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Project # 235300918

Visual Resource Assessment and Mitigation Plan

Clover Creek Solar Project LLC d/b/a New Frontiers Solar
Park— Breckinridge County, Kentucky

September 2024





**VISUAL RESOURCE ASSESSMENT AND
MITIGATION PLAN**

Clover Creek Solar Project LLC d/b/a New
Frontiers Solar Park—Breckinridge County,
Kentucky

September 2024

Prepared for:

Clover Creek Solar Project LLC d/b/a New
Frontiers Solar Park— Breckinridge County,
Kentucky

1501 McKinney Street,
Suite 1300
Houston, TX 77010

Prepared by:

Stantec Consulting Services Inc.
8401 Shoal Creek Boulevard, Suite 100
Austin TX 78757-7621
www.stantec.com

Project Number:

235300918

Revision	Description	Author	Date
1	Write Up	Kevin Rubio, Biologist	09.25.2024
	Technical Review	Chad Martin, Senior Principal	09.26.2024
2	Edits	Kelsey Cleve, Biologist	10.15.2024



The conclusions in the Report titled [Visual Resource Assessment and Mitigation Plan](#) are Stantec’s professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient’s own risk.

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Kevin Rubio

Prepared by: _____
Signature
Kevin Rubio, Biologist

Printed Name

Reviewed by: 
Signature
Chad Martin, Project Manager

Printed Name

Approved by: 
Signature
Chad Martin, Project Manager

Printed Name



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Acronyms / Abbreviations

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
Project	Clover Creek Solar Project LLC d/b/a New Frontiers Solar Park
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

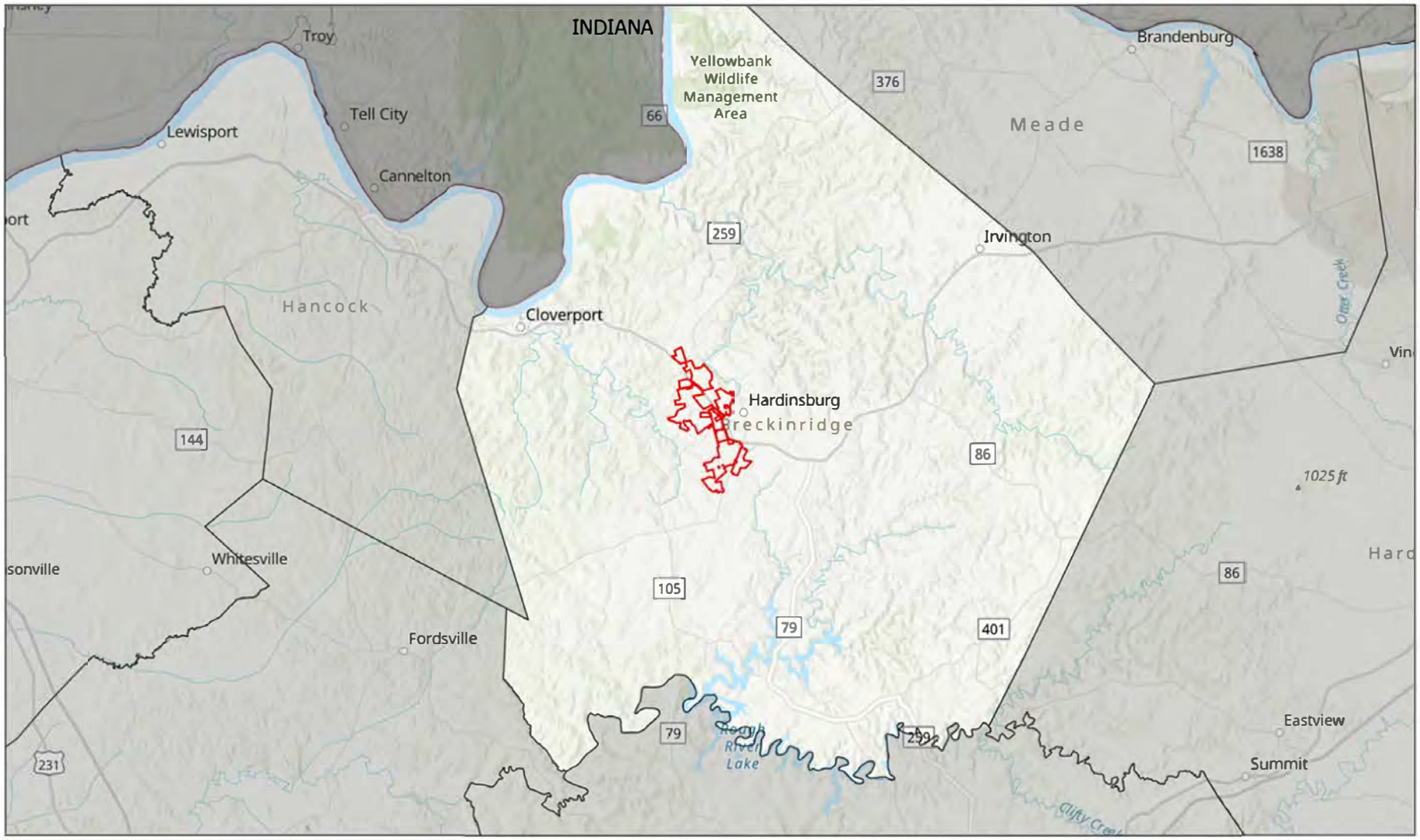
At the request of EDP Renewables North America LLC (EDP), Stantec Consulting Services Inc. (Stantec) has prepared this Visual Resource Assessment (VRA) in support of the Clover Creek Solar Project LLC d/b/a New Frontiers Solar Park (Project) near Hardinsburg in Breckinridge County, Kentucky, located approximately 50 miles southwest of Louisville, Kentucky (Figure 1-1).

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 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.

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Project Area



0 1 2 Miles
 (At original document size of 8.5x11)
 1:388,291

- Notes**
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet
 2. Data Sources: KyFromAbove (2024)
 3. Background: Esri (2024)

Project Location
 Breckinridge County, Kentucky

Prepared by KR on 2024-07-12

Client/Project 235300918
 Client EDP Renewables North America LLC
 Project New Frontiers Solar Park
 Report Visual Resource Assessment

Figure No.
1-1

Title
Project Location - US Topographic



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1.2 PROJECT LOCATION AND DESCRIPTION

The Project is located within an agricultural and rural residential area to the immediate west of Hardinsburg, in Breckinridge County, Kentucky.

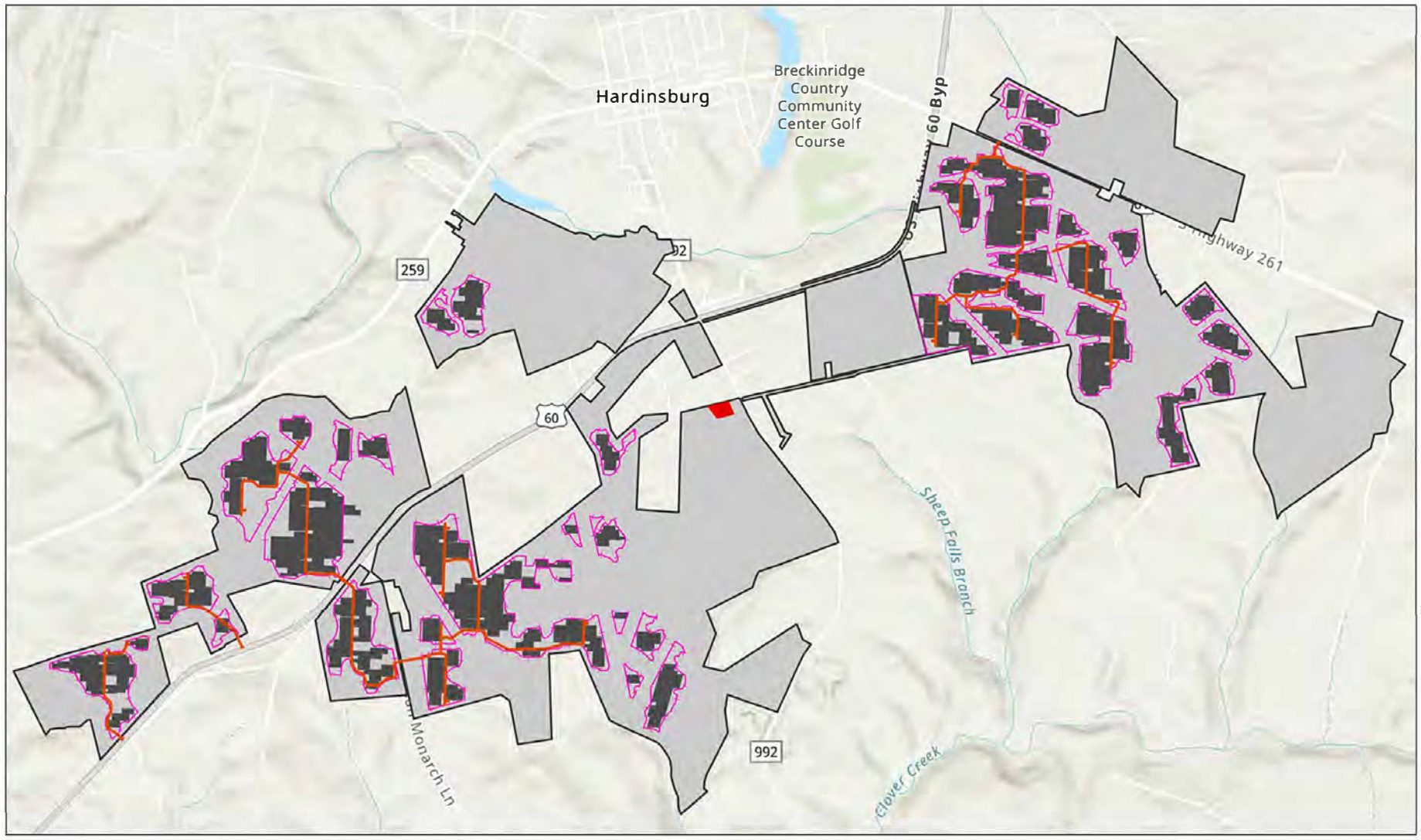
At the time of this study, approximately 1,100 acres are expected to be occupied by project components located on parcels of land totaling to 3,288 acres. The land use within consists of crop farms and pasture fields, and the land immediately adjacent to the Project consists primarily of woodlots, agricultural land, and rural residential areas.

The proposed Project is a solar power electric generation facility with a generating capacity up to 100 megawatts (MW) alternating current (AC). The Project will include the installation of single axis tracking solar panel arrays mounted on support piles that are driven into the ground. 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. 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.

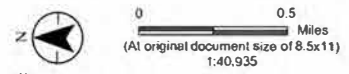
1.2.1 Visual Study Area

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, 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 approximately 163.5 square miles and is located wholly within Breckinridge County. The location and extent of the VSA is illustrated in Figure 1-3.

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-  Project Area
-  Solar Panel Arrays
-  Proposed Substation
-  Proposed Fenceline
-  Proposed Roads



- Notes**
1. Coordinate System: NAD 1983 2011 StatePlane Kentucky FIPS 1600 Ft US
 2. Data Sources: PCL
 3. Background: Esri (2024)

Project Location: Breckinridge County, Kentucky
 Prepared by KR on 2024-09-23

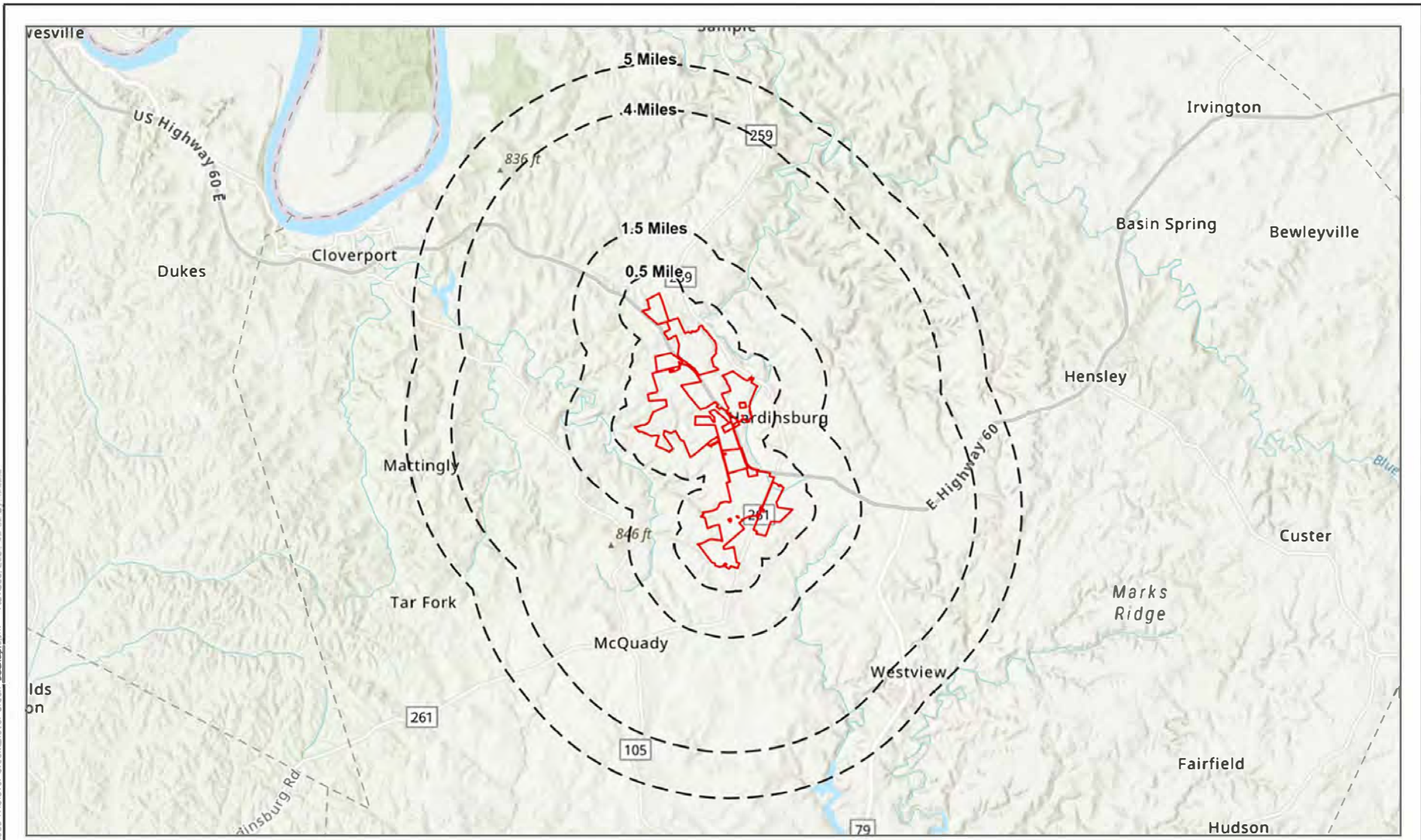
Client/Project	235300918
Client	EDP Renewables North America LLC
Project	New Franklin's Salar Park
Report	Visual Resource Assessment

Figure No. **1-2**

Title: **Preliminary Project Layout**



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Project Area
 Visibility Range Rings



0 1 2 Miles
 (At original document size of 8.5x11)
 1:199,896

- Notes**
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600
 2. Data Sources:
 3. Background: Esri (2024)

Project Location Breckinridge County, Kentucky	Prepared by KR on 2024-07-12
Client/Project Client Project Report	235300918 EDP Renewables North America LLC New Frontiers Solar Park Visual Resource Assessment
Figure No. 1-3	
Title Visual Study Area	



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1.2.2 Landscape Character

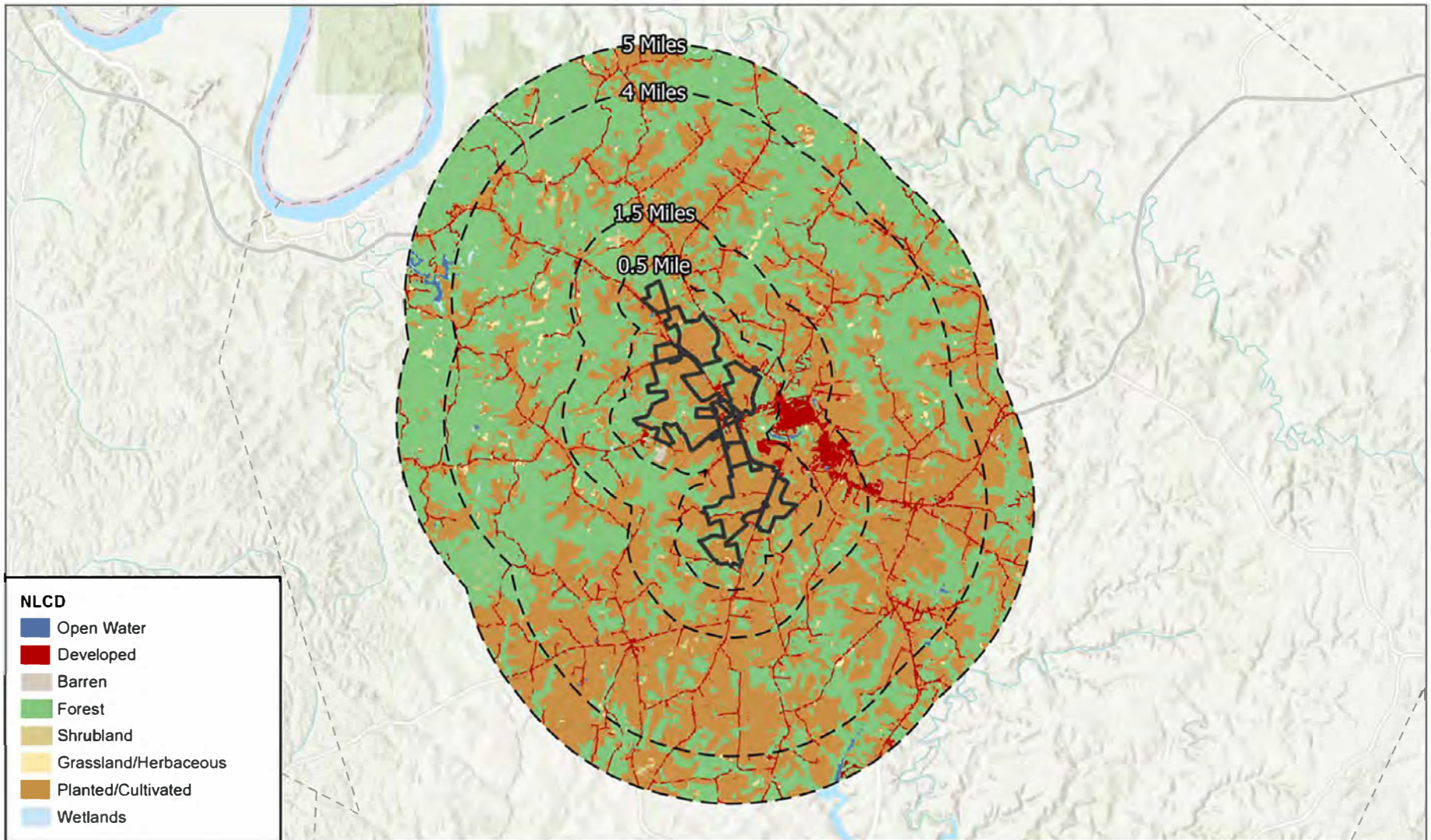
The land use and landscape community types within the VSA are based on data provided by the Multi-Resolution Land Characteristics Consortium (MRLC) from the 2021 National Land Cover Database, (MRLC 2021). Understanding the landscape types (LTs) within the VSA provides the framework for analyzing the 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)
Forested	51,869.80	49.56%
Planted/Cultivated	45,425.91	43.40%
Developed	5,692.05	5.44%
Grassland/Herbaceous	636.18	0.61%
Shrubland	543.87	0.52%
Open Water	288.18	0.28%
Wetlands	125.12	0.12%
Barren	89.05	0.09%
Grand Total	104,670.14	100.00%

The Project components are proposed to be built principally within the Planted/Cultivated LT, that makes up 43.40% of the VSA. The agricultural LT has opportunity for views of PV panels within the Project vicinity due to the potential presence of low growing crops and lack of mature vegetation and other screening; taller crops such as corn provide the most screening within this LT. The Developed LT makes up 5.44% of the VSA and includes the City of Hardinsburg. Views from developed areas nearby containing little to no forested screening offer the greatest opportunity for views of the Project. In greater distances, 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 Open Water and Wetlands LTs are scattered throughout the VSA and collectively make about 0.12% of the land area. These LTs are often associated with river or stream corridors, the most notable being Clover Creek and Hardins Creek, where long distance views are typically limited due to the presence of tree-lined creek banks and adjacent forested slopes. The Forested, Herbaceous, Shrubland, and Barren LTs collectively make up about 50.77% of the VSA. These areas are typically limited due to the presence of mature trees and dense vegetation.

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NLCD

- Open Water
- Developed
- Barren
- Forest
- Shrubland
- Grassland/Herbaceous
- Planted/Cultivated
- Wetlands



Project Area

N

0 1 2 Miles
(At original document size of 8.5x11)
1:199,896

- Notes**
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet
 2. Data Sources: NLCD (2021)
 3. Background: Esri (2024)

Project Location Breckinridge County, Kentucky	Prepared by KR on 2024-07-12
Client/Project Client Project Report	235300918 EDP Renewables North America LLC New Frontiers Solar Park Visual Resource Assessment
Figure No. 1-4	
Title Landcover within 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 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, Forested, is reflective of the wooded and vegetated nature of the area. Developed is characteristic of certain areas within the VSA, some of which is immediately adjacent to the Project and the bulk of which is further out into Hardinsburg, as shown on Figure 1-4. Also of note, the Developed LT makes up an average of approximately 5% 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	6,614.10 (58.50%)	6,598.07 (46.38%)	22,738.28 (44.06%)	9,475.46 (34.42%)
Forested	3,796.79 (33.58%)	6,087.06 (42.79%)	25,736.80 (49.87%)	16,249.14 (59.02%)
Developed	764.78 (6.76%)	1,351.10 (9.50%)	2,388.47 (4.63%)	1,187.70 (4.31%)
Grassland/Herbaceous	39.46 (0.35%)	57.92 (0.41%)	358.66 (0.69%)	180.14 (0.65%)
Shrubland	19.83 (0.18%)	79.53 (0.56%)	269.81 (0.52%)	174.70 (0.63%)
Wetlands	1.02 (0.01%)	6.09 (0.04%)	50.62 (0.10%)	67.39 (0.24%)
Open Water	20.41 (0.18%)	39.75 (0.28%)	44.78 (0.09%)	183.24 (0.67%)
Barren Land	49.10 (0.43%)	5.75 (0.04%)	19.28 (0.04%)	14.91 (0.05%)
Total Distance Zone Area	11,305.49	14,225.27	51,606.71	27,532.68

2 Methodology

2.1 PV ARRAY VIEWSHED ANALYSIS

Stantec conducted a viewshed analysis to assess the visibility of solar panels within the Project. The analysis was conducted using a digital surface model (DSM) derived from the 2022 KyFromAbove Statewide Lidar Project data for Hardinsburg 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 boundary. The sample points were placed at a height of 12 feet to represent the maximum height of the solar panels and the analysis assumed a viewer height of 6 feet.

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 Natural Resources.
- 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

Stantec conducted a site visit to the Project on September 9, 2024, 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 Stantec field team drove public roads throughout the Project and collected photographs from three individual viewpoints for creation in visual simulations.

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 PCL 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 at the time of planting. 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.

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 98.8% 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	163.55 mi ²	17.66 mi ²	22.22 mi ²	80.64 mi ²	43.02 mi ²
Total DSM Viewshed Visibility	9.34 mi ² (5.71%)	6.52 mi ² (3.99%)	1.18 mi ² (0.72%)	1.61 mi ² (0.99%)	0.02 mi ² (0.01%)

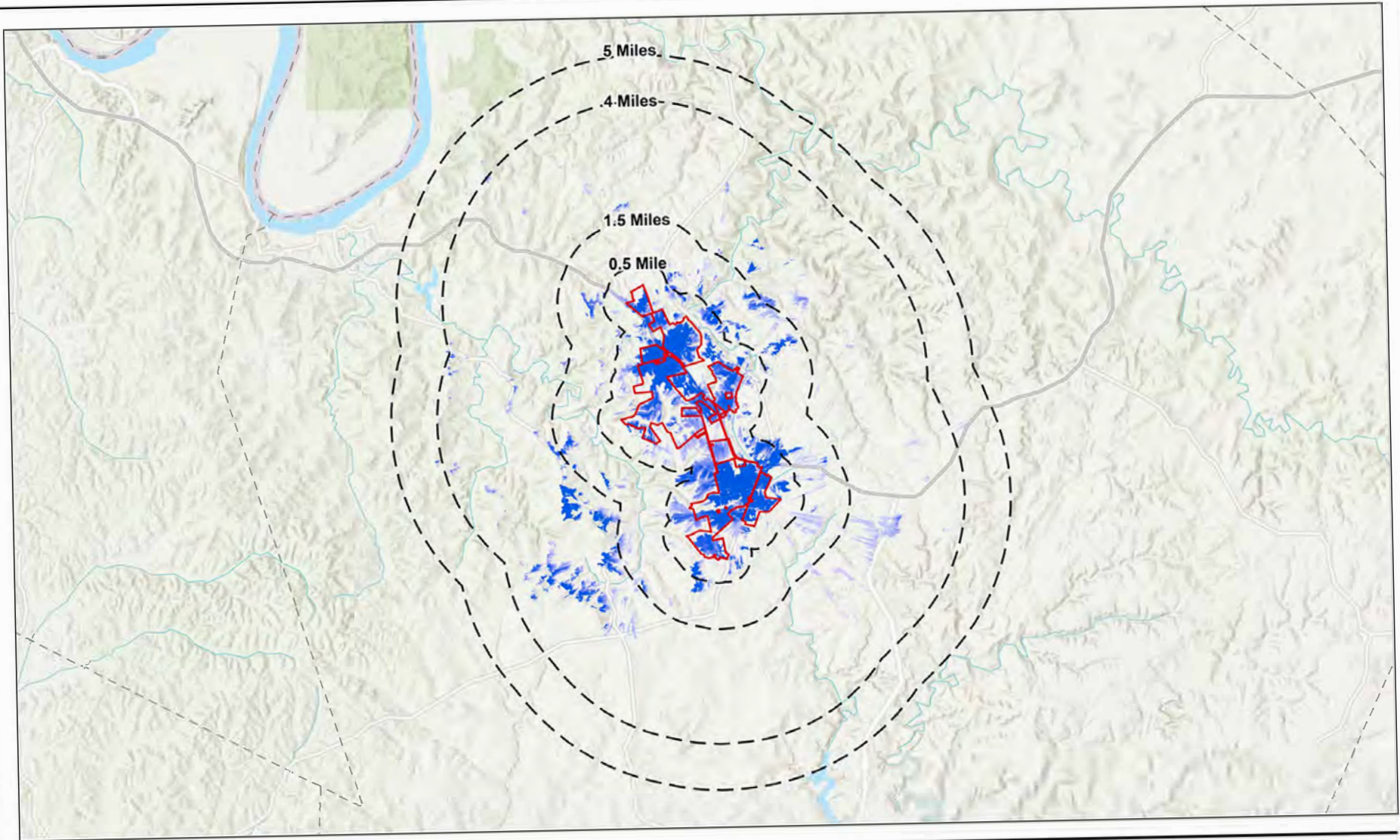
The majority of Project visibility is concentrated within the near-foreground distance zone, with 3.99% of the VSA indicated as having potential views of some portion of the Project within 0.5 miles. Views from areas beyond the near-foreground and into the foreground distance zone (0.5 to 1.5 miles) are better screened, with 0.72% of the VSA having the potential for views of the PV arrays in the foreground distance zone. The DSM viewshed analysis indicates that potential Project visibility is further reduced at distances beyond the foreground. About 99% of the view of PV arrays are screened in the middle ground (1.5 to 4 miles) and in the background (4 to 5 miles).

The topography and vegetation associated with 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 residential and 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 and buildings 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 (fall, winter), 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 2022, any changes to structures and vegetation since its creation would not be represented in the analysis. Stantec 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 at higher elevations to the north. Further analysis is provided on the vegetative model below.

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- Project Area
- Visibility Range Rings
- More Panels Visible
- Fewer Panels Visible



0 1 2 Miles
 (At original document size of 8.5x11)
 1:199,896

Notes

1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet
2. Data Sources: Stantec (2024), KyFromAbove
3. Background: Esri (2024)



Project Location: Breckinridge County, Kentucky
 Prepared by KR on 2024-09-06

Client/Project: 235300618
 Client: EDP Renewables
 Project: New Frontiers Solar Park
 Report: Visual Resource Assessment

Figure No: **3-1**

Title: **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							
		Forested	Planted Cultivated	Developed	Grassland/Herbaceous	Shrubland	Open Water	Wetlands	Barren
Total Area	163.55 mi ²	81.05 mi ²	70.98 mi ²	8.89 mi ²	0.99 mi ²	0.85 mi ²	0.45 mi ²	0.20 mi ²	0.14 mi ²
Total DSM Viewshed Visibility	9.34mi ² (5.71%)	0.45 mi ² (0.28%)	8.02 mi ² (4.90%)	0.80 mi ² (0.49%)	0.02 mi ² (0.01%)	0.02 mi ² (0.01%)	0.02 mi ² (0.01%)	-mi ² (0%)	0.01 mi ² (0.001%)

The greatest potential for visibility of the proposed solar arrays is indicated within the Planted/Cultivated LT. The DSM viewshed indicates that 4.9% 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 0.28% 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 LT 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 potential for solar array visibility within the Developed LT is indicated in approximately 0.8 square miles, or 0.49% of the total VSA. This LT is primarily composed of a church and a residential area near the Project. Visibility within this LT occurs most frequently along its edges, with limited outward views due to the presence of buildings and closely situated houses, landscaped yards/planted vegetation, utility poles, and other visual clutter. A segment of North Highway 259 to North Main Street offers the greatest potential for views of the Project; however, there will be little to no PV panel visibility from most of the developed areas following the placement of the proposed landscape screening.

The LTs with the least amount of potential solar array visibility are Grasslands/Herbaceous (0.01%), Shrubland (0.01%), Open Water (0.01%), Barren (0.001%), and Wetlands (0%). Visible portions of these LTs comprise 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 18 of the 86 VSRs identified within the VSA (20.9%) may have some visibility of the PV arrays. The locations of mapped VSRs within the VSA are illustrated in Figure 3-2.

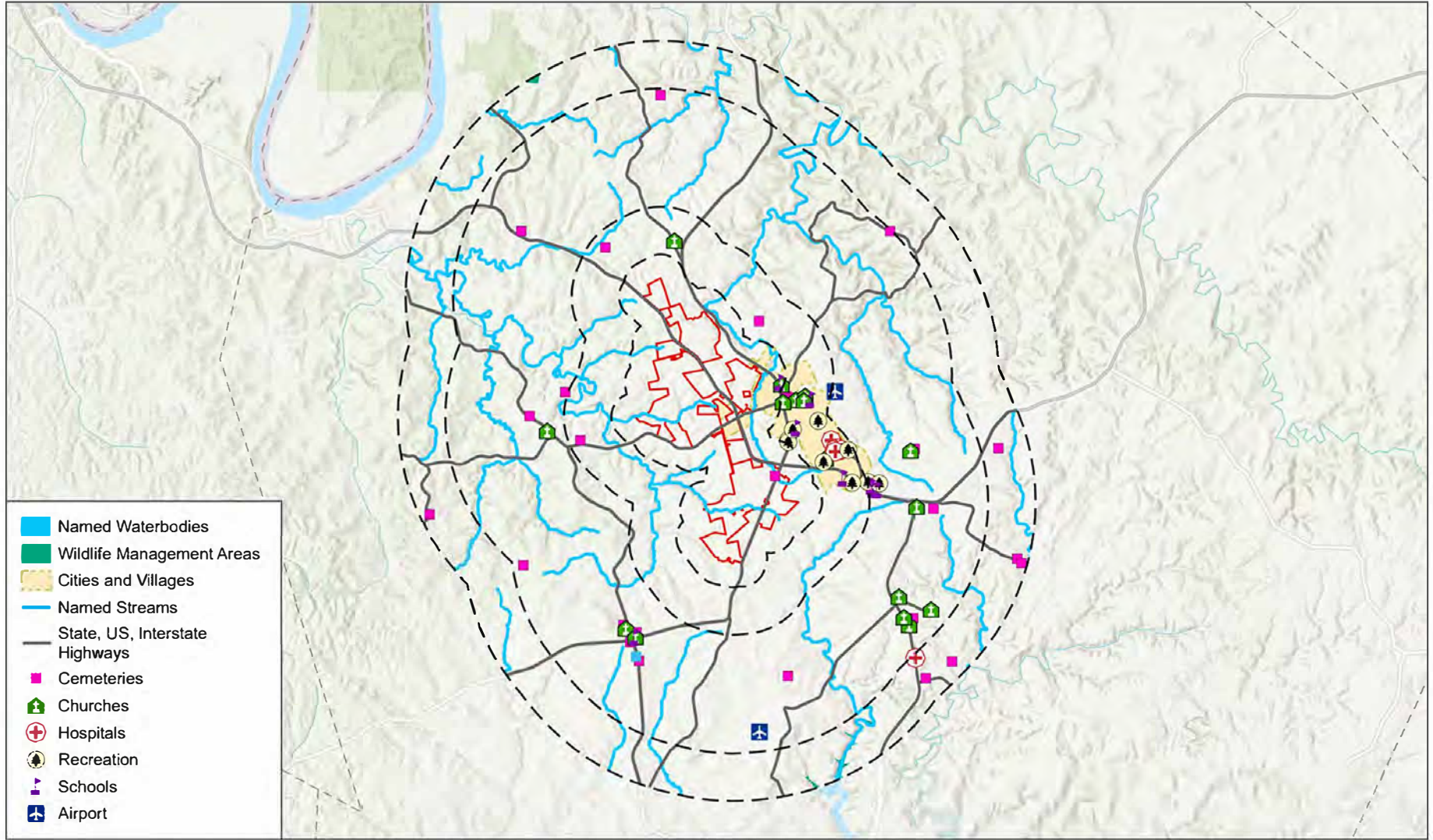
Table 3-3 Visually Sensitive Resources in the DSM Viewshed

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)	0	0
National/State Historic Sites	0	0
Historic Bridges	0	0
Cemeteries	30	4
Kentucky Historic State Markers	0	0
Total	30	4
<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	2	0
State Forest	0	0
Other State Lands	0	0
Designated Trails	0	0
Local Parks and Recreation Areas	9	3
Conservation Lands/Easements	0	0
Named Lakes, Ponds, and Reservoirs	1	0
Total	12	3
<i>High-Use Public Areas</i>		
State, US, and Interstate Highways	11	7
Cities, Villages,	1	1

Visual Resource Assessment and Mitigation Plan, New Frontiers Solar Park—Breckinridge County, Kentucky

Visually Sensitive Resources	Total Number of Resources within the Visual Study Area	Total Number of Resources with Visibility
Schools	7	1
Airports	2	0
Hospitals	7	0
Churches	16	2
Total	44	11
Total Number of Visually Sensitive Resources in the VSA	86	18

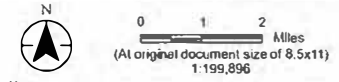
\\12353\235301184\03_data\avis cad\Projects\WithoutPNC\Clover Creek_backup.aprx - Revised: 2024-09-06 By: AV/BJG



- Named Waterbodies
- Wildlife Management Areas
- Cities and Villages
- Named Streams
- State, US, Interstate Highways
- Cemeteries
- Ⓜ Churches
- ⊕ Hospitals
- Ⓜ Recreation
- Ⓜ Schools
- ✈ Airport



- Project Area
- Visibility Range Rings



- Notes**
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet
 2. Data Sources: Stantec (2024)
 3. Background: Esri (2024)



Project Location: Breckinridge County, Kentucky
Prepared by KR on 2024-09-06

Client/Project	EDP Renewables North America LLC	235300618
Project	Nesse Funtlers Solar Park	
Report	Visual Resource Assessment	

Figure No
3-2

Title
Location of Visually Sensitive Resources

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

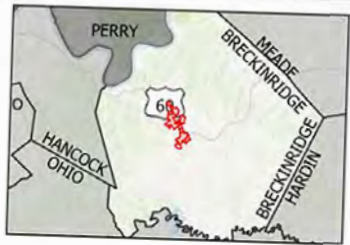
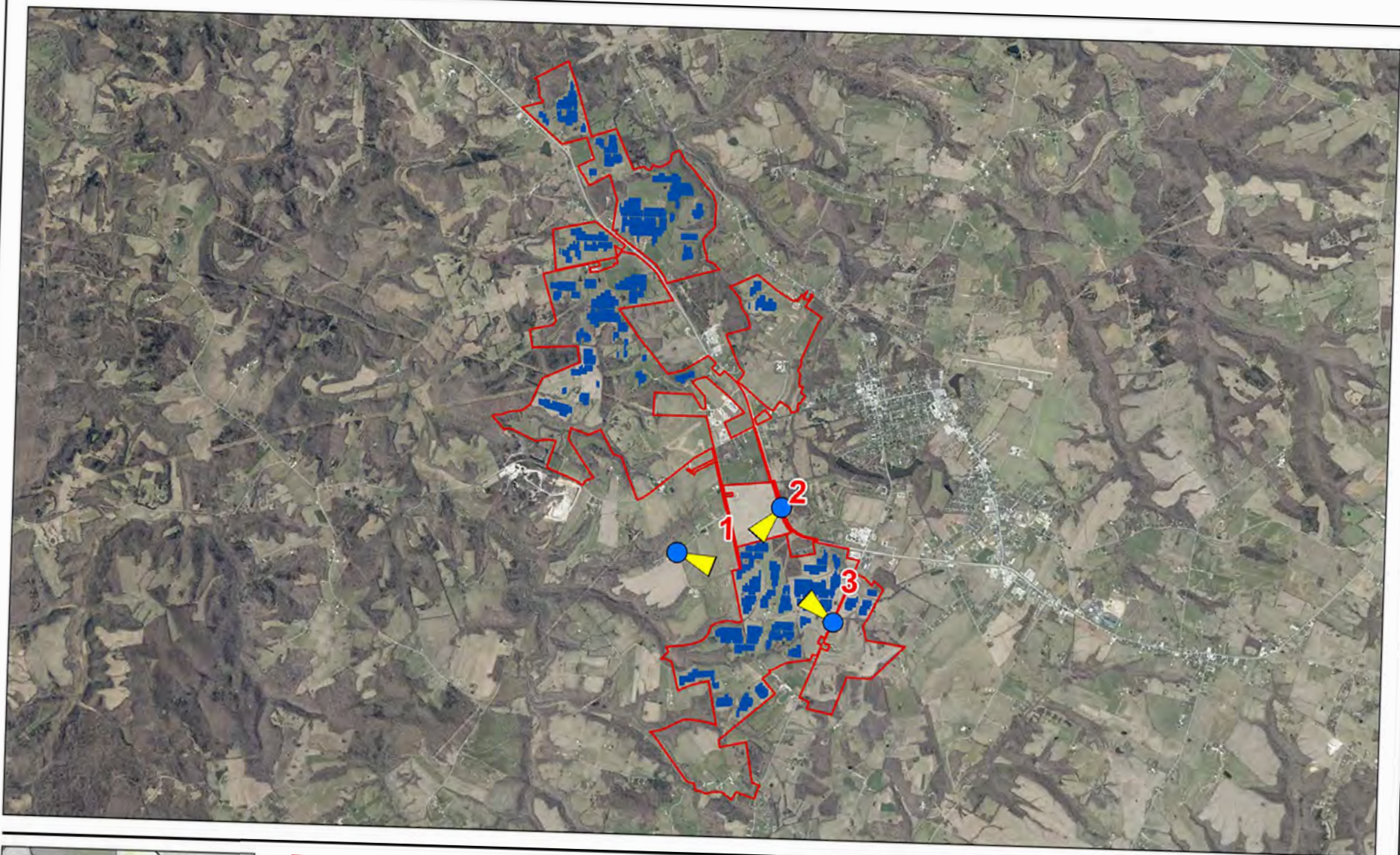
3.1.3 Field Verification Results

According to the DSM viewshed analysis, the Project will be screened from approximately 79.1% of the VSA by intervening landforms, vegetation, and structures. Field visits confirmed the results of this analysis, as Project visibility was observed to be largely restricted to areas directly adjacent to the Project where public roads are bordered by open agricultural fields. It was also confirmed during field visits that mature vegetation associated with stream corridors, woodlots, hedgerows, and buildings 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 beyond the immediate area due to the level of visual blending into the background at the outer extents of this distance zone. The combination of existing hedgerows, existing developed areas, 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. These visual simulations provide a time-lapse from existing conditions to post-construction with the inclusion of prescribed plantings (see Appendix A). The prescribed planting simulations illustrate the initial planting, which will provide a robust screen for the Project within 5-7 years. Images and details are presented in Appendix A of all three visual simulations.

1:20251225101164103_data\GIS_cad\Project\WithoutPNI\Clover_Creek\Clover_Creek_backup.aprx Revised: 2024-09-25 By: krubio



 Project Area
 Solar Panel Arrays

 Visual Simulation Locations

 N
0 0.5 Miles
(At original document size of 8.5x11)
1:75,069

Notes
1. Coordinate System: NAD 1983 2011 StatePlane Kentucky FIPS 1600 Ft US
2. Data Sources: PCL, Stantec (2024)
3. Background: KyFromAbove (2021)

Project Location
Breckinridge County, Kentucky
Prepared by KR on 2024-09-25

Client/Project
Client: EDP Renewables North America LLC
Project: New Frontiers Salar Park
Report: Visual Resource Assessment
235300918

Figure No
3-3
Title
Visual Simulation Viewpoints Map



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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 79.1% of the 5-mile radius VSA. Visibility is concentrated within the Project and the adjacent town of Hardinsburg. The viewshed analysis also suggests that panel visibility substantially diminishes beyond the foreground distance zone (1.5 miles).

The viewshed analysis of the 86 identified VSRs within the VSA indicates that 18 VSRs (20.9%) 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 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

New Frontier Solar Park proposes to plant vegetation along the Project boundary at publicly 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. 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

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APPENDIX A

Visual Simulations



Viewpoint 1 | Hardinsburg

Viewpoint Information

Viewpoint ID: 1
County: Breckinridge
City/Town: Hardinsburg
Location: Stanley Gray Lane
Coordinates: 37.761238, -86.4895196
Direction of View: South-East
Distance to Project: 0.5 mile
Distance Zone: Near-Foreground

Visual Resources

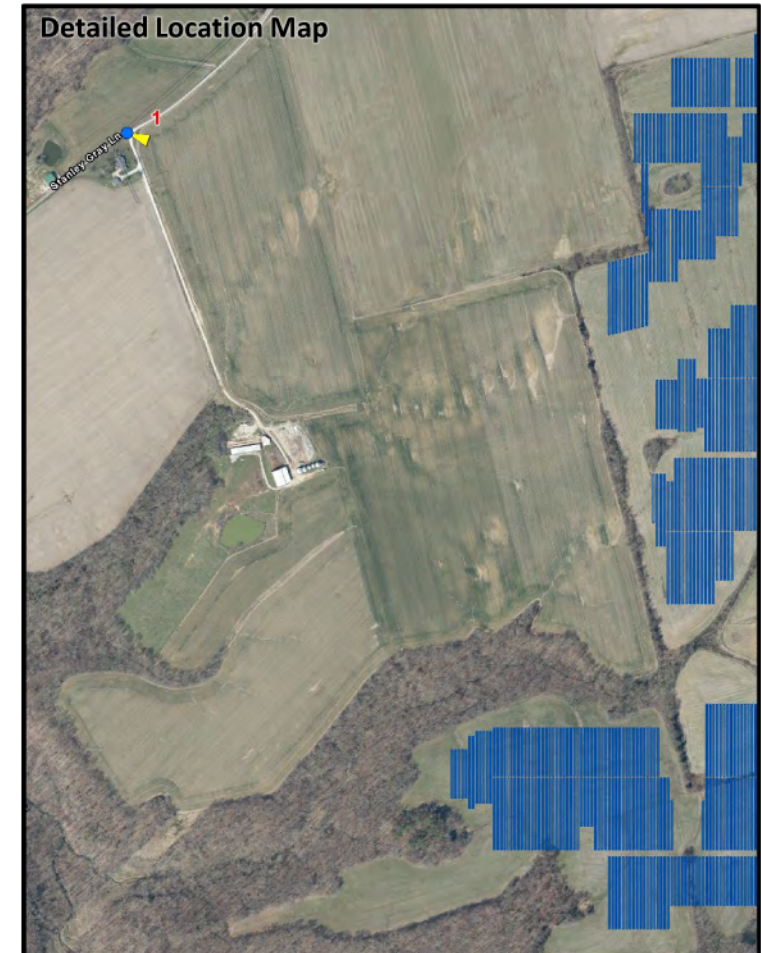
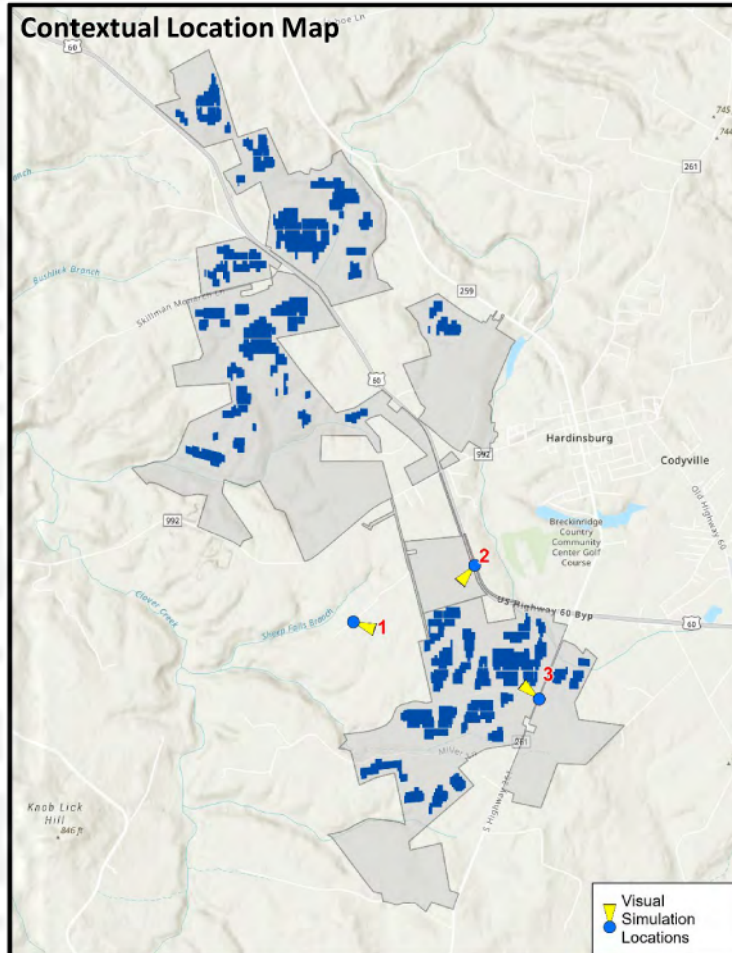
Landscape Type: Farmland
User Group: Resident

Photograph Information

Date Taken: March 14, 2023
Time: 11:03 AM
Camera: Canon EOS REBEL T5
Resolution: 5184 x 3456 pixels
Lens Focal Length: 27 mm
Camera Elevation: 5.6 feet

Project Information

Racking Type: Single Axis Tracker
Max Panel Height: 12 Feet
Buildable Area: 890 acres



New Frontiers Solar Park

Breckinridge County, Kentucky
[Visual Resource Assessment](#) | Appendix B, Viewpoint 1 at Stanley Gray Lane – Context
Sheet Sheet 1 of 11



Existing Conditions



New Frontiers Solar Park

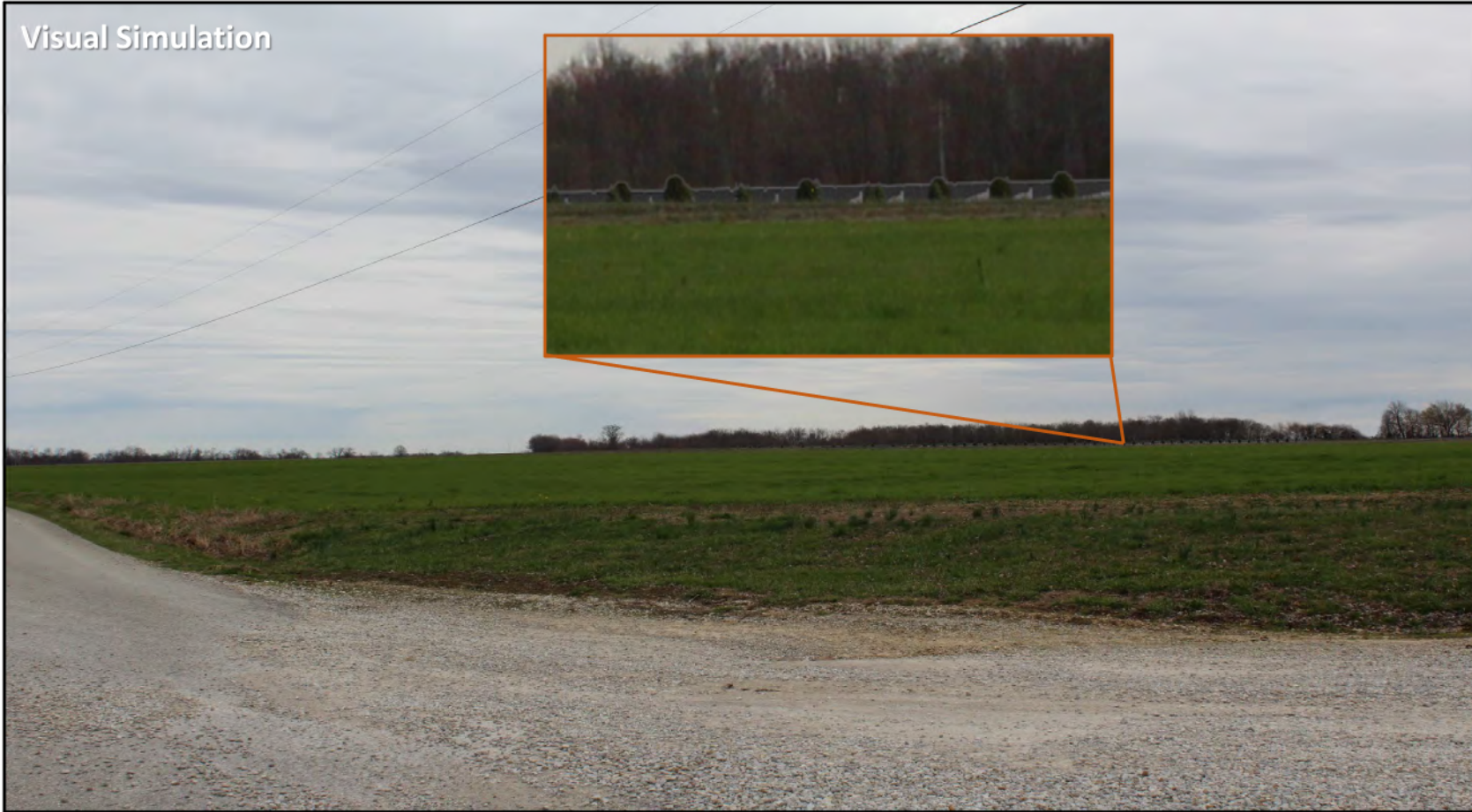
Breckinridge County, Kentucky

[Visual Resource Assessment](#) | Appendix B, Viewpoint 1 at Stanley Gray Lane – Existing Conditions

Sheet 2 of 11



Visual Simulation



New Frontiers Solar Park

Breckinridge County, Kentucky

Visual Resource Assessment | Appendix B, Viewpoint 1 at Stanley Gray Lane – Visual Simulation Sheet 3 of 11



Viewpoint 2 | Hardinsburg

Viewpoint Information

Viewpoint ID: 2
County: Breckinridge
City/Town: Hardinsburg
Location: US-60
Coordinates: 37.7670340, -86.474342
Direction of View: South-West
Distance to Project: 0.3 mile
Distance Zone: Near-Foreground

Visual Resources

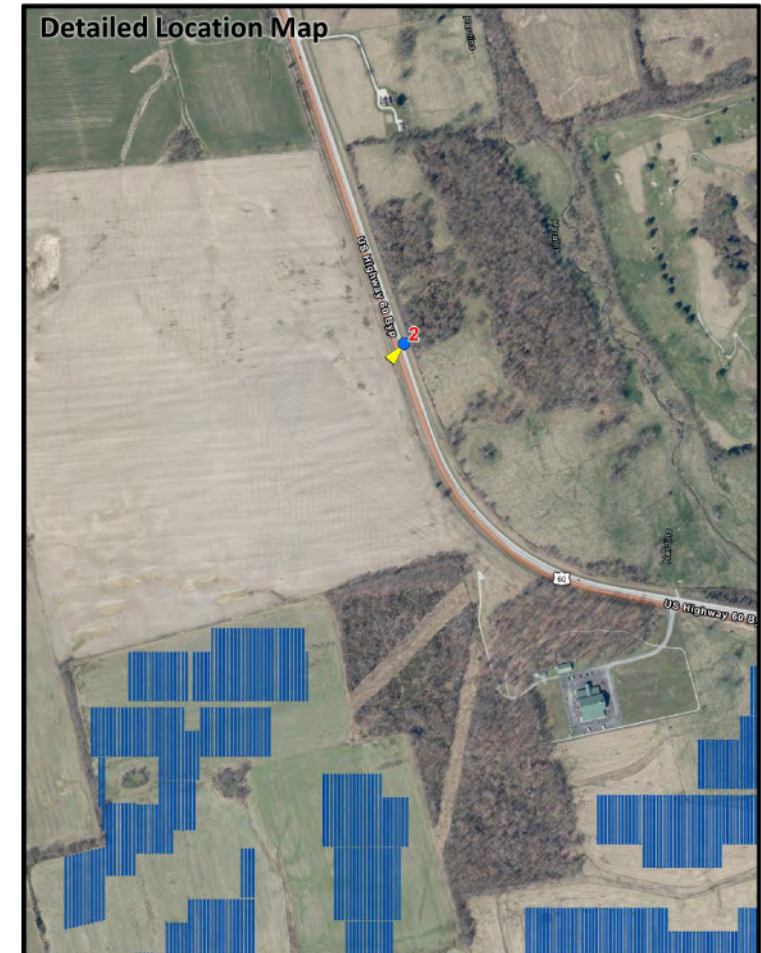
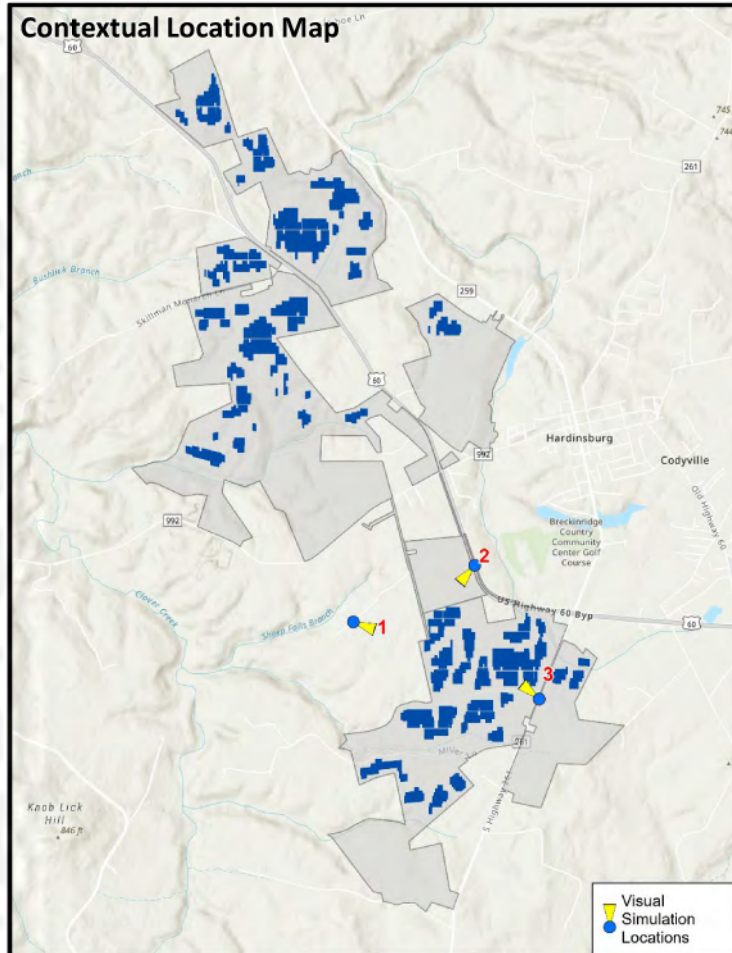
Landscape Type: Rural Residential
User Group: Resident

Photograph Information

Date Taken: March 14, 2023
Time: 11:12 AM
Camera: Canon EOS REBEL T5
Resolution: 5184 x 3456 pixels
Lens Focal Length: 27 mm
Camera Elevation: 5.6 feet

Project Information

Racking Type: Single Axis Tracker
Max Panel Height: 12 Feet
Buildable Area: 890 acres



New Frontiers Solar Park

Breckinridge County, Kentucky

[Visual Resource Assessment](#) | Appendix B, Viewpoint 2 at US-60 – Context
Sheet Sheet 4 of 11



Existing Conditions



New Frontiers Solar Park

Breckinridge County, Kentucky

Visual Resource Assessment | Appendix B, Viewpoint 2 at US-60 – Existing
Conditions Sheet 5 of 11



Visual Simulation



New Frontiers Solar Park

Breckinridge County, Kentucky

Visual Resource Assessment | Appendix B, Viewpoint 2 at US-60 – Visual
Simulation Sheet 6 of 11



Viewpoint 3 | Hardinsburg

Viewpoint Information

Viewpoint ID: 3
County: Breckinridge
City/Town: Hardinsburg
Location: US-261
Coordinates: 37.7535348, -86.465821
Direction of View: North-West
Distance to Project: 0.1 mile
Distance Zone: Near-Foreground

Visual Resources

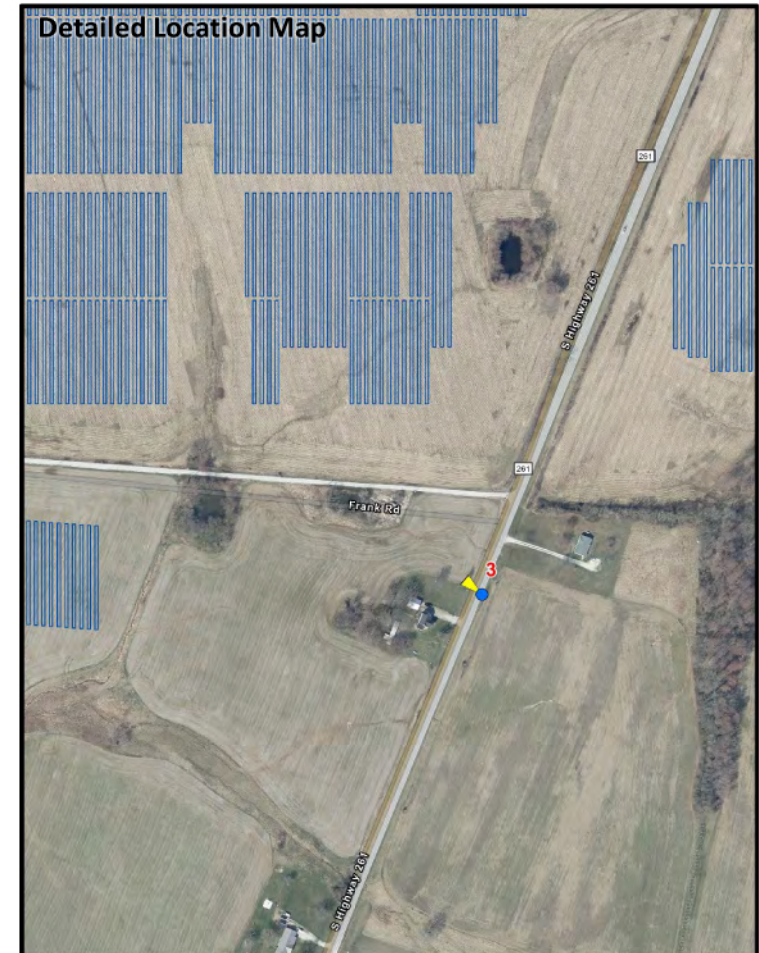
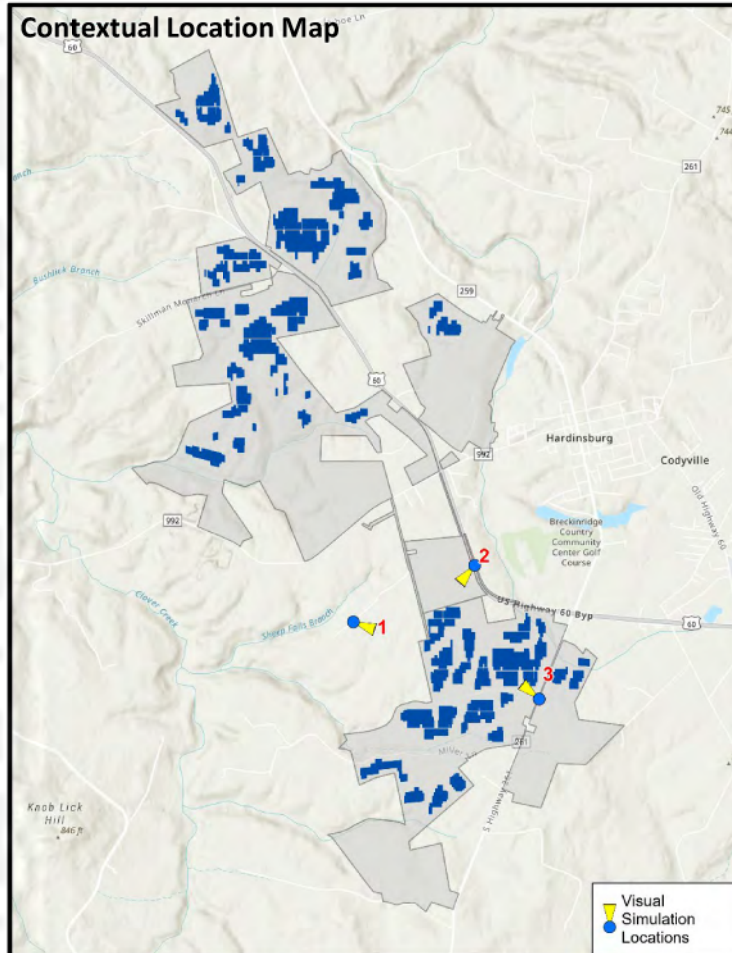
Landscape Type: Rural Residential
User Group: Resident

Photograph Information

Date Taken: March 14, 2023
Time: 11:23 AM
Camera: Canon EOS REBEL T5
Resolution: 5184 x 3456 pixels
Lens Focal Length: 27 mm
Camera Elevation: 5.6 feet

Project Information

Racking Type: Single Axis Tracker
Max Panel Height: 12 Feet
Buildable Area: 890 acres



New Frontiers Solar Park

Breckinridge County, Kentucky

[Visual Resource Assessment](#) | Appendix B, Viewpoint 3 at US-261 – Context
Sheet Sheet 7 of 11



Existing Conditions



New Frontiers Solar Park

Breckinridge County, Kentucky

Visual Resource Assessment | Appendix B, Viewpoint 3 at US-261 – Existing
Conditions Sheet 8 of 11



Visual Simulation



New Frontiers Solar Park

Breckinridge County, Kentucky

Visual Resource Assessment | Appendix B, Viewpoint 3 at US-261 – Visual Simulation Sheet 9 of 11



Existing Conditions



Google Earth

New Frontiers Solar Park

Breckinridge County, Kentucky

Visual Resource Assessment | Appendix B, View at Substation, Street View - Existing
Conditions Sheet 10 of 11



Visual Simulation



New Frontiers Solar Park

Breckinridge County, Kentucky

[Visual Resource Assessment](#) | Appendix B, View at Substation, Street View - Visual Simulation Sheet 11 of 11



APPENDIX B

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)			
None within VSA.			
National/State Historic Sites			
None within VSA.			
Historic Bridges			
None within VSA.			
Cemeteries			
Tar Fork Cambellite Cemetery	Breckinridge	5.18	-
Woods Cemetery	Breckinridge	5.12	-
Laslie Armes Cemetery	Breckinridge	5.07	-
Westview Cemetery	Breckinridge	4.98	-
Wales Cemetery	Breckinridge	4.51	-
Horsley Chapel United Methodist Church Cemetery	Breckinridge	4.22	-
Old St Mary of the Woods Cemetery	Breckinridge	4.07	-
Hall Cemetery	Breckinridge	4.03	-
Mount Zion United Methodist Church Cemetery	Breckinridge	3.96	-
Kingswood Cemetery	Breckinridge	3.85	-
McQuady Cemetery Number 2	Breckinridge	3.34	-
McQuady Cemetery Number 1	Breckinridge	3.29	-
Durham Cemetery	Breckinridge	3.25	-
Harned Cemetery	Breckinridge	3.14	-
Old Corinth Baptist Church Cemetery	Breckinridge	3.09	-
Chapin Cemetery	Breckinridge	3.05	-
Saint Mary of the Woods Cemetery	Breckinridge	2.89	-
Pleasant Grove Baptist Church Cemetery	Breckinridge	2.85	-
Ephesus Church Cemetery	Breckinridge	2.78	-
Taul Cemetery	Breckinridge	2.60	-
New Clover Creek Baptist Church Cemetery	Breckinridge	2.26	+/-
Pate Cemetery	Breckinridge	1.88	-
Brickey Cemetery	Breckinridge	1.64	+/-
Hawkins Cemetery	Breckinridge	1.41	-
Ivy Hill Cemetery	Breckinridge	1.18	-
Old Ivy Hill Cemetery	Breckinridge	1.02	-
Jolly Cemetery	Breckinridge	0.95	+/-
New Bethel Cemetery	Breckinridge	0.95	-
Saint Romuald Cemetery	Breckinridge	0.84	-
John De Haven Family Cemetery	Breckinridge	0.05	+
Historial 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.			

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)
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			
Yellowbank WMA	Breckinridge	4.98	-
Rough River Lake WMA	Breckinridge	3.98	-
State Forest			
None within VSA.			
Other State Lands			
None within VSA.			
Designated Trails			
None within VSA.			
Local Parks and Recreation Areas			
Baseball Fields	Breckinridge	1.95	-
Breckinridge County Highschool Football Field	Breckinridge	1.71	-
Breckinridge County Fair	Breckinridge	1.44	-
Breckinridge Public Library	Breckinridge	1.38	-
US 60 Dragway	Breckinridge	1.38	-
FFA Camp Sports Complex	Breckinridge	0.90	-
Hardinsburg City Park	Breckinridge	0.86	+/-
Community Center Pool	Breckinridge	0.66	+/-
Breckinridge Golf Course	Breckinridge	0.63	+
Conservation Lands/Easements			
None within VSA.			
Named Lakes, Ponds, and Reservoirs			
Rough River Lake	Breckinridge	4.10	-
High-Use Public Areas			
State, US, and Interstate Highways			
KY-105	Breckinridge	1.93	+/-
KY-1401	Breckinridge	3.23	-
KY-144	Breckinridge	3.85	-
KY-232	Breckinridge	3.16	-
KY-259	Breckinridge	0.15	+/-
KY-261	Breckinridge	0.02	+/-
KY-690	Breckinridge	4.96	-
KY-79	Breckinridge	2.76	-
KY-992	Breckinridge	0.43	+/-
MAIN ST	Breckinridge	0.21	+/-
US-60	Breckinridge	0.04	+/-
Cities, Villages			

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)
Hardinsburg	Breckinridge	0.02	+/-
Schools			
Pleasant View Baptist School	Breckinridge	2.96	-
Breckinridge County High School	Breckinridge	1.92	-
Breckinridge County Technical Center	Breckinridge	1.82	-
Breckinridge County Middle School	Breckinridge	1.78	-
Hardinsburg Elementary School	Breckinridge	1.19	+/-
FFA Leadership Training Center	Breckinridge	0.97	-
Saint Romuald Interparochial School	Breckinridge	0.78	-
Airports			
Brushy Fork Field	Breckinridge	4.26	-

SAR
ATTACHMENT F



Glare Hazard Analysis

Clover Creek Solar Project LLC d/b/a New
Frontiers Solar Park Breckinridge County,
Kentucky

October 14, 2024

Prepared for:

Clover Creek Solar Project LLC d/b/a New
Frontiers Solar Park
1501 McKinney Street Suite 1300
Houston, TX 77010

Prepared by:

Stantec Consulting Services Inc.
76 San Marcos Street
Austin, TX 78702



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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 New Frontier Solar Park (Project), a 100-megawatt (MW), utility-scale, solar-powered electric generating facility located in Breckinridge 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 1,100 acres spread throughout agricultural areas located west of the City of Breckinridge in north central 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 at three of four runways at two airports located within a 10-mile radius of the Project, including the Breckinridge County Airport and the Rough River State Park Airport. Pilots approaching Runway 10 at the Breckinridge County Airport are predicted to experience green and yellow glare for a portion of the approach path, which crosses directly over a portion of the array. According to the Federal Aviation Administration, green glare is not considered problematic for pilots. No glare is predicted for helicopter pilots hovering 500 feet above the helipads at the Breckenridge Memorial Hospital helipad or at the AE 92 helipad facility on U.S. Highway 60.

The results of the ForgeSolar analysis determined no glare from the Project is predicted to occur for drivers of vehicles on 10 of 11 roads adjacent to the Project. The analysis was completed at two viewing heights for roadways: five feet for cars and small trucks and nine feet for semi-trucks. Green glare is predicted to drivers on Kentucky Highway 259 in the early afternoon from approximately November through January. Green glare is generally not considered to be problematic for drivers.

Glare is predicted for only one of approximately 105 structures, primarily residences, that were analyzed within proximity to the Project area. Viewers in this structure (OP25) are predicted to see green glare for up to 61 minutes per year, or 4-5 minutes per day, in the early afternoon in December.

The predicted glare and durations to be experienced at the airport, flight paths, surrounding roads and buildings is considered acceptable by existing standards and industry practice. Drivers and pilots will pass through areas of glare within seconds and glare to the single home is only predicted to last 4-5 minutes per day in December. These results assume a 10 degree resting angle is used.

**NEW FRONTIERS SOLAR PARK
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

**NEW FRONTIERS SOLAR PARK
GLARE HAZARD ANALYSIS**

Glossary

Correlate Slope Error with Surface Type?	Correlates the slope error value based on the surface material type; default value is 8.43 milliradians (mrads).
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 mrads 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.

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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/>

1.0 INTRODUCTION

On behalf of Clover Creek Solar Park LLC d/b/a New Frontiers Solar Park (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 spread out over approximately five miles (north to south), west of the City of Hardinsburg in Breckinridge County, north central 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 low potential for a 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 airline pilots landing at two airports within 10 miles of the Project area and for helicopter pilots hovering 500 feet over two helipads located within 10 miles of the project limits (**Figure 3**). 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 11 road segments adjacent to the PV panels (**Figures 4-7; Table 1**). Roadways were analyzed for array glare within proximity to each panel block; therefore, not every road was analyzed for all panel blocks¹.

The analysis also included potential glare to viewers at approximately 105 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 (**Figures 4-7**). The analyses were separated into four blocks of

¹ Due to program limitations, only 20 subarrays can be included in a single analysis, and therefore, the entire array was divided into four blocks.

NEW FRONTIERS SOLAR PARK GLARE HAZARD ANALYSIS

arrays due to program limitations on the size and number of subarrays², and the analyses conducted for each block considered the structures most likely to see glare from the array. Not all structures were analyzed for all four panel blocks³. All airports, roadways, and structures were analyzed using 4.25-ft and 5.83-ft AGL panel heights. **Table 1** indicates which roadways were analyzed with each block. 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.

³ ForgeSolar only allows 40 Observation Points ([OPs] e.g., structures) to be included in each analysis.

**NEW FRONTIERS SOLAR PARK
GLARE HAZARD ANALYSIS**

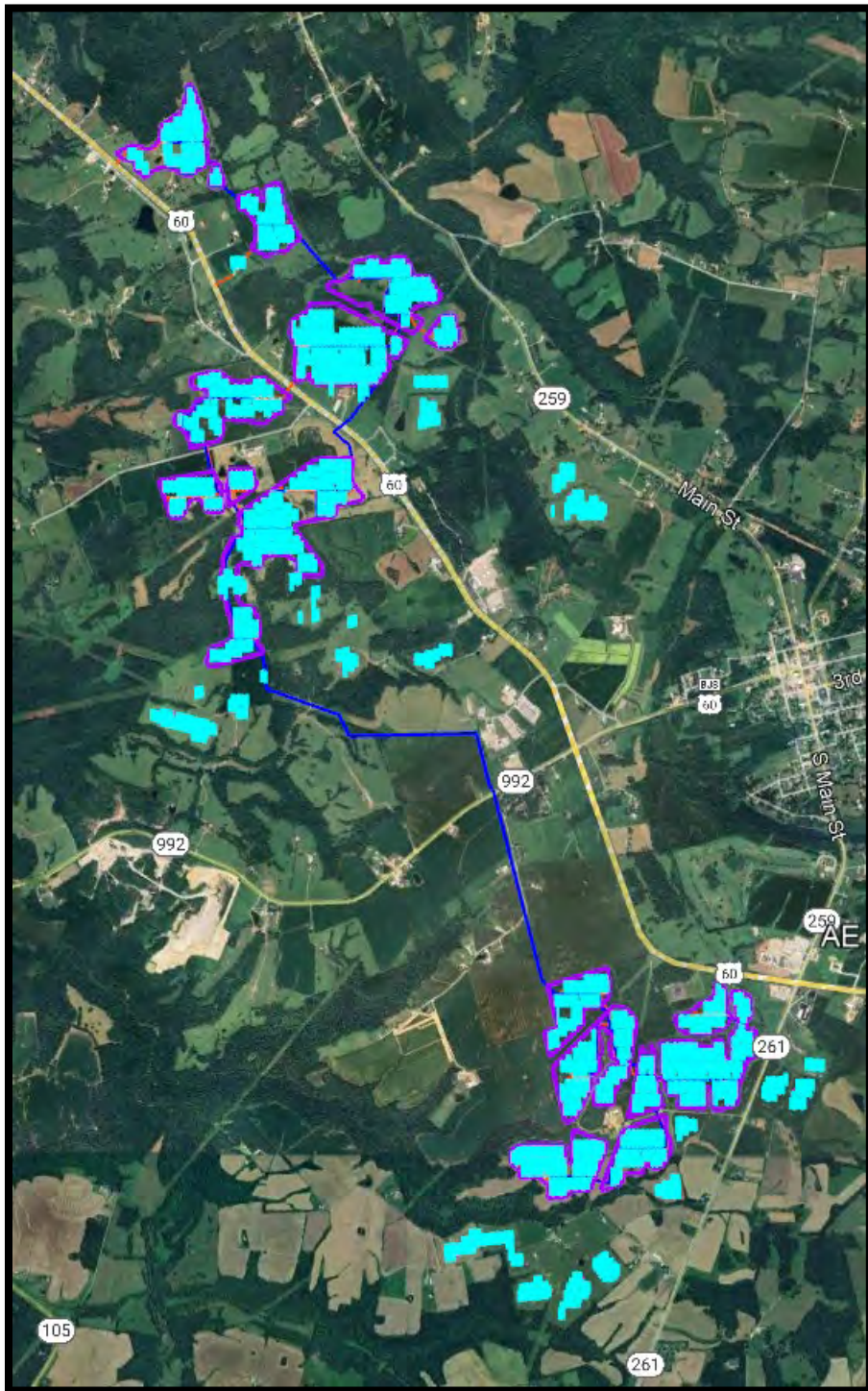
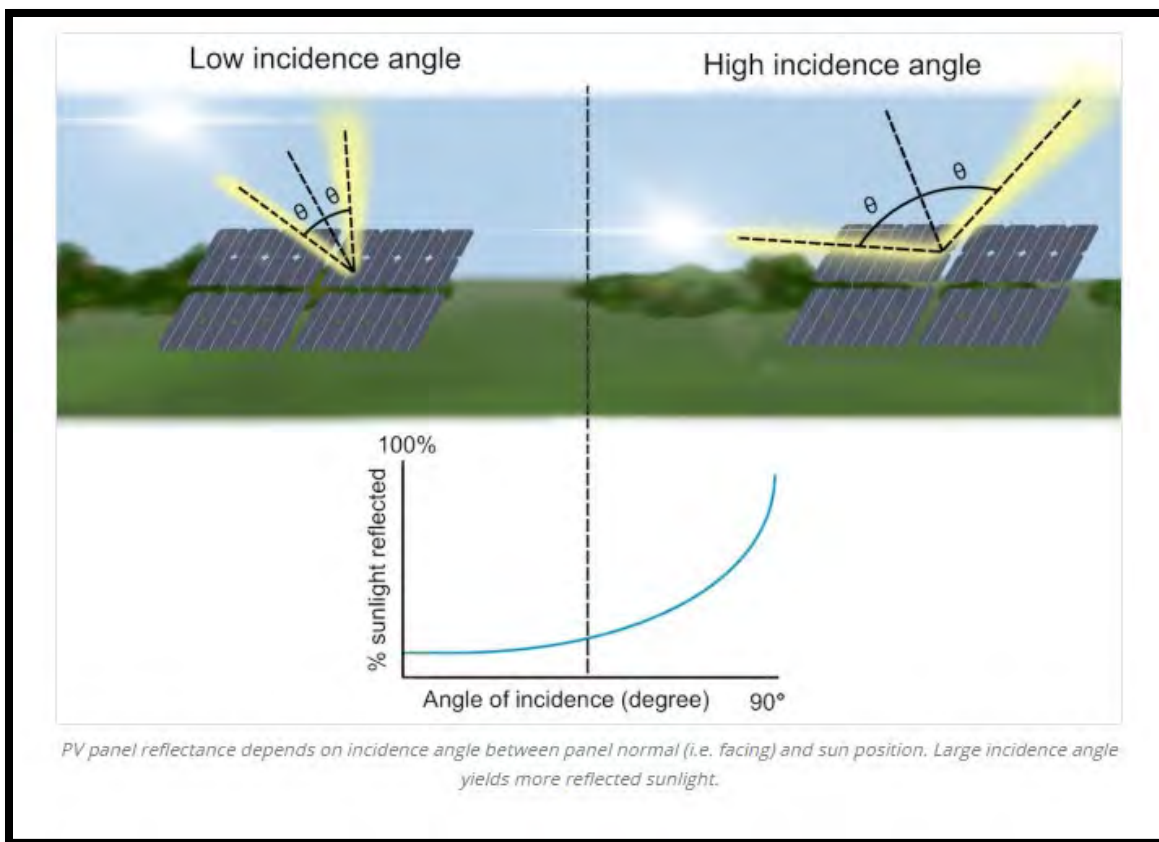


Figure 1. New Frontiers Solar Park Location Map* Source: Google Earth Imagery *Project location is shown in blue.

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GLARE HAZARD ANALYSIS**

Figure 2. Reflectivity Differences Between Low and High Incidence Angles



Source: ForgeSolar.com 2024

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Table 1: Roadways Included in ForgeSolar Analysis

Route Name	Blocks Including Route in Analysis
US Highway 60	1,2,3
Skillman Monarch Lane	1,2
County Road 1730	1
Kentucky Highway 259	1
Main Street	2
Highway 261	3,4
Lighthouse Road	2
Frank Farm Lane	3,4
Bens Hole Branch Road	3
Highway 992	2
Stanley Gray Lane	3

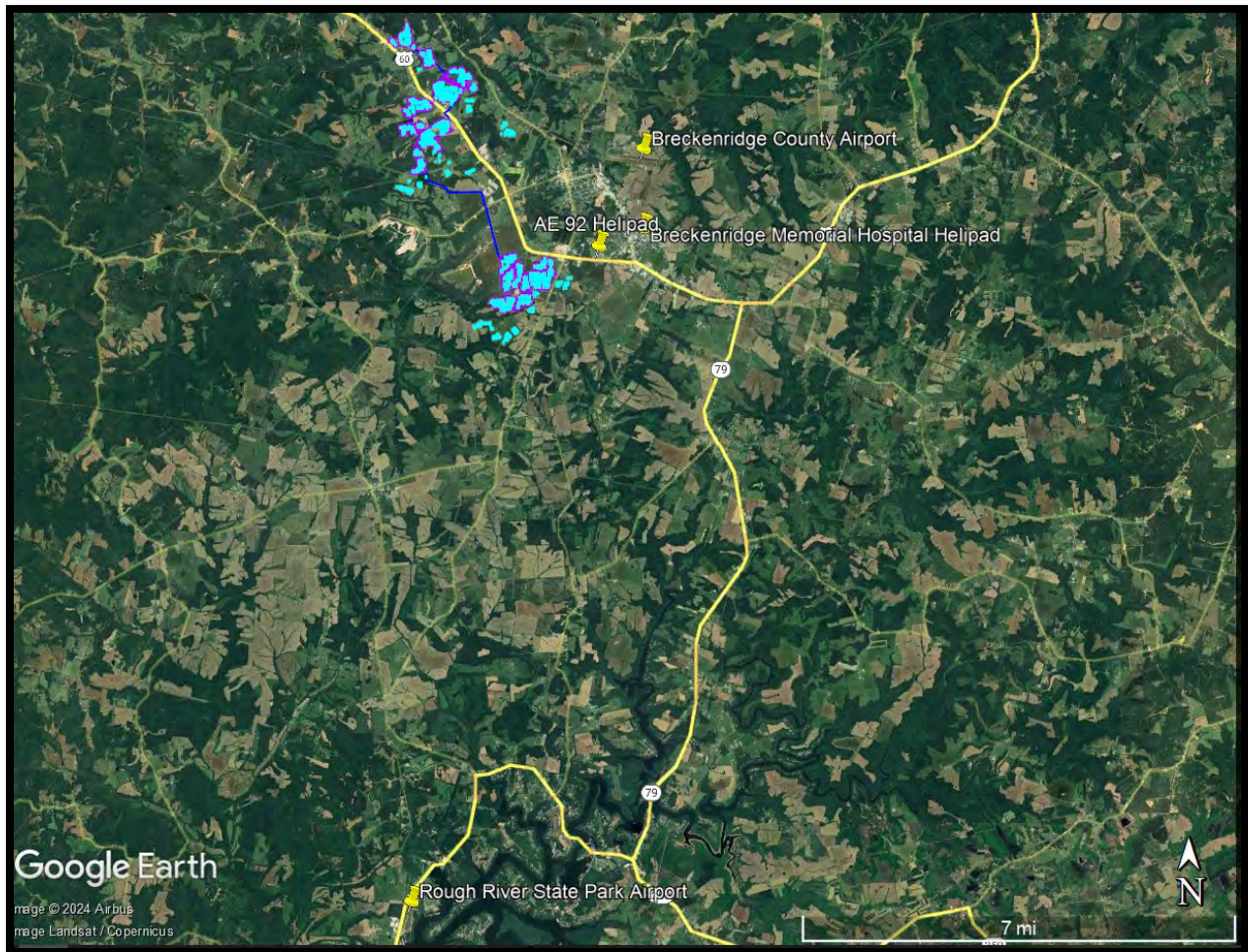


Figure 3. Airport and Helipad Within Vicinity of the New Frontiers Solar Park*

*Project location is shown in blue. Source: Google Earth Imagery

**NEW FRONTIERS SOLAR PARK
GLARE HAZARD ANALYSIS**

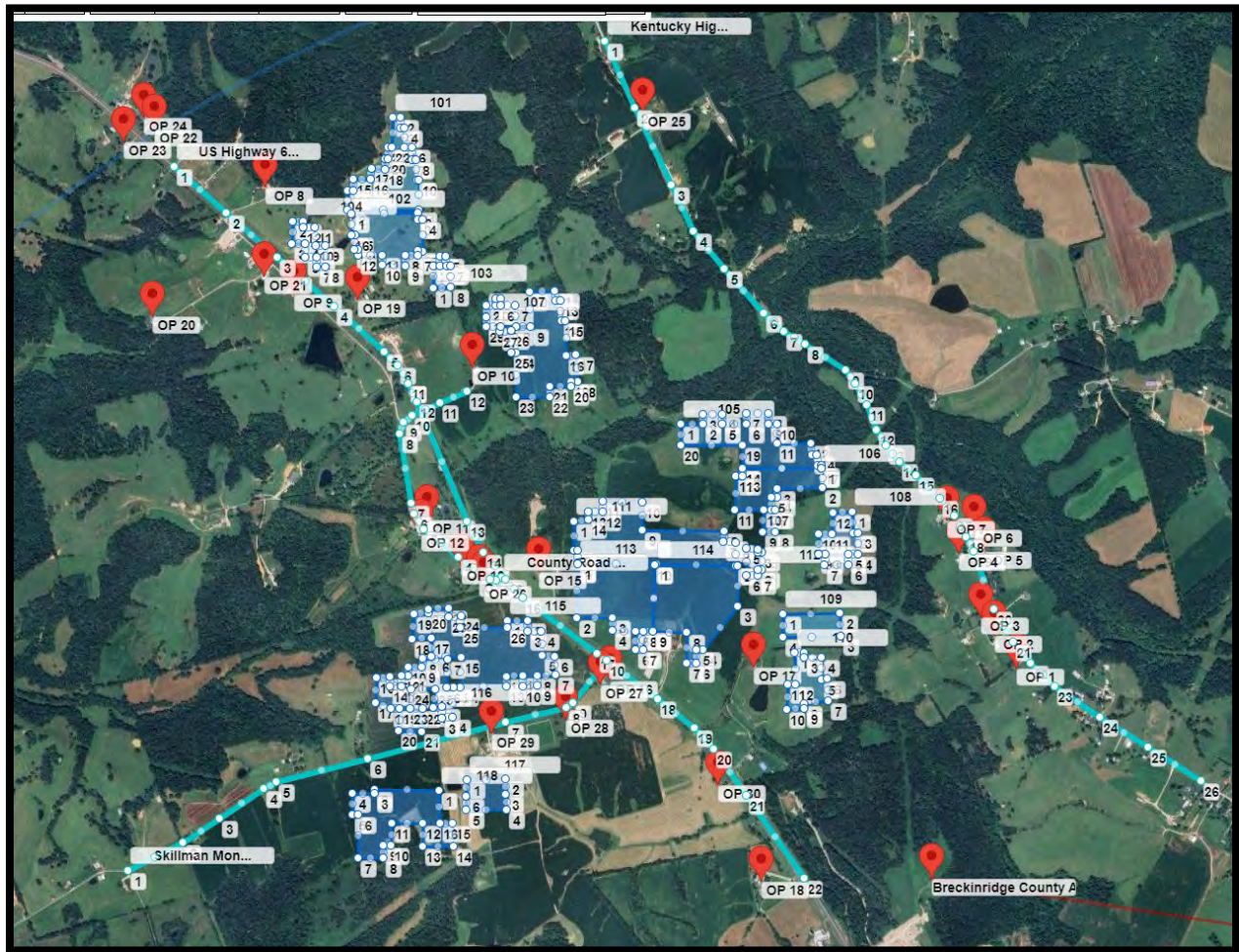


Figure 4: Block 1 Analysis Area, Structures, and Roadways*

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

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GLARE HAZARD ANALYSIS**

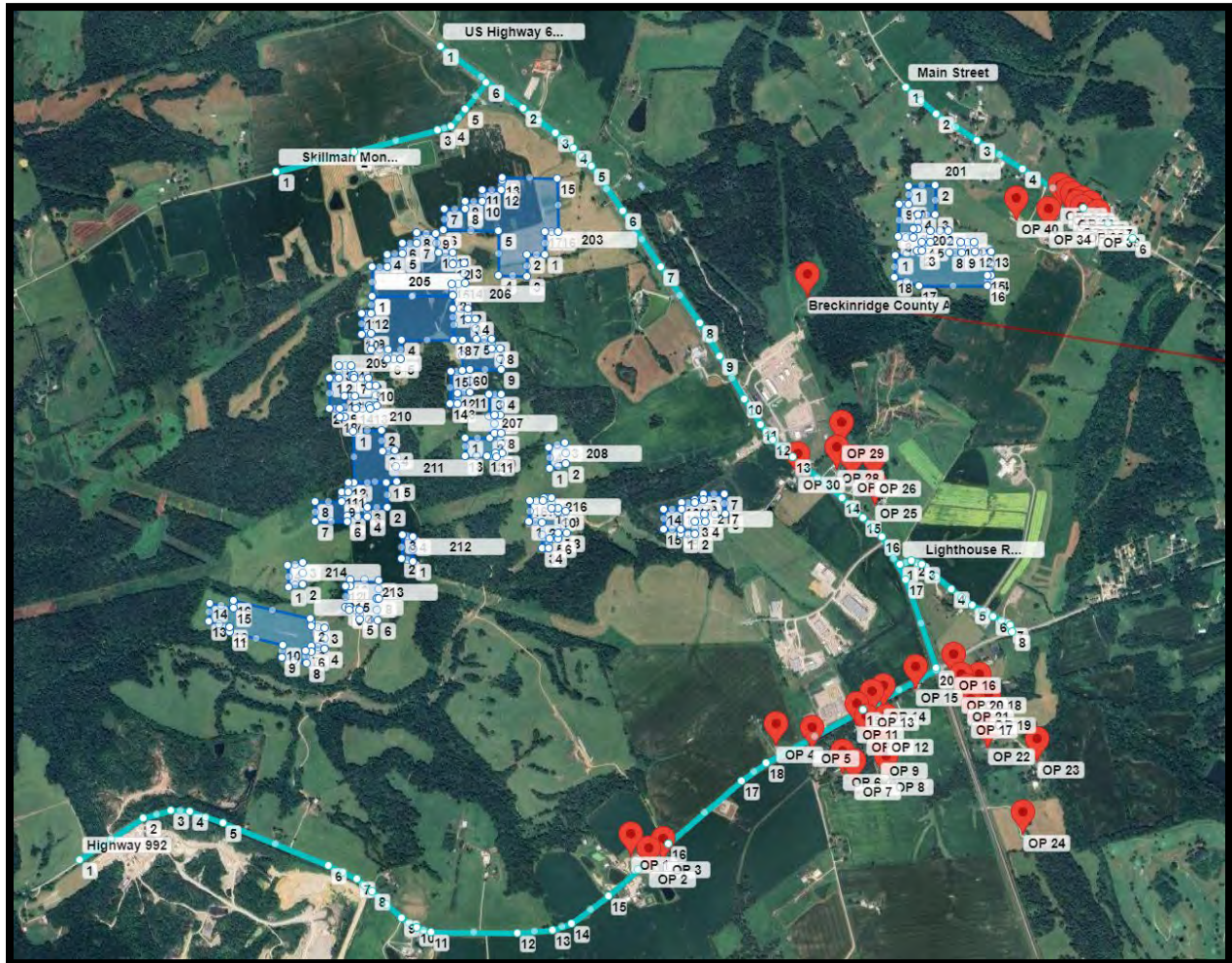


Figure 5: Block 2 Analysis Area, Structures, and Roadways*

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

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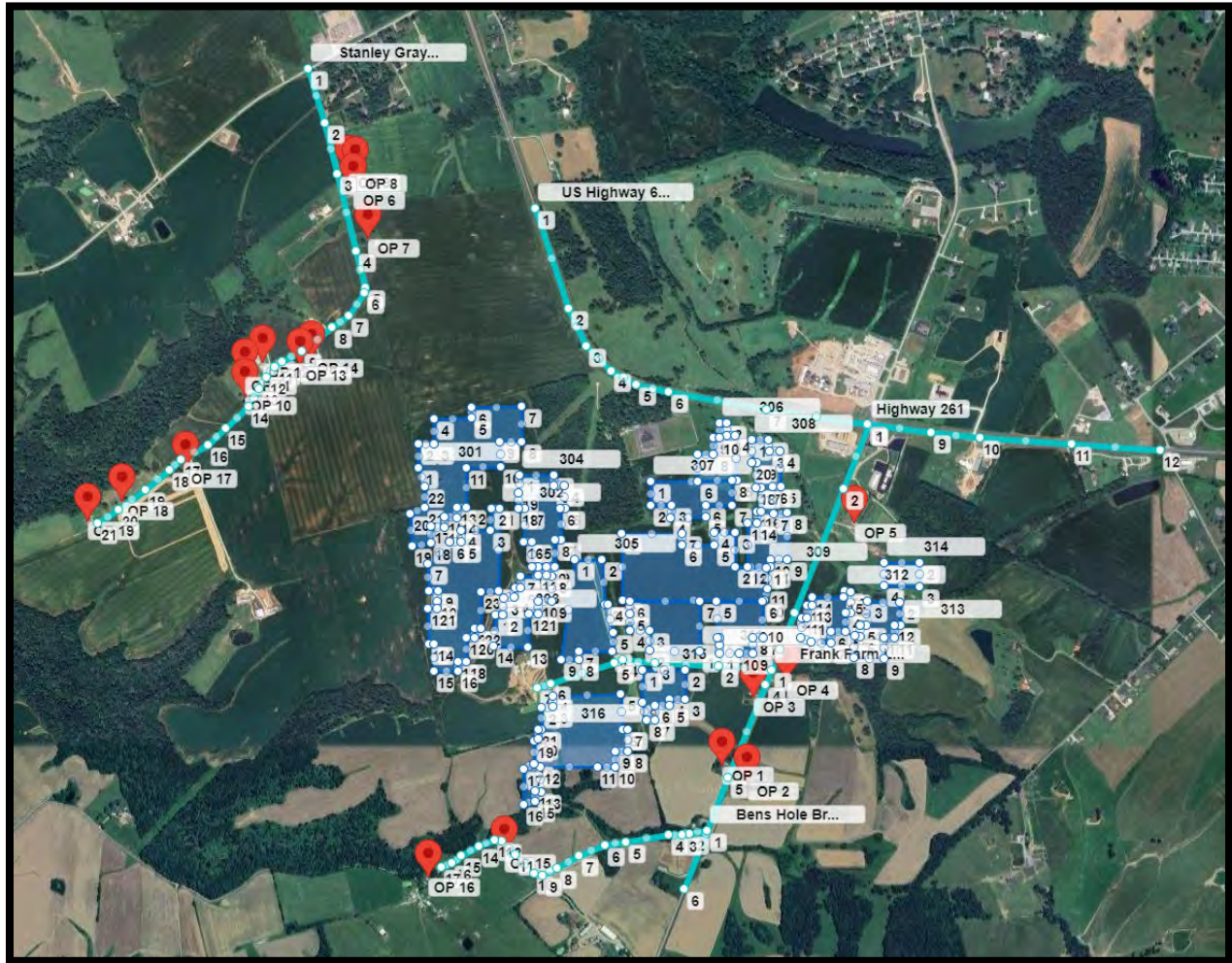


Figure 6: Block 3 Analysis Area, Structures, and Roadways*

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

**NEW FRONTIERS SOLAR PARK
GLARE HAZARD ANALYSIS**

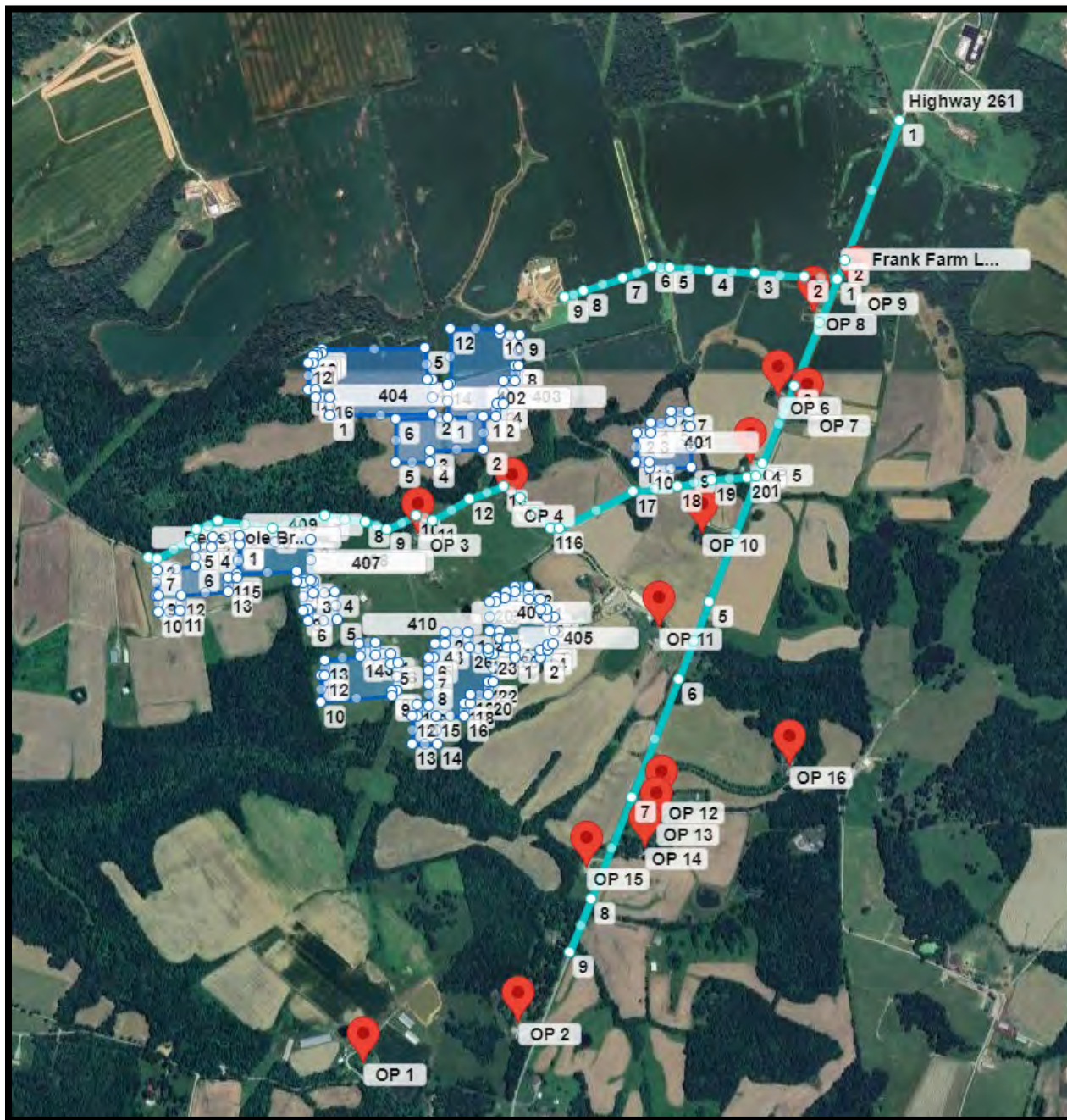


Figure 7: Block 4 Analysis Area, Structures, and Roadways*

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

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 the Project proponent. The analyses described below were conducted using 4.25-ft and 5.83-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)	60.0	Provided
Resting Angle (deg)	10.0	Provided
Rated Power (kW)	Not Used	NA
Vary reflectivity?	Yes	Default
Panel material	Smooth glass with Anti-Reflective Coating	Provided
Time zone offset	-6	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)	8.43	Default

2.2 AIRPORT APPROACH PATHS AND AIR TRAFFIC CONTROL TOWER

Two airports and two helipads were included in the glare analyses for this Project: the Breckinridge County Airport, the Rough River State Park Airport, the Breckinridge Memorial Hospital helipad, and the AE-92 helipad. Approach paths were analyzed for runways in all directions available to pilots at the airports. Since helicopters do not have a set landing path, helicopters were analyzed hovering 500 feet AGL over the helicopter landing pads [Observation Points (OP) 1 and 2 in the ForgeSolar Helipad reports in **Appendix A**]. Neither of the airports have a control tower.

2.3 ROADWAYS AND PROPERTIES LOCATED ADJACENT TO THE SOLAR ARRAYS

This analysis included potential glare to vehicles traveling on 11 road segments in the vicinity of the Project Area (**Table 1**). 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 viewer⁴.

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 location of the roadway routes analyzed is shown as turquoise route lines in **Figures 4-7**.

Analyses for each of the four array blocks were run four times, once for 5-ft car heights and once for 9-ft truck heights, and once again for each of the two-panel heights (4.25-ft and 5.83-ft AGL).

Potential glare to viewers from approximately 105 unique structures in the vicinity of the Project was also analyzed at 16-ft AGL viewing heights.

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.

⁴ Rogers, J. A., et al. (2015). Evaluation of Glare as a Hazard for General Aviation Pilots on Final Approach, Federal Aviation Administration ([link](#))

3.1 AIRPORT APPROACH PATHS

Glare is not predicted for three of the four available approach paths for the Breckinridge County Airport or for the Rough River State Park Airport. Green glare is predicted to be visible to pilots on the approach path for runway 10 for the county airport year-round from analysis subarrays 201 and 202, which underlie the approach path. Glare is not predicted for helicopters hovering 500 feet above the helipads depicted in **Figure 3**, at any time of the day, any time throughout the year based on the input parameters described above. Results are shown for each of the approach paths and the helicopter simulations (OPs 1 and 2 in the helipad analyses) in the ForgeSolar reports in **Appendix A**. Based on FAA criteria, green or yellow glare are not considered problematic for pilots⁵.

3.2 AIR TRAFFIC CONTROL TOWERS

The airports located within 10 miles of the Project do not have Air Traffic Control Towers (ATCTs); therefore, no glare impact to ATCT personnel is predicted.

3.3 ROADWAYS AND PROPERTIES LOCATED ADJACENT TO THE SOLAR ARRAYS

Glare is not predicted for drivers along 10 of 11 road segments analyzed (**Table 1**) that are adjacent to the Project area. 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. Drivers along the northern analyzed portion of Kentucky Highway 259 are predicted to see green glare derived from subarray 105. This glare is predicted to affect a portion of the road for up to 15 minutes per day in December and early January.

Glare is also predicted for only one of 105 unique structures (OP25) analyzed at 16-ft viewing heights and only for about five minutes per day for a few days in December. Green glare for this structure is also derived from subarray 105 as shown in **Figure 4**.

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 at three of four runways at two airports located within a 10-mile radius of the Project, including the Breckinridge County Airport and the Rough River State Park Airport. Pilots approaching Runway 10 at the Breckinridge County Airport are predicted to experience green and yellow glare for a portion of the approach path, which crosses directly over a portion of the array. According to the Federal Aviation Administration, green and yellow glare are not considered problematic for pilots. No glare

⁵ [Federal Register :: Federal Aviation Administration Policy: Review of Solar Energy System Projects on Federally-Obligated Airports](#)

NEW FRONTIERS SOLAR PARK GLARE HAZARD ANALYSIS

is predicted for helicopter pilots hovering 500 feet above the helipads at the Breckenridge Memorial Hospital helipad or at the AE 92 helipad facility on U.S. Highway 60.

The results of the ForgeSolar analysis determined no glare from the Project is predicted to occur for drivers of vehicles on 10 of 11 roads adjacent to the Project. The analysis was completed at two viewing heights for roadways: five feet for cars and small trucks and nine feet for semi-trucks. Green glare is predicted to drivers on Kentucky Highway 259 in the early afternoon from approximately November through January. Green glare is generally not considered to be problematic for drivers.

Glare is predicted for only one of approximately 105 structures, primarily residences, that were analyzed within proximity to the Project area. Viewers in this structure (OP25) are predicted to see green glare for up to 61 minutes per year, or 4-5 minutes per day, in the early afternoon in December.

The predicted glare and durations to be experienced at the airport, flight paths, surrounding roads and buildings is considered acceptable by existing standards and industry practice. Drivers and pilots will pass through areas of glare within seconds and glare to the single home is only predicted to last 4-5 minutes per day in December. These results assume a 10 degree resting angle is used.

APPENDIX A

ForgeSolar Reports





Clover Creek Solar 2024

Block 1 4_25 panels 5ft vehicles

Created Oct 02, 2024
Updated Oct 11, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 130382.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

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

PV Name	Tilt deg	Orientation deg	"Green" Glare min	"Yellow" Glare min	Energy Produced 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	362	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	-

Component Data

PV Array(s)

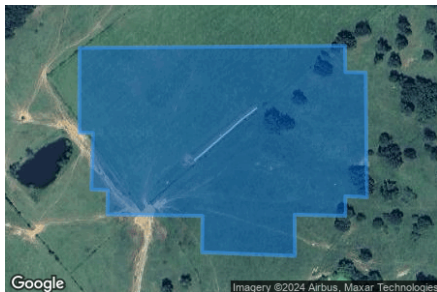
Total PV footprint area: 217.4 acres

Name: 101
Footprint area: 13.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.816564	-86.508260	615.99	4.25	620.24
2	37.816564	-86.507943	618.83	4.25	623.08
3	37.816200	-86.507932	618.59	4.25	622.84
4	37.816195	-86.507745	618.56	4.25	622.81
5	37.815522	-86.507745	619.82	4.25	624.07
6	37.815526	-86.507428	614.02	4.25	618.27
7	37.815082	-86.507412	620.71	4.25	624.96
8	37.815088	-86.507256	619.25	4.25	623.50
9	37.814364	-86.507224	620.84	4.25	625.09
10	37.814368	-86.507112	621.01	4.25	625.26
11	37.813308	-86.507133	605.30	4.25	609.55
12	37.813300	-86.510309	596.74	4.25	600.99
13	37.813997	-86.510279	594.62	4.25	598.87
14	37.813999	-86.510049	599.80	4.25	604.05
15	37.814395	-86.510033	611.91	4.25	616.16
16	37.814401	-86.509249	612.90	4.25	617.15
17	37.814767	-86.509243	610.61	4.25	614.86
18	37.814750	-86.508624	615.92	4.25	620.17
19	37.815096	-86.508616	615.00	4.25	619.25
20	37.815093	-86.508506	617.09	4.25	621.34
21	37.815507	-86.508490	615.38	4.25	619.63
22	37.815505	-86.508318	617.86	4.25	622.11

Name: 102
Footprint area: 11.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.813176	-86.510120	602.69	4.25	606.94
2	37.813195	-86.507181	601.88	4.25	606.13
3	37.812964	-86.507175	591.97	4.25	596.22
4	37.812960	-86.506950	589.72	4.25	593.97
5	37.811866	-86.506937	581.94	4.25	586.19
6	37.811875	-86.507175	587.67	4.25	591.92
7	37.811703	-86.507175	587.49	4.25	591.74
8	37.811714	-86.507739	600.79	4.25	605.04
9	37.811351	-86.507733	598.84	4.25	603.09
10	37.811383	-86.508763	618.00	4.25	622.25
11	37.811703	-86.508758	614.76	4.25	619.01
12	37.811716	-86.509812	614.48	4.25	618.73
13	37.811928	-86.509807	613.30	4.25	617.55
14	37.811934	-86.509989	609.80	4.25	614.05
15	37.812430	-86.509970	605.33	4.25	609.58
16	37.812432	-86.510123	604.71	4.25	608.96

Name: 103
Footprint area: 1.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



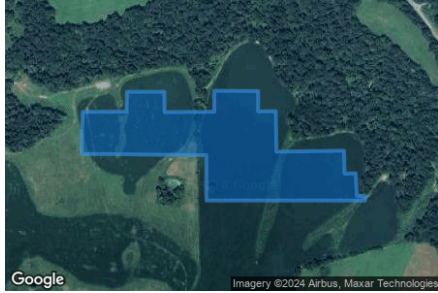
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.810578	-86.506491	601.75	4.25	606.00
2	37.811338	-86.506483	577.13	4.25	581.38
3	37.811340	-86.506191	578.54	4.25	582.79
4	37.811684	-86.506191	568.99	4.25	573.24
5	37.811684	-86.505907	568.44	4.25	572.69
6	37.811355	-86.505891	577.86	4.25	582.11
7	37.811355	-86.505708	576.48	4.25	580.73
8	37.810582	-86.505689	576.67	4.25	580.92

Name: 104
Footprint area: 2.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



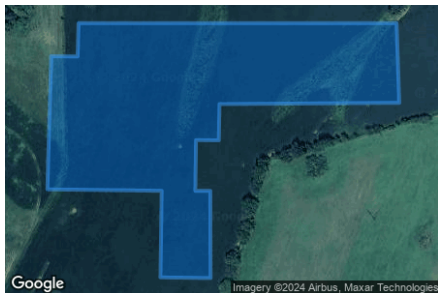
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.812892	-86.512253	571.34	4.25	575.59
2	37.812904	-86.512749	589.26	4.25	593.51
3	37.812129	-86.512773	588.23	4.25	592.48
4	37.812129	-86.512202	587.64	4.25	591.89
5	37.811643	-86.512196	598.88	4.25	603.13
6	37.811637	-86.511671	603.52	4.25	607.77
7	37.811321	-86.511679	611.06	4.25	615.31
8	37.811326	-86.511301	608.82	4.25	613.07
9	37.812054	-86.511276	595.45	4.25	599.70
10	37.812063	-86.511722	594.72	4.25	598.97
11	37.812694	-86.511738	578.64	4.25	582.89
12	37.812709	-86.512250	572.33	4.25	576.58

Name: 105
Footprint area: 15.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.805786	-86.495431	566.35	4.25	570.60
2	37.805790	-86.494460	558.62	4.25	562.87
3	37.806138	-86.494454	552.07	4.25	556.32
4	37.806138	-86.493623	558.05	4.25	562.30
5	37.805782	-86.493617	562.24	4.25	566.49
6	37.805790	-86.492518	560.95	4.25	565.20
7	37.806155	-86.492523	555.60	4.25	559.85
8	37.806151	-86.491547	566.63	4.25	570.88
9	37.805795	-86.491547	569.68	4.25	573.93
10	37.805799	-86.491155	566.56	4.25	570.81
11	37.805091	-86.491139	565.61	4.25	569.86
12	37.805108	-86.489645	563.83	4.25	568.08
13	37.804707	-86.489632	569.19	4.25	573.44
14	37.804712	-86.489385	561.34	4.25	565.59
15	37.804322	-86.489361	565.02	4.25	569.27
16	37.804320	-86.489176	562.41	4.25	566.66
17	37.804235	-86.489173	564.04	4.25	568.29
18	37.804237	-86.492695	592.19	4.25	596.44
19	37.805030	-86.492695	566.86	4.25	571.11
20	37.805051	-86.495463	590.04	4.25	594.29

Name: 106
Footprint area: 10.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.804230	-86.489174	564.04	4.25	568.29
2	37.803530	-86.489145	581.06	4.25	585.31
3	37.803520	-86.491135	599.95	4.25	604.20
4	37.803202	-86.491143	607.03	4.25	611.28
5	37.803204	-86.491395	605.53	4.25	609.78
6	37.802759	-86.491403	619.71	4.25	623.96
7	37.802759	-86.491237	618.34	4.25	622.59
8	37.801994	-86.491234	618.99	4.25	623.24
9	37.802000	-86.491789	613.94	4.25	618.19
10	37.802759	-86.491776	620.24	4.25	624.49
11	37.802772	-86.493042	631.23	4.25	635.48
12	37.803939	-86.492999	605.00	4.25	609.25
13	37.803937	-86.492707	602.95	4.25	607.20
14	37.804230	-86.492696	592.49	4.25	596.74

Name: 107
Footprint area: 20.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.809536	-86.504108	594.17	4.25	598.42
2	37.809947	-86.504114	593.40	4.25	597.65
3	37.809951	-86.503690	604.24	4.25	608.49
4	37.810180	-86.503690	602.47	4.25	606.72
5	37.810180	-86.503491	600.45	4.25	604.70
6	37.809955	-86.503481	604.38	4.25	608.63
7	37.809947	-86.502826	589.59	4.25	593.84
8	37.809205	-86.502805	602.77	4.25	607.02
9	37.809205	-86.502150	606.74	4.25	610.99
10	37.810438	-86.502177	584.48	4.25	588.73
11	37.810460	-86.501050	613.78	4.25	618.03
12	37.810120	-86.501029	612.38	4.25	616.63
13	37.810129	-86.500820	612.06	4.25	616.31
14	37.809400	-86.500788	615.46	4.25	619.71
15	37.809400	-86.500584	615.28	4.25	619.53
16	37.808196	-86.500562	612.34	4.25	616.59
17	37.808209	-86.500106	596.42	4.25	600.67
18	37.807268	-86.500047	620.41	4.25	624.66
19	37.807277	-86.500348	625.16	4.25	629.41
20	37.807094	-86.500348	620.75	4.25	625.00
21	37.807090	-86.501286	624.38	4.25	628.63
22	37.806738	-86.501286	607.00	4.25	611.25
23	37.806721	-86.502794	604.54	4.25	608.79
24	37.808277	-86.502794	626.27	4.25	630.52
25	37.808281	-86.503003	627.09	4.25	631.34
26	37.809057	-86.502982	610.02	4.25	614.27
27	37.809048	-86.503513	612.19	4.25	616.44
28	37.809205	-86.503491	609.80	4.25	614.05
29	37.809197	-86.504124	602.77	4.25	607.02

Name: 108
Footprint area: 5.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.802693	-86.487814	586.06	4.25	590.31
2	37.801940	-86.487784	581.65	4.25	585.90
3	37.801940	-86.487543	579.56	4.25	583.81
4	37.801197	-86.487537	588.17	4.25	592.42
5	37.801194	-86.487972	591.82	4.25	596.07
6	37.800824	-86.487969	586.08	4.25	590.33
7	37.800830	-86.489031	593.92	4.25	598.17
8	37.801201	-86.489026	598.37	4.25	602.62
9	37.801205	-86.489321	603.28	4.25	607.53
10	37.801930	-86.489297	604.83	4.25	609.08
11	37.801926	-86.488693	597.08	4.25	601.33
12	37.802674	-86.488653	588.23	4.25	592.48

Name: 109
Footprint area: 5.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.799090	-86.490909	592.15	4.25	596.40
2	37.799126	-86.488369	594.33	4.25	598.58
3	37.798318	-86.488337	591.38	4.25	595.63
4	37.798284	-86.490904	605.17	4.25	609.42

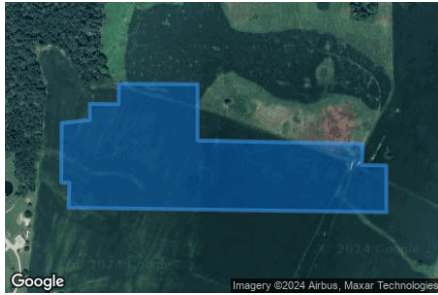


Name: 110
Footprint area: 6.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 5.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.797731	-86.490364	603.70	4.25	607.95
2	37.797748	-86.489959	600.82	4.25	605.07
3	37.797570	-86.489951	599.07	4.25	603.32
4	37.797574	-86.489195	586.47	4.25	590.72
5	37.796803	-86.489168	584.45	4.25	588.70
6	37.796820	-86.488905	579.72	4.25	583.97
7	37.796053	-86.488887	581.26	4.25	585.51
8	37.795949	-86.489965	585.10	4.25	589.35
9	37.795796	-86.489959	584.77	4.25	589.02
10	37.795739	-86.490705	590.79	4.25	595.04
11	37.796621	-86.490681	602.99	4.25	607.24
12	37.796621	-86.490340	598.85	4.25	603.10



Name: 111
Footprint area: 25.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.802371	-86.500189	613.28	4.25	617.53
2	37.801328	-86.500200	612.79	4.25	617.04
3	37.801328	-86.500018	614.39	4.25	618.64
4	37.800891	-86.500039	615.02	4.25	619.27
5	37.800811	-86.492996	601.37	4.25	605.62
6	37.801629	-86.493001	602.76	4.25	607.01
7	37.801637	-86.493543	604.14	4.25	608.39
8	37.802006	-86.493521	609.13	4.25	613.38
9	37.802065	-86.497180	626.78	4.25	631.03
10	37.803049	-86.497180	623.34	4.25	627.59
11	37.803057	-86.498923	608.21	4.25	612.46
12	37.802701	-86.498929	615.57	4.25	619.82
13	37.802705	-86.499567	610.27	4.25	614.52
14	37.802421	-86.499567	616.03	4.25	620.28

Name: 112
Footprint area: 1.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800647	-86.491844	603.74	4.25	607.99
2	37.801283	-86.491833	611.55	4.25	615.80
3	37.801279	-86.492005	610.86	4.25	615.11
4	37.801389	-86.492010	611.82	4.25	616.07
5	37.801397	-86.492536	606.62	4.25	610.87
6	37.800461	-86.492531	598.83	4.25	603.08
7	37.800461	-86.492000	599.23	4.25	603.48
8	37.800656	-86.492000	603.24	4.25	607.49

Name: 113
Footprint area: 17.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800870	-86.500039	615.18	4.25	619.43
2	37.798984	-86.500082	624.10	4.25	628.35
3	37.798975	-86.498489	633.39	4.25	637.64
4	37.798535	-86.498489	632.25	4.25	636.50
5	37.798483	-86.497484	614.52	4.25	618.77
6	37.797846	-86.497454	602.97	4.25	607.22
7	37.797846	-86.497102	605.98	4.25	610.23
8	37.798504	-86.497128	613.16	4.25	617.41
9	37.798513	-86.496692	608.03	4.25	612.28
10	37.800840	-86.496627	612.95	4.25	617.20

Name: 114
Footprint area: 22.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800832	-86.496606	612.86	4.25	617.11
2	37.800807	-86.492926	601.57	4.25	605.82
3	37.799387	-86.492904	595.02	4.25	599.27
4	37.797839	-86.494439	588.31	4.25	592.56
5	37.797835	-86.494771	589.14	4.25	593.39
6	37.797360	-86.494766	591.81	4.25	596.06
7	37.797360	-86.495195	596.31	4.25	600.56
8	37.798454	-86.495206	594.79	4.25	599.04
9	37.798492	-86.496681	607.87	4.25	612.12

Name: 115
Footprint area: 25.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.798861	-86.503172	619.02	4.25	623.27
2	37.798869	-86.502287	618.62	4.25	622.87
3	37.798509	-86.502271	615.90	4.25	620.15
4	37.798505	-86.501654	620.46	4.25	624.71
5	37.797632	-86.501627	604.94	4.25	609.19
6	37.797627	-86.501064	605.81	4.25	610.06
7	37.796953	-86.501042	600.67	4.25	604.92
8	37.796941	-86.501858	615.72	4.25	619.97
9	37.796585	-86.501842	613.68	4.25	617.93
10	37.796572	-86.502501	619.19	4.25	623.44
11	37.796928	-86.502496	623.05	4.25	627.30
12	37.796915	-86.503204	627.29	4.25	631.54
13	37.796555	-86.503199	625.75	4.25	630.00
14	37.796538	-86.505286	625.97	4.25	630.22
15	37.797589	-86.505248	625.13	4.25	629.38
16	37.797610	-86.506578	622.14	4.25	626.39
17	37.798255	-86.506541	620.38	4.25	624.63
18	37.798234	-86.507410	619.13	4.25	623.38
19	37.799120	-86.507351	612.53	4.25	616.78
20	37.799149	-86.506707	619.88	4.25	624.13
21	37.799276	-86.506707	617.04	4.25	621.29
22	37.799314	-86.505806	615.66	4.25	619.91
23	37.799001	-86.505806	621.60	4.25	625.85
24	37.799022	-86.505243	625.70	4.25	629.95
25	37.798636	-86.505264	625.35	4.25	629.60
26	37.798645	-86.503167	620.11	4.25	624.36

Name: 116
Footprint area: 11.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.795817	-86.506471	622.91	4.25	627.16
2	37.795834	-86.506079	625.17	4.25	629.42
3	37.795457	-86.506085	625.45	4.25	629.70
4	37.795461	-86.505618	626.34	4.25	630.59
5	37.796525	-86.505586	626.40	4.25	630.65
6	37.796529	-86.505859	627.04	4.25	631.29
7	37.797509	-86.505822	619.57	4.25	623.82
8	37.797530	-86.506964	623.78	4.25	628.03
9	37.797229	-86.506975	624.23	4.25	628.48
10	37.797229	-86.507597	617.69	4.25	621.94
11	37.796928	-86.507608	615.45	4.25	619.70
12	37.796941	-86.507876	611.83	4.25	616.08
13	37.796568	-86.507903	618.04	4.25	622.29
14	37.796572	-86.508407	618.45	4.25	622.70
15	37.796885	-86.508391	613.39	4.25	617.64
16	37.796873	-86.509024	611.51	4.25	615.76
17	37.796000	-86.509067	618.28	4.25	622.53
18	37.795783	-86.508359	623.18	4.25	627.43
19	37.795788	-86.507978	625.08	4.25	629.33
20	37.794986	-86.508016	624.48	4.25	628.73
21	37.794974	-86.507002	626.92	4.25	631.17
22	37.795796	-86.506959	623.09	4.25	627.34
23	37.795796	-86.507517	626.98	4.25	631.23
24	37.796474	-86.507469	618.86	4.25	623.11
25	37.796453	-86.506390	624.55	4.25	628.80

Name: 117
Footprint area: 4.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.793274	-86.504996	617.74	4.25	621.99
2	37.793291	-86.503247	616.14	4.25	620.39
3	37.792778	-86.503241	616.51	4.25	620.76
4	37.792218	-86.503215	614.25	4.25	618.50
5	37.792210	-86.505012	609.05	4.25	613.30
6	37.792697	-86.505012	613.24	4.25	617.49



Name: 118
Footprint area: 17.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.792909	-86.506213	618.25	4.25	622.50
2	37.792935	-86.509099	623.48	4.25	627.73
3	37.792808	-86.509099	623.80	4.25	628.05
4	37.792803	-86.510086	623.04	4.25	627.29
5	37.792066	-86.510103	624.95	4.25	629.20
6	37.792066	-86.509808	624.06	4.25	628.31
7	37.790514	-86.509818	621.22	4.25	625.47
8	37.790523	-86.508697	619.84	4.25	624.09
9	37.790955	-86.508702	620.18	4.25	624.43
10	37.790959	-86.508348	610.18	4.25	614.43
11	37.791731	-86.508332	619.40	4.25	623.65
12	37.791743	-86.506954	616.84	4.25	621.09
13	37.790921	-86.506932	603.64	4.25	607.89
14	37.790921	-86.505580	604.61	4.25	608.86
15	37.791743	-86.505623	604.20	4.25	608.45
16	37.791735	-86.506187	616.61	4.25	620.86



2-Mile Flight Path Receptor(s)

Name: Breckinridge County Airport Runway 10
Description:
Threshold height : 50 ft
Direction: 98.7 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	37.785423	-86.448080	710.62	50.00	760.62
2-mile point	37.789817	-86.484281	648.03	666.02	1314.04

Name: Breckinridge County Airport Runway 28
Description:
Threshold height : 50 ft
Direction: 275.1 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	37.784151	-86.434486	722.18	50.00	772.18
2-mile point	37.781596	-86.398004	742.72	582.88	1325.61

Name: Rough River State Park Airport Runway 2
Description:
Threshold height : 50 ft
Direction: 18.9 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	37.606011	-86.508874	563.89	50.00	613.89
2-mile point	37.578654	-86.520697	493.37	673.95	1167.32

Name: Rough River State Park Airport Runway 20

Description:

Threshold height : 50 ft

Direction: 198.4 deg

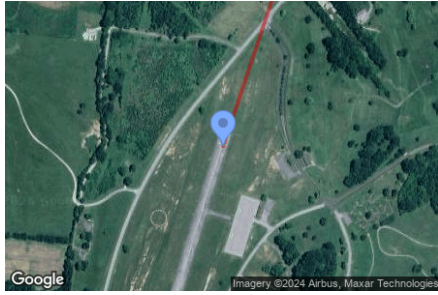
Glide slope: 3.0 deg

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	37.613983	-86.505752	577.15	50.00	627.15
2-mile point	37.641413	-86.494199	566.11	614.47	1180.58



Route Receptor(s)

Name: County Road 1730
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	37.800378	-86.503440	632.29	5.00	637.29
2	37.800302	-86.503697	634.76	5.00	639.76
3	37.800319	-86.503966	637.46	5.00	642.46
4	37.801116	-86.505350	648.62	5.00	653.62
5	37.802082	-86.506927	639.74	5.00	644.74
6	37.802633	-86.507345	628.11	5.00	633.11
7	37.802989	-86.507469	622.96	5.00	627.96
8	37.805439	-86.507962	633.76	5.00	638.76
9	37.805846	-86.507801	637.25	5.00	642.25
10	37.806092	-86.507420	638.11	5.00	643.11
11	37.806524	-86.506192	628.08	5.00	633.08
12	37.806939	-86.504963	626.70	5.00	631.70

Name: Kentucky Highway 259
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	37.819238	-86.498843	631.69	5.00	636.69
2	37.816907	-86.497502	588.19	5.00	593.19
3	37.814195	-86.495892	549.02	5.00	554.02
4	37.812551	-86.494884	523.61	5.00	528.61
5	37.811245	-86.493532	490.39	5.00	495.39
6	37.809694	-86.491751	476.71	5.00	481.71
7	37.809050	-86.490850	475.36	5.00	480.36
8	37.808601	-86.489906	478.37	5.00	483.37
9	37.807677	-86.488092	521.93	5.00	526.93
10	37.807219	-86.487674	533.77	5.00	538.77
11	37.806465	-86.487180	554.45	5.00	559.45
12	37.805592	-86.486730	566.47	5.00	571.47
13	37.805024	-86.486301	571.07	5.00	576.07
14	37.804473	-86.485700	578.81	5.00	583.81
15	37.803973	-86.484981	584.01	5.00	589.01
16	37.803176	-86.483897	595.05	5.00	600.05
17	37.802557	-86.483275	597.98	5.00	602.98
18	37.801828	-86.482739	602.59	5.00	607.59
19	37.801311	-86.482417	605.11	5.00	610.11
20	37.799259	-86.481516	620.48	5.00	625.48
21	37.798106	-86.480636	620.82	5.00	625.82
22	37.797360	-86.479874	633.69	5.00	638.69
23	37.796555	-86.478790	658.36	5.00	663.36
24	37.795478	-86.476784	643.73	5.00	648.73
25	37.794410	-86.474617	657.89	5.00	662.89
26	37.793248	-86.472267	678.40	5.00	683.40

Name: Skillman Monarch Lane
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	37.790094	-86.520080	601.46	5.00	606.46
2	37.791052	-86.517656	610.74	5.00	615.74
3	37.791917	-86.515993	612.01	5.00	617.01
4	37.792977	-86.514019	612.15	5.00	617.15
5	37.793189	-86.513471	615.33	5.00	620.33
6	37.794020	-86.509416	617.83	5.00	622.83
7	37.795300	-86.503258	629.13	5.00	634.13
8	37.795826	-86.500565	613.74	5.00	618.74
9	37.795970	-86.500275	607.75	5.00	612.75
10	37.797470	-86.498773	606.69	5.00	611.69

Name: US Highway 60
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	37.814827	-86.518015	596.43	5.00	601.43
2	37.813220	-86.515703	600.25	5.00	605.25
3	37.811644	-86.513439	615.45	5.00	620.45
4	37.809927	-86.510907	634.89	5.00	639.89
5	37.808338	-86.508654	645.89	5.00	650.89
6	37.807868	-86.508048	648.28	5.00	653.28
7	37.807202	-86.507589	641.99	5.00	646.99
8	37.807202	-86.507589	641.99	5.00	646.99
9	37.807202	-86.507589	641.99	5.00	646.99
10	37.807202	-86.507589	641.99	5.00	646.99
11	37.807202	-86.507589	641.99	5.00	646.99
12	37.806554	-86.507227	636.24	5.00	641.24
13	37.802349	-86.504958	630.65	5.00	635.65
14	37.801285	-86.504234	632.32	5.00	637.32
15	37.800315	-86.503252	629.19	5.00	634.19
16	37.799675	-86.502474	627.18	5.00	632.18
17	37.797729	-86.499191	608.09	5.00	613.09
18	37.796114	-86.496488	596.64	5.00	601.64
19	37.795109	-86.494852	590.73	5.00	595.73
20	37.794359	-86.493972	590.36	5.00	595.36
21	37.792735	-86.492529	585.85	5.00	590.85
22	37.789806	-86.489965	601.62	5.00	606.62

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.797207	-86.480528	644.38	16.00	660.38
OP 2	37.798364	-86.481483	632.18	16.00	648.18
OP 3	37.799013	-86.482089	625.78	16.00	641.78
OP 4	37.801225	-86.483087	596.09	16.00	612.09
OP 5	37.801323	-86.481987	608.37	16.00	624.37
OP 6	37.802082	-86.482406	600.32	16.00	616.32
OP 7	37.802408	-86.483623	604.65	16.00	620.65
OP 8	37.814135	-86.514002	602.43	16.00	618.43
OP 9	37.810359	-86.512699	630.45	16.00	646.45
OP 10	37.807795	-86.504754	630.53	16.00	646.53
OP 11	37.802425	-86.506766	634.51	16.00	650.51
OP 12	37.801908	-86.507028	643.26	16.00	659.26
OP 13	37.800780	-86.505226	647.96	16.00	663.96
OP 14	37.800327	-86.504470	642.42	16.00	658.42
OP 15	37.800581	-86.501820	622.37	16.00	638.37
OP 16	37.796770	-86.498628	597.07	16.00	613.07
OP 17	37.797237	-86.492231	603.82	16.00	619.82
OP 18	37.789700	-86.491877	600.70	16.00	616.70
OP 19	37.810160	-86.509850	663.00	16.00	679.00
OP 20	37.809579	-86.518994	591.54	16.00	607.54
OP 21	37.810969	-86.514043	603.84	16.00	619.84
OP 22	37.816158	-86.518919	599.15	16.00	615.15
OP 23	37.815705	-86.520276	594.02	16.00	610.02
OP 24	37.816550	-86.519415	601.20	16.00	617.20
OP 25	37.816739	-86.497161	576.72	16.00	592.72
OP 26	37.800124	-86.504239	640.80	16.00	656.80
OP 27	37.796640	-86.499068	593.49	16.00	609.49
OP 28	37.795419	-86.500581	620.43	16.00	636.43
OP 29	37.794910	-86.503907	631.13	16.00	647.13
OP 30	37.793104	-86.493822	600.78	16.00	616.78

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	362	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	-	-

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
105 (green)	21	0	0	0	0	0	0	0	0	0	0	286
105 (yellow)	0	0	0	0	0	0	0	0	0	0	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: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

102 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

103 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

104 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

105 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0

FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	55	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	307	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

105: Breckinridge County Airport Runway 10

No glare found

105: Breckinridge County Airport Runway 28

No glare found

105: Rough River State Park Airport Runway 2

No glare found

105: Rough River State Park Airport Runway 20

No glare found

105: OP 1

No glare found

105: OP 2

No glare found

105: OP 3

No glare found

105: OP 4

No glare found

105: OP 5

No glare found

105: OP 6

No glare found

105: OP 7

No glare found

105: OP 8

No glare found

105: OP 9

No glare found

105: OP 10

No glare found

105: OP 11

No glare found

105: OP 12

No glare found

105: OP 13

No glare found

105: OP 14

No glare found

105: OP 15

No glare found

105: OP 16

No glare found

105: OP 17

No glare found

105: OP 18

No glare found

105: OP 19

No glare found

105: OP 20

No glare found

105: OP 21

No glare found

105: OP 22

No glare found

105: OP 23

No glare found

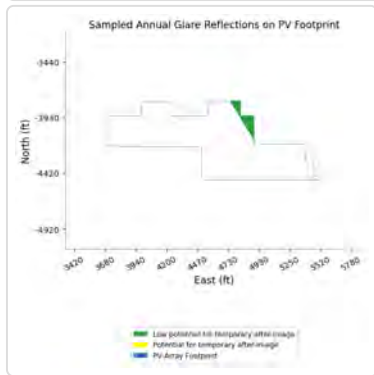
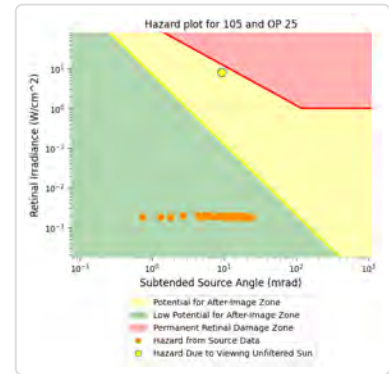
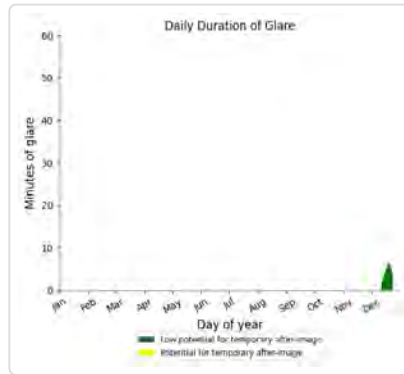
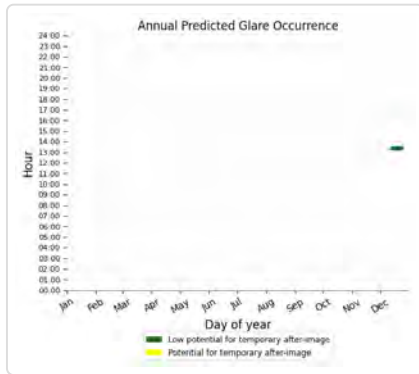
105: OP 24

No glare found

105: OP 25

PV array is expected to produce the following glare for this receptor:

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



105: OP 26

No glare found

105: OP 27

No glare found

105: OP 28

No glare found

105: OP 29

No glare found

105: OP 30

No glare found

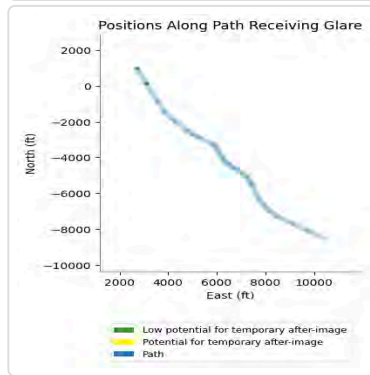
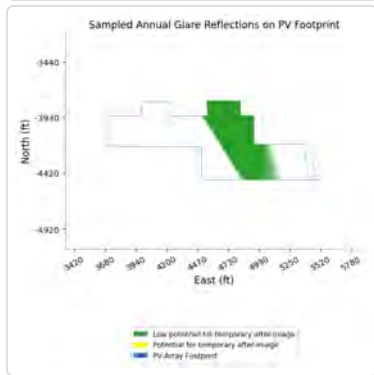
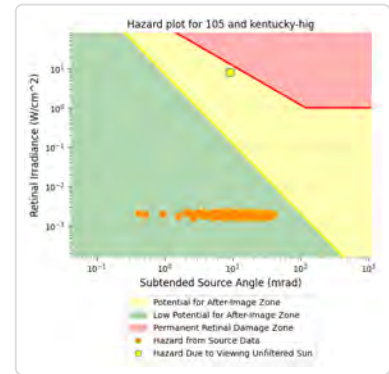
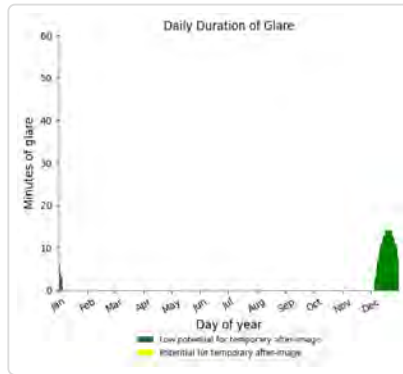
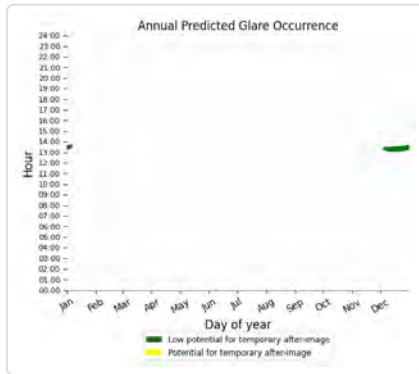
105: County Road 1730

No glare found

105: Kentucky Highway 259

PV array is expected to produce the following glare for this receptor:

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



105: Skillman Monarch Lane

No glare found

105: US Highway 60

No glare found

106 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

107 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

108 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

109 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

110 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

111 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

112 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

113 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

114 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

115 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

116 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

117 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

118 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 1 4_25 panels 9ft vehicles

Created Oct 03, 2024
Updated Oct 11, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 130506.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

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

PV Name	Tilt deg	Orientation deg	"Green" Glare min	"Yellow" Glare min	Energy Produced 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	399	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	-

Component Data

PV Array(s)

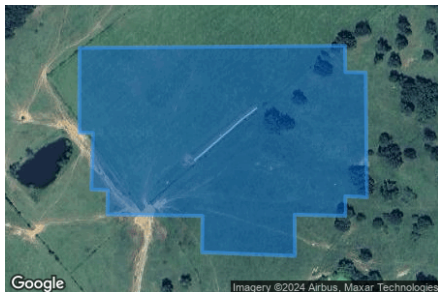
Total PV footprint area: 217.4 acres

Name: 101
Footprint area: 13.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.816564	-86.508260	615.99	4.25	620.24
2	37.816564	-86.507943	618.83	4.25	623.08
3	37.816200	-86.507932	618.59	4.25	622.84
4	37.816195	-86.507745	618.56	4.25	622.81
5	37.815522	-86.507745	619.82	4.25	624.07
6	37.815526	-86.507428	614.02	4.25	618.27
7	37.815082	-86.507412	620.71	4.25	624.96
8	37.815088	-86.507256	619.25	4.25	623.50
9	37.814364	-86.507224	620.84	4.25	625.09
10	37.814368	-86.507112	621.01	4.25	625.26
11	37.813308	-86.507133	605.30	4.25	609.55
12	37.813300	-86.510309	596.74	4.25	600.99
13	37.813997	-86.510279	594.62	4.25	598.87
14	37.813999	-86.510049	599.80	4.25	604.05
15	37.814395	-86.510033	611.91	4.25	616.16
16	37.814401	-86.509249	612.90	4.25	617.15
17	37.814767	-86.509243	610.61	4.25	614.86
18	37.814750	-86.508624	615.92	4.25	620.17
19	37.815096	-86.508616	615.00	4.25	619.25
20	37.815093	-86.508506	617.09	4.25	621.34
21	37.815507	-86.508490	615.38	4.25	619.63
22	37.815505	-86.508318	617.86	4.25	622.11

Name: 102
Footprint area: 11.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.813176	-86.510120	602.69	4.25	606.94
2	37.813195	-86.507181	601.88	4.25	606.13
3	37.812964	-86.507175	591.97	4.25	596.22
4	37.812960	-86.506950	589.72	4.25	593.97
5	37.811866	-86.506937	581.94	4.25	586.19
6	37.811875	-86.507175	587.67	4.25	591.92
7	37.811703	-86.507175	587.49	4.25	591.74
8	37.811714	-86.507739	600.79	4.25	605.04
9	37.811351	-86.507733	598.84	4.25	603.09
10	37.811383	-86.508763	618.00	4.25	622.25
11	37.811703	-86.508758	614.76	4.25	619.01
12	37.811716	-86.509812	614.48	4.25	618.73
13	37.811928	-86.509807	613.30	4.25	617.55
14	37.811934	-86.509989	609.80	4.25	614.05
15	37.812430	-86.509970	605.33	4.25	609.58
16	37.812432	-86.510123	604.71	4.25	608.96

Name: 103
Footprint area: 1.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



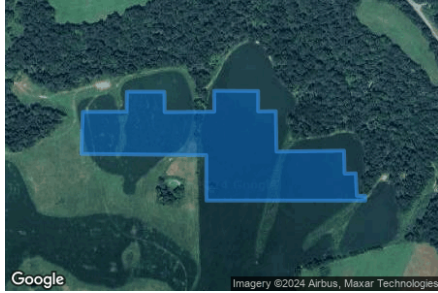
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.810578	-86.506491	601.75	4.25	606.00
2	37.811338	-86.506483	577.13	4.25	581.38
3	37.811340	-86.506191	578.54	4.25	582.79
4	37.811684	-86.506191	568.99	4.25	573.24
5	37.811684	-86.505907	568.44	4.25	572.69
6	37.811355	-86.505891	577.86	4.25	582.11
7	37.811355	-86.505708	576.48	4.25	580.73
8	37.810582	-86.505689	576.67	4.25	580.92

Name: 104
Footprint area: 2.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



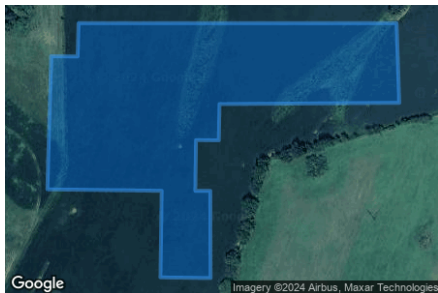
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.812892	-86.512253	571.34	4.25	575.59
2	37.812904	-86.512749	589.26	4.25	593.51
3	37.812129	-86.512773	588.23	4.25	592.48
4	37.812129	-86.512202	587.64	4.25	591.89
5	37.811643	-86.512196	598.88	4.25	603.13
6	37.811637	-86.511671	603.52	4.25	607.77
7	37.811321	-86.511679	611.06	4.25	615.31
8	37.811326	-86.511301	608.82	4.25	613.07
9	37.812054	-86.511276	595.45	4.25	599.70
10	37.812063	-86.511722	594.72	4.25	598.97
11	37.812694	-86.511738	578.64	4.25	582.89
12	37.812709	-86.512250	572.33	4.25	576.58

Name: 105
Footprint area: 15.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.805786	-86.495431	566.35	4.25	570.60
2	37.805790	-86.494460	558.62	4.25	562.87
3	37.806138	-86.494454	552.07	4.25	556.32
4	37.806138	-86.493623	558.05	4.25	562.30
5	37.805782	-86.493617	562.24	4.25	566.49
6	37.805790	-86.492518	560.95	4.25	565.20
7	37.806155	-86.492523	555.60	4.25	559.85
8	37.806151	-86.491547	566.63	4.25	570.88
9	37.805795	-86.491547	569.68	4.25	573.93
10	37.805799	-86.491155	566.56	4.25	570.81
11	37.805091	-86.491139	565.61	4.25	569.86
12	37.805108	-86.489645	563.83	4.25	568.08
13	37.804707	-86.489632	569.19	4.25	573.44
14	37.804712	-86.489385	561.34	4.25	565.59
15	37.804322	-86.489361	565.02	4.25	569.27
16	37.804320	-86.489176	562.41	4.25	566.66
17	37.804235	-86.489173	564.04	4.25	568.29
18	37.804237	-86.492695	592.19	4.25	596.44
19	37.805030	-86.492695	566.86	4.25	571.11
20	37.805051	-86.495463	590.04	4.25	594.29

Name: 106
Footprint area: 10.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.804230	-86.489174	564.04	4.25	568.29
2	37.803530	-86.489145	581.06	4.25	585.31
3	37.803520	-86.491135	599.95	4.25	604.20
4	37.803202	-86.491143	607.03	4.25	611.28
5	37.803204	-86.491395	605.53	4.25	609.78
6	37.802759	-86.491403	619.71	4.25	623.96
7	37.802759	-86.491237	618.34	4.25	622.59
8	37.801994	-86.491234	618.99	4.25	623.24
9	37.802000	-86.491789	613.94	4.25	618.19
10	37.802759	-86.491776	620.24	4.25	624.49
11	37.802772	-86.493042	631.23	4.25	635.48
12	37.803939	-86.492999	605.00	4.25	609.25
13	37.803937	-86.492707	602.95	4.25	607.20
14	37.804230	-86.492696	592.49	4.25	596.74

Name: 107
Footprint area: 20.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.809536	-86.504108	594.17	4.25	598.42
2	37.809947	-86.504114	593.40	4.25	597.65
3	37.809951	-86.503690	604.24	4.25	608.49
4	37.810180	-86.503690	602.47	4.25	606.72
5	37.810180	-86.503491	600.45	4.25	604.70
6	37.809955	-86.503481	604.38	4.25	608.63
7	37.809947	-86.502826	589.59	4.25	593.84
8	37.809205	-86.502805	602.77	4.25	607.02
9	37.809205	-86.502150	606.74	4.25	610.99
10	37.810438	-86.502177	584.48	4.25	588.73
11	37.810460	-86.501050	613.78	4.25	618.03
12	37.810120	-86.501029	612.38	4.25	616.63
13	37.810129	-86.500820	612.06	4.25	616.31
14	37.809400	-86.500788	615.46	4.25	619.71
15	37.809400	-86.500584	615.28	4.25	619.53
16	37.808196	-86.500562	612.34	4.25	616.59
17	37.808209	-86.500106	596.42	4.25	600.67
18	37.807268	-86.500047	620.41	4.25	624.66
19	37.807277	-86.500348	625.16	4.25	629.41
20	37.807094	-86.500348	620.75	4.25	625.00
21	37.807090	-86.501286	624.38	4.25	628.63
22	37.806738	-86.501286	607.00	4.25	611.25
23	37.806721	-86.502794	604.54	4.25	608.79
24	37.808277	-86.502794	626.27	4.25	630.52
25	37.808281	-86.503003	627.09	4.25	631.34
26	37.809057	-86.502982	610.02	4.25	614.27
27	37.809048	-86.503513	612.19	4.25	616.44
28	37.809205	-86.503491	609.80	4.25	614.05
29	37.809197	-86.504124	602.77	4.25	607.02

Name: 108
Footprint area: 5.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.802693	-86.487814	586.06	4.25	590.31
2	37.801940	-86.487784	581.65	4.25	585.90
3	37.801940	-86.487543	579.56	4.25	583.81
4	37.801197	-86.487537	588.17	4.25	592.42
5	37.801194	-86.487972	591.82	4.25	596.07
6	37.800824	-86.487969	586.08	4.25	590.33
7	37.800830	-86.489031	593.92	4.25	598.17
8	37.801201	-86.489026	598.37	4.25	602.62
9	37.801205	-86.489321	603.28	4.25	607.53
10	37.801930	-86.489297	604.83	4.25	609.08
11	37.801926	-86.488693	597.08	4.25	601.33
12	37.802674	-86.488653	588.23	4.25	592.48

Name: 109
Footprint area: 5.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.799090	-86.490909	592.15	4.25	596.40
2	37.799126	-86.488369	594.33	4.25	598.58
3	37.798318	-86.488337	591.38	4.25	595.63
4	37.798284	-86.490904	605.17	4.25	609.42

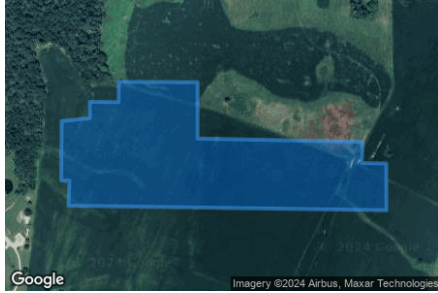


Name: 110
Footprint area: 6.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.797731	-86.490364	603.70	4.25	607.95
2	37.797748	-86.489959	600.82	4.25	605.07
3	37.797570	-86.489951	599.07	4.25	603.32
4	37.797574	-86.489195	586.47	4.25	590.72
5	37.796803	-86.489168	584.45	4.25	588.70
6	37.796820	-86.488905	579.72	4.25	583.97
7	37.796053	-86.488887	581.26	4.25	585.51
8	37.795949	-86.489965	585.10	4.25	589.35
9	37.795796	-86.489959	584.77	4.25	589.02
10	37.795739	-86.490705	590.79	4.25	595.04
11	37.796621	-86.490681	602.99	4.25	607.24
12	37.796621	-86.490340	598.85	4.25	603.10



Name: 111
Footprint area: 25.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.802371	-86.500189	613.28	4.25	617.53
2	37.801328	-86.500200	612.79	4.25	617.04
3	37.801328	-86.500018	614.39	4.25	618.64
4	37.800891	-86.500039	615.02	4.25	619.27
5	37.800811	-86.492996	601.37	4.25	605.62
6	37.801629	-86.493001	602.76	4.25	607.01
7	37.801637	-86.493543	604.14	4.25	608.39
8	37.802006	-86.493521	609.13	4.25	613.38
9	37.802065	-86.497180	626.78	4.25	631.03
10	37.803049	-86.497180	623.34	4.25	627.59
11	37.803057	-86.498923	608.21	4.25	612.46
12	37.802701	-86.498929	615.57	4.25	619.82
13	37.802705	-86.499567	610.27	4.25	614.52
14	37.802421	-86.499567	616.03	4.25	620.28

Name: 112
Footprint area: 1.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.800647	-86.491844	603.74	4.25	607.99
2	37.801283	-86.491833	611.55	4.25	615.80
3	37.801279	-86.492005	610.86	4.25	615.11
4	37.801389	-86.492010	611.82	4.25	616.07
5	37.801397	-86.492536	606.62	4.25	610.87
6	37.800461	-86.492531	598.83	4.25	603.08
7	37.800461	-86.492000	599.23	4.25	603.48
8	37.800656	-86.492000	603.24	4.25	607.49

Name: 113
Footprint area: 17.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800870	-86.500039	615.18	4.25	619.43
2	37.798984	-86.500082	624.10	4.25	628.35
3	37.798975	-86.498489	633.39	4.25	637.64
4	37.798535	-86.498489	632.25	4.25	636.50
5	37.798483	-86.497484	614.52	4.25	618.77
6	37.797846	-86.497454	602.97	4.25	607.22
7	37.797846	-86.497102	605.98	4.25	610.23
8	37.798504	-86.497128	613.16	4.25	617.41
9	37.798513	-86.496692	608.03	4.25	612.28
10	37.800840	-86.496627	612.95	4.25	617.20

Name: 114
Footprint area: 22.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800832	-86.496606	612.86	4.25	617.11
2	37.800807	-86.492926	601.57	4.25	605.82
3	37.799387	-86.492904	595.02	4.25	599.27
4	37.797839	-86.494439	588.31	4.25	592.56
5	37.797835	-86.494771	589.14	4.25	593.39
6	37.797360	-86.494766	591.81	4.25	596.06
7	37.797360	-86.495195	596.31	4.25	600.56
8	37.798454	-86.495206	594.79	4.25	599.04
9	37.798492	-86.496681	607.87	4.25	612.12

Name: 115
Footprint area: 25.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.798861	-86.503172	619.02	4.25	623.27
2	37.798869	-86.502287	618.62	4.25	622.87
3	37.798509	-86.502271	615.90	4.25	620.15
4	37.798505	-86.501654	620.46	4.25	624.71
5	37.797632	-86.501627	604.94	4.25	609.19
6	37.797627	-86.501064	605.81	4.25	610.06
7	37.796953	-86.501042	600.67	4.25	604.92
8	37.796941	-86.501858	615.72	4.25	619.97
9	37.796585	-86.501842	613.68	4.25	617.93
10	37.796572	-86.502501	619.19	4.25	623.44
11	37.796928	-86.502496	623.05	4.25	627.30
12	37.796915	-86.503204	627.29	4.25	631.54
13	37.796555	-86.503199	625.75	4.25	630.00
14	37.796538	-86.505286	625.97	4.25	630.22
15	37.797589	-86.505248	625.13	4.25	629.38
16	37.797610	-86.506578	622.14	4.25	626.39
17	37.798255	-86.506541	620.38	4.25	624.63
18	37.798234	-86.507410	619.13	4.25	623.38
19	37.799120	-86.507351	612.53	4.25	616.78
20	37.799149	-86.506707	619.88	4.25	624.13
21	37.799276	-86.506707	617.04	4.25	621.29
22	37.799314	-86.505806	615.66	4.25	619.91
23	37.799001	-86.505806	621.60	4.25	625.85
24	37.799022	-86.505243	625.70	4.25	629.95
25	37.798636	-86.505264	625.35	4.25	629.60
26	37.798645	-86.503167	620.11	4.25	624.36

Name: 116
Footprint area: 11.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.795817	-86.506471	622.91	4.25	627.16
2	37.795834	-86.506079	625.17	4.25	629.42
3	37.795457	-86.506085	625.45	4.25	629.70
4	37.795461	-86.505618	626.34	4.25	630.59
5	37.796525	-86.505586	626.40	4.25	630.65
6	37.796529	-86.505859	627.04	4.25	631.29
7	37.797509	-86.505822	619.57	4.25	623.82
8	37.797530	-86.506964	623.78	4.25	628.03
9	37.797229	-86.506975	624.23	4.25	628.48
10	37.797229	-86.507597	617.69	4.25	621.94
11	37.796928	-86.507608	615.45	4.25	619.70
12	37.796941	-86.507876	611.83	4.25	616.08
13	37.796568	-86.507903	618.04	4.25	622.29
14	37.796572	-86.508407	618.45	4.25	622.70
15	37.796885	-86.508391	613.39	4.25	617.64
16	37.796873	-86.509024	611.51	4.25	615.76
17	37.796000	-86.509067	618.28	4.25	622.53
18	37.795783	-86.508359	623.18	4.25	627.43
19	37.795788	-86.507978	625.08	4.25	629.33
20	37.794986	-86.508016	624.48	4.25	628.73
21	37.794974	-86.507002	626.92	4.25	631.17
22	37.795796	-86.506959	623.09	4.25	627.34
23	37.795796	-86.507517	626.98	4.25	631.23
24	37.796474	-86.507469	618.86	4.25	623.11
25	37.796453	-86.506390	624.55	4.25	628.80

Name: 117
Footprint area: 4.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.793274	-86.504996	617.74	4.25	621.99
2	37.793291	-86.503247	616.14	4.25	620.39
3	37.792778	-86.503241	616.51	4.25	620.76
4	37.792218	-86.503215	614.25	4.25	618.50
5	37.792210	-86.505012	609.05	4.25	613.30
6	37.792697	-86.505012	613.24	4.25	617.49



Name: 118
Footprint area: 17.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.792909	-86.506213	618.25	4.25	622.50
2	37.792935	-86.509099	623.48	4.25	627.73
3	37.792808	-86.509099	623.80	4.25	628.05
4	37.792803	-86.510086	623.04	4.25	627.29
5	37.792066	-86.510103	624.95	4.25	629.20
6	37.792066	-86.509808	624.06	4.25	628.31
7	37.790514	-86.509818	621.22	4.25	625.47
8	37.790523	-86.508697	619.84	4.25	624.09
9	37.790955	-86.508702	620.18	4.25	624.43
10	37.790959	-86.508348	610.18	4.25	614.43
11	37.791731	-86.508332	619.40	4.25	623.65
12	37.791743	-86.506954	616.84	4.25	621.09
13	37.790921	-86.506932	603.64	4.25	607.89
14	37.790921	-86.505580	604.61	4.25	608.86
15	37.791743	-86.505623	604.20	4.25	608.45
16	37.791735	-86.506187	616.61	4.25	620.86



2-Mile Flight Path Receptor(s)

Name: Breckinridge County Airport Runway 10
Description:
Threshold height : 50 ft
Direction: 98.7 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	37.785423	-86.448080	710.62	50.00	760.62
2-mile point	37.789817	-86.484281	648.03	666.02	1314.04

Name: Breckinridge County Airport Runway 28
Description:
Threshold height : 50 ft
Direction: 275.1 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	37.784151	-86.434486	722.18	50.00	772.18
2-mile point	37.781596	-86.398004	742.72	582.88	1325.61

Name: Rough River State Park Airport Runway 2
Description:
Threshold height : 50 ft
Direction: 18.9 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	37.606011	-86.508874	563.89	50.00	613.89
2-mile point	37.578654	-86.520697	493.37	673.95	1167.32

Name: Rough River State Park Airport Runway 20

Description:

Threshold height : 50 ft

Direction: 198.4 deg

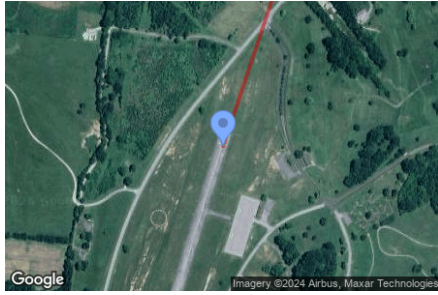
Glide slope: 3.0 deg

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	37.613983	-86.505752	577.15	50.00	627.15
2-mile point	37.641413	-86.494199	566.11	614.47	1180.58



Route Receptor(s)

Name: County Road 1730
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	37.800378	-86.503440	632.29	9.00	641.29
2	37.800302	-86.503697	634.76	9.00	643.76
3	37.800319	-86.503966	637.46	9.00	646.46
4	37.801116	-86.505350	648.62	9.00	657.62
5	37.802082	-86.506927	639.74	9.00	648.74
6	37.802633	-86.507345	628.11	9.00	637.11
7	37.802989	-86.507469	622.96	9.00	631.96
8	37.805439	-86.507962	633.76	9.00	642.76
9	37.805846	-86.507801	637.25	9.00	646.25
10	37.806092	-86.507420	638.11	9.00	647.11
11	37.806524	-86.506192	628.08	9.00	637.08
12	37.806939	-86.504963	626.70	9.00	635.70

Name: Kentucky Highway 259
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	37.819238	-86.498843	631.69	9.00	640.69
2	37.816907	-86.497502	588.19	9.00	597.19
3	37.814195	-86.495892	549.02	9.00	558.02
4	37.812551	-86.494884	523.61	9.00	532.61
5	37.811245	-86.493532	490.39	9.00	499.39
6	37.809694	-86.491751	476.71	9.00	485.71
7	37.809050	-86.490850	475.36	9.00	484.36
8	37.808601	-86.489906	478.37	9.00	487.37
9	37.807677	-86.488092	521.93	9.00	530.93
10	37.807219	-86.487674	533.77	9.00	542.77
11	37.806465	-86.487180	554.45	9.00	563.45
12	37.805592	-86.486730	566.47	9.00	575.47
13	37.805024	-86.486301	571.07	9.00	580.07
14	37.804473	-86.485700	578.81	9.00	587.81
15	37.803973	-86.484981	584.01	9.00	593.01
16	37.803176	-86.483897	595.05	9.00	604.05
17	37.802557	-86.483275	597.98	9.00	606.98
18	37.801828	-86.482739	602.59	9.00	611.59
19	37.801311	-86.482417	605.11	9.00	614.11
20	37.799259	-86.481516	620.48	9.00	629.48
21	37.798106	-86.480636	620.82	9.00	629.82
22	37.797360	-86.479874	633.69	9.00	642.69
23	37.796555	-86.478790	658.36	9.00	667.36
24	37.795478	-86.476784	643.73	9.00	652.73
25	37.794410	-86.474617	657.89	9.00	666.89
26	37.793248	-86.472267	678.40	9.00	687.40

Name: Skillman Monarch Lane
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	37.790094	-86.520080	601.46	9.00	610.46
2	37.791052	-86.517656	610.74	9.00	619.74
3	37.791917	-86.515993	612.01	9.00	621.01
4	37.792977	-86.514019	612.15	9.00	621.15
5	37.793189	-86.513471	615.33	9.00	624.33
6	37.794020	-86.509416	617.83	9.00	626.83
7	37.795300	-86.503258	629.13	9.00	638.13
8	37.795826	-86.500565	613.74	9.00	622.74
9	37.795970	-86.500275	607.75	9.00	616.75
10	37.797470	-86.498773	606.69	9.00	615.69

Name: US Highway 60
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	37.814827	-86.518015	596.43	9.00	605.43
2	37.813220	-86.515703	600.25	9.00	609.25
3	37.811644	-86.513439	615.45	9.00	624.45
4	37.809927	-86.510907	634.89	9.00	643.89
5	37.808338	-86.508654	645.89	9.00	654.89
6	37.807868	-86.508048	648.28	9.00	657.28
7	37.807202	-86.507589	641.99	9.00	650.99
8	37.807202	-86.507589	641.99	9.00	650.99
9	37.807202	-86.507589	641.99	9.00	650.99
10	37.807202	-86.507589	641.99	9.00	650.99
11	37.807202	-86.507589	641.99	9.00	650.99
12	37.806554	-86.507227	636.24	9.00	645.24
13	37.802349	-86.504958	630.65	9.00	639.65
14	37.801285	-86.504234	632.32	9.00	641.32
15	37.800315	-86.503252	629.19	9.00	638.19
16	37.799675	-86.502474	627.18	9.00	636.18
17	37.797729	-86.499191	608.09	9.00	617.09
18	37.796114	-86.496488	596.64	9.00	605.64
19	37.795109	-86.494852	590.73	9.00	599.73
20	37.794359	-86.493972	590.36	9.00	599.36
21	37.792735	-86.492529	585.85	9.00	594.85
22	37.789806	-86.489965	601.62	9.00	610.62

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.797207	-86.480528	644.38	16.00	660.38
OP 2	37.798364	-86.481483	632.18	16.00	648.18
OP 3	37.799013	-86.482089	625.78	16.00	641.78
OP 4	37.801225	-86.483087	596.09	16.00	612.09
OP 5	37.801323	-86.481987	608.37	16.00	624.37
OP 6	37.802082	-86.482406	600.32	16.00	616.32
OP 7	37.802408	-86.483623	604.65	16.00	620.65
OP 8	37.814135	-86.514002	602.43	16.00	618.43
OP 9	37.810359	-86.512699	630.45	16.00	646.45
OP 10	37.807795	-86.504754	630.53	16.00	646.53
OP 11	37.802425	-86.506766	634.51	16.00	650.51
OP 12	37.801908	-86.507028	643.26	16.00	659.26
OP 13	37.800780	-86.505226	647.96	16.00	663.96
OP 14	37.800327	-86.504470	642.42	16.00	658.42
OP 15	37.800581	-86.501820	622.37	16.00	638.37
OP 16	37.796770	-86.498628	597.07	16.00	613.07
OP 17	37.797237	-86.492231	603.82	16.00	619.82
OP 18	37.789700	-86.491877	600.70	16.00	616.70
OP 19	37.810160	-86.509850	663.00	16.00	679.00
OP 20	37.809579	-86.518994	591.54	16.00	607.54
OP 21	37.810969	-86.514043	603.84	16.00	619.84
OP 22	37.816158	-86.518919	599.15	16.00	615.15
OP 23	37.815705	-86.520276	594.02	16.00	610.02
OP 24	37.816550	-86.519415	601.20	16.00	617.20
OP 25	37.816739	-86.497161	576.72	16.00	592.72
OP 26	37.800124	-86.504239	640.80	16.00	656.80
OP 27	37.796640	-86.499068	593.49	16.00	609.49
OP 28	37.795419	-86.500581	620.43	16.00	636.43
OP 29	37.794910	-86.503907	631.13	16.00	647.13
OP 30	37.793104	-86.493822	600.78	16.00	616.78

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	399	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	-	-

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
105 (green)	26	0	0	0	0	0	0	0	0	0	0	312
105 (yellow)	0	0	0	0	0	0	0	0	0	0	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: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

102 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

103 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

104 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

105 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0

FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	61	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	338	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

105: Breckinridge County Airport Runway 10

No glare found

105: Breckinridge County Airport Runway 28

No glare found

105: Rough River State Park Airport Runway 2

No glare found

105: Rough River State Park Airport Runway 20

No glare found

105: OP 1

No glare found

105: OP 2

No glare found

105: OP 3

No glare found

105: OP 4

No glare found

105: OP 5

No glare found

105: OP 6

No glare found

105: OP 7

No glare found

105: OP 8

No glare found

105: OP 9

No glare found

105: OP 10

No glare found

105: OP 11

No glare found

105: OP 12

No glare found

105: OP 13

No glare found

105: OP 14

No glare found

105: OP 15

No glare found

105: OP 16

No glare found

105: OP 17

No glare found

105: OP 18

No glare found

105: OP 19

No glare found

105: OP 20

No glare found

105: OP 21

No glare found

105: OP 22

No glare found

105: OP 23

No glare found

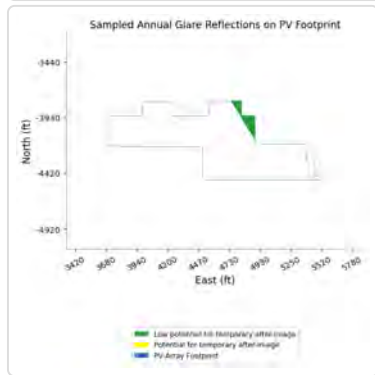
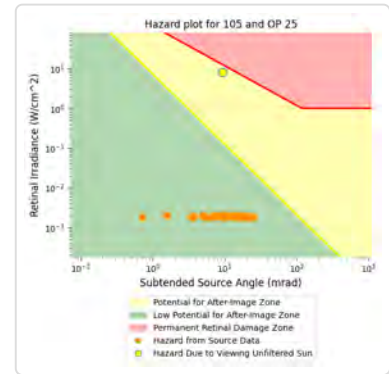
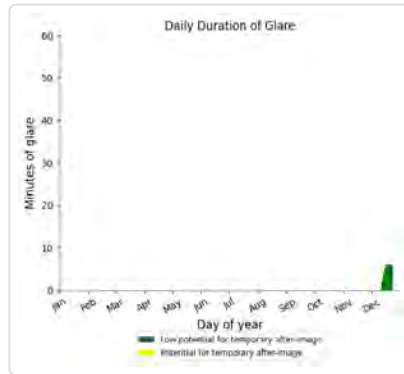
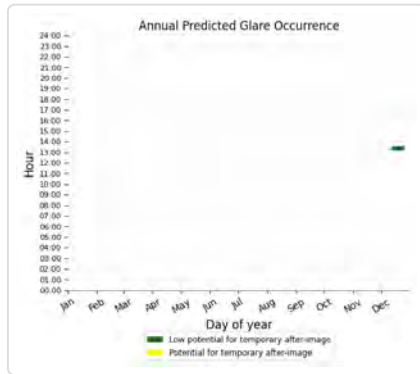
105: OP 24

No glare found

105: OP 25

PV array is expected to produce the following glare for this receptor:

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



105: OP 26

No glare found

105: OP 27

No glare found

105: OP 28

No glare found

105: OP 29

No glare found

105: OP 30

No glare found

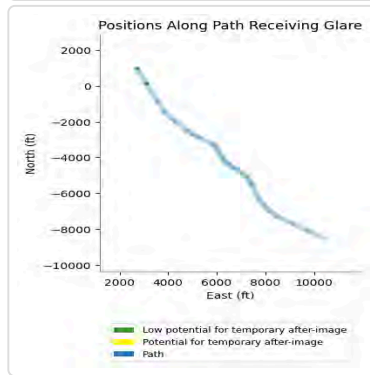
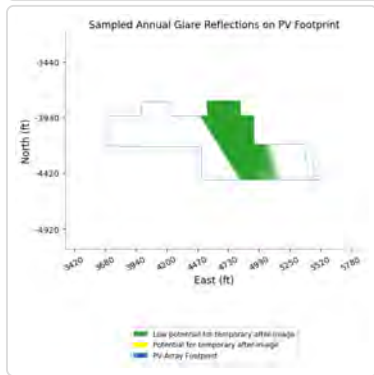
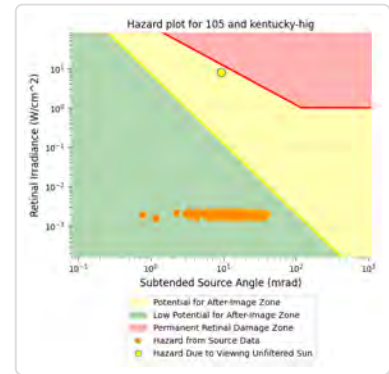
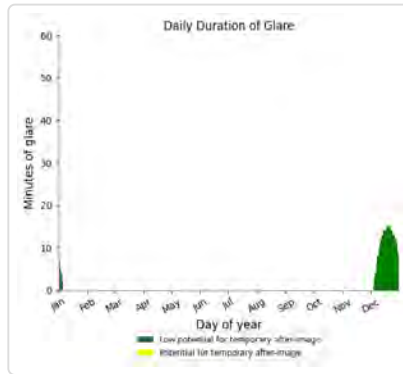
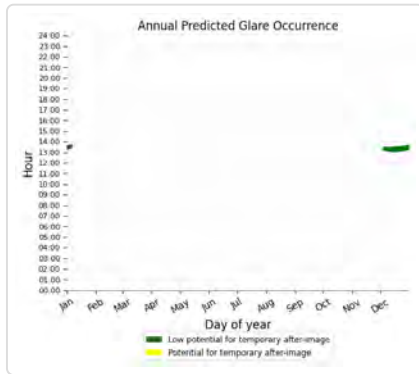
105: County Road 1730

No glare found

105: Kentucky Highway 259

PV array is expected to produce the following glare for this receptor:

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



105: Skillman Monarch Lane

No glare found

105: US Highway 60

No glare found

106 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

107 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

108 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

109 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

110 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

111 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

112 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

113 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

114 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

115 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

116 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

117 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

118 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 1 4_25 panels helipads

Created Oct 14, 2024
Updated Oct 14, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 131211.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

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	-

Component Data

PV Array(s)

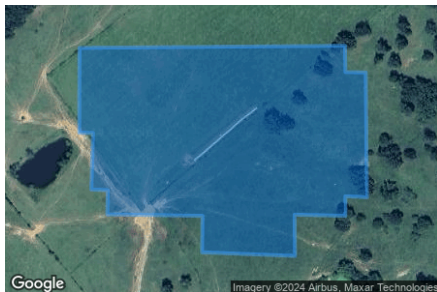
Total PV footprint area: 217.4 acres

Name: 101
Footprint area: 13.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.816564	-86.508260	615.99	4.25	620.24
2	37.816564	-86.507943	618.83	4.25	623.08
3	37.816200	-86.507932	618.59	4.25	622.84
4	37.816195	-86.507745	618.56	4.25	622.81
5	37.815522	-86.507745	619.82	4.25	624.07
6	37.815526	-86.507428	614.02	4.25	618.27
7	37.815082	-86.507412	620.71	4.25	624.96
8	37.815088	-86.507256	619.25	4.25	623.50
9	37.814364	-86.507224	620.84	4.25	625.09
10	37.814368	-86.507112	621.01	4.25	625.26
11	37.813308	-86.507133	605.30	4.25	609.55
12	37.813300	-86.510309	596.74	4.25	600.99
13	37.813997	-86.510279	594.62	4.25	598.87
14	37.813999	-86.510049	599.80	4.25	604.05
15	37.814395	-86.510033	611.91	4.25	616.16
16	37.814401	-86.509249	612.90	4.25	617.15
17	37.814767	-86.509243	610.61	4.25	614.86
18	37.814750	-86.508624	615.92	4.25	620.17
19	37.815096	-86.508616	615.00	4.25	619.25
20	37.815093	-86.508506	617.09	4.25	621.34
21	37.815507	-86.508490	615.38	4.25	619.63
22	37.815505	-86.508318	617.86	4.25	622.11

Name: 102
Footprint area: 11.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.813176	-86.510120	602.69	4.25	606.94
2	37.813195	-86.507181	601.88	4.25	606.13
3	37.812964	-86.507175	591.97	4.25	596.22
4	37.812960	-86.506950	589.72	4.25	593.97
5	37.811866	-86.506937	581.94	4.25	586.19
6	37.811875	-86.507175	587.67	4.25	591.92
7	37.811703	-86.507175	587.49	4.25	591.74
8	37.811714	-86.507739	600.79	4.25	605.04
9	37.811351	-86.507733	598.84	4.25	603.09
10	37.811383	-86.508763	618.00	4.25	622.25
11	37.811703	-86.508758	614.76	4.25	619.01
12	37.811716	-86.509812	614.48	4.25	618.73
13	37.811928	-86.509807	613.30	4.25	617.55
14	37.811934	-86.509989	609.80	4.25	614.05
15	37.812430	-86.509970	605.33	4.25	609.58
16	37.812432	-86.510123	604.71	4.25	608.96

Name: 103
Footprint area: 1.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



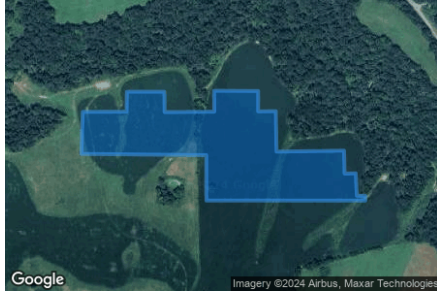
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.810578	-86.506491	601.75	4.25	606.00
2	37.811338	-86.506483	577.13	4.25	581.38
3	37.811340	-86.506191	578.54	4.25	582.79
4	37.811684	-86.506191	568.99	4.25	573.24
5	37.811684	-86.505907	568.44	4.25	572.69
6	37.811355	-86.505891	577.86	4.25	582.11
7	37.811355	-86.505708	576.48	4.25	580.73
8	37.810582	-86.505689	576.67	4.25	580.92

Name: 104
Footprint area: 2.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



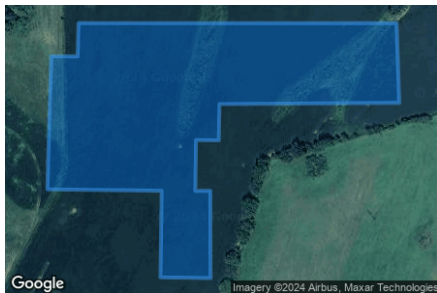
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.812892	-86.512253	571.34	4.25	575.59
2	37.812904	-86.512749	589.26	4.25	593.51
3	37.812129	-86.512773	588.23	4.25	592.48
4	37.812129	-86.512202	587.64	4.25	591.89
5	37.811643	-86.512196	598.88	4.25	603.13
6	37.811637	-86.511671	603.52	4.25	607.77
7	37.811321	-86.511679	611.06	4.25	615.31
8	37.811326	-86.511301	608.82	4.25	613.07
9	37.812054	-86.511276	595.45	4.25	599.70
10	37.812063	-86.511722	594.72	4.25	598.97
11	37.812694	-86.511738	578.64	4.25	582.89
12	37.812709	-86.512250	572.33	4.25	576.58

Name: 105
Footprint area: 15.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.805786	-86.495431	566.35	4.25	570.60
2	37.805790	-86.494460	558.62	4.25	562.87
3	37.806138	-86.494454	552.07	4.25	556.32
4	37.806138	-86.493623	558.05	4.25	562.30
5	37.805782	-86.493617	562.24	4.25	566.49
6	37.805790	-86.492518	560.95	4.25	565.20
7	37.806155	-86.492523	555.60	4.25	559.85
8	37.806151	-86.491547	566.63	4.25	570.88
9	37.805795	-86.491547	569.68	4.25	573.93
10	37.805799	-86.491155	566.56	4.25	570.81
11	37.805091	-86.491139	565.61	4.25	569.86
12	37.805108	-86.489645	563.83	4.25	568.08
13	37.804707	-86.489632	569.19	4.25	573.44
14	37.804712	-86.489385	561.34	4.25	565.59
15	37.804322	-86.489361	565.02	4.25	569.27
16	37.804320	-86.489176	562.41	4.25	566.66
17	37.804235	-86.489173	564.04	4.25	568.29
18	37.804237	-86.492695	592.19	4.25	596.44
19	37.805030	-86.492695	566.86	4.25	571.11
20	37.805051	-86.495463	590.04	4.25	594.29

Name: 106
Footprint area: 10.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.804230	-86.489174	564.04	4.25	568.29
2	37.803530	-86.489145	581.06	4.25	585.31
3	37.803520	-86.491135	599.95	4.25	604.20
4	37.803202	-86.491143	607.03	4.25	611.28
5	37.803204	-86.491395	605.53	4.25	609.78
6	37.802759	-86.491403	619.71	4.25	623.96
7	37.802759	-86.491237	618.34	4.25	622.59
8	37.801994	-86.491234	618.99	4.25	623.24
9	37.802000	-86.491789	613.94	4.25	618.19
10	37.802759	-86.491776	620.24	4.25	624.49
11	37.802772	-86.493042	631.23	4.25	635.48
12	37.803939	-86.492999	605.00	4.25	609.25
13	37.803937	-86.492707	602.95	4.25	607.20
14	37.804230	-86.492696	592.49	4.25	596.74

Name: 107
Footprint area: 20.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.809536	-86.504108	594.17	4.25	598.42
2	37.809947	-86.504114	593.40	4.25	597.65
3	37.809951	-86.503690	604.24	4.25	608.49
4	37.810180	-86.503690	602.47	4.25	606.72
5	37.810180	-86.503491	600.45	4.25	604.70
6	37.809955	-86.503481	604.38	4.25	608.63
7	37.809947	-86.502826	589.59	4.25	593.84
8	37.809205	-86.502805	602.77	4.25	607.02
9	37.809205	-86.502150	606.74	4.25	610.99
10	37.810438	-86.502177	584.48	4.25	588.73
11	37.810460	-86.501050	613.78	4.25	618.03
12	37.810120	-86.501029	612.38	4.25	616.63
13	37.810129	-86.500820	612.06	4.25	616.31
14	37.809400	-86.500788	615.46	4.25	619.71
15	37.809400	-86.500584	615.28	4.25	619.53
16	37.808196	-86.500562	612.34	4.25	616.59
17	37.808209	-86.500106	596.42	4.25	600.67
18	37.807268	-86.500047	620.41	4.25	624.66
19	37.807277	-86.500348	625.16	4.25	629.41
20	37.807094	-86.500348	620.75	4.25	625.00
21	37.807090	-86.501286	624.38	4.25	628.63
22	37.806738	-86.501286	607.00	4.25	611.25
23	37.806721	-86.502794	604.54	4.25	608.79
24	37.808277	-86.502794	626.27	4.25	630.52
25	37.808281	-86.503003	627.09	4.25	631.34
26	37.809057	-86.502982	610.02	4.25	614.27
27	37.809048	-86.503513	612.19	4.25	616.44
28	37.809205	-86.503491	609.80	4.25	614.05
29	37.809197	-86.504124	602.77	4.25	607.02

Name: 108
Footprint area: 5.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.802693	-86.487814	586.06	4.25	590.31
2	37.801940	-86.487784	581.65	4.25	585.90
3	37.801940	-86.487543	579.56	4.25	583.81
4	37.801197	-86.487537	588.17	4.25	592.42
5	37.801194	-86.487972	591.82	4.25	596.07
6	37.800824	-86.487969	586.08	4.25	590.33
7	37.800830	-86.489031	593.92	4.25	598.17
8	37.801201	-86.489026	598.37	4.25	602.62
9	37.801205	-86.489321	603.28	4.25	607.53
10	37.801930	-86.489297	604.83	4.25	609.08
11	37.801926	-86.488693	597.08	4.25	601.33
12	37.802674	-86.488653	588.23	4.25	592.48

Name: 109
Footprint area: 5.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.799090	-86.490909	592.15	4.25	596.40
2	37.799126	-86.488369	594.33	4.25	598.58
3	37.798318	-86.488337	591.38	4.25	595.63
4	37.798284	-86.490904	605.17	4.25	609.42

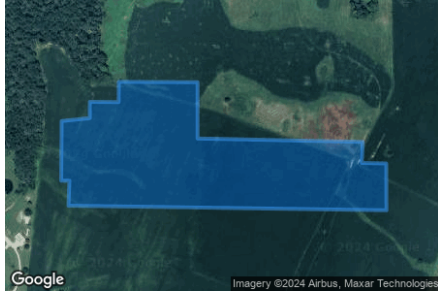


Name: 110
Footprint area: 6.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 5.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.797731	-86.490364	603.70	4.25	607.95
2	37.797748	-86.489959	600.82	4.25	605.07
3	37.797570	-86.489951	599.07	4.25	603.32
4	37.797574	-86.489195	586.47	4.25	590.72
5	37.796803	-86.489168	584.45	4.25	588.70
6	37.796820	-86.488905	579.72	4.25	583.97
7	37.796053	-86.488887	581.26	4.25	585.51
8	37.795949	-86.489965	585.10	4.25	589.35
9	37.795796	-86.489959	584.77	4.25	589.02
10	37.795739	-86.490705	590.79	4.25	595.04
11	37.796621	-86.490681	602.99	4.25	607.24
12	37.796621	-86.490340	598.85	4.25	603.10



Name: 111
Footprint area: 25.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.802371	-86.500189	613.28	4.25	617.53
2	37.801328	-86.500200	612.79	4.25	617.04
3	37.801328	-86.500018	614.39	4.25	618.64
4	37.800891	-86.500039	615.02	4.25	619.27
5	37.800811	-86.492996	601.37	4.25	605.62
6	37.801629	-86.493001	602.76	4.25	607.01
7	37.801637	-86.493543	604.14	4.25	608.39
8	37.802006	-86.493521	609.13	4.25	613.38
9	37.802065	-86.497180	626.78	4.25	631.03
10	37.803049	-86.497180	623.34	4.25	627.59
11	37.803057	-86.498923	608.21	4.25	612.46
12	37.802701	-86.498929	615.57	4.25	619.82
13	37.802705	-86.499567	610.27	4.25	614.52
14	37.802421	-86.499567	616.03	4.25	620.28

Name: 112
Footprint area: 1.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800647	-86.491844	603.74	4.25	607.99
2	37.801283	-86.491833	611.55	4.25	615.80
3	37.801279	-86.492005	610.86	4.25	615.11
4	37.801389	-86.492010	611.82	4.25	616.07
5	37.801397	-86.492536	606.62	4.25	610.87
6	37.800461	-86.492531	598.83	4.25	603.08
7	37.800461	-86.492000	599.23	4.25	603.48
8	37.800656	-86.492000	603.24	4.25	607.49

Name: 113
Footprint area: 17.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800870	-86.500039	615.18	4.25	619.43
2	37.798984	-86.500082	624.10	4.25	628.35
3	37.798975	-86.498489	633.39	4.25	637.64
4	37.798535	-86.498489	632.25	4.25	636.50
5	37.798483	-86.497484	614.52	4.25	618.77
6	37.797846	-86.497454	602.97	4.25	607.22
7	37.797846	-86.497102	605.98	4.25	610.23
8	37.798504	-86.497128	613.16	4.25	617.41
9	37.798513	-86.496692	608.03	4.25	612.28
10	37.800840	-86.496627	612.95	4.25	617.20

Name: 114
Footprint area: 22.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800832	-86.496606	612.86	4.25	617.11
2	37.800807	-86.492926	601.57	4.25	605.82
3	37.799387	-86.492904	595.02	4.25	599.27
4	37.797839	-86.494439	588.31	4.25	592.56
5	37.797835	-86.494771	589.14	4.25	593.39
6	37.797360	-86.494766	591.81	4.25	596.06
7	37.797360	-86.495195	596.31	4.25	600.56
8	37.798454	-86.495206	594.79	4.25	599.04
9	37.798492	-86.496681	607.87	4.25	612.12

Name: 115
Footprint area: 25.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.798861	-86.503172	619.02	4.25	623.27
2	37.798869	-86.502287	618.62	4.25	622.87
3	37.798509	-86.502271	615.90	4.25	620.15
4	37.798505	-86.501654	620.46	4.25	624.71
5	37.797632	-86.501627	604.94	4.25	609.19
6	37.797627	-86.501064	605.81	4.25	610.06
7	37.796953	-86.501042	600.67	4.25	604.92
8	37.796941	-86.501858	615.72	4.25	619.97
9	37.796585	-86.501842	613.68	4.25	617.93
10	37.796572	-86.502501	619.19	4.25	623.44
11	37.796928	-86.502496	623.05	4.25	627.30
12	37.796915	-86.503204	627.29	4.25	631.54
13	37.796555	-86.503199	625.75	4.25	630.00
14	37.796538	-86.505286	625.97	4.25	630.22
15	37.797589	-86.505248	625.13	4.25	629.38
16	37.797610	-86.506578	622.14	4.25	626.39
17	37.798255	-86.506541	620.38	4.25	624.63
18	37.798234	-86.507410	619.13	4.25	623.38
19	37.799120	-86.507351	612.53	4.25	616.78
20	37.799149	-86.506707	619.88	4.25	624.13
21	37.799276	-86.506707	617.04	4.25	621.29
22	37.799314	-86.505806	615.66	4.25	619.91
23	37.799001	-86.505806	621.60	4.25	625.85
24	37.799022	-86.505243	625.70	4.25	629.95
25	37.798636	-86.505264	625.35	4.25	629.60
26	37.798645	-86.503167	620.11	4.25	624.36

Name: 116
Footprint area: 11.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.795817	-86.506471	622.91	4.25	627.16
2	37.795834	-86.506079	625.17	4.25	629.42
3	37.795457	-86.506085	625.45	4.25	629.70
4	37.795461	-86.505618	626.34	4.25	630.59
5	37.796525	-86.505586	626.40	4.25	630.65
6	37.796529	-86.505859	627.04	4.25	631.29
7	37.797509	-86.505822	619.57	4.25	623.82
8	37.797530	-86.506964	623.78	4.25	628.03
9	37.797229	-86.506975	624.23	4.25	628.48
10	37.797229	-86.507597	617.69	4.25	621.94
11	37.796928	-86.507608	615.45	4.25	619.70
12	37.796941	-86.507876	611.83	4.25	616.08
13	37.796568	-86.507903	618.04	4.25	622.29
14	37.796572	-86.508407	618.45	4.25	622.70
15	37.796885	-86.508391	613.39	4.25	617.64
16	37.796873	-86.509024	611.51	4.25	615.76
17	37.796000	-86.509067	618.28	4.25	622.53
18	37.795783	-86.508359	623.18	4.25	627.43
19	37.795788	-86.507978	625.08	4.25	629.33
20	37.794986	-86.508016	624.48	4.25	628.73
21	37.794974	-86.507002	626.92	4.25	631.17
22	37.795796	-86.506959	623.09	4.25	627.34
23	37.795796	-86.507517	626.98	4.25	631.23
24	37.796474	-86.507469	618.86	4.25	623.11
25	37.796453	-86.506390	624.55	4.25	628.80

Name: 117
Footprint area: 4.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.793274	-86.504996	617.74	4.25	621.99
2	37.793291	-86.503247	616.14	4.25	620.39
3	37.792778	-86.503241	616.51	4.25	620.76
4	37.792218	-86.503215	614.25	4.25	618.50
5	37.792210	-86.505012	609.05	4.25	613.30
6	37.792697	-86.505012	613.24	4.25	617.49



Name: 118
Footprint area: 17.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.792909	-86.506213	618.25	4.25	622.50
2	37.792935	-86.509099	623.48	4.25	627.73
3	37.792808	-86.509099	623.80	4.25	628.05
4	37.792803	-86.510086	623.04	4.25	627.29
5	37.792066	-86.510103	624.95	4.25	629.20
6	37.792066	-86.509808	624.06	4.25	628.31
7	37.790514	-86.509818	621.22	4.25	625.47
8	37.790523	-86.508697	619.84	4.25	624.09
9	37.790955	-86.508702	620.18	4.25	624.43
10	37.790959	-86.508348	610.18	4.25	614.43
11	37.791731	-86.508332	619.40	4.25	623.65
12	37.791743	-86.506954	616.84	4.25	621.09
13	37.790921	-86.506932	603.64	4.25	607.89
14	37.790921	-86.505580	604.61	4.25	608.86
15	37.791743	-86.505623	604.20	4.25	608.45
16	37.791735	-86.506187	616.61	4.25	620.86



Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.766027	-86.439707	726.55	500.00	1226.55
OP 2	37.761995	-86.452507	691.78	500.00	1191.78

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	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

101 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

102 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

103 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

104 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

105 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

106 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

107 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

108 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

109 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

110 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

111 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

112 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

113 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

114 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

115 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

116 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

117 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

118 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 1 5_83ft panels 5ft vehicles

Created Oct 03, 2024
Updated Oct 11, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 130509.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

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

PV Name	Tilt deg	Orientation deg	"Green" Glare min	"Yellow" Glare min	Energy Produced 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	357	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	-

Component Data

PV Array(s)

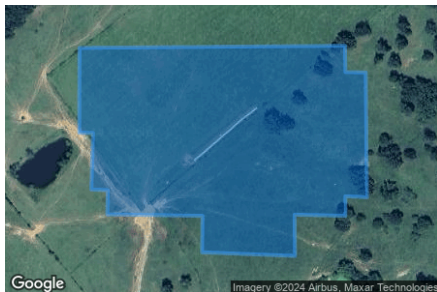
Total PV footprint area: 217.4 acres

Name: 101
Footprint area: 13.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.816564	-86.508260	615.99	5.83	621.82
2	37.816564	-86.507943	618.83	5.83	624.66
3	37.816200	-86.507932	618.59	5.83	624.42
4	37.816195	-86.507745	618.56	5.83	624.39
5	37.815522	-86.507745	619.82	5.83	625.65
6	37.815526	-86.507428	614.02	5.83	619.85
7	37.815082	-86.507412	620.71	5.83	626.54
8	37.815088	-86.507256	619.25	5.83	625.08
9	37.814364	-86.507224	620.84	5.83	626.67
10	37.814368	-86.507112	621.01	5.83	626.84
11	37.813308	-86.507133	605.30	5.83	611.13
12	37.813300	-86.510309	596.74	5.83	602.57
13	37.813997	-86.510279	594.62	5.83	600.45
14	37.813999	-86.510049	599.80	5.83	605.63
15	37.814395	-86.510033	611.91	5.83	617.74
16	37.814401	-86.509249	612.90	5.83	618.73
17	37.814767	-86.509243	610.61	5.83	616.44
18	37.814750	-86.508624	615.92	5.83	621.75
19	37.815096	-86.508616	615.00	5.83	620.83
20	37.815093	-86.508506	617.09	5.83	622.92
21	37.815507	-86.508490	615.38	5.83	621.21
22	37.815505	-86.508318	617.86	5.83	623.69

Name: 102
Footprint area: 11.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.813176	-86.510120	602.69	5.83	608.52
2	37.813195	-86.507181	601.88	5.83	607.71
3	37.812964	-86.507175	591.97	5.83	597.80
4	37.812960	-86.506950	589.72	5.83	595.55
5	37.811866	-86.506937	581.94	5.83	587.77
6	37.811875	-86.507175	587.67	5.83	593.50
7	37.811703	-86.507175	587.49	5.83	593.32
8	37.811714	-86.507739	600.79	5.83	606.62
9	37.811351	-86.507733	598.84	5.83	604.67
10	37.811383	-86.508763	618.00	5.83	623.83
11	37.811703	-86.508758	614.76	5.83	620.59
12	37.811716	-86.509812	614.48	5.83	620.31
13	37.811928	-86.509807	613.30	5.83	619.13
14	37.811934	-86.509989	609.80	5.83	615.63
15	37.812430	-86.509970	605.33	5.83	611.16
16	37.812432	-86.510123	604.71	5.83	610.54

Name: 103
Footprint area: 1.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



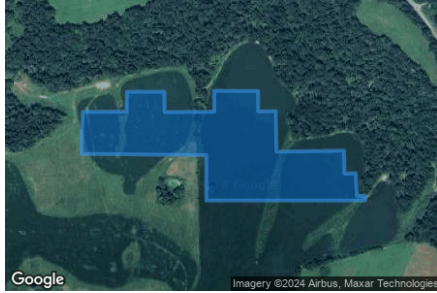
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.810578	-86.506491	601.75	5.83	607.58
2	37.811338	-86.506483	577.13	5.83	582.96
3	37.811340	-86.506191	578.54	5.83	584.37
4	37.811684	-86.506191	568.99	5.83	574.82
5	37.811684	-86.505907	568.44	5.83	574.27
6	37.811355	-86.505891	577.86	5.83	583.69
7	37.811355	-86.505708	576.48	5.83	582.31
8	37.810582	-86.505689	576.67	5.83	582.50

Name: 104
Footprint area: 2.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



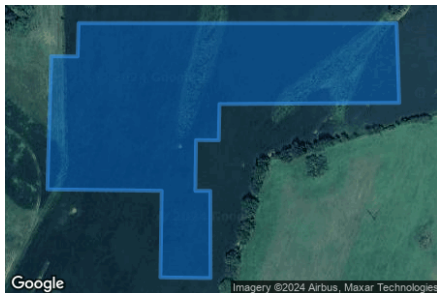
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.812892	-86.512253	571.34	5.83	577.17
2	37.812904	-86.512749	589.26	5.83	595.09
3	37.812129	-86.512773	588.23	5.83	594.06
4	37.812129	-86.512202	587.64	5.83	593.47
5	37.811643	-86.512196	598.88	5.83	604.71
6	37.811637	-86.511671	603.52	5.83	609.35
7	37.811321	-86.511679	611.06	5.83	616.89
8	37.811326	-86.511301	608.82	5.83	614.65
9	37.812054	-86.511276	595.45	5.83	601.28
10	37.812063	-86.511722	594.72	5.83	600.55
11	37.812694	-86.511738	578.64	5.83	584.47
12	37.812709	-86.512250	572.33	5.83	578.16

Name: 105
Footprint area: 15.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.805786	-86.495431	566.35	5.83	572.18
2	37.805790	-86.494460	558.62	5.83	564.45
3	37.806138	-86.494454	552.07	5.83	557.90
4	37.806138	-86.493623	558.05	5.83	563.88
5	37.805782	-86.493617	562.24	5.83	568.07
6	37.805790	-86.492518	560.95	5.83	566.78
7	37.806155	-86.492523	555.60	5.83	561.43
8	37.806151	-86.491547	566.63	5.83	572.46
9	37.805795	-86.491547	569.68	5.83	575.51
10	37.805799	-86.491155	566.56	5.83	572.39
11	37.805091	-86.491139	565.61	5.83	571.44
12	37.805108	-86.489645	563.83	5.83	569.66
13	37.804707	-86.489632	569.19	5.83	575.02
14	37.804712	-86.489385	561.34	5.83	567.17
15	37.804322	-86.489361	565.02	5.83	570.85
16	37.804320	-86.489176	562.41	5.83	568.24
17	37.804235	-86.489173	564.04	5.83	569.87
18	37.804237	-86.492695	592.19	5.83	598.02
19	37.805030	-86.492695	566.86	5.83	572.69
20	37.805051	-86.495463	590.04	5.83	595.87

Name: 106
Footprint area: 10.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.804230	-86.489174	564.04	5.83	569.87
2	37.803530	-86.489145	581.06	5.83	586.89
3	37.803520	-86.491135	599.95	5.83	605.78
4	37.803202	-86.491143	607.03	5.83	612.86
5	37.803204	-86.491395	605.53	5.83	611.36
6	37.802759	-86.491403	619.71	5.83	625.54
7	37.802759	-86.491237	618.34	5.83	624.17
8	37.801994	-86.491234	618.99	5.83	624.82
9	37.802000	-86.491789	613.94	5.83	619.77
10	37.802759	-86.491776	620.24	5.83	626.07
11	37.802772	-86.493042	631.23	5.83	637.06
12	37.803939	-86.492999	605.00	5.83	610.83
13	37.803937	-86.492707	602.95	5.83	608.78
14	37.804230	-86.492696	592.49	5.83	598.32

Name: 107
Footprint area: 20.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.809536	-86.504108	594.17	5.83	600.00
2	37.809947	-86.504114	593.40	5.83	599.23
3	37.809951	-86.503690	604.24	5.83	610.07
4	37.810180	-86.503690	602.47	5.83	608.30
5	37.810180	-86.503491	600.45	5.83	606.28
6	37.809955	-86.503481	604.38	5.83	610.21
7	37.809947	-86.502826	589.59	5.83	595.42
8	37.809205	-86.502805	602.77	5.83	608.60
9	37.809205	-86.502150	606.74	5.83	612.57
10	37.810438	-86.502177	584.48	5.83	590.31
11	37.810460	-86.501050	613.78	5.83	619.61
12	37.810120	-86.501029	612.38	5.83	618.21
13	37.810129	-86.500820	612.06	5.83	617.89
14	37.809400	-86.500788	615.46	5.83	621.29
15	37.809400	-86.500584	615.28	5.83	621.11
16	37.808196	-86.500562	612.34	5.83	618.17
17	37.808209	-86.500106	596.42	5.83	602.25
18	37.807268	-86.500047	620.41	5.83	626.24
19	37.807277	-86.500348	625.16	5.83	630.99
20	37.807094	-86.500348	620.75	5.83	626.58
21	37.807090	-86.501286	624.38	5.83	630.21
22	37.806738	-86.501286	607.00	5.83	612.83
23	37.806721	-86.502794	604.54	5.83	610.37
24	37.808277	-86.502794	626.27	5.83	632.10
25	37.808281	-86.503003	627.09	5.83	632.92
26	37.809057	-86.502982	610.02	5.83	615.85
27	37.809048	-86.503513	612.19	5.83	618.02
28	37.809205	-86.503491	609.80	5.83	615.63
29	37.809197	-86.504124	602.77	5.83	608.60

Name: 108
Footprint area: 5.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.802693	-86.487814	586.06	5.83	591.89
2	37.801940	-86.487784	581.65	5.83	587.48
3	37.801940	-86.487543	579.56	5.83	585.39
4	37.801197	-86.487537	588.17	5.83	594.00
5	37.801194	-86.487972	591.82	5.83	597.65
6	37.800824	-86.487969	586.08	5.83	591.91
7	37.800830	-86.489031	593.92	5.83	599.75
8	37.801201	-86.489026	598.37	5.83	604.20
9	37.801205	-86.489321	603.28	5.83	609.11
10	37.801930	-86.489297	604.83	5.83	610.66
11	37.801926	-86.488693	597.08	5.83	602.91
12	37.802674	-86.488653	588.23	5.83	594.06

Name: 109
Footprint area: 5.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.799090	-86.490909	592.15	5.83	597.98
2	37.799126	-86.488369	594.33	5.83	600.16
3	37.798318	-86.488337	591.38	5.83	597.21
4	37.798284	-86.490904	605.17	5.83	611.00

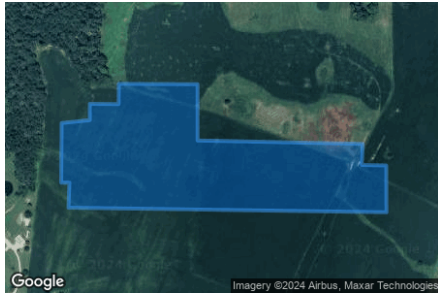


Name: 110
Footprint area: 6.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.797731	-86.490364	603.70	5.83	609.53
2	37.797748	-86.489959	600.82	5.83	606.65
3	37.797570	-86.489951	599.07	5.83	604.90
4	37.797574	-86.489195	586.47	5.83	592.30
5	37.796803	-86.489168	584.45	5.83	590.28
6	37.796820	-86.488905	579.72	5.83	585.55
7	37.796053	-86.488887	581.26	5.83	587.09
8	37.795949	-86.489965	585.10	5.83	590.93
9	37.795796	-86.489959	584.77	5.83	590.60
10	37.795739	-86.490705	590.79	5.83	596.62
11	37.796621	-86.490681	602.99	5.83	608.82
12	37.796621	-86.490340	598.85	5.83	604.68



Name: 111
Footprint area: 25.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.802371	-86.500189	613.28	5.83	619.11
2	37.801328	-86.500200	612.79	5.83	618.62
3	37.801328	-86.500018	614.39	5.83	620.22
4	37.800891	-86.500039	615.02	5.83	620.85
5	37.800811	-86.492996	601.37	5.83	607.20
6	37.801629	-86.493001	602.76	5.83	608.59
7	37.801637	-86.493543	604.14	5.83	609.97
8	37.802006	-86.493521	609.13	5.83	614.96
9	37.802065	-86.497180	626.78	5.83	632.61
10	37.803049	-86.497180	623.34	5.83	629.17
11	37.803057	-86.498923	608.21	5.83	614.04
12	37.802701	-86.498929	615.57	5.83	621.40
13	37.802705	-86.499567	610.27	5.83	616.10
14	37.802421	-86.499567	616.03	5.83	621.86

Name: 112
Footprint area: 1.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800647	-86.491844	603.74	5.83	609.57
2	37.801283	-86.491833	611.55	5.83	617.38
3	37.801279	-86.492005	610.86	5.83	616.69
4	37.801389	-86.492010	611.82	5.83	617.65
5	37.801397	-86.492536	606.62	5.83	612.45
6	37.800461	-86.492531	598.83	5.83	604.66
7	37.800461	-86.492000	599.23	5.83	605.06
8	37.800656	-86.492000	603.24	5.83	609.07

Name: 113
Footprint area: 17.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800870	-86.500039	615.18	5.83	621.01
2	37.798984	-86.500082	624.10	5.83	629.93
3	37.798975	-86.498489	633.39	5.83	639.22
4	37.798535	-86.498489	632.25	5.83	638.08
5	37.798483	-86.497484	614.52	5.83	620.35
6	37.797846	-86.497454	602.97	5.83	608.80
7	37.797846	-86.497102	605.98	5.83	611.81
8	37.798504	-86.497128	613.16	5.83	618.99
9	37.798513	-86.496692	608.03	5.83	613.86
10	37.800840	-86.496627	612.95	5.83	618.78

Name: 114
Footprint area: 22.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800832	-86.496606	612.86	5.83	618.69
2	37.800807	-86.492926	601.57	5.83	607.40
3	37.799387	-86.492904	595.02	5.83	600.85
4	37.797839	-86.494439	588.31	5.83	594.14
5	37.797835	-86.494771	589.14	5.83	594.97
6	37.797360	-86.494766	591.81	5.83	597.64
7	37.797360	-86.495195	596.31	5.83	602.14
8	37.798454	-86.495206	594.79	5.83	600.62
9	37.798492	-86.496681	607.87	5.83	613.70

Name: 115
Footprint area: 25.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.798861	-86.503172	619.02	5.83	624.85
2	37.798869	-86.502287	618.62	5.83	624.45
3	37.798509	-86.502271	615.90	5.83	621.73
4	37.798505	-86.501654	620.46	5.83	626.29
5	37.797632	-86.501627	604.94	5.83	610.77
6	37.797627	-86.501064	605.81	5.83	611.64
7	37.796953	-86.501042	600.67	5.83	606.50
8	37.796941	-86.501858	615.72	5.83	621.55
9	37.796585	-86.501842	613.68	5.83	619.51
10	37.796572	-86.502501	619.19	5.83	625.02
11	37.796928	-86.502496	623.05	5.83	628.88
12	37.796915	-86.503204	627.29	5.83	633.12
13	37.796555	-86.503199	625.75	5.83	631.58
14	37.796538	-86.505286	625.97	5.83	631.80
15	37.797589	-86.505248	625.13	5.83	630.96
16	37.797610	-86.506578	622.14	5.83	627.97
17	37.798255	-86.506541	620.38	5.83	626.21
18	37.798234	-86.507410	619.13	5.83	624.96
19	37.799120	-86.507351	612.53	5.83	618.36
20	37.799149	-86.506707	619.88	5.83	625.71
21	37.799276	-86.506707	617.04	5.83	622.87
22	37.799314	-86.505806	615.66	5.83	621.49
23	37.799001	-86.505806	621.60	5.83	627.43
24	37.799022	-86.505243	625.70	5.83	631.53
25	37.798636	-86.505264	625.35	5.83	631.18
26	37.798645	-86.503167	620.11	5.83	625.94

Name: 116
Footprint area: 11.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.795817	-86.506471	622.91	5.83	628.74
2	37.795834	-86.506079	625.17	5.83	631.00
3	37.795457	-86.506085	625.45	5.83	631.28
4	37.795461	-86.505618	626.34	5.83	632.17
5	37.796525	-86.505586	626.40	5.83	632.23
6	37.796529	-86.505859	627.04	5.83	632.87
7	37.797509	-86.505822	619.57	5.83	625.40
8	37.797530	-86.506964	623.78	5.83	629.61
9	37.797229	-86.506975	624.23	5.83	630.06
10	37.797229	-86.507597	617.69	5.83	623.52
11	37.796928	-86.507608	615.45	5.83	621.28
12	37.796941	-86.507876	611.83	5.83	617.66
13	37.796568	-86.507903	618.04	5.83	623.87
14	37.796572	-86.508407	618.45	5.83	624.28
15	37.796885	-86.508391	613.39	5.83	619.22
16	37.796873	-86.509024	611.51	5.83	617.34
17	37.796000	-86.509067	618.28	5.83	624.11
18	37.795783	-86.508359	623.18	5.83	629.01
19	37.795788	-86.507978	625.08	5.83	630.91
20	37.794986	-86.508016	624.48	5.83	630.31
21	37.794974	-86.507002	626.92	5.83	632.75
22	37.795796	-86.506959	623.09	5.83	628.92
23	37.795796	-86.507517	626.98	5.83	632.81
24	37.796474	-86.507469	618.86	5.83	624.69
25	37.796453	-86.506390	624.55	5.83	630.38

Name: 117
Footprint area: 4.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.793274	-86.504996	617.74	5.83	623.57
2	37.793291	-86.503247	616.14	5.83	621.97
3	37.792778	-86.503241	616.51	5.83	622.34
4	37.792218	-86.503215	614.25	5.83	620.08
5	37.792210	-86.505012	609.05	5.83	614.88
6	37.792697	-86.505012	613.24	5.83	619.07



Name: 118
Footprint area: 17.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.792909	-86.506213	618.25	5.83	624.08
2	37.792935	-86.509099	623.48	5.83	629.31
3	37.792808	-86.509099	623.80	5.83	629.63
4	37.792803	-86.510086	623.04	5.83	628.87
5	37.792066	-86.510103	624.95	5.83	630.78
6	37.792066	-86.509808	624.06	5.83	629.89
7	37.790514	-86.509818	621.22	5.83	627.05
8	37.790523	-86.508697	619.84	5.83	625.67
9	37.790955	-86.508702	620.18	5.83	626.01
10	37.790959	-86.508348	610.18	5.83	616.01
11	37.791731	-86.508332	619.40	5.83	625.23
12	37.791743	-86.506954	616.84	5.83	622.67
13	37.790921	-86.506932	603.64	5.83	609.47
14	37.790921	-86.505580	604.61	5.83	610.44
15	37.791743	-86.505623	604.20	5.83	610.03
16	37.791735	-86.506187	616.61	5.83	622.44



2-Mile Flight Path Receptor(s)

Name: Breckinridge County Airport Runway 10
Description:
Threshold height : 50 ft
Direction: 98.7 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	37.785423	-86.448080	710.62	50.00	760.62
2-mile point	37.789817	-86.484281	648.03	666.02	1314.04

Name: Breckinridge County Airport Runway 28
Description:
Threshold height : 50 ft
Direction: 275.1 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	37.784151	-86.434486	722.18	50.00	772.18
2-mile point	37.781596	-86.398004	742.72	582.88	1325.61

Name: Rough River State Park Airport Runway 2
Description:
Threshold height : 50 ft
Direction: 18.9 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	37.606011	-86.508874	563.89	50.00	613.89
2-mile point	37.578654	-86.520697	493.37	673.95	1167.32

Name: Rough River State Park Airport Runway 20

Description:

Threshold height : 50 ft

Direction: 198.4 deg

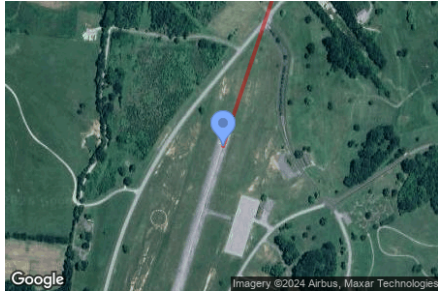
Glide slope: 3.0 deg

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	37.613983	-86.505752	577.15	50.00	627.15
2-mile point	37.641413	-86.494199	566.11	614.47	1180.58



Route Receptor(s)

Name: County Road 1730
Route type: Two-way
View angle: 50.0 deg



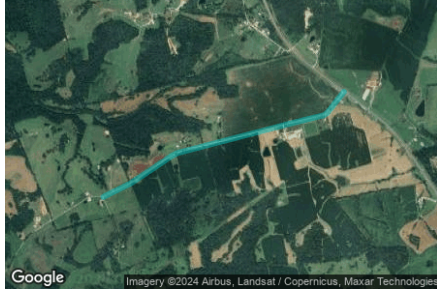
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.800378	-86.503440	632.29	5.00	637.29
2	37.800302	-86.503697	634.76	5.00	639.76
3	37.800319	-86.503966	637.46	5.00	642.46
4	37.801116	-86.505350	648.62	5.00	653.62
5	37.802082	-86.506927	639.74	5.00	644.74
6	37.802633	-86.507345	628.11	5.00	633.11
7	37.802989	-86.507469	622.96	5.00	627.96
8	37.805439	-86.507962	633.76	5.00	638.76
9	37.805846	-86.507801	637.25	5.00	642.25
10	37.806092	-86.507420	638.11	5.00	643.11
11	37.806524	-86.506192	628.08	5.00	633.08
12	37.806939	-86.504963	626.70	5.00	631.70

Name: Kentucky Highway 259
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	37.819238	-86.498843	631.69	5.00	636.69
2	37.816907	-86.497502	588.19	5.00	593.19
3	37.814195	-86.495892	549.02	5.00	554.02
4	37.812551	-86.494884	523.61	5.00	528.61
5	37.811245	-86.493532	490.39	5.00	495.39
6	37.809694	-86.491751	476.71	5.00	481.71
7	37.809050	-86.490850	475.36	5.00	480.36
8	37.808601	-86.489906	478.37	5.00	483.37
9	37.807677	-86.488092	521.93	5.00	526.93
10	37.807219	-86.487674	533.77	5.00	538.77
11	37.806465	-86.487180	554.45	5.00	559.45
12	37.805592	-86.486730	566.47	5.00	571.47
13	37.805024	-86.486301	571.07	5.00	576.07
14	37.804473	-86.485700	578.81	5.00	583.81
15	37.803973	-86.484981	584.01	5.00	589.01
16	37.803176	-86.483897	595.05	5.00	600.05
17	37.802557	-86.483275	597.98	5.00	602.98
18	37.801828	-86.482739	602.59	5.00	607.59
19	37.801311	-86.482417	605.11	5.00	610.11
20	37.799259	-86.481516	620.48	5.00	625.48
21	37.798106	-86.480636	620.82	5.00	625.82
22	37.797360	-86.479874	633.69	5.00	638.69
23	37.796555	-86.478790	658.36	5.00	663.36
24	37.795478	-86.476784	643.73	5.00	648.73
25	37.794410	-86.474617	657.89	5.00	662.89
26	37.793248	-86.472267	678.40	5.00	683.40

Name: Skillman Monarch Lane
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	37.790094	-86.520080	601.46	5.00	606.46
2	37.791052	-86.517656	610.74	5.00	615.74
3	37.791917	-86.515993	612.01	5.00	617.01
4	37.792977	-86.514019	612.15	5.00	617.15
5	37.793189	-86.513471	615.33	5.00	620.33
6	37.794020	-86.509416	617.83	5.00	622.83
7	37.795300	-86.503258	629.13	5.00	634.13
8	37.795826	-86.500565	613.74	5.00	618.74
9	37.795970	-86.500275	607.75	5.00	612.75
10	37.797470	-86.498773	606.69	5.00	611.69

Name: US Highway 60
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	37.814827	-86.518015	596.43	5.00	601.43
2	37.813220	-86.515703	600.25	5.00	605.25
3	37.811644	-86.513439	615.45	5.00	620.45
4	37.809927	-86.510907	634.89	5.00	639.89
5	37.808338	-86.508654	645.89	5.00	650.89
6	37.807868	-86.508048	648.28	5.00	653.28
7	37.807202	-86.507589	641.99	5.00	646.99
8	37.807202	-86.507589	641.99	5.00	646.99
9	37.807202	-86.507589	641.99	5.00	646.99
10	37.807202	-86.507589	641.99	5.00	646.99
11	37.807202	-86.507589	641.99	5.00	646.99
12	37.806554	-86.507227	636.24	5.00	641.24
13	37.802349	-86.504958	630.65	5.00	635.65
14	37.801285	-86.504234	632.32	5.00	637.32
15	37.800315	-86.503252	629.19	5.00	634.19
16	37.799675	-86.502474	627.18	5.00	632.18
17	37.797729	-86.499191	608.09	5.00	613.09
18	37.796114	-86.496488	596.64	5.00	601.64
19	37.795092	-86.494862	590.94	5.00	595.94
20	37.794359	-86.493972	590.36	5.00	595.36
21	37.792735	-86.492529	585.85	5.00	590.85
22	37.789806	-86.489965	601.62	5.00	606.62

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.797207	-86.480528	644.38	16.00	660.38
OP 2	37.798364	-86.481483	632.18	16.00	648.18
OP 3	37.799013	-86.482089	625.78	16.00	641.78
OP 4	37.801225	-86.483087	596.09	16.00	612.09
OP 5	37.801323	-86.481987	608.37	16.00	624.37
OP 6	37.802082	-86.482406	600.32	16.00	616.32
OP 7	37.802408	-86.483623	604.65	16.00	620.65
OP 8	37.814135	-86.514002	602.43	16.00	618.43
OP 9	37.810359	-86.512699	630.45	16.00	646.45
OP 10	37.807795	-86.504754	630.53	16.00	646.53
OP 11	37.802425	-86.506766	634.51	16.00	650.51
OP 12	37.801908	-86.507028	643.26	16.00	659.26
OP 13	37.800780	-86.505226	647.96	16.00	663.96
OP 14	37.800327	-86.504470	642.42	16.00	658.42
OP 15	37.800581	-86.501820	622.37	16.00	638.37
OP 16	37.796770	-86.498628	597.07	16.00	613.07
OP 17	37.797237	-86.492231	603.82	16.00	619.82
OP 18	37.789700	-86.491877	600.70	16.00	616.70
OP 19	37.810160	-86.509850	663.00	16.00	679.00
OP 20	37.809579	-86.518994	591.54	16.00	607.54
OP 21	37.810969	-86.514043	603.84	16.00	619.84
OP 22	37.816158	-86.518919	599.15	16.00	615.15
OP 23	37.815705	-86.520276	594.02	16.00	610.02
OP 24	37.816550	-86.519415	601.20	16.00	617.20
OP 25	37.816739	-86.497161	576.72	16.00	592.72
OP 26	37.800124	-86.504239	640.80	16.00	656.80
OP 27	37.796640	-86.499068	593.49	16.00	609.49
OP 28	37.795419	-86.500581	620.43	16.00	636.43
OP 29	37.794910	-86.503907	631.13	16.00	647.13
OP 30	37.793104	-86.493822	600.78	16.00	616.78

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	357	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	-	-

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
105 (green)	19	0	0	0	0	0	0	0	0	0	0	280
105 (yellow)	0	0	0	0	0	0	0	0	0	0	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: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

102 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

103 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

104 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

105 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0

FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	58	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	299	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

105: Breckinridge County Airport Runway 10

No glare found

105: Breckinridge County Airport Runway 28

No glare found

105: Rough River State Park Airport Runway 2

No glare found

105: Rough River State Park Airport Runway 20

No glare found

105: OP 1

No glare found

105: OP 2

No glare found

105: OP 3

No glare found

105: OP 4

No glare found

105: OP 5

No glare found

105: OP 6

No glare found

105: OP 7

No glare found

105: OP 8

No glare found

105: OP 9

No glare found

105: OP 10

No glare found

105: OP 11

No glare found

105: OP 12

No glare found

105: OP 13

No glare found

105: OP 14

No glare found

105: OP 15

No glare found

105: OP 16

No glare found

105: OP 17

No glare found

105: OP 18

No glare found

105: OP 19

No glare found

105: OP 20

No glare found

105: OP 21

No glare found

105: OP 22

No glare found

105: OP 23

No glare found

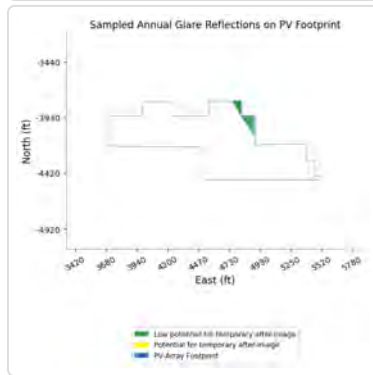
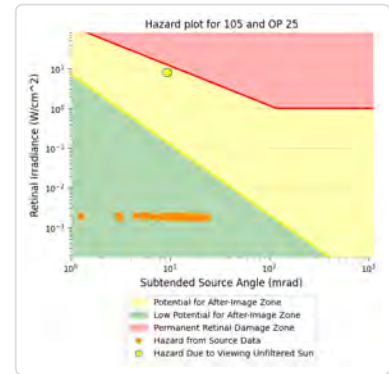
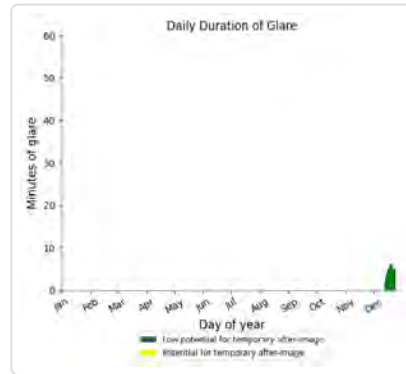
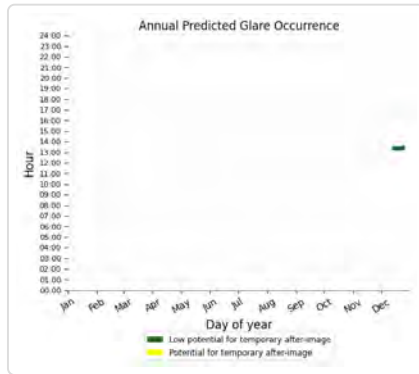
105: OP 24

No glare found

105: OP 25

PV array is expected to produce the following glare for this receptor:

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



105: OP 26

No glare found

105: OP 27

No glare found

105: OP 28

No glare found

105: OP 29

No glare found

105: OP 30

No glare found

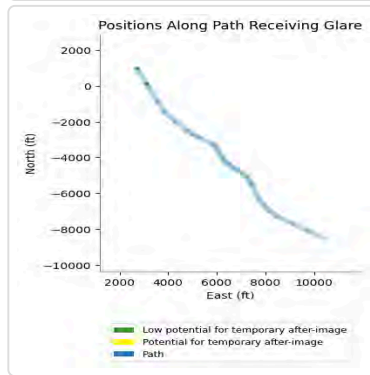
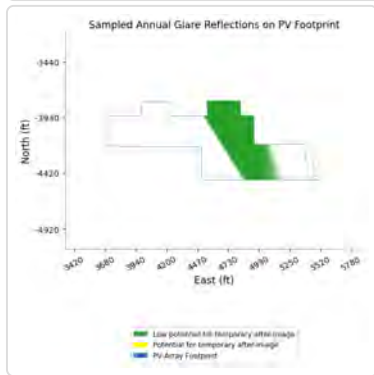
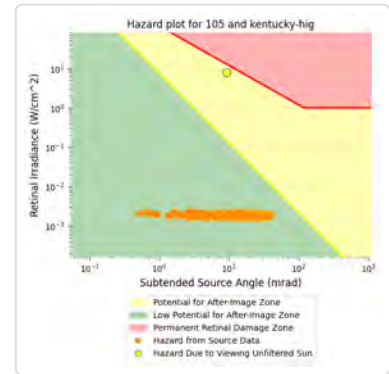
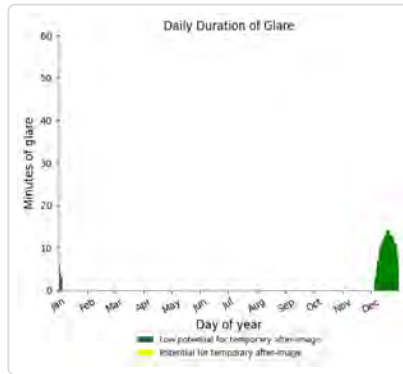
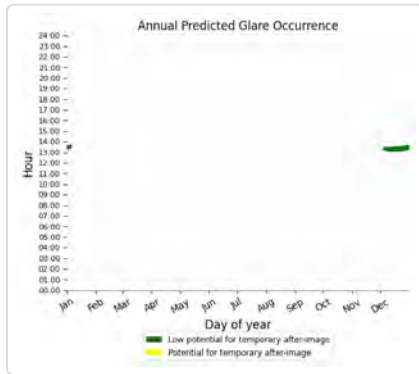
105: County Road 1730

No glare found

105: Kentucky Highway 259

PV array is expected to produce the following glare for this receptor:

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



105: Skillman Monarch Lane

No glare found

105: US Highway 60

No glare found

106 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

107 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

108 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

109 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

110 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

111 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

112 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

113 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

114 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

115 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

116 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

117 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

118 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 1 5_83ft panels 9ft vehicles

Created Oct 03, 2024
Updated Oct 11, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 130507.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

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
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	385	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	-

Component Data

PV Array(s)

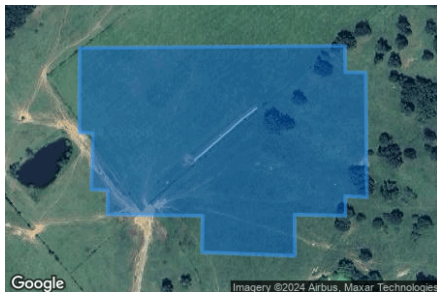
Total PV footprint area: 217.4 acres

Name: 101
Footprint area: 13.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.816564	-86.508260	615.99	5.83	621.82
2	37.816564	-86.507943	618.83	5.83	624.66
3	37.816200	-86.507932	618.59	5.83	624.42
4	37.816195	-86.507745	618.56	5.83	624.39
5	37.815522	-86.507745	619.82	5.83	625.65
6	37.815526	-86.507428	614.02	5.83	619.85
7	37.815082	-86.507412	620.71	5.83	626.54
8	37.815088	-86.507256	619.25	5.83	625.08
9	37.814364	-86.507224	620.84	5.83	626.67
10	37.814368	-86.507112	621.01	5.83	626.84
11	37.813308	-86.507133	605.30	5.83	611.13
12	37.813300	-86.510309	596.74	5.83	602.57
13	37.813997	-86.510279	594.62	5.83	600.45
14	37.813999	-86.510049	599.80	5.83	605.63
15	37.814395	-86.510033	611.91	5.83	617.74
16	37.814401	-86.509249	612.90	5.83	618.73
17	37.814767	-86.509243	610.61	5.83	616.44
18	37.814750	-86.508624	615.92	5.83	621.75
19	37.815096	-86.508616	615.00	5.83	620.83
20	37.815093	-86.508506	617.09	5.83	622.92
21	37.815507	-86.508490	615.38	5.83	621.21
22	37.815505	-86.508318	617.86	5.83	623.69

Name: 102
Footprint area: 11.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.813176	-86.510120	602.69	5.83	608.52
2	37.813195	-86.507181	601.88	5.83	607.71
3	37.812964	-86.507175	591.97	5.83	597.80
4	37.812960	-86.506950	589.72	5.83	595.55
5	37.811866	-86.506937	581.94	5.83	587.77
6	37.811875	-86.507175	587.67	5.83	593.50
7	37.811703	-86.507175	587.49	5.83	593.32
8	37.811714	-86.507739	600.79	5.83	606.62
9	37.811351	-86.507733	598.84	5.83	604.67
10	37.811383	-86.508763	618.00	5.83	623.83
11	37.811703	-86.508758	614.76	5.83	620.59
12	37.811716	-86.509812	614.48	5.83	620.31
13	37.811928	-86.509807	613.30	5.83	619.13
14	37.811934	-86.509989	609.80	5.83	615.63
15	37.812430	-86.509970	605.33	5.83	611.16
16	37.812432	-86.510123	604.71	5.83	610.54

Name: 103
Footprint area: 1.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



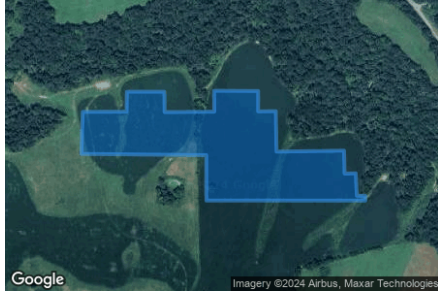
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.810578	-86.506491	601.75	5.83	607.58
2	37.811338	-86.506483	577.13	5.83	582.96
3	37.811340	-86.506191	578.54	5.83	584.37
4	37.811684	-86.506191	568.99	5.83	574.82
5	37.811684	-86.505907	568.44	5.83	574.27
6	37.811355	-86.505891	577.86	5.83	583.69
7	37.811355	-86.505708	576.48	5.83	582.31
8	37.810582	-86.505689	576.67	5.83	582.50

Name: 104
Footprint area: 2.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



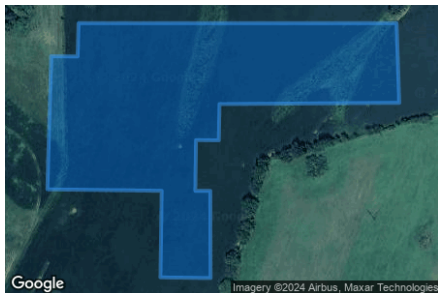
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.812892	-86.512253	571.34	5.83	577.17
2	37.812904	-86.512749	589.26	5.83	595.09
3	37.812129	-86.512773	588.23	5.83	594.06
4	37.812129	-86.512202	587.64	5.83	593.47
5	37.811643	-86.512196	598.88	5.83	604.71
6	37.811637	-86.511671	603.52	5.83	609.35
7	37.811321	-86.511679	611.06	5.83	616.89
8	37.811326	-86.511301	608.82	5.83	614.65
9	37.812054	-86.511276	595.45	5.83	601.28
10	37.812063	-86.511722	594.72	5.83	600.55
11	37.812694	-86.511738	578.64	5.83	584.47
12	37.812709	-86.512250	572.33	5.83	578.16

Name: 105
Footprint area: 15.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.805786	-86.495431	566.35	5.83	572.18
2	37.805790	-86.494460	558.62	5.83	564.45
3	37.806138	-86.494454	552.07	5.83	557.90
4	37.806138	-86.493623	558.05	5.83	563.88
5	37.805782	-86.493617	562.24	5.83	568.07
6	37.805790	-86.492518	560.95	5.83	566.78
7	37.806155	-86.492523	555.60	5.83	561.43
8	37.806151	-86.491547	566.63	5.83	572.46
9	37.805795	-86.491547	569.68	5.83	575.51
10	37.805799	-86.491155	566.56	5.83	572.39
11	37.805091	-86.491139	565.61	5.83	571.44
12	37.805108	-86.489645	563.83	5.83	569.66
13	37.804707	-86.489632	569.19	5.83	575.02
14	37.804712	-86.489385	561.34	5.83	567.17
15	37.804322	-86.489361	565.02	5.83	570.85
16	37.804320	-86.489176	562.41	5.83	568.24
17	37.804235	-86.489173	564.04	5.83	569.87
18	37.804237	-86.492695	592.19	5.83	598.02
19	37.805030	-86.492695	566.86	5.83	572.69
20	37.805051	-86.495463	590.04	5.83	595.87

Name: 106
Footprint area: 10.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.804230	-86.489174	564.04	5.83	569.87
2	37.803530	-86.489145	581.06	5.83	586.89
3	37.803520	-86.491135	599.95	5.83	605.78
4	37.803202	-86.491143	607.03	5.83	612.86
5	37.803204	-86.491395	605.53	5.83	611.36
6	37.802759	-86.491403	619.71	5.83	625.54
7	37.802759	-86.491237	618.34	5.83	624.17
8	37.801994	-86.491234	618.99	5.83	624.82
9	37.802000	-86.491789	613.94	5.83	619.77
10	37.802759	-86.491776	620.24	5.83	626.07
11	37.802772	-86.493042	631.23	5.83	637.06
12	37.803939	-86.492999	605.00	5.83	610.83
13	37.803937	-86.492707	602.95	5.83	608.78
14	37.804230	-86.492696	592.49	5.83	598.32

Name: 107
Footprint area: 20.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.809536	-86.504108	594.17	5.83	600.00
2	37.809947	-86.504114	593.40	5.83	599.23
3	37.809951	-86.503690	604.24	5.83	610.07
4	37.810180	-86.503690	602.47	5.83	608.30
5	37.810180	-86.503491	600.45	5.83	606.28
6	37.809955	-86.503481	604.38	5.83	610.21
7	37.809947	-86.502826	589.59	5.83	595.42
8	37.809205	-86.502805	602.77	5.83	608.60
9	37.809205	-86.502150	606.74	5.83	612.57
10	37.810438	-86.502177	584.48	5.83	590.31
11	37.810460	-86.501050	613.78	5.83	619.61
12	37.810120	-86.501029	612.38	5.83	618.21
13	37.810129	-86.500820	612.06	5.83	617.89
14	37.809400	-86.500788	615.46	5.83	621.29
15	37.809400	-86.500584	615.28	5.83	621.11
16	37.808196	-86.500562	612.34	5.83	618.17
17	37.808209	-86.500106	596.42	5.83	602.25
18	37.807268	-86.500047	620.41	5.83	626.24
19	37.807277	-86.500348	625.16	5.83	630.99
20	37.807094	-86.500348	620.75	5.83	626.58
21	37.807090	-86.501286	624.38	5.83	630.21
22	37.806738	-86.501286	607.00	5.83	612.83
23	37.806721	-86.502794	604.54	5.83	610.37
24	37.808277	-86.502794	626.27	5.83	632.10
25	37.808281	-86.503003	627.09	5.83	632.92
26	37.809057	-86.502982	610.02	5.83	615.85
27	37.809048	-86.503513	612.19	5.83	618.02
28	37.809205	-86.503491	609.80	5.83	615.63
29	37.809197	-86.504124	602.77	5.83	608.60

Name: 108
Footprint area: 5.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.802693	-86.487814	586.06	5.83	591.89
2	37.801940	-86.487784	581.65	5.83	587.48
3	37.801940	-86.487543	579.56	5.83	585.39
4	37.801197	-86.487537	588.17	5.83	594.00
5	37.801194	-86.487972	591.82	5.83	597.65
6	37.800824	-86.487969	586.08	5.83	591.91
7	37.800830	-86.489031	593.92	5.83	599.75
8	37.801201	-86.489026	598.37	5.83	604.20
9	37.801205	-86.489321	603.28	5.83	609.11
10	37.801930	-86.489297	604.83	5.83	610.66
11	37.801926	-86.488693	597.08	5.83	602.91
12	37.802674	-86.488653	588.23	5.83	594.06

Name: 109
Footprint area: 5.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.799090	-86.490909	592.15	5.83	597.98
2	37.799126	-86.488369	594.33	5.83	600.16
3	37.798318	-86.488337	591.38	5.83	597.21
4	37.798284	-86.490904	605.17	5.83	611.00

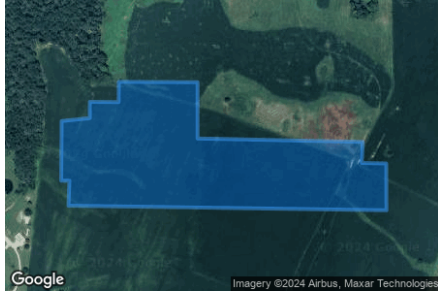


Name: 110
Footprint area: 6.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.797731	-86.490364	603.70	5.83	609.53
2	37.797748	-86.489959	600.82	5.83	606.65
3	37.797570	-86.489951	599.07	5.83	604.90
4	37.797574	-86.489195	586.47	5.83	592.30
5	37.796803	-86.489168	584.45	5.83	590.28
6	37.796820	-86.488905	579.72	5.83	585.55
7	37.796053	-86.488887	581.26	5.83	587.09
8	37.795949	-86.489965	585.10	5.83	590.93
9	37.795796	-86.489959	584.77	5.83	590.60
10	37.795739	-86.490705	590.79	5.83	596.62
11	37.796621	-86.490681	602.99	5.83	608.82
12	37.796621	-86.490340	598.85	5.83	604.68



Name: 111
Footprint area: 25.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.802371	-86.500189	613.28	5.83	619.11
2	37.801328	-86.500200	612.79	5.83	618.62
3	37.801328	-86.500018	614.39	5.83	620.22
4	37.800891	-86.500039	615.02	5.83	620.85
5	37.800811	-86.492996	601.37	5.83	607.20
6	37.801629	-86.493001	602.76	5.83	608.59
7	37.801637	-86.493543	604.14	5.83	609.97
8	37.802006	-86.493521	609.13	5.83	614.96
9	37.802065	-86.497180	626.78	5.83	632.61
10	37.803049	-86.497180	623.34	5.83	629.17
11	37.803057	-86.498923	608.21	5.83	614.04
12	37.802701	-86.498929	615.57	5.83	621.40
13	37.802705	-86.499567	610.27	5.83	616.10
14	37.802421	-86.499567	616.03	5.83	621.86

Name: 112
Footprint area: 1.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800647	-86.491844	603.74	5.83	609.57
2	37.801283	-86.491833	611.55	5.83	617.38
3	37.801279	-86.492005	610.86	5.83	616.69
4	37.801389	-86.492010	611.82	5.83	617.65
5	37.801397	-86.492536	606.62	5.83	612.45
6	37.800461	-86.492531	598.83	5.83	604.66
7	37.800461	-86.492000	599.23	5.83	605.06
8	37.800656	-86.492000	603.24	5.83	609.07

Name: 113
Footprint area: 17.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800870	-86.500039	615.18	5.83	621.01
2	37.798984	-86.500082	624.10	5.83	629.93
3	37.798975	-86.498489	633.39	5.83	639.22
4	37.798535	-86.498489	632.25	5.83	638.08
5	37.798483	-86.497484	614.52	5.83	620.35
6	37.797846	-86.497454	602.97	5.83	608.80
7	37.797846	-86.497102	605.98	5.83	611.81
8	37.798504	-86.497128	613.16	5.83	618.99
9	37.798513	-86.496692	608.03	5.83	613.86
10	37.800840	-86.496627	612.95	5.83	618.78

Name: 114
Footprint area: 22.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800832	-86.496606	612.86	5.83	618.69
2	37.800807	-86.492926	601.57	5.83	607.40
3	37.799387	-86.492904	595.02	5.83	600.85
4	37.797839	-86.494439	588.31	5.83	594.14
5	37.797835	-86.494771	589.14	5.83	594.97
6	37.797360	-86.494766	591.81	5.83	597.64
7	37.797360	-86.495195	596.31	5.83	602.14
8	37.798454	-86.495206	594.79	5.83	600.62
9	37.798492	-86.496681	607.87	5.83	613.70

Name: 115
Footprint area: 25.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.798861	-86.503172	619.02	5.83	624.85
2	37.798869	-86.502287	618.62	5.83	624.45
3	37.798509	-86.502271	615.90	5.83	621.73
4	37.798505	-86.501654	620.46	5.83	626.29
5	37.797632	-86.501627	604.94	5.83	610.77
6	37.797627	-86.501064	605.81	5.83	611.64
7	37.796953	-86.501042	600.67	5.83	606.50
8	37.796941	-86.501858	615.72	5.83	621.55
9	37.796585	-86.501842	613.68	5.83	619.51
10	37.796572	-86.502501	619.19	5.83	625.02
11	37.796928	-86.502496	623.05	5.83	628.88
12	37.796915	-86.503204	627.29	5.83	633.12
13	37.796555	-86.503199	625.75	5.83	631.58
14	37.796538	-86.505286	625.97	5.83	631.80
15	37.797589	-86.505248	625.13	5.83	630.96
16	37.797610	-86.506578	622.14	5.83	627.97
17	37.798255	-86.506541	620.38	5.83	626.21
18	37.798234	-86.507410	619.13	5.83	624.96
19	37.799120	-86.507351	612.53	5.83	618.36
20	37.799149	-86.506707	619.88	5.83	625.71
21	37.799276	-86.506707	617.04	5.83	622.87
22	37.799314	-86.505806	615.66	5.83	621.49
23	37.799001	-86.505806	621.60	5.83	627.43
24	37.799022	-86.505243	625.70	5.83	631.53
25	37.798636	-86.505264	625.35	5.83	631.18
26	37.798645	-86.503167	620.11	5.83	625.94

Name: 116
Footprint area: 11.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.795817	-86.506471	622.91	5.83	628.74
2	37.795834	-86.506079	625.17	5.83	631.00
3	37.795457	-86.506085	625.45	5.83	631.28
4	37.795461	-86.505618	626.34	5.83	632.17
5	37.796525	-86.505586	626.40	5.83	632.23
6	37.796529	-86.505859	627.04	5.83	632.87
7	37.797509	-86.505822	619.57	5.83	625.40
8	37.797530	-86.506964	623.78	5.83	629.61
9	37.797229	-86.506975	624.23	5.83	630.06
10	37.797229	-86.507597	617.69	5.83	623.52
11	37.796928	-86.507608	615.45	5.83	621.28
12	37.796941	-86.507876	611.83	5.83	617.66
13	37.796568	-86.507903	618.04	5.83	623.87
14	37.796572	-86.508407	618.45	5.83	624.28
15	37.796885	-86.508391	613.39	5.83	619.22
16	37.796873	-86.509024	611.51	5.83	617.34
17	37.796000	-86.509067	618.28	5.83	624.11
18	37.795783	-86.508359	623.18	5.83	629.01
19	37.795788	-86.507978	625.08	5.83	630.91
20	37.794986	-86.508016	624.48	5.83	630.31
21	37.794974	-86.507002	626.92	5.83	632.75
22	37.795796	-86.506959	623.09	5.83	628.92
23	37.795796	-86.507517	626.98	5.83	632.81
24	37.796474	-86.507469	618.86	5.83	624.69
25	37.796453	-86.506390	624.55	5.83	630.38

Name: 117
Footprint area: 4.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.793274	-86.504996	617.74	5.83	623.57
2	37.793291	-86.503247	616.14	5.83	621.97
3	37.792778	-86.503241	616.51	5.83	622.34
4	37.792218	-86.503215	614.25	5.83	620.08
5	37.792210	-86.505012	609.05	5.83	614.88
6	37.792697	-86.505012	613.24	5.83	619.07



Name: 118
Footprint area: 17.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.792909	-86.506213	618.25	5.83	624.08
2	37.792935	-86.509099	623.48	5.83	629.31
3	37.792808	-86.509099	623.80	5.83	629.63
4	37.792803	-86.510086	623.04	5.83	628.87
5	37.792066	-86.510103	624.95	5.83	630.78
6	37.792066	-86.509808	624.06	5.83	629.89
7	37.790514	-86.509818	621.22	5.83	627.05
8	37.790523	-86.508697	619.84	5.83	625.67
9	37.790955	-86.508702	620.18	5.83	626.01
10	37.790959	-86.508348	610.18	5.83	616.01
11	37.791731	-86.508332	619.40	5.83	625.23
12	37.791743	-86.506954	616.84	5.83	622.67
13	37.790921	-86.506932	603.64	5.83	609.47
14	37.790921	-86.505580	604.61	5.83	610.44
15	37.791743	-86.505623	604.20	5.83	610.03
16	37.791735	-86.506187	616.61	5.83	622.44



2-Mile Flight Path Receptor(s)

Name: Breckinridge County Airport Runway 10
Description:
Threshold height : 50 ft
Direction: 98.7 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	37.785423	-86.448080	710.62	50.00	760.62
2-mile point	37.789817	-86.484281	648.03	666.02	1314.04

Name: Breckinridge County Airport Runway 28
Description:
Threshold height : 50 ft
Direction: 275.1 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	37.784151	-86.434486	722.18	50.00	772.18
2-mile point	37.781596	-86.398004	742.72	582.88	1325.61

Name: Rough River State Park Airport Runway 2
Description:
Threshold height : 50 ft
Direction: 18.9 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	37.606011	-86.508874	563.89	50.00	613.89
2-mile point	37.578654	-86.520697	493.37	673.95	1167.32

Name: Rough River State Park Airport Runway 20

Description:

Threshold height : 50 ft

Direction: 198.4 deg

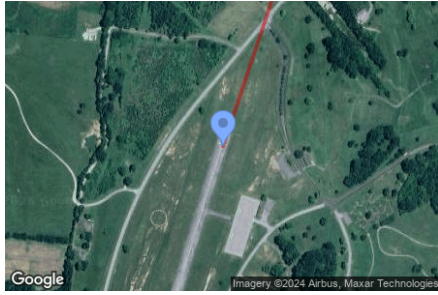
Glide slope: 3.0 deg

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	37.613983	-86.505752	577.15	50.00	627.15
2-mile point	37.641413	-86.494199	566.11	614.47	1180.58



Route Receptor(s)

Name: County Road 1730
Route type: Two-way
View angle: 50.0 deg



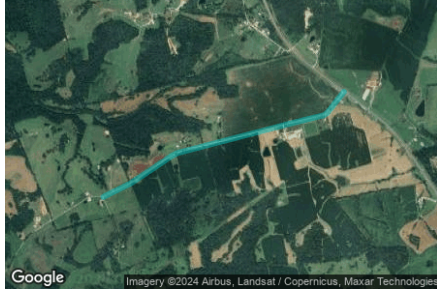
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.800378	-86.503440	632.29	9.00	641.29
2	37.800302	-86.503697	634.76	9.00	643.76
3	37.800319	-86.503966	637.46	9.00	646.46
4	37.801116	-86.505350	648.62	9.00	657.62
5	37.802082	-86.506927	639.74	9.00	648.74
6	37.802633	-86.507345	628.11	9.00	637.11
7	37.802989	-86.507469	622.96	9.00	631.96
8	37.805439	-86.507962	633.76	9.00	642.76
9	37.805846	-86.507801	637.25	9.00	646.25
10	37.806092	-86.507420	638.11	9.00	647.11
11	37.806524	-86.506192	628.08	9.00	637.08
12	37.806939	-86.504963	626.70	9.00	635.70

Name: Kentucky Highway 259
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	37.819238	-86.498843	631.69	9.00	640.69
2	37.816907	-86.497502	588.19	9.00	597.19
3	37.814195	-86.495892	549.02	9.00	558.02
4	37.812551	-86.494884	523.61	9.00	532.61
5	37.811245	-86.493532	490.39	9.00	499.39
6	37.809694	-86.491751	476.71	9.00	485.71
7	37.809050	-86.490850	475.36	9.00	484.36
8	37.808601	-86.489906	478.37	9.00	487.37
9	37.807677	-86.488092	521.93	9.00	530.93
10	37.807219	-86.487674	533.77	9.00	542.77
11	37.806465	-86.487180	554.45	9.00	563.45
12	37.805592	-86.486730	566.47	9.00	575.47
13	37.805024	-86.486301	571.07	9.00	580.07
14	37.804473	-86.485700	578.81	9.00	587.81
15	37.803973	-86.484981	584.01	9.00	593.01
16	37.803176	-86.483897	595.05	9.00	604.05
17	37.802557	-86.483275	597.98	9.00	606.98
18	37.801828	-86.482739	602.59	9.00	611.59
19	37.801311	-86.482417	605.11	9.00	614.11
20	37.799259	-86.481516	620.48	9.00	629.48
21	37.798106	-86.480636	620.82	9.00	629.82
22	37.797360	-86.479874	633.69	9.00	642.69
23	37.796555	-86.478790	658.36	9.00	667.36
24	37.795478	-86.476784	643.73	9.00	652.73
25	37.794410	-86.474617	657.89	9.00	666.89
26	37.793248	-86.472267	678.40	9.00	687.40

Name: Skillman Monarch Lane
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	37.790094	-86.520080	601.46	9.00	610.46
2	37.791052	-86.517656	610.74	9.00	619.74
3	37.791917	-86.515993	612.01	9.00	621.01
4	37.792977	-86.514019	612.15	9.00	621.15
5	37.793189	-86.513471	615.33	9.00	624.33
6	37.794020	-86.509416	617.83	9.00	626.83
7	37.795300	-86.503258	629.13	9.00	638.13
8	37.795826	-86.500565	613.74	9.00	622.74
9	37.795970	-86.500275	607.75	9.00	616.75
10	37.797470	-86.498773	606.69	9.00	615.69

Name: US Highway 60
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	37.814827	-86.518015	596.43	9.00	605.43
2	37.813220	-86.515703	600.25	9.00	609.25
3	37.811644	-86.513439	615.45	9.00	624.45
4	37.809927	-86.510907	634.89	9.00	643.89
5	37.808338	-86.508654	645.89	9.00	654.89
6	37.807868	-86.508048	648.28	9.00	657.28
7	37.807202	-86.507589	641.99	9.00	650.99
8	37.807202	-86.507589	641.99	9.00	650.99
9	37.807202	-86.507589	641.99	9.00	650.99
10	37.807202	-86.507589	641.99	9.00	650.99
11	37.807202	-86.507589	641.99	9.00	650.99
12	37.806554	-86.507227	636.24	9.00	645.24
13	37.802349	-86.504958	630.65	9.00	639.65
14	37.801285	-86.504234	632.32	9.00	641.32
15	37.800315	-86.503252	629.19	9.00	638.19
16	37.799675	-86.502474	627.18	9.00	636.18
17	37.797729	-86.499191	608.09	9.00	617.09
18	37.796114	-86.496488	596.64	9.00	605.64
19	37.795109	-86.494852	590.73	9.00	599.73
20	37.794359	-86.493972	590.36	9.00	599.36
21	37.792735	-86.492529	585.85	9.00	594.85
22	37.789806	-86.489965	601.62	9.00	610.62

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.797207	-86.480528	644.38	16.00	660.38
OP 2	37.798364	-86.481483	632.18	16.00	648.18
OP 3	37.799013	-86.482089	625.78	16.00	641.78
OP 4	37.801225	-86.483087	596.09	16.00	612.09
OP 5	37.801323	-86.481987	608.37	16.00	624.37
OP 6	37.802082	-86.482406	600.32	16.00	616.32
OP 7	37.802408	-86.483623	604.65	16.00	620.65
OP 8	37.814135	-86.514002	602.43	16.00	618.43
OP 9	37.810359	-86.512699	630.45	16.00	646.45
OP 10	37.807795	-86.504754	630.53	16.00	646.53
OP 11	37.802425	-86.506766	634.51	16.00	650.51
OP 12	37.801908	-86.507028	643.26	16.00	659.26
OP 13	37.800780	-86.505226	647.96	16.00	663.96
OP 14	37.800327	-86.504470	642.42	16.00	658.42
OP 15	37.800581	-86.501820	622.37	16.00	638.37
OP 16	37.796770	-86.498628	597.07	16.00	613.07
OP 17	37.797237	-86.492231	603.82	16.00	619.82
OP 18	37.789700	-86.491877	600.70	16.00	616.70
OP 19	37.810160	-86.509850	663.00	16.00	679.00
OP 20	37.809579	-86.518994	591.54	16.00	607.54
OP 21	37.810969	-86.514043	603.84	16.00	619.84
OP 22	37.816158	-86.518919	599.15	16.00	615.15
OP 23	37.815705	-86.520276	594.02	16.00	610.02
OP 24	37.816550	-86.519415	601.20	16.00	617.20
OP 25	37.816739	-86.497161	576.72	16.00	592.72
OP 26	37.800124	-86.504239	640.80	16.00	656.80
OP 27	37.796640	-86.499068	593.49	16.00	609.49
OP 28	37.795419	-86.500581	620.43	16.00	636.43
OP 29	37.794910	-86.503907	631.13	16.00	647.13
OP 30	37.793104	-86.493822	600.78	16.00	616.78

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	385	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	-	-

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
105 (green)	25	0	0	0	0	0	0	0	0	0	0	302
105 (yellow)	0	0	0	0	0	0	0	0	0	0	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: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

102 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

103 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

104 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

105 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0

FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	58	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	327	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

105: Breckinridge County Airport Runway 10

No glare found

105: Breckinridge County Airport Runway 28

No glare found

105: Rough River State Park Airport Runway 2

No glare found

105: Rough River State Park Airport Runway 20

No glare found

105: OP 1

No glare found

105: OP 2

No glare found

105: OP 3

No glare found

105: OP 4

No glare found

105: OP 5

No glare found

105: OP 6

No glare found

105: OP 7

No glare found

105: OP 8

No glare found

105: OP 9

No glare found

105: OP 10

No glare found

105: OP 11

No glare found

105: OP 12

No glare found

105: OP 13

No glare found

105: OP 14

No glare found

105: OP 15

No glare found

105: OP 16

No glare found

105: OP 17

No glare found

105: OP 18

No glare found

105: OP 19

No glare found

105: OP 20

No glare found

105: OP 21

No glare found

105: OP 22

No glare found

105: OP 23

No glare found

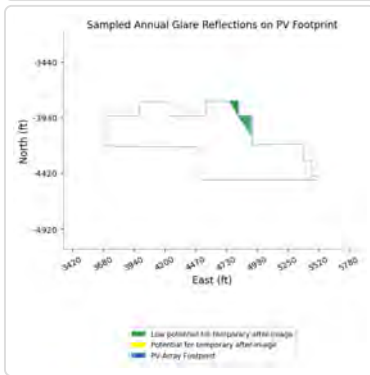
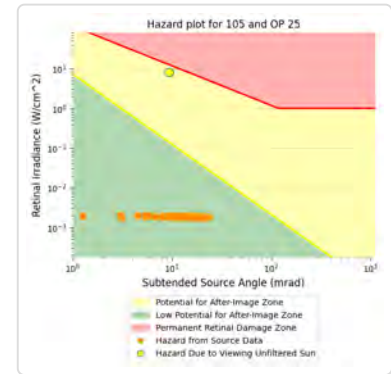
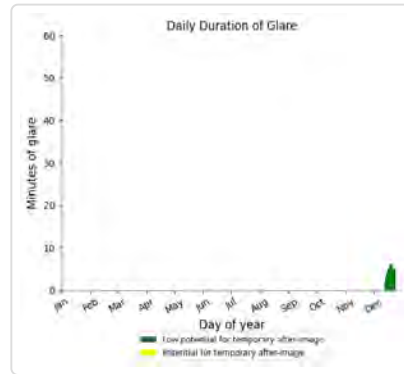
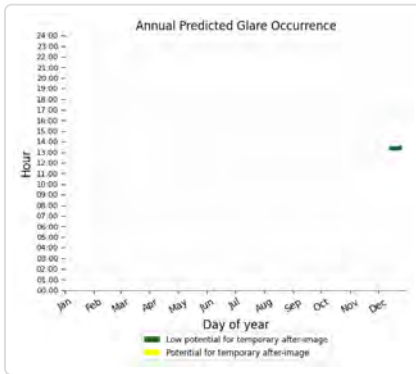
105: OP 24

No glare found

105: OP 25

PV array is expected to produce the following glare for this receptor:

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



105: OP 26

No glare found

105: OP 27

No glare found

105: OP 28

No glare found

105: OP 29

No glare found

105: OP 30

No glare found

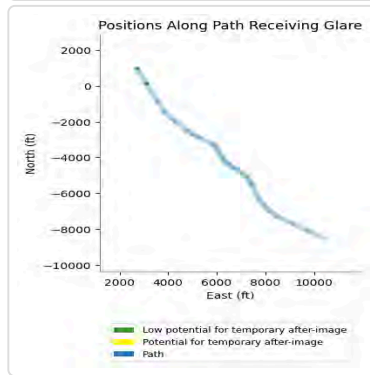
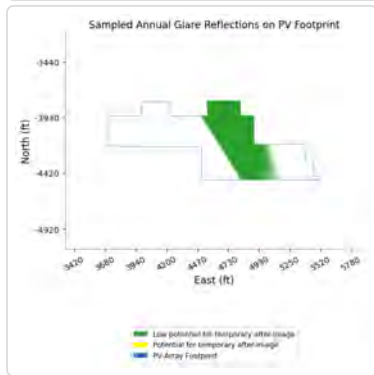
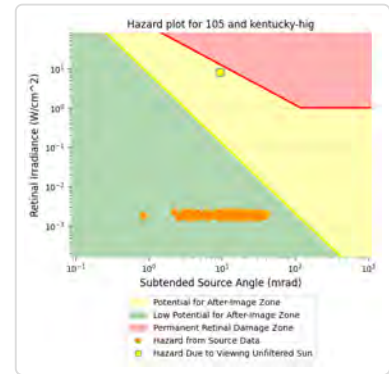
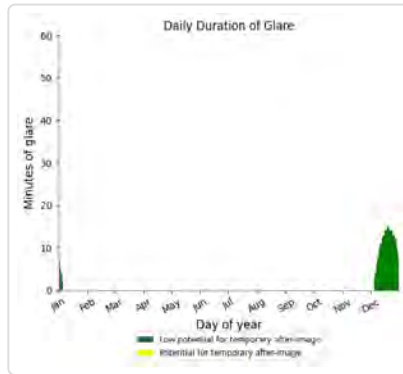
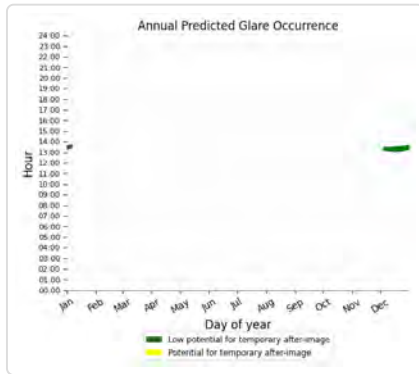
105: County Road 1730

No glare found

105: Kentucky Highway 259

PV array is expected to produce the following glare for this receptor:

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



105: Skillman Monarch Lane

No glare found

105: US Highway 60

No glare found

106 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

107 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

108 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

109 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

110 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

111 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

112 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

113 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

114 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

115 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

116 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

117 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

No glare found

118 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
Route: County Road 1730	0	0
Route: Kentucky Highway 259	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 1 5_83ft panels helipads

Created Oct 14, 2024
Updated Oct 14, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 131215.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

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	-

Component Data

PV Array(s)

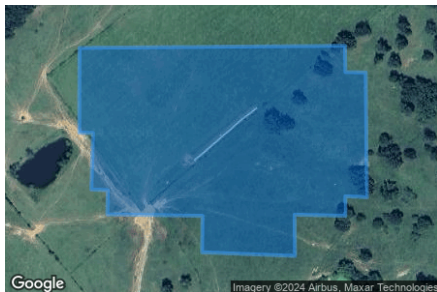
Total PV footprint area: 217.4 acres

Name: 101
Footprint area: 13.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.816564	-86.508260	615.99	5.83	621.82
2	37.816564	-86.507943	618.83	5.83	624.66
3	37.816200	-86.507932	618.59	5.83	624.42
4	37.816195	-86.507745	618.56	5.83	624.39
5	37.815522	-86.507745	619.82	5.83	625.65
6	37.815526	-86.507428	614.02	5.83	619.85
7	37.815082	-86.507412	620.71	5.83	626.54
8	37.815088	-86.507256	619.25	5.83	625.08
9	37.814364	-86.507224	620.84	5.83	626.67
10	37.814368	-86.507112	621.01	5.83	626.84
11	37.813308	-86.507133	605.30	5.83	611.13
12	37.813300	-86.510309	596.74	5.83	602.57
13	37.813997	-86.510279	594.62	5.83	600.45
14	37.813999	-86.510049	599.80	5.83	605.63
15	37.814395	-86.510033	611.91	5.83	617.74
16	37.814401	-86.509249	612.90	5.83	618.73
17	37.814767	-86.509243	610.61	5.83	616.44
18	37.814750	-86.508624	615.92	5.83	621.75
19	37.815096	-86.508616	615.00	5.83	620.83
20	37.815093	-86.508506	617.09	5.83	622.92
21	37.815507	-86.508490	615.38	5.83	621.21
22	37.815505	-86.508318	617.86	5.83	623.69

Name: 102
Footprint area: 11.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.813176	-86.510120	602.69	5.83	608.52
2	37.813195	-86.507181	601.88	5.83	607.71
3	37.812964	-86.507175	591.97	5.83	597.80
4	37.812960	-86.506950	589.72	5.83	595.55
5	37.811866	-86.506937	581.94	5.83	587.77
6	37.811875	-86.507175	587.67	5.83	593.50
7	37.811703	-86.507175	587.49	5.83	593.32
8	37.811714	-86.507739	600.79	5.83	606.62
9	37.811351	-86.507733	598.84	5.83	604.67
10	37.811383	-86.508763	618.00	5.83	623.83
11	37.811703	-86.508758	614.76	5.83	620.59
12	37.811716	-86.509812	614.48	5.83	620.31
13	37.811928	-86.509807	613.30	5.83	619.13
14	37.811934	-86.509989	609.80	5.83	615.63
15	37.812430	-86.509970	605.33	5.83	611.16
16	37.812432	-86.510123	604.71	5.83	610.54

Name: 103
Footprint area: 1.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



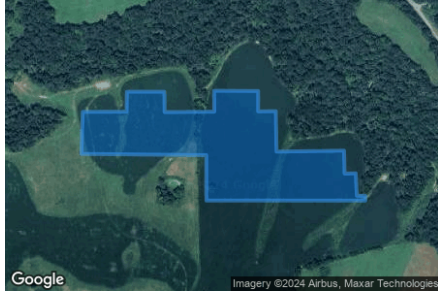
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.810578	-86.506491	601.75	5.83	607.58
2	37.811338	-86.506483	577.13	5.83	582.96
3	37.811340	-86.506191	578.54	5.83	584.37
4	37.811684	-86.506191	568.99	5.83	574.82
5	37.811684	-86.505907	568.44	5.83	574.27
6	37.811355	-86.505891	577.86	5.83	583.69
7	37.811355	-86.505708	576.48	5.83	582.31
8	37.810582	-86.505689	576.67	5.83	582.50

Name: 104
Footprint area: 2.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



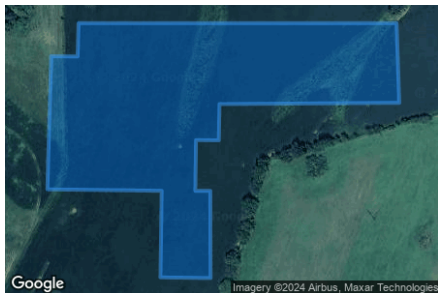
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.812892	-86.512253	571.34	5.83	577.17
2	37.812904	-86.512749	589.26	5.83	595.09
3	37.812129	-86.512773	588.23	5.83	594.06
4	37.812129	-86.512202	587.64	5.83	593.47
5	37.811643	-86.512196	598.88	5.83	604.71
6	37.811637	-86.511671	603.52	5.83	609.35
7	37.811321	-86.511679	611.06	5.83	616.89
8	37.811326	-86.511301	608.82	5.83	614.65
9	37.812054	-86.511276	595.45	5.83	601.28
10	37.812063	-86.511722	594.72	5.83	600.55
11	37.812694	-86.511738	578.64	5.83	584.47
12	37.812709	-86.512250	572.33	5.83	578.16

Name: 105
Footprint area: 15.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.805786	-86.495431	566.35	5.83	572.18
2	37.805790	-86.494460	558.62	5.83	564.45
3	37.806138	-86.494454	552.07	5.83	557.90
4	37.806138	-86.493623	558.05	5.83	563.88
5	37.805782	-86.493617	562.24	5.83	568.07
6	37.805790	-86.492518	560.95	5.83	566.78
7	37.806155	-86.492523	555.60	5.83	561.43
8	37.806151	-86.491547	566.63	5.83	572.46
9	37.805795	-86.491547	569.68	5.83	575.51
10	37.805799	-86.491155	566.56	5.83	572.39
11	37.805091	-86.491139	565.61	5.83	571.44
12	37.805108	-86.489645	563.83	5.83	569.66
13	37.804707	-86.489632	569.19	5.83	575.02
14	37.804712	-86.489385	561.34	5.83	567.17
15	37.804322	-86.489361	565.02	5.83	570.85
16	37.804320	-86.489176	562.41	5.83	568.24
17	37.804235	-86.489173	564.04	5.83	569.87
18	37.804237	-86.492695	592.19	5.83	598.02
19	37.805030	-86.492695	566.86	5.83	572.69
20	37.805051	-86.495463	590.04	5.83	595.87

Name: 106
Footprint area: 10.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.804230	-86.489174	564.04	5.83	569.87
2	37.803530	-86.489145	581.06	5.83	586.89
3	37.803520	-86.491135	599.95	5.83	605.78
4	37.803202	-86.491143	607.03	5.83	612.86
5	37.803204	-86.491395	605.53	5.83	611.36
6	37.802759	-86.491403	619.71	5.83	625.54
7	37.802759	-86.491237	618.34	5.83	624.17
8	37.801994	-86.491234	618.99	5.83	624.82
9	37.802000	-86.491789	613.94	5.83	619.77
10	37.802759	-86.491776	620.24	5.83	626.07
11	37.802772	-86.493042	631.23	5.83	637.06
12	37.803939	-86.492999	605.00	5.83	610.83
13	37.803937	-86.492707	602.95	5.83	608.78
14	37.804230	-86.492696	592.49	5.83	598.32

Name: 107
Footprint area: 20.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.809536	-86.504108	594.17	5.83	600.00
2	37.809947	-86.504114	593.40	5.83	599.23
3	37.809951	-86.503690	604.24	5.83	610.07
4	37.810180	-86.503690	602.47	5.83	608.30
5	37.810180	-86.503491	600.45	5.83	606.28
6	37.809955	-86.503481	604.38	5.83	610.21
7	37.809947	-86.502826	589.59	5.83	595.42
8	37.809205	-86.502805	602.77	5.83	608.60
9	37.809205	-86.502150	606.74	5.83	612.57
10	37.810438	-86.502177	584.48	5.83	590.31
11	37.810460	-86.501050	613.78	5.83	619.61
12	37.810120	-86.501029	612.38	5.83	618.21
13	37.810129	-86.500820	612.06	5.83	617.89
14	37.809400	-86.500788	615.46	5.83	621.29
15	37.809400	-86.500584	615.28	5.83	621.11
16	37.808196	-86.500562	612.34	5.83	618.17
17	37.808209	-86.500106	596.42	5.83	602.25
18	37.807268	-86.500047	620.41	5.83	626.24
19	37.807277	-86.500348	625.16	5.83	630.99
20	37.807094	-86.500348	620.75	5.83	626.58
21	37.807090	-86.501286	624.38	5.83	630.21
22	37.806738	-86.501286	607.00	5.83	612.83
23	37.806721	-86.502794	604.54	5.83	610.37
24	37.808277	-86.502794	626.27	5.83	632.10
25	37.808281	-86.503003	627.09	5.83	632.92
26	37.809057	-86.502982	610.02	5.83	615.85
27	37.809048	-86.503513	612.19	5.83	618.02
28	37.809205	-86.503491	609.80	5.83	615.63
29	37.809197	-86.504124	602.77	5.83	608.60

Name: 108
Footprint area: 5.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.802693	-86.487814	586.06	5.83	591.89
2	37.801940	-86.487784	581.65	5.83	587.48
3	37.801940	-86.487543	579.56	5.83	585.39
4	37.801197	-86.487537	588.17	5.83	594.00
5	37.801194	-86.487972	591.82	5.83	597.65
6	37.800824	-86.487969	586.08	5.83	591.91
7	37.800830	-86.489031	593.92	5.83	599.75
8	37.801201	-86.489026	598.37	5.83	604.20
9	37.801205	-86.489321	603.28	5.83	609.11
10	37.801930	-86.489297	604.83	5.83	610.66
11	37.801926	-86.488693	597.08	5.83	602.91
12	37.802674	-86.488653	588.23	5.83	594.06

Name: 109
Footprint area: 5.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.799090	-86.490909	592.15	5.83	597.98
2	37.799126	-86.488369	594.33	5.83	600.16
3	37.798318	-86.488337	591.38	5.83	597.21
4	37.798284	-86.490904	605.17	5.83	611.00

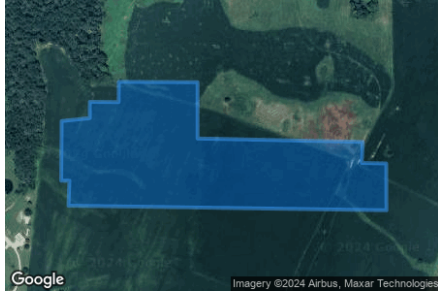


Name: 110
Footprint area: 6.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.797731	-86.490364	603.70	5.83	609.53
2	37.797748	-86.489959	600.82	5.83	606.65
3	37.797570	-86.489951	599.07	5.83	604.90
4	37.797574	-86.489195	586.47	5.83	592.30
5	37.796803	-86.489168	584.45	5.83	590.28
6	37.796820	-86.488905	579.72	5.83	585.55
7	37.796053	-86.488887	581.26	5.83	587.09
8	37.795949	-86.489965	585.10	5.83	590.93
9	37.795796	-86.489959	584.77	5.83	590.60
10	37.795739	-86.490705	590.79	5.83	596.62
11	37.796621	-86.490681	602.99	5.83	608.82
12	37.796621	-86.490340	598.85	5.83	604.68



Name: 111
Footprint area: 25.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.802371	-86.500189	613.28	5.83	619.11
2	37.801328	-86.500200	612.79	5.83	618.62
3	37.801328	-86.500018	614.39	5.83	620.22
4	37.800891	-86.500039	615.02	5.83	620.85
5	37.800811	-86.492996	601.37	5.83	607.20
6	37.801629	-86.493001	602.76	5.83	608.59
7	37.801637	-86.493543	604.14	5.83	609.97
8	37.802006	-86.493521	609.13	5.83	614.96
9	37.802065	-86.497180	626.78	5.83	632.61
10	37.803049	-86.497180	623.34	5.83	629.17
11	37.803057	-86.498923	608.21	5.83	614.04
12	37.802701	-86.498929	615.57	5.83	621.40
13	37.802705	-86.499567	610.27	5.83	616.10
14	37.802421	-86.499567	616.03	5.83	621.86

Name: 112
Footprint area: 1.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800647	-86.491844	603.74	5.83	609.57
2	37.801283	-86.491833	611.55	5.83	617.38
3	37.801279	-86.492005	610.86	5.83	616.69
4	37.801389	-86.492010	611.82	5.83	617.65
5	37.801397	-86.492536	606.62	5.83	612.45
6	37.800461	-86.492531	598.83	5.83	604.66
7	37.800461	-86.492000	599.23	5.83	605.06
8	37.800656	-86.492000	603.24	5.83	609.07

Name: 113
Footprint area: 17.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800870	-86.500039	615.18	5.83	621.01
2	37.798984	-86.500082	624.10	5.83	629.93
3	37.798975	-86.498489	633.39	5.83	639.22
4	37.798535	-86.498489	632.25	5.83	638.08
5	37.798483	-86.497484	614.52	5.83	620.35
6	37.797846	-86.497454	602.97	5.83	608.80
7	37.797846	-86.497102	605.98	5.83	611.81
8	37.798504	-86.497128	613.16	5.83	618.99
9	37.798513	-86.496692	608.03	5.83	613.86
10	37.800840	-86.496627	612.95	5.83	618.78

Name: 114
Footprint area: 22.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.800832	-86.496606	612.86	5.83	618.69
2	37.800807	-86.492926	601.57	5.83	607.40
3	37.799387	-86.492904	595.02	5.83	600.85
4	37.797839	-86.494439	588.31	5.83	594.14
5	37.797835	-86.494771	589.14	5.83	594.97
6	37.797360	-86.494766	591.81	5.83	597.64
7	37.797360	-86.495195	596.31	5.83	602.14
8	37.798454	-86.495206	594.79	5.83	600.62
9	37.798492	-86.496681	607.87	5.83	613.70

Name: 115
Footprint area: 25.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.798861	-86.503172	619.02	5.83	624.85
2	37.798869	-86.502287	618.62	5.83	624.45
3	37.798509	-86.502271	615.90	5.83	621.73
4	37.798505	-86.501654	620.46	5.83	626.29
5	37.797632	-86.501627	604.94	5.83	610.77
6	37.797627	-86.501064	605.81	5.83	611.64
7	37.796953	-86.501042	600.67	5.83	606.50
8	37.796941	-86.501858	615.72	5.83	621.55
9	37.796585	-86.501842	613.68	5.83	619.51
10	37.796572	-86.502501	619.19	5.83	625.02
11	37.796928	-86.502496	623.05	5.83	628.88
12	37.796915	-86.503204	627.29	5.83	633.12
13	37.796555	-86.503199	625.75	5.83	631.58
14	37.796538	-86.505286	625.97	5.83	631.80
15	37.797589	-86.505248	625.13	5.83	630.96
16	37.797610	-86.506578	622.14	5.83	627.97
17	37.798255	-86.506541	620.38	5.83	626.21
18	37.798234	-86.507410	619.13	5.83	624.96
19	37.799120	-86.507351	612.53	5.83	618.36
20	37.799149	-86.506707	619.88	5.83	625.71
21	37.799276	-86.506707	617.04	5.83	622.87
22	37.799314	-86.505806	615.66	5.83	621.49
23	37.799001	-86.505806	621.60	5.83	627.43
24	37.799022	-86.505243	625.70	5.83	631.53
25	37.798636	-86.505264	625.35	5.83	631.18
26	37.798645	-86.503167	620.11	5.83	625.94

Name: 116
Footprint area: 11.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.795817	-86.506471	622.91	5.83	628.74
2	37.795834	-86.506079	625.17	5.83	631.00
3	37.795457	-86.506085	625.45	5.83	631.28
4	37.795461	-86.505618	626.34	5.83	632.17
5	37.796525	-86.505586	626.40	5.83	632.23
6	37.796529	-86.505859	627.04	5.83	632.87
7	37.797509	-86.505822	619.57	5.83	625.40
8	37.797530	-86.506964	623.78	5.83	629.61
9	37.797229	-86.506975	624.23	5.83	630.06
10	37.797229	-86.507597	617.69	5.83	623.52
11	37.796928	-86.507608	615.45	5.83	621.28
12	37.796941	-86.507876	611.83	5.83	617.66
13	37.796568	-86.507903	618.04	5.83	623.87
14	37.796572	-86.508407	618.45	5.83	624.28
15	37.796885	-86.508391	613.39	5.83	619.22
16	37.796873	-86.509024	611.51	5.83	617.34
17	37.796000	-86.509067	618.28	5.83	624.11
18	37.795783	-86.508359	623.18	5.83	629.01
19	37.795788	-86.507978	625.08	5.83	630.91
20	37.794986	-86.508016	624.48	5.83	630.31
21	37.794974	-86.507002	626.92	5.83	632.75
22	37.795796	-86.506959	623.09	5.83	628.92
23	37.795796	-86.507517	626.98	5.83	632.81
24	37.796474	-86.507469	618.86	5.83	624.69
25	37.796453	-86.506390	624.55	5.83	630.38

Name: 117
Footprint area: 4.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.793274	-86.504996	617.74	5.83	623.57
2	37.793291	-86.503247	616.14	5.83	621.97
3	37.792778	-86.503241	616.51	5.83	622.34
4	37.792218	-86.503215	614.25	5.83	620.08
5	37.792210	-86.505012	609.05	5.83	614.88
6	37.792697	-86.505012	613.24	5.83	619.07



Name: 118
Footprint area: 17.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.792909	-86.506213	618.25	5.83	624.08
2	37.792935	-86.509099	623.48	5.83	629.31
3	37.792808	-86.509099	623.80	5.83	629.63
4	37.792803	-86.510086	623.04	5.83	628.87
5	37.792066	-86.510103	624.95	5.83	630.78
6	37.792066	-86.509808	624.06	5.83	629.89
7	37.790514	-86.509818	621.22	5.83	627.05
8	37.790523	-86.508697	619.84	5.83	625.67
9	37.790955	-86.508702	620.18	5.83	626.01
10	37.790959	-86.508348	610.18	5.83	616.01
11	37.791731	-86.508332	619.40	5.83	625.23
12	37.791743	-86.506954	616.84	5.83	622.67
13	37.790921	-86.506932	603.64	5.83	609.47
14	37.790921	-86.505580	604.61	5.83	610.44
15	37.791743	-86.505623	604.20	5.83	610.03
16	37.791735	-86.506187	616.61	5.83	622.44



Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.766028	-86.439700	726.49	500.00	1226.49
OP 2	37.761982	-86.452510	691.69	500.00	1191.69

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	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

101 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

102 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

103 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

104 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

105 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

106 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

107 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

108 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

109 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

110 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

111 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

112 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

113 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

114 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

115 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

116 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

117 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

118 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 2 4_25 panels 5ft vehicles

Created Oct 02, 2024
Updated Oct 11, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 130401.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

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

PV Name	Tilt deg	Orientation deg	"Green" Glare min	"Yellow" Glare min	Energy Produced kWh
201	SA tracking	SA tracking	1,484	0	-
202	SA tracking	SA tracking	6,178	2,285	-
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	-

Component Data

PV Array(s)

Total PV footprint area: 139.0 acres

Name: 201
Footprint area: 4.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



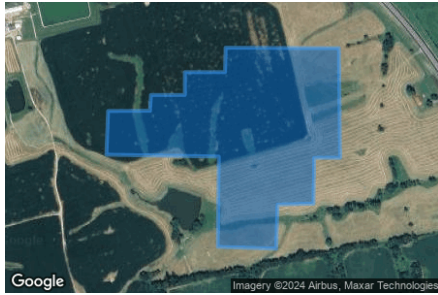
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.793756	-86.479678	607.17	4.25	611.42
2	37.793773	-86.478503	621.12	4.25	625.37
3	37.792722	-86.478482	599.99	4.25	604.24
4	37.792717	-86.479265	604.26	4.25	608.51
5	37.792209	-86.479249	586.72	4.25	590.97
6	37.792209	-86.479501	589.65	4.25	593.90
7	37.791920	-86.479490	579.28	4.25	583.53
8	37.791933	-86.480150	586.11	4.25	590.36
9	37.793095	-86.480113	592.13	4.25	596.38
10	37.793099	-86.479684	599.90	4.25	604.15

Name: 202
Footprint area: 14.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.791255	-86.480306	583.85	4.25	588.10
2	37.791429	-86.479297	594.30	4.25	598.55
3	37.791424	-86.479099	598.48	4.25	602.73
4	37.791755	-86.479099	588.20	4.25	592.45
5	37.791747	-86.478696	598.41	4.25	602.66
6	37.792154	-86.478691	590.36	4.25	594.61
7	37.792166	-86.477881	605.63	4.25	609.88
8	37.791369	-86.477865	629.87	4.25	634.12
9	37.791386	-86.477296	629.50	4.25	633.75
10	37.791759	-86.477318	626.66	4.25	630.91
11	37.791759	-86.476728	629.01	4.25	633.26
12	37.791391	-86.476712	641.14	4.25	645.39
13	37.791399	-86.475971	648.17	4.25	652.42
14	37.790560	-86.475955	664.16	4.25	668.41
15	37.790555	-86.476140	662.61	4.25	666.86
16	37.790191	-86.476127	661.52	4.25	665.77
17	37.790195	-86.479233	595.80	4.25	600.05
18	37.790483	-86.480338	585.15	4.25	589.40

Name: 203
Footprint area: 25.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



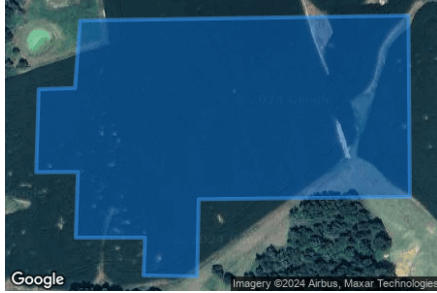
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.791314	-86.496136	576.36	4.25	580.61
2	37.791297	-86.496930	580.88	4.25	585.13
3	37.790526	-86.496962	580.64	4.25	584.89
4	37.790560	-86.498255	594.33	4.25	598.58
5	37.792137	-86.498234	600.76	4.25	605.01
6	37.792171	-86.500723	595.22	4.25	599.47
7	37.792934	-86.500685	606.35	4.25	610.60
8	37.792938	-86.499757	607.62	4.25	611.87
9	37.793213	-86.499736	609.63	4.25	613.88
10	37.793213	-86.498985	608.03	4.25	612.28
11	37.793612	-86.498985	614.96	4.25	619.21
12	37.793612	-86.498094	611.55	4.25	615.80
13	37.793959	-86.498083	615.43	4.25	619.68
14	37.794040	-86.498083	615.35	4.25	619.60
15	37.794032	-86.495573	593.75	4.25	598.00
16	37.792115	-86.495546	593.32	4.25	597.57
17	37.792115	-86.496120	592.75	4.25	597.00

Name: 204
Footprint area: 15.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789803	-86.503929	609.08	4.25	613.33
2	37.790863	-86.503934	611.82	4.25	616.07
3	37.790876	-86.503264	615.73	4.25	619.98
4	37.791312	-86.503258	617.31	4.25	621.56
5	37.791333	-86.502572	618.53	4.25	622.78
6	37.791694	-86.502561	615.79	4.25	620.04
7	37.791698	-86.501928	609.05	4.25	613.30
8	37.792067	-86.501917	600.05	4.25	604.30
9	37.792058	-86.501070	593.37	4.25	597.62
10	37.791355	-86.500957	597.96	4.25	602.21
11	37.791372	-86.500297	592.78	4.25	597.03
12	37.790977	-86.500276	601.32	4.25	605.57
13	37.790982	-86.499782	594.75	4.25	599.00
14	37.790269	-86.499739	596.83	4.25	601.08
15	37.790265	-86.500324	606.42	4.25	610.67
16	37.789854	-86.500308	600.57	4.25	604.82

Name: 205
Footprint area: 16.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789797	-86.503945	608.98	4.25	613.23
2	37.789841	-86.500308	600.58	4.25	604.83
3	37.788256	-86.500292	615.32	4.25	619.57
4	37.788234	-86.502631	609.54	4.25	613.79
5	37.787560	-86.502647	605.57	4.25	609.82
6	37.787569	-86.503242	603.23	4.25	607.48
7	37.787900	-86.503226	608.45	4.25	612.70
8	37.787900	-86.503993	605.32	4.25	609.57
9	37.788473	-86.503969	608.19	4.25	612.44
10	37.788471	-86.504430	608.03	4.25	612.28
11	37.789196	-86.504403	608.91	4.25	613.16
12	37.789207	-86.504001	611.19	4.25	615.44

Name: 206
Footprint area: 8.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789370	-86.500283	611.26	4.25	615.51
2	37.789387	-86.499597	607.77	4.25	612.02
3	37.789009	-86.499597	610.51	4.25	614.76
4	37.789005	-86.499280	605.67	4.25	609.92
5	37.788302	-86.499243	616.32	4.25	620.57
6	37.788302	-86.498551	611.65	4.25	615.90
7	37.787954	-86.498535	620.01	4.25	624.26
8	37.787962	-86.498170	614.81	4.25	619.06
9	37.787212	-86.498127	621.15	4.25	625.40
10	37.787195	-86.499527	618.79	4.25	623.04
11	37.786385	-86.499532	631.53	4.25	635.78
12	37.786394	-86.500069	631.74	4.25	635.99
13	37.785978	-86.500085	630.92	4.25	635.17
14	37.785987	-86.500417	629.25	4.25	633.50
15	37.787140	-86.500401	624.06	4.25	628.31
16	37.787157	-86.499865	613.67	4.25	617.92
17	37.788251	-86.499870	616.70	4.25	620.95
18	37.788251	-86.500251	615.63	4.25	619.88

Name: 207
Footprint area: 3.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.784762	-86.499728	599.27	4.25	603.52
2	37.784750	-86.498644	604.01	4.25	608.26
3	37.786314	-86.498655	633.24	4.25	637.49
4	37.786310	-86.498129	632.51	4.25	636.76
5	37.785580	-86.498135	628.05	4.25	632.30
6	37.785585	-86.498419	629.78	4.25	634.03
7	37.784915	-86.498397	601.87	4.25	606.12
8	37.784915	-86.498097	590.70	4.25	594.95
9	37.784203	-86.498081	567.34	4.25	571.59
10	37.784207	-86.498349	574.24	4.25	578.49
11	37.784092	-86.498344	568.73	4.25	572.98
12	37.784109	-86.498741	581.71	4.25	585.96
13	37.784118	-86.499738	609.22	4.25	613.47

Name: 208
Footprint area: 1.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.783668	-86.495914	620.62	4.25	624.87
2	37.783830	-86.495195	624.06	4.25	628.31
3	37.784588	-86.495227	600.68	4.25	604.93
4	37.784419	-86.495946	591.42	4.25	595.67

Name: 209
Footprint area: 5.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



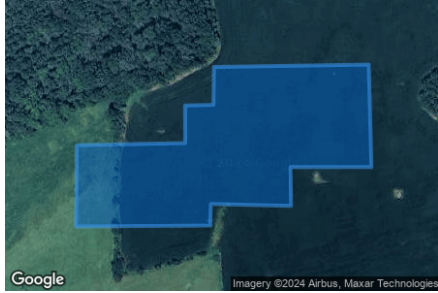
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.786886	-86.505897	612.01	4.25	616.26
2	37.786886	-86.505449	612.31	4.25	616.56
3	37.787321	-86.505462	610.49	4.25	614.74
4	37.787329	-86.504872	610.22	4.25	614.47
5	37.787007	-86.504864	612.44	4.25	616.69
6	37.787009	-86.504752	612.16	4.25	616.41
7	37.786895	-86.504746	612.20	4.25	616.45
8	37.786907	-86.504110	600.51	4.25	604.76
9	37.786625	-86.504089	602.19	4.25	606.44
10	37.786628	-86.503786	590.95	4.25	595.20
11	37.785913	-86.503730	593.48	4.25	597.73
12	37.785911	-86.504054	601.44	4.25	605.69
13	37.785814	-86.504049	602.69	4.25	606.94
14	37.785816	-86.504682	602.05	4.25	606.30
15	37.786242	-86.504706	605.99	4.25	610.24
16	37.786248	-86.505178	608.65	4.25	612.90
17	37.785504	-86.505170	601.89	4.25	606.14
18	37.785504	-86.505385	602.84	4.25	607.09
19	37.785816	-86.505385	607.29	4.25	611.54
20	37.785820	-86.505873	606.00	4.25	610.25

Name: 210
Footprint area: 7.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.785012	-86.504795	587.15	4.25	591.40
2	37.785024	-86.503523	598.49	4.25	602.74
3	37.784295	-86.503486	598.46	4.25	602.71
4	37.784304	-86.502906	581.07	4.25	585.32
5	37.783189	-86.502847	583.39	4.25	587.64
6	37.783176	-86.504746	589.14	4.25	593.39

Name: 211
Footprint area: 7.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.783180	-86.503290	595.71	4.25	599.96
2	37.782283	-86.503261	608.35	4.25	612.60
3	37.782283	-86.504157	595.74	4.25	599.99
4	37.781944	-86.504151	602.56	4.25	606.81
5	37.781961	-86.505039	586.59	4.25	590.84
6	37.781772	-86.505044	582.39	4.25	586.64
7	37.781764	-86.506534	596.26	4.25	600.51
8	37.782474	-86.506523	560.50	4.25	564.75
9	37.782494	-86.505324	592.20	4.25	596.45
10	37.782822	-86.505324	583.02	4.25	587.27
11	37.782828	-86.505010	590.65	4.25	594.90
12	37.783159	-86.505005	584.17	4.25	588.42

Name: 212
Footprint area: 1.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.780357	-86.502092	599.13	4.25	603.38
2	37.780452	-86.502599	603.97	4.25	608.22
3	37.781289	-86.502588	606.79	4.25	611.04
4	37.781232	-86.502087	608.44	4.25	612.69

Name: 213
Footprint area: 4.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.778712	-86.505142	576.82	4.25	581.07
2	37.778710	-86.504967	579.67	4.25	583.92
3	37.778610	-86.504967	578.09	4.25	582.34
4	37.778617	-86.504495	578.72	4.25	582.97
5	37.778267	-86.504495	575.37	4.25	579.62
6	37.778260	-86.503691	555.95	4.25	560.20
7	37.779009	-86.503728	583.58	4.25	587.83
8	37.779011	-86.503632	580.28	4.25	584.53
9	37.779685	-86.503653	593.73	4.25	597.98
10	37.779696	-86.504924	584.22	4.25	588.47
11	37.779475	-86.504932	584.19	4.25	588.44
12	37.779475	-86.505139	584.61	4.25	588.86

Name: 214
Footprint area: 1.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.779437	-86.507727	529.04	4.25	533.29
2	37.779534	-86.507073	536.30	4.25	540.55
3	37.780319	-86.507076	563.92	4.25	568.17
4	37.780204	-86.507752	560.39	4.25	564.64

Name: 215
Footprint area: 13.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.778163	-86.506702	559.11	4.25	563.36
2	37.778040	-86.506691	556.59	4.25	560.84
3	37.777972	-86.506101	549.75	4.25	554.00
4	37.777243	-86.506079	511.23	4.25	515.48
5	37.777323	-86.506696	526.23	4.25	530.48
6	37.777128	-86.506691	520.96	4.25	525.21
7	37.777158	-86.506932	528.73	4.25	532.98
8	37.776725	-86.506927	518.41	4.25	522.66
9	37.776925	-86.508011	513.19	4.25	517.44
10	37.777374	-86.508000	523.24	4.25	527.49
11	37.777832	-86.510387	511.76	4.25	516.01
12	37.778006	-86.510398	517.06	4.25	521.31
13	37.778205	-86.511326	512.47	4.25	516.72
14	37.778867	-86.511294	490.65	4.25	494.90
15	37.778701	-86.510226	504.67	4.25	508.92
16	37.778943	-86.510221	491.38	4.25	495.63
17	37.778298	-86.506718	559.97	4.25	564.22

Name: 216
Footprint area: 4.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.781758	-86.496847	619.74	4.25	623.99
2	37.781754	-86.496273	618.91	4.25	623.16
3	37.780813	-86.496279	585.13	4.25	589.38
4	37.780808	-86.495951	579.38	4.25	583.63
5	37.781152	-86.495941	592.35	4.25	596.60
6	37.781158	-86.495530	582.32	4.25	586.57
7	37.781364	-86.495528	591.84	4.25	596.09
8	37.781362	-86.495168	576.85	4.25	581.10
9	37.782129	-86.495179	596.25	4.25	600.50
10	37.782121	-86.495536	608.10	4.25	612.35
11	37.782237	-86.495538	610.45	4.25	614.70
12	37.782242	-86.495836	618.60	4.25	622.85
13	37.782615	-86.495841	614.82	4.25	619.07
14	37.782613	-86.496198	622.71	4.25	626.96
15	37.782504	-86.496209	623.06	4.25	627.31
16	37.782515	-86.496820	632.39	4.25	636.64

Name: 217
Footprint area: 5.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.781317	-86.489986	635.89	4.25	640.14
2	37.781334	-86.489337	646.24	4.25	650.49
3	37.781762	-86.489348	648.79	4.25	653.04
4	37.781768	-86.488900	650.38	4.25	654.63
5	37.782050	-86.488913	650.18	4.25	654.43
6	37.782061	-86.487991	647.51	4.25	651.76
7	37.782750	-86.488015	643.13	4.25	647.38
8	37.782741	-86.488948	646.10	4.25	650.35
9	37.782546	-86.488951	647.16	4.25	651.41
10	37.782542	-86.489340	647.46	4.25	651.71
11	37.782451	-86.489337	648.25	4.25	652.50
12	37.782442	-86.489957	640.24	4.25	644.49
13	37.782224	-86.489973	643.71	4.25	647.96
14	37.782222	-86.490775	642.06	4.25	646.31
15	37.781512	-86.490775	629.22	4.25	633.47
16	37.781505	-86.489986	642.58	4.25	646.83

2-Mile Flight Path Receptor(s)

Name: Breckinridge County Airport Runway 10
Description:
Threshold height : 50 ft
Direction: 98.7 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	37.785423	-86.448080	710.62	50.00	760.62
2-mile point	37.789817	-86.484281	648.03	666.02	1314.04

Name: Breckinridge County Airport Runway 28
Description:
Threshold height : 50 ft
Direction: 275.1 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	37.784151	-86.434486	722.18	50.00	772.18
2-mile point	37.781596	-86.398004	742.72	582.88	1325.61

Name: Rough River State Park Airport Runway 2
Description:
Threshold height : 50 ft
Direction: 18.9 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	37.606011	-86.508874	563.89	50.00	613.89
2-mile point	37.578654	-86.520697	493.37	673.95	1167.32

Name: Rough River State Park Airport Runway 20

Description:

Threshold height : 50 ft

Direction: 198.4 deg

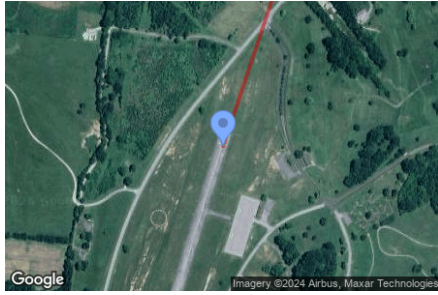
Glide slope: 3.0 deg

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	37.613983	-86.505752	577.15	50.00	627.15
2-mile point	37.641413	-86.494199	566.11	614.47	1180.58



Route Receptor(s)

Name: Highway 992
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	37.769714	-86.517179	513.31	5.00	518.31
2	37.771206	-86.514271	584.60	5.00	589.60
3	37.771461	-86.513059	604.67	5.00	609.67
4	37.771444	-86.512190	608.46	5.00	613.46
5	37.771037	-86.510688	612.20	5.00	617.20
6	37.769493	-86.505924	618.92	5.00	623.92
7	37.769010	-86.504615	623.52	5.00	628.52
8	37.768586	-86.503961	626.65	5.00	631.65
9	37.767644	-86.502620	624.60	5.00	629.60
10	37.767288	-86.501944	628.48	5.00	633.48
11	37.767110	-86.501290	630.49	5.00	635.49
12	37.767102	-86.497384	637.06	5.00	642.06
13	37.767195	-86.495807	638.60	5.00	643.60
14	37.767441	-86.494927	639.54	5.00	644.54
15	37.768425	-86.493254	653.02	5.00	658.02
16	37.770282	-86.490561	655.97	5.00	660.97
17	37.772529	-86.487245	664.06	5.00	669.06
18	37.773148	-86.486140	665.68	5.00	670.68
19	37.775065	-86.481763	665.80	5.00	670.80
20	37.776473	-86.478459	663.54	5.00	668.54

Name: Lighthouse 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	37.780252	-86.480089	658.08	5.00	663.08
2	37.780396	-86.479564	657.43	5.00	662.43
3	37.780235	-86.479092	657.88	5.00	662.88
4	37.779353	-86.477772	664.52	5.00	669.52
5	37.778776	-86.476817	665.45	5.00	670.45
6	37.778386	-86.475873	657.19	5.00	662.19
7	37.778089	-86.475090	644.37	5.00	649.37
8	37.777843	-86.475015	644.00	5.00	649.00

Name: Main Street
Route type: Two-way
View angle: 50.0 deg



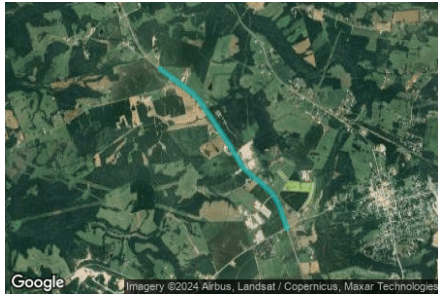
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.797288	-86.479810	636.35	5.00	641.35
2	37.796314	-86.478459	658.65	5.00	663.65
3	37.795389	-86.476624	643.07	5.00	648.07
4	37.794355	-86.474543	659.26	5.00	664.26
5	37.792982	-86.471796	682.47	5.00	687.47
6	37.791896	-86.469586	650.06	5.00	655.06

Name: Skillman Monarch Lane
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	37.794262	-86.508295	623.54	5.00	628.54
2	37.794982	-86.504744	625.83	5.00	630.83
3	37.795754	-86.500978	617.74	5.00	622.74
4	37.795881	-86.500367	610.48	5.00	615.48
5	37.796509	-86.499745	599.85	5.00	604.85
6	37.797458	-86.498779	606.78	5.00	611.78

Name: US Highway 60
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	37.798742	-86.500871	622.77	5.00	627.77
2	37.796530	-86.497137	597.47	5.00	602.47
3	37.795648	-86.495657	588.93	5.00	593.93
4	37.795114	-86.494852	590.73	5.00	595.73
5	37.794453	-86.494048	589.74	5.00	594.74
6	37.792850	-86.492631	587.14	5.00	592.14
7	37.790866	-86.490915	588.84	5.00	593.84
8	37.788857	-86.489155	613.63	5.00	618.63
9	37.787661	-86.488233	629.92	5.00	634.92
10	37.786161	-86.487117	640.57	5.00	645.57
11	37.785228	-86.486409	647.67	5.00	652.67
12	37.784702	-86.485840	650.66	5.00	655.66
13	37.784066	-86.484917	648.80	5.00	653.80
14	37.782616	-86.482707	640.92	5.00	645.92
15	37.781922	-86.481742	644.13	5.00	649.13
16	37.781228	-86.480905	649.07	5.00	654.07
17	37.779704	-86.479832	665.32	5.00	670.32
18	37.776553	-86.478459	663.38	5.00	668.38

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.769845	-86.492256	663.40	16.00	679.40
OP 2	37.769311	-86.491446	659.13	16.00	675.13
OP 3	37.769663	-86.490824	659.75	16.00	675.75
OP 4	37.773760	-86.485711	665.77	16.00	681.77
OP 5	37.773641	-86.484086	668.98	16.00	684.98
OP 6	37.772781	-86.482696	666.11	16.00	682.11
OP 7	37.772429	-86.482192	670.66	16.00	686.66
OP 8	37.772598	-86.480733	666.18	16.00	682.18
OP 9	37.773175	-86.480991	667.90	16.00	683.90
OP 10	37.774048	-86.481629	670.13	16.00	686.13
OP 11	37.774485	-86.482058	669.67	16.00	685.67
OP 12	37.774036	-86.480744	671.57	16.00	687.57
OP 13	37.774913	-86.481382	670.71	16.00	686.71
OP 14	37.775134	-86.480862	669.95	16.00	685.95
OP 15	37.775812	-86.479376	667.74	16.00	683.74
OP 16	37.776241	-86.477697	661.56	16.00	677.56
OP 17	37.774638	-86.476898	664.03	16.00	680.03
OP 18	37.775532	-86.476538	655.44	16.00	671.44
OP 19	37.774807	-86.476077	657.66	16.00	673.66
OP 20	37.775520	-86.477316	658.66	16.00	674.66
OP 21	37.775113	-86.477091	661.78	16.00	677.78
OP 22	37.773705	-86.476146	657.71	16.00	673.71
OP 23	37.773234	-86.473883	642.66	16.00	658.66
OP 24	37.770622	-86.474548	666.38	16.00	682.38
OP 25	37.782380	-86.481237	647.30	16.00	663.30
OP 26	37.783279	-86.481302	640.33	16.00	656.33
OP 27	37.783296	-86.482267	635.82	16.00	651.82
OP 28	37.783643	-86.482943	635.23	16.00	651.23
OP 29	37.784517	-86.482739	643.30	16.00	659.30
OP 30	37.783414	-86.484724	653.73	16.00	669.73
OP 31	37.793012	-86.472872	675.31	16.00	691.31
OP 32	37.792820	-86.472517	679.53	16.00	695.53
OP 33	37.792678	-86.472298	685.35	16.00	701.35
OP 34	37.792158	-86.473368	672.89	16.00	688.89
OP 35	37.792529	-86.471882	686.24	16.00	702.24
OP 36	37.792379	-86.472096	685.45	16.00	701.45
OP 37	37.792343	-86.471479	692.15	16.00	708.15
OP 38	37.792207	-86.471901	686.13	16.00	702.13
OP 39	37.792044	-86.471174	690.55	16.00	706.55
OP 40	37.792523	-86.474840	663.96	16.00	679.96

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	1,484	0	-	-
202	SA tracking	SA tracking	6,178	2,285	-	-
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	-	-

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
201 (green)	0	0	0	0	94	1055	335	0	0	0	0	0
201 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0
202 (green)	0	0	0	815	1405	1313	1436	1145	64	0	0	0
202 (yellow)	0	0	0	72	602	714	674	223	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

201 low potential for temporary after-image

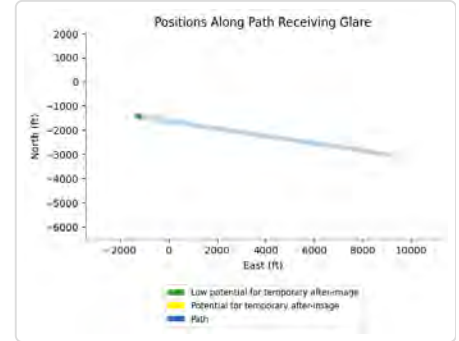
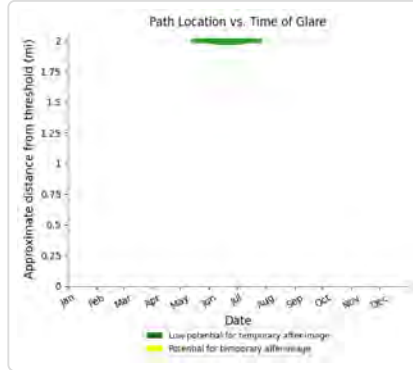
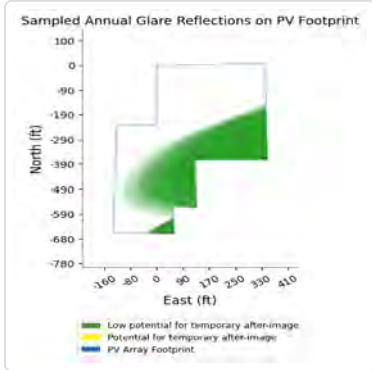
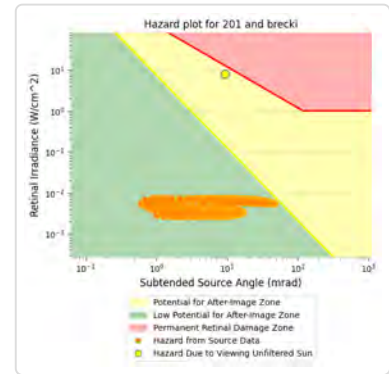
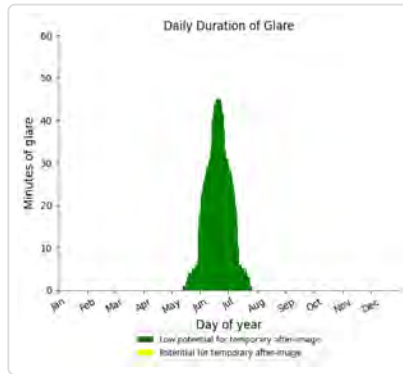
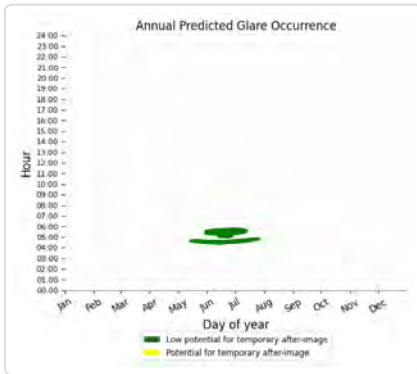
Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	1484	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0

OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

201: Breckinridge County Airport Runway 10

PV array is expected to produce the following glare for this receptor:

- 1,484 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



201: Breckinridge County Airport Runway 28

No glare found

201: Rough River State Park Airport Runway 2

No glare found

201: Rough River State Park Airport Runway 20

No glare found

201: OP 1

No glare found

201: OP 2

No glare found

201: OP 3

No glare found

201: OP 4

No glare found

201: OP 5

No glare found

201: OP 6

No glare found

201: OP 7

No glare found

201: OP 8

No glare found

201: OP 9

No glare found

201: OP 10

No glare found

201: OP 11

No glare found

201: OP 12

No glare found

201: OP 13

No glare found

201: OP 14

No glare found

201: OP 15

No glare found

201: OP 16

No glare found

201: OP 17

No glare found

201: OP 18

No glare found

201: OP 19

No glare found

201: OP 20

No glare found

201: OP 21

No glare found

201: OP 22

No glare found

201: OP 23

No glare found

201: OP 24

No glare found

201: OP 25

No glare found

201: OP 26

No glare found

201: OP 27

No glare found

201: OP 28

No glare found

201: OP 29

No glare found

201: OP 30

No glare found

201: OP 31

No glare found

201: OP 32

No glare found

201: OP 33

No glare found

201: OP 34

No glare found

201: OP 35

No glare found

201: OP 36

No glare found

201: OP 37

No glare found

201: OP 38

No glare found

201: OP 39

No glare found

201: OP 40

No glare found

201: Highway 992

No glare found

201: Lighthouse Road

No glare found

201: Main Street

No glare found

201: Skillman Monarch Lane

No glare found

201: US Highway 60

No glare found

202 potential temporary after-image

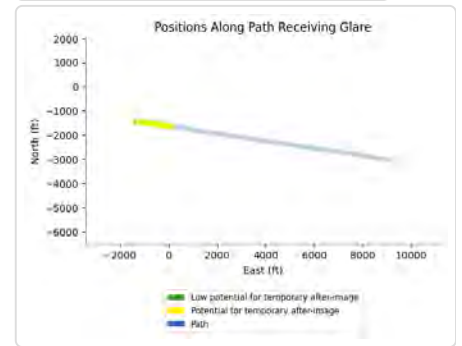
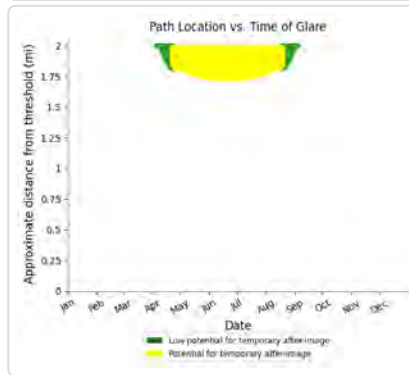
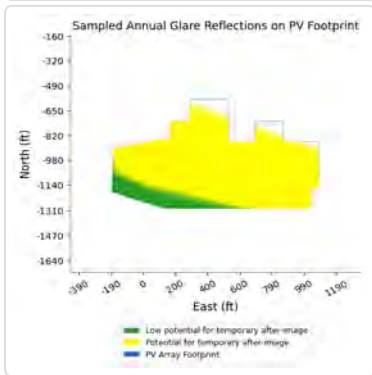
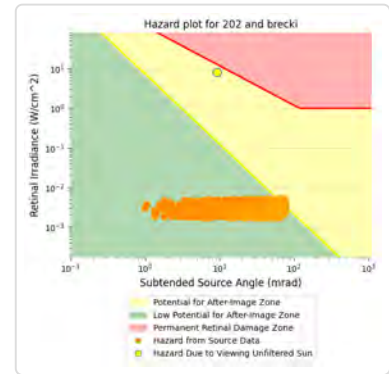
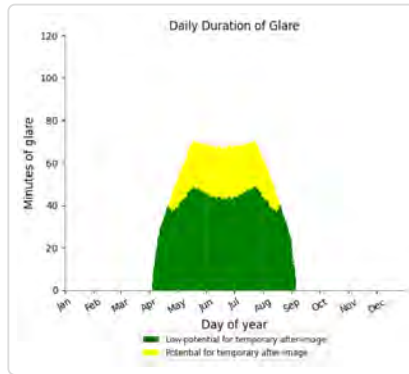
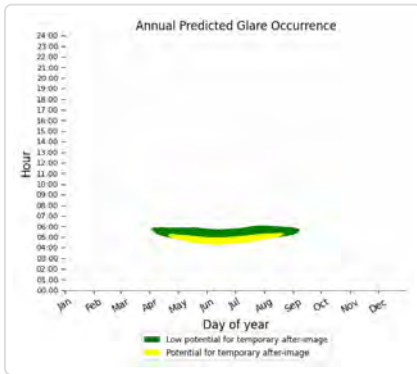
Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	6178	2285
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0

OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

202: Breckinridge County Airport Runway 10

PV array is expected to produce the following glare for this receptor:

- 6,178 minutes of "green" glare with low potential to cause temporary after-image.
- 2,285 minutes of "yellow" glare with potential to cause temporary after-image.



202: Breckinridge County Airport Runway 28

No glare found

202: Rough River State Park Airport Runway 2

No glare found

202: Rough River State Park Airport Runway 20

No glare found

202: OP 1

No glare found

202: OP 2

No glare found

202: OP 3

No glare found

202: OP 4

No glare found

202: OP 5

No glare found

202: OP 6

No glare found

202: OP 7

No glare found

202: OP 8

No glare found

202: OP 9

No glare found

202: OP 10

No glare found

202: OP 11

No glare found

202: OP 12

No glare found

202: OP 13

No glare found

202: OP 14

No glare found

202: OP 15

No glare found

202: OP 16

No glare found

202: OP 17

No glare found

202: OP 18

No glare found

202: OP 19

No glare found

202: OP 20

No glare found

202: OP 21

No glare found

202: OP 22

No glare found

202: OP 23

No glare found

202: OP 24

No glare found

202: OP 25

No glare found

202: OP 26

No glare found

202: OP 27

No glare found

202: OP 28

No glare found

202: OP 29

No glare found

202: OP 30

No glare found

202: OP 31

No glare found

202: OP 32

No glare found

202: OP 33

No glare found

202: OP 34

No glare found

202: OP 35

No glare found

202: OP 36

No glare found

202: OP 37

No glare found

202: OP 38

No glare found

202: OP 39

No glare found

202: OP 40

No glare found

202: Highway 992

No glare found

202: Lighthouse Road

No glare found

202: Main Street

No glare found

202: Skillman Monarch Lane

No glare found

202: US Highway 60

No glare found

203 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

204 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

205 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

206 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

207 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

208 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

209 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

210 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

211 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

212 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

213 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

214 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

215 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

216 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
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No glare found

217 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
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No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 2 4_25 panels 9ft vehicles

Created Oct 04, 2024
Updated Oct 11, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 130566.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

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
201	SA tracking	SA tracking	1,484	0	-
202	SA tracking	SA tracking	6,178	2,285	-
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	-

Component Data

PV Array(s)

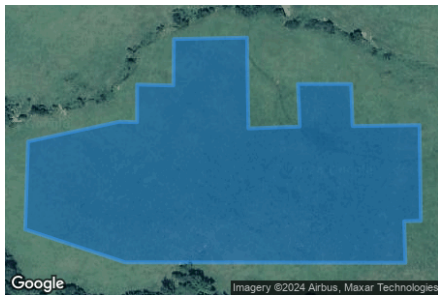
Total PV footprint area: 139.0 acres

Name: 201
Footprint area: 4.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



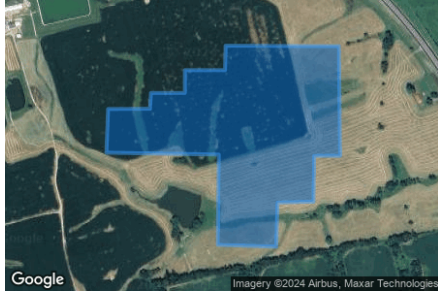
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.793756	-86.479678	607.17	4.25	611.42
2	37.793773	-86.478503	621.12	4.25	625.37
3	37.792722	-86.478482	599.99	4.25	604.24
4	37.792717	-86.479265	604.26	4.25	608.51
5	37.792209	-86.479249	586.72	4.25	590.97
6	37.792209	-86.479501	589.65	4.25	593.90
7	37.791920	-86.479490	579.28	4.25	583.53
8	37.791933	-86.480150	586.11	4.25	590.36
9	37.793095	-86.480113	592.13	4.25	596.38
10	37.793099	-86.479684	599.90	4.25	604.15

Name: 202
Footprint area: 14.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.791255	-86.480306	583.85	4.25	588.10
2	37.791429	-86.479297	594.30	4.25	598.55
3	37.791424	-86.479099	598.48	4.25	602.73
4	37.791755	-86.479099	588.20	4.25	592.45
5	37.791747	-86.478696	598.41	4.25	602.66
6	37.792154	-86.478691	590.36	4.25	594.61
7	37.792166	-86.477881	605.63	4.25	609.88
8	37.791369	-86.477865	629.87	4.25	634.12
9	37.791386	-86.477296	629.50	4.25	633.75
10	37.791759	-86.477318	626.66	4.25	630.91
11	37.791759	-86.476728	629.01	4.25	633.26
12	37.791391	-86.476712	641.14	4.25	645.39
13	37.791399	-86.475971	648.17	4.25	652.42
14	37.790560	-86.475955	664.16	4.25	668.41
15	37.790555	-86.476140	662.61	4.25	666.86
16	37.790191	-86.476127	661.52	4.25	665.77
17	37.790195	-86.479233	595.80	4.25	600.05
18	37.790483	-86.480338	585.15	4.25	589.40

Name: 203
Footprint area: 25.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



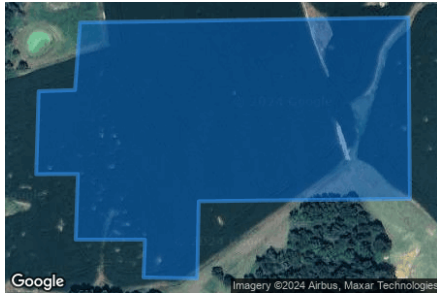
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.791314	-86.496136	576.36	4.25	580.61
2	37.791297	-86.496930	580.88	4.25	585.13
3	37.790526	-86.496962	580.64	4.25	584.89
4	37.790560	-86.498255	594.33	4.25	598.58
5	37.792137	-86.498234	600.76	4.25	605.01
6	37.792171	-86.500723	595.22	4.25	599.47
7	37.792934	-86.500685	606.35	4.25	610.60
8	37.792938	-86.499757	607.62	4.25	611.87
9	37.793213	-86.499736	609.63	4.25	613.88
10	37.793213	-86.498985	608.03	4.25	612.28
11	37.793612	-86.498985	614.96	4.25	619.21
12	37.793612	-86.498094	611.55	4.25	615.80
13	37.793959	-86.498083	615.43	4.25	619.68
14	37.794040	-86.498083	615.35	4.25	619.60
15	37.794032	-86.495573	593.75	4.25	598.00
16	37.792115	-86.495546	593.32	4.25	597.57
17	37.792115	-86.496120	592.75	4.25	597.00

Name: 204
Footprint area: 15.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789803	-86.503929	609.08	4.25	613.33
2	37.790863	-86.503934	611.82	4.25	616.07
3	37.790876	-86.503264	615.73	4.25	619.98
4	37.791312	-86.503258	617.31	4.25	621.56
5	37.791333	-86.502572	618.53	4.25	622.78
6	37.791694	-86.502561	615.79	4.25	620.04
7	37.791698	-86.501928	609.05	4.25	613.30
8	37.792067	-86.501917	600.05	4.25	604.30
9	37.792058	-86.501070	593.37	4.25	597.62
10	37.791355	-86.500957	597.96	4.25	602.21
11	37.791372	-86.500297	592.78	4.25	597.03
12	37.790977	-86.500276	601.32	4.25	605.57
13	37.790982	-86.499782	594.75	4.25	599.00
14	37.790269	-86.499739	596.83	4.25	601.08
15	37.790265	-86.500324	606.42	4.25	610.67
16	37.789854	-86.500308	600.57	4.25	604.82

Name: 205
Footprint area: 16.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789797	-86.503945	608.98	4.25	613.23
2	37.789841	-86.500308	600.58	4.25	604.83
3	37.788256	-86.500292	615.32	4.25	619.57
4	37.788234	-86.502631	609.54	4.25	613.79
5	37.787560	-86.502647	605.57	4.25	609.82
6	37.787569	-86.503242	603.23	4.25	607.48
7	37.787900	-86.503226	608.45	4.25	612.70
8	37.787900	-86.503993	605.32	4.25	609.57
9	37.788473	-86.503969	608.19	4.25	612.44
10	37.788471	-86.504430	608.03	4.25	612.28
11	37.789196	-86.504403	608.91	4.25	613.16
12	37.789207	-86.504001	611.19	4.25	615.44

Name: 206
Footprint area: 8.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789370	-86.500283	611.26	4.25	615.51
2	37.789387	-86.499597	607.77	4.25	612.02
3	37.789009	-86.499597	610.51	4.25	614.76
4	37.789005	-86.499280	605.67	4.25	609.92
5	37.788302	-86.499243	616.32	4.25	620.57
6	37.788302	-86.498551	611.65	4.25	615.90
7	37.787954	-86.498535	620.01	4.25	624.26
8	37.787962	-86.498170	614.81	4.25	619.06
9	37.787212	-86.498127	621.15	4.25	625.40
10	37.787195	-86.499527	618.79	4.25	623.04
11	37.786385	-86.499532	631.53	4.25	635.78
12	37.786394	-86.500069	631.74	4.25	635.99
13	37.785978	-86.500085	630.92	4.25	635.17
14	37.785987	-86.500417	629.25	4.25	633.50
15	37.787140	-86.500401	624.06	4.25	628.31
16	37.787157	-86.499865	613.67	4.25	617.92
17	37.788251	-86.499870	616.70	4.25	620.95
18	37.788251	-86.500251	615.63	4.25	619.88

Name: 207
Footprint area: 3.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.784762	-86.499728	599.27	4.25	603.52
2	37.784750	-86.498644	604.01	4.25	608.26
3	37.786314	-86.498655	633.24	4.25	637.49
4	37.786310	-86.498129	632.51	4.25	636.76
5	37.785580	-86.498135	628.05	4.25	632.30
6	37.785585	-86.498419	629.78	4.25	634.03
7	37.784915	-86.498397	601.87	4.25	606.12
8	37.784915	-86.498097	590.70	4.25	594.95
9	37.784203	-86.498081	567.34	4.25	571.59
10	37.784207	-86.498349	574.24	4.25	578.49
11	37.784092	-86.498344	568.73	4.25	572.98
12	37.784109	-86.498741	581.71	4.25	585.96
13	37.784118	-86.499738	609.22	4.25	613.47

Name: 208
Footprint area: 1.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.783668	-86.495914	620.62	4.25	624.87
2	37.783830	-86.495195	624.06	4.25	628.31
3	37.784588	-86.495227	600.68	4.25	604.93
4	37.784419	-86.495946	591.42	4.25	595.67

Name: 209
Footprint area: 5.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.786886	-86.505897	612.01	4.25	616.26
2	37.786886	-86.505449	612.31	4.25	616.56
3	37.787321	-86.505462	610.49	4.25	614.74
4	37.787329	-86.504872	610.22	4.25	614.47
5	37.787007	-86.504864	612.44	4.25	616.69
6	37.787009	-86.504752	612.16	4.25	616.41
7	37.786895	-86.504746	612.20	4.25	616.45
8	37.786907	-86.504110	600.51	4.25	604.76
9	37.786625	-86.504089	602.19	4.25	606.44
10	37.786628	-86.503786	590.95	4.25	595.20
11	37.785913	-86.503730	593.48	4.25	597.73
12	37.785911	-86.504054	601.44	4.25	605.69
13	37.785814	-86.504049	602.69	4.25	606.94
14	37.785816	-86.504682	602.05	4.25	606.30
15	37.786242	-86.504706	605.99	4.25	610.24
16	37.786248	-86.505178	608.65	4.25	612.90
17	37.785504	-86.505170	601.89	4.25	606.14
18	37.785504	-86.505385	602.84	4.25	607.09
19	37.785816	-86.505385	607.29	4.25	611.54
20	37.785820	-86.505873	606.00	4.25	610.25

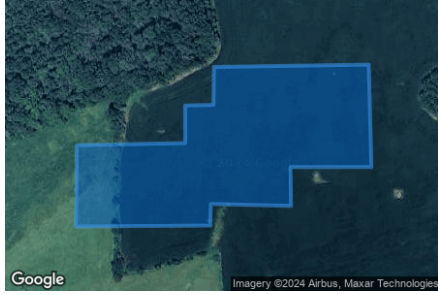
Name: 210
Footprint area: 7.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.785012	-86.504795	587.15	4.25	591.40
2	37.785024	-86.503523	598.49	4.25	602.74
3	37.784295	-86.503486	598.46	4.25	602.71
4	37.784304	-86.502906	581.07	4.25	585.32
5	37.783189	-86.502847	583.39	4.25	587.64
6	37.783176	-86.504746	589.14	4.25	593.39

Name: 211

Footprint area: 7.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.783180	-86.503290	595.71	4.25	599.96
2	37.782283	-86.503261	608.35	4.25	612.60
3	37.782283	-86.504157	595.74	4.25	599.99
4	37.781944	-86.504151	602.56	4.25	606.81
5	37.781961	-86.505039	586.59	4.25	590.84
6	37.781772	-86.505044	582.39	4.25	586.64
7	37.781764	-86.506534	596.26	4.25	600.51
8	37.782474	-86.506523	560.50	4.25	564.75
9	37.782494	-86.505324	592.20	4.25	596.45
10	37.782822	-86.505324	583.02	4.25	587.27
11	37.782828	-86.505010	590.65	4.25	594.90
12	37.783159	-86.505005	584.17	4.25	588.42

Name: 212

Footprint area: 1.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.780357	-86.502092	599.13	4.25	603.38
2	37.780452	-86.502599	603.97	4.25	608.22
3	37.781289	-86.502588	606.79	4.25	611.04
4	37.781232	-86.502087	608.44	4.25	612.69

Name: 213
Footprint area: 4.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.778712	-86.505142	576.82	4.25	581.07
2	37.778710	-86.504967	579.67	4.25	583.92
3	37.778610	-86.504967	578.09	4.25	582.34
4	37.778617	-86.504495	578.72	4.25	582.97
5	37.778267	-86.504495	575.37	4.25	579.62
6	37.778260	-86.503691	555.95	4.25	560.20
7	37.779009	-86.503728	583.58	4.25	587.83
8	37.779011	-86.503632	580.28	4.25	584.53
9	37.779685	-86.503653	593.73	4.25	597.98
10	37.779696	-86.504924	584.22	4.25	588.47
11	37.779475	-86.504932	584.19	4.25	588.44
12	37.779475	-86.505139	584.61	4.25	588.86

Name: 214
Footprint area: 1.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.779437	-86.507727	529.04	4.25	533.29
2	37.779534	-86.507073	536.30	4.25	540.55
3	37.780319	-86.507076	563.92	4.25	568.17
4	37.780204	-86.507752	560.39	4.25	564.64

Name: 215
Footprint area: 13.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.778163	-86.506702	559.11	4.25	563.36
2	37.778040	-86.506691	556.59	4.25	560.84
3	37.777972	-86.506101	549.75	4.25	554.00
4	37.777243	-86.506079	511.23	4.25	515.48
5	37.777323	-86.506696	526.23	4.25	530.48
6	37.777128	-86.506691	520.96	4.25	525.21
7	37.777158	-86.506932	528.73	4.25	532.98
8	37.776725	-86.506927	518.41	4.25	522.66
9	37.776925	-86.508011	513.19	4.25	517.44
10	37.777374	-86.508000	523.24	4.25	527.49
11	37.777832	-86.510387	511.76	4.25	516.01
12	37.778006	-86.510398	517.06	4.25	521.31
13	37.778205	-86.511326	512.47	4.25	516.72
14	37.778867	-86.511294	490.65	4.25	494.90
15	37.778701	-86.510226	504.67	4.25	508.92
16	37.778943	-86.510221	491.38	4.25	495.63
17	37.778298	-86.506718	559.97	4.25	564.22

Name: 216
Footprint area: 4.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.781758	-86.496847	619.74	4.25	623.99
2	37.781754	-86.496273	618.91	4.25	623.16
3	37.780813	-86.496279	585.13	4.25	589.38
4	37.780808	-86.495951	579.38	4.25	583.63
5	37.781152	-86.495941	592.35	4.25	596.60
6	37.781158	-86.495530	582.32	4.25	586.57
7	37.781364	-86.495528	591.84	4.25	596.09
8	37.781362	-86.495168	576.85	4.25	581.10
9	37.782129	-86.495179	596.25	4.25	600.50
10	37.782121	-86.495536	608.10	4.25	612.35
11	37.782237	-86.495538	610.45	4.25	614.70
12	37.782242	-86.495836	618.60	4.25	622.85
13	37.782615	-86.495841	614.82	4.25	619.07
14	37.782613	-86.496198	622.71	4.25	626.96
15	37.782504	-86.496209	623.06	4.25	627.31
16	37.782515	-86.496820	632.39	4.25	636.64

Name: 217
Footprint area: 5.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.781317	-86.489986	635.89	4.25	640.14
2	37.781334	-86.489337	646.24	4.25	650.49
3	37.781762	-86.489348	648.79	4.25	653.04
4	37.781768	-86.488900	650.38	4.25	654.63
5	37.782050	-86.488913	650.18	4.25	654.43
6	37.782061	-86.487991	647.51	4.25	651.76
7	37.782750	-86.488015	643.13	4.25	647.38
8	37.782741	-86.488948	646.10	4.25	650.35
9	37.782546	-86.488951	647.16	4.25	651.41
10	37.782542	-86.489340	647.46	4.25	651.71
11	37.782451	-86.489337	648.25	4.25	652.50
12	37.782442	-86.489957	640.24	4.25	644.49
13	37.782224	-86.489973	643.71	4.25	647.96
14	37.782222	-86.490775	642.06	4.25	646.31
15	37.781512	-86.490775	629.22	4.25	633.47
16	37.781505	-86.489986	642.58	4.25	646.83

2-Mile Flight Path Receptor(s)

Name: Breckinridge County Airport Runway 10
Description:
Threshold height : 50 ft
Direction: 98.7 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	37.785423	-86.448080	710.62	50.00	760.62
2-mile point	37.789817	-86.484281	648.03	666.02	1314.04

Name: Breckinridge County Airport Runway 28
Description:
Threshold height : 50 ft
Direction: 275.1 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	37.784151	-86.434486	722.18	50.00	772.18
2-mile point	37.781596	-86.398004	742.72	582.88	1325.61

Name: Rough River State Park Airport Runway 2
Description:
Threshold height : 50 ft
Direction: 18.9 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	37.606011	-86.508874	563.89	50.00	613.89
2-mile point	37.578654	-86.520697	493.37	673.95	1167.32

Name: Rough River State Park Airport Runway 20

Description:

Threshold height : 50 ft

Direction: 198.4 deg

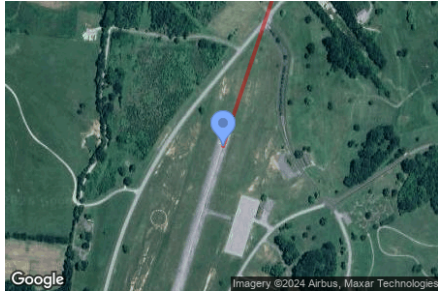
Glide slope: 3.0 deg

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	37.613983	-86.505752	577.15	50.00	627.15
2-mile point	37.641413	-86.494199	566.11	614.47	1180.58



Route Receptor(s)

Name: Highway 992
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	37.769714	-86.517179	513.31	9.00	522.31
2	37.771206	-86.514271	584.60	9.00	593.60
3	37.771461	-86.513059	604.67	9.00	613.67
4	37.771444	-86.512190	608.46	9.00	617.46
5	37.771037	-86.510688	612.20	9.00	621.20
6	37.769493	-86.505924	618.92	9.00	627.92
7	37.769010	-86.504615	623.52	9.00	632.52
8	37.768586	-86.503961	626.65	9.00	635.65
9	37.767644	-86.502620	624.60	9.00	633.60
10	37.767288	-86.501944	628.48	9.00	637.48
11	37.767110	-86.501290	630.49	9.00	639.49
12	37.767102	-86.497384	637.06	9.00	646.06
13	37.767195	-86.495807	638.60	9.00	647.60
14	37.767441	-86.494927	639.54	9.00	648.54
15	37.768425	-86.493254	653.02	9.00	662.02
16	37.770282	-86.490561	655.97	9.00	664.97
17	37.772529	-86.487245	664.06	9.00	673.06
18	37.773148	-86.486140	665.68	9.00	674.68
19	37.775065	-86.481763	665.80	9.00	674.80
20	37.776473	-86.478459	663.54	9.00	672.54

Name: Lighthouse 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	37.780252	-86.480089	658.08	9.00	667.08
2	37.780396	-86.479564	657.43	9.00	666.43
3	37.780235	-86.479092	657.88	9.00	666.88
4	37.779353	-86.477772	664.52	9.00	673.52
5	37.778776	-86.476817	665.45	9.00	674.45
6	37.778386	-86.475873	657.19	9.00	666.19
7	37.778089	-86.475090	644.37	9.00	653.37
8	37.777843	-86.475015	644.00	9.00	653.00

Name: Main Street
Route type: Two-way
View angle: 50.0 deg



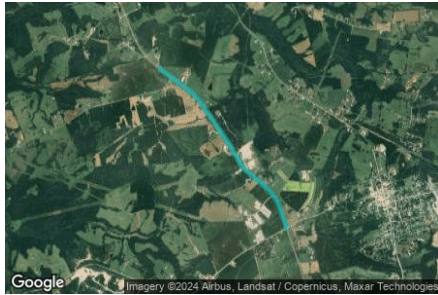
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.797288	-86.479810	636.35	9.00	645.35
2	37.796314	-86.478459	658.65	9.00	667.65
3	37.795389	-86.476624	643.07	9.00	652.07
4	37.794355	-86.474543	659.26	9.00	668.26
5	37.792982	-86.471796	682.47	9.00	691.47
6	37.791896	-86.469586	650.06	9.00	659.06

Name: Skillman Monarch Lane
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	37.794262	-86.508295	623.54	9.00	632.54
2	37.794982	-86.504744	625.83	9.00	634.83
3	37.795754	-86.500978	617.74	9.00	626.74
4	37.795881	-86.500367	610.48	9.00	619.48
5	37.796509	-86.499745	599.85	9.00	608.85
6	37.797458	-86.498779	606.78	9.00	615.78

Name: US Highway 60
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	37.798742	-86.500871	622.77	9.00	631.77
2	37.796530	-86.497137	597.47	9.00	606.47
3	37.795648	-86.495657	588.93	9.00	597.93
4	37.795114	-86.494852	590.73	9.00	599.73
5	37.794453	-86.494048	589.74	9.00	598.74
6	37.792850	-86.492631	587.14	9.00	596.14
7	37.790866	-86.490915	588.84	9.00	597.84
8	37.788857	-86.489155	613.63	9.00	622.63
9	37.787661	-86.488233	629.92	9.00	638.92
10	37.786161	-86.487117	640.57	9.00	649.57
11	37.785228	-86.486409	647.67	9.00	656.67
12	37.784702	-86.485840	650.66	9.00	659.66
13	37.784066	-86.484917	648.80	9.00	657.80
14	37.782616	-86.482707	640.92	9.00	649.92
15	37.781922	-86.481742	644.13	9.00	653.13
16	37.781228	-86.480905	649.07	9.00	658.07
17	37.779704	-86.479832	665.32	9.00	674.32
18	37.776553	-86.478459	663.38	9.00	672.38

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.769845	-86.492256	663.40	16.00	679.40
OP 2	37.769311	-86.491446	659.13	16.00	675.13
OP 3	37.769663	-86.490824	659.75	16.00	675.75
OP 4	37.773760	-86.485711	665.77	16.00	681.77
OP 5	37.773641	-86.484086	668.98	16.00	684.98
OP 6	37.772781	-86.482696	666.11	16.00	682.11
OP 7	37.772429	-86.482192	670.66	16.00	686.66
OP 8	37.772598	-86.480733	666.18	16.00	682.18
OP 9	37.773175	-86.480991	667.90	16.00	683.90
OP 10	37.774048	-86.481629	670.13	16.00	686.13
OP 11	37.774485	-86.482058	669.67	16.00	685.67
OP 12	37.774036	-86.480744	671.57	16.00	687.57
OP 13	37.774913	-86.481382	670.71	16.00	686.71
OP 14	37.775134	-86.480862	669.95	16.00	685.95
OP 15	37.775812	-86.479376	667.74	16.00	683.74
OP 16	37.776241	-86.477697	661.56	16.00	677.56
OP 17	37.774638	-86.476898	664.03	16.00	680.03
OP 18	37.775532	-86.476538	655.44	16.00	671.44
OP 19	37.774807	-86.476077	657.66	16.00	673.66
OP 20	37.775520	-86.477316	658.66	16.00	674.66
OP 21	37.775113	-86.477091	661.78	16.00	677.78
OP 22	37.773705	-86.476146	657.71	16.00	673.71
OP 23	37.773234	-86.473883	642.66	16.00	658.66
OP 24	37.770622	-86.474548	666.38	16.00	682.38
OP 25	37.782380	-86.481237	647.30	16.00	663.30
OP 26	37.783279	-86.481302	640.33	16.00	656.33
OP 27	37.783296	-86.482267	635.82	16.00	651.82
OP 28	37.783643	-86.482943	635.23	16.00	651.23
OP 29	37.784517	-86.482739	643.30	16.00	659.30
OP 30	37.783414	-86.484724	653.73	16.00	669.73
OP 31	37.793012	-86.472872	675.31	16.00	691.31
OP 32	37.792820	-86.472517	679.53	16.00	695.53
OP 33	37.792678	-86.472298	685.35	16.00	701.35
OP 34	37.792158	-86.473368	672.89	16.00	688.89
OP 35	37.792529	-86.471882	686.24	16.00	702.24
OP 36	37.792379	-86.472096	685.45	16.00	701.45
OP 37	37.792343	-86.471479	692.15	16.00	708.15
OP 38	37.792207	-86.471901	686.13	16.00	702.13
OP 39	37.792044	-86.471174	690.55	16.00	706.55
OP 40	37.792523	-86.474840	663.96	16.00	679.96

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	1,484	0	-	-
202	SA tracking	SA tracking	6,178	2,285	-	-
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	-	-

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
201 (green)	0	0	0	0	94	1055	335	0	0	0	0	0
201 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0
202 (green)	0	0	0	815	1405	1313	1436	1145	64	0	0	0
202 (yellow)	0	0	0	72	602	714	674	223	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

201 low potential for temporary after-image

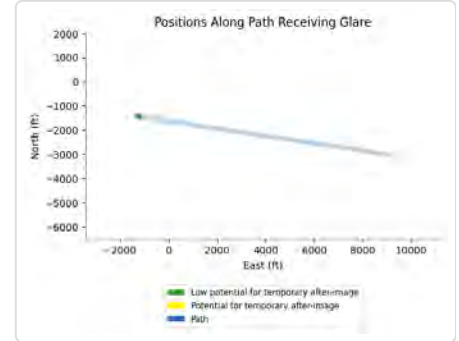
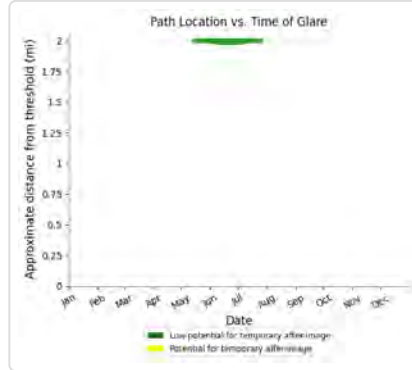
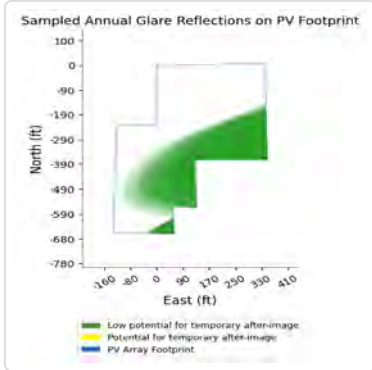
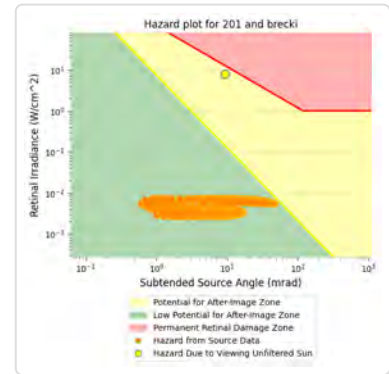
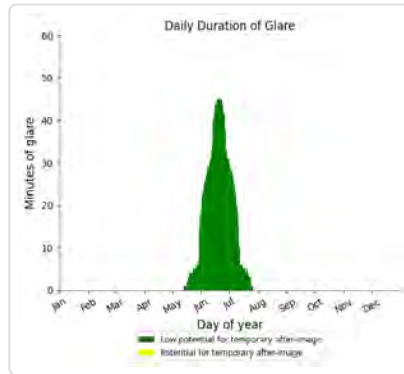
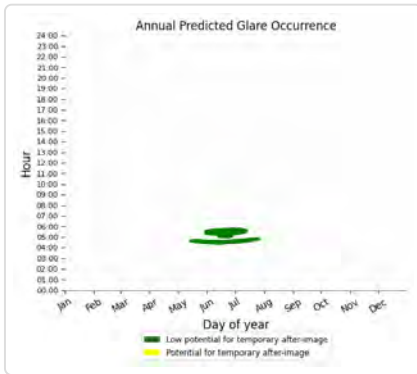
Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	1484	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0

OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

201: Breckinridge County Airport Runway 10

PV array is expected to produce the following glare for this receptor:

- 1,484 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



201: Breckinridge County Airport Runway 28

No glare found

201: Rough River State Park Airport Runway 2

No glare found

201: Rough River State Park Airport Runway 20

No glare found

201: OP 1

No glare found

201: OP 2

No glare found

201: OP 3

No glare found

201: OP 4

No glare found

201: OP 5

No glare found

201: OP 6

No glare found

201: OP 7

No glare found

201: OP 8

No glare found

201: OP 9

No glare found

201: OP 10

No glare found

201: OP 11

No glare found

201: OP 12

No glare found

201: OP 13

No glare found

201: OP 14

No glare found

201: OP 15

No glare found

201: OP 16

No glare found

201: OP 17

No glare found

201: OP 18

No glare found

201: OP 19

No glare found

201: OP 20

No glare found

201: OP 21

No glare found

201: OP 22

No glare found

201: OP 23

No glare found

201: OP 24

No glare found

201: OP 25

No glare found

201: OP 26

No glare found

201: OP 27

No glare found

201: OP 28

No glare found

201: OP 29

No glare found

201: OP 30

No glare found

201: OP 31

No glare found

201: OP 32

No glare found

201: OP 33

No glare found

201: OP 34

No glare found

201: OP 35

No glare found

201: OP 36

No glare found

201: OP 37

No glare found

201: OP 38

No glare found

201: OP 39

No glare found

201: OP 40

No glare found

201: Highway 992

No glare found

201: Lighthouse Road

No glare found

201: Main Street

No glare found

201: Skillman Monarch Lane

No glare found

201: US Highway 60

No glare found

202 potential temporary after-image

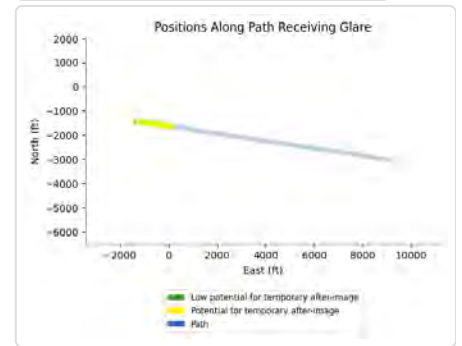
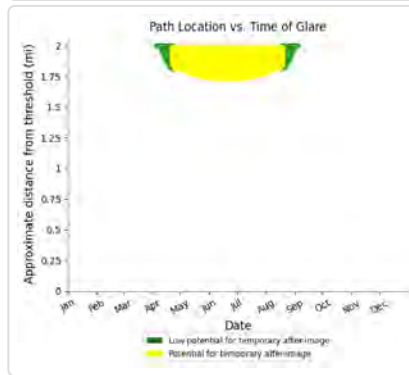
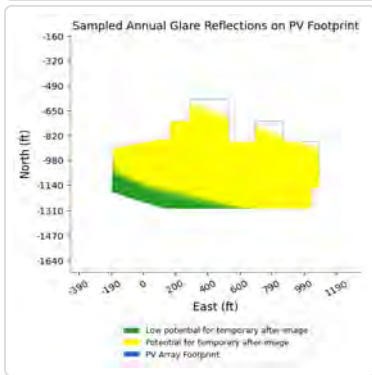
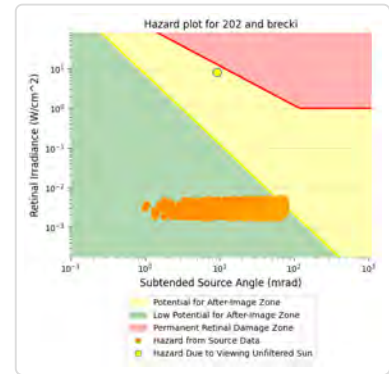
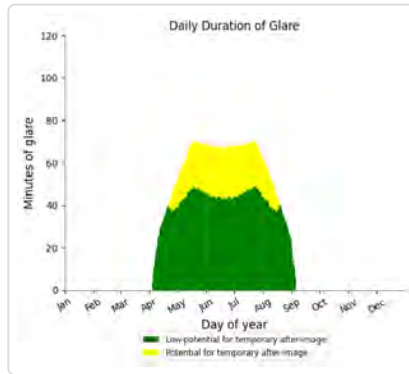
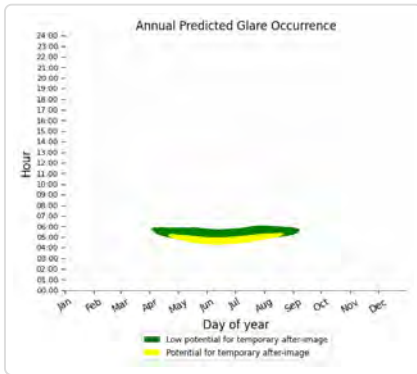
Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	6178	2285
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0

OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

202: Breckinridge County Airport Runway 10

PV array is expected to produce the following glare for this receptor:

- 6,178 minutes of "green" glare with low potential to cause temporary after-image.
- 2,285 minutes of "yellow" glare with potential to cause temporary after-image.



202: Breckinridge County Airport Runway 28

No glare found

202: Rough River State Park Airport Runway 2

No glare found

202: Rough River State Park Airport Runway 20

No glare found

202: OP 1

No glare found

202: OP 2

No glare found

202: OP 3

No glare found

202: OP 4

No glare found

202: OP 5

No glare found

202: OP 6

No glare found

202: OP 7

No glare found

202: OP 8

No glare found

202: OP 9

No glare found

202: OP 10

No glare found

202: OP 11

No glare found

202: OP 12

No glare found

202: OP 13

No glare found

202: OP 14

No glare found

202: OP 15

No glare found

202: OP 16

No glare found

202: OP 17

No glare found

202: OP 18

No glare found

202: OP 19

No glare found

202: OP 20

No glare found

202: OP 21

No glare found

202: OP 22

No glare found

202: OP 23

No glare found

202: OP 24

No glare found

202: OP 25

No glare found

202: OP 26

No glare found

202: OP 27

No glare found

202: OP 28

No glare found

202: OP 29

No glare found

202: OP 30

No glare found

202: OP 31

No glare found

202: OP 32

No glare found

202: OP 33

No glare found

202: OP 34

No glare found

202: OP 35

No glare found

202: OP 36

No glare found

202: OP 37

No glare found

202: OP 38

No glare found

202: OP 39

No glare found

202: OP 40

No glare found

202: Highway 992

No glare found

202: Lighthouse Road

No glare found

202: Main Street

No glare found

202: Skillman Monarch Lane

No glare found

202: US Highway 60

No glare found

203 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

204 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

205 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

206 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

207 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

208 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

209 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

210 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

211 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

212 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

213 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
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No glare found

214 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
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No glare found

215 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
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No glare found

216 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
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No glare found

217 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
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No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 2 4_25 panels helipads

Created Oct 14, 2024
Updated Oct 14, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 131218.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

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	-

Component Data

PV Array(s)

Total PV footprint area: 139.0 acres

Name: 201
Footprint area: 4.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



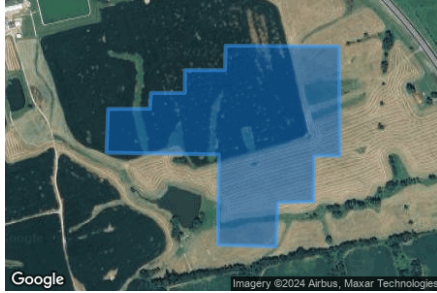
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.793756	-86.479678	607.17	4.25	611.42
2	37.793773	-86.478503	621.12	4.25	625.37
3	37.792722	-86.478482	599.99	4.25	604.24
4	37.792717	-86.479265	604.26	4.25	608.51
5	37.792209	-86.479249	586.72	4.25	590.97
6	37.792200	-86.479501	589.65	4.25	593.90
7	37.791920	-86.479490	579.28	4.25	583.53
8	37.791933	-86.480150	586.11	4.25	590.36
9	37.793095	-86.480113	592.13	4.25	596.38
10	37.793099	-86.479684	599.90	4.25	604.15

Name: 202
Footprint area: 14.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.791255	-86.480306	583.85	4.25	588.10
2	37.791429	-86.479297	594.30	4.25	598.55
3	37.791424	-86.479099	598.48	4.25	602.73
4	37.791755	-86.479099	588.20	4.25	592.45
5	37.791747	-86.478696	598.41	4.25	602.66
6	37.792154	-86.478691	590.36	4.25	594.61
7	37.792166	-86.477881	605.63	4.25	609.88
8	37.791369	-86.477865	629.87	4.25	634.12
9	37.791386	-86.477296	629.50	4.25	633.75
10	37.791759	-86.477318	626.66	4.25	630.91
11	37.791759	-86.476728	629.01	4.25	633.26
12	37.791391	-86.476712	641.14	4.25	645.39
13	37.791399	-86.475971	648.17	4.25	652.42
14	37.790560	-86.475955	664.16	4.25	668.41
15	37.790555	-86.476140	662.61	4.25	666.86
16	37.790191	-86.476127	661.52	4.25	665.77
17	37.790195	-86.479233	595.80	4.25	600.05
18	37.790483	-86.480338	585.15	4.25	589.40

Name: 203
Footprint area: 25.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



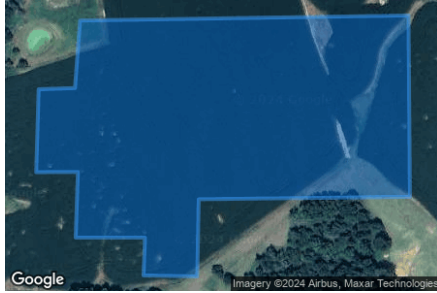
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.791314	-86.496136	576.36	4.25	580.61
2	37.791297	-86.496930	580.88	4.25	585.13
3	37.790526	-86.496962	580.64	4.25	584.89
4	37.790560	-86.498255	594.33	4.25	598.58
5	37.792137	-86.498234	600.76	4.25	605.01
6	37.792171	-86.500723	595.22	4.25	599.47
7	37.792934	-86.500685	606.35	4.25	610.60
8	37.792938	-86.499757	607.62	4.25	611.87
9	37.793213	-86.499736	609.63	4.25	613.88
10	37.793213	-86.498985	608.03	4.25	612.28
11	37.793612	-86.498985	614.96	4.25	619.21
12	37.793612	-86.498094	611.55	4.25	615.80
13	37.793959	-86.498083	615.43	4.25	619.68
14	37.794040	-86.498083	615.35	4.25	619.60
15	37.794032	-86.495573	593.75	4.25	598.00
16	37.792115	-86.495546	593.32	4.25	597.57
17	37.792115	-86.496120	592.75	4.25	597.00

Name: 204
Footprint area: 15.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789803	-86.503929	609.08	4.25	613.33
2	37.790863	-86.503934	611.82	4.25	616.07
3	37.790876	-86.503264	615.73	4.25	619.98
4	37.791312	-86.503258	617.31	4.25	621.56
5	37.791333	-86.502572	618.53	4.25	622.78
6	37.791694	-86.502561	615.79	4.25	620.04
7	37.791698	-86.501928	609.05	4.25	613.30
8	37.792067	-86.501917	600.05	4.25	604.30
9	37.792058	-86.501070	593.37	4.25	597.62
10	37.791355	-86.500957	597.96	4.25	602.21
11	37.791372	-86.500297	592.78	4.25	597.03
12	37.790977	-86.500276	601.32	4.25	605.57
13	37.790982	-86.499782	594.75	4.25	599.00
14	37.790269	-86.499739	596.83	4.25	601.08
15	37.790265	-86.500324	606.42	4.25	610.67
16	37.789854	-86.500308	600.57	4.25	604.82

Name: 205
Footprint area: 16.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789797	-86.503945	608.98	4.25	613.23
2	37.789841	-86.500308	600.58	4.25	604.83
3	37.788256	-86.500292	615.32	4.25	619.57
4	37.788234	-86.502631	609.54	4.25	613.79
5	37.787560	-86.502647	605.57	4.25	609.82
6	37.787569	-86.503242	603.23	4.25	607.48
7	37.787900	-86.503226	608.45	4.25	612.70
8	37.787900	-86.503993	605.32	4.25	609.57
9	37.788473	-86.503969	608.19	4.25	612.44
10	37.788471	-86.504430	608.03	4.25	612.28
11	37.789196	-86.504403	608.91	4.25	613.16
12	37.789207	-86.504001	611.19	4.25	615.44

Name: 206
Footprint area: 8.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789370	-86.500283	611.26	4.25	615.51
2	37.789387	-86.499597	607.77	4.25	612.02
3	37.789009	-86.499597	610.51	4.25	614.76
4	37.789005	-86.499280	605.67	4.25	609.92
5	37.788302	-86.499243	616.32	4.25	620.57
6	37.788302	-86.498551	611.65	4.25	615.90
7	37.787954	-86.498535	620.01	4.25	624.26
8	37.787962	-86.498170	614.81	4.25	619.06
9	37.787212	-86.498127	621.15	4.25	625.40
10	37.787195	-86.499527	618.79	4.25	623.04
11	37.786385	-86.499532	631.53	4.25	635.78
12	37.786394	-86.500069	631.74	4.25	635.99
13	37.785978	-86.500085	630.92	4.25	635.17
14	37.785987	-86.500417	629.25	4.25	633.50
15	37.787140	-86.500401	624.06	4.25	628.31
16	37.787157	-86.499865	613.67	4.25	617.92
17	37.788251	-86.499870	616.70	4.25	620.95
18	37.788251	-86.500251	615.63	4.25	619.88

Name: 207
Footprint area: 3.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.784762	-86.499728	599.27	4.25	603.52
2	37.784750	-86.498644	604.01	4.25	608.26
3	37.786314	-86.498655	633.24	4.25	637.49
4	37.786310	-86.498129	632.51	4.25	636.76
5	37.785580	-86.498135	628.05	4.25	632.30
6	37.785585	-86.498419	629.78	4.25	634.03
7	37.784915	-86.498397	601.87	4.25	606.12
8	37.784915	-86.498097	590.70	4.25	594.95
9	37.784203	-86.498081	567.34	4.25	571.59
10	37.784207	-86.498349	574.24	4.25	578.49
11	37.784092	-86.498344	568.73	4.25	572.98
12	37.784109	-86.498741	581.71	4.25	585.96
13	37.784118	-86.499738	609.22	4.25	613.47

Name: 208
Footprint area: 1.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.783668	-86.495914	620.62	4.25	624.87
2	37.783830	-86.495195	624.06	4.25	628.31
3	37.784588	-86.495227	600.68	4.25	604.93
4	37.784419	-86.495946	591.42	4.25	595.67

Name: 209
Footprint area: 5.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



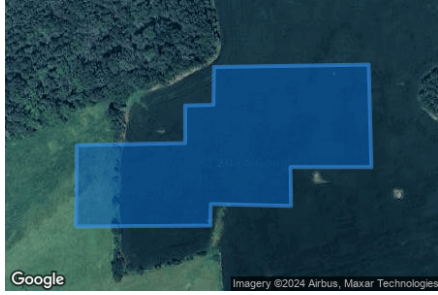
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.786886	-86.505897	612.01	4.25	616.26
2	37.786886	-86.505449	612.31	4.25	616.56
3	37.787321	-86.505462	610.49	4.25	614.74
4	37.787329	-86.504872	610.22	4.25	614.47
5	37.787007	-86.504864	612.44	4.25	616.69
6	37.787009	-86.504752	612.16	4.25	616.41
7	37.786895	-86.504746	612.20	4.25	616.45
8	37.786907	-86.504110	600.51	4.25	604.76
9	37.786625	-86.504089	602.19	4.25	606.44
10	37.786628	-86.503786	590.95	4.25	595.20
11	37.785913	-86.503730	593.48	4.25	597.73
12	37.785911	-86.504054	601.44	4.25	605.69
13	37.785814	-86.504049	602.69	4.25	606.94
14	37.785816	-86.504682	602.05	4.25	606.30
15	37.786242	-86.504706	605.99	4.25	610.24
16	37.786248	-86.505178	608.65	4.25	612.90
17	37.785504	-86.505170	601.89	4.25	606.14
18	37.785504	-86.505385	602.84	4.25	607.09
19	37.785816	-86.505385	607.29	4.25	611.54
20	37.785820	-86.505873	606.00	4.25	610.25

Name: 210
Footprint area: 7.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.785012	-86.504795	587.15	4.25	591.40
2	37.785024	-86.503523	598.49	4.25	602.74
3	37.784295	-86.503486	598.46	4.25	602.71
4	37.784304	-86.502906	581.07	4.25	585.32
5	37.783189	-86.502847	583.39	4.25	587.64
6	37.783176	-86.504746	589.14	4.25	593.39

Name: 211
Footprint area: 7.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.783180	-86.503290	595.71	4.25	599.96
2	37.782283	-86.503261	608.35	4.25	612.60
3	37.782283	-86.504157	595.74	4.25	599.99
4	37.781944	-86.504151	602.56	4.25	606.81
5	37.781961	-86.505039	586.59	4.25	590.84
6	37.781772	-86.505044	582.39	4.25	586.64
7	37.781764	-86.506534	596.26	4.25	600.51
8	37.782474	-86.506523	560.50	4.25	564.75
9	37.782494	-86.505324	592.20	4.25	596.45
10	37.782822	-86.505324	583.02	4.25	587.27
11	37.782828	-86.505010	590.65	4.25	594.90
12	37.783159	-86.505005	584.17	4.25	588.42

Name: 212
Footprint area: 1.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.780357	-86.502092	599.13	4.25	603.38
2	37.780452	-86.502599	603.97	4.25	608.22
3	37.781289	-86.502588	606.79	4.25	611.04
4	37.781232	-86.502087	608.44	4.25	612.69

Name: 213
Footprint area: 4.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.778712	-86.505142	576.82	4.25	581.07
2	37.778710	-86.504967	579.67	4.25	583.92
3	37.778610	-86.504967	578.09	4.25	582.34
4	37.778617	-86.504495	578.72	4.25	582.97
5	37.778267	-86.504495	575.37	4.25	579.62
6	37.778260	-86.503691	555.95	4.25	560.20
7	37.779009	-86.503728	583.58	4.25	587.83
8	37.779011	-86.503632	580.28	4.25	584.53
9	37.779685	-86.503653	593.73	4.25	597.98
10	37.779696	-86.504924	584.22	4.25	588.47
11	37.779475	-86.504932	584.19	4.25	588.44
12	37.779475	-86.505139	584.61	4.25	588.86

Name: 214
Footprint area: 1.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.779437	-86.507727	529.04	4.25	533.29
2	37.779534	-86.507073	536.30	4.25	540.55
3	37.780319	-86.507076	563.92	4.25	568.17
4	37.780204	-86.507752	560.39	4.25	564.64

Name: 215
Footprint area: 13.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.778163	-86.506702	559.11	4.25	563.36
2	37.778040	-86.506691	556.59	4.25	560.84
3	37.777972	-86.506101	549.75	4.25	554.00
4	37.777243	-86.506079	511.23	4.25	515.48
5	37.777323	-86.506696	526.23	4.25	530.48
6	37.777128	-86.506691	520.96	4.25	525.21
7	37.777158	-86.506932	528.73	4.25	532.98
8	37.776725	-86.506927	518.41	4.25	522.66
9	37.776925	-86.508011	513.19	4.25	517.44
10	37.777374	-86.508000	523.24	4.25	527.49
11	37.777832	-86.510387	511.76	4.25	516.01
12	37.778006	-86.510398	517.06	4.25	521.31
13	37.778205	-86.511326	512.47	4.25	516.72
14	37.778867	-86.511294	490.65	4.25	494.90
15	37.778701	-86.510226	504.67	4.25	508.92
16	37.778943	-86.510221	491.38	4.25	495.63
17	37.778298	-86.506718	559.97	4.25	564.22

Name: 216
Footprint area: 4.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.781758	-86.496847	619.74	4.25	623.99
2	37.781754	-86.496273	618.91	4.25	623.16
3	37.780813	-86.496279	585.13	4.25	589.38
4	37.780808	-86.495951	579.38	4.25	583.63
5	37.781152	-86.495941	592.35	4.25	596.60
6	37.781158	-86.495530	582.32	4.25	586.57
7	37.781364	-86.495528	591.84	4.25	596.09
8	37.781362	-86.495168	576.85	4.25	581.10
9	37.782129	-86.495179	596.25	4.25	600.50
10	37.782121	-86.495536	608.10	4.25	612.35
11	37.782237	-86.495538	610.45	4.25	614.70
12	37.782242	-86.495836	618.60	4.25	622.85
13	37.782615	-86.495841	614.82	4.25	619.07
14	37.782613	-86.496198	622.71	4.25	626.96
15	37.782504	-86.496209	623.06	4.25	627.31
16	37.782515	-86.496820	632.39	4.25	636.64

Name: 217
Footprint area: 5.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.781317	-86.489986	635.89	4.25	640.14
2	37.781334	-86.489337	646.24	4.25	650.49
3	37.781762	-86.489348	648.79	4.25	653.04
4	37.781768	-86.488900	650.38	4.25	654.63
5	37.782050	-86.488913	650.18	4.25	654.43
6	37.782061	-86.487991	647.51	4.25	651.76
7	37.782750	-86.488015	643.13	4.25	647.38
8	37.782741	-86.488948	646.10	4.25	650.35
9	37.782546	-86.488951	647.16	4.25	651.41
10	37.782542	-86.489340	647.46	4.25	651.71
11	37.782451	-86.489337	648.25	4.25	652.50
12	37.782442	-86.489957	640.24	4.25	644.49
13	37.782224	-86.489973	643.71	4.25	647.96
14	37.782222	-86.490775	642.06	4.25	646.31
15	37.781512	-86.490775	629.22	4.25	633.47
16	37.781505	-86.489986	642.58	4.25	646.83

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.766035	-86.439689	726.43	0.00	726.43
OP 2	37.761998	-86.452505	691.78	0.00	691.78

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	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

201 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

202 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

203 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

204 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

205 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

206 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

207 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

208 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

209 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

210 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

211 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

212 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

213 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

214 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

215 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

216 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

217 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 2 5_83 panels 5ft vehicles

Created Oct 04, 2024
Updated Oct 11, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 130572.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

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

PV Name	Tilt deg	Orientation deg	"Green" Glare min	"Yellow" Glare min	Energy Produced kWh
201	SA tracking	SA tracking	1,505	0	-
202	SA tracking	SA tracking	6,164	2,287	-
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	-

Component Data

PV Array(s)

Total PV footprint area: 139.1 acres

Name: 201
Footprint area: 4.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



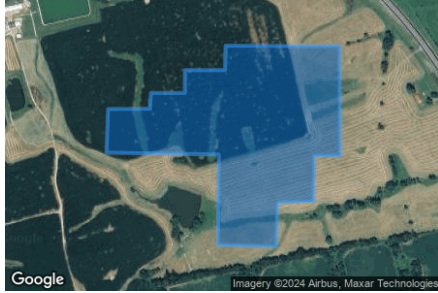
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.793756	-86.479678	607.17	5.83	613.00
2	37.793773	-86.478503	621.12	5.83	626.95
3	37.792722	-86.478482	599.99	5.83	605.82
4	37.792717	-86.479265	604.26	5.83	610.09
5	37.792209	-86.479249	586.72	5.83	592.55
6	37.792209	-86.479501	589.65	5.83	595.48
7	37.791920	-86.479490	579.28	5.83	585.11
8	37.791933	-86.480150	586.11	5.83	591.94
9	37.793095	-86.480113	592.13	5.83	597.96
10	37.793099	-86.479684	599.90	5.83	605.73

Name: 202
Footprint area: 14.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.791255	-86.480306	583.85	5.83	589.68
2	37.791429	-86.479297	594.30	5.83	600.13
3	37.791424	-86.479099	598.48	5.83	604.31
4	37.791755	-86.479099	588.20	5.83	594.03
5	37.791747	-86.478696	598.41	5.83	604.24
6	37.792154	-86.478691	590.36	5.83	596.19
7	37.792166	-86.477881	605.63	5.83	611.46
8	37.791369	-86.477865	629.87	5.83	635.70
9	37.791386	-86.477296	629.50	5.83	635.33
10	37.791759	-86.477318	626.66	5.83	632.49
11	37.791759	-86.476728	629.01	5.83	634.84
12	37.791391	-86.476712	641.14	5.83	646.97
13	37.791399	-86.475971	648.17	5.83	654.00
14	37.790560	-86.475955	664.16	5.83	669.99
15	37.790555	-86.476140	662.61	5.83	668.44
16	37.790191	-86.476127	661.52	5.83	667.35
17	37.790195	-86.479233	595.80	5.83	601.63
18	37.790483	-86.480338	585.15	5.83	590.98

Name: 203
Footprint area: 25.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



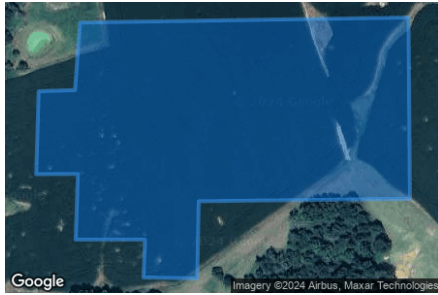
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.791314	-86.496136	576.36	5.83	582.19
2	37.791297	-86.496930	580.88	5.83	586.71
3	37.790526	-86.496962	580.64	5.83	586.47
4	37.790560	-86.498255	594.33	5.83	600.16
5	37.792137	-86.498234	600.76	5.83	606.59
6	37.792171	-86.500723	595.22	5.83	601.05
7	37.792934	-86.500685	606.35	5.83	612.18
8	37.792938	-86.499757	607.62	5.83	613.45
9	37.793213	-86.499736	609.63	5.83	615.46
10	37.793213	-86.498985	608.03	5.83	613.86
11	37.793612	-86.498985	614.96	5.83	620.79
12	37.793612	-86.498094	611.55	5.83	617.38
13	37.793959	-86.498083	615.43	5.83	621.26
14	37.794040	-86.498083	615.35	5.83	621.18
15	37.794032	-86.495557	593.56	5.83	599.39
16	37.792115	-86.495546	593.32	5.83	599.15
17	37.792115	-86.496120	592.75	5.83	598.58

Name: 204
Footprint area: 15.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789803	-86.503929	609.08	5.83	614.91
2	37.790863	-86.503934	611.82	5.83	617.65
3	37.790876	-86.503264	615.73	5.83	621.56
4	37.791312	-86.503258	617.31	5.83	623.14
5	37.791333	-86.502572	618.53	5.83	624.36
6	37.791694	-86.502561	615.79	5.83	621.62
7	37.791698	-86.501928	609.05	5.83	614.88
8	37.792067	-86.501917	600.05	5.83	605.88
9	37.792058	-86.501070	593.37	5.83	599.20
10	37.791355	-86.500957	597.96	5.83	603.79
11	37.791372	-86.500297	592.78	5.83	598.61
12	37.790977	-86.500276	601.32	5.83	607.15
13	37.790982	-86.499782	594.75	5.83	600.58
14	37.790269	-86.499739	596.83	5.83	602.66
15	37.790265	-86.500324	606.42	5.83	612.25
16	37.789854	-86.500308	600.57	5.83	606.40

Name: 205
Footprint area: 16.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789797	-86.503945	608.98	5.83	614.81
2	37.789841	-86.500308	600.58	5.83	606.41
3	37.788256	-86.500292	615.32	5.83	621.15
4	37.788234	-86.502631	609.54	5.83	615.37
5	37.787560	-86.502647	605.57	5.83	611.40
6	37.787569	-86.503242	603.23	5.83	609.06
7	37.787900	-86.503226	608.45	5.83	614.28
8	37.787900	-86.503993	605.32	5.83	611.15
9	37.788473	-86.503969	608.19	5.83	614.02
10	37.788471	-86.504430	608.03	5.83	613.86
11	37.789196	-86.504403	608.91	5.83	614.74
12	37.789207	-86.504001	611.19	5.83	617.02

Name: 206
Footprint area: 8.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789370	-86.500283	611.26	5.83	617.09
2	37.789387	-86.499597	607.77	5.83	613.60
3	37.789009	-86.499597	610.51	5.83	616.34
4	37.789005	-86.499280	605.67	5.83	611.50
5	37.788302	-86.499243	616.32	5.83	622.15
6	37.788302	-86.498551	611.65	5.83	617.48
7	37.787954	-86.498535	620.01	5.83	625.84
8	37.787962	-86.498170	614.81	5.83	620.64
9	37.787212	-86.498127	621.15	5.83	626.98
10	37.787195	-86.499527	618.79	5.83	624.62
11	37.786385	-86.499532	631.53	5.83	637.36
12	37.786364	-86.500063	631.58	5.83	637.41
13	37.785978	-86.500085	630.92	5.83	636.75
14	37.785987	-86.500417	629.25	5.83	635.08
15	37.787140	-86.500401	624.06	5.83	629.89
16	37.787157	-86.499865	613.67	5.83	619.50
17	37.788251	-86.499870	616.70	5.83	622.53
18	37.788251	-86.500251	615.63	5.83	621.46

Name: 207
Footprint area: 3.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.784762	-86.499728	599.27	5.83	605.10
2	37.784750	-86.498644	604.01	5.83	609.84
3	37.786314	-86.498655	633.24	5.83	639.07
4	37.786310	-86.498129	632.51	5.83	638.34
5	37.785580	-86.498135	628.05	5.83	633.88
6	37.785585	-86.498419	629.78	5.83	635.61
7	37.784915	-86.498397	601.87	5.83	607.70
8	37.784915	-86.498097	590.70	5.83	596.53
9	37.784203	-86.498081	567.34	5.83	573.17
10	37.784207	-86.498349	574.24	5.83	580.07
11	37.784092	-86.498344	568.73	5.83	574.56
12	37.784109	-86.498741	581.71	5.83	587.54
13	37.784118	-86.499738	609.22	5.83	615.05

Name: 208
Footprint area: 1.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.783668	-86.495914	620.62	5.83	626.45
2	37.783830	-86.495195	624.06	5.83	629.89
3	37.784588	-86.495227	600.68	5.83	606.51
4	37.784419	-86.495946	591.42	5.83	597.25

Name: 209
Footprint area: 5.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



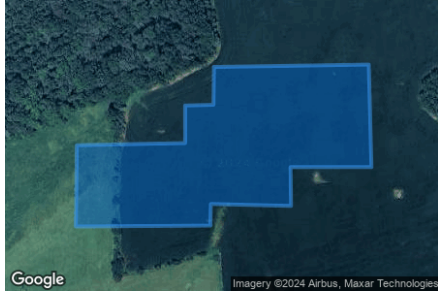
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.786886	-86.505897	612.01	5.83	617.84
2	37.786886	-86.505449	612.31	5.83	618.14
3	37.787321	-86.505462	610.49	5.83	616.32
4	37.787329	-86.504872	610.22	5.83	616.05
5	37.787007	-86.504864	612.44	5.83	618.27
6	37.787009	-86.504752	612.16	5.83	617.99
7	37.786895	-86.504746	612.20	5.83	618.03
8	37.786907	-86.504110	600.51	5.83	606.34
9	37.786625	-86.504089	602.19	5.83	608.02
10	37.786628	-86.503786	590.95	5.83	596.78
11	37.785913	-86.503730	593.48	5.83	599.31
12	37.785911	-86.504054	601.44	5.83	607.27
13	37.785814	-86.504049	602.69	5.83	608.52
14	37.785816	-86.504682	602.05	5.83	607.88
15	37.786242	-86.504706	605.99	5.83	611.82
16	37.786248	-86.505178	608.65	5.83	614.48
17	37.785504	-86.505170	601.89	5.83	607.72
18	37.785504	-86.505385	602.84	5.83	608.67
19	37.785816	-86.505385	607.29	5.83	613.12
20	37.785820	-86.505873	606.00	5.83	611.83

Name: 210
Footprint area: 7.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.785012	-86.504795	587.15	5.83	592.98
2	37.785024	-86.503523	598.49	5.83	604.32
3	37.784295	-86.503486	598.46	5.83	604.29
4	37.784304	-86.502906	581.07	5.83	586.90
5	37.783189	-86.502847	583.39	5.83	589.22
6	37.783176	-86.504746	589.14	5.83	594.97

Name: 211
Footprint area: 7.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.783180	-86.503290	595.71	5.83	601.54
2	37.782283	-86.503261	608.35	5.83	614.18
3	37.782283	-86.504157	595.74	5.83	601.57
4	37.781944	-86.504151	602.56	5.83	608.39
5	37.781961	-86.505039	586.59	5.83	592.42
6	37.781772	-86.505044	582.39	5.83	588.22
7	37.781764	-86.506534	596.26	5.83	602.09
8	37.782474	-86.506523	560.50	5.83	566.33
9	37.782494	-86.505324	592.20	5.83	598.03
10	37.782822	-86.505324	583.02	5.83	588.85
11	37.782828	-86.505010	590.65	5.83	596.48
12	37.783159	-86.505005	584.17	5.83	590.00

Name: 212
Footprint area: 1.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.780357	-86.502092	599.13	5.83	604.96
2	37.780452	-86.502599	603.97	5.83	609.80
3	37.781289	-86.502588	606.79	5.83	612.62
4	37.781232	-86.502087	608.44	5.83	614.27

Name: 213
Footprint area: 4.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.778712	-86.505142	576.82	5.83	582.65
2	37.778710	-86.504967	579.67	5.83	585.50
3	37.778610	-86.504967	578.09	5.83	583.92
4	37.778617	-86.504495	578.72	5.83	584.55
5	37.778267	-86.504495	575.37	5.83	581.20
6	37.778260	-86.503691	555.95	5.83	561.78
7	37.779009	-86.503728	583.58	5.83	589.41
8	37.779011	-86.503632	580.28	5.83	586.11
9	37.779685	-86.503653	593.73	5.83	599.56
10	37.779696	-86.504924	584.22	5.83	590.05
11	37.779475	-86.504932	584.19	5.83	590.02
12	37.779475	-86.505139	584.61	5.83	590.44

Name: 214
Footprint area: 1.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.779437	-86.507727	529.04	5.83	534.87
2	37.779534	-86.507073	536.30	5.83	542.13
3	37.780319	-86.507076	563.92	5.83	569.75
4	37.780204	-86.507752	560.39	5.83	566.22

Name: 215
Footprint area: 13.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.778163	-86.506702	559.11	5.83	564.94
2	37.778040	-86.506691	556.59	5.83	562.42
3	37.777972	-86.506101	549.75	5.83	555.58
4	37.777243	-86.506079	511.23	5.83	517.06
5	37.777323	-86.506696	526.23	5.83	532.06
6	37.777128	-86.506691	520.96	5.83	526.79
7	37.777158	-86.506932	528.73	5.83	534.56
8	37.776725	-86.506927	518.41	5.83	524.24
9	37.776925	-86.508011	513.19	5.83	519.02
10	37.777374	-86.508000	523.24	5.83	529.07
11	37.777832	-86.510387	511.76	5.83	517.59
12	37.778006	-86.510398	517.06	5.83	522.89
13	37.778205	-86.511326	512.47	5.83	518.30
14	37.778867	-86.511294	490.65	5.83	496.48
15	37.778701	-86.510226	504.67	5.83	510.50
16	37.778943	-86.510221	491.38	5.83	497.21
17	37.778298	-86.506718	559.97	5.83	565.80

Name: 216
Footprint area: 4.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.781758	-86.496847	619.74	5.83	625.57
2	37.781754	-86.496273	618.91	5.83	624.74
3	37.780813	-86.496279	585.13	5.83	590.96
4	37.780808	-86.495951	579.38	5.83	585.21
5	37.781152	-86.495941	592.35	5.83	598.18
6	37.781158	-86.495530	582.32	5.83	588.15
7	37.781364	-86.495528	591.84	5.83	597.67
8	37.781362	-86.495168	576.85	5.83	582.68
9	37.782129	-86.495179	596.25	5.83	602.08
10	37.782121	-86.495536	608.10	5.83	613.93
11	37.782237	-86.495538	610.45	5.83	616.28
12	37.782242	-86.495836	618.60	5.83	624.43
13	37.782615	-86.495841	614.82	5.83	620.65
14	37.782613	-86.496198	622.71	5.83	628.54
15	37.782504	-86.496209	623.06	5.83	628.89
16	37.782515	-86.496820	632.39	5.83	638.22

Name: 217
Footprint area: 5.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.781317	-86.489986	635.89	5.83	641.72
2	37.781334	-86.489337	646.24	5.83	652.07
3	37.781762	-86.489348	648.79	5.83	654.62
4	37.781768	-86.488900	650.38	5.83	656.21
5	37.782050	-86.488913	650.18	5.83	656.01
6	37.782061	-86.487991	647.51	5.83	653.34
7	37.782750	-86.488015	643.13	5.83	648.96
8	37.782741	-86.488948	646.10	5.83	651.93
9	37.782546	-86.488951	647.16	5.83	652.99
10	37.782542	-86.489340	647.46	5.83	653.29
11	37.782451	-86.489337	648.25	5.83	654.08
12	37.782442	-86.489957	640.24	5.83	646.07
13	37.782224	-86.489973	643.71	5.83	649.54
14	37.782222	-86.490775	642.06	5.83	647.89
15	37.781512	-86.490775	629.22	5.83	635.05
16	37.781505	-86.489986	642.58	5.83	648.41

2-Mile Flight Path Receptor(s)

Name: Breckinridge County Airport Runway 10
Description:
Threshold height : 50 ft
Direction: 98.7 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	37.785423	-86.448080	710.62	50.00	760.62
2-mile point	37.789817	-86.484281	648.03	666.02	1314.04

Name: Breckinridge County Airport Runway 28
Description:
Threshold height : 50 ft
Direction: 275.1 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	37.784151	-86.434486	722.18	50.00	772.18
2-mile point	37.781596	-86.398004	742.72	582.88	1325.61

Name: Rough River State Park Airport Runway 2
Description:
Threshold height : 50 ft
Direction: 18.9 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	37.606011	-86.508874	563.89	50.00	613.89
2-mile point	37.578654	-86.520697	493.37	673.95	1167.32

Name: Rough River State Park Airport Runway 20

Description:

Threshold height : 50 ft

Direction: 198.4 deg

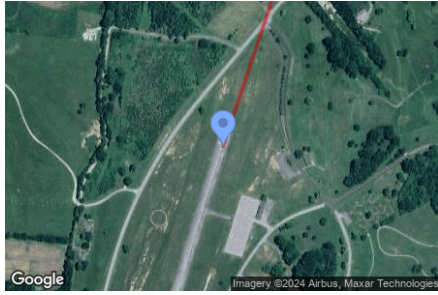
Glide slope: 3.0 deg

Pilot view restricted? Yes

Vertical view restriction: 30.0 deg

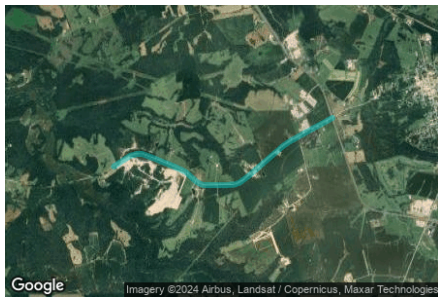
Azimuthal view restriction: 50.0 deg

Point	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
Threshold	37.613983	-86.505752	577.15	50.00	627.15
2-mile point	37.641413	-86.494199	566.11	614.47	1180.58



Route Receptor(s)

Name: Highway 992
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	37.769714	-86.517179	513.31	5.00	518.31
2	37.771206	-86.514271	584.60	5.00	589.60
3	37.771461	-86.513059	604.67	5.00	609.67
4	37.771444	-86.512190	608.46	5.00	613.46
5	37.771037	-86.510688	612.20	5.00	617.20
6	37.769493	-86.505924	618.92	5.00	623.92
7	37.769010	-86.504615	623.52	5.00	628.52
8	37.768586	-86.503961	626.65	5.00	631.65
9	37.767644	-86.502620	624.60	5.00	629.60
10	37.767288	-86.501944	628.48	5.00	633.48
11	37.767110	-86.501290	630.49	5.00	635.49
12	37.767102	-86.497384	637.06	5.00	642.06
13	37.767195	-86.495807	638.60	5.00	643.60
14	37.767441	-86.494927	639.54	5.00	644.54
15	37.768425	-86.493254	653.02	5.00	658.02
16	37.770282	-86.490561	655.97	5.00	660.97
17	37.772529	-86.487245	664.06	5.00	669.06
18	37.773148	-86.486140	665.68	5.00	670.68
19	37.775065	-86.481763	665.80	5.00	670.80
20	37.776473	-86.478459	663.54	5.00	668.54

Name: Lighthouse 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	37.780252	-86.480089	658.08	5.00	663.08
2	37.780396	-86.479564	657.43	5.00	662.43
3	37.780235	-86.479092	657.88	5.00	662.88
4	37.779353	-86.477772	664.52	5.00	669.52
5	37.778776	-86.476817	665.45	5.00	670.45
6	37.778386	-86.475873	657.19	5.00	662.19
7	37.778089	-86.475090	644.37	5.00	649.37
8	37.777843	-86.475015	644.00	5.00	649.00

Name: Main Street
Route type: Two-way
View angle: 50.0 deg



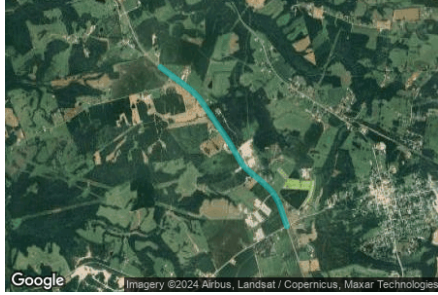
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.797288	-86.479810	636.35	5.00	641.35
2	37.796314	-86.478459	658.65	5.00	663.65
3	37.795389	-86.476624	643.07	5.00	648.07
4	37.794355	-86.474543	659.26	5.00	664.26
5	37.792982	-86.471796	682.47	5.00	687.47
6	37.791896	-86.469586	650.06	5.00	655.06

Name: Skillman Monarch Lane
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	37.794262	-86.508295	623.54	5.00	628.54
2	37.794982	-86.504744	625.83	5.00	630.83
3	37.795754	-86.500978	617.74	5.00	622.74
4	37.795881	-86.500367	610.48	5.00	615.48
5	37.796509	-86.499745	599.85	5.00	604.85
6	37.797458	-86.498779	606.78	5.00	611.78

Name: US Highway 60
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	37.798742	-86.500871	622.77	5.00	627.77
2	37.796530	-86.497137	597.47	5.00	602.47
3	37.795648	-86.495657	588.93	5.00	593.93
4	37.795114	-86.494852	590.73	5.00	595.73
5	37.794453	-86.494048	589.74	5.00	594.74
6	37.792850	-86.492631	587.14	5.00	592.14
7	37.790866	-86.490915	588.84	5.00	593.84
8	37.788857	-86.489155	613.63	5.00	618.63
9	37.787661	-86.488233	629.92	5.00	634.92
10	37.786161	-86.487117	640.57	5.00	645.57
11	37.785228	-86.486409	647.67	5.00	652.67
12	37.784702	-86.485840	650.66	5.00	655.66
13	37.784066	-86.484917	648.80	5.00	653.80
14	37.782616	-86.482707	640.92	5.00	645.92
15	37.781922	-86.481742	644.13	5.00	649.13
16	37.781228	-86.480905	649.07	5.00	654.07
17	37.779704	-86.479832	665.32	5.00	670.32
18	37.776553	-86.478459	663.38	5.00	668.38

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.769845	-86.492256	663.40	16.00	679.40
OP 2	37.769311	-86.491446	659.13	16.00	675.13
OP 3	37.769663	-86.490824	659.75	16.00	675.75
OP 4	37.773760	-86.485711	665.77	16.00	681.77
OP 5	37.773641	-86.484086	668.98	16.00	684.98
OP 6	37.772781	-86.482696	666.11	16.00	682.11
OP 7	37.772429	-86.482192	670.66	16.00	686.66
OP 8	37.772598	-86.480733	666.18	16.00	682.18
OP 9	37.773175	-86.480991	667.90	16.00	683.90
OP 10	37.774048	-86.481629	670.13	16.00	686.13
OP 11	37.774485	-86.482058	669.67	16.00	685.67
OP 12	37.774036	-86.480744	671.57	16.00	687.57
OP 13	37.774913	-86.481382	670.71	16.00	686.71
OP 14	37.775134	-86.480862	669.95	16.00	685.95
OP 15	37.775812	-86.479376	667.74	16.00	683.74
OP 16	37.776241	-86.477697	661.56	16.00	677.56
OP 17	37.774638	-86.476898	664.03	16.00	680.03
OP 18	37.775532	-86.476538	655.44	16.00	671.44
OP 19	37.774807	-86.476077	657.66	16.00	673.66
OP 20	37.775520	-86.477316	658.66	16.00	674.66
OP 21	37.775113	-86.477091	661.78	16.00	677.78
OP 22	37.773705	-86.476146	657.71	16.00	673.71
OP 23	37.773234	-86.473883	642.66	16.00	658.66
OP 24	37.770622	-86.474548	666.38	16.00	682.38
OP 25	37.782380	-86.481237	647.30	16.00	663.30
OP 26	37.783279	-86.481302	640.33	16.00	656.33
OP 27	37.783296	-86.482267	635.82	16.00	651.82
OP 28	37.783643	-86.482943	635.23	16.00	651.23
OP 29	37.784517	-86.482739	643.30	16.00	659.30
OP 30	37.783414	-86.484724	653.73	16.00	669.73
OP 31	37.793012	-86.472872	675.31	16.00	691.31
OP 32	37.792820	-86.472517	679.53	16.00	695.53
OP 33	37.792678	-86.472298	685.35	16.00	701.35
OP 34	37.792158	-86.473368	672.89	16.00	688.89
OP 35	37.792529	-86.471882	686.24	16.00	702.24
OP 36	37.792379	-86.472096	685.45	16.00	701.45
OP 37	37.792343	-86.471479	692.15	16.00	708.15
OP 38	37.792207	-86.471901	686.13	16.00	702.13
OP 39	37.792044	-86.471174	690.55	16.00	706.55
OP 40	37.792523	-86.474840	663.96	16.00	679.96

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	1,505	0	-	-
202	SA tracking	SA tracking	6,164	2,287	-	-
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	-	-

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
201 (green)	0	0	0	0	94	1071	340	0	0	0	0	0
201 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0
202 (green)	0	0	0	810	1402	1313	1434	1141	64	0	0	0
202 (yellow)	0	0	0	73	603	714	674	223	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

201 low potential for temporary after-image

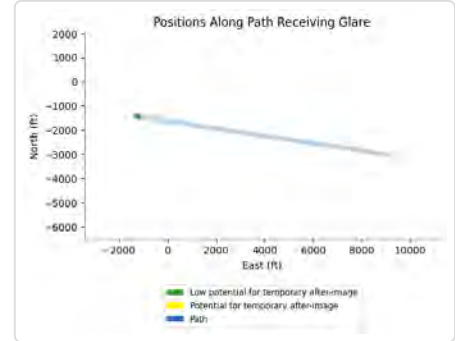
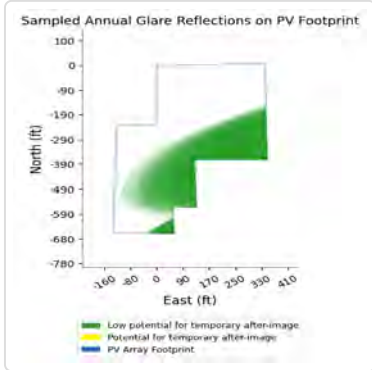
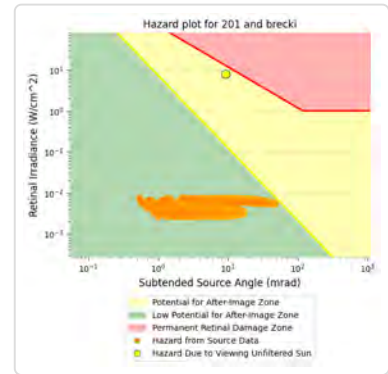
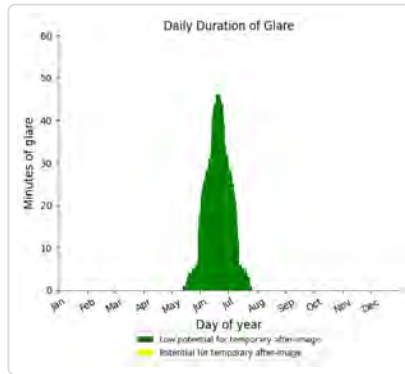
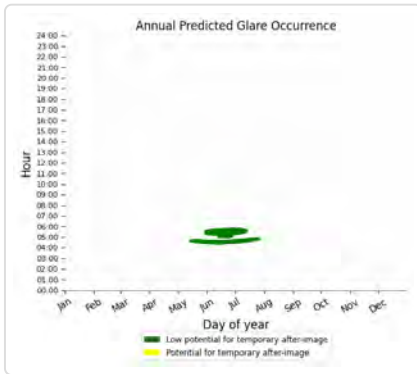
Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	1505	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0

OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

201: Breckinridge County Airport Runway 10

PV array is expected to produce the following glare for this receptor:

- 1,505 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



201: Breckinridge County Airport Runway 28

No glare found

201: Rough River State Park Airport Runway 2

No glare found

201: Rough River State Park Airport Runway 20

No glare found

201: OP 1

No glare found

201: OP 2

No glare found

201: OP 3

No glare found

201: OP 4

No glare found

201: OP 5

No glare found

201: OP 6

No glare found

201: OP 7

No glare found

201: OP 8

No glare found

201: OP 9

No glare found

201: OP 10

No glare found

201: OP 11

No glare found

201: OP 12

No glare found

201: OP 13

No glare found

201: OP 14

No glare found

201: OP 15

No glare found

201: OP 16

No glare found

201: OP 17

No glare found

201: OP 18

No glare found

201: OP 19

No glare found

201: OP 20

No glare found

201: OP 21

No glare found

201: OP 22

No glare found

201: OP 23

No glare found

201: OP 24

No glare found

201: OP 25

No glare found

201: OP 26

No glare found

201: OP 27

No glare found

201: OP 28

No glare found

201: OP 29

No glare found

201: OP 30

No glare found

201: OP 31

No glare found

201: OP 32

No glare found

201: OP 33

No glare found

201: OP 34

No glare found

201: OP 35

No glare found

201: OP 36

No glare found

201: OP 37

No glare found

201: OP 38

No glare found

201: OP 39

No glare found

201: OP 40

No glare found

201: Highway 992

No glare found

201: Lighthouse Road

No glare found

201: Main Street

No glare found

201: Skillman Monarch Lane

No glare found

201: US Highway 60

No glare found

202 potential temporary after-image

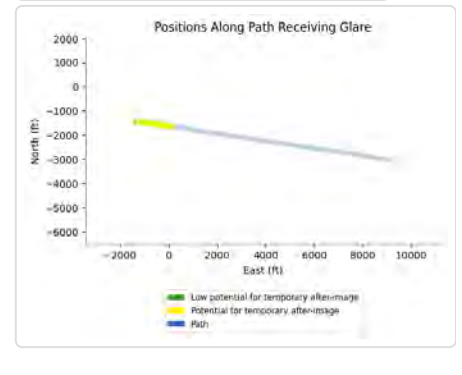
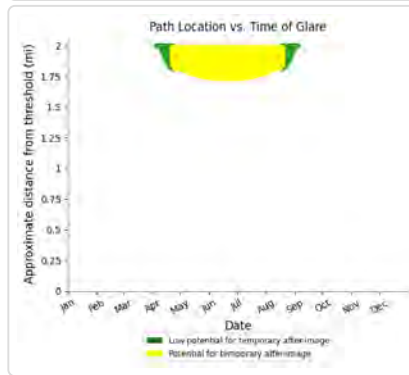
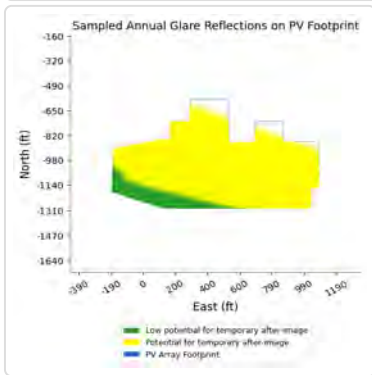
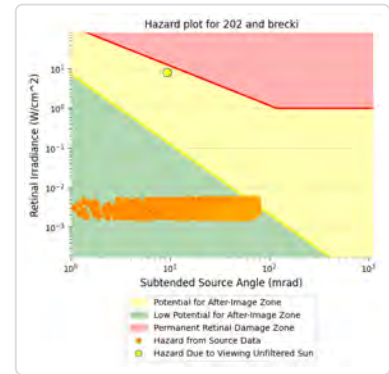
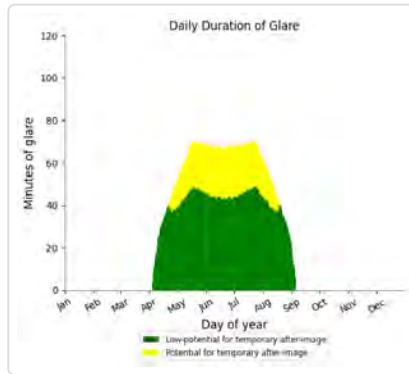
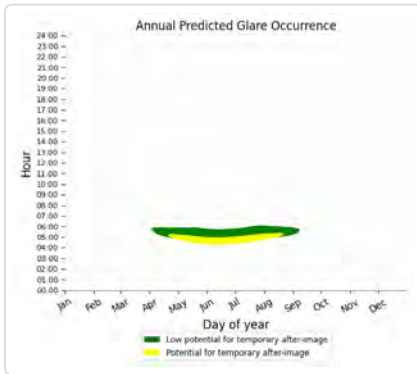
Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	6164	2287
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0

OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

202: Breckinridge County Airport Runway 10

PV array is expected to produce the following glare for this receptor:

- 6,164 minutes of "green" glare with low potential to cause temporary after-image.
- 2,287 minutes of "yellow" glare with potential to cause temporary after-image.



202: Breckinridge County Airport Runway 28

No glare found

202: Rough River State Park Airport Runway 2

No glare found

202: Rough River State Park Airport Runway 20

No glare found

202: OP 1

No glare found

202: OP 2

No glare found

202: OP 3

No glare found

202: OP 4

No glare found

202: OP 5

No glare found

202: OP 6

No glare found

202: OP 7

No glare found

202: OP 8

No glare found

202: OP 9

No glare found

202: OP 10

No glare found

202: OP 11

No glare found

202: OP 12

No glare found

202: OP 13

No glare found

202: OP 14

No glare found

202: OP 15

No glare found

202: OP 16

No glare found

202: OP 17

No glare found

202: OP 18

No glare found

202: OP 19

No glare found

202: OP 20

No glare found

202: OP 21

No glare found

202: OP 22

No glare found

202: OP 23

No glare found

202: OP 24

No glare found

202: OP 25

No glare found

202: OP 26

No glare found

202: OP 27

No glare found

202: OP 28

No glare found

202: OP 29

No glare found

202: OP 30

No glare found

202: OP 31

No glare found

202: OP 32

No glare found

202: OP 33

No glare found

202: OP 34

No glare found

202: OP 35

No glare found

202: OP 36

No glare found

202: OP 37

No glare found

202: OP 38

No glare found

202: OP 39

No glare found

202: OP 40

No glare found

202: Highway 992

No glare found

202: Lighthouse Road

No glare found

202: Main Street

No glare found

202: Skillman Monarch Lane

No glare found

202: US Highway 60

No glare found

203 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
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No glare found

204 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
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No glare found

205 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
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OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
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No glare found

206 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

207 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

208 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

209 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

210 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

211 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

212 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

213 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

214 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

215 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

216 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
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No glare found

217 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 2 5_83 panels 9ft vehicles

Created Oct 04, 2024
Updated Oct 11, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 130567.22255

Project type Advanced
Project status: active
Category >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	PV Analysis Methodology: Version 2 Enhanced subtended angle calculation: On
--	--

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

PV Name	Tilt deg	Orientation deg	"Green" Glare min	"Yellow" Glare min	Energy Produced kWh
201	SA tracking	SA tracking	1,505	0	-
202	SA tracking	SA tracking	6,164	2,287	-
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	-

Component Data

PV Array(s)

Total PV footprint area: 139.1 acres

Name: 201
Footprint area: 4.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



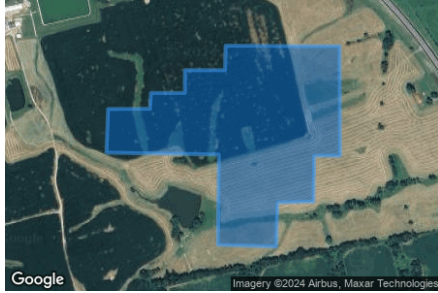
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.793756	-86.479678	607.17	5.83	613.00
2	37.793773	-86.478503	621.12	5.83	626.95
3	37.792722	-86.478482	599.99	5.83	605.82
4	37.792717	-86.479265	604.26	5.83	610.09
5	37.792209	-86.479249	586.72	5.83	592.55
6	37.792209	-86.479501	589.65	5.83	595.48
7	37.791920	-86.479490	579.28	5.83	585.11
8	37.791933	-86.480150	586.11	5.83	591.94
9	37.793095	-86.480113	592.13	5.83	597.96
10	37.793099	-86.479684	599.90	5.83	605.73

Name: 202
Footprint area: 14.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.791255	-86.480306	583.85	5.83	589.68
2	37.791429	-86.479297	594.30	5.83	600.13
3	37.791424	-86.479099	598.48	5.83	604.31
4	37.791755	-86.479099	588.20	5.83	594.03
5	37.791747	-86.478696	598.41	5.83	604.24
6	37.792154	-86.478691	590.36	5.83	596.19
7	37.792166	-86.477881	605.63	5.83	611.46
8	37.791369	-86.477865	629.87	5.83	635.70
9	37.791386	-86.477296	629.50	5.83	635.33
10	37.791759	-86.477318	626.66	5.83	632.49
11	37.791759	-86.476728	629.01	5.83	634.84
12	37.791391	-86.476712	641.14	5.83	646.97
13	37.791399	-86.475971	648.17	5.83	654.00
14	37.790560	-86.475955	664.16	5.83	669.99
15	37.790555	-86.476140	662.61	5.83	668.44
16	37.790191	-86.476127	661.52	5.83	667.35
17	37.790195	-86.479233	595.80	5.83	601.63
18	37.790483	-86.480338	585.15	5.83	590.98

Name: 203
Footprint area: 25.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



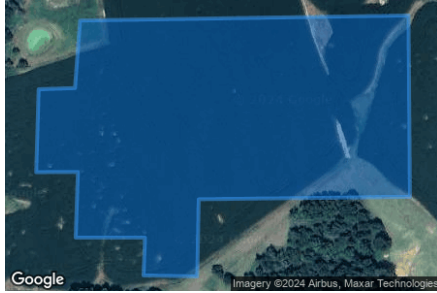
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.791314	-86.496136	576.36	5.83	582.19
2	37.791297	-86.496930	580.88	5.83	586.71
3	37.790526	-86.496962	580.64	5.83	586.47
4	37.790560	-86.498255	594.33	5.83	600.16
5	37.792137	-86.498234	600.76	5.83	606.59
6	37.792171	-86.500723	595.22	5.83	601.05
7	37.792934	-86.500685	606.35	5.83	612.18
8	37.792938	-86.499757	607.62	5.83	613.45
9	37.793213	-86.499736	609.63	5.83	615.46
10	37.793213	-86.498985	608.03	5.83	613.86
11	37.793612	-86.498985	614.96	5.83	620.79
12	37.793612	-86.498094	611.55	5.83	617.38
13	37.793959	-86.498083	615.43	5.83	621.26
14	37.794040	-86.498083	615.35	5.83	621.18
15	37.794032	-86.495557	593.56	5.83	599.39
16	37.792115	-86.495546	593.32	5.83	599.15
17	37.792115	-86.496120	592.75	5.83	598.58

Name: 204
Footprint area: 15.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789803	-86.503929	609.08	5.83	614.91
2	37.790863	-86.503934	611.82	5.83	617.65
3	37.790876	-86.503264	615.73	5.83	621.56
4	37.791312	-86.503258	617.31	5.83	623.14
5	37.791333	-86.502572	618.53	5.83	624.36
6	37.791694	-86.502561	615.79	5.83	621.62
7	37.791698	-86.501928	609.05	5.83	614.88
8	37.792067	-86.501917	600.05	5.83	605.88
9	37.792058	-86.501070	593.37	5.83	599.20
10	37.791355	-86.500957	597.96	5.83	603.79
11	37.791372	-86.500297	592.78	5.83	598.61
12	37.790977	-86.500276	601.32	5.83	607.15
13	37.790982	-86.499782	594.75	5.83	600.58
14	37.790269	-86.499739	596.83	5.83	602.66
15	37.790265	-86.500324	606.42	5.83	612.25
16	37.789854	-86.500308	600.57	5.83	606.40

Name: 205
Footprint area: 16.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789797	-86.503945	608.98	5.83	614.81
2	37.789841	-86.500308	600.58	5.83	606.41
3	37.788256	-86.500292	615.32	5.83	621.15
4	37.788234	-86.502631	609.54	5.83	615.37
5	37.787560	-86.502647	605.57	5.83	611.40
6	37.787569	-86.503242	603.23	5.83	609.06
7	37.787900	-86.503226	608.45	5.83	614.28
8	37.787900	-86.503993	605.32	5.83	611.15
9	37.788473	-86.503969	608.19	5.83	614.02
10	37.788471	-86.504430	608.03	5.83	613.86
11	37.789196	-86.504403	608.91	5.83	614.74
12	37.789207	-86.504001	611.19	5.83	617.02

Name: 206
Footprint area: 8.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789370	-86.500283	611.26	5.83	617.09
2	37.789387	-86.499597	607.77	5.83	613.60
3	37.789009	-86.499597	610.51	5.83	616.34
4	37.789005	-86.499280	605.67	5.83	611.50
5	37.788302	-86.499243	616.32	5.83	622.15
6	37.788302	-86.498551	611.65	5.83	617.48
7	37.787954	-86.498535	620.01	5.83	625.84
8	37.787962	-86.498170	614.81	5.83	620.64
9	37.787212	-86.498127	621.15	5.83	626.98
10	37.787195	-86.499527	618.79	5.83	624.62
11	37.786385	-86.499532	631.53	5.83	637.36
12	37.786364	-86.500063	631.58	5.83	637.41
13	37.785978	-86.500085	630.92	5.83	636.75
14	37.785987	-86.500417	629.25	5.83	635.08
15	37.787140	-86.500401	624.06	5.83	629.89
16	37.787157	-86.499865	613.67	5.83	619.50
17	37.788251	-86.499870	616.70	5.83	622.53
18	37.788251	-86.500251	615.63	5.83	621.46

Name: 207
Footprint area: 3.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.784762	-86.499728	599.27	5.83	605.10
2	37.784750	-86.498644	604.01	5.83	609.84
3	37.786314	-86.498655	633.24	5.83	639.07
4	37.786310	-86.498129	632.51	5.83	638.34
5	37.785580	-86.498135	628.05	5.83	633.88
6	37.785585	-86.498419	629.78	5.83	635.61
7	37.784915	-86.498397	601.87	5.83	607.70
8	37.784915	-86.498097	590.70	5.83	596.53
9	37.784203	-86.498081	567.34	5.83	573.17
10	37.784207	-86.498349	574.24	5.83	580.07
11	37.784092	-86.498344	568.73	5.83	574.56
12	37.784109	-86.498741	581.71	5.83	587.54
13	37.784118	-86.499738	609.22	5.83	615.05

Name: 208
Footprint area: 1.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.783668	-86.495914	620.62	5.83	626.45
2	37.783830	-86.495195	624.06	5.83	629.89
3	37.784588	-86.495227	600.68	5.83	606.51
4	37.784419	-86.495946	591.42	5.83	597.25

Name: 209
Footprint area: 5.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



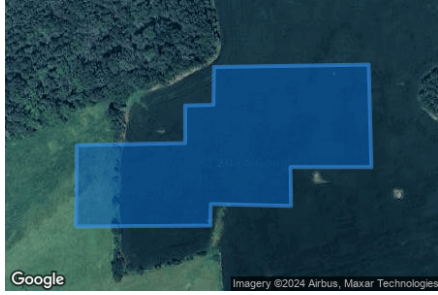
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.786886	-86.505897	612.01	5.83	617.84
2	37.786886	-86.505449	612.31	5.83	618.14
3	37.787321	-86.505462	610.49	5.83	616.32
4	37.787329	-86.504872	610.22	5.83	616.05
5	37.787007	-86.504864	612.44	5.83	618.27
6	37.787009	-86.504752	612.16	5.83	617.99
7	37.786895	-86.504746	612.20	5.83	618.03
8	37.786907	-86.504110	600.51	5.83	606.34
9	37.786625	-86.504089	602.19	5.83	608.02
10	37.786628	-86.503786	590.95	5.83	596.78
11	37.785913	-86.503730	593.48	5.83	599.31
12	37.785911	-86.504054	601.44	5.83	607.27
13	37.785814	-86.504049	602.69	5.83	608.52
14	37.785816	-86.504682	602.05	5.83	607.88
15	37.786242	-86.504706	605.99	5.83	611.82
16	37.786248	-86.505178	608.65	5.83	614.48
17	37.785504	-86.505170	601.89	5.83	607.72
18	37.785504	-86.505385	602.84	5.83	608.67
19	37.785816	-86.505385	607.29	5.83	613.12
20	37.785820	-86.505873	606.00	5.83	611.83

Name: 210
Footprint area: 7.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.785012	-86.504795	587.15	5.83	592.98
2	37.785024	-86.503523	598.49	5.83	604.32
3	37.784295	-86.503486	598.46	5.83	604.29
4	37.784304	-86.502906	581.07	5.83	586.90
5	37.783189	-86.502847	583.39	5.83	589.22
6	37.783176	-86.504746	589.14	5.83	594.97

Name: 211
Footprint area: 7.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.783180	-86.503290	595.71	5.83	601.54
2	37.782283	-86.503261	608.35	5.83	614.18
3	37.782283	-86.504157	595.74	5.83	601.57
4	37.781944	-86.504151	602.56	5.83	608.39
5	37.781961	-86.505039	586.59	5.83	592.42
6	37.781772	-86.505044	582.39	5.83	588.22
7	37.781764	-86.506534	596.26	5.83	602.09
8	37.782474	-86.506523	560.50	5.83	566.33
9	37.782494	-86.505324	592.20	5.83	598.03
10	37.782822	-86.505324	583.02	5.83	588.85
11	37.782828	-86.505010	590.65	5.83	596.48
12	37.783159	-86.505005	584.17	5.83	590.00

Name: 212
Footprint area: 1.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.780357	-86.502092	599.13	5.83	604.96
2	37.780452	-86.502599	603.97	5.83	609.80
3	37.781289	-86.502588	606.79	5.83	612.62
4	37.781232	-86.502087	608.44	5.83	614.27

Name: 213
Footprint area: 4.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.778712	-86.505142	576.82	5.83	582.65
2	37.778710	-86.504967	579.67	5.83	585.50
3	37.778610	-86.504967	578.09	5.83	583.92
4	37.778617	-86.504495	578.72	5.83	584.55
5	37.778267	-86.504495	575.37	5.83	581.20
6	37.778260	-86.503691	555.95	5.83	561.78
7	37.779009	-86.503728	583.58	5.83	589.41
8	37.779011	-86.503632	580.28	5.83	586.11
9	37.779685	-86.503653	593.73	5.83	599.56
10	37.779696	-86.504924	584.22	5.83	590.05
11	37.779475	-86.504932	584.19	5.83	590.02
12	37.779475	-86.505139	584.61	5.83	590.44

Name: 214
Footprint area: 1.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.779437	-86.507727	529.04	5.83	534.87
2	37.779534	-86.507073	536.30	5.83	542.13
3	37.780319	-86.507076	563.92	5.83	569.75
4	37.780204	-86.507752	560.39	5.83	566.22

Name: 215
Footprint area: 13.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.778163	-86.506702	559.11	5.83	564.94
2	37.778040	-86.506691	556.59	5.83	562.42
3	37.777972	-86.506101	549.75	5.83	555.58
4	37.777243	-86.506079	511.23	5.83	517.06
5	37.777323	-86.506696	526.23	5.83	532.06
6	37.777128	-86.506691	520.96	5.83	526.79
7	37.777158	-86.506932	528.73	5.83	534.56
8	37.776725	-86.506927	518.41	5.83	524.24
9	37.776925	-86.508011	513.19	5.83	519.02
10	37.777374	-86.508000	523.24	5.83	529.07
11	37.777832	-86.510387	511.76	5.83	517.59
12	37.778006	-86.510398	517.06	5.83	522.89
13	37.778205	-86.511326	512.47	5.83	518.30
14	37.778867	-86.511294	490.65	5.83	496.48
15	37.778701	-86.510226	504.67	5.83	510.50
16	37.778943	-86.510221	491.38	5.83	497.21
17	37.778298	-86.506718	559.97	5.83	565.80

Name: 216
Footprint area: 4.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.781758	-86.496847	619.74	5.83	625.57
2	37.781754	-86.496273	618.91	5.83	624.74
3	37.780813	-86.496279	585.13	5.83	590.96
4	37.780808	-86.495951	579.38	5.83	585.21
5	37.781152	-86.495941	592.35	5.83	598.18
6	37.781158	-86.495530	582.32	5.83	588.15
7	37.781364	-86.495528	591.84	5.83	597.67
8	37.781362	-86.495168	576.85	5.83	582.68
9	37.782129	-86.495179	596.25	5.83	602.08
10	37.782121	-86.495536	608.10	5.83	613.93
11	37.782237	-86.495538	610.45	5.83	616.28
12	37.782242	-86.495836	618.60	5.83	624.43
13	37.782615	-86.495841	614.82	5.83	620.65
14	37.782613	-86.496198	622.71	5.83	628.54
15	37.782504	-86.496209	623.06	5.83	628.89
16	37.782515	-86.496820	632.39	5.83	638.22

Name: 217
Footprint area: 5.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.781317	-86.489986	635.89	5.83	641.72
2	37.781334	-86.489337	646.24	5.83	652.07
3	37.781762	-86.489348	648.79	5.83	654.62
4	37.781768	-86.488900	650.38	5.83	656.21
5	37.782050	-86.488913	650.18	5.83	656.01
6	37.782061	-86.487991	647.51	5.83	653.34
7	37.782750	-86.488015	643.13	5.83	648.96
8	37.782741	-86.488948	646.10	5.83	651.93
9	37.782546	-86.488951	647.16	5.83	652.99
10	37.782542	-86.489340	647.46	5.83	653.29
11	37.782451	-86.489337	648.25	5.83	654.08
12	37.782442	-86.489957	640.24	5.83	646.07
13	37.782224	-86.489973	643.71	5.83	649.54
14	37.782222	-86.490775	642.06	5.83	647.89
15	37.781512	-86.490775	629.22	5.83	635.05
16	37.781505	-86.489986	642.58	5.83	648.41

2-Mile Flight Path Receptor(s)

Name: Breckinridge County Airport Runway 10
Description:
Threshold height : 50 ft
Direction: 98.7 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	37.785423	-86.448080	710.62	50.00	760.62
2-mile point	37.789817	-86.484281	648.03	666.02	1314.04

Name: Breckinridge County Airport Runway 28
Description:
Threshold height : 50 ft
Direction: 275.1 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	37.784151	-86.434486	722.18	50.00	772.18
2-mile point	37.781596	-86.398004	742.72	582.88	1325.61

Name: Rough River State Park Airport Runway 2
Description:
Threshold height : 50 ft
Direction: 18.9 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	37.606011	-86.508874	563.89	50.00	613.89
2-mile point	37.578654	-86.520697	493.37	673.95	1167.32

Name: Rough River State Park Airport Runway 20

Description:

Threshold height : 50 ft

Direction: 198.4 deg

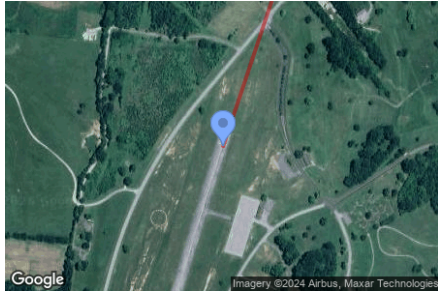
Glide slope: 3.0 deg

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	37.613983	-86.505752	577.15	50.00	627.15
2-mile point	37.641413	-86.494199	566.11	614.47	1180.58



Route Receptor(s)

Name: Highway 992
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	37.769714	-86.517179	513.31	9.00	522.31
2	37.771206	-86.514271	584.60	9.00	593.60
3	37.771461	-86.513059	604.67	9.00	613.67
4	37.771444	-86.512190	608.46	9.00	617.46
5	37.771037	-86.510688	612.20	9.00	621.20
6	37.769493	-86.505924	618.92	9.00	627.92
7	37.769010	-86.504615	623.52	9.00	632.52
8	37.768586	-86.503961	626.65	9.00	635.65
9	37.767644	-86.502620	624.60	9.00	633.60
10	37.767288	-86.501944	628.48	9.00	637.48
11	37.767110	-86.501290	630.49	9.00	639.49
12	37.767102	-86.497384	637.06	9.00	646.06
13	37.767195	-86.495807	638.60	9.00	647.60
14	37.767441	-86.494927	639.54	9.00	648.54
15	37.768425	-86.493254	653.02	9.00	662.02
16	37.770282	-86.490561	655.97	9.00	664.97
17	37.772529	-86.487245	664.06	9.00	673.06
18	37.773148	-86.486140	665.68	9.00	674.68
19	37.775065	-86.481763	665.80	9.00	674.80
20	37.776473	-86.478459	663.54	9.00	672.54

Name: Lighthouse 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	37.780252	-86.480089	658.08	9.00	667.08
2	37.780396	-86.479564	657.43	9.00	666.43
3	37.780235	-86.479092	657.88	9.00	666.88
4	37.779353	-86.477772	664.52	9.00	673.52
5	37.778776	-86.476817	665.45	9.00	674.45
6	37.778386	-86.475873	657.19	9.00	666.19
7	37.778089	-86.475090	644.37	9.00	653.37
8	37.777843	-86.475015	644.00	9.00	653.00

Name: Main Street
Route type: Two-way
View angle: 50.0 deg



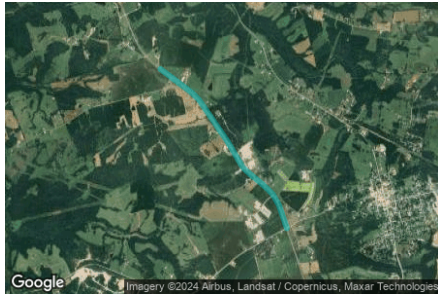
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.797288	-86.479810	636.35	9.00	645.35
2	37.796314	-86.478459	658.65	9.00	667.65
3	37.795389	-86.476624	643.07	9.00	652.07
4	37.794355	-86.474543	659.26	9.00	668.26
5	37.792982	-86.471796	682.47	9.00	691.47
6	37.791896	-86.469586	650.06	9.00	659.06

Name: Skillman Monarch Lane
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	37.794262	-86.508295	623.54	9.00	632.54
2	37.794982	-86.504744	625.83	9.00	634.83
3	37.795754	-86.500978	617.74	9.00	626.74
4	37.795881	-86.500367	610.48	9.00	619.48
5	37.796509	-86.499745	599.85	9.00	608.85
6	37.797458	-86.498779	606.78	9.00	615.78

Name: US Highway 60
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	37.798742	-86.500871	622.77	9.00	631.77
2	37.796530	-86.497137	597.47	9.00	606.47
3	37.795648	-86.495657	588.93	9.00	597.93
4	37.795114	-86.494852	590.73	9.00	599.73
5	37.794453	-86.494048	589.74	9.00	598.74
6	37.792850	-86.492631	587.14	9.00	596.14
7	37.790866	-86.490915	588.84	9.00	597.84
8	37.788857	-86.489155	613.63	9.00	622.63
9	37.787661	-86.488233	629.92	9.00	638.92
10	37.786161	-86.487117	640.57	9.00	649.57
11	37.785228	-86.486409	647.67	9.00	656.67
12	37.784702	-86.485840	650.66	9.00	659.66
13	37.784066	-86.484917	648.80	9.00	657.80
14	37.782616	-86.482707	640.92	9.00	649.92
15	37.781922	-86.481742	644.13	9.00	653.13
16	37.781228	-86.480905	649.07	9.00	658.07
17	37.779704	-86.479832	665.32	9.00	674.32
18	37.776553	-86.478459	663.38	9.00	672.38

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.769845	-86.492256	663.40	16.00	679.40
OP 2	37.769311	-86.491446	659.13	16.00	675.13
OP 3	37.769663	-86.490824	659.75	16.00	675.75
OP 4	37.773760	-86.485711	665.77	16.00	681.77
OP 5	37.773641	-86.484086	668.98	16.00	684.98
OP 6	37.772781	-86.482696	666.11	16.00	682.11
OP 7	37.772429	-86.482192	670.66	16.00	686.66
OP 8	37.772598	-86.480733	666.18	16.00	682.18
OP 9	37.773175	-86.480991	667.90	16.00	683.90
OP 10	37.774048	-86.481629	670.13	16.00	686.13
OP 11	37.774485	-86.482058	669.67	16.00	685.67
OP 12	37.774036	-86.480744	671.57	16.00	687.57
OP 13	37.774913	-86.481382	670.71	16.00	686.71
OP 14	37.775134	-86.480862	669.95	16.00	685.95
OP 15	37.775812	-86.479376	667.74	16.00	683.74
OP 16	37.776241	-86.477697	661.56	16.00	677.56
OP 17	37.774638	-86.476898	664.03	16.00	680.03
OP 18	37.775532	-86.476538	655.44	16.00	671.44
OP 19	37.774807	-86.476077	657.66	16.00	673.66
OP 20	37.775520	-86.477316	658.66	16.00	674.66
OP 21	37.775113	-86.477091	661.78	16.00	677.78
OP 22	37.773705	-86.476146	657.71	16.00	673.71
OP 23	37.773234	-86.473883	642.66	16.00	658.66
OP 24	37.770622	-86.474548	666.38	16.00	682.38
OP 25	37.782380	-86.481237	647.30	16.00	663.30
OP 26	37.783279	-86.481302	640.33	16.00	656.33
OP 27	37.783296	-86.482267	635.82	16.00	651.82
OP 28	37.783643	-86.482943	635.23	16.00	651.23
OP 29	37.784517	-86.482739	643.30	16.00	659.30
OP 30	37.783414	-86.484724	653.73	16.00	669.73
OP 31	37.793012	-86.472872	675.31	16.00	691.31
OP 32	37.792820	-86.472517	679.53	16.00	695.53
OP 33	37.792678	-86.472298	685.35	16.00	701.35
OP 34	37.792158	-86.473368	672.89	16.00	688.89
OP 35	37.792529	-86.471882	686.24	16.00	702.24
OP 36	37.792379	-86.472096	685.45	16.00	701.45
OP 37	37.792343	-86.471479	692.15	16.00	708.15
OP 38	37.792207	-86.471901	686.13	16.00	702.13
OP 39	37.792044	-86.471174	690.55	16.00	706.55
OP 40	37.792523	-86.474840	663.96	16.00	679.96

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	1,505	0	-	-
202	SA tracking	SA tracking	6,164	2,287	-	-
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	-	-

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
201 (green)	0	0	0	0	94	1071	340	0	0	0	0	0
201 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0
202 (green)	0	0	0	810	1402	1313	1434	1141	64	0	0	0
202 (yellow)	0	0	0	73	603	714	674	223	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

201 low potential for temporary after-image

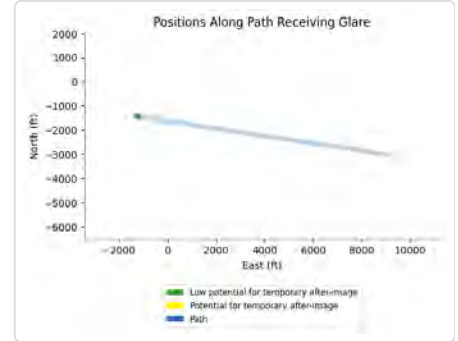
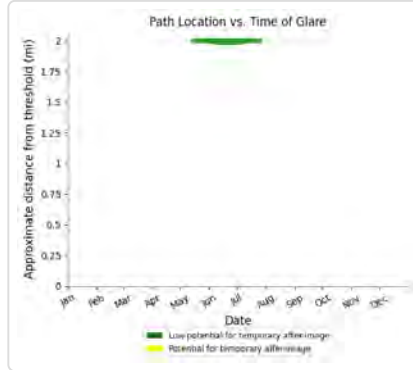
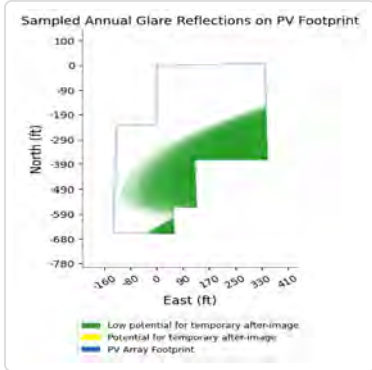
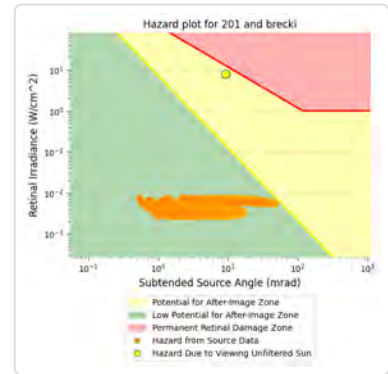
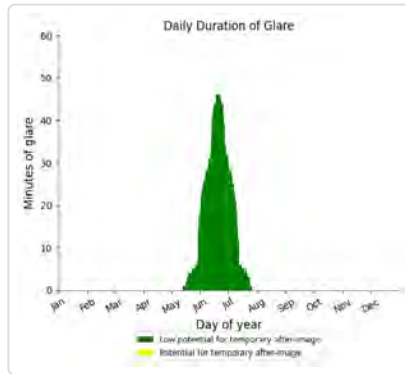
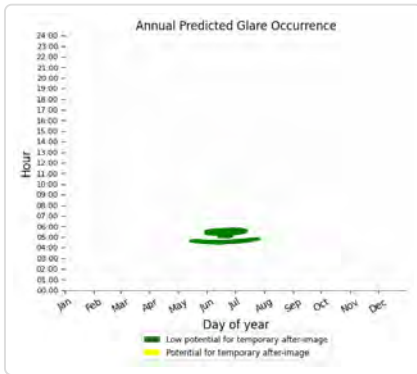
Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	1505	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0

OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

201: Breckinridge County Airport Runway 10

PV array is expected to produce the following glare for this receptor:

- 1,505 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



201: Breckinridge County Airport Runway 28

No glare found

201: Rough River State Park Airport Runway 2

No glare found

201: Rough River State Park Airport Runway 20

No glare found

201: OP 1

No glare found

201: OP 2

No glare found

201: OP 3

No glare found

201: OP 4

No glare found

201: OP 5

No glare found

201: OP 6

No glare found

201: OP 7

No glare found

201: OP 8

No glare found

201: OP 9

No glare found

201: OP 10

No glare found

201: OP 11

No glare found

201: OP 12

No glare found

201: OP 13

No glare found

201: OP 14

No glare found

201: OP 15

No glare found

201: OP 16

No glare found

201: OP 17

No glare found

201: OP 18

No glare found

201: OP 19

No glare found

201: OP 20

No glare found

201: OP 21

No glare found

201: OP 22

No glare found

201: OP 23

No glare found

201: OP 24

No glare found

201: OP 25

No glare found

201: OP 26

No glare found

201: OP 27

No glare found

201: OP 28

No glare found

201: OP 29

No glare found

201: OP 30

No glare found

201: OP 31

No glare found

201: OP 32

No glare found

201: OP 33

No glare found

201: OP 34

No glare found

201: OP 35

No glare found

201: OP 36

No glare found

201: OP 37

No glare found

201: OP 38

No glare found

201: OP 39

No glare found

201: OP 40

No glare found

201: Highway 992

No glare found

201: Lighthouse Road

No glare found

201: Main Street

No glare found

201: Skillman Monarch Lane

No glare found

201: US Highway 60

No glare found

202 potential temporary after-image

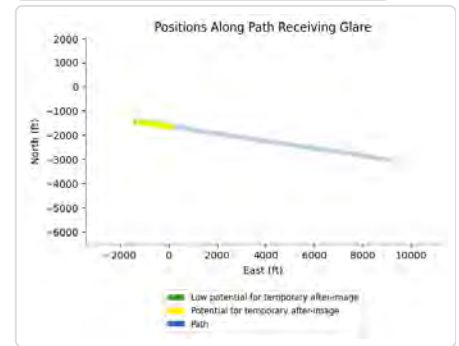
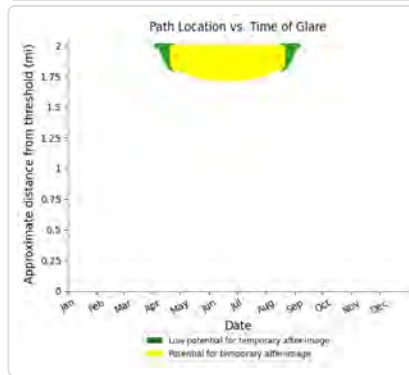
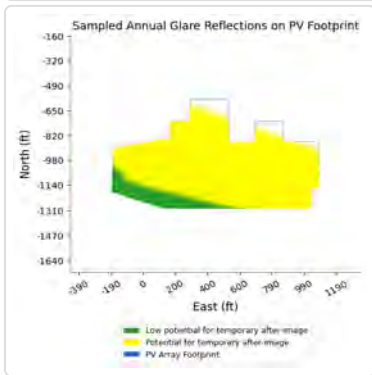
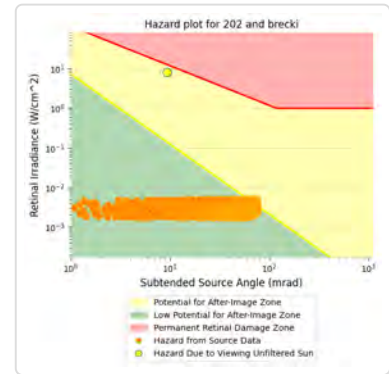
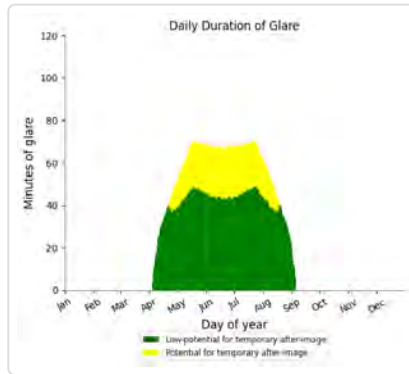
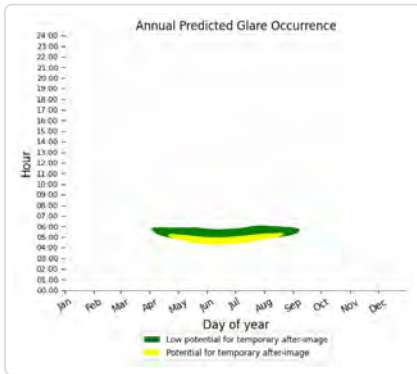
Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	6164	2287
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0

OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0
Route: US Highway 60	0	0

202: Breckinridge County Airport Runway 10

PV array is expected to produce the following glare for this receptor:

- 6,164 minutes of "green" glare with low potential to cause temporary after-image.
- 2,287 minutes of "yellow" glare with potential to cause temporary after-image.



202: Breckinridge County Airport Runway 28

No glare found

202: Rough River State Park Airport Runway 2

No glare found

202: Rough River State Park Airport Runway 20

No glare found

202: OP 1

No glare found

202: OP 2

No glare found

202: OP 3

No glare found

202: OP 4

No glare found

202: OP 5

No glare found

202: OP 6

No glare found

202: OP 7

No glare found

202: OP 8

No glare found

202: OP 9

No glare found

202: OP 10

No glare found

202: OP 11

No glare found

202: OP 12

No glare found

202: OP 13

No glare found

202: OP 14

No glare found

202: OP 15

No glare found

202: OP 16

No glare found

202: OP 17

No glare found

202: OP 18

No glare found

202: OP 19

No glare found

202: OP 20

No glare found

202: OP 21

No glare found

202: OP 22

No glare found

202: OP 23

No glare found

202: OP 24

No glare found

202: OP 25

No glare found

202: OP 26

No glare found

202: OP 27

No glare found

202: OP 28

No glare found

202: OP 29

No glare found

202: OP 30

No glare found

202: OP 31

No glare found

202: OP 32

No glare found

202: OP 33

No glare found

202: OP 34

No glare found

202: OP 35

No glare found

202: OP 36

No glare found

202: OP 37

No glare found

202: OP 38

No glare found

202: OP 39

No glare found

202: OP 40

No glare found

202: Highway 992

No glare found

202: Lighthouse Road

No glare found

202: Main Street

No glare found

202: Skillman Monarch Lane

No glare found

202: US Highway 60

No glare found

203 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

204 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

205 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

206 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

207 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

208 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

209 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

210 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

211 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

212 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

213 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

214 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

215 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

216 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	0	0
----------------------	---	---

No glare found

217 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
Route: Highway 992	0	0
Route: Lighthouse Road	0	0
Route: Main Street	0	0
Route: Skillman Monarch Lane	0	0

Route: US Highway 60	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 2 5_83 panels helipads

Created Oct 14, 2024
Updated Oct 14, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 131219.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

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	-

Component Data

PV Array(s)

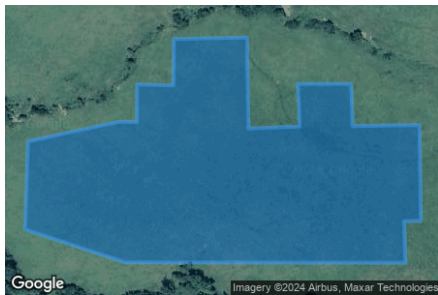
Total PV footprint area: 139.1 acres

Name: 201
Footprint area: 4.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



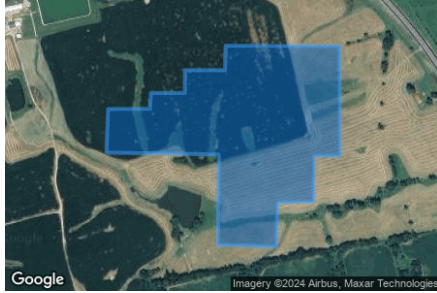
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.793756	-86.479678	607.17	5.83	613.00
2	37.793773	-86.478503	621.12	5.83	626.95
3	37.792722	-86.478482	599.99	5.83	605.82
4	37.792717	-86.479265	604.26	5.83	610.09
5	37.792209	-86.479249	586.72	5.83	592.55
6	37.792209	-86.479501	589.65	5.83	595.48
7	37.791920	-86.479490	579.28	5.83	585.11
8	37.791933	-86.480150	586.11	5.83	591.94
9	37.793095	-86.480113	592.13	5.83	597.96
10	37.793099	-86.479684	599.90	5.83	605.73

Name: 202
Footprint area: 14.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.791255	-86.480306	583.85	5.83	589.68
2	37.791429	-86.479297	594.30	5.83	600.13
3	37.791424	-86.479099	598.48	5.83	604.31
4	37.791755	-86.479099	588.20	5.83	594.03
5	37.791747	-86.478696	598.41	5.83	604.24
6	37.792154	-86.478691	590.36	5.83	596.19
7	37.792166	-86.477881	605.63	5.83	611.46
8	37.791369	-86.477865	629.87	5.83	635.70
9	37.791386	-86.477296	629.50	5.83	635.33
10	37.791759	-86.477318	626.66	5.83	632.49
11	37.791759	-86.476728	629.01	5.83	634.84
12	37.791391	-86.476712	641.14	5.83	646.97
13	37.791399	-86.475971	648.17	5.83	654.00
14	37.790560	-86.475955	664.16	5.83	669.99
15	37.790555	-86.476140	662.61	5.83	668.44
16	37.790191	-86.476127	661.52	5.83	667.35
17	37.790195	-86.479233	595.80	5.83	601.63
18	37.790483	-86.480338	585.15	5.83	590.98

Name: 203
Footprint area: 25.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



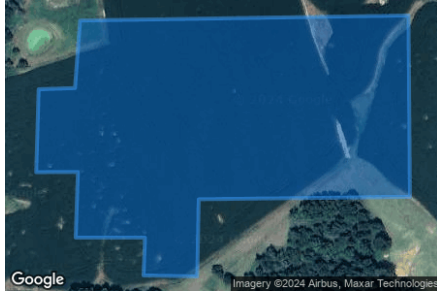
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.791314	-86.496136	576.36	5.83	582.19
2	37.791297	-86.496930	580.88	5.83	586.71
3	37.790526	-86.496962	580.64	5.83	586.47
4	37.790560	-86.498255	594.33	5.83	600.16
5	37.792137	-86.498234	600.76	5.83	606.59
6	37.792171	-86.500723	595.22	5.83	601.05
7	37.792934	-86.500685	606.35	5.83	612.18
8	37.792938	-86.499757	607.62	5.83	613.45
9	37.793213	-86.499736	609.63	5.83	615.46
10	37.793213	-86.498985	608.03	5.83	613.86
11	37.793612	-86.498985	614.96	5.83	620.79
12	37.793612	-86.498094	611.55	5.83	617.38
13	37.793959	-86.498083	615.43	5.83	621.26
14	37.794040	-86.498083	615.35	5.83	621.18
15	37.794032	-86.495557	593.56	5.83	599.39
16	37.792115	-86.495546	593.32	5.83	599.15
17	37.792115	-86.496120	592.75	5.83	598.58

Name: 204
Footprint area: 15.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789803	-86.503929	609.08	5.83	614.91
2	37.790863	-86.503934	611.82	5.83	617.65
3	37.790876	-86.503264	615.73	5.83	621.56
4	37.791312	-86.503258	617.31	5.83	623.14
5	37.791333	-86.502572	618.53	5.83	624.36
6	37.791694	-86.502561	615.79	5.83	621.62
7	37.791698	-86.501928	609.05	5.83	614.88
8	37.792067	-86.501917	600.05	5.83	605.88
9	37.792058	-86.501070	593.37	5.83	599.20
10	37.791355	-86.500957	597.96	5.83	603.79
11	37.791372	-86.500297	592.78	5.83	598.61
12	37.790977	-86.500276	601.32	5.83	607.15
13	37.790982	-86.499782	594.75	5.83	600.58
14	37.790269	-86.499739	596.83	5.83	602.66
15	37.790265	-86.500324	606.42	5.83	612.25
16	37.789854	-86.500308	600.57	5.83	606.40

Name: 205
Footprint area: 16.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789797	-86.503945	608.98	5.83	614.81
2	37.789841	-86.500308	600.58	5.83	606.41
3	37.788256	-86.500292	615.32	5.83	621.15
4	37.788234	-86.502631	609.54	5.83	615.37
5	37.787560	-86.502647	605.57	5.83	611.40
6	37.787569	-86.503242	603.23	5.83	609.06
7	37.787900	-86.503226	608.45	5.83	614.28
8	37.787900	-86.503993	605.32	5.83	611.15
9	37.788473	-86.503969	608.19	5.83	614.02
10	37.788471	-86.504430	608.03	5.83	613.86
11	37.789196	-86.504403	608.91	5.83	614.74
12	37.789207	-86.504001	611.19	5.83	617.02

Name: 206
Footprint area: 8.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.789370	-86.500283	611.26	5.83	617.09
2	37.789387	-86.499597	607.77	5.83	613.60
3	37.789009	-86.499597	610.51	5.83	616.34
4	37.789005	-86.499280	605.67	5.83	611.50
5	37.788302	-86.499243	616.32	5.83	622.15
6	37.788302	-86.498551	611.65	5.83	617.48
7	37.787954	-86.498535	620.01	5.83	625.84
8	37.787962	-86.498170	614.81	5.83	620.64
9	37.787212	-86.498127	621.15	5.83	626.98
10	37.787195	-86.499527	618.79	5.83	624.62
11	37.786385	-86.499532	631.53	5.83	637.36
12	37.786364	-86.500063	631.58	5.83	637.41
13	37.785978	-86.500085	630.92	5.83	636.75
14	37.785987	-86.500417	629.25	5.83	635.08
15	37.787140	-86.500401	624.06	5.83	629.89
16	37.787157	-86.499865	613.67	5.83	619.50
17	37.788251	-86.499870	616.70	5.83	622.53
18	37.788251	-86.500251	615.63	5.83	621.46

Name: 207
Footprint area: 3.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.784762	-86.499728	599.27	5.83	605.10
2	37.784750	-86.498644	604.01	5.83	609.84
3	37.786314	-86.498655	633.24	5.83	639.07
4	37.786310	-86.498129	632.51	5.83	638.34
5	37.785580	-86.498135	628.05	5.83	633.88
6	37.785585	-86.498419	629.78	5.83	635.61
7	37.784915	-86.498397	601.87	5.83	607.70
8	37.784915	-86.498097	590.70	5.83	596.53
9	37.784203	-86.498081	567.34	5.83	573.17
10	37.784207	-86.498349	574.24	5.83	580.07
11	37.784092	-86.498344	568.73	5.83	574.56
12	37.784109	-86.498741	581.71	5.83	587.54
13	37.784118	-86.499738	609.22	5.83	615.05

Name: 208
Footprint area: 1.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.783668	-86.495914	620.62	5.83	626.45
2	37.783830	-86.495195	624.06	5.83	629.89
3	37.784588	-86.495227	600.68	5.83	606.51
4	37.784419	-86.495946	591.42	5.83	597.25

Name: 209
Footprint area: 5.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



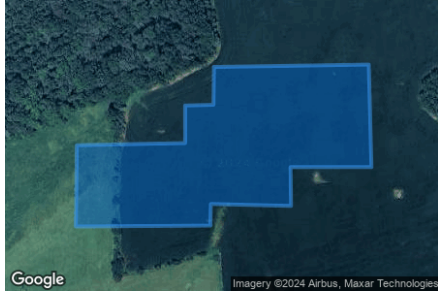
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.786886	-86.505897	612.01	5.83	617.84
2	37.786886	-86.505449	612.31	5.83	618.14
3	37.787321	-86.505462	610.49	5.83	616.32
4	37.787329	-86.504872	610.22	5.83	616.05
5	37.787007	-86.504864	612.44	5.83	618.27
6	37.787009	-86.504752	612.16	5.83	617.99
7	37.786895	-86.504746	612.20	5.83	618.03
8	37.786907	-86.504110	600.51	5.83	606.34
9	37.786625	-86.504089	602.19	5.83	608.02
10	37.786628	-86.503786	590.95	5.83	596.78
11	37.785913	-86.503730	593.48	5.83	599.31
12	37.785911	-86.504054	601.44	5.83	607.27
13	37.785814	-86.504049	602.69	5.83	608.52
14	37.785816	-86.504682	602.05	5.83	607.88
15	37.786242	-86.504706	605.99	5.83	611.82
16	37.786248	-86.505178	608.65	5.83	614.48
17	37.785504	-86.505170	601.89	5.83	607.72
18	37.785504	-86.505385	602.84	5.83	608.67
19	37.785816	-86.505385	607.29	5.83	613.12
20	37.785820	-86.505873	606.00	5.83	611.83

Name: 210
Footprint area: 7.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.785012	-86.504795	587.15	5.83	592.98
2	37.785024	-86.503523	598.49	5.83	604.32
3	37.784295	-86.503486	598.46	5.83	604.29
4	37.784304	-86.502906	581.07	5.83	586.90
5	37.783189	-86.502847	583.39	5.83	589.22
6	37.783176	-86.504746	589.14	5.83	594.97

Name: 211
Footprint area: 7.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.783180	-86.503290	595.71	5.83	601.54
2	37.782283	-86.503261	608.35	5.83	614.18
3	37.782283	-86.504157	595.74	5.83	601.57
4	37.781944	-86.504151	602.56	5.83	608.39
5	37.781961	-86.505039	586.59	5.83	592.42
6	37.781772	-86.505044	582.39	5.83	588.22
7	37.781764	-86.506534	596.26	5.83	602.09
8	37.782474	-86.506523	560.50	5.83	566.33
9	37.782494	-86.505324	592.20	5.83	598.03
10	37.782822	-86.505324	583.02	5.83	588.85
11	37.782828	-86.505010	590.65	5.83	596.48
12	37.783159	-86.505005	584.17	5.83	590.00

Name: 212
Footprint area: 1.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.780357	-86.502092	599.13	5.83	604.96
2	37.780452	-86.502599	603.97	5.83	609.80
3	37.781289	-86.502588	606.79	5.83	612.62
4	37.781232	-86.502087	608.44	5.83	614.27

Name: 213
Footprint area: 4.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.778712	-86.505142	576.82	5.83	582.65
2	37.778710	-86.504967	579.67	5.83	585.50
3	37.778610	-86.504967	578.09	5.83	583.92
4	37.778617	-86.504495	578.72	5.83	584.55
5	37.778267	-86.504495	575.37	5.83	581.20
6	37.778260	-86.503691	555.95	5.83	561.78
7	37.779009	-86.503728	583.58	5.83	589.41
8	37.779011	-86.503632	580.28	5.83	586.11
9	37.779685	-86.503653	593.73	5.83	599.56
10	37.779696	-86.504924	584.22	5.83	590.05
11	37.779475	-86.504932	584.19	5.83	590.02
12	37.779475	-86.505139	584.61	5.83	590.44

Name: 214
Footprint area: 1.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.779437	-86.507727	529.04	5.83	534.87
2	37.779534	-86.507073	536.30	5.83	542.13
3	37.780319	-86.507076	563.92	5.83	569.75
4	37.780204	-86.507752	560.39	5.83	566.22

Name: 215
Footprint area: 13.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.778163	-86.506702	559.11	5.83	564.94
2	37.778040	-86.506691	556.59	5.83	562.42
3	37.777972	-86.506101	549.75	5.83	555.58
4	37.777243	-86.506079	511.23	5.83	517.06
5	37.777323	-86.506696	526.23	5.83	532.06
6	37.777128	-86.506691	520.96	5.83	526.79
7	37.777158	-86.506932	528.73	5.83	534.56
8	37.776725	-86.506927	518.41	5.83	524.24
9	37.776925	-86.508011	513.19	5.83	519.02
10	37.777374	-86.508000	523.24	5.83	529.07
11	37.777832	-86.510387	511.76	5.83	517.59
12	37.778006	-86.510398	517.06	5.83	522.89
13	37.778205	-86.511326	512.47	5.83	518.30
14	37.778867	-86.511294	490.65	5.83	496.48
15	37.778701	-86.510226	504.67	5.83	510.50
16	37.778943	-86.510221	491.38	5.83	497.21
17	37.778298	-86.506718	559.97	5.83	565.80

Name: 216
Footprint area: 4.2 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.781758	-86.496847	619.74	5.83	625.57
2	37.781754	-86.496273	618.91	5.83	624.74
3	37.780813	-86.496279	585.13	5.83	590.96
4	37.780808	-86.495951	579.38	5.83	585.21
5	37.781152	-86.495941	592.35	5.83	598.18
6	37.781158	-86.495530	582.32	5.83	588.15
7	37.781364	-86.495528	591.84	5.83	597.67
8	37.781362	-86.495168	576.85	5.83	582.68
9	37.782129	-86.495179	596.25	5.83	602.08
10	37.782121	-86.495536	608.10	5.83	613.93
11	37.782237	-86.495538	610.45	5.83	616.28
12	37.782242	-86.495836	618.60	5.83	624.43
13	37.782615	-86.495841	614.82	5.83	620.65
14	37.782613	-86.496198	622.71	5.83	628.54
15	37.782504	-86.496209	623.06	5.83	628.89
16	37.782515	-86.496820	632.39	5.83	638.22

Name: 217
Footprint area: 5.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.781317	-86.489986	635.89	5.83	641.72
2	37.781334	-86.489337	646.24	5.83	652.07
3	37.781762	-86.489348	648.79	5.83	654.62
4	37.781768	-86.488900	650.38	5.83	656.21
5	37.782050	-86.488913	650.18	5.83	656.01
6	37.782061	-86.487991	647.51	5.83	653.34
7	37.782750	-86.488015	643.13	5.83	648.96
8	37.782741	-86.488948	646.10	5.83	651.93
9	37.782546	-86.488951	647.16	5.83	652.99
10	37.782542	-86.489340	647.46	5.83	653.29
11	37.782451	-86.489337	648.25	5.83	654.08
12	37.782442	-86.489957	640.24	5.83	646.07
13	37.782224	-86.489973	643.71	5.83	649.54
14	37.782222	-86.490775	642.06	5.83	647.89
15	37.781512	-86.490775	629.22	5.83	635.05
16	37.781505	-86.489986	642.58	5.83	648.41

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.766035	-86.439688	726.42	500.00	1226.42
OP 2	37.761985	-86.452504	691.68	500.00	1191.68

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	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

201 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

202 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

203 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

204 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

205 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

206 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

207 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

208 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

209 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

210 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

211 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

212 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

213 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

214 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

215 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

216 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

217 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 3 4_25 panels 5ft vehicles

Created Oct 03, 2024
Updated Oct 11, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 130478.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

Summary of Results No glare predicted!

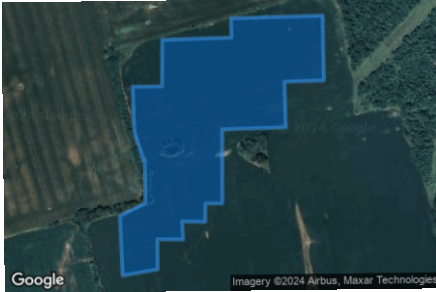
PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
301	SA tracking	SA tracking	0	0	-
302	SA tracking	SA tracking	0	0	-
303	SA tracking	SA tracking	0	0	-
304	SA tracking	SA tracking	0	0	-
305	SA tracking	SA tracking	0	0	-
306	SA tracking	SA tracking	0	0	-
307	SA 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	-

Component Data

PV Array(s)

Total PV footprint area: 184.2 acres

Name: 301
Footprint area: 24.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760803	-86.480022	673.16	4.25	677.41
2	37.761588	-86.480049	673.00	4.25	677.25
3	37.761588	-86.479394	672.33	4.25	676.58
4	37.762407	-86.479378	672.43	4.25	676.68
5	37.762432	-86.477839	675.58	4.25	679.83
6	37.762771	-86.477850	675.26	4.25	679.51
7	37.762801	-86.475811	676.26	4.25	680.51
8	37.761660	-86.475800	677.07	4.25	681.32
9	37.761643	-86.476675	676.02	4.25	680.27
10	37.760842	-86.476659	674.12	4.25	678.37
11	37.760816	-86.478069	673.69	4.25	677.94
12	37.759514	-86.478086	673.53	4.25	677.78
13	37.759514	-86.478461	673.32	4.25	677.57
14	37.759192	-86.478472	672.31	4.25	676.56
15	37.759205	-86.478981	671.57	4.25	675.82
16	37.758887	-86.478965	671.28	4.25	675.53
17	37.758895	-86.479534	670.83	4.25	675.08
18	37.758365	-86.479539	670.01	4.25	674.26
19	37.758263	-86.480317	667.41	4.25	671.66
20	37.759311	-86.480365	669.10	4.25	673.35
21	37.759535	-86.479797	673.11	4.25	677.36
22	37.760214	-86.479797	673.66	4.25	677.91

Name: 302
Footprint area: 23.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.759480	-86.476707	667.16	4.25	671.41
2	37.759484	-86.477050	670.05	4.25	674.30
3	37.758772	-86.477077	671.05	4.25	675.30
4	37.758768	-86.478300	672.06	4.25	676.31
5	37.758386	-86.478300	671.27	4.25	675.52
6	37.758407	-86.478745	672.18	4.25	676.43
7	37.757691	-86.479641	666.17	4.25	670.42
8	37.756808	-86.479625	663.09	4.25	667.34
9	37.756804	-86.479228	663.87	4.25	668.12
10	37.756465	-86.479266	659.53	4.25	663.78
11	37.756244	-86.479276	658.73	4.25	662.98
12	37.756236	-86.479657	658.15	4.25	662.40
13	37.755086	-86.479625	656.97	4.25	661.22
14	37.755086	-86.479416	656.85	4.25	661.10
15	37.754196	-86.479378	655.74	4.25	659.99
16	37.754204	-86.478397	647.86	4.25	652.11
17	37.754505	-86.478402	649.36	4.25	653.61
18	37.754505	-86.478053	646.43	4.25	650.68
19	37.755290	-86.478064	654.51	4.25	658.76
20	37.755290	-86.477715	650.94	4.25	655.19
21	37.755570	-86.477731	654.35	4.25	658.60
22	37.755574	-86.477453	651.85	4.25	656.10
23	37.756766	-86.477458	660.89	4.25	665.14
24	37.756808	-86.476728	655.26	4.25	659.51

Name: 303
Footprint area: 7.8 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.756015	-86.476873	655.14	4.25	659.39
2	37.756015	-86.476551	658.12	4.25	662.37
3	37.756584	-86.476541	655.85	4.25	660.10
4	37.756592	-86.476074	661.88	4.25	666.13
5	37.756898	-86.476068	661.52	4.25	665.77
6	37.756902	-86.475816	662.79	4.25	667.04
7	37.757275	-86.475816	662.10	4.25	666.35
8	37.757288	-86.474556	669.83	4.25	674.08
9	37.756461	-86.474545	670.93	4.25	675.18
10	37.756461	-86.475124	667.93	4.25	672.18
11	37.756075	-86.475114	668.20	4.25	672.45
12	37.756075	-86.475505	667.32	4.25	671.57
13	37.754964	-86.475537	665.44	4.25	669.69
14	37.754993	-86.476932	660.15	4.25	664.40

Name: 304
Footprint area: 10.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760562	-86.475881	674.66	4.25	678.91
2	37.760570	-86.474470	676.91	4.25	681.16
3	37.760218	-86.474465	675.20	4.25	679.45
4	37.760227	-86.474019	676.12	4.25	680.37
5	37.759502	-86.474003	674.86	4.25	679.11
6	37.759502	-86.474186	673.63	4.25	677.88
7	37.758454	-86.474175	672.25	4.25	676.50
8	37.758454	-86.474432	671.70	4.25	675.95
9	37.757572	-86.474422	669.45	4.25	673.70
10	37.757572	-86.474754	667.62	4.25	671.87
11	37.757309	-86.474749	668.66	4.25	672.91
12	37.757313	-86.475114	666.31	4.25	670.56
13	37.757576	-86.475108	665.61	4.25	669.86
14	37.757576	-86.475371	664.57	4.25	668.82
15	37.758416	-86.475371	665.66	4.25	669.91
16	37.758416	-86.475698	665.53	4.25	669.78
17	37.759476	-86.475666	670.13	4.25	674.38
18	37.759481	-86.475929	669.74	4.25	673.99
19	37.760011	-86.475902	672.03	4.25	676.28

Name: 305
Footprint area: 12.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757810	-86.473617	672.40	4.25	676.65
2	37.757826	-86.472469	671.91	4.25	676.16
3	37.756351	-86.472367	668.76	4.25	673.01
4	37.756351	-86.472244	667.85	4.25	672.10
5	37.755434	-86.472008	664.53	4.25	668.78
6	37.754832	-86.472040	662.93	4.25	667.18
7	37.754845	-86.473440	666.92	4.25	671.17
8	37.754569	-86.473451	666.45	4.25	670.70
9	37.754582	-86.474143	667.29	4.25	671.54

Name: 306
Footprint area: 4.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.762280	-86.467625	638.43	4.25	642.68
2	37.762280	-86.467330	633.58	4.25	637.83
3	37.761847	-86.467324	648.13	4.25	652.38
4	37.761860	-86.466981	638.90	4.25	643.15
5	37.760397	-86.466922	656.86	4.25	661.11
6	37.760384	-86.468542	666.44	4.25	670.69
7	37.761249	-86.468537	659.43	4.25	663.68
8	37.761262	-86.467882	658.70	4.25	662.95
9	37.761779	-86.467888	646.69	4.25	650.94
10	37.761779	-86.467625	650.31	4.25	654.56

Name: 307
Footprint area: 7.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



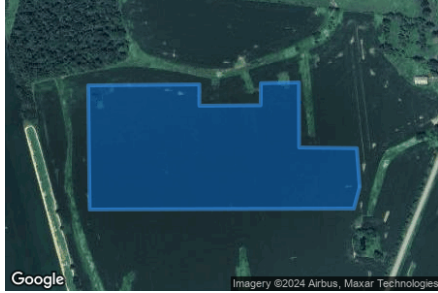
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760354	-86.470452	672.97	4.25	677.22
2	37.759587	-86.470463	673.95	4.25	678.20
3	37.759574	-86.469604	672.36	4.25	676.61
4	37.759192	-86.469637	670.79	4.25	675.04
5	37.759201	-86.468183	663.46	4.25	667.71
6	37.759587	-86.468188	665.66	4.25	669.91
7	37.759587	-86.467110	657.17	4.25	661.42
8	37.760388	-86.467121	657.32	4.25	661.57

Name: 308
Footprint area: 10.8 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.761720	-86.466311	640.69	4.25	644.94
2	37.761741	-86.465613	640.75	4.25	645.00
3	37.761347	-86.465597	645.66	4.25	649.91
4	37.761347	-86.465163	641.32	4.25	645.57
5	37.760193	-86.465093	657.69	4.25	661.94
6	37.760189	-86.465458	659.11	4.25	663.36
7	37.759315	-86.465404	660.67	4.25	664.92
8	37.759336	-86.464841	657.09	4.25	661.34
9	37.757835	-86.464841	659.47	4.25	663.72
10	37.757831	-86.465543	669.09	4.25	673.34
11	37.757572	-86.465522	665.28	4.25	669.53
12	37.757589	-86.466488	669.71	4.25	673.96
13	37.759022	-86.466498	659.72	4.25	663.97
14	37.759022	-86.466080	661.50	4.25	665.75
15	37.759396	-86.466091	656.93	4.25	661.18
16	37.759400	-86.465908	659.92	4.25	664.17
17	37.760172	-86.465935	656.57	4.25	660.82
18	37.760159	-86.466117	652.94	4.25	657.19
19	37.760965	-86.466112	647.05	4.25	651.30
20	37.760965	-86.466321	646.64	4.25	650.89

Name: 309
Footprint area: 26.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757564	-86.465715	667.28	4.25	671.53
2	37.757576	-86.466992	671.21	4.25	675.46
3	37.758713	-86.466997	661.22	4.25	665.47
4	37.758700	-86.467839	664.09	4.25	668.34
5	37.758314	-86.467845	665.48	4.25	669.73
6	37.758306	-86.469202	668.66	4.25	672.91
7	37.758679	-86.469202	667.72	4.25	671.97
8	37.758662	-86.471664	674.50	4.25	678.75
9	37.756491	-86.471632	669.07	4.25	673.32
10	37.756507	-86.465780	671.87	4.25	676.12
11	37.756885	-86.465651	667.61	4.25	671.86

Name: 310
Footprint area: 6.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754779	-86.467620	662.36	4.25	666.61
2	37.755053	-86.467622	663.16	4.25	667.41
3	37.755294	-86.467636	665.08	4.25	669.33
4	37.755294	-86.467738	664.03	4.25	668.28
5	37.756461	-86.467748	670.69	4.25	674.94
6	37.756465	-86.465898	672.71	4.25	676.96
7	37.755273	-86.465833	671.92	4.25	676.17
8	37.755273	-86.466278	669.34	4.25	673.59
9	37.754777	-86.466260	670.52	4.25	674.77
10	37.754779	-86.466801	666.20	4.25	670.45

Name: 311
Footprint area: 9.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754830	-86.468446	662.39	4.25	666.64
2	37.754866	-86.470530	662.04	4.25	666.29
3	37.755513	-86.470508	663.96	4.25	668.21
4	37.755528	-86.471321	663.92	4.25	668.17
5	37.756071	-86.471318	667.26	4.25	671.51
6	37.756465	-86.471310	670.21	4.25	674.46
7	37.756465	-86.468467	667.44	4.25	671.69

Name: 312
Footprint area: 5.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.756792	-86.462499	651.00	4.25	655.25
2	37.756787	-86.462231	648.71	4.25	652.96
3	37.756088	-86.462226	653.07	4.25	657.32
4	37.756092	-86.462429	656.68	4.25	660.93
5	37.755481	-86.462456	654.15	4.25	658.40
6	37.755490	-86.463046	665.34	4.25	669.59
7	37.755116	-86.463062	662.45	4.25	666.70
8	37.755129	-86.463840	671.69	4.25	675.94
9	37.755282	-86.464269	676.87	4.25	681.12
10	37.755926	-86.464248	674.71	4.25	678.96
11	37.755926	-86.464012	674.98	4.25	679.23
12	37.756338	-86.464017	670.26	4.25	674.51
13	37.756334	-86.463824	669.28	4.25	673.53
14	37.756609	-86.463824	665.05	4.25	669.30
15	37.756601	-86.462515	654.03	4.25	658.28

Name: 313
Footprint area: 5.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.755685	-86.460187	658.59	4.25	662.84
2	37.756440	-86.460209	650.89	4.25	655.14
3	37.756452	-86.461555	647.99	4.25	652.24
4	37.755676	-86.461577	654.66	4.25	658.91
5	37.755689	-86.461834	652.48	4.25	656.73
6	37.755328	-86.461850	655.96	4.25	660.21
7	37.755337	-86.462075	653.68	4.25	657.93
8	37.754620	-86.462086	658.86	4.25	663.11
9	37.754607	-86.460842	672.96	4.25	677.21
10	37.755273	-86.460842	662.46	4.25	666.71
11	37.755265	-86.460429	662.71	4.25	666.96
12	37.755676	-86.460429	658.61	4.25	662.86

Name: 314
Footprint area: 2.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



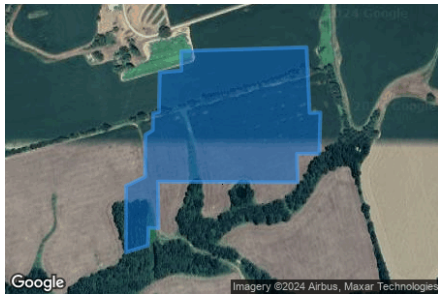
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757737	-86.460847	665.07	4.25	669.32
2	37.757708	-86.459382	667.13	4.25	671.38
3	37.756957	-86.459388	660.64	4.25	664.89
4	37.756987	-86.460858	651.37	4.25	655.62

Name: 315
Footprint area: 5.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754223	-86.470813	660.76	4.25	665.01
2	37.754218	-86.469038	663.36	4.25	667.61
3	37.753277	-86.469049	656.45	4.25	660.70
4	37.753281	-86.469698	660.14	4.25	664.39
5	37.753065	-86.469698	658.95	4.25	663.20
6	37.753069	-86.470282	657.42	4.25	661.67
7	37.752594	-86.470288	654.19	4.25	658.44
8	37.752594	-86.470658	654.45	4.25	658.70
9	37.753162	-86.470835	656.19	4.25	660.44

Name: 316
Footprint area: 20.8 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.752306	-86.474992	661.96	4.25	666.21
2	37.753001	-86.474971	662.61	4.25	666.86
3	37.753031	-86.474493	663.18	4.25	667.43
4	37.753374	-86.474499	664.00	4.25	668.25
5	37.753442	-86.471720	657.68	4.25	661.93
6	37.752289	-86.471650	659.56	4.25	663.81
7	37.752297	-86.471414	658.10	4.25	662.35
8	37.751576	-86.471436	653.58	4.25	657.83
9	37.751572	-86.471935	653.49	4.25	657.74
10	37.751071	-86.471919	650.06	4.25	654.31
11	37.751071	-86.472659	651.42	4.25	655.67
12	37.751084	-86.475014	655.17	4.25	659.42
13	37.750265	-86.474998	648.35	4.25	652.60
14	37.750274	-86.475218	649.37	4.25	653.62
15	37.749960	-86.475234	644.20	4.25	648.45
16	37.749841	-86.475722	642.88	4.25	647.13
17	37.751008	-86.475722	651.81	4.25	656.06
18	37.751169	-86.475298	654.73	4.25	658.98
19	37.751903	-86.475293	659.30	4.25	663.55
20	37.751987	-86.475126	659.77	4.25	664.02
21	37.752284	-86.475121	661.30	4.25	665.55

2-Mile Flight Path Receptor(s)

Name: Breckinridge County Airport Runway 10
Description:
Threshold height : 50 ft
Direction: 98.7 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	37.785423	-86.448080	710.62	50.00	760.62
2-mile point	37.789817	-86.484281	648.03	666.02	1314.04

Name: Breckinridge County Airport Runway 28
Description:
Threshold height : 50 ft
Direction: 275.1 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	37.784151	-86.434486	722.18	50.00	772.18
2-mile point	37.781596	-86.398004	742.72	582.88	1325.61

Name: Rough River State Park Airport Runway 2
Description:
Threshold height : 50 ft
Direction: 18.9 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	37.606011	-86.508874	563.89	50.00	613.89
2-mile point	37.578654	-86.520697	493.37	673.95	1167.32

Name: Rough River State Park Airport Runway 20

Description:

Threshold height : 50 ft

Direction: 198.4 deg

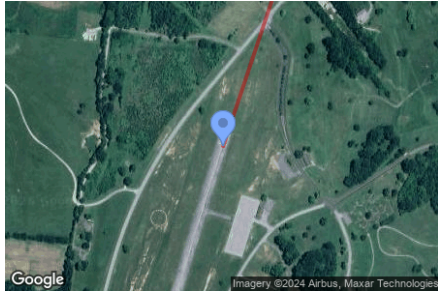
Glide slope: 3.0 deg

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	37.613983	-86.505752	577.15	50.00	627.15
2-mile point	37.641413	-86.494199	566.11	614.47	1180.58



Route Receptor(s)

Name: Bens Hole Branch 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	37.748997	-86.468161	663.98	5.00	668.98
2	37.748908	-86.468886	659.47	5.00	664.47
3	37.748879	-86.469181	656.92	5.00	661.92
4	37.748866	-86.469755	656.03	5.00	661.03
5	37.748637	-86.471503	653.01	5.00	658.01
6	37.748526	-86.472378	653.92	5.00	658.92
7	37.748170	-86.473429	656.67	5.00	661.67
8	37.747793	-86.474320	657.30	5.00	662.30
9	37.747538	-86.474953	655.66	5.00	660.66
10	37.747598	-86.475291	651.82	5.00	656.82
11	37.748208	-86.476042	643.99	5.00	648.99
12	37.748645	-86.476605	637.90	5.00	642.90
13	37.748688	-86.476922	638.75	5.00	643.75
14	37.748501	-86.477555	635.77	5.00	640.77
15	37.748183	-86.478263	639.91	5.00	644.91
16	37.747937	-86.478681	639.64	5.00	644.64
17	37.747797	-86.479100	631.13	5.00	636.13

Name: Frank Farm Lane
Route type: Two-way
View angle: 50.0 deg



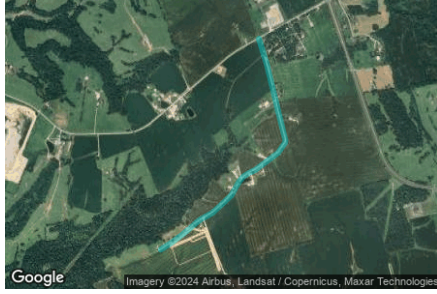
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.754231	-86.465511	673.50	5.00	678.50
2	37.754350	-86.467695	663.74	5.00	668.74
3	37.754473	-86.470313	662.96	5.00	667.96
4	37.754554	-86.471643	661.13	5.00	666.13
5	37.754494	-86.471949	661.08	5.00	666.08
6	37.753786	-86.474583	667.31	5.00	672.31
7	37.753638	-86.475135	664.30	5.00	669.30

Name: Highway 261
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	37.762202	-86.461519	666.22	5.00	671.22
2	37.760132	-86.462549	652.20	5.00	657.20
3	37.756078	-86.464545	672.47	5.00	677.47
4	37.753753	-86.465746	671.84	5.00	676.84
5	37.750716	-86.467291	672.39	5.00	677.39
6	37.747086	-86.469094	664.28	5.00	669.28

Name: Stanley Gray Lane
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	37.773786	-86.484581	665.93	5.00	670.93
2	37.772022	-86.483894	661.34	5.00	666.34
3	37.770360	-86.483379	668.07	5.00	673.07
4	37.767866	-86.482618	666.26	5.00	671.26
5	37.766662	-86.482231	661.45	5.00	666.45
6	37.766501	-86.482264	660.56	5.00	665.56
7	37.765771	-86.482897	654.70	5.00	659.70
8	37.765373	-86.483583	646.86	5.00	651.86
9	37.764610	-86.484849	654.84	5.00	659.84
10	37.764279	-86.485665	658.15	5.00	663.15
11	37.764109	-86.485976	658.69	5.00	663.69
12	37.763770	-86.486319	656.48	5.00	661.48
13	37.763371	-86.486619	655.88	5.00	660.88
14	37.762811	-86.487016	650.45	5.00	655.45
15	37.762082	-86.487993	647.68	5.00	652.68
16	37.761556	-86.488722	645.96	5.00	650.96
17	37.761081	-86.489817	641.10	5.00	646.10
18	37.760750	-86.490310	637.26	5.00	642.26
19	37.760106	-86.491265	637.13	5.00	642.13
20	37.759444	-86.492381	634.21	5.00	639.21
21	37.758995	-86.493271	632.13	5.00	637.13

Name: US Highway 60
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	37.769267	-86.475252	670.30	5.00	675.30
2	37.765984	-86.473857	672.90	5.00	677.90
3	37.764763	-86.473138	669.33	5.00	674.33
4	37.763974	-86.472098	665.76	5.00	670.76
5	37.763516	-86.471068	661.28	5.00	666.28
6	37.763279	-86.469737	658.13	5.00	663.13
7	37.762719	-86.465725	653.14	5.00	658.14
8	37.762227	-86.461530	666.20	5.00	671.20
9	37.761947	-86.458923	673.09	5.00	678.09
10	37.761786	-86.456895	678.33	5.00	683.33
11	37.761582	-86.453140	686.52	5.00	691.52
12	37.761379	-86.449503	694.23	5.00	699.23

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.751101	-86.467541	676.07	16.00	692.07
OP 2	37.750583	-86.466522	677.14	16.00	693.14
OP 3	37.753353	-86.466270	675.70	16.00	691.70
OP 4	37.753875	-86.464891	680.83	16.00	696.83
OP 5	37.759013	-86.462102	661.80	16.00	677.80
OP 6	37.769819	-86.482749	670.83	16.00	686.83
OP 7	37.768283	-86.482159	672.92	16.00	688.92
OP 8	37.770378	-86.482647	674.32	16.00	690.32
OP 9	37.770425	-86.482948	672.03	16.00	688.03
OP 10	37.763156	-86.487207	651.97	16.00	667.97
OP 11	37.763793	-86.487191	654.30	16.00	670.30
OP 12	37.764229	-86.486483	654.10	16.00	670.10
OP 13	37.764136	-86.484949	662.30	16.00	678.30
OP 14	37.764369	-86.484477	663.32	16.00	679.32
OP 15	37.748246	-86.476526	649.09	16.00	665.09
OP 16	37.747487	-86.479671	639.30	16.00	655.30
OP 17	37.760759	-86.489640	645.95	16.00	661.95
OP 18	37.759720	-86.492284	635.08	16.00	651.08
OP 19	37.759092	-86.493668	628.16	16.00	644.16

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	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

301 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

302 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

303 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

304 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

305 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

306 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

307 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

308 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

309 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

310 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

311 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

312 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

313 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

314 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

315 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

316 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 3 4_25 panels 9ft vehicles

Created Oct 04, 2024
Updated Oct 11, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 130575.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

Summary of Results No glare predicted!

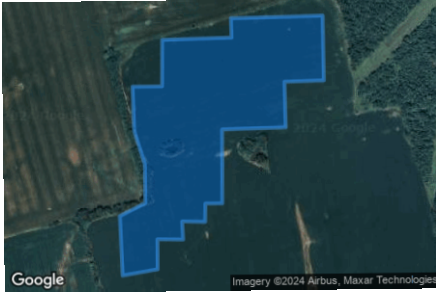
PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
301	SA tracking	SA tracking	0	0	-
302	SA tracking	SA tracking	0	0	-
303	SA tracking	SA tracking	0	0	-
304	SA tracking	SA tracking	0	0	-
305	SA tracking	SA tracking	0	0	-
306	SA tracking	SA tracking	0	0	-
307	SA 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	-

Component Data

PV Array(s)

Total PV footprint area: 184.2 acres

Name: 301
Footprint area: 24.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760803	-86.480022	673.16	4.25	677.41
2	37.761588	-86.480049	673.00	4.25	677.25
3	37.761588	-86.479394	672.33	4.25	676.58
4	37.762407	-86.479378	672.43	4.25	676.68
5	37.762432	-86.477839	675.58	4.25	679.83
6	37.762771	-86.477850	675.26	4.25	679.51
7	37.762801	-86.475811	676.26	4.25	680.51
8	37.761660	-86.475800	677.07	4.25	681.32
9	37.761643	-86.476675	676.02	4.25	680.27
10	37.760842	-86.476659	674.12	4.25	678.37
11	37.760816	-86.478069	673.69	4.25	677.94
12	37.759514	-86.478086	673.53	4.25	677.78
13	37.759514	-86.478461	673.32	4.25	677.57
14	37.759192	-86.478472	672.31	4.25	676.56
15	37.759205	-86.478981	671.57	4.25	675.82
16	37.758887	-86.478965	671.28	4.25	675.53
17	37.758895	-86.479534	670.83	4.25	675.08
18	37.758365	-86.479539	670.01	4.25	674.26
19	37.758263	-86.480317	667.41	4.25	671.66
20	37.759311	-86.480365	669.10	4.25	673.35
21	37.759535	-86.479797	673.11	4.25	677.36
22	37.760214	-86.479797	673.66	4.25	677.91

Name: 302
Footprint area: 23.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.759480	-86.476707	667.16	4.25	671.41
2	37.759484	-86.477050	670.05	4.25	674.30
3	37.758772	-86.477077	671.05	4.25	675.30
4	37.758768	-86.478300	672.06	4.25	676.31
5	37.758386	-86.478300	671.27	4.25	675.52
6	37.758407	-86.478745	672.18	4.25	676.43
7	37.757691	-86.479641	666.17	4.25	670.42
8	37.756808	-86.479625	663.09	4.25	667.34
9	37.756804	-86.479228	663.87	4.25	668.12
10	37.756465	-86.479266	659.53	4.25	663.78
11	37.756244	-86.479276	658.73	4.25	662.98
12	37.756236	-86.479657	658.15	4.25	662.40
13	37.755086	-86.479625	656.97	4.25	661.22
14	37.755086	-86.479416	656.85	4.25	661.10
15	37.754196	-86.479378	655.74	4.25	659.99
16	37.754204	-86.478397	647.86	4.25	652.11
17	37.754505	-86.478402	649.36	4.25	653.61
18	37.754505	-86.478053	646.43	4.25	650.68
19	37.755290	-86.478064	654.51	4.25	658.76
20	37.755290	-86.477715	650.94	4.25	655.19
21	37.755570	-86.477731	654.35	4.25	658.60
22	37.755574	-86.477453	651.85	4.25	656.10
23	37.756766	-86.477458	660.89	4.25	665.14
24	37.756808	-86.476728	655.26	4.25	659.51

Name: 303
Footprint area: 7.8 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.756015	-86.476873	655.14	4.25	659.39
2	37.756015	-86.476551	658.12	4.25	662.37
3	37.756584	-86.476541	655.85	4.25	660.10
4	37.756592	-86.476074	661.88	4.25	666.13
5	37.756898	-86.476068	661.52	4.25	665.77
6	37.756902	-86.475816	662.79	4.25	667.04
7	37.757275	-86.475816	662.10	4.25	666.35
8	37.757288	-86.474556	669.83	4.25	674.08
9	37.756461	-86.474545	670.93	4.25	675.18
10	37.756461	-86.475124	667.93	4.25	672.18
11	37.756075	-86.475114	668.20	4.25	672.45
12	37.756075	-86.475505	667.32	4.25	671.57
13	37.754964	-86.475537	665.44	4.25	669.69
14	37.754993	-86.476932	660.15	4.25	664.40

Name: 304
Footprint area: 10.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760562	-86.475881	674.66	4.25	678.91
2	37.760570	-86.474470	676.91	4.25	681.16
3	37.760218	-86.474465	675.20	4.25	679.45
4	37.760227	-86.474019	676.12	4.25	680.37
5	37.759502	-86.474003	674.86	4.25	679.11
6	37.759502	-86.474186	673.63	4.25	677.88
7	37.758454	-86.474175	672.25	4.25	676.50
8	37.758454	-86.474432	671.70	4.25	675.95
9	37.757572	-86.474422	669.45	4.25	673.70
10	37.757572	-86.474754	667.62	4.25	671.87
11	37.757309	-86.474749	668.66	4.25	672.91
12	37.757313	-86.475114	666.31	4.25	670.56
13	37.757576	-86.475108	665.61	4.25	669.86
14	37.757576	-86.475371	664.57	4.25	668.82
15	37.758416	-86.475371	665.66	4.25	669.91
16	37.758416	-86.475698	665.53	4.25	669.78
17	37.759476	-86.475666	670.13	4.25	674.38
18	37.759481	-86.475929	669.74	4.25	673.99
19	37.760011	-86.475902	672.03	4.25	676.28

Name: 305
Footprint area: 12.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757810	-86.473617	672.40	4.25	676.65
2	37.757826	-86.472469	671.91	4.25	676.16
3	37.756351	-86.472367	668.76	4.25	673.01
4	37.756351	-86.472244	667.85	4.25	672.10
5	37.755434	-86.472008	664.53	4.25	668.78
6	37.754832	-86.472040	662.93	4.25	667.18
7	37.754845	-86.473440	666.92	4.25	671.17
8	37.754569	-86.473451	666.45	4.25	670.70
9	37.754582	-86.474143	667.29	4.25	671.54

Name: 306
Footprint area: 4.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.762280	-86.467625	638.43	4.25	642.68
2	37.762280	-86.467330	633.58	4.25	637.83
3	37.761847	-86.467324	648.13	4.25	652.38
4	37.761860	-86.466981	638.90	4.25	643.15
5	37.760397	-86.466922	656.86	4.25	661.11
6	37.760384	-86.468542	666.44	4.25	670.69
7	37.761249	-86.468537	659.43	4.25	663.68
8	37.761262	-86.467882	658.70	4.25	662.95
9	37.761779	-86.467888	646.69	4.25	650.94
10	37.761779	-86.467625	650.31	4.25	654.56

Name: 307
Footprint area: 7.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760354	-86.470452	672.97	4.25	677.22
2	37.759587	-86.470463	673.95	4.25	678.20
3	37.759574	-86.469604	672.36	4.25	676.61
4	37.759192	-86.469637	670.79	4.25	675.04
5	37.759201	-86.468183	663.46	4.25	667.71
6	37.759587	-86.468188	665.66	4.25	669.91
7	37.759587	-86.467110	657.17	4.25	661.42
8	37.760388	-86.467121	657.32	4.25	661.57

Name: 308
Footprint area: 10.8 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.761720	-86.466311	640.69	4.25	644.94
2	37.761741	-86.465613	640.75	4.25	645.00
3	37.761347	-86.465597	645.66	4.25	649.91
4	37.761347	-86.465163	641.32	4.25	645.57
5	37.760193	-86.465093	657.69	4.25	661.94
6	37.760189	-86.465458	659.11	4.25	663.36
7	37.759315	-86.465404	660.67	4.25	664.92
8	37.759336	-86.464841	657.09	4.25	661.34
9	37.757835	-86.464841	659.47	4.25	663.72
10	37.757831	-86.465543	669.09	4.25	673.34
11	37.757572	-86.465522	665.28	4.25	669.53
12	37.757589	-86.466488	669.71	4.25	673.96
13	37.759022	-86.466498	659.72	4.25	663.97
14	37.759022	-86.466080	661.50	4.25	665.75
15	37.759396	-86.466091	656.93	4.25	661.18
16	37.759400	-86.465908	659.92	4.25	664.17
17	37.760172	-86.465935	656.57	4.25	660.82
18	37.760159	-86.466117	652.94	4.25	657.19
19	37.760965	-86.466112	647.05	4.25	651.30
20	37.760965	-86.466321	646.64	4.25	650.89

Name: 309
Footprint area: 26.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757564	-86.465715	667.28	4.25	671.53
2	37.757576	-86.466992	671.21	4.25	675.46
3	37.758713	-86.466997	661.22	4.25	665.47
4	37.758700	-86.467839	664.09	4.25	668.34
5	37.758314	-86.467845	665.48	4.25	669.73
6	37.758306	-86.469202	668.66	4.25	672.91
7	37.758679	-86.469202	667.72	4.25	671.97
8	37.758662	-86.471664	674.50	4.25	678.75
9	37.756491	-86.471632	669.07	4.25	673.32
10	37.756507	-86.465780	671.87	4.25	676.12
11	37.756885	-86.465651	667.61	4.25	671.86

Name: 310
Footprint area: 6.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754779	-86.467620	662.36	4.25	666.61
2	37.755053	-86.467622	663.16	4.25	667.41
3	37.755294	-86.467636	665.08	4.25	669.33
4	37.755294	-86.467738	664.03	4.25	668.28
5	37.756461	-86.467748	670.69	4.25	674.94
6	37.756465	-86.465898	672.71	4.25	676.96
7	37.755273	-86.465833	671.92	4.25	676.17
8	37.755273	-86.466278	669.34	4.25	673.59
9	37.754777	-86.466260	670.52	4.25	674.77
10	37.754779	-86.466801	666.20	4.25	670.45

Name: 311
Footprint area: 9.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754830	-86.468446	662.39	4.25	666.64
2	37.754866	-86.470530	662.04	4.25	666.29
3	37.755513	-86.470508	663.96	4.25	668.21
4	37.755528	-86.471321	663.92	4.25	668.17
5	37.756071	-86.471318	667.26	4.25	671.51
6	37.756465	-86.471310	670.21	4.25	674.46
7	37.756465	-86.468467	667.44	4.25	671.69

Name: 312
Footprint area: 5.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.756792	-86.462499	651.00	4.25	655.25
2	37.756787	-86.462231	648.71	4.25	652.96
3	37.756088	-86.462226	653.07	4.25	657.32
4	37.756092	-86.462429	656.68	4.25	660.93
5	37.755481	-86.462456	654.15	4.25	658.40
6	37.755490	-86.463046	665.34	4.25	669.59
7	37.755116	-86.463062	662.45	4.25	666.70
8	37.755129	-86.463840	671.69	4.25	675.94
9	37.755282	-86.464269	676.87	4.25	681.12
10	37.755926	-86.464248	674.71	4.25	678.96
11	37.755926	-86.464012	674.98	4.25	679.23
12	37.756338	-86.464017	670.26	4.25	674.51
13	37.756334	-86.463824	669.28	4.25	673.53
14	37.756609	-86.463824	665.05	4.25	669.30
15	37.756601	-86.462515	654.03	4.25	658.28

Name: 313
Footprint area: 5.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.755685	-86.460187	658.59	4.25	662.84
2	37.756440	-86.460209	650.89	4.25	655.14
3	37.756452	-86.461555	647.99	4.25	652.24
4	37.755676	-86.461577	654.66	4.25	658.91
5	37.755689	-86.461834	652.48	4.25	656.73
6	37.755328	-86.461850	655.96	4.25	660.21
7	37.755337	-86.462075	653.68	4.25	657.93
8	37.754620	-86.462086	658.86	4.25	663.11
9	37.754607	-86.460842	672.96	4.25	677.21
10	37.755273	-86.460842	662.46	4.25	666.71
11	37.755265	-86.460429	662.71	4.25	666.96
12	37.755676	-86.460429	658.61	4.25	662.86

Name: 314
Footprint area: 2.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



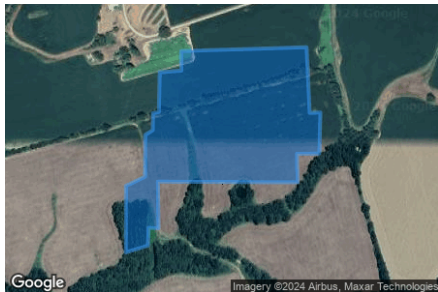
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757737	-86.460847	665.07	4.25	669.32
2	37.757708	-86.459382	667.13	4.25	671.38
3	37.756957	-86.459388	660.64	4.25	664.89
4	37.756987	-86.460858	651.37	4.25	655.62

Name: 315
Footprint area: 5.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754223	-86.470813	660.76	4.25	665.01
2	37.754218	-86.469038	663.36	4.25	667.61
3	37.753277	-86.469049	656.45	4.25	660.70
4	37.753281	-86.469698	660.14	4.25	664.39
5	37.753065	-86.469698	658.95	4.25	663.20
6	37.753069	-86.470282	657.42	4.25	661.67
7	37.752594	-86.470288	654.19	4.25	658.44
8	37.752594	-86.470658	654.45	4.25	658.70
9	37.753162	-86.470835	656.19	4.25	660.44

Name: 316
Footprint area: 20.8 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.752306	-86.474992	661.96	4.25	666.21
2	37.753001	-86.474971	662.61	4.25	666.86
3	37.753031	-86.474493	663.18	4.25	667.43
4	37.753374	-86.474499	664.00	4.25	668.25
5	37.753442	-86.471720	657.68	4.25	661.93
6	37.752289	-86.471650	659.56	4.25	663.81
7	37.752297	-86.471414	658.10	4.25	662.35
8	37.751576	-86.471436	653.58	4.25	657.83
9	37.751572	-86.471935	653.49	4.25	657.74
10	37.751071	-86.471919	650.06	4.25	654.31
11	37.751071	-86.472659	651.42	4.25	655.67
12	37.751084	-86.475014	655.17	4.25	659.42
13	37.750265	-86.474998	648.35	4.25	652.60
14	37.750274	-86.475218	649.37	4.25	653.62
15	37.749960	-86.475234	644.20	4.25	648.45
16	37.749841	-86.475722	642.88	4.25	647.13
17	37.751008	-86.475722	651.81	4.25	656.06
18	37.751169	-86.475298	654.73	4.25	658.98
19	37.751903	-86.475293	659.30	4.25	663.55
20	37.751987	-86.475126	659.77	4.25	664.02
21	37.752284	-86.475121	661.30	4.25	665.55

2-Mile Flight Path Receptor(s)

Name: Breckinridge County Airport Runway 10
Description:
Threshold height : 50 ft
Direction: 98.7 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	37.785423	-86.448080	710.62	50.00	760.62
2-mile point	37.789817	-86.484281	648.03	666.02	1314.04

Name: Breckinridge County Airport Runway 28
Description:
Threshold height : 50 ft
Direction: 275.1 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	37.784151	-86.434486	722.18	50.00	772.18
2-mile point	37.781596	-86.398004	742.72	582.88	1325.61

Name: Rough River State Park Airport Runway 2
Description:
Threshold height : 50 ft
Direction: 18.9 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	37.606011	-86.508874	563.89	50.00	613.89
2-mile point	37.578654	-86.520697	493.37	673.95	1167.32

Name: Rough River State Park Airport Runway 20

Description:

Threshold height : 50 ft

Direction: 198.4 deg

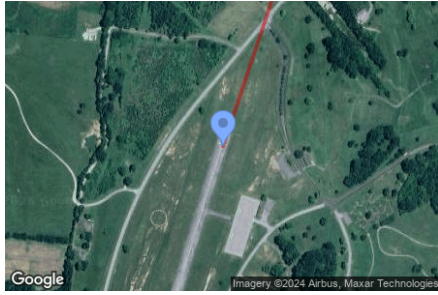
Glide slope: 3.0 deg

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	37.613983	-86.505752	577.15	50.00	627.15
2-mile point	37.641413	-86.494199	566.11	614.47	1180.58



Route Receptor(s)

Name: Bens Hole Branch 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	37.748997	-86.468161	663.98	9.00	672.98
2	37.748908	-86.468886	659.47	9.00	668.47
3	37.748879	-86.469181	656.92	9.00	665.92
4	37.748866	-86.469755	656.03	9.00	665.03
5	37.748637	-86.471503	653.01	9.00	662.01
6	37.748526	-86.472378	653.92	9.00	662.92
7	37.748170	-86.473429	656.67	9.00	665.67
8	37.747793	-86.474320	657.30	9.00	666.30
9	37.747538	-86.474953	655.66	9.00	664.66
10	37.747598	-86.475291	651.82	9.00	660.82
11	37.748208	-86.476042	643.99	9.00	652.99
12	37.748645	-86.476605	637.90	9.00	646.90
13	37.748688	-86.476922	638.75	9.00	647.75
14	37.748501	-86.477555	635.77	9.00	644.77
15	37.748183	-86.478263	639.91	9.00	648.91
16	37.747937	-86.478681	639.64	9.00	648.64
17	37.747797	-86.479100	631.13	9.00	640.13

Name: Frank Farm Lane
Route type: Two-way
View angle: 50.0 deg



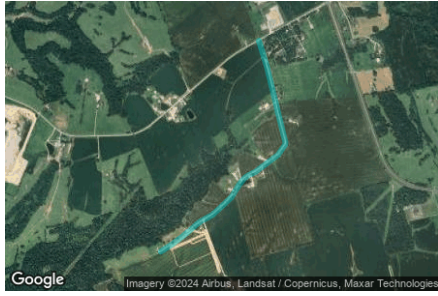
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.754231	-86.465511	673.50	9.00	682.50
2	37.754350	-86.467695	663.74	9.00	672.74
3	37.754473	-86.470313	662.96	9.00	671.96
4	37.754554	-86.471643	661.13	9.00	670.13
5	37.754494	-86.471949	661.08	9.00	670.08
6	37.753786	-86.474583	667.31	9.00	676.31
7	37.753638	-86.475135	664.30	9.00	673.30

Name: Highway 261
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	37.762202	-86.461519	666.22	9.00	675.22
2	37.760132	-86.462549	652.20	9.00	661.20
3	37.756078	-86.464545	672.47	9.00	681.47
4	37.753753	-86.465746	671.84	9.00	680.84
5	37.750716	-86.467291	672.39	9.00	681.39
6	37.747086	-86.469094	664.28	9.00	673.28

Name: Stanley Gray Lane
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	37.773786	-86.484581	665.93	9.00	674.93
2	37.772022	-86.483894	661.34	9.00	670.34
3	37.770360	-86.483379	668.07	9.00	677.07
4	37.767866	-86.482618	666.26	9.00	675.26
5	37.766662	-86.482231	661.45	9.00	670.45
6	37.766501	-86.482264	660.56	9.00	669.56
7	37.765771	-86.482897	654.70	9.00	663.70
8	37.765373	-86.483583	646.86	9.00	655.86
9	37.764610	-86.484849	654.84	9.00	663.84
10	37.764279	-86.485665	658.15	9.00	667.15
11	37.764075	-86.485949	659.45	9.00	668.45
12	37.763749	-86.486271	657.49	9.00	666.49
13	37.763363	-86.486587	656.31	9.00	665.31
14	37.762811	-86.487016	650.45	9.00	659.45
15	37.762082	-86.487993	647.68	9.00	656.68
16	37.761556	-86.488722	645.96	9.00	654.96
17	37.761081	-86.489817	641.10	9.00	650.10
18	37.760750	-86.490310	637.26	9.00	646.26
19	37.760106	-86.491265	637.13	9.00	646.13
20	37.759444	-86.492381	634.21	9.00	643.21
21	37.758995	-86.493271	632.13	9.00	641.13

Name: US Highway 60
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	37.769267	-86.475252	670.30	9.00	679.30
2	37.765984	-86.473857	672.90	9.00	681.90
3	37.764763	-86.473138	669.33	9.00	678.33
4	37.763987	-86.472098	665.41	9.00	674.41
5	37.763516	-86.471068	661.28	9.00	670.28
6	37.763279	-86.469737	658.13	9.00	667.13
7	37.762719	-86.465725	653.14	9.00	662.14
8	37.762227	-86.461530	666.20	9.00	675.20
9	37.761947	-86.458923	673.09	9.00	682.09
10	37.761786	-86.456895	678.33	9.00	687.33
11	37.761582	-86.453140	686.52	9.00	695.52
12	37.761379	-86.449503	694.23	9.00	703.23

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.751101	-86.467541	676.07	16.00	692.07
OP 2	37.750583	-86.466522	677.14	16.00	693.14
OP 3	37.753353	-86.466270	675.70	16.00	691.70
OP 4	37.753875	-86.464891	680.83	16.00	696.83
OP 5	37.759013	-86.462102	661.80	16.00	677.80
OP 6	37.769819	-86.482749	670.83	16.00	686.83
OP 7	37.768283	-86.482159	672.92	16.00	688.92
OP 8	37.770378	-86.482647	674.32	16.00	690.32
OP 9	37.770425	-86.482948	672.03	16.00	688.03
OP 10	37.763156	-86.487207	651.97	16.00	667.97
OP 11	37.763793	-86.487191	654.30	16.00	670.30
OP 12	37.764229	-86.486483	654.10	16.00	670.10
OP 13	37.764136	-86.484949	662.30	16.00	678.30
OP 14	37.764369	-86.484477	663.32	16.00	679.32
OP 15	37.748246	-86.476526	649.09	16.00	665.09
OP 16	37.747487	-86.479671	639.30	16.00	655.30
OP 17	37.760759	-86.489640	645.95	16.00	661.95
OP 18	37.759720	-86.492284	635.08	16.00	651.08
OP 19	37.759092	-86.493668	628.16	16.00	644.16

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	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

301 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

302 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

303 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

304 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

305 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

306 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

307 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

308 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

309 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

310 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

311 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

312 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

313 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

314 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

315 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

316 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 3 4_25 panels helipads

Created Oct 14, 2024
Updated Oct 14, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 131220.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

Summary of Results No glare predicted!

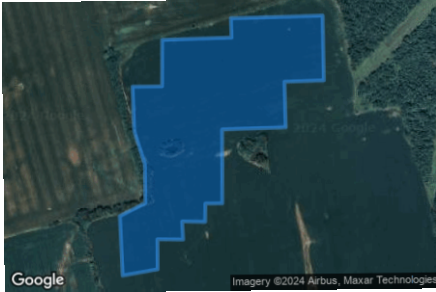
PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
301	SA tracking	SA tracking	0	0	-
302	SA tracking	SA tracking	0	0	-
303	SA tracking	SA tracking	0	0	-
304	SA tracking	SA tracking	0	0	-
305	SA tracking	SA tracking	0	0	-
306	SA tracking	SA tracking	0	0	-
307	SA 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	-

Component Data

PV Array(s)

Total PV footprint area: 184.2 acres

Name: 301
Footprint area: 24.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760803	-86.480022	673.16	4.25	677.41
2	37.761588	-86.480049	673.00	4.25	677.25
3	37.761588	-86.479394	672.33	4.25	676.58
4	37.762407	-86.479378	672.43	4.25	676.68
5	37.762432	-86.477839	675.58	4.25	679.83
6	37.762771	-86.477850	675.26	4.25	679.51
7	37.762801	-86.475811	676.26	4.25	680.51
8	37.761660	-86.475800	677.07	4.25	681.32
9	37.761643	-86.476675	676.02	4.25	680.27
10	37.760842	-86.476659	674.12	4.25	678.37
11	37.760816	-86.478069	673.69	4.25	677.94
12	37.759514	-86.478086	673.53	4.25	677.78
13	37.759514	-86.478461	673.32	4.25	677.57
14	37.759192	-86.478472	672.31	4.25	676.56
15	37.759205	-86.478981	671.57	4.25	675.82
16	37.758887	-86.478965	671.28	4.25	675.53
17	37.758895	-86.479534	670.83	4.25	675.08
18	37.758365	-86.479539	670.01	4.25	674.26
19	37.758263	-86.480317	667.41	4.25	671.66
20	37.759311	-86.480365	669.10	4.25	673.35
21	37.759535	-86.479797	673.11	4.25	677.36
22	37.760214	-86.479797	673.66	4.25	677.91

Name: 302
Footprint area: 23.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.759480	-86.476707	667.16	4.25	671.41
2	37.759484	-86.477050	670.05	4.25	674.30
3	37.758772	-86.477077	671.05	4.25	675.30
4	37.758768	-86.478300	672.06	4.25	676.31
5	37.758386	-86.478300	671.27	4.25	675.52
6	37.758407	-86.478745	672.18	4.25	676.43
7	37.757691	-86.479641	666.17	4.25	670.42
8	37.756808	-86.479625	663.09	4.25	667.34
9	37.756804	-86.479228	663.87	4.25	668.12
10	37.756465	-86.479266	659.53	4.25	663.78
11	37.756244	-86.479276	658.73	4.25	662.98
12	37.756236	-86.479657	658.15	4.25	662.40
13	37.755086	-86.479625	656.97	4.25	661.22
14	37.755086	-86.479416	656.85	4.25	661.10
15	37.754196	-86.479378	655.74	4.25	659.99
16	37.754204	-86.478397	647.86	4.25	652.11
17	37.754505	-86.478402	649.36	4.25	653.61
18	37.754505	-86.478053	646.43	4.25	650.68
19	37.755290	-86.478064	654.51	4.25	658.76
20	37.755290	-86.477715	650.94	4.25	655.19
21	37.755570	-86.477731	654.35	4.25	658.60
22	37.755574	-86.477453	651.85	4.25	656.10
23	37.756766	-86.477458	660.89	4.25	665.14
24	37.756808	-86.476728	655.26	4.25	659.51

Name: 303
Footprint area: 7.8 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.756015	-86.476873	655.14	4.25	659.39
2	37.756015	-86.476551	658.12	4.25	662.37
3	37.756584	-86.476541	655.85	4.25	660.10
4	37.756592	-86.476074	661.88	4.25	666.13
5	37.756898	-86.476068	661.52	4.25	665.77
6	37.756902	-86.475816	662.79	4.25	667.04
7	37.757275	-86.475816	662.10	4.25	666.35
8	37.757288	-86.474556	669.83	4.25	674.08
9	37.756461	-86.474545	670.93	4.25	675.18
10	37.756461	-86.475124	667.93	4.25	672.18
11	37.756075	-86.475114	668.20	4.25	672.45
12	37.756075	-86.475505	667.32	4.25	671.57
13	37.754964	-86.475537	665.44	4.25	669.69
14	37.754993	-86.476932	660.15	4.25	664.40

Name: 304
Footprint area: 10.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760562	-86.475881	674.66	4.25	678.91
2	37.760570	-86.474470	676.91	4.25	681.16
3	37.760218	-86.474465	675.20	4.25	679.45
4	37.760227	-86.474019	676.12	4.25	680.37
5	37.759502	-86.474003	674.86	4.25	679.11
6	37.759502	-86.474186	673.63	4.25	677.88
7	37.758454	-86.474175	672.25	4.25	676.50
8	37.758454	-86.474432	671.70	4.25	675.95
9	37.757572	-86.474422	669.45	4.25	673.70
10	37.757572	-86.474754	667.62	4.25	671.87
11	37.757309	-86.474749	668.66	4.25	672.91
12	37.757313	-86.475114	666.31	4.25	670.56
13	37.757576	-86.475108	665.61	4.25	669.86
14	37.757576	-86.475371	664.57	4.25	668.82
15	37.758416	-86.475371	665.66	4.25	669.91
16	37.758416	-86.475698	665.53	4.25	669.78
17	37.759476	-86.475666	670.13	4.25	674.38
18	37.759481	-86.475929	669.74	4.25	673.99
19	37.760011	-86.475902	672.03	4.25	676.28

Name: 305
Footprint area: 12.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757810	-86.473617	672.40	4.25	676.65
2	37.757826	-86.472469	671.91	4.25	676.16
3	37.756351	-86.472367	668.76	4.25	673.01
4	37.756351	-86.472244	667.85	4.25	672.10
5	37.755434	-86.472008	664.53	4.25	668.78
6	37.754832	-86.472040	662.93	4.25	667.18
7	37.754845	-86.473440	666.92	4.25	671.17
8	37.754569	-86.473451	666.45	4.25	670.70
9	37.754582	-86.474143	667.29	4.25	671.54

Name: 306
Footprint area: 4.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.762280	-86.467625	638.43	4.25	642.68
2	37.762280	-86.467330	633.58	4.25	637.83
3	37.761847	-86.467324	648.13	4.25	652.38
4	37.761860	-86.466981	638.90	4.25	643.15
5	37.760397	-86.466922	656.86	4.25	661.11
6	37.760384	-86.468542	666.44	4.25	670.69
7	37.761249	-86.468537	659.43	4.25	663.68
8	37.761262	-86.467882	658.70	4.25	662.95
9	37.761779	-86.467888	646.69	4.25	650.94
10	37.761779	-86.467625	650.31	4.25	654.56

Name: 307
Footprint area: 7.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



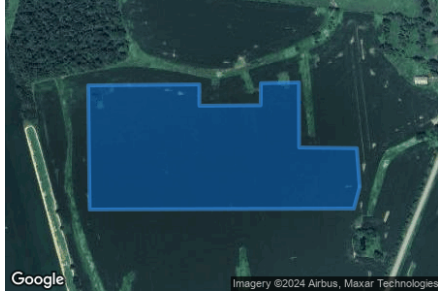
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760354	-86.470452	672.97	4.25	677.22
2	37.759587	-86.470463	673.95	4.25	678.20
3	37.759574	-86.469604	672.36	4.25	676.61
4	37.759192	-86.469637	670.79	4.25	675.04
5	37.759201	-86.468183	663.46	4.25	667.71
6	37.759587	-86.468188	665.66	4.25	669.91
7	37.759587	-86.467110	657.17	4.25	661.42
8	37.760388	-86.467121	657.32	4.25	661.57

Name: 308
Footprint area: 10.8 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.761720	-86.466311	640.69	4.25	644.94
2	37.761741	-86.465613	640.75	4.25	645.00
3	37.761347	-86.465597	645.66	4.25	649.91
4	37.761347	-86.465163	641.32	4.25	645.57
5	37.760193	-86.465093	657.69	4.25	661.94
6	37.760189	-86.465458	659.11	4.25	663.36
7	37.759315	-86.465404	660.67	4.25	664.92
8	37.759336	-86.464841	657.09	4.25	661.34
9	37.757835	-86.464841	659.47	4.25	663.72
10	37.757831	-86.465543	669.09	4.25	673.34
11	37.757572	-86.465522	665.28	4.25	669.53
12	37.757589	-86.466488	669.71	4.25	673.96
13	37.759022	-86.466498	659.72	4.25	663.97
14	37.759022	-86.466080	661.50	4.25	665.75
15	37.759396	-86.466091	656.93	4.25	661.18
16	37.759400	-86.465908	659.92	4.25	664.17
17	37.760172	-86.465935	656.57	4.25	660.82
18	37.760159	-86.466117	652.94	4.25	657.19
19	37.760965	-86.466112	647.05	4.25	651.30
20	37.760965	-86.466321	646.64	4.25	650.89

Name: 309
Footprint area: 26.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757564	-86.465715	667.28	4.25	671.53
2	37.757576	-86.466992	671.21	4.25	675.46
3	37.758713	-86.466997	661.22	4.25	665.47
4	37.758700	-86.467839	664.09	4.25	668.34
5	37.758314	-86.467845	665.48	4.25	669.73
6	37.758306	-86.469202	668.66	4.25	672.91
7	37.758679	-86.469202	667.72	4.25	671.97
8	37.758662	-86.471664	674.50	4.25	678.75
9	37.756491	-86.471632	669.07	4.25	673.32
10	37.756507	-86.465780	671.87	4.25	676.12
11	37.756885	-86.465651	667.61	4.25	671.86

Name: 310
Footprint area: 6.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754779	-86.467620	662.36	4.25	666.61
2	37.755053	-86.467622	663.16	4.25	667.41
3	37.755294	-86.467636	665.08	4.25	669.33
4	37.755294	-86.467738	664.03	4.25	668.28
5	37.756461	-86.467748	670.69	4.25	674.94
6	37.756465	-86.465898	672.71	4.25	676.96
7	37.755273	-86.465833	671.92	4.25	676.17
8	37.755273	-86.466278	669.34	4.25	673.59
9	37.754777	-86.466260	670.52	4.25	674.77
10	37.754779	-86.466801	666.20	4.25	670.45

Name: 311
Footprint area: 9.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754830	-86.468446	662.39	4.25	666.64
2	37.754866	-86.470530	662.04	4.25	666.29
3	37.755513	-86.470508	663.96	4.25	668.21
4	37.755528	-86.471321	663.92	4.25	668.17
5	37.756071	-86.471318	667.26	4.25	671.51
6	37.756465	-86.471310	670.21	4.25	674.46
7	37.756465	-86.468467	667.44	4.25	671.69

Name: 312
Footprint area: 5.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.756792	-86.462499	651.00	4.25	655.25
2	37.756787	-86.462231	648.71	4.25	652.96
3	37.756088	-86.462226	653.07	4.25	657.32
4	37.756092	-86.462429	656.68	4.25	660.93
5	37.755481	-86.462456	654.15	4.25	658.40
6	37.755490	-86.463046	665.34	4.25	669.59
7	37.755116	-86.463062	662.45	4.25	666.70
8	37.755129	-86.463840	671.69	4.25	675.94
9	37.755282	-86.464269	676.87	4.25	681.12
10	37.755926	-86.464248	674.71	4.25	678.96
11	37.755926	-86.464012	674.98	4.25	679.23
12	37.756338	-86.464017	670.26	4.25	674.51
13	37.756334	-86.463824	669.28	4.25	673.53
14	37.756609	-86.463824	665.05	4.25	669.30
15	37.756601	-86.462515	654.03	4.25	658.28

Name: 313
Footprint area: 5.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.755685	-86.460187	658.59	4.25	662.84
2	37.756440	-86.460209	650.89	4.25	655.14
3	37.756452	-86.461555	647.99	4.25	652.24
4	37.755676	-86.461577	654.66	4.25	658.91
5	37.755689	-86.461834	652.48	4.25	656.73
6	37.755328	-86.461850	655.96	4.25	660.21
7	37.755337	-86.462075	653.68	4.25	657.93
8	37.754620	-86.462086	658.86	4.25	663.11
9	37.754607	-86.460842	672.96	4.25	677.21
10	37.755273	-86.460842	662.46	4.25	666.71
11	37.755265	-86.460429	662.71	4.25	666.96
12	37.755676	-86.460429	658.61	4.25	662.86

Name: 314
Footprint area: 2.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



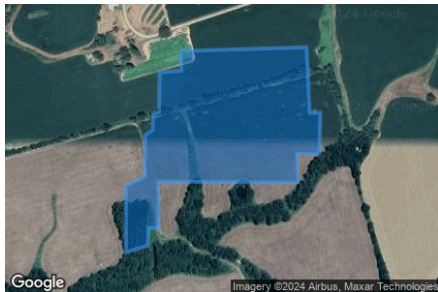
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757737	-86.460847	665.07	4.25	669.32
2	37.757708	-86.459382	667.13	4.25	671.38
3	37.756957	-86.459388	660.64	4.25	664.89
4	37.756987	-86.460858	651.37	4.25	655.62

Name: 315
Footprint area: 5.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754223	-86.470813	660.76	4.25	665.01
2	37.754218	-86.469038	663.36	4.25	667.61
3	37.753277	-86.469049	656.45	4.25	660.70
4	37.753281	-86.469698	660.14	4.25	664.39
5	37.753065	-86.469698	658.95	4.25	663.20
6	37.753069	-86.470282	657.42	4.25	661.67
7	37.752594	-86.470288	654.19	4.25	658.44
8	37.752594	-86.470658	654.45	4.25	658.70
9	37.753162	-86.470835	656.19	4.25	660.44

Name: 316
Footprint area: 20.8 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.752306	-86.474992	661.96	4.25	666.21
2	37.753001	-86.474971	662.61	4.25	666.86
3	37.753031	-86.474493	663.18	4.25	667.43
4	37.753374	-86.474499	664.00	4.25	668.25
5	37.753442	-86.471720	657.68	4.25	661.93
6	37.752289	-86.471650	659.56	4.25	663.81
7	37.752297	-86.471414	658.10	4.25	662.35
8	37.751576	-86.471436	653.58	4.25	657.83
9	37.751572	-86.471935	653.49	4.25	657.74
10	37.751071	-86.471919	650.06	4.25	654.31
11	37.751071	-86.472659	651.42	4.25	655.67
12	37.751084	-86.475014	655.17	4.25	659.42
13	37.750265	-86.474998	648.35	4.25	652.60
14	37.750274	-86.475218	649.37	4.25	653.62
15	37.749960	-86.475234	644.20	4.25	648.45
16	37.749841	-86.475722	642.88	4.25	647.13
17	37.751008	-86.475722	651.81	4.25	656.06
18	37.751169	-86.475298	654.73	4.25	658.98
19	37.751903	-86.475293	659.30	4.25	663.55
20	37.751987	-86.475126	659.77	4.25	664.02
21	37.752284	-86.475121	661.30	4.25	665.55

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.766029	-86.439714	726.55	500.00	1226.55
OP 2	37.761984	-86.452525	691.69	500.00	1191.69

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	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

301 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

302 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

303 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

304 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

305 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

306 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

307 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

308 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

309 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

310 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

311 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

312 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

313 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

314 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

315 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

316 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 3 5_83 panels 5ft vehicles

Created Oct 04, 2024
Updated Oct 14, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 131210.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

Summary of Results No glare predicted!

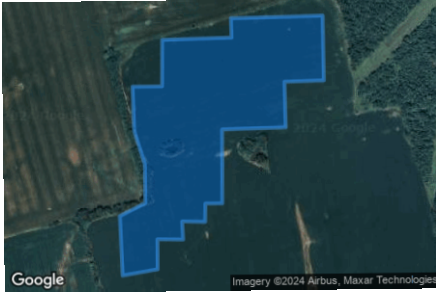
PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
301	SA tracking	SA tracking	0	0	-
302	SA tracking	SA tracking	0	0	-
303	SA tracking	SA tracking	0	0	-
304	SA tracking	SA tracking	0	0	-
305	SA tracking	SA tracking	0	0	-
306	SA tracking	SA tracking	0	0	-
307	SA 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	-

Component Data

PV Array(s)

Total PV footprint area: 184.2 acres

Name: 301
Footprint area: 24.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760803	-86.480022	673.16	5.83	678.99
2	37.761588	-86.480049	673.00	5.83	678.83
3	37.761588	-86.479394	672.33	5.83	678.16
4	37.762407	-86.479378	672.43	5.83	678.26
5	37.762432	-86.477839	675.58	5.83	681.41
6	37.762771	-86.477850	675.26	5.83	681.09
7	37.762801	-86.475811	676.26	5.83	682.09
8	37.761660	-86.475800	677.07	5.83	682.90
9	37.761643	-86.476675	676.02	5.83	681.85
10	37.760842	-86.476659	674.12	5.83	679.95
11	37.760816	-86.478069	673.69	5.83	679.52
12	37.759514	-86.478086	673.53	5.83	679.36
13	37.759514	-86.478461	673.32	5.83	679.15
14	37.759192	-86.478472	672.31	5.83	678.14
15	37.759205	-86.478981	671.57	5.83	677.40
16	37.758887	-86.478965	671.28	5.83	677.11
17	37.758895	-86.479534	670.83	5.83	676.66
18	37.758365	-86.479539	670.01	5.83	675.84
19	37.758263	-86.480317	667.41	5.83	673.24
20	37.759311	-86.480365	669.10	5.83	674.93
21	37.759535	-86.479797	673.11	5.83	678.94
22	37.760214	-86.479797	673.66	5.83	679.49

Name: 302
Footprint area: 23.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.759480	-86.476707	667.16	5.83	672.99
2	37.759484	-86.477050	670.05	5.83	675.88
3	37.758772	-86.477077	671.05	5.83	676.88
4	37.758768	-86.478300	672.06	5.83	677.89
5	37.758386	-86.478300	671.27	5.83	677.10
6	37.758407	-86.478745	672.18	5.83	678.01
7	37.757691	-86.479641	666.17	5.83	672.00
8	37.756808	-86.479625	663.09	5.83	668.92
9	37.756804	-86.479228	663.87	5.83	669.70
10	37.756465	-86.479266	659.53	5.83	665.36
11	37.756244	-86.479276	658.73	5.83	664.56
12	37.756236	-86.479657	658.15	5.83	663.98
13	37.755086	-86.479625	656.97	5.83	662.80
14	37.755086	-86.479416	656.85	5.83	662.68
15	37.754196	-86.479378	655.74	5.83	661.57
16	37.754204	-86.478397	647.86	5.83	653.69
17	37.754505	-86.478402	649.36	5.83	655.19
18	37.754505	-86.478053	646.43	5.83	652.26
19	37.755290	-86.478064	654.51	5.83	660.34
20	37.755290	-86.477715	650.94	5.83	656.77
21	37.755570	-86.477731	654.35	5.83	660.18
22	37.755574	-86.477453	651.85	5.83	657.68
23	37.756766	-86.477458	660.89	5.83	666.72
24	37.756808	-86.476728	655.26	5.83	661.09

Name: 303
Footprint area: 7.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.756015	-86.476873	655.14	5.83	660.97
2	37.756015	-86.476551	658.12	5.83	663.95
3	37.756584	-86.476541	655.85	5.83	661.68
4	37.756592	-86.476074	661.88	5.83	667.71
5	37.756898	-86.476068	661.52	5.83	667.35
6	37.756902	-86.475816	662.79	5.83	668.62
7	37.757275	-86.475816	662.10	5.83	667.93
8	37.757288	-86.474556	669.83	5.83	675.66
9	37.756461	-86.474545	670.93	5.83	676.76
10	37.756461	-86.475124	667.93	5.83	673.76
11	37.756075	-86.475114	668.20	5.83	674.03
12	37.756075	-86.475505	667.32	5.83	673.15
13	37.754964	-86.475537	665.44	5.83	671.27
14	37.754993	-86.476932	660.15	5.83	665.98

Name: 304
Footprint area: 10.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760562	-86.475881	674.66	5.83	680.49
2	37.760570	-86.474470	676.91	5.83	682.74
3	37.760218	-86.474465	675.20	5.83	681.03
4	37.760227	-86.474019	676.12	5.83	681.95
5	37.759502	-86.474003	674.86	5.83	680.69
6	37.759502	-86.474186	673.63	5.83	679.46
7	37.758454	-86.474175	672.25	5.83	678.08
8	37.758454	-86.474432	671.70	5.83	677.53
9	37.757572	-86.474422	669.45	5.83	675.28
10	37.757572	-86.474754	667.62	5.83	673.45
11	37.757309	-86.474749	668.66	5.83	674.49
12	37.757313	-86.475114	666.31	5.83	672.14
13	37.757576	-86.475108	665.61	5.83	671.44
14	37.757576	-86.475371	664.57	5.83	670.40
15	37.758416	-86.475371	665.66	5.83	671.49
16	37.758416	-86.475698	665.53	5.83	671.36
17	37.759476	-86.475666	670.13	5.83	675.96
18	37.759481	-86.475929	669.74	5.83	675.57
19	37.760011	-86.475902	672.03	5.83	677.86

Name: 305
Footprint area: 12.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757810	-86.473617	672.40	5.83	678.23
2	37.757826	-86.472469	671.91	5.83	677.74
3	37.756351	-86.472367	668.76	5.83	674.59
4	37.756351	-86.472244	667.85	5.83	673.68
5	37.755434	-86.472008	664.53	5.83	670.36
6	37.754832	-86.472040	662.93	5.83	668.76
7	37.754845	-86.473440	666.92	5.83	672.75
8	37.754569	-86.473451	666.45	5.83	672.28
9	37.754582	-86.474143	667.29	5.83	673.12

Name: 306
Footprint area: 4.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.762280	-86.467625	638.43	5.83	644.26
2	37.762280	-86.467330	633.58	5.83	639.41
3	37.761847	-86.467324	648.13	5.83	653.96
4	37.761860	-86.466981	638.90	5.83	644.73
5	37.760397	-86.466922	656.86	5.83	662.69
6	37.760384	-86.468542	666.44	5.83	672.27
7	37.761249	-86.468537	659.43	5.83	665.26
8	37.761262	-86.467882	658.70	5.83	664.53
9	37.761779	-86.467888	646.69	5.83	652.52
10	37.761779	-86.467625	650.31	5.83	656.14

Name: 307
Footprint area: 7.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760354	-86.470452	672.97	5.83	678.80
2	37.759587	-86.470463	673.95	5.83	679.78
3	37.759574	-86.469604	672.36	5.83	678.19
4	37.759192	-86.469637	670.79	5.83	676.62
5	37.759201	-86.468183	663.46	5.83	669.29
6	37.759587	-86.468188	665.66	5.83	671.49
7	37.759587	-86.467110	657.17	5.83	663.00
8	37.760388	-86.467121	657.32	5.83	663.15

Name: 308
Footprint area: 10.8 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.761720	-86.466311	640.69	5.83	646.52
2	37.761741	-86.465613	640.75	5.83	646.58
3	37.761347	-86.465597	645.66	5.83	651.49
4	37.761347	-86.465163	641.32	5.83	647.15
5	37.760193	-86.465093	657.69	5.83	663.52
6	37.760189	-86.465458	659.11	5.83	664.94
7	37.759315	-86.465404	660.67	5.83	666.50
8	37.759336	-86.464841	657.09	5.83	662.92
9	37.757835	-86.464841	659.47	5.83	665.30
10	37.757831	-86.465543	669.09	5.83	674.92
11	37.757572	-86.465522	665.28	5.83	671.11
12	37.757589	-86.466488	669.71	5.83	675.54
13	37.759022	-86.466498	659.72	5.83	665.55
14	37.759022	-86.466080	661.50	5.83	667.33
15	37.759396	-86.466091	656.93	5.83	662.76
16	37.759400	-86.465908	659.92	5.83	665.75
17	37.760172	-86.465935	656.57	5.83	662.40
18	37.760159	-86.466117	652.94	5.83	658.77
19	37.760965	-86.466112	647.05	5.83	652.88
20	37.760965	-86.466321	646.64	5.83	652.47

Name: 309
Footprint area: 26.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.757564	-86.465715	667.28	5.83	673.11
2	37.757576	-86.466992	671.21	5.83	677.04
3	37.758713	-86.466997	661.22	5.83	667.05
4	37.758700	-86.467839	664.09	5.83	669.92
5	37.758314	-86.467845	665.48	5.83	671.31
6	37.758306	-86.469202	668.66	5.83	674.49
7	37.758679	-86.469202	667.72	5.83	673.55
8	37.758662	-86.471664	674.50	5.83	680.33
9	37.756491	-86.471632	669.07	5.83	674.90
10	37.756507	-86.465780	671.87	5.83	677.70
11	37.756885	-86.465651	667.61	5.83	673.44

Name: 310
Footprint area: 6.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.754779	-86.467620	662.36	5.83	668.19
2	37.755053	-86.467622	663.16	5.83	668.99
3	37.755294	-86.467636	665.08	5.83	670.91
4	37.755294	-86.467738	664.03	5.83	669.86
5	37.756461	-86.467748	670.69	5.83	676.52
6	37.756465	-86.465898	672.71	5.83	678.54
7	37.755273	-86.465833	671.92	5.83	677.75
8	37.755273	-86.466278	669.34	5.83	675.17
9	37.754777	-86.466260	670.52	5.83	676.35
10	37.754779	-86.466801	666.20	5.83	672.03

Name: 311
Footprint area: 9.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754830	-86.468446	662.39	5.83	668.22
2	37.754866	-86.470530	662.04	5.83	667.87
3	37.755513	-86.470508	663.96	5.83	669.79
4	37.755528	-86.471321	663.92	5.83	669.75
5	37.756071	-86.471318	667.26	5.83	673.09
6	37.756465	-86.471310	670.21	5.83	676.04
7	37.756465	-86.468467	667.44	5.83	673.27



Name: 312
Footprint area: 5.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.756792	-86.462499	651.00	5.83	656.83
2	37.756787	-86.462231	648.71	5.83	654.54
3	37.756088	-86.462226	653.07	5.83	658.90
4	37.756092	-86.462429	656.68	5.83	662.51
5	37.755481	-86.462456	654.15	5.83	659.98
6	37.755490	-86.463046	665.34	5.83	671.17
7	37.755116	-86.463062	662.45	5.83	668.28
8	37.755129	-86.463840	671.69	5.83	677.52
9	37.755282	-86.464269	676.87	5.83	682.70
10	37.755926	-86.464248	674.71	5.83	680.54
11	37.755926	-86.464012	674.98	5.83	680.81
12	37.756338	-86.464017	670.26	5.83	676.09
13	37.756334	-86.463824	669.28	5.83	675.11
14	37.756609	-86.463824	665.05	5.83	670.88
15	37.756601	-86.462515	654.03	5.83	659.86



Name: 313
Footprint area: 5.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.755685	-86.460187	658.59	5.83	664.42
2	37.756440	-86.460209	650.89	5.83	656.72
3	37.756452	-86.461555	647.99	5.83	653.82
4	37.755676	-86.461577	654.66	5.83	660.49
5	37.755689	-86.461834	652.48	5.83	658.31
6	37.755328	-86.461850	655.96	5.83	661.79
7	37.755337	-86.462075	653.68	5.83	659.51
8	37.754620	-86.462086	658.86	5.83	664.69
9	37.754607	-86.460842	672.96	5.83	678.79
10	37.755273	-86.460842	662.46	5.83	668.29
11	37.755265	-86.460429	662.71	5.83	668.54
12	37.755676	-86.460429	658.61	5.83	664.44

Name: 314
Footprint area: 2.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



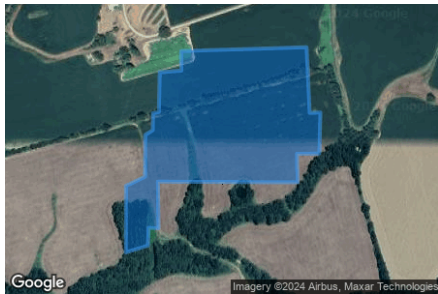
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757737	-86.460847	665.07	5.83	670.90
2	37.757708	-86.459382	667.13	5.83	672.96
3	37.756957	-86.459388	660.64	5.83	666.47
4	37.756987	-86.460858	651.37	5.83	657.20

Name: 315
Footprint area: 5.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754223	-86.470813	660.76	5.83	666.59
2	37.754218	-86.469038	663.36	5.83	669.19
3	37.753277	-86.469049	656.45	5.83	662.28
4	37.753281	-86.469698	660.14	5.83	665.97
5	37.753065	-86.469698	658.95	5.83	664.78
6	37.753069	-86.470282	657.42	5.83	663.25
7	37.752594	-86.470288	654.19	5.83	660.02
8	37.752594	-86.470658	654.45	5.83	660.28
9	37.753162	-86.470835	656.19	5.83	662.02

Name: 316
Footprint area: 20.8 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.752306	-86.474992	661.96	5.83	667.79
2	37.753001	-86.474971	662.61	5.83	668.44
3	37.753031	-86.474493	663.18	5.83	669.01
4	37.753374	-86.474499	664.00	5.83	669.83
5	37.753442	-86.471720	657.68	5.83	663.51
6	37.752289	-86.471650	659.56	5.83	665.39
7	37.752297	-86.471414	658.10	5.83	663.93
8	37.751576	-86.471436	653.58	5.83	659.41
9	37.751572	-86.471935	653.49	5.83	659.32
10	37.751071	-86.471919	650.06	5.83	655.89
11	37.751071	-86.472659	651.42	5.83	657.25
12	37.751084	-86.475014	655.17	5.83	661.00
13	37.750265	-86.474998	648.35	5.83	654.18
14	37.750274	-86.475218	649.37	5.83	655.20
15	37.749960	-86.475234	644.20	5.83	650.03
16	37.749841	-86.475722	642.88	5.83	648.71
17	37.751008	-86.475722	651.81	5.83	657.64
18	37.751169	-86.475298	654.73	5.83	660.56
19	37.751903	-86.475293	659.30	5.83	665.13
20	37.751987	-86.475126	659.77	5.83	665.60
21	37.752284	-86.475121	661.30	5.83	667.13

2-Mile Flight Path Receptor(s)

Name: Breckinridge County Airport Runway 10
Description:
Threshold height : 50 ft
Direction: 98.7 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	37.785423	-86.448080	710.62	50.00	760.62
2-mile point	37.789817	-86.484281	648.03	666.02	1314.04

Name: Breckinridge County Airport Runway 28
Description:
Threshold height : 50 ft
Direction: 275.1 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	37.784151	-86.434486	722.18	50.00	772.18
2-mile point	37.781596	-86.398004	742.72	582.88	1325.61

Name: Rough River State Park Airport Runway 2
Description:
Threshold height : 50 ft
Direction: 18.9 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	37.606011	-86.508874	563.89	50.00	613.89
2-mile point	37.578654	-86.520697	493.37	673.95	1167.32

Name: Rough River State Park Airport Runway 20

Description:

Threshold height : 50 ft

Direction: 198.4 deg

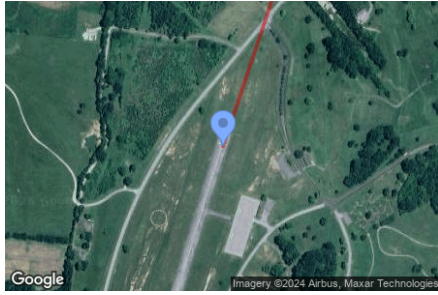
Glide slope: 3.0 deg

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	37.613983	-86.505752	577.15	50.00	627.15
2-mile point	37.641413	-86.494199	566.11	614.47	1180.58



Route Receptor(s)

Name: Bens Hole Branch 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	37.748997	-86.468161	663.98	5.00	668.98
2	37.748908	-86.468886	659.47	5.00	664.47
3	37.748879	-86.469181	656.92	5.00	661.92
4	37.748866	-86.469755	656.03	5.00	661.03
5	37.748637	-86.471503	653.01	5.00	658.01
6	37.748526	-86.472378	653.92	5.00	658.92
7	37.748170	-86.473429	656.67	5.00	661.67
8	37.747793	-86.474320	657.30	5.00	662.30
9	37.747538	-86.474953	655.66	5.00	660.66
10	37.747598	-86.475291	651.82	5.00	656.82
11	37.748208	-86.476042	643.99	5.00	648.99
12	37.748645	-86.476605	637.90	5.00	642.90
13	37.748688	-86.476922	638.75	5.00	643.75
14	37.748501	-86.477555	635.77	5.00	640.77
15	37.748183	-86.478263	639.91	5.00	644.91
16	37.747937	-86.478681	639.64	5.00	644.64
17	37.747797	-86.479100	631.13	5.00	636.13

Name: Frank Farm Lane
Route type: Two-way
View angle: 50.0 deg



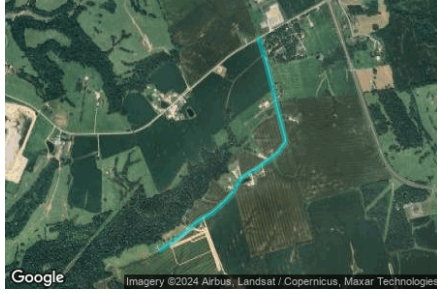
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.754231	-86.465511	673.50	5.00	678.50
2	37.754350	-86.467695	663.74	5.00	668.74
3	37.754473	-86.470313	662.96	5.00	667.96
4	37.754554	-86.471643	661.13	5.00	666.13
5	37.754469	-86.471992	660.90	5.00	665.90
6	37.753786	-86.474583	667.31	5.00	672.31
7	37.753638	-86.475135	664.30	5.00	669.30

Name: Highway 261
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	37.762202	-86.461519	666.22	5.00	671.22
2	37.760132	-86.462549	652.20	5.00	657.20
3	37.756078	-86.464545	672.47	5.00	677.47
4	37.753753	-86.465746	671.84	5.00	676.84
5	37.750716	-86.467291	672.39	5.00	677.39
6	37.747086	-86.469094	664.28	5.00	669.28

Name: Stanley Gray Lane
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	37.773786	-86.484581	665.93	5.00	670.93
2	37.772022	-86.483894	661.34	5.00	666.34
3	37.770360	-86.483379	668.07	5.00	673.07
4	37.767866	-86.482618	666.26	5.00	671.26
5	37.766662	-86.482231	661.45	5.00	666.45
6	37.766501	-86.482264	660.56	5.00	665.56
7	37.765771	-86.482897	654.70	5.00	659.70
8	37.765373	-86.483583	646.86	5.00	651.86
9	37.764610	-86.484849	654.84	5.00	659.84
10	37.764279	-86.485665	658.15	5.00	663.15
11	37.764109	-86.485976	658.69	5.00	663.69
12	37.763770	-86.486319	656.48	5.00	661.48
13	37.763371	-86.486619	655.88	5.00	660.88
14	37.762811	-86.487016	650.45	5.00	655.45
15	37.762082	-86.487993	647.68	5.00	652.68
16	37.761556	-86.488722	645.96	5.00	650.96
17	37.761081	-86.489817	641.10	5.00	646.10
18	37.760750	-86.490310	637.26	5.00	642.26
19	37.760106	-86.491265	637.13	5.00	642.13
20	37.759444	-86.492381	634.21	5.00	639.21
21	37.758995	-86.493271	632.13	5.00	637.13

Name: US Highway 60
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	37.769267	-86.475252	670.30	5.00	675.30
2	37.765984	-86.473857	672.90	5.00	677.90
3	37.764763	-86.473138	669.33	5.00	674.33
4	37.763974	-86.472098	665.76	5.00	670.76
5	37.763516	-86.471068	661.28	5.00	666.28
6	37.763279	-86.469737	658.13	5.00	663.13
7	37.762719	-86.465725	653.14	5.00	658.14
8	37.762227	-86.461530	666.20	5.00	671.20
9	37.761947	-86.458923	673.09	5.00	678.09
10	37.761786	-86.456895	678.33	5.00	683.33
11	37.761582	-86.453140	686.52	5.00	691.52
12	37.761379	-86.449503	694.23	5.00	699.23

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.751101	-86.467541	676.07	16.00	692.07
OP 2	37.750583	-86.466522	677.14	16.00	693.14
OP 3	37.753353	-86.466270	675.70	16.00	691.70
OP 4	37.753875	-86.464891	680.83	16.00	696.83
OP 5	37.759013	-86.462102	661.80	16.00	677.80
OP 6	37.769819	-86.482749	670.83	16.00	686.83
OP 7	37.768283	-86.482159	672.92	16.00	688.92
OP 8	37.770378	-86.482647	674.32	16.00	690.32
OP 9	37.770425	-86.482948	672.03	16.00	688.03
OP 10	37.763156	-86.487207	651.97	16.00	667.97
OP 11	37.763793	-86.487191	654.30	16.00	670.30
OP 12	37.764229	-86.486483	654.10	16.00	670.10
OP 13	37.764136	-86.484949	662.30	16.00	678.30
OP 14	37.764369	-86.484477	663.32	16.00	679.32
OP 15	37.748246	-86.476526	649.09	16.00	665.09
OP 16	37.747487	-86.479671	639.30	16.00	655.30
OP 17	37.760759	-86.489640	645.95	16.00	661.95
OP 18	37.759720	-86.492284	635.08	16.00	651.08
OP 19	37.759092	-86.493668	628.16	16.00	644.16

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	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

301 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

302 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

303 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

304 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

305 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

306 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

307 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

308 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

309 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

310 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

311 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

312 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

313 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

314 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

315 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

316 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 3 5_83 panels 9ft vehicles

Created Oct 04, 2024
Updated Oct 14, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 130574.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

Summary of Results No glare predicted!

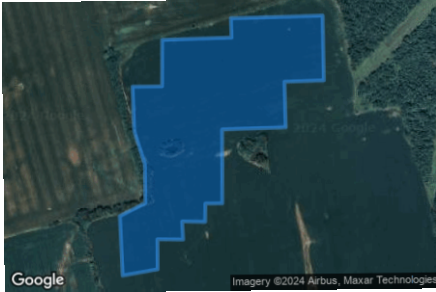
PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
301	SA tracking	SA tracking	0	0	-
302	SA tracking	SA tracking	0	0	-
303	SA tracking	SA tracking	0	0	-
304	SA tracking	SA tracking	0	0	-
305	SA tracking	SA tracking	0	0	-
306	SA tracking	SA tracking	0	0	-
307	SA 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	-

Component Data

PV Array(s)

Total PV footprint area: 184.2 acres

Name: 301
Footprint area: 24.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760803	-86.480022	673.16	5.83	678.99
2	37.761588	-86.480049	673.00	5.83	678.83
3	37.761588	-86.479394	672.33	5.83	678.16
4	37.762407	-86.479378	672.43	5.83	678.26
5	37.762432	-86.477839	675.58	5.83	681.41
6	37.762771	-86.477850	675.26	5.83	681.09
7	37.762801	-86.475811	676.26	5.83	682.09
8	37.761660	-86.475800	677.07	5.83	682.90
9	37.761643	-86.476675	676.02	5.83	681.85
10	37.760842	-86.476659	674.12	5.83	679.95
11	37.760816	-86.478069	673.69	5.83	679.52
12	37.759514	-86.478086	673.53	5.83	679.36
13	37.759514	-86.478461	673.32	5.83	679.15
14	37.759192	-86.478472	672.31	5.83	678.14
15	37.759205	-86.478981	671.57	5.83	677.40
16	37.758887	-86.478965	671.28	5.83	677.11
17	37.758895	-86.479534	670.83	5.83	676.66
18	37.758365	-86.479539	670.01	5.83	675.84
19	37.758263	-86.480317	667.41	5.83	673.24
20	37.759311	-86.480365	669.10	5.83	674.93
21	37.759535	-86.479797	673.11	5.83	678.94
22	37.760214	-86.479797	673.66	5.83	679.49

Name: 302
Footprint area: 23.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.759480	-86.476707	667.16	5.83	672.99
2	37.759484	-86.477050	670.05	5.83	675.88
3	37.758772	-86.477077	671.05	5.83	676.88
4	37.758768	-86.478300	672.06	5.83	677.89
5	37.758386	-86.478300	671.27	5.83	677.10
6	37.758407	-86.478745	672.18	5.83	678.01
7	37.757691	-86.479641	666.17	5.83	672.00
8	37.756808	-86.479625	663.09	5.83	668.92
9	37.756804	-86.479228	663.87	5.83	669.70
10	37.756465	-86.479266	659.53	5.83	665.36
11	37.756244	-86.479276	658.73	5.83	664.56
12	37.756236	-86.479657	658.15	5.83	663.98
13	37.755086	-86.479625	656.97	5.83	662.80
14	37.755086	-86.479416	656.85	5.83	662.68
15	37.754196	-86.479378	655.74	5.83	661.57
16	37.754204	-86.478397	647.86	5.83	653.69
17	37.754505	-86.478402	649.36	5.83	655.19
18	37.754505	-86.478053	646.43	5.83	652.26
19	37.755290	-86.478064	654.51	5.83	660.34
20	37.755290	-86.477715	650.94	5.83	656.77
21	37.755570	-86.477731	654.35	5.83	660.18
22	37.755574	-86.477453	651.85	5.83	657.68
23	37.756766	-86.477458	660.89	5.83	666.72
24	37.756808	-86.476728	655.26	5.83	661.09

Name: 303
Footprint area: 7.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.756015	-86.476873	655.14	5.83	660.97
2	37.756015	-86.476551	658.12	5.83	663.95
3	37.756584	-86.476541	655.85	5.83	661.68
4	37.756592	-86.476074	661.88	5.83	667.71
5	37.756898	-86.476068	661.52	5.83	667.35
6	37.756902	-86.475816	662.79	5.83	668.62
7	37.757275	-86.475816	662.10	5.83	667.93
8	37.757288	-86.474556	669.83	5.83	675.66
9	37.756461	-86.474545	670.93	5.83	676.76
10	37.756461	-86.475124	667.93	5.83	673.76
11	37.756075	-86.475114	668.20	5.83	674.03
12	37.756075	-86.475505	667.32	5.83	673.15
13	37.754964	-86.475537	665.44	5.83	671.27
14	37.754993	-86.476932	660.15	5.83	665.98

Name: 304
Footprint area: 10.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760562	-86.475881	674.66	5.83	680.49
2	37.760570	-86.474470	676.91	5.83	682.74
3	37.760218	-86.474465	675.20	5.83	681.03
4	37.760227	-86.474019	676.12	5.83	681.95
5	37.759502	-86.474003	674.86	5.83	680.69
6	37.759502	-86.474186	673.63	5.83	679.46
7	37.758454	-86.474175	672.25	5.83	678.08
8	37.758454	-86.474432	671.70	5.83	677.53
9	37.757572	-86.474422	669.45	5.83	675.28
10	37.757572	-86.474754	667.62	5.83	673.45
11	37.757309	-86.474749	668.66	5.83	674.49
12	37.757313	-86.475114	666.31	5.83	672.14
13	37.757576	-86.475108	665.61	5.83	671.44
14	37.757576	-86.475371	664.57	5.83	670.40
15	37.758416	-86.475371	665.66	5.83	671.49
16	37.758416	-86.475698	665.53	5.83	671.36
17	37.759476	-86.475666	670.13	5.83	675.96
18	37.759481	-86.475929	669.74	5.83	675.57
19	37.760011	-86.475902	672.03	5.83	677.86

Name: 305
Footprint area: 12.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757810	-86.473617	672.40	5.83	678.23
2	37.757826	-86.472469	671.91	5.83	677.74
3	37.756351	-86.472367	668.76	5.83	674.59
4	37.756351	-86.472244	667.85	5.83	673.68
5	37.755434	-86.472008	664.53	5.83	670.36
6	37.754832	-86.472040	662.93	5.83	668.76
7	37.754845	-86.473440	666.92	5.83	672.75
8	37.754569	-86.473451	666.45	5.83	672.28
9	37.754582	-86.474143	667.29	5.83	673.12

Name: 306
Footprint area: 4.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.762280	-86.467625	638.43	5.83	644.26
2	37.762280	-86.467330	633.58	5.83	639.41
3	37.761847	-86.467324	648.13	5.83	653.96
4	37.761860	-86.466981	638.90	5.83	644.73
5	37.760397	-86.466922	656.86	5.83	662.69
6	37.760384	-86.468542	666.44	5.83	672.27
7	37.761249	-86.468537	659.43	5.83	665.26
8	37.761262	-86.467882	658.70	5.83	664.53
9	37.761779	-86.467888	646.69	5.83	652.52
10	37.761779	-86.467625	650.31	5.83	656.14

Name: 307
Footprint area: 7.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



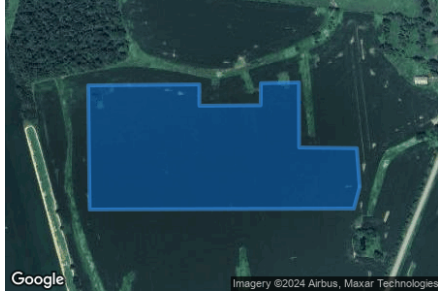
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760354	-86.470452	672.97	5.83	678.80
2	37.759587	-86.470463	673.95	5.83	679.78
3	37.759574	-86.469604	672.36	5.83	678.19
4	37.759192	-86.469637	670.79	5.83	676.62
5	37.759201	-86.468183	663.46	5.83	669.29
6	37.759587	-86.468188	665.66	5.83	671.49
7	37.759587	-86.467110	657.17	5.83	663.00
8	37.760388	-86.467121	657.32	5.83	663.15

Name: 308
Footprint area: 10.8 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.761720	-86.466311	640.69	5.83	646.52
2	37.761741	-86.465613	640.75	5.83	646.58
3	37.761347	-86.465597	645.66	5.83	651.49
4	37.761347	-86.465163	641.32	5.83	647.15
5	37.760193	-86.465093	657.69	5.83	663.52
6	37.760189	-86.465458	659.11	5.83	664.94
7	37.759315	-86.465404	660.67	5.83	666.50
8	37.759336	-86.464841	657.09	5.83	662.92
9	37.757835	-86.464841	659.47	5.83	665.30
10	37.757831	-86.465543	669.09	5.83	674.92
11	37.757572	-86.465522	665.28	5.83	671.11
12	37.757589	-86.466488	669.71	5.83	675.54
13	37.759022	-86.466498	659.72	5.83	665.55
14	37.759022	-86.466080	661.50	5.83	667.33
15	37.759396	-86.466091	656.93	5.83	662.76
16	37.759400	-86.465908	659.92	5.83	665.75
17	37.760172	-86.465935	656.57	5.83	662.40
18	37.760159	-86.466117	652.94	5.83	658.77
19	37.760965	-86.466112	647.05	5.83	652.88
20	37.760965	-86.466321	646.64	5.83	652.47

Name: 309
Footprint area: 26.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757564	-86.465715	667.28	5.83	673.11
2	37.757576	-86.466992	671.21	5.83	677.04
3	37.758713	-86.466997	661.22	5.83	667.05
4	37.758700	-86.467839	664.09	5.83	669.92
5	37.758314	-86.467845	665.48	5.83	671.31
6	37.758306	-86.469202	668.66	5.83	674.49
7	37.758679	-86.469202	667.72	5.83	673.55
8	37.758662	-86.471664	674.50	5.83	680.33
9	37.756491	-86.471632	669.07	5.83	674.90
10	37.756507	-86.465780	671.87	5.83	677.70
11	37.756885	-86.465651	667.61	5.83	673.44

Name: 310
Footprint area: 6.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754779	-86.467620	662.36	5.83	668.19
2	37.755053	-86.467622	663.16	5.83	668.99
3	37.755294	-86.467636	665.08	5.83	670.91
4	37.755294	-86.467738	664.03	5.83	669.86
5	37.756461	-86.467748	670.69	5.83	676.52
6	37.756465	-86.465898	672.71	5.83	678.54
7	37.755273	-86.465833	671.92	5.83	677.75
8	37.755273	-86.466278	669.34	5.83	675.17
9	37.754777	-86.466260	670.52	5.83	676.35
10	37.754779	-86.466801	666.20	5.83	672.03

Name: 311
Footprint area: 9.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754830	-86.468446	662.39	5.83	668.22
2	37.754866	-86.470530	662.04	5.83	667.87
3	37.755513	-86.470508	663.96	5.83	669.79
4	37.755528	-86.471321	663.92	5.83	669.75
5	37.756071	-86.471318	667.26	5.83	673.09
6	37.756465	-86.471310	670.21	5.83	676.04
7	37.756465	-86.468467	667.44	5.83	673.27

Name: 312
Footprint area: 5.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.756792	-86.462499	651.00	5.83	656.83
2	37.756787	-86.462231	648.71	5.83	654.54
3	37.756088	-86.462226	653.07	5.83	658.90
4	37.756092	-86.462429	656.68	5.83	662.51
5	37.755481	-86.462456	654.15	5.83	659.98
6	37.755490	-86.463046	665.34	5.83	671.17
7	37.755116	-86.463062	662.45	5.83	668.28
8	37.755129	-86.463840	671.69	5.83	677.52
9	37.755282	-86.464269	676.87	5.83	682.70
10	37.755926	-86.464248	674.71	5.83	680.54
11	37.755926	-86.464012	674.98	5.83	680.81
12	37.756338	-86.464017	670.26	5.83	676.09
13	37.756334	-86.463824	669.28	5.83	675.11
14	37.756609	-86.463824	665.05	5.83	670.88
15	37.756601	-86.462515	654.03	5.83	659.86

Name: 313
Footprint area: 5.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.755685	-86.460187	658.59	5.83	664.42
2	37.756440	-86.460209	650.89	5.83	656.72
3	37.756452	-86.461555	647.99	5.83	653.82
4	37.755676	-86.461577	654.66	5.83	660.49
5	37.755689	-86.461834	652.48	5.83	658.31
6	37.755328	-86.461850	655.96	5.83	661.79
7	37.755337	-86.462075	653.68	5.83	659.51
8	37.754620	-86.462086	658.86	5.83	664.69
9	37.754607	-86.460842	672.96	5.83	678.79
10	37.755273	-86.460842	662.46	5.83	668.29
11	37.755265	-86.460429	662.71	5.83	668.54
12	37.755676	-86.460429	658.61	5.83	664.44

Name: 314
Footprint area: 2.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



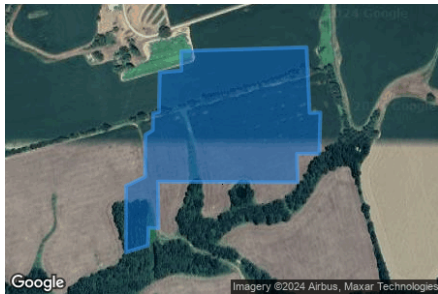
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757737	-86.460847	665.07	5.83	670.90
2	37.757708	-86.459382	667.13	5.83	672.96
3	37.756957	-86.459388	660.64	5.83	666.47
4	37.756987	-86.460858	651.37	5.83	657.20

Name: 315
Footprint area: 5.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754223	-86.470813	660.76	5.83	666.59
2	37.754218	-86.469038	663.36	5.83	669.19
3	37.753277	-86.469049	656.45	5.83	662.28
4	37.753281	-86.469698	660.14	5.83	665.97
5	37.753065	-86.469698	658.95	5.83	664.78
6	37.753069	-86.470282	657.42	5.83	663.25
7	37.752594	-86.470288	654.19	5.83	660.02
8	37.752594	-86.470658	654.45	5.83	660.28
9	37.753162	-86.470835	656.19	5.83	662.02

Name: 316
Footprint area: 20.8 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.752306	-86.474992	661.96	5.83	667.79
2	37.753001	-86.474971	662.61	5.83	668.44
3	37.753031	-86.474493	663.18	5.83	669.01
4	37.753374	-86.474499	664.00	5.83	669.83
5	37.753442	-86.471720	657.68	5.83	663.51
6	37.752289	-86.471650	659.56	5.83	665.39
7	37.752297	-86.471414	658.10	5.83	663.93
8	37.751576	-86.471436	653.58	5.83	659.41
9	37.751572	-86.471935	653.49	5.83	659.32
10	37.751071	-86.471919	650.06	5.83	655.89
11	37.751071	-86.472659	651.42	5.83	657.25
12	37.751084	-86.475014	655.17	5.83	661.00
13	37.750265	-86.474998	648.35	5.83	654.18
14	37.750274	-86.475218	649.37	5.83	655.20
15	37.749960	-86.475234	644.20	5.83	650.03
16	37.749841	-86.475722	642.88	5.83	648.71
17	37.751008	-86.475722	651.81	5.83	657.64
18	37.751169	-86.475298	654.73	5.83	660.56
19	37.751903	-86.475293	659.30	5.83	665.13
20	37.751987	-86.475126	659.77	5.83	665.60
21	37.752284	-86.475121	661.30	5.83	667.13

2-Mile Flight Path Receptor(s)

Name: Breckinridge County Airport Runway 10
Description:
Threshold height : 50 ft
Direction: 98.7 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	37.785423	-86.448080	710.62	50.00	760.62
2-mile point	37.789817	-86.484281	648.03	666.02	1314.04

Name: Breckinridge County Airport Runway 28
Description:
Threshold height : 50 ft
Direction: 275.1 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	37.784151	-86.434486	722.18	50.00	772.18
2-mile point	37.781596	-86.398004	742.72	582.88	1325.61

Name: Rough River State Park Airport Runway 2
Description:
Threshold height : 50 ft
Direction: 18.9 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	37.606011	-86.508874	563.89	50.00	613.89
2-mile point	37.578654	-86.520697	493.37	673.95	1167.32

Name: Rough River State Park Airport Runway 20

Description:

Threshold height : 50 ft

Direction: 198.4 deg

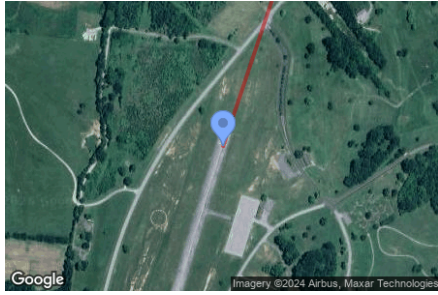
Glide slope: 3.0 deg

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	37.613983	-86.505752	577.15	50.00	627.15
2-mile point	37.641413	-86.494199	566.11	614.47	1180.58



Route Receptor(s)

Name: Bens Hole Branch 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	37.748997	-86.468161	663.98	9.00	672.98
2	37.748908	-86.468886	659.47	9.00	668.47
3	37.748879	-86.469181	656.92	9.00	665.92
4	37.748866	-86.469755	656.03	9.00	665.03
5	37.748637	-86.471503	653.01	9.00	662.01
6	37.748526	-86.472378	653.92	9.00	662.92
7	37.748170	-86.473429	656.67	9.00	665.67
8	37.747793	-86.474320	657.30	9.00	666.30
9	37.747538	-86.474953	655.66	9.00	664.66
10	37.747598	-86.475291	651.82	9.00	660.82
11	37.748208	-86.476042	643.99	9.00	652.99
12	37.748645	-86.476605	637.90	9.00	646.90
13	37.748688	-86.476922	638.75	9.00	647.75
14	37.748501	-86.477555	635.77	9.00	644.77
15	37.748183	-86.478263	639.91	9.00	648.91
16	37.747937	-86.478681	639.64	9.00	648.64
17	37.747797	-86.479100	631.13	9.00	640.13

Name: Frank Farm Lane
Route type: Two-way
View angle: 50.0 deg



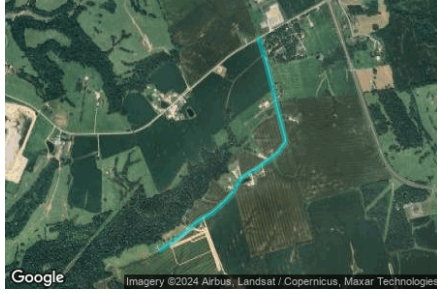
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.754231	-86.465511	673.50	9.00	682.50
2	37.754350	-86.467695	663.74	9.00	672.74
3	37.754473	-86.470313	662.96	9.00	671.96
4	37.754554	-86.471643	661.13	9.00	670.13
5	37.754469	-86.471992	660.90	9.00	669.90
6	37.753786	-86.474583	667.31	9.00	676.31
7	37.753638	-86.475135	664.30	9.00	673.30

Name: Highway 261
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	37.762202	-86.461519	666.22	9.00	675.22
2	37.760132	-86.462549	652.20	9.00	661.20
3	37.756078	-86.464545	672.47	9.00	681.47
4	37.753753	-86.465746	671.84	9.00	680.84
5	37.750716	-86.467291	672.39	9.00	681.39
6	37.747086	-86.469094	664.28	9.00	673.28

Name: Stanley Gray Lane
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	37.773786	-86.484581	665.93	9.00	674.93
2	37.772022	-86.483894	661.34	9.00	670.34
3	37.770360	-86.483379	668.07	9.00	677.07
4	37.767866	-86.482618	666.26	9.00	675.26
5	37.766662	-86.482231	661.45	9.00	670.45
6	37.766501	-86.482264	660.56	9.00	669.56
7	37.765771	-86.482897	654.70	9.00	663.70
8	37.765373	-86.483583	646.86	9.00	655.86
9	37.764610	-86.484849	654.84	9.00	663.84
10	37.764279	-86.485665	658.15	9.00	667.15
11	37.764109	-86.485976	658.69	9.00	667.69
12	37.763770	-86.486319	656.48	9.00	665.48
13	37.763371	-86.486619	655.88	9.00	664.88
14	37.762811	-86.487016	650.45	9.00	659.45
15	37.762082	-86.487993	647.68	9.00	656.68
16	37.761556	-86.488722	645.96	9.00	654.96
17	37.761081	-86.489817	641.10	9.00	650.10
18	37.760750	-86.490310	637.26	9.00	646.26
19	37.760106	-86.491265	637.13	9.00	646.13
20	37.759444	-86.492381	634.21	9.00	643.21
21	37.758995	-86.493271	632.13	9.00	641.13

Name: US Highway 60
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	37.769267	-86.475252	670.30	9.00	679.30
2	37.765984	-86.473857	672.90	9.00	681.90
3	37.764763	-86.473138	669.33	9.00	678.33
4	37.763974	-86.472098	665.76	9.00	674.76
5	37.763516	-86.471068	661.28	9.00	670.28
6	37.763279	-86.469737	658.13	9.00	667.13
7	37.762719	-86.465725	653.14	9.00	662.14
8	37.762227	-86.461530	666.20	9.00	675.20
9	37.761947	-86.458923	673.09	9.00	682.09
10	37.761786	-86.456895	678.33	9.00	687.33
11	37.761582	-86.453140	686.52	9.00	695.52
12	37.761379	-86.449503	694.23	9.00	703.23

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.751101	-86.467541	676.07	16.00	692.07
OP 2	37.750583	-86.466522	677.14	16.00	693.14
OP 3	37.753353	-86.466270	675.70	16.00	691.70
OP 4	37.753875	-86.464891	680.83	16.00	696.83
OP 5	37.759013	-86.462102	661.80	16.00	677.80
OP 6	37.769819	-86.482749	670.83	16.00	686.83
OP 7	37.768283	-86.482159	672.92	16.00	688.92
OP 8	37.770378	-86.482647	674.32	16.00	690.32
OP 9	37.770425	-86.482948	672.03	16.00	688.03
OP 10	37.763156	-86.487207	651.97	16.00	667.97
OP 11	37.763793	-86.487191	654.30	16.00	670.30
OP 12	37.764229	-86.486483	654.10	16.00	670.10
OP 13	37.764136	-86.484949	662.30	16.00	678.30
OP 14	37.764369	-86.484477	663.32	16.00	679.32
OP 15	37.748246	-86.476526	649.09	16.00	665.09
OP 16	37.747487	-86.479671	639.30	16.00	655.30
OP 17	37.760759	-86.489640	645.95	16.00	661.95
OP 18	37.759720	-86.492284	635.08	16.00	651.08
OP 19	37.759092	-86.493668	628.16	16.00	644.16

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	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

301 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

302 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

303 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

304 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

305 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

306 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

307 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

308 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

309 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

310 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

311 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

312 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

313 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

314 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

315 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	0	0

No glare found

316 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0
Route: Stanley Gray Lane	0	0
Route: US Highway 60	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 3 5_83 panels helipads

Created Oct 14, 2024
Updated Oct 14, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 131221.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

Summary of Results No glare predicted!

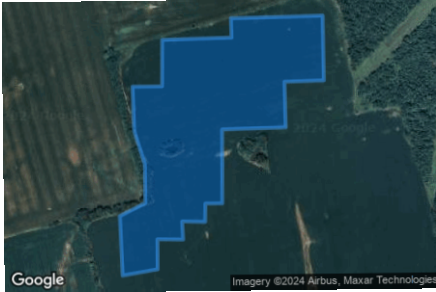
PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
301	SA tracking	SA tracking	0	0	-
302	SA tracking	SA tracking	0	0	-
303	SA tracking	SA tracking	0	0	-
304	SA tracking	SA tracking	0	0	-
305	SA tracking	SA tracking	0	0	-
306	SA tracking	SA tracking	0	0	-
307	SA 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	-

Component Data

PV Array(s)

Total PV footprint area: 184.2 acres

Name: 301
Footprint area: 24.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760803	-86.480022	673.16	5.83	678.99
2	37.761588	-86.480049	673.00	5.83	678.83
3	37.761588	-86.479394	672.33	5.83	678.16
4	37.762407	-86.479378	672.43	5.83	678.26
5	37.762432	-86.477839	675.58	5.83	681.41
6	37.762771	-86.477850	675.26	5.83	681.09
7	37.762801	-86.475811	676.26	5.83	682.09
8	37.761660	-86.475800	677.07	5.83	682.90
9	37.761643	-86.476675	676.02	5.83	681.85
10	37.760842	-86.476659	674.12	5.83	679.95
11	37.760816	-86.478069	673.69	5.83	679.52
12	37.759514	-86.478086	673.53	5.83	679.36
13	37.759514	-86.478461	673.32	5.83	679.15
14	37.759192	-86.478472	672.31	5.83	678.14
15	37.759205	-86.478981	671.57	5.83	677.40
16	37.758887	-86.478965	671.28	5.83	677.11
17	37.758895	-86.479534	670.83	5.83	676.66
18	37.758365	-86.479539	670.01	5.83	675.84
19	37.758263	-86.480317	667.41	5.83	673.24
20	37.759311	-86.480365	669.10	5.83	674.93
21	37.759535	-86.479797	673.11	5.83	678.94
22	37.760214	-86.479797	673.66	5.83	679.49

Name: 302
Footprint area: 23.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.759480	-86.476707	667.16	5.83	672.99
2	37.759484	-86.477050	670.05	5.83	675.88
3	37.758772	-86.477077	671.05	5.83	676.88
4	37.758768	-86.478300	672.06	5.83	677.89
5	37.758386	-86.478300	671.27	5.83	677.10
6	37.758407	-86.478745	672.18	5.83	678.01
7	37.757691	-86.479641	666.17	5.83	672.00
8	37.756808	-86.479625	663.09	5.83	668.92
9	37.756804	-86.479228	663.87	5.83	669.70
10	37.756465	-86.479266	659.53	5.83	665.36
11	37.756244	-86.479276	658.73	5.83	664.56
12	37.756236	-86.479657	658.15	5.83	663.98
13	37.755086	-86.479625	656.97	5.83	662.80
14	37.755086	-86.479416	656.85	5.83	662.68
15	37.754196	-86.479378	655.74	5.83	661.57
16	37.754204	-86.478397	647.86	5.83	653.69
17	37.754505	-86.478402	649.36	5.83	655.19
18	37.754505	-86.478053	646.43	5.83	652.26
19	37.755290	-86.478064	654.51	5.83	660.34
20	37.755290	-86.477715	650.94	5.83	656.77
21	37.755570	-86.477731	654.35	5.83	660.18
22	37.755574	-86.477453	651.85	5.83	657.68
23	37.756766	-86.477458	660.89	5.83	666.72
24	37.756808	-86.476728	655.26	5.83	661.09

Name: 303
Footprint area: 7.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.756015	-86.476873	655.14	5.83	660.97
2	37.756015	-86.476551	658.12	5.83	663.95
3	37.756584	-86.476541	655.85	5.83	661.68
4	37.756592	-86.476074	661.88	5.83	667.71
5	37.756898	-86.476068	661.52	5.83	667.35
6	37.756902	-86.475816	662.79	5.83	668.62
7	37.757275	-86.475816	662.10	5.83	667.93
8	37.757288	-86.474556	669.83	5.83	675.66
9	37.756461	-86.474545	670.93	5.83	676.76
10	37.756461	-86.475124	667.93	5.83	673.76
11	37.756075	-86.475114	668.20	5.83	674.03
12	37.756075	-86.475505	667.32	5.83	673.15
13	37.754964	-86.475537	665.44	5.83	671.27
14	37.754993	-86.476932	660.15	5.83	665.98

Name: 304
Footprint area: 10.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760562	-86.475881	674.66	5.83	680.49
2	37.760570	-86.474470	676.91	5.83	682.74
3	37.760218	-86.474465	675.20	5.83	681.03
4	37.760227	-86.474019	676.12	5.83	681.95
5	37.759502	-86.474003	674.86	5.83	680.69
6	37.759502	-86.474186	673.63	5.83	679.46
7	37.758454	-86.474175	672.25	5.83	678.08
8	37.758454	-86.474432	671.70	5.83	677.53
9	37.757572	-86.474422	669.45	5.83	675.28
10	37.757572	-86.474754	667.62	5.83	673.45
11	37.757309	-86.474749	668.66	5.83	674.49
12	37.757313	-86.475114	666.31	5.83	672.14
13	37.757576	-86.475108	665.61	5.83	671.44
14	37.757576	-86.475371	664.57	5.83	670.40
15	37.758416	-86.475371	665.66	5.83	671.49
16	37.758416	-86.475698	665.53	5.83	671.36
17	37.759476	-86.475666	670.13	5.83	675.96
18	37.759481	-86.475929	669.74	5.83	675.57
19	37.760011	-86.475902	672.03	5.83	677.86

Name: 305
Footprint area: 12.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757810	-86.473617	672.40	5.83	678.23
2	37.757826	-86.472469	671.91	5.83	677.74
3	37.756351	-86.472367	668.76	5.83	674.59
4	37.756351	-86.472244	667.85	5.83	673.68
5	37.755434	-86.472008	664.53	5.83	670.36
6	37.754832	-86.472040	662.93	5.83	668.76
7	37.754845	-86.473440	666.92	5.83	672.75
8	37.754569	-86.473451	666.45	5.83	672.28
9	37.754582	-86.474143	667.29	5.83	673.12

Name: 306
Footprint area: 4.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.762280	-86.467625	638.43	5.83	644.26
2	37.762280	-86.467330	633.58	5.83	639.41
3	37.761847	-86.467324	648.13	5.83	653.96
4	37.761860	-86.466981	638.90	5.83	644.73
5	37.760397	-86.466922	656.86	5.83	662.69
6	37.760384	-86.468542	666.44	5.83	672.27
7	37.761249	-86.468537	659.43	5.83	665.26
8	37.761262	-86.467882	658.70	5.83	664.53
9	37.761779	-86.467888	646.69	5.83	652.52
10	37.761779	-86.467625	650.31	5.83	656.14

Name: 307
Footprint area: 7.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.760354	-86.470452	672.97	5.83	678.80
2	37.759587	-86.470463	673.95	5.83	679.78
3	37.759574	-86.469604	672.36	5.83	678.19
4	37.759192	-86.469637	670.79	5.83	676.62
5	37.759201	-86.468183	663.46	5.83	669.29
6	37.759587	-86.468188	665.66	5.83	671.49
7	37.759587	-86.467110	657.17	5.83	663.00
8	37.760388	-86.467121	657.32	5.83	663.15

Name: 308
Footprint area: 10.8 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.761720	-86.466311	640.69	5.83	646.52
2	37.761741	-86.465613	640.75	5.83	646.58
3	37.761347	-86.465597	645.66	5.83	651.49
4	37.761347	-86.465163	641.32	5.83	647.15
5	37.760193	-86.465093	657.69	5.83	663.52
6	37.760189	-86.465458	659.11	5.83	664.94
7	37.759315	-86.465404	660.67	5.83	666.50
8	37.759336	-86.464841	657.09	5.83	662.92
9	37.757835	-86.464841	659.47	5.83	665.30
10	37.757831	-86.465543	669.09	5.83	674.92
11	37.757572	-86.465522	665.28	5.83	671.11
12	37.757589	-86.466488	669.71	5.83	675.54
13	37.759022	-86.466498	659.72	5.83	665.55
14	37.759022	-86.466080	661.50	5.83	667.33
15	37.759396	-86.466091	656.93	5.83	662.76
16	37.759400	-86.465908	659.92	5.83	665.75
17	37.760172	-86.465935	656.57	5.83	662.40
18	37.760159	-86.466117	652.94	5.83	658.77
19	37.760965	-86.466112	647.05	5.83	652.88
20	37.760965	-86.466321	646.64	5.83	652.47

Name: 309
Footprint area: 26.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757564	-86.465715	667.28	5.83	673.11
2	37.757576	-86.466992	671.21	5.83	677.04
3	37.758713	-86.466997	661.22	5.83	667.05
4	37.758700	-86.467839	664.09	5.83	669.92
5	37.758314	-86.467845	665.48	5.83	671.31
6	37.758306	-86.469202	668.66	5.83	674.49
7	37.758679	-86.469202	667.72	5.83	673.55
8	37.758662	-86.471664	674.50	5.83	680.33
9	37.756491	-86.471632	669.07	5.83	674.90
10	37.756507	-86.465780	671.87	5.83	677.70
11	37.756885	-86.465651	667.61	5.83	673.44

Name: 310
Footprint area: 6.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754779	-86.467620	662.36	5.83	668.19
2	37.755053	-86.467622	663.16	5.83	668.99
3	37.755294	-86.467636	665.08	5.83	670.91
4	37.755294	-86.467738	664.03	5.83	669.86
5	37.756461	-86.467748	670.69	5.83	676.52
6	37.756465	-86.465898	672.71	5.83	678.54
7	37.755273	-86.465833	671.92	5.83	677.75
8	37.755273	-86.466278	669.34	5.83	675.17
9	37.754777	-86.466260	670.52	5.83	676.35
10	37.754779	-86.466801	666.20	5.83	672.03

Name: 311
Footprint area: 9.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754830	-86.468446	662.39	5.83	668.22
2	37.754866	-86.470530	662.04	5.83	667.87
3	37.755513	-86.470508	663.96	5.83	669.79
4	37.755528	-86.471321	663.92	5.83	669.75
5	37.756071	-86.471318	667.26	5.83	673.09
6	37.756465	-86.471310	670.21	5.83	676.04
7	37.756465	-86.468467	667.44	5.83	673.27

Name: 312
Footprint area: 5.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.756792	-86.462499	651.00	5.83	656.83
2	37.756787	-86.462231	648.71	5.83	654.54
3	37.756088	-86.462226	653.07	5.83	658.90
4	37.756092	-86.462429	656.68	5.83	662.51
5	37.755481	-86.462456	654.15	5.83	659.98
6	37.755490	-86.463046	665.34	5.83	671.17
7	37.755116	-86.463062	662.45	5.83	668.28
8	37.755129	-86.463840	671.69	5.83	677.52
9	37.755282	-86.464269	676.87	5.83	682.70
10	37.755926	-86.464248	674.71	5.83	680.54
11	37.755926	-86.464012	674.98	5.83	680.81
12	37.756338	-86.464017	670.26	5.83	676.09
13	37.756334	-86.463824	669.28	5.83	675.11
14	37.756609	-86.463824	665.05	5.83	670.88
15	37.756601	-86.462515	654.03	5.83	659.86

Name: 313
Footprint area: 5.9 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.755685	-86.460187	658.59	5.83	664.42
2	37.756440	-86.460209	650.89	5.83	656.72
3	37.756452	-86.461555	647.99	5.83	653.82
4	37.755676	-86.461577	654.66	5.83	660.49
5	37.755689	-86.461834	652.48	5.83	658.31
6	37.755328	-86.461850	655.96	5.83	661.79
7	37.755337	-86.462075	653.68	5.83	659.51
8	37.754620	-86.462086	658.86	5.83	664.69
9	37.754607	-86.460842	672.96	5.83	678.79
10	37.755273	-86.460842	662.46	5.83	668.29
11	37.755265	-86.460429	662.71	5.83	668.54
12	37.755676	-86.460429	658.61	5.83	664.44

Name: 314
Footprint area: 2.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



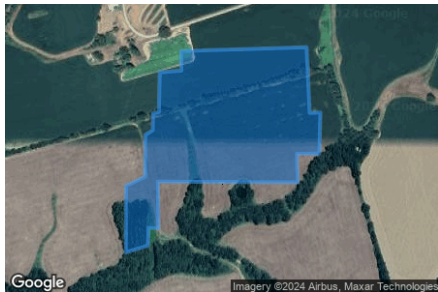
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.757737	-86.460847	665.07	5.83	670.90
2	37.757708	-86.459382	667.13	5.83	672.96
3	37.756957	-86.459388	660.64	5.83	666.47
4	37.756987	-86.460858	651.37	5.83	657.20

Name: 315
Footprint area: 5.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.754223	-86.470813	660.76	5.83	666.59
2	37.754218	-86.469038	663.36	5.83	669.19
3	37.753277	-86.469049	656.45	5.83	662.28
4	37.753281	-86.469698	660.14	5.83	665.97
5	37.753065	-86.469698	658.95	5.83	664.78
6	37.753069	-86.470282	657.42	5.83	663.25
7	37.752594	-86.470288	654.19	5.83	660.02
8	37.752594	-86.470658	654.45	5.83	660.28
9	37.753162	-86.470835	656.19	5.83	662.02

Name: 316
Footprint area: 20.8 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.752306	-86.474992	661.96	5.83	667.79
2	37.753001	-86.474971	662.61	5.83	668.44
3	37.753031	-86.474493	663.18	5.83	669.01
4	37.753374	-86.474499	664.00	5.83	669.83
5	37.753442	-86.471720	657.68	5.83	663.51
6	37.752289	-86.471650	659.56	5.83	665.39
7	37.752297	-86.471414	658.10	5.83	663.93
8	37.751576	-86.471436	653.58	5.83	659.41
9	37.751572	-86.471935	653.49	5.83	659.32
10	37.751071	-86.471919	650.06	5.83	655.89
11	37.751071	-86.472659	651.42	5.83	657.25
12	37.751084	-86.475014	655.17	5.83	661.00
13	37.750265	-86.474998	648.35	5.83	654.18
14	37.750274	-86.475218	649.37	5.83	655.20
15	37.749960	-86.475234	644.20	5.83	650.03
16	37.749841	-86.475722	642.88	5.83	648.71
17	37.751008	-86.475722	651.81	5.83	657.64
18	37.751169	-86.475298	654.73	5.83	660.56
19	37.751903	-86.475293	659.30	5.83	665.13
20	37.751987	-86.475126	659.77	5.83	665.60
21	37.752284	-86.475121	661.30	5.83	667.13

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.766040	-86.439708	726.55	500.00	1226.55
OP 2	37.761994	-86.452528	691.79	500.00	1191.79

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	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

301 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

302 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

303 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

304 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

305 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

306 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

307 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

308 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

309 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

310 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

311 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

312 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

313 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

314 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

315 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

316 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 4 4_25 panels 5ft vehicles

Created Oct 03, 2024
Updated Oct 11, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 130495.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

Summary of Results No glare 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	-

Component Data

PV Array(s)

Total PV footprint area: 79.6 acres

Name: 401
Footprint area: 5.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.749353	-86.472304	647.11	4.25	651.36
2	37.750130	-86.472293	647.78	4.25	652.03
3	37.750130	-86.471811	651.84	4.25	656.09
4	37.750397	-86.471805	650.82	4.25	655.07
5	37.750409	-86.471102	656.43	4.25	660.68
6	37.750681	-86.471113	655.32	4.25	659.57
7	37.750698	-86.470534	657.97	4.25	662.22
8	37.750278	-86.470453	660.44	4.25	664.69
9	37.749192	-86.470416	655.78	4.25	660.03
10	37.749179	-86.471837	649.41	4.25	653.66
11	37.749345	-86.471832	649.33	4.25	653.58

Name: 402
Footprint area: 11.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750541	-86.478677	650.73	4.25	654.98
2	37.750549	-86.477019	650.10	4.25	654.35
3	37.750885	-86.477014	652.40	4.25	656.65
4	37.750889	-86.476799	652.10	4.25	656.35
5	37.751512	-86.476767	657.74	4.25	661.99
6	37.751525	-86.476397	657.83	4.25	662.08
7	37.751919	-86.476386	658.97	4.25	663.22
8	37.751928	-86.476258	660.08	4.25	664.33
9	37.752730	-86.476236	659.87	4.25	664.12
10	37.752751	-86.476907	656.30	4.25	660.55
11	37.752887	-86.476896	655.67	4.25	659.92
12	37.752891	-86.478575	647.35	4.25	651.60
13	37.751432	-86.478564	655.37	4.25	659.62
14	37.751398	-86.478656	655.35	4.25	659.60

Name: 403
Footprint area: 7.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750554	-86.477465	649.50	4.25	653.75
2	37.749688	-86.477486	643.09	4.25	647.34
3	37.749659	-86.479289	644.74	4.25	648.99
4	37.749336	-86.479283	642.14	4.25	646.39
5	37.749332	-86.480437	645.46	4.25	649.71
6	37.750507	-86.480415	650.17	4.25	654.42



Name: 404
Footprint area: 16.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750583	-86.482647	646.37	4.25	650.62
2	37.750613	-86.479203	650.70	4.25	654.95
3	37.751538	-86.479187	656.57	4.25	660.82
4	37.751533	-86.479337	656.20	4.25	660.45
5	37.752382	-86.479439	653.10	4.25	657.35
6	37.752365	-86.482904	642.11	4.25	646.36
7	37.752272	-86.482904	643.68	4.25	647.93
8	37.752263	-86.483103	641.91	4.25	646.16
9	37.752199	-86.483108	642.54	4.25	646.79
10	37.752199	-86.483199	641.24	4.25	645.49
11	37.751979	-86.483215	646.04	4.25	650.29
12	37.751983	-86.483403	645.26	4.25	649.51
13	37.751279	-86.483392	644.75	4.25	649.00
14	37.751283	-86.483135	645.04	4.25	649.29
15	37.751054	-86.483129	640.91	4.25	645.16
16	37.751067	-86.482679	644.04	4.25	648.29



Name: 405
Footprint area: 7.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744115	-86.476386	635.46	4.25	639.71
2	37.744115	-86.475528	642.66	4.25	646.91
3	37.744310	-86.475544	642.69	4.25	646.94
4	37.744310	-86.475265	644.27	4.25	648.52
5	37.744458	-86.475292	645.47	4.25	649.72
6	37.744475	-86.475099	645.62	4.25	649.87
7	37.745205	-86.475056	647.96	4.25	652.21
8	37.745201	-86.475308	644.96	4.25	649.21
9	37.745404	-86.475308	646.82	4.25	651.07
10	37.745417	-86.475550	647.83	4.25	652.08
11	37.745659	-86.475544	650.65	4.25	654.90
12	37.745688	-86.475925	649.33	4.25	653.58
13	37.746015	-86.475936	651.59	4.25	655.84
14	37.746024	-86.476408	648.88	4.25	653.13
15	37.745879	-86.476413	648.96	4.25	653.21
16	37.745888	-86.476714	648.53	4.25	652.78
17	37.745718	-86.476719	647.35	4.25	651.60
18	37.745727	-86.477030	647.38	4.25	651.63
19	37.745604	-86.477041	646.91	4.25	651.16
20	37.745608	-86.477255	646.16	4.25	650.41
21	37.744823	-86.477272	644.44	4.25	648.69
22	37.744823	-86.476923	642.49	4.25	646.74
23	37.744615	-86.476917	641.38	4.25	645.63
24	37.744594	-86.476660	639.33	4.25	643.58
25	37.744386	-86.476639	638.20	4.25	642.45
26	37.744399	-86.476376	636.55	4.25	640.80

Name: 406
Footprint area: 10.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744789	-86.477974	641.26	4.25	645.51
2	37.744802	-86.478752	638.88	4.25	643.13
3	37.744488	-86.478768	640.57	4.25	644.82
4	37.744488	-86.479101	639.16	4.25	643.41
5	37.744110	-86.479128	639.52	4.25	643.77
6	37.744102	-86.479305	638.24	4.25	642.49
7	37.743771	-86.479326	636.60	4.25	640.85
8	37.743402	-86.479326	633.96	4.25	638.21
9	37.742834	-86.479315	630.67	4.25	634.92
10	37.742842	-86.479702	625.51	4.25	629.76
11	37.742541	-86.479696	629.97	4.25	634.22
12	37.742541	-86.479857	626.66	4.25	630.91
13	37.741803	-86.479889	626.29	4.25	630.54
14	37.741790	-86.479031	627.32	4.25	631.57
15	37.742549	-86.479042	633.42	4.25	637.67
16	37.742541	-86.478092	631.24	4.25	635.49
17	37.742897	-86.478098	635.46	4.25	639.71
18	37.742885	-86.477899	635.56	4.25	639.81
19	37.743126	-86.477910	636.18	4.25	640.43
20	37.743143	-86.477309	630.84	4.25	635.09
21	37.743457	-86.477309	635.30	4.25	639.55
22	37.743461	-86.477124	633.54	4.25	637.79
23	37.744221	-86.477127	639.55	4.25	643.80
24	37.744238	-86.477288	639.50	4.25	643.75
25	37.744365	-86.477293	641.31	4.25	645.56
26	37.744369	-86.477958	640.25	4.25	644.50

Name: 407
Footprint area: 2.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.746120	-86.483578	634.61	4.25	638.86
2	37.746158	-86.483216	633.38	4.25	637.63
3	37.745837	-86.483208	629.28	4.25	633.53
4	37.745865	-86.482470	633.49	4.25	637.74
5	37.745135	-86.482417	631.41	4.25	635.66
6	37.745082	-86.483371	626.02	4.25	630.27
7	37.745394	-86.483404	624.48	4.25	628.73
8	37.745386	-86.483548	624.80	4.25	629.05

Name: 408
Footprint area: 5.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.746189	-86.483302	633.56	4.25	637.81
2	37.747267	-86.483320	639.24	4.25	643.49
3	37.747152	-86.485716	634.77	4.25	639.02
4	37.746349	-86.485772	637.58	4.25	641.83
5	37.746433	-86.483787	635.91	4.25	640.16
6	37.746149	-86.483774	634.49	4.25	638.74

Name: 409
Footprint area: 7.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.747138	-86.485721	634.78	4.25	639.03
2	37.747356	-86.485694	634.41	4.25	638.66
3	37.747328	-86.486628	632.62	4.25	636.87
4	37.747057	-86.486644	633.18	4.25	637.43
5	37.747051	-86.487207	629.08	4.25	633.33
6	37.746552	-86.487202	625.75	4.25	630.00
7	37.746457	-86.488489	619.30	4.25	623.55
8	37.745772	-86.488548	631.27	4.25	635.52
9	37.745770	-86.488454	630.31	4.25	634.56
10	37.745343	-86.488451	636.22	4.25	640.47
11	37.745358	-86.487706	634.41	4.25	638.66
12	37.745782	-86.487679	630.66	4.25	634.91
13	37.745876	-86.486088	636.56	4.25	640.81
14	37.746249	-86.486088	636.65	4.25	640.90
15	37.746257	-86.485788	638.66	4.25	642.91

Name: 410
Footprint area: 7.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744495	-86.481652	624.49	4.25	628.74
2	37.744523	-86.481097	627.63	4.25	631.88
3	37.744187	-86.481110	630.65	4.25	634.90
4	37.744228	-86.480611	632.56	4.25	636.81
5	37.743958	-86.480603	634.16	4.25	638.41
6	37.743986	-86.480362	634.76	4.25	639.01
7	37.743246	-86.480386	630.08	4.25	634.33
8	37.743246	-86.480550	629.89	4.25	634.14
9	37.743101	-86.480566	626.74	4.25	630.99
10	37.742925	-86.482958	620.45	4.25	624.70
11	37.743634	-86.482956	624.71	4.25	628.96
12	37.743640	-86.482822	626.26	4.25	630.51
13	37.744050	-86.482814	618.88	4.25	623.13
14	37.744162	-86.481647	632.49	4.25	636.74

2-Mile Flight Path Receptor(s)

Name: Breckinridge County Airport Runway 10
Description:
Threshold height : 50 ft
Direction: 98.7 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	37.785423	-86.448080	710.62	50.00	760.62
2-mile point	37.789817	-86.484281	648.03	666.02	1314.04

Name: Breckinridge County Airport Runway 28
Description:
Threshold height : 50 ft
Direction: 275.1 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	37.784151	-86.434486	722.18	50.00	772.18
2-mile point	37.781596	-86.398004	742.72	582.88	1325.61

Name: Rough River State Park Airport Runway 2
Description:
Threshold height : 50 ft
Direction: 18.9 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	37.606011	-86.508874	563.89	50.00	613.89
2-mile point	37.578654	-86.520697	493.37	673.95	1167.32

Name: Rough River State Park Airport Runway 20

Description:

Threshold height : 50 ft

Direction: 198.4 deg

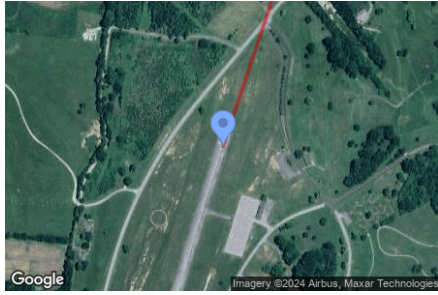
Glide slope: 3.0 deg

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	37.613983	-86.505752	577.15	50.00	627.15
2-mile point	37.641413	-86.494199	566.11	614.47	1180.58



Route Receptor(s)

Name: Bens Hole Branch Road
Route type: Two-way
View angle: 50.0 deg



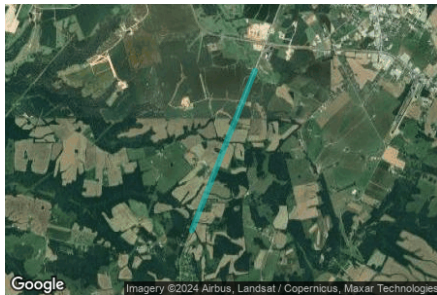
Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	37.746788	-86.488812	618.92	5.00	623.92
2	37.746754	-86.488490	616.93	5.00	621.93
3	37.747229	-86.487364	625.40	5.00	630.40
4	37.747543	-86.487149	616.47	5.00	621.47
5	37.747764	-86.486441	626.42	5.00	631.42
6	37.747577	-86.484596	632.16	5.00	637.16
7	37.747900	-86.482847	631.68	5.00	636.68
8	37.747738	-86.481441	628.05	5.00	633.05
9	37.747535	-86.480733	631.00	5.00	636.00
10	37.747908	-86.479725	628.78	5.00	633.78
11	37.747772	-86.479177	630.41	5.00	635.41
12	37.748349	-86.477922	636.91	5.00	641.91
13	37.748706	-86.476785	637.74	5.00	642.74
14	37.748400	-86.476238	640.41	5.00	645.41
15	37.747577	-86.475197	652.46	5.00	657.46
16	37.747577	-86.474875	655.86	5.00	660.86
17	37.748544	-86.472408	653.70	5.00	658.70
18	37.748706	-86.470916	653.12	5.00	658.12
19	37.748858	-86.469736	655.87	5.00	660.87
20	37.748943	-86.468556	659.77	5.00	664.77
21	37.748977	-86.468245	662.54	5.00	667.54

Name: Frank Farm Lane
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	37.754236	-86.465509	673.52	5.00	678.52
2	37.754283	-86.466609	670.31	5.00	675.31
3	37.754381	-86.468266	662.18	5.00	667.18
4	37.754465	-86.469827	665.31	5.00	670.31
5	37.754546	-86.471174	661.56	5.00	666.56
6	37.754550	-86.471764	661.07	5.00	666.07
7	37.754266	-86.472751	661.62	5.00	666.62
8	37.753918	-86.474087	666.19	5.00	671.19
9	37.753749	-86.474730	666.98	5.00	671.98

Name: Highway 261
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	37.758477	-86.463385	642.00	5.00	647.00
2	37.754728	-86.465252	676.28	5.00	681.28
3	37.751386	-86.466947	673.33	5.00	678.33
4	37.749299	-86.468020	664.18	5.00	669.18
5	37.745600	-86.469823	663.67	5.00	668.67
6	37.743530	-86.470874	648.98	5.00	653.98
7	37.740374	-86.472440	640.41	5.00	645.41
8	37.737659	-86.473814	631.52	5.00	636.52
9	37.736251	-86.474543	637.99	5.00	642.99

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.733273	-86.481552	629.45	16.00	645.45
OP 2	37.734368	-86.476322	711.92	16.00	727.92
OP 3	37.747450	-86.479718	640.06	16.00	656.06
OP 4	37.748214	-86.476542	649.49	16.00	665.49
OP 5	37.749308	-86.468452	665.86	16.00	681.86
OP 6	37.751107	-86.467508	675.90	16.00	691.90
OP 7	37.750615	-86.466543	676.52	16.00	692.52
OP 8	37.753342	-86.466307	676.10	16.00	692.10
OP 9	37.753885	-86.464906	680.94	16.00	696.94
OP 10	37.747454	-86.470103	671.56	16.00	687.56
OP 11	37.744945	-86.471557	669.48	16.00	685.48
OP 12	37.740279	-86.471458	661.93	16.00	677.93
OP 13	37.739689	-86.471613	653.82	16.00	669.82
OP 14	37.739074	-86.472027	643.47	16.00	659.47
OP 15	37.738510	-86.473985	635.00	16.00	651.00
OP 16	37.741216	-86.467113	736.51	16.00	752.51

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	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

401 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

402 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

403 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

404 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

405 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

406 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

407 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

408 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

409 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

410 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 4 4_25 panels 9ft vehicles

Created Oct 04, 2024
Updated Oct 11, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 130577.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

Summary of Results No glare 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	-

Component Data

PV Array(s)

Total PV footprint area: 79.6 acres

Name: 401
Footprint area: 5.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.749353	-86.472304	647.11	4.25	651.36
2	37.750130	-86.472293	647.78	4.25	652.03
3	37.750130	-86.471811	651.84	4.25	656.09
4	37.750397	-86.471805	650.82	4.25	655.07
5	37.750409	-86.471102	656.43	4.25	660.68
6	37.750681	-86.471113	655.32	4.25	659.57
7	37.750698	-86.470534	657.97	4.25	662.22
8	37.750278	-86.470453	660.44	4.25	664.69
9	37.749192	-86.470416	655.78	4.25	660.03
10	37.749179	-86.471837	649.41	4.25	653.66
11	37.749345	-86.471832	649.33	4.25	653.58

Name: 402
Footprint area: 11.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750541	-86.478677	650.73	4.25	654.98
2	37.750549	-86.477019	650.10	4.25	654.35
3	37.750885	-86.477014	652.40	4.25	656.65
4	37.750889	-86.476799	652.10	4.25	656.35
5	37.751512	-86.476767	657.74	4.25	661.99
6	37.751525	-86.476397	657.83	4.25	662.08
7	37.751919	-86.476386	658.97	4.25	663.22
8	37.751928	-86.476258	660.08	4.25	664.33
9	37.752730	-86.476236	659.87	4.25	664.12
10	37.752751	-86.476907	656.30	4.25	660.55
11	37.752887	-86.476896	655.67	4.25	659.92
12	37.752891	-86.478575	647.35	4.25	651.60
13	37.751432	-86.478564	655.37	4.25	659.62
14	37.751398	-86.478656	655.35	4.25	659.60

Name: 403
Footprint area: 7.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750554	-86.477465	649.50	4.25	653.75
2	37.749688	-86.477486	643.09	4.25	647.34
3	37.749659	-86.479289	644.74	4.25	648.99
4	37.749336	-86.479283	642.14	4.25	646.39
5	37.749332	-86.480437	645.46	4.25	649.71
6	37.750507	-86.480415	650.17	4.25	654.42



Name: 404
Footprint area: 16.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750583	-86.482647	646.37	4.25	650.62
2	37.750613	-86.479203	650.70	4.25	654.95
3	37.751538	-86.479187	656.57	4.25	660.82
4	37.751533	-86.479337	656.20	4.25	660.45
5	37.752382	-86.479439	653.10	4.25	657.35
6	37.752365	-86.482904	642.11	4.25	646.36
7	37.752272	-86.482904	643.68	4.25	647.93
8	37.752263	-86.483103	641.91	4.25	646.16
9	37.752199	-86.483108	642.54	4.25	646.79
10	37.752199	-86.483199	641.24	4.25	645.49
11	37.751979	-86.483215	646.04	4.25	650.29
12	37.751983	-86.483403	645.26	4.25	649.51
13	37.751279	-86.483392	644.75	4.25	649.00
14	37.751283	-86.483135	645.04	4.25	649.29
15	37.751054	-86.483129	640.91	4.25	645.16
16	37.751067	-86.482679	644.04	4.25	648.29



Name: 405
Footprint area: 7.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744115	-86.476386	635.46	4.25	639.71
2	37.744115	-86.475528	642.66	4.25	646.91
3	37.744310	-86.475544	642.69	4.25	646.94
4	37.744310	-86.475265	644.27	4.25	648.52
5	37.744458	-86.475292	645.47	4.25	649.72
6	37.744475	-86.475099	645.62	4.25	649.87
7	37.745205	-86.475056	647.96	4.25	652.21
8	37.745201	-86.475308	644.96	4.25	649.21
9	37.745404	-86.475308	646.82	4.25	651.07
10	37.745417	-86.475550	647.83	4.25	652.08
11	37.745659	-86.475544	650.65	4.25	654.90
12	37.745688	-86.475925	649.33	4.25	653.58
13	37.746015	-86.475936	651.59	4.25	655.84
14	37.746024	-86.476408	648.88	4.25	653.13
15	37.745879	-86.476413	648.96	4.25	653.21
16	37.745888	-86.476714	648.53	4.25	652.78
17	37.745718	-86.476719	647.35	4.25	651.60
18	37.745727	-86.477030	647.38	4.25	651.63
19	37.745604	-86.477041	646.91	4.25	651.16
20	37.745608	-86.477255	646.16	4.25	650.41
21	37.744823	-86.477272	644.44	4.25	648.69
22	37.744823	-86.476923	642.49	4.25	646.74
23	37.744615	-86.476917	641.38	4.25	645.63
24	37.744594	-86.476660	639.33	4.25	643.58
25	37.744386	-86.476639	638.20	4.25	642.45
26	37.744399	-86.476376	636.55	4.25	640.80

Name: 406
Footprint area: 10.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744789	-86.477974	641.26	4.25	645.51
2	37.744802	-86.478752	638.88	4.25	643.13
3	37.744488	-86.478768	640.57	4.25	644.82
4	37.744488	-86.479101	639.16	4.25	643.41
5	37.744110	-86.479128	639.52	4.25	643.77
6	37.744102	-86.479305	638.24	4.25	642.49
7	37.743771	-86.479326	636.60	4.25	640.85
8	37.743402	-86.479326	633.96	4.25	638.21
9	37.742834	-86.479315	630.67	4.25	634.92
10	37.742842	-86.479702	625.51	4.25	629.76
11	37.742541	-86.479696	629.97	4.25	634.22
12	37.742541	-86.479857	626.66	4.25	630.91
13	37.741803	-86.479889	626.29	4.25	630.54
14	37.741790	-86.479031	627.32	4.25	631.57
15	37.742549	-86.479042	633.42	4.25	637.67
16	37.742541	-86.478092	631.24	4.25	635.49
17	37.742897	-86.478098	635.46	4.25	639.71
18	37.742885	-86.477899	635.56	4.25	639.81
19	37.743126	-86.477910	636.18	4.25	640.43
20	37.743143	-86.477309	630.84	4.25	635.09
21	37.743457	-86.477309	635.30	4.25	639.55
22	37.743461	-86.477124	633.54	4.25	637.79
23	37.744221	-86.477127	639.55	4.25	643.80
24	37.744238	-86.477288	639.50	4.25	643.75
25	37.744365	-86.477293	641.31	4.25	645.56
26	37.744369	-86.477958	640.25	4.25	644.50

Name: 407
Footprint area: 2.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.746120	-86.483578	634.61	4.25	638.86
2	37.746158	-86.483216	633.38	4.25	637.63
3	37.745837	-86.483208	629.28	4.25	633.53
4	37.745865	-86.482470	633.49	4.25	637.74
5	37.745135	-86.482417	631.41	4.25	635.66
6	37.745082	-86.483371	626.02	4.25	630.27
7	37.745394	-86.483404	624.48	4.25	628.73
8	37.745386	-86.483548	624.80	4.25	629.05

Name: 408
Footprint area: 5.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.746189	-86.483302	633.56	4.25	637.81
2	37.747267	-86.483320	639.24	4.25	643.49
3	37.747152	-86.485716	634.77	4.25	639.02
4	37.746349	-86.485772	637.58	4.25	641.83
5	37.746433	-86.483787	635.91	4.25	640.16
6	37.746149	-86.483774	634.49	4.25	638.74

Name: 409
Footprint area: 7.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.747138	-86.485721	634.78	4.25	639.03
2	37.747356	-86.485694	634.41	4.25	638.66
3	37.747328	-86.486628	632.62	4.25	636.87
4	37.747057	-86.486644	633.18	4.25	637.43
5	37.747051	-86.487207	629.08	4.25	633.33
6	37.746552	-86.487202	625.75	4.25	630.00
7	37.746457	-86.488489	619.30	4.25	623.55
8	37.745772	-86.488548	631.27	4.25	635.52
9	37.745770	-86.488454	630.31	4.25	634.56
10	37.745343	-86.488451	636.22	4.25	640.47
11	37.745358	-86.487706	634.41	4.25	638.66
12	37.745782	-86.487679	630.66	4.25	634.91
13	37.745876	-86.486088	636.56	4.25	640.81
14	37.746249	-86.486088	636.65	4.25	640.90
15	37.746257	-86.485788	638.66	4.25	642.91

Name: 410
Footprint area: 7.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744495	-86.481652	624.49	4.25	628.74
2	37.744523	-86.481097	627.63	4.25	631.88
3	37.744187	-86.481110	630.65	4.25	634.90
4	37.744228	-86.480611	632.56	4.25	636.81
5	37.743958	-86.480603	634.16	4.25	638.41
6	37.743986	-86.480362	634.76	4.25	639.01
7	37.743246	-86.480386	630.08	4.25	634.33
8	37.743246	-86.480550	629.89	4.25	634.14
9	37.743101	-86.480566	626.74	4.25	630.99
10	37.742925	-86.482958	620.45	4.25	624.70
11	37.743634	-86.482956	624.71	4.25	628.96
12	37.743640	-86.482822	626.26	4.25	630.51
13	37.744050	-86.482814	618.88	4.25	623.13
14	37.744162	-86.481647	632.49	4.25	636.74

2-Mile Flight Path Receptor(s)

Name: Breckinridge County Airport Runway 10
Description:
Threshold height : 50 ft
Direction: 98.7 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	37.785423	-86.448080	710.62	50.00	760.62
2-mile point	37.789817	-86.484281	648.03	666.02	1314.04

Name: Breckinridge County Airport Runway 28
Description:
Threshold height : 50 ft
Direction: 275.1 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	37.784151	-86.434486	722.18	50.00	772.18
2-mile point	37.781596	-86.398004	742.72	582.88	1325.61

Name: Rough River State Park Airport Runway 2
Description:
Threshold height : 50 ft
Direction: 18.9 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	37.606011	-86.508874	563.89	50.00	613.89
2-mile point	37.578654	-86.520697	493.37	673.95	1167.32

Name: Rough River State Park Airport Runway 20

Description:

Threshold height : 50 ft

Direction: 198.4 deg

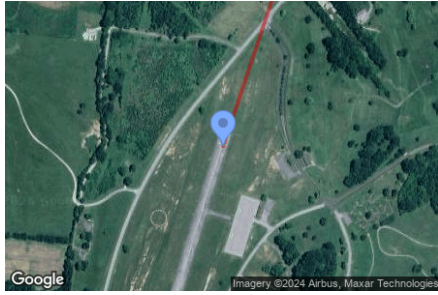
Glide slope: 3.0 deg

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	37.613983	-86.505752	577.15	50.00	627.15
2-mile point	37.641413	-86.494199	566.11	614.47	1180.58



Route Receptor(s)

Name: Bens Hole Branch 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	37.746788	-86.488812	618.92	9.00	627.92
2	37.746754	-86.488490	616.93	9.00	625.93
3	37.747229	-86.487364	625.40	9.00	634.40
4	37.747543	-86.487149	616.47	9.00	625.47
5	37.747764	-86.486441	626.42	9.00	635.42
6	37.747577	-86.484596	632.16	9.00	641.16
7	37.747900	-86.482847	631.68	9.00	640.68
8	37.747738	-86.481441	628.05	9.00	637.05
9	37.747535	-86.480733	631.00	9.00	640.00
10	37.747908	-86.479725	628.78	9.00	637.78
11	37.747772	-86.479177	630.41	9.00	639.41
12	37.748349	-86.477922	636.91	9.00	645.91
13	37.748706	-86.476785	637.74	9.00	646.74
14	37.748400	-86.476238	640.41	9.00	649.41
15	37.747577	-86.475197	652.46	9.00	661.46
16	37.747577	-86.474875	655.86	9.00	664.86
17	37.748544	-86.472408	653.70	9.00	662.70
18	37.748706	-86.470916	653.12	9.00	662.12
19	37.748858	-86.469736	655.87	9.00	664.87
20	37.748943	-86.468556	659.77	9.00	668.77
21	37.748977	-86.468245	662.54	9.00	671.54

Name: Frank Farm Lane
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	37.754236	-86.465509	673.52	9.00	682.52
2	37.754283	-86.466609	670.31	9.00	679.31
3	37.754381	-86.468266	662.18	9.00	671.18
4	37.754465	-86.469827	665.31	9.00	674.31
5	37.754546	-86.471174	661.56	9.00	670.56
6	37.754550	-86.471764	661.07	9.00	670.07
7	37.754266	-86.472751	661.62	9.00	670.62
8	37.753918	-86.474087	666.19	9.00	675.19
9	37.753749	-86.474730	666.98	9.00	675.98

Name: Highway 261
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	37.758477	-86.463385	642.00	9.00	651.00
2	37.754728	-86.465252	676.28	9.00	685.28
3	37.751386	-86.466947	673.33	9.00	682.33
4	37.749299	-86.468020	664.18	9.00	673.18
5	37.745600	-86.469823	663.67	9.00	672.67
6	37.743530	-86.470874	648.98	9.00	657.98
7	37.740374	-86.472440	640.41	9.00	649.41
8	37.737659	-86.473814	631.52	9.00	640.52
9	37.736251	-86.474543	637.99	9.00	646.99

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.733273	-86.481552	629.45	16.00	645.45
OP 2	37.734368	-86.476322	711.92	16.00	727.92
OP 3	37.747450	-86.479718	640.06	16.00	656.06
OP 4	37.748214	-86.476542	649.49	16.00	665.49
OP 5	37.749308	-86.468452	665.86	16.00	681.86
OP 6	37.751107	-86.467508	675.90	16.00	691.90
OP 7	37.750615	-86.466543	676.52	16.00	692.52
OP 8	37.753342	-86.466307	676.10	16.00	692.10
OP 9	37.753885	-86.464906	680.94	16.00	696.94
OP 10	37.747454	-86.470103	671.56	16.00	687.56
OP 11	37.744945	-86.471557	669.48	16.00	685.48
OP 12	37.740279	-86.471458	661.93	16.00	677.93
OP 13	37.739689	-86.471613	653.82	16.00	669.82
OP 14	37.739074	-86.472027	643.47	16.00	659.47
OP 15	37.738510	-86.473985	635.00	16.00	651.00
OP 16	37.741216	-86.467113	736.51	16.00	752.51

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	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

401 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

402 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

403 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

404 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

405 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

406 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

407 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

408 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

409 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

410 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

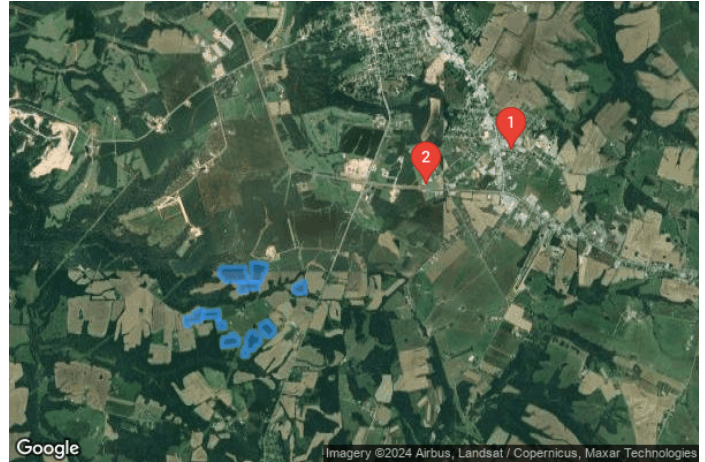


Clover Creek Solar 2024

Block 4 4_25 panels helipads

Created Oct 14, 2024
Updated Oct 14, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 131223.22255

Project type Advanced
Project status: active
Category >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

PV Analysis Methodology: Version 2
Enhanced subtended angle calculation: On

Summary of Results No glare 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	-

Component Data

PV Array(s)

Total PV footprint area: 79.6 acres

Name: 401
Footprint area: 5.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.749353	-86.472304	647.11	4.25	651.36
2	37.750130	-86.472293	647.78	4.25	652.03
3	37.750130	-86.471811	651.84	4.25	656.09
4	37.750397	-86.471805	650.82	4.25	655.07
5	37.750409	-86.471102	656.43	4.25	660.68
6	37.750681	-86.471113	655.32	4.25	659.57
7	37.750698	-86.470534	657.97	4.25	662.22
8	37.750278	-86.470453	660.44	4.25	664.69
9	37.749192	-86.470416	655.78	4.25	660.03
10	37.749179	-86.471837	649.41	4.25	653.66
11	37.749345	-86.471832	649.33	4.25	653.58

Name: 402
Footprint area: 11.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750541	-86.478677	650.73	4.25	654.98
2	37.750549	-86.477019	650.10	4.25	654.35
3	37.750885	-86.477014	652.40	4.25	656.65
4	37.750889	-86.476799	652.10	4.25	656.35
5	37.751512	-86.476767	657.74	4.25	661.99
6	37.751525	-86.476397	657.83	4.25	662.08
7	37.751919	-86.476386	658.97	4.25	663.22
8	37.751928	-86.476258	660.08	4.25	664.33
9	37.752730	-86.476236	659.87	4.25	664.12
10	37.752751	-86.476907	656.30	4.25	660.55
11	37.752887	-86.476896	655.67	4.25	659.92
12	37.752891	-86.478575	647.35	4.25	651.60
13	37.751432	-86.478564	655.37	4.25	659.62
14	37.751398	-86.478656	655.35	4.25	659.60

Name: 403
Footprint area: 7.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750554	-86.477465	649.50	4.25	653.75
2	37.749688	-86.477486	643.09	4.25	647.34
3	37.749659	-86.479289	644.74	4.25	648.99
4	37.749336	-86.479283	642.14	4.25	646.39
5	37.749332	-86.480437	645.46	4.25	649.71
6	37.750507	-86.480415	650.17	4.25	654.42



Name: 404
Footprint area: 16.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750583	-86.482647	646.37	4.25	650.62
2	37.750613	-86.479203	650.70	4.25	654.95
3	37.751538	-86.479187	656.57	4.25	660.82
4	37.751533	-86.479337	656.20	4.25	660.45
5	37.752382	-86.479439	653.10	4.25	657.35
6	37.752365	-86.482904	642.11	4.25	646.36
7	37.752272	-86.482904	643.68	4.25	647.93
8	37.752263	-86.483103	641.91	4.25	646.16
9	37.752199	-86.483108	642.54	4.25	646.79
10	37.752199	-86.483199	641.24	4.25	645.49
11	37.751979	-86.483215	646.04	4.25	650.29
12	37.751983	-86.483403	645.26	4.25	649.51
13	37.751279	-86.483392	644.75	4.25	649.00
14	37.751283	-86.483135	645.04	4.25	649.29
15	37.751054	-86.483129	640.91	4.25	645.16
16	37.751067	-86.482679	644.04	4.25	648.29



Name: 405
Footprint area: 7.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744115	-86.476386	635.46	4.25	639.71
2	37.744115	-86.475528	642.66	4.25	646.91
3	37.744310	-86.475544	642.69	4.25	646.94
4	37.744310	-86.475265	644.27	4.25	648.52
5	37.744458	-86.475292	645.47	4.25	649.72
6	37.744475	-86.475099	645.62	4.25	649.87
7	37.745205	-86.475056	647.96	4.25	652.21
8	37.745201	-86.475308	644.96	4.25	649.21
9	37.745404	-86.475308	646.82	4.25	651.07
10	37.745417	-86.475550	647.83	4.25	652.08
11	37.745659	-86.475544	650.65	4.25	654.90
12	37.745688	-86.475925	649.33	4.25	653.58
13	37.746015	-86.475936	651.59	4.25	655.84
14	37.746024	-86.476408	648.88	4.25	653.13
15	37.745879	-86.476413	648.96	4.25	653.21
16	37.745888	-86.476714	648.53	4.25	652.78
17	37.745718	-86.476719	647.35	4.25	651.60
18	37.745727	-86.477030	647.38	4.25	651.63
19	37.745604	-86.477041	646.91	4.25	651.16
20	37.745608	-86.477255	646.16	4.25	650.41
21	37.744823	-86.477272	644.44	4.25	648.69
22	37.744823	-86.476923	642.49	4.25	646.74
23	37.744615	-86.476917	641.38	4.25	645.63
24	37.744594	-86.476660	639.33	4.25	643.58
25	37.744386	-86.476639	638.20	4.25	642.45
26	37.744399	-86.476376	636.55	4.25	640.80

Name: 406
Footprint area: 10.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744789	-86.477974	641.26	4.25	645.51
2	37.744802	-86.478752	638.88	4.25	643.13
3	37.744488	-86.478768	640.57	4.25	644.82
4	37.744488	-86.479101	639.16	4.25	643.41
5	37.744110	-86.479128	639.52	4.25	643.77
6	37.744102	-86.479305	638.24	4.25	642.49
7	37.743771	-86.479326	636.60	4.25	640.85
8	37.743402	-86.479326	633.96	4.25	638.21
9	37.742834	-86.479315	630.67	4.25	634.92
10	37.742842	-86.479702	625.51	4.25	629.76
11	37.742541	-86.479696	629.97	4.25	634.22
12	37.742541	-86.479857	626.66	4.25	630.91
13	37.741803	-86.479889	626.29	4.25	630.54
14	37.741790	-86.479031	627.32	4.25	631.57
15	37.742549	-86.479042	633.42	4.25	637.67
16	37.742541	-86.478092	631.24	4.25	635.49
17	37.742897	-86.478098	635.46	4.25	639.71
18	37.742885	-86.477899	635.56	4.25	639.81
19	37.743126	-86.477910	636.18	4.25	640.43
20	37.743143	-86.477309	630.84	4.25	635.09
21	37.743457	-86.477309	635.30	4.25	639.55
22	37.743461	-86.477124	633.54	4.25	637.79
23	37.744221	-86.477127	639.55	4.25	643.80
24	37.744238	-86.477288	639.50	4.25	643.75
25	37.744365	-86.477293	641.31	4.25	645.56
26	37.744369	-86.477958	640.25	4.25	644.50

Name: 407
Footprint area: 2.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.746120	-86.483578	634.61	4.25	638.86
2	37.746158	-86.483216	633.38	4.25	637.63
3	37.745837	-86.483208	629.28	4.25	633.53
4	37.745865	-86.482470	633.49	4.25	637.74
5	37.745135	-86.482417	631.41	4.25	635.66
6	37.745082	-86.483371	626.02	4.25	630.27
7	37.745394	-86.483404	624.48	4.25	628.73
8	37.745386	-86.483548	624.80	4.25	629.05

Name: 408
Footprint area: 5.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.746189	-86.483302	633.56	4.25	637.81
2	37.747267	-86.483320	639.24	4.25	643.49
3	37.747152	-86.485716	634.77	4.25	639.02
4	37.746349	-86.485772	637.58	4.25	641.83
5	37.746433	-86.483787	635.91	4.25	640.16
6	37.746149	-86.483774	634.49	4.25	638.74

Name: 409
Footprint area: 7.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.747138	-86.485721	634.78	4.25	639.03
2	37.747356	-86.485694	634.41	4.25	638.66
3	37.747328	-86.486628	632.62	4.25	636.87
4	37.747057	-86.486644	633.18	4.25	637.43
5	37.747051	-86.487207	629.08	4.25	633.33
6	37.746552	-86.487202	625.75	4.25	630.00
7	37.746457	-86.488489	619.30	4.25	623.55
8	37.745772	-86.488548	631.27	4.25	635.52
9	37.745770	-86.488454	630.31	4.25	634.56
10	37.745343	-86.488451	636.22	4.25	640.47
11	37.745358	-86.487706	634.41	4.25	638.66
12	37.745782	-86.487679	630.66	4.25	634.91
13	37.745876	-86.486088	636.56	4.25	640.81
14	37.746249	-86.486088	636.65	4.25	640.90
15	37.746257	-86.485788	638.66	4.25	642.91

Name: 410
Footprint area: 7.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744495	-86.481652	624.49	4.25	628.74
2	37.744523	-86.481097	627.63	4.25	631.88
3	37.744187	-86.481110	630.65	4.25	634.90
4	37.744228	-86.480611	632.56	4.25	636.81
5	37.743958	-86.480603	634.16	4.25	638.41
6	37.743986	-86.480362	634.76	4.25	639.01
7	37.743246	-86.480386	630.08	4.25	634.33
8	37.743246	-86.480550	629.89	4.25	634.14
9	37.743101	-86.480566	626.74	4.25	630.99
10	37.742925	-86.482958	620.45	4.25	624.70
11	37.743634	-86.482956	624.71	4.25	628.96
12	37.743640	-86.482822	626.26	4.25	630.51
13	37.744050	-86.482814	618.88	4.25	623.13
14	37.744162	-86.481647	632.49	4.25	636.74

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.766057	-86.439714	726.54	500.00	1226.54
OP 2	37.762003	-86.452514	691.78	500.00	1191.78

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	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

401 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

402 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

403 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

404 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

405 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

406 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

407 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

408 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

409 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

410 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 4 5_83 panels 5ft vehicles

Created Oct 04, 2024
Updated Oct 11, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 130579.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

Summary of Results No glare 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	-

Component Data

PV Array(s)

Total PV footprint area: 79.6 acres

Name: 401
Footprint area: 5.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.749353	-86.472304	647.11	5.83	652.94
2	37.750130	-86.472293	647.78	5.83	653.61
3	37.750130	-86.471811	651.84	5.83	657.67
4	37.750397	-86.471805	650.82	5.83	656.65
5	37.750409	-86.471102	656.43	5.83	662.26
6	37.750681	-86.471113	655.32	5.83	661.15
7	37.750698	-86.470534	657.97	5.83	663.80
8	37.750278	-86.470453	660.44	5.83	666.27
9	37.749192	-86.470416	655.78	5.83	661.61
10	37.749179	-86.471837	649.41	5.83	655.24
11	37.749345	-86.471832	649.33	5.83	655.16

Name: 402
Footprint area: 11.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750541	-86.478677	650.73	5.83	656.56
2	37.750549	-86.477019	650.10	5.83	655.93
3	37.750885	-86.477014	652.40	5.83	658.23
4	37.750889	-86.476799	652.10	5.83	657.93
5	37.751512	-86.476767	657.74	5.83	663.57
6	37.751525	-86.476397	657.83	5.83	663.66
7	37.751919	-86.476386	658.97	5.83	664.80
8	37.751928	-86.476258	660.08	5.83	665.91
9	37.752730	-86.476236	659.87	5.83	665.70
10	37.752751	-86.476907	656.30	5.83	662.13
11	37.752887	-86.476896	655.67	5.83	661.50
12	37.752891	-86.478575	647.35	5.83	653.18
13	37.751432	-86.478564	655.37	5.83	661.20
14	37.751398	-86.478656	655.35	5.83	661.18

Name: 403
Footprint area: 7.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750554	-86.477465	649.50	5.83	655.33
2	37.749688	-86.477486	643.09	5.83	648.92
3	37.749659	-86.479289	644.74	5.83	650.57
4	37.749336	-86.479283	642.14	5.83	647.97
5	37.749332	-86.480437	645.46	5.83	651.29
6	37.750507	-86.480415	650.17	5.83	656.00



Name: 404
Footprint area: 16.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750583	-86.482647	646.37	5.83	652.20
2	37.750613	-86.479203	650.70	5.83	656.53
3	37.751538	-86.479187	656.57	5.83	662.40
4	37.751533	-86.479337	656.20	5.83	662.03
5	37.752382	-86.479439	653.10	5.83	658.93
6	37.752365	-86.482904	642.11	5.83	647.94
7	37.752272	-86.482904	643.68	5.83	649.51
8	37.752263	-86.483103	641.91	5.83	647.74
9	37.752199	-86.483108	642.54	5.83	648.37
10	37.752199	-86.483199	641.24	5.83	647.07
11	37.751979	-86.483215	646.04	5.83	651.87
12	37.751983	-86.483403	645.26	5.83	651.09
13	37.751279	-86.483392	644.75	5.83	650.58
14	37.751283	-86.483135	645.04	5.83	650.87
15	37.751054	-86.483129	640.91	5.83	646.74
16	37.751067	-86.482679	644.04	5.83	649.87



Name: 405
Footprint area: 7.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744115	-86.476386	635.46	5.83	641.29
2	37.744115	-86.475528	642.66	5.83	648.49
3	37.744310	-86.475544	642.69	5.83	648.52
4	37.744310	-86.475265	644.27	5.83	650.10
5	37.744458	-86.475292	645.47	5.83	651.30
6	37.744475	-86.475099	645.62	5.83	651.45
7	37.745205	-86.475056	647.96	5.83	653.79
8	37.745201	-86.475308	644.96	5.83	650.79
9	37.745404	-86.475308	646.82	5.83	652.65
10	37.745417	-86.475550	647.83	5.83	653.66
11	37.745659	-86.475544	650.65	5.83	656.48
12	37.745688	-86.475925	649.33	5.83	655.16
13	37.746015	-86.475936	651.59	5.83	657.42
14	37.746024	-86.476408	648.88	5.83	654.71
15	37.745879	-86.476413	648.96	5.83	654.79
16	37.745888	-86.476714	648.53	5.83	654.36
17	37.745718	-86.476719	647.35	5.83	653.18
18	37.745727	-86.477030	647.38	5.83	653.21
19	37.745604	-86.477041	646.91	5.83	652.74
20	37.745608	-86.477255	646.16	5.83	651.99
21	37.744823	-86.477272	644.44	5.83	650.27
22	37.744823	-86.476923	642.49	5.83	648.32
23	37.744615	-86.476917	641.38	5.83	647.21
24	37.744594	-86.476660	639.33	5.83	645.16
25	37.744386	-86.476639	638.20	5.83	644.03
26	37.744399	-86.476376	636.55	5.83	642.38

Name: 406
Footprint area: 10.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744789	-86.477974	641.26	5.83	647.09
2	37.744802	-86.478752	638.88	5.83	644.71
3	37.744488	-86.478768	640.57	5.83	646.40
4	37.744488	-86.479101	639.16	5.83	644.99
5	37.744110	-86.479128	639.52	5.83	645.35
6	37.744102	-86.479305	638.24	5.83	644.07
7	37.743771	-86.479326	636.60	5.83	642.43
8	37.743402	-86.479326	633.96	5.83	639.79
9	37.742834	-86.479315	630.67	5.83	636.50
10	37.742842	-86.479702	625.51	5.83	631.34
11	37.742541	-86.479696	629.97	5.83	635.80
12	37.742541	-86.479857	626.66	5.83	632.49
13	37.741803	-86.479889	626.29	5.83	632.12
14	37.741790	-86.479031	627.32	5.83	633.15
15	37.742549	-86.479042	633.42	5.83	639.25
16	37.742541	-86.478092	631.24	5.83	637.07
17	37.742897	-86.478098	635.46	5.83	641.29
18	37.742885	-86.477899	635.56	5.83	641.39
19	37.743126	-86.477910	636.18	5.83	642.01
20	37.743143	-86.477309	630.84	5.83	636.67
21	37.743457	-86.477309	635.30	5.83	641.13
22	37.743461	-86.477124	633.54	5.83	639.37
23	37.744221	-86.477127	639.55	5.83	645.38
24	37.744238	-86.477288	639.50	5.83	645.33
25	37.744365	-86.477293	641.31	5.83	647.14
26	37.744369	-86.477958	640.25	5.83	646.08

Name: 407
Footprint area: 2.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.746120	-86.483578	634.61	5.83	640.44
2	37.746158	-86.483216	633.38	5.83	639.21
3	37.745837	-86.483208	629.28	5.83	635.11
4	37.745865	-86.482470	633.49	5.83	639.32
5	37.745135	-86.482417	631.41	5.83	637.24
6	37.745082	-86.483371	626.02	5.83	631.85
7	37.745394	-86.483404	624.48	5.83	630.31
8	37.745386	-86.483548	624.80	5.83	630.63

Name: 408
Footprint area: 5.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.746189	-86.483302	633.56	5.83	639.39
2	37.747267	-86.483320	639.24	5.83	645.07
3	37.747152	-86.485716	634.77	5.83	640.60
4	37.746349	-86.485772	637.58	5.83	643.41
5	37.746433	-86.483787	635.91	5.83	641.74
6	37.746149	-86.483774	634.49	5.83	640.32

Name: 409
Footprint area: 7.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.747138	-86.485721	634.78	5.83	640.61
2	37.747356	-86.485694	634.41	5.83	640.24
3	37.747328	-86.486628	632.62	5.83	638.45
4	37.747057	-86.486644	633.18	5.83	639.01
5	37.747051	-86.487207	629.08	5.83	634.91
6	37.746552	-86.487202	625.75	5.83	631.58
7	37.746457	-86.488489	619.30	5.83	625.13
8	37.745772	-86.488548	631.27	5.83	637.10
9	37.745770	-86.488454	630.31	5.83	636.14
10	37.745343	-86.488451	636.22	5.83	642.05
11	37.745358	-86.487706	634.41	5.83	640.24
12	37.745782	-86.487679	630.66	5.83	636.49
13	37.745876	-86.486088	636.56	5.83	642.39
14	37.746249	-86.486088	636.65	5.83	642.48
15	37.746257	-86.485788	638.66	5.83	644.49

Name: 410
Footprint area: 7.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744495	-86.481652	624.49	5.83	630.32
2	37.744523	-86.481097	627.63	5.83	633.46
3	37.744187	-86.481110	630.65	5.83	636.48
4	37.744228	-86.480611	632.56	5.83	638.39
5	37.743958	-86.480603	634.16	5.83	639.99
6	37.743986	-86.480362	634.76	5.83	640.59
7	37.743246	-86.480386	630.08	5.83	635.91
8	37.743246	-86.480550	629.89	5.83	635.72
9	37.743101	-86.480566	626.74	5.83	632.57
10	37.742925	-86.482958	620.45	5.83	626.28
11	37.743634	-86.482956	624.71	5.83	630.54
12	37.743640	-86.482822	626.26	5.83	632.09
13	37.744050	-86.482814	618.88	5.83	624.71
14	37.744162	-86.481647	632.49	5.83	638.32

2-Mile Flight Path Receptor(s)

Name: Breckinridge County Airport Runway 10
Description:
Threshold height : 50 ft
Direction: 98.7 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	37.785423	-86.448080	710.62	50.00	760.62
2-mile point	37.789817	-86.484281	648.03	666.02	1314.04

Name: Breckinridge County Airport Runway 28
Description:
Threshold height : 50 ft
Direction: 275.1 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	37.784151	-86.434486	722.18	50.00	772.18
2-mile point	37.781596	-86.398004	742.72	582.88	1325.61

Name: Rough River State Park Airport Runway 2
Description:
Threshold height : 50 ft
Direction: 18.9 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	37.606011	-86.508874	563.89	50.00	613.89
2-mile point	37.578654	-86.520697	493.37	673.95	1167.32

Name: Rough River State Park Airport Runway 20

Description:

Threshold height : 50 ft

Direction: 198.4 deg

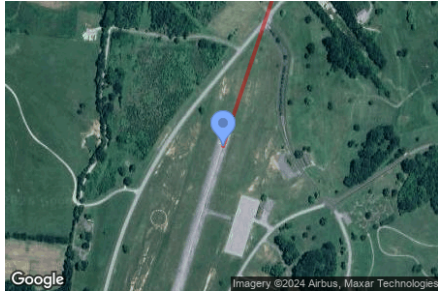
Glide slope: 3.0 deg

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	37.613983	-86.505752	577.15	50.00	627.15
2-mile point	37.641413	-86.494199	566.11	614.47	1180.58



Route Receptor(s)

Name: Bens Hole Branch 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	37.746788	-86.488812	618.92	5.00	623.92
2	37.746754	-86.488490	616.93	5.00	621.93
3	37.747229	-86.487364	625.40	5.00	630.40
4	37.747543	-86.487149	616.47	5.00	621.47
5	37.747764	-86.486441	626.42	5.00	631.42
6	37.747577	-86.484596	632.16	5.00	637.16
7	37.747900	-86.482847	631.68	5.00	636.68
8	37.747738	-86.481441	628.05	5.00	633.05
9	37.747535	-86.480733	631.00	5.00	636.00
10	37.747908	-86.479725	628.78	5.00	633.78
11	37.747772	-86.479177	630.41	5.00	635.41
12	37.748349	-86.477922	636.91	5.00	641.91
13	37.748706	-86.476785	637.74	5.00	642.74
14	37.748400	-86.476238	640.41	5.00	645.41
15	37.747577	-86.475197	652.46	5.00	657.46
16	37.747577	-86.474875	655.86	5.00	660.86
17	37.748544	-86.472408	653.70	5.00	658.70
18	37.748706	-86.470916	653.12	5.00	658.12
19	37.748858	-86.469736	655.87	5.00	660.87
20	37.748943	-86.468556	659.77	5.00	664.77
21	37.748977	-86.468245	662.54	5.00	667.54

Name: Frank Farm Lane
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	37.754236	-86.465509	673.52	5.00	678.52
2	37.754283	-86.466609	670.31	5.00	675.31
3	37.754381	-86.468266	662.18	5.00	667.18
4	37.754465	-86.469827	665.31	5.00	670.31
5	37.754546	-86.471174	661.56	5.00	666.56
6	37.754550	-86.471764	661.07	5.00	666.07
7	37.754266	-86.472751	661.62	5.00	666.62
8	37.753918	-86.474087	666.19	5.00	671.19
9	37.753749	-86.474730	666.98	5.00	671.98

Name: Highway 261
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	37.758477	-86.463385	642.00	5.00	647.00
2	37.754728	-86.465252	676.28	5.00	681.28
3	37.751386	-86.466947	673.33	5.00	678.33
4	37.749299	-86.468020	664.18	5.00	669.18
5	37.745600	-86.469823	663.67	5.00	668.67
6	37.743530	-86.470874	648.98	5.00	653.98
7	37.740374	-86.472440	640.41	5.00	645.41
8	37.737659	-86.473814	631.52	5.00	636.52
9	37.736251	-86.474543	637.99	5.00	642.99

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.733273	-86.481552	629.45	16.00	645.45
OP 2	37.734368	-86.476322	711.92	16.00	727.92
OP 3	37.747450	-86.479718	640.06	16.00	656.06
OP 4	37.748214	-86.476542	649.49	16.00	665.49
OP 5	37.749308	-86.468452	665.86	16.00	681.86
OP 6	37.751107	-86.467508	675.90	16.00	691.90
OP 7	37.750615	-86.466543	676.52	16.00	692.52
OP 8	37.753342	-86.466307	676.10	16.00	692.10
OP 9	37.753885	-86.464906	680.94	16.00	696.94
OP 10	37.747454	-86.470103	671.56	16.00	687.56
OP 11	37.744945	-86.471557	669.48	16.00	685.48
OP 12	37.740279	-86.471458	661.93	16.00	677.93
OP 13	37.739689	-86.471613	653.82	16.00	669.82
OP 14	37.739074	-86.472027	643.47	16.00	659.47
OP 15	37.738510	-86.473985	635.00	16.00	651.00
OP 16	37.741216	-86.467113	736.51	16.00	752.51

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	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

401 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

402 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

403 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

404 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

405 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

406 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

407 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

408 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

409 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

410 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.



Clover Creek Solar 2024

Block 4 5_83 panels 9ft vehicles

Created Oct 04, 2024
Updated Oct 11, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 130578.22255

Project type Advanced
Project status: active
Category >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**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

Summary of Results No glare 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	-

Component Data

PV Array(s)

Total PV footprint area: 79.6 acres

Name: 401
Footprint area: 5.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.749353	-86.472304	647.11	5.83	652.94
2	37.750130	-86.472293	647.78	5.83	653.61
3	37.750130	-86.471811	651.84	5.83	657.67
4	37.750397	-86.471805	650.82	5.83	656.65
5	37.750409	-86.471102	656.43	5.83	662.26
6	37.750681	-86.471113	655.32	5.83	661.15
7	37.750698	-86.470534	657.97	5.83	663.80
8	37.750278	-86.470453	660.44	5.83	666.27
9	37.749192	-86.470416	655.78	5.83	661.61
10	37.749179	-86.471837	649.41	5.83	655.24
11	37.749345	-86.471832	649.33	5.83	655.16

Name: 402
Footprint area: 11.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750541	-86.478677	650.73	5.83	656.56
2	37.750549	-86.477019	650.10	5.83	655.93
3	37.750885	-86.477014	652.40	5.83	658.23
4	37.750889	-86.476799	652.10	5.83	657.93
5	37.751512	-86.476767	657.74	5.83	663.57
6	37.751525	-86.476397	657.83	5.83	663.66
7	37.751919	-86.476386	658.97	5.83	664.80
8	37.751928	-86.476258	660.08	5.83	665.91
9	37.752730	-86.476236	659.87	5.83	665.70
10	37.752751	-86.476907	656.30	5.83	662.13
11	37.752887	-86.476896	655.67	5.83	661.50
12	37.752891	-86.478575	647.35	5.83	653.18
13	37.751432	-86.478564	655.37	5.83	661.20
14	37.751398	-86.478656	655.35	5.83	661.18

Name: 403
Footprint area: 7.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750554	-86.477465	649.50	5.83	655.33
2	37.749688	-86.477486	643.09	5.83	648.92
3	37.749659	-86.479289	644.74	5.83	650.57
4	37.749336	-86.479283	642.14	5.83	647.97
5	37.749332	-86.480437	645.46	5.83	651.29
6	37.750507	-86.480415	650.17	5.83	656.00



Name: 404
Footprint area: 16.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750583	-86.482647	646.37	5.83	652.20
2	37.750613	-86.479203	650.70	5.83	656.53
3	37.751538	-86.479187	656.57	5.83	662.40
4	37.751533	-86.479337	656.20	5.83	662.03
5	37.752382	-86.479439	653.10	5.83	658.93
6	37.752365	-86.482904	642.11	5.83	647.94
7	37.752272	-86.482904	643.68	5.83	649.51
8	37.752263	-86.483103	641.91	5.83	647.74
9	37.752199	-86.483108	642.54	5.83	648.37
10	37.752199	-86.483199	641.24	5.83	647.07
11	37.751979	-86.483215	646.04	5.83	651.87
12	37.751983	-86.483403	645.26	5.83	651.09
13	37.751279	-86.483392	644.75	5.83	650.58
14	37.751283	-86.483135	645.04	5.83	650.87
15	37.751054	-86.483129	640.91	5.83	646.74
16	37.751067	-86.482679	644.04	5.83	649.87



Name: 405
Footprint area: 7.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744115	-86.476386	635.46	5.83	641.29
2	37.744115	-86.475528	642.66	5.83	648.49
3	37.744310	-86.475544	642.69	5.83	648.52
4	37.744310	-86.475265	644.27	5.83	650.10
5	37.744458	-86.475292	645.47	5.83	651.30
6	37.744475	-86.475099	645.62	5.83	651.45
7	37.745205	-86.475056	647.96	5.83	653.79
8	37.745201	-86.475308	644.96	5.83	650.79
9	37.745404	-86.475308	646.82	5.83	652.65
10	37.745417	-86.475550	647.83	5.83	653.66
11	37.745659	-86.475544	650.65	5.83	656.48
12	37.745688	-86.475925	649.33	5.83	655.16
13	37.746015	-86.475936	651.59	5.83	657.42
14	37.746024	-86.476408	648.88	5.83	654.71
15	37.745879	-86.476413	648.96	5.83	654.79
16	37.745888	-86.476714	648.53	5.83	654.36
17	37.745718	-86.476719	647.35	5.83	653.18
18	37.745727	-86.477030	647.38	5.83	653.21
19	37.745604	-86.477041	646.91	5.83	652.74
20	37.745608	-86.477255	646.16	5.83	651.99
21	37.744823	-86.477272	644.44	5.83	650.27
22	37.744823	-86.476923	642.49	5.83	648.32
23	37.744615	-86.476917	641.38	5.83	647.21
24	37.744594	-86.476660	639.33	5.83	645.16
25	37.744386	-86.476639	638.20	5.83	644.03
26	37.744399	-86.476376	636.55	5.83	642.38

Name: 406
Footprint area: 10.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744789	-86.477974	641.26	5.83	647.09
2	37.744802	-86.478752	638.88	5.83	644.71
3	37.744488	-86.478768	640.57	5.83	646.40
4	37.744488	-86.479101	639.16	5.83	644.99
5	37.744110	-86.479128	639.52	5.83	645.35
6	37.744102	-86.479305	638.24	5.83	644.07
7	37.743771	-86.479326	636.60	5.83	642.43
8	37.743402	-86.479326	633.96	5.83	639.79
9	37.742834	-86.479315	630.67	5.83	636.50
10	37.742842	-86.479702	625.51	5.83	631.34
11	37.742541	-86.479696	629.97	5.83	635.80
12	37.742541	-86.479857	626.66	5.83	632.49
13	37.741803	-86.479889	626.29	5.83	632.12
14	37.741790	-86.479031	627.32	5.83	633.15
15	37.742549	-86.479042	633.42	5.83	639.25
16	37.742541	-86.478092	631.24	5.83	637.07
17	37.742897	-86.478098	635.46	5.83	641.29
18	37.742885	-86.477899	635.56	5.83	641.39
19	37.743126	-86.477910	636.18	5.83	642.01
20	37.743143	-86.477309	630.84	5.83	636.67
21	37.743457	-86.477309	635.30	5.83	641.13
22	37.743461	-86.477124	633.54	5.83	639.37
23	37.744221	-86.477127	639.55	5.83	645.38
24	37.744238	-86.477288	639.50	5.83	645.33
25	37.744365	-86.477293	641.31	5.83	647.14
26	37.744369	-86.477958	640.25	5.83	646.08

Name: 407
Footprint area: 2.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.746120	-86.483578	634.61	5.83	640.44
2	37.746158	-86.483216	633.38	5.83	639.21
3	37.745837	-86.483208	629.28	5.83	635.11
4	37.745865	-86.482470	633.49	5.83	639.32
5	37.745135	-86.482417	631.41	5.83	637.24
6	37.745082	-86.483371	626.02	5.83	631.85
7	37.745394	-86.483404	624.48	5.83	630.31
8	37.745386	-86.483548	624.80	5.83	630.63

Name: 408
Footprint area: 5.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.746189	-86.483302	633.56	5.83	639.39
2	37.747267	-86.483320	639.24	5.83	645.07
3	37.747152	-86.485716	634.77	5.83	640.60
4	37.746349	-86.485772	637.58	5.83	643.41
5	37.746433	-86.483787	635.91	5.83	641.74
6	37.746149	-86.483774	634.49	5.83	640.32

Name: 409
Footprint area: 7.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.747138	-86.485721	634.78	5.83	640.61
2	37.747356	-86.485694	634.41	5.83	640.24
3	37.747328	-86.486628	632.62	5.83	638.45
4	37.747057	-86.486644	633.18	5.83	639.01
5	37.747051	-86.487207	629.08	5.83	634.91
6	37.746552	-86.487202	625.75	5.83	631.58
7	37.746457	-86.488489	619.30	5.83	625.13
8	37.745772	-86.488548	631.27	5.83	637.10
9	37.745770	-86.488454	630.31	5.83	636.14
10	37.745343	-86.488451	636.22	5.83	642.05
11	37.745358	-86.487706	634.41	5.83	640.24
12	37.745782	-86.487679	630.66	5.83	636.49
13	37.745876	-86.486088	636.56	5.83	642.39
14	37.746249	-86.486088	636.65	5.83	642.48
15	37.746257	-86.485788	638.66	5.83	644.49

Name: 410
Footprint area: 7.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744495	-86.481652	624.49	5.83	630.32
2	37.744523	-86.481097	627.63	5.83	633.46
3	37.744187	-86.481110	630.65	5.83	636.48
4	37.744228	-86.480611	632.56	5.83	638.39
5	37.743958	-86.480603	634.16	5.83	639.99
6	37.743986	-86.480362	634.76	5.83	640.59
7	37.743246	-86.480386	630.08	5.83	635.91
8	37.743246	-86.480550	629.89	5.83	635.72
9	37.743101	-86.480566	626.74	5.83	632.57
10	37.742925	-86.482958	620.45	5.83	626.28
11	37.743634	-86.482956	624.71	5.83	630.54
12	37.743640	-86.482822	626.26	5.83	632.09
13	37.744050	-86.482814	618.88	5.83	624.71
14	37.744162	-86.481647	632.49	5.83	638.32

2-Mile Flight Path Receptor(s)

Name: Breckinridge County Airport Runway 10
Description:
Threshold height : 50 ft
Direction: 98.7 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	37.785423	-86.448080	710.62	50.00	760.62
2-mile point	37.789817	-86.484281	648.03	666.02	1314.04

Name: Breckinridge County Airport Runway 28
Description:
Threshold height : 50 ft
Direction: 275.1 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	37.784151	-86.434486	722.18	50.00	772.18
2-mile point	37.781596	-86.398004	742.72	582.88	1325.61

Name: Rough River State Park Airport Runway 2
Description:
Threshold height : 50 ft
Direction: 18.9 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	37.606011	-86.508874	563.89	50.00	613.89
2-mile point	37.578654	-86.520697	493.37	673.95	1167.32

Name: Rough River State Park Airport Runway 20

Description:

Threshold height : 50 ft

Direction: 198.4 deg

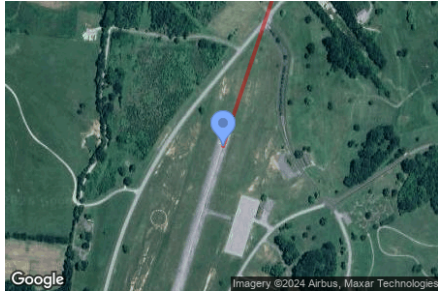
Glide slope: 3.0 deg

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	37.613983	-86.505752	577.15	50.00	627.15
2-mile point	37.641413	-86.494199	566.11	614.47	1180.58



Route Receptor(s)

Name: Bens Hole Branch 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	37.746788	-86.488812	618.92	9.00	627.92
2	37.746754	-86.488490	616.93	9.00	625.93
3	37.747229	-86.487364	625.40	9.00	634.40
4	37.747543	-86.487149	616.47	9.00	625.47
5	37.747764	-86.486441	626.42	9.00	635.42
6	37.747577	-86.484596	632.16	9.00	641.16
7	37.747900	-86.482847	631.68	9.00	640.68
8	37.747738	-86.481441	628.05	9.00	637.05
9	37.747535	-86.480733	631.00	9.00	640.00
10	37.747908	-86.479725	628.78	9.00	637.78
11	37.747772	-86.479177	630.41	9.00	639.41
12	37.748349	-86.477922	636.91	9.00	645.91
13	37.748706	-86.476785	637.74	9.00	646.74
14	37.748400	-86.476238	640.41	9.00	649.41
15	37.747577	-86.475197	652.46	9.00	661.46
16	37.747577	-86.474875	655.86	9.00	664.86
17	37.748544	-86.472408	653.70	9.00	662.70
18	37.748706	-86.470916	653.12	9.00	662.12
19	37.748858	-86.469736	655.87	9.00	664.87
20	37.748943	-86.468556	659.77	9.00	668.77
21	37.748977	-86.468245	662.54	9.00	671.54

Name: Frank Farm Lane
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	37.754236	-86.465509	673.52	9.00	682.52
2	37.754283	-86.466609	670.31	9.00	679.31
3	37.754381	-86.468266	662.18	9.00	671.18
4	37.754465	-86.469827	665.31	9.00	674.31
5	37.754546	-86.471174	661.56	9.00	670.56
6	37.754550	-86.471764	661.07	9.00	670.07
7	37.754266	-86.472751	661.62	9.00	670.62
8	37.753918	-86.474087	666.19	9.00	675.19
9	37.753749	-86.474730	666.98	9.00	675.98

Name: Highway 261
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	37.758477	-86.463385	642.00	9.00	651.00
2	37.754728	-86.465252	676.28	9.00	685.28
3	37.751386	-86.466947	673.33	9.00	682.33
4	37.749299	-86.468020	664.18	9.00	673.18
5	37.745600	-86.469823	663.67	9.00	672.67
6	37.743530	-86.470874	648.98	9.00	657.98
7	37.740374	-86.472440	640.41	9.00	649.41
8	37.737659	-86.473814	631.52	9.00	640.52
9	37.736251	-86.474543	637.99	9.00	646.99

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.733273	-86.481552	629.45	16.00	645.45
OP 2	37.734368	-86.476322	711.92	16.00	727.92
OP 3	37.747450	-86.479718	640.06	16.00	656.06
OP 4	37.748214	-86.476542	649.49	16.00	665.49
OP 5	37.749308	-86.468452	665.86	16.00	681.86
OP 6	37.751107	-86.467508	675.90	16.00	691.90
OP 7	37.750615	-86.466543	676.52	16.00	692.52
OP 8	37.753342	-86.466307	676.10	16.00	692.10
OP 9	37.753885	-86.464906	680.94	16.00	696.94
OP 10	37.747454	-86.470103	671.56	16.00	687.56
OP 11	37.744945	-86.471557	669.48	16.00	685.48
OP 12	37.740279	-86.471458	661.93	16.00	677.93
OP 13	37.739689	-86.471613	653.82	16.00	669.82
OP 14	37.739074	-86.472027	643.47	16.00	659.47
OP 15	37.738510	-86.473985	635.00	16.00	651.00
OP 16	37.741216	-86.467113	736.51	16.00	752.51

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	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

401 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

402 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

403 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

404 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

405 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

406 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

407 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

408 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

409 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	0	0

No glare found

410 no glare found

Component	Green glare (min)	Yellow glare (min)
FP: Breckinridge County Airport Runway 10	0	0
FP: Breckinridge County Airport Runway 28	0	0
FP: Rough River State Park Airport Runway 2	0	0
FP: Rough River State Park Airport Runway 20	0	0
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
Route: Bens Hole Branch Road	0	0
Route: Frank Farm Lane	0	0
Route: Highway 261	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

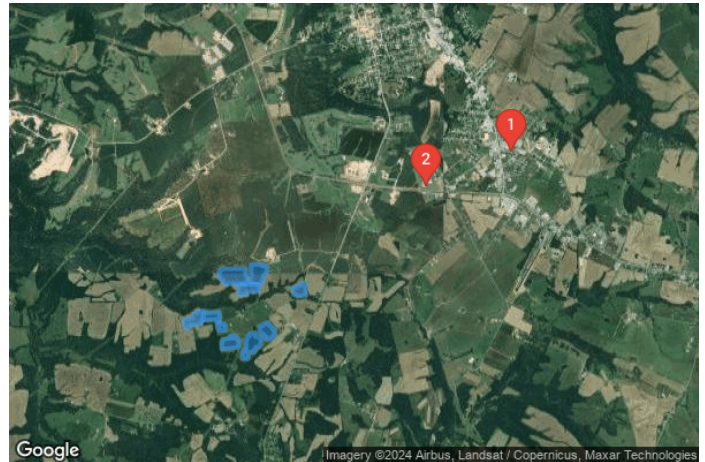


Clover Creek Solar 2024

Block 4 5_83 panels helipads

Created Oct 14, 2024
Updated Oct 14, 2024
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 131224.22255

Project type Advanced
Project status: active
Category >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

PV Analysis Methodology: Version 2
Enhanced subtended angle calculation: On

Summary of Results No glare 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	-

Component Data

PV Array(s)

Total PV footprint area: 79.6 acres

Name: 401
Footprint area: 5.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.749353	-86.472304	647.11	5.83	652.94
2	37.750130	-86.472293	647.78	5.83	653.61
3	37.750130	-86.471811	651.84	5.83	657.67
4	37.750397	-86.471805	650.82	5.83	656.65
5	37.750409	-86.471102	656.43	5.83	662.26
6	37.750681	-86.471113	655.32	5.83	661.15
7	37.750698	-86.470534	657.97	5.83	663.80
8	37.750278	-86.470453	660.44	5.83	666.27
9	37.749192	-86.470416	655.78	5.83	661.61
10	37.749179	-86.471837	649.41	5.83	655.24
11	37.749345	-86.471832	649.33	5.83	655.16

Name: 402
Footprint area: 11.5 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750541	-86.478677	650.73	5.83	656.56
2	37.750549	-86.477019	650.10	5.83	655.93
3	37.750885	-86.477014	652.40	5.83	658.23
4	37.750889	-86.476799	652.10	5.83	657.93
5	37.751512	-86.476767	657.74	5.83	663.57
6	37.751525	-86.476397	657.83	5.83	663.66
7	37.751919	-86.476386	658.97	5.83	664.80
8	37.751928	-86.476258	660.08	5.83	665.91
9	37.752730	-86.476236	659.87	5.83	665.70
10	37.752751	-86.476907	656.30	5.83	662.13
11	37.752887	-86.476896	655.67	5.83	661.50
12	37.752891	-86.478575	647.35	5.83	653.18
13	37.751432	-86.478564	655.37	5.83	661.20
14	37.751398	-86.478656	655.35	5.83	661.18

Name: 403
Footprint area: 7.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750554	-86.477465	649.50	5.83	655.33
2	37.749688	-86.477486	643.09	5.83	648.92
3	37.749659	-86.479289	644.74	5.83	650.57
4	37.749336	-86.479283	642.14	5.83	647.97
5	37.749332	-86.480437	645.46	5.83	651.29
6	37.750507	-86.480415	650.17	5.83	656.00



Name: 404
Footprint area: 16.3 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.750583	-86.482647	646.37	5.83	652.20
2	37.750613	-86.479203	650.70	5.83	656.53
3	37.751538	-86.479187	656.57	5.83	662.40
4	37.751533	-86.479337	656.20	5.83	662.03
5	37.752382	-86.479439	653.10	5.83	658.93
6	37.752365	-86.482904	642.11	5.83	647.94
7	37.752272	-86.482904	643.68	5.83	649.51
8	37.752263	-86.483103	641.91	5.83	647.74
9	37.752199	-86.483108	642.54	5.83	648.37
10	37.752199	-86.483199	641.24	5.83	647.07
11	37.751979	-86.483215	646.04	5.83	651.87
12	37.751983	-86.483403	645.26	5.83	651.09
13	37.751279	-86.483392	644.75	5.83	650.58
14	37.751283	-86.483135	645.04	5.83	650.87
15	37.751054	-86.483129	640.91	5.83	646.74
16	37.751067	-86.482679	644.04	5.83	649.87



Name: 405
Footprint area: 7.0 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744115	-86.476386	635.46	5.83	641.29
2	37.744115	-86.475528	642.66	5.83	648.49
3	37.744310	-86.475544	642.69	5.83	648.52
4	37.744310	-86.475265	644.27	5.83	650.10
5	37.744458	-86.475292	645.47	5.83	651.30
6	37.744475	-86.475099	645.62	5.83	651.45
7	37.745205	-86.475056	647.96	5.83	653.79
8	37.745201	-86.475308	644.96	5.83	650.79
9	37.745404	-86.475308	646.82	5.83	652.65
10	37.745417	-86.475550	647.83	5.83	653.66
11	37.745659	-86.475544	650.65	5.83	656.48
12	37.745688	-86.475925	649.33	5.83	655.16
13	37.746015	-86.475936	651.59	5.83	657.42
14	37.746024	-86.476408	648.88	5.83	654.71
15	37.745879	-86.476413	648.96	5.83	654.79
16	37.745888	-86.476714	648.53	5.83	654.36
17	37.745718	-86.476719	647.35	5.83	653.18
18	37.745727	-86.477030	647.38	5.83	653.21
19	37.745604	-86.477041	646.91	5.83	652.74
20	37.745608	-86.477255	646.16	5.83	651.99
21	37.744823	-86.477272	644.44	5.83	650.27
22	37.744823	-86.476923	642.49	5.83	648.32
23	37.744615	-86.476917	641.38	5.83	647.21
24	37.744594	-86.476660	639.33	5.83	645.16
25	37.744386	-86.476639	638.20	5.83	644.03
26	37.744399	-86.476376	636.55	5.83	642.38

Name: 406
Footprint area: 10.7 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744789	-86.477974	641.26	5.83	647.09
2	37.744802	-86.478752	638.88	5.83	644.71
3	37.744488	-86.478768	640.57	5.83	646.40
4	37.744488	-86.479101	639.16	5.83	644.99
5	37.744110	-86.479128	639.52	5.83	645.35
6	37.744102	-86.479305	638.24	5.83	644.07
7	37.743771	-86.479326	636.60	5.83	642.43
8	37.743402	-86.479326	633.96	5.83	639.79
9	37.742834	-86.479315	630.67	5.83	636.50
10	37.742842	-86.479702	625.51	5.83	631.34
11	37.742541	-86.479696	629.97	5.83	635.80
12	37.742541	-86.479857	626.66	5.83	632.49
13	37.741803	-86.479889	626.29	5.83	632.12
14	37.741790	-86.479031	627.32	5.83	633.15
15	37.742549	-86.479042	633.42	5.83	639.25
16	37.742541	-86.478092	631.24	5.83	637.07
17	37.742897	-86.478098	635.46	5.83	641.29
18	37.742885	-86.477899	635.56	5.83	641.39
19	37.743126	-86.477910	636.18	5.83	642.01
20	37.743143	-86.477309	630.84	5.83	636.67
21	37.743457	-86.477309	635.30	5.83	641.13
22	37.743461	-86.477124	633.54	5.83	639.37
23	37.744221	-86.477127	639.55	5.83	645.38
24	37.744238	-86.477288	639.50	5.83	645.33
25	37.744365	-86.477293	641.31	5.83	647.14
26	37.744369	-86.477958	640.25	5.83	646.08

Name: 407
Footprint area: 2.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.746120	-86.483578	634.61	5.83	640.44
2	37.746158	-86.483216	633.38	5.83	639.21
3	37.745837	-86.483208	629.28	5.83	635.11
4	37.745865	-86.482470	633.49	5.83	639.32
5	37.745135	-86.482417	631.41	5.83	637.24
6	37.745082	-86.483371	626.02	5.83	631.85
7	37.745394	-86.483404	624.48	5.83	630.31
8	37.745386	-86.483548	624.80	5.83	630.63

Name: 408
Footprint area: 5.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.746189	-86.483302	633.56	5.83	639.39
2	37.747267	-86.483320	639.24	5.83	645.07
3	37.747152	-86.485716	634.77	5.83	640.60
4	37.746349	-86.485772	637.58	5.83	643.41
5	37.746433	-86.483787	635.91	5.83	641.74
6	37.746149	-86.483774	634.49	5.83	640.32

Name: 409
Footprint area: 7.6 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.747138	-86.485721	634.78	5.83	640.61
2	37.747356	-86.485694	634.41	5.83	640.24
3	37.747328	-86.486628	632.62	5.83	638.45
4	37.747057	-86.486644	633.18	5.83	639.01
5	37.747051	-86.487207	629.08	5.83	634.91
6	37.746552	-86.487202	625.75	5.83	631.58
7	37.746457	-86.488489	619.30	5.83	625.13
8	37.745772	-86.488548	631.27	5.83	637.10
9	37.745770	-86.488454	630.31	5.83	636.14
10	37.745343	-86.488451	636.22	5.83	642.05
11	37.745358	-86.487706	634.41	5.83	640.24
12	37.745782	-86.487679	630.66	5.83	636.49
13	37.745876	-86.486088	636.56	5.83	642.39
14	37.746249	-86.486088	636.65	5.83	642.48
15	37.746257	-86.485788	638.66	5.83	644.49

Name: 410
Footprint area: 7.1 acres
Axis tracking: Single-axis rotation
Backtracking: Shade-slope
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 10.0 deg
Ground Coverage Ratio: 0.5
Rated power: -
Panel material: Smooth glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 8.43 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	37.744495	-86.481652	624.49	5.83	630.32
2	37.744523	-86.481097	627.63	5.83	633.46
3	37.744187	-86.481110	630.65	5.83	636.48
4	37.744228	-86.480611	632.56	5.83	638.39
5	37.743958	-86.480603	634.16	5.83	639.99
6	37.743986	-86.480362	634.76	5.83	640.59
7	37.743246	-86.480386	630.08	5.83	635.91
8	37.743246	-86.480550	629.89	5.83	635.72
9	37.743101	-86.480566	626.74	5.83	632.57
10	37.742925	-86.482958	620.45	5.83	626.28
11	37.743634	-86.482956	624.71	5.83	630.54
12	37.743640	-86.482822	626.26	5.83	632.09
13	37.744050	-86.482814	618.88	5.83	624.71
14	37.744162	-86.481647	632.49	5.83	638.32

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	37.766041	-86.439724	726.61	500.00	1226.61
OP 2	37.761995	-86.452523	691.78	500.00	1191.78

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	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

401 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

402 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

403 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

404 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

405 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

406 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

407 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

408 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

409 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0

No glare found

410 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	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 automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographical 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.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

SAR
ATTACHMENT G



Project # 235300918

Landscape Plan

Clover Creek Solar Project LLC d/b/a New Frontiers Solar
Park— Breckinridge County, Kentucky

September 2024





LANDSCAPE PLAN

Clover Creek Solar Project LLC d/b/a New
Frontiers Solar Park—Breckinridge County,
Kentucky

September 2024

Prepared for:

Clover Creek Solar Project LLC d/b/a New
Frontiers Solar Park

1501 McKinney Street, Suite 1300
Houston, TX 77010

Prepared by:

Stantec Consulting Services Inc.
8401 Shoal Creek Boulevard
Suite 100
Austin, Texas 78747
Tel: 512.338.2223
www.stantec.com

Project Number:

235300918

Landscape Plan, New Frontiers Solar Park—Breckinridge County, Kentucky

Revision	Description	Author	Date
1	Write Up	Corbin Hoffmann, Environmental Scientist	08/27/2024
2	Independent Review	Chad Martin, Project Manager	09/06/2024
3	Revisions	Kelsey Cleve, Biologist	10/11/2024



The conclusions in the Report titled [Landscape Plan](#) are Stantec’s professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific Project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the Project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient’s own risk.

Stantec has assumed all information received from [Clover Creek Solar Project LLC d/b/a New Frontiers Solar Park](#) (the “Client”) and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This Report is intended solely for use by the Client in accordance with Stantec’s contract with the Client. While the Report may be provided to applicable authorities having jurisdiction and others for whom the Client is responsible, Stantec does not warrant the services to any third party. The Report may not be relied upon by any other party without the express written consent of Stantec, which may be withheld at Stantec’s discretion.

Prepared by: _____

Signature
Corbin Hoffmann, Environmental Scientist

Printed Name

Reviewed by: _____

Signature
Chad Martin, Project Manager

Printed Name

Approved by: _____

Signature
Chad Martin, Project Manager

Printed Name



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Acronyms / Abbreviations

EDP	EDP Renewables North America LLC
MW	megawatt
Project	Clover Creek Solar Project LLC d/b/a New Frontiers Solar Park



1 Introduction

Clover Creek Solar Project LLC d/b/a New Frontiers Solar Park, (Project), proposed by EDP Renewables North America LLC (EDP), is to be located west of the town of Hardinsburg in central Breckinridge County, Kentucky. The Project site can be generally described as being along State Road 261, 259, 992, and State Highway 60. The Project encompasses approximately 1,100 acres in an agricultural area. The petitioner proposes to utilize the land to establish a 100-megawatt (MW), utility-scale, solar-powered electric generating facility.

As part of the development of this site, Stantec has worked with EDP to develop a landscape plan to help mitigate visual impacts of the Project from residences 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 modules are included in this document.

The Project will be visible from various roadways and properties, both participating and non-participating landowners. It is important that visual mitigation be considered differently for areas depending on the adjacent uses, intensity of viewership, viewsheds and overall contextual relationship to the Project. Specific treatment modules as outlined in this plan are designed to be replicable and are able to be prescribed in various scenarios 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 landscape materials which are native to the region to the extent possible. Native plants also provide long-term maintenance benefits as well as ecological benefits for soil stabilization, water quality, wildlife habitat, and pollinators. These ecological benefits will be balanced with the need to provide visual mitigation and overall aesthetic character that will complement the existing land use and setting. This is a conceptual landscape plan document, intended to be updated to include long-term management and biodiversity efforts.



2 Design Methodology

The overall goal of the landscape plan is to provide visual interest while softening the infrastructure of the Project, in conformance with any County and City Ordinance requirements. Screening should be provided in higher viewership areas and where there are adjacent land uses that would require them. Screening intensity will vary 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 in order to be prescribed in the various scenarios around the Project. The primary goals of the landscape plan are to:

1. Utilize existing landscape where possible;
2. Provide visual interest to soften the proposed infrastructure;
3. Provide screening and visual barriers that consider viewership intensity and adjacent land use;
4. Develop modules that would be appropriate for the existing landscape;
5. 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 footprint has been designed in a way to minimize impacts to forested lands, shrublands, wetlands, and streams within the Project, 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, increased ground disturbance and soil exposure. In order to limit the impacts to vegetation, all clearing will be confined to the Project infrastructure footprint. In addition to solar panel arrays, typical footprints include:

- 10 feet on either side of access road centerline
- 10 feet on either side of buried collection line centerline
- 10 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, and efforts to retain desirable vegetation growth will be maximized to the extent practicable. The Project will minimize clearing of tree stands within various windrow or tree lot communities. No trees greater than 3 inches in diameter at breast height (DBH) will be cut outside of the approved cutting season of November 15th through March 31st. Any trees and limbs removed, with approval from EDP, 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 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 and/or grazing. During maintenance inspections, the Project 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 7).



5 Plant Materials

The plant palette used for the modules included known regional vegetation species. Selected species are native to Kentucky and excludes invasive or nuisance plants as identified by the Kentucky Department of Fish and Wildlife. Existing native species that were observed at the site in some form of abundance are summarized in Table 5-1.

Table 5-1 Native Trees Observed within the Project

Scientific Name	Common Name
<i>Acer rubrum</i>	Red Maple
<i>Carya glabra</i>	Pignut Hickory
<i>Liquidambar styraciflua</i>	Sweetgum
<i>Liriodendron tulipifera</i>	Tuliptree
<i>Quercus rubra</i>	Northern Red Oak
<i>Diospyros virginiana</i>	Persimmon
<i>Ulmus americana</i>	American Elm

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). It is also important to add some other native species to increase diversity and provide additional benefits such as ornamental and screening value (Figure 5-1).

Figure 5-1 Proposed Plant Material Selection for the New Frontiers Solar Park

Trees / Shrubs (Evergreen)



Northern white cedar (*Thuja occidentalis*)

American holly (*Ilex opaca*)

Eastern red cedar (*Juniperus virginiana*)



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.



6 Planting Modules

One module has been developed for this project to help soften and screen the infrastructure of the Project. This module is intended to be flexible and adaptable to the various conditions that occur along the perimeter of the Project. They will be prescribed for various areas based on the need to provide screening, visual interest, softening and character to the existing landscape. Where necessary, 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 each module is proposed is provided in Appendix A.

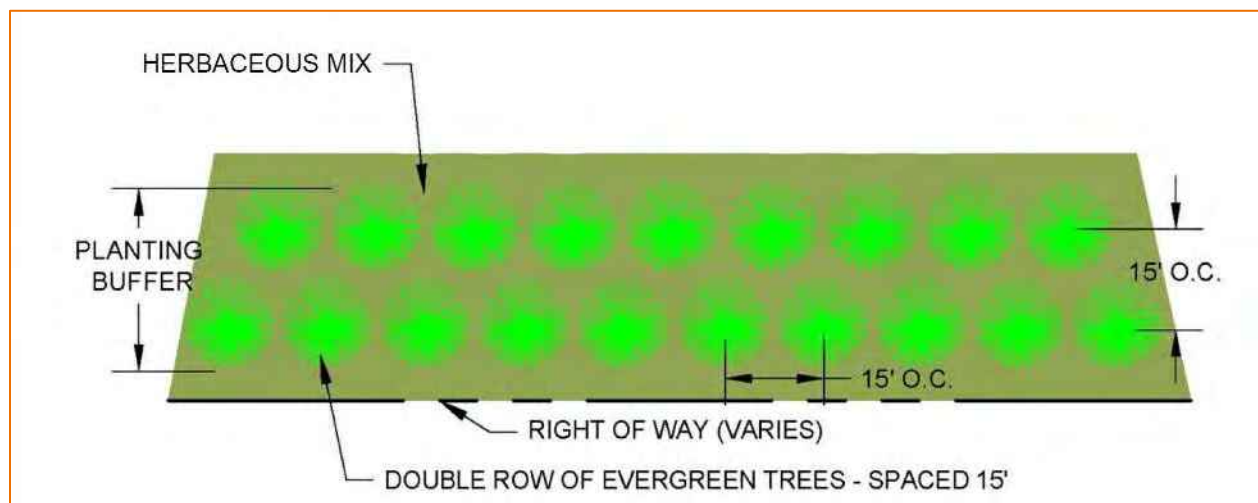
6.1 PLANTING MODULE

The intent of this module is to provide softening, visual interest and more 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. This module is comprised of a double row of evergreen trees spaced at 15 feet on center to help provide visual screening from the infrastructure of the Project (Table 6-1 and Figure 6-1). Shading should be considered as to not cast shadows on the solar arrays.

Table 6-1 New Frontiers Solar Park Module Trees

Scientific Name	Common Name
<i>Thuja occidentalis</i>	Northern white cedar
<i>Ilex opaca</i>	American Holly
<i>Juniperus virginiana</i>	Eastern red cedar

Figure 6-1 New Frontiers Solar Park Module Screening



7 Landscape Buffer

7.1 BUFFER LANDSCAPE MAINTENANCE

Maintenance of planted landscape buffers will be conducted as needed following installation and will focus on ensuring survival of planted materials.

7.1.1 Plants

After the initial planting, maintenance of native trees and shrubs will include:

- Protection from deer and/or other animals;
- Application of mulch around tree rings after planting;
- 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. New Frontiers Solar Park will replace any plantings that die within the first five years to ensure a minimum of 90% survival. Typically, plant material that has sustained one full growing season has a very high likelihood of continued survival. New Frontiers Solar Park will monitor the plantings annually during operations to ensure no significant dieback or loss is occurring. Some dieback is expected, mimicking natural succession, and New Frontiers Solar Park will evaluate any areas of concern to make sure the intent of the module prescribed is still being met for any specific area. If significant dieback were to occur, New Frontiers Solar Park would evaluate the need for mitigation options to ensure the goals of the landscape plan are still being met.

7.1.2 Fescue Seed Mix and Ground Cover

After the initial seeding, fescue requires some maintenance to ensure seed gets established. After the establishment period (5 years) the need for maintenance decreases. After the plantings are established, site maintenance is primarily 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. New Frontiers Solar Park 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. New Frontiers Solar Park intends to manage the ground coverage of its solar facility by including pollinators, native and naturalized plants as much as possible to help ensure that the soil quality is as good or better when the project is decommissioned.

7.2 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



7 Landscape Buffer

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.

7.2.1 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 with a no-till rangeland type drill planter.

7.2.2 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.

7.2.3 Chemical Applications

Many perennial weed species in uplands, such as teasel (*Dipsacus fullonum*), Canada thistle (*Cirsium arvense*), maretail (*Conyza canadensis*), 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 young native 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.

7.3 VEGETATIVE BUFFER VISUALIZATIONS

Figures 7-1 and 7-2 represent examples of module planting scenario. In these scenarios, trees in these are planted at 4-6 feet in height and shrubs from 2-4 feet in height. These scenarios are for example only and actual height at planting may vary.



7 Landscape Buffer

Figure 7-1 Module Simulation



Figure 7-2 Module Simulation



8 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 on-site. Doing so will create a landscape that will visually soften the infrastructure of the Project where needed while providing ecological benefits by incorporating native and pollinator species. In total the proposed screening for the New Frontiers Solar Park would include 32,666.62 feet (6.18 miles) of tree and shrub plantings.

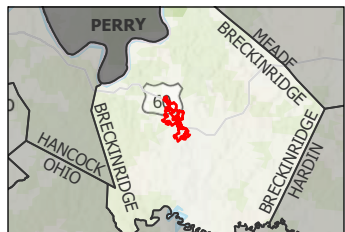
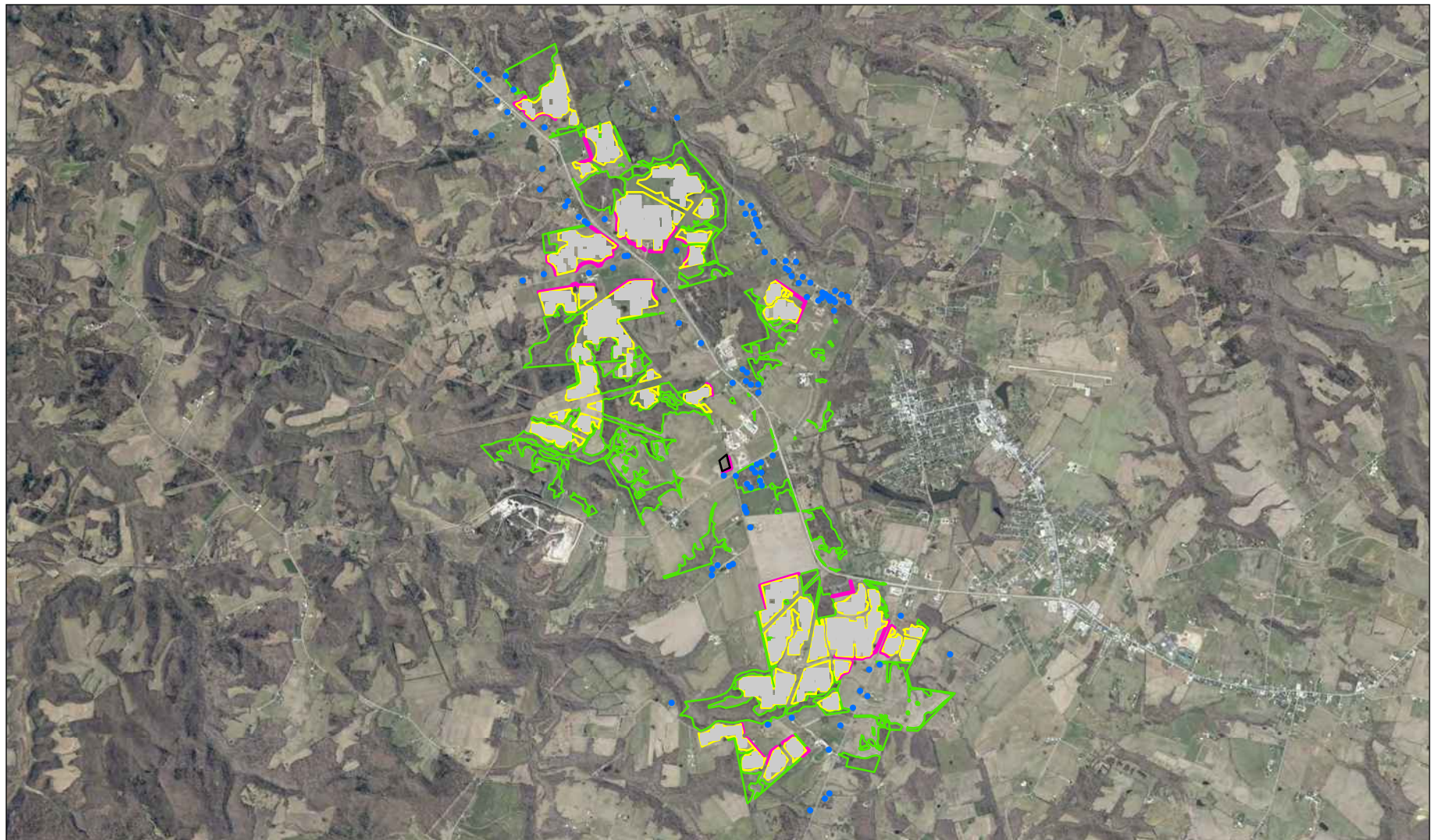


APPENDIX A

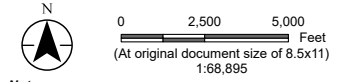
Screening Plan



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- Notes**
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 2. Data Sources: EDP Clover Creek Solar Layout
 3. Background: KyFromAbove Orthoimagery (2021)

Project Location: Breckinridge County, Kentucky
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 Client: EDP Renewables
 Project: New Frontiers Solar Park
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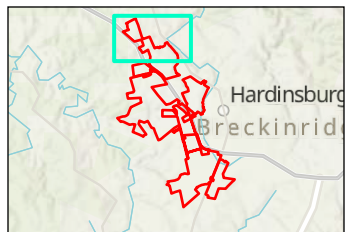
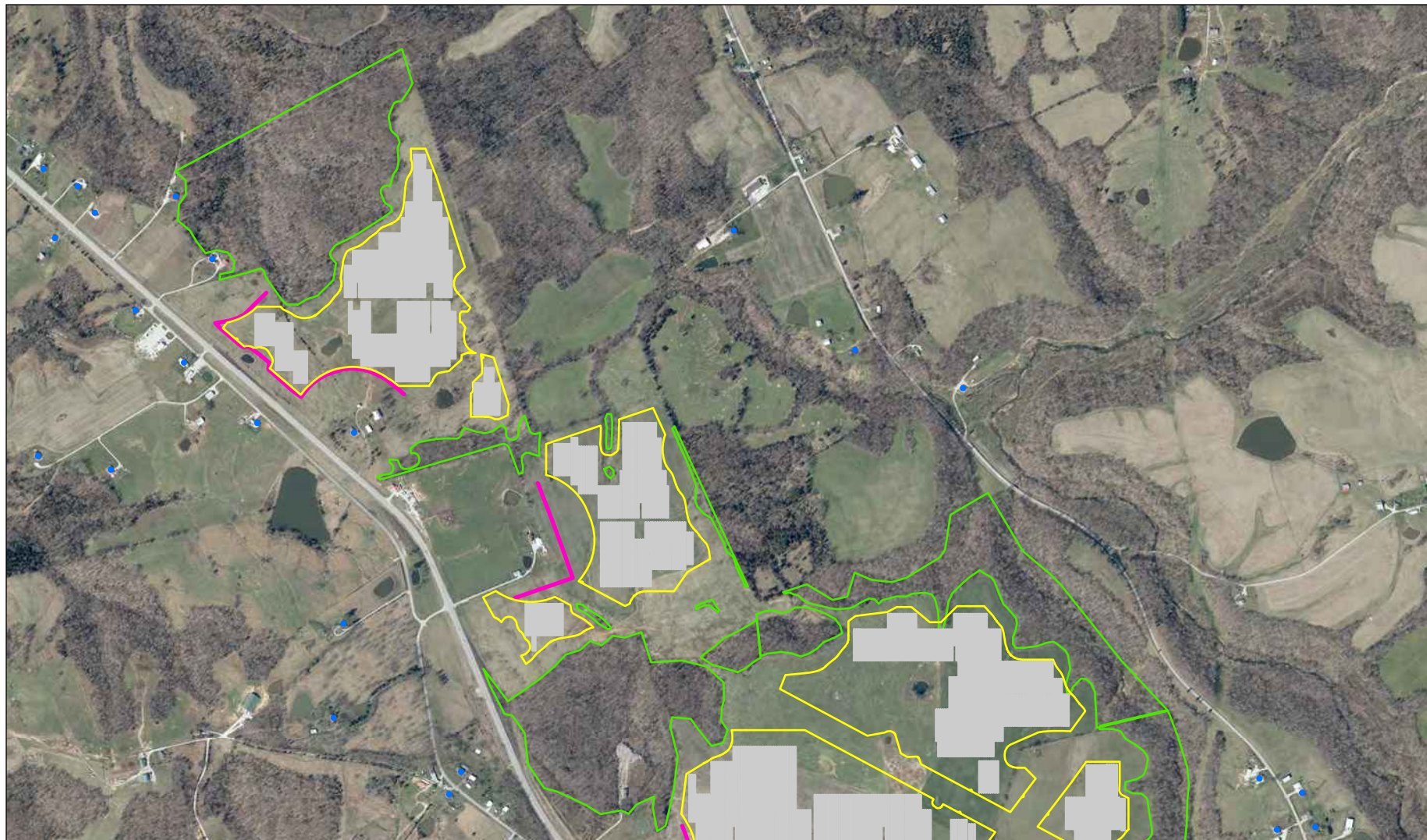
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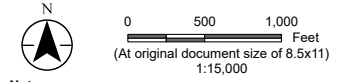


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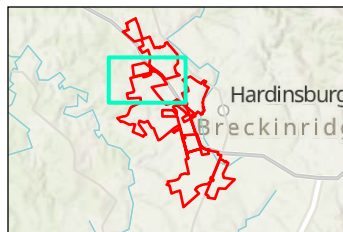
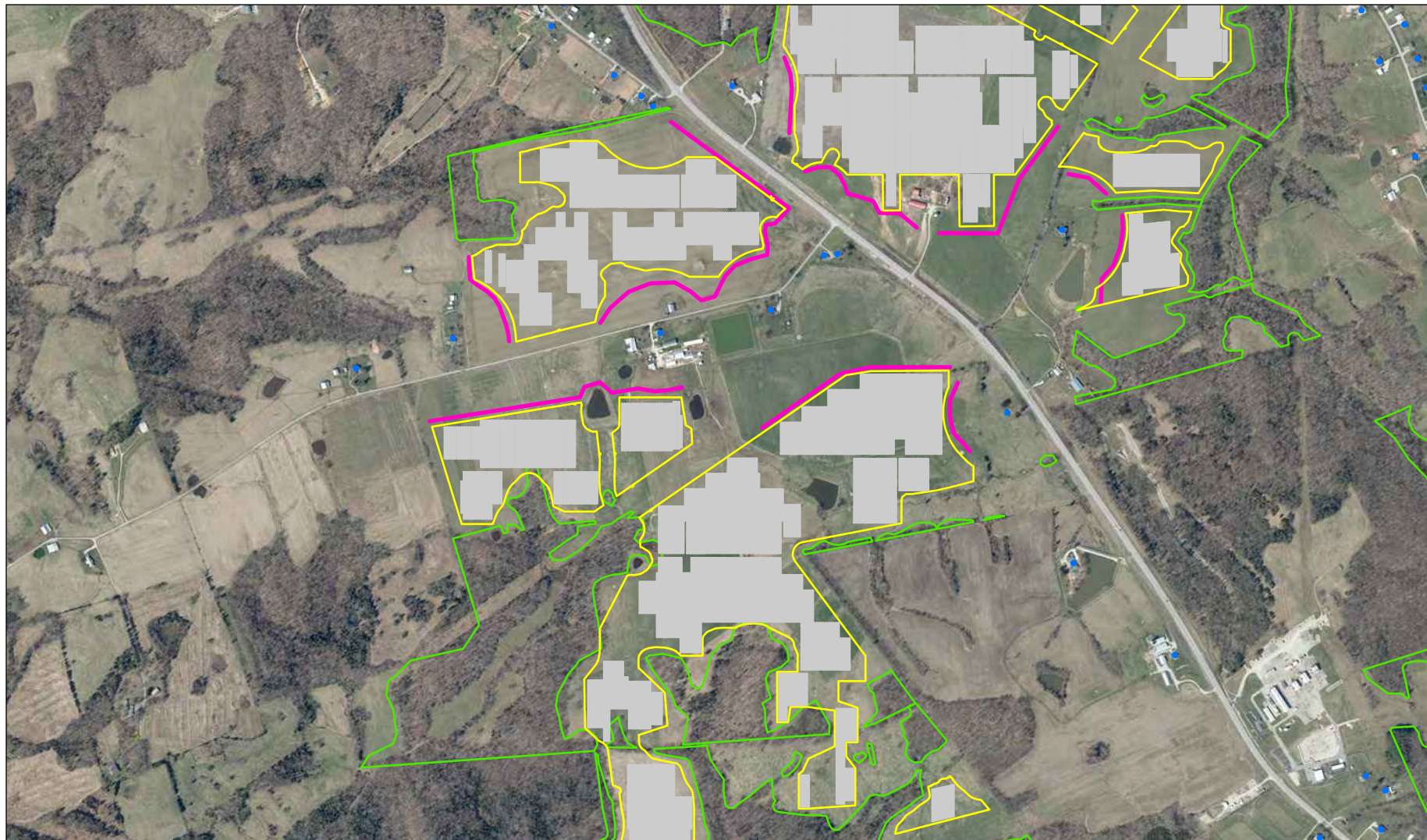
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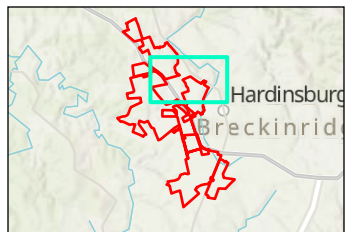
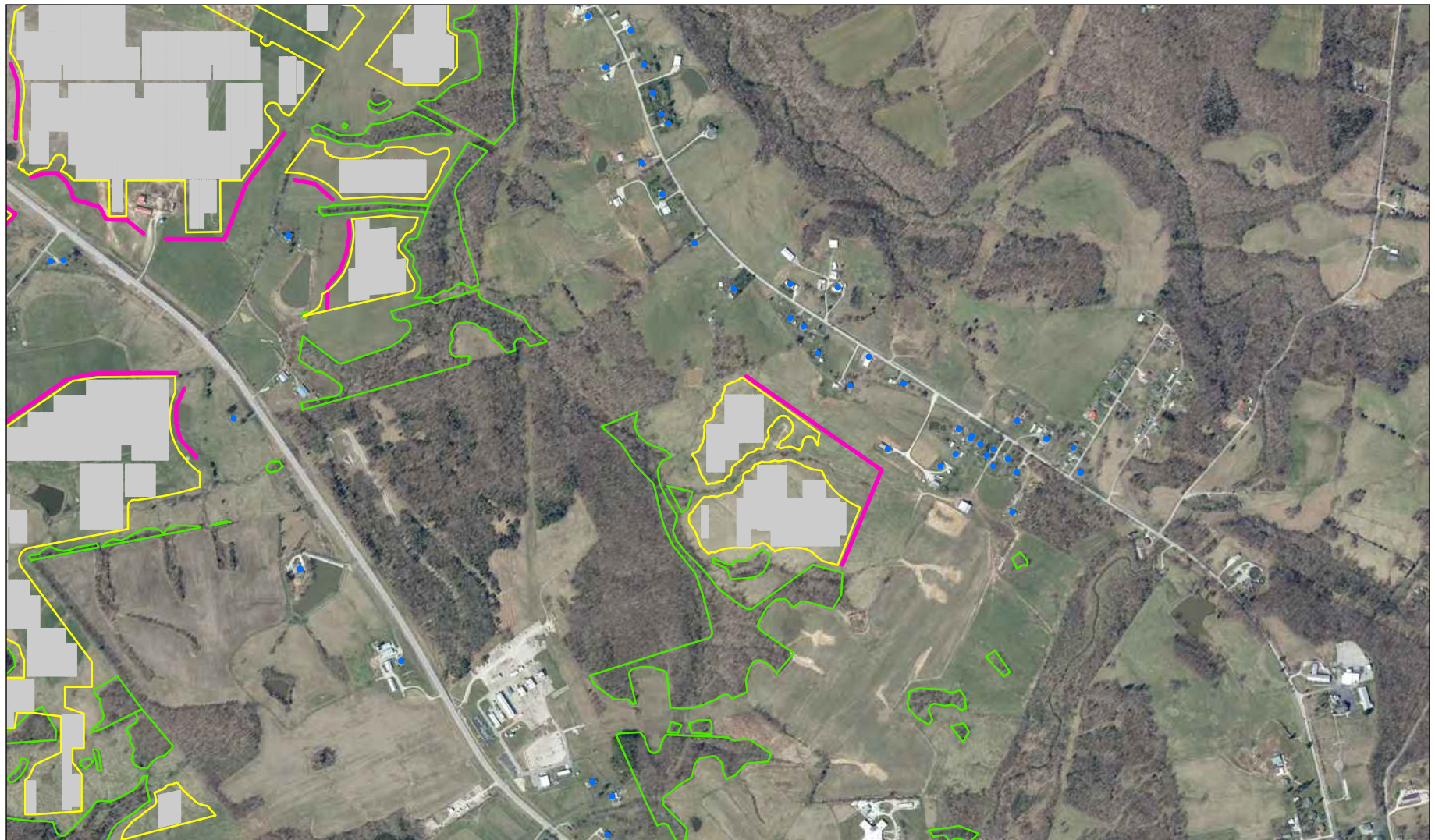
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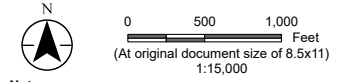


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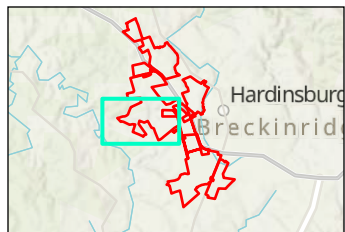
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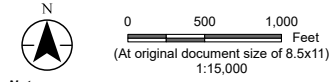
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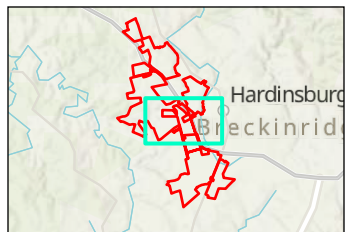
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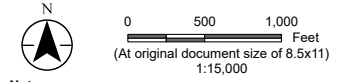


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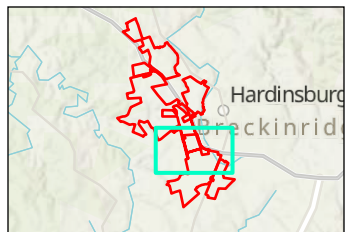
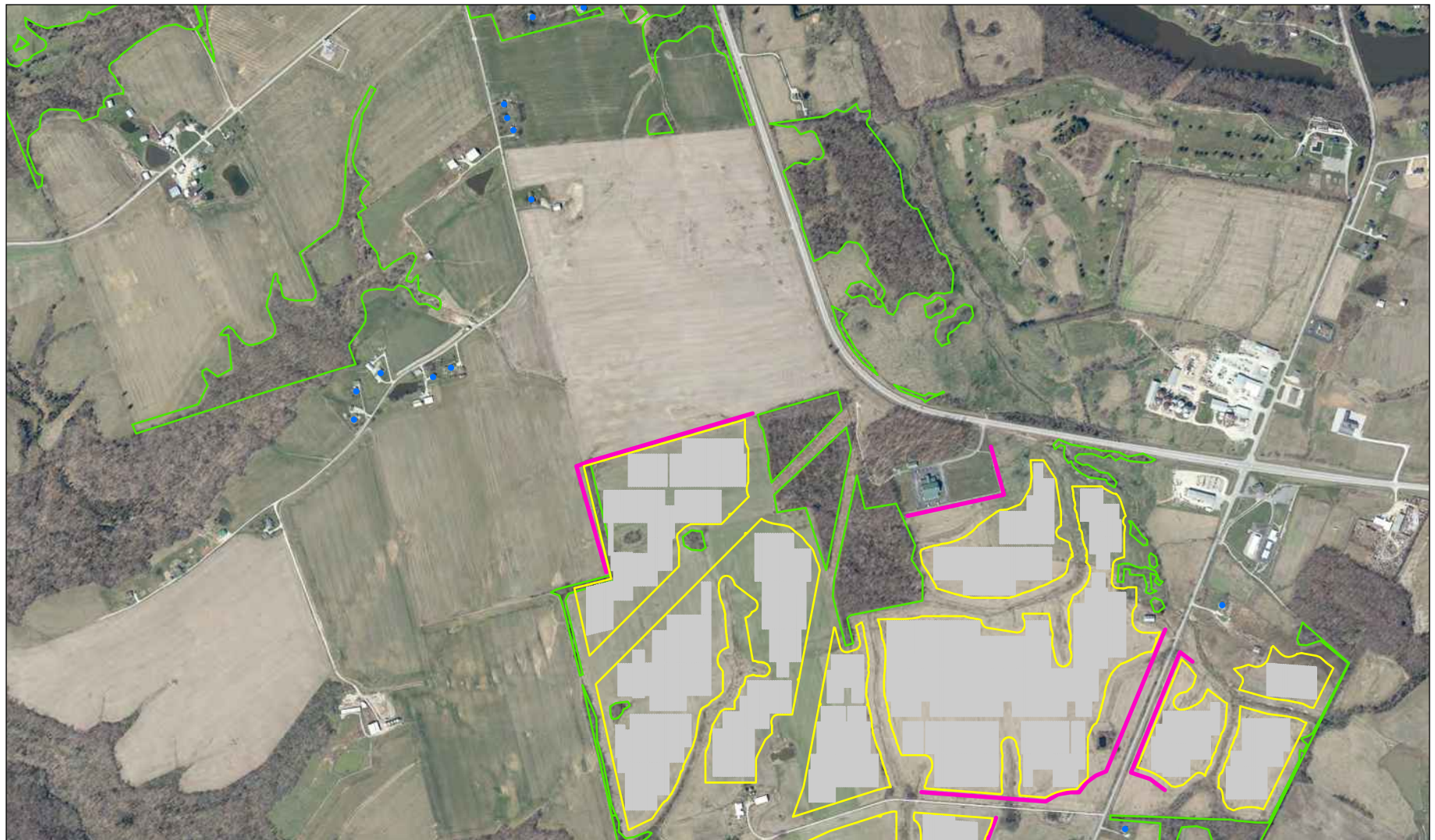
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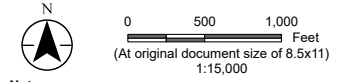


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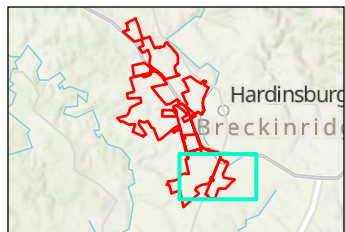
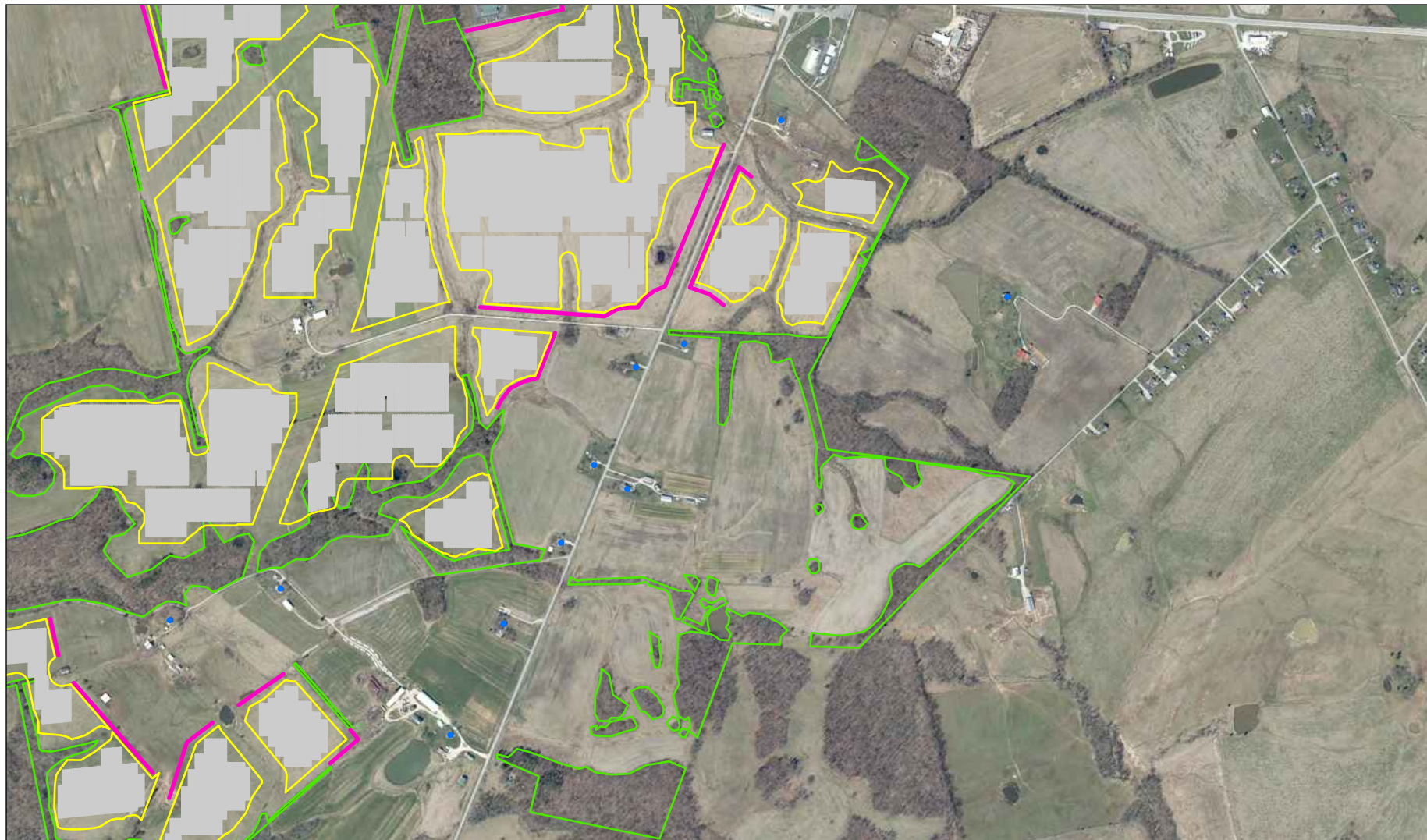
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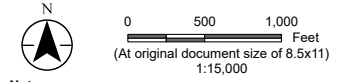


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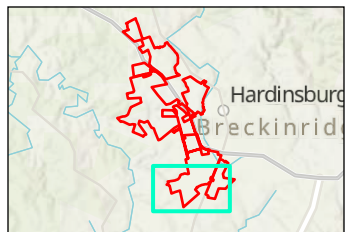
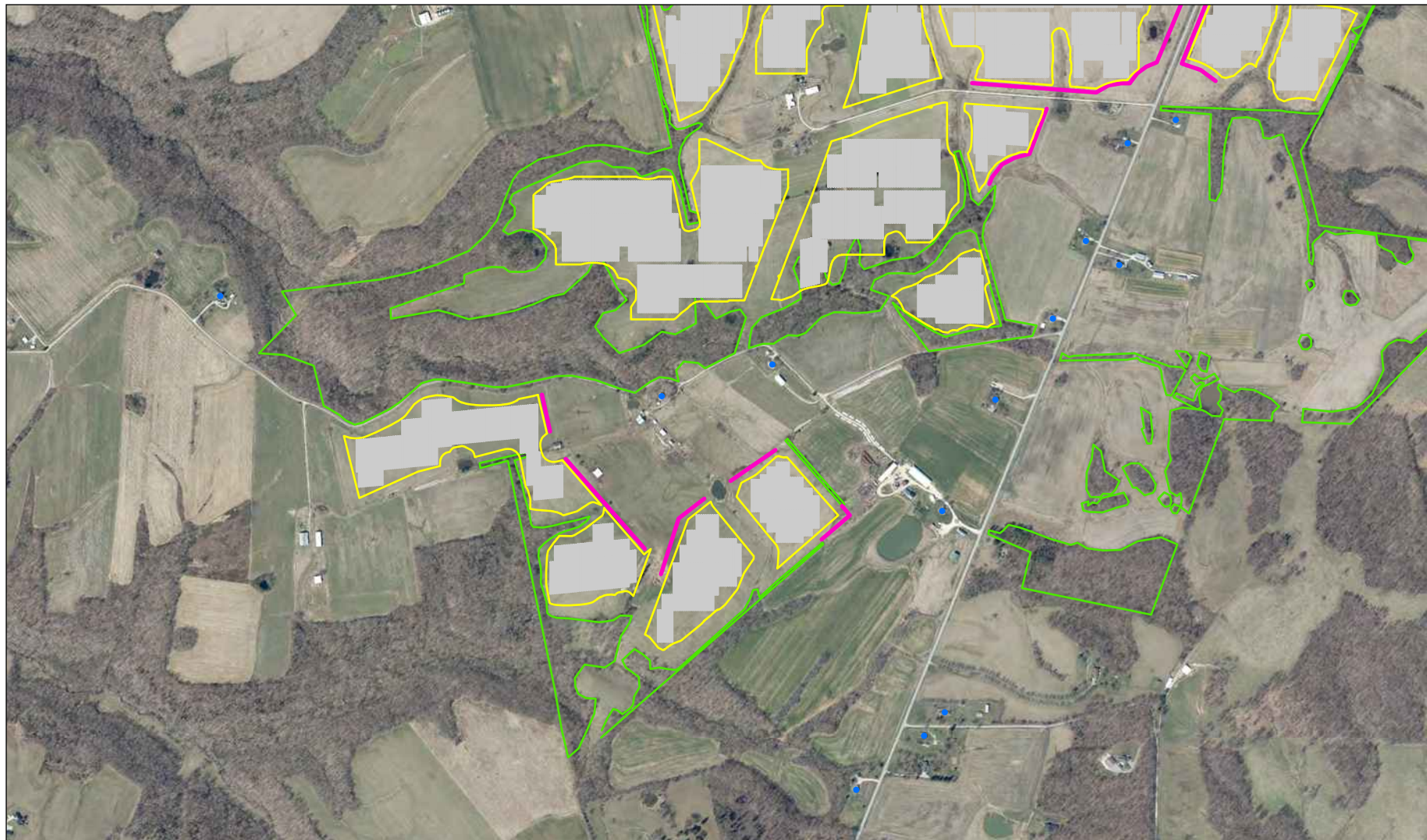
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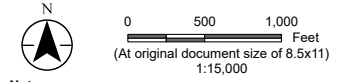
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SAR
ATTACHMENT H



Clover Creek Solar Project LLC
d/b/a New Frontiers Solar Park

Traffic Impact Study

September 23, 2024

Prepared for:

EDP Renewables

Prepared by:

Stantec





Clover Creek Solar Project LLC d/b/a New Frontiers Solar Park

Revision	Description	Author		Quality Check		Independent Review	
1		Callie Castro	9/23/2024			Chad Martin	9/26/024



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Prepared by _____
(signature)

Callie Castro, PE, PTOE



Approved by _____
(signature)

Joey Lefante, PE, PTOE



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Executive Summary

The purpose of this study is to estimate the traffic impacts of the construction of the Clover Creek Solar Project LLC d/b/a New Frontiers Solar Park (the Project). The Project is to be located just west of Hardinsburg, Kentucky in Breckinridge County. The Project site can be generally described as along US Highway 60, State Route 992, and State Route 261. The Project area encompasses approximately 1,100 acres in an agricultural area that is utilized as a solar-powered electric generating facility.

Historical Average Daily Traffic (ADT) volumes were obtained from the Kentucky Transportation Cabinet (KYTC) for three (3) locations along US Highway 60, State Route 992, and State Route 261. These routes will likely be impacted the most from increased traffic volumes during the construction process. The facility is managed and monitored by a small number of employees that generate only a few trips per day. This additional volume of daily traffic is considered negligible and assumed to be included in the 2023 existing traffic volumes. Trip generation during the construction phase of the Project will likely have the greatest impact on area traffic operations. While specific details concerning construction duration and intensity are not currently known, this study has employed a sensitivity analysis to demonstrate likely construction traffic levels will not have a significant, adverse effect on peak hour traffic operations. To demonstrate this, traffic on studied roadways was increased by 25 percent. This increase is far greater than would be anticipated for the actual construction of the Project.

Two-lane highway analysis was used to evaluate the roadways based on methods described in the Highway Capacity Manual (HCM) and implemented within the Highway Capacity Software (HCS 7). As demonstrated in the traffic analysis, the construction period will not produce significant operational changes to existing roadways. All roadways within the Project area will continue to operate at LOS D or better during peak construction traffic except for US Highway 60 which is anticipated to operate at an LOS E. Since the Percent Time Spent Following (PTSF) does not increase significantly and the increase of construction traffic was assumed to be far greater than anticipated during actual construction an LOS E is not a concern. Although no significant adverse traffic impacts are expected during Project construction, using mitigation measures such as ridesharing between construction workers, using appropriate traffic controls, or allowing flexible working hours outside of peak hours could be implemented to minimize any potential for delays during the peak hours.



1.0 INTRODUCTION

The purpose of this study is to estimate the traffic impacts of the construction of the Clover Creek Solar Project LLC d/b/a New Frontiers Solar Park (the Project). The Project is to be located just west of Hardinsburg, Kentucky in Breckinridge County. The Project site can be generally described as along US Highway 60, State Route 992, and State Route 261. The proposed Project site is shown in red in **Figure 1**.

The Project area encompasses approximately 1,100 acres in an agricultural area. The existing site utilizes the land as a solar-powered electric generating facility. The Project has access points around the site primarily along US Highway 60 and State Route 261. A construction year of 2023 was evaluated as part of the study.

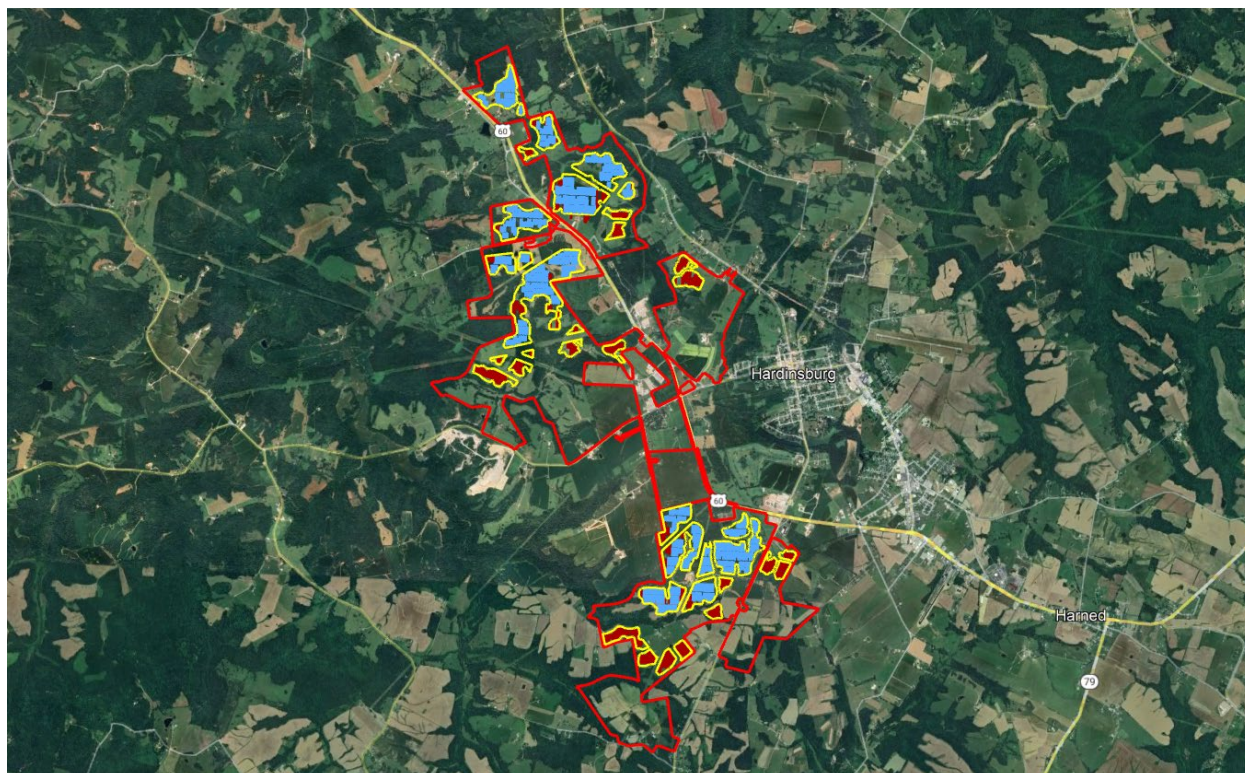


Figure 1: Project Area



1.1 PROJECT AREA ROADWAYS

US Highway 60 is a two-lane, undivided highway with 12-foot lanes, 10-foot shoulders, and a posted speed limit of 55 mph. State Route 992 is a two-lane, undivided highway with 11-foot lanes, no shoulders, and a posted speed limit of 55 mph. State Route 261 is a two-lane, undivided highway with 10-foot lanes, 1-foot wide shoulders, and a posted speed limit of 55 mph.

2.0 DATA COLLECTION

Historical Average Daily Traffic (ADT) volumes were obtained from the Kentucky Transportation Cabinet (KYCB) for three (3) locations listed below along US Highway 60, State Route 992, and State Route 261. These routes will likely be impacted the most from increased traffic volumes during the construction process.

- Count Station 014A35 – US Hwy 60 south of SR 992
- Count Station 014751 – SR 992 west of US Hwy 60
- Count Station 014752 – SR 261

A historic growth rate was calculated at each Count Station using historical AADT data obtained from the Kentucky Transportation Cabinet. **Table 1** outlines the ADT volumes that were obtained from the database for each location. **Figure 2** through **Figure 4** shows the calculated historical growth rate at each Count Station. Based on the calculations, a growth rate of 1.6% was applied to the 2021 ADT volumes at Count Station 014A35, a growth rate of 1.7% was applied to the 2019 ADT volumes at Count Station 014751 and a growth rate of 0.2% was applied to the 2021 ADT volumes at Count Station 014752 to determine the 2023 volumes for capacity analysis.

Table 1: Historical ADT Volumes

Count Year	Count Station 014A35 (US 60)	Count Station 014751 (SR 992)	Count Station 014752 (SR 261)
2021	4,194		2,846
2019		844	
2018	3,993		2,572
2016		793	
2015	3,653		2,743
2013		763	



Clover Creek Solar Project LLC d/b/a New Frontiers Solar Park

Data Collection

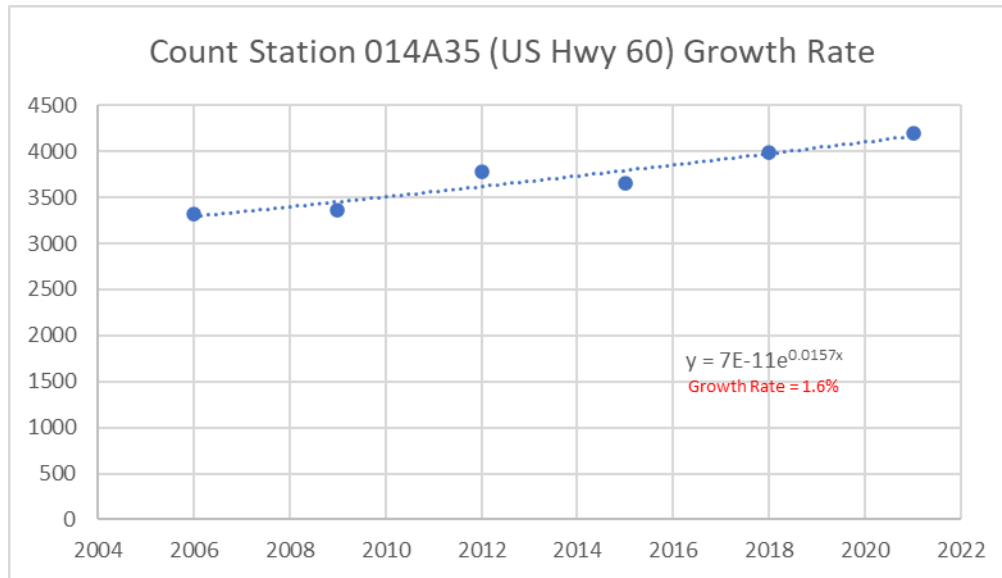


Figure 2: Count Station 014A35 (US Hwy 60) Growth Rate

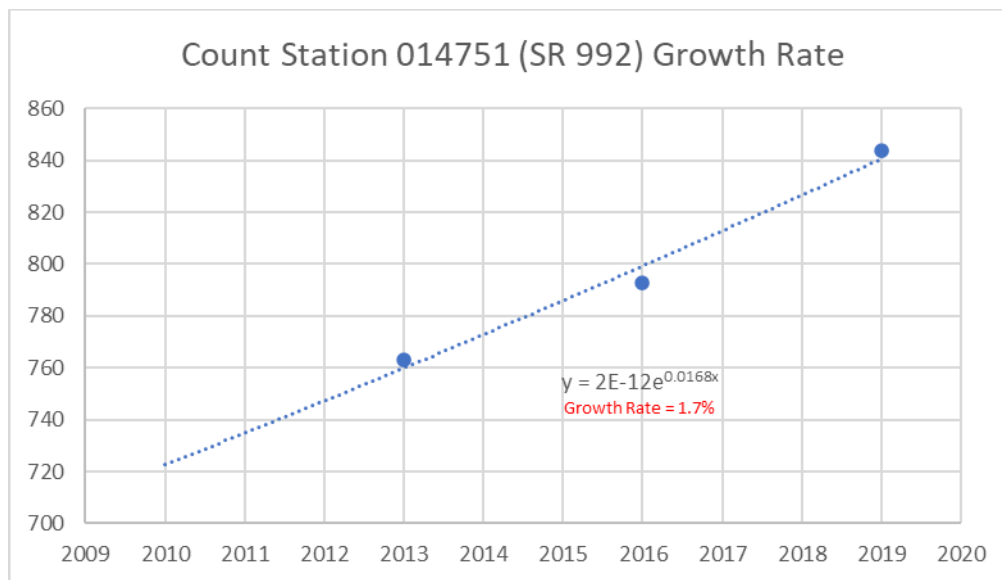


Figure 3: Count Station 014751 (SR 992) Growth Rate



Clover Creek Solar Project LLC d/b/a New Frontiers Solar Park

Data Collection

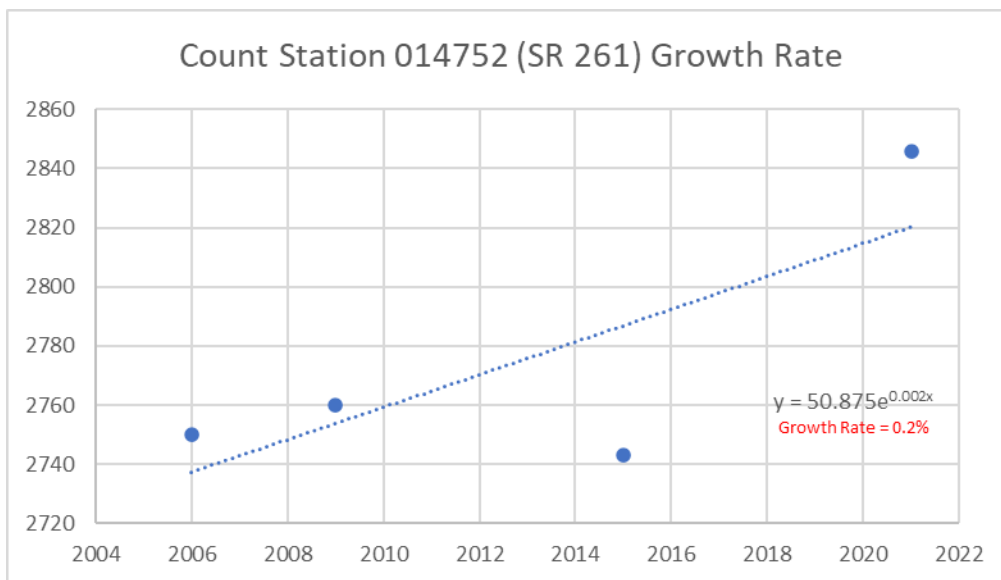


Figure 4: Count Station 014752 (SR 261) Growth Rate

Table 2 outlines the 2023 ADT and peak hour existing conditions volumes at the three (3) analysis locations. To determine the peak hour analysis volumes, a K factor for each Count Station was obtained from the Kentucky Transportation Cabinet to determine the amount of the daily traffic occurring in the peak hour and a 50/50 directional split in the peak hour was assumed due to the rural nature of the area.

Table 2: 2023 Existing Conditions Volumes

	Count Station 014A35 (US 60)	Count Station 014751 (SR 992)	Count Station 014752 (SR 261)
2023 ADT	4,329	903	2,857
2023 Peak Hour Directional Volume	208	46	150



3.0 PROJECT TRIP GENERATION

The existing facility is managed and monitored by a small number of employees that generate only a few trips per day. This additional volume of daily traffic is considered negligible and assumed to be included in the existing 2023 traffic volumes. Therefore, trip generation during the construction phase of the Project will likely have the greatest impact on area traffic operations. The trip generation analysis for the construction of the Project would generally be based on the number of workers and the associated construction vehicles and truck trips expected during the construction of the Project. Construction workers will consist of laborers, equipment operators, electricians, supervisory personnel, support personnel, and construction management personnel. It is envisioned that workers will arrive/depart from passenger vehicles and trucks daily during the AM (7:00 – 9:00 AM) and PM (3:00 – 6:00 PM) peak hours. The delivery of equipment will occur on trailers, flatbeds, or other large vehicles at various times during the day and from different inception locations. While specific details concerning construction duration and intensity are not currently known, this study has employed a sensitivity analysis to demonstrate likely construction traffic levels will not have a significant, adverse effect on peak hour traffic operations. To demonstrate this, traffic on studied roadways was increased by 25 percent as shown in **Table 3**. This increase is far greater than would be anticipated for the actual construction of the Project.

Table 3: 2023 Peak Hour Analysis Volumes

	Count Station 491000880 (LA 167)	Count Station 491000881 (LA 103)	Count Station 491000873 (Dupree Rd)
2023 Peak Hour Volume - Existing Conditions	208	46	150
2023 Peak Hour Volume - Construction Conditions	260	58	188



4.0 CAPACITY ANALYSIS

Two-lane highway analysis was used to evaluate the roadways based on methods described in the Highway Capacity Manual (HCM) and implemented within the Highway Capacity Software (HCS 7). The results can be found in Appendix A. The analyses were used to estimate capacity and Level of Service (LOS) for given traffic and geometric conditions. LOS provides a measure of the quality of traffic flow provided by a roadway facility, expressed in terms of letter grades with LOS A representing the highest quality traffic flow and minimal delay, and LOS F representing poor traffic operations and significant delay. For rural areas, LOS C or better is generally considered to be desirable. In urban areas, LOS D or better is generally considered desirable. The two-lane highways method utilizes Percent Time Spent Following (PTSF) as the service measure for LOS. **Table 4** outlines the capacity analysis results for the 2023 existing conditions and construction conditions scenarios. Complete HCS output reports are included in **Appendix A**.

Table 4: Capacity Results

Location	2023 Existing Conditions		2023 Construction Conditions	
	PTSF	LOS	PTSF	LOS
Count Station 014A35 (US Hwy 60)	46.8	D	52.1	E
Count Station 014751 (SR 992)	21.0	C	22.6	C
Count Station 014752 (SR 261)	37.8	D	44.3	D

5.0 CONCLUSIONS

As demonstrated in the traffic analysis, the construction period will not produce significant operational changes to existing roadways. All roadways within the Project area will continue to operate at LOS D or better during peak construction traffic except for US Highway 60 which is predicted to operate under a LOS E during the construction process. Since the Percent Time Spent Following (PTSF) does not increase significantly and the increase of construction traffic was assumed to be far greater than anticipated during actual construction an LOS E is not a concern. Although no significant adverse traffic impacts are expected during Project construction, using mitigation measures such as ridesharing between construction workers, using appropriate traffic controls, or allowing flexible working hours outside of peak hours could be implemented to minimize any potential for delays during the peak hours.



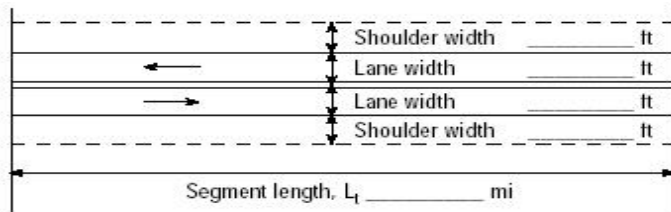
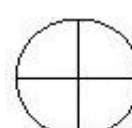
Clover Creek Solar Project LLC d/b/a New Frontiers

Solar Park

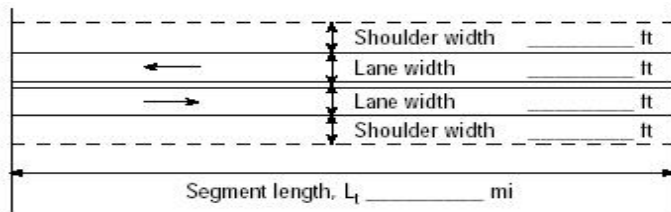
Appendix A Capacity Results

Appendix A CAPACITY RESULTS

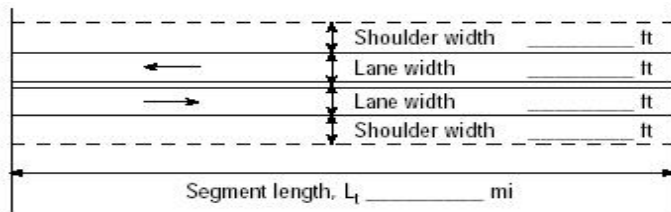


DIRECTIONAL TWO-LANE HIGHWAY SEGMENT WORKSHEET		
General Information		Site Information
Analyst	Stantec	Highway / Direction of Travel US 60
Agency or Company		From/To
Date Performed	2/21/2023	Jurisdiction
Analysis Time Period	Peak Hour	Analysis Year 2023
Project Description: Existing		
Input Data		
 <p style="font-size: small;">Shoulder width _____ ft Lane width _____ ft Lane width _____ ft Shoulder width _____ ft</p> <p style="text-align: center;">Segment length, L_1 _____ mi</p>	<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  Show North Arrow </div> <div> <input checked="" type="checkbox"/> Class I highway <input type="checkbox"/> Class II highway <input type="checkbox"/> Class III highway Terrain <input checked="" type="checkbox"/> Level <input type="checkbox"/> Rolling Grade Length _____ mi Up/down Peak-hour factor, PHF 0.88 No-passing zone 20% % Trucks and Buses, P_T 10 % % Recreational vehicles, P_R 4% Access points mi 6/mi </div> </div>	
Analysis direction vol., V_d	208veh/h	
Opposing direction vol., V_o	208veh/h	
Shoulder width ft	10.0	
Lane Width ft	12.0	
Segment Length mi	2.0	
Average Travel Speed		
	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E_T (Exhibit 15-11 or 15-12)	1.5	1.5
Passenger-car equivalents for RVs, E_R (Exhibit 15-11 or 15-13)	1.0	1.0
Heavy-vehicle adjustment factor, $f_{HV,ATS}=1/(1+P_T(E_T-1)+P_R(E_R-1))$	0.952	0.952
Grade adjustment factor ¹ , $f_{g,ATS}$ (Exhibit 15-9)	1.00	1.00
Demand flow rate ² , v_i (pc/h) $v_i=V_i/(PHF * f_{g,ATS} * f_{HV,ATS})$	248	248
Free-Flow Speed from Field Measurement	Estimated Free-Flow Speed	
Mean speed of sample ³ , S_{FM}	Base free-flow speed ⁴ , BFFS 55.0 mi/h	
Total demand flow rate, both directions, v	Adj. for lane and shoulder width, ⁴ f_{LS} (Exhibit 15-7) 0.0 mi/h	
Free-flow speed, $FFS=S_{FM}+0.00776(v/f_{HV,ATS})$	Adj. for access points ⁴ , f_A (Exhibit 15-8) 10.0 mi/h	
Adj. for no-passing zones, $f_{np,ATS}$ (Exhibit 15-15) 0.9 mi/h	Free-flow speed, FFS ($FFS=BFFS-f_{LS}-f_A$) 45.0 mi/h	
	Average travel speed, $ATS_d=FFS-0.00776(v_d/ATS + V_o/ATS) - f_{np,ATS}$ 40.3 mi/h	
	Percent free flow speed, PFFS 89.4 %	
Percent Time-Spent-Following		
	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E_T (Exhibit 15-18 or 15-19)	1.1	1.1
Passenger-car equivalents for RVs, E_R (Exhibit 15-18 or 15-19)	1.0	1.0
Heavy-vehicle adjustment factor, $f_{HV}=1/(1+P_T(E_T-1)+P_R(E_R-1))$	0.990	0.990
Grade adjustment factor ¹ , $f_{g,PTSF}$ (Exhibit 15-16 or Ex 15-17)	1.00	1.00
Directional flow rate ² , v_i (pc/h) $v_i=V_i/(PHF * f_{HV,PTSF} * f_{g,PTSF})$	239	239
Base percent time-spent-following ⁴ , $BPTSF_d(\%)=100(1-e^{av_d^b})$	26.8	
Adj. for no-passing zone, $f_{np,PTSF}$ (Exhibit 15-21)	39.9	
Percent time-spent-following, $PTSF_d(\%)=BPTSF_d + f_{np,PTSF} * (v_d/PTSF / v_d/PTSF + V_o/PTSF)$	46.8	
Level of Service and Other Performance Measures		
Level of service, LOS (Exhibit 15-3)	D	
Volume to capacity ratio, v/c	0.14	

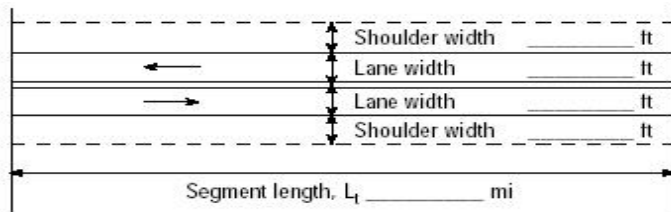
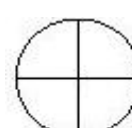
Capacity, $C_{d,ATS}$ (Equation 15-12) veh/h	1700
Capacity, $C_{d,PTSF}$ (Equation 15-13) veh/h	1700
Percent Free-Flow Speed $PFFS_d$ (Equation 15-11 - Class III only)	89.4
Bicycle Level of Service	
Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	236.4
Effective width, W_v (Eq. 15-29) ft	32.00
Effective speed factor, S_t (Eq. 15-30)	4.79
Bicycle level of service score, BLOS (Eq. 15-31)	3.17
Bicycle level of service (Exhibit 15-4)	C
Notes	
<p>1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.</p> <p>2. If $v_i(v_d \text{ or } v_o) \geq 1,700$ pc/h, terminate analysis--the LOS is F.</p> <p>3. For the analysis direction only and for $v > 200$ veh/h.</p> <p>4. For the analysis direction only</p> <p>5. Exhibit 15-20 provides coefficients a and b for Equation 15-10.</p> <p>6. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.</p>	

DIRECTIONAL TWO-LANE HIGHWAY SEGMENT WORKSHEET		
General Information		Site Information
Analyst	Stantec	Highway / Direction of Travel State Route 992
Agency or Company		From/To
Date Performed	2/21/2023	Jurisdiction
Analysis Time Period	Peak Hour	Analysis Year 2023
Project Description: Existing		
Input Data		
	<input checked="" type="checkbox"/> Class I highway <input type="checkbox"/> Class II highway <input type="checkbox"/> Class III highway Terrain <input checked="" type="checkbox"/> Level <input type="checkbox"/> Rolling Grade Length mi Up/down Peak-hour factor, PHF 0.88 No-passing zone 20% % Trucks and Buses, P _T 10 % % Recreational vehicles, P _R 4% Access points mi 6/mi	
Analysis direction vol., V _d	46veh/h	
Opposing direction vol., V _o	46veh/h	
Shoulder width ft	0.0	
Lane Width ft	11.0	
Segment Length mi	2.0	
Average Travel Speed		
	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E _T (Exhibit 15-11 or 15-12)	1.9	1.9
Passenger-car equivalents for RVs, E _R (Exhibit 15-11 or 15-13)	1.0	1.0
Heavy-vehicle adjustment factor, f _{HV,ATS} =1/(1+ P _T (E _T -1)+P _R (E _R -1))	0.917	0.917
Grade adjustment factor ¹ , f _{g,ATS} (Exhibit 15-9)	1.00	1.00
Demand flow rate ² , v _i (pc/h) v _i =V _i / (PHF* f _{g,ATS} * f _{HV,ATS})	57	57
Free-Flow Speed from Field Measurement	Estimated Free-Flow Speed	
Mean speed of sample ³ , S _{FM}	Base free-flow speed ⁴ , BFFS 55.0 mi/h	
Total demand flow rate, both directions, v	Adj. for lane and shoulder width, ⁴ f _{LS} (Exhibit 15-7) 4.7 mi/h	
Free-flow speed, FFS=S _{FM} +0.00776(v/ f _{HV,ATS})	Adj. for access points ⁴ , f _A (Exhibit 15-8) 1.5 mi/h	
Adj. for no-passing zones, f _{np,ATS} (Exhibit 15-15) 0.2 mi/h	Free-flow speed, FFS (FFS=BFFS-f _{LS} -f _A) 48.8 mi/h	
	Average travel speed, ATS _d =FFS-0.00776(v _{d,ATS} + V _{o,ATS}) - f _{np,ATS} 47.7 mi/h	
	Percent free flow speed, PFFS 97.8 %	
Percent Time-Spent-Following		
	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E _T (Exhibit 15-18 or 15-19)	1.1	1.1
Passenger-car equivalents for RVs, E _R (Exhibit 15-18 or 15-19)	1.0	1.0
Heavy-vehicle adjustment factor, f _{HV} =1/(1+ P _T (E _T -1)+P _R (E _R -1))	0.990	0.990
Grade adjustment factor ¹ , f _{g,PTSF} (Exhibit 15-16 or Ex 15-17)	1.00	1.00
Directional flow rate ² , v _i (pc/h) v _i =V _i /(PHF*f _{HV,PTSF} * f _{g,PTSF})	53	53
Base percent time-spent-following ⁴ , BPTSF _d (%)=100(1-e ^{-av_d^b})	6.4	
Adj. for no-passing zone, f _{np,PTSF} (Exhibit 15-21)	29.2	
Percent time-spent-following, PTSF _d (%)=BPTSF _d +f _{np,PTSF} *(v _{d,PTSF} / v _{d,PTSF} + V _{o,PTSF})	21.0	
Level of Service and Other Performance Measures		
Level of service, LOS (Exhibit 15-3)	C	
Volume to capacity ratio, v/c	0.03	

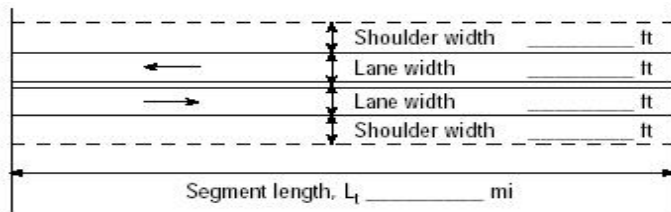

Capacity, $C_{d,ATS}$ (Equation 15-12) veh/h	1700
Capacity, $C_{d,PTSF}$ (Equation 15-13) veh/h	1700
Percent Free-Flow Speed $PFFS_d$ (Equation 15-11 - Class III only)	97.8
Bicycle Level of Service	
Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	52.3
Effective width, Wv (Eq. 15-29) ft	19.47
Effective speed factor, S_t (Eq. 15-30)	4.79
Bicycle level of service score, BLLOS (Eq. 15-31)	5.63
Bicycle level of service (Exhibit 15-4)	F
Notes	
<p>1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.</p> <p>2. If $v_i(v_d \text{ or } v_o) \geq 1,700$ pc/h, terminate analysis--the LOS is F.</p> <p>3. For the analysis direction only and for $v > 200$ veh/h.</p> <p>4. For the analysis direction only</p> <p>5. Exhibit 15-20 provides coefficients a and b for Equation 15-10.</p> <p>6. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.</p>	

DIRECTIONAL TWO-LANE HIGHWAY SEGMENT WORKSHEET		
General Information		Site Information
Analyst	Stantec	Highway / Direction of Travel State Route 261
Agency or Company		From/To
Date Performed	2/21/2023	Jurisdiction
Analysis Time Period	Peak Hour	Analysis Year 2023
Project Description: Existing		
Input Data		
	<input checked="" type="checkbox"/> Class I highway <input type="checkbox"/> Class II highway <input type="checkbox"/> Class III highway Terrain <input checked="" type="checkbox"/> Level <input type="checkbox"/> Rolling Grade Length mi Up/down Peak-hour factor, PHF 0.88 No-passing zone 20% % Trucks and Buses, P _T 10 % % Recreational vehicles, P _R 4% Access points mi 8/mi	
Analysis direction vol., V _d	150veh/h	
Opposing direction vol., V _o	150veh/h	
Shoulder width ft	1.0	
Lane Width ft	10.0	
Segment Length mi	2.0	
Average Travel Speed		
	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E _T (Exhibit 15-11 or 15-12)	1.6	1.6
Passenger-car equivalents for RVs, E _R (Exhibit 15-11 or 15-13)	1.0	1.0
Heavy-vehicle adjustment factor, f _{HV,ATS} =1/ (1+ P _T (E _T -1)+P _R (E _R -1))	0.943	0.943
Grade adjustment factor ¹ , f _{g,ATS} (Exhibit 15-9)	1.00	1.00
Demand flow rate ² , v _i (pc/h) v _i =V _i / (PHF* f _{g,ATS} * f _{HV,ATS})	181	181
Free-Flow Speed from Field Measurement	Estimated Free-Flow Speed	
Mean speed of sample ³ , S _{FM}	Base free-flow speed ⁴ , BFFS 55.0 mi/h	
Total demand flow rate, both directions, v	Adj. for lane and shoulder width, ⁴ f _{LS} (Exhibit 15-7) 5.3 mi/h	
Free-flow speed, FFS=S _{FM} +0.00776(v/ f _{HV,ATS})	Adj. for access points ⁴ , f _A (Exhibit 15-8) 2.0 mi/h	
Adj. for no-passing zones, f _{np,ATS} (Exhibit 15-15) 0.9 mi/h	Free-flow speed, FFS (FFS=BFFS-f _{LS} -f _A) 47.7 mi/h	
	Average travel speed, ATS _d =FFS-0.00776(v _{d,ATS} + V _{o,ATS}) - f _{np,ATS} 44.0 mi/h	
	Percent free flow speed, PFFS 92.2 %	
Percent Time-Spent-Following		
	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E _T (Exhibit 15-18 or 15-19)	1.1	1.1
Passenger-car equivalents for RVs, E _R (Exhibit 15-18 or 15-19)	1.0	1.0
Heavy-vehicle adjustment factor, f _{HV} =1/ (1+ P _T (E _T -1)+P _R (E _R -1))	0.990	0.990
Grade adjustment factor ¹ , f _{g,PTSF} (Exhibit 15-16 or Ex 15-17)	1.00	1.00
Directional flow rate ² , v _i (pc/h) v _i =V _i / (PHF* f _{HV,PTSF} * f _{g,PTSF})	172	172
Base percent time-spent-following ⁴ , BPTSF _d (%)=100(1-e ^{-av_d^b})	18.9	
Adj. for no-passing zone, f _{np,PTSF} (Exhibit 15-21)	37.7	
Percent time-spent-following, PTSF _d (%)=BPTSF _d +f _{np,PTSF} *(v _{d,PTSF} / v _{d,PTSF} + V _{o,PTSF})	37.8	
Level of Service and Other Performance Measures		
Level of service, LOS (Exhibit 15-3)	D	
Volume to capacity ratio, v/c	0.10	

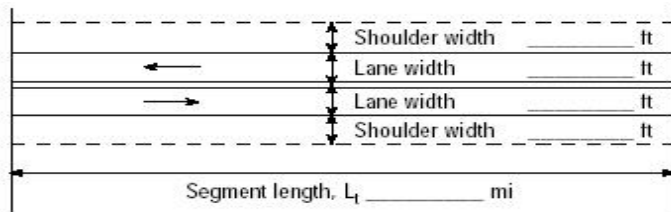
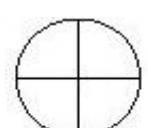
Capacity, $C_{d,ATS}$ (Equation 15-12) veh/h	1700
Capacity, $C_{d,PTSF}$ (Equation 15-13) veh/h	1700
Percent Free-Flow Speed $PFFS_d$ (Equation 15-11 - Class III only)	92.2
Bicycle Level of Service	
Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	170.5
Effective width, W_v (Eq. 15-29) ft	13.75
Effective speed factor, S_t (Eq. 15-30)	4.79
Bicycle level of service score, BLLOS (Eq. 15-31)	7.18
Bicycle level of service (Exhibit 15-4)	F
Notes	
<p>1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.</p> <p>2. If $v_i(v_d \text{ or } v_o) \geq 1,700$ pc/h, terminate analysis--the LOS is F.</p> <p>3. For the analysis direction only and for $v > 200$ veh/h.</p> <p>4. For the analysis direction only</p> <p>5. Exhibit 15-20 provides coefficients a and b for Equation 15-10.</p> <p>6. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.</p>	

DIRECTIONAL TWO-LANE HIGHWAY SEGMENT WORKSHEET		
General Information		Site Information
Analyst	Stantec	Highway / Direction of Travel US 60
Agency or Company		From/To
Date Performed	2/21/2023	Jurisdiction
Analysis Time Period	Peak Hour	Analysis Year 2023
Project Description: Construction		
Input Data		
	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input checked="" type="checkbox"/> Class I highway <input type="checkbox"/> Class II highway <input type="checkbox"/> Class III highway </div> <div style="width: 45%;"> Terrain <input checked="" type="checkbox"/> Level <input type="checkbox"/> Rolling </div> </div> <div style="margin-top: 10px;">  <p>Show North Arrow</p> </div> <div style="margin-top: 10px;"> Grade Length mi Up/down Peak-hour factor, PHF 0.88 No-passing zone 20% % Trucks and Buses, P_T 10 % % Recreational vehicles, P_R 4% Access points mi 6/mi </div>	
Analysis direction vol., V _d	260veh/h	
Opposing direction vol., V _o	260veh/h	
Shoulder width ft	10.0	
Lane Width ft	12.0	
Segment Length mi	2.0	
Average Travel Speed		
	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E _T (Exhibit 15-11 or 15-12)	1.4	1.4
Passenger-car equivalents for RVs, E _R (Exhibit 15-11 or 15-13)	1.0	1.0
Heavy-vehicle adjustment factor, f _{HV,ATS} =1/ (1+ P _T (E _T -1)+P _R (E _R -1))	0.962	0.962
Grade adjustment factor ¹ , f _{g,ATS} (Exhibit 15-9)	1.00	1.00
Demand flow rate ² , v _i (pc/h) v _i =V _i / (PHF* f _{g,ATS} * f _{HV,ATS})	307	307
Free-Flow Speed from Field Measurement	Estimated Free-Flow Speed	
Mean speed of sample ³ , S _{FM}	Base free-flow speed ⁴ , BFFS 55.0 mi/h	
Total demand flow rate, both directions, v	Adj. for lane and shoulder width, ⁴ f _{LS} (Exhibit 15-7) 0.0 mi/h	
Free-flow speed, FFS=S _{FM} +0.00776(v/ f _{HV,ATS})	Adj. for access points ⁴ , f _A (Exhibit 15-8) 10.0 mi/h	
Adj. for no-passing zones, f _{np,ATS} (Exhibit 15-15) 0.9 mi/h	Free-flow speed, FFS (FFS=BFFS-f _{LS} -f _A) 45.0 mi/h	
	Average travel speed, ATS _d =FFS-0.00776(v _{d,ATS} + V _{o,ATS}) - f _{np,ATS} 39.3 mi/h	
	Percent free flow speed, PFFS 87.4 %	
Percent Time-Spent-Following		
	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E _T (Exhibit 15-18 or 15-19)	1.1	1.1
Passenger-car equivalents for RVs, E _R (Exhibit 15-18 or 15-19)	1.0	1.0
Heavy-vehicle adjustment factor, f _{HV} =1/ (1+ P _T (E _T -1)+P _R (E _R -1))	0.990	0.990
Grade adjustment factor ¹ , f _{g,PTSF} (Exhibit 15-16 or Ex 15-17)	1.00	1.00
Directional flow rate ² , v _i (pc/h) v _i =V _i / (PHF* f _{HV,PTSF} * f _{g,PTSF})	298	298
Base percent time-spent-following ⁴ , BPTSF _d (%)=100(1-e ^{-av_d^b})	32.9	
Adj. for no-passing zone, f _{np,PTSF} (Exhibit 15-21)	38.3	
Percent time-spent-following, PTSF _d (%)=BPTSF _d +f _{np,PTSF} *(v _{d,PTSF} / v _{d,PTSF} + V _{o,PTSF})	52.1	
Level of Service and Other Performance Measures		
Level of service, LOS (Exhibit 15-3)	E	
Volume to capacity ratio, v/c	0.17	

Capacity, $C_{d,ATS}$ (Equation 15-12) veh/h	1700
Capacity, $C_{d,PTSF}$ (Equation 15-13) veh/h	1700
Percent Free-Flow Speed $PFFS_d$ (Equation 15-11 - Class III only)	87.4
Bicycle Level of Service	
Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	295.5
Effective width, W_v (Eq. 15-29) ft	32.00
Effective speed factor, S_t (Eq. 15-30)	4.79
Bicycle level of service score, BLOS (Eq. 15-31)	3.29
Bicycle level of service (Exhibit 15-4)	C
Notes	
<p>1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.</p> <p>2. If $v_i(v_d \text{ or } v_o) \geq 1,700$ pc/h, terminate analysis--the LOS is F.</p> <p>3. For the analysis direction only and for $v > 200$ veh/h.</p> <p>4. For the analysis direction only</p> <p>5. Exhibit 15-20 provides coefficients a and b for Equation 15-10.</p> <p>6. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.</p>	

DIRECTIONAL TWO-LANE HIGHWAY SEGMENT WORKSHEET			
General Information		Site Information	
Analyst	Stantec	Highway / Direction of Travel	State Route 992
Agency or Company		From/To	
Date Performed	2/21/2023	Jurisdiction	
Analysis Time Period	Peak Hour	Analysis Year	2023
Project Description: <i>Construction</i>			
Input Data			
		<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  <p>Show North Arrow</p> </div> <div> <input checked="" type="checkbox"/> Class I highway <input type="checkbox"/> Class II highway <input type="checkbox"/> Class III highway Terrain <input checked="" type="checkbox"/> Level <input type="checkbox"/> Rolling Grade Length mi Up/down Peak-hour factor, PHF 0.88 No-passing zone 20% % Trucks and Buses, P_T 10 % % Recreational vehicles, P_R 4% Access points <i>mi</i> 6/mi </div> </div>	
Analysis direction vol., V _d	58veh/h		
Opposing direction vol., V _o	58veh/h		
Shoulder width ft	0.0		
Lane Width ft	11.0		
Segment Length mi	2.0		
Average Travel Speed			
	Analysis Direction (d)	Opposing Direction (o)	
Passenger-car equivalents for trucks, E _T (Exhibit 15-11 or 15-12)	1.9	1.9	
Passenger-car equivalents for RVs, E _R (Exhibit 15-11 or 15-13)	1.0	1.0	
Heavy-vehicle adjustment factor, f _{HV,ATS} =1/ (1+ P _T (E _T -1)+P _R (E _R -1))	0.917	0.917	
Grade adjustment factor ¹ , f _{g,ATS} (Exhibit 15-9)	1.00	1.00	
Demand flow rate ² , v _i (pc/h) v _i =V _i / (PHF* f _{g,ATS} * f _{HV,ATS})	72	72	
Free-Flow Speed from Field Measurement		Estimated Free-Flow Speed	
Mean speed of sample ³ , S _{FM}		Base free-flow speed ⁴ , BFFS	55.0 mi/h
Total demand flow rate, both directions, v		Adj. for lane and shoulder width, ⁴ f _{LS} (Exhibit 15-7)	4.7 mi/h
Free-flow speed, FFS=S _{FM} +0.00776(v/ f _{HV,ATS})		Adj. for access points ⁴ , f _A (Exhibit 15-8)	1.5 mi/h
Adj. for no-passing zones, f _{np,ATS} (Exhibit 15-15)	0.2 mi/h	Free-flow speed, FFS (FFS=BFFS-f _{LS} -f _A)	48.8 mi/h
		Average travel speed, ATS _d =FFS-0.00776(v _{d,ATS} + V _{o,ATS}) - f _{np,ATS}	47.5 mi/h
		Percent free flow speed, PFFS	97.3 %
Percent Time-Spent-Following			
	Analysis Direction (d)	Opposing Direction (o)	
Passenger-car equivalents for trucks, E _T (Exhibit 15-18 or 15-19)	1.1	1.1	
Passenger-car equivalents for RVs, E _R (Exhibit 15-18 or 15-19)	1.0	1.0	
Heavy-vehicle adjustment factor, f _{HV} =1/ (1+ P _T (E _T -1)+P _R (E _R -1))	0.990	0.990	
Grade adjustment factor ¹ , f _{g,PTSF} (Exhibit 15-16 or Ex 15-17)	1.00	1.00	
Directional flow rate ² , v _i (pc/h) v _i =V _i / (PHF* f _{HV,PTSF} * f _{g,PTSF})	67	67	
Base percent time-spent-following ⁴ , BPTSF _d (%)=100(1-e ^{-av_d^b})			8.0
Adj. for no-passing zone, f _{np,PTSF} (Exhibit 15-21)			29.2
Percent time-spent-following, PTSF _d (%)=BPTSF _d +f _{np,PTSF} *(v _{d,PTSF} / v _{d,PTSF} + V _{o,PTSF})			22.6
Level of Service and Other Performance Measures			
Level of service, LOS (Exhibit 15-3)			C
Volume to capacity ratio, v/c			0.04

Capacity, $C_{d,ATS}$ (Equation 15-12) veh/h	1700
Capacity, $C_{d,PTSF}$ (Equation 15-13) veh/h	1700
Percent Free-Flow Speed $PFFS_d$ (Equation 15-11 - Class III only)	97.3
Bicycle Level of Service	
Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	65.9
Effective width, Wv (Eq. 15-29) ft	18.81
Effective speed factor, S_t (Eq. 15-30)	4.79
Bicycle level of service score, $BLoS$ (Eq. 15-31)	5.88
Bicycle level of service (Exhibit 15-4)	F
Notes	
<p>1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.</p> <p>2. If $v_i(v_d \text{ or } v_o) \geq 1,700$ pc/h, terminate analysis--the LOS is F.</p> <p>3. For the analysis direction only and for $v > 200$ veh/h.</p> <p>4. For the analysis direction only</p> <p>5. Exhibit 15-20 provides coefficients a and b for Equation 15-10.</p> <p>6. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.</p>	

DIRECTIONAL TWO-LANE HIGHWAY SEGMENT WORKSHEET			
General Information		Site Information	
Analyst	Stantec	Highway / Direction of Travel	State Route 261
Agency or Company		From/To	
Date Performed	2/21/2023	Jurisdiction	
Analysis Time Period	Peak Hour	Analysis Year	2023
Project Description:			
Input Data			
		<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  <p>Show North Arrow</p> </div> <div> <input checked="" type="checkbox"/> Class I highway <input type="checkbox"/> Class II highway <input type="checkbox"/> Class III highway Terrain <input checked="" type="checkbox"/> Level <input type="checkbox"/> Rolling Grade Length mi Up/down Peak-hour factor, PHF 0.88 No-passing zone 20% % Trucks and Buses, P_T 10 % % Recreational vehicles, P_R 4% Access points mi 8/mi </div> </div>	
Analysis direction vol., V _d	188veh/h		
Opposing direction vol., V _o	188veh/h		
Shoulder width ft	1.0		
Lane Width ft	10.0		
Segment Length mi	2.0		
Average Travel Speed			
	Analysis Direction (d)	Opposing Direction (o)	
Passenger-car equivalents for trucks, E _T (Exhibit 15-11 or 15-12)	1.5	1.5	
Passenger-car equivalents for RVs, E _R (Exhibit 15-11 or 15-13)	1.0	1.0	
Heavy-vehicle adjustment factor, f _{HV,ATS} =1/ (1+ P _T (E _T -1)+P _R (E _R -1))	0.952	0.952	
Grade adjustment factor ¹ , f _{g,ATS} (Exhibit 15-9)	1.00	1.00	
Demand flow rate ² , v _i (pc/h) v _i =V _i / (PHF* f _{g,ATS} * f _{HV,ATS})	224	224	
Free-Flow Speed from Field Measurement		Estimated Free-Flow Speed	
Mean speed of sample ³ , S _{FM}		Base free-flow speed ⁴ , BFFS	55.0 mi/h
Total demand flow rate, both directions, v		Adj. for lane and shoulder width, ⁴ f _{LS} (Exhibit 15-7)	5.3 mi/h
Free-flow speed, FFS=S _{FM} +0.00776(v/ f _{HV,ATS})		Adj. for access points ⁴ , f _A (Exhibit 15-8)	2.0 mi/h
Adj. for no-passing zones, f _{np,ATS} (Exhibit 15-15)	1.1 mi/h	Free-flow speed, FFS (FFS=BFFS-f _{LS} -f _A)	47.7 mi/h
		Average travel speed, ATS _d =FFS-0.00776(v _{d,ATS} + V _{o,ATS}) - f _{np,ATS}	43.2 mi/h
		Percent free flow speed, PFFS	90.5 %
Percent Time-Spent-Following			
	Analysis Direction (d)	Opposing Direction (o)	
Passenger-car equivalents for trucks, E _T (Exhibit 15-18 or 15-19)	1.1	1.1	
Passenger-car equivalents for RVs, E _R (Exhibit 15-18 or 15-19)	1.0	1.0	
Heavy-vehicle adjustment factor, f _{HV} =1/ (1+ P _T (E _T -1)+P _R (E _R -1))	0.990	0.990	
Grade adjustment factor ¹ , f _{g,PTSF} (Exhibit 15-16 or Ex 15-17)	1.00	1.00	
Directional flow rate ² , v _i (pc/h) v _i =V _i / (PHF* f _{HV,PTSF} * f _{g,PTSF})	216	216	
Base percent time-spent-following ⁴ , BPTSF _d (%)=100(1-e ^{-av_d^b})		24.0	
Adj. for no-passing zone, f _{np,PTSF} (Exhibit 15-21)		40.6	
Percent time-spent-following, PTSF _d (%)=BPTSF _d +f _{np,PTSF} *(v _{d,PTSF} / v _{d,PTSF} + V _{o,PTSF})		44.3	
Level of Service and Other Performance Measures			
Level of service, LOS (Exhibit 15-3)	D		
Volume to capacity ratio, v/c	0.13		

Capacity, $C_{d,ATS}$ (Equation 15-12) veh/h	1700
Capacity, $C_{d,PTSF}$ (Equation 15-13) veh/h	1700
Percent Free-Flow Speed $PFFS_d$ (Equation 15-11 - Class III only)	90.5
Bicycle Level of Service	
Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	213.6
Effective width, Wv (Eq. 15-29) ft	11.00
Effective speed factor, S_t (Eq. 15-30)	4.79
Bicycle level of service score, BLLOS (Eq. 15-31)	7.64
Bicycle level of service (Exhibit 15-4)	F
Notes	
<p>1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.</p> <p>2. If $v_i(v_d \text{ or } v_o) \geq 1,700$ pc/h, terminate analysis--the LOS is F.</p> <p>3. For the analysis direction only and for $v > 200$ veh/h.</p> <p>4. For the analysis direction only</p> <p>5. Exhibit 15-20 provides coefficients a and b for Equation 15-10.</p> <p>6. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.</p>	