

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR
217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 1148 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2318)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

	January	February	March	April	May	June
1	07:43 16:45	07:28 17:21	06:49 17:58	16:19 (T25) 17:26 (T25)	06:55 19:36	06:06 17:07 (T29)
2	07:43 16:46	07:27 17:23	06:47 18:00	16:19 (T25) 17:27 (T25)	06:53 19:37	06:05 17:04 (T29)
3	07:43 16:47	07:25 17:24	06:46 18:01	16:19 (T25) 17:27 (T25)	06:51 19:38	06:03 20:12
4	07:43 16:48	07:24 17:25	06:44 18:02	16:18 (T25) 17:27 (T25)	06:50 19:39	06:02 20:13
5	07:43 16:49	07:23 17:27	06:42 18:03	16:18 (T25) 17:28 (T25)	06:48 19:41	06:01 20:14
6	07:43 16:50	07:22 17:28	06:41 18:05	16:17 (T25) 17:27 (T25)	06:46 19:42	05:59 20:15
7	07:43 16:51	07:21 17:29	06:39 18:06	16:17 (T25) 17:27 (T25)	06:44 19:43	05:58 20:17
8	07:43 16:52	07:20 17:31	06:37 18:07	16:16 (T25) 17:27 (T25)	06:43 19:44	05:57 20:18
9	07:42 16:53	07:18 17:32	06:36 18:08	16:17 (T25) 17:27 (T25)	06:41 19:45	05:55 20:19
10	07:42 16:54	07:17 17:34	06:34 18:10	16:17 (T25) 17:27 (T25)	06:39 19:46	05:54 20:20
11	07:42 16:55	07:16 17:35	06:32 18:11	16:16 (T25) 17:26 (T25)	06:38 19:48	05:53 20:21
12	07:42 16:56	07:14 17:36	06:30 18:12	16:16 (T25) 17:25 (T25)	06:36 19:49	05:52 20:22
13	07:41 16:57	07:13 17:38	06:29 17:11 (T25)	16:15 (T25) 18:26 (T25)	06:34 19:50	05:51 20:23
14	07:41 16:58	07:12 17:39	06:27 17:13 (T25)	16:14 (T25) 18:25 (T25)	06:33 19:51	05:49 20:24
15	07:40 17:00	07:10 17:40	06:25 17:14 (T25)	16:13 (T25) 18:24 (T25)	06:31 19:52	05:48 20:25
16	07:40 17:01	07:09 17:42	06:23 17:15 (T25)	16:12 (T25) 18:23 (T25)	06:29 19:53	05:47 20:27
17	07:39 17:02	07:08 17:43	06:22 17:16 (T25)	16:11 (T25) 18:22 (T25)	06:28 19:55	05:46 20:28
18	07:39 17:03	07:06 17:44	06:20 17:17 (T25)	16:10 (T25) 18:21 (T25)	06:26 19:56	05:45 20:29
19	07:38 17:04	07:05 17:45	06:19 17:18 (T25)	16:09 (T25) 18:20 (T25)	06:24 19:57	05:44 20:30
20	07:38 17:06	07:03 17:47	06:17 17:19 (T25)	16:08 (T25) 18:19 (T25)	06:23 19:58	05:43 20:31
21	07:37 17:07	07:02 17:48	06:15 17:20 (T25)	16:07 (T25) 18:18 (T25)	06:21 19:59	05:42 20:32
22	07:36 17:08	07:00 17:49	06:13 17:21 (T25)	16:06 (T25) 18:17 (T25)	06:20 20:00	05:42 20:33
23	07:36 17:10	06:59 17:51	06:11 17:22 (T25)	16:05 (T25) 18:15 (T25)	06:18 20:00	05:41 20:34
24	07:35 17:11	06:57 17:52	06:09 17:23 (T25)	16:04 (T25) 18:13 (T25)	06:16 20:02	05:40 20:35
25	07:34 17:12	06:55 17:53	06:07 17:24 (T25)	16:03 (T25) 18:11 (T25)	06:15 20:03	05:39 20:36
26	07:33 17:13	06:54 17:55	06:06 17:25 (T25)	16:02 (T25) 18:09 (T25)	06:13 20:04	05:38 20:37
27	07:32 17:15	06:52 17:56	06:04 17:26 (T25)	16:01 (T25) 18:08 (T25)	06:12 20:05	05:38 20:38
28	07:32 17:16	06:51 17:57	06:02 17:27 (T25)	16:00 (T25) 18:05 (T25)	06:10 20:06	05:37 20:39
29	07:31 17:17		06:00 19:32	17:34 (T25) 18:01 (T25)	06:09 20:07	05:36 20:40
30	07:30 17:19		06:59 19:33	17:38 (T25) 17:57 (T25)	06:07 20:09	05:36 20:40
31	07:29 17:20		06:57 19:35		20:09	05:35 20:41
Potential sun hours	291	294	369	401	453	459
Total, worst case		739	1771	551	29	
Sun reduction		0.40	0.47	0.54	0.58	
Oper. time red.		1.00	1.00	1.00	1.00	
Wind dir. red.		0.75	0.75	0.75	0.75	
Total reduction		0.30	0.35	0.40	0.43	
Total, real		222	624	222	13	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR
217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 1148 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2318)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
0.36 0.40 0.47 0.54 0.58 0.63 0.67 0.63 0.56 0.44 0.25 0.24

Operational time

N NNE NE ENE E ESE SE SSE S SSW SW WSW W WNW NW NNW Sum
245 195 263 395 451 393 363 382 412 337 736 1,617 1,224 837 579 320 8,760

	July	August	September	October	November	December
1	05:34	06:00	06:34	06:57 (T29)	07:07	16:56 (T25)
	20:55	20:35	19:48	17:14 (T29)	18:54	18:04 (T25)
2	05:35	06:01	06:35	06:58 (T29)	07:08	16:55 (T25)
	20:55	20:34	19:46	17:12 (T29)	18:52	18:04 (T25)
3	05:35	06:02	06:36	06:59 (T29)	07:09	16:55 (T25)
	20:54	20:33	19:44	17:09 (T29)	18:51	18:05 (T25)
4	05:36	06:03	06:37	07:00 (T29)	07:10	16:54 (T25)
	20:54	20:32	19:43	17:05 (T29)	18:49	18:04 (T25)
5	05:36	06:04	06:38		07:11	16:54 (T25)
	20:54	20:30	19:41		18:47	18:04 (T25)
6	05:37	06:05	06:39		07:12	16:53 (T25)
	20:54	20:29	19:39		18:45	18:03 (T25)
7	05:38	06:06	06:40		07:14	16:53 (T25)
	20:54	20:28	19:37		18:44	18:03 (T25)
8	05:38	06:07	06:41		07:15	16:53 (T25)
	20:53	20:27	19:36		18:42	18:03 (T25)
9	05:39	06:08	06:42		07:16	16:53 (T25)
	20:53	20:25	19:34		18:40	18:03 (T25)
10	05:40	06:09	06:43		07:17	16:52 (T25)
	20:52	20:24	19:32		18:38	18:02 (T25)
11	05:40	06:11	07:04 (T29)	06:45	07:18	16:52 (T25)
	20:52	20:22	07:10 (T29)	19:30	18:37	18:01 (T25)
12	05:41	06:12	07:00 (T29)	06:46	07:19	16:52 (T25)
	20:52	20:21	07:14 (T29)	19:29	18:35	18:00 (T25)
13	05:42	06:13	06:57 (T29)	06:47	07:21	16:53 (T25)
	20:51	20:20	07:16 (T29)	19:27	18:33	18:00 (T25)
14	05:43	06:14	06:55 (T29)	06:48	07:22	16:53 (T25)
	20:50	20:18	07:17 (T29)	19:25	17:47 (T25)	17:59 (T25)
15	05:44	06:15	06:54 (T29)	06:49	07:23	16:53 (T25)
	20:50	20:17	07:18 (T29)	19:23	17:51 (T25)	17:58 (T25)
16	05:44	06:16	06:53 (T29)	06:50	07:24	16:53 (T25)
	20:49	20:15	07:19 (T29)	19:21	17:54 (T25)	17:57 (T25)
17	05:45	06:17	06:51 (T29)	06:51	07:25	16:55 (T25)
	20:49	20:14	07:20 (T29)	19:19	17:56 (T25)	17:57 (T25)
18	05:46	06:18	06:50 (T29)	06:52	07:27	16:55 (T25)
	20:48	20:12	07:20 (T29)	19:18	17:57 (T25)	17:55 (T25)
19	05:47	06:19	06:50 (T29)	06:53	07:28	16:55 (T25)
	20:47	20:11	07:21 (T29)	19:16	17:58 (T25)	17:54 (T25)
20	05:48	06:20	06:49 (T29)	06:54	07:29	16:56 (T25)
	20:47	20:09	07:21 (T29)	19:14	17:59 (T25)	17:52 (T25)
21	05:49	06:21	06:49 (T29)	06:56	07:30	16:58 (T25)
	20:46	20:08	07:22 (T29)	19:12	18:00 (T25)	17:52 (T25)
22	05:50	06:23	06:49 (T29)	06:57	07:31	16:59 (T25)
	20:45	20:06	07:22 (T29)	19:10	18:01 (T25)	17:50 (T25)
23	05:51	06:24	06:48 (T29)	06:58	07:33	17:00 (T25)
	20:44	20:05	07:22 (T29)	19:09	18:02 (T25)	17:48 (T25)
24	05:52	06:25	06:49 (T29)	06:59	07:34	17:02 (T25)
	20:43	20:03	07:22 (T29)	19:07	18:03 (T25)	17:47 (T25)
25	05:53	06:26	06:50 (T29)	07:00	07:35	17:03 (T25)
	20:42	20:01	07:21 (T29)	19:05	18:04 (T25)	17:45 (T25)
26	05:54	06:27	06:51 (T29)	07:01	07:36	17:05 (T25)
	20:41	20:00	07:21 (T29)	19:03	18:04 (T25)	17:42 (T25)
27	05:55	06:28	06:52 (T29)	07:02	07:38	17:08 (T25)
	20:40	19:56	07:20 (T29)	19:01	18:04 (T25)	17:40 (T25)
28	05:56	06:29	06:53 (T29)	07:03	07:39	17:10 (T25)
	20:39	19:55	07:19 (T29)	19:00	18:04 (T25)	17:37 (T25)
29	05:57	06:30	06:54 (T29)	07:04	07:40	17:14 (T25)
	20:38	19:53	07:18 (T29)	18:58	18:04 (T25)	17:32 (T25)
30	05:58	06:31	06:55 (T29)	07:06	07:42	
	20:37	19:51	07:17 (T29)	18:56	18:04 (T25)	
31	05:59	06:33	06:56 (T29)		07:43	
	20:36	19:50	07:16 (T29)		18:06	
Potential sun hours	466	433	376		343	293
Total, worst case		547	899		1658	
Sun reduction		0.63	0.56		0.44	
Oper. time red.		1.00	1.00		1.00	
Wind dir. red.		0.75	0.75		0.75	
Total reduction		0.47	0.42		0.33	
Total, real		257	377		547	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR
217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 1158 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2320)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

January		February		March		April		May		June	
1	07:43	08:09 (T29)	07:28	08:20 (T29)	06:49	06:55	06:06			05:34	06:03 (T30)
	16:45	45 15:48 (T25)	17:21	33 08:53 (T29)	17:58	19:36	20:10			20:42	41 06:44 (T30)
2	07:43	08:09 (T29)	07:27	08:21 (T29)	06:47	06:53	06:05			05:34	06:04 (T30)
	16:46	39 08:48 (T29)	17:23	31 08:52 (T29)	18:00	19:37	20:11			20:43	41 06:45 (T30)
3	07:43	08:09 (T29)	07:25	08:23 (T29)	06:46	06:51	06:03			05:33	06:04 (T30)
	16:47	40 08:49 (T29)	17:24	28 08:51 (T29)	18:01	19:38	20:12			20:44	40 06:44 (T30)
4	07:43	08:09 (T29)	07:24	08:25 (T29)	06:44	06:50	06:02			05:33	06:04 (T30)
	16:48	41 08:50 (T29)	17:25	25 08:50 (T29)	18:02	19:39	20:13			20:45	41 06:45 (T30)
5	07:43	08:09 (T29)	07:23	08:27 (T29)	06:42	06:48	06:00			05:33	06:05 (T30)
	16:49	41 08:50 (T29)	17:27	21 08:48 (T29)	18:03	19:40	20:14			20:45	40 06:45 (T30)
6	07:43	08:09 (T29)	07:22	08:29 (T29)	06:41	06:46	05:59			05:32	06:04 (T30)
	16:50	42 08:51 (T29)	17:28	16 08:45 (T29)	18:05	19:42	20:15			20:46	40 06:44 (T30)
7	07:43	08:08 (T29)	07:21	08:35 (T29)	06:39	06:44	05:58	06:21 (T30)		05:32	06:05 (T30)
	16:51	43 08:51 (T29)	17:29	4 08:39 (T29)	18:06	19:43	20:17	5 06:26 (T30)		20:47	40 06:45 (T30)
8	07:43	08:08 (T29)	07:20		06:37	06:43	05:57	06:20 (T30)		05:31	06:06 (T30)
	16:52	44 08:52 (T29)	17:31		18:07	19:44	20:18	11 06:31 (T30)		20:47	39 06:45 (T30)
9	07:42	08:08 (T29)	07:18		06:36	06:41	05:55	06:18 (T30)		05:31	06:06 (T30)
	16:53	45 08:53 (T29)	17:32		18:08	19:45	20:19	14 06:32 (T30)		20:48	39 06:45 (T30)
10	07:42	08:09 (T29)	07:17		06:34	06:39	05:54	06:17 (T30)		05:31	06:06 (T30)
	16:54	44 08:53 (T29)	17:33		18:10	19:46	20:20	17 06:34 (T30)		20:49	39 06:45 (T30)
11	07:42	08:08 (T29)	07:16		06:32	06:38	05:53	06:16 (T30)		05:31	06:06 (T30)
	16:55	45 08:53 (T29)	17:35		18:11	19:48	20:21	20 06:36 (T30)		20:49	39 06:45 (T30)
12	07:42	08:09 (T29)	07:14		06:30	06:36	05:52	06:15 (T30)		05:31	06:06 (T30)
	16:56	45 08:54 (T29)	17:36		18:12	19:49	20:22	22 06:37 (T30)		20:50	39 06:45 (T30)
13	07:41	08:09 (T29)	07:13		07:29	06:34	05:51	06:14 (T30)		05:30	06:07 (T30)
	16:57	45 08:54 (T29)	17:37		19:13	19:50	20:23	24 06:38 (T30)		20:50	38 06:45 (T30)
14	07:41	08:09 (T29)	07:12		07:27	06:32	05:49	06:13 (T30)		05:30	06:07 (T30)
	16:58	46 08:55 (T29)	17:39		19:14	19:51	20:24	26 06:39 (T30)		20:51	38 06:45 (T30)
15	07:40	08:09 (T29)	07:10		07:25	06:31	05:48	06:12 (T30)		05:30	06:07 (T30)
	17:00	46 08:55 (T29)	17:40		19:16	19:52	20:25	28 06:40 (T30)		20:51	39 06:46 (T30)
16	07:40	08:10 (T29)	07:09		07:23	06:29	05:47	06:11 (T30)		05:30	06:08 (T30)
	17:01	46 08:56 (T29)	17:41		19:17	19:53	20:27	29 06:40 (T30)		20:52	38 06:46 (T30)
17	07:39	08:10 (T29)	07:08		07:22	06:28	05:46	06:10 (T30)		05:30	06:08 (T30)
	17:02	46 08:56 (T29)	17:43		19:18	19:55	20:28	31 06:41 (T30)		20:52	38 06:46 (T30)
18	07:39	08:11 (T29)	07:06		07:20	06:26	05:45	06:09 (T30)		05:30	06:08 (T30)
	17:03	46 08:57 (T29)	17:44		19:19	19:56	20:29	32 06:41 (T30)		20:53	38 06:46 (T30)
19	07:38	08:11 (T29)	07:05		07:18	06:24	05:44	06:08 (T30)		05:30	06:08 (T30)
	17:04	46 08:57 (T29)	17:45		19:20	19:57	20:30	34 06:42 (T30)		20:53	38 06:46 (T30)
20	07:38	08:11 (T29)	07:03		07:16	06:23	05:43	06:07 (T30)		05:31	06:08 (T30)
	17:06	46 08:57 (T29)	17:47		19:22	19:58	20:31	35 06:42 (T30)		20:53	38 06:46 (T30)
21	07:37	08:12 (T29)	07:02		07:15	06:21	05:42	06:06 (T30)		05:31	06:09 (T30)
	17:07	46 08:58 (T29)	17:48		19:23	19:59	20:32	36 06:42 (T30)		20:54	38 06:47 (T30)
22	07:36	08:12 (T29)	07:00		07:13	06:19	05:41	06:06 (T30)		05:31	06:09 (T30)
	17:08	45 08:57 (T29)	17:49		19:24	20:00	20:33	37 06:43 (T30)		20:54	38 06:47 (T30)
23	07:36	08:13 (T29)	06:59		07:11	06:18	05:41	06:05 (T30)		05:31	06:09 (T30)
	17:09	44 08:57 (T29)	17:51		19:25	20:00	20:34	38 06:43 (T30)		20:54	38 06:47 (T30)
24	07:35	08:13 (T29)	06:57		07:09	06:16	05:40	06:04 (T30)		05:31	06:09 (T30)
	17:11	44 08:57 (T29)	17:52		19:26	20:02	20:35	39 06:43 (T30)		20:54	38 06:47 (T30)
25	07:34	08:14 (T29)	06:55		07:07	06:15	05:39	06:03 (T30)		05:32	06:10 (T30)
	17:12	43 08:57 (T29)	17:53		19:28	20:03	20:36	40 06:43 (T30)		20:55	38 06:48 (T30)
26	07:33	08:14 (T29)	06:54		07:06	06:13	05:38	06:03 (T30)		05:32	06:10 (T30)
	17:13	43 08:57 (T29)	17:55		19:29	20:04	20:37	41 06:44 (T30)		20:55	38 06:48 (T30)
27	07:32	08:15 (T29)	06:52		07:04	06:12	05:38	06:03 (T30)		05:32	06:10 (T30)
	17:15	41 08:56 (T29)	17:56		19:30	20:05	20:38	41 06:44 (T30)		20:55	38 06:48 (T30)
28	07:32	08:15 (T29)	06:51		07:02	06:10	05:37	06:02 (T30)		05:33	06:11 (T30)
	17:16	41 08:56 (T29)	17:57		19:31	20:06	20:39	42 06:44 (T30)		20:55	38 06:49 (T30)
29	07:31	08:16 (T29)			07:00	06:09	05:36	06:03 (T30)		05:33	06:10 (T30)
	17:17	39 08:55 (T29)			19:32	20:07	20:40	41 06:44 (T30)		20:55	38 06:48 (T30)
30	07:30	08:17 (T29)			06:59	06:07	05:36	06:03 (T30)		05:34	06:11 (T30)
	17:19	38 08:55 (T29)			19:33	20:08	20:40	41 06:44 (T30)		20:55	38 06:49 (T30)
31	07:29	08:18 (T29)			06:57		05:35	06:04 (T30)			
	17:20	36 08:54 (T29)			19:35		20:41	41 06:45 (T30)			
Potential sun hours	291		294		369		454		459		
Total, worst case	1341		158				765		1163		
Sun reduction	0.36		0.40				0.58		0.63		
Oper. time red.	1.00		1.00				1.00		1.00		
Wind dir. red.	0.61		0.61				0.75		0.75		
Total reduction	0.21		0.23				0.42		0.45		
Total, real	282		37				319		527		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

SHADOW - Calendar

Shadow receptor: 1158 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2320)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

July			August			September			October			November			December		
1	05:34	06:11 (T30)	06:00		06:25 (T30)	06:34	07:07	07:44		07:22	07:50 (T29)						
	20:55	38 06:49 (T30)	20:35	23	06:48 (T30)	19:48	18:54	18:04		16:37	43 08:35 (T29)						
2	05:35	06:11 (T30)	06:01		06:26 (T30)	06:35	07:08	07:45		07:23	07:51 (T29)						
	20:55	39 06:50 (T30)	20:34	21	06:47 (T30)	19:46	18:52	18:03		16:37	43 08:36 (T29)						
3	05:35	06:11 (T30)	06:02		06:27 (T30)	06:36	07:09	07:47		07:24	07:52 (T29)						
	20:54	39 06:50 (T30)	20:33	19	06:46 (T30)	19:44	18:51	18:02		16:36	42 08:37 (T29)						
4	05:36	06:11 (T30)	06:03		06:28 (T30)	06:37	07:10	07:48		07:25	07:52 (T29)						
	20:54	39 06:50 (T30)	20:32	16	06:44 (T30)	19:43	18:49	18:00		16:36	42 08:37 (T29)						
5	05:36	06:11 (T30)	06:04		06:29 (T30)	06:38	07:11	07:49		07:26	07:53 (T29)						
	20:54	39 06:50 (T30)	20:30	13	06:42 (T30)	19:41	18:47	17:59	6	09:10 (T29)	16:36	41	08:37 (T29)				
6	05:37	06:11 (T30)	06:05		06:30 (T30)	06:39	07:12	06:50		07:59 (T29)	07:27		07:54 (T29)				
	20:54	40 06:51 (T30)	20:29	9	06:39 (T30)	19:39	18:45	16:58	16	08:15 (T29)	16:36	42	08:37 (T29)				
7	05:38	06:11 (T30)	06:06			06:40	07:14	06:52		07:57 (T29)	07:28		07:55 (T29)				
	20:54	40 06:51 (T30)	20:28			19:37	18:44	16:57	19	08:18 (T29)	16:35	39	08:37 (T29)				
8	05:38	06:11 (T30)	06:07			06:41	07:15	06:53		07:54 (T29)	07:29		07:56 (T29)				
	20:53	40 06:51 (T30)	20:27			19:36	18:42	16:55	26	08:20 (T29)	16:35	41	08:38 (T29)				
9	05:39	06:11 (T30)	06:08			06:42	07:16	06:54		07:53 (T29)	07:30		07:57 (T29)				
	20:53	41 06:52 (T30)	20:25			19:34	18:40	16:54	29	08:22 (T29)	16:35	38	08:38 (T29)				
10	05:40	06:11 (T30)	06:09			06:43	07:17	06:56		07:52 (T29)	07:31		07:58 (T29)				
	20:52	40 06:51 (T30)	20:24			19:32	18:38	16:53	31	08:23 (T29)	16:35	40	08:38 (T29)				
11	05:40	06:11 (T30)	06:10			06:45	07:18	06:57		07:51 (T29)	07:32		07:59 (T29)				
	20:52	41 06:52 (T30)	20:22			19:30	18:37	16:52	31	08:23 (T29)	16:35	40	08:39 (T29)				
12	05:41	06:12 (T30)	06:12			06:46	07:19	06:58		07:50 (T29)	07:32		08:00 (T29)				
	20:52	40 06:52 (T30)	20:21			19:28	18:35	16:51	33	08:26 (T29)	16:35	38	15:39 (T25)				
13	05:42	06:12 (T30)	06:13			06:47	07:21	07:00		07:49 (T29)	07:33		08:00 (T29)				
	20:51	41 06:53 (T30)	20:20			19:27	18:33	16:50	35	08:27 (T29)	16:35	44	15:40 (T25)				
14	05:43	06:11 (T30)	06:14			06:48	07:22	07:01		07:48 (T29)	07:34		08:01 (T29)				
	20:50	41 06:52 (T30)	20:18			19:25	18:32	16:49	32	08:27 (T29)	16:36	45	15:42 (T25)				
15	05:44	06:11 (T30)	06:15			06:49	07:23	07:02		07:48 (T29)	07:35		08:02 (T29)				
	20:50	42 06:53 (T30)	20:17			19:23	18:30	16:48	39	08:29 (T29)	16:36	44	15:42 (T25)				
16	05:44	06:12 (T30)	06:16			06:50	07:24	07:03		07:48 (T29)	07:36		08:03 (T29)				
	20:49	41 06:53 (T30)	20:15			19:21	18:28	16:47	37	08:28 (T29)	16:36	48	15:44 (T25)				
17	05:45	06:12 (T30)	06:17			06:51	07:25	07:05		07:48 (T29)	07:36		08:03 (T29)				
	20:49	41 06:53 (T30)	20:14			19:19	18:27	16:46	40	08:31 (T29)	16:36	47	15:42 (T25)				
18	05:46	06:12 (T30)	06:18			06:52	07:27	07:06		07:48 (T29)	07:37		08:04 (T29)				
	20:48	41 06:53 (T30)	20:12			19:18	18:25	16:45	39	08:31 (T29)	16:37	47	15:45 (T25)				
19	05:47	06:16 (T30)	06:19			06:53	07:28	07:07		07:47 (T29)	07:38		08:05 (T29)				
	20:47	26 06:54 (T30)	20:11			19:16	18:23	16:44	42	08:31 (T29)	16:37	46	15:47 (T25)				
20	05:48	06:13 (T30)	06:20			06:54	07:29	07:08		07:48 (T29)	07:38		08:05 (T29)				
	20:47	25 06:53 (T30)	20:09			19:14	18:22	16:43	41	08:32 (T29)	16:37	51	15:47 (T25)				
21	05:49	06:14 (T30)	06:21			06:55	07:30	07:10		07:47 (T29)	07:39		08:06 (T29)				
	20:46	37 06:53 (T30)	20:08			19:12	18:20	16:43	44	08:32 (T29)	16:38	49	15:48 (T25)				
22	05:50	06:15 (T30)	06:23			06:57	07:31	07:11		07:47 (T29)	07:39		08:06 (T29)				
	20:45	33 06:53 (T30)	20:06			19:10	18:19	16:42	43	08:32 (T29)	16:38	45	15:48 (T25)				
23	05:51	06:16 (T30)	06:24			06:58	07:33	07:12		07:48 (T29)	07:40		08:07 (T29)				
	20:44	25 06:53 (T30)	20:05			19:09	18:17	16:41	43	08:34 (T29)	16:39	50	15:49 (T25)				
24	05:52	06:17 (T30)	06:25			06:59	07:34	07:13		07:48 (T29)	07:40		08:07 (T29)				
	20:43	36 06:53 (T30)	20:03			19:07	18:16	16:41	43	08:34 (T29)	16:39	48	15:49 (T25)				
25	05:53	06:18 (T30)	06:26			07:00	07:35	07:15		07:50 (T29)	07:41		08:08 (T29)				
	20:42	23 06:52 (T30)	20:01			19:05	18:14	16:40	42	08:34 (T29)	16:40	49	15:49 (T25)				
26	05:54	06:19 (T30)	06:27			07:01	07:36	07:16		07:48 (T29)	07:41		08:08 (T29)				
	20:41	25 06:52 (T30)	20:00			19:03	18:13	16:39	44	08:33 (T29)	16:40	49	15:50 (T25)				
27	05:55	06:23 (T30)	06:28			07:02	07:38	07:17		07:49 (T29)	07:41		08:08 (T29)				
	20:40	23 06:52 (T30)	19:56			19:01	18:11	16:39	43	08:35 (T29)	16:41	47	15:49 (T25)				
28	05:56	06:21 (T30)	06:29			07:03	07:39	07:18		07:49 (T29)	07:42		08:08 (T29)				
	20:39	30 06:51 (T30)	19:55			19:00	18:10	16:38	44	08:35 (T29)	16:42	44	15:49 (T25)				
29	05:57	06:22 (T30)	06:30			07:04	07:40	07:19		07:49 (T29)	07:42		08:09 (T29)				
	20:38	29 06:51 (T30)	19:53			18:58	18:08	16:38	44	08:35 (T29)	16:43	44	15:48 (T25)				
30	05:58	06:23 (T30)	06:31			07:06	07:42	07:20		07:50 (T29)	07:42		08:09 (T29)				
	20:37	27 06:50 (T30)	19:51			18:56	18:07	16:37	43	08:35 (T29)	16:43	48	15:50 (T25)				
31	05:59	06:24 (T30)	06:32				07:43						08:09 (T29)				
	20:36	25 06:49 (T30)	19:50				18:06				16:44	44	15:49 (T25)				
Potential sun hours	466		433			376		293			281						
Total, worst case	1087		101					929			1378						
Sun reduction	0.67		0.63					0.25			0.24						
Oper. time red.	1.00		1.00					1.00			1.00						
Wind dir. red.	0.75		0.75					0.61			0.62						
Total reduction	0.48		0.45					0.15			0.14						
Total, real	524		46					136			198						

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR
217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 1167 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2321)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

January				February				March				April				May				June				
1	07:43			08:09 (T29)	07:28			06:49				06:55				07:17 (T30)	06:06			06:29 (T27)	05:34		06:27 (T27)	
	16:45	8		08:17 (T29)	17:21			17:58				19:36	13			07:30 (T30)	20:10	38		07:07 (T27)	20:42	36	07:03 (T27)	
2	07:43			08:09 (T29)	07:27			06:47				06:53				07:15 (T30)	06:05			06:27 (T27)	05:34		06:29 (T27)	
	16:46	9		08:18 (T29)	17:23			18:00				19:37	15			07:30 (T30)	20:11	40		07:07 (T27)	20:43	35	07:04 (T27)	
3	07:43			08:09 (T29)	07:25			06:46				06:51				07:13 (T30)	06:03			06:26 (T27)	05:33		06:29 (T27)	
	16:47	9		08:18 (T29)	17:24			18:01				19:38	17			07:30 (T30)	20:12	42		07:08 (T27)	20:44	34	07:03 (T27)	
4	07:43			08:09 (T29)	07:24			06:44				06:50				07:11 (T30)	06:02			06:25 (T27)	05:33		06:30 (T27)	
	16:48	10		08:19 (T29)	17:25			18:02				19:39	19			07:30 (T30)	20:13	43		07:08 (T27)	20:45	33	07:03 (T27)	
5	07:43			08:09 (T29)	07:23			06:42				06:48				07:10 (T30)	06:01			06:23 (T27)	05:33		06:31 (T27)	
	16:49	11		08:20 (T29)	17:27			18:03				19:41	21			07:31 (T30)	20:14	45		07:08 (T27)	20:45	32	07:03 (T27)	
6	07:43			08:09 (T29)	07:22			06:41				06:46				07:08 (T30)	05:59			06:22 (T27)	05:32		06:31 (T27)	
	16:50	12		08:21 (T29)	17:28			18:05				19:42	22			07:30 (T30)	20:15	47		07:09 (T27)	20:46	30	07:01 (T27)	
7	07:43			08:09 (T29)	07:21			06:39				06:44				07:06 (T30)	05:58			06:22 (T27)	05:32		06:32 (T27)	
	16:51	13		08:22 (T29)	17:29			18:06				19:43	23			07:29 (T30)	20:17	47		07:09 (T27)	20:47	29	07:01 (T27)	
8	07:43			08:08 (T29)	07:20			06:37				06:43				07:04 (T30)	05:57			06:21 (T27)	05:31		06:33 (T27)	
	16:52	14		08:22 (T29)	17:31			18:07				19:44	25			07:29 (T30)	20:18	48		07:09 (T27)	20:47	28	07:01 (T27)	
9	07:42			08:08 (T29)	07:18			06:36				06:41				07:03 (T30)	05:55			06:20 (T27)	05:31		06:34 (T27)	
	16:53	15		08:23 (T29)	17:32			18:08				19:45	26			07:29 (T30)	20:19	49		07:09 (T27)	20:48	27	07:01 (T27)	
10	07:42			08:08 (T29)	07:17			06:34				06:39				07:04 (T30)	05:54			06:20 (T27)	05:31		06:34 (T27)	
	16:54	16		08:24 (T29)	17:33			18:10				19:46	23			07:27 (T30)	20:20	49		07:09 (T27)	20:49	26	07:00 (T27)	
11	07:42			08:07 (T29)	07:16			06:32				06:38				07:04 (T30)	05:53			06:20 (T27)	05:31		06:35 (T27)	
	16:55	17		08:24 (T29)	17:35			18:11				19:48	22			07:26 (T30)	20:21	49		07:09 (T27)	20:49	25	07:00 (T27)	
12	07:42			08:07 (T29)	07:15			06:30				06:36				07:05 (T30)	05:52			06:20 (T27)	05:31		06:35 (T27)	
	16:56	18		08:25 (T29)	17:36			18:12				19:49	20			07:25 (T30)	20:22	49		07:09 (T27)	20:50	25	07:00 (T27)	
13	07:41			08:06 (T29)	07:13			07:29				06:34				07:06 (T30)	05:51			06:20 (T27)	05:30		06:36 (T27)	
	16:57	19		08:25 (T29)	17:38			19:13				19:50	17			07:23 (T30)	20:23	49		07:09 (T27)	20:50	23	06:59 (T27)	
14	07:41			08:06 (T29)	07:12			07:27				06:33				07:08 (T30)	05:49			06:20 (T27)	05:30		06:37 (T27)	
	16:58	20		08:26 (T29)	17:39			19:14				19:51	12			07:20 (T30)	20:24	49		07:09 (T27)	20:51	22	06:59 (T27)	
15	07:40			08:06 (T29)	07:10			07:25				06:31					05:48			06:20 (T27)	05:30		06:37 (T27)	
	17:00	21		08:27 (T29)	17:40			19:16				19:52					20:26	49		07:09 (T27)	20:51	22	06:59 (T27)	
16	07:40			08:05 (T29)	07:09			07:23				06:29					05:47			06:21 (T27)	05:30		06:38 (T27)	
	17:01	22		08:27 (T29)	17:42			19:17				19:53					20:27	48		07:09 (T27)	20:52	21	06:59 (T27)	
17	07:40			08:04 (T29)	07:08			07:22				06:28					05:46			06:21 (T27)	05:30		06:39 (T27)	
	17:02	23		08:27 (T29)	17:43			19:18				19:55					20:28	48		07:09 (T27)	20:52	20	06:59 (T27)	
18	07:39			08:04 (T29)	07:06			07:20				06:26					05:45			06:21 (T27)	05:30		06:39 (T27)	
	17:03	24		08:28 (T29)	17:44			19:19				19:56					20:29	47		07:08 (T27)	20:53	19	06:58 (T27)	
19	07:38			08:03 (T29)	07:05			07:18				06:24					05:44			06:21 (T27)	05:30		06:39 (T27)	
	17:04	25		08:28 (T29)	17:45			19:20				19:57					20:30	47		07:08 (T27)	20:53	19	06:58 (T27)	
20	07:38			08:02 (T29)	07:03			07:16				06:23					05:43			06:21 (T27)	05:31		06:39 (T27)	
	17:06	25		08:27 (T29)	17:47			19:22				19:58					20:31	47		07:08 (T27)	20:53	19	06:58 (T27)	
21	07:37			08:02 (T29)	07:02			07:15				06:21					05:42			06:21 (T27)	05:31		06:41 (T27)	
	17:07	26		08:28 (T29)	17:48			19:23				19:59					20:32	46		07:07 (T27)	20:54	18	06:59 (T27)	
22	07:36			08:02 (T29)	07:00			07:13				06:19					05:42			06:23 (T27)	05:31		06:41 (T27)	
	17:08	26		08:28 (T29)	17:49			19:24				20:00					20:33	45		07:08 (T27)	20:54	18	06:59 (T27)	
23	07:36			08:02 (T29)	06:59			07:11				06:18					05:41			06:23 (T27)	05:31		06:41 (T27)	
	17:09	26		08:28 (T29)	17:51			19:25				20:00	10				06:52 (T27)	20:34	44		07:07 (T27)	20:54	18	06:59 (T27)
24	07:35			08:03 (T29)	06:57			07:09				06:16					06:39 (T27)	20:35	44		06:23 (T27)	05:31		06:40 (T27)
	17:11	24		08:27 (T29)	17:52			19:26				20:02	18				06:57 (T27)	20:35	44		07:07 (T27)	20:54	19	06:59 (T27)
25	07:34			08:04 (T29)	06:55			07:07				06:15					06:37 (T27)	20:35	44		06:23 (T27)	05:32		06:41 (T27)
	17:12	23		08:27 (T29)	17:53			19:28				20:03	22				06:59 (T27)	20:36	43		07:06 (T27)	20:55	19	07:00 (T27)
26	07:33			08:04 (T29)	06:54			07:06				06:13					06:36 (T27)	20:36	43		06:24 (T27)	05:32		06:41 (T27)
	17:13	22		08:26 (T29)	17:55			19:29				20:04	25				07:01 (T27)	20:37	42		07:06 (T27)	20:55	20	07:01 (T27)
27	07:32			08:06 (T29)	06:52			07:04				06:12					06:34 (T27)	20:38	41		06:25 (T27)	05:32		06:40 (T27)
	17:15	20		08:26 (T29)	17:56			19:30				20:05	28				07:02 (T27)	20:38	41		07:06 (T27)	20:55	21	07:01 (T27)
28	07:32			08:07 (T29)	06:51			07:02				06:10					06:33 (T27)	20:37	40		06:25 (T27)	05:33		06:41 (T27)
	17:16	18		08:25 (T29)	17:57			19:31				20:06	31				07:04 (T27)	20:39	40		07:05 (T27)	20:55	15	07:01 (T27)
29	07:31			08:09 (T29)				07:00				06:09					06:31 (T27)	20:36	39		06:26 (T27)	05:33		06:41 (T27)
	17:17	14		08:23 (T29)				19:32	3			20:07	33				07:04 (T27)	20:40	39		07:05 (T27)	20:55	14	06:59 (T27)
30	07:30			08:11 (T29)				06:59				06:07					06:30 (T27)	20:36	38		06:26 (T27)	05:34		06:43 (T27)
	17:19	10		08:21 (T29)				19:33	7			20:09	36				07:06 (T27)	20:40	38		07:04 (T27)	20:55	14	07:03 (T27)

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR
217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 1167 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2321)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
0.36 0.40 0.47 0.54 0.58 0.63 0.67 0.63 0.56 0.44 0.25 0.24

Operational time

N NNE NE ENE E ESE SE SSE S SSW SW WSW W WNW NW NNW Sum
245 195 263 395 451 393 363 382 412 348 736 1,617 1,224 837 579 320 8,760

	July		August		September		October		November		December		
1	05:34		06:40 (T27)	06:00		06:31 (T27)	06:34		07:07 (T30)	07:07		07:44	
	20:55	19	07:03 (T27)	20:35	30	07:19 (T27)	19:48	14	07:24 (T30)	18:54		18:04	
2	05:35		06:40 (T27)	06:01		06:33 (T27)	06:35		07:03 (T30)	07:08		07:45	
	20:55	25	07:05 (T27)	20:34	28	07:20 (T27)	19:46	7	07:25 (T30)	18:52		18:03	
3	05:35		06:39 (T27)	06:02		06:35 (T27)	06:36		07:04 (T30)	07:09		07:47	
	20:54	26	07:05 (T27)	20:33	35	07:20 (T27)	19:44	15	07:25 (T30)	18:51		18:02	
4	05:36		06:39 (T27)	06:03		06:31 (T27)	06:37		07:02 (T30)	07:10		07:48	
	20:54	27	07:06 (T27)	20:32	34	07:19 (T27)	19:43	21	07:26 (T30)	18:49		18:00	
5	05:36		06:38 (T27)	06:04		06:31 (T27)	06:38		07:01 (T30)	07:11		07:49	
	20:54	24	07:06 (T27)	20:30	39	07:19 (T27)	19:41	20	07:26 (T30)	18:47		17:59	
6	05:37		06:43 (T27)	06:05		06:31 (T27)	06:39		07:02 (T30)	07:12		06:51	
	20:54	13	07:07 (T27)	20:29	25	07:19 (T27)	19:39	17	07:22 (T30)	18:45		16:58	
7	05:38		06:37 (T27)	06:06		06:33 (T27)	06:40		07:03 (T30)	07:14		06:52	
	20:54	17	07:05 (T27)	20:28	36	07:18 (T27)	19:37	10	07:21 (T30)	18:44		16:57	
8	05:38		06:37 (T27)	06:07		06:34 (T27)	06:41		07:04 (T30)	07:15		06:53	
	20:53	12	07:08 (T27)	20:27	27	07:18 (T27)	19:36	15	07:25 (T30)	18:42		16:55	
9	05:39		06:37 (T27)	06:08		06:34 (T27)	06:42		07:05 (T30)	07:16		06:54	
	20:53	33	07:10 (T27)	20:25	25	07:17 (T27)	19:34	10	07:23 (T30)	18:40		16:54	
10	05:40		06:36 (T27)	06:09		06:38 (T27)	06:43		07:06 (T30)	07:17		06:56	
	20:52	30	07:10 (T27)	20:24	32	07:17 (T27)	19:32	10	07:23 (T30)	18:38		16:53	
11	05:40		06:36 (T27)	06:11		06:39 (T27)	06:45		07:16 (T30)	07:18		06:57	
	20:52	29	07:10 (T27)	20:23	20	07:13 (T27)	19:30	6	07:23 (T30)	18:37		16:52	
12	05:41		06:36 (T27)	06:12		06:37 (T27)	06:46		07:12 (T30)	07:19		06:58	
	20:52	16	07:12 (T27)	20:21	23	07:15 (T27)	19:29	9	07:22 (T30)	18:35		16:51	
13	05:42		06:36 (T27)	06:13		06:43 (T27)	06:47		07:10 (T30)	07:21		07:00	
	20:51	27	07:12 (T27)	20:20	25	07:14 (T27)	19:27	7	07:17 (T30)	18:33		16:50	
14	05:43		06:35 (T27)	06:14		06:38 (T27)	06:48		07:12 (T30)	07:22		07:01	
	20:51	23	07:10 (T27)	20:18	22	07:13 (T27)	19:25	5	07:18 (T30)	18:32		16:49	
15	05:44		06:35 (T27)	06:15		06:39 (T27)	06:49		07:12 (T30)	07:23		07:02	
	20:50	27	07:13 (T27)	20:17	33	07:12 (T27)	19:23	2	07:15 (T30)	18:30		16:48	
16	05:44		06:34 (T27)	06:16		06:40 (T27)	06:50		07:24	07:03		07:03	
	20:49	28	07:14 (T27)	20:15	28	07:09 (T27)	19:21		18:28	16:47	19	07:59 (T29)	
17	05:45		06:34 (T27)	06:17		06:41 (T27)	06:51		07:25	07:05		07:39 (T29)	
	20:49	26	07:15 (T27)	20:14	25	07:08 (T27)	19:19		18:27	16:46	18	08:00 (T29)	
18	05:46		06:34 (T27)	06:18		06:42 (T27)	06:52		07:27	07:06		07:38 (T29)	
	20:48	25	07:16 (T27)	20:12	20	07:06 (T27)	19:18		18:25	16:45	16	08:01 (T29)	
19	05:47		06:37 (T27)	06:19		06:43 (T27)	06:53		07:28	07:07		07:37 (T29)	
	20:47	18	07:16 (T27)	20:11	21	07:04 (T27)	19:16		18:23	16:44	23	08:01 (T29)	
20	05:48		06:33 (T27)	06:20		06:44 (T27)	06:54		07:29	07:08		07:37 (T29)	
	20:47	21	07:15 (T27)	20:09	15	07:01 (T27)	19:14		18:22	16:43	25	08:03 (T29)	
21	05:49		06:32 (T27)	06:21		06:50 (T27)	06:56		07:30	07:10		07:37 (T29)	
	20:46	32	07:16 (T27)	20:08	5	06:56 (T27)	19:12		18:20	16:43	26	08:03 (T29)	
22	05:50		06:32 (T27)	06:23			06:57		07:32	07:11		07:37 (T29)	
	20:45	29	07:17 (T27)	20:06			19:10		18:19	16:42	24	08:03 (T29)	
23	05:51		06:32 (T27)	06:24			06:58		07:33	07:12		07:39 (T29)	
	20:44	27	07:16 (T27)	20:05			19:09		18:17	16:41	24	08:05 (T29)	
24	05:52		06:32 (T27)	06:25			06:59		07:34	07:13		07:40 (T29)	
	20:43	43	07:18 (T27)	20:03			19:07		18:16	16:41	24	08:05 (T29)	
25	05:53		06:33 (T27)	06:26			07:00		07:35	07:15		07:41 (T29)	
	20:42	26	07:18 (T27)	20:01			19:05		18:14	16:40	22	08:05 (T29)	
26	05:54		06:33 (T27)	06:27			07:01		07:36	07:16		07:42 (T29)	
	20:41	31	07:18 (T27)	20:00			19:03		18:13	16:39	23	08:05 (T29)	
27	05:55		06:31 (T27)	06:28			07:02		07:38	07:17		07:44 (T29)	
	20:40	25	07:19 (T27)	19:56			19:01		18:11	16:39	18	08:06 (T29)	
28	05:56		06:31 (T27)	06:29			07:03		07:39	07:18		07:45 (T29)	
	20:39	39	07:19 (T27)	19:55			19:00		18:10	16:38	21	08:06 (T29)	
29	05:57		06:31 (T27)	06:30			07:04		07:40	07:19		07:46 (T29)	
	20:38	45	07:20 (T27)	19:53			18:58		18:08	16:38	20	08:06 (T29)	
30	05:58		06:31 (T27)	06:31		07:14 (T30)	07:06		07:42	07:20		07:47 (T29)	
	20:37	48	07:20 (T27)	19:51	4	07:20 (T30)	18:56		18:07	16:37	18	08:06 (T29)	
31	05:59		06:31 (T27)	06:32		07:06 (T30)			07:43			07:43	
	20:36	28	07:18 (T27)	19:50	14	07:21 (T30)			18:06			16:44	
Potential sun hours	466		433				376		343		293		281
Total, worst case	839		566				168			360			246
Sun reduction	0.67		0.63				0.56			0.25			0.24
Oper. time red.	1.00		1.00				1.00			1.00			1.00
Wind dir. red.	0.75		0.75				0.75			0.62			0.62
Total reduction	0.49		0.46				0.41			0.15			0.15
Total, real	415		263				69			55			36

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR
217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 1172 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2747)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

January		February		March	April		May		June	
1	07:43	08:09 (T29)	07:28	06:49	06:55	07:17 (T30)	06:06	06:30 (T27)	05:34	06:32 (T27)
	16:45	26 08:35 (T29)	17:21	17:58	19:36	22 07:39 (T30)	20:10	50 07:20 (T27)	20:42	44 07:16 (T27)
2	07:43	08:09 (T29)	07:27	06:47	06:53	07:15 (T30)	06:05	06:28 (T27)	05:34	06:33 (T27)
	16:46	27 08:36 (T29)	17:23	18:00	19:37	24 07:39 (T30)	20:11	52 07:20 (T27)	20:43	43 07:16 (T27)
3	07:43	08:09 (T29)	07:25	06:46	06:51	07:13 (T30)	06:03	06:28 (T27)	05:33	06:33 (T27)
	16:47	27 08:36 (T29)	17:24	18:01	19:38	25 07:38 (T30)	20:12	53 07:21 (T27)	20:44	42 07:15 (T27)
4	07:43	08:09 (T29)	07:24	06:44	06:50	07:11 (T30)	06:02	06:28 (T27)	05:33	06:34 (T27)
	16:48	28 08:37 (T29)	17:25	18:02	19:39	27 07:38 (T30)	20:13	53 07:21 (T27)	20:45	41 07:15 (T27)
5	07:43	08:09 (T29)	07:23	06:42	06:48	07:10 (T30)	06:00	06:27 (T27)	05:33	06:35 (T27)
	16:49	28 08:37 (T29)	17:27	18:03	19:41	28 07:38 (T30)	20:14	54 07:21 (T27)	20:45	40 07:15 (T27)
6	07:43	08:09 (T29)	07:22	06:41	06:46	07:10 (T30)	05:59	06:27 (T27)	05:32	06:35 (T27)
	16:50	28 08:37 (T29)	17:28	18:05	19:42	27 07:37 (T30)	20:15	54 07:21 (T27)	20:46	39 07:14 (T27)
7	07:43	08:10 (T29)	07:21	06:39	06:44	07:10 (T30)	05:58	06:26 (T27)	05:32	06:36 (T27)
	16:51	28 08:38 (T29)	17:29	18:06	19:43	26 07:36 (T30)	20:17	56 07:22 (T27)	20:47	38 07:14 (T27)
8	07:43	08:09 (T29)	07:20	06:37	06:43	07:10 (T30)	05:57	06:26 (T27)	05:31	06:37 (T27)
	16:52	28 08:37 (T29)	17:31	18:07	19:44	24 07:34 (T30)	20:18	56 07:22 (T27)	20:47	37 07:14 (T27)
9	07:42	08:10 (T29)	07:18	06:36	06:41	07:11 (T30)	05:55	06:25 (T27)	05:31	06:38 (T27)
	16:53	28 08:38 (T29)	17:32	18:08	19:45	22 07:33 (T30)	20:19	56 07:21 (T27)	20:48	36 07:14 (T27)
10	07:42	08:11 (T29)	07:17	06:34	06:39	07:12 (T30)	05:54	06:25 (T27)	05:31	06:38 (T27)
	16:54	27 08:38 (T29)	17:33	18:10	19:46	19 07:31 (T30)	20:20	56 07:21 (T27)	20:49	35 07:13 (T27)
11	07:42	08:11 (T29)	07:16	06:32	06:38	07:14 (T30)	05:53	06:25 (T27)	05:31	06:39 (T27)
	16:55	27 08:38 (T29)	17:35	18:11	19:48	15 07:29 (T30)	20:21	57 07:22 (T27)	20:49	34 07:13 (T27)
12	07:42	08:12 (T29)	07:15	06:30	06:36	07:17 (T30)	05:52	06:25 (T27)	05:31	06:39 (T27)
	16:56	26 08:38 (T29)	17:36	18:12	19:49	9 07:26 (T30)	20:22	57 07:22 (T27)	20:50	34 07:13 (T27)
13	07:41	08:12 (T29)	07:13	07:29	06:34		05:51	06:25 (T27)	05:30	06:40 (T27)
	16:57	26 08:38 (T29)	17:38	19:13	19:50		20:23	57 07:22 (T27)	20:50	33 07:13 (T27)
14	07:41	08:14 (T29)	07:12	07:27	06:33		05:49	06:26 (T27)	05:30	06:40 (T27)
	16:58	24 08:38 (T29)	17:39	19:14	19:51		20:24	55 07:21 (T27)	20:51	33 07:13 (T27)
15	07:40	08:15 (T29)	07:10	07:25	06:31		05:48	06:26 (T27)	05:30	06:41 (T27)
	17:00	24 08:39 (T29)	17:40	19:16	19:52		20:26	55 07:21 (T27)	20:51	32 07:13 (T27)
16	07:40	08:16 (T29)	07:09	07:23	06:29		05:47	06:26 (T27)	05:30	06:41 (T27)
	17:01	22 08:38 (T29)	17:41	19:17	19:53		20:27	55 07:21 (T27)	20:52	32 07:13 (T27)
17	07:40	08:16 (T29)	07:08	07:22	06:28		05:46	06:26 (T27)	05:30	06:42 (T27)
	17:02	21 08:37 (T29)	17:43	19:18	19:55		20:28	55 07:21 (T27)	20:52	31 07:13 (T27)
18	07:39	08:18 (T29)	07:06	07:20	06:26		05:45	06:26 (T27)	05:30	06:42 (T27)
	17:03	19 08:37 (T29)	17:44	19:19	19:56		20:29	55 07:21 (T27)	20:53	31 07:13 (T27)
19	07:38	08:19 (T29)	07:05	07:18	06:24		05:44	06:26 (T27)	05:30	06:42 (T27)
	17:04	17 08:36 (T29)	17:45	19:20	19:57		20:30	54 07:20 (T27)	20:53	31 07:13 (T27)
20	07:38	08:21 (T29)	07:03	07:16	06:23	06:49 (T27)	05:43	06:26 (T27)	05:31	06:42 (T27)
	17:06	13 08:34 (T29)	17:47	19:22	19:58	16 07:05 (T27)	20:31	54 07:20 (T27)	20:53	30 07:12 (T27)
21	07:37	08:24 (T29)	07:02	07:15	06:21	06:45 (T27)	05:42	06:27 (T27)	05:31	06:44 (T27)
	17:07	9 08:33 (T29)	17:48	19:23	19:59	23 07:08 (T27)	20:32	52 07:19 (T27)	20:54	29 07:13 (T27)
22	07:36		07:00	07:13	06:19	06:42 (T27)	05:42	06:28 (T27)	05:31	06:44 (T27)
	17:08		17:49	19:24	20:00	29 07:11 (T27)	20:33	52 07:20 (T27)	20:54	29 07:13 (T27)
23	07:36		06:59	07:11	06:18	06:40 (T27)	05:41	06:28 (T27)	05:31	06:44 (T27)
	17:09		17:51	19:25	20:00	32 07:12 (T27)	20:34	51 07:19 (T27)	20:54	29 07:13 (T27)
24	07:35		06:57	07:09	06:16	06:39 (T27)	05:40	06:28 (T27)	05:31	06:43 (T27)
	17:11		17:52	19:26	20:02	35 07:14 (T27)	20:35	51 07:19 (T27)	20:54	31 07:14 (T27)
25	07:34		06:55	07:07	06:15	06:37 (T27)	05:39	06:28 (T27)	05:32	06:44 (T27)
	17:12		17:53	19:28	1 07:30 (T30)	20:03	38 07:15 (T27)	50 07:18 (T27)	20:55	31 07:15 (T27)
26	07:33		06:54	07:06	06:13	07:27 (T30)	05:38	06:30 (T27)	05:32	06:44 (T27)
	17:13		17:55	19:29	6 07:33 (T30)	20:04	41 07:17 (T27)	49 07:19 (T27)	20:55	31 07:15 (T27)
27	07:32		06:52	07:04	06:12	06:34 (T27)	05:38	06:30 (T27)	05:32	06:44 (T27)
	17:15		17:56	19:30	10 07:36 (T30)	20:05	43 07:17 (T27)	48 07:18 (T27)	20:55	31 07:15 (T27)
28	07:32		06:51	07:02	06:10	07:24 (T30)	05:37	06:30 (T27)	05:33	06:44 (T27)
	17:16		17:57	19:31	13 07:37 (T30)	20:06	45 07:18 (T27)	47 07:17 (T27)	20:55	20 07:16 (T27)
29	07:31		07:00		06:09	07:22 (T30)	05:36	06:31 (T27)	05:33	06:44 (T27)
	17:17		19:32	16 07:38 (T30)	20:07	48 07:19 (T27)	20:40	46 07:17 (T27)	20:55	24 07:16 (T27)
30	07:30		06:59	07:20 (T30)	06:07	06:30 (T27)	05:36	06:31 (T27)	05:34	06:44 (T27)
	17:19		19:33	18 07:38 (T30)	20:09	50 07:20 (T27)	20:40	46 07:17 (T27)	20:55	20 07:17 (T27)
31	07:29		06:57	07:18 (T30)			05:35	06:32 (T27)		
	17:20		19:35	20 07:38 (T30)			20:41	45 07:17 (T27)		
Potential sun hours	291		294	369	401		454		459	
Total, worst case	503			84	668		1631		991	
Sun reduction	0.36			0.47	0.54		0.58		0.63	
Oper. time red.	1.00			1.00	1.00		1.00		1.00	
Wind dir. red.	0.60			0.75	0.75		0.75		0.75	
Total reduction	0.21			0.34	0.40		0.43		0.46	
Total, real	107			29	265		696		459	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

SHADOW - Calendar

Shadow receptor: 1172 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2747)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

July		August		September		October		November		December	
1	05:34	06:43 (T27)	06:00	06:36 (T27)	06:34	07:16 (T30)	07:07	07:44		07:22	07:54 (T29)
	20:55	24 07:17 (T27)	20:35	40 07:32 (T27)	19:48	7 07:24 (T30)	18:54	18:04		16:37	25 08:20 (T29)
2	05:35	06:44 (T27)	06:01	06:40 (T27)	06:35	07:15 (T30)	07:08	07:45		07:23	07:54 (T29)
	20:55	31 07:18 (T27)	20:34	38 07:32 (T27)	19:46	8 07:28 (T30)	18:52	18:03		16:37	25 08:21 (T29)
3	05:35	06:43 (T27)	06:02	06:36 (T27)	06:36	07:12 (T30)	07:09	07:47		07:24	07:54 (T29)
	20:54	35 07:18 (T27)	20:33	46 07:32 (T27)	19:44	12 07:29 (T30)	18:51	18:02		16:36	28 08:22 (T29)
4	05:36	06:43 (T27)	06:03	06:36 (T27)	06:37	07:08 (T30)	07:10	07:48		07:25	07:54 (T29)
	20:54	36 07:19 (T27)	20:32	42 07:32 (T27)	19:43	19 07:30 (T30)	18:49	18:00		16:36	26 08:22 (T29)
5	05:36	06:43 (T27)	06:04	06:37 (T27)	06:38	07:07 (T30)	07:11	07:49		07:26	07:54 (T29)
	20:54	29 07:19 (T27)	20:30	49 07:32 (T27)	19:41	18 07:31 (T30)	18:47	17:59		16:36	29 08:23 (T29)
6	05:37	06:43 (T27)	06:05	06:37 (T27)	06:39	07:06 (T30)	07:12	06:51		07:27	07:55 (T29)
	20:54	24 07:20 (T27)	20:29	36 07:32 (T27)	19:39	14 07:32 (T30)	18:45	16:58		16:36	27 08:23 (T29)
7	05:38	06:44 (T27)	06:06	06:36 (T27)	06:40	07:06 (T30)	07:14	06:52		07:28	07:55 (T29)
	20:54	22 07:20 (T27)	20:28	46 07:31 (T27)	19:37	13 07:32 (T30)	18:44	16:57		16:35	28 08:23 (T29)
8	05:38	06:42 (T27)	06:07	06:36 (T27)	06:41	07:04 (T30)	07:15	06:53		07:29	07:56 (T29)
	20:53	20 07:21 (T27)	20:27	38 07:31 (T27)	19:36	17 07:27 (T30)	18:42	16:55		16:35	27 08:24 (T29)
9	05:39	06:42 (T27)	06:08	06:36 (T27)	06:42	07:05 (T30)	07:16	06:54		07:30	07:57 (T29)
	20:53	40 07:22 (T27)	20:25	37 07:31 (T27)	19:34	14 07:30 (T30)	18:40	16:54		16:35	25 08:25 (T29)
10	05:40	06:41 (T27)	06:09	06:38 (T27)	06:43	07:06 (T30)	07:17	06:56		07:31	07:58 (T29)
	20:52	35 07:22 (T27)	20:24	45 07:30 (T27)	19:32	17 07:31 (T30)	18:38	16:53		16:35	27 08:25 (T29)
11	05:40	06:41 (T27)	06:11	06:39 (T27)	06:45	07:16 (T30)	07:18	06:57		07:32	07:59 (T29)
	20:52	33 07:23 (T27)	20:22	29 07:28 (T27)	19:30	12 07:30 (T30)	18:37	16:52		16:35	27 08:26 (T29)
12	05:41	06:43 (T27)	06:12	06:37 (T27)	06:46	07:12 (T30)	07:19	06:58		07:32	08:00 (T29)
	20:52	25 07:24 (T27)	20:21	32 07:27 (T27)	19:29	16 07:31 (T30)	18:35	16:51		16:35	23 08:26 (T29)
13	05:42	06:41 (T27)	06:13	06:43 (T27)	06:47	07:10 (T30)	07:21	07:00		07:33	08:01 (T29)
	20:51	36 07:25 (T27)	20:20	34 07:28 (T27)	19:27	14 07:31 (T30)	18:33	16:50		16:35	26 08:27 (T29)
14	05:43	06:40 (T27)	06:14	06:38 (T27)	06:48	07:12 (T30)	07:22	07:01		07:34	08:01 (T29)
	20:51	29 07:25 (T27)	20:18	31 07:26 (T27)	19:25	14 07:29 (T30)	18:32	16:49		16:36	23 08:27 (T29)
15	05:44	06:40 (T27)	06:15	06:39 (T27)	06:49	07:12 (T30)	07:23	07:02		07:35	08:02 (T29)
	20:50	32 07:26 (T27)	20:17	47 07:26 (T27)	19:23	13 07:26 (T30)	18:30	16:48		16:36	22 08:27 (T29)
16	05:44	06:39 (T27)	06:16	06:40 (T27)	06:50	07:13 (T30)	07:24	07:03		07:36	08:03 (T29)
	20:49	33 07:26 (T27)	20:15	33 07:25 (T27)	19:21	11 07:27 (T30)	18:28	16:47		16:36	25 08:28 (T29)
17	05:45	06:41 (T27)	06:17	06:41 (T27)	06:51	07:14 (T30)	07:25	07:05		07:36	08:03 (T29)
	20:49	34 07:27 (T27)	20:14	31 07:24 (T27)	19:19	8 07:25 (T30)	18:27	16:46		16:36	24 08:28 (T29)
18	05:46	06:43 (T27)	06:18	06:42 (T27)	06:52	07:15 (T30)	07:27	07:06		07:37	08:04 (T29)
	20:48	30 07:28 (T27)	20:12	35 07:22 (T27)	19:18	3 07:19 (T30)	18:25	16:45		16:37	23 08:29 (T29)
19	05:47	06:39 (T27)	06:19	06:43 (T27)	06:53	07:16 (T30)	07:28	07:07		07:38	08:05 (T29)
	20:47	25 07:28 (T27)	20:11	38 07:21 (T27)	19:16	3 07:19 (T30)	18:23	16:44		16:37	22 08:29 (T29)
20	05:48	06:41 (T27)	06:20	06:44 (T27)	06:54		07:29	07:08		07:38	08:05 (T29)
	20:47	29 07:28 (T27)	20:09	26 07:19 (T27)	19:14		18:22	16:43		16:37	24 08:29 (T29)
21	05:49	06:38 (T27)	06:21	06:46 (T27)	06:56		07:30	07:10		07:39	08:06 (T29)
	20:46	39 07:29 (T27)	20:08	24 07:18 (T27)	19:12		18:20	16:43		16:38	21 08:30 (T29)
22	05:50	06:37 (T27)	06:23	06:48 (T27)	06:57		07:32	07:11		07:39	08:06 (T29)
	20:45	36 07:29 (T27)	20:06	14 07:15 (T27)	19:10		18:19	16:42	9 08:08 (T29)	16:38	23 08:30 (T29)
23	05:51	06:37 (T27)	06:24	06:51 (T27)	06:58		07:33	07:12	07:58 (T29)	07:40	08:07 (T29)
	20:44	34 07:30 (T27)	20:05	14 07:08 (T27)	19:09		18:17	16:41	12 08:11 (T29)	16:39	22 08:31 (T29)
24	05:52	06:37 (T27)	06:25	06:54 (T27)	06:59		07:34	07:13	07:57 (T29)	07:40	08:07 (T29)
	20:43	50 07:30 (T27)	20:03	7 07:08 (T27)	19:07		18:16	16:41	15 08:13 (T29)	16:39	23 08:31 (T29)
25	05:53	06:37 (T27)	06:26		07:00		07:35	07:15	07:55 (T29)	07:41	08:08 (T29)
	20:42	33 07:31 (T27)	20:01		19:05		18:14	16:40	18 08:14 (T29)	16:40	22 08:32 (T29)
26	05:54	06:38 (T27)	06:27		07:01		07:36	07:16	07:55 (T29)	07:41	08:08 (T29)
	20:41	40 07:31 (T27)	20:00		19:03		18:13	16:39	19 08:15 (T29)	16:40	23 08:33 (T29)
27	05:55	06:37 (T27)	06:28		07:02		07:38	07:17	07:55 (T29)	07:42	08:08 (T29)
	20:40	32 07:31 (T27)	19:56		19:01		18:11	16:39	19 08:17 (T29)	16:41	23 08:33 (T29)
28	05:56	06:36 (T27)	06:29		07:03		07:39	07:18	07:54 (T29)	07:42	08:08 (T29)
	20:39	47 07:32 (T27)	19:55		19:00		18:10	16:38	22 08:18 (T29)	16:42	23 08:32 (T29)
29	05:57	06:36 (T27)	06:30		07:04		07:40	07:19	07:54 (T29)	07:42	08:09 (T29)
	20:38	52 07:32 (T27)	19:53		18:58		18:08	16:38	24 08:18 (T29)	16:43	23 08:34 (T29)
30	05:58	06:36 (T27)	06:31		07:06		07:42	07:20	07:54 (T29)	07:42	08:09 (T29)
	20:37	55 07:32 (T27)	19:51		18:56		18:07	16:37	23 08:19 (T29)	16:43	24 08:34 (T29)
31	05:59	06:37 (T27)	06:32				07:43			07:43	08:09 (T29)
	20:36	35 07:32 (T27)	19:50				18:06			16:44	24 08:35 (T29)
Potential sun hours	466		433		376		343	293		281	
Total, worst case	1055		812		233			161			757
Sun reduction	0.67		0.63		0.56			0.25			0.24
Oper. time red.	1.00		1.00		1.00			1.00			1.00
Wind dir. red.	0.75		0.75		0.75			0.60			0.60
Total reduction	0.49		0.46		0.41			0.15			0.14
Total, real	520		376		95			24			108

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR
217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 1174 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2748)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

January				February				March				April				May				June			
1	07:43		08:11 (T29)	07:28	06:49							06:55		07:18 (T30)	06:06				06:42 (T27)	05:34		06:00 (T28)	
	16:45	27	08:38 (T29)	17:21	17:58							19:36	27	07:45 (T30)	20:10	54	07:36 (T27)	20:42	9	06:09 (T28)			
2	07:43		08:12 (T29)	07:27	06:47							06:53		07:18 (T30)	06:05				06:41 (T27)	05:34		05:59 (T28)	
	16:46	26	08:38 (T29)	17:23	18:00							19:37	26	07:44 (T30)	20:11	54	07:35 (T27)	20:43	13	06:12 (T28)			
3	07:43		08:13 (T29)	07:25	06:46							06:51		07:19 (T30)	06:03				06:41 (T27)	05:33		05:58 (T28)	
	16:47	26	08:39 (T29)	17:24	18:01							19:38	24	07:43 (T30)	20:12	54	07:35 (T27)	20:44	15	06:13 (T28)			
4	07:43		08:13 (T29)	07:24	06:44							06:50		07:19 (T30)	06:02				06:42 (T27)	05:33		05:58 (T28)	
	16:48	26	08:39 (T29)	17:25	18:02							19:39	22	07:41 (T30)	20:13	53	07:35 (T27)	20:45	17	06:15 (T28)			
5	07:43		08:14 (T29)	07:23	06:42							06:48		07:21 (T30)	06:00				06:41 (T27)	05:33		05:58 (T28)	
	16:49	25	08:39 (T29)	17:27	18:03							19:41	19	07:40 (T30)	20:14	52	07:33 (T27)	20:45	18	06:16 (T28)			
6	07:43		08:15 (T29)	07:22	06:41							06:46		07:22 (T30)	05:59				06:42 (T27)	05:32		05:57 (T28)	
	16:50	25	08:40 (T29)	17:28	18:05							19:42	15	07:37 (T30)	20:15	51	07:33 (T27)	20:46	20	06:17 (T28)			
7	07:43		08:16 (T29)	07:21	06:39							06:44		07:25 (T30)	05:58				06:42 (T27)	05:32		05:57 (T28)	
	16:51	24	08:40 (T29)	17:29	18:06							19:43	9	07:34 (T30)	20:17	51	07:33 (T27)	20:47	21	06:18 (T28)			
8	07:43		08:16 (T29)	07:20	06:37							06:43			05:57				06:43 (T27)	05:31		05:57 (T28)	
	16:52	23	08:39 (T29)	17:31	18:07							19:44			20:18	49	07:32 (T27)	20:47	22	06:19 (T28)			
9	07:42		08:17 (T29)	07:18	06:36							06:41			05:55				06:43 (T27)	05:31		05:57 (T28)	
	16:53	23	08:40 (T29)	17:32	18:08							19:45			20:19	48	07:31 (T27)	20:48	23	06:20 (T28)			
10	07:42		08:18 (T29)	07:17	06:34							06:39		07:06 (T27)	05:54				06:43 (T27)	05:31		05:56 (T28)	
	16:54	22	08:40 (T29)	17:33	18:10							19:46	14	07:20 (T27)	20:20	47	07:30 (T27)	20:49	24	06:20 (T28)			
11	07:42		08:19 (T29)	07:16	06:32							06:38		07:01 (T27)	05:53				06:44 (T27)	05:31		05:56 (T28)	
	16:55	20	08:39 (T29)	17:35	18:11							19:48	23	07:24 (T27)	20:21	46	07:30 (T27)	20:49	25	06:21 (T28)			
12	07:42		08:20 (T29)	07:15	06:30							06:36		06:59 (T27)	05:52				06:45 (T27)	05:31		05:56 (T28)	
	16:56	19	08:39 (T29)	17:36	18:12							19:49	28	07:27 (T27)	20:22	44	07:29 (T27)	20:50	25	06:21 (T28)			
13	07:41		08:21 (T29)	07:13	07:29							06:34		06:56 (T27)	05:51				06:45 (T27)	05:30		05:56 (T28)	
	16:57	17	08:38 (T29)	17:38	19:13							19:50	33	07:29 (T27)	20:23	43	07:28 (T27)	20:50	26	06:22 (T28)			
14	07:41		08:22 (T29)	07:12	07:27							06:33		06:54 (T27)	05:49				06:46 (T27)	05:30		05:56 (T28)	
	16:58	16	08:38 (T29)	17:39	19:14							19:51	36	07:30 (T27)	20:24	42	07:28 (T27)	20:51	27	06:23 (T28)			
15	07:40		08:25 (T29)	07:10	07:25							06:31		06:53 (T27)	05:48				06:47 (T27)	05:30		05:56 (T28)	
	17:00	12	08:37 (T29)	17:40	19:16							19:52	39	07:32 (T27)	20:26	40	07:27 (T27)	20:51	27	06:23 (T28)			
16	07:40		08:26 (T29)	07:09	07:23							06:29		06:51 (T27)	05:47				06:48 (T27)	05:30		05:56 (T28)	
	17:01	9	08:35 (T29)	17:41	19:17							19:53	42	07:33 (T27)	20:27	38	07:26 (T27)	20:52	27	06:23 (T28)			
17	07:40			07:08	07:22							06:28		06:49 (T27)	05:46				06:49 (T27)	05:30		05:56 (T28)	
	17:02			17:43	19:18							19:55	44	07:33 (T27)	20:28	36	07:25 (T27)	20:52	28	06:24 (T28)			
18	07:39			07:06	07:20							06:26		06:48 (T27)	05:45				06:50 (T27)	05:30		05:56 (T28)	
	17:03			17:44	19:19							19:56	46	07:34 (T27)	20:29	33	07:23 (T27)	20:53	28	06:24 (T28)			
19	07:38			07:05	07:18							06:24		06:47 (T27)	05:44				06:51 (T27)	05:30		05:56 (T28)	
	17:04			17:45	19:20							19:57	48	07:35 (T27)	20:30	31	07:22 (T27)	20:53	28	06:24 (T28)			
20	07:38			07:03	07:16							06:23		06:46 (T27)	05:43				06:53 (T27)	05:31		05:56 (T28)	
	17:06			17:47	19:22							19:58	50	07:36 (T27)	20:31	27	07:20 (T27)	20:53	27	06:24 (T28)			
21	07:37			07:02	07:15							06:21		06:45 (T27)	05:42				06:54 (T27)	05:31		05:57 (T28)	
	17:07			17:48	19:23	4	07:40 (T30)	19:59	51	07:36 (T27)	20:32	25	07:19 (T27)	20:54	28	06:25 (T28)							
22	07:36			07:00	07:13		07:35 (T30)	06:19		06:45 (T27)	05:42		06:57 (T27)	05:31		05:57 (T28)							
	17:08			17:49	19:24	9	07:44 (T30)	20:00	51	07:36 (T27)	20:33	21	07:18 (T27)	20:54	26	06:23 (T28)							
23	07:36			06:59	07:11		07:33 (T30)	06:18		06:43 (T27)	05:41		06:59 (T27)	05:31		05:57 (T28)							
	17:09			17:51	19:25	12	07:45 (T30)	20:00	53	07:36 (T27)	20:34	17	07:16 (T27)	20:54	28	06:25 (T28)							
24	07:35			06:57	07:09		07:31 (T30)	06:16		06:43 (T27)	05:40		07:01 (T27)	05:31		05:57 (T28)							
	17:11			17:52	19:26	15	07:46 (T30)	20:02	54	07:37 (T27)	20:35	11	07:12 (T27)	20:54	28	06:25 (T28)							
25	07:34			06:55	07:07		07:29 (T30)	06:15		06:42 (T27)	05:39			05:32		05:58 (T28)							
	17:12			17:53	19:28	17	07:46 (T30)	20:03	54	07:36 (T27)	20:36			20:55	28	06:26 (T28)							
26	07:33			06:54	07:06		07:27 (T30)	06:13		06:42 (T27)	05:38			05:32		05:58 (T28)							
	17:13			17:55	19:29	19	07:46 (T30)	20:04	55	07:37 (T27)	20:37			20:55	27	06:26 (T28)							
27	07:32			06:52	07:04		07:26 (T30)	06:12		06:42 (T27)	05:38			05:32		05:58 (T28)							
	17:15			17:56	19:30	21	07:47 (T30)	20:05	54	07:36 (T27)	20:38			20:55	25	06:23 (T28)							
28	07:32			06:51	07:02		07:24 (T30)	06:10		06:42 (T27)	05:37			05:33		05:59 (T28)							
	17:16			17:57	19:31	23	07:47 (T30)	20:06	54	07:36 (T27)	20:39			20:55	23	06:26 (T28)							
29	07:31				07:00		07:22 (T30)	06:09		06:41 (T27)	05:36			05:33		05:59 (T28)							
	17:17				19:32	25	07:47 (T30)	20:07	55	07:36 (T27)	20:40			20:55	25	06:26 (T28)							
30	07:30				06:59		07:20 (T30)	06:07		06:41 (T27)	05:36			05:34		06:00 (T28)							
	17:19				19:33	26	07:46 (T30)	20:09	55	07:36 (T27)	20:40			20:55	25	06:26 (T28)							
31	07:29				06:57		07:18 (T30)				05:35												
	17:20				19:35	27	07:45 (T30)				20:41												
Potential sun hours	291			294	369		401				454					459							
Total, worst case		340			198		1081				967					713							

SHADOW - Calendar

Shadow receptor: 1174 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2748)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

July		August		September		October		November		December	
1	05:34	06:00 (T28)	06:00	06:56 (T27)	06:34	06:58 (T27)	07:07	07:44		07:22	08:02 (T29)
	20:55	26 06:26 (T28)	20:35	32 07:39 (T27)	19:48	19 07:26 (T27)	18:54	18:04		16:37	18 08:21 (T29)
2	05:35	06:01 (T28)	06:01	06:57 (T27)	06:35	07:00 (T27)	07:08	07:45		07:23	08:02 (T29)
	20:55	25 06:26 (T28)	20:34	34 07:40 (T27)	19:46	10 07:23 (T27)	18:52	18:03		16:37	19 08:22 (T29)
3	05:35	06:01 (T28)	06:02	06:55 (T27)	06:36	07:04 (T27)	07:09	07:47		07:24	08:01 (T29)
	20:54	24 06:25 (T28)	20:33	39 07:41 (T27)	19:44	12 07:18 (T27)	18:51	18:02		16:36	21 08:22 (T29)
4	05:36	06:02 (T28)	06:03	06:59 (T27)	06:37		07:10	07:48		07:25	08:01 (T29)
	20:54	23 06:25 (T28)	20:32	38 07:41 (T27)	19:43		18:49	18:00		16:36	21 08:24 (T29)
5	05:36	06:02 (T28)	06:04	06:53 (T27)	06:38		07:11	07:49		07:26	08:01 (T29)
	20:54	23 06:25 (T28)	20:30	45 07:42 (T27)	19:41		18:47	17:59		16:36	23 08:24 (T29)
6	05:37	06:03 (T28)	06:05	06:53 (T27)	06:39	07:21 (T30)	07:12	06:51		07:27	08:01 (T29)
	20:54	20 06:24 (T28)	20:29	37 07:42 (T27)	19:39	1 07:22 (T30)	18:45	16:58		16:36	23 08:25 (T29)
7	05:38	06:03 (T28)	06:06	06:52 (T27)	06:40	07:18 (T30)	07:14	06:52		07:28	08:01 (T29)
	20:54	20 06:23 (T28)	20:28	46 07:43 (T27)	19:37	7 07:32 (T30)	18:44	16:57		16:35	24 08:26 (T29)
8	05:38	06:04 (T28)	06:07	06:53 (T27)	06:41	07:15 (T30)	07:15	06:53		07:29	08:01 (T29)
	20:53	19 06:23 (T28)	20:27	41 07:43 (T27)	19:36	12 07:34 (T30)	18:42	16:55		16:35	24 08:26 (T29)
9	05:39	06:05 (T28)	06:08	07:01 (T27)	06:42	07:13 (T30)	07:16	06:54		07:30	08:01 (T29)
	20:53	18 06:23 (T28)	20:25	39 07:43 (T27)	19:34	9 07:30 (T30)	18:40	16:54		16:35	23 08:27 (T29)
10	05:40	06:05 (T28)	06:09	06:50 (T27)	06:43	07:12 (T30)	07:17	06:56		07:31	08:02 (T29)
	20:52	16 06:21 (T28)	20:24	49 07:43 (T27)	19:32	13 07:33 (T30)	18:38	16:53		16:35	26 08:28 (T29)
11	05:40	06:06 (T28)	06:11	06:50 (T27)	06:45	07:16 (T30)	07:18	06:57		07:32	08:02 (T29)
	20:52	14 06:20 (T28)	20:23	29 07:44 (T27)	19:30	16 07:37 (T30)	18:37	16:52		16:35	27 08:29 (T29)
12	05:41	06:07 (T28)	06:12	06:49 (T27)	06:46	07:12 (T30)	07:19	06:58		07:32	08:03 (T29)
	20:52	11 06:18 (T28)	20:21	35 07:44 (T27)	19:29	20 07:37 (T30)	18:35	16:51		16:35	23 08:29 (T29)
13	05:42	06:11 (T28)	06:13	06:49 (T27)	06:47	07:10 (T30)	07:21	07:00		07:33	08:03 (T29)
	20:51	4 06:15 (T28)	20:20	41 07:44 (T27)	19:27	18 07:37 (T30)	18:33	16:50		16:35	27 08:30 (T29)
14	05:43		06:14	06:49 (T27)	06:48	07:12 (T30)	07:22	07:01		07:34	08:03 (T29)
	20:51		20:18	35 07:44 (T27)	19:25	21 07:37 (T30)	18:32	16:49		16:36	24 08:30 (T29)
15	05:44		06:15	06:49 (T27)	06:49	07:12 (T30)	07:23	07:02		07:35	08:03 (T29)
	20:50		20:17	54 07:43 (T27)	19:23	19 07:37 (T30)	18:30	16:48		16:36	23 08:29 (T29)
16	05:44		06:16	06:48 (T27)	06:50	07:13 (T30)	07:24	07:03		07:36	08:04 (T29)
	20:49		20:15	41 07:43 (T27)	19:21	19 07:36 (T30)	18:28	16:47		16:36	27 08:31 (T29)
17	05:45		06:17	06:48 (T27)	06:51	07:14 (T30)	07:25	07:05		07:36	08:04 (T29)
	20:49		20:14	43 07:43 (T27)	19:19	17 07:36 (T30)	18:27	16:46		16:36	26 08:31 (T29)
18	05:46		06:18	06:48 (T27)	06:52	07:15 (T30)	07:27	07:06		07:37	08:04 (T29)
	20:48		20:12	49 07:42 (T27)	19:18	10 07:35 (T30)	18:25	16:45		16:37	26 08:32 (T29)
19	05:47		06:19	06:48 (T27)	06:53	07:16 (T30)	07:28	07:07		07:38	08:05 (T29)
	20:47		20:11	54 07:42 (T27)	19:16	13 07:34 (T30)	18:23	16:44		16:37	25 08:33 (T29)
20	05:48	07:13 (T27)	06:20	06:48 (T27)	06:54	07:17 (T30)	07:29	07:08		07:38	08:05 (T29)
	20:47	4 07:19 (T27)	20:09	35 07:39 (T27)	19:14	12 07:32 (T30)	18:22	16:43		16:37	28 08:33 (T29)
21	05:49	07:09 (T27)	06:21	06:50 (T27)	06:56	07:18 (T30)	07:30	07:10		07:39	08:06 (T29)
	20:46	15 07:24 (T27)	20:08	45 07:42 (T27)	19:12	10 07:31 (T30)	18:20	16:43		16:38	25 08:34 (T29)
22	05:50	07:07 (T27)	06:23	06:53 (T27)	06:57	07:19 (T30)	07:32	07:11		07:39	08:06 (T29)
	20:45	15 07:26 (T27)	20:06	32 07:41 (T27)	19:10	8 07:29 (T30)	18:19	16:42		16:38	27 08:34 (T29)
23	05:51	07:06 (T27)	06:24	06:51 (T27)	06:58	07:20 (T30)	07:33	07:12		07:40	08:07 (T29)
	20:44	18 07:28 (T27)	20:05	35 07:40 (T27)	19:09	5 07:26 (T30)	18:17	16:41		16:39	26 08:35 (T29)
24	05:52	07:04 (T27)	06:25	06:53 (T27)	06:59		07:34	07:13		07:40	08:07 (T29)
	20:43	26 07:30 (T27)	20:03	28 07:39 (T27)	19:07		18:16	16:41		16:39	27 08:35 (T29)
25	05:53	07:03 (T27)	06:26	06:50 (T27)	07:00		07:35	07:15		07:41	08:08 (T29)
	20:42	20 07:32 (T27)	20:01	32 07:38 (T27)	19:05		18:14	16:40		16:40	26 08:36 (T29)
26	05:54	07:01 (T27)	06:27	06:51 (T27)	07:01		07:36	07:16		07:41	08:08 (T29)
	20:41	27 07:33 (T27)	20:00	28 07:37 (T27)	19:03		18:13	16:39		16:40	26 08:36 (T29)
27	05:55	07:02 (T27)	06:28	06:52 (T27)	07:02		07:38	07:17	08:06 (T29)	07:42	08:08 (T29)
	20:40	27 07:34 (T27)	19:56	26 07:36 (T27)	19:01		18:11	16:39	8 08:14 (T29)	16:41	26 08:36 (T29)
28	05:56	06:59 (T27)	06:29	06:53 (T27)	07:03		07:39	07:18	08:04 (T29)	07:42	08:09 (T29)
	20:39	35 07:36 (T27)	19:55	39 07:34 (T27)	19:00		18:10	16:38	10 08:16 (T29)	16:42	25 08:36 (T29)
29	05:57	06:59 (T27)	06:30	06:54 (T27)	07:04		07:40	07:19	08:03 (T29)	07:42	08:10 (T29)
	20:38	38 07:37 (T27)	19:53	37 07:33 (T27)	18:58		18:08	16:38	15 08:18 (T29)	16:43	25 08:37 (T29)
30	05:58	06:57 (T27)	06:31	06:55 (T27)	07:06		07:42	07:20	08:02 (T29)	07:42	08:10 (T29)
	20:37	41 07:38 (T27)	19:51	15 07:31 (T27)	18:56		18:07	16:37	16 08:19 (T29)	16:43	27 08:38 (T29)
31	05:59	07:02 (T27)	06:32	06:56 (T27)			07:43			07:43	08:11 (T29)
	20:36	30 07:38 (T27)	19:50	28 07:29 (T27)			18:06			16:44	25 08:38 (T29)
Potential sun hours	466		433		376		343	293		281	
Total, worst case	539		1161		271			49			763
Sun reduction	0.67		0.63		0.56			0.25			0.24
Oper. time red.	1.00		1.00		1.00			1.00			1.00
Wind dir. red.	0.74		0.75		0.74			0.60			0.60
Total reduction	0.49		0.46		0.41			0.15			0.14
Total, real	262		536		111			7			108

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

SHADOW - Calendar

Shadow receptor: 1184 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2424)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

January			February			March			April			May			June			
1	07:43	16:45	07:28	17:21	17:58	06:49			06:55			07:31 (T27)	06:06		06:32 (T28)	05:34	05:59 (T31)	
									19:36	58	08:29 (T27)	20:10	12	06:44 (T28)	20:42	59	07:03 (T28)	
2	07:43	16:46	07:27	17:23	18:00	06:47			06:53			07:31 (T27)	06:05		06:27 (T28)	05:34	05:59 (T31)	
									19:37	57	08:28 (T27)	20:11	20	06:47 (T28)	20:43	61	07:03 (T28)	
3	07:43	16:47	07:25	17:24	18:01	06:46			06:51			07:31 (T27)	06:03		06:26 (T28)	05:33	05:58 (T31)	
									19:38	56	08:27 (T27)	20:12	24	06:50 (T28)	20:44	61	07:02 (T28)	
4	07:43	16:48	07:24	17:25	18:02	06:44			06:50			07:31 (T27)	06:02		06:25 (T28)	05:33	05:58 (T31)	
									19:39	55	08:26 (T27)	20:13	27	06:52 (T28)	20:45	62	07:03 (T28)	
5	07:43	16:49	07:23	17:27	18:03	06:42			06:48			07:32 (T27)	06:00		06:23 (T28)	05:33	05:58 (T31)	
									19:41	54	08:26 (T27)	20:14	30	06:53 (T28)	20:45	63	07:03 (T28)	
6	07:43	16:50	07:22	17:28	18:05	06:41		07:03 (T30)	06:46			07:32 (T27)	05:59		06:22 (T28)	05:32	05:57 (T31)	
							6	07:09 (T30)	19:42	53	08:25 (T27)	20:15	32	06:54 (T28)	20:46	63	07:03 (T28)	
7	07:43	16:51	07:21	17:29	18:06	06:39			07:01 (T30)			07:32 (T27)	05:58		06:21 (T28)	05:32	05:57 (T31)	
									19:43	51	08:23 (T27)	20:17	35	06:56 (T28)	20:47	63	07:03 (T28)	
8	07:43	16:52	07:20	17:31	18:07	06:37			06:59 (T30)			07:32 (T27)	05:57		06:20 (T28)	05:31	05:57 (T31)	
									19:44	50	08:22 (T27)	20:18	37	06:57 (T28)	20:47	64	07:03 (T28)	
9	07:42	16:53	07:18	17:32	18:08	06:36			06:58 (T30)			07:33 (T27)	05:55		06:18 (T28)	05:31	05:57 (T31)	
									19:45	48	08:21 (T27)	20:19	39	06:57 (T28)	20:48	64	07:03 (T28)	
10	07:42	16:54	07:17	17:33	18:10	06:34			06:56 (T30)			07:34 (T27)	05:54		06:17 (T28)	05:31	05:56 (T31)	
									19:46	45	08:19 (T27)	20:20	41	06:58 (T28)	20:49	65	07:03 (T28)	
11	07:42	16:55	07:16	17:35	18:11	06:32			06:54 (T30)			07:34 (T27)	05:53		06:16 (T28)	05:31	05:56 (T31)	
									19:48	43	08:17 (T27)	20:21	42	06:58 (T28)	20:49	65	07:03 (T28)	
12	07:42	16:56	07:15	17:36	18:12	06:30			06:52 (T30)			07:36 (T27)	05:52		06:15 (T28)	05:31	05:56 (T31)	
									19:49	40	08:16 (T27)	20:22	44	06:59 (T28)	20:50	65	07:03 (T28)	
13	07:41	16:57	07:13	17:38	18:13	06:29			07:51 (T30)			07:37 (T27)	05:51		06:14 (T28)	05:30	05:56 (T31)	
									19:50	37	08:14 (T27)	20:23	46	07:00 (T28)	20:50	66	07:03 (T28)	
14	07:41	16:58	07:12	17:39	18:14	06:27			07:49 (T27)			07:38 (T27)	05:49		06:13 (T28)	05:30	05:56 (T31)	
									19:51	34	08:12 (T27)	20:24	47	07:00 (T28)	20:51	65	07:03 (T28)	
15	07:40	17:00	07:10	17:40	18:16	06:25			07:47 (T27)			07:41 (T27)	05:48		06:12 (T28)	05:30	05:56 (T31)	
									19:52	29	08:10 (T27)	20:26	49	07:01 (T28)	20:51	66	07:04 (T28)	
16	07:40	17:01	07:09	17:41	18:17	06:23			07:45 (T27)			07:43 (T27)	05:47		06:12 (T28)	05:30	05:56 (T31)	
									19:53	23	08:06 (T27)	20:27	49	07:01 (T28)	20:52	66	07:04 (T28)	
17	07:40	17:02	07:08	17:43	18:18	06:22			07:43 (T27)			07:46 (T27)	05:46		06:11 (T28)	05:30	05:56 (T31)	
									19:55	16	08:02 (T27)	20:28	50	07:01 (T28)	20:52	66	07:04 (T28)	
18	07:39	17:03	07:06	17:44	18:19	06:20			07:42 (T27)				05:45		06:11 (T28)	05:30	05:56 (T31)	
									19:56				20:29	50	07:01 (T28)	20:53	42	07:04 (T28)
19	07:38	17:04	07:05	17:45	18:20	06:18			07:40 (T27)				05:44		06:11 (T28)	05:30	05:56 (T31)	
									19:57				20:30	51	07:02 (T28)	20:53	44	07:04 (T28)
20	07:38	17:06	07:03	17:47	18:22	06:16			07:39 (T27)				05:43		06:10 (T28)	05:31	05:56 (T31)	
									19:58				20:31	52	07:02 (T28)	20:53	40	07:04 (T28)
21	07:37	17:07	07:02	17:48	18:23	06:15			07:37 (T27)				05:42		06:10 (T28)	05:31	05:57 (T31)	
									19:59				20:32	52	07:02 (T28)	20:54	44	07:05 (T28)
22	07:36	17:08	07:00	17:49	18:24	06:14			07:37 (T27)				05:41		06:11 (T28)	05:31	05:57 (T31)	
									20:00				20:33	52	07:03 (T28)	20:54	34	07:05 (T28)
23	07:36	17:09	06:59	17:51	18:25	06:13			07:36 (T27)				05:41		06:11 (T28)	05:31	05:57 (T31)	
									20:01				20:34	51	07:02 (T28)	20:54	46	07:03 (T28)
24	07:35	17:11	06:57	17:52	18:26	06:12			07:35 (T27)				05:40		06:11 (T28)	05:31	05:57 (T31)	
									20:02				20:35	51	07:02 (T28)	20:54	48	07:05 (T28)
25	07:34	17:12	06:55	17:53	18:27	06:11			07:34 (T27)				05:39		06:10 (T28)	05:32	05:58 (T31)	
									20:03				20:36	52	07:02 (T28)	20:55	48	07:06 (T28)
26	07:33	17:13	06:54	17:54	18:28	06:10			07:33 (T27)				05:38		06:11 (T28)	05:32	05:58 (T31)	
									20:04				20:37	52	07:03 (T28)	20:55	52	07:06 (T28)
27	07:32	17:15	06:52	17:56	18:29	06:09			07:33 (T27)				05:38		06:11 (T28)	05:32	05:58 (T31)	
									20:05				20:38	52	07:03 (T28)	20:55	36	07:06 (T28)
28	07:32	17:16	06:51	17:57	18:30	06:08			07:32 (T27)				05:37		06:01 (T31)	05:33	05:59 (T31)	
									20:06				20:39	52	07:02 (T28)	20:55	42	07:07 (T28)
29	07:31	17:17			18:31	06:07			07:32 (T27)				05:36		06:01 (T31)	05:33	05:59 (T31)	
									20:07				20:40	55	07:03 (T28)	20:55	44	07:06 (T28)
30	07:30	17:19			18:32	06:06			07:31 (T27)				05:36		06:00 (T31)	05:34	06:03 (T31)	
									20:08				20:40	57	07:03 (T28)	20:55	40	07:05 (T28)
31	07:29	17:20			18:33	06:05			07:31 (T27)				05:35		06:00 (T31)			
									20:09				20:41	58	07:03 (T28)			
Potential sun hours	291	294	369						401				454		459			
Total, worst case						1057			749				1361				1644	
Sun reduction						0.47			0.54				0.58				0.63	
Oper. time red.						1.00			1.00				1.00				1.00	
Wind dir. red.						0.73			0.73				0.75				0.74	
Total reduction						0.34			0.40				0.43				0.47	
Total, real						363			297				590				770	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR
217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 1184 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2424)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
0.36 0.40 0.47 0.54 0.58 0.63 0.67 0.63 0.56 0.44 0.25 0.24

Operational time

N NNE NE ENE E ESE SE SSE S SSW SW WSW W WNW NW NNW Sum
245 195 263 395 451 393 363 382 412 348 736 1,617 1,224 837 579 320 8,760

	July		August		September		October		November		December			
1	05:34		06:00 (T31)	06:00	06:26 (T28)	06:34	07:36 (T27)	07:07	07:29 (T30)	07:44	07:22			
	20:55	37	07:07 (T28)	20:35	30	07:10 (T28)	19:48	29	08:15 (T27)	18:54	31	08:00 (T27)	18:04	16:37
2	05:35		06:02 (T31)	06:01		06:26 (T28)	06:35		07:35 (T27)	07:08		07:31 (T30)	07:45	07:23
	20:55	57	07:08 (T28)	20:34	29	07:09 (T28)	19:46	31	08:16 (T27)	18:52	27	07:58 (T27)	18:03	16:37
3	05:35		06:02 (T31)	06:02		06:27 (T28)	06:36		07:32 (T27)	07:09		07:32 (T30)	07:47	07:24
	20:54	64	07:08 (T28)	20:33	27	07:09 (T28)	19:44	26	08:17 (T27)	18:51	21	07:53 (T27)	18:02	16:36
4	05:36		06:04 (T31)	06:03		06:28 (T28)	06:37		07:30 (T27)	07:10		07:33 (T30)	07:48	07:25
	20:54	63	07:09 (T28)	20:32	34	07:08 (T28)	19:43	36	08:18 (T27)	18:49	19	07:52 (T30)	18:00	16:36
5	05:36		06:02 (T31)	06:04		06:32 (T28)	06:38		07:29 (T27)	07:11		07:34 (T30)	07:49	07:26
	20:54	47	07:08 (T28)	20:30	30	07:07 (T28)	19:41	33	08:15 (T27)	18:47	17	07:51 (T30)	17:59	16:36
6	05:37		06:03 (T31)	06:05		06:31 (T28)	06:39		07:28 (T27)	07:12		07:35 (T30)	06:51	07:27
	20:54	33	07:09 (T28)	20:29	19	07:06 (T28)	19:39	38	08:16 (T27)	18:45	14	07:49 (T30)	16:58	16:36
7	05:38		06:03 (T31)	06:06		06:33 (T28)	06:40		07:27 (T27)	07:14		07:36 (T30)	06:52	07:28
	20:54	40	07:09 (T28)	20:28	28	07:05 (T28)	19:37	32	08:20 (T27)	18:44	11	07:47 (T30)	16:57	16:35
8	05:38		06:04 (T31)	06:07		06:34 (T28)	06:41		07:26 (T27)	07:15		07:38 (T30)	06:53	07:29
	20:53	35	07:09 (T28)	20:27	20	07:03 (T28)	19:36	33	08:20 (T27)	18:42	8	07:46 (T30)	16:55	16:35
9	05:39		06:06 (T31)	06:08		06:34 (T28)	06:42		07:25 (T27)	07:16		07:39 (T30)	06:54	07:30
	20:53	58	07:10 (T28)	20:25	19	07:02 (T28)	19:34	37	08:19 (T27)	18:40	4	07:43 (T30)	16:54	16:35
10	05:40		06:05 (T31)	06:09		06:34 (T28)	06:43		07:24 (T27)	07:17			06:56	07:31
	20:52	52	07:10 (T28)	20:24	26	07:00 (T28)	19:32	44	08:20 (T27)	18:38			16:53	16:35
11	05:40		06:06 (T31)	06:10		06:39 (T28)	06:45		07:24 (T27)	07:18			06:57	07:32
	20:52	52	07:10 (T28)	20:23	14	06:58 (T28)	19:30	44	08:21 (T27)	18:37			16:52	16:35
12	05:41		06:07 (T31)	06:12		06:36 (T28)	06:46		07:25 (T27)	07:19			06:58	07:32
	20:52	32	07:11 (T28)	20:21	17	06:55 (T28)	19:29	33	08:21 (T27)	18:35			16:51	16:35
13	05:42		06:08 (T31)	06:13		06:41 (T28)	06:47		07:23 (T27)	07:21			07:00	07:33
	20:51	44	07:11 (T28)	20:20	9	06:50 (T28)	19:27	43	08:21 (T27)	18:33			16:50	16:35
14	05:43		06:08 (T31)	06:14			06:48		07:24 (T27)	07:22			07:01	07:34
	20:51	36	07:10 (T28)	20:18			19:25	40	08:21 (T27)	18:32			16:49	16:36
15	05:44		06:09 (T31)	06:15			06:49		07:22 (T27)	07:23			07:02	07:35
	20:50	40	07:11 (T28)	20:17			19:23	39	08:20 (T27)	18:30			16:48	16:36
16	05:44		06:10 (T31)	06:16			06:50		07:22 (T27)	07:24			07:03	07:36
	20:49	34	07:12 (T28)	20:15			19:21	41	08:20 (T27)	18:28			16:47	16:36
17	05:45		06:20 (T28)	06:17			06:51		07:21 (T27)	07:25			07:05	07:36
	20:49	31	07:11 (T28)	20:14			19:19	42	08:19 (T27)	18:27			16:46	16:36
18	05:46		06:20 (T28)	06:18			06:52		07:21 (T27)	07:27			07:06	07:37
	20:48	37	07:12 (T28)	20:12			19:18	40	08:15 (T27)	18:25			16:45	16:37
19	05:47		06:21 (T28)	06:19			06:53		07:21 (T27)	07:28			07:07	07:38
	20:47	25	07:13 (T28)	20:11			19:16	35	08:18 (T27)	18:23			16:44	16:37
20	05:48		06:20 (T28)	06:20			06:54		07:21 (T27)	07:29			07:08	07:38
	20:47	25	07:12 (T28)	20:09			19:14	34	08:13 (T27)	18:22			16:43	16:37
21	05:49		06:20 (T28)	06:21			06:56		07:21 (T27)	07:30			07:10	07:39
	20:46	40	07:12 (T28)	20:08			19:12	41	08:16 (T27)	18:20			16:43	16:38
22	05:50		06:20 (T28)	06:23			06:57		07:21 (T27)	07:32			07:11	07:39
	20:45	36	07:12 (T28)	20:06			19:10	46	08:15 (T27)	18:19			16:42	16:38
23	05:51		06:21 (T28)	06:24			06:58		07:21 (T27)	07:33			07:12	07:40
	20:44	33	07:12 (T28)	20:05			19:09	43	08:14 (T27)	18:17			16:41	16:39
24	05:52		06:21 (T28)	06:25			06:59		07:26 (T27)	07:34			07:13	07:40
	20:43	46	07:12 (T28)	20:03			19:07	39	08:14 (T27)	18:16			16:41	16:39
25	05:53		06:21 (T28)	06:26			07:00		07:23 (T27)	07:35			07:15	07:41
	20:42	24	07:12 (T28)	20:01			19:05	48	08:13 (T27)	18:14			16:40	16:40
26	05:54		06:21 (T28)	06:27			07:01		07:24 (T27)	07:36			07:16	07:41
	20:41	33	07:12 (T28)	20:00			19:03	44	08:11 (T27)	18:13			16:39	16:40
27	05:55		06:22 (T28)	06:28		07:48 (T27)	07:02		07:25 (T27)	07:38			07:17	07:42
	20:40	25	07:12 (T28)	19:56	14	08:05 (T27)	19:01	44	08:09 (T27)	18:11			16:39	16:41
28	05:56		06:22 (T28)	06:29		07:45 (T27)	07:03		07:26 (T27)	07:39			07:18	07:42
	20:39	48	07:12 (T28)	19:55	23	08:08 (T27)	19:00	31	08:07 (T27)	18:10			16:38	16:42
29	05:57		06:22 (T28)	06:30		07:42 (T27)	07:04		07:27 (T27)	07:40			07:19	07:42
	20:38	48	07:11 (T28)	19:53	23	08:06 (T27)	18:58	37	08:05 (T27)	18:08			16:38	16:43
30	05:58		06:23 (T28)	06:31		07:41 (T27)	07:06		07:28 (T27)	07:42			07:20	07:42
	20:37	45	07:11 (T28)	19:51	23	08:13 (T27)	18:56	32	08:03 (T27)	18:07			16:37	16:43
31	05:59		06:24 (T28)	06:32		07:37 (T27)				07:43				07:43
	20:36	31	07:11 (T28)	19:50	22	08:14 (T27)				18:06				16:44
Potential sun hours	466			433			376			343			293	281
Total, worst case		1251			407			1135			152			
Sun reduction		0.67			0.63			0.56			0.44			
Oper. time red.		1.00			1.00			1.00			1.00			
Wind dir. red.		0.75			0.74			0.73			0.73			
Total reduction		0.50			0.47			0.41			0.32			
Total, real		626			191			465			49			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR

217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 1196 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2323)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

January		February		March		April		May		June			
1	07:43 16:45		07:28 17:21	29	08:20 (T27) 17:58	26	08:14 (T27) 19:36	47	08:10 (T28) 20:10	20	06:29 (T31) 20:42	34	06:01 (T26) 06:43 (T26)
2	07:43 16:46		07:27 17:23	31	07:50 (T27) 18:00	16	07:55 (T27) 19:37	47	07:22 (T28) 20:11	22	06:27 (T31) 20:43	46	06:02 (T26) 06:49 (T26)
3	07:43 16:47		07:26 17:24	34	07:49 (T27) 18:01	1	08:02 (T27) 19:38	46	07:22 (T28) 20:12	23	06:26 (T31) 20:44	44	06:01 (T26) 06:49 (T26)
4	07:43 16:48		07:24 17:25	36	07:48 (T27) 18:02		06:50 19:39	45	07:22 (T28) 20:13	24	06:25 (T31) 20:45	38	06:02 (T26) 06:50 (T26)
5	07:43 16:49		07:23 17:27	38	07:47 (T27) 18:03		06:48 19:41	44	07:23 (T28) 20:14	25	06:23 (T31) 20:45	42	06:02 (T26) 06:51 (T26)
6	07:43 16:50		07:22 17:28	40	07:45 (T27) 18:05		06:46 19:42	44	07:22 (T28) 20:15	26	06:22 (T31) 20:46	38	06:02 (T26) 06:46 (T26)
7	07:43 16:51		07:21 17:29	42	07:44 (T27) 18:06		06:44 19:43	42	07:23 (T28) 20:16	27	06:21 (T31) 20:47	42	06:02 (T26) 06:51 (T26)
8	07:43 16:52		07:20 17:31	44	07:43 (T27) 18:07		06:37 19:44	41	07:23 (T28) 20:17	28	06:22 (T31) 20:48	36	06:03 (T26) 06:50 (T26)
9	07:42 16:53		07:18 17:32	46	07:42 (T27) 18:08		06:36 19:45	39	07:24 (T28) 20:18	26	06:21 (T31) 20:49	43	06:03 (T26) 06:51 (T26)
10	07:42 16:54		07:17 17:33	47	07:41 (T27) 18:10		06:39 19:46	37	07:25 (T28) 20:19	28	06:18 (T26) 20:50	44	06:02 (T26) 06:50 (T26)
11	07:42 16:55		07:16 17:35	47	07:41 (T27) 18:11		06:38 19:48	35	07:26 (T28) 20:20	30	06:16 (T26) 20:51	36	06:03 (T26) 06:48 (T26)
12	07:42 16:56		07:15 17:36	51	07:38 (T30) 18:12		06:30 19:49	31	07:27 (T28) 20:21	30	06:15 (T26) 20:52	40	06:03 (T26) 06:47 (T26)
13	07:41 16:57		07:13 17:37	53	08:29 (T27) 19:13		06:34 19:50	28	07:28 (T28) 20:22	30	06:14 (T26) 20:53	40	06:04 (T26) 06:51 (T26)
14	07:41 16:58		07:12 17:39	54	07:35 (T30) 19:14		06:33 19:51	24	07:29 (T28) 20:23	30	06:13 (T26) 20:54	37	06:04 (T26) 06:47 (T26)
15	07:40 17:00		07:10 17:40	56	07:33 (T30) 19:16		06:31 19:52	19	07:32 (T28) 20:24	29	06:12 (T26) 20:55	48	06:04 (T26) 06:52 (T26)
16	07:40 17:01		07:09 17:41	57	07:32 (T30) 19:17		06:29 19:53	10	07:36 (T28) 20:25	30	06:11 (T26) 20:56	48	06:04 (T26) 06:52 (T26)
17	07:40 17:02		07:08 17:43	58	07:30 (T30) 19:18	6	07:47 (T28) 19:55		05:46 20:26	32	06:10 (T26) 20:57	41	06:04 (T26) 06:53 (T26)
18	07:39 17:03		07:06 17:44	59	07:29 (T30) 19:19	18	07:42 (T28) 19:56		05:45 20:27	34	06:09 (T26) 20:58	31	06:04 (T26) 06:53 (T26)
19	07:38 17:04		07:05 17:45	60	07:27 (T30) 19:20	22	07:40 (T28) 19:57		05:44 20:28	36	06:08 (T26) 20:59	33	06:04 (T26) 06:53 (T26)
20	07:38 17:06		07:03 17:47	61	07:26 (T30) 19:21	26	07:38 (T28) 19:58		05:43 20:29	37	06:07 (T26) 21:00	31	06:04 (T26) 06:53 (T26)
21	07:37 17:07		07:02 17:48	62	07:24 (T30) 19:23	29	07:36 (T28) 19:59		05:42 20:30	39	06:06 (T26) 21:01	30	06:05 (T26) 06:54 (T26)
22	07:36 17:08		07:00 17:49	63	07:23 (T30) 19:24	32	08:05 (T28) 20:00		05:41 20:31	40	06:05 (T26) 21:02	17	06:06 (T26) 06:54 (T26)
23	07:36 17:09		06:59 17:51	64	07:21 (T30) 19:25	35	07:33 (T28) 20:00		05:40 20:32	41	06:04 (T26) 21:03	36	06:05 (T26) 06:54 (T26)
24	07:35 17:11		06:57 17:52	62	07:22 (T30) 19:26	38	07:31 (T28) 20:01	3	06:39 (T31) 20:33	43	06:04 (T26) 21:04	32	06:05 (T26) 06:54 (T26)
25	07:34 17:12		06:55 17:53	60	07:23 (T30) 19:28	40	07:29 (T28) 20:03	7	06:42 (T31) 20:34	44	06:03 (T26) 21:05	36	06:06 (T26) 06:55 (T26)
26	07:33 17:13		06:54 17:55	55	07:23 (T30) 19:29	42	08:09 (T28) 20:04		06:44 (T31) 20:35	45	06:03 (T26) 21:06	39	06:06 (T26) 06:55 (T26)
27	07:32 17:15	11	07:57 (T27) 08:08 (T27)	49	07:25 (T30) 19:30	44	07:26 (T28) 20:05	12	06:34 (T31) 20:36	46	06:02 (T26) 21:07	26	06:06 (T26) 06:51 (T26)
28	07:32 17:16	17	07:56 (T27) 08:13 (T27)	41	07:27 (T30) 19:31	45	08:10 (T28) 20:06	15	06:46 (T31) 20:37	47	06:01 (T26) 21:08	32	06:07 (T26) 06:54 (T26)
29	07:31 17:17	20	07:54 (T27) 08:14 (T27)		07:00 19:32	46	07:24 (T28) 20:07	17	06:31 (T31) 20:38	47	06:02 (T26) 21:09	32	06:07 (T26) 06:55 (T26)
30	07:30 17:19	23	07:53 (T27) 08:16 (T27)		06:59 19:33	47	07:23 (T28) 20:09	18	06:48 (T31) 20:40	48	06:01 (T26) 21:10	27	06:07 (T26) 06:52 (T26)
31	07:29 17:20	26	07:52 (T27) 08:18 (T27)		06:57 19:35	46	08:10 (T28) 20:10		05:35 20:41	47	06:02 (T26) 21:11		
Potential sun hours	291		294		369		401		454		459		1102
Total, worst case	97		1399		559		661		1052		1102		0.63
Sun reduction	0.36		0.40		0.47		0.54		0.58		0.63		1.00
Oper. time red.	1.00		1.00		1.00		1.00		1.00		1.00		0.74
Wind dir. red.	0.66		0.67		0.73		0.74		0.75		0.74		0.46
Total reduction	0.24		0.26		0.34		0.40		0.43		0.46		512
Total, real	23		371		191		262		451		512		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker
			(WTG causing flicker last time)

SHADOW - Calendar

Shadow receptor: 1196 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2323)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

July			August			September			October			November			December		
1	05:34		06:07 (T26)	06:00		06:26 (T26)	06:34		07:26 (T28)	07:07		07:44			08:11 (T27)	07:22	
	20:55	29	06:56 (T26)	20:35	21	06:55 (T31)	19:48	21	07:57 (T28)	18:54		18:04	44	08:58 (T27)	16:37		
2	05:35		06:08 (T26)	06:01		06:26 (T26)	06:35		07:24 (T28)	07:08		07:45			08:11 (T27)	07:23	
	20:55	37	06:56 (T26)	20:34	18	06:56 (T31)	19:46	29	07:59 (T28)	18:52		18:03	43	08:58 (T27)	16:37		
3	05:35		06:07 (T26)	06:02		06:27 (T26)	06:36		07:24 (T28)	07:09		07:47			08:11 (T27)	07:24	
	20:55	49	06:56 (T26)	20:33	22	06:57 (T31)	19:44	16	07:58 (T28)	18:51		18:02	42	08:57 (T27)	16:36		
4	05:36		06:08 (T26)	06:03		06:30 (T26)	06:37		07:21 (T28)	07:10		07:48			08:13 (T27)	07:25	
	20:54	49	06:57 (T26)	20:32	20	06:57 (T31)	19:43	29	08:00 (T28)	18:49		18:00	44	08:57 (T27)	16:36		
5	05:36		06:08 (T26)	06:04		06:32 (T31)	06:38		07:20 (T28)	07:11		07:49			08:14 (T27)	07:26	
	20:54	32	06:56 (T26)	20:30	21	06:58 (T31)	19:41	25	08:00 (T28)	18:47		17:59	41	08:56 (T27)	16:36		
6	05:37		06:08 (T26)	06:05		06:31 (T31)	06:39		07:20 (T28)	07:12		06:51			07:15 (T27)	07:27	
	20:54	20	06:52 (T26)	20:29	15	06:58 (T31)	19:39	26	08:01 (T28)	18:45		16:58	35	07:55 (T27)	16:36		
7	05:38		06:08 (T26)	06:06		06:33 (T31)	06:40		07:18 (T28)	07:14		06:52			07:17 (T27)	07:28	
	20:54	33	06:56 (T26)	20:28	21	06:58 (T31)	19:37	26	08:00 (T28)	18:44		16:57	37	07:55 (T27)	16:35		
8	05:38		06:08 (T26)	06:07		06:34 (T31)	06:41		07:18 (T28)	07:15		06:53			07:18 (T27)	07:29	
	20:53	22	06:57 (T26)	20:27	15	06:57 (T31)	19:36	27	08:01 (T28)	18:42		16:55	34	07:54 (T27)	16:35		
9	05:39		06:09 (T26)	06:08		06:34 (T31)	06:42		07:19 (T28)	07:16		06:54			07:20 (T27)	07:30	
	20:53	42	06:57 (T26)	20:25	12	06:48 (T31)	19:34	26	08:00 (T28)	18:40		16:54	29	07:53 (T27)	16:35		
10	05:40		06:09 (T26)	06:09		06:35 (T31)	06:43		07:21 (T28)	07:17		06:56			07:21 (T27)	07:31	
	20:52	41	06:57 (T26)	20:24	14	06:54 (T31)	19:32	35	08:01 (T28)	18:38		16:53	30	07:52 (T27)	16:35		
11	05:40		06:09 (T26)	06:10		06:39 (T31)	06:45		07:16 (T28)	07:18		06:57			07:22 (T27)	07:32	
	20:52	34	06:57 (T26)	20:23	13	06:57 (T31)	19:30	37	08:02 (T28)	18:37		16:52	27	07:51 (T27)	16:35		
12	05:41		06:10 (T26)	06:12		06:37 (T31)	06:46		07:15 (T28)	07:19		06:58			07:24 (T27)	07:32	
	20:52	23	06:56 (T26)	20:21	14	06:57 (T31)	19:29	28	08:01 (T28)	18:35	11	08:41 (T27)	16:51	26	07:50 (T27)	16:35	
13	05:42		06:10 (T26)	06:13		06:43 (T31)	06:47		07:15 (T28)	07:21		08:27 (T27)	07:00		07:25 (T27)	07:33	
	20:51	30	06:58 (T26)	20:20	12	06:57 (T31)	19:27	32	08:01 (T28)	18:33	19	08:46 (T27)	16:50	22	07:48 (T27)	16:35	
14	05:43		06:10 (T26)	06:14		06:38 (T31)	06:48		07:15 (T28)	07:22		08:02 (T30)	07:01		07:27 (T27)	07:34	
	20:51	36	06:57 (T26)	20:18	8	06:56 (T31)	19:25	35	08:01 (T28)	18:32	34	08:49 (T27)	16:49	20	07:47 (T27)	16:36	
15	05:44		06:10 (T26)	06:15		06:39 (T31)	06:49		07:14 (T28)	07:23		07:58 (T30)	07:02		07:28 (T27)	07:35	
	20:50	35	06:55 (T26)	20:17	16	06:55 (T31)	19:23	33	08:00 (T28)	18:30	44	08:50 (T27)	16:48	16	07:45 (T27)	16:36	
16	05:44		06:10 (T26)	06:16		06:40 (T31)	06:50		07:14 (T28)	07:24		07:56 (T30)	07:03		07:30 (T27)	07:36	
	20:49	23	06:56 (T26)	20:15	14	06:54 (T31)	19:21	30	07:59 (T28)	18:28	51	08:52 (T27)	16:47	11	07:41 (T27)	16:36	
17	05:45		06:11 (T26)	06:17		06:41 (T31)	06:51		07:14 (T28)	07:25		07:55 (T30)	07:05			07:36	
	20:49	26	06:57 (T26)	20:14	10	06:53 (T31)	19:19	33	07:58 (T28)	18:27	57	08:54 (T27)	16:46			16:36	
18	05:46		06:12 (T26)	06:18		06:42 (T31)	06:52		07:15 (T28)	07:27		07:54 (T30)	07:06			07:37	
	20:48	24	06:57 (T26)	20:12	5	06:49 (T31)	19:18	27	07:58 (T28)	18:25	60	08:54 (T27)	16:45			16:37	
19	05:47		06:16 (T26)	06:19		06:43 (T31)	06:53		07:16 (T28)	07:28		07:53 (T30)	07:07			07:38	
	20:47	17	06:45 (T26)	20:11	6	06:49 (T31)	19:16	25	07:55 (T28)	18:23	62	08:55 (T27)	16:44			16:37	
20	05:48		06:13 (T26)	06:20		06:44 (T31)	06:54		07:17 (T28)	07:29		07:52 (T30)	07:08			07:38	
	20:47	20	06:56 (T26)	20:09	1	06:45 (T31)	19:14	26	07:50 (T28)	18:22	64	08:56 (T27)	16:43			16:37	
21	05:49		06:14 (T26)	06:21		06:56			07:18 (T28)	07:30		07:54 (T30)	07:10			07:39	
	20:46	34	06:56 (T26)	20:08		19:12	26	07:54 (T28)	18:20	63	08:57 (T27)	16:43				16:38	
22	05:50		06:15 (T26)	06:23		06:57			07:19 (T28)	07:32		07:55 (T30)	07:11			07:39	
	20:45	25	06:55 (T26)	20:06		19:10	26	07:52 (T28)	18:19	62	08:57 (T27)	16:42				16:38	
23	05:51		06:16 (T26)	06:24		06:58			07:20 (T28)	07:33		07:56 (T30)	07:12			07:40	
	20:44	21	06:52 (T26)	20:05		19:09	19	07:49 (T28)	18:17	61	08:57 (T27)	16:41				16:39	
24	05:52		06:17 (T26)	06:25		06:59			07:26 (T28)	07:34		07:58 (T30)	07:13			07:40	
	20:43	32	06:55 (T26)	20:03		19:07	20	07:49 (T28)	18:16	60	08:58 (T27)	16:41				16:39	
25	05:53		06:18 (T26)	06:26		07:00			07:23 (T28)	07:35		07:59 (T30)	07:15			07:41	
	20:42	19	06:55 (T26)	20:01		19:05	19	07:46 (T28)	18:14	59	08:58 (T27)	16:40				16:40	
26	05:54		06:19 (T26)	06:27		07:01			07:24 (T28)	07:37		08:00 (T30)	07:16			07:41	
	20:41	20	06:54 (T26)	20:00		19:03	13	07:43 (T28)	18:13	58	08:58 (T27)	16:39				16:40	
27	05:55		06:23 (T26)	06:28		07:02			07:27 (T28)	07:38		08:02 (T30)	07:17			07:42	
	20:40	14	06:48 (T26)	19:56		19:01	8	07:38 (T28)	18:11	57	08:59 (T27)	16:39				16:41	
28	05:56		06:21 (T26)	06:29		07:37 (T28)	07:03		07:39			08:03 (T30)	07:18			07:42	
	20:39	29	06:52 (T26)	19:55	11	07:48 (T28)	19:00		18:10	55	08:58 (T27)	16:38				16:42	
29	05:57		06:22 (T26)	06:30		07:33 (T28)	07:04		07:40			08:04 (T30)	07:19			07:42	
	20:38	29	06:52 (T26)	19:53	15	07:51 (T28)	18:58		18:08	54	08:58 (T27)	16:38				16:43	
30	05:58		06:23 (T26)	06:31		07:31 (T28)	07:06		07:42			08:06 (T30)	07:20			07:42	
	20:37	26	06:53 (T31)	19:51	19	07:54 (T28)	18:56		18:07	52	08:58 (T27)	16:37				16:43	
31	05:59		06:24 (T26)	06:32		07:28 (T28)			07:43			08:07 (T30)				07:43	
	20:36	23	06:54 (T31)	19:50	18	07:56 (T28)			18:06	51	08:58 (T27)					16:44	
Potential sun hours	466		433			376			343			293				281	
Total, worst case	894		341			697			1034			501					
Sun reduction	0.67		0.63			0.56			0.44			0.25					
Oper. time red.	1.00		1.00			1.00			1.00			1.00					
Wind dir. red.	0.74		0.75			0.74			0.67			0.66					
Total reduction	0.49		0.47			0.41			0.29			0.16					
Total, real	442		159			286			302			82					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR

217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 1210 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2749)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

	January		February		March		April		May		June						
1	07:43		07:28	07:51 (T27)	06:49		06:55	07:32 (T28)	06:06		06:29 (T26)	05:34	06:22 (T26)				
	16:45		17:21	18	08:09 (T27)	17:58		19:36	35	08:07 (T28)	20:10	26	06:55 (T31)	20:42	17	06:54 (T26)	
2	07:43		07:27		07:50 (T27)	06:47		06:53		07:32 (T28)	06:05		06:27 (T26)	05:34		06:23 (T26)	
	16:46		17:23	21	08:11 (T27)	18:00		19:37	34	08:06 (T28)	20:11	26	06:53 (T31)	20:43	27	06:54 (T26)	
3	07:43		07:26		07:49 (T27)	06:46		06:51		07:33 (T28)	06:03		06:26 (T26)	05:33		06:23 (T26)	
	16:47		17:24	24	08:13 (T27)	18:01		19:38	31	08:04 (T28)	20:12	29	06:55 (T26)	20:44	24	06:53 (T26)	
4	07:43		07:24		07:48 (T27)	06:44		06:50		07:33 (T28)	06:02		06:25 (T26)	05:33		06:25 (T26)	
	16:48		17:25	26	08:14 (T27)	18:02		19:39	29	08:02 (T28)	20:13	31	06:56 (T26)	20:45	17	06:53 (T26)	
5	07:43		07:23		07:47 (T27)	06:42		06:48		07:36 (T28)	06:00		06:23 (T26)	05:33		06:26 (T26)	
	16:49		17:27	29	08:16 (T27)	18:03		19:41	25	08:01 (T28)	20:14	33	06:56 (T26)	20:45	19	06:52 (T26)	
6	07:43		07:22		07:45 (T27)	06:41		06:46		07:37 (T28)	05:59		06:22 (T26)	05:32		06:26 (T26)	
	16:50		17:28	31	08:16 (T27)	18:05		19:42	21	07:58 (T28)	20:15	35	06:57 (T26)	20:46	16	06:52 (T26)	
7	07:43		07:21		07:44 (T27)	06:39		06:44		07:40 (T28)	05:58		06:21 (T26)	05:32		06:27 (T26)	
	16:51		17:29	33	08:17 (T27)	18:06		19:43	14	07:54 (T28)	20:17	36	06:57 (T26)	20:47	18	06:52 (T26)	
8	07:43		07:20		07:43 (T27)	06:37		06:43			05:57		06:20 (T26)	05:31		06:28 (T26)	
	16:52		17:31	35	08:18 (T27)	18:07		19:44			20:18	38	06:58 (T26)	20:47	12	06:52 (T26)	
9	07:42		07:18		07:42 (T27)	06:36		06:41			05:55		06:18 (T26)	05:31		06:29 (T26)	
	16:53		17:32	37	08:19 (T27)	18:08		19:45			20:19	39	06:57 (T26)	20:48	17	06:51 (T26)	
10	07:42		07:17		07:40 (T27)	06:34		06:39			05:54		06:17 (T26)	05:31		06:29 (T26)	
	16:54		17:33	39	08:19 (T27)	18:10		19:46			20:20	41	06:58 (T26)	20:49	17	06:50 (T26)	
11	07:42		07:16		07:39 (T27)	06:32		06:38			05:53		06:16 (T26)	05:31		06:30 (T26)	
	16:55		17:35	41	08:20 (T27)	18:11		19:48			20:21	42	06:58 (T26)	20:49	9	06:48 (T26)	
12	07:42		07:15		07:38 (T30)	06:30		06:36			05:52		06:16 (T26)	05:31		06:30 (T26)	
	16:56		17:36	42	08:20 (T27)	18:12		19:49			20:22	42	06:58 (T26)	20:50	13	06:47 (T26)	
13	07:41		07:13		07:36 (T30)	07:29		06:34			05:51		06:16 (T26)	05:30		06:31 (T26)	
	16:57		17:38	44	08:20 (T27)	19:13	7	07:59 (T28)			20:23	42	06:58 (T26)	20:51	13	06:49 (T26)	
14	07:41		07:12		07:35 (T30)	07:27		06:33			05:49		06:16 (T26)	05:30		06:32 (T26)	
	16:58		17:39	45	08:20 (T28)	19:14	15	08:04 (T28)			20:24	42	06:58 (T26)	20:51	9	06:47 (T26)	
15	07:41		07:10		07:33 (T30)	07:25		06:31			05:48		06:16 (T26)	05:30		06:33 (T26)	
	17:00		17:40	47	08:20 (T27)	19:16	19	08:06 (T28)			20:26	43	06:59 (T26)	20:52	16	06:49 (T26)	
16	07:40		07:09		07:32 (T30)	07:23		06:29			05:47		06:16 (T26)	05:30		06:33 (T26)	
	17:01		17:41	48	08:20 (T27)	19:17	22	08:07 (T28)			20:27	42	06:58 (T26)	20:52	16	06:49 (T26)	
17	07:40		07:08		07:30 (T30)	07:22		06:28			05:46		06:16 (T26)	05:30		06:34 (T26)	
	17:02		17:43	49	08:19 (T27)	19:18	26	08:09 (T28)			20:28	42	06:58 (T26)	20:52	8	06:47 (T26)	
18	07:39		07:06		07:29 (T30)	07:20		06:26		06:48 (T31)	05:45		06:16 (T26)	05:30		06:35 (T26)	
	17:03		17:44	50	08:19 (T27)	19:19	28	08:10 (T28)		2	06:50 (T31)	20:29	42	06:58 (T26)	20:53	6	06:45 (T26)
19	07:38		07:05		07:27 (T30)	07:18		06:24			05:44		06:16 (T26)	05:30		06:35 (T26)	
	17:04		17:45	51	08:18 (T27)	19:20	31	08:11 (T28)		6	06:52 (T31)	20:30	42	06:58 (T26)	20:53	9	06:47 (T26)
20	07:38		07:03		07:26 (T30)	07:16		06:23			05:43		06:16 (T26)	05:31		06:36 (T26)	
	17:06		17:47	52	08:18 (T27)	19:22	33	08:11 (T28)		9	06:54 (T31)	20:31	42	06:58 (T26)	20:53	9	06:48 (T26)
21	07:37		07:02		07:24 (T30)	07:15		06:21			05:42		06:16 (T26)	05:31		06:36 (T26)	
	17:07		17:48	53	08:17 (T27)	19:23	36	08:12 (T28)		11	06:54 (T31)	20:32	41	06:57 (T26)	20:54	9	06:47 (T26)
22	07:36		07:00		07:23 (T30)	07:13		06:19			05:41		06:18 (T26)	05:31		06:37 (T26)	
	17:08		17:49	54	08:17 (T28)	19:24	38	08:13 (T28)		14	06:56 (T31)	20:33	40	06:58 (T26)	20:54	8	06:48 (T26)
23	07:36		06:59		07:22 (T30)	07:11		06:18			05:41		06:18 (T26)	05:31		06:36 (T26)	
	17:09		17:51	53	08:15 (T27)	19:25	39	08:12 (T28)		16	06:56 (T31)	20:34	39	06:57 (T26)	20:54	5	06:44 (T26)
24	07:35		06:57		07:23 (T30)	07:09		06:16			05:40		06:18 (T26)	05:31		06:36 (T26)	
	17:11		17:52	51	08:14 (T27)	19:26	40	08:12 (T28)		17	06:56 (T31)	20:35	39	06:57 (T26)	20:54	11	06:49 (T26)
25	07:34		06:55		07:23 (T30)	07:07		06:15			05:39		06:18 (T26)	05:32		06:39 (T26)	
	17:12		17:53	47	08:12 (T27)	19:28	41	08:12 (T28)		19	06:56 (T31)	20:36	38	06:56 (T26)	20:55	7	06:50 (T26)
26	07:33		06:54		07:24 (T30)	07:06		06:13			05:38		06:19 (T26)	05:32		06:38 (T26)	
	17:13		17:55	41	08:10 (T27)	19:29	40	08:11 (T28)		20	06:56 (T31)	20:37	38	06:57 (T26)	20:55	11	06:49 (T26)
27	07:32		06:52		07:27 (T30)	07:04		06:12			05:38		06:19 (T26)	05:32		06:36 (T26)	
	17:15		17:56	31	08:08 (T27)	19:30	41	08:12 (T28)		22	06:56 (T31)	20:38	37	06:56 (T26)	20:55	8	06:50 (T26)
28	07:32		06:51		07:51 (T27)	07:02		06:10			05:37		06:20 (T26)	05:33		06:36 (T26)	
	17:16		17:57	13	08:04 (T27)	19:31	40	08:11 (T28)		23	06:56 (T31)	20:39	35	06:55 (T26)	20:55	13	06:50 (T26)
29	07:31					07:00		06:09			05:36		06:21 (T26)	05:33		06:35 (T26)	
	17:17	4	07:56 (T27)			19:32	39	08:10 (T28)		24	06:55 (T31)	20:40	34	06:55 (T26)	20:55	12	06:52 (T26)
30	07:30		07:53 (T27)			06:59		06:07			05:36		06:21 (T26)	05:34		06:36 (T26)	
	17:19	11	08:04 (T27)			19:33	39	08:09 (T28)		25	06:55 (T31)	20:40	34	06:55 (T26)	20:55	11	06:52 (T26)
31	07:29		07:52 (T27)			06:57		06:08			05:35		06:22 (T26)				
	17:20	15	08:07 (T27)			19:35	37	08:08 (T28)			20:41	32	06:54 (T26)				
Potential sun hours	291		294			369		401			454		459				
Total, worst case	30		1105			611		397			1162		387				
Sun reduction	0.36		0.40			0.47		0.54			0.58		0.63				
Oper. time red.	1.00		1.00			1.00		1.00			1.00		1.00				
Wind dir. red.	0.67		0.67			0.74		0.74			0.75		0.75				
Total reduction	0.24		0.27			0.34		0.40			0.43		0.47				
Total, real	7		295			209		158			501		181				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

SHADOW - Calendar

Shadow receptor: 1210 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2749)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

July		August		September		October		November		December	
1	05:34	06:37 (T26)	06:00	06:27 (T26)	06:34	07:07	07:29 (T28)	07:44	08:09 (T27)	07:22	
	20:55	12 06:54 (T26)	20:35	28 07:07 (T26)	19:48	18:54	11 07:40 (T28)	18:04	37 08:49 (T27)	16:37	
2	05:35	06:35 (T26)	06:01	06:27 (T26)	06:35	07:08		07:45		08:10 (T27)	07:23
	20:55	20 06:55 (T26)	20:34	24 07:07 (T26)	19:46	18:52		18:03	36 08:49 (T27)	16:37	
3	05:35	06:34 (T26)	06:02	06:27 (T26)	06:36	07:09		07:47		08:11 (T27)	07:24
	20:55	21 06:55 (T26)	20:33	27 07:09 (T26)	19:44	18:51		18:02	33 08:48 (T27)	16:36	
4	05:36	06:34 (T26)	06:03	06:28 (T26)	06:37	07:10		07:48		08:13 (T27)	07:25
	20:54	22 06:56 (T26)	20:32	27 07:08 (T26)	19:43	18:49		18:00	35 08:48 (T27)	16:36	
5	05:36	06:34 (T26)	06:04	06:32 (T26)	06:38	07:11		07:49		08:14 (T27)	07:26
	20:54	13 06:56 (T26)	20:30	27 07:08 (T26)	19:41	18:47		17:59	33 08:47 (T27)	16:36	
6	05:37	06:35 (T26)	06:05	06:31 (T26)	06:39	07:12	07:39 (T28)	07:12		07:15 (T27)	07:27
	20:54	10 06:58 (T26)	20:29	19 07:07 (T26)	19:39	10 07:50 (T28)	18:45	16:58	27 07:45 (T27)	16:36	
7	05:38	06:32 (T26)	06:06	06:33 (T26)	06:40	07:14	07:32 (T28)	07:14		07:17 (T27)	07:28
	20:54	18 06:56 (T26)	20:28	29 07:07 (T26)	19:37	16 07:53 (T28)	18:44	16:57	29 07:46 (T27)	16:35	
8	05:38	06:32 (T26)	06:07	06:34 (T26)	06:41	07:15	07:32 (T28)	07:15		07:18 (T27)	07:29
	20:53	11 06:57 (T26)	20:27	17 07:01 (T26)	19:36	16 07:51 (T28)	18:42	16:55	24 07:44 (T27)	16:35	
9	05:39	06:32 (T26)	06:08	06:34 (T26)	06:42	07:16	07:28 (T28)	07:16		07:20 (T27)	07:30
	20:53	28 07:00 (T26)	20:25	16 07:05 (T26)	19:34	17 07:55 (T28)	18:40	16:54	20 07:40 (T27)	16:35	
10	05:40	06:33 (T26)	06:09	06:38 (T26)	06:43	07:17	07:26 (T28)	07:17		07:21 (T27)	07:31
	20:53	22 06:57 (T26)	20:24	14 07:04 (T26)	19:32	26 07:56 (T28)	18:38	16:53	21 07:42 (T27)	16:35	
11	05:40	06:31 (T26)	06:10	06:39 (T26)	06:45	07:18	07:26 (T28)	07:18		07:22 (T27)	07:32
	20:52	16 07:01 (T26)	20:23	17 07:03 (T26)	19:30	26 07:59 (T28)	18:37	16:52	17 07:40 (T27)	16:35	
12	05:41	06:31 (T26)	06:12	06:37 (T26)	06:46	07:19	07:25 (T28)	07:19		07:24 (T27)	07:32
	20:52	14 07:01 (T26)	20:21	19 07:02 (T31)	19:29	19 07:54 (T28)	18:35	16:51	15 07:39 (T27)	16:35	
13	05:42	06:31 (T26)	06:13	06:43 (T31)	06:47	07:21	07:23 (T28)	07:21		07:25 (T27)	07:33
	20:51	24 07:03 (T26)	20:20	17 07:02 (T31)	19:27	27 08:00 (T28)	18:33	16:50	11 07:36 (T27)	16:35	
14	05:43	06:29 (T26)	06:14	06:38 (T31)	06:48	07:22	07:22 (T28)	07:22		07:28 (T27)	07:34
	20:51	25 06:58 (T26)	20:18	14 07:03 (T31)	19:25	27 08:00 (T28)	18:32	4 08:32 (T27)	4 07:32 (T27)	16:36	
15	05:44	06:29 (T26)	06:15	06:39 (T31)	06:49	07:23	07:21 (T28)	07:23		08:02 (T30)	07:02
	20:50	23 07:00 (T26)	20:17	24 07:03 (T31)	19:23	26 08:00 (T28)	18:30	21 08:38 (T27)		16:48	16:36
16	05:44	06:37 (T26)	06:16	06:40 (T31)	06:50	07:24	07:20 (T28)	07:24		07:58 (T30)	07:03
	20:49	15 07:04 (T26)	20:15	22 07:02 (T31)	19:21	25 07:59 (T28)	18:28	34 08:40 (T27)		16:47	16:36
17	05:45	06:29 (T26)	06:17	06:41 (T31)	06:51	07:25	07:22 (T28)	07:25		07:56 (T30)	07:05
	20:49	23 07:05 (T26)	20:14	15 07:02 (T31)	19:19	28 07:58 (T28)	18:27	43 08:43 (T27)		16:46	16:36
18	05:46	06:29 (T26)	06:18	06:42 (T31)	06:52	07:27	07:23 (T28)	07:27		07:55 (T30)	07:06
	20:48	22 07:06 (T26)	20:12	8 07:02 (T31)	19:18	25 08:00 (T28)	18:25	48 08:44 (T27)		16:45	16:37
19	05:47	06:32 (T26)	06:19	06:43 (T31)	06:53	07:28	07:18 (T28)	07:28		07:53 (T30)	07:07
	20:47	14 07:06 (T26)	20:11	18 07:02 (T31)	19:16	24 07:59 (T28)	18:23	52 08:45 (T27)		16:44	16:37
20	05:48	06:28 (T26)	06:20	06:44 (T31)	06:54	07:29	07:18 (T28)	07:29		07:52 (T30)	07:08
	20:47	17 07:04 (T26)	20:09	14 07:01 (T31)	19:14	25 07:50 (T28)	18:22	54 08:46 (T27)		16:43	16:37
21	05:49	06:27 (T26)	06:21	06:46 (T31)	06:56	07:30	07:18 (T28)	07:30		07:54 (T30)	07:10
	20:46	29 07:04 (T26)	20:08	9 06:58 (T31)	19:12	30 07:58 (T28)	18:20	53 08:47 (T27)		16:43	16:38
22	05:50	06:29 (T26)	06:23	06:53 (T31)	06:57	07:32	07:19 (T28)	07:32		07:55 (T30)	07:11
	20:45	23 07:07 (T26)	20:06	4 06:58 (T31)	19:10	30 07:57 (T28)	18:19	53 08:48 (T27)		16:42	16:38
23	05:51	06:29 (T26)	06:24	06:51 (T31)	06:58	07:33	07:20 (T28)	07:33		07:56 (T30)	07:12
	20:44	24 07:08 (T26)	20:05	6 06:59 (T31)	19:09	23 07:56 (T28)	18:17	52 08:48 (T27)		16:41	16:39
24	05:52	06:32 (T26)	06:25	06:53 (T31)	06:59	07:34	07:26 (T28)	07:34		07:58 (T30)	07:13
	20:43	28 07:06 (T26)	20:03	3 06:56 (T31)	19:07	26 07:56 (T28)	18:16	51 08:49 (T27)		16:41	16:39
25	05:53	06:30 (T26)	06:26	06:52 (T31)	07:00	07:35	07:23 (T28)	07:35		07:59 (T30)	07:15
	20:42	21 07:04 (T26)	20:01	3 06:55 (T31)	19:05	25 07:55 (T28)	18:14	50 08:49 (T27)		16:40	16:40
26	05:54	06:27 (T26)	06:27	06:51 (T31)	07:01	07:37	07:24 (T28)	07:37		08:00 (T30)	07:16
	20:41	26 07:08 (T26)	20:00	1 06:52 (T31)	19:03	16 07:53 (T28)	18:13	49 08:49 (T27)		16:39	16:40
27	05:55	06:30 (T26)	06:28		07:02	07:38	07:25 (T28)	07:38		08:02 (T30)	07:17
	20:40	19 07:07 (T26)	19:56		19:01	22 07:52 (T28)	18:11	48 08:50 (T27)		16:39	16:41
28	05:56	06:27 (T26)	06:29		07:03	07:39	07:26 (T28)	07:39		08:03 (T30)	07:18
	20:39	31 07:09 (T26)	19:55		19:00	13 07:47 (T28)	18:10	46 08:49 (T27)		16:38	16:42
29	05:57	06:27 (T26)	06:30		07:04	07:40	07:27 (T28)	07:40		08:04 (T30)	07:19
	20:38	38 07:09 (T26)	19:53		18:58	15 07:47 (T28)	18:08	45 08:49 (T27)		16:38	16:43
30	05:58	06:30 (T26)	06:31		07:06	07:42	07:28 (T28)	07:42		08:06 (T30)	07:20
	20:37	37 07:09 (T26)	19:51		18:56	10 07:44 (T28)	18:07	44 08:50 (T27)		16:37	16:43
31	05:59	06:27 (T26)	06:32			07:43		08:07 (T30)			07:43
	20:36	26 07:09 (T26)	19:50			18:06	40 08:49 (T27)				16:44
Potential sun hours	466		433		376		343		293		281
Total, worst case	672		422		547		798		342		
Sun reduction	0.67		0.63		0.56		0.44		0.25		
Oper. time red.	1.00		1.00		1.00		1.00		1.00		
Wind dir. red.	0.75		0.75		0.74		0.68		0.67		
Total reduction	0.50		0.47		0.41		0.29		0.17		
Total, real	335		198		223		235		57		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

SHADOW - Calendar

Shadow receptor: 1211 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2324)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

	January		February		March		April		May		June		
1	07:43 16:45		07:28 17:21	07:51 (T27) 15 08:06 (T27)	06:49 17:58	34	07:26 (T30) 08:09 (T27)	06:55 19:36	07:24 (T28) 08:07 (T28)	06:06 20:10	06:29 (T31) 06:51 (T31)	05:34 20:42	06:07 (T26) 06:52 (T26)
2	07:43 16:46		07:27 17:23	07:50 (T27) 19 08:09 (T27)	06:47 18:00	20	07:47 (T27) 08:07 (T27)	06:53 19:37	07:23 (T28) 08:06 (T28)	06:05 20:11	06:27 (T31) 06:50 (T31)	05:34 20:43	06:08 (T26) 06:49 (T26)
3	07:43 16:47		07:26 17:24	07:49 (T27) 22 08:11 (T27)	06:46 18:01	12	07:50 (T27) 08:02 (T27)	06:51 19:38	07:23 (T28) 08:05 (T28)	06:03 20:12	06:26 (T31) 06:50 (T31)	05:33 20:44	06:08 (T26) 06:50 (T26)
4	07:43 16:48		07:24 17:25	07:48 (T27) 25 08:13 (T27)	06:44 18:02			06:50 19:39	07:23 (T28) 08:04 (T28)	06:02 20:13	06:25 (T31) 06:50 (T31)	05:33 20:45	06:08 (T26) 06:52 (T26)
5	07:43 16:49		07:23 17:27	07:47 (T27) 28 08:15 (T27)	06:42 18:03			06:48 19:41	07:24 (T28) 08:04 (T28)	06:00 20:14	06:23 (T26) 06:49 (T31)	05:33 20:45	06:09 (T26) 06:52 (T26)
6	07:43 16:50		07:22 17:28	07:45 (T27) 30 08:15 (T27)	06:41 18:05			06:46 19:42	07:24 (T28) 08:02 (T28)	05:59 20:15	06:22 (T26) 06:49 (T31)	05:32 20:46	06:09 (T26) 06:52 (T26)
7	07:43 16:51		07:21 17:29	07:44 (T27) 32 08:16 (T27)	06:39 18:06			06:44 19:43	07:25 (T28) 08:01 (T28)	05:58 20:17	06:21 (T26) 06:48 (T31)	05:32 20:47	06:09 (T26) 06:52 (T26)
8	07:43 16:52		07:20 17:31	07:43 (T27) 35 08:18 (T27)	06:37 18:07			06:43 19:44	07:25 (T28) 07:59 (T28)	05:57 20:18	06:20 (T26) 06:48 (T31)	05:31 20:47	06:10 (T26) 06:52 (T26)
9	07:42 16:53		07:18 17:32	07:42 (T27) 37 08:19 (T27)	06:36 18:08			06:41 19:45	07:27 (T28) 07:58 (T28)	05:55 20:19	06:18 (T26) 06:46 (T31)	05:31 20:48	06:10 (T26) 06:51 (T26)
10	07:42 16:54		07:17 17:33	07:40 (T27) 39 08:19 (T27)	06:34 18:10			06:39 19:46	07:28 (T28) 07:56 (T28)	05:54 20:20	06:17 (T26) 06:45 (T31)	05:31 20:49	06:10 (T26) 06:52 (T26)
11	07:42 16:55		07:16 17:35	07:39 (T27) 41 08:20 (T27)	06:32 18:11			06:38 19:48	07:29 (T28) 07:53 (T28)	05:53 20:21	06:16 (T26) 06:46 (T26)	05:31 20:49	06:10 (T26) 06:52 (T26)
12	07:42 16:56		07:15 17:36	07:38 (T27) 43 08:21 (T27)	06:30 18:12			06:36 19:49	07:32 (T28) 07:51 (T28)	05:52 20:22	06:15 (T26) 06:47 (T26)	05:31 20:50	06:11 (T26) 06:47 (T26)
13	07:41 16:57		07:13 17:38	07:36 (T30) 44 08:20 (T27)	07:29 19:13			06:34 19:50	07:35 (T28) 07:47 (T28)	05:51 20:23	06:14 (T26) 06:47 (T26)	05:30 20:51	06:11 (T26) 06:53 (T26)
14	07:41 16:58		07:12 17:39	07:35 (T30) 46 08:21 (T27)	07:27 19:14			06:33 19:51		05:49 20:24	06:13 (T26) 06:48 (T26)	05:30 20:51	06:12 (T26) 06:53 (T26)
15	07:40 17:00		07:10 17:40	07:33 (T30) 48 08:21 (T27)	07:25 19:16			06:31 19:52		05:48 20:26	06:12 (T26) 06:49 (T26)	05:30 20:52	06:12 (T26) 06:53 (T26)
16	07:40 17:01		07:09 17:41	07:32 (T30) 49 08:21 (T27)	07:23 19:17			06:29 19:53		05:47 20:27	06:11 (T26) 06:49 (T26)	05:30 20:52	06:12 (T26) 06:53 (T26)
17	07:40 17:02		07:08 17:43	07:30 (T30) 51 08:21 (T27)	07:22 19:18	12	07:43 (T28) 07:55 (T28)	06:28 19:55		05:46 20:28	06:10 (T26) 06:50 (T26)	05:30 20:52	06:12 (T26) 06:53 (T26)
18	07:39 17:03		07:06 17:44	07:29 (T30) 52 08:21 (T27)	07:20 19:19	18	07:42 (T28) 08:00 (T28)	06:26 19:56		05:45 20:29	06:09 (T26) 06:50 (T26)	05:30 20:53	06:14 (T26) 06:53 (T26)
19	07:38 17:04		07:05 17:45	07:27 (T30) 53 08:20 (T27)	07:18 19:20	22	07:40 (T28) 08:02 (T28)	06:24 19:57		05:44 20:30	06:08 (T26) 06:50 (T26)	05:30 20:53	06:13 (T26) 06:53 (T26)
20	07:38 17:06		07:03 17:47	07:26 (T30) 54 08:20 (T27)	07:16 19:22	25	07:38 (T28) 08:03 (T28)	06:23 19:58		05:43 20:31	06:07 (T26) 06:50 (T26)	05:31 20:53	06:15 (T26) 06:53 (T26)
21	07:37 17:07		07:02 17:48	07:24 (T30) 55 08:19 (T27)	07:15 19:23	28	07:36 (T28) 08:04 (T28)	06:21 19:59		05:42 20:32	06:06 (T26) 06:50 (T26)	05:31 20:54	06:14 (T26) 06:54 (T26)
22	07:36 17:08		07:00 17:49	07:23 (T30) 56 08:19 (T27)	07:13 19:24	31	07:35 (T28) 08:06 (T28)	06:19 20:00	06:42 (T31) 06:45 (T31)	05:41 20:33	06:07 (T26) 06:51 (T26)	05:31 20:54	06:18 (T26) 06:48 (T26)
23	07:36 17:09		06:59 17:51	07:21 (T30) 57 08:18 (T27)	07:11 19:25	34	07:33 (T28) 08:07 (T28)	06:18 20:00	06:40 (T31) 06:46 (T31)	05:41 20:34	06:07 (T26) 06:51 (T26)	05:31 20:54	06:14 (T26) 06:54 (T26)
24	07:35 17:11		06:57 17:52	07:20 (T30) 58 08:18 (T27)	07:09 19:26	36	07:31 (T28) 08:07 (T28)	06:16 20:02	06:39 (T31) 06:48 (T31)	05:40 20:35	06:06 (T26) 06:51 (T26)	05:31 20:54	06:17 (T26) 06:54 (T26)
25	07:34 17:12		06:55 17:53	07:20 (T30) 56 08:16 (T27)	07:07 19:28	38	07:29 (T28) 08:07 (T28)	06:15 20:03	06:37 (T31) 06:49 (T31)	05:39 20:36	06:06 (T26) 06:51 (T26)	05:32 20:55	06:15 (T26) 06:55 (T26)
26	07:33 17:13		06:54 17:55	07:21 (T30) 54 08:15 (T27)	07:06 19:29	40	07:27 (T28) 08:07 (T28)	06:13 20:04	06:36 (T31) 06:50 (T31)	05:38 20:37	06:07 (T26) 06:52 (T26)	05:32 20:55	06:14 (T26) 06:55 (T26)
27	07:32 17:15		06:52 17:56	07:22 (T30) 50 08:14 (T27)	07:04 19:30	42	07:26 (T28) 08:08 (T28)	06:12 20:05	06:34 (T31) 06:50 (T31)	05:38 20:38	06:07 (T26) 06:52 (T26)	05:32 20:55	06:15 (T26) 06:51 (T26)
28	07:32 17:16		06:51 17:57	07:24 (T30) 42 08:11 (T27)	07:02 19:31	43	07:25 (T28) 08:08 (T28)	06:10 20:06	06:33 (T31) 06:51 (T31)	05:37 20:39	06:06 (T26) 06:51 (T26)	05:33 20:55	06:15 (T26) 06:54 (T26)
29	07:31 17:17				07:00 19:32	43	07:24 (T28) 08:07 (T28)	06:09 20:07	06:31 (T31) 06:50 (T31)	05:36 20:40	06:07 (T26) 06:52 (T26)	05:33 20:55	06:21 (T26) 06:56 (T26)
30	07:30 17:19				06:59 19:33	43	07:24 (T28) 08:07 (T28)	06:07 20:09	06:30 (T31) 06:51 (T31)	05:36 20:40	06:07 (T26) 06:52 (T26)	05:34 20:55	06:15 (T26) 06:57 (T26)
31	07:29 17:20	07:52 (T27) 11 08:03 (T27)			06:57 19:35	43	07:23 (T28) 08:06 (T28)		05:35 20:41		06:08 (T26) 06:52 (T26)		
Potential sun hours	291		294		369		401		454		459		
Total, worst case	11		1191		564		549		1120		918		
Sun reduction	0.36		0.40		0.47		0.54		0.58		0.63		
Oper. time red.	1.00		1.00		1.00		1.00		1.00		1.00		
Wind dir. red.	0.67		0.67		0.73		0.74		0.75		0.75		
Total reduction	0.24		0.27		0.34		0.40		0.43		0.47		
Total, real	3		319		192		218		482		429		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

SHADOW - Calendar

Shadow receptor: 1211 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2324)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

July		August		September		October		November		December	
1	05:34	06:15 (T26)	06:00	06:26 (T26)	06:34	07:36 (T28)	07:07	07:44	08:09 (T27)	07:22	
	20:55	26 06:56 (T26)	20:35	23 06:57 (T26)	19:48	12 07:50 (T28)	18:54	18:04	37 08:49 (T27)	16:37	
2	05:35	06:16 (T26)	06:01	06:26 (T26)	06:35	07:28 (T28)	07:08	07:45	08:10 (T27)	07:23	
	20:55	34 06:57 (T26)	20:34	17 06:55 (T26)	19:46	20 07:52 (T28)	18:52	18:03	35 08:47 (T27)	16:37	
3	05:35	06:15 (T26)	06:02	06:27 (T26)	06:36	07:29 (T28)	07:09	07:47	08:11 (T27)	07:24	
	20:55	42 06:57 (T26)	20:33	21 06:56 (T26)	19:44	12 07:50 (T28)	18:51	18:02	32 08:47 (T27)	16:36	
4	05:36	06:16 (T26)	06:03	06:28 (T26)	06:37	07:25 (T28)	07:10	07:48	08:13 (T27)	07:25	
	20:54	42 06:58 (T26)	20:32	21 06:49 (T31)	19:43	24 07:55 (T28)	18:49	18:00	34 08:47 (T27)	16:36	
5	05:36	06:15 (T26)	06:04	06:32 (T26)	06:38	07:22 (T28)	07:11	07:49	08:14 (T27)	07:26	
	20:54	27 06:58 (T26)	20:30	20 06:57 (T31)	19:41	19 07:56 (T28)	18:47	17:59	32 08:46 (T27)	16:36	
6	05:37	06:15 (T26)	06:05	06:31 (T26)	06:39	07:21 (T28)	07:12	06:51	07:15 (T27)	07:27	
	20:54	18 06:58 (T26)	20:29	15 06:58 (T31)	19:39	21 07:57 (T28)	18:45	16:58	27 07:45 (T27)	16:36	
7	05:38	06:16 (T26)	06:06	06:33 (T26)	06:40	07:19 (T28)	07:14	06:52	07:17 (T27)	07:28	
	20:54	30 06:56 (T26)	20:28	21 06:58 (T31)	19:37	22 07:53 (T28)	18:44	16:57	27 07:44 (T27)	16:35	
8	05:38	06:16 (T26)	06:07	06:34 (T31)	06:41	07:18 (T28)	07:15	06:53	07:18 (T27)	07:29	
	20:53	18 06:57 (T26)	20:27	16 06:59 (T31)	19:36	25 07:58 (T28)	18:42	16:55	23 07:43 (T27)	16:35	
9	05:39	06:16 (T26)	06:08	06:34 (T31)	06:42	07:19 (T28)	07:16	06:54	07:20 (T27)	07:30	
	20:53	41 06:59 (T26)	20:25	13 06:59 (T31)	19:34	24 07:58 (T28)	18:40	16:54	20 07:40 (T27)	16:35	
10	05:40	06:15 (T26)	06:09	06:35 (T31)	06:43	07:21 (T28)	07:17	06:56	07:21 (T27)	07:31	
	20:52	35 06:57 (T26)	20:24	14 06:54 (T31)	19:32	32 07:58 (T28)	18:38	16:53	19 07:40 (T27)	16:35	
11	05:40	06:15 (T26)	06:10	06:39 (T31)	06:45	07:17 (T28)	07:18	06:57	07:22 (T27)	07:32	
	20:52	30 06:59 (T26)	20:23	14 06:59 (T31)	19:30	33 07:59 (T28)	18:37	1 08:31 (T27)	14 07:37 (T27)	16:35	
12	05:41	06:16 (T26)	06:12	06:37 (T31)	06:46	07:16 (T28)	07:19	08:22 (T27)	06:58	07:32	
	20:52	19 07:00 (T26)	20:21	16 06:59 (T31)	19:29	25 07:54 (T28)	18:35	16 08:38 (T27)	16:51	11 07:35 (T27)	16:35
13	05:42	06:22 (T26)	06:13	06:43 (T31)	06:47	07:15 (T28)	07:21	08:19 (T27)	07:00	07:33	
	20:51	27 07:00 (T26)	20:20	14 06:59 (T31)	19:27	30 07:59 (T28)	18:33	22 08:41 (T27)	16:50	16:35	
14	05:43	06:17 (T26)	06:14	06:38 (T31)	06:48	07:15 (T28)	07:22	07:58 (T30)	07:01	07:34	
	20:51	32 06:58 (T26)	20:18	11 06:59 (T31)	19:25	32 07:58 (T28)	18:32	37 08:43 (T27)	16:49	16:36	
15	05:44	06:17 (T26)	06:15	06:39 (T31)	06:49	07:14 (T28)	07:23	07:55 (T30)	07:02	07:35	
	20:50	34 07:00 (T26)	20:17	19 06:58 (T31)	19:23	31 07:58 (T28)	18:30	47 08:45 (T27)	16:48	16:36	
16	05:44	06:19 (T26)	06:16	06:40 (T31)	06:50	07:14 (T28)	07:24	07:53 (T30)	07:03	07:36	
	20:49	20 07:01 (T26)	20:15	17 06:57 (T31)	19:21	28 07:57 (T28)	18:28	53 08:46 (T27)	16:47	16:36	
17	05:45	06:17 (T26)	06:17	06:41 (T31)	06:51	07:14 (T28)	07:25	07:53 (T30)	07:05	07:36	
	20:49	25 07:01 (T26)	20:14	12 06:55 (T31)	19:19	31 07:56 (T28)	18:27	54 08:47 (T27)	16:46	16:36	
18	05:46	06:16 (T26)	06:18	06:42 (T31)	06:52	07:15 (T28)	07:27	07:51 (T30)	07:06	07:37	
	20:48	22 07:01 (T26)	20:12	7 06:55 (T31)	19:18	25 07:56 (T28)	18:25	57 08:48 (T27)	16:45	16:37	
19	05:47	06:17 (T26)	06:19	06:43 (T31)	06:53	07:16 (T28)	07:28	07:51 (T30)	07:07	07:38	
	20:47	18 07:00 (T26)	20:11	10 06:53 (T31)	19:16	25 07:55 (T28)	18:23	57 08:48 (T27)	16:44	16:37	
20	05:48	06:16 (T26)	06:20	06:44 (T31)	06:54	07:17 (T28)	07:29	07:52 (T30)	07:08	07:38	
	20:47	21 07:00 (T26)	20:09	8 06:53 (T31)	19:14	26 07:50 (T28)	18:22	57 08:49 (T27)	16:43	16:37	
21	05:49	06:16 (T26)	06:21	06:46 (T31)	06:56	07:18 (T28)	07:30	07:54 (T30)	07:10	07:39	
	20:46	35 07:00 (T26)	20:08	4 06:52 (T31)	19:12	25 07:52 (T28)	18:20	56 08:50 (T27)	16:43	16:38	
22	05:50	06:16 (T26)	06:23		06:57	07:19 (T28)	07:32	07:55 (T30)	07:11	07:39	
	20:45	28 07:01 (T26)	20:06		19:10	25 07:51 (T28)	18:19	55 08:50 (T27)	16:42	16:38	
23	05:51	06:29 (T26)	06:24		06:58	07:20 (T28)	07:33	07:56 (T30)	07:12	07:40	
	20:44	20 06:52 (T26)	20:05		19:09	19 07:49 (T28)	18:17	54 08:50 (T27)	16:41	16:39	
24	05:52	06:17 (T26)	06:25		06:59	07:26 (T28)	07:34	07:58 (T30)	07:13	07:40	
	20:43	35 06:58 (T26)	20:03		19:07	19 07:48 (T28)	18:16	53 08:51 (T27)	16:41	16:39	
25	05:53	06:18 (T26)	06:26		07:00	07:23 (T28)	07:35	07:59 (T30)	07:15	07:41	
	20:42	20 07:01 (T26)	20:01		19:05	19 07:46 (T28)	18:14	52 08:51 (T27)	16:40	16:40	
26	05:54	06:19 (T26)	06:27		07:01	07:24 (T28)	07:37	08:00 (T30)	07:16	07:41	
	20:41	26 07:00 (T26)	20:00		19:03	13 07:43 (T28)	18:13	50 08:50 (T27)	16:39	16:40	
27	05:55	06:23 (T26)	06:28		07:02	07:25 (T28)	07:38	08:02 (T30)	07:17	07:42	
	20:40	16 06:57 (T26)	19:56		19:01	10 07:38 (T28)	18:11	49 08:51 (T27)	16:39	16:41	
28	05:56	06:21 (T26)	06:29		07:03		07:39	08:03 (T30)	07:18	07:42	
	20:39	31 07:00 (T26)	19:55		19:00		18:10	47 08:50 (T27)	16:38	16:42	
29	05:57	06:22 (T26)	06:30		07:04		07:40	08:04 (T30)	07:19	07:42	
	20:38	33 07:00 (T26)	19:53		18:58		18:08	44 08:50 (T27)	16:38	16:43	
30	05:58	06:23 (T26)	06:31		07:06		07:42	08:06 (T27)	07:20	07:42	
	20:37	31 06:59 (T26)	19:51		18:56		18:07	43 08:50 (T27)	16:37	16:43	
31	05:59	06:24 (T26)	06:32		07:36 (T28)		07:43	08:10 (T27)		07:43	
	20:36	23 06:54 (T26)	19:50	6	07:47 (T28)		18:06	39 08:49 (T27)		16:44	
Potential sun hours	466		433		376		343		293		281
Total, worst case	859		319		627		943		311		
Sun reduction	0.67		0.63		0.56		0.44		0.25		
Oper. time red.	1.00		1.00		1.00		1.00		1.00		
Wind dir. red.	0.75		0.75		0.74		0.68		0.67		
Total reduction	0.50		0.47		0.41		0.30		0.17		
Total, real	426		149		258		278		52		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR
217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 1227 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2326)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

January			February			March			April			May			June		
1	07:43	08:09 (T28)	07:28	08:11 (T28)	06:49	07:11 (T26)	06:55	07:36 (T31)	06:06	05:34							
	16:45	30	08:39 (T28)	17:21	40	08:51 (T28)	17:58	33	07:44 (T26)	19:36	13	07:49 (T31)	20:10	20:42			
2	07:43	08:09 (T28)	07:27	08:12 (T28)	06:47	07:10 (T26)	06:53		07:40 (T31)	06:05							
	16:46	30	08:39 (T28)	17:23	39	08:51 (T28)	18:00	36	07:46 (T26)	19:37	3	07:43 (T31)	20:11	20:43			
3	07:43	08:09 (T28)	07:26	08:13 (T28)	06:46	07:08 (T26)	06:51			06:03							
	16:47	31	08:40 (T28)	17:24	37	08:50 (T28)	18:01	39	07:47 (T26)	19:38			20:12	20:44			
4	07:43	08:09 (T28)	07:24	08:15 (T28)	06:44	07:06 (T26)	06:50			06:02							
	16:48	32	08:41 (T28)	17:25	34	08:49 (T28)	18:02	42	07:48 (T26)	19:39			20:13	20:45			
5	07:43	08:09 (T28)	07:23	08:16 (T28)	06:42	07:05 (T26)	06:48			06:00							
	16:49	33	08:42 (T28)	17:27	33	08:49 (T28)	18:03	45	07:50 (T26)	19:41			20:14	20:45			
6	07:43	08:09 (T28)	07:22	08:17 (T28)	06:41	07:03 (T26)	06:46			05:59							
	16:50	34	08:43 (T28)	17:28	30	08:47 (T28)	18:05	47	07:50 (T26)	19:42			20:15	20:46			
7	07:43	08:09 (T28)	07:21	08:18 (T28)	06:39	07:02 (T26)	06:44			05:58							
	16:51	35	08:44 (T28)	17:29	27	08:45 (T28)	18:06	48	07:50 (T26)	19:43			20:17	20:47			
8	07:43	08:08 (T28)	07:20	08:21 (T28)	06:37	07:01 (T26)	06:43			05:57							
	16:52	36	08:44 (T28)	17:31	23	08:44 (T28)	18:07	50	07:51 (T26)	19:44			20:18	20:48			
9	07:42	08:08 (T28)	07:18	08:23 (T28)	06:36	07:01 (T26)	06:41			05:55							
	16:53	37	08:45 (T28)	17:32	19	08:42 (T28)	18:08	51	07:52 (T26)	19:45			20:19	20:48			
10	07:42	08:08 (T28)	07:17	08:26 (T28)	06:34	07:00 (T26)	06:39			05:54							
	16:54	38	08:46 (T28)	17:33	12	08:38 (T28)	18:10	52	07:52 (T26)	19:46			20:20	20:49			
11	07:42	08:07 (T28)	07:16		06:32	06:59 (T26)	06:38			05:53							
	16:55	39	08:46 (T28)	17:35		18:11	52	07:51 (T26)	19:48	20:21				20:49			
12	07:42	08:07 (T28)	07:15		06:30	06:58 (T26)	06:36			05:52							
	16:56	40	08:47 (T28)	17:36		18:12	53	07:51 (T26)	19:49	20:22				20:50			
13	07:41	08:07 (T28)	07:13		07:29	07:59 (T26)	06:34			05:51							
	16:57	41	08:48 (T28)	17:37		19:13	53	08:52 (T26)	19:50	20:23				20:51			
14	07:41	08:06 (T28)	07:12		07:27	07:58 (T26)	06:32			05:49							
	16:58	42	08:48 (T28)	17:39		19:14	53	08:51 (T26)	19:51	20:24				20:51			
15	07:41	08:06 (T28)	07:10		07:25	07:47 (T31)	06:31			05:48							
	17:00	43	08:49 (T28)	17:40		19:16	61	08:51 (T26)	19:52	20:26				20:52			
16	07:40	08:06 (T28)	07:09		07:23	07:45 (T31)	06:29			05:47							
	17:01	43	08:49 (T28)	17:41		19:17	64	08:50 (T26)	19:53	20:27				20:52			
17	07:40	08:06 (T28)	07:08		07:22	07:43 (T31)	06:28			05:46							
	17:02	43	08:49 (T28)	17:43		19:18	66	08:49 (T26)	19:55	20:28				20:52			
18	07:39	08:06 (T28)	07:06		07:20	07:42 (T31)	06:26			05:45							
	17:03	44	08:50 (T28)	17:44		19:19	67	08:49 (T26)	19:56	20:29				20:53			
19	07:38	08:06 (T28)	07:05		07:18	07:40 (T31)	06:24			05:44							
	17:04	45	08:51 (T28)	17:45		19:20	68	08:48 (T26)	19:57	20:30				20:53			
20	07:38	08:06 (T28)	07:03		07:16	07:38 (T31)	06:23			05:43							
	17:06	45	08:51 (T28)	17:47		19:22	69	08:47 (T26)	19:58	20:31				20:53			
21	07:37	08:07 (T28)	07:02		07:15	07:36 (T31)	06:21			05:42							
	17:07	45	08:52 (T28)	17:48		19:23	70	08:46 (T26)	19:59	20:32				20:54			
22	07:36	08:07 (T28)	07:00		07:13	07:35 (T31)	06:19			05:41							
	17:08	45	08:52 (T28)	17:49		19:24	71	08:46 (T26)	20:00	20:33				20:54			
23	07:36	08:07 (T28)	06:59		07:11	07:33 (T31)	06:18			05:41							
	17:09	45	08:52 (T28)	17:51		19:25	71	08:44 (T26)	20:00	20:34				20:54			
24	07:35	08:07 (T28)	06:57		07:09	07:31 (T31)	06:16			05:40							
	17:11	45	08:52 (T28)	17:52		19:26	71	08:42 (T26)	20:02	20:35				20:54			
25	07:34	08:08 (T28)	06:55		07:07	07:29 (T31)	06:15			05:39							
	17:12	44	08:52 (T28)	17:53		19:28	71	08:41 (T26)	20:03	20:36				20:55			
26	07:33	08:08 (T28)	06:54		07:06	07:29 (T31)	06:13			05:38							
	17:13	44	08:52 (T28)	17:55	17	07:36 (T26)	19:29	67	08:39 (T26)	20:04				20:57			
27	07:32	08:08 (T28)	06:52		07:04	07:30 (T31)	06:12			05:38							
	17:15	44	08:52 (T28)	17:56	24	07:40 (T26)	19:30	62	08:37 (T26)	20:05				20:58			
28	07:32	08:10 (T28)	06:51		07:02	07:30 (T31)	06:10			05:37							
	17:16	43	08:53 (T28)	17:57	30	07:43 (T26)	19:31	57	08:35 (T26)	20:06				20:59			
29	07:31	08:10 (T28)			07:00	07:31 (T31)	06:09			05:36							
	17:17	43	08:53 (T28)		19:32	50	08:32 (T26)	20:07		20:40				20:55			
30	07:30	08:10 (T28)			06:59	07:32 (T31)	06:07			05:36							
	17:19	42	08:52 (T28)		19:33	40	08:28 (T26)	20:09		20:40				20:55			
31	07:29	08:11 (T28)			06:57	07:33 (T31)				05:35							
	17:20	40	08:51 (T28)		19:35	26	08:22 (T26)			20:41							
Potential sun hours	291		294		369		401			454			459				
Total, worst case	1241		365		1705		16										
Sun reduction	0.36		0.40		0.47		0.54										
Oper. time red.	1.00		1.00		1.00		1.00										
Wind dir. red.	0.61		0.63		0.72		0.74										
Total reduction	0.22		0.25		0.33		0.39										
Total, real	267		90		562		6										

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR
217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 1227 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2326)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

	July	August	September	October	November	December
1	05:34	06:00	06:34	07:07	07:37 (T26)	07:44
	20:55	20:35	19:48	18:54	08:30 (T26)	18:04
2	05:35	06:01	06:35	07:08	07:38 (T26)	07:45
	20:55	20:34	19:46	18:52	08:31 (T26)	18:03
3	05:35	06:02	06:36	07:09	07:38 (T26)	07:47
	20:55	20:33	19:44	18:51	08:30 (T26)	18:02
4	05:36	06:03	06:37	07:10	07:37 (T26)	07:48
	20:54	20:32	19:43	18:49	08:29 (T26)	18:00
5	05:36	06:04	06:38	07:11	07:37 (T26)	07:49
	20:54	20:30	19:41	18:47	08:29 (T26)	17:59
6	05:37	06:05	06:39	07:12	07:37 (T26)	06:51
	20:54	20:29	19:39	18:45	08:28 (T26)	16:58
7	05:38	06:06	06:40	07:14	07:37 (T26)	06:52
	20:54	20:28	19:37	18:44	08:26 (T26)	16:56
8	05:38	06:07	06:41	07:15	07:39 (T26)	06:53
	20:53	20:27	19:36	18:42	08:26 (T26)	16:55
9	05:39	06:08	06:42	07:16	07:39 (T26)	06:54
	20:53	20:25	19:34	18:40	08:25 (T26)	16:54
10	05:40	06:09	06:43	07:17	07:40 (T26)	06:56
	20:53	20:24	19:32	18:38	08:24 (T26)	16:53
11	05:40	06:10	06:45	07:18	07:41 (T26)	06:57
	20:52	20:23	19:30	18:37	08:22 (T26)	16:52
12	05:41	06:12	06:46	07:19	07:42 (T26)	06:58
	20:52	20:21	19:29	18:35	08:20 (T26)	16:51
13	05:42	06:13	06:47	07:21	07:44 (T26)	07:00
	20:51	20:20	19:27	18:33	08:19 (T26)	16:50
14	05:43	06:14	06:48	07:22	07:45 (T26)	07:01
	20:51	20:18	19:25	18:32	08:17 (T26)	16:49
15	05:44	06:15	06:49	07:23	07:46 (T26)	07:02
	20:50	20:17	19:23	18:30	08:14 (T26)	16:48
16	05:44	06:16	06:50	07:24	07:49 (T26)	07:03
	20:49	20:15	19:21	18:28	08:11 (T26)	16:47
17	05:45	06:17	06:51	07:25	07:53 (T26)	07:05
	20:49	20:14	19:19	18:27	08:07 (T26)	16:46
18	05:46	06:18	06:52	07:27	07:06	07:42 (T28)
	20:48	20:12	19:18	18:25	16:45	08:26 (T28)
19	05:47	06:19	06:53	07:28	07:07	07:41 (T28)
	20:47	20:11	19:16	18:23	16:44	08:26 (T28)
20	05:48	06:20	06:54	07:29	07:08	07:42 (T28)
	20:47	20:09	19:14	18:22	16:43	08:27 (T28)
21	05:49	06:21	06:56	07:30	07:10	07:42 (T28)
	20:46	20:08	19:12	18:20	16:43	08:27 (T28)
22	05:50	06:23	06:57	07:32	07:11	07:42 (T28)
	20:45	20:06	19:10	18:19	16:42	08:27 (T28)
23	05:51	06:24	06:58	07:33	07:12	07:43 (T28)
	20:44	20:05	19:09	18:17	16:41	08:28 (T28)
24	05:52	06:25	06:59	07:34	07:13	07:43 (T28)
	20:43	20:03	19:07	18:16	16:41	08:28 (T28)
25	05:53	06:26	07:00	07:35	07:15	07:43 (T28)
	20:42	20:01	19:05	18:14	16:40	08:28 (T28)
26	05:54	06:27	07:01	07:37	07:16	07:45 (T28)
	20:41	20:00	19:03	18:13	16:39	08:28 (T28)
27	05:55	06:28	07:02	07:38	07:17	07:45 (T28)
	20:40	19:56	19:01	18:11	16:39	08:28 (T28)
28	05:56	06:29	07:03	07:39	07:18	07:45 (T28)
	20:39	19:55	19:00	18:10	16:38	08:28 (T28)
29	05:57	06:30	07:04	07:40	07:19	07:46 (T28)
	20:38	19:53	18:58	18:08	16:38	08:28 (T28)
30	05:58	06:31	07:06	07:42	07:20	07:47 (T28)
	20:37	19:51	18:56	18:07	16:37	08:28 (T28)
31	05:59	06:32		07:43		07:43
	20:36	19:50		18:06		16:44
Potential sun hours	467	433	376	343	293	281
Total, worst case			1111	709	1125	928
Sun reduction			0.56	0.44	0.25	0.24
Oper. time red.			1.00	1.00	1.00	1.00
Wind dir. red.			0.72	0.71	0.61	0.61
Total reduction			0.39	0.31	0.15	0.14
Total, real			439	217	168	133

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR
217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 1232 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2751)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

		January		February		March		April		May		June		July		August		September		October		November		December			
1	07:43		08:21 (T31) 07:28		08:28 (T31) 06:49		06:55		06:06		05:34		05:34		06:00		06:34		07:07				07:44		09:03 (T31) 07:22		08:05 (T31)
	16:45	144	14:44 (T26) 17:21	74	09:42 (T31) 17:58		19:36		20:10		20:42		20:55		20:35		19:48		18:54				18:04	63	10:06 (T31) 16:37	131	14:27 (T26)
2	07:43		08:21 (T31) 07:27		08:28 (T31) 06:47		06:53		06:05		05:34		05:35		06:01		06:35		07:08				07:45		09:02 (T31) 07:23		08:06 (T31)
	16:46	144	14:44 (T26) 17:23	74	09:42 (T31) 18:00		19:37		20:11		20:43		20:55		20:34		19:46		18:52				18:03	66	10:08 (T31) 16:37	132	14:27 (T26)
3	07:43		08:21 (T31) 07:25		08:29 (T31) 06:46		06:51		06:03		05:33		05:35		06:02		06:36		07:09				07:47		09:01 (T31) 07:24		08:06 (T31)
	16:47	145	14:45 (T26) 17:24	73	09:42 (T31) 18:01		19:38		20:12		20:44		20:54		20:33		19:44		18:51				18:01	67	10:08 (T31) 16:36	130	14:28 (T26)
4	07:43		08:22 (T31) 07:24		08:29 (T31) 06:44		06:50		06:02		05:33		05:36		06:03		06:37		07:10				07:48		09:01 (T31) 07:25		08:07 (T31)
	16:48	144	14:45 (T26) 17:25	73	09:42 (T31) 18:02		19:39		20:13		20:45		20:54		20:32		19:43		18:49				18:00	69	10:10 (T31) 16:36	136	14:29 (T26)
5	07:43		08:22 (T31) 07:23		08:30 (T31) 06:42		06:48		06:00		05:32		05:36		06:04		06:38		07:11				07:49		09:01 (T31) 07:26		08:07 (T31)
	16:49	143	14:45 (T26) 17:27	72	09:42 (T31) 18:03		19:40		20:14		20:45		20:54		20:30		19:41		18:47				17:59	69	10:10 (T31) 16:36	135	14:30 (T26)
6	07:43		08:22 (T31) 07:22		08:30 (T31) 06:41		06:46		05:59		05:32		05:37		06:05		06:39		07:12				06:51		08:00 (T31) 07:27		08:08 (T31)
	16:50	143	14:45 (T26) 17:28	70	09:40 (T31) 18:05		19:42		20:15		20:46		20:54		20:29		19:39		18:45				16:58	70	09:10 (T31) 16:36	137	14:31 (T26)
7	07:43		08:23 (T31) 07:21		08:31 (T31) 06:39		06:44		05:58		05:32		05:37		06:06		06:40		07:14				06:52		08:00 (T31) 07:28		08:08 (T31)
	16:51	143	14:46 (T26) 17:29	69	09:40 (T31) 18:06		19:43		20:17		20:47		20:54		20:28		19:37		18:44				16:56	71	09:11 (T31) 16:35	128	14:31 (T26)
8	07:43		08:22 (T31) 07:20		08:32 (T31) 06:37		06:43		05:57		05:31		05:38		06:07		06:41		07:15				06:53		07:59 (T31) 07:29		08:09 (T31)
	16:52	143	14:45 (T26) 17:31	68	09:40 (T31) 18:07		19:44		20:18		20:47		20:53		20:27		19:36		18:42				16:55	73	09:12 (T31) 16:35	136	14:32 (T26)
9	07:42		08:23 (T31) 07:18		08:33 (T31) 06:36		06:41		05:55		05:31		05:39		06:08		06:42		07:16				06:54		08:00 (T31) 07:30		08:10 (T31)
	16:53	142	14:45 (T26) 17:32	66	09:39 (T31) 18:08		19:45		20:19		20:48		20:53		20:25		19:34		18:40				16:54	73	09:13 (T31) 16:35	138	14:33 (T26)
10	07:42		08:23 (T31) 07:17		08:33 (T31) 06:34		06:39		05:54		05:31		05:40		06:09		06:43		07:17				06:56		07:59 (T31) 07:31		08:10 (T31)
	16:54	141	14:45 (T26) 17:33	65	09:38 (T31) 18:10		19:46		20:20		20:49		20:52		20:24		19:32		18:38				16:53	74	09:13 (T31) 16:35	137	14:34 (T26)
11	07:42		08:23 (T31) 07:16		08:34 (T31) 06:32		06:38		05:53		05:31		05:40		06:10		06:44		07:18				06:57		07:59 (T31) 07:32		08:11 (T31)
	16:55	140	14:44 (T26) 17:35	63	09:37 (T31) 18:11		19:47		20:21		20:49		20:52		20:22		19:30		18:37				16:52	74	09:13 (T31) 16:35	137	14:34 (T26)
12	07:42		08:23 (T31) 07:14		08:34 (T31) 06:30		06:36		05:52		05:31		05:41		06:12		06:46		07:19				06:58		07:59 (T31) 07:32		08:12 (T31)
	16:56	140	14:45 (T26) 17:36	61	09:35 (T31) 18:12		19:49		20:22		20:50		20:52		20:21		19:28		18:35				16:51	75	09:14 (T31) 16:35	129	14:35 (T26)
13	07:41		08:23 (T31) 07:13		08:36 (T31) 07:29		06:34		05:51		05:30		05:42		06:13		06:47		07:21				07:00		07:59 (T31) 07:33		08:13 (T31)
	16:57	139	14:44 (T26) 17:37	59	09:35 (T31) 19:13		19:50		20:23		20:50		20:51		20:20		19:27		18:33				16:50	75	09:14 (T31) 16:35	136	14:36 (T26)
14	07:41		08:24 (T31) 07:12		08:37 (T31) 07:27		06:32		05:49		05:30		05:43		06:14		06:48		07:22				07:01		07:59 (T31) 07:34		08:13 (T31)
	16:58	137	14:44 (T26) 17:39	57	09:34 (T31) 19:14		19:51		20:24		20:51		20:51		20:18		19:25		18:32				16:49	76	09:15 (T31) 16:36	142	14:36 (T26)
15	07:40		08:23 (T31) 07:10		08:38 (T31) 07:25		06:31		05:48		05:30		05:43		06:15		06:49		07:23				07:02		07:59 (T31) 07:35		08:13 (T31)
	17:00	136	14:43 (T26) 17:40	54	09:32 (T31) 19:16		19:52		20:25		20:51		20:50		20:17		19:23		18:30				16:48	76	09:15 (T31) 16:36	134	14:37 (T26)
16	07:40		08:24 (T31) 07:09		08:39 (T31) 07:23		06:29		05:47		05:30		05:44		06:16		06:50		07:24				07:03		07:59 (T31) 07:36		08:14 (T31)
	17:01	134	14:43 (T26) 17:41	52	09:31 (T31) 19:17		19:53		20:27		20:52		20:49		20:15		19:21		18:28				16:47	76	09:15 (T31) 16:36	136	14:38 (T26)
17	07:39		08:24 (T31) 07:08		08:40 (T31) 07:22		06:27		05:46		05:30		05:45		06:17		06:51		07:25				07:05		08:00 (T31) 07:36		08:14 (T31)
	17:02	132	14:42 (T26) 17:43	48	09:28 (T31) 19:18		19:55		20:28		20:52		20:49		20:14		19:19		18:27				16:46	94	14:01 (T26) 16:36	138	14:37 (T26)
18	07:39		08:25 (T31) 07:06		08:42 (T31) 07:20		06:26		05:45		05:30		05:46		06:18		06:52		07:27				07:06		07:59 (T31) 07:37		08:15 (T31)
	17:03	130	14:42 (T26) 17:44	45	09:27 (T31) 19:19		19:56		20:29		20:53		20:48		20:12		19:18		18:25				16:45	104	14:05 (T26) 16:37	133	14:38 (T26)
19	07:38		08:24 (T31) 07:05		08:44 (T31) 07:18		06:24		05:44		05:30		05:47		06:19		06:53		07:28				07:07		07:59 (T31) 07:38		08:16 (T31)
	17:04	128	14:41 (T26) 17:45	40	09:24 (T31) 19:20		19:57		20:30		20:53		20:47		20:11		19:16		18:23				16:44	110	14:08 (T26) 16:37	131	14:39 (T26)
20	07:38		08:24 (T31) 07:03		08:47 (T31) 07:16		06:23		05:43		05:30		05:48		06:20		06:54		07:29				07:08		08:00 (T31) 07:38		08:16 (T31)
	17:06	126	14:40 (T26) 17:47	35	09:22 (T31) 19:22		19:58		20:31		20:53		20:47		20:09		19:14		18:22		13	09:40 (T31) 16:43	115	14:11 (T26) 16:37	141	14:39 (T26)	
21	07:37		08:25 (T31) 07:02		08:49 (T31) 07:14		06:21		05:42		05:31		05:49		06:21		06:55		07:30				07:09		08:00 (T31) 07:39		08:17 (T31)
	17:07	122	14:39 (T26) 17:48	29	09:18 (T31) 19:23		19:59		20:32		20:54		20:46		20:08		19:12		18:20		24	09:46 (T31) 16:43	117	14:13 (T26) 16:38	136	14:40 (T26)	
22	07:36		08:25 (T31) 07:00		08:53 (T31) 07:13		06:19		05:41		05:31		05:50		06:23		06:57		07:31				07:10		08:00 (T31) 07:39		08:17 (T31)
	17:08	119	14:38 (T26) 17:49	21	09:14 (T31) 19:24		20:00		20:33		20:54		20:45		20:06		19:10		18:19		31	09:50 (T31) 16:42	113	14:14 (T26) 16:38	138	14:40 (T26)	
23	07:36		08:25 (T31) 06:59		09:00 (T31) 07:11		06:18		05:41		05:31		05:51		06:24		06:58		07:33				07:11		08:01 (T31) 07:40		08:18 (T31)
	17:09	115	14:36 (T26) 17:																								

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR
217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 1234 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2752)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
0.36 0.40 0.47 0.54 0.58 0.63 0.67 0.63 0.56 0.44 0.25 0.24

Operational time

N NNE NE ENE E ESE SE SSE S SSW SW WSW W WNW NW NNW Sum
245 195 263 395 451 393 363 382 412 348 736 1,617 1,224 837 579 320 8,760

		January		February		March		April		May		June		July		August		September		October		November		December	
1	07:43	08:33 (T31)	07:28	08:45 (T31)	06:49	06:55	06:06	05:34	05:34	06:00	06:34	07:07		07:44		09:23 (T31)	07:22		08:19 (T31)						
	16:45	15:04 (T26)	17:21	15:06 (T26)	17:21	75	10:00 (T31)	17:58	19:36	20:10	20:42	20:55	20:35	19:48	18:54	18:04	57	10:20 (T31)	16:37	140	14:48 (T26)				
2	07:43	08:34 (T31)	07:27	08:46 (T31)	06:47	06:53	06:05	05:34	05:35	06:01	06:35	07:08		07:45		09:23 (T31)	07:23		08:19 (T31)						
	16:46	15:04 (T26)	17:23	73	09:59 (T31)	18:00	19:37	20:11	20:43	20:55	20:34	19:46	18:52	18:03	59	10:22 (T31)	16:37	140	14:48 (T26)						
3	07:43	08:34 (T31)	07:25	08:47 (T31)	06:46	06:51	06:03	05:33	05:35	06:02	06:36	07:09		07:47		09:21 (T31)	07:24		08:20 (T31)						
	16:47	15:04 (T26)	17:24	72	09:59 (T31)	18:01	19:38	20:12	20:44	20:54	20:33	19:44	18:51	18:01	62	10:23 (T31)	16:36	136	14:49 (T26)						
4	07:43	08:34 (T31)	07:24	08:48 (T31)	06:44	06:50	06:02	05:33	05:36	06:03	06:37	07:10		07:48		09:21 (T31)	07:25		08:20 (T31)						
	16:48	15:05 (T26)	17:25	70	09:58 (T31)	18:02	19:39	20:13	20:45	20:54	20:32	19:43	18:49	18:00	64	10:25 (T31)	16:36	146	14:49 (T26)						
5	07:43	08:35 (T31)	07:23	08:49 (T31)	06:42	06:48	06:00	05:32	05:36	06:04	06:38	07:11		07:49		09:20 (T31)	07:26		08:20 (T31)						
	16:49	15:05 (T26)	17:27	69	09:58 (T31)	18:03	19:40	20:14	20:45	20:54	20:30	19:41	18:47	17:59	65	10:25 (T31)	16:36	142	14:50 (T26)						
6	07:43	08:35 (T31)	07:22	08:49 (T31)	06:41	06:46	05:59	05:32	05:37	06:05	06:39	07:12		07:50		09:19 (T31)	07:27		08:21 (T31)						
	16:50	15:05 (T26)	17:28	67	09:56 (T31)	18:05	19:42	20:15	20:46	20:54	20:29	19:39	18:45	16:58	67	09:26 (T31)	16:36	146	14:51 (T26)						
7	07:43	08:36 (T31)	07:21	08:50 (T31)	06:39	06:44	05:58	05:32	05:37	06:06	06:40	07:14		07:51		09:19 (T31)	07:28		08:21 (T31)						
	16:51	15:06 (T26)	17:29	65	09:55 (T31)	18:06	19:43	20:17	20:47	20:54	20:28	19:37	18:44	16:56	69	09:28 (T31)	16:35	136	14:51 (T26)						
8	07:43	08:35 (T31)	07:20	08:51 (T31)	06:37	06:43	05:57	05:31	05:38	06:07	06:41	07:15		07:52		09:18 (T31)	07:29		08:22 (T31)						
	16:52	15:06 (T26)	17:31	64	09:55 (T31)	18:07	19:44	20:18	20:47	20:53	20:27	19:36	18:42	16:55	70	09:28 (T31)	16:35	145	14:52 (T26)						
9	07:42	08:36 (T31)	07:18	08:53 (T31)	06:36	06:41	05:55	05:31	05:39	06:08	06:42	07:16		07:53		09:18 (T31)	07:30		08:22 (T31)						
	16:53	15:06 (T26)	17:32	61	09:54 (T31)	18:08	19:45	20:19	20:48	20:53	20:25	19:34	18:40	16:54	72	09:30 (T31)	16:35	151	14:53 (T26)						
10	07:42	08:37 (T31)	07:17	08:53 (T31)	06:34	06:39	05:54	05:31	05:40	06:09	06:43	07:17		07:54		09:17 (T31)	07:31		08:23 (T31)						
	16:54	15:06 (T26)	17:33	59	09:52 (T31)	18:10	19:46	20:20	20:49	20:52	20:24	19:32	18:38	16:53	73	09:30 (T31)	16:35	145	14:53 (T26)						
11	07:42	08:36 (T31)	07:16	08:55 (T31)	06:32	06:38	05:53	05:31	05:40	06:10	06:44	07:18		07:55		09:16 (T31)	07:32		08:24 (T31)						
	16:55	15:06 (T26)	17:35	56	09:51 (T31)	18:11	19:47	20:21	20:49	20:52	20:22	19:30	18:37	16:52	75	09:31 (T31)	16:35	144	14:52 (T26)						
12	07:42	08:37 (T31)	07:14	08:55 (T31)	06:30	06:36	05:52	05:31	05:41	06:12	06:46	07:19		07:56		09:16 (T31)	07:32		08:24 (T31)						
	16:56	15:06 (T26)	17:36	53	09:48 (T31)	18:12	19:49	20:22	20:50	20:52	20:21	19:28	18:35	16:51	76	09:32 (T31)	16:35	138	14:55 (T26)						
13	07:41	08:37 (T31)	07:13	08:57 (T31)	07:29	06:34	05:51	05:30	05:42	06:13	06:47	07:21		07:57		09:16 (T31)	07:33		08:25 (T31)						
	16:57	15:04 (T26)	17:37	50	09:47 (T31)	19:13	19:50	20:23	20:50	20:51	20:20	19:27	18:33	16:50	76	09:32 (T31)	16:35	148	14:56 (T26)						
14	07:41	08:38 (T31)	07:12	08:59 (T31)	07:27	06:32	05:49	05:30	05:43	06:14	06:48	07:22		07:58		09:16 (T31)	07:34		08:25 (T31)						
	16:58	15:05 (T26)	17:39	46	09:45 (T31)	19:14	19:51	20:24	20:51	20:51	20:18	19:25	18:32	16:49	77	09:33 (T31)	16:36	152	14:56 (T26)						
15	07:40	08:37 (T31)	07:10	09:01 (T31)	07:25	06:31	05:48	05:30	05:43	06:15	06:49	07:23		07:59		09:16 (T31)	07:35		08:25 (T31)						
	17:00	15:04 (T26)	17:40	41	09:42 (T31)	19:16	19:52	20:25	20:51	20:50	20:17	19:23	18:30	16:48	97	14:21 (T26)	16:36	144	14:56 (T26)						
16	07:40	08:38 (T31)	07:09	09:04 (T31)	07:23	06:29	05:47	05:30	05:44	06:16	06:50	07:24		07:59		09:15 (T31)	07:36		08:26 (T31)						
	17:01	15:04 (T26)	17:41	36	09:40 (T31)	19:17	19:53	20:27	20:52	20:49	20:15	19:21	18:28	16:47	105	14:24 (T26)	16:36	146	14:57 (T26)						
17	07:39	08:38 (T31)	07:08	09:06 (T31)	07:22	06:27	05:46	05:30	05:45	06:17	06:51	07:25		07:59		09:16 (T31)	07:36		08:26 (T31)						
	17:02	15:03 (T26)	17:43	30	09:36 (T31)	19:18	19:54	20:28	20:52	20:49	20:14	19:19	18:27	16:46	112	14:28 (T26)	16:36	149	14:57 (T26)						
18	07:39	08:39 (T31)	07:06	09:10 (T31)	07:20	06:26	05:45	05:30	05:46	06:18	06:52	07:27		07:59		09:15 (T31)	07:37		08:27 (T31)						
	17:03	15:04 (T26)	17:44	22	09:32 (T31)	19:19	19:56	20:29	20:53	20:48	20:12	19:18	18:25	16:45	117	14:30 (T26)	16:37	147	14:58 (T26)						
19	07:38	08:39 (T31)	07:05	09:17 (T31)	07:18	06:24	05:44	05:30	05:47	06:19	06:53	07:28		07:59		09:15 (T31)	07:38		08:28 (T31)						
	17:04	15:03 (T26)	17:45	7	09:24 (T31)	19:20	19:57	20:30	20:53	20:47	20:11	19:16	18:23	16:44	122	14:32 (T26)	16:37	143	14:59 (T26)						
20	07:38	08:39 (T31)	07:03		07:16	06:23	05:43	05:30	05:48	06:20	06:54	07:29		07:59		09:16 (T31)	07:38		08:28 (T31)						
	17:06	15:02 (T26)	17:47		19:22	19:58	20:31	20:53	20:47	20:09	19:14	18:22		16:43	125	14:34 (T26)	16:37	149	14:59 (T26)						
21	07:37	08:40 (T31)	07:02		07:14	06:21	05:42	05:31	05:49	06:21	06:55	07:30		07:10		08:16 (T31)	07:39		08:29 (T31)						
	17:07	15:02 (T26)	17:48		19:23	19:59	20:32	20:54	20:46	20:08	19:12	18:20		16:43	128	14:35 (T26)	16:38	147	15:00 (T26)						
22	07:36	08:41 (T31)	07:00		07:13	06:19	05:41	05:31	05:50	06:23	06:57	07:31		07:11		08:16 (T31)	07:39		08:29 (T31)						
	17:08	15:00 (T26)	17:49		19:24	20:00	20:33	20:54	20:45	20:06	19:10	18:19		16:42	123	14:37 (T26)	16:38	149	15:00 (T26)						
23	07:36	08:41 (T31)	06:59		07:11	06:18	05:41	05:31	05:51	06:24	06:58	07:33		07:12		08:16 (T31)	07:40		08:30 (T31)						
	17:09	14:59 (T26)	17:51		19:25	20:00	20:34	20:54	20:44	20:05	19:09	18:17		16:41	133	14:39 (T26)	16:39	149	15:01 (T26)						
24	07:35	08:41 (T31)	06:57		07:09	06:16	05:40	05:31	05:52	06:25	06:59	07:34		07:13		08:16 (T31)	07:40		08:30 (T31)						
	17:11	14:58 (T26)	17:52		19:26	20:02	20:35	20:54	20:43	20:03	19:07	18:16		13	09:58 (T31)	16:41	128	14:40 (T26)	16:39	144	15:01 (T26)				
25	07:34	08:41 (T31)	06:55		07:07	06:15	05:39	05:32	05:53	06:26	07:00	07:35		09:39 (T31)	07:15	08:39 (T31)	07:41		08:31 (T31)						
	17:12	14:56 (T26)	17:53		19:28	20:03	20:36	20:55	20:42	20:01	19:05	18:14		24	10:03 (T31)	16:40									

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR
217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 1235 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2327)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

January			February			March			April			May			June		
1	07:43	14:13 (T31)	07:28	14:27 (T31)	06:49	16:51 (T26)	06:55	06:06	05:34								
	16:45	109	16:02 (T28)	17:21	102	16:58 (T26)	17:58	4	16:55 (T26)	19:36	20:10	20:42					
2	07:43	14:13 (T31)	07:27	14:28 (T31)	06:47		06:53	06:04	05:34								
	16:46	109	16:02 (T28)	17:23	104	17:00 (T26)	18:00		19:37	20:11	20:43						
3	07:43	14:14 (T31)	07:25	14:29 (T31)	06:46		06:51	06:03	05:33								
	16:47	108	16:02 (T28)	17:24	104	17:01 (T26)	18:01		19:38	20:12	20:44						
4	07:43	14:14 (T31)	07:24	14:30 (T31)	06:44		06:50	06:02	05:33								
	16:48	108	16:02 (T28)	17:25	106	17:03 (T26)	18:02		19:39	20:13	20:45						
5	07:43	14:15 (T31)	07:23	14:31 (T31)	06:42		06:48	06:00	05:32								
	16:49	107	16:02 (T28)	17:27	108	17:05 (T26)	18:03		19:40	20:14	20:45						
6	07:43	14:15 (T31)	07:22	14:31 (T31)	06:41		06:46	05:59	05:32								
	16:50	108	16:03 (T28)	17:28	109	17:05 (T26)	18:05		19:42	20:15	20:46						
7	07:43	14:15 (T31)	07:21	14:32 (T31)	06:39		06:44	05:58	05:32								
	16:51	107	16:02 (T28)	17:29	109	17:07 (T26)	18:06		19:43	20:17	20:47						
8	07:43	14:15 (T31)	07:20	14:34 (T31)	06:37		06:43	05:56	05:31								
	16:52	107	16:02 (T28)	17:31	110	17:09 (T26)	18:07		19:44	20:18	20:47						
9	07:42	14:16 (T31)	07:18	14:35 (T31)	06:36		06:41	05:55	05:31								
	16:53	106	16:02 (T28)	17:32	110	17:11 (T26)	18:08		19:45	20:19	20:48						
10	07:42	14:17 (T31)	07:17	14:36 (T31)	06:34		06:39	05:54	05:31								
	16:54	105	16:02 (T28)	17:33	109	17:11 (T26)	18:10		19:46	20:20	20:49						
11	07:42	14:16 (T31)	07:16	14:38 (T31)	06:32		06:37	05:53	05:31								
	16:55	105	16:01 (T28)	17:35	108	17:13 (T26)	18:11		19:47	20:21	20:49						
12	07:42	14:17 (T31)	07:14	14:39 (T31)	06:30		06:36	05:52	05:30								
	16:56	104	16:01 (T28)	17:36	108	17:14 (T26)	18:12		19:49	20:22	20:50						
13	07:41	14:17 (T31)	07:13	14:41 (T31)	07:29		06:34	05:50	05:30								
	16:57	102	15:59 (T28)	17:37	105	17:14 (T26)	19:13		19:50	20:23	20:50						
14	07:41	14:18 (T31)	07:12	14:43 (T31)	07:27		06:32	05:49	05:30								
	16:58	101	15:59 (T28)	17:39	102	17:15 (T26)	19:14		19:51	20:24	20:51						
15	07:40	14:18 (T31)	07:10	14:44 (T31)	07:25		06:31	05:48	05:30								
	16:59	99	15:57 (T28)	17:40	99	17:14 (T26)	19:16		19:52	20:25	20:51						
16	07:40	14:19 (T31)	07:09	14:47 (T31)	07:23		06:29	05:47	05:30								
	17:01	93	15:52 (T31)	17:41	96	17:15 (T26)	19:17		19:53	20:27	20:52						
17	07:39	14:18 (T31)	07:08	14:49 (T31)	07:22		06:27	05:46	05:30								
	17:02	94	15:52 (T31)	17:43	90	17:14 (T26)	19:18		19:54	20:28	20:52						
18	07:39	14:20 (T31)	07:06	14:52 (T31)	07:20		06:26	05:45	05:30								
	17:03	92	15:52 (T31)	17:44	85	17:14 (T26)	19:19		19:56	20:29	20:53						
19	07:38	14:20 (T31)	07:05	14:54 (T31)	07:18		06:24	05:44	05:30								
	17:04	92	15:52 (T31)	17:45	79	17:13 (T26)	19:20		19:57	20:30	20:53						
20	07:38	14:20 (T31)	07:03	14:58 (T31)	07:16		06:23	05:43	05:30								
	17:06	92	15:52 (T31)	17:47	71	17:13 (T26)	19:22		19:58	20:31	20:53						
21	07:37	14:21 (T31)	07:02	15:03 (T31)	07:14		06:21	05:42	05:31								
	17:07	92	15:53 (T31)	17:48	61	17:12 (T26)	19:23		19:59	20:32	20:54						
22	07:36	14:21 (T31)	07:00	15:11 (T31)	07:13		06:19	05:41	05:31								
	17:08	92	15:53 (T31)	17:49	44	17:12 (T26)	19:24		20:00	20:33	20:54						
23	07:36	14:21 (T31)	06:59	16:36 (T26)	07:11		06:18	05:41	05:31								
	17:09	92	15:53 (T31)	17:51	35	17:11 (T26)	19:25		20:00	20:34	20:54						
24	07:35	14:22 (T31)	06:57	16:37 (T26)	07:09		06:16	05:40	05:31								
	17:11	91	15:53 (T31)	17:52	32	17:09 (T26)	19:26		20:01	20:35	20:54						
25	07:34	14:22 (T31)	06:55	16:39 (T26)	07:07		06:15	05:39	05:32								
	17:12	91	15:53 (T31)	17:53	29	17:08 (T26)	19:28		20:03	20:36	20:55						
26	07:33	14:23 (T31)	06:54	16:40 (T26)	07:06		06:13	05:38	05:32								
	17:13	90	15:53 (T31)	17:54	26	17:06 (T26)	19:29		20:04	20:37	20:55						
27	07:32	14:23 (T31)	06:52	16:43 (T26)	07:04		06:12	05:37	05:32								
	17:15	90	15:53 (T31)	17:56	21	17:04 (T26)	19:30		20:05	20:38	20:55						
28	07:31	14:24 (T31)	06:51	16:45 (T26)	07:02		06:10	05:37	05:33								
	17:16	89	15:53 (T31)	17:57	16	17:01 (T26)	19:31		20:06	20:39	20:55						
29	07:31	14:24 (T31)			07:00		06:09	05:36	05:33								
	17:17	89	15:53 (T31)		19:32		20:07	20:40	20:55								
30	07:30	14:25 (T31)			06:58		06:07	05:35	05:34								
	17:19	94	16:55 (T26)		19:33		20:08	20:40	20:55								
31	07:29	14:26 (T31)			06:57			05:35									
	17:20	99	16:57 (T26)		19:35			20:41									
Potential sun hours	291		294		369		401	454	460								
Total, worst case	3057		2278		4												
Sun reduction	0.36		0.40		0.47												
Oper. time red.	1.00		1.00		1.00												
Wind dir. red.	0.68		0.70		0.74												
Total reduction	0.24		0.28		0.35												
Total, real	745		638		1												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

SHADOW - Calendar

Shadow receptor: 1235 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2327)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

	July	August	September	October	November	December
1	05:34	06:00	06:33	07:07	07:44	15:06 (T31) 07:21 13:58 (T31)
	20:55	20:35	19:48	18:54	18:04 109	17:42 (T26) 16:37 103 15:42 (T28)
2	05:34	06:01	06:35	07:08	07:45	15:06 (T31) 07:23 13:59 (T31)
	20:55	20:34	19:46	18:52	18:03 109	17:41 (T26) 16:37 96 15:44 (T28)
3	05:35	06:02	06:36	07:09	07:47	15:04 (T31) 07:24 14:00 (T31)
	20:54	20:33	19:44	18:51	18:01 109	17:39 (T26) 16:36 100 15:45 (T28)
4	05:36	06:03	06:37	07:10	07:48	15:04 (T31) 07:25 14:00 (T31)
	20:54	20:32	19:43	18:49	18:00 110	17:39 (T26) 16:36 104 15:46 (T28)
5	05:36	06:04	06:38	07:11	07:49	15:02 (T31) 07:26 14:00 (T31)
	20:54	20:30	19:41	18:47	17:59 109	17:37 (T26) 16:36 99 15:47 (T28)
6	05:37	06:05	06:39	07:12	06:50	14:01 (T31) 07:27 14:01 (T31)
	20:54	20:29	19:39	18:45	16:58 109	16:35 (T26) 16:36 102 15:48 (T28)
7	05:37	06:06	06:40	07:14	06:52	14:01 (T31) 07:28 14:01 (T31)
	20:54	20:28	19:37	18:44	16:56 108	16:35 (T26) 16:35 96 15:49 (T28)
8	05:38	06:07	06:41	07:15	06:53	14:00 (T31) 07:29 14:02 (T31)
	20:53	20:26	19:36	18:42	16:55 102	16:33 (T26) 16:35 99 15:49 (T28)
9	05:39	06:08	06:42	07:16	06:54	14:00 (T31) 07:30 14:02 (T31)
	20:53	20:25	19:34	18:40	16:54 101	16:32 (T26) 16:35 105 15:50 (T28)
10	05:40	06:09	06:43	07:17	06:56	13:59 (T31) 07:31 14:03 (T31)
	20:52	20:24	19:32	18:38	16:53 98	16:31 (T26) 16:35 105 15:51 (T28)
11	05:40	06:10	06:44	07:18	06:57	13:58 (T31) 07:32 14:03 (T31)
	20:52	20:22	19:30	18:37	16:52 97	16:29 (T26) 16:35 101 15:52 (T28)
12	05:41	06:11	06:46	07:19	06:58	13:58 (T31) 07:32 14:04 (T31)
	20:52	20:21	19:28	18:35	16:51 91	16:29 (T26) 16:35 103 15:51 (T28)
13	05:42	06:13	06:47	07:21	06:59	13:57 (T31) 07:33 14:04 (T31)
	20:51	20:20	19:27	18:33	16:50 87	16:27 (T26) 16:35 101 15:53 (T28)
14	05:43	06:14	06:48	07:22	17:21 (T26) 07:01	13:56 (T31) 07:34 14:04 (T31)
	20:50	20:18	19:25	18:32	17:31 (T26) 16:49 78	15:23 (T31) 16:36 104 15:53 (T28)
15	05:43	06:15	06:49	07:23	17:16 (T26) 07:02	13:57 (T31) 07:35 14:05 (T31)
	20:50	20:17	19:23	18:30	17:35 (T26) 16:48 82	15:26 (T31) 16:36 107 15:54 (T28)
16	05:44	06:16	06:50	07:24	17:13 (T26) 07:03	13:56 (T31) 07:36 14:06 (T31)
	20:49	20:15	19:21	18:28	17:37 (T26) 16:47 86	15:26 (T31) 16:36 106 15:55 (T28)
17	05:45	06:17	06:51	07:25	17:12 (T26) 07:05	13:57 (T31) 07:36 14:06 (T31)
	20:49	20:14	19:19	18:27	17:39 (T26) 16:46 80	15:27 (T31) 16:36 102 15:55 (T28)
18	05:46	06:18	06:52	07:27	17:10 (T26) 07:06	13:56 (T31) 07:37 14:06 (T31)
	20:48	20:12	19:18	18:25	17:40 (T26) 16:45 88	15:27 (T31) 16:36 102 15:56 (T28)
19	05:47	06:19	06:53	07:28	17:08 (T26) 07:07	13:56 (T31) 07:38 14:07 (T31)
	20:47	20:11	19:16	18:23	17:41 (T26) 16:44 87	15:27 (T31) 16:37 109 15:57 (T28)
20	05:48	06:20	06:54	07:29	17:07 (T26) 07:08	13:57 (T31) 07:38 14:07 (T31)
	20:46	20:09	19:14	18:22	17:41 (T26) 16:43 83	15:28 (T31) 16:37 103 15:57 (T28)
21	05:49	06:21	06:55	07:30	15:39 (T31) 07:10	13:56 (T31) 07:39 14:08 (T31)
	20:46	20:08	19:12	18:20	17:43 (T26) 16:43 83	15:28 (T31) 16:38 104 15:58 (T28)
22	05:50	06:22	06:57	07:31	15:32 (T31) 07:11	13:56 (T31) 07:39 14:08 (T31)
	20:45	20:06	19:10	18:19	17:43 (T26) 16:42 88	15:28 (T31) 16:38 107 15:58 (T28)
23	05:51	06:24	06:58	07:33	15:27 (T31) 07:12	13:57 (T31) 07:40 14:09 (T31)
	20:44	20:05	19:09	18:17	17:43 (T26) 16:41 85	15:29 (T31) 16:39 103 15:59 (T28)
24	05:52	06:25	06:59	07:34	15:24 (T31) 07:13	13:57 (T31) 07:40 14:09 (T31)
	20:43	20:03	19:07	18:16	17:44 (T26) 16:40 87	15:29 (T31) 16:39 103 15:59 (T28)
25	05:53	06:26	07:00	07:35	15:21 (T31) 07:15	13:57 (T31) 07:41 14:10 (T31)
	20:42	20:01	19:05	18:14	17:44 (T26) 16:40 87	15:30 (T31) 16:40 103 16:00 (T28)
26	05:54	06:27	07:01	07:36	15:18 (T31) 07:16	13:57 (T31) 07:41 14:10 (T31)
	20:41	20:00	19:03	18:13	17:44 (T26) 16:39 85	15:30 (T31) 16:40 106 16:00 (T28)
27	05:55	06:28	07:02	07:38	15:16 (T31) 07:17	13:58 (T31) 07:41 14:10 (T31)
	20:40	19:56	19:01	18:11	17:45 (T26) 16:39 87	15:31 (T31) 16:41 103 16:00 (T28)
28	05:56	06:29	07:03	07:39	15:14 (T31) 07:18	13:58 (T31) 07:42 14:11 (T31)
	20:39	19:55	18:59	18:10	17:44 (T26) 16:38 91	15:36 (T28) 16:42 99 16:00 (T28)
29	05:57	06:30	07:04	07:40	15:11 (T31) 07:19	13:58 (T31) 07:42 14:12 (T31)
	20:38	19:53	18:58	18:08	17:44 (T26) 16:38 97	15:39 (T28) 16:42 105 16:01 (T28)
30	05:58	06:31	07:06	07:41	15:10 (T31) 07:20	13:58 (T31) 07:42 14:13 (T31)
	20:37	19:51	18:56	18:07	17:44 (T26) 16:37 95	15:40 (T28) 16:43 100 16:01 (T28)
31	05:59	06:32		07:43	15:08 (T31)	07:42 14:14 (T31)
	20:36	19:50		18:05	17:43 (T26)	16:44 100 16:01 (T28)
Potential sun hours	467	433	376	343	293	281
Total, worst case				1140	2808	3180
Sun reduction				0.44	0.25	0.24
Oper. time red.				1.00	1.00	1.00
Wind dir. red.				0.71	0.68	0.68
Total reduction				0.31	0.17	0.16
Total, real				356	479	519

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR
217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 1303 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2340)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

January		February		March		April		May		June	
1	07:43	08:26 (T27)	07:28	07:54 (T30)	06:49	07:34 (T28)	06:55	07:17 (T31)	06:06	05:34	
	16:45	41 09:07 (T27)	17:21	23 08:17 (T30)	17:58	37 08:11 (T28)	19:36	39 07:56 (T26)	20:10	20:42	
2	07:43	08:27 (T27)	07:27	07:55 (T30)	06:47	07:36 (T28)	06:53	07:15 (T31)	06:05	05:34	
	16:46	40 09:07 (T27)	17:23	21 08:16 (T30)	18:00	34 08:10 (T28)	19:37	41 07:56 (T26)	20:11	20:43	
3	07:43	08:27 (T27)	07:26	07:56 (T30)	06:46	07:36 (T28)	06:51	07:13 (T31)	06:03	05:33	
	16:47	40 09:07 (T27)	17:24	20 08:16 (T30)	18:01	32 08:08 (T28)	19:38	44 07:57 (T26)	20:12	20:44	
4	07:43	08:28 (T27)	07:24	07:52 (T28)	06:44	07:37 (T28)	06:50	07:11 (T31)	06:02	05:33	
	16:48	40 09:08 (T27)	17:25	21 08:15 (T30)	18:02	29 08:06 (T28)	19:39	46 07:57 (T26)	20:13	20:45	
5	07:43	08:29 (T27)	07:23	07:47 (T28)	06:42	07:40 (T28)	06:48	07:10 (T31)	06:00	05:32	
	16:49	39 09:08 (T27)	17:27	26 08:13 (T30)	18:03	24 08:04 (T28)	19:41	48 07:58 (T26)	20:14	20:45	
6	07:43	08:29 (T27)	07:22	07:45 (T28)	06:41	07:42 (T28)	06:46	07:08 (T31)	05:59	05:32	
	16:50	39 09:08 (T27)	17:28	25 08:10 (T30)	18:05	19 08:01 (T28)	19:42	50 07:58 (T26)	20:15	20:46	
7	07:43	08:30 (T27)	07:21	07:44 (T28)	06:39	07:46 (T28)	06:44	07:06 (T31)	05:58	05:32	
	16:51	39 09:09 (T27)	17:29	23 08:07 (T28)	18:06	10 07:56 (T28)	19:43	52 07:58 (T26)	20:17	20:47	
8	07:43	08:30 (T27)	07:20	07:43 (T28)	06:37		06:43	07:04 (T31)	05:57	05:31	
	16:52	38 09:08 (T27)	17:31	26 08:09 (T28)	18:07		19:44	54 07:58 (T26)	20:18	20:48	
9	07:42	08:31 (T27)	07:18	07:42 (T28)	06:36		06:41	07:03 (T31)	05:55	05:31	
	16:53	37 09:08 (T27)	17:32	29 08:11 (T28)	18:08		19:45	56 07:59 (T26)	20:19	20:48	
10	07:42	08:32 (T27)	07:17	07:40 (T28)	06:34		06:39	07:02 (T31)	05:54	05:31	
	16:54	37 09:09 (T27)	17:33	31 08:11 (T28)	18:10		19:46	56 07:58 (T26)	20:20	20:49	
11	07:42	08:33 (T27)	07:16	07:39 (T28)	06:32		06:38	07:01 (T31)	05:53	05:31	
	16:55	35 09:08 (T27)	17:35	34 08:13 (T28)	18:11		19:48	56 07:57 (T26)	20:21	20:49	
12	07:42	08:34 (T27)	07:15	07:38 (T28)	06:30		06:36	07:02 (T31)	05:52	05:31	
	16:56	34 09:08 (T27)	17:36	36 08:14 (T28)	18:12		19:49	56 07:58 (T26)	20:22	20:50	
13	07:41	08:35 (T27)	07:13	07:36 (T28)	07:29		06:34	07:02 (T31)	05:51	05:30	
	16:57	34 09:09 (T27)	17:37	38 08:14 (T28)	19:13		19:50	55 07:57 (T26)	20:23	20:51	
14	07:41	08:36 (T27)	07:12	07:35 (T28)	07:27		06:32	07:03 (T31)	05:49	05:30	
	16:58	32 09:08 (T27)	17:39	40 08:15 (T28)	19:14		19:51	53 07:56 (T26)	20:24	20:51	
15	07:41	08:06 (T30)	07:10	07:33 (T28)	07:25		06:31	07:04 (T31)	05:48	05:30	
	17:00	34 09:08 (T27)	17:40	42 08:15 (T28)	19:16		19:52	52 07:56 (T26)	20:26	20:52	
16	07:40	08:05 (T30)	07:09	07:33 (T28)	07:23		06:29	07:05 (T31)	05:47	05:30	
	17:01	34 09:07 (T27)	17:41	43 08:16 (T28)	19:17		19:53	50 07:55 (T26)	20:27	20:52	
17	07:40	08:04 (T30)	07:08	07:32 (T28)	07:22		06:28	07:06 (T26)	05:46	05:30	
	17:02	33 09:06 (T27)	17:43	44 08:16 (T28)	19:18		19:55	48 07:54 (T26)	20:28	20:52	
18	07:39	08:04 (T30)	07:06	07:32 (T28)	07:20		06:26	07:07 (T26)	05:45	05:30	
	17:03	33 09:06 (T27)	17:44	45 08:17 (T28)	19:19		19:56	47 07:54 (T26)	20:29	20:53	
19	07:38	08:03 (T30)	07:05	07:31 (T28)	07:18		06:24	07:07 (T26)	05:44	05:30	
	17:04	32 09:04 (T27)	17:45	45 08:16 (T28)	19:20		19:57	46 07:53 (T26)	20:30	20:53	
20	07:38	08:02 (T30)	07:03	07:32 (T28)	07:16		06:23	07:08 (T26)	05:43	05:31	
	17:06	30 09:03 (T27)	17:47	45 08:17 (T28)	19:22		19:58	44 07:52 (T26)	20:31	20:53	
21	07:37	08:02 (T30)	07:02	07:31 (T28)	07:15		06:21	07:08 (T26)	05:42	05:31	
	17:07	28 09:02 (T27)	17:48	45 08:16 (T28)	19:23		19:59	43 07:51 (T26)	20:32	20:54	
22	07:36	08:01 (T30)	07:00	07:32 (T28)	07:13		06:19	07:10 (T26)	05:41	05:31	
	17:08	24 08:59 (T27)	17:49	45 08:17 (T28)	19:24		20:00	40 07:50 (T26)	20:33	20:54	
23	07:36	08:00 (T30)	06:59	07:31 (T28)	07:11		06:18	07:10 (T26)	05:41	05:31	
	17:09	16 08:16 (T30)	17:51	45 08:16 (T28)	19:25		20:00	38 07:48 (T26)	20:34	20:54	
24	07:35	07:59 (T30)	06:57	07:32 (T28)	07:09		06:16	07:11 (T26)	05:40	05:31	
	17:11	17 08:16 (T30)	17:52	44 08:16 (T28)	19:26		20:02	36 07:47 (T26)	20:35	20:54	
25	07:34	07:58 (T30)	06:55	07:32 (T28)	07:07		06:15	07:12 (T26)	05:39	05:32	
	17:12	19 08:17 (T30)	17:53	43 08:15 (T28)	19:28		20:03	33 07:45 (T26)	20:36	20:55	
26	07:33	07:57 (T30)	06:54	07:32 (T28)	07:06		06:13	07:14 (T26)	05:38	05:32	
	17:13	20 08:17 (T30)	17:55	42 08:14 (T28)	19:29	6	07:40 (T26)	29 07:43 (T26)	20:37	20:55	
27	07:32	07:56 (T30)	06:52	07:33 (T28)	07:04		06:12	07:15 (T26)	05:38	05:32	
	17:15	21 08:17 (T30)	17:56	41 08:14 (T28)	19:30	19	07:47 (T26)	26 07:41 (T26)	20:38	20:55	
28	07:32	07:56 (T30)	06:51	07:33 (T28)	07:02		06:10	07:18 (T26)	05:37	05:33	
	17:16	22 08:18 (T30)	17:57	39 08:12 (T28)	19:31	25	07:50 (T26)	20 07:38 (T26)	20:39	20:55	
29	07:31	07:55 (T30)			07:00		06:09	07:21 (T26)	05:36	05:33	
	17:17	23 08:18 (T30)			19:32	30	07:52 (T26)	13 07:34 (T26)	20:40	20:55	
30	07:30	07:53 (T30)			06:59		06:07		05:36	05:34	
	17:19	24 08:17 (T30)			19:33	33	07:53 (T26)		20:40	20:55	
31	07:29	07:53 (T30)			06:57		07:18 (T31)		05:35		
	17:20	24 08:17 (T30)			19:35	36	07:54 (T26)		20:41		
Potential sun hours	291		294		369		401		454	459	
Total, worst case	959		1001		334		1271				
Sun reduction	0.36		0.40		0.47		0.54				
Oper. time red.	1.00		1.00		1.00		1.00				
Wind dir. red.	0.60		0.67		0.71		0.75				
Total reduction	0.21		0.26		0.32		0.39				
Total, real	202		263		108		499				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

SHADOW - Calendar

Shadow receptor: 1303 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2340)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

July		August		September		October		November		December	
1	05:34	06:00		06:34	07:01 (T31)	07:07		07:44	08:09 (T28)	07:22	08:16 (T27)
	20:55	20:35		19:48	07:57 (T26)	18:54		18:04	08:42 (T28)	16:37	08:50 (T27)
2	05:35	06:01		06:35	07:00 (T31)	07:08		07:45	08:10 (T28)	07:23	08:16 (T27)
	20:55	20:34		19:46	07:56 (T26)	18:52		18:03	08:41 (T28)	16:37	08:51 (T27)
3	05:35	06:02		06:36	07:00 (T31)	07:09		07:47	08:11 (T28)	07:24	08:15 (T27)
	20:55	20:33		19:44	07:56 (T26)	18:51		18:02	08:39 (T28)	16:36	08:52 (T27)
4	05:36	06:03		06:37	07:00 (T31)	07:10		07:48	08:13 (T28)	07:25	08:16 (T27)
	20:54	20:32		19:43	07:56 (T26)	18:49		18:00	08:38 (T28)	16:36	08:52 (T27)
5	05:36	06:04		06:38	07:01 (T31)	07:11		07:49	08:14 (T28)	07:26	08:15 (T27)
	20:54	20:30		19:41	07:55 (T26)	18:47		17:59	08:36 (T28)	16:36	08:53 (T27)
6	05:37	06:05		06:39	07:02 (T31)	07:12		06:51	07:15 (T28)	07:27	08:15 (T27)
	20:54	20:29		19:39	07:54 (T26)	18:45		16:58	07:40 (T30)	16:36	08:54 (T27)
7	05:38	06:06		06:40	07:03 (T31)	07:14		06:52	07:17 (T28)	07:28	08:16 (T27)
	20:54	20:28		19:37	07:53 (T26)	18:44		16:57	07:43 (T30)	16:35	08:53 (T27)
8	05:38	06:07		06:41	07:04 (T31)	07:15		06:53	07:23 (T28)	07:29	08:16 (T27)
	20:53	20:27		19:36	07:52 (T26)	18:42	15	08:35 (T28)	07:45 (T30)	16:35	08:55 (T27)
9	05:39	06:08		06:42	07:05 (T31)	07:16		06:54	07:27 (T30)	07:30	08:16 (T27)
	20:53	20:25		19:34	07:51 (T26)	18:40	22	08:38 (T28)	07:47 (T30)	16:35	08:56 (T27)
10	05:40	06:09		06:43	07:06 (T31)	07:17		06:56	07:26 (T30)	07:31	08:16 (T27)
	20:53	20:24		19:32	07:50 (T26)	18:38	27	08:40 (T28)	07:47 (T30)	16:35	08:56 (T27)
11	05:40	06:10		06:45	07:08 (T31)	07:18		06:57	07:25 (T30)	07:32	08:17 (T27)
	20:52	20:23		19:30	07:50 (T26)	18:37	30	08:41 (T28)	07:48 (T30)	16:35	08:57 (T27)
12	05:41	06:12		06:46	07:09 (T31)	07:19		06:58	07:25 (T30)	07:32	08:17 (T27)
	20:52	20:21		19:29	07:48 (T26)	18:35	33	08:42 (T28)	07:49 (T30)	16:35	08:58 (T27)
13	05:42	06:13		06:47	07:10 (T31)	07:21		07:00	07:25 (T30)	07:33	08:18 (T27)
	20:51	20:20		19:27	07:47 (T26)	18:33	36	08:44 (T28)	07:49 (T30)	16:35	08:59 (T27)
14	05:43	06:14		06:48	07:11 (T31)	07:22		07:01	07:27 (T30)	07:34	08:17 (T27)
	20:51	20:18	2	07:34 (T26)	07:45 (T26)	18:32	38	08:45 (T28)	07:50 (T30)	16:36	08:58 (T27)
15	05:44	06:15		06:49	07:12 (T26)	07:23		07:02	07:28 (T30)	07:35	08:18 (T27)
	20:50	20:17	16	07:43 (T26)	07:42 (T26)	18:30	39	08:45 (T28)	07:50 (T30)	16:36	08:59 (T27)
16	05:44	06:16		06:50	07:13 (T26)	07:24		07:03	07:29 (T30)	07:36	08:18 (T27)
	20:49	20:15	22	07:46 (T26)	07:40 (T26)	18:28	41	08:45 (T28)	07:50 (T30)	16:36	09:00 (T27)
17	05:45	06:17		06:51	07:16 (T26)	07:25		07:05	07:31 (T30)	07:36	08:19 (T27)
	20:49	20:14	26	07:48 (T26)	07:36 (T26)	18:27	43	08:47 (T28)	07:51 (T30)	16:36	09:01 (T27)
18	05:46	06:18		06:52	07:20 (T26)	07:27		07:06	07:32 (T30)	07:37	08:20 (T27)
	20:48	20:12	31	07:50 (T26)	07:31 (T26)	18:25	44	08:47 (T28)	07:51 (T30)	16:37	09:01 (T27)
19	05:47	06:19		06:53	07:18 (T26)	07:28		07:07	07:33 (T30)	07:38	08:20 (T27)
	20:47	20:11	33	07:51 (T26)	07:16 (T26)	18:23	44	08:47 (T28)	07:50 (T30)	16:37	09:02 (T27)
20	05:48	06:20		06:54	07:16 (T26)	07:29		07:08	07:35 (T30)	07:38	08:20 (T27)
	20:47	20:09	36	07:52 (T26)	07:14 (T26)	18:22	44	08:46 (T28)	07:51 (T30)	16:37	09:01 (T27)
21	05:49	06:21		06:56	07:14 (T26)	07:30		07:10	07:36 (T30)	07:39	08:21 (T27)
	20:46	20:08	39	07:53 (T26)	07:12 (T26)	18:20	45	08:47 (T28)	07:50 (T30)	16:38	09:02 (T27)
22	05:50	06:23		06:57	07:14 (T26)	07:32		07:11	07:37 (T30)	07:39	08:20 (T27)
	20:45	20:06	41	07:55 (T26)	07:10 (T26)	18:19	45	08:47 (T28)	07:50 (T30)	16:38	09:02 (T27)
23	05:51	06:24		06:58	07:13 (T26)	07:33		07:12	07:39 (T30)	07:40	08:23 (T27)
	20:44	20:05	42	07:55 (T26)	07:09 (T26)	18:17	45	08:46 (T28)	07:50 (T30)	16:39	09:03 (T27)
24	05:52	06:25		06:59	07:12 (T26)	07:34		07:13	07:40 (T30)	07:40	08:22 (T27)
	20:43	20:03	44	07:56 (T26)	07:07 (T26)	18:16	45	08:47 (T28)	07:50 (T30)	16:39	09:03 (T27)
25	05:53	06:26		07:00	07:11 (T26)	07:35		07:15	07:41 (T30)	07:41	08:23 (T27)
	20:42	20:01	45	07:56 (T26)	07:05 (T26)	18:14	44	08:46 (T28)	07:50 (T30)	16:40	09:04 (T27)
26	05:54	06:27		07:01	07:10 (T26)	07:37		07:16	07:43 (T30)	07:41	08:23 (T27)
	20:41	20:00	47	07:57 (T26)	07:03 (T26)	18:13	44	08:46 (T28)	07:50 (T30)	16:40	09:05 (T27)
27	05:55	06:28		07:02	07:09 (T26)	07:38		07:17	07:44 (T30)	07:42	08:23 (T27)
	20:40	19:56	48	07:57 (T26)	07:01 (T26)	18:11	43	08:46 (T28)	07:50 (T30)	16:41	09:05 (T27)
28	05:56	06:29		07:03	07:07 (T31)	07:39		07:18	07:45 (T30)	07:42	08:23 (T27)
	20:39	19:55	50	07:57 (T26)	07:00 (T26)	18:10	42	08:45 (T28)	07:50 (T30)	16:42	09:05 (T27)
29	05:57	06:30		07:04	07:05 (T31)	07:40		07:19	07:46 (T30)	07:42	08:26 (T27)
	20:38	19:53	52	07:57 (T26)	07:00 (T26)	18:08	40	08:44 (T28)	07:50 (T30)	16:43	09:06 (T27)
30	05:58	06:31		07:06	07:04 (T31)	07:42		07:20	08:15 (T27)	07:42	08:25 (T27)
	20:37	19:51	53	07:57 (T26)	07:00 (T26)	18:07	38	08:44 (T28)	07:50 (T30)	16:43	09:05 (T27)
31	05:59	06:32		07:07	07:02 (T31)	07:43		07:21	08:16 (T27)	07:43	08:25 (T27)
	20:36	19:50	55	07:57 (T26)	07:00 (T26)	18:06	36	08:43 (T28)	07:50 (T30)	16:44	09:06 (T27)
Potential sun hours	466	433		376		343		293		281	
Total, worst case			682		758		923		727		1166
Sun reduction			0.63		0.56		0.44		0.25		0.24
Oper. time red.			1.00		1.00		1.00		1.00		1.00
Wind dir. red.			0.75		0.75		0.68		0.63		0.58
Total reduction			0.46		0.41		0.29		0.15		0.14
Total, real			312		309		268		112		160

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

2019-12-08_Heritage SFA

Licensed user:

EDR
217 Montgomery St., Suite 1000
US-SYRACUSE, NY 13202
(315) 471 0688

Calculated:

7/11/2022 8:58 AM/3.4.424

SHADOW - Calendar

Shadow receptor: 2570 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2418)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

January		February		March		April		May		June	
1	07:43	15:56 (T22)	07:28	06:49	06:55	18:49 (T20)	06:06	05:34	19:37 (T23)		
2	16:45	25 16:21 (T22)	17:21	17:58	19:36	27 19:16 (T20)	20:10	20:42	39 20:16 (T23)		
3	07:43	15:56 (T22)	07:27	06:47	06:53	18:48 (T20)	06:05	05:34	19:38 (T23)		
4	16:46	25 16:21 (T22)	17:23	18:00	19:37	29 19:17 (T20)	20:11	20:43	39 20:17 (T23)		
5	07:43	15:56 (T22)	07:25	06:46	06:51	18:47 (T20)	06:03	05:33	19:37 (T23)		
6	16:47	26 16:22 (T22)	17:24	18:01	19:38	31 19:18 (T20)	20:12	20:44	40 20:17 (T23)		
7	07:43	15:57 (T22)	07:24	06:44	06:50	18:45 (T20)	06:02	05:33	19:38 (T23)		
8	16:48	26 16:23 (T22)	17:25	18:02	19:39	34 19:19 (T20)	20:13	20:44	39 20:17 (T23)		
9	07:43	15:57 (T22)	07:23	06:42	06:48	18:46 (T20)	06:01	05:33	19:39 (T23)		
10	16:49	27 16:24 (T22)	17:27	18:03	19:40	35 19:21 (T20)	20:14	20:45	39 20:18 (T23)		
11	07:43	15:58 (T22)	07:22	06:41	06:46	18:45 (T20)	05:59	05:32	19:38 (T23)		
12	16:50	28 16:26 (T22)	17:28	18:05	19:42	36 19:21 (T20)	20:15	20:46	39 20:17 (T23)		
13	07:43	15:57 (T22)	07:21	06:39	06:44	18:44 (T20)	05:58	05:32	19:39 (T23)		
14	16:51	29 16:26 (T22)	17:29	18:06	19:43	37 19:21 (T20)	20:17	20:47	39 20:18 (T23)		
15	07:43	15:58 (T22)	07:20	06:37	06:43	18:44 (T20)	05:57	05:32	19:39 (T23)		
16	16:52	29 16:27 (T22)	17:31	18:07	19:44	36 19:20 (T20)	20:18	20:47	39 20:18 (T23)		
17	07:42	15:59 (T22)	07:18	06:36	06:41	18:44 (T20)	05:55	05:31	19:40 (T23)		
18	16:53	29 16:28 (T22)	17:32	18:08	19:45	37 19:21 (T20)	20:19	20:48	38 20:18 (T23)		
19	07:42	15:59 (T22)	07:17	06:34	06:39	18:44 (T20)	05:54	05:31	19:39 (T23)		
20	16:54	31 16:30 (T22)	17:34	18:10	19:46	36 19:20 (T20)	20:20	20:49	39 20:18 (T23)		
21	07:42	15:59 (T22)	07:16	06:32	06:38	18:44 (T20)	05:53	05:31	19:40 (T23)		
22	16:55	31 16:30 (T22)	17:35	18:11	19:47	35 19:19 (T20)	20:21	20:50	38 20:18 (T23)		
23	07:42	16:00 (T22)	07:14	06:30	06:36	18:45 (T20)	05:52	05:31	19:40 (T23)		
24	16:56	32 16:32 (T22)	17:36	18:12	19:49	34 19:19 (T20)	20:22	20:50	38 20:18 (T23)		
25	07:41	16:00 (T22)	07:13	06:29	06:34	18:45 (T20)	05:51	05:31	19:40 (T23)		
26	16:57	31 16:31 (T22)	17:38	19:13	19:50	32 19:17 (T20)	20:23	20:50	38 20:18 (T23)		
27	07:41	16:01 (T22)	07:12	06:27	06:33	18:45 (T20)	05:50	05:30	19:41 (T23)		
28	16:58	31 16:32 (T22)	17:39	19:14	19:51	31 19:16 (T20)	20:24	20:51	37 20:18 (T23)		
29	07:40	16:01 (T22)	07:10	06:25	06:31	18:47 (T20)	05:48	05:30	19:41 (T23)		
30	17:00	31 16:32 (T22)	17:40	19:16	19:52	28 19:15 (T20)	20:25	20:51	38 20:19 (T23)		
31	07:40	16:02 (T22)	07:09	06:23	06:29	18:48 (T20)	05:47	05:30	19:41 (T23)		
32	17:01	31 16:33 (T22)	17:42	19:17	19:53	25 19:13 (T20)	20:26	20:52	38 20:19 (T23)		
33	07:39	16:02 (T22)	07:08	06:22	06:28	18:49 (T20)	05:46	05:30	19:41 (T23)		
34	17:02	30 16:32 (T22)	17:43	19:18	19:54	22 19:11 (T20)	20:28	20:52	38 20:19 (T23)		
35	07:39	16:03 (T22)	07:06	06:20	06:26	18:51 (T20)	05:45	05:30	19:42 (T23)		
36	17:03	30 16:33 (T22)	17:44	19:19	19:56	18 19:09 (T20)	20:29	20:53	37 20:19 (T23)		
37	07:38	16:04 (T22)	07:05	06:18	06:24	18:54 (T20)	05:44	05:31	19:42 (T23)		
38	17:04	29 16:33 (T22)	17:45	19:20	19:57	11 19:05 (T20)	20:30	20:53	37 20:19 (T23)		
39	07:38	16:04 (T22)	07:03	06:16	06:23	05:43	20:30	05:31	19:42 (T23)		
40	17:06	28 16:32 (T22)	17:47	19:22	19:58	20:31	30 20:08 (T23)	20:53	37 20:19 (T23)		
41	07:37	16:06 (T22)	07:02	06:15	06:21	05:42	19:38 (T23)	05:31	19:43 (T23)		
42	17:07	27 16:33 (T22)	17:48	19:23	19:59	20:32	31 20:09 (T23)	20:54	37 20:20 (T23)		
43	07:36	16:07 (T22)	07:00	06:13	06:20	05:42	19:38 (T23)	05:31	19:43 (T23)		
44	17:08	25 16:32 (T22)	17:49	19:24	20:00	20:33	33 20:11 (T23)	20:54	37 20:20 (T23)		
45	07:36	16:07 (T22)	06:59	06:11	06:18	05:41	19:38 (T23)	05:31	19:43 (T23)		
46	17:10	24 16:31 (T22)	17:51	19:25	20:00	20:34	34 20:12 (T23)	20:54	37 20:20 (T23)		
47	07:35	16:09 (T22)	06:57	06:09	06:16	05:40	19:37 (T23)	05:31	19:43 (T23)		
48	17:11	22 16:31 (T22)	17:52	19:26	20:01	20:35	35 20:12 (T23)	20:54	37 20:20 (T23)		
49	07:34	16:10 (T22)	06:55	06:07	06:15	05:39	19:37 (T23)	05:32	19:44 (T23)		
50	17:12	20 16:30 (T22)	17:53	19:28	20:03	20:36	36 20:13 (T23)	20:54	37 20:21 (T23)		
51	07:33	16:11 (T22)	06:54	06:06	06:13	05:38	19:37 (T23)	05:32	19:43 (T23)		
52	17:13	17 16:28 (T22)	17:55	19:29	20:04	20:37	37 20:14 (T23)	20:55	38 20:21 (T23)		
53	07:32	16:14 (T22)	06:52	06:04	06:12	05:38	19:37 (T23)	05:32	19:43 (T23)		
54	17:15	13 16:27 (T22)	17:56	19:30	20:05	20:38	38 20:15 (T23)	20:55	38 20:21 (T23)		
55	07:31	16:17 (T22)	06:51	06:02	06:10	05:37	19:37 (T23)	05:33	19:44 (T23)		
56	17:16	6 16:23 (T22)	17:57	19:31	20:06	20:39	38 20:15 (T23)	20:55	38 20:22 (T23)		
57	07:31			06:00	06:09	05:36	19:37 (T23)	05:33	19:44 (T23)		
58	17:17			19:32	20:07	20:39	39 20:16 (T23)	20:55	38 20:22 (T23)		
59	07:30			06:59	06:07	05:36	19:37 (T23)	05:34	19:44 (T23)		
60	17:19			19:33	20:08	20:40	39 20:16 (T23)	20:55	38 20:22 (T23)		
61	07:29			06:57	06:08	05:35	19:38 (T23)				
62	17:20			19:35	20:10	20:41	39 20:17 (T23)				
Potential sun hours	291	294	369	401	453	459					
Total, worst case	733	779	89	574	623	1141					
Sun reduction	0.36	0.40	0.47	0.54	0.58	0.63					
Oper. time red.	1.00	1.00	1.00	1.00	1.00	1.00					
Wind dir. red.	0.72	0.74	0.74	0.74	0.67	0.67					
Total reduction	0.26	0.30	0.35	0.40	0.39	0.43					
Total, real	191	233	31	231	246	489					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker
			(WTG causing flicker last time)

SHADOW - Calendar

Shadow receptor: 2570 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (2418)

Assumptions for shadow calculations

Reference year for calendar

2022

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0.36	0.40	0.47	0.54	0.58	0.63	0.67	0.63	0.56	0.44	0.25	0.24

Operational time

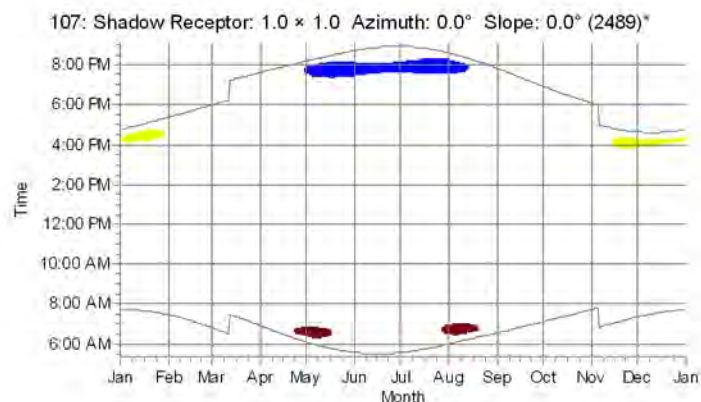
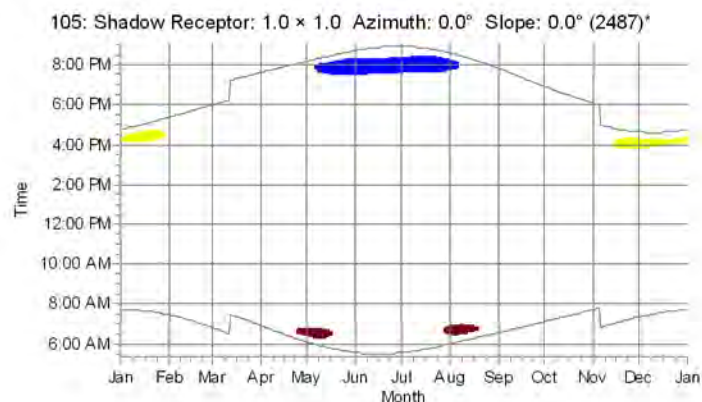
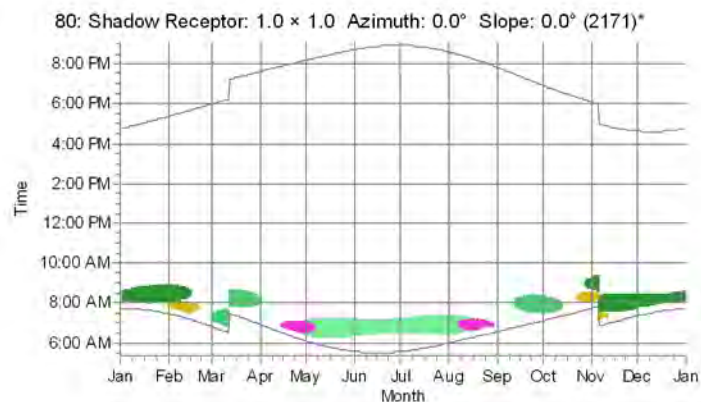
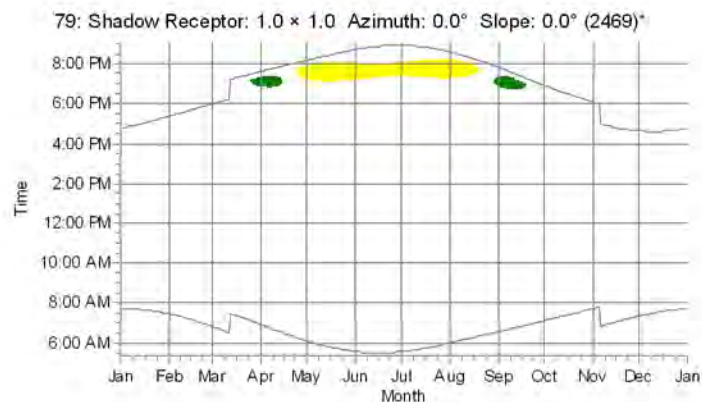
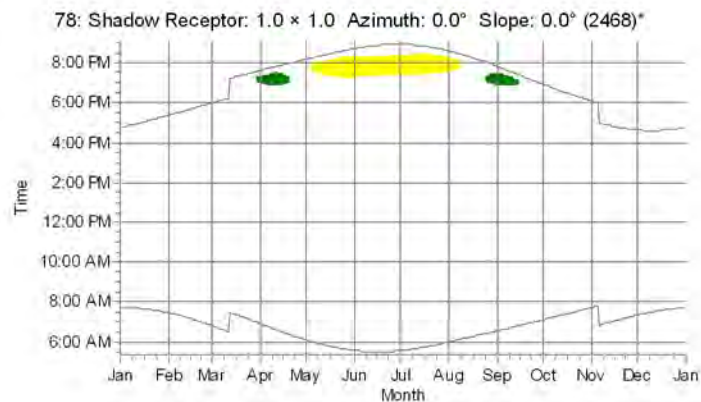
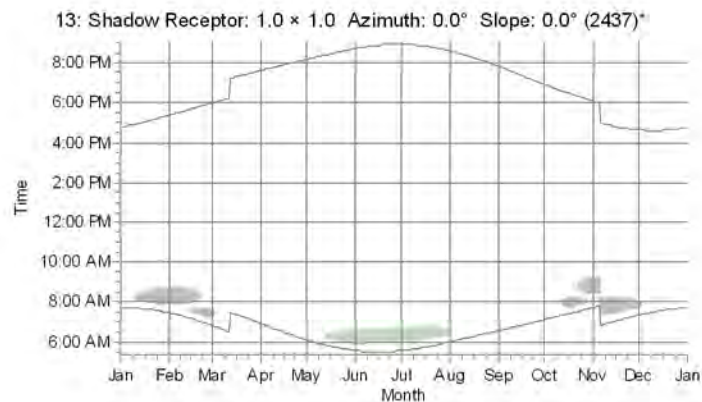
N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Sum
245	195	263	395	451	393	363	382	412	348	736	1,617	1,224	837	579	320	8,760

July		August		September		October		November		December	
1	05:34	19:44 (T23)	06:00	19:56 (T23)	06:34	18:44 (T20)	07:07	07:44	17:07 (T24)	07:21	15:41 (T22)
	20:55	38 20:22 (T23)	20:35	16 20:12 (T23)	19:48	34 19:18 (T20)	18:54	18:04	35 17:42 (T24)	16:37	32 16:13 (T22)
2	05:35	19:45 (T23)	06:01	19:58 (T23)	06:35	18:43 (T20)	07:08	07:45	17:08 (T24)	07:23	15:42 (T22)
	20:55	38 20:23 (T23)	20:34	13 20:11 (T23)	19:46	35 19:18 (T20)	18:52	18:03	33 17:41 (T24)	16:37	32 16:14 (T22)
3	05:35	19:44 (T23)	06:02	20:01 (T23)	06:36	18:42 (T20)	07:09	07:47	17:08 (T24)	07:24	15:42 (T22)
	20:54	39 20:23 (T23)	20:33	9 20:10 (T23)	19:44	36 19:18 (T20)	18:51	18:02	31 17:39 (T24)	16:36	31 16:13 (T22)
4	05:36	19:45 (T23)	06:03		06:37	18:41 (T20)	07:10	07:48	17:10 (T24)	07:25	15:43 (T22)
	20:54	38 20:23 (T23)	20:32		19:43	37 19:18 (T20)	18:49	18:00	29 17:39 (T24)	16:36	30 16:13 (T22)
5	05:36	19:44 (T23)	06:04		06:38	18:41 (T20)	07:11	07:49	17:10 (T24)	07:26	15:43 (T22)
	20:54	39 20:23 (T23)	20:30		19:41	36 19:17 (T20)	18:47	17:59	27 17:37 (T24)	16:36	29 16:12 (T22)
6	05:37	19:45 (T23)	06:05		06:39	18:40 (T20)	07:12	06:50	16:11 (T24)	07:27	15:43 (T22)
	20:54	39 20:24 (T23)	20:29		19:39	37 19:17 (T20)	18:45	16:58	24 16:35 (T24)	16:36	29 16:12 (T22)
7	05:38	19:45 (T23)	06:06		06:40	18:40 (T20)	07:14	06:52	16:13 (T24)	07:28	15:44 (T22)
	20:53	39 20:24 (T23)	20:28		19:37	37 19:17 (T20)	18:44	16:57	22 16:35 (T24)	16:36	28 16:12 (T22)
8	05:38	19:45 (T23)	06:07		06:41	18:40 (T20)	07:15	06:53	16:14 (T24)	07:29	15:44 (T22)
	20:53	39 20:24 (T23)	20:26		19:36	35 19:15 (T20)	18:42	16:55	19 16:33 (T24)	16:35	28 16:12 (T22)
9	05:39	19:45 (T23)	06:08		06:42	18:40 (T20)	07:16	06:54	16:17 (T24)	07:30	15:45 (T22)
	20:53	39 20:24 (T23)	20:25		19:34	33 19:13 (T20)	18:40	16:54	15 16:32 (T24)	16:35	26 16:11 (T22)
10	05:40	19:46 (T23)	06:09		06:43	18:40 (T20)	07:17	06:56	16:20 (T24)	07:31	15:46 (T22)
	20:52	39 20:25 (T23)	20:24		19:32	31 19:11 (T20)	18:38	16:53	11 16:31 (T24)	16:35	25 16:11 (T22)
11	05:40	19:45 (T23)	06:11		06:45	18:41 (T20)	07:18	06:57		07:31	15:46 (T22)
	20:52	39 20:24 (T23)	20:22		19:30	29 19:10 (T20)	18:37	16:52		16:35	26 16:12 (T22)
12	05:41	19:45 (T23)	06:12		06:46	18:41 (T20)	07:19	06:58		07:32	15:47 (T22)
	20:51	40 20:25 (T23)	20:21		19:28	27 19:08 (T20)	18:35	16:51		16:35	25 16:12 (T22)
13	05:42	19:46 (T23)	06:13		06:47	18:42 (T20)	07:21	06:59		07:33	15:47 (T22)
	20:51	39 20:25 (T23)	20:20		19:27	25 19:07 (T20)	18:33	16:50		16:36	24 16:11 (T22)
14	05:43	19:46 (T23)	06:14		06:48	18:42 (T20)	07:22	07:01		07:34	15:47 (T22)
	20:50	39 20:25 (T23)	20:18		19:25	23 19:05 (T20)	18:32	16:49		16:36	24 16:11 (T22)
15	05:44	19:46 (T23)	06:15		06:49	18:44 (T20)	07:23	07:02	15:50 (T22)	07:35	15:48 (T22)
	20:50	39 20:25 (T23)	20:17		19:23	19 19:03 (T20)	18:30	12 17:33 (T24)	6 15:56 (T22)	16:36	24 16:12 (T22)
16	05:44	19:46 (T23)	06:16		06:50	18:45 (T20)	07:24	07:03	15:47 (T22)	07:35	15:49 (T22)
	20:49	39 20:25 (T23)	20:15		19:21	16 19:01 (T20)	18:28	19 17:36 (T24)	13 16:00 (T22)	16:36	23 16:12 (T22)
17	05:45	19:46 (T23)	06:17		06:51	18:47 (T20)	07:25	07:05	15:46 (T22)	07:36	15:49 (T22)
	20:49	39 20:25 (T23)	20:14		19:19	12 18:59 (T20)	18:27	23 17:39 (T24)	16 16:02 (T22)	16:36	23 16:12 (T22)
18	05:46	19:47 (T23)	06:18		06:52	18:53 (T20)	07:27	07:06	15:44 (T22)	07:37	15:50 (T22)
	20:48	37 20:24 (T23)	20:12		19:18	3 18:56 (T20)	18:25	26 17:40 (T24)	20 16:04 (T22)	16:37	22 16:12 (T22)
19	05:47	19:47 (T23)	06:19		06:53		07:28	07:07	15:43 (T22)	07:38	15:51 (T22)
	20:47	37 20:24 (T23)	20:11		19:16		18:23	29 17:41 (T24)	22 16:05 (T22)	16:37	22 16:13 (T22)
20	05:48	19:48 (T23)	06:20		06:54		07:29	07:08	15:43 (T22)	07:38	15:50 (T22)
	20:46	35 20:23 (T23)	20:09		19:14		18:22	31 17:41 (T24)	23 16:06 (T22)	16:37	23 16:13 (T22)
21	05:49	19:47 (T23)	06:22		06:56		07:30	07:10	15:42 (T22)	07:39	15:51 (T22)
	20:46	34 20:21 (T23)	20:08		19:12		18:20	33 17:43 (T24)	25 16:07 (T22)	16:38	22 16:13 (T22)
22	05:50	19:47 (T23)	06:23		06:57		07:31	07:11	15:41 (T22)	07:39	15:51 (T22)
	20:45	34 20:21 (T23)	20:06		19:10		18:19	34 17:43 (T24)	27 16:08 (T22)	16:38	22 16:13 (T22)
23	05:51	19:48 (T23)	06:24		06:58		07:33	07:12	15:41 (T22)	07:40	15:52 (T22)
	20:44	32 20:20 (T23)	20:05		19:09		18:17	35 17:43 (T24)	28 16:09 (T22)	16:39	22 16:14 (T22)
24	05:52	19:49 (T23)	06:25		06:59		07:34	07:13	15:41 (T22)	07:40	15:52 (T22)
	20:43	30 20:19 (T23)	20:03		19:07		18:16	36 17:44 (T24)	29 16:10 (T22)	16:39	23 16:15 (T22)
25	05:53	19:49 (T23)	06:26		18:57 (T20)	07:00	07:35	07:14	15:40 (T22)	07:41	15:52 (T22)
	20:42	29 20:18 (T23)	20:01	12	19:09 (T20)	19:05	18:14	37 17:44 (T24)	30 16:10 (T22)	16:40	23 16:15 (T22)
26	05:54	19:50 (T23)	06:27		18:54 (T20)	07:01	07:36	07:16	15:40 (T22)	07:41	15:54 (T22)
	20:41	28 20:18 (T23)	20:00	18	19:12 (T20)	19:03	18:13	38 17:44 (T24)	30 16:10 (T22)	16:41	22 16:16 (T22)
27	05:55	19:50 (T23)	06:28		18:51 (T20)	07:02	07:38	07:17	15:41 (T22)	07:41	15:54 (T22)
	20:40	27 20:17 (T23)	19:56	23	19:14 (T20)	19:01	18:11	37 17:44 (T24)	31 16:12 (T22)	16:41	22 16:16 (T22)
28	05:56	19:51 (T23)	06:29		18:50 (T20)	07:03	07:39	07:18	15:41 (T22)	07:42	15:54 (T22)
	20:39	25 20:16 (T23)	19:55	25	19:15 (T20)	19:00	18:10	38 17:44 (T24)	31 16:12 (T22)	16:42	23 16:17 (T22)
29	05:57	19:52 (T23)	06:30		18:48 (T20)	07:04	07:40	07:19	15:41 (T22)	07:42	15:55 (T22)
	20:38	23 20:15 (T23)	19:53	28	19:16 (T20)	18:58	18:08	37 17:43 (T24)	31 16:12 (T22)	16:43	23 16:18 (T22)
30	05:58	19:53 (T23)	06:31		18:46 (T20)	07:06	07:41	07:20	15:41 (T22)	07:42	15:55 (T22)
	20:37	21 20:14 (T23)	19:51	31	19:17 (T20)	18:56	18:07	37 17:44 (T24)	32 16:13 (T22)	16:43	24 16:19 (T22)
31	05:59	19:54 (T23)	06:33		18:45 (T20)		07:43	07:21		07:42	15:55 (T22)
	20:36	19 20:13 (T23)	19:50	32	19:17 (T20)		18:06	36 17:43 (T24)		16:44	25 16:20 (T22)
Potential sun hours	466		433		376		343		293		281
Total, worst case	1072		207		505		538		640		777
Sun reduction	0.67		0.63		0.56		0.44		0.25		0.24
Oper. time red.	1.00		1.00		1.00		1.00		1.00		1.00
Wind dir. red.	0.67		0.73		0.74		0.74		0.73		0.72
Total reduction	0.46		0.46		0.42		0.33		0.18		0.17
Total, real	488		96		211		177		117		135

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

SHADOW - Calendar, graphical

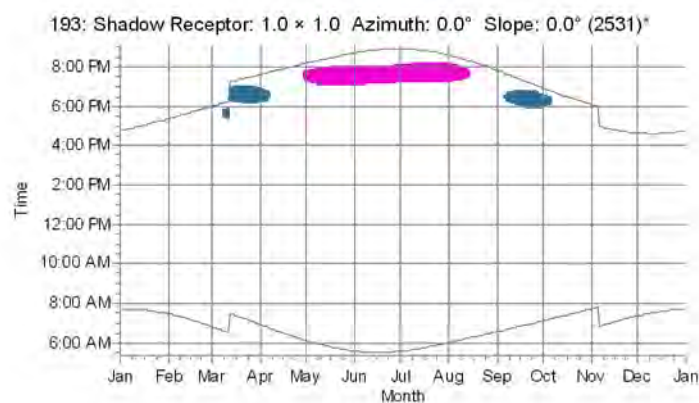
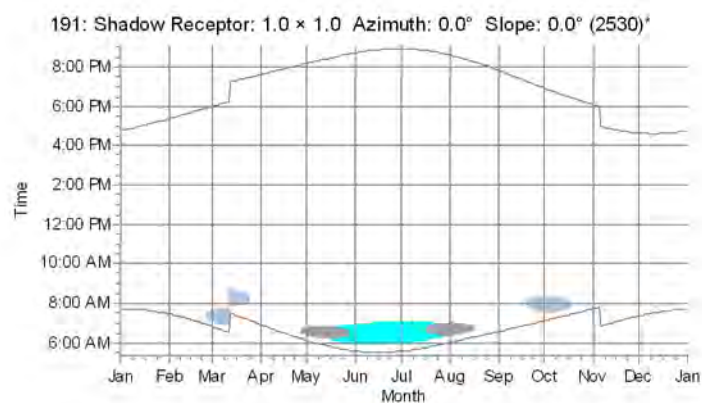
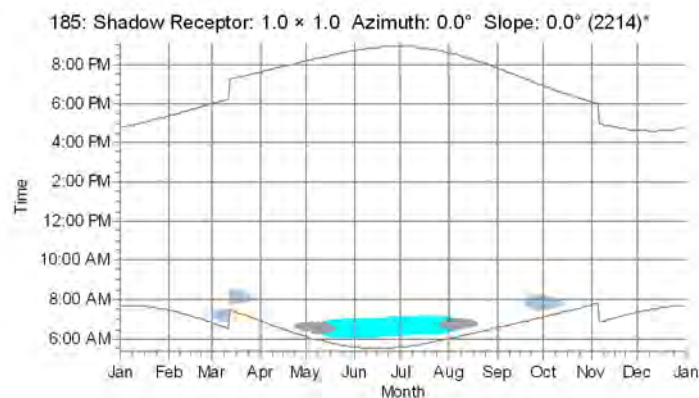
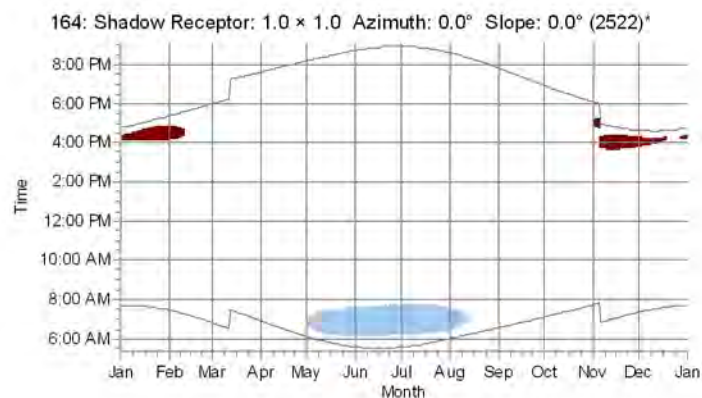
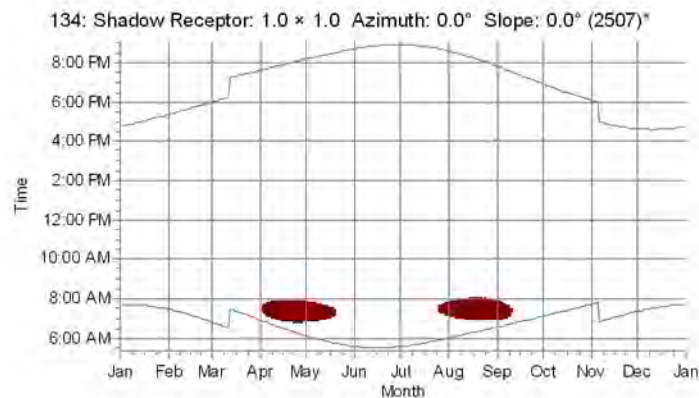
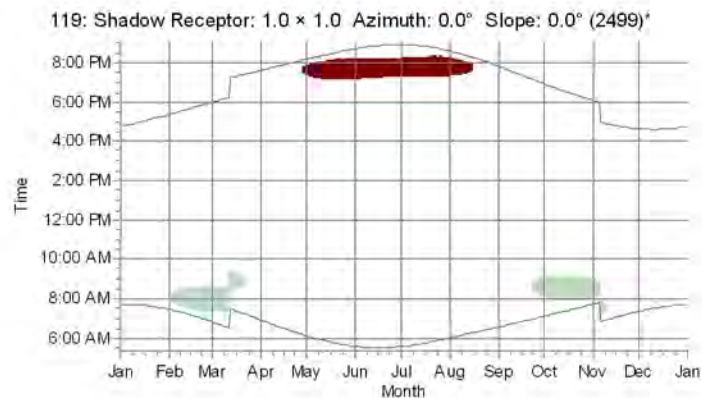


WTGs

T01: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (100)	T12: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (111)	T27: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (126)
T02: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (101)	T14: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (113)	T28: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (127)
T03: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (102)	T17: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (116)	T30: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (129)
T08: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (107)	T26: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (125)	T31: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (130)

* Results reduced by flicker curtailment

SHADOW - Calendar, graphical

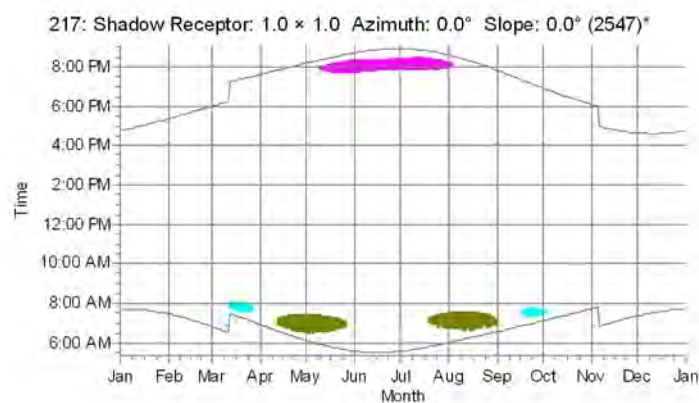
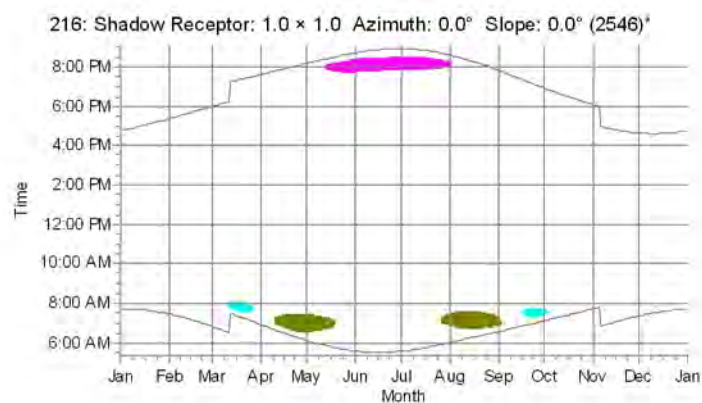
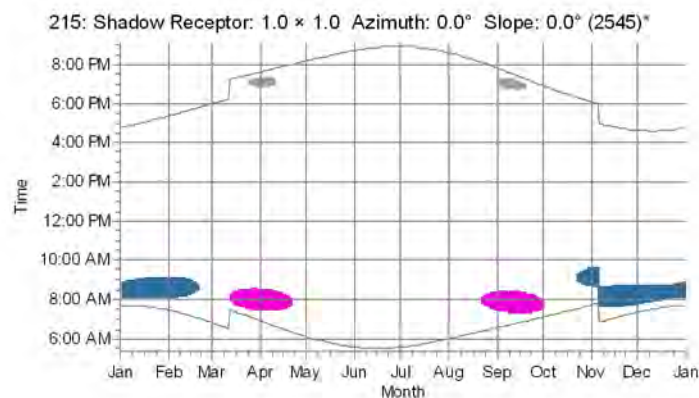
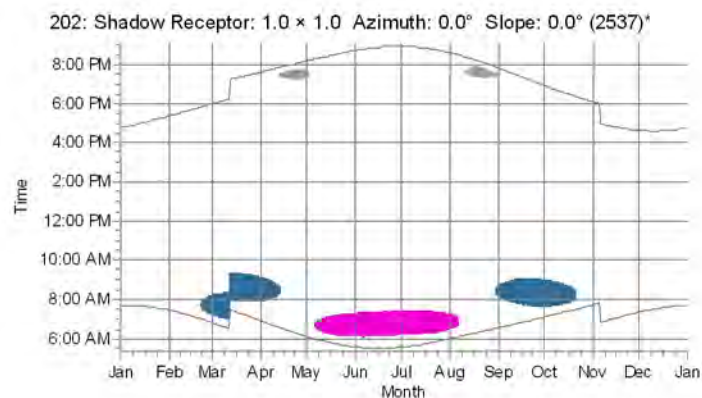
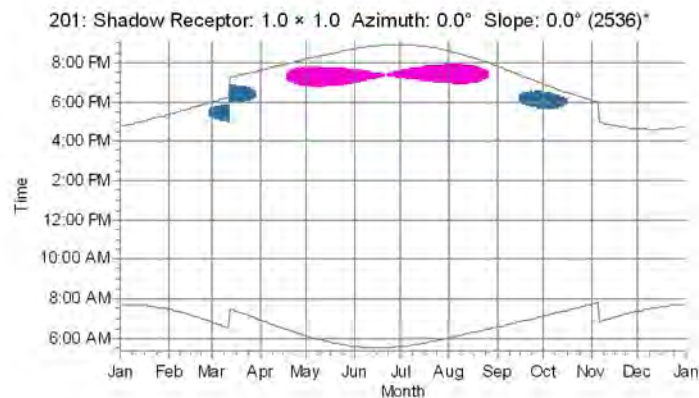
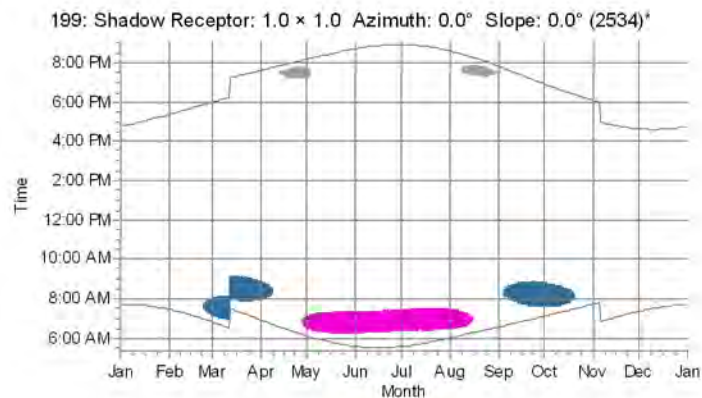


WTGs

T08: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (107)	T15: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (114)	T24: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (123)
T13: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (112)	T16: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (115)	
T14: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (113)	T22: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (121)	

* Results reduced by flicker curtailment

SHADOW - Calendar, graphical

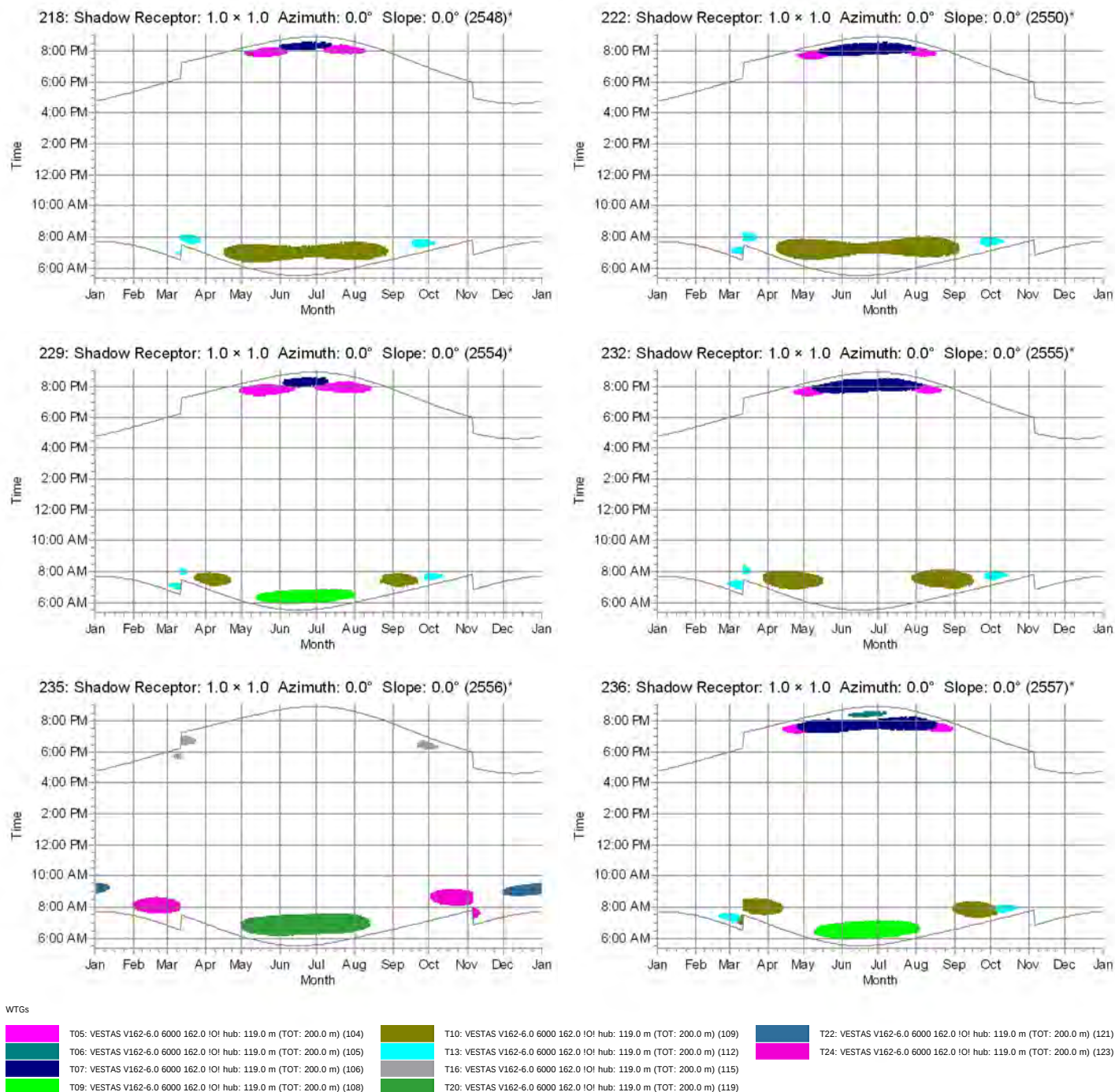


WTGs

T05: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (104)	T13: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (112)	T22: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (121)
T10: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (109)	T16: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (115)	T24: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (123)

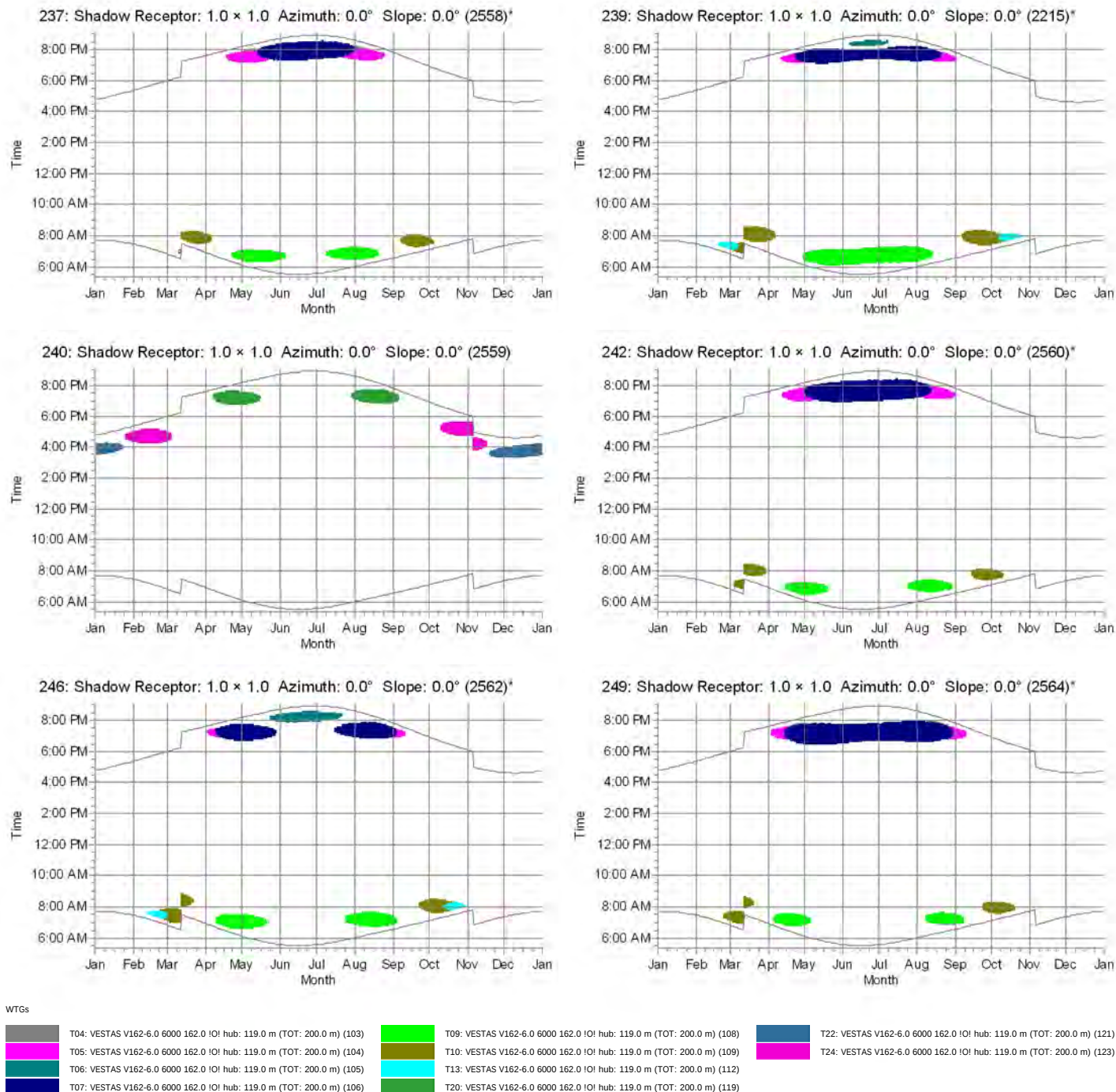
* Results reduced by flicker curtailment

SHADOW - Calendar, graphical



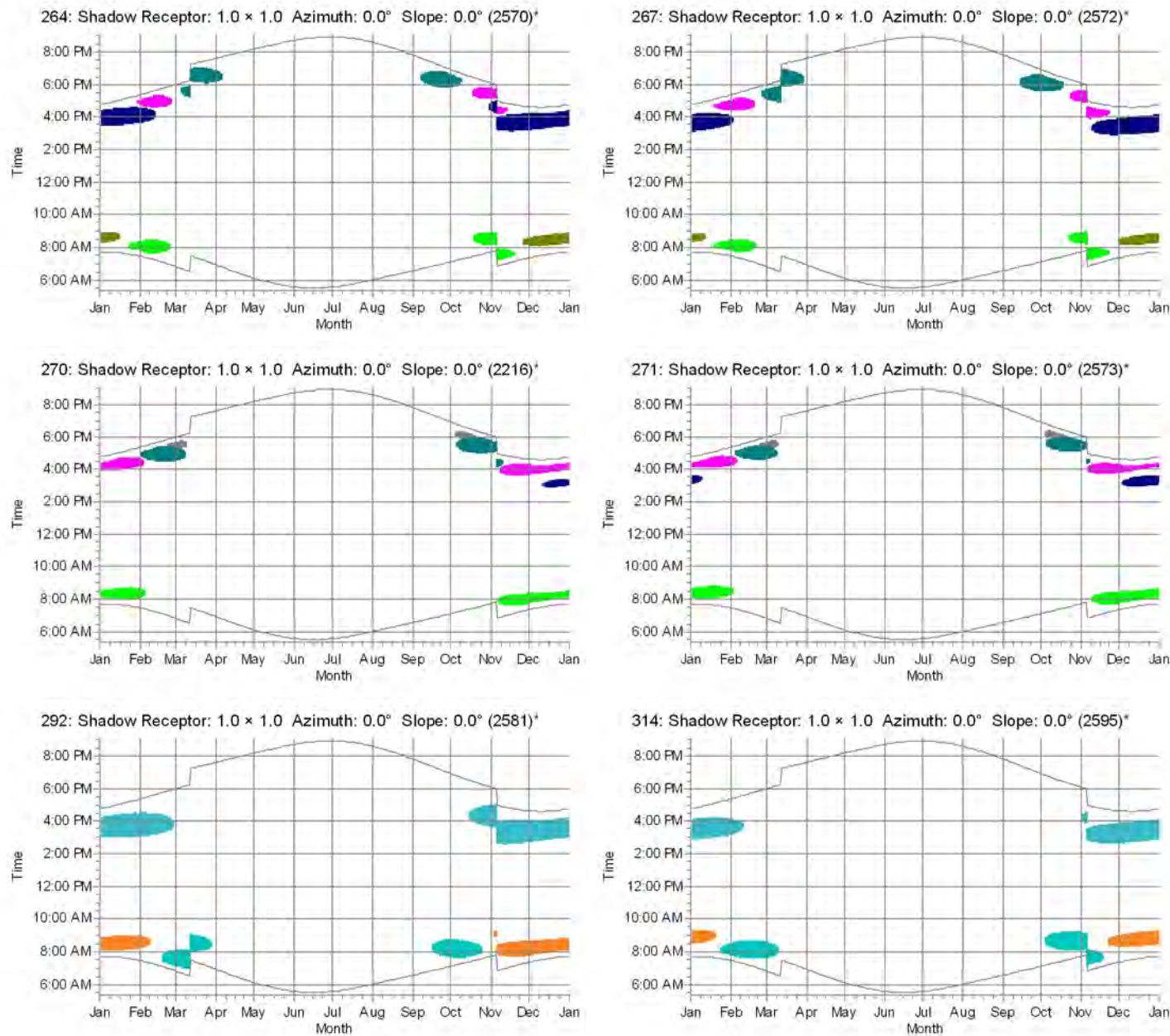
* Results reduced by flicker curtailment

SHADOW - Calendar, graphical



* Results reduced by flicker curtailment

SHADOW - Calendar, graphical

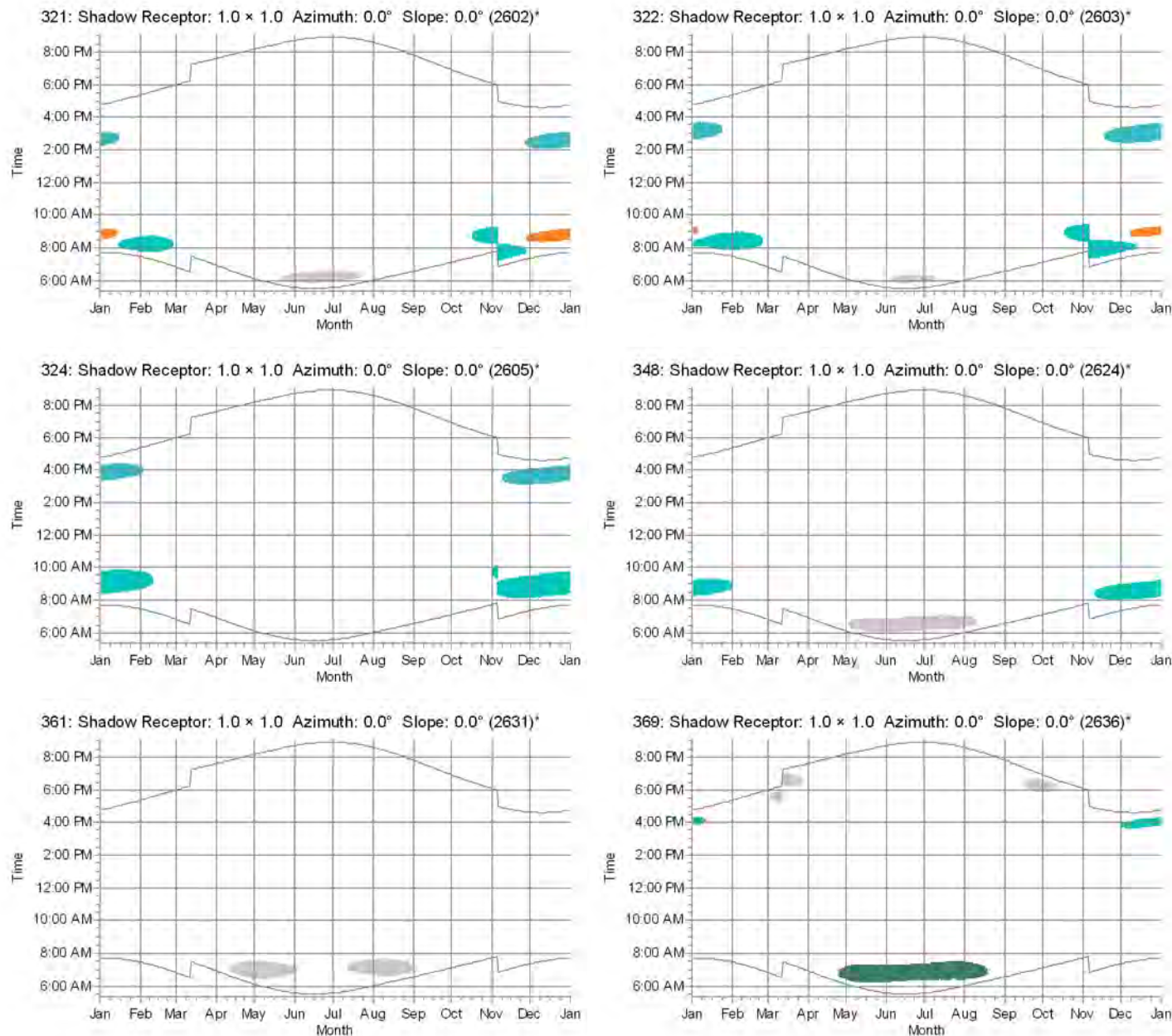


WTGs

T04: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (103)	T07: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (106)	T19: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (118)
T05: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (104)	T09: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (108)	T21: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (120)
T06: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (105)	T10: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (109)	T23: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (122)

* Results reduced by flicker curtailment

SHADOW - Calendar, graphical

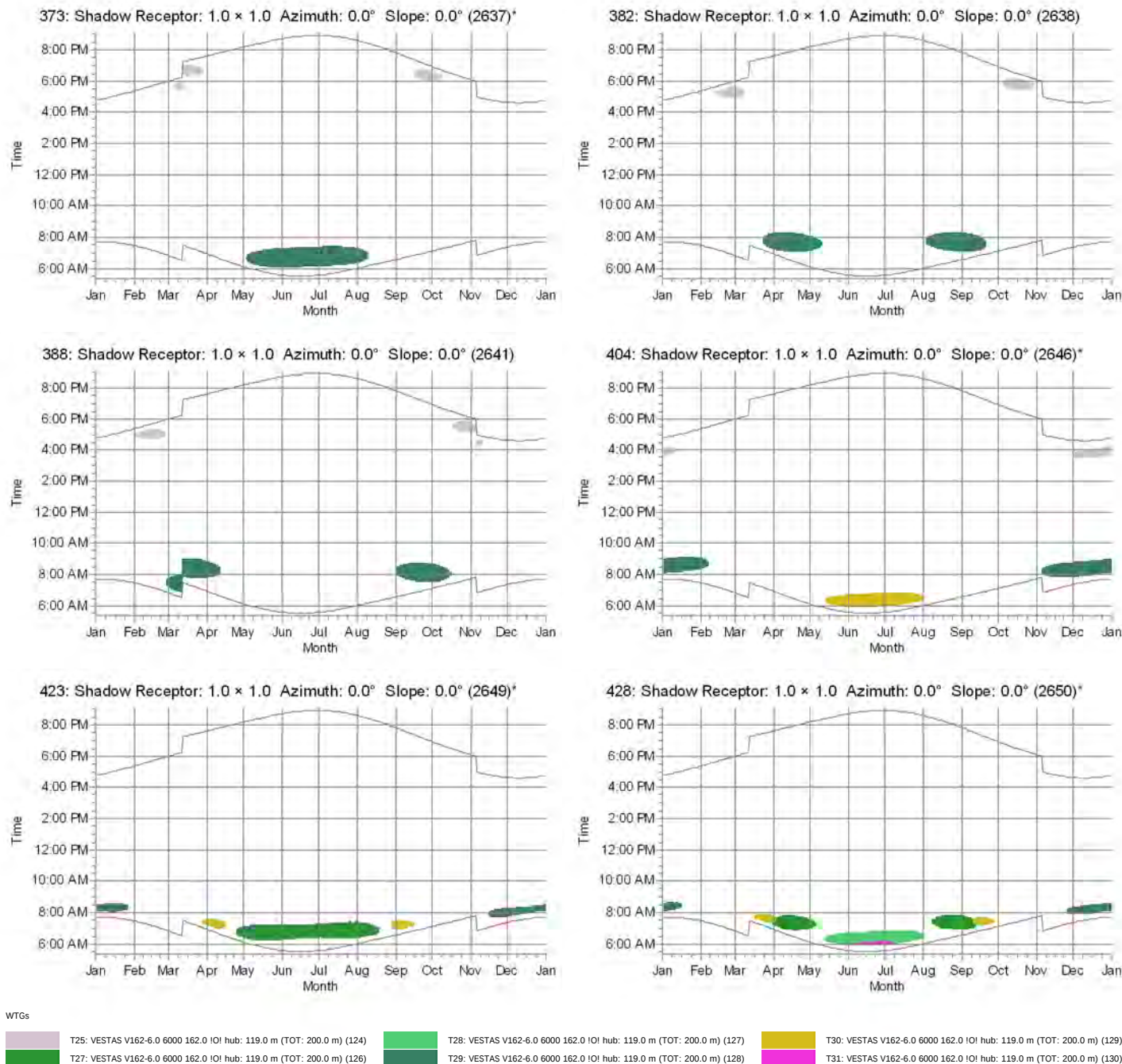


WTGs

T19: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (118)	T23: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (122)	T29: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (128)
T21: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (120)	T25: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (124)	

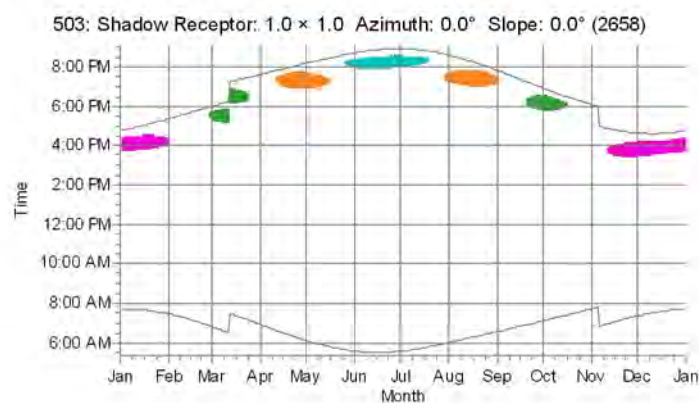
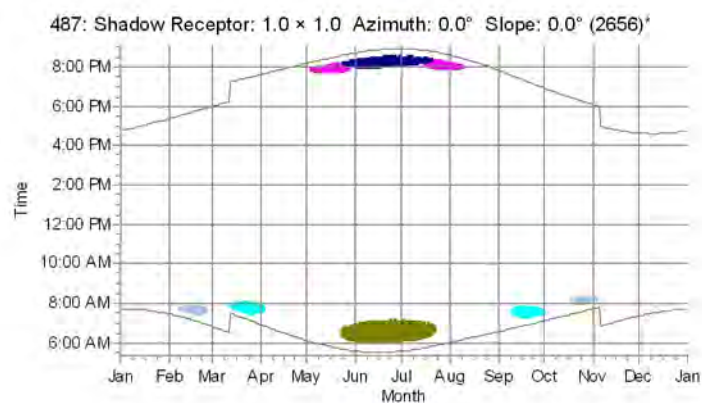
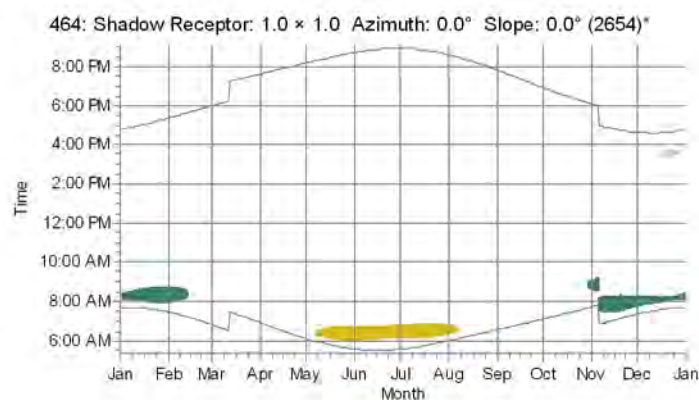
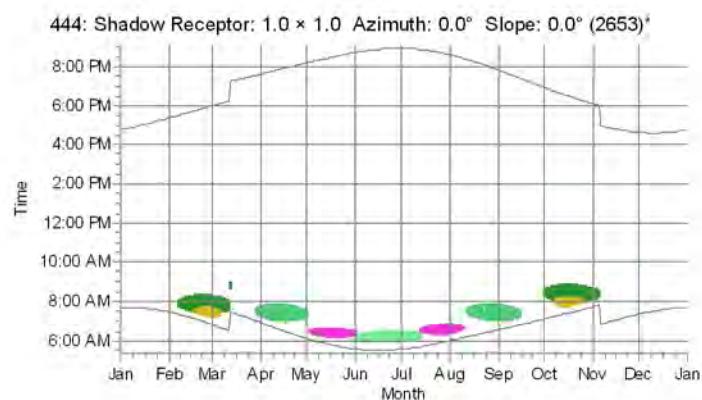
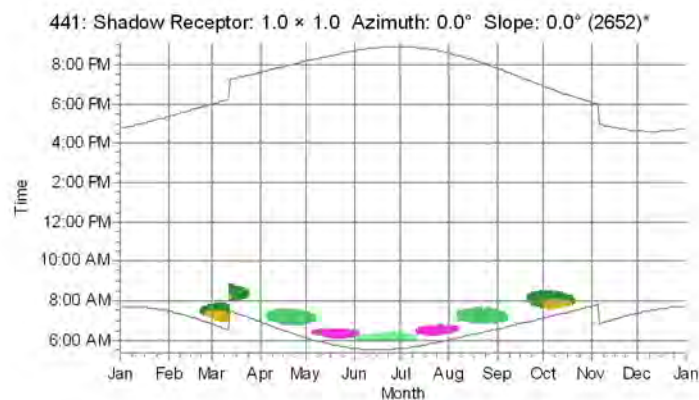
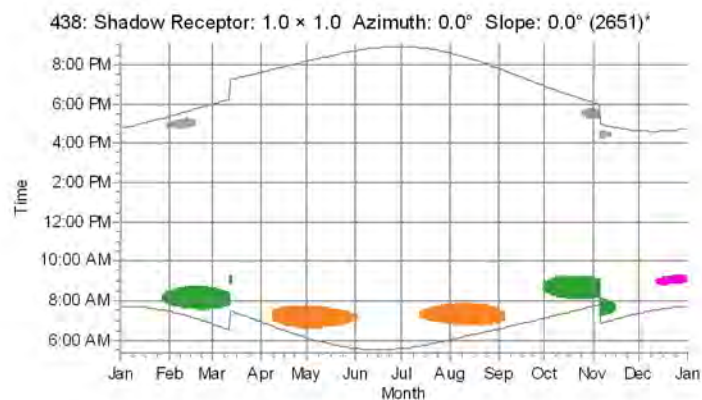
* Results reduced by flicker curtailment

SHADOW - Calendar, graphical



* Results reduced by flicker curtailment

SHADOW - Calendar, graphical

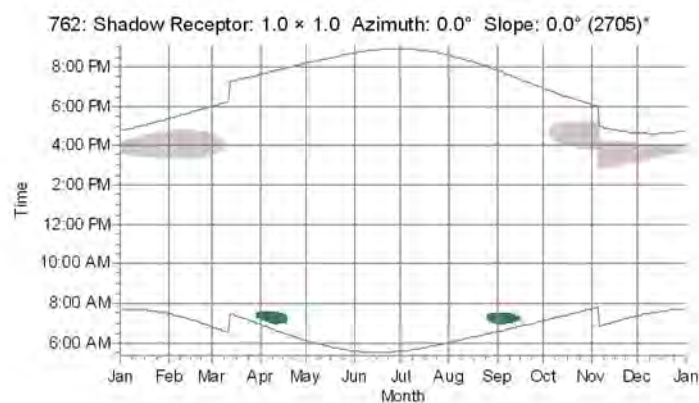
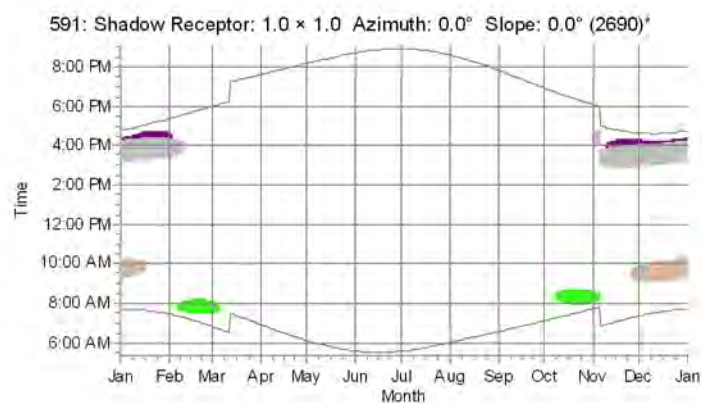
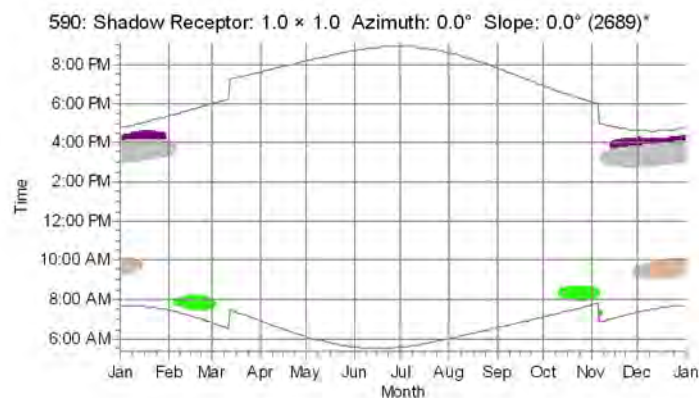
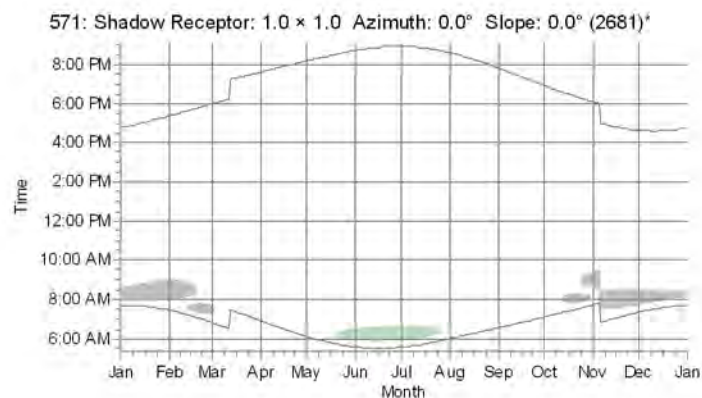
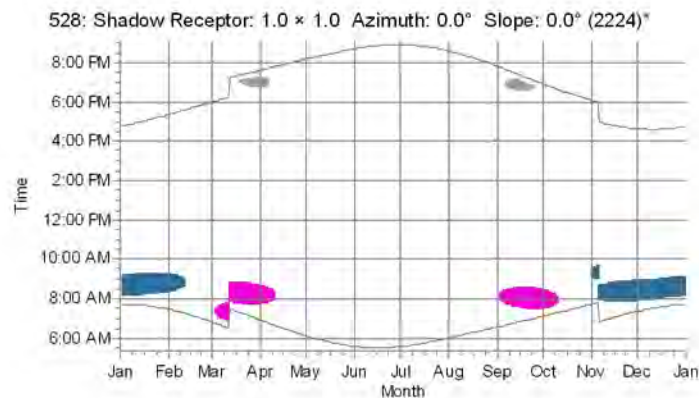
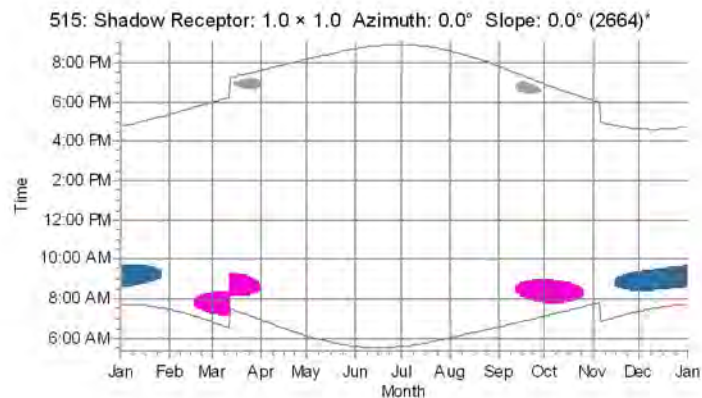


WTGs

T05: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (104)	T20: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (119)	T27: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (126)
T07: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (106)	T21: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (120)	T28: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (127)
T10: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (109)	T23: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (122)	T29: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (128)
T13: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (112)	T24: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (123)	T30: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (129)
T15: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (114)	T25: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (124)	T31: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (130)
T16: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (115)	T26: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (125)	

* Results reduced by flicker curtailment

SHADOW - Calendar, graphical



WTGs

T11: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (110)	T17: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (116)	T25: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (124)
T12: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (111)	T18: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (117)	T29: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (128)
T14: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (113)	T22: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (121)	
T16: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (115)	T24: VESTAS V162-6.0 6000 162.0 IOI hub: 119.0 m (TOT: 200.0 m) (123)	

* Results reduced by flicker curtailment