

February 16, 2021

Ms. Tanowa Troupe, Secretary
Ohio Power Siting Board
Docketing Division
180 East Broad Street, 11th Floor
Columbus, Ohio 43215-3797

Re: Case No. 20-1362-EL-BGN - In the Matter of the Application of Clearview Solar I, LLC for a Certificate of Environmental Compatibility and Public Need to Construct a Solar-Powered Electric Generation Facility in Champaign County, Ohio.

Supplemental Response to First Data Request from Staff of the Ohio Power Siting Board

Dear Ms. Troupe:

At this time, Clearview Solar I, LLC's ("Applicant") is filing this Supplemental Response to the First Data Request from the staff of the Ohio Power Siting Board ("OPSB Staff"), which was provided to OPSB Staff on February 9, 2021 ("February 9, 2021 Response"). In response to Question 1 in the February 9, 2021 Response, the Applicant stated that it would provide a copy of the glint and glare analysis to OPSB Staff once it was final and reduced to a written report. Attached please find a copy of that analysis. The Applicant provided this response to OPSB Staff on February 15, 2021.

We are available, at your convenience, to answer any questions you may have.

Respectfully submitted,

/s/ Christine M.T. Pirik

Christine M.T. Pirik (0029759)

(Counsel of Record)

William Vorys (0093479)

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Ms. Tanowa Troupe
Clearview Solar I, LLC
Case No. 20-1362-EL-BGN

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CERTIFICATE OF SERVICE

The Ohio Power Siting Board's e-filing system will electronically serve notice of the filing of this document on the parties referenced in the service list of the docket card who have electronically subscribed to these cases. In addition, the undersigned certifies that a copy of the foregoing document is also being served upon the persons below this 16th day of February, 2021.

/s/ Christine M.T. Pirik

Christine M.T. Pirik (0029759)

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4818-9503-6892 v2 [85890-4]

February 15, 2021

Doug Herling
Open Road Renewables
1105 Navasota St
Austin, TX 78702

Sent Via Email: doug@openroadrenewables.com

Subject: Clearview Solar, Champaign Co. Ohio, Glare Analysis
Project: 0028621.00

Dear Mr. Herling:

Westwood conducted a glare analysis for Open Road Renewables (Client) for the proposed Clearview Solar Project area located on approximately 1,000 acres, 2.5 miles south-southwest of the city of Quincy in Champaign County, Ohio with coordinates, 40°15'57.50"N, -83°59'13.82"W (Figure 1 & 2). The ForgeSolar model is the standard modeling software used to assess solar glare and it is an accepted modeling software accepted by local, state and federal regulatory agencies across the country. Westwood uses this model to predict and model solar glare on projects across the country ranging in size from rooftop arrays to projects covering over a thousand acres. The Federal Aviation Administration (FAA) also recommends the ForgeSolar model for use in assessing and reporting glare generated from solar project related to airports.

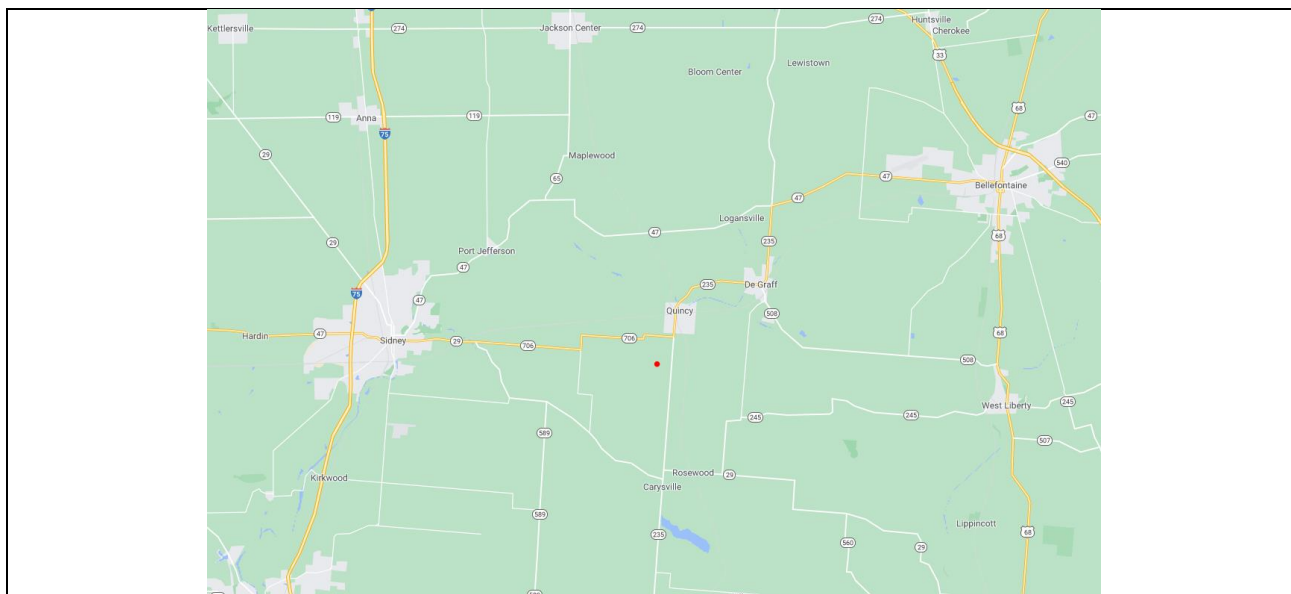


Figure 1 Clearview Site Location Map

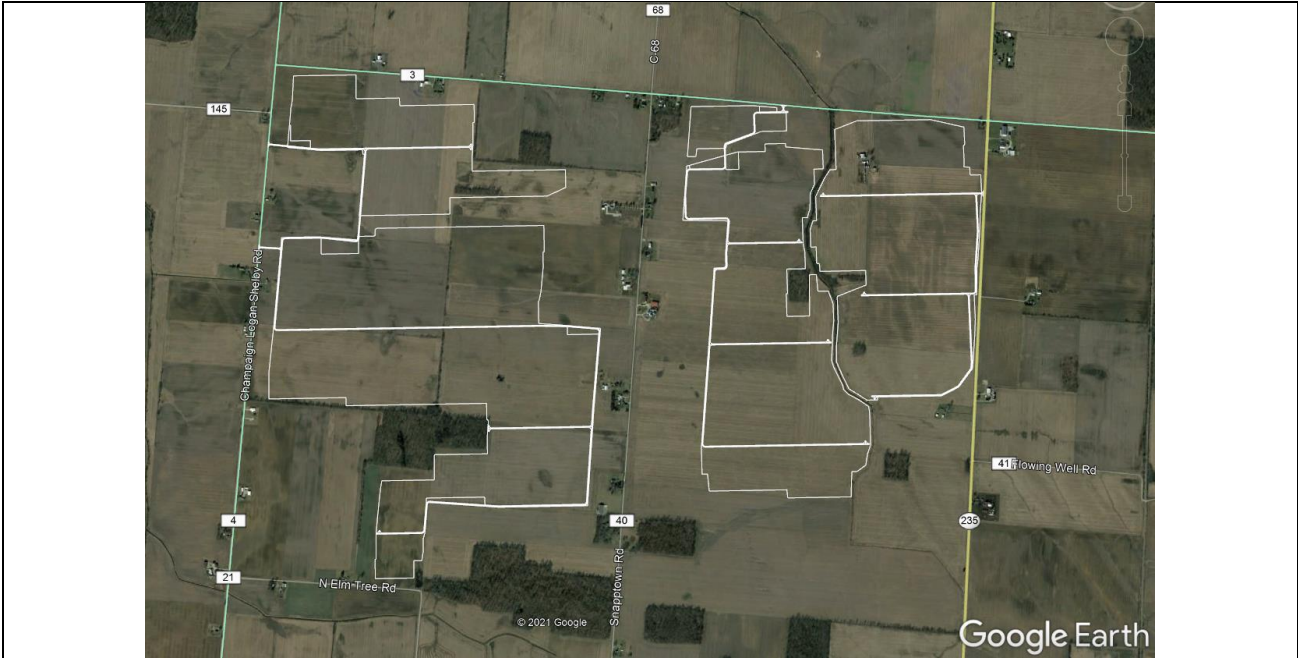


Figure 2 Site Map

Methods and Model:

The glare assessment method found in the ForgeSolar PV Planning and Glare Analysis model was used to assess reflected glare from the arrays separated into 19 smaller sub-arrays covering approximately 890 acres. They are shown in Appendix 1 on pages 2-11. Drivers along eight road segments, shown in Appendix 1 on pages 12-13 were also assessed for receiving glare. They are listed in Table 1 adjacent to and within 500 feet of the proposed arrays. Westwood modeled 16 residential receptors (discrete observation receptors) listed in Table 2. They were separated into two levels, an assumed first floor with an eye height of 8 feet above ground, and at the same structure on the second floor with an eye height of 16 feet above ground. Table 2 shows that OP1 and OP 101 are at the same structure; OP2 and OP 102 are at the same structure.

Table 3 shows the numerous solar array parameters.

Table 1	
ID	Route
1	Route 145 Johnston Rd
2	Route 3A Champaign Logan Road W
3	Route 3B Champaign Logan Road E
4	Route 4A Champaign Logan Shelby Road N
5	Route 4B Champaign Logan Shelby Road S
6	Snapptown Road Route 40
7	State Route 235
8	Twp Hwy 21 N Elm Tree Rd

Table 2					
Residential Receptors					
Receptor ID	Latitude (deg)	Longitude (deg)	Ground Elevation (ft.)	Elevation Above Ground (ft.)	Total Elevation (ft.)
OP 1	40.273358	-84.008675	1079.02	8.00	1087.02
OP 2	40.272639	-84.005377	1082.97	8.00	1090.97
OP 3	40.271133	-84.015303	1077.49	8.00	1085.49
OP 4	40.263704	-84.015353	1080.63	8.00	1088.63
OP 5	40.262186	-84.016014	1081.68	8.00	1089.68
OP 6	40.258218	-84.015558	1083.27	8.00	1091.28
OP 7	40.251433	-84.010413	1089.72	8.00	1097.72
OP 8	40.253687	-83.996021	1094.06	8.00	1102.06
OP 9	40.255272	-83.995413	1091.77	8.00	1099.77
OP 10	40.258803	-83.995066	1093.58	8.00	1101.58
OP 11	40.259600	-83.995435	1094.39	8.00	1102.39
OP 12	40.271887	-83.992743	1085.46	8.00	1093.46
OP 13	40.271538	-83.992204	1085.33	8.00	1093.33
OP 14	40.270856	-83.974554	1090.57	8.00	1098.57
OP 15	40.269567	-83.973962	1091.73	8.00	1099.73
OP 16	40.258614	-83.977020	1088.17	8.00	1096.17
OP 101	40.273358	-84.008675	1079.02	16.00	1095.02
OP 102	40.272639	-84.005377	1082.97	16.00	1098.97
OP 103	40.271133	-84.015303	1077.49	16.00	1093.49
OP 104	40.263704	-84.015353	1080.63	16.00	1096.63
OP 105	40.262186	-84.016014	1081.68	16.00	1097.68
OP 106	40.258218	-84.015558	1083.27	16.00	1099.28
OP 107	40.251433	-84.010413	1089.72	16.00	1105.72
OP 108	40.253687	-83.996021	1094.06	16.00	1110.06
OP 109	40.255272	-83.995413	1091.77	16.00	1107.77
OP 110	40.258803	-83.995066	1093.58	16.00	1109.58
OP 111	40.259600	-83.995435	1094.39	16.00	1110.39
OP 112	40.271887	-83.992743	1085.46	16.00	1101.46
OP 113	40.271538	-83.992204	1085.33	16.00	1101.33
OP 114	40.270856	-83.974554	1090.57	16.00	1106.57
OP 115	40.269567	-83.973962	1091.73	16.00	1107.73
OP 116	40.258614	-83.977020	1088.17	16.00	1104.17

Table 3

Name: PV 1
Axis tracking: Single-axis rotation
Tracking axis orientation: 180.0 deg
Tracking axis tilt: 0.0 deg
Tracking axis panel offset: 0.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 5.0 deg
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad
Approx. area: 2,352,417 sq-ft

Findings and Conclusions:

Based upon the input data detailed in Appendix 1, the ForgeSolar glare model findings report that no glare will result from the arrays modeled to receptors on the 8 routes and 32 OP fixed receptors.

If you have questions about this review, please contact me at Tom.braman@westwoodps.com.

Kind regards,

WESTWOOD PROFESSIONAL SERVICES

A handwritten signature in black ink that reads "Thomas Braman". The signature is written in a cursive, flowing style with a large initial 'T'.

Thomas Braman
Sr. Environmental Scientist



ForgeSolar

Site Configuration: Clearview A1-19 5 Degrees 8ftRt8_16FtKOP 210209

Project site configuration details and results.

Created **Oct. 9, 2020 noon**
 Updated **Feb. 9, 2021 12:33 p.m.**
 DNI **varies** and peaks at **1,000.0 W/m²**
 Analyze every **1 minute(s)**
0.5 ocular transmission coefficient
0.002 m pupil diameter
0.017 m eye focal length
9.3 mrad sun subtended angle
 Timezone **UTC-5**
 Site Configuration ID: 44260.8008

Summary of Results No glare predicted!

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
PV 1	SA tracking	SA tracking	0	0	-
PV 10	SA tracking	SA tracking	0	0	-
PV 11	SA tracking	SA tracking	0	0	-
PV 12	SA tracking	SA tracking	0	0	-
PV 13	SA tracking	SA tracking	0	0	-
PV 14	SA tracking	SA tracking	0	0	-
PV 15	SA tracking	SA tracking	0	0	-
PV 16	SA tracking	SA tracking	0	0	-
PV 17	SA tracking	SA tracking	0	0	-
PV 18	SA tracking	SA tracking	0	0	-
PV 19	SA tracking	SA tracking	0	0	-
PV 2	SA tracking	SA tracking	0	0	-
PV 3	SA tracking	SA tracking	0	0	-
PV 4	SA tracking	SA tracking	0	0	-
PV 5	SA tracking	SA tracking	0	0	-
PV 6	SA tracking	SA tracking	0	0	-
PV 7	SA tracking	SA tracking	0	0	-
PV 8	SA tracking	SA tracking	0	0	-
PV 9	SA tracking	SA tracking	0	0	-

Component Data

PV Array(s)

Note: PV array encompasses a large surface area (greater than 25 acres). Accuracy of path receptor glare analysis may be affected by footprint size. Additional analyses of array sub-sections may provide more information on expected glare.



Name: PV 1

Axis tracking: Single-axis rotation

Tracking axis orientation: 180.0 deg

Tracking axis tilt: 0.0 deg

Tracking axis panel offset: 0.0 deg

Maximum tracking angle: 60.0 deg

Resting angle: 5.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Approx. area: 2,352,417 sq-ft



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	40.272912	-84.013653	1078.67	6.00	1084.67
2	40.272956	-84.010243	1074.49	6.00	1080.49
3	40.271902	-84.010220	1075.40	6.00	1081.40
4	40.271933	-84.007812	1078.31	6.00	1084.31
5	40.271593	-84.007805	1078.00	6.00	1084.00
6	40.271648	-84.003516	1080.56	6.00	1086.56
7	40.270961	-84.003501	1081.30	6.00	1087.30
8	40.269904	-84.003704	1081.77	6.00	1087.77
9	40.269789	-84.012681	1078.67	6.00	1084.67
10	40.270128	-84.012688	1078.64	6.00	1084.64
11	40.270114	-84.013817	1076.98	6.00	1082.98
12	40.270801	-84.013832	1078.89	6.00	1084.89

Name: PV 10

Axis tracking: Single-axis rotation

Tracking axis orientation: 180.0 deg

Tracking axis tilt: 0.0 deg

Tracking axis panel offset: 0.0 deg

Maximum tracking angle: 60.0 deg

Resting angle: 5.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Approx. area: 653,317 sq-ft



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	40.271557	-83.991039	1082.78	6.00	1088.78
2	40.271600	-83.987630	1076.47	6.00	1082.47
3	40.271283	-83.985817	1082.29	6.00	1088.30
4	40.270596	-83.985802	1078.95	6.00	1084.95
5	40.270551	-83.989338	1082.46	6.00	1088.46
6	40.269837	-83.989323	1080.04	6.00	1086.04
7	40.269816	-83.990978	1079.65	6.00	1085.65
8	40.269476	-83.990971	1078.65	6.00	1084.65
9	40.269474	-83.991145	1078.74	6.00	1084.74
10	40.270501	-83.991167	1081.18	6.00	1087.18

Note: PV array encompasses a large surface area (greater than 25 acres). Accuracy of path receptor glare analysis may be affected by footprint size. Additional analyses of array sub-sections may provide more information on expected glare. ✕

Name: PV 11

Axis tracking: Single-axis rotation

Tracking axis orientation: 180.0 deg

Tracking axis tilt: 0.0 deg

Tracking axis panel offset: 0.0 deg

Maximum tracking angle: 60.0 deg

Resting angle: 5.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Approx. area: 2,367,837 sq-ft



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	40.269926	-83.986896	1075.43	6.00	1081.43
2	40.269939	-83.985894	1075.59	6.00	1081.59
3	40.269626	-83.983780	1074.61	6.00	1080.61
4	40.268938	-83.983765	1072.97	6.00	1078.97
5	40.268217	-83.984277	1072.17	6.00	1078.17
6	40.267159	-83.984555	1072.38	6.00	1078.38
7	40.266818	-83.984698	1072.58	6.00	1078.58
8	40.266100	-83.984984	1074.40	6.00	1080.40
9	40.265752	-83.985578	1078.36	6.00	1084.36
10	40.265709	-83.988988	1085.92	6.00	1091.92
11	40.266763	-83.989010	1081.49	6.00	1087.49
12	40.266734	-83.991343	1084.94	6.00	1090.94
13	40.267073	-83.991425	1084.38	6.00	1090.38
14	40.267760	-83.991440	1082.21	6.00	1088.22
15	40.268475	-83.991380	1078.94	6.00	1084.94
16	40.268816	-83.991312	1079.09	6.00	1085.09
17	40.268852	-83.988453	1076.98	6.00	1082.98
18	40.269566	-83.988469	1079.18	6.00	1085.18

Note: PV array encompasses a large surface area (greater than 25 acres). Accuracy of path receptor glare analysis may be affected by footprint size. Additional analyses of array sub-sections may provide more information on expected glare. ✕

Name: PV 12

Axis tracking: Single-axis rotation

Tracking axis orientation: 180.0 deg

Tracking axis tilt: 0.0 deg

Tracking axis panel offset: 0.0 deg

Maximum tracking angle: 60.0 deg

Resting angle: 5.0 deg

Rated power: -

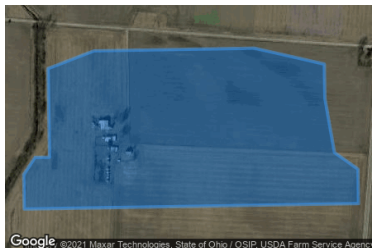
Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Approx. area: 2,388,508 sq-ft



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	40.270924	-83.981737	1090.75	6.00	1096.75
2	40.270976	-83.977576	1085.86	6.00	1091.86
3	40.270659	-83.975763	1087.16	6.00	1093.16
4	40.269972	-83.975748	1087.00	6.00	1093.00
5	40.268894	-83.975499	1087.27	6.00	1093.27
6	40.268561	-83.974890	1087.33	6.00	1093.33
7	40.267874	-83.974875	1087.91	6.00	1093.91
8	40.267765	-83.983551	1073.29	6.00	1079.29
9	40.268453	-83.983566	1071.87	6.00	1077.87
10	40.268796	-83.983272	1071.41	6.00	1077.41
11	40.268801	-83.982896	1072.28	6.00	1078.28
12	40.270569	-83.982934	1070.94	6.00	1076.94

Note: PV array encompasses a large surface area (greater than 25 acres). Accuracy of path receptor glare analysis may be affected by footprint size. Additional analyses of array sub-sections may provide more information on expected glare. ✕

Name: PV 13

Axis tracking: Single-axis rotation

Tracking axis orientation: 180.0 deg

Tracking axis tilt: 0.0 deg

Tracking axis panel offset: 0.0 deg

Maximum tracking angle: 60.0 deg

Resting angle: 5.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

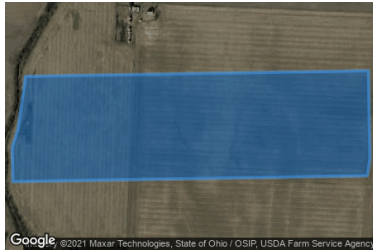
Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Approx. area: 1,931,311 sq-ft

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	40.267633	-83.984075	1072.10	6.00	1078.10
2	40.267744	-83.975174	1088.17	6.00	1094.17
3	40.266003	-83.975136	1088.81	6.00	1094.81
4	40.265662	-83.975204	1088.77	6.00	1094.77
5	40.265547	-83.984407	1074.30	6.00	1080.30
6	40.266234	-83.984421	1074.15	6.00	1080.15
7	40.266576	-83.984278	1073.98	6.00	1079.98



Note: PV array encompasses a large surface area (greater than 25 acres). Accuracy of path receptor glare analysis may be affected by footprint size. Additional analyses of array sub-sections may provide more information on expected glare. ✕

Name: PV 14

Axis tracking: Single-axis rotation

Tracking axis orientation: 180.0 deg

Tracking axis tilt: 0.0 deg

Tracking axis panel offset: 0.0 deg

Maximum tracking angle: 60.0 deg

Resting angle: 5.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

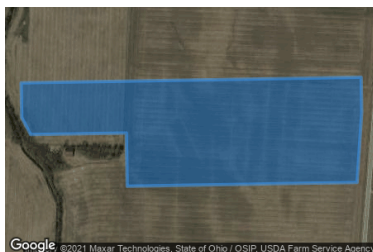
Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Approx. area: 1,562,916 sq-ft

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	40.265523	-83.984105	1079.00	6.00	1085.00
2	40.265634	-83.975279	1088.78	6.00	1094.78
3	40.264947	-83.975264	1088.20	6.00	1094.20
4	40.263551	-83.975385	1087.77	6.00	1093.77
5	40.263476	-83.981352	1093.23	6.00	1099.23
6	40.264531	-83.981375	1091.51	6.00	1097.51
7	40.264499	-83.983857	1074.27	6.00	1080.27
8	40.264836	-83.984090	1073.90	6.00	1079.90



Note: PV array encompasses a large surface area (greater than 25 acres). Accuracy of path receptor glare analysis may be affected by footprint size. Additional analyses of array sub-sections may provide more information on expected glare. ✕

Name: PV 15

Axis tracking: Single-axis rotation

Tracking axis orientation: 180.0 deg

Tracking axis tilt: 0.0 deg

Tracking axis panel offset: 0.0 deg

Maximum tracking angle: 60.0 deg

Resting angle: 5.0 deg

Rated power: -

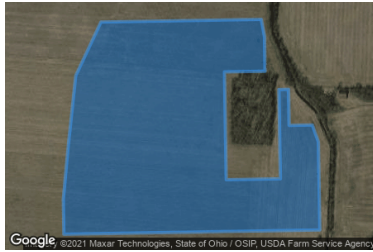
Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Approx. area: 2,143,937 sq-ft



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	40.265581	-83.989135	1086.81	6.00	1092.81
2	40.265634	-83.984974	1074.77	6.00	1080.77
3	40.265295	-83.984891	1075.03	6.00	1081.03
4	40.264608	-83.984877	1079.79	6.00	1085.79
5	40.264595	-83.985930	1086.69	6.00	1092.69
6	40.262459	-83.985884	1085.37	6.00	1091.37
7	40.262476	-83.984478	1084.85	6.00	1090.85
8	40.264245	-83.984516	1079.56	6.00	1085.56
9	40.264248	-83.984267	1076.86	6.00	1082.86
10	40.263534	-83.984251	1083.86	6.00	1089.86
11	40.263541	-83.983650	1075.20	6.00	1081.20
12	40.263204	-83.983492	1076.13	6.00	1082.13
13	40.261462	-83.983455	1075.94	6.00	1081.94
14	40.261379	-83.990098	1085.28	6.00	1091.28
15	40.262066	-83.990113	1084.07	6.00	1090.07
16	40.263122	-83.989985	1084.34	6.00	1090.34
17	40.264518	-83.989790	1084.98	6.00	1090.98

Note: PV array encompasses a large surface area (greater than 25 acres). Accuracy of path receptor glare analysis may be affected by footprint size. Additional analyses of array sub-sections may provide more information on expected glare. ✕

Name: PV 16

Axis tracking: Single-axis rotation

Tracking axis orientation: 180.0 deg

Tracking axis tilt: 0.0 deg

Tracking axis panel offset: 0.0 deg

Maximum tracking angle: 60.0 deg

Resting angle: 5.0 deg

Rated power: -

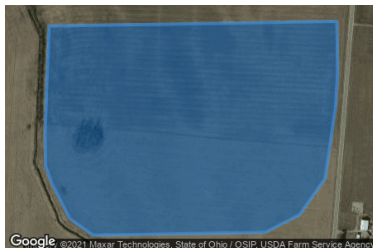
Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Approx. area: 3,031,131 sq-ft



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	40.263330	-83.982929	1075.46	6.00	1081.46
2	40.263424	-83.975458	1087.73	6.00	1093.73
3	40.262397	-83.975436	1087.55	6.00	1093.55
4	40.261682	-83.975496	1087.08	6.00	1093.08
5	40.260284	-83.975767	1086.66	6.00	1092.66
6	40.259561	-83.976429	1085.98	6.00	1091.99
7	40.259210	-83.977324	1084.73	6.00	1090.73
8	40.259154	-83.981786	1078.42	6.00	1084.42
9	40.259486	-83.982395	1077.46	6.00	1083.46
10	40.260195	-83.982862	1077.47	6.00	1083.47
11	40.260533	-83.983020	1076.40	6.00	1082.40
12	40.261220	-83.983035	1076.27	6.00	1082.27

Note: PV array encompasses a large surface area (greater than 25 acres). Accuracy of path receptor glare analysis may be affected by footprint size. Additional analyses of array sub-sections may provide more information on expected glare. ✕

Name: PV 17

Axis tracking: Single-axis rotation

Tracking axis orientation: 180.0 deg

Tracking axis tilt: 0.0 deg

Tracking axis panel offset: 0.0 deg

Maximum tracking angle: 60.0 deg

Resting angle: 5.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Approx. area: 1,752,738 sq-ft

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	40.261296	-83.986635	1085.23	6.00	1091.23
2	40.261335	-83.983527	1076.12	6.00	1082.12
3	40.259945	-83.983196	1076.69	6.00	1082.69
4	40.259236	-83.982730	1078.48	6.00	1084.48
5	40.258906	-83.981970	1078.06	6.00	1084.06
6	40.258197	-83.981503	1079.58	6.00	1085.58
7	40.257170	-83.981481	1080.45	6.00	1086.45
8	40.257107	-83.986545	1088.68	6.00	1094.68



Note: PV array encompasses a large surface area (greater than 25 acres). Accuracy of path receptor glare analysis may be affected by footprint size. Additional analyses of array sub-sections may provide more information on expected glare. ✕

Name: PV 18

Axis tracking: Single-axis rotation

Tracking axis orientation: 180.0 deg

Tracking axis tilt: 0.0 deg

Tracking axis panel offset: 0.0 deg

Maximum tracking angle: 60.0 deg

Resting angle: 5.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

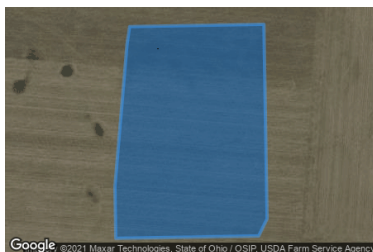
Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Approx. area: 1,604,336 sq-ft

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	40.261251	-83.990171	1085.73	6.00	1091.73
2	40.261295	-83.986687	1085.18	6.00	1091.18
3	40.257446	-83.986604	1084.84	6.00	1090.84
4	40.257103	-83.986822	1089.37	6.00	1095.37
5	40.257056	-83.990532	1086.97	6.00	1092.97
6	40.258083	-83.990554	1080.73	6.00	1086.73
7	40.260911	-83.990239	1086.39	6.00	1092.39



Note: PV array encompasses a large surface area (greater than 25 acres). Accuracy of path receptor glare analysis may be affected by footprint size. Additional analyses of array sub-sections may provide more information on expected glare. ✕

Name: PV 19

Axis tracking: Single-axis rotation

Tracking axis orientation: 180.0 deg

Tracking axis tilt: 0.0 deg

Tracking axis panel offset: 0.0 deg

Maximum tracking angle: 60.0 deg

Resting angle: 5.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

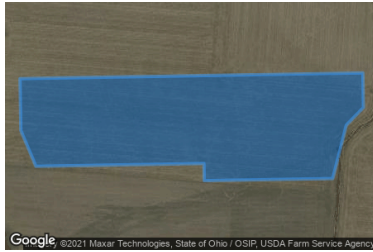
Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Approx. area: 1,629,705 sq-ft

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	40.256928	-83.990680	1088.08	6.00	1094.08
2	40.257040	-83.981780	1081.24	6.00	1087.24
3	40.256353	-83.981765	1082.31	6.00	1088.31
4	40.256008	-83.982209	1087.07	6.00	1093.07
5	40.254949	-83.982562	1084.90	6.00	1090.90
6	40.254907	-83.985896	1085.98	6.00	1091.98
7	40.255247	-83.985903	1088.79	6.00	1094.79
8	40.255192	-83.990266	1091.87	6.00	1097.87
9	40.255901	-83.990658	1096.24	6.00	1102.24



Note: PV array encompasses a large surface area (greater than 25 acres). Accuracy of path receptor glare analysis may be affected by footprint size. Additional analyses of array sub-sections may provide more information on expected glare. ✕

Name: PV 2

Axis tracking: Single-axis rotation

Tracking axis orientation: 180.0 deg

Tracking axis tilt: 0.0 deg

Tracking axis panel offset: 0.0 deg

Maximum tracking angle: 60.0 deg

Resting angle: 5.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

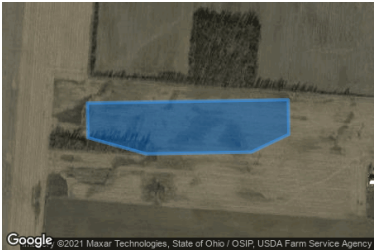
Approx. area: 1,526,660 sq-ft

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	40.269703	-84.009518	1080.26	6.00	1086.26
2	40.269777	-84.003701	1081.82	6.00	1087.82
3	40.269439	-84.003619	1081.93	6.00	1087.93
4	40.268752	-84.003604	1081.04	6.00	1087.05
5	40.268740	-84.004582	1080.87	6.00	1086.88
6	40.267685	-84.004559	1081.52	6.00	1087.52
7	40.266967	-84.004844	1080.38	6.00	1086.39
8	40.266905	-84.009683	1079.53	6.00	1085.53
9	40.267592	-84.009698	1077.17	6.00	1083.17



Name: PV 3
Axis tracking: Single-axis rotation
Tracking axis orientation: 180.0 deg
Tracking axis tilt: 0.0 deg
Tracking axis panel offset: 0.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 5.0 deg
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad
Approx. area: 501,624 sq-ft

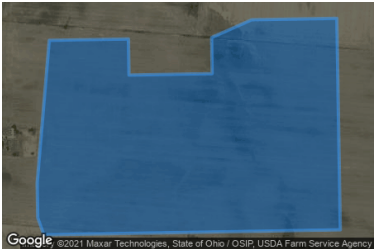
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	40.268725	-84.003551	1081.01	6.00	1087.01
2	40.268791	-83.998336	1082.21	6.00	1088.21
3	40.268104	-83.998322	1083.83	6.00	1089.83
4	40.267752	-83.999292	1082.84	6.00	1088.84
5	40.267717	-84.002024	1082.04	6.00	1088.04
6	40.268038	-84.003537	1081.95	6.00	1087.95



Note: PV array encompasses a large surface area (greater than 25 acres). Accuracy of path receptor glare analysis may be affected by footprint size. Additional analyses of array sub-sections may provide more information on expected glare.

Name: PV 4
Axis tracking: Single-axis rotation
Tracking axis orientation: 180.0 deg
Tracking axis tilt: 0.0 deg
Tracking axis panel offset: 0.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 5.0 deg
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad
Approx. area: 2,953,430 sq-ft

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	40.266248	-84.008830	1079.58	6.00	1085.58
2	40.266277	-84.006625	1080.47	6.00	1086.47
3	40.262087	-84.006533	1082.35	6.00	1088.35
4	40.261989	-84.014231	1080.26	6.00	1086.26
5	40.262326	-84.014388	1080.07	6.00	1086.07
6	40.263014	-84.014403	1080.08	6.00	1086.08
7	40.265841	-84.014089	1079.76	6.00	1085.76
8	40.265868	-84.012034	1079.46	6.00	1085.46
9	40.265153	-84.012019	1080.43	6.00	1086.43
10	40.265181	-84.009860	1078.97	6.00	1084.97
11	40.265895	-84.009876	1078.94	6.00	1084.94



Note: PV array encompasses a large surface area (greater than 25 acres). Accuracy of path receptor glare analysis may be affected by footprint size. Additional analyses of array sub-sections may provide more information on expected glare. ✕

Name: PV 5

Axis tracking: Single-axis rotation

Tracking axis orientation: 180.0 deg

Tracking axis tilt: 0.0 deg

Tracking axis panel offset: 0.0 deg

Maximum tracking angle: 60.0 deg

Resting angle: 5.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

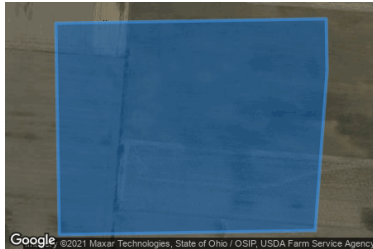
Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Approx. area: 2,930,474 sq-ft

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	40.266277	-84.006573	1080.42	6.00	1086.42
2	40.266367	-83.999553	1083.21	6.00	1089.21
3	40.265340	-83.999530	1083.16	6.00	1089.16
4	40.262173	-83.999838	1084.18	6.00	1090.18
5	40.262088	-84.006482	1082.30	6.00	1088.31



Note: PV array encompasses a large surface area (greater than 25 acres). Accuracy of path receptor glare analysis may be affected by footprint size. Additional analyses of array sub-sections may provide more information on expected glare. ✕

Name: PV 6

Axis tracking: Single-axis rotation

Tracking axis orientation: 180.0 deg

Tracking axis tilt: 0.0 deg

Tracking axis panel offset: 0.0 deg

Maximum tracking angle: 60.0 deg

Resting angle: 5.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Approx. area: 3,165,500 sq-ft

Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	40.261860	-84.014453	1080.34	6.00	1086.34
2	40.261990	-84.004274	1083.05	6.00	1089.05
3	40.258855	-84.004206	1084.87	6.00	1090.87
4	40.258776	-84.010398	1084.25	6.00	1090.25
5	40.259115	-84.010405	1083.92	6.00	1089.92
6	40.259060	-84.014693	1081.72	6.00	1087.72
7	40.259747	-84.014708	1082.04	6.00	1088.04
8	40.260463	-84.014649	1082.85	6.00	1088.85
9	40.261519	-84.014521	1080.62	6.00	1086.62

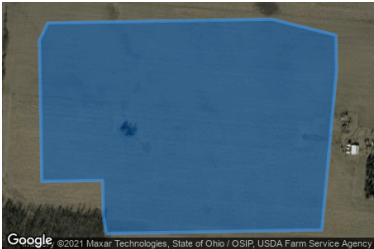


Note: PV array encompasses a large surface area (greater than 25 acres). Accuracy of path receptor glare analysis may be affected by footprint size. Additional analyses of array sub-sections may provide more information on expected glare.



Name: PV 7
Axis tracking: Single-axis rotation
Tracking axis orientation: 180.0 deg
Tracking axis tilt: 0.0 deg
Tracking axis panel offset: 0.0 deg
Maximum tracking angle: 60.0 deg
Resting angle: 5.0 deg
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad
Approx. area: 3,003,394 sq-ft

Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	40.261994	-84.003996	1083.98	6.00	1089.98
2	40.262068	-83.998180	1084.08	6.00	1090.09
3	40.261749	-83.996518	1084.17	6.00	1090.18
4	40.261062	-83.996503	1084.49	6.00	1090.50
5	40.257894	-83.996886	1088.07	6.00	1094.07
6	40.257823	-84.002476	1085.22	6.00	1091.22
7	40.258161	-84.002559	1085.35	6.00	1091.35
8	40.258876	-84.002574	1085.66	6.00	1091.67
9	40.258856	-84.004154	1085.05	6.00	1091.05
10	40.261651	-84.004215	1083.41	6.00	1089.42



Note: PV array encompasses a large surface area (greater than 25 acres). Accuracy of path receptor glare analysis may be affected by footprint size. Additional analyses of array sub-sections may provide more information on expected glare.



Name: PV 8

Axis tracking: Single-axis rotation

Tracking axis orientation: 180.0 deg

Tracking axis tilt: 0.0 deg

Tracking axis panel offset: 0.0 deg

Maximum tracking angle: 60.0 deg

Resting angle: 5.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Approx. area: 2,820,669 sq-ft



Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	40.257696	-84.002473	1085.24	6.00	1091.24
2	40.257765	-83.997034	1088.12	6.00	1094.12
3	40.256739	-83.997011	1086.94	6.00	1092.94
4	40.255684	-83.997064	1090.38	6.00	1096.38
5	40.254628	-83.997191	1094.79	6.00	1100.79
6	40.254557	-84.002706	1088.92	6.00	1094.92
7	40.254897	-84.002714	1089.26	6.00	1095.26
8	40.254855	-84.006000	1088.56	6.00	1094.56
9	40.254515	-84.005992	1088.27	6.00	1094.27
10	40.253800	-84.006052	1087.81	6.00	1093.81
11	40.253459	-84.006120	1088.33	6.00	1094.33
12	40.253430	-84.008400	1086.00	6.00	1092.00
13	40.253769	-84.008483	1086.00	6.00	1092.00
14	40.254456	-84.008498	1085.52	6.00	1091.52
15	40.255171	-84.008438	1085.66	6.00	1091.66
16	40.255512	-84.008370	1085.24	6.00	1091.24
17	40.255550	-84.005437	1087.08	6.00	1093.08
18	40.256604	-84.005459	1086.45	6.00	1092.45
19	40.256641	-84.002526	1085.68	6.00	1091.68
20	40.257356	-84.002541	1085.19	6.00	1091.19

Name: PV 9

Axis tracking: Single-axis rotation

Tracking axis orientation: 180.0 deg

Tracking axis tilt: 0.0 deg

Tracking axis panel offset: 0.0 deg

Maximum tracking angle: 60.0 deg

Resting angle: 5.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad

Approx. area: 416,371 sq-ft

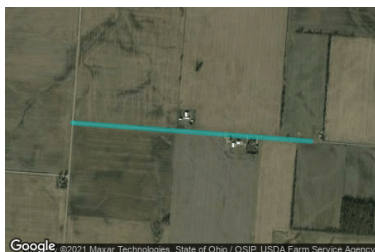


Vertex	Latitude deg	Longitude deg	Ground elevation ft	Height above ground ft	Total elevation ft
1	40.253301	-84.008623	1086.12	6.00	1092.12
2	40.253332	-84.006192	1088.21	6.00	1094.21
3	40.252645	-84.006177	1087.49	6.00	1093.49
4	40.252304	-84.006245	1086.58	6.00	1092.58
5	40.251584	-84.006681	1085.80	6.00	1091.80
6	40.251559	-84.008660	1086.33	6.00	1092.33
7	40.252246	-84.008675	1086.01	6.00	1092.01

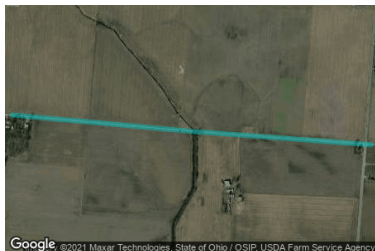
Route Receptor(s)

Name: Route 145 Johnston Rd**Route type** Two-way**View angle:** 50.0 deg

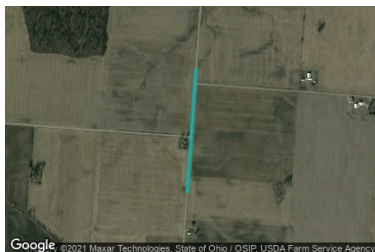
Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	ft	ft	ft
1	40.271385	-84.015578	1076.94	8.00	1084.94
2	40.271350	-84.014989	1078.25	8.00	1086.25

Name: Route 3A Champaign Logan Road W**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	40.273467	-84.014790	1077.24	8.00	1085.24
2	40.272741	-84.002433	1080.14	8.00	1088.14

Name: Route 3B Champaign Logan Road E**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	40.272157	-83.992650	1083.48	8.00	1091.48
2	40.271512	-83.983364	1074.63	8.00	1082.63
3	40.270983	-83.974022	1091.10	8.00	1099.10

Name: Route 4A Champaign Logan Shelby Road N**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	40.274003	-84.014739	1076.62	8.00	1084.62
2	40.269231	-84.015188	1077.61	8.00	1085.61

Name: Route 4B Champaign Logan Shelby Road S
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	40.266764	-84.015415	1083.62	8.00	1091.62
2	40.258321	-84.016202	1084.14	8.00	1092.14

Name: Snapptown Road Route 40
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	40.272207	-83.993387	1082.86	0.00	1082.86
2	40.257916	-83.994756	1086.83	0.00	1086.83
3	40.252918	-83.995254	1091.29	0.00	1091.29

Name: State Route 235
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	40.271421	-83.974273	1091.38	8.00	1099.38
2	40.258348	-83.975591	1083.34	8.00	1091.34

Name: Twp Hwy 21 N Elm Tree Rd
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	40.251235	-84.010401	1088.34	8.00	1096.34
2	40.251045	-84.006449	1086.58	8.00	1094.58
3	40.250981	-84.006253	1086.66	8.00	1094.66
4	40.250821	-84.006202	1086.49	8.00	1094.49
5	40.250249	-84.006266	1085.64	8.00	1093.64

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	ft	ft	ft
OP 1	40.273358	-84.008675	1079.02	8.00	1087.02
OP 2	40.272639	-84.005377	1082.97	8.00	1090.97
OP 3	40.271133	-84.015303	1077.49	8.00	1085.49
OP 4	40.263704	-84.015353	1080.63	8.00	1088.63
OP 5	40.262186	-84.016014	1081.68	8.00	1089.68
OP 6	40.258218	-84.015558	1083.27	8.00	1091.28
OP 7	40.251433	-84.010413	1089.72	8.00	1097.72
OP 8	40.253687	-83.996021	1094.06	8.00	1102.06
OP 9	40.255272	-83.995413	1091.77	8.00	1099.77
OP 10	40.258803	-83.995066	1093.58	8.00	1101.58
OP 11	40.259600	-83.995435	1094.39	8.00	1102.39
OP 12	40.271887	-83.992743	1085.46	8.00	1093.46
OP 13	40.271538	-83.992204	1085.33	8.00	1093.33
OP 14	40.270856	-83.974554	1090.57	8.00	1098.57
OP 15	40.269567	-83.973962	1091.73	8.00	1099.73
OP 16	40.258614	-83.977020	1088.17	8.00	1096.17
OP 101	40.273358	-84.008675	1079.02	16.00	1095.02
OP 102	40.272639	-84.005377	1082.97	16.00	1098.97
OP 103	40.271133	-84.015303	1077.49	16.00	1093.49
OP 104	40.263704	-84.015353	1080.63	16.00	1096.63
OP 105	40.262186	-84.016014	1081.68	16.00	1097.68
OP 106	40.258218	-84.015558	1083.27	16.00	1099.28
OP 107	40.251433	-84.010413	1089.72	16.00	1105.72
OP 108	40.253687	-83.996021	1094.06	16.00	1110.06
OP 109	40.255272	-83.995413	1091.77	16.00	1107.77
OP 110	40.258803	-83.995066	1093.58	16.00	1109.58
OP 111	40.259600	-83.995435	1094.39	16.00	1110.39
OP 112	40.271887	-83.992743	1085.46	16.00	1101.46
OP 113	40.271538	-83.992204	1085.33	16.00	1101.33
OP 114	40.270856	-83.974554	1090.57	16.00	1106.57
OP 115	40.269567	-83.973962	1091.73	16.00	1107.73
OP 116	40.258614	-83.977020	1088.17	16.00	1104.17

PV Array Results

Summary of PV Glare Analysis PV configuration and predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File ?
	deg	deg	min	min	kWh	
PV 1	SA tracking	SA tracking	0	0	-	-
PV 10	SA tracking	SA tracking	0	0	-	-
PV 11	SA tracking	SA tracking	0	0	-	-
PV 12	SA tracking	SA tracking	0	0	-	-
PV 13	SA tracking	SA tracking	0	0	-	-
PV 14	SA tracking	SA tracking	0	0	-	-
PV 15	SA tracking	SA tracking	0	0	-	-
PV 16	SA tracking	SA tracking	0	0	-	-
PV 17	SA tracking	SA tracking	0	0	-	-
PV 18	SA tracking	SA tracking	0	0	-	-
PV 19	SA tracking	SA tracking	0	0	-	-
PV 2	SA tracking	SA tracking	0	0	-	-
PV 3	SA tracking	SA tracking	0	0	-	-
PV 4	SA tracking	SA tracking	0	0	-	-
PV 5	SA tracking	SA tracking	0	0	-	-
PV 6	SA tracking	SA tracking	0	0	-	-
PV 7	SA tracking	SA tracking	0	0	-	-
PV 8	SA tracking	SA tracking	0	0	-	-
PV 9	SA tracking	SA tracking	0	0	-	-

Click the name of the PV array to scroll to its results

PV & Receptor Analysis Results detailed results for each PV array and receptor

PV 1 no glare found

▼ <

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 10 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 11 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 12 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 13 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 14 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 15 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 16 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 17 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 18 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 19 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 2 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 3 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 4 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 5 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 6 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 7 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 8 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

PV 9 no glare found



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	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
OP: OP 108	0	0
OP: OP 109	0	0
OP: OP 110	0	0
OP: OP 111	0	0
OP: OP 112	0	0
OP: OP 113	0	0
OP: OP 114	0	0
OP: OP 115	0	0
OP: OP 116	0	0
Route: Route 145 Johnston Rd	0	0
Route: Route 3A Champaign Logan Road W	0	0
Route: Route 3B Champaign Logan Road E	0	0
Route: Route 4A Champaign Logan Shelby Road N	0	0
Route: Route 4B Champaign Logan Shelby Road S	0	0
Route: Snapptown Road Route 40	0	0
Route: State Route 235	0	0
Route: Twp Hwy 21 N Elm Tree Rd	0	0

No glare found

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions.
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several 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 : continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Glare analysis methods used: OP V1, FP V1, Route V1
- Refer to the **Help page** for assumptions and limitations not listed here.

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Summary: Response - Supplemental Response to First Data Request from Staff of the Ohio
Power

Siting Board electronically filed by Christine M.T. Pirik on behalf of Clearview Solar I, LLC