

# Glyntaff Solar Farm

## Glyntaff Solar Farm Residential 25 Degrees

**Created** Feb 11, 2025  
**Updated** Feb 25, 2025  
**Time-step** 1 minute  
**Timezone offset** UTC0  
**Minimum sun altitude** 0.0 deg  
**Site ID** 141080.23859

**Project type** Advanced  
**Project status:** active  
**Category** 10 MW to 100 MW

### Misc. Analysis Settings

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

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

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

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
PV array 1	25.0	180.0	7,472	1,271	-
PV array 2	25.0	180.0	14,715	407	-
PV array 3	25.0	180.0	13,328	0	-
PV array 4	25.0	180.0	20,966	1,212	-
PV array 5	25.0	180.0	55,679	3,692	-

## Component Data

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## PV Array(s)

Total PV footprint area: 424,331 m<sup>2</sup>

Name: PV array 1

Footprint area: 17,880 m<sup>2</sup>

Axis tracking: Fixed (no rotation)

Tilt: 25.0 deg

Orientation: 180.0 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



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	51.601938	-3.313555	265.09	3.00	268.09
2	51.601611	-3.314070	259.47	3.00	262.47
3	51.600658	-3.313716	254.63	3.00	257.63
4	51.600565	-3.313266	256.31	3.00	259.31
5	51.600705	-3.311184	256.66	3.00	259.66
6	51.601965	-3.313169	266.61	3.00	269.61

Name: PV array 2

Footprint area: 49,551 m<sup>2</sup>

Axis tracking: Fixed (no rotation)

Tilt: 25.0 deg

Orientation: 180.0 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



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	51.601265	-3.314843	244.83	3.00	247.83
2	51.600558	-3.314854	236.32	3.00	239.32
3	51.600339	-3.314671	235.55	3.00	238.55
4	51.599725	-3.315519	226.27	3.00	229.27
5	51.599466	-3.314800	226.21	3.00	229.21
6	51.599812	-3.314478	230.46	3.00	233.46
7	51.599606	-3.313491	234.07	3.00	237.07
8	51.599172	-3.313277	228.27	3.00	231.27
9	51.599112	-3.313062	228.90	3.00	231.90
10	51.599472	-3.312665	240.65	3.00	243.65
11	51.599279	-3.312193	238.25	3.00	241.25
12	51.598366	-3.312772	215.54	3.00	218.54
13	51.598613	-3.314285	217.43	3.00	220.43
14	51.600099	-3.317729	223.93	3.00	226.93
15	51.600439	-3.316828	230.35	3.00	233.35
16	51.600792	-3.316957	231.71	3.00	234.71
17	51.600925	-3.317150	232.30	3.00	235.30
18	51.601192	-3.317107	234.16	3.00	237.16

Name: PV array 3

Footprint area: 149,753 m<sup>2</sup>

Axis tracking: Fixed (no rotation)

Tilt: 25.0 deg

Orientation: 180.0 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



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	51.605456	-3.314339	282.26	3.00	285.26
2	51.605503	-3.308062	317.40	3.00	320.40
3	51.605236	-3.308116	315.98	3.00	318.98
4	51.605090	-3.308159	315.21	3.00	318.21
5	51.605043	-3.307687	319.87	3.00	322.87
6	51.603977	-3.306914	319.05	3.00	322.05
7	51.602578	-3.308846	300.16	3.00	303.16
8	51.602398	-3.309618	297.80	3.00	300.80
9	51.602211	-3.309897	295.43	3.00	298.43
10	51.602165	-3.309532	294.68	3.00	297.68
11	51.601691	-3.309221	289.06	3.00	292.06
12	51.601018	-3.309028	283.77	3.00	286.77
13	51.601018	-3.309307	283.85	3.00	286.85
14	51.602118	-3.311131	292.67	3.00	295.67
15	51.603171	-3.313105	292.60	3.00	295.60
16	51.603870	-3.314135	286.52	3.00	289.52
17	51.604637	-3.314467	283.17	3.00	286.17

Name: PV array 4

Footprint area: 106,771 m<sup>2</sup>

Axis tracking: Fixed (no rotation)

Tilt: 25.0 deg

Orientation: 180.0 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



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	51.602218	-3.309039	295.46	3.00	298.46
2	51.602418	-3.308041	301.51	3.00	304.51
3	51.602824	-3.307537	304.80	3.00	307.80
4	51.602844	-3.307118	307.70	3.00	310.70
5	51.602804	-3.305101	317.41	3.00	320.41
6	51.602518	-3.304822	314.60	3.00	317.60
7	51.602324	-3.302623	322.20	3.00	325.20
8	51.602111	-3.302505	319.44	3.00	322.44
9	51.600439	-3.303320	299.07	3.00	302.07
10	51.600132	-3.306024	284.88	3.00	287.88
11	51.599872	-3.306260	280.94	3.00	283.94
12	51.599885	-3.306796	279.08	3.00	282.08
13	51.599646	-3.306893	276.48	3.00	279.48
14	51.599699	-3.307794	274.05	3.00	277.05
15	51.599932	-3.308180	273.69	3.00	276.69
16	51.600105	-3.308234	275.93	3.00	278.93
17	51.600465	-3.307633	281.09	3.00	284.09
18	51.600592	-3.306764	286.62	3.00	289.62
19	51.600885	-3.306732	289.59	3.00	292.59
20	51.600778	-3.308513	281.54	3.00	284.54
21	51.601651	-3.308749	288.49	3.00	291.49

Name: PV array 5

Footprint area: 100,376 m<sup>2</sup>

Axis tracking: Fixed (no rotation)

Tilt: 25.0 deg

Orientation: 180.0 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



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	51.600205	-3.303385	294.90	3.00	297.90
2	51.599945	-3.303513	290.50	3.00	293.50
3	51.599745	-3.305852	282.14	3.00	285.14
4	51.598906	-3.306614	269.30	3.00	272.30
5	51.598566	-3.306710	263.61	3.00	266.61
6	51.598233	-3.306474	257.58	3.00	260.58
7	51.597766	-3.306657	245.68	3.00	248.68
8	51.596740	-3.306067	230.77	3.00	233.77
9	51.596587	-3.306646	229.73	3.00	232.73
10	51.596820	-3.307419	229.75	3.00	232.75
11	51.596626	-3.307655	225.39	3.00	228.39
12	51.596007	-3.305691	215.67	3.00	218.67
13	51.595787	-3.305509	211.16	3.00	214.16
14	51.595773	-3.306131	209.75	3.00	212.75
15	51.596213	-3.307783	216.75	3.00	219.75
16	51.596613	-3.308148	221.38	3.00	224.38
17	51.596806	-3.308009	225.93	3.00	228.93
18	51.597086	-3.308899	221.68	3.00	224.68
19	51.596300	-3.309049	203.96	3.00	206.96
20	51.596033	-3.308373	204.56	3.00	207.56
21	51.594560	-3.308953	170.18	3.00	173.18
22	51.594180	-3.309811	160.65	3.00	163.65
23	51.594547	-3.310884	160.99	3.00	163.99
24	51.594387	-3.311378	157.73	3.00	160.73
25	51.594360	-3.312000	154.10	3.00	157.10
26	51.595314	-3.312021	171.30	3.00	174.30
27	51.595507	-3.311753	175.53	3.00	178.53
28	51.595613	-3.312204	174.41	3.00	177.41
29	51.596533	-3.312686	187.07	3.00	190.07
30	51.596493	-3.312354	189.19	3.00	192.19
31	51.595800	-3.311839	180.50	3.00	183.50
32	51.595693	-3.311313	180.82	3.00	183.82
33	51.595887	-3.311023	185.16	3.00	188.16
34	51.595180	-3.309918	180.13	3.00	183.13
35	51.595893	-3.309457	195.26	3.00	198.26
36	51.597226	-3.309328	219.20	3.00	222.20
37	51.597703	-3.309666	224.92	3.00	227.92
38	51.598126	-3.310492	226.04	3.00	229.04
39	51.598839	-3.309071	247.64	3.00	250.64
40	51.598363	-3.308652	242.13	3.00	245.13
41	51.598176	-3.308304	242.91	3.00	245.91
42	51.598176	-3.307494	250.43	3.00	253.43
43	51.598732	-3.307086	265.32	3.00	268.32
44	51.598872	-3.307864	264.95	3.00	267.95
45	51.599396	-3.307681	271.60	3.00	274.60
46	51.599479	-3.306415	276.33	3.00	279.33
47	51.599942	-3.305723	285.01	3.00	288.01

## Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	m	m	m
OP 1	51.604857	-3.321731	211.05	2.00	213.05
OP 2	51.604284	-3.322401	205.68	2.00	207.68
OP 3	51.606296	-3.326417	153.07	2.00	155.07
OP 4	51.605620	-3.326599	147.10	2.00	149.10
OP 5	51.605213	-3.327055	136.40	2.00	138.40
OP 6	51.604310	-3.326551	137.06	2.00	139.06
OP 7	51.602595	-3.331518	64.83	2.00	66.83
OP 8	51.601788	-3.329367	71.53	2.00	73.53
OP 9	51.596820	-3.318810	94.59	2.00	96.59
OP 10	51.595557	-3.322308	62.43	2.00	64.43
OP 11	51.595117	-3.321541	66.14	2.00	68.14
OP 12	51.599993	-3.310196	254.41	2.00	256.41
OP 13	51.597717	-3.311470	212.12	2.00	214.12
OP 14	51.597059	-3.314613	171.95	2.00	173.95
OP 15	51.596839	-3.314503	167.95	2.00	169.95
OP 16	51.598417	-3.331978	56.74	2.00	58.74
OP 17	51.598560	-3.330551	54.64	2.00	56.64
OP 18	51.597957	-3.329376	54.14	2.00	56.14
OP 19	51.597091	-3.329510	57.01	2.00	59.01
OP 20	51.596574	-3.327424	54.70	2.00	56.70
OP 21	51.596534	-3.325337	58.56	2.00	60.56
OP 22	51.595774	-3.324940	56.89	2.00	58.89
OP 23	51.595254	-3.325551	55.81	2.00	57.81
OP 24	51.595111	-3.324387	53.88	2.00	55.88
OP 25	51.594418	-3.324613	56.21	2.00	58.21
OP 26	51.593572	-3.324725	63.73	2.00	65.73
OP 27	51.592735	-3.324677	64.57	2.00	66.57
OP 28	51.592149	-3.324012	58.59	2.00	60.59
OP 29	51.591449	-3.324028	59.26	2.00	61.26
OP 30	51.590759	-3.323733	60.06	2.00	62.06
OP 31	51.589936	-3.323277	59.47	2.00	61.47
OP 32	51.589426	-3.322601	58.70	2.00	60.70
OP 33	51.588939	-3.322327	56.61	2.00	58.61
OP 34	51.588382	-3.322102	56.64	2.00	58.64
OP 35	51.591393	-3.325814	68.63	2.00	70.63
OP 36	51.592103	-3.326008	70.34	2.00	72.34
OP 37	51.592953	-3.326297	71.61	2.00	73.61
OP 38	51.593816	-3.326528	71.22	2.00	73.22
OP 39	51.594372	-3.327215	73.36	2.00	75.36
OP 40	51.595122	-3.328395	76.09	2.00	78.09
OP 41	51.595777	-3.329430	77.99	2.00	79.99
OP 42	51.596337	-3.330679	85.43	2.00	87.43
OP 43	51.592769	-3.322922	54.88	2.00	56.88
OP 44	51.592299	-3.322820	53.91	2.00	55.91
OP 45	51.591692	-3.322697	50.32	2.00	52.32
OP 46	51.591306	-3.322268	52.02	2.00	54.02
OP 47	51.590636	-3.321479	52.29	2.00	54.29
OP 48	51.590298	-3.321242	52.55	2.00	54.55
OP 49	51.592161	-3.321199	59.53	2.00	61.53
OP 50	51.592497	-3.320533	61.50	2.00	63.50
OP 51	51.592484	-3.319289	63.99	2.00	65.99
OP 52	51.592454	-3.318313	64.90	2.00	66.90
OP 53	51.592121	-3.316789	69.60	2.00	71.60
OP 54	51.591464	-3.315507	71.47	2.00	73.47
OP 55	51.590624	-3.314488	74.01	2.00	76.01
OP 56	51.590158	-3.318409	58.03	2.00	60.03
OP 57	51.589644	-3.319858	55.53	2.00	57.53
OP 58	51.590884	-3.319836	57.77	2.00	59.77
OP 59	51.591451	-3.320769	59.12	2.00	61.12
OP 60	51.589551	-3.302557	121.91	2.00	123.91
OP 61	51.588968	-3.301399	115.76	2.00	117.76
OP 62	51.595120	-3.301058	210.81	2.00	212.81
OP 63	51.594170	-3.299100	217.33	2.00	219.33

OP 64	51.594230	-3.298397	222.31	2.00	224.31
OP 65	51.590652	-3.297697	168.56	2.00	170.56

# 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	
PV array 1	25.0	180.0	7,472	1,271	-	-
PV array 2	25.0	180.0	14,715	407	-	-
PV array 3	25.0	180.0	13,328	0	-	-
PV array 4	25.0	180.0	20,966	1,212	-	-
PV array 5	25.0	180.0	55,679	3,692	-	-

## 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
pv-array-1 (green)	0	0	0	71	1000	968	1031	398	0	0	0	0
pv-array-1 (yellow)	0	0	0	0	212	609	450	0	0	0	0	0
pv-array-2 (green)	0	0	297	334	1022	1664	1419	451	371	45	0	0
pv-array-2 (yellow)	0	0	36	142	26	0	0	125	78	0	0	0
pv-array-3 (green)	0	0	0	1	551	825	737	124	0	0	0	0
pv-array-3 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0
pv-array-4 (green)	0	0	0	36	403	614	529	140	0	0	0	0
pv-array-4 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0
pv-array-5 (green)	0	0	506	1604	2068	2014	2239	1752	1005	0	0	0
pv-array-5 (yellow)	0	0	0	24	149	303	90	160	0	0	0	0

## PV & Receptor Analysis Results

Results for each PV array and receptor

### PV array 1 potential temporary after-image

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	1367	1271
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0



OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	1239	0
OP: OP 20	931	0
OP: OP 21	384	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
OP: OP 41	1450	0
OP: OP 42	2101	0
OP: OP 43	0	0
OP: OP 44	0	0
OP: OP 45	0	0
OP: OP 46	0	0
OP: OP 47	0	0
OP: OP 48	0	0
OP: OP 49	0	0
OP: OP 50	0	0
OP: OP 51	0	0
OP: OP 52	0	0
OP: OP 53	0	0
OP: OP 54	0	0
OP: OP 55	0	0
OP: OP 56	0	0
OP: OP 57	0	0
OP: OP 58	0	0
OP: OP 59	0	0
OP: OP 60	0	0
OP: OP 61	0	0
OP: OP 62	0	0
OP: OP 63	0	0
OP: OP 64	0	0
OP: OP 65	0	0

## PV array 1: OP 1

*No glare found*

**PV array 1: OP 2**

*No glare found*

**PV array 1: OP 3**

*No glare found*

**PV array 1: OP 4**

*No glare found*

**PV array 1: OP 5**

*No glare found*

**PV array 1: OP 6**

*No glare found*

**PV array 1: OP 7**

*No glare found*

**PV array 1: OP 8**

*No glare found*

**PV array 1: OP 9**

*No glare found*

**PV array 1: OP 10**

*No glare found*

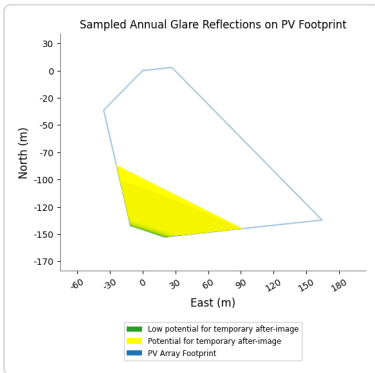
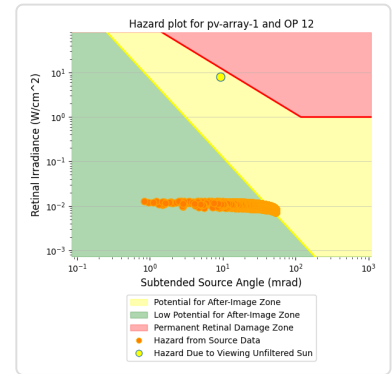
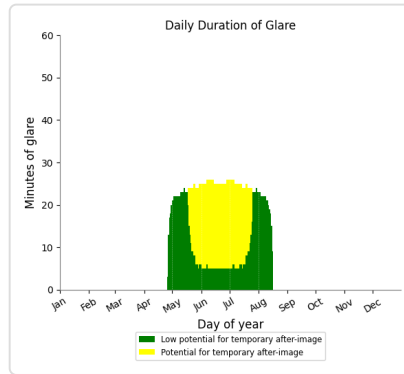
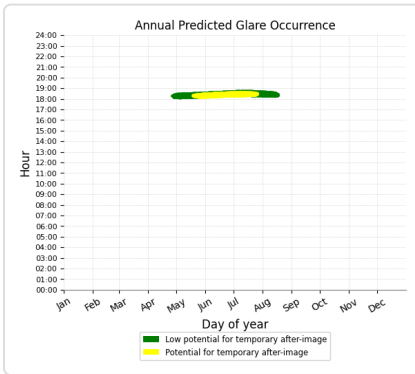
**PV array 1: OP 11**

*No glare found*

## PV array 1: OP 12

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

- 1,367 minutes of "green" glare with low potential to cause temporary after-image.
- 1,271 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 1: OP 13

No glare found

## PV array 1: OP 14

No glare found

## PV array 1: OP 15

No glare found

## PV array 1: OP 16

No glare found

## PV array 1: OP 17

No glare found

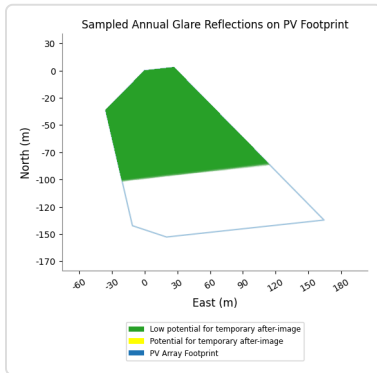
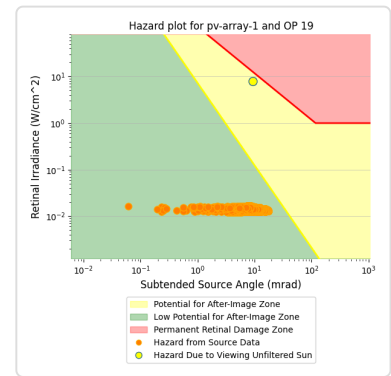
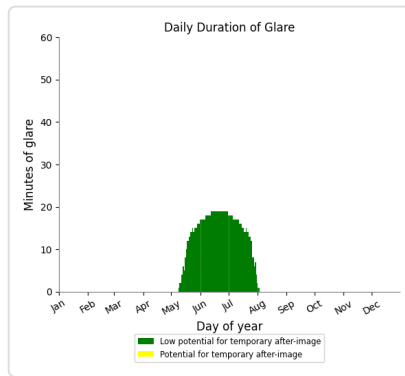
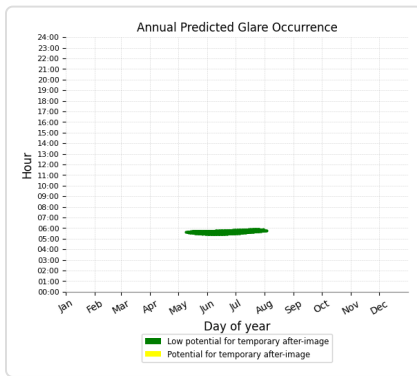
## PV array 1: OP 18

No glare found

## PV array 1: OP 19

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

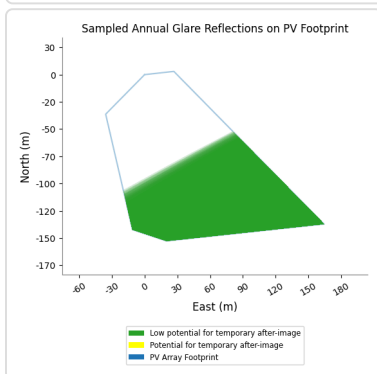
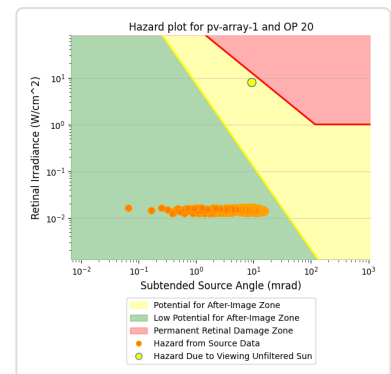
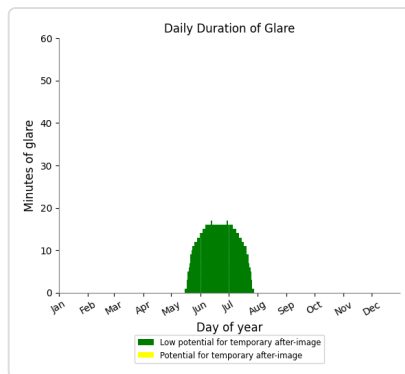
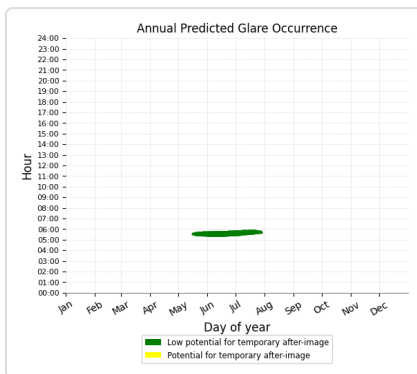
- 1,239 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 1: OP 20

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

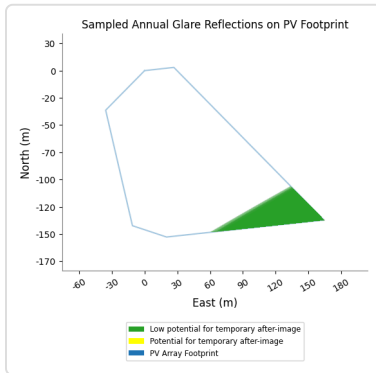
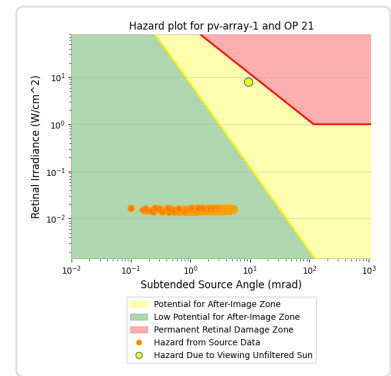
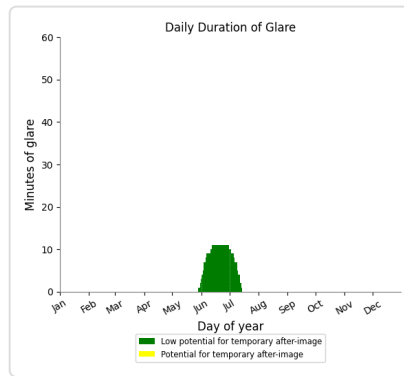
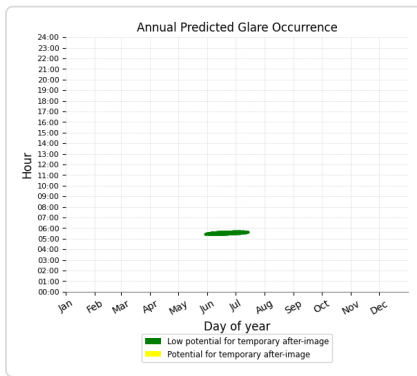
- 931 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 1: OP 21

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

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



## PV array 1: OP 22

No glare found

## PV array 1: OP 23

No glare found

## PV array 1: OP 24

No glare found

## PV array 1: OP 25

No glare found

## PV array 1: OP 26

No glare found

## PV array 1: OP 27

No glare found

## PV array 1: OP 28

No glare found

## PV array 1: OP 29

No glare found

## PV array 1: OP 30

No glare found

**PV array 1: OP 31**

*No glare found*

**PV array 1: OP 32**

*No glare found*

**PV array 1: OP 33**

*No glare found*

**PV array 1: OP 34**

*No glare found*

**PV array 1: OP 35**

*No glare found*

**PV array 1: OP 36**

*No glare found*

**PV array 1: OP 37**

*No glare found*

**PV array 1: OP 38**

*No glare found*

**PV array 1: OP 39**

*No glare found*

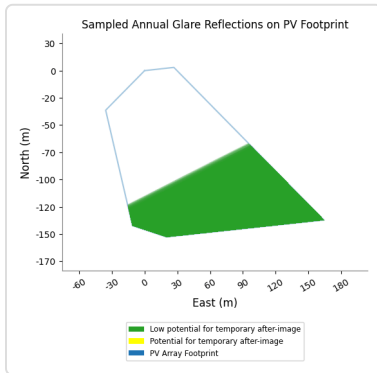
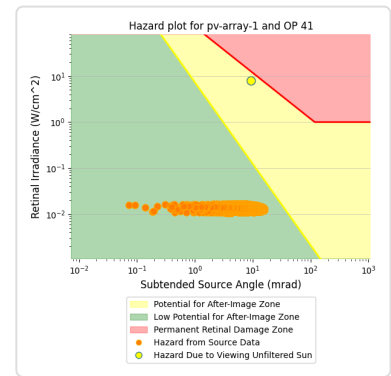
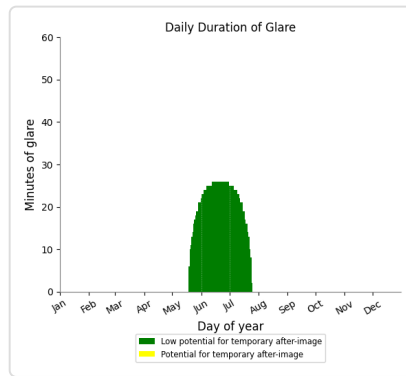
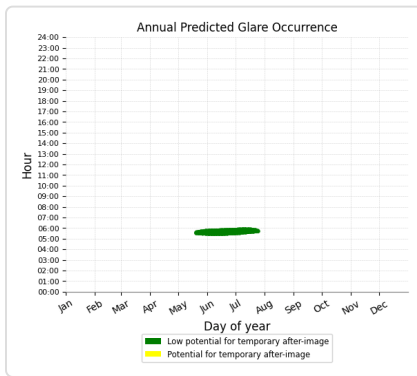
**PV array 1: OP 40**

*No glare found*

## PV array 1: OP 41

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

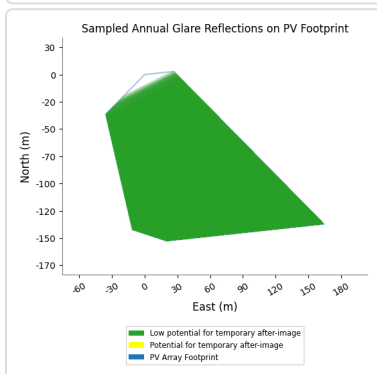
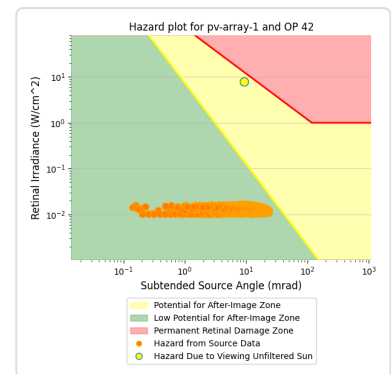
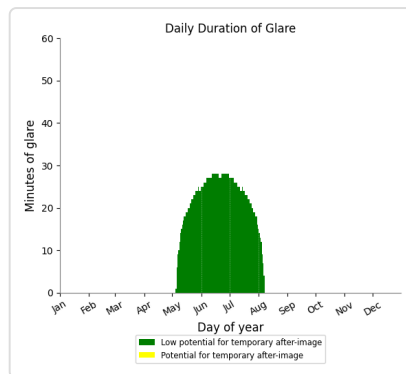
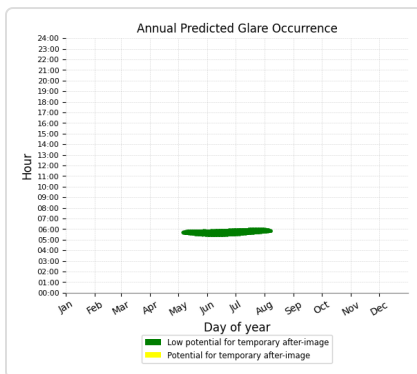
- 1,450 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 1: OP 42

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

- 2,101 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 1: OP 43

No glare found

**PV array 1: OP 44**

*No glare found*

**PV array 1: OP 45**

*No glare found*

**PV array 1: OP 46**

*No glare found*

**PV array 1: OP 47**

*No glare found*

**PV array 1: OP 48**

*No glare found*

**PV array 1: OP 49**

*No glare found*

**PV array 1: OP 50**

*No glare found*

**PV array 1: OP 51**

*No glare found*

**PV array 1: OP 52**

*No glare found*

**PV array 1: OP 53**

*No glare found*

**PV array 1: OP 54**

*No glare found*

**PV array 1: OP 55**

*No glare found*

**PV array 1: OP 56**

*No glare found*

**PV array 1: OP 57**

*No glare found*

**PV array 1: OP 58**

*No glare found*

**PV array 1: OP 59**

*No glare found*



### PV array 1: OP 60

No glare found

### PV array 1: OP 61

No glare found

### PV array 1: OP 62

No glare found

### PV array 1: OP 63

No glare found

### PV array 1: OP 64

No glare found

### PV array 1: OP 65

No glare found

### PV array 2 potential temporary after-image

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	2816	407
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	1099	0
OP: OP 20	557	0
OP: OP 21	0	0
OP: OP 22	576	0
OP: OP 23	915	0
OP: OP 24	481	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0

OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	1045	0
OP: OP 40	1426	0
OP: OP 41	1470	0
OP: OP 42	1476	0
OP: OP 43	0	0
OP: OP 44	0	0
OP: OP 45	0	0
OP: OP 46	0	0
OP: OP 47	0	0
OP: OP 48	0	0
OP: OP 49	0	0
OP: OP 50	0	0
OP: OP 51	0	0
OP: OP 52	0	0
OP: OP 53	0	0
OP: OP 54	0	0
OP: OP 55	0	0
OP: OP 56	0	0
OP: OP 57	0	0
OP: OP 58	0	0
OP: OP 59	0	0
OP: OP 60	0	0
OP: OP 61	0	0
OP: OP 62	1307	0
OP: OP 63	624	0
OP: OP 64	923	0
OP: OP 65	0	0

**PV array 2: OP 1**

*No glare found*

**PV array 2: OP 2**

*No glare found*

**PV array 2: OP 3**

*No glare found*

**PV array 2: OP 4**

*No glare found*

**PV array 2: OP 5**

*No glare found*

## PV array 2: OP 6

No glare found

## PV array 2: OP 7

No glare found

## PV array 2: OP 8

No glare found

## PV array 2: OP 9

No glare found

## PV array 2: OP 10

No glare found

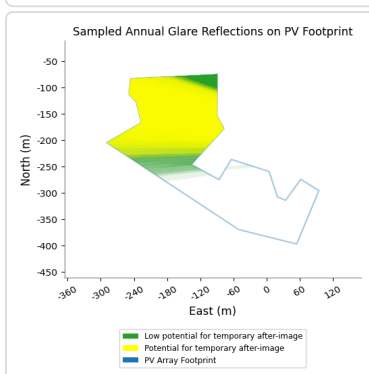
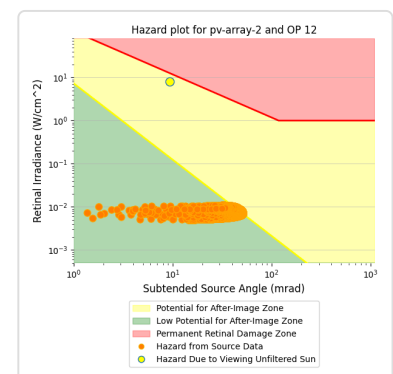
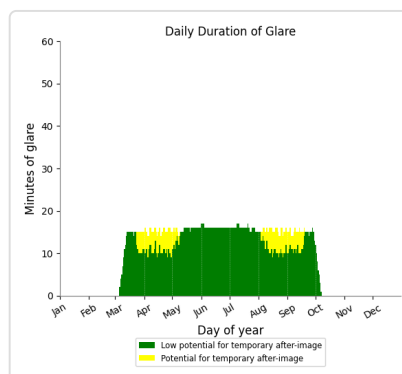
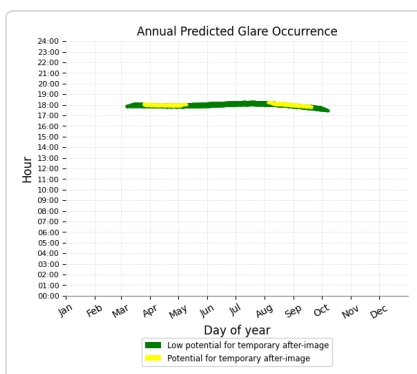
## PV array 2: OP 11

No glare found

## PV array 2: OP 12

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

- 2,816 minutes of "green" glare with low potential to cause temporary after-image.
- 407 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 2: OP 13

No glare found

## PV array 2: OP 14

No glare found

## PV array 2: OP 15

No glare found

## PV array 2: OP 16

No glare found

## PV array 2: OP 17

No glare found

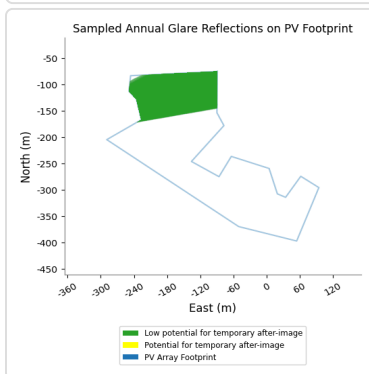
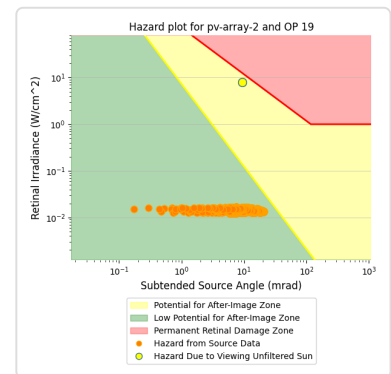
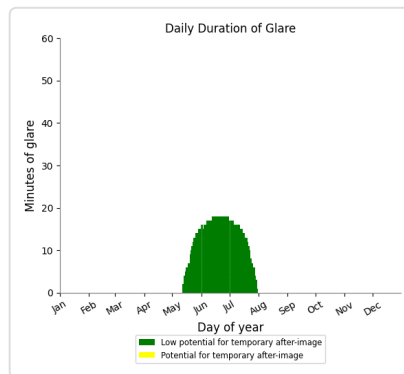
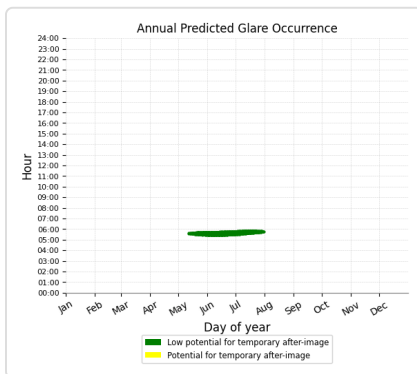
## PV array 2: OP 18

No glare found

## PV array 2: OP 19

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

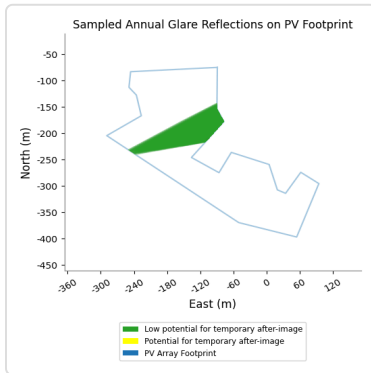
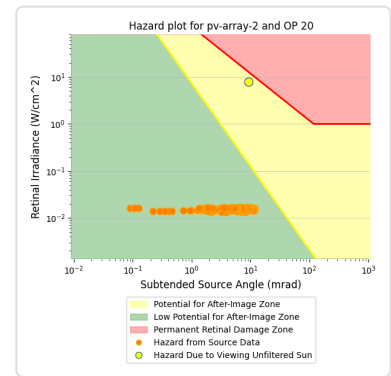
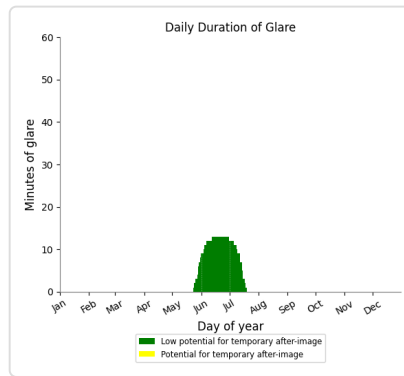
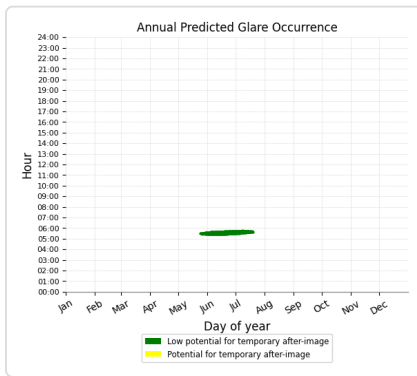
- 1,099 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 2: OP 20

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

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



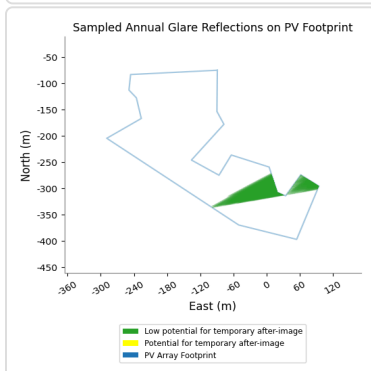
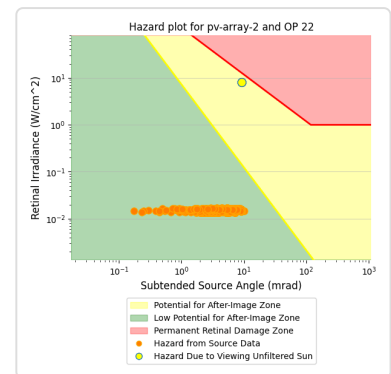
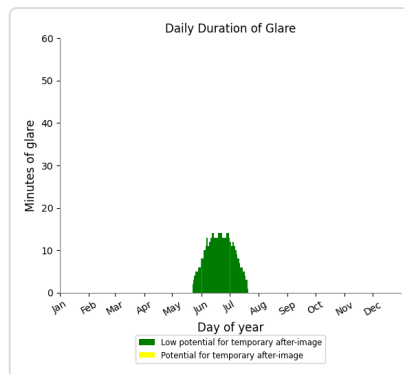
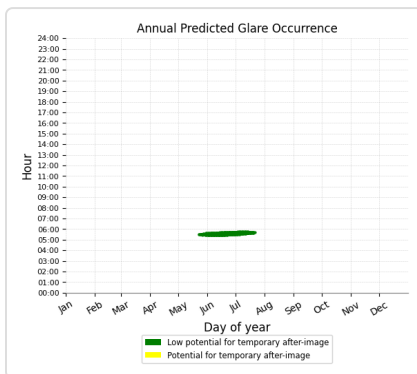
## PV array 2: OP 21

No glare found

## PV array 2: OP 22

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

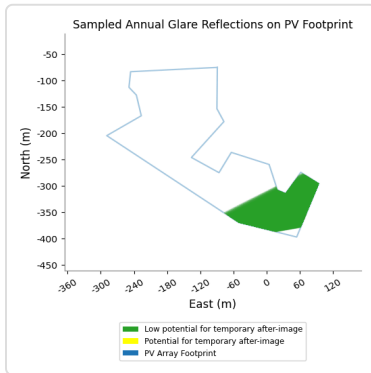
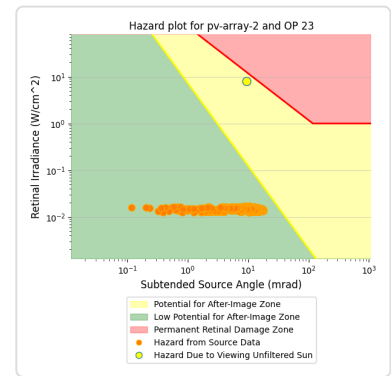
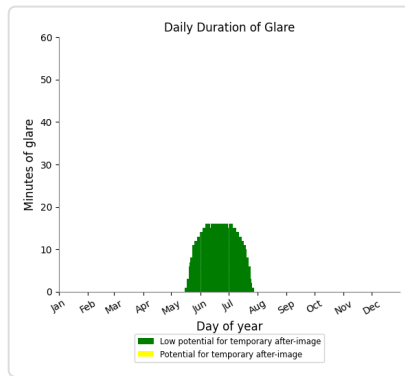
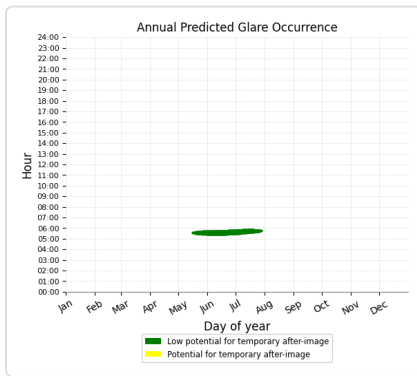
- 576 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 2: OP 23

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

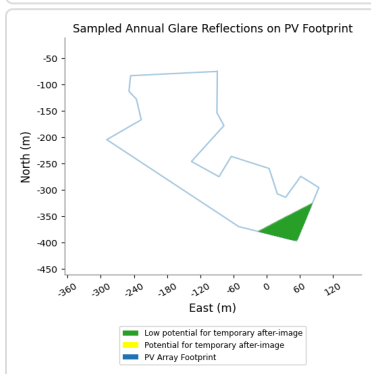
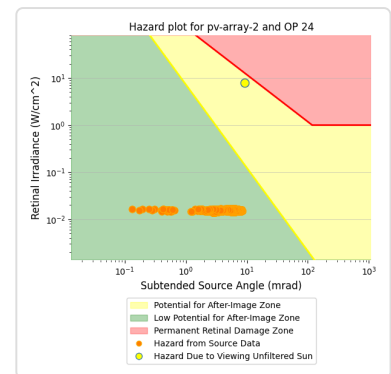
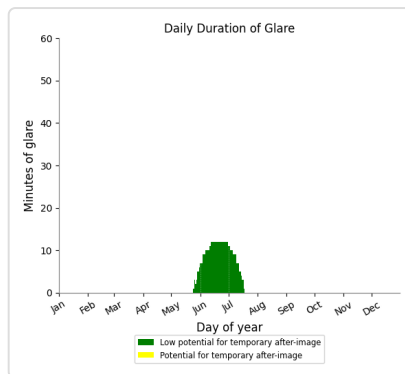
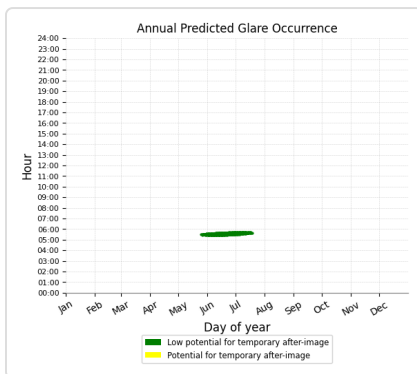
- 915 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 2: OP 24

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

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



## PV array 2: OP 25

No glare found

**PV array 2: OP 26**

*No glare found*

**PV array 2: OP 27**

*No glare found*

**PV array 2: OP 28**

*No glare found*

**PV array 2: OP 29**

*No glare found*

**PV array 2: OP 30**

*No glare found*

**PV array 2: OP 31**

*No glare found*

**PV array 2: OP 32**

*No glare found*

**PV array 2: OP 33**

*No glare found*

**PV array 2: OP 34**

*No glare found*

**PV array 2: OP 35**

*No glare found*

**PV array 2: OP 36**

*No glare found*

**PV array 2: OP 37**

*No glare found*

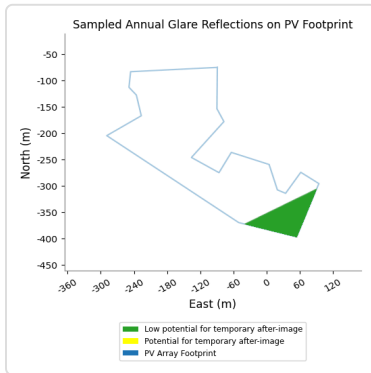
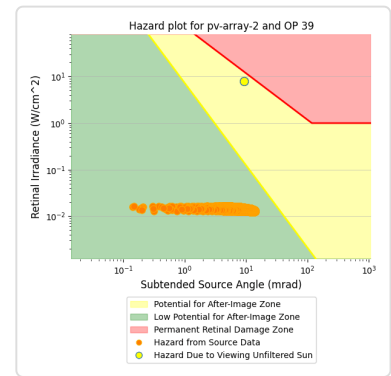
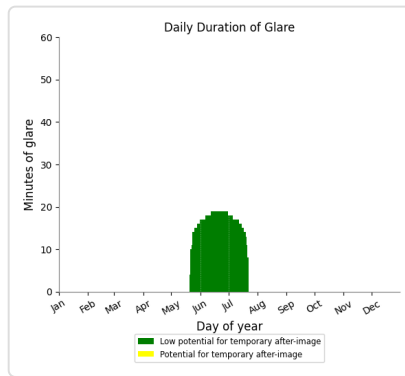
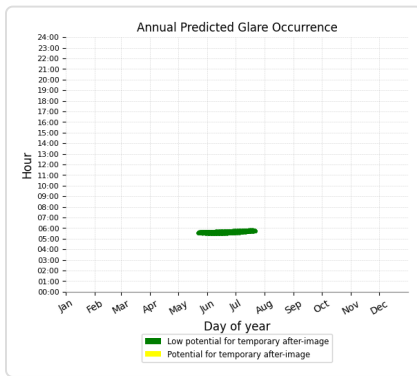
**PV array 2: OP 38**

*No glare found*

## PV array 2: OP 39

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

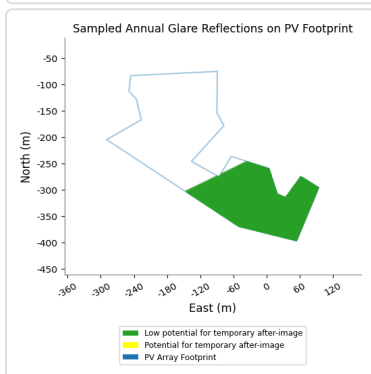
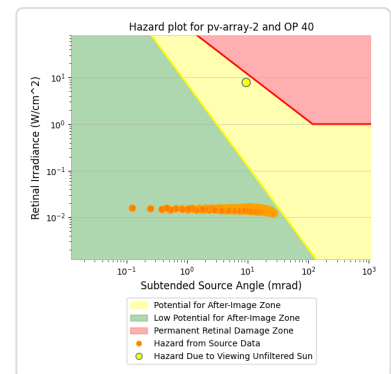
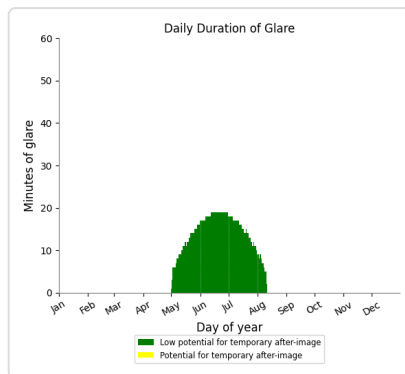
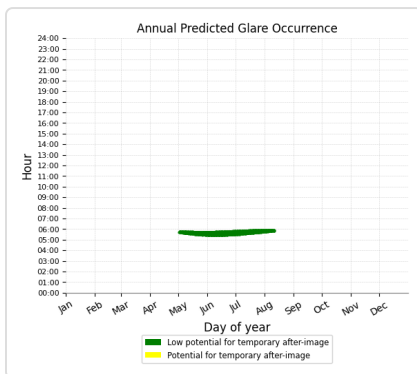
- 1,045 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 2: OP 40

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

- 1,426 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

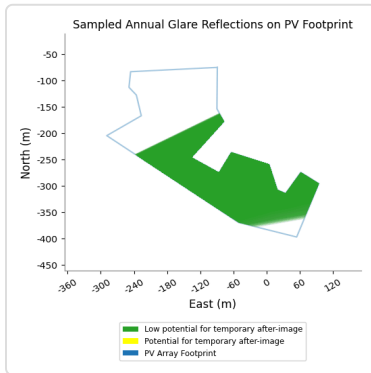
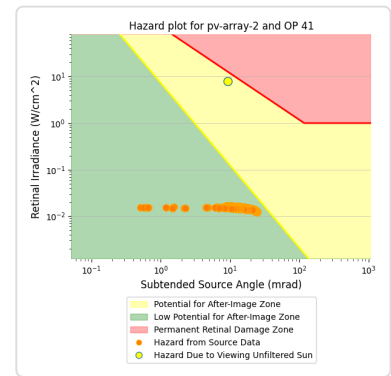
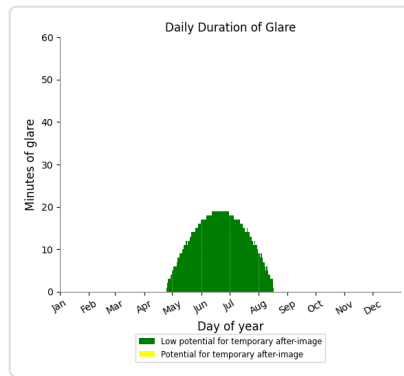
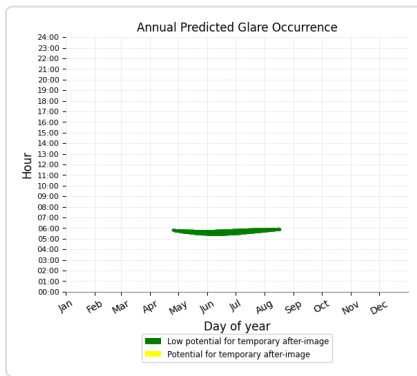




## PV array 2: OP 41

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

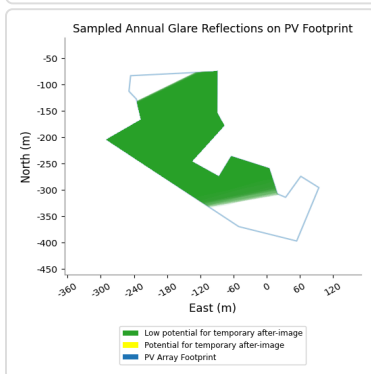
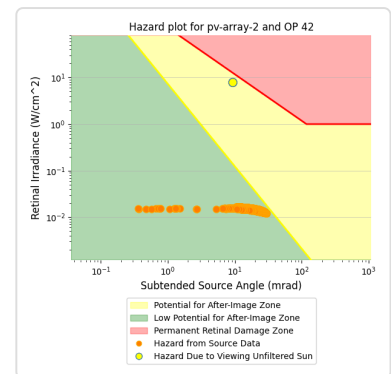
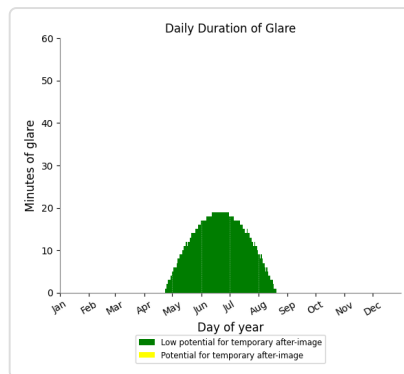
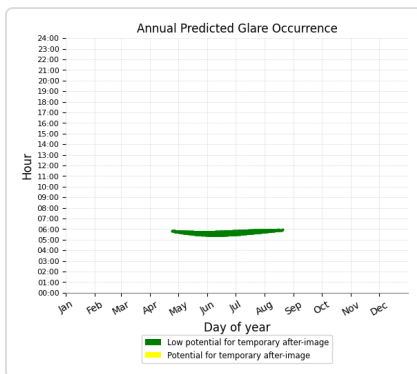
- 1,470 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 2: OP 42

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

- 1,476 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 2: OP 43

No glare found

**PV array 2: OP 44**

*No glare found*

**PV array 2: OP 45**

*No glare found*

**PV array 2: OP 46**

*No glare found*

**PV array 2: OP 47**

*No glare found*

**PV array 2: OP 48**

*No glare found*

**PV array 2: OP 49**

*No glare found*

**PV array 2: OP 50**

*No glare found*

**PV array 2: OP 51**

*No glare found*

**PV array 2: OP 52**

*No glare found*

**PV array 2: OP 53**

*No glare found*

**PV array 2: OP 54**

*No glare found*

**PV array 2: OP 55**

*No glare found*

**PV array 2: OP 56**

*No glare found*

**PV array 2: OP 57**

*No glare found*

**PV array 2: OP 58**

*No glare found*

**PV array 2: OP 59**

*No glare found*

## PV array 2: OP 60

No glare found

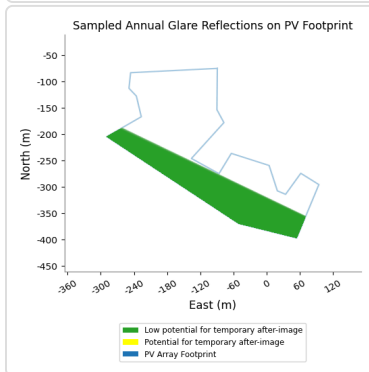
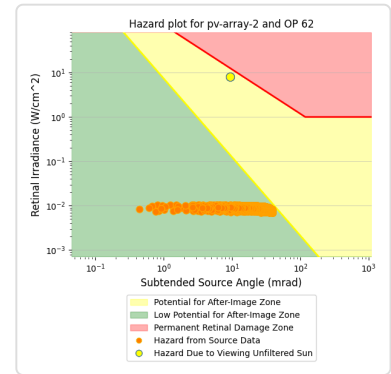
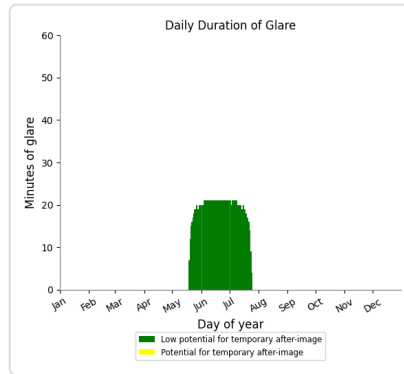
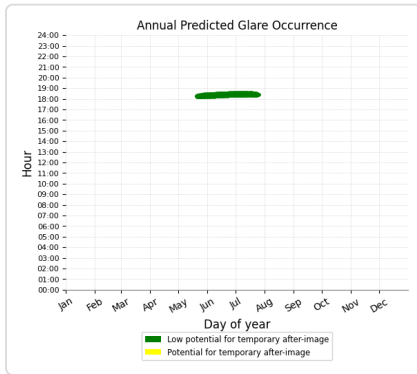
## PV array 2: OP 61

No glare found

## PV array 2: OP 62

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

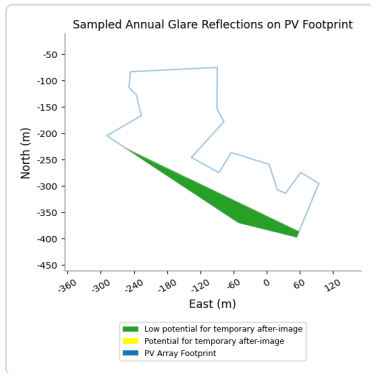
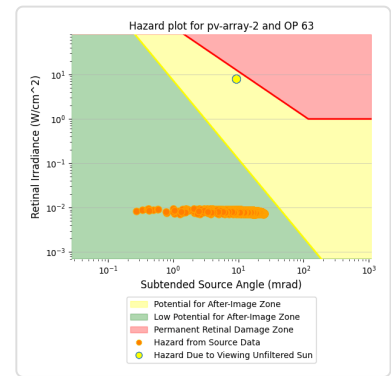
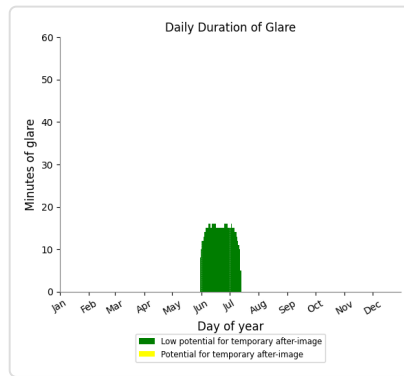
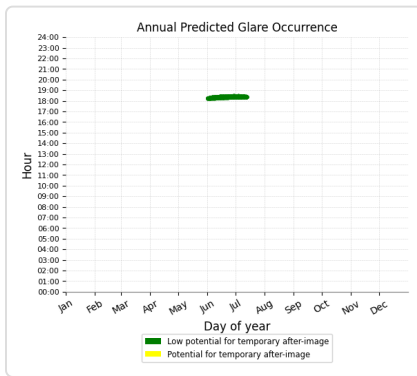
- 1,307 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 2: OP 63

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

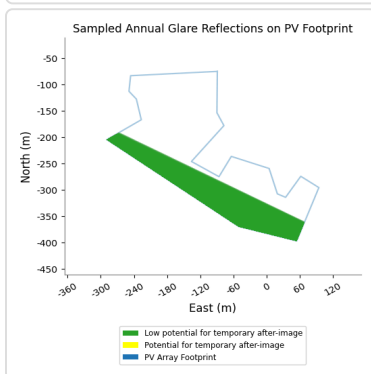
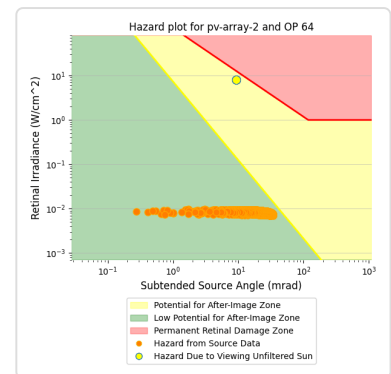
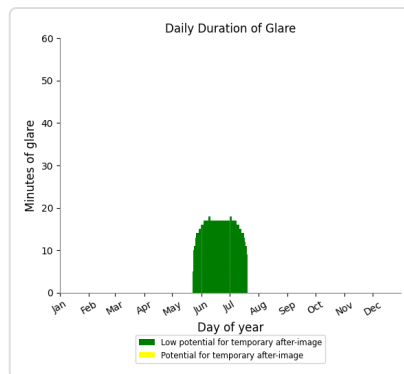
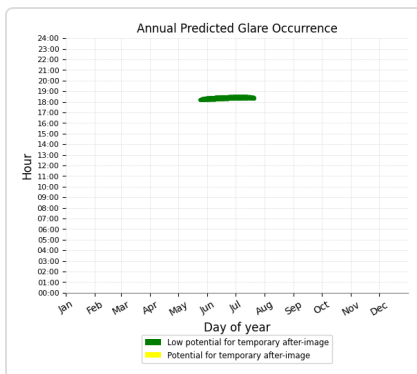
- 624 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 2: OP 64

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

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



## PV array 2: OP 65

No glare found

**PV array 3** low potential for temporary after-image

<b>Component</b>	<b>Green glare (min)</b>	<b>Yellow glare (min)</b>
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	2054	0
OP: OP 17	1777	0
OP: OP 18	1544	0
OP: OP 19	1587	0
OP: OP 20	1149	0
OP: OP 21	646	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	0	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	698	0
OP: OP 41	1679	0
OP: OP 42	2194	0
OP: OP 43	0	0
OP: OP 44	0	0
OP: OP 45	0	0
OP: OP 46	0	0
OP: OP 47	0	0
OP: OP 48	0	0
OP: OP 49	0	0
OP: OP 50	0	0

OP: OP 51	0	0
OP: OP 52	0	0
OP: OP 53	0	0
OP: OP 54	0	0
OP: OP 55	0	0
OP: OP 56	0	0
OP: OP 57	0	0
OP: OP 58	0	0
OP: OP 59	0	0
OP: OP 60	0	0
OP: OP 61	0	0
OP: OP 62	0	0
OP: OP 63	0	0
OP: OP 64	0	0
OP: OP 65	0	0

### **PV array 3: OP 1**

*No glare found*

### **PV array 3: OP 2**

*No glare found*

### **PV array 3: OP 3**

*No glare found*

### **PV array 3: OP 4**

*No glare found*

### **PV array 3: OP 5**

*No glare found*

### **PV array 3: OP 6**

*No glare found*

### **PV array 3: OP 7**

*No glare found*

### **PV array 3: OP 8**

*No glare found*

### **PV array 3: OP 9**

*No glare found*

### **PV array 3: OP 10**

*No glare found*

### **PV array 3: OP 11**

*No glare found*

## PV array 3: OP 12

No glare found

## PV array 3: OP 13

No glare found

## PV array 3: OP 14

No glare found

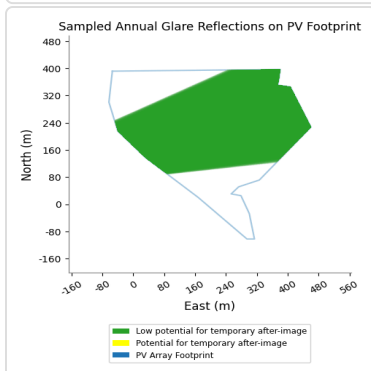
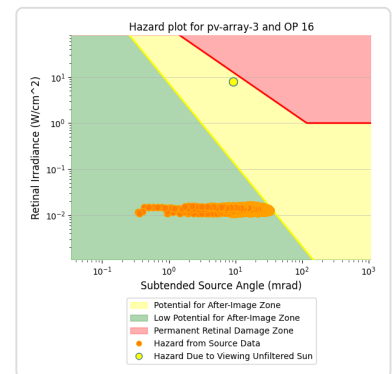
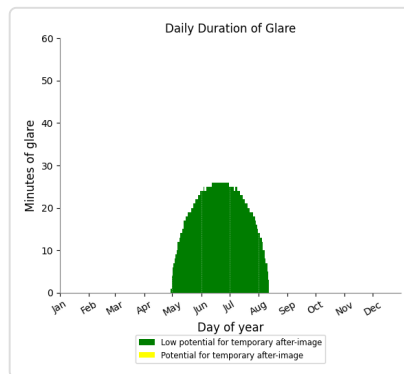
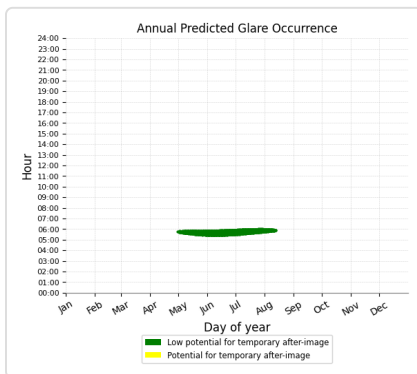
## PV array 3: OP 15

No glare found

## PV array 3: OP 16

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

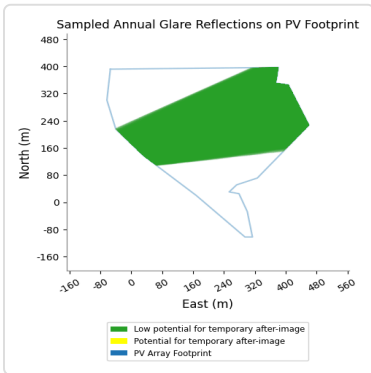
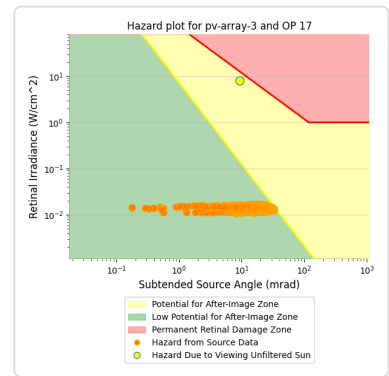
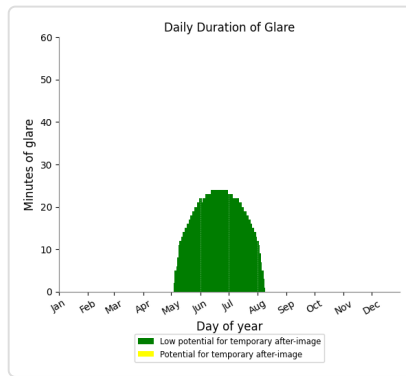
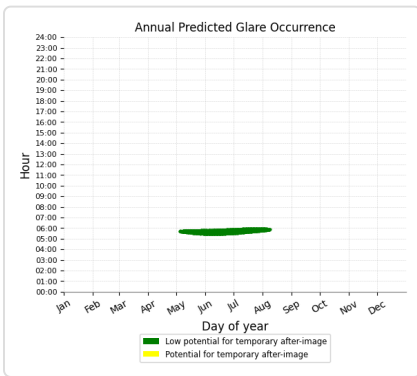
- 2,054 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



### PV array 3: OP 17

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

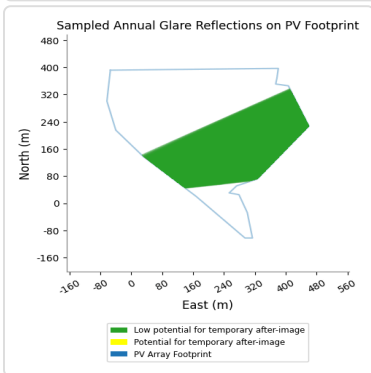
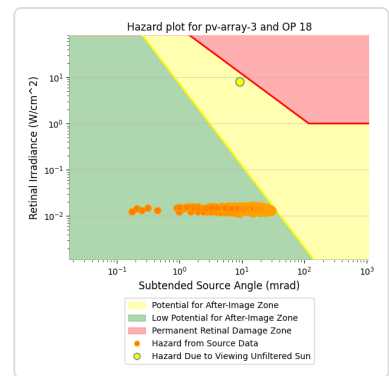
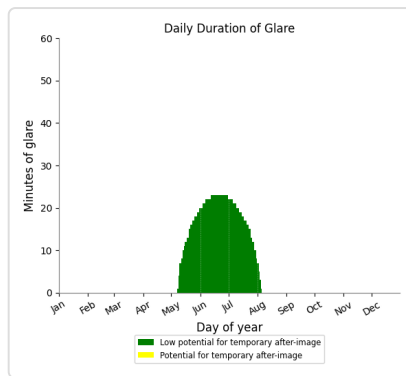
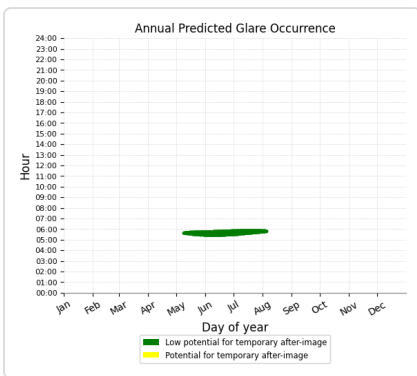
- 1,777 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



### PV array 3: OP 18

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

- 1,544 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

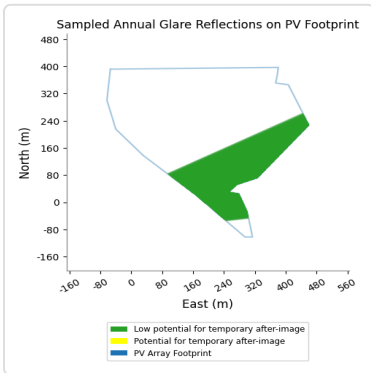
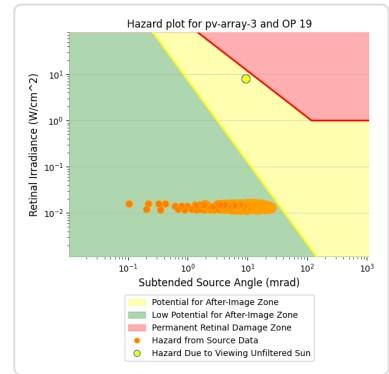
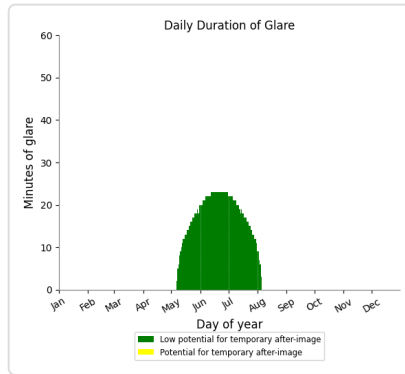
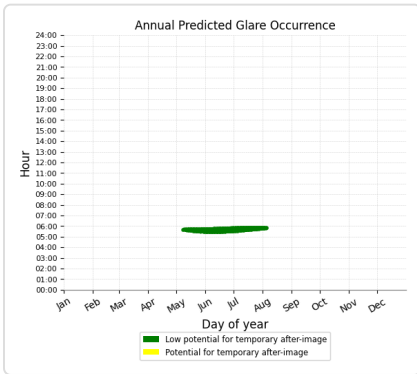




### PV array 3: OP 19

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

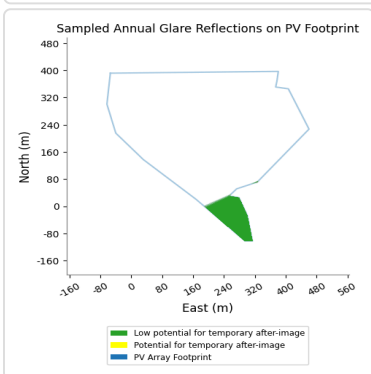
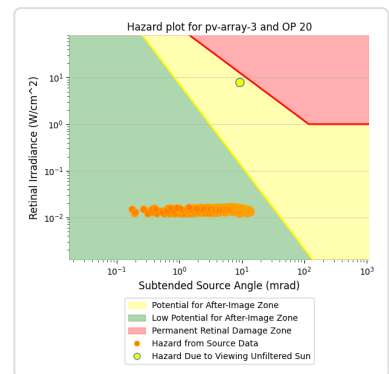
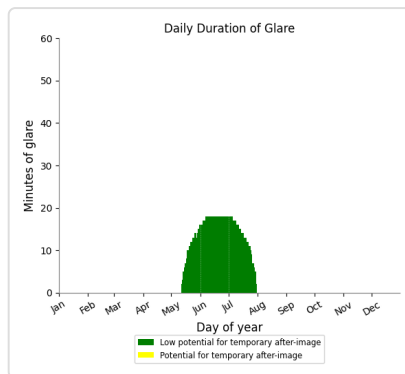
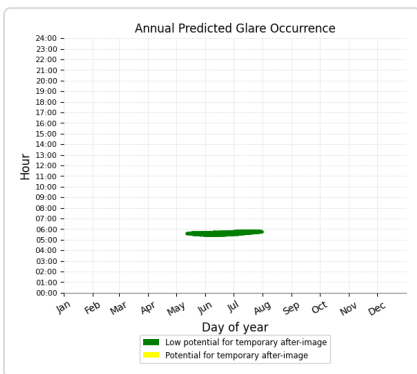
- 1,587 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



### PV array 3: OP 20

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

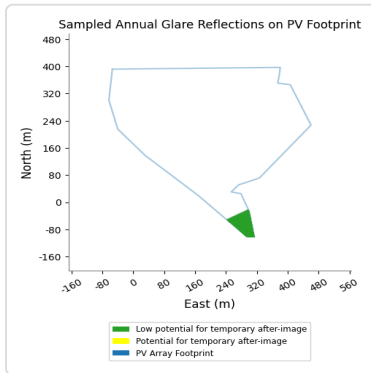
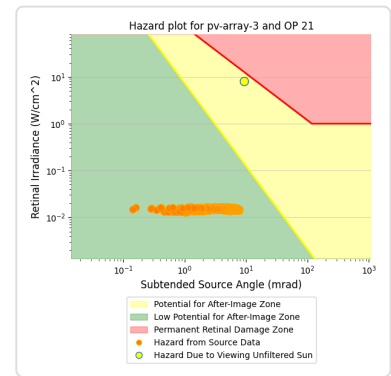
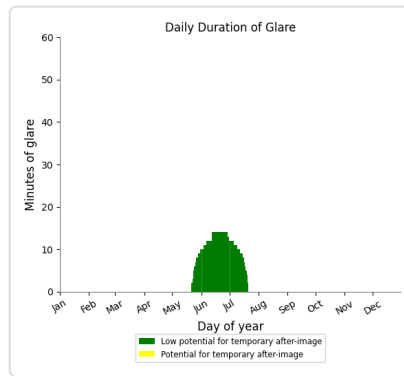
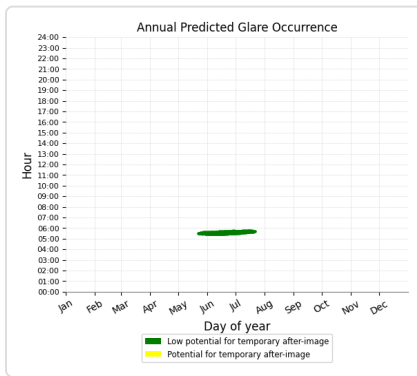
- 1,149 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 3: OP 21

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

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



## PV array 3: OP 22

No glare found

## PV array 3: OP 23

No glare found

## PV array 3: OP 24

No glare found

## PV array 3: OP 25

No glare found

## PV array 3: OP 26

No glare found

## PV array 3: OP 27

No glare found

## PV array 3: OP 28

No glare found

## PV array 3: OP 29

No glare found

## PV array 3: OP 30

No glare found

### PV array 3: OP 31

No glare found

### PV array 3: OP 32

No glare found

### PV array 3: OP 33

No glare found

### PV array 3: OP 34

No glare found

### PV array 3: OP 35

No glare found

### PV array 3: OP 36

No glare found

### PV array 3: OP 37

No glare found

### PV array 3: OP 38

No glare found

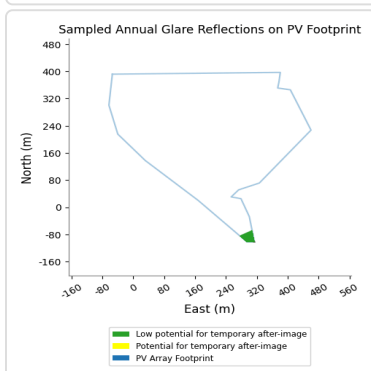
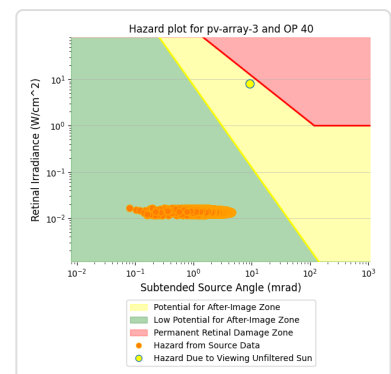
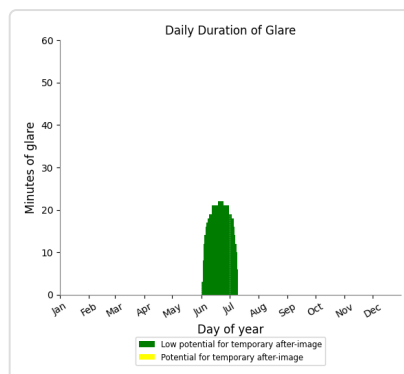
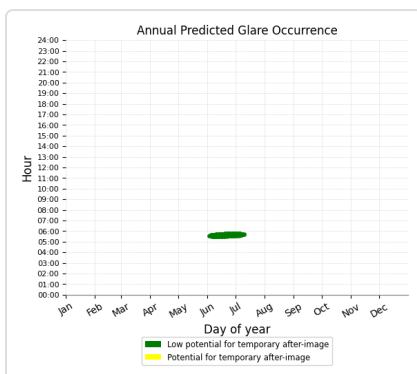
### PV array 3: OP 39

No glare found

### PV array 3: OP 40

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

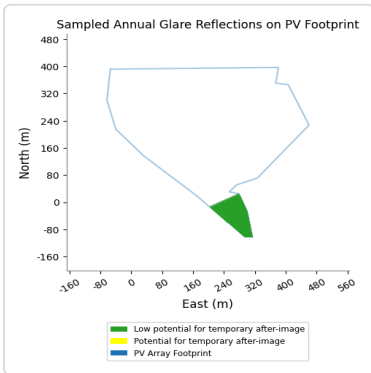
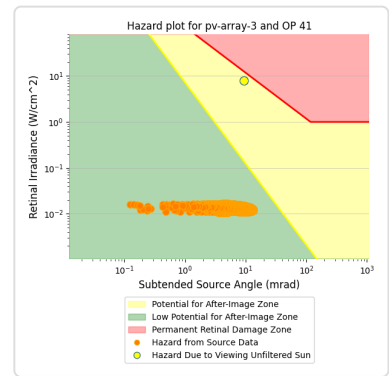
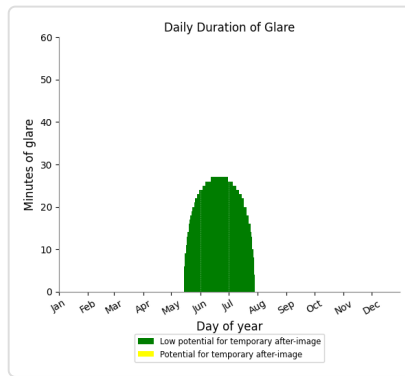
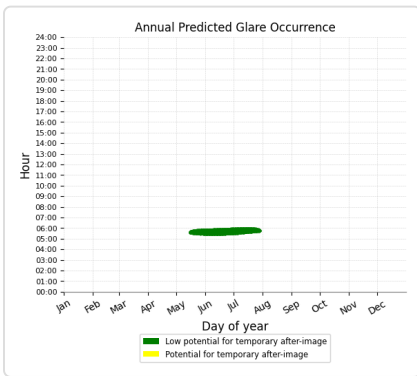
- 698 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



### PV array 3: OP 41

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

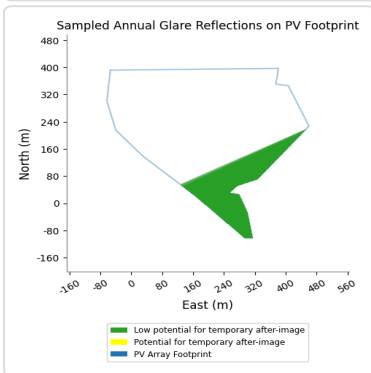
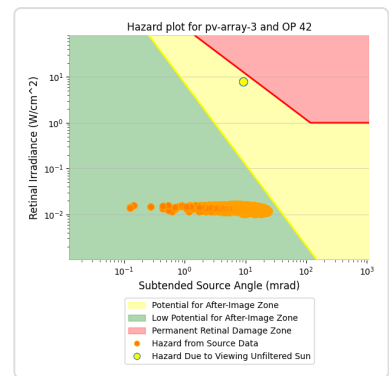
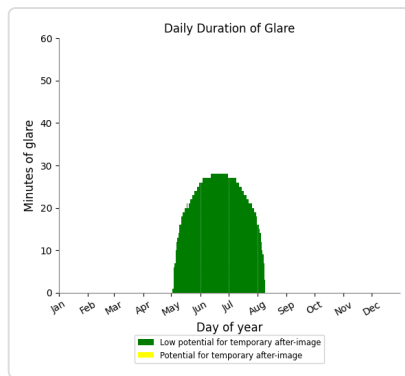
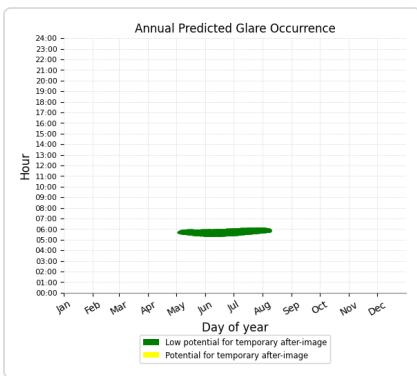
- 1,679 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



### PV array 3: OP 42

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

- 2,194 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



### PV array 3: OP 43

No glare found

**PV array 3: OP 44**

*No glare found*

**PV array 3: OP 45**

*No glare found*

**PV array 3: OP 46**

*No glare found*

**PV array 3: OP 47**

*No glare found*

**PV array 3: OP 48**

*No glare found*

**PV array 3: OP 49**

*No glare found*

**PV array 3: OP 50**

*No glare found*

**PV array 3: OP 51**

*No glare found*

**PV array 3: OP 52**

*No glare found*

**PV array 3: OP 53**

*No glare found*

**PV array 3: OP 54**

*No glare found*

**PV array 3: OP 55**

*No glare found*

**PV array 3: OP 56**

*No glare found*

**PV array 3: OP 57**

*No glare found*

**PV array 3: OP 58**

*No glare found*

**PV array 3: OP 59**

*No glare found*

### PV array 3: OP 60

No glare found

### PV array 3: OP 61

No glare found

### PV array 3: OP 62

No glare found

### PV array 3: OP 63

No glare found

### PV array 3: OP 64

No glare found

### PV array 3: OP 65

No glare found

### PV array 4 potential temporary after-image

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	689	0
OP: OP 10	1006	0
OP: OP 11	664	0
OP: OP 12	509	1212
OP: OP 13	0	0
OP: OP 14	737	0
OP: OP 15	28	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	1610	0
OP: OP 20	1565	0
OP: OP 21	1422	0
OP: OP 22	1433	0
OP: OP 23	1461	0
OP: OP 24	1267	0
OP: OP 25	1014	0
OP: OP 26	80	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0

OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	1052	0
OP: OP 39	1387	0
OP: OP 40	1620	0
OP: OP 41	1703	0
OP: OP 42	1719	0
OP: OP 43	0	0
OP: OP 44	0	0
OP: OP 45	0	0
OP: OP 46	0	0
OP: OP 47	0	0
OP: OP 48	0	0
OP: OP 49	0	0
OP: OP 50	0	0
OP: OP 51	0	0
OP: OP 52	0	0
OP: OP 53	0	0
OP: OP 54	0	0
OP: OP 55	0	0
OP: OP 56	0	0
OP: OP 57	0	0
OP: OP 58	0	0
OP: OP 59	0	0
OP: OP 60	0	0
OP: OP 61	0	0
OP: OP 62	0	0
OP: OP 63	0	0
OP: OP 64	0	0
OP: OP 65	0	0

#### **PV array 4: OP 1**

*No glare found*

#### **PV array 4: OP 2**

*No glare found*

#### **PV array 4: OP 3**

*No glare found*

#### **PV array 4: OP 4**

*No glare found*

#### **PV array 4: OP 5**

*No glare found*

## PV array 4: OP 6

No glare found

## PV array 4: OP 7

No glare found

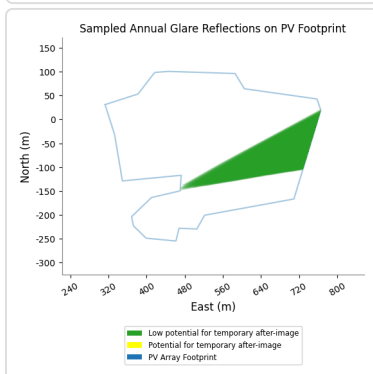
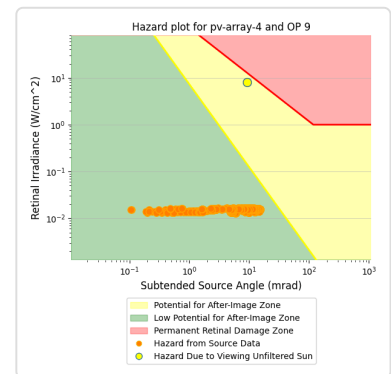
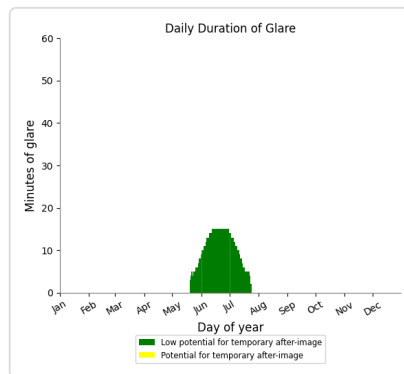
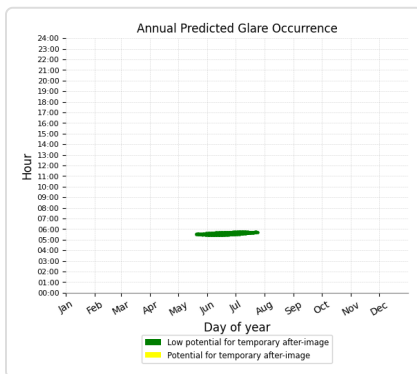
## PV array 4: OP 8

No glare found

## PV array 4: OP 9

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

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

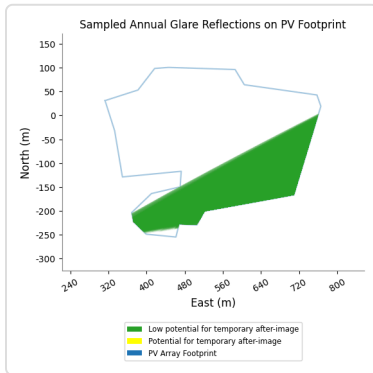
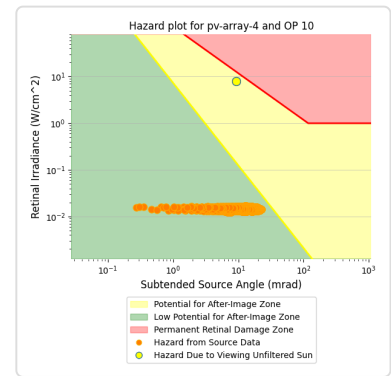
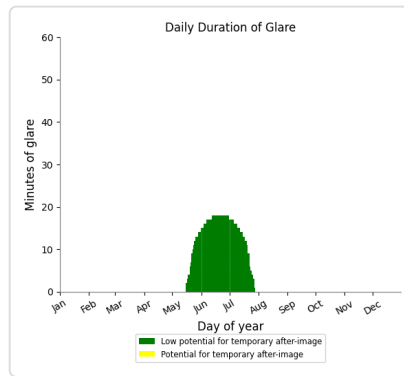
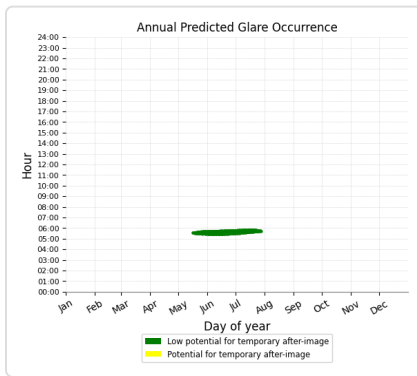




## PV array 4: OP 10

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

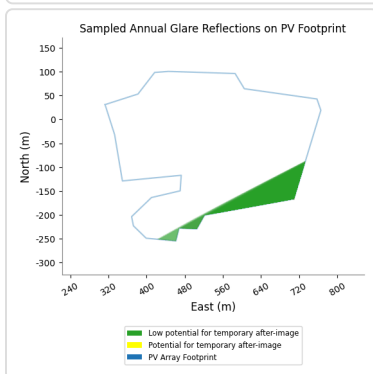
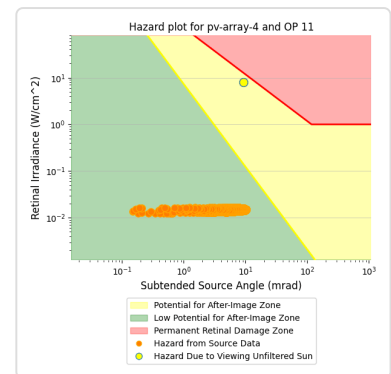
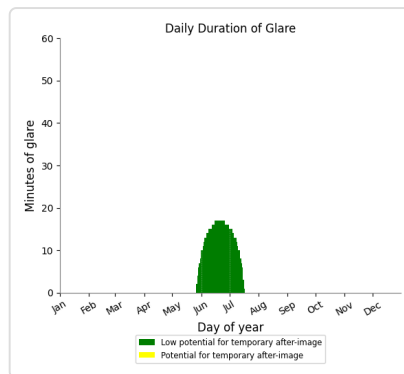
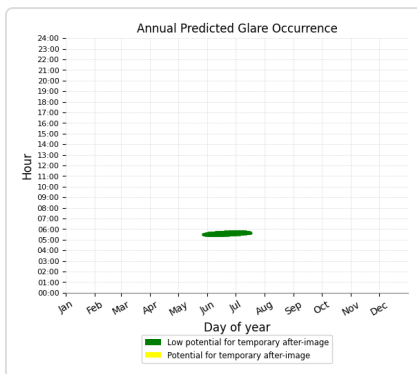
- 1,006 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 4: OP 11

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

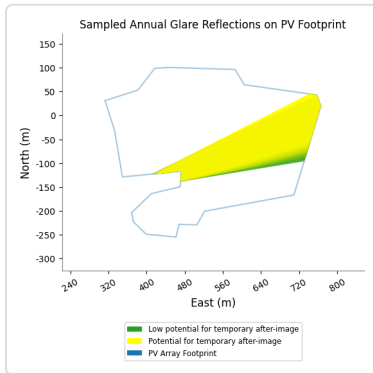
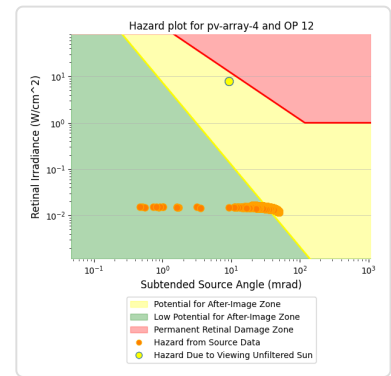
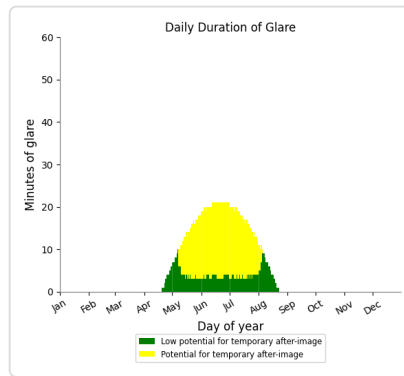
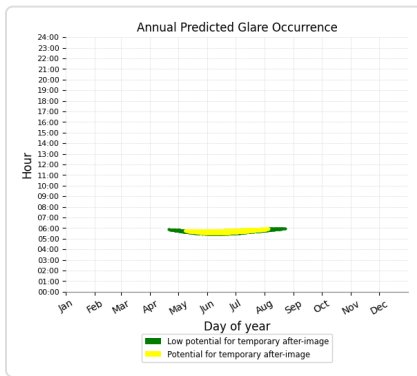
- 664 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 4: OP 12

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

- 509 minutes of "green" glare with low potential to cause temporary after-image.
- 1,212 minutes of "yellow" glare with potential to cause temporary after-image.



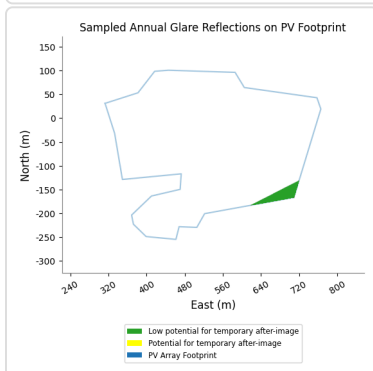
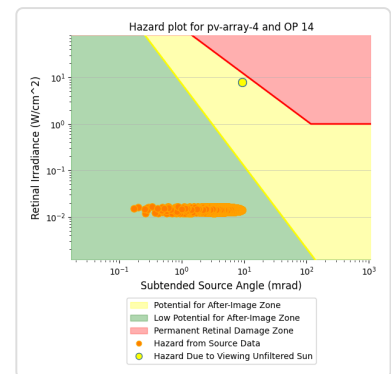
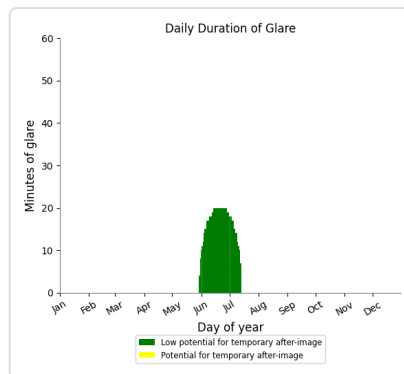
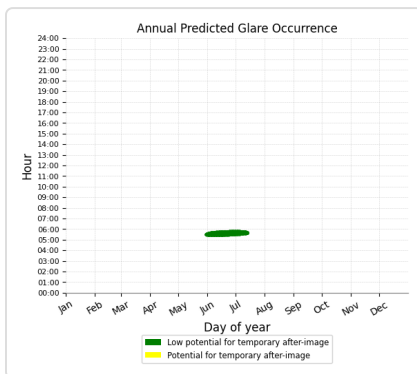
## PV array 4: OP 13

No glare found

## PV array 4: OP 14

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

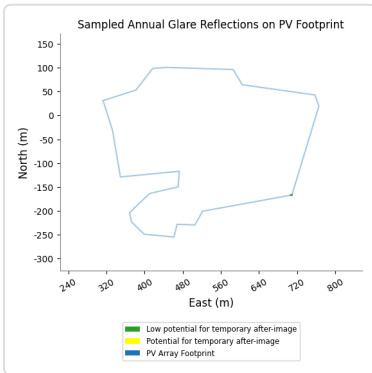
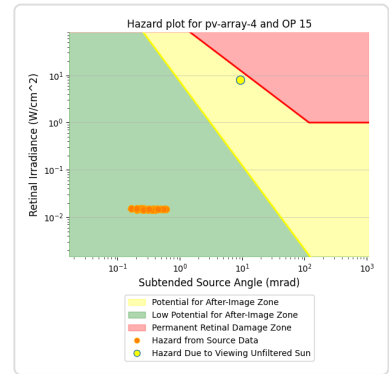
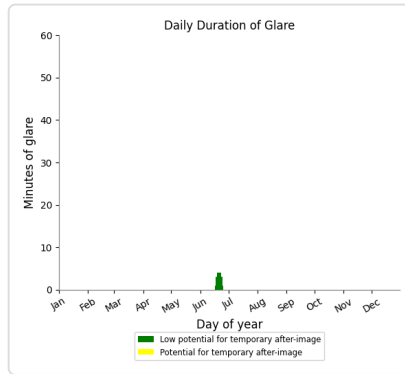
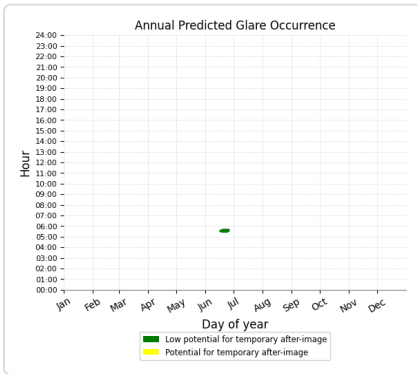
- 737 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 4: OP 15

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

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



## PV array 4: OP 16

No glare found

## PV array 4: OP 17

No glare found

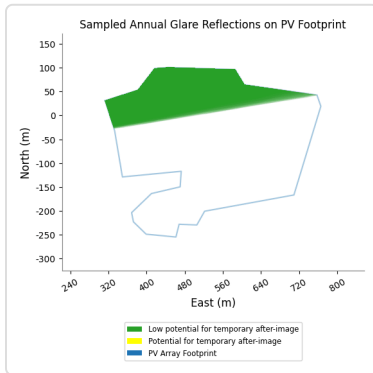
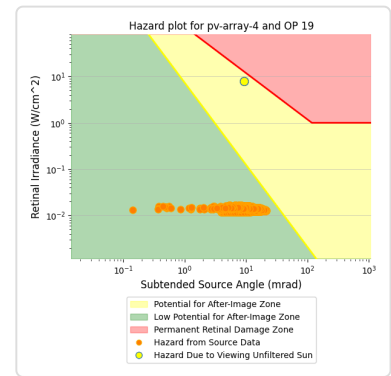
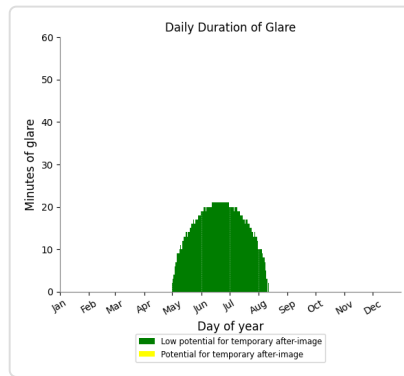
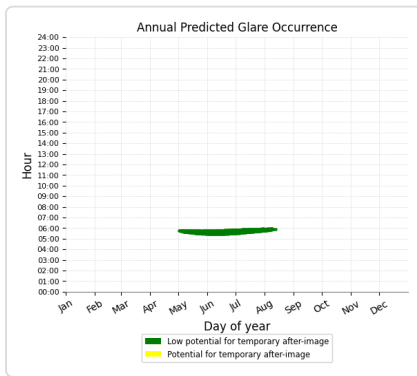
## PV array 4: OP 18

No glare found

## PV array 4: OP 19

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

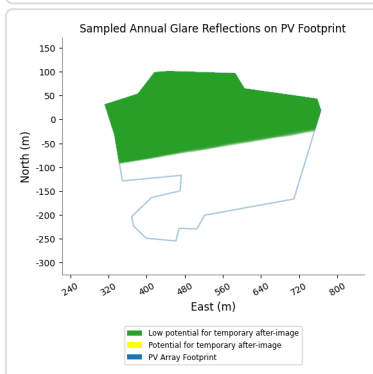
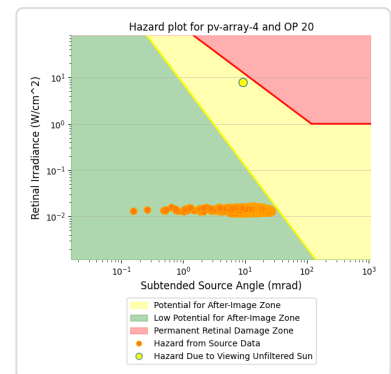
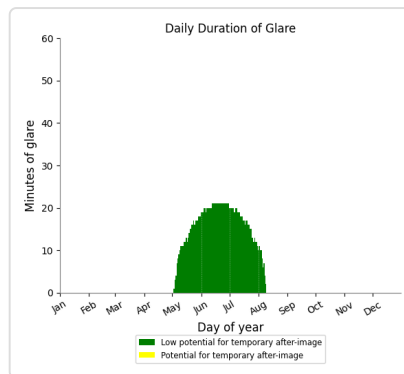
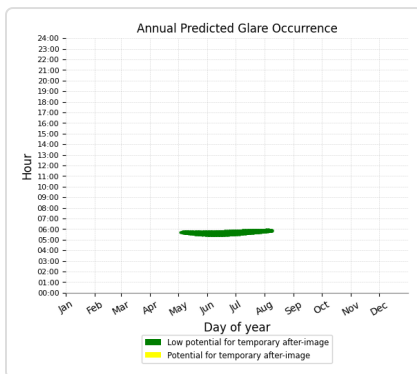
- 1,610 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 4: OP 20

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

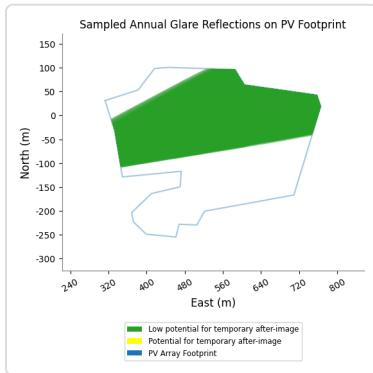
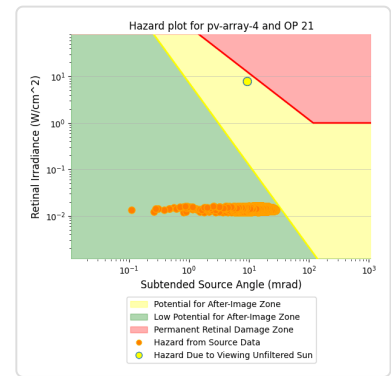
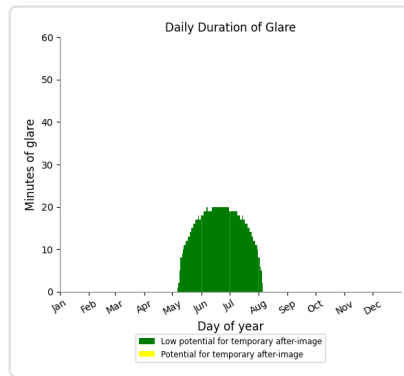
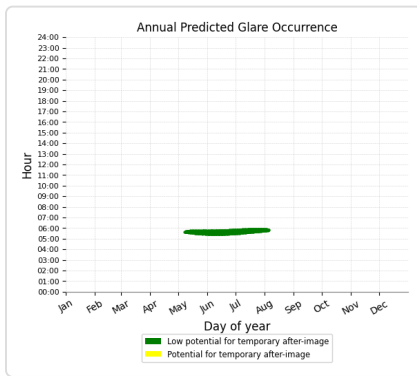
- 1,565 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 4: OP 21

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

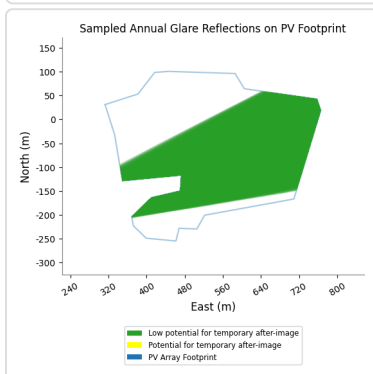
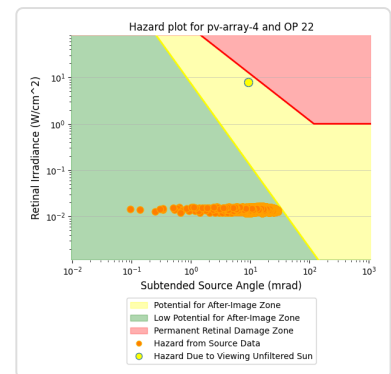
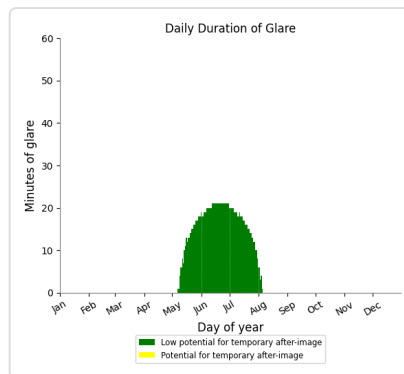
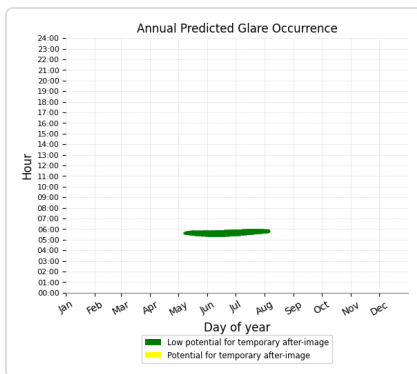
- 1,422 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 4: OP 22

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

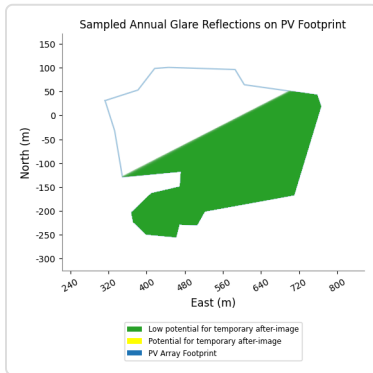
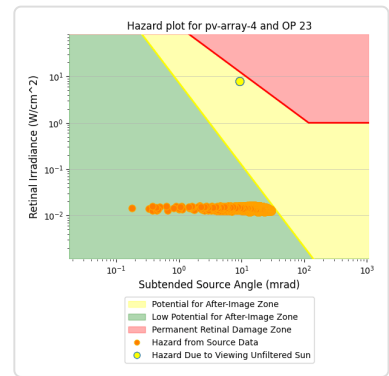
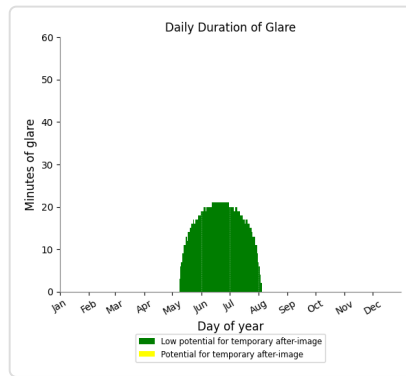
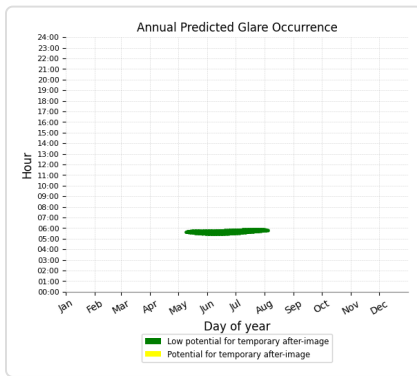
- 1,433 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 4: OP 23

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

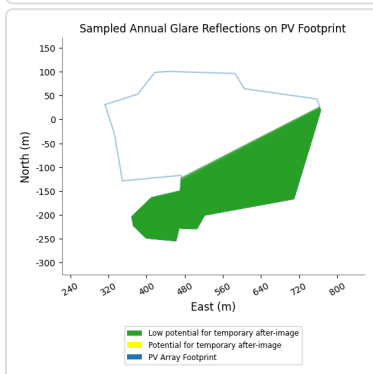
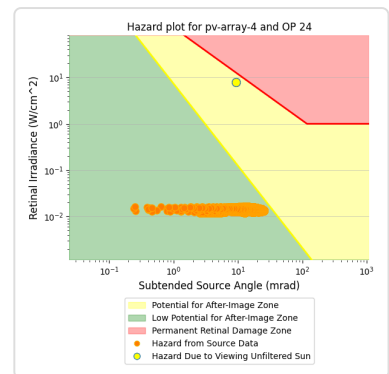
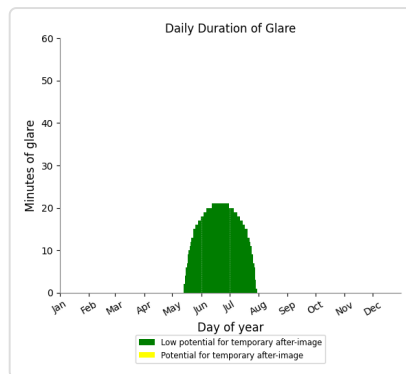
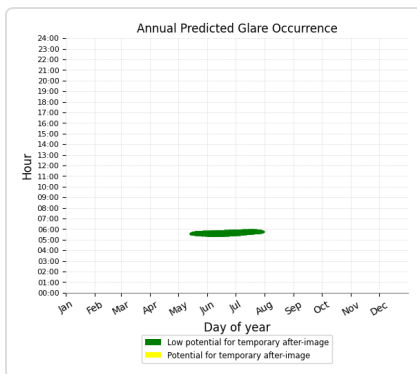
- 1,461 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 4: OP 24

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

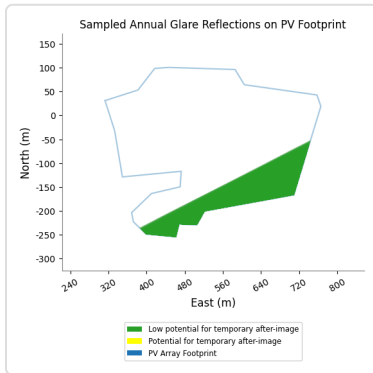
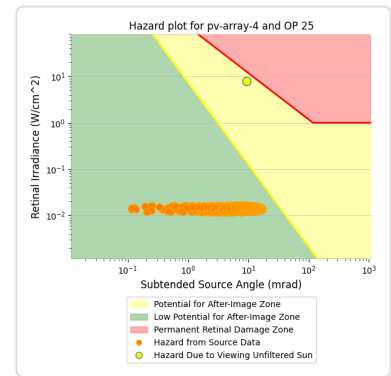
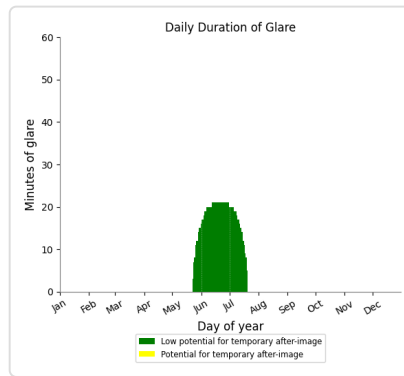
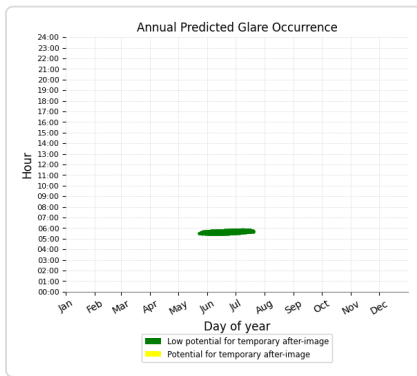
- 1,267 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 4: OP 25

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

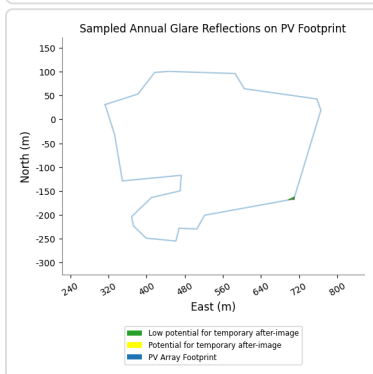
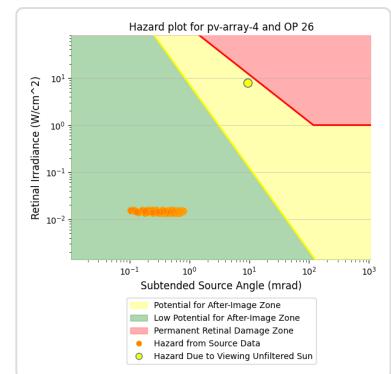
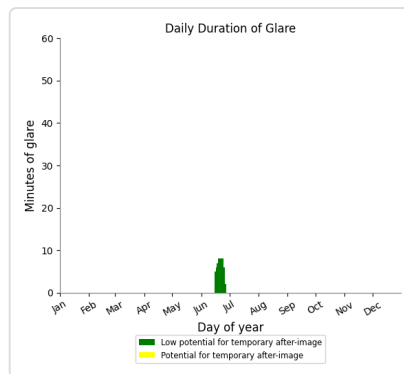
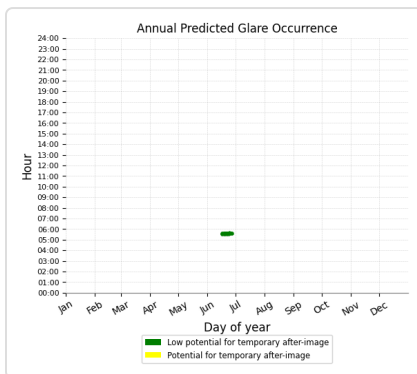
- 1,014 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 4: OP 26

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

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



## PV array 4: OP 27

No glare found

**PV array 4: OP 28**

*No glare found*

**PV array 4: OP 29**

*No glare found*

**PV array 4: OP 30**

*No glare found*

**PV array 4: OP 31**

*No glare found*

**PV array 4: OP 32**

*No glare found*

**PV array 4: OP 33**

*No glare found*

**PV array 4: OP 34**

*No glare found*

**PV array 4: OP 35**

*No glare found*

**PV array 4: OP 36**

*No glare found*

**PV array 4: OP 37**

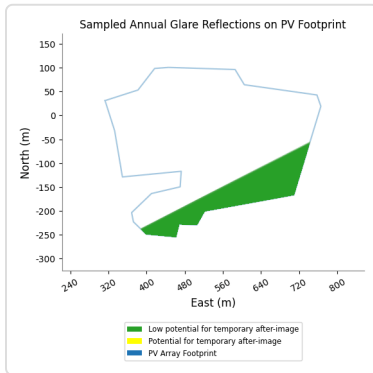
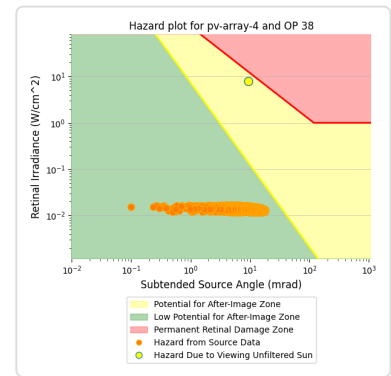
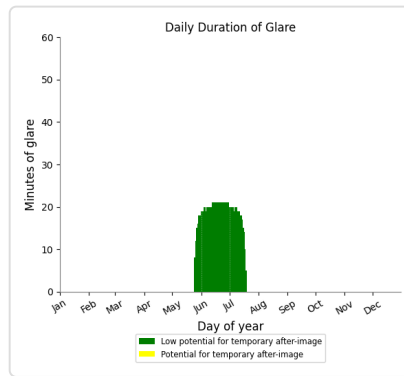
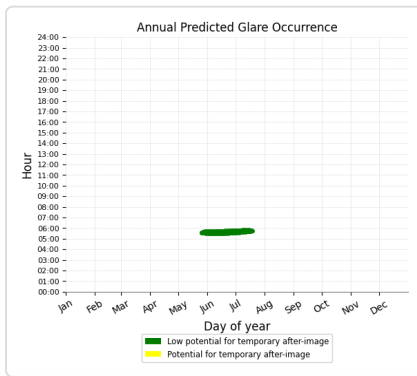
*No glare found*



## PV array 4: OP 38

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

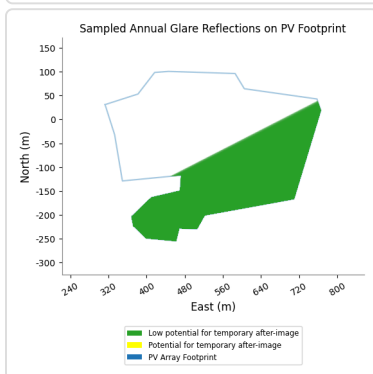
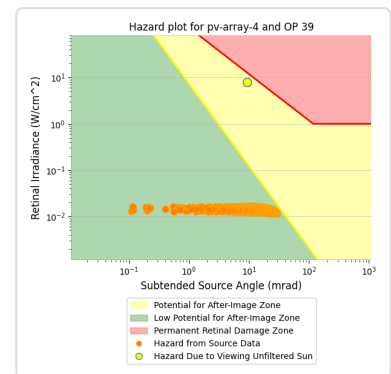
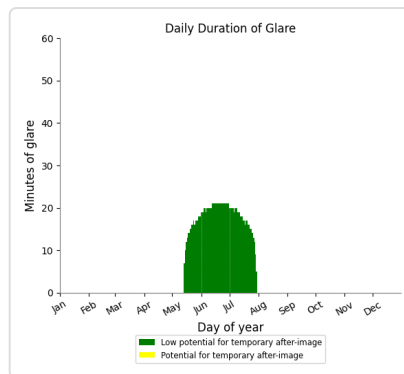
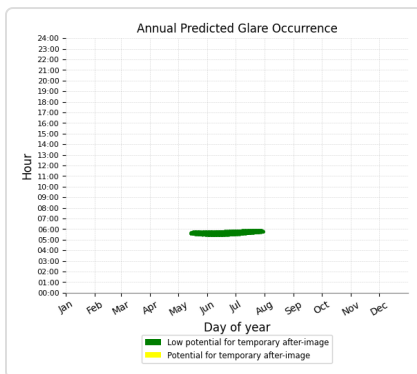
- 1,052 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 4: OP 39

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

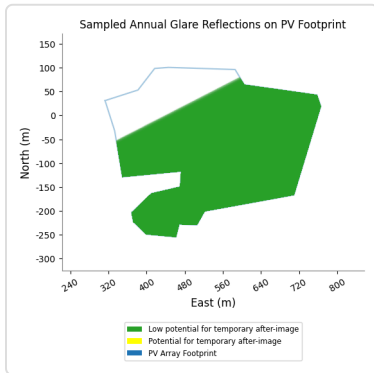
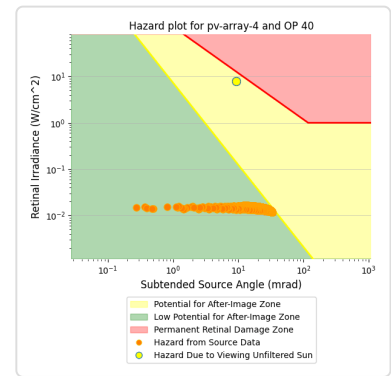
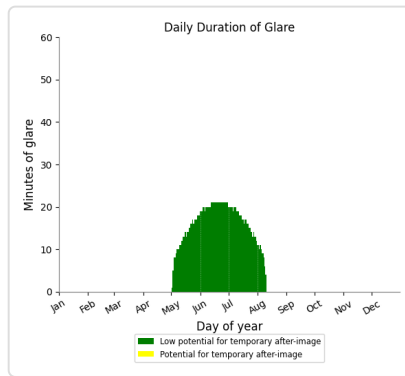
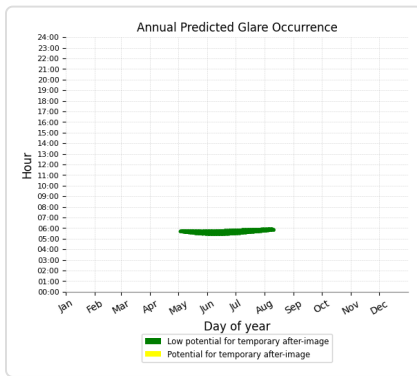
- 1,387 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 4: OP 40

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

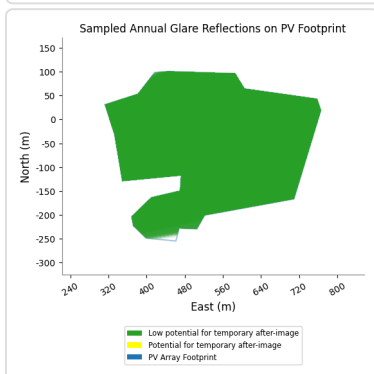
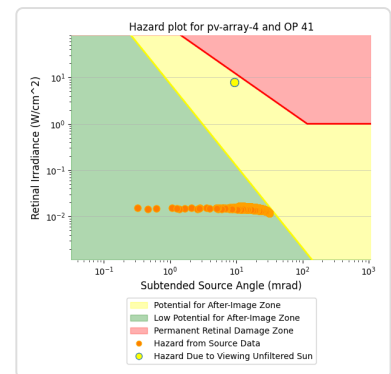
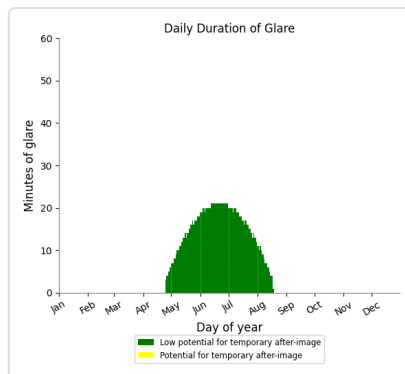
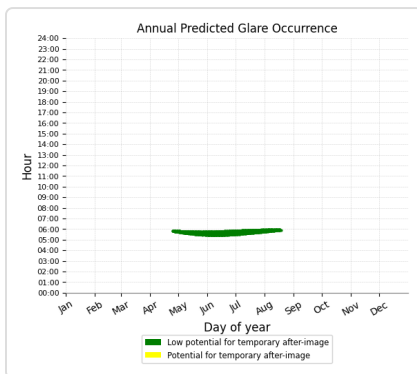
- 1,620 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 4: OP 41

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

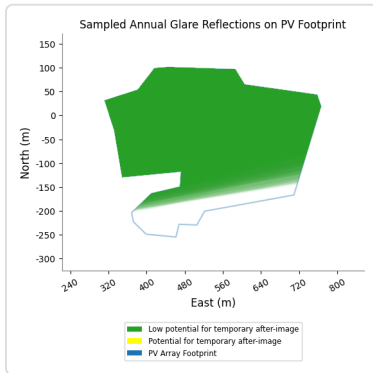
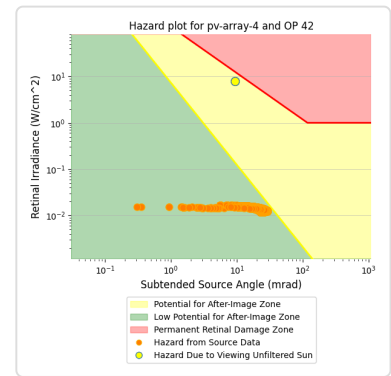
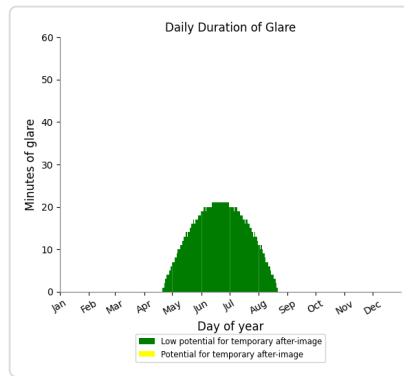
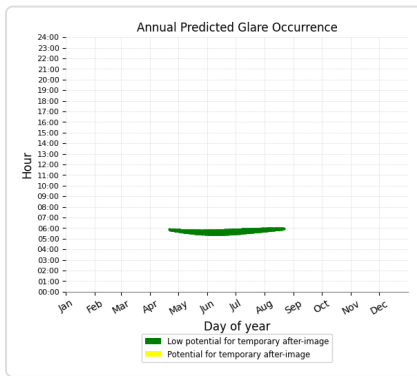
- 1,703 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 4: OP 42

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

- 1,719 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 4: OP 43

No glare found

## PV array 4: OP 44

No glare found

## PV array 4: OP 45

No glare found

## PV array 4: OP 46

No glare found

## PV array 4: OP 47

No glare found

## PV array 4: OP 48

No glare found

## PV array 4: OP 49

No glare found

## PV array 4: OP 50

No glare found

## PV array 4: OP 51

No glare found

**PV array 4: OP 52**

*No glare found*

**PV array 4: OP 53**

*No glare found*

**PV array 4: OP 54**

*No glare found*

**PV array 4: OP 55**

*No glare found*

**PV array 4: OP 56**

*No glare found*

**PV array 4: OP 57**

*No glare found*

**PV array 4: OP 58**

*No glare found*

**PV array 4: OP 59**

*No glare found*

**PV array 4: OP 60**

*No glare found*

**PV array 4: OP 61**

*No glare found*

**PV array 4: OP 62**

*No glare found*

**PV array 4: OP 63**

*No glare found*

**PV array 4: OP 64**

*No glare found*

**PV array 4: OP 65**

*No glare found*

**PV array 5** potential temporary after-image

<b>Component</b>	<b>Green glare (min)</b>	<b>Yellow glare (min)</b>
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0

OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	496	0
OP: OP 11	490	0
OP: OP 12	0	0
OP: OP 13	2335	2654
OP: OP 14	458	0
OP: OP 15	491	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	329	0
OP: OP 24	480	0
OP: OP 25	481	0
OP: OP 26	1827	0
OP: OP 27	2593	0
OP: OP 28	2550	0
OP: OP 29	2572	0
OP: OP 30	2007	0
OP: OP 31	160	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	3167	0
OP: OP 36	3272	0
OP: OP 37	3055	0
OP: OP 38	2390	0
OP: OP 39	2163	0
OP: OP 40	969	0
OP: OP 41	302	0
OP: OP 42	0	0
OP: OP 43	1768	0
OP: OP 44	2076	0
OP: OP 45	2033	0
OP: OP 46	1790	0
OP: OP 47	565	0
OP: OP 48	0	0
OP: OP 49	1755	186
OP: OP 50	1376	126
OP: OP 51	210	0
OP: OP 52	505	0
OP: OP 53	225	0
OP: OP 54	0	0
OP: OP 55	0	0
OP: OP 56	0	0
OP: OP 57	0	0

OP: OP 58	0	0
OP: OP 59	1511	0
OP: OP 60	0	0
OP: OP 61	0	0
OP: OP 62	2776	726
OP: OP 63	2793	0
OP: OP 64	2770	0
OP: OP 65	939	0

### **PV array 5: OP 1**

*No glare found*

### **PV array 5: OP 2**

*No glare found*

### **PV array 5: OP 3**

*No glare found*

### **PV array 5: OP 4**

*No glare found*

### **PV array 5: OP 5**

*No glare found*

### **PV array 5: OP 6**

*No glare found*

### **PV array 5: OP 7**

*No glare found*

### **PV array 5: OP 8**

*No glare found*

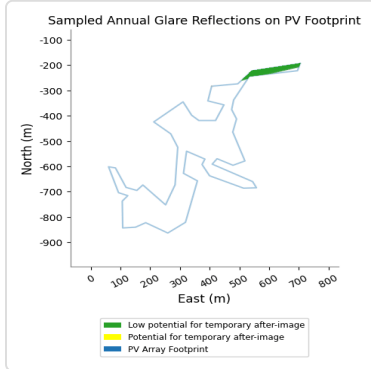
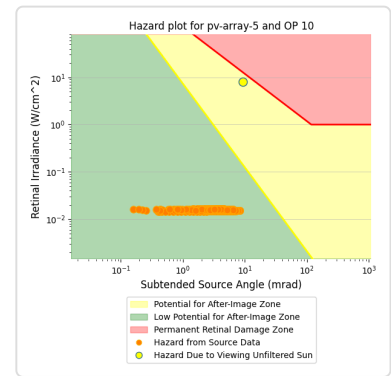
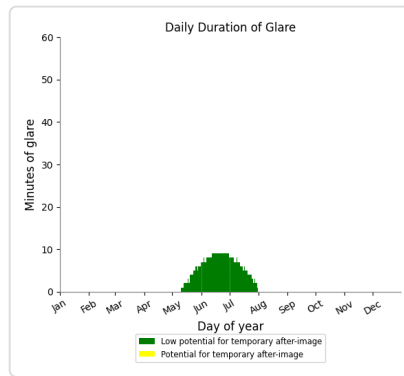
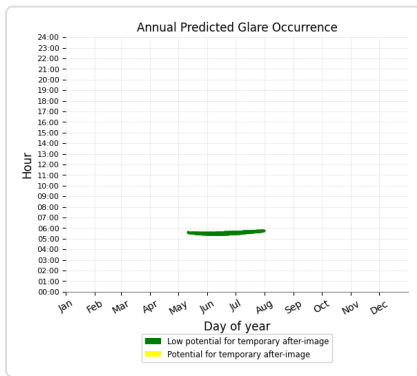
### **PV array 5: OP 9**

*No glare found*

## PV array 5: OP 10

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

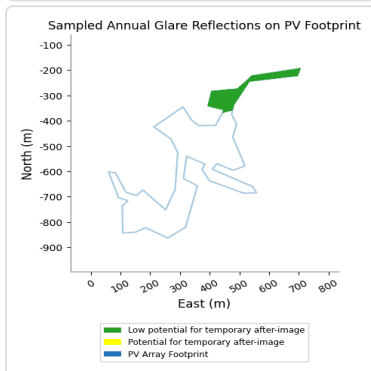
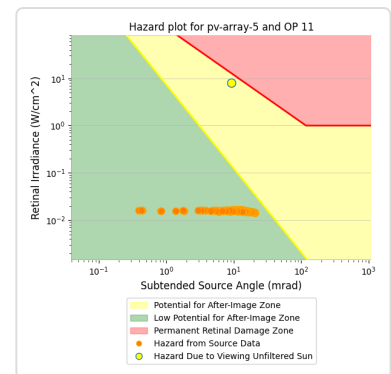
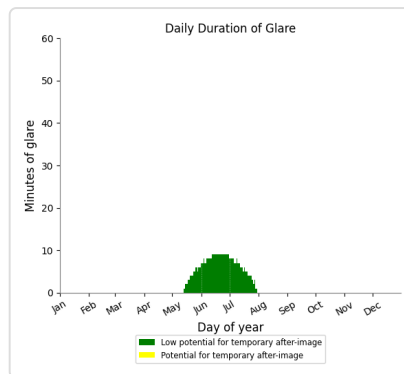
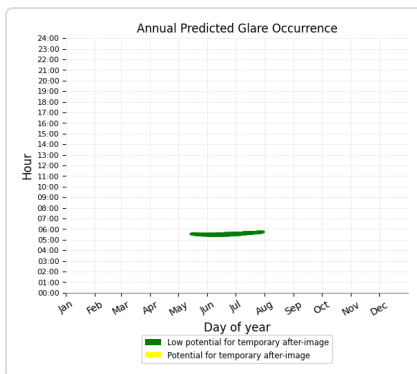
- 496 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 11

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

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



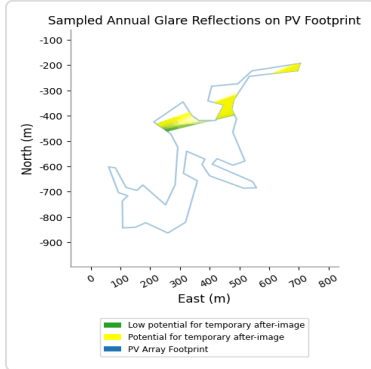
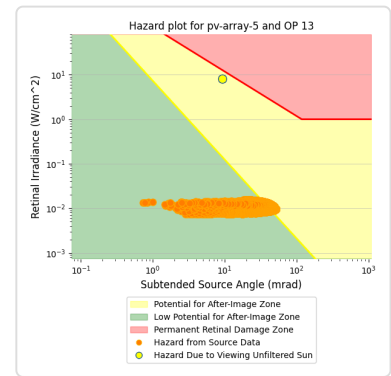
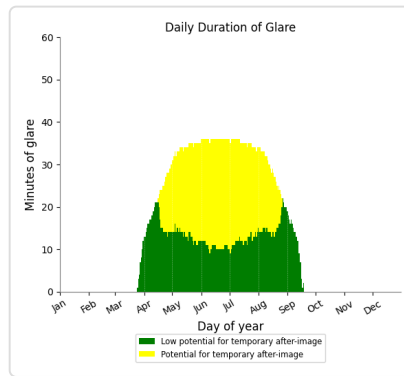
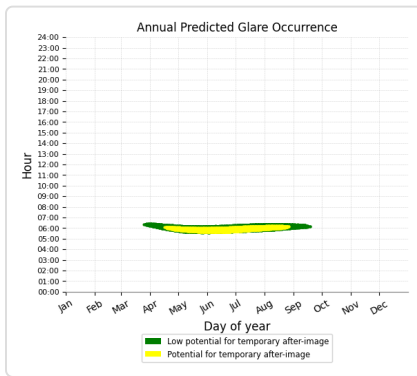
## PV array 5: OP 12

No glare found

## PV array 5: OP 13

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

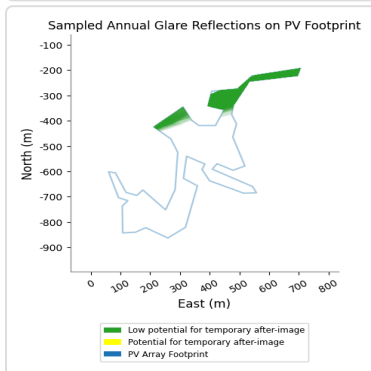
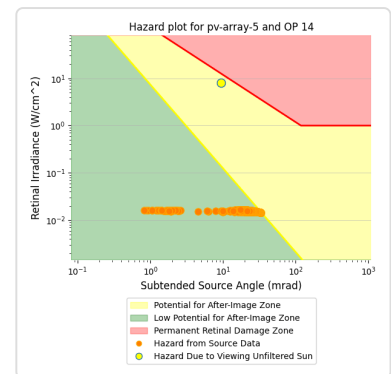
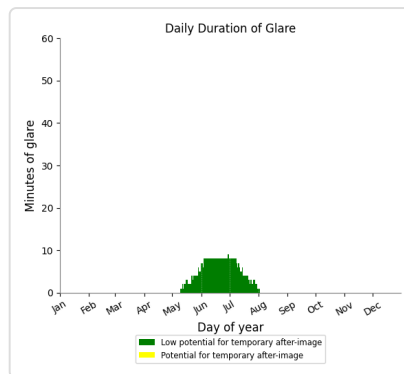
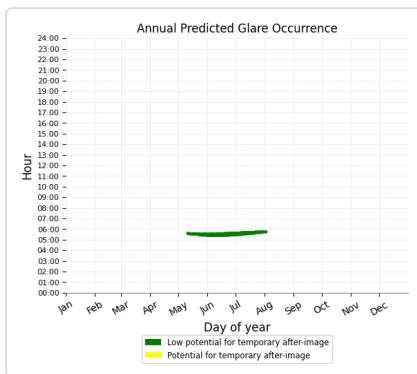
- 2,335 minutes of "green" glare with low potential to cause temporary after-image.
- 2,654 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 14

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

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

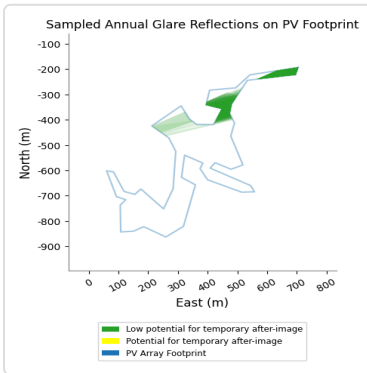
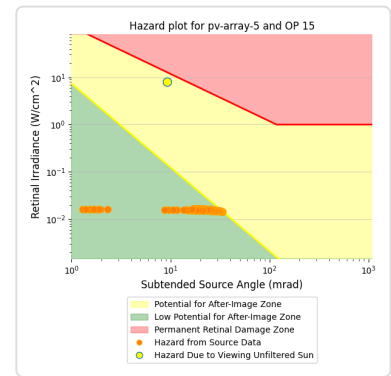
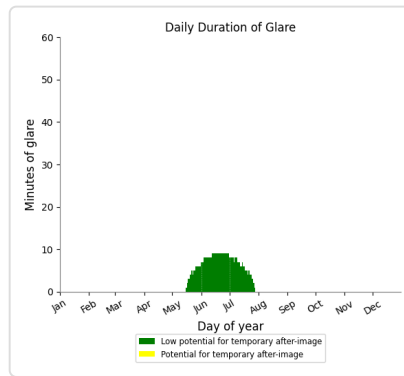
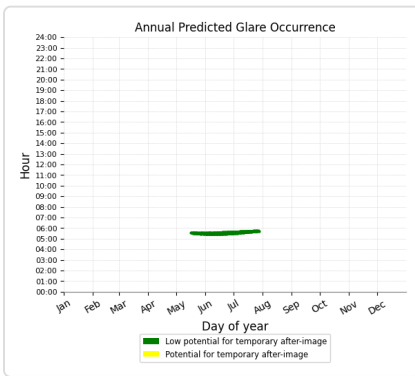




## PV array 5: OP 15

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

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



## PV array 5: OP 16

No glare found

## PV array 5: OP 17

No glare found

## PV array 5: OP 18

No glare found

## PV array 5: OP 19

No glare found

## PV array 5: OP 20

No glare found

## PV array 5: OP 21

No glare found

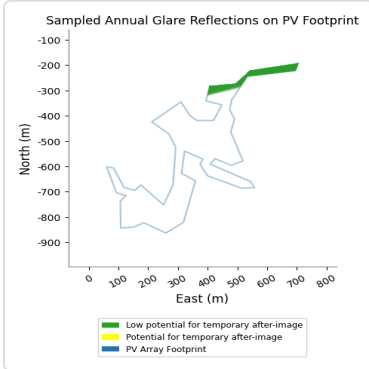
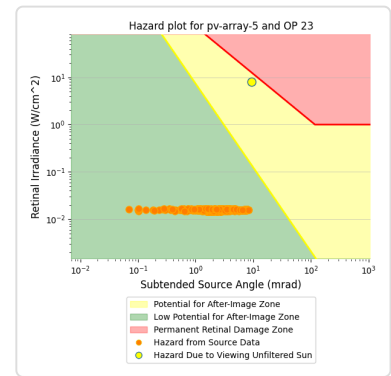
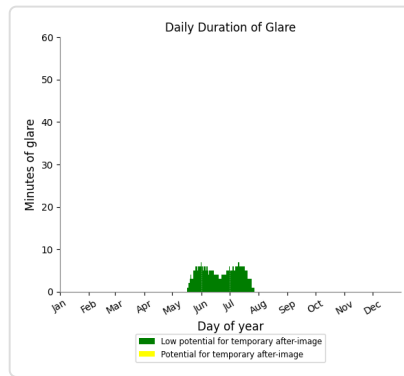
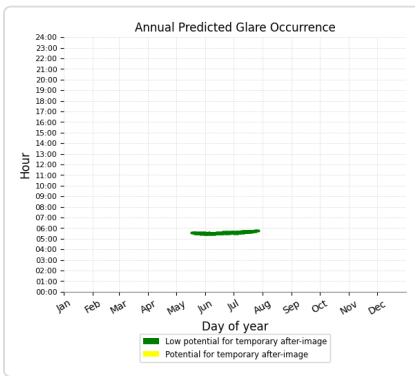
## PV array 5: OP 22

No glare found

## PV array 5: OP 23

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

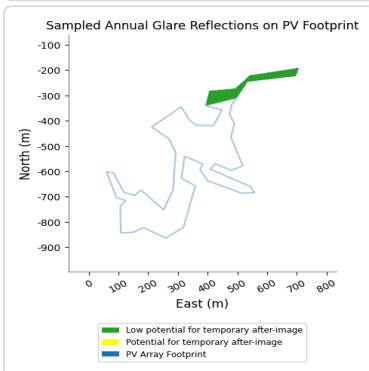
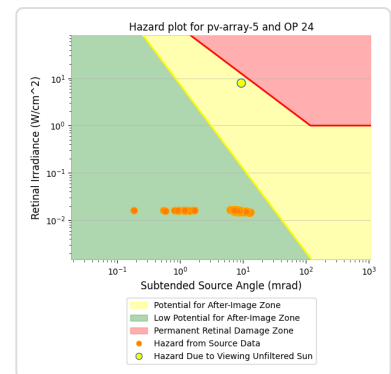
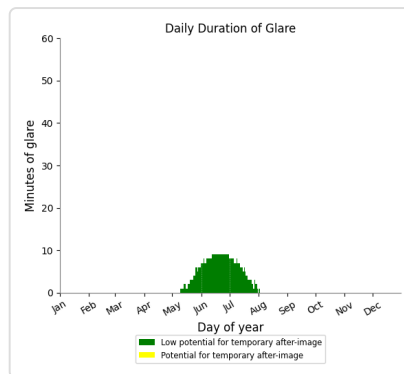
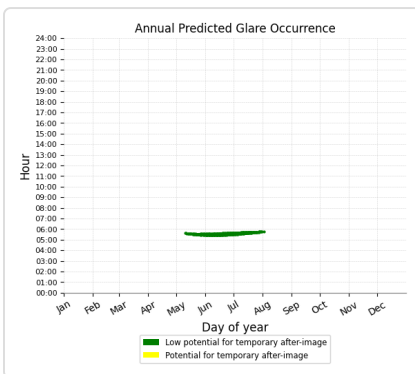
- 329 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 24

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

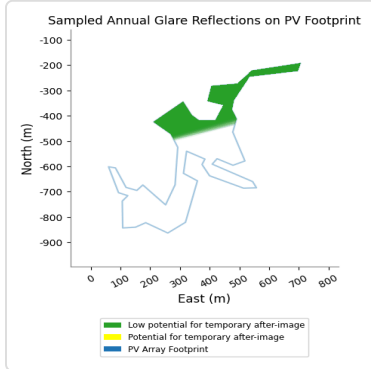
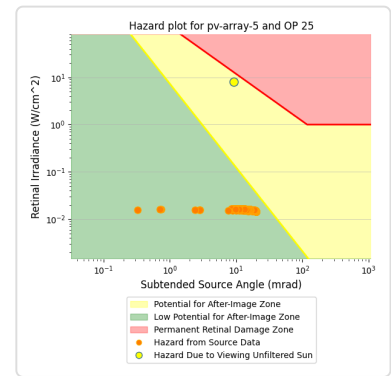
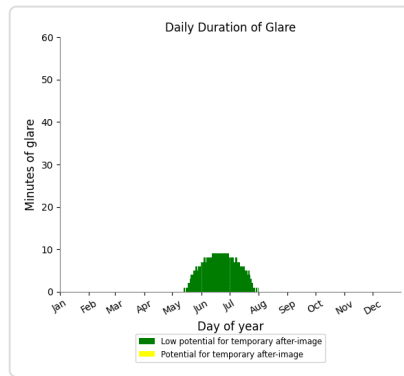
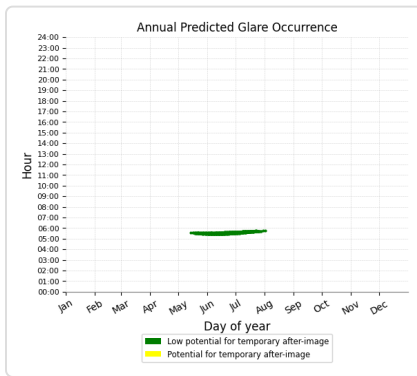
- 480 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 25

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

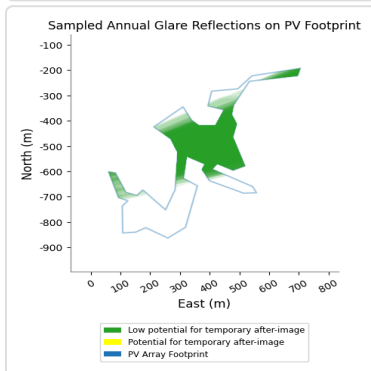
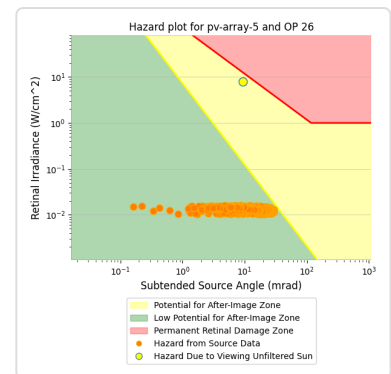
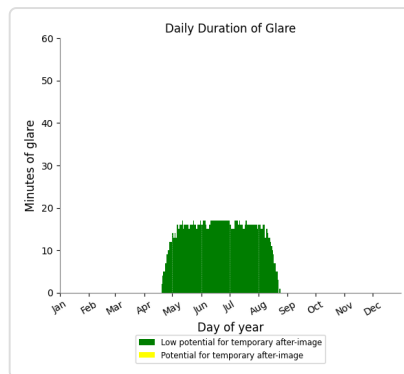
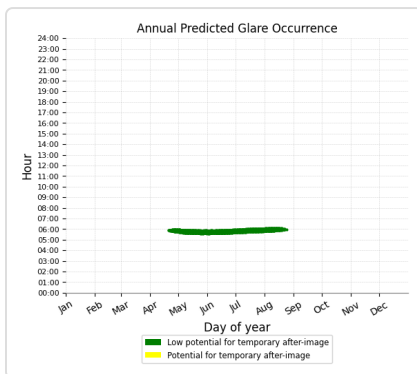
- 481 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 26

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

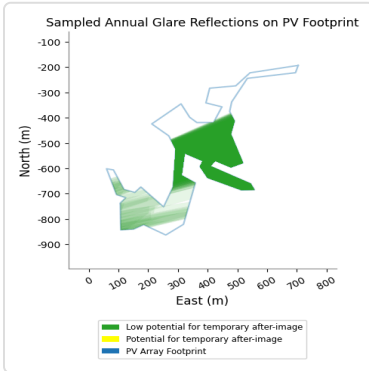
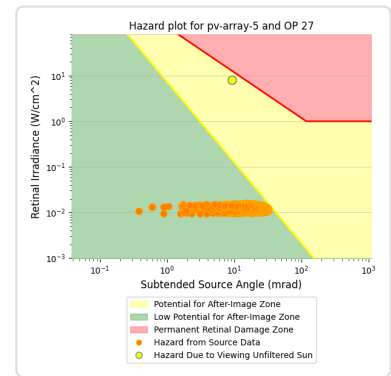
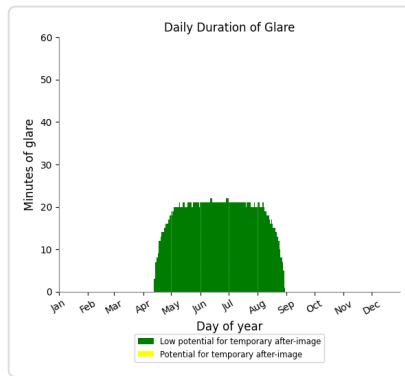
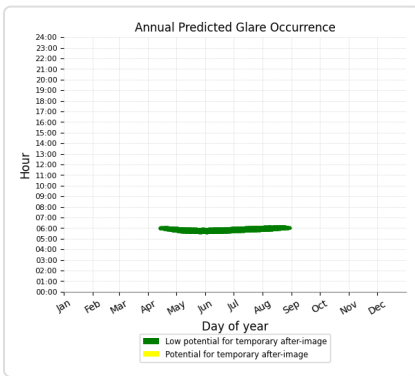
- 1,827 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 27

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

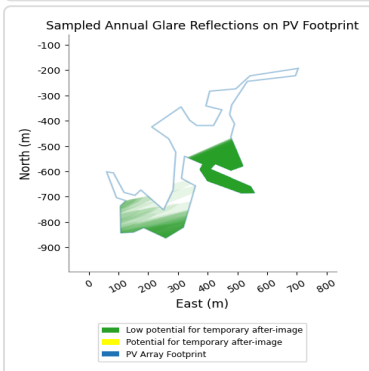
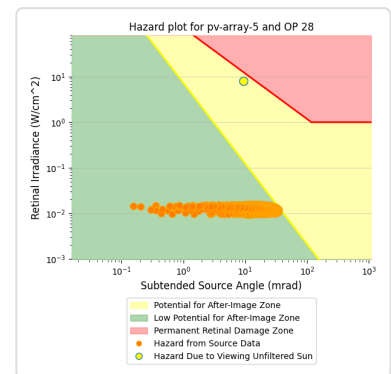
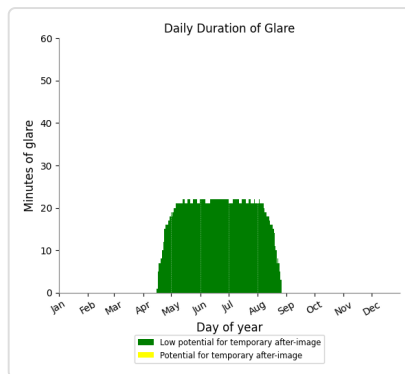
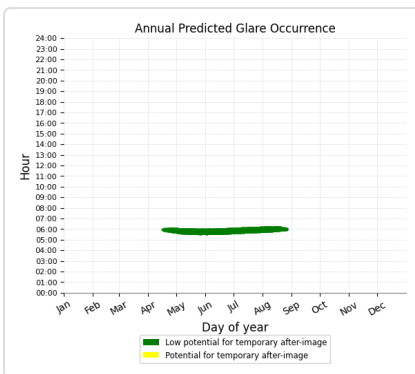
- 2,593 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 28

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

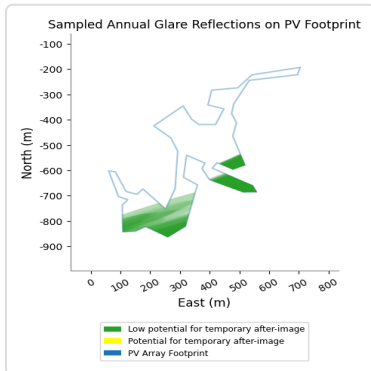
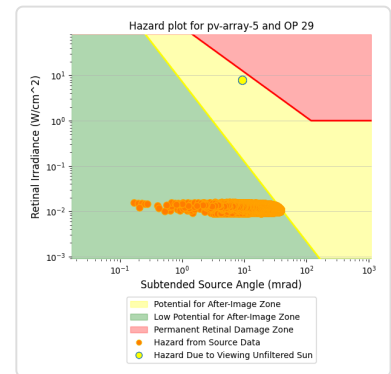
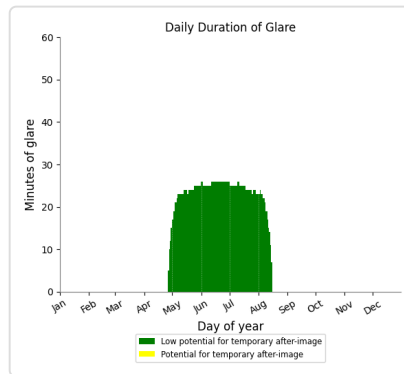
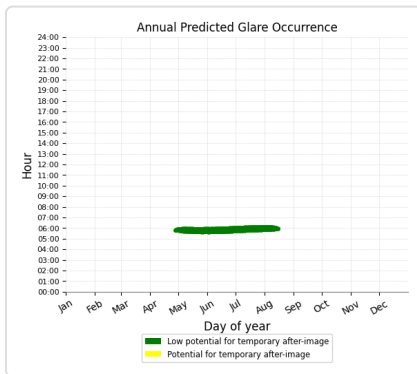
- 2,550 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 29

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

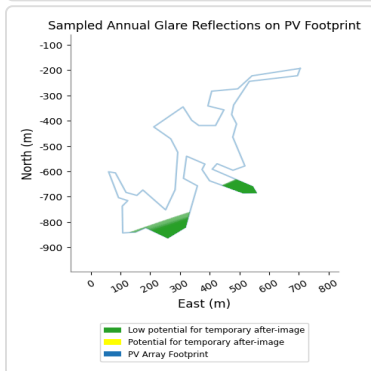
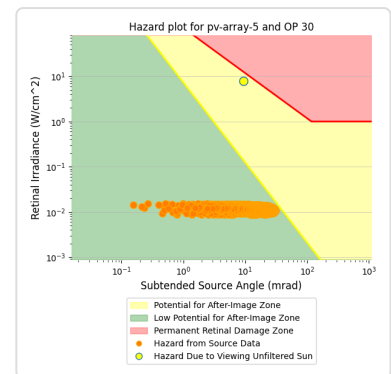
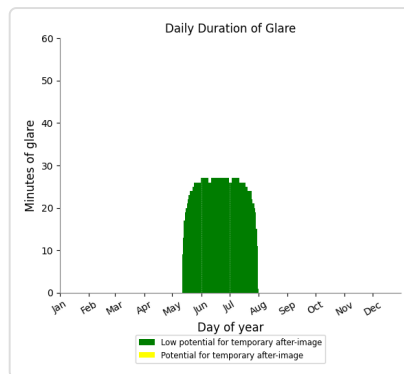
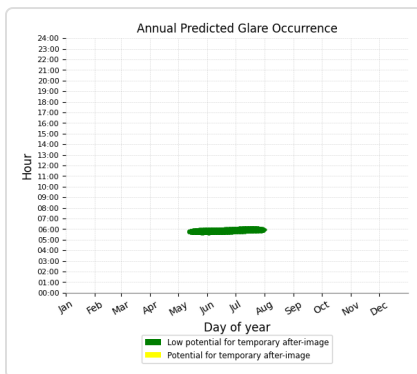
- 2,572 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 30

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

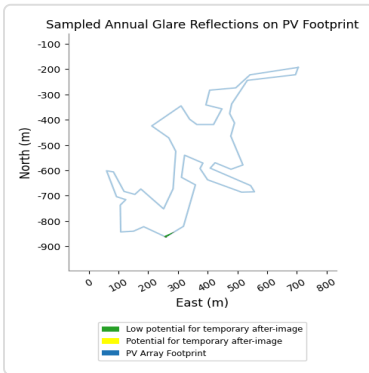
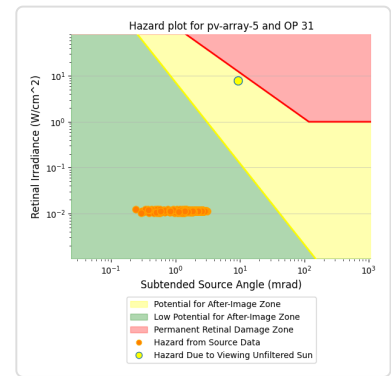
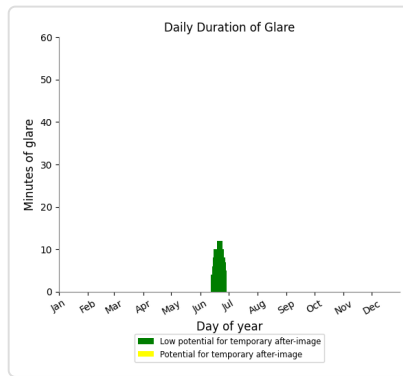
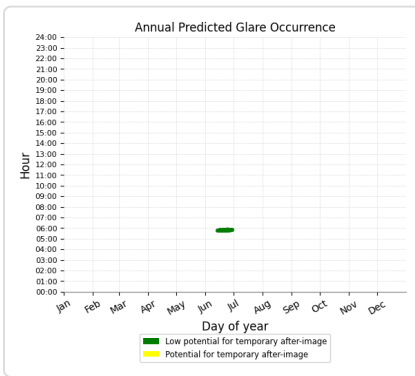
- 2,007 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 31

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

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



## PV array 5: OP 32

No glare found

## PV array 5: OP 33

No glare found

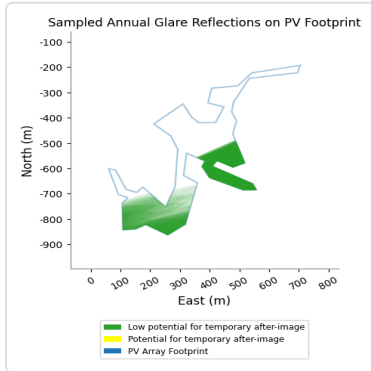
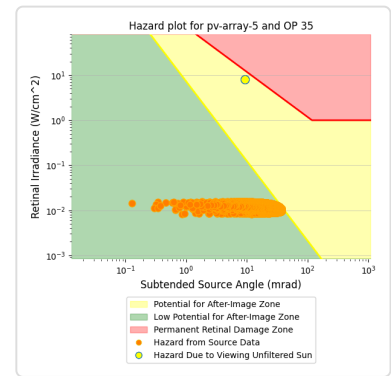
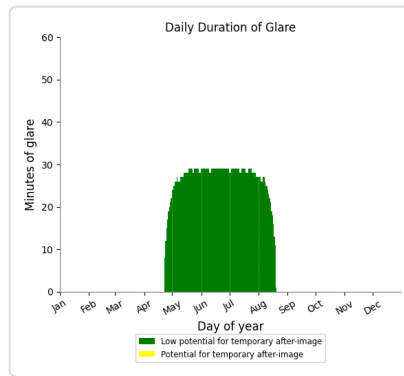
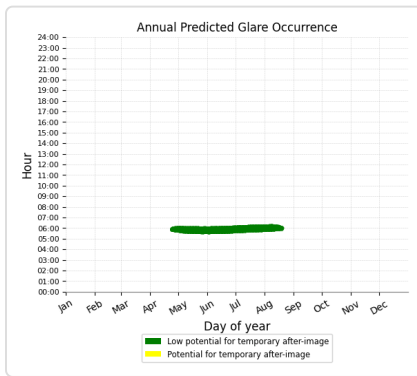
## PV array 5: OP 34

No glare found

## PV array 5: OP 35

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

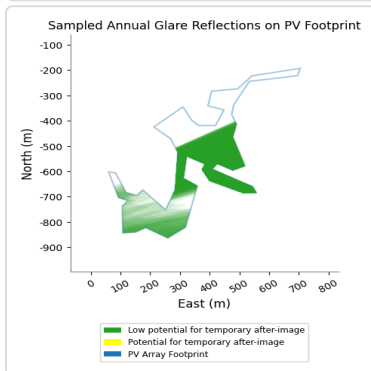
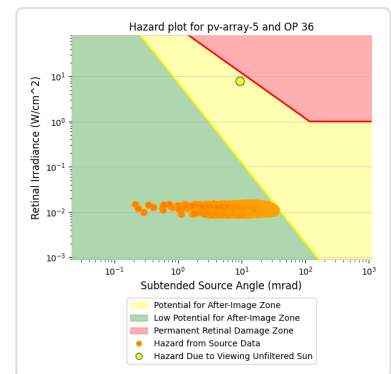
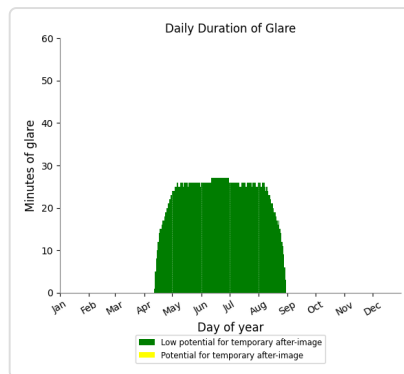
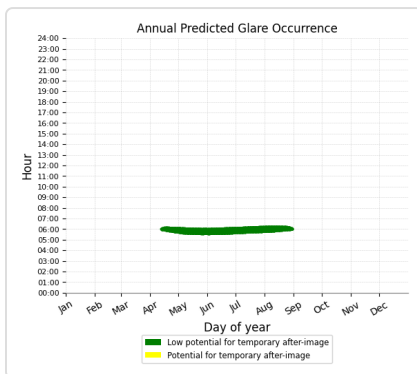
- 3,167 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 36

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

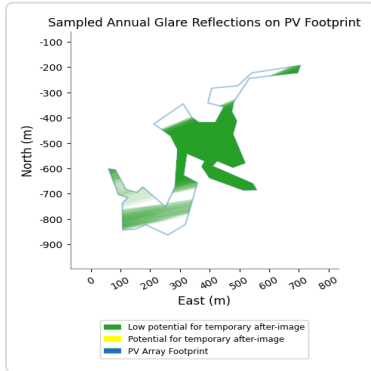
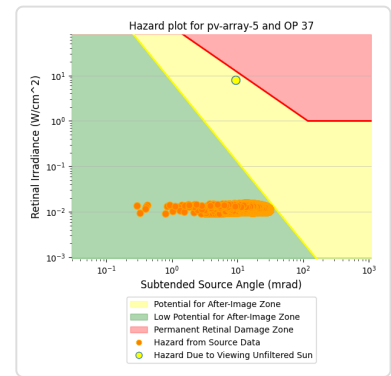
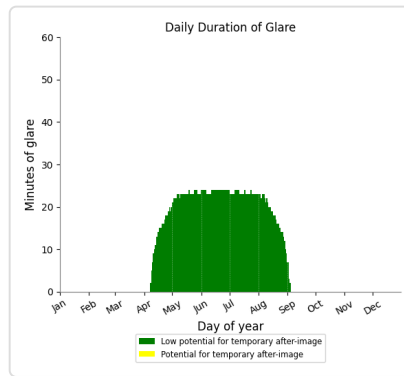
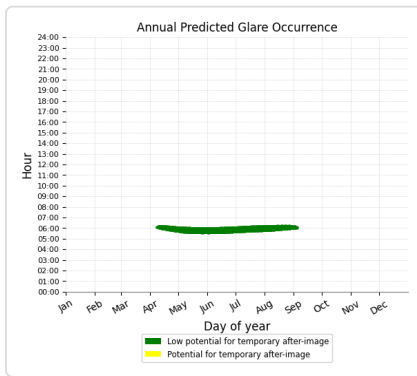
- 3,272 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 37

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

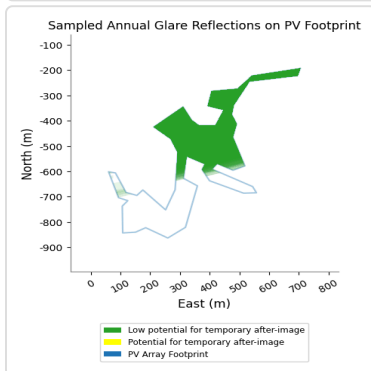
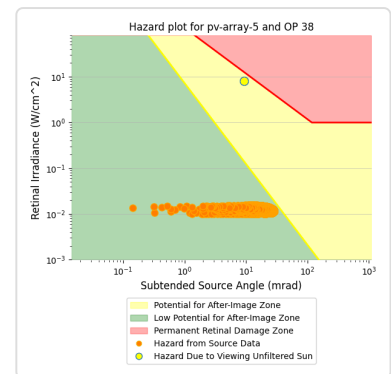
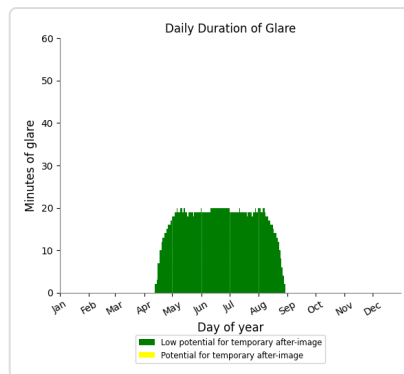
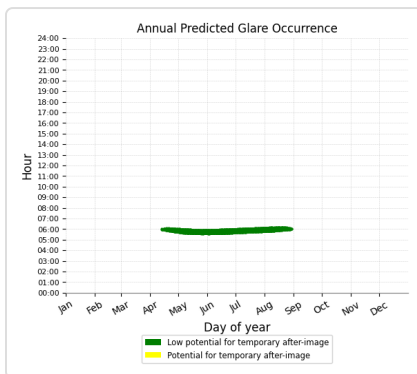
- 3,055 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 38

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

- 2,390 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

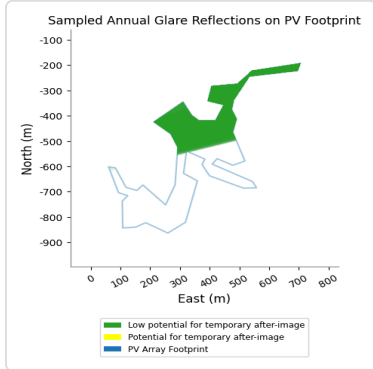
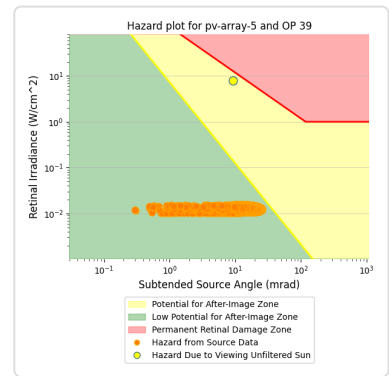
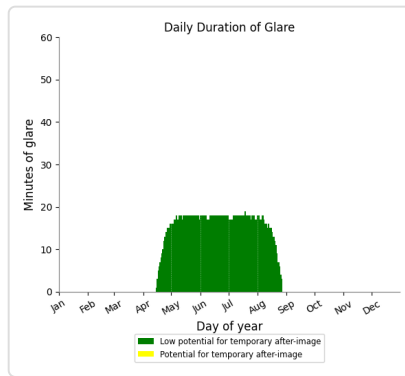
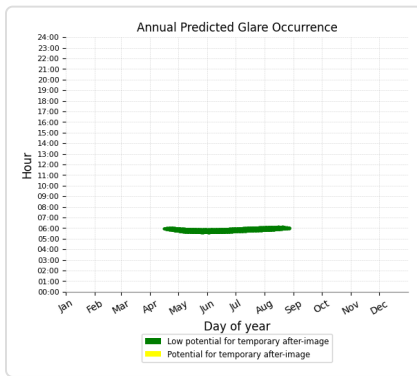




## PV array 5: OP 39

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

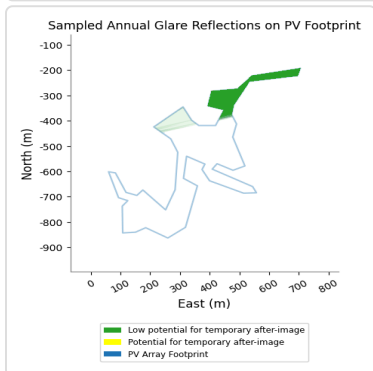
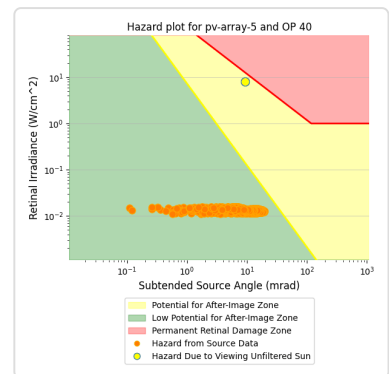
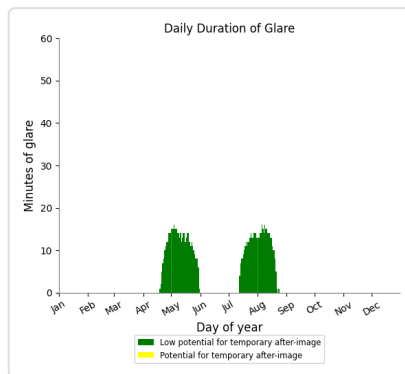
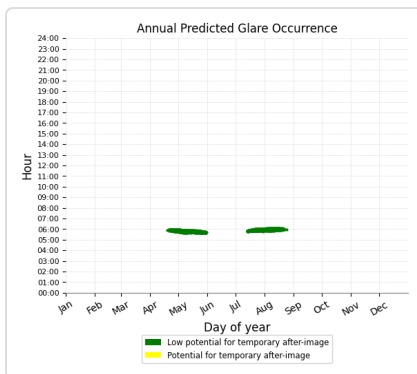
- 2,163 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 40

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

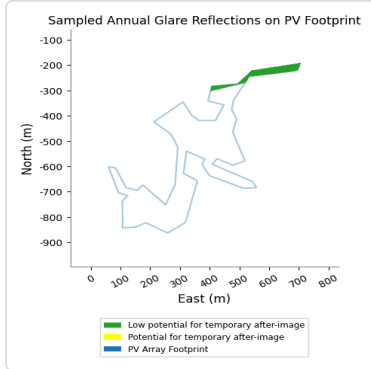
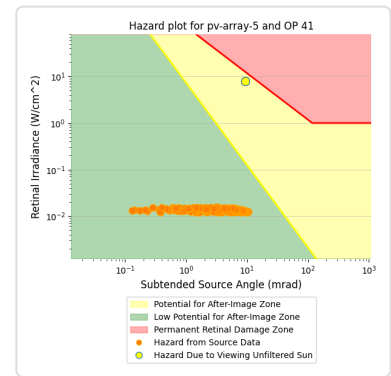
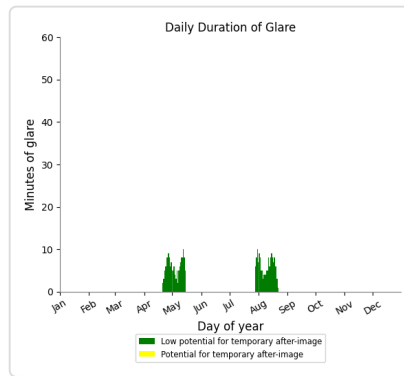
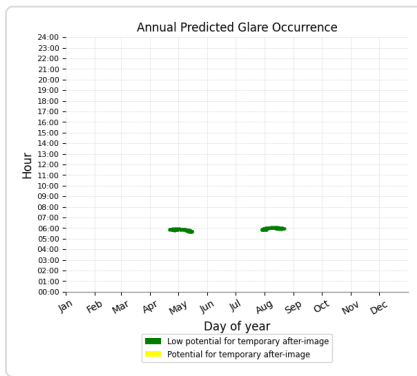
- 969 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 41

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

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



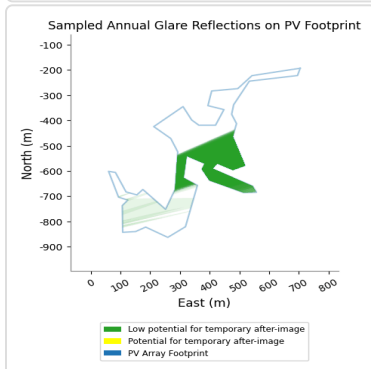
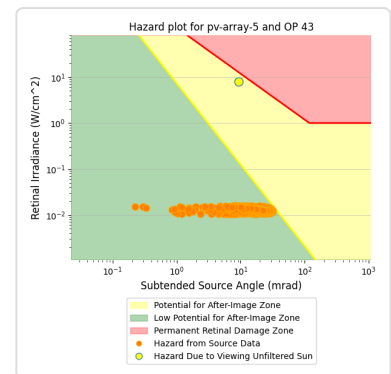
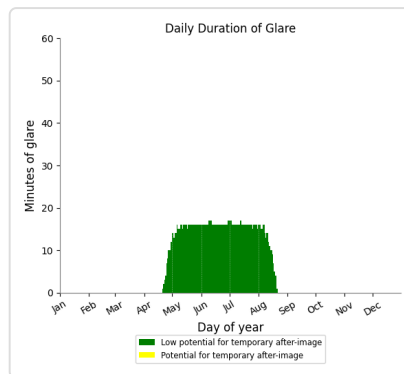
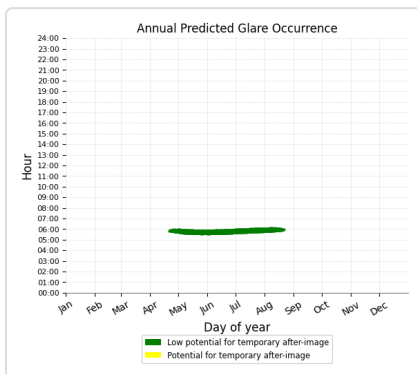
## PV array 5: OP 42

No glare found

## PV array 5: OP 43

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

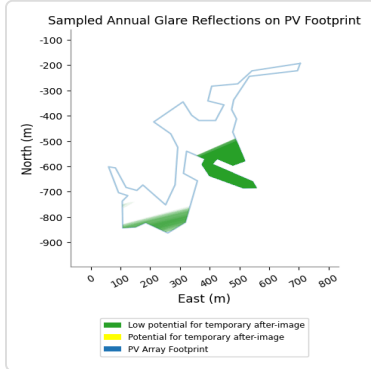
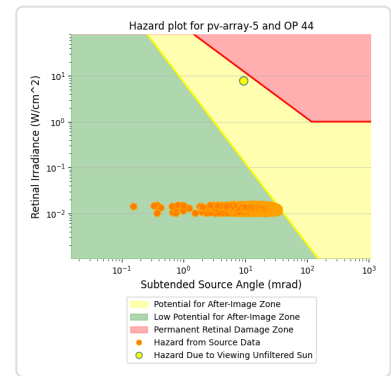
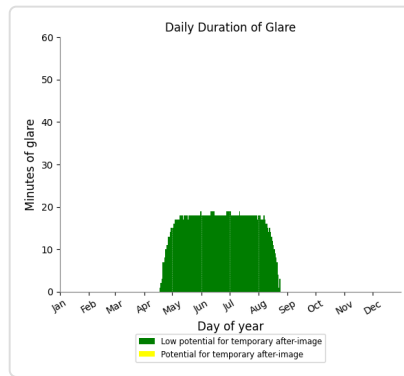
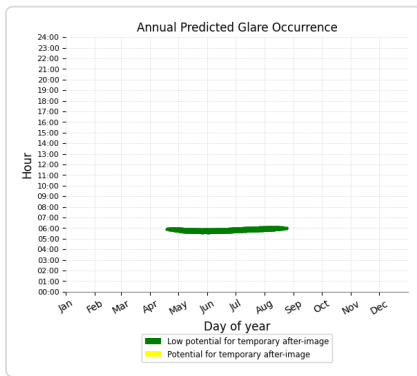
- 1,768 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 44

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

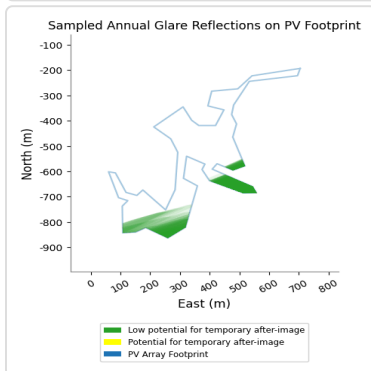
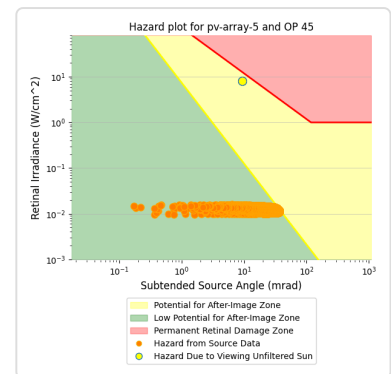
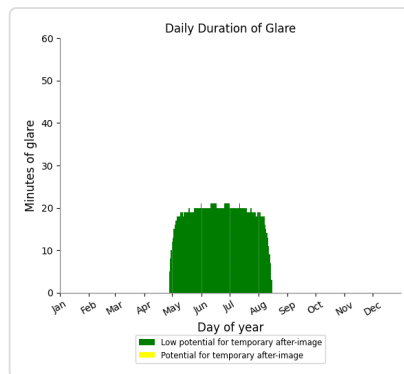
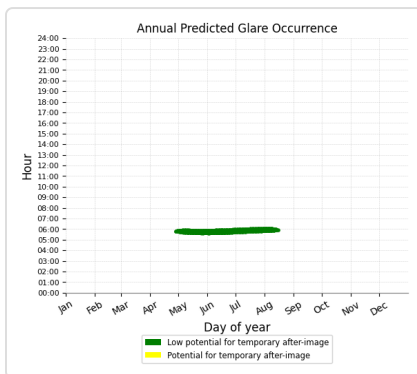
- 2,076 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 45

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

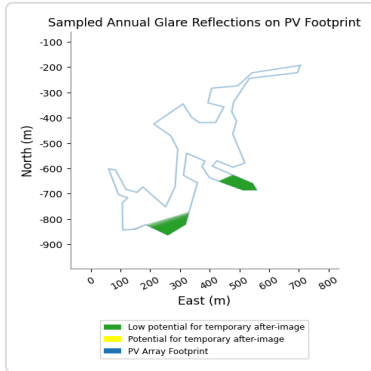
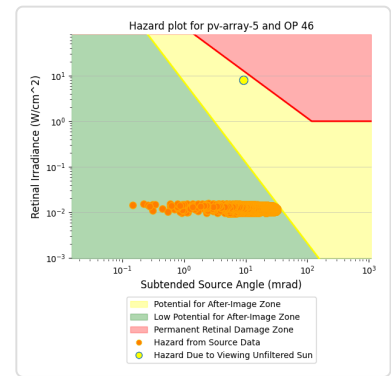
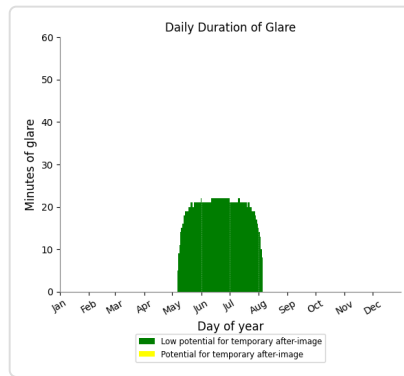
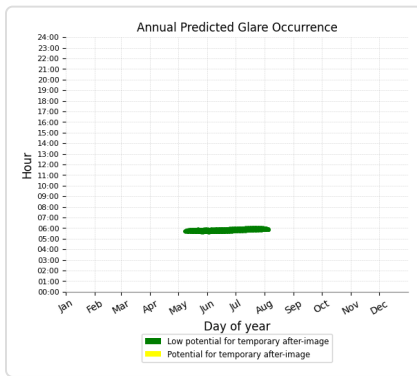
- 2,033 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 46

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

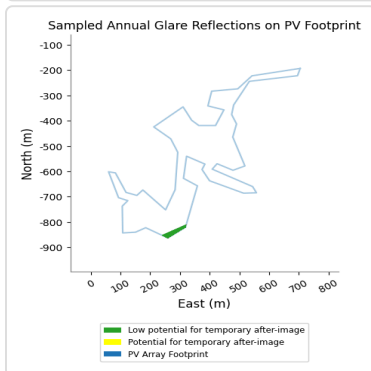
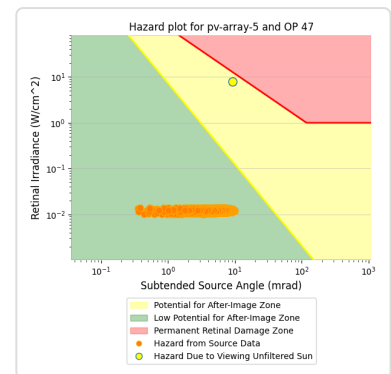
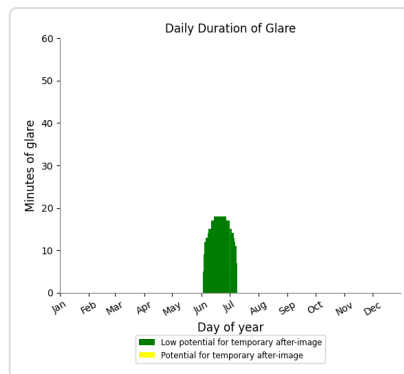
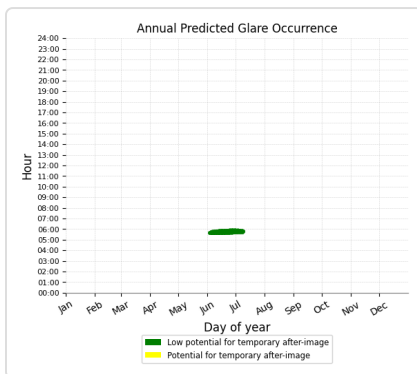
- 1,790 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 47

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

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



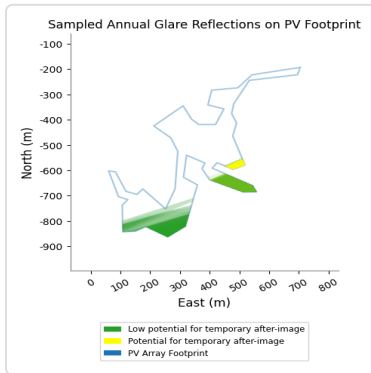
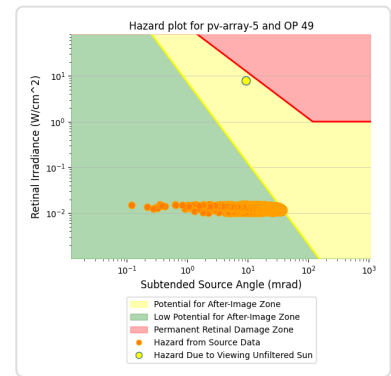
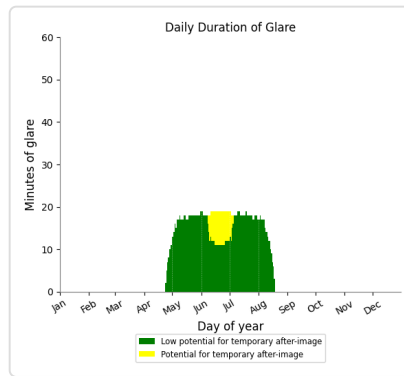
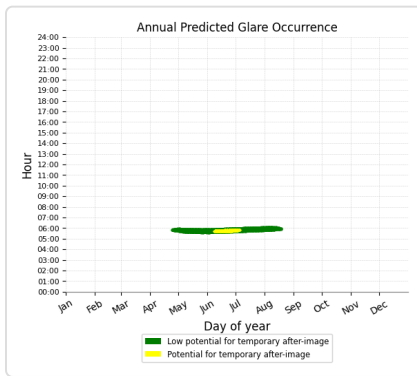
## PV array 5: OP 48

No glare found

## PV array 5: OP 49

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

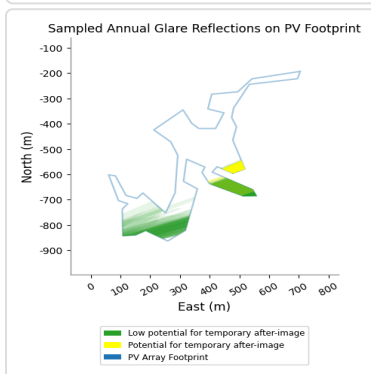
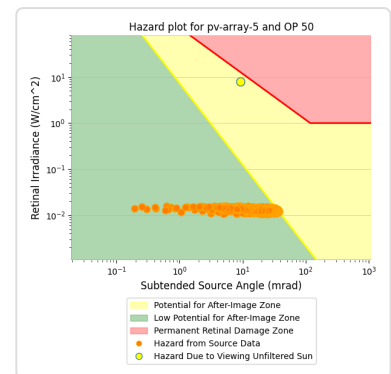
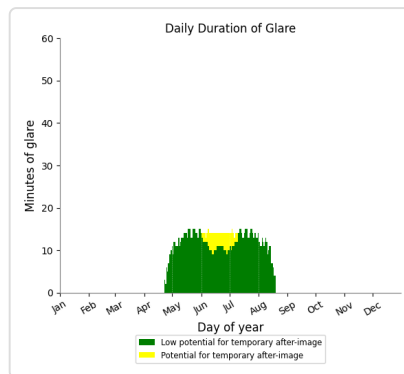
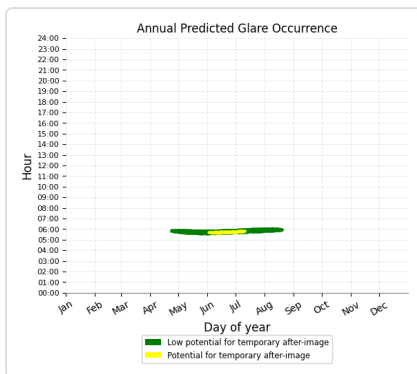
- 1,755 minutes of "green" glare with low potential to cause temporary after-image.
- 186 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 50

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

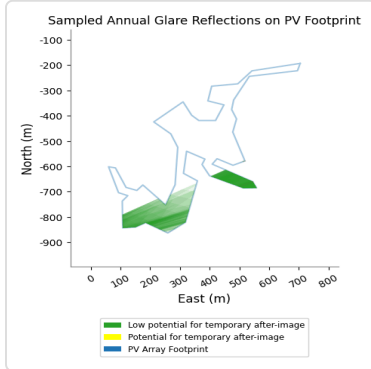
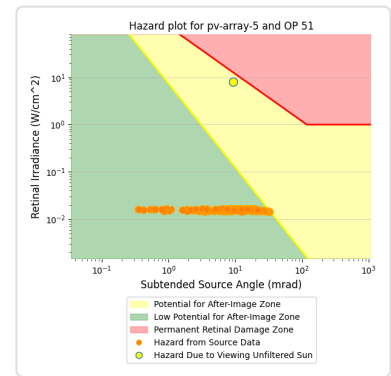
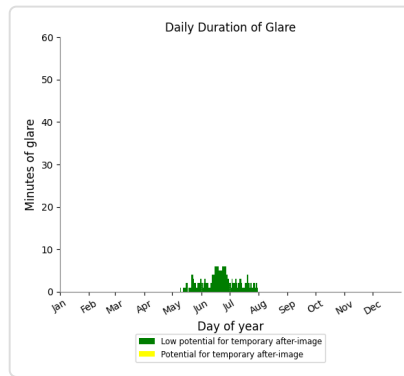
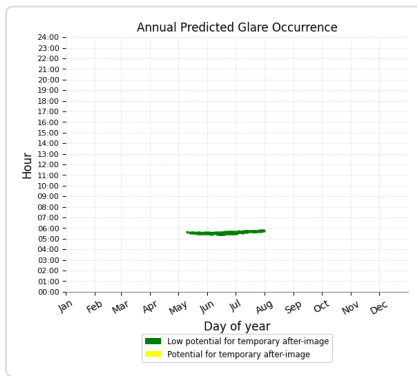
- 1,376 minutes of "green" glare with low potential to cause temporary after-image.
- 126 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 51

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

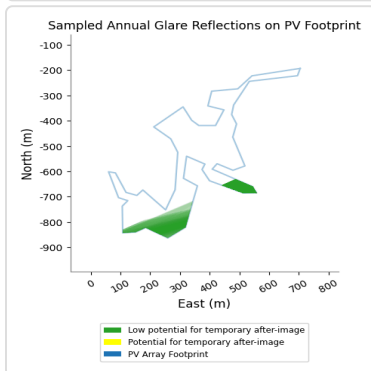
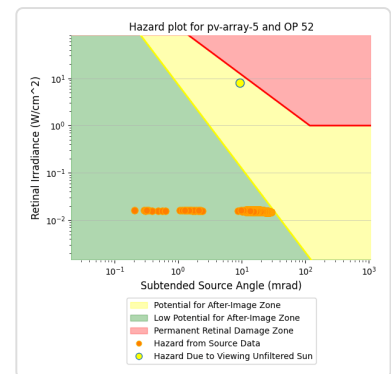
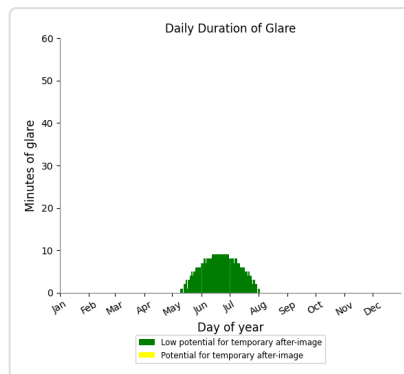
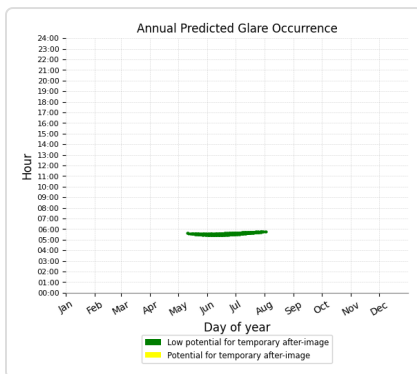
- 210 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 52

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

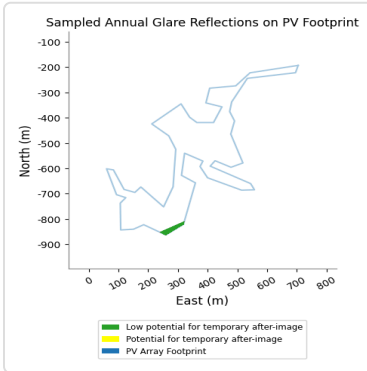
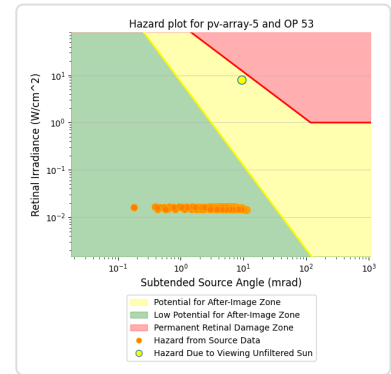
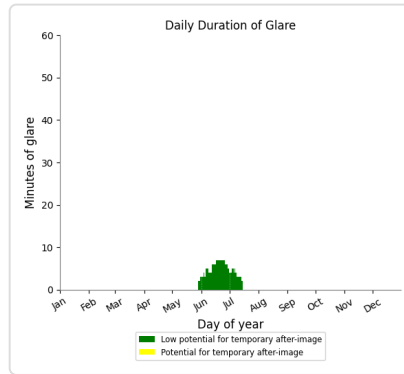
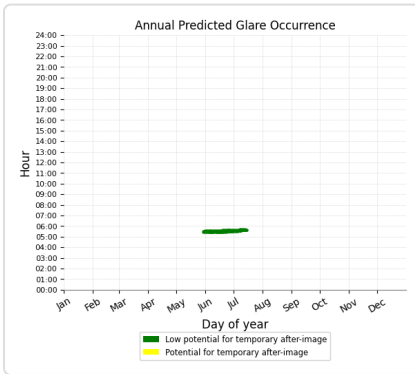
- 505 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 53

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

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



## PV array 5: OP 54

No glare found

## PV array 5: OP 55

No glare found

## PV array 5: OP 56

No glare found

## PV array 5: OP 57

No glare found

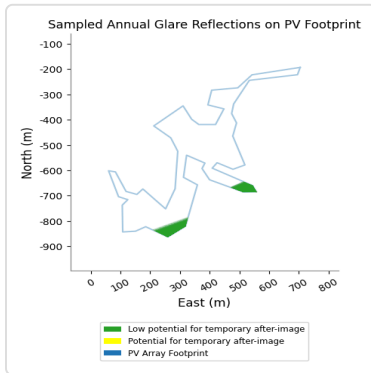
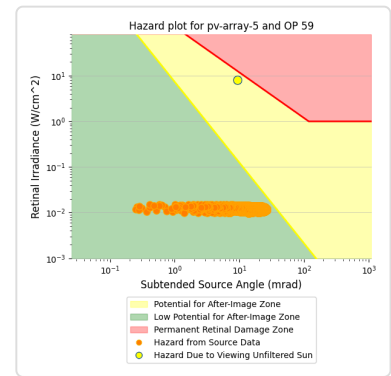
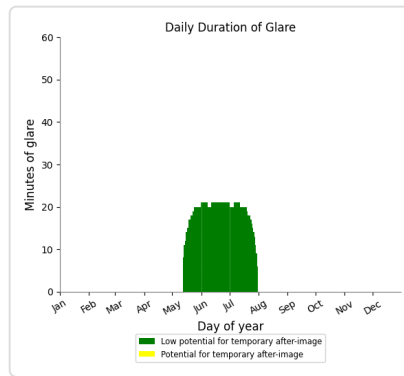
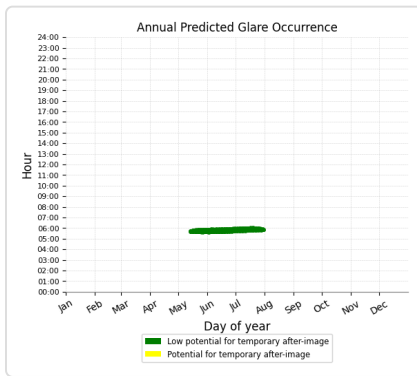
## PV array 5: OP 58

No glare found

## PV array 5: OP 59

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

- 1,511 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 60

No glare found

## PV array 5: OP 61

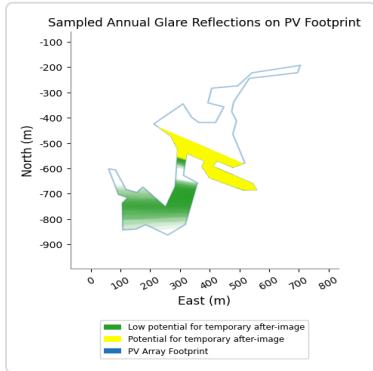
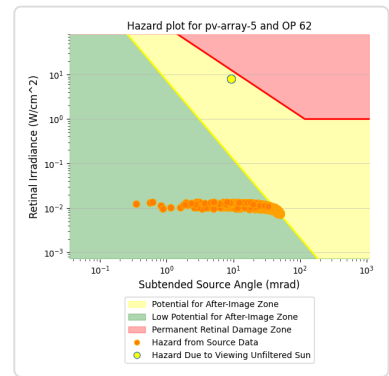
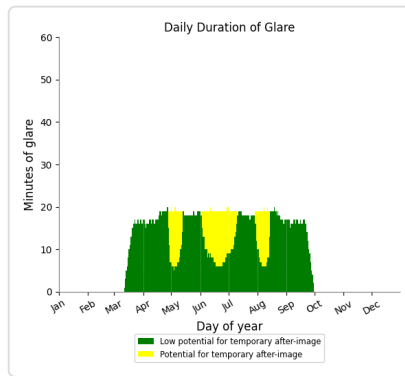
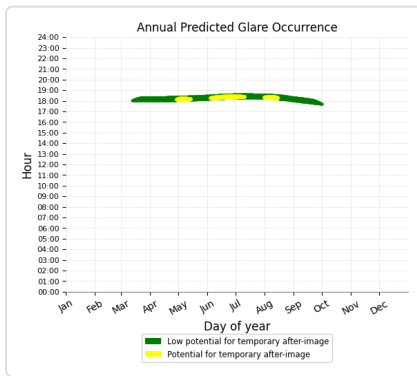
No glare found



## PV array 5: OP 62

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

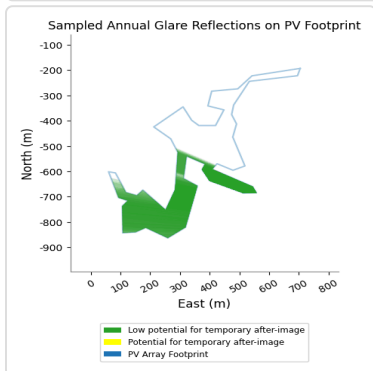
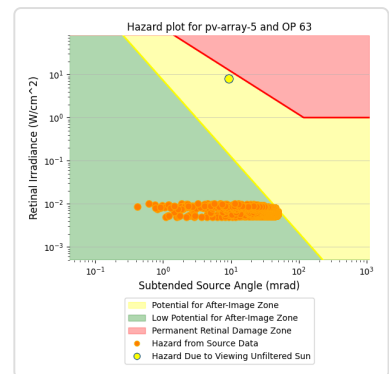
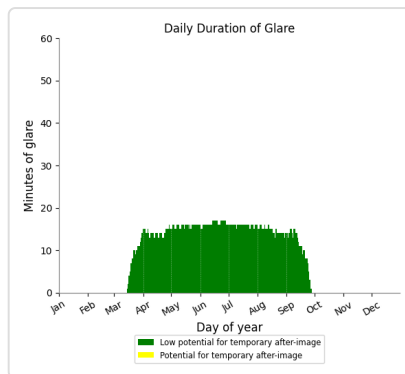
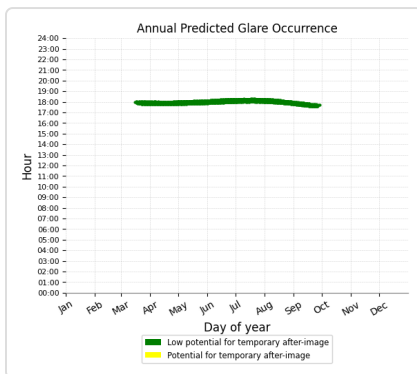
- 2,776 minutes of "green" glare with low potential to cause temporary after-image.
- 726 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 63

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

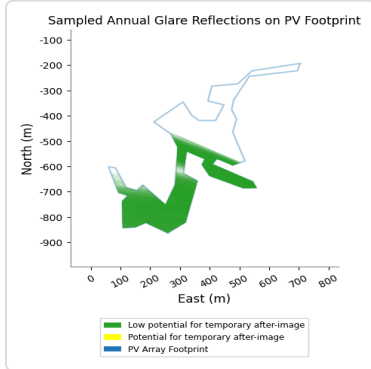
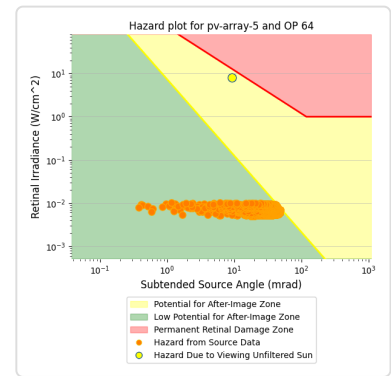
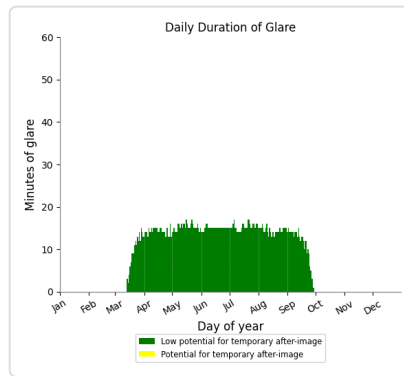
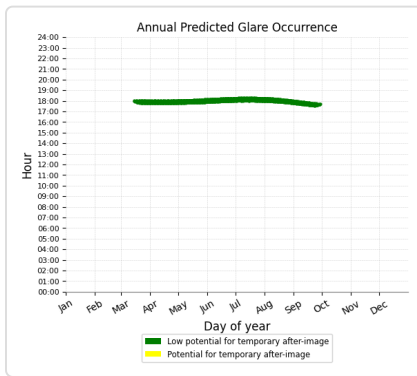
- 2,793 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 64

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

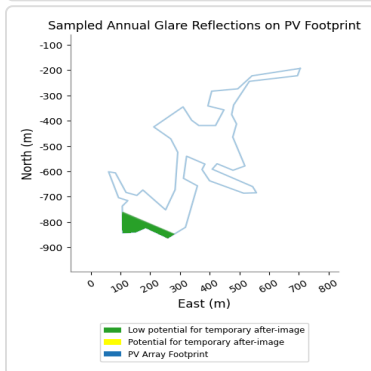
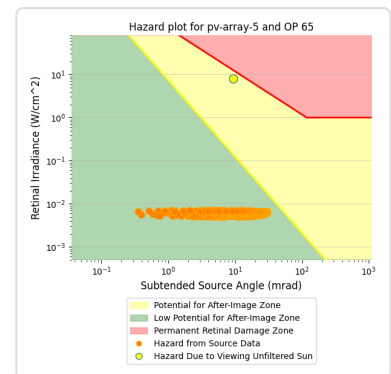
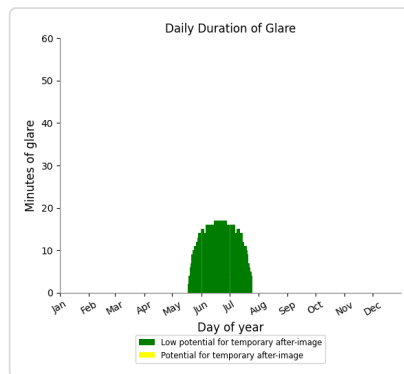
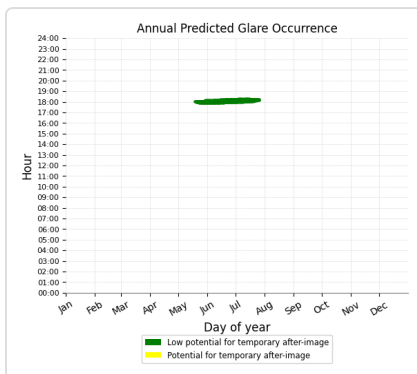
- 2,770 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



## PV array 5: OP 65

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

- 939 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

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- 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.