GLARE STUDY

SV CSG Welter Road Solar LLC

Kane County, Illinois

March 20, 2026

PREPARED FOR:

SUNVEST SOLAR LLC

PREPARED BY:

Westwood

Westwood

Glare Study

SV CSG Welter Road Solar LLC

Kane County, Illinois

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Project Number: R0078301.00
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Executive Summary

Westwood Professional Services, Inc., (Westwood) completed this glare study using ForgeSolar's GlareGauge software to analyze potential glare hazard for the proposed SV CSG Welter Road Solar LLC (Project) located in Kane County, Illinois as shown on the maps (**Exhibits 1 and 2**).

Glare was modeled for the proposed photo-voltaic (PV) solar Project using the engineered design parameters provided by the project sponsor. The proposed Project will use an average array height of 4-feet measured when the array is horizontal. Glare was modeled with a zero-degree rest angle (0-DRA) and a 52-DRA. A 52-DRA is the proposed rest angle for this Project. A 0-DRA was modeled to compare and contrast glare against the proposed rest angle.

Receptor points were modeled within approximately 1,000 feet of the Project. Four residences were modeled for glare at two heights, resulting in 8 observation points. An observer's eye height of 5-feet above ground and 15-feet above ground were used to simulate a person's eye level on a first and second level at each residence.

Two roads were modeled for glare at two heights, resulting in 4 route segments. For passenger vehicles a 3.5-foot driver's eye height was used and for commercial trucks a 7.75-foot driver's eye height was used.

No airports were modeled for glare for this study.

TABLE 1: SUMMARY OF RECEPTORS RECEIVING GLARE FOR THE PROPOSED ARRAY(S)

Welter Road Solar Glare Analysis Grand Summary						
Number of Components with Glare	Red Glare		Yellow Glare		Green Glare	
	4-ft		4-ft		4-ft	
	0-DRA	52-DRA	0-DRA	52-DRA	0-DRA	52-DRA
Observation Points (OPs)	-	-	1	-	5	-
Routes	-	-	-	-	2	-

When a 0-DRA is modeled, results predict yellow glare at 1 observation point (OP) and green glare is predicted at 5 OPs and 2 routes.

When a 52-DRA is modeled, no glare is predicted (**Appendix B & C**).

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1.0 Introduction and Purpose

The purpose of this glare study is for due diligence reporting of modeled qualitative and quantitative glare impacts to identified receptors adjacent and proximal to the proposed SV CSG Welter Road Solar LLC (Project). SV CSG Welter Road Solar LLC (Client) contracted Westwood Professional Services, Inc. (Westwood) to report potential glare associated with the Project.

This study provides answers to the following questions:

1. Will glare from the photovoltaic (PV) modules be visible to residents, or airport flight paths near the Project?
2. Will glare from the PV modules be visible to routes near the Project?
3. If glare is visible, what is its duration and hazard category?

A discussion on the impact of glare from solar modules is in **Appendix A.** Study results are summarized in Section 4 and **Appendix B,** and detailed data are presented in **Appendix C.**

2.0 Glare Study Methodology

2.1 Summary

This analysis modeled glare for a 4-foot array structure height measured when the array has a 0-DRA and a 52-DRA (also referred to as stow angles). The glare values of minutes per year are calculated using line of sight elevations and do not account for existing vegetation or structures that would reduce the visibility of glare from arrays by physical screening.

For glare modeling, the array layout is shown in **Exhibit 2**. To model the potential intensity and time of Project-related glare to receptors, Westwood used ForgeSolar's GlareGauge software, a web-based tool that models when and where glare could occur throughout a typical year from a modeled PV array as viewed from specified observer locations. GlareGauge software uses an interactive web map interface with user-specified parameters such as orientation and tilt of the modules to calculate the occurrence, intensity, and size of the potential glare throughout the year.

Observation points (OPs) were assessed for glare in this study. The receptors modeled for glare are simulated human eyes at single, stationary OPs. The OPs are derived from residences located near the arrays; each residence was assessed for glare at two heights, 5-feet, and 15-feet above ground level (AGL). Road segments, when assessed for glare for passenger vehicles, use an assumed eye height of 3.5-feet, and for commercial trucks 7.75-feet following U.S. Department of Transportation, Federal Highway Administration (FHWA) standards.

No airports were evaluated for this project. However, when evaluating airports, two-mile flight paths are incorporated for each runway representing a 3% glide slope approach per ForgeSolar standards. Flight paths are used to evaluate potential glare impacts on pilots from the final approach fix to the touchdown zone.

Receptors near the array were modeled for glare are shown below (**Table 2**).

TABLE 2: RECEPTORS MODELED FOR GLARE

Number of Components in Glare Study	
Observation Points (OPs)	8
Routes	2
Flight Paths*	0

*Airport flight paths were not modeled for this study. The Federal Aviation Administration (FAA) has reduced the glare study requirements in the 2021 final policy. It now requires glare study only for a solar project located on a federally obligated airport with an air traffic control tower.

2.2 Green, Yellow, and Red Glare Definitions

The analysis presented in this study was prepared with the ForgeSolar GlareGauge software which uses the Solar Glare Hazard Analysis Tool (SGHAT). This technology was developed by Sandia National Laboratories and is compatible with 2021 FAA glare guidelines. The SGHAT tool estimates when and where reflected solar glare could occur in one-minute intervals throughout the year from a modeled PV array.

If glare is predicted, the GlareGauge program categorizes the glare hazard of PV arrays for the identified receptors modeled in the analysis. Ocular hazards are separated into categories of severity from a *low potential to cause temporary after-image* to *retinal burn*.

GlareGauge produces a three-stage, color coded display of the potential for glare to result in an ocular impact.

- Green glare: low potential to cause temporary after-image.
    - Exposure is the least intense of the glare categories.
- Yellow glare: potential to cause temporary after-image.
    - Example: is experienced when seeing a camera flash in the eye. Following the flash, the observer typically blinks, and the bright light temporarily appears visible.
- Red glare: the most intense, can result in retinal burn.
    - PV modules do not focus or concentrate reflected sunlight and therefore do not produce red glare (retinal burn).

3.0 Project Location and Description

The Project Area is located in Virgil Township, Kane County, Illinois on agricultural row crop land (**Exhibits 1-3**). PV modules will be attached to single axis solar trackers with electrical inverters and associated racking, foundations, collection lines, and access roads.

The PV modules will be stacked in a one or two module height (Mh) configuration in a portrait orientation on a single axis tracker system. The stacked modules will be configured in tracker rows of PV modules and arranged in a series of variable rectangular units (arrays) (**Figure *1***).

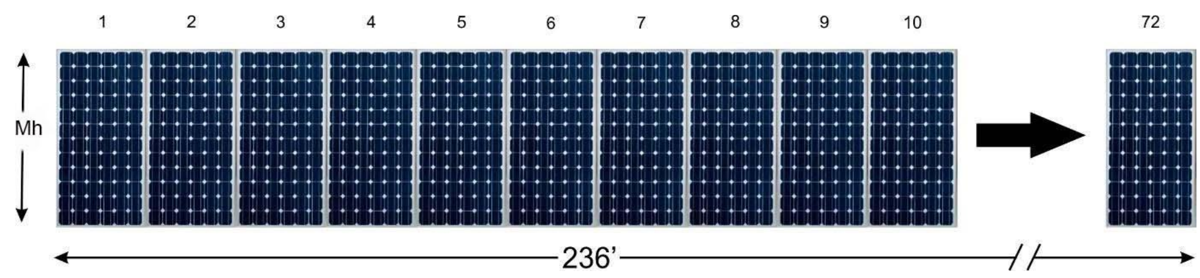


Figure 1: Diagram of Proposed Racking System Configuration 1Mh

Rows of PV modules will be constructed along a north-south orientated axis. Trackers will rotate each row of modules daily east to west following the sun as shown in **Figure 2** and **Figure 3**.

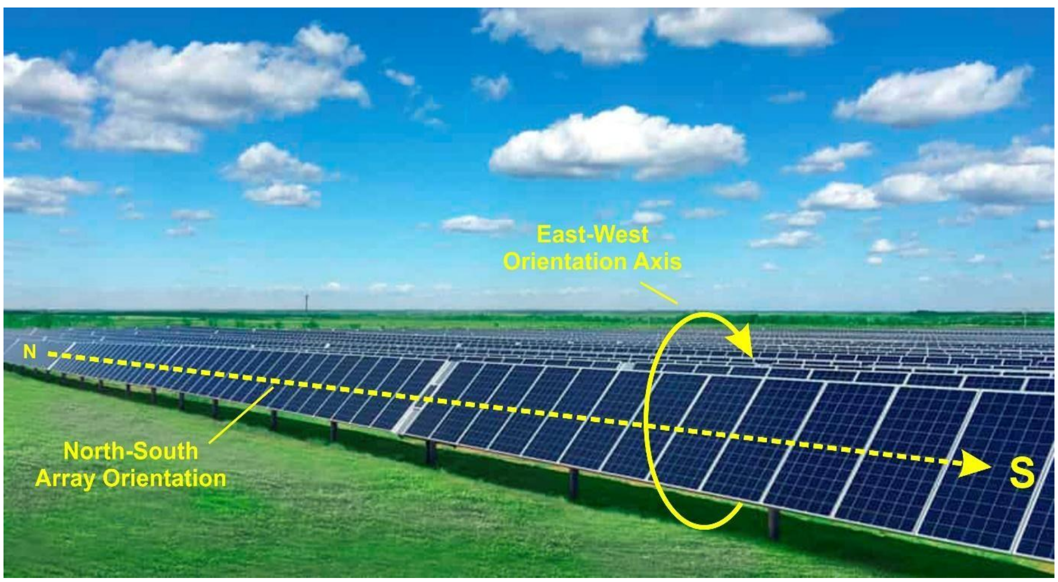


Figure 2: Example of Typical Tracker Array Rotation and Orientation

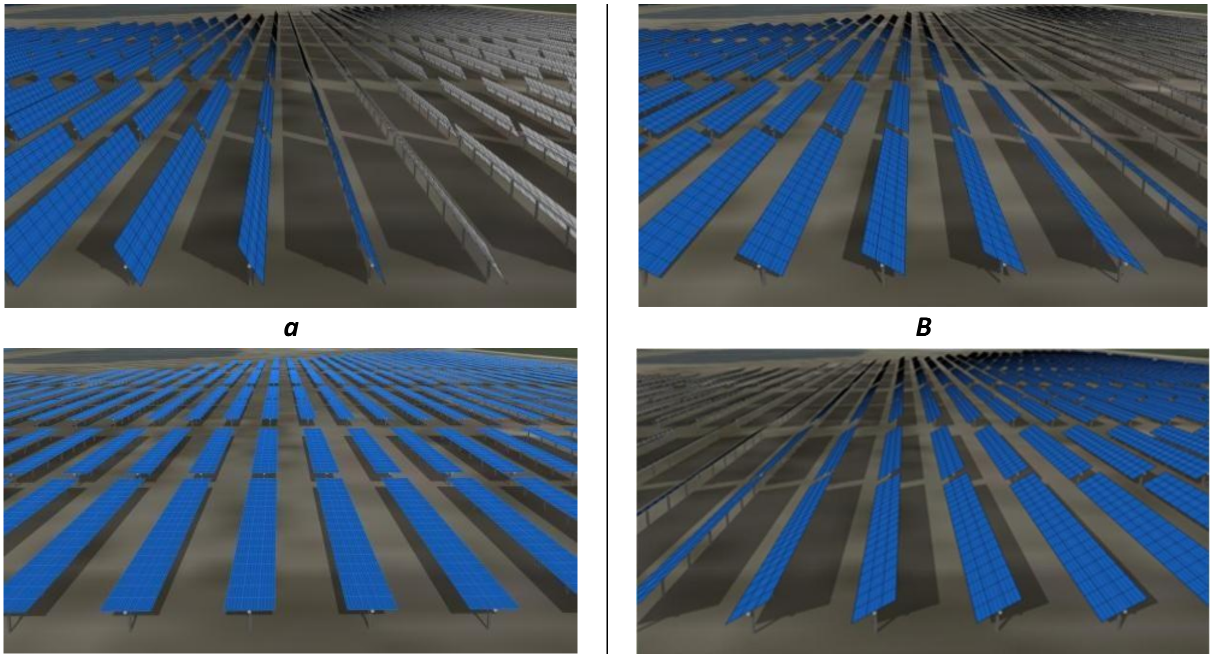


Figure 3: Example of Shadows from a PV Tracker System Configuration at (a) 9:00 AM, (b) 10:00 AM, (c) 12:00 PM, and (d) 2:00 PM on December 21st, the Winter Solstice in the Northern Hemisphere

The dimensions and specifications of the preferred modeled single axis tracking system elevation used in this study are shown in **Figure *4*.**

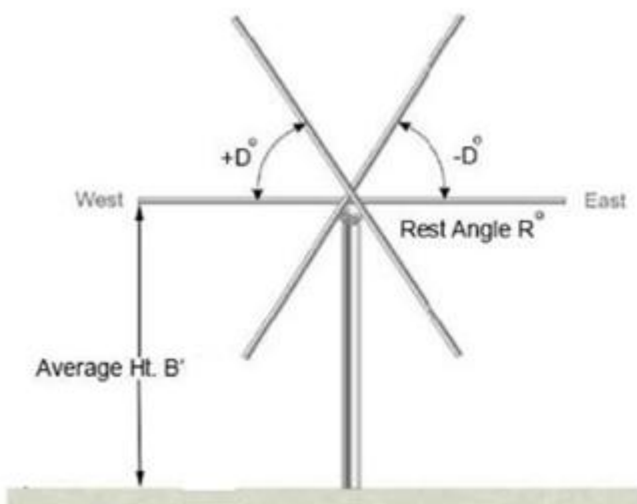


Figure 4: Project Proposed Modeled 1-Axis Tracking System Configuration Elevation View B=4'; D=52° to -52°; R=0° & 52°

3.1 Modeled Observation Points at Residences and Sensitive Facilities

Four residences were modeled for glare were each modeled at receptor eye heights with two elevations making 8 OPs, one each at 5-feet, and 15-feet to simulate a person assumed first and second level (**Table 3**). Each OP is mapped in **Exhibit 2.**

TABLE 3: LOCATIONS OF MODELED OPS

OP #	Latitude (deg)	Longitude (deg)	Elevation	Height Above Ground	Total Elevation
100	41.937742	-88.492209	887.1361	5	892.1361
101	41.937742	-88.492209	887.1361	15	902.1361
102	41.935529	-88.491692	881.2419	5	886.2419
103	41.935529	-88.491692	881.2419	15	896.2419
104	41.936868	-88.49029	886.5192	5	891.5192
105	41.936868	-88.49029	886.5192	15	901.5192
106	41.934073	-88.488236	886.866	5	891.866
107	41.934073	-88.488236	886.866	15	901.866

3.2 Modeled Routes

One route segment was modeled for glare at two heights, a passenger vehicle driver's eye height of 3.5-feet and a commercial truck driver's eye height of 7.75-feet (**Table 4**). Routes are mapped in **Exhibit 2.**

TABLE 4: LOCATION OF ROUTES MODELED

Welter Rd - Car Height	Latitude (deg)	Longitude (deg)	Elevation	Height Above Ground	Total Elevation
10001	41.939288	-88.49454	879.8	3.5	883.3
10002	41.937367	-88.48899	890.3	3.5	893.8

Welter Rd - Truck Height					
10001	41.939288	-88.49454	879.8	7.75	887.5
10002	41.937367	-88.48899	890.3	7.75	898.1

3.3 Modeled Flight Paths

No airports or flight paths were modeled for glare for this glare study.

TABLE 5: LOCATION OF FLIGHT PATHS MODELED

No Airports, Air Traffic Control Towers or Flight Paths Were Modeled

4.0 Summary Of Glare Results

The summary in **Table 1** reports the number of OPs and Routes receiving the three categories of glare: **red glare** (*potential for permanent eye damage* [retinal burn]), **yellow glare** (*potential to cause temporary after-image),* and **green glare** (*low potential to cause temporary after-image*).

This Project will use PV modules which do not focus reflected sunlight and thereby do not produce red glare. The PV modules being considered for this Project are manufactured to absorb as much light as possible rather than reflecting light thereby reducing yellow and green glare. This Project will use a single axis tracker to follow the sun, which also produces less glare and provides more options to mitigate glare when it occurs than a fixed mount solar project does.

Of the 4 residences modeled for glare at 2 heights (8 OPs) using 0-DRA, 1 OP receive predicted yellow glare and 5 green glare. Both the car and truck receptor height route receptors modeled receive green glare using 0-DRA.

Airports, air traffic control towers, and flight paths were not modeled (**Table 6**).

TABLE 6: PREDICTED GLARE MODELED WITH 0-DRA

OPs With Most Green Glare at 4-ft + 0-DRA			
OP	**Sub-Array**	**Backtracking**	**Maximum Minutes per Year**
OP 105	A01	Instant	2129
OP 103	A01	Instant	1318
OP 103	A01	Shade	462
OP 107	A01	Instant	389
OP 106	A01	Instant	369
OP 105	A01	Shade	242
OP 102	A01	Instant	229
OP 102	A01	Shade	31
OP 107	A01	Shade	18

Routes With Most Green Glare at 4-ft + 0-DRA			
Route	**Sub-Array**	**Backtracking**	**Maximum Minutes per Year**
Welter Rd - Truck Height	A01	Instant	51
Welter Rd - Car Height	A01	Instant	21

OPs With Most Yellow Glare at 4-ft + 0-DRA			
OP	**Sub-Array**	**Backtracking**	**Maximum Minutes per Year**
OP 103	A01	Instant	2385
OP 103	A01	Shade	53

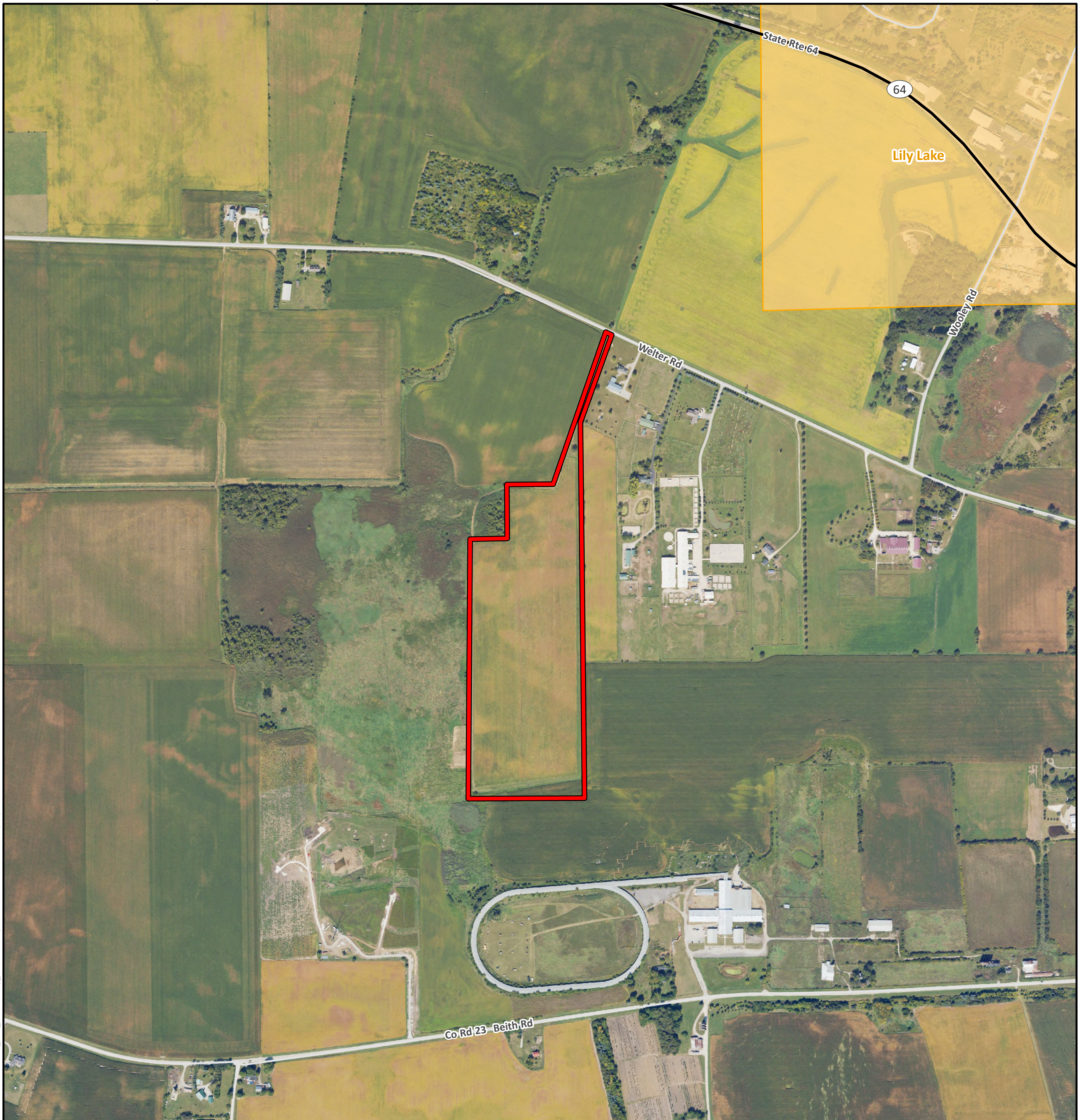
Flight Paths With Most Glare at 0-DRA
Flight Paths Were Not Modeled for Glare

No glare was predicted to the modeled residences or routes using a 52-DRA (**Table 7**).

TABLE 7: PREDICTED GLARE MODELED WITH 52-DRA

Receptors With Green or Yellow Glare at 4-ft + 52-DRA
No OPs With Glare at 52-DRA
No Routes With Glare at 52-DRA
Flight Paths Were Not Modeled for Glare

Exhibits



Data Source(s): Westwood (2026); Esri WMS World Streets Basemap (Accessed 2026); NAIP (2025); U.S. Census Bureau (2025).

N

0 1,000 Feet

Welter Road Solar Project

Kane County, Illinois

Project Location

Exhibit 1

Westwood

Toll Free (888) 937-5150 westwoodps.com

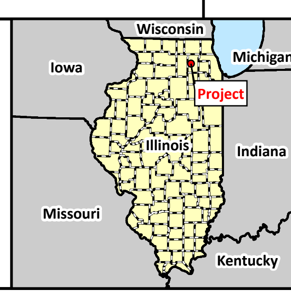
Legend

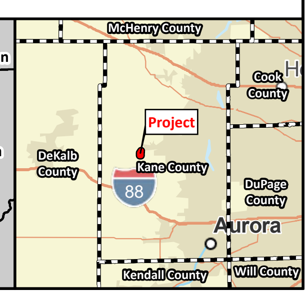
Project Area

Municipal Boundary

Major Road

Road





Data Source(s): Westwood (2026); NAIP (2025); U.S. Census Bureau (2025).

N

0 500 Feet

Welter Road Solar Project

Kane County, Illinois

Glare Study

Exhibit 2

Legend

Array Group

Road

Array Group 1500ft Buffer

Observation Point

Modeled Public Transportation Route

Westwood

Toll Free (888) 937-5150 westwoodps.com

Map Document: N:\0078301.00_GIS_ArcPro\R0078301_040_GlareStudy_20260226\R0078301_040_GlareStudy_20260226.aprx 3/9/2026 8:54 AM BPryzby

Appendix A

Impact of Glare from Solar Panels

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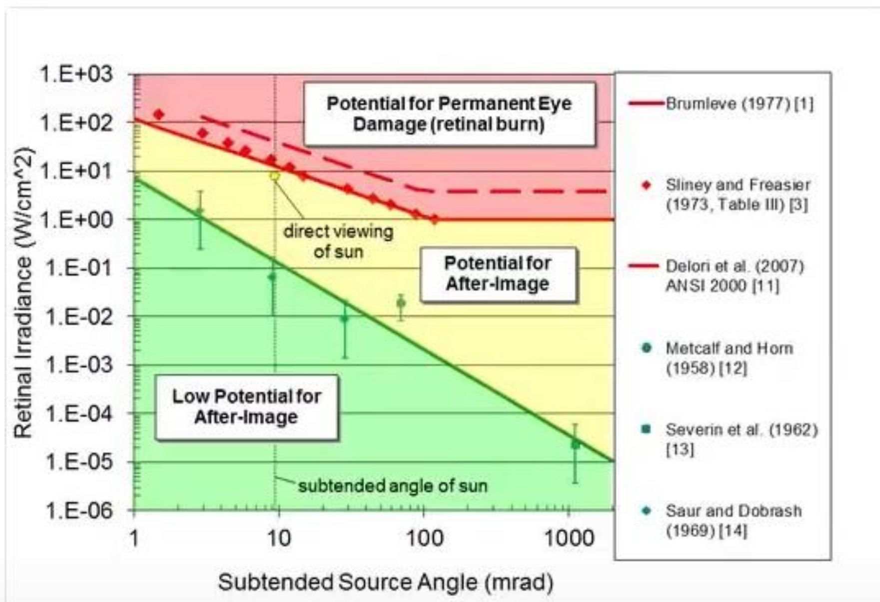
Figures

1.0 Impact of Glare from Solar Modules

1.1 The Ocular Impact of Solar Glare

The ocular impact of glare is visualized with the Glare Hazard Plot (**Figure 1**). This chart displays the ocular impact as a function of glare subtended source angle and retinal irradiance. Each minute of glare is displayed on the chart as a small circle in its respective hazard zone. For convenience, a reference point is provided which illustrates the hazard from direct viewing of the sun. Each plot includes predicted glare for one PV array and one receptor.



Sample glare hazard plot defining ocular impact as function of retinal irradiance and subtended source angle (Ho, 2011)

Figure 1: The Ocular Impact of Solar Glare Quantified Into Three Categories. Source: (Ho, 2011)

1.2 General Discussion of Reflection

With increasing numbers of solar energy facilities being proposed and installed throughout the United States, the potential impact of sunlight reflection (the return of light from a solar module surface) producing glint (momentary flash of reflected sunlight) and glare (long duration of reflected sunlight) from PV modules is receiving increased attention as a potential nuisance to neighboring residential properties or as potential hazards or distractions for vehicle drivers.

A common misconception about PV modules is that they inherently cause or create problematic amounts of glare which poses a nuisance to neighbors. In certain situations, the glass surfaces of PV modules can produce glare, however, light absorption rather than reflection is central to the function of a PV module. PV modules absorb solar radiation that is converted to electricity. PV modules are constructed from high-transmission, low-iron glass and are covered with an antireflective (AR) coating. Modern PV modules reflect as little as two percent of incoming sunlight, about the same as water and less than soil or even wood shingles (Ho C. K., 2019).

1.3 Reflection Type from Solar Modules

Smooth surfaces such as glass and still water exhibit specular reflection. Specular reflection is propagated when light hits a surface at an angle and is reflected in another, like a mirror. In contrast, diffuse reflection occurs when light reflects off rough surfaces and scatters. Diffuse reflection is what happens when light hits virtually everything in our field of vision. The difference between the two types of reflections is illustrated in **Figure 2**. Since PV modules are flat and have a relatively smooth surface, most of the light reflected is specular, meaning that incident light from a specific direction is reradiated in a different direction.

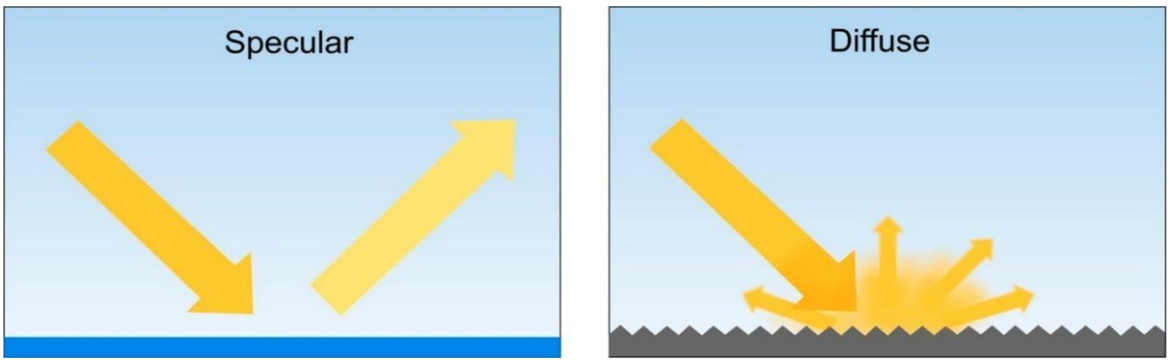


Figure 2: Specular and Diffuse Reflections

When sunlight is reflected on a smooth surface, it can result in glare for those who are on the receiving angle. In both cases, the light reflected is diminished by having first hit the substrate that reflected it–unless that surface is a perfect mirror. When the sun is the original source of the light reflected off a reflective surface, the time and position at which glare might occur depends on the original position of the sun in the sky, the angle of the reflective surface, and its relation to the location of the viewer.

1.4 Relative Reflectance of Modules Compared to Other Surfaces

PV modules are designed to absorb light. They reflect only a small amount of the sunlight that falls on them. Most notably, PV modules reflect significantly less light than flat water like lakes and ponds, or standard window glass. To increase PV module efficiency and power output, most PV modules are treated with an AR coating. Standard low-iron glass reflects approximately eight percent of light, whereas high-transmission, low-iron AR glass modules reflect a total of approximately two to three percent of the light (**Figure 3**).

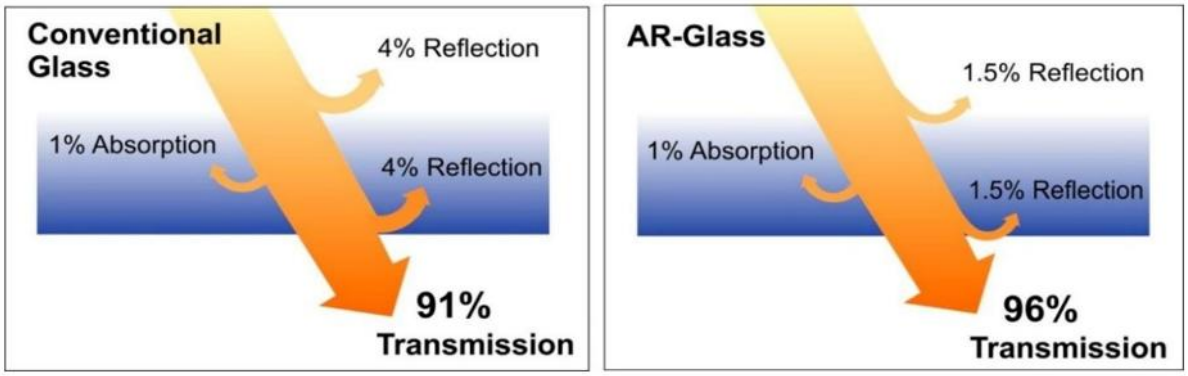


Figure 3: Light Transmission of Glass

Studies measuring the intensity of reflections from PV modules, with respect to other naturally occurring and manmade surfaces, have been conducted. The results of the studies show that reflections of the sun from PV modules are possible. However, the reflections produced will be of an intensity like or less than those produced from still water and significantly less than reflections from glass and steel. The reflectivity of solar modules relative to other natural or manmade surfaces are provided in **Figures 4 and 5**.

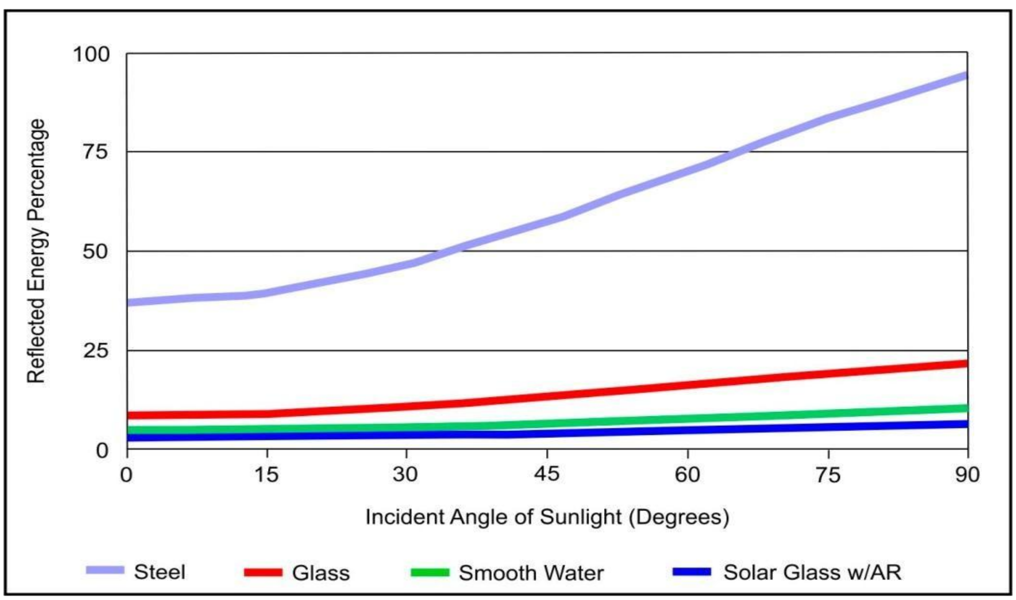


Figure 4: Analysis of Typical Material Reflectivity with Sunlight Angle.
Source: (Capital Solar Farm, 2010)

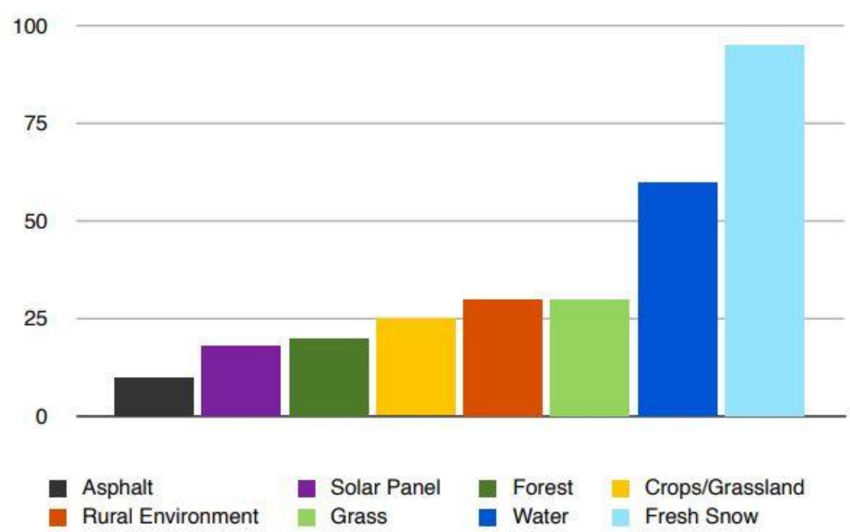


Figure 5: Albedo for Various Common Surfaces.
Source: ***(Capital Solar Farm, 2010)***

One measure of reflectivity is albedo, the ratio of solar radiation across the visible and invisible light spectrum reflected by a surface. Albedo values vary between zero, a surface that reflects no light, and one, a mirror-like surface that reflects all incoming light. PV modules with a single AR coating have a reflectivity of between 0.03 and 0.18. Common sand has an albedo between 0.15 and 0.45 and agricultural vegetation has an albedo between 0.18 and 0.25. This diffuse reflectivity measure is consistent with the intent of PV modules to absorb most of solar energy it is exposed to for conversion into electricity.

1.5 Overview of Sun Movements and Relative Reflections

The basic concept to understand in any discussion of glare elevation is that the angle of incidence is always equal to the angle of reflectance. The empirical inquiry is then whether the potential observer is within the elevation of reflection given the distance of the observer from the PV module. At any angle of reflectance, as a potential observer is farther and farther away from the PV module, the elevation of the reflected sunlight (i.e., any glare) is more likely to be above the observer and, thus, not seen. In contrast, at a high angle of reflectance, the elevation of reflected sunlight will likely be above the observer-even at short distances.

Given the basic principle of light reflectivity, evaluating the angle of reflectance from a PV module must begin with a determination of the solar elevation (in degrees) relative to the ground. The “solar altitude” or elevation is the angle of the sun in degrees above or below the horizon. As such, the most important consideration when calculating light reflectivity is not the horizon, but the angle at which the PV module is mounted relative to the horizon.

As the angle of the sun in relation to the PV module increases, the angle of reflection will decrease, and the elevation of reflection will increase. The elevation of the sun differs based on multiple factors: the time of day, the season of the year, and the latitude at which the PV module is located.

1.6 Determining the Vector Location of Incident Sunlight

The sun's apparent path across the sky changes slightly every day in known and predictable ways. The location of the subject area on the earth and date are the most important factors affecting this. At any given instant, the sun's position in the sky can be described by a directional vector characterized by an azimuth and an elevation. An azimuth is defined as the angle of the sun's position from due north in a clockwise direction. For example, if the sun rose exactly in the east and set exactly in the west, the azimuth of the sunrise would be 90° from north, and the sunset would occur at 270° from the north. The sun's elevation is defined as the degrees of the sun's orb above the horizon at any instant in time. Other azimuth conventions consider azimuth from north to south along the east half as ranging from 0° to 180°, and along the west half as ranging from 0° to -180°.

Sun path chart diagrams plot the azimuth and elevation of the sun at any instant in time for any location on the earth. A sun path chart for the latitude and longitude of the proposed Project is shown in **Figure 6**. The sun's path for a given date is shown in blue and the time during which the sun is at a specific location in the sky is shown in red. For the location of a given receptor such as a residence, the solar elevation and azimuth where reflections would be received at the receptor can be calculated and plotted on the solar chart. For example, for the hypothetical receptor shown in green, reflected light would only be received when the sun is between approximately 75° and 90° azimuth (from north) and at an elevation between 22° and 40°. From the chart, this would occur between 8 AM and 9 AM between the dates of March 20 to April 20.

Due to minimum elevation changes between OPs and the angle of the sun in relation to the PV arrays, glare will occur at lower elevations during the spring and fall equinox to the west and south of the Project during morning hours, and during the winter solstice in the east during evening hours.

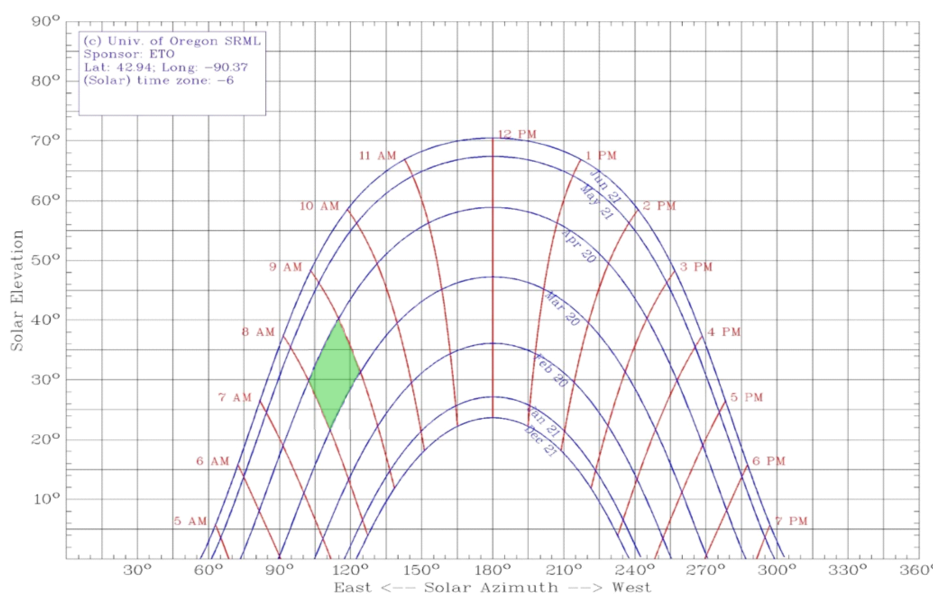
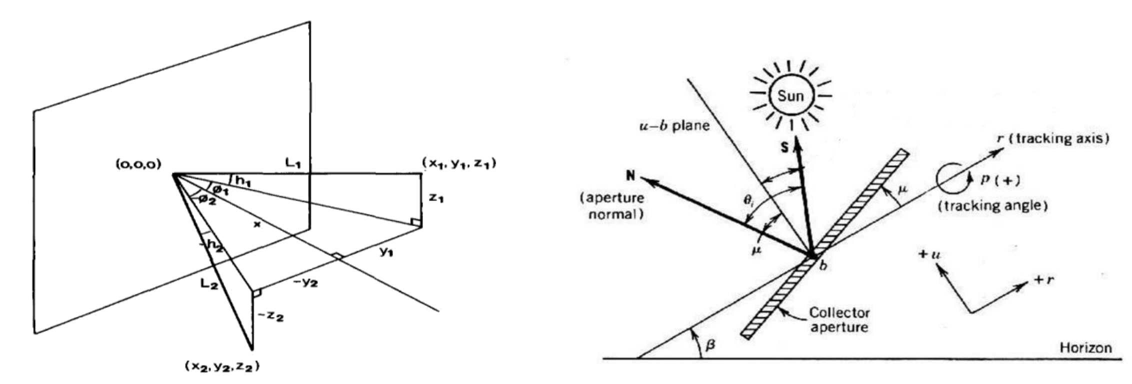


Figure 6: Solar Path Chart Plotting Solar Azimuths

1.7 Sunlight Geometry

The determination and characterization of the geometry of incident and reflected light is a mathematical process that is based on angles and vectors in three-dimensional coordinate systems. Light reflected from a surface is described in **Figure 7a** and **b** and shows that reflected light is symmetrical about the normal of the surface. All methods used to calculate the path of reflected rays assume this symmetric condition.



(a) (b)

Figure 7: (a) Geometry of the Reflection (L2) of an Incident Ray of Sunlight (L1) From a Vertical Reflective Surface. Source: (Lillefair, 1987)
(b) Reflections From a Sloping Reflective 1-Single Axis Tracker Surface. Source: (Stine, 2001)

1.8 Characteristics of PV Module Configuration and Perceived Glare

With respect to assessing the impacts of reflected sunlight associated with PV modules for the proposed Project, the following assumptions apply:

Perceived glare is based on a line of sight from the reflective surface *without accounting for any existing or planned visual screening from vegetation or buildings* (worst case scenario).
The magnitude and duration of glare reflections are related to the height of the observer. An average eye height of 5- and 15-feet were used for observers at a first floor and second floor residence (residential OPs) respectively; for non-residential OPs, an average eye height of 5-feet was used; and an average eye height of 3.5-feet was used for observers in passenger vehicles along evaluated routes. When the height of the observer is less than the module height and the landscape is flat, only one reflecting row of PV modules will be visible at a time.

Stationary receptors that are below the top height of the PV modules will only see glare from those modules when the reflective surfaces are visible from that location. The glare will move as the sun moves until the azimuth and elevation of the sun's rays are such that reflections are no longer received at the stationary receptor.

When the orientation of each row of PV modules is the same, each row will reflect glare at the same angle for the same time increment, given azimuth, and elevation angle of the sun. Thus, if a car with the observer at a height below the highest point of the PV row observes a solar reflection, the same reflection at the same relative location will be observed as the car proceeds parallel to the PV row.

As the height of the stationary receptor rises above the height of the PV row, progressively more of adjacent PV rows' reflective surfaces will be observed. At low heights, most of the PV module area of successive rows are blocked, but as receptor heights increase progressively more of the reflective area of the full array contributes to overall sunlight reflection.

1.9 Definitions of Common Terms Used in Glare Analysis

Eye Level Height Above Ground – User input to modify or correct an observer's (receptor's) elevation above ground.

Glare and Glint – Glare is defined as a harsh bright light. Glare is generally associated with stationary objects, which, due to the slow relative movement of the sun, reflect sunlight for a longer duration. Glint is defined as a momentary flash of light reflected off a moving source. A common example of glint is a flash of light reflected to your eye from a passing car (Forge Solar, 2022).

The difference between glare and glint is duration. Industry-standard glare analysis tools evaluate the occurrence of glare on a minute-by-minute basis; accordingly, they generally refer to solar hazards as 'glare.'

Ground Elevation – Elevation of vertices above sea level. Values are entered into the table once the vertex is located. This is considered the point's base elevation. This value is used to shape the reflective plane used to estimate glare.

Height Above Ground – User input to modify or correct vertex elevation above ground. This is defined as 'PV array installation height above ground.' Since this Project will use a single axis tracker system the height varies.

Latitude and Longitude – The geographic coordinates of the PV array boundary vertices were used to define the area covered by the proposed PV array. **Appendix B** provides the coordinates of the perimeter and their map image which also corresponds to PV arrays. GlareGauge creates a reflective plane using elevation values of the array for the glare assessment.

Maximum Tracking Angle – The maximum angle the module will rotate in both the clockwise and counterclockwise directions from the zenith (upward) position. The maximum rotation limit currently under consideration is approximately ±60°.

Module Surface Material – Types of material and surface finish of a PV module. According to specifications from the module manufacturers, it was determined that the input light textured Glass with an AR coating would be the most representative option.

Offset Angle of Module – The vertical offset angle between the tracking axis and the module. No offset was selected for the single axis tracker.

Observation Points (OPs) – The eye levels of human observers. They have height parameters calculated using GIS software and aerial photographs of the Project. For residences, a five-foot eye height above ground was used for a person in a first-floor residence and a 15-foot height above ground was used for a person's eye level on a second floor. For non-residences, a 5-foot height above ground was used.

Orientation of Tracking Axis – Orientation of the tracking axis in degrees, measured clockwise from true north. In this case the value was determined to be 180°.

Rated Power (kilowatts [kW]) – kW power of solar PV plant. No rated power was selected for the proposed size of the solar arrays because the area of module coverage relating to glare potential is the primary measure for this study.

Reflectivity of PV Module – The near-normal specular reflectance of PV glass (e.g., with AR coating) can be as low as two percent. The reflectance can increase as the incidence angle of the sunlight increases (glancing angles). This number is based in part on the array parameters.

Routes – Segments of public roads modeled for glare. The receptor is a person in a passenger vehicle on the route with a 3.5-foot eye height above ground. This eye-height measurement is based upon U.S. Department of Transportation, Federal Highway Administration guidelines (AASHTO, 2018). These parameter units are in feet (**Appendix B**).

Slope Error – Mirror-like surfaces that produce specular reflections will have a slope error closer to zero, while rough surfaces that produce more scattered (diffuse) reflections have higher slope errors. Based on typical values for the module types under consideration, a value of 8.43 milliradian was used.

Tilt of Tracking Axis – Elevation angle of the tracking axis in degrees, where 0° is facing skyward and 90° is facing horizontally. The modules rotate about the tracking axis. For this report, 0° was selected as the modules will be facing up.

Total Elevation – Calculated by adding '*Ground Elevation*' and '*Height above Ground*.' All units are in feet.

2.0 References

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Appendix B

Glare Summary Pages

Westwood

0-Degree Rest Angle
Summary

Arrays A01 at 4ft with 0 Degree Rest Angle + Instant Backtracking Green Glare Min/Yr		
Component	A01	Maximum Minutes
OP 100	-	0
OP 101	-	0
OP 102	229	229
OP 103	1,318	1318
OP 104	-	0
OP 105	2,129	2129
OP 106	369	369
OP 107	389	389
Welter Rd - Car Height	21	21
Welter Rd - Truck Height	51	51

Arrays A01 at 4ft with 0 Degree Rest Angle + Instant Backtracking Yellow Glare Min/Yr		
Component	A01	Maximum Minutes
OP 100	0	0
OP 101	0	0
OP 102	0	0
OP 103	2385	2385
OP 104	0	0
OP 105	0	0
OP 106	0	0
OP 107	0	0
Welter Rd - Car Height	0	0
Welter Rd - Truck Height	0	0

Westwood

52-Degree Rest Angle

Summary

Arrays A01 at 4ft with 52 Degree Rest Angle + Instant Backtracking Green Glare Min/Yr		
Component	A01	Maximum Minutes
OP 100	0	0
OP 101	0	0
OP 102	0	0
OP 103	0	0
OP 104	0	0
OP 105	0	0
OP 106	0	0
OP 107	0	0
Welter Rd - Car Height	0	0
Welter Rd - Truck Height	0	0

Arrays A01 at 4ft with 52 Degree Rest Angle + Instant Backtracking Yellow Glare Min/Yr		
Component	A01	Maximum Minutes
OP 100	0	0
OP 101	0	0
OP 102	0	0
OP 103	0	0
OP 104	0	0
OP 105	0	0
OP 106	0	0
OP 107	0	0
Welter Rd - Car Height	0	0
Welter Rd - Truck Height	0	0

Westwood

Appendix C
Glare Detail Data

0-Degree Rest Angle

Details

ForgeSolar

Welter Road

WR_A01_Instant_4fA__0DRA_SGARC

Created Mar 04, 2026
Updated Mar 09, 2026
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 172370.28624

Project type Advanced
Project status: active
Category 500 kW to 1 MW

Misc. Analysis Settings

DNI: **varies (1,000.0 W/m^2 peak)**
Ocular transmission coefficient: **0.5**
Pupil diameter: **0.002 m**
Eye focal length: **0.017 m**
Sun subtended angle: **9.3 mrad**

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

ForgeSolar Radiometric Physics Engine 3.1.0

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
A01	SA tracking	SA tracking	4,506	2,385	-

Component Data

PV Array(s)

Total PV footprint area: 8.4 acres

Name: A01
Footprint area: 8.4 acres
Axis tracking: Single-axis rotation
Backtracking: Instant
Tracking axis orientation: 180.0 deg
Tracking axis tilt: 0.0 deg
Tracking axis panel offset: 0.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 0.0 deg

Rated power: -
Panel material: Smooth glass with AR coating

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	41.935171	-88.495024	867.54	4.00	871.54
2	41.935174	-88.493655	877.89	4.00	881.89
3	41.933080	-88.493648	876.52	4.00	880.52
4	41.933076	-88.495822	871.77	4.00	875.77
5	41.934080	-88.495825	866.24	4.00	870.24
6	41.934081	-88.495021	869.82	4.00	873.82

Route Receptor(s)

Name: Welter Rd - Car Height
Route type Two-way
Azimuthal view angle: 50.0 deg
Downward view angle: 90.0 deg

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	41.939288	-88.494540	879.76	3.50	883.26
2	41.937367	-88.488990	890.31	3.50	893.81

Name: Welter Rd - Truck Height
Route type Two-way
Azimuthal view angle: 50.0 deg
Downward view angle: 90.0 deg

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	41.939288	-88.494540	879.76	7.75	887.51
2	41.937367	-88.488990	890.31	7.75	898.06

Discrete Observation Receptors

Number	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total Elevation ft
OP 100	41.937742	-88.492209	887.14	5.00	892.14
OP 101	41.937742	-88.492209	887.14	15.00	902.14
OP 102	41.935529	-88.491692	881.24	5.00	886.24
OP 103	41.935529	-88.491692	881.24	15.00	896.24
OP 104	41.936868	-88.490290	886.52	5.00	891.52
OP 105	41.936868	-88.490290	886.52	15.00	901.52
OP 106	41.934073	-88.488236	886.87	5.00	891.87
OP 107	41.934073	-88.488236	886.87	15.00	901.87

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	
A01	SA tracking	SA tracking	4,506	2,385	-	

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
a01 (green)	186	232	351	92	0	0	0	59	170	378	209	183
a01 (yellow)	546	407	47	0	0	0	0	0	0	325	496	564

PV & Receptor Analysis Results

Results for each PV array and receptor

A01 potential temporary after-image

Component	Green glare (min)	Yellow glare (min)
OP: OP 100	0	0
OP: OP 101	0	0
OP: OP 102	229	0
OP: OP 103	1318	2385
OP: OP 104	0	0
OP: OP 105	2129	0
OP: OP 106	369	0
OP: OP 107	389	0
Route: Welter Rd - Car Height	21	0
Route: Welter Rd - Truck Height	51	0

A01: OP 100

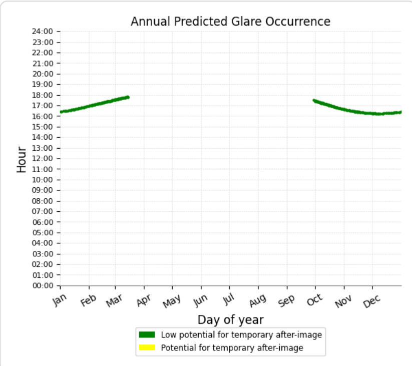
No glare found

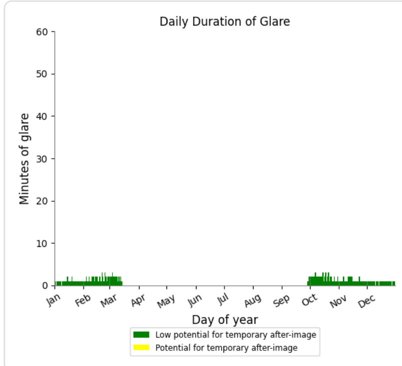
A01: OP 101

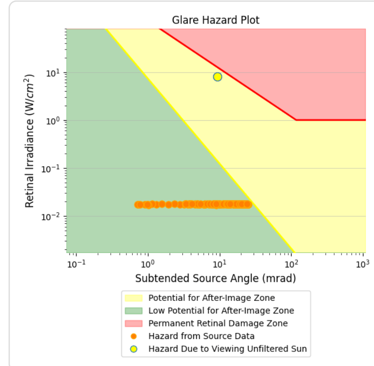
No glare found

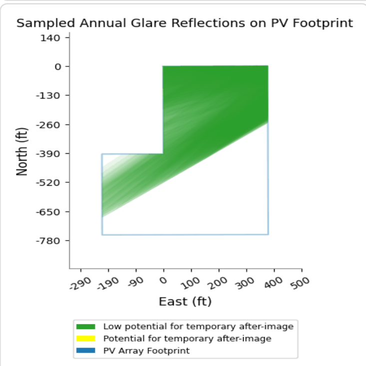
A01: OP 102

PV array is expected to produce the following glare for this receptor:
- 229 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



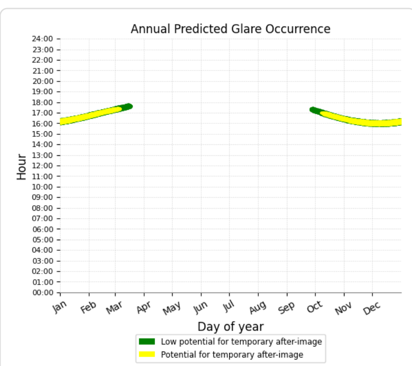


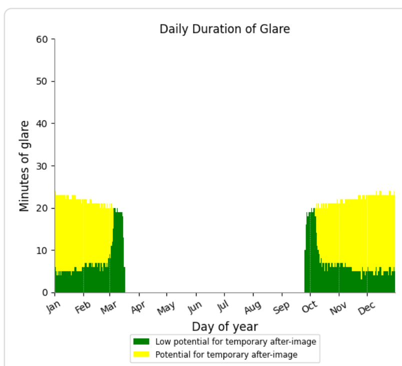


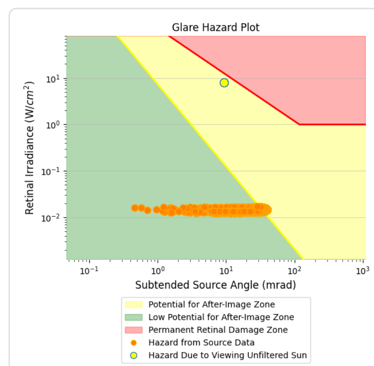


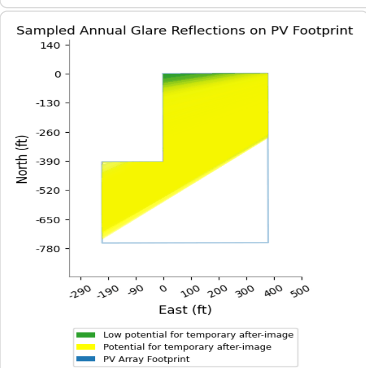
A01: OP 103

PV array is expected to produce the following glare for this receptor:
- 1,318 minutes of "green" glare with low potential to cause temporary after-image.
- 2,385 minutes of "yellow" glare with potential to cause temporary after-image.









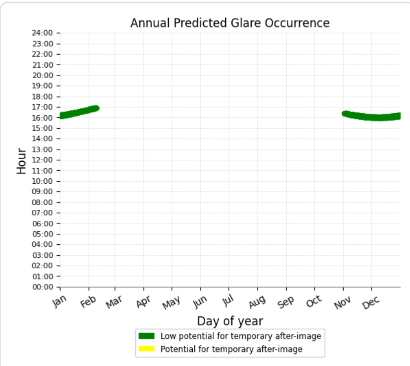
A01: OP 104

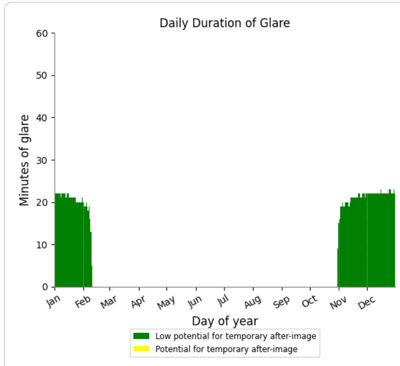
No glare found

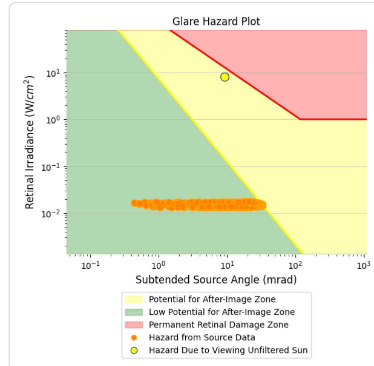
A01: OP 105

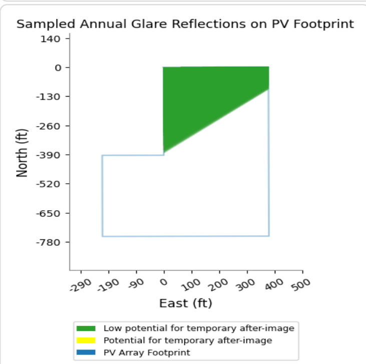
PV array is expected to produce the following glare for this receptor:

- 2,129 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.





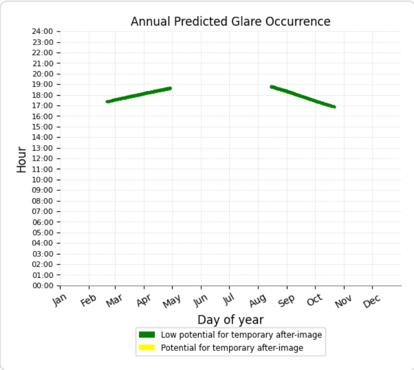


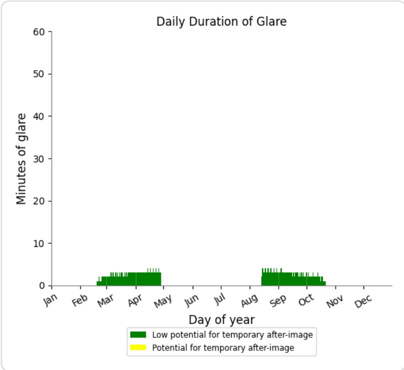


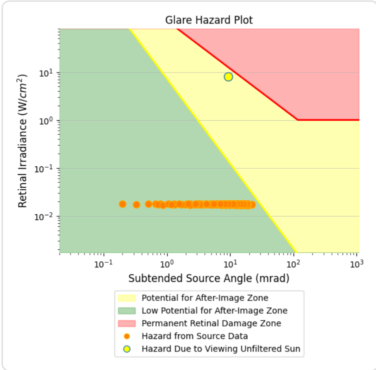
A01: OP 106

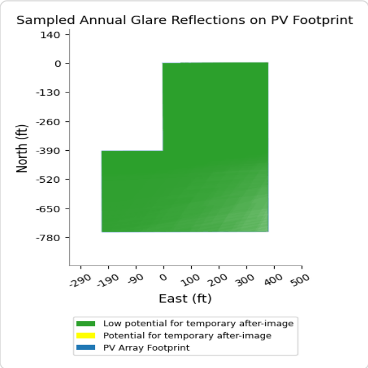
PV array is expected to produce the following glare for this receptor:

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





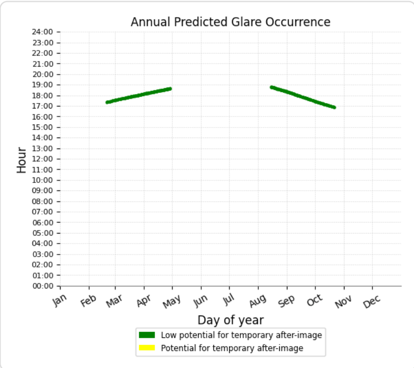


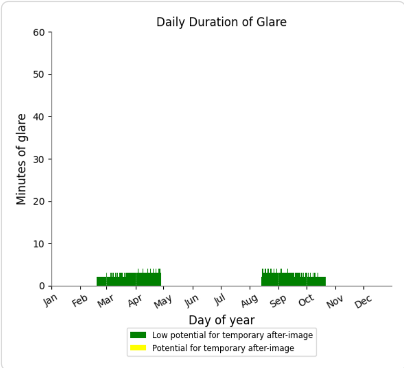


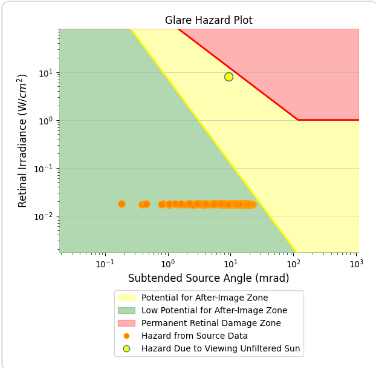
A01: OP 107

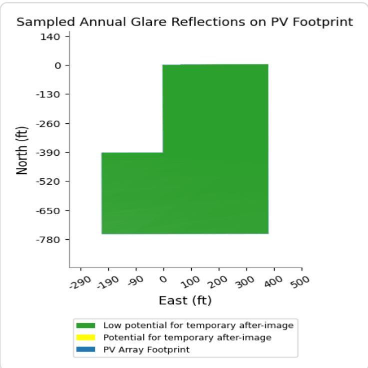
PV array is expected to produce the following glare for this receptor:

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





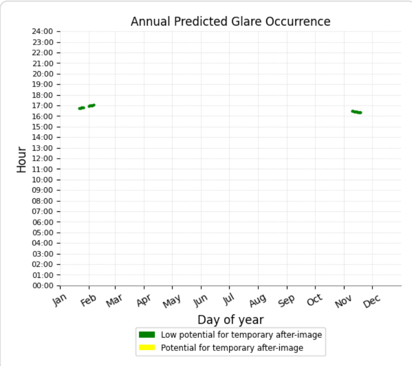


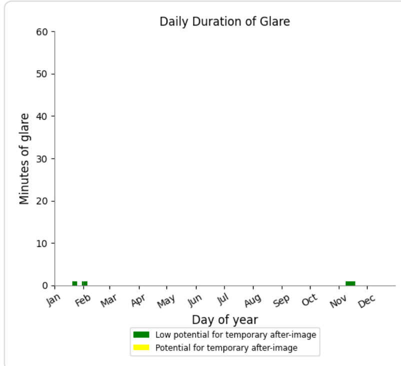


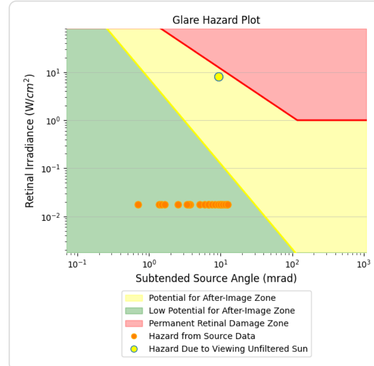
A01: Welter Rd - Car Height

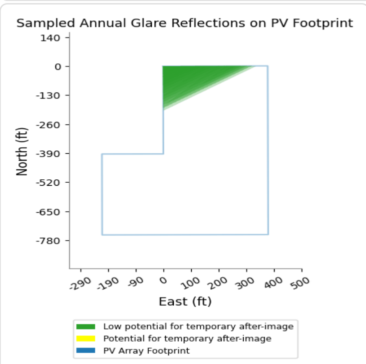
PV array is expected to produce the following glare for this receptor:

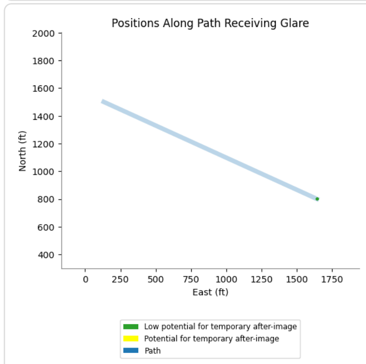
- 21 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.







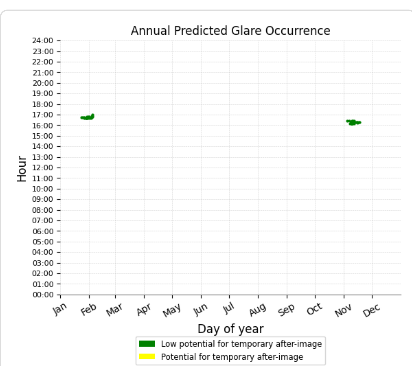


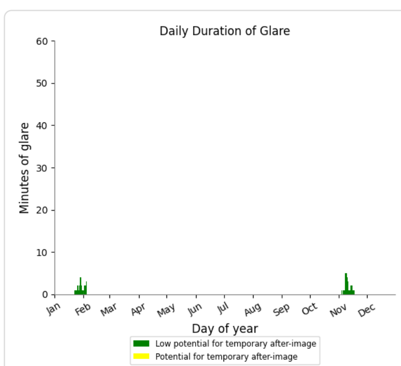


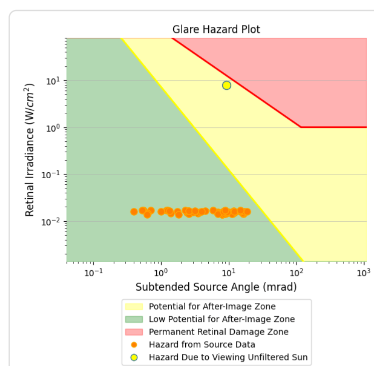
A01: Welter Rd - Truck Height

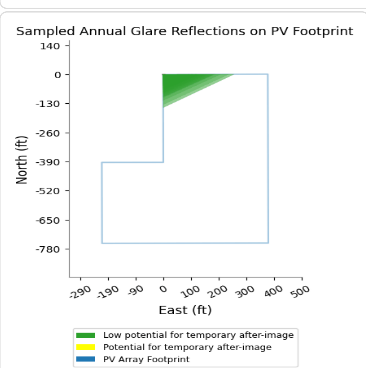
PV array is expected to produce the following glare for this receptor:

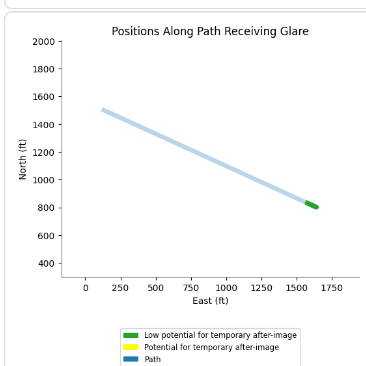
- 51 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.











Summary of Vertical Surface Glare Analysis

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

ForgeSolar

Welter Road

WR_A01_SAS_4fA__0DRA_SGARC

Created Mar 04, 2026
Updated Mar 09, 2026
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 172364.28624

Project type Advanced
Project status: active
Category 500 kW to 1 MW

Misc. Analysis Settings

DNI: **varies (1,000.0 W/m^2 peak)**
Ocular transmission coefficient: **0.5**
Pupil diameter: **0.002 m**
Eye focal length: **0.017 m**
Sun subtended angle: **9.3 mrad**

Summary of Results

Glare with potential for temporary after-image predicted

ForgeSolar Radiometric Physics Engine 3.1.0

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
A01	SA tracking	SA tracking	753	53	-

Component Data

PV Array(s)

Total PV footprint area: 8.4 acres

Name: A01
Footprint area: 8.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 0.0 deg
Ground Coverage Ratio: 0.3

Rated power: -
Panel material: Smooth glass with AR coating

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	41.935171	-88.495024	867.54	4.00	871.54
2	41.935174	-88.493655	877.89	4.00	881.89
3	41.933080	-88.493648	876.52	4.00	880.52
4	41.933076	-88.495822	871.77	4.00	875.77
5	41.934080	-88.495825	866.24	4.00	870.24
6	41.934081	-88.495021	869.82	4.00	873.82

Route Receptor(s)

Name: Welter Rd - Car Height
Route type Two-way
Azimuthal view angle: 50.0 deg
Downward view angle: 90.0 deg

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	41.939288	-88.494540	879.76	3.50	883.26
2	41.937367	-88.488990	890.31	3.50	893.81

Name: Welter Rd - Truck Height
Route type Two-way
Azimuthal view angle: 50.0 deg
Downward view angle: 90.0 deg

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	41.939288	-88.494540	879.76	7.75	887.51
2	41.937367	-88.488990	890.31	7.75	898.06

Discrete Observation Receptors

Number	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total Elevation ft
OP 100	41.937742	-88.492209	887.14	5.00	892.14
OP 101	41.937742	-88.492209	887.14	15.00	902.14
OP 102	41.935529	-88.491692	881.24	5.00	886.24
OP 103	41.935529	-88.491692	881.24	15.00	896.24
OP 104	41.936868	-88.490290	886.52	5.00	891.52
OP 105	41.936868	-88.490290	886.52	15.00	901.52
OP 106	41.934073	-88.488236	886.87	5.00	891.87
OP 107	41.934073	-88.488236	886.87	15.00	901.87

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	
A01	SA tracking	SA tracking	753	53	-	

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
a01 (green)	88	89	36	2	0	0	0	1	7	82	100	101
a01 (yellow)	20	0	0	0	0	0	0	0	0	0	10	23

PV & Receptor Analysis Results

Results for each PV array and receptor

A01 potential temporary after-image

Component	Green glare (min)	Yellow glare (min)
OP: OP 100	0	0
OP: OP 101	0	0
OP: OP 102	31	0
OP: OP 103	462	53
OP: OP 104	0	0
OP: OP 105	242	0
OP: OP 106	0	0
OP: OP 107	18	0
Route: Welter Rd - Car Height	0	0
Route: Welter Rd - Truck Height	0	0

A01: OP 100

No glare found

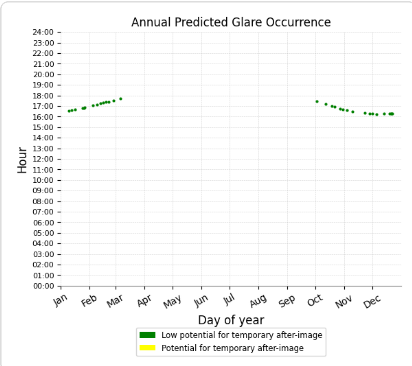
A01: OP 101

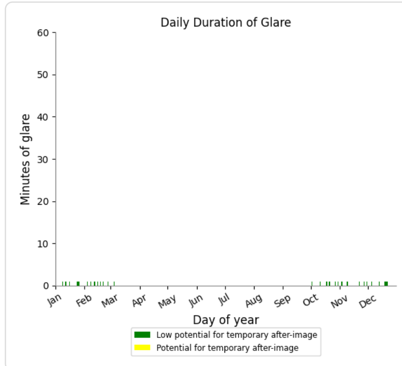
No glare found

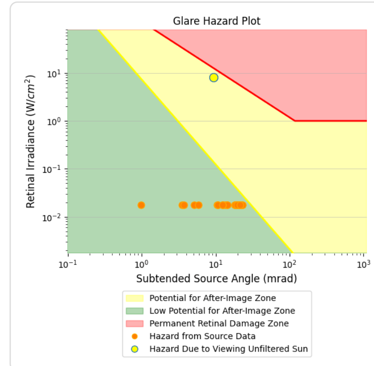
A01: OP 102

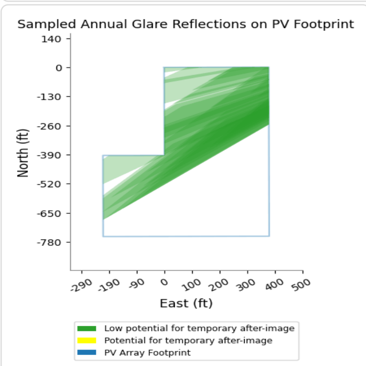
PV array is expected to produce the following glare for this receptor:

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





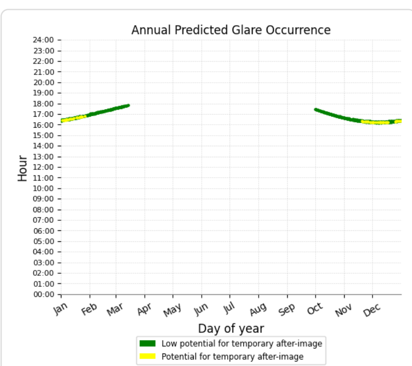


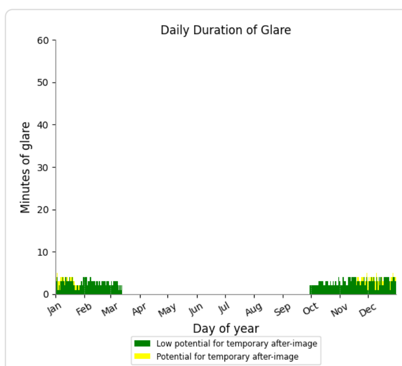


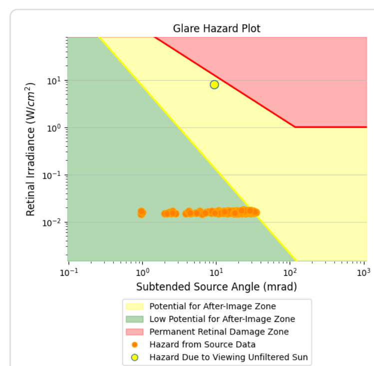
A01: OP 103

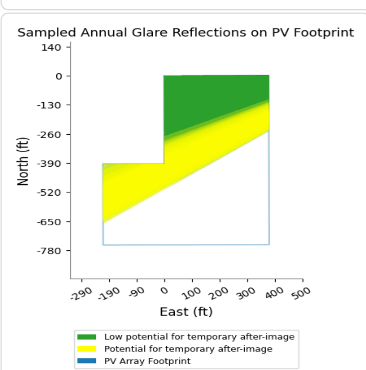
PV array is expected to produce the following glare for this receptor:

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









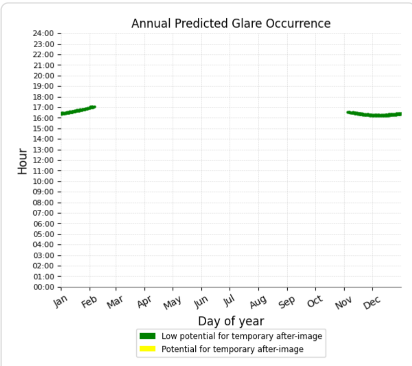
A01: OP 104

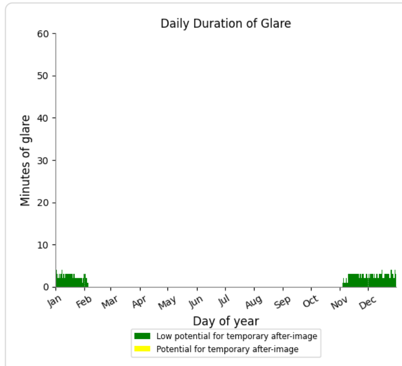
No glare found

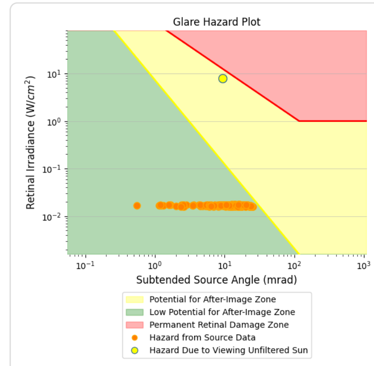
A01: OP 105

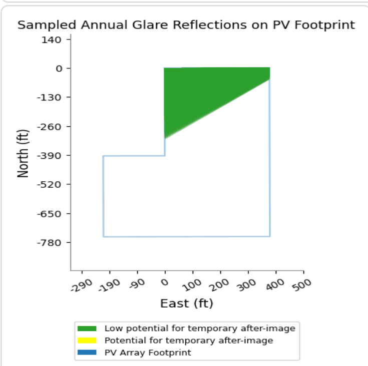
PV array is expected to produce the following glare for this receptor:

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







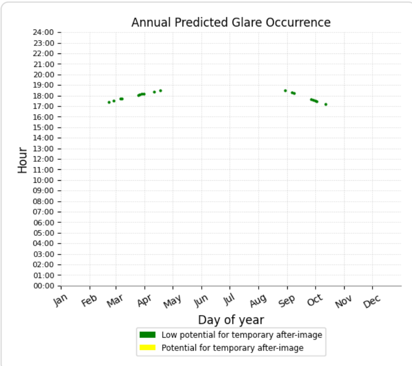


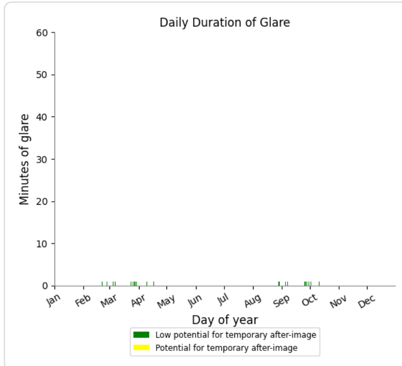
A01: OP 106

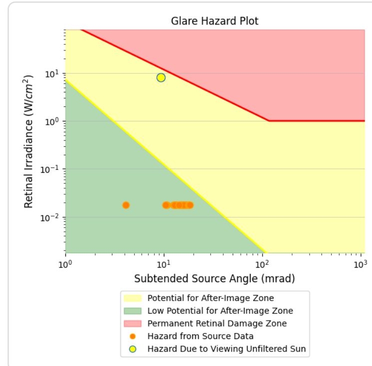
No glare found

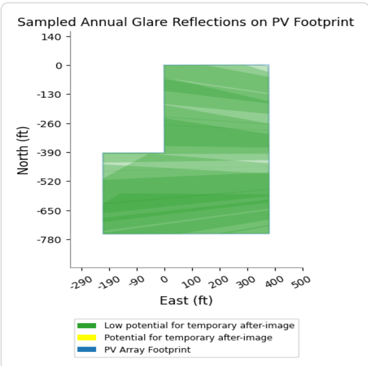
A01: OP 107

PV array is expected to produce the following glare for this receptor:
- 18 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.









A01: Welter Rd - Car Height

No glare found

A01: Welter Rd - Truck Height

No glare found

Summary of Vertical Surface Glare Analysis

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

52-Degree Rest Angle

Details

ForgeSolar

Welter Road

WR_A01_Instant_4fA__52DRA_SGARC

Created Mar 04, 2026
Updated Mar 04, 2026
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 172372.28624

Project type Advanced
Project status: active
Category 500 kW to 1 MW

Misc. Analysis Settings

DNI: **varies (1,000.0 W/m^2 peak)**
Ocular transmission coefficient: **0.5**
Pupil diameter: **0.002 m**
Eye focal length: **0.017 m**
Sun subtended angle: **9.3 mrad**

Summary of Results No glare predicted!

ForgeSolar Radiometric Physics Engine 3.0.0

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
A01	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 8.4 acres

Name: A01
Footprint area: 8.4 acres
Axis tracking: Single-axis rotation
Backtracking: Instant
Tracking axis orientation: 180.0 deg
Tracking axis tilt: 0.0 deg
Tracking axis panel offset: 0.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg

Rated power: -
Panel material: Smooth glass with AR coating

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	41.935171	-88.495024	867.54	4.00	871.54
2	41.935174	-88.493655	877.89	4.00	881.89
3	41.933080	-88.493648	876.52	4.00	880.52
4	41.933076	-88.495822	871.77	4.00	875.77
5	41.934080	-88.495825	866.24	4.00	870.24
6	41.934081	-88.495021	869.82	4.00	873.82

Route Receptor(s)

Name: Welter Rd - Car Height
Route type Two-way
Azimuthal view angle: 50.0 deg
Downward view angle: 90.0 deg

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	41.939288	-88.494540	879.76	3.50	883.26
2	41.937367	-88.488990	890.31	3.50	893.81

Name: Welter Rd - Truck Height
Route type Two-way
Azimuthal view angle: 50.0 deg
Downward view angle: 90.0 deg

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	41.939288	-88.494540	879.76	7.75	887.51
2	41.937367	-88.488990	890.31	7.75	898.06

Discrete Observation Receptors

Number	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total Elevation ft
OP 100	41.937742	-88.492209	887.14	5.00	892.14
OP 101	41.937742	-88.492209	887.14	15.00	902.14
OP 102	41.935529	-88.491692	881.24	5.00	886.24
OP 103	41.935529	-88.491692	881.24	15.00	896.24
OP 104	41.936868	-88.490290	886.52	5.00	891.52
OP 105	41.936868	-88.490290	886.52	15.00	901.52
OP 106	41.934073	-88.488236	886.87	5.00	891.87
OP 107	41.934073	-88.488236	886.87	15.00	901.87

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt deg	Orientation deg	"Green" Glare min	"Yellow" Glare min	Energy Produced kWh	Data File
A01	SA tracking	SA tracking	0	0	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

A01 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 100	0	0
OP: OP 101	0	0
OP: OP 102	0	0
OP: OP 103	0	0
OP: OP 104	0	0
OP: OP 105	0	0
OP: OP 106	0	0
OP: OP 107	0	0
Route: Welter Rd - Car Height	0	0
Route: Welter Rd - Truck Height	0	0

No glare found

Summary of Vertical Surface Glare Analysis

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
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ForgeSolar

Welter Road

WR_A01_SAS_4fA__52DRA_SGARC

Created Mar 04, 2026
Updated Mar 04, 2026
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
Site ID 172373.28624

Project type Advanced
Project status: active
Category 500 kW to 1 MW

Misc. Analysis Settings

DNI: **varies (1,000.0 W/m^2 peak)**
Ocular transmission coefficient: **0.5**
Pupil diameter: **0.002 m**
Eye focal length: **0.017 m**
Sun subtended angle: **9.3 mrad**

Summary of Results No glare predicted!

ForgeSolar Radiometric Physics Engine 3.0.0

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
A01	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Total PV footprint area: 8.4 acres

Name: A01
Footprint area: 8.4 acres
Axis tracking: Single-axis rotation
Backtracking: Shade
Tracking axis orientation: 180.0 deg
Maximum tracking angle: 52.0 deg
Resting angle: 52.0 deg
Ground Coverage Ratio: 0.3

Rated power: -
Panel material: Smooth glass with AR coating

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	41.935171	-88.495024	867.54	4.00	871.54
2	41.935174	-88.493655	877.89	4.00	881.89
3	41.933080	-88.493648	876.52	4.00	880.52
4	41.933076	-88.495822	871.77	4.00	875.77
5	41.934080	-88.495825	866.24	4.00	870.24
6	41.934081	-88.495021	869.82	4.00	873.82

Route Receptor(s)

Name: Welter Rd - Car Height
Route type Two-way
Azimuthal view angle: 50.0 deg
Downward view angle: 90.0 deg

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	41.939288	-88.494540	879.76	3.50	883.26
2	41.937367	-88.488990	890.31	3.50	893.81

Name: Welter Rd - Truck Height
Route type Two-way
Azimuthal view angle: 50.0 deg
Downward view angle: 90.0 deg

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	41.939288	-88.494540	879.76	7.75	887.51
2	41.937367	-88.488990	890.31	7.75	898.06

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OP 105	41.936868	-88.490290	886.52	15.00	901.52
OP 106	41.934073	-88.488236	886.87	5.00	891.87
OP 107	41.934073	-88.488236	886.87	15.00	901.87

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	
A01	SA tracking	SA tracking	0	0	-	-

PV & Receptor Analysis Results

Results for each PV array and receptor

A01 no glare found

Component	Green glare (min)	Yellow glare (min)
OP: OP 100	0	0
OP: OP 101	0	0
OP: OP 102	0	0
OP: OP 103	0	0
OP: OP 104	0	0
OP: OP 105	0	0
OP: OP 106	0	0
OP: OP 107	0	0
Route: Welter Rd - Car Height	0	0
Route: Welter Rd - Truck Height	0	0

No glare found

Summary of Vertical Surface Glare Analysis

Assumptions

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