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Visual Resource Assessment and Mitigation Plan

Hummingbird Solar Project

September 2022



 **Cardno**

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Document Information

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Acronyms

AC	Alternating Current
DC	Direct Current
DSM	Digital Surface Model
GPS	Global Positioning System
LT	Landscape Type
MW	Megawatt
NHL	National Historic Landmarks
NLCD	National Land Cover Database
NRHP	National Register of Historic Places
PV	Photovoltaic
SRHP	State Register of Historic Places
VRA	Visual Resource Assessment
VSA	Visual Study Area
VSR	Visually Sensitive Resource

1 Introduction

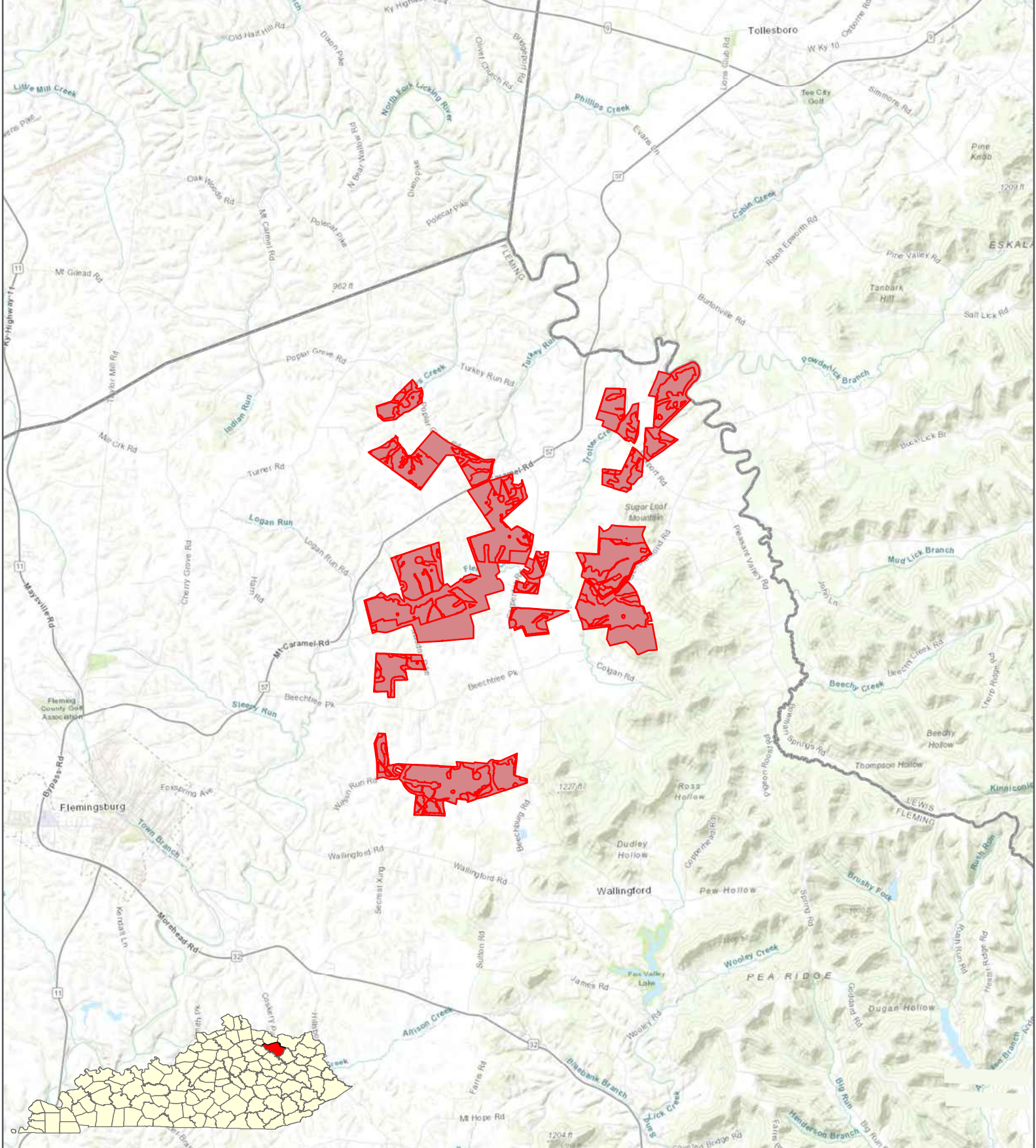
1.1 Purpose of the Investigation

At the request of Hummingbird Energy, LLC (Hummingbird Solar), Cardno, Inc. (Cardno) has prepared this Visual Resource Assessment (VRA) in support of the Hummingbird Solar Project (Project) near Mt. Carmel Kentucky, and located approximately 3 miles northeast of Flemingsburg, Kentucky (Figure 1-1). The Project Area is located in Fleming County, Kentucky.

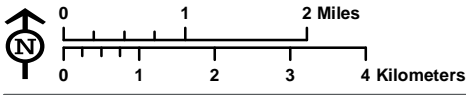
This study has been conducted to identify and assess the Visually Sensitive Resources (VSRs), project visibility, and potential visual impacts resulting from construction of the proposed solar-powered electric generation facility.

The VRA includes the following:

- > Description of the visible components of the proposed Project;
- > Definition of the visual character of the Visual Study Area (VSA);
- > Inventory and evaluation of the existing Visually Sensitive Resources (VSRs) within the VSA;
- > Evaluation of the potential visibility of the Project within the VSA;
- > Photographic simulations of the proposed Project from select locations;
- > Assessment of the visual impacts associated with the Project; and
- > Description of measures proposed to minimize visual impact.



 Project Area



7.5' Quadrangles:
 Cynthiana, KY (1984)
 Shady Nook, KY (1984)
 Shawhan, KY (1984)
 Millersburg, KY (1984)

PLSS: unsectioned

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1-1: Project Location - USGS Topographic Quad

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 Hummingbird Solar, LLC
 Fleming County, Kentucky



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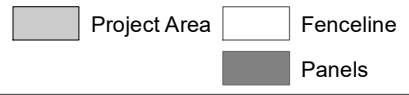
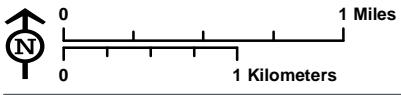
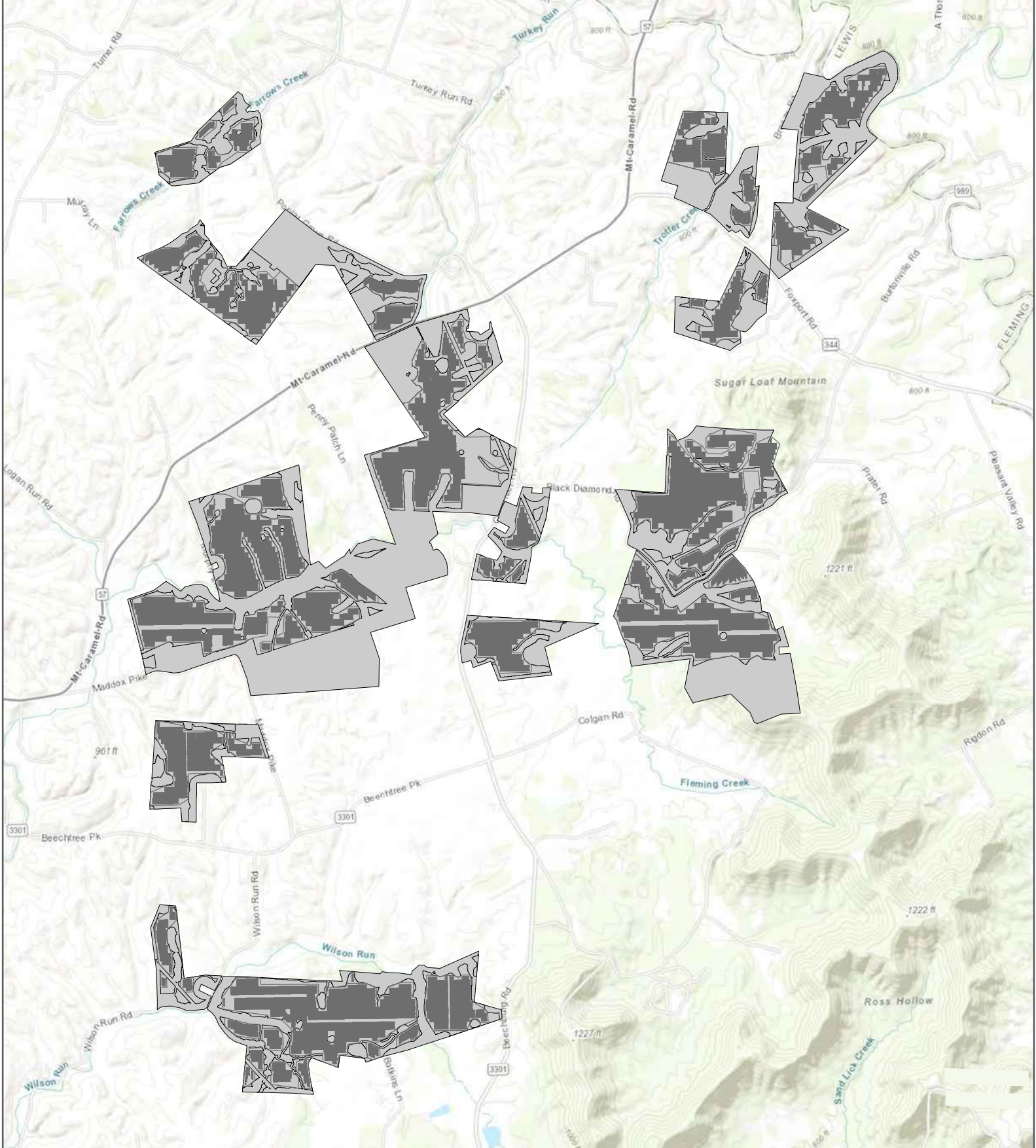
1.2 Project Location and Description

The Project is located approximately 3 miles northeast of Flemingsburg, in Fleming County, Kentucky. At the time of this study, the total acreage of the privately-owned parcels within which the Project is planned is 5,512-acre (Study Area), but only 1,731 acres are expected to be occupied by project components (Project Area). The land use within and immediately adjacent to the Project area consists primarily of agricultural land.

The proposed Project is a solar power electric generation facility with a generating capacity up to 200 MW. The Project will include the installation single axis tracking solar panel arrays mounted on support piles that are driven into the ground. Additionally, a collection substation will be constructed, which will collect the generated electricity and increase the voltage for transfer to the electric transmission grid. Inverters will be installed to convert the generated electricity from direct current to alternating current, which will be transferred to the collection substation via buried collection lines. The Project will also include a battery storage facility with storage capacity of up to 200 MW. Groupings of facility infrastructure will be surrounded by fencing for safety and security. Gravel covered permanent access roads will be constructed to provide access to solar array components for the use by maintenance crews and emergency services. The preliminary locations of the proposed major Project components are illustrated in Figure 1-2.

1.2.1 Visual Study Area

Traditionally, a VRA may be prepared to evaluate the visual impacts to recreational, scenic, and historic resources from a proposed generating facility within a 10-mile radius; however, we determined that a 10-mile radius is an excessive size for a study area for this assessment due to the low profile of the proposed Project components and the results of the visibility analysis presented in this report. In order to determine a more appropriately sized study area, a viewshed analysis was conducted to better understand the Project's area of potential effect. The viewshed analysis indicated that areas of potential Project visibility do not extend beyond 5-miles, with only discrete corridors and pockets of visibility extending beyond 0.5-miles from the Project. As such, it was determined that a 5-mile radius around the Project would be a more than sufficient study area for the purposes of this assessment. The VSA encompasses a total of approximately 180.7 square miles, including portions of Fleming, Mason, and Lewis counties. The location and extent of the VSA is illustrated in Figure 1-3.



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 PLSS: unsectioned

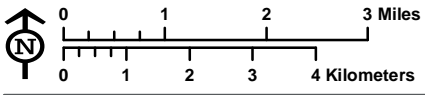
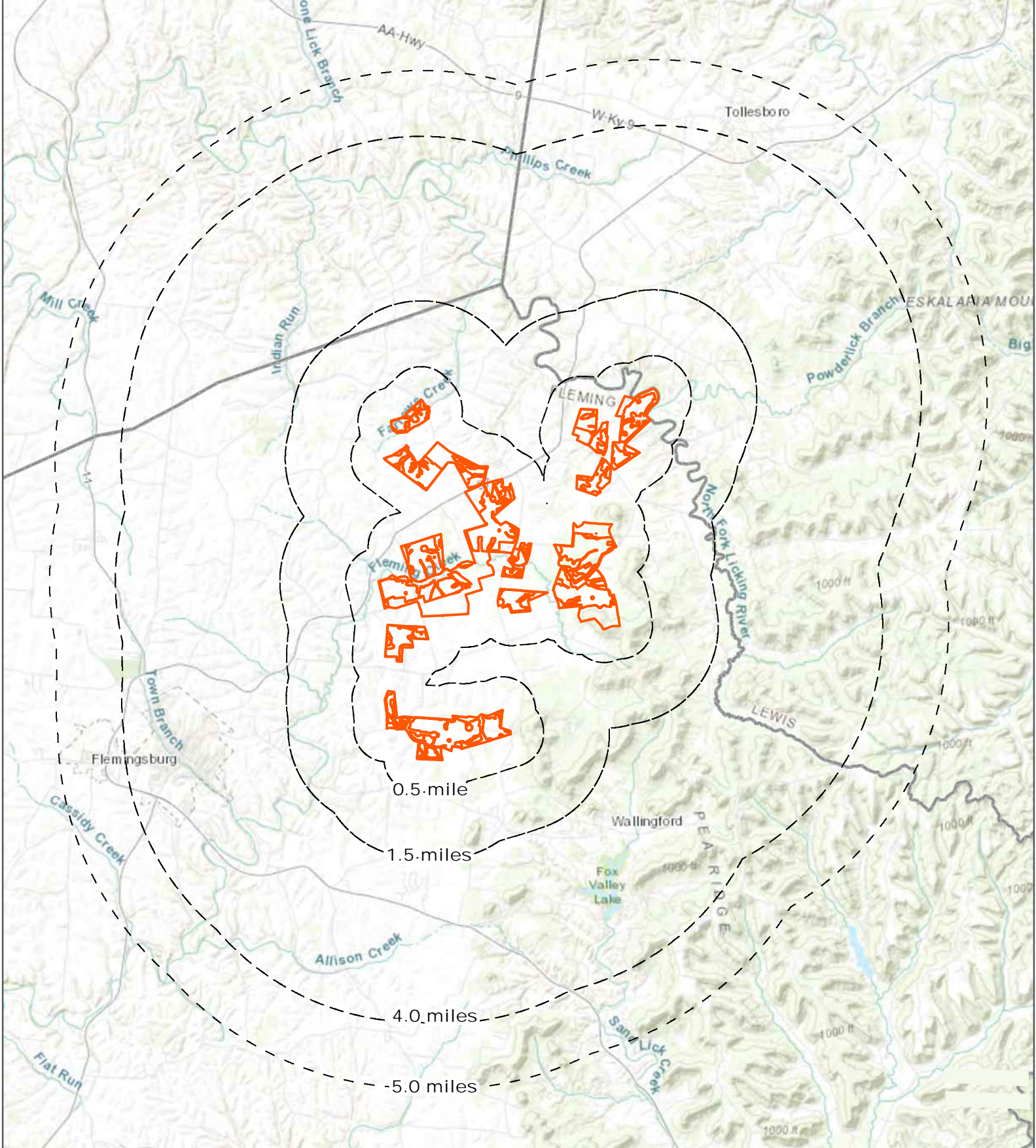
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1-2: Preliminary Project Layout Map

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--- Visibility Range Rings
 [Red Outline] Project Area

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1-3: Visual Study Area Map

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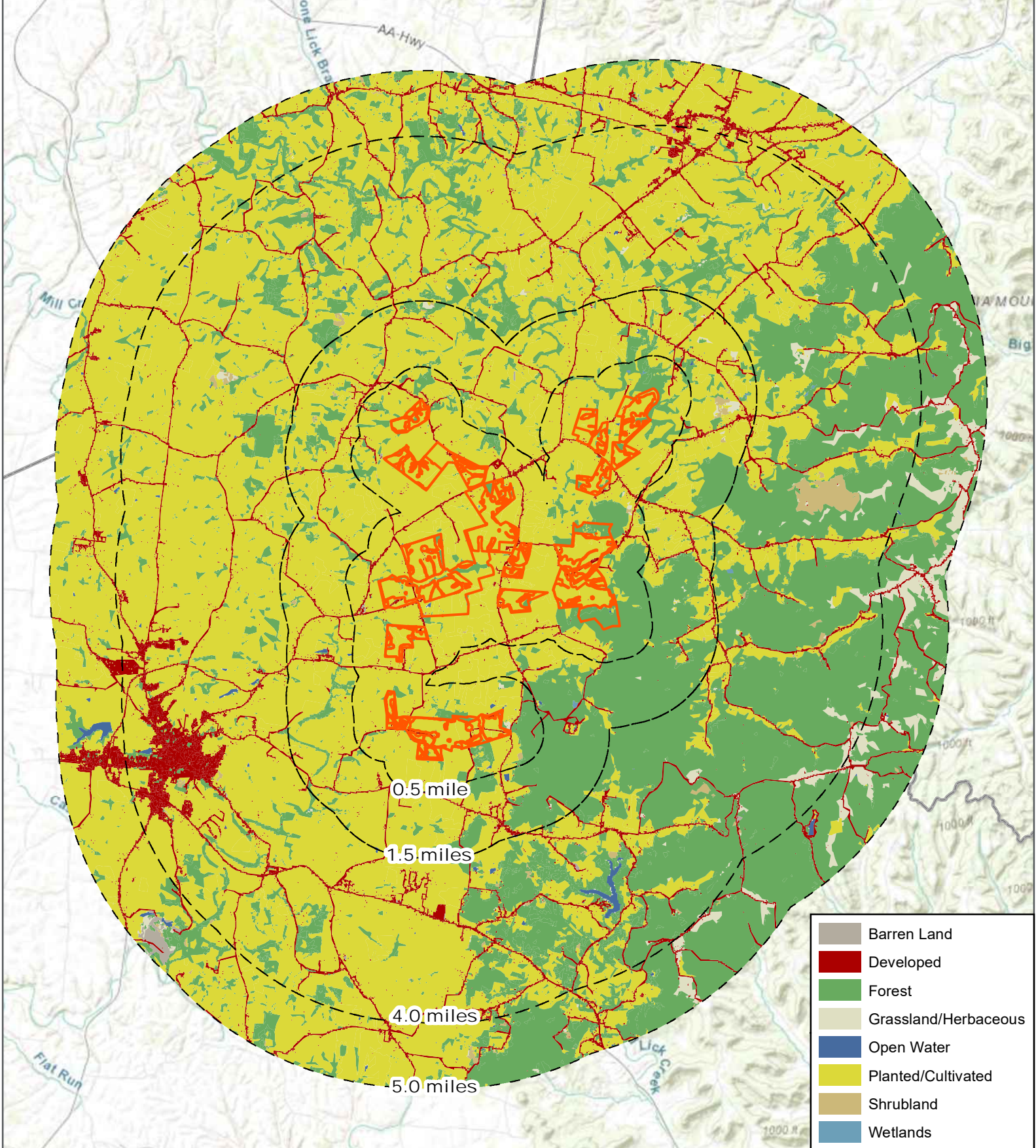
1.2.2 Landscape Character

The land use and landscape community types within the VSA are based on data provided by the Multi-Resolution Land Characteristics Consortium (MRLC) from the 2011 National Land Cover Database, amended 2019 (MRLC 2019). Understanding the landscape types (LTs) within the VSA provides the framework for analyzing the potential visual effects of the Project. These LTs were categorized based on the similarity of various features, including landform, vegetation, and/or land use patterns. The LTs defined within the VSA are presented in Table 1-1 and Figure 1-4.

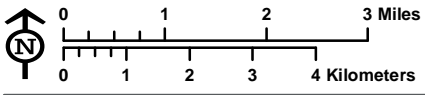
Table 1-1 Landscape Types within the Visual Study Area

Landscape Type	Total Area of LT within the Visual Study Area (acres)	Total Area within the Visual Study Area (percent)
Planted/Cultivated	69,453.88	59.95%
Forest	35,974.31	31.05%
Developed	7,772.25	6.71%
Grassland/Herbaceous	1,680.64	1.45%
Shrubland	542.71	0.47%
Open Water	262.79	0.23%
Barren Land	136.77	0.12%
Wetlands	20.89	0.02%
Total	115,844.23	100.00%

The Project components are proposed to be built principally within the Planted/Cultivated LT, which makes up 59.95% of the VSA. The agricultural LT has the greatest opportunity for views of PV panels within the Project Area and vicinity due to the relatively low growing crops and lack of mature vegetation and other screening. The Forest LT makes up 31.05% of the VSA. Views within the Forest LT are typically limited due to the presence of mature trees and dense vegetation. The Developed LT makes up 6.71% of the VSA and includes the City of Flemingsburg. The Developed LT typically provides limited outward views due to the presence of buildings and closely situated houses, landscaped yards/planted vegetation, utility poles, and other visual clutter. The Grassland/Herbaceous and Shrubland LTs collectively makeup 1.92% of the land area. Although some opportunity for views of PV panels could exist within these LTs, they are not typically occupied or frequented by potential viewers. The Open Water and Wetlands LTs are scattered throughout the VSA and collectively make up only 0.25% of the land area. These LTs are often associated with river or stream corridors, the most notable being Fleming Creek and the North Fork of the Licking River, where long distance views are typically limited due to the presence of tree-lined riverbanks and adjacent forested slopes.



- Barren Land
 - Developed
 - Forest
 - Grassland/Herbaceous
 - Open Water
 - Planted/Cultivated
 - Shrubland
 - Wetlands
- Visibility Range Rings
 Project Area



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1-4: Land Cover Types within the Visual Study Area

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1.2.3 Distance Zones

Distance zones are used to divide the VSA into distinct radii around the Project Area that are based on visual receptors that can be perceived by a viewer. Four distance zones have been defined, per agency protocols published by the U.S. Forest Service, Bureau of Land Management and U.S. Department of Transportation, as a guide for identifying distances from which landscape detail can be perceived by a viewer. Using appropriate adjustments associated with Kentucky's landscape types, the following distance zones have been defined for use in this VSA:

- > Near-Foreground: 0 to 0.5 mile. At this distance, a viewer is able to perceive details of an object with clarity. Surface textures, small features, and the full intensity and value of color can be seen on foreground objects.
- > Foreground: 0.5 to 1.5 miles. At this distance, elements in the landscape tend to retain visual distinction, but specific textures become less defined. So larger intact scale landscapes, seamless mosaics of a landscape type, will appear more as a series or a pattern instead of discrete individual landscape components.
- > Middle ground: 1.5 to 4.0 miles. The middle ground is the prevalent distance at which landscapes are seen. At these distances a viewer can recognize trees and individual structures but not in great detail. This is the zone where the parts of the landscape start to merge; individual hills become a range, individual trees merge into a forest, and buildings appear as shapes. Colors will be softened and blended. Contrast in texture between landscape elements will also be decreased.
- > Background: Over 4.0 miles. The background encompasses the general regional landscape within the viewshed. Within this distance zone, the landscape is simplified; little detail is visible, vegetation and non-vegetated areas are seen as blocks of color, and colors are muted by atmospheric haze. Prominent land masses or other regional features (mountains, larger bodies of water, vast tracks of open lands, etc.) and/or the skyline are often the overriding visual characteristics in the background. The background acts as the backdrop for the foreground and middle ground features, creating the basis of the regional scenic quality.

For the purpose of this assessment, the visual conditions described in these distance zones depict potential perspectives for viewers during periods of peak visual clarity, and do not account for variations in environmental factors such as atmospheric conditions, time of day, or background composition/coloration.

The landscape types defined within the distance zones of the VSA are presented in Table 1-2. As can be seen, the most significant landscape type, Planted/Cultivated, is reflective of the agricultural nature of the area. Forest is characteristic of certain areas within the VSA, with density of forested areas in each given location varying as shown on Figure 1-4. Also of note, the Developed LT only makes up an average of approximately 6.7% across all distance zones within the VSA.

Table 1-2 Distance Zones by Landscape Type

Common Name	Total Area (acres) and Percent of Landscape Type in Distance Zone			
	Near-Foreground (0 – 0.5 mile)	Foreground (0.5 – 1.5 miles)	Middle Ground (1.5 – 4.0 miles)	Background (>4.0 miles)
Planted/Cultivated	11,240.00 (78.28%)	11,116.90 (65.45%)	31,819.56 (57.40%)	15,277.43 (52.57%)
Forest	2,309.06 (16.08%)	4,790.70 (28.21%)	18,766.55 (33.85%)	10,108.00 (34.78%)
Developed	750.47 (5.23%)	940.53 (5.54%)	3,869.36 (6.98%)	2,211.89 (7.61%)
Grassland/Herbaceous	15.81 (0.11%)	52.25 (0.31%)	425.98 (0.77%)	1,186.61 (4.08%)
Shrubland	12.83 (0.09%)	49.81 (0.29%)	401.27 (0.72%)	78.79 (0.27%)
Open Water	20.44 (0.14%)	21.33 (0.13%)	125.38 (0.23%)	95.65 (0.33%)
Barren Land	6.99 (0.05%)	6.67 (0.04%)	19.05 (0.03%)	104.05 (0.36%)
Wetlands	2.82 (0.02%)	7.03 (0.04%)	10.26 (0.02%)	0.78 (0.002%)
Total Distance Zone Area	14,358.40	16,985.21	55,437.41	29,063.20

2 Methodology

2.1 PV Array Viewshed Analysis

Cardno conducted a viewshed analysis to assess the visibility of solar panels within the Project Area. The analysis was conducted using a digital surface model (DSM) derived from the Statewide Imagery Program's (KyFromAbove) 2021 LIDAR data for Fleming, Mason, and Lewis counties, and enhanced with Esri ArcGIS® software. Because the specific layout of solar panels is in the preliminary design phase, sample points were placed approximately 400 to 1,000 feet apart along the proposed infrastructure within the Project Area boundary. The sample points were placed at a height of 15 feet to represent the maximum height of the solar panels and the analysis assumed a viewer height of 6 feet. Although the proposed substation and interconnection structures will result in some minimal visual impacts in their immediate vicinity, they will comprise a footprint considerably smaller than the proposed solar panels. For these reasons, the DSM did not include these structures.

The viewshed analysis incorporated the screening effects of existing topography, structures, and vegetation within the VSA. This was accomplished by creating a DSM of the VSA from the LIDAR data, which includes the elevations of buildings, trees, and other objects large enough to be resolved by LIDAR technology. Transmission lines that were included in these LIDAR data were removed from the resulting DSM and road centerlines were buffered 50 feet to remove utility lines. LIDAR data for these narrow, vertical landscape features are removed from the DSM to avoid including artificial screening in the analysis. Additionally, vegetation within the fence line was removed, including narrow hedgerows that will be cleared during construction of the Project. This was done to simulate bare-earth elevation.

Although the viewshed analysis provides a useful representation of Project visibility, there are conditions that are not incorporated into the DSM (e.g., color, distance from viewer, and atmospheric/weather conditions). Therefore, being located within the VSA does not reflect actual visibility of the Project.

2.2 Visually Sensitive Resources

Below are the potential VSR categories that may be present within the VSA. In addition, other aesthetic resources were considered for evaluation based on the type of resource, or the prominence within the VSA. Typical VSRs include the following:

- > Landmarks such as districts, sites, buildings, structures, and objects that are recognized by, registered with, or identified as eligible for registration by the national registry of natural landmarks, the state historical preservation office, or the Kentucky Department of Fish & Wildlife
- > Recreation Areas that are any formally adopted land and water recreation areas, recreational trails, scenic rivers, scenic routes or byways
- > Registered landmarks of historic, religious, archaeological, scenic, natural, or other cultural significance.
- > Other public areas such as state, US, and Interstate Highways, Schools, Cities, and Villages.

2.3 Field Verification

Cardno conducted a site visit to the Project Area on August 8, 2022, to verify the results of the viewshed analysis, document characteristics of the LTs and existing visual screening, and collect photographs for use in the creation of visual simulations.

The Cardno field team drove public roads throughout the Project Area and collected photographs from 15 individual viewpoints. A viewpoint location map and photolog are included in Appendix A.

2.4 Creation of Visual Simulations

Visual simulations of key components of the proposed Project were developed using a three-dimensional (3D) computer model of the proposed Project infrastructure based on specifications, dimensions, and locations provided by Hummingbird Solar. Camera specifications and global positioning system (GPS) coordinates collected at each photo location were incorporated into the 3D model. Next, the photo was pulled into the model and the scale and perspective of the project components (e.g., fence, panels) were adjusted appropriately.

At viewpoints where vegetative screening is proposed, plantings were added to the simulations to represent conditions approximately 5 to 7 years after installation. Vegetative screening was illustrated based on the following screening applications that are planned for certain segments of the Project's perimeter. Greater detail of the module composition can be found in the separate landscaping plan prepared for the Project.

- > **Module 1** –Adjacent Resource (double row evergreen trees, spaced 15ft on-center): Provides the highest level of screening, for use in areas where stationary adjacent uses and non-participating viewers could be impacted by the installation of Project components.

3 Results

3.1 Viewshed Analysis

3.1.1 PV Array Viewshed Analysis

Potential visibility of the proposed Project is illustrated in Figure 3-1 and results of the analysis are summarized in Table 3-1. The results of the analysis indicate the Project will be screened from approximately 95.9% of the VSA by topography, vegetation, and physical structures.

Table 3-1 PV Array Viewshed Analysis Results

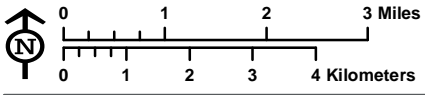
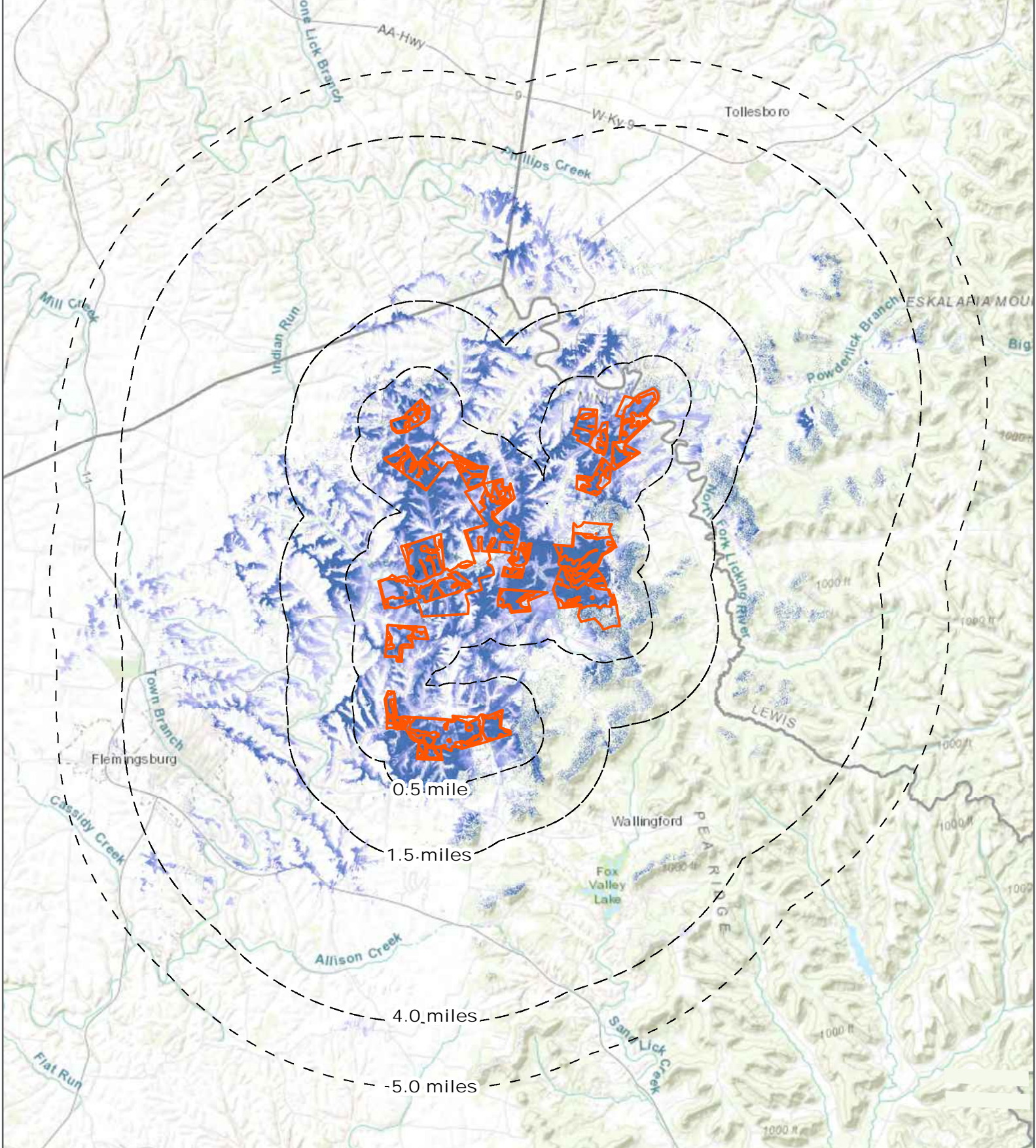
Analysis	VSA	Distance from Project			
		Near-Foreground (0 – 0.5 mile)	Foreground (0.5 – 1.5 mile)	Middle Ground (1.5 – 4.0 mile)	Background (4.0 – 5.0) mile
Total Area	180.7 mi ²	17.9 mi ²	24.5 mi ²	85.6 mi ²	45.3 mi ²
DSM Viewshed Visibility	7.4 mi ² (4.1%)	4.5 mi ² (20.3%)	2.0 mi ² (7.4%)	0.9 mi ² (1.0%)	0.0 mi ² (0.0%)

The majority of Project visibility is concentrated within the near-foreground distance zone, with 20.3% of the area out to 0.5 mile from the Project Area indicated as having potential views of some portion of the Project. Views from areas beyond the near-foreground and into the foreground distance zone (0.5 to 1.5 miles) are better screened, with 7.4% of the foreground distance zone having the potential for views of the PV arrays. The DSM viewshed analysis indicates that potential Project visibility is further reduced at distances beyond the foreground. More than 99% of the VSA is screened from view of the PV arrays in the middle ground (1.5 to 4 miles) and in the background (4 to 5 miles).

The topography and vegetation associated with hills and valleys, rivers and streams, and forested woodlots play a significant role in reducing potential PV array visibility within the VSA. Due to their establishment and orientation throughout the VSA, stream corridors and forested areas serve to concentrate areas of potential visibility in the near-foreground distance zone, on level open ground within agricultural tracts. A few additional locations of potential visibility are present in the distance zones beyond the near-foreground distance zone. These areas are discrete corridors of visibility that result from breaks in the forest vegetation combined with slight topographic elevation. Due to the limited portion of the Project that would be visible, and the distance from the Project, it is unlikely that Project visibility within these narrow corridors or elevated viewpoints would be readily noticeable to a casual viewer.

Existing structures and vegetation (i.e., small woodlots and hedgerows) are assumed to fully block views of the Project. This scenario is likely in leaf-on conditions; however, during leaf-off conditions, this may be conservative since sparsely vegetated areas may not actually provide screening that fully obscure views of the Project. Furthermore, although the LIDAR data used in this analysis is from 2021, any changes to structures and vegetation since its creation would not be represented in the analysis. Cardno reviewed available recent aerial photography and field-collected photos which suggest that the LIDAR data appear to accurately reflect current screening conditions within the VSA.

Figure 3-1 of the DSM viewshed analysis for a 5-mile radius depicts a viewshed that incorporates a vegetative model. This figure illustrates that visibility beyond a 0.5-mile radius will be primarily limited to discrete corridors of agricultural fields to the north and west. Further analysis is provided on the vegetative model below.



- Greater Number of Panels Visible
- Fewer Number of Panels Visible
- Visibility Range Rings
- Project Area

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3-1 Viewshed Analysis - PV Panel (5-mile radius)

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Potential PV panel visibility within the various LTs, as predicted by the DSM viewshed analysis, is summarized in Table 3-2.

Table 3-2 Landscape Types Viewshed Analysis Results Summary

Analysis	VSA	Landscape Types							
		Planted/ Cultivated	Forest	Developed	Shrubland	Open Water	Grassland/ Herbaceous	Barren	Wetland
Total Area	180.7 mi ²	102.7 mi ²	54.8 mi ²	11.7 mi ²	0.8 mi ²	0.4 mi ²	2.6 mi ²	0.2 mi ²	0.03 mi ²
DSM Viewshed Visibility	7.4 mi ² (4.1%)	5.6 mi ² (3.1%)	1.4 mi ² (0.8%)	0.4 mi ² (0.2%)	0.011 mi ² (0.01%)	0.01 mi ² (0.005%)	0.004 mi ² (0.002%)	0.001 mi ² (0.0007%)	--

The greatest potential for visibility of the proposed solar arrays is indicated within the Planted/Cultivated LT. The DSM viewshed indicates that 3.1% of the total VSA could potentially offer views of the proposed PV panels from this LT. Visibility within the Planted/Cultivated LT is most heavily concentrated within the Project itself, and within adjacent open agricultural fields in the near-foreground distance zone.

The potential for solar array visibility within the Forested LT is indicated in approximately 0.8% of the total VSA. Visibility may occur in small breaks or clearings in the forest vegetation, but the occurrence of these areas is generally limited. Visibility within this zone occurs most frequently along the forest edges where abutting open fields provide opportunities for outward views. However, there will be little to no PV panel visibility from the majority of the forested areas, particularly during the growing season.

The LTs with the least amount of potential solar array visibility are the Developed (0.02%), Shrubland (0.01%), Open Water (0.005%), and Grassland/Herbaceous (0.002%). Visible portions of these LTs comprise less than 0.04% of the total VSA and their visibility varies considerably based on proximity to the Project, elevation, and orientation.

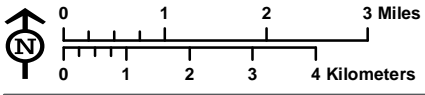
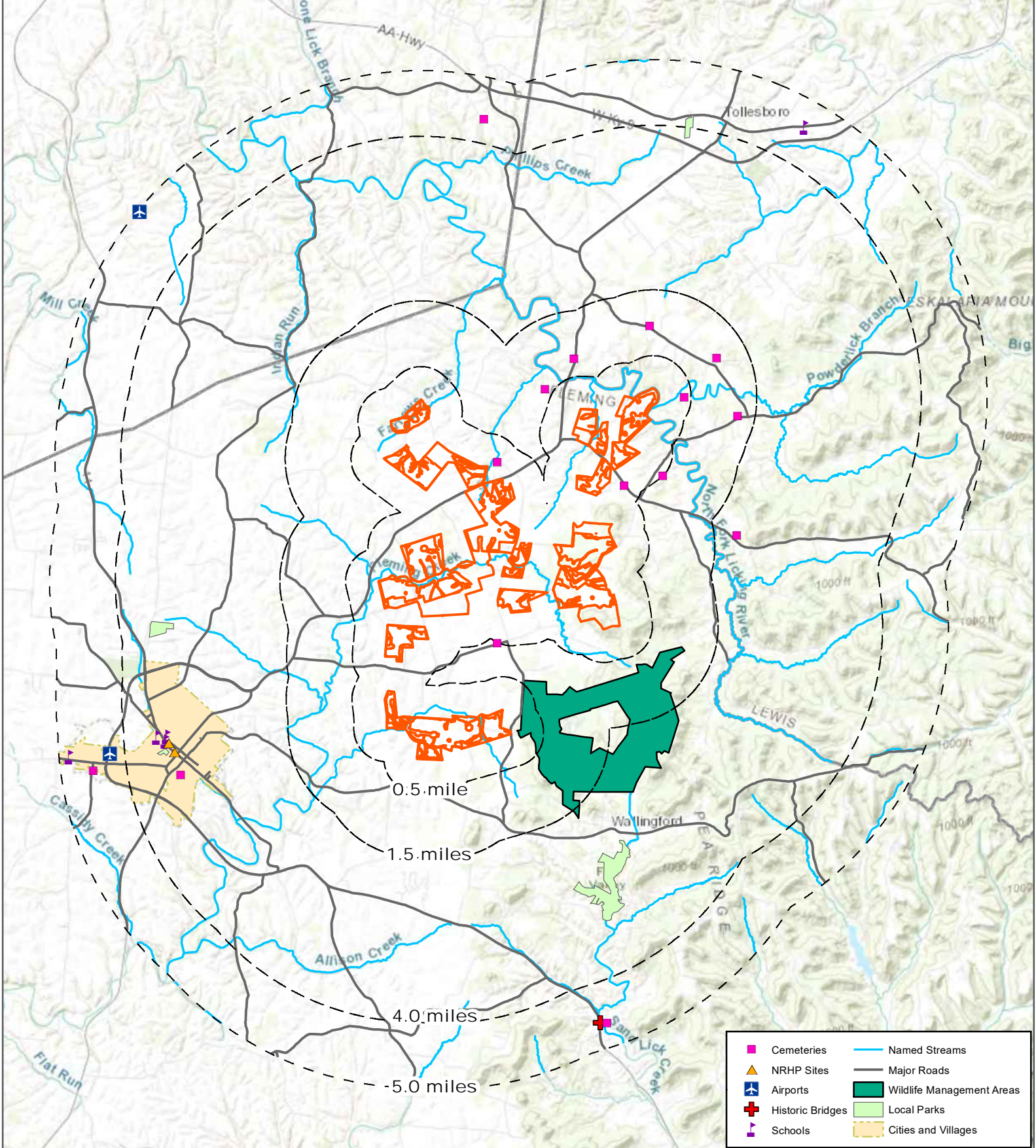
3.1.2 Visibility Results from Visually Sensitive Resources

As summarized in Table 3-3, the DSM viewshed analysis indicates that 21 of the 64 VSRs identified within the VSA (32%) may have some visibility of the PV arrays. The locations of mapped VSRs within the VSA are illustrated in Figure 3-2.

Table 3-3 Visually Sensitive Resources in the DSM Viewshed

Visually Sensitive Resources	Total Number of Resources within the Visual Study Area	Total Number of Resources with Visibility
<i>Properties of Historic Significance</i>		
National Historic Landmarks (NHL)	0	0
Sites Listed on National or State Registers of Historic Places (NRHP/SRHP)	2	0
National/State Historic Sites	0	0
Historic Bridges	1	0
OGS Cemeteries	15	9
Kentucky Historic State Markers	0	0
Total	18	9

Visually Sensitive Resources	Total Number of Resources within the Visual Study Area	Total Number of Resources with Visibility
<i>Designated Scenic Resources</i>		
Rivers Designated as National or State Wild, Scenic or Recreational	0	0
Sites, Areas, Lakes, Reservoirs or Highways Designated or Eligible for Designation as Scenic ([ECL Article 49Title 1] or equivalent)	0	0
Scenic Areas of Statewide Significance [Article 42 of Executive Law]	0	0
Other Designated Scenic Resources (Easements, Roads, Districts, and Overlooks)	0	0
Total	0	0
<i>Public Lands and Recreational Resources</i>		
National Parks, Recreation Areas, Seashores, and/or Forests [16 U.S.C. 1c]	0	0
National Natural Landmarks [36 CFR Part 62]	0	0
National Wildlife Refuges [16 U.S.C. 668dd]	0	0
State Parks [Parks, Recreation and Historic Preservation Law Section 3.09]	0	0
Wildlife Areas	1	0
State Forest	0	0
Other State Lands	0	0
Designated Trails	0	0
Local Parks and Recreation Areas	5	2
Conservation Lands/Easements	0	0
Named Lakes, Ponds, and Reservoirs	2	0
Total	8	2
<i>High-Use Public Areas</i>		
State, US, and Interstate Highways	31	9
Cities, Villages,	1	1
Schools	5	0
Airports	1	0
Total	38	10
Total Number of Visually Sensitive Resources in the VSA	64	21



- | | |
|------------------|---------------------------|
| Cemeteries | Named Streams |
| NRHP Sites | Major Roads |
| Airports | Wildlife Management Areas |
| Historic Bridges | Local Parks |
| Schools | Cities and Villages |

- Visibility Range Rings
- Project Area

7.5' Quadrangles:
 Cynthiana, KY (1984)
 Shady Nook, KY (1984)
 Shawhan, KY (1984)
 Millersburg, KY (1984)
 PLSS: unsectioned

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1-3: Visual Study Area Map

Visual Resource Assessment for the Hummingbird Solar Project
 Hummingbird Solar, LLC
 Fleming County, Kentucky

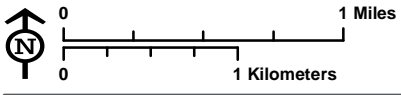
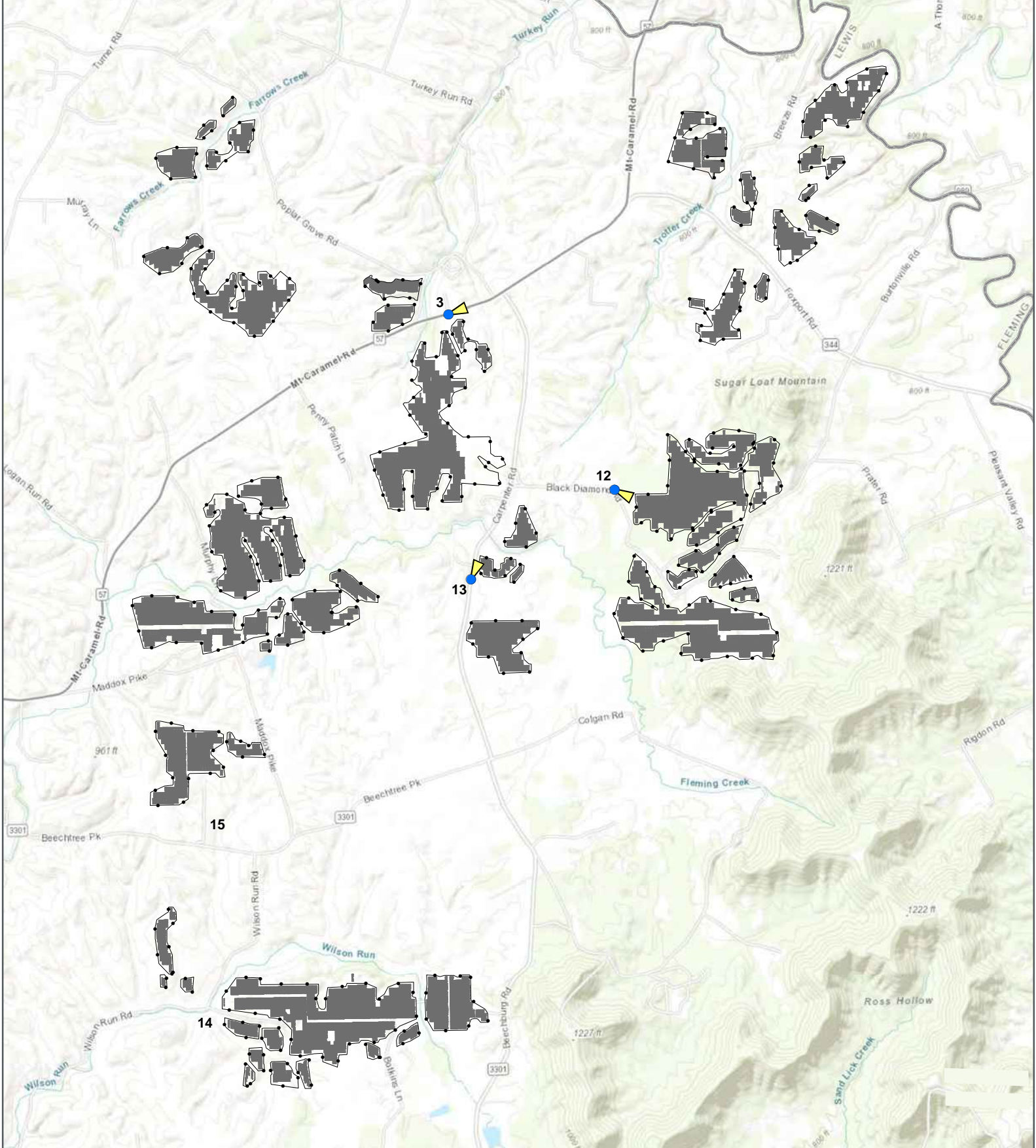
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

3.1.3 Field Verification Results

According to the DSM viewshed analysis, the Project will be screened from approximately 95.9% of the VSA by intervening landforms, vegetation, and structures. Field visits generally confirmed the results of this analysis, as Project visibility was observed to be largely restricted to areas adjacent to the Project Area where public roads are bordered by open agricultural fields. It was also confirmed during field visits that existing topography, as well as mature vegetation associated with hills and valleys, stream corridors, woodlots, and hedgerows will screen the Project from more distant portions of the VSA. Within the near-foreground (0-0.5 miles) distance zone, field review revealed that although portions of the Project are technically visible as indicated in the viewshed analysis, there is a low likelihood of discerning the proposed Project due to the level of visual blending into the background at the outer extents of this distance zone. During the growing season, visibility of the Project from residences and roadways may also be limited by the growth of cultivated crops in the foreground agricultural fields. The combination of relatively low panel height, along with existing hedgerows, rolling topographic relief, and the atmospheric effects of distance, will significantly limit visibility of the Project from the majority of the VSA.

3.2 Visual Simulations

Visual simulations were created to illustrate the Project from three representative locations. The visual simulations provide a time-lapse from existing conditions, to initial construction of Project components, to 5 to 7 years post-construction with the inclusion of prescribed plantings. The locations of the viewpoints selected for the production of visual simulations are illustrated in Figure 3-3. The visual simulations and a discussion of the potential visual effects associated with the Project are summarized below. Full size images are presented in Appendix B.



 Visual Simulation Locations
  Fenceline
  Panels

7.5' Quadrangles:
 Cynthia, KY (1984)
 Shady Nook, KY (1984)
 Shawhan, KY (1984)
 Millersburg, KY (1984)
 PLSS: unsectioned

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3-3 Visual Simulation Viewpoints Map

Visual Resource Assessment for the Hummingbird Solar Project

Hummingbird Solar, LLC
 Fleming County, Kentucky


 76 San Marcos Street
 Austin, TX 78702 USA
 Phone (+1) 512.745.8129
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Basemap: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
 GIS Analyst: samuel.walton

3.2.1.1 Viewpoint 3 Existing Conditions

Viewpoint 3 is situated at the northern terminus of Mt. Carmel Road, facing east/southeast towards an agricultural field. The existing conditions in this view from an adjacent residence and business show the rural field that extends from the foreground to the background of the visual. The vegetation viewed in the background of the image are located approximately 1,000 feet from the viewpoint (Figure 3-4, Existing Conditions).

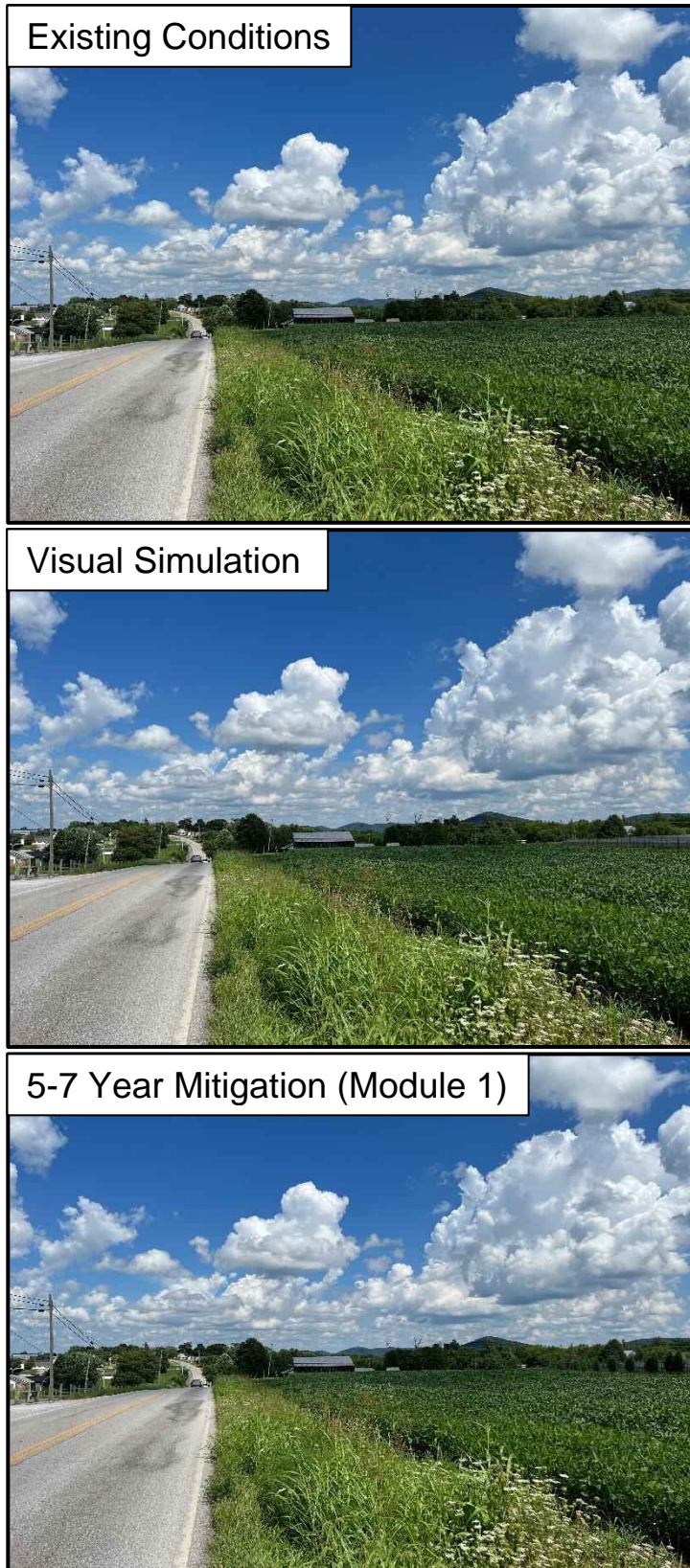
3.2.1.2 Viewpoint 3 Proposed Project

With the addition of the proposed Project, panel arrays and associated fence line can be seen approximately 335 feet from the viewpoint location (Figure 3-4, Visual Simulation).

3.2.1.3 Viewpoint 3 Proposed Project with Mitigation

With proposed mitigation plantings placed and established 5 to 7 years following installation, the area comprising the proposed panel arrays is surrounded by a variety of large evergreen trees. Although stationary views of the Project remain available through gaps in the vegetation, adjacent plantings interrupt the horizontal lines of the Project components, allowing them to blend into the vegetated background (Figure 3-4, 5 to 7 Year Mitigation).

Figure 3-4 Viewpoint 3 - Existing Conditions, Visual Simulation, and 5-7 Year Mitigation



3.2.1.4 Viewpoint 12 Existing Conditions

Viewpoint 12 is situated along Black Diamond Road facing southwest towards an open agricultural field. The existing conditions in this view show the rural field that extends from the foreground to the background of the visual. The barn in the middle ground of the image is located 250-feet from the viewpoint and the residence is 500-feet from the viewpoint (Figure 3-5, Existing Conditions).

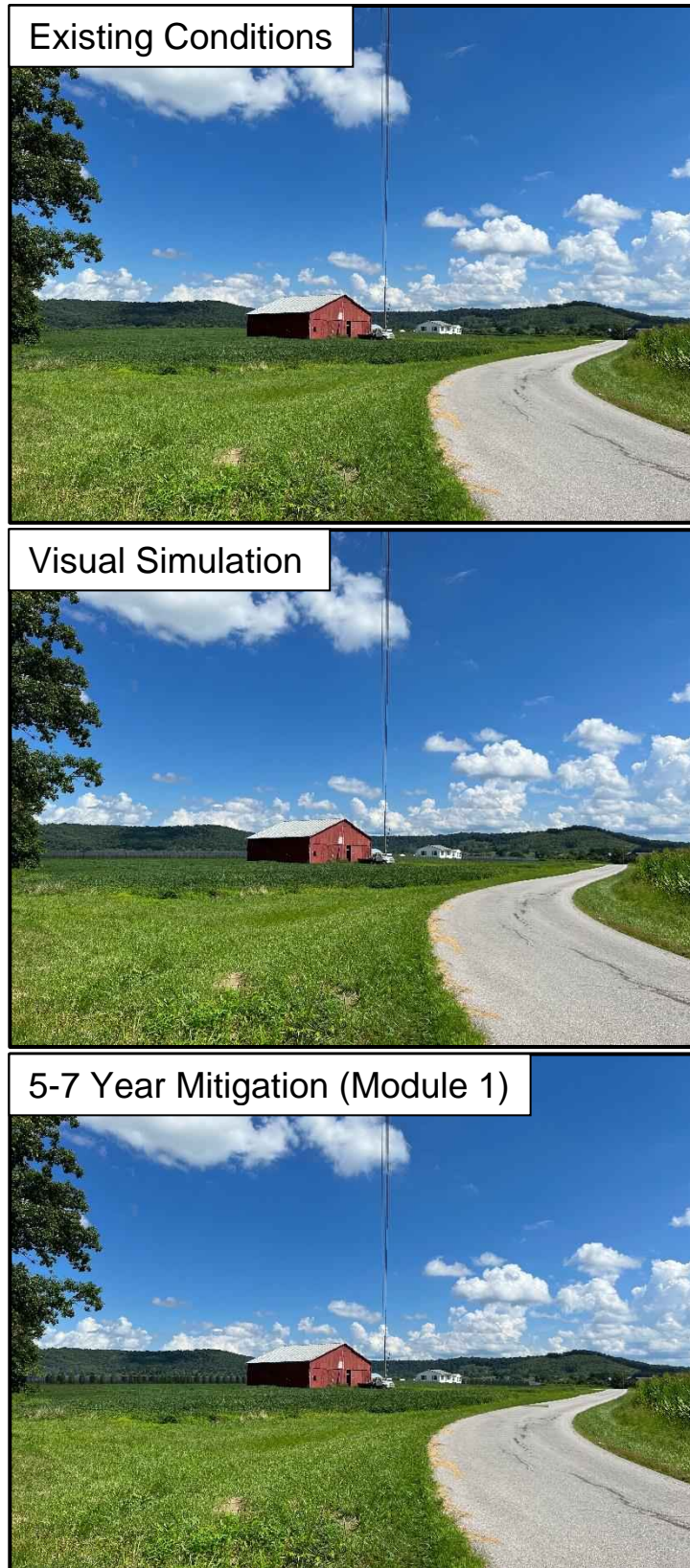
3.2.1.5 Viewpoint 12 Proposed Project

With the addition of the proposed Project, panel arrays and associated fence line can be viewed within the field. The closest panels in the image are approximately 640-feet from the viewpoint (Figure 3-5, Visual Simulation).

3.2.1.6 Viewpoint 12 Proposed Project with Mitigation

With proposed mitigation plantings placed and established 5 to 7 years following installation, the area comprising the proposed panel arrays is surrounded by a variety of large evergreen trees. Although views of the panel arrays remain available, the duration of these views will be limited for drivers passing along Black Diamond Road (Figure 3-5, 5 to 7 Year Mitigation).

Figure 3-5 Viewpoint 12 - Existing Conditions, Visual Simulation, and 5-7 Year Mitigation



3.2.1.7 Viewpoint 13 Existing Conditions

Viewpoint 13 is situated along Carpenter Road facing north towards an open agricultural field. The existing conditions in this view show the rural field that extends from the foreground to the background of the visual. The barn in the middle ground of the image is located 750-feet from the viewpoint (Figure 3-5, Existing Conditions).

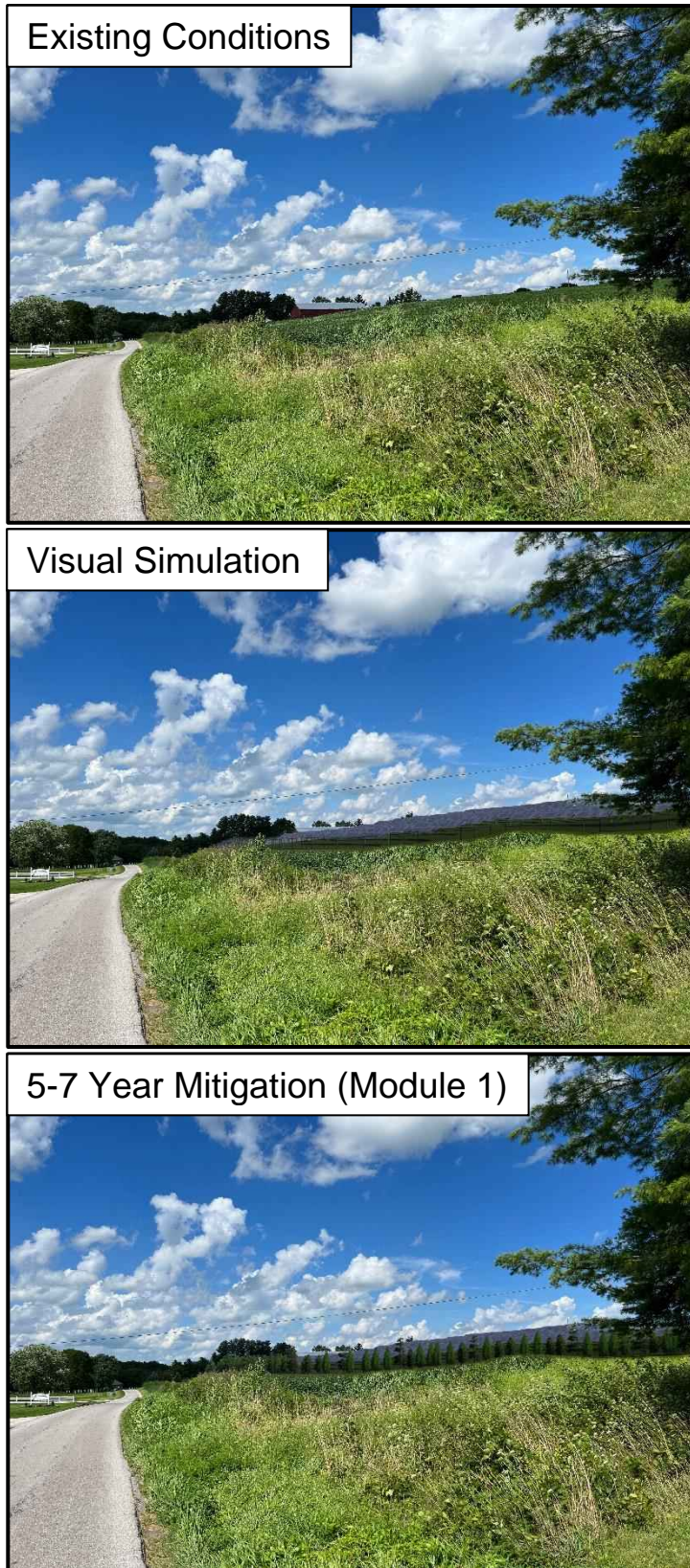
3.2.1.8 Viewpoint 13 Proposed Project

With the addition of the proposed Project, panel arrays and associated fence line can be viewed within the field. The closest panels in the image are approximately 380-feet from the viewpoint (Figure 3-5, Visual Simulation).

3.2.1.9 Viewpoint 13 Proposed Project with Mitigation

With proposed mitigation plantings placed and established 5 to 7 years following installation, the area comprising the proposed panel arrays is surrounded by a variety of large evergreen trees. Although views of the panel arrays remain available, the duration of these views will be limited for drivers passing along Carpenter Road (Figure 3-5, 5 to 7 Year Mitigation).

Figure 3-5 Viewpoint 13 - Existing Conditions, Visual Simulation, and 5-7 Year Mitigation



4 Conclusions

4.1 Visual Resource Assessment Summary

Results of this viewshed analysis indicate that the proposed solar arrays associated with the Project will be screened from view in approximately 95.9% of the 5-mile radius VSA. Visibility is concentrated within the Project Area and adjacent open fields. The viewshed analysis also suggests that panel visibility substantially diminishes beyond the near-foreground distance zone (0.5 mile).

The viewshed analysis of the 64 identified VSRs within the VSA indicates that 21 (32%) have potential Project visibility. Viewshed results suggest that views from VSRs will generally be small and/or include only a limited number of Project components.

The Field visit generally confirmed the results of the viewshed analysis. Beyond 0.5-mile, Project visibility will be reduced due to screening provided by topography and hedgerows in combination with the low height of the solar panels. Additionally, discernibility of panels that are visible in the outer extents of the 0.5 mile range will be diminished due to visual blending with the background at these distances.

The Project will result in varying levels of visual impact when viewed from its surrounding vicinity. The Project will install structures that will alter the scenic quality and/or existing agricultural character of the landscape. However, as illustrated in the visual simulations, Project visibility and potential visual impact will diminish rapidly at greater distances. For this reason, it is anticipated that the impacts will be localized to a limited number of areas adjacent to the Project. Additionally, these impacts will likely be mitigated to some degree by the presence of seasonal crops in actively farmed fields.

4.2 Mitigation

Hummingbird Solar proposes to plant vegetation along the Project boundary at publically viewable areas to reduce or screen views of constructed PV panels. The conceptual plan developed for this Project is based on the assumption that 100% screening is not necessary and that introduction of native vegetation in clumps and hedgerows will adequately mimic the existing plant materials observed in the vicinity of the Project Area. The visual simulations illustrate how the proposed planting module will minimize potential visual impacts created by the installation of the PV panels. Although the mitigation represented in the visual simulations is conceptual at this time, and planting composition may be adjusted, the design goals and approach will not change. Additional details can be found in the separate landscaping plan for the Project.

5 References

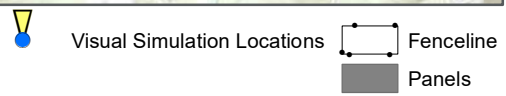
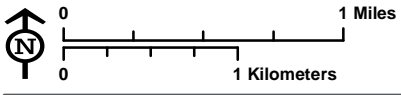
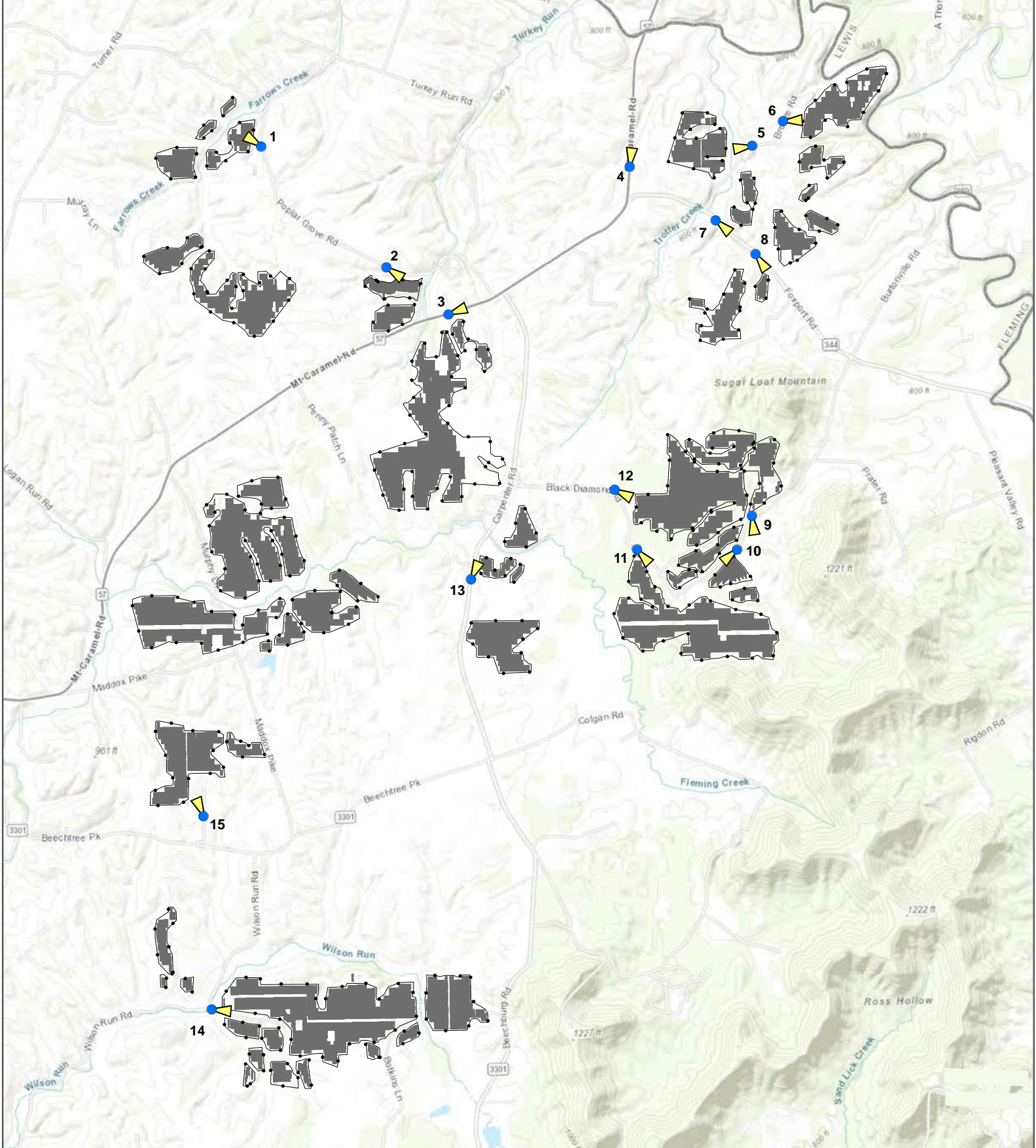
- Multi-Resolution Land Characteristics Consortium (MRLC). 2016. National Land Cover Database. Available at: <https://www.mrlc.gov/data/nlcd-2011-land-cover-conus-0>. Accessed Sep 2022.
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- United States Forest Service (USFS). 2013b. Other Congressionally Designated Areas. Accessed Sep 2022. Available at: <https://www.fs.fed.us/recreation/programs/cda/special-areas.shtml>
- United States Geological Survey (USGS). 2018. National Hydrography Dataset Waterbody data. The National Map. Accessed Sep 2022. Available at: <https://viewer.nationalmap.gov/advanced-viewer/>
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Visual Resource Assessment and
Mitigation Plan
Hummingbird Solar Project

APPENDIX

A

VIEWPOINT LOCATION MAP AND
PHOTOLOG



7.5' Quadrangles:
 Cynthia, KY (1984)
 Shady Nook, KY (1984)
 Shawhan, KY (1984)
 Millersburg, KY (1984)

PLSS: unsectioned

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Appendix A: Viewpoint Photo Locations Map

Visual Resource Assessment for the Hummingbird Solar Project
 Hummingbird Solar, LLC
 Fleming County, Kentucky

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Hummingbird Solar Viewpoint Photolog



Viewpoint 1

Direction Facing

North/Northwest

Location

38.495657, -83.662528

Caption/Description

View from Poplar Grove Road in Fleming County. 328 feet from the nearest proposed PV panel, in the Near-Foreground distance zone.



Viewpoint 2

Direction Facing

East/Southeast

Location

38.485819, -83.650166

Caption/Description

View from Poplar Grove Road in Fleming County. 435 feet from the nearest proposed PV panel, in the Near-Foreground distance zone.



Viewpoint 3

Direction Facing

East/Southeast

Location

38.482002, -83.644056

Caption/Description

View from Mt. Carmel Road in Fleming County. 331 feet from the nearest proposed PV panel, in the Near-Foreground distance zone.

Hummingbird Solar Viewpoint Photolog



Viewpoint 4

Direction Facing

Northeast

Location

38.493309, -83.625459

Caption/Description

View from Mt. Carmel Road in Fleming County. 1,272 feet from the nearest proposed PV panel, in the Near-Foreground distance zone.



Viewpoint 5

Direction Facing

West

Location

38.494750, -83.613015

Caption/Description

View from Breeze Road in Fleming County. 801 feet from the nearest proposed PV panel, in the Near-Foreground distance zone.



Viewpoint 6

Direction Facing

East/Northwest

Location

38.496504, -83.609942

Caption/Description

View from Breese Road in Fleming County. 601 feet from the nearest proposed PV panel, in the Near-Foreground distance zone.

Hummingbird Solar Viewpoint Photolog



Viewpoint 7

Direction Facing

East

Location

38.488943, -83.616864

Caption/Description

View from Foxport Road in Fleming County. 510 feet from the nearest proposed PV panel, in the Near-Foreground distance zone.



Viewpoint 8

Direction Facing

South/Southeast

Location

38.486126, -83.612847

Caption/Description

View from the Foxport Road in Fleming County. 629 feet from the nearest proposed PV panel, in the Near-Foreground distance zone.



Viewpoint 9

Direction Facing

South/Southwest

Location

38.465490, -83.613898

Caption/Description

View from Black Diamond Road in Fleming County. 187 feet from the nearest proposed PV panel, in the Near-Foreground distance zone.

Hummingbird Solar Viewpoint Photolog



Viewpoint 10

Direction Facing

Southwest

Location

38.462637, -83.615874

Caption/Description

View from Black Diamond Road in Fleming County. 186 feet from the nearest proposed PV panel, in the Near-Foreground distance zone.



Viewpoint 11

Direction Facing

Southeast

Location

38.462992, -83.625733

Caption/Description

View from Black Diamond Road in Fleming County. 335 feet from the nearest proposed PV panel, in the Near-Foreground distance zone.



Viewpoint 12

Direction Facing

Southeast

Location

38.467827, -83.627736

Caption/Description

View from Black Diamond Road in Fleming County. 656 feet from the nearest proposed PV panel, in the Near-Foreground distance zone.

Hummingbird Solar Viewpoint Photolog



Viewpoint 13

Direction Facing

North/Northeast

Location

38.460959, -83.642386

Caption/Description

View from Carpenter Road in Fleming County. 408 feet from the nearest proposed PV panel, in the Near-Foreground distance zone.



Viewpoint 14

Direction Facing

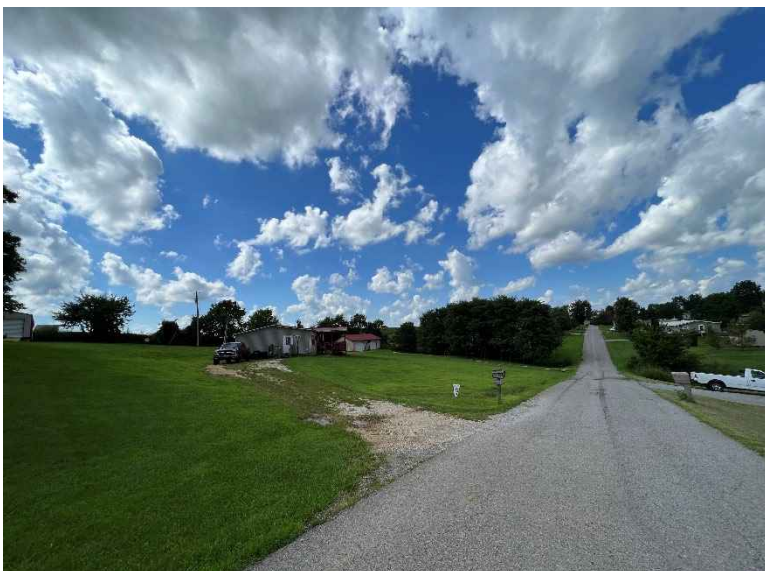
South/Southeast

Location

38.430735, -83.668136

Caption/Description

View from Wilson Run Road in Fleming County. 511 feet from the nearest proposed PV panel, in the Near-Foreground distance zone.



Viewpoint 15

Direction Facing

Northwest

Location

38.443517, -83.669759

Caption/Description

View from Beach Springs Drive in Fleming County. 557 feet from the nearest proposed PV panel, in the Near-Foreground distance zone.

Visual Resource Assessment and
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Hummingbird Solar Project

APPENDIX

B

VISUAL SIMULATIONS

Viewpoint 3 | Mt. Carmel Rd

Viewpoint Information

Viewpoint ID: 3

County: Fleming

City/Town: Unincorporated Territory

Location: Mt. Carmel Road

Coordinates: 38.482002, -83.644056

Direction of View: East/Southeast

Distance to Project: 0.06 mile

Distance Zone: Near-Foreground

Visual Resources

Landscape Type: Farmland

User Group: Resident

Photograph Information

Date Taken: August 8, 2022

Time: 3.10 PM

Camera: iPhone 12 Pro Max

Resolution: 4032 x 3024 pixels

Lens Focal Length: 5 mm

Camera Elevation: 5.6 feet

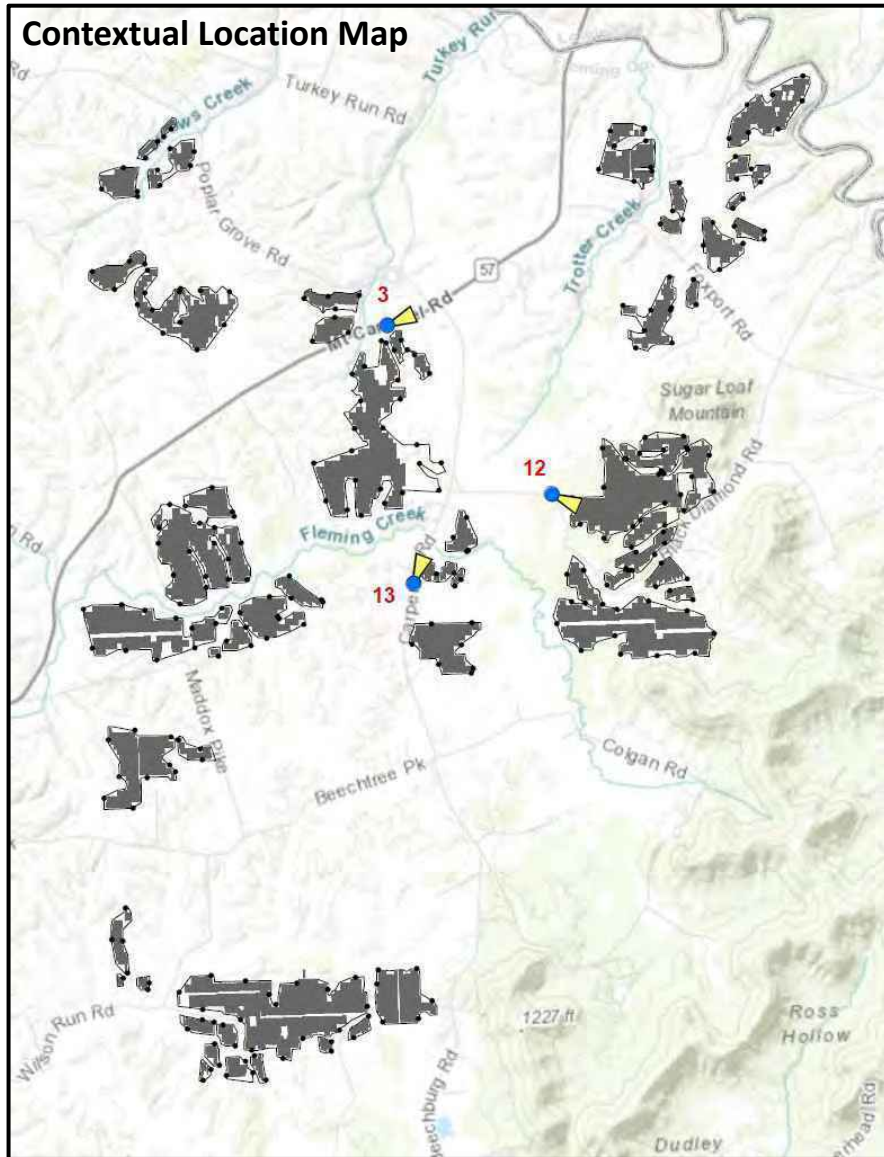
Project Information

Racking Type: Single Axis Tracker

Max Panel Height: 15.0 feet

Total Buildable Area: 1,731 acres

Contextual Location Map



Detailed Location Map



Hummingbird Solar Project

Fleming County, Kentucky

[Visual Resource Assessment](#) | Appendix B, Viewpoint 3 at Mt. Carmel Road – Context Sheet

Sheet 1 of 12

Existing Conditions



Hummingbird Solar Project

Fleming County, Kentucky

[Visual Resource Assessment](#) | Appendix B, Viewpoint 3 at Mt. Carmel Road – Existing Conditions

Sheet 2 of 12

Visual Simulation



Hummingbird Solar Project

Fleming County, Kentucky

Visual Resource Assessment | Appendix B, Viewpoint 3 at Mt. Carmel Road – Visual Simulation

Sheet 3 of 12

Visual Simulation – 7 Year Mitigation



Hummingbird Solar Project

Fleming County, Kentucky

Visual Resource Assessment | Appendix B, Viewpoint 3 at Mt. Carmel Road – Visual Simulation – 5-7 Year Mitigation

Sheet 4 of 12

Viewpoint 12 | Black Diamond Rd

Viewpoint Information

Viewpoint ID: 12

County: Fleming

City/Town: Unincorporated Territory

Location: Black Diamond Rd

Coordinates: 38.467827, -83.627736

Direction of View: Southeast

Distance to Project: 0.12 mile

Distance Zone: Near-Foreground

Visual Resources

Landscape Type: Farmland

User Group: Resident

Photograph Information

Date Taken: August 8, 2022

Time: 3:44 PM

Camera: iPhone 12 Pro Max

Resolution: 4032 x 3024 pixels

Lens Focal Length: 5 mm

Camera Elevation: 5.6 feet

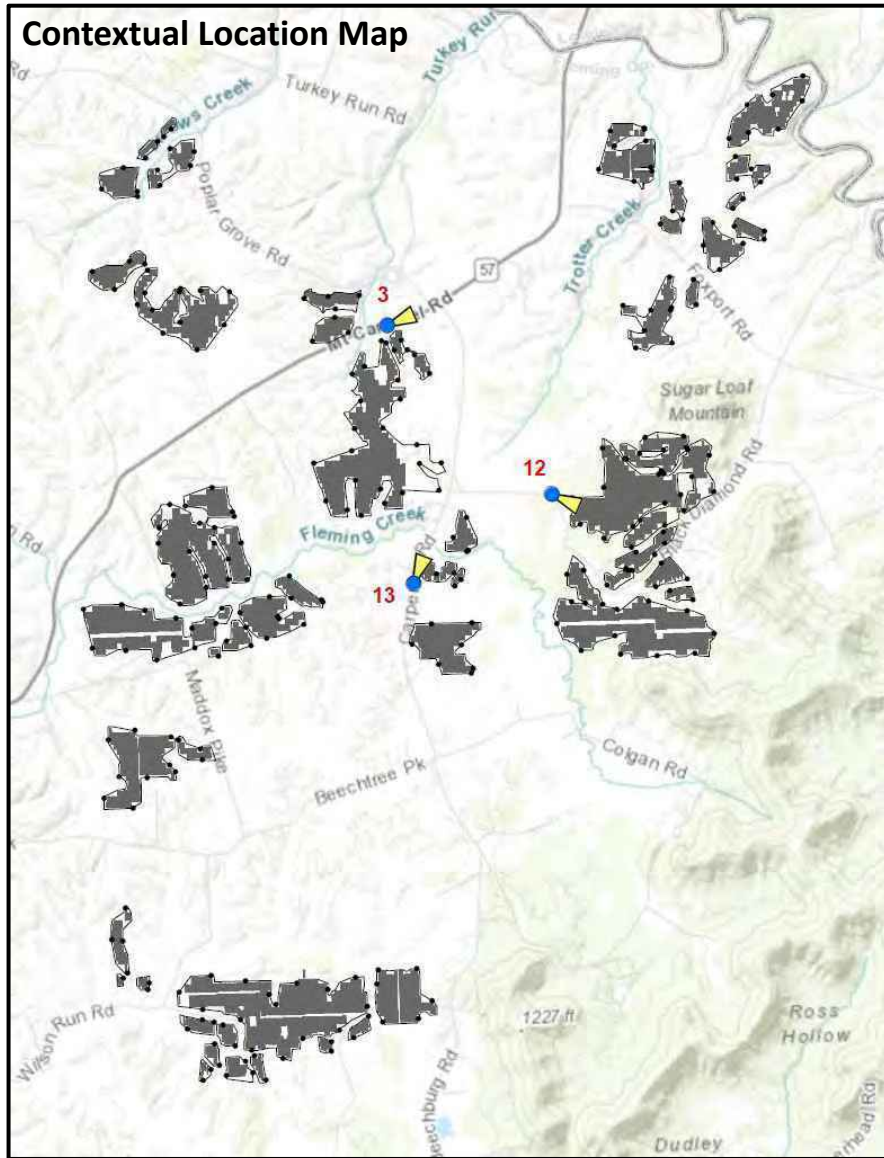
Project Information

Racking Type: Single Axis Tracker

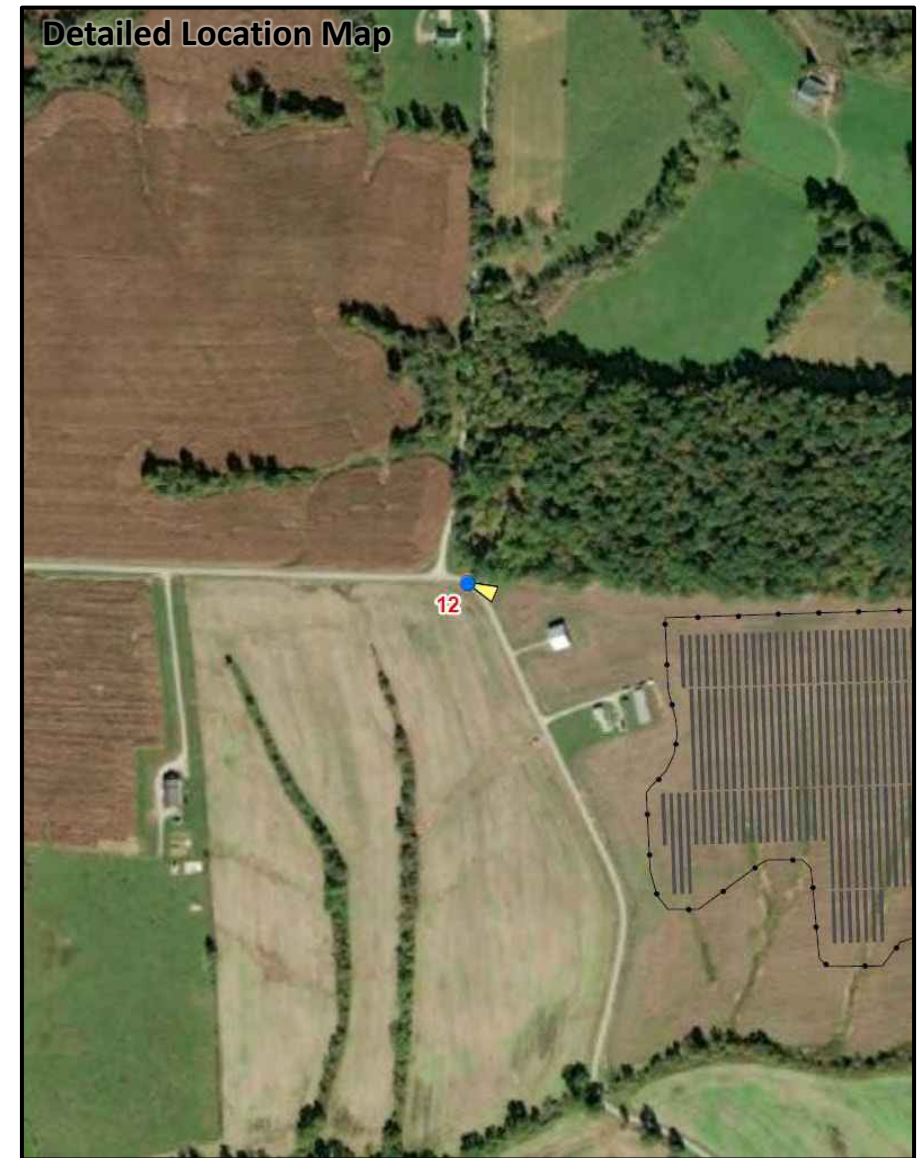
Max Panel Height: 15.0 feet

Total Buildable Area: 1,731 acres

Contextual Location Map



Detailed Location Map



Hummingbird Solar Project

Fleming County, Kentucky

[Visual Resource Assessment](#) | Appendix B, Viewpoint 12 at Black Diamond Road – Context Sheet

Sheet 5 of 12

Existing Conditions



Hummingbird Solar Project

Fleming County, Kentucky

[Visual Resource Assessment](#) | Appendix B, Viewpoint 12 at Black Diamond Road – Existing Conditions

Sheet 6 of 12

Visual Simulation



Hummingbird Solar Project

Fleming County, Kentucky

[Visual Resource Assessment](#) | Appendix B, Viewpoint 12 at Black Diamond Road – Visual Simulation

Sheet 7 of 12

Visual Simulation – 7 Year Mitigation



Hummingbird Solar Project

Fleming County, Kentucky

[Visual Resource Assessment](#) | Appendix B, Viewpoint 12 at Black Diamond Road – Visual Simulation – 5-7 Year Mitigation

Sheet 8 of 12

Viewpoint 13 | Carpenter Rd

Viewpoint Information

Viewpoint ID: 13

County: Fleming

City/Town: Unincorporated Territory

Location: Carpenter Road

Coordinates: 38.460959, -83.642386

Direction of View: North/Northeast

Distance to Project: 0.07 mile

Distance Zone: Near-Foreground

Visual Resources

Landscape Type: Farmland

User Group: Resident

Photograph Information

Date Taken: August 8, 2022

Time: 3:49 PM

Camera: iPhone 12 Pro Max

Resolution: 4032 x 3024 pixels

Lens Focal Length: 5 mm

Camera Elevation: 5.6 feet

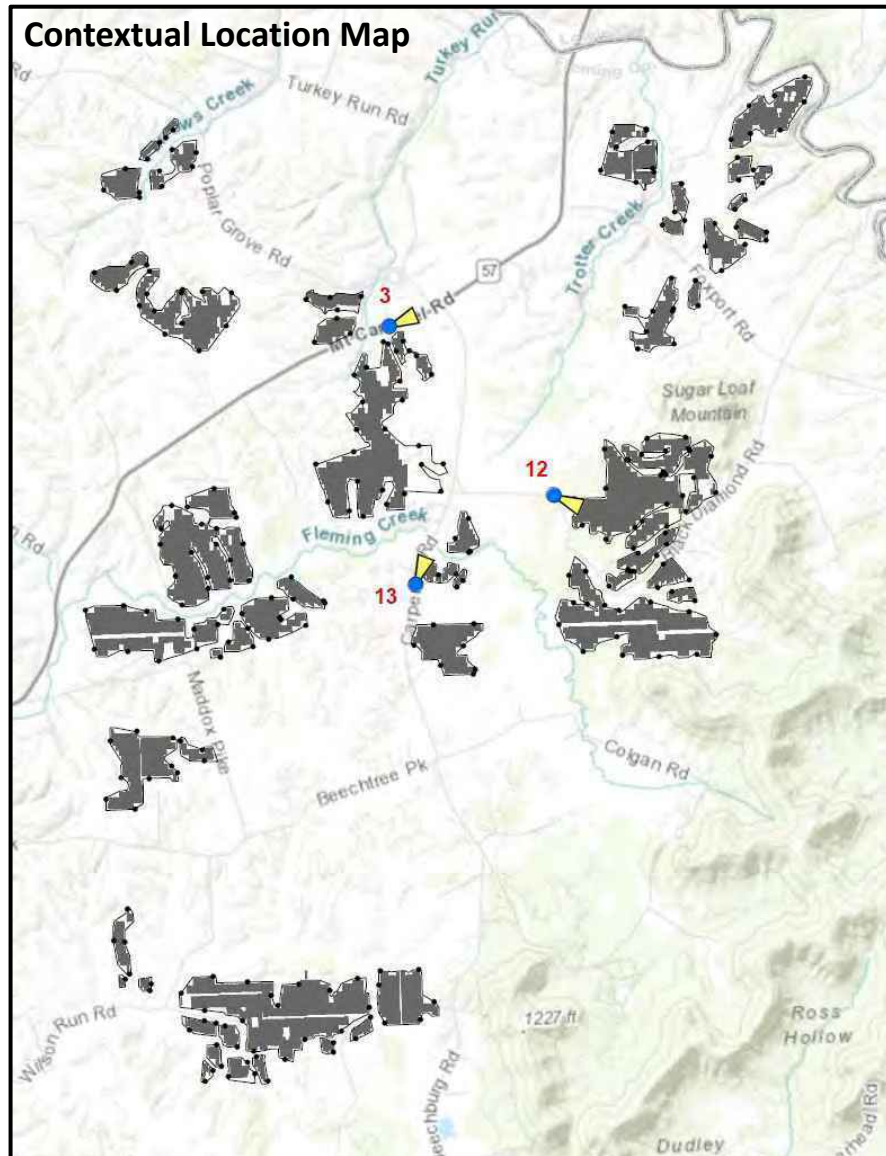
Project Information

Racking Type: Single Axis Tracker

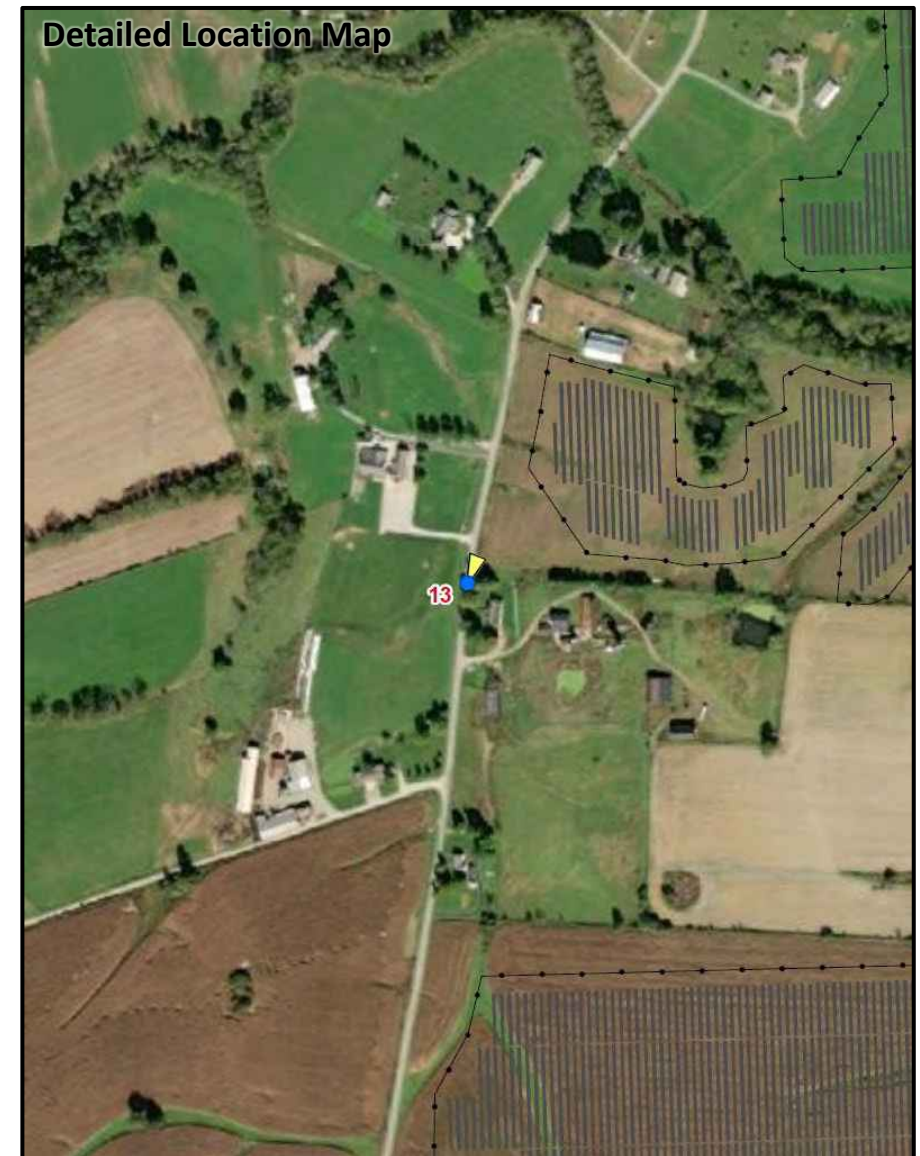
Max Panel Height: 15.0 feet

Total Buildable Area: 1,731 acres

Contextual Location Map



Detailed Location Map



Hummingbird Solar Project

Fleming County, Kentucky

[Visual Resource Assessment](#) | Appendix B, Viewpoint 13 at Carpenter Road – Context Sheet

Sheet 9 of 12

Existing Conditions



Hummingbird Solar Project

Fleming County, Kentucky

Visual Resource Assessment | Appendix B, Viewpoint 13 at Carpenter Road – Existing Conditions

Sheet 10 of 12

Visual Simulation



Hummingbird Solar Project

Fleming County, Kentucky

Visual Resource Assessment | Appendix B, Viewpoint 13 at Carpenter Road – Visual Simulation

Sheet 11 of 12



Hummingbird Solar Project

Fleming County, Kentucky

Visual Resource Assessment | Appendix B, Viewpoint 13 at Carpenter Road – Visual Simulation – 5-7 Year Mitigation

Sheet 12 of 12

Visual Resource Assessment and
Mitigation Plan
Hummingbird Solar Project

APPENDIX

C

VISUALLY SENSITIVE RESOURCE
ANALYSIS

Visually Sensitive Resources	Location	Distance	Project Visibility (Viewshed Results)
	County	Miles from Nearest PV Array	+ Visible - Not Visible +/- Partially Visible
			DSM Viewshed (Topography, Structures, Vegetation)
Properties of Historic Significance			
National Historic Landmarks (NHL)			
None within VSA.			
Sites Listed on National or State Registers of Historic Places (NRHP/SRHP)			
First Presbyterian Church	Fleming	2.96	-
Fleming, Thomas W., House	Fleming	3.56	-
National/State Historic Sites			
None within VSA.			
Historic Bridges			
Goddard Bridge	Fleming	4.61	-
OGS Cemeteries			
Galilee Church Cemetery	Lewis	1.04	+/-
Canaan Church	Lewis	1.11	-
Foxport Cemetery	Fleming	0.27	+
Arnold Cemetery	Fleming	0.57	+
Mount Carmel Cemetery	Fleming	0.21	+
Arnold-Power Cemetery	Lewis	0.78	-
Goddard-Power Cemetery	Fleming	0.63	+/-
Ruggels Cemetery	Lewis	0.47	+/-
Burton Cemetery	Lewis	1.32	-
Miller Cemetery	Fleming	0.55	+/-
Andrews Cemetery	Fleming	4.56	-
Fleming County Cemetery	Fleming	3.27	-
Goddard Cemetery	Fleming	4.65	-
Mineer Cemetery	Lewis	1.88	+/-
Olivet United Methodist Cemetery	Mason	4.42	+
Kentucky Historic State Markers			
None within VSA.			
Designated Scenic Resources			
Rivers Designated as National or State Wild, Scenic or Recreational			
None within VSA.			
Sites, Areas, Lakes, Reservoirs or Highways Designated or Eligible for Designation as Scenic ([ECL Article 49 Title 1] or equivalent)			
None within VSA.			
Scenic Areas of Statewide Significance [Article 42 of Executive Law]			
None within VSA.			
Other Designated Scenic Resources (Easements, Roads, Districts, and Overlooks)			
None within VSA.			
Public Lands and Recreational Resources			
National Parks, Recreation Areas, Seashores, and/or Forests [16U.S.C. 1c]			
None within VSA.			
National Natural Landmarks [36 CFR Part 62]			
None within VSA.			
National Wildlife Refuges [16 U.S.C. 668dd]			
None within VSA.			
Heritage Areas [Parks, Recreation and Historic Preservation Law Section 35.15]			
None within VSA.			
State Parks [Parks, Recreation and Historic Preservation Law Section 3.09]			
None within VSA.			
State Nature and Historic Preserve Areas [Section 4 of Article XIV of the State Constitution]			
None within VSA.			
Wildlife Areas			

Visually Sensitive Resources	Location	Distance	Project Visibility (Viewshed Results)
	County	Miles from Nearest PV Array	+ Visible - Not Visible +/- Partially Visible
			DSM Viewshed (Topography, Structures, Vegetation)
Fleming WMA	Fleming	0.19	-
State Forest			
None within VSA.			
Other State Lands			
None within VSA.			
Designated Trails			
None within VSA.			
Local Parks and Recreation Areas			
Flemingsburg Fleming County Recreation Park	Fleming	3.20	+/-
Fox Valley Lake	Fleming	2.33	-
Flemingsburg City Park (1)	Fleming	2.85	+/-
Flemingsburg City Park (2)	Fleming	3.37	-
Tollesboro Lions Club Park	Lewis	3.93	-
Conservation Lands/Easements			
None within VSA.			
Named Lakes, Ponds, and Reservoirs			
Sycamore Lake	Fleming	2.26	-
Park Lake	Fleming	4.47	-
High-Use Public Areas			
State, US, and Interstate Highways			
State Route 156	Fleming	3.72	-
State Route 11	Fleming, Mason	3.17	-
State Route 32	Fleming	2.23	-
State Route 57	Fleming, Lewis	0.03	+/-
State Route 2504	Fleming	2.98	-
State Route 559	Fleming, Lewis	0.51	+/-
State Route 597	Fleming, Mason	1.58	+/-
State Route 344	Fleming, Lewis	0.04	+/-
State Route 1325	Fleming	4.54	-
State Route 697	Fleming	2.96	-
State Route 1902	Fleming	1.06	-
State Route 3299	Fleming	0.95	+/-
State Route 3301	Fleming	0.09	+/-
State Route 1515	Fleming	4.98	-
State Route 2503	Fleming	3.44	-
State Route 1013	Fleming	3.86	-
State Route 2508	Fleming	3.58	-
State Route 3110	Fleming	4.61	-
State Route 989	Fleming, Lewis	0.43	+/-
State Route 2507	Fleming	2.82	-
State Route 111	Fleming	2.39	-
State Route 2506	Fleming	2.84	-
State Route 1200	Fleming	4.10	+/-
State Route 1237	Lewis, Mason	0.82	+/-
State Route 9	Lewis, Mason	3.73	-
State Route 10	Lewis, Mason	4.20	-
State Route 3310	Lewis	4.47	-
State Route 1234	Mason	1.91	-
State Route 3313	Mason	3.29	-
State Route 1449	Mason	4.86	-

Visually Sensitive Resources	Location	Distance	Project Visibility (Viewshed Results)
	County	Miles from Nearest PV Array	+ Visible - Not Visible +/- Partially Visible
			DSM Viewshed (Topography, Structures, Vegetation)
State Route 324	Mason	4.52	-
Cities, Villages,			
Flemingsburg (City)	Fleming	2.43	+/-
Schools			
Simons Middle School	Fleming	3.39	-
Fleming County High School	Fleming	4.89	-
Flemingsburg Elementary School	Fleming	3.53	-
Fleming County District Office	Fleming	3.41	-
Tollesboro Elementary School	Lewis	4.66	-
Airports			
Fleming Mason Airport	Fleming	4.99	-

Visual Resource Assessment
and Mitigation Plan
Hummingbird Solar Project

APPENDIX

D

GLINT AND GLARE ANALYSIS



Glare Hazard Analysis

Hummingbird Energy LLC
Fleming County, Kentucky

August 18, 2022

Prepared for:

Hummingbird Energy LLC

Prepared by:

Stantec Consulting Services Inc.
98 San Jacinto Blvd, Suite 750
Austin, TX 78701



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HUMMINGBIRD SOLAR PROJECT GLARE HAZARD ANALYSIS

Executive Summary

Stantec Consulting Services, Inc. (Stantec) utilized the web-based ForgeSolar glare hazard analysis program to analyze the potential for glare from the proposed Hummingbird Energy LLC solar project (Project), a 200-megawatt (MW), utility-scale, solar-powered electric generating facility located in Fleming County, Kentucky (**Figure 1**). The Project will include photovoltaic (PV) solar panels mounted on a racking system to maximize solar energy capture and electric generation of the array. The Project area will encompass approximately 3,900 acres in an agricultural area located approximately 3 miles east of the community of Fleming in northeast Kentucky. The ForgeSolar program identifies the three following types of glare (no color indicates no glare predicted):

- GREEN - Low potential for temporary after-image.
- YELLOW - Potential for temporary after-image.
- RED - Potential for permanent eye damage.

Based on the solar array parameters provided and the current site design, glare from the Project is not predicted to impact pilots landing on two runways at one airport, the Fleming Mason Airstrip, located approximately 5 miles northwest of the Project.

The results of the ForgeSolar analysis determined that glare from the Project is not predicted to occur for drivers of vehicles on 12 of 16 road segments analyzed adjacent to the Project, and one of the four roads predicted to see glare appears to be outside the viewshed of the array. The remaining three roads predicted to see green glare in limited areas include Breeze Road, Foxport Road, and Maddox Road. Of the road segments included in the analysis, these roads are expected to see up to 150, 120 and 2 minutes per day of green glare, respectively. It should be noted that vehicles will quickly pass through any areas of green glare, which the Federal Aviation Administration does not consider a problem for pilots and is therefore unlikely to significantly affect drivers. The analysis was completed at two viewing heights for roadways: five feet for cars and small trucks and nine feet for semi-trucks.

Glare is not predicted for 168 of the 172 structures, primarily residences, that were analyzed within proximity to the Project area. The remaining four structures are predicted to see green glare for up to 20-25 minutes per day, mid-day late November to early January. This glare should be considered negligible both due to severity (green category) and length of time predicted.

All routes and structures were analyzed using 1.5-foot and 10-foot panel heights. The analysis was conducted using the 'shade-slope' methodology, which simulates backtracking of panels at night to return panels to the resting positions, and during the daytime to account for operational measures used to avoid shading effects, as well as tilt caused by the topography of the land.

*****It should be noted that a 'resting angle' of 52 degrees was used for the panels in the analysis. If panels are rotated back to a 0-degree position once they reach their maximum rotation, but before sunset, they will be facing up/flat at sunrise and sunset, which results in a high likelihood of glare***

**HUMMINGBIRD SOLAR PROJECT
GLARE HAZARD ANALYSIS**

(see Figure 2 below). Panels should therefore not be returned to a 0-degree position prior to sunset and should be in place at 52 degrees to the east prior to sunrise.

**HUMMINGBIRD SOLAR PROJECT
GLARE HAZARD ANALYSIS**

Abbreviations

AGL	above ground level
deg	degrees (0 is due north, 180 is due south)
DNI	direct normal irradiance
FAA	Federal Aviation Administration
FP	flight path (landing path from threshold to two miles out)
ft	Foot
kW	Kilowatt
kWh	kilowatt hour
m	Meters
mi	Mile
min	Minutes
mrad	Milliradian
MW	Megawatt
MSL	mean sea level
OP	observation point (e.g., control tower, vehicle location)
PV	Photovoltaic
W/m ²	Watts per square meter

**HUMMINGBIRD SOLAR PROJECT
GLARE HAZARD ANALYSIS**

Glossary

Eye Focal Length [meter (m)]	Typical distance between the cornea and the retina of the human eye, default is 0.017, though some sources indicate that the typical length is 0.022.
Glide Slope [degrees (deg)]	Angle at which the plane approaches the runway during landing (default is 3 deg from horizontal).
Maximum Tracking Angle (deg)	Rotation limit of panels in either direction. Full rotation is 2×maximum tracking angle. E.g., maximum tracking angle of 60 deg indicates full panel rotation range of 120 deg.
Resting Angle (deg)	Angle modules return to after maximum angle is reached.
Observation Point	A specific location, such as a control tower or vehicle, from which an observer might experience glare.
Ocular Transmission Coefficient	Related to the ability of the eye to transmit light, set by at 0.5 by ForgeSolar.
Offset angle of module (deg)	Additional tilt/elevation angle between the tracking axis and the panel.
Orientation of Tracking Axis (deg)	Azimuthal position of tracking axis measured clockwise from true north. Tracking systems in the northern hemisphere are typically oriented near 180 deg. Tracking systems in the southern hemisphere are typically oriented near 0 deg.
Peak DNI (W/m ²)**	This value is set at 1,000 by ForgeSolar and is the amount of solar radiation per unit surface area by a surface perpendicular to the sun's rays in a straight line from the direction of the sun at its current position in the sky.
Pupil Diameter (m)	Typical pupil diameter for observer, default is 0.002 m.
PV Array Axis Tracking	Panel tracking mode, if any. Panel can be set to track along one (single) or two (dual) axis tracking. This parameter affects the positioning of the panels at every time step when the sun is up.
PV Array Panel Material	Surface material of panels, including use of anti-reflective coating (ARC). Options include smooth glass without ARC, smooth glass with ARC, light-textured glass without ARC, light-textured glass with ARC, and deeply textured glass.
Rated Power (kilowatts)	Power rating of the solar array - used to estimate the energy output per year of the array (optional).
Slope Error (mrad)	Accounts for beam scatter of sunlight on the array. Default is 8.43 mrad for smooth glass with anti-reflective coating, but the value may be adjusted based on the panel material type.
Subtended Angle of Sun (mrad)	The angle above horizontal at which the viewer observes the sun, default value is 9.3 mrad.
Threshold	The physical beginning of the runway. Aircraft are typically expected to be 50 feet above ground at this point.

**HUMMINGBIRD SOLAR PROJECT
GLARE HAZARD ANALYSIS**

Time Interval (minutes)	Time step intervals used by the program for analyses. Default is set to analyze for glare at every one-minute interval throughout the year.
Time zone	Time zone difference from Greenwich Mean Time at the location of the analysis.
Tilt of Tracking Axis (deg)	The elevation angle of the tracking axis upon which panels rotate (e.g., torque tube), measured from flat ground. 0 deg implies the axis is on level, flat ground. Values between 0 and 30 deg are typical.
Vary Reflectivity	Varies panel reflectivity with sun position at each time step.
Maximum Downward Viewing Angle (deg)	The angle extending downward from the horizon indicating the maximum downward viewing angle from the cockpit. Used to determine whether glare is visible by the pilot along the flight path. Default is 30 degrees.

Sources:

Ho, Clifford, K., Cianan A. Sims, Julius E. Yellowhair. 2015. Solar Glare Hazard Analysis Tool (SGHAT) User's Manual v. 2H. Sandia National Laboratories.

ForgeSolar – PV Planning & Glare Analysis. <https://www.forgesolar.com/>

** <http://www.3tier.com/en/support/solar-prospecting-tools/what-direct-normal-irradiance-solar-prospecting/>

HUMMINGBIRD SOLAR PROJECT GLARE HAZARD ANALYSIS

1.0 INTRODUCTION

On behalf of Hummingbird Solar LLC solar project (Project), Stantec Consulting Services Inc. utilized the web-based ForgeSolar glare hazard analysis program to complete a glare analysis for the Project to determine the potential effect of glint and/or glare (glare) from the photovoltaic (PV) solar panels on pilots and airport operations, residents in the area, and drivers in the vicinity of the Project area. The Project is located approximately 3 miles northeast of the community of Fleming, Fleming County, northeast Kentucky (**Figure 1**).

ForgeSolar is an interactive tool that provides a quantified assessment of (1) when and where glare will occur throughout the year for a prescribed solar project and (2) potential effects on the human eye at locations where glare occurs. Glare can occur from the reflection of sunlight on the PV solar panels of utility-scale solar-powered electric generating facilities. While PV solar panels absorb direct sunlight, some reflection can occur when the panels are directed close to horizontal, which mainly occurs during sunset and sunrise when the incidence angle of the panels is highest, as depicted in **Figure 2** below.

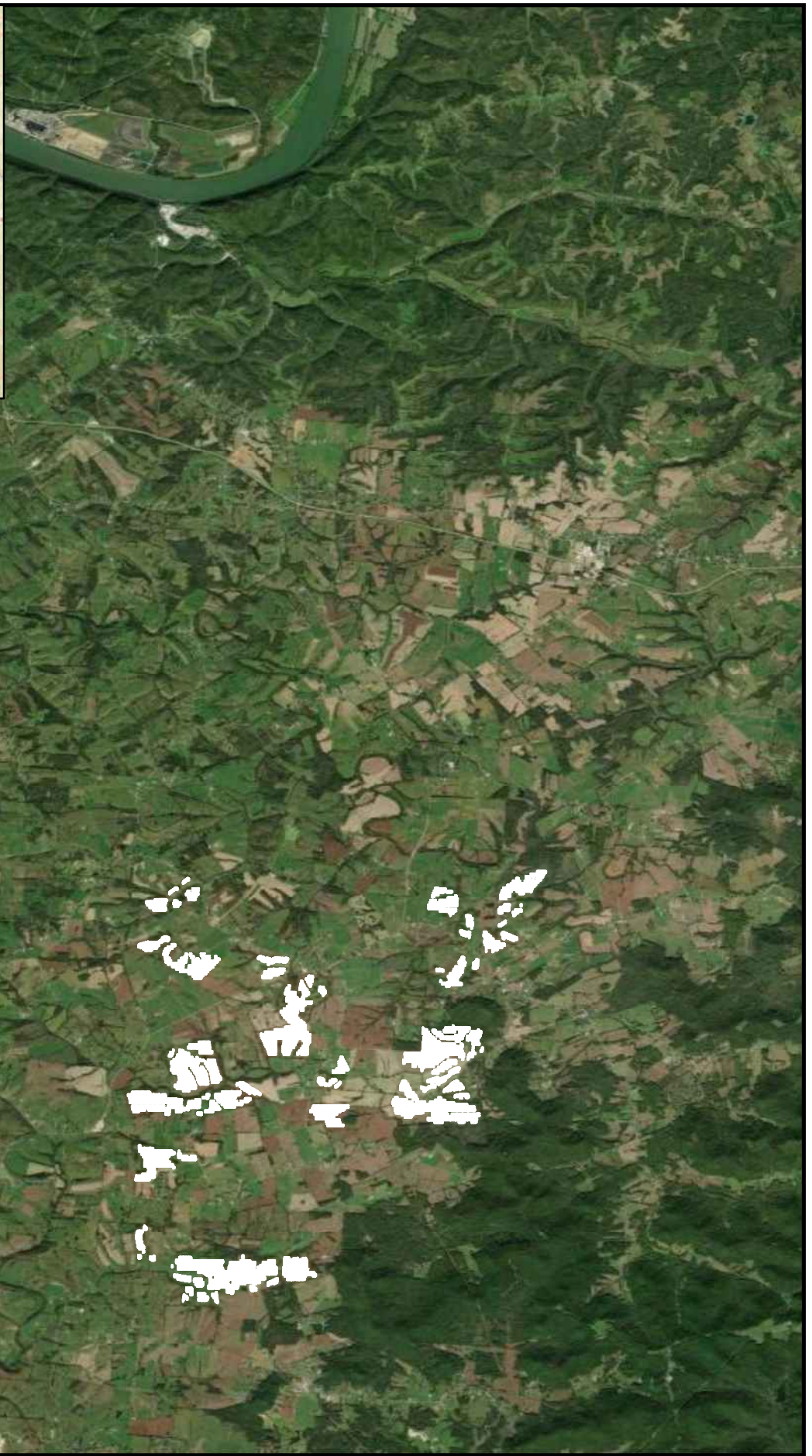
ForgeSolar uses an interactive Google map for site location, mapping the proposed PV array(s) and specifying observer locations, vehicular travel routes, and flight paths. Latitude, longitude, and elevation are automatically recorded through the Google interface, providing necessary information for sun position and vector calculations. Additional information regarding the orientation and tilt of the PV solar panels, reflectance, environment, and ocular factors are entered by the user.

If glare is found, ForgeSolar calculates the retinal irradiance and subtended angle (size/distance) of the glare source to predict potential ocular hazards ranging from temporary after-image to retinal burn. The results are presented in a plot that specifies when glare will occur throughout the year, with color codes indicating the potential ocular hazard.

This study analyzes potential glare for pilots landing on both available approach paths at the Fleming Mason Airstrip (**Figure 1**). Glare analyses were also conducted for drivers of vehicles at five feet (ft) above ground level (AGL) for cars and small trucks and nine feet AGL for semi-truck viewing heights on 16 road segments adjacent to the PV panels (**Figures 3-8**).

The analysis also included potential glare to viewers at 172 unique structures, primarily residences, in the vicinity of the Project using a 16-ft AGL viewing height which is a conservative viewing height for one- and two-story structures (**Figure 4**). The airports, roadways, and structures were analyzed using 1.5-ft and 10-ft AGL panel heights. The arrays used in the analysis program were drawn to be conservative in the glare analysis by analyzing slightly more area than the panels will occupy.



Because the ForgeSolar program only allows up to 20 subarrays to be drawn per analysis block, and due to limitations in the size of subarrays necessary to maintain program accuracy, the analyses for the entire site were conducted across six separate blocks of subarrays as shown in **Figures 3-8** below. ForgeSolar also limits the number of Observation Points (OPs), primarily residences, to 40 per analysis block.



Fleming
Mason
Airport



LEGEND

-  Points of Interest
-  PV Panels

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

Notes:
 1. Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
 2. Source data: Stantec
 3. Imagery: ESRI Imagery, BaseMap 2020

Hummingbird Solar Project

Figure 1: Location Map
August 2022

Stantec Consulting Services Inc.
 777 S. Harbour Island Blvd, Suite 600
 Tampa, FL 33602
 Tel 813.223.9500
 Fax 813.223.0009

0 5,000 10,000 Feet



Prepared by: LS 08/17/22
 Technical Review by: K.K. MM/DD/YY
 Independent Review by: K.K. MM/DD/YY

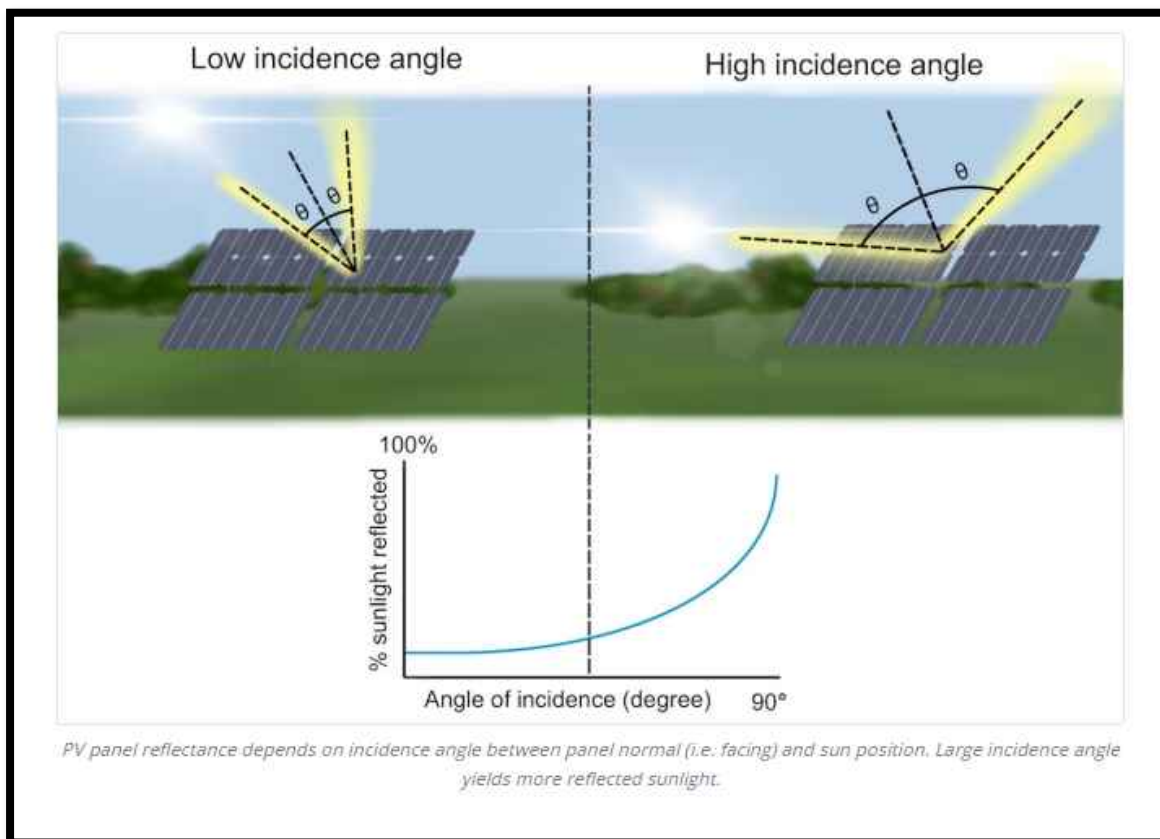


**HUMMINGBIRD SOLAR PROJECT
GLARE HAZARD ANALYSIS**

Table 1: Roads analyzed for each Block

Road Name	Block Analysis Inclusion
Carpenter Road	1,2,2b,4,5
Kilbreath Valley Road	1
Mt Carmel Road Route 57	1,2,2b,3
Poplar Grove Road	1,5
Turner Road	1
Beech Springs Drive	2,2b
Beechtree Pike	2,2b,3
Maddox Road	2,2b
Beechburg Wallingford Road	3
Breeze Road	3,4,5
Foxport Road Route 344	3,4,5
Wallingford Road	3
Wilson Run Road	3
Black Diamond Road	4,5
Route 989	4
Colgan Road	5

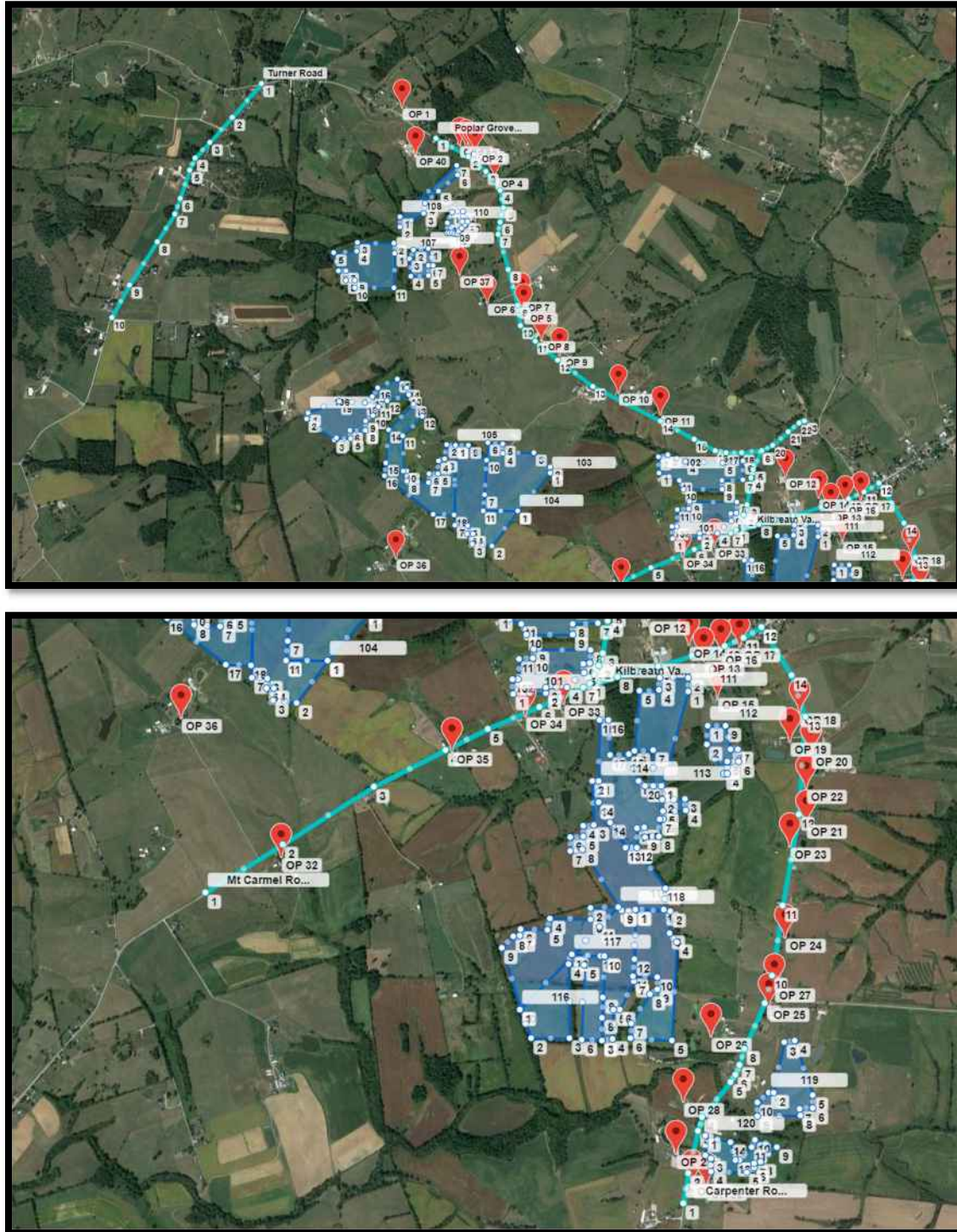
Figure 2. Reflectivity Differences Between Low and High Incidence Angles



Source: ForgeSolar 2022

HUMMINGBIRD SOLAR PROJECT GLARE HAZARD ANALYSIS

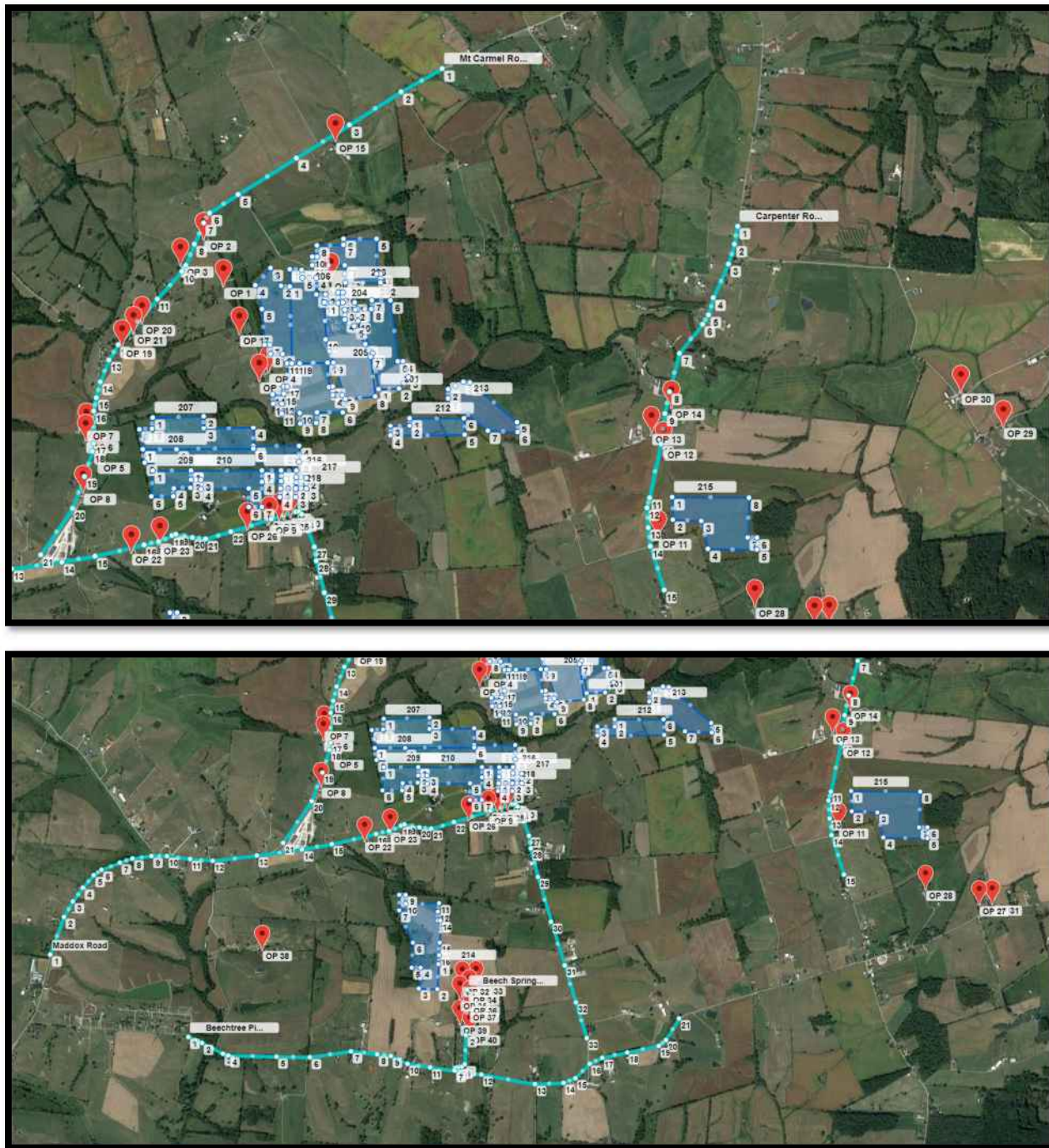
Figure 3: Block 1 Analysis Area, Structures, and Roadways*



*Red markers indicate structures, turquoise lines indicate roads, and blue polygons indicate PV arrays. Source: ForgeSolar, Google Earth Imagery

HUMMINGBIRD SOLAR PROJECT GLARE HAZARD ANALYSIS

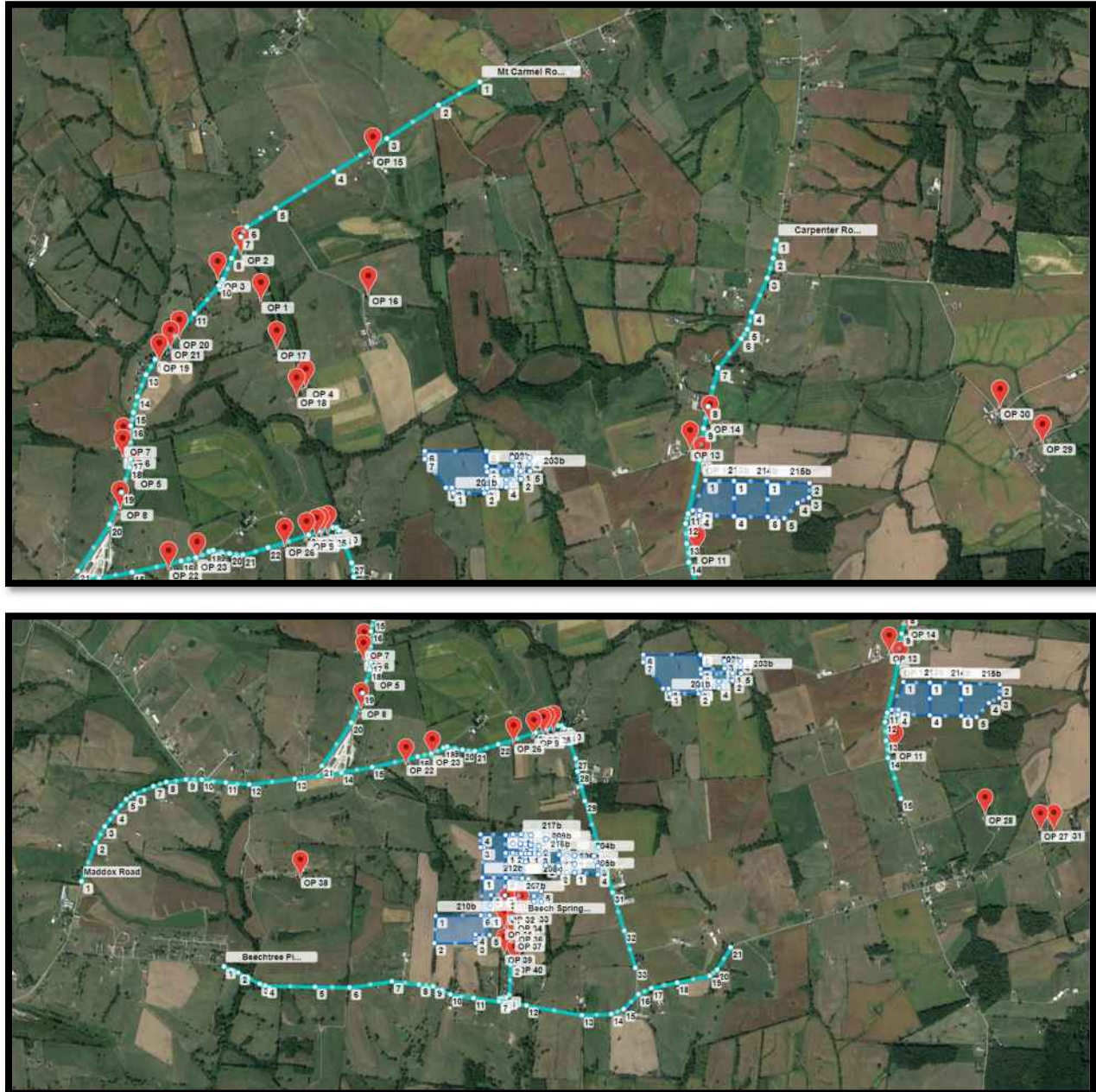
Figure 4: Block 2 Analysis Area, Structures, and Roadways*



*Red markers indicate structures, turquoise lines indicate roads, and blue polygons indicate PV arrays. Source: ForgeSolar, Google Earth Imagery

HUMMINGBIRD SOLAR PROJECT GLARE HAZARD ANALYSIS

Figure 5: Block 2b Analysis Area, Structures, and Roadways*



*Red markers indicate structures, turquoise lines indicate roads, and blue polygons indicate PV arrays. Source: ForgeSolar, Google Earth Imagery

HUMMINGBIRD SOLAR PROJECT GLARE HAZARD ANALYSIS

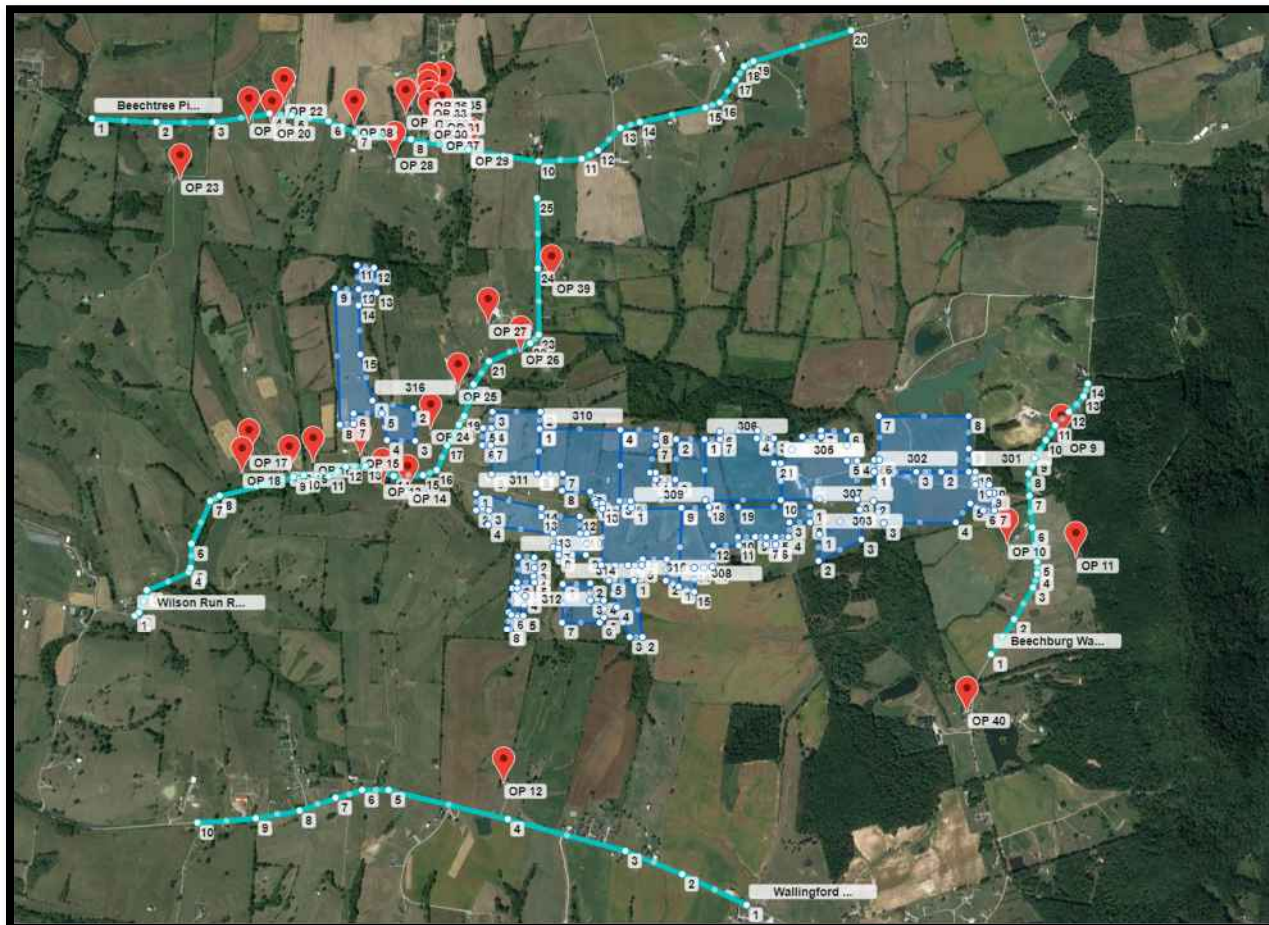
Figure 6a: Block 3 Analysis Area, Structures, and Roadways*



*Red markers indicate structures, turquoise lines indicate roads, and blue polygons indicate PV arrays. Source: ForgeSolar, Google Earth Imagery

HUMMINGBIRD SOLAR PROJECT GLARE HAZARD ANALYSIS

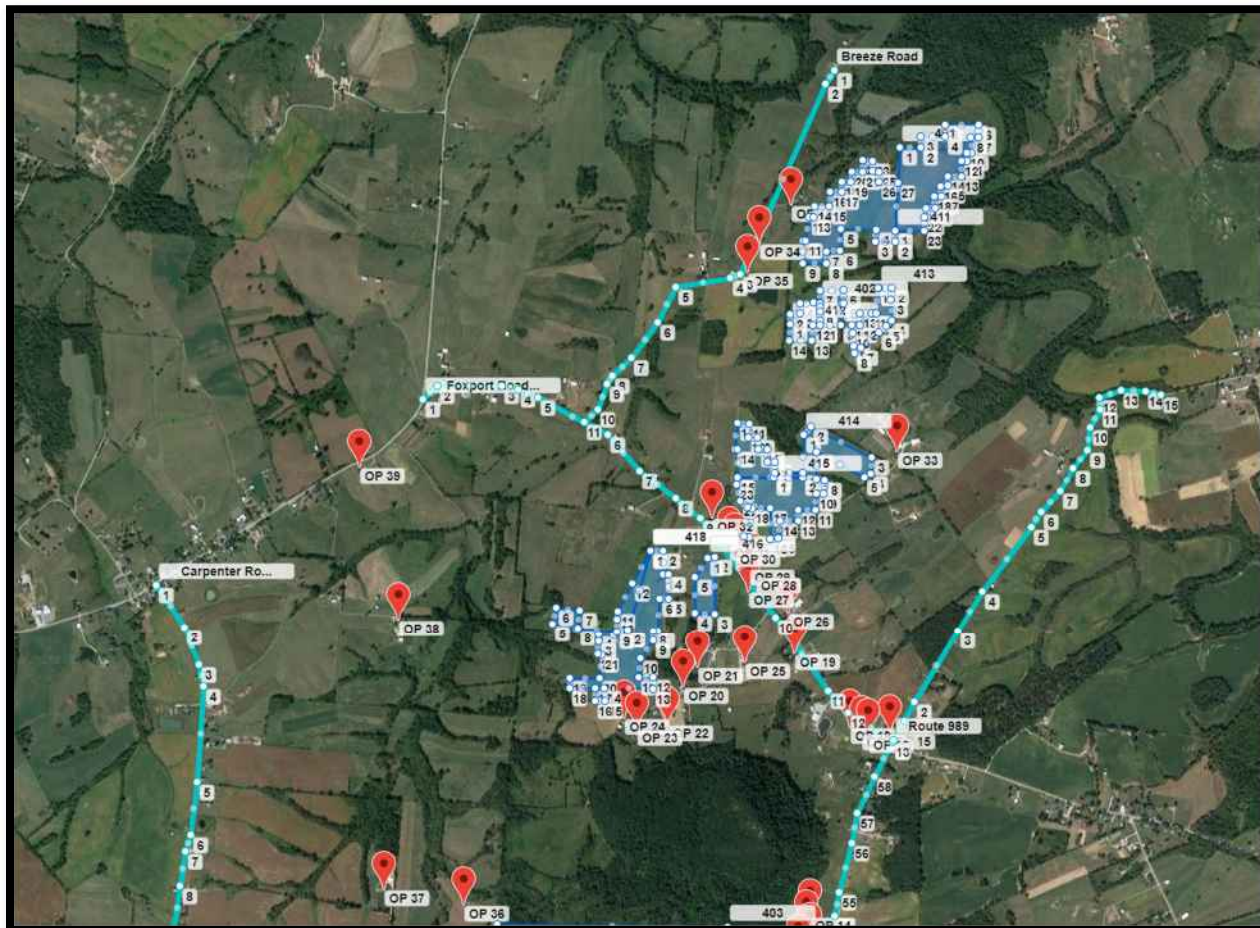
Figure 6b: Block 3 Analysis Area, Structures, and Roadways*



*Red markers indicate structures, turquoise lines indicate roads, and blue polygons indicate PV arrays. Source: ForgeSolar, Google Earth Imagery

HUMMINGBIRD SOLAR PROJECT GLARE HAZARD ANALYSIS

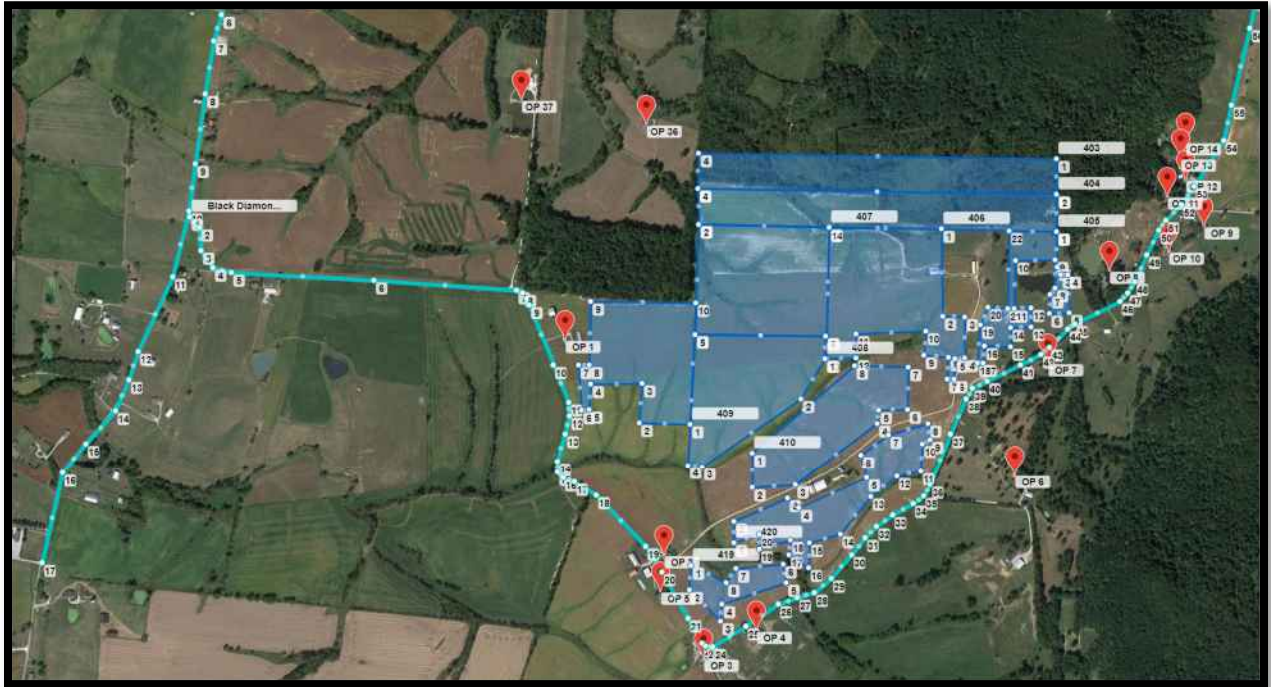
Figure 7a: Block 4 Analysis Area, Structures, and Roadways*



*Red markers indicate structures, turquoise lines indicate roads, and blue polygons indicate PV arrays. Source: ForgeSolar, Google Earth Imagery

HUMMINGBIRD SOLAR PROJECT GLARE HAZARD ANALYSIS

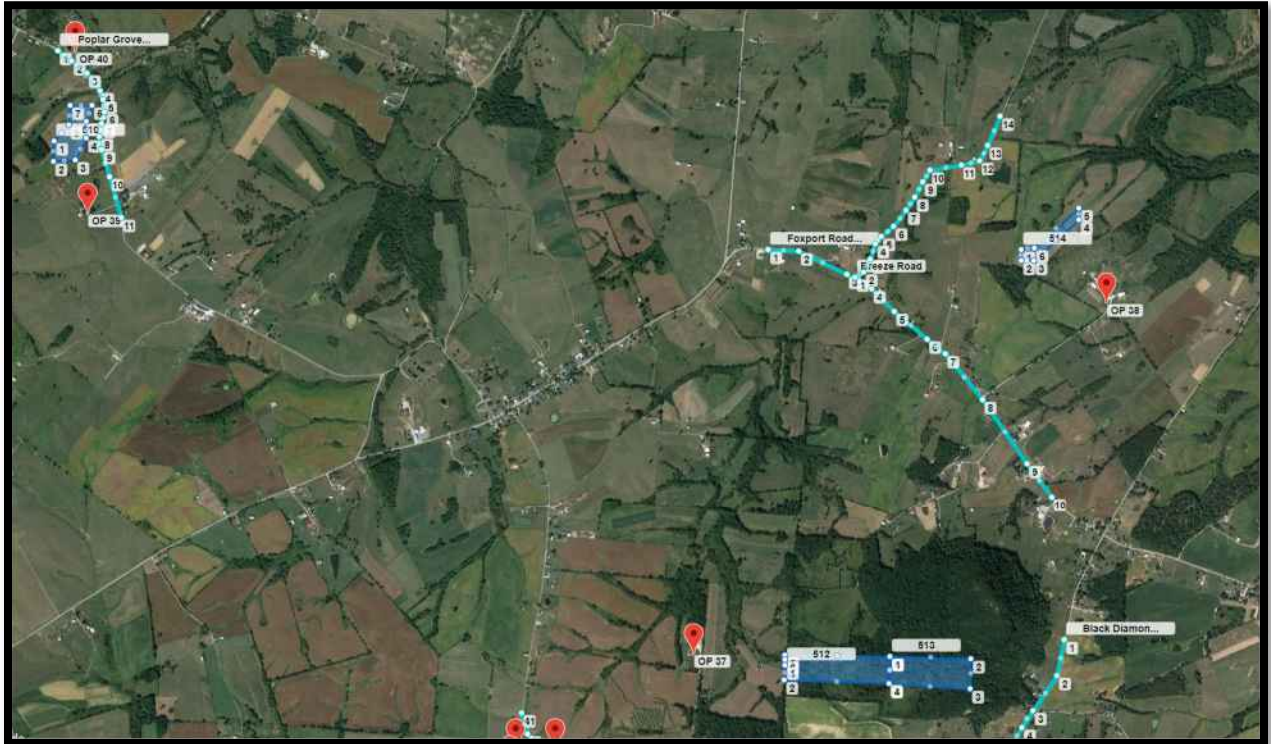
Figure 7b: Block 4 Analysis Area, Structures, and Roadways*



*Red markers indicate structures, turquoise lines indicate roads, and blue polygons indicate PV arrays. Source: ForgeSolar, Google Earth Imagery

HUMMINGBIRD SOLAR PROJECT GLARE HAZARD ANALYSIS

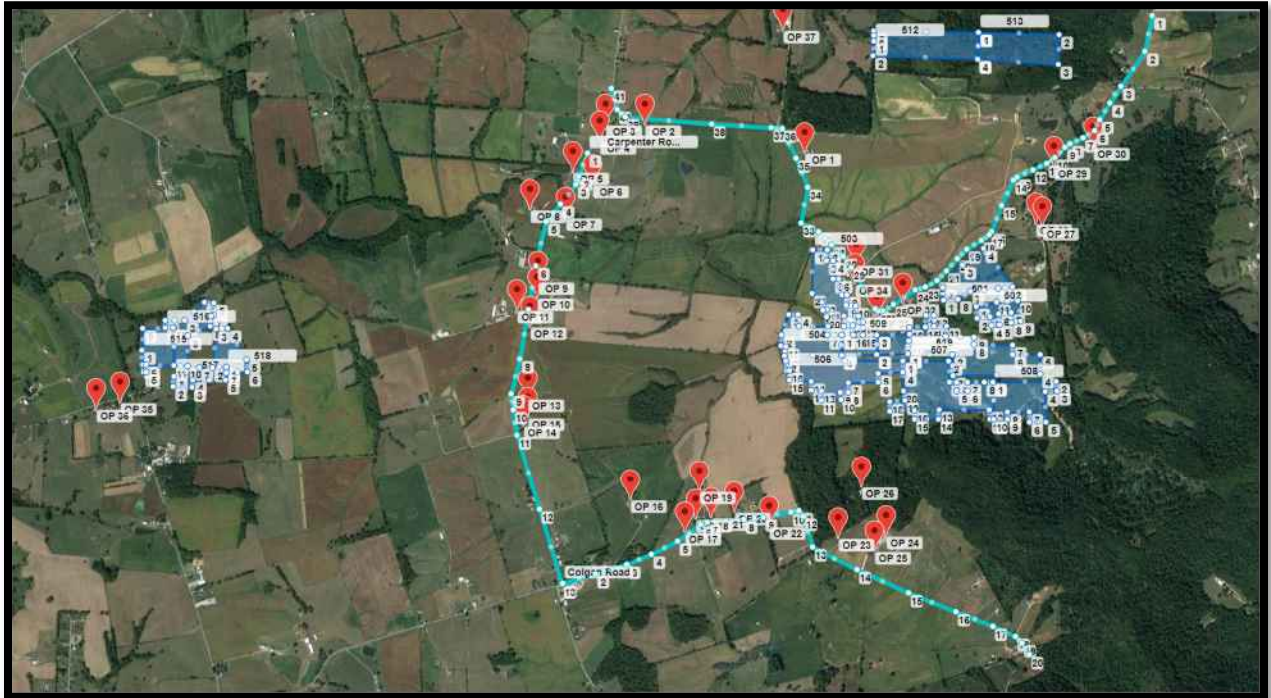
Figure 8a: Block 5 Analysis Area, Structures, and Roadways*



*Red markers indicate structures, turquoise lines indicate roads, and blue polygons indicate PV arrays. Source: ForgeSolar, Google Earth Imagery

HUMMINGBIRD SOLAR PROJECT GLARE HAZARD ANALYSIS

Figure 8b: Block 5 Analysis Area, Structures, and Roadways*



*Red markers indicate structures, turquoise lines indicate roads, and blue polygons indicate PV arrays. Source: ForgeSolar, Google Earth Imagery

2.0 DATA INPUT SUMMARY

The parameters used for the analyses are listed in **Table 2** below. “Default” indicates the default parameter value set by ForgeSolar and is considered the most conservative value for the parameter. “Chosen” parameters were selected to perform the most conservative analysis concerning glare potential. “Provided” parameters are Project specific information provided by the client.

2.1 SOLAR ARRAY

The location of the solar array and array parameters used for the analyses is based on information provided by Hummingbird Solar LLC (**Table 2**). The analyses described below were conducted using 1.5-ft and 10-ft panel heights AGL. A detailed description of each parameter is provided in the Glossary.

Table 2: Solar Panel Parameters Used for Glare Analysis

Parameter	Value Used	Default, Chosen or Provided?
Axis tracking	Single	Provided
Tracking Axis Tilt (deg)	Varies – determined by ForgeSolar	Shade-Slope Analysis Method Used
Tracking Axis Orientation (deg)	180.0	Provided
Tracking Axis Panel Offset (deg)	0.0	Default
Maximum Tracking Angle (deg)	52.0	Provided
Resting Angle (deg)	52.0	Provided
Rated Power (kW)	Not Used	NA
Vary reflectivity?	Yes	Default
Panel material	Lightly Textured Glass with Anti-Reflective Coating	Provided
Time zone offset	-5	Based on site location
Subtended angle of sun (mrad)	9.3	Default
Peak DNI (W/m ²)	1,000	Default
Ocular transmission coefficient	0.5	Default
Pupil diameter (m)	0.002	Default
Eye focal length (m)	0.017	Default
Time interval (min)	1	Default
Correlate slope error with surface type?	Yes	Default
Slope error (mrad)	9.16	Default

2.2 AIRPORT APPROACH PATHS

One airport with two approach paths (runways 7 and 25) was found to be located within the vicinity of the Project, the Fleming Mason Airstrip located approximately five miles northwest of the Project. There is no Air Traffic Control Tower (ATCT) associated with this airport and therefore glare impacts are not predicted for ATCT staff.

2.3 ROADWAYS AND PROPERTIES LOCATED ADJACENT TO THE SOLAR ARRAYS

This analysis included potential glare to vehicles traveling on 16 road segments in the vicinity of the Project area. The ForgeSolar program sets the default viewing angle of the array at 50 degrees from the driver's direct line of sight when looking forward. The Federal Aviation Administration (FAA) has determined that glare beyond 50 degrees from the line of sight will not impact the viewer¹.

Potential glare to drivers was evaluated for both passenger vehicles and semi-trucks, where the passenger vehicles were assumed to have a maximum viewing height of five feet AGL, while the viewing height for drivers of semi-trucks was assumed to be a maximum of nine feet AGL. The locations of the 16 roadway segments are shown as blue-green route lines in **Figures 3-8** and the roadways included in each of the six analysis blocks are identified in **Table 1** above.

Analyses for each array block was run twice, once for 5-ft car heights and once for 9-ft truck heights, and once again for each of the two-panel heights (1.5-ft and 10-ft AGL).

Potential glare to viewers from 172 unique structures in the vicinity of the Project was also analyzed at 16-ft AGL viewing heights. Forty structures were included in each of the six analysis blocks. A total of 172 unique structures were analyzed, with 68 of structures included in more than one block. Structures were primarily residences in the vicinity of the array blocks.

¹ Rogers, J. A., et al. (2015). Evaluation of Glare as a Hazard for General Aviation Pilots on Final Approach, Federal Aviation Administration ([link](#))

3.0 GLARE ANALYSES RESULTS

The web-based ForgeSolar program was used to analyze glare potential in one-minute increments throughout the year. The program identifies the three following types of glare (no color indicates no glare predicted):

- GREEN** - Low potential for temporary after-image.
- YELLOW** - Potential for temporary after-image.
- RED** - Potential for permanent eye damage.

3.1 AIRPORT APPROACH PATHS

Glare is not predicted for pilots approaching either of the airport runways at the Fleming Mason Airstrip depicted in **Figure 1**, at any time of the day, any time throughout the year based on the input parameters described above. Results for airports and all other parameters analyzed are presented in the ForgeSolar reports included in **Appendix A** and the limited predicted glare, or lack thereof, for all analyses are summarized in **Appendix B**.

3.2 ROADWAYS AND PROPERTIES LOCATED ADJACENT TO THE SOLAR ARRAYS

Glare is predicted for drivers along 4 of the 16 road segments analyzed that are adjacent to the Project area. Of these four, only one (Poplar Grove Road) was predicted to see yellow glare and that portion of the roadway does not appear to be visible from the PV array based on a viewshed analysis conducted separately from this report, and therefore the yellow glare to Poplar Grove Road should be disregarded. The amount of yellow glare predicted for this road segment not visible to the array was also only predicted for about 4 minutes per day in late December at one short point along the road. This predicted glare is therefore not considered a problem.

Green glare, which is not considered problematic for pilots according to the FAA², is predicted to be seen from portions of Breeze, Foxport, and Maddox Road. However, it should be noted that not all of the segments analyzed are predicted to be seen from the array based on the viewshed analysis. Therefore, while these roads are expected to see up to 150, 120 and 2 minutes per day of green glare, respectively, it should be noted that vehicles will quickly pass through any areas of green glare and is therefore this predicted glare is unlikely to significantly affect drivers. Yellow glare was predicted for Poplar Grove Road as well, for approximately 2 minutes per day in December; however, this stretch of road is not visible to the PV array based on a viewshed analysis.

The potential for glare for a range of driver conditions was evaluated for viewing heights of five feet for cars and small trucks and nine feet for semi-trucks.

² Federal Aviation Administration Policy: Review of Solar Energy System Projects on Federally-Obligated Airports. May 11, 2021.

HUMMINGBIRD SOLAR PROJECT GLARE HAZARD ANALYSIS

Glare is also not predicted for 168 of 172 unique structures analyzed at 16-ft viewing heights, as shown in **Figures 3-8**. Of the four structures predicted to see green glare, all four are also predicted to be visible to the PV array and therefore these four homes may experience green glare for up to 20-25 minutes per day, mid-day from late November to early January. This glare should be considered negligible both due to severity (green category) and length of time predicted.

4.0 CONCLUSIONS

Based on the solar array parameters provided and the current site design, glare from the Project is not predicted to impact pilots landing on two runways at one airport, the Fleming Mason Airstrip, located approximately 5 miles northwest of the Project.

The results of the ForgeSolar analysis determined that glare from the Project is not predicted to occur for drivers of vehicles on 12 of 16 road segments analyzed adjacent to the Project, and one of the four roads predicted to see glare appears to be outside the viewshed of the array. The remaining three roads predicted to see green glare in limited areas include Breeze Road, Foxport Road, and Maddox Road. Of the road segments included in the analysis, these roads are expected to see up to 150, 120 and 2 minutes per day of green glare, respectively. It should be noted that vehicles will quickly pass through any areas of green glare, which the Federal Aviation Administration does not consider a problem for pilots and is therefore unlikely to significantly affect drivers. The analysis was completed at two viewing heights for roadways: five feet for cars and small trucks and nine feet for semi-trucks.

Glare is not predicted for 168 of the 172 structures, primarily residences, that were analyzed within proximity to the Project area. The remaining four structures are predicted to see green glare for up to 20-25 minutes per day, mid-day from late November to early January. This glare should be considered negligible both due to severity (green category) and length of time predicted.

All routes and structures were analyzed using 1.5-foot and 10-foot panel heights. The analysis was conducted using the 'shade-slope' methodology, which simulates backtracking of panels at night to return panels to the resting positions, and during the daytime to account for operational measures used to avoid shading effects, as well as tilt caused by the topography of the land.

Overall, the minimal glare findings from the analyses, as detailed in **Appendix B**, should be considered negligible in terms of being bothersome or causing problems for the surrounding community.

*****It should be noted that a 'resting angle' of 52 degrees was used for the panels in the analysis. If panels are rotated back to a 0-degree position once they reach their maximum rotation, but before sunset, they will be facing up/flat at sunrise and sunset, which results in a high likelihood of glare (see Figure 2 above). Panels should therefore not be returned to a 0-degree position prior to sunset and should be in place at 52 degrees to the east prior to sunrise.***

APPENDIX A

ForgeSolar Reports



Hummingbird

Block 1 5ft veh 1_5ft pan 52rest

Created June 21, 2022
Updated Aug. 15, 2022
Time-step 1 minute
Timezone offset UTC-5
Site ID 71084.12548

Project type Advanced
Project status: active
Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
Ocular transmission coefficient: 0.5
Pupil diameter: 0.002 m
Eye focal length: 0.017 m
Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results No glare predicted!

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
101	SA tracking	SA tracking	0	0	-
102	SA tracking	SA tracking	0	0	-
103	SA tracking	SA tracking	0	0	-
104	SA tracking	SA tracking	0	0	-
105	SA tracking	SA tracking	0	0	-
106	SA tracking	SA tracking	0	0	-
107	SA tracking	SA tracking	0	0	-
108	SA tracking	SA tracking	0	0	-
109	SA tracking	SA tracking	0	0	-
110	SA tracking	SA tracking	0	0	-
111	SA tracking	SA tracking	0	0	-
112	SA tracking	SA tracking	0	0	-
113	SA tracking	SA tracking	0	0	-
114	SA tracking	SA tracking	0	0	-
115	SA tracking	SA tracking	0	0	-
116	SA tracking	SA tracking	0	0	-
117	SA tracking	SA tracking	0	0	-
118	SA tracking	SA tracking	0	0	-
119	SA tracking	SA tracking	0	0	-
120	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 323.4 acres

Name: 101

Footprint area: 13.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.480913	-83.651590	893.09	1.50	894.59
2	38.480950	-83.649868	890.70	1.50	892.20
3	38.481160	-83.649865	890.63	1.50	892.13
4	38.481188	-83.648729	880.49	1.50	881.99
5	38.481796	-83.647858	862.16	1.50	863.66
6	38.482154	-83.647871	867.45	1.50	868.95
7	38.482168	-83.647529	863.09	1.50	864.59
8	38.482708	-83.647486	855.91	1.50	857.41
9	38.482757	-83.650501	878.96	1.50	880.46
10	38.482385	-83.650541	888.64	1.50	890.14
11	38.482359	-83.651264	891.06	1.50	892.56
12	38.481520	-83.651304	897.96	1.50	899.46
13	38.481506	-83.651608	898.06	1.50	899.56

Name: 102

Footprint area: 14.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484165	-83.652448	897.55	1.50	899.05
2	38.484955	-83.652480	865.51	1.50	867.01
3	38.485072	-83.651880	859.26	1.50	860.76
4	38.484728	-83.650774	857.31	1.50	858.81
5	38.484652	-83.648393	850.03	1.50	851.53
6	38.484778	-83.647105	838.32	1.50	839.82
7	38.483812	-83.647094	856.38	1.50	857.88
8	38.483787	-83.648436	875.80	1.50	877.30
9	38.483367	-83.648436	858.12	1.50	859.62
10	38.483359	-83.650882	881.09	1.50	882.59
11	38.483796	-83.651139	887.81	1.50	889.31

Name: 103

Footprint area: 24.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484165	-83.659336	929.11	1.50	930.61
2	38.484467	-83.659325	932.59	1.50	934.09
3	38.485173	-83.660366	924.24	1.50	925.74
4	38.485148	-83.662329	925.16	1.50	926.66
5	38.485614	-83.662335	923.15	1.50	924.65
6	38.485662	-83.663282	909.00	1.50	910.50
7	38.483100	-83.663518	934.16	1.50	935.66
8	38.482302	-83.663583	939.58	1.50	941.08
9	38.482280	-83.661374	936.67	1.50	938.17

Name: 104

Footprint area: 24.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.482286	-83.661389	936.91	1.50	938.41
2	38.480539	-83.663052	925.27	1.50	926.77
3	38.480640	-83.664275	936.38	1.50	937.88
4	38.481127	-83.664253	938.82	1.50	940.32
5	38.481127	-83.664607	937.04	1.50	938.54
6	38.481539	-83.664565	935.04	1.50	936.54
7	38.481589	-83.665412	933.16	1.50	934.66
8	38.485553	-83.665369	884.63	1.50	886.13
9	38.485553	-83.664554	899.24	1.50	900.74
10	38.484806	-83.663363	907.80	1.50	909.30
11	38.482286	-83.663588	939.72	1.50	941.22

Name: 105

Footprint area: 24.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.485553	-83.665369	884.63	1.50	886.13
2	38.485562	-83.665906	889.75	1.50	891.26
3	38.484884	-83.666057	907.33	1.50	908.83
4	38.484777	-83.666422	902.67	1.50	904.17
5	38.484128	-83.666488	917.53	1.50	919.03
6	38.484138	-83.667005	914.93	1.50	916.43
7	38.483706	-83.667064	932.54	1.50	934.04
8	38.483764	-83.668459	919.16	1.50	920.66
9	38.484260	-83.668427	922.45	1.50	923.95
10	38.484277	-83.668663	926.96	1.50	928.46
11	38.486005	-83.668687	911.69	1.50	913.19
12	38.486977	-83.667445	888.68	1.50	890.18
13	38.487594	-83.668008	874.78	1.50	876.28
14	38.486326	-83.669580	889.93	1.50	891.43
15	38.484671	-83.669779	928.11	1.50	929.61
16	38.484025	-83.669854	935.93	1.50	937.43
17	38.482110	-83.666764	926.70	1.50	928.20
18	38.482093	-83.665434	920.44	1.50	921.94

Name: 106

Footprint area: 17.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.487153	-83.674721	929.75	1.50	931.25
2	38.486838	-83.674791	931.53	1.50	933.03
3	38.485796	-83.673042	922.75	1.50	924.25
4	38.485897	-83.672886	921.63	1.50	923.13
5	38.485885	-83.672017	908.84	1.50	910.34
6	38.486275	-83.672049	919.57	1.50	921.07
7	38.486288	-83.671164	899.99	1.50	901.49
8	38.486288	-83.671057	897.72	1.50	899.22
9	38.486741	-83.671078	910.47	1.50	911.97
10	38.487027	-83.670596	906.85	1.50	908.35
11	38.487458	-83.670246	908.94	1.50	910.44
12	38.487747	-83.669702	901.69	1.50	903.19
13	38.488072	-83.668316	861.94	1.50	863.44
14	38.488398	-83.668428	865.04	1.50	866.54
15	38.488833	-83.669043	882.64	1.50	884.14
16	38.488400	-83.670299	890.23	1.50	891.73
17	38.487950	-83.670622	906.91	1.50	908.41
18	38.487661	-83.671100	910.28	1.50	911.78
19	38.487732	-83.672725	911.28	1.50	912.78

Name: 107

Footprint area: 16.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.495087	-83.669204	849.95	1.50	851.45
2	38.495583	-83.669237	854.78	1.50	856.28
3	38.495604	-83.671592	894.40	1.50	895.90
4	38.495171	-83.671610	883.99	1.50	885.49
5	38.495126	-83.673061	892.96	1.50	894.46
6	38.494223	-83.672785	875.58	1.50	877.08
7	38.494197	-83.672288	887.21	1.50	888.71
8	38.493750	-83.672288	876.67	1.50	878.17
9	38.493755	-83.671760	878.03	1.50	879.53
10	38.493361	-83.671759	864.15	1.50	865.65
11	38.493372	-83.669243	838.22	1.50	839.72

Name: 108

Footprint area: 4.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.496884	-83.668862	869.51	1.50	871.01
2	38.496376	-83.668873	836.47	1.50	837.97
3	38.497060	-83.667371	843.68	1.50	845.18
4	38.497574	-83.667296	845.13	1.50	846.63
5	38.498163	-83.666416	839.34	1.50	840.84
6	38.498964	-83.665225	851.88	1.50	853.38
7	38.499457	-83.665257	866.99	1.50	868.49

Name: 109

Footprint area: 3.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.495314	-83.667076	863.09	1.50	864.59
2	38.495259	-83.668025	824.34	1.50	825.84
3	38.494797	-83.668267	825.49	1.50	826.99
4	38.493945	-83.668175	848.61	1.50	850.11
5	38.493966	-83.667081	892.98	1.50	894.48
6	38.494468	-83.667084	887.59	1.50	889.09
7	38.494479	-83.666747	898.48	1.50	899.98

Name: 110

Footprint area: 2.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.496598	-83.665864	845.54	1.50	847.04
2	38.496090	-83.665853	874.69	1.50	876.19
3	38.496094	-83.665746	877.64	1.50	879.14
4	38.496073	-83.665580	884.11	1.50	885.61
5	38.496056	-83.665392	889.74	1.50	891.24
6	38.496061	-83.665220	892.95	1.50	894.45
7	38.496174	-83.665124	892.66	1.50	894.16
8	38.496315	-83.664960	891.50	1.50	893.00
9	38.496486	-83.664750	890.03	1.50	891.53
10	38.496664	-83.664572	888.17	1.50	889.67
11	38.496658	-83.664904	883.17	1.50	884.67
12	38.497170	-83.664891	862.43	1.50	863.93
13	38.497127	-83.665576	833.73	1.50	835.23

Name: 111

Footprint area: 17.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.480996	-83.642359	864.19	1.50	865.69
2	38.481576	-83.642359	869.84	1.50	871.34
3	38.481584	-83.643872	886.03	1.50	887.53
4	38.481064	-83.643891	881.21	1.50	882.71
5	38.481047	-83.644918	885.09	1.50	886.59
6	38.478544	-83.645183	886.14	1.50	887.64
7	38.478582	-83.644195	891.37	1.50	892.87
8	38.477110	-83.644210	896.33	1.50	897.83
9	38.477130	-83.643735	891.87	1.50	893.37

Name: 112

Footprint area: 4.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.479597	-83.641334	881.74	1.50	883.24
2	38.478816	-83.641382	891.26	1.50	892.76
3	38.477615	-83.640481	876.91	1.50	878.41
4	38.477623	-83.640282	875.15	1.50	876.65
5	38.478114	-83.640277	866.09	1.50	867.59
6	38.478127	-83.639697	862.40	1.50	863.90
7	38.478618	-83.639719	862.68	1.50	864.18
8	38.478618	-83.640105	868.23	1.50	869.73
9	38.479605	-83.640363	879.51	1.50	881.01

Name: 113

Footprint area: 23.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477123	-83.643748	891.90	1.50	893.40
2	38.476523	-83.643715	896.81	1.50	898.31
3	38.476586	-83.642541	891.45	1.50	892.95
4	38.476107	-83.642476	879.84	1.50	881.34
5	38.476057	-83.643662	890.80	1.50	892.30
6	38.475729	-83.643662	889.33	1.50	890.83
7	38.475729	-83.643847	892.15	1.50	893.65
8	38.475032	-83.643903	885.85	1.50	887.35
9	38.474992	-83.644603	888.66	1.50	890.16
10	38.475397	-83.644649	893.35	1.50	894.85
11	38.475362	-83.645040	895.58	1.50	897.08
12	38.474600	-83.645038	892.94	1.50	894.44
13	38.474585	-83.645610	897.32	1.50	898.82
14	38.476402	-83.647095	898.25	1.50	899.75
15	38.479822	-83.647045	843.54	1.50	845.04
16	38.479827	-83.646569	847.32	1.50	848.82
17	38.478382	-83.646455	873.86	1.50	875.36
18	38.478421	-83.645503	890.21	1.50	891.71
19	38.477301	-83.644975	896.02	1.50	897.52
20	38.477113	-83.644628	901.23	1.50	902.73

Name: 114

Footprint area: 24.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477322	-83.647063	894.77	1.50	896.27
2	38.477322	-83.647406	891.16	1.50	892.66
3	38.475491	-83.647320	892.88	1.50	894.38
4	38.475457	-83.647878	891.68	1.50	893.18
5	38.475020	-83.647878	891.85	1.50	893.35
6	38.474987	-83.648586	876.73	1.50	878.23
7	38.474432	-83.648586	885.45	1.50	886.95
8	38.474483	-83.647921	886.88	1.50	888.38
9	38.471997	-83.645926	898.67	1.50	900.17
10	38.471997	-83.643630	898.82	1.50	900.32
11	38.472870	-83.643565	893.92	1.50	895.42
12	38.474550	-83.645067	893.20	1.50	894.70
13	38.474550	-83.645668	897.41	1.50	898.91
14	38.475608	-83.646473	898.94	1.50	900.44
15	38.476431	-83.647068	898.61	1.50	900.11

Name: 115

Footprint area: 23.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.472125	-83.646036	898.33	1.50	899.83
2	38.472075	-83.647496	892.74	1.50	894.24
3	38.471604	-83.647517	895.42	1.50	896.92
4	38.471638	-83.649652	895.60	1.50	897.10
5	38.471176	-83.649770	894.98	1.50	896.48
6	38.471201	-83.651186	906.22	1.50	907.72
7	38.470915	-83.651229	903.12	1.50	904.62
8	38.470899	-83.651573	900.03	1.50	901.53
9	38.470411	-83.652163	882.22	1.50	883.72
10	38.467858	-83.651202	889.74	1.50	891.25

Name: 116

Footprint area: 22.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.467858	-83.651218	889.83	1.50	891.33
2	38.466698	-83.650628	862.67	1.50	864.17
3	38.466682	-83.648611	854.59	1.50	856.09
4	38.469756	-83.648644	872.94	1.50	874.44
5	38.469731	-83.647860	877.41	1.50	878.91
6	38.466640	-83.647957	850.70	1.50	852.20
7	38.466614	-83.646884	854.49	1.50	855.99
8	38.467547	-83.646884	884.26	1.50	885.76
9	38.468370	-83.646852	894.93	1.50	896.43
10	38.470059	-83.646745	900.75	1.50	902.25
11	38.470084	-83.647002	898.24	1.50	899.74
12	38.470126	-83.648461	874.11	1.50	875.61

Name: 117

Footprint area: 18.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.470139	-83.648467	874.49	1.50	875.99
2	38.470072	-83.646761	900.59	1.50	902.09
3	38.466594	-83.646890	854.26	1.50	855.76
4	38.466670	-83.646332	850.17	1.50	851.67
5	38.467879	-83.646289	877.71	1.50	879.21
6	38.467879	-83.645935	877.78	1.50	879.28
7	38.469039	-83.645238	886.34	1.50	887.84
8	38.471995	-83.645109	900.50	1.50	902.00
9	38.471961	-83.645854	899.37	1.50	900.87
10	38.472111	-83.646061	898.33	1.50	899.83
11	38.471302	-83.647014	892.69	1.50	894.19

Name: 118

Footprint area: 23.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.471987	-83.645120	900.50	1.50	902.00
2	38.471945	-83.643296	899.23	1.50	900.73
3	38.471013	-83.643339	900.75	1.50	902.25
4	38.470660	-83.642963	898.79	1.50	900.29
5	38.466577	-83.643199	888.08	1.50	889.58
6	38.466695	-83.645399	870.18	1.50	871.68
7	38.467283	-83.645345	874.58	1.50	876.08
8	38.468501	-83.644380	887.36	1.50	888.86
9	38.468711	-83.643993	893.97	1.50	895.47
10	38.469215	-83.643961	885.96	1.50	887.46
11	38.469257	-83.645249	884.50	1.50	886.00
12	38.469963	-83.645163	886.43	1.50	887.93

Name: 119

Footprint area: 12.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.464450	-83.638103	850.29	1.50	851.79
2	38.464441	-83.637856	856.52	1.50	858.02
3	38.466531	-83.637274	859.98	1.50	861.48
4	38.466591	-83.636734	874.80	1.50	876.30
5	38.464344	-83.635783	872.76	1.50	874.26
6	38.463806	-83.635771	851.96	1.50	853.46
7	38.463787	-83.636453	858.89	1.50	860.39
8	38.463507	-83.636424	846.65	1.50	848.15
9	38.463467	-83.638682	839.96	1.50	841.46
10	38.464034	-83.638704	841.42	1.50	842.92

Name: 120

Footprint area: 7.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.462673	-83.641456	858.48	1.50	859.98
2	38.461858	-83.641450	865.72	1.50	867.22
3	38.461715	-83.641128	874.58	1.50	876.08
4	38.461186	-83.641128	882.65	1.50	884.15
5	38.461144	-83.639245	876.51	1.50	878.01
6	38.461346	-83.638870	874.96	1.50	876.46
7	38.461526	-83.638891	878.22	1.50	879.72
8	38.461572	-83.638545	871.26	1.50	872.76
9	38.462207	-83.637658	859.99	1.50	861.49
10	38.462499	-83.638850	871.13	1.50	872.63
11	38.462176	-83.639002	873.31	1.50	874.81
12	38.461669	-83.639661	876.79	1.50	878.29
13	38.461647	-83.639861	876.19	1.50	877.69
14	38.462407	-83.640128	872.69	1.50	874.19

2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25
Description:
Threshold height : 50 ft
Direction: 247.0 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg



Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22

Name: Fleming Mason Airport Runway 7
Description:
Threshold height : 50 ft
Direction: 66.8 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg



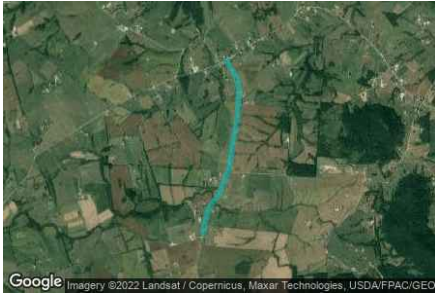
Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01

Route Receptor(s)

Name: Carpenter Road

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.459866	-83.642626	864.09	5.00	869.09
2	38.461109	-83.642347	855.22	5.00	860.22
3	38.462848	-83.641833	851.32	5.00	856.33
4	38.463436	-83.641607	848.80	5.00	853.80
5	38.464889	-83.640127	838.93	5.00	843.93
6	38.465192	-83.639848	844.48	5.00	849.48
7	38.465595	-83.639644	859.58	5.00	864.58
8	38.466267	-83.639386	879.08	5.00	884.08
9	38.468140	-83.638303	876.73	5.00	881.73
10	38.469274	-83.637927	865.16	5.00	870.16
11	38.472166	-83.637351	892.19	5.00	897.19
12	38.475940	-83.636533	889.50	5.00	894.50
13	38.479982	-83.636187	886.89	5.00	891.89
14	38.481682	-83.636911	877.14	5.00	882.14
15	38.483673	-83.638489	888.82	5.00	893.82

Name: Kilbreath Valley Road

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.481336	-83.647553	868.42	5.00	873.42
2	38.482071	-83.647070	857.21	5.00	862.21
3	38.482598	-83.646850	848.59	5.00	853.59
4	38.483920	-83.646590	835.76	5.00	840.76
5	38.484329	-83.646449	831.32	5.00	836.32
6	38.485225	-83.645986	826.59	5.00	831.59

Name: Mt Carmel Road

Route type: Two-way

View angle: 50.0 deg

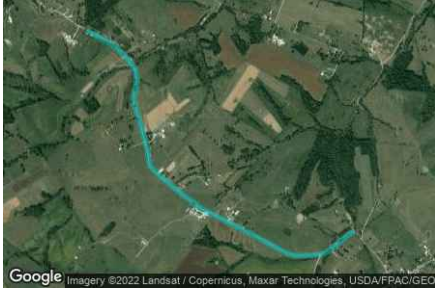


Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.472706	-83.667836	911.05	5.00	916.05
2	38.474688	-83.663780	908.25	5.00	913.25
3	38.477082	-83.658974	922.59	5.00	927.59
4	38.478581	-83.655197	913.86	5.00	918.86
5	38.479465	-83.652966	878.72	5.00	883.72
6	38.480369	-83.650198	876.67	5.00	881.67
7	38.481191	-83.647864	871.72	5.00	876.72
8	38.481618	-83.646075	847.94	5.00	852.94
9	38.482055	-83.643925	884.85	5.00	889.85
10	38.482886	-83.640399	844.48	5.00	849.48
11	38.483209	-83.639419	874.86	5.00	879.86
12	38.483667	-83.638482	888.82	5.00	893.82

Name: Poplar Grove Road

Route type Two-way

View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.500787	-83.666606	850.70	5.00	855.70
2	38.499899	-83.664545	830.31	5.00	835.31
3	38.499153	-83.663439	826.75	5.00	831.75
4	38.498218	-83.662522	812.10	5.00	817.10
5	38.497321	-83.662320	832.85	5.00	837.85
6	38.496638	-83.662531	853.08	5.00	858.08
7	38.496036	-83.662647	864.32	5.00	869.32
8	38.494274	-83.662000	893.22	5.00	898.22
9	38.492511	-83.661396	927.32	5.00	932.32
10	38.491479	-83.661221	925.90	5.00	930.90
11	38.490702	-83.660297	926.18	5.00	931.18
12	38.489791	-83.658857	915.01	5.00	920.01
13	38.488452	-83.656623	913.98	5.00	918.98
14	38.486747	-83.652348	894.21	5.00	899.21
15	38.485840	-83.650191	871.80	5.00	876.80
16	38.485286	-83.648882	850.33	5.00	855.33
17	38.485185	-83.648196	840.82	5.00	845.82
18	38.485185	-83.647187	833.21	5.00	838.21
19	38.485278	-83.645921	826.20	5.00	831.20
20	38.485551	-83.645224	820.52	5.00	825.52
21	38.486225	-83.644221	826.86	5.00	831.86
22	38.486662	-83.643537	825.57	5.00	830.57
23	38.486764	-83.643217	822.11	5.00	827.11

Name: Turner Road

Route type Two-way

View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.503501	-83.677657	931.62	5.00	936.62
2	38.501838	-83.679502	926.93	5.00	931.93
3	38.500596	-83.680940	929.71	5.00	934.71
4	38.499823	-83.681884	935.31	5.00	940.31
5	38.499219	-83.682206	929.25	5.00	934.25
6	38.497808	-83.682828	924.18	5.00	929.18
7	38.497019	-83.683172	930.61	5.00	935.61
8	38.495658	-83.684277	946.33	5.00	951.33
9	38.493492	-83.686026	949.01	5.00	954.01
10	38.491896	-83.687163	947.95	5.00	952.96

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.502308	-83.668752	892.39	16.00	908.39
OP 2	38.500074	-83.664115	837.81	16.00	853.81
OP 3	38.500179	-83.664372	840.03	16.00	856.03
OP 4	38.498859	-83.662843	818.80	16.00	834.80
OP 5	38.492150	-83.661027	925.49	16.00	941.50
OP 6	38.492600	-83.663347	919.60	16.00	935.60
OP 7	38.492709	-83.661142	928.12	16.00	944.12
OP 8	38.490739	-83.659898	928.93	16.00	944.93
OP 9	38.489983	-83.658739	921.40	16.00	937.40
OP 10	38.488123	-83.655001	914.23	16.00	930.23
OP 11	38.487040	-83.652365	900.35	16.00	916.35
OP 12	38.483929	-83.644394	884.31	16.00	900.31
OP 13	38.482255	-83.641547	864.04	16.00	880.04
OP 14	38.482902	-83.642315	866.99	16.00	882.99
OP 15	38.480768	-83.640823	876.32	16.00	892.32
OP 16	38.482629	-83.640630	841.43	16.00	857.43
OP 17	38.482809	-83.639638	867.95	16.00	883.95
OP 18	38.480117	-83.636473	890.07	16.00	906.07
OP 19	38.478929	-83.636993	892.65	16.00	908.65
OP 20	38.478404	-83.635850	888.76	16.00	904.76
OP 21	38.475527	-83.636119	896.36	16.00	912.36
OP 22	38.476964	-83.636124	895.95	16.00	911.95
OP 23	38.474603	-83.636988	893.04	16.00	909.04
OP 24	38.470811	-83.637256	878.86	16.00	894.86
OP 25	38.467959	-83.638093	878.00	16.00	894.00
OP 26	38.466716	-83.641145	886.31	16.00	902.31
OP 27	38.468785	-83.637796	863.30	16.00	879.30
OP 28	38.464039	-83.642586	844.91	16.00	860.91
OP 29	38.461897	-83.643011	873.56	16.00	889.56
OP 30	38.460595	-83.641423	883.66	16.00	899.66
OP 31	38.460679	-83.642152	865.43	16.00	881.43
OP 32	38.474161	-83.663839	913.56	16.00	929.56
OP 33	38.480456	-83.648910	889.03	16.00	905.03
OP 34	38.479969	-83.650943	877.26	16.00	893.26
OP 35	38.478512	-83.654822	916.14	16.00	932.14
OP 36	38.479889	-83.669133	945.61	16.00	961.62
OP 37	38.493984	-83.665110	918.88	16.00	934.88
OP 38	38.500315	-83.664670	845.19	16.00	861.19
OP 39	38.500433	-83.665078	848.69	16.00	864.69
OP 40	38.499937	-83.667889	894.61	16.00	910.61

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
101	SA tracking	SA tracking	0	0	-	
102	SA tracking	SA tracking	0	0	-	
103	SA tracking	SA tracking	0	0	-	
104	SA tracking	SA tracking	0	0	-	
105	SA tracking	SA tracking	0	0	-	
106	SA tracking	SA tracking	0	0	-	
107	SA tracking	SA tracking	0	0	-	
108	SA tracking	SA tracking	0	0	-	
109	SA tracking	SA tracking	0	0	-	
110	SA tracking	SA tracking	0	0	-	
111	SA tracking	SA tracking	0	0	-	
112	SA tracking	SA tracking	0	0	-	
113	SA tracking	SA tracking	0	0	-	
114	SA tracking	SA tracking	0	0	-	
115	SA tracking	SA tracking	0	0	-	
116	SA tracking	SA tracking	0	0	-	
117	SA tracking	SA tracking	0	0	-	
118	SA tracking	SA tracking	0	0	-	
119	SA tracking	SA tracking	0	0	-	
120	SA tracking	SA tracking	0	0	-	

PV & Receptor Analysis Results

Results for each PV array and receptor

101 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

102 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

103 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

104 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

105 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

107 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

109 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

110 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

111 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

112 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

113 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

114 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

115 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

116 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

117 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

118 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

119 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

120 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 1 5ft veh 10ft pan 52rest

Created Aug. 11, 2022
 Updated Aug. 15, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73912.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results No glare predicted!

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
101	SA tracking	SA tracking	0	0	-
102	SA tracking	SA tracking	0	0	-
103	SA tracking	SA tracking	0	0	-
104	SA tracking	SA tracking	0	0	-
105	SA tracking	SA tracking	0	0	-
106	SA tracking	SA tracking	0	0	-
107	SA tracking	SA tracking	0	0	-
108	SA tracking	SA tracking	0	0	-
109	SA tracking	SA tracking	0	0	-
110	SA tracking	SA tracking	0	0	-
111	SA tracking	SA tracking	0	0	-
112	SA tracking	SA tracking	0	0	-
113	SA tracking	SA tracking	0	0	-
114	SA tracking	SA tracking	0	0	-
115	SA tracking	SA tracking	0	0	-
116	SA tracking	SA tracking	0	0	-
117	SA tracking	SA tracking	0	0	-
118	SA tracking	SA tracking	0	0	-
119	SA tracking	SA tracking	0	0	-
120	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 323.4 acres

Name: 101

Footprint area: 13.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.480913	-83.651590	893.09	10.00	903.09
2	38.480950	-83.649868	890.70	10.00	900.70
3	38.481160	-83.649865	890.63	10.00	900.63
4	38.481188	-83.648729	880.49	10.00	890.49
5	38.481796	-83.647858	862.16	10.00	872.16
6	38.482154	-83.647871	867.45	10.00	877.45
7	38.482168	-83.647529	863.09	10.00	873.09
8	38.482708	-83.647486	855.91	10.00	865.92
9	38.482757	-83.650501	878.96	10.00	888.96
10	38.482385	-83.650541	888.64	10.00	898.64
11	38.482359	-83.651264	891.06	10.00	901.06
12	38.481520	-83.651304	897.96	10.00	907.96
13	38.481506	-83.651608	898.06	10.00	908.06

Name: 102

Footprint area: 14.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484165	-83.652448	897.55	10.00	907.55
2	38.484955	-83.652480	865.51	10.00	875.51
3	38.485072	-83.651880	859.26	10.00	869.26
4	38.484728	-83.650774	857.31	10.00	867.32
5	38.484652	-83.648393	850.03	10.00	860.03
6	38.484778	-83.647105	838.32	10.00	848.32
7	38.483812	-83.647094	856.38	10.00	866.38
8	38.483787	-83.648436	875.80	10.00	885.80
9	38.483367	-83.648436	858.12	10.00	868.12
10	38.483359	-83.650882	881.09	10.00	891.09
11	38.483796	-83.651139	887.81	10.00	897.81

Name: 103

Footprint area: 24.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484165	-83.659336	929.11	10.00	939.11
2	38.484467	-83.659325	932.59	10.00	942.59
3	38.485173	-83.660366	924.24	10.00	934.24
4	38.485148	-83.662329	925.16	10.00	935.16
5	38.485614	-83.662335	923.15	10.00	933.15
6	38.485662	-83.663282	909.00	10.00	919.00
7	38.483100	-83.663518	934.16	10.00	944.16
8	38.482302	-83.663583	939.58	10.00	949.58
9	38.482280	-83.661374	936.67	10.00	946.67

Name: 104

Footprint area: 24.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.482286	-83.661389	936.91	10.00	946.91
2	38.480539	-83.663052	925.27	10.00	935.27
3	38.480640	-83.664275	936.38	10.00	946.38
4	38.481127	-83.664253	938.82	10.00	948.82
5	38.481127	-83.664607	937.04	10.00	947.04
6	38.481539	-83.664565	935.04	10.00	945.04
7	38.481589	-83.665412	933.16	10.00	943.16
8	38.485553	-83.665369	884.63	10.00	894.63
9	38.485553	-83.664554	899.24	10.00	909.24
10	38.484806	-83.663363	907.80	10.00	917.80
11	38.482286	-83.663588	939.72	10.00	949.73

Name: 105

Footprint area: 24.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.485553	-83.665369	884.63	10.00	894.63
2	38.485562	-83.665906	889.75	10.00	899.76
3	38.484884	-83.666057	907.33	10.00	917.33
4	38.484777	-83.666422	902.67	10.00	912.67
5	38.484128	-83.666488	917.53	10.00	927.54
6	38.484138	-83.667005	914.93	10.00	924.93
7	38.483706	-83.667064	932.54	10.00	942.54
8	38.483764	-83.668459	919.16	10.00	929.16
9	38.484260	-83.668427	922.45	10.00	932.45
10	38.484277	-83.668663	926.96	10.00	936.96
11	38.486005	-83.668687	911.69	10.00	921.69
12	38.486977	-83.667445	888.68	10.00	898.68
13	38.487594	-83.668008	874.78	10.00	884.78
14	38.486326	-83.669580	889.93	10.00	899.94
15	38.484671	-83.669779	928.11	10.00	938.11
16	38.484025	-83.669854	935.93	10.00	945.93
17	38.482110	-83.666764	926.70	10.00	936.70
18	38.482093	-83.665434	920.44	10.00	930.44

Name: 106

Footprint area: 17.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.487153	-83.674721	929.75	10.00	939.75
2	38.486838	-83.674791	931.53	10.00	941.53
3	38.485796	-83.673042	922.75	10.00	932.75
4	38.485897	-83.672886	921.63	10.00	931.63
5	38.485885	-83.672017	908.84	10.00	918.84
6	38.486275	-83.672049	919.57	10.00	929.57
7	38.486288	-83.671164	899.99	10.00	909.99
8	38.486288	-83.671057	897.72	10.00	907.72
9	38.486741	-83.671078	910.47	10.00	920.47
10	38.487027	-83.670596	906.85	10.00	916.85
11	38.487458	-83.670246	908.94	10.00	918.94
12	38.487747	-83.669702	901.69	10.00	911.69
13	38.488072	-83.668316	861.94	10.00	871.94
14	38.488398	-83.668428	865.04	10.00	875.04
15	38.488833	-83.669043	882.64	10.00	892.64
16	38.488400	-83.670299	890.23	10.00	900.23
17	38.487950	-83.670622	906.91	10.00	916.91
18	38.487661	-83.671100	910.28	10.00	920.28
19	38.487732	-83.672725	911.28	10.00	921.28

Name: 107

Footprint area: 16.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.495087	-83.669204	849.95	10.00	859.95
2	38.495583	-83.669237	854.78	10.00	864.78
3	38.495604	-83.671592	894.40	10.00	904.40
4	38.495171	-83.671610	883.99	10.00	893.99
5	38.495126	-83.673061	892.96	10.00	902.96
6	38.494223	-83.672785	875.58	10.00	885.58
7	38.494197	-83.672288	887.21	10.00	897.22
8	38.493750	-83.672288	876.67	10.00	886.67
9	38.493755	-83.671760	878.03	10.00	888.03
10	38.493361	-83.671759	864.15	10.00	874.15
11	38.493372	-83.669243	838.22	10.00	848.22

Name: 108

Footprint area: 4.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.496884	-83.668862	869.51	10.00	879.51
2	38.496376	-83.668873	836.47	10.00	846.47
3	38.497060	-83.667371	843.68	10.00	853.68
4	38.497574	-83.667296	845.13	10.00	855.13
5	38.498163	-83.666416	839.34	10.00	849.34
6	38.498964	-83.665225	851.88	10.00	861.88
7	38.499457	-83.665257	866.99	10.00	876.99

Name: 109

Footprint area: 3.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.495314	-83.667076	863.09	10.00	873.09
2	38.495259	-83.668025	824.34	10.00	834.34
3	38.494797	-83.668267	825.49	10.00	835.49
4	38.493945	-83.668175	848.61	10.00	858.61
5	38.493966	-83.667081	892.98	10.00	902.98
6	38.494468	-83.667084	887.59	10.00	897.59
7	38.494479	-83.666747	898.48	10.00	908.48

Name: 110

Footprint area: 2.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.496598	-83.665864	845.54	10.00	855.54
2	38.496090	-83.665853	874.69	10.00	884.69
3	38.496094	-83.665746	877.64	10.00	887.64
4	38.496073	-83.665580	884.11	10.00	894.11
5	38.496056	-83.665392	889.74	10.00	899.74
6	38.496061	-83.665220	892.95	10.00	902.95
7	38.496174	-83.665124	892.66	10.00	902.66
8	38.496315	-83.664960	891.50	10.00	901.50
9	38.496486	-83.664750	890.03	10.00	900.03
10	38.496664	-83.664572	888.17	10.00	898.18
11	38.496658	-83.664904	883.17	10.00	893.17
12	38.497170	-83.664891	862.43	10.00	872.43
13	38.497127	-83.665576	833.73	10.00	843.73

Name: 111

Footprint area: 17.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.480996	-83.642359	864.19	10.00	874.19
2	38.481576	-83.642359	869.84	10.00	879.84
3	38.481584	-83.643872	886.03	10.00	896.03
4	38.481064	-83.643891	881.21	10.00	891.21
5	38.481047	-83.644918	885.09	10.00	895.09
6	38.478544	-83.645183	886.14	10.00	896.14
7	38.478582	-83.644195	891.37	10.00	901.37
8	38.477110	-83.644210	896.33	10.00	906.33
9	38.477130	-83.643735	891.87	10.00	901.87

Name: 112

Footprint area: 4.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.479597	-83.641334	881.74	10.00	891.74
2	38.478816	-83.641382	891.26	10.00	901.26
3	38.477615	-83.640481	876.91	10.00	886.91
4	38.477623	-83.640282	875.15	10.00	885.15
5	38.478114	-83.640277	866.09	10.00	876.09
6	38.478127	-83.639697	862.40	10.00	872.40
7	38.478618	-83.639719	862.68	10.00	872.68
8	38.478618	-83.640105	868.23	10.00	878.23
9	38.479605	-83.640363	879.51	10.00	889.51

Name: 113

Footprint area: 23.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477123	-83.643748	891.90	10.00	901.90
2	38.476523	-83.643715	896.81	10.00	906.81
3	38.476586	-83.642541	891.45	10.00	901.45
4	38.476107	-83.642476	879.84	10.00	889.84
5	38.476057	-83.643662	890.80	10.00	900.80
6	38.475729	-83.643662	889.33	10.00	899.33
7	38.475729	-83.643847	892.15	10.00	902.15
8	38.475032	-83.643903	885.85	10.00	895.85
9	38.474992	-83.644603	888.66	10.00	898.66
10	38.475397	-83.644649	893.35	10.00	903.35
11	38.475362	-83.645040	895.58	10.00	905.58
12	38.474600	-83.645038	892.94	10.00	902.94
13	38.474585	-83.645610	897.32	10.00	907.32
14	38.476402	-83.647095	898.25	10.00	908.25
15	38.479822	-83.647045	843.54	10.00	853.54
16	38.479827	-83.646569	847.32	10.00	857.32
17	38.478382	-83.646455	873.86	10.00	883.86
18	38.478421	-83.645503	890.21	10.00	900.21
19	38.477301	-83.644975	896.02	10.00	906.02
20	38.477113	-83.644628	901.23	10.00	911.23

Name: 114

Footprint area: 24.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477322	-83.647063	894.77	10.00	904.77
2	38.477322	-83.647406	891.16	10.00	901.16
3	38.475491	-83.647320	892.88	10.00	902.88
4	38.475457	-83.647878	891.68	10.00	901.68
5	38.475020	-83.647878	891.85	10.00	901.85
6	38.474987	-83.648586	876.73	10.00	886.73
7	38.474432	-83.648586	885.45	10.00	895.45
8	38.474483	-83.647921	886.88	10.00	896.88
9	38.471997	-83.645926	898.67	10.00	908.67
10	38.471997	-83.643630	898.82	10.00	908.82
11	38.472870	-83.643565	893.92	10.00	903.92
12	38.474550	-83.645067	893.20	10.00	903.20
13	38.474550	-83.645668	897.41	10.00	907.41
14	38.475608	-83.646473	898.94	10.00	908.94
15	38.476431	-83.647068	898.61	10.00	908.61

Name: 115

Footprint area: 23.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.472125	-83.646036	898.33	10.00	908.33
2	38.472075	-83.647496	892.74	10.00	902.74
3	38.471604	-83.647517	895.42	10.00	905.42
4	38.471638	-83.649652	895.60	10.00	905.60
5	38.471176	-83.649770	894.98	10.00	904.98
6	38.471201	-83.651186	906.22	10.00	916.22
7	38.470915	-83.651229	903.12	10.00	913.12
8	38.470899	-83.651573	900.03	10.00	910.03
9	38.470411	-83.652163	882.22	10.00	892.22
10	38.467858	-83.651202	889.74	10.00	899.75

Name: 116

Footprint area: 22.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.467858	-83.651218	889.83	10.00	899.83
2	38.466698	-83.650628	862.67	10.00	872.67
3	38.466682	-83.648611	854.59	10.00	864.59
4	38.469756	-83.648644	872.94	10.00	882.94
5	38.469731	-83.647860	877.41	10.00	887.41
6	38.466640	-83.647957	850.70	10.00	860.70
7	38.466614	-83.646884	854.49	10.00	864.49
8	38.467547	-83.646884	884.26	10.00	894.26
9	38.468370	-83.646852	894.93	10.00	904.93
10	38.470059	-83.646745	900.75	10.00	910.75
11	38.470084	-83.647002	898.24	10.00	908.24
12	38.470126	-83.648461	874.11	10.00	884.11

Name: 117

Footprint area: 18.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.470139	-83.648467	874.49	10.00	884.49
2	38.470072	-83.646761	900.59	10.00	910.59
3	38.466594	-83.646890	854.26	10.00	864.26
4	38.466670	-83.646332	850.17	10.00	860.17
5	38.467879	-83.646289	877.71	10.00	887.71
6	38.467879	-83.645935	877.78	10.00	887.78
7	38.469039	-83.645238	886.34	10.00	896.34
8	38.471995	-83.645109	900.50	10.00	910.50
9	38.471961	-83.645854	899.37	10.00	909.37
10	38.472111	-83.646061	898.33	10.00	908.33
11	38.471302	-83.647014	892.69	10.00	902.69

Name: 118

Footprint area: 23.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.471987	-83.645120	900.50	10.00	910.50
2	38.471945	-83.643296	899.23	10.00	909.23
3	38.471013	-83.643339	900.75	10.00	910.75
4	38.470660	-83.642963	898.79	10.00	908.79
5	38.466577	-83.643199	888.08	10.00	898.08
6	38.466695	-83.645399	870.18	10.00	880.18
7	38.467283	-83.645345	874.58	10.00	884.58
8	38.468501	-83.644380	887.36	10.00	897.37
9	38.468711	-83.643993	893.97	10.00	903.97
10	38.469215	-83.643961	885.96	10.00	895.96
11	38.469257	-83.645249	884.50	10.00	894.50
12	38.469963	-83.645163	886.43	10.00	896.43

Name: 119

Footprint area: 12.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.464450	-83.638103	850.29	10.00	860.29
2	38.464441	-83.637856	856.52	10.00	866.52
3	38.466531	-83.637274	859.98	10.00	869.98
4	38.466591	-83.636734	874.80	10.00	884.80
5	38.464344	-83.635783	872.76	10.00	882.76
6	38.463806	-83.635771	851.96	10.00	861.96
7	38.463787	-83.636453	858.89	10.00	868.89
8	38.463507	-83.636424	846.65	10.00	856.65
9	38.463467	-83.638682	839.96	10.00	849.96
10	38.464034	-83.638704	841.42	10.00	851.42

Name: 120

Footprint area: 7.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.462673	-83.641456	858.48	10.00	868.48
2	38.461858	-83.641450	865.72	10.00	875.72
3	38.461715	-83.641128	874.58	10.00	884.58
4	38.461186	-83.641128	882.65	10.00	892.65
5	38.461144	-83.639245	876.51	10.00	886.51
6	38.461346	-83.638870	874.96	10.00	884.96
7	38.461526	-83.638891	878.22	10.00	888.22
8	38.461572	-83.638545	871.26	10.00	881.26
9	38.462207	-83.637658	859.99	10.00	869.99
10	38.462499	-83.638850	871.13	10.00	881.13
11	38.462176	-83.639002	873.31	10.00	883.32
12	38.461669	-83.639661	876.79	10.00	886.79
13	38.461647	-83.639861	876.19	10.00	886.19
14	38.462407	-83.640128	872.69	10.00	882.69

2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25
Description:
Threshold height : 50 ft
Direction: 247.0 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7
Description:
Threshold height : 50 ft
Direction: 66.8 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01

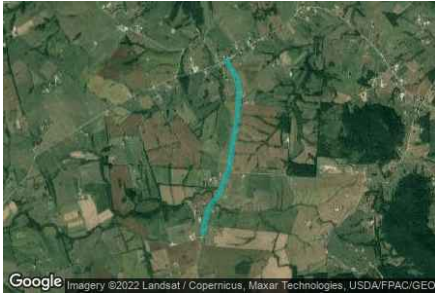


Route Receptor(s)

Name: Carpenter Road

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.459866	-83.642626	864.09	5.00	869.09
2	38.461109	-83.642347	855.22	5.00	860.22
3	38.462848	-83.641833	851.32	5.00	856.33
4	38.463436	-83.641607	848.80	5.00	853.80
5	38.464889	-83.640127	838.93	5.00	843.93
6	38.465192	-83.639848	844.48	5.00	849.48
7	38.465595	-83.639644	859.58	5.00	864.58
8	38.466267	-83.639386	879.08	5.00	884.08
9	38.468140	-83.638303	876.73	5.00	881.73
10	38.469274	-83.637927	865.16	5.00	870.16
11	38.472166	-83.637351	892.19	5.00	897.19
12	38.475940	-83.636533	889.50	5.00	894.50
13	38.479982	-83.636187	886.89	5.00	891.89
14	38.481682	-83.636911	877.14	5.00	882.14
15	38.483673	-83.638489	888.82	5.00	893.82

Name: Kilbreath Valley Road

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.481336	-83.647553	868.42	5.00	873.42
2	38.482071	-83.647070	857.21	5.00	862.21
3	38.482598	-83.646850	848.59	5.00	853.59
4	38.483920	-83.646590	835.76	5.00	840.76
5	38.484329	-83.646449	831.32	5.00	836.32
6	38.485225	-83.645986	826.59	5.00	831.59

Name: Mt Carmel Road

Route type: Two-way

View angle: 50.0 deg

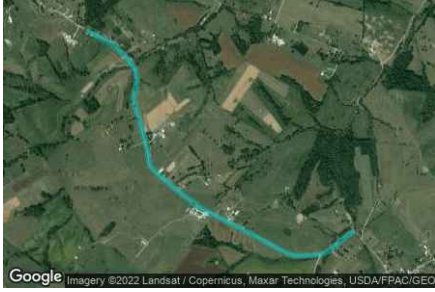


Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.472706	-83.667836	911.05	5.00	916.05
2	38.474688	-83.663780	908.25	5.00	913.25
3	38.477082	-83.658974	922.59	5.00	927.59
4	38.478581	-83.655197	913.86	5.00	918.86
5	38.479465	-83.652966	878.72	5.00	883.72
6	38.480369	-83.650198	876.67	5.00	881.67
7	38.481191	-83.647864	871.72	5.00	876.72
8	38.481618	-83.646075	847.94	5.00	852.94
9	38.482055	-83.643925	884.85	5.00	889.85
10	38.482886	-83.640399	844.48	5.00	849.48
11	38.483209	-83.639419	874.86	5.00	879.86
12	38.483667	-83.638482	888.82	5.00	893.82

Name: Poplar Grove Road

Route type Two-way

View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.500787	-83.666606	850.70	5.00	855.70
2	38.499899	-83.664545	830.31	5.00	835.31
3	38.499153	-83.663439	826.75	5.00	831.75
4	38.498218	-83.662522	812.10	5.00	817.10
5	38.497321	-83.662320	832.85	5.00	837.85
6	38.496638	-83.662531	853.08	5.00	858.08
7	38.496036	-83.662647	864.32	5.00	869.32
8	38.494274	-83.662000	893.22	5.00	898.22
9	38.492511	-83.661396	927.32	5.00	932.32
10	38.491479	-83.661221	925.90	5.00	930.90
11	38.490702	-83.660297	926.18	5.00	931.18
12	38.489791	-83.658857	915.01	5.00	920.01
13	38.488452	-83.656623	913.98	5.00	918.98
14	38.486747	-83.652348	894.21	5.00	899.21
15	38.485840	-83.650191	871.80	5.00	876.80
16	38.485286	-83.648882	850.33	5.00	855.33
17	38.485185	-83.648196	840.82	5.00	845.82
18	38.485185	-83.647187	833.21	5.00	838.21
19	38.485278	-83.645921	826.20	5.00	831.20
20	38.485551	-83.645224	820.52	5.00	825.52
21	38.486225	-83.644221	826.86	5.00	831.86
22	38.486662	-83.643537	825.57	5.00	830.57
23	38.486764	-83.643217	822.11	5.00	827.11

Name: Turner Road

Route type Two-way

View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.503501	-83.677657	931.62	5.00	936.62
2	38.501838	-83.679502	926.93	5.00	931.93
3	38.500596	-83.680940	929.71	5.00	934.71
4	38.499823	-83.681884	935.31	5.00	940.31
5	38.499219	-83.682206	929.25	5.00	934.25
6	38.497808	-83.682828	924.18	5.00	929.18
7	38.497019	-83.683172	930.61	5.00	935.61
8	38.495658	-83.684277	946.33	5.00	951.33
9	38.493492	-83.686026	949.01	5.00	954.01
10	38.491896	-83.687163	947.95	5.00	952.96

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.502308	-83.668752	892.39	16.00	908.39
OP 2	38.500074	-83.664115	837.81	16.00	853.81
OP 3	38.500179	-83.664372	840.03	16.00	856.03
OP 4	38.498859	-83.662843	818.80	16.00	834.80
OP 5	38.492150	-83.661027	925.49	16.00	941.50
OP 6	38.492600	-83.663347	919.60	16.00	935.60
OP 7	38.492709	-83.661142	928.12	16.00	944.12
OP 8	38.490739	-83.659898	928.93	16.00	944.93
OP 9	38.489983	-83.658739	921.40	16.00	937.40
OP 10	38.488123	-83.655001	914.23	16.00	930.23
OP 11	38.487040	-83.652365	900.35	16.00	916.35
OP 12	38.483929	-83.644394	884.31	16.00	900.31
OP 13	38.482255	-83.641547	864.04	16.00	880.04
OP 14	38.482902	-83.642315	866.99	16.00	882.99
OP 15	38.480768	-83.640823	876.32	16.00	892.32
OP 16	38.482629	-83.640630	841.43	16.00	857.43
OP 17	38.482809	-83.639638	867.95	16.00	883.95
OP 18	38.480117	-83.636473	890.07	16.00	906.07
OP 19	38.478929	-83.636993	892.65	16.00	908.65
OP 20	38.478404	-83.635850	888.76	16.00	904.76
OP 21	38.475527	-83.636119	896.36	16.00	912.36
OP 22	38.476964	-83.636124	895.95	16.00	911.95
OP 23	38.474603	-83.636988	893.04	16.00	909.04
OP 24	38.470811	-83.637256	878.86	16.00	894.86
OP 25	38.467959	-83.638093	878.00	16.00	894.00
OP 26	38.466716	-83.641145	886.31	16.00	902.31
OP 27	38.468785	-83.637796	863.30	16.00	879.30
OP 28	38.464039	-83.642586	844.91	16.00	860.91
OP 29	38.461897	-83.643011	873.56	16.00	889.56
OP 30	38.460595	-83.641423	883.66	16.00	899.66
OP 31	38.460679	-83.642152	865.43	16.00	881.43
OP 32	38.474161	-83.663839	913.56	16.00	929.56
OP 33	38.480456	-83.648910	889.03	16.00	905.03
OP 34	38.479969	-83.650943	877.26	16.00	893.26
OP 35	38.478512	-83.654822	916.14	16.00	932.14
OP 36	38.479889	-83.669133	945.61	16.00	961.62
OP 37	38.493984	-83.665110	918.88	16.00	934.88
OP 38	38.500315	-83.664670	845.19	16.00	861.19
OP 39	38.500433	-83.665078	848.69	16.00	864.69
OP 40	38.499937	-83.667889	894.61	16.00	910.61

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
101	SA tracking	SA tracking	0	0	-	
102	SA tracking	SA tracking	0	0	-	
103	SA tracking	SA tracking	0	0	-	
104	SA tracking	SA tracking	0	0	-	
105	SA tracking	SA tracking	0	0	-	
106	SA tracking	SA tracking	0	0	-	
107	SA tracking	SA tracking	0	0	-	
108	SA tracking	SA tracking	0	0	-	
109	SA tracking	SA tracking	0	0	-	
110	SA tracking	SA tracking	0	0	-	
111	SA tracking	SA tracking	0	0	-	
112	SA tracking	SA tracking	0	0	-	
113	SA tracking	SA tracking	0	0	-	
114	SA tracking	SA tracking	0	0	-	
115	SA tracking	SA tracking	0	0	-	
116	SA tracking	SA tracking	0	0	-	
117	SA tracking	SA tracking	0	0	-	
118	SA tracking	SA tracking	0	0	-	
119	SA tracking	SA tracking	0	0	-	
120	SA tracking	SA tracking	0	0	-	

PV & Receptor Analysis Results

Results for each PV array and receptor

101 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

102 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

103 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

104 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

105 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

107 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

109 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

110 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

111 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

112 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

113 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

114 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

115 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

116 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

117 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

118 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

119 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

120 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 1 9ft veh 1_5ft pan 52rest

Created Aug. 11, 2022
 Updated Aug. 15, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73911.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results Glare with potential for temporary after-image predicted

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
101	SA tracking	SA tracking	0	0	-
102	SA tracking	SA tracking	5	53	-
103	SA tracking	SA tracking	0	0	-
104	SA tracking	SA tracking	0	0	-
105	SA tracking	SA tracking	0	0	-
106	SA tracking	SA tracking	0	0	-
107	SA tracking	SA tracking	0	0	-
108	SA tracking	SA tracking	0	0	-
109	SA tracking	SA tracking	0	0	-
110	SA tracking	SA tracking	0	0	-
111	SA tracking	SA tracking	0	0	-
112	SA tracking	SA tracking	0	0	-
113	SA tracking	SA tracking	0	0	-
114	SA tracking	SA tracking	0	0	-
115	SA tracking	SA tracking	0	0	-
116	SA tracking	SA tracking	0	0	-
117	SA tracking	SA tracking	0	0	-
118	SA tracking	SA tracking	0	0	-
119	SA tracking	SA tracking	0	0	-
120	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 323.4 acres

Name: 101

Footprint area: 13.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.480913	-83.651590	893.09	1.50	894.59
2	38.480950	-83.649868	890.70	1.50	892.20
3	38.481160	-83.649865	890.63	1.50	892.13
4	38.481188	-83.648729	880.49	1.50	881.99
5	38.481796	-83.647858	862.16	1.50	863.66
6	38.482154	-83.647871	867.45	1.50	868.95
7	38.482168	-83.647529	863.09	1.50	864.59
8	38.482708	-83.647486	855.91	1.50	857.41
9	38.482757	-83.650501	878.96	1.50	880.46
10	38.482385	-83.650541	888.64	1.50	890.14
11	38.482359	-83.651264	891.06	1.50	892.56
12	38.481520	-83.651304	897.96	1.50	899.46
13	38.481506	-83.651608	898.06	1.50	899.56

Name: 102

Footprint area: 14.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484165	-83.652448	897.55	1.50	899.05
2	38.484955	-83.652480	865.51	1.50	867.01
3	38.485072	-83.651880	859.26	1.50	860.76
4	38.484728	-83.650774	857.31	1.50	858.81
5	38.484652	-83.648393	850.03	1.50	851.53
6	38.484778	-83.647105	838.32	1.50	839.82
7	38.483812	-83.647094	856.38	1.50	857.88
8	38.483787	-83.648436	875.80	1.50	877.30
9	38.483367	-83.648436	858.12	1.50	859.62
10	38.483359	-83.650882	881.09	1.50	882.59
11	38.483796	-83.651139	887.81	1.50	889.31

Name: 103

Footprint area: 24.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484165	-83.659336	929.11	1.50	930.61
2	38.484467	-83.659325	932.59	1.50	934.09
3	38.485173	-83.660366	924.24	1.50	925.74
4	38.485148	-83.662329	925.16	1.50	926.66
5	38.485614	-83.662335	923.15	1.50	924.65
6	38.485662	-83.663282	909.00	1.50	910.50
7	38.483100	-83.663518	934.16	1.50	935.66
8	38.482302	-83.663583	939.58	1.50	941.08
9	38.482280	-83.661374	936.67	1.50	938.17

Name: 104

Footprint area: 24.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

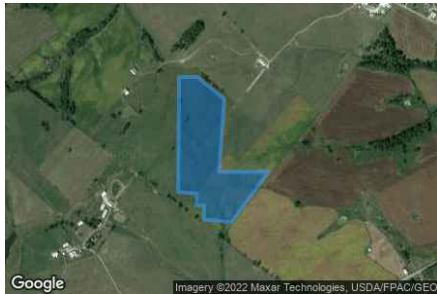
Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.482286	-83.661389	936.91	1.50	938.41
2	38.480539	-83.663052	925.27	1.50	926.77
3	38.480640	-83.664275	936.38	1.50	937.88
4	38.481127	-83.664253	938.82	1.50	940.32
5	38.481127	-83.664607	937.04	1.50	938.54
6	38.481539	-83.664565	935.04	1.50	936.54
7	38.481589	-83.665412	933.16	1.50	934.66
8	38.485553	-83.665369	884.63	1.50	886.13
9	38.485553	-83.664554	899.24	1.50	900.74
10	38.484806	-83.663363	907.80	1.50	909.30
11	38.482286	-83.663588	939.72	1.50	941.22

Name: 105

Footprint area: 24.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.485553	-83.665369	884.63	1.50	886.13
2	38.485562	-83.665906	889.75	1.50	891.26
3	38.484884	-83.666057	907.33	1.50	908.83
4	38.484777	-83.666422	902.67	1.50	904.17
5	38.484128	-83.666488	917.53	1.50	919.03
6	38.484138	-83.667005	914.93	1.50	916.43
7	38.483706	-83.667064	932.54	1.50	934.04
8	38.483764	-83.668459	919.16	1.50	920.66
9	38.484260	-83.668427	922.45	1.50	923.95
10	38.484277	-83.668663	926.96	1.50	928.46
11	38.486005	-83.668687	911.69	1.50	913.19
12	38.486977	-83.667445	888.68	1.50	890.18
13	38.487594	-83.668008	874.78	1.50	876.28
14	38.486326	-83.669580	889.93	1.50	891.43
15	38.484671	-83.669779	928.11	1.50	929.61
16	38.484025	-83.669854	935.93	1.50	937.43
17	38.482110	-83.666764	926.70	1.50	928.20
18	38.482093	-83.665434	920.44	1.50	921.94

Name: 106

Footprint area: 17.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.487153	-83.674721	929.75	1.50	931.25
2	38.486838	-83.674791	931.53	1.50	933.03
3	38.485796	-83.673042	922.75	1.50	924.25
4	38.485897	-83.672886	921.63	1.50	923.13
5	38.485885	-83.672017	908.84	1.50	910.34
6	38.486275	-83.672049	919.57	1.50	921.07
7	38.486288	-83.671164	899.99	1.50	901.49
8	38.486288	-83.671057	897.72	1.50	899.22
9	38.486741	-83.671078	910.47	1.50	911.97
10	38.487027	-83.670596	906.85	1.50	908.35
11	38.487458	-83.670246	908.94	1.50	910.44
12	38.487747	-83.669702	901.69	1.50	903.19
13	38.488072	-83.668316	861.94	1.50	863.44
14	38.488398	-83.668428	865.04	1.50	866.54
15	38.488833	-83.669043	882.64	1.50	884.14
16	38.488400	-83.670299	890.23	1.50	891.73
17	38.487950	-83.670622	906.91	1.50	908.41
18	38.487661	-83.671100	910.28	1.50	911.78
19	38.487732	-83.672725	911.28	1.50	912.78

Name: 107

Footprint area: 16.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.495087	-83.669204	849.95	1.50	851.45
2	38.495583	-83.669237	854.78	1.50	856.28
3	38.495604	-83.671592	894.40	1.50	895.90
4	38.495171	-83.671610	883.99	1.50	885.49
5	38.495126	-83.673061	892.96	1.50	894.46
6	38.494223	-83.672785	875.58	1.50	877.08
7	38.494197	-83.672288	887.21	1.50	888.71
8	38.493750	-83.672288	876.67	1.50	878.17
9	38.493755	-83.671760	878.03	1.50	879.53
10	38.493361	-83.671759	864.15	1.50	865.65
11	38.493372	-83.669243	838.22	1.50	839.72

Name: 108

Footprint area: 4.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.496884	-83.668862	869.51	1.50	871.01
2	38.496376	-83.668873	836.47	1.50	837.97
3	38.497060	-83.667371	843.68	1.50	845.18
4	38.497574	-83.667296	845.13	1.50	846.63
5	38.498163	-83.666416	839.34	1.50	840.84
6	38.498964	-83.665225	851.88	1.50	853.38
7	38.499457	-83.665257	866.99	1.50	868.49

Name: 109

Footprint area: 3.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.495314	-83.667076	863.09	1.50	864.59
2	38.495259	-83.668025	824.34	1.50	825.84
3	38.494797	-83.668267	825.49	1.50	826.99
4	38.493945	-83.668175	848.61	1.50	850.11
5	38.493966	-83.667081	892.98	1.50	894.48
6	38.494468	-83.667084	887.59	1.50	889.09
7	38.494479	-83.666747	898.48	1.50	899.98

Name: 110

Footprint area: 2.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.496598	-83.665864	845.54	1.50	847.04
2	38.496090	-83.665853	874.69	1.50	876.19
3	38.496094	-83.665746	877.64	1.50	879.14
4	38.496073	-83.665580	884.11	1.50	885.61
5	38.496056	-83.665392	889.74	1.50	891.24
6	38.496061	-83.665220	892.95	1.50	894.45
7	38.496174	-83.665124	892.66	1.50	894.16
8	38.496315	-83.664960	891.50	1.50	893.00
9	38.496486	-83.664750	890.03	1.50	891.53
10	38.496664	-83.664572	888.17	1.50	889.67
11	38.496658	-83.664904	883.17	1.50	884.67
12	38.497170	-83.664891	862.43	1.50	863.93
13	38.497127	-83.665576	833.73	1.50	835.23

Name: 111

Footprint area: 17.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.480996	-83.642359	864.19	1.50	865.69
2	38.481576	-83.642359	869.84	1.50	871.34
3	38.481584	-83.643872	886.03	1.50	887.53
4	38.481064	-83.643891	881.21	1.50	882.71
5	38.481047	-83.644918	885.09	1.50	886.59
6	38.478544	-83.645183	886.14	1.50	887.64
7	38.478582	-83.644195	891.37	1.50	892.87
8	38.477110	-83.644210	896.33	1.50	897.83
9	38.477130	-83.643735	891.87	1.50	893.37

Name: 112

Footprint area: 4.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.479597	-83.641334	881.74	1.50	883.24
2	38.478816	-83.641382	891.26	1.50	892.76
3	38.477615	-83.640481	876.91	1.50	878.41
4	38.477623	-83.640282	875.15	1.50	876.65
5	38.478114	-83.640277	866.09	1.50	867.59
6	38.478127	-83.639697	862.40	1.50	863.90
7	38.478618	-83.639719	862.68	1.50	864.18
8	38.478618	-83.640105	868.23	1.50	869.73
9	38.479605	-83.640363	879.51	1.50	881.01

Name: 113

Footprint area: 23.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477123	-83.643748	891.90	1.50	893.40
2	38.476523	-83.643715	896.81	1.50	898.31
3	38.476586	-83.642541	891.45	1.50	892.95
4	38.476107	-83.642476	879.84	1.50	881.34
5	38.476057	-83.643662	890.80	1.50	892.30
6	38.475729	-83.643662	889.33	1.50	890.83
7	38.475729	-83.643847	892.15	1.50	893.65
8	38.475032	-83.643903	885.85	1.50	887.35
9	38.474992	-83.644603	888.66	1.50	890.16
10	38.475397	-83.644649	893.35	1.50	894.85
11	38.475362	-83.645040	895.58	1.50	897.08
12	38.474600	-83.645038	892.94	1.50	894.44
13	38.474585	-83.645610	897.32	1.50	898.82
14	38.476402	-83.647095	898.25	1.50	899.75
15	38.479822	-83.647045	843.54	1.50	845.04
16	38.479827	-83.646669	847.32	1.50	848.82
17	38.478382	-83.646455	873.86	1.50	875.36
18	38.478421	-83.645503	890.21	1.50	891.71
19	38.477301	-83.644975	896.02	1.50	897.52
20	38.477113	-83.644628	901.23	1.50	902.73

Name: 114

Footprint area: 24.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477322	-83.647063	894.77	1.50	896.27
2	38.477322	-83.647406	891.16	1.50	892.66
3	38.475491	-83.647320	892.88	1.50	894.38
4	38.475457	-83.647878	891.68	1.50	893.18
5	38.475020	-83.647878	891.85	1.50	893.35
6	38.474987	-83.648586	876.73	1.50	878.23
7	38.474432	-83.648586	885.45	1.50	886.95
8	38.474483	-83.647921	886.88	1.50	888.38
9	38.471997	-83.645926	898.67	1.50	900.17
10	38.471997	-83.643630	898.82	1.50	900.32
11	38.472870	-83.643565	893.92	1.50	895.42
12	38.474550	-83.645067	893.20	1.50	894.70
13	38.474550	-83.645668	897.41	1.50	898.91
14	38.475608	-83.646473	898.94	1.50	900.44
15	38.476431	-83.647068	898.61	1.50	900.11

Name: 115

Footprint area: 23.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.472125	-83.646036	898.33	1.50	899.83
2	38.472075	-83.647496	892.74	1.50	894.24
3	38.471604	-83.647517	895.42	1.50	896.92
4	38.471638	-83.649652	895.60	1.50	897.10
5	38.471176	-83.649770	894.98	1.50	896.48
6	38.471201	-83.651186	906.22	1.50	907.72
7	38.470915	-83.651229	903.12	1.50	904.62
8	38.470899	-83.651573	900.03	1.50	901.53
9	38.470411	-83.652163	882.22	1.50	883.72
10	38.467858	-83.651202	889.74	1.50	891.25

Name: 116

Footprint area: 22.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.467858	-83.651218	889.83	1.50	891.33
2	38.466698	-83.650628	862.67	1.50	864.17
3	38.466682	-83.648611	854.59	1.50	856.09
4	38.469756	-83.648644	872.94	1.50	874.44
5	38.469731	-83.647860	877.41	1.50	878.91
6	38.466640	-83.647957	850.70	1.50	852.20
7	38.466614	-83.646884	854.49	1.50	855.99
8	38.467547	-83.646884	884.26	1.50	885.76
9	38.468370	-83.646852	894.93	1.50	896.43
10	38.470059	-83.646745	900.75	1.50	902.25
11	38.470084	-83.647002	898.24	1.50	899.74
12	38.470126	-83.648461	874.11	1.50	875.61

Name: 117

Footprint area: 18.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.470139	-83.648467	874.49	1.50	875.99
2	38.470072	-83.646761	900.59	1.50	902.09
3	38.466594	-83.646890	854.26	1.50	855.76
4	38.466670	-83.646332	850.17	1.50	851.67
5	38.467879	-83.646289	877.71	1.50	879.21
6	38.467879	-83.645935	877.78	1.50	879.28
7	38.469039	-83.645238	886.34	1.50	887.84
8	38.471995	-83.645109	900.50	1.50	902.00
9	38.471961	-83.645854	899.37	1.50	900.87
10	38.472111	-83.646061	898.33	1.50	899.83
11	38.471302	-83.647014	892.69	1.50	894.19

Name: 118

Footprint area: 23.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.471987	-83.645120	900.50	1.50	902.00
2	38.471945	-83.643296	899.23	1.50	900.73
3	38.471013	-83.643339	900.75	1.50	902.25
4	38.470660	-83.642963	898.79	1.50	900.29
5	38.466577	-83.643199	888.08	1.50	889.58
6	38.466695	-83.645399	870.18	1.50	871.68
7	38.467283	-83.645345	874.58	1.50	876.08
8	38.468501	-83.644380	887.36	1.50	888.86
9	38.468711	-83.643993	893.97	1.50	895.47
10	38.469215	-83.643961	885.96	1.50	887.46
11	38.469257	-83.645249	884.50	1.50	886.00
12	38.469963	-83.645163	886.43	1.50	887.93

Name: 119

Footprint area: 12.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.464450	-83.638103	850.29	1.50	851.79
2	38.464441	-83.637856	856.52	1.50	858.02
3	38.466531	-83.637274	859.98	1.50	861.48
4	38.466591	-83.636734	874.80	1.50	876.30
5	38.464344	-83.635783	872.76	1.50	874.26
6	38.463806	-83.635771	851.96	1.50	853.46
7	38.463787	-83.636453	858.89	1.50	860.39
8	38.463507	-83.636424	846.65	1.50	848.15
9	38.463467	-83.638682	839.96	1.50	841.46
10	38.464034	-83.638704	841.42	1.50	842.92

Name: 120

Footprint area: 7.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.462673	-83.641456	858.48	1.50	859.98
2	38.461858	-83.641450	865.72	1.50	867.22
3	38.461715	-83.641128	874.58	1.50	876.08
4	38.461186	-83.641128	882.65	1.50	884.15
5	38.461144	-83.639245	876.51	1.50	878.01
6	38.461346	-83.638870	874.96	1.50	876.46
7	38.461526	-83.638891	878.22	1.50	879.72
8	38.461572	-83.638545	871.26	1.50	872.76
9	38.462207	-83.637658	859.99	1.50	861.49
10	38.462499	-83.638850	871.13	1.50	872.63
11	38.462176	-83.639002	873.31	1.50	874.81
12	38.461669	-83.639661	876.79	1.50	878.29
13	38.461647	-83.639861	876.19	1.50	877.69
14	38.462407	-83.640128	872.69	1.50	874.19

2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25
Description:
Threshold height : 50 ft
Direction: 247.0 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7
Description:
Threshold height : 50 ft
Direction: 66.8 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



Route Receptor(s)

Name: Carpenter Road

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.459866	-83.642626	864.09	9.00	873.09
2	38.461109	-83.642347	855.22	9.00	864.22
3	38.462848	-83.641833	851.32	9.00	860.33
4	38.463436	-83.641607	848.80	9.00	857.80
5	38.464889	-83.640127	838.93	9.00	847.93
6	38.465192	-83.639848	844.48	9.00	853.48
7	38.465595	-83.639644	859.58	9.00	868.58
8	38.466267	-83.639386	879.08	9.00	888.08
9	38.468140	-83.638303	876.73	9.00	885.73
10	38.469274	-83.637927	865.16	9.00	874.16
11	38.472166	-83.637351	892.19	9.00	901.19
12	38.475940	-83.636533	889.50	9.00	898.50
13	38.479982	-83.636187	886.89	9.00	895.89
14	38.481682	-83.636911	877.14	9.00	886.14
15	38.483673	-83.638489	888.82	9.00	897.82

Name: Kilbreath Valley Road

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.481336	-83.647553	868.42	9.00	877.42
2	38.482071	-83.647070	857.21	9.00	866.21
3	38.482598	-83.646850	848.59	9.00	857.59
4	38.483920	-83.646590	835.76	9.00	844.76
5	38.484329	-83.646449	831.32	9.00	840.32
6	38.485225	-83.645986	826.59	9.00	835.59

Name: Mt Carmel Road

Route type: Two-way

View angle: 50.0 deg

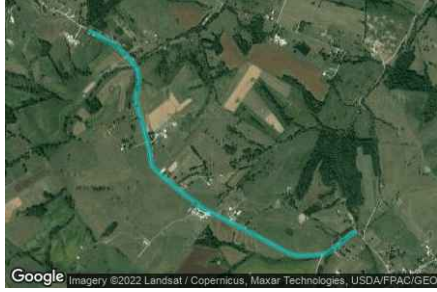


Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.472706	-83.667836	911.05	9.00	920.05
2	38.474688	-83.663780	908.25	9.00	917.25
3	38.477082	-83.658974	922.59	9.00	931.59
4	38.478581	-83.655197	913.86	9.00	922.86
5	38.479465	-83.652966	878.72	9.00	887.72
6	38.480369	-83.650198	876.67	9.00	885.67
7	38.481191	-83.647864	871.72	9.00	880.72
8	38.481618	-83.646075	847.94	9.00	856.94
9	38.482055	-83.643925	884.85	9.00	893.85
10	38.482886	-83.640399	844.48	9.00	853.48
11	38.483209	-83.639419	874.86	9.00	883.86
12	38.483667	-83.638482	888.82	9.00	897.82

Name: Poplar Grove Road

Route type Two-way

View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.500787	-83.666606	850.70	9.00	859.70
2	38.499899	-83.664545	830.31	9.00	839.31
3	38.499153	-83.663439	826.75	9.00	835.75
4	38.498218	-83.662522	812.10	9.00	821.10
5	38.497321	-83.662320	832.85	9.00	841.85
6	38.496638	-83.662531	853.08	9.00	862.08
7	38.496036	-83.662647	864.32	9.00	873.32
8	38.494274	-83.662000	893.22	9.00	902.22
9	38.492511	-83.661396	927.32	9.00	936.32
10	38.491479	-83.661221	925.90	9.00	934.90
11	38.490702	-83.660297	926.18	9.00	935.18
12	38.489791	-83.658857	915.01	9.00	924.01
13	38.488452	-83.656623	913.98	9.00	922.98
14	38.486747	-83.652348	894.21	9.00	903.21
15	38.485840	-83.650191	871.80	9.00	880.80
16	38.485286	-83.648882	850.33	9.00	859.33
17	38.485185	-83.648196	840.82	9.00	849.82
18	38.485185	-83.647187	833.21	9.00	842.21
19	38.485278	-83.645921	826.20	9.00	835.20
20	38.485551	-83.645224	820.52	9.00	829.52
21	38.486225	-83.644221	826.86	9.00	835.86
22	38.486662	-83.643537	825.57	9.00	834.57
23	38.486764	-83.643217	822.11	9.00	831.11

Name: Turner Road

Route type Two-way

View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.503501	-83.677657	931.62	9.00	940.62
2	38.501838	-83.679502	926.93	9.00	935.93
3	38.500596	-83.680940	929.71	9.00	938.71
4	38.499823	-83.681884	935.31	9.00	944.31
5	38.499219	-83.682206	929.25	9.00	938.25
6	38.497808	-83.682828	924.18	9.00	933.18
7	38.497019	-83.683172	930.61	9.00	939.61
8	38.495658	-83.684277	946.33	9.00	955.33
9	38.493492	-83.686026	949.01	9.00	958.01
10	38.491896	-83.687163	947.95	9.00	956.96

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.502308	-83.668752	892.39	16.00	908.39
OP 2	38.500074	-83.664115	837.81	16.00	853.81
OP 3	38.500179	-83.664372	840.03	16.00	856.03
OP 4	38.498859	-83.662843	818.80	16.00	834.80
OP 5	38.492150	-83.661027	925.49	16.00	941.50
OP 6	38.492600	-83.663347	919.60	16.00	935.60
OP 7	38.492709	-83.661142	928.12	16.00	944.12
OP 8	38.490739	-83.659898	928.93	16.00	944.93
OP 9	38.489983	-83.658739	921.40	16.00	937.40
OP 10	38.488123	-83.655001	914.23	16.00	930.23
OP 11	38.487040	-83.652365	900.35	16.00	916.35
OP 12	38.483929	-83.644394	884.31	16.00	900.31
OP 13	38.482255	-83.641547	864.04	16.00	880.04
OP 14	38.482902	-83.642315	866.99	16.00	882.99
OP 15	38.480768	-83.640823	876.32	16.00	892.32
OP 16	38.482629	-83.640630	841.43	16.00	857.43
OP 17	38.482809	-83.639638	867.95	16.00	883.95
OP 18	38.480117	-83.636473	890.07	16.00	906.07
OP 19	38.478929	-83.636993	892.65	16.00	908.65
OP 20	38.478404	-83.635850	888.76	16.00	904.76
OP 21	38.475527	-83.636119	896.36	16.00	912.36
OP 22	38.476964	-83.636124	895.95	16.00	911.95
OP 23	38.474603	-83.636988	893.04	16.00	909.04
OP 24	38.470811	-83.637256	878.86	16.00	894.86
OP 25	38.467959	-83.638093	878.00	16.00	894.00
OP 26	38.466716	-83.641145	886.31	16.00	902.31
OP 27	38.468785	-83.637796	863.30	16.00	879.30
OP 28	38.464039	-83.642586	844.91	16.00	860.91
OP 29	38.461897	-83.643011	873.56	16.00	889.56
OP 30	38.460595	-83.641423	883.66	16.00	899.66
OP 31	38.460679	-83.642152	865.43	16.00	881.43
OP 32	38.474161	-83.663839	913.56	16.00	929.56
OP 33	38.480456	-83.648910	889.03	16.00	905.03
OP 34	38.479969	-83.650943	877.26	16.00	893.26
OP 35	38.478512	-83.654822	916.14	16.00	932.14
OP 36	38.479889	-83.669133	945.61	16.00	961.62
OP 37	38.493984	-83.665110	918.88	16.00	934.88
OP 38	38.500315	-83.664670	845.19	16.00	861.19
OP 39	38.500433	-83.665078	848.69	16.00	864.69
OP 40	38.499937	-83.667889	894.61	16.00	910.61

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
101	SA tracking	SA tracking	0	0	-	
102	SA tracking	SA tracking	5	53	-	-
103	SA tracking	SA tracking	0	0	-	
104	SA tracking	SA tracking	0	0	-	
105	SA tracking	SA tracking	0	0	-	
106	SA tracking	SA tracking	0	0	-	
107	SA tracking	SA tracking	0	0	-	
108	SA tracking	SA tracking	0	0	-	
109	SA tracking	SA tracking	0	0	-	
110	SA tracking	SA tracking	0	0	-	
111	SA tracking	SA tracking	0	0	-	
112	SA tracking	SA tracking	0	0	-	
113	SA tracking	SA tracking	0	0	-	
114	SA tracking	SA tracking	0	0	-	
115	SA tracking	SA tracking	0	0	-	
116	SA tracking	SA tracking	0	0	-	
117	SA tracking	SA tracking	0	0	-	
118	SA tracking	SA tracking	0	0	-	
119	SA tracking	SA tracking	0	0	-	
120	SA tracking	SA tracking	0	0	-	

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
102 (green)	0	0	0	0	0	0	0	0	0	0	0	5
102 (yellow)	0	0	0	0	0	0	0	0	0	0	0	53

PV & Receptor Analysis Results

Results for each PV array and receptor

101 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	5	53

102 - Receptor (Fleming Mason Airport Runway 25)

No glare found

102 - Receptor (Fleming Mason Airport Runway 7)

No glare found

102 - OP Receptor (OP 1)

No glare found

102 - OP Receptor (OP 2)

No glare found

102 - OP Receptor (OP 3)

No glare found

102 - OP Receptor (OP 4)

No glare found

102 - OP Receptor (OP 5)

No glare found

102 - OP Receptor (OP 6)

No glare found

102 - OP Receptor (OP 7)

No glare found

102 - OP Receptor (OP 8)

No glare found

102 - OP Receptor (OP 9)

No glare found

102 - OP Receptor (OP 10)

No glare found

102 - OP Receptor (OP 11)

No glare found

102 - OP Receptor (OP 12)

No glare found

102 - OP Receptor (OP 13)

No glare found

102 - OP Receptor (OP 14)

No glare found

102 - OP Receptor (OP 15)

No glare found

102 - OP Receptor (OP 16)

No glare found

102 - OP Receptor (OP 17)

No glare found

102 - OP Receptor (OP 18)

No glare found

102 - OP Receptor (OP 19)

No glare found

102 - OP Receptor (OP 20)

No glare found

102 - OP Receptor (OP 21)

No glare found

102 - OP Receptor (OP 22)

No glare found

102 - OP Receptor (OP 23)

No glare found

102 - OP Receptor (OP 24)

No glare found

102 - OP Receptor (OP 25)

No glare found

102 - OP Receptor (OP 26)

No glare found

102 - OP Receptor (OP 27)

No glare found

102 - OP Receptor (OP 28)

No glare found

102 - OP Receptor (OP 29)

No glare found

102 - OP Receptor (OP 30)

No glare found

102 - OP Receptor (OP 31)

No glare found

102 - OP Receptor (OP 32)

No glare found

102 - OP Receptor (OP 33)

No glare found

102 - OP Receptor (OP 34)

No glare found

102 - OP Receptor (OP 35)

No glare found

102 - OP Receptor (OP 36)

No glare found

102 - OP Receptor (OP 37)

No glare found

102 - OP Receptor (OP 38)

No glare found

102 - OP Receptor (OP 39)

No glare found

102 - OP Receptor (OP 40)

No glare found

102 - Route Receptor (Carpenter Road)

No glare found

102 - Route Receptor (Kilbreath Valley Road)

No glare found

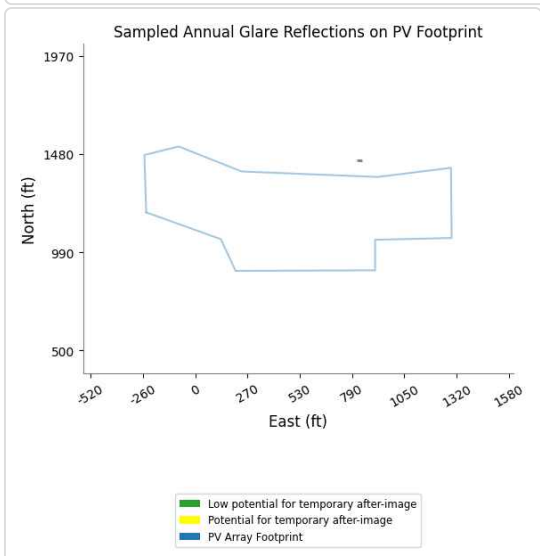
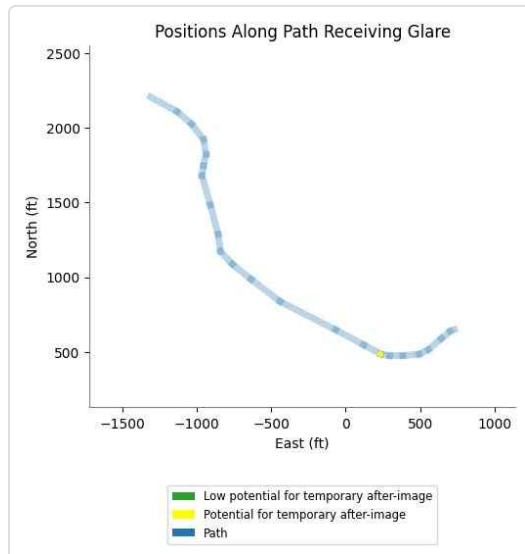
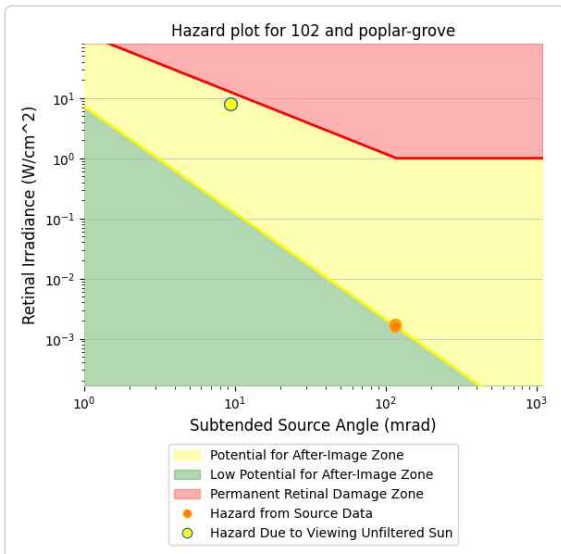
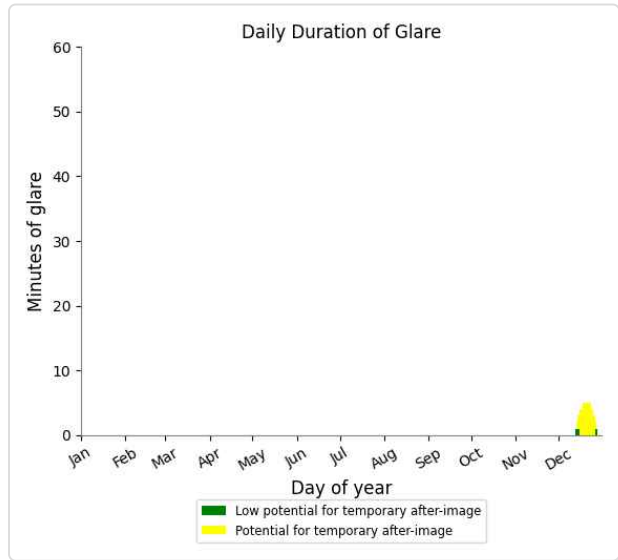
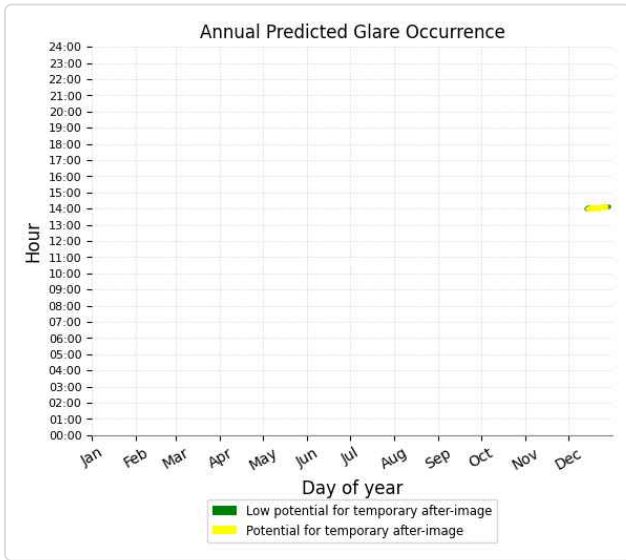
102 - Route Receptor (Mt Carmel Road)

No glare found

102 - Route Receptor (Poplar Grove Road)

PV array is expected to produce the following glare for receptors at this location:

- 5 minutes of "green" glare with low potential to cause temporary after-image.
- 53 minutes of "yellow" glare with potential to cause temporary after-image.



102 - Route Receptor (Turner Road)

No glare found

103 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

104 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

105 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

107 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

110 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

111 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

112 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

113 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

114 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

115 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

116 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

117 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

118 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

119 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

120 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 1 9ft veh 10ft pan 52rest

Created Aug. 11, 2022
 Updated Aug. 15, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73913.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results No glare predicted!

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
101	SA tracking	SA tracking	0	0	-
102	SA tracking	SA tracking	0	0	-
103	SA tracking	SA tracking	0	0	-
104	SA tracking	SA tracking	0	0	-
105	SA tracking	SA tracking	0	0	-
106	SA tracking	SA tracking	0	0	-
107	SA tracking	SA tracking	0	0	-
108	SA tracking	SA tracking	0	0	-
109	SA tracking	SA tracking	0	0	-
110	SA tracking	SA tracking	0	0	-
111	SA tracking	SA tracking	0	0	-
112	SA tracking	SA tracking	0	0	-
113	SA tracking	SA tracking	0	0	-
114	SA tracking	SA tracking	0	0	-
115	SA tracking	SA tracking	0	0	-
116	SA tracking	SA tracking	0	0	-
117	SA tracking	SA tracking	0	0	-
118	SA tracking	SA tracking	0	0	-
119	SA tracking	SA tracking	0	0	-
120	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 323.4 acres

Name: 101

Footprint area: 13.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.480913	-83.651590	893.09	10.00	903.09
2	38.480950	-83.649868	890.70	10.00	900.70
3	38.481160	-83.649865	890.63	10.00	900.63
4	38.481188	-83.648729	880.49	10.00	890.49
5	38.481796	-83.647858	862.16	10.00	872.16
6	38.482154	-83.647871	867.45	10.00	877.45
7	38.482168	-83.647529	863.09	10.00	873.09
8	38.482708	-83.647486	855.91	10.00	865.92
9	38.482757	-83.650501	878.96	10.00	888.96
10	38.482385	-83.650541	888.64	10.00	898.64
11	38.482359	-83.651264	891.06	10.00	901.06
12	38.481520	-83.651304	897.96	10.00	907.96
13	38.481506	-83.651608	898.06	10.00	908.06

Name: 102

Footprint area: 14.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484165	-83.652448	897.55	10.00	907.55
2	38.484955	-83.652480	865.51	10.00	875.51
3	38.485072	-83.651880	859.26	10.00	869.26
4	38.484728	-83.650774	857.31	10.00	867.32
5	38.484652	-83.648393	850.03	10.00	860.03
6	38.484778	-83.647105	838.32	10.00	848.32
7	38.483812	-83.647094	856.38	10.00	866.38
8	38.483787	-83.648436	875.80	10.00	885.80
9	38.483367	-83.648436	858.12	10.00	868.12
10	38.483359	-83.650882	881.09	10.00	891.09
11	38.483796	-83.651139	887.81	10.00	897.81

Name: 103

Footprint area: 24.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484165	-83.659336	929.11	10.00	939.11
2	38.484467	-83.659325	932.59	10.00	942.59
3	38.485173	-83.660366	924.24	10.00	934.24
4	38.485148	-83.662329	925.16	10.00	935.16
5	38.485614	-83.662335	923.15	10.00	933.15
6	38.485662	-83.663282	909.00	10.00	919.00
7	38.483100	-83.663518	934.16	10.00	944.16
8	38.482302	-83.663583	939.58	10.00	949.58
9	38.482280	-83.661374	936.67	10.00	946.67

Name: 104

Footprint area: 24.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

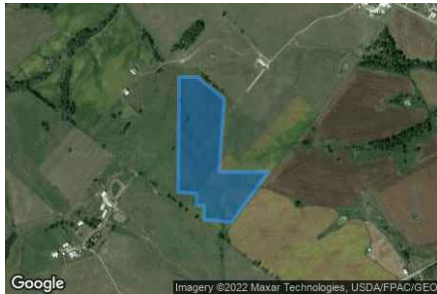
Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.482286	-83.661389	936.91	10.00	946.91
2	38.480539	-83.663052	925.27	10.00	935.27
3	38.480640	-83.664275	936.38	10.00	946.38
4	38.481127	-83.664253	938.82	10.00	948.82
5	38.481127	-83.664607	937.04	10.00	947.04
6	38.481539	-83.664565	935.04	10.00	945.04
7	38.481589	-83.665412	933.16	10.00	943.16
8	38.485553	-83.665369	884.63	10.00	894.63
9	38.485553	-83.664554	899.24	10.00	909.24
10	38.484806	-83.663363	907.80	10.00	917.80
11	38.482286	-83.663588	939.72	10.00	949.73

Name: 105

Footprint area: 24.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.485553	-83.665369	884.63	10.00	894.63
2	38.485562	-83.665906	889.75	10.00	899.76
3	38.484884	-83.666057	907.33	10.00	917.33
4	38.484777	-83.666422	902.67	10.00	912.67
5	38.484128	-83.666488	917.53	10.00	927.54
6	38.484138	-83.667005	914.93	10.00	924.93
7	38.483706	-83.667064	932.54	10.00	942.54
8	38.483764	-83.668459	919.16	10.00	929.16
9	38.484260	-83.668427	922.45	10.00	932.45
10	38.484277	-83.668663	926.96	10.00	936.96
11	38.486005	-83.668687	911.69	10.00	921.69
12	38.486977	-83.667445	888.68	10.00	898.68
13	38.487594	-83.668008	874.78	10.00	884.78
14	38.486326	-83.669580	889.93	10.00	899.94
15	38.484671	-83.669779	928.11	10.00	938.11
16	38.484025	-83.669854	935.93	10.00	945.93
17	38.482110	-83.666764	926.70	10.00	936.70
18	38.482093	-83.665434	920.44	10.00	930.44

Name: 106

Footprint area: 17.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.487153	-83.674721	929.75	10.00	939.75
2	38.486838	-83.674791	931.53	10.00	941.53
3	38.485796	-83.673042	922.75	10.00	932.75
4	38.485897	-83.672886	921.63	10.00	931.63
5	38.485885	-83.672017	908.84	10.00	918.84
6	38.486275	-83.672049	919.57	10.00	929.57
7	38.486288	-83.671164	899.99	10.00	909.99
8	38.486288	-83.671057	897.72	10.00	907.72
9	38.486741	-83.671078	910.47	10.00	920.47
10	38.487027	-83.670596	906.85	10.00	916.85
11	38.487458	-83.670246	908.94	10.00	918.94
12	38.487747	-83.669702	901.69	10.00	911.69
13	38.488072	-83.668316	861.94	10.00	871.94
14	38.488398	-83.668428	865.04	10.00	875.04
15	38.488833	-83.669043	882.64	10.00	892.64
16	38.488400	-83.670299	890.23	10.00	900.23
17	38.487950	-83.670622	906.91	10.00	916.91
18	38.487661	-83.671100	910.28	10.00	920.28
19	38.487732	-83.672725	911.28	10.00	921.28

Name: 107

Footprint area: 16.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.495087	-83.669204	849.95	10.00	859.95
2	38.495583	-83.669237	854.78	10.00	864.78
3	38.495604	-83.671592	894.40	10.00	904.40
4	38.495171	-83.671610	883.99	10.00	893.99
5	38.495126	-83.673061	892.96	10.00	902.96
6	38.494223	-83.672785	875.58	10.00	885.58
7	38.494197	-83.672288	887.21	10.00	897.22
8	38.493750	-83.672288	876.67	10.00	886.67
9	38.493755	-83.671760	878.03	10.00	888.03
10	38.493361	-83.671759	864.15	10.00	874.15
11	38.493372	-83.669243	838.22	10.00	848.22

Name: 108

Footprint area: 4.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.496884	-83.668862	869.51	10.00	879.51
2	38.496376	-83.668873	836.47	10.00	846.47
3	38.497060	-83.667371	843.68	10.00	853.68
4	38.497574	-83.667296	845.13	10.00	855.13
5	38.498163	-83.666416	839.34	10.00	849.34
6	38.498964	-83.665225	851.88	10.00	861.88
7	38.499457	-83.665257	866.99	10.00	876.99

Name: 109

Footprint area: 3.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.495314	-83.667076	863.09	10.00	873.09
2	38.495259	-83.668025	824.34	10.00	834.34
3	38.494797	-83.668267	825.49	10.00	835.49
4	38.493945	-83.668175	848.61	10.00	858.61
5	38.493966	-83.667081	892.98	10.00	902.98
6	38.494468	-83.667084	887.59	10.00	897.59
7	38.494479	-83.666747	898.48	10.00	908.48

Name: 110

Footprint area: 2.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.496598	-83.665864	845.54	10.00	855.54
2	38.496090	-83.665853	874.69	10.00	884.69
3	38.496094	-83.665746	877.64	10.00	887.64
4	38.496073	-83.665580	884.11	10.00	894.11
5	38.496056	-83.665392	889.74	10.00	899.74
6	38.496061	-83.665220	892.95	10.00	902.95
7	38.496174	-83.665124	892.66	10.00	902.66
8	38.496315	-83.664960	891.50	10.00	901.50
9	38.496486	-83.664750	890.03	10.00	900.03
10	38.496664	-83.664572	888.17	10.00	898.18
11	38.496658	-83.664904	883.17	10.00	893.17
12	38.497170	-83.664891	862.43	10.00	872.43
13	38.497127	-83.665576	833.73	10.00	843.73

Name: 111

Footprint area: 17.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.480996	-83.642359	864.19	10.00	874.19
2	38.481576	-83.642359	869.84	10.00	879.84
3	38.481584	-83.643872	886.03	10.00	896.03
4	38.481064	-83.643891	881.21	10.00	891.21
5	38.481047	-83.644918	885.09	10.00	895.09
6	38.478544	-83.645183	886.14	10.00	896.14
7	38.478582	-83.644195	891.37	10.00	901.37
8	38.477110	-83.644210	896.33	10.00	906.33
9	38.477130	-83.643735	891.87	10.00	901.87

Name: 112

Footprint area: 4.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.479597	-83.641334	881.74	10.00	891.74
2	38.478816	-83.641382	891.26	10.00	901.26
3	38.477615	-83.640481	876.91	10.00	886.91
4	38.477623	-83.640282	875.15	10.00	885.15
5	38.478114	-83.640277	866.09	10.00	876.09
6	38.478127	-83.639697	862.40	10.00	872.40
7	38.478618	-83.639719	862.68	10.00	872.68
8	38.478618	-83.640105	868.23	10.00	878.23
9	38.479605	-83.640363	879.51	10.00	889.51

Name: 113

Footprint area: 23.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477123	-83.643748	891.90	10.00	901.90
2	38.476523	-83.643715	896.81	10.00	906.81
3	38.476586	-83.642541	891.45	10.00	901.45
4	38.476107	-83.642476	879.84	10.00	889.84
5	38.476057	-83.643662	890.80	10.00	900.80
6	38.475729	-83.643662	889.33	10.00	899.33
7	38.475729	-83.643847	892.15	10.00	902.15
8	38.475032	-83.643903	885.85	10.00	895.85
9	38.474992	-83.644603	888.66	10.00	898.66
10	38.475397	-83.644649	893.35	10.00	903.35
11	38.475362	-83.645040	895.58	10.00	905.58
12	38.474600	-83.645038	892.94	10.00	902.94
13	38.474585	-83.645610	897.32	10.00	907.32
14	38.476402	-83.647095	898.25	10.00	908.25
15	38.479822	-83.647045	843.54	10.00	853.54
16	38.479827	-83.646569	847.32	10.00	857.32
17	38.478382	-83.646455	873.86	10.00	883.86
18	38.478421	-83.645503	890.21	10.00	900.21
19	38.477301	-83.644975	896.02	10.00	906.02
20	38.477113	-83.644628	901.23	10.00	911.23

Name: 114

Footprint area: 24.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477322	-83.647063	894.77	10.00	904.77
2	38.477322	-83.647406	891.16	10.00	901.16
3	38.475491	-83.647320	892.88	10.00	902.88
4	38.475457	-83.647878	891.68	10.00	901.68
5	38.475020	-83.647878	891.85	10.00	901.85
6	38.474987	-83.648586	876.73	10.00	886.73
7	38.474432	-83.648586	885.45	10.00	895.45
8	38.474483	-83.647921	886.88	10.00	896.88
9	38.471997	-83.645926	898.67	10.00	908.67
10	38.471997	-83.643630	898.82	10.00	908.82
11	38.472870	-83.643565	893.92	10.00	903.92
12	38.474550	-83.645067	893.20	10.00	903.20
13	38.474550	-83.645668	897.41	10.00	907.41
14	38.475608	-83.646473	898.94	10.00	908.94
15	38.476431	-83.647068	898.61	10.00	908.61

Name: 115

Footprint area: 23.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.472125	-83.646036	898.33	10.00	908.33
2	38.472075	-83.647496	892.74	10.00	902.74
3	38.471604	-83.647517	895.42	10.00	905.42
4	38.471638	-83.649652	895.60	10.00	905.60
5	38.471176	-83.649770	894.98	10.00	904.98
6	38.471201	-83.651186	906.22	10.00	916.22
7	38.470915	-83.651229	903.12	10.00	913.12
8	38.470899	-83.651573	900.03	10.00	910.03
9	38.470411	-83.652163	882.22	10.00	892.22
10	38.467858	-83.651202	889.74	10.00	899.75

Name: 116

Footprint area: 22.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.467858	-83.651218	889.83	10.00	899.83
2	38.466698	-83.650628	862.67	10.00	872.67
3	38.466682	-83.648611	854.59	10.00	864.59
4	38.469756	-83.648644	872.94	10.00	882.94
5	38.469731	-83.647860	877.41	10.00	887.41
6	38.466640	-83.647957	850.70	10.00	860.70
7	38.466614	-83.646884	854.49	10.00	864.49
8	38.467547	-83.646884	884.26	10.00	894.26
9	38.468370	-83.646852	894.93	10.00	904.93
10	38.470059	-83.646745	900.75	10.00	910.75
11	38.470084	-83.647002	898.24	10.00	908.24
12	38.470126	-83.648461	874.11	10.00	884.11

Name: 117

Footprint area: 18.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.470139	-83.648467	874.49	10.00	884.49
2	38.470072	-83.646761	900.59	10.00	910.59
3	38.466594	-83.646890	854.26	10.00	864.26
4	38.466670	-83.646332	850.17	10.00	860.17
5	38.467879	-83.646289	877.71	10.00	887.71
6	38.467879	-83.645935	877.78	10.00	887.78
7	38.469039	-83.645238	886.34	10.00	896.34
8	38.471995	-83.645109	900.50	10.00	910.50
9	38.471961	-83.645854	899.37	10.00	909.37
10	38.472111	-83.646061	898.33	10.00	908.33
11	38.471302	-83.647014	892.69	10.00	902.69

Name: 118

Footprint area: 23.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.471987	-83.645120	900.50	10.00	910.50
2	38.471945	-83.643296	899.23	10.00	909.23
3	38.471013	-83.643339	900.75	10.00	910.75
4	38.470660	-83.642963	898.79	10.00	908.79
5	38.466577	-83.643199	888.08	10.00	898.08
6	38.466695	-83.645399	870.18	10.00	880.18
7	38.467283	-83.645345	874.58	10.00	884.58
8	38.468501	-83.644380	887.36	10.00	897.37
9	38.468711	-83.643993	893.97	10.00	903.97
10	38.469215	-83.643961	885.96	10.00	895.96
11	38.469257	-83.645249	884.50	10.00	894.50
12	38.469963	-83.645163	886.43	10.00	896.43

Name: 119

Footprint area: 12.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.464450	-83.638103	850.29	10.00	860.29
2	38.464441	-83.637856	856.52	10.00	866.52
3	38.466531	-83.637274	859.98	10.00	869.98
4	38.466591	-83.636734	874.80	10.00	884.80
5	38.464344	-83.635783	872.76	10.00	882.76
6	38.463806	-83.635771	851.96	10.00	861.96
7	38.463787	-83.636453	858.89	10.00	868.89
8	38.463507	-83.636424	846.65	10.00	856.65
9	38.463467	-83.638682	839.96	10.00	849.96
10	38.464034	-83.638704	841.42	10.00	851.42

Name: 120

Footprint area: 7.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.462673	-83.641456	858.48	10.00	868.48
2	38.461858	-83.641450	865.72	10.00	875.72
3	38.461715	-83.641128	874.58	10.00	884.58
4	38.461186	-83.641128	882.65	10.00	892.65
5	38.461144	-83.639245	876.51	10.00	886.51
6	38.461346	-83.638870	874.96	10.00	884.96
7	38.461526	-83.638891	878.22	10.00	888.22
8	38.461572	-83.638545	871.26	10.00	881.26
9	38.462207	-83.637658	859.99	10.00	869.99
10	38.462499	-83.638850	871.13	10.00	881.13
11	38.462176	-83.639002	873.31	10.00	883.32
12	38.461669	-83.639661	876.79	10.00	886.79
13	38.461647	-83.639861	876.19	10.00	886.19
14	38.462407	-83.640128	872.69	10.00	882.69

2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25
Description:
Threshold height : 50 ft
Direction: 247.0 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7
Description:
Threshold height : 50 ft
Direction: 66.8 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01

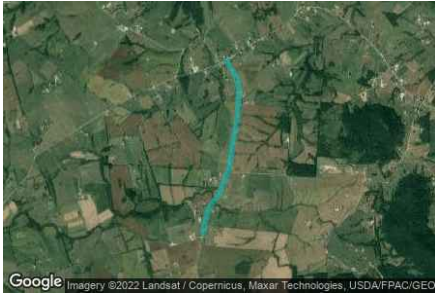


Route Receptor(s)

Name: Carpenter Road

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.459866	-83.642626	864.09	9.00	873.09
2	38.461109	-83.642347	855.22	9.00	864.22
3	38.462848	-83.641833	851.32	9.00	860.33
4	38.463436	-83.641607	848.80	9.00	857.80
5	38.464889	-83.640127	838.93	9.00	847.93
6	38.465192	-83.639848	844.48	9.00	853.48
7	38.465595	-83.639644	859.58	9.00	868.58
8	38.466267	-83.639386	879.08	9.00	888.08
9	38.468140	-83.638303	876.73	9.00	885.73
10	38.469274	-83.637927	865.16	9.00	874.16
11	38.472166	-83.637351	892.19	9.00	901.19
12	38.475940	-83.636533	889.50	9.00	898.50
13	38.479982	-83.636187	886.89	9.00	895.89
14	38.481682	-83.636911	877.14	9.00	886.14
15	38.483673	-83.638489	888.82	9.00	897.82

Name: Kilbreath Valley Road

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.481336	-83.647553	868.42	9.00	877.42
2	38.482071	-83.647070	857.21	9.00	866.21
3	38.482598	-83.646850	848.59	9.00	857.59
4	38.483920	-83.646590	835.76	9.00	844.76
5	38.484329	-83.646449	831.32	9.00	840.32
6	38.485225	-83.645986	826.59	9.00	835.59

Name: Mt Carmel Road

Route type: Two-way

View angle: 50.0 deg

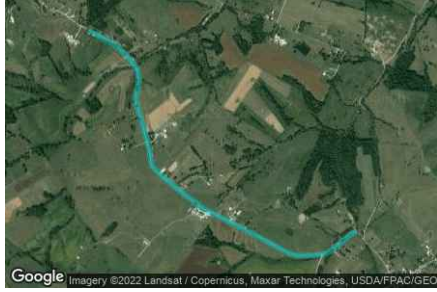


Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.472706	-83.667836	911.05	9.00	920.05
2	38.474688	-83.663780	908.25	9.00	917.25
3	38.477082	-83.658974	922.59	9.00	931.59
4	38.478581	-83.655197	913.86	9.00	922.86
5	38.479465	-83.652966	878.72	9.00	887.72
6	38.480369	-83.650198	876.67	9.00	885.67
7	38.481191	-83.647864	871.72	9.00	880.72
8	38.481618	-83.646075	847.94	9.00	856.94
9	38.482055	-83.643925	884.85	9.00	893.85
10	38.482886	-83.640399	844.48	9.00	853.48
11	38.483209	-83.639419	874.86	9.00	883.86
12	38.483667	-83.638482	888.82	9.00	897.82

Name: Poplar Grove Road

Route type Two-way

View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.500787	-83.666606	850.70	9.00	859.70
2	38.499899	-83.664545	830.31	9.00	839.31
3	38.499153	-83.663439	826.75	9.00	835.75
4	38.498218	-83.662522	812.10	9.00	821.10
5	38.497321	-83.662320	832.85	9.00	841.85
6	38.496638	-83.662531	853.08	9.00	862.08
7	38.496036	-83.662647	864.32	9.00	873.32
8	38.494274	-83.662000	893.22	9.00	902.22
9	38.492511	-83.661396	927.32	9.00	936.32
10	38.491479	-83.661221	925.90	9.00	934.90
11	38.490702	-83.660297	926.18	9.00	935.18
12	38.489791	-83.658857	915.01	9.00	924.01
13	38.488452	-83.656623	913.98	9.00	922.98
14	38.486747	-83.652348	894.21	9.00	903.21
15	38.485840	-83.650191	871.80	9.00	880.80
16	38.485286	-83.648882	850.33	9.00	859.33
17	38.485185	-83.648196	840.82	9.00	849.82
18	38.485185	-83.647187	833.21	9.00	842.21
19	38.485278	-83.645921	826.20	9.00	835.20
20	38.485551	-83.645224	820.52	9.00	829.52
21	38.486225	-83.644221	826.86	9.00	835.86
22	38.486662	-83.643537	825.57	9.00	834.57
23	38.486764	-83.643217	822.11	9.00	831.11

Name: Turner Road

Route type Two-way

View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.503501	-83.677657	931.62	9.00	940.62
2	38.501838	-83.679502	926.93	9.00	935.93
3	38.500596	-83.680940	929.71	9.00	938.71
4	38.499823	-83.681884	935.31	9.00	944.31
5	38.499219	-83.682206	929.25	9.00	938.25
6	38.497808	-83.682828	924.18	9.00	933.18
7	38.497019	-83.683172	930.61	9.00	939.61
8	38.495658	-83.684277	946.33	9.00	955.33
9	38.493492	-83.686026	949.01	9.00	958.01
10	38.491896	-83.687163	947.95	9.00	956.96

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.502308	-83.668752	892.39	16.00	908.39
OP 2	38.500074	-83.664115	837.81	16.00	853.81
OP 3	38.500179	-83.664372	840.03	16.00	856.03
OP 4	38.498859	-83.662843	818.80	16.00	834.80
OP 5	38.492150	-83.661027	925.49	16.00	941.50
OP 6	38.492600	-83.663347	919.60	16.00	935.60
OP 7	38.492709	-83.661142	928.12	16.00	944.12
OP 8	38.490739	-83.659898	928.93	16.00	944.93
OP 9	38.489983	-83.658739	921.40	16.00	937.40
OP 10	38.488123	-83.655001	914.23	16.00	930.23
OP 11	38.487040	-83.652365	900.35	16.00	916.35
OP 12	38.483929	-83.644394	884.31	16.00	900.31
OP 13	38.482255	-83.641547	864.04	16.00	880.04
OP 14	38.482902	-83.642315	866.99	16.00	882.99
OP 15	38.480768	-83.640823	876.32	16.00	892.32
OP 16	38.482629	-83.640630	841.43	16.00	857.43
OP 17	38.482809	-83.639638	867.95	16.00	883.95
OP 18	38.480117	-83.636473	890.07	16.00	906.07
OP 19	38.478929	-83.636993	892.65	16.00	908.65
OP 20	38.478404	-83.635850	888.76	16.00	904.76
OP 21	38.475527	-83.636119	896.36	16.00	912.36
OP 22	38.476964	-83.636124	895.95	16.00	911.95
OP 23	38.474603	-83.636988	893.04	16.00	909.04
OP 24	38.470811	-83.637256	878.86	16.00	894.86
OP 25	38.467959	-83.638093	878.00	16.00	894.00
OP 26	38.466716	-83.641145	886.31	16.00	902.31
OP 27	38.468785	-83.637796	863.30	16.00	879.30
OP 28	38.464039	-83.642586	844.91	16.00	860.91
OP 29	38.461897	-83.643011	873.56	16.00	889.56
OP 30	38.460595	-83.641423	883.66	16.00	899.66
OP 31	38.460679	-83.642152	865.43	16.00	881.43
OP 32	38.474161	-83.663839	913.56	16.00	929.56
OP 33	38.480456	-83.648910	889.03	16.00	905.03
OP 34	38.479969	-83.650943	877.26	16.00	893.26
OP 35	38.478512	-83.654822	916.14	16.00	932.14
OP 36	38.479889	-83.669133	945.61	16.00	961.62
OP 37	38.493984	-83.665110	918.88	16.00	934.88
OP 38	38.500315	-83.664670	845.19	16.00	861.19
OP 39	38.500433	-83.665078	848.69	16.00	864.69
OP 40	38.499937	-83.667889	894.61	16.00	910.61

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
101	SA tracking	SA tracking	0	0	-	
102	SA tracking	SA tracking	0	0	-	
103	SA tracking	SA tracking	0	0	-	
104	SA tracking	SA tracking	0	0	-	
105	SA tracking	SA tracking	0	0	-	
106	SA tracking	SA tracking	0	0	-	
107	SA tracking	SA tracking	0	0	-	
108	SA tracking	SA tracking	0	0	-	
109	SA tracking	SA tracking	0	0	-	
110	SA tracking	SA tracking	0	0	-	
111	SA tracking	SA tracking	0	0	-	
112	SA tracking	SA tracking	0	0	-	
113	SA tracking	SA tracking	0	0	-	
114	SA tracking	SA tracking	0	0	-	
115	SA tracking	SA tracking	0	0	-	
116	SA tracking	SA tracking	0	0	-	
117	SA tracking	SA tracking	0	0	-	
118	SA tracking	SA tracking	0	0	-	
119	SA tracking	SA tracking	0	0	-	
120	SA tracking	SA tracking	0	0	-	

PV & Receptor Analysis Results

Results for each PV array and receptor

101 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

102 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

103 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

104 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

105 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

107 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

109 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

110 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

111 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

112 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

113 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

114 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

115 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

116 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

117 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

118 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

119 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

120 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Carpenter Road	0	0
Route: Kilbreath Valley Road	0	0
Route: Mt Carmel Road	0	0
Route: Poplar Grove Road	0	0
Route: Turner Road	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 2 5ft veh 1_5ft pan 52rest

Created Aug. 11, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73922.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results No glare predicted!

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
201	SA tracking	SA tracking	0	0	-
202	SA tracking	SA tracking	0	0	-
203	SA tracking	SA tracking	0	0	-
204	SA tracking	SA tracking	0	0	-
205	SA tracking	SA tracking	0	0	-
206	SA tracking	SA tracking	0	0	-
207	SA tracking	SA tracking	0	0	-
208	SA tracking	SA tracking	0	0	-
209	SA tracking	SA tracking	0	0	-
210	SA tracking	SA tracking	0	0	-
211	SA tracking	SA tracking	0	0	-
212	SA tracking	SA tracking	0	0	-
213	SA tracking	SA tracking	0	0	-
214	SA tracking	SA tracking	0	0	-
215	SA tracking	SA tracking	0	0	-
216	SA tracking	SA tracking	0	0	-
217	SA tracking	SA tracking	0	0	-
218	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 254.2 acres

Name: 201
Footprint area: 19.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.461669	-83.661089	834.75	1.50	836.25
2	38.461673	-83.659764	830.29	1.50	831.79
3	38.462253	-83.659164	831.95	1.50	833.45
4	38.463064	-83.659534	845.56	1.50	847.06
5	38.463051	-83.659839	850.03	1.50	851.53
6	38.466151	-83.660317	857.66	1.50	859.16
7	38.466151	-83.661535	874.21	1.50	875.71
8	38.465728	-83.661557	884.73	1.50	886.23
9	38.465725	-83.662460	889.24	1.50	890.74
10	38.465125	-83.662429	875.88	1.50	877.38
11	38.463473	-83.661480	854.47	1.50	855.97

Name: 202
Footprint area: 24.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466058	-83.662645	887.46	1.50	888.96
2	38.465672	-83.662624	887.86	1.50	889.36
3	38.465672	-83.663310	889.61	1.50	891.11
4	38.465168	-83.663278	887.14	1.50	888.64
5	38.464832	-83.662699	876.04	1.50	877.54
6	38.463950	-83.661948	865.32	1.50	866.82
7	38.463303	-83.661637	855.44	1.50	856.94
8	38.461270	-83.661336	832.46	1.50	833.96
9	38.461161	-83.663257	833.65	1.50	835.15
10	38.464168	-83.664533	875.59	1.50	877.09
11	38.466042	-83.664619	906.15	1.50	907.65
12	38.466025	-83.663718	894.72	1.50	896.22
13	38.466571	-83.663739	882.41	1.50	883.91
14	38.466571	-83.663428	880.12	1.50	881.62
15	38.466067	-83.663412	891.89	1.50	893.39

Name: 203

Footprint area: 15.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.467050	-83.663251	887.20	1.50	888.70
2	38.467054	-83.660971	871.95	1.50	873.45
3	38.467516	-83.660971	871.82	1.50	873.32
4	38.467512	-83.661250	876.47	1.50	877.97
5	38.469288	-83.661245	867.35	1.50	868.85
6	38.469288	-83.663359	893.62	1.50	895.12
7	38.468973	-83.663369	895.49	1.50	896.99
8	38.468936	-83.665102	904.03	1.50	905.53
9	38.468385	-83.665097	912.90	1.50	914.40
10	38.468377	-83.665402	915.20	1.50	916.70
11	38.467923	-83.665376	909.59	1.50	911.09
12	38.467923	-83.663305	901.91	1.50	903.41

Name: 204

Footprint area: 23.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466037	-83.664512	906.50	1.50	908.00
2	38.466474	-83.664528	903.87	1.50	905.37
3	38.466470	-83.665145	907.27	1.50	908.77
4	38.467293	-83.665140	913.62	1.50	915.12
5	38.467302	-83.666057	917.78	1.50	919.28
6	38.467718	-83.666062	919.19	1.50	920.69
7	38.467734	-83.666872	922.62	1.50	924.12
8	38.462967	-83.666733	883.95	1.50	885.46
9	38.462992	-83.664040	856.65	1.50	858.15
10	38.464173	-83.664536	875.47	1.50	876.97
11	38.466050	-83.664635	906.16	1.50	907.66

Name: 205

Footprint area: 21.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.462992	-83.664410	858.98	1.50	860.48
2	38.461770	-83.664319	849.79	1.50	851.29
3	38.461774	-83.664067	844.74	1.50	846.24
4	38.461358	-83.664051	841.67	1.50	843.17
5	38.461362	-83.663450	836.92	1.50	838.42
6	38.460464	-83.663418	826.86	1.50	828.36
7	38.460464	-83.665102	831.78	1.50	833.28
8	38.459926	-83.665118	823.68	1.50	825.18
9	38.459892	-83.666186	826.24	1.50	827.74
10	38.460457	-83.666204	835.50	1.50	837.00
11	38.460425	-83.667370	827.16	1.50	828.66
12	38.460912	-83.667370	838.98	1.50	840.48
13	38.460921	-83.667939	837.75	1.50	839.25
14	38.461390	-83.667977	845.56	1.50	847.06
15	38.461431	-83.667224	852.23	1.50	853.73
16	38.461783	-83.667257	858.35	1.50	859.85
17	38.461791	-83.667032	859.35	1.50	860.85
18	38.462965	-83.667044	878.56	1.50	880.06
19	38.462980	-83.666212	882.91	1.50	884.41

Name: 206

Footprint area: 17.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466874	-83.666844	912.06	1.50	913.56
2	38.466883	-83.667402	894.36	1.50	895.86
3	38.467811	-83.668078	905.40	1.50	906.90
4	38.466927	-83.669070	880.15	1.50	881.65
5	38.465715	-83.668647	866.64	1.50	868.14
6	38.463917	-83.668496	852.94	1.50	854.44
7	38.463921	-83.668126	860.67	1.50	862.17
8	38.463445	-83.668086	873.47	1.50	874.97
9	38.463446	-83.667326	885.34	1.50	886.84
10	38.462967	-83.667036	878.56	1.50	880.06
11	38.462959	-83.666736	883.77	1.50	885.27

Name: 207

Footprint area: 22.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.460220	-83.675742	874.71	1.50	876.21
2	38.460271	-83.672427	883.94	1.50	885.44
3	38.459649	-83.672438	910.39	1.50	911.89
4	38.459657	-83.669208	832.13	1.50	833.63
5	38.458607	-83.669187	873.93	1.50	875.43
6	38.458573	-83.674208	877.07	1.50	878.57
7	38.458557	-83.676354	854.05	1.50	855.55
8	38.459582	-83.676611	865.30	1.50	866.81
9	38.459607	-83.675785	872.40	1.50	873.90

Name: 208

Footprint area: 16.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458567	-83.676368	854.94	1.50	856.44
2	38.457887	-83.676272	833.82	1.50	835.32
3	38.457929	-83.666262	869.08	1.50	870.58
4	38.458727	-83.666251	848.94	1.50	850.44
5	38.458727	-83.669201	874.27	1.50	875.77
6	38.458601	-83.669201	873.42	1.50	874.92

Name: 209

Footprint area: 6.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457493	-83.675736	842.56	1.50	844.06
2	38.457484	-83.673247	890.11	1.50	891.61
3	38.456602	-83.673279	875.66	1.50	877.16
4	38.456594	-83.674363	871.19	1.50	872.69
5	38.456182	-83.674416	890.24	1.50	891.74
6	38.456191	-83.675843	893.45	1.50	894.95

Name: 210

Footprint area: 11.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457493	-83.673247	890.24	1.50	891.74
2	38.457014	-83.673268	874.04	1.50	875.54
3	38.457031	-83.672614	885.17	1.50	886.67
4	38.456543	-83.672603	894.04	1.50	895.54
5	38.456585	-83.669535	911.17	1.50	912.67
6	38.455644	-83.669502	917.97	1.50	919.47
7	38.455644	-83.668676	924.28	1.50	925.78
8	38.457493	-83.668655	886.64	1.50	888.14

Name: 211

Footprint area: 1.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457493	-83.668650	886.64	1.50	888.14
2	38.457497	-83.667411	911.24	1.50	912.74
3	38.456959	-83.667411	916.36	1.50	917.86
4	38.456925	-83.668672	903.18	1.50	904.68

Name: 212

Footprint area: 8.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.460159	-83.659102	856.34	1.50	857.84
2	38.459756	-83.659108	876.19	1.50	877.69
3	38.459756	-83.660347	842.05	1.50	843.55
4	38.459269	-83.660331	841.81	1.50	843.31
5	38.459290	-83.655519	864.51	1.50	866.01
6	38.460184	-83.655562	839.86	1.50	841.36

Name: 213

Footprint area: 13.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.461188	-83.656581	833.39	1.50	834.89
2	38.461659	-83.656613	833.46	1.50	834.96
3	38.462007	-83.655621	853.11	1.50	854.61
4	38.461995	-83.655181	870.35	1.50	871.85
5	38.459979	-83.652118	880.10	1.50	881.60
6	38.459445	-83.652091	863.37	1.50	864.87
7	38.459504	-83.654022	842.22	1.50	843.72

Name: 214

Footprint area: 23.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446393	-83.671773	922.99	1.50	924.49
2	38.444981	-83.671859	948.28	1.50	949.78
3	38.445006	-83.673211	924.15	1.50	925.65
4	38.446183	-83.673071	907.35	1.50	908.85
5	38.446199	-83.673726	893.99	1.50	895.49
6	38.447594	-83.673651	882.50	1.50	884.00
7	38.449434	-83.674616	883.15	1.50	884.65
8	38.450291	-83.674627	892.00	1.50	893.50
9	38.450291	-83.674155	899.83	1.50	901.33
10	38.449779	-83.674155	903.37	1.50	904.87
11	38.449834	-83.671757	886.22	1.50	887.72
12	38.449348	-83.671813	912.36	1.50	913.86
13	38.448857	-83.671838	931.45	1.50	932.95
14	38.448854	-83.671648	930.62	1.50	932.12
15	38.447598	-83.671705	923.51	1.50	925.01
16	38.446911	-83.671755	911.92	1.50	913.42

Name: 215

Footprint area: 24.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456144	-83.642058	885.21	1.50	886.71
2	38.454993	-83.641994	895.60	1.50	897.10
3	38.454917	-83.640159	895.90	1.50	897.40
4	38.453531	-83.639730	890.91	1.50	892.41
5	38.453476	-83.636570	874.39	1.50	875.89
6	38.454079	-83.636546	876.13	1.50	877.63
7	38.454082	-83.637178	878.61	1.50	880.11
8	38.456108	-83.637059	873.05	1.50	874.55

Name: 216

Footprint area: 2.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457497	-83.667400	911.01	1.50	912.51
2	38.457497	-83.666429	875.02	1.50	876.52
3	38.456581	-83.666451	896.75	1.50	898.25
4	38.456573	-83.667454	922.49	1.50	923.99
5	38.456955	-83.667465	917.57	1.50	919.07
6	38.456955	-83.667422	916.73	1.50	918.23

Name: 217

Footprint area: 0.88 acre

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457157	-83.666429	880.92	1.50	882.42
2	38.457131	-83.665796	866.64	1.50	868.14
3	38.456577	-83.665791	891.24	1.50	892.74
4	38.456585	-83.666453	896.47	1.50	897.97



Name: 218

Footprint area: 1.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456577	-83.667475	922.85	1.50	924.35
2	38.456581	-83.666472	898.05	1.50	899.55
3	38.456157	-83.666483	913.31	1.50	914.81
4	38.456153	-83.667491	925.36	1.50	926.86



2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25
Description:
Threshold height : 50 ft
Direction: 247.0 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7
Description:
Threshold height : 50 ft
Direction: 66.8 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



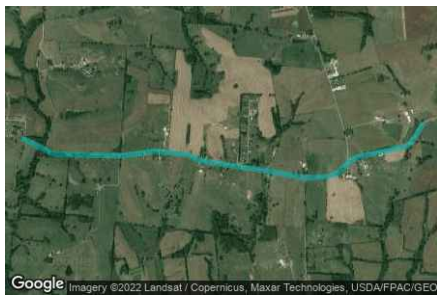
Route Receptor(s)

Name: Beech Springs Drive
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.444962	-83.669717	918.20	5.00	923.20
2	38.442383	-83.669824	920.37	5.00	925.37
3	38.440744	-83.669921	900.87	5.00	905.87
4	38.440626	-83.670103	899.87	5.00	904.87
5	38.440593	-83.670436	895.94	5.00	900.94
6	38.440534	-83.670597	890.50	5.00	895.50
7	38.440400	-83.670650	887.59	5.00	892.59

Name: Beechtree Pike
Route type: Two-way
View angle: 50.0 deg



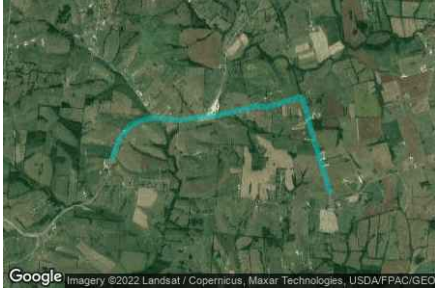
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.442299	-83.689810	818.46	5.00	823.47
2	38.441963	-83.688823	809.66	5.00	814.66
3	38.441341	-83.687342	811.93	5.00	816.93
4	38.441257	-83.686934	815.05	5.00	820.05
5	38.441190	-83.683458	837.81	5.00	842.81
6	38.441156	-83.681055	886.66	5.00	891.66
7	38.441492	-83.678115	931.20	5.00	936.20
8	38.441324	-83.676205	929.13	5.00	934.14
9	38.441223	-83.675218	916.01	5.00	921.01
10	38.440786	-83.674017	929.30	5.00	934.30
11	38.440584	-83.672386	914.48	5.00	919.48
12	38.440164	-83.668695	871.54	5.00	876.54
13	38.439626	-83.664833	929.11	5.00	934.11
14	38.439694	-83.662794	910.74	5.00	915.74
15	38.439963	-83.661936	923.45	5.00	928.45
16	38.440769	-83.660885	922.38	5.00	927.38
17	38.441122	-83.660005	916.66	5.00	921.66
18	38.441425	-83.658202	911.05	5.00	916.05
19	38.441795	-83.655928	871.51	5.00	876.51
20	38.442131	-83.655392	878.90	5.00	883.90
21	38.443324	-83.654447	902.20	5.00	907.20

Name: Carpenter Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.469909	-83.637808	875.35	5.00	880.35
2	38.469019	-83.638023	866.64	5.00	871.64
3	38.467994	-83.638388	878.37	5.00	883.37
4	38.466280	-83.639375	879.12	5.00	884.12
5	38.465423	-83.639697	851.98	5.00	856.98
6	38.464944	-83.640072	839.47	5.00	844.47
7	38.463483	-83.641596	847.69	5.00	852.69
8	38.461509	-83.642229	854.19	5.00	859.19
9	38.460400	-83.642518	859.05	5.00	864.05
10	38.458820	-83.642787	872.19	5.00	877.20
11	38.456098	-83.643516	876.71	5.00	881.71
12	38.455619	-83.643688	882.41	5.00	887.41
13	38.454603	-83.643591	895.46	5.00	900.46
14	38.453653	-83.643452	900.67	5.00	905.67
15	38.451427	-83.642551	887.13	5.00	892.14

Name: Maddox Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446929	-83.699779	900.63	5.00	905.63
2	38.449042	-83.698781	905.70	5.00	910.71
3	38.449927	-83.698140	897.24	5.00	902.24
4	38.450712	-83.697392	908.55	5.00	913.55
5	38.451421	-83.696633	891.77	5.00	896.77
6	38.451700	-83.696060	876.07	5.00	881.07
7	38.452125	-83.694733	855.23	5.00	860.23
8	38.452337	-83.693834	836.76	5.00	841.76
9	38.452486	-83.692483	818.16	5.00	823.16
10	38.452467	-83.691356	831.05	5.00	836.05
11	38.452315	-83.689688	857.58	5.00	862.58
12	38.452197	-83.688039	868.10	5.00	873.10
13	38.452525	-83.684875	821.15	5.00	826.15
14	38.452852	-83.681604	815.71	5.00	820.71
15	38.453155	-83.679459	827.25	5.00	832.25
16	38.453718	-83.676315	891.02	5.00	896.02
17	38.453903	-83.675349	909.39	5.00	914.39
18	38.454180	-83.674480	916.55	5.00	921.55
19	38.454255	-83.674234	918.84	5.00	923.84
20	38.454104	-83.673150	907.07	5.00	912.07
21	38.454020	-83.672302	914.35	5.00	919.35
22	38.454381	-83.670672	906.27	5.00	911.27
23	38.455028	-83.668043	931.42	5.00	936.42
24	38.455406	-83.666487	925.20	5.00	930.20
25	38.455415	-83.666251	922.49	5.00	927.49
26	38.455272	-83.666090	918.64	5.00	923.64
27	38.453617	-83.665275	921.14	5.00	926.14
28	38.452920	-83.665125	929.57	5.00	934.57
29	38.451306	-83.664631	930.86	5.00	935.86
30	38.448771	-83.663671	913.58	5.00	918.58
31	38.446320	-83.662711	932.18	5.00	937.18
32	38.444229	-83.661879	924.19	5.00	929.19
33	38.442240	-83.661112	932.56	5.00	937.56

Name: Mt Carmel Road Route 57
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477903	-83.656992	911.49	5.00	916.49
2	38.476744	-83.659642	924.08	5.00	929.08
3	38.475072	-83.663001	887.47	5.00	892.47
4	38.473367	-83.666444	901.07	5.00	906.07
5	38.471544	-83.670189	926.95	5.00	931.95
6	38.470604	-83.672066	924.51	5.00	929.51
7	38.470100	-83.672453	916.10	5.00	921.10
8	38.468999	-83.673032	917.05	5.00	922.05
9	38.467932	-83.673579	922.96	5.00	927.96
10	38.467647	-83.673858	923.05	5.00	928.05
11	38.466227	-83.675425	910.13	5.00	915.13
12	38.463917	-83.677989	869.39	5.00	874.39
13	38.463144	-83.678579	855.82	5.00	860.82
14	38.462027	-83.679126	827.87	5.00	832.87
15	38.461203	-83.679405	816.24	5.00	821.24
16	38.460531	-83.679577	815.85	5.00	820.85
17	38.458876	-83.679555	819.48	5.00	824.48
18	38.458470	-83.679624	816.78	5.00	821.78
19	38.457173	-83.680164	816.34	5.00	821.34
20	38.455570	-83.680923	819.49	5.00	824.49
21	38.453222	-83.682999	830.52	5.00	835.52

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.466831	-83.671151	914.48	16.00	930.48
OP 2	38.469203	-83.672438	925.10	16.00	941.10
OP 3	38.467904	-83.673952	925.35	16.00	941.35
OP 4	38.462445	-83.668247	869.42	16.00	885.42
OP 5	38.457921	-83.679349	815.32	16.00	831.32
OP 6	38.458955	-83.680054	826.45	16.00	842.45
OP 7	38.459530	-83.680011	827.20	16.00	843.20
OP 8	38.456355	-83.680258	818.16	16.00	834.16
OP 9	38.454767	-83.668188	935.10	16.00	951.10
OP 10	38.455090	-83.666804	935.71	16.00	951.71
OP 11	38.454052	-83.642962	905.82	16.00	921.82
OP 12	38.458600	-83.642610	874.74	16.00	890.74
OP 13	38.459360	-83.643382	891.27	16.00	907.27
OP 14	38.460688	-83.642100	866.38	16.00	882.38
OP 15	38.474174	-83.663874	914.48	16.00	930.48
OP 16	38.467157	-83.664205	908.96	16.00	924.96
OP 17	38.464426	-83.670114	881.40	16.00	897.40
OP 18	38.462019	-83.668841	863.13	16.00	879.14
OP 19	38.463767	-83.677704	871.22	16.00	887.22
OP 20	38.464958	-83.676419	881.58	16.00	897.58
OP 21	38.464443	-83.676966	873.81	16.00	889.81
OP 22	38.453300	-83.677095	871.17	16.00	887.17
OP 23	38.453739	-83.675249	906.43	16.00	922.43
OP 24	38.454988	-83.667223	938.94	16.00	954.94
OP 25	38.454929	-83.667545	937.94	16.00	953.94
OP 26	38.454471	-83.669605	914.05	16.00	930.05
OP 27	38.449690	-83.632821	880.84	16.00	896.84
OP 28	38.450573	-83.636689	875.47	16.00	891.47
OP 29	38.459672	-83.620596	883.93	16.00	899.93
OP 30	38.461448	-83.623342	880.63	16.00	896.63
OP 31	38.449730	-83.631872	877.57	16.00	893.57
OP 32	38.445141	-83.670053	928.74	16.00	944.75
OP 33	38.445191	-83.669102	923.01	16.00	939.01
OP 34	38.444686	-83.669547	917.25	16.00	933.25
OP 35	38.444354	-83.670228	925.17	16.00	941.17
OP 36	38.444094	-83.669504	910.20	16.00	926.20
OP 37	38.443716	-83.669536	909.00	16.00	925.00
OP 38	38.447168	-83.684498	867.84	16.00	883.84
OP 39	38.442962	-83.670249	920.41	16.00	936.41
OP 40	38.442432	-83.669536	917.92	16.00	933.92

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
201	SA tracking	SA tracking	0	0	-	
202	SA tracking	SA tracking	0	0	-	
203	SA tracking	SA tracking	0	0	-	
204	SA tracking	SA tracking	0	0	-	
205	SA tracking	SA tracking	0	0	-	
206	SA tracking	SA tracking	0	0	-	
207	SA tracking	SA tracking	0	0	-	
208	SA tracking	SA tracking	0	0	-	
209	SA tracking	SA tracking	0	0	-	
210	SA tracking	SA tracking	0	0	-	
211	SA tracking	SA tracking	0	0	-	
212	SA tracking	SA tracking	0	0	-	
213	SA tracking	SA tracking	0	0	-	
214	SA tracking	SA tracking	0	0	-	
215	SA tracking	SA tracking	0	0	-	
216	SA tracking	SA tracking	0	0	-	
217	SA tracking	SA tracking	0	0	-	
218	SA tracking	SA tracking	0	0	-	

PV & Receptor Analysis Results

Results for each PV array and receptor

201 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

202 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

203 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

204 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

205 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

206 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

207 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

208 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

209 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

210 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

211 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

212 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

213 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

214 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

215 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

216 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

217 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

218 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 2 5ft veh 10ft pan 52rest

Created Aug. 11, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73923.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results No glare predicted!

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
201	SA tracking	SA tracking	0	0	-
202	SA tracking	SA tracking	0	0	-
203	SA tracking	SA tracking	0	0	-
204	SA tracking	SA tracking	0	0	-
205	SA tracking	SA tracking	0	0	-
206	SA tracking	SA tracking	0	0	-
207	SA tracking	SA tracking	0	0	-
208	SA tracking	SA tracking	0	0	-
209	SA tracking	SA tracking	0	0	-
210	SA tracking	SA tracking	0	0	-
211	SA tracking	SA tracking	0	0	-
212	SA tracking	SA tracking	0	0	-
213	SA tracking	SA tracking	0	0	-
214	SA tracking	SA tracking	0	0	-
215	SA tracking	SA tracking	0	0	-
216	SA tracking	SA tracking	0	0	-
217	SA tracking	SA tracking	0	0	-
218	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 254.2 acres

Name: 201
Footprint area: 19.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.461669	-83.661089	834.75	10.00	844.75
2	38.461673	-83.659764	830.29	10.00	840.29
3	38.462253	-83.659164	831.95	10.00	841.95
4	38.463064	-83.659534	845.56	10.00	855.56
5	38.463051	-83.659839	850.03	10.00	860.03
6	38.466151	-83.660317	857.66	10.00	867.66
7	38.466151	-83.661535	874.21	10.00	884.21
8	38.465728	-83.661557	884.73	10.00	894.73
9	38.465725	-83.662460	889.24	10.00	899.25
10	38.465125	-83.662429	875.88	10.00	885.88
11	38.463473	-83.661480	854.47	10.00	864.47

Name: 202
Footprint area: 24.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466058	-83.662645	887.46	10.00	897.46
2	38.465672	-83.662624	887.86	10.00	897.86
3	38.465672	-83.663310	889.61	10.00	899.61
4	38.465168	-83.663278	887.14	10.00	897.14
5	38.464832	-83.662699	876.04	10.00	886.05
6	38.463950	-83.661948	865.32	10.00	875.32
7	38.463303	-83.661637	855.44	10.00	865.44
8	38.461270	-83.661336	832.46	10.00	842.46
9	38.461161	-83.663257	833.65	10.00	843.65
10	38.464168	-83.664533	875.59	10.00	885.59
11	38.466042	-83.664619	906.15	10.00	916.15
12	38.466025	-83.663718	894.72	10.00	904.72
13	38.466571	-83.663739	882.41	10.00	892.41
14	38.466571	-83.663428	880.12	10.00	890.12
15	38.466067	-83.663412	891.89	10.00	901.89

Name: 203

Footprint area: 15.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.467050	-83.663251	887.20	10.00	897.20
2	38.467054	-83.660971	871.95	10.00	881.95
3	38.467516	-83.660971	871.82	10.00	881.82
4	38.467512	-83.661250	876.47	10.00	886.47
5	38.469288	-83.661245	867.35	10.00	877.35
6	38.469288	-83.663359	893.62	10.00	903.62
7	38.468973	-83.663369	895.49	10.00	905.49
8	38.468936	-83.665102	904.03	10.00	914.03
9	38.468385	-83.665097	912.90	10.00	922.90
10	38.468377	-83.665402	915.20	10.00	925.21
11	38.467923	-83.665376	909.59	10.00	919.59
12	38.467923	-83.663305	901.91	10.00	911.91

Name: 204

Footprint area: 23.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466037	-83.664512	906.50	10.00	916.50
2	38.466474	-83.664528	903.87	10.00	913.87
3	38.466470	-83.665145	907.27	10.00	917.27
4	38.467293	-83.665140	913.62	10.00	923.62
5	38.467302	-83.666057	917.78	10.00	927.78
6	38.467718	-83.666062	919.19	10.00	929.19
7	38.467734	-83.666872	922.62	10.00	932.62
8	38.462967	-83.666733	883.95	10.00	893.96
9	38.462992	-83.664040	856.65	10.00	866.65
10	38.464173	-83.664536	875.47	10.00	885.47
11	38.466050	-83.664635	906.16	10.00	916.16

Name: 205

Footprint area: 21.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.462992	-83.664410	858.98	10.00	868.98
2	38.461770	-83.664319	849.79	10.00	859.79
3	38.461774	-83.664067	844.74	10.00	854.74
4	38.461358	-83.664051	841.67	10.00	851.67
5	38.461362	-83.663450	836.92	10.00	846.92
6	38.460464	-83.663418	826.86	10.00	836.86
7	38.460464	-83.665102	831.78	10.00	841.78
8	38.459926	-83.665118	823.68	10.00	833.68
9	38.459892	-83.666186	826.24	10.00	836.24
10	38.460457	-83.666204	835.50	10.00	845.50
11	38.460425	-83.667370	827.16	10.00	837.16
12	38.460912	-83.667370	838.98	10.00	848.98
13	38.460921	-83.667939	837.75	10.00	847.75
14	38.461390	-83.667977	845.56	10.00	855.56
15	38.461431	-83.667224	852.23	10.00	862.23
16	38.461783	-83.667257	858.35	10.00	868.35
17	38.461791	-83.667032	859.35	10.00	869.35
18	38.462965	-83.667044	878.56	10.00	888.56
19	38.462980	-83.666212	882.91	10.00	892.91

Name: 206

Footprint area: 17.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466874	-83.666844	912.06	10.00	922.06
2	38.466883	-83.667402	894.36	10.00	904.36
3	38.467811	-83.668078	905.40	10.00	915.40
4	38.466927	-83.669070	880.15	10.00	890.15
5	38.465715	-83.668647	866.64	10.00	876.64
6	38.463917	-83.668496	852.94	10.00	862.94
7	38.463921	-83.668126	860.67	10.00	870.67
8	38.463445	-83.668086	873.47	10.00	883.47
9	38.463446	-83.667326	885.34	10.00	895.34
10	38.462967	-83.667036	878.56	10.00	888.56
11	38.462959	-83.666736	883.77	10.00	893.77

Name: 207

Footprint area: 22.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.460220	-83.675742	874.71	10.00	884.71
2	38.460271	-83.672427	883.94	10.00	893.94
3	38.459649	-83.672438	910.39	10.00	920.39
4	38.459657	-83.669208	832.13	10.00	842.13
5	38.458607	-83.669187	873.93	10.00	883.93
6	38.458573	-83.674208	877.07	10.00	887.07
7	38.458557	-83.676354	854.05	10.00	864.05
8	38.459582	-83.676611	865.30	10.00	875.31
9	38.459607	-83.675785	872.40	10.00	882.40

Name: 208

Footprint area: 16.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458567	-83.676368	854.94	10.00	864.94
2	38.457887	-83.676272	833.82	10.00	843.82
3	38.457929	-83.666262	869.08	10.00	879.08
4	38.458727	-83.666251	848.94	10.00	858.94
5	38.458727	-83.669201	874.27	10.00	884.27
6	38.458601	-83.669201	873.42	10.00	883.42

Name: 209

Footprint area: 6.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457493	-83.675736	842.56	10.00	852.56
2	38.457484	-83.673247	890.11	10.00	900.11
3	38.456602	-83.673279	875.66	10.00	885.67
4	38.456594	-83.674363	871.19	10.00	881.19
5	38.456182	-83.674416	890.24	10.00	900.24
6	38.456191	-83.675843	893.45	10.00	903.45



Name: 210

Footprint area: 11.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457493	-83.673247	890.24	10.00	900.24
2	38.457014	-83.673268	874.04	10.00	884.04
3	38.457031	-83.672614	885.17	10.00	895.17
4	38.456543	-83.672603	894.04	10.00	904.04
5	38.456585	-83.669535	911.17	10.00	921.17
6	38.455644	-83.669502	917.97	10.00	927.97
7	38.455644	-83.668676	924.28	10.00	934.28
8	38.457493	-83.668655	886.64	10.00	896.64



Name: 211

Footprint area: 1.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457493	-83.668650	886.64	10.00	896.64
2	38.457497	-83.667411	911.24	10.00	921.24
3	38.456959	-83.667411	916.36	10.00	926.36
4	38.456925	-83.668672	903.18	10.00	913.18

Name: 212

Footprint area: 8.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.460159	-83.659102	856.34	10.00	866.34
2	38.459756	-83.659108	876.19	10.00	886.19
3	38.459756	-83.660347	842.05	10.00	852.05
4	38.459269	-83.660331	841.81	10.00	851.81
5	38.459290	-83.655519	864.51	10.00	874.51
6	38.460184	-83.655562	839.86	10.00	849.86

Name: 213

Footprint area: 13.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.461188	-83.656581	833.39	10.00	843.39
2	38.461659	-83.656613	833.46	10.00	843.46
3	38.462007	-83.655621	853.11	10.00	863.11
4	38.461995	-83.655181	870.35	10.00	880.35
5	38.459979	-83.652118	880.10	10.00	890.10
6	38.459445	-83.652091	863.37	10.00	873.37
7	38.459504	-83.654022	842.22	10.00	852.22

Name: 214

Footprint area: 23.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446393	-83.671773	922.99	10.00	932.99
2	38.444981	-83.671859	948.28	10.00	958.28
3	38.445006	-83.673211	924.15	10.00	934.15
4	38.446183	-83.673071	907.35	10.00	917.35
5	38.446199	-83.673726	893.99	10.00	903.99
6	38.447594	-83.673651	882.50	10.00	892.50
7	38.449434	-83.674616	883.15	10.00	893.15
8	38.450291	-83.674627	892.00	10.00	902.00
9	38.450291	-83.674155	899.83	10.00	909.83
10	38.449779	-83.674155	903.37	10.00	913.37
11	38.449834	-83.671757	886.22	10.00	896.22
12	38.449348	-83.671813	912.36	10.00	922.36
13	38.448857	-83.671838	931.45	10.00	941.45
14	38.448854	-83.671648	930.62	10.00	940.62
15	38.447598	-83.671705	923.51	10.00	933.51
16	38.446911	-83.671755	911.92	10.00	921.92

Name: 215

Footprint area: 24.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456144	-83.642058	885.21	10.00	895.21
2	38.454993	-83.641994	895.60	10.00	905.60
3	38.454917	-83.640159	895.90	10.00	905.90
4	38.453531	-83.639730	890.91	10.00	900.91
5	38.453476	-83.636570	874.39	10.00	884.39
6	38.454079	-83.636546	876.13	10.00	886.14
7	38.454082	-83.637178	878.61	10.00	888.61
8	38.456108	-83.637059	873.05	10.00	883.05

Name: 216

Footprint area: 2.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457497	-83.667400	911.01	10.00	921.01
2	38.457497	-83.666429	875.02	10.00	885.02
3	38.456581	-83.666451	896.75	10.00	906.75
4	38.456573	-83.667454	922.49	10.00	932.49
5	38.456955	-83.667465	917.57	10.00	927.57
6	38.456955	-83.667422	916.73	10.00	926.73

Name: 217

Footprint area: 0.88 acre

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457157	-83.666429	880.92	10.00	890.92
2	38.457131	-83.665796	866.64	10.00	876.64
3	38.456577	-83.665791	891.24	10.00	901.24
4	38.456585	-83.666453	896.47	10.00	906.47

Name: 218

Footprint area: 1.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456577	-83.667475	922.85	10.00	932.85
2	38.456581	-83.666472	898.05	10.00	908.05
3	38.456157	-83.666483	913.31	10.00	923.31
4	38.456153	-83.667491	925.36	10.00	935.36

2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25
Description:
Threshold height : 50 ft
Direction: 247.0 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7
Description:
Threshold height : 50 ft
Direction: 66.8 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



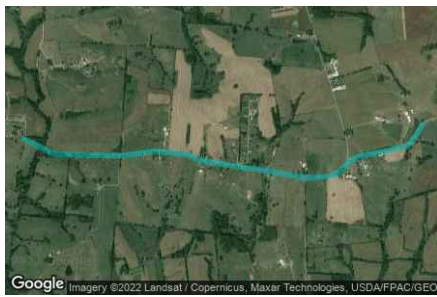
Route Receptor(s)

Name: Beech Springs Drive
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.444962	-83.669717	918.20	5.00	923.20
2	38.442383	-83.669824	920.37	5.00	925.37
3	38.440744	-83.669921	900.87	5.00	905.87
4	38.440626	-83.670103	899.87	5.00	904.87
5	38.440593	-83.670436	895.94	5.00	900.94
6	38.440534	-83.670597	890.50	5.00	895.50
7	38.440400	-83.670650	887.59	5.00	892.59

Name: Beechtree Pike
Route type: Two-way
View angle: 50.0 deg



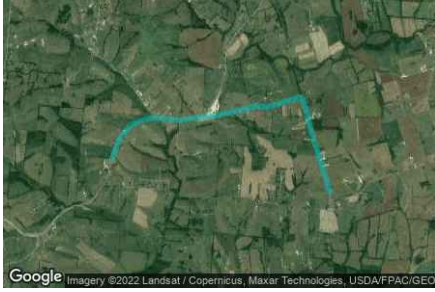
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.442299	-83.689810	818.46	5.00	823.47
2	38.441963	-83.688823	809.66	5.00	814.66
3	38.441341	-83.687342	811.93	5.00	816.93
4	38.441257	-83.686934	815.05	5.00	820.05
5	38.441190	-83.683458	837.81	5.00	842.81
6	38.441156	-83.681055	886.66	5.00	891.66
7	38.441492	-83.678115	931.20	5.00	936.20
8	38.441324	-83.676205	929.13	5.00	934.14
9	38.441223	-83.675218	916.01	5.00	921.01
10	38.440786	-83.674017	929.30	5.00	934.30
11	38.440584	-83.672386	914.48	5.00	919.48
12	38.440164	-83.668695	871.54	5.00	876.54
13	38.439626	-83.664833	929.11	5.00	934.11
14	38.439694	-83.662794	910.74	5.00	915.74
15	38.439963	-83.661936	923.45	5.00	928.45
16	38.440769	-83.660885	922.38	5.00	927.38
17	38.441122	-83.660005	916.66	5.00	921.66
18	38.441425	-83.658202	911.05	5.00	916.05
19	38.441795	-83.655928	871.51	5.00	876.51
20	38.442131	-83.655392	878.90	5.00	883.90
21	38.443324	-83.654447	902.20	5.00	907.20

Name: Carpenter Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.469909	-83.637808	875.35	5.00	880.35
2	38.469019	-83.638023	866.64	5.00	871.64
3	38.467994	-83.638388	878.37	5.00	883.37
4	38.466280	-83.639375	879.12	5.00	884.12
5	38.465423	-83.639697	851.98	5.00	856.98
6	38.464944	-83.640072	839.47	5.00	844.47
7	38.463483	-83.641596	847.69	5.00	852.69
8	38.461509	-83.642229	854.19	5.00	859.19
9	38.460400	-83.642518	859.05	5.00	864.05
10	38.458820	-83.642787	872.19	5.00	877.20
11	38.456098	-83.643516	876.71	5.00	881.71
12	38.455619	-83.643688	882.41	5.00	887.41
13	38.454603	-83.643591	895.46	5.00	900.46
14	38.453653	-83.643452	900.67	5.00	905.67
15	38.451427	-83.642551	887.13	5.00	892.14

Name: Maddox Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446929	-83.699779	900.63	5.00	905.63
2	38.449042	-83.698781	905.70	5.00	910.71
3	38.449927	-83.698140	897.24	5.00	902.24
4	38.450712	-83.697392	908.55	5.00	913.55
5	38.451421	-83.696633	891.77	5.00	896.77
6	38.451700	-83.696060	876.07	5.00	881.07
7	38.452125	-83.694733	855.23	5.00	860.23
8	38.452337	-83.693834	836.76	5.00	841.76
9	38.452486	-83.692483	818.16	5.00	823.16
10	38.452467	-83.691356	831.05	5.00	836.05
11	38.452315	-83.689688	857.58	5.00	862.58
12	38.452197	-83.688039	868.10	5.00	873.10
13	38.452525	-83.684875	821.15	5.00	826.15
14	38.452852	-83.681604	815.71	5.00	820.71
15	38.453155	-83.679459	827.25	5.00	832.25
16	38.453718	-83.676315	891.02	5.00	896.02
17	38.453903	-83.675349	909.39	5.00	914.39
18	38.454180	-83.674480	916.55	5.00	921.55
19	38.454255	-83.674234	918.84	5.00	923.84
20	38.454104	-83.673150	907.07	5.00	912.07
21	38.454020	-83.672302	914.35	5.00	919.35
22	38.454381	-83.670672	906.27	5.00	911.27
23	38.455028	-83.668043	931.42	5.00	936.42
24	38.455406	-83.666487	925.20	5.00	930.20
25	38.455415	-83.666251	922.49	5.00	927.49
26	38.455272	-83.666090	918.64	5.00	923.64
27	38.453617	-83.665275	921.14	5.00	926.14
28	38.452920	-83.665125	929.57	5.00	934.57
29	38.451306	-83.664631	930.86	5.00	935.86
30	38.448771	-83.663671	913.58	5.00	918.58
31	38.446320	-83.662711	932.18	5.00	937.18
32	38.444229	-83.661879	924.19	5.00	929.19
33	38.442240	-83.661112	932.56	5.00	937.56

Name: Mt Carmel Road Route 57
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477903	-83.656992	911.49	5.00	916.49
2	38.476744	-83.659642	924.08	5.00	929.08
3	38.475072	-83.663001	887.47	5.00	892.47
4	38.473367	-83.666444	901.07	5.00	906.07
5	38.471544	-83.670189	926.95	5.00	931.95
6	38.470604	-83.672066	924.51	5.00	929.51
7	38.470100	-83.672453	916.10	5.00	921.10
8	38.468999	-83.673032	917.05	5.00	922.05
9	38.467932	-83.673579	922.96	5.00	927.96
10	38.467647	-83.673858	923.05	5.00	928.05
11	38.466227	-83.675425	910.13	5.00	915.13
12	38.463917	-83.677989	869.39	5.00	874.39
13	38.463144	-83.678579	855.82	5.00	860.82
14	38.462027	-83.679126	827.87	5.00	832.87
15	38.461203	-83.679405	816.24	5.00	821.24
16	38.460531	-83.679577	815.85	5.00	820.85
17	38.458876	-83.679555	819.48	5.00	824.48
18	38.458470	-83.679624	816.78	5.00	821.78
19	38.457173	-83.680164	816.34	5.00	821.34
20	38.455570	-83.680923	819.49	5.00	824.49
21	38.453222	-83.682999	830.52	5.00	835.52

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.466831	-83.671151	914.48	16.00	930.48
OP 2	38.469203	-83.672438	925.10	16.00	941.10
OP 3	38.467904	-83.673952	925.35	16.00	941.35
OP 4	38.462445	-83.668247	869.42	16.00	885.42
OP 5	38.457921	-83.679349	815.32	16.00	831.32
OP 6	38.458955	-83.680054	826.45	16.00	842.45
OP 7	38.459530	-83.680011	827.20	16.00	843.20
OP 8	38.456355	-83.680258	818.16	16.00	834.16
OP 9	38.454767	-83.668188	935.10	16.00	951.10
OP 10	38.455090	-83.666804	935.71	16.00	951.71
OP 11	38.454052	-83.642962	905.82	16.00	921.82
OP 12	38.458600	-83.642610	874.74	16.00	890.74
OP 13	38.459360	-83.643382	891.27	16.00	907.27
OP 14	38.460688	-83.642100	866.38	16.00	882.38
OP 15	38.474174	-83.663874	914.48	16.00	930.48
OP 16	38.467157	-83.664205	908.96	16.00	924.96
OP 17	38.464426	-83.670114	881.40	16.00	897.40
OP 18	38.462019	-83.668841	863.13	16.00	879.14
OP 19	38.463767	-83.677704	871.22	16.00	887.22
OP 20	38.464958	-83.676419	881.58	16.00	897.58
OP 21	38.464443	-83.676966	873.81	16.00	889.81
OP 22	38.453300	-83.677095	871.17	16.00	887.17
OP 23	38.453739	-83.675249	906.43	16.00	922.43
OP 24	38.454988	-83.667223	938.94	16.00	954.94
OP 25	38.454929	-83.667545	937.94	16.00	953.94
OP 26	38.454471	-83.669605	914.05	16.00	930.05
OP 27	38.449690	-83.632821	880.84	16.00	896.84
OP 28	38.450573	-83.636689	875.47	16.00	891.47
OP 29	38.459672	-83.620596	883.93	16.00	899.93
OP 30	38.461448	-83.623342	880.63	16.00	896.63
OP 31	38.449730	-83.631872	877.57	16.00	893.57
OP 32	38.445141	-83.670053	928.74	16.00	944.75
OP 33	38.445191	-83.669102	923.01	16.00	939.01
OP 34	38.444686	-83.669547	917.25	16.00	933.25
OP 35	38.444354	-83.670228	925.17	16.00	941.17
OP 36	38.444094	-83.669504	910.20	16.00	926.20
OP 37	38.443716	-83.669536	909.00	16.00	925.00
OP 38	38.447168	-83.684498	867.84	16.00	883.84
OP 39	38.442962	-83.670249	920.41	16.00	936.41
OP 40	38.442432	-83.669536	917.92	16.00	933.92

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
201	SA tracking	SA tracking	0	0	-	
202	SA tracking	SA tracking	0	0	-	
203	SA tracking	SA tracking	0	0	-	
204	SA tracking	SA tracking	0	0	-	
205	SA tracking	SA tracking	0	0	-	
206	SA tracking	SA tracking	0	0	-	
207	SA tracking	SA tracking	0	0	-	
208	SA tracking	SA tracking	0	0	-	
209	SA tracking	SA tracking	0	0	-	
210	SA tracking	SA tracking	0	0	-	
211	SA tracking	SA tracking	0	0	-	
212	SA tracking	SA tracking	0	0	-	
213	SA tracking	SA tracking	0	0	-	
214	SA tracking	SA tracking	0	0	-	
215	SA tracking	SA tracking	0	0	-	
216	SA tracking	SA tracking	0	0	-	
217	SA tracking	SA tracking	0	0	-	
218	SA tracking	SA tracking	0	0	-	

PV & Receptor Analysis Results

Results for each PV array and receptor

201 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

202 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

203 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

204 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

205 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

206 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

207 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

208 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

209 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

210 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

211 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

212 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

213 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

214 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

215 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

216 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

217 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

218 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 2 9ft veh 1_5ft pan 52rest

Created July 12, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 72143.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results No glare predicted!

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
201	SA tracking	SA tracking	0	0	-
202	SA tracking	SA tracking	0	0	-
203	SA tracking	SA tracking	0	0	-
204	SA tracking	SA tracking	0	0	-
205	SA tracking	SA tracking	0	0	-
206	SA tracking	SA tracking	0	0	-
207	SA tracking	SA tracking	0	0	-
208	SA tracking	SA tracking	0	0	-
209	SA tracking	SA tracking	0	0	-
210	SA tracking	SA tracking	0	0	-
211	SA tracking	SA tracking	0	0	-
212	SA tracking	SA tracking	0	0	-
213	SA tracking	SA tracking	0	0	-
214	SA tracking	SA tracking	0	0	-
215	SA tracking	SA tracking	0	0	-
216	SA tracking	SA tracking	0	0	-
217	SA tracking	SA tracking	0	0	-
218	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 254.2 acres

Name: 201
Footprint area: 19.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.461669	-83.661089	834.75	1.50	836.25
2	38.461673	-83.659764	830.29	1.50	831.79
3	38.462253	-83.659164	831.95	1.50	833.45
4	38.463064	-83.659534	845.56	1.50	847.06
5	38.463051	-83.659839	850.03	1.50	851.53
6	38.466151	-83.660317	857.66	1.50	859.16
7	38.466151	-83.661535	874.21	1.50	875.71
8	38.465728	-83.661557	884.73	1.50	886.23
9	38.465725	-83.662460	889.24	1.50	890.74
10	38.465125	-83.662429	875.88	1.50	877.38
11	38.463473	-83.661480	854.47	1.50	855.97

Name: 202
Footprint area: 24.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466058	-83.662645	887.46	1.50	888.96
2	38.465672	-83.662624	887.86	1.50	889.36
3	38.465672	-83.663310	889.61	1.50	891.11
4	38.465168	-83.663278	887.14	1.50	888.64
5	38.464832	-83.662699	876.04	1.50	877.54
6	38.463950	-83.661948	865.32	1.50	866.82
7	38.463303	-83.661637	855.44	1.50	856.94
8	38.461270	-83.661336	832.46	1.50	833.96
9	38.461161	-83.663257	833.65	1.50	835.15
10	38.464168	-83.664533	875.59	1.50	877.09
11	38.466042	-83.664619	906.15	1.50	907.65
12	38.466025	-83.663718	894.72	1.50	896.22
13	38.466571	-83.663739	882.41	1.50	883.91
14	38.466571	-83.663428	880.12	1.50	881.62
15	38.466067	-83.663412	891.89	1.50	893.39

Name: 203

Footprint area: 15.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.467050	-83.663251	887.20	1.50	888.70
2	38.467054	-83.660971	871.95	1.50	873.45
3	38.467516	-83.660971	871.82	1.50	873.32
4	38.467512	-83.661250	876.47	1.50	877.97
5	38.469288	-83.661245	867.35	1.50	868.85
6	38.469288	-83.663359	893.62	1.50	895.12
7	38.468973	-83.663369	895.49	1.50	896.99
8	38.468936	-83.665102	904.03	1.50	905.53
9	38.468385	-83.665097	912.90	1.50	914.40
10	38.468377	-83.665402	915.20	1.50	916.70
11	38.467923	-83.665376	909.59	1.50	911.09
12	38.467923	-83.663305	901.91	1.50	903.41

Name: 204

Footprint area: 23.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466037	-83.664512	906.50	1.50	908.00
2	38.466474	-83.664528	903.87	1.50	905.37
3	38.466470	-83.665145	907.27	1.50	908.77
4	38.467293	-83.665140	913.62	1.50	915.12
5	38.467302	-83.666057	917.78	1.50	919.28
6	38.467718	-83.666062	919.19	1.50	920.69
7	38.467734	-83.666872	922.62	1.50	924.12
8	38.462967	-83.666733	883.95	1.50	885.46
9	38.462992	-83.664040	856.65	1.50	858.15
10	38.464173	-83.664536	875.47	1.50	876.97
11	38.466050	-83.664635	906.16	1.50	907.66

Name: 205

Footprint area: 21.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.462992	-83.664410	858.98	1.50	860.48
2	38.461770	-83.664319	849.79	1.50	851.29
3	38.461774	-83.664067	844.74	1.50	846.24
4	38.461358	-83.664051	841.67	1.50	843.17
5	38.461362	-83.663450	836.92	1.50	838.42
6	38.460464	-83.663418	826.86	1.50	828.36
7	38.460464	-83.665102	831.78	1.50	833.28
8	38.459926	-83.665118	823.68	1.50	825.18
9	38.459892	-83.666186	826.24	1.50	827.74
10	38.460457	-83.666204	835.50	1.50	837.00
11	38.460425	-83.667370	827.16	1.50	828.66
12	38.460912	-83.667370	838.98	1.50	840.48
13	38.460921	-83.667939	837.75	1.50	839.25
14	38.461390	-83.667977	845.56	1.50	847.06
15	38.461431	-83.667224	852.23	1.50	853.73
16	38.461783	-83.667257	858.35	1.50	859.85
17	38.461791	-83.667032	859.35	1.50	860.85
18	38.462965	-83.667044	878.56	1.50	880.06
19	38.462980	-83.666212	882.91	1.50	884.41

Name: 206

Footprint area: 17.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466874	-83.666844	912.06	1.50	913.56
2	38.466883	-83.667402	894.36	1.50	895.86
3	38.467811	-83.668078	905.40	1.50	906.90
4	38.466927	-83.669070	880.15	1.50	881.65
5	38.465715	-83.668647	866.64	1.50	868.14
6	38.463917	-83.668496	852.94	1.50	854.44
7	38.463921	-83.668126	860.67	1.50	862.17
8	38.463445	-83.668086	873.47	1.50	874.97
9	38.463446	-83.667326	885.34	1.50	886.84
10	38.462967	-83.667036	878.56	1.50	880.06
11	38.462959	-83.666736	883.77	1.50	885.27

Name: 207

Footprint area: 22.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.460220	-83.675742	874.71	1.50	876.21
2	38.460271	-83.672427	883.94	1.50	885.44
3	38.459649	-83.672438	910.39	1.50	911.89
4	38.459657	-83.669208	832.13	1.50	833.63
5	38.458607	-83.669187	873.93	1.50	875.43
6	38.458573	-83.674208	877.07	1.50	878.57
7	38.458557	-83.676354	854.05	1.50	855.55
8	38.459582	-83.676611	865.30	1.50	866.81
9	38.459607	-83.675785	872.40	1.50	873.90

Name: 208

Footprint area: 16.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458567	-83.676368	854.94	1.50	856.44
2	38.457887	-83.676272	833.82	1.50	835.32
3	38.457929	-83.666262	869.08	1.50	870.58
4	38.458727	-83.666251	848.94	1.50	850.44
5	38.458727	-83.669201	874.27	1.50	875.77
6	38.458601	-83.669201	873.42	1.50	874.92

Name: 209

Footprint area: 6.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457493	-83.675736	842.56	1.50	844.06
2	38.457484	-83.673247	890.11	1.50	891.61
3	38.456602	-83.673279	875.66	1.50	877.16
4	38.456594	-83.674363	871.19	1.50	872.69
5	38.456182	-83.674416	890.24	1.50	891.74
6	38.456191	-83.675843	893.45	1.50	894.95



Name: 210

Footprint area: 11.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457493	-83.673247	890.24	1.50	891.74
2	38.457014	-83.673268	874.04	1.50	875.54
3	38.457031	-83.672614	885.17	1.50	886.67
4	38.456543	-83.672603	894.04	1.50	895.54
5	38.456585	-83.669535	911.17	1.50	912.67
6	38.455644	-83.669502	917.97	1.50	919.47
7	38.455644	-83.668676	924.28	1.50	925.78
8	38.457493	-83.668655	886.64	1.50	888.14



Name: 211

Footprint area: 1.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457493	-83.668650	886.64	1.50	888.14
2	38.457497	-83.667411	911.24	1.50	912.74
3	38.456959	-83.667411	916.36	1.50	917.86
4	38.456925	-83.668672	903.18	1.50	904.68



Name: 212

Footprint area: 8.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.460159	-83.659102	856.34	1.50	857.84
2	38.459756	-83.659108	876.19	1.50	877.69
3	38.459756	-83.660347	842.05	1.50	843.55
4	38.459269	-83.660331	841.81	1.50	843.31
5	38.459290	-83.655519	864.51	1.50	866.01
6	38.460184	-83.655562	839.86	1.50	841.36



Name: 213

Footprint area: 13.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.461188	-83.656581	833.39	1.50	834.89
2	38.461659	-83.656613	833.46	1.50	834.96
3	38.462007	-83.655621	853.11	1.50	854.61
4	38.461995	-83.655181	870.35	1.50	871.85
5	38.459979	-83.652118	880.10	1.50	881.60
6	38.459445	-83.652091	863.37	1.50	864.87
7	38.459504	-83.654022	842.22	1.50	843.72

Name: 214

Footprint area: 23.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446393	-83.671773	922.99	1.50	924.49
2	38.444981	-83.671859	948.28	1.50	949.78
3	38.445006	-83.673211	924.15	1.50	925.65
4	38.446183	-83.673071	907.35	1.50	908.85
5	38.446199	-83.673726	893.99	1.50	895.49
6	38.447594	-83.673651	882.50	1.50	884.00
7	38.449434	-83.674616	883.15	1.50	884.65
8	38.450291	-83.674627	892.00	1.50	893.50
9	38.450291	-83.674155	899.83	1.50	901.33
10	38.449779	-83.674155	903.37	1.50	904.87
11	38.449834	-83.671757	886.22	1.50	887.72
12	38.449348	-83.671813	912.36	1.50	913.86
13	38.448857	-83.671838	931.45	1.50	932.95
14	38.448854	-83.671648	930.62	1.50	932.12
15	38.447598	-83.671705	923.51	1.50	925.01
16	38.446911	-83.671755	911.92	1.50	913.42

Name: 215

Footprint area: 24.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456144	-83.642058	885.21	1.50	886.71
2	38.454993	-83.641994	895.60	1.50	897.10
3	38.454917	-83.640159	895.90	1.50	897.40
4	38.453531	-83.639730	890.91	1.50	892.41
5	38.453476	-83.636570	874.39	1.50	875.89
6	38.454079	-83.636546	876.13	1.50	877.63
7	38.454082	-83.637178	878.61	1.50	880.11
8	38.456108	-83.637059	873.05	1.50	874.55

Name: 216

Footprint area: 2.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457497	-83.667400	911.01	1.50	912.51
2	38.457497	-83.666429	875.02	1.50	876.52
3	38.456581	-83.666451	896.75	1.50	898.25
4	38.456573	-83.667454	922.49	1.50	923.99
5	38.456955	-83.667465	917.57	1.50	919.07
6	38.456955	-83.667422	916.73	1.50	918.23

Name: 217

Footprint area: 0.88 acre

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457157	-83.666429	880.92	1.50	882.42
2	38.457131	-83.665796	866.64	1.50	868.14
3	38.456577	-83.665791	891.24	1.50	892.74
4	38.456585	-83.666453	896.47	1.50	897.97

Name: 218

Footprint area: 1.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456577	-83.667475	922.85	1.50	924.35
2	38.456581	-83.666472	898.05	1.50	899.55
3	38.456157	-83.666483	913.31	1.50	914.81
4	38.456153	-83.667491	925.36	1.50	926.86

2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25
Description:
Threshold height : 50 ft
Direction: 247.0 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7
Description:
Threshold height : 50 ft
Direction: 66.8 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



Route Receptor(s)

Name: Beech Springs Drive
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.444962	-83.669717	918.20	9.00	927.20
2	38.442383	-83.669824	920.37	9.00	929.37
3	38.440744	-83.669921	900.87	9.00	909.87
4	38.440626	-83.670103	899.87	9.00	908.87
5	38.440593	-83.670436	895.94	9.00	904.94
6	38.440534	-83.670597	890.50	9.00	899.50
7	38.440400	-83.670650	887.59	9.00	896.59

Name: Beechtree Pike
Route type: Two-way
View angle: 50.0 deg



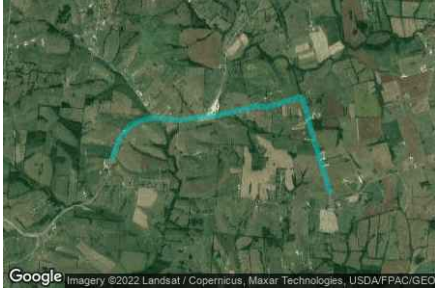
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.442299	-83.689810	818.46	9.00	827.47
2	38.441963	-83.688823	809.66	9.00	818.66
3	38.441341	-83.687342	811.93	9.00	820.93
4	38.441257	-83.686934	815.05	9.00	824.05
5	38.441190	-83.683458	837.81	9.00	846.81
6	38.441156	-83.681055	886.66	9.00	895.66
7	38.441492	-83.678115	931.20	9.00	940.20
8	38.441324	-83.676205	929.13	9.00	938.14
9	38.441223	-83.675218	916.01	9.00	925.01
10	38.440786	-83.674017	929.30	9.00	938.30
11	38.440584	-83.672386	914.48	9.00	923.48
12	38.440164	-83.668695	871.54	9.00	880.54
13	38.439626	-83.664833	929.11	9.00	938.11
14	38.439694	-83.662794	910.74	9.00	919.74
15	38.439963	-83.661936	923.45	9.00	932.45
16	38.440769	-83.660885	922.38	9.00	931.38
17	38.441122	-83.660005	916.66	9.00	925.66
18	38.441425	-83.658202	911.05	9.00	920.05
19	38.441795	-83.655928	871.51	9.00	880.51
20	38.442131	-83.655392	878.90	9.00	887.90
21	38.443324	-83.654447	902.20	9.00	911.20

Name: Carpenter Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.469909	-83.637808	875.35	9.00	884.35
2	38.469019	-83.638023	866.64	9.00	875.64
3	38.467994	-83.638388	878.37	9.00	887.37
4	38.466280	-83.639375	879.12	9.00	888.12
5	38.465423	-83.639697	851.98	9.00	860.98
6	38.464944	-83.640072	839.47	9.00	848.47
7	38.463483	-83.641596	847.69	9.00	856.69
8	38.461509	-83.642229	854.19	9.00	863.19
9	38.460400	-83.642518	859.05	9.00	868.05
10	38.458820	-83.642787	872.19	9.00	881.20
11	38.456098	-83.643516	876.71	9.00	885.71
12	38.455619	-83.643688	882.41	9.00	891.42
13	38.454603	-83.643591	895.46	9.00	904.46
14	38.453653	-83.643452	900.67	9.00	909.67
15	38.451427	-83.642551	887.13	9.00	896.14

Name: Maddox Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446929	-83.699779	900.63	9.00	909.63
2	38.449042	-83.698781	905.70	9.00	914.71
3	38.449927	-83.698140	897.24	9.00	906.24
4	38.450712	-83.697392	908.55	9.00	917.55
5	38.451421	-83.696633	891.77	9.00	900.77
6	38.451700	-83.696060	876.07	9.00	885.07
7	38.452125	-83.694733	855.23	9.00	864.24
8	38.452337	-83.693834	836.76	9.00	845.76
9	38.452486	-83.692483	818.16	9.00	827.16
10	38.452467	-83.691356	831.05	9.00	840.05
11	38.452315	-83.689688	857.58	9.00	866.58
12	38.452197	-83.688039	868.10	9.00	877.10
13	38.452525	-83.684875	821.15	9.00	830.15
14	38.452852	-83.681604	815.71	9.00	824.71
15	38.453155	-83.679459	827.25	9.00	836.25
16	38.453718	-83.676315	891.02	9.00	900.02
17	38.453903	-83.675349	909.39	9.00	918.39
18	38.454180	-83.674480	916.55	9.00	925.55
19	38.454255	-83.674234	918.84	9.00	927.84
20	38.454104	-83.673150	907.07	9.00	916.07
21	38.454020	-83.672302	914.35	9.00	923.35
22	38.454381	-83.670672	906.27	9.00	915.27
23	38.455028	-83.668043	931.42	9.00	940.42
24	38.455406	-83.666487	925.20	9.00	934.20
25	38.455415	-83.666251	922.49	9.00	931.49
26	38.455272	-83.666090	918.64	9.00	927.64
27	38.453617	-83.665275	921.14	9.00	930.14
28	38.452920	-83.665125	929.57	9.00	938.57
29	38.451306	-83.664631	930.86	9.00	939.86
30	38.448771	-83.663671	913.58	9.00	922.58
31	38.446320	-83.662711	932.18	9.00	941.18
32	38.444229	-83.661879	924.19	9.00	933.19
33	38.442240	-83.661112	932.56	9.00	941.56

Name: Mt Carmel Road Route 57
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477903	-83.656992	911.49	9.00	920.49
2	38.476744	-83.659642	924.08	9.00	933.08
3	38.475072	-83.663001	887.47	9.00	896.47
4	38.473367	-83.666444	901.07	9.00	910.07
5	38.471544	-83.670189	926.95	9.00	935.95
6	38.470604	-83.672066	924.51	9.00	933.51
7	38.470100	-83.672453	916.10	9.00	925.10
8	38.468999	-83.673032	917.05	9.00	926.05
9	38.467932	-83.673579	922.96	9.00	931.96
10	38.467647	-83.673858	923.05	9.00	932.05
11	38.466227	-83.675425	910.13	9.00	919.13
12	38.463917	-83.677989	869.39	9.00	878.39
13	38.463144	-83.678579	855.82	9.00	864.82
14	38.462027	-83.679126	827.87	9.00	836.87
15	38.461203	-83.679405	816.24	9.00	825.24
16	38.460531	-83.679577	815.85	9.00	824.85
17	38.458876	-83.679555	819.48	9.00	828.48
18	38.458470	-83.679624	816.78	9.00	825.78
19	38.457173	-83.680164	816.34	9.00	825.34
20	38.455570	-83.680923	819.49	9.00	828.49
21	38.453222	-83.682999	830.52	9.00	839.52

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.466831	-83.671151	914.48	16.00	930.48
OP 2	38.469203	-83.672438	925.10	16.00	941.10
OP 3	38.467904	-83.673952	925.35	16.00	941.35
OP 4	38.462445	-83.668247	869.42	16.00	885.42
OP 5	38.457921	-83.679349	815.32	16.00	831.32
OP 6	38.458955	-83.680054	826.45	16.00	842.45
OP 7	38.459530	-83.680011	827.20	16.00	843.20
OP 8	38.456355	-83.680258	818.16	16.00	834.16
OP 9	38.454767	-83.668188	935.10	16.00	951.10
OP 10	38.455090	-83.666804	935.71	16.00	951.71
OP 11	38.454052	-83.642962	905.82	16.00	921.82
OP 12	38.458600	-83.642610	874.74	16.00	890.74
OP 13	38.459360	-83.643382	891.27	16.00	907.27
OP 14	38.460688	-83.642100	866.38	16.00	882.38
OP 15	38.474174	-83.663874	914.48	16.00	930.48
OP 16	38.467157	-83.664205	908.96	16.00	924.96
OP 17	38.464426	-83.670114	881.40	16.00	897.40
OP 18	38.462019	-83.668841	863.13	16.00	879.14
OP 19	38.463767	-83.677704	871.22	16.00	887.22
OP 20	38.464958	-83.676419	881.58	16.00	897.58
OP 21	38.464443	-83.676966	873.81	16.00	889.81
OP 22	38.453300	-83.677095	871.17	16.00	887.17
OP 23	38.453739	-83.675249	906.43	16.00	922.43
OP 24	38.454988	-83.667223	938.94	16.00	954.94
OP 25	38.454929	-83.667545	937.94	16.00	953.94
OP 26	38.454471	-83.669605	914.05	16.00	930.05
OP 27	38.449690	-83.632821	880.84	16.00	896.84
OP 28	38.450573	-83.636689	875.47	16.00	891.47
OP 29	38.459672	-83.620596	883.93	16.00	899.93
OP 30	38.461448	-83.623342	880.63	16.00	896.63
OP 31	38.449730	-83.631872	877.57	16.00	893.57
OP 32	38.445141	-83.670053	928.74	16.00	944.75
OP 33	38.445191	-83.669102	923.01	16.00	939.01
OP 34	38.444686	-83.669547	917.25	16.00	933.25
OP 35	38.444354	-83.670228	925.17	16.00	941.17
OP 36	38.444094	-83.669504	910.20	16.00	926.20
OP 37	38.443716	-83.669536	909.00	16.00	925.00
OP 38	38.447168	-83.684498	867.84	16.00	883.84
OP 39	38.442962	-83.670249	920.41	16.00	936.41
OP 40	38.442432	-83.669536	917.92	16.00	933.92

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
201	SA tracking	SA tracking	0	0	-	
202	SA tracking	SA tracking	0	0	-	
203	SA tracking	SA tracking	0	0	-	
204	SA tracking	SA tracking	0	0	-	
205	SA tracking	SA tracking	0	0	-	
206	SA tracking	SA tracking	0	0	-	
207	SA tracking	SA tracking	0	0	-	
208	SA tracking	SA tracking	0	0	-	
209	SA tracking	SA tracking	0	0	-	
210	SA tracking	SA tracking	0	0	-	
211	SA tracking	SA tracking	0	0	-	
212	SA tracking	SA tracking	0	0	-	
213	SA tracking	SA tracking	0	0	-	
214	SA tracking	SA tracking	0	0	-	
215	SA tracking	SA tracking	0	0	-	
216	SA tracking	SA tracking	0	0	-	
217	SA tracking	SA tracking	0	0	-	
218	SA tracking	SA tracking	0	0	-	

PV & Receptor Analysis Results

Results for each PV array and receptor

201 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

202 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

203 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

204 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

205 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

206 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

207 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

208 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

209 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

210 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

211 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

212 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

213 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

214 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

215 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

216 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

217 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

218 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 2 9ft veh 10ft pan 52rest

Created Aug. 11, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73924.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results No glare predicted!

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
201	SA tracking	SA tracking	0	0	-
202	SA tracking	SA tracking	0	0	-
203	SA tracking	SA tracking	0	0	-
204	SA tracking	SA tracking	0	0	-
205	SA tracking	SA tracking	0	0	-
206	SA tracking	SA tracking	0	0	-
207	SA tracking	SA tracking	0	0	-
208	SA tracking	SA tracking	0	0	-
209	SA tracking	SA tracking	0	0	-
210	SA tracking	SA tracking	0	0	-
211	SA tracking	SA tracking	0	0	-
212	SA tracking	SA tracking	0	0	-
213	SA tracking	SA tracking	0	0	-
214	SA tracking	SA tracking	0	0	-
215	SA tracking	SA tracking	0	0	-
216	SA tracking	SA tracking	0	0	-
217	SA tracking	SA tracking	0	0	-
218	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 254.2 acres

Name: 201

Footprint area: 19.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.461669	-83.661089	834.75	10.00	844.75
2	38.461673	-83.659764	830.29	10.00	840.29
3	38.462253	-83.659164	831.95	10.00	841.95
4	38.463064	-83.659534	845.56	10.00	855.56
5	38.463051	-83.659839	850.03	10.00	860.03
6	38.466151	-83.660317	857.66	10.00	867.66
7	38.466151	-83.661535	874.21	10.00	884.21
8	38.465728	-83.661557	884.73	10.00	894.73
9	38.465725	-83.662460	889.24	10.00	899.25
10	38.465125	-83.662429	875.88	10.00	885.88
11	38.463473	-83.661480	854.47	10.00	864.47

Name: 202

Footprint area: 24.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466058	-83.662645	887.46	10.00	897.46
2	38.465672	-83.662624	887.86	10.00	897.86
3	38.465672	-83.663310	889.61	10.00	899.61
4	38.465168	-83.663278	887.14	10.00	897.14
5	38.464832	-83.662699	876.04	10.00	886.05
6	38.463950	-83.661948	865.32	10.00	875.32
7	38.463303	-83.661637	855.44	10.00	865.44
8	38.461270	-83.661336	832.46	10.00	842.46
9	38.461161	-83.663257	833.65	10.00	843.65
10	38.464168	-83.664533	875.59	10.00	885.59
11	38.466042	-83.664619	906.15	10.00	916.15
12	38.466025	-83.663718	894.72	10.00	904.72
13	38.466571	-83.663739	882.41	10.00	892.41
14	38.466571	-83.663428	880.12	10.00	890.12
15	38.466067	-83.663412	891.89	10.00	901.89

Name: 203

Footprint area: 15.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.467050	-83.663251	887.20	10.00	897.20
2	38.467054	-83.660971	871.95	10.00	881.95
3	38.467516	-83.660971	871.82	10.00	881.82
4	38.467512	-83.661250	876.47	10.00	886.47
5	38.469288	-83.661245	867.35	10.00	877.35
6	38.469288	-83.663359	893.62	10.00	903.62
7	38.468973	-83.663369	895.49	10.00	905.49
8	38.468936	-83.665102	904.03	10.00	914.03
9	38.468385	-83.665097	912.90	10.00	922.90
10	38.468377	-83.665402	915.20	10.00	925.21
11	38.467923	-83.665376	909.59	10.00	919.59
12	38.467923	-83.663305	901.91	10.00	911.91

Name: 204

Footprint area: 23.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466037	-83.664512	906.50	10.00	916.50
2	38.466474	-83.664528	903.87	10.00	913.87
3	38.466470	-83.665145	907.27	10.00	917.27
4	38.467293	-83.665140	913.62	10.00	923.62
5	38.467302	-83.666057	917.78	10.00	927.78
6	38.467718	-83.666062	919.19	10.00	929.19
7	38.467734	-83.666872	922.62	10.00	932.62
8	38.462967	-83.666733	883.95	10.00	893.96
9	38.462992	-83.664040	856.65	10.00	866.65
10	38.464173	-83.664536	875.47	10.00	885.47
11	38.466050	-83.664635	906.16	10.00	916.16

Name: 205

Footprint area: 21.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.462992	-83.664410	858.98	10.00	868.98
2	38.461770	-83.664319	849.79	10.00	859.79
3	38.461774	-83.664067	844.74	10.00	854.74
4	38.461358	-83.664051	841.67	10.00	851.67
5	38.461362	-83.663450	836.92	10.00	846.92
6	38.460464	-83.663418	826.86	10.00	836.86
7	38.460464	-83.665102	831.78	10.00	841.78
8	38.459926	-83.665118	823.68	10.00	833.68
9	38.459892	-83.666186	826.24	10.00	836.24
10	38.460457	-83.666204	835.50	10.00	845.50
11	38.460425	-83.667370	827.16	10.00	837.16
12	38.460912	-83.667370	838.98	10.00	848.98
13	38.460921	-83.667939	837.75	10.00	847.75
14	38.461390	-83.667977	845.56	10.00	855.56
15	38.461431	-83.667224	852.23	10.00	862.23
16	38.461783	-83.667257	858.35	10.00	868.35
17	38.461791	-83.667032	859.35	10.00	869.35
18	38.462965	-83.667044	878.56	10.00	888.56
19	38.462980	-83.666212	882.91	10.00	892.91

Name: 206

Footprint area: 17.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466874	-83.666844	912.06	10.00	922.06
2	38.466883	-83.667402	894.36	10.00	904.36
3	38.467811	-83.668078	905.40	10.00	915.40
4	38.466927	-83.669070	880.15	10.00	890.15
5	38.465715	-83.668647	866.64	10.00	876.64
6	38.463917	-83.668496	852.94	10.00	862.94
7	38.463921	-83.668126	860.67	10.00	870.67
8	38.463445	-83.668086	873.47	10.00	883.47
9	38.463446	-83.667326	885.34	10.00	895.34
10	38.462967	-83.667036	878.56	10.00	888.56
11	38.462959	-83.666736	883.77	10.00	893.77

Name: 207

Footprint area: 22.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.460220	-83.675742	874.71	10.00	884.71
2	38.460271	-83.672427	883.94	10.00	893.94
3	38.459649	-83.672438	910.39	10.00	920.39
4	38.459657	-83.669208	832.13	10.00	842.13
5	38.458607	-83.669187	873.93	10.00	883.93
6	38.458573	-83.674208	877.07	10.00	887.07
7	38.458557	-83.676354	854.05	10.00	864.05
8	38.459582	-83.676611	865.30	10.00	875.31
9	38.459607	-83.675785	872.40	10.00	882.40

Name: 208

Footprint area: 16.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458567	-83.676368	854.94	10.00	864.94
2	38.457887	-83.676272	833.82	10.00	843.82
3	38.457929	-83.666262	869.08	10.00	879.08
4	38.458727	-83.666251	848.94	10.00	858.94
5	38.458727	-83.669201	874.27	10.00	884.27
6	38.458601	-83.669201	873.42	10.00	883.42

Name: 209

Footprint area: 6.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457493	-83.675736	842.56	10.00	852.56
2	38.457484	-83.673247	890.11	10.00	900.11
3	38.456602	-83.673279	875.66	10.00	885.67
4	38.456594	-83.674363	871.19	10.00	881.19
5	38.456182	-83.674416	890.24	10.00	900.24
6	38.456191	-83.675843	893.45	10.00	903.45

Name: 210

Footprint area: 11.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457493	-83.673247	890.24	10.00	900.24
2	38.457014	-83.673268	874.04	10.00	884.04
3	38.457031	-83.672614	885.17	10.00	895.17
4	38.456543	-83.672603	894.04	10.00	904.04
5	38.456585	-83.669535	911.17	10.00	921.17
6	38.455644	-83.669502	917.97	10.00	927.97
7	38.455644	-83.668676	924.28	10.00	934.28
8	38.457493	-83.668655	886.64	10.00	896.64

Name: 211

Footprint area: 1.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457493	-83.668650	886.64	10.00	896.64
2	38.457497	-83.667411	911.24	10.00	921.24
3	38.456959	-83.667411	916.36	10.00	926.36
4	38.456925	-83.668672	903.18	10.00	913.18

Name: 212

Footprint area: 8.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.460159	-83.659102	856.34	10.00	866.34
2	38.459756	-83.659108	876.19	10.00	886.19
3	38.459756	-83.660347	842.05	10.00	852.05
4	38.459269	-83.660331	841.81	10.00	851.81
5	38.459290	-83.655519	864.51	10.00	874.51
6	38.460184	-83.655562	839.86	10.00	849.86

Name: 213

Footprint area: 13.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.461188	-83.656581	833.39	10.00	843.39
2	38.461659	-83.656613	833.46	10.00	843.46
3	38.462007	-83.655621	853.11	10.00	863.11
4	38.461995	-83.655181	870.35	10.00	880.35
5	38.459979	-83.652118	880.10	10.00	890.10
6	38.459445	-83.652091	863.37	10.00	873.37
7	38.459504	-83.654022	842.22	10.00	852.22

Name: 214

Footprint area: 23.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446393	-83.671773	922.99	10.00	932.99
2	38.444981	-83.671859	948.28	10.00	958.28
3	38.445006	-83.673211	924.15	10.00	934.15
4	38.446183	-83.673071	907.35	10.00	917.35
5	38.446199	-83.673726	893.99	10.00	903.99
6	38.447594	-83.673651	882.50	10.00	892.50
7	38.449434	-83.674616	883.15	10.00	893.15
8	38.450291	-83.674627	892.00	10.00	902.00
9	38.450291	-83.674155	899.83	10.00	909.83
10	38.449779	-83.674155	903.37	10.00	913.37
11	38.449834	-83.671757	886.22	10.00	896.22
12	38.449348	-83.671813	912.36	10.00	922.36
13	38.448857	-83.671838	931.45	10.00	941.45
14	38.448854	-83.671648	930.62	10.00	940.62
15	38.447598	-83.671705	923.51	10.00	933.51
16	38.446911	-83.671755	911.92	10.00	921.92

Name: 215

Footprint area: 24.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456144	-83.642058	885.21	10.00	895.21
2	38.454993	-83.641994	895.60	10.00	905.60
3	38.454917	-83.640159	895.90	10.00	905.90
4	38.453531	-83.639730	890.91	10.00	900.91
5	38.453476	-83.636570	874.39	10.00	884.39
6	38.454079	-83.636546	876.13	10.00	886.14
7	38.454082	-83.637178	878.61	10.00	888.61
8	38.456108	-83.637059	873.05	10.00	883.05

Name: 216

Footprint area: 2.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457497	-83.667400	911.01	10.00	921.01
2	38.457497	-83.666429	875.02	10.00	885.02
3	38.456581	-83.666451	896.75	10.00	906.75
4	38.456573	-83.667454	922.49	10.00	932.49
5	38.456955	-83.667465	917.57	10.00	927.57
6	38.456955	-83.667422	916.73	10.00	926.73

Name: 217

Footprint area: 0.88 acre

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457157	-83.666429	880.92	10.00	890.92
2	38.457131	-83.665796	866.64	10.00	876.64
3	38.456577	-83.665791	891.24	10.00	901.24
4	38.456585	-83.666453	896.47	10.00	906.47

Name: 218

Footprint area: 1.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456577	-83.667475	922.85	10.00	932.85
2	38.456581	-83.666472	898.05	10.00	908.05
3	38.456157	-83.666483	913.31	10.00	923.31
4	38.456153	-83.667491	925.36	10.00	935.36

2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25
Description:
Threshold height : 50 ft
Direction: 247.0 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7
Description:
Threshold height : 50 ft
Direction: 66.8 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



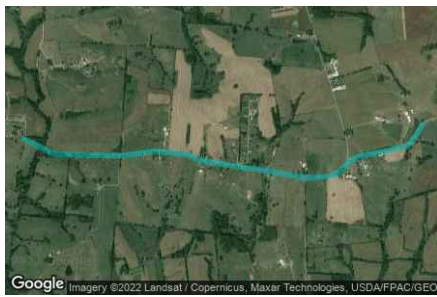
Route Receptor(s)

Name: Beech Springs Drive
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.444962	-83.669717	918.20	9.00	927.20
2	38.442383	-83.669824	920.37	9.00	929.37
3	38.440744	-83.669921	900.87	9.00	909.87
4	38.440626	-83.670103	899.87	9.00	908.87
5	38.440593	-83.670436	895.94	9.00	904.94
6	38.440534	-83.670597	890.50	9.00	899.50
7	38.440400	-83.670650	887.59	9.00	896.59

Name: Beechtree Pike
Route type: Two-way
View angle: 50.0 deg



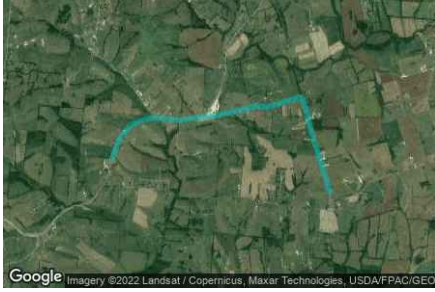
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.442299	-83.689810	818.46	9.00	827.47
2	38.441963	-83.688823	809.66	9.00	818.66
3	38.441341	-83.687342	811.93	9.00	820.93
4	38.441257	-83.686934	815.05	9.00	824.05
5	38.441190	-83.683458	837.81	9.00	846.81
6	38.441156	-83.681055	886.66	9.00	895.66
7	38.441492	-83.678115	931.20	9.00	940.20
8	38.441324	-83.676205	929.13	9.00	938.14
9	38.441223	-83.675218	916.01	9.00	925.01
10	38.440786	-83.674017	929.30	9.00	938.30
11	38.440584	-83.672386	914.48	9.00	923.48
12	38.440164	-83.668695	871.54	9.00	880.54
13	38.439626	-83.664833	929.11	9.00	938.11
14	38.439694	-83.662794	910.74	9.00	919.74
15	38.439963	-83.661936	923.45	9.00	932.45
16	38.440769	-83.660885	922.38	9.00	931.38
17	38.441122	-83.660005	916.66	9.00	925.66
18	38.441425	-83.658202	911.05	9.00	920.05
19	38.441795	-83.655928	871.51	9.00	880.51
20	38.442131	-83.655392	878.90	9.00	887.90
21	38.443324	-83.654447	902.20	9.00	911.20

Name: Carpenter Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.469909	-83.637808	875.35	9.00	884.35
2	38.469019	-83.638023	866.64	9.00	875.64
3	38.467994	-83.638388	878.37	9.00	887.37
4	38.466280	-83.639375	879.12	9.00	888.12
5	38.465423	-83.639697	851.98	9.00	860.98
6	38.464944	-83.640072	839.47	9.00	848.47
7	38.463483	-83.641596	847.69	9.00	856.69
8	38.461509	-83.642229	854.19	9.00	863.19
9	38.460400	-83.642518	859.05	9.00	868.05
10	38.458820	-83.642787	872.19	9.00	881.20
11	38.456098	-83.643516	876.71	9.00	885.71
12	38.455619	-83.643688	882.41	9.00	891.42
13	38.454603	-83.643591	895.46	9.00	904.46
14	38.453653	-83.643452	900.67	9.00	909.67
15	38.451427	-83.642551	887.13	9.00	896.14

Name: Maddox Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446929	-83.699779	900.63	9.00	909.63
2	38.449042	-83.698781	905.70	9.00	914.71
3	38.449927	-83.698140	897.24	9.00	906.24
4	38.450712	-83.697392	908.55	9.00	917.55
5	38.451421	-83.696633	891.77	9.00	900.77
6	38.451700	-83.696060	876.07	9.00	885.07
7	38.452125	-83.694733	855.23	9.00	864.24
8	38.452337	-83.693834	836.76	9.00	845.76
9	38.452486	-83.692483	818.16	9.00	827.16
10	38.452467	-83.691356	831.05	9.00	840.05
11	38.452315	-83.689688	857.58	9.00	866.58
12	38.452197	-83.688039	868.10	9.00	877.10
13	38.452525	-83.684875	821.15	9.00	830.15
14	38.452852	-83.681604	815.71	9.00	824.71
15	38.453155	-83.679459	827.25	9.00	836.25
16	38.453718	-83.676315	891.02	9.00	900.02
17	38.453903	-83.675349	909.39	9.00	918.39
18	38.454180	-83.674480	916.55	9.00	925.55
19	38.454255	-83.674234	918.84	9.00	927.84
20	38.454104	-83.673150	907.07	9.00	916.07
21	38.454020	-83.672302	914.35	9.00	923.35
22	38.454381	-83.670672	906.27	9.00	915.27
23	38.455028	-83.668043	931.42	9.00	940.42
24	38.455406	-83.666487	925.20	9.00	934.20
25	38.455415	-83.666251	922.49	9.00	931.49
26	38.455272	-83.666090	918.64	9.00	927.64
27	38.453617	-83.665275	921.14	9.00	930.14
28	38.452920	-83.665125	929.57	9.00	938.57
29	38.451306	-83.664631	930.86	9.00	939.86
30	38.448771	-83.663671	913.58	9.00	922.58
31	38.446320	-83.662711	932.18	9.00	941.18
32	38.444229	-83.661879	924.19	9.00	933.19
33	38.442240	-83.661112	932.56	9.00	941.56

Name: Mt Carmel Road Route 57
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477903	-83.656992	911.49	9.00	920.49
2	38.476744	-83.659642	924.08	9.00	933.08
3	38.475072	-83.663001	887.47	9.00	896.47
4	38.473367	-83.666444	901.07	9.00	910.07
5	38.471544	-83.670189	926.95	9.00	935.95
6	38.470604	-83.672066	924.51	9.00	933.51
7	38.470100	-83.672453	916.10	9.00	925.10
8	38.468999	-83.673032	917.05	9.00	926.05
9	38.467932	-83.673579	922.96	9.00	931.96
10	38.467647	-83.673858	923.05	9.00	932.05
11	38.466227	-83.675425	910.13	9.00	919.13
12	38.463917	-83.677989	869.39	9.00	878.39
13	38.463144	-83.678579	855.82	9.00	864.82
14	38.462027	-83.679126	827.87	9.00	836.87
15	38.461203	-83.679405	816.24	9.00	825.24
16	38.460531	-83.679577	815.85	9.00	824.85
17	38.458876	-83.679555	819.48	9.00	828.48
18	38.458470	-83.679624	816.78	9.00	825.78
19	38.457173	-83.680164	816.34	9.00	825.34
20	38.455570	-83.680923	819.49	9.00	828.49
21	38.453222	-83.682999	830.52	9.00	839.52

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.466831	-83.671151	914.48	16.00	930.48
OP 2	38.469203	-83.672438	925.10	16.00	941.10
OP 3	38.467904	-83.673952	925.35	16.00	941.35
OP 4	38.462445	-83.668247	869.42	16.00	885.42
OP 5	38.457921	-83.679349	815.32	16.00	831.32
OP 6	38.458955	-83.680054	826.45	16.00	842.45
OP 7	38.459530	-83.680011	827.20	16.00	843.20
OP 8	38.456355	-83.680258	818.16	16.00	834.16
OP 9	38.454767	-83.668188	935.10	16.00	951.10
OP 10	38.455090	-83.666804	935.71	16.00	951.71
OP 11	38.454052	-83.642962	905.82	16.00	921.82
OP 12	38.458600	-83.642610	874.74	16.00	890.74
OP 13	38.459360	-83.643382	891.27	16.00	907.27
OP 14	38.460688	-83.642100	866.38	16.00	882.38
OP 15	38.474174	-83.663874	914.48	16.00	930.48
OP 16	38.467157	-83.664205	908.96	16.00	924.96
OP 17	38.464426	-83.670114	881.40	16.00	897.40
OP 18	38.462019	-83.668841	863.13	16.00	879.14
OP 19	38.463767	-83.677704	871.22	16.00	887.22
OP 20	38.464958	-83.676419	881.58	16.00	897.58
OP 21	38.464443	-83.676966	873.81	16.00	889.81
OP 22	38.453300	-83.677095	871.17	16.00	887.17
OP 23	38.453739	-83.675249	906.43	16.00	922.43
OP 24	38.454988	-83.667223	938.94	16.00	954.94
OP 25	38.454929	-83.667545	937.94	16.00	953.94
OP 26	38.454471	-83.669605	914.05	16.00	930.05
OP 27	38.449690	-83.632821	880.84	16.00	896.84
OP 28	38.450573	-83.636689	875.47	16.00	891.47
OP 29	38.459672	-83.620596	883.93	16.00	899.93
OP 30	38.461448	-83.623342	880.63	16.00	896.63
OP 31	38.449730	-83.631872	877.57	16.00	893.57
OP 32	38.445141	-83.670053	928.74	16.00	944.75
OP 33	38.445191	-83.669102	923.01	16.00	939.01
OP 34	38.444686	-83.669547	917.25	16.00	933.25
OP 35	38.444354	-83.670228	925.17	16.00	941.17
OP 36	38.444094	-83.669504	910.20	16.00	926.20
OP 37	38.443716	-83.669536	909.00	16.00	925.00
OP 38	38.447168	-83.684498	867.84	16.00	883.84
OP 39	38.442962	-83.670249	920.41	16.00	936.41
OP 40	38.442432	-83.669536	917.92	16.00	933.92

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
201	SA tracking	SA tracking	0	0	-	
202	SA tracking	SA tracking	0	0	-	
203	SA tracking	SA tracking	0	0	-	
204	SA tracking	SA tracking	0	0	-	
205	SA tracking	SA tracking	0	0	-	
206	SA tracking	SA tracking	0	0	-	
207	SA tracking	SA tracking	0	0	-	
208	SA tracking	SA tracking	0	0	-	
209	SA tracking	SA tracking	0	0	-	
210	SA tracking	SA tracking	0	0	-	
211	SA tracking	SA tracking	0	0	-	
212	SA tracking	SA tracking	0	0	-	
213	SA tracking	SA tracking	0	0	-	
214	SA tracking	SA tracking	0	0	-	
215	SA tracking	SA tracking	0	0	-	
216	SA tracking	SA tracking	0	0	-	
217	SA tracking	SA tracking	0	0	-	
218	SA tracking	SA tracking	0	0	-	

PV & Receptor Analysis Results

Results for each PV array and receptor

201 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

202 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

203 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

204 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

205 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

206 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

207 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

208 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

209 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

210 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

211 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

212 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

213 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

214 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

215 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

216 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

217 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

218 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 2b 5ft veh 1_5ft pan 5

Created Aug. 11, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73936.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results Glare with low potential for temporary after-image predicted

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
201b	SA tracking	SA tracking	0	0	-
202b	SA tracking	SA tracking	0	0	-
203b	SA tracking	SA tracking	0	0	-
204b	SA tracking	SA tracking	0	0	-
205b	SA tracking	SA tracking	0	0	-
206b	SA tracking	SA tracking	0	0	-
207b	SA tracking	SA tracking	0	0	-
208b	SA tracking	SA tracking	0	0	-
209b	SA tracking	SA tracking	0	0	-
210b	SA tracking	SA tracking	0	0	-
211b	SA tracking	SA tracking	0	0	-
212b	SA tracking	SA tracking	462	0	-
213b	SA tracking	SA tracking	0	0	-
214b	SA tracking	SA tracking	0	0	-
215b	SA tracking	SA tracking	0	0	-
216b	SA tracking	SA tracking	0	0	-
217b	SA tracking	SA tracking	0	0	-
218b	SA tracking	SA tracking	0	0	-
219b	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 100.9 acres

Name: 201b
Footprint area: 16.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457137	-83.658688	854.00	1.50	855.50
2	38.457154	-83.656681	902.23	1.50	903.73
3	38.457398	-83.656724	903.42	1.50	904.92
4	38.457423	-83.656499	904.22	1.50	905.73
5	38.459254	-83.656574	886.62	1.50	888.12
6	38.459271	-83.660554	833.29	1.50	834.79
7	38.458876	-83.660533	834.43	1.50	835.93
8	38.457423	-83.659170	845.91	1.50	847.41
9	38.457431	-83.658784	857.00	1.50	858.50

Name: 202b
Footprint area: 2.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458483	-83.656538	898.08	1.50	899.58
2	38.458531	-83.654862	884.83	1.50	886.33
3	38.458922	-83.654880	868.64	1.50	870.14
4	38.458932	-83.653770	847.12	1.50	848.62
5	38.458266	-83.653730	860.79	1.50	862.29
6	38.458224	-83.656538	900.47	1.50	901.97

Name: 203b

Footprint area: 3.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458262	-83.654333	883.51	1.50	885.01
2	38.457840	-83.654325	888.82	1.50	890.32
3	38.457817	-83.655280	894.80	1.50	896.30
4	38.457458	-83.655264	900.53	1.50	902.03
5	38.457422	-83.656501	904.22	1.50	905.73
6	38.458220	-83.656527	900.35	1.50	901.85



Name: 204b

Footprint area: 3.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448333	-83.665346	914.53	1.50	916.03
2	38.448323	-83.663997	925.90	1.50	927.40
3	38.447766	-83.663734	921.87	1.50	923.37
4	38.447314	-83.663732	931.97	1.50	933.47
5	38.447405	-83.665338	932.82	1.50	934.32



Name: 205b

Footprint area: 2.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.447407	-83.665338	932.89	1.50	934.39
2	38.447417	-83.666465	936.32	1.50	937.82
3	38.448377	-83.666438	918.46	1.50	919.96
4	38.448333	-83.665349	914.53	1.50	916.03

Name: 206b

Footprint area: 3.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.447787	-83.666454	933.79	1.50	935.29
2	38.447804	-83.667355	906.46	1.50	907.96
3	38.449224	-83.667334	879.91	1.50	881.41
4	38.449209	-83.666438	883.65	1.50	885.15

Name: 207b

Footprint area: 5.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446167	-83.670215	932.16	1.50	933.66
2	38.446125	-83.668182	928.63	1.50	930.13
3	38.445823	-83.668171	926.78	1.50	928.28
4	38.445827	-83.667672	927.94	1.50	929.44
5	38.446411	-83.667677	936.52	1.50	938.02
6	38.447079	-83.668557	936.39	1.50	937.89
7	38.447121	-83.670172	940.87	1.50	942.37

Name: 208b

Footprint area: 4.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.447092	-83.668997	938.14	1.50	939.64
2	38.448029	-83.668992	931.72	1.50	933.22
3	38.448024	-83.668739	929.31	1.50	930.81
4	38.448445	-83.668723	921.84	1.50	923.34
5	38.448474	-83.670140	916.47	1.50	917.97
6	38.447125	-83.670177	941.10	1.50	942.60

Name: 209b

Footprint area: 0.64 acre

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448881	-83.668411	904.88	1.50	906.38
2	38.448864	-83.667829	891.82	1.50	893.32
3	38.448427	-83.667840	896.58	1.50	898.08
4	38.448440	-83.668462	915.33	1.50	916.83



Name: 210b

Footprint area: 12.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.445067	-83.675064	932.26	1.50	933.76
2	38.443563	-83.675134	936.03	1.50	937.53
3	38.443558	-83.672248	930.86	1.50	932.36
4	38.444033	-83.672253	936.13	1.50	937.63
5	38.444012	-83.671271	921.17	1.50	922.67
6	38.445088	-83.671266	941.85	1.50	943.35



Name: 211b

Footprint area: 5.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.445083	-83.671261	941.53	1.50	943.03
2	38.446188	-83.671196	945.92	1.50	947.42
3	38.446172	-83.670199	931.98	1.50	933.48
4	38.447134	-83.670166	941.09	1.50	942.59
5	38.447146	-83.671792	912.84	1.50	914.34
6	38.445088	-83.671862	948.45	1.50	949.95



Name: 212b

Footprint area: 8.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.447151	-83.671781	912.96	1.50	914.46
2	38.448776	-83.671717	932.01	1.50	933.51
3	38.448785	-83.671937	931.30	1.50	932.80
4	38.449486	-83.671899	905.53	1.50	907.03
5	38.449470	-83.670172	874.20	1.50	875.70
6	38.447125	-83.670177	941.10	1.50	942.60



Name: 213b

Footprint area: 9.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457783	-83.642412	867.14	1.50	868.64
2	38.456271	-83.643216	875.68	1.50	877.18
3	38.456263	-83.642744	885.36	1.50	886.86
4	38.456011	-83.642766	887.91	1.50	889.41
5	38.455994	-83.640545	894.54	1.50	896.04
6	38.457758	-83.640534	889.00	1.50	890.50



Name: 214b

Footprint area: 9.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457766	-83.640548	888.98	1.50	890.48
2	38.457741	-83.638413	883.21	1.50	884.71
3	38.455935	-83.638381	882.94	1.50	884.44
4	38.455977	-83.640548	894.55	1.50	896.05



Name: 215b

Footprint area: 9.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457733	-83.638388	883.10	1.50	884.60
2	38.457641	-83.635653	871.29	1.50	872.79
3	38.456910	-83.635685	867.91	1.50	869.41
4	38.456641	-83.636447	868.61	1.50	870.11
5	38.455868	-83.637305	874.98	1.50	876.48
6	38.455927	-83.638367	882.88	1.50	884.38



Name: 216b

Footprint area: 0.80 acre

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448439	-83.668478	915.85	1.50	917.35
2	38.448922	-83.668419	903.63	1.50	905.13
3	38.448960	-83.669111	905.20	1.50	906.70
4	38.448443	-83.669122	924.61	1.50	926.11



Name: 217b

Footprint area: 1.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.449469	-83.669085	878.83	1.50	880.33
2	38.449482	-83.669659	882.24	1.50	883.74
3	38.448473	-83.669659	918.36	1.50	919.86
4	38.448452	-83.669106	924.51	1.50	926.01

Name: 218b

Footprint area: 1.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448473	-83.670152	916.58	1.50	918.08
2	38.448469	-83.669664	918.36	1.50	919.86
3	38.449482	-83.669653	882.32	1.50	883.82
4	38.449461	-83.670144	874.76	1.50	876.26

Name: 219b

Footprint area: 0.88 acre

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448969	-83.669116	904.76	1.50	906.26
2	38.449481	-83.669084	878.14	1.50	879.64
3	38.449456	-83.668403	875.85	1.50	877.35
4	38.448922	-83.668414	903.49	1.50	904.99



2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25

Description:

Threshold height : 50 ft

Direction: 247.0 deg

Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7

Description:

Threshold height : 50 ft

Direction: 66.8 deg

Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



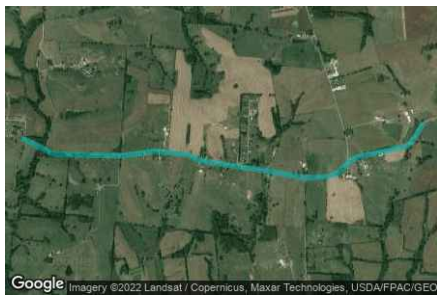
Route Receptor(s)

Name: Beech Springs Drive
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.444962	-83.669717	918.20	5.00	923.20
2	38.442383	-83.669824	920.37	5.00	925.37
3	38.440744	-83.669921	900.87	5.00	905.87
4	38.440626	-83.670103	899.87	5.00	904.87
5	38.440593	-83.670436	895.94	5.00	900.94
6	38.440534	-83.670597	890.50	5.00	895.50
7	38.440400	-83.670650	887.59	5.00	892.59

Name: Beechtree Pike
Route type: Two-way
View angle: 50.0 deg



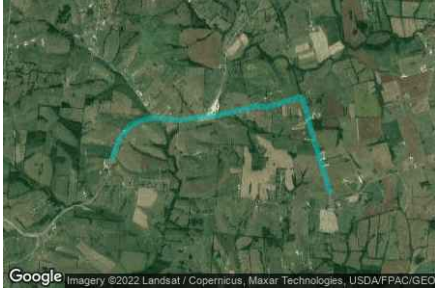
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.442299	-83.689810	818.46	5.00	823.47
2	38.441963	-83.688823	809.66	5.00	814.66
3	38.441341	-83.687342	811.93	5.00	816.93
4	38.441257	-83.686934	815.05	5.00	820.05
5	38.441190	-83.683458	837.81	5.00	842.81
6	38.441156	-83.681055	886.66	5.00	891.66
7	38.441492	-83.678115	931.20	5.00	936.20
8	38.441324	-83.676205	929.13	5.00	934.14
9	38.441223	-83.675218	916.01	5.00	921.01
10	38.440786	-83.674017	929.30	5.00	934.30
11	38.440584	-83.672386	914.48	5.00	919.48
12	38.440164	-83.668695	871.54	5.00	876.54
13	38.439626	-83.664833	929.11	5.00	934.11
14	38.439694	-83.662794	910.74	5.00	915.74
15	38.439963	-83.661936	923.45	5.00	928.45
16	38.440769	-83.660885	922.38	5.00	927.38
17	38.441122	-83.660005	916.66	5.00	921.66
18	38.441425	-83.658202	911.05	5.00	916.05
19	38.441795	-83.655928	871.51	5.00	876.51
20	38.442131	-83.655392	878.90	5.00	883.90
21	38.443324	-83.654447	902.20	5.00	907.20

Name: Carpenter Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.469909	-83.637808	875.35	5.00	880.35
2	38.469019	-83.638023	866.64	5.00	871.64
3	38.467994	-83.638388	878.37	5.00	883.37
4	38.466280	-83.639375	879.12	5.00	884.12
5	38.465423	-83.639697	851.98	5.00	856.98
6	38.464944	-83.640072	839.47	5.00	844.47
7	38.463483	-83.641596	847.69	5.00	852.69
8	38.461509	-83.642229	854.19	5.00	859.19
9	38.460400	-83.642518	859.05	5.00	864.05
10	38.458820	-83.642787	872.19	5.00	877.20
11	38.456098	-83.643516	876.71	5.00	881.71
12	38.455619	-83.643688	882.41	5.00	887.41
13	38.454603	-83.643591	895.46	5.00	900.46
14	38.453653	-83.643452	900.67	5.00	905.67
15	38.451427	-83.642551	887.13	5.00	892.14

Name: Maddox Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446929	-83.699779	900.63	5.00	905.63
2	38.449042	-83.698781	905.70	5.00	910.71
3	38.449927	-83.698140	897.24	5.00	902.24
4	38.450712	-83.697392	908.55	5.00	913.55
5	38.451421	-83.696633	891.77	5.00	896.77
6	38.451700	-83.696060	876.07	5.00	881.07
7	38.452125	-83.694733	855.23	5.00	860.23
8	38.452337	-83.693834	836.76	5.00	841.76
9	38.452486	-83.692483	818.16	5.00	823.16
10	38.452467	-83.691356	831.05	5.00	836.05
11	38.452315	-83.689688	857.58	5.00	862.58
12	38.452197	-83.688039	868.10	5.00	873.10
13	38.452525	-83.684875	821.15	5.00	826.15
14	38.452852	-83.681604	815.71	5.00	820.71
15	38.453155	-83.679459	827.25	5.00	832.25
16	38.453718	-83.676315	891.02	5.00	896.02
17	38.453903	-83.675349	909.39	5.00	914.39
18	38.454180	-83.674480	916.55	5.00	921.55
19	38.454255	-83.674234	918.84	5.00	923.84
20	38.454104	-83.673150	907.07	5.00	912.07
21	38.454020	-83.672302	914.35	5.00	919.35
22	38.454381	-83.670672	906.27	5.00	911.27
23	38.455028	-83.668043	931.42	5.00	936.42
24	38.455406	-83.666487	925.20	5.00	930.20
25	38.455415	-83.666251	922.49	5.00	927.49
26	38.455272	-83.666090	918.64	5.00	923.64
27	38.453617	-83.665275	921.14	5.00	926.14
28	38.452920	-83.665125	929.57	5.00	934.57
29	38.451306	-83.664631	930.86	5.00	935.86
30	38.448771	-83.663671	913.58	5.00	918.58
31	38.446320	-83.662711	932.18	5.00	937.18
32	38.444229	-83.661879	924.19	5.00	929.19
33	38.442240	-83.661112	932.56	5.00	937.56

Name: Mt Carmel Road Route 57
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477903	-83.656992	911.49	5.00	916.49
2	38.476744	-83.659642	924.08	5.00	929.08
3	38.475072	-83.663001	887.47	5.00	892.47
4	38.473367	-83.666444	901.07	5.00	906.07
5	38.471544	-83.670189	926.95	5.00	931.95
6	38.470604	-83.672066	924.51	5.00	929.51
7	38.470100	-83.672453	916.10	5.00	921.10
8	38.468999	-83.673032	917.05	5.00	922.05
9	38.467932	-83.673579	922.96	5.00	927.96
10	38.467647	-83.673858	923.05	5.00	928.05
11	38.466227	-83.675425	910.13	5.00	915.13
12	38.463917	-83.677989	869.39	5.00	874.39
13	38.463144	-83.678579	855.82	5.00	860.82
14	38.462027	-83.679126	827.87	5.00	832.87
15	38.461203	-83.679405	816.24	5.00	821.24
16	38.460531	-83.679577	815.85	5.00	820.85
17	38.458876	-83.679555	819.48	5.00	824.48
18	38.458470	-83.679624	816.78	5.00	821.78
19	38.457173	-83.680164	816.34	5.00	821.34
20	38.455570	-83.680923	819.49	5.00	824.49
21	38.453222	-83.682999	830.52	5.00	835.52

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.466831	-83.671151	914.48	16.00	930.48
OP 2	38.469203	-83.672438	925.10	16.00	941.10
OP 3	38.467904	-83.673952	925.35	16.00	941.35
OP 4	38.462445	-83.668247	869.42	16.00	885.42
OP 5	38.457921	-83.679349	815.32	16.00	831.32
OP 6	38.458955	-83.680054	826.45	16.00	842.45
OP 7	38.459530	-83.680011	827.20	16.00	843.20
OP 8	38.456355	-83.680258	818.16	16.00	834.16
OP 9	38.454767	-83.668188	935.10	16.00	951.10
OP 10	38.455090	-83.666804	935.71	16.00	951.71
OP 11	38.454052	-83.642962	905.82	16.00	921.82
OP 12	38.458600	-83.642610	874.74	16.00	890.74
OP 13	38.459360	-83.643382	891.27	16.00	907.27
OP 14	38.460688	-83.642100	866.38	16.00	882.38
OP 15	38.474174	-83.663874	914.48	16.00	930.48
OP 16	38.467157	-83.664205	908.96	16.00	924.96
OP 17	38.464426	-83.670114	881.40	16.00	897.40
OP 18	38.462019	-83.668841	863.13	16.00	879.14
OP 19	38.463767	-83.677704	871.22	16.00	887.22
OP 20	38.464958	-83.676419	881.58	16.00	897.58
OP 21	38.464443	-83.676966	873.81	16.00	889.81
OP 22	38.453300	-83.677095	871.17	16.00	887.17
OP 23	38.453739	-83.675249	906.43	16.00	922.43
OP 24	38.454988	-83.667223	938.94	16.00	954.94
OP 25	38.454929	-83.667545	937.94	16.00	953.94
OP 26	38.454471	-83.669605	914.05	16.00	930.05
OP 27	38.449690	-83.632821	880.84	16.00	896.84
OP 28	38.450573	-83.636689	875.47	16.00	891.47
OP 29	38.459672	-83.620596	883.93	16.00	899.93
OP 30	38.461448	-83.623342	880.63	16.00	896.63
OP 31	38.449730	-83.631872	877.57	16.00	893.57
OP 32	38.445141	-83.670053	928.74	16.00	944.75
OP 33	38.445191	-83.669102	923.01	16.00	939.01
OP 34	38.444686	-83.669547	917.25	16.00	933.25
OP 35	38.444354	-83.670228	925.17	16.00	941.17
OP 36	38.444094	-83.669504	910.20	16.00	926.20
OP 37	38.443716	-83.669536	909.00	16.00	925.00
OP 38	38.447168	-83.684498	867.84	16.00	883.84
OP 39	38.442962	-83.670249	920.41	16.00	936.41
OP 40	38.442432	-83.669536	917.92	16.00	933.92

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
201b	SA tracking	SA tracking	0	0	-	
202b	SA tracking	SA tracking	0	0	-	
203b	SA tracking	SA tracking	0	0	-	
204b	SA tracking	SA tracking	0	0	-	
205b	SA tracking	SA tracking	0	0	-	
206b	SA tracking	SA tracking	0	0	-	
207b	SA tracking	SA tracking	0	0	-	
208b	SA tracking	SA tracking	0	0	-	
209b	SA tracking	SA tracking	0	0	-	
210b	SA tracking	SA tracking	0	0	-	
211b	SA tracking	SA tracking	0	0	-	
212b	SA tracking	SA tracking	462	0	-	-
213b	SA tracking	SA tracking	0	0	-	
214b	SA tracking	SA tracking	0	0	-	
215b	SA tracking	SA tracking	0	0	-	
216b	SA tracking	SA tracking	0	0	-	
217b	SA tracking	SA tracking	0	0	-	
218b	SA tracking	SA tracking	0	0	-	
219b	SA tracking	SA tracking	0	0	-	

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
212b (green)	7	0	0	0	0	0	0	0	0	0	0	325
212b (yellow)	0	0	0	0	0	0	0	0	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

201b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

202b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

203b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

204b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

205b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

206b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

207b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

208b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

209b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

210b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

211b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

212b low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	326	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	136	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0

212b - Receptor (Fleming Mason Airport Runway 25)

No glare found

212b - Receptor (Fleming Mason Airport Runway 7)

No glare found

212b - OP Receptor (OP 1)

No glare found

212b - OP Receptor (OP 2)

No glare found

212b - OP Receptor (OP 3)

No glare found

212b - OP Receptor (OP 4)

No glare found

212b - OP Receptor (OP 5)

No glare found

212b - OP Receptor (OP 6)

No glare found

212b - OP Receptor (OP 7)

No glare found

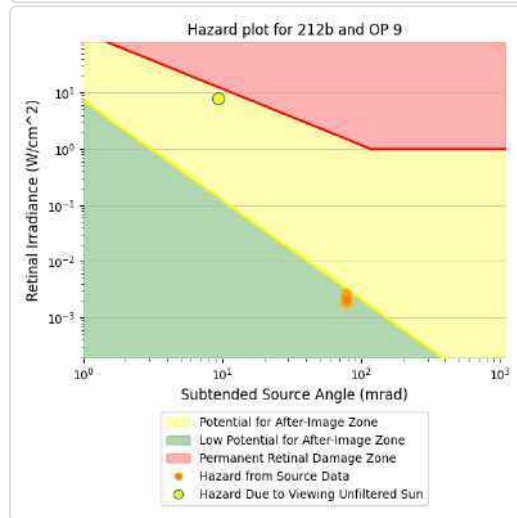
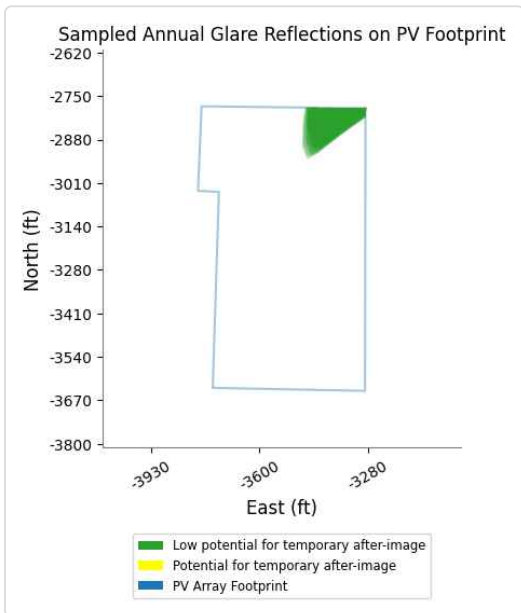
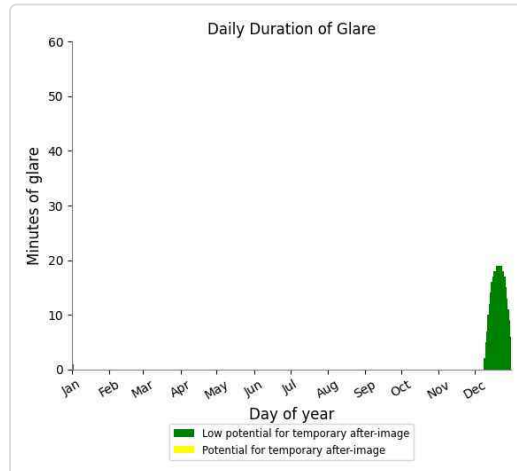
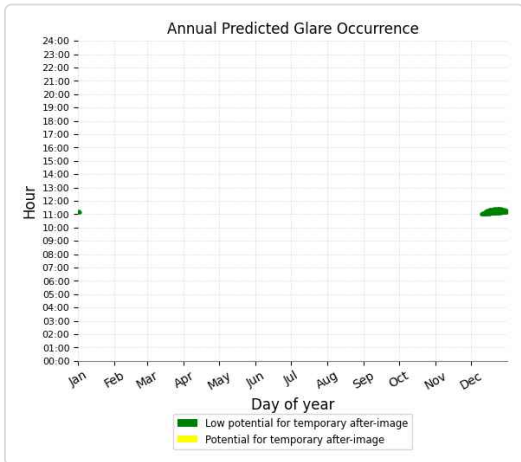
212b - OP Receptor (OP 8)

No glare found

212b - OP Receptor (OP 9)

PV array is expected to produce the following glare for receptors at this location:

- 326 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



212b - OP Receptor (OP 10)

No glare found

212b - OP Receptor (OP 11)

No glare found

212b - OP Receptor (OP 12)

No glare found

212b - OP Receptor (OP 13)

No glare found

212b - OP Receptor (OP 14)

No glare found

212b - OP Receptor (OP 15)

No glare found

212b - OP Receptor (OP 16)

No glare found

212b - OP Receptor (OP 17)

No glare found

212b - OP Receptor (OP 18)

No glare found

212b - OP Receptor (OP 19)

No glare found

212b - OP Receptor (OP 20)

No glare found

212b - OP Receptor (OP 21)

No glare found

212b - OP Receptor (OP 22)

No glare found

212b - OP Receptor (OP 23)

No glare found

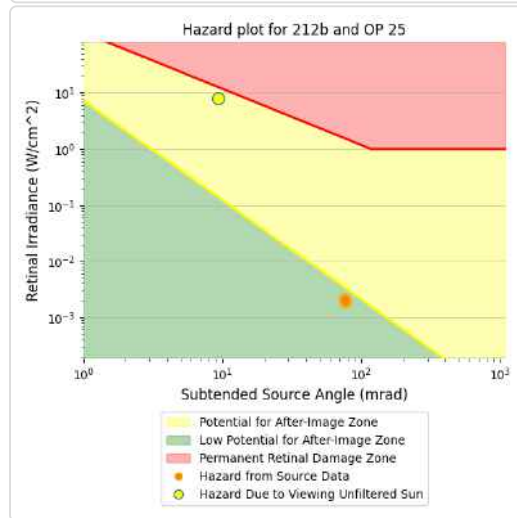
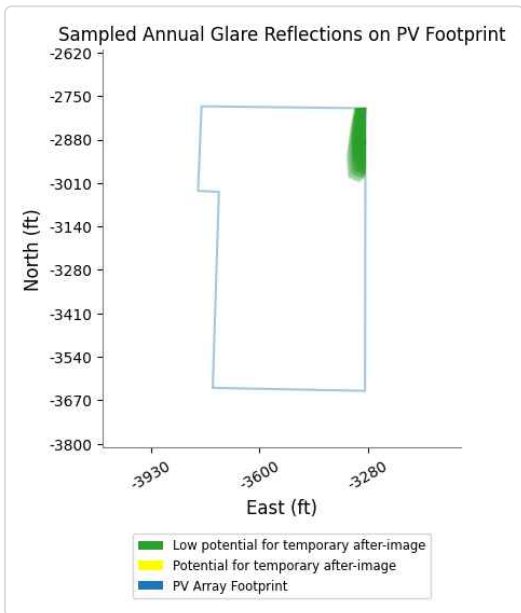
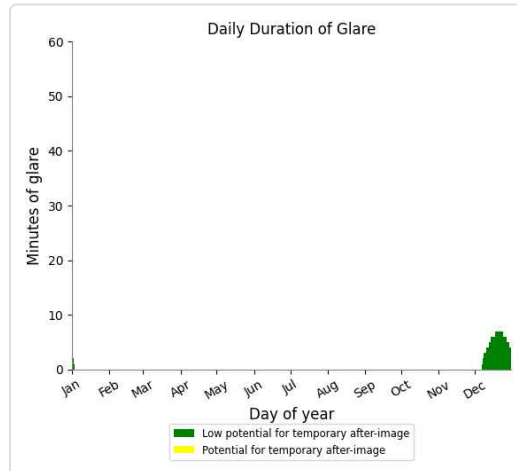
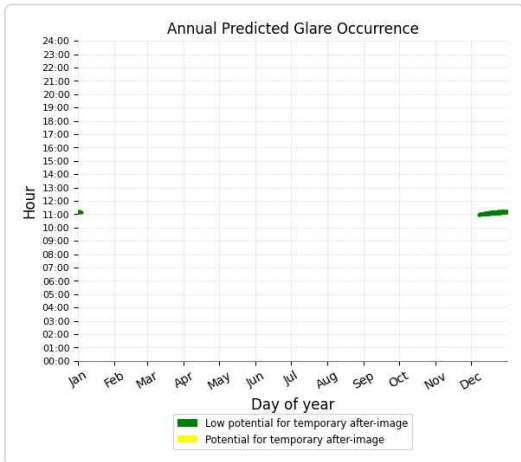
212b - OP Receptor (OP 24)

No glare found

212b - OP Receptor (OP 25)

PV array is expected to produce the following glare for receptors at this location:

- 136 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



212b - OP Receptor (OP 26)

No glare found

212b - OP Receptor (OP 27)

No glare found

212b - OP Receptor (OP 28)

No glare found

212b - OP Receptor (OP 29)

No glare found

212b - OP Receptor (OP 30)

No glare found

212b - OP Receptor (OP 31)

No glare found

212b - OP Receptor (OP 32)

No glare found

212b - OP Receptor (OP 33)

No glare found

212b - OP Receptor (OP 34)

No glare found

212b - OP Receptor (OP 35)

No glare found

212b - OP Receptor (OP 36)

No glare found

212b - OP Receptor (OP 37)

No glare found

212b - OP Receptor (OP 38)

No glare found

212b - OP Receptor (OP 39)

No glare found

212b - OP Receptor (OP 40)

No glare found

212b - Route Receptor (Beech Springs Drive)

No glare found

212b - Route Receptor (Beechtree Pike)

No glare found

212b - Route Receptor (Carpenter Road)

No glare found

212b - Route Receptor (Maddox Road)

No glare found

212b - Route Receptor (Mt Carmel Road Route 57)

No glare found

213b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

214b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

215b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

216b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

217b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

218b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

219b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 2b 5ft veh 10ft pan

Created Aug. 11, 2022
Updated Aug. 11, 2022
Time-step 1 minute
Timezone offset UTC-5
Site ID 73937.12548

Project type Advanced
Project status: active
Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
Ocular transmission coefficient: 0.5
Pupil diameter: 0.002 m
Eye focal length: 0.017 m
Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results Glare with low potential for temporary after-image predicted

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
201b	SA tracking	SA tracking	0	0	-
202b	SA tracking	SA tracking	0	0	-
203b	SA tracking	SA tracking	0	0	-
204b	SA tracking	SA tracking	0	0	-
205b	SA tracking	SA tracking	0	0	-
206b	SA tracking	SA tracking	0	0	-
207b	SA tracking	SA tracking	0	0	-
208b	SA tracking	SA tracking	0	0	-
209b	SA tracking	SA tracking	0	0	-
210b	SA tracking	SA tracking	0	0	-
211b	SA tracking	SA tracking	0	0	-
212b	SA tracking	SA tracking	168	0	-
213b	SA tracking	SA tracking	0	0	-
214b	SA tracking	SA tracking	0	0	-
215b	SA tracking	SA tracking	0	0	-
216b	SA tracking	SA tracking	0	0	-
217b	SA tracking	SA tracking	0	0	-
218b	SA tracking	SA tracking	0	0	-
219b	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 100.9 acres

Name: 201b
Footprint area: 16.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457137	-83.658688	854.00	10.00	864.00
2	38.457154	-83.656681	902.23	10.00	912.23
3	38.457398	-83.656724	903.42	10.00	913.42
4	38.457423	-83.656499	904.22	10.00	914.23
5	38.459254	-83.656574	886.62	10.00	896.62
6	38.459271	-83.660554	833.29	10.00	843.29
7	38.458876	-83.660533	834.43	10.00	844.43
8	38.457423	-83.659170	845.91	10.00	855.91
9	38.457431	-83.658784	857.00	10.00	867.00

Name: 202b
Footprint area: 2.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458483	-83.656538	898.08	10.00	908.08
2	38.458531	-83.654862	884.83	10.00	894.83
3	38.458922	-83.654880	868.64	10.00	878.64
4	38.458932	-83.653770	847.12	10.00	857.12
5	38.458266	-83.653730	860.79	10.00	870.79
6	38.458224	-83.656538	900.47	10.00	910.47

Name: 203b

Footprint area: 3.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458262	-83.654333	883.51	10.00	893.51
2	38.457840	-83.654325	888.82	10.00	898.82
3	38.457817	-83.655280	894.80	10.00	904.80
4	38.457458	-83.655264	900.53	10.00	910.53
5	38.457422	-83.656501	904.22	10.00	914.23
6	38.458220	-83.656527	900.35	10.00	910.35



Name: 204b

Footprint area: 3.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448333	-83.665346	914.53	10.00	924.53
2	38.448323	-83.663997	925.90	10.00	935.90
3	38.447766	-83.663734	921.87	10.00	931.87
4	38.447314	-83.663732	931.97	10.00	941.98
5	38.447405	-83.665338	932.82	10.00	942.82



Name: 205b

Footprint area: 2.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.447407	-83.665338	932.89	10.00	942.89
2	38.447417	-83.666465	936.32	10.00	946.32
3	38.448377	-83.666438	918.46	10.00	928.47
4	38.448333	-83.665349	914.53	10.00	924.53



Name: 206b

Footprint area: 3.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.447787	-83.666454	933.79	10.00	943.79
2	38.447804	-83.667355	906.46	10.00	916.46
3	38.449224	-83.667334	879.91	10.00	889.91
4	38.449209	-83.666438	883.65	10.00	893.65



Name: 207b

Footprint area: 5.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446167	-83.670215	932.16	10.00	942.16
2	38.446125	-83.668182	928.63	10.00	938.63
3	38.445823	-83.668171	926.78	10.00	936.78
4	38.445827	-83.667672	927.94	10.00	937.94
5	38.446411	-83.667677	936.52	10.00	946.52
6	38.447079	-83.668557	936.39	10.00	946.39
7	38.447121	-83.670172	940.87	10.00	950.87

Name: 208b

Footprint area: 4.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.447092	-83.668997	938.14	10.00	948.14
2	38.448029	-83.668992	931.72	10.00	941.72
3	38.448024	-83.668739	929.31	10.00	939.31
4	38.448445	-83.668723	921.84	10.00	931.84
5	38.448474	-83.670140	916.47	10.00	926.47
6	38.447125	-83.670177	941.10	10.00	951.11

Name: 209b

Footprint area: 0.64 acre

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448881	-83.668411	904.88	10.00	914.88
2	38.448864	-83.667829	891.82	10.00	901.82
3	38.448427	-83.667840	896.58	10.00	906.58
4	38.448440	-83.668462	915.33	10.00	925.33



Name: 210b

Footprint area: 12.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.445067	-83.675064	932.26	10.00	942.26
2	38.443563	-83.675134	936.03	10.00	946.03
3	38.443558	-83.672248	930.86	10.00	940.86
4	38.444033	-83.672253	936.13	10.00	946.13
5	38.444012	-83.671271	921.17	10.00	931.17
6	38.445088	-83.671266	941.85	10.00	951.85



Name: 211b

Footprint area: 5.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.445083	-83.671261	941.53	10.00	951.53
2	38.446188	-83.671196	945.92	10.00	955.93
3	38.446172	-83.670199	931.98	10.00	941.98
4	38.447134	-83.670166	941.09	10.00	951.09
5	38.447146	-83.671792	912.84	10.00	922.84
6	38.445088	-83.671862	948.45	10.00	958.45



Name: 212b

Footprint area: 8.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.447151	-83.671781	912.96	10.00	922.96
2	38.448776	-83.671717	932.01	10.00	942.01
3	38.448785	-83.671937	931.30	10.00	941.30
4	38.449486	-83.671899	905.53	10.00	915.53
5	38.449470	-83.670172	874.20	10.00	884.20
6	38.447125	-83.670177	941.10	10.00	951.11



Name: 213b

Footprint area: 9.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457783	-83.642412	867.14	10.00	877.15
2	38.456271	-83.643216	875.68	10.00	885.68
3	38.456263	-83.642744	885.36	10.00	895.36
4	38.456011	-83.642766	887.91	10.00	897.91
5	38.455994	-83.640545	894.54	10.00	904.54
6	38.457758	-83.640534	889.00	10.00	899.00



Name: 214b

Footprint area: 9.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457766	-83.640548	888.98	10.00	898.98
2	38.457741	-83.638413	883.21	10.00	893.21
3	38.455935	-83.638381	882.94	10.00	892.94
4	38.455977	-83.640548	894.55	10.00	904.55



Name: 215b

Footprint area: 9.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457733	-83.638388	883.10	10.00	893.10
2	38.457641	-83.635653	871.29	10.00	881.30
3	38.456910	-83.635685	867.91	10.00	877.91
4	38.456641	-83.636447	868.61	10.00	878.61
5	38.455868	-83.637305	874.98	10.00	884.99
6	38.455927	-83.638367	882.88	10.00	892.88



Name: 216b

Footprint area: 0.80 acre

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448439	-83.668478	915.85	10.00	925.85
2	38.448922	-83.668419	903.63	10.00	913.63
3	38.448960	-83.669111	905.20	10.00	915.20
4	38.448443	-83.669122	924.61	10.00	934.61



Name: 217b

Footprint area: 1.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.449469	-83.669085	878.83	10.00	888.84
2	38.449482	-83.669659	882.24	10.00	892.24
3	38.448473	-83.669659	918.36	10.00	928.36
4	38.448452	-83.669106	924.51	10.00	934.51

Name: 218b

Footprint area: 1.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448473	-83.670152	916.58	10.00	926.59
2	38.448469	-83.669664	918.36	10.00	928.36
3	38.449482	-83.669653	882.32	10.00	892.32
4	38.449461	-83.670144	874.76	10.00	884.76

Name: 219b

Footprint area: 0.88 acre

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448969	-83.669116	904.76	10.00	914.76
2	38.449481	-83.669084	878.14	10.00	888.14
3	38.449456	-83.668403	875.85	10.00	885.85
4	38.448922	-83.668414	903.49	10.00	913.49



2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25

Description:

Threshold height : 50 ft

Direction: 247.0 deg

Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7

Description:

Threshold height : 50 ft

Direction: 66.8 deg

Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



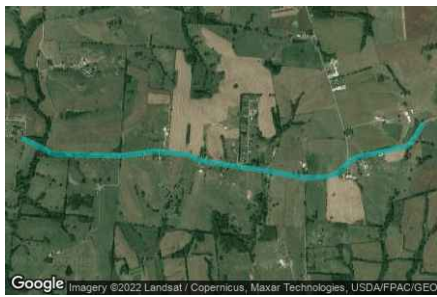
Route Receptor(s)

Name: Beech Springs Drive
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.444962	-83.669717	918.20	5.00	923.20
2	38.442383	-83.669824	920.37	5.00	925.37
3	38.440744	-83.669921	900.87	5.00	905.87
4	38.440626	-83.670103	899.87	5.00	904.87
5	38.440593	-83.670436	895.94	5.00	900.94
6	38.440534	-83.670597	890.50	5.00	895.50
7	38.440400	-83.670650	887.59	5.00	892.59

Name: Beechtree Pike
Route type: Two-way
View angle: 50.0 deg



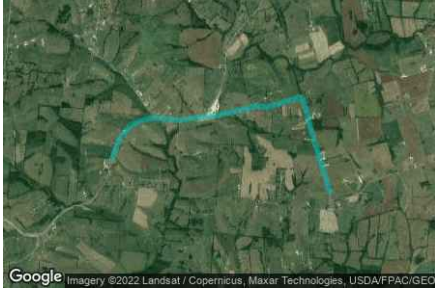
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.442299	-83.689810	818.46	5.00	823.47
2	38.441963	-83.688823	809.66	5.00	814.66
3	38.441341	-83.687342	811.93	5.00	816.93
4	38.441257	-83.686934	815.05	5.00	820.05
5	38.441190	-83.683458	837.81	5.00	842.81
6	38.441156	-83.681055	886.66	5.00	891.66
7	38.441492	-83.678115	931.20	5.00	936.20
8	38.441324	-83.676205	929.13	5.00	934.14
9	38.441223	-83.675218	916.01	5.00	921.01
10	38.440786	-83.674017	929.30	5.00	934.30
11	38.440584	-83.672386	914.48	5.00	919.48
12	38.440164	-83.668695	871.54	5.00	876.54
13	38.439626	-83.664833	929.11	5.00	934.11
14	38.439694	-83.662794	910.74	5.00	915.74
15	38.439963	-83.661936	923.45	5.00	928.45
16	38.440769	-83.660885	922.38	5.00	927.38
17	38.441122	-83.660005	916.66	5.00	921.66
18	38.441425	-83.658202	911.05	5.00	916.05
19	38.441795	-83.655928	871.51	5.00	876.51
20	38.442131	-83.655392	878.90	5.00	883.90
21	38.443324	-83.654447	902.20	5.00	907.20

Name: Carpenter Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.469909	-83.637808	875.35	5.00	880.35
2	38.469019	-83.638023	866.64	5.00	871.64
3	38.467994	-83.638388	878.37	5.00	883.37
4	38.466280	-83.639375	879.12	5.00	884.12
5	38.465423	-83.639697	851.98	5.00	856.98
6	38.464944	-83.640072	839.47	5.00	844.47
7	38.463483	-83.641596	847.69	5.00	852.69
8	38.461509	-83.642229	854.19	5.00	859.19
9	38.460400	-83.642518	859.05	5.00	864.05
10	38.458820	-83.642787	872.19	5.00	877.20
11	38.456098	-83.643516	876.71	5.00	881.71
12	38.455619	-83.643688	882.41	5.00	887.41
13	38.454603	-83.643591	895.46	5.00	900.46
14	38.453653	-83.643452	900.67	5.00	905.67
15	38.451427	-83.642551	887.13	5.00	892.14

Name: Maddox Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446929	-83.699779	900.63	5.00	905.63
2	38.449042	-83.698781	905.70	5.00	910.71
3	38.449927	-83.698140	897.24	5.00	902.24
4	38.450712	-83.697392	908.55	5.00	913.55
5	38.451421	-83.696633	891.77	5.00	896.77
6	38.451700	-83.696060	876.07	5.00	881.07
7	38.452125	-83.694733	855.23	5.00	860.23
8	38.452337	-83.693834	836.76	5.00	841.76
9	38.452486	-83.692483	818.16	5.00	823.16
10	38.452467	-83.691356	831.05	5.00	836.05
11	38.452315	-83.689688	857.58	5.00	862.58
12	38.452197	-83.688039	868.10	5.00	873.10
13	38.452525	-83.684875	821.15	5.00	826.15
14	38.452852	-83.681604	815.71	5.00	820.71
15	38.453155	-83.679459	827.25	5.00	832.25
16	38.453718	-83.676315	891.02	5.00	896.02
17	38.453903	-83.675349	909.39	5.00	914.39
18	38.454180	-83.674480	916.55	5.00	921.55
19	38.454255	-83.674234	918.84	5.00	923.84
20	38.454104	-83.673150	907.07	5.00	912.07
21	38.454020	-83.672302	914.35	5.00	919.35
22	38.454381	-83.670672	906.27	5.00	911.27
23	38.455028	-83.668043	931.42	5.00	936.42
24	38.455406	-83.666487	925.20	5.00	930.20
25	38.455415	-83.666251	922.49	5.00	927.49
26	38.455272	-83.666090	918.64	5.00	923.64
27	38.453617	-83.665275	921.14	5.00	926.14
28	38.452920	-83.665125	929.57	5.00	934.57
29	38.451306	-83.664631	930.86	5.00	935.86
30	38.448771	-83.663671	913.58	5.00	918.58
31	38.446320	-83.662711	932.18	5.00	937.18
32	38.444229	-83.661879	924.19	5.00	929.19
33	38.442240	-83.661112	932.56	5.00	937.56

Name: Mt Carmel Road Route 57
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477903	-83.656992	911.49	5.00	916.49
2	38.476744	-83.659642	924.08	5.00	929.08
3	38.475072	-83.663001	887.47	5.00	892.47
4	38.473367	-83.666444	901.07	5.00	906.07
5	38.471544	-83.670189	926.95	5.00	931.95
6	38.470604	-83.672066	924.51	5.00	929.51
7	38.470100	-83.672453	916.10	5.00	921.10
8	38.468999	-83.673032	917.05	5.00	922.05
9	38.467932	-83.673579	922.96	5.00	927.96
10	38.467647	-83.673858	923.05	5.00	928.05
11	38.466227	-83.675425	910.13	5.00	915.13
12	38.463917	-83.677989	869.39	5.00	874.39
13	38.463144	-83.678579	855.82	5.00	860.82
14	38.462027	-83.679126	827.87	5.00	832.87
15	38.461203	-83.679405	816.24	5.00	821.24
16	38.460531	-83.679577	815.85	5.00	820.85
17	38.458876	-83.679555	819.48	5.00	824.48
18	38.458470	-83.679624	816.78	5.00	821.78
19	38.457173	-83.680164	816.34	5.00	821.34
20	38.455570	-83.680923	819.49	5.00	824.49
21	38.453222	-83.682999	830.52	5.00	835.52

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.466831	-83.671151	914.48	16.00	930.48
OP 2	38.469203	-83.672438	925.10	16.00	941.10
OP 3	38.467904	-83.673952	925.35	16.00	941.35
OP 4	38.462445	-83.668247	869.42	16.00	885.42
OP 5	38.457921	-83.679349	815.32	16.00	831.32
OP 6	38.458955	-83.680054	826.45	16.00	842.45
OP 7	38.459530	-83.680011	827.20	16.00	843.20
OP 8	38.456355	-83.680258	818.16	16.00	834.16
OP 9	38.454767	-83.668188	935.10	16.00	951.10
OP 10	38.455090	-83.666804	935.71	16.00	951.71
OP 11	38.454052	-83.642962	905.82	16.00	921.82
OP 12	38.458600	-83.642610	874.74	16.00	890.74
OP 13	38.459360	-83.643382	891.27	16.00	907.27
OP 14	38.460688	-83.642100	866.38	16.00	882.38
OP 15	38.474174	-83.663874	914.48	16.00	930.48
OP 16	38.467157	-83.664205	908.96	16.00	924.96
OP 17	38.464426	-83.670114	881.40	16.00	897.40
OP 18	38.462019	-83.668841	863.13	16.00	879.14
OP 19	38.463767	-83.677704	871.22	16.00	887.22
OP 20	38.464958	-83.676419	881.58	16.00	897.58
OP 21	38.464443	-83.676966	873.81	16.00	889.81
OP 22	38.453300	-83.677095	871.17	16.00	887.17
OP 23	38.453739	-83.675249	906.43	16.00	922.43
OP 24	38.454988	-83.667223	938.94	16.00	954.94
OP 25	38.454929	-83.667545	937.94	16.00	953.94
OP 26	38.454471	-83.669605	914.05	16.00	930.05
OP 27	38.449690	-83.632821	880.84	16.00	896.84
OP 28	38.450573	-83.636689	875.47	16.00	891.47
OP 29	38.459672	-83.620596	883.93	16.00	899.93
OP 30	38.461448	-83.623342	880.63	16.00	896.63
OP 31	38.449730	-83.631872	877.57	16.00	893.57
OP 32	38.445141	-83.670053	928.74	16.00	944.75
OP 33	38.445191	-83.669102	923.01	16.00	939.01
OP 34	38.444686	-83.669547	917.25	16.00	933.25
OP 35	38.444354	-83.670228	925.17	16.00	941.17
OP 36	38.444094	-83.669504	910.20	16.00	926.20
OP 37	38.443716	-83.669536	909.00	16.00	925.00
OP 38	38.447168	-83.684498	867.84	16.00	883.84
OP 39	38.442962	-83.670249	920.41	16.00	936.41
OP 40	38.442432	-83.669536	917.92	16.00	933.92

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
201b	SA tracking	SA tracking	0	0	-	
202b	SA tracking	SA tracking	0	0	-	
203b	SA tracking	SA tracking	0	0	-	
204b	SA tracking	SA tracking	0	0	-	
205b	SA tracking	SA tracking	0	0	-	
206b	SA tracking	SA tracking	0	0	-	
207b	SA tracking	SA tracking	0	0	-	
208b	SA tracking	SA tracking	0	0	-	
209b	SA tracking	SA tracking	0	0	-	
210b	SA tracking	SA tracking	0	0	-	
211b	SA tracking	SA tracking	0	0	-	
212b	SA tracking	SA tracking	168	0	-	-
213b	SA tracking	SA tracking	0	0	-	
214b	SA tracking	SA tracking	0	0	-	
215b	SA tracking	SA tracking	0	0	-	
216b	SA tracking	SA tracking	0	0	-	
217b	SA tracking	SA tracking	0	0	-	
218b	SA tracking	SA tracking	0	0	-	
219b	SA tracking	SA tracking	0	0	-	

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
212b (green)	0	0	0	0	0	0	0	0	0	0	0	118
212b (yellow)	0	0	0	0	0	0	0	0	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

201b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

202b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

203b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

204b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

205b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

206b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

207b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

208b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

209b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

210b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

211b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

212b low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	114	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	54	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0

212b - Receptor (Fleming Mason Airport Runway 25)

No glare found

212b - Receptor (Fleming Mason Airport Runway 7)

No glare found

212b - OP Receptor (OP 1)

No glare found

212b - OP Receptor (OP 2)

No glare found

212b - OP Receptor (OP 3)

No glare found

212b - OP Receptor (OP 4)

No glare found

212b - OP Receptor (OP 5)

No glare found

212b - OP Receptor (OP 6)

No glare found

212b - OP Receptor (OP 7)

No glare found

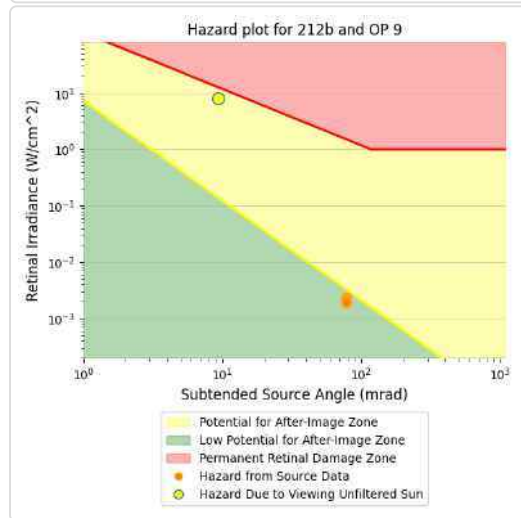
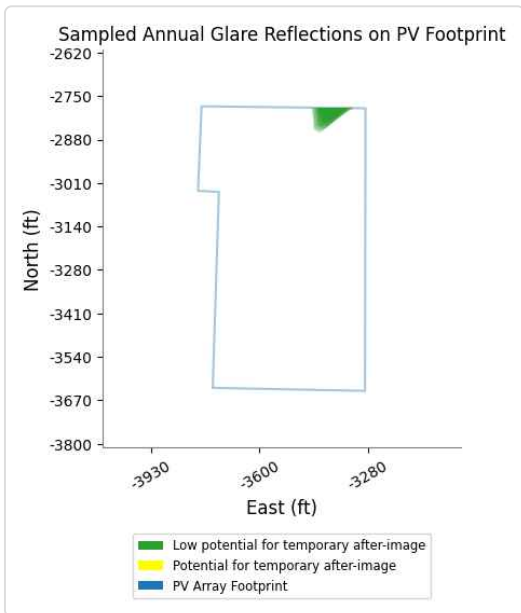
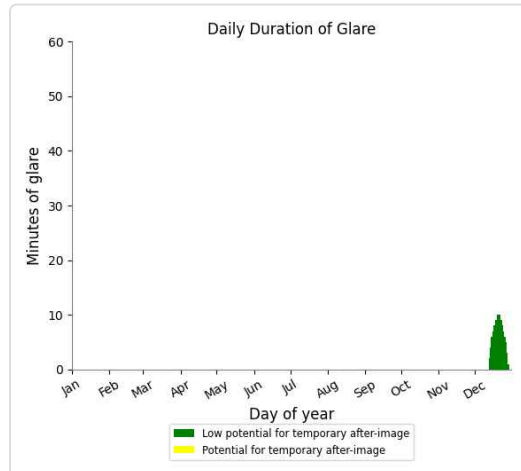
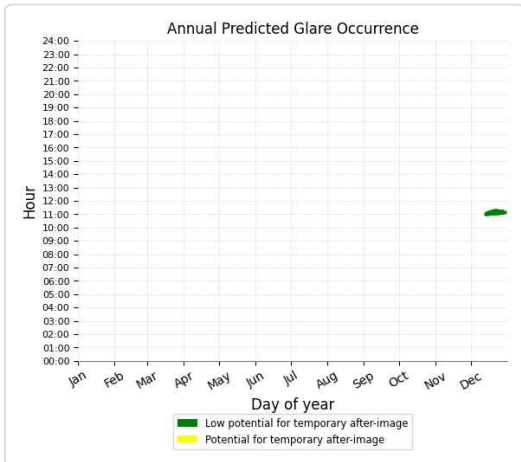
212b - OP Receptor (OP 8)

No glare found

212b - OP Receptor (OP 9)

PV array is expected to produce the following glare for receptors at this location:

- 114 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



212b - OP Receptor (OP 10)

No glare found

212b - OP Receptor (OP 11)

No glare found

212b - OP Receptor (OP 12)

No glare found

212b - OP Receptor (OP 13)

No glare found

212b - OP Receptor (OP 14)

No glare found

212b - OP Receptor (OP 15)

No glare found

212b - OP Receptor (OP 16)

No glare found

212b - OP Receptor (OP 17)

No glare found

212b - OP Receptor (OP 18)

No glare found

212b - OP Receptor (OP 19)

No glare found

212b - OP Receptor (OP 20)

No glare found

212b - OP Receptor (OP 21)

No glare found

212b - OP Receptor (OP 22)

No glare found

212b - OP Receptor (OP 23)

No glare found

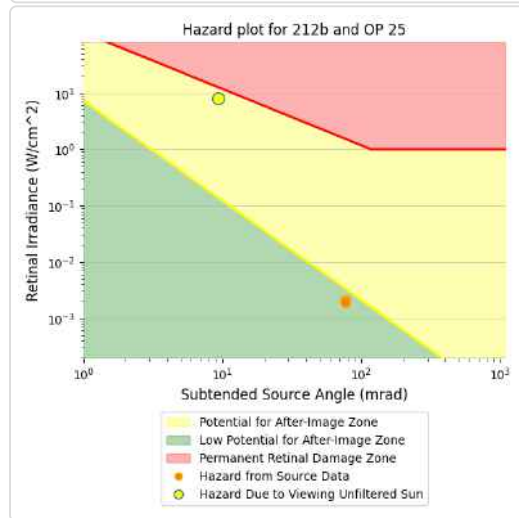
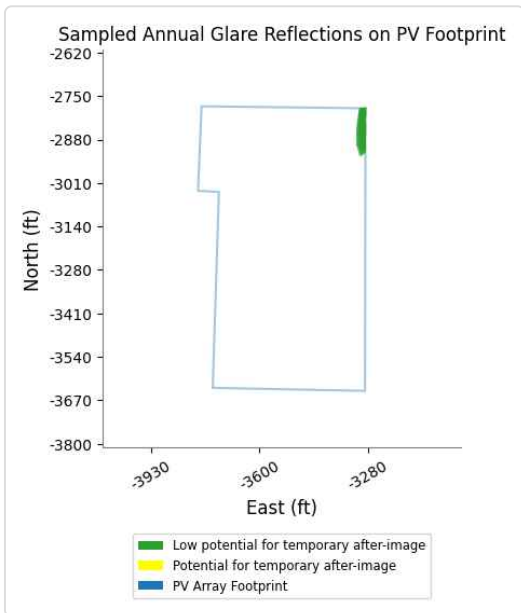
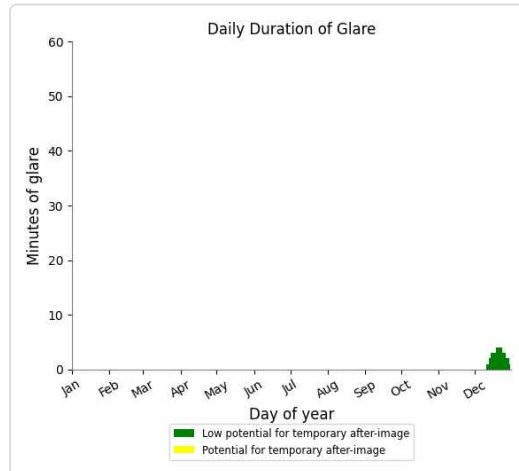
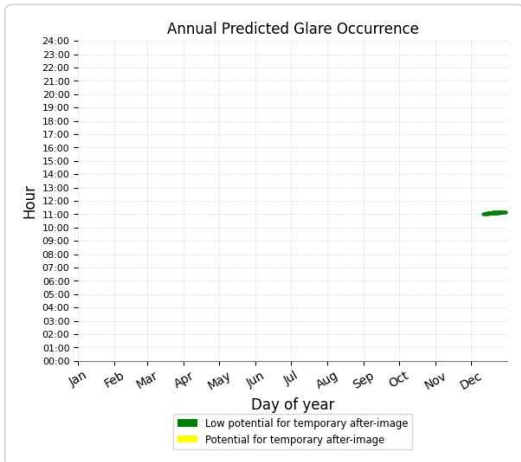
212b - OP Receptor (OP 24)

No glare found

212b - OP Receptor (OP 25)

PV array is expected to produce the following glare for receptors at this location:

- 54 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



212b - OP Receptor (OP 26)

No glare found

212b - OP Receptor (OP 27)

No glare found

212b - OP Receptor (OP 28)

No glare found

212b - OP Receptor (OP 29)

No glare found

212b - OP Receptor (OP 30)

No glare found

212b - OP Receptor (OP 31)

No glare found

212b - OP Receptor (OP 32)

No glare found

212b - OP Receptor (OP 33)

No glare found

212b - OP Receptor (OP 34)

No glare found

212b - OP Receptor (OP 35)

No glare found

212b - OP Receptor (OP 36)

No glare found

212b - OP Receptor (OP 37)

No glare found

212b - OP Receptor (OP 38)

No glare found

212b - OP Receptor (OP 39)

No glare found

212b - OP Receptor (OP 40)

No glare found

212b - Route Receptor (Beech Springs Drive)

No glare found

212b - Route Receptor (Beechtree Pike)

No glare found

212b - Route Receptor (Carpenter Road)

No glare found

212b - Route Receptor (Maddox Road)

No glare found

212b - Route Receptor (Mt Carmel Road Route 57)

No glare found

213b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

214b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

215b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

216b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

217b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

218b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

219b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 2b 9ft veh 1_5ft pan 52rest

Created Aug. 10, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73856.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results Glare with low potential for temporary after-image predicted

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
201b	SA tracking	SA tracking	0	0	-
202b	SA tracking	SA tracking	0	0	-
203b	SA tracking	SA tracking	0	0	-
204b	SA tracking	SA tracking	0	0	-
205b	SA tracking	SA tracking	0	0	-
206b	SA tracking	SA tracking	0	0	-
207b	SA tracking	SA tracking	0	0	-
208b	SA tracking	SA tracking	0	0	-
209b	SA tracking	SA tracking	0	0	-
210b	SA tracking	SA tracking	0	0	-
211b	SA tracking	SA tracking	0	0	-
212b	SA tracking	SA tracking	483	0	-
213b	SA tracking	SA tracking	0	0	-
214b	SA tracking	SA tracking	0	0	-
215b	SA tracking	SA tracking	0	0	-
216b	SA tracking	SA tracking	0	0	-
217b	SA tracking	SA tracking	0	0	-
218b	SA tracking	SA tracking	0	0	-
219b	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 100.9 acres

Name: 201b
Footprint area: 16.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457137	-83.658688	854.00	1.50	855.50
2	38.457154	-83.656681	902.23	1.50	903.73
3	38.457398	-83.656724	903.42	1.50	904.92
4	38.457423	-83.656499	904.22	1.50	905.73
5	38.459254	-83.656574	886.62	1.50	888.12
6	38.459271	-83.660554	833.29	1.50	834.79
7	38.458876	-83.660533	834.43	1.50	835.93
8	38.457423	-83.659170	845.91	1.50	847.41
9	38.457431	-83.658784	857.00	1.50	858.50

Name: 202b
Footprint area: 2.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458483	-83.656538	898.08	1.50	899.58
2	38.458531	-83.654862	884.83	1.50	886.33
3	38.458922	-83.654880	868.64	1.50	870.14
4	38.458932	-83.653770	847.12	1.50	848.62
5	38.458266	-83.653730	860.79	1.50	862.29
6	38.458224	-83.656538	900.47	1.50	901.97

Name: 203b

Footprint area: 3.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458262	-83.654333	883.51	1.50	885.01
2	38.457840	-83.654325	888.82	1.50	890.32
3	38.457817	-83.655280	894.80	1.50	896.30
4	38.457458	-83.655264	900.53	1.50	902.03
5	38.457422	-83.656501	904.22	1.50	905.73
6	38.458220	-83.656527	900.35	1.50	901.85



Name: 204b

Footprint area: 3.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448333	-83.665346	914.53	1.50	916.03
2	38.448323	-83.663997	925.90	1.50	927.40
3	38.447766	-83.663734	921.87	1.50	923.37
4	38.447314	-83.663732	931.97	1.50	933.47
5	38.447405	-83.665338	932.82	1.50	934.32



Name: 205b

Footprint area: 2.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.447407	-83.665338	932.89	1.50	934.39
2	38.447417	-83.666465	936.32	1.50	937.82
3	38.448377	-83.666438	918.46	1.50	919.96
4	38.448333	-83.665349	914.53	1.50	916.03

Name: 206b

Footprint area: 3.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.447787	-83.666454	933.79	1.50	935.29
2	38.447804	-83.667355	906.46	1.50	907.96
3	38.449224	-83.667334	879.91	1.50	881.41
4	38.449209	-83.666438	883.65	1.50	885.15

Name: 207b

Footprint area: 5.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446167	-83.670215	932.16	1.50	933.66
2	38.446125	-83.668182	928.63	1.50	930.13
3	38.445823	-83.668171	926.78	1.50	928.28
4	38.445827	-83.667672	927.94	1.50	929.44
5	38.446411	-83.667677	936.52	1.50	938.02
6	38.447079	-83.668557	936.39	1.50	937.89
7	38.447121	-83.670172	940.87	1.50	942.37

Name: 208b

Footprint area: 4.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.447092	-83.668997	938.14	1.50	939.64
2	38.448029	-83.668992	931.72	1.50	933.22
3	38.448024	-83.668739	929.31	1.50	930.81
4	38.448445	-83.668723	921.84	1.50	923.34
5	38.448474	-83.670140	916.47	1.50	917.97
6	38.447125	-83.670177	941.10	1.50	942.60

Name: 209b

Footprint area: 0.64 acre

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448881	-83.668411	904.88	1.50	906.38
2	38.448864	-83.667829	891.82	1.50	893.32
3	38.448427	-83.667840	896.58	1.50	898.08
4	38.448440	-83.668462	915.33	1.50	916.83



Name: 210b

Footprint area: 12.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.445067	-83.675064	932.26	1.50	933.76
2	38.443563	-83.675134	936.03	1.50	937.53
3	38.443558	-83.672248	930.86	1.50	932.36
4	38.444033	-83.672253	936.13	1.50	937.63
5	38.444012	-83.671271	921.17	1.50	922.67
6	38.445088	-83.671266	941.85	1.50	943.35



Name: 211b

Footprint area: 5.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.445083	-83.671261	941.53	1.50	943.03
2	38.446188	-83.671196	945.92	1.50	947.42
3	38.446172	-83.670199	931.98	1.50	933.48
4	38.447134	-83.670166	941.09	1.50	942.59
5	38.447146	-83.671792	912.84	1.50	914.34
6	38.445088	-83.671862	948.45	1.50	949.95



Name: 212b

Footprint area: 8.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.447151	-83.671781	912.96	1.50	914.46
2	38.448776	-83.671717	932.01	1.50	933.51
3	38.448785	-83.671937	931.30	1.50	932.80
4	38.449486	-83.671899	905.53	1.50	907.03
5	38.449470	-83.670172	874.20	1.50	875.70
6	38.447125	-83.670177	941.10	1.50	942.60



Name: 213b

Footprint area: 9.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457783	-83.642412	867.14	1.50	868.64
2	38.456271	-83.643216	875.68	1.50	877.18
3	38.456263	-83.642744	885.36	1.50	886.86
4	38.456011	-83.642766	887.91	1.50	889.41
5	38.455994	-83.640545	894.54	1.50	896.04
6	38.457758	-83.640534	889.00	1.50	890.50



Name: 214b

Footprint area: 9.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457766	-83.640548	888.98	1.50	890.48
2	38.457741	-83.638413	883.21	1.50	884.71
3	38.455935	-83.638381	882.94	1.50	884.44
4	38.455977	-83.640548	894.55	1.50	896.05



Name: 215b

Footprint area: 9.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457733	-83.638388	883.10	1.50	884.60
2	38.457641	-83.635653	871.29	1.50	872.79
3	38.456910	-83.635685	867.91	1.50	869.41
4	38.456641	-83.636447	868.61	1.50	870.11
5	38.455868	-83.637305	874.98	1.50	876.48
6	38.455927	-83.638367	882.88	1.50	884.38



Name: 216b

Footprint area: 0.80 acre

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448439	-83.668478	915.85	1.50	917.35
2	38.448922	-83.668419	903.63	1.50	905.13
3	38.448960	-83.669111	905.20	1.50	906.70
4	38.448443	-83.669122	924.61	1.50	926.11



Name: 217b

Footprint area: 1.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.449469	-83.669085	878.83	1.50	880.33
2	38.449482	-83.669659	882.24	1.50	883.74
3	38.448473	-83.669659	918.36	1.50	919.86
4	38.448452	-83.669106	924.51	1.50	926.01

Name: 218b

Footprint area: 1.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448473	-83.670152	916.58	1.50	918.08
2	38.448469	-83.669664	918.36	1.50	919.86
3	38.449482	-83.669653	882.32	1.50	883.82
4	38.449461	-83.670144	874.76	1.50	876.26

Name: 219b

Footprint area: 0.88 acre

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448969	-83.669116	904.76	1.50	906.26
2	38.449481	-83.669084	878.14	1.50	879.64
3	38.449456	-83.668403	875.85	1.50	877.35
4	38.448922	-83.668414	903.49	1.50	904.99



2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25

Description:

Threshold height : 50 ft

Direction: 247.0 deg

Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7

Description:

Threshold height : 50 ft

Direction: 66.8 deg

Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



Route Receptor(s)

Name: Beech Springs Drive
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.444962	-83.669717	918.20	9.00	927.20
2	38.442383	-83.669824	920.37	9.00	929.37
3	38.440744	-83.669921	900.87	9.00	909.87
4	38.440626	-83.670103	899.87	9.00	908.87
5	38.440593	-83.670436	895.94	9.00	904.94
6	38.440534	-83.670597	890.50	9.00	899.50
7	38.440400	-83.670650	887.59	9.00	896.59

Name: Beechtree Pike
Route type: Two-way
View angle: 50.0 deg



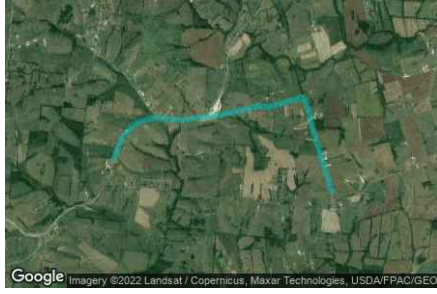
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.442299	-83.689810	818.46	9.00	827.47
2	38.441963	-83.688823	809.66	9.00	818.66
3	38.441341	-83.687342	811.93	9.00	820.93
4	38.441257	-83.686934	815.05	9.00	824.05
5	38.441190	-83.683458	837.81	9.00	846.81
6	38.441156	-83.681055	886.66	9.00	895.66
7	38.441492	-83.678115	931.20	9.00	940.20
8	38.441324	-83.676205	929.13	9.00	938.14
9	38.441223	-83.675218	916.01	9.00	925.01
10	38.440786	-83.674017	929.30	9.00	938.30
11	38.440584	-83.672386	914.48	9.00	923.48
12	38.440164	-83.668695	871.54	9.00	880.54
13	38.439626	-83.664833	929.11	9.00	938.11
14	38.439694	-83.662794	910.74	9.00	919.74
15	38.439963	-83.661936	923.45	9.00	932.45
16	38.440769	-83.660885	922.38	9.00	931.38
17	38.441122	-83.660005	916.66	9.00	925.66
18	38.441425	-83.658202	911.05	9.00	920.05
19	38.441795	-83.655928	871.51	9.00	880.51
20	38.442131	-83.655392	878.90	9.00	887.90
21	38.443324	-83.654447	902.20	9.00	911.20

Name: Carpenter Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.469909	-83.637808	875.35	9.00	884.35
2	38.469019	-83.638023	866.64	9.00	875.64
3	38.467994	-83.638388	878.37	9.00	887.37
4	38.466280	-83.639375	879.12	9.00	888.12
5	38.465423	-83.639697	851.98	9.00	860.98
6	38.464944	-83.640072	839.47	9.00	848.47
7	38.463483	-83.641596	847.69	9.00	856.69
8	38.461509	-83.642229	854.19	9.00	863.19
9	38.460400	-83.642518	859.05	9.00	868.05
10	38.458820	-83.642787	872.19	9.00	881.20
11	38.456098	-83.643516	876.71	9.00	885.71
12	38.455619	-83.643688	882.41	9.00	891.42
13	38.454603	-83.643591	895.46	9.00	904.46
14	38.453653	-83.643452	900.67	9.00	909.67
15	38.451427	-83.642551	887.13	9.00	896.14

Name: Maddox Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446929	-83.699779	900.63	9.00	909.63
2	38.449042	-83.698781	905.70	9.00	914.71
3	38.449927	-83.698140	897.24	9.00	906.24
4	38.450712	-83.697392	908.55	9.00	917.55
5	38.451421	-83.696633	891.77	9.00	900.77
6	38.451700	-83.696060	876.07	9.00	885.07
7	38.452125	-83.694733	855.23	9.00	864.24
8	38.452337	-83.693834	836.76	9.00	845.76
9	38.452486	-83.692483	818.16	9.00	827.16
10	38.452467	-83.691356	831.05	9.00	840.05
11	38.452315	-83.689688	857.58	9.00	866.58
12	38.452197	-83.688039	868.10	9.00	877.10
13	38.452525	-83.684875	821.15	9.00	830.15
14	38.452852	-83.681604	815.71	9.00	824.71
15	38.453155	-83.679459	827.25	9.00	836.25
16	38.453718	-83.676315	891.02	9.00	900.02
17	38.453903	-83.675349	909.39	9.00	918.39
18	38.454180	-83.674480	916.55	9.00	925.55
19	38.454255	-83.674234	918.84	9.00	927.84
20	38.454104	-83.673150	907.07	9.00	916.07
21	38.454020	-83.672302	914.35	9.00	923.35
22	38.454381	-83.670672	906.27	9.00	915.27
23	38.455028	-83.668043	931.42	9.00	940.42
24	38.455406	-83.666487	925.20	9.00	934.20
25	38.455415	-83.666251	922.49	9.00	931.49
26	38.455272	-83.666090	918.64	9.00	927.64
27	38.453617	-83.665275	921.14	9.00	930.14
28	38.452920	-83.665125	929.57	9.00	938.57
29	38.451306	-83.664631	930.86	9.00	939.86
30	38.448771	-83.663671	913.58	9.00	922.58
31	38.446320	-83.662711	932.18	9.00	941.18
32	38.444229	-83.661879	924.19	9.00	933.19
33	38.442240	-83.661112	932.56	9.00	941.56

Name: Mt Carmel Road Route 57
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477903	-83.656992	911.49	9.00	920.49
2	38.476744	-83.659642	924.08	9.00	933.08
3	38.475072	-83.663001	887.47	9.00	896.47
4	38.473367	-83.666444	901.07	9.00	910.07
5	38.471544	-83.670189	926.95	9.00	935.95
6	38.470604	-83.672066	924.51	9.00	933.51
7	38.470100	-83.672453	916.10	9.00	925.10
8	38.468999	-83.673032	917.05	9.00	926.05
9	38.467932	-83.673579	922.96	9.00	931.96
10	38.467647	-83.673858	923.05	9.00	932.05
11	38.466227	-83.675425	910.13	9.00	919.13
12	38.463917	-83.677989	869.39	9.00	878.39
13	38.463144	-83.678579	855.82	9.00	864.82
14	38.462027	-83.679126	827.87	9.00	836.87
15	38.461203	-83.679405	816.24	9.00	825.24
16	38.460531	-83.679577	815.85	9.00	824.85
17	38.458876	-83.679555	819.48	9.00	828.48
18	38.458470	-83.679624	816.78	9.00	825.78
19	38.457173	-83.680164	816.34	9.00	825.34
20	38.455570	-83.680923	819.49	9.00	828.49
21	38.453222	-83.682999	830.52	9.00	839.52

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.466831	-83.671151	914.48	16.00	930.48
OP 2	38.469203	-83.672438	925.10	16.00	941.10
OP 3	38.467904	-83.673952	925.35	16.00	941.35
OP 4	38.462445	-83.668247	869.42	16.00	885.42
OP 5	38.457921	-83.679349	815.32	16.00	831.32
OP 6	38.458955	-83.680054	826.45	16.00	842.45
OP 7	38.459530	-83.680011	827.20	16.00	843.20
OP 8	38.456355	-83.680258	818.16	16.00	834.16
OP 9	38.454767	-83.668188	935.10	16.00	951.10
OP 10	38.455090	-83.666804	935.71	16.00	951.71
OP 11	38.454052	-83.642962	905.82	16.00	921.82
OP 12	38.458600	-83.642610	874.74	16.00	890.74
OP 13	38.459360	-83.643382	891.27	16.00	907.27
OP 14	38.460688	-83.642100	866.38	16.00	882.38
OP 15	38.474174	-83.663874	914.48	16.00	930.48
OP 16	38.467157	-83.664205	908.96	16.00	924.96
OP 17	38.464426	-83.670114	881.40	16.00	897.40
OP 18	38.462019	-83.668841	863.13	16.00	879.14
OP 19	38.463767	-83.677704	871.22	16.00	887.22
OP 20	38.464958	-83.676419	881.58	16.00	897.58
OP 21	38.464443	-83.676966	873.81	16.00	889.81
OP 22	38.453300	-83.677095	871.17	16.00	887.17
OP 23	38.453739	-83.675249	906.43	16.00	922.43
OP 24	38.454988	-83.667223	938.94	16.00	954.94
OP 25	38.454929	-83.667545	937.94	16.00	953.94
OP 26	38.454471	-83.669605	914.05	16.00	930.05
OP 27	38.449690	-83.632821	880.84	16.00	896.84
OP 28	38.450573	-83.636689	875.47	16.00	891.47
OP 29	38.459672	-83.620596	883.93	16.00	899.93
OP 30	38.461448	-83.623342	880.63	16.00	896.63
OP 31	38.449730	-83.631872	877.57	16.00	893.57
OP 32	38.445141	-83.670053	928.74	16.00	944.75
OP 33	38.445191	-83.669102	923.01	16.00	939.01
OP 34	38.444686	-83.669547	917.25	16.00	933.25
OP 35	38.444354	-83.670228	925.17	16.00	941.17
OP 36	38.444094	-83.669504	910.20	16.00	926.20
OP 37	38.443716	-83.669536	909.00	16.00	925.00
OP 38	38.447168	-83.684498	867.84	16.00	883.84
OP 39	38.442962	-83.670249	920.41	16.00	936.41
OP 40	38.442432	-83.669536	917.92	16.00	933.92

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
201b	SA tracking	SA tracking	0	0	-	
202b	SA tracking	SA tracking	0	0	-	
203b	SA tracking	SA tracking	0	0	-	
204b	SA tracking	SA tracking	0	0	-	
205b	SA tracking	SA tracking	0	0	-	
206b	SA tracking	SA tracking	0	0	-	
207b	SA tracking	SA tracking	0	0	-	
208b	SA tracking	SA tracking	0	0	-	
209b	SA tracking	SA tracking	0	0	-	
210b	SA tracking	SA tracking	0	0	-	
211b	SA tracking	SA tracking	0	0	-	
212b	SA tracking	SA tracking	483	0	-	-
213b	SA tracking	SA tracking	0	0	-	
214b	SA tracking	SA tracking	0	0	-	
215b	SA tracking	SA tracking	0	0	-	
216b	SA tracking	SA tracking	0	0	-	
217b	SA tracking	SA tracking	0	0	-	
218b	SA tracking	SA tracking	0	0	-	
219b	SA tracking	SA tracking	0	0	-	

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
212b (green)	6	0	0	0	0	0	0	0	0	0	0	325
212b (yellow)	0	0	0	0	0	0	0	0	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

201b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

202b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

203b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

204b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

205b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

206b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

207b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

208b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

209b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

210b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

211b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

212b low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	325	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	135	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	23	0

212b - Receptor (Fleming Mason Airport Runway 25)

No glare found

212b - Receptor (Fleming Mason Airport Runway 7)

No glare found

212b - OP Receptor (OP 1)

No glare found

212b - OP Receptor (OP 2)

No glare found

212b - OP Receptor (OP 3)

No glare found

212b - OP Receptor (OP 4)

No glare found

212b - OP Receptor (OP 5)

No glare found

212b - OP Receptor (OP 6)

No glare found

212b - OP Receptor (OP 7)

No glare found

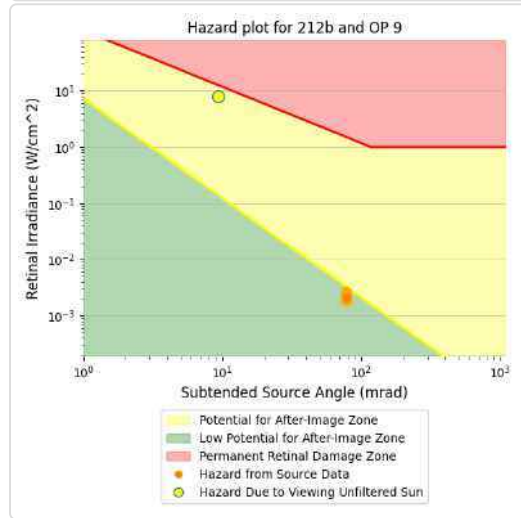
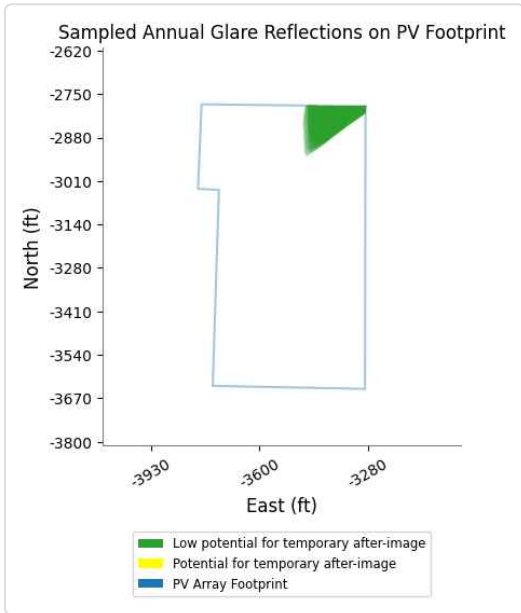
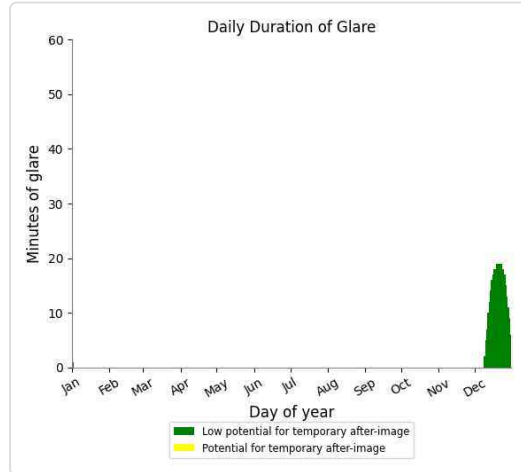
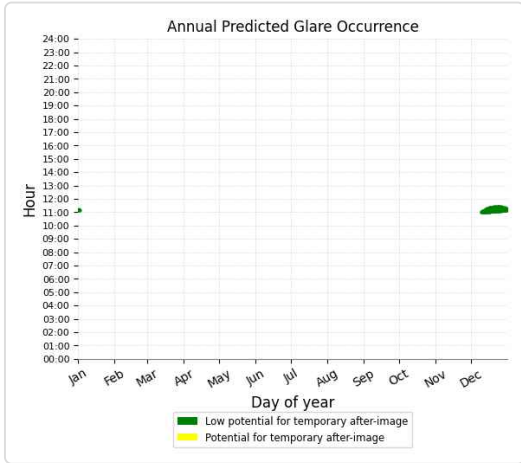
212b - OP Receptor (OP 8)

No glare found

212b - OP Receptor (OP 9)

PV array is expected to produce the following glare for receptors at this location:

- 325 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



212b - OP Receptor (OP 10)

No glare found

212b - OP Receptor (OP 11)

No glare found

212b - OP Receptor (OP 12)

No glare found

212b - OP Receptor (OP 13)

No glare found

212b - OP Receptor (OP 14)

No glare found

212b - OP Receptor (OP 15)

No glare found

212b - OP Receptor (OP 16)

No glare found

212b - OP Receptor (OP 17)

No glare found

212b - OP Receptor (OP 18)

No glare found

212b - OP Receptor (OP 19)

No glare found

212b - OP Receptor (OP 20)

No glare found

212b - OP Receptor (OP 21)

No glare found

212b - OP Receptor (OP 22)

No glare found

212b - OP Receptor (OP 23)

No glare found

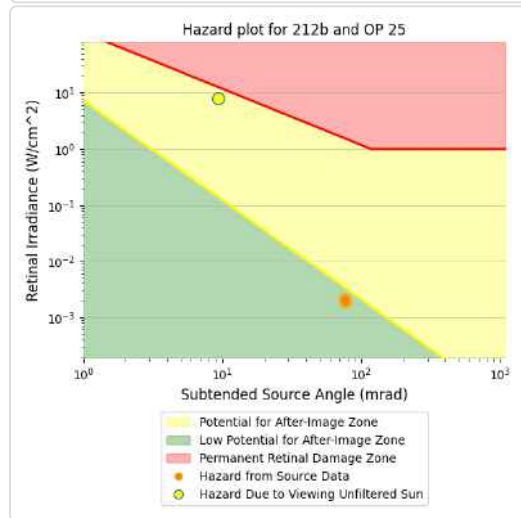
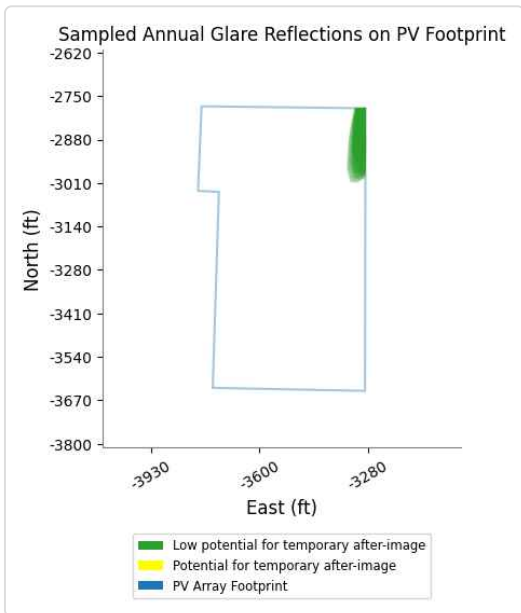
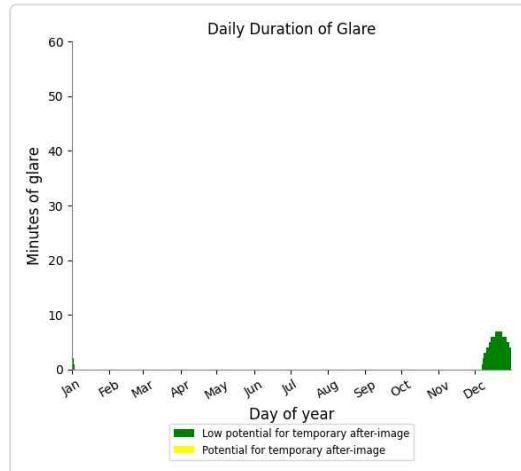
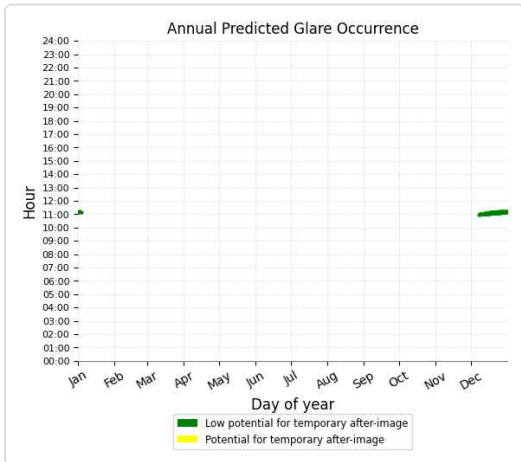
212b - OP Receptor (OP 24)

No glare found

212b - OP Receptor (OP 25)

PV array is expected to produce the following glare for receptors at this location:

- 135 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



212b - OP Receptor (OP 26)

No glare found

212b - OP Receptor (OP 27)

No glare found

212b - OP Receptor (OP 28)

No glare found

212b - OP Receptor (OP 29)

No glare found

212b - OP Receptor (OP 30)

No glare found

212b - OP Receptor (OP 31)

No glare found

212b - OP Receptor (OP 32)

No glare found

212b - OP Receptor (OP 33)

No glare found

212b - OP Receptor (OP 34)

No glare found

212b - OP Receptor (OP 35)

No glare found

212b - OP Receptor (OP 36)

No glare found

212b - OP Receptor (OP 37)

No glare found

212b - OP Receptor (OP 38)

No glare found

212b - OP Receptor (OP 39)

No glare found

212b - OP Receptor (OP 40)

No glare found

212b - Route Receptor (Beech Springs Drive)

No glare found

212b - Route Receptor (Beechtree Pike)

No glare found

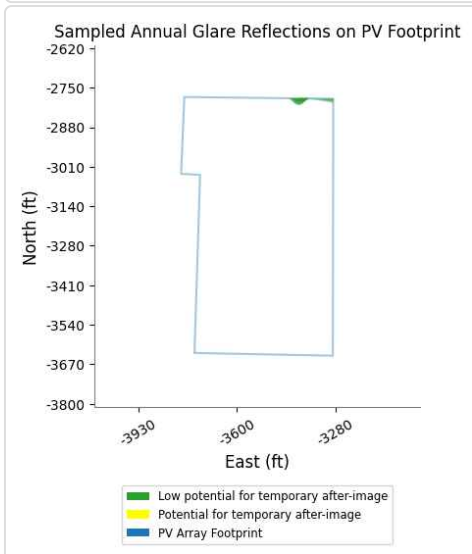
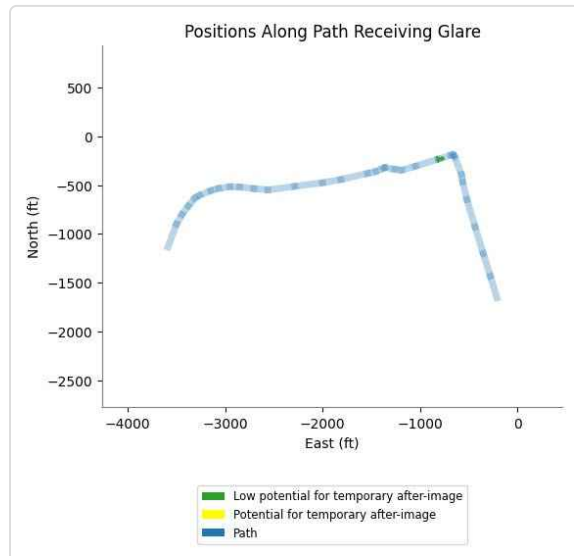
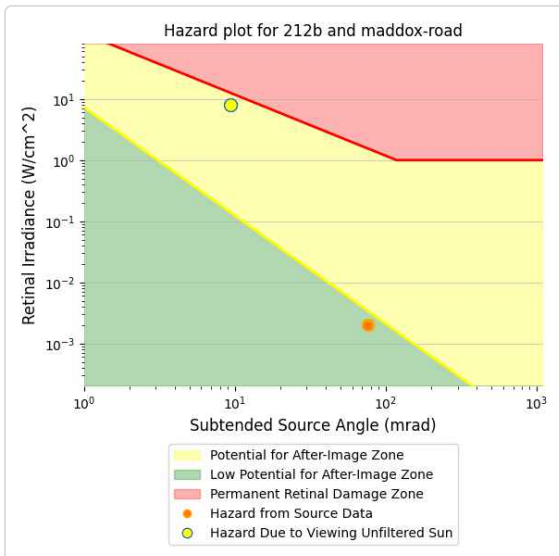
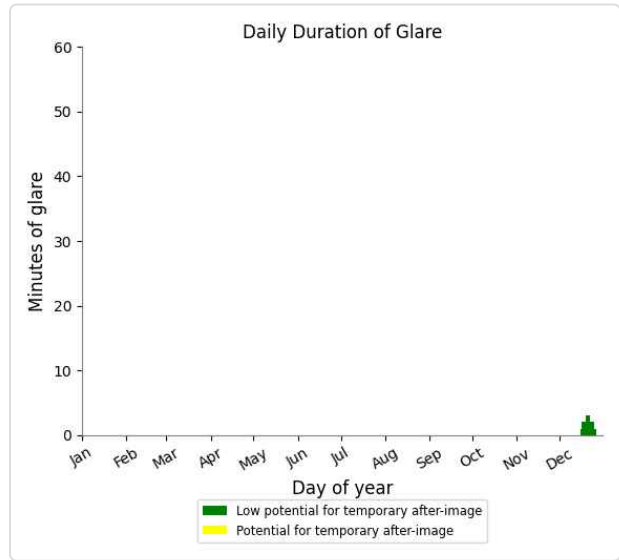
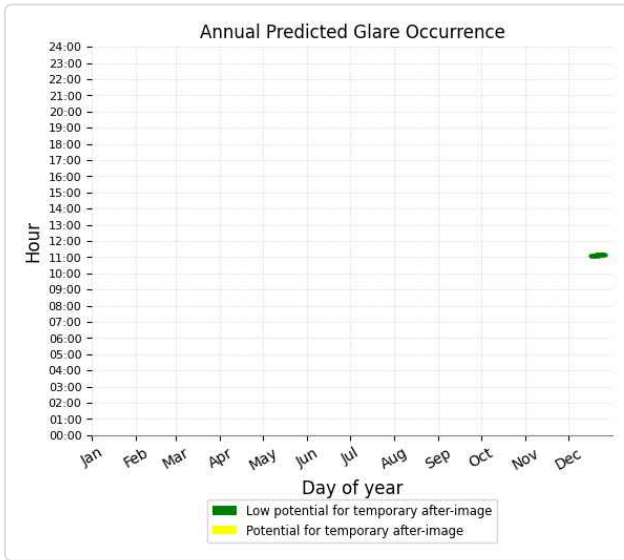
212b - Route Receptor (Carpenter Road)

No glare found

212b - Route Receptor (Maddox Road)

PV array is expected to produce the following glare for receptors at this location:

- 23 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



212b - Route Receptor (Mt Carmel Road Route 57)

No glare found

213b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

214b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

215b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

216b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

217b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

218b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

219b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 2b 9ft veh 10ft pan

Created Aug. 11, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73938.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results Glare with low potential for temporary after-image predicted

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
201b	SA tracking	SA tracking	0	0	-
202b	SA tracking	SA tracking	0	0	-
203b	SA tracking	SA tracking	0	0	-
204b	SA tracking	SA tracking	0	0	-
205b	SA tracking	SA tracking	0	0	-
206b	SA tracking	SA tracking	0	0	-
207b	SA tracking	SA tracking	0	0	-
208b	SA tracking	SA tracking	0	0	-
209b	SA tracking	SA tracking	0	0	-
210b	SA tracking	SA tracking	0	0	-
211b	SA tracking	SA tracking	0	0	-
212b	SA tracking	SA tracking	165	0	-
213b	SA tracking	SA tracking	0	0	-
214b	SA tracking	SA tracking	0	0	-
215b	SA tracking	SA tracking	0	0	-
216b	SA tracking	SA tracking	0	0	-
217b	SA tracking	SA tracking	0	0	-
218b	SA tracking	SA tracking	0	0	-
219b	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 100.9 acres

Name: 201b
Footprint area: 16.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457137	-83.658688	854.00	10.00	864.00
2	38.457154	-83.656681	902.23	10.00	912.23
3	38.457398	-83.656724	903.42	10.00	913.42
4	38.457423	-83.656499	904.22	10.00	914.23
5	38.459254	-83.656574	886.62	10.00	896.62
6	38.459271	-83.660554	833.29	10.00	843.29
7	38.458876	-83.660533	834.43	10.00	844.43
8	38.457423	-83.659170	845.91	10.00	855.91
9	38.457431	-83.658784	857.00	10.00	867.00

Name: 202b
Footprint area: 2.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458483	-83.656538	898.08	10.00	908.08
2	38.458531	-83.654862	884.83	10.00	894.83
3	38.458922	-83.654880	868.64	10.00	878.64
4	38.458932	-83.653770	847.12	10.00	857.12
5	38.458266	-83.653730	860.79	10.00	870.79
6	38.458224	-83.656538	900.47	10.00	910.47

Name: 203b

Footprint area: 3.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458262	-83.654333	883.51	10.00	893.51
2	38.457840	-83.654325	888.82	10.00	898.82
3	38.457817	-83.655280	894.80	10.00	904.80
4	38.457458	-83.655264	900.53	10.00	910.53
5	38.457422	-83.656501	904.22	10.00	914.23
6	38.458220	-83.656527	900.35	10.00	910.35



Name: 204b

Footprint area: 3.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448333	-83.665346	914.53	10.00	924.53
2	38.448323	-83.663997	925.90	10.00	935.90
3	38.447766	-83.663734	921.87	10.00	931.87
4	38.447314	-83.663732	931.97	10.00	941.98
5	38.447405	-83.665338	932.82	10.00	942.82



Name: 205b

Footprint area: 2.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.447407	-83.665338	932.89	10.00	942.89
2	38.447417	-83.666465	936.32	10.00	946.32
3	38.448377	-83.666438	918.46	10.00	928.47
4	38.448333	-83.665349	914.53	10.00	924.53

Name: 206b

Footprint area: 3.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.447787	-83.666454	933.79	10.00	943.79
2	38.447804	-83.667355	906.46	10.00	916.46
3	38.449224	-83.667334	879.91	10.00	889.91
4	38.449209	-83.666438	883.65	10.00	893.65

Name: 207b

Footprint area: 5.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446167	-83.670215	932.16	10.00	942.16
2	38.446125	-83.668182	928.63	10.00	938.63
3	38.445823	-83.668171	926.78	10.00	936.78
4	38.445827	-83.667672	927.94	10.00	937.94
5	38.446411	-83.667677	936.52	10.00	946.52
6	38.447079	-83.668557	936.39	10.00	946.39
7	38.447121	-83.670172	940.87	10.00	950.87

Name: 208b

Footprint area: 4.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.447092	-83.668997	938.14	10.00	948.14
2	38.448029	-83.668992	931.72	10.00	941.72
3	38.448024	-83.668739	929.31	10.00	939.31
4	38.448445	-83.668723	921.84	10.00	931.84
5	38.448474	-83.670140	916.47	10.00	926.47
6	38.447125	-83.670177	941.10	10.00	951.11

Name: 209b

Footprint area: 0.64 acre

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448881	-83.668411	904.88	10.00	914.88
2	38.448864	-83.667829	891.82	10.00	901.82
3	38.448427	-83.667840	896.58	10.00	906.58
4	38.448440	-83.668462	915.33	10.00	925.33

Name: 210b

Footprint area: 12.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.445067	-83.675064	932.26	10.00	942.26
2	38.443563	-83.675134	936.03	10.00	946.03
3	38.443558	-83.672248	930.86	10.00	940.86
4	38.444033	-83.672253	936.13	10.00	946.13
5	38.444012	-83.671271	921.17	10.00	931.17
6	38.445088	-83.671266	941.85	10.00	951.85

Name: 211b

Footprint area: 5.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.445083	-83.671261	941.53	10.00	951.53
2	38.446188	-83.671196	945.92	10.00	955.93
3	38.446172	-83.670199	931.98	10.00	941.98
4	38.447134	-83.670166	941.09	10.00	951.09
5	38.447146	-83.671792	912.84	10.00	922.84
6	38.445088	-83.671862	948.45	10.00	958.45



Name: 212b

Footprint area: 8.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.447151	-83.671781	912.96	10.00	922.96
2	38.448776	-83.671717	932.01	10.00	942.01
3	38.448785	-83.671937	931.30	10.00	941.30
4	38.449486	-83.671899	905.53	10.00	915.53
5	38.449470	-83.670172	874.20	10.00	884.20
6	38.447125	-83.670177	941.10	10.00	951.11



Name: 213b

Footprint area: 9.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457783	-83.642412	867.14	10.00	877.15
2	38.456271	-83.643216	875.68	10.00	885.68
3	38.456263	-83.642744	885.36	10.00	895.36
4	38.456011	-83.642766	887.91	10.00	897.91
5	38.455994	-83.640545	894.54	10.00	904.54
6	38.457758	-83.640534	889.00	10.00	899.00



Name: 214b

Footprint area: 9.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457766	-83.640548	888.98	10.00	898.98
2	38.457741	-83.638413	883.21	10.00	893.21
3	38.455935	-83.638381	882.94	10.00	892.94
4	38.455977	-83.640548	894.55	10.00	904.55



Name: 215b

Footprint area: 9.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457733	-83.638388	883.10	10.00	893.10
2	38.457641	-83.635653	871.29	10.00	881.30
3	38.456910	-83.635685	867.91	10.00	877.91
4	38.456641	-83.636447	868.61	10.00	878.61
5	38.455868	-83.637305	874.98	10.00	884.99
6	38.455927	-83.638367	882.88	10.00	892.88



Name: 216b

Footprint area: 0.80 acre

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448439	-83.668478	915.85	10.00	925.85
2	38.448922	-83.668419	903.63	10.00	913.63
3	38.448960	-83.669111	905.20	10.00	915.20
4	38.448443	-83.669122	924.61	10.00	934.61



Name: 217b

Footprint area: 1.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.449469	-83.669085	878.83	10.00	888.84
2	38.449482	-83.669659	882.24	10.00	892.24
3	38.448473	-83.669659	918.36	10.00	928.36
4	38.448452	-83.669106	924.51	10.00	934.51

Name: 218b

Footprint area: 1.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448473	-83.670152	916.58	10.00	926.59
2	38.448469	-83.669664	918.36	10.00	928.36
3	38.449482	-83.669653	882.32	10.00	892.32
4	38.449461	-83.670144	874.76	10.00	884.76

Name: 219b

Footprint area: 0.88 acre

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.448969	-83.669116	904.76	10.00	914.76
2	38.449481	-83.669084	878.14	10.00	888.14
3	38.449456	-83.668403	875.85	10.00	885.85
4	38.448922	-83.668414	903.49	10.00	913.49



2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25

Description:

Threshold height : 50 ft

Direction: 247.0 deg

Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7

Description:

Threshold height : 50 ft

Direction: 66.8 deg

Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



Route Receptor(s)

Name: Beech Springs Drive
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.444962	-83.669717	918.20	9.00	927.20
2	38.442383	-83.669824	920.37	9.00	929.37
3	38.440744	-83.669921	900.87	9.00	909.87
4	38.440626	-83.670103	899.87	9.00	908.87
5	38.440593	-83.670436	895.94	9.00	904.94
6	38.440534	-83.670597	890.50	9.00	899.50
7	38.440400	-83.670650	887.59	9.00	896.59

Name: Beechtree Pike
Route type: Two-way
View angle: 50.0 deg



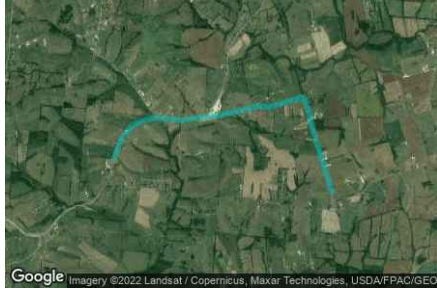
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.442299	-83.689810	818.46	9.00	827.47
2	38.441963	-83.688823	809.66	9.00	818.66
3	38.441341	-83.687342	811.93	9.00	820.93
4	38.441257	-83.686934	815.05	9.00	824.05
5	38.441190	-83.683458	837.81	9.00	846.81
6	38.441156	-83.681055	886.66	9.00	895.66
7	38.441492	-83.678115	931.20	9.00	940.20
8	38.441324	-83.676205	929.13	9.00	938.14
9	38.441223	-83.675218	916.01	9.00	925.01
10	38.440786	-83.674017	929.30	9.00	938.30
11	38.440584	-83.672386	914.48	9.00	923.48
12	38.440164	-83.668695	871.54	9.00	880.54
13	38.439626	-83.664833	929.11	9.00	938.11
14	38.439694	-83.662794	910.74	9.00	919.74
15	38.439963	-83.661936	923.45	9.00	932.45
16	38.440769	-83.660885	922.38	9.00	931.38
17	38.441122	-83.660005	916.66	9.00	925.66
18	38.441425	-83.658202	911.05	9.00	920.05
19	38.441795	-83.655928	871.51	9.00	880.51
20	38.442131	-83.655392	878.90	9.00	887.90
21	38.443324	-83.654447	902.20	9.00	911.20

Name: Carpenter Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.469909	-83.637808	875.35	9.00	884.35
2	38.469019	-83.638023	866.64	9.00	875.64
3	38.467994	-83.638388	878.37	9.00	887.37
4	38.466280	-83.639375	879.12	9.00	888.12
5	38.465423	-83.639697	851.98	9.00	860.98
6	38.464944	-83.640072	839.47	9.00	848.47
7	38.463483	-83.641596	847.69	9.00	856.69
8	38.461509	-83.642229	854.19	9.00	863.19
9	38.460400	-83.642518	859.05	9.00	868.05
10	38.458820	-83.642787	872.19	9.00	881.20
11	38.456098	-83.643516	876.71	9.00	885.71
12	38.455619	-83.643688	882.41	9.00	891.42
13	38.454603	-83.643591	895.46	9.00	904.46
14	38.453653	-83.643452	900.67	9.00	909.67
15	38.451427	-83.642551	887.13	9.00	896.14

Name: Maddox Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446929	-83.699779	900.63	9.00	909.63
2	38.449042	-83.698781	905.70	9.00	914.71
3	38.449927	-83.698140	897.24	9.00	906.24
4	38.450712	-83.697392	908.55	9.00	917.55
5	38.451421	-83.696633	891.77	9.00	900.77
6	38.451700	-83.696060	876.07	9.00	885.07
7	38.452125	-83.694733	855.23	9.00	864.24
8	38.452337	-83.693834	836.76	9.00	845.76
9	38.452486	-83.692483	818.16	9.00	827.16
10	38.452467	-83.691356	831.05	9.00	840.05
11	38.452315	-83.689688	857.58	9.00	866.58
12	38.452197	-83.688039	868.10	9.00	877.10
13	38.452525	-83.684875	821.15	9.00	830.15
14	38.452852	-83.681604	815.71	9.00	824.71
15	38.453155	-83.679459	827.25	9.00	836.25
16	38.453718	-83.676315	891.02	9.00	900.02
17	38.453903	-83.675349	909.39	9.00	918.39
18	38.454180	-83.674480	916.55	9.00	925.55
19	38.454255	-83.674234	918.84	9.00	927.84
20	38.454104	-83.673150	907.07	9.00	916.07
21	38.454020	-83.672302	914.35	9.00	923.35
22	38.454381	-83.670672	906.27	9.00	915.27
23	38.455028	-83.668043	931.42	9.00	940.42
24	38.455406	-83.666487	925.20	9.00	934.20
25	38.455415	-83.666251	922.49	9.00	931.49
26	38.455272	-83.666090	918.64	9.00	927.64
27	38.453617	-83.665275	921.14	9.00	930.14
28	38.452920	-83.665125	929.57	9.00	938.57
29	38.451306	-83.664631	930.86	9.00	939.86
30	38.448771	-83.663671	913.58	9.00	922.58
31	38.446320	-83.662711	932.18	9.00	941.18
32	38.444229	-83.661879	924.19	9.00	933.19
33	38.442240	-83.661112	932.56	9.00	941.56

Name: Mt Carmel Road Route 57
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477903	-83.656992	911.49	9.00	920.49
2	38.476744	-83.659642	924.08	9.00	933.08
3	38.475072	-83.663001	887.47	9.00	896.47
4	38.473367	-83.666444	901.07	9.00	910.07
5	38.471544	-83.670189	926.95	9.00	935.95
6	38.470604	-83.672066	924.51	9.00	933.51
7	38.470100	-83.672453	916.10	9.00	925.10
8	38.468999	-83.673032	917.05	9.00	926.05
9	38.467932	-83.673579	922.96	9.00	931.96
10	38.467647	-83.673858	923.05	9.00	932.05
11	38.466227	-83.675425	910.13	9.00	919.13
12	38.463917	-83.677989	869.39	9.00	878.39
13	38.463144	-83.678579	855.82	9.00	864.82
14	38.462027	-83.679126	827.87	9.00	836.87
15	38.461203	-83.679405	816.24	9.00	825.24
16	38.460531	-83.679577	815.85	9.00	824.85
17	38.458876	-83.679555	819.48	9.00	828.48
18	38.458470	-83.679624	816.78	9.00	825.78
19	38.457173	-83.680164	816.34	9.00	825.34
20	38.455570	-83.680923	819.49	9.00	828.49
21	38.453222	-83.682999	830.52	9.00	839.52

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.466831	-83.671151	914.48	16.00	930.48
OP 2	38.469203	-83.672438	925.10	16.00	941.10
OP 3	38.467904	-83.673952	925.35	16.00	941.35
OP 4	38.462445	-83.668247	869.42	16.00	885.42
OP 5	38.457921	-83.679349	815.32	16.00	831.32
OP 6	38.458955	-83.680054	826.45	16.00	842.45
OP 7	38.459530	-83.680011	827.20	16.00	843.20
OP 8	38.456355	-83.680258	818.16	16.00	834.16
OP 9	38.454767	-83.668188	935.10	16.00	951.10
OP 10	38.455090	-83.666804	935.71	16.00	951.71
OP 11	38.454052	-83.642962	905.82	16.00	921.82
OP 12	38.458600	-83.642610	874.74	16.00	890.74
OP 13	38.459360	-83.643382	891.27	16.00	907.27
OP 14	38.460688	-83.642100	866.38	16.00	882.38
OP 15	38.474174	-83.663874	914.48	16.00	930.48
OP 16	38.467157	-83.664205	908.96	16.00	924.96
OP 17	38.464426	-83.670114	881.40	16.00	897.40
OP 18	38.462019	-83.668841	863.13	16.00	879.14
OP 19	38.463767	-83.677704	871.22	16.00	887.22
OP 20	38.464958	-83.676419	881.58	16.00	897.58
OP 21	38.464443	-83.676966	873.81	16.00	889.81
OP 22	38.453300	-83.677095	871.17	16.00	887.17
OP 23	38.453739	-83.675249	906.43	16.00	922.43
OP 24	38.454988	-83.667223	938.94	16.00	954.94
OP 25	38.454929	-83.667545	937.94	16.00	953.94
OP 26	38.454471	-83.669605	914.05	16.00	930.05
OP 27	38.449690	-83.632821	880.84	16.00	896.84
OP 28	38.450573	-83.636689	875.47	16.00	891.47
OP 29	38.459672	-83.620596	883.93	16.00	899.93
OP 30	38.461448	-83.623342	880.63	16.00	896.63
OP 31	38.449730	-83.631872	877.57	16.00	893.57
OP 32	38.445141	-83.670053	928.74	16.00	944.75
OP 33	38.445191	-83.669102	923.01	16.00	939.01
OP 34	38.444686	-83.669547	917.25	16.00	933.25
OP 35	38.444354	-83.670228	925.17	16.00	941.17
OP 36	38.444094	-83.669504	910.20	16.00	926.20
OP 37	38.443716	-83.669536	909.00	16.00	925.00
OP 38	38.447168	-83.684498	867.84	16.00	883.84
OP 39	38.442962	-83.670249	920.41	16.00	936.41
OP 40	38.442432	-83.669536	917.92	16.00	933.92

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
201b	SA tracking	SA tracking	0	0	-	
202b	SA tracking	SA tracking	0	0	-	
203b	SA tracking	SA tracking	0	0	-	
204b	SA tracking	SA tracking	0	0	-	
205b	SA tracking	SA tracking	0	0	-	
206b	SA tracking	SA tracking	0	0	-	
207b	SA tracking	SA tracking	0	0	-	
208b	SA tracking	SA tracking	0	0	-	
209b	SA tracking	SA tracking	0	0	-	
210b	SA tracking	SA tracking	0	0	-	
211b	SA tracking	SA tracking	0	0	-	
212b	SA tracking	SA tracking	165	0	-	-
213b	SA tracking	SA tracking	0	0	-	
214b	SA tracking	SA tracking	0	0	-	
215b	SA tracking	SA tracking	0	0	-	
216b	SA tracking	SA tracking	0	0	-	
217b	SA tracking	SA tracking	0	0	-	
218b	SA tracking	SA tracking	0	0	-	
219b	SA tracking	SA tracking	0	0	-	

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
212b (green)	0	0	0	0	0	0	0	0	0	0	0	116
212b (yellow)	0	0	0	0	0	0	0	0	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

201b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

202b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

203b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

204b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

205b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

206b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

207b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

208b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

209b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

210b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

211b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

212b low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	113	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	52	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0

212b - Receptor (Fleming Mason Airport Runway 25)

No glare found

212b - Receptor (Fleming Mason Airport Runway 7)

No glare found

212b - OP Receptor (OP 1)

No glare found

212b - OP Receptor (OP 2)

No glare found

212b - OP Receptor (OP 3)

No glare found

212b - OP Receptor (OP 4)

No glare found

212b - OP Receptor (OP 5)

No glare found

212b - OP Receptor (OP 6)

No glare found

212b - OP Receptor (OP 7)

No glare found

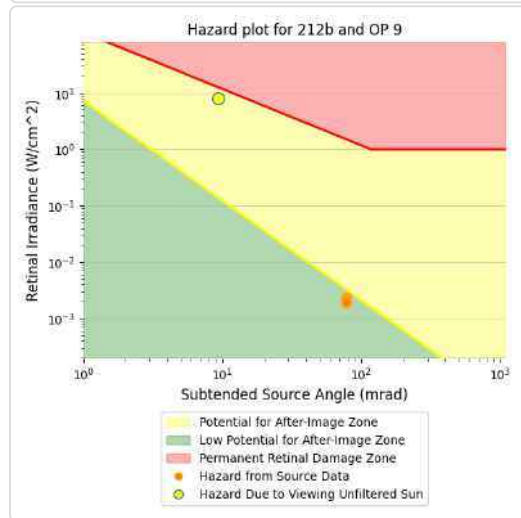
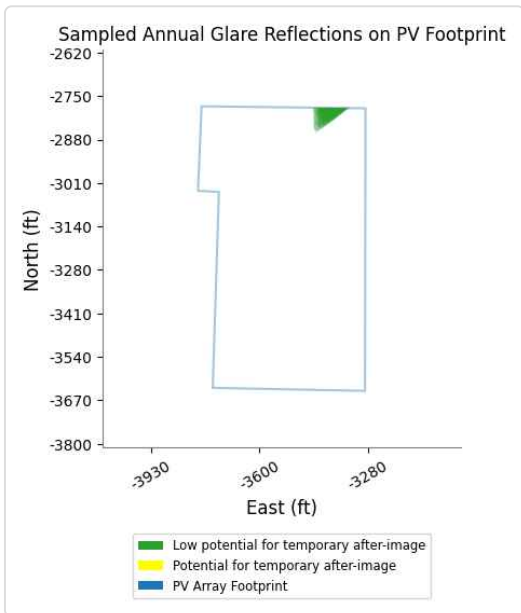
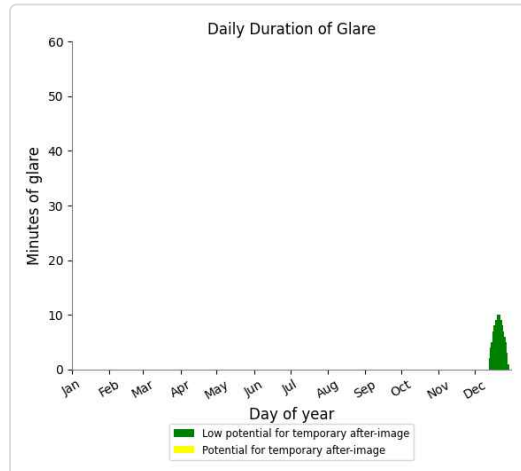
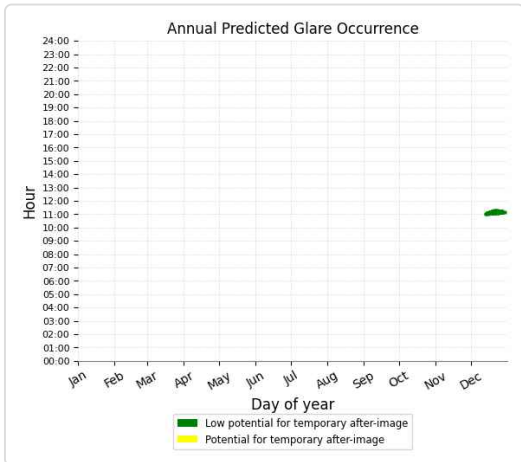
212b - OP Receptor (OP 8)

No glare found

212b - OP Receptor (OP 9)

PV array is expected to produce the following glare for receptors at this location:

- 113 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



212b - OP Receptor (OP 10)

No glare found

212b - OP Receptor (OP 11)

No glare found

212b - OP Receptor (OP 12)

No glare found

212b - OP Receptor (OP 13)

No glare found

212b - OP Receptor (OP 14)

No glare found

212b - OP Receptor (OP 15)

No glare found

212b - OP Receptor (OP 16)

No glare found

212b - OP Receptor (OP 17)

No glare found

212b - OP Receptor (OP 18)

No glare found

212b - OP Receptor (OP 19)

No glare found

212b - OP Receptor (OP 20)

No glare found

212b - OP Receptor (OP 21)

No glare found

212b - OP Receptor (OP 22)

No glare found

212b - OP Receptor (OP 23)

No glare found

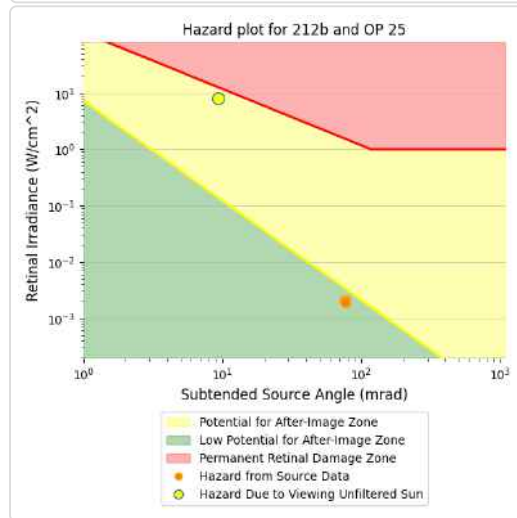
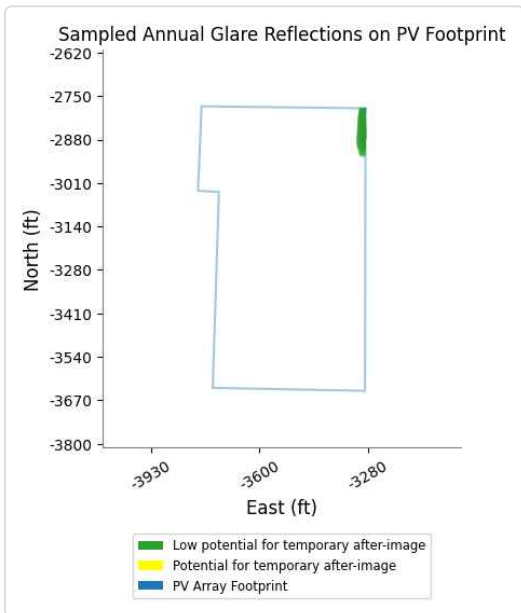
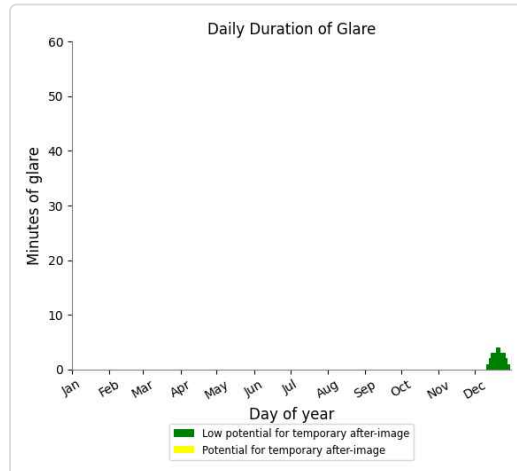
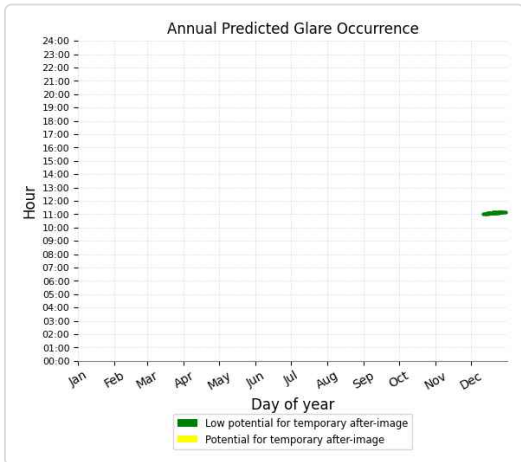
212b - OP Receptor (OP 24)

No glare found

212b - OP Receptor (OP 25)

PV array is expected to produce the following glare for receptors at this location:

- 52 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



212b - OP Receptor (OP 26)

No glare found

212b - OP Receptor (OP 27)

No glare found

212b - OP Receptor (OP 28)

No glare found

212b - OP Receptor (OP 29)

No glare found

212b - OP Receptor (OP 30)

No glare found

212b - OP Receptor (OP 31)

No glare found

212b - OP Receptor (OP 32)

No glare found

212b - OP Receptor (OP 33)

No glare found

212b - OP Receptor (OP 34)

No glare found

212b - OP Receptor (OP 35)

No glare found

212b - OP Receptor (OP 36)

No glare found

212b - OP Receptor (OP 37)

No glare found

212b - OP Receptor (OP 38)

No glare found

212b - OP Receptor (OP 39)

No glare found

212b - OP Receptor (OP 40)

No glare found

212b - Route Receptor (Beech Springs Drive)

No glare found

212b - Route Receptor (Beechtree Pike)

No glare found

212b - Route Receptor (Carpenter Road)

No glare found

212b - Route Receptor (Maddox Road)

No glare found

212b - Route Receptor (Mt Carmel Road Route 57)

No glare found

213b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

214b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

215b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

216b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

217b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

218b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

219b no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beech Springs Drive	0	0
Route: Beechtree Pike	0	0
Route: Carpenter Road	0	0
Route: Maddox Road	0	0
Route: Mt Carmel Road Route 57	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 3 5ft veh 1_5ft pan 52rest

Created Aug. 11, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73933.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results No glare predicted!

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
301	SA tracking	SA tracking	0	0	-
302	SA tracking	SA tracking	0	0	-
303	SA tracking	SA tracking	0	0	-
304	SA tracking	SA tracking	0	0	-
305	SA tracking	SA tracking	0	0	-
306	SA tracking	SA tracking	0	0	-
307	SA tracking	SA tracking	0	0	-
308	SA tracking	SA tracking	0	0	-
309	SA tracking	SA tracking	0	0	-
310	SA tracking	SA tracking	0	0	-
311	SA tracking	SA tracking	0	0	-
312	SA tracking	SA tracking	0	0	-
313	SA tracking	SA tracking	0	0	-
314	SA tracking	SA tracking	0	0	-
315	SA tracking	SA tracking	0	0	-
316	SA tracking	SA tracking	0	0	-
317	SA tracking	SA tracking	0	0	-
318	SA tracking	SA tracking	0	0	-
319	SA tracking	SA tracking	0	0	-
320	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 310.6 acres

Name: 301

Footprint area: 22.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.427443	-83.643189	889.44	1.50	890.94
2	38.427450	-83.644586	873.37	1.50	874.87
3	38.427443	-83.645828	864.47	1.50	865.97
4	38.427443	-83.647920	847.66	1.50	849.16
5	38.427901	-83.647915	846.76	1.50	848.26
6	38.427910	-83.647684	848.80	1.50	850.30
7	38.429633	-83.647695	868.60	1.50	870.10
8	38.429612	-83.643221	863.61	1.50	865.11
9	38.428343	-83.643194	885.96	1.50	887.46

Name: 302

Footprint area: 24.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.427443	-83.647926	847.39	1.50	848.89
2	38.426288	-83.647963	844.72	1.50	846.22
3	38.425430	-83.647459	843.68	1.50	845.18
4	38.425468	-83.643859	876.34	1.50	877.84
5	38.426208	-83.643122	880.98	1.50	882.48
6	38.425926	-83.642496	879.61	1.50	881.11
7	38.425920	-83.641903	887.57	1.50	889.07
8	38.426598	-83.641972	894.99	1.50	896.49
9	38.426588	-83.642184	892.33	1.50	893.83
10	38.426919	-83.642193	898.46	1.50	899.96
11	38.426933	-83.642846	890.75	1.50	892.25
12	38.427435	-83.642878	894.56	1.50	896.06

Name: 303

Footprint area: 5.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.424989	-83.650678	856.97	1.50	858.47
2	38.423947	-83.650721	872.97	1.50	874.47
3	38.424779	-83.648575	866.51	1.50	868.01
4	38.425956	-83.648650	845.60	1.50	847.10

Name: 304

Footprint area: 20.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.427767	-83.652582	860.56	1.50	862.06
2	38.426346	-83.652587	882.80	1.50	884.30
3	38.426355	-83.648768	846.23	1.50	847.73
4	38.427880	-83.648789	840.18	1.50	841.68
5	38.427882	-83.649318	853.10	1.50	854.60
6	38.429056	-83.649316	847.16	1.50	848.66
7	38.429048	-83.650579	868.71	1.50	870.21
8	38.428826	-83.650580	870.55	1.50	872.05
9	38.428824	-83.651546	867.36	1.50	868.86

Name: 305

Footprint area: 22.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.427774	-83.652593	860.21	1.50	861.71
2	38.427783	-83.652958	859.28	1.50	860.78
3	38.428741	-83.652953	873.92	1.50	875.42
4	38.428749	-83.653790	885.83	1.50	887.33
5	38.429043	-83.653779	886.24	1.50	887.74
6	38.429031	-83.655673	895.66	1.50	897.16
7	38.428726	-83.655673	890.60	1.50	892.10
8	38.428725	-83.656429	896.44	1.50	897.94
9	38.426312	-83.656397	898.46	1.50	899.96
10	38.426341	-83.652599	882.84	1.50	884.34

Name: 306

Footprint area: 21.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.428720	-83.656413	896.45	1.50	897.95
2	38.428724	-83.657835	855.90	1.50	857.40
3	38.427131	-83.657877	885.05	1.50	886.55
4	38.427148	-83.658891	895.44	1.50	896.94
5	38.427413	-83.658870	890.22	1.50	891.72
6	38.427409	-83.659192	898.19	1.50	899.69
7	38.428476	-83.658875	871.42	1.50	872.92
8	38.429077	-83.658843	887.74	1.50	889.24
9	38.429069	-83.660640	889.66	1.50	891.16
10	38.426291	-83.660715	879.13	1.50	880.63
11	38.426312	-83.656397	898.46	1.50	899.96

Name: 307

Footprint area: 24.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.426043	-83.651156	873.01	1.50	874.51
2	38.425454	-83.651140	864.40	1.50	865.90
3	38.425446	-83.652164	877.73	1.50	879.23
4	38.424875	-83.652202	867.32	1.50	868.82
5	38.424866	-83.652859	873.85	1.50	875.35
6	38.424570	-83.652862	870.78	1.50	872.28
7	38.424576	-83.653347	874.06	1.50	875.56
8	38.424868	-83.653339	874.34	1.50	875.84
9	38.424883	-83.653910	879.11	1.50	880.61
10	38.424883	-83.654737	887.29	1.50	888.79
11	38.424557	-83.654726	885.38	1.50	886.88
12	38.424562	-83.655981	889.31	1.50	890.81
13	38.423695	-83.656024	882.45	1.50	883.95
14	38.423663	-83.656920	876.20	1.50	877.70
15	38.422744	-83.656923	889.15	1.50	890.65
16	38.422940	-83.657707	886.26	1.50	887.76
17	38.426019	-83.657584	893.78	1.50	895.28
18	38.426044	-83.656196	896.03	1.50	897.53
19	38.426055	-83.654758	891.04	1.50	892.54

Name: 308

Footprint area: 21.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.422941	-83.657714	886.26	1.50	887.76
2	38.423172	-83.658347	873.25	1.50	874.75
3	38.424005	-83.658315	869.73	1.50	871.24
4	38.424013	-83.659570	866.36	1.50	867.86
5	38.423765	-83.659607	860.27	1.50	861.77
6	38.423769	-83.660294	860.13	1.50	861.63
7	38.423782	-83.661603	853.79	1.50	855.29
8	38.426005	-83.661560	885.14	1.50	886.64
9	38.426026	-83.657601	893.81	1.50	895.31

Name: 309

Footprint area: 23.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.426018	-83.660133	883.56	1.50	885.06
2	38.426308	-83.660139	879.15	1.50	880.65
3	38.426287	-83.660718	879.13	1.50	880.63
4	38.429077	-83.660654	889.56	1.50	891.06
5	38.429140	-83.664714	899.71	1.50	901.21
6	38.427365	-83.664814	894.97	1.50	896.47
7	38.427358	-83.663534	901.57	1.50	903.07
8	38.426694	-83.663577	894.02	1.50	895.52
9	38.426652	-83.662182	884.97	1.50	886.47
10	38.426341	-83.661979	885.89	1.50	887.39
11	38.426207	-83.661882	890.77	1.50	892.27
12	38.426198	-83.661592	889.52	1.50	891.02
13	38.426005	-83.661576	885.57	1.50	887.07

Name: 310

Footprint area: 14.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.429127	-83.664725	899.85	1.50	901.35
2	38.429787	-83.664677	882.51	1.50	884.01
3	38.429800	-83.667059	837.23	1.50	838.73
4	38.429157	-83.667128	853.25	1.50	854.75
5	38.429148	-83.667536	837.37	1.50	838.87
6	38.428484	-83.667590	845.71	1.50	847.21
7	38.428489	-83.667144	858.18	1.50	859.68
8	38.427350	-83.667096	849.50	1.50	851.00
9	38.427358	-83.664816	894.73	1.50	896.23

Name: 311

Footprint area: 13.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.426589	-83.667879	840.23	1.50	841.74
2	38.425938	-83.667890	820.17	1.50	821.67
3	38.425938	-83.667236	837.53	1.50	839.03
4	38.425366	-83.667262	823.94	1.50	825.44
5	38.425013	-83.664038	856.15	1.50	857.65
6	38.424467	-83.664017	836.68	1.50	838.18
7	38.424450	-83.663754	839.25	1.50	840.75
8	38.424177	-83.663765	833.48	1.50	834.98
9	38.424168	-83.662370	845.63	1.50	847.13
10	38.425030	-83.662359	864.64	1.50	866.14
11	38.425030	-83.662697	861.73	1.50	863.23
12	38.425698	-83.662681	875.48	1.50	876.98
13	38.425698	-83.664634	860.50	1.50	862.00
14	38.426022	-83.664610	865.99	1.50	867.49

Name: 312

Footprint area: 1.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.421916	-83.666232	893.11	1.50	894.61
2	38.422878	-83.666098	893.27	1.50	894.77
3	38.422866	-83.665836	894.23	1.50	895.73
4	38.422563	-83.665449	889.30	1.50	890.80
5	38.421794	-83.665530	878.95	1.50	880.45
6	38.421819	-83.666141	892.58	1.50	894.08
7	38.421264	-83.666206	895.53	1.50	897.03
8	38.421264	-83.666329	898.55	1.50	900.05

Name: 313

Footprint area: 1.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.424122	-83.665760	835.17	1.50	836.67
2	38.424084	-83.664950	832.76	1.50	834.26
3	38.423677	-83.664983	846.29	1.50	847.79
4	38.423336	-83.665004	858.65	1.50	860.15
5	38.423097	-83.664983	866.06	1.50	867.56
6	38.423109	-83.665825	886.30	1.50	887.80



Name: 314

Footprint area: 6.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.423022	-83.663540	843.43	1.50	844.93
2	38.423060	-83.662196	846.55	1.50	848.05
3	38.422396	-83.662185	866.58	1.50	868.08
4	38.422402	-83.661509	849.80	1.50	851.30
5	38.421717	-83.661507	862.60	1.50	864.10
6	38.421529	-83.661705	875.52	1.50	877.02
7	38.421510	-83.663601	874.58	1.50	876.08



Name: 315

Footprint area: 5.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.423167	-83.659972	868.23	1.50	869.73
2	38.420902	-83.659551	883.99	1.50	885.49
3	38.420917	-83.660208	857.02	1.50	858.52
4	38.422124	-83.660846	847.39	1.50	848.89
5	38.423165	-83.661247	845.44	1.50	846.94

Name: 316

Footprint area: 23.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.430230	-83.673089	850.53	1.50	852.03
2	38.429919	-83.671008	850.27	1.50	851.77
3	38.428650	-83.670922	830.50	1.50	832.00
4	38.428679	-83.672343	848.93	1.50	850.43
5	38.429723	-83.672620	838.45	1.50	839.95
6	38.429709	-83.674012	851.57	1.50	853.07
7	38.429330	-83.674000	842.67	1.50	844.17
8	38.429297	-83.674696	853.18	1.50	854.68
9	38.434625	-83.674961	891.40	1.50	892.90
10	38.434592	-83.673776	916.43	1.50	917.93
11	38.435526	-83.673837	914.29	1.50	915.79
12	38.435436	-83.672976	921.91	1.50	923.41
13	38.434449	-83.672842	915.42	1.50	916.92
14	38.433953	-83.673770	906.45	1.50	907.95
15	38.432032	-83.673682	881.71	1.50	883.21

Name: 317

Footprint area: 21.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.493329	-83.621424	856.16	1.50	857.66
2	38.493980	-83.621467	858.51	1.50	860.01
3	38.497591	-83.619938	840.87	1.50	842.37
4	38.497540	-83.617943	796.85	1.50	798.35
5	38.497070	-83.618007	821.60	1.50	823.10
6	38.497045	-83.616784	789.24	1.50	790.74
7	38.496566	-83.616784	783.13	1.50	784.63
8	38.496625	-83.618222	835.68	1.50	837.18
9	38.495582	-83.620188	844.00	1.50	845.50
10	38.495379	-83.620248	841.00	1.50	842.50
11	38.495391	-83.618513	838.25	1.50	839.75
12	38.494301	-83.618810	834.39	1.50	835.89
13	38.493274	-83.619071	836.27	1.50	837.77

Name: 318

Footprint area: 21.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.495391	-83.618533	838.35	1.50	839.85
2	38.495399	-83.617621	821.50	1.50	823.00
3	38.495903	-83.617524	801.31	1.50	802.81
4	38.495915	-83.616199	774.28	1.50	775.78
5	38.496356	-83.616173	775.20	1.50	776.70
6	38.496341	-83.615542	767.93	1.50	769.43
7	38.492766	-83.615953	778.73	1.50	780.23
8	38.492801	-83.617601	800.09	1.50	801.59
9	38.493281	-83.619056	836.78	1.50	838.28

Name: 319

Footprint area: 8.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.492731	-83.614481	819.68	1.50	821.18
2	38.492765	-83.612979	835.47	1.50	836.97
3	38.490388	-83.612904	830.79	1.50	832.29
4	38.490380	-83.614213	810.54	1.50	812.04
5	38.491169	-83.614513	816.92	1.50	818.42

Name: 320

Footprint area: 5.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490136	-83.615447	823.51	1.50	825.01
2	38.488776	-83.615597	811.12	1.50	812.62
3	38.488692	-83.613311	838.08	1.50	839.58
4	38.489733	-83.613290	814.46	1.50	815.96
5	38.489708	-83.614535	828.35	1.50	829.85

2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25
Description:
Threshold height : 50 ft
Direction: 247.0 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7
Description:
Threshold height : 50 ft
Direction: 66.8 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



Route Receptor(s)

Name: Beechburg Wallingford Road

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.420245	-83.642085	868.08	5.00	873.08
2	38.421639	-83.640946	875.50	5.00	880.50
3	38.422900	-83.640002	884.81	5.00	889.81
4	38.423435	-83.639759	896.96	5.00	901.96
5	38.423893	-83.639786	894.81	5.00	899.81
6	38.425242	-83.640027	903.96	5.00	908.96
7	38.426491	-83.640171	913.66	5.00	918.66
8	38.427370	-83.640187	910.80	5.00	915.80
9	38.427968	-83.639917	908.18	5.00	913.19
10	38.428678	-83.639334	901.87	5.00	906.87
11	38.429238	-83.638877	912.28	5.00	917.28
12	38.429805	-83.638178	920.57	5.00	925.57
13	38.430384	-83.637444	908.89	5.00	913.89
14	38.430886	-83.637243	915.03	5.00	920.03

Name: Beechtree Pike

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.441286	-83.687089	813.99	5.00	818.99
2	38.441168	-83.683871	834.57	5.00	839.57
3	38.441151	-83.681103	886.06	5.00	891.06
4	38.441504	-83.678206	930.80	5.00	935.80
5	38.441420	-83.677111	930.06	5.00	935.06
6	38.441185	-83.675266	916.35	5.00	921.35
7	38.440765	-83.673936	930.68	5.00	935.68
8	38.440479	-83.671146	890.61	5.00	895.61
9	38.440093	-83.668271	874.30	5.00	879.30
10	38.439605	-83.664752	929.28	5.00	934.29
11	38.439723	-83.662585	913.81	5.00	918.81
12	38.440059	-83.661791	923.48	5.00	928.48
13	38.440916	-83.660653	922.80	5.00	927.80
14	38.441168	-83.659688	913.44	5.00	918.44
15	38.441723	-83.656383	879.80	5.00	884.80
16	38.441941	-83.655654	871.79	5.00	876.79
17	38.442799	-83.654860	892.32	5.00	897.32
18	38.443353	-83.654452	902.54	5.00	907.54
19	38.443555	-83.653959	904.47	5.00	909.47
20	38.444748	-83.649066	915.72	5.00	920.72

Name: Breeze Road
Route type: Two-way
View angle: 50.0 deg



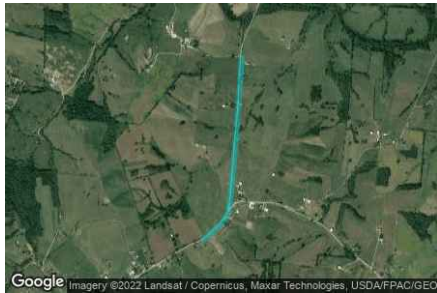
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.489698	-83.618198	785.43	5.00	790.43
2	38.489900	-83.617747	780.81	5.00	785.81
3	38.490756	-83.617211	783.91	5.00	788.92
4	38.491327	-83.616996	788.50	5.00	793.50
5	38.491546	-83.616717	781.28	5.00	786.28
6	38.491865	-83.616159	778.93	5.00	783.93
7	38.492721	-83.615258	772.82	5.00	777.82
8	38.493460	-83.614636	778.14	5.00	783.14
9	38.494535	-83.613928	818.73	5.00	823.73
10	38.494670	-83.613713	825.33	5.00	830.33
11	38.495056	-83.610945	839.44	5.00	844.44
12	38.495241	-83.610731	841.76	5.00	846.76
13	38.498146	-83.609035	804.95	5.00	809.95

Name: Foxport Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490449	-83.625851	863.42	5.00	868.42
2	38.491054	-83.624928	866.37	5.00	871.37
3	38.491020	-83.623298	856.98	5.00	861.98
4	38.490953	-83.621645	838.08	5.00	843.08
5	38.490449	-83.620229	819.40	5.00	824.41
6	38.489660	-83.618105	784.54	5.00	789.54
7	38.489106	-83.617011	787.91	5.00	792.91
8	38.487964	-83.615659	793.50	5.00	798.50
9	38.486082	-83.612762	811.96	5.00	816.96
10	38.484840	-83.611517	832.44	5.00	837.44

Name: Mt Carmel Road Route 57
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.488484	-83.628104	870.09	5.00	875.09
2	38.489626	-83.626431	866.62	5.00	871.62
3	38.490372	-83.625878	864.93	5.00	869.93
4	38.492461	-83.625583	850.94	5.00	855.94
5	38.495765	-83.625207	798.50	5.00	803.51
6	38.501063	-83.624714	839.97	5.00	844.97

Name: Wallingford Road
Route type: Two-way
View angle: 50.0 deg

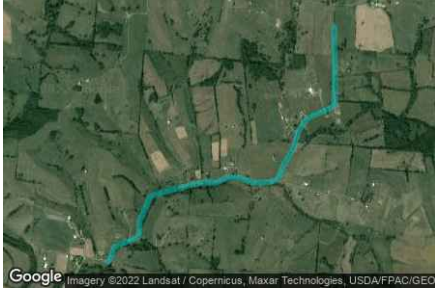


Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.410439	-83.654302	900.38	5.00	905.38
2	38.411650	-83.657542	908.88	5.00	913.88
3	38.412541	-83.660396	915.45	5.00	920.45
4	38.413776	-83.666299	929.39	5.00	934.39
5	38.414943	-83.672245	932.78	5.00	937.78
6	38.414924	-83.673579	938.69	5.00	943.69
7	38.414617	-83.674917	937.35	5.00	942.35
8	38.414138	-83.676736	898.71	5.00	903.71
9	38.413819	-83.678914	872.61	5.00	877.61
10	38.413651	-83.681811	871.92	5.00	876.92

Name: Wilson Run Road

Route type Two-way

View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.421788	-83.684965	801.96	5.00	806.96
2	38.421939	-83.684729	804.00	5.00	809.00
3	38.422796	-83.684364	807.66	5.00	812.66
4	38.423502	-83.682240	807.03	5.00	812.03
5	38.423687	-83.682175	807.71	5.00	812.71
6	38.424612	-83.682111	822.44	5.00	827.44
7	38.426293	-83.681167	814.48	5.00	819.48
8	38.426495	-83.680716	810.66	5.00	815.66
9	38.427234	-83.677026	809.86	5.00	814.86
10	38.427301	-83.676489	809.14	5.00	814.14
11	38.427285	-83.675266	810.01	5.00	815.01
12	38.427654	-83.674386	810.03	5.00	815.03
13	38.427671	-83.673421	812.53	5.00	817.53
14	38.427285	-83.671983	811.54	5.00	816.54
15	38.427318	-83.670545	812.01	5.00	817.01
16	38.427520	-83.669837	813.63	5.00	818.63
17	38.428495	-83.669344	820.21	5.00	825.21
18	38.429285	-83.668722	816.57	5.00	821.57
19	38.429621	-83.668464	819.63	5.00	824.63
20	38.430865	-83.668013	826.87	5.00	831.87
21	38.431773	-83.667219	827.50	5.00	832.50
22	38.432496	-83.665181	833.51	5.00	838.51
23	38.432815	-83.664752	836.15	5.00	841.15
24	38.435420	-83.664773	856.16	5.00	861.16
25	38.438160	-83.664838	903.61	5.00	908.61

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.494923	-83.612523	844.72	16.00	860.72
OP 2	38.495212	-83.610458	844.04	16.00	860.04
OP 3	38.497656	-83.608392	826.82	16.00	842.82
OP 4	38.488147	-83.612198	845.15	16.00	861.15
OP 5	38.491246	-83.622018	850.29	16.00	866.29
OP 6	38.490781	-83.623060	859.16	16.00	875.16
OP 7	38.491267	-83.624560	869.24	16.00	885.24
OP 8	38.499512	-83.624711	838.83	16.00	854.84
OP 9	38.428689	-83.638569	942.01	16.00	958.01
OP 10	38.424601	-83.641264	909.00	16.00	925.01
OP 11	38.424071	-83.637823	954.41	16.00	970.41
OP 12	38.415202	-83.666523	941.89	16.00	957.89
OP 13	38.426955	-83.672570	820.08	16.00	836.09
OP 14	38.426711	-83.671326	835.90	16.00	851.90
OP 15	38.428080	-83.673668	821.70	16.00	837.70
OP 16	38.427807	-83.676023	815.95	16.00	831.95
OP 17	38.428105	-83.679247	844.54	16.00	860.54
OP 18	38.427412	-83.679580	823.36	16.00	839.37
OP 19	38.427483	-83.677257	814.55	16.00	830.55
OP 20	38.441008	-83.678088	931.02	16.00	947.02
OP 21	38.441123	-83.679267	934.24	16.00	950.25
OP 22	38.441888	-83.677502	944.01	16.00	960.01
OP 23	38.438892	-83.682689	938.04	16.00	954.04
OP 24	38.429108	-83.670165	833.40	16.00	849.40
OP 25	38.430709	-83.668797	838.26	16.00	854.26
OP 26	38.432144	-83.665643	844.72	16.00	860.72
OP 27	38.433259	-83.667264	872.73	16.00	888.73
OP 28	38.439779	-83.671940	921.01	16.00	937.01
OP 29	38.439926	-83.668164	875.48	16.00	891.48
OP 30	38.440981	-83.670240	911.75	16.00	927.75
OP 31	38.441260	-83.669587	905.93	16.00	921.93
OP 32	38.441373	-83.670209	917.10	16.00	933.10
OP 33	38.441781	-83.670279	920.71	16.00	936.71
OP 34	38.441453	-83.671390	914.01	16.00	930.01
OP 35	38.442113	-83.669566	915.63	16.00	931.63
OP 36	38.442092	-83.670252	924.41	16.00	940.41
OP 37	38.440550	-83.669657	897.44	16.00	913.44
OP 38	38.441066	-83.673975	936.42	16.00	952.42
OP 39	38.434918	-83.664112	865.85	16.00	881.85
OP 40	38.417949	-83.643306	877.24	16.00	893.24

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
301	SA tracking	SA tracking	0	0	-	
302	SA tracking	SA tracking	0	0	-	
303	SA tracking	SA tracking	0	0	-	
304	SA tracking	SA tracking	0	0	-	
305	SA tracking	SA tracking	0	0	-	
306	SA tracking	SA tracking	0	0	-	
307	SA tracking	SA tracking	0	0	-	
308	SA tracking	SA tracking	0	0	-	
309	SA tracking	SA tracking	0	0	-	
310	SA tracking	SA tracking	0	0	-	
311	SA tracking	SA tracking	0	0	-	
312	SA tracking	SA tracking	0	0	-	
313	SA tracking	SA tracking	0	0	-	
314	SA tracking	SA tracking	0	0	-	
315	SA tracking	SA tracking	0	0	-	
316	SA tracking	SA tracking	0	0	-	
317	SA tracking	SA tracking	0	0	-	
318	SA tracking	SA tracking	0	0	-	
319	SA tracking	SA tracking	0	0	-	
320	SA tracking	SA tracking	0	0	-	

PV & Receptor Analysis Results

Results for each PV array and receptor

301 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

302 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

303 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

304 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

305 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

306 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

307 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

308 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

309 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

310 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

311 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

312 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

313 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

314 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

315 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

316 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

317 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

318 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

319 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

320 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 3 5ft veh 10ft pan 52rest

Created Aug. 11, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73934.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results No glare predicted!

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
301	SA tracking	SA tracking	0	0	-
302	SA tracking	SA tracking	0	0	-
303	SA tracking	SA tracking	0	0	-
304	SA tracking	SA tracking	0	0	-
305	SA tracking	SA tracking	0	0	-
306	SA tracking	SA tracking	0	0	-
307	SA tracking	SA tracking	0	0	-
308	SA tracking	SA tracking	0	0	-
309	SA tracking	SA tracking	0	0	-
310	SA tracking	SA tracking	0	0	-
311	SA tracking	SA tracking	0	0	-
312	SA tracking	SA tracking	0	0	-
313	SA tracking	SA tracking	0	0	-
314	SA tracking	SA tracking	0	0	-
315	SA tracking	SA tracking	0	0	-
316	SA tracking	SA tracking	0	0	-
317	SA tracking	SA tracking	0	0	-
318	SA tracking	SA tracking	0	0	-
319	SA tracking	SA tracking	0	0	-
320	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 310.6 acres

Name: 301

Footprint area: 22.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.427443	-83.643189	889.44	10.00	899.44
2	38.427450	-83.644586	873.37	10.00	883.37
3	38.427443	-83.645828	864.47	10.00	874.47
4	38.427443	-83.647920	847.66	10.00	857.66
5	38.427901	-83.647915	846.76	10.00	856.77
6	38.427910	-83.647684	848.80	10.00	858.80
7	38.429633	-83.647695	868.60	10.00	878.60
8	38.429612	-83.643221	863.61	10.00	873.61
9	38.428343	-83.643194	885.96	10.00	895.96

Name: 302

Footprint area: 24.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.427443	-83.647926	847.39	10.00	857.39
2	38.426288	-83.647963	844.72	10.00	854.72
3	38.425430	-83.647459	843.68	10.00	853.68
4	38.425468	-83.643859	876.34	10.00	886.34
5	38.426208	-83.643122	880.98	10.00	890.98
6	38.425926	-83.642496	879.61	10.00	889.61
7	38.425920	-83.641903	887.57	10.00	897.57
8	38.426598	-83.641972	894.99	10.00	904.99
9	38.426588	-83.642184	892.33	10.00	902.33
10	38.426919	-83.642193	898.46	10.00	908.46
11	38.426933	-83.642846	890.75	10.00	900.75
12	38.427435	-83.642878	894.56	10.00	904.56

Name: 303

Footprint area: 5.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.424989	-83.650678	856.97	10.00	866.97
2	38.423947	-83.650721	872.97	10.00	882.97
3	38.424779	-83.648575	866.51	10.00	876.51
4	38.425956	-83.648650	845.60	10.00	855.61

Name: 304

Footprint area: 20.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.427767	-83.652582	860.56	10.00	870.56
2	38.426346	-83.652587	882.80	10.00	892.80
3	38.426355	-83.648768	846.23	10.00	856.23
4	38.427880	-83.648789	840.18	10.00	850.18
5	38.427882	-83.649318	853.10	10.00	863.10
6	38.429056	-83.649316	847.16	10.00	857.16
7	38.429048	-83.650579	868.71	10.00	878.71
8	38.428826	-83.650580	870.55	10.00	880.55
9	38.428824	-83.651546	867.36	10.00	877.36

Name: 305

Footprint area: 22.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.427774	-83.652593	860.21	10.00	870.21
2	38.427783	-83.652958	859.28	10.00	869.28
3	38.428741	-83.652953	873.92	10.00	883.92
4	38.428749	-83.653790	885.83	10.00	895.83
5	38.429043	-83.653779	886.24	10.00	896.24
6	38.429031	-83.655673	895.66	10.00	905.66
7	38.428726	-83.655673	890.60	10.00	900.60
8	38.428725	-83.656429	896.44	10.00	906.44
9	38.426312	-83.656397	898.46	10.00	908.46
10	38.426341	-83.652599	882.84	10.00	892.84

Name: 306

Footprint area: 21.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.428720	-83.656413	896.45	10.00	906.45
2	38.428724	-83.657835	855.90	10.00	865.90
3	38.427131	-83.657877	885.05	10.00	895.05
4	38.427148	-83.658891	895.44	10.00	905.44
5	38.427413	-83.658870	890.22	10.00	900.22
6	38.427409	-83.659192	898.19	10.00	908.19
7	38.428476	-83.658875	871.42	10.00	881.42
8	38.429077	-83.658843	887.74	10.00	897.74
9	38.429069	-83.660640	889.66	10.00	899.66
10	38.426291	-83.660715	879.13	10.00	889.13
11	38.426312	-83.656397	898.46	10.00	908.46

Name: 307

Footprint area: 24.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.426043	-83.651156	873.01	10.00	883.01
2	38.425454	-83.651140	864.40	10.00	874.40
3	38.425446	-83.652164	877.73	10.00	887.73
4	38.424875	-83.652202	867.32	10.00	877.32
5	38.424866	-83.652859	873.85	10.00	883.85
6	38.424570	-83.652862	870.78	10.00	880.78
7	38.424576	-83.653347	874.06	10.00	884.07
8	38.424868	-83.653339	874.34	10.00	884.34
9	38.424883	-83.653910	879.11	10.00	889.11
10	38.424883	-83.654737	887.29	10.00	897.29
11	38.424557	-83.654726	885.38	10.00	895.38
12	38.424562	-83.655981	889.31	10.00	899.31
13	38.423695	-83.656024	882.45	10.00	892.45
14	38.423663	-83.656920	876.20	10.00	886.20
15	38.422744	-83.656923	889.15	10.00	899.15
16	38.422940	-83.657707	886.26	10.00	896.26
17	38.426019	-83.657584	893.78	10.00	903.78
18	38.426044	-83.656196	896.03	10.00	906.03
19	38.426055	-83.654758	891.04	10.00	901.05

Name: 308

Footprint area: 21.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.422941	-83.657714	886.26	10.00	896.26
2	38.423172	-83.658347	873.25	10.00	883.25
3	38.424005	-83.658315	869.73	10.00	879.74
4	38.424013	-83.659570	866.36	10.00	876.36
5	38.423765	-83.659607	860.27	10.00	870.27
6	38.423769	-83.660294	860.13	10.00	870.13
7	38.423782	-83.661603	853.79	10.00	863.80
8	38.426005	-83.661560	885.14	10.00	895.14
9	38.426026	-83.657601	893.81	10.00	903.81

Name: 309

Footprint area: 23.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.426018	-83.660133	883.56	10.00	893.56
2	38.426308	-83.660139	879.15	10.00	889.15
3	38.426287	-83.660718	879.13	10.00	889.13
4	38.429077	-83.660654	889.56	10.00	899.56
5	38.429140	-83.664714	899.71	10.00	909.71
6	38.427365	-83.664814	894.97	10.00	904.97
7	38.427358	-83.663534	901.57	10.00	911.57
8	38.426694	-83.663577	894.02	10.00	904.02
9	38.426652	-83.662182	884.97	10.00	894.97
10	38.426341	-83.661979	885.89	10.00	895.89
11	38.426207	-83.661882	890.77	10.00	900.77
12	38.426198	-83.661592	889.52	10.00	899.52
13	38.426005	-83.661576	885.57	10.00	895.57

Name: 310

Footprint area: 14.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.429127	-83.664725	899.85	10.00	909.85
2	38.429787	-83.664677	882.51	10.00	892.52
3	38.429800	-83.667059	837.23	10.00	847.23
4	38.429157	-83.667128	853.25	10.00	863.25
5	38.429148	-83.667536	837.37	10.00	847.37
6	38.428484	-83.667590	845.71	10.00	855.71
7	38.428489	-83.667144	858.18	10.00	868.19
8	38.427350	-83.667096	849.50	10.00	859.50
9	38.427358	-83.664816	894.73	10.00	904.73

Name: 311

Footprint area: 13.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.426589	-83.667879	840.23	10.00	850.24
2	38.425938	-83.667890	820.17	10.00	830.17
3	38.425938	-83.667236	837.53	10.00	847.53
4	38.425366	-83.667262	823.94	10.00	833.94
5	38.425013	-83.664038	856.15	10.00	866.15
6	38.424467	-83.664017	836.68	10.00	846.68
7	38.424450	-83.663754	839.25	10.00	849.25
8	38.424177	-83.663765	833.48	10.00	843.48
9	38.424168	-83.662370	845.63	10.00	855.63
10	38.425030	-83.662359	864.64	10.00	874.64
11	38.425030	-83.662697	861.73	10.00	871.73
12	38.425698	-83.662681	875.48	10.00	885.48
13	38.425698	-83.664634	860.50	10.00	870.50
14	38.426022	-83.664610	865.99	10.00	875.99

Name: 312

Footprint area: 1.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.421916	-83.666232	893.11	10.00	903.11
2	38.422878	-83.666098	893.27	10.00	903.27
3	38.422866	-83.665836	894.23	10.00	904.23
4	38.422563	-83.665449	889.30	10.00	899.30
5	38.421794	-83.665530	878.95	10.00	888.95
6	38.421819	-83.666141	892.58	10.00	902.58
7	38.421264	-83.666206	895.53	10.00	905.53
8	38.421264	-83.666329	898.55	10.00	908.55

Name: 313

Footprint area: 1.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.424122	-83.665760	835.17	10.00	845.17
2	38.424084	-83.664950	832.76	10.00	842.76
3	38.423677	-83.664983	846.29	10.00	856.29
4	38.423336	-83.665004	858.65	10.00	868.65
5	38.423097	-83.664983	866.06	10.00	876.06
6	38.423109	-83.665825	886.30	10.00	896.30



Name: 314

Footprint area: 6.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.423022	-83.663540	843.43	10.00	853.43
2	38.423060	-83.662196	846.55	10.00	856.55
3	38.422396	-83.662185	866.58	10.00	876.58
4	38.422402	-83.661509	849.80	10.00	859.80
5	38.421717	-83.661507	862.60	10.00	872.60
6	38.421529	-83.661705	875.52	10.00	885.52
7	38.421510	-83.663601	874.58	10.00	884.58



Name: 315

Footprint area: 5.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.423167	-83.659972	868.23	10.00	878.23
2	38.420902	-83.659551	883.99	10.00	893.99
3	38.420917	-83.660208	857.02	10.00	867.02
4	38.422124	-83.660846	847.39	10.00	857.39
5	38.423165	-83.661247	845.44	10.00	855.44

Name: 316

Footprint area: 23.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.430230	-83.673089	850.53	10.00	860.53
2	38.429919	-83.671008	850.27	10.00	860.27
3	38.428650	-83.670922	830.50	10.00	840.50
4	38.428679	-83.672343	848.93	10.00	858.93
5	38.429723	-83.672620	838.45	10.00	848.45
6	38.429709	-83.674012	851.57	10.00	861.57
7	38.429330	-83.674000	842.67	10.00	852.67
8	38.429297	-83.674696	853.18	10.00	863.18
9	38.434625	-83.674961	891.40	10.00	901.40
10	38.434592	-83.673776	916.43	10.00	926.43
11	38.435526	-83.673837	914.29	10.00	924.29
12	38.435436	-83.672976	921.91	10.00	931.91
13	38.434449	-83.672842	915.42	10.00	925.42
14	38.433953	-83.673770	906.45	10.00	916.45
15	38.432032	-83.673682	881.71	10.00	891.71

Name: 317

Footprint area: 21.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.493329	-83.621424	856.16	10.00	866.16
2	38.493980	-83.621467	858.51	10.00	868.51
3	38.497591	-83.619938	840.87	10.00	850.87
4	38.497540	-83.617943	796.85	10.00	806.85
5	38.497070	-83.618007	821.60	10.00	831.60
6	38.497045	-83.616784	789.24	10.00	799.24
7	38.496566	-83.616784	783.13	10.00	793.13
8	38.496625	-83.618222	835.68	10.00	845.68
9	38.495582	-83.620188	844.00	10.00	854.00
10	38.495379	-83.620248	841.00	10.00	851.00
11	38.495391	-83.618513	838.25	10.00	848.25
12	38.494301	-83.618810	834.39	10.00	844.39
13	38.493274	-83.619071	836.27	10.00	846.27

Name: 318

Footprint area: 21.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.495391	-83.618533	838.35	10.00	848.35
2	38.495399	-83.617621	821.50	10.00	831.50
3	38.495903	-83.617524	801.31	10.00	811.31
4	38.495915	-83.616199	774.28	10.00	784.28
5	38.496356	-83.616173	775.20	10.00	785.20
6	38.496341	-83.615542	767.93	10.00	777.93
7	38.492766	-83.615953	778.73	10.00	788.73
8	38.492801	-83.617601	800.09	10.00	810.09
9	38.493281	-83.619056	836.78	10.00	846.78

Name: 319

Footprint area: 8.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.492731	-83.614481	819.68	10.00	829.68
2	38.492765	-83.612979	835.47	10.00	845.47
3	38.490388	-83.612904	830.79	10.00	840.79
4	38.490380	-83.614213	810.54	10.00	820.54
5	38.491169	-83.614513	816.92	10.00	826.92

Name: 320

Footprint area: 5.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490136	-83.615447	823.51	10.00	833.51
2	38.488776	-83.615597	811.12	10.00	821.12
3	38.488692	-83.613311	838.08	10.00	848.08
4	38.489733	-83.613290	814.46	10.00	824.46
5	38.489708	-83.614535	828.35	10.00	838.35

2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25
Description:
Threshold height : 50 ft
Direction: 247.0 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7
Description:
Threshold height : 50 ft
Direction: 66.8 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



Route Receptor(s)

Name: Beechburg Wallingford Road

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.420245	-83.642085	868.08	5.00	873.08
2	38.421639	-83.640946	875.50	5.00	880.50
3	38.422900	-83.640002	884.81	5.00	889.81
4	38.423435	-83.639759	896.96	5.00	901.96
5	38.423893	-83.639786	894.81	5.00	899.81
6	38.425242	-83.640027	903.96	5.00	908.96
7	38.426491	-83.640171	913.66	5.00	918.66
8	38.427370	-83.640187	910.80	5.00	915.80
9	38.427968	-83.639917	908.18	5.00	913.19
10	38.428678	-83.639334	901.87	5.00	906.87
11	38.429238	-83.638877	912.28	5.00	917.28
12	38.429805	-83.638178	920.57	5.00	925.57
13	38.430384	-83.637444	908.89	5.00	913.89
14	38.430886	-83.637243	915.03	5.00	920.03

Name: Beechtree Pike

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.441286	-83.687089	813.99	5.00	818.99
2	38.441168	-83.683871	834.57	5.00	839.57
3	38.441151	-83.681103	886.06	5.00	891.06
4	38.441504	-83.678206	930.80	5.00	935.80
5	38.441420	-83.677111	930.06	5.00	935.06
6	38.441185	-83.675266	916.35	5.00	921.35
7	38.440765	-83.673936	930.68	5.00	935.68
8	38.440479	-83.671146	890.61	5.00	895.61
9	38.440093	-83.668271	874.30	5.00	879.30
10	38.439605	-83.664752	929.28	5.00	934.29
11	38.439723	-83.662585	913.81	5.00	918.81
12	38.440059	-83.661791	923.48	5.00	928.48
13	38.440916	-83.660653	922.80	5.00	927.80
14	38.441168	-83.659688	913.44	5.00	918.44
15	38.441723	-83.656383	879.80	5.00	884.80
16	38.441941	-83.655654	871.79	5.00	876.79
17	38.442799	-83.654860	892.32	5.00	897.32
18	38.443353	-83.654452	902.54	5.00	907.54
19	38.443555	-83.653959	904.47	5.00	909.47
20	38.444748	-83.649066	915.72	5.00	920.72

Name: Breeze Road
Route type: Two-way
View angle: 50.0 deg



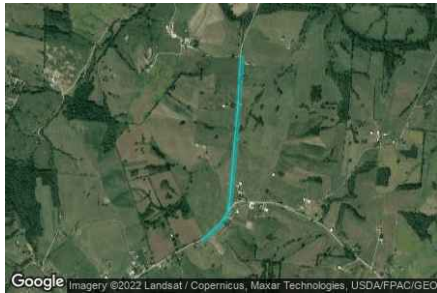
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.489698	-83.618198	785.43	5.00	790.43
2	38.489900	-83.617747	780.81	5.00	785.81
3	38.490756	-83.617211	783.91	5.00	788.92
4	38.491327	-83.616996	788.50	5.00	793.50
5	38.491546	-83.616717	781.28	5.00	786.28
6	38.491865	-83.616159	778.93	5.00	783.93
7	38.492721	-83.615258	772.82	5.00	777.82
8	38.493460	-83.614636	778.14	5.00	783.14
9	38.494535	-83.613928	818.73	5.00	823.73
10	38.494670	-83.613713	825.33	5.00	830.33
11	38.495056	-83.610945	839.44	5.00	844.44
12	38.495241	-83.610731	841.76	5.00	846.76
13	38.498146	-83.609035	804.95	5.00	809.95

Name: Foxport Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490449	-83.625851	863.42	5.00	868.42
2	38.491054	-83.624928	866.37	5.00	871.37
3	38.491020	-83.623298	856.98	5.00	861.98
4	38.490953	-83.621645	838.08	5.00	843.08
5	38.490449	-83.620229	819.40	5.00	824.41
6	38.489660	-83.618105	784.54	5.00	789.54
7	38.489106	-83.617011	787.91	5.00	792.91
8	38.487964	-83.615659	793.50	5.00	798.50
9	38.486082	-83.612762	811.96	5.00	816.96
10	38.484840	-83.611517	832.44	5.00	837.44

Name: Mt Carmel Road Route 57
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.488484	-83.628104	870.09	5.00	875.09
2	38.489626	-83.626431	866.62	5.00	871.62
3	38.490372	-83.625878	864.93	5.00	869.93
4	38.492461	-83.625583	850.94	5.00	855.94
5	38.495765	-83.625207	798.50	5.00	803.51
6	38.501063	-83.624714	839.97	5.00	844.97

Name: Wallingford Road
Route type: Two-way
View angle: 50.0 deg

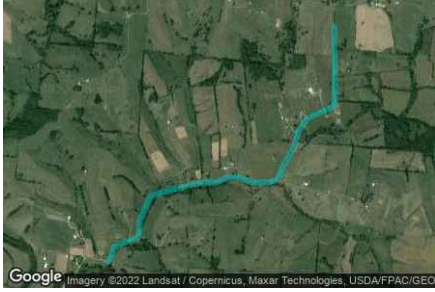


Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.410439	-83.654302	900.38	5.00	905.38
2	38.411650	-83.657542	908.88	5.00	913.88
3	38.412541	-83.660396	915.45	5.00	920.45
4	38.413776	-83.666299	929.39	5.00	934.39
5	38.414943	-83.672245	932.78	5.00	937.78
6	38.414924	-83.673579	938.69	5.00	943.69
7	38.414617	-83.674917	937.35	5.00	942.35
8	38.414138	-83.676736	898.71	5.00	903.71
9	38.413819	-83.678914	872.61	5.00	877.61
10	38.413651	-83.681811	871.92	5.00	876.92

Name: Wilson Run Road

Route type Two-way

View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.421788	-83.684965	801.96	5.00	806.96
2	38.421939	-83.684729	804.00	5.00	809.00
3	38.422796	-83.684364	807.66	5.00	812.66
4	38.423502	-83.682240	807.03	5.00	812.03
5	38.423687	-83.682175	807.71	5.00	812.71
6	38.424612	-83.682111	822.44	5.00	827.44
7	38.426293	-83.681167	814.48	5.00	819.48
8	38.426495	-83.680716	810.66	5.00	815.66
9	38.427234	-83.677026	809.86	5.00	814.86
10	38.427301	-83.676489	809.14	5.00	814.14
11	38.427285	-83.675266	810.01	5.00	815.01
12	38.427654	-83.674386	810.03	5.00	815.03
13	38.427671	-83.673421	812.53	5.00	817.53
14	38.427285	-83.671983	811.54	5.00	816.54
15	38.427318	-83.670545	812.01	5.00	817.01
16	38.427520	-83.669837	813.63	5.00	818.63
17	38.428495	-83.669344	820.21	5.00	825.21
18	38.429285	-83.668722	816.57	5.00	821.57
19	38.429621	-83.668464	819.63	5.00	824.63
20	38.430865	-83.668013	826.87	5.00	831.87
21	38.431773	-83.667219	827.50	5.00	832.50
22	38.432496	-83.665181	833.51	5.00	838.51
23	38.432815	-83.664752	836.15	5.00	841.15
24	38.435420	-83.664773	856.16	5.00	861.16
25	38.438160	-83.664838	903.61	5.00	908.61

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.494923	-83.612523	844.72	16.00	860.72
OP 2	38.495212	-83.610458	844.04	16.00	860.04
OP 3	38.497656	-83.608392	826.82	16.00	842.82
OP 4	38.488147	-83.612198	845.15	16.00	861.15
OP 5	38.491246	-83.622018	850.29	16.00	866.29
OP 6	38.490781	-83.623060	859.16	16.00	875.16
OP 7	38.491267	-83.624560	869.24	16.00	885.24
OP 8	38.499512	-83.624711	838.83	16.00	854.84
OP 9	38.428689	-83.638569	942.01	16.00	958.01
OP 10	38.424601	-83.641264	909.00	16.00	925.01
OP 11	38.424071	-83.637823	954.41	16.00	970.41
OP 12	38.415202	-83.666523	941.89	16.00	957.89
OP 13	38.426955	-83.672570	820.08	16.00	836.09
OP 14	38.426711	-83.671326	835.90	16.00	851.90
OP 15	38.428080	-83.673668	821.70	16.00	837.70
OP 16	38.427807	-83.676023	815.95	16.00	831.95
OP 17	38.428105	-83.679247	844.54	16.00	860.54
OP 18	38.427412	-83.679580	823.36	16.00	839.37
OP 19	38.427483	-83.677257	814.55	16.00	830.55
OP 20	38.441008	-83.678088	931.02	16.00	947.02
OP 21	38.441123	-83.679267	934.24	16.00	950.25
OP 22	38.441888	-83.677502	944.01	16.00	960.01
OP 23	38.438892	-83.682689	938.04	16.00	954.04
OP 24	38.429108	-83.670165	833.40	16.00	849.40
OP 25	38.430709	-83.668797	838.26	16.00	854.26
OP 26	38.432144	-83.665643	844.72	16.00	860.72
OP 27	38.433259	-83.667264	872.73	16.00	888.73
OP 28	38.439779	-83.671940	921.01	16.00	937.01
OP 29	38.439926	-83.668164	875.48	16.00	891.48
OP 30	38.440981	-83.670240	911.75	16.00	927.75
OP 31	38.441260	-83.669587	905.93	16.00	921.93
OP 32	38.441373	-83.670209	917.10	16.00	933.10
OP 33	38.441781	-83.670279	920.71	16.00	936.71
OP 34	38.441453	-83.671390	914.01	16.00	930.01
OP 35	38.442113	-83.669566	915.63	16.00	931.63
OP 36	38.442092	-83.670252	924.41	16.00	940.41
OP 37	38.440550	-83.669657	897.44	16.00	913.44
OP 38	38.441066	-83.673975	936.42	16.00	952.42
OP 39	38.434918	-83.664112	865.85	16.00	881.85
OP 40	38.417949	-83.643306	877.24	16.00	893.24

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
301	SA tracking	SA tracking	0	0	-	
302	SA tracking	SA tracking	0	0	-	
303	SA tracking	SA tracking	0	0	-	
304	SA tracking	SA tracking	0	0	-	
305	SA tracking	SA tracking	0	0	-	
306	SA tracking	SA tracking	0	0	-	
307	SA tracking	SA tracking	0	0	-	
308	SA tracking	SA tracking	0	0	-	
309	SA tracking	SA tracking	0	0	-	
310	SA tracking	SA tracking	0	0	-	
311	SA tracking	SA tracking	0	0	-	
312	SA tracking	SA tracking	0	0	-	
313	SA tracking	SA tracking	0	0	-	
314	SA tracking	SA tracking	0	0	-	
315	SA tracking	SA tracking	0	0	-	
316	SA tracking	SA tracking	0	0	-	
317	SA tracking	SA tracking	0	0	-	
318	SA tracking	SA tracking	0	0	-	
319	SA tracking	SA tracking	0	0	-	
320	SA tracking	SA tracking	0	0	-	

PV & Receptor Analysis Results

Results for each PV array and receptor

301 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

302 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

303 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

304 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

305 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

306 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

307 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

308 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

309 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

310 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

311 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

312 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

313 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

314 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

315 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

316 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

317 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

318 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

319 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

320 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 3 9ft veh 1_5ft pan 52rest

Created July 12, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 72183.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results No glare predicted!

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
301	SA tracking	SA tracking	0	0	-
302	SA tracking	SA tracking	0	0	-
303	SA tracking	SA tracking	0	0	-
304	SA tracking	SA tracking	0	0	-
305	SA tracking	SA tracking	0	0	-
306	SA tracking	SA tracking	0	0	-
307	SA tracking	SA tracking	0	0	-
308	SA tracking	SA tracking	0	0	-
309	SA tracking	SA tracking	0	0	-
310	SA tracking	SA tracking	0	0	-
311	SA tracking	SA tracking	0	0	-
312	SA tracking	SA tracking	0	0	-
313	SA tracking	SA tracking	0	0	-
314	SA tracking	SA tracking	0	0	-
315	SA tracking	SA tracking	0	0	-
316	SA tracking	SA tracking	0	0	-
317	SA tracking	SA tracking	0	0	-
318	SA tracking	SA tracking	0	0	-
319	SA tracking	SA tracking	0	0	-
320	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 310.6 acres

Name: 301
Footprint area: 22.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.427443	-83.643189	889.44	1.50	890.94
2	38.427450	-83.644586	873.37	1.50	874.87
3	38.427443	-83.645828	864.47	1.50	865.97
4	38.427443	-83.647920	847.66	1.50	849.16
5	38.427901	-83.647915	846.76	1.50	848.26
6	38.427910	-83.647684	848.80	1.50	850.30
7	38.429633	-83.647695	868.60	1.50	870.10
8	38.429612	-83.643221	863.61	1.50	865.11
9	38.428343	-83.643194	885.96	1.50	887.46

Name: 302
Footprint area: 24.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.427443	-83.647926	847.39	1.50	848.89
2	38.426288	-83.647963	844.72	1.50	846.22
3	38.425430	-83.647459	843.68	1.50	845.18
4	38.425468	-83.643859	876.34	1.50	877.84
5	38.426208	-83.643122	880.98	1.50	882.48
6	38.425926	-83.642496	879.61	1.50	881.11
7	38.425920	-83.641903	887.57	1.50	889.07
8	38.426598	-83.641972	894.99	1.50	896.49
9	38.426588	-83.642184	892.33	1.50	893.83
10	38.426919	-83.642193	898.46	1.50	899.96
11	38.426933	-83.642846	890.75	1.50	892.25
12	38.427435	-83.642878	894.56	1.50	896.06

Name: 303

Footprint area: 5.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.424989	-83.650678	856.97	1.50	858.47
2	38.423947	-83.650721	872.97	1.50	874.47
3	38.424779	-83.648575	866.51	1.50	868.01
4	38.425956	-83.648650	845.60	1.50	847.10

Name: 304

Footprint area: 20.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.427767	-83.652582	860.56	1.50	862.06
2	38.426346	-83.652587	882.80	1.50	884.30
3	38.426355	-83.648768	846.23	1.50	847.73
4	38.427880	-83.648789	840.18	1.50	841.68
5	38.427882	-83.649318	853.10	1.50	854.60
6	38.429056	-83.649316	847.16	1.50	848.66
7	38.429048	-83.650579	868.71	1.50	870.21
8	38.428826	-83.650580	870.55	1.50	872.05
9	38.428824	-83.651546	867.36	1.50	868.86

Name: 305

Footprint area: 22.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.427774	-83.652593	860.21	1.50	861.71
2	38.427783	-83.652958	859.28	1.50	860.78
3	38.428741	-83.652953	873.92	1.50	875.42
4	38.428749	-83.653790	885.83	1.50	887.33
5	38.429043	-83.653779	886.24	1.50	887.74
6	38.429031	-83.655673	895.66	1.50	897.16
7	38.428726	-83.655673	890.60	1.50	892.10
8	38.428725	-83.656429	896.44	1.50	897.94
9	38.426312	-83.656397	898.46	1.50	899.96
10	38.426341	-83.652599	882.84	1.50	884.34

Name: 306

Footprint area: 21.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.428720	-83.656413	896.45	1.50	897.95
2	38.428724	-83.657835	855.90	1.50	857.40
3	38.427131	-83.657877	885.05	1.50	886.55
4	38.427148	-83.658891	895.44	1.50	896.94
5	38.427413	-83.658870	890.22	1.50	891.72
6	38.427409	-83.659192	898.19	1.50	899.69
7	38.428476	-83.658875	871.42	1.50	872.92
8	38.429077	-83.658843	887.74	1.50	889.24
9	38.429069	-83.660640	889.66	1.50	891.16
10	38.426291	-83.660715	879.13	1.50	880.63
11	38.426312	-83.656397	898.46	1.50	899.96

Name: 307

Footprint area: 24.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.426043	-83.651156	873.01	1.50	874.51
2	38.425454	-83.651140	864.40	1.50	865.90
3	38.425446	-83.652164	877.73	1.50	879.23
4	38.424875	-83.652202	867.32	1.50	868.82
5	38.424866	-83.652859	873.85	1.50	875.35
6	38.424570	-83.652862	870.78	1.50	872.28
7	38.424576	-83.653347	874.06	1.50	875.56
8	38.424868	-83.653339	874.34	1.50	875.84
9	38.424883	-83.653910	879.11	1.50	880.61
10	38.424883	-83.654737	887.29	1.50	888.79
11	38.424557	-83.654726	885.38	1.50	886.88
12	38.424562	-83.655981	889.31	1.50	890.81
13	38.423695	-83.656024	882.45	1.50	883.95
14	38.423663	-83.656920	876.20	1.50	877.70
15	38.422744	-83.656923	889.15	1.50	890.65
16	38.422940	-83.657707	886.26	1.50	887.76
17	38.426019	-83.657584	893.78	1.50	895.28
18	38.426044	-83.656196	896.03	1.50	897.53
19	38.426055	-83.654758	891.04	1.50	892.54

Name: 308

Footprint area: 21.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.422941	-83.657714	886.26	1.50	887.76
2	38.423172	-83.658347	873.25	1.50	874.75
3	38.424005	-83.658315	869.73	1.50	871.24
4	38.424013	-83.659570	866.36	1.50	867.86
5	38.423765	-83.659607	860.27	1.50	861.77
6	38.423769	-83.660294	860.13	1.50	861.63
7	38.423782	-83.661603	853.79	1.50	855.29
8	38.426005	-83.661560	885.14	1.50	886.64
9	38.426026	-83.657601	893.81	1.50	895.31

Name: 309

Footprint area: 23.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.426018	-83.660133	883.56	1.50	885.06
2	38.426308	-83.660139	879.15	1.50	880.65
3	38.426287	-83.660718	879.13	1.50	880.63
4	38.429077	-83.660654	889.56	1.50	891.06
5	38.429140	-83.664714	899.71	1.50	901.21
6	38.427365	-83.664814	894.97	1.50	896.47
7	38.427358	-83.663534	901.57	1.50	903.07
8	38.426694	-83.663577	894.02	1.50	895.52
9	38.426652	-83.662182	884.97	1.50	886.47
10	38.426341	-83.661979	885.89	1.50	887.39
11	38.426207	-83.661882	890.77	1.50	892.27
12	38.426198	-83.661592	889.52	1.50	891.02
13	38.426005	-83.661576	885.57	1.50	887.07

Name: 310

Footprint area: 14.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.429127	-83.664725	899.85	1.50	901.35
2	38.429787	-83.664677	882.51	1.50	884.01
3	38.429800	-83.667059	837.23	1.50	838.73
4	38.429157	-83.667128	853.25	1.50	854.75
5	38.429148	-83.667536	837.37	1.50	838.87
6	38.428484	-83.667590	845.71	1.50	847.21
7	38.428489	-83.667144	858.18	1.50	859.68
8	38.427350	-83.667096	849.50	1.50	851.00
9	38.427358	-83.664816	894.73	1.50	896.23

Name: 311

Footprint area: 13.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.426589	-83.667879	840.23	1.50	841.74
2	38.425938	-83.667890	820.17	1.50	821.67
3	38.425938	-83.667236	837.53	1.50	839.03
4	38.425366	-83.667262	823.94	1.50	825.44
5	38.425013	-83.664038	856.15	1.50	857.65
6	38.424467	-83.664017	836.68	1.50	838.18
7	38.424450	-83.663754	839.25	1.50	840.75
8	38.424177	-83.663765	833.48	1.50	834.98
9	38.424168	-83.662370	845.63	1.50	847.13
10	38.425030	-83.662359	864.64	1.50	866.14
11	38.425030	-83.662697	861.73	1.50	863.23
12	38.425698	-83.662681	875.48	1.50	876.98
13	38.425698	-83.664634	860.50	1.50	862.00
14	38.426022	-83.664610	865.99	1.50	867.49

Name: 312

Footprint area: 1.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.421916	-83.666232	893.11	1.50	894.61
2	38.422878	-83.666098	893.27	1.50	894.77
3	38.422866	-83.665836	894.23	1.50	895.73
4	38.422563	-83.665449	889.30	1.50	890.80
5	38.421794	-83.665530	878.95	1.50	880.45
6	38.421819	-83.666141	892.58	1.50	894.08
7	38.421264	-83.666206	895.53	1.50	897.03
8	38.421264	-83.666329	898.55	1.50	900.05

Name: 313

Footprint area: 1.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.424122	-83.665760	835.17	1.50	836.67
2	38.424084	-83.664950	832.76	1.50	834.26
3	38.423677	-83.664983	846.29	1.50	847.79
4	38.423336	-83.665004	858.65	1.50	860.15
5	38.423097	-83.664983	866.06	1.50	867.56
6	38.423109	-83.665825	886.30	1.50	887.80



Name: 314

Footprint area: 6.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.423022	-83.663540	843.43	1.50	844.93
2	38.423060	-83.662196	846.55	1.50	848.05
3	38.422396	-83.662185	866.58	1.50	868.08
4	38.422402	-83.661509	849.80	1.50	851.30
5	38.421717	-83.661507	862.60	1.50	864.10
6	38.421529	-83.661705	875.52	1.50	877.02
7	38.421510	-83.663601	874.58	1.50	876.08



Name: 315

Footprint area: 5.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.423167	-83.659972	868.23	1.50	869.73
2	38.420902	-83.659551	883.99	1.50	885.49
3	38.420917	-83.660208	857.02	1.50	858.52
4	38.422124	-83.660846	847.39	1.50	848.89
5	38.423165	-83.661247	845.44	1.50	846.94

Name: 316

Footprint area: 23.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.430230	-83.673089	850.53	1.50	852.03
2	38.429919	-83.671008	850.27	1.50	851.77
3	38.428650	-83.670922	830.50	1.50	832.00
4	38.428679	-83.672343	848.93	1.50	850.43
5	38.429723	-83.672620	838.45	1.50	839.95
6	38.429709	-83.674012	851.57	1.50	853.07
7	38.429330	-83.674000	842.67	1.50	844.17
8	38.429297	-83.674696	853.18	1.50	854.68
9	38.434625	-83.674961	891.40	1.50	892.90
10	38.434592	-83.673776	916.43	1.50	917.93
11	38.435526	-83.673837	914.29	1.50	915.79
12	38.435436	-83.672976	921.91	1.50	923.41
13	38.434449	-83.672842	915.42	1.50	916.92
14	38.433953	-83.673770	906.45	1.50	907.95
15	38.432032	-83.673682	881.71	1.50	883.21

Name: 317

Footprint area: 21.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.493329	-83.621424	856.16	1.50	857.66
2	38.493980	-83.621467	858.51	1.50	860.01
3	38.497591	-83.619938	840.87	1.50	842.37
4	38.497540	-83.617943	796.85	1.50	798.35
5	38.497070	-83.618007	821.60	1.50	823.10
6	38.497045	-83.616784	789.24	1.50	790.74
7	38.496566	-83.616784	783.13	1.50	784.63
8	38.496625	-83.618222	835.68	1.50	837.18
9	38.495582	-83.620188	844.00	1.50	845.50
10	38.495379	-83.620248	841.00	1.50	842.50
11	38.495391	-83.618513	838.25	1.50	839.75
12	38.494301	-83.618810	834.39	1.50	835.89
13	38.493274	-83.619071	836.27	1.50	837.77

Name: 318

Footprint area: 21.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.495391	-83.618533	838.35	1.50	839.85
2	38.495399	-83.617621	821.50	1.50	823.00
3	38.495903	-83.617524	801.31	1.50	802.81
4	38.495915	-83.616199	774.28	1.50	775.78
5	38.496356	-83.616173	775.20	1.50	776.70
6	38.496341	-83.615542	767.93	1.50	769.43
7	38.492766	-83.615953	778.73	1.50	780.23
8	38.492801	-83.617601	800.09	1.50	801.59
9	38.493281	-83.619056	836.78	1.50	838.28

Name: 319

Footprint area: 8.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.492731	-83.614481	819.68	1.50	821.18
2	38.492765	-83.612979	835.47	1.50	836.97
3	38.490388	-83.612904	830.79	1.50	832.29
4	38.490380	-83.614213	810.54	1.50	812.04
5	38.491169	-83.614513	816.92	1.50	818.42

Name: 320

Footprint area: 5.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490136	-83.615447	823.51	1.50	825.01
2	38.488776	-83.615597	811.12	1.50	812.62
3	38.488692	-83.613311	838.08	1.50	839.58
4	38.489733	-83.613290	814.46	1.50	815.96
5	38.489708	-83.614535	828.35	1.50	829.85

2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25
Description:
Threshold height : 50 ft
Direction: 247.0 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7
Description:
Threshold height : 50 ft
Direction: 66.8 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



Route Receptor(s)

Name: Beechburg Wallingford Road

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.420245	-83.642085	868.08	9.00	877.08
2	38.421639	-83.640946	875.50	9.00	884.50
3	38.422900	-83.640002	884.81	9.00	893.81
4	38.423435	-83.639759	896.96	9.00	905.96
5	38.423893	-83.639786	894.81	9.00	903.81
6	38.425242	-83.640027	903.96	9.00	912.96
7	38.426491	-83.640171	913.66	9.00	922.66
8	38.427370	-83.640187	910.80	9.00	919.80
9	38.427968	-83.639917	908.18	9.00	917.19
10	38.428678	-83.639334	901.87	9.00	910.87
11	38.429238	-83.638877	912.28	9.00	921.28
12	38.429805	-83.638178	920.57	9.00	929.57
13	38.430384	-83.637444	908.89	9.00	917.89
14	38.430886	-83.637243	915.03	9.00	924.03

Name: Beechtree Pike

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.441286	-83.687089	813.99	9.00	822.99
2	38.441168	-83.683871	834.57	9.00	843.57
3	38.441151	-83.681103	886.06	9.00	895.06
4	38.441504	-83.678206	930.80	9.00	939.80
5	38.441420	-83.677111	930.06	9.00	939.06
6	38.441185	-83.675266	916.35	9.00	925.35
7	38.440765	-83.673936	930.68	9.00	939.68
8	38.440479	-83.671146	890.61	9.00	899.61
9	38.440093	-83.668271	874.30	9.00	883.30
10	38.439605	-83.664752	929.28	9.00	938.29
11	38.439723	-83.662585	913.81	9.00	922.81
12	38.440059	-83.661791	923.48	9.00	932.48
13	38.440916	-83.660653	922.80	9.00	931.80
14	38.441168	-83.659688	913.44	9.00	922.44
15	38.441723	-83.656383	879.80	9.00	888.80
16	38.441941	-83.655654	871.79	9.00	880.79
17	38.442799	-83.654860	892.32	9.00	901.32
18	38.443353	-83.654452	902.54	9.00	911.54
19	38.443555	-83.653959	904.47	9.00	913.47
20	38.444748	-83.649066	915.72	9.00	924.72

Name: Breeze Road
Route type: Two-way
View angle: 50.0 deg



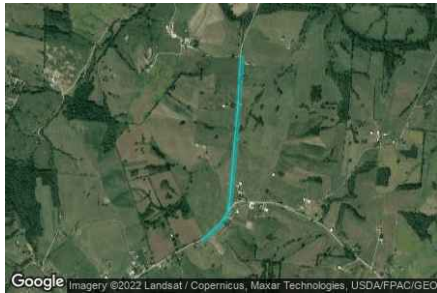
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.489698	-83.618198	785.43	9.00	794.43
2	38.489900	-83.617747	780.81	9.00	789.81
3	38.490756	-83.617211	783.91	9.00	792.92
4	38.491327	-83.616996	788.50	9.00	797.50
5	38.491546	-83.616717	781.28	9.00	790.28
6	38.491865	-83.616159	778.93	9.00	787.93
7	38.492721	-83.615258	772.82	9.00	781.82
8	38.493460	-83.614636	778.14	9.00	787.14
9	38.494535	-83.613928	818.73	9.00	827.73
10	38.494670	-83.613713	825.33	9.00	834.33
11	38.495056	-83.610945	839.44	9.00	848.44
12	38.495241	-83.610731	841.76	9.00	850.76
13	38.498146	-83.609035	804.95	9.00	813.96

Name: Foxport Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490449	-83.625851	863.42	9.00	872.42
2	38.491054	-83.624928	866.37	9.00	875.37
3	38.491020	-83.623298	856.98	9.00	865.98
4	38.490953	-83.621645	838.08	9.00	847.08
5	38.490449	-83.620229	819.40	9.00	828.41
6	38.489660	-83.618105	784.54	9.00	793.54
7	38.489106	-83.617011	787.91	9.00	796.91
8	38.487964	-83.615659	793.50	9.00	802.50
9	38.486082	-83.612762	811.96	9.00	820.96
10	38.484840	-83.611517	832.44	9.00	841.44

Name: Mt Carmel Road Route 57
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.488484	-83.628104	870.09	9.00	879.09
2	38.489626	-83.626431	866.62	9.00	875.62
3	38.490372	-83.625878	864.93	9.00	873.93
4	38.492461	-83.625583	850.94	9.00	859.94
5	38.495765	-83.625207	798.50	9.00	807.51
6	38.501063	-83.624714	839.97	9.00	848.97

Name: Wallingford Road
Route type: Two-way
View angle: 50.0 deg

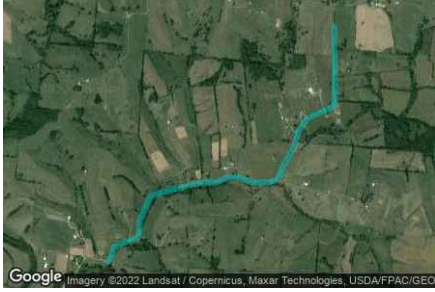


Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.410439	-83.654302	900.38	9.00	909.38
2	38.411650	-83.657542	908.88	9.00	917.88
3	38.412541	-83.660396	915.45	9.00	924.45
4	38.413776	-83.666299	929.39	9.00	938.39
5	38.414943	-83.672245	932.78	9.00	941.78
6	38.414924	-83.673579	938.69	9.00	947.69
7	38.414617	-83.674917	937.35	9.00	946.35
8	38.414138	-83.676736	898.71	9.00	907.71
9	38.413819	-83.678914	872.61	9.00	881.61
10	38.413651	-83.681811	871.92	9.00	880.92

Name: Wilson Run Road

Route type Two-way

View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.421788	-83.684965	801.96	9.00	810.96
2	38.421939	-83.684729	804.00	9.00	813.00
3	38.422796	-83.684364	807.66	9.00	816.66
4	38.423502	-83.682240	807.03	9.00	816.03
5	38.423687	-83.682175	807.71	9.00	816.71
6	38.424612	-83.682111	822.44	9.00	831.44
7	38.426293	-83.681167	814.48	9.00	823.48
8	38.426495	-83.680716	810.66	9.00	819.66
9	38.427234	-83.677026	809.86	9.00	818.86
10	38.427301	-83.676489	809.14	9.00	818.14
11	38.427285	-83.675266	810.01	9.00	819.01
12	38.427654	-83.674386	810.03	9.00	819.03
13	38.427671	-83.673421	812.53	9.00	821.53
14	38.427285	-83.671983	811.54	9.00	820.54
15	38.427318	-83.670545	812.01	9.00	821.01
16	38.427520	-83.669837	813.63	9.00	822.63
17	38.428495	-83.669344	820.21	9.00	829.21
18	38.429285	-83.668722	816.57	9.00	825.57
19	38.429621	-83.668464	819.63	9.00	828.63
20	38.430865	-83.668013	826.87	9.00	835.87
21	38.431773	-83.667219	827.50	9.00	836.50
22	38.432496	-83.665181	833.51	9.00	842.51
23	38.432815	-83.664752	836.15	9.00	845.15
24	38.435420	-83.664773	856.16	9.00	865.16
25	38.438160	-83.664838	903.61	9.00	912.61

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.494923	-83.612523	844.72	16.00	860.72
OP 2	38.495212	-83.610458	844.04	16.00	860.04
OP 3	38.497656	-83.608392	826.82	16.00	842.82
OP 4	38.488147	-83.612198	845.15	16.00	861.15
OP 5	38.491246	-83.622018	850.29	16.00	866.29
OP 6	38.490781	-83.623060	859.16	16.00	875.16
OP 7	38.491267	-83.624560	869.24	16.00	885.24
OP 8	38.499512	-83.624711	838.83	16.00	854.84
OP 9	38.428689	-83.638569	942.01	16.00	958.01
OP 10	38.424601	-83.641264	909.00	16.00	925.01
OP 11	38.424071	-83.637823	954.41	16.00	970.41
OP 12	38.415202	-83.666523	941.89	16.00	957.89
OP 13	38.426955	-83.672570	820.08	16.00	836.09
OP 14	38.426711	-83.671326	835.90	16.00	851.90
OP 15	38.428080	-83.673668	821.70	16.00	837.70
OP 16	38.427807	-83.676023	815.95	16.00	831.95
OP 17	38.428105	-83.679247	844.54	16.00	860.54
OP 18	38.427412	-83.679580	823.36	16.00	839.37
OP 19	38.427483	-83.677257	814.55	16.00	830.55
OP 20	38.441008	-83.678088	931.02	16.00	947.02
OP 21	38.441123	-83.679267	934.24	16.00	950.25
OP 22	38.441888	-83.677502	944.01	16.00	960.01
OP 23	38.438892	-83.682689	938.04	16.00	954.04
OP 24	38.429108	-83.670165	833.40	16.00	849.40
OP 25	38.430709	-83.668797	838.26	16.00	854.26
OP 26	38.432144	-83.665643	844.72	16.00	860.72
OP 27	38.433259	-83.667264	872.73	16.00	888.73
OP 28	38.439779	-83.671940	921.01	16.00	937.01
OP 29	38.439926	-83.668164	875.48	16.00	891.48
OP 30	38.440981	-83.670240	911.75	16.00	927.75
OP 31	38.441260	-83.669587	905.93	16.00	921.93
OP 32	38.441373	-83.670209	917.10	16.00	933.10
OP 33	38.441781	-83.670279	920.71	16.00	936.71
OP 34	38.441453	-83.671390	914.01	16.00	930.01
OP 35	38.442113	-83.669566	915.63	16.00	931.63
OP 36	38.442092	-83.670252	924.41	16.00	940.41
OP 37	38.440550	-83.669657	897.44	16.00	913.44
OP 38	38.441066	-83.673975	936.42	16.00	952.42
OP 39	38.434918	-83.664112	865.85	16.00	881.85
OP 40	38.417949	-83.643306	877.24	16.00	893.24

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
301	SA tracking	SA tracking	0	0	-	
302	SA tracking	SA tracking	0	0	-	
303	SA tracking	SA tracking	0	0	-	
304	SA tracking	SA tracking	0	0	-	
305	SA tracking	SA tracking	0	0	-	
306	SA tracking	SA tracking	0	0	-	
307	SA tracking	SA tracking	0	0	-	
308	SA tracking	SA tracking	0	0	-	
309	SA tracking	SA tracking	0	0	-	
310	SA tracking	SA tracking	0	0	-	
311	SA tracking	SA tracking	0	0	-	
312	SA tracking	SA tracking	0	0	-	
313	SA tracking	SA tracking	0	0	-	
314	SA tracking	SA tracking	0	0	-	
315	SA tracking	SA tracking	0	0	-	
316	SA tracking	SA tracking	0	0	-	
317	SA tracking	SA tracking	0	0	-	
318	SA tracking	SA tracking	0	0	-	
319	SA tracking	SA tracking	0	0	-	
320	SA tracking	SA tracking	0	0	-	

PV & Receptor Analysis Results

Results for each PV array and receptor

301 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

302 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

303 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

304 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

305 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

306 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

307 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

308 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

309 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

310 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

311 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

312 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

313 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

314 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

315 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

316 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

317 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

318 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

319 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

320 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 3 9ft veh 10ft pan 52rest

Created Aug. 11, 2022
Updated Aug. 11, 2022
Time-step 1 minute
Timezone offset UTC-5
Site ID 73935.12548

Project type Advanced
Project status: active
Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: **0.5**
 Pupil diameter: **0.002 m**
 Eye focal length: **0.017 m**
 Sun subtended angle: **9.3 mrad**

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results No glare predicted!

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
301	SA tracking	SA tracking	0	0	-
302	SA tracking	SA tracking	0	0	-
303	SA tracking	SA tracking	0	0	-
304	SA tracking	SA tracking	0	0	-
305	SA tracking	SA tracking	0	0	-
306	SA tracking	SA tracking	0	0	-
307	SA tracking	SA tracking	0	0	-
308	SA tracking	SA tracking	0	0	-
309	SA tracking	SA tracking	0	0	-
310	SA tracking	SA tracking	0	0	-
311	SA tracking	SA tracking	0	0	-
312	SA tracking	SA tracking	0	0	-
313	SA tracking	SA tracking	0	0	-
314	SA tracking	SA tracking	0	0	-
315	SA tracking	SA tracking	0	0	-
316	SA tracking	SA tracking	0	0	-
317	SA tracking	SA tracking	0	0	-
318	SA tracking	SA tracking	0	0	-
319	SA tracking	SA tracking	0	0	-
320	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 310.6 acres

Name: 301

Footprint area: 22.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.427443	-83.643189	889.44	10.00	899.44
2	38.427450	-83.644586	873.37	10.00	883.37
3	38.427443	-83.645828	864.47	10.00	874.47
4	38.427443	-83.647920	847.66	10.00	857.66
5	38.427901	-83.647915	846.76	10.00	856.77
6	38.427910	-83.647684	848.80	10.00	858.80
7	38.429633	-83.647695	868.60	10.00	878.60
8	38.429612	-83.643221	863.61	10.00	873.61
9	38.428343	-83.643194	885.96	10.00	895.96

Name: 302

Footprint area: 24.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.427443	-83.647926	847.39	10.00	857.39
2	38.426288	-83.647963	844.72	10.00	854.72
3	38.425430	-83.647459	843.68	10.00	853.68
4	38.425468	-83.643859	876.34	10.00	886.34
5	38.426208	-83.643122	880.98	10.00	890.98
6	38.425926	-83.642496	879.61	10.00	889.61
7	38.425920	-83.641903	887.57	10.00	897.57
8	38.426598	-83.641972	894.99	10.00	904.99
9	38.426588	-83.642184	892.33	10.00	902.33
10	38.426919	-83.642193	898.46	10.00	908.46
11	38.426933	-83.642846	890.75	10.00	900.75
12	38.427435	-83.642878	894.56	10.00	904.56

Name: 303

Footprint area: 5.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.424989	-83.650678	856.97	10.00	866.97
2	38.423947	-83.650721	872.97	10.00	882.97
3	38.424779	-83.648575	866.51	10.00	876.51
4	38.425956	-83.648650	845.60	10.00	855.61

Name: 304

Footprint area: 20.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.427767	-83.652582	860.56	10.00	870.56
2	38.426346	-83.652587	882.80	10.00	892.80
3	38.426355	-83.648768	846.23	10.00	856.23
4	38.427880	-83.648789	840.18	10.00	850.18
5	38.427882	-83.649318	853.10	10.00	863.10
6	38.429056	-83.649316	847.16	10.00	857.16
7	38.429048	-83.650579	868.71	10.00	878.71
8	38.428826	-83.650580	870.55	10.00	880.55
9	38.428824	-83.651546	867.36	10.00	877.36

Name: 305

Footprint area: 22.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.427774	-83.652593	860.21	10.00	870.21
2	38.427783	-83.652958	859.28	10.00	869.28
3	38.428741	-83.652953	873.92	10.00	883.92
4	38.428749	-83.653790	885.83	10.00	895.83
5	38.429043	-83.653779	886.24	10.00	896.24
6	38.429031	-83.655673	895.66	10.00	905.66
7	38.428726	-83.655673	890.60	10.00	900.60
8	38.428725	-83.656429	896.44	10.00	906.44
9	38.426312	-83.656397	898.46	10.00	908.46
10	38.426341	-83.652599	882.84	10.00	892.84

Name: 306

Footprint area: 21.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.428720	-83.656413	896.45	10.00	906.45
2	38.428724	-83.657835	855.90	10.00	865.90
3	38.427131	-83.657877	885.05	10.00	895.05
4	38.427148	-83.658891	895.44	10.00	905.44
5	38.427413	-83.658870	890.22	10.00	900.22
6	38.427409	-83.659192	898.19	10.00	908.19
7	38.428476	-83.658875	871.42	10.00	881.42
8	38.429077	-83.658843	887.74	10.00	897.74
9	38.429069	-83.660640	889.66	10.00	899.66
10	38.426291	-83.660715	879.13	10.00	889.13
11	38.426312	-83.656397	898.46	10.00	908.46

Name: 307

Footprint area: 24.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.426043	-83.651156	873.01	10.00	883.01
2	38.425454	-83.651140	864.40	10.00	874.40
3	38.425446	-83.652164	877.73	10.00	887.73
4	38.424875	-83.652202	867.32	10.00	877.32
5	38.424866	-83.652859	873.85	10.00	883.85
6	38.424570	-83.652862	870.78	10.00	880.78
7	38.424576	-83.653347	874.06	10.00	884.07
8	38.424868	-83.653339	874.34	10.00	884.34
9	38.424883	-83.653910	879.11	10.00	889.11
10	38.424883	-83.654737	887.29	10.00	897.29
11	38.424557	-83.654726	885.38	10.00	895.38
12	38.424562	-83.655981	889.31	10.00	899.31
13	38.423695	-83.656024	882.45	10.00	892.45
14	38.423663	-83.656920	876.20	10.00	886.20
15	38.422744	-83.656923	889.15	10.00	899.15
16	38.422940	-83.657707	886.26	10.00	896.26
17	38.426019	-83.657584	893.78	10.00	903.78
18	38.426044	-83.656196	896.03	10.00	906.03
19	38.426055	-83.654758	891.04	10.00	901.05

Name: 308

Footprint area: 21.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.422941	-83.657714	886.26	10.00	896.26
2	38.423172	-83.658347	873.25	10.00	883.25
3	38.424005	-83.658315	869.73	10.00	879.74
4	38.424013	-83.659570	866.36	10.00	876.36
5	38.423765	-83.659607	860.27	10.00	870.27
6	38.423769	-83.660294	860.13	10.00	870.13
7	38.423782	-83.661603	853.79	10.00	863.80
8	38.426005	-83.661560	885.14	10.00	895.14
9	38.426026	-83.657601	893.81	10.00	903.81

Name: 309

Footprint area: 23.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.426018	-83.660133	883.56	10.00	893.56
2	38.426308	-83.660139	879.15	10.00	889.15
3	38.426287	-83.660718	879.13	10.00	889.13
4	38.429077	-83.660654	889.56	10.00	899.56
5	38.429140	-83.664714	899.71	10.00	909.71
6	38.427365	-83.664814	894.97	10.00	904.97
7	38.427358	-83.663534	901.57	10.00	911.57
8	38.426694	-83.663577	894.02	10.00	904.02
9	38.426652	-83.662182	884.97	10.00	894.97
10	38.426341	-83.661979	885.89	10.00	895.89
11	38.426207	-83.661882	890.77	10.00	900.77
12	38.426198	-83.661592	889.52	10.00	899.52
13	38.426005	-83.661576	885.57	10.00	895.57

Name: 310

Footprint area: 14.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.429127	-83.664725	899.85	10.00	909.85
2	38.429787	-83.664677	882.51	10.00	892.52
3	38.429800	-83.667059	837.23	10.00	847.23
4	38.429157	-83.667128	853.25	10.00	863.25
5	38.429148	-83.667536	837.37	10.00	847.37
6	38.428484	-83.667590	845.71	10.00	855.71
7	38.428489	-83.667144	858.18	10.00	868.19
8	38.427350	-83.667096	849.50	10.00	859.50
9	38.427358	-83.664816	894.73	10.00	904.73

Name: 311

Footprint area: 13.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.426589	-83.667879	840.23	10.00	850.24
2	38.425938	-83.667890	820.17	10.00	830.17
3	38.425938	-83.667236	837.53	10.00	847.53
4	38.425366	-83.667262	823.94	10.00	833.94
5	38.425013	-83.664038	856.15	10.00	866.15
6	38.424467	-83.664017	836.68	10.00	846.68
7	38.424450	-83.663754	839.25	10.00	849.25
8	38.424177	-83.663765	833.48	10.00	843.48
9	38.424168	-83.662370	845.63	10.00	855.63
10	38.425030	-83.662359	864.64	10.00	874.64
11	38.425030	-83.662697	861.73	10.00	871.73
12	38.425698	-83.662681	875.48	10.00	885.48
13	38.425698	-83.664634	860.50	10.00	870.50
14	38.426022	-83.664610	865.99	10.00	875.99

Name: 312

Footprint area: 1.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.421916	-83.666232	893.11	10.00	903.11
2	38.422878	-83.666098	893.27	10.00	903.27
3	38.422866	-83.665836	894.23	10.00	904.23
4	38.422563	-83.665449	889.30	10.00	899.30
5	38.421794	-83.665530	878.95	10.00	888.95
6	38.421819	-83.666141	892.58	10.00	902.58
7	38.421264	-83.666206	895.53	10.00	905.53
8	38.421264	-83.666329	898.55	10.00	908.55

Name: 313

Footprint area: 1.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.424122	-83.665760	835.17	10.00	845.17
2	38.424084	-83.664950	832.76	10.00	842.76
3	38.423677	-83.664983	846.29	10.00	856.29
4	38.423336	-83.665004	858.65	10.00	868.65
5	38.423097	-83.664983	866.06	10.00	876.06
6	38.423109	-83.665825	886.30	10.00	896.30



Name: 314

Footprint area: 6.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.423022	-83.663540	843.43	10.00	853.43
2	38.423060	-83.662196	846.55	10.00	856.55
3	38.422396	-83.662185	866.58	10.00	876.58
4	38.422402	-83.661509	849.80	10.00	859.80
5	38.421717	-83.661507	862.60	10.00	872.60
6	38.421529	-83.661705	875.52	10.00	885.52
7	38.421510	-83.663601	874.58	10.00	884.58



Name: 315

Footprint area: 5.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.423167	-83.659972	868.23	10.00	878.23
2	38.420902	-83.659551	883.99	10.00	893.99
3	38.420917	-83.660208	857.02	10.00	867.02
4	38.422124	-83.660846	847.39	10.00	857.39
5	38.423165	-83.661247	845.44	10.00	855.44

Name: 316

Footprint area: 23.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.430230	-83.673089	850.53	10.00	860.53
2	38.429919	-83.671008	850.27	10.00	860.27
3	38.428650	-83.670922	830.50	10.00	840.50
4	38.428679	-83.672343	848.93	10.00	858.93
5	38.429723	-83.672620	838.45	10.00	848.45
6	38.429709	-83.674012	851.57	10.00	861.57
7	38.429330	-83.674000	842.67	10.00	852.67
8	38.429297	-83.674696	853.18	10.00	863.18
9	38.434625	-83.674961	891.40	10.00	901.40
10	38.434592	-83.673776	916.43	10.00	926.43
11	38.435526	-83.673837	914.29	10.00	924.29
12	38.435436	-83.672976	921.91	10.00	931.91
13	38.434449	-83.672842	915.42	10.00	925.42
14	38.433953	-83.673770	906.45	10.00	916.45
15	38.432032	-83.673682	881.71	10.00	891.71

Name: 317

Footprint area: 21.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.493329	-83.621424	856.16	10.00	866.16
2	38.493980	-83.621467	858.51	10.00	868.51
3	38.497591	-83.619938	840.87	10.00	850.87
4	38.497540	-83.617943	796.85	10.00	806.85
5	38.497070	-83.618007	821.60	10.00	831.60
6	38.497045	-83.616784	789.24	10.00	799.24
7	38.496566	-83.616784	783.13	10.00	793.13
8	38.496625	-83.618222	835.68	10.00	845.68
9	38.495582	-83.620188	844.00	10.00	854.00
10	38.495379	-83.620248	841.00	10.00	851.00
11	38.495391	-83.618513	838.25	10.00	848.25
12	38.494301	-83.618810	834.39	10.00	844.39
13	38.493274	-83.619071	836.27	10.00	846.27

Name: 318

Footprint area: 21.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.495391	-83.618533	838.35	10.00	848.35
2	38.495399	-83.617621	821.50	10.00	831.50
3	38.495903	-83.617524	801.31	10.00	811.31
4	38.495915	-83.616199	774.28	10.00	784.28
5	38.496356	-83.616173	775.20	10.00	785.20
6	38.496341	-83.615542	767.93	10.00	777.93
7	38.492766	-83.615953	778.73	10.00	788.73
8	38.492801	-83.617601	800.09	10.00	810.09
9	38.493281	-83.619056	836.78	10.00	846.78

Name: 319

Footprint area: 8.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.492731	-83.614481	819.68	10.00	829.68
2	38.492765	-83.612979	835.47	10.00	845.47
3	38.490388	-83.612904	830.79	10.00	840.79
4	38.490380	-83.614213	810.54	10.00	820.54
5	38.491169	-83.614513	816.92	10.00	826.92

Name: 320

Footprint area: 5.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490136	-83.615447	823.51	10.00	833.51
2	38.488776	-83.615597	811.12	10.00	821.12
3	38.488692	-83.613311	838.08	10.00	848.08
4	38.489733	-83.613290	814.46	10.00	824.46
5	38.489708	-83.614535	828.35	10.00	838.35

2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25
Description:
Threshold height : 50 ft
Direction: 247.0 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7
Description:
Threshold height : 50 ft
Direction: 66.8 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



Route Receptor(s)

Name: Beechburg Wallingford Road

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.420245	-83.642085	868.08	9.00	877.08
2	38.421639	-83.640946	875.50	9.00	884.50
3	38.422900	-83.640002	884.81	9.00	893.81
4	38.423435	-83.639759	896.96	9.00	905.96
5	38.423893	-83.639786	894.81	9.00	903.81
6	38.425242	-83.640027	903.96	9.00	912.96
7	38.426491	-83.640171	913.66	9.00	922.66
8	38.427370	-83.640187	910.80	9.00	919.80
9	38.427968	-83.639917	908.18	9.00	917.19
10	38.428678	-83.639334	901.87	9.00	910.87
11	38.429238	-83.638877	912.28	9.00	921.28
12	38.429805	-83.638178	920.57	9.00	929.57
13	38.430384	-83.637444	908.89	9.00	917.89
14	38.430886	-83.637243	915.03	9.00	924.03

Name: Beechtree Pike

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.441286	-83.687089	813.99	9.00	822.99
2	38.441168	-83.683871	834.57	9.00	843.57
3	38.441151	-83.681103	886.06	9.00	895.06
4	38.441504	-83.678206	930.80	9.00	939.80
5	38.441420	-83.677111	930.06	9.00	939.06
6	38.441185	-83.675266	916.35	9.00	925.35
7	38.440765	-83.673936	930.68	9.00	939.68
8	38.440479	-83.671146	890.61	9.00	899.61
9	38.440093	-83.668271	874.30	9.00	883.30
10	38.439605	-83.664752	929.28	9.00	938.29
11	38.439723	-83.662585	913.81	9.00	922.81
12	38.440059	-83.661791	923.48	9.00	932.48
13	38.440916	-83.660653	922.80	9.00	931.80
14	38.441168	-83.659688	913.44	9.00	922.44
15	38.441723	-83.656383	879.80	9.00	888.80
16	38.441941	-83.655654	871.79	9.00	880.79
17	38.442799	-83.654860	892.32	9.00	901.32
18	38.443353	-83.654452	902.54	9.00	911.54
19	38.443555	-83.653959	904.47	9.00	913.47
20	38.444748	-83.649066	915.72	9.00	924.72

Name: Breeze Road
Route type: Two-way
View angle: 50.0 deg



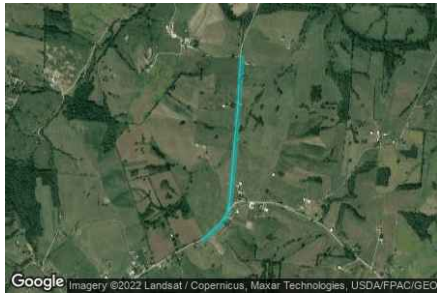
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.489698	-83.618198	785.43	9.00	794.43
2	38.489900	-83.617747	780.81	9.00	789.81
3	38.490756	-83.617211	783.91	9.00	792.92
4	38.491327	-83.616996	788.50	9.00	797.50
5	38.491546	-83.616717	781.28	9.00	790.28
6	38.491865	-83.616159	778.93	9.00	787.93
7	38.492721	-83.615258	772.82	9.00	781.82
8	38.493460	-83.614636	778.14	9.00	787.14
9	38.494535	-83.613928	818.73	9.00	827.73
10	38.494670	-83.613713	825.33	9.00	834.33
11	38.495056	-83.610945	839.44	9.00	848.44
12	38.495241	-83.610731	841.76	9.00	850.76
13	38.498146	-83.609035	804.95	9.00	813.96

Name: Foxport Road
Route type: Two-way
View angle: 50.0 deg



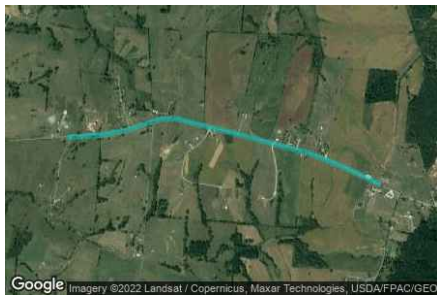
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490449	-83.625851	863.42	9.00	872.42
2	38.491054	-83.624928	866.37	9.00	875.37
3	38.491020	-83.623298	856.98	9.00	865.98
4	38.490953	-83.621645	838.08	9.00	847.08
5	38.490449	-83.620229	819.40	9.00	828.41
6	38.489660	-83.618105	784.54	9.00	793.54
7	38.489106	-83.617011	787.91	9.00	796.91
8	38.487964	-83.615659	793.50	9.00	802.50
9	38.486082	-83.612762	811.96	9.00	820.96
10	38.484840	-83.611517	832.44	9.00	841.44

Name: Mt Carmel Road Route 57
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.488484	-83.628104	870.09	9.00	879.09
2	38.489626	-83.626431	866.62	9.00	875.62
3	38.490372	-83.625878	864.93	9.00	873.93
4	38.492461	-83.625583	850.94	9.00	859.94
5	38.495731	-83.625218	798.50	9.00	807.50
6	38.501063	-83.624714	839.97	9.00	848.97

Name: Wallingford Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.410439	-83.654302	900.38	9.00	909.38
2	38.411650	-83.657542	908.88	9.00	917.88
3	38.412541	-83.660396	915.45	9.00	924.45
4	38.413776	-83.666299	929.39	9.00	938.39
5	38.414943	-83.672245	932.78	9.00	941.78
6	38.414924	-83.673579	938.69	9.00	947.69
7	38.414617	-83.674917	937.35	9.00	946.35
8	38.414138	-83.676736	898.71	9.00	907.71
9	38.413819	-83.678914	872.61	9.00	881.61
10	38.413651	-83.681811	871.92	9.00	880.92

Name: Wilson Run Road

Route type Two-way

View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.421788	-83.684965	801.96	9.00	810.96
2	38.421939	-83.684729	804.00	9.00	813.00
3	38.422796	-83.684364	807.66	9.00	816.66
4	38.423502	-83.682240	807.03	9.00	816.03
5	38.423687	-83.682175	807.71	9.00	816.71
6	38.424612	-83.682111	822.44	9.00	831.44
7	38.426293	-83.681167	814.48	9.00	823.48
8	38.426495	-83.680716	810.66	9.00	819.66
9	38.427234	-83.677026	809.86	9.00	818.86
10	38.427301	-83.676489	809.14	9.00	818.14
11	38.427285	-83.675266	810.01	9.00	819.01
12	38.427654	-83.674386	810.03	9.00	819.03
13	38.427671	-83.673421	812.53	9.00	821.53
14	38.427285	-83.671983	811.54	9.00	820.54
15	38.427318	-83.670545	812.01	9.00	821.01
16	38.427520	-83.669837	813.63	9.00	822.63
17	38.428495	-83.669344	820.21	9.00	829.21
18	38.429285	-83.668722	816.57	9.00	825.57
19	38.429621	-83.668464	819.63	9.00	828.63
20	38.430865	-83.668013	826.87	9.00	835.87
21	38.431773	-83.667219	827.50	9.00	836.50
22	38.432496	-83.665181	833.51	9.00	842.51
23	38.432815	-83.664752	836.15	9.00	845.15
24	38.435420	-83.664773	856.16	9.00	865.16
25	38.438160	-83.664838	903.61	9.00	912.61

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.494923	-83.612523	844.72	16.00	860.72
OP 2	38.495212	-83.610458	844.04	16.00	860.04
OP 3	38.497656	-83.608392	826.82	16.00	842.82
OP 4	38.488147	-83.612198	845.15	16.00	861.15
OP 5	38.491246	-83.622018	850.29	16.00	866.29
OP 6	38.490781	-83.623060	859.16	16.00	875.16
OP 7	38.491267	-83.624560	869.24	16.00	885.24
OP 8	38.499512	-83.624711	838.83	16.00	854.84
OP 9	38.428689	-83.638569	942.01	16.00	958.01
OP 10	38.424601	-83.641264	909.00	16.00	925.01
OP 11	38.424071	-83.637823	954.41	16.00	970.41
OP 12	38.415202	-83.666523	941.89	16.00	957.89
OP 13	38.426955	-83.672570	820.08	16.00	836.09
OP 14	38.426711	-83.671326	835.90	16.00	851.90
OP 15	38.428080	-83.673668	821.70	16.00	837.70
OP 16	38.427807	-83.676023	815.95	16.00	831.95
OP 17	38.428105	-83.679247	844.54	16.00	860.54
OP 18	38.427412	-83.679580	823.36	16.00	839.37
OP 19	38.427483	-83.677257	814.55	16.00	830.55
OP 20	38.441008	-83.678088	931.02	16.00	947.02
OP 21	38.441123	-83.679267	934.24	16.00	950.25
OP 22	38.441888	-83.677502	944.01	16.00	960.01
OP 23	38.438892	-83.682689	938.04	16.00	954.04
OP 24	38.429108	-83.670165	833.40	16.00	849.40
OP 25	38.430709	-83.668797	838.26	16.00	854.26
OP 26	38.432144	-83.665643	844.72	16.00	860.72
OP 27	38.433259	-83.667264	872.73	16.00	888.73
OP 28	38.439779	-83.671940	921.01	16.00	937.01
OP 29	38.439926	-83.668164	875.48	16.00	891.48
OP 30	38.440981	-83.670240	911.75	16.00	927.75
OP 31	38.441260	-83.669587	905.93	16.00	921.93
OP 32	38.441373	-83.670209	917.10	16.00	933.10
OP 33	38.441781	-83.670279	920.71	16.00	936.71
OP 34	38.441453	-83.671390	914.01	16.00	930.01
OP 35	38.442113	-83.669566	915.63	16.00	931.63
OP 36	38.442092	-83.670252	924.41	16.00	940.41
OP 37	38.440550	-83.669657	897.44	16.00	913.44
OP 38	38.441066	-83.673975	936.42	16.00	952.42
OP 39	38.434918	-83.664112	865.85	16.00	881.85
OP 40	38.417949	-83.643306	877.24	16.00	893.24

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
301	SA tracking	SA tracking	0	0	-	
302	SA tracking	SA tracking	0	0	-	
303	SA tracking	SA tracking	0	0	-	
304	SA tracking	SA tracking	0	0	-	
305	SA tracking	SA tracking	0	0	-	
306	SA tracking	SA tracking	0	0	-	
307	SA tracking	SA tracking	0	0	-	
308	SA tracking	SA tracking	0	0	-	
309	SA tracking	SA tracking	0	0	-	
310	SA tracking	SA tracking	0	0	-	
311	SA tracking	SA tracking	0	0	-	
312	SA tracking	SA tracking	0	0	-	
313	SA tracking	SA tracking	0	0	-	
314	SA tracking	SA tracking	0	0	-	
315	SA tracking	SA tracking	0	0	-	
316	SA tracking	SA tracking	0	0	-	
317	SA tracking	SA tracking	0	0	-	
318	SA tracking	SA tracking	0	0	-	
319	SA tracking	SA tracking	0	0	-	
320	SA tracking	SA tracking	0	0	-	

PV & Receptor Analysis Results

Results for each PV array and receptor

301 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

302 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

303 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

304 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

305 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

306 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

307 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

308 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

309 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

310 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

311 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

312 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

313 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

314 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

315 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

316 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

317 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

318 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

319 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

No glare found

320 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Beechburg Wallingford Road	0	0
Route: Beechtree Pike	0	0
Route: Breeze Road	0	0
Route: Foxport Road	0	0
Route: Mt Carmel Road Route 57	0	0
Route: Wallingford Road	0	0
Route: Wilson Run Road	0	0

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 4 5ft veh 1_5ft pan 52rest

Created July 14, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 72366.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results Glare with low potential for temporary after-image predicted

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
401	SA tracking	SA tracking	0	0	-
402	SA tracking	SA tracking	0	0	-
403	SA tracking	SA tracking	0	0	-
404	SA tracking	SA tracking	0	0	-
405	SA tracking	SA tracking	0	0	-
406	SA tracking	SA tracking	0	0	-
407	SA tracking	SA tracking	0	0	-
408	SA tracking	SA tracking	0	0	-
409	SA tracking	SA tracking	0	0	-
410	SA tracking	SA tracking	0	0	-
411	SA tracking	SA tracking	0	0	-
412	SA tracking	SA tracking	1,580	0	-
413	SA tracking	SA tracking	0	0	-
414	SA tracking	SA tracking	0	0	-
415	SA tracking	SA tracking	0	0	-
416	SA tracking	SA tracking	0	0	-
417	SA tracking	SA tracking	0	0	-
418	SA tracking	SA tracking	0	0	-
419	SA tracking	SA tracking	0	0	-
420	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 285.9 acres

Name: 401
Footprint area: 20.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.499805	-83.603269	778.47	1.50	779.97
2	38.499831	-83.602255	785.32	1.50	786.82
3	38.500221	-83.602261	769.39	1.50	770.89
4	38.500208	-83.601124	767.57	1.50	769.07
5	38.500670	-83.601113	760.84	1.50	762.34
6	38.500653	-83.599536	765.38	1.50	766.88
7	38.500171	-83.599525	776.48	1.50	777.98
8	38.500171	-83.599895	782.86	1.50	784.36
9	38.499621	-83.599863	785.58	1.50	787.08
10	38.499625	-83.600069	785.35	1.50	786.85
11	38.499320	-83.600071	788.85	1.50	790.35
12	38.499298	-83.600340	792.72	1.50	794.22
13	38.498750	-83.600329	796.95	1.50	798.45
14	38.498728	-83.600979	796.85	1.50	798.35
15	38.498393	-83.600981	802.53	1.50	804.03
16	38.498390	-83.601305	801.95	1.50	803.45
17	38.498002	-83.601300	803.76	1.50	805.26
18	38.497993	-83.601625	806.95	1.50	808.45
19	38.497577	-83.601583	807.34	1.50	808.84
20	38.497566	-83.601992	811.15	1.50	812.65
21	38.497246	-83.601981	808.22	1.50	809.72
22	38.497241	-83.602100	810.38	1.50	811.88
23	38.496730	-83.602116	800.92	1.50	802.42
24	38.496742	-83.603462	813.86	1.50	815.36

Name: 402
Footprint area: 3.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.494063	-83.607043	824.90	1.50	826.40
2	38.493239	-83.607046	832.08	1.50	833.58
3	38.493236	-83.606029	817.37	1.50	818.87
4	38.494033	-83.606018	820.32	1.50	821.82
5	38.494050	-83.605911	816.53	1.50	818.03
6	38.494529	-83.605933	813.58	1.50	815.08
7	38.494512	-83.607038	806.95	1.50	808.45

Name: 403

Footprint area: 22.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.470917	-83.611421	935.56	1.50	937.06
2	38.470052	-83.611416	931.55	1.50	933.05
3	38.470207	-83.622332	858.39	1.50	859.89
4	38.471039	-83.622311	864.63	1.50	866.13

Name: 404

Footprint area: 22.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.470064	-83.611432	930.40	1.50	931.90
2	38.469178	-83.611432	884.40	1.50	885.90
3	38.469359	-83.622289	850.94	1.50	852.44
4	38.470207	-83.622332	858.39	1.50	859.89

Name: 405

Footprint area: 6.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.469174	-83.611427	883.90	1.50	885.40
2	38.468342	-83.611416	850.90	1.50	852.40
3	38.468149	-83.611292	846.44	1.50	847.94
4	38.468153	-83.611094	844.13	1.50	845.63
5	38.467246	-83.611046	831.95	1.50	833.45
6	38.467233	-83.611646	845.37	1.50	846.87
7	38.467679	-83.611612	846.12	1.50	847.62
8	38.467838	-83.611468	845.63	1.50	847.13
9	38.468502	-83.611482	857.96	1.50	859.46
10	38.468485	-83.612672	851.56	1.50	853.06
11	38.467357	-83.612709	868.95	1.50	870.45
12	38.467359	-83.612197	861.12	1.50	862.62
13	38.466921	-83.612201	852.09	1.50	853.59
14	38.466892	-83.612817	860.75	1.50	862.25
15	38.466450	-83.612819	854.87	1.50	856.37
16	38.466458	-83.613619	873.73	1.50	875.23
17	38.466052	-83.613668	883.56	1.50	885.06
18	38.466054	-83.613835	883.21	1.50	884.71
19	38.466956	-83.613739	884.47	1.50	885.97
20	38.467376	-83.613505	890.58	1.50	892.08
21	38.467353	-83.612906	874.47	1.50	875.97
22	38.469195	-83.612870	871.26	1.50	872.76

Name: 406

Footprint area: 24.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.469250	-83.614916	869.33	1.50	870.83
2	38.467173	-83.614873	881.43	1.50	882.93
3	38.467147	-83.614219	886.72	1.50	888.22
4	38.466173	-83.614219	884.77	1.50	886.27
5	38.466156	-83.614508	882.35	1.50	883.85
6	38.466677	-83.614530	884.17	1.50	885.67
7	38.466677	-83.614744	884.67	1.50	886.17
8	38.466198	-83.614712	881.27	1.50	882.77
9	38.466249	-83.615453	876.85	1.50	878.35
10	38.466820	-83.615399	875.85	1.50	877.35
11	38.466753	-83.617512	874.88	1.50	876.38
12	38.466181	-83.617523	866.08	1.50	867.58
13	38.466156	-83.618424	869.38	1.50	870.88
14	38.469264	-83.618339	855.80	1.50	857.30

Name: 407

Footprint area: 24.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.469275	-83.618342	855.80	1.50	857.30
2	38.469342	-83.622301	850.89	1.50	852.39
3	38.466738	-83.622414	871.64	1.50	873.14
4	38.466696	-83.618417	876.09	1.50	877.59

Name: 408

Footprint area: 20.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466155	-83.618467	869.38	1.50	870.88
2	38.465198	-83.619186	862.08	1.50	863.58
3	38.463576	-83.622190	853.11	1.50	854.61
4	38.463601	-83.622630	852.78	1.50	854.28
5	38.466726	-83.622405	871.86	1.50	873.36
6	38.466693	-83.618446	876.02	1.50	877.52

Name: 409

Footprint area: 18.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.464587	-83.622569	862.37	1.50	863.87
2	38.464620	-83.624114	856.99	1.50	858.49
3	38.465570	-83.624018	862.76	1.50	864.26
4	38.465544	-83.625595	866.37	1.50	867.87
5	38.464940	-83.625638	859.73	1.50	861.23
6	38.464923	-83.625874	860.06	1.50	861.56
7	38.466006	-83.625949	872.08	1.50	873.58
8	38.465998	-83.625627	870.73	1.50	872.23
9	38.467518	-83.625595	876.53	1.50	878.03
10	38.467485	-83.622398	863.46	1.50	864.96

Name: 410

Footprint area: 16.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.463898	-83.620670	857.34	1.50	858.84
2	38.463058	-83.620681	862.76	1.50	864.26
3	38.463133	-83.619361	876.28	1.50	877.78
4	38.464612	-83.616883	876.60	1.50	878.10
5	38.464935	-83.616845	874.91	1.50	876.41
6	38.464948	-83.615950	882.63	1.50	884.13
7	38.465960	-83.615939	879.14	1.50	880.64
8	38.465988	-83.617564	866.71	1.50	868.21

Name: 411

Footprint area: 21.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.496744	-83.603475	813.90	1.50	815.40
2	38.496312	-83.603470	814.91	1.50	816.41
3	38.496329	-83.604409	815.75	1.50	817.25
4	38.496772	-83.604390	811.09	1.50	812.60
5	38.496797	-83.606059	818.53	1.50	820.03
6	38.495979	-83.606074	811.12	1.50	812.62
7	38.495968	-83.606729	821.52	1.50	823.02
8	38.495508	-83.606746	815.28	1.50	816.78
9	38.495535	-83.607851	815.82	1.50	817.32
10	38.496360	-83.607838	827.27	1.50	828.77
11	38.496373	-83.607711	826.80	1.50	828.30
12	38.497238	-83.607559	817.21	1.50	818.71
13	38.497232	-83.607316	815.70	1.50	817.20
14	38.497636	-83.607292	804.54	1.50	806.04
15	38.497627	-83.606583	821.78	1.50	823.28
16	38.498178	-83.606566	801.24	1.50	802.74
17	38.498181	-83.605992	815.34	1.50	816.84
18	38.498550	-83.605981	805.19	1.50	806.69
19	38.498552	-83.605551	812.60	1.50	814.10
20	38.498927	-83.605527	799.81	1.50	801.31
21	38.498919	-83.605029	801.18	1.50	802.68
22	38.499332	-83.604993	777.62	1.50	779.12
23	38.499321	-83.604561	776.32	1.50	777.82
24	38.498933	-83.604525	792.24	1.50	793.74
25	38.498920	-83.604244	784.95	1.50	786.45
26	38.498533	-83.604232	792.68	1.50	794.18
27	38.498525	-83.603360	789.74	1.50	791.24

Name: 412

Footprint area: 3.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.493278	-83.608443	826.67	1.50	828.17
2	38.493648	-83.608432	816.02	1.50	817.52
3	38.493656	-83.607987	812.88	1.50	814.38
4	38.494030	-83.607965	806.71	1.50	808.21
5	38.494058	-83.607344	820.38	1.50	821.88
6	38.494063	-83.607041	824.90	1.50	826.40
7	38.494026	-83.607048	825.83	1.50	827.33
8	38.493923	-83.607050	828.80	1.50	830.30
9	38.493751	-83.607045	831.11	1.50	832.61
10	38.493406	-83.607050	832.49	1.50	833.99
11	38.493236	-83.607048	832.08	1.50	833.58
12	38.493232	-83.607386	832.12	1.50	833.62
13	38.492657	-83.607402	833.93	1.50	835.43
14	38.492674	-83.608475	828.50	1.50	830.00

Name: 413

Footprint area: 5.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.494609	-83.604258	801.75	1.50	803.25
2	38.494618	-83.603652	804.96	1.50	806.46
3	38.494164	-83.603663	816.44	1.50	817.94
4	38.493394	-83.603644	820.51	1.50	822.01
5	38.493211	-83.603883	823.14	1.50	824.64
6	38.492955	-83.604258	824.75	1.50	826.25
7	38.492392	-83.605111	829.59	1.50	831.09
8	38.492187	-83.605417	829.46	1.50	830.96
9	38.492464	-83.605455	829.47	1.50	830.97
10	38.492938	-83.605476	825.00	1.50	826.50
11	38.493236	-83.605519	816.81	1.50	818.31
12	38.493241	-83.605143	825.15	1.50	826.65
13	38.493665	-83.605138	816.56	1.50	818.06
14	38.493673	-83.604591	816.47	1.50	817.97
15	38.493673	-83.604360	820.87	1.50	822.37
16	38.494614	-83.604296	800.70	1.50	802.20

Name: 414

Footprint area: 21.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.489168	-83.607815	830.35	1.50	831.85
2	38.489462	-83.607472	824.90	1.50	826.40
3	38.488336	-83.604586	834.27	1.50	835.77
4	38.487723	-83.604623	830.05	1.50	831.55
5	38.487593	-83.604934	829.33	1.50	830.83
6	38.488517	-83.607198	835.09	1.50	836.59
7	38.487518	-83.607205	832.48	1.50	833.98
8	38.487499	-83.606833	829.69	1.50	831.19
9	38.486994	-83.606840	832.00	1.50	833.50
10	38.486981	-83.607219	837.89	1.50	839.39
11	38.486375	-83.607233	833.73	1.50	835.23
12	38.486390	-83.608062	840.28	1.50	841.78
13	38.485967	-83.608059	837.66	1.50	839.16
14	38.485970	-83.608926	841.88	1.50	843.38
15	38.485329	-83.608989	837.55	1.50	839.05
16	38.485310	-83.609375	837.01	1.50	838.51
17	38.486452	-83.609407	843.93	1.50	845.43
18	38.486436	-83.610234	838.37	1.50	839.87
19	38.485379	-83.610397	836.82	1.50	838.32
20	38.485398	-83.610625	836.58	1.50	838.08
21	38.486468	-83.610480	836.56	1.50	838.06
22	38.486722	-83.610819	836.70	1.50	838.20
23	38.487312	-83.610965	830.10	1.50	831.60
24	38.487602	-83.610936	832.38	1.50	833.88
25	38.487578	-83.607846	836.65	1.50	838.15

Name: 415

Footprint area: 6.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.487593	-83.609204	839.98	1.50	841.48
2	38.487578	-83.607847	836.65	1.50	838.15
3	38.487761	-83.607843	836.65	1.50	838.15
4	38.487766	-83.609175	838.79	1.50	840.29
5	38.488160	-83.609183	836.59	1.50	838.09
6	38.488164	-83.609532	838.35	1.50	839.85
7	38.488626	-83.609537	836.04	1.50	837.54
8	38.488630	-83.609945	838.55	1.50	840.05
9	38.489067	-83.609971	838.38	1.50	839.88
10	38.489067	-83.610433	840.10	1.50	841.60
11	38.489583	-83.610395	838.75	1.50	840.25
12	38.489596	-83.610937	840.32	1.50	841.82
13	38.488647	-83.611066	840.22	1.50	841.72
14	38.488639	-83.610932	840.21	1.50	841.71
15	38.487606	-83.610942	832.50	1.50	834.00

Name: 416

Footprint area: 4.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484613	-83.612370	815.73	1.50	817.23
2	38.484619	-83.612019	823.27	1.50	824.77
3	38.482524	-83.612019	844.06	1.50	845.56
4	38.482542	-83.612972	844.66	1.50	846.16
5	38.483882	-83.612964	820.07	1.50	821.57

Name: 417

Footprint area: 20.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484867	-83.615048	832.26	1.50	833.76
2	38.484854	-83.614436	828.34	1.50	829.84
3	38.483989	-83.614474	839.75	1.50	841.25
4	38.483989	-83.614195	840.46	1.50	841.96
5	38.483074	-83.614211	839.64	1.50	841.14
6	38.483078	-83.614629	840.18	1.50	841.68
7	38.481864	-83.614720	842.15	1.50	843.65
8	38.481869	-83.614935	843.72	1.50	845.22
9	38.481520	-83.614940	844.97	1.50	846.47
10	38.480823	-83.615546	850.14	1.50	851.64
11	38.480141	-83.615613	853.19	1.50	854.69
12	38.480144	-83.614917	854.82	1.50	856.32
13	38.479713	-83.614934	860.02	1.50	861.52
14	38.479724	-83.617222	857.70	1.50	859.20
15	38.479268	-83.617208	862.42	1.50	863.92
16	38.479271	-83.617694	858.29	1.50	859.79
17	38.479726	-83.617658	857.75	1.50	859.25
18	38.479739	-83.618869	848.25	1.50	849.75
19	38.480107	-83.618857	852.57	1.50	854.07
20	38.480097	-83.617451	854.47	1.50	855.97
21	38.480987	-83.617392	851.24	1.50	852.74
22	38.480991	-83.617561	848.89	1.50	850.39
23	38.481497	-83.617500	853.11	1.50	854.61
24	38.481901	-83.616113	852.65	1.50	854.15

Name: 418

Footprint area: 6.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484877	-83.615056	831.98	1.50	833.48
2	38.481900	-83.616123	852.79	1.50	854.29
3	38.481493	-83.617507	852.84	1.50	854.34
4	38.481732	-83.617480	856.09	1.50	857.59
5	38.482135	-83.619696	853.20	1.50	854.70
6	38.482748	-83.619497	847.17	1.50	848.67
7	38.482643	-83.618392	855.44	1.50	856.94
8	38.481988	-83.618505	849.28	1.50	850.78
9	38.481862	-83.616654	860.71	1.50	862.21
10	38.482320	-83.616643	854.12	1.50	855.62
11	38.482623	-83.616590	850.84	1.50	852.34
12	38.483666	-83.615914	842.80	1.50	844.31

Name: 419

Footprint area: 4.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.461214	-83.622548	866.27	1.50	867.77
2	38.460638	-83.622580	872.75	1.50	874.25
3	38.459899	-83.621647	865.95	1.50	867.45
4	38.460306	-83.621593	861.91	1.50	863.41
5	38.460815	-83.619646	861.06	1.50	862.56
6	38.461247	-83.619727	862.24	1.50	863.74
7	38.461146	-83.621164	856.47	1.50	857.97
8	38.460810	-83.621475	859.44	1.50	860.94

Name: 420

Footprint area: 13.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.461747	-83.621245	856.51	1.50	858.01
2	38.462264	-83.621245	859.20	1.50	860.70
3	38.462814	-83.619598	872.07	1.50	873.58
4	38.462575	-83.619265	872.91	1.50	874.41
5	38.463293	-83.617195	873.95	1.50	875.45
6	38.463852	-83.617372	880.58	1.50	882.08
7	38.464343	-83.616535	879.09	1.50	880.59
8	38.464603	-83.615338	885.39	1.50	886.89
9	38.464221	-83.615269	882.52	1.50	884.02
10	38.464116	-83.615499	882.21	1.50	883.71
11	38.463457	-83.615553	875.86	1.50	877.36
12	38.463331	-83.616283	871.07	1.50	872.57
13	38.462852	-83.617082	868.29	1.50	869.79
14	38.461957	-83.618005	863.78	1.50	865.28
15	38.461747	-83.618933	866.47	1.50	867.97
16	38.461159	-83.618965	860.17	1.50	861.67
17	38.461466	-83.619566	860.22	1.50	861.72
18	38.461814	-83.619528	865.12	1.50	866.62
19	38.461596	-83.620456	859.78	1.50	861.28
20	38.461961	-83.620467	862.23	1.50	863.73

2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25
Description:
Threshold height : 50 ft
Direction: 247.0 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7
Description:
Threshold height : 50 ft
Direction: 66.8 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



Route Receptor(s)

Name: Black Diamond Road

Route type Two-way

View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.469533	-83.637775	866.75	5.00	871.75
2	38.469287	-83.637485	865.66	5.00	870.66
3	38.468728	-83.637437	865.68	5.00	870.68
4	38.468322	-83.637080	864.73	5.00	869.73
5	38.468203	-83.636515	873.21	5.00	878.21
6	38.468026	-83.632178	878.23	5.00	883.23
7	38.467782	-83.627840	869.75	5.00	874.75
8	38.467727	-83.627658	870.94	5.00	875.94
9	38.467441	-83.627448	869.71	5.00	874.72
10	38.466005	-83.626719	871.56	5.00	876.56
11	38.465123	-83.626257	867.37	5.00	872.37
12	38.464799	-83.626241	858.46	5.00	863.46
13	38.464358	-83.626370	854.26	5.00	859.26
14	38.463699	-83.626595	850.85	5.00	855.85
15	38.463443	-83.626595	849.21	5.00	854.21
16	38.463304	-83.626429	849.26	5.00	854.26
17	38.463195	-83.626075	851.30	5.00	856.30
18	38.462880	-83.625410	862.57	5.00	867.57
19	38.461666	-83.623908	876.83	5.00	881.83
20	38.461061	-83.623430	880.47	5.00	885.47
21	38.459973	-83.622626	874.11	5.00	879.11
22	38.459393	-83.622202	873.70	5.00	878.70
23	38.459314	-83.622100	874.88	5.00	879.88
24	38.459301	-83.621880	876.04	5.00	881.04
25	38.459788	-83.620861	876.68	5.00	881.68
26	38.460305	-83.619874	861.82	5.00	866.82
27	38.460460	-83.619294	861.76	5.00	866.76
28	38.460586	-83.618785	862.01	5.00	867.01
29	38.460914	-83.618280	862.00	5.00	867.00
30	38.461473	-83.617653	866.03	5.00	871.03
31	38.461880	-83.617234	867.95	5.00	872.95
32	38.462149	-83.616891	869.18	5.00	874.18
33	38.462409	-83.616408	873.98	5.00	878.98
34	38.462678	-83.615781	879.05	5.00	884.05
35	38.462863	-83.615459	879.68	5.00	884.68
36	38.463128	-83.615271	877.47	5.00	882.47
37	38.464354	-83.614654	890.16	5.00	895.16
38	38.465194	-83.614171	885.76	5.00	890.76
39	38.465455	-83.613984	883.04	5.00	888.04
40	38.465618	-83.613533	877.74	5.00	882.74
41	38.466005	-83.612519	867.58	5.00	872.58
42	38.466253	-83.611891	850.30	5.00	855.30
43	38.466421	-83.611645	844.93	5.00	849.93
44	38.466866	-83.611092	831.94	5.00	836.94
45	38.466984	-83.610862	828.62	5.00	833.62
46	38.467521	-83.609504	829.06	5.00	834.06
47	38.467714	-83.609258	827.64	5.00	832.64
48	38.467992	-83.609043	825.21	5.00	830.21
49	38.468626	-83.608678	825.37	5.00	830.37
50	38.469218	-83.608313	823.81	5.00	828.81
51	38.469453	-83.608104	821.11	5.00	826.11
52	38.469814	-83.607621	825.81	5.00	830.81
53	38.470251	-83.607246	822.28	5.00	827.28
54	38.471343	-83.606334	841.63	5.00	846.63
55	38.472192	-83.606109	836.92	5.00	841.92
56	38.474023	-83.605545	849.68	5.00	854.68
57	38.475144	-83.605256	846.28	5.00	851.28
58	38.476450	-83.604467	833.35	5.00	838.35
59	38.477802	-83.603571	836.93	5.00	841.93

Name: Breeze Road
Route type: Two-way
View angle: 50.0 deg



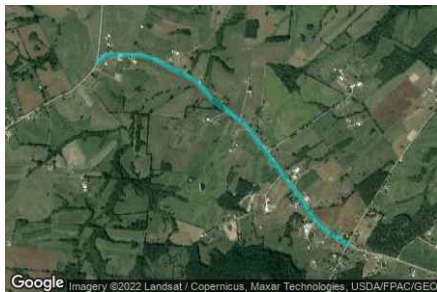
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.502666	-83.606324	816.76	5.00	821.76
2	38.502179	-83.606774	818.14	5.00	823.14
3	38.495109	-83.610787	839.74	5.00	844.74
4	38.494975	-83.611259	838.16	5.00	843.16
5	38.494639	-83.613855	820.44	5.00	825.44
6	38.493346	-83.614714	776.70	5.00	781.70
7	38.492036	-83.615937	778.66	5.00	783.67
8	38.491364	-83.616838	782.76	5.00	787.76
9	38.491045	-83.617095	790.29	5.00	795.29
10	38.490105	-83.617525	780.57	5.00	785.57
11	38.489651	-83.618168	784.49	5.00	789.49

Name: Carpenter Road
Route type: Two-way
View angle: 50.0 deg



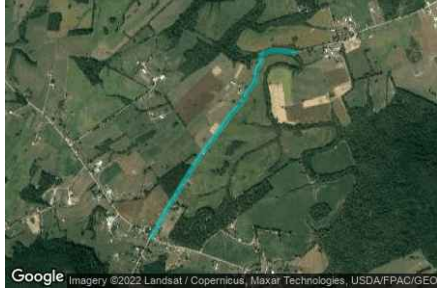
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.483604	-83.638432	888.77	5.00	893.77
2	38.482008	-83.637123	878.46	5.00	883.46
3	38.480597	-83.636415	884.06	5.00	889.06
4	38.479808	-83.636201	887.52	5.00	892.52
5	38.476264	-83.636523	887.25	5.00	892.25
6	38.474332	-83.636823	892.05	5.00	897.05
7	38.473710	-83.637059	891.52	5.00	896.52
8	38.472450	-83.637317	894.29	5.00	899.29
9	38.470787	-83.637617	871.96	5.00	876.96
10	38.469661	-83.637810	870.05	5.00	875.05
11	38.468099	-83.638304	877.63	5.00	882.63
12	38.466318	-83.639355	879.24	5.00	884.24
13	38.465646	-83.639634	862.31	5.00	867.31
14	38.464907	-83.640042	839.44	5.00	844.44
15	38.464117	-83.640943	842.62	5.00	847.62
16	38.463412	-83.641651	849.55	5.00	854.55
17	38.461278	-83.642273	857.09	5.00	862.09

Name: Foxport Road Route 344
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490470	-83.625827	863.26	5.00	868.26
2	38.490974	-83.625141	866.70	5.00	871.70
3	38.490974	-83.622094	841.96	5.00	846.96
4	38.490857	-83.621300	833.15	5.00	838.16
5	38.490538	-83.620377	822.44	5.00	827.44
6	38.489160	-83.617073	787.60	5.00	792.60
7	38.487833	-83.615571	796.45	5.00	801.45
8	38.486809	-83.613854	800.92	5.00	805.92
9	38.486087	-83.612695	813.94	5.00	818.94
10	38.482391	-83.609112	835.06	5.00	840.06
11	38.479620	-83.606655	837.80	5.00	842.80
12	38.478822	-83.605684	835.21	5.00	840.21
13	38.477755	-83.603597	837.80	5.00	842.80

Name: Route 989
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477811	-83.603561	836.70	5.00	841.70
2	38.479243	-83.602557	824.75	5.00	829.75
3	38.481881	-83.600500	829.39	5.00	834.39
4	38.483359	-83.599363	815.20	5.00	820.20
5	38.485745	-83.597046	808.57	5.00	813.57
6	38.486316	-83.596574	800.46	5.00	805.46
7	38.487071	-83.595651	778.35	5.00	783.35
8	38.487911	-83.595071	770.75	5.00	775.75
9	38.488600	-83.594363	777.20	5.00	782.20
10	38.489423	-83.594256	772.08	5.00	777.08
11	38.490095	-83.593763	766.98	5.00	771.98
12	38.490548	-83.593827	773.14	5.00	778.14
13	38.490817	-83.592776	771.64	5.00	776.64
14	38.490783	-83.591617	770.66	5.00	775.66
15	38.490649	-83.590887	779.46	5.00	784.46

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.466597	-83.626369	881.18	16.00	897.18
OP 2	38.461447	-83.623360	880.53	16.00	896.53
OP 3	38.459019	-83.622163	881.18	16.00	897.18
OP 4	38.459670	-83.620549	884.36	16.00	900.36
OP 5	38.460590	-83.623467	888.49	16.00	904.49
OP 6	38.463346	-83.612702	923.31	16.00	939.31
OP 7	38.466047	-83.611696	852.30	16.00	868.30
OP 8	38.468233	-83.609827	870.47	16.00	886.47
OP 9	38.469300	-83.606935	819.36	16.00	835.36
OP 10	38.468699	-83.608014	824.18	16.00	840.18
OP 11	38.469999	-83.608065	841.89	16.00	857.89
OP 12	38.470413	-83.607512	828.97	16.00	844.97
OP 13	38.470906	-83.607654	841.32	16.00	857.32
OP 14	38.471295	-83.607501	848.56	16.00	864.56
OP 15	38.478090	-83.603736	839.23	16.00	855.23
OP 16	38.477951	-83.604760	848.25	16.00	864.25
OP 17	38.478065	-83.605061	847.35	16.00	863.35
OP 18	38.478300	-83.605629	842.41	16.00	858.41
OP 19	38.481009	-83.608220	843.39	16.00	859.39
OP 20	38.479773	-83.613507	875.20	16.00	891.20
OP 21	38.480500	-83.612825	858.62	16.00	874.62
OP 22	38.478375	-83.614231	890.30	16.00	906.30
OP 23	38.478207	-83.615695	884.19	16.00	900.19
OP 24	38.478627	-83.616280	876.49	16.00	892.50
OP 25	38.480674	-83.610607	856.34	16.00	872.34
OP 26	38.482562	-83.608531	836.86	16.00	852.86
OP 27	38.483351	-83.610440	841.35	16.00	857.35
OP 28	38.483889	-83.610097	839.08	16.00	855.08
OP 29	38.484204	-83.610371	838.93	16.00	854.93
OP 30	38.484871	-83.611063	839.74	16.00	855.74
OP 31	38.485094	-83.611315	833.63	16.00	849.63
OP 32	38.486072	-83.612119	831.11	16.00	847.11
OP 33	38.488524	-83.603365	829.40	16.00	845.40
OP 34	38.496254	-83.609893	841.80	16.00	857.80
OP 35	38.495196	-83.610467	844.03	16.00	860.03
OP 36	38.471722	-83.623895	858.16	16.00	874.17
OP 37	38.472310	-83.627693	868.62	16.00	884.63
OP 38	38.482292	-83.626980	863.58	16.00	879.58
OP 39	38.487971	-83.628832	872.10	16.00	888.10
OP 40	38.497656	-83.608395	826.82	16.00	842.82

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
401	SA tracking	SA tracking	0	0	-	
402	SA tracking	SA tracking	0	0	-	
403	SA tracking	SA tracking	0	0	-	
404	SA tracking	SA tracking	0	0	-	
405	SA tracking	SA tracking	0	0	-	
406	SA tracking	SA tracking	0	0	-	
407	SA tracking	SA tracking	0	0	-	
408	SA tracking	SA tracking	0	0	-	
409	SA tracking	SA tracking	0	0	-	
410	SA tracking	SA tracking	0	0	-	
411	SA tracking	SA tracking	0	0	-	
412	SA tracking	SA tracking	1,580	0	-	-
413	SA tracking	SA tracking	0	0	-	
414	SA tracking	SA tracking	0	0	-	
415	SA tracking	SA tracking	0	0	-	
416	SA tracking	SA tracking	0	0	-	
417	SA tracking	SA tracking	0	0	-	
418	SA tracking	SA tracking	0	0	-	
419	SA tracking	SA tracking	0	0	-	
420	SA tracking	SA tracking	0	0	-	

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
412 (green)	112	0	0	0	0	0	0	0	0	0	6	647
412 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

401 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

402 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

403 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

404 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

405 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

406 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

407 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

408 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

409 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

410 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

411 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

412 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	603	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	357	0
Route: Black Diamond Road	0	0
Route: Breeze Road	620	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0

412 - Receptor (Fleming Mason Airport Runway 25)

No glare found

412 - Receptor (Fleming Mason Airport Runway 7)

No glare found

412 - OP Receptor (OP 1)

No glare found

412 - OP Receptor (OP 2)

No glare found

412 - OP Receptor (OP 3)

No glare found

412 - OP Receptor (OP 4)

No glare found

412 - OP Receptor (OP 5)

No glare found

412 - OP Receptor (OP 6)

No glare found

412 - OP Receptor (OP 7)

No glare found

412 - OP Receptor (OP 8)

No glare found

412 - OP Receptor (OP 9)

No glare found

412 - OP Receptor (OP 10)

No glare found

412 - OP Receptor (OP 11)

No glare found

412 - OP Receptor (OP 12)

No glare found

412 - OP Receptor (OP 13)

No glare found

412 - OP Receptor (OP 14)

No glare found

412 - OP Receptor (OP 15)

No glare found

412 - OP Receptor (OP 16)

No glare found

412 - OP Receptor (OP 17)

No glare found

412 - OP Receptor (OP 18)

No glare found

412 - OP Receptor (OP 19)

No glare found

412 - OP Receptor (OP 20)

No glare found

412 - OP Receptor (OP 21)

No glare found

412 - OP Receptor (OP 22)

No glare found

412 - OP Receptor (OP 23)

No glare found

412 - OP Receptor (OP 24)

No glare found

412 - OP Receptor (OP 25)

No glare found

412 - OP Receptor (OP 26)

No glare found

412 - OP Receptor (OP 27)

No glare found

412 - OP Receptor (OP 28)

No glare found

412 - OP Receptor (OP 29)

No glare found

412 - OP Receptor (OP 30)

No glare found

412 - OP Receptor (OP 31)

No glare found

412 - OP Receptor (OP 32)

No glare found

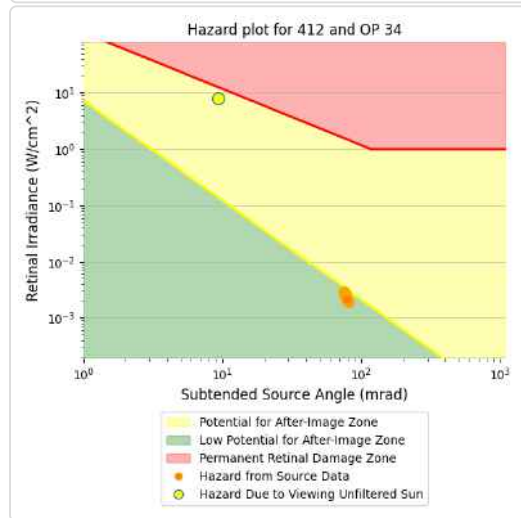
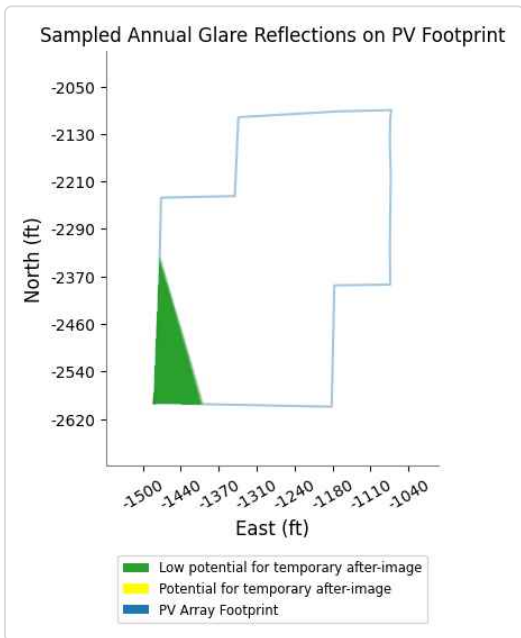
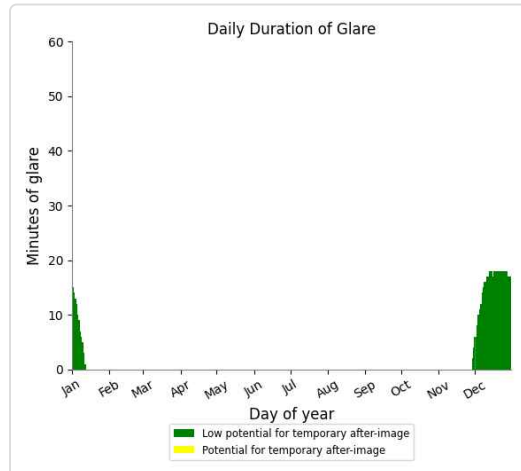
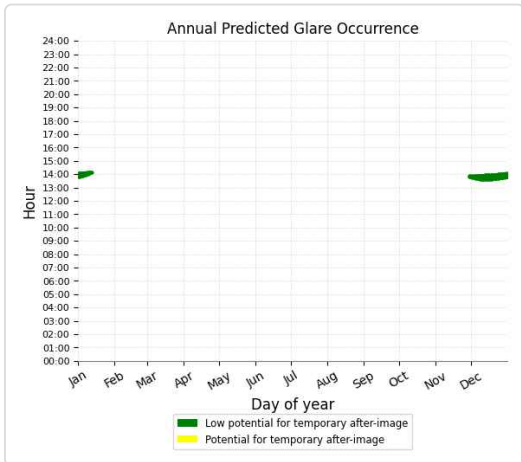
412 - OP Receptor (OP 33)

No glare found

412 - OP Receptor (OP 34)

PV array is expected to produce the following glare for receptors at this location:

- 603 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



412 - OP Receptor (OP 35)

No glare found

412 - OP Receptor (OP 36)

No glare found

412 - OP Receptor (OP 37)

No glare found

412 - OP Receptor (OP 38)

No glare found

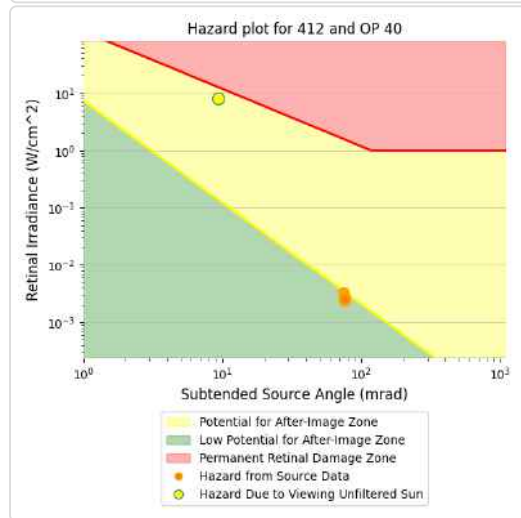
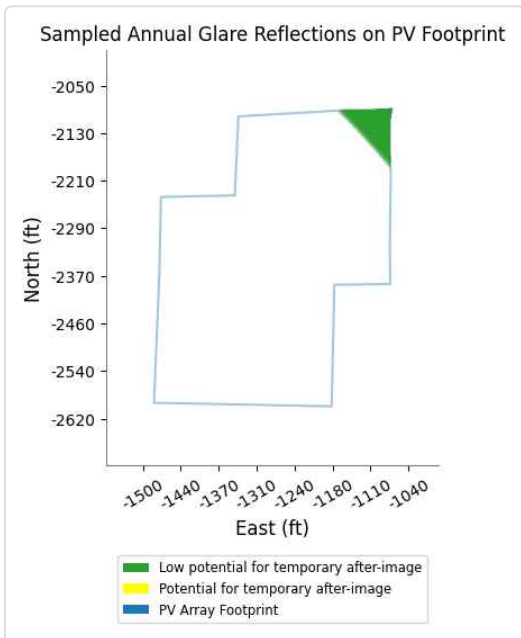
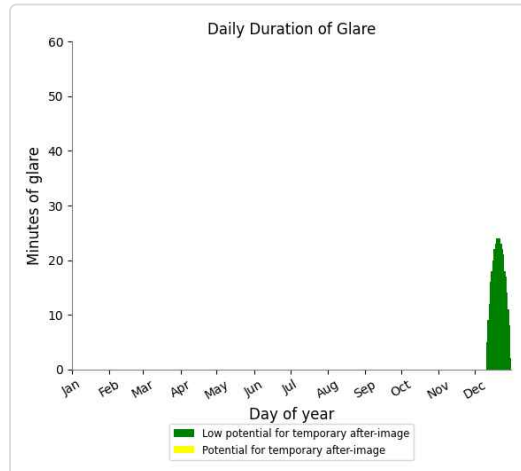
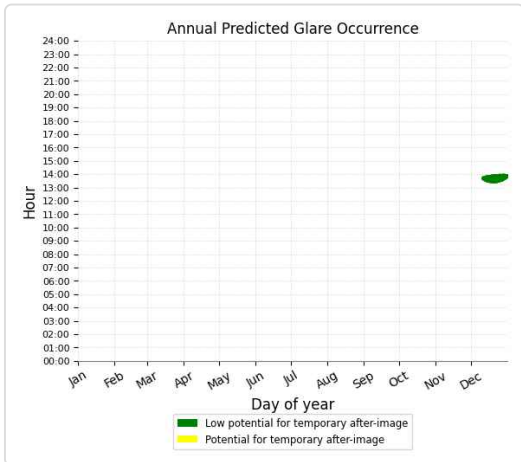
412 - OP Receptor (OP 39)

No glare found

412 - OP Receptor (OP 40)

PV array is expected to produce the following glare for receptors at this location:

- 357 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



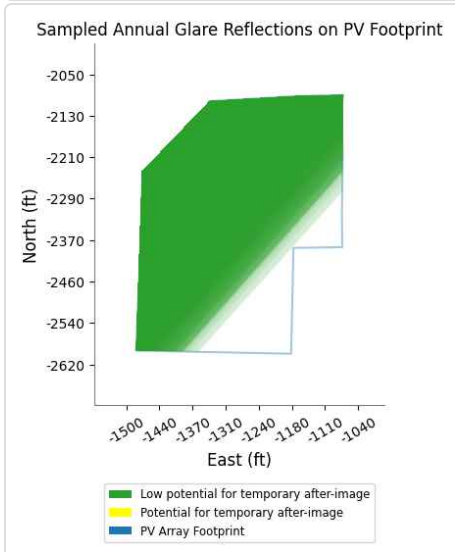
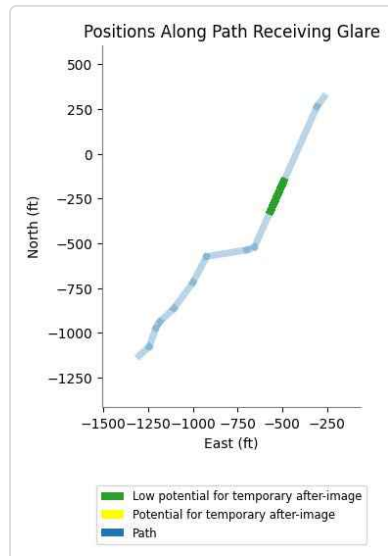
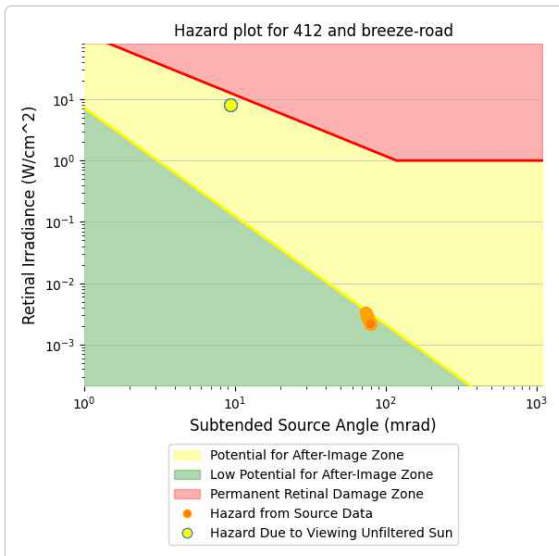
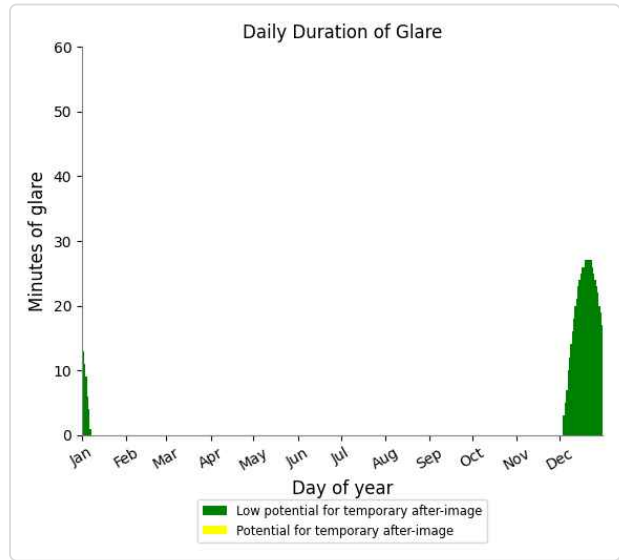
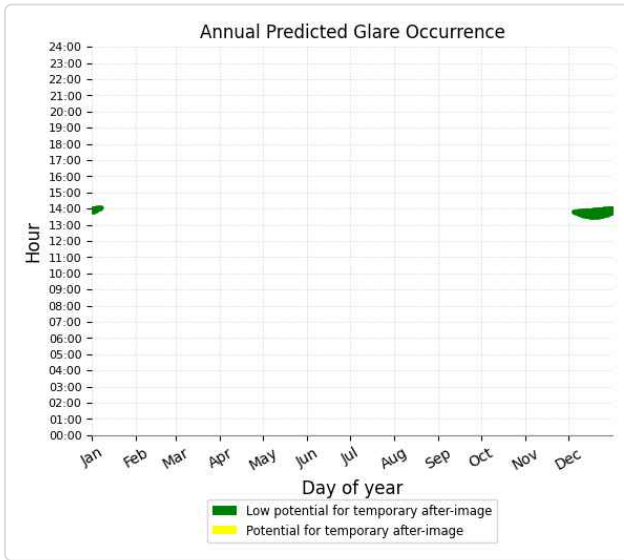
412 - Route Receptor (Black Diamond Road)

No glare found

412 - Route Receptor (Breeze Road)

PV array is expected to produce the following glare for receptors at this location:

- 620 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



412 - Route Receptor (Carpenter Road)

No glare found

412 - Route Receptor (Foxport Road Route 344)

No glare found

412 - Route Receptor (Route 989)

No glare found

413 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

414 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

415 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

416 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

417 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

418 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

419 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

420 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 4 5ft veh 10ft pan 52rest

Created Aug. 11, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73941.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results Glare with low potential for temporary after-image predicted

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
401	SA tracking	SA tracking	0	0	-
402	SA tracking	SA tracking	0	0	-
403	SA tracking	SA tracking	0	0	-
404	SA tracking	SA tracking	0	0	-
405	SA tracking	SA tracking	0	0	-
406	SA tracking	SA tracking	0	0	-
407	SA tracking	SA tracking	0	0	-
408	SA tracking	SA tracking	0	0	-
409	SA tracking	SA tracking	0	0	-
410	SA tracking	SA tracking	0	0	-
411	SA tracking	SA tracking	0	0	-
412	SA tracking	SA tracking	620	0	-
413	SA tracking	SA tracking	0	0	-
414	SA tracking	SA tracking	0	0	-
415	SA tracking	SA tracking	0	0	-
416	SA tracking	SA tracking	0	0	-
417	SA tracking	SA tracking	0	0	-
418	SA tracking	SA tracking	0	0	-
419	SA tracking	SA tracking	0	0	-
420	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 285.9 acres

Name: 401
Footprint area: 20.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.499805	-83.603269	778.47	10.00	788.47
2	38.499831	-83.602255	785.32	10.00	795.32
3	38.500221	-83.602261	769.39	10.00	779.39
4	38.500208	-83.601124	767.57	10.00	777.57
5	38.500670	-83.601113	760.84	10.00	770.84
6	38.500653	-83.599536	765.38	10.00	775.38
7	38.500171	-83.599525	776.48	10.00	786.48
8	38.500171	-83.599895	782.86	10.00	792.86
9	38.499621	-83.599863	785.58	10.00	795.58
10	38.499625	-83.600069	785.35	10.00	795.35
11	38.499320	-83.600071	788.85	10.00	798.85
12	38.499298	-83.600340	792.72	10.00	802.72
13	38.498750	-83.600329	796.95	10.00	806.95
14	38.498728	-83.600979	796.85	10.00	806.85
15	38.498393	-83.600981	802.53	10.00	812.53
16	38.498390	-83.601305	801.95	10.00	811.95
17	38.498002	-83.601300	803.76	10.00	813.76
18	38.497993	-83.601625	806.95	10.00	816.95
19	38.497577	-83.601583	807.34	10.00	817.34
20	38.497566	-83.601992	811.15	10.00	821.15
21	38.497246	-83.601981	808.22	10.00	818.22
22	38.497241	-83.602100	810.38	10.00	820.38
23	38.496730	-83.602116	800.92	10.00	810.92
24	38.496742	-83.603462	813.86	10.00	823.86

Name: 402
Footprint area: 3.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.494063	-83.607043	824.90	10.00	834.90
2	38.493239	-83.607046	832.08	10.00	842.08
3	38.493236	-83.606029	817.37	10.00	827.38
4	38.494033	-83.606018	820.32	10.00	830.32
5	38.494050	-83.605911	816.53	10.00	826.53
6	38.494529	-83.605933	813.58	10.00	823.58
7	38.494512	-83.607038	806.95	10.00	816.95

Name: 403

Footprint area: 22.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.470917	-83.611421	935.56	10.00	945.56
2	38.470052	-83.611416	931.55	10.00	941.55
3	38.470207	-83.622332	858.39	10.00	868.39
4	38.471039	-83.622311	864.63	10.00	874.63

Name: 404

Footprint area: 22.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.470064	-83.611432	930.40	10.00	940.40
2	38.469178	-83.611432	884.40	10.00	894.40
3	38.469359	-83.622289	850.94	10.00	860.94
4	38.470207	-83.622332	858.39	10.00	868.39

Name: 405

Footprint area: 6.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.469174	-83.611427	883.90	10.00	893.90
2	38.468342	-83.611416	850.90	10.00	860.90
3	38.468149	-83.611292	846.44	10.00	856.44
4	38.468153	-83.611094	844.13	10.00	854.13
5	38.467246	-83.611046	831.95	10.00	841.95
6	38.467233	-83.611646	845.37	10.00	855.37
7	38.467679	-83.611612	846.12	10.00	856.12
8	38.467838	-83.611468	845.63	10.00	855.63
9	38.468502	-83.611482	857.96	10.00	867.96
10	38.468485	-83.612672	851.56	10.00	861.56
11	38.467357	-83.612709	868.95	10.00	878.95
12	38.467359	-83.612197	861.12	10.00	871.12
13	38.466921	-83.612201	852.09	10.00	862.09
14	38.466892	-83.612817	860.75	10.00	870.75
15	38.466450	-83.612819	854.87	10.00	864.88
16	38.466458	-83.613619	873.73	10.00	883.73
17	38.466052	-83.613668	883.56	10.00	893.56
18	38.466054	-83.613835	883.21	10.00	893.21
19	38.466956	-83.613739	884.47	10.00	894.47
20	38.467376	-83.613505	890.58	10.00	900.58
21	38.467353	-83.612906	874.47	10.00	884.47
22	38.469195	-83.612870	871.26	10.00	881.26

Name: 406

Footprint area: 24.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.469250	-83.614916	869.33	10.00	879.33
2	38.467173	-83.614873	881.43	10.00	891.43
3	38.467147	-83.614219	886.72	10.00	896.72
4	38.466173	-83.614219	884.77	10.00	894.77
5	38.466156	-83.614508	882.35	10.00	892.35
6	38.466677	-83.614530	884.17	10.00	894.17
7	38.466677	-83.614744	884.67	10.00	894.67
8	38.466198	-83.614712	881.27	10.00	891.27
9	38.466249	-83.615453	876.85	10.00	886.85
10	38.466820	-83.615399	875.85	10.00	885.85
11	38.466753	-83.617512	874.88	10.00	884.88
12	38.466181	-83.617523	866.08	10.00	876.08
13	38.466156	-83.618424	869.38	10.00	879.38
14	38.469264	-83.618339	855.80	10.00	865.80

Name: 407

Footprint area: 24.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.469275	-83.618342	855.80	10.00	865.80
2	38.469342	-83.622301	850.89	10.00	860.89
3	38.466738	-83.622414	871.64	10.00	881.64
4	38.466696	-83.618417	876.09	10.00	886.09

Name: 408

Footprint area: 20.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466155	-83.618467	869.38	10.00	879.38
2	38.465198	-83.619186	862.08	10.00	872.08
3	38.463576	-83.622190	853.11	10.00	863.11
4	38.463601	-83.622630	852.78	10.00	862.78
5	38.466726	-83.622405	871.86	10.00	881.86
6	38.466693	-83.618446	876.02	10.00	886.02

Name: 409

Footprint area: 18.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.464587	-83.622569	862.37	10.00	872.38
2	38.464620	-83.624114	856.99	10.00	866.99
3	38.465570	-83.624018	862.76	10.00	872.76
4	38.465544	-83.625595	866.37	10.00	876.37
5	38.464940	-83.625638	859.73	10.00	869.73
6	38.464923	-83.625874	860.06	10.00	870.06
7	38.466006	-83.625949	872.08	10.00	882.08
8	38.465998	-83.625627	870.73	10.00	880.73
9	38.467518	-83.625595	876.53	10.00	886.53
10	38.467485	-83.622398	863.46	10.00	873.46

Name: 410

Footprint area: 16.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.463898	-83.620670	857.34	10.00	867.34
2	38.463058	-83.620681	862.76	10.00	872.76
3	38.463133	-83.619361	876.28	10.00	886.28
4	38.464612	-83.616883	876.60	10.00	886.60
5	38.464935	-83.616845	874.91	10.00	884.91
6	38.464948	-83.615950	882.63	10.00	892.63
7	38.465960	-83.615939	879.14	10.00	889.14
8	38.465988	-83.617564	866.71	10.00	876.71

Name: 411

Footprint area: 21.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.496744	-83.603475	813.90	10.00	823.90
2	38.496312	-83.603470	814.91	10.00	824.91
3	38.496329	-83.604409	815.75	10.00	825.75
4	38.496772	-83.604390	811.09	10.00	821.10
5	38.496797	-83.606059	818.53	10.00	828.53
6	38.495979	-83.606074	811.12	10.00	821.12
7	38.495968	-83.606729	821.52	10.00	831.52
8	38.495508	-83.606746	815.28	10.00	825.28
9	38.495535	-83.607851	815.82	10.00	825.82
10	38.496360	-83.607838	827.27	10.00	837.27
11	38.496373	-83.607711	826.80	10.00	836.80
12	38.497238	-83.607559	817.21	10.00	827.21
13	38.497232	-83.607316	815.70	10.00	825.70
14	38.497636	-83.607292	804.54	10.00	814.54
15	38.497627	-83.606583	821.78	10.00	831.78
16	38.498178	-83.606566	801.24	10.00	811.24
17	38.498181	-83.605992	815.34	10.00	825.34
18	38.498550	-83.605981	805.19	10.00	815.19
19	38.498552	-83.605551	812.60	10.00	822.60
20	38.498927	-83.605527	799.81	10.00	809.81
21	38.498919	-83.605029	801.18	10.00	811.18
22	38.499332	-83.604993	777.62	10.00	787.62
23	38.499321	-83.604561	776.32	10.00	786.32
24	38.498933	-83.604525	792.24	10.00	802.24
25	38.498920	-83.604244	784.95	10.00	794.95
26	38.498533	-83.604232	792.68	10.00	802.68
27	38.498525	-83.603360	789.74	10.00	799.74

Name: 412

Footprint area: 3.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.493278	-83.608443	826.67	10.00	836.67
2	38.493648	-83.608432	816.02	10.00	826.02
3	38.493656	-83.607987	812.88	10.00	822.88
4	38.494030	-83.607965	806.71	10.00	816.71
5	38.494058	-83.607344	820.38	10.00	830.38
6	38.494063	-83.607041	824.90	10.00	834.90
7	38.494026	-83.607048	825.83	10.00	835.83
8	38.493923	-83.607050	828.80	10.00	838.80
9	38.493751	-83.607045	831.11	10.00	841.11
10	38.493406	-83.607050	832.49	10.00	842.49
11	38.493236	-83.607048	832.08	10.00	842.08
12	38.493232	-83.607386	832.12	10.00	842.12
13	38.492657	-83.607402	833.93	10.00	843.93
14	38.492674	-83.608475	828.50	10.00	838.50

Name: 413

Footprint area: 5.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.494609	-83.604258	801.75	10.00	811.75
2	38.494618	-83.603652	804.96	10.00	814.96
3	38.494164	-83.603663	816.44	10.00	826.44
4	38.493394	-83.603644	820.51	10.00	830.51
5	38.493211	-83.603883	823.14	10.00	833.15
6	38.492955	-83.604258	824.75	10.00	834.75
7	38.492392	-83.605111	829.59	10.00	839.59
8	38.492187	-83.605417	829.46	10.00	839.46
9	38.492464	-83.605455	829.47	10.00	839.47
10	38.492938	-83.605476	825.00	10.00	835.00
11	38.493236	-83.605519	816.81	10.00	826.81
12	38.493241	-83.605143	825.15	10.00	835.15
13	38.493665	-83.605138	816.56	10.00	826.56
14	38.493673	-83.604591	816.47	10.00	826.47
15	38.493673	-83.604360	820.87	10.00	830.87
16	38.494614	-83.604296	800.70	10.00	810.70

Name: 414

Footprint area: 21.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.489168	-83.607815	830.35	10.00	840.35
2	38.489462	-83.607472	824.90	10.00	834.90
3	38.488336	-83.604586	834.27	10.00	844.27
4	38.487723	-83.604623	830.05	10.00	840.05
5	38.487593	-83.604934	829.33	10.00	839.33
6	38.488517	-83.607198	835.09	10.00	845.10
7	38.487518	-83.607205	832.48	10.00	842.48
8	38.487499	-83.606833	829.69	10.00	839.69
9	38.486994	-83.606840	832.00	10.00	842.00
10	38.486981	-83.607219	837.89	10.00	847.89
11	38.486375	-83.607233	833.73	10.00	843.73
12	38.486390	-83.608062	840.28	10.00	850.28
13	38.485967	-83.608059	837.66	10.00	847.66
14	38.485970	-83.608926	841.88	10.00	851.88
15	38.485329	-83.608989	837.55	10.00	847.55
16	38.485310	-83.609375	837.01	10.00	847.01
17	38.486452	-83.609407	843.93	10.00	853.93
18	38.486436	-83.610234	838.37	10.00	848.37
19	38.485379	-83.610397	836.82	10.00	846.82
20	38.485398	-83.610625	836.58	10.00	846.58
21	38.486468	-83.610480	836.56	10.00	846.56
22	38.486722	-83.610819	836.70	10.00	846.70
23	38.487312	-83.610965	830.10	10.00	840.10
24	38.487602	-83.610936	832.38	10.00	842.38
25	38.487578	-83.607846	836.65	10.00	846.65

Name: 415

Footprint area: 6.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.487593	-83.609204	839.98	10.00	849.99
2	38.487578	-83.607847	836.65	10.00	846.65
3	38.487761	-83.607843	836.65	10.00	846.65
4	38.487766	-83.609175	838.79	10.00	848.79
5	38.488160	-83.609183	836.59	10.00	846.59
6	38.488164	-83.609532	838.35	10.00	848.35
7	38.488626	-83.609537	836.04	10.00	846.04
8	38.488630	-83.609945	838.55	10.00	848.55
9	38.489067	-83.609971	838.38	10.00	848.38
10	38.489067	-83.610433	840.10	10.00	850.10
11	38.489583	-83.610395	838.75	10.00	848.76
12	38.489596	-83.610937	840.32	10.00	850.32
13	38.488647	-83.611066	840.22	10.00	850.22
14	38.488639	-83.610932	840.21	10.00	850.21
15	38.487606	-83.610942	832.50	10.00	842.50

Name: 416

Footprint area: 4.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484613	-83.612370	815.73	10.00	825.73
2	38.484619	-83.612019	823.27	10.00	833.27
3	38.482524	-83.612019	844.06	10.00	854.06
4	38.482542	-83.612972	844.66	10.00	854.66
5	38.483882	-83.612964	820.07	10.00	830.07

Name: 417

Footprint area: 20.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484867	-83.615048	832.26	10.00	842.26
2	38.484854	-83.614436	828.34	10.00	838.34
3	38.483989	-83.614474	839.75	10.00	849.75
4	38.483989	-83.614195	840.46	10.00	850.46
5	38.483074	-83.614211	839.64	10.00	849.64
6	38.483078	-83.614629	840.18	10.00	850.18
7	38.481864	-83.614720	842.15	10.00	852.15
8	38.481869	-83.614935	843.72	10.00	853.72
9	38.481520	-83.614940	844.97	10.00	854.97
10	38.480823	-83.615546	850.14	10.00	860.14
11	38.480141	-83.615613	853.19	10.00	863.19
12	38.480144	-83.614917	854.82	10.00	864.82
13	38.479713	-83.614934	860.02	10.00	870.02
14	38.479724	-83.617222	857.70	10.00	867.70
15	38.479268	-83.617208	862.42	10.00	872.42
16	38.479271	-83.617694	858.29	10.00	868.29
17	38.479726	-83.617658	857.75	10.00	867.75
18	38.479739	-83.618869	848.25	10.00	858.25
19	38.480107	-83.618857	852.57	10.00	862.57
20	38.480097	-83.617451	854.47	10.00	864.47
21	38.480987	-83.617392	851.24	10.00	861.24
22	38.480991	-83.617561	848.89	10.00	858.90
23	38.481497	-83.617500	853.11	10.00	863.11
24	38.481901	-83.616113	852.65	10.00	862.65

Name: 418

Footprint area: 6.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484877	-83.615056	831.98	10.00	841.98
2	38.481900	-83.616123	852.79	10.00	862.79
3	38.481493	-83.617507	852.84	10.00	862.84
4	38.481732	-83.617480	856.09	10.00	866.09
5	38.482135	-83.619696	853.20	10.00	863.20
6	38.482748	-83.619497	847.17	10.00	857.17
7	38.482643	-83.618392	855.44	10.00	865.44
8	38.481988	-83.618505	849.28	10.00	859.28
9	38.481862	-83.616654	860.71	10.00	870.71
10	38.482320	-83.616643	854.12	10.00	864.12
11	38.482623	-83.616590	850.84	10.00	860.84
12	38.483666	-83.615914	842.80	10.00	852.81

Name: 419

Footprint area: 4.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.461214	-83.622548	866.27	10.00	876.27
2	38.460638	-83.622580	872.75	10.00	882.75
3	38.459899	-83.621647	865.95	10.00	875.95
4	38.460306	-83.621593	861.91	10.00	871.91
5	38.460815	-83.619646	861.06	10.00	871.06
6	38.461247	-83.619727	862.24	10.00	872.24
7	38.461146	-83.621164	856.47	10.00	866.48
8	38.460810	-83.621475	859.44	10.00	869.44

Name: 420

Footprint area: 13.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.461747	-83.621245	856.51	10.00	866.51
2	38.462264	-83.621245	859.20	10.00	869.20
3	38.462814	-83.619598	872.07	10.00	882.08
4	38.462575	-83.619265	872.91	10.00	882.91
5	38.463293	-83.617195	873.95	10.00	883.95
6	38.463852	-83.617372	880.58	10.00	890.58
7	38.464343	-83.616535	879.09	10.00	889.09
8	38.464603	-83.615338	885.39	10.00	895.39
9	38.464221	-83.615269	882.52	10.00	892.52
10	38.464116	-83.615499	882.21	10.00	892.21
11	38.463457	-83.615553	875.86	10.00	885.86
12	38.463331	-83.616283	871.07	10.00	881.07
13	38.462852	-83.617082	868.29	10.00	878.29
14	38.461957	-83.618005	863.78	10.00	873.78
15	38.461747	-83.618933	866.47	10.00	876.47
16	38.461159	-83.618965	860.17	10.00	870.17
17	38.461466	-83.619566	860.22	10.00	870.22
18	38.461814	-83.619528	865.12	10.00	875.12
19	38.461596	-83.620456	859.78	10.00	869.78
20	38.461961	-83.620467	862.23	10.00	872.23

2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25
Description:
Threshold height : 50 ft
Direction: 247.0 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7
Description:
Threshold height : 50 ft
Direction: 66.8 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



Route Receptor(s)

Name: Black Diamond Road

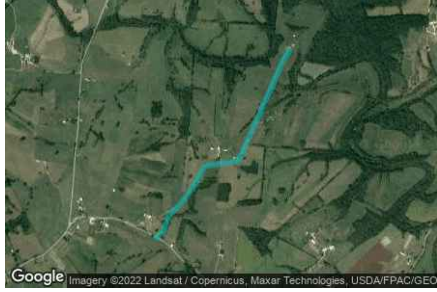
Route type Two-way

View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.469533	-83.637775	866.75	5.00	871.75
2	38.469287	-83.637485	865.66	5.00	870.66
3	38.468728	-83.637437	865.68	5.00	870.68
4	38.468322	-83.637080	864.73	5.00	869.73
5	38.468203	-83.636515	873.21	5.00	878.21
6	38.468026	-83.632178	878.23	5.00	883.23
7	38.467782	-83.627840	869.75	5.00	874.75
8	38.467727	-83.627658	870.94	5.00	875.94
9	38.467441	-83.627448	869.71	5.00	874.72
10	38.466005	-83.626719	871.56	5.00	876.56
11	38.465133	-83.626263	867.57	5.00	872.57
12	38.464799	-83.626241	858.46	5.00	863.46
13	38.464358	-83.626370	854.26	5.00	859.26
14	38.463699	-83.626595	850.85	5.00	855.85
15	38.463443	-83.626595	849.21	5.00	854.21
16	38.463304	-83.626429	849.26	5.00	854.26
17	38.463195	-83.626075	851.30	5.00	856.30
18	38.462880	-83.625410	862.57	5.00	867.57
19	38.461666	-83.623908	876.83	5.00	881.83
20	38.461061	-83.623430	880.47	5.00	885.47
21	38.459973	-83.622626	874.11	5.00	879.11
22	38.459393	-83.622202	873.70	5.00	878.70
23	38.459314	-83.622100	874.88	5.00	879.88
24	38.459301	-83.621880	876.04	5.00	881.04
25	38.459788	-83.620861	876.68	5.00	881.68
26	38.460303	-83.619868	861.82	5.00	866.82
27	38.460460	-83.619294	861.76	5.00	866.76
28	38.460586	-83.618785	862.01	5.00	867.01
29	38.460914	-83.618280	862.00	5.00	867.00
30	38.461473	-83.617653	866.03	5.00	871.03
31	38.461880	-83.617234	867.95	5.00	872.95
32	38.462149	-83.616891	869.18	5.00	874.18
33	38.462409	-83.616408	873.98	5.00	878.98
34	38.462678	-83.615781	879.05	5.00	884.05
35	38.462863	-83.615459	879.68	5.00	884.68
36	38.463128	-83.615271	877.47	5.00	882.47
37	38.464354	-83.614654	890.16	5.00	895.16
38	38.465194	-83.614171	885.76	5.00	890.76
39	38.465455	-83.613984	883.04	5.00	888.04
40	38.465618	-83.613533	877.74	5.00	882.74
41	38.466005	-83.612519	867.58	5.00	872.58
42	38.466253	-83.611891	850.30	5.00	855.30
43	38.466421	-83.611645	844.93	5.00	849.93
44	38.466866	-83.611092	831.94	5.00	836.94
45	38.466984	-83.610862	828.62	5.00	833.62
46	38.467521	-83.609504	829.06	5.00	834.06
47	38.467714	-83.609258	827.64	5.00	832.64
48	38.467992	-83.609043	825.21	5.00	830.21
49	38.468626	-83.608678	825.37	5.00	830.37
50	38.469218	-83.608313	823.81	5.00	828.81
51	38.469453	-83.608104	821.11	5.00	826.11
52	38.469814	-83.607621	825.81	5.00	830.81
53	38.470251	-83.607246	822.28	5.00	827.28
54	38.471343	-83.606334	841.63	5.00	846.63
55	38.472192	-83.606109	836.92	5.00	841.92
56	38.474023	-83.605545	849.68	5.00	854.68
57	38.475144	-83.605256	846.28	5.00	851.28
58	38.476463	-83.604456	833.06	5.00	838.06
59	38.477802	-83.603571	836.93	5.00	841.93

Name: Breeze Road
Route type: Two-way
View angle: 50.0 deg



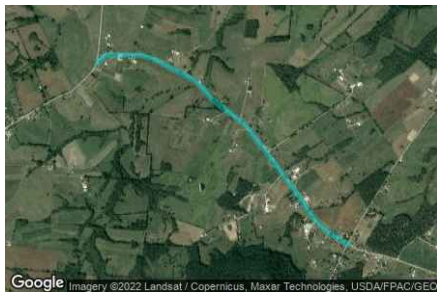
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.502666	-83.606324	816.76	5.00	821.76
2	38.502179	-83.606774	818.14	5.00	823.14
3	38.495109	-83.610787	839.74	5.00	844.74
4	38.494975	-83.611259	838.16	5.00	843.16
5	38.494639	-83.613855	820.44	5.00	825.44
6	38.493346	-83.614714	776.70	5.00	781.70
7	38.492036	-83.615937	778.66	5.00	783.67
8	38.491364	-83.616838	782.76	5.00	787.76
9	38.491045	-83.617095	790.29	5.00	795.29
10	38.490105	-83.617525	780.57	5.00	785.57
11	38.489651	-83.618168	784.49	5.00	789.49

Name: Carpenter Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.483604	-83.638432	888.77	5.00	893.77
2	38.482008	-83.637123	878.46	5.00	883.46
3	38.480597	-83.636415	884.06	5.00	889.06
4	38.479808	-83.636201	887.52	5.00	892.52
5	38.476264	-83.636523	887.25	5.00	892.25
6	38.474332	-83.636823	892.05	5.00	897.05
7	38.473710	-83.637059	891.52	5.00	896.52
8	38.472450	-83.637317	894.29	5.00	899.29
9	38.470787	-83.637617	871.96	5.00	876.96
10	38.469661	-83.637810	870.05	5.00	875.05
11	38.468099	-83.638304	877.63	5.00	882.63
12	38.466318	-83.639355	879.24	5.00	884.24
13	38.465646	-83.639634	862.31	5.00	867.31
14	38.464907	-83.640042	839.44	5.00	844.44
15	38.464117	-83.640943	842.62	5.00	847.62
16	38.463412	-83.641651	849.55	5.00	854.55
17	38.461278	-83.642273	857.09	5.00	862.09

Name: Foxport Road Route 344
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490470	-83.625827	863.26	5.00	868.26
2	38.490974	-83.625141	866.70	5.00	871.70
3	38.490974	-83.622094	841.96	5.00	846.96
4	38.490857	-83.621300	833.15	5.00	838.16
5	38.490538	-83.620377	822.44	5.00	827.44
6	38.489160	-83.617073	787.60	5.00	792.60
7	38.487833	-83.615571	796.45	5.00	801.45
8	38.486809	-83.613854	800.92	5.00	805.92
9	38.486087	-83.612695	813.94	5.00	818.94
10	38.482391	-83.609112	835.06	5.00	840.06
11	38.479620	-83.606655	837.80	5.00	842.80
12	38.478822	-83.605684	835.21	5.00	840.21
13	38.477755	-83.603597	837.80	5.00	842.80

Name: Route 989
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477811	-83.603561	836.70	5.00	841.70
2	38.479243	-83.602557	824.75	5.00	829.75
3	38.481881	-83.600500	829.39	5.00	834.39
4	38.483359	-83.599363	815.20	5.00	820.20
5	38.485745	-83.597046	808.57	5.00	813.57
6	38.486316	-83.596574	800.46	5.00	805.46
7	38.487071	-83.595651	778.35	5.00	783.35
8	38.487911	-83.595071	770.75	5.00	775.75
9	38.488600	-83.594363	777.20	5.00	782.20
10	38.489423	-83.594256	772.08	5.00	777.08
11	38.490095	-83.593763	766.98	5.00	771.98
12	38.490548	-83.593827	773.14	5.00	778.14
13	38.490817	-83.592776	771.64	5.00	776.64
14	38.490783	-83.591617	770.66	5.00	775.66
15	38.490649	-83.590887	779.46	5.00	784.46

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.466597	-83.626369	881.18	16.00	897.18
OP 2	38.461447	-83.623360	880.53	16.00	896.53
OP 3	38.459019	-83.622163	881.18	16.00	897.18
OP 4	38.459670	-83.620549	884.36	16.00	900.36
OP 5	38.460590	-83.623467	888.49	16.00	904.49
OP 6	38.463346	-83.612702	923.31	16.00	939.31
OP 7	38.466047	-83.611696	852.30	16.00	868.30
OP 8	38.468233	-83.609827	870.47	16.00	886.47
OP 9	38.469300	-83.606935	819.36	16.00	835.36
OP 10	38.468699	-83.608014	824.18	16.00	840.18
OP 11	38.469999	-83.608065	841.89	16.00	857.89
OP 12	38.470413	-83.607512	828.97	16.00	844.97
OP 13	38.470906	-83.607654	841.32	16.00	857.32
OP 14	38.471295	-83.607501	848.56	16.00	864.56
OP 15	38.478090	-83.603736	839.23	16.00	855.23
OP 16	38.477951	-83.604760	848.25	16.00	864.25
OP 17	38.478065	-83.605061	847.35	16.00	863.35
OP 18	38.478300	-83.605629	842.41	16.00	858.41
OP 19	38.481009	-83.608220	843.39	16.00	859.39
OP 20	38.479773	-83.613507	875.20	16.00	891.20
OP 21	38.480500	-83.612825	858.62	16.00	874.62
OP 22	38.478375	-83.614231	890.30	16.00	906.30
OP 23	38.478207	-83.615695	884.19	16.00	900.19
OP 24	38.478627	-83.616280	876.49	16.00	892.50
OP 25	38.480674	-83.610607	856.34	16.00	872.34
OP 26	38.482562	-83.608531	836.86	16.00	852.86
OP 27	38.483351	-83.610440	841.35	16.00	857.35
OP 28	38.483889	-83.610097	839.08	16.00	855.08
OP 29	38.484204	-83.610371	838.93	16.00	854.93
OP 30	38.484871	-83.611063	839.74	16.00	855.74
OP 31	38.485094	-83.611315	833.63	16.00	849.63
OP 32	38.486072	-83.612119	831.11	16.00	847.11
OP 33	38.488524	-83.603365	829.40	16.00	845.40
OP 34	38.496254	-83.609893	841.80	16.00	857.80
OP 35	38.495196	-83.610467	844.03	16.00	860.03
OP 36	38.471722	-83.623895	858.16	16.00	874.17
OP 37	38.472310	-83.627693	868.62	16.00	884.63
OP 38	38.482292	-83.626980	863.58	16.00	879.58
OP 39	38.487971	-83.628832	872.10	16.00	888.10
OP 40	38.497656	-83.608395	826.82	16.00	842.82

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
401	SA tracking	SA tracking	0	0	-	
402	SA tracking	SA tracking	0	0	-	
403	SA tracking	SA tracking	0	0	-	
404	SA tracking	SA tracking	0	0	-	
405	SA tracking	SA tracking	0	0	-	
406	SA tracking	SA tracking	0	0	-	
407	SA tracking	SA tracking	0	0	-	
408	SA tracking	SA tracking	0	0	-	
409	SA tracking	SA tracking	0	0	-	
410	SA tracking	SA tracking	0	0	-	
411	SA tracking	SA tracking	0	0	-	
412	SA tracking	SA tracking	620	0	-	-
413	SA tracking	SA tracking	0	0	-	
414	SA tracking	SA tracking	0	0	-	
415	SA tracking	SA tracking	0	0	-	
416	SA tracking	SA tracking	0	0	-	
417	SA tracking	SA tracking	0	0	-	
418	SA tracking	SA tracking	0	0	-	
419	SA tracking	SA tracking	0	0	-	
420	SA tracking	SA tracking	0	0	-	

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
412 (green)	39	0	0	0	0	0	0	0	0	0	0	340
412 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

401 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

402 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

403 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

404 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

405 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

406 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

407 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

408 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

409 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

410 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

411 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

412 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	360	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	10	0
Route: Black Diamond Road	0	0
Route: Breeze Road	250	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0

412 - Receptor (Fleming Mason Airport Runway 25)

No glare found

412 - Receptor (Fleming Mason Airport Runway 7)

No glare found

412 - OP Receptor (OP 1)

No glare found

412 - OP Receptor (OP 2)

No glare found

412 - OP Receptor (OP 3)

No glare found

412 - OP Receptor (OP 4)

No glare found

412 - OP Receptor (OP 5)

No glare found

412 - OP Receptor (OP 6)

No glare found

412 - OP Receptor (OP 7)

No glare found

412 - OP Receptor (OP 8)

No glare found

412 - OP Receptor (OP 9)

No glare found

412 - OP Receptor (OP 10)

No glare found

412 - OP Receptor (OP 11)

No glare found

412 - OP Receptor (OP 12)

No glare found

412 - OP Receptor (OP 13)

No glare found

412 - OP Receptor (OP 14)

No glare found

412 - OP Receptor (OP 15)

No glare found

412 - OP Receptor (OP 16)

No glare found

412 - OP Receptor (OP 17)

No glare found

412 - OP Receptor (OP 18)

No glare found

412 - OP Receptor (OP 19)

No glare found

412 - OP Receptor (OP 20)

No glare found

412 - OP Receptor (OP 21)

No glare found

412 - OP Receptor (OP 22)

No glare found

412 - OP Receptor (OP 23)

No glare found

412 - OP Receptor (OP 24)

No glare found

412 - OP Receptor (OP 25)

No glare found

412 - OP Receptor (OP 26)

No glare found

412 - OP Receptor (OP 27)

No glare found

412 - OP Receptor (OP 28)

No glare found

412 - OP Receptor (OP 29)

No glare found

412 - OP Receptor (OP 30)

No glare found

412 - OP Receptor (OP 31)

No glare found

412 - OP Receptor (OP 32)

No glare found

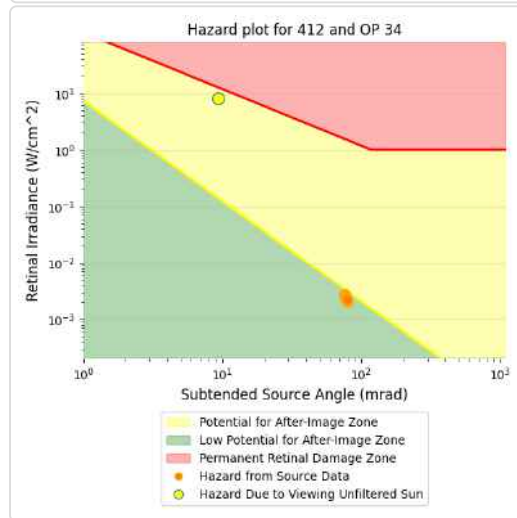
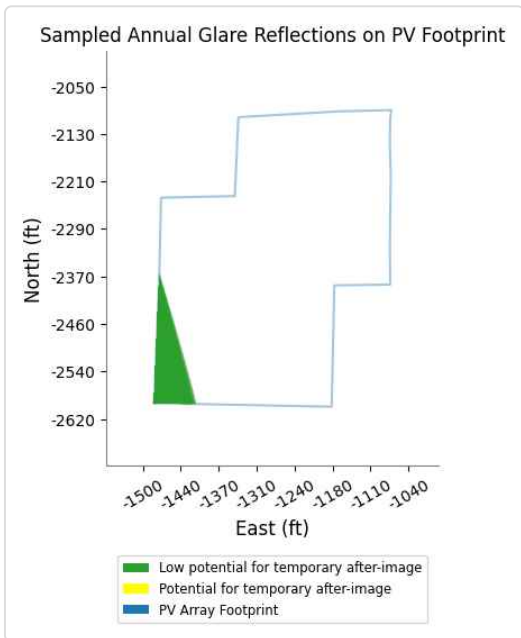
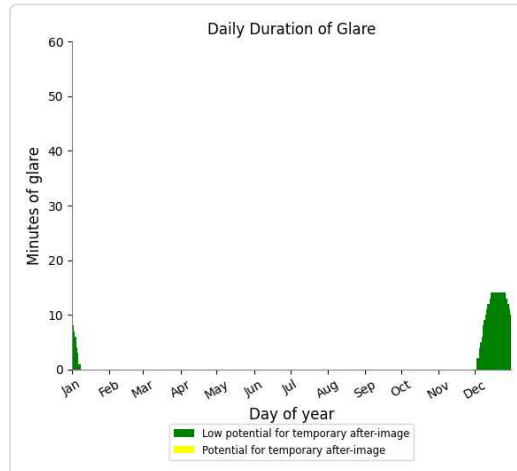
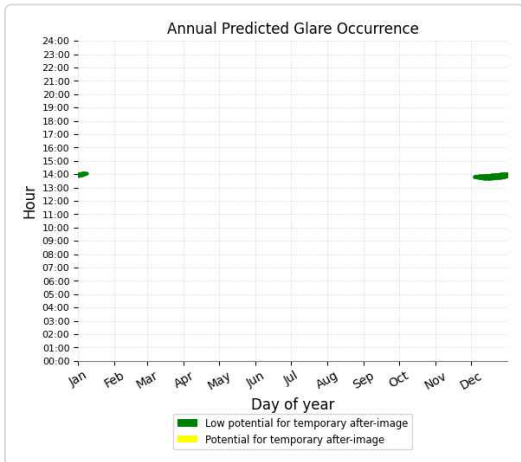
412 - OP Receptor (OP 33)

No glare found

412 - OP Receptor (OP 34)

PV array is expected to produce the following glare for receptors at this location:

- 360 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



412 - OP Receptor (OP 35)

No glare found

412 - OP Receptor (OP 36)

No glare found

412 - OP Receptor (OP 37)

No glare found

412 - OP Receptor (OP 38)

No glare found

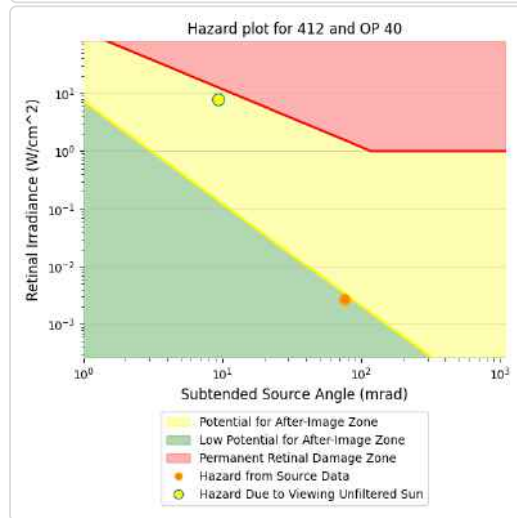
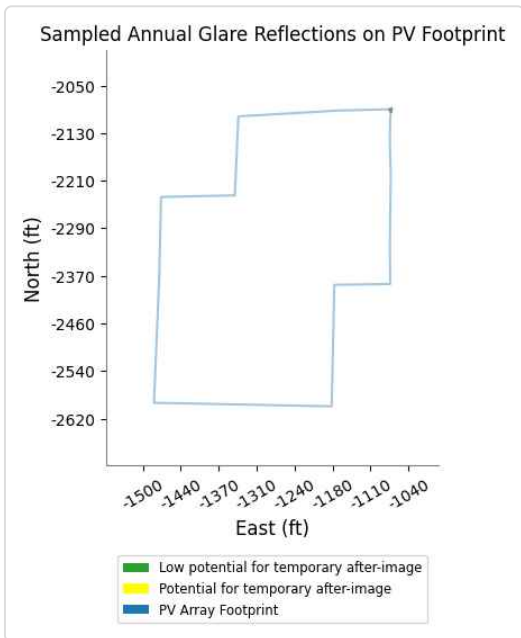
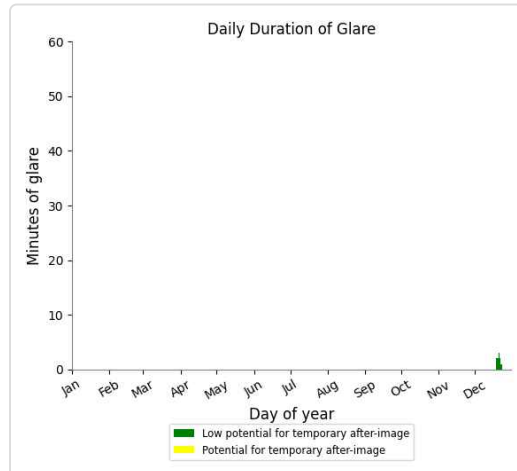
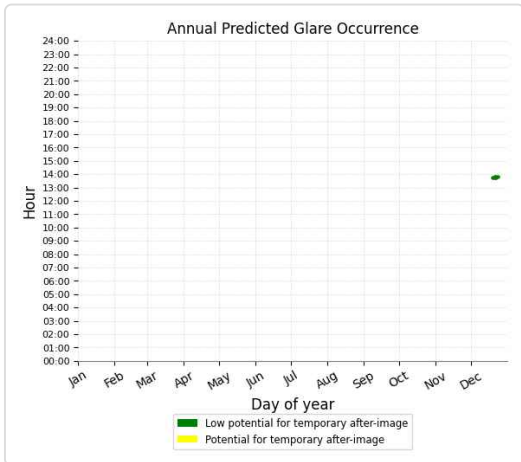
412 - OP Receptor (OP 39)

No glare found

412 - OP Receptor (OP 40)

PV array is expected to produce the following glare for receptors at this location:

- 10 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



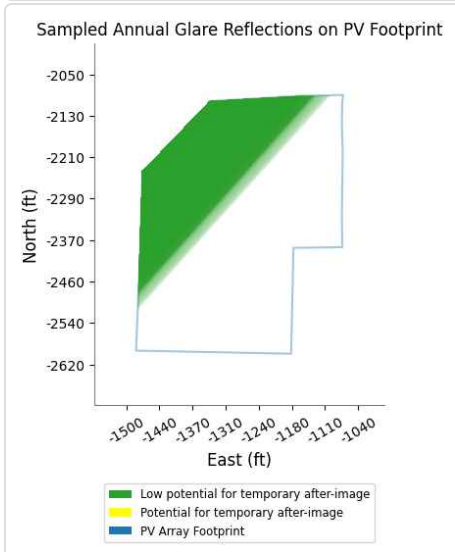
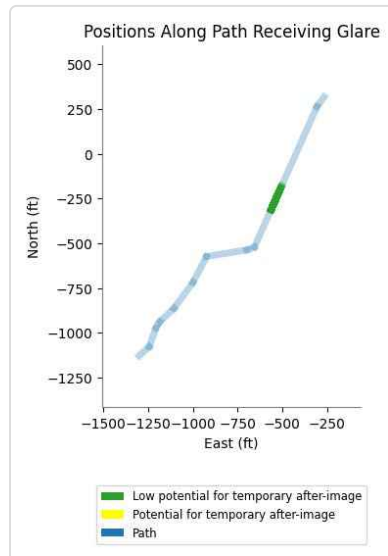
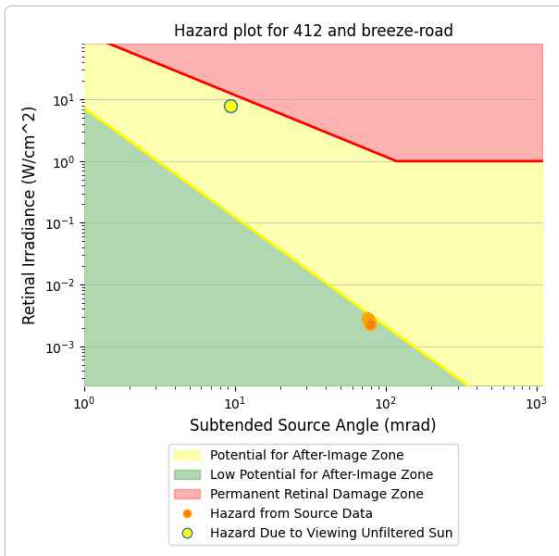
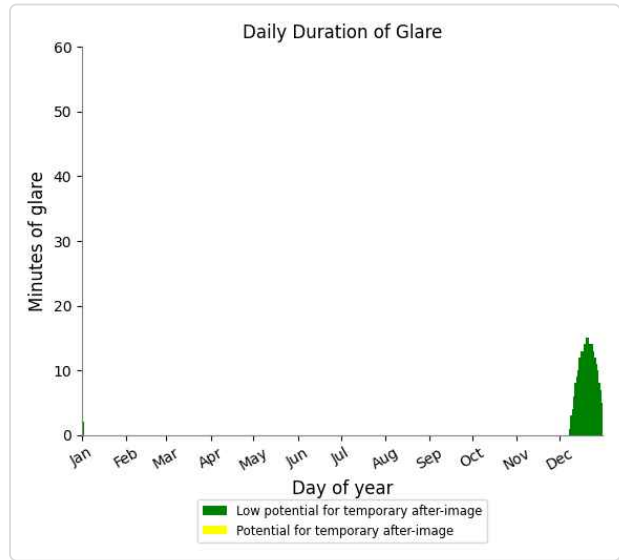
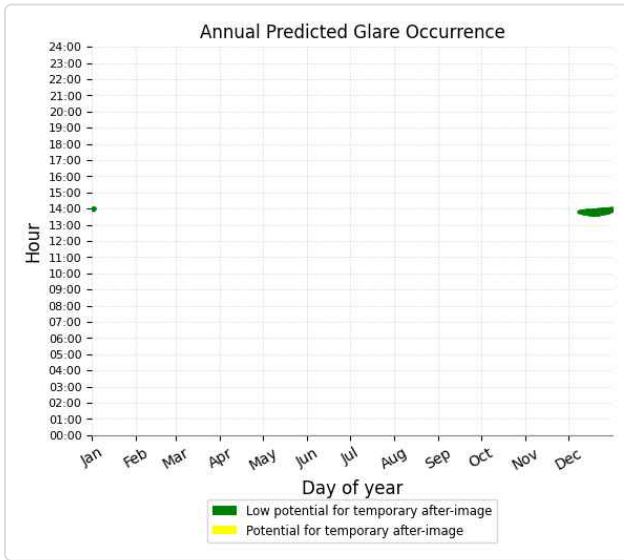
412 - Route Receptor (Black Diamond Road)

No glare found

412 - Route Receptor (Breeze Road)

PV array is expected to produce the following glare for receptors at this location:

- 250 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



412 - Route Receptor (Carpenter Road)

No glare found

412 - Route Receptor (Foxport Road Route 344)

No glare found

412 - Route Receptor (Route 989)

No glare found

413 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

414 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

415 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

416 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

417 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

418 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

419 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

420 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 4 9ft veh 1_5ft pan 52rest

Created Aug. 11, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73939.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results Glare with low potential for temporary after-image predicted

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
401	SA tracking	SA tracking	0	0	-
402	SA tracking	SA tracking	0	0	-
403	SA tracking	SA tracking	0	0	-
404	SA tracking	SA tracking	0	0	-
405	SA tracking	SA tracking	0	0	-
406	SA tracking	SA tracking	0	0	-
407	SA tracking	SA tracking	0	0	-
408	SA tracking	SA tracking	0	0	-
409	SA tracking	SA tracking	0	0	-
410	SA tracking	SA tracking	0	0	-
411	SA tracking	SA tracking	0	0	-
412	SA tracking	SA tracking	1,781	0	-
413	SA tracking	SA tracking	0	0	-
414	SA tracking	SA tracking	0	0	-
415	SA tracking	SA tracking	0	0	-
416	SA tracking	SA tracking	0	0	-
417	SA tracking	SA tracking	0	0	-
418	SA tracking	SA tracking	0	0	-
419	SA tracking	SA tracking	0	0	-
420	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 285.9 acres

Name: 401
Footprint area: 20.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.499805	-83.603269	778.47	1.50	779.97
2	38.499831	-83.602255	785.32	1.50	786.82
3	38.500221	-83.602261	769.39	1.50	770.89
4	38.500208	-83.601124	767.57	1.50	769.07
5	38.500670	-83.601113	760.84	1.50	762.34
6	38.500653	-83.599536	765.38	1.50	766.88
7	38.500171	-83.599525	776.48	1.50	777.98
8	38.500171	-83.599895	782.86	1.50	784.36
9	38.499621	-83.599863	785.58	1.50	787.08
10	38.499625	-83.600069	785.35	1.50	786.85
11	38.499320	-83.600071	788.85	1.50	790.35
12	38.499298	-83.600340	792.72	1.50	794.22
13	38.498750	-83.600329	796.95	1.50	798.45
14	38.498728	-83.600979	796.85	1.50	798.35
15	38.498393	-83.600981	802.53	1.50	804.03
16	38.498390	-83.601305	801.95	1.50	803.45
17	38.498002	-83.601300	803.76	1.50	805.26
18	38.497993	-83.601625	806.95	1.50	808.45
19	38.497577	-83.601583	807.34	1.50	808.84
20	38.497566	-83.601992	811.15	1.50	812.65
21	38.497246	-83.601981	808.22	1.50	809.72
22	38.497241	-83.602100	810.38	1.50	811.88
23	38.496730	-83.602116	800.92	1.50	802.42
24	38.496742	-83.603462	813.86	1.50	815.36

Name: 402
Footprint area: 3.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.494063	-83.607043	824.90	1.50	826.40
2	38.493239	-83.607046	832.08	1.50	833.58
3	38.493236	-83.606029	817.37	1.50	818.87
4	38.494033	-83.606018	820.32	1.50	821.82
5	38.494050	-83.605911	816.53	1.50	818.03
6	38.494529	-83.605933	813.58	1.50	815.08
7	38.494512	-83.607038	806.95	1.50	808.45

Name: 403

Footprint area: 22.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.470917	-83.611421	935.56	1.50	937.06
2	38.470052	-83.611416	931.55	1.50	933.05
3	38.470207	-83.622332	858.39	1.50	859.89
4	38.471039	-83.622311	864.63	1.50	866.13

Name: 404

Footprint area: 22.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.470064	-83.611432	930.40	1.50	931.90
2	38.469178	-83.611432	884.40	1.50	885.90
3	38.469359	-83.622289	850.94	1.50	852.44
4	38.470207	-83.622332	858.39	1.50	859.89

Name: 405

Footprint area: 6.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.469174	-83.611427	883.90	1.50	885.40
2	38.468342	-83.611416	850.90	1.50	852.40
3	38.468149	-83.611292	846.44	1.50	847.94
4	38.468153	-83.611094	844.13	1.50	845.63
5	38.467246	-83.611046	831.95	1.50	833.45
6	38.467233	-83.611646	845.37	1.50	846.87
7	38.467679	-83.611612	846.12	1.50	847.62
8	38.467838	-83.611468	845.63	1.50	847.13
9	38.468502	-83.611482	857.96	1.50	859.46
10	38.468485	-83.612672	851.56	1.50	853.06
11	38.467357	-83.612709	868.95	1.50	870.45
12	38.467359	-83.612197	861.12	1.50	862.62
13	38.466921	-83.612201	852.09	1.50	853.59
14	38.466892	-83.612817	860.75	1.50	862.25
15	38.466450	-83.612819	854.87	1.50	856.37
16	38.466458	-83.613619	873.73	1.50	875.23
17	38.466052	-83.613668	883.56	1.50	885.06
18	38.466054	-83.613835	883.21	1.50	884.71
19	38.466956	-83.613739	884.47	1.50	885.97
20	38.467376	-83.613505	890.58	1.50	892.08
21	38.467353	-83.612906	874.47	1.50	875.97
22	38.469195	-83.612870	871.26	1.50	872.76

Name: 406

Footprint area: 24.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.469250	-83.614916	869.33	1.50	870.83
2	38.467173	-83.614873	881.43	1.50	882.93
3	38.467147	-83.614219	886.72	1.50	888.22
4	38.466173	-83.614219	884.77	1.50	886.27
5	38.466156	-83.614508	882.35	1.50	883.85
6	38.466677	-83.614530	884.17	1.50	885.67
7	38.466677	-83.614744	884.67	1.50	886.17
8	38.466198	-83.614712	881.27	1.50	882.77
9	38.466249	-83.615453	876.85	1.50	878.35
10	38.466820	-83.615399	875.85	1.50	877.35
11	38.466753	-83.617512	874.88	1.50	876.38
12	38.466181	-83.617523	866.08	1.50	867.58
13	38.466156	-83.618424	869.38	1.50	870.88
14	38.469264	-83.618339	855.80	1.50	857.30

Name: 407

Footprint area: 24.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.469275	-83.618342	855.80	1.50	857.30
2	38.469342	-83.622301	850.89	1.50	852.39
3	38.466738	-83.622414	871.64	1.50	873.14
4	38.466696	-83.618417	876.09	1.50	877.59

Name: 408

Footprint area: 20.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466155	-83.618467	869.38	1.50	870.88
2	38.465198	-83.619186	862.08	1.50	863.58
3	38.463576	-83.622190	853.11	1.50	854.61
4	38.463601	-83.622630	852.78	1.50	854.28
5	38.466726	-83.622405	871.86	1.50	873.36
6	38.466693	-83.618446	876.02	1.50	877.52

Name: 409

Footprint area: 18.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.464587	-83.622569	862.37	1.50	863.87
2	38.464620	-83.624114	856.99	1.50	858.49
3	38.465570	-83.624018	862.76	1.50	864.26
4	38.465544	-83.625595	866.37	1.50	867.87
5	38.464940	-83.625638	859.73	1.50	861.23
6	38.464923	-83.625874	860.06	1.50	861.56
7	38.466006	-83.625949	872.08	1.50	873.58
8	38.465998	-83.625627	870.73	1.50	872.23
9	38.467518	-83.625595	876.53	1.50	878.03
10	38.467485	-83.622398	863.46	1.50	864.96

Name: 410

Footprint area: 16.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.463898	-83.620670	857.34	1.50	858.84
2	38.463058	-83.620681	862.76	1.50	864.26
3	38.463133	-83.619361	876.28	1.50	877.78
4	38.464612	-83.616883	876.60	1.50	878.10
5	38.464935	-83.616845	874.91	1.50	876.41
6	38.464948	-83.615950	882.63	1.50	884.13
7	38.465960	-83.615939	879.14	1.50	880.64
8	38.465988	-83.617564	866.71	1.50	868.21

Name: 411

Footprint area: 21.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.496744	-83.603475	813.90	1.50	815.40
2	38.496312	-83.603470	814.91	1.50	816.41
3	38.496329	-83.604409	815.75	1.50	817.25
4	38.496772	-83.604390	811.09	1.50	812.60
5	38.496797	-83.606059	818.53	1.50	820.03
6	38.495979	-83.606074	811.12	1.50	812.62
7	38.495968	-83.606729	821.52	1.50	823.02
8	38.495508	-83.606746	815.28	1.50	816.78
9	38.495535	-83.607851	815.82	1.50	817.32
10	38.496360	-83.607838	827.27	1.50	828.77
11	38.496373	-83.607711	826.80	1.50	828.30
12	38.497238	-83.607559	817.21	1.50	818.71
13	38.497232	-83.607316	815.70	1.50	817.20
14	38.497636	-83.607292	804.54	1.50	806.04
15	38.497627	-83.606583	821.78	1.50	823.28
16	38.498178	-83.606566	801.24	1.50	802.74
17	38.498181	-83.605992	815.34	1.50	816.84
18	38.498550	-83.605981	805.19	1.50	806.69
19	38.498552	-83.605551	812.60	1.50	814.10
20	38.498927	-83.605527	799.81	1.50	801.31
21	38.498919	-83.605029	801.18	1.50	802.68
22	38.499332	-83.604993	777.62	1.50	779.12
23	38.499321	-83.604561	776.32	1.50	777.82
24	38.498933	-83.604525	792.24	1.50	793.74
25	38.498920	-83.604244	784.95	1.50	786.45
26	38.498533	-83.604232	792.68	1.50	794.18
27	38.498525	-83.603360	789.74	1.50	791.24

Name: 412

Footprint area: 3.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.493278	-83.608443	826.67	1.50	828.17
2	38.493648	-83.608432	816.02	1.50	817.52
3	38.493656	-83.607987	812.88	1.50	814.38
4	38.494030	-83.607965	806.71	1.50	808.21
5	38.494058	-83.607344	820.38	1.50	821.88
6	38.494063	-83.607041	824.90	1.50	826.40
7	38.494026	-83.607048	825.83	1.50	827.33
8	38.493923	-83.607050	828.80	1.50	830.30
9	38.493751	-83.607045	831.11	1.50	832.61
10	38.493406	-83.607050	832.49	1.50	833.99
11	38.493236	-83.607048	832.08	1.50	833.58
12	38.493232	-83.607386	832.12	1.50	833.62
13	38.492657	-83.607402	833.93	1.50	835.43
14	38.492674	-83.608475	828.50	1.50	830.00

Name: 413

Footprint area: 5.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.494609	-83.604258	801.75	1.50	803.25
2	38.494618	-83.603652	804.96	1.50	806.46
3	38.494164	-83.603663	816.44	1.50	817.94
4	38.493394	-83.603644	820.51	1.50	822.01
5	38.493211	-83.603883	823.14	1.50	824.64
6	38.492955	-83.604258	824.75	1.50	826.25
7	38.492392	-83.605111	829.59	1.50	831.09
8	38.492187	-83.605417	829.46	1.50	830.96
9	38.492464	-83.605455	829.47	1.50	830.97
10	38.492938	-83.605476	825.00	1.50	826.50
11	38.493236	-83.605519	816.81	1.50	818.31
12	38.493241	-83.605143	825.15	1.50	826.65
13	38.493665	-83.605138	816.56	1.50	818.06
14	38.493673	-83.604591	816.47	1.50	817.97
15	38.493673	-83.604360	820.87	1.50	822.37
16	38.494614	-83.604296	800.70	1.50	802.20

Name: 414

Footprint area: 21.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.489168	-83.607815	830.35	1.50	831.85
2	38.489462	-83.607472	824.90	1.50	826.40
3	38.488336	-83.604586	834.27	1.50	835.77
4	38.487723	-83.604623	830.05	1.50	831.55
5	38.487593	-83.604934	829.33	1.50	830.83
6	38.488517	-83.607198	835.09	1.50	836.59
7	38.487518	-83.607205	832.48	1.50	833.98
8	38.487499	-83.606833	829.69	1.50	831.19
9	38.486994	-83.606840	832.00	1.50	833.50
10	38.486981	-83.607219	837.89	1.50	839.39
11	38.486375	-83.607233	833.73	1.50	835.23
12	38.486390	-83.608062	840.28	1.50	841.78
13	38.485967	-83.608059	837.66	1.50	839.16
14	38.485970	-83.608926	841.88	1.50	843.38
15	38.485329	-83.608989	837.55	1.50	839.05
16	38.485310	-83.609375	837.01	1.50	838.51
17	38.486452	-83.609407	843.93	1.50	845.43
18	38.486436	-83.610234	838.37	1.50	839.87
19	38.485379	-83.610397	836.82	1.50	838.32
20	38.485398	-83.610625	836.58	1.50	838.08
21	38.486468	-83.610480	836.56	1.50	838.06
22	38.486722	-83.610819	836.70	1.50	838.20
23	38.487312	-83.610965	830.10	1.50	831.60
24	38.487602	-83.610936	832.38	1.50	833.88
25	38.487578	-83.607846	836.65	1.50	838.15

Name: 415

Footprint area: 6.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.487593	-83.609204	839.98	1.50	841.48
2	38.487578	-83.607847	836.65	1.50	838.15
3	38.487761	-83.607843	836.65	1.50	838.15
4	38.487766	-83.609175	838.79	1.50	840.29
5	38.488160	-83.609183	836.59	1.50	838.09
6	38.488164	-83.609532	838.35	1.50	839.85
7	38.488626	-83.609537	836.04	1.50	837.54
8	38.488630	-83.609945	838.55	1.50	840.05
9	38.489067	-83.609971	838.38	1.50	839.88
10	38.489067	-83.610433	840.10	1.50	841.60
11	38.489583	-83.610395	838.75	1.50	840.25
12	38.489596	-83.610937	840.32	1.50	841.82
13	38.488647	-83.611066	840.22	1.50	841.72
14	38.488639	-83.610932	840.21	1.50	841.71
15	38.487606	-83.610942	832.50	1.50	834.00

Name: 416

Footprint area: 4.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484613	-83.612370	815.73	1.50	817.23
2	38.484619	-83.612019	823.27	1.50	824.77
3	38.482524	-83.612019	844.06	1.50	845.56
4	38.482542	-83.612972	844.66	1.50	846.16
5	38.483882	-83.612964	820.07	1.50	821.57

Name: 417

Footprint area: 20.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484867	-83.615048	832.26	1.50	833.76
2	38.484854	-83.614436	828.34	1.50	829.84
3	38.483989	-83.614474	839.75	1.50	841.25
4	38.483989	-83.614195	840.46	1.50	841.96
5	38.483074	-83.614211	839.64	1.50	841.14
6	38.483078	-83.614629	840.18	1.50	841.68
7	38.481864	-83.614720	842.15	1.50	843.65
8	38.481869	-83.614935	843.72	1.50	845.22
9	38.481520	-83.614940	844.97	1.50	846.47
10	38.480823	-83.615546	850.14	1.50	851.64
11	38.480141	-83.615613	853.19	1.50	854.69
12	38.480144	-83.614917	854.82	1.50	856.32
13	38.479713	-83.614934	860.02	1.50	861.52
14	38.479724	-83.617222	857.70	1.50	859.20
15	38.479268	-83.617208	862.42	1.50	863.92
16	38.479271	-83.617694	858.29	1.50	859.79
17	38.479726	-83.617658	857.75	1.50	859.25
18	38.479739	-83.618869	848.25	1.50	849.75
19	38.480107	-83.618857	852.57	1.50	854.07
20	38.480097	-83.617451	854.47	1.50	855.97
21	38.480987	-83.617392	851.24	1.50	852.74
22	38.480991	-83.617561	848.89	1.50	850.39
23	38.481497	-83.617500	853.11	1.50	854.61
24	38.481901	-83.616113	852.65	1.50	854.15

Name: 418

Footprint area: 6.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484877	-83.615056	831.98	1.50	833.48
2	38.481900	-83.616123	852.79	1.50	854.29
3	38.481493	-83.617507	852.84	1.50	854.34
4	38.481732	-83.617480	856.09	1.50	857.59
5	38.482135	-83.619696	853.20	1.50	854.70
6	38.482748	-83.619497	847.17	1.50	848.67
7	38.482643	-83.618392	855.44	1.50	856.94
8	38.481988	-83.618505	849.28	1.50	850.78
9	38.481862	-83.616654	860.71	1.50	862.21
10	38.482320	-83.616643	854.12	1.50	855.62
11	38.482623	-83.616590	850.84	1.50	852.34
12	38.483666	-83.615914	842.80	1.50	844.31

Name: 419

Footprint area: 4.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.461214	-83.622548	866.27	1.50	867.77
2	38.460638	-83.622580	872.75	1.50	874.25
3	38.459899	-83.621647	865.95	1.50	867.45
4	38.460306	-83.621593	861.91	1.50	863.41
5	38.460815	-83.619646	861.06	1.50	862.56
6	38.461247	-83.619727	862.24	1.50	863.74
7	38.461146	-83.621164	856.47	1.50	857.97
8	38.460810	-83.621475	859.44	1.50	860.94

Name: 420

Footprint area: 13.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.461747	-83.621245	856.51	1.50	858.01
2	38.462264	-83.621245	859.20	1.50	860.70
3	38.462814	-83.619598	872.07	1.50	873.58
4	38.462575	-83.619265	872.91	1.50	874.41
5	38.463293	-83.617195	873.95	1.50	875.45
6	38.463852	-83.617372	880.58	1.50	882.08
7	38.464343	-83.616535	879.09	1.50	880.59
8	38.464603	-83.615338	885.39	1.50	886.89
9	38.464221	-83.615269	882.52	1.50	884.02
10	38.464116	-83.615499	882.21	1.50	883.71
11	38.463457	-83.615553	875.86	1.50	877.36
12	38.463331	-83.616283	871.07	1.50	872.57
13	38.462852	-83.617082	868.29	1.50	869.79
14	38.461957	-83.618005	863.78	1.50	865.28
15	38.461747	-83.618933	866.47	1.50	867.97
16	38.461159	-83.618965	860.17	1.50	861.67
17	38.461466	-83.619566	860.22	1.50	861.72
18	38.461814	-83.619528	865.12	1.50	866.62
19	38.461596	-83.620456	859.78	1.50	861.28
20	38.461961	-83.620467	862.23	1.50	863.73

2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25
Description:
Threshold height : 50 ft
Direction: 247.0 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7
Description:
Threshold height : 50 ft
Direction: 66.8 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



Route Receptor(s)

Name: Black Diamond Road

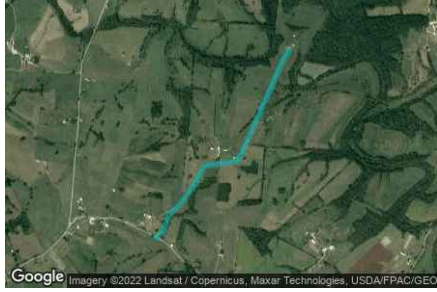
Route type Two-way

View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.469533	-83.637775	866.75	9.00	875.75
2	38.469287	-83.637485	865.66	9.00	874.66
3	38.468728	-83.637437	865.68	9.00	874.68
4	38.468322	-83.637080	864.73	9.00	873.74
5	38.468203	-83.636515	873.21	9.00	882.21
6	38.468026	-83.632178	878.23	9.00	887.23
7	38.467782	-83.627840	869.75	9.00	878.75
8	38.467727	-83.627658	870.94	9.00	879.94
9	38.467441	-83.627448	869.71	9.00	878.72
10	38.466005	-83.626719	871.56	9.00	880.56
11	38.465123	-83.626257	867.37	9.00	876.37
12	38.464799	-83.626241	858.46	9.00	867.47
13	38.464358	-83.626370	854.26	9.00	863.26
14	38.463699	-83.626595	850.85	9.00	859.85
15	38.463443	-83.626595	849.21	9.00	858.21
16	38.463304	-83.626429	849.26	9.00	858.26
17	38.463195	-83.626075	851.30	9.00	860.30
18	38.462880	-83.625410	862.57	9.00	871.57
19	38.461666	-83.623908	876.83	9.00	885.83
20	38.461061	-83.623430	880.47	9.00	889.47
21	38.459973	-83.622626	874.11	9.00	883.11
22	38.459393	-83.622202	873.70	9.00	882.70
23	38.459314	-83.622100	874.88	9.00	883.88
24	38.459301	-83.621880	876.04	9.00	885.04
25	38.459788	-83.620861	876.68	9.00	885.68
26	38.460305	-83.619874	861.82	9.00	870.82
27	38.460460	-83.619294	861.76	9.00	870.76
28	38.460586	-83.618785	862.01	9.00	871.01
29	38.460914	-83.618280	862.00	9.00	871.00
30	38.461473	-83.617653	866.03	9.00	875.03
31	38.461880	-83.617234	867.95	9.00	876.95
32	38.462149	-83.616891	869.18	9.00	878.18
33	38.462409	-83.616408	873.98	9.00	882.98
34	38.462678	-83.615781	879.05	9.00	888.05
35	38.462863	-83.615459	879.68	9.00	888.68
36	38.463128	-83.615271	877.47	9.00	886.47
37	38.464354	-83.614654	890.16	9.00	899.16
38	38.465194	-83.614171	885.76	9.00	894.76
39	38.465455	-83.613984	883.04	9.00	892.04
40	38.465618	-83.613533	877.74	9.00	886.74
41	38.466005	-83.612519	867.58	9.00	876.58
42	38.466253	-83.611891	850.30	9.00	859.30
43	38.466421	-83.611645	844.93	9.00	853.93
44	38.466866	-83.611092	831.94	9.00	840.94
45	38.466984	-83.610862	828.62	9.00	837.62
46	38.467521	-83.609504	829.06	9.00	838.06
47	38.467714	-83.609258	827.64	9.00	836.64
48	38.467992	-83.609043	825.21	9.00	834.22
49	38.468626	-83.608678	825.37	9.00	834.37
50	38.469218	-83.608313	823.81	9.00	832.81
51	38.469453	-83.608104	821.11	9.00	830.11
52	38.469814	-83.607621	825.81	9.00	834.81
53	38.470251	-83.607246	822.28	9.00	831.28
54	38.471343	-83.606334	841.63	9.00	850.63
55	38.472192	-83.606109	836.92	9.00	845.92
56	38.474023	-83.605545	849.68	9.00	858.68
57	38.475144	-83.605256	846.28	9.00	855.28
58	38.476463	-83.604456	833.06	9.00	842.06
59	38.477802	-83.603571	836.93	9.00	845.93

Name: Breeze Road
Route type: Two-way
View angle: 50.0 deg



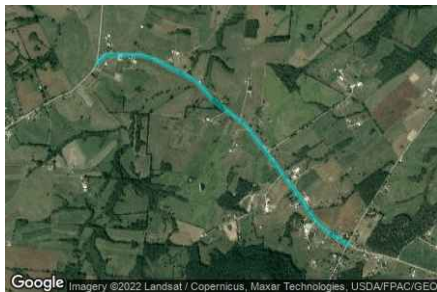
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.502666	-83.606324	816.76	9.00	825.76
2	38.502179	-83.606774	818.14	9.00	827.15
3	38.495109	-83.610787	839.74	9.00	848.74
4	38.494975	-83.611259	838.16	9.00	847.16
5	38.494639	-83.613855	820.44	9.00	829.44
6	38.493346	-83.614714	776.70	9.00	785.70
7	38.492036	-83.615937	778.66	9.00	787.67
8	38.491364	-83.616838	782.76	9.00	791.76
9	38.491045	-83.617095	790.29	9.00	799.29
10	38.490105	-83.617525	780.57	9.00	789.57
11	38.489651	-83.618168	784.49	9.00	793.49

Name: Carpenter Road
Route type: Two-way
View angle: 50.0 deg



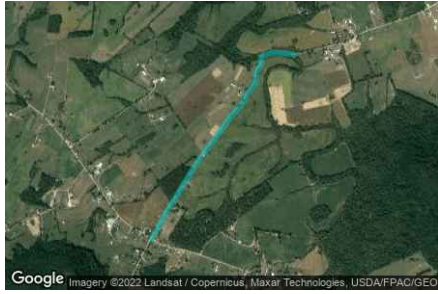
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.483604	-83.638432	888.77	9.00	897.77
2	38.482008	-83.637123	878.46	9.00	887.46
3	38.480597	-83.636415	884.06	9.00	893.06
4	38.479808	-83.636201	887.52	9.00	896.52
5	38.476264	-83.636523	887.25	9.00	896.25
6	38.474332	-83.636823	892.05	9.00	901.05
7	38.473710	-83.637059	891.52	9.00	900.52
8	38.472450	-83.637317	894.29	9.00	903.29
9	38.470787	-83.637617	871.96	9.00	880.96
10	38.469661	-83.637810	870.05	9.00	879.05
11	38.468099	-83.638304	877.63	9.00	886.63
12	38.466318	-83.639355	879.24	9.00	888.24
13	38.465646	-83.639634	862.31	9.00	871.31
14	38.464907	-83.640042	839.44	9.00	848.44
15	38.464117	-83.640943	842.62	9.00	851.62
16	38.463412	-83.641651	849.55	9.00	858.55
17	38.461278	-83.642273	857.09	9.00	866.09

Name: Foxport Road Route 344
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490470	-83.625827	863.26	9.00	872.26
2	38.490974	-83.625141	866.70	9.00	875.70
3	38.490974	-83.622094	841.96	9.00	850.96
4	38.490857	-83.621300	833.15	9.00	842.16
5	38.490538	-83.620377	822.44	9.00	831.44
6	38.489160	-83.617073	787.60	9.00	796.60
7	38.487833	-83.615571	796.45	9.00	805.45
8	38.486809	-83.613854	800.92	9.00	809.92
9	38.486087	-83.612695	813.94	9.00	822.94
10	38.482391	-83.609112	835.06	9.00	844.06
11	38.479620	-83.606655	837.80	9.00	846.80
12	38.478822	-83.605684	835.21	9.00	844.22
13	38.477755	-83.603597	837.80	9.00	846.80

Name: Route 989
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477811	-83.603561	836.70	9.00	845.70
2	38.479243	-83.602557	824.75	9.00	833.75
3	38.481881	-83.600500	829.39	9.00	838.39
4	38.483359	-83.599363	815.20	9.00	824.20
5	38.485745	-83.597046	808.57	9.00	817.57
6	38.486316	-83.596574	800.46	9.00	809.46
7	38.487071	-83.595651	778.35	9.00	787.35
8	38.487911	-83.595071	770.75	9.00	779.75
9	38.488600	-83.594363	777.20	9.00	786.20
10	38.489423	-83.594256	772.08	9.00	781.08
11	38.490095	-83.593763	766.98	9.00	775.98
12	38.490548	-83.593827	773.14	9.00	782.14
13	38.490817	-83.592776	771.64	9.00	780.65
14	38.490783	-83.591617	770.66	9.00	779.66
15	38.490649	-83.590887	779.46	9.00	788.46

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.466597	-83.626369	881.18	16.00	897.18
OP 2	38.461447	-83.623360	880.53	16.00	896.53
OP 3	38.459019	-83.622163	881.18	16.00	897.18
OP 4	38.459670	-83.620549	884.36	16.00	900.36
OP 5	38.460590	-83.623467	888.49	16.00	904.49
OP 6	38.463346	-83.612702	923.31	16.00	939.31
OP 7	38.466047	-83.611696	852.30	16.00	868.30
OP 8	38.468233	-83.609827	870.47	16.00	886.47
OP 9	38.469300	-83.606935	819.36	16.00	835.36
OP 10	38.468699	-83.608014	824.18	16.00	840.18
OP 11	38.469999	-83.608065	841.89	16.00	857.89
OP 12	38.470413	-83.607512	828.97	16.00	844.97
OP 13	38.470906	-83.607654	841.32	16.00	857.32
OP 14	38.471295	-83.607501	848.56	16.00	864.56
OP 15	38.478090	-83.603736	839.23	16.00	855.23
OP 16	38.477951	-83.604760	848.25	16.00	864.25
OP 17	38.478065	-83.605061	847.35	16.00	863.35
OP 18	38.478300	-83.605629	842.41	16.00	858.41
OP 19	38.481009	-83.608220	843.39	16.00	859.39
OP 20	38.479773	-83.613507	875.20	16.00	891.20
OP 21	38.480500	-83.612825	858.62	16.00	874.62
OP 22	38.478375	-83.614231	890.30	16.00	906.30
OP 23	38.478207	-83.615695	884.19	16.00	900.19
OP 24	38.478627	-83.616280	876.49	16.00	892.50
OP 25	38.480674	-83.610607	856.34	16.00	872.34
OP 26	38.482562	-83.608531	836.86	16.00	852.86
OP 27	38.483351	-83.610440	841.35	16.00	857.35
OP 28	38.483889	-83.610097	839.08	16.00	855.08
OP 29	38.484204	-83.610371	838.93	16.00	854.93
OP 30	38.484871	-83.611063	839.74	16.00	855.74
OP 31	38.485094	-83.611315	833.63	16.00	849.63
OP 32	38.486072	-83.612119	831.11	16.00	847.11
OP 33	38.488524	-83.603365	829.40	16.00	845.40
OP 34	38.496254	-83.609893	841.80	16.00	857.80
OP 35	38.495196	-83.610467	844.03	16.00	860.03
OP 36	38.471722	-83.623895	858.16	16.00	874.17
OP 37	38.472310	-83.627693	868.62	16.00	884.63
OP 38	38.482292	-83.626980	863.58	16.00	879.58
OP 39	38.487971	-83.628832	872.10	16.00	888.10
OP 40	38.497656	-83.608395	826.82	16.00	842.82

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
401	SA tracking	SA tracking	0	0	-	
402	SA tracking	SA tracking	0	0	-	
403	SA tracking	SA tracking	0	0	-	
404	SA tracking	SA tracking	0	0	-	
405	SA tracking	SA tracking	0	0	-	
406	SA tracking	SA tracking	0	0	-	
407	SA tracking	SA tracking	0	0	-	
408	SA tracking	SA tracking	0	0	-	
409	SA tracking	SA tracking	0	0	-	
410	SA tracking	SA tracking	0	0	-	
411	SA tracking	SA tracking	0	0	-	
412	SA tracking	SA tracking	1,781	0	-	-
413	SA tracking	SA tracking	0	0	-	
414	SA tracking	SA tracking	0	0	-	
415	SA tracking	SA tracking	0	0	-	
416	SA tracking	SA tracking	0	0	-	
417	SA tracking	SA tracking	0	0	-	
418	SA tracking	SA tracking	0	0	-	
419	SA tracking	SA tracking	0	0	-	
420	SA tracking	SA tracking	0	0	-	

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
412 (green)	128	0	0	0	0	0	0	0	0	0	6	761
412 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

401 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

402 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

403 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

404 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

405 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

406 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

407 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

408 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

409 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

410 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

411 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

412 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	604	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	346	0
Route: Black Diamond Road	0	0
Route: Breeze Road	831	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0

412 - Receptor (Fleming Mason Airport Runway 25)

No glare found

412 - Receptor (Fleming Mason Airport Runway 7)

No glare found

412 - OP Receptor (OP 1)

No glare found

412 - OP Receptor (OP 2)

No glare found

412 - OP Receptor (OP 3)

No glare found

412 - OP Receptor (OP 4)

No glare found

412 - OP Receptor (OP 5)

No glare found

412 - OP Receptor (OP 6)

No glare found

412 - OP Receptor (OP 7)

No glare found

412 - OP Receptor (OP 8)

No glare found

412 - OP Receptor (OP 9)

No glare found

412 - OP Receptor (OP 10)

No glare found

412 - OP Receptor (OP 11)

No glare found

412 - OP Receptor (OP 12)

No glare found

412 - OP Receptor (OP 13)

No glare found

412 - OP Receptor (OP 14)

No glare found

412 - OP Receptor (OP 15)

No glare found

412 - OP Receptor (OP 16)

No glare found

412 - OP Receptor (OP 17)

No glare found

412 - OP Receptor (OP 18)

No glare found

412 - OP Receptor (OP 19)

No glare found

412 - OP Receptor (OP 20)

No glare found

412 - OP Receptor (OP 21)

No glare found

412 - OP Receptor (OP 22)

No glare found

412 - OP Receptor (OP 23)

No glare found

412 - OP Receptor (OP 24)

No glare found

412 - OP Receptor (OP 25)

No glare found

412 - OP Receptor (OP 26)

No glare found

412 - OP Receptor (OP 27)

No glare found

412 - OP Receptor (OP 28)

No glare found

412 - OP Receptor (OP 29)

No glare found

412 - OP Receptor (OP 30)

No glare found

412 - OP Receptor (OP 31)

No glare found

412 - OP Receptor (OP 32)

No glare found

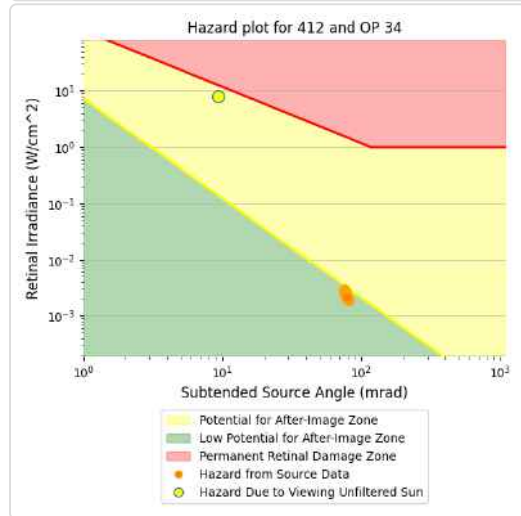
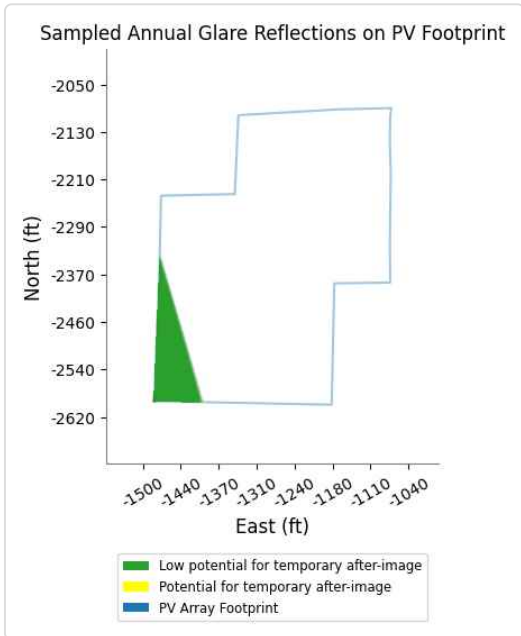
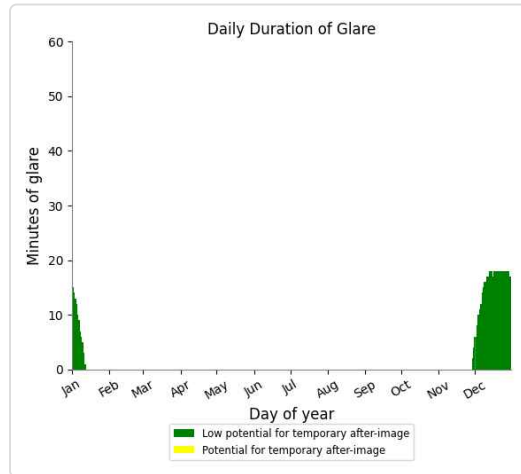
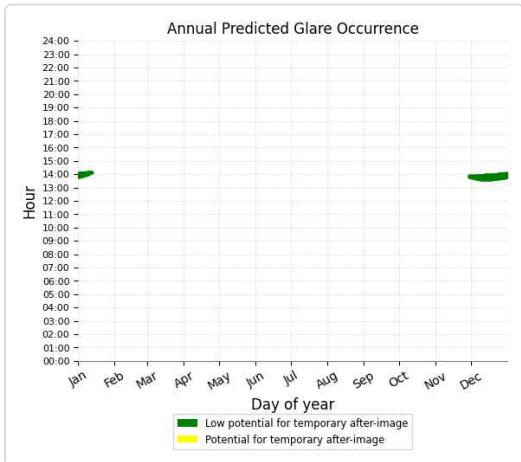
412 - OP Receptor (OP 33)

No glare found

412 - OP Receptor (OP 34)

PV array is expected to produce the following glare for receptors at this location:

- 604 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



412 - OP Receptor (OP 35)

No glare found

412 - OP Receptor (OP 36)

No glare found

412 - OP Receptor (OP 37)

No glare found

412 - OP Receptor (OP 38)

No glare found

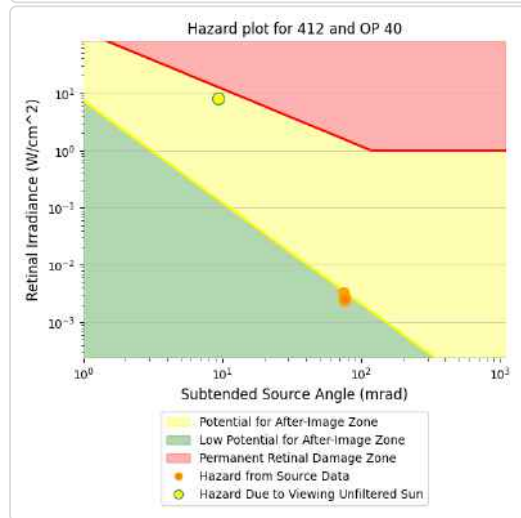
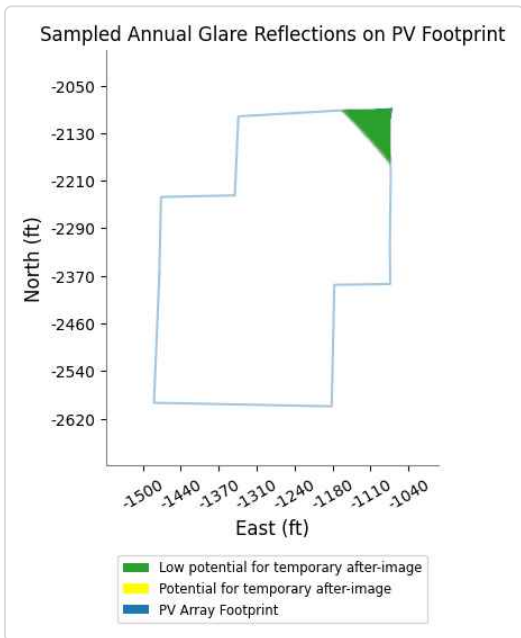
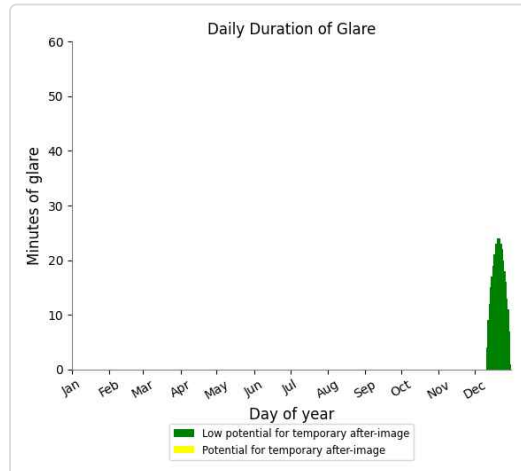
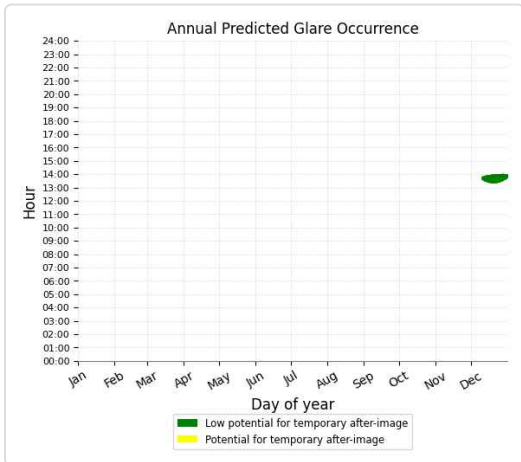
412 - OP Receptor (OP 39)

No glare found

412 - OP Receptor (OP 40)

PV array is expected to produce the following glare for receptors at this location:

- 346 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



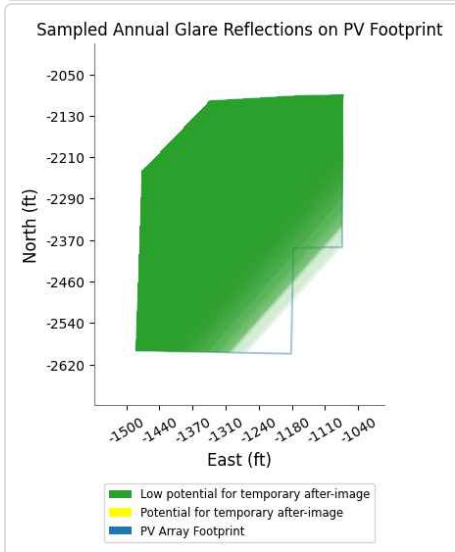
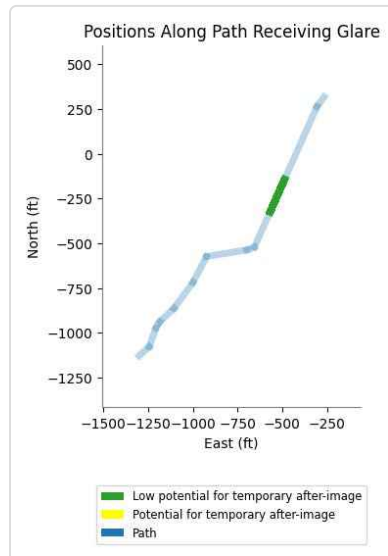
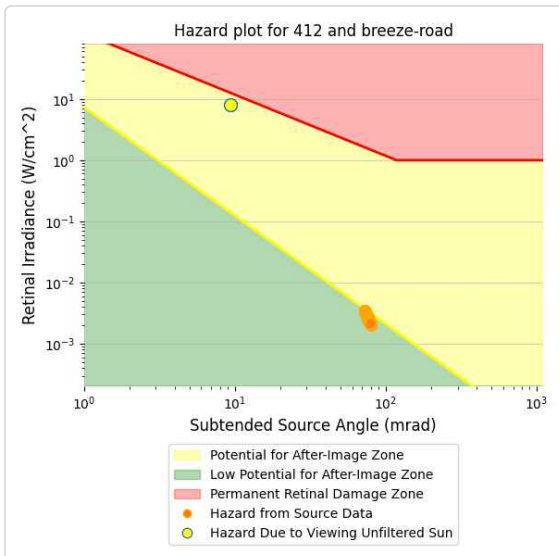
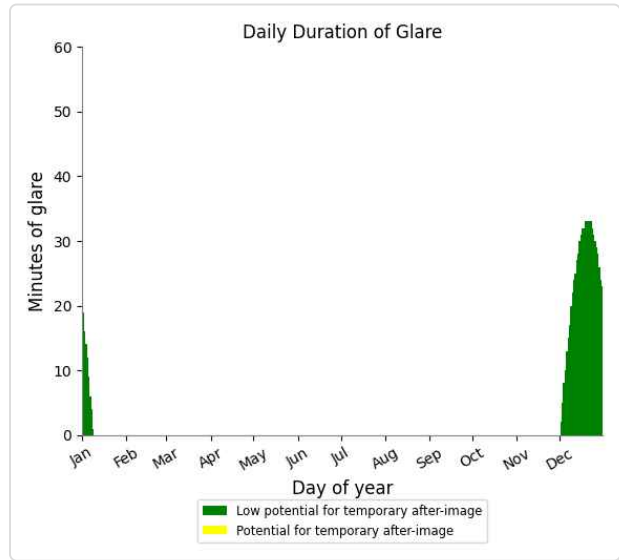
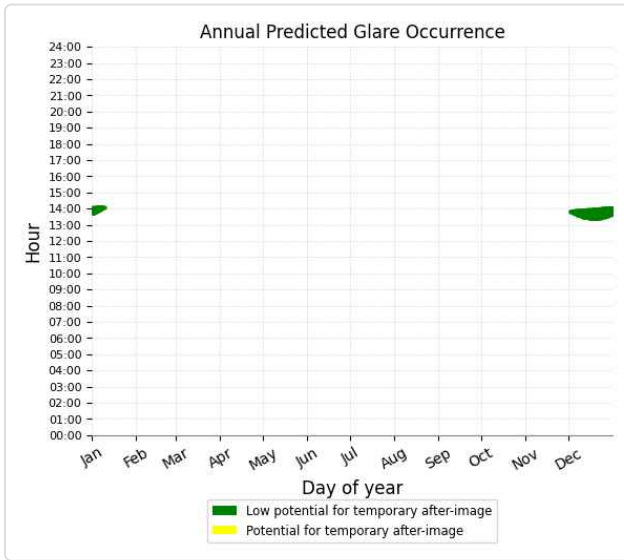
412 - Route Receptor (Black Diamond Road)

No glare found

412 - Route Receptor (Breeze Road)

PV array is expected to produce the following glare for receptors at this location:

- 831 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



412 - Route Receptor (Carpenter Road)

No glare found

412 - Route Receptor (Foxport Road Route 344)

No glare found

412 - Route Receptor (Route 989)

No glare found

413 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

414 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

415 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

416 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

417 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

418 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

419 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

420 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 4 9ft veh 10ft pan 52rest

Created Aug. 11, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73940.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results Glare with low potential for temporary after-image predicted

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
401	SA tracking	SA tracking	0	0	-
402	SA tracking	SA tracking	0	0	-
403	SA tracking	SA tracking	0	0	-
404	SA tracking	SA tracking	0	0	-
405	SA tracking	SA tracking	0	0	-
406	SA tracking	SA tracking	0	0	-
407	SA tracking	SA tracking	0	0	-
408	SA tracking	SA tracking	0	0	-
409	SA tracking	SA tracking	0	0	-
410	SA tracking	SA tracking	0	0	-
411	SA tracking	SA tracking	0	0	-
412	SA tracking	SA tracking	728	0	-
413	SA tracking	SA tracking	0	0	-
414	SA tracking	SA tracking	0	0	-
415	SA tracking	SA tracking	0	0	-
416	SA tracking	SA tracking	0	0	-
417	SA tracking	SA tracking	0	0	-
418	SA tracking	SA tracking	0	0	-
419	SA tracking	SA tracking	0	0	-
420	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 285.9 acres

Name: 401
Footprint area: 20.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.499805	-83.603269	778.47	10.00	788.47
2	38.499831	-83.602255	785.32	10.00	795.32
3	38.500221	-83.602261	769.39	10.00	779.39
4	38.500208	-83.601124	767.57	10.00	777.57
5	38.500670	-83.601113	760.84	10.00	770.84
6	38.500653	-83.599536	765.38	10.00	775.38
7	38.500171	-83.599525	776.48	10.00	786.48
8	38.500171	-83.599895	782.86	10.00	792.86
9	38.499621	-83.599863	785.58	10.00	795.58
10	38.499625	-83.600069	785.35	10.00	795.35
11	38.499320	-83.600071	788.85	10.00	798.85
12	38.499298	-83.600340	792.72	10.00	802.72
13	38.498750	-83.600329	796.95	10.00	806.95
14	38.498728	-83.600979	796.85	10.00	806.85
15	38.498393	-83.600981	802.53	10.00	812.53
16	38.498390	-83.601305	801.95	10.00	811.95
17	38.498002	-83.601300	803.76	10.00	813.76
18	38.497993	-83.601625	806.95	10.00	816.95
19	38.497577	-83.601583	807.34	10.00	817.34
20	38.497566	-83.601992	811.15	10.00	821.15
21	38.497246	-83.601981	808.22	10.00	818.22
22	38.497241	-83.602100	810.38	10.00	820.38
23	38.496730	-83.602116	800.92	10.00	810.92
24	38.496742	-83.603462	813.86	10.00	823.86

Name: 402
Footprint area: 3.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.494063	-83.607043	824.90	10.00	834.90
2	38.493239	-83.607046	832.08	10.00	842.08
3	38.493236	-83.606029	817.37	10.00	827.38
4	38.494033	-83.606018	820.32	10.00	830.32
5	38.494050	-83.605911	816.53	10.00	826.53
6	38.494529	-83.605933	813.58	10.00	823.58
7	38.494512	-83.607038	806.95	10.00	816.95

Name: 403

Footprint area: 22.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.470917	-83.611421	935.56	10.00	945.56
2	38.470052	-83.611416	931.55	10.00	941.55
3	38.470207	-83.622332	858.39	10.00	868.39
4	38.471039	-83.622311	864.63	10.00	874.63

Name: 404

Footprint area: 22.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.470064	-83.611432	930.40	10.00	940.40
2	38.469178	-83.611432	884.40	10.00	894.40
3	38.469359	-83.622289	850.94	10.00	860.94
4	38.470207	-83.622332	858.39	10.00	868.39

Name: 405

Footprint area: 6.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.469174	-83.611427	883.90	10.00	893.90
2	38.468342	-83.611416	850.90	10.00	860.90
3	38.468149	-83.611292	846.44	10.00	856.44
4	38.468153	-83.611094	844.13	10.00	854.13
5	38.467246	-83.611046	831.95	10.00	841.95
6	38.467233	-83.611646	845.37	10.00	855.37
7	38.467679	-83.611612	846.12	10.00	856.12
8	38.467838	-83.611468	845.63	10.00	855.63
9	38.468502	-83.611482	857.96	10.00	867.96
10	38.468485	-83.612672	851.56	10.00	861.56
11	38.467357	-83.612709	868.95	10.00	878.95
12	38.467359	-83.612197	861.12	10.00	871.12
13	38.466921	-83.612201	852.09	10.00	862.09
14	38.466892	-83.612817	860.75	10.00	870.75
15	38.466450	-83.612819	854.87	10.00	864.88
16	38.466458	-83.613619	873.73	10.00	883.73
17	38.466052	-83.613668	883.56	10.00	893.56
18	38.466054	-83.613835	883.21	10.00	893.21
19	38.466956	-83.613739	884.47	10.00	894.47
20	38.467376	-83.613505	890.58	10.00	900.58
21	38.467353	-83.612906	874.47	10.00	884.47
22	38.469195	-83.612870	871.26	10.00	881.26

Name: 406

Footprint area: 24.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.469250	-83.614916	869.33	10.00	879.33
2	38.467173	-83.614873	881.43	10.00	891.43
3	38.467147	-83.614219	886.72	10.00	896.72
4	38.466173	-83.614219	884.77	10.00	894.77
5	38.466156	-83.614508	882.35	10.00	892.35
6	38.466677	-83.614530	884.17	10.00	894.17
7	38.466677	-83.614744	884.67	10.00	894.67
8	38.466198	-83.614712	881.27	10.00	891.27
9	38.466249	-83.615453	876.85	10.00	886.85
10	38.466820	-83.615399	875.85	10.00	885.85
11	38.466753	-83.617512	874.88	10.00	884.88
12	38.466181	-83.617523	866.08	10.00	876.08
13	38.466156	-83.618424	869.38	10.00	879.38
14	38.469264	-83.618339	855.80	10.00	865.80

Name: 407

Footprint area: 24.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.469275	-83.618342	855.80	10.00	865.80
2	38.469342	-83.622301	850.89	10.00	860.89
3	38.466738	-83.622414	871.64	10.00	881.64
4	38.466696	-83.618417	876.09	10.00	886.09

Name: 408

Footprint area: 20.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466155	-83.618467	869.38	10.00	879.38
2	38.465198	-83.619186	862.08	10.00	872.08
3	38.463576	-83.622190	853.11	10.00	863.11
4	38.463601	-83.622630	852.78	10.00	862.78
5	38.466726	-83.622405	871.86	10.00	881.86
6	38.466693	-83.618446	876.02	10.00	886.02

Name: 409

Footprint area: 18.8 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.464587	-83.622569	862.37	10.00	872.38
2	38.464620	-83.624114	856.99	10.00	866.99
3	38.465570	-83.624018	862.76	10.00	872.76
4	38.465544	-83.625595	866.37	10.00	876.37
5	38.464940	-83.625638	859.73	10.00	869.73
6	38.464923	-83.625874	860.06	10.00	870.06
7	38.466006	-83.625949	872.08	10.00	882.08
8	38.465998	-83.625627	870.73	10.00	880.73
9	38.467518	-83.625595	876.53	10.00	886.53
10	38.467485	-83.622398	863.46	10.00	873.46

Name: 410

Footprint area: 16.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.463898	-83.620670	857.34	10.00	867.34
2	38.463058	-83.620681	862.76	10.00	872.76
3	38.463133	-83.619361	876.28	10.00	886.28
4	38.464612	-83.616883	876.60	10.00	886.60
5	38.464935	-83.616845	874.91	10.00	884.91
6	38.464948	-83.615950	882.63	10.00	892.63
7	38.465960	-83.615939	879.14	10.00	889.14
8	38.465988	-83.617564	866.71	10.00	876.71

Name: 411

Footprint area: 21.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.496744	-83.603475	813.90	10.00	823.90
2	38.496312	-83.603470	814.91	10.00	824.91
3	38.496329	-83.604409	815.75	10.00	825.75
4	38.496772	-83.604390	811.09	10.00	821.10
5	38.496797	-83.606059	818.53	10.00	828.53
6	38.495979	-83.606074	811.12	10.00	821.12
7	38.495968	-83.606729	821.52	10.00	831.52
8	38.495508	-83.606746	815.28	10.00	825.28
9	38.495535	-83.607851	815.82	10.00	825.82
10	38.496360	-83.607838	827.27	10.00	837.27
11	38.496373	-83.607711	826.80	10.00	836.80
12	38.497238	-83.607559	817.21	10.00	827.21
13	38.497232	-83.607316	815.70	10.00	825.70
14	38.497636	-83.607292	804.54	10.00	814.54
15	38.497627	-83.606583	821.78	10.00	831.78
16	38.498178	-83.606566	801.24	10.00	811.24
17	38.498181	-83.605992	815.34	10.00	825.34
18	38.498550	-83.605981	805.19	10.00	815.19
19	38.498552	-83.605551	812.60	10.00	822.60
20	38.498927	-83.605527	799.81	10.00	809.81
21	38.498919	-83.605029	801.18	10.00	811.18
22	38.499332	-83.604993	777.62	10.00	787.62
23	38.499321	-83.604561	776.32	10.00	786.32
24	38.498933	-83.604525	792.24	10.00	802.24
25	38.498920	-83.604244	784.95	10.00	794.95
26	38.498533	-83.604232	792.68	10.00	802.68
27	38.498525	-83.603360	789.74	10.00	799.74

Name: 412

Footprint area: 3.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.493278	-83.608443	826.67	10.00	836.67
2	38.493648	-83.608432	816.02	10.00	826.02
3	38.493656	-83.607987	812.88	10.00	822.88
4	38.494030	-83.607965	806.71	10.00	816.71
5	38.494058	-83.607344	820.38	10.00	830.38
6	38.494063	-83.607041	824.90	10.00	834.90
7	38.494026	-83.607048	825.83	10.00	835.83
8	38.493923	-83.607050	828.80	10.00	838.80
9	38.493751	-83.607045	831.11	10.00	841.11
10	38.493406	-83.607050	832.49	10.00	842.49
11	38.493236	-83.607048	832.08	10.00	842.08
12	38.493232	-83.607386	832.12	10.00	842.12
13	38.492657	-83.607402	833.93	10.00	843.93
14	38.492674	-83.608475	828.50	10.00	838.50

Name: 413

Footprint area: 5.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.494609	-83.604258	801.75	10.00	811.75
2	38.494618	-83.603652	804.96	10.00	814.96
3	38.494164	-83.603663	816.44	10.00	826.44
4	38.493394	-83.603644	820.51	10.00	830.51
5	38.493211	-83.603883	823.14	10.00	833.15
6	38.492955	-83.604258	824.75	10.00	834.75
7	38.492392	-83.605111	829.59	10.00	839.59
8	38.492187	-83.605417	829.46	10.00	839.46
9	38.492464	-83.605455	829.47	10.00	839.47
10	38.492938	-83.605476	825.00	10.00	835.00
11	38.493236	-83.605519	816.81	10.00	826.81
12	38.493241	-83.605143	825.15	10.00	835.15
13	38.493665	-83.605138	816.56	10.00	826.56
14	38.493673	-83.604591	816.47	10.00	826.47
15	38.493673	-83.604360	820.87	10.00	830.87
16	38.494614	-83.604296	800.70	10.00	810.70

Name: 414

Footprint area: 21.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.489168	-83.607815	830.35	10.00	840.35
2	38.489462	-83.607472	824.90	10.00	834.90
3	38.488336	-83.604586	834.27	10.00	844.27
4	38.487723	-83.604623	830.05	10.00	840.05
5	38.487593	-83.604934	829.33	10.00	839.33
6	38.488517	-83.607198	835.09	10.00	845.10
7	38.487518	-83.607205	832.48	10.00	842.48
8	38.487499	-83.606833	829.69	10.00	839.69
9	38.486994	-83.606840	832.00	10.00	842.00
10	38.486981	-83.607219	837.89	10.00	847.89
11	38.486375	-83.607233	833.73	10.00	843.73
12	38.486390	-83.608062	840.28	10.00	850.28
13	38.485967	-83.608059	837.66	10.00	847.66
14	38.485970	-83.608926	841.88	10.00	851.88
15	38.485329	-83.608989	837.55	10.00	847.55
16	38.485310	-83.609375	837.01	10.00	847.01
17	38.486452	-83.609407	843.93	10.00	853.93
18	38.486436	-83.610234	838.37	10.00	848.37
19	38.485379	-83.610397	836.82	10.00	846.82
20	38.485398	-83.610625	836.58	10.00	846.58
21	38.486468	-83.610480	836.56	10.00	846.56
22	38.486722	-83.610819	836.70	10.00	846.70
23	38.487312	-83.610965	830.10	10.00	840.10
24	38.487602	-83.610936	832.38	10.00	842.38
25	38.487578	-83.607846	836.65	10.00	846.65

Name: 415

Footprint area: 6.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.487593	-83.609204	839.98	10.00	849.99
2	38.487578	-83.607847	836.65	10.00	846.65
3	38.487761	-83.607843	836.65	10.00	846.65
4	38.487766	-83.609175	838.79	10.00	848.79
5	38.488160	-83.609183	836.59	10.00	846.59
6	38.488164	-83.609532	838.35	10.00	848.35
7	38.488626	-83.609537	836.04	10.00	846.04
8	38.488630	-83.609945	838.55	10.00	848.55
9	38.489067	-83.609971	838.38	10.00	848.38
10	38.489067	-83.610433	840.10	10.00	850.10
11	38.489583	-83.610395	838.75	10.00	848.76
12	38.489596	-83.610937	840.32	10.00	850.32
13	38.488647	-83.611066	840.22	10.00	850.22
14	38.488639	-83.610932	840.21	10.00	850.21
15	38.487606	-83.610942	832.50	10.00	842.50

Name: 416

Footprint area: 4.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484613	-83.612370	815.73	10.00	825.73
2	38.484619	-83.612019	823.27	10.00	833.27
3	38.482524	-83.612019	844.06	10.00	854.06
4	38.482542	-83.612972	844.66	10.00	854.66
5	38.483882	-83.612964	820.07	10.00	830.07

Name: 417

Footprint area: 20.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484867	-83.615048	832.26	10.00	842.26
2	38.484854	-83.614436	828.34	10.00	838.34
3	38.483989	-83.614474	839.75	10.00	849.75
4	38.483989	-83.614195	840.46	10.00	850.46
5	38.483074	-83.614211	839.64	10.00	849.64
6	38.483078	-83.614629	840.18	10.00	850.18
7	38.481864	-83.614720	842.15	10.00	852.15
8	38.481869	-83.614935	843.72	10.00	853.72
9	38.481520	-83.614940	844.97	10.00	854.97
10	38.480823	-83.615546	850.14	10.00	860.14
11	38.480141	-83.615613	853.19	10.00	863.19
12	38.480144	-83.614917	854.82	10.00	864.82
13	38.479713	-83.614934	860.02	10.00	870.02
14	38.479724	-83.617222	857.70	10.00	867.70
15	38.479268	-83.617208	862.42	10.00	872.42
16	38.479271	-83.617694	858.29	10.00	868.29
17	38.479726	-83.617658	857.75	10.00	867.75
18	38.479739	-83.618869	848.25	10.00	858.25
19	38.480107	-83.618857	852.57	10.00	862.57
20	38.480097	-83.617451	854.47	10.00	864.47
21	38.480987	-83.617392	851.24	10.00	861.24
22	38.480991	-83.617561	848.89	10.00	858.90
23	38.481497	-83.617500	853.11	10.00	863.11
24	38.481901	-83.616113	852.65	10.00	862.65

Name: 418

Footprint area: 6.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.484877	-83.615056	831.98	10.00	841.98
2	38.481900	-83.616123	852.79	10.00	862.79
3	38.481493	-83.617507	852.84	10.00	862.84
4	38.481732	-83.617480	856.09	10.00	866.09
5	38.482135	-83.619696	853.20	10.00	863.20
6	38.482748	-83.619497	847.17	10.00	857.17
7	38.482643	-83.618392	855.44	10.00	865.44
8	38.481988	-83.618505	849.28	10.00	859.28
9	38.481862	-83.616654	860.71	10.00	870.71
10	38.482320	-83.616643	854.12	10.00	864.12
11	38.482623	-83.616590	850.84	10.00	860.84
12	38.483666	-83.615914	842.80	10.00	852.81

Name: 419

Footprint area: 4.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.461214	-83.622548	866.27	10.00	876.27
2	38.460638	-83.622580	872.75	10.00	882.75
3	38.459899	-83.621647	865.95	10.00	875.95
4	38.460306	-83.621593	861.91	10.00	871.91
5	38.460815	-83.619646	861.06	10.00	871.06
6	38.461247	-83.619727	862.24	10.00	872.24
7	38.461146	-83.621164	856.47	10.00	866.48
8	38.460810	-83.621475	859.44	10.00	869.44

Name: 420

Footprint area: 13.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.461747	-83.621245	856.51	10.00	866.51
2	38.462264	-83.621245	859.20	10.00	869.20
3	38.462814	-83.619598	872.07	10.00	882.08
4	38.462575	-83.619265	872.91	10.00	882.91
5	38.463293	-83.617195	873.95	10.00	883.95
6	38.463852	-83.617372	880.58	10.00	890.58
7	38.464343	-83.616535	879.09	10.00	889.09
8	38.464603	-83.615338	885.39	10.00	895.39
9	38.464221	-83.615269	882.52	10.00	892.52
10	38.464116	-83.615499	882.21	10.00	892.21
11	38.463457	-83.615553	875.86	10.00	885.86
12	38.463331	-83.616283	871.07	10.00	881.07
13	38.462852	-83.617082	868.29	10.00	878.29
14	38.461957	-83.618005	863.78	10.00	873.78
15	38.461747	-83.618933	866.47	10.00	876.47
16	38.461159	-83.618965	860.17	10.00	870.17
17	38.461466	-83.619566	860.22	10.00	870.22
18	38.461814	-83.619528	865.12	10.00	875.12
19	38.461596	-83.620456	859.78	10.00	869.78
20	38.461961	-83.620467	862.23	10.00	872.23

2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25
Description:
Threshold height : 50 ft
Direction: 247.0 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7
Description:
Threshold height : 50 ft
Direction: 66.8 deg
Glide slope: 3.0 deg
Pilot view restricted? Yes
Vertical view restriction: 30.0 deg
Azimuthal view restriction: 50.0 deg

Point	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



Route Receptor(s)

Name: Black Diamond Road

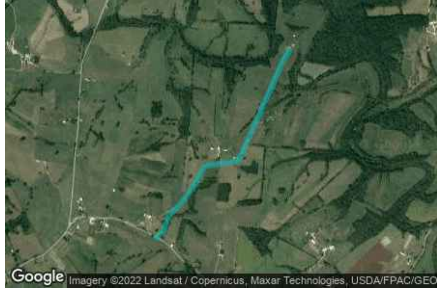
Route type Two-way

View angle: 50.0 deg



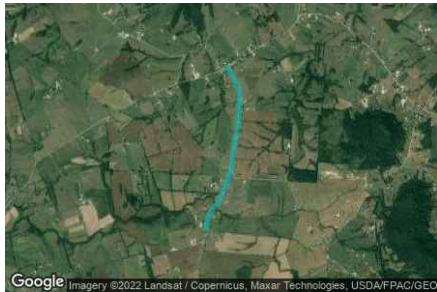
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.469533	-83.637775	866.75	9.00	875.75
2	38.469287	-83.637485	865.66	9.00	874.66
3	38.468728	-83.637437	865.68	9.00	874.68
4	38.468322	-83.637080	864.73	9.00	873.74
5	38.468203	-83.636515	873.21	9.00	882.21
6	38.468026	-83.632178	878.23	9.00	887.23
7	38.467782	-83.627840	869.75	9.00	878.75
8	38.467727	-83.627658	870.94	9.00	879.94
9	38.467441	-83.627448	869.71	9.00	878.72
10	38.466005	-83.626719	871.56	9.00	880.56
11	38.465123	-83.626257	867.37	9.00	876.37
12	38.464799	-83.626241	858.46	9.00	867.47
13	38.464358	-83.626370	854.26	9.00	863.26
14	38.463699	-83.626595	850.85	9.00	859.85
15	38.463443	-83.626595	849.21	9.00	858.21
16	38.463304	-83.626429	849.26	9.00	858.26
17	38.463195	-83.626075	851.30	9.00	860.30
18	38.462880	-83.625410	862.57	9.00	871.57
19	38.461666	-83.623908	876.83	9.00	885.83
20	38.461061	-83.623430	880.47	9.00	889.47
21	38.459973	-83.622626	874.11	9.00	883.11
22	38.459393	-83.622202	873.70	9.00	882.70
23	38.459314	-83.622100	874.88	9.00	883.88
24	38.459301	-83.621880	876.04	9.00	885.04
25	38.459788	-83.620861	876.68	9.00	885.68
26	38.460305	-83.619874	861.82	9.00	870.82
27	38.460460	-83.619294	861.76	9.00	870.76
28	38.460586	-83.618785	862.01	9.00	871.01
29	38.460914	-83.618280	862.00	9.00	871.00
30	38.461473	-83.617653	866.03	9.00	875.03
31	38.461880	-83.617234	867.95	9.00	876.95
32	38.462149	-83.616891	869.18	9.00	878.18
33	38.462409	-83.616408	873.98	9.00	882.98
34	38.462678	-83.615781	879.05	9.00	888.05
35	38.462863	-83.615459	879.68	9.00	888.68
36	38.463128	-83.615271	877.47	9.00	886.47
37	38.464354	-83.614654	890.16	9.00	899.16
38	38.465194	-83.614171	885.76	9.00	894.76
39	38.465455	-83.613984	883.04	9.00	892.04
40	38.465618	-83.613533	877.74	9.00	886.74
41	38.466005	-83.612519	867.58	9.00	876.58
42	38.466253	-83.611891	850.30	9.00	859.30
43	38.466421	-83.611645	844.93	9.00	853.93
44	38.466866	-83.611092	831.94	9.00	840.94
45	38.466984	-83.610862	828.62	9.00	837.62
46	38.467521	-83.609504	829.06	9.00	838.06
47	38.467714	-83.609258	827.64	9.00	836.64
48	38.467992	-83.609043	825.21	9.00	834.22
49	38.468626	-83.608678	825.37	9.00	834.37
50	38.469218	-83.608313	823.81	9.00	832.81
51	38.469453	-83.608104	821.11	9.00	830.11
52	38.469814	-83.607621	825.81	9.00	834.81
53	38.470251	-83.607246	822.28	9.00	831.28
54	38.471343	-83.606334	841.63	9.00	850.63
55	38.472192	-83.606109	836.92	9.00	845.92
56	38.474023	-83.605545	849.68	9.00	858.68
57	38.475144	-83.605256	846.28	9.00	855.28
58	38.476463	-83.604456	833.06	9.00	842.06
59	38.477802	-83.603571	836.93	9.00	845.93

Name: Breeze Road
Route type: Two-way
View angle: 50.0 deg



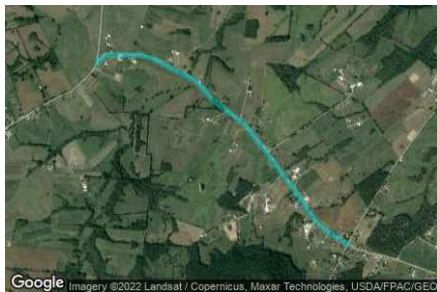
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.502666	-83.606324	816.76	9.00	825.76
2	38.502179	-83.606774	818.14	9.00	827.15
3	38.495109	-83.610787	839.74	9.00	848.74
4	38.494975	-83.611259	838.16	9.00	847.16
5	38.494639	-83.613855	820.44	9.00	829.44
6	38.493346	-83.614714	776.70	9.00	785.70
7	38.492036	-83.615937	778.66	9.00	787.67
8	38.491364	-83.616838	782.76	9.00	791.76
9	38.491045	-83.617095	790.29	9.00	799.29
10	38.490105	-83.617525	780.57	9.00	789.57
11	38.489651	-83.618168	784.49	9.00	793.49

Name: Carpenter Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.483604	-83.638432	888.77	9.00	897.77
2	38.482008	-83.637123	878.46	9.00	887.46
3	38.480597	-83.636415	884.06	9.00	893.06
4	38.479808	-83.636201	887.52	9.00	896.52
5	38.476264	-83.636523	887.25	9.00	896.25
6	38.474332	-83.636823	892.05	9.00	901.05
7	38.473710	-83.637059	891.52	9.00	900.52
8	38.472450	-83.637317	894.29	9.00	903.29
9	38.470787	-83.637617	871.96	9.00	880.96
10	38.469661	-83.637810	870.05	9.00	879.05
11	38.468099	-83.638304	877.63	9.00	886.63
12	38.466318	-83.639355	879.24	9.00	888.24
13	38.465646	-83.639634	862.31	9.00	871.31
14	38.464907	-83.640042	839.44	9.00	848.44
15	38.464117	-83.640943	842.62	9.00	851.62
16	38.463412	-83.641651	849.55	9.00	858.55
17	38.461278	-83.642273	857.09	9.00	866.09

Name: Foxport Road Route 344
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490470	-83.625827	863.26	9.00	872.26
2	38.490974	-83.625141	866.70	9.00	875.70
3	38.490974	-83.622094	841.96	9.00	850.96
4	38.490857	-83.621300	833.15	9.00	842.16
5	38.490538	-83.620377	822.44	9.00	831.44
6	38.489160	-83.617073	787.60	9.00	796.60
7	38.487833	-83.615571	796.45	9.00	805.45
8	38.486809	-83.613854	800.92	9.00	809.92
9	38.486087	-83.612695	813.94	9.00	822.94
10	38.482391	-83.609112	835.06	9.00	844.06
11	38.479620	-83.606655	837.80	9.00	846.80
12	38.478822	-83.605684	835.21	9.00	844.22
13	38.477755	-83.603597	837.80	9.00	846.80

Name: Route 989
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.477811	-83.603561	836.70	9.00	845.70
2	38.479243	-83.602557	824.75	9.00	833.75
3	38.481881	-83.600500	829.39	9.00	838.39
4	38.483359	-83.599363	815.20	9.00	824.20
5	38.485745	-83.597046	808.57	9.00	817.57
6	38.486316	-83.596574	800.46	9.00	809.46
7	38.487071	-83.595651	778.35	9.00	787.35
8	38.487911	-83.595071	770.75	9.00	779.75
9	38.488600	-83.594363	777.20	9.00	786.20
10	38.489423	-83.594256	772.08	9.00	781.08
11	38.490095	-83.593763	766.98	9.00	775.98
12	38.490548	-83.593827	773.14	9.00	782.14
13	38.490817	-83.592776	771.64	9.00	780.65
14	38.490783	-83.591617	770.66	9.00	779.66
15	38.490649	-83.590887	779.46	9.00	788.46

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.466597	-83.626369	881.18	16.00	897.18
OP 2	38.461447	-83.623360	880.53	16.00	896.53
OP 3	38.459019	-83.622163	881.18	16.00	897.18
OP 4	38.459670	-83.620549	884.36	16.00	900.36
OP 5	38.460590	-83.623467	888.49	16.00	904.49
OP 6	38.463346	-83.612702	923.31	16.00	939.31
OP 7	38.466047	-83.611696	852.30	16.00	868.30
OP 8	38.468233	-83.609827	870.47	16.00	886.47
OP 9	38.469300	-83.606935	819.36	16.00	835.36
OP 10	38.468699	-83.608014	824.18	16.00	840.18
OP 11	38.469999	-83.608065	841.89	16.00	857.89
OP 12	38.470413	-83.607512	828.97	16.00	844.97
OP 13	38.470906	-83.607654	841.32	16.00	857.32
OP 14	38.471295	-83.607501	848.56	16.00	864.56
OP 15	38.478090	-83.603736	839.23	16.00	855.23
OP 16	38.477951	-83.604760	848.25	16.00	864.25
OP 17	38.478065	-83.605061	847.35	16.00	863.35
OP 18	38.478300	-83.605629	842.41	16.00	858.41
OP 19	38.481009	-83.608220	843.39	16.00	859.39
OP 20	38.479773	-83.613507	875.20	16.00	891.20
OP 21	38.480500	-83.612825	858.62	16.00	874.62
OP 22	38.478375	-83.614231	890.30	16.00	906.30
OP 23	38.478207	-83.615695	884.19	16.00	900.19
OP 24	38.478627	-83.616280	876.49	16.00	892.50
OP 25	38.480674	-83.610607	856.34	16.00	872.34
OP 26	38.482562	-83.608531	836.86	16.00	852.86
OP 27	38.483351	-83.610440	841.35	16.00	857.35
OP 28	38.483889	-83.610097	839.08	16.00	855.08
OP 29	38.484204	-83.610371	838.93	16.00	854.93
OP 30	38.484871	-83.611063	839.74	16.00	855.74
OP 31	38.485094	-83.611315	833.63	16.00	849.63
OP 32	38.486072	-83.612119	831.11	16.00	847.11
OP 33	38.488524	-83.603365	829.40	16.00	845.40
OP 34	38.496254	-83.609893	841.80	16.00	857.80
OP 35	38.495196	-83.610467	844.03	16.00	860.03
OP 36	38.471722	-83.623895	858.16	16.00	874.17
OP 37	38.472310	-83.627693	868.62	16.00	884.63
OP 38	38.482292	-83.626980	863.58	16.00	879.58
OP 39	38.487971	-83.628832	872.10	16.00	888.10
OP 40	38.497656	-83.608395	826.82	16.00	842.82

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
401	SA tracking	SA tracking	0	0	-	
402	SA tracking	SA tracking	0	0	-	
403	SA tracking	SA tracking	0	0	-	
404	SA tracking	SA tracking	0	0	-	
405	SA tracking	SA tracking	0	0	-	
406	SA tracking	SA tracking	0	0	-	
407	SA tracking	SA tracking	0	0	-	
408	SA tracking	SA tracking	0	0	-	
409	SA tracking	SA tracking	0	0	-	
410	SA tracking	SA tracking	0	0	-	
411	SA tracking	SA tracking	0	0	-	
412	SA tracking	SA tracking	728	0	-	-
413	SA tracking	SA tracking	0	0	-	
414	SA tracking	SA tracking	0	0	-	
415	SA tracking	SA tracking	0	0	-	
416	SA tracking	SA tracking	0	0	-	
417	SA tracking	SA tracking	0	0	-	
418	SA tracking	SA tracking	0	0	-	
419	SA tracking	SA tracking	0	0	-	
420	SA tracking	SA tracking	0	0	-	

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
412 (green)	34	0	0	0	0	0	0	0	0	0	0	405
412 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

401 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

402 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

403 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

404 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

405 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

406 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

407 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

408 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

409 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

410 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

411 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

412 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	319	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	409	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0

412 - Receptor (Fleming Mason Airport Runway 25)

No glare found

412 - Receptor (Fleming Mason Airport Runway 7)

No glare found

412 - OP Receptor (OP 1)

No glare found

412 - OP Receptor (OP 2)

No glare found

412 - OP Receptor (OP 3)

No glare found

412 - OP Receptor (OP 4)

No glare found

412 - OP Receptor (OP 5)

No glare found

412 - OP Receptor (OP 6)

No glare found

412 - OP Receptor (OP 7)

No glare found

412 - OP Receptor (OP 8)

No glare found

412 - OP Receptor (OP 9)

No glare found

412 - OP Receptor (OP 10)

No glare found

412 - OP Receptor (OP 11)

No glare found

412 - OP Receptor (OP 12)

No glare found

412 - OP Receptor (OP 13)

No glare found

412 - OP Receptor (OP 14)

No glare found

412 - OP Receptor (OP 15)

No glare found

412 - OP Receptor (OP 16)

No glare found

412 - OP Receptor (OP 17)

No glare found

412 - OP Receptor (OP 18)

No glare found

412 - OP Receptor (OP 19)

No glare found

412 - OP Receptor (OP 20)

No glare found

412 - OP Receptor (OP 21)

No glare found

412 - OP Receptor (OP 22)

No glare found

412 - OP Receptor (OP 23)

No glare found

412 - OP Receptor (OP 24)

No glare found

412 - OP Receptor (OP 25)

No glare found

412 - OP Receptor (OP 26)

No glare found

412 - OP Receptor (OP 27)

No glare found

412 - OP Receptor (OP 28)

No glare found

412 - OP Receptor (OP 29)

No glare found

412 - OP Receptor (OP 30)

No glare found

412 - OP Receptor (OP 31)

No glare found

412 - OP Receptor (OP 32)

No glare found

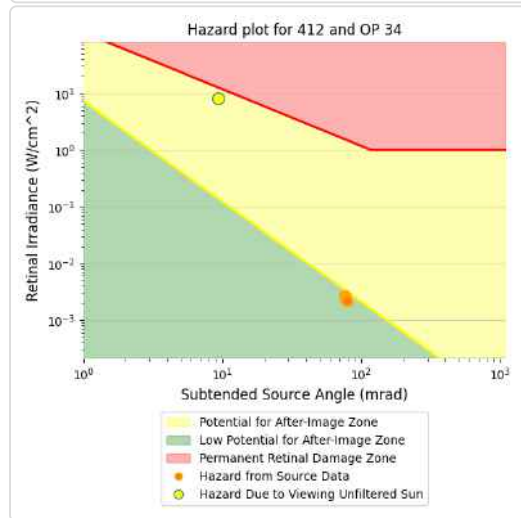
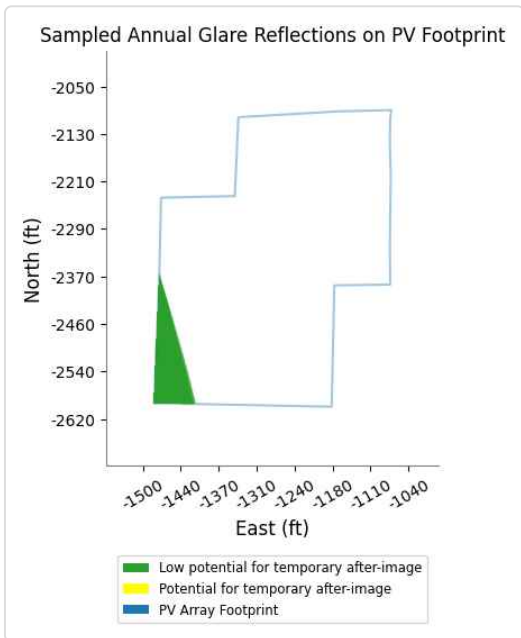
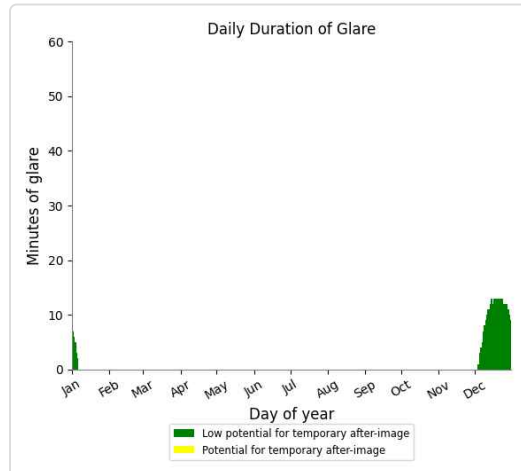
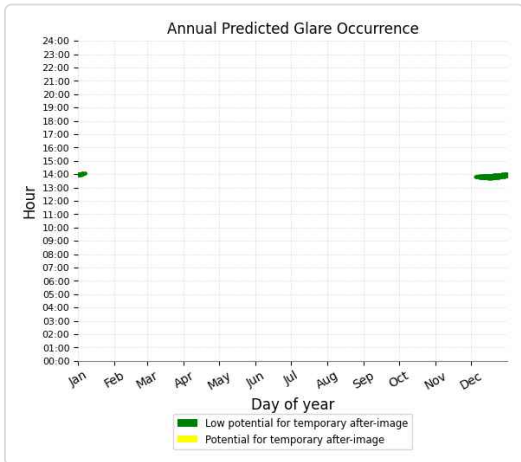
412 - OP Receptor (OP 33)

No glare found

412 - OP Receptor (OP 34)

PV array is expected to produce the following glare for receptors at this location:

- 319 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



412 - OP Receptor (OP 35)

No glare found

412 - OP Receptor (OP 36)

No glare found

412 - OP Receptor (OP 37)

No glare found

412 - OP Receptor (OP 38)

No glare found

412 - OP Receptor (OP 39)

No glare found

412 - OP Receptor (OP 40)

No glare found

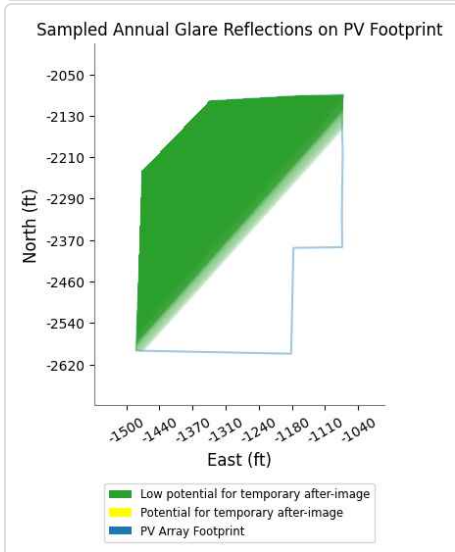
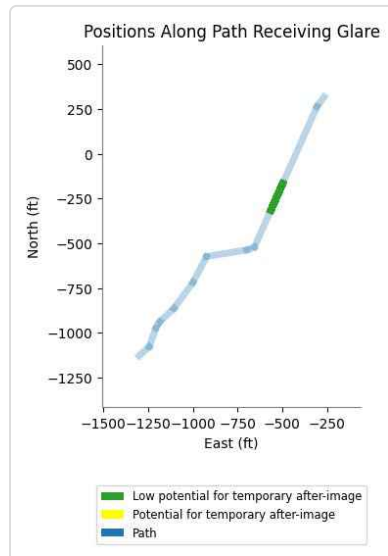
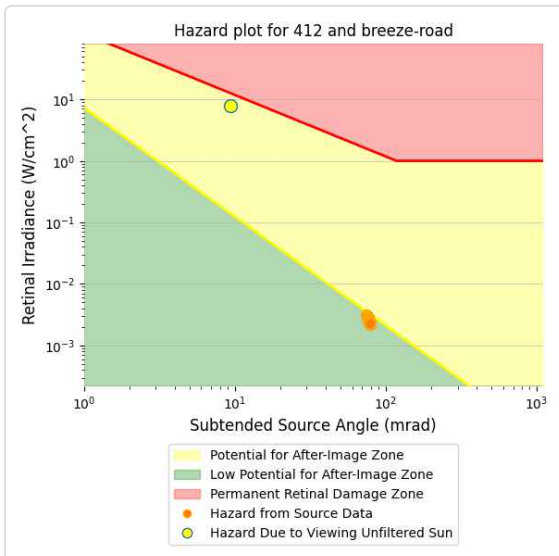
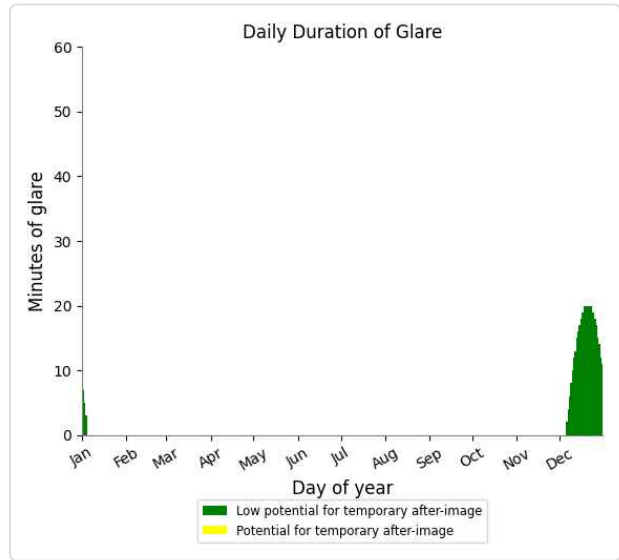
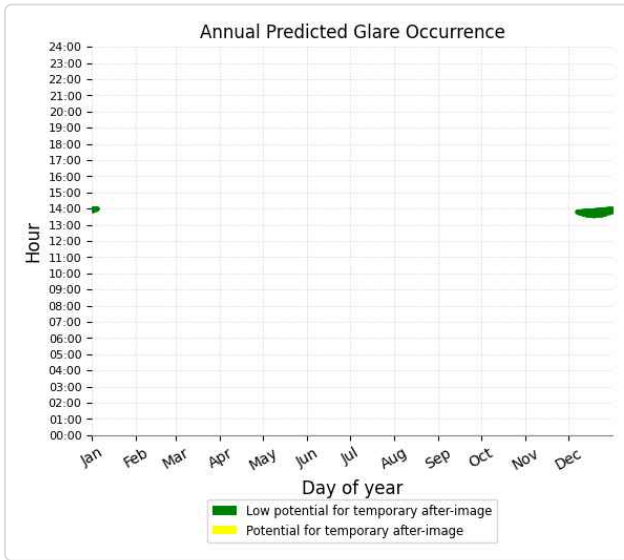
412 - Route Receptor (Black Diamond Road)

No glare found

412 - Route Receptor (Breeze Road)

PV array is expected to produce the following glare for receptors at this location:

- 409 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



412 - Route Receptor (Carpenter Road)

No glare found

412 - Route Receptor (Foxport Road Route 344)

No glare found

412 - Route Receptor (Route 989)

No glare found

413 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

414 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

415 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

416 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

417 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

418 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

419 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

420 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Foxport Road Route 344	0	0
Route: Route 989	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 5 5ft veh 1_5ft pan 52rest

Created Aug. 11, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73943.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results Glare with low potential for temporary after-image predicted

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
501	SA tracking	SA tracking	0	0	-
502	SA tracking	SA tracking	0	0	-
503	SA tracking	SA tracking	0	0	-
504	SA tracking	SA tracking	0	0	-
505	SA tracking	SA tracking	0	0	-
506	SA tracking	SA tracking	0	0	-
507	SA tracking	SA tracking	0	0	-
508	SA tracking	SA tracking	0	0	-
509	SA tracking	SA tracking	0	0	-
510	SA tracking	SA tracking	0	0	-
511	SA tracking	SA tracking	0	0	-
512	SA tracking	SA tracking	15,289	0	-
513	SA tracking	SA tracking	0	0	-
514	SA tracking	SA tracking	1,188	0	-
515	SA tracking	SA tracking	0	0	-
516	SA tracking	SA tracking	0	0	-
517	SA tracking	SA tracking	0	0	-
518	SA tracking	SA tracking	0	0	-
519	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 200.5 acres

Name: 501

Footprint area: 11.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.459849	-83.618200	864.69	1.50	866.19
2	38.460412	-83.618221	863.95	1.50	865.45
3	38.461445	-83.617063	872.96	1.50	874.46
4	38.462239	-83.615834	884.34	1.50	885.84
5	38.460445	-83.614104	890.27	1.50	891.77
6	38.460387	-83.614973	878.94	1.50	880.44
7	38.460227	-83.616617	871.89	1.50	873.39
8	38.459864	-83.617309	865.79	1.50	867.29

Name: 502

Footprint area: 4.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.459536	-83.616262	869.15	1.50	870.65
2	38.459007	-83.616230	870.32	1.50	871.82
3	38.459074	-83.615436	875.45	1.50	876.95
4	38.458666	-83.615361	873.05	1.50	874.55
5	38.458704	-83.614889	876.29	1.50	877.79
6	38.459217	-83.614931	878.85	1.50	880.35
7	38.459263	-83.614197	883.90	1.50	885.40
8	38.458813	-83.614186	882.20	1.50	883.70
9	38.458855	-83.613633	887.19	1.50	888.69
10	38.459817	-83.613816	885.91	1.50	887.41
11	38.459723	-83.615039	875.91	1.50	877.41

Name: 503

Footprint area: 12.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.462162	-83.625923	867.99	1.50	869.49
2	38.462158	-83.625076	871.01	1.50	872.51
3	38.461662	-83.625092	873.63	1.50	875.13
4	38.461658	-83.624732	875.14	1.50	876.64
5	38.460830	-83.624705	869.06	1.50	870.56
6	38.460830	-83.624351	873.90	1.50	875.40
7	38.460078	-83.624212	871.41	1.50	872.91
8	38.460083	-83.623911	874.93	1.50	876.43
9	38.459601	-83.623918	870.15	1.50	871.65
10	38.459570	-83.623401	870.53	1.50	872.03
11	38.459113	-83.623389	865.99	1.50	867.49
12	38.459107	-83.623212	866.86	1.50	868.36
13	38.458844	-83.623188	865.19	1.50	866.69
14	38.458830	-83.622971	868.26	1.50	869.76
15	38.458226	-83.622957	865.51	1.50	867.01
16	38.458220	-83.623530	861.59	1.50	863.09
17	38.458661	-83.623537	861.09	1.50	862.59
18	38.458638	-83.624053	858.84	1.50	860.34
19	38.459084	-83.624083	862.73	1.50	864.23
20	38.459070	-83.625109	855.22	1.50	856.72
21	38.459403	-83.625118	857.20	1.50	858.70
22	38.459385	-83.625307	856.13	1.50	857.63
23	38.459754	-83.625340	856.88	1.50	858.38
24	38.460144	-83.625963	855.09	1.50	856.59

Name: 504

Footprint area: 11.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457720	-83.627797	861.63	1.50	863.13
2	38.458241	-83.627765	856.90	1.50	858.40
3	38.459174	-83.627336	855.91	1.50	857.41
4	38.459165	-83.626757	854.78	1.50	856.28
5	38.458628	-83.626724	860.80	1.50	862.30
6	38.458636	-83.625008	855.53	1.50	857.03
7	38.458241	-83.625040	859.49	1.50	860.99
8	38.458233	-83.624182	858.71	1.50	860.21
9	38.457292	-83.624192	864.91	1.50	866.41
10	38.457250	-83.627594	870.82	1.50	872.32
11	38.457704	-83.627518	861.64	1.50	863.14

Name: 505

Footprint area: 24.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457346	-83.620306	880.33	1.50	881.83
2	38.457313	-83.617689	887.29	1.50	888.79
3	38.456342	-83.617651	882.59	1.50	884.09
4	38.456405	-83.612480	879.57	1.50	881.07
5	38.457321	-83.612490	875.60	1.50	877.10
6	38.457330	-83.614132	872.38	1.50	873.88
7	38.457758	-83.614121	871.13	1.50	872.63
8	38.457777	-83.616385	868.66	1.50	870.16
9	38.458139	-83.616377	867.49	1.50	868.99
10	38.458161	-83.618065	878.98	1.50	880.48
11	38.458617	-83.618030	875.69	1.50	877.19
12	38.458614	-83.618736	872.81	1.50	874.31
13	38.459150	-83.618725	871.33	1.50	872.83
14	38.459124	-83.619213	865.22	1.50	866.72
15	38.458594	-83.619274	869.32	1.50	870.82
16	38.458573	-83.620201	869.85	1.50	871.35
17	38.457960	-83.620254	873.15	1.50	874.65

Name: 506

Footprint area: 17.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456586	-83.627479	868.42	1.50	869.92
2	38.457014	-83.627484	873.40	1.50	874.90
3	38.457040	-83.620564	882.91	1.50	884.41
4	38.456502	-83.620580	880.68	1.50	882.18
5	38.456456	-83.622061	879.15	1.50	880.65
6	38.456057	-83.622061	871.79	1.50	873.29
7	38.456015	-83.623815	875.79	1.50	877.29
8	38.455557	-83.623815	868.40	1.50	869.90
9	38.455561	-83.624265	874.43	1.50	875.93
10	38.455238	-83.624241	867.59	1.50	869.09
11	38.455214	-83.625404	858.57	1.50	860.07
12	38.455650	-83.625409	859.72	1.50	861.22
13	38.455660	-83.625988	856.60	1.50	858.10
14	38.456073	-83.626005	866.02	1.50	867.52
15	38.456133	-83.627278	866.79	1.50	868.29
16	38.456581	-83.627280	871.66	1.50	873.16

Name: 507

Footprint area: 24.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457033	-83.620572	883.18	1.50	884.68
2	38.457021	-83.617869	887.56	1.50	889.06
3	38.456059	-83.617853	889.34	1.50	890.84
4	38.456050	-83.617423	887.06	1.50	888.56
5	38.455630	-83.617407	899.31	1.50	900.81
6	38.455639	-83.616769	901.31	1.50	902.81
7	38.456038	-83.616758	890.30	1.50	891.80
8	38.456055	-83.615766	880.96	1.50	882.46
9	38.456063	-83.615256	881.68	1.50	883.18
10	38.454332	-83.615224	924.38	1.50	925.88
11	38.454328	-83.615460	932.81	1.50	934.31
12	38.454773	-83.615476	934.79	1.50	936.29
13	38.454769	-83.618464	901.20	1.50	902.70
14	38.454328	-83.618480	924.94	1.50	926.44
15	38.454320	-83.619907	902.38	1.50	903.88
16	38.454731	-83.619896	892.04	1.50	893.54
17	38.454706	-83.621377	879.38	1.50	880.88
18	38.455151	-83.621345	869.49	1.50	870.99
19	38.455200	-83.620484	882.23	1.50	883.73
20	38.455636	-83.620568	875.31	1.50	876.81

Name: 508

Footprint area: 12.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456059	-83.615255	881.83	1.50	883.33
2	38.456088	-83.611516	879.89	1.50	881.39
3	38.455630	-83.611494	882.94	1.50	884.44
4	38.455614	-83.612181	889.99	1.50	891.49
5	38.454206	-83.612149	903.48	1.50	904.98
6	38.454194	-83.613136	929.61	1.50	931.11
7	38.454668	-83.613130	913.97	1.50	915.47
8	38.454660	-83.614407	906.66	1.50	908.16
9	38.454315	-83.614423	918.16	1.50	919.66
10	38.454332	-83.615228	924.74	1.50	926.24

Name: 509

Footprint area: 4.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458222	-83.624195	858.75	1.50	860.25
2	38.458226	-83.622119	872.42	1.50	873.92
3	38.457331	-83.622113	873.14	1.50	874.64
4	38.457298	-83.624205	864.50	1.50	866.00

Name: 510

Footprint area: 8.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.495975	-83.665326	893.56	1.50	895.06
2	38.495034	-83.665348	907.79	1.50	909.29
3	38.495127	-83.664060	888.58	1.50	890.08
4	38.496118	-83.663427	851.62	1.50	853.12
5	38.496898	-83.663438	858.77	1.50	860.27
6	38.497621	-83.663063	842.29	1.50	843.79
7	38.497621	-83.664382	847.07	1.50	848.57
8	38.496731	-83.664457	887.73	1.50	889.23

Name: 511

Footprint area: 3.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.424177	-83.665801	833.60	1.50	835.10
2	38.424135	-83.664503	832.54	1.50	834.04
3	38.423093	-83.664546	861.12	1.50	862.62
4	38.423160	-83.665898	883.22	1.50	884.72

Name: 512

Footprint area: 15.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.471798	-83.622300	852.83	1.50	854.33
2	38.471130	-83.622337	864.44	1.50	865.94
3	38.470995	-83.616222	873.53	1.50	875.03
4	38.472188	-83.616136	882.27	1.50	883.77
5	38.472264	-83.622327	835.95	1.50	837.45
6	38.472083	-83.622316	839.70	1.50	841.20

Name: 513

Footprint area: 15.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.472205	-83.616115	882.00	1.50	883.50
2	38.472104	-83.611351	925.83	1.50	927.33
3	38.470727	-83.611394	922.52	1.50	924.02
4	38.470945	-83.616179	872.15	1.50	873.65

Name: 514

Footprint area: 4.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490986	-83.608398	837.17	1.50	838.67
2	38.490482	-83.608420	834.42	1.50	835.92
3	38.490490	-83.607658	820.76	1.50	822.26
4	38.492346	-83.605030	829.47	1.50	830.97
5	38.492883	-83.605030	828.21	1.50	829.71
6	38.491061	-83.607615	828.95	1.50	830.45

Name: 515

Footprint area: 7.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457505	-83.665508	871.32	1.50	872.82
2	38.456846	-83.665529	888.69	1.50	890.19
3	38.456863	-83.665433	889.86	1.50	891.36
4	38.456518	-83.665438	899.57	1.50	901.07
5	38.456527	-83.665256	905.75	1.50	907.25
6	38.456837	-83.665250	896.04	1.50	897.54
7	38.456825	-83.663636	883.77	1.50	885.27
8	38.458551	-83.663652	878.92	1.50	880.42
9	38.458522	-83.665481	842.90	1.50	844.40

Name: 516

Footprint area: 8.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458548	-83.664142	879.92	1.50	881.42
2	38.458901	-83.664142	864.36	1.50	865.86
3	38.458901	-83.663005	872.55	1.50	874.05
4	38.459729	-83.661846	846.47	1.50	847.97
5	38.459712	-83.661283	836.06	1.50	837.56
6	38.459120	-83.661272	836.79	1.50	838.29
7	38.459107	-83.661465	845.47	1.50	846.97
8	38.458636	-83.661497	836.08	1.50	837.58
9	38.458191	-83.662806	873.84	1.50	875.34
10	38.456780	-83.662838	862.93	1.50	864.43
11	38.456813	-83.663632	883.70	1.50	885.20
12	38.458548	-83.663659	879.00	1.50	880.50

Name: 517

Footprint area: 4.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456301	-83.663648	892.32	1.50	893.82
2	38.455826	-83.663670	895.45	1.50	896.95
3	38.455805	-83.662549	858.32	1.50	859.82
4	38.456154	-83.662522	855.87	1.50	857.37
5	38.456141	-83.660580	913.31	1.50	914.81
6	38.456738	-83.660564	905.81	1.50	907.31
7	38.456708	-83.662149	862.50	1.50	864.00

Name: 518

Footprint area: 6.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456742	-83.660564	905.81	1.50	907.31
2	38.456723	-83.661347	888.30	1.50	889.80
3	38.458510	-83.661154	847.68	1.50	849.18
4	38.458527	-83.660456	836.27	1.50	837.77
5	38.457078	-83.659325	848.30	1.50	849.80
6	38.456498	-83.659287	869.25	1.50	870.75
7	38.456494	-83.660558	909.69	1.50	911.19

Name: 519

Footprint area: 4.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457348	-83.620311	880.33	1.50	881.83
2	38.457331	-83.622119	873.10	1.50	874.60
3	38.458230	-83.622119	872.42	1.50	873.92
4	38.458245	-83.620222	870.96	1.50	872.46



2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25

Description:

Threshold height : 50 ft

Direction: 247.0 deg

Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7

Description:

Threshold height : 50 ft

Direction: 66.8 deg

Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



Route Receptor(s)

Name: Black Diamond Road

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.472963	-83.605859	842.68	5.00	847.68
2	38.471342	-83.606288	841.06	5.00	846.06
3	38.469725	-83.607726	824.77	5.00	829.77
4	38.468959	-83.608353	820.68	5.00	825.68
5	38.468160	-83.608981	826.96	5.00	831.96
6	38.467685	-83.609271	826.63	5.00	831.63
7	38.467341	-83.609952	827.75	5.00	832.75
8	38.467052	-83.610708	828.08	5.00	833.08
9	38.466895	-83.611036	831.56	5.00	836.56
10	38.466439	-83.611612	844.54	5.00	849.54
11	38.466169	-83.612088	856.52	5.00	861.52
12	38.465853	-83.612895	873.71	5.00	878.71
13	38.465506	-83.613846	880.60	5.00	885.60
14	38.465375	-83.614047	883.91	5.00	888.91
15	38.464210	-83.614742	889.83	5.00	894.83
16	38.462983	-83.615365	879.68	5.00	884.68
17	38.462849	-83.615472	879.79	5.00	884.79
18	38.462580	-83.615966	878.36	5.00	883.36
19	38.462177	-83.616824	869.55	5.00	874.55
20	38.461740	-83.617382	867.13	5.00	872.13
21	38.461169	-83.618025	864.14	5.00	869.14
22	38.460732	-83.618583	861.83	5.00	866.83
23	38.460446	-83.619249	861.82	5.00	866.82
24	38.460312	-83.619849	861.79	5.00	866.79
25	38.459640	-83.621137	875.57	5.00	880.57
26	38.459321	-83.621802	876.11	5.00	881.11
27	38.459321	-83.622038	875.04	5.00	880.04
28	38.459421	-83.622210	872.99	5.00	877.99
29	38.461354	-83.623647	877.85	5.00	882.86
30	38.461858	-83.624119	874.39	5.00	879.39
31	38.462379	-83.624785	868.45	5.00	873.45
32	38.463000	-83.625557	860.29	5.00	865.29
33	38.463403	-83.626609	849.22	5.00	854.22
34	38.465055	-83.626213	865.83	5.00	870.84
35	38.466404	-83.626890	871.48	5.00	876.48
36	38.467758	-83.627730	870.47	5.00	875.47
37	38.467811	-83.628379	870.00	5.00	875.00
38	38.467984	-83.631866	876.80	5.00	881.80
39	38.468297	-83.636994	865.46	5.00	870.46
40	38.468654	-83.637466	864.23	5.00	869.23
41	38.469603	-83.637809	868.37	5.00	873.37

Name: Breeze Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.489717	-83.618176	785.71	5.00	790.71
2	38.489935	-83.617682	780.48	5.00	785.48
3	38.490556	-83.617274	782.85	5.00	787.86
4	38.491245	-83.616996	787.90	5.00	792.90
5	38.491581	-83.616631	780.18	5.00	785.18
6	38.492051	-83.615923	778.63	5.00	783.63
7	38.492790	-83.615172	772.91	5.00	777.91
8	38.493412	-83.614657	777.76	5.00	782.76
9	38.494100	-83.614206	806.89	5.00	811.89
10	38.494638	-83.613777	823.19	5.00	828.19
11	38.494889	-83.611910	840.00	5.00	845.00
12	38.495074	-83.610859	839.42	5.00	844.42
13	38.495780	-83.610365	839.32	5.00	844.32
14	38.497140	-83.609636	825.21	5.00	830.21

Name: Carpenter Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466629	-83.639204	872.25	5.00	877.25
2	38.465554	-83.639719	855.97	5.00	860.97
3	38.465168	-83.639891	843.71	5.00	848.71
4	38.464260	-83.640792	840.29	5.00	845.29
5	38.463471	-83.641650	847.66	5.00	852.66
6	38.461421	-83.642273	855.60	5.00	860.60
7	38.459405	-83.642702	870.66	5.00	875.66
8	38.457103	-83.643217	876.57	5.00	881.57
9	38.455490	-83.643710	884.95	5.00	889.95
10	38.454750	-83.643603	892.16	5.00	897.16
11	38.453591	-83.643388	899.59	5.00	904.59
12	38.450112	-83.642037	872.76	5.00	877.76
13	38.446650	-83.640728	898.81	5.00	903.81

Name: Colgan Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446701	-83.640685	899.21	5.00	904.21
2	38.447138	-83.638732	889.25	5.00	894.25
3	38.447558	-83.636908	877.09	5.00	882.09
4	38.448045	-83.635428	868.05	5.00	873.05
5	38.448650	-83.633883	880.36	5.00	885.36
6	38.449423	-83.632509	879.78	5.00	884.78
7	38.449524	-83.632123	876.11	5.00	881.11
8	38.449659	-83.629977	868.25	5.00	873.25
9	38.449759	-83.628819	860.60	5.00	865.60
10	38.449995	-83.627188	854.64	5.00	859.64
11	38.450045	-83.626716	854.72	5.00	859.72
12	38.449776	-83.626480	854.41	5.00	859.41
13	38.448365	-83.625922	857.04	5.00	862.04
14	38.447323	-83.623304	866.55	5.00	871.55
15	38.446264	-83.620257	878.95	5.00	883.95
16	38.445390	-83.617468	882.99	5.00	887.99
17	38.444701	-83.615257	883.36	5.00	888.36
18	38.444230	-83.613949	886.33	5.00	891.33
19	38.443945	-83.613541	885.15	5.00	890.15
20	38.443390	-83.613133	894.88	5.00	899.88

Name: Foxport Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490993	-83.623304	857.33	5.00	862.33
2	38.490909	-83.621480	835.34	5.00	840.34
3	38.489851	-83.618648	793.22	5.00	798.23
4	38.489179	-83.617189	787.43	5.00	792.43
5	38.488121	-83.615858	790.26	5.00	795.26
6	38.486861	-83.613949	800.67	5.00	805.67
7	38.486173	-83.612876	810.36	5.00	815.36
8	38.484056	-83.610666	837.12	5.00	842.12
9	38.481117	-83.608048	838.95	5.00	843.95
10	38.479572	-83.606610	838.07	5.00	843.07

Name: Poplar Grove Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.500159	-83.665075	835.46	5.00	840.46
2	38.499689	-83.664281	827.86	5.00	832.86
3	38.499118	-83.663380	825.68	5.00	830.68
4	38.498304	-83.662607	808.23	5.00	813.23
5	38.497901	-83.662414	822.72	5.00	827.72
6	38.497330	-83.662339	832.36	5.00	837.36
7	38.496784	-83.662500	851.91	5.00	856.91
8	38.496204	-83.662650	860.37	5.00	865.37
9	38.495575	-83.662532	868.72	5.00	873.72
10	38.494349	-83.662060	890.20	5.00	895.20
11	38.492451	-83.661373	928.34	5.00	933.34

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.466612	-83.626383	881.32	16.00	897.32
OP 2	38.467927	-83.635809	888.42	16.00	904.42
OP 3	38.467944	-83.638142	879.07	16.00	895.07
OP 4	38.467163	-83.638480	875.73	16.00	891.73
OP 5	38.465747	-83.640068	859.73	16.00	875.73
OP 6	38.465147	-83.638909	861.73	16.00	877.73
OP 7	38.463653	-83.640508	865.11	16.00	881.11
OP 8	38.463998	-83.642619	844.35	16.00	860.35
OP 9	38.460684	-83.642117	866.02	16.00	882.02
OP 10	38.459928	-83.642165	861.93	16.00	877.93
OP 11	38.459360	-83.643386	891.43	16.00	907.43
OP 12	38.458592	-83.642605	874.94	16.00	890.94
OP 13	38.455286	-83.642726	898.38	16.00	914.38
OP 14	38.454042	-83.642983	905.81	16.00	921.82
OP 15	38.454383	-83.642747	903.62	16.00	919.62
OP 16	38.450555	-83.636675	875.07	16.00	891.07
OP 17	38.449056	-83.633478	886.55	16.00	902.55
OP 18	38.449673	-83.632834	881.02	16.00	897.02
OP 19	38.450978	-83.632593	875.81	16.00	891.81
OP 20	38.449993	-83.630533	873.88	16.00	889.88
OP 21	38.449728	-83.631917	877.29	16.00	893.29
OP 22	38.449320	-83.628497	861.29	16.00	877.29
OP 23	38.448792	-83.624425	859.93	16.00	875.93
OP 24	38.448897	-83.621571	896.29	16.00	912.29
OP 25	38.448174	-83.622257	888.05	16.00	904.05
OP 26	38.451161	-83.623051	883.04	16.00	899.04
OP 27	38.463196	-83.612348	929.86	16.00	945.86
OP 28	38.463368	-83.612729	922.71	16.00	938.71
OP 29	38.466001	-83.611667	851.27	16.00	867.27
OP 30	38.466904	-83.609349	840.80	16.00	856.80
OP 31	38.461465	-83.623341	880.49	16.00	896.49
OP 32	38.459667	-83.620573	884.18	16.00	900.19
OP 33	38.459016	-83.622139	881.28	16.00	897.28
OP 34	38.460583	-83.623427	888.85	16.00	904.85
OP 35	38.455087	-83.666827	936.25	16.00	952.25
OP 36	38.454802	-83.668249	935.62	16.00	951.62
OP 37	38.472309	-83.627694	868.62	16.00	884.63
OP 38	38.488490	-83.603391	829.74	16.00	845.74
OP 39	38.492636	-83.663355	918.77	16.00	934.77
OP 40	38.500101	-83.664079	839.86	16.00	855.86

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
501	SA tracking	SA tracking	0	0	-	
502	SA tracking	SA tracking	0	0	-	
503	SA tracking	SA tracking	0	0	-	
504	SA tracking	SA tracking	0	0	-	
505	SA tracking	SA tracking	0	0	-	
506	SA tracking	SA tracking	0	0	-	
507	SA tracking	SA tracking	0	0	-	
508	SA tracking	SA tracking	0	0	-	
509	SA tracking	SA tracking	0	0	-	
510	SA tracking	SA tracking	0	0	-	
511	SA tracking	SA tracking	0	0	-	
512	SA tracking	SA tracking	15,289	0	-	-
513	SA tracking	SA tracking	0	0	-	
514	SA tracking	SA tracking	1,188	0	-	-
515	SA tracking	SA tracking	0	0	-	
516	SA tracking	SA tracking	0	0	-	
517	SA tracking	SA tracking	0	0	-	
518	SA tracking	SA tracking	0	0	-	
519	SA tracking	SA tracking	0	0	-	

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
512 (green)	1345	1929	1332	0	0	0	0	0	0	2975	1335	1074
512 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0
514 (green)	196	0	0	0	0	0	0	0	0	0	8	984
514 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

501 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

502 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

503 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

504 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

505 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

506 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

507 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

508 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

509 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

510 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

511 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

512 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	7821	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0

Route: Foxport Road	7468	0
Route: Poplar Grove Road	0	0

512 - Receptor (Fleming Mason Airport Runway 25)

No glare found

512 - Receptor (Fleming Mason Airport Runway 7)

No glare found

512 - OP Receptor (OP 1)

No glare found

512 - OP Receptor (OP 2)

No glare found

512 - OP Receptor (OP 3)

No glare found

512 - OP Receptor (OP 4)

No glare found

512 - OP Receptor (OP 5)

No glare found

512 - OP Receptor (OP 6)

No glare found

512 - OP Receptor (OP 7)

No glare found

512 - OP Receptor (OP 8)

No glare found

512 - OP Receptor (OP 9)

No glare found

512 - OP Receptor (OP 10)

No glare found

512 - OP Receptor (OP 11)

No glare found

512 - OP Receptor (OP 12)

No glare found

512 - OP Receptor (OP 13)

No glare found

512 - OP Receptor (OP 14)

No glare found

512 - OP Receptor (OP 15)

No glare found

512 - OP Receptor (OP 16)

No glare found

512 - OP Receptor (OP 17)

No glare found

512 - OP Receptor (OP 18)

No glare found

512 - OP Receptor (OP 19)

No glare found

512 - OP Receptor (OP 20)

No glare found

512 - OP Receptor (OP 21)

No glare found

512 - OP Receptor (OP 22)

No glare found

512 - OP Receptor (OP 23)

No glare found

512 - OP Receptor (OP 24)

No glare found

512 - OP Receptor (OP 25)

No glare found

512 - OP Receptor (OP 26)

No glare found

512 - OP Receptor (OP 27)

No glare found

512 - OP Receptor (OP 28)

No glare found

512 - OP Receptor (OP 29)

No glare found

512 - OP Receptor (OP 30)

No glare found

512 - OP Receptor (OP 31)

No glare found

512 - OP Receptor (OP 32)

No glare found

512 - OP Receptor (OP 33)

No glare found

512 - OP Receptor (OP 34)

No glare found

512 - OP Receptor (OP 35)

No glare found

512 - OP Receptor (OP 36)

No glare found

512 - OP Receptor (OP 37)

No glare found

512 - OP Receptor (OP 38)

No glare found

512 - OP Receptor (OP 39)

No glare found

512 - OP Receptor (OP 40)

No glare found

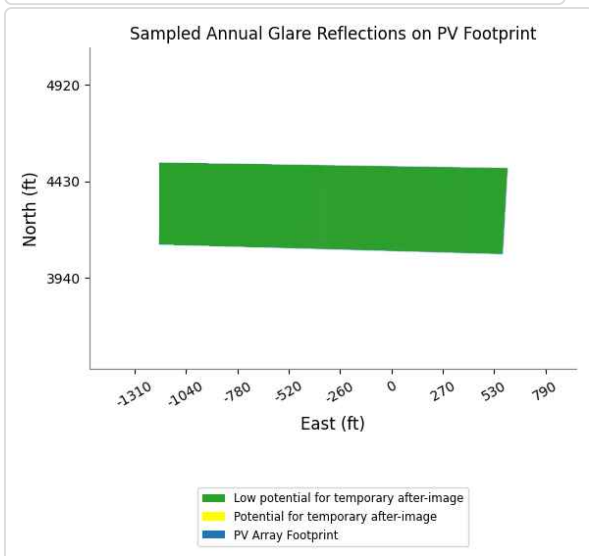
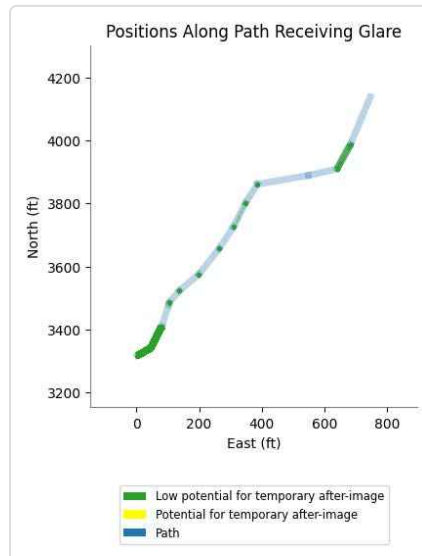
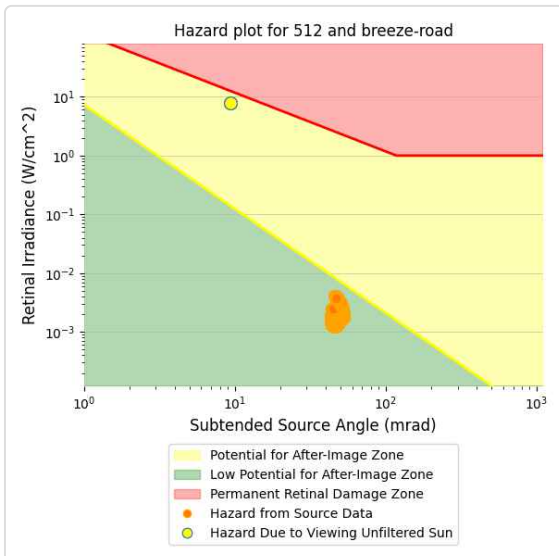
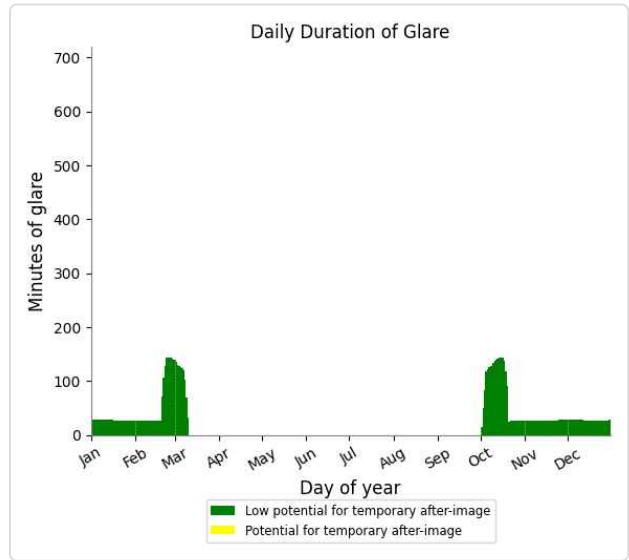
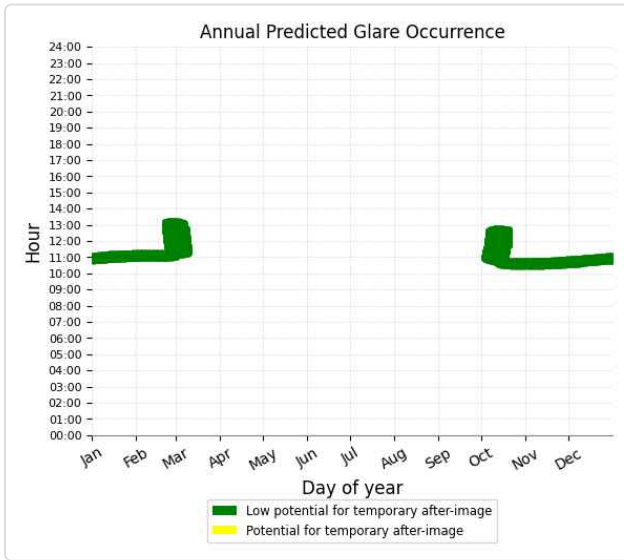
512 - Route Receptor (Black Diamond Road)

No glare found

512 - Route Receptor (Breeze Road)

PV array is expected to produce the following glare for receptors at this location:

- 7,821 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



512 - Route Receptor (Carpenter Road)

No glare found

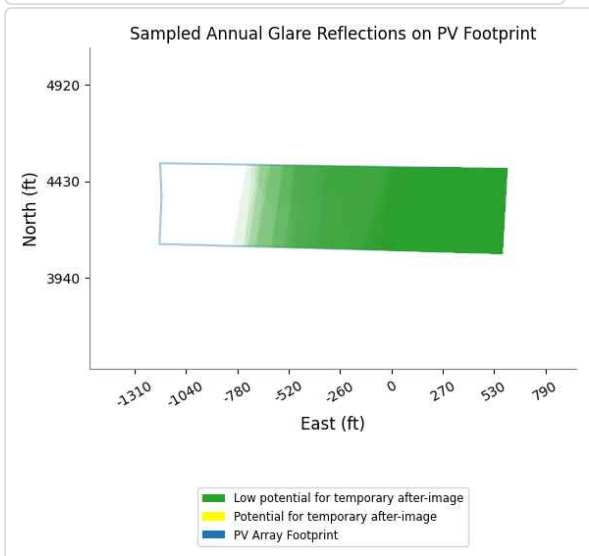
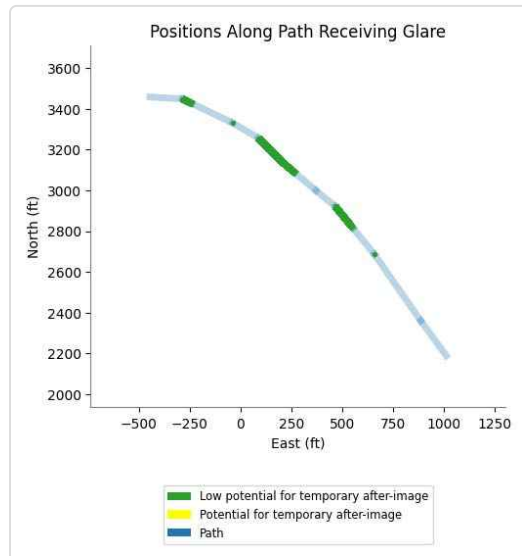
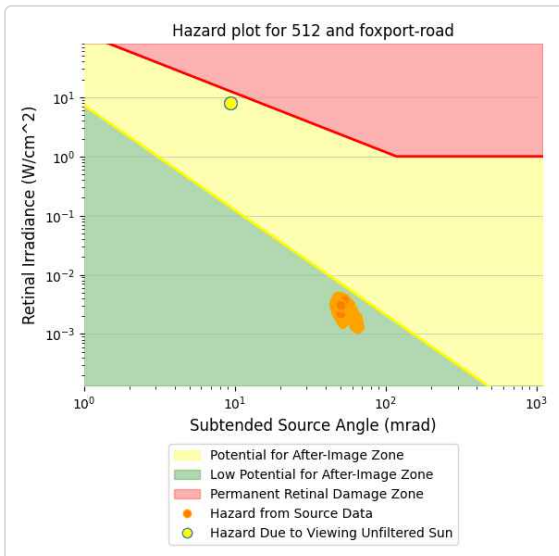
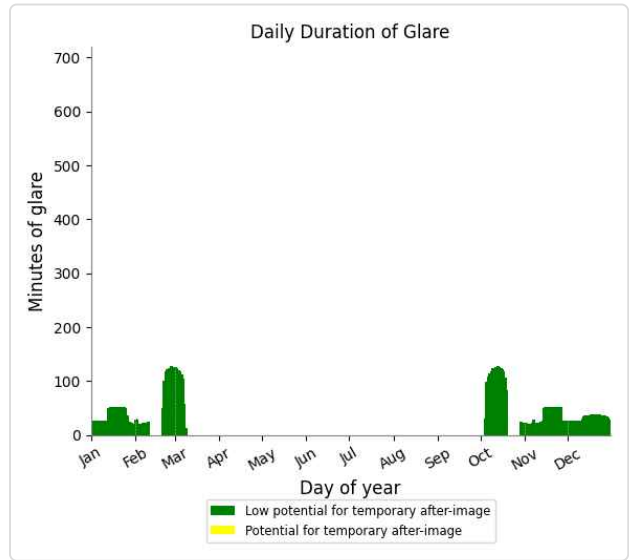
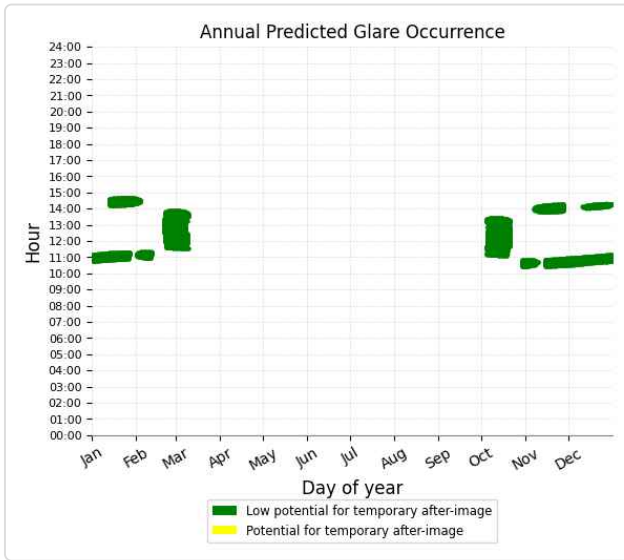
512 - Route Receptor (Colgan Road)

No glare found

512 - Route Receptor (Foxport Road)

PV array is expected to produce the following glare for receptors at this location:

- 7,468 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



512 - Route Receptor (Poplar Grove Road)

No glare found

513 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

514 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	1188	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0

Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

514 - Receptor (Fleming Mason Airport Runway 25)

No glare found

514 - Receptor (Fleming Mason Airport Runway 7)

No glare found

514 - OP Receptor (OP 1)

No glare found

514 - OP Receptor (OP 2)

No glare found

514 - OP Receptor (OP 3)

No glare found

514 - OP Receptor (OP 4)

No glare found

514 - OP Receptor (OP 5)

No glare found

514 - OP Receptor (OP 6)

No glare found

514 - OP Receptor (OP 7)

No glare found

514 - OP Receptor (OP 8)

No glare found

514 - OP Receptor (OP 9)

No glare found

514 - OP Receptor (OP 10)

No glare found

514 - OP Receptor (OP 11)

No glare found

514 - OP Receptor (OP 12)

No glare found

514 - OP Receptor (OP 13)

No glare found

514 - OP Receptor (OP 14)

No glare found

514 - OP Receptor (OP 15)

No glare found

514 - OP Receptor (OP 16)

No glare found

514 - OP Receptor (OP 17)

No glare found

514 - OP Receptor (OP 18)

No glare found

514 - OP Receptor (OP 19)

No glare found

514 - OP Receptor (OP 20)

No glare found

514 - OP Receptor (OP 21)

No glare found

514 - OP Receptor (OP 22)

No glare found

514 - OP Receptor (OP 23)

No glare found

514 - OP Receptor (OP 24)

No glare found

514 - OP Receptor (OP 25)

No glare found

514 - OP Receptor (OP 26)

No glare found

514 - OP Receptor (OP 27)

No glare found

514 - OP Receptor (OP 28)

No glare found

514 - OP Receptor (OP 29)

No glare found

514 - OP Receptor (OP 30)

No glare found

514 - OP Receptor (OP 31)

No glare found

514 - OP Receptor (OP 32)

No glare found

514 - OP Receptor (OP 33)

No glare found

514 - OP Receptor (OP 34)

No glare found

514 - OP Receptor (OP 35)

No glare found

514 - OP Receptor (OP 36)

No glare found

514 - OP Receptor (OP 37)

No glare found

514 - OP Receptor (OP 38)

No glare found

514 - OP Receptor (OP 39)

No glare found

514 - OP Receptor (OP 40)

No glare found

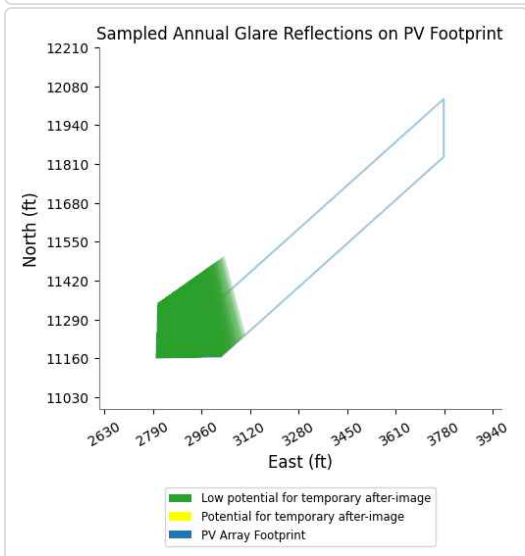
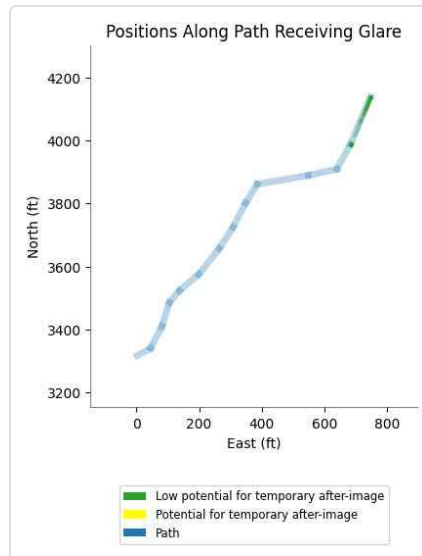
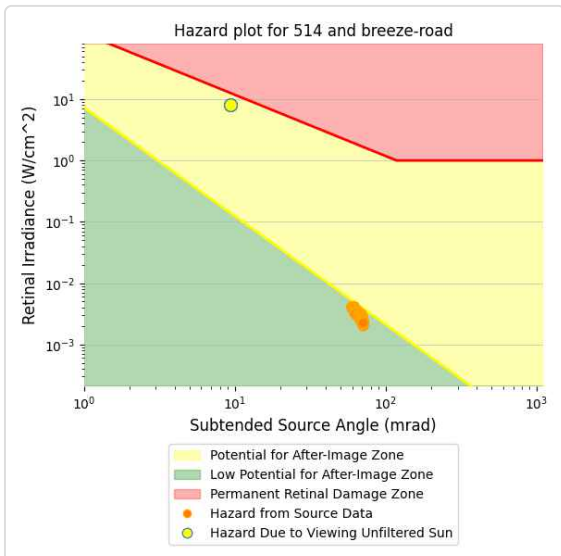
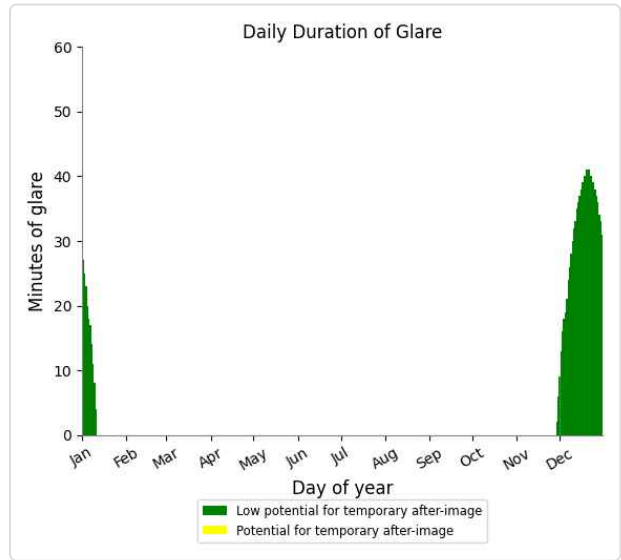
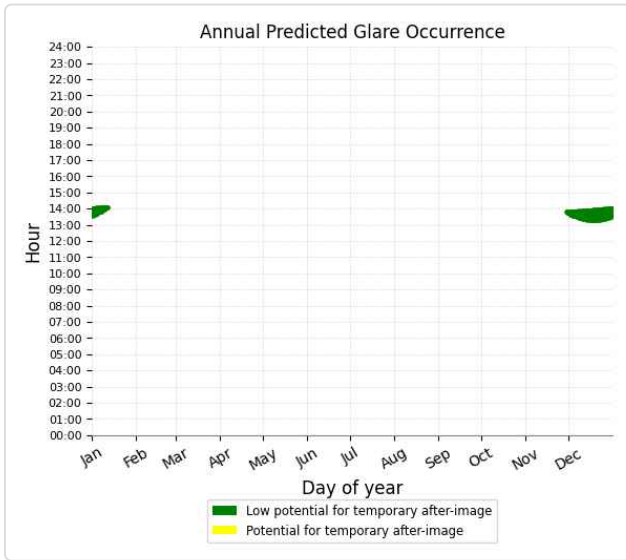
514 - Route Receptor (Black Diamond Road)

No glare found

514 - Route Receptor (Breeze Road)

PV array is expected to produce the following glare for receptors at this location:

- 1,188 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



514 - Route Receptor (Carpenter Road)

No glare found

514 - Route Receptor (Colgan Road)

No glare found

514 - Route Receptor (Foxport Road)

No glare found

514 - Route Receptor (Poplar Grove Road)

No glare found

515 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

516 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

517 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

518 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
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OP: OP 23	0	0
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OP: OP 26	0	0
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OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

519 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
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OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 5 5ft veh 10ft pan 52rest

Created Aug. 11, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73942.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results Glare with low potential for temporary after-image predicted

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
501	SA tracking	SA tracking	0	0	-
502	SA tracking	SA tracking	0	0	-
503	SA tracking	SA tracking	0	0	-
504	SA tracking	SA tracking	0	0	-
505	SA tracking	SA tracking	0	0	-
506	SA tracking	SA tracking	0	0	-
507	SA tracking	SA tracking	0	0	-
508	SA tracking	SA tracking	0	0	-
509	SA tracking	SA tracking	0	0	-
510	SA tracking	SA tracking	0	0	-
511	SA tracking	SA tracking	0	0	-
512	SA tracking	SA tracking	15,026	0	-
513	SA tracking	SA tracking	0	0	-
514	SA tracking	SA tracking	1,012	0	-
515	SA tracking	SA tracking	0	0	-
516	SA tracking	SA tracking	0	0	-
517	SA tracking	SA tracking	0	0	-
518	SA tracking	SA tracking	0	0	-
519	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 200.4 acres

Name: 501

Footprint area: 11.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.459849	-83.618200	864.69	10.00	874.69
2	38.460412	-83.618221	863.95	10.00	873.95
3	38.461437	-83.617063	873.00	10.00	883.00
4	38.462239	-83.615834	884.34	10.00	894.34
5	38.460445	-83.614104	890.27	10.00	900.28
6	38.460387	-83.614973	878.94	10.00	888.94
7	38.460227	-83.616617	871.89	10.00	881.89
8	38.459864	-83.617309	865.79	10.00	875.79

Name: 502

Footprint area: 4.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.459536	-83.616262	869.15	10.00	879.15
2	38.459007	-83.616230	870.32	10.00	880.32
3	38.459074	-83.615436	875.45	10.00	885.45
4	38.458666	-83.615361	873.05	10.00	883.05
5	38.458704	-83.614889	876.29	10.00	886.29
6	38.459217	-83.614931	878.85	10.00	888.85
7	38.459263	-83.614197	883.90	10.00	893.90
8	38.458813	-83.614186	882.20	10.00	892.20
9	38.458855	-83.613633	887.19	10.00	897.19
10	38.459817	-83.613837	885.49	10.00	895.49
11	38.459723	-83.615039	875.91	10.00	885.91

Name: 503

Footprint area: 12.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.462162	-83.625923	867.99	10.00	877.99
2	38.462158	-83.625076	871.01	10.00	881.01
3	38.461662	-83.625092	873.63	10.00	883.63
4	38.461658	-83.624732	875.14	10.00	885.14
5	38.460830	-83.624705	869.06	10.00	879.06
6	38.460830	-83.624351	873.90	10.00	883.90
7	38.460078	-83.624212	871.41	10.00	881.41
8	38.460083	-83.623911	874.93	10.00	884.93
9	38.459601	-83.623918	870.15	10.00	880.15
10	38.459570	-83.623401	870.53	10.00	880.53
11	38.459113	-83.623389	865.99	10.00	875.99
12	38.459107	-83.623212	866.86	10.00	876.86
13	38.458844	-83.623188	865.19	10.00	875.19
14	38.458830	-83.622971	868.26	10.00	878.26
15	38.458226	-83.622957	865.51	10.00	875.51
16	38.458220	-83.623530	861.59	10.00	871.59
17	38.458661	-83.623537	861.09	10.00	871.09
18	38.458638	-83.624053	858.84	10.00	868.85
19	38.459084	-83.624083	862.73	10.00	872.73
20	38.459070	-83.625109	855.22	10.00	865.22
21	38.459403	-83.625118	857.20	10.00	867.20
22	38.459385	-83.625307	856.13	10.00	866.13
23	38.459754	-83.625340	856.88	10.00	866.88
24	38.460144	-83.625963	855.09	10.00	865.09

Name: 504

Footprint area: 11.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457720	-83.627797	861.63	10.00	871.63
2	38.458241	-83.627765	856.90	10.00	866.90
3	38.459174	-83.627336	855.91	10.00	865.91
4	38.459165	-83.626757	854.78	10.00	864.78
5	38.458628	-83.626724	860.80	10.00	870.80
6	38.458636	-83.625008	855.53	10.00	865.53
7	38.458241	-83.625040	859.49	10.00	869.49
8	38.458233	-83.624182	858.71	10.00	868.71
9	38.457292	-83.624192	864.91	10.00	874.91
10	38.457250	-83.627594	870.82	10.00	880.82
11	38.457704	-83.627518	861.64	10.00	871.64

Name: 505

Footprint area: 24.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457346	-83.620306	880.33	10.00	890.33
2	38.457313	-83.617689	887.29	10.00	897.29
3	38.456355	-83.617651	882.33	10.00	892.33
4	38.456405	-83.612480	879.57	10.00	889.57
5	38.457321	-83.612490	875.60	10.00	885.60
6	38.457330	-83.614132	872.38	10.00	882.38
7	38.457758	-83.614121	871.13	10.00	881.14
8	38.457777	-83.616385	868.66	10.00	878.66
9	38.458139	-83.616377	867.49	10.00	877.49
10	38.458161	-83.618065	878.98	10.00	888.98
11	38.458617	-83.618030	875.69	10.00	885.69
12	38.458614	-83.618736	872.81	10.00	882.81
13	38.459150	-83.618725	871.33	10.00	881.33
14	38.459124	-83.619213	865.22	10.00	875.22
15	38.458594	-83.619274	869.32	10.00	879.32
16	38.458573	-83.620201	869.85	10.00	879.85
17	38.457960	-83.620254	873.15	10.00	883.15

Name: 506

Footprint area: 17.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456586	-83.627479	868.42	10.00	878.42
2	38.457014	-83.627484	873.40	10.00	883.40
3	38.457040	-83.620564	882.91	10.00	892.91
4	38.456502	-83.620580	880.68	10.00	890.68
5	38.456456	-83.622061	879.15	10.00	889.15
6	38.456057	-83.622061	871.79	10.00	881.79
7	38.456015	-83.623815	875.79	10.00	885.79
8	38.455557	-83.623815	868.40	10.00	878.40
9	38.455561	-83.624265	874.43	10.00	884.43
10	38.455238	-83.624241	867.59	10.00	877.59
11	38.455214	-83.625404	858.57	10.00	868.57
12	38.455650	-83.625409	859.72	10.00	869.72
13	38.455660	-83.625988	856.60	10.00	866.60
14	38.456073	-83.626005	866.02	10.00	876.02
15	38.456133	-83.627278	866.79	10.00	876.79
16	38.456581	-83.627280	871.66	10.00	881.66

Name: 507

Footprint area: 24.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457033	-83.620572	883.18	10.00	893.18
2	38.457021	-83.617869	887.56	10.00	897.56
3	38.456059	-83.617853	889.34	10.00	899.34
4	38.456050	-83.617423	887.06	10.00	897.06
5	38.455630	-83.617407	899.31	10.00	909.31
6	38.455639	-83.616769	901.31	10.00	911.31
7	38.456038	-83.616758	890.30	10.00	900.30
8	38.456055	-83.615766	880.96	10.00	890.96
9	38.456063	-83.615256	881.68	10.00	891.68
10	38.454332	-83.615224	924.38	10.00	934.39
11	38.454328	-83.615460	932.81	10.00	942.81
12	38.454773	-83.615476	934.79	10.00	944.79
13	38.454769	-83.618464	901.20	10.00	911.21
14	38.454328	-83.618480	924.94	10.00	934.94
15	38.454320	-83.619907	902.38	10.00	912.38
16	38.454731	-83.619896	892.04	10.00	902.04
17	38.454706	-83.621377	879.38	10.00	889.38
18	38.455151	-83.621345	869.49	10.00	879.49
19	38.455200	-83.620484	882.23	10.00	892.23
20	38.455636	-83.620568	875.31	10.00	885.31

Name: 508

Footprint area: 12.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456059	-83.615255	881.83	10.00	891.83
2	38.456088	-83.611516	879.89	10.00	889.90
3	38.455630	-83.611494	882.94	10.00	892.94
4	38.455614	-83.612181	889.99	10.00	899.99
5	38.454206	-83.612149	903.48	10.00	913.48
6	38.454194	-83.613136	929.61	10.00	939.61
7	38.454668	-83.613130	913.97	10.00	923.97
8	38.454660	-83.614407	906.66	10.00	916.66
9	38.454315	-83.614423	918.16	10.00	928.16
10	38.454332	-83.615228	924.74	10.00	934.74

Name: 509

Footprint area: 4.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458222	-83.624195	858.75	10.00	868.75
2	38.458234	-83.622135	872.33	10.00	882.33
3	38.457331	-83.622113	873.14	10.00	883.14
4	38.457298	-83.624205	864.50	10.00	874.50

Name: 510

Footprint area: 8.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.495975	-83.665326	893.56	10.00	903.56
2	38.495034	-83.665348	907.79	10.00	917.79
3	38.495127	-83.664060	888.58	10.00	898.58
4	38.496118	-83.663427	851.62	10.00	861.62
5	38.496898	-83.663438	858.77	10.00	868.77
6	38.497621	-83.663063	842.29	10.00	852.29
7	38.497621	-83.664382	847.07	10.00	857.07
8	38.496731	-83.664457	887.73	10.00	897.73

Name: 511

Footprint area: 3.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.424177	-83.665801	833.60	10.00	843.60
2	38.424135	-83.664503	832.54	10.00	842.54
3	38.423093	-83.664546	861.12	10.00	871.12
4	38.423160	-83.665898	883.22	10.00	893.22

Name: 512

Footprint area: 15.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.471798	-83.622300	852.83	10.00	862.83
2	38.471130	-83.622337	864.44	10.00	874.44
3	38.470995	-83.616222	873.53	10.00	883.53
4	38.472188	-83.616136	882.27	10.00	892.27
5	38.472264	-83.622327	835.95	10.00	845.95
6	38.472083	-83.622316	839.70	10.00	849.70

Name: 513

Footprint area: 15.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.472205	-83.616115	882.00	10.00	892.00
2	38.472104	-83.611351	925.83	10.00	935.83
3	38.470727	-83.611394	922.52	10.00	932.53
4	38.470945	-83.616179	872.15	10.00	882.15

Name: 514

Footprint area: 4.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490986	-83.608398	837.17	10.00	847.17
2	38.490482	-83.608420	834.42	10.00	844.42
3	38.490490	-83.607658	820.76	10.00	830.76
4	38.492346	-83.605030	829.47	10.00	839.47
5	38.492883	-83.605030	828.21	10.00	838.21
6	38.491061	-83.607615	828.95	10.00	838.95

Name: 515

Footprint area: 7.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457505	-83.665508	871.32	10.00	881.32
2	38.456846	-83.665529	888.69	10.00	898.69
3	38.456863	-83.665433	889.86	10.00	899.86
4	38.456518	-83.665438	899.57	10.00	909.57
5	38.456527	-83.665256	905.75	10.00	915.75
6	38.456837	-83.665250	896.04	10.00	906.04
7	38.456825	-83.663636	883.77	10.00	893.77
8	38.458551	-83.663652	878.92	10.00	888.92
9	38.458522	-83.665481	842.90	10.00	852.90

Name: 516

Footprint area: 8.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458548	-83.664142	879.92	10.00	889.92
2	38.458901	-83.664142	864.36	10.00	874.36
3	38.458901	-83.663005	872.55	10.00	882.55
4	38.459729	-83.661846	846.47	10.00	856.47
5	38.459712	-83.661283	836.06	10.00	846.06
6	38.459120	-83.661272	836.79	10.00	846.79
7	38.459107	-83.661465	845.47	10.00	855.47
8	38.458636	-83.661497	836.08	10.00	846.08
9	38.458191	-83.662806	873.84	10.00	883.84
10	38.456780	-83.662838	862.93	10.00	872.93
11	38.456813	-83.663632	883.70	10.00	893.71
12	38.458548	-83.663659	879.00	10.00	889.00

Name: 517

Footprint area: 4.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456301	-83.663648	892.32	10.00	902.32
2	38.455826	-83.663670	895.45	10.00	905.45
3	38.455814	-83.662570	858.29	10.00	868.30
4	38.456154	-83.662522	855.87	10.00	865.87
5	38.456141	-83.660580	913.31	10.00	923.31
6	38.456738	-83.660564	905.81	10.00	915.82
7	38.456708	-83.662149	862.50	10.00	872.50

Name: 518

Footprint area: 6.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456742	-83.660564	905.81	10.00	915.82
2	38.456723	-83.661347	888.30	10.00	898.30
3	38.458510	-83.661154	847.68	10.00	857.68
4	38.458527	-83.660456	836.27	10.00	846.27
5	38.457078	-83.659325	848.30	10.00	858.30
6	38.456498	-83.659287	869.25	10.00	879.25
7	38.456494	-83.660558	909.69	10.00	919.69

Name: 519

Footprint area: 4.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457348	-83.620311	880.33	10.00	890.33
2	38.457331	-83.622119	873.10	10.00	883.10
3	38.458243	-83.622140	872.34	10.00	882.34
4	38.458245	-83.620222	870.96	10.00	880.96



2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25

Description:

Threshold height : 50 ft

Direction: 247.0 deg

Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7

Description:

Threshold height : 50 ft

Direction: 66.8 deg

Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



Route Receptor(s)

Name: Black Diamond Road

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.472963	-83.605859	842.68	5.00	847.68
2	38.471342	-83.606288	841.06	5.00	846.06
3	38.469725	-83.607726	824.77	5.00	829.77
4	38.468959	-83.608353	820.68	5.00	825.68
5	38.468160	-83.608981	826.96	5.00	831.96
6	38.467685	-83.609271	826.63	5.00	831.63
7	38.467341	-83.609952	827.75	5.00	832.75
8	38.467052	-83.610708	828.08	5.00	833.08
9	38.466895	-83.611036	831.56	5.00	836.56
10	38.466439	-83.611612	844.54	5.00	849.54
11	38.466169	-83.612088	856.52	5.00	861.52
12	38.465853	-83.612895	873.71	5.00	878.71
13	38.465506	-83.613846	880.60	5.00	885.60
14	38.465375	-83.614047	883.91	5.00	888.91
15	38.464210	-83.614742	889.83	5.00	894.83
16	38.462983	-83.615365	879.68	5.00	884.68
17	38.462849	-83.615472	879.79	5.00	884.79
18	38.462580	-83.615966	878.36	5.00	883.36
19	38.462177	-83.616824	869.55	5.00	874.55
20	38.461740	-83.617382	867.13	5.00	872.13
21	38.461169	-83.618025	864.14	5.00	869.14
22	38.460732	-83.618583	861.83	5.00	866.83
23	38.460446	-83.619249	861.82	5.00	866.82
24	38.460312	-83.619849	861.79	5.00	866.79
25	38.459640	-83.621137	875.57	5.00	880.57
26	38.459321	-83.621802	876.11	5.00	881.11
27	38.459321	-83.622038	875.04	5.00	880.04
28	38.459421	-83.622210	872.99	5.00	877.99
29	38.461354	-83.623647	877.85	5.00	882.86
30	38.461858	-83.624119	874.39	5.00	879.39
31	38.462379	-83.624785	868.45	5.00	873.45
32	38.463000	-83.625557	860.29	5.00	865.29
33	38.463403	-83.626609	849.22	5.00	854.22
34	38.465055	-83.626213	865.83	5.00	870.84
35	38.466404	-83.626890	871.48	5.00	876.48
36	38.467758	-83.627730	870.47	5.00	875.47
37	38.467811	-83.628379	870.00	5.00	875.00
38	38.467984	-83.631866	876.80	5.00	881.80
39	38.468297	-83.636994	865.46	5.00	870.46
40	38.468654	-83.637466	864.23	5.00	869.23
41	38.469603	-83.637809	868.37	5.00	873.37

Name: Breeze Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.489717	-83.618176	785.71	5.00	790.71
2	38.489935	-83.617682	780.48	5.00	785.48
3	38.490556	-83.617274	782.85	5.00	787.86
4	38.491245	-83.616996	787.90	5.00	792.90
5	38.491581	-83.616631	780.18	5.00	785.18
6	38.492051	-83.615923	778.63	5.00	783.63
7	38.492790	-83.615172	772.91	5.00	777.91
8	38.493412	-83.614657	777.76	5.00	782.76
9	38.494100	-83.614206	806.89	5.00	811.89
10	38.494638	-83.613777	823.19	5.00	828.19
11	38.494889	-83.611910	840.00	5.00	845.00
12	38.495074	-83.610859	839.42	5.00	844.42
13	38.495780	-83.610365	839.32	5.00	844.32
14	38.497140	-83.609636	825.21	5.00	830.21

Name: Carpenter Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466629	-83.639204	872.25	5.00	877.25
2	38.465554	-83.639719	855.97	5.00	860.97
3	38.465168	-83.639891	843.71	5.00	848.71
4	38.464260	-83.640792	840.29	5.00	845.29
5	38.463471	-83.641650	847.66	5.00	852.66
6	38.461421	-83.642273	855.60	5.00	860.60
7	38.459405	-83.642702	870.66	5.00	875.66
8	38.457103	-83.643217	876.57	5.00	881.57
9	38.455490	-83.643710	884.95	5.00	889.95
10	38.454750	-83.643603	892.16	5.00	897.16
11	38.453591	-83.643388	899.59	5.00	904.59
12	38.450112	-83.642037	872.76	5.00	877.76
13	38.446650	-83.640728	898.81	5.00	903.81

Name: Colgan Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446701	-83.640685	899.21	5.00	904.21
2	38.447138	-83.638732	889.25	5.00	894.25
3	38.447558	-83.636908	877.09	5.00	882.09
4	38.448045	-83.635428	868.05	5.00	873.05
5	38.448650	-83.633883	880.36	5.00	885.36
6	38.449423	-83.632509	879.78	5.00	884.78
7	38.449524	-83.632123	876.11	5.00	881.11
8	38.449659	-83.629977	868.25	5.00	873.25
9	38.449759	-83.628819	860.60	5.00	865.60
10	38.449995	-83.627188	854.64	5.00	859.64
11	38.450045	-83.626716	854.72	5.00	859.72
12	38.449776	-83.626480	854.41	5.00	859.41
13	38.448365	-83.625922	857.04	5.00	862.04
14	38.447323	-83.623304	866.55	5.00	871.55
15	38.446264	-83.620257	878.95	5.00	883.95
16	38.445390	-83.617468	882.99	5.00	887.99
17	38.444701	-83.615257	883.36	5.00	888.36
18	38.444230	-83.613949	886.33	5.00	891.33
19	38.443945	-83.613541	885.15	5.00	890.15
20	38.443390	-83.613133	894.88	5.00	899.88

Name: Foxport Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490993	-83.623304	857.33	5.00	862.33
2	38.490909	-83.621480	835.34	5.00	840.34
3	38.489851	-83.618648	793.22	5.00	798.23
4	38.489179	-83.617189	787.43	5.00	792.43
5	38.488121	-83.615858	790.26	5.00	795.26
6	38.486861	-83.613949	800.67	5.00	805.67
7	38.486173	-83.612876	810.36	5.00	815.36
8	38.484056	-83.610666	837.12	5.00	842.12
9	38.481117	-83.608048	838.95	5.00	843.95
10	38.479572	-83.606610	838.07	5.00	843.07

Name: Poplar Grove Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.500159	-83.665075	835.46	5.00	840.46
2	38.499689	-83.664281	827.86	5.00	832.86
3	38.499118	-83.663380	825.68	5.00	830.68
4	38.498304	-83.662607	808.23	5.00	813.23
5	38.497901	-83.662414	822.72	5.00	827.72
6	38.497330	-83.662339	832.36	5.00	837.36
7	38.496784	-83.662500	851.91	5.00	856.91
8	38.496204	-83.662650	860.37	5.00	865.37
9	38.495575	-83.662532	868.72	5.00	873.72
10	38.494349	-83.662060	890.20	5.00	895.20
11	38.492451	-83.661373	928.34	5.00	933.34

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.466612	-83.626383	881.32	16.00	897.32
OP 2	38.467927	-83.635809	888.42	16.00	904.42
OP 3	38.467944	-83.638142	879.07	16.00	895.07
OP 4	38.467163	-83.638480	875.73	16.00	891.73
OP 5	38.465747	-83.640068	859.73	16.00	875.73
OP 6	38.465147	-83.638909	861.73	16.00	877.73
OP 7	38.463653	-83.640508	865.11	16.00	881.11
OP 8	38.463998	-83.642619	844.35	16.00	860.35
OP 9	38.460684	-83.642117	866.02	16.00	882.02
OP 10	38.459928	-83.642165	861.93	16.00	877.93
OP 11	38.459360	-83.643386	891.43	16.00	907.43
OP 12	38.458592	-83.642605	874.94	16.00	890.94
OP 13	38.455286	-83.642726	898.38	16.00	914.38
OP 14	38.454042	-83.642983	905.81	16.00	921.82
OP 15	38.454383	-83.642747	903.62	16.00	919.62
OP 16	38.450555	-83.636675	875.07	16.00	891.07
OP 17	38.449056	-83.633478	886.55	16.00	902.55
OP 18	38.449673	-83.632834	881.02	16.00	897.02
OP 19	38.450978	-83.632593	875.81	16.00	891.81
OP 20	38.449993	-83.630533	873.88	16.00	889.88
OP 21	38.449728	-83.631917	877.29	16.00	893.29
OP 22	38.449320	-83.628497	861.29	16.00	877.29
OP 23	38.448792	-83.624425	859.93	16.00	875.93
OP 24	38.448897	-83.621571	896.29	16.00	912.29
OP 25	38.448174	-83.622257	888.05	16.00	904.05
OP 26	38.451161	-83.623051	883.04	16.00	899.04
OP 27	38.463196	-83.612348	929.86	16.00	945.86
OP 28	38.463368	-83.612729	922.71	16.00	938.71
OP 29	38.466001	-83.611667	851.27	16.00	867.27
OP 30	38.466904	-83.609349	840.80	16.00	856.80
OP 31	38.461465	-83.623341	880.49	16.00	896.49
OP 32	38.459667	-83.620573	884.18	16.00	900.19
OP 33	38.459016	-83.622139	881.28	16.00	897.28
OP 34	38.460583	-83.623427	888.85	16.00	904.85
OP 35	38.455087	-83.666827	936.25	16.00	952.25
OP 36	38.454802	-83.668249	935.62	16.00	951.62
OP 37	38.472309	-83.627694	868.62	16.00	884.63
OP 38	38.488490	-83.603391	829.74	16.00	845.74
OP 39	38.492636	-83.663355	918.77	16.00	934.77
OP 40	38.500101	-83.664079	839.86	16.00	855.86

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
501	SA tracking	SA tracking	0	0	-	
502	SA tracking	SA tracking	0	0	-	
503	SA tracking	SA tracking	0	0	-	
504	SA tracking	SA tracking	0	0	-	
505	SA tracking	SA tracking	0	0	-	
506	SA tracking	SA tracking	0	0	-	
507	SA tracking	SA tracking	0	0	-	
508	SA tracking	SA tracking	0	0	-	
509	SA tracking	SA tracking	0	0	-	
510	SA tracking	SA tracking	0	0	-	
511	SA tracking	SA tracking	0	0	-	
512	SA tracking	SA tracking	15,026	0	-	-
513	SA tracking	SA tracking	0	0	-	
514	SA tracking	SA tracking	1,012	0	-	-
515	SA tracking	SA tracking	0	0	-	
516	SA tracking	SA tracking	0	0	-	
517	SA tracking	SA tracking	0	0	-	
518	SA tracking	SA tracking	0	0	-	
519	SA tracking	SA tracking	0	0	-	

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
512 (green)	1312	1922	1289	0	0	0	0	0	0	2947	1309	1008
512 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0
514 (green)	136	0	0	0	0	0	0	0	0	0	0	876
514 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

501 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

502 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

503 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

504 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

505 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

506 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

507 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

508 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

509 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

510 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

511 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

512 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	7702	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0

Route: Foxport Road	7324	0
Route: Poplar Grove Road	0	0

512 - Receptor (Fleming Mason Airport Runway 25)

No glare found

512 - Receptor (Fleming Mason Airport Runway 7)

No glare found

512 - OP Receptor (OP 1)

No glare found

512 - OP Receptor (OP 2)

No glare found

512 - OP Receptor (OP 3)

No glare found

512 - OP Receptor (OP 4)

No glare found

512 - OP Receptor (OP 5)

No glare found

512 - OP Receptor (OP 6)

No glare found

512 - OP Receptor (OP 7)

No glare found

512 - OP Receptor (OP 8)

No glare found

512 - OP Receptor (OP 9)

No glare found

512 - OP Receptor (OP 10)

No glare found

512 - OP Receptor (OP 11)

No glare found

512 - OP Receptor (OP 12)

No glare found

512 - OP Receptor (OP 13)

No glare found

512 - OP Receptor (OP 14)

No glare found

512 - OP Receptor (OP 15)

No glare found

512 - OP Receptor (OP 16)

No glare found

512 - OP Receptor (OP 17)

No glare found

512 - OP Receptor (OP 18)

No glare found

512 - OP Receptor (OP 19)

No glare found

512 - OP Receptor (OP 20)

No glare found

512 - OP Receptor (OP 21)

No glare found

512 - OP Receptor (OP 22)

No glare found

512 - OP Receptor (OP 23)

No glare found

512 - OP Receptor (OP 24)

No glare found

512 - OP Receptor (OP 25)

No glare found

512 - OP Receptor (OP 26)

No glare found

512 - OP Receptor (OP 27)

No glare found

512 - OP Receptor (OP 28)

No glare found

512 - OP Receptor (OP 29)

No glare found

512 - OP Receptor (OP 30)

No glare found

512 - OP Receptor (OP 31)

No glare found

512 - OP Receptor (OP 32)

No glare found

512 - OP Receptor (OP 33)

No glare found

512 - OP Receptor (OP 34)

No glare found

512 - OP Receptor (OP 35)

No glare found

512 - OP Receptor (OP 36)

No glare found

512 - OP Receptor (OP 37)

No glare found

512 - OP Receptor (OP 38)

No glare found

512 - OP Receptor (OP 39)

No glare found

512 - OP Receptor (OP 40)

No glare found

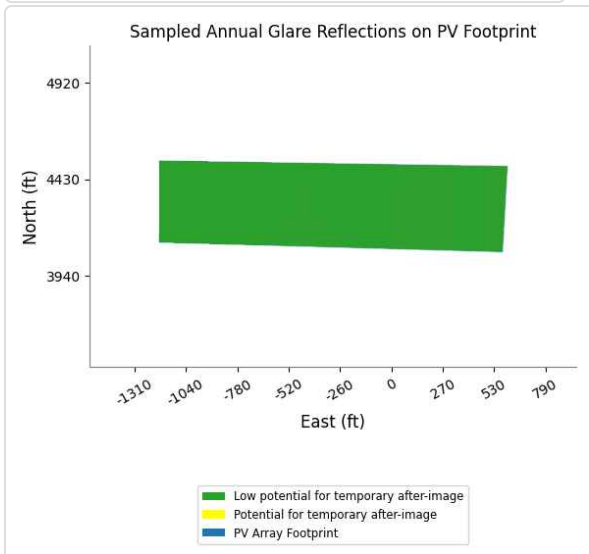
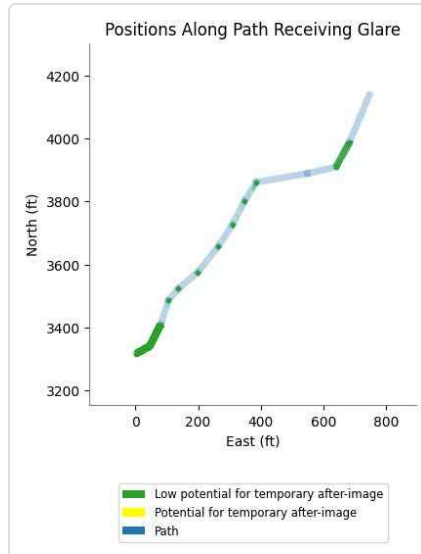
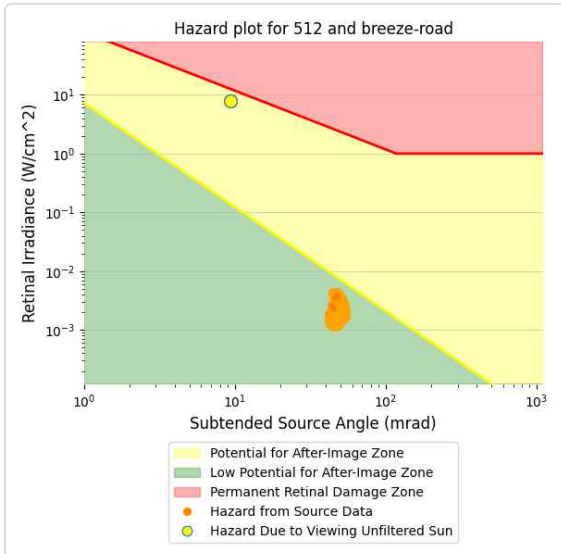
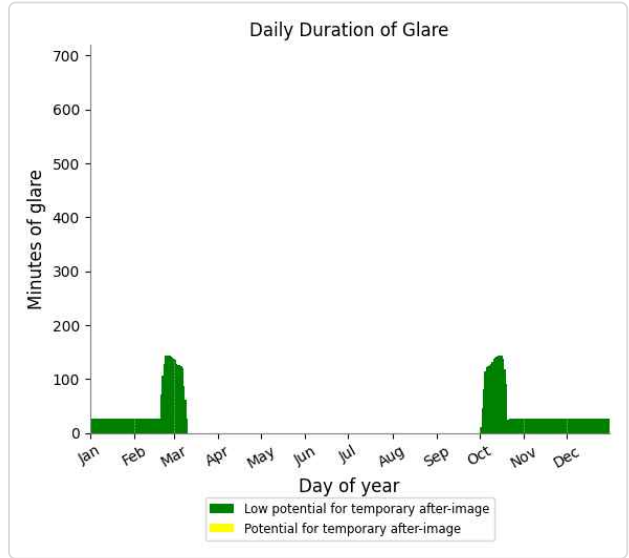
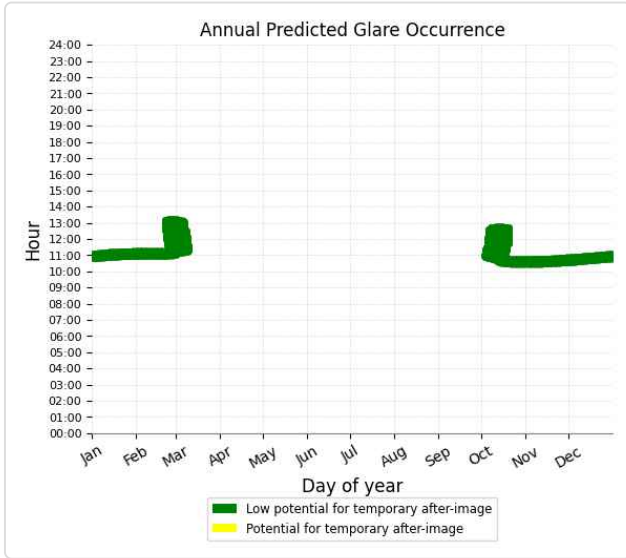
512 - Route Receptor (Black Diamond Road)

No glare found

512 - Route Receptor (Breeze Road)

PV array is expected to produce the following glare for receptors at this location:

- 7,702 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



512 - Route Receptor (Carpenter Road)

No glare found

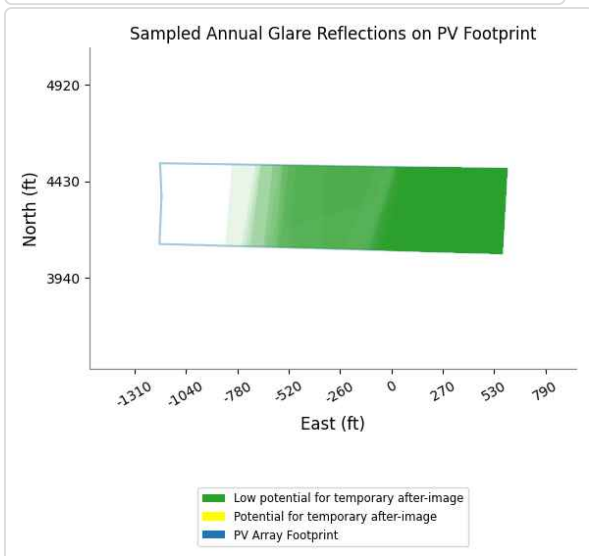
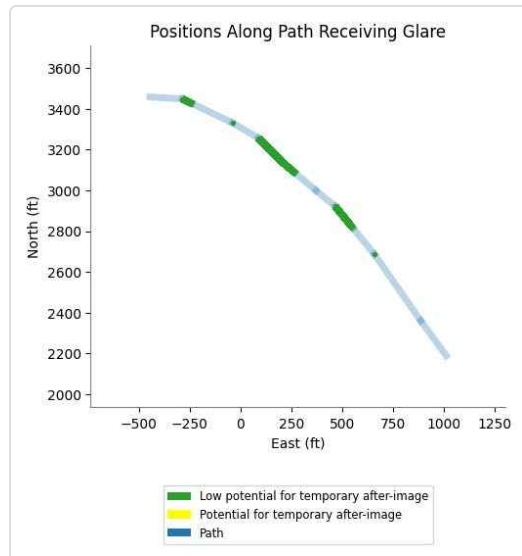
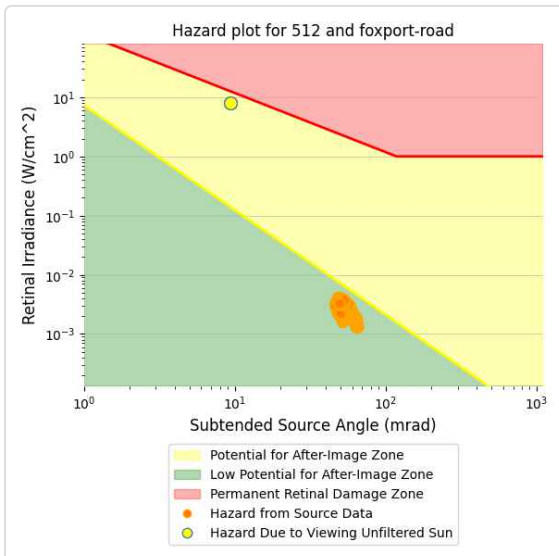
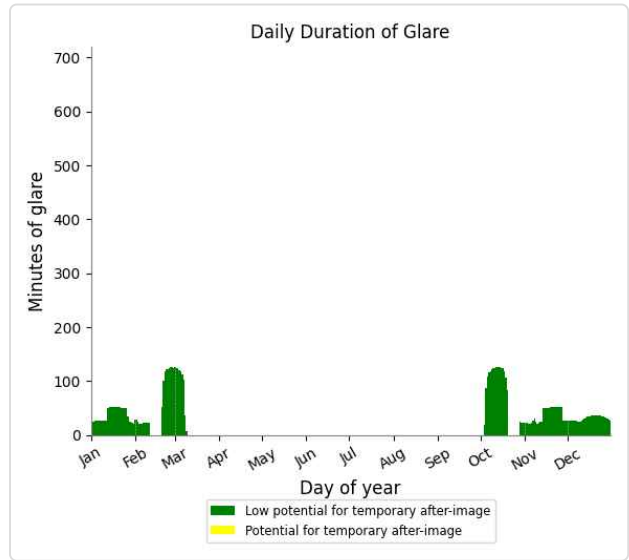
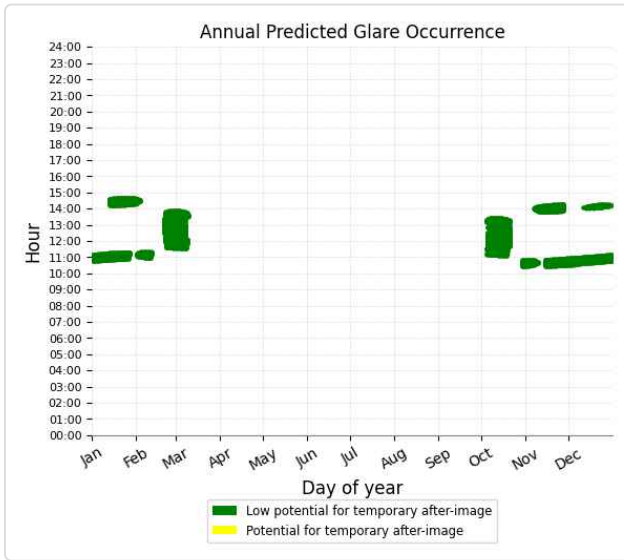
512 - Route Receptor (Colgan Road)

No glare found

512 - Route Receptor (Foxport Road)

PV array is expected to produce the following glare for receptors at this location:

- 7,324 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



512 - Route Receptor (Poplar Grove Road)

No glare found

513 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

514 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	1012	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0

Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

514 - Receptor (Fleming Mason Airport Runway 25)

No glare found

514 - Receptor (Fleming Mason Airport Runway 7)

No glare found

514 - OP Receptor (OP 1)

No glare found

514 - OP Receptor (OP 2)

No glare found

514 - OP Receptor (OP 3)

No glare found

514 - OP Receptor (OP 4)

No glare found

514 - OP Receptor (OP 5)

No glare found

514 - OP Receptor (OP 6)

No glare found

514 - OP Receptor (OP 7)

No glare found

514 - OP Receptor (OP 8)

No glare found

514 - OP Receptor (OP 9)

No glare found

514 - OP Receptor (OP 10)

No glare found

514 - OP Receptor (OP 11)

No glare found

514 - OP Receptor (OP 12)

No glare found

514 - OP Receptor (OP 13)

No glare found

514 - OP Receptor (OP 14)

No glare found

514 - OP Receptor (OP 15)

No glare found

514 - OP Receptor (OP 16)

No glare found

514 - OP Receptor (OP 17)

No glare found

514 - OP Receptor (OP 18)

No glare found

514 - OP Receptor (OP 19)

No glare found

514 - OP Receptor (OP 20)

No glare found

514 - OP Receptor (OP 21)

No glare found

514 - OP Receptor (OP 22)

No glare found

514 - OP Receptor (OP 23)

No glare found

514 - OP Receptor (OP 24)

No glare found

514 - OP Receptor (OP 25)

No glare found

514 - OP Receptor (OP 26)

No glare found

514 - OP Receptor (OP 27)

No glare found

514 - OP Receptor (OP 28)

No glare found

514 - OP Receptor (OP 29)

No glare found

514 - OP Receptor (OP 30)

No glare found

514 - OP Receptor (OP 31)

No glare found

514 - OP Receptor (OP 32)

No glare found

514 - OP Receptor (OP 33)

No glare found

514 - OP Receptor (OP 34)

No glare found

514 - OP Receptor (OP 35)

No glare found

514 - OP Receptor (OP 36)

No glare found

514 - OP Receptor (OP 37)

No glare found

514 - OP Receptor (OP 38)

No glare found

514 - OP Receptor (OP 39)

No glare found

514 - OP Receptor (OP 40)

No glare found

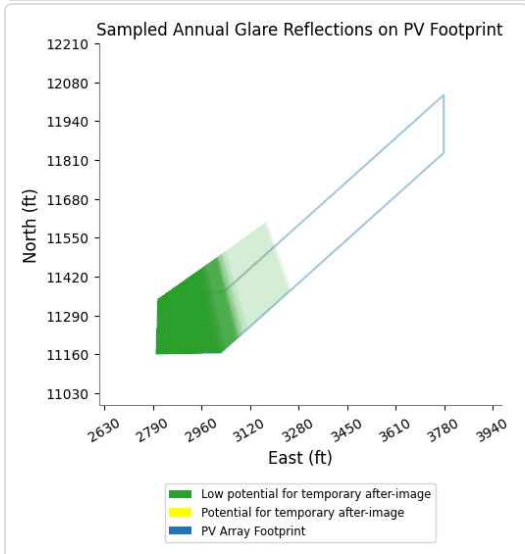
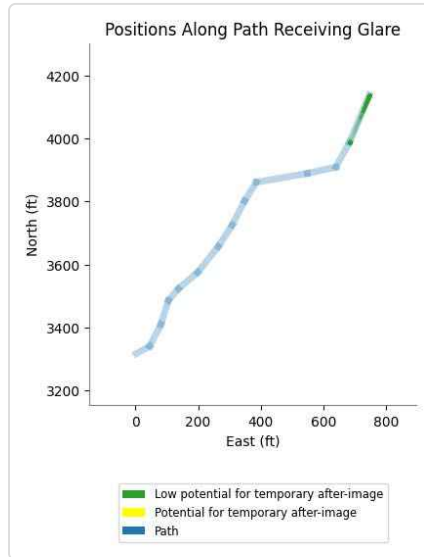
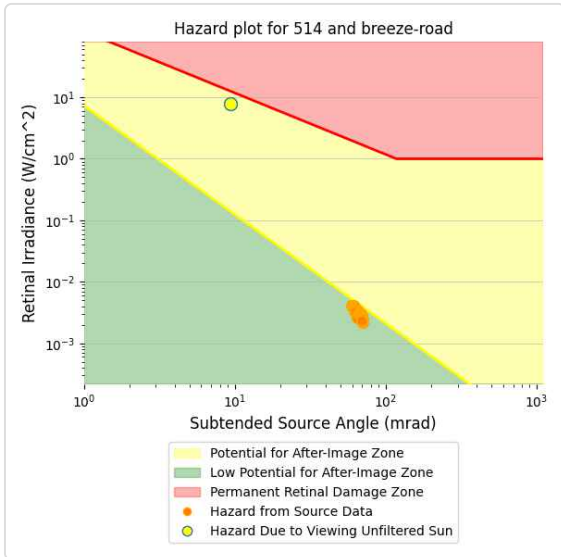
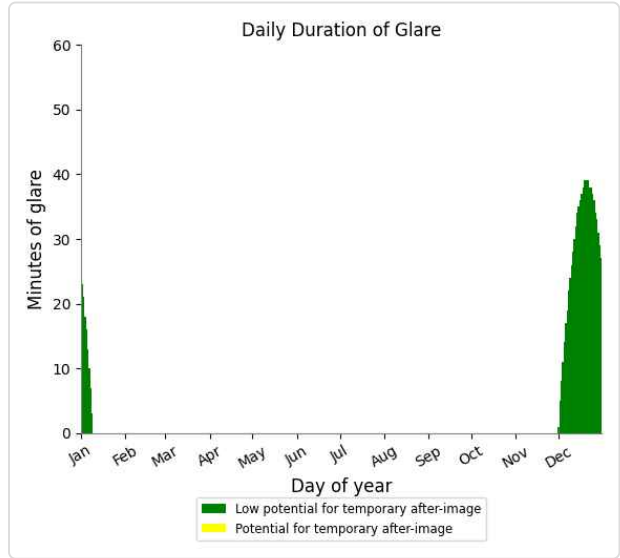
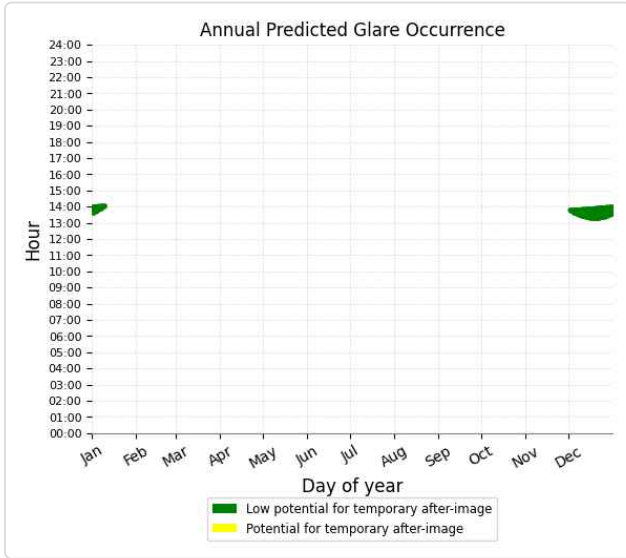
514 - Route Receptor (Black Diamond Road)

No glare found

514 - Route Receptor (Breeze Road)

PV array is expected to produce the following glare for receptors at this location:

- 1,012 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



514 - Route Receptor (Carpenter Road)

No glare found

514 - Route Receptor (Colgan Road)

No glare found

514 - Route Receptor (Foxport Road)

No glare found

514 - Route Receptor (Poplar Grove Road)

No glare found

515 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

516 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

517 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

518 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

519 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 5 9ft veh 1_5ft pan 52rest

Created Aug. 11, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 73944.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results Glare with low potential for temporary after-image predicted

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
501	SA tracking	SA tracking	0	0	-
502	SA tracking	SA tracking	0	0	-
503	SA tracking	SA tracking	0	0	-
504	SA tracking	SA tracking	0	0	-
505	SA tracking	SA tracking	0	0	-
506	SA tracking	SA tracking	0	0	-
507	SA tracking	SA tracking	0	0	-
508	SA tracking	SA tracking	0	0	-
509	SA tracking	SA tracking	0	0	-
510	SA tracking	SA tracking	0	0	-
511	SA tracking	SA tracking	0	0	-
512	SA tracking	SA tracking	15,300	0	-
513	SA tracking	SA tracking	0	0	-
514	SA tracking	SA tracking	1,408	0	-
515	SA tracking	SA tracking	0	0	-
516	SA tracking	SA tracking	0	0	-
517	SA tracking	SA tracking	0	0	-
518	SA tracking	SA tracking	0	0	-
519	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 200.5 acres

Name: 501
Footprint area: 11.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.459849	-83.618200	864.69	1.50	866.19
2	38.460412	-83.618221	863.95	1.50	865.45
3	38.461445	-83.617063	872.96	1.50	874.46
4	38.462239	-83.615834	884.34	1.50	885.84
5	38.460445	-83.614104	890.27	1.50	891.77
6	38.460387	-83.614973	878.94	1.50	880.44
7	38.460227	-83.616617	871.89	1.50	873.39
8	38.459864	-83.617309	865.79	1.50	867.29

Name: 502
Footprint area: 4.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.459536	-83.616262	869.15	1.50	870.65
2	38.459007	-83.616230	870.32	1.50	871.82
3	38.459074	-83.615436	875.45	1.50	876.95
4	38.458666	-83.615361	873.05	1.50	874.55
5	38.458704	-83.614889	876.29	1.50	877.79
6	38.459217	-83.614931	878.85	1.50	880.35
7	38.459263	-83.614197	883.90	1.50	885.40
8	38.458813	-83.614186	882.20	1.50	883.70
9	38.458855	-83.613633	887.19	1.50	888.69
10	38.459817	-83.613816	885.91	1.50	887.41
11	38.459723	-83.615039	875.91	1.50	877.41

Name: 503

Footprint area: 12.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.462162	-83.625923	867.99	1.50	869.49
2	38.462158	-83.625076	871.01	1.50	872.51
3	38.461662	-83.625092	873.63	1.50	875.13
4	38.461658	-83.624732	875.14	1.50	876.64
5	38.460830	-83.624705	869.06	1.50	870.56
6	38.460830	-83.624351	873.90	1.50	875.40
7	38.460078	-83.624212	871.41	1.50	872.91
8	38.460083	-83.623911	874.93	1.50	876.43
9	38.459601	-83.623918	870.15	1.50	871.65
10	38.459570	-83.623401	870.53	1.50	872.03
11	38.459113	-83.623389	865.99	1.50	867.49
12	38.459107	-83.623212	866.86	1.50	868.36
13	38.458844	-83.623188	865.19	1.50	866.69
14	38.458830	-83.622971	868.26	1.50	869.76
15	38.458226	-83.622957	865.51	1.50	867.01
16	38.458220	-83.623530	861.59	1.50	863.09
17	38.458661	-83.623537	861.09	1.50	862.59
18	38.458638	-83.624053	858.84	1.50	860.34
19	38.459084	-83.624083	862.73	1.50	864.23
20	38.459070	-83.625109	855.22	1.50	856.72
21	38.459403	-83.625118	857.20	1.50	858.70
22	38.459385	-83.625307	856.13	1.50	857.63
23	38.459754	-83.625340	856.88	1.50	858.38
24	38.460144	-83.625963	855.09	1.50	856.59

Name: 504

Footprint area: 11.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457720	-83.627797	861.63	1.50	863.13
2	38.458241	-83.627765	856.90	1.50	858.40
3	38.459174	-83.627336	855.91	1.50	857.41
4	38.459165	-83.626757	854.78	1.50	856.28
5	38.458628	-83.626724	860.80	1.50	862.30
6	38.458636	-83.625008	855.53	1.50	857.03
7	38.458241	-83.625040	859.49	1.50	860.99
8	38.458233	-83.624182	858.71	1.50	860.21
9	38.457292	-83.624192	864.91	1.50	866.41
10	38.457250	-83.627594	870.82	1.50	872.32
11	38.457704	-83.627518	861.64	1.50	863.14

Name: 505

Footprint area: 24.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.457346	-83.620306	880.33	1.50	881.83
2	38.457313	-83.617689	887.29	1.50	888.79
3	38.456342	-83.617651	882.59	1.50	884.09
4	38.456405	-83.612480	879.57	1.50	881.07
5	38.457321	-83.612490	875.60	1.50	877.10
6	38.457330	-83.614132	872.38	1.50	873.88
7	38.457758	-83.614121	871.13	1.50	872.63
8	38.457777	-83.616385	868.66	1.50	870.16
9	38.458139	-83.616377	867.49	1.50	868.99
10	38.458161	-83.618065	878.98	1.50	880.48
11	38.458617	-83.618030	875.69	1.50	877.19
12	38.458614	-83.618736	872.81	1.50	874.31
13	38.459150	-83.618725	871.33	1.50	872.83
14	38.459124	-83.619213	865.22	1.50	866.72
15	38.458594	-83.619274	869.32	1.50	870.82
16	38.458573	-83.620201	869.85	1.50	871.35
17	38.457960	-83.620254	873.15	1.50	874.65

Name: 506

Footprint area: 17.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.456586	-83.627479	868.42	1.50	869.92
2	38.457014	-83.627484	873.40	1.50	874.90
3	38.457040	-83.620564	882.91	1.50	884.41
4	38.456502	-83.620580	880.68	1.50	882.18
5	38.456456	-83.622061	879.15	1.50	880.65
6	38.456057	-83.622061	871.79	1.50	873.29
7	38.456015	-83.623815	875.79	1.50	877.29
8	38.455557	-83.623815	868.40	1.50	869.90
9	38.455561	-83.624265	874.43	1.50	875.93
10	38.455238	-83.624241	867.59	1.50	869.09
11	38.455214	-83.625404	858.57	1.50	860.07
12	38.455650	-83.625409	859.72	1.50	861.22
13	38.455660	-83.625988	856.60	1.50	858.10
14	38.456073	-83.626005	866.02	1.50	867.52
15	38.456133	-83.627278	866.79	1.50	868.29
16	38.456581	-83.627280	871.66	1.50	873.16

Name: 507

Footprint area: 24.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457033	-83.620572	883.18	1.50	884.68
2	38.457021	-83.617869	887.56	1.50	889.06
3	38.456059	-83.617853	889.34	1.50	890.84
4	38.456050	-83.617423	887.06	1.50	888.56
5	38.455630	-83.617407	899.31	1.50	900.81
6	38.455639	-83.616769	901.31	1.50	902.81
7	38.456038	-83.616758	890.30	1.50	891.80
8	38.456055	-83.615766	880.96	1.50	882.46
9	38.456063	-83.615256	881.68	1.50	883.18
10	38.454332	-83.615224	924.38	1.50	925.88
11	38.454328	-83.615460	932.81	1.50	934.31
12	38.454773	-83.615476	934.79	1.50	936.29
13	38.454769	-83.618464	901.20	1.50	902.70
14	38.454328	-83.618480	924.94	1.50	926.44
15	38.454320	-83.619907	902.38	1.50	903.88
16	38.454731	-83.619896	892.04	1.50	893.54
17	38.454706	-83.621377	879.38	1.50	880.88
18	38.455151	-83.621345	869.49	1.50	870.99
19	38.455200	-83.620484	882.23	1.50	883.73
20	38.455636	-83.620568	875.31	1.50	876.81

Name: 508

Footprint area: 12.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456059	-83.615255	881.83	1.50	883.33
2	38.456088	-83.611516	879.89	1.50	881.39
3	38.455630	-83.611494	882.94	1.50	884.44
4	38.455614	-83.612181	889.99	1.50	891.49
5	38.454206	-83.612149	903.48	1.50	904.98
6	38.454194	-83.613136	929.61	1.50	931.11
7	38.454668	-83.613130	913.97	1.50	915.47
8	38.454660	-83.614407	906.66	1.50	908.16
9	38.454315	-83.614423	918.16	1.50	919.66
10	38.454332	-83.615228	924.74	1.50	926.24

Name: 509

Footprint area: 4.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458222	-83.624195	858.75	1.50	860.25
2	38.458226	-83.622119	872.42	1.50	873.92
3	38.457331	-83.622113	873.14	1.50	874.64
4	38.457298	-83.624205	864.50	1.50	866.00

Name: 510

Footprint area: 8.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.495975	-83.665326	893.56	1.50	895.06
2	38.495034	-83.665348	907.79	1.50	909.29
3	38.495127	-83.664060	888.58	1.50	890.08
4	38.496118	-83.663427	851.62	1.50	853.12
5	38.496898	-83.663438	858.77	1.50	860.27
6	38.497621	-83.663063	842.29	1.50	843.79
7	38.497621	-83.664382	847.07	1.50	848.57
8	38.496731	-83.664457	887.73	1.50	889.23

Name: 511

Footprint area: 3.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.424177	-83.665801	833.60	1.50	835.10
2	38.424135	-83.664503	832.54	1.50	834.04
3	38.423093	-83.664546	861.12	1.50	862.62
4	38.423160	-83.665898	883.22	1.50	884.72

Name: 512

Footprint area: 15.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.471798	-83.622300	852.83	1.50	854.33
2	38.471130	-83.622337	864.44	1.50	865.94
3	38.470995	-83.616222	873.53	1.50	875.03
4	38.472188	-83.616136	882.27	1.50	883.77
5	38.472264	-83.622327	835.95	1.50	837.45
6	38.472083	-83.622316	839.70	1.50	841.20

Name: 513

Footprint area: 15.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.472205	-83.616115	882.00	1.50	883.50
2	38.472104	-83.611351	925.83	1.50	927.33
3	38.470727	-83.611394	922.52	1.50	924.02
4	38.470945	-83.616179	872.15	1.50	873.65

Name: 514

Footprint area: 4.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490986	-83.608398	837.17	1.50	838.67
2	38.490482	-83.608420	834.42	1.50	835.92
3	38.490490	-83.607658	820.76	1.50	822.26
4	38.492346	-83.605030	829.47	1.50	830.97
5	38.492883	-83.605030	828.21	1.50	829.71
6	38.491061	-83.607615	828.95	1.50	830.45

Name: 515

Footprint area: 7.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457505	-83.665508	871.32	1.50	872.82
2	38.456846	-83.665529	888.69	1.50	890.19
3	38.456863	-83.665433	889.86	1.50	891.36
4	38.456518	-83.665438	899.57	1.50	901.07
5	38.456527	-83.665256	905.75	1.50	907.25
6	38.456837	-83.665250	896.04	1.50	897.54
7	38.456825	-83.663636	883.77	1.50	885.27
8	38.458551	-83.663652	878.92	1.50	880.42
9	38.458522	-83.665481	842.90	1.50	844.40

Name: 516

Footprint area: 8.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458548	-83.664142	879.92	1.50	881.42
2	38.458901	-83.664142	864.36	1.50	865.86
3	38.458901	-83.663005	872.55	1.50	874.05
4	38.459729	-83.661846	846.47	1.50	847.97
5	38.459712	-83.661283	836.06	1.50	837.56
6	38.459120	-83.661272	836.79	1.50	838.29
7	38.459107	-83.661465	845.47	1.50	846.97
8	38.458636	-83.661497	836.08	1.50	837.58
9	38.458191	-83.662806	873.84	1.50	875.34
10	38.456780	-83.662838	862.93	1.50	864.43
11	38.456813	-83.663632	883.70	1.50	885.20
12	38.458548	-83.663659	879.00	1.50	880.50

Name: 517

Footprint area: 4.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456301	-83.663648	892.32	1.50	893.82
2	38.455826	-83.663670	895.45	1.50	896.95
3	38.455805	-83.662549	858.32	1.50	859.82
4	38.456154	-83.662522	855.87	1.50	857.37
5	38.456141	-83.660580	913.31	1.50	914.81
6	38.456738	-83.660564	905.81	1.50	907.31
7	38.456708	-83.662149	862.50	1.50	864.00

Name: 518

Footprint area: 6.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456742	-83.660564	905.81	1.50	907.31
2	38.456723	-83.661347	888.30	1.50	889.80
3	38.458510	-83.661154	847.68	1.50	849.18
4	38.458527	-83.660456	836.27	1.50	837.77
5	38.457078	-83.659325	848.30	1.50	849.80
6	38.456498	-83.659287	869.25	1.50	870.75
7	38.456494	-83.660558	909.69	1.50	911.19

Name: 519

Footprint area: 4.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457348	-83.620311	880.33	1.50	881.83
2	38.457331	-83.622119	873.10	1.50	874.60
3	38.458230	-83.622119	872.42	1.50	873.92
4	38.458245	-83.620222	870.96	1.50	872.46



2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25

Description:

Threshold height : 50 ft

Direction: 247.0 deg

Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7

Description:

Threshold height : 50 ft

Direction: 66.8 deg

Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



Route Receptor(s)

Name: Black Diamond Road

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.472963	-83.605859	842.68	9.00	851.68
2	38.471342	-83.606288	841.06	9.00	850.06
3	38.469725	-83.607726	824.77	9.00	833.77
4	38.468959	-83.608353	820.68	9.00	829.68
5	38.468160	-83.608981	826.96	9.00	835.96
6	38.467685	-83.609271	826.63	9.00	835.63
7	38.467341	-83.609952	827.75	9.00	836.75
8	38.467052	-83.610708	828.08	9.00	837.09
9	38.466895	-83.611036	831.56	9.00	840.56
10	38.466439	-83.611612	844.54	9.00	853.54
11	38.466169	-83.612088	856.52	9.00	865.52
12	38.465853	-83.612895	873.71	9.00	882.71
13	38.465506	-83.613846	880.60	9.00	889.60
14	38.465375	-83.614047	883.91	9.00	892.91
15	38.464210	-83.614742	889.83	9.00	898.83
16	38.462983	-83.615365	879.68	9.00	888.68
17	38.462849	-83.615472	879.79	9.00	888.79
18	38.462580	-83.615966	878.36	9.00	887.36
19	38.462177	-83.616824	869.55	9.00	878.55
20	38.461740	-83.617382	867.13	9.00	876.14
21	38.461169	-83.618025	864.14	9.00	873.14
22	38.460732	-83.618583	861.83	9.00	870.83
23	38.460446	-83.619249	861.82	9.00	870.82
24	38.460312	-83.619849	861.79	9.00	870.79
25	38.459640	-83.621137	875.57	9.00	884.57
26	38.459321	-83.621802	876.11	9.00	885.12
27	38.459321	-83.622038	875.04	9.00	884.04
28	38.459421	-83.622210	872.99	9.00	881.99
29	38.461354	-83.623647	877.85	9.00	886.86
30	38.461858	-83.624119	874.39	9.00	883.39
31	38.462379	-83.624785	868.45	9.00	877.45
32	38.463000	-83.625557	860.29	9.00	869.29
33	38.463403	-83.626609	849.22	9.00	858.22
34	38.465055	-83.626213	865.83	9.00	874.84
35	38.466404	-83.626890	871.48	9.00	880.48
36	38.467758	-83.627730	870.47	9.00	879.47
37	38.467811	-83.628379	870.00	9.00	879.00
38	38.467984	-83.631866	876.80	9.00	885.80
39	38.468297	-83.636994	865.46	9.00	874.46
40	38.468654	-83.637466	864.23	9.00	873.24
41	38.469603	-83.637809	868.37	9.00	877.37

Name: Breeze Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.489717	-83.618176	785.71	9.00	794.71
2	38.489935	-83.617682	780.48	9.00	789.48
3	38.490556	-83.617274	782.85	9.00	791.86
4	38.491245	-83.616996	787.90	9.00	796.90
5	38.491581	-83.616631	780.18	9.00	789.18
6	38.492051	-83.615923	778.63	9.00	787.63
7	38.492790	-83.615172	772.91	9.00	781.91
8	38.493412	-83.614657	777.76	9.00	786.76
9	38.494100	-83.614206	806.89	9.00	815.89
10	38.494638	-83.613777	823.19	9.00	832.20
11	38.494889	-83.611910	840.00	9.00	849.00
12	38.495074	-83.610859	839.42	9.00	848.42
13	38.495780	-83.610365	839.32	9.00	848.32
14	38.497140	-83.609636	825.21	9.00	834.21

Name: Carpenter Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466629	-83.639204	872.25	9.00	881.25
2	38.465554	-83.639719	855.97	9.00	864.97
3	38.465168	-83.639891	843.71	9.00	852.71
4	38.464260	-83.640792	840.29	9.00	849.29
5	38.463471	-83.641650	847.66	9.00	856.66
6	38.461421	-83.642273	855.60	9.00	864.60
7	38.459405	-83.642702	870.66	9.00	879.66
8	38.457103	-83.643217	876.57	9.00	885.57
9	38.455490	-83.643710	884.95	9.00	893.95
10	38.454750	-83.643603	892.16	9.00	901.16
11	38.453591	-83.643388	899.59	9.00	908.59
12	38.450112	-83.642037	872.76	9.00	881.76
13	38.446650	-83.640728	898.81	9.00	907.81

Name: Colgan Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446701	-83.640685	899.21	9.00	908.21
2	38.447138	-83.638732	889.25	9.00	898.25
3	38.447558	-83.636908	877.09	9.00	886.09
4	38.448045	-83.635428	868.05	9.00	877.05
5	38.448650	-83.633883	880.36	9.00	889.36
6	38.449423	-83.632509	879.78	9.00	888.78
7	38.449524	-83.632123	876.11	9.00	885.11
8	38.449659	-83.629977	868.25	9.00	877.25
9	38.449759	-83.628819	860.60	9.00	869.60
10	38.449995	-83.627188	854.64	9.00	863.64
11	38.450045	-83.626716	854.72	9.00	863.72
12	38.449776	-83.626480	854.41	9.00	863.41
13	38.448365	-83.625922	857.04	9.00	866.04
14	38.447323	-83.623304	866.55	9.00	875.55
15	38.446264	-83.620257	878.95	9.00	887.95
16	38.445390	-83.617468	882.99	9.00	891.99
17	38.444701	-83.615257	883.36	9.00	892.36
18	38.444230	-83.613949	886.33	9.00	895.33
19	38.443945	-83.613541	885.15	9.00	894.15
20	38.443390	-83.613133	894.88	9.00	903.88

Name: Foxport Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490993	-83.623304	857.33	9.00	866.33
2	38.490909	-83.621480	835.34	9.00	844.34
3	38.489851	-83.618648	793.22	9.00	802.23
4	38.489179	-83.617189	787.43	9.00	796.43
5	38.488121	-83.615858	790.26	9.00	799.26
6	38.486861	-83.613949	800.67	9.00	809.67
7	38.486173	-83.612876	810.36	9.00	819.36
8	38.484056	-83.610666	837.12	9.00	846.12
9	38.481117	-83.608048	838.95	9.00	847.95
10	38.479572	-83.606610	838.07	9.00	847.07

Name: Poplar Grove Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.500159	-83.665075	835.46	9.00	844.46
2	38.499689	-83.664281	827.86	9.00	836.86
3	38.499118	-83.663380	825.68	9.00	834.68
4	38.498304	-83.662607	808.23	9.00	817.23
5	38.497901	-83.662414	822.72	9.00	831.72
6	38.497330	-83.662339	832.36	9.00	841.36
7	38.496784	-83.662500	851.91	9.00	860.91
8	38.496204	-83.662650	860.37	9.00	869.37
9	38.495575	-83.662532	868.72	9.00	877.72
10	38.494349	-83.662060	890.20	9.00	899.20
11	38.492451	-83.661373	928.34	9.00	937.34

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.466612	-83.626383	881.32	16.00	897.32
OP 2	38.467927	-83.635809	888.42	16.00	904.42
OP 3	38.467944	-83.638142	879.07	16.00	895.07
OP 4	38.467163	-83.638480	875.73	16.00	891.73
OP 5	38.465747	-83.640068	859.73	16.00	875.73
OP 6	38.465147	-83.638909	861.73	16.00	877.73
OP 7	38.463653	-83.640508	865.11	16.00	881.11
OP 8	38.463998	-83.642619	844.35	16.00	860.35
OP 9	38.460684	-83.642117	866.02	16.00	882.02
OP 10	38.459928	-83.642165	861.93	16.00	877.93
OP 11	38.459360	-83.643386	891.43	16.00	907.43
OP 12	38.458592	-83.642605	874.94	16.00	890.94
OP 13	38.455286	-83.642726	898.38	16.00	914.38
OP 14	38.454042	-83.642983	905.81	16.00	921.82
OP 15	38.454383	-83.642747	903.62	16.00	919.62
OP 16	38.450555	-83.636675	875.07	16.00	891.07
OP 17	38.449056	-83.633478	886.55	16.00	902.55
OP 18	38.449673	-83.632834	881.02	16.00	897.02
OP 19	38.450978	-83.632593	875.81	16.00	891.81
OP 20	38.449993	-83.630533	873.88	16.00	889.88
OP 21	38.449728	-83.631917	877.29	16.00	893.29
OP 22	38.449320	-83.628497	861.29	16.00	877.29
OP 23	38.448792	-83.624425	859.93	16.00	875.93
OP 24	38.448897	-83.621571	896.29	16.00	912.29
OP 25	38.448174	-83.622257	888.05	16.00	904.05
OP 26	38.451161	-83.623051	883.04	16.00	899.04
OP 27	38.463196	-83.612348	929.86	16.00	945.86
OP 28	38.463368	-83.612729	922.71	16.00	938.71
OP 29	38.466001	-83.611667	851.27	16.00	867.27
OP 30	38.466904	-83.609349	840.80	16.00	856.80
OP 31	38.461465	-83.623341	880.49	16.00	896.49
OP 32	38.459667	-83.620573	884.18	16.00	900.19
OP 33	38.459016	-83.622139	881.28	16.00	897.28
OP 34	38.460583	-83.623427	888.85	16.00	904.85
OP 35	38.455087	-83.666827	936.25	16.00	952.25
OP 36	38.454802	-83.668249	935.62	16.00	951.62
OP 37	38.472309	-83.627694	868.62	16.00	884.63
OP 38	38.488490	-83.603391	829.74	16.00	845.74
OP 39	38.492636	-83.663355	918.77	16.00	934.77
OP 40	38.500101	-83.664079	839.86	16.00	855.86

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
501	SA tracking	SA tracking	0	0	-	
502	SA tracking	SA tracking	0	0	-	
503	SA tracking	SA tracking	0	0	-	
504	SA tracking	SA tracking	0	0	-	
505	SA tracking	SA tracking	0	0	-	
506	SA tracking	SA tracking	0	0	-	
507	SA tracking	SA tracking	0	0	-	
508	SA tracking	SA tracking	0	0	-	
509	SA tracking	SA tracking	0	0	-	
510	SA tracking	SA tracking	0	0	-	
511	SA tracking	SA tracking	0	0	-	
512	SA tracking	SA tracking	15,300	0	-	-
513	SA tracking	SA tracking	0	0	-	
514	SA tracking	SA tracking	1,408	0	-	-
515	SA tracking	SA tracking	0	0	-	
516	SA tracking	SA tracking	0	0	-	
517	SA tracking	SA tracking	0	0	-	
518	SA tracking	SA tracking	0	0	-	
519	SA tracking	SA tracking	0	0	-	

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
512 (green)	1349	1923	1349	0	0	0	0	0	0	2979	1340	1048
512 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0
514 (green)	240	0	0	0	0	0	0	0	0	0	17	1151
514 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

501 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

502 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

503 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

504 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

505 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

506 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

507 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

508 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

509 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

510 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

511 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

512 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	7844	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0

Route: Foxport Road	7456	0
Route: Poplar Grove Road	0	0

512 - Receptor (Fleming Mason Airport Runway 25)

No glare found

512 - Receptor (Fleming Mason Airport Runway 7)

No glare found

512 - OP Receptor (OP 1)

No glare found

512 - OP Receptor (OP 2)

No glare found

512 - OP Receptor (OP 3)

No glare found

512 - OP Receptor (OP 4)

No glare found

512 - OP Receptor (OP 5)

No glare found

512 - OP Receptor (OP 6)

No glare found

512 - OP Receptor (OP 7)

No glare found

512 - OP Receptor (OP 8)

No glare found

512 - OP Receptor (OP 9)

No glare found

512 - OP Receptor (OP 10)

No glare found

512 - OP Receptor (OP 11)

No glare found

512 - OP Receptor (OP 12)

No glare found

512 - OP Receptor (OP 13)

No glare found

512 - OP Receptor (OP 14)

No glare found

512 - OP Receptor (OP 15)

No glare found

512 - OP Receptor (OP 16)

No glare found

512 - OP Receptor (OP 17)

No glare found

512 - OP Receptor (OP 18)

No glare found

512 - OP Receptor (OP 19)

No glare found

512 - OP Receptor (OP 20)

No glare found

512 - OP Receptor (OP 21)

No glare found

512 - OP Receptor (OP 22)

No glare found

512 - OP Receptor (OP 23)

No glare found

512 - OP Receptor (OP 24)

No glare found

512 - OP Receptor (OP 25)

No glare found

512 - OP Receptor (OP 26)

No glare found

512 - OP Receptor (OP 27)

No glare found

512 - OP Receptor (OP 28)

No glare found

512 - OP Receptor (OP 29)

No glare found

512 - OP Receptor (OP 30)

No glare found

512 - OP Receptor (OP 31)

No glare found

512 - OP Receptor (OP 32)

No glare found

512 - OP Receptor (OP 33)

No glare found

512 - OP Receptor (OP 34)

No glare found

512 - OP Receptor (OP 35)

No glare found

512 - OP Receptor (OP 36)

No glare found

512 - OP Receptor (OP 37)

No glare found

512 - OP Receptor (OP 38)

No glare found

512 - OP Receptor (OP 39)

No glare found

512 - OP Receptor (OP 40)

No glare found

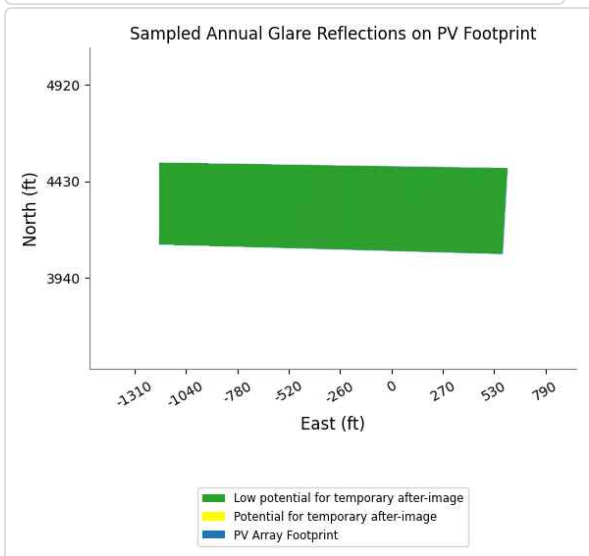
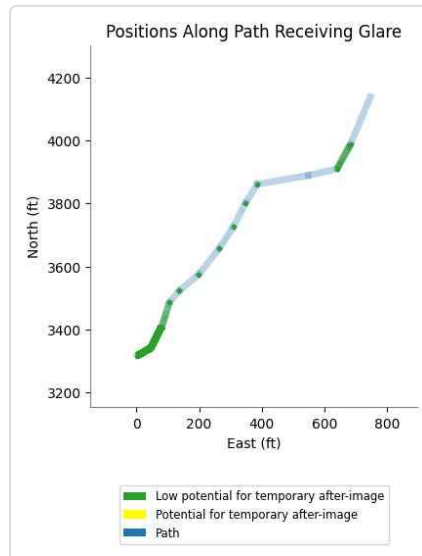
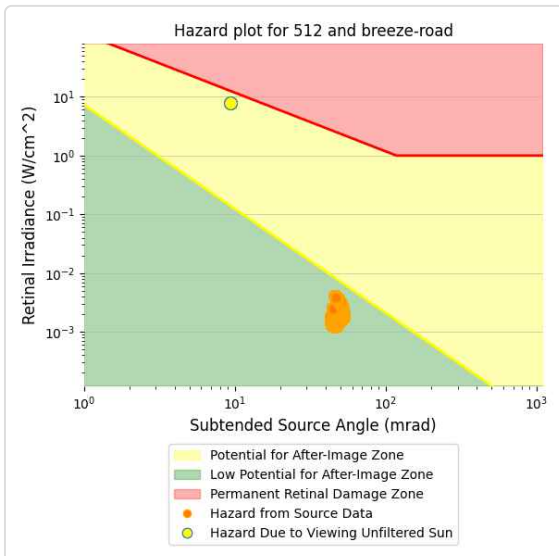
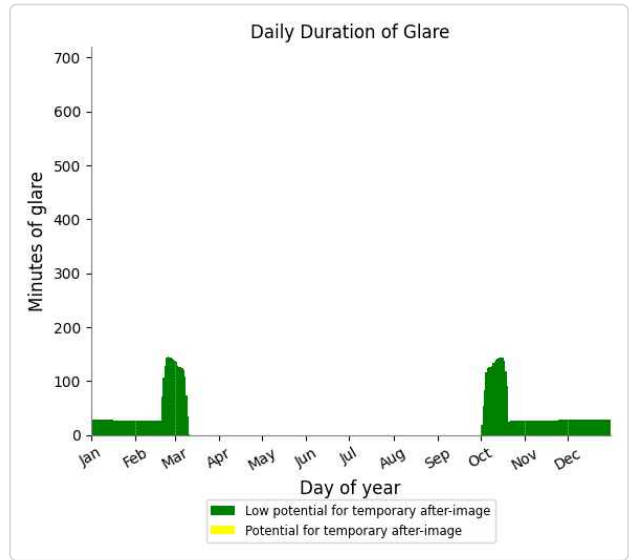
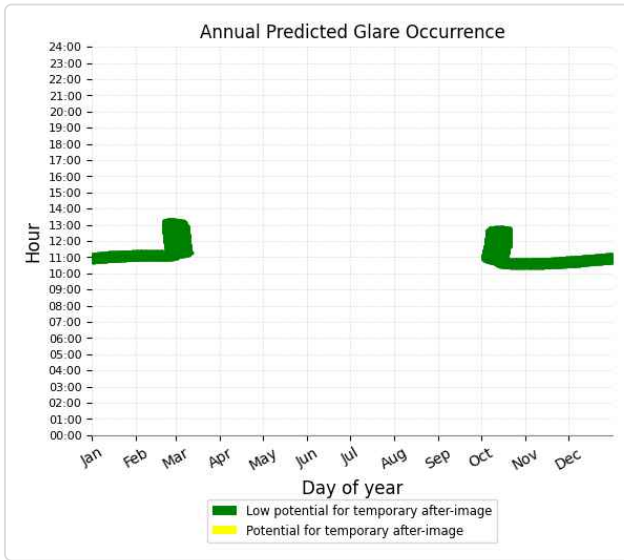
512 - Route Receptor (Black Diamond Road)

No glare found

512 - Route Receptor (Breeze Road)

PV array is expected to produce the following glare for receptors at this location:

- 7,844 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



512 - Route Receptor (Carpenter Road)

No glare found

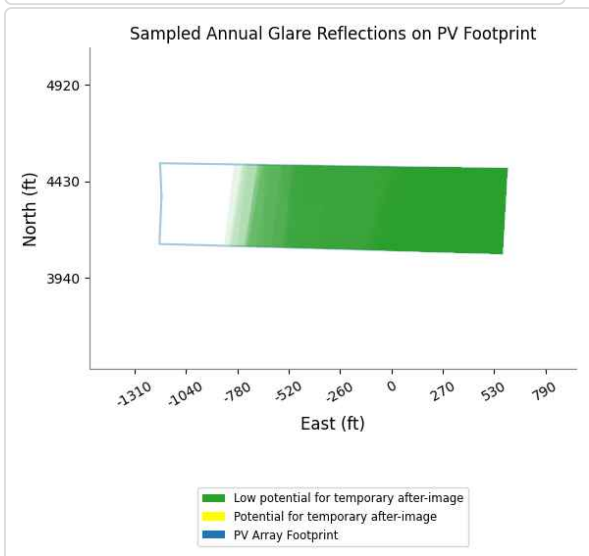
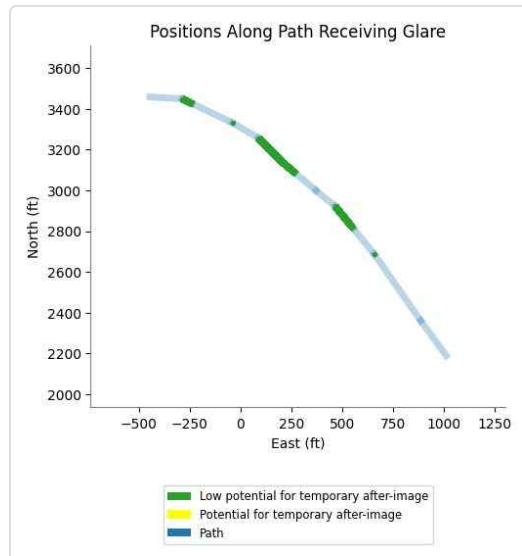
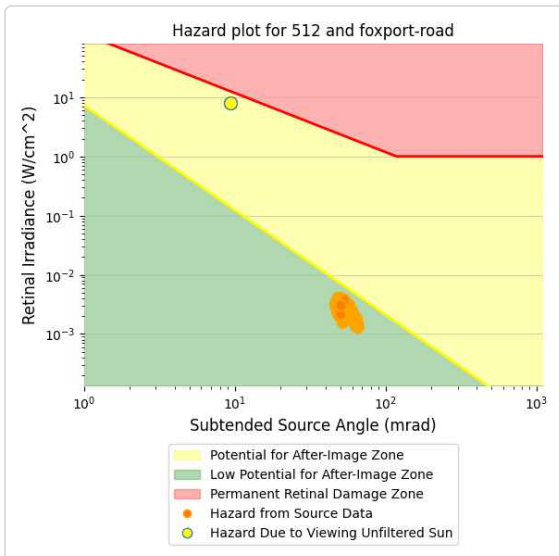
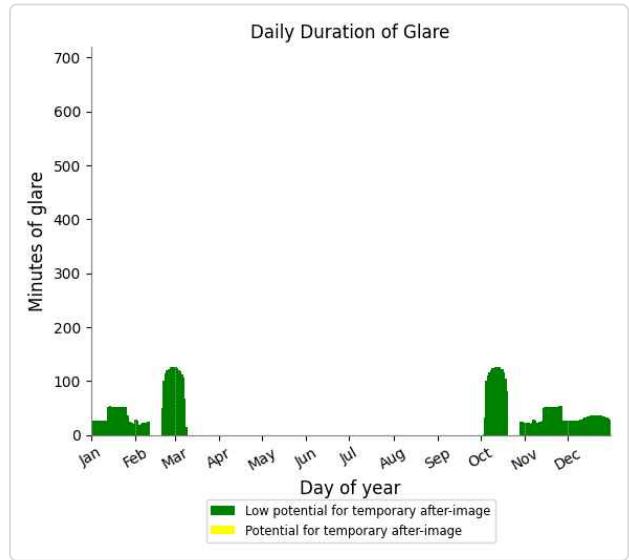
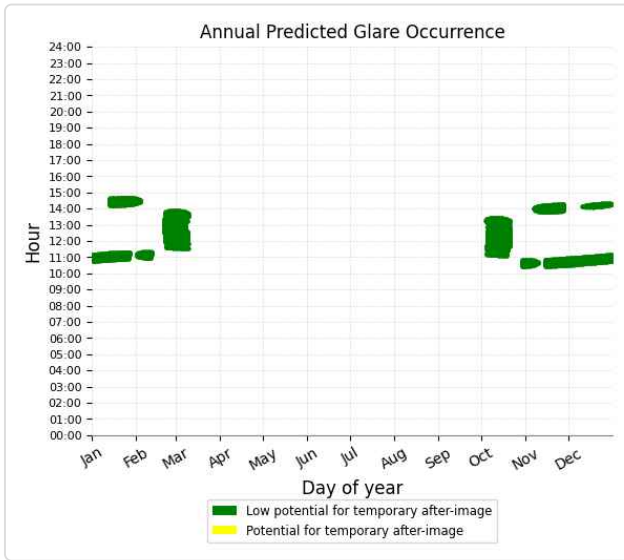
512 - Route Receptor (Colgan Road)

No glare found

512 - Route Receptor (Foxport Road)

PV array is expected to produce the following glare for receptors at this location:

- 7,456 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



512 - Route Receptor (Poplar Grove Road)

No glare found

513 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

514 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	1408	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0

Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

514 - Receptor (Fleming Mason Airport Runway 25)

No glare found

514 - Receptor (Fleming Mason Airport Runway 7)

No glare found

514 - OP Receptor (OP 1)

No glare found

514 - OP Receptor (OP 2)

No glare found

514 - OP Receptor (OP 3)

No glare found

514 - OP Receptor (OP 4)

No glare found

514 - OP Receptor (OP 5)

No glare found

514 - OP Receptor (OP 6)

No glare found

514 - OP Receptor (OP 7)

No glare found

514 - OP Receptor (OP 8)

No glare found

514 - OP Receptor (OP 9)

No glare found

514 - OP Receptor (OP 10)

No glare found

514 - OP Receptor (OP 11)

No glare found

514 - OP Receptor (OP 12)

No glare found

514 - OP Receptor (OP 13)

No glare found

514 - OP Receptor (OP 14)

No glare found

514 - OP Receptor (OP 15)

No glare found

514 - OP Receptor (OP 16)

No glare found

514 - OP Receptor (OP 17)

No glare found

514 - OP Receptor (OP 18)

No glare found

514 - OP Receptor (OP 19)

No glare found

514 - OP Receptor (OP 20)

No glare found

514 - OP Receptor (OP 21)

No glare found

514 - OP Receptor (OP 22)

No glare found

514 - OP Receptor (OP 23)

No glare found

514 - OP Receptor (OP 24)

No glare found

514 - OP Receptor (OP 25)

No glare found

514 - OP Receptor (OP 26)

No glare found

514 - OP Receptor (OP 27)

No glare found

514 - OP Receptor (OP 28)

No glare found

514 - OP Receptor (OP 29)

No glare found

514 - OP Receptor (OP 30)

No glare found

514 - OP Receptor (OP 31)

No glare found

514 - OP Receptor (OP 32)

No glare found

514 - OP Receptor (OP 33)

No glare found

514 - OP Receptor (OP 34)

No glare found

514 - OP Receptor (OP 35)

No glare found

514 - OP Receptor (OP 36)

No glare found

514 - OP Receptor (OP 37)

No glare found

514 - OP Receptor (OP 38)

No glare found

514 - OP Receptor (OP 39)

No glare found

514 - OP Receptor (OP 40)

No glare found

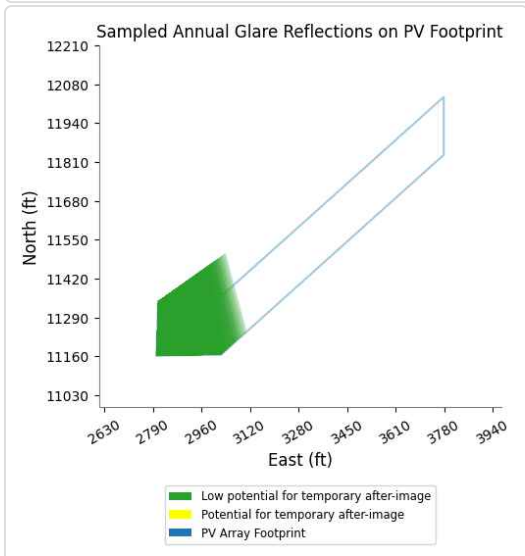
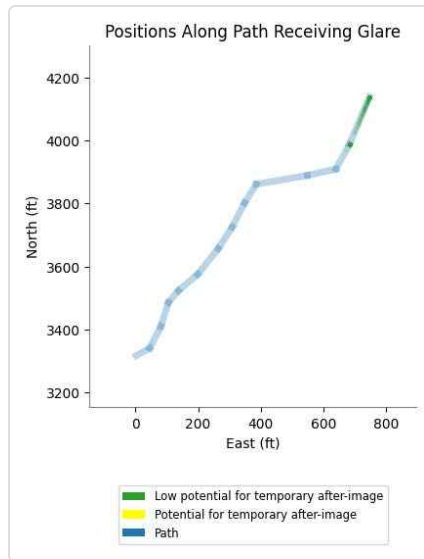
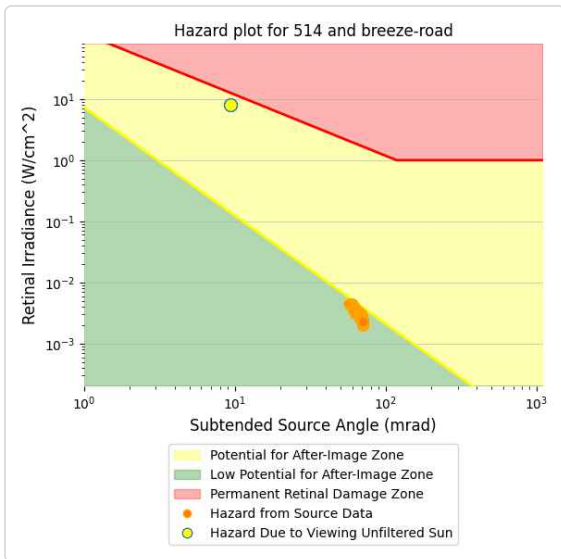
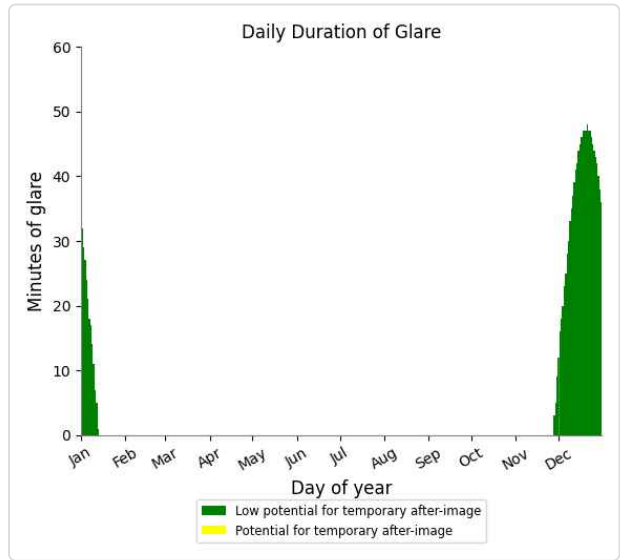
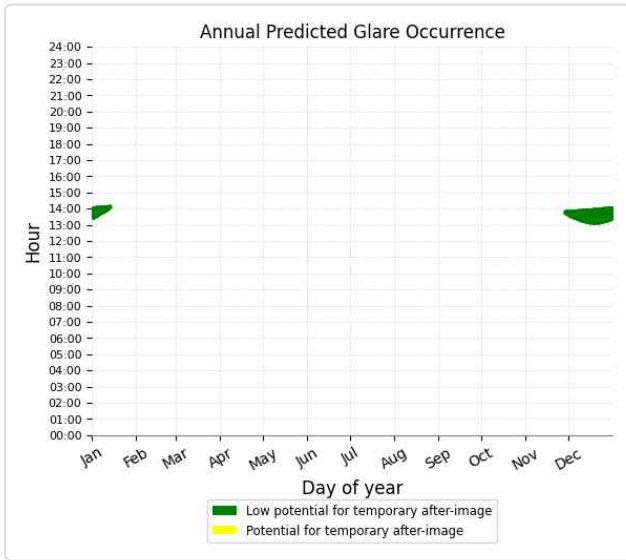
514 - Route Receptor (Black Diamond Road)

No glare found

514 - Route Receptor (Breeze Road)

PV array is expected to produce the following glare for receptors at this location:

- 1,408 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



514 - Route Receptor (Carpenter Road)

No glare found

514 - Route Receptor (Colgan Road)

No glare found

514 - Route Receptor (Foxport Road)

No glare found

514 - Route Receptor (Poplar Grove Road)

No glare found

515 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

516 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

517 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

518 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

519 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

Hummingbird

Block 5 9ft veh 10ft pan 52rest

Created July 14, 2022
 Updated Aug. 11, 2022
 Time-step 1 minute
 Timezone offset UTC-5
 Site ID 72384.12548

Project type Advanced
 Project status: active
 Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: 0.5
 Pupil diameter: 0.002 m
 Eye focal length: 0.017 m
 Sun subtended angle: 9.3 mrad

Analysis Methodologies:

- Observation point: **Version 2**
- 2-Mile Flight Path: **Version 2**
- Route: **Version 2**

Summary of Results Glare with low potential for temporary after-image predicted

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
501	SA tracking	SA tracking	0	0	-
502	SA tracking	SA tracking	0	0	-
503	SA tracking	SA tracking	0	0	-
504	SA tracking	SA tracking	0	0	-
505	SA tracking	SA tracking	0	0	-
506	SA tracking	SA tracking	0	0	-
507	SA tracking	SA tracking	0	0	-
508	SA tracking	SA tracking	0	0	-
509	SA tracking	SA tracking	0	0	-
510	SA tracking	SA tracking	0	0	-
511	SA tracking	SA tracking	0	0	-
512	SA tracking	SA tracking	15,217	0	-
513	SA tracking	SA tracking	0	0	-
514	SA tracking	SA tracking	1,148	0	-
515	SA tracking	SA tracking	0	0	-
516	SA tracking	SA tracking	0	0	-
517	SA tracking	SA tracking	0	0	-
518	SA tracking	SA tracking	0	0	-
519	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 200.4 acres

Name: 501

Footprint area: 11.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.459849	-83.618200	864.69	10.00	874.69
2	38.460412	-83.618221	863.95	10.00	873.95
3	38.461437	-83.617063	873.00	10.00	883.00
4	38.462239	-83.615834	884.34	10.00	894.34
5	38.460445	-83.614104	890.27	10.00	900.28
6	38.460387	-83.614973	878.94	10.00	888.94
7	38.460227	-83.616617	871.89	10.00	881.89
8	38.459864	-83.617309	865.79	10.00	875.79

Name: 502

Footprint area: 4.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.459536	-83.616262	869.15	10.00	879.15
2	38.459007	-83.616230	870.32	10.00	880.32
3	38.459074	-83.615436	875.45	10.00	885.45
4	38.458666	-83.615361	873.05	10.00	883.05
5	38.458704	-83.614889	876.29	10.00	886.29
6	38.459217	-83.614931	878.85	10.00	888.85
7	38.459263	-83.614197	883.90	10.00	893.90
8	38.458813	-83.614186	882.20	10.00	892.20
9	38.458855	-83.613633	887.19	10.00	897.19
10	38.459817	-83.613837	885.49	10.00	895.49
11	38.459723	-83.615039	875.91	10.00	885.91

Name: 503

Footprint area: 12.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.462162	-83.625923	867.99	10.00	877.99
2	38.462158	-83.625076	871.01	10.00	881.01
3	38.461662	-83.625092	873.63	10.00	883.63
4	38.461658	-83.624732	875.14	10.00	885.14
5	38.460830	-83.624705	869.06	10.00	879.06
6	38.460830	-83.624351	873.90	10.00	883.90
7	38.460078	-83.624212	871.41	10.00	881.41
8	38.460083	-83.623911	874.93	10.00	884.93
9	38.459601	-83.623918	870.15	10.00	880.15
10	38.459570	-83.623401	870.53	10.00	880.53
11	38.459113	-83.623389	865.99	10.00	875.99
12	38.459107	-83.623212	866.86	10.00	876.86
13	38.458844	-83.623188	865.19	10.00	875.19
14	38.458830	-83.622971	868.26	10.00	878.26
15	38.458226	-83.622957	865.51	10.00	875.51
16	38.458220	-83.623530	861.59	10.00	871.59
17	38.458661	-83.623537	861.09	10.00	871.09
18	38.458638	-83.624053	858.84	10.00	868.85
19	38.459084	-83.624083	862.73	10.00	872.73
20	38.459070	-83.625109	855.22	10.00	865.22
21	38.459403	-83.625118	857.20	10.00	867.20
22	38.459385	-83.625307	856.13	10.00	866.13
23	38.459754	-83.625340	856.88	10.00	866.88
24	38.460144	-83.625963	855.09	10.00	865.09

Name: 504

Footprint area: 11.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457720	-83.627797	861.63	10.00	871.63
2	38.458241	-83.627765	856.90	10.00	866.90
3	38.459174	-83.627336	855.91	10.00	865.91
4	38.459165	-83.626757	854.78	10.00	864.78
5	38.458628	-83.626724	860.80	10.00	870.80
6	38.458636	-83.625008	855.53	10.00	865.53
7	38.458241	-83.625040	859.49	10.00	869.49
8	38.458233	-83.624182	858.71	10.00	868.71
9	38.457292	-83.624192	864.91	10.00	874.91
10	38.457250	-83.627594	870.82	10.00	880.82
11	38.457704	-83.627518	861.64	10.00	871.64

Name: 505

Footprint area: 24.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.457346	-83.620306	880.33	10.00	890.33
2	38.457313	-83.617689	887.29	10.00	897.29
3	38.456355	-83.617651	882.33	10.00	892.33
4	38.456405	-83.612480	879.57	10.00	889.57
5	38.457321	-83.612490	875.60	10.00	885.60
6	38.457330	-83.614132	872.38	10.00	882.38
7	38.457758	-83.614121	871.13	10.00	881.14
8	38.457777	-83.616385	868.66	10.00	878.66
9	38.458139	-83.616377	867.49	10.00	877.49
10	38.458161	-83.618065	878.98	10.00	888.98
11	38.458617	-83.618030	875.69	10.00	885.69
12	38.458614	-83.618736	872.81	10.00	882.81
13	38.459150	-83.618725	871.33	10.00	881.33
14	38.459124	-83.619213	865.22	10.00	875.22
15	38.458594	-83.619274	869.32	10.00	879.32
16	38.458573	-83.620201	869.85	10.00	879.85
17	38.457960	-83.620254	873.15	10.00	883.15

Name: 506

Footprint area: 17.4 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.456586	-83.627479	868.42	10.00	878.42
2	38.457014	-83.627484	873.40	10.00	883.40
3	38.457040	-83.620564	882.91	10.00	892.91
4	38.456502	-83.620580	880.68	10.00	890.68
5	38.456456	-83.622061	879.15	10.00	889.15
6	38.456057	-83.622061	871.79	10.00	881.79
7	38.456015	-83.623815	875.79	10.00	885.79
8	38.455557	-83.623815	868.40	10.00	878.40
9	38.455561	-83.624265	874.43	10.00	884.43
10	38.455238	-83.624241	867.59	10.00	877.59
11	38.455214	-83.625404	858.57	10.00	868.57
12	38.455650	-83.625409	859.72	10.00	869.72
13	38.455660	-83.625988	856.60	10.00	866.60
14	38.456073	-83.626005	866.02	10.00	876.02
15	38.456133	-83.627278	866.79	10.00	876.79
16	38.456581	-83.627280	871.66	10.00	881.66

Name: 507

Footprint area: 24.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457033	-83.620572	883.18	10.00	893.18
2	38.457021	-83.617869	887.56	10.00	897.56
3	38.456059	-83.617853	889.34	10.00	899.34
4	38.456050	-83.617423	887.06	10.00	897.06
5	38.455630	-83.617407	899.31	10.00	909.31
6	38.455639	-83.616769	901.31	10.00	911.31
7	38.456038	-83.616758	890.30	10.00	900.30
8	38.456055	-83.615766	880.96	10.00	890.96
9	38.456063	-83.615256	881.68	10.00	891.68
10	38.454332	-83.615224	924.38	10.00	934.39
11	38.454328	-83.615460	932.81	10.00	942.81
12	38.454773	-83.615476	934.79	10.00	944.79
13	38.454769	-83.618464	901.20	10.00	911.21
14	38.454328	-83.618480	924.94	10.00	934.94
15	38.454320	-83.619907	902.38	10.00	912.38
16	38.454731	-83.619896	892.04	10.00	902.04
17	38.454706	-83.621377	879.38	10.00	889.38
18	38.455151	-83.621345	869.49	10.00	879.49
19	38.455200	-83.620484	882.23	10.00	892.23
20	38.455636	-83.620568	875.31	10.00	885.31

Name: 508

Footprint area: 12.7 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456059	-83.615255	881.83	10.00	891.83
2	38.456088	-83.611516	879.89	10.00	889.90
3	38.455630	-83.611494	882.94	10.00	892.94
4	38.455614	-83.612181	889.99	10.00	899.99
5	38.454206	-83.612149	903.48	10.00	913.48
6	38.454194	-83.613136	929.61	10.00	939.61
7	38.454668	-83.613130	913.97	10.00	923.97
8	38.454660	-83.614407	906.66	10.00	916.66
9	38.454315	-83.614423	918.16	10.00	928.16
10	38.454332	-83.615228	924.74	10.00	934.74

Name: 509

Footprint area: 4.5 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458222	-83.624195	858.75	10.00	868.75
2	38.458234	-83.622135	872.33	10.00	882.33
3	38.457331	-83.622113	873.14	10.00	883.14
4	38.457298	-83.624205	864.50	10.00	874.50

Name: 510

Footprint area: 8.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.495975	-83.665326	893.56	10.00	903.56
2	38.495034	-83.665348	907.79	10.00	917.79
3	38.495127	-83.664060	888.58	10.00	898.58
4	38.496118	-83.663427	851.62	10.00	861.62
5	38.496898	-83.663438	858.77	10.00	868.77
6	38.497621	-83.663063	842.29	10.00	852.29
7	38.497621	-83.664382	847.07	10.00	857.07
8	38.496731	-83.664457	887.73	10.00	897.73

Name: 511

Footprint area: 3.3 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.424177	-83.665801	833.60	10.00	843.60
2	38.424135	-83.664503	832.54	10.00	842.54
3	38.423093	-83.664546	861.12	10.00	871.12
4	38.423160	-83.665898	883.22	10.00	893.22

Name: 512

Footprint area: 15.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.471798	-83.622300	852.83	10.00	862.83
2	38.471130	-83.622337	864.44	10.00	874.44
3	38.470995	-83.616222	873.53	10.00	883.53
4	38.472188	-83.616136	882.27	10.00	892.27
5	38.472264	-83.622327	835.95	10.00	845.95
6	38.472083	-83.622316	839.70	10.00	849.70

Name: 513

Footprint area: 15.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.472205	-83.616115	882.00	10.00	892.00
2	38.472104	-83.611351	925.83	10.00	935.83
3	38.470727	-83.611394	922.52	10.00	932.53
4	38.470945	-83.616179	872.15	10.00	882.15

Name: 514

Footprint area: 4.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490986	-83.608398	837.17	10.00	847.17
2	38.490482	-83.608420	834.42	10.00	844.42
3	38.490490	-83.607658	820.76	10.00	830.76
4	38.492346	-83.605030	829.47	10.00	839.47
5	38.492883	-83.605030	828.21	10.00	838.21
6	38.491061	-83.607615	828.95	10.00	838.95

Name: 515

Footprint area: 7.6 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457505	-83.665508	871.32	10.00	881.32
2	38.456846	-83.665529	888.69	10.00	898.69
3	38.456863	-83.665433	889.86	10.00	899.86
4	38.456518	-83.665438	899.57	10.00	909.57
5	38.456527	-83.665256	905.75	10.00	915.75
6	38.456837	-83.665250	896.04	10.00	906.04
7	38.456825	-83.663636	883.77	10.00	893.77
8	38.458551	-83.663652	878.92	10.00	888.92
9	38.458522	-83.665481	842.90	10.00	852.90

Name: 516

Footprint area: 8.2 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.458548	-83.664142	879.92	10.00	889.92
2	38.458901	-83.664142	864.36	10.00	874.36
3	38.458901	-83.663005	872.55	10.00	882.55
4	38.459729	-83.661846	846.47	10.00	856.47
5	38.459712	-83.661283	836.06	10.00	846.06
6	38.459120	-83.661272	836.79	10.00	846.79
7	38.459107	-83.661465	845.47	10.00	855.47
8	38.458636	-83.661497	836.08	10.00	846.08
9	38.458191	-83.662806	873.84	10.00	883.84
10	38.456780	-83.662838	862.93	10.00	872.93
11	38.456813	-83.663632	883.70	10.00	893.71
12	38.458548	-83.663659	879.00	10.00	889.00

Name: 517

Footprint area: 4.1 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456301	-83.663648	892.32	10.00	902.32
2	38.455826	-83.663670	895.45	10.00	905.45
3	38.455814	-83.662570	858.29	10.00	868.30
4	38.456154	-83.662522	855.87	10.00	865.87
5	38.456141	-83.660580	913.31	10.00	923.31
6	38.456738	-83.660564	905.81	10.00	915.82
7	38.456708	-83.662149	862.50	10.00	872.50

Name: 518

Footprint area: 6.9 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.456742	-83.660564	905.81	10.00	915.82
2	38.456723	-83.661347	888.30	10.00	898.30
3	38.458510	-83.661154	847.68	10.00	857.68
4	38.458527	-83.660456	836.27	10.00	846.27
5	38.457078	-83.659325	848.30	10.00	858.30
6	38.456498	-83.659287	869.25	10.00	879.25
7	38.456494	-83.660558	909.69	10.00	919.69

Name: 519

Footprint area: 4.0 acres

Axis tracking: Single-axis rotation

Backtracking: Shade-slope

Tracking axis orientation: 180.0 deg

Maximum tracking angle: 52.0 deg

Resting angle: 52.0 deg

Ground Coverage Ratio: 0.5

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.457348	-83.620311	880.33	10.00	890.33
2	38.457331	-83.622119	873.10	10.00	883.10
3	38.458243	-83.622140	872.34	10.00	882.34
4	38.458245	-83.620222	870.96	10.00	880.96



2-Mile Flight Path Receptor(s)

Name: Fleming Mason Airport Runway 25

Description:

Threshold height : 50 ft

Direction: 247.0 deg

Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	38.544437	-83.735470	906.77	50.00	956.77
2-mile point	38.555729	-83.701399	743.92	766.30	1510.22



Name: Fleming Mason Airport Runway 7

Description:

Threshold height : 50 ft

Direction: 66.8 deg

Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	38.539503	-83.750415	905.56	50.00	955.56
2-mile point	38.528113	-83.784430	815.07	693.95	1509.01



Route Receptor(s)

Name: Black Diamond Road

Route type: Two-way

View angle: 50.0 deg



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	38.472963	-83.605859	842.68	9.00	851.68
2	38.471342	-83.606288	841.06	9.00	850.06
3	38.469725	-83.607726	824.77	9.00	833.77
4	38.468959	-83.608353	820.68	9.00	829.68
5	38.468160	-83.608981	826.96	9.00	835.96
6	38.467685	-83.609271	826.63	9.00	835.63
7	38.467341	-83.609952	827.75	9.00	836.75
8	38.467052	-83.610708	828.08	9.00	837.09
9	38.466895	-83.611036	831.56	9.00	840.56
10	38.466439	-83.611612	844.54	9.00	853.54
11	38.466169	-83.612088	856.52	9.00	865.52
12	38.465853	-83.612895	873.71	9.00	882.71
13	38.465506	-83.613846	880.60	9.00	889.60
14	38.465375	-83.614047	883.91	9.00	892.91
15	38.464210	-83.614742	889.83	9.00	898.83
16	38.462983	-83.615365	879.68	9.00	888.68
17	38.462849	-83.615472	879.79	9.00	888.79
18	38.462580	-83.615966	878.36	9.00	887.36
19	38.462177	-83.616824	869.55	9.00	878.55
20	38.461740	-83.617382	867.13	9.00	876.14
21	38.461169	-83.618025	864.14	9.00	873.14
22	38.460732	-83.618583	861.83	9.00	870.83
23	38.460446	-83.619249	861.82	9.00	870.82
24	38.460312	-83.619849	861.79	9.00	870.79
25	38.459640	-83.621137	875.57	9.00	884.57
26	38.459321	-83.621802	876.11	9.00	885.12
27	38.459321	-83.622038	875.04	9.00	884.04
28	38.459421	-83.622210	872.99	9.00	881.99
29	38.461354	-83.623647	877.85	9.00	886.86
30	38.461858	-83.624119	874.39	9.00	883.39
31	38.462379	-83.624785	868.45	9.00	877.45
32	38.463000	-83.625557	860.29	9.00	869.29
33	38.463403	-83.626609	849.22	9.00	858.22
34	38.465055	-83.626213	865.83	9.00	874.84
35	38.466404	-83.626890	871.48	9.00	880.48
36	38.467758	-83.627730	870.47	9.00	879.47
37	38.467811	-83.628379	870.00	9.00	879.00
38	38.467984	-83.631866	876.80	9.00	885.80
39	38.468297	-83.636994	865.46	9.00	874.46
40	38.468654	-83.637466	864.23	9.00	873.24
41	38.469603	-83.637809	868.37	9.00	877.37

Name: Breeze Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.489717	-83.618176	785.71	9.00	794.71
2	38.489935	-83.617682	780.48	9.00	789.48
3	38.490556	-83.617274	782.85	9.00	791.86
4	38.491245	-83.616996	787.90	9.00	796.90
5	38.491581	-83.616631	780.18	9.00	789.18
6	38.492051	-83.615923	778.63	9.00	787.63
7	38.492790	-83.615172	772.91	9.00	781.91
8	38.493412	-83.614657	777.76	9.00	786.76
9	38.494100	-83.614206	806.89	9.00	815.89
10	38.494638	-83.613777	823.19	9.00	832.20
11	38.494889	-83.611910	840.00	9.00	849.00
12	38.495074	-83.610859	839.42	9.00	848.42
13	38.495780	-83.610365	839.32	9.00	848.32
14	38.497140	-83.609636	825.21	9.00	834.21

Name: Carpenter Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.466629	-83.639204	872.25	9.00	881.25
2	38.465554	-83.639719	855.97	9.00	864.97
3	38.465168	-83.639891	843.71	9.00	852.71
4	38.464260	-83.640792	840.29	9.00	849.29
5	38.463471	-83.641650	847.66	9.00	856.66
6	38.461421	-83.642273	855.60	9.00	864.60
7	38.459405	-83.642702	870.66	9.00	879.66
8	38.457103	-83.643217	876.57	9.00	885.57
9	38.455490	-83.643710	884.95	9.00	893.95
10	38.454750	-83.643603	892.16	9.00	901.16
11	38.453591	-83.643388	899.59	9.00	908.59
12	38.450112	-83.642037	872.76	9.00	881.76
13	38.446650	-83.640728	898.81	9.00	907.81

Name: Colgan Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.446701	-83.640685	899.21	9.00	908.21
2	38.447138	-83.638732	889.25	9.00	898.25
3	38.447558	-83.636908	877.09	9.00	886.09
4	38.448045	-83.635428	868.05	9.00	877.05
5	38.448650	-83.633883	880.36	9.00	889.36
6	38.449423	-83.632509	879.78	9.00	888.78
7	38.449524	-83.632123	876.11	9.00	885.11
8	38.449659	-83.629977	868.25	9.00	877.25
9	38.449759	-83.628819	860.60	9.00	869.60
10	38.449995	-83.627188	854.64	9.00	863.64
11	38.450045	-83.626716	854.72	9.00	863.72
12	38.449776	-83.626480	854.41	9.00	863.41
13	38.448365	-83.625922	857.04	9.00	866.04
14	38.447323	-83.623304	866.55	9.00	875.55
15	38.446264	-83.620257	878.95	9.00	887.95
16	38.445390	-83.617468	882.99	9.00	891.99
17	38.444701	-83.615257	883.36	9.00	892.36
18	38.444230	-83.613949	886.33	9.00	895.33
19	38.443945	-83.613541	885.15	9.00	894.15
20	38.443390	-83.613133	894.88	9.00	903.88

Name: Foxport Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.490993	-83.623304	857.33	9.00	866.33
2	38.490909	-83.621480	835.34	9.00	844.34
3	38.489851	-83.618648	793.22	9.00	802.23
4	38.489179	-83.617189	787.43	9.00	796.43
5	38.488121	-83.615858	790.26	9.00	799.26
6	38.486861	-83.613949	800.67	9.00	809.67
7	38.486173	-83.612876	810.36	9.00	819.36
8	38.484056	-83.610666	837.12	9.00	846.12
9	38.481117	-83.608048	838.95	9.00	847.95
10	38.479572	-83.606610	838.07	9.00	847.07

Name: Poplar Grove Road
Route type: Two-way
View angle: 50.0 deg



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	38.500159	-83.665075	835.46	9.00	844.46
2	38.499689	-83.664281	827.86	9.00	836.86
3	38.499118	-83.663380	825.68	9.00	834.68
4	38.498304	-83.662607	808.23	9.00	817.23
5	38.497901	-83.662414	822.72	9.00	831.72
6	38.497330	-83.662339	832.36	9.00	841.36
7	38.496784	-83.662500	851.91	9.00	860.91
8	38.496204	-83.662650	860.37	9.00	869.37
9	38.495575	-83.662532	868.72	9.00	877.72
10	38.494349	-83.662060	890.20	9.00	899.20
11	38.492451	-83.661373	928.34	9.00	937.34

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	38.466612	-83.626383	881.32	16.00	897.32
OP 2	38.467927	-83.635809	888.42	16.00	904.42
OP 3	38.467944	-83.638142	879.07	16.00	895.07
OP 4	38.467163	-83.638480	875.73	16.00	891.73
OP 5	38.465747	-83.640068	859.73	16.00	875.73
OP 6	38.465147	-83.638909	861.73	16.00	877.73
OP 7	38.463653	-83.640508	865.11	16.00	881.11
OP 8	38.463998	-83.642619	844.35	16.00	860.35
OP 9	38.460684	-83.642117	866.02	16.00	882.02
OP 10	38.459928	-83.642165	861.93	16.00	877.93
OP 11	38.459360	-83.643386	891.43	16.00	907.43
OP 12	38.458592	-83.642605	874.94	16.00	890.94
OP 13	38.455286	-83.642726	898.38	16.00	914.38
OP 14	38.454042	-83.642983	905.81	16.00	921.82
OP 15	38.454383	-83.642747	903.62	16.00	919.62
OP 16	38.450555	-83.636675	875.07	16.00	891.07
OP 17	38.449056	-83.633478	886.55	16.00	902.55
OP 18	38.449673	-83.632834	881.02	16.00	897.02
OP 19	38.450978	-83.632593	875.81	16.00	891.81
OP 20	38.449993	-83.630533	873.88	16.00	889.88
OP 21	38.449728	-83.631917	877.29	16.00	893.29
OP 22	38.449320	-83.628497	861.29	16.00	877.29
OP 23	38.448792	-83.624425	859.93	16.00	875.93
OP 24	38.448897	-83.621571	896.29	16.00	912.29
OP 25	38.448174	-83.622257	888.05	16.00	904.05
OP 26	38.451161	-83.623051	883.04	16.00	899.04
OP 27	38.463196	-83.612348	929.86	16.00	945.86
OP 28	38.463368	-83.612729	922.71	16.00	938.71
OP 29	38.466001	-83.611667	851.27	16.00	867.27
OP 30	38.466904	-83.609349	840.80	16.00	856.80
OP 31	38.461465	-83.623341	880.49	16.00	896.49
OP 32	38.459667	-83.620573	884.18	16.00	900.19
OP 33	38.459016	-83.622139	881.28	16.00	897.28
OP 34	38.460583	-83.623427	888.85	16.00	904.85
OP 35	38.455087	-83.666827	936.25	16.00	952.25
OP 36	38.454802	-83.668249	935.62	16.00	951.62
OP 37	38.472309	-83.627694	868.62	16.00	884.63
OP 38	38.488490	-83.603391	829.74	16.00	845.74
OP 39	38.492636	-83.663355	918.77	16.00	934.77
OP 40	38.500101	-83.664079	839.86	16.00	855.86

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
501	SA tracking	SA tracking	0	0	-	
502	SA tracking	SA tracking	0	0	-	
503	SA tracking	SA tracking	0	0	-	
504	SA tracking	SA tracking	0	0	-	
505	SA tracking	SA tracking	0	0	-	
506	SA tracking	SA tracking	0	0	-	
507	SA tracking	SA tracking	0	0	-	
508	SA tracking	SA tracking	0	0	-	
509	SA tracking	SA tracking	0	0	-	
510	SA tracking	SA tracking	0	0	-	
511	SA tracking	SA tracking	0	0	-	
512	SA tracking	SA tracking	15,217	0	-	-
513	SA tracking	SA tracking	0	0	-	
514	SA tracking	SA tracking	1,148	0	-	-
515	SA tracking	SA tracking	0	0	-	
516	SA tracking	SA tracking	0	0	-	
517	SA tracking	SA tracking	0	0	-	
518	SA tracking	SA tracking	0	0	-	
519	SA tracking	SA tracking	0	0	-	

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
512 (green)	1343	1927	1304	0	0	0	0	0	0	2963	1332	1093
512 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0
514 (green)	167	0	0	0	0	0	0	0	0	0	1	980
514 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

501 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

502 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

503 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

504 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

505 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

506 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

507 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

508 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

509 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

510 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

511 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

512 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	7771	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0

Route: Foxport Road	7446	0
Route: Poplar Grove Road	0	0

512 - Receptor (Fleming Mason Airport Runway 25)

No glare found

512 - Receptor (Fleming Mason Airport Runway 7)

No glare found

512 - OP Receptor (OP 1)

No glare found

512 - OP Receptor (OP 2)

No glare found

512 - OP Receptor (OP 3)

No glare found

512 - OP Receptor (OP 4)

No glare found

512 - OP Receptor (OP 5)

No glare found

512 - OP Receptor (OP 6)

No glare found

512 - OP Receptor (OP 7)

No glare found

512 - OP Receptor (OP 8)

No glare found

512 - OP Receptor (OP 9)

No glare found

512 - OP Receptor (OP 10)

No glare found

512 - OP Receptor (OP 11)

No glare found

512 - OP Receptor (OP 12)

No glare found

512 - OP Receptor (OP 13)

No glare found

512 - OP Receptor (OP 14)

No glare found

512 - OP Receptor (OP 15)

No glare found

512 - OP Receptor (OP 16)

No glare found

512 - OP Receptor (OP 17)

No glare found

512 - OP Receptor (OP 18)

No glare found

512 - OP Receptor (OP 19)

No glare found

512 - OP Receptor (OP 20)

No glare found

512 - OP Receptor (OP 21)

No glare found

512 - OP Receptor (OP 22)

No glare found

512 - OP Receptor (OP 23)

No glare found

512 - OP Receptor (OP 24)

No glare found

512 - OP Receptor (OP 25)

No glare found

512 - OP Receptor (OP 26)

No glare found

512 - OP Receptor (OP 27)

No glare found

512 - OP Receptor (OP 28)

No glare found

512 - OP Receptor (OP 29)

No glare found

512 - OP Receptor (OP 30)

No glare found

512 - OP Receptor (OP 31)

No glare found

512 - OP Receptor (OP 32)

No glare found

512 - OP Receptor (OP 33)

No glare found

512 - OP Receptor (OP 34)

No glare found

512 - OP Receptor (OP 35)

No glare found

512 - OP Receptor (OP 36)

No glare found

512 - OP Receptor (OP 37)

No glare found

512 - OP Receptor (OP 38)

No glare found

512 - OP Receptor (OP 39)

No glare found

512 - OP Receptor (OP 40)

No glare found

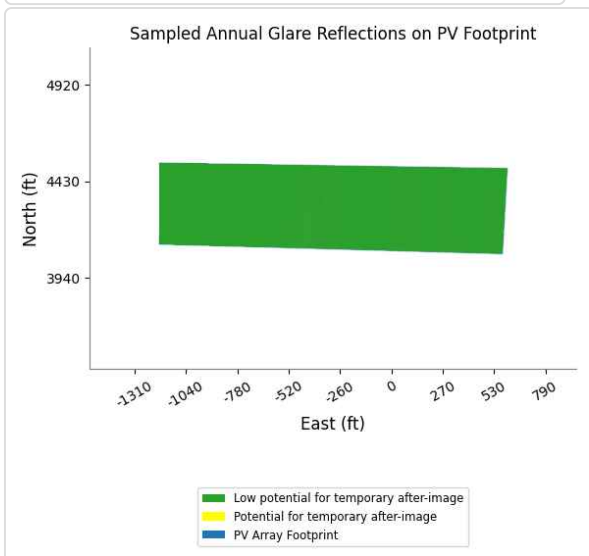
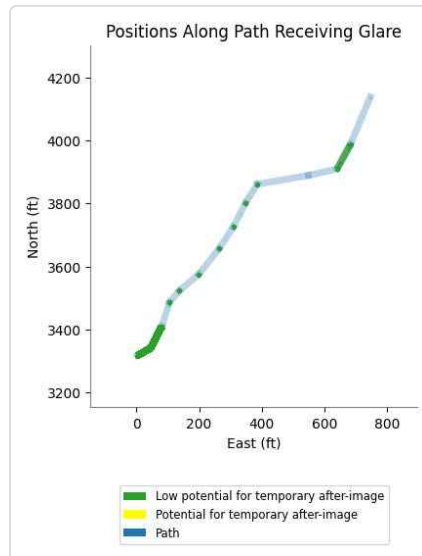
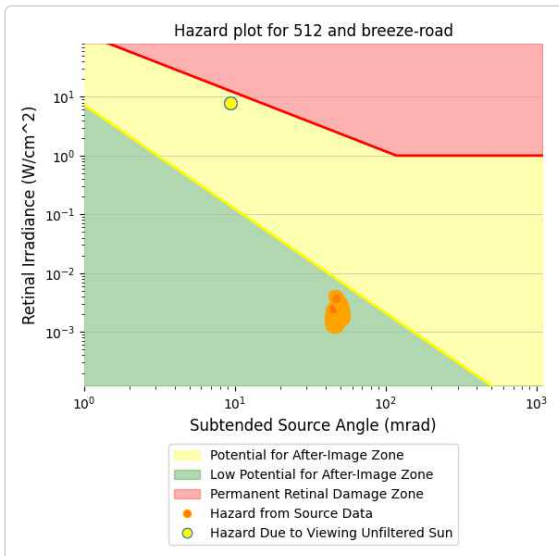
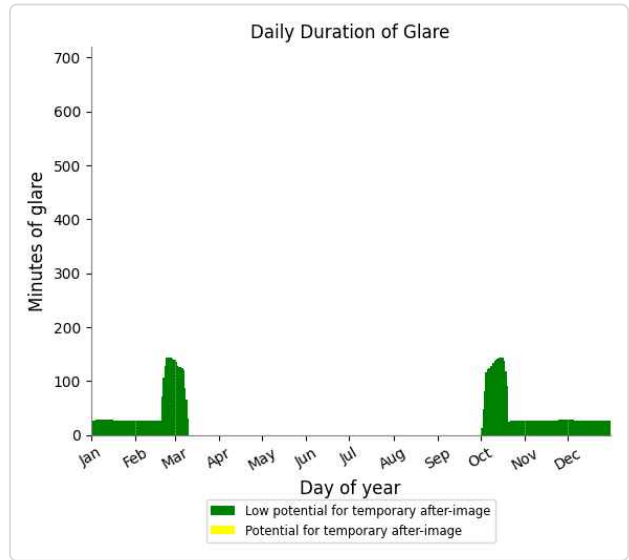
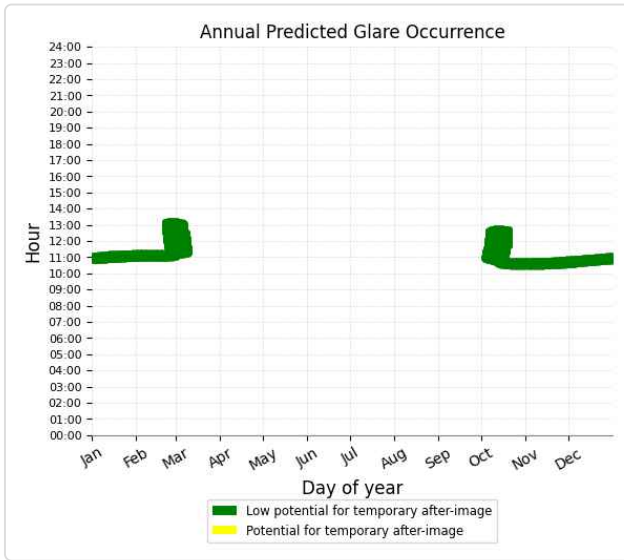
512 - Route Receptor (Black Diamond Road)

No glare found

512 - Route Receptor (Breeze Road)

PV array is expected to produce the following glare for receptors at this location:

- 7,771 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



512 - Route Receptor (Carpenter Road)

No glare found

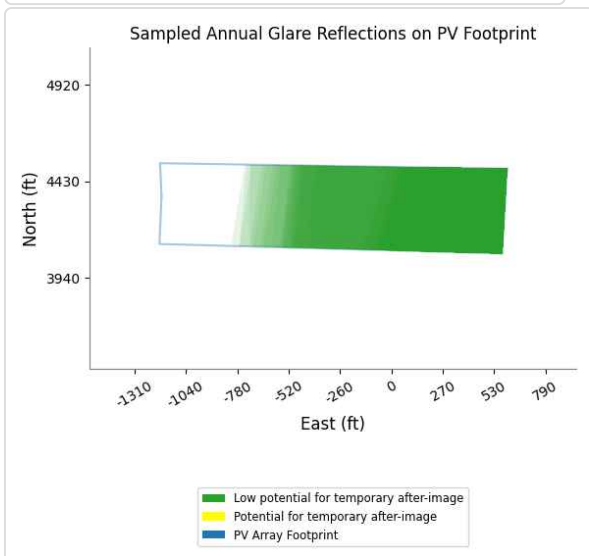
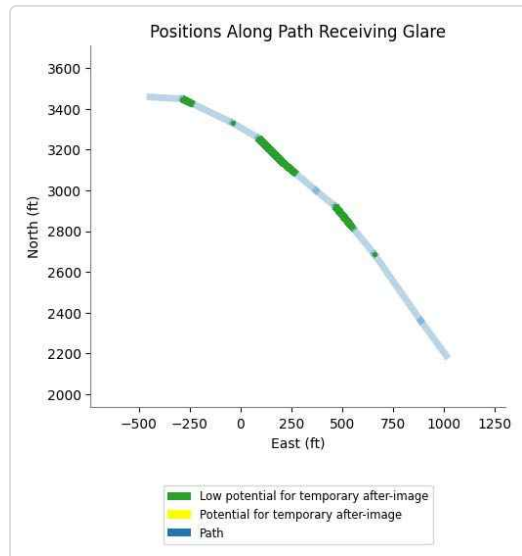
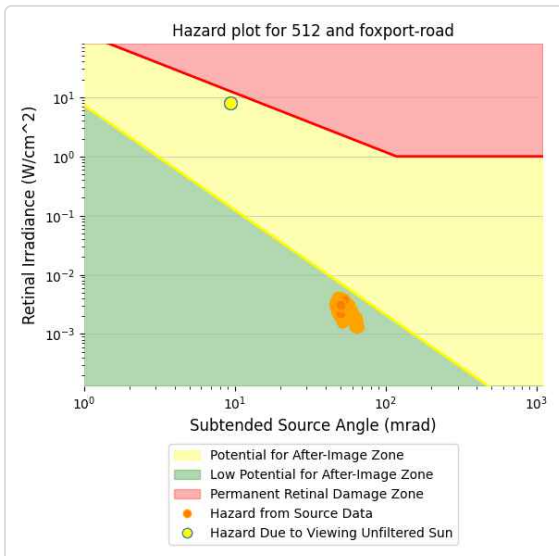
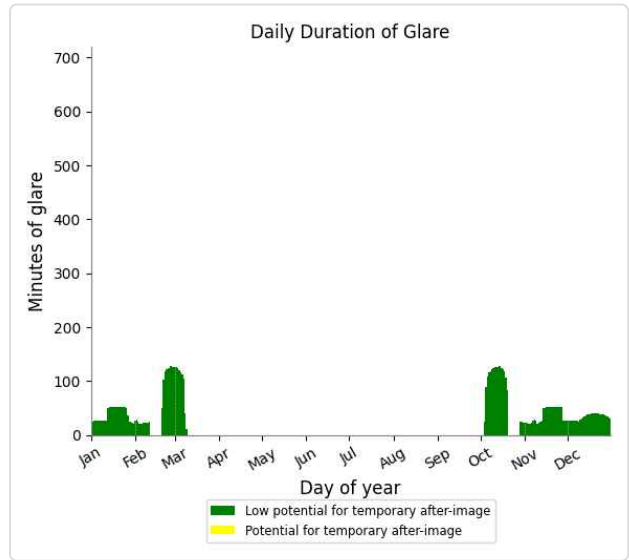
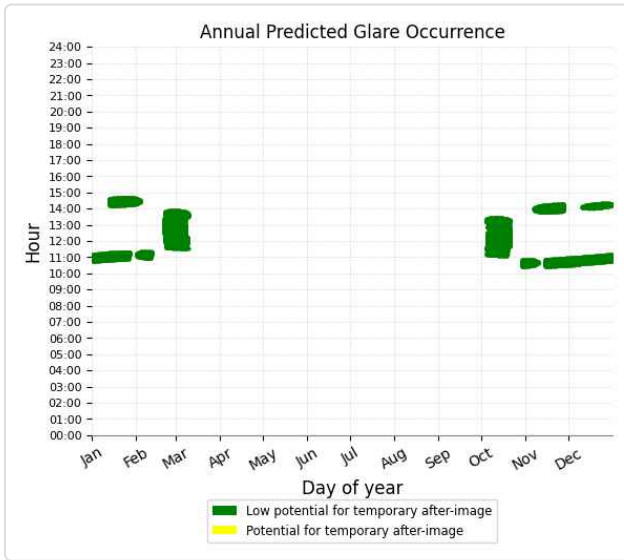
512 - Route Receptor (Colgan Road)

No glare found

512 - Route Receptor (Foxport Road)

PV array is expected to produce the following glare for receptors at this location:

- 7,446 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



512 - Route Receptor (Poplar Grove Road)

No glare found

513 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

514 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	1148	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0

Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

514 - Receptor (Fleming Mason Airport Runway 25)

No glare found

514 - Receptor (Fleming Mason Airport Runway 7)

No glare found

514 - OP Receptor (OP 1)

No glare found

514 - OP Receptor (OP 2)

No glare found

514 - OP Receptor (OP 3)

No glare found

514 - OP Receptor (OP 4)

No glare found

514 - OP Receptor (OP 5)

No glare found

514 - OP Receptor (OP 6)

No glare found

514 - OP Receptor (OP 7)

No glare found

514 - OP Receptor (OP 8)

No glare found

514 - OP Receptor (OP 9)

No glare found

514 - OP Receptor (OP 10)

No glare found

514 - OP Receptor (OP 11)

No glare found

514 - OP Receptor (OP 12)

No glare found

514 - OP Receptor (OP 13)

No glare found

514 - OP Receptor (OP 14)

No glare found

514 - OP Receptor (OP 15)

No glare found

514 - OP Receptor (OP 16)

No glare found

514 - OP Receptor (OP 17)

No glare found

514 - OP Receptor (OP 18)

No glare found

514 - OP Receptor (OP 19)

No glare found

514 - OP Receptor (OP 20)

No glare found

514 - OP Receptor (OP 21)

No glare found

514 - OP Receptor (OP 22)

No glare found

514 - OP Receptor (OP 23)

No glare found

514 - OP Receptor (OP 24)

No glare found

514 - OP Receptor (OP 25)

No glare found

514 - OP Receptor (OP 26)

No glare found

514 - OP Receptor (OP 27)

No glare found

514 - OP Receptor (OP 28)

No glare found

514 - OP Receptor (OP 29)

No glare found

514 - OP Receptor (OP 30)

No glare found

514 - OP Receptor (OP 31)

No glare found

514 - OP Receptor (OP 32)

No glare found

514 - OP Receptor (OP 33)

No glare found

514 - OP Receptor (OP 34)

No glare found

514 - OP Receptor (OP 35)

No glare found

514 - OP Receptor (OP 36)

No glare found

514 - OP Receptor (OP 37)

No glare found

514 - OP Receptor (OP 38)

No glare found

514 - OP Receptor (OP 39)

No glare found

514 - OP Receptor (OP 40)

No glare found

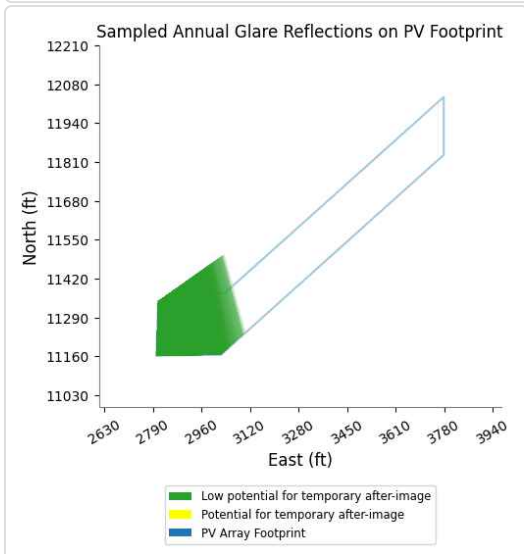
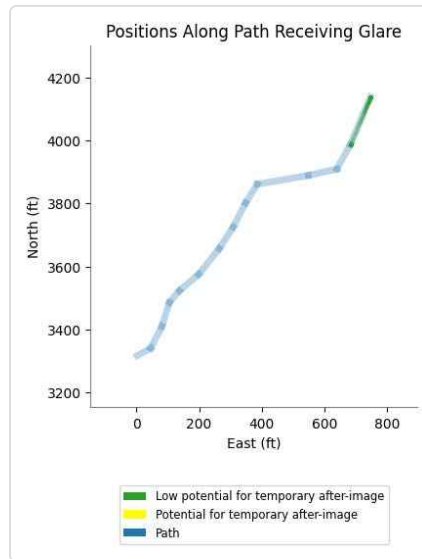
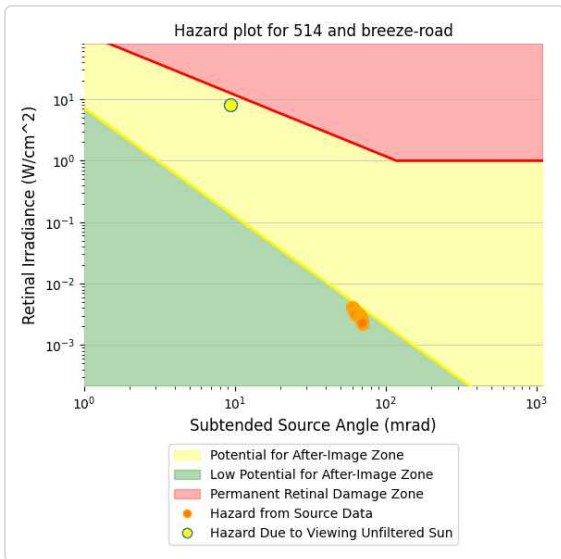
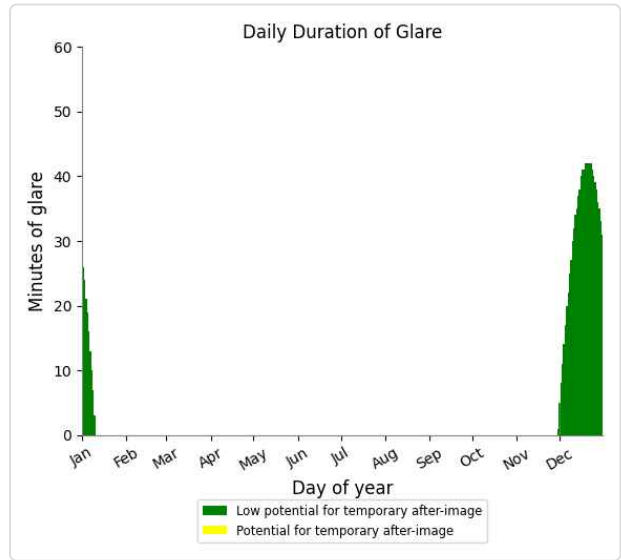
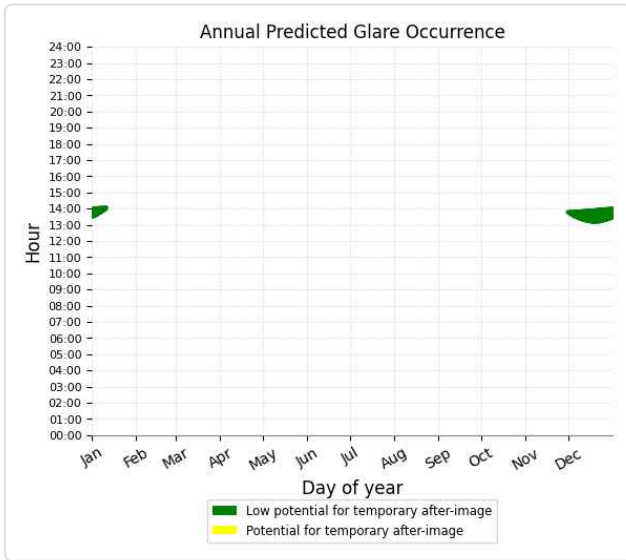
514 - Route Receptor (Black Diamond Road)

No glare found

514 - Route Receptor (Breeze Road)

PV array is expected to produce the following glare for receptors at this location:

- 1,148 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



514 - Route Receptor (Carpenter Road)

No glare found

514 - Route Receptor (Colgan Road)

No glare found

514 - Route Receptor (Foxport Road)

No glare found

514 - Route Receptor (Poplar Grove Road)

No glare found

515 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

516 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

517 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

518 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

519 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Fleming Mason Airport Runway 25	0	0
FP: Fleming Mason Airport Runway 7	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Black Diamond Road	0	0
Route: Breeze Road	0	0
Route: Carpenter Road	0	0
Route: Colgan Road	0	0
Route: Foxport Road	0	0
Route: Poplar Grove Road	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

APPENDIX B

Glare Results Summary Table



Table B.1: Hummingbird Glare Results Summary Table

Block 1	Glare?	Yellow or Green?	Approx. length (maximum minutes/day)	Approx. Time of Day	Approx. Time of Year	Glare Point In Viewshed?	Observation Point Latitude	Observation Point Longitude
Airports/Heliport								
Fleming Mason Airport Runway 25	no							
Fleming Mason Airport Runway 7	no							
Roads								
Carpenter Road	no							
Kilbreath Valley Road	no							
Mt Carmel Road	no							
Poplar Grove Road	yes	both	4	2:00 PM	Late December	No		
Turner Road	no							
Residences								
OP1	no						38.50230842	-83.66875219
OP2	no						38.50007406	-83.6641147
OP3	no						38.50017901	-83.66437219
OP4	no						38.49885866	-83.66284333
OP5	no						38.49215031	-83.66102713
OP6	no						38.49259957	-83.66334724
OP7	no						38.49270874	-83.66114246
OP8	no						38.4907392	-83.65989792
OP9	no						38.48998341	-83.65873921
OP10	no						38.48812341	-83.65500105
OP11	no						38.48704009	-83.6523655
OP12	no						38.48392923	-83.64439418
OP13	no						38.48225492	-83.64154744
OP14	no						38.48290161	-83.64231455
OP15	no						38.48076837	-83.64082324
OP16	no						38.48262866	-83.64063012
OP17	no						38.48280923	-83.6396377
OP18	no						38.48011746	-83.6364727
OP19	no						38.47892902	-83.63699305
OP20	no						38.47840409	-83.63585043
OP21	no						38.47552738	-83.63611865
OP22	no						38.47696365	-83.63612401
OP23	no						38.47460345	-83.63698768
OP24	no						38.470811	-83.6372559
OP25	no						38.46795919	-83.63809275
OP26	no						38.46671595	-83.64114511
OP27	no						38.46878542	-83.63779595
OP28	no						38.4640392	-83.64258637
OP29	no						38.46189713	-83.64301068
OP30	no						38.46059497	-83.64142281
OP31	no						38.46067898	-83.64215237
OP32	no						38.4741607	-83.66383924
OP33	no						38.48045584	-83.64891006
OP34	no						38.47996871	-83.65094318
OP35	no						38.47851151	-83.65482165
OP36	no						38.47988876	-83.66913334
OP37	no						38.49398415	-83.66510994
OP38	no						38.50031534	-83.66467006
OP39	no						38.50043289	-83.66507776
OP40	no						38.4999375	-83.66788871

Block 2 - NO GLARE	Glare?	Yellow or Green?	Approx. length (maximum minutes/day)	Approx. Time of Day	Approx. Time of Year	Observation Point Latitude	Observation Point Longitude
Airports/Heliport							
Fleming Mason Airport Runway 25	no						
Fleming Mason Airport Runway 7	no						
Roads							
Beech Springs Drive	no						
Beechtree Pike	no						
Carpenter Road	no						
Maddox Road	no						
Mt Carmel Road Route 57	no						
Residences							
OP1	no					38.46683145	-83.6711513
OP2	no					38.46920337	-83.67243761
OP3	no					38.46790362	-83.67395206
OP4	no					38.46244538	-83.668247
OP5	no					38.45792138	-83.67934866
OP6	no					38.45895474	-83.68005408
OP7	no					38.45953022	-83.68001117
OP8	no					38.4563545	-83.68025793
OP9	no					38.45476659	-83.66818799
OP10	no					38.45509006	-83.66680397
OP11	no					38.45405244	-83.64296182
OP12	no					38.45860003	-83.64260963
OP13	no					38.45936034	-83.6433821
OP14	no					38.46068772	-83.64210001
OP15	no					38.47417435	-83.66387418
OP16	no					38.4671566	-83.66420461
OP17	no					38.46442552	-83.67011374
OP18	no					38.4620187	-83.66884103
OP19	no					38.46376693	-83.677704
OP20	no					38.46495772	-83.67641923
OP21	no					38.46444318	-83.6769664
OP22	no					38.45330012	-83.67709476
OP23	no					38.45373912	-83.6752494
OP24	no					38.45498779	-83.66722306
OP25	no					38.45492898	-83.66754492
OP26	no					38.45447109	-83.66960486
OP27	no					38.44969031	-83.63282105
OP28	no					38.45057255	-83.63668879

OP29	no							38.4596716	-83.62059554
OP30	no							38.46144843	-83.62334212
OP31	no							38.44973039	-83.63187172
OP32	no							38.44514129	-83.67005289
OP33	no							38.44519052	-83.66910163
OP34	no							38.44468635	-83.66954687
OP35	no							38.44435443	-83.67022816
OP36	no							38.44409394	-83.66950396
OP37	no							38.44371581	-83.66953615
OP38	no							38.44716754	-83.68449765
OP39	no							38.44296159	-83.67024918
OP40	no							38.44243219	-83.66953571

Block 2b	Glare?	Yellow or Green?	Approx. length (maximum minutes/day)	Approx. Time of Day	Approx. Time of Year		Observation Point Latitude	Observation Point Longitude
Airports/Heliport								
Fleming Mason Airport Runway 25	no							
Fleming Mason Airport Runway 7	no							
Roads								
Beech Springs Drive	no							
Beechtree Pike	no							
Carpenter Road	no							
Maddox Road	yes	green	2	11:00 AM	Late Dec	yes		
Mt Carmel Road Route 57	no							
Residences								
OP1	no						38.46683145	-83.6711513
OP2	no						38.46920337	-83.67243761
OP3	no						38.46790362	-83.67395206
OP4	no						38.46244538	-83.668247
OP5	no						38.45792138	-83.67934866
OP6	no						38.45895474	-83.68005408
OP7	no						38.45953022	-83.68001117
OP8	no						38.4563545	-83.68025793
OP9	yes	green	18	11:00 AM	Dec-Jan	yes	38.45476659	-83.66818799
OP10	no						38.45509006	-83.66680397
OP11	no						38.45405244	-83.64296182
OP12	no						38.45860003	-83.64260963
OP13	no						38.45936034	-83.6433821
OP14	no						38.46068772	-83.64210001
OP15	no						38.47417435	-83.66387418
OP16	no						38.46715666	-83.66420461
OP17	no						38.46442552	-83.67011374
OP18	no						38.4620187	-83.66884103
OP19	no						38.46376693	-83.677704
OP20	no						38.46495772	-83.67641923
OP21	no						38.46444318	-83.67696664
OP22	no						38.45330012	-83.67709476
OP23	no						38.45373912	-83.6752494
OP24	no						38.45498779	-83.66722306
OP25	yes	green	5	11:00 AM	Dec-Jan	yes	38.45492898	-83.66754492
OP26	no						38.45447109	-83.66960486
OP27	no						38.44969031	-83.63282105
OP28	no						38.45057255	-83.63668879
OP29	no						38.4596716	-83.62059554
OP30	no						38.46144843	-83.62334212
OP31	no						38.44973039	-83.63187172
OP32	no						38.44514129	-83.67005289
OP33	no						38.44519052	-83.66910163
OP34	no						38.44468635	-83.66954687
OP35	no						38.44435443	-83.67022816
OP36	no						38.44409394	-83.66950396
OP37	no						38.44371581	-83.66953615
OP38	no						38.44716754	-83.68449765
OP39	no						38.44296159	-83.67024918
OP40	no						38.44243219	-83.66953571

Block 3 - NO GLARE	Glare?	Yellow or Green?	Approx. length (maximum minutes/day)	Approx. Time of Day	Approx. Time of Year		Observation Point Latitude	Observation Point Longitude
Airports/Heliport								
Fleming Mason Airport Runway 25	no							
Fleming Mason Airport Runway 7	no							
Roads								
Beechburg Wallingford Road	no							
Beechtree Pike	no							
Breeze Road	no							
Foxport Road	no							
Mt Carmel Road Route 57	no							
Wallingford Road	no							
Wilson Run Road	no							
Residences								
OP1	no						38.49492265	-83.61252291
OP2	no						38.49521235	-83.61045761
OP3	no						38.49765569	-83.60839229
OP4	no						38.48814666	-83.61219848
OP5	no						38.49124563	-83.62201843
OP6	no						38.49078075	-83.62306018
OP7	no						38.49126663	-83.62456045
OP8	no						38.49951249	-83.62471066
OP9	no						38.42868916	-83.6385689
OP10	no						38.4246013	-83.64126359
OP11	no						38.42407058	-83.63782324
OP12	no						38.41520243	-83.66652288
OP13	no						38.42695473	-83.67257034
OP14	no						38.42671098	-83.67132579

OP15	no							38.42807981	-83.67366828
OP16	no							38.42780665	-83.67602326
OP17	no							38.42810502	-83.67924728
OP18	no							38.42741162	-83.67957987
OP19	no							38.42748306	-83.67725708
OP20	no							38.44100825	-83.67808789
OP21	no							38.44112292	-83.67926683
OP22	no							38.44188762	-83.67750193
OP23	no							38.4388918	-83.68268933
OP24	no							38.42910767	-83.67016534
OP25	no							38.43070875	-83.66879741
OP26	no							38.43214445	-83.66564251
OP27	no							38.4332592	-83.66726432
OP28	no							38.43977942	-83.67194034
OP29	no							38.43992648	-83.66816379
OP30	no							38.44098111	-83.67023982
OP31	no							38.4412596	-83.66958712
OP32	no							38.44137305	-83.67020939
OP33	no							38.44178061	-83.67027913
OP34	no							38.44145288	-83.67138956
OP35	no							38.44211254	-83.66956566
OP36	no							38.44209153	-83.6702523
OP37	no							38.44054952	-83.66965685
OP38	no							38.44106633	-83.67397521
OP39	no							38.43491787	-83.66411194
OP40	no							38.41794907	-83.64330608

Block 4	Glare?	Yellow or Green?	Approx. length (maximum minutes/day)	Approx. Time of Day	Approx. Time of Year		Observation Point Latitude	Observation Point Longitude
Airports/Heliport								
Fleming Mason Airport Runway 25	no							
Fleming Mason Airport Runway 7	no							
Roads								
Black Diamond Road	no							
Breeze Road	yes	green	33	2:00 PM	Dec-Jan	No		
Carpenter Road	no							
Foxport Road Route 344	no							
Route 989	no							
Residences								
OP1	no						38.46659656	-83.62636909
OP2	no						38.46144695	-83.62335965
OP3	no						38.45901903	-83.62216339
OP4	no						38.45967012	-83.6205487
OP5	no						38.46059005	-83.62346694
OP6	no						38.46334578	-83.61270207
OP7	no						38.46604657	-83.61169624
OP8	no						38.46823275	-83.60982674
OP9	no						38.46929956	-83.60693532
OP10	no						38.46869896	-83.60801356
OP11	no						38.46999887	-83.60806453
OP12	no						38.47041256	-83.60751199
OP13	no						38.47090606	-83.60765415
OP14	no						38.47129455	-83.60750126
OP15	no						38.47809001	-83.6037356
OP16	no						38.47795143	-83.6047602
OP17	no						38.47806481	-83.60506061
OP18	no						38.47829999	-83.60562924
OP19	no						38.48100861	-83.60822025
OP20	no						38.47977317	-83.61350653
OP21	no						38.48049967	-83.61282525
OP22	no						38.47837475	-83.61423073
OP23	no						38.47820677	-83.61569521
OP24	no						38.47862672	-83.61627994
OP25	no						38.4806741	-83.61060657
OP26	no						38.48256169	-83.60853054
OP27	no						38.48335114	-83.61044027
OP28	no						38.48388864	-83.61009695
OP29	no						38.48420358	-83.61037054
OP30	no						38.48487124	-83.61106255
OP31	no						38.48509379	-83.61131467
OP32	no						38.48607218	-83.61211934
OP33	no						38.48852438	-83.60336461
OP34	yes	green	22	2:00 PM	Late Nov-Jan	Yes	38.49625415	-83.6098931
OP35	no						38.49519613	-83.6104671
OP36	no						38.47172174	-83.62389518
OP37	no						38.47230972	-83.62769319
OP38	no						38.48229208	-83.62697972
OP39	no						38.48797062	-83.62883192
OP40	yes	green	23	2:00 PM	Late Dec	Yes	38.49765595	-83.60839478

Block 5	Glare?	Yellow or Green?	Approx. length (maximum minutes/day)	Approx. Time of Day	Approx. Time of Year		Observation Point Latitude	Observation Point Longitude
Airports/Heliport								
Fleming Mason Airport Runway 25	no							
Fleming Mason Airport Runway 7	no							
Roads								
Black Diamond Road	no							
Breeze Road	yes	green	150	mid-day	Oct-Mar	Partially		
Carpenter Road	no							
Colgan Road	no							
Foxport Road	yes	green	120	11am-3pm	Oct-Mar	Partially		
Poplar Grove Road	no							
Residences								
OP1	no						38.46661247	-83.62638325

OP2	no						38.46792711	-83.63580854
OP3	no						38.46794391	-83.63814206
OP4	no						38.46716269	-83.63848002
OP5	no						38.46574723	-83.64006788
OP6	no						38.46514659	-83.63890917
OP7	no						38.46365338	-83.64050777
OP8	no						38.46399781	-83.64261867
OP9	no						38.46068367	-83.64211709
OP10	no						38.45992757	-83.64216537
OP11	no						38.45936049	-83.64338578
OP12	no						38.45859177	-83.64260525
OP13	no						38.45528579	-83.64272595
OP14	no						38.45404233	-83.64298345
OP15	no						38.45438226	-83.64274741
OP16	no						38.45055548	-83.63667489
OP17	no						38.44905567	-83.6334777
OP18	no						38.44967324	-83.63283397
OP19	no						38.4509777	-83.63259257
OP20	no						38.4499253	-83.63053263
OP21	no						38.44972786	-83.63191665
OP22	no						38.44932034	-83.62849683
OP23	no						38.44879171	-83.62442457
OP24	no						38.44889674	-83.6215707
OP25	no						38.44817413	-83.62225734
OP26	no						38.45116116	-83.62305128
OP27	no						38.46319561	-83.61234801
OP28	no						38.46336783	-83.61272888
OP29	no						38.46600141	-83.61166673
OP30	no						38.46690445	-83.6093493
OP31	no						38.46146532	-83.62334085
OP32	no						38.45966749	-83.62057281
OP33	no						38.4590164	-83.62213922
OP34	no						38.46058321	-83.62342668
OP35	no						38.45508721	-83.66682693
OP36	no						38.45480155	-83.6682485
OP37	no						38.47230865	-83.6276935
OP38	no						38.48848969	-83.60339117
OP39	no						38.49263575	-83.6633546
OP40	no						38.50010059	-83.66407879

SAR Exhibit G

Landscape Plan

Recurrent Energy LLC

Hummingbird Solar Project

September 2022

E320201703



Document Information

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Appendix A Screening Plan

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1 Introduction

Recurrent Energy LLC (Recurrent) is proposing to construct the Hummingbird Solar Project (Project) in an unincorporated area of Fleming County, Kentucky, which is located approximately 2-miles east of Flemingsburg, Kentucky. The proposed Project will have a generation capacity of 200 megawatts (MW). The leased parcels total 3,900 acres but the acreage that will comprise the Project is proposed to be constructed within an approximate area of 2,106 acres (Project Area) due to constraints and required setbacks. As part of the development of this site, Cardno, now Stantec (Cardno) has worked with Recurrent to develop a landscape plan to help mitigate any visual impacts of the Project from roadways and adjacent land uses while maintaining a natural character that fits within the context and character of the existing landscape. General information about proposed design methodology, plant materials, and planting module are included in this document.

The Project will be visible from various roadways and properties (both participating landowners and non-participating landowners). It is important that visual mitigation be considered for these areas depending on the adjacent uses, intensity of viewership, viewsheds, and overall contextual relationship to the Project. A specific treatment module as outlined in this plan is designed to be replicable and is able to be prescribed in single scenario around the Project.

With any site, plant community composition varies due to differences in topography, soils, sun exposure, and other factors. It is important to not only recognize what plants are appropriate for a region, but also for a specific site. This landscape plan proposes to utilize native landscape material that will be well adapted to the climate of this region. Native plants also provide long term maintenance benefits as well as ecological benefits for soil stabilization, water quality, and wildlife habitat. These ecological benefits will all be balanced with the need to provide visual mitigation and overall aesthetic character that will complement the existing land use and setting.

2 Design Methodology

The overall goal of the landscape plan is to provide visual interest while softening the infrastructure of the Project. Screening should be provided in higher viewership areas and where there are adjacent land uses that would require them. Screening intensity is based on the need to provide a visual barrier. One specific treatment module is proposed for this Project and is designed to be replicable and flexible, if landowners desire, in order to be prescribed in the various scenarios around the Project. The primary goals of the landscape plan are to:

1. Provide visual interest to soften the proposed infrastructure;
2. Provide screening and visual barriers that consider viewership intensity and adjacent land use;
3. Develop a module that would be appropriate for the existing landscape;
4. Incorporate species that are existing in the landscape that were observed during field surveys;
5. Utilize existing landscape where possible;
7. Avoid monocultures of same species in order to increase biodiversity and;
8. Utilize native plant material when possible.

It is important to note that the vegetation will not provide 100% screening or visual obstruction from the Project. The primary intent is to provide visual relief in order to break up the lines of the infrastructure and enhance the overall aesthetics of the Project. Existing landscape along roadways, property lines and fence rows should be maintained where possible.

3 Vegetation Protection

The Project has been sited in a way to minimize impacts to the forested lands, shrublands, wetlands, and streams within the Project area, thereby minimizing impacts to trees and woody vegetation. Project infrastructure and the maintained buffers around them will be located primarily on agriculture and open lands. In order to protect vegetation from unauthorized removal, Project drawings will clearly illustrate the limits of construction. Prior to any ground disturbing activities, the limits for clearing will be adequately flagged or staked in the field.

4 Vegetation Management

4.1 Construction

Construction activities for solar infrastructure have the potential to impact vegetation through cutting and clearing, removal of stumps and roots, and increased ground disturbance and soil exposure. In order to limit the impacts to vegetation, all clearing will be confined to the Project infrastructure footprint. Typical footprints include:

- 10 feet on either side of access road centerline
- 5 feet on either side of buried collection line centerline
- 3 acres for laydown yard(s)

Project construction will require a limited area of permanent disturbance of vegetation. The majority of disturbance activities will occur in agricultural lands for roads or laydown areas, and efforts to retain desirable vegetation growth will be maximized to the extent practicable. The Project will require minimal clearing of tree stands within various windrow or tree lot communities in order to access adjacent parcels. No trees greater than 3 inches in diameter at breast height (DBH) will be cut outside of the approved cutting season of October 1 through March 31. Any trees and limbs removed, with approval, will be logged, and/or chipped, and either removed or left to remain on the land, per landowner request and as allowed under federal, state, and local regulations. Authorization to leave cleared vegetation on the land (either chipped or utilized by landowners) reduces the need for further equipment mobilization to haul cut vegetation, thereby reducing further impacts to the site; however, if removal is required, all equipment will utilize existing travel lanes to the extent practicable to reduce overland travel.

After construction, disturbed areas not used for Project infrastructure will be returned to approximate pre-construction use and capability via reclamation and revegetation. This involves the treatment of soil as necessary to preserve approximate pre-construction capability and the stabilization of the work surface in a manner consistent with the initial land use. Disturbed soils inside the Project's fence line will be re-seeded with a mix of fescue and/or pollinators to stabilize exposed soils and control sedimentation and erosion.

4.2 Operation

During Project operation, on-site vegetation within the fence line of the Project will be regularly maintained through mowing. During maintenance inspections, the Project area will also be assessed for the growth of noxious weeds. If noxious weeds do become established, herbicide treatment may be conducted, as appropriate, by a licensed professional. All vegetation monitoring and maintenance will be conducted by an experienced and qualified contractor (see Section 8).

5 Plant Materials

The plant palette used for the module included in this plan is based on species observed during on-site field surveys as well as known regional vegetation species. Selected species are native to Northern Kentucky and exclude invasive or nuisance plants as identified by the Kentucky Department of Fish and Wildlife Resources. Existing native species that were observed at the site in some form of abundance are summarized in Table 5-1.

Table 5-1 Inventory of Trees Observed in the Project Area

Scientific Name	Common Name
<i>Acer saccharinum</i>	Silver Maple
<i>Carya ovata</i>	Shagbark Hickory
<i>Celtis occidentalis</i>	Common Hackberry
<i>Fraxinus americana</i>	White Ash
<i>Gleditsia triacanthos</i>	Honey Locust
<i>Juglans nigra</i>	Black Walnut
<i>Maclura pomifera</i>	Osage Orange
<i>Quercus macrocarpa</i>	Burr Oak
<i>Salix nigra</i>	Black Willow
<i>Ulmus americana</i>	American Elm
<i>Juniperis virginiana</i>	Eastern Cedar

Inventory of Shrubs Observed in the Project Area

Scientific Name	Common Name
<i>Rubus occidentalis</i>	Black Raspberry

While the table above provides a comprehensive list of tree species found within the limits of the site, it is important to select species that are best suited for the Project area and the purpose of the module (see Section 6).

5.1 Native Plants

There are many benefits to using native plants. Most notably, they are adapted to the specific conditions of a region and are able to better tolerate weather, drought, disease, and soil conditions than non-native species. Because of these benefits, native plants generally survive longer and are easier to maintain over the course of their establishment. Native plants will also blend better into the existing landscape since many of these plants are naturally occurring in existing fields, roadsides, fence rows, etc.

PRIMARY TREES



Eastern Cedar

SECONDARY TREES



American Holly



Shortleaf Pine

Figure 5-1 Potential Plant Material Selection for the Hummingbird Solar Project

6 Planting Modules

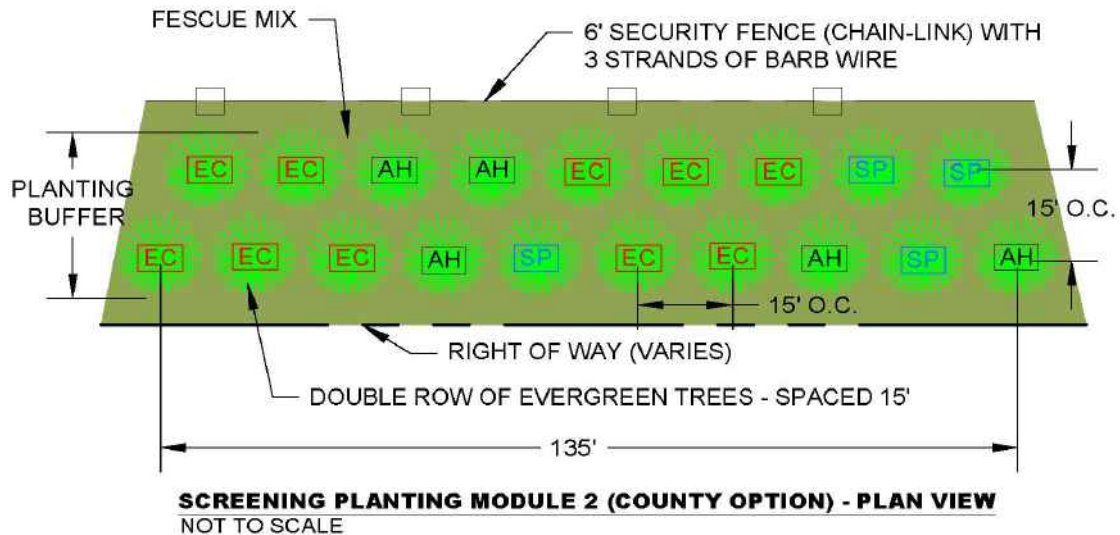
A single module has been developed for this Project to meet the requirements usually required by the Kentucky Siting Board and similar county regulations to help soften and screen the infrastructure of the Project. The screening module is intended to be flexible and adaptable (based on landowner and county discretion) to the various conditions that occur along the perimeter of the Project. The module is prescribed for various areas based on the need to provide screening, visual interest, softening and character to the existing landscape. Where possible, existing vegetation will be utilized along the road, fence lines and property lines. These existing areas should be incorporated into any final design and the modules should be adjusted to account for such conditions. A map of where the module is proposed is provided in Appendix A.

Table 6-1 Module 1 Trees

Scientific Name	Common Name
Trees	
<i>Ilex opaca</i>	American Holly
<i>Juniperus virginiana</i>	Eastern Red Cedar
<i>Pinus echinata</i>	Littleleaf Pine

Module 1

The intent of Module 1 is to provide softening, visual interest and a robust screening in areas of the highest viewership and the longest viewing period. A good example would be when a residence is located across the street or adjacent to the Project. The intent is to provide a year-round visual landscape screen for more stationary viewers while also enhancing aesthetics of the Project to non-stationary receptors. Module 1 is comprised of evergreen trees spaced at 15-feet on center to help provide visual screening from the infrastructure of the Project (Table 6-1). Shading should be considered as to not cast shadows on the solar arrays. Although not required, this module will be utilized throughout the Project.



- EC EASTERN CEDAR
- AH AMERICAN HOLLY
- SP SHORLEAF PINE

Figure 6-1 Module 1 Screening

7 Buffer Visualizations



Figure 7-1 Module 1 Simulation



Figure 7-2 Module 1 Simulation

8 Maintenance

8.1 Buffer Landscape Maintenance

Maintenance of planted landscape buffers will be conducted as needed following installation and will focus on ensuring survival of planted materials.

8.1.1 Plants

After the initial planting, maintenance of native trees will include:

- Guying and maintenance of guying for at least one season for trees to ensure they stay upright during the establishment period;
- Application of mulch around tree rings – mulch should be consistently at a depth of 2-3” to help retain moisture and prevent weed growth;
- Pruning of plants as needed to remove dead limbs or unwanted growth; and
- Watering as needed until final acceptance/warranty period expires.

After the initial maintenance period and 1-year warranty (provided by contractor), the plant material selected should not require ongoing intensive maintenance since the proposed species were selected because they are native to Kentucky. Recurrent will replace any plantings that die within 6-months. Typically, plant material that has sustained one full growing season has a very high likelihood of continued survival. Recurrent will monitor the plantings annually during operations to ensure no significant dieback or loss is occurring. If significant dieback were to occur, Recurrent would evaluate the need for mitigation options to ensure the goals of the landscape plan are still being met.

8.1.2 Fescue Mix

After the initial seeding, fescue requires some maintenance to ensure seed gets established. Typical maintenance for seeding establishment includes:

- Mowing – within the first 5 years mowing is recommended up to 2-3 times per year to promote regrowth and decrease abundance of annual weeds that are typical during establishment. After Year 5, the need to mow may decrease based on successful establishment.
- Spot Spraying – selective spraying of invasive and nuisance species should be conducted by a licensed herbicide professional 1-2 times a year for the first 5 years. Spot spraying should be limited to target these unwanted species only. No broadcast spraying should be conducted.
- Reseeding and Over-seeding – Reseeding and or/over-seeding should be conducted in areas where large bare areas are exposed. This may be necessary in areas that did not germinate or in areas where nuisance or invasive species were eradicated during maintenance.

Typically with fescue seeding, after the establishment period (5 years), the need for maintenance decreases. After the plantings are established, site maintenance is really only dictated by the need to control woody growth and grass height, which is limited to 1-2 annual mowing events and spot spraying as needed. Hummingbird will monitor any areas planted in fescue for the first 5-years to ensure adequate establishment and desired fescue abundance is present and to make sure the goals of the landscape plan are still being met.

8.2 On-site Vegetation Establishment

The vegetation contractor shall be responsible for supplemental seeding, exotic and invasive species control, and any other activity that may contribute to the establishment of the vegetation. The contractor must have supervisors and crew who are experienced with identification of a variety of herbaceous vegetation. All crew members performing chemical applications must be licensed in accordance with state laws pertaining to the specific application being performed. There are several methods or techniques

typically utilized to facilitate the establishment of a newly vegetated area. The exact techniques and frequencies used will depend largely on the degree of development of the site, as well as special social and cultural concerns that may arise from specific techniques. Typically after several years of intensive maintenance and more robust growth of desirable species the frequency of the establishment activities will be reduced.

8.2.1 Supplemental Seeding

The need for supplemental seeding can usually be determined by the middle of the first growing season following installation. If the site exists as bare ground or is very sparsely vegetated, seeding should be performed.

8.2.2 Mowing

Mowing should be used for site management if an abundance of annual weeds are present which may compromise the success of the planting in the first few years after installation. Species such as Foxtail (*Setaria spp.*) and Ragweed (*Ambrosia spp.*) can be controlled by mowing.

8.2.3 Chemical Applications

Many perennial weed species in uplands, such as teasel (*Dipsacus Fullonum*), canada thistle (*Cirsium arvense*), marehail (*Conyza Canadenis*), poison hemlock (*Conium maculatum*), spotted knapweed (*Centaurea maculosa*), purple loosestrife (*Lythrum salicaria*), and Common Reed (*Phragmites australis*), are best controlled through chemical applications. If left unmanaged, many of these weed species will quickly outcompete the desired species for sunlight, nutrients, and space. Additionally, allelopathic species such as spotted knapweed will actually emit chemicals into the soil that will inhibit the growth of other species.

9 Summary

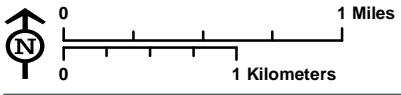
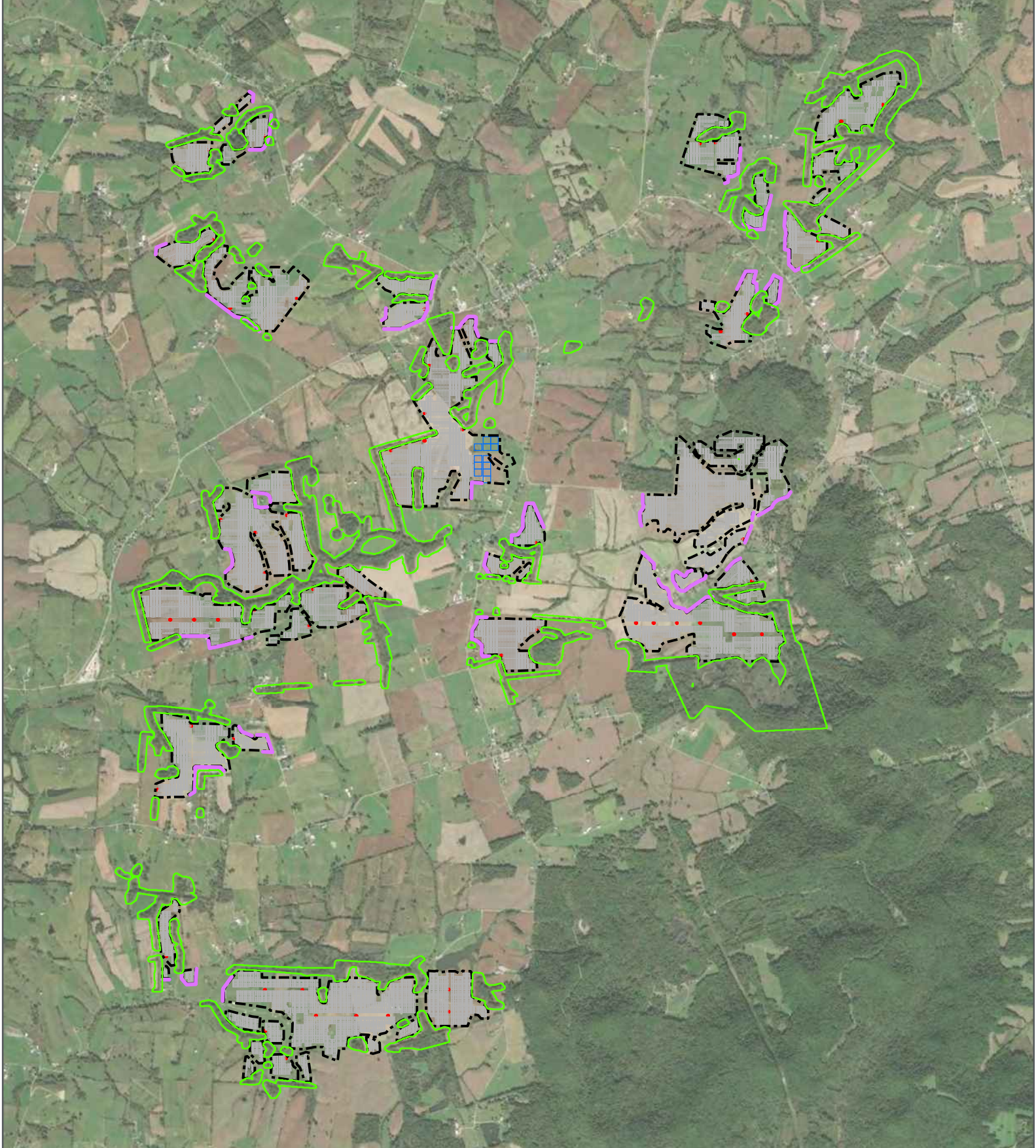
The proposed module and maintenance activities outlined in this plan serve as a guideline for the final landscape design to ensure that the installation of plant material will align with the objectives set forth for the Project. It is important that visual mitigation be planned according to adjacent uses, intensity of viewership, viewsheds and overall contextual relationship to the Project. It is also important that the proposed landscape blends into the overall character of the existing habitat by utilizing much of the same native plant materials found onsite. Doing so will create a landscape that will visually soften the infrastructure of the Project.

Recurrent Energy LLC

APPENDIX

A

SCREENING PLAN



- Existing Buffer
- Fence
- Inverters
- Module 1 - 15' Evergreen Spacing (Double Row)
- Arrays
- Battery Energy Storage System

7.5' Quadrangles:
 Flemingsburg, KY (2019)
 Orangeburg, KY (2019)
 Burtonville, KY (2019)

PLSS: unsectioned

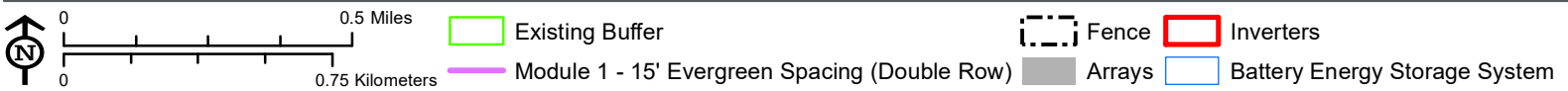
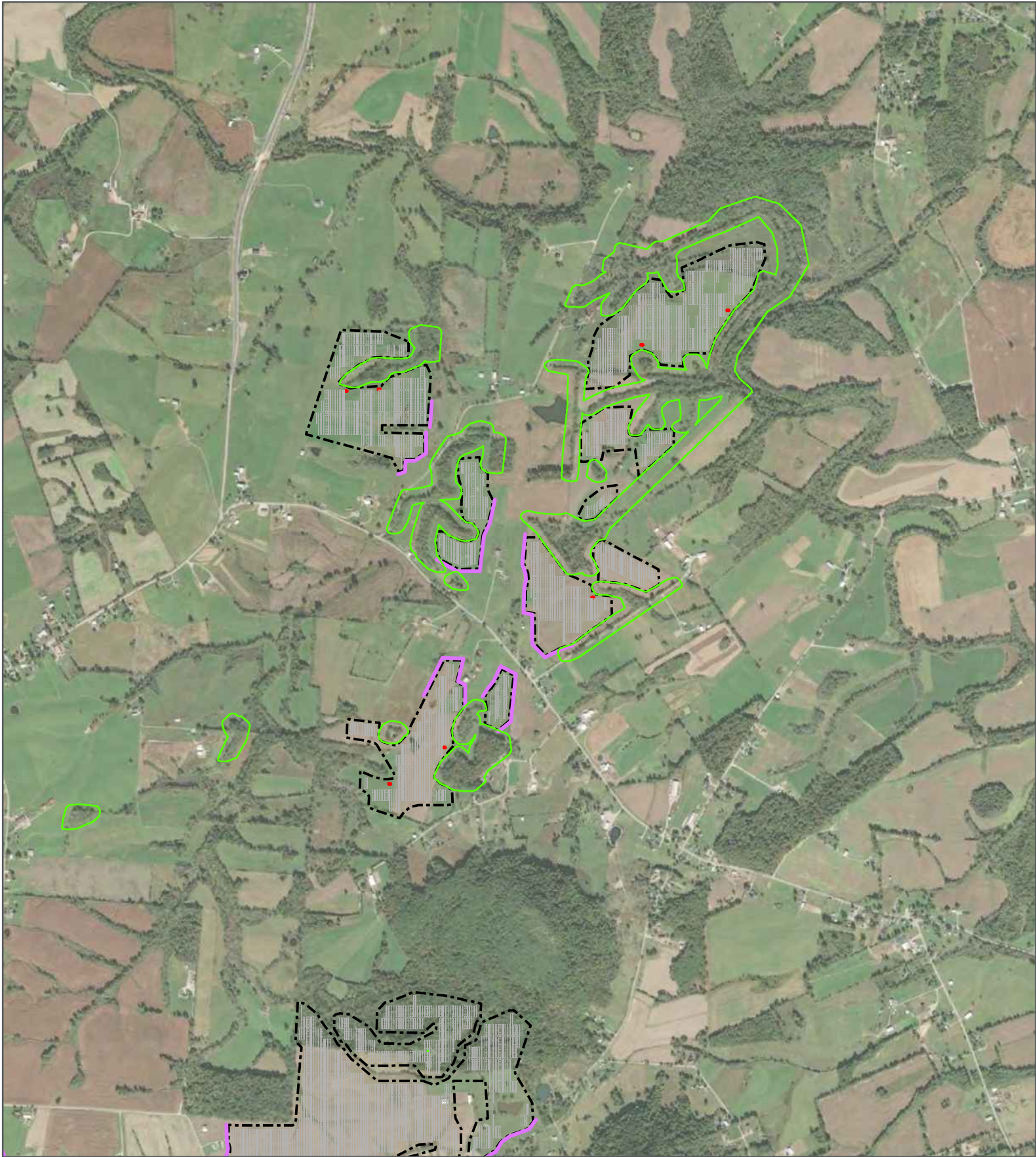
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Appendix A: Preliminary Landscaping Plan

Visual Resource Assessment for the Hummingbird Solar Project

Hummingbird Solar, LLC
 Fleming County, Kentucky


 76 San Marcos Street
 Austin, TX 78702 USA
 Phone (+1) 512.745.8129
www.cardno.com



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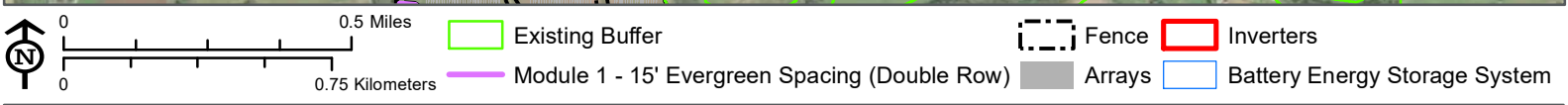
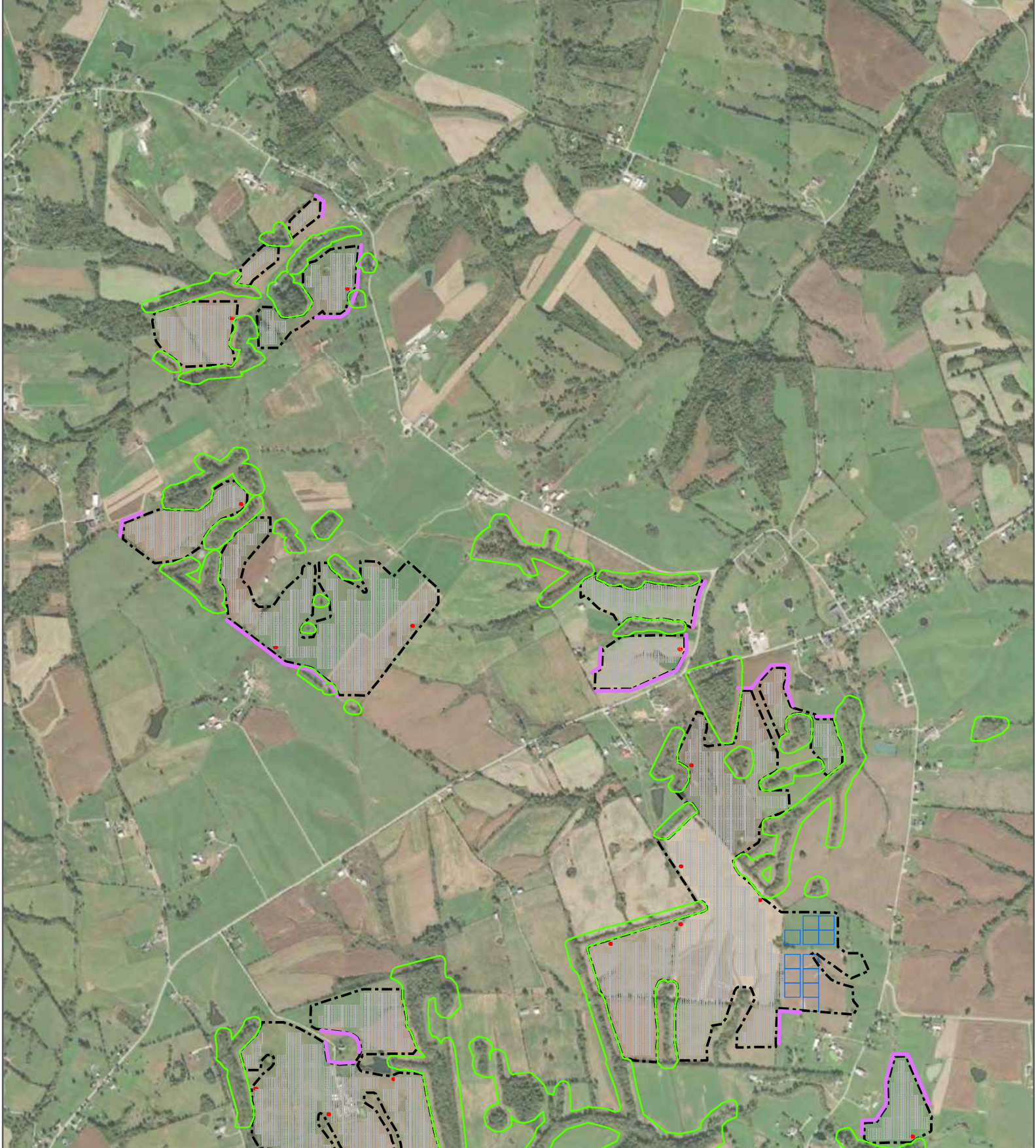
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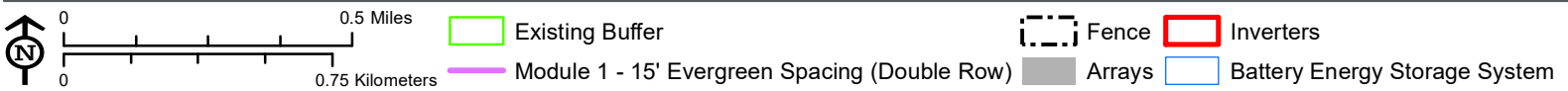
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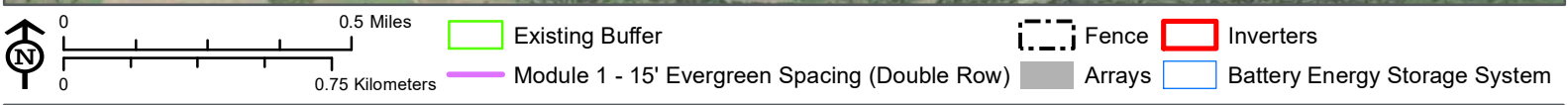
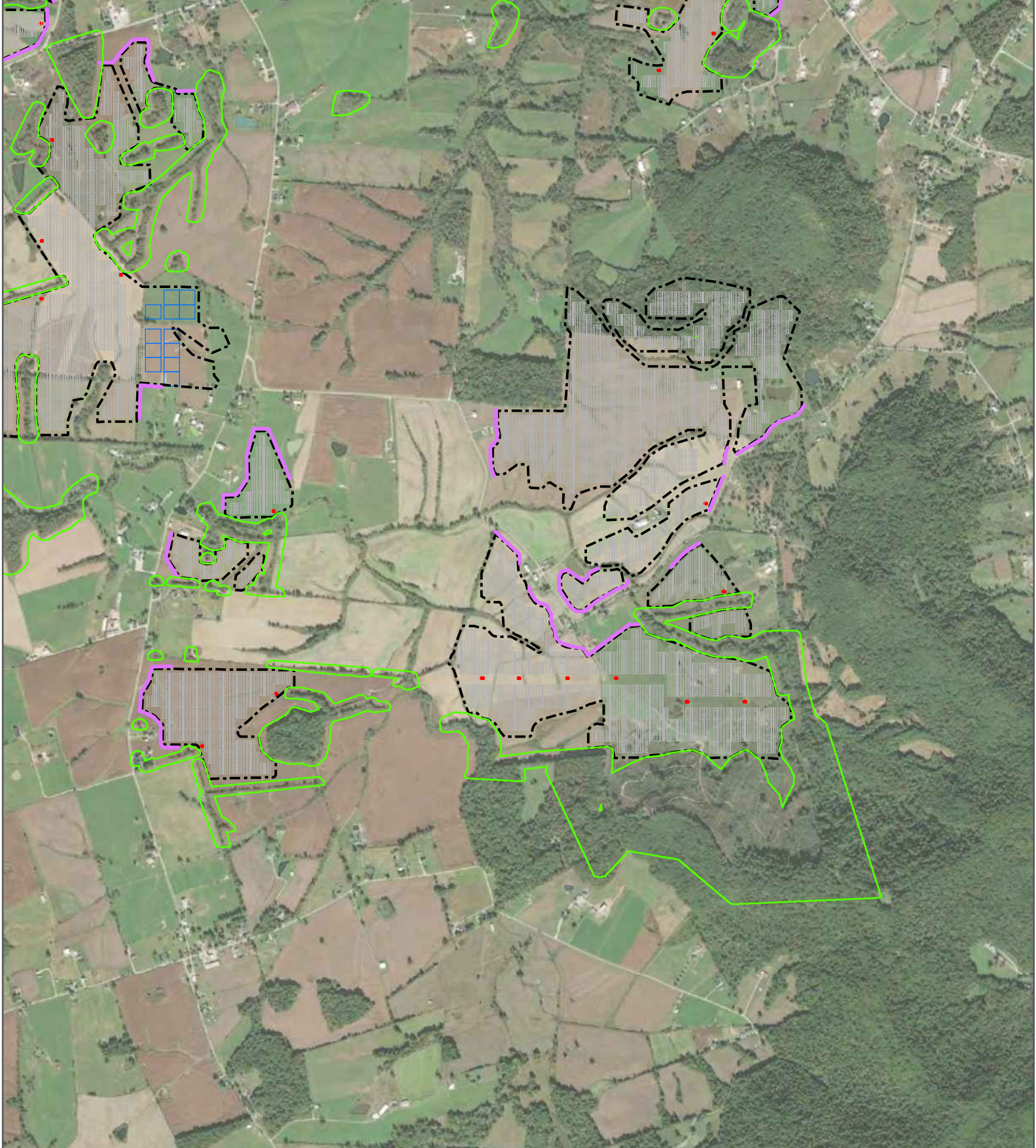
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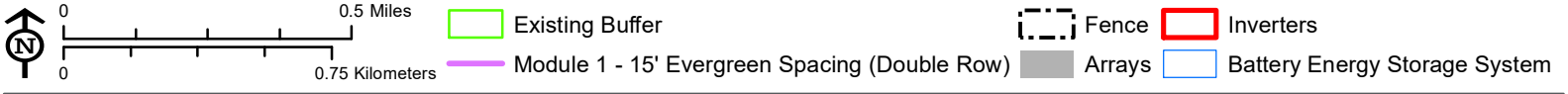
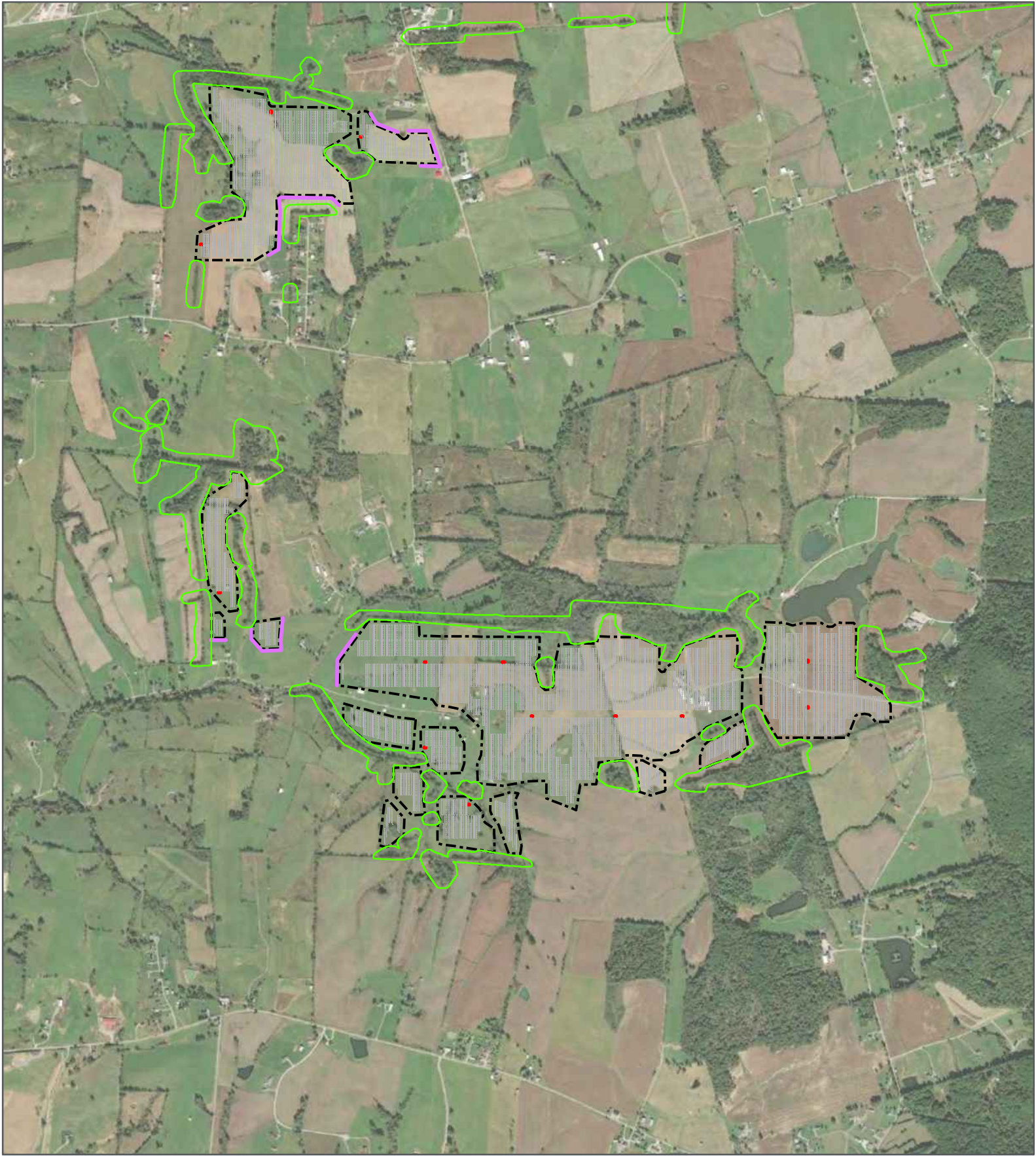
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