



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: KrU_01 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -96.5° Slope: 90.0° (32)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June		
1	07:44	07:28	06:48	07:52 (LZ06)	06:53	07:17 (LZ02)	06:03	05:31
	16:42	17:19	17:57	48 08:40 (LZ06)	19:35	16 07:33 (LZ02)	20:11	20:44
2	07:44	07:27	06:46	07:51 (LZ06)	06:51	07:15 (LZ02)	06:02	05:30
	16:43	17:20	17:58	49 08:40 (LZ06)	19:36	19 07:34 (LZ02)	20:12	20:45
3	07:44	07:25	06:45	07:50 (LZ06)	06:49	07:15 (LZ02)	06:00	05:30
	16:44	17:22	17:59	50 08:40 (LZ06)	19:38	20 07:35 (LZ02)	20:14	20:46
4	07:44	07:24	06:43	07:50 (LZ06)	06:48	07:14 (LZ02)	05:59	05:29
	16:45	17:23	18:01	51 08:41 (LZ06)	19:39	21 07:35 (LZ02)	20:15	20:46
5	07:44	07:23	06:41	07:50 (LZ06)	06:46	07:13 (LZ02)	05:57	05:29
	16:46	17:24	18:02	51 08:41 (LZ06)	19:40	21 07:34 (LZ02)	20:16	20:47
6	07:44	07:22	06:40	07:49 (LZ06)	06:44	07:13 (LZ02)	05:56	05:28
	16:47	17:26	18:03	51 08:40 (LZ06)	19:41	21 07:34 (LZ02)	20:17	20:48
7	07:44	07:21	06:38	07:48 (LZ06)	06:42	07:12 (LZ02)	05:55	05:28
	16:48	17:27	18:04	52 08:40 (LZ06)	19:42	21 07:33 (LZ02)	20:18	20:49
8	07:43	07:19	06:36	07:49 (LZ06)	06:40	07:13 (LZ02)	05:53	05:28
	16:49	17:29	18:06	51 08:40 (LZ06)	19:44	20 07:33 (LZ02)	20:19	20:49
9	07:43	07:18	06:34	07:49 (LZ06)	06:39	07:14 (LZ02)	05:52	05:28
	16:50	17:30	18:07	50 08:39 (LZ06)	19:45	17 07:31 (LZ02)	20:20	20:50
10	07:43	07:17	06:33	07:48 (LZ06)	06:37	07:14 (LZ02)	05:51	05:27
	16:51	17:31	18:08	50 08:38 (LZ06)	19:46	16 07:30 (LZ02)	20:22	20:50
11	07:43	07:15	06:31	07:48 (LZ06)	06:35	07:15 (LZ02)	05:50	05:27
	16:52	17:33	18:10	50 08:38 (LZ06)	19:47	12 07:27 (LZ02)	20:23	20:51
12	07:42	07:14	06:29	07:48 (LZ06)	06:33	07:19 (LZ02)	05:48	05:27
	16:53	17:34	18:11	48 08:36 (LZ06)	19:48	5 07:24 (LZ02)	20:24	20:52
13	07:42	07:13	06:27	07:49 (LZ06)	06:32		05:47	05:27
	16:54	17:35	18:12	47 08:36 (LZ06)	19:50		20:25	20:52
14	07:42	07:11	06:25	07:49 (LZ06)	06:30		05:46	05:27
	16:56	17:37	18:13	46 08:35 (LZ06)	19:51		20:26	20:53
15	07:41	07:10	06:24	07:50 (LZ06)	06:28		05:45	05:27
	16:57	17:38	18:15	43 08:33 (LZ06)	19:52		20:27	20:53
16	07:41	07:08	06:22	07:50 (LZ06)	06:27		05:44	05:27
	16:58	17:40	18:16	42 08:32 (LZ06)	19:53		20:28	20:53
17	07:40	07:07	06:20	07:51 (LZ06)	06:25		05:43	05:27
	16:59	17:41	18:17	39 08:30 (LZ06)	19:54		20:29	20:54
18	07:39	07:05	08:17 (LZ06)	06:18	07:53 (LZ06)	06:23	05:42	05:27
	17:00	17:42	1 08:18 (LZ06)	18:18	36 08:29 (LZ06)	19:56	20:31	20:54
19	07:39	07:04	08:09 (LZ06)	06:16	07:54 (LZ06)	06:22	05:41	05:27
	17:02	17:44	17 08:26 (LZ06)	18:19	33 08:27 (LZ06)	19:57	20:32	20:54
20	07:38	07:02	08:06 (LZ06)	06:15	07:55 (LZ06)	06:20	05:40	05:27
	17:03	17:45	24 08:30 (LZ06)	18:21	29 08:24 (LZ06)	19:58	20:33	20:55
21	07:38	07:01	08:03 (LZ06)	06:13	07:57 (LZ06)	06:18	05:39	05:27
	17:04	17:46	29 08:32 (LZ06)	18:22	24 08:21 (LZ06)	19:59	20:34	20:55
22	07:37	06:59	08:00 (LZ06)	06:11	07:59 (LZ06)	06:17	05:38	05:27
	17:06	17:48	33 08:33 (LZ06)	18:23	18 08:17 (LZ06)	20:00	20:35	20:55
23	07:36	06:58	07:59 (LZ06)	06:09	08:05 (LZ06)	06:15	05:37	05:27
	17:07	17:49	36 08:35 (LZ06)	18:24	5 08:10 (LZ06)	20:02	20:36	20:55
24	07:35	06:56	07:57 (LZ06)	06:07		06:14	05:36	05:28
	17:08	17:50	39 08:36 (LZ06)	18:26		20:03	20:37	20:56
25	07:34	06:55	07:56 (LZ06)	06:06		06:12	05:36	05:28
	17:09	17:52	42 08:38 (LZ06)	18:27		20:04	20:38	20:56
26	07:34	06:53	07:55 (LZ06)	06:04		06:10	05:35	05:28
	17:11	17:53	43 08:38 (LZ06)	18:28		20:05	20:39	20:56
27	07:33	06:51	07:54 (LZ06)	06:02		06:09	05:34	05:29
	17:12	17:54	45 08:39 (LZ06)	18:29		20:06	20:40	20:56
28	07:32	06:50	07:52 (LZ06)	06:00		06:07	05:33	05:29
	17:13	17:55	47 08:39 (LZ06)	18:30		20:08	20:40	20:56
29	07:31			06:58		06:06	05:33	05:30
	17:15			19:32		20:09	20:41	20:56
30	07:30			06:57	07:21 (LZ02)	06:04	05:32	05:30
	17:16			19:33	9 07:30 (LZ02)	20:10	20:42	20:56
31	07:29			06:55	07:19 (LZ02)		05:31	
	17:18			19:34	13 07:32 (LZ02)		20:43	
Potential sun hours	289	293	356	985	402	209	456	462
Total, worst case								

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)
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SHADOW - Calendar

Calculation: Worst Case Shadow receptor: KrU_01 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -96.5° Slope: 90.0° (32)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December		
1	05:31 20:56	05:57 20:34	06:32 19:47	07:15 (LZ02) 18:52	07:06 18:52	08:28 (LZ06) 17:01	06:44 16:34	07:22 16:34
2	05:31 20:55	05:58 20:33	06:33 19:45	07:13 (LZ02) 18:50	07:07 18:50	08:27 (LZ06) 17:00	06:46 16:33	07:24 16:33
3	05:32 20:55	05:59 20:32	06:34 19:43	07:12 (LZ02) 18:49	07:08 18:49	08:26 (LZ06) 16:59	06:47 16:33	07:25 16:33
4	05:32 20:55	06:00 20:30	06:35 19:42	07:10 (LZ02) 18:47	07:09 18:47	08:26 (LZ06) 16:57	06:48 16:33	07:26 16:33
5	05:33 20:55	06:01 20:29	06:36 19:40	07:10 (LZ02) 18:45	07:11 18:45	08:26 (LZ06) 16:56	06:50 16:32	07:27 16:32
6	05:33 20:54	06:02 20:28	06:37 19:38	07:09 (LZ02) 18:43	07:12 18:43	08:25 (LZ06) 16:55	06:51 16:32	07:28 16:32
7	05:34 20:54	06:03 20:26	06:38 19:36	07:08 (LZ02) 18:42	07:13 18:42	08:25 (LZ06) 16:54	06:52 16:32	07:29 16:32
8	05:35 20:54	06:05 20:25	06:40 19:34	07:08 (LZ02) 18:40	07:14 18:40	08:24 (LZ06) 16:53	06:53 16:32	07:30 16:32
9	05:35 20:53	06:06 20:24	06:41 19:33	07:08 (LZ02) 18:38	07:15 18:38	08:25 (LZ06) 16:51	06:55 16:32	07:31 16:32
10	05:36 20:53	06:07 20:22	06:42 19:31	07:08 (LZ02) 18:36	07:17 18:36	08:25 (LZ06) 16:50	06:56 16:32	07:32 16:32
11	05:37 20:52	06:08 20:21	06:43 19:29	07:09 (LZ02) 18:35	07:18 18:35	08:25 (LZ06) 16:49	06:57 16:32	07:33 16:32
12	05:38 20:52	06:09 20:19	06:44 19:27	07:11 (LZ02) 18:33	07:19 18:33	08:25 (LZ06) 16:48	06:59 16:32	07:33 16:32
13	05:39 20:51	06:10 20:18	06:45 19:25	07:12 (LZ02) 18:31	07:20 18:31	08:26 (LZ06) 16:47	07:00 16:32	07:34 16:32
14	05:39 20:51	06:11 20:16	06:46 19:24	07:22 (LZ02) 18:29	18:31 18:29	08:26 (LZ06) 16:46	07:01 16:32	07:35 16:32
15	05:40 20:50	06:12 20:15	06:47 19:22	07:23 18:28	18:29 18:28	08:26 (LZ06) 16:45	07:03 16:32	07:36 16:32
16	05:41 20:49	06:14 20:13	06:49 19:20	07:24 18:26	18:28 18:26	08:27 (LZ06) 16:44	07:04 16:33	07:37 16:33
17	05:42 20:49	06:15 20:12	06:50 19:18	07:25 18:24	18:26 18:24	08:28 (LZ06) 16:43	07:05 16:33	07:37 16:33
18	05:43 20:48	06:16 20:10	06:51 19:16	07:26 18:23	18:24 18:23	08:29 (LZ06) 16:42	07:07 16:33	07:38 16:33
19	05:44 20:47	06:17 20:09	06:52 19:14	07:28 18:21	18:23 18:21	08:30 (LZ06) 16:41	07:08 16:34	07:39 16:34
20	05:45 20:46	06:18 20:07	06:53 19:12	07:29 18:19	18:21 18:19	08:32 (LZ06) 16:40	07:09 16:34	07:39 16:34
21	05:46 20:45	06:19 20:06	06:54 19:11	07:30 18:18	18:19 18:18	08:34 (LZ06) 16:39	07:10 16:34	07:40 16:34
22	05:47 20:45	06:20 20:04	06:55 19:09	08:43 (LZ06) 18:16	07:31 18:16	09:01 (LZ06) 16:39	07:12 16:35	07:40 16:35
23	05:48 20:44	06:21 20:02	06:57 19:07	09:06 (LZ06) 18:15	07:33 18:15	08:58 (LZ06) 16:38	07:13 16:35	07:41 16:35
24	05:49 20:43	06:23 20:01	06:58 19:05	08:40 (LZ06) 18:13	07:34 18:13	08:55 (LZ06) 16:37	07:14 16:36	07:41 16:36
25	05:50 20:42	06:24 19:59	06:59 19:03	08:36 (LZ06) 17:12	06:35 17:12	08:36 (LZ06) 16:37	07:15 16:37	07:42 16:37
26	05:51 20:41	06:25 19:57	07:00 19:01	08:34 (LZ06) 17:10	06:36 17:10	08:34 (LZ06) 16:36	07:17 16:37	07:42 16:37
27	05:52 20:40	06:26 19:56	07:01 19:00	09:12 (LZ06) 17:09	06:38 17:09	09:11 (LZ06) 16:36	07:18 16:38	07:43 16:38
28	05:53 20:39	06:27 19:54	07:02 18:58	08:31 (LZ06) 17:07	06:39 17:07	08:31 (LZ06) 16:35	07:19 16:39	07:43 16:39
29	05:54 20:38	06:28 19:52	07:03 18:56	08:30 (LZ06) 17:06	06:40 17:06	08:30 (LZ06) 16:35	07:20 16:39	07:43 16:39
30	05:55 20:36	06:29 19:50	07:05 18:54	08:29 (LZ06) 17:04	06:42 17:04	09:15 (LZ06) 16:34	07:21 16:40	07:43 16:40
31	05:56 20:35	06:31 19:49	07:19 (LZ02) 07:25 (LZ02)	09:16 (LZ06) 17:03	06:43 17:03	08:34 (LZ06) 16:41	07:22 16:41	07:43 16:41
Potential sun hours	468	434	376	342	291	278		
Total, worst case		6	576	991				

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

Day in month	Sun rise (hh:mm)	Minutes with flicker	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

Calculation: Worst Case Shadow receptor: KrU_02 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -90.0° Slope: 90.0° (33)

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December	
1	07:44 16:42	07:28 17:19	06:48 17:57	06:53 19:35	07:58 (LZ06) 08:44 (LZ06)	06:03 20:11	05:31 20:44	05:57 20:56	06:32 19:47	07:51 (LZ06) 08:43 (LZ06)	07:06 18:52	06:44 17:01	07:22 16:34
2	07:44 16:43	07:27 17:20	06:46 17:58	06:51 19:36	07:57 (LZ06) 08:44 (LZ06)	06:02 20:12	05:30 20:45	05:58 20:55	06:33 19:45	07:50 (LZ06) 08:43 (LZ06)	07:07 18:50	06:46 17:00	07:24 16:33
3	07:44 16:44	07:25 17:22	06:45 17:59	06:49 19:38	07:57 (LZ06) 08:45 (LZ06)	06:00 20:13	05:30 20:46	05:59 20:55	06:34 19:43	07:50 (LZ06) 08:42 (LZ06)	07:08 18:49	06:47 16:59	07:25 16:33
4	07:44 16:45	07:24 17:23	06:43 18:01	06:48 19:39	07:55 (LZ06) 08:45 (LZ06)	05:59 20:15	05:29 20:46	06:00 20:55	06:35 19:42	07:50 (LZ06) 08:42 (LZ06)	07:09 18:47	06:48 16:57	07:26 16:33
5	07:44 16:46	07:23 17:24	06:41 18:02	06:46 19:40	07:54 (LZ06) 08:45 (LZ06)	05:57 20:16	05:29 20:47	06:01 20:55	06:36 19:40	07:50 (LZ06) 08:41 (LZ06)	07:11 18:45	06:50 16:56	07:27 16:32
6	07:44 16:47	07:22 17:26	06:40 18:03	06:44 19:41	07:53 (LZ06) 08:45 (LZ06)	05:56 20:17	05:28 20:48	06:02 20:54	06:37 19:38	07:50 (LZ06) 08:41 (LZ06)	07:12 18:43	06:51 16:55	07:28 16:32
7	07:44 16:48	07:21 17:27	06:38 18:04	06:42 19:42	07:53 (LZ06) 08:44 (LZ06)	05:55 20:18	05:28 20:49	06:03 20:54	06:38 19:36	07:49 (LZ06) 08:40 (LZ06)	07:13 18:42	06:52 16:54	07:29 16:32
8	07:43 16:49	07:19 17:29	06:36 18:06	06:40 19:44	07:53 (LZ06) 08:45 (LZ06)	05:53 20:19	05:28 20:49	06:05 20:54	06:40 19:34	07:50 (LZ06) 08:39 (LZ06)	07:14 18:40	06:53 16:52	07:30 16:32
9	07:43 16:50	07:18 17:30	06:34 18:07	06:39 19:45	07:52 (LZ06) 08:44 (LZ06)	05:52 20:20	05:28 20:50	06:06 20:53	06:41 19:33	07:50 (LZ06) 08:38 (LZ06)	07:15 18:38	06:55 16:51	07:31 16:32
10	07:43 16:51	07:17 17:31	06:33 18:08	06:37 19:46	07:51 (LZ06) 08:44 (LZ06)	05:51 20:22	05:27 20:50	06:07 20:53	06:42 19:31	07:50 (LZ06) 08:37 (LZ06)	07:17 18:36	06:56 16:50	07:32 16:32
11	07:43 16:52	07:15 17:33	06:31 18:10	06:35 19:47	07:51 (LZ06) 08:43 (LZ06)	05:50 20:23	05:27 20:51	06:08 20:21	06:43 19:29	07:50 (LZ06) 08:36 (LZ06)	07:18 18:35	06:57 16:49	07:33 16:32
12	07:42 16:53	07:14 17:34	06:29 18:11	06:33 19:48	07:51 (LZ06) 08:43 (LZ06)	05:48 20:24	05:27 20:52	06:09 20:19	06:44 19:27	07:52 (LZ06) 08:36 (LZ06)	07:19 18:33	06:59 16:48	07:33 16:32
13	07:42 16:54	07:13 17:35	06:27 18:12	06:32 19:50	07:51 (LZ06) 08:42 (LZ06)	05:47 20:25	05:27 20:51	06:10 20:18	06:45 19:25	07:53 (LZ06) 08:34 (LZ06)	07:20 18:31	07:00 16:47	07:34 16:32
14	07:42 16:56	07:11 17:37	06:25 18:13	06:30 19:51	07:51 (LZ06) 08:41 (LZ06)	05:46 20:26	05:27 20:51	06:11 20:16	06:46 19:24	07:54 (LZ06) 08:32 (LZ06)	07:21 18:29	07:01 16:46	07:35 16:32
15	07:41 16:57	07:10 17:38	06:24 18:15	06:28 19:52	07:52 (LZ06) 08:41 (LZ06)	05:45 20:27	05:27 20:50	06:12 20:15	06:47 19:22	07:55 (LZ06) 08:30 (LZ06)	07:23 18:28	07:03 16:45	07:36 16:32
16	07:41 16:58	07:08 17:40	06:22 18:16	06:27 19:53	07:51 (LZ06) 08:40 (LZ06)	05:44 20:28	05:27 20:53	06:14 20:13	06:49 19:20	07:56 (LZ06) 08:28 (LZ06)	07:24 18:26	07:04 16:44	07:37 16:33
17	07:40 16:59	07:07 17:41	06:20 18:17	06:25 19:54	07:51 (LZ06) 08:38 (LZ06)	05:43 20:29	05:27 20:54	06:15 20:12	06:50 19:18	07:58 (LZ06) 08:25 (LZ06)	07:25 18:24	07:05 16:43	07:37 16:33
18	07:39 17:00	07:05 17:42	06:18 18:18	06:23 19:56	07:52 (LZ06) 08:38 (LZ06)	05:42 20:31	05:27 20:54	06:16 20:10	06:51 19:16	08:00 (LZ06) 08:22 (LZ06)	07:26 18:23	07:07 16:42	07:38 16:33
19	07:39 17:02	07:04 17:44	06:16 18:19	06:22 19:57	07:52 (LZ06) 08:36 (LZ06)	05:41 20:32	05:27 20:54	06:17 20:09	06:52 19:14	08:03 (LZ06) 08:17 (LZ06)	07:28 18:21	07:08 16:41	07:39 16:34
20	07:38 17:03	07:02 17:45	06:15 18:21	06:20 19:58	07:54 (LZ06) 08:36 (LZ06)	05:40 20:33	05:27 20:55	06:18 20:07	06:53 19:12	08:01 (LZ06) 08:37 (LZ06)	07:29 18:19	07:09 16:40	07:39 16:34
21	07:37 17:04	07:01 17:46	06:13 18:22	06:18 19:59	07:54 (LZ06) 08:34 (LZ06)	05:39 20:34	05:27 20:55	06:19 20:05	06:54 19:11	08:00 (LZ06) 08:38 (LZ06)	07:30 18:18	07:10 16:39	07:40 16:34
22	07:37 17:06	06:59 17:48	06:11 18:23	06:17 20:00	07:54 (LZ06) 08:32 (LZ06)	05:38 20:35	05:27 20:55	06:20 20:04	06:55 19:09	07:58 (LZ06) 08:39 (LZ06)	07:31 18:16	07:12 16:39	07:40 16:35
23	07:36 17:07	06:58 17:49	06:09 18:24	06:15 20:02	07:56 (LZ06) 08:31 (LZ06)	05:37 20:36	05:27 20:55	06:22 20:02	06:57 19:07	07:57 (LZ06) 08:40 (LZ06)	07:33 18:15	07:13 16:38	07:41 16:35
24	07:35 17:08	06:56 17:50	06:07 18:26	06:14 20:03	07:57 (LZ06) 08:28 (LZ06)	05:36 20:37	05:28 20:56	06:23 20:01	06:58 19:05	07:56 (LZ06) 08:41 (LZ06)	07:34 18:13	07:14 16:37	07:41 16:36
25	07:34 17:09	06:55 17:52	06:06 18:27	8 07:28 (LZ06) 07:14 (LZ06)	06:12 20:04	05:31 20:38	05:28 20:56	06:24 20:02	06:59 19:03	07:55 (LZ06) 08:41 (LZ06)	06:59 18:12	07:15 16:37	07:42 16:37
26	07:34 17:11	06:53 17:53	06:04 18:28	20 07:34 (LZ06) 07:10 (LZ06)	06:10 20:05	05:28 20:39	05:28 20:56	06:25 20:41	07:00 19:01	07:54 (LZ06) 08:41 (LZ06)	07:00 18:10	07:17 16:36	07:42 16:37
27	07:33 17:12	06:51 17:54	06:02 18:29	26 07:07 (LZ06) 07:38 (LZ06)	06:09 20:06	05:34 20:40	05:29 20:56	06:26 20:40	07:01 19:56	07:53 (LZ06) 08:42 (LZ06)	07:01 18:09	07:18 16:36	07:43 16:38
28	07:32 17:13	06:50 17:55	06:00 18:30	31 07:05 (LZ06) 07:40 (LZ06)	06:07 20:08	05:33 20:40	05:29 20:56	06:27 20:39	07:02 19:54	07:52 (LZ06) 08:42 (LZ06)	07:02 18:58	07:19 16:35	07:43 16:39
29	07:31 17:15	06:48 17:57	05:58 18:31	35 07:05 (LZ06) 08:04 (LZ06)	06:07 20:09	05:33 20:41	05:30 20:56	06:28 20:38	07:03 19:52	07:52 (LZ06) 08:42 (LZ06)	07:03 18:56	07:20 16:35	07:43 16:39
30	07:30 17:16	06:47 17:58	05:57 18:32	38 08:02 (LZ06) 08:43 (LZ06)	06:04 20:10	05:32 20:42	05:30 20:56	06:29 20:36	07:05 19:50	07:51 (LZ06) 08:43 (LZ06)	07:05 18:54	07:21 16:34	07:43 16:40
31	07:29 17:18	06:46 17:59	05:56 18:33	41 08:00 (LZ06) 08:43 (LZ06)	06:03 20:11	05:31 20:43	05:30 20:56	06:31 20:35	07:06 19:49	07:51 (LZ06) 08:43 (LZ06)	07:06 18:54	07:22 16:41	07:43 16:41
Potential sun hours	289	293	369	402	456	462	468	434	376	342	291	278	
Total, worst case			242	1210				668	804				

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: KrU_03 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -87.1° Slope: 90.0° (34)

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June
1	07:44 16:42	07:28 17:19	08:04 (LZ17) 17:57	06:48 19:35	06:03 20:11	06:36 (LZ02) 08:30 (LZ06)
2	07:44 16:43	07:27 17:20	08:04 (LZ17) 17:58	06:46 19:36	06:02 20:12	06:37 (LZ02) 08:30 (LZ06)
3	07:44 16:44	07:25 17:22	08:05 (LZ17) 17:59	06:45 19:38	06:00 20:13	06:37 (LZ02) 08:31 (LZ06)
4	07:44 16:45	07:24 17:23	08:06 (LZ17) 18:01	06:43 19:39	05:59 20:15	06:37 (LZ02) 08:30 (LZ06)
5	07:44 16:46	07:23 17:24	08:07 (LZ17) 18:02	06:41 19:40	05:57 20:16	06:39 (LZ02) 08:30 (LZ06)
6	07:44 16:47	07:22 17:26	08:10 (LZ17) 18:03	06:39 19:41	05:56 20:17	06:40 (LZ02) 08:30 (LZ06)
7	07:44 16:48	07:21 17:27	08:13 (LZ17) 18:04	06:38 19:42	05:55 20:18	06:41 (LZ02) 08:29 (LZ06)
8	07:43 16:49	07:19 17:29	08:15 (LZ17) 18:06	06:36 19:44	05:53 20:19	07:21 (LZ06) 08:30 (LZ06)
9	07:43 16:50	07:18 17:30	08:15 (LZ17) 18:07	06:34 19:45	05:52 20:20	07:21 (LZ06) 08:30 (LZ06)
10	07:43 16:51	07:17 17:31	08:15 (LZ17) 18:08	06:33 19:46	05:51 20:22	07:21 (LZ06) 08:30 (LZ06)
11	07:43 16:52	07:15 17:33	08:15 (LZ17) 18:10	06:31 19:47	05:50 20:23	07:22 (LZ06) 08:30 (LZ06)
12	07:42 16:53	07:14 17:34	08:15 (LZ17) 18:11	06:29 19:48	05:48 20:24	07:22 (LZ06) 08:29 (LZ06)
13	07:42 16:54	07:13 17:35	08:15 (LZ17) 18:12	06:27 19:50	05:47 20:25	07:21 (LZ06) 08:28 (LZ06)
14	07:41 16:56	07:11 17:37	08:15 (LZ17) 18:13	06:25 19:51	05:46 20:26	07:21 (LZ06) 08:28 (LZ06)
15	07:41 16:57	07:10 17:38	08:15 (LZ17) 18:14	06:23 19:52	05:45 20:27	07:21 (LZ06) 08:28 (LZ06)
16	07:41 16:58	07:08 17:40	08:15 (LZ17) 18:16	06:22 19:53	05:44 20:28	07:21 (LZ06) 08:27 (LZ06)
17	07:40 16:59	07:07 17:41	08:15 (LZ17) 18:17	06:20 19:54	05:43 20:29	07:21 (LZ06) 08:27 (LZ06)
18	07:39 17:00	08:08 (LZ17) 17:42	08:15 (LZ17) 18:18	06:23 19:56	05:42 20:30	07:21 (LZ06) 08:27 (LZ06)
19	07:39 17:02	08:06 (LZ17) 17:44	08:15 (LZ17) 18:19	06:22 19:57	05:41 20:32	07:22 (LZ06) 08:26 (LZ06)
20	07:38 17:03	08:04 (LZ17) 17:45	08:15 (LZ17) 18:21	06:20 19:58	05:40 20:33	07:23 (LZ06) 08:27 (LZ06)
21	07:37 17:04	08:04 (LZ17) 17:46	08:15 (LZ17) 18:22	06:18 19:59	05:39 20:34	07:23 (LZ06) 08:26 (LZ06)
22	07:37 17:06	08:03 (LZ17) 17:48	08:15 (LZ17) 18:23	06:17 20:00	05:38 20:35	07:23 (LZ06) 08:26 (LZ06)
23	07:36 17:07	08:03 (LZ17) 17:49	08:15 (LZ17) 18:24	06:15 20:02	05:37 20:36	07:23 (LZ06) 08:25 (LZ06)
24	07:35 17:08	08:02 (LZ17) 17:50	08:15 (LZ17) 18:26	06:14 20:03	05:36 20:37	07:23 (LZ06) 08:25 (LZ06)
25	07:34 17:09	08:02 (LZ17) 17:52	08:15 (LZ17) 18:27	06:12 20:04	05:36 20:38	07:24 (LZ06) 08:25 (LZ06)
26	07:34 17:11	08:02 (LZ17) 17:53	08:15 (LZ17) 18:28	06:10 20:05	05:35 20:39	07:25 (LZ06) 08:24 (LZ06)
27	07:33 17:12	08:02 (LZ17) 17:54	08:15 (LZ17) 18:29	06:09 20:06	05:34 20:40	07:25 (LZ06) 08:24 (LZ06)
28	07:32 17:13	08:02 (LZ17) 17:55	08:15 (LZ17) 18:30	06:07 20:08	05:33 20:40	07:26 (LZ06) 08:24 (LZ06)
29	07:31 17:15	08:02 (LZ17) 17:56	08:15 (LZ17) 18:32	06:06 20:09	05:33 20:41	07:26 (LZ06) 08:23 (LZ06)
30	07:30 17:16	08:03 (LZ17) 17:57	08:15 (LZ17) 18:34	06:04 20:10	05:32 20:42	07:27 (LZ06) 08:23 (LZ06)
31	07:29 17:18	08:03 (LZ17) 17:58	08:15 (LZ17) 18:35	06:03 20:11	05:31 20:43	07:27 (LZ06) 08:23 (LZ06)
Potential sun hours	289	293	369	402	456	462
Total, worst case	255	104		1037	2114	1438

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

Calculation: Worst Case Shadow receptor: KrU_03 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -87.1° Slope: 90.0° (34)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:56	07:37 (LZ06) 08:25 (LZ06)	05:57 20:34	07:31 (LZ06) 08:39 (LZ06)	06:32 19:47	07:06 18:52
2	05:31 20:55	07:36 (LZ06) 08:25 (LZ06)	05:58 20:33	07:31 (LZ06) 08:39 (LZ06)	06:33 19:45	07:07 18:50
3	05:32 20:55	07:37 (LZ06) 08:26 (LZ06)	05:59 20:32	07:31 (LZ06) 08:39 (LZ06)	06:34 19:43	07:08 18:49
4	05:32 20:55	07:36 (LZ06) 08:25 (LZ06)	06:00 20:30	07:31 (LZ06) 08:39 (LZ06)	06:35 19:42	07:09 18:47
5	05:33 20:55	07:36 (LZ06) 08:26 (LZ06)	06:01 20:29	06:54 (LZ02) 08:40 (LZ06)	06:36 19:40	07:11 18:45
6	05:33 20:54	07:37 (LZ06) 08:27 (LZ06)	06:02 20:28	06:51 (LZ02) 08:40 (LZ06)	06:37 19:38	07:12 18:43
7	05:34 20:54	07:36 (LZ06) 08:27 (LZ06)	06:03 20:26	06:49 (LZ02) 08:40 (LZ06)	06:38 19:36	07:13 18:42
8	05:35 20:54	07:36 (LZ06) 08:28 (LZ06)	06:05 20:25	06:48 (LZ02) 08:40 (LZ06)	06:40 19:34	07:14 18:40
9	05:35 20:53	07:36 (LZ06) 08:29 (LZ06)	06:06 20:24	06:47 (LZ02) 08:39 (LZ06)	06:41 19:33	07:15 18:38
10	05:36 20:53	07:35 (LZ06) 08:29 (LZ06)	06:07 20:22	06:46 (LZ02) 08:39 (LZ06)	06:42 19:31	07:16 18:36
11	05:37 20:52	07:35 (LZ06) 08:30 (LZ06)	06:08 20:21	06:45 (LZ02) 08:39 (LZ06)	06:43 19:29	07:18 18:35
12	05:38 20:52	07:35 (LZ06) 08:31 (LZ06)	06:09 20:19	06:44 (LZ02) 08:38 (LZ06)	06:44 19:27	07:19 18:33
13	05:39 20:51	07:35 (LZ06) 08:31 (LZ06)	06:10 20:18	06:44 (LZ02) 08:38 (LZ06)	06:45 19:25	07:20 18:31
14	05:39 20:51	07:34 (LZ06) 08:31 (LZ06)	06:11 20:16	06:44 (LZ02) 08:37 (LZ06)	06:46 19:24	07:21 18:29
15	05:40 20:50	07:34 (LZ06) 08:32 (LZ06)	06:12 20:15	06:43 (LZ02) 08:36 (LZ06)	06:47 19:22	07:23 18:28
16	05:41 20:49	07:34 (LZ06) 08:33 (LZ06)	06:14 20:13	06:43 (LZ02) 08:36 (LZ06)	06:49 19:20	07:24 18:26
17	05:42 20:49	07:34 (LZ06) 08:33 (LZ06)	06:15 20:12	06:43 (LZ02) 08:35 (LZ06)	06:50 19:18	07:25 18:24
18	05:43 20:48	07:34 (LZ06) 08:34 (LZ06)	06:16 20:10	06:44 (LZ02) 08:34 (LZ06)	06:51 19:16	07:26 18:23
19	05:44 20:47	07:34 (LZ06) 08:35 (LZ06)	06:17 20:09	06:45 (LZ02) 08:34 (LZ06)	06:52 19:14	07:28 18:21
20	05:45 20:46	07:34 (LZ06) 08:35 (LZ06)	06:18 20:07	06:46 (LZ02) 08:33 (LZ06)	06:53 19:12	07:29 18:19
21	05:46 20:45	07:34 (LZ06) 08:36 (LZ06)	06:19 20:06	06:47 (LZ02) 08:31 (LZ06)	06:54 19:11	07:30 18:18
22	05:47 20:45	07:33 (LZ06) 08:36 (LZ06)	06:20 20:04	06:49 (LZ02) 08:30 (LZ06)	06:55 19:09	07:31 18:16
23	05:48 20:44	07:32 (LZ06) 08:36 (LZ06)	06:21 20:02	07:40 (LZ06) 08:28 (LZ06)	06:57 19:07	07:33 18:15
24	05:49 20:43	07:32 (LZ06) 08:37 (LZ06)	06:23 20:01	07:41 (LZ06) 08:26 (LZ06)	06:58 19:05	07:34 18:13
25	05:50 20:42	07:32 (LZ06) 08:37 (LZ06)	06:24 19:59	07:42 (LZ06) 08:24 (LZ06)	06:59 19:03	07:35 17:12
26	05:51 20:41	07:32 (LZ06) 08:37 (LZ06)	06:25 19:57	07:44 (LZ06) 08:22 (LZ06)	07:00 19:01	07:37 17:10
27	05:52 20:40	07:32 (LZ06) 08:38 (LZ06)	06:26 19:56	07:46 (LZ06) 08:19 (LZ06)	07:01 19:00	07:38 17:09
28	05:53 20:39	07:32 (LZ06) 08:38 (LZ06)	06:27 19:54	07:49 (LZ06) 08:15 (LZ06)	07:02 18:58	07:39 17:07
29	05:54 20:37	07:32 (LZ06) 08:38 (LZ06)	06:28 19:52	07:53 (LZ06) 08:11 (LZ06)	07:03 18:56	07:40 17:06
30	05:55 20:36	07:31 (LZ06) 08:39 (LZ06)	06:29 19:50		07:05 18:54	07:41 17:04
31	05:56 20:35	07:31 (LZ06) 08:39 (LZ06)	06:31 19:49			07:43 17:03
Potential sun hours	468	434	376	342	291	278
Total, worst case	1805	1970			365	

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: KrU_04 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -91.1° Slope: 90.0° (35)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January			February			March	April		May	June		
1	07:44		09:00 (LZ16)	07:28		07:54 (LZ17)	06:48	06:53		06:03	06:28 (LZ02)	05:31	06:52 (LZ06)
	16:42	26	09:26 (LZ16)	17:19	18	08:12 (LZ17)	17:57	19:35		20:11	06:45 (LZ02)	20:44	07:55 (LZ06)
2	07:44		09:01 (LZ16)	07:27		07:54 (LZ17)	06:46	06:51		06:02	06:27 (LZ02)	05:30	06:52 (LZ06)
	16:43	25	09:26 (LZ16)	17:20	20	08:14 (LZ17)	17:58	19:36		20:12	06:46 (LZ02)	20:45	07:55 (LZ06)
3	07:44		09:02 (LZ16)	07:25		07:53 (LZ17)	06:45	06:49		06:00	06:27 (LZ02)	05:30	06:52 (LZ06)
	16:44	24	09:26 (LZ16)	17:22	20	08:13 (LZ17)	17:59	19:38		20:13	06:47 (LZ02)	20:46	07:56 (LZ06)
4	07:44		09:03 (LZ16)	07:24		07:53 (LZ17)	06:43	06:48		05:59	06:26 (LZ02)	05:29	06:51 (LZ06)
	16:45	23	09:26 (LZ16)	17:23	21	08:14 (LZ17)	18:01	19:39		20:15	06:47 (LZ02)	20:46	07:55 (LZ06)
5	07:44		09:03 (LZ16)	07:23		07:53 (LZ17)	06:41	06:46		05:57	06:26 (LZ02)	05:29	06:52 (LZ06)
	16:46	22	09:25 (LZ16)	17:24	22	08:15 (LZ17)	18:02	19:40		20:16	06:47 (LZ02)	20:47	07:56 (LZ06)
6	07:44		09:04 (LZ16)	07:22		07:53 (LZ17)	06:39	06:44		05:56	06:26 (LZ02)	05:28	06:52 (LZ06)
	16:47	21	09:25 (LZ16)	17:26	22	08:15 (LZ17)	18:03	19:41		20:17	06:48 (LZ02)	20:48	07:57 (LZ06)
7	07:44		09:05 (LZ16)	07:21		07:52 (LZ17)	06:38	06:42		05:55	06:25 (LZ02)	05:28	06:51 (LZ06)
	16:48	20	09:25 (LZ16)	17:27	23	08:15 (LZ17)	18:04	19:42		20:18	06:47 (LZ02)	20:48	07:56 (LZ06)
8	07:43		09:07 (LZ16)	07:19		07:53 (LZ17)	06:36	06:40		05:53	06:25 (LZ02)	05:28	06:52 (LZ06)
	16:49	18	09:25 (LZ16)	17:29	22	08:15 (LZ17)	18:06	19:44		20:19	07:26 (LZ06)	20:49	07:57 (LZ06)
9	07:43		09:08 (LZ16)	07:18		07:54 (LZ17)	06:34	06:39		05:52	06:25 (LZ02)	05:28	06:52 (LZ06)
	16:50	15	09:23 (LZ16)	17:30	21	08:15 (LZ17)	18:07	19:45		20:20	07:32 (LZ06)	20:50	07:57 (LZ06)
10	07:43		09:10 (LZ16)	07:17		07:53 (LZ17)	06:33	06:37		05:51	06:26 (LZ02)	05:27	06:52 (LZ06)
	16:51	13	09:23 (LZ16)	17:31	21	08:14 (LZ17)	18:08	19:46		20:22	07:36 (LZ06)	20:50	07:58 (LZ06)
11	07:43		09:13 (LZ16)	07:15		07:55 (LZ17)	06:31	06:35		05:50	06:26 (LZ02)	05:27	06:53 (LZ06)
	16:52	8	09:21 (LZ16)	17:33	19	08:14 (LZ17)	18:10	19:47		20:23	07:38 (LZ06)	20:51	07:58 (LZ06)
12	07:42			07:14		07:56 (LZ17)	06:29	06:33		05:48	06:27 (LZ02)	05:27	06:52 (LZ06)
	16:53			17:34	17	08:13 (LZ17)	18:11	19:48		20:24	07:40 (LZ06)	20:52	07:57 (LZ06)
13	07:42			07:13		07:57 (LZ17)	06:27	06:32		05:47	06:27 (LZ02)	05:27	06:52 (LZ06)
	16:54			17:35	14	08:11 (LZ17)	18:12	19:50		20:25	07:41 (LZ06)	20:52	07:58 (LZ06)
14	07:41			07:11		07:59 (LZ17)	06:25	06:30		05:46	06:28 (LZ02)	05:27	06:52 (LZ06)
	16:56			17:37	10	08:09 (LZ17)	18:13	19:51		20:26	07:43 (LZ06)	20:53	07:58 (LZ06)
15	07:41			07:10			06:24	06:28		05:45	06:29 (LZ02)	05:27	06:52 (LZ06)
	16:57			17:38			18:15	19:52		20:27	07:44 (LZ06)	20:53	07:58 (LZ06)
16	07:41			07:08			06:22	06:27		05:44	06:31 (LZ02)	05:27	06:52 (LZ06)
	16:58			17:40			18:16	19:53		20:28	07:45 (LZ06)	20:53	07:58 (LZ06)
17	07:40			07:07			06:20	06:25		05:43	06:34 (LZ02)	05:27	06:53 (LZ06)
	16:59			17:41			18:17	19:54		20:29	07:46 (LZ06)	20:54	07:59 (LZ06)
18	07:39			07:05			06:18	06:23		05:42	06:57 (LZ06)	05:27	06:53 (LZ06)
	17:00			17:42			18:18	19:56		20:30	07:47 (LZ06)	20:54	07:59 (LZ06)
19	07:39			07:04			06:16	06:22		05:41	06:57 (LZ06)	05:27	06:54 (LZ06)
	17:02			17:44			18:19	19:57		20:32	07:49 (LZ06)	20:54	08:00 (LZ06)
20	07:38			07:02			06:15	06:20		05:40	06:57 (LZ06)	05:27	06:54 (LZ06)
	17:03			17:45			18:21	19:58		20:33	07:49 (LZ06)	20:55	08:00 (LZ06)
21	07:37			07:01			06:13	06:18		05:39	06:56 (LZ06)	05:27	06:54 (LZ06)
	17:04			17:46			18:22	19:59		20:34	07:50 (LZ06)	20:55	08:00 (LZ06)
22	07:37			06:59			06:11	06:17		05:38	06:55 (LZ06)	05:27	06:54 (LZ06)
	17:06			17:48			18:23	20:00		20:35	07:50 (LZ06)	20:55	08:00 (LZ06)
23	07:36			06:58			06:09	06:15		05:37	06:54 (LZ06)	05:27	06:54 (LZ06)
	17:07			17:49			18:24	20:02		20:36	07:51 (LZ06)	20:55	08:00 (LZ06)
24	07:35			06:56			06:07	06:14		05:36	06:53 (LZ06)	05:28	06:55 (LZ06)
	17:08			17:50			18:26	20:03		20:37	07:51 (LZ06)	20:56	08:01 (LZ06)
25	07:34			06:55			06:06	06:12		05:36	06:54 (LZ06)	05:28	06:55 (LZ06)
	17:09			17:52			18:27	20:04		20:38	07:52 (LZ06)	20:56	08:01 (LZ06)
26	07:34			06:53			06:04	06:10		05:35	06:53 (LZ06)	05:28	06:54 (LZ06)
	17:11			17:53			18:28	20:05		20:39	07:52 (LZ06)	20:56	08:01 (LZ06)
27	07:33			06:51			06:02	06:09		05:34	06:52 (LZ06)	05:29	06:55 (LZ06)
	17:12			17:54			18:29	20:06		20:40	07:53 (LZ06)	20:56	08:01 (LZ06)
28	07:32			06:50			06:00	06:07		05:33	06:53 (LZ06)	05:29	06:55 (LZ06)
	17:13			17:55			18:30	20:08	6	06:40 (LZ02)	07:54 (LZ06)	20:56	08:01 (LZ06)
29	07:31		07:58 (LZ17)				06:58	06:06		05:33	06:52 (LZ06)	05:30	06:56 (LZ06)
	17:15	9	08:07 (LZ17)				19:32	20:09	12	06:43 (LZ02)	07:54 (LZ06)	20:56	08:02 (LZ06)
30	07:30		07:56 (LZ17)				06:56	06:04		05:32	06:53 (LZ06)	05:30	06:56 (LZ06)
	17:16	13	08:09 (LZ17)				19:33	20:10	15	06:45 (LZ02)	07:55 (LZ06)	20:56	08:02 (LZ06)
31	07:29		07:55 (LZ17)				06:55			05:31	06:52 (LZ06)		
	17:18	16	08:11 (LZ17)				19:34			20:43	07:54 (LZ06)		
Potential sun hours	289			293			369	402		456		462	
Total, worst case		253			270			33		1436			1963

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: KrU_04 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -91.1° Slope: 90.0° (35)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:56 65	06:57 (LZ06) 08:02 (LZ06) 20:34	05:57 07:49 (LZ06) 19:47	06:32 07:49 (LZ06) 18:52	07:06 17:01 18:52	07:22 17:01 16:34
2	05:31 20:55 66	06:56 (LZ06) 08:02 (LZ06) 20:33	05:58 07:47 (LZ06) 19:45	06:33 07:47 (LZ06) 18:50	07:07 17:00 18:50	07:24 17:00 16:33
3	05:32 20:55 65	06:57 (LZ06) 08:02 (LZ06) 20:32	05:59 07:44 (LZ06) 19:43	06:34 07:44 (LZ06) 18:49	07:08 16:59 18:49	07:25 17:00 16:33
4	05:32 20:55 65	06:57 (LZ06) 08:02 (LZ06) 20:30	06:00 07:40 (LZ06) 19:42	06:35 07:40 (LZ06) 18:47	07:09 16:57 18:47	07:26 17:00 16:33
5	05:33 20:55 65	06:58 (LZ06) 08:03 (LZ06) 20:29	06:01 07:39 (LZ06) 19:40	06:36 07:39 (LZ06) 18:45	07:11 16:56 18:45	07:27 17:00 16:32
6	05:33 20:54 65	06:58 (LZ06) 08:03 (LZ06) 20:28	06:02 07:38 (LZ06) 19:38	06:37 07:38 (LZ06) 18:43	07:12 16:55 18:43	07:28 17:00 16:32
7	05:34 20:54 64	06:58 (LZ06) 08:02 (LZ06) 20:26	06:03 07:37 (LZ06) 19:36	06:38 07:37 (LZ06) 18:42	07:13 16:54 18:42	07:29 17:00 16:32
8	05:35 20:54 64	06:59 (LZ06) 08:03 (LZ06) 20:25	06:05 07:36 (LZ06) 19:34	06:40 07:36 (LZ06) 18:40	07:14 16:52 18:40	07:30 17:00 16:32
9	05:36 20:53 64	06:59 (LZ06) 08:03 (LZ06) 20:24	06:06 07:35 (LZ06) 19:33	06:41 07:35 (LZ06) 18:38	07:15 16:51 18:38	07:31 17:00 16:32
10	05:36 20:53 63	06:59 (LZ06) 08:02 (LZ06) 20:22	06:07 07:34 (LZ06) 19:31	06:42 07:34 (LZ06) 18:36	07:16 16:50 18:36	07:32 17:00 16:32
11	05:37 20:52 64	06:59 (LZ06) 08:03 (LZ06) 20:21	06:08 07:33 (LZ06) 19:29	06:43 07:33 (LZ06) 18:35	07:18 16:49 18:35	07:33 17:00 16:32
12	05:38 20:52 63	07:00 (LZ06) 08:03 (LZ06) 20:19	06:09 07:32 (LZ06) 19:27	06:44 07:32 (LZ06) 18:33	07:19 16:48 18:33	07:33 17:00 16:32
13	05:39 20:51 62	07:01 (LZ06) 08:03 (LZ06) 20:18	06:10 07:31 (LZ06) 19:25	06:45 07:31 (LZ06) 18:31	07:20 16:47 18:31	07:34 17:00 16:32
14	05:39 20:51 62	07:00 (LZ06) 08:02 (LZ06) 20:16	06:11 07:30 (LZ06) 19:24	06:46 07:30 (LZ06) 18:29	07:21 16:46 18:29	07:35 17:00 16:32
15	05:40 20:50 61	07:01 (LZ06) 08:02 (LZ06) 20:15	06:12 07:29 (LZ06) 19:22	06:47 07:29 (LZ06) 18:28	07:23 16:45 18:28	07:36 17:00 16:32
16	05:41 20:49 60	07:02 (LZ06) 08:02 (LZ06) 20:13	06:14 07:28 (LZ06) 19:20	06:49 07:28 (LZ06) 18:26	07:24 16:44 18:26	07:37 17:00 16:33
17	05:42 20:49 60	07:02 (LZ06) 08:02 (LZ06) 20:12	06:15 07:27 (LZ06) 19:18	06:50 07:27 (LZ06) 18:24	07:25 16:43 18:24	07:37 17:00 16:33
18	05:43 20:48 59	07:03 (LZ06) 08:02 (LZ06) 20:10	06:16 07:26 (LZ06) 19:16	06:51 07:26 (LZ06) 18:23	07:26 16:42 18:23	07:38 17:00 16:33
19	05:44 20:47 58	07:04 (LZ06) 08:02 (LZ06) 20:09	06:17 07:25 (LZ06) 19:14	06:52 07:25 (LZ06) 18:21	07:28 16:41 18:21	07:39 17:00 16:34
20	05:45 20:46 57	07:04 (LZ06) 08:01 (LZ06) 20:07	06:18 07:24 (LZ06) 19:12	06:53 07:24 (LZ06) 18:19	07:29 16:40 18:19	07:39 17:00 16:34
21	05:46 20:45 56	07:05 (LZ06) 08:01 (LZ06) 20:06	06:19 07:23 (LZ06) 19:11	06:54 07:23 (LZ06) 18:18	07:30 16:39 18:18	07:40 17:00 16:34
22	05:47 20:45 55	07:05 (LZ06) 08:00 (LZ06) 20:04	06:20 07:22 (LZ06) 19:09	06:55 07:22 (LZ06) 18:16	07:31 16:39 18:16	07:40 17:00 16:35
23	05:48 20:44 53	07:06 (LZ06) 07:59 (LZ06) 20:02	06:21 07:21 (LZ06) 19:07	06:57 07:21 (LZ06) 18:15	07:33 16:38 18:15	07:41 17:00 16:35
24	05:49 20:43 53	07:06 (LZ06) 07:59 (LZ06) 20:01	06:23 07:20 (LZ06) 19:05	06:58 07:20 (LZ06) 18:13	07:34 16:37 18:13	07:41 17:00 16:36
25	05:50 20:42 51	07:07 (LZ06) 07:58 (LZ06) 19:59	06:24 07:19 (LZ06) 19:03	06:59 07:19 (LZ06) 18:12	07:35 16:37 18:12	07:42 17:00 16:37
26	05:51 20:41 49	07:08 (LZ06) 07:57 (LZ06) 19:57	06:25 07:18 (LZ06) 19:01	07:00 07:18 (LZ06) 18:10	07:36 16:36 18:10	07:42 17:00 16:37
27	05:52 20:40 53	06:43 (LZ06) 07:56 (LZ06) 19:56	06:26 07:17 (LZ06) 19:00	07:01 07:17 (LZ06) 18:09	07:37 16:36 18:09	07:42 17:00 16:38
28	05:53 20:39 57	06:40 (LZ06) 07:55 (LZ06) 19:54	06:27 07:16 (LZ06) 18:58	07:02 07:16 (LZ06) 18:07	07:38 16:35 18:07	07:43 17:00 16:39
29	05:54 20:37 56	06:39 (LZ06) 07:54 (LZ06) 19:52	06:28 07:15 (LZ06) 18:56	07:03 07:15 (LZ06) 18:06	07:39 16:35 18:06	07:43 17:00 16:39
30	05:55 20:36 56	06:38 (LZ06) 07:53 (LZ06) 19:50	06:29 07:14 (LZ06) 18:54	07:05 07:14 (LZ06) 18:04	07:40 16:34 18:04	07:43 17:00 16:40
31	05:56 20:35 54	06:37 (LZ06) 07:51 (LZ06) 19:49	06:31 07:13 (LZ06) 19:49	07:06 07:13 (LZ06) 18:03	07:41 16:34 18:03	07:43 17:00 16:40
Potential sun hours	468	434	376	342	291	278
Total, worst case	1845	375	68	250	774	

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

Calculation: Worst Case Shadow receptor: KrU_05 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -89.3° Slope: 90.0° (36)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June
1	07:44 16:42	08:44 (LZ16) 09:20 (LZ16)	07:28 17:19	06:48 17:57	06:53 19:35	06:03 20:11
2	07:44 16:43	08:45 (LZ16) 09:20 (LZ16)	07:27 17:20	06:46 17:58	06:51 19:36	06:02 20:12
3	07:44 16:44	08:45 (LZ16) 09:21 (LZ16)	07:25 17:22	06:45 17:59	06:49 19:38	06:00 20:13
4	07:44 16:45	08:46 (LZ16) 09:21 (LZ16)	07:24 17:23	06:43 18:01	06:48 19:39	05:59 20:15
5	07:44 16:46	08:45 (LZ16) 09:21 (LZ16)	07:23 17:24	06:41 18:02	06:46 19:40	05:57 20:16
6	07:44 16:47	08:46 (LZ16) 09:21 (LZ16)	07:22 17:26	06:39 18:03	06:44 19:41	05:56 20:17
7	07:44 16:48	08:47 (LZ16) 09:22 (LZ16)	07:21 17:27	06:38 18:04	06:42 19:42	05:55 20:18
8	07:43 16:49	08:48 (LZ16) 09:22 (LZ16)	07:19 17:29	06:36 18:06	06:40 19:44	05:53 20:19
9	07:43 16:50	08:48 (LZ16) 09:22 (LZ16)	07:18 17:30	06:34 18:07	06:39 19:45	05:52 20:20
10	07:43 16:51	08:49 (LZ16) 09:22 (LZ16)	07:17 17:31	06:33 18:08	06:37 19:46	05:51 20:22
11	07:43 16:52	08:50 (LZ16) 09:23 (LZ16)	07:15 17:33	06:31 18:10	06:35 19:47	05:50 20:23
12	07:42 16:53	08:50 (LZ16) 09:22 (LZ16)	07:14 17:34	06:29 18:11	06:33 19:48	05:48 20:24
13	07:42 16:54	08:51 (LZ16) 09:23 (LZ16)	07:13 17:35	06:27 18:12	06:32 19:50	05:47 20:25
14	07:41 16:56	08:51 (LZ16) 09:22 (LZ16)	07:11 17:37	06:25 18:13	06:30 19:51	05:46 20:26
15	07:41 16:57	08:53 (LZ16) 09:22 (LZ16)	07:10 17:38	06:24 18:15	06:28 19:52	05:45 20:27
16	07:41 16:58	08:53 (LZ16) 09:22 (LZ16)	07:08 17:40	06:22 18:16	06:27 19:53	05:44 20:28
17	07:40 16:59	08:54 (LZ16) 09:21 (LZ16)	07:07 17:41	06:20 18:17	06:25 19:54	05:43 20:29
18	07:39 17:00	08:55 (LZ16) 09:21 (LZ16)	07:05 17:42	06:18 18:18	06:23 19:56	05:42 20:30
19	07:39 17:02	08:56 (LZ16) 09:20 (LZ16)	07:04 17:44	06:16 18:19	06:22 19:57	05:41 20:32
20	07:38 17:03	08:57 (LZ16) 09:19 (LZ16)	07:02 17:45	06:15 18:21	06:20 19:58	05:40 20:33
21	07:37 17:04	09:00 (LZ16) 09:19 (LZ16)	07:01 17:46	06:13 18:22	06:18 19:59	05:39 20:34
22	07:37 17:06	09:01 (LZ16) 09:17 (LZ16)	06:59 17:48	06:11 18:23	06:17 20:00	05:38 20:35
23	07:36 17:07	09:04 (LZ16) 09:15 (LZ16)	06:58 17:49	06:09 18:24	06:15 20:02	05:37 20:36
24	07:35 17:08		06:56 17:50	06:07 18:26	06:14 20:03	05:36 20:37
25	07:34 17:09		06:55 17:52	06:06 18:27	06:12 20:04	05:36 20:38
26	07:33 17:11		06:53 17:53	06:04 18:28	06:10 20:05	05:35 20:39
27	07:33 17:12		06:51 17:54	06:02 18:29	06:09 20:06	05:34 20:40
28	07:32 17:13		06:50 17:55	06:00 18:30	06:07 20:08	05:33 20:40
29	07:31 17:15			06:58 19:32	06:06 20:09	05:33 20:41
30	07:30 17:16			06:56 19:33	06:04 20:10	05:32 20:42
31	07:29 17:18			06:55 19:34		05:31 20:43
Potential sun hours	289	293	369	402	456	462
Total, worst case	680	296			372	914

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: KrU_05 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -89.3° Slope: 90.0° (36)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July			August			September			October			November			December		
1	05:31		06:50 (LZ06)	05:57		06:28 (LZ02)	06:32		07:06				06:44		07:15 (LZ17)	07:22		08:32 (LZ16)
	20:56	33	07:23 (LZ06)	20:34	22	06:50 (LZ02)	19:47		18:52				17:01	21	07:36 (LZ17)	16:34	33	09:05 (LZ16)
2	05:31		06:50 (LZ06)	05:58		06:28 (LZ02)	06:33		07:07				06:46		07:15 (LZ17)	07:24		08:32 (LZ16)
	20:55	32	07:22 (LZ06)	20:33	21	06:49 (LZ02)	19:45		18:50				17:00	20	07:35 (LZ17)	16:33	33	09:05 (LZ16)
3	05:32		06:52 (LZ06)	05:59		06:28 (LZ02)	06:34		07:08				06:47		07:16 (LZ17)	07:25		08:32 (LZ16)
	20:55	30	07:22 (LZ06)	20:32	21	06:49 (LZ02)	19:43		18:49				16:59	19	07:35 (LZ17)	16:33	34	09:06 (LZ16)
4	05:32		06:52 (LZ06)	06:00		06:29 (LZ02)	06:35		07:09				06:48		07:17 (LZ17)	07:26		08:32 (LZ16)
	20:55	29	07:21 (LZ06)	20:30	19	06:48 (LZ02)	19:42		18:47				16:57	17	07:34 (LZ17)	16:33	34	09:06 (LZ16)
5	05:33		06:54 (LZ06)	06:01		06:30 (LZ02)	06:36		07:11				06:50		07:19 (LZ17)	07:27		08:32 (LZ16)
	20:55	27	07:21 (LZ06)	20:29	18	06:48 (LZ02)	19:40		18:45				16:56	14	07:33 (LZ17)	16:32	35	09:07 (LZ16)
6	05:33		06:55 (LZ06)	06:02		06:31 (LZ02)	06:37		07:12				06:51		07:21 (LZ17)	07:28		08:32 (LZ16)
	20:54	25	07:20 (LZ06)	20:28	16	06:47 (LZ02)	19:38		18:43				16:55	9	07:30 (LZ17)	16:32	35	09:07 (LZ16)
7	05:34		06:56 (LZ06)	06:03		06:32 (LZ02)	06:38		07:13				06:52			07:29		08:32 (LZ16)
	20:54	22	07:18 (LZ06)	20:26	14	06:46 (LZ02)	19:36		18:42				16:54			16:32	36	09:08 (LZ16)
8	05:35		06:58 (LZ06)	06:05		06:33 (LZ02)	06:40		07:14				06:53			07:30		08:33 (LZ16)
	20:54	19	07:17 (LZ06)	20:25	11	06:44 (LZ02)	19:34		18:40				16:52			16:32	35	09:08 (LZ16)
9	05:36		07:00 (LZ06)	06:06		06:36 (LZ02)	06:41		07:15				06:55			07:31		08:33 (LZ16)
	20:53	16	07:16 (LZ06)	20:24	5	06:41 (LZ02)	19:33		18:38				16:51			16:32	36	09:09 (LZ16)
10	05:36		07:02 (LZ06)	06:07			06:42		07:16				06:56			07:32		08:34 (LZ16)
	20:53	11	07:13 (LZ06)	20:22			19:31		18:36				16:50			16:32	35	09:09 (LZ16)
11	05:37			06:08			06:43		07:18				06:57			07:33		08:34 (LZ16)
	20:52			20:21			19:29		18:35				16:49			16:32	36	09:10 (LZ16)
12	05:38			06:09			06:44		07:19				06:59			07:33		08:35 (LZ16)
	20:52			20:19			19:27		18:33				16:48			16:32	35	09:10 (LZ16)
13	05:39			06:10			06:45		07:20				07:00			07:34		08:35 (LZ16)
	20:51			20:18			19:25		18:31				16:47			16:32	36	09:11 (LZ16)
14	05:39			06:11			06:46		07:21				07:01			07:35		08:35 (LZ16)
	20:51			20:16			19:24		18:29				16:46			16:32	36	09:11 (LZ16)
15	05:40			06:12			06:47		07:23				07:03			07:36		08:36 (LZ16)
	20:50			20:15			19:22		18:28				16:45			16:32	35	09:11 (LZ16)
16	05:41			06:14			06:49		07:24				07:04			07:37		08:36 (LZ16)
	20:49			20:13			19:20		18:26				16:44			16:33	36	09:12 (LZ16)
17	05:42			06:15			06:50		07:25				07:05			07:37		08:37 (LZ16)
	20:49			20:12			19:18		18:24				16:43			16:33	36	09:13 (LZ16)
18	05:43			06:16			06:51		07:26				07:07			07:38		08:37 (LZ16)
	20:48			20:10			19:16		18:23				16:42			16:33	36	09:13 (LZ16)
19	05:44		06:35 (LZ02)	06:17			06:52		07:28				07:08		08:38 (LZ16)	07:39		08:38 (LZ16)
	20:47	7	06:42 (LZ02)	20:09			19:14		18:21				16:41	11	08:49 (LZ16)	16:34	36	09:14 (LZ16)
20	05:45		06:34 (LZ02)	06:18			06:53		07:29				07:09		08:36 (LZ16)	07:39		08:38 (LZ16)
	20:46	10	06:44 (LZ02)	20:07			19:12		18:19				16:40	16	08:52 (LZ16)	16:34	36	09:14 (LZ16)
21	05:46		06:33 (LZ02)	06:19			06:54		07:30				07:10		08:35 (LZ16)	07:40		08:39 (LZ16)
	20:45	13	06:46 (LZ02)	20:06			19:11		18:18				16:39	19	08:54 (LZ16)	16:34	36	09:15 (LZ16)
22	05:47		06:31 (LZ02)	06:20			06:55		07:31		08:21 (LZ17)	07:12			08:33 (LZ16)	07:40		08:39 (LZ16)
	20:45	15	06:46 (LZ02)	20:04			19:09		18:16	10	08:31 (LZ17)	16:39	22		08:55 (LZ16)	16:35	36	09:15 (LZ16)
23	05:48		06:30 (LZ02)	06:21			06:57		07:33		08:19 (LZ17)	07:13			08:33 (LZ16)	07:41		08:40 (LZ16)
	20:44	17	06:47 (LZ02)	20:02			19:07		18:15	15	08:34 (LZ17)	16:38	24		08:57 (LZ16)	16:35	36	09:16 (LZ16)
24	05:49		06:30 (LZ02)	06:23			06:58		07:34		08:17 (LZ17)	07:14			08:32 (LZ16)	07:41		08:40 (LZ16)
	20:43	18	06:48 (LZ02)	20:01			19:05		18:13	18	08:35 (LZ17)	16:37	26		08:58 (LZ16)	16:36	36	09:16 (LZ16)
25	05:50		06:29 (LZ02)	06:24			06:59		06:35		07:16 (LZ17)	07:15			08:32 (LZ16)	07:42		08:41 (LZ16)
	20:42	19	06:48 (LZ02)	19:59			19:03		17:12	19	07:35 (LZ17)	16:37	27		08:59 (LZ16)	16:37	36	09:17 (LZ16)
26	05:51		06:29 (LZ02)	06:25			07:00		06:36		07:16 (LZ17)	07:17			08:32 (LZ16)	07:42		08:41 (LZ16)
	20:41	20	06:49 (LZ02)	19:57			19:01		17:10	21	07:37 (LZ17)	16:36	29		09:01 (LZ16)	16:37	36	09:17 (LZ16)
27	05:52		06:28 (LZ02)	06:26			07:01		06:38		07:15 (LZ17)	07:18			08:32 (LZ16)	07:42		08:41 (LZ16)
	20:40	21	06:49 (LZ02)	19:56			19:00		17:09	22	07:37 (LZ17)	16:36	29		09:01 (LZ16)	16:38	36	09:17 (LZ16)
28	05:53		06:28 (LZ02)	06:27			07:02		06:39		07:15 (LZ17)	07:19			08:31 (LZ16)	07:43		08:42 (LZ16)
	20:39	21	06:49 (LZ02)	19:54			18:58		17:07	22	07:37 (LZ17)	16:35	31		09:02 (LZ16)	16:39	35	09:17 (LZ16)
29	05:54		06:28 (LZ02)	06:28			07:03		06:40		07:14 (LZ17)	07:20			08:31 (LZ16)	07:43		08:42 (LZ16)
	20:37	22	06:50 (LZ02)	19:52			18:56		17:06	23	07:37 (LZ17)	16:35	32		09:03 (LZ16)	16:39	36	09:18 (LZ16)
30	05:55		06:28 (LZ02)	06:29			07:05		06:42		07:14 (LZ17)	07:21			08:32 (LZ16)	07:43		08:43 (LZ16)
	20:36	22	06:50 (LZ02)	19:50			18:54		17:04	23	07:37 (LZ17)	16:34	32		09:04 (LZ16)	16:40	36	09:19 (LZ16)
31	05:56		06:28 (LZ02)	06:31					06:43		07:15 (LZ17)					07:43		08:44 (LZ16)
	20:35	22	06:50 (LZ02)	19:49					17:03	22	07:37 (LZ17)					16:41	35	09:19 (LZ16)
Potential sun hours	468			434			376		342				291			278		
Total, worst case		471			147				195				398				1098	

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

Calculation: Worst Case Shadow receptor: KrU_06 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -94.2° Slope: 90.0° (37)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January			February			March			April		May		June	
1	07:44			07:28	08:33 (LZ16)	06:48		07:31 (LZ17)	06:53		06:03		05:31		
	16:42			17:19	36 09:09 (LZ16)	17:57	18	07:49 (LZ17)	19:35		20:11		20:44		
2	07:44			07:27	08:34 (LZ16)	06:46		07:33 (LZ17)	06:51		06:02		05:30		
	16:43			17:20	35 09:09 (LZ16)	17:58	13	07:46 (LZ17)	19:36		20:12		20:45		
3	07:44			07:25	08:33 (LZ16)	06:45		07:35 (LZ17)	06:49		06:00		05:30		
	16:44			17:22	35 09:08 (LZ16)	17:59	8	07:43 (LZ17)	19:38		20:13		20:46		
4	07:44	08:39 (LZ16)	07:24	08:34 (LZ16)	06:43				06:48		05:59		05:29		
	16:45	7 08:46 (LZ16)	17:23	34 09:08 (LZ16)	18:01				19:39		20:15		20:46		
5	07:44	08:37 (LZ16)	07:23	08:35 (LZ16)	06:41				06:46		05:57		05:29		
	16:46	11 08:48 (LZ16)	17:24	32 09:07 (LZ16)	18:02				19:40		20:16		20:47		
6	07:44	08:36 (LZ16)	07:22	08:37 (LZ16)	06:39				06:44		05:56		05:28		
	16:47	14 08:50 (LZ16)	17:26	30 09:07 (LZ16)	18:03				19:41		20:17		20:48		
7	07:44	08:35 (LZ16)	07:21	08:37 (LZ16)	06:38				06:42		05:55		05:28		
	16:48	17 08:52 (LZ16)	17:27	28 09:05 (LZ16)	18:04				19:42		20:18		20:48		
8	07:43	08:35 (LZ16)	07:19	08:39 (LZ16)	06:36				06:40		05:53		05:28		
	16:49	19 08:54 (LZ16)	17:29	25 09:04 (LZ16)	18:06				19:44		20:19		20:49		
9	07:43	08:34 (LZ16)	07:18	08:41 (LZ16)	06:34				06:39		05:52		05:28		
	16:50	20 08:54 (LZ16)	17:30	21 09:02 (LZ16)	18:07				19:45		20:20		20:50		
10	07:43	08:33 (LZ16)	07:17	08:42 (LZ16)	06:33				06:37		05:51		05:27		
	16:51	23 08:56 (LZ16)	17:31	17 08:59 (LZ16)	18:08				19:46		20:22		20:50		
11	07:43	08:33 (LZ16)	07:15	08:46 (LZ16)	06:31				06:35		05:50		05:27		
	16:52	25 08:58 (LZ16)	17:33	10 08:56 (LZ16)	18:10				19:47		20:23		20:51		
12	07:42	08:32 (LZ16)	07:14		06:29				06:33		05:49		05:27		
	16:53	26 08:58 (LZ16)	17:34		18:11				19:48		20:24		20:52		
13	07:42	08:32 (LZ16)	07:13		06:27				06:32		05:47		05:27		
	16:54	28 09:00 (LZ16)	17:35		18:12				19:50		20:25		20:52		
14	07:41	08:32 (LZ16)	07:11		06:25				06:30		05:46		05:27		
	16:56	28 09:00 (LZ16)	17:37		18:13				19:51		20:26		20:53		
15	07:41	08:32 (LZ16)	07:10		06:24				06:28		05:45		05:27		
	16:57	30 09:02 (LZ16)	17:38		18:15				19:52		20:27		20:53		
16	07:41	08:31 (LZ16)	07:08		06:22				06:27		05:44		05:27		
	16:58	31 09:02 (LZ16)	17:40		18:16				19:53		20:28		20:53		
17	07:40	08:31 (LZ16)	07:07		07:35 (LZ17)	06:20			06:25		05:43		05:27		
	16:59	32 09:03 (LZ16)	17:41	11	07:46 (LZ17)	18:17			19:54		20:29		20:54		
18	07:39	08:31 (LZ16)	07:05		07:34 (LZ17)	06:18			06:23		05:42		05:27		
	17:00	33 09:04 (LZ16)	17:42	15	07:49 (LZ17)	18:18			19:56		20:30		20:54		
19	07:39	08:31 (LZ16)	07:04		07:32 (LZ17)	06:16			06:22		05:41		05:27		
	17:02	34 09:05 (LZ16)	17:44	18	07:50 (LZ17)	18:19			19:57		20:32		20:54		
20	07:38	08:30 (LZ16)	07:02		07:31 (LZ17)	06:15			06:20		05:40		05:27		
	17:03	35 09:05 (LZ16)	17:45	20	07:51 (LZ17)	18:21			19:58		20:33		20:55		
21	07:37	08:31 (LZ16)	07:01		07:30 (LZ17)	06:13			06:18		05:39		05:27		
	17:04	36 09:07 (LZ16)	17:46	22	07:52 (LZ17)	18:22			19:59		20:34		20:55		
22	07:37	08:31 (LZ16)	06:59		07:29 (LZ17)	06:11			06:17		05:38		05:27		
	17:06	36 09:07 (LZ16)	17:48	23	07:52 (LZ17)	18:23			20:00		20:35		20:55		
23	07:36	08:31 (LZ16)	06:58		07:29 (LZ17)	06:09			06:15		05:37		05:28		
	17:07	37 09:08 (LZ16)	17:49	23	07:52 (LZ17)	18:24			20:02		20:36		20:55		
24	07:35	08:31 (LZ16)	06:56		07:29 (LZ17)	06:07			06:14		05:36		05:28		
	17:08	37 09:08 (LZ16)	17:50	23	07:52 (LZ17)	18:26			20:03		20:37		20:56		
25	07:34	08:31 (LZ16)	06:55		07:29 (LZ17)	06:06			06:12		05:36		05:28		
	17:09	37 09:08 (LZ16)	17:52	22	07:51 (LZ17)	18:27			20:04		20:38		20:56		
26	07:33	08:31 (LZ16)	06:53		07:29 (LZ17)	06:04			06:10		05:35		05:28		
	17:11	38 09:09 (LZ16)	17:53	23	07:52 (LZ17)	18:28			20:05		20:39		20:56		
27	07:33	08:31 (LZ16)	06:51		07:29 (LZ17)	06:02			06:09		05:34		05:29		
	17:12	38 09:09 (LZ16)	17:54	22	07:51 (LZ17)	18:29			20:06		20:40		20:56		
28	07:32	08:31 (LZ16)	06:50		07:30 (LZ17)	06:00			06:07		05:33		05:29		
	17:13	38 09:09 (LZ16)	17:55	19	07:49 (LZ17)	18:30			20:08		20:40		20:56		
29	07:31	08:31 (LZ16)			06:58				06:06		05:33		05:30		
	17:15	38 09:09 (LZ16)			19:32				20:09		20:41		20:56		
30	07:30	08:32 (LZ16)			06:57				06:04		05:32		05:30		
	17:16	37 09:09 (LZ16)			19:33				20:10		20:42		20:56		
31	07:29	08:32 (LZ16)			06:55						05:31				
	17:18	37 09:09 (LZ16)			19:34						20:43				
Potential sun hours	289		293			369			402		456			462	
Total, worst case	822		544			39									

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

Calculation: Worst Case Shadow receptor: KrU_06 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -94.2° Slope: 90.0° (37)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31	05:57	06:32	07:06	06:44	08:12 (LZ16) 07:22 08:15 (LZ16)
	20:56	20:34	19:47	18:52	17:01 18 08:30 (LZ16) 16:34 25 08:40 (LZ16)	
2	05:31	05:58	06:33	07:07	06:46	08:09 (LZ16) 07:24 08:16 (LZ16)
	20:55	20:33	19:45	18:50	17:00 22 08:31 (LZ16) 16:33 23 08:39 (LZ16)	
3	05:32	05:59	06:34	07:08	06:47	08:08 (LZ16) 07:25 08:18 (LZ16)
	20:55	20:32	19:43	18:49	16:59 26 08:34 (LZ16) 16:33 20 08:38 (LZ16)	
4	05:32	06:00	06:35	07:09	06:48	08:07 (LZ16) 07:26 08:19 (LZ16)
	20:55	20:30	19:42	18:47	16:57 28 08:35 (LZ16) 16:33 19 08:38 (LZ16)	
5	05:33	06:01	06:36	07:11	06:50	08:06 (LZ16) 07:27 08:20 (LZ16)
	20:55	20:29	19:40	18:45	16:56 30 08:36 (LZ16) 16:32 17 08:37 (LZ16)	
6	05:33	06:02	06:37	07:12	06:51	08:05 (LZ16) 07:28 08:22 (LZ16)
	20:54	20:28	19:38	18:43	16:55 32 08:37 (LZ16) 16:32 14 08:36 (LZ16)	
7	05:34	06:03	06:38	07:13	06:52	08:05 (LZ16) 07:29 08:24 (LZ16)
	20:54	20:26	19:36	18:42	16:54 33 08:38 (LZ16) 16:32 11 08:35 (LZ16)	
8	05:35	06:05	06:40	07:14	06:53	08:04 (LZ16) 07:30 08:26 (LZ16)
	20:54	20:25	19:34	18:40	16:52 35 08:39 (LZ16) 16:32 8 08:34 (LZ16)	
9	05:36	06:06	06:41	07:15	06:55	08:03 (LZ16) 07:31
	20:53	20:24	19:33	18:38	16:51 36 08:39 (LZ16) 16:32	
10	05:36	06:07	06:42	07:16	06:56	08:04 (LZ16) 07:32
	20:53	20:22	19:31	18:36	16:50 36 08:40 (LZ16) 16:32	
11	05:37	06:08	06:43	07:18	08:08 (LZ17) 06:57	08:03 (LZ16) 07:33
	20:52	20:21	19:29	18:35	11 08:19 (LZ17) 16:49 37 08:40 (LZ16) 16:32	
12	05:38	06:09	06:44	07:19	08:05 (LZ17) 06:59	08:04 (LZ16) 07:33
	20:52	20:19	19:27	18:33	16 08:21 (LZ17) 16:48 37 08:41 (LZ16) 16:32	
13	05:39	06:10	06:45	07:20	08:04 (LZ17) 07:00	08:03 (LZ16) 07:34
	20:51	20:18	19:25	18:31	18 08:22 (LZ17) 16:47 38 08:41 (LZ16) 16:32	
14	05:39	06:11	06:46	07:21	08:03 (LZ17) 07:01	08:03 (LZ16) 07:35
	20:51	20:16	19:24	18:29	20 08:23 (LZ17) 16:46 38 08:41 (LZ16) 16:32	
15	05:40	06:12	06:47	07:23	08:02 (LZ17) 07:03	08:04 (LZ16) 07:36
	20:50	20:15	19:22	18:28	21 08:23 (LZ17) 16:45 38 08:42 (LZ16) 16:32	
16	05:41	06:14	06:49	07:24	08:01 (LZ17) 07:04	08:04 (LZ16) 07:37
	20:49	20:13	19:20	18:26	22 08:23 (LZ17) 16:44 38 08:42 (LZ16) 16:33	
17	05:42	06:15	06:50	07:25	08:01 (LZ17) 07:05	08:05 (LZ16) 07:37
	20:49	20:12	19:18	18:24	23 08:24 (LZ17) 16:43 37 08:42 (LZ16) 16:33	
18	05:43	06:16	06:51	07:26	08:00 (LZ17) 07:07	08:05 (LZ16) 07:38
	20:48	20:10	19:16	18:23	23 08:23 (LZ17) 16:42 37 08:42 (LZ16) 16:33	
19	05:44	06:17	06:52	07:28	08:00 (LZ17) 07:08	08:05 (LZ16) 07:39
	20:47	20:09	19:14	18:21	23 08:23 (LZ17) 16:41 37 08:42 (LZ16) 16:34	
20	05:45	06:18	06:53	07:29	08:01 (LZ17) 07:09	08:06 (LZ16) 07:39
	20:46	20:07	19:12	18:19	22 08:23 (LZ17) 16:40 36 08:42 (LZ16) 16:34	
21	05:46	06:19	06:54	07:30	08:01 (LZ17) 07:10	08:06 (LZ16) 07:40
	20:45	20:06	19:11	18:18	21 08:22 (LZ17) 16:39 36 08:42 (LZ16) 16:34	
22	05:47	06:20	06:55	07:31	08:01 (LZ17) 07:12	08:06 (LZ16) 07:40
	20:44	20:04	19:09	18:16	20 08:21 (LZ17) 16:39 35 08:41 (LZ16) 16:35	
23	05:48	06:22	06:57	07:33	08:03 (LZ17) 07:13	08:08 (LZ16) 07:41
	20:44	20:02	19:07	18:15	17 08:20 (LZ17) 16:38 34 08:42 (LZ16) 16:35	
24	05:49	06:23	06:58	07:34	08:04 (LZ17) 07:14	08:08 (LZ16) 07:41
	20:43	20:01	19:05	18:13	14 08:18 (LZ17) 16:37 33 08:41 (LZ16) 16:36	
25	05:50	06:24	06:59	06:35	07:06 (LZ17) 07:15	08:09 (LZ16) 07:42
	20:42	19:59	19:03	17:12	9 07:15 (LZ17) 16:37 32 08:41 (LZ16) 16:37	
26	05:51	06:25	07:00	06:36	07:17	08:10 (LZ16) 07:42
	20:41	19:57	19:01	17:10	16:36 31 08:41 (LZ16) 16:37	
27	05:52	06:26	07:01	06:38	07:18	08:11 (LZ16) 07:42
	20:40	19:56	19:00	17:09	16:36 30 08:41 (LZ16) 16:38	
28	05:53	06:27	07:02	06:39	07:19	08:12 (LZ16) 07:43
	20:39	19:54	18:58	17:07	16:35 28 08:40 (LZ16) 16:39	
29	05:54	06:28	07:03	06:40	07:20	08:12 (LZ16) 07:43
	20:37	19:52	18:56	17:06	16:35 28 08:40 (LZ16) 16:39	
30	05:55	06:29	07:05	06:42	07:21	08:13 (LZ16) 07:43
	20:36	19:50	18:54	17:04	16:34 26 08:39 (LZ16) 16:40	
31	05:56	06:31		06:43	08:15 (LZ16)	07:43
	20:35	19:49		17:03	12 08:27 (LZ16)	16:41
Potential sun hours	468	434	376	342	291	278
Total, worst case				292	982	137

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

Calculation: Worst Case Shadow receptor: KrU_07 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -65.3° Slope: 90.0° (38)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	07:44 16:42	07:28 17:19	08:18 (LZ16) 17:57	06:48 17:57	07:22 (LZ17) 19:35	06:53 20:11	05:31 20:44	05:31 20:56	05:57 20:34	06:32 19:47	07:06 18:52	06:44 17:01
2	07:44 16:43	07:27 17:20	08:18 (LZ16) 17:58	06:46 17:58	07:21 (LZ17) 19:36	06:51 20:12	05:31 20:45	05:58 20:55	06:33 20:33	07:07 19:45	07:46 18:50	06:46 17:00
3	07:44 16:44	07:25 17:22	08:17 (LZ16) 17:59	06:45 17:59	07:21 (LZ17) 19:38	06:49 20:13	05:30 20:46	05:59 20:55	06:34 19:43	07:08 18:49	07:47 18:49	06:47 16:59
4	07:44 16:45	07:24 17:23	08:17 (LZ16) 18:01	06:43 18:01	07:22 (LZ17) 19:39	06:48 20:15	05:29 20:46	05:32 20:55	06:00 20:30	07:09 19:42	07:47 18:47	06:48 16:57
5	07:44 16:46	07:23 17:24	08:17 (LZ16) 18:02	06:41 18:02	07:23 (LZ17) 19:40	06:46 20:16	05:29 20:47	05:33 20:55	06:01 20:29	07:11 19:40	07:47 18:45	06:50 16:56
6	07:44 16:47	07:22 17:26	08:17 (LZ16) 18:03	06:40 18:03	07:24 (LZ17) 19:41	06:44 20:17	05:29 20:48	05:33 20:54	06:02 20:28	07:12 19:38	07:47 18:43	06:51 16:55
7	07:44 16:48	07:21 17:27	08:17 (LZ16) 18:04	06:38 18:04	07:25 (LZ17) 19:42	06:42 20:18	05:28 20:48	05:34 20:54	06:04 20:26	07:13 19:36	07:48 18:42	06:52 16:54
8	07:43 16:49	07:19 17:29	08:17 (LZ16) 18:06	06:36 18:06	07:36 (LZ17) 19:44	06:40 20:19	05:28 20:49	05:35 20:54	06:05 20:25	07:14 19:40	07:48 18:40	06:53 16:52
9	07:43 16:50	07:18 17:30	08:18 (LZ16) 18:07	06:34 18:07	07:39 (LZ17) 19:45	06:41 20:20	05:28 20:50	05:36 20:53	06:06 20:24	07:15 19:33	07:48 18:38	06:55 16:58
10	07:43 16:51	07:17 17:31	08:18 (LZ16) 18:08	06:33 18:08	07:40 (LZ17) 19:46	06:40 20:21	05:27 20:51	05:36 20:53	06:07 20:22	07:17 19:31	07:49 18:36	06:56 16:59
11	07:43 16:52	07:15 17:33	08:18 (LZ16) 18:10	06:31 18:10	07:41 (LZ17) 19:47	06:35 20:23	05:27 20:51	05:37 20:52	06:08 20:21	07:18 19:29	07:50 18:35	06:57 16:59
12	07:42 16:53	07:14 17:34	08:19 (LZ16) 18:11	06:29 18:11	07:42 (LZ17) 19:48	06:33 20:24	05:27 20:52	05:38 20:52	06:09 20:19	07:19 19:27	07:51 18:33	06:59 16:48
13	07:42 16:54	07:13 17:35	08:19 (LZ16) 18:12	06:27 18:12	07:43 (LZ17) 19:49	06:33 20:25	05:27 20:52	05:39 20:51	06:10 20:18	07:20 19:25	07:52 18:31	07:00 16:45
14	07:41 16:56	07:11 17:37	08:20 (LZ16) 18:13	06:25 18:13	07:44 (LZ17) 19:50	06:30 20:26	05:27 20:53	05:39 20:51	06:11 20:16	07:21 19:24	07:53 18:29	07:01 16:46
15	07:41 16:57	07:10 17:38	08:21 (LZ16) 18:15	06:24 18:15	07:45 (LZ17) 19:51	06:28 20:27	05:27 20:53	05:40 20:50	06:12 20:15	07:22 19:22	07:54 18:28	07:03 16:45
16	07:41 16:58	07:08 17:40	08:22 (LZ16) 18:16	06:22 18:16	07:46 (LZ17) 19:52	06:27 20:28	05:27 20:53	05:41 20:49	06:14 20:13	07:24 19:20	07:55 18:26	07:04 16:42
17	07:40 16:59	07:07 17:41	08:23 (LZ16) 18:17	06:20 18:17	07:47 (LZ17) 19:53	06:25 20:29	05:27 20:54	05:42 20:49	06:15 20:12	07:25 19:18	07:56 18:24	07:05 16:43
18	07:39 17:00	07:05 17:42	08:25 (LZ16) 18:18	06:18 18:18	07:48 (LZ17) 19:54	06:23 20:30	05:27 20:54	05:43 20:48	06:16 20:10	07:26 19:16	07:57 18:23	07:07 16:42
19	07:39 17:02	07:04 17:44	08:26 (LZ16) 18:19	06:16 18:19	07:49 (LZ17) 19:55	06:22 20:32	05:27 20:54	05:44 20:47	06:17 20:09	07:28 19:14	07:58 18:21	07:08 16:41
20	07:38 17:03	07:02 17:45	08:34 (LZ16) 18:21	06:15 18:21	07:50 (LZ17) 19:56	06:20 20:33	05:27 20:55	05:45 20:46	06:18 20:12	07:29 19:12	08:02 (LZ17) 18:19	07:09 16:40
21	07:37 17:04	07:01 17:46	08:36 (LZ16) 18:22	06:13 18:22	07:51 (LZ17) 19:57	06:18 20:34	05:27 20:55	05:46 20:45	06:19 20:06	07:30 19:11	08:07 (LZ17) 18:18	07:10 16:40
22	07:37 17:06	06:59 17:48	07:29 (LZ17) 18:23	06:11 18:23	07:52 (LZ17) 19:58	06:17 20:35	05:27 20:55	05:47 20:45	06:20 20:04	07:31 19:09	09:01 (LZ16) 18:16	07:12 16:39
23	07:36 17:07	06:58 17:49	07:27 (LZ17) 18:24	06:09 18:24	07:53 (LZ17) 19:59	06:15 20:37	05:28 20:56	05:48 20:44	06:22 20:02	07:33 19:07	09:09 (LZ16) 18:15	07:13 16:38
24	07:35 17:08	06:56 17:50	07:25 (LZ17) 18:26	06:07 18:26	07:54 (LZ17) 20:00	06:14 20:37	05:28 20:56	05:49 20:43	06:23 20:01	07:34 19:05	09:13 (LZ16) 18:13	07:14 16:37
25	07:34 17:09	06:55 17:52	07:24 (LZ17) 18:27	06:06 18:27	07:55 (LZ17) 20:01	06:12 20:38	05:28 20:56	05:50 20:42	06:24 19:59	06:35 19:03	09:15 (LZ16) 18:12	07:15 16:37
26	07:33 17:11	06:53 17:53	07:23 (LZ17) 18:28	06:04 18:28	07:56 (LZ17) 20:02	06:10 20:39	05:28 20:56	05:52 20:41	06:25 19:57	07:00 19:01	09:17 (LZ16) 18:10	07:17 16:36
27	07:33 17:12	06:51 17:54	07:22 (LZ17) 18:29	06:02 18:29	07:57 (LZ17) 20:03	06:09 20:40	05:29 20:56	05:52 20:40	06:26 19:56	07:01 19:00	09:19 (LZ16) 18:09	07:18 16:36
28	07:32 17:14	06:50 17:55	07:21 (LZ17) 18:30	06:00 18:30	07:58 (LZ17) 20:04	06:07 20:40	05:29 20:56	05:53 20:39	06:27 19:54	07:02 18:58	09:21 (LZ16) 18:07	07:19 16:35
29	07:31 17:15	06:48 17:57	07:20 (LZ17) 18:31	05:58 18:31	07:59 (LZ17) 20:05	06:06 20:41	05:30 20:56	05:54 20:37	06:28 19:52	07:03 18:56	09:23 (LZ16) 18:06	07:20 16:35
30	07:30 17:16	06:47 18:00	07:19 (LZ17) 18:32	05:57 18:32	08:00 (LZ17) 20:06	06:04 20:42	05:30 20:56	05:55 20:36	06:29 19:50	07:05 18:54	09:25 (LZ16) 18:04	07:21 16:34
31	07:29 17:18	06:46 18:01	07:18 (LZ17) 18:33	05:56 18:33	08:01 (LZ17) 20:07	06:03 20:43	05:30 20:56	05:56 20:35	06:31 19:49	07:04 18:53	09:27 (LZ16) 18:03	07:22 16:41
Potential sun hours	289	293	369	402	456	462	468	434	376	342	291	278
Total, worst case	198	712	129	402	456	462	468	434	376	342	508	278

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		





SHADOW - Calendar

Calculation: Worst Case Shadow receptor: KrU_08 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 79.3° Slope: 90.0° (39)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March		April		May	June
1	07:44	07:28	06:48		06:53		06:03	05:31
	16:42	17:19	17:57		19:35		20:11	20:44
2	07:44	07:27	06:46		06:51		06:02	05:30
	16:43	17:20	17:58		19:36		20:12	20:45
3	07:44	07:25	06:45		06:49	07:15 (LZ06)	06:00	05:30
	16:44	17:22	17:59		19:38	10 07:25 (LZ06)	20:14	20:46
4	07:44	07:24	06:43		06:48	07:12 (LZ06)	05:59	05:29
	16:45	17:23	18:01		19:39	15 07:27 (LZ06)	20:15	20:46
5	07:44	07:23	06:41		06:46	07:10 (LZ06)	05:57	05:29
	16:46	17:25	18:02		19:40	18 07:28 (LZ06)	20:16	20:47
6	07:44	07:22	06:40		06:44	07:09 (LZ06)	05:56	05:29
	16:47	17:26	18:03		19:41	20 07:29 (LZ06)	20:17	20:48
7	07:44	07:21	06:38		06:42	07:07 (LZ06)	05:55	05:28
	16:48	17:27	18:05		19:42	22 07:29 (LZ06)	20:18	20:49
8	07:43	07:19	06:36		06:40	07:07 (LZ06)	05:54	05:28
	16:49	17:29	18:06		19:44	23 07:30 (LZ06)	20:19	20:49
9	07:43	07:18	06:34		17:34 (LZ07)	06:39	07:06 (LZ06)	05:52
	16:50	17:30	18:07	6	17:40 (LZ07)	19:45	24 07:30 (LZ06)	20:21
10	07:43	07:17	06:33		17:30 (LZ07)	06:37	07:06 (LZ06)	05:51
	16:51	17:31	18:08	13	17:43 (LZ07)	19:46	23 07:29 (LZ06)	20:22
11	07:43	07:16	06:31		17:28 (LZ07)	06:35	07:06 (LZ06)	05:50
	16:52	17:33	18:10	16	17:44 (LZ07)	19:47	23 07:29 (LZ06)	20:23
12	07:42	07:14	06:29		17:27 (LZ07)	06:34	07:06 (LZ06)	05:49
	16:53	17:34	18:11	19	17:46 (LZ07)	19:48	22 07:28 (LZ06)	20:24
13	07:42	07:13	06:27		17:26 (LZ07)	06:32	07:06 (LZ06)	05:47
	16:54	17:35	18:12	20	17:46 (LZ07)	19:50	21 07:27 (LZ06)	20:25
14	07:42	07:11	06:25		17:25 (LZ07)	06:30	07:06 (LZ06)	05:46
	16:56	17:37	18:13	22	17:47 (LZ07)	19:51	20 07:26 (LZ06)	20:26
15	07:41	07:10	06:24		17:24 (LZ07)	06:28	07:08 (LZ06)	05:45
	16:57	17:38	18:15	22	17:46 (LZ07)	19:52	17 07:25 (LZ06)	20:27
16	07:41	07:08	06:22		17:24 (LZ07)	06:27	07:08 (LZ06)	05:44
	16:58	17:40	18:16	22	17:46 (LZ07)	19:53	15 07:23 (LZ06)	20:28
17	07:40	07:07	06:20		17:24 (LZ07)	06:25	07:10 (LZ06)	05:43
	16:59	17:41	18:17	21	17:45 (LZ07)	19:54	10 07:20 (LZ06)	20:29
18	07:39	07:06	06:18		17:25 (LZ07)	06:23		05:42
	17:00	17:42	18:18	20	17:45 (LZ07)	19:56		20:31
19	07:39	07:04	06:16		17:25 (LZ07)	06:22		05:41
	17:02	17:44	18:19	19	17:44 (LZ07)	19:57		20:32
20	07:38	07:03	06:15		17:25 (LZ07)	06:20		05:40
	17:03	17:45	18:21	18	17:43 (LZ07)	19:58		20:33
21	07:38	07:01	06:13		17:27 (LZ07)	06:18		05:39
	17:04	17:46	18:22	14	17:41 (LZ07)	19:59		20:34
22	07:37	06:59	06:11		17:28 (LZ07)	06:17		05:38
	17:06	17:48	18:23	10	17:38 (LZ07)	20:00		20:35
23	07:36	06:58	06:09			06:15		05:37
	17:07	17:49	18:24			20:02		20:36
24	07:35	06:56	06:07			06:14		05:36
	17:08	17:50	18:26			20:03		20:37
25	07:34	06:55	06:06			06:12		05:36
	17:10	17:52	18:27			20:04		20:38
26	07:34	06:53	06:04			06:11		05:35
	17:11	17:53	18:28			20:05		20:39
27	07:33	06:51	06:02			06:09		05:34
	17:12	17:54	18:29			20:06		20:40
28	07:32	06:50	06:00			06:07		05:33
	17:14	17:56	18:30			20:08		20:41
29	07:31		06:58			06:06		05:33
	17:15		19:32			20:09		20:41
30	07:30		06:57			06:05		05:32
	17:16		19:33			20:10		20:42
31	07:29		06:55					05:31
	17:18		19:34					20:43
Potential sun hours	289	293	369		402		456	462
Total, worst case			242		283			

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

Calculation: Worst Case Shadow receptor: KrU_08 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 79.3° Slope: 90.0° (39)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:56	05:57 20:34	06:32 19:47	07:05 (LZ06) 18:52	07:06 18:25 (LZ07)	06:44 17:01
2	05:31 20:55	05:58 20:33	06:33 19:45	07:05 (LZ06) 18:51	07:07 18:24 (LZ07)	06:46 17:00
3	05:32 20:55	05:59 20:32	06:34 19:44	07:04 (LZ06) 18:49	07:08 18:22 (LZ07)	06:47 16:59
4	05:32 20:55	06:00 20:30	06:35 19:42	07:04 (LZ06) 18:47	07:09 18:20 (LZ07)	06:48 16:57
5	05:33 20:55	06:01 20:29	06:36 19:40	07:04 (LZ06) 18:45	07:11 18:19	06:50 16:56
6	05:33 20:54	06:02 20:28	06:37 19:38	07:05 (LZ06) 18:43	07:12 18:18	06:51 16:55
7	05:34 20:54	06:04 20:26	06:39 19:36	07:05 (LZ06) 18:42	07:13 18:17	06:52 16:54
8	05:35 20:54	06:05 20:25	06:40 19:35	07:06 (LZ06) 18:40	07:14 18:16	06:54 16:52
9	05:36 20:53	06:06 20:24	06:41 19:33	07:08 (LZ06) 18:38	07:15 18:15	06:55 16:51
10	05:36 20:53	06:07 20:22	06:42 19:31	07:17 18:36	07:17 18:14	06:56 16:50
11	05:37 20:52	06:08 20:21	06:43 19:29	07:18 18:35	07:18 18:13	06:57 16:49
12	05:38 20:52	06:09 20:19	06:44 19:27	07:19 18:33	07:19 18:12	06:59 16:48
13	05:39 20:51	06:10 20:18	06:45 19:25	07:20 18:31	07:20 18:11	07:00 16:47
14	05:39 20:51	06:11 20:17	06:46 19:24	07:21 18:29	07:21 18:10	07:01 16:46
15	05:40 20:50	06:13 20:15	06:48 19:22	07:23 18:28	07:23 18:09	07:03 16:45
16	05:41 20:49	06:14 20:14	06:49 19:20	07:24 18:26	07:24 18:08	07:04 16:44
17	05:42 20:49	06:15 20:12	06:50 19:18	07:25 18:24	07:25 18:07	07:05 16:43
18	05:43 20:48	06:16 20:10	06:51 19:16	07:26 18:23	07:26 18:06	07:07 16:42
19	05:44 20:47	06:17 20:09	06:52 19:14	07:28 18:21	07:28 18:05	07:08 16:41
20	05:45 20:46	06:18 20:07	06:53 19:13	07:29 18:19	07:29 18:04	07:09 16:40
21	05:46 20:45	06:19 20:06	06:54 19:11	18:16 (LZ07) 18:23 (LZ07)	07:30 18:18	07:10 16:40
22	05:47 20:45	06:20 20:04	06:55 19:09	18:12 (LZ07) 18:26 (LZ07)	07:31 18:16	07:12 16:39
23	05:48 20:44	06:22 20:02	06:57 19:07	18:10 (LZ07) 18:27 (LZ07)	07:33 18:15	07:13 16:38
24	05:49 20:43	06:23 20:01	06:58 19:05	18:09 (LZ07) 18:27 (LZ07)	07:34 18:13	07:14 16:37
25	05:50 20:42	06:24 19:59	06:59 19:03	18:07 (LZ07) 18:28 (LZ07)	06:35 17:12	07:15 16:37
26	05:51 20:41	06:25 19:57	07:00 19:01	18:06 (LZ07) 18:28 (LZ07)	06:37 17:10	07:17 16:36
27	05:52 20:40	06:26 19:56	07:01 19:00	18:06 (LZ07) 18:27 (LZ07)	06:38 17:09	07:18 16:36
28	05:53 20:39	06:27 19:54	07:02 18:58	18:06 (LZ07) 18:28 (LZ07)	06:39 17:07	07:19 16:35
29	05:54 20:38	06:28 19:52	07:04 18:56	18:06 (LZ07) 18:27 (LZ07)	06:40 17:06	07:20 16:35
30	05:55 20:36	06:29 19:51	07:06 18:54	18:06 (LZ07) 18:26 (LZ07)	06:42 17:04	07:21 16:34
31	05:56 20:35	06:31 19:49	07:06 18:54	18:26 (LZ07) 17:03	06:43 17:03	07:22 16:41
Potential sun hours	468	434	376	342	291	278
Total, worst case		110	362	62		10

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: KrU_09 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 77.7° Slope: 90.0° (40)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June
1	07:44 16:42	15:26 (LZ15) 15:51 (LZ15)	07:28 17:19	06:48 17:57		05:31 20:44
2	07:44 16:43	15:27 (LZ15) 15:51 (LZ15)	07:27 17:20	06:51 17:58	06:03 20:12	05:30 20:45
3	07:44 16:44	15:28 (LZ15) 15:52 (LZ15)	07:25 17:22	06:49 17:59	06:00 20:14	05:30 20:46
4	07:44 16:45	15:28 (LZ15) 15:52 (LZ15)	07:24 17:23	06:48 18:01	05:59 20:15	05:29 20:46
5	07:44 16:46	15:28 (LZ15) 15:51 (LZ15)	07:23 17:25	06:41 18:02	05:57 20:16	05:29 20:47
6	07:44 16:47	15:29 (LZ15) 15:51 (LZ15)	07:22 17:26	06:44 18:03	05:56 20:17	05:29 20:48
7	07:44 16:48	15:31 (LZ15) 15:52 (LZ15)	07:21 17:27	06:42 18:05	05:55 20:18	05:28 20:49
8	07:43 16:49	15:32 (LZ15) 15:52 (LZ15)	07:19 17:29	06:40 18:06	05:54 20:19	05:28 20:49
9	07:43 16:50	15:32 (LZ15) 15:51 (LZ15)	07:18 17:30	06:39 18:07	05:52 20:21	05:28 20:50
10	07:43 16:51	15:34 (LZ15) 15:51 (LZ15)	07:17 17:31	06:37 18:08	05:51 20:22	05:27 20:50
11	07:43 16:52	15:35 (LZ15) 15:51 (LZ15)	07:16 17:33	06:35 18:10	05:50 20:23	05:27 20:51
12	07:42 16:53	15:36 (LZ15) 15:49 (LZ15)	07:14 17:34	06:34 18:11	05:49 20:24	05:27 20:52
13	07:42 16:54	15:39 (LZ15) 15:49 (LZ15)	07:13 17:35	06:32 18:12	05:47 20:25	05:27 20:52
14	07:42 16:56	15:42 (LZ15) 15:46 (LZ15)	07:11 17:37	06:30 18:13	05:46 20:26	05:27 20:53
15	07:41 16:57		07:10 17:38	06:28 18:15	05:45 20:27	05:27 20:53
16	07:41 16:58		07:08 17:40	06:27 18:16	05:44 20:28	05:27 20:53
17	07:40 16:59		07:07 17:41	06:25 18:17	05:43 20:29	05:27 20:54
18	07:39 17:00		07:06 17:42	06:23 18:18	05:42 20:31	05:27 20:54
19	07:39 17:02		07:04 17:44	06:22 18:19	05:41 20:32	05:27 20:55
20	07:38 17:03		07:03 17:45	06:20 18:21	05:40 20:33	05:27 20:55
21	07:38 17:04		07:01 17:46	06:18 18:22	05:39 20:34	05:27 20:55
22	07:37 17:06		06:59 17:48	06:17 18:23	05:38 20:35	05:27 20:55
23	07:36 17:07		06:58 17:49	06:15 18:24	05:37 20:36	05:28 20:55
24	07:35 17:08		06:56 17:50	06:14 18:26	05:36 20:37	05:28 20:56
25	07:34 17:10		06:55 17:52	06:12 18:27	05:36 20:38	05:28 20:56
26	07:34 17:11		06:53 17:53	06:11 18:28	05:35 20:39	05:28 20:56
27	07:33 17:12		06:51 17:54	06:09 18:29	05:34 20:40	05:29 20:56
28	07:32 17:14		06:50 17:56	06:07 18:30	05:33 20:41	05:29 20:56
29	07:31 17:15			06:06 19:32	05:33 20:41	05:30 20:56
30	07:30 17:16			06:05 19:33	05:32 20:42	05:30 20:56
31	07:29 17:18			06:04 19:34	05:31 20:43	
Potential sun hours	289	293	369	402	456	462
Total, worst case	262		237	308		

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

Day in month	Sun rise (hh:mm)	Minutes with flicker	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

Calculation: Worst Case Shadow receptor: KrU_09 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 77.7° Slope: 90.0° (40)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:56	05:57 20:34	06:32 19:47	06:59 (LZ06) 18:52	07:06 17:01	07:23 16:34
2	05:31 20:55	05:58 20:33	06:33 19:45	07:01 (LZ06) 18:51	07:07 17:00	07:24 16:33
3	05:32 20:55	05:59 20:32	06:34 19:44	07:08 18:49	06:47 16:59	07:25 16:33
4	05:32 20:55	06:00 20:30	06:35 19:42	07:09 18:47	06:48 16:57	07:26 16:33
5	05:33 20:55	06:01 20:29	06:36 19:40	07:11 18:45	06:50 16:56	07:27 16:33
6	05:33 20:54	06:02 20:28	06:37 19:38	07:12 18:43	06:51 16:55	07:28 16:32
7	05:34 20:54	06:04 20:26	06:39 19:36	07:13 18:42	06:52 16:54	07:29 16:32
8	05:35 20:54	06:05 20:25	06:40 19:35	07:14 18:40	06:54 16:52	07:30 16:32
9	05:36 20:53	06:06 20:24	06:41 19:33	07:15 18:38	06:55 16:51	07:31 16:32
10	05:36 20:53	06:07 20:22	06:42 19:31	07:17 18:36	06:56 16:50	07:32 16:32
11	05:37 20:52	06:08 20:21	06:43 19:29	07:18 18:35	06:57 16:49	07:33 16:32
12	05:38 20:52	06:09 20:19	06:44 19:27	07:19 18:33	06:59 16:48	07:34 16:32
13	05:39 20:51	06:10 20:18	06:45 19:25	07:20 18:31	07:00 16:47	07:34 16:32
14	05:39 20:51	06:11 20:17	06:46 19:24	07:21 18:29	07:01 16:46	07:35 16:32
15	05:40 20:50	06:13 20:15	06:48 19:22	18:28 (LZ07) 18:35 (LZ07)	07:03 16:45	07:36 16:32
16	05:41 20:49	06:14 20:14	06:49 19:20	18:24 (LZ07) 18:37 (LZ07)	07:04 16:44	07:37 16:33
17	05:42 20:49	06:15 20:12	06:50 19:18	18:22 (LZ07) 18:39 (LZ07)	07:05 16:43	07:37 16:33
18	05:43 20:48	06:16 20:10	06:51 19:16	18:21 (LZ07) 18:39 (LZ07)	07:07 16:42	07:38 16:33
19	05:44 20:47	06:17 20:09	06:52 19:14	18:19 (LZ07) 18:39 (LZ07)	07:08 16:41	07:39 16:34
20	05:45 20:46	06:18 20:07	06:53 19:13	18:18 (LZ07) 18:39 (LZ07)	07:09 16:40	07:39 16:34
21	05:46 20:45	06:19 20:06	06:54 19:11	18:19 (LZ07) 18:40 (LZ07)	07:10 16:40	07:40 16:34
22	05:47 20:45	06:20 20:04	06:55 19:09	18:18 (LZ07) 18:40 (LZ07)	07:12 16:39	07:40 16:35
23	05:48 20:44	06:22 20:02	06:58 (LZ06) 19:07	18:18 (LZ07) 18:39 (LZ07)	07:13 16:38	07:41 16:35
24	05:49 20:43	06:23 20:01	06:58 (LZ06) 19:05	18:18 (LZ07) 18:38 (LZ07)	07:14 16:37	07:41 16:36
25	05:50 20:42	06:24 19:59	06:57 (LZ06) 19:03	18:18 (LZ07) 18:37 (LZ07)	07:15 16:37	07:42 16:37
26	05:51 20:41	06:25 19:57	06:56 (LZ06) 19:01	18:18 (LZ07) 18:35 (LZ07)	07:17 16:36	07:42 16:37
27	05:52 20:40	06:26 19:56	06:56 (LZ06) 19:00	18:19 (LZ07) 18:33 (LZ07)	07:18 16:36	07:43 16:38
28	05:53 20:39	06:27 19:54	06:56 (LZ06) 18:58	18:22 (LZ07) 18:31 (LZ07)	07:19 17:07	07:43 16:35
29	05:54 20:38	06:28 19:52	06:56 (LZ06) 18:56	07:04 17:06	06:40 16:35	07:43 16:35
30	05:55 20:36	06:29 19:51	06:56 (LZ06) 18:54	07:05 17:04	06:42 16:34	07:43 16:40
31	05:56 20:35	06:31 19:49	06:58 (LZ06) 18:54	07:04 17:03	06:43 17:03	07:44 16:41
Potential sun hours	468	434	376	342	291	278
Total, worst case		284	265		25	758

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: KrU_10 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 83.7° Slope: 90.0° (41)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June
1	07:44	15:27 (LZ15)	07:28	06:48		
	16:42	15:56 (LZ15)	17:19	17:57		
2	07:44	15:28 (LZ15)	07:27	06:46		
	16:43	15:56 (LZ15)	17:20	17:58		
3	07:44	15:28 (LZ15)	07:25	06:45		
	16:44	15:56 (LZ15)	17:22	17:59		
4	07:44	15:29 (LZ15)	07:24	06:43		
	16:45	15:57 (LZ15)	17:23	18:01		
5	07:44	15:29 (LZ15)	07:23	06:41		
	16:46	15:56 (LZ15)	17:25	18:02		
6	07:44	15:29 (LZ15)	07:22	06:40		
	16:47	15:57 (LZ15)	17:26	18:03		
7	07:44	15:30 (LZ15)	07:21	06:38		
	16:48	15:57 (LZ15)	17:27	18:05		
8	07:43	15:31 (LZ15)	07:19	06:36		
	16:49	15:58 (LZ15)	17:29	18:06		
9	07:43	15:31 (LZ15)	07:18	06:34		
	16:50	15:57 (LZ15)	17:30	18:07		
10	07:43	15:32 (LZ15)	07:17	06:33		
	16:51	15:57 (LZ15)	17:31	18:08		
11	07:43	15:34 (LZ15)	07:16	06:31		
	16:52	15:58 (LZ15)	17:33	18:10		
12	07:42	15:34 (LZ15)	07:14	06:29		
	16:53	15:57 (LZ15)	17:34	18:11		
13	07:42	15:36 (LZ15)	07:13	06:27		
	16:54	15:57 (LZ15)	17:36	18:12		
14	07:42	15:36 (LZ15)	07:11	06:25		
	16:56	15:57 (LZ15)	17:37	18:13		
15	07:41	15:38 (LZ15)	07:10	06:24		
	16:57	15:57 (LZ15)	17:38	18:15		
16	07:41	15:39 (LZ15)	07:08	06:22		
	16:58	15:56 (LZ15)	17:40	18:16		
17	07:40	15:41 (LZ15)	07:07	06:20		
	16:59	15:55 (LZ15)	17:41	18:17		
18	07:39	15:43 (LZ15)	07:06	06:18		
	17:00	15:53 (LZ15)	17:42	18:18		
19	07:39	15:47 (LZ15)	07:04	06:16		
	17:02	15:50 (LZ15)	17:44	18:19		
20	07:38		07:03	06:15		
	17:03		17:45	18:21		
21	07:38		07:01	06:13		
	17:04		17:46	18:22		
22	07:37		06:59	06:11		
	17:06		17:48	18:23		
23	07:36		06:58	06:09		
	17:07		17:49	18:24		
24	07:35		06:56	06:07		
	17:08		17:50	18:26		
25	07:34		06:55	06:06		
	17:10		17:52	18:27		
26	07:34		06:53	06:04		
	17:11		17:53	18:28		
27	07:33		06:51	06:02		
	17:12		17:54	18:29		
28	07:32		06:50	06:00		
	17:14		17:56	18:30		
29	07:31			06:58		
	17:15			19:32		
30	07:30			06:57		
	17:16			19:33		
31	07:29			06:55		
	17:18			19:34		
Potential sun hours	289	293	369	402	456	462
Total, worst case	425		239	317		

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: KrU_10 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 83.7° Slope: 90.0° (41)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:56	05:57 20:34	06:32 19:47	07:06 18:52	06:44 17:01	07:23 16:34 24 15:16 (LZ15)
2	05:31 20:55	05:58 20:33	06:33 19:45	07:07 18:51	06:46 17:00	07:24 16:33 24 15:16 (LZ15)
3	05:32 20:55	05:59 20:32	06:34 19:44	07:08 18:49	06:47 16:59	07:25 16:33 26 15:15 (LZ15)
4	05:32 20:55	06:00 20:30	06:35 19:42	07:09 18:47	06:48 16:57	07:26 16:33 27 15:15 (LZ15)
5	05:33 20:55	06:01 20:29	06:36 19:40	07:11 18:45	06:50 16:56	07:27 16:33 27 15:15 (LZ15)
6	05:34 20:54	06:02 20:28	06:37 19:38	07:12 18:43	06:51 16:55	07:28 16:32 27 15:16 (LZ15)
7	05:34 20:54	06:04 20:26	06:39 19:36	07:13 18:42	06:52 16:54	07:29 16:32 27 15:16 (LZ15)
8	05:35 20:54	06:05 20:25	06:40 19:35	07:14 18:40	06:54 16:52	07:30 16:32 28 15:16 (LZ15)
9	05:36 20:53	06:06 20:24	06:41 19:33	07:15 18:38	06:55 16:51	07:31 16:32 29 15:16 (LZ15)
10	05:36 20:53	06:07 20:22	06:42 19:31	07:17 18:36	06:56 16:50	07:32 16:32 28 15:17 (LZ15)
11	05:37 20:52	06:08 20:21	06:43 19:29	18:34 (LZ07) 07:18	06:57 16:49	07:33 16:32 29 15:17 (LZ15)
12	05:38 20:52	06:09 20:19	06:44 19:27	18:42 (LZ07) 07:19	06:59 16:48	07:34 16:32 29 15:18 (LZ15)
13	05:39 20:51	06:10 20:18	06:45 19:25	18:44 (LZ07) 07:20	07:00 16:47	07:35 16:32 29 15:18 (LZ15)
14	05:39 20:51	06:11 20:17	06:46 19:24	18:25 (LZ07) 07:21	07:01 16:46	07:36 16:32 29 15:18 (LZ15)
15	05:40 20:50	06:13 20:15	06:48 19:22	18:26 (LZ07) 07:23	07:03 16:45	07:37 16:32 29 15:18 (LZ15)
16	05:41 20:49	06:14 20:14	06:49 19:20	18:27 (LZ07) 07:24	07:04 16:44	07:38 16:33 29 15:19 (LZ15)
17	05:42 20:49	06:15 20:12	06:50 19:18	18:24 (LZ07) 07:25	07:05 16:43	07:39 16:33 29 15:20 (LZ15)
18	05:43 20:48	06:16 20:10	06:51 19:16	18:24 (LZ07) 07:26	07:07 16:42	07:38 16:33 29 15:20 (LZ15)
19	05:44 20:47	06:17 20:09	06:52 19:14	18:23 (LZ07) 07:28	07:08 16:41	07:39 16:33 29 15:21 (LZ15)
20	05:45 20:46	06:18 20:07	06:53 19:13	18:23 (LZ07) 07:29	07:09 16:40	07:39 16:34 29 15:21 (LZ15)
21	05:46 20:45	06:19 20:06	06:54 19:11	18:24 (LZ07) 07:30	07:10 16:40	07:40 16:34 30 15:21 (LZ15)
22	05:47 20:45	06:20 20:04	06:55 19:09	18:25 (LZ07) 07:31	07:12 16:39	07:40 16:35 30 15:21 (LZ15)
23	05:48 20:44	06:22 20:02	06:57 19:07	18:26 (LZ07) 07:33	07:13 16:38	15:24 (LZ15) 07:41 15:27 (LZ15) 16:35 29 15:23 (LZ15)
24	05:49 20:43	06:23 20:01	06:58 19:05	18:27 (LZ07) 07:34	07:14 16:37	15:20 (LZ15) 07:41 15:30 (LZ15) 16:36 29 15:23 (LZ15)
25	05:50 20:42	06:24 19:59	06:59 19:03	18:38 (LZ07) 07:35	07:15 16:37	15:18 (LZ15) 07:42 15:32 (LZ15) 16:37 29 15:24 (LZ15)
26	05:51 20:41	06:25 19:57	07:00 19:01	17:12 17:10	16:37 16:36	15:18 (LZ15) 07:42 15:35 (LZ15) 16:37 29 15:24 (LZ15)
27	05:52 20:40	06:26 19:56	07:01 19:00	16:38 17:09	07:18 16:36	15:17 (LZ15) 07:43 15:36 (LZ15) 16:38 29 15:24 (LZ15)
28	05:53 20:39	06:27 19:54	07:02 18:58	06:39 17:07	07:19 16:35	15:16 (LZ15) 07:43 15:37 (LZ15) 16:39 29 15:24 (LZ15)
29	05:54 20:38	06:28 19:52	07:04 18:56	06:40 17:06	07:20 16:35	15:16 (LZ15) 07:43 15:37 (LZ15) 16:39 29 15:26 (LZ15)
30	05:55 20:36	06:29 19:51	07:05 18:54	06:42 17:04	07:21 16:34	15:16 (LZ15) 07:43 15:39 (LZ15) 16:40 29 15:26 (LZ15)
31	05:56 20:35	06:31 19:49		06:43 17:03		07:44 16:41 29 15:26 (LZ15)
Potential sun hours	468	434	376	342	291	278
Total, worst case		308	251		128	877

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

Day in month	Sun rise (hh:mm)	Minutes with flicker	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

Calculation: Worst Case Shadow receptor: KrU_11 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 87.5° Slope: 90.0° (42)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June
1	07:44 16:42	15:38 (LZ15) 16:06 (LZ15)	07:28 17:19	06:48 17:57	06:53 19:35	06:37 (LZ06) 20:11
2	07:44 16:43	15:39 (LZ15) 16:07 (LZ15)	07:27 17:20	06:46 17:58	06:51 19:36	06:37 (LZ06) 20:12
3	07:44 16:44	15:39 (LZ15) 16:07 (LZ15)	07:25 17:22	06:45 17:59	06:49 19:38	06:38 (LZ06) 20:14
4	07:44 16:45	15:39 (LZ15) 16:08 (LZ15)	07:24 17:23	06:43 18:01	06:48 19:39	06:39 (LZ06) 20:15
5	07:44 16:46	15:39 (LZ15) 16:08 (LZ15)	07:23 17:25	06:41 18:02	06:46 19:40	06:40 (LZ06) 20:16
6	07:44 16:47	15:39 (LZ15) 16:08 (LZ15)	07:22 17:26	06:40 18:03	06:44 19:41	06:42 (LZ06) 20:17
7	07:44 16:48	15:40 (LZ15) 16:09 (LZ15)	07:21 17:27	06:38 18:05	06:42 19:42	06:55 (LZ06) 20:18
8	07:43 16:49	15:40 (LZ15) 16:10 (LZ15)	07:19 17:29	06:36 18:06	06:40 19:44	06:54 20:19
9	07:43 16:50	15:40 (LZ15) 16:10 (LZ15)	07:18 17:30	06:34 18:07	06:39 19:45	05:52 20:21
10	07:43 16:51	15:41 (LZ15) 16:11 (LZ15)	07:17 17:31	06:33 18:08	06:37 19:46	05:51 20:22
11	07:43 16:52	15:42 (LZ15) 16:11 (LZ15)	07:16 17:33	06:31 18:10	06:35 19:47	05:50 20:23
12	07:42 16:53	15:41 (LZ15) 16:11 (LZ15)	07:14 17:34	06:29 18:11	06:34 19:48	05:49 20:24
13	07:42 16:54	15:42 (LZ15) 16:12 (LZ15)	07:13 17:36	06:27 18:12	06:32 19:50	05:47 20:25
14	07:42 16:56	15:42 (LZ15) 16:12 (LZ15)	07:11 17:37	06:25 18:13	06:30 19:51	05:46 20:26
15	07:41 16:57	15:43 (LZ15) 16:13 (LZ15)	07:10 17:38	06:24 18:15	06:28 19:52	05:45 20:27
16	07:41 16:58	15:43 (LZ15) 16:12 (LZ15)	07:08 17:40	06:22 18:16	06:27 19:53	05:44 20:28
17	07:40 16:59	15:45 (LZ15) 16:13 (LZ15)	07:07 17:41	06:20 18:17	06:25 19:54	05:43 20:29
18	07:39 17:00	15:45 (LZ15) 16:13 (LZ15)	07:06 17:42	06:18 18:18	06:23 19:56	05:42 20:31
19	07:39 17:02	15:45 (LZ15) 16:13 (LZ15)	07:04 17:44	06:16 18:19	06:22 19:57	05:41 20:32
20	07:38 17:03	15:46 (LZ15) 16:12 (LZ15)	07:03 17:45	06:15 18:21	06:20 19:58	05:40 20:33
21	07:38 17:04	15:47 (LZ15) 16:13 (LZ15)	07:01 17:46	06:13 18:22	06:18 19:59	05:39 20:34
22	07:37 17:06	15:48 (LZ15) 16:12 (LZ15)	06:59 17:48	06:11 18:23	06:17 20:00	05:38 20:35
23	07:36 17:07	15:49 (LZ15) 16:12 (LZ15)	06:58 17:49	06:09 18:24	06:15 20:02	05:37 20:36
24	07:35 17:08	15:50 (LZ15) 16:11 (LZ15)	06:56 17:50	06:07 18:26	06:14 20:03	05:36 20:37
25	07:34 17:10	15:51 (LZ15) 16:10 (LZ15)	06:55 17:52	06:06 18:27	06:12 20:04	05:36 20:38
26	07:34 17:11	15:53 (LZ15) 16:09 (LZ15)	06:53 17:53	06:04 18:28	06:11 20:05	05:35 20:39
27	07:33 17:12	15:55 (LZ15) 16:07 (LZ15)	06:51 17:54	06:02 18:29	06:09 20:06	05:34 20:40
28	07:32 17:14	16:00 (LZ15) 16:03 (LZ15)	06:50 17:56	06:00 18:30	06:07 20:08	05:33 20:40
29	07:31 17:15			06:58 19:32	06:06 20:09	05:33 20:41
30	07:30 17:16			06:57 19:33	06:05 20:10	05:32 20:42
31	07:29 17:18			06:55 19:34	06:04 20:10	05:31 20:43
Potential sun hours	289	293	369	402	456	462
Total, worst case	722		137	335	112	

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: KrU_11 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 87.5° Slope: 90.0° (42)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December	
1	05:31 20:56	05:57 20:34	06:32 19:47	07:06 18:52	06:44 17:01	07:23 16:34	15:24 (LZ15) 15:53 (LZ15)
2	05:31 20:55	05:58 20:33	06:33 19:45	07:07 18:51	06:46 17:00	07:24 16:33	15:24 (LZ15) 15:54 (LZ15)
3	05:32 20:55	05:59 20:32	06:34 19:44	07:08 18:49	06:47 16:59	07:25 16:33	15:24 (LZ15) 15:54 (LZ15)
4	05:32 20:55	06:00 20:30	06:35 19:42	07:09 18:47	06:48 16:57	07:26 16:33	15:24 (LZ15) 15:54 (LZ15)
5	05:33 20:55	06:01 20:29	06:36 19:40	07:11 18:50 (LZ07)	06:50 16:56	07:27 16:33	15:25 (LZ15) 15:54 (LZ15)
6	05:34 20:54	06:02 20:28	06:37 19:38	07:12 18:43 (LZ07)	06:51 16:55	07:28 16:32	15:25 (LZ15) 15:54 (LZ15)
7	05:34 20:54	06:04 20:26	06:39 19:36	07:13 18:40 (LZ07)	06:52 16:54	07:29 16:32	15:26 (LZ15) 15:55 (LZ15)
8	05:35 20:54	06:05 20:25	06:40 19:35	07:14 18:37 (LZ07)	06:54 16:52	07:30 16:32	15:26 (LZ15) 15:55 (LZ15)
9	05:36 20:53	06:06 20:24	06:41 19:33	07:15 18:36 (LZ07)	06:55 16:51	07:31 16:32	15:27 (LZ15) 15:56 (LZ15)
10	05:36 20:53	06:07 20:22	06:42 19:31	07:17 18:36 (LZ07)	06:56 16:50	07:32 16:32	15:28 (LZ15) 15:56 (LZ15)
11	05:37 20:52	06:08 20:21	06:43 19:29	07:18 18:36 (LZ07)	06:57 16:49	07:33 16:32	15:28 (LZ15) 15:56 (LZ15)
12	05:38 20:52	06:09 20:19	06:44 19:27	07:19 18:35 (LZ07)	06:59 16:48	07:34 16:32	15:29 (LZ15) 15:56 (LZ15)
13	05:39 20:51	06:10 20:18	06:45 19:25	07:20 18:35 (LZ07)	07:00 16:47	07:34 16:32	15:30 (LZ15) 15:57 (LZ15)
14	05:39 20:51	06:11 20:17	06:46 19:24	07:21 18:35 (LZ07)	07:01 16:46	07:35 16:32	15:30 (LZ15) 15:56 (LZ15)
15	05:40 20:50	06:13 20:15	06:48 19:22	07:23 18:35 (LZ07)	07:03 16:45	5 15:31 (LZ15) 15:28 (LZ15)	16:32 26 15:56 (LZ15) 07:36 26 15:31 (LZ15)
16	05:41 20:49	06:14 20:14	06:49 19:20	07:24 18:35 (LZ07)	07:04 16:44	12 15:40 (LZ15) 15:26 (LZ15)	16:33 26 15:57 (LZ15) 07:37 27 15:31 (LZ15)
17	05:42 20:49	06:15 20:12	06:50 19:18	07:25 18:36 (LZ07)	07:05 16:43	16 15:42 (LZ15) 15:25 (LZ15)	16:33 27 15:58 (LZ15) 07:38 26 15:32 (LZ15)
18	05:43 20:48	06:16 20:10	06:51 19:16	07:26 18:37 (LZ07)	07:07 16:42	19 15:44 (LZ15) 15:24 (LZ15)	16:33 26 15:58 (LZ15) 07:39 26 15:33 (LZ15)
19	05:44 20:47	06:17 20:09	06:52 19:14	07:28 18:39 (LZ07)	07:08 16:41	21 15:45 (LZ15) 15:23 (LZ15)	16:33 26 15:58 (LZ15) 07:39 26 15:33 (LZ15)
20	05:45 20:46	06:18 20:07	06:53 19:13	07:29 18:41 (LZ07)	07:09 16:40	23 15:46 (LZ15) 15:23 (LZ15)	16:34 26 15:59 (LZ15) 07:39 26 15:33 (LZ15)
21	05:46 20:45	06:19 20:06	06:54 19:11	07:30 18:42 (LZ07)	07:10 16:40	24 15:47 (LZ15) 15:22 (LZ15)	16:34 26 15:59 (LZ15) 07:40 26 16:00 (LZ15)
22	05:47 20:45	06:20 20:04	06:55 19:09	07:31 18:43 (LZ07)	07:12 16:39	26 15:48 (LZ15) 15:22 (LZ15)	16:34 26 16:00 (LZ15) 07:41 26 15:34 (LZ15)
23	05:48 20:44	06:22 20:02	06:57 19:07	07:33 18:44 (LZ07)	07:13 16:38	26 15:49 (LZ15) 15:22 (LZ15)	16:35 26 16:00 (LZ15) 07:41 26 15:35 (LZ15)
24	05:49 20:43	06:23 20:01	06:58 19:05	07:34 18:45 (LZ07)	07:14 16:37	28 15:50 (LZ15) 15:22 (LZ15)	16:35 26 16:01 (LZ15) 07:41 26 15:35 (LZ15)
25	05:50 20:42	06:24 19:59	06:59 19:03	07:35 18:46 (LZ07)	07:15 16:37	28 15:51 (LZ15) 15:22 (LZ15)	16:36 26 16:01 (LZ15) 07:42 26 15:36 (LZ15)
26	05:51 20:41	06:25 19:57	07:00 19:01	07:36 18:47 (LZ07)	07:17 16:36	28 15:52 (LZ15) 15:22 (LZ15)	16:37 26 16:02 (LZ15) 07:42 26 15:36 (LZ15)
27	05:52 20:40	06:26 19:56	07:01 19:00	07:38 18:48 (LZ07)	07:18 16:36	30 15:53 (LZ15) 15:22 (LZ15)	16:37 26 16:02 (LZ15) 07:43 26 15:36 (LZ15)
28	05:53 20:39	06:27 19:54	07:02 18:58	07:39 18:49 (LZ07)	07:19 16:35	30 15:54 (LZ15) 15:22 (LZ15)	16:38 26 16:02 (LZ15) 07:43 27 16:03 (LZ15)
29	05:54 20:38	06:28 19:52	07:04 18:56	07:40 18:50 (LZ07)	07:20 16:35	30 15:55 (LZ15) 15:22 (LZ15)	16:39 26 16:04 (LZ15) 07:43 27 16:04 (LZ15)
30	05:55 20:36	06:29 19:51	07:05 18:54	07:41 18:51 (LZ07)	07:21 16:34	30 15:56 (LZ15) 15:23 (LZ15)	16:40 27 16:05 (LZ15) 07:43 27 16:05 (LZ15)
31	05:56 20:35	06:31 19:49		07:43 17:03		07:43 16:41	15:38 (LZ15) 16:05 (LZ15)
Potential sun hours	468	434	376	342	291	278	845
Total, worst case		336	252		406		

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: KrU_12 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 89.2° Slope: 90.0° (43)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January			February			March	April	May			June
1	07:44			07:28	16:03 (LZ15)	06:48	06:53		06:03	06:27 (LZ06)	05:31	
	16:42			17:19	30 16:33 (LZ15)	17:57	19:35		20:11	11 06:38 (LZ06)	20:44	
2	07:44			07:27	16:03 (LZ15)	06:46	06:51		06:02	06:25 (LZ06)	05:30	
	16:43			17:20	30 16:33 (LZ15)	17:58	19:36		20:12	15 06:40 (LZ06)	20:45	
3	07:44			07:25	16:03 (LZ15)	06:45	06:49	19:04 (LZ07)	06:00	06:24 (LZ06)	05:30	
	16:44			17:22	29 16:32 (LZ15)	17:59	19:38	8 19:12 (LZ07)	20:14	18 06:42 (LZ06)	20:46	
4	07:44			07:24	16:04 (LZ15)	06:43	06:48	19:01 (LZ07)	05:59	06:23 (LZ06)	05:29	
	16:45			17:23	27 16:31 (LZ15)	18:01	19:39	13 19:14 (LZ07)	20:15	19 06:42 (LZ06)	20:46	
5	07:44			07:23	16:06 (LZ15)	06:41	06:46	18:59 (LZ07)	05:57	06:22 (LZ06)	05:29	
	16:46			17:25	25 16:31 (LZ15)	18:02	19:40	17 19:16 (LZ07)	20:16	21 06:43 (LZ06)	20:47	
6	07:44			07:22	16:07 (LZ15)	06:40	06:44	18:57 (LZ07)	05:56	06:22 (LZ06)	05:29	
	16:47			17:26	23 16:30 (LZ15)	18:03	19:41	19 19:16 (LZ07)	20:17	22 06:44 (LZ06)	20:48	
7	07:44			07:21	16:08 (LZ15)	06:38	06:42	18:56 (LZ07)	05:55	06:21 (LZ06)	05:28	
	16:48			17:27	20 16:28 (LZ15)	18:05	19:42	20 19:16 (LZ07)	20:18	22 06:43 (LZ06)	20:49	
8	07:43			07:19	16:10 (LZ15)	06:36	06:40	18:56 (LZ07)	05:54	06:21 (LZ06)	05:28	
	16:49			17:29	17 16:27 (LZ15)	18:06	19:44	21 19:17 (LZ07)	20:19	22 06:43 (LZ06)	20:49	
9	07:43			07:18	16:13 (LZ15)	06:34	06:39	18:55 (LZ07)	05:52	06:21 (LZ06)	05:28	
	16:50			17:30	12 16:25 (LZ15)	18:07	19:45	22 19:17 (LZ07)	20:21	23 06:44 (LZ06)	20:50	
10	07:43			07:17		06:33	06:37	18:54 (LZ07)	05:51	06:21 (LZ06)	05:27	
	16:51			17:31		18:08	19:46	23 19:17 (LZ07)	20:22	23 06:44 (LZ06)	20:50	
11	07:43		16:08 (LZ15)	07:16		06:31	06:35	18:55 (LZ07)	05:50	06:21 (LZ06)	05:27	
	16:52	7	16:15 (LZ15)	17:33		18:10	19:47	22 19:17 (LZ07)	20:23	23 06:44 (LZ06)	20:51	
12	07:42		16:06 (LZ15)	07:14		06:29	06:34	18:55 (LZ07)	05:49	06:21 (LZ06)	05:27	
	16:53	11	16:17 (LZ15)	17:34		18:11	19:48	21 19:16 (LZ07)	20:24	23 06:44 (LZ06)	20:52	
13	07:42		16:05 (LZ15)	07:13		06:27	06:32	18:55 (LZ07)	05:47	06:21 (LZ06)	05:27	
	16:54	15	16:20 (LZ15)	17:36		18:12	19:50	20 19:15 (LZ07)	20:25	21 06:42 (LZ06)	20:52	
14	07:42		16:04 (LZ15)	07:11		06:25	06:30	18:55 (LZ07)	05:46	06:21 (LZ06)	05:27	
	16:56	17	16:21 (LZ15)	17:37		18:13	19:51	19 19:14 (LZ07)	20:26	21 06:42 (LZ06)	20:53	
15	07:41		16:04 (LZ15)	07:10		06:24	06:28	18:56 (LZ07)	05:45	06:22 (LZ06)	05:27	
	16:57	19	16:23 (LZ15)	17:38		18:15	19:52	17 19:13 (LZ07)	20:27	19 06:41 (LZ06)	20:53	
16	07:41		16:03 (LZ15)	07:08		06:22	06:27	18:57 (LZ07)	05:44	06:22 (LZ06)	05:27	
	16:58	21	16:24 (LZ15)	17:40		18:16	19:53	14 19:11 (LZ07)	20:28	19 06:41 (LZ06)	20:53	
17	07:40		16:03 (LZ15)	07:07		06:20	06:25	18:59 (LZ07)	05:43	06:23 (LZ06)	05:27	
	16:59	23	16:26 (LZ15)	17:41		18:17	19:54	9 19:08 (LZ07)	20:29	17 06:40 (LZ06)	20:54	
18	07:39		16:02 (LZ15)	07:06		06:18	06:23		05:42	06:24 (LZ06)	05:27	
	17:00	24	16:26 (LZ15)	17:42		18:18	19:56		20:31	15 06:39 (LZ06)	20:54	
19	07:39		16:01 (LZ15)	07:04		06:16	06:22		05:41	06:26 (LZ06)	05:27	
	17:02	26	16:27 (LZ15)	17:44		18:19	19:57		20:32	13 06:39 (LZ06)	20:55	
20	07:38		16:01 (LZ15)	07:03		06:15	06:20		05:40	06:28 (LZ06)	05:27	
	17:03	27	16:28 (LZ15)	17:45		18:21	19:58		20:33	9 06:37 (LZ06)	20:55	
21	07:38		16:01 (LZ15)	07:01		06:13	06:18		05:39	06:32 (LZ06)	05:27	
	17:04	28	16:29 (LZ15)	17:46		18:22	19:59		20:34	1 06:33 (LZ06)	20:55	
22	07:37		16:01 (LZ15)	06:59		06:11	06:17		05:38		05:27	
	17:06	29	16:30 (LZ15)	17:48		18:23	20:00		20:35		20:55	
23	07:36		16:01 (LZ15)	06:58		06:09	06:15		05:37		05:28	
	17:07	29	16:30 (LZ15)	17:49		18:24	20:02		20:36		20:55	
24	07:35		16:01 (LZ15)	06:56		06:07	06:14		05:36		05:28	
	17:08	30	16:31 (LZ15)	17:50		18:26	20:03		20:37		20:56	
25	07:34		16:00 (LZ15)	06:55		06:06	06:12		05:36		05:28	
	17:10	31	16:31 (LZ15)	17:52		18:27	20:04		20:38		20:56	
26	07:34		16:00 (LZ15)	06:53		06:04	06:11		05:35		05:28	
	17:11	32	16:32 (LZ15)	17:53		18:28	20:05		20:39		20:56	
27	07:33		16:01 (LZ15)	06:51		06:02	06:09		05:34		05:29	
	17:12	31	16:32 (LZ15)	17:54		18:29	20:06		20:40		20:56	
28	07:32		16:01 (LZ15)	06:50		06:00	06:07		05:33		05:29	
	17:14	31	16:32 (LZ15)	17:56		18:30	20:08		20:40		20:56	
29	07:31		16:01 (LZ15)			06:58	06:06		05:33		05:30	
	17:15	32	16:33 (LZ15)			19:32	20:09		20:41		20:56	
30	07:30		16:01 (LZ15)			06:57	06:05	06:31 (LZ06)	05:32		05:30	
	17:16	32	16:33 (LZ15)			19:33	20:10	5 06:36 (LZ06)	20:42		20:56	
31	07:29		16:02 (LZ15)			06:55			05:31			
	17:18	31	16:33 (LZ15)			19:34			20:43			
Potential sun hours	289			293		369	402		456		462	
Total, worst case	526			213			270		377			

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: KrU_12 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 89.2° Slope: 90.0° (43)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

July		August		September		October	November		December	
1	05:31	05:57	06:31 (LZ06)	06:32	18:54 (LZ07)	07:06	06:44	15:46 (LZ15)	07:23	15:50 (LZ15)
	20:56	20:34	22 06:53 (LZ06)	19:47	19:16 (LZ07)	18:52	17:01	4 15:50 (LZ15)	16:34	15:57 (LZ15)
2	05:31	05:58	06:30 (LZ06)	06:33	18:53 (LZ07)	07:07	06:46	15:42 (LZ15)	07:24	
	20:55	20:33	23 06:53 (LZ06)	19:45	19:16 (LZ07)	18:51	17:00	13 15:55 (LZ15)	16:33	
3	05:32	05:59	06:30 (LZ06)	06:34	18:53 (LZ07)	07:08	06:47	15:40 (LZ15)	07:25	
	20:55	20:32	23 06:53 (LZ06)	19:44	19:15 (LZ07)	18:49	16:59	17 15:57 (LZ15)	16:33	
4	05:32	06:00	06:31 (LZ06)	06:35	18:53 (LZ07)	07:09	06:48	15:37 (LZ15)	07:26	
	20:55	20:30	23 06:54 (LZ06)	19:42	19:14 (LZ07)	18:47	16:57	21 15:58 (LZ15)	16:33	
5	05:33	06:01	06:31 (LZ06)	06:36	18:53 (LZ07)	07:11	06:50	15:37 (LZ15)	07:27	
	20:55	20:29	23 06:54 (LZ06)	19:40	19:14 (LZ07)	18:45	16:56	23 16:00 (LZ15)	16:33	
6	05:34	06:02	06:31 (LZ06)	06:37	18:53 (LZ07)	07:12	06:51	15:35 (LZ15)	07:28	
	20:54	20:28	23 06:54 (LZ06)	19:38	19:12 (LZ07)	18:43	16:55	26 16:01 (LZ15)	16:32	
7	05:34	06:04	06:32 (LZ06)	06:39	18:54 (LZ07)	07:13	06:52	15:35 (LZ15)	07:29	
	20:54	20:26	21 06:53 (LZ06)	19:36	19:11 (LZ07)	18:42	16:54	27 16:02 (LZ15)	16:32	
8	05:35	06:05	06:32 (LZ06)	06:40	18:55 (LZ07)	07:14	06:54	15:34 (LZ15)	07:30	
	20:54	20:25	20 06:52 (LZ06)	19:35	19:09 (LZ07)	18:40	16:52	29 16:03 (LZ15)	16:32	
9	05:36	06:06	06:33 (LZ06)	06:41	18:57 (LZ07)	07:15	06:55	15:33 (LZ15)	07:31	
	20:53	20:24	18 06:51 (LZ06)	19:33	9 19:06 (LZ07)	18:38	16:51	30 16:03 (LZ15)	16:32	
10	05:36	06:07	06:33 (LZ06)	06:42		07:17	06:56	15:34 (LZ15)	07:32	
	20:53	20:22	17 06:50 (LZ06)	19:31		18:36	16:50	30 16:04 (LZ15)	16:32	
11	05:37	06:08	06:34 (LZ06)	06:43		07:18	06:57	15:33 (LZ15)	07:33	
	20:52	20:21	15 06:49 (LZ06)	19:29		18:35	16:49	31 16:04 (LZ15)	16:32	
12	05:38	06:09	06:36 (LZ06)	06:44		07:19	06:59	15:33 (LZ15)	07:34	
	20:52	20:19	11 06:47 (LZ06)	19:27		18:33	16:48	32 16:05 (LZ15)	16:32	
13	05:39	06:10		06:45		07:20	07:00	15:33 (LZ15)	07:34	
	20:51	20:18		19:25		18:31	16:47	32 16:05 (LZ15)	16:32	
14	05:39	06:11		06:46		07:21	07:01	15:33 (LZ15)	07:35	
	20:51	20:17		19:24		18:29	16:46	31 16:04 (LZ15)	16:32	
15	05:40	06:13		06:48		07:23	07:03	15:34 (LZ15)	07:36	
	20:50	20:15		19:22		18:28	16:45	31 16:05 (LZ15)	16:33	
16	05:41	06:14		06:49		07:24	07:04	15:33 (LZ15)	07:37	
	20:49	20:14		19:20		18:26	16:44	32 16:05 (LZ15)	16:33	
17	05:42	06:15		06:50		07:25	07:05	15:34 (LZ15)	07:37	
	20:49	20:12		19:18		18:24	16:43	31 16:05 (LZ15)	16:33	
18	05:43	06:16		06:51		07:26	07:07	15:35 (LZ15)	07:38	
	20:48	20:10		19:16		18:23	16:42	30 16:05 (LZ15)	16:33	
19	05:44	06:17		06:52		07:28	07:08	15:35 (LZ15)	07:39	
	20:47	20:09		19:14		18:21	16:41	29 16:04 (LZ15)	16:34	
20	05:45	06:18		06:53		07:29	07:09	15:36 (LZ15)	07:39	
	20:46	20:07		19:13		18:19	16:40	29 16:05 (LZ15)	16:34	
21	05:46	06:19		06:54		07:30	07:10	15:36 (LZ15)	07:40	
	20:45	20:06		19:11		18:18	16:40	28 16:04 (LZ15)	16:35	
22	05:47	06:20		06:55		07:31	07:12	15:37 (LZ15)	07:40	
	20:45	20:04		19:09		18:16	16:39	27 16:04 (LZ15)	16:35	
23	05:48	06:22	06:39 (LZ06)	06:57		07:33	07:13	15:38 (LZ15)	07:41	
	20:44	20:02	6 06:45 (LZ06)	19:07		18:15	16:38	26 16:04 (LZ15)	16:35	
24	05:49	06:23	06:37 (LZ06)	06:58		07:34	07:14	15:39 (LZ15)	07:41	
	20:43	20:01	10 06:47 (LZ06)	19:05		18:13	16:37	24 16:03 (LZ15)	16:36	
25	05:50	06:24	06:35 (LZ06)	06:59		06:35	07:15	15:40 (LZ15)	07:42	
	20:42	19:59	14 06:49 (LZ06)	19:03		17:12	16:37	23 16:03 (LZ15)	16:37	
26	05:51	06:25	06:34 (LZ06)	19:02 (LZ07)	07:00	06:36	07:17	15:42 (LZ15)	07:42	
	20:41	19:57	16 06:50 (LZ06)	19:11 (LZ07)	19:01	17:10	16:36	21 16:03 (LZ15)	16:37	
27	05:52	06:26	06:33 (LZ06)	18:59 (LZ07)	07:01	06:38	07:18	15:43 (LZ15)	07:43	
	20:40	19:56	18 06:51 (LZ06)	19:13 (LZ07)	19:00	17:09	16:36	19 16:02 (LZ15)	16:38	
28	05:53	06:27	06:33 (LZ06)	18:57 (LZ07)	07:02	06:39	07:19	15:44 (LZ15)	07:43	
	20:39	19:54	19 06:52 (LZ06)	19:14 (LZ07)	18:58	17:07	16:35	17 16:01 (LZ15)	16:39	
29	05:54	06:28	06:32 (LZ06)	18:56 (LZ07)	07:04	06:40	07:20	15:45 (LZ15)	07:43	
	20:38	19:52	20 06:52 (LZ06)	19:15 (LZ07)	18:56	17:06	16:35	15 16:00 (LZ15)	16:39	
30	05:55	06:29	06:31 (LZ06)	18:55 (LZ07)	07:05	06:42	07:21	15:48 (LZ15)	07:43	
	20:36	19:51	22 06:53 (LZ06)	19:16 (LZ07)	18:54	17:04	16:34	11 15:59 (LZ15)	16:40	
31	05:56	06:31	06:31 (LZ06)	18:55 (LZ07)		06:43			07:43	
	20:35	19:49	22 06:53 (LZ06)	19:16 (LZ07)		17:03			16:41	
Potential sun hours	468	434		376		342	291		278	
Total, worst case	147	340		168			739		7	

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

Calculation: Worst Case Shadow receptor: KrU_13 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 56.5° Slope: 90.0° (64)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June
1	07:44 16:42	07:28 17:19	16:41 (LZ15) 16:46 (LZ15)	06:48 17:57	07:10 (LZ16) 19:35	06:03 20:11
2	07:44 16:43	07:27 17:20	16:37 (LZ15) 16:50 (LZ15)	06:46 17:58	07:09 (LZ16) 19:36	06:02 20:12
3	07:44 16:44	07:25 17:22	16:35 (LZ15) 16:51 (LZ15)	06:45 17:59	07:08 (LZ16) 19:38	06:00 20:14
4	07:44 16:45	07:24 17:23	16:34 (LZ15) 16:53 (LZ15)	06:43 18:01	07:08 (LZ16) 19:39	05:59 20:15
5	07:44 16:46	07:23 17:25	16:33 (LZ15) 16:55 (LZ15)	06:41 18:02	07:08 (LZ16) 19:40	05:57 20:16
6	07:44 16:47	07:22 17:26	16:32 (LZ15) 16:56 (LZ15)	06:40 18:03	07:07 (LZ16) 19:41	05:56 20:17
7	07:44 16:48	07:21 17:27	16:31 (LZ15) 16:56 (LZ15)	06:38 18:05	07:07 (LZ16) 19:42	05:55 20:18
8	07:43 16:49	07:19 17:29	16:31 (LZ15) 16:57 (LZ15)	06:36 18:06	07:08 (LZ16) 19:44	05:54 20:19
9	07:43 16:50	07:18 17:30	16:31 (LZ15) 16:58 (LZ15)	06:34 18:07	07:09 (LZ16) 19:45	05:52 20:21
10	07:43 16:51	07:17 17:31	16:30 (LZ15) 16:58 (LZ15)	06:33 18:08	07:10 (LZ16) 19:46	05:51 20:22
11	07:43 16:52	07:15 17:33	16:30 (LZ15) 16:58 (LZ15)	06:31 18:10	07:11 (LZ16) 19:47	05:50 20:23
12	07:42 16:53	07:14 17:34	16:30 (LZ15) 16:59 (LZ15)	06:29 18:11	06:34 19:48	05:49 20:24
13	07:42 16:54	07:13 17:35	16:30 (LZ15) 16:58 (LZ15)	06:27 18:12	06:32 19:50	05:47 20:25
14	07:42 16:56	07:11 17:37	16:31 (LZ15) 16:59 (LZ15)	06:25 18:13	06:30 19:51	05:46 20:26
15	07:41 16:57	07:10 17:38	16:30 (LZ15) 16:58 (LZ15)	06:24 18:15	06:28 19:52	05:45 20:27
16	07:41 16:58	07:08 17:40	16:31 (LZ15) 16:58 (LZ15)	06:22 18:16	06:27 19:53	05:44 20:28
17	07:40 16:59	07:07 17:41	16:32 (LZ15) 16:56 (LZ15)	06:20 18:17	06:25 19:54	05:43 20:29
18	07:39 17:00	07:06 17:42	16:33 (LZ15) 16:56 (LZ15)	06:18 18:18	06:23 19:56	05:42 20:31
19	07:39 17:02	07:04 17:44	16:34 (LZ15) 16:54 (LZ15)	06:16 18:19	06:22 19:57	05:41 20:32
20	07:38 17:03	07:02 17:45	16:36 (LZ15) 16:53 (LZ15)	06:15 18:21	06:20 19:58	05:40 20:33
21	07:38 17:04	07:01 17:46	16:38 (LZ15) 16:50 (LZ15)	06:13 18:22	06:18 19:59	05:39 20:34
22	07:37 17:06	06:59 17:48	16:43 (LZ15) 16:44 (LZ15)	06:11 18:23	06:17 20:00	05:38 20:35
23	07:36 17:07	06:58 17:49		06:09 18:24	06:15 20:02	05:37 20:36
24	07:35 17:08	06:56 17:50		06:07 18:26	06:14 20:03	05:36 20:37
25	07:34 17:10	06:55 17:52		06:06 18:27	06:12 20:04	05:36 20:38
26	07:34 17:11	06:53 17:53	07:17 (LZ16)	06:04 18:28	06:11 20:05	05:35 20:39
27	07:33 17:12	06:51 17:54	07:13 (LZ16)	06:02 18:29	06:09 20:06	05:34 20:40
28	07:32 17:14	06:50 17:56	07:12 (LZ16)	06:00 18:30	06:07 20:08	05:33 20:40
29	07:31 17:15		07:28 (LZ16)	06:58 19:32	06:06 20:09	05:33 20:41
30	07:30 17:16			06:57 19:33	06:05 20:10	05:32 20:42
31	07:29 17:18			06:55 19:34		05:31 20:43
Potential sun hours	289	293	369	402	456	462
Total, worst case		505	210		373	656

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: KrU_13 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 56.5° Slope: 90.0° (64)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:56	06:15 (LZ06) 20:34	05:57 19:47	06:32 18:52	07:06 17:01	06:44 15:59 (LZ15)
2	05:31 20:55	06:14 (LZ06) 20:33	05:58 19:45	06:33 18:51	07:07 17:00	06:46 16:00 (LZ15)
3	05:32 20:55	06:15 (LZ06) 20:32	05:59 19:43	06:34 18:49	07:08 16:59	06:47 16:27 (LZ15)
4	05:32 20:55	06:14 (LZ06) 20:30	06:00 19:42	06:35 18:47	07:09 16:57	06:48 16:26 (LZ15)
5	05:33 20:55	06:14 (LZ06) 20:29	06:01 19:40	07:11 18:45	06:50 16:56	16:02 (LZ15) 16:26 (LZ15)
6	05:34 20:54	06:15 (LZ06) 20:28	06:02 19:38	07:12 18:43	06:51 16:55	16:03 (LZ15) 16:24 (LZ15)
7	05:34 20:54	06:14 (LZ06) 20:26	06:04 19:36	07:13 18:42	06:52 16:54	16:05 (LZ15) 16:24 (LZ15)
8	05:35 20:54	06:14 (LZ06) 20:25	06:05 19:35	07:14 18:40	06:54 16:52	16:06 (LZ15) 16:22 (LZ15)
9	05:36 20:53	06:15 (LZ06) 20:24	06:06 19:33	07:15 18:38	06:55 16:51	16:08 (LZ15) 16:19 (LZ15)
10	05:36 20:53	06:14 (LZ06) 20:22	06:07 19:31	07:17 18:36	06:56 16:50	16:12 (LZ15) 16:16 (LZ15)
11	05:37 20:52	06:14 (LZ06) 20:21	06:08 19:29	07:18 18:35	06:57 16:49	07:33 16:32
12	05:38 20:52	06:15 (LZ06) 20:19	06:09 19:27	07:19 18:33	06:59 16:48	07:34 16:32
13	05:39 20:51	06:15 (LZ06) 20:18	06:10 19:25	07:20 18:31	07:00 16:47	07:34 16:32
14	05:39 20:51	06:14 (LZ06) 20:17	06:11 19:24	07:21 18:29	07:01 16:46	07:35 16:32
15	05:40 20:50	06:15 (LZ06) 20:15	06:13 19:22	07:23 18:28	07:03 16:45	07:36 16:33
16	05:41 20:49	06:15 (LZ06) 20:13	06:14 19:20	07:24 18:26	07:04 16:44	07:37 16:33
17	05:42 20:49	06:15 (LZ06) 20:12	06:15 19:18	07:25 18:24	07:05 16:43	07:37 16:33
18	05:43 20:48	06:16 (LZ06) 20:10	06:16 19:16	07:26 18:23	07:07 16:42	07:38 16:33
19	05:44 20:47	06:16 (LZ06) 20:09	06:17 19:14	07:28 18:21	07:08 16:41	07:39 16:34
20	05:45 20:46	06:16 (LZ06) 20:07	06:18 19:13	07:29 18:19	17:12 (LZ15) 17:19 (LZ15)	07:09 16:40
21	05:46 20:45	06:17 (LZ06) 20:06	06:19 19:11	07:30 18:18	17:08 (LZ15) 17:22 (LZ15)	07:10 16:40
22	05:47 20:45	06:17 (LZ06) 20:04	06:55 19:09	07:31 18:16	17:05 (LZ15) 17:23 (LZ15)	07:12 16:39
23	05:48 20:44	06:17 (LZ06) 20:02	06:57 19:07	07:33 18:15	17:04 (LZ15) 17:25 (LZ15)	07:13 16:38
24	05:49 20:43	06:18 (LZ06) 20:01	06:58 19:05	07:34 18:13	17:02 (LZ15) 17:26 (LZ15)	07:14 16:37
25	05:50 20:42	06:18 (LZ06) 19:59	06:59 19:03	06:35 17:12	16:01 (LZ15) 16:26 (LZ15)	07:15 16:37
26	05:51 20:41	06:19 (LZ06) 19:57	07:00 19:01	06:36 17:10	16:01 (LZ15) 16:27 (LZ15)	07:17 16:36
27	05:52 20:40	06:20 (LZ06) 19:56	07:01 19:00	06:38 17:09	16:00 (LZ15) 16:27 (LZ15)	07:18 16:36
28	05:53 20:39	06:22 (LZ06) 19:54	07:02 18:58	06:39 17:07	16:00 (LZ15) 16:28 (LZ15)	07:19 16:35
29	05:54 20:38	06:24 (LZ06) 19:52	07:04 18:56	06:40 17:06	15:59 (LZ15) 16:28 (LZ15)	07:20 16:35
30	05:55 20:36		07:05 19:51	06:42 17:04	15:59 (LZ15) 16:28 (LZ15)	07:21 16:34
31	05:56 20:35		06:31 19:49	06:43 17:03	16:00 (LZ15) 16:28 (LZ15)	07:43 16:41
Potential sun hours	468	434	376	342	291	278
Total, worst case	648			525	203	

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

Day in month	Sun rise (hh:mm)	Minutes with flicker	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

Calculation: Worst Case Shadow receptor: KrU_14 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 39.8° Slope: 90.0° (65)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June
1	07:44	07:28	06:48	07:16 (LZ16)	06:53	06:03
	16:42	17:19	17:57	25 07:41 (LZ16)	19:35	20:11
2	07:44	07:27	06:46	07:16 (LZ16)	06:51	06:02
	16:43	17:20	17:58	24 07:40 (LZ16)	19:36	20:12
3	07:44	07:25	06:45	07:16 (LZ16)	06:49	06:00
	16:44	17:22	17:59	23 07:39 (LZ16)	19:38	20:14
4	07:44	07:24	16:49 (LZ15)	07:17 (LZ16)	06:48	05:59
	16:45	17:23	3 16:52 (LZ15)	18:01	22 07:39 (LZ16)	19:39
5	07:44	07:23	16:45 (LZ15)	06:41	07:17 (LZ16)	06:46
	16:46	17:24	11 16:56 (LZ15)	18:02	21 07:38 (LZ16)	19:40
6	07:44	07:22	16:43 (LZ15)	06:40	07:18 (LZ16)	06:44
	16:47	17:26	16 16:59 (LZ15)	18:03	19 07:37 (LZ16)	19:41
7	07:44	07:21	16:41 (LZ15)	06:38	07:19 (LZ16)	06:42
	16:48	17:27	19 17:00 (LZ15)	18:05	16 07:35 (LZ16)	19:42
8	07:43	07:19	16:40 (LZ15)	06:36	07:21 (LZ16)	06:40
	16:49	17:29	21 17:01 (LZ15)	18:06	12 07:33 (LZ16)	19:44
9	07:43	07:18	16:40 (LZ15)	06:34		06:39
	16:50	17:30	22 17:02 (LZ15)	18:07		19:45
10	07:43	07:17	16:39 (LZ15)	06:33		06:37
	16:51	17:31	23 17:02 (LZ15)	18:08		19:46
11	07:43	07:15	16:39 (LZ15)	06:31		06:35
	16:52	17:33	24 17:03 (LZ15)	18:10		19:47
12	07:42	07:14	16:39 (LZ15)	06:29		06:33
	16:53	17:34	25 17:04 (LZ15)	18:11		19:48
13	07:42	07:13	16:38 (LZ15)	06:27		06:32
	16:54	17:35	26 17:04 (LZ15)	18:12		19:50
14	07:42	07:11	16:39 (LZ15)	06:25		06:30
	16:56	17:37	25 17:04 (LZ15)	18:13		19:51
15	07:41	07:10	16:38 (LZ15)	06:24		06:28
	16:57	17:38	26 17:04 (LZ15)	18:15		19:52
16	07:41	07:08	16:39 (LZ15)	06:22		06:27
	16:58	17:40	25 17:04 (LZ15)	18:16		19:53
17	07:40	07:07	16:39 (LZ15)	06:20		06:25
	16:59	17:41	24 17:03 (LZ15)	18:17		19:54
18	07:39	07:06	16:40 (LZ15)	06:18		06:23
	17:00	17:42	23 17:03 (LZ15)	18:18		19:56
19	07:39	07:04	16:41 (LZ15)	06:16		06:22
	17:02	17:44	20 17:01 (LZ15)	18:19		19:57
20	07:38	07:02	16:42 (LZ15)	06:15		06:20
	17:03	17:45	18 17:00 (LZ15)	18:21		19:58
21	07:38	07:01	16:44 (LZ15)	06:13		06:18
	17:04	17:46	14 16:58 (LZ15)	18:22		19:59
22	07:37	06:59	07:24 (LZ16)	06:11		06:17
	17:06	17:48	19 16:55 (LZ15)	18:23		20:00
23	07:36	06:58	07:22 (LZ16)	06:09		06:15
	17:07	17:49	15 07:37 (LZ16)	18:24		20:02
24	07:35	06:56	07:20 (LZ16)	06:07		06:14
	17:08	17:50	18 07:38 (LZ16)	18:26		20:03
25	07:34	06:55	07:19 (LZ16)	06:06		06:12
	17:10	17:52	21 07:40 (LZ16)	18:27		20:04
26	07:34	06:53	07:18 (LZ16)	06:04		06:11
	17:11	17:53	22 07:40 (LZ16)	18:28		20:05
27	07:33	06:51	07:17 (LZ16)	06:02		06:09
	17:12	17:54	23 07:40 (LZ16)	18:29		20:06
28	07:32	06:50	07:17 (LZ16)	06:00		06:07
	17:14	17:56	24 07:41 (LZ16)	18:30		20:08
29	07:31			06:58		06:06
	17:15			19:32		20:09
30	07:30			06:57		06:05
	17:16			19:33		20:10
31	07:29			06:55		05:31
	17:18			19:34		20:43
Potential sun hours	289	293	369	402	456	462
Total, worst case		507	162		250	856

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: KrU_14 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 39.8° Slope: 90.0° (65)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:56	06:10 (LZ06) 06:38 (LZ06)	05:57 20:34	06:32 19:47	07:06 18:52	06:44 17:01
2	05:31 20:55	06:09 (LZ06) 06:38 (LZ06)	05:58 20:33	06:33 19:45	07:07 18:51	06:46 17:00
3	05:32 20:55	06:10 (LZ06) 06:39 (LZ06)	05:59 20:32	06:34 19:43	07:08 18:49	06:47 16:59
4	05:32 20:55	06:10 (LZ06) 06:38 (LZ06)	06:00 20:30	06:35 19:42	07:09 18:47	06:48 16:57
5	05:33 20:55	06:10 (LZ06) 06:39 (LZ06)	06:01 20:29	06:36 19:40	07:11 18:45	06:50 16:56
6	05:33 20:54	06:11 (LZ06) 06:39 (LZ06)	06:02 20:28	06:37 19:38	07:12 18:43	06:51 16:55
7	05:34 20:54	06:11 (LZ06) 06:39 (LZ06)	06:04 20:26	06:39 19:36	07:13 18:42	06:52 16:54
8	05:35 20:54	06:11 (LZ06) 06:39 (LZ06)	06:05 20:25	06:40 19:35	07:14 18:40	06:54 16:52
9	05:36 20:53	06:12 (LZ06) 06:40 (LZ06)	06:06 20:24	06:41 19:33	07:15 18:38	06:55 16:51
10	05:36 20:53	06:11 (LZ06) 06:39 (LZ06)	06:07 20:22	06:42 19:31	07:17 18:36	06:56 16:50
11	05:37 20:52	06:12 (LZ06) 06:39 (LZ06)	06:08 20:21	06:43 19:29	07:18 18:35	06:57 16:49
12	05:38 20:52	06:12 (LZ06) 06:39 (LZ06)	06:09 20:19	06:44 19:27	07:19 18:33	06:59 16:48
13	05:39 20:51	06:13 (LZ06) 06:39 (LZ06)	06:10 20:18	06:45 19:25	07:20 18:31	07:00 16:47
14	05:39 20:51	06:13 (LZ06) 06:38 (LZ06)	06:11 20:17	06:46 19:24	07:21 18:29	07:01 16:46
15	05:40 20:50	06:13 (LZ06) 06:38 (LZ06)	06:12 20:15	06:48 19:22	07:23 18:28	07:03 16:45
16	05:41 20:49	06:14 (LZ06) 06:38 (LZ06)	06:14 20:13	06:49 19:20	07:24 18:26	07:04 16:44
17	05:42 20:49	06:15 (LZ06) 06:38 (LZ06)	06:15 20:12	06:50 19:18	07:25 18:24	07:05 16:43
18	05:43 20:48	06:16 (LZ06) 06:38 (LZ06)	06:16 20:10	06:51 19:16	07:26 18:23	07:07 16:42
19	05:44 20:47	06:16 (LZ06) 06:37 (LZ06)	06:17 20:09	06:52 19:14	07:28 18:21	07:08 16:41
20	05:45 20:46	06:17 (LZ06) 06:37 (LZ06)	06:18 20:07	06:53 19:13	07:29 18:19	07:09 16:40
21	05:46 20:45	06:18 (LZ06) 06:36 (LZ06)	06:19 20:06	06:54 19:11	07:30 18:18	07:10 16:40
22	05:47 20:45	06:20 (LZ06) 06:35 (LZ06)	06:20 20:04	06:55 19:09	07:31 18:16	07:12 16:39
23	05:48 20:44	06:21 (LZ06) 06:32 (LZ06)	06:22 20:02	06:57 19:07	07:33 18:15	07:13 16:38
24	05:49 20:43	06:23 (LZ06) 06:30 (LZ06)	06:23 20:01	06:58 19:05	07:34 18:13	07:14 16:37
25	05:50 20:42		06:24 19:59	06:59 19:03	06:35 17:12	07:15 16:37
26	05:51 20:41		06:25 19:57	07:00 19:01	06:36 17:10	07:17 16:36
27	05:52 20:40		06:26 19:56	07:01 19:00	06:38 17:09	07:18 16:36
28	05:53 20:39		06:27 19:54	07:02 18:58	06:39 17:07	07:19 16:35
29	05:54 20:38		06:28 19:52	07:04 18:56	06:40 17:06	07:20 16:35
30	05:55 20:36		06:29 19:50	07:05 18:54	06:42 17:04	07:21 16:34
31	05:56 20:35		06:31 19:49		06:43 17:03	07:22 16:41
Potential sun hours	468		434	376	342	291
Total, worst case	574			563	110	278

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: KrU_15 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -60.9° Slope: 90.0° (66)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December			
1	07:44 16:42	07:28 17:19	06:48 17:57	07:16 (LZ16) 17:20 (LZ15)	06:53 19:35	06:03 20:11	05:31 20:44	05:31 20:56	05:57 20:34	06:32 19:47	07:06 18:52	07:53 (LZ16) 08:14 (LZ16)	06:44 17:01	07:22 16:34	
2	07:44 16:43	07:27 17:20	06:46 17:58	07:15 (LZ16) 17:18 (LZ15)	06:51 19:36	06:02 20:12	05:30 20:45	05:31 20:55	05:58 20:33	06:33 19:45	07:07 18:51	07:52 (LZ16) 08:15 (LZ16)	06:46 17:00	07:24 16:33	
3	07:44 16:44	07:25 17:22	06:45 17:59	07:14 (LZ16) 17:16 (LZ15)	06:49 19:38	06:00 20:14	05:30 20:46	05:32 20:55	05:59 20:32	06:34 19:43	07:08 18:49	07:50 (LZ16) 08:15 (LZ16)	06:47 16:59	07:25 16:33	
4	07:44 16:45	07:24 17:23	06:43 18:01	07:14 (LZ16) 17:14 (LZ15)	06:48 19:39	05:59 20:15	05:29 20:46	05:32 20:55	06:00 20:30	06:35 19:42	07:09 18:47	07:50 (LZ16) 08:17 (LZ16)	06:48 16:57	07:26 16:33	
5	07:44 16:46	07:23 17:24	06:41 18:02	07:13 (LZ16) 07:40 (LZ16)	06:46 19:40	05:57 20:16	05:29 20:47	05:33 20:55	06:01 20:29	06:36 19:40	07:11 18:45	07:49 (LZ16) 08:16 (LZ16)	06:50 16:56	07:27 16:33	
6	07:44 16:47	07:22 17:26	06:40 18:03	07:12 (LZ16) 07:40 (LZ16)	06:44 19:41	05:56 20:17	05:29 20:48	05:33 20:54	06:02 20:28	06:37 19:38	07:12 18:43	07:48 (LZ16) 08:16 (LZ16)	06:51 16:55	07:28 16:32	
7	07:44 16:48	07:21 17:27	06:38 18:05	07:12 (LZ16) 07:40 (LZ16)	06:42 19:42	05:55 20:18	05:28 20:49	05:34 20:54	06:04 20:26	06:39 19:36	07:13 18:42	07:48 (LZ16) 08:16 (LZ16)	06:52 16:54	07:29 16:32	
8	07:43 16:49	07:19 17:29	06:36 18:06	07:12 (LZ16) 07:40 (LZ16)	06:40 19:44	05:53 20:19	05:28 20:49	05:35 20:54	06:05 20:25	06:40 19:35	07:14 18:40	07:47 (LZ16) 08:15 (LZ16)	06:53 16:52	07:30 16:32	
9	07:43 16:50	07:18 17:30	06:34 18:07	07:12 (LZ16) 07:39 (LZ16)	06:39 19:45	05:52 20:20	05:28 20:50	05:36 20:53	06:06 20:24	06:41 19:33	07:15 18:38	07:48 (LZ16) 08:15 (LZ16)	06:55 16:51	07:31 16:32	
10	07:43 16:51	07:17 17:31	06:33 18:08	07:12 (LZ16) 07:38 (LZ16)	06:37 19:46	05:51 20:22	05:27 20:50	05:36 20:53	06:07 20:22	06:42 19:31	07:17 18:36	07:48 (LZ16) 17:50 (LZ15)	06:56 16:50	07:32 16:32	
11	07:43 16:52	07:15 17:33	06:31 18:10	07:13 (LZ16) 07:37 (LZ16)	06:35 19:47	05:50 20:23	05:27 20:51	05:37 20:52	06:08 20:21	06:43 19:29	07:18 18:35	07:48 (LZ16) 17:51 (LZ15)	06:57 16:49	07:33 16:32	
12	07:42 16:53	07:14 17:34	06:29 18:11	07:13 (LZ16) 07:35 (LZ16)	06:33 19:48	05:49 20:24	05:27 20:52	05:38 20:52	06:09 20:19	06:44 19:27	07:19 18:33	07:49 (LZ16) 17:52 (LZ15)	06:59 16:48	07:33 16:32	
13	07:42 16:54	07:13 17:35	06:27 18:12	07:15 (LZ16) 07:34 (LZ16)	06:32 19:50	05:47 20:25	05:27 20:52	05:39 20:51	06:10 20:18	06:45 19:25	07:20 18:31	07:50 (LZ16) 17:54 (LZ15)	07:00 16:47	07:34 16:32	
14	07:42 16:56	07:11 17:37	06:25 18:13	07:17 (LZ16) 07:32 (LZ16)	06:30 19:51	05:46 20:26	05:27 20:53	05:39 20:51	06:11 20:17	06:46 19:24	07:21 18:29	07:51 (LZ16) 17:54 (LZ15)	07:01 16:46	07:35 16:32	
15	07:41 16:57	07:10 17:38	06:24 18:15	07:19 (LZ16) 07:28 (LZ16)	06:28 19:52	05:45 20:27	05:27 20:53	05:40 20:50	06:12 20:15	06:48 19:22	07:23 18:28	07:53 (LZ16) 17:54 (LZ15)	07:03 16:45	07:36 16:32	
16	07:41 16:58	07:08 17:40	06:22 18:16		06:27 19:53	05:44 20:28	05:27 20:53	05:41 20:49	06:14 20:13	06:49 19:20	07:24 18:26	07:57 (LZ16) 17:54 (LZ15)	07:04 16:44	07:37 16:33	
17	07:40 16:59	07:07 17:41	06:20 18:17		06:25 19:54	05:43 20:29	05:27 20:54	05:42 20:49	06:15 20:12	06:50 19:18	07:25 18:24	17:31 (LZ15) 17:54 (LZ15)	07:05 16:43	07:37 16:33	
18	07:39 17:00	07:06 17:42	06:18 18:18		06:23 19:56	05:42 20:31	05:27 20:54	05:43 20:48	06:16 20:10	06:51 19:16	07:26 18:23	17:31 (LZ15) 17:54 (LZ15)	07:07 16:42	07:38 16:33	
19	07:39 17:02	07:04 17:44	06:16 18:19		06:22 19:57	05:41 20:32	05:27 20:54	05:44 20:47	06:17 20:09	06:52 19:14	07:28 18:21	17:31 (LZ15) 17:53 (LZ15)	07:08 16:41	07:39 16:34	
20	07:38 17:03	07:02 17:45	06:15 18:21		06:20 19:58	05:40 20:33	05:27 20:55	05:45 20:46	06:18 20:07	06:53 19:13	07:29 18:19	17:32 (LZ15) 17:53 (LZ15)	07:09 16:40	07:39 16:34	
21	07:37 17:04	07:01 17:46	06:13 18:22		06:18 19:59	05:39 20:34	05:27 20:55	05:46 20:45	06:19 20:06	06:54 19:11	07:30 18:18	17:32 (LZ15) 17:54 (LZ15)	07:10 16:40	07:40 16:34	
22	07:37 17:06	06:59 17:48	06:11 18:23		06:17 20:00	05:38 20:35	05:27 20:55	05:47 20:45	06:20 20:04	06:55 19:09	07:31 18:16	17:33 (LZ15) 17:50 (LZ15)	07:12 16:39	07:40 16:35	
23	07:36 17:07	06:58 17:49	06:09 18:24		06:15 20:02	05:37 20:36	05:28 20:55	05:48 20:44	06:22 20:02	06:57 19:07	07:33 18:15	17:35 (LZ15) 17:49 (LZ15)	07:13 16:38	07:41 16:35	
24	07:35 17:08	06:56 17:50	06:07 18:26		06:14 20:03	05:36 20:37	05:28 20:56	05:49 20:43	06:23 20:01	06:58 19:05	07:34 18:13	17:37 (LZ15) 17:46 (LZ15)	07:14 16:37	07:41 16:36	
25	07:34 17:10	06:55 17:52	06:06 18:27		06:12 20:04	05:36 20:38	05:28 20:56	05:50 20:42	06:24 19:59	06:59 19:03	07:35 17:12	17:46 (LZ15) 17:52 (LZ15)	07:15 16:37	07:42 16:37	
26	07:34 17:11	06:53 17:53	06:04 18:28		06:11 20:05	05:35 20:39	05:28 20:56	05:51 20:41	06:25 19:57	07:00 19:01	07:36 17:10	17:53 (LZ15) 17:53 (LZ15)	07:17 16:36	07:42 16:37	
27	07:33 17:12	06:51 17:54	06:02 18:29		06:09 20:06	05:34 20:40	05:29 20:56	05:52 20:40	06:26 19:56	07:01 19:00	07:38 17:09	17:54 (LZ15) 17:54 (LZ15)	07:18 16:36	07:43 16:38	
28	07:32 17:14	06:50 17:56	06:00 18:30		06:07 20:08	05:33 20:40	05:29 20:56	05:53 20:39	06:27 19:54	07:02 18:58	07:39 17:07	08:02 (LZ16) 08:06 (LZ16)	07:19 16:35	07:43 16:39	
29	07:31 17:15		06:58 19:32		06:06 20:09	05:33 20:41	05:30 20:56	05:54 20:38	06:28 19:52	07:04 18:56	07:40 17:06	08:06 (LZ16) 08:11 (LZ16)	07:20 16:35	07:43 16:39	
30	07:30 17:16		06:57 19:33		06:05 20:10	05:32 20:42	05:30 20:56	05:55 20:36	06:29 19:50	07:05 18:54	07:41 17:04	08:11 (LZ16) 08:13 (LZ16)	07:21 16:34	07:43 16:40	
31	07:29 17:18		06:55 19:34			05:31 20:43		05:56 20:35	06:31 19:49		07:42 17:03			07:43 16:41	
Potential sun hours	289	293	369	405	402	456	462	468	434	376	35	342	645	291	278
Total, worst case		262													

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: LoZ_01 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -111.8° Slope: 90.0° (54)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June
1	07:44 16:42	08:48 (LZ66) 17:19	06:48 17:57	07:17 (LZ64) 19:35	06:53 19:35	06:03 20:11
2	07:44 16:43	08:53 (LZ66) 17:21	06:46 17:58	07:17 (LZ64) 19:37	06:51 19:37	06:02 20:12
3	07:44 16:44	07:25 17:22	06:45 18:00	07:17 (LZ64) 19:38	06:49 19:38	06:00 20:14
4	07:44 16:45	07:24 17:23	06:43 18:01	07:19 (LZ64) 19:39	06:48 19:39	05:59 20:15
5	07:44 16:46	07:23 17:25	06:41 18:02	07:19 (LZ64) 19:40	06:46 19:40	05:58 20:16
6	07:44 16:47	07:22 17:26	06:40 18:03	07:21 (LZ64) 19:41	06:44 19:41	05:56 20:17
7	07:44 16:48	07:21 17:27	06:38 18:05	07:24 (LZ65) 19:43	06:42 19:43	05:55 20:18
8	07:43 16:49	07:19 17:29	06:36 18:06	07:22 (LZ65) 19:44	06:41 19:44	05:54 20:19
9	07:43 16:50	07:18 17:30	06:34 18:07	07:20 (LZ65) 19:45	06:39 19:45	05:52 20:21
10	07:43 16:51	07:17 17:32	06:33 18:08	07:18 (LZ65) 19:46	06:37 19:46	05:51 20:22
11	07:43 16:52	07:16 17:33	06:31 18:10	07:16 (LZ65) 19:47	06:35 19:47	05:50 20:23
12	07:42 16:53	07:14 17:34	06:29 18:11	07:15 (LZ65) 19:48	06:34 19:48	05:49 20:24
13	07:42 16:55	07:13 17:36	06:27 18:12	07:14 (LZ65) 19:50	06:32 19:50	05:48 20:25
14	07:41 16:56	07:11 17:37	06:26 18:13	07:13 (LZ65) 19:51	06:30 19:51	05:46 20:26
15	07:41 16:57	07:10 17:38	06:24 18:15	07:12 (LZ65) 19:52	06:29 19:52	05:45 20:27
16	07:41 16:58	07:09 17:40	06:22 18:16	07:11 (LZ65) 19:53	06:27 19:53	05:44 20:28
17	07:40 16:59	07:07 17:41	06:20 18:17	07:12 (LZ65) 19:54	06:25 19:54	05:43 20:29
18	07:39 17:01	07:06 17:42	06:18 18:18	07:11 (LZ65) 19:56	06:24 19:56	05:42 20:30
19	07:39 17:02	07:04 17:44	06:17 18:20	07:10 (LZ65) 19:57	06:22 19:57	05:41 20:32
20	07:38 17:03	07:03 17:45	06:15 18:21	07:10 (LZ65) 19:58	06:20 19:58	05:40 20:33
21	07:37 17:05	07:01 17:46	06:13 18:22	07:10 (LZ65) 19:59	06:19 19:59	05:39 20:34
22	07:37 17:06	06:59 17:48	06:11 18:23	07:10 (LZ65) 20:00	06:17 20:00	05:38 20:35
23	07:36 17:07	06:58 17:49	06:09 18:24	07:11 (LZ65) 20:02	06:15 20:02	05:37 20:36
24	07:35 17:08	06:56 17:50	06:08 18:26	07:11 (LZ65) 20:03	06:14 20:03	05:37 20:37
25	07:34 17:10	06:55 17:52	06:06 18:27	07:11 (LZ65) 20:04	06:12 20:04	05:36 20:38
26	07:34 17:11	06:53 17:53	06:04 18:28	07:12 (LZ65) 20:05	06:11 20:05	05:35 20:39
27	07:33 17:12	06:51 17:54	06:02 18:29	07:12 (LZ65) 20:06	06:09 20:06	05:34 20:40
28	07:32 17:14	06:50 17:56	06:00 18:30	07:14 (LZ65) 20:08	06:08 20:08	05:34 20:40
29	07:31 17:15		05:58 19:32	08:16 (LZ65) 20:09	06:06 20:09	05:33 20:41
30	07:30 17:16		06:57 19:33	08:18 (LZ65) 20:10	06:05 20:10	05:32 20:42
31	07:29 17:18		06:55 19:34	08:21 (LZ65) 20:11		05:32 20:43
Potential sun hours	289	293	369	402	456	462
Total, worst case	5	119	949			

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: LoZ_01 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -111.8° Slope: 90.0° (54)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:55	05:57 20:34	06:32 19:47	07:06 18:52	07:54 (LZ65) 08:31 (LZ65)	06:44 17:02
2	05:31 20:55	05:58 20:33	06:33 19:45	07:07 18:51	07:54 (LZ65) 08:29 (LZ65)	06:46 17:00
3	05:32 20:55	05:59 20:32	06:34 19:44	07:08 18:49	07:55 (LZ65) 08:28 (LZ65)	06:47 16:59
4	05:33 20:55	06:00 20:30	06:35 19:42	07:09 18:47	07:57 (LZ65) 08:27 (LZ65)	06:48 16:58
5	05:33 20:55	06:02 20:29	06:36 19:40	07:11 18:45	07:58 (LZ65) 08:25 (LZ65)	06:50 16:56
6	05:34 20:54	06:03 20:28	06:38 19:38	07:12 18:43	07:59 (LZ65) 08:23 (LZ65)	06:51 16:55
7	05:34 20:54	06:04 20:26	06:39 19:36	07:13 18:42	07:58 (LZ64) 08:19 (LZ65)	06:52 16:54
8	05:35 20:54	06:05 20:25	06:40 19:35	07:14 18:40	07:55 (LZ64) 08:14 (LZ65)	06:54 16:53
9	05:36 20:53	06:06 20:24	06:41 19:33	07:15 18:38	07:54 (LZ64) 08:10 (LZ64)	06:55 16:51
10	05:37 20:53	06:07 20:22	06:42 19:31	07:17 18:36	07:53 (LZ64) 08:11 (LZ64)	06:56 16:50
11	05:37 20:52	06:08 20:21	06:43 19:29	07:18 18:35	07:51 (LZ64) 08:11 (LZ64)	06:57 16:49
12	05:38 20:52	06:09 20:19	06:44 19:27	07:19 18:33	07:50 (LZ64) 08:11 (LZ64)	06:59 16:48
13	05:39 20:51	06:10 20:18	06:45 19:25	07:20 18:31	07:51 (LZ64) 08:12 (LZ64)	07:00 16:47
14	05:40 20:51	06:12 20:17	06:47 19:24	07:21 18:30	07:50 (LZ64) 08:11 (LZ64)	07:01 16:46
15	05:41 20:50	06:13 20:15	06:48 19:22	07:23 18:28	07:50 (LZ64) 08:11 (LZ64)	07:03 16:45
16	05:41 20:49	06:14 20:14	06:49 19:20	07:24 18:26	07:51 (LZ64) 08:11 (LZ64)	07:04 16:44
17	05:42 20:49	06:15 20:12	06:50 19:18	07:25 18:25	07:51 (LZ64) 08:09 (LZ64)	07:05 16:43
18	05:43 20:48	06:16 20:10	06:51 19:16	07:26 18:23	07:52 (LZ64) 08:08 (LZ64)	07:07 16:42
19	05:44 20:47	06:17 20:09	06:52 19:14	07:28 18:21	07:53 (LZ64) 08:06 (LZ64)	07:08 16:41
20	05:45 20:46	06:18 20:07	06:53 19:13	07:29 18:20	07:56 (LZ64) 08:03 (LZ64)	07:09 16:41
21	05:46 20:45	06:19 20:06	06:54 19:11	07:30 18:18	07:10 08:35 (LZ65)	07:40 16:40
22	05:47 20:44	06:21 20:04	06:56 19:09	07:31 18:16	07:12 08:35 (LZ65)	07:40 16:39
23	05:48 20:44	06:22 20:02	06:57 19:07	07:33 18:15	07:13 08:35 (LZ65)	07:41 16:38
24	05:49 20:43	06:23 20:01	06:58 19:05	07:34 18:13	07:14 08:35 (LZ65)	07:41 16:38
25	05:50 20:42	06:24 19:59	06:59 19:03	07:35 17:12	07:15 08:35 (LZ65)	07:42 16:37
26	05:51 20:41	06:25 19:57	07:00 19:02	07:37 17:10	07:17 08:34 (LZ65)	07:42 16:38
27	05:52 20:40	06:26 19:56	07:01 19:00	07:38 17:09	07:18 08:34 (LZ65)	07:42 16:38
28	05:53 20:39	06:27 19:54	07:02 18:58	07:39 17:07	07:19 08:34 (LZ65)	07:43 16:39
29	05:54 20:37	06:29 19:52	07:04 18:56	07:40 17:06	07:20 08:33 (LZ65)	07:43 16:40
30	05:55 20:36	06:30 19:51	07:05 18:54	07:42 17:04	07:21 08:32 (LZ65)	07:43 16:40
31	05:56 20:35	06:31 19:49		06:43 17:03		07:43 16:41
Potential sun hours	468	433	376	342	291	279
Total, worst case			652	438		233

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: LoZ_02 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -98.1° Slope: 90.0° (55)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

January			February			March			April			May			June		
1	07:44		08:20 (LZ66)	07:28	06:48				06:53			06:03			07:04 (LZ65)	05:31	
	16:42	22	08:42 (LZ66)	17:19	17:57				19:35			20:11	46		07:50 (LZ65)	20:44	
2	07:44		08:20 (LZ66)	07:27	06:46				06:51			06:02			07:04 (LZ65)	05:31	
	16:43	23	08:43 (LZ66)	17:21	17:58				19:36			20:12	46		07:50 (LZ65)	20:45	
3	07:44		08:20 (LZ66)	07:25	06:45				06:49			06:00			07:05 (LZ65)	05:30	
	16:44	24	08:44 (LZ66)	17:22	18:00				19:38			20:14	45		07:50 (LZ65)	20:46	
4	07:44		08:19 (LZ66)	07:24	06:43				06:48			05:59			07:04 (LZ65)	05:30	
	16:45	24	08:43 (LZ66)	17:23	18:01				19:39			20:15	45		07:49 (LZ65)	20:46	
5	07:44		08:20 (LZ66)	07:23	06:41				06:46			05:58			07:05 (LZ65)	05:29	
	16:46	24	08:44 (LZ66)	17:25	18:02				19:40			20:16	44		07:49 (LZ65)	20:47	
6	07:44		08:20 (LZ66)	07:22	06:40				06:44			05:56			07:05 (LZ65)	05:29	
	16:47	25	08:45 (LZ66)	17:26	18:03				19:41			20:17	43		07:48 (LZ65)	20:48	
7	07:44		08:20 (LZ66)	07:21	06:38				06:42			05:55			07:06 (LZ65)	05:28	
	16:48	26	08:46 (LZ66)	17:27	18:05				19:42			20:18	42		07:48 (LZ65)	20:48	
8	07:43		08:21 (LZ66)	07:19	06:36				06:41			05:54			07:06 (LZ65)	05:28	
	16:49	26	08:47 (LZ66)	17:29	18:06				19:44			20:19	40		07:46 (LZ65)	20:49	
9	07:43		08:20 (LZ66)	07:18	06:34				06:39			05:52			07:07 (LZ65)	05:28	
	16:50	27	08:47 (LZ66)	17:30	18:07				19:45			20:20	39		07:46 (LZ65)	20:50	
10	07:43		08:21 (LZ66)	07:17	06:33				06:37			05:51			07:07 (LZ65)	05:28	
	16:51	27	08:48 (LZ66)	17:32	18:08				19:46			20:22	38		07:45 (LZ65)	20:50	
11	07:43		08:22 (LZ66)	07:16	06:31			06:56 (LZ64)	06:35			05:50			07:08 (LZ65)	05:27	
	16:52	27	08:49 (LZ66)	17:33	18:10	8		07:04 (LZ64)	19:47			20:23	36		07:44 (LZ65)	20:51	
12	07:42		08:21 (LZ66)	07:14	06:29				06:34			05:49			07:09 (LZ65)	05:27	
	16:53	28	08:49 (LZ66)	17:34	18:11	14		07:08 (LZ64)	19:48	7		07:36 (LZ65)	20:24	34	07:43 (LZ65)	20:51	
13	07:42		08:22 (LZ66)	07:13	06:27			06:52 (LZ64)	06:32			07:23 (LZ65)	05:48		07:10 (LZ65)	05:27	
	16:55	28	08:50 (LZ66)	17:36	18:12	17		07:09 (LZ64)	19:50	18		07:41 (LZ65)	20:25	32	07:42 (LZ65)	20:52	
14	07:41		08:22 (LZ66)	07:11	06:26			06:50 (LZ64)	06:30			07:20 (LZ65)	05:46		07:11 (LZ65)	05:27	
	16:56	27	08:49 (LZ66)	17:37	18:13	20		07:10 (LZ64)	19:51	24		07:44 (LZ65)	20:26	30	07:41 (LZ65)	20:52	
15	07:41		08:23 (LZ66)	07:10	06:24			06:49 (LZ64)	06:29			07:17 (LZ65)	05:45		07:13 (LZ65)	05:27	
	16:57	27	08:50 (LZ66)	17:38	18:15	21		07:10 (LZ64)	19:52	28		07:45 (LZ65)	20:27	27	07:40 (LZ65)	20:53	
16	07:41		08:23 (LZ66)	07:08	06:22			06:48 (LZ64)	06:27			07:15 (LZ65)	05:44		07:14 (LZ65)	05:27	
	16:58	27	08:50 (LZ66)	17:40	18:16	22		07:10 (LZ64)	19:53	32		07:47 (LZ65)	20:28	25	07:39 (LZ65)	20:53	
17	07:40		08:23 (LZ66)	07:07	06:20			06:48 (LZ64)	06:25			07:14 (LZ65)	05:43		07:15 (LZ65)	05:27	
	16:59	27	08:50 (LZ66)	17:41	18:17	23		07:11 (LZ64)	19:54	34		07:48 (LZ65)	20:29	22	07:37 (LZ65)	20:54	
18	07:39		08:24 (LZ66)	07:06	06:18			06:48 (LZ64)	06:24			07:12 (LZ65)	05:42		07:17 (LZ65)	05:27	
	17:01	27	08:51 (LZ66)	17:42	18:18	22		07:10 (LZ64)	19:56	37		07:49 (LZ65)	20:30	18	07:35 (LZ65)	20:54	
19	07:39		08:24 (LZ66)	07:04	06:17			06:47 (LZ64)	06:22			07:10 (LZ65)	05:41		07:20 (LZ65)	05:27	
	17:02	27	08:51 (LZ66)	17:44	18:20	22		07:09 (LZ64)	19:57	39		07:49 (LZ65)	20:32	12	07:32 (LZ65)	20:54	
20	07:38		08:24 (LZ66)	07:03	06:15			06:47 (LZ64)	06:20			07:10 (LZ65)	05:40		07:25 (LZ65)	05:27	
	17:03	27	08:51 (LZ66)	17:45	18:21	22		07:09 (LZ64)	19:58	41		07:51 (LZ65)	20:33	2	07:27 (LZ65)	20:55	
21	07:37		08:26 (LZ66)	07:01	06:13			06:48 (LZ64)	06:19			07:08 (LZ65)	05:39			05:27	
	17:05	25	08:51 (LZ66)	17:46	18:22	19		07:07 (LZ64)	19:59	43		07:51 (LZ65)	20:34			20:55	
22	07:37		08:26 (LZ66)	06:59	06:11			06:48 (LZ64)	06:17			07:08 (LZ65)	05:38			05:28	
	17:06	25	08:51 (LZ66)	17:48	18:23	18		07:06 (LZ64)	20:00	44		07:52 (LZ65)	20:35			20:55	
23	07:36		08:27 (LZ66)	06:58	06:09			06:50 (LZ64)	06:15			07:07 (LZ65)	05:37			05:28	
	17:07	23	08:50 (LZ66)	17:49	18:24	15		07:05 (LZ64)	20:02	44		07:51 (LZ65)	20:36			20:55	
24	07:35		08:28 (LZ66)	06:56	06:08			06:52 (LZ64)	06:14			07:07 (LZ65)	05:37			05:28	
	17:08	22	08:50 (LZ66)	17:50	18:26	10		07:02 (LZ64)	20:03	45		07:52 (LZ65)	20:37			20:55	
25	07:34		08:29 (LZ66)	06:55	06:06				06:12			07:06 (LZ65)	05:36			05:28	
	17:10	20	08:49 (LZ66)	17:52	18:27				20:04	46		07:52 (LZ65)	20:38			20:56	
26	07:34		08:30 (LZ66)	06:53	06:04				06:11			07:06 (LZ65)	05:35			05:29	
	17:11	18	08:48 (LZ66)	17:53	18:28				20:05	46		07:52 (LZ65)	20:39			20:56	
27	07:33		08:32 (LZ66)	06:51	06:02				06:09			07:05 (LZ65)	05:34			05:29	
	17:12	15	08:47 (LZ66)	17:54	18:29				20:06	46		07:51 (LZ65)	20:39			20:56	
28	07:32		08:34 (LZ66)	06:50	06:00				06:08			07:05 (LZ65)	05:34			05:30	
	17:14	11	08:45 (LZ66)	17:56	18:30				20:08	47		07:52 (LZ65)	20:40			20:56	
29	07:31		08:38 (LZ66)		06:58				06:06			07:04 (LZ65)	05:33			05:30	
	17:15	3	08:41 (LZ66)		19:32				20:09	47		07:51 (LZ65)	20:41			20:56	
30	07:30				06:57				06:05			07:05 (LZ65)	05:32			05:30	
	17:16				19:33				20:10	46		07:51 (LZ65)	20:42			20:56	
31	07:29				06:55							05:32					
	17:18				19:34							20:43					
Potential sun hours	289			293	369			402	714			456	666		462		
Total, worst case	682				253												

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		

SHADOW - Calendar

Calculation: Worst Case Shadow receptor: LoZ_02 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -98.1° Slope: 90.0° (55)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

July		August		September		October		November		December	
1	05:31	05:57	07:19 (LZ65)	06:32	07:06	07:32 (LZ64)	06:44	07:22	08:04 (LZ66)		
	20:55	20:34	35 07:54 (LZ65)	19:47		18:52	17:02	16:34	27 08:31 (LZ66)		
2	05:31	05:58	07:19 (LZ65)	06:33		07:07	06:46	07:24	08:04 (LZ66)		
	20:55	20:33	36 07:55 (LZ65)	19:45		18:51	17:00	16:34	27 08:31 (LZ66)		
3	05:32	05:59	07:18 (LZ65)	06:34		07:08	06:47	07:25	08:04 (LZ66)		
	20:55	20:32	38 07:56 (LZ65)	19:44		18:49	16:59	16:33	27 08:31 (LZ66)		
4	05:33	06:00	07:17 (LZ65)	06:35		07:09	06:48	07:26	08:05 (LZ66)		
	20:55	20:30	40 07:57 (LZ65)	19:42		18:47	16:58	16:33	26 08:31 (LZ66)		
5	05:33	06:02	07:16 (LZ65)	06:36		07:11	06:50	07:27	08:05 (LZ66)		
	20:55	20:29	41 07:57 (LZ65)	19:40		18:45	16:56	16:33	26 08:31 (LZ66)		
6	05:34	06:03	07:16 (LZ65)	06:38		07:12	06:51	07:28	08:06 (LZ66)		
	20:54	20:28	42 07:58 (LZ65)	19:38		18:43	16:55	16:33	25 08:31 (LZ66)		
7	05:34	06:04	07:15 (LZ65)	06:39		07:13	06:52	07:29	08:07 (LZ66)		
	20:54	20:26	43 07:58 (LZ65)	19:36		18:42	16:54	16:32	24 08:31 (LZ66)		
8	05:35	06:05	07:14 (LZ65)	06:40		07:14	06:54	07:30	08:07 (LZ66)		
	20:54	20:25	44 07:58 (LZ65)	19:35		18:40	16:53	16:32	24 08:31 (LZ66)		
9	05:36	06:06	07:14 (LZ65)	06:41		07:15	06:55	07:31	08:08 (LZ66)		
	20:53	20:24	45 07:59 (LZ65)	19:33		18:38	16:51	16:32	24 08:32 (LZ66)		
10	05:37	06:07	07:13 (LZ65)	06:42		07:17	06:56	07:32	08:09 (LZ66)		
	20:53	20:22	46 07:59 (LZ65)	19:31		18:36	16:50	16:32	23 08:32 (LZ66)		
11	05:37	06:08	07:13 (LZ65)	06:43		07:18	06:57	07:33	08:10 (LZ66)		
	20:52	20:21	46 07:59 (LZ65)	19:29		18:35	16:49	16:32	22 08:32 (LZ66)		
12	05:38	06:09	07:13 (LZ65)	06:44		07:19	06:59	07:33	08:10 (LZ66)		
	20:52	20:19	46 07:59 (LZ65)	19:27		18:33	16:48	16:32	23 08:33 (LZ66)		
13	05:39	06:10	07:12 (LZ65)	06:45		07:20	07:00	07:34	08:11 (LZ66)		
	20:51	20:18	47 07:59 (LZ65)	19:25		18:31	16:47	16:32	22 08:33 (LZ66)		
14	05:40	06:12	07:12 (LZ65)	06:47		07:21	07:01	07:35	08:11 (LZ66)		
	20:51	20:17	47 07:59 (LZ65)	19:24		18:30	16:46	16:33	21 08:32 (LZ66)		
15	05:41	06:13	07:12 (LZ65)	06:48		07:23	07:03	07:36	08:12 (LZ66)		
	20:50	20:15	46 07:58 (LZ65)	19:22		18:28	16:45	16:33	21 08:33 (LZ66)		
16	05:41	06:14	07:13 (LZ65)	06:49		07:24	07:04	07:37	08:13 (LZ66)		
	20:49	20:13	46 07:59 (LZ65)	19:20		18:26	16:44	16:33	20 08:33 (LZ66)		
17	05:42	06:15	07:13 (LZ65)	06:50		07:25	07:05	07:37	08:13 (LZ66)		
	20:49	20:12	46 07:59 (LZ65)	19:18		18:25	16:43	16:33	20 08:33 (LZ66)		
18	05:43	06:16	07:13 (LZ65)	06:51		07:26	07:07	07:38	08:14 (LZ66)		
	20:48	20:10	45 07:58 (LZ65)	19:16		18:23	16:42	16:34	20 08:34 (LZ66)		
19	05:44	06:17	07:13 (LZ65)	06:52		07:28	07:08	07:39	08:15 (LZ66)		
	20:47	20:09	45 07:58 (LZ65)	19:14	9 07:39 (LZ64)	18:21	16:41	16:34	19 08:34 (LZ66)		
20	05:45	06:18	07:13 (LZ65)	06:53		07:29	07:09	07:39	08:15 (LZ66)		
	20:46	20:07	44 07:57 (LZ65)	19:13	14 07:51 (LZ64)	18:20	16:41	16:34	19 08:34 (LZ66)		
21	05:46	06:19	07:13 (LZ65)	06:54		07:30	07:10	07:40	08:16 (LZ66)		
	20:45	20:06	43 07:56 (LZ65)	19:11	17 07:52 (LZ64)	18:18	16:40	16:35	19 08:35 (LZ66)		
22	05:47	06:21	07:13 (LZ65)	06:56		07:31	07:12	07:40	08:16 (LZ66)		
	20:44	20:04	42 07:55 (LZ65)	19:09	19 07:52 (LZ64)	18:16	16:39	16:35	19 08:35 (LZ66)		
23	05:48	06:22	07:14 (LZ65)	06:57		07:33	07:13	07:41	08:17 (LZ66)		
	20:44	20:02	40 07:54 (LZ65)	19:07	21 07:53 (LZ64)	18:15	16:38	16:36	19 08:36 (LZ66)		
24	05:49	06:23	07:14 (LZ65)	06:58		07:34	07:14	07:41	08:17 (LZ66)		
	20:43	9 07:41 (LZ65)	20:01	39 07:53 (LZ65)	19:05	22 07:53 (LZ64)	18:13	16:38	19 08:36 (LZ66)		
25	05:50	07:29 (LZ65)	06:24	06:59		07:30 (LZ64)	06:35	07:42	08:17 (LZ66)		
	20:42	15 07:44 (LZ65)	19:59	37 07:52 (LZ65)	19:03	23 07:53 (LZ64)	17:12	16:37	20 08:37 (LZ66)		
26	05:51	07:27 (LZ65)	06:25	07:16 (LZ65)	07:00		06:37	07:42	08:18 (LZ66)		
	20:41	19 07:46 (LZ65)	19:57	34 07:50 (LZ65)	19:02	22 07:52 (LZ64)	17:10	16:36	20 08:38 (LZ66)		
27	05:52	07:25 (LZ65)	06:26	07:17 (LZ65)	07:01		06:38	07:42	08:18 (LZ66)		
	20:40	23 07:48 (LZ65)	19:56	31 07:48 (LZ65)	19:00	22 07:51 (LZ64)	17:09	16:36	20 08:38 (LZ66)		
28	05:53	07:24 (LZ65)	06:27	07:18 (LZ65)	07:02		06:39	07:43	08:18 (LZ66)		
	20:39	26 07:50 (LZ65)	19:54	28 07:46 (LZ65)	18:58	22 07:52 (LZ64)	17:07	16:35	21 08:39 (LZ66)		
29	05:54	07:23 (LZ65)	06:29	07:21 (LZ65)	07:04		06:40	07:43	08:18 (LZ66)		
	20:37	28 07:51 (LZ65)	19:52	24 07:45 (LZ65)	18:56	19 07:50 (LZ64)	17:06	16:35	21 08:39 (LZ66)		
30	05:55	07:21 (LZ65)	06:30	07:24 (LZ65)	07:05		06:42	07:43	08:19 (LZ66)		
	20:36	31 07:52 (LZ65)	19:51	17 07:41 (LZ65)	18:54	18 07:49 (LZ64)	17:04	16:34	22 08:41 (LZ66)		
31	05:56	07:20 (LZ65)	06:31	07:29 (LZ65)			06:43	07:43	08:19 (LZ66)		
	20:35	33 07:53 (LZ65)	19:49	6 07:35 (LZ65)			17:03	16:41	22 08:41 (LZ66)		
Potential sun hours	468		433		376		342	291		279	
Total, worst case	184		1209		228		25	408		682	

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

Calculation: Worst Case Shadow receptor: LoZ_03 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -99.0° Slope: 90.0° (56)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June
1	07:44 16:42	07:28 17:19	08:08 (LZ66) 08:41 (LZ66)	06:48 17:57	07:33 (LZ67) 07:40 (LZ67)	06:53 19:35
2	07:44 16:43	07:27 17:21	08:08 (LZ66) 08:41 (LZ66)	06:46 17:58	19:35 19:36	21 07:18 (LZ64) 07:17 (LZ64)
3	07:44 16:44	07:25 17:22	08:08 (LZ66) 08:41 (LZ66)	06:45 18:00	23 07:40 (LZ64) 07:17 (LZ64)	20:11 06:02
4	07:44 16:45	07:24 17:23	08:08 (LZ66) 08:41 (LZ66)	06:43 18:01	24 07:41 (LZ64) 07:16 (LZ64)	05:30 20:12
5	07:44 16:46	07:23 17:25	08:08 (LZ66) 08:41 (LZ66)	06:41 18:02	25 07:40 (LZ64) 07:15 (LZ64)	20:13 05:58
6	07:44 16:47	07:22 17:26	08:09 (LZ66) 08:41 (LZ66)	06:40 18:03	26 07:40 (LZ64) 07:15 (LZ64)	20:16 05:56
7	07:43 16:48	07:21 17:27	08:09 (LZ66) 08:41 (LZ66)	06:38 18:05	27 07:39 (LZ64) 07:15 (LZ64)	20:17 05:55
8	07:43 16:49	07:19 17:29	08:09 (LZ66) 08:40 (LZ66)	06:36 18:06	28 07:39 (LZ64) 07:15 (LZ64)	20:18 05:54
9	07:43 16:50	07:18 17:30	08:10 (LZ66) 08:40 (LZ66)	06:34 18:07	29 07:38 (LZ64) 07:15 (LZ64)	20:19 05:52
10	07:43 16:51	07:17 17:32	08:10 (LZ66) 08:39 (LZ66)	06:33 18:08	30 07:37 (LZ64) 07:16 (LZ64)	20:20 05:51
11	07:43 16:52	07:15 17:33	08:12 (LZ66) 08:39 (LZ66)	06:31 18:10	31 07:36 (LZ64) 07:18 (LZ64)	20:22 05:50
12	07:42 16:53	07:14 17:34	08:13 (LZ66) 08:38 (LZ66)	06:29 18:11	07:35 (LZ64) 07:19 (LZ64)	20:23 05:49
13	07:42 16:55	07:13 17:36	08:14 (LZ66) 08:36 (LZ66)	06:27 18:12	13 07:32 (LZ64) 07:21 (LZ64)	20:24 05:48
14	07:41 16:56	07:11 17:37	08:16 (LZ66) 08:35 (LZ66)	06:26 18:13	7 07:28 (LZ64)	20:25 05:46
15	07:41 16:57	07:10 17:38	07:33 (LZ67) 08:32 (LZ66)	06:24 18:15	06:29 19:52	20:26 05:45
16	07:41 16:58	07:08 17:40	07:31 (LZ67) 08:27 (LZ66)	06:22 18:16	06:27 19:53	20:27 05:44
17	07:40 16:59	07:07 17:41	07:29 (LZ67) 07:46 (LZ67)	06:20 18:17	06:25 19:54	20:28 05:43
18	07:39 17:01	07:06 17:42	07:29 (LZ67) 07:48 (LZ67)	06:18 18:18	06:24 19:56	20:29 05:42
19	07:39 17:02	07:04 17:44	07:27 (LZ67) 07:48 (LZ67)	06:17 18:20	06:22 19:57	20:30 05:41
20	07:38 17:03	07:03 08:18 (LZ66)	07:27 (LZ67) 07:49 (LZ67)	06:15 18:21	06:20 19:58	20:32 05:40
21	07:37 17:05	07:01 08:16 (LZ66)	07:27 (LZ67) 07:49 (LZ67)	06:13 18:22	06:19 19:59	20:33 05:39
22	07:37 17:06	06:59 08:14 (LZ66)	07:26 (LZ67) 07:48 (LZ67)	06:11 18:23	06:17 20:00	20:34 05:38
23	07:36 17:07	06:58 08:13 (LZ66)	07:27 (LZ67) 07:49 (LZ67)	06:09 18:24	06:15 20:02	20:35 05:37
24	07:35 17:08	06:56 08:12 (LZ66)	07:27 (LZ67) 07:48 (LZ67)	06:08 18:26	06:14 20:03	20:36 05:36
25	07:34 17:10	06:55 08:11 (LZ66)	07:28 (LZ67) 07:48 (LZ67)	06:06 18:27	06:12 20:04	20:37 05:35
26	07:33 17:11	06:53 08:10 (LZ66)	07:28 (LZ67) 07:47 (LZ67)	06:04 18:28	06:11 20:05	20:38 05:34
27	07:33 17:12	06:51 08:09 (LZ66)	07:29 (LZ67) 07:45 (LZ67)	06:02 18:29	06:09 20:06	20:39 05:33
28	07:32 17:14	06:50 08:09 (LZ66)	07:31 (LZ67) 07:44 (LZ67)	06:00 18:30	06:08 20:08	20:40 05:32
29	07:31 17:15	06:49 08:09 (LZ66)	06:58 19:32	07:24 (LZ64) 07:36 (LZ64)	06:06 20:09	20:41 05:31
30	07:30 17:16	06:48 08:08 (LZ66)	06:57 19:33	07:22 (LZ64) 07:38 (LZ64)	06:05 20:10	20:42 05:30
31	07:29 17:18	06:47 08:08 (LZ66)	06:55 19:34	07:20 (LZ64) 07:39 (LZ64)	06:04 20:11	20:43 05:29
Potential sun hours	289	293	369	402	456	462
Total, worst case	278	687	54	267		

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

Calculation: Worst Case Shadow receptor: LoZ_03 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -99.0° Slope: 90.0° (56)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:55	05:57 20:34	06:32 19:47	07:17 (LZ64) 18:52	06:44 17:02	07:40 (LZ66) 16:34
2	05:31 20:55	05:58 20:33	06:33 19:45	07:15 (LZ64) 18:51	06:46 17:00	07:40 (LZ66) 16:34
3	05:32 20:55	05:59 20:32	06:34 19:44	07:13 (LZ64) 18:49	06:47 16:59	07:39 (LZ66) 16:33
4	05:33 20:55	06:00 20:30	06:35 19:42	07:12 (LZ64) 18:47	06:48 16:58	07:38 (LZ66) 16:33
5	05:33 20:55	06:02 20:29	06:36 19:40	07:11 (LZ64) 18:45	06:50 16:56	07:39 (LZ66) 16:33
6	05:34 20:54	06:03 20:28	06:38 19:38	07:11 (LZ64) 18:43	06:51 16:55	07:38 (LZ66) 16:33
7	05:34 20:54	06:04 20:26	06:39 19:36	07:10 (LZ64) 18:42	06:52 16:54	07:39 (LZ66) 16:32
8	05:35 20:54	06:05 20:25	06:40 19:35	07:10 (LZ64) 18:40	06:53 16:53	07:39 (LZ66) 16:32
9	05:36 20:53	06:06 20:24	06:41 19:33	07:10 (LZ64) 18:38	06:55 16:51	07:38 (LZ66) 16:32
10	05:37 20:53	06:07 20:22	06:42 19:31	07:11 (LZ64) 18:36	06:56 16:50	07:39 (LZ66) 16:32
11	05:37 20:52	06:08 20:21	06:43 19:29	07:11 (LZ64) 18:35	06:57 16:49	07:39 (LZ66) 16:32
12	05:38 20:52	06:09 20:19	06:44 19:27	07:12 (LZ64) 18:33	06:59 16:48	07:40 (LZ66) 16:32
13	05:39 20:51	06:10 20:18	06:45 19:25	07:13 (LZ64) 18:31	07:00 16:47	07:41 (LZ66) 16:32
14	05:40 20:51	06:12 20:17	06:47 19:24	07:14 (LZ64) 18:30	08:05 (LZ67) 16:46	07:41 (LZ66) 16:33
15	05:41 20:50	06:13 20:15	06:48 19:22	07:18 (LZ64) 18:28	08:00 (LZ67) 16:45	07:42 (LZ66) 16:33
16	05:41 20:49	06:14 20:13	06:49 19:20	07:22 (LZ64) 18:26	08:18 (LZ67) 16:44	08:10 (LZ66) 16:33
17	05:42 20:49	06:15 20:12	06:50 19:18	07:24 18:25	08:00 (LZ67) 16:43	08:09 (LZ66) 16:33
18	05:43 20:48	06:16 20:10	06:51 19:16	07:26 18:23	07:58 (LZ67) 16:42	07:46 (LZ66) 16:34
19	05:44 20:47	06:17 20:09	06:52 19:14	07:28 18:21	08:20 (LZ67) 16:41	07:47 (LZ66) 16:34
20	05:45 20:46	06:18 20:07	06:53 19:13	07:29 18:20	08:19 (LZ67) 16:41	08:06 (LZ66) 16:34
21	05:46 20:45	06:19 20:06	06:54 19:11	07:30 18:18	08:20 (LZ67) 16:40	08:06 (LZ66) 16:35
22	05:47 20:44	06:21 20:04	06:56 19:09	07:31 18:16	08:19 (LZ67) 16:39	08:04 (LZ66) 16:35
23	05:48 20:44	06:22 20:02	06:57 19:07	07:33 18:15	08:19 (LZ67) 16:38	08:01 (LZ66) 16:36
24	05:49 20:43	06:23 20:01	06:58 19:05	07:34 18:13	08:18 (LZ67) 16:38	07:49 (LZ66) 16:36
25	05:50 20:42	06:24 19:59	06:59 19:03	07:35 17:12	08:17 (LZ67) 16:37	08:08 (LZ66) 16:37
26	05:51 20:41	06:25 19:57	07:00 19:02	07:37 17:10	07:01 (LZ67) 16:36	07:15 (LZ66) 16:38
27	05:52 20:40	06:26 19:56	07:01 19:00	07:38 17:09	07:58 (LZ66) 16:36	07:18 (LZ66) 16:38
28	05:53 20:39	06:27 19:54	07:02 18:58	07:39 17:07	08:02 (LZ66) 16:35	07:19 (LZ66) 16:39
29	05:54 20:37	06:29 19:52	07:04 18:56	07:40 17:06	08:05 (LZ66) 16:35	07:20 (LZ66) 16:40
30	05:55 20:36	06:30 19:51	07:05 18:54	07:42 (LZ66) 17:04	08:06 (LZ66) 16:34	07:21 (LZ66) 16:40
31	05:56 20:35	06:31 19:49	07:19 (LZ64) 07:32 (LZ64)	06:43 17:03	08:07 (LZ66) 08:08 (LZ66)	07:22 (LZ66) 16:41
Potential sun hours	468	433	376	342	291	279
Total, worst case		21	302	387	596	

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

Day in month	Sun rise (hh:mm)	Minutes with flicker	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

Calculation: Worst Case Shadow receptor: LoZ_04 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -100.3° Slope: 90.0° (57)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June
1	07:44 16:42	07:28 17:19	08:09 (LZ73) 17:57	07:34 (LZ66) 19:35	06:03 20:11	06:38 (LZ64) 20:44
2	07:44 16:43	07:27 17:21	08:11 (LZ73) 17:58	07:33 (LZ66) 19:36	06:02 20:12	06:39 (LZ64) 20:45
3	07:44 16:44	07:25 17:22	08:12 (LZ73) 18:00	07:32 (LZ66) 19:38	06:00 20:13	06:40 (LZ64) 20:45
4	07:44 16:45	07:24 17:23	06:43 18:01	07:33 (LZ66) 19:39	05:59 20:15	06:40 (LZ64) 20:46
5	07:44 16:46	07:23 17:25	06:41 18:02	07:07 (LZ67) 19:40	05:58 20:16	06:41 (LZ64) 20:47
6	07:44 16:47	07:22 17:26	06:40 18:03	07:04 (LZ67) 19:41	05:56 20:17	06:42 (LZ64) 20:48
7	07:43 16:48	07:21 17:27	06:38 18:05	07:02 (LZ67) 19:42	05:55 20:18	06:43 (LZ64) 20:48
8	07:43 16:49	07:19 17:29	06:36 18:06	07:01 (LZ67) 19:44	05:54 20:19	06:44 (LZ64) 20:49
9	07:43 16:50	07:18 17:30	06:34 18:07	07:00 (LZ67) 19:45	05:52 20:20	06:56 (LZ64) 20:50
10	07:43 16:51	07:17 17:32	06:33 18:08	06:59 (LZ67) 19:46	05:51 20:22	06:53 (LZ64) 20:50
11	07:43 16:52	07:15 17:33	06:31 18:10	06:58 (LZ67) 19:47	05:50 20:23	06:52 20:51
12	07:42 16:53	08:10 (LZ73) 17:34	06:29 18:11	06:58 (LZ67) 19:48	05:49 20:24	06:51 20:51
13	07:42 16:55	08:08 (LZ73) 17:36	06:27 18:12	06:58 (LZ67) 19:50	05:48 20:25	06:50 20:52
14	07:41 16:56	08:07 (LZ73) 17:37	06:26 18:13	06:58 (LZ67) 19:51	05:46 20:26	06:49 20:52
15	07:41 16:57	08:06 (LZ73) 17:38	06:24 18:15	06:58 (LZ67) 19:52	05:45 20:27	06:48 20:53
16	07:41 16:58	08:05 (LZ73) 17:40	06:22 18:16	06:58 (LZ67) 19:53	05:44 20:28	06:47 20:53
17	07:40 16:59	08:05 (LZ73) 17:41	06:20 18:17	07:00 (LZ67) 19:54	05:43 20:29	06:46 20:54
18	07:39 17:01	08:05 (LZ73) 17:42	06:18 18:18	07:01 (LZ67) 19:56	05:42 20:30	06:45 20:54
19	07:39 17:02	08:04 (LZ73) 17:44	06:17 18:20	07:04 (LZ67) 19:57	05:41 20:32	06:44 20:54
20	07:38 17:03	08:04 (LZ73) 17:45	06:15 18:21	06:20 19:58	06:48 (LZ64) 20:33	06:43 20:55
21	07:37 17:05	08:05 (LZ73) 17:46	06:13 18:22	06:19 19:59	06:45 (LZ64) 20:34	06:42 20:55
22	07:37 17:06	08:04 (LZ73) 17:48	06:11 18:23	06:17 20:00	07:01 (LZ64) 20:35	06:41 20:55
23	07:36 17:07	08:04 (LZ73) 17:49	06:09 18:24	06:15 20:02	07:03 (LZ64) 20:36	06:40 20:55
24	07:35 17:08	08:04 (LZ73) 17:50	06:08 18:26	06:14 20:03	07:04 (LZ64) 20:37	06:39 20:55
25	07:34 17:10	08:04 (LZ73) 17:52	06:06 18:27	06:12 20:04	07:04 (LZ64) 20:38	06:38 20:56
26	07:33 17:11	08:05 (LZ73) 17:53	06:04 18:28	06:11 20:05	07:05 (LZ64) 20:39	06:37 20:56
27	07:33 17:12	08:05 (LZ73) 17:54	06:02 18:29	06:09 20:06	07:05 (LZ64) 20:39	06:36 20:56
28	07:32 17:14	08:06 (LZ73) 17:56	06:00 18:30	06:08 20:08	07:06 (LZ64) 20:40	06:35 20:56
29	07:31 17:15	08:06 (LZ73) 17:57	05:58 18:31	06:06 20:09	07:06 (LZ64) 20:41	06:34 20:56
30	07:30 17:16	08:07 (LZ73) 17:58	05:57 18:32	06:05 20:10	07:07 (LZ64) 20:42	06:33 20:56
31	07:29 17:18	08:08 (LZ73) 17:59	05:55 18:33	06:04 20:11	07:08 (LZ64) 20:43	06:32 20:56
Potential sun hours	289	293	369	402	456	462
Total, worst case	367	326	713	240	165	

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

Calculation: Worst Case Shadow receptor: LoZ_04 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -100.3° Slope: 90.0° (57)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December	
1	05:31 20:55	05:57 20:34	06:32 19:47	07:06 18:52	07:37 (LZ67) 08:39 (LZ66)	06:44 17:02	07:22 16:34
2	05:31 20:55	05:58 20:33	06:33 19:45	07:07 18:51	07:37 (LZ67) 08:40 (LZ66)	06:46 17:00	07:24 16:34
3	05:32 20:55	05:59 20:32	06:34 19:44	07:08 18:49	07:36 (LZ67) 08:41 (LZ66)	06:47 16:59	07:25 16:33
4	05:33 20:55	06:00 20:30	06:56 (LZ64) 07:05 (LZ64)	06:35 19:42	07:37 (LZ67) 08:43 (LZ66)	06:48 16:58	07:26 16:33
5	05:33 20:55	06:02 20:29	06:54 (LZ64) 07:07 (LZ64)	06:36 19:40	07:37 (LZ67) 08:43 (LZ66)	06:50 16:56	07:27 16:33
6	05:34 20:54	06:03 20:28	06:52 (LZ64) 07:09 (LZ64)	06:38 19:38	07:38 (LZ67) 08:44 (LZ66)	06:51 16:55	07:28 16:33
7	05:34 20:54	06:04 20:26	06:51 (LZ64) 07:10 (LZ64)	06:39 19:36	07:39 (LZ67) 08:44 (LZ66)	06:52 16:54	07:29 16:32
8	05:35 20:54	06:05 20:25	06:50 (LZ64) 07:11 (LZ64)	06:40 19:35	07:40 (LZ67) 08:44 (LZ66)	06:53 16:53	07:30 16:32
9	05:36 20:53	06:06 20:24	06:49 (LZ64) 07:11 (LZ64)	06:41 19:33	07:44 (LZ67) 08:45 (LZ66)	06:55 16:51	07:31 16:32
10	05:37 20:53	06:07 20:22	06:48 (LZ64) 07:12 (LZ64)	06:42 19:31	08:07 (LZ66) 08:44 (LZ66)	06:56 16:50	07:32 16:32
11	05:37 20:52	06:08 20:21	06:48 (LZ64) 07:12 (LZ64)	06:43 19:29	08:07 (LZ66) 08:44 (LZ66)	06:57 16:49	07:33 16:32
12	05:38 20:52	06:09 20:19	06:47 (LZ64) 07:12 (LZ64)	06:44 19:27	08:06 (LZ66) 08:44 (LZ66)	06:59 16:48	07:33 16:32
13	05:39 20:51	06:10 20:18	06:47 (LZ64) 07:12 (LZ64)	06:45 19:25	08:07 (LZ66) 08:44 (LZ66)	07:00 16:47	07:34 16:32
14	05:40 20:51	06:12 20:16	06:46 (LZ64) 07:12 (LZ64)	06:47 19:24	08:07 (LZ66) 08:43 (LZ66)	07:01 16:46	07:35 16:33
15	05:41 20:50	06:13 20:15	06:46 (LZ64) 07:12 (LZ64)	06:48 19:22	08:07 (LZ66) 08:42 (LZ66)	07:03 16:45	07:36 16:33
16	05:41 20:49	06:14 20:13	06:47 (LZ64) 07:12 (LZ64)	06:49 19:20	08:07 (LZ66) 08:41 (LZ66)	07:04 16:44	07:37 16:33
17	05:42 20:49	06:15 20:12	06:47 (LZ64) 07:12 (LZ64)	06:50 19:18	08:08 (LZ66) 08:41 (LZ66)	07:05 16:43	07:37 16:33
18	05:43 20:48	06:16 20:10	06:47 (LZ64) 07:11 (LZ64)	06:51 19:16	08:09 (LZ66) 08:39 (LZ66)	07:07 16:42	07:38 16:34
19	05:44 20:47	06:17 20:09	06:48 (LZ64) 07:10 (LZ64)	06:52 19:14	08:09 (LZ66) 08:38 (LZ66)	07:08 16:41	07:38 16:34
20	05:45 20:46	06:18 20:07	06:48 (LZ64) 07:09 (LZ64)	06:53 19:13	08:11 (LZ66) 08:37 (LZ66)	07:09 16:41	07:39 16:34
21	05:46 20:45	06:19 20:06	06:49 (LZ64) 07:07 (LZ64)	06:54 19:11	08:13 (LZ66) 08:35 (LZ66)	07:10 16:40	07:40 16:35
22	05:47 20:44	06:21 20:04	06:50 (LZ64) 07:05 (LZ64)	06:56 19:09	08:14 (LZ66) 08:32 (LZ66)	07:12 16:39	07:40 16:35
23	05:48 20:44	06:22 20:02	06:52 (LZ64) 07:03 (LZ64)	06:57 19:07	08:19 (LZ66) 08:29 (LZ66)	07:13 16:38	07:41 16:36
24	05:49 20:43	06:23 20:01	06:58 19:05	07:49 (LZ67) 07:54 (LZ67)	07:34 18:13	07:14 16:38	07:42 (LZ73) 08:01 (LZ73)
25	05:50 20:42	06:24 19:59	06:59 19:03	07:45 (LZ67) 07:57 (LZ67)	06:35 17:12	07:15 16:37	07:43 (LZ73) 08:00 (LZ73)
26	05:51 20:41	06:25 19:57	07:00 19:02	07:42 (LZ67) 07:59 (LZ67)	06:36 17:10	07:17 16:36	07:44 (LZ73) 08:00 (LZ73)
27	05:52 20:40	06:26 19:56	07:01 19:00	07:40 (LZ67) 08:00 (LZ67)	06:38 17:09	07:18 16:36	07:45 (LZ73) 07:59 (LZ73)
28	05:53 20:39	06:27 19:54	07:02 18:58	07:40 (LZ67) 08:01 (LZ67)	06:39 17:07	07:19 16:35	07:47 (LZ73) 07:58 (LZ73)
29	05:54 20:37	06:29 19:52	07:04 18:56	07:39 (LZ67) 08:33 (LZ66)	06:40 17:06	07:20 16:35	07:48 (LZ73) 07:57 (LZ73)
30	05:55 20:36	06:30 19:51	07:05 18:54	07:38 (LZ67) 08:37 (LZ66)	06:42 17:04	07:21 16:34	07:51 (LZ73) 07:54 (LZ73)
31	05:56 20:35	06:31 19:49			06:43 17:03		07:54 (LZ73) 16:41
Potential sun hours	468	433	376	342	291	279	
Total, worst case		412	145	872	411		

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: LoZ_05 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -94.1° Slope: 90.0° (58)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

January		February		March		April		May		June	
1	07:44	08:29 (LZ74)	07:28	06:48	06:53	07:19 (LZ67)	06:03	05:31	06:01 (LZ64)		
	16:42	31 09:00 (LZ74)	17:19	17:57	19:35	25 07:51 (LZ66)	20:11	20:44	20 06:21 (LZ64)		
2	07:44	08:29 (LZ74)	07:27	06:46	06:51	07:17 (LZ67)	06:02	05:31	06:00 (LZ64)		
	16:43	32 09:01 (LZ74)	17:21	17:58	19:36	37 07:55 (LZ66)	20:12	20:45	21 06:21 (LZ64)		
3	07:44	08:30 (LZ74)	07:25	06:45	06:49	07:16 (LZ67)	06:00	05:30	06:00 (LZ64)		
	16:44	31 09:01 (LZ74)	17:22	18:00	19:38	42 07:58 (LZ66)	20:13	20:45	22 06:22 (LZ64)		
4	07:44	08:29 (LZ74)	07:24	06:43	06:48	07:15 (LZ67)	05:59	05:30	06:01 (LZ64)		
	16:45	32 09:01 (LZ74)	17:23	18:01	19:39	45 08:00 (LZ66)	20:15	20:46	22 06:23 (LZ64)		
5	07:44	08:30 (LZ74)	07:23	06:41	06:46	07:14 (LZ67)	05:58	05:29	06:00 (LZ64)		
	16:46	32 09:02 (LZ74)	17:25	18:02	19:40	47 08:01 (LZ66)	20:16	20:47	22 06:22 (LZ64)		
6	07:44	08:30 (LZ74)	07:22	06:40	06:44	07:13 (LZ67)	05:56	05:29	06:00 (LZ64)		
	16:47	32 09:02 (LZ74)	17:26	18:03	19:41	49 08:02 (LZ66)	20:17	20:48	23 06:23 (LZ64)		
7	07:43	08:31 (LZ74)	07:21	06:38	06:42	07:13 (LZ67)	05:55	05:28	06:00 (LZ64)		
	16:48	32 09:03 (LZ74)	17:27	18:05	19:42	50 08:03 (LZ66)	20:18	20:48	24 06:24 (LZ64)		
8	07:43	08:32 (LZ74)	07:19	06:36	06:41	07:12 (LZ67)	05:54	05:28	06:00 (LZ64)		
	16:49	32 09:04 (LZ74)	17:29	18:06	19:44	52 08:04 (LZ66)	20:19	20:49	23 06:23 (LZ64)		
9	07:43	08:31 (LZ74)	07:18	06:34	06:39	07:12 (LZ67)	05:52	05:28	06:00 (LZ64)		
	16:50	32 09:03 (LZ74)	17:30	18:07	19:45	52 08:04 (LZ66)	20:20	20:50	24 06:24 (LZ64)		
10	07:43	08:32 (LZ74)	07:17	06:33	06:37	07:12 (LZ67)	05:51	05:28	06:00 (LZ64)		
	16:51	32 09:04 (LZ74)	17:32	18:08	19:46	52 08:04 (LZ66)	20:22	20:50	24 06:24 (LZ64)		
11	07:43	08:33 (LZ74)	07:15	06:31	06:35	07:13 (LZ67)	05:50	05:27	06:00 (LZ64)		
	16:52	32 09:05 (LZ74)	17:33	18:10	19:47	51 08:04 (LZ66)	20:23	20:51	25 06:25 (LZ64)		
12	07:42	08:33 (LZ74)	07:14	06:29	06:34	07:13 (LZ67)	05:49	05:27	06:00 (LZ64)		
	16:54	32 09:05 (LZ74)	17:34	18:11	19:48	51 08:04 (LZ66)	20:24	20:51	25 06:25 (LZ64)		
13	07:42	08:34 (LZ74)	07:13	06:27	06:32	07:14 (LZ67)	05:48	05:27	06:01 (LZ64)		
	16:55	31 09:05 (LZ74)	17:36	18:12	19:50	50 08:04 (LZ66)	20:25	20:52	25 06:26 (LZ64)		
14	07:41	08:34 (LZ74)	07:11	06:26	06:30	07:16 (LZ67)	05:46	05:27	06:01 (LZ64)		
	16:56	31 09:05 (LZ74)	17:37	18:13	19:51	48 08:04 (LZ66)	20:26	20:52	25 06:26 (LZ64)		
15	07:41	08:35 (LZ74)	07:10	06:24	06:29	07:18 (LZ67)	05:45	05:27	06:01 (LZ64)		
	16:57	31 09:06 (LZ74)	17:38	18:15	19:52	46 08:04 (LZ66)	20:27	20:53	25 06:26 (LZ64)		
16	07:40	08:35 (LZ74)	07:08	06:22	06:27	07:21 (LZ66)	05:44	05:27	06:01 (LZ64)		
	16:58	30 09:05 (LZ74)	17:40	18:16	19:53	42 08:03 (LZ66)	20:28	20:53	25 06:26 (LZ64)		
17	07:40	08:36 (LZ74)	07:07	06:20	06:25	07:21 (LZ66)	05:43	05:27	06:01 (LZ64)		
	16:59	29 09:05 (LZ74)	17:41	18:17	19:54	42 08:03 (LZ66)	20:29	20:54	26 06:27 (LZ64)		
18	07:39	08:37 (LZ74)	07:06	06:18	06:24	07:21 (LZ66)	05:42	05:27	06:01 (LZ64)		
	17:01	29 09:06 (LZ74)	17:42	18:18	19:56	41 08:02 (LZ66)	20:30	20:54	26 06:27 (LZ64)		
19	07:39	08:37 (LZ74)	07:04	06:17	06:22	07:21 (LZ66)	05:41	05:27	06:01 (LZ64)		
	17:02	28 09:05 (LZ74)	17:44	18:20	19:57	40 08:01 (LZ66)	20:31	20:54	26 06:27 (LZ64)		
20	07:38	08:38 (LZ74)	07:02	06:15	06:20	07:22 (LZ66)	05:40	05:27	06:01 (LZ64)		
	17:03	27 09:05 (LZ74)	17:45	18:21	19:58	39 08:01 (LZ66)	20:33	20:55	26 06:27 (LZ64)		
21	07:37	08:39 (LZ74)	07:01	06:13	06:19	07:21 (LZ66)	05:39	05:27	06:01 (LZ64)		
	17:05	25 09:04 (LZ74)	17:46	18:22	19:59	38 07:59 (LZ66)	20:34	20:55	26 06:27 (LZ64)		
22	07:37	08:41 (LZ74)	06:59	06:11	06:17	07:22 (LZ66)	05:38	05:28	06:02 (LZ64)		
	17:06	23 09:04 (LZ74)	17:48	18:23	20:00	37 07:59 (LZ66)	20:35	20:55	26 06:28 (LZ64)		
23	07:36	08:42 (LZ74)	06:58	06:09	06:15	07:23 (LZ66)	05:38	05:28	06:02 (LZ64)		
	17:07	21 09:03 (LZ74)	17:49	18:24	20:02	34 07:57 (LZ66)	20:36	20:55	26 06:28 (LZ64)		
24	07:35	08:43 (LZ74)	06:56	06:08	06:14	07:24 (LZ66)	05:37	05:28	06:02 (LZ64)		
	17:08	19 09:02 (LZ74)	17:50	18:26	20:03	33 07:57 (LZ66)	20:37	20:55	26 06:28 (LZ64)		
25	07:34	08:45 (LZ74)	06:55	06:06	06:12	07:24 (LZ66)	05:36	05:28	06:02 (LZ64)		
	17:10	16 09:01 (LZ74)	17:52	18:27	20:04	31 07:55 (LZ66)	20:38	20:56	26 06:28 (LZ64)		
26	07:33	08:47 (LZ74)	06:53	06:04	06:11	07:26 (LZ66)	05:35	05:29	06:03 (LZ64)		
	17:11	12 08:59 (LZ74)	17:53	18:28	20:05	28 07:54 (LZ66)	20:39	20:56	26 06:29 (LZ64)		
27	07:33		06:51	06:02	06:09	07:27 (LZ66)	05:34	05:29	06:03 (LZ64)		
	17:12		17:54	18:29	20:06	24 07:51 (LZ66)	20:39	20:56	25 06:28 (LZ64)		
28	07:32		06:50	06:00	06:08	07:29 (LZ66)	05:34	05:30	06:04 (LZ64)		
	17:14		17:56	18:30	20:08	21 07:50 (LZ66)	20:40	20:56	25 06:29 (LZ64)		
29	07:31			06:58	06:06	07:31 (LZ66)	05:33	05:30	06:04 (LZ64)		
	17:15			19:32	20:09	15 07:46 (LZ66)	20:41	20:56	25 06:29 (LZ64)		
30	07:30			06:57	06:05	07:35 (LZ66)	05:32	05:30	06:04 (LZ64)		
	17:16			19:33	2 07:29 (LZ67)	20:10	20:42	20:56	24 06:28 (LZ64)		
31	07:29			06:55	07:21 (LZ67)		05:32	06:01 (LZ64)			
	17:18			19:34	13 07:34 (LZ67)		20:43	18 06:19 (LZ64)			
Potential sun hours	289		293	369	402		456	462			
Total, worst case	734		350	15	1169		80	734			

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

Calculation: Worst Case Shadow receptor: LoZ_05 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -94.1° Slope: 90.0° (58)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

July			August			September			October			November			December		
1	05:31		06:04 (LZ64)	05:57		06:32	07:12 (LZ67)	07:06				06:44			07:22		08:15 (LZ74)
	20:55	25	06:29 (LZ64)	20:34		19:47	08:03 (LZ66)	18:52				17:02			16:34	32	08:47 (LZ74)
2	05:31		06:05 (LZ64)	05:58		06:33	07:11 (LZ67)	07:07				06:46			07:24		08:15 (LZ74)
	20:55	25	06:30 (LZ64)	20:33		19:45	08:03 (LZ66)	18:51				17:00			16:34	32	08:47 (LZ74)
3	05:32		06:05 (LZ64)	05:59		06:34	07:10 (LZ67)	07:08				06:47			07:25		08:15 (LZ74)
	20:55	24	06:29 (LZ64)	20:32		19:44	08:02 (LZ66)	18:49				16:59			16:33	33	08:48 (LZ74)
4	05:33		06:06 (LZ64)	06:00		06:35	07:09 (LZ67)	07:09				06:48			07:26		08:16 (LZ74)
	20:55	24	06:30 (LZ64)	20:30		19:42	08:01 (LZ66)	18:47				16:58			16:33	32	08:48 (LZ74)
5	05:33		06:05 (LZ64)	06:02		06:36	07:09 (LZ67)	07:11				06:50			07:27		08:16 (LZ74)
	20:55	24	06:29 (LZ64)	20:29		19:40	07:59 (LZ66)	18:45				16:56			16:33	32	08:48 (LZ74)
6	05:34		06:06 (LZ64)	06:03		06:38	07:09 (LZ67)	07:12				06:51			07:28		08:16 (LZ74)
	20:54	23	06:29 (LZ64)	20:28		19:38	07:58 (LZ66)	18:43				16:55			16:33	32	08:48 (LZ74)
7	05:34		06:07 (LZ64)	06:04		06:39	07:09 (LZ67)	07:13				06:52			07:29		08:17 (LZ74)
	20:54	23	06:30 (LZ64)	20:26		19:36	07:56 (LZ66)	18:42				16:54			16:32	32	08:49 (LZ74)
8	05:35		06:07 (LZ64)	06:05		06:40	07:09 (LZ67)	07:14				06:53			07:30		08:17 (LZ74)
	20:54	22	06:29 (LZ64)	20:25		19:35	07:54 (LZ66)	18:40				16:53			16:32	32	08:49 (LZ74)
9	05:36		06:08 (LZ64)	06:06		06:41	07:09 (LZ67)	07:15				06:55			07:31		08:18 (LZ74)
	20:53	21	06:29 (LZ64)	20:24		19:33	07:52 (LZ66)	18:38				16:51			16:32	32	08:50 (LZ74)
10	05:37		06:08 (LZ64)	06:07		06:42	07:11 (LZ67)	07:17				06:56			07:32		08:18 (LZ74)
	20:53	21	06:29 (LZ64)	20:22		19:31	07:50 (LZ66)	18:36				16:50			16:32	32	08:50 (LZ74)
11	05:37		06:08 (LZ64)	06:08		06:43	07:11 (LZ67)	07:18				06:57			07:33		08:19 (LZ74)
	20:52	20	06:28 (LZ64)	20:21		19:29	07:45 (LZ66)	18:35				16:49			16:32	31	08:50 (LZ74)
12	05:38		06:09 (LZ64)	06:09		06:44	07:13 (LZ67)	07:19				06:59			07:33		08:20 (LZ74)
	20:52	19	06:28 (LZ64)	20:19		19:27	07:26 (LZ67)	18:33				16:48			16:32	31	08:51 (LZ74)
13	05:39		06:10 (LZ64)	06:10	07:41 (LZ66)	06:45	07:16 (LZ67)	07:20				07:00			07:34		08:20 (LZ74)
	20:51	18	06:28 (LZ64)	20:18	07:52 (LZ66)	19:25	07:22 (LZ67)	18:31				16:47			16:32	31	08:51 (LZ74)
14	05:40		06:11 (LZ64)	06:12	07:38 (LZ66)	06:47		07:21			08:17 (LZ73)	07:01			07:35		08:20 (LZ74)
	20:51	16	06:27 (LZ64)	20:16	07:55 (LZ66)	19:24		18:30	5		08:22 (LZ73)	16:46			16:33	31	08:51 (LZ74)
15	05:41		06:12 (LZ64)	06:13	07:35 (LZ66)	06:48		07:23			08:12 (LZ73)	07:03		08:25 (LZ74)	07:36		08:21 (LZ74)
	20:50	15	06:27 (LZ64)	20:15	07:57 (LZ66)	19:22		18:28	13		08:25 (LZ73)	16:45	2	08:27 (LZ74)	16:33	31	08:52 (LZ74)
16	05:41		06:13 (LZ64)	06:14	07:34 (LZ66)	06:49		07:24			08:10 (LZ73)	07:04		08:20 (LZ74)	07:37		08:22 (LZ74)
	20:49	12	06:25 (LZ64)	20:13	08:00 (LZ66)	19:20		18:26	17		08:27 (LZ73)	16:44	12	08:32 (LZ74)	16:33	30	08:52 (LZ74)
17	05:42		06:15 (LZ64)	06:15	07:32 (LZ66)	06:50		07:25			08:09 (LZ73)	07:05		08:19 (LZ74)	07:37		08:22 (LZ74)
	20:48	8	06:23 (LZ64)	20:12	08:01 (LZ66)	19:18		18:25	20		08:29 (LZ73)	16:43	16	08:35 (LZ74)	16:33	30	08:52 (LZ74)
18	05:43			06:16	07:31 (LZ66)	06:51		07:26			08:08 (LZ73)	07:07		08:17 (LZ74)	07:38		08:22 (LZ74)
	20:48			20:10	08:02 (LZ66)	19:16		18:23	21		08:29 (LZ73)	16:42	19	08:36 (LZ74)	16:34	31	08:53 (LZ74)
19	05:44			06:17	07:29 (LZ66)	06:52		07:28			08:06 (LZ73)	07:08		08:16 (LZ74)	07:39		08:23 (LZ74)
	20:47			20:09	08:03 (LZ66)	19:14		18:21	24		08:30 (LZ73)	16:41	21	08:37 (LZ74)	16:34	31	08:54 (LZ74)
20	05:45			06:18	07:28 (LZ66)	06:53		07:29			08:06 (LZ73)	07:09		08:16 (LZ74)	07:39		08:23 (LZ74)
	20:46			20:07	08:03 (LZ66)	19:13		18:20	25		08:31 (LZ73)	16:41	23	08:39 (LZ74)	16:34	31	08:54 (LZ74)
21	05:46			06:19	07:27 (LZ66)	06:54		07:30			08:06 (LZ73)	07:10		08:15 (LZ74)	07:40		08:24 (LZ74)
	20:45			20:06	08:04 (LZ66)	19:11		18:18	25		08:31 (LZ73)	16:40	25	08:40 (LZ74)	16:35	31	08:55 (LZ74)
22	05:47			06:21	07:26 (LZ66)	06:56		07:31			08:05 (LZ73)	07:12		08:14 (LZ74)	07:40		08:24 (LZ74)
	20:44			20:04	08:04 (LZ66)	19:09		18:16	25		08:30 (LZ73)	16:39	27	08:41 (LZ74)	16:35	31	08:55 (LZ74)
23	05:48			06:22	07:25 (LZ66)	06:57		07:33			08:05 (LZ73)	07:13		08:14 (LZ74)	07:41		08:25 (LZ74)
	20:44			20:02	08:05 (LZ66)	19:07		18:15	26		08:31 (LZ73)	16:38	28	08:42 (LZ74)	16:36	31	08:56 (LZ74)
24	05:49			06:23	07:25 (LZ66)	06:58		07:34			08:05 (LZ73)	07:14		08:14 (LZ74)	07:41		08:25 (LZ74)
	20:43			20:01	08:05 (LZ66)	19:05		18:13	25		08:30 (LZ73)	16:38	29	08:43 (LZ74)	16:36	31	08:56 (LZ74)
25	05:50			06:24	07:24 (LZ66)	06:59		06:35			07:05 (LZ73)	07:15		08:14 (LZ74)	07:42		08:25 (LZ74)
	20:42			19:59	08:05 (LZ66)	19:03		17:12	24		07:29 (LZ73)	16:37	29	08:43 (LZ74)	16:37	31	08:56 (LZ74)
26	05:51			06:25	07:23 (LZ66)	07:00		06:36			07:06 (LZ73)	07:17		08:14 (LZ74)	07:42		08:27 (LZ74)
	20:41			19:57	08:05 (LZ66)	19:02		17:10	23		07:29 (LZ73)	16:36	30	08:44 (LZ74)	16:38	30	08:57 (LZ74)
27	05:52			06:26	07:23 (LZ66)	07:01		06:38			07:06 (LZ73)	07:18		08:14 (LZ74)	07:42		08:27 (LZ74)
	20:40			19:56	08:05 (LZ66)	19:00		17:09	22		07:28 (LZ73)	16:36	31	08:45 (LZ74)	16:38	30	08:57 (LZ74)
28	05:53			06:27	07:19 (LZ67)	07:02		06:39			07:08 (LZ73)	07:19		08:14 (LZ74)	07:43		08:27 (LZ74)
	20:39			19:54	08:05 (LZ66)	18:58		17:07	20		07:28 (LZ73)	16:35	31	08:45 (LZ74)	16:39	31	08:58 (LZ74)
29	05:54			06:29	07:17 (LZ67)	07:04		06:40			07:09 (LZ73)	07:20		08:14 (LZ74)	07:43		08:27 (LZ74)
	20:37			19:52	08:05 (LZ66)	18:56		17:06	17		07:26 (LZ73)	16:35	31	08:45 (LZ74)	16:40	31	08:58 (LZ74)
30	05:55			06:30	07:15 (LZ67)	07:05		06:42			07:10 (LZ73)	07:21		08:14 (LZ74)	07:43		08:27 (LZ74)
	20:36			19:51	08:05 (LZ66)	18:54		17:04	14		07:24 (LZ73)	16:34	32	08:46 (LZ74)	16:40	31	08:58 (LZ74)
31	05:56			06:31	07:13 (LZ67)			06:43			07:14 (LZ73)				07:43		08:29 (LZ74)
	20:35			19:49	08:04 (LZ66)			17:03	8		07:22 (LZ73)				16:41	31	09:00 (LZ74)
Potential sun hours	468			433		376		342			291				279		
Total, worst case	340			680		526		354			386				968		

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: LoZ_06 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -90.4° Slope: 90.0° (59)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June
1	07:44 16:42	07:28 17:19	08:12 (LZ74) 08:45 (LZ74)	06:48 17:57	07:18 (LZ73) 07:28 (LZ73)	06:03 20:11
2	07:44 16:43	07:27 17:21	08:12 (LZ74) 08:45 (LZ74)	06:46 17:58	07:15 (LZ73) 07:30 (LZ73)	06:02 20:12
3	07:44 16:44	07:25 17:22	08:11 (LZ74) 08:45 (LZ74)	06:45 18:00	07:12 (LZ73) 07:31 (LZ73)	06:00 20:13
4	07:44 16:45	07:24 17:23	08:11 (LZ74) 08:46 (LZ74)	06:43 18:01	07:12 (LZ73) 07:33 (LZ73)	05:59 20:15
5	07:44 16:46	07:23 17:25	08:11 (LZ74) 08:46 (LZ74)	06:41 18:02	07:10 (LZ73) 07:34 (LZ73)	05:58 20:16
6	07:44 16:47	07:22 17:26	08:12 (LZ74) 08:47 (LZ74)	06:40 18:03	07:09 (LZ73) 07:34 (LZ73)	05:56 20:17
7	07:43 16:48	07:21 17:27	08:11 (LZ74) 08:46 (LZ74)	06:38 18:05	07:08 (LZ73) 07:34 (LZ73)	05:55 20:18
8	07:43 16:49	07:19 17:29	08:12 (LZ74) 08:46 (LZ74)	06:36 18:06	07:08 (LZ73) 07:34 (LZ73)	05:54 20:19
9	07:43 16:50	07:18 17:30	08:12 (LZ74) 08:46 (LZ74)	06:34 18:07	07:08 (LZ73) 07:34 (LZ73)	05:52 20:20
10	07:43 16:51	07:17 17:32	08:12 (LZ74) 08:45 (LZ74)	06:33 18:08	07:07 (LZ73) 07:33 (LZ73)	05:51 20:22
11	07:43 16:52	07:15 17:33	08:13 (LZ74) 08:45 (LZ74)	06:31 18:10	07:07 (LZ73) 07:33 (LZ73)	05:50 20:23
12	07:42 16:54	07:14 17:34	08:14 (LZ74) 08:45 (LZ74)	06:29 18:11	07:08 (LZ73) 07:33 (LZ73)	05:49 20:24
13	07:42 16:55	07:13 17:36	08:14 (LZ74) 08:44 (LZ74)	06:27 18:12	07:09 (LZ73) 07:31 (LZ73)	05:48 20:25
14	07:41 16:56	07:11 17:37	08:15 (LZ74) 08:43 (LZ74)	06:26 18:13	07:09 (LZ73) 07:30 (LZ73)	05:46 20:26
15	07:41 16:57	07:10 17:38	08:16 (LZ74) 08:41 (LZ74)	06:24 18:15	07:10 (LZ73) 07:28 (LZ73)	05:45 20:27
16	07:40 16:58	07:08 17:40	08:18 (LZ74) 08:40 (LZ74)	06:22 18:16	07:12 (LZ73) 07:25 (LZ73)	05:44 20:28
17	07:40 16:59	07:07 17:41	08:19 (LZ74) 08:38 (LZ74)	06:20 18:17	07:16 (LZ73) 07:22 (LZ73)	05:43 20:29
18	07:39 17:01	07:06 17:42	08:23 (LZ74) 08:35 (LZ74)	06:18 18:18	06:24 19:56	05:42 20:30
19	07:39 17:02	07:04 17:44	08:35 (LZ74) 18:20	06:17 18:20	06:22 19:57	05:41 20:31
20	07:38 17:03	07:02 17:45	08:33 (LZ74) 18:21	06:15 18:21	06:20 19:58	05:40 20:33
21	07:37 17:05	07:01 17:46	08:33 (LZ74) 18:22	06:13 18:22	06:19 19:59	05:39 20:34
22	07:37 17:06	07:00 18:24 (LZ74)	08:33 (LZ74) 18:23	06:11 18:23	06:17 20:00	05:38 20:35
23	07:36 17:07	06:58 18:25 (LZ74)	08:33 (LZ74) 18:24	06:09 18:24	06:15 20:02	05:38 20:36
24	07:35 17:08	06:56 18:26 (LZ74)	08:33 (LZ74) 18:25	06:08 18:25	06:14 20:03	05:37 20:37
25	07:34 17:10	06:55 18:27 (LZ74)	08:33 (LZ74) 18:26	06:06 18:26	06:12 20:04	05:36 20:38
26	07:33 17:11	06:53 18:28 (LZ74)	08:33 (LZ74) 18:27	06:04 18:27	06:11 20:05	05:35 20:39
27	07:33 17:12	06:51 18:29 (LZ74)	08:33 (LZ74) 18:28	06:02 18:28	06:09 20:06	05:34 20:40
28	07:32 17:14	06:50 18:30 (LZ74)	08:33 (LZ74) 18:29	06:00 18:29	06:08 20:07	05:34 20:41
29	07:31 17:15	06:48 18:31 (LZ74)	08:33 (LZ74) 18:30	05:58 18:30	06:06 20:08	05:33 20:42
30	07:30 17:17	06:46 18:32 (LZ74)	08:33 (LZ74) 18:31	06:57 18:31	06:05 20:09	05:32 20:43
31	07:29 17:18	06:44 18:33 (LZ74)	08:33 (LZ74) 18:32	06:55 18:32	06:03 20:10	05:30 20:44
Potential sun hours	289	293	369	402	456	462
Total, worst case	221	540	349	285	1106	1136

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

Calculation: Worst Case Shadow receptor: LoZ_06 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -90.4° Slope: 90.0° (59)

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:55 38	06:44 (LZ66) 07:22 (LZ66) 20:34	05:57 07:25 (LZ66) 19:47	07:06 18:52 24	07:47 (LZ73) 08:11 (LZ73) 17:02	06:44 08:15 (LZ74) 16:34
2	05:31 20:55 39	06:44 (LZ66) 07:23 (LZ66) 20:33	05:58 06:50 (LZ66) 19:45	07:07 18:51 25	07:46 (LZ73) 08:11 (LZ73) 17:00	06:46 07:41 (LZ74) 16:34
3	05:32 20:55 38	06:44 (LZ66) 07:22 (LZ66) 20:32	05:59 06:50 (LZ66) 19:44	07:08 18:49 26	07:45 (LZ73) 08:11 (LZ73) 16:59	06:47 07:41 (LZ74) 16:33
4	05:33 20:55 39	06:44 (LZ66) 07:23 (LZ66) 20:30	06:00 06:51 (LZ66) 19:42	07:09 18:47 26	07:46 (LZ73) 08:12 (LZ73) 16:58	06:48 07:41 (LZ74) 16:33
5	05:33 20:55 39	06:44 (LZ66) 07:23 (LZ66) 20:29	06:02 06:52 (LZ66) 19:40	07:11 18:45 26	07:45 (LZ73) 08:11 (LZ73) 16:56	06:50 07:41 (LZ74) 16:33
6	05:34 20:54 40	06:44 (LZ66) 07:24 (LZ66) 20:28	06:03 06:54 (LZ66) 19:38	07:12 18:43 26	07:45 (LZ73) 08:11 (LZ73) 16:55	06:51 07:41 (LZ74) 16:33
7	05:34 20:54 40	06:44 (LZ66) 07:24 (LZ66) 20:26	06:04 06:55 (LZ66) 19:36	07:13 18:42 26	07:44 (LZ73) 08:10 (LZ73) 16:54	06:52 07:42 (LZ74) 16:32
8	05:35 20:54 40	06:44 (LZ66) 07:24 (LZ66) 20:25	06:05 06:56 (LZ67) 19:35	07:14 18:40 24	07:45 (LZ73) 08:09 (LZ73) 16:53	06:53 07:42 (LZ74) 16:32
9	05:36 20:53 41	06:44 (LZ66) 07:25 (LZ66) 20:24	06:06 06:55 (LZ67) 19:33	07:15 18:38 22	07:46 (LZ73) 08:08 (LZ73) 16:51	06:55 07:42 (LZ74) 16:32
10	05:37 20:53 41	06:44 (LZ66) 07:25 (LZ66) 20:22	06:07 06:53 (LZ67) 19:31	07:17 18:36 21	07:46 (LZ73) 08:07 (LZ73) 16:50	06:56 07:43 (LZ74) 16:32
11	05:37 20:52 41	06:44 (LZ66) 07:25 (LZ66) 20:21	06:08 06:52 (LZ67) 19:29	07:18 18:35 18	07:47 (LZ73) 08:05 (LZ73) 16:49	06:57 07:43 (LZ74) 16:32
12	05:38 20:52 42	06:44 (LZ66) 07:26 (LZ66) 20:19	06:09 06:51 (LZ67) 19:27	07:19 18:33 13	07:49 (LZ73) 08:02 (LZ73) 16:48	06:59 07:45 (LZ74) 16:32
13	05:39 20:51 42	06:44 (LZ66) 07:26 (LZ66) 20:18	06:10 06:51 (LZ67) 19:25	07:20 18:31 6	07:53 (LZ73) 07:59 (LZ73) 16:47	07:00 08:14 (LZ74) 16:32
14	05:40 20:50 43	06:44 (LZ66) 07:27 (LZ66) 20:16	06:12 06:50 (LZ67) 19:24	07:21 18:30 23	07:01 16:46 27	07:01 08:13 (LZ74) 16:33
15	05:41 20:50 42	06:45 (LZ66) 07:27 (LZ66) 20:15	06:13 06:49 (LZ67) 19:22	07:23 18:28 24	07:03 16:45 25	07:03 08:13 (LZ74) 16:33
16	05:41 20:49 42	06:44 (LZ66) 07:26 (LZ66) 20:13	06:14 06:50 (LZ67) 19:20	07:24 18:26 25	07:04 16:44 23	07:04 08:11 (LZ74) 16:33
17	05:42 20:48 43	06:44 (LZ66) 07:27 (LZ66) 20:12	06:15 06:50 (LZ67) 19:18	07:25 18:25 26	07:05 16:43 20	07:05 08:11 (LZ74) 16:33
18	05:43 20:48 43	06:44 (LZ66) 07:27 (LZ66) 20:10	06:16 06:50 (LZ67) 19:16	07:26 18:23 27	07:07 16:42 17	07:07 08:09 (LZ74) 16:34
19	05:44 20:47 43	06:44 (LZ66) 07:27 (LZ66) 20:09	06:17 06:50 (LZ67) 19:14	07:28 18:21 29	07:08 16:41 13	07:08 08:07 (LZ74) 16:34
20	05:45 20:46 42	06:45 (LZ66) 07:27 (LZ66) 20:07	06:18 06:50 (LZ67) 19:13	07:29 18:20 30	07:09 16:41 5	07:09 08:04 (LZ74) 16:34
21	05:46 20:45 43	06:45 (LZ66) 07:28 (LZ66) 20:06	06:19 06:50 (LZ67) 19:11	07:30 18:18 31	07:10 16:40 12	07:10 16:35 13
22	05:47 20:44 43	06:45 (LZ66) 07:28 (LZ66) 20:04	06:21 06:51 (LZ67) 19:09	07:31 18:16 32	07:12 16:39 13	07:12 16:35 14
23	05:48 20:44 43	06:45 (LZ66) 07:28 (LZ66) 20:02	06:22 06:52 (LZ67) 19:07	07:33 18:15 5	07:13 16:38 14	07:13 16:36 15
24	05:49 20:43 43	06:45 (LZ66) 07:28 (LZ66) 20:01	06:23 06:53 (LZ67) 19:05	07:34 18:13 15	07:14 16:38 15	07:14 16:36 16
25	05:50 20:42 42	06:46 (LZ66) 07:28 (LZ66) 19:59	06:24 06:55 (LZ67) 19:03	06:35 17:12 20	07:15 16:37 21	07:15 16:37 17
26	05:51 20:41 41	06:46 (LZ66) 07:27 (LZ66) 19:57	07:00 19:02 12	06:36 17:10 23	07:17 16:36 24	07:17 16:38 18
27	05:52 20:40 41	06:46 (LZ66) 07:27 (LZ66) 19:56	07:01 19:00 13	06:38 17:09 26	07:18 16:36 25	07:18 16:38 19
28	05:53 20:39 40	06:47 (LZ66) 07:27 (LZ66) 19:54	07:02 18:58 17	06:39 17:07 28	07:19 16:35 26	07:19 16:39 20
29	05:54 20:37 40	06:47 (LZ66) 07:27 (LZ66) 19:52	07:04 18:56 20	06:40 17:06 29	07:20 16:35 30	07:20 16:40 21
30	05:55 20:36 38	06:48 (LZ66) 07:26 (LZ66) 19:51	07:05 18:54 22	06:42 17:04 32	07:21 16:34 31	07:21 16:40 22
31	05:56 20:35 37	06:48 (LZ66) 07:25 (LZ66) 19:49	06:31 19:49 37	06:43 17:03 33	07:22 16:34 34	07:22 16:41 23
Potential sun hours	468	433	376	342	291	279
Total, worst case	1269	590	71	494	562	

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

Calculation: Worst Case Shadow receptor: SeV_01 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -92.7° Slope: 90.0° (44)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June
1	07:44 16:42	07:28 17:19	06:48 17:57	07:20 (LZ26) 06:53	07:18 (LZ25) 06:03	05:31 20:44
2	07:44 16:43	07:27 17:21	06:47 17:58	07:19 (LZ26) 06:51	07:18 (LZ25) 06:02	05:31 20:45
3	07:44 16:44	07:26 17:22	06:45 18:00	07:19 (LZ26) 06:50	07:17 (LZ25) 06:00	05:30 20:46
4	07:44 16:45	07:24 17:23	06:43 18:01	07:18 (LZ26) 06:48	07:16 (LZ25) 05:59	05:30 20:47
5	07:44 16:46	07:23 17:25	06:41 18:02	07:17 (LZ26) 06:46	07:16 (LZ25) 05:58	05:29 20:47
6	07:44 16:47	07:22 17:26	06:40 18:03	07:17 (LZ26) 06:44	07:15 (LZ25) 05:56	05:29 20:48
7	07:44 16:48	07:21 17:28	06:38 18:05	07:17 (LZ26) 06:42	07:16 (LZ25) 05:55	05:28 20:49
8	07:44 16:49	07:20 17:29	06:36 18:06	07:17 (LZ26) 06:41	07:16 (LZ25) 05:54	05:28 20:49
9	07:43 16:50	07:18 17:30	06:35 18:07	07:17 (LZ26) 06:39	07:16 (LZ25) 05:52	05:28 20:50
10	07:43 16:51	07:17 17:32	06:33 18:09	07:17 (LZ26) 06:37	07:16 (LZ25) 05:51	05:28 20:51
11	07:43 16:52	07:16 17:33	06:31 18:10	07:18 (LZ26) 06:35	07:18 (LZ25) 05:50	05:27 20:51
12	07:42 16:53	07:14 17:34	06:29 18:11	07:18 (LZ26) 06:34	07:19 (LZ25) 05:49	05:27 20:52
13	07:42 16:55	07:13 17:36	06:27 18:12	07:19 (LZ26) 06:32	07:21 (LZ25) 05:48	05:27 20:52
14	07:42 16:56	07:12 17:37	06:26 18:14	07:20 (LZ26) 06:30	07:30 (LZ25) 05:46	05:27 20:53
15	07:41 16:57	07:10 17:38	06:24 18:15	07:22 (LZ26) 06:29	05:45 20:27	05:27 20:53
16	07:41 16:58	07:09 17:40	06:22 18:16	07:24 (LZ26) 06:27	05:44 20:29	05:27 20:54
17	07:40 16:59	07:07 17:41	06:20 18:17	07:35 (LZ26) 06:25	05:43 20:30	05:27 20:54
18	07:40 17:01	07:06 17:43	06:19 18:18	06:24 19:56	05:42 20:31	05:27 20:54
19	07:39 17:02	07:04 17:44	06:17 18:20	06:22 19:57	05:41 20:32	05:27 20:55
20	07:38 17:03	07:03 17:45	06:15 18:21	06:20 19:58	05:40 20:33	05:27 20:55
21	07:38 17:05	07:01 17:47	06:13 18:22	06:19 19:59	05:39 20:34	05:27 20:55
22	07:37 17:06	07:00 17:48	06:11 18:23	06:17 20:01	05:38 20:35	05:28 20:55
23	07:36 17:07	06:58 17:49	06:09 18:25	06:15 20:02	05:37 20:36	05:28 20:56
24	07:35 17:08	06:56 17:51	06:08 18:26	06:14 20:03	05:37 20:37	05:28 20:56
25	07:35 17:10	06:55 17:52	06:06 18:27	06:12 20:04	05:36 20:38	05:28 20:56
26	07:34 17:11	06:53 17:53	06:04 18:28	06:11 20:05	05:35 20:39	05:29 20:56
27	07:33 17:12	06:52 17:54	06:02 18:29	06:09 20:07	05:34 20:40	06:01 (LZ13) 05:29
28	07:32 17:14	06:50 17:56	06:00 18:31	06:28 (LZ25) 06:08	05:34 20:41	06:07 (LZ13) 05:29
29	07:31 17:15		06:59 19:32	07:24 (LZ25) 06:06	05:33 20:42	06:09 (LZ13) 05:30
30	07:30 17:17		06:57 19:33	07:22 (LZ25) 06:05	05:32 20:42	06:10 (LZ13) 05:30
31	07:29 17:18		06:55 19:34	07:20 (LZ25) 07:41 (LZ25)	05:32 20:43	06:12 (LZ13) 05:30
Potential sun hours	289	293	369	402	456	462
Total, worst case		85	496	284	60	698

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: SeV_01 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -92.7° Slope: 90.0° (44)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July				August				September				October				November		December	
1	05:31		05:59 (LZ13)	05:57				06:32	07:17 (LZ25)	07:06		07:57 (LZ26)	06:44	07:23						
	20:56	23	06:22 (LZ13)	20:34				19:47	18	07:35 (LZ25)	18:53	26	08:23 (LZ26)	17:02	16:34					
2	05:31		05:58 (LZ13)	05:58				06:33		07:15 (LZ25)	07:07		07:56 (LZ26)	06:46	07:24					
	20:56	24	06:22 (LZ13)	20:33				19:45	21	07:36 (LZ25)	18:51	28	08:24 (LZ26)	17:00	16:34					
3	05:32		05:59 (LZ13)	05:59				06:34		07:14 (LZ25)	07:08		07:56 (LZ26)	06:47	07:25					
	20:55	23	06:22 (LZ13)	20:32				19:44	23	07:37 (LZ25)	18:49	29	08:25 (LZ26)	16:59	16:33					
4	05:33		06:00 (LZ13)	06:00				06:35		07:13 (LZ25)	07:10		07:55 (LZ26)	06:48	07:26					
	20:55	23	06:23 (LZ13)	20:31				19:42	24	07:37 (LZ25)	18:47	30	08:25 (LZ26)	16:58	16:33					
5	05:33		06:00 (LZ13)	06:02				06:36		07:12 (LZ25)	07:11		07:54 (LZ26)	06:50	07:27					
	20:55	22	06:22 (LZ13)	20:29				19:40	25	07:37 (LZ25)	18:45	31	08:25 (LZ26)	16:56	16:33					
6	05:34		06:00 (LZ13)	06:03				06:38		07:11 (LZ25)	07:12		07:53 (LZ26)	06:51	07:28					
	20:55	23	06:23 (LZ13)	20:28				19:38	26	07:37 (LZ25)	18:44	32	08:25 (LZ26)	16:55	16:33					
7	05:34		06:01 (LZ13)	06:04				06:39		07:11 (LZ25)	07:13		07:52 (LZ26)	06:52	07:29					
	20:54	22	06:23 (LZ13)	20:27				19:37	25	07:36 (LZ25)	18:42	33	08:25 (LZ26)	16:54	16:32					
8	05:35		06:01 (LZ13)	06:05				06:40		07:10 (LZ25)	07:14		07:53 (LZ26)	06:54	07:30					
	20:54	21	06:22 (LZ13)	20:25				19:35	26	07:36 (LZ25)	18:40	32	08:25 (LZ26)	16:53	16:32					
9	05:36		06:02 (LZ13)	06:06				06:41		07:11 (LZ25)	07:16		07:53 (LZ26)	06:55	07:31					
	20:53	20	06:22 (LZ13)	20:24				19:33	25	07:36 (LZ25)	18:38	31	08:24 (LZ26)	16:52	16:32					
10	05:37		06:03 (LZ13)	06:07				06:42		07:11 (LZ25)	07:17		07:53 (LZ26)	06:56	07:32					
	20:53	19	06:22 (LZ13)	20:23				19:31	24	07:35 (LZ25)	18:37	31	08:24 (LZ26)	16:50	16:32					
11	05:37		06:03 (LZ13)	06:08				06:43		07:11 (LZ25)	07:18		07:53 (LZ26)	06:58	07:33					
	20:52	18	06:21 (LZ13)	20:21				19:29	23	07:34 (LZ25)	18:35	29	08:22 (LZ26)	16:49	16:32					
12	05:38		06:04 (LZ13)	06:09				06:44		07:12 (LZ25)	07:19		07:54 (LZ26)	06:59	07:34					
	20:52	17	06:21 (LZ13)	20:20				19:27	21	07:33 (LZ25)	18:33	28	08:22 (LZ26)	16:48	16:32					
13	05:39		06:05 (LZ13)	06:10				06:46		07:13 (LZ25)	07:20		07:54 (LZ26)	07:00	07:35					
	20:51	15	06:20 (LZ13)	20:18				19:26	18	07:31 (LZ25)	18:31	27	08:21 (LZ26)	16:47	16:32					
14	05:40		06:06 (LZ13)	06:12				06:47		07:14 (LZ25)	07:22		07:55 (LZ26)	07:02	07:35					
	20:51	14	06:20 (LZ13)	20:17				19:24	15	07:29 (LZ25)	18:30	24	08:19 (LZ26)	16:46	16:33					
15	05:41		06:07 (LZ13)	06:13				06:48		07:17 (LZ25)	07:23		07:56 (LZ26)	07:03	07:36					
	20:50	12	06:19 (LZ13)	20:15				19:22	8	07:25 (LZ25)	18:28	21	08:17 (LZ26)	16:45	16:33					
16	05:41		06:08 (LZ13)	06:14				06:49			07:24		07:58 (LZ26)	07:04	07:37					
	20:49	9	06:17 (LZ13)	20:14				19:20			18:26	18	08:16 (LZ26)	16:44	16:33					
17	05:42		06:12 (LZ13)	06:15				06:50			07:25		08:01 (LZ26)	07:06	07:38					
	20:49	2	06:14 (LZ13)	20:12				19:18			18:25	11	08:12 (LZ26)	16:43	16:33					
18	05:43			06:16				06:51			07:27			07:07	07:38					
	20:48			20:11				19:16			18:23			16:42	16:34					
19	05:44			06:17				06:52			07:28			07:08	07:39					
	20:47			20:09				19:15			18:21			16:41	16:34					
20	05:45			06:18				06:53			07:29			07:09	07:39					
	20:46			20:07				19:13			18:20			16:41	16:34					
21	05:46			06:20				06:55			07:30			07:11	07:40					
	20:46			20:06				19:11			18:18			16:40	16:35					
22	05:47			06:21				06:56			07:32			07:12	07:41					
	20:45			20:04				19:09			18:16			16:39	16:35					
23	05:48			06:22				06:57			07:33			07:13	07:41					
	20:44			20:03				19:07			18:15			16:38	16:36					
24	05:49			06:23				06:58			07:34			07:14	07:42					
	20:43			20:01				19:05			18:13			16:38	16:36					
25	05:50			06:24				06:59			06:35			07:16	07:42					
	20:42			19:59				19:04			17:12			16:37	16:37					
26	05:51			06:25				07:00			06:37			07:17	07:42					
	20:41			19:58				19:02			17:10			16:36	16:38					
27	05:52			06:26				07:01		08:09 (LZ26)	06:38			07:18	07:43					
	20:40			19:56				19:00	7	08:16 (LZ26)	17:09			16:36	16:38					
28	05:53			06:27				07:03		08:04 (LZ26)	06:39			07:19	07:43					
	20:39			19:54				18:58	15	08:19 (LZ26)	17:07			16:35	16:39					
29	05:54			06:29				07:04		08:01 (LZ26)	06:41			07:20	07:43					
	20:38			19:52				18:56	20	08:21 (LZ26)	17:06			16:35	16:40					
30	05:55			06:30		07:22 (LZ25)		07:05		07:59 (LZ26)	06:42			07:22	07:43					
	20:37			19:51	9	07:31 (LZ25)		18:54	24	08:23 (LZ26)	17:04			16:34	16:40					
31	05:56			06:31		07:19 (LZ25)					06:43				07:44					
	20:35			19:49	15	07:34 (LZ25)					17:03				16:41					
Potential sun hours	468			433				376			342			291		279				
Total, worst case		307			24				388			461								

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

Calculation: Worst Case Shadow receptor: SeV_02 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -92.0° Slope: 90.0° (45)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March			April			May	June	July	August	September		October	November		December		
1	07:44 16:42	07:28 17:19	06:48 17:57			06:53 19:35			06:03 20:11	05:31 20:44	05:31 20:56	05:57 20:34	06:32 19:47	26	07:04 (LZ25) 07:30 (LZ25)	07:06 18:53	35	07:46 (LZ26) 08:21 (LZ26)	06:44 17:02	07:23 16:34
2	07:44 16:43	07:27 17:21	06:47 17:58			06:51 19:37			06:02 20:13	05:31 20:45	05:31 20:56	05:58 20:33	06:33 19:45	25	07:04 (LZ25) 07:29 (LZ25)	07:07 18:51	34	07:46 (LZ26) 08:20 (LZ26)	06:46 17:00	07:24 16:34
3	07:44 16:44	07:26 17:22	06:45 18:00	4		07:25 (LZ26) 19:38			06:00 20:14	05:30 20:46	05:32 20:55	05:59 20:32	06:34 19:44	24	07:04 (LZ25) 07:28 (LZ25)	07:08 18:49	33	07:47 (LZ26) 08:20 (LZ26)	06:47 16:59	07:25 16:33
4	07:44 16:45	07:24 17:23	06:43 18:01	15		07:19 (LZ26) 19:39			05:59 20:15	05:30 20:47	05:33 20:55	06:00 20:31	06:35 19:42	22	07:05 (LZ25) 07:27 (LZ25)	07:10 18:47	32	07:47 (LZ26) 08:19 (LZ26)	06:48 16:58	07:26 16:33
5	07:44 16:46	07:23 17:25	06:41 18:02			07:16 (LZ26) 19:40		07:14 (LZ25)	05:58 20:16	05:29 20:47	05:33 20:55	06:02 20:29	06:36 19:40	22	07:05 (LZ25) 07:25 (LZ25)	07:11 18:45	32	07:48 (LZ26) 08:18 (LZ26)	06:50 16:56	07:27 16:33
6	07:44 16:47	07:22 17:26	06:40 18:03	21		07:14 (LZ26) 19:44	11	07:25 (LZ25)	05:56 20:17	05:29 20:48	05:34 20:55	06:03 20:28	06:38 19:38	20	07:07 (LZ25) 07:23 (LZ25)	07:12 18:44	30	07:48 (LZ26) 08:16 (LZ26)	06:51 16:55	07:28 16:33
7	07:44 16:47	07:21 17:27	06:38 18:05	24		07:13 (LZ26) 19:43	16	07:27 (LZ25)	05:55 20:18	05:28 20:49	05:34 20:54	06:04 20:27	06:39 19:37	16	07:09 (LZ25) 07:20 (LZ25)	07:13 18:42	28	07:49 (LZ26) 08:15 (LZ26)	06:52 16:54	07:29 16:32
8	07:44 16:49	07:20 17:29	06:36 18:06			07:11 (LZ26) 19:41		07:08 (LZ25)	05:54 20:20	05:28 20:49	05:35 20:54	06:05 20:25	06:40 19:35	11	07:20 (LZ25)	07:14 18:40	28	07:51 (LZ26) 08:13 (LZ26)	06:54 16:53	07:30 16:32
9	07:43 16:50	07:18 17:30	06:35 18:07			07:10 (LZ26) 19:39		07:06 (LZ25)	05:52 20:21	05:28 20:50	05:36 20:53	06:06 20:24	06:41 19:33			07:16 18:38	18	07:53 (LZ26) 08:11 (LZ26)	06:55 16:52	07:31 16:32
10	07:43 16:51	07:17 17:32	06:33 18:09			07:09 (LZ26) 19:46	27	07:05 (LZ25)	05:51 20:22	05:28 20:51	05:37 20:53	06:07 20:23	06:42 19:31			07:17 18:37	11	07:56 (LZ26) 08:07 (LZ26)	06:56 16:50	07:32 16:32
11	07:43 16:52	07:16 17:33	06:31 18:10	32		07:09 (LZ26) 19:46	25	07:05 (LZ25)	05:50 20:23	05:27 20:51	05:37 20:52	06:08 20:21	06:43 19:29			07:18 18:35			06:58 16:49	07:33 16:32
12	07:42 16:53	07:14 17:34	06:29 18:11	34		07:08 (LZ26) 19:47	26	07:04 (LZ25)	05:49 20:24	05:27 20:52	05:38 20:52	06:09 20:20	06:44 19:27			07:19 18:33			06:59 16:48	07:34 16:32
13	07:42 16:55	07:13 17:36	06:27 18:12			07:07 (LZ26) 19:50	27	07:03 (LZ25)	05:48 20:25	05:27 20:52	05:39 20:51	06:10 20:18	06:46 19:26			07:20 18:31			07:00 16:47	07:35 16:32
14	07:42 16:56	07:12 17:37	06:26 18:14	35		07:07 (LZ26) 19:51	28	07:03 (LZ25)	05:46 20:26	05:27 20:53	05:40 20:51	06:12 20:17	06:47 19:24			07:22 18:30			07:02 16:46	07:35 16:33
15	07:41 16:57	07:10 17:38	06:24 18:15			07:06 (LZ26) 19:52	28	07:03 (LZ25)	05:45 20:27	05:27 20:53	05:41 20:50	06:13 20:15	06:48 19:22			07:23 18:28			07:03 16:45	07:36 16:33
16	07:41 16:58	07:09 17:40	06:22 18:16			07:06 (LZ26) 19:53	27	07:03 (LZ25)	05:44 20:29	05:27 20:54	05:41 20:49	06:14 20:14	06:49 19:20			07:24 18:26			07:04 16:44	07:37 16:33
17	07:40 16:59	07:07 17:41	06:20 18:17	34		07:07 (LZ26) 19:55	26	07:04 (LZ25)	05:43 20:30	05:27 20:54	05:42 20:49	06:15 20:12	06:50 19:18			07:25 18:25			07:05 16:43	07:38 16:33
18	07:40 17:01	07:06 17:43	06:18 18:18			07:07 (LZ26) 19:56	25	07:04 (LZ25)	05:42 20:31	05:27 20:54	05:43 20:48	06:16 20:11	06:51 19:16			07:27 18:23			07:07 16:42	07:38 16:34
19	07:39 17:02	07:04 17:44	06:17 18:20	33		07:07 (LZ26) 19:57	24	07:04 (LZ25)	05:41 20:32	05:27 20:55	05:44 20:47	06:17 20:09	06:52 19:15	5	08:05 (LZ26) 08:10 (LZ26)	07:27 18:23			07:08 16:41	07:39 16:34
20	07:38 17:03	07:03 17:45	06:15 18:21	31		07:08 (LZ26) 19:58	22	07:05 (LZ25)	05:40 20:33	05:27 20:55	05:45 20:46	06:18 20:07	06:53 19:13	15	08:16 (LZ26) 08:22 (LZ26)	07:29 18:26	15	08:17 (LZ26) 08:23 (LZ26)	07:09 16:41	07:39 16:35
21	07:38 17:05	07:01 17:47	06:13 18:22	30		07:08 (LZ26) 19:59	20	07:06 (LZ25)	05:39 20:34	05:27 20:55	05:46 20:46	06:20 20:06	6	07:23 (LZ25) 07:26 (LZ25)	19:13	20	08:18 (LZ26) 08:24 (LZ26)	07:11 16:40	07:40 16:35	
22	07:37 17:06	07:00 17:48	06:11 18:23			07:10 (LZ26) 19:57	17	07:07 (LZ25)	05:38 20:35	05:28 20:55	05:47 20:45	06:21 20:04	13	07:11 (LZ25) 07:28 (LZ25)	19:11	24	08:19 (LZ26) 08:25 (LZ26)	07:12 16:39	07:41 16:35	
23	07:36 17:07	06:58 17:49	06:09 18:25	24		07:11 (LZ26) 20:02	12	07:12 (LZ25)	05:37 20:36	05:28 20:56	05:48 20:44	06:22 20:03	17	07:09 (LZ25) 07:29 (LZ25)	19:07	29	08:20 (LZ26) 08:26 (LZ26)	07:13 16:38	07:41 16:36	
24	07:35 17:08	06:56 17:51	06:08 18:26			07:13 (LZ26) 20:03			05:37 20:37	05:28 20:56	05:49 20:43	06:23 20:01	22	07:08 (LZ25) 07:30 (LZ25)	19:05	32	08:22 (LZ26) 08:28 (LZ26)	07:14 16:38	07:42 16:36	
25	07:35 17:10	06:55 17:52	06:06 18:27	9		07:16 (LZ26) 20:04			05:36 20:38	05:28 20:56	05:50 20:42	06:24 19:59	25	07:06 (LZ25) 07:31 (LZ25)	19:04	33	08:23 (LZ26) 08:29 (LZ26)	07:16 16:37	07:42 16:37	
26	07:34 17:11	06:53 17:53	06:04 18:28			06:11 20:05			05:35 20:39	05:29 20:56	05:51 20:41	06:25 19:58	26	07:05 (LZ25) 07:32 (LZ25)	19:00	34	08:24 (LZ26) 08:30 (LZ26)	07:17 16:38	07:42 16:38	
27	07:33 17:12	06:52 17:54	06:02 18:29			06:09 20:07			05:34 20:40	05:29 20:56	05:52 20:40	06:26 19:56	27	07:05 (LZ25) 07:32 (LZ25)	19:01	35	08:25 (LZ26) 08:31 (LZ26)	07:18 16:39	07:43 16:39	
28	07:32 17:14	06:50 17:56	06:00 18:31			06:08 20:08			05:34 20:41	05:29 20:56	05:53 20:39	06:27 19:54	26	07:05 (LZ25) 07:32 (LZ25)	19:03	35	08:26 (LZ26) 08:32 (LZ26)	07:19 16:40	07:43 16:40	
29	07:31 17:15	06:49 17:57	05:59 18:32			06:06 20:09			05:33 20:42	05:30 20:56	05:54 20:38	06:29 19:52	27	07:04 (LZ25) 07:33 (LZ25)	19:04	36	08:27 (LZ26) 08:33 (LZ26)	07:20 16:41	07:43 16:41	
30	07:30 17:17	06:47 17:59	05:57 18:33			06:05 20:10			05:32 20:43	05:30 20:57	05:55 20:39	06:30 19:51	28	07:04 (LZ25) 07:34 (LZ25)	19:05	37	08:28 (LZ26) 08:34 (LZ26)	07:22 16:42	07:43 16:41	
31	07:29 17:18	06:45 18:01	05:55 18:34			06:03 20:11			05:32 20:44	05:30 20:58	05:56 20:40	06:31 19:49	27	07:04 (LZ25) 07:35 (LZ25)	19:06	38	08:29 (LZ26) 08:35 (LZ26)	07:23 16:43	07:44 16:41	
Potential sun hours	289	293	369			402			456	462	468	433	376	503		342	269	291	279	
Total, worst case			616			403						264								

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

Calculation: Worst Case Shadow receptor: SeV_03 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -92.6° Slope: 90.0° (46)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June
1	07:44 16:42	07:28 17:19	08:03 (LZ35) 17:57	06:53 19:35	07:53 (LZ26) 20:11	06:49 (LZ25) 20:44
2	07:44 16:43	07:27 17:21	08:04 (LZ35) 17:58	06:51 19:37	07:55 (LZ26) 20:13	06:49 (LZ25) 20:45
3	07:44 16:44	07:26 17:22	08:05 (LZ35) 18:00	06:50 19:38	07:55 (LZ26) 20:14	06:50 (LZ25) 20:46
4	07:44 16:45	07:24 17:23	08:05 (LZ35) 18:01	06:48 19:39	07:57 (LZ26) 20:15	06:51 (LZ25) 20:47
5	07:44 16:46	07:23 17:25	08:06 (LZ35) 18:02	06:46 19:40	07:58 (LZ26) 20:16	06:53 (LZ25) 20:47
6	07:44 16:47	07:22 17:26	08:09 (LZ35) 18:03	06:44 19:41	08:01 (LZ26) 20:17	06:55 (LZ25) 20:48
7	07:44 16:48	07:21 17:27	08:12 (LZ35) 18:05	06:42 19:43	08:14 (LZ26) 20:18	07:00 (LZ25) 20:49
8	07:44 16:49	07:20 17:29	08:17 (LZ35) 18:06	06:41 19:44	05:55 20:20	07:09 (LZ25) 20:49
9	07:43 16:50	07:18 17:30	08:09 (LZ35) 18:07	06:39 19:45	05:52 20:21	06:55 (LZ25) 20:50
10	07:43 16:51	07:17 17:32	08:12 (LZ35) 18:09	06:37 19:46	05:51 20:22	07:07 (LZ25) 20:51
11	07:43 16:52	07:16 17:33	08:17 (LZ35) 18:10	06:35 19:47	05:50 20:23	07:12 (LZ25) 20:51
12	07:42 16:53	07:14 17:34	08:20 (LZ35) 18:11	06:34 19:49	05:49 20:24	07:15 (LZ25) 20:52
13	07:42 16:55	07:13 17:36	08:24 (LZ35) 18:12	06:32 19:50	05:48 20:25	07:18 (LZ25) 20:52
14	07:42 16:56	07:12 17:37	08:28 (LZ35) 18:14	06:30 19:51	05:46 20:26	07:21 (LZ25) 20:53
15	07:41 16:57	07:10 17:38	08:32 (LZ35) 18:15	06:29 19:52	07:00 (LZ25) 20:27	07:24 (LZ25) 20:53
16	07:41 16:58	07:09 17:40	08:36 (LZ35) 18:16	06:27 19:53	07:09 (LZ25) 20:29	07:27 (LZ25) 20:54
17	07:40 16:59	07:07 17:41	08:40 (LZ35) 18:17	06:25 19:55	07:12 (LZ25) 20:30	07:30 (LZ25) 20:54
18	07:40 17:01	07:06 17:43	08:44 (LZ35) 18:18	06:24 19:56	07:14 (LZ25) 20:31	07:33 (LZ25) 20:54
19	07:39 17:02	07:04 17:44	08:48 (LZ35) 18:19	06:22 19:57	07:15 (LZ25) 20:32	07:36 (LZ25) 20:55
20	07:38 17:03	07:03 17:45	08:52 (LZ35) 18:20	06:20 19:58	07:16 (LZ25) 20:33	07:39 (LZ25) 20:55
21	07:38 17:05	07:01 17:47	08:56 (LZ35) 18:21	06:19 19:59	07:17 (LZ25) 20:34	07:42 (LZ25) 20:55
22	07:37 17:06	07:00 17:48	09:00 (LZ35) 18:22	06:17 20:01	07:18 (LZ25) 20:35	07:45 (LZ25) 20:55
23	07:36 17:07	06:58 17:49	09:04 (LZ35) 18:23	06:15 20:02	07:19 (LZ25) 20:36	07:48 (LZ25) 20:56
24	07:35 17:08	06:56 17:51	09:08 (LZ35) 18:24	06:14 20:03	07:20 (LZ25) 20:37	07:51 (LZ25) 20:56
25	07:35 17:10	06:55 17:52	09:12 (LZ35) 18:25	06:12 20:04	07:21 (LZ25) 20:38	07:54 (LZ25) 20:56
26	07:34 17:11	06:53 17:53	09:16 (LZ35) 18:26	06:11 20:05	07:22 (LZ25) 20:39	07:57 (LZ25) 20:56
27	07:33 17:12	06:52 17:54	09:20 (LZ35) 18:27	06:09 20:07	07:23 (LZ25) 20:40	07:59 (LZ25) 20:56
28	07:32 17:14	06:50 17:56	09:24 (LZ35) 18:28	06:08 20:08	07:24 (LZ25) 20:41	08:02 (LZ25) 20:56
29	07:31 17:15	06:49 17:57	09:28 (LZ35) 18:29	06:06 20:09	07:25 (LZ25) 20:42	08:05 (LZ25) 20:56
30	07:30 17:17	06:48 17:58	09:32 (LZ35) 18:30	06:05 20:10	07:26 (LZ25) 20:43	08:08 (LZ25) 20:56
31	07:29 17:18	06:47 17:59	09:36 (LZ35) 18:31	06:04 20:11	07:27 (LZ25) 20:44	08:11 (LZ25) 20:56
Potential sun hours	289	293	369	402	456	462
Total, worst case	239	108	645	552	121	

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

Calculation: Worst Case Shadow receptor: SeV_03 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -92.6° Slope: 90.0° (46)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:56	05:57 20:34	06:32 19:47	07:06 18:53	07:52 (LZ26) 17:02	07:23 16:34
2	05:31 20:56	05:58 20:33	06:33 19:45	07:07 18:51	07:58 (LZ26) 17:00	07:24 16:34
3	05:32 20:55	05:59 20:32	06:34 19:44	07:08 18:49	06:47 16:59	07:25 16:33
4	05:33 20:55	06:00 20:31	06:35 19:42	07:10 18:47	06:48 16:58	07:41 (LZ35) 16:33
5	05:33 20:55	06:02 20:29	06:36 19:40	07:11 18:45	06:50 16:56	07:38 (LZ35) 16:33
6	05:34 20:55	06:03 20:28	07:07 (LZ25) 19:38	07:12 18:44	06:51 16:55	07:36 (LZ35) 16:33
7	05:34 20:54	06:04 20:27	07:14 (LZ25) 19:37	08:10 (LZ26) 18:42	06:52 16:54	07:36 (LZ35) 16:32
8	05:35 20:54	06:05 20:25	07:02 (LZ25) 19:35	07:51 (LZ26) 18:40	06:54 16:53	07:50 (LZ35) 16:32
9	05:36 20:53	06:06 20:24	07:19 (LZ25) 19:33	08:15 (LZ26) 18:38	06:55 16:52	07:53 (LZ35) 16:32
10	05:37 20:53	06:07 20:23	07:00 (LZ25) 19:31	07:50 (LZ26) 18:37	06:56 16:50	07:34 (LZ35) 16:32
11	05:37 20:52	06:08 20:21	07:21 (LZ25) 19:29	08:18 (LZ26) 18:35	07:55 (LZ35) 16:49	07:33 (LZ35) 16:32
12	05:38 20:52	06:09 20:20	07:22 (LZ25) 19:27	07:46 (LZ26) 18:33	07:55 (LZ35) 16:48	07:34 (LZ35) 16:32
13	05:39 20:51	06:10 20:18	06:56 (LZ25) 19:26	07:44 (LZ26) 18:31	07:00 16:47	07:33 (LZ35) 16:32
14	05:40 20:51	06:12 20:17	07:23 (LZ25) 19:24	08:20 (LZ26) 18:30	07:56 (LZ35) 16:46	07:34 (LZ35) 16:33
15	05:41 20:50	06:13 20:15	07:24 (LZ25) 19:22	07:42 (LZ26) 18:28	07:03 16:45	07:34 (LZ35) 16:33
16	05:41 20:49	06:14 20:14	06:55 (LZ25) 19:20	08:20 (LZ26) 18:26	07:04 16:44	07:34 (LZ35) 16:33
17	05:42 20:49	06:15 20:12	07:24 (LZ25) 19:18	08:20 (LZ26) 18:25	07:05 16:43	07:36 (LZ35) 16:33
18	05:43 20:48	06:16 20:11	06:54 (LZ25) 19:16	07:40 (LZ26) 18:23	07:07 16:42	07:36 (LZ35) 16:34
19	05:44 20:47	06:17 20:09	06:54 (LZ25) 19:15	07:39 (LZ26) 18:21	07:08 16:41	07:37 (LZ35) 16:34
20	05:45 20:46	06:18 20:07	06:54 (LZ25) 19:13	08:19 (LZ26) 18:20	07:09 16:41	07:38 (LZ35) 16:34
21	05:46 20:46	06:20 20:06	07:23 (LZ25) 19:11	08:19 (LZ26) 18:18	07:11 16:40	07:39 (LZ35) 16:35
22	05:47 20:45	06:21 20:04	06:54 (LZ25) 19:09	07:40 (LZ26) 18:16	07:12 16:39	07:53 (LZ35) 16:35
23	05:48 20:44	06:22 20:03	06:55 (LZ25) 19:07	07:40 (LZ26) 18:15	07:13 16:38	07:43 (LZ35) 16:36
24	05:49 20:43	06:23 20:01	06:55 (LZ25) 19:05	08:17 (LZ26) 18:13	07:14 16:38	07:51 (LZ35) 16:36
25	05:50 20:42	06:24 19:59	07:19 (LZ25) 19:04	07:40 (LZ26) 18:12	07:16 16:37	07:34 (LZ35) 16:37
26	05:51 20:41	06:25 19:58	06:57 (LZ25) 19:02	08:14 (LZ26) 18:10	07:17 16:36	07:35 (LZ35) 16:38
27	05:52 20:40	06:26 19:56	07:16 (LZ25) 19:00	07:43 (LZ26) 17:09	07:18 16:36	07:36 (LZ35) 16:38
28	05:53 20:39	06:27 19:54	07:14 (LZ25) 18:58	08:12 (LZ26) 17:07	07:19 16:35	07:37 (LZ35) 16:39
29	05:54 20:38	06:29 19:52	07:02 (LZ25) 18:56	07:04 (LZ26) 17:06	07:20 16:35	07:38 (LZ35) 16:40
30	05:55 20:37	06:30 19:51	07:11 (LZ25) 18:54	07:48 (LZ26) 17:04	07:22 16:34	07:39 (LZ35) 16:41
31	05:56 20:35	06:31 19:49		08:04 (LZ26) 17:03		07:44 16:41
Potential sun hours	468	433	376	342	291	279
Total, worst case		530	797	6	350	

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: SeV_04 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -91.0° Slope: 90.0° (47)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June
1	07:44 16:42	07:28 17:19	07:56 (LZ35) 08:16 (LZ35)	06:48 17:57	06:53 19:35	07:35 (LZ26) 08:12 (LZ26)
2	07:44 16:43	07:27 17:21	07:55 (LZ35) 08:17 (LZ35)	06:47 17:58	06:51 19:37	07:35 (LZ26) 08:13 (LZ26)
3	07:44 16:44	07:26 17:22	07:55 (LZ35) 08:17 (LZ35)	06:45 18:00	06:50 19:38	07:34 (LZ26) 08:13 (LZ26)
4	07:44 16:45	07:24 17:23	07:54 (LZ35) 08:17 (LZ35)	06:43 18:01	06:48 19:39	07:33 (LZ26) 08:13 (LZ26)
5	07:44 16:46	07:23 17:25	07:55 (LZ35) 08:17 (LZ35)	06:41 18:02	06:46 19:40	07:32 (LZ26) 08:13 (LZ26)
6	07:44 16:47	07:22 17:26	07:55 (LZ35) 08:18 (LZ35)	06:40 18:03	06:44 19:41	07:31 (LZ26) 08:12 (LZ26)
7	07:44 16:48	07:21 17:27	07:56 (LZ35) 08:18 (LZ35)	06:38 18:05	06:42 19:43	07:32 (LZ26) 08:13 (LZ26)
8	07:44 16:49	07:20 17:29	07:55 (LZ35) 08:17 (LZ35)	06:36 18:06	06:41 19:44	07:31 (LZ26) 08:12 (LZ26)
9	07:43 16:50	07:18 17:30	07:56 (LZ35) 08:17 (LZ35)	06:35 18:07	06:39 19:45	07:31 (LZ26) 08:11 (LZ26)
10	07:43 16:51	07:17 17:32	07:57 (LZ35) 08:16 (LZ35)	06:33 18:09	06:37 19:46	07:31 (LZ26) 08:10 (LZ26)
11	07:43 16:52	07:16 17:33	07:58 (LZ35) 08:15 (LZ35)	06:31 18:10	06:35 19:47	07:32 (LZ26) 08:10 (LZ26)
12	07:42 16:53	07:14 17:34	08:00 (LZ35) 08:14 (LZ35)	06:29 18:11	06:34 19:49	07:32 (LZ26) 08:09 (LZ26)
13	07:42 16:55	07:13 17:36	08:01 (LZ35) 08:11 (LZ35)	06:27 18:12	06:32 19:50	07:32 (LZ26) 08:07 (LZ26)
14	07:42 16:56	07:12 17:37	08:02 (LZ35) 18:14	06:26 18:14	06:30 19:51	07:33 (LZ26) 08:07 (LZ26)
15	07:41 16:57	07:10 17:38	08:03 (LZ35) 18:15	06:24 18:15	06:29 19:52	07:33 (LZ26) 08:05 (LZ26)
16	07:41 16:58	07:09 17:40	08:04 (LZ35) 18:16	06:22 18:16	06:27 19:53	07:34 (LZ26) 08:03 (LZ26)
17	07:40 16:59	07:07 17:41	08:05 (LZ35) 18:17	06:20 18:17	06:25 19:55	07:36 (LZ26) 08:02 (LZ26)
18	07:40 17:01	07:06 17:43	08:06 (LZ35) 18:18	06:18 18:18	06:24 19:56	07:37 (LZ26) 08:00 (LZ26)
19	07:39 17:02	07:04 17:44	08:07 (LZ35) 18:20	06:17 18:20	06:22 19:57	07:38 (LZ26) 07:57 (LZ26)
20	07:38 17:03	07:03 17:45	08:08 (LZ35) 18:21	06:15 18:21	06:20 19:58	07:42 (LZ26) 07:54 (LZ26)
21	07:38 17:05	07:01 17:47	08:09 (LZ35) 18:22	06:13 18:22	06:19 19:59	07:55 (LZ26) 08:06 (LZ26)
22	07:37 17:06	07:00 17:48	08:10 (LZ35) 18:23	06:11 18:23	06:17 20:01	07:56 (LZ26) 08:07 (LZ26)
23	07:36 17:07	06:58 17:49	08:11 (LZ35) 18:25	06:09 18:25	06:15 20:02	08:08 (LZ26) 08:08 (LZ26)
24	07:35 17:08	06:56 17:51	08:12 (LZ35) 18:26	06:08 18:26	06:14 20:03	08:09 (LZ26) 08:09 (LZ26)
25	07:35 17:10	06:55 17:52	08:13 (LZ35) 18:27	06:06 18:27	06:12 20:04	08:10 (LZ26) 06:45 (LZ25)
26	07:34 17:11	06:53 17:53	08:14 (LZ35) 18:28	06:04 18:28	06:11 20:05	08:11 (LZ26) 06:43 (LZ25)
27	07:33 17:12	06:52 17:54	08:15 (LZ35) 18:29	06:02 18:29	06:09 20:07	08:12 (LZ26) 06:40 (LZ25)
28	07:32 17:14	06:50 17:56	08:16 (LZ35) 18:31	06:00 18:31	06:08 20:08	08:13 (LZ26) 06:39 (LZ25)
29	07:31 17:15	06:48 17:57	08:17 (LZ35) 18:32	05:59 18:32	06:06 20:09	08:14 (LZ26) 06:37 (LZ25)
30	07:30 17:17	06:46 17:58	08:18 (LZ35) 18:33	05:57 18:33	06:05 20:10	08:15 (LZ26) 06:36 (LZ25)
31	07:29 17:18	06:44 17:59	08:19 (LZ35) 18:34	05:55 18:34	06:03 20:11	08:16 (LZ26) 06:35 (LZ25)
Potential sun hours	289	293	369	402	456	462
Total, worst case	66	257	182	796	498	

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

Calculation: Worst Case Shadow receptor: SeV_04 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -91.0° Slope: 90.0° (47)

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:56	05:57 20:34	06:45 (LZ25) 19:47	07:31 (LZ26) 18:53	06:44 17:02	07:26 (LZ35) 16:34
2	05:31 20:56	05:58 20:33	06:44 (LZ25) 19:45	07:30 (LZ26) 18:51	06:46 17:00	07:26 (LZ35) 16:34
3	05:32 20:55	05:59 20:32	06:44 (LZ25) 19:44	07:29 (LZ26) 18:49	06:47 16:59	07:25 (LZ35) 16:33
4	05:33 20:55	06:00 20:31	06:44 (LZ25) 19:42	07:28 (LZ26) 18:47	06:48 16:58	07:25 (LZ35) 16:33
5	05:33 20:55	06:02 20:29	06:43 (LZ25) 19:40	07:28 (LZ26) 18:45	06:50 16:56	07:25 (LZ35) 16:33
6	05:34 20:55	06:03 20:28	06:43 (LZ25) 19:38	07:28 (LZ26) 18:44	06:51 16:55	07:24 (LZ35) 16:33
7	05:34 20:54	06:04 20:27	06:43 (LZ25) 19:37	07:27 (LZ26) 18:42	06:52 16:54	07:25 (LZ35) 16:32
8	05:35 20:54	06:05 20:25	06:43 (LZ25) 19:35	07:27 (LZ26) 18:40	06:54 16:53	07:25 (LZ35) 16:32
9	05:36 20:53	06:06 20:24	06:43 (LZ25) 19:33	07:28 (LZ26) 18:38	06:55 16:52	07:26 (LZ35) 16:32
10	05:37 20:53	06:07 20:23	06:43 (LZ25) 19:31	07:28 (LZ26) 18:37	06:56 16:50	07:27 (LZ35) 16:32
11	05:37 20:52	06:08 20:21	06:43 (LZ25) 19:29	07:28 (LZ26) 18:35	06:58 16:49	07:27 (LZ35) 16:32
12	05:38 20:52	06:09 20:20	06:44 (LZ25) 19:27	07:29 (LZ26) 18:33	06:59 16:48	07:29 (LZ35) 16:32
13	05:39 20:51	06:10 20:18	06:44 (LZ25) 19:26	07:29 (LZ26) 18:31	07:00 16:47	07:30 (LZ35) 16:32
14	05:40 20:51	06:12 20:17	06:45 (LZ25) 19:24	07:30 (LZ26) 18:30	07:02 16:46	07:32 (LZ35) 16:33
15	05:41 20:50	06:13 20:15	06:47 (LZ25) 19:22	07:31 (LZ26) 18:28	07:03 16:45	07:34 (LZ35) 16:33
16	05:41 20:49	06:14 20:14	06:48 (LZ25) 19:20	07:32 (LZ26) 18:26	07:04 16:44	07:37 16:33
17	05:42 20:49	06:15 20:12	06:50 (LZ25) 19:18	07:34 (LZ26) 18:25	07:05 16:43	07:38 16:33
18	05:43 20:48	06:16 20:11	06:53 (LZ25) 19:16	07:37 (LZ26) 18:23	07:07 16:42	07:38 16:34
19	05:44 20:47	06:17 20:09	06:52 19:15	07:28 18:21	07:08 16:41	07:39 16:34
20	05:45 20:46	06:18 20:07	06:53 19:13	07:29 18:20	07:09 16:41	07:39 16:34
21	05:46 20:46	06:20 20:06	06:55 19:11	07:30 18:18	07:11 16:40	07:40 16:35
22	05:47 20:45	06:21 20:04	06:56 19:09	07:32 18:16	07:12 16:39	07:41 16:35
23	05:48 20:44	06:22 20:03	06:57 19:07	07:33 18:15	07:13 16:38	07:41 16:36
24	05:49 20:43	06:23 20:01	06:58 19:05	07:34 18:13	07:14 16:38	07:42 16:36
25	05:50 20:42	06:24 19:59	06:59 19:04	06:59 17:12	07:16 16:37	07:42 16:37
26	05:51 20:41	06:25 19:58	07:00 19:02	07:10 17:10	07:17 16:36	07:42 16:38
27	05:52 20:40	06:26 19:56	07:01 19:00	06:38 17:09	07:18 16:36	07:43 16:38
28	05:53 20:39	06:27 19:54	07:03 18:58	06:39 17:07	07:19 16:35	07:43 16:39
29	05:54 20:38	06:29 19:52	07:04 18:56	06:41 17:06	07:20 16:35	07:43 16:40
30	05:55 20:37	06:30 19:51	07:05 18:54	06:42 17:04	07:22 16:34	07:43 16:40
31	05:56 20:35	06:31 19:49	07:31 (LZ26) 18:54	06:43 17:03	07:27 (LZ35) 16:34	07:44 16:41
Potential sun hours	468	433	376	342	291	279
Total, worst case	170	705	620	46	283	

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)



Project:

WEP_Lozenetz

Licensed user:

Enviro Project Ltd
Mladejka Str, 23
BG-9000 Varna

Enviro Project Ltd / office@enviroproject.bg

Calculated:

11/07/2024 12:18 PM/4.1.254



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: SvO_01 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 84.6° Slope: 90.0° (60)

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

		January	February	March	April	May		June		July		August	September	October	November	December
1	07:43	07:27	06:48	06:53	06:03		05:31	19:34 (LZ60)	05:31	19:44 (LZ60)	05:57	06:32	07:06	06:44	07:22	
	16:42	17:19	17:57	19:35	20:11		20:44	22 19:56 (LZ60)	20:55	14 19:58 (LZ60)	20:34	19:47	18:52	17:01	16:34	
2	07:43	07:26	06:46	06:51	06:02		05:30	19:34 (LZ60)	05:31	19:43 (LZ60)	05:58	06:33	07:07	06:45	07:23	
	16:43	17:20	17:58	19:36	20:12		20:44	21 19:55 (LZ60)	20:55	15 19:58 (LZ60)	20:32	19:45	18:50	17:00	16:33	
3	07:43	07:25	06:44	06:49	06:00		05:30	19:35 (LZ60)	05:32	19:44 (LZ60)	05:59	06:34	07:08	06:47	07:24	
	16:44	17:22	17:59	19:37	20:13		20:45	20 19:55 (LZ60)	20:55	15 19:59 (LZ60)	20:31	19:43	18:48	16:59	16:33	
4	07:43	07:24	06:43	06:47	05:59		05:29	19:35 (LZ60)	05:32	19:43 (LZ60)	06:00	06:35	07:09	06:48	07:25	
	16:45	17:23	18:00	19:39	20:14		20:46	20 19:55 (LZ60)	20:55	16 19:59 (LZ60)	20:30	19:41	18:47	16:57	16:33	
5	07:43	07:23	06:41	06:46	05:57		05:29	19:36 (LZ60)	05:33	19:43 (LZ60)	06:01	06:36	07:10	06:49	07:26	
	16:46	17:24	18:02	19:40	20:15		20:47	19 19:55 (LZ60)	20:54	17 20:00 (LZ60)	20:29	19:40	18:45	16:56	16:32	
6	07:43	07:22	06:39	06:44	05:56		05:29	19:37 (LZ60)	05:33	19:43 (LZ60)	06:02	06:37	07:11	06:51	07:27	
	16:47	17:26	18:03	19:41	20:17		20:47	18 19:55 (LZ60)	20:54	18 20:01 (LZ60)	20:27	19:38	18:43	16:55	16:32	
7	07:43	07:20	06:38	06:42	05:55		05:28	19:37 (LZ60)	05:34	19:42 (LZ60)	06:03	06:38	07:13	06:52	07:28	
	16:48	17:27	18:04	19:42	20:18		20:48	17 19:54 (LZ60)	20:54	19 20:01 (LZ60)	20:26	19:36	18:41	16:54	16:32	
8	07:43	07:19	06:36	06:40	05:53		05:28	19:38 (LZ60)	05:35	19:43 (LZ60)	06:05	06:39	07:14	06:53	07:29	
	16:49	17:29	18:06	19:43	20:19		20:49	16 19:54 (LZ60)	20:53	19 20:02 (LZ60)	20:25	19:34	18:40	16:52	16:32	
9	07:43	07:18	06:34	06:39	05:52		05:28	19:38 (LZ60)	05:36	19:43 (LZ60)	06:06	06:41	07:15	06:54	07:30	
	16:50	17:30	18:07	19:45	20:20		20:49	16 19:54 (LZ60)	20:53	20 20:03 (LZ60)	20:23	19:32	18:38	16:51	16:32	
10	07:43	07:16	06:32	06:37	05:51		05:27	19:39 (LZ60)	05:36	19:42 (LZ60)	06:07	06:42	07:16	06:56	07:31	
	16:51	17:31	18:08	19:46	20:21		20:50	15 19:54 (LZ60)	20:52	20 20:02 (LZ60)	20:22	19:31	18:36	16:50	16:32	
11	07:42	07:15	06:31	06:35	05:50		05:27	19:40 (LZ60)	05:37	19:42 (LZ60)	06:08	06:43	07:17	06:57	07:32	
	16:52	17:33	18:09	19:47	20:22		20:51	14 19:54 (LZ60)	20:52	21 20:03 (LZ60)	20:21	19:29	18:34	16:49	16:32	
12	07:42	07:14	06:29	06:33	05:48		05:27	19:40 (LZ60)	05:38	19:42 (LZ60)	06:09	06:44	07:19	06:58	07:33	
	16:53	17:34	18:11	19:48	20:24		20:51	13 19:53 (LZ60)	20:51	22 20:04 (LZ60)	20:19	19:27	18:33	16:48	16:32	
13	07:42	07:12	06:27	06:32	05:47	19:38 (LZ60)	05:27	19:40 (LZ60)	05:39	19:42 (LZ60)	06:10	06:45	07:20	07:00	07:34	
	16:54	17:35	18:12	19:49	20:25	10 19:48 (LZ60)	20:52	13 19:53 (LZ60)	20:51	22 20:04 (LZ60)	20:18	19:25	18:31	16:47	16:32	
14	07:41	07:11	06:25	06:30	05:46	19:36 (LZ60)	05:27	19:41 (LZ60)	05:39	19:41 (LZ60)	06:11	06:46	07:21	07:01	07:35	
	16:55	17:37	18:13	19:51	20:26	14 19:50 (LZ60)	20:52	12 19:53 (LZ60)	20:50	23 20:04 (LZ60)	20:16	19:23	18:29	16:46	16:32	
15	07:41	07:10	06:23	06:28	05:45	19:35 (LZ60)	05:27	19:41 (LZ60)	05:40	19:41 (LZ60)	06:12	06:47	07:22	07:02	07:35	
	16:57	17:38	18:14	19:52	20:27	16 19:51 (LZ60)	20:53	12 19:53 (LZ60)	20:50	23 20:04 (LZ60)	20:15	19:21	18:28	16:45	16:32	
16	07:40	07:08	06:22	06:27	05:44	19:34 (LZ60)	05:27	19:42 (LZ60)	05:41	19:41 (LZ60)	06:14	06:48	07:24	07:04	07:36	
	16:58	17:39	18:16	19:53	20:28	18 19:52 (LZ60)	20:53	11 19:53 (LZ60)	20:49	24 20:05 (LZ60)	20:13	19:20	18:26	16:44	16:33	
17	07:40	07:07	06:20	06:25	05:43	19:33 (LZ60)	05:27	19:42 (LZ60)	05:42	19:42 (LZ60)	06:15	06:50	07:25	07:05	07:37	
	16:59	17:41	18:17	19:54	20:29	20 19:53 (LZ60)	20:53	10 19:52 (LZ60)	20:48	23 20:05 (LZ60)	20:12	19:18	18:24	16:43	16:33	
18	07:39	07:05	06:18	06:23	05:42	19:33 (LZ60)	05:27	19:43 (LZ60)	05:43	19:42 (LZ60)	06:16	06:51	07:26	07:06	07:38	
	17:00	17:42	18:18	19:55	20:30	20 19:53 (LZ60)	20:54	9 19:52 (LZ60)	20:47	23 20:05 (LZ60)	20:10	19:16	18:23	16:42	16:33	
19	07:38	07:04	06:16	06:22	05:41	19:32 (LZ60)	05:27	19:44 (LZ60)	05:44	19:42 (LZ60)	06:17	06:52	07:27	07:07	07:38	
	17:02	17:43	18:19	19:56	20:31	22 19:54 (LZ60)	20:54	9 19:53 (LZ60)	20:47	23 20:05 (LZ60)	20:08	19:14	18:21	16:41	16:34	
20	07:38	07:02	06:14	06:20	05:40	19:33 (LZ60)	05:27	19:44 (LZ60)	05:45	19:42 (LZ60)	06:18	06:53	07:29	07:09	07:39	
	17:03	17:45	18:20	19:58	20:32	22 19:55 (LZ60)	20:54	9 19:53 (LZ60)	20:46	24 20:06 (LZ60)	20:07	19:12	18:19	16:40	16:34	
21	07:37	07:01	06:13	06:18	05:39	19:32 (LZ60)	05:27	19:44 (LZ60)	05:46	19:41 (LZ60)	06:19	06:54	07:30	07:10	07:39	
	17:04	17:46	18:22	19:59	20:33	23 19:55 (LZ60)	20:55	9 19:53 (LZ60)	20:45	24 20:05 (LZ60)	20:05	19:10	18:18	16:39	16:34	
22	07:36	06:59	06:11	06:17	05:38	19:32 (LZ60)	05:27	19:44 (LZ60)	05:47	19:42 (LZ60)	06:20	06:55	07:31	07:11	07:40	
	17:05	17:47	18:23	20:00	20:34	23 19:55 (LZ60)	20:55	9 19:53 (LZ60)	20:44	23 20:05 (LZ60)	20:04	19:09	18:16	16:39	16:35	
23	07:36	06:57	06:09	06:15	05:37	19:32 (LZ60)	05:28	19:44 (LZ60)	05:48	19:42 (LZ60)	06:21	06:56	07:32	07:13	07:40	
	17:07	17:49	18:24	20:01	20:35	23 19:55 (LZ60)	20:55	9 19:53 (LZ60)	20:43	23 20:05 (LZ60)	20:02	19:07	18:15	16:38	16:35	
24	07:35	06:56	06:07	06:13	05:36	19:32 (LZ60)	05:28	19:45 (LZ60)	05:49	19:42 (LZ60)	06:23	06:58	07:34	07:14	07:41	
	17:08	17:50	18:25	20:02	20:36	23 19:55 (LZ60)	20:55	9 19:54 (LZ60)	20:42	22 20:04 (LZ60)	20:00	19:05	18:13	16:37	16:36	
25	07:34	06:54	06:05	06:12	05:36	19:32 (LZ60)	05:28	19:45 (LZ60)	05:50	19:43 (LZ60)	06:24	06:59	06:35	07:15	07:41	
	17:09	17:51	18:27	20:04	20:37	24 19:56 (LZ60)	20:55	9 19:54 (LZ60)	20:41	21 20:04 (LZ60)	19:59	19:03	17:11	16:37	16:37	
26	07:33	06:53	06:04	06:10	05:35	19:32 (LZ60)	05:28	19:44 (LZ60)	05:51	19:43 (LZ60)	06:25	07:00	06:36	07:16	07:42	
	17:11	17:53	18:28	20:05	20:38	24 19:56 (LZ60)	20:55	10 19:54 (LZ60)	20:40	20 20:03 (LZ60)	19:57	19:01	17:10	16:36	16:37	
27	07:32	06:51	06:02	06:09	05:34	19:32 (LZ60)	05:29	19:45 (LZ60)	05:52	19:44 (LZ60)	06:26	07:01	06:37	07:17	07:42	
	17:12	17:54	18:29	20:06	20:39	23 19:55 (LZ60)	20:55	11 19:56 (LZ60)	20:39	19 20:03 (LZ60)	19:55	18:59	17:08	16:36	16:38	
28	07:31	06:49	06:00	06:07	05:33	19:33 (LZ60)	05:29	19:44 (LZ60)	05:53	19:45 (LZ60)	06:27	07:02	06:39	07:19	07:42	
	17:13	17:55	18:30	20:07	20:40	23 19:56 (LZ60)	20:55	12 19:56 (LZ60)	20:38	17 20:02 (LZ60)	19:54	18:58	17:07	16:35	16:39	
29	07:30		06:58	06:06	05:33	19:33 (LZ60)	05:30	19:45 (LZ60)	05:54	19:46 (LZ60)	06:28	07:03	06:40	07:20	07:43	
	17:15		19:31	20:08	20:41	23 19:56 (LZ60)	20:55	12 19:57 (LZ60)	20:37	15 20:01 (LZ60)	19:52	18:56	17:06	16:35	16:39	
30	07:29		06:56	06:04	05:32	19:34 (LZ60)	05:30	19:44 (LZ60)	05:55	19:47 (LZ60)	06:29	07:04	06:41	07:21	07:43	
	17:16		19:33	20:10	20:42	22 19:56 (LZ60)	20:55	13 19:57 (LZ60)	20:36	12 19:59 (LZ60)	19:50	18:54	17:04	16:34	16:40	
31	07:28		06:55		05:31	19:34 (LZ60)			05:56		06:30		06:43		07:43	
	17:18		19:34		20:43	21 19:55 (LZ60)			20:35	7 19:57 (LZ60)	19:48		17:03		16:41	
Potential sun hours	289	293	369	402	456		462		468		433	376	342	291	279	
Total, worst case					394		399		604							

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: SvO_02 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 85.2° Slope: 90.0° (61)

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

		January	February	March	April	May	June		July		August	September	October	November	December
1	07:43 16:42	07:27 17:19	06:48 17:57	06:53 19:35	06:03 20:11	05:31 20:44			05:31 20:55	20:05 (LZ60) 20:19 (LZ60)	05:57 20:34	06:32 19:47	07:06 18:52	06:44 17:01	07:22 16:34
2	07:43 16:43	07:26 17:20	06:46 17:58	06:51 19:36	06:02 20:12	05:30 20:44			05:31 20:55	20:05 (LZ60) 20:18 (LZ60)	05:58 20:32	06:33 19:45	07:07 18:50	06:45 17:00	07:23 16:33
3	07:43 16:44	07:25 17:22	06:44 17:59	06:49 19:37	06:00 20:13	05:30 20:45			05:32 20:55	20:06 (LZ60) 20:18 (LZ60)	05:59 20:31	06:34 19:43	07:08 18:48	06:47 16:59	07:24 16:33
4	07:43 16:45	07:24 17:23	06:43 18:00	06:47 19:39	05:59 20:14	05:29 20:46			05:32 20:55	20:06 (LZ60) 20:17 (LZ60)	06:00 20:30	06:35 19:41	07:09 18:47	06:48 16:57	07:25 16:33
5	07:43 16:46	07:23 17:24	06:41 18:02	06:46 19:40	05:57 20:15	05:29 20:47	20:05 (LZ60) 2		05:33 20:54	20:07 (LZ60) 20:17 (LZ60)	06:01 20:29	06:36 19:40	07:10 18:45	06:49 16:56	07:26 16:32
6	07:43 16:47	07:22 17:26	06:39 18:03	06:44 19:41	05:56 20:17	05:29 20:47	20:03 (LZ60) 7		05:33 20:54	20:09 (LZ60) 20:17 (LZ60)	06:02 20:27	06:37 19:38	07:11 18:43	06:51 16:55	07:27 16:32
7	07:43 16:48	07:20 17:27	06:38 18:04	06:42 19:42	05:55 20:18	05:28 20:48	20:02 (LZ60) 9		05:34 20:54	20:10 (LZ60) 20:15 (LZ60)	06:03 20:26	06:38 19:36	07:13 18:41	06:52 16:54	07:28 16:32
8	07:43 16:49	07:19 17:29	06:36 18:06	06:40 19:43	05:53 20:19	05:28 20:49	20:01 (LZ60) 11		05:35 20:53	20:01 (LZ60) 20:12 (LZ60)	06:05 20:25	06:39 19:34	07:14 18:40	06:53 16:52	07:29 16:32
9	07:43 16:50	07:18 17:30	06:34 18:07	06:39 19:45	05:52 20:20	05:28 20:49	20:01 (LZ60) 12		05:36 20:53	20:01 (LZ60) 20:13 (LZ60)	06:06 20:23	06:41 19:32	07:15 18:38	06:54 16:51	07:30 16:32
10	07:42 16:51	07:16 17:31	06:32 18:08	06:37 19:46	05:51 20:21	05:27 20:50	20:01 (LZ60) 13		05:36 20:52	20:01 (LZ60) 20:14 (LZ60)	06:07 20:22	06:42 19:31	07:16 18:36	06:56 16:50	07:31 16:32
11	07:42 16:52	07:15 17:33	06:31 18:09	06:35 19:47	05:50 20:22	05:27 20:51	20:01 (LZ60) 14		05:37 20:52	20:01 (LZ60) 20:15 (LZ60)	06:08 20:21	06:43 19:29	07:17 18:34	06:57 16:49	07:32 16:32
12	07:42 16:53	07:14 17:34	06:29 18:11	06:33 19:48	05:48 20:24	05:27 20:51	20:00 (LZ60) 14		05:38 20:51	20:00 (LZ60) 20:14 (LZ60)	06:09 20:19	06:44 19:27	07:19 18:33	06:58 16:48	07:33 16:32
13	07:42 16:54	07:12 17:35	06:27 18:12	06:32 19:49	05:47 20:25	05:27 20:52	20:00 (LZ60) 15		05:39 20:51	20:00 (LZ60) 20:15 (LZ60)	06:10 20:18	06:45 19:25	07:20 18:31	07:00 16:47	07:34 16:32
14	07:41 16:56	07:11 17:37	06:25 18:13	06:30 19:51	05:46 20:26	05:27 20:52	20:00 (LZ60) 15		05:39 20:50	20:00 (LZ60) 20:15 (LZ60)	06:11 20:16	06:46 19:23	07:21 18:29	07:01 16:46	07:35 16:32
15	07:41 16:57	07:10 17:38	06:23 18:14	06:28 19:52	05:45 20:27	05:27 20:53	20:00 (LZ60) 16		05:40 20:50	20:00 (LZ60) 20:16 (LZ60)	06:12 20:15	06:47 19:21	07:22 18:28	07:02 16:45	07:35 16:32
16	07:40 16:58	07:08 17:39	06:22 18:16	06:27 19:53	05:44 20:28	05:27 20:53	20:00 (LZ60) 16		05:41 20:49	20:00 (LZ60) 20:16 (LZ60)	06:14 20:13	06:48 19:20	07:24 18:26	07:04 16:44	07:36 16:33
17	07:40 16:59	07:07 17:41	06:20 18:17	06:25 19:54	05:43 20:29	05:27 20:53	20:00 (LZ60) 17		05:42 20:48	20:00 (LZ60) 20:17 (LZ60)	06:15 20:12	06:50 19:18	07:25 18:24	07:05 16:43	07:37 16:33
18	07:39 17:00	07:05 17:42	06:18 18:18	06:23 19:55	05:42 20:30	05:27 20:54	20:00 (LZ60) 17		05:43 20:47	20:00 (LZ60) 20:17 (LZ60)	06:16 20:10	06:51 19:16	07:26 18:23	07:06 16:42	07:38 16:33
19	07:38 17:02	07:04 17:43	06:16 18:19	06:22 19:56	05:41 20:31	05:27 20:54	20:01 (LZ60) 17		05:44 20:47	20:01 (LZ60) 20:18 (LZ60)	06:17 20:08	06:52 19:14	07:27 18:21	07:07 16:41	07:38 16:34
20	07:38 17:03	07:02 17:45	06:14 18:20	06:20 19:58	05:40 20:32	05:27 20:54	20:01 (LZ60) 17		05:45 20:46	20:01 (LZ60) 20:18 (LZ60)	06:18 20:07	06:53 19:12	07:29 18:19	07:09 16:40	07:39 16:34
21	07:37 17:04	07:01 17:46	06:13 18:22	06:18 19:59	05:39 20:33	05:27 20:55	20:01 (LZ60) 17		05:46 20:45	20:01 (LZ60) 20:18 (LZ60)	06:19 20:05	06:54 19:10	07:30 18:18	07:10 16:39	07:39 16:34
22	07:36 17:05	06:59 17:47	06:11 18:23	06:17 20:00	05:38 20:34	05:27 20:55	20:01 (LZ60) 17		05:47 20:44	20:01 (LZ60) 20:18 (LZ60)	06:20 20:04	06:55 19:09	07:31 18:16	07:11 16:39	07:40 16:35
23	07:36 17:07	06:57 17:49	06:09 18:24	06:15 20:01	05:37 20:35	05:28 20:55	20:01 (LZ60) 17		05:48 20:43	20:01 (LZ60) 20:18 (LZ60)	06:21 20:02	06:56 19:07	07:32 18:15	07:13 16:38	07:40 16:35
24	07:35 17:08	06:56 17:50	06:07 18:25	06:13 20:02	05:36 20:36	05:28 20:55	20:02 (LZ60) 17		05:49 20:42	20:02 (LZ60) 20:19 (LZ60)	06:23 20:00	06:58 19:05	07:34 18:13	07:14 16:37	07:41 16:36
25	07:34 17:09	06:54 17:51	06:05 18:27	06:12 20:04	05:36 20:37	05:28 20:55	20:02 (LZ60) 17		05:50 20:41	20:02 (LZ60) 20:19 (LZ60)	06:24 19:59	06:59 19:03	06:35 17:11	07:15 16:37	07:41 16:37
26	07:33 17:11	06:53 17:53	06:04 18:28	06:10 20:05	05:35 20:38	05:28 20:55	20:02 (LZ60) 16		05:51 20:40	20:02 (LZ60) 20:18 (LZ60)	06:25 19:57	07:00 19:01	06:36 17:10	07:16 16:36	07:42 16:37
27	07:32 17:12	06:51 17:54	06:02 18:29	06:09 20:06	05:34 20:39	05:29 20:55	20:03 (LZ60) 16		05:52 20:39	20:03 (LZ60) 20:19 (LZ60)	06:26 19:55	07:01 18:59	06:37 17:08	07:17 16:36	07:42 16:38
28	07:31 17:13	06:49 17:55	06:00 18:30	06:07 20:07	05:33 20:40	05:29 20:55	20:03 (LZ60) 16		05:53 20:38	20:03 (LZ60) 20:19 (LZ60)	06:27 19:54	07:02 18:58	06:39 17:07	07:19 16:35	07:42 16:39
29	07:30 17:15		06:58 19:31	06:06 20:08	05:33 20:41	05:30 20:55	20:04 (LZ60) 15		05:54 20:37	20:04 (LZ60) 20:19 (LZ60)	06:28 19:52	07:03 18:56	06:40 17:06	07:20 16:35	07:43 16:39
30	07:29 17:16		06:56 19:33	06:04 20:10	05:32 20:42	05:30 20:55	20:04 (LZ60) 15		05:55 20:36	20:04 (LZ60) 20:19 (LZ60)	06:29 19:50	07:04 18:54	06:41 17:04	07:21 16:34	07:43 16:40
31	07:28 17:18		06:55 19:34		05:31 20:43				05:56 20:35		06:30 19:48		06:43 17:03		07:43 16:41
Potential sun hours	289	293	369	402	456	462		468		433	376	342	291	279	
Total, worst case						375		73							

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		





SHADOW - Calendar

Calculation: Worst Case Shadow receptor: SvO_03 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 86.6° Slope: 90.0° (62)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	07:43 16:42	07:27 17:19	06:48 17:57	06:53 19:35	06:03 20:11	05:31 20:44	05:31 20:55	05:57 20:34	06:32 19:47	07:06 18:52	06:44 17:01	07:22 16:34
2	07:43 16:43	07:26 17:20	06:46 17:58	06:51 19:36	06:02 20:12	05:30 20:44	05:31 20:55	05:58 20:32	06:33 19:45	07:07 18:50	06:45 17:00	07:23 16:33
3	07:43 16:44	07:25 17:22	06:44 17:59	06:49 19:37	06:00 20:13	05:30 20:45	05:32 20:55	05:59 20:31	06:34 19:43	07:08 18:49	06:47 16:59	07:24 16:33
4	07:43 16:45	07:24 17:23	06:43 18:01	06:47 19:39	05:59 20:14	05:29 20:46	05:32 20:55	06:00 20:30	06:35 19:41	07:09 18:47	06:48 16:57	07:25 16:33
5	07:43 16:46	07:23 17:24	06:41 18:02	06:46 19:40	05:57 20:15	05:29 20:54	05:33 20:54	06:01 20:29	06:36 19:40	07:10 18:45	06:49 16:56	07:26 16:33
6	07:43 16:47	07:22 17:26	06:39 18:03	06:44 19:41	05:56 20:17	05:29 20:47	05:33 20:54	06:02 20:27	06:37 19:38	07:11 18:43	06:51 16:55	07:27 16:32
7	07:43 16:48	07:20 17:27	06:38 18:04	06:42 19:42	05:55 20:18	05:28 20:48	05:34 20:54	06:03 20:26	06:38 19:36	07:13 18:41	06:52 16:54	07:28 16:32
8	07:43 16:49	07:19 17:29	06:36 18:06	06:40 19:43	05:53 20:19	05:28 20:49	05:35 20:53	06:05 20:25	06:39 19:34	07:14 18:40	06:53 16:52	07:29 16:32
9	07:43 16:50	07:18 17:30	06:34 18:07	06:39 19:45	05:52 20:20	05:28 20:49	05:36 20:53	06:06 20:23	06:41 19:32	07:15 18:38	06:54 16:51	07:30 16:32
10	07:43 16:51	07:16 17:31	06:32 18:08	06:37 19:46	05:51 20:21	05:27 20:50	05:36 20:52	06:07 20:22	06:42 19:31	07:16 18:36	06:56 16:50	07:31 16:32
11	07:42 16:52	07:15 17:33	06:31 18:09	06:35 19:47	05:50 20:22	05:27 20:51	05:37 20:52	06:08 20:21	06:43 19:29	07:17 18:34	06:57 16:49	07:32 16:32
12	07:42 16:53	07:14 17:34	06:29 18:11	06:33 19:48	05:48 20:24	05:27 20:51	05:38 20:51	06:09 20:19	06:44 19:27	07:19 18:33	06:58 16:48	07:33 16:32
13	07:42 16:54	07:12 17:35	06:27 18:12	06:32 19:49	05:47 20:25	05:27 20:52	05:39 20:51	06:10 20:18	06:45 19:25	07:20 18:31	07:00 16:47	07:34 16:32
14	07:41 16:56	07:11 17:37	06:25 18:13	06:30 19:51	05:46 20:26	05:27 20:52	05:39 20:50	06:11 20:16	06:46 19:23	07:21 18:29	07:01 16:46	07:35 16:32
15	07:41 16:57	07:10 17:38	06:23 18:14	06:28 19:52	05:45 20:27	05:27 20:53	05:40 20:50	06:12 20:15	06:47 19:21	07:22 18:28	07:02 16:45	07:35 16:32
16	07:40 16:58	07:08 17:39	06:22 18:16	06:27 19:53	05:44 20:28	05:27 20:53	05:41 20:49	06:14 20:13	06:48 19:20	07:24 18:26	07:04 16:44	07:36 16:33
17	07:40 16:59	07:07 17:41	06:20 18:17	06:25 19:54	05:43 20:29	05:27 20:53	05:42 20:48	06:15 20:12	06:50 19:18	07:25 18:24	07:05 16:43	07:37 16:33
18	07:39 17:00	07:05 17:42	06:18 18:18	06:23 19:55	05:42 20:30	05:27 20:54	05:43 20:47	06:16 20:10	06:51 19:16	07:26 18:23	07:06 16:42	07:38 16:33
19	07:38 17:02	07:04 17:43	06:16 18:19	06:22 19:57	05:41 20:31	05:27 20:54	05:44 20:47	06:17 20:08	06:52 19:14	07:27 18:21	07:07 16:41	07:38 16:34
20	07:38 17:03	07:02 17:45	06:14 18:20	06:20 19:58	05:40 20:32	05:27 20:54	05:45 20:46	06:18 20:07	06:53 19:12	07:29 18:19	07:09 16:40	07:39 16:34
21	07:37 17:04	07:01 17:46	06:13 18:22	06:18 19:59	05:39 20:33	05:27 20:55	05:46 20:45	06:19 20:05	06:54 19:10	07:30 18:18	07:10 16:39	07:39 16:34
22	07:36 17:06	06:59 17:47	06:11 18:23	06:17 20:00	05:38 20:34	05:27 20:55	05:47 20:44	06:20 20:04	06:55 19:09	07:31 18:16	07:11 16:39	07:40 16:35
23	07:36 17:07	06:57 17:49	06:09 18:24	06:15 20:01	05:37 20:35	05:28 20:55	05:48 20:43	06:21 20:02	06:56 19:07	07:32 18:15	07:13 16:38	07:40 16:35
24	07:35 17:08	06:56 17:50	06:07 18:25	06:14 20:02	05:36 20:36	05:28 20:55	05:49 20:42	06:23 20:00	06:58 19:05	07:34 18:13	07:14 16:37	07:41 16:36
25	07:34 17:09	06:54 17:51	06:05 18:27	06:12 20:04	05:36 20:37	05:28 20:55	05:50 20:41	06:24 19:59	06:59 19:03	07:35 17:11	07:15 16:37	07:41 16:37
26	07:33 17:11	06:53 17:53	06:04 18:28	06:10 20:05	05:35 20:38	05:28 20:55	05:51 20:40	06:25 19:57	07:00 19:01	07:36 17:10	07:16 16:36	07:42 16:37
27	07:32 17:12	06:51 17:54	06:02 18:29	06:09 20:06	05:34 20:39	05:29 20:55	05:52 20:39	06:26 19:55	07:01 18:59	07:37 17:08	07:17 16:36	07:42 16:38
28	07:31 17:13	06:49 17:55	06:00 18:30	06:07 20:07	05:33 20:40	05:29 20:55	05:53 20:38	06:27 19:54	07:02 18:58	07:39 17:07	07:19 16:35	07:42 16:39
29	07:30 17:15		06:58 19:31	06:06 20:08	05:33 20:41	05:30 20:55	05:54 20:37	06:28 19:52	07:03 18:56	07:40 17:06	07:20 16:35	07:43 16:39
30	07:29 17:16		06:56 19:33	06:04 20:10	05:32 20:42	05:30 20:55	05:55 20:36	06:29 19:50	07:04 18:54	07:41 17:04	07:21 16:34	07:43 16:40
31	07:28 17:18		06:55 19:34		05:31 20:43		05:56 20:35	06:30 19:48		06:43 17:03		07:43 16:41
Potential sun hours	289	293	369	402	456	462	468	433	376	342	291	279
Total, worst case												

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: SvO_04 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 82.7° Slope: 90.0° (63)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	07:43 16:42	07:27 17:19	06:48 17:57	06:53 19:35	06:03 20:11	05:31 20:44	05:31 20:55	05:57 20:34	06:32 19:47	07:06 18:52	06:44 17:01	07:22 16:34
2	07:43 16:43	07:26 17:20	06:46 17:58	06:51 19:36	06:02 20:12	05:30 20:44	05:31 20:55	05:58 20:32	06:33 19:45	07:07 18:50	06:45 17:00	07:23 16:33
3	07:43 16:44	07:25 17:22	06:44 17:59	06:49 19:37	06:00 20:13	05:30 20:45	05:32 20:55	05:59 20:31	06:34 19:43	07:08 18:49	06:47 16:59	07:24 16:33
4	07:43 16:45	07:24 17:23	06:43 18:01	06:47 19:39	05:59 20:14	05:29 20:46	05:32 20:54	06:00 20:30	06:35 19:41	07:09 18:47	06:48 16:57	07:25 16:33
5	07:43 16:46	07:23 17:24	06:41 18:02	06:46 19:40	05:57 20:15	05:29 20:54	05:33 20:54	06:01 20:29	06:36 19:40	07:10 18:45	06:49 16:56	07:26 16:33
6	07:43 16:47	07:22 17:26	06:39 18:03	06:44 19:41	05:56 20:17	05:29 20:47	05:34 20:54	06:02 20:27	06:37 19:38	07:11 18:43	06:50 16:55	07:27 16:32
7	07:43 16:48	07:20 17:27	06:38 18:04	06:42 19:42	05:55 20:18	05:28 20:48	05:34 20:54	06:03 20:26	06:38 19:36	07:13 18:41	06:52 16:54	07:28 16:32
8	07:43 16:49	07:19 17:29	06:36 18:06	06:40 19:43	05:53 20:19	05:28 20:49	05:35 20:53	06:05 20:25	06:39 19:34	07:14 18:40	06:53 16:52	07:29 16:32
9	07:43 16:50	07:18 17:30	06:34 18:07	06:39 19:45	05:52 20:20	05:28 20:49	05:36 20:53	06:06 20:23	06:41 19:32	07:15 18:38	06:54 16:51	07:30 16:32
10	07:42 16:51	07:16 17:31	06:32 18:08	06:37 19:46	05:51 20:21	05:27 20:50	05:36 20:52	06:07 20:22	06:42 19:31	07:16 18:36	06:56 16:50	07:31 16:32
11	07:42 16:52	07:15 17:33	06:31 18:09	06:35 19:47	05:50 20:22	05:27 20:51	05:37 20:52	06:08 20:21	06:43 19:29	07:17 18:34	06:57 16:49	07:32 16:32
12	07:42 16:53	07:14 17:34	06:29 18:11	06:33 19:48	05:48 20:24	05:27 20:51	05:38 20:51	06:09 20:19	06:44 19:27	07:19 18:33	06:58 16:48	07:33 16:32
13	07:41 16:54	07:12 17:35	06:27 18:12	06:32 19:49	05:47 20:25	05:27 20:52	05:39 20:51	06:10 20:18	06:45 19:25	07:20 18:31	07:00 16:47	07:34 16:32
14	07:41 16:56	07:11 17:37	06:25 18:13	06:30 19:51	05:46 20:26	05:27 20:52	05:39 20:50	06:11 20:16	06:46 19:23	07:21 18:29	07:01 16:46	07:35 16:32
15	07:41 16:57	07:10 17:38	06:23 18:14	06:28 19:52	05:45 20:27	05:27 20:53	05:40 20:50	06:12 20:15	06:47 19:21	07:22 18:28	07:02 16:45	07:35 16:32
16	07:40 16:58	07:08 17:39	06:22 18:16	06:27 19:53	05:44 20:28	05:27 20:53	05:41 20:49	06:14 20:13	06:48 19:20	07:24 18:26	07:04 16:44	07:36 16:33
17	07:40 16:59	07:07 17:41	06:20 18:17	06:25 19:54	05:43 20:29	05:27 20:53	05:42 20:48	06:15 20:12	06:50 19:18	07:25 18:24	07:05 16:43	07:37 16:33
18	07:39 17:00	07:05 17:42	06:18 18:18	06:23 19:55	05:42 20:30	05:27 20:54	05:43 20:47	06:16 20:10	06:51 19:16	07:26 18:23	07:06 16:42	07:38 16:33
19	07:38 17:02	07:04 17:43	06:16 18:19	06:22 19:56	05:41 20:31	05:27 20:54	05:44 20:47	06:17 20:08	06:52 19:14	07:27 18:21	07:07 16:41	07:38 16:34
20	07:38 17:03	07:02 17:45	06:14 18:20	06:20 19:58	05:40 20:32	05:27 20:54	05:45 20:46	06:18 20:07	06:53 19:12	07:29 18:19	07:09 16:40	07:39 16:34
21	07:37 17:04	07:01 17:46	06:13 18:22	06:18 19:59	05:39 20:33	05:27 20:55	05:46 20:45	06:19 20:05	06:54 19:10	07:30 18:18	07:10 16:39	07:39 16:34
22	07:36 17:06	06:59 17:47	06:11 18:23	06:17 20:00	05:38 20:34	05:27 20:55	05:47 20:44	06:20 20:04	06:55 19:09	07:31 18:16	07:11 16:39	07:40 16:35
23	07:36 17:07	06:57 17:49	06:09 18:24	06:15 20:01	05:37 20:35	05:28 20:55	05:48 20:43	06:21 20:02	06:56 19:07	07:32 18:15	07:13 16:38	07:40 16:35
24	07:35 17:08	06:56 17:50	06:07 18:25	06:14 20:02	05:36 20:36	05:28 20:55	05:49 20:42	06:23 20:00	06:58 19:05	07:34 18:13	07:14 16:37	07:41 16:36
25	07:34 17:09	06:54 17:51	06:05 18:27	06:12 20:04	05:36 20:37	05:28 20:55	05:50 20:41	06:24 19:59	06:59 19:03	07:35 17:11	07:15 16:37	07:41 16:37
26	07:33 17:11	06:53 17:53	06:04 18:28	06:10 20:05	05:35 20:38	05:28 20:55	05:51 20:40	06:25 19:57	07:00 19:01	07:36 17:10	07:16 16:36	07:42 16:37
27	07:32 17:12	06:51 17:54	06:02 18:29	06:09 20:06	05:34 20:39	05:29 20:55	05:52 20:39	06:26 19:55	07:01 18:59	07:37 17:08	07:17 16:36	07:42 16:38
28	07:31 17:13	06:49 17:55	06:00 18:30	06:07 20:07	05:33 20:40	05:29 20:55	05:53 20:38	06:27 19:54	07:02 18:58	07:38 17:07	07:19 16:35	07:42 16:39
29	07:30 17:15		06:58 19:31	06:06 20:08	05:33 20:41	05:30 20:55	05:54 20:37	06:28 19:52	07:03 18:56	07:39 17:06	07:20 16:35	07:43 16:39
30	07:29 17:16		06:56 19:33	06:04 20:10	05:32 20:42	05:30 20:55	05:55 20:36	06:29 19:50	07:04 18:54	07:40 17:04	07:21 16:34	07:43 16:40
31	07:28 17:18		06:55 19:34		05:31 20:43		05:56 20:35	06:30 19:48		06:43 17:03		07:43 16:41
Potential sun hours	289	293	369	402	456	462	468	433	376	342	291	279
Total, worst case												

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: ZaG_01 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -94.9° Slope: 90.0° (51)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June
1	07:43 16:42 24	08:28 (LZ56) 17:19	06:48 17:57	07:36 (LZ45) 19:35	07:22 (LZ40) 20:11	06:33 (LZ32) 20:44
2	07:44 16:43 23	08:28 (LZ56) 17:20	06:46 17:58	07:36 (LZ45) 19:36	07:21 (LZ40) 20:12	06:33 (LZ32) 20:45
3	07:44 16:44 22	08:29 (LZ56) 17:22	06:45 17:59	07:37 (LZ45) 19:37	07:20 (LZ40) 20:13	06:33 (LZ32) 20:45
4	07:44 16:45 22	08:30 (LZ56) 17:23	06:43 18:01	07:39 (LZ45) 19:39	07:21 (LZ40) 20:15	06:34 (LZ32) 20:46
5	07:44 16:46 22	08:30 (LZ56) 17:24	06:41 18:02	07:40 (LZ45) 19:40	07:20 (LZ40) 20:16	06:34 (LZ32) 20:47
6	07:43 16:47 21	08:31 (LZ56) 17:26	06:39 18:03	07:43 (LZ45) 19:41	07:20 (LZ40) 20:17	06:35 (LZ32) 20:48
7	07:43 16:48 20	08:32 (LZ56) 17:27	06:38 18:04	07:44 (LZ45) 19:42	07:20 (LZ40) 20:18	06:36 (LZ32) 20:48
8	07:43 16:49 19	08:34 (LZ56) 17:29	06:36 18:06	07:45 (LZ45) 19:43	07:20 (LZ40) 20:19	06:37 (LZ32) 20:49
9	07:43 16:50 18	08:34 (LZ56) 17:30	06:34 18:07	07:46 (LZ45) 19:45	07:21 (LZ40) 20:20	06:39 (LZ32) 20:50
10	07:43 16:51 17	08:35 (LZ56) 17:31	06:32 18:08	07:47 (LZ45) 19:46	07:21 (LZ40) 20:21	06:40 (LZ32) 20:51
11	07:42 16:52 15	08:36 (LZ56) 17:33	06:31 18:09	07:48 (LZ45) 19:47	07:22 (LZ40) 20:22	06:41 (LZ32) 20:52
12	07:42 16:53 12	08:38 (LZ56) 17:34	06:29 18:11	07:49 (LZ45) 19:48	07:23 (LZ40) 20:24	06:42 (LZ32) 20:53
13	07:42 16:54 10	08:40 (LZ56) 17:35	06:27 18:12	07:50 (LZ45) 19:49	07:25 (LZ40) 20:25	06:43 (LZ32) 20:54
14	07:41 16:56 5	08:42 (LZ56) 17:37	06:25 18:13	07:51 (LZ45) 19:51	07:28 (LZ40) 20:26	06:44 (LZ32) 20:55
15	07:41 16:57 16	08:47 (LZ56) 17:38	06:24 18:14	07:52 (LZ45) 19:52	07:35 (LZ40) 20:27	06:45 (LZ32) 20:56
16	07:40 16:58 17	08:05 (LZ45) 17:39	06:22 18:16	07:53 (LZ45) 19:53	07:36 (LZ40) 20:28	06:46 (LZ32) 20:57
17	07:40 16:59 18	08:07 (LZ45) 17:41	06:20 18:17	07:54 (LZ45) 19:54	07:37 (LZ40) 20:29	06:47 (LZ32) 20:58
18	07:39 17:00 19	08:09 (LZ45) 17:42	06:18 18:18	07:55 (LZ45) 19:55	07:38 (LZ40) 20:30	06:48 (LZ32) 20:59
19	07:39 17:02 20	08:10 (LZ45) 17:44	06:16 18:19	07:56 (LZ45) 19:56	07:39 (LZ40) 20:31	06:49 (LZ32) 21:00
20	07:38 17:03 21	08:11 (LZ45) 17:45	06:15 18:21	07:57 (LZ45) 19:57	07:40 (LZ40) 20:32	06:50 (LZ32) 21:01
21	07:37 17:04 22	08:12 (LZ45) 17:46	06:13 18:22	07:58 (LZ45) 19:58	07:41 (LZ40) 20:33	06:51 (LZ32) 21:02
22	07:37 17:06 23	08:13 (LZ45) 17:48	06:11 18:23	07:59 (LZ45) 20:00	07:42 (LZ40) 20:34	06:52 (LZ32) 21:03
23	07:36 17:07 24	08:14 (LZ45) 17:49	06:09 18:24	08:00 (LZ45) 20:01	07:43 (LZ40) 20:35	06:53 (LZ32) 21:04
24	07:35 17:08 25	08:15 (LZ45) 17:50	06:07 18:25	08:01 (LZ45) 20:02	07:44 (LZ40) 20:36	06:54 (LZ32) 21:05
25	07:34 17:09 26	08:16 (LZ45) 17:52	06:05 18:27	08:02 (LZ45) 20:03	07:45 (LZ40) 20:37	06:55 (LZ32) 21:06
26	07:33 17:11 27	08:17 (LZ45) 17:53	06:04 18:28	08:03 (LZ45) 20:04	07:46 (LZ40) 20:38	06:56 (LZ32) 21:07
27	07:32 17:12 28	08:18 (LZ45) 17:54	06:02 18:29	08:04 (LZ45) 20:05	07:47 (LZ40) 20:39	06:57 (LZ32) 21:08
28	07:31 17:13 29	08:19 (LZ45) 17:55	06:00 18:30	08:05 (LZ45) 20:06	07:48 (LZ40) 20:40	06:58 (LZ32) 21:09
29	07:31 17:15 30	08:20 (LZ45) 17:56	06:58 18:31	08:06 (LZ45) 20:07	07:49 (LZ40) 20:41	06:59 (LZ32) 21:10
30	07:30 17:16 31	08:21 (LZ45) 17:57	06:56 18:32	08:07 (LZ45) 20:08	07:50 (LZ40) 20:42	07:00 (LZ40) 21:11
Potential sun hours	289	293	369	402	456	462
Total, worst case	250	523	242	513	169	

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

Calculation: Worst Case Shadow receptor: ZaG_01 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -94.9° Slope: 90.0° (51)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:55	05:57 20:34	06:32 19:47	07:21 (LZ40) 18:52	06:44 17:01	07:22 16:34
2	05:31 20:55	05:58 20:33	06:33 19:45	07:20 (LZ40) 18:50	06:45 17:00	07:23 16:33
3	05:32 20:55	05:59 20:31	06:34 19:43	07:19 (LZ40) 18:49	06:47 16:59	07:24 16:33
4	05:32 20:55	06:00 20:30	06:35 19:42	07:17 (LZ40) 18:47	06:48 16:57	07:26 16:33
5	05:33 20:54	06:01 20:29	06:36 19:40	07:17 (LZ40) 18:45	06:49 16:56	07:27 16:33
6	05:33 20:54	06:02 20:28	06:37 19:38	07:16 (LZ40) 18:43	06:51 16:55	07:28 16:32
7	05:34 20:54	06:03 20:26	06:38 19:36	07:15 (LZ40) 18:41	06:52 16:54	07:29 16:32
8	05:35 20:53	06:05 20:25	06:40 19:34	07:15 (LZ40) 18:40	06:53 16:52	07:30 16:32
9	05:36 20:53	06:06 20:24	06:41 19:33	07:15 (LZ40) 18:38	06:55 16:51	07:31 16:32
10	05:36 20:53	06:07 20:22	06:42 (LZ32) 19:31	07:14 (LZ40) 18:36	06:56 16:50	07:32 16:32
11	05:37 20:52	06:08 20:21	06:43 (LZ32) 19:29	07:14 (LZ40) 18:34	06:57 16:49	07:32 16:32
12	05:38 20:52	06:09 20:19	06:44 (LZ32) 19:27	07:15 (LZ40) 18:33	06:59 16:48	07:33 16:32
13	05:39 20:51	06:10 20:18	06:45 (LZ32) 19:25	07:16 (LZ40) 18:31	07:00 16:47	07:34 16:32
14	05:39 20:50	06:11 20:16	06:46 (LZ32) 19:23	07:17 (LZ40) 18:29	07:01 16:46	07:35 16:32
15	05:40 20:50	06:12 20:15	06:47 (LZ32) 19:22	07:18 (LZ40) 18:28	07:03 16:45	07:36 16:32
16	05:41 20:49	06:14 20:13	06:49 (LZ32) 19:20	07:20 (LZ40) 18:26	07:04 16:44	07:36 16:33
17	05:42 20:48	06:15 20:12	06:50 (LZ32) 19:18	07:24 (LZ40) 18:24	07:05 16:43	07:37 16:33
18	05:43 20:48	06:16 20:10	06:51 (LZ32) 19:16	07:26 (LZ40) 18:23	07:06 16:42	07:38 16:33
19	05:44 20:47	06:17 20:09	06:52 (LZ32) 19:14	07:27 (LZ40) 18:21	07:08 16:41	07:38 16:34
20	05:45 20:46	06:18 20:07	06:53 (LZ32) 19:12	07:29 (LZ40) 18:19	07:09 16:40	07:39 16:34
21	05:46 20:45	06:19 20:05	06:54 (LZ32) 19:11	07:30 (LZ40) 18:18	07:10 16:40	07:40 16:34
22	05:47 20:44	06:20 20:04	06:55 (LZ32) 19:09	07:31 (LZ40) 18:16	07:11 16:39	07:40 16:35
23	05:48 20:43	06:21 20:02	06:56 (LZ32) 19:07	07:32 (LZ40) 18:15	07:13 16:38	07:41 16:35
24	05:49 20:42	06:23 20:01	06:58 (LZ32) 19:05	07:34 (LZ40) 18:13	07:14 16:37	07:41 16:36
25	05:50 20:41	06:24 19:59	06:59 (LZ32) 19:03	07:35 (LZ40) 18:12	07:15 16:37	07:42 16:37
26	05:51 20:40	06:25 19:57	07:00 (LZ32) 19:01	07:36 (LZ40) 18:10	07:16 16:36	07:42 16:37
27	05:52 20:39	06:26 19:55	07:01 (LZ32) 19:00	07:37 (LZ40) 18:09	07:18 16:36	07:42 16:38
28	05:53 20:38	06:27 19:54	07:02 (LZ32) 18:58	07:39 (LZ40) 18:07	07:19 16:35	07:43 16:39
29	05:54 20:37	06:28 19:52	07:03 (LZ40) 18:56	07:40 (LZ40) 18:06	07:20 16:35	07:43 16:40
30	05:55 20:36	06:29 19:50	07:05 (LZ40) 18:54	07:41 (LZ40) 18:05	07:21 16:34	07:43 16:40
31	05:56 20:35	06:31 19:49	07:22 (LZ40) 18:54	06:43 17:03	07:43 16:41	07:43 16:41
Potential sun hours	468	433	376	342	291	279
Total, worst case		391	411	672	26	708

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		





SHADOW - Calendar

Calculation: Worst Case Shadow receptor: ZaG_02 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -83.7° Slope: 90.0° (52)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

January			February			March			April			May			June		
1	07:43		08:14 (LZ56)	07:27		06:48			06:53			06:03			05:31		
	16:42	14	08:28 (LZ56)	17:19		17:57			19:35			20:11			20:44		
2	07:44		08:14 (LZ56)	07:26		06:46		07:21 (LZ45)	06:51			06:02			05:30		
	16:43	15	08:29 (LZ56)	17:20		17:58	7	07:28 (LZ45)	19:36			20:12			20:45		
3	07:44		08:14 (LZ56)	07:25		06:45		07:16 (LZ45)	06:49			06:00			05:30		
	16:44	17	08:31 (LZ56)	17:22		17:59	16	07:32 (LZ45)	19:37			20:13			20:45		
4	07:44		08:14 (LZ56)	07:24		06:43		07:14 (LZ45)	06:47			05:59		06:25 (LZ32)	05:29		
	16:45	18	08:32 (LZ56)	17:23		18:01	21	07:35 (LZ45)	19:39			20:14	6	06:31 (LZ32)	20:46		
5	07:44		08:14 (LZ56)	07:23		06:41		07:12 (LZ45)	06:46			05:57		06:23 (LZ32)	05:29		
	16:46	19	08:33 (LZ56)	17:24		18:02	24	07:36 (LZ45)	19:40			20:16	11	06:34 (LZ32)	20:47		
6	07:43		08:14 (LZ56)	07:22		06:39		07:10 (LZ45)	06:44			05:56		06:21 (LZ32)	05:29		
	16:47	20	08:34 (LZ56)	17:26		18:03	27	07:37 (LZ45)	19:41			20:17	15	06:36 (LZ32)	20:48		
7	07:43		08:14 (LZ56)	07:20		06:38		07:08 (LZ45)	06:42			05:55		06:19 (LZ32)	05:28		
	16:48	21	08:35 (LZ56)	17:27		18:04	30	07:38 (LZ45)	19:42			20:18	17	06:36 (LZ32)	20:48		
8	07:43		08:15 (LZ56)	07:19		06:36		07:07 (LZ45)	06:40			05:53		06:18 (LZ32)	05:28		
	16:49	21	08:36 (LZ56)	17:29		18:06	31	07:38 (LZ45)	19:43			20:19	19	06:37 (LZ32)	20:49		
9	07:43		08:14 (LZ56)	07:18		06:34		07:06 (LZ45)	06:39			05:52		06:18 (LZ32)	05:28		
	16:50	22	08:36 (LZ56)	17:30		18:07	34	07:40 (LZ45)	19:45			20:20	20	06:38 (LZ32)	20:50		
10	07:43		08:14 (LZ56)	07:17		06:32		07:05 (LZ45)	06:37		07:08 (LZ40)	05:51		06:17 (LZ32)	05:27		
	16:51	23	08:37 (LZ56)	17:31		18:08	35	07:40 (LZ45)	19:46	7	07:15 (LZ40)	20:21	22	06:39 (LZ32)	20:50		
11	07:42		08:14 (LZ56)	07:15		06:31		07:04 (LZ45)	06:35		07:04 (LZ40)	05:50		06:17 (LZ32)	05:27		
	16:52	23	08:37 (LZ56)	17:33		18:09	36	07:40 (LZ45)	19:47	14	07:18 (LZ40)	20:23	22	06:39 (LZ32)	20:51		
12	07:42		08:14 (LZ56)	07:14		06:29		07:04 (LZ45)	06:33		07:02 (LZ40)	05:49		06:17 (LZ32)	05:27		
	16:53	24	08:38 (LZ56)	17:34		18:11	35	07:39 (LZ45)	19:48	19	07:21 (LZ40)	20:24	22	06:39 (LZ32)	20:51		
13	07:42		08:15 (LZ56)	07:13		06:27		07:04 (LZ45)	06:32		07:00 (LZ40)	05:47		06:16 (LZ32)	05:27		
	16:54	25	08:40 (LZ56)	17:35		18:12	36	07:40 (LZ45)	19:49	22	07:22 (LZ40)	20:25	23	06:39 (LZ32)	20:52		
14	07:41		08:14 (LZ56)	07:11		06:25		07:04 (LZ45)	06:30		06:58 (LZ40)	05:46		06:16 (LZ32)	05:27		
	16:56	26	08:40 (LZ56)	17:37		18:13	36	07:40 (LZ45)	19:51	24	07:22 (LZ40)	20:26	23	06:39 (LZ32)	20:52		
15	07:41		08:14 (LZ56)	07:10		06:24		07:03 (LZ45)	06:28		06:58 (LZ40)	05:45		06:16 (LZ32)	05:27		
	16:57	26	08:40 (LZ56)	17:38		18:14	36	07:39 (LZ45)	19:52	26	07:24 (LZ40)	20:27	23	06:39 (LZ32)	20:53		
16	07:40		08:15 (LZ56)	07:08		06:22		07:03 (LZ45)	06:27		06:57 (LZ40)	05:44		06:16 (LZ32)	05:27		
	16:58	26	08:41 (LZ56)	17:40		18:16	35	07:38 (LZ45)	19:53	27	07:24 (LZ40)	20:28	23	06:39 (LZ32)	20:53		
17	07:40		08:15 (LZ56)	07:07		06:20		07:03 (LZ45)	06:25		06:56 (LZ40)	05:43		06:16 (LZ32)	05:27		
	16:59	26	08:41 (LZ56)	17:41		18:17	34	07:37 (LZ45)	19:54	27	07:23 (LZ40)	20:29	22	06:38 (LZ32)	20:54		
18	07:39		08:16 (LZ56)	07:05		06:18		07:03 (LZ45)	06:23		06:56 (LZ40)	05:42		06:17 (LZ32)	05:27		
	17:00	26	08:42 (LZ56)	17:42		18:18	33	07:36 (LZ45)	19:55	28	07:24 (LZ40)	20:30	21	06:38 (LZ32)	20:54		
19	07:39		08:16 (LZ56)	07:04		06:16		07:05 (LZ45)	06:22		06:55 (LZ40)	05:41		06:18 (LZ32)	05:27		
	17:02	26	08:42 (LZ56)	17:44		18:19	31	07:36 (LZ45)	19:57	29	07:24 (LZ40)	20:31	21	06:39 (LZ32)	20:54		
20	07:38		08:16 (LZ56)	07:02		06:15		07:05 (LZ45)	06:20		06:55 (LZ40)	05:40		06:18 (LZ32)	05:27		
	17:03	26	08:42 (LZ56)	17:45		18:21	29	07:34 (LZ45)	19:58	29	07:24 (LZ40)	20:32	20	06:38 (LZ32)	20:55		
21	07:37		08:16 (LZ56)	07:01		06:13		07:06 (LZ45)	06:18		06:55 (LZ40)	05:39		06:19 (LZ32)	05:27		
	17:04	26	08:42 (LZ56)	17:46		18:22	26	07:32 (LZ45)	19:59	28	07:23 (LZ40)	20:33	18	06:37 (LZ32)	20:55		
22	07:37		08:17 (LZ56)	06:59		06:11		07:07 (LZ45)	06:17		06:54 (LZ40)	05:38		06:19 (LZ32)	05:27		
	17:06	26	08:43 (LZ56)	17:48		18:23	23	07:30 (LZ45)	20:00	28	07:22 (LZ40)	20:34	17	06:36 (LZ32)	20:55		
23	07:36		08:18 (LZ56)	06:58		06:09		07:09 (LZ45)	06:15		06:55 (LZ40)	05:37		06:20 (LZ32)	05:28		
	17:07	25	08:43 (LZ56)	17:49		18:24	18	07:27 (LZ45)	20:01	27	07:22 (LZ40)	20:35	16	06:36 (LZ32)	20:55		
24	07:35		08:18 (LZ56)	06:56		06:07		07:12 (LZ45)	06:14		06:55 (LZ40)	05:36		06:21 (LZ32)	05:28		
	17:08	24	08:42 (LZ56)	17:50		18:25	13	07:25 (LZ45)	20:03	26	07:21 (LZ40)	20:36	13	06:34 (LZ32)	20:55		
25	07:34		08:19 (LZ56)	06:54		06:05		06:56 (LZ40)	05:36		06:56 (LZ40)	05:36		06:23 (LZ32)	05:28		
	17:09	23	08:42 (LZ56)	17:52		18:27		20:04	25	07:21 (LZ40)	20:37	11	06:34 (LZ32)	20:55			
26	07:33		08:20 (LZ56)	06:53		06:04		06:10			06:56 (LZ40)	05:35		06:24 (LZ32)	05:28		
	17:11	22	08:42 (LZ56)	17:53		18:28		20:05	23	07:19 (LZ40)	20:38	8	06:32 (LZ32)	20:56			
27	07:32		08:21 (LZ56)	06:51		06:02		06:09			06:57 (LZ40)	05:34		06:27 (LZ32)	05:29		
	17:12	20	08:41 (LZ56)	17:54		18:29		20:06	21	07:18 (LZ40)	20:39	2	06:29 (LZ32)	20:56			
28	07:31		08:22 (LZ56)	06:50		06:00		06:07			06:58 (LZ40)	05:33			05:29		
	17:14	18	08:40 (LZ56)	17:55		18:30		20:07	18	07:16 (LZ40)	20:40			20:56			
29	07:31		08:24 (LZ56)			06:58		06:06			07:00 (LZ40)	05:33			05:30		
	17:15	15	08:39 (LZ56)			19:31		20:09	14	07:14 (LZ40)	20:41			20:56			
30	07:30		08:26 (LZ56)			06:56		06:04			07:03 (LZ40)	05:32			05:30		
	17:16	11	08:37 (LZ56)			19:33		20:10	9	07:12 (LZ40)	20:42			20:55			
31	07:29		08:30 (LZ56)			06:55						05:31					
	17:18	4	08:34 (LZ56)			19:34						20:43					
Potential sun hours	289			293		369		402				456			462		
Total, worst case	658					646		471				415					

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: ZaG_02 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -83.7° Slope: 90.0° (52)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

July		August		September		October		November		December	
1	05:31		05:57	06:27 (LZ32)	06:32	07:04 (LZ40)	07:06	07:43 (LZ45)	06:44	07:22	07:56 (LZ56)
	20:55		20:34	06:49 (LZ32)	19:47	07:18 (LZ40)	18:52	08:19 (LZ45)	17:01	16:34	08:19 (LZ56)
2	05:31		05:58	06:27 (LZ32)	06:33	07:07 (LZ40)	07:07	07:43 (LZ45)	06:45	07:23	07:57 (LZ56)
	20:55		20:33	06:49 (LZ32)	19:45	07:14 (LZ40)	18:50	08:18 (LZ45)	17:00	16:33	08:20 (LZ56)
3	05:32		05:59	06:27 (LZ32)	06:34		07:08	07:43 (LZ45)	06:47	07:24	07:58 (LZ56)
	20:55		20:31	06:48 (LZ32)	19:43		18:49	08:18 (LZ45)	16:59	16:33	08:20 (LZ56)
4	05:32		06:00	06:28 (LZ32)	06:35		07:09	07:43 (LZ45)	06:48	07:26	07:59 (LZ56)
	20:55		20:30	06:47 (LZ32)	19:42		18:47	08:17 (LZ45)	16:57	16:33	08:20 (LZ56)
5	05:33		06:01	06:29 (LZ32)	06:36		07:10	07:44 (LZ45)	06:49	07:27	07:59 (LZ56)
	20:54		20:29	06:48 (LZ32)	19:40		18:45	08:17 (LZ45)	16:56	16:33	08:20 (LZ56)
6	05:33		06:02	06:30 (LZ32)	06:37		07:12	07:44 (LZ45)	06:51	07:28	08:00 (LZ56)
	20:54		20:28	06:46 (LZ32)	19:38		18:43	08:15 (LZ45)	16:55	16:32	08:20 (LZ56)
7	05:34		06:03	06:31 (LZ32)	06:38		07:13	07:45 (LZ45)	06:52	07:29	08:01 (LZ56)
	20:54		20:26	06:45 (LZ32)	19:36		18:41	08:14 (LZ45)	16:54	16:32	08:20 (LZ56)
8	05:35		06:05	06:33 (LZ32)	06:40		07:14	07:46 (LZ45)	06:53	07:30	08:02 (LZ56)
	20:53		20:25	06:43 (LZ32)	19:34		18:40	08:12 (LZ45)	16:52	16:32	08:20 (LZ56)
9	05:36		06:06		06:41		07:15	07:47 (LZ45)	06:55	07:31	08:03 (LZ56)
	20:53		20:24		19:33		18:38	08:10 (LZ45)	16:51	16:32	08:20 (LZ56)
10	05:36		06:07		06:42		07:16	07:49 (LZ45)	06:56	07:32	08:04 (LZ56)
	20:53		20:22		19:31		18:36	08:08 (LZ45)	16:50	16:32	08:20 (LZ56)
11	05:37		06:08		06:43		07:18	07:52 (LZ45)	06:57	07:32	08:05 (LZ56)
	20:52		20:21		19:29		18:34	08:04 (LZ45)	16:49	16:32	08:20 (LZ56)
12	05:38		06:09		06:44		07:19		06:59	07:33	08:06 (LZ56)
	20:52		20:19		19:27		18:33		16:48	16:32	08:20 (LZ56)
13	05:39		06:10	07:10 (LZ40)	06:45		07:20		07:00	07:34	08:06 (LZ56)
	20:51		20:18	07:20 (LZ40)	19:25		18:31		16:47	16:32	08:19 (LZ56)
14	05:39		06:11	07:07 (LZ40)	06:46		07:21		07:01	07:35	08:08 (LZ56)
	20:50		20:16	07:23 (LZ40)	19:23		18:29		16:46	16:32	08:19 (LZ56)
15	05:40		06:12	07:05 (LZ40)	06:47		07:22		07:03	07:36	08:09 (LZ56)
	20:50		20:15	07:24 (LZ40)	19:22		18:28		16:45	16:32	08:19 (LZ56)
16	05:41		06:14	07:04 (LZ40)	06:49		07:24		07:04	07:36	08:10 (LZ56)
	20:49		20:13	07:25 (LZ40)	19:20		18:26		16:44	16:33	08:19 (LZ56)
17	05:42	06:35 (LZ32)	06:15	07:02 (LZ40)	06:50		07:25		07:05	07:37	08:10 (LZ56)
	20:48	5	06:40 (LZ32)	07:26 (LZ40)	19:18		18:24		16:43	16:33	08:18 (LZ56)
18	05:43		06:33 (LZ32)	07:01 (LZ40)	06:51		07:26		07:06	07:38	08:12 (LZ56)
	20:48	10	06:43 (LZ32)	07:26 (LZ40)	19:16		18:23		16:42	16:33	08:19 (LZ56)
19	05:44		06:32 (LZ32)	07:01 (LZ40)	06:52	08:00 (LZ45)	07:27		07:08	07:38	08:13 (LZ56)
	20:47	12	06:44 (LZ32)	07:28 (LZ40)	19:14	10	08:10 (LZ45)	18:21	16:41	16:34	08:19 (LZ56)
20	05:45		06:31 (LZ32)	07:01 (LZ40)	06:53		07:56 (LZ45)	07:29	07:09	07:39	08:13 (LZ56)
	20:46	14	06:45 (LZ32)	07:28 (LZ40)	19:12	17	08:13 (LZ45)	18:19	16:40	16:34	08:19 (LZ56)
21	05:46		06:30 (LZ32)	07:00 (LZ40)	06:54		07:53 (LZ45)	07:30	07:10	07:40	08:14 (LZ56)
	20:45	17	06:47 (LZ32)	07:28 (LZ40)	19:11	22	08:15 (LZ45)	18:18	16:40	16:34	08:20 (LZ56)
22	05:47		06:29 (LZ32)	06:59 (LZ40)	06:55		07:52 (LZ45)	07:31	07:11	07:40	08:14 (LZ56)
	20:44	17	06:46 (LZ32)	07:28 (LZ40)	19:09	25	08:17 (LZ45)	18:16	16:39	16:35	08:20 (LZ56)
23	05:48		06:28 (LZ32)	06:59 (LZ40)	06:56		07:50 (LZ45)	07:32	07:13	07:41	08:15 (LZ56)
	20:43	19	06:47 (LZ32)	07:28 (LZ40)	19:07	28	08:18 (LZ45)	18:15	16:38	16:35	08:21 (LZ56)
24	05:49		06:28 (LZ32)	06:59 (LZ40)	06:58		07:48 (LZ45)	07:34	07:14	07:41	08:15 (LZ56)
	20:42	20	06:48 (LZ32)	07:27 (LZ40)	19:05	31	08:19 (LZ45)	18:13	16:37	16:36	08:21 (LZ56)
25	05:50		06:27 (LZ32)	06:58 (LZ40)	06:59		07:47 (LZ45)	06:35	07:15	07:42	08:15 (LZ56)
	20:41	21	06:48 (LZ32)	07:27 (LZ40)	19:03	32	08:19 (LZ45)	17:12	16:37	16:37	08:22 (LZ56)
26	05:51		06:27 (LZ32)	06:58 (LZ40)	07:00		07:46 (LZ45)	06:36	07:16	07:42	08:16 (LZ56)
	20:40	22	06:49 (LZ32)	07:26 (LZ40)	19:01	33	08:19 (LZ45)	17:10	16:36	16:37	08:23 (LZ56)
27	05:52		06:27 (LZ32)	06:59 (LZ40)	07:01		07:45 (LZ45)	06:38	07:18	07:42	08:15 (LZ56)
	20:39	22	06:49 (LZ32)	07:25 (LZ40)	19:00	34	08:19 (LZ45)	17:09	16:36	16:38	08:24 (LZ56)
28	05:53		06:27 (LZ32)	06:59 (LZ40)	07:02		07:44 (LZ45)	06:39	07:19	07:43	08:15 (LZ56)
	20:38	22	06:49 (LZ32)	07:24 (LZ40)	18:58	35	08:19 (LZ45)	17:07	16:35	16:39	08:25 (LZ56)
29	05:54		06:26 (LZ32)	06:59 (LZ40)	07:03		07:44 (LZ45)	06:40	07:20	07:43	08:15 (LZ56)
	20:37	23	06:49 (LZ32)	07:23 (LZ40)	18:56	36	08:20 (LZ45)	17:06	16:35	16:39	08:25 (LZ56)
30	05:55		06:26 (LZ32)	07:00 (LZ40)	07:05		07:44 (LZ45)	06:41	07:21	07:43	08:14 (LZ56)
	20:36	23	06:49 (LZ32)	07:22 (LZ40)	18:54	36	08:20 (LZ45)	17:04	16:34	16:40	08:26 (LZ56)
31	05:56		06:26 (LZ32)	07:01 (LZ40)				06:43		07:43	08:14 (LZ56)
	20:35	23	06:49 (LZ32)	07:20 (LZ40)				17:03		16:41	08:27 (LZ56)
Potential sun hours	468		433		376		342		291		279
Total, worst case	270		599		360		313		449		391

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

Calculation: Worst Case Shadow receptor: ZaG_03 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 85.2° Slope: 90.0° (53)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January			February			March			April			May		June
1	07:43			07:27	08:11 (LZ56)	06:48		07:12 (LZ45)	06:53		07:20 (LZ40)	06:03		05:31	
	16:42			17:19	28 16:30 (LZ54)	17:57	16	07:28 (LZ45)	19:35	2	07:22 (LZ40)	20:11		20:44	
2	07:44			07:26	08:13 (LZ56)	06:46		07:09 (LZ45)	06:51		07:14 (LZ40)	06:02		05:30	
	16:43			17:20	20 16:27 (LZ54)	17:58	20	07:29 (LZ45)	19:36	12	07:26 (LZ40)	20:12		20:45	
3	07:44			07:25	16:19 (LZ54)	06:45		07:08 (LZ45)	06:49		07:12 (LZ40)	06:00		05:30	
	16:44			17:22	5 16:24 (LZ54)	17:59	22	07:30 (LZ45)	19:37	16	07:28 (LZ40)	20:13		20:45	
4	07:44			07:24		06:43		07:07 (LZ45)	06:47		07:11 (LZ40)	05:59		05:29	
	16:45			17:23		18:01	25	07:32 (LZ45)	19:39	19	07:30 (LZ40)	20:15		20:46	
5	07:44			07:23		06:41		07:06 (LZ45)	06:46		07:09 (LZ40)	05:57		05:29	
	16:46			17:24		18:02	26	07:32 (LZ45)	19:40	21	07:30 (LZ40)	20:16		20:47	
6	07:43			07:22		06:39		07:05 (LZ45)	06:44		07:08 (LZ40)	05:56		05:29	
	16:47			17:26		18:03	27	07:32 (LZ45)	19:41	22	07:30 (LZ40)	20:17		20:48	
7	07:43			07:20		06:38		07:04 (LZ45)	06:42		07:07 (LZ40)	05:55		05:28	
	16:48			17:27		18:04	37	17:39 (LZ47)	19:42	23	07:30 (LZ40)	20:18		20:48	
8	07:43			07:19		06:36		07:04 (LZ45)	06:40		07:07 (LZ40)	05:53		05:28	
	16:49			17:29		18:06	43	17:42 (LZ47)	19:44	24	07:31 (LZ40)	20:19		20:49	
9	07:43		16:12 (LZ54)	07:18		06:34		07:04 (LZ45)	06:39		07:07 (LZ40)	05:52		05:28	
	16:50	5	16:17 (LZ54)	17:30		18:07	45	17:43 (LZ47)	19:45	24	07:31 (LZ40)	20:20		20:50	
10	07:43			07:17		06:32		07:03 (LZ45)	06:37		07:06 (LZ40)	05:51		05:27	
	16:51	9	16:20 (LZ54)	17:31		18:08	49	17:44 (LZ47)	19:46	24	07:30 (LZ40)	20:21		20:50	
11	07:42		08:09 (LZ56)	07:15		06:31		07:03 (LZ45)	06:35		07:06 (LZ40)	05:50		05:27	
	16:52	17	16:21 (LZ54)	17:33		18:09	49	17:44 (LZ47)	19:47	23	07:29 (LZ40)	20:23		20:51	
12	07:42		08:07 (LZ56)	07:14		06:29		07:03 (LZ45)	06:33		07:07 (LZ40)	05:49		05:27	
	16:53	23	16:23 (LZ54)	17:34		18:11	49	17:44 (LZ47)	19:48	22	07:29 (LZ40)	20:24		20:51	
13	07:42		08:07 (LZ56)	07:13		06:27		07:04 (LZ45)	06:32		07:07 (LZ40)	05:47		05:27	
	16:54	27	16:24 (LZ54)	17:35		18:12	47	17:45 (LZ47)	19:49	20	07:27 (LZ40)	20:25		20:52	
14	07:41		08:06 (LZ56)	07:11		06:25		07:05 (LZ45)	06:30		07:07 (LZ40)	05:46		05:27	
	16:56	31	16:25 (LZ54)	17:37		18:13	46	17:45 (LZ47)	19:51	19	07:26 (LZ40)	20:26		20:52	
15	07:41		08:05 (LZ56)	07:10		06:24		07:06 (LZ45)	06:28		07:09 (LZ40)	05:45		05:27	
	16:57	34	16:26 (LZ54)	17:38		18:14	42	17:44 (LZ47)	19:52	16	07:25 (LZ40)	20:27		20:53	
16	07:40		08:05 (LZ56)	07:08		06:22		07:07 (LZ45)	06:27		07:11 (LZ40)	05:44		05:27	
	16:58	36	16:27 (LZ54)	17:40		18:16	38	17:43 (LZ47)	19:53	11	07:22 (LZ40)	20:28		20:53	
17	07:40		08:04 (LZ56)	07:07		06:20		07:09 (LZ45)	06:25			05:43		05:27	
	16:59	40	16:28 (LZ54)	17:41		18:17	32	17:42 (LZ47)	19:54			20:29		20:54	
18	07:39		08:05 (LZ56)	07:05		06:18		17:24 (LZ47)	06:23			05:42		05:27	
	17:00	40	16:29 (LZ54)	17:42		18:18	17	17:41 (LZ47)	19:55			20:30		20:54	
19	07:39		08:04 (LZ56)	07:04		06:16		17:25 (LZ47)	06:22			05:41		05:27	
	17:02	44	16:30 (LZ54)	17:44		18:19	14	17:39 (LZ47)	19:57			20:31		20:54	
20	07:38		08:04 (LZ56)	07:02		06:15		17:27 (LZ47)	06:20			05:40		05:27	
	17:03	44	16:30 (LZ54)	17:45		18:21	9	17:36 (LZ47)	19:58			20:32		20:55	
21	07:37		08:04 (LZ56)	07:01		06:13			06:18			05:39		05:27	
	17:04	44	16:30 (LZ54)	17:46		18:22			19:59			20:33		20:55	
22	07:37		08:05 (LZ56)	06:59		06:11			06:17			05:38		05:27	
	17:06	46	16:32 (LZ54)	17:48		18:23			20:00			20:34		20:55	
23	07:36		08:05 (LZ56)	06:58		06:09			06:15			05:37		05:28	
	17:07	46	16:32 (LZ54)	17:49		18:24			20:01			20:35		20:55	
24	07:35		08:05 (LZ56)	06:56		06:07			06:14			05:36		05:28	
	17:08	46	16:32 (LZ54)	17:50		18:25			20:03			20:36		20:55	
25	07:34		08:05 (LZ56)	06:54		06:05			06:12			05:36		05:28	
	17:09	46	16:32 (LZ54)	17:52		18:27			20:04			20:37		20:55	
26	07:33		08:05 (LZ56)	06:53		06:04			06:10			05:35		05:28	
	17:11	45	16:32 (LZ54)	17:53		18:28			20:05			20:38		20:56	
27	07:32		08:06 (LZ56)	06:51		06:02			06:09			05:34		05:29	
	17:12	44	16:32 (LZ54)	17:54		18:29			20:06			20:39		20:56	
28	07:32		08:07 (LZ56)	06:50		06:00			06:07			05:33		05:29	
	17:14	42	16:32 (LZ54)	17:55	10	07:14 (LZ45)			20:07			20:40		20:56	
29	07:31		08:07 (LZ56)			06:58			06:06			05:33		05:30	
	17:15	41	16:32 (LZ54)			19:31			20:09			20:41		20:56	
30	07:30		08:08 (LZ56)			06:56			06:04			05:32		05:30	
	17:16	37	16:31 (LZ54)			19:33			20:10			20:42		20:55	
31	07:29		08:10 (LZ56)			06:55						05:31			
	17:18	32	16:30 (LZ54)			19:34						20:43			
Potential sun hours	289			293			369			402		456		462	
Total, worst case		819			63			653		298					

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: ZaG_03 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 85.2° Slope: 90.0° (53)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:55	05:57 20:34	06:32 19:47	07:06 (LZ40) 18:52	07:06 18:24 (LZ47)	07:22 16:34
2	05:31 20:55	05:58 20:33	06:33 19:45	07:05 (LZ40) 18:50	07:07 18:23 (LZ47)	07:23 16:33
3	05:32 20:55	05:59 20:31	06:34 19:43	07:05 (LZ40) 18:49	07:08 18:22 (LZ47)	07:25 16:33
4	05:32 20:55	06:00 20:30	06:35 19:42	07:04 (LZ40) 18:47	07:09 18:21 (LZ47)	07:26 16:33
5	05:33 20:54	06:01 20:29	06:36 19:40	07:04 (LZ40) 18:45	07:10 18:20 (LZ47)	07:27 16:33
6	05:34 20:54	06:02 20:28	06:37 19:38	07:04 (LZ40) 18:43	07:12 18:17 (LZ47)	07:28 16:32
7	05:34 20:54	06:04 20:26	06:38 19:36	07:04 (LZ40) 18:41	07:13 18:13 (LZ47)	07:29 16:32
8	05:35 20:53	06:05 20:25	06:40 19:34	07:05 (LZ40) 18:40	07:14 08:07 (LZ45)	15:50 (LZ54) 15:56 (LZ54)
9	05:36 20:53	06:06 20:24	06:41 19:33	07:06 (LZ40) 18:38	07:15 08:06 (LZ45)	07:31 15:58 (LZ54)
10	05:36 20:53	06:07 20:22	06:42 19:31	07:07 (LZ40) 18:36	07:16 08:05 (LZ45)	07:32 16:01 (LZ54)
11	05:37 20:52	06:08 20:21	06:43 19:29	07:11 (LZ40) 18:34	07:18 08:04 (LZ45)	07:32 16:01 (LZ54)
12	05:38 20:52	06:09 20:19	06:44 19:27	07:19 18:33	06:59 08:02 (LZ45)	07:33 16:02 (LZ54)
13	05:39 20:51	06:10 20:18	06:45 19:25	07:20 18:31	07:00 07:59 (LZ45)	07:34 16:04 (LZ54)
14	05:39 20:50	06:11 20:16	06:46 19:23	07:21 18:29	07:01 07:55 (LZ45)	07:35 16:04 (LZ54)
15	05:40 20:50	06:12 20:15	06:47 19:22	07:22 18:28	16:46 16:45	16:32 16:05 (LZ54)
16	05:41 20:49	06:14 20:13	06:49 19:20	07:24 18:26	07:04 16:44	07:36 16:05 (LZ54)
17	05:42 20:48	06:15 20:12	06:50 19:18	07:25 18:24	07:05 16:43	07:37 16:05 (LZ54)
18	05:43 20:48	06:16 20:10	06:51 19:16	07:26 18:23	07:06 16:42	07:38 16:06 (LZ54)
19	05:44 20:47	06:17 20:09	06:52 19:14	07:27 18:21	07:08 16:41	07:39 16:06 (LZ54)
20	05:45 20:46	06:18 20:07	06:53 19:12	07:29 18:19	07:09 16:40	07:40 16:07 (LZ54)
21	05:46 20:45	06:19 20:05	06:54 19:11	07:30 18:18	07:10 16:40	07:41 16:06 (LZ54)
22	05:47 20:44	06:20 20:04	06:55 19:09	07:31 18:16	07:12 16:39	07:42 16:06 (LZ54)
23	05:48 20:43	06:21 20:02	06:57 19:07	18:12 (LZ47) 18:20 (LZ47)	07:13 16:38	07:41 16:07 (LZ54)
24	05:49 20:42	06:23 20:01	06:58 19:05	18:09 (LZ47) 18:22 (LZ47)	07:14 16:37	07:42 16:06 (LZ54)
25	05:50 20:42	06:24 19:59	06:59 19:03	18:07 (LZ47) 18:23 (LZ47)	07:15 16:37	07:42 16:06 (LZ54)
26	05:51 20:41	06:25 19:57	07:00 19:01	07:53 (LZ45) 18:24 (LZ47)	07:16 16:36	07:43 16:05 (LZ54)
27	05:52 20:39	06:26 19:55	07:01 19:00	07:49 (LZ45) 18:24 (LZ47)	07:18 16:36	07:45 16:06 (LZ54)
28	05:53 20:38	06:27 19:54	07:02 19:00	07:47 (LZ45) 18:24 (LZ47)	07:19 16:35	07:46 16:05 (LZ54)
29	05:54 20:37	06:28 19:52	07:03 18:58	07:46 (LZ45) 18:25 (LZ47)	07:20 16:35	07:47 16:05 (LZ54)
30	05:55 20:36	06:29 19:50	07:05 18:54	07:44 (LZ45) 18:25 (LZ47)	06:42 17:04	07:43 16:04 (LZ54)
31	05:56 20:35	06:31 19:49	07:06 (LZ40) 07:28 (LZ40)	06:43 17:03	16:34 17:03	07:43 16:41
Potential sun hours	468	433	376	342	291	279
Total, worst case		92	448	444	849	32

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: ZaG_04 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 76.5° Slope: 90.0° (68)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June
1	07:43 16:42	07:27 17:19	08:03 (LZ56) 16:51 (LZ54)	06:48 17:57	06:53 19:35	05:31 20:44
2	07:44 16:43	07:26 17:20	08:03 (LZ56) 16:51 (LZ54)	06:46 17:58	06:51 19:36	05:30 20:45
3	07:44 16:44	07:25 17:22	08:04 (LZ56) 16:52 (LZ54)	06:45 17:59	06:49 19:37	05:30 20:45
4	07:44 16:45	07:24 17:23	08:05 (LZ56) 16:53 (LZ54)	06:43 18:01	06:47 19:39	05:29 20:46
5	07:44 16:46	07:23 17:24	08:06 (LZ56) 16:53 (LZ54)	06:41 18:02	06:46 19:40	05:29 20:47
6	07:43 16:47	07:22 17:26	08:08 (LZ56) 16:54 (LZ54)	06:39 18:03	06:44 19:41	05:29 20:48
7	07:43 16:48	07:20 17:27	08:09 (LZ56) 16:53 (LZ54)	06:38 18:04	06:42 19:42	05:28 20:48
8	07:43 16:49	07:19 17:29	08:12 (LZ56) 16:53 (LZ54)	06:36 18:06	06:40 19:43	05:28 20:49
9	07:43 16:50	07:18 17:30	16:32 (LZ54) 16:54 (LZ54)	06:34 18:07	06:39 19:45	05:28 20:50
10	07:43 16:51	07:17 17:31	16:31 (LZ54) 16:53 (LZ54)	06:32 18:08	06:37 19:46	05:27 20:50
11	07:42 16:52	07:15 17:33	16:33 (LZ54) 16:52 (LZ54)	06:31 18:09	06:35 19:47	05:27 20:51
12	07:42 16:53	07:14 17:34	16:33 (LZ54) 16:51 (LZ54)	06:29 18:11	06:33 19:48	05:27 20:51
13	07:42 16:54	07:13 17:35	16:35 (LZ54) 16:50 (LZ54)	06:27 18:12	06:32 19:49	05:27 20:52
14	07:41 16:56	07:11 17:37	16:37 (LZ54) 16:48 (LZ54)	06:25 18:13	06:30 19:51	05:27 20:52
15	07:41 16:57	07:10 17:38	06:24 18:14	06:28 19:52	06:28 20:00	05:27 20:53
16	07:40 16:58	07:08 17:40	06:22 18:16	06:27 19:53	06:27 20:01	05:27 20:53
17	07:40 16:59	07:07 17:41	06:20 18:17	06:25 19:54	06:25 20:02	05:27 20:54
18	07:39 17:00	08:08 (LZ56) 08:16 (LZ56)	07:05 17:42	06:18 18:18	06:23 19:55	05:27 20:54
19	07:39 17:02	08:06 (LZ56) 08:18 (LZ56)	07:04 17:44	06:16 18:19	06:22 19:57	05:27 20:54
20	07:38 17:03	08:04 (LZ56) 08:19 (LZ56)	07:02 17:45	06:15 18:21	06:20 19:58	05:27 20:55
21	07:37 17:04	08:03 (LZ56) 08:21 (LZ56)	07:01 17:46	06:13 18:22	06:18 19:59	05:27 20:55
22	07:37 17:06	08:04 (LZ56) 08:23 (LZ56)	06:59 17:48	06:11 18:23	06:17 20:00	05:27 20:55
23	07:36 17:07	08:03 (LZ56) 08:23 (LZ56)	06:58 17:49	06:09 18:24	06:15 20:01	05:28 20:55
24	07:35 17:08	08:03 (LZ56) 08:24 (LZ56)	06:56 17:50	06:07 18:25	06:14 20:03	05:28 20:55
25	07:34 17:09	08:02 (LZ56) 08:25 (LZ56)	06:54 17:52	06:05 18:27	06:12 20:04	05:28 20:55
26	07:33 17:11	08:02 (LZ56) 08:25 (LZ56)	06:53 17:53	06:04 18:28	06:10 20:05	05:28 20:56
27	07:32 17:12	08:02 (LZ56) 08:26 (LZ56)	06:51 17:54	06:02 18:29	06:09 20:06	05:29 20:56
28	07:32 17:14	08:02 (LZ56) 16:43 (LZ54)	06:50 17:55	06:00 18:30	06:07 20:07	05:29 20:56
29	07:31 17:15	08:02 (LZ56) 16:46 (LZ54)	06:58 17:55	06:58 19:31	06:06 20:09	05:30 20:56
30	07:30 17:16	08:02 (LZ56) 16:48 (LZ54)	06:56 17:55	06:56 19:33	06:04 20:10	05:30 20:56
31	07:29 17:18	08:03 (LZ56) 16:50 (LZ54)	06:55 17:55	06:55 19:34	06:04 20:10	05:31 20:56
Potential sun hours	289	293	369	402	456	462
Total, worst case	328	424	730	385		

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

Calculation: Worst Case Shadow receptor: ZaG_04 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 76.5° Slope: 90.0° (68)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:55	05:57 20:34	06:32 19:47	07:06 18:52	07:33 (LZ45) 17:01	06:44 16:01 (LZ54) 07:22
2	05:31 20:55	05:58 20:33	06:33 19:45	07:07 18:50	07:34 (LZ45) 17:00	06:45 16:00 (LZ54) 07:23
3	05:32 20:55	05:59 20:31	06:34 19:43	07:08 18:49	07:36 (LZ45) 16:59	06:47 16:22 (LZ54) 07:24
4	05:32 20:55	06:00 20:30	06:35 19:42	07:09 18:47	07:39 (LZ45) 16:57	06:48 16:23 (LZ54) 07:26
5	05:33 20:54	06:01 20:29	06:36 19:40	07:10 18:45	06:49 16:56	07:37 (LZ56) 16:24 (LZ54) 07:27
6	05:34 20:54	06:02 20:28	06:37 19:38	07:12 18:43	06:51 16:55	07:36 (LZ56) 16:23 (LZ54) 07:28
7	05:34 20:54	06:04 20:26	06:38 19:36	07:13 18:41	06:52 16:54	07:35 (LZ56) 16:23 (LZ54) 07:29
8	05:35 20:53	06:05 20:25	06:40 19:34	07:14 18:40	06:53 16:52	07:35 (LZ56) 16:23 (LZ54) 07:30
9	05:36 20:53	06:06 20:24	06:41 19:33	07:15 18:38	06:55 16:51	07:34 (LZ56) 16:22 (LZ54) 07:31
10	05:36 20:53	06:07 20:22	06:42 19:31	07:16 18:36	06:56 16:50	07:34 (LZ56) 16:22 (LZ54) 07:32
11	05:37 20:52	06:08 20:21	06:43 19:29	07:18 18:34	06:57 16:49	07:34 (LZ56) 16:20 (LZ54) 07:32
12	05:38 20:52	06:09 20:19	06:44 19:27	07:19 18:33	06:59 16:48	07:33 (LZ56) 16:19 (LZ54) 07:33
13	05:39 20:51	06:10 20:18	06:45 19:25	07:20 18:31	07:00 16:47	07:34 (LZ56) 16:18 (LZ54) 07:34
14	05:39 20:50	06:11 20:16	06:46 19:23	07:21 18:29	07:01 16:46	07:34 (LZ56) 16:14 (LZ54) 07:35
15	05:40 20:50	06:12 20:15	06:47 19:22	07:22 18:28	07:03 16:45	07:35 (LZ56) 07:59 (LZ56) 07:36
16	05:41 20:49	06:14 20:13	06:49 19:20	07:24 18:26	07:04 16:44	07:35 (LZ56) 07:58 (LZ56) 07:36
17	05:42 20:48	06:15 20:12	06:50 19:18	07:25 18:24	07:05 16:43	07:35 (LZ56) 07:58 (LZ56) 07:37
18	05:43 20:48	06:16 20:10	06:51 19:16	07:26 18:23	07:06 16:42	07:37 (LZ56) 07:58 (LZ56) 07:38
19	05:44 20:47	06:17 20:09	06:52 19:14	07:27 18:21	07:08 16:41	07:37 (LZ56) 07:57 (LZ56) 07:38
20	05:45 20:46	06:18 20:07	06:53 19:12	07:29 18:19	07:09 16:40	07:39 (LZ56) 07:58 (LZ56) 07:39
21	05:46 20:45	06:19 20:05	06:54 19:11	07:30 18:18	07:10 16:40	07:39 (LZ56) 07:57 (LZ56) 07:40
22	05:47 20:44	06:20 20:04	06:55 19:09	07:31 18:16	07:11 16:39	07:40 (LZ56) 07:55 (LZ56) 07:40
23	05:48 20:43	06:21 20:02	06:56 19:07	07:32 18:15	07:13 16:38	07:43 (LZ56) 07:55 (LZ56) 07:41
24	05:49 20:42	06:23 20:01	06:58 19:05	07:34 18:13	07:14 16:37	07:44 (LZ56) 07:53 (LZ56) 07:41
25	05:50 20:41	06:24 19:59	06:59 19:03	07:35 18:12	07:15 16:37	07:45 (LZ56) 16:37 07:42
26	05:51 20:40	06:25 19:57	07:00 19:01	07:36 18:10	07:16 16:36	16:37 07:42 16:37
27	05:52 20:39	06:26 19:55	07:01 19:00	07:37 18:09	07:17 16:35	16:38 07:43 16:38
28	05:53 20:38	06:27 19:54	07:02 18:58	07:38 18:07	07:18 16:34	16:39 07:44 16:39
29	05:54 20:37	06:28 19:52	07:03 18:56	07:39 18:05	07:19 16:33	16:40 07:45 16:40
30	05:55 20:36	06:29 19:50	07:04 18:54	07:40 18:03	07:20 16:32	16:41 07:46 16:41
31	05:56 20:35	06:31 19:49	07:05 18:53	07:41 18:02	07:21 16:31	16:42 07:47 16:42
Potential sun hours	468	433	376	342	291	279
Total, worst case		390	671	144	692	

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: ZeM_01 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -91.1° Slope: 90.0° (48)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December						
1	07:44	07:27	06:48	06:53	07:49 (LZ21)	06:03	05:31	05:31	05:57	06:32	07:34 (LZ21)	07:06	18:02 (LZ22)	06:44	07:22			
	16:42	17:19	17:57	19:35	21	08:10 (LZ21)	20:11	20:44	20:55	20:34	19:47	44	08:18 (LZ21)	18:52	15	18:17 (LZ22)	17:01	16:34
2	07:44	07:26	06:46	06:51	07:46 (LZ21)	06:02	05:30	05:31	05:58	06:33	07:34 (LZ21)	07:07	18:04 (LZ22)	06:45	07:23			
	16:43	17:20	17:58	19:36	26	08:12 (LZ21)	20:12	20:45	20:55	20:33	19:45	43	08:17 (LZ21)	18:50	11	18:15 (LZ22)	17:00	16:33
3	07:44	07:25	06:45	06:49	07:44 (LZ21)	06:00	05:30	05:32	05:59	06:34	07:34 (LZ21)	07:08		06:47	07:25			
	16:44	17:22	17:59	19:38	30	08:14 (LZ21)	20:13	20:45	20:55	20:31	19:43	42	08:16 (LZ21)	18:49		16:59	16:33	
4	07:44	07:24	06:43	06:47	07:42 (LZ21)	05:59	05:29	05:32	06:00	06:35	07:34 (LZ21)	07:09		06:48	07:26			
	16:45	17:23	18:01	19:39	34	08:16 (LZ21)	20:15	20:46	20:55	20:30	19:42	41	08:15 (LZ21)	18:47		16:57	16:33	
5	07:44	07:23	06:41	06:46	07:41 (LZ21)	05:57	05:29	05:33	06:01	06:36	07:35 (LZ21)	07:10		06:49	07:27			
	16:46	17:24	18:02	19:40	35	08:16 (LZ21)	20:16	20:47	20:55	20:29	19:40	39	08:14 (LZ21)	18:45		16:56	16:32	
6	07:44	07:22	06:39	06:44	07:39 (LZ21)	05:56	05:28	05:33	06:02	06:37	07:35 (LZ21)	07:12		06:51	07:28			
	16:47	17:26	18:03	19:41	38	08:17 (LZ21)	20:17	20:48	20:54	20:28	19:38	38	08:13 (LZ21)	18:43		16:55	16:32	
7	07:43	07:21	06:38	06:42	07:38 (LZ21)	05:55	05:28	05:34	06:03	06:38	07:36 (LZ21)	07:13		06:52	07:29			
	16:48	17:27	18:04	19:42	39	08:17 (LZ21)	20:18	20:48	20:54	20:26	19:36	35	08:11 (LZ21)	18:41		16:54	16:32	
8	07:43	07:19	06:36	06:40	07:37 (LZ21)	05:53	05:28	05:35	06:05	06:40	07:36 (LZ21)	07:14		06:53	07:30			
	16:49	17:29	18:06	19:44	41	08:18 (LZ21)	20:19	20:49	20:54	20:25	19:34	34	08:10 (LZ21)	18:40		16:52	16:32	
9	07:43	07:18	06:34	06:39	07:36 (LZ21)	05:52	05:28	05:35	06:06	06:41	07:38 (LZ21)	07:15		06:55	07:31			
	16:50	17:30	18:07	19:45	42	08:18 (LZ21)	20:20	20:50	20:53	20:24	19:33	30	08:08 (LZ21)	18:38		16:51	16:32	
10	07:43	07:17	06:32	06:37	07:35 (LZ21)	05:51	05:27	05:36	06:07	06:42	07:39 (LZ21)	07:16		06:56	07:32			
	16:51	17:31	18:08	19:46	43	08:18 (LZ21)	20:22	20:50	20:53	20:22	19:31	27	08:06 (LZ21)	18:36		16:50	16:32	
11	07:42	07:15	06:31	17:27 (LZ22)	06:35	07:34 (LZ21)	05:50	05:27	05:37	06:08	06:43	27	08:07 (LZ21)	18:37		06:57	07:32	
	16:52	17:33	18:09	7	17:34 (LZ22)	19:47	44	08:18 (LZ21)	20:23	20:51	19:29	22	08:03 (LZ21)	18:34		16:49	16:32	
12	07:42	07:14	06:29	17:23 (LZ22)	06:33	07:34 (LZ21)	05:48	05:27	05:38	06:09	06:44	15	07:44 (LZ21)	18:33		06:59	07:33	
	16:53	17:34	18:11	14	17:37 (LZ22)	19:48	44	08:18 (LZ21)	20:24	20:51	19:27	15	07:59 (LZ21)	18:33		16:48	16:32	
13	07:42	07:13	06:27	17:22 (LZ22)	06:32	07:33 (LZ21)	05:47	05:27	05:39	06:10	07:54 (LZ21)	06:45		07:20		07:00	07:34	
	16:54	17:35	18:12	17	17:39 (LZ22)	19:50	45	08:18 (LZ21)	20:25	20:52	10	08:04 (LZ21)	19:25		16:47	16:32		
14	07:41	07:11	06:25	17:20 (LZ22)	06:30	07:33 (LZ21)	05:46	05:27	05:39	06:11	07:50 (LZ21)	06:46		07:21		07:01	07:35	
	16:55	17:37	18:13	20	17:40 (LZ22)	19:51	44	08:17 (LZ21)	20:26	20:52	18	08:08 (LZ21)	19:23		16:46	16:32		
15	07:41	07:10	06:24	17:19 (LZ22)	06:28	07:33 (LZ21)	05:45	05:27	05:40	06:12	07:47 (LZ21)	06:47		07:22		07:03	07:36	
	16:57	17:38	18:14	22	17:41 (LZ22)	19:52	44	08:17 (LZ21)	20:27	20:53	20:15	23	08:10 (LZ21)	19:22		16:45	16:32	
16	07:40	07:08	06:22	17:18 (LZ22)	06:27	07:33 (LZ21)	05:44	05:27	05:41	06:14	07:45 (LZ21)	06:49		07:24		07:04	07:37	
	16:58	17:39	18:16	23	17:41 (LZ22)	19:53	44	08:17 (LZ21)	20:28	20:53	20:13	26	08:11 (LZ21)	19:20		16:44	16:33	
17	07:40	07:07	06:20	17:17 (LZ22)	06:25	07:32 (LZ21)	05:43	05:27	05:42	06:15	07:44 (LZ21)	06:50		07:25		07:05	07:37	
	16:59	17:41	18:17	24	17:41 (LZ22)	19:54	44	08:16 (LZ21)	20:29	20:54	20:12	29	08:13 (LZ21)	19:18		16:43	16:33	
18	07:39	07:05	06:18	17:18 (LZ22)	06:23	07:33 (LZ21)	05:42	05:27	05:43	06:16	07:42 (LZ21)	06:51		07:26		07:06	07:38	
	17:00	17:42	18:18	23	17:41 (LZ22)	19:56	43	08:16 (LZ21)	20:30	20:54	20:12	32	08:14 (LZ21)	19:16		16:42	16:33	
19	07:39	07:04	06:16	17:17 (LZ22)	06:22	07:33 (LZ21)	05:41	05:27	05:44	06:17	07:41 (LZ21)	06:52		07:27		07:08	07:39	
	17:02	17:44	18:19	24	17:41 (LZ22)	19:57	41	08:14 (LZ21)	20:31	20:54	20:47	20:09	34	08:15 (LZ21)	19:14		16:41	16:34
20	07:38	07:02	06:15	17:17 (LZ22)	06:20	07:34 (LZ21)	05:40	05:27	05:45	06:18	07:40 (LZ21)	06:53		07:29		07:09	07:39	
	17:03	17:45	18:21	23	17:40 (LZ22)	19:58	40	08:14 (LZ21)	20:32	20:55	20:47	37	08:17 (LZ21)	19:12		16:40	16:34	
21	07:37	07:01	06:13	17:17 (LZ22)	06:18	07:34 (LZ21)	05:39	05:27	05:46	06:19	07:39 (LZ21)	06:54		07:30		07:10	07:40	
	17:04	17:46	18:22	22	17:39 (LZ22)	19:59	39	08:13 (LZ21)	20:34	20:55	20:45	20:05	38	08:17 (LZ21)	19:11		16:39	16:34
22	07:37	06:59	06:11	17:17 (LZ22)	06:17	07:34 (LZ21)	05:38	05:27	05:47	06:20	07:38 (LZ21)	06:55		07:31		07:12	07:40	
	17:05	17:48	18:23	21	17:38 (LZ22)	20:00	37	08:11 (LZ21)	20:35	20:55	20:44	20:04	40	08:18 (LZ21)	19:09		16:39	16:35
23	07:36	06:58	06:09	17:18 (LZ22)	06:15	07:35 (LZ21)	05:37	05:27	05:48	06:21	07:37 (LZ21)	06:56		07:33		07:13	07:41	
	17:07	17:49	18:24	18	17:36 (LZ22)	20:01	36	08:11 (LZ21)	20:36	20:55	20:43	20:02	41	08:18 (LZ21)	19:07		16:38	16:35
24	07:35	06:56	06:07	17:20 (LZ22)	06:14	07:35 (LZ21)	05:36	05:28	05:49	06:23	07:36 (LZ21)	06:58		07:34		07:14	07:41	
	17:08	17:50	18:25	15	17:35 (LZ22)	20:03	34	08:09 (LZ21)	20:37	20:55	20:41	42	08:18 (LZ21)	19:05		16:37	16:36	
25	07:34	06:54	06:05	17:22 (LZ22)	06:12	07:36 (LZ21)	05:36	05:28	05:50	06:24	07:36 (LZ21)	06:59		07:35		07:15	07:42	
	17:09	17:51	18:27	10	17:32 (LZ22)	20:04	32	08:08 (LZ21)	20:37	20:56	20:42	42	08:18 (LZ21)	19:03		16:37	16:37	
26	07:33	06:53	06:04	06:10	07:37 (LZ21)	05:35	05:28	05:51	06:25	06:25	07:35 (LZ21)	07:00		07:36		07:16	07:42	
	17:11	17:53	18:28	20:05	29	08:06 (LZ21)	20:38	20:56	20:41	19:57	44	08:19 (LZ21)	19:01		16:36	16:37		
27	07:32	06:51	06:02	06:09	07:39 (LZ21)	05:34	05:29	05:52	06:26	06:26	07:35 (LZ21)	07:01		07:38		07:18	07:42	
	17:12	17:54	18:29	20:06	25	08:04 (LZ21)	20:39	20:56	20:40	19:56	43	08:18 (LZ21)	19:00		16:36	16:38		
28	07:32	06:50	06:00	06:07	07:40 (LZ21)	05:33	05:29	05:53	06:27	06:27	07:34 (LZ21)	07:02		07:39		07:19	07:43	
	17:13	17:55	18:30	20:07	22	08:02 (LZ21)	20:40	20:56	20:38	19:54	44	08:18 (LZ21)	18:58		16:35	16:39		
29	07:31		06:58	06:06	07:43 (LZ21)	05:33	05:30	05:54	06:28	06:28	07:34 (LZ21)	07:03		07:40		07:20	07:43	
	17:15		19:31	20:09	16	07:59 (LZ21)	20:41	20:56	20:37	19:52	44	08:18 (LZ21)	18:56		16:35	16:39		
30	07:30		06:56	06:04	07:47 (LZ21)	05:32	05:30	05:55	06:29	06:29	07:33 (LZ21)	07:05		07:41		07:21	07:43	
	17:16		19:33	20:10	8	07:55 (LZ21)	20:42	20:56	20:36	19:50	45	08:18 (LZ21)	18:54		16:34	16:40		
31	07:29		06:55	06:03		05:31		05:56	06:31		07:33 (LZ21)			06:43		07:43		
	17:18		19:34	14	08:07 (LZ21)	20:43		20:35	19:49	44	08:17 (LZ21)			17:03		16:41		
Potential sun hours	289	293	369		402	456	462	468	433	376	667		342	291	279			
Total, worst case			297	1060					676			26						

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		





SHADOW - Calendar

Calculation: Worst Case Shadow receptor: ZeM_02 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -90.0° Slope: 90.0° (49)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June			
1	07:44 16:42	07:27 17:19	06:48 17:57	06:53 19:35	18:31 (LZ22) 18:50 (LZ22)	06:03 20:11	07:03 (LZ21) 07:47 (LZ21)	05:31 20:44	07:09 (LZ21) 07:41 (LZ21)
2	07:44 16:43	07:26 17:20	06:46 17:58	06:51 19:36	18:32 (LZ22) 18:48 (LZ22)	06:02 20:12	07:03 (LZ21) 07:48 (LZ21)	05:30 20:45	07:09 (LZ21) 07:40 (LZ21)
3	07:44 16:44	07:25 17:22	06:45 17:59	06:49 19:38	18:34 (LZ22) 18:46 (LZ22)	06:00 20:13	07:02 (LZ21) 07:47 (LZ21)	05:30 20:45	07:10 (LZ21) 07:40 (LZ21)
4	07:44 16:45	07:24 17:23	06:43 18:01	06:47 19:39	18:38 (LZ22) 18:43 (LZ22)	05:59 20:15	07:01 (LZ21) 07:48 (LZ21)	05:29 20:46	07:10 (LZ21) 07:39 (LZ21)
5	07:44 16:46	07:23 17:24	06:41 18:02	06:46 19:40		05:57 20:16	07:01 (LZ21) 07:48 (LZ21)	05:29 20:47	07:11 (LZ21) 07:39 (LZ21)
6	07:44 16:47	07:22 17:26	06:39 18:03	06:44 19:41		05:56 20:17	07:01 (LZ21) 07:49 (LZ21)	05:28 20:48	07:13 (LZ21) 07:38 (LZ21)
7	07:43 16:48	07:21 17:27	06:38 18:04	06:42 19:42		05:55 20:18	07:00 (LZ21) 07:48 (LZ21)	05:28 20:48	07:13 (LZ21) 07:37 (LZ21)
8	07:43 16:49	07:19 17:29	06:36 18:06	06:40 19:44		05:53 20:19	07:00 (LZ21) 07:48 (LZ21)	05:28 20:49	07:14 (LZ21) 07:37 (LZ21)
9	07:43 16:50	07:18 17:30	06:34 18:07	06:39 19:45		05:52 20:20	07:00 (LZ21) 07:49 (LZ21)	05:28 20:50	07:15 (LZ21) 07:37 (LZ21)
10	07:43 16:51	07:17 17:31	06:32 18:08	06:37 19:46		05:51 20:22	07:00 (LZ21) 07:49 (LZ21)	05:27 20:50	07:16 (LZ21) 07:36 (LZ21)
11	07:42 16:52	07:15 17:33	06:31 18:09	06:35 19:47		05:50 20:23	07:00 (LZ21) 07:49 (LZ21)	05:27 20:51	07:16 (LZ21) 07:35 (LZ21)
12	07:42 16:53	07:14 17:34	06:29 18:11	06:33 19:48		05:48 20:24	06:59 (LZ21) 07:48 (LZ21)	05:27 20:51	07:17 (LZ21) 07:34 (LZ21)
13	07:42 16:54	07:13 17:35	06:27 18:12	06:32 19:50		05:47 20:25	06:59 (LZ21) 07:48 (LZ21)	05:27 20:52	07:18 (LZ21) 07:34 (LZ21)
14	07:41 16:55	07:11 17:37	06:25 18:13	06:30 19:51		05:46 20:26	06:59 (LZ21) 07:47 (LZ21)	05:27 20:52	07:19 (LZ21) 07:34 (LZ21)
15	07:41 16:57	07:10 17:38	06:24 18:14	06:28 19:52		05:45 20:27	07:00 (LZ21) 07:47 (LZ21)	05:27 20:53	07:19 (LZ21) 07:33 (LZ21)
16	07:40 16:58	07:08 17:39	06:22 18:16	06:27 19:53		05:44 20:28	07:00 (LZ21) 07:47 (LZ21)	05:27 20:53	07:20 (LZ21) 07:33 (LZ21)
17	07:40 16:59	07:07 17:41	06:20 18:17	06:25 19:54		05:43 20:29	07:00 (LZ21) 07:47 (LZ21)	05:27 20:54	07:21 (LZ21) 07:33 (LZ21)
18	07:39 17:00	07:05 17:42	06:18 18:18	06:23 19:55		05:42 20:30	07:00 (LZ21) 07:46 (LZ21)	05:27 20:54	07:21 (LZ21) 07:32 (LZ21)
19	07:39 17:02	07:04 17:44	06:16 18:19	06:22 19:57		05:41 20:31	07:00 (LZ21) 07:46 (LZ21)	05:27 20:54	07:23 (LZ21) 07:33 (LZ21)
20	07:38 17:03	07:02 17:45	06:15 18:21	06:20 19:58		05:40 20:32	07:02 (LZ21) 07:46 (LZ21)	05:27 20:55	07:23 (LZ21) 07:33 (LZ21)
21	07:37 17:04	07:01 17:46	06:13 18:22	06:18 19:59		05:39 20:34	07:02 (LZ21) 07:46 (LZ21)	05:27 20:55	07:23 (LZ21) 07:33 (LZ21)
22	07:37 17:05	06:59 17:48	06:11 18:23	06:17 20:00	07:19 (LZ21) 07:34 (LZ21)	05:38 20:35	07:02 (LZ21) 07:45 (LZ21)	05:27 20:55	07:23 (LZ21) 07:33 (LZ21)
23	07:36 17:07	06:58 17:49	06:09 18:24	06:15 20:01	07:16 (LZ21) 07:38 (LZ21)	05:37 20:36	07:02 (LZ21) 07:45 (LZ21)	05:27 20:55	07:23 (LZ21) 07:33 (LZ21)
24	07:35 17:08	06:56 17:50	06:07 18:25	06:14 20:03	07:13 (LZ21) 07:40 (LZ21)	05:36 20:37	07:03 (LZ21) 07:44 (LZ21)	05:28 20:55	07:24 (LZ21) 07:34 (LZ21)
25	07:34 17:09	06:54 17:51	06:05 18:27	06:12 20:04	07:11 (LZ21) 07:42 (LZ21)	05:36 20:37	07:04 (LZ21) 07:44 (LZ21)	05:28 20:56	07:23 (LZ21) 07:34 (LZ21)
26	07:33 17:11	06:53 17:53	06:04 18:28	06:10 20:05	07:09 (LZ21) 07:43 (LZ21)	05:35 20:38	07:04 (LZ21) 07:43 (LZ21)	05:28 20:56	07:22 (LZ21) 07:35 (LZ21)
27	07:32 17:12	06:51 17:54	06:02 18:29	06:09 20:06	07:08 (LZ21) 07:44 (LZ21)	05:34 20:39	07:05 (LZ21) 07:43 (LZ21)	05:29 20:56	07:23 (LZ21) 07:36 (LZ21)
28	07:32 17:13	06:50 17:55	06:00 18:30	06:07 20:07	07:06 (LZ21) 07:45 (LZ21)	05:33 20:40	07:06 (LZ21) 07:43 (LZ21)	05:29 20:56	07:22 (LZ21) 07:37 (LZ21)
29	07:31 17:15		06:58 19:31	06:06 20:09	07:05 (LZ21) 07:46 (LZ21)	05:33 20:41	07:06 (LZ21) 07:42 (LZ21)	05:30 20:56	07:22 (LZ21) 07:38 (LZ21)
30	07:30 17:16		06:56 19:33	06:04 20:10	07:05 (LZ21) 07:47 (LZ21)	05:32 20:42	07:07 (LZ21) 07:42 (LZ21)	05:30 20:55	07:21 (LZ21) 07:38 (LZ21)
31	07:29 17:18		06:55 19:34	18:31 (LZ22) 18:52 (LZ22)		05:31 20:43	07:08 (LZ21) 07:41 (LZ21)		
Potential sun hours	289	293	369	402	339	456	462	526	
Total, worst case			220			1371		526	

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: ZeM_02 - Shadow Receptor: 1.0 ? 1.0 Azimuth: -90.0° Slope: 90.0° (49)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:55	07:21 (LZ21) 07:40 (LZ21)	05:57 20:34	07:10 (LZ21) 07:58 (LZ21)	06:32 19:47	07:06 18:52
2	05:31 20:55	07:20 (LZ21) 07:40 (LZ21)	05:58 20:33	07:10 (LZ21) 07:58 (LZ21)	06:33 19:45	07:07 18:50
3	05:32 20:55	07:20 (LZ21) 07:41 (LZ21)	05:59 20:31	07:10 (LZ21) 07:58 (LZ21)	06:34 19:43	07:08 18:49
4	05:32 20:55	07:19 (LZ21) 07:42 (LZ21)	06:00 20:30	07:10 (LZ21) 07:58 (LZ21)	06:35 19:42	07:09 18:47
5	05:33 20:55	07:19 (LZ21) 07:43 (LZ21)	06:01 20:29	07:10 (LZ21) 07:58 (LZ21)	06:36 19:40	07:10 18:45
6	05:33 20:54	07:19 (LZ21) 07:44 (LZ21)	06:02 20:28	07:11 (LZ21) 07:59 (LZ21)	06:37 19:38	07:12 18:43
7	05:34 20:54	07:18 (LZ21) 07:44 (LZ21)	06:03 20:26	07:11 (LZ21) 07:58 (LZ21)	06:38 19:36	07:13 18:41
8	05:35 20:54	07:18 (LZ21) 07:46 (LZ21)	06:05 20:25	07:11 (LZ21) 07:58 (LZ21)	06:40 19:34	18:33 (LZ22) 18:36 (LZ22)
9	05:35 20:53	07:18 (LZ21) 07:47 (LZ21)	06:06 20:24	07:11 (LZ21) 07:57 (LZ21)	06:41 19:33	18:28 (LZ22) 18:40 (LZ22)
10	05:36 20:53	07:17 (LZ21) 07:47 (LZ21)	06:07 20:22	07:11 (LZ21) 07:57 (LZ21)	06:42 19:31	18:26 (LZ22) 18:41 (LZ22)
11	05:37 20:52	07:16 (LZ21) 07:48 (LZ21)	06:08 20:21	07:12 (LZ21) 07:56 (LZ21)	06:43 19:29	18:24 (LZ22) 18:42 (LZ22)
12	05:38 20:52	07:16 (LZ21) 07:49 (LZ21)	06:09 20:19	07:12 (LZ21) 07:55 (LZ21)	06:44 19:27	18:22 (LZ22) 18:43 (LZ22)
13	05:39 20:51	07:16 (LZ21) 07:50 (LZ21)	06:10 20:18	07:13 (LZ21) 07:54 (LZ21)	06:45 19:25	18:22 (LZ22) 18:44 (LZ22)
14	05:39 20:50	07:15 (LZ21) 07:50 (LZ21)	06:11 20:16	07:13 (LZ21) 07:53 (LZ21)	06:46 19:23	18:21 (LZ22) 18:44 (LZ22)
15	05:40 20:50	07:14 (LZ21) 07:51 (LZ21)	06:12 20:15	07:14 (LZ21) 07:52 (LZ21)	06:47 19:22	18:20 (LZ22) 18:44 (LZ22)
16	05:41 20:49	07:14 (LZ21) 07:52 (LZ21)	06:14 20:13	07:15 (LZ21) 07:51 (LZ21)	06:49 19:20	18:20 (LZ22) 18:43 (LZ22)
17	05:42 20:48	07:14 (LZ21) 07:53 (LZ21)	06:15 20:12	07:16 (LZ21) 07:49 (LZ21)	06:50 19:18	18:20 (LZ22) 18:42 (LZ22)
18	05:43 20:48	07:14 (LZ21) 07:53 (LZ21)	06:16 20:10	07:17 (LZ21) 07:47 (LZ21)	06:51 19:16	18:20 (LZ22) 18:41 (LZ22)
19	05:44 20:47	07:13 (LZ21) 07:54 (LZ21)	06:17 20:09	07:19 (LZ21) 07:45 (LZ21)	06:52 19:14	18:20 (LZ22) 18:40 (LZ22)
20	05:45 20:46	07:13 (LZ21) 07:55 (LZ21)	06:18 20:07	07:22 (LZ21) 07:43 (LZ21)	06:53 19:12	18:20 (LZ22) 18:39 (LZ22)
21	05:46 20:45	07:12 (LZ21) 07:54 (LZ21)	06:19 20:05	07:25 (LZ21) 07:39 (LZ21)	06:54 19:11	18:21 (LZ22) 18:37 (LZ22)
22	05:47 20:44	07:12 (LZ21) 07:55 (LZ21)	06:20 20:04	06:55 19:09	18:24 (LZ22) 18:35 (LZ22)	07:31 18:16
23	05:48 20:43	07:11 (LZ21) 07:56 (LZ21)	06:21 20:02	06:56 19:07	07:33 18:15	07:13 16:38
24	05:49 20:43	07:11 (LZ21) 07:56 (LZ21)	06:23 20:01	06:58 19:05	07:34 18:13	07:14 16:37
25	05:50 20:42	07:11 (LZ21) 07:57 (LZ21)	06:24 19:59	06:59 19:03	06:35 17:12	07:15 16:37
26	05:51 20:41	07:11 (LZ21) 07:57 (LZ21)	06:25 19:57	07:00 19:01	06:36 17:10	07:16 16:36
27	05:52 20:40	07:10 (LZ21) 07:57 (LZ21)	06:26 19:56	07:01 19:00	06:38 17:09	07:18 16:36
28	05:53 20:38	07:10 (LZ21) 07:58 (LZ21)	06:27 19:54	07:02 18:58	06:39 17:07	07:19 16:35
29	05:54 20:37	07:10 (LZ21) 07:58 (LZ21)	06:28 19:52	07:03 18:56	06:40 17:06	07:20 16:35
30	05:55 20:36	07:10 (LZ21) 07:58 (LZ21)	06:29 19:50	07:05 18:54	06:42 17:04	07:21 16:34
31	05:56 20:35	07:10 (LZ21) 07:58 (LZ21)	06:31 19:49		06:43 17:03	07:22 16:41
Potential sun hours	468	433	376	342	291	279
Total, worst case	1121	840	270			

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

Day in month	Sun rise (hh:mm)	Minutes with flicker	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

Calculation: Worst Case Shadow receptor: ZeM_03 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 85.1° Slope: 90.0° (50)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June						
1	07:44	07:28	06:48	16:56 (LZ30)	06:53	18:22 (LZ22)	06:03	06:59 (LZ21)	05:31			
	16:42	17:19	17:57	16	17:12 (LZ30)	19:35	30	18:52 (LZ22)	20:11	23	07:22 (LZ21)	20:44
2	07:44	07:26	06:46	16:58 (LZ30)	06:51	18:22 (LZ22)	06:02	07:01 (LZ21)	05:30			
	16:43	17:20	17:58	11	17:09 (LZ30)	19:36	30	18:52 (LZ22)	20:12	20	07:21 (LZ21)	20:45
3	07:44	07:25	06:45			06:49		18:22 (LZ22)	06:00		07:02 (LZ21)	05:30
	16:44	17:22	17:59			19:38	29	18:51 (LZ22)	20:13	16	07:18 (LZ21)	20:45
4	07:44	07:24	06:43			06:47		18:23 (LZ22)	05:59		07:05 (LZ21)	05:29
	16:45	17:23	18:01			19:39	27	18:50 (LZ22)	20:15	11	07:16 (LZ21)	20:46
5	07:44	07:23	06:41			06:46		18:23 (LZ22)	05:57			05:29
	16:46	17:24	18:02			19:40	26	18:49 (LZ22)	20:16			20:47
6	07:44	07:22	06:39			06:44		18:24 (LZ22)	05:56			05:29
	16:47	17:26	18:03			19:41	23	18:47 (LZ22)	20:17			20:48
7	07:43	07:21	06:38			06:42		18:25 (LZ22)	05:55			05:28
	16:48	17:27	18:04			19:42	20	18:45 (LZ22)	20:18			20:48
8	07:43	07:19	06:36			06:40		18:27 (LZ22)	05:53			05:28
	16:49	17:29	18:06			19:44	17	18:44 (LZ22)	20:19			20:49
9	07:43	07:18	06:34			06:39		18:29 (LZ22)	05:52			05:28
	16:50	17:30	18:07			19:45	12	18:41 (LZ22)	20:20			20:50
10	07:43	07:17	06:32			06:37			05:51			05:27
	16:51	17:31	18:08			19:46			20:22			20:50
11	07:43	07:15	06:31			06:35		07:12 (LZ21)	05:50			05:27
	16:52	17:33	18:09			19:47	7	07:19 (LZ21)	20:23			20:51
12	07:42	07:14	06:29			06:33		07:08 (LZ21)	05:48			05:27
	16:53	17:34	18:11			19:48	15	07:23 (LZ21)	20:24			20:51
13	07:42	07:13	06:27			06:32		07:05 (LZ21)	05:47			05:27
	16:54	17:35	18:12			19:50	20	07:25 (LZ21)	20:25			20:52
14	07:41	07:11	06:25			06:30		07:03 (LZ21)	05:46			05:27
	16:56	17:37	18:13			19:51	23	07:26 (LZ21)	20:26			20:52
15	07:41	07:10	17:02 (LZ30)	06:24		06:28		07:02 (LZ21)	05:45			05:27
	16:57	17:38	17:07 (LZ30)	18:14		19:52	26	07:28 (LZ21)	20:27			20:53
16	07:40	07:08	16:59 (LZ30)	06:22		06:27		07:00 (LZ21)	05:44			05:27
	16:58	17:40	17:11 (LZ30)	18:16		19:53	28	07:28 (LZ21)	20:28			20:53
17	07:40	07:07	16:57 (LZ30)	06:20		06:25		06:59 (LZ21)	05:43			05:27
	16:59	17:41	17:12 (LZ30)	18:17		19:54	29	07:28 (LZ21)	20:29			20:54
18	07:39	07:05	16:56 (LZ30)	06:18		06:23		06:59 (LZ21)	05:42			05:27
	17:00	17:42	17:14 (LZ30)	18:18		19:56	30	07:29 (LZ21)	20:30			20:54
19	07:39	07:04	16:54 (LZ30)	06:16		06:22		06:58 (LZ21)	05:41			05:27
	17:02	17:44	17:15 (LZ30)	18:19		19:57	31	07:29 (LZ21)	20:31			20:54
20	07:38	07:02	16:53 (LZ30)	06:15		06:20		06:58 (LZ21)	05:40			05:27
	17:03	17:45	17:15 (LZ30)	18:21		19:58	32	07:30 (LZ21)	20:32			20:55
21	07:37	07:01	16:53 (LZ30)	06:13		17:39 (LZ22)	06:18	06:57 (LZ21)	05:39			05:27
	17:04	17:46	17:16 (LZ30)	18:22	3	17:42 (LZ22)	19:59	07:29 (LZ21)	20:34			20:55
22	07:37	06:59	16:52 (LZ30)	06:11		17:33 (LZ22)	06:17	06:56 (LZ21)	05:38			05:27
	17:06	17:48	17:16 (LZ30)	18:23	14	17:47 (LZ22)	20:00	07:29 (LZ21)	20:35			20:55
23	07:36	06:58	16:53 (LZ30)	06:09		17:30 (LZ22)	06:15	06:56 (LZ21)	05:37			05:28
	17:07	17:49	17:16 (LZ30)	18:24	19	17:49 (LZ22)	20:01	07:29 (LZ21)	20:36			20:55
24	07:35	06:56	16:52 (LZ30)	06:07		17:29 (LZ22)	06:14	06:56 (LZ21)	05:36			05:28
	17:08	17:50	17:16 (LZ30)	18:25	22	17:51 (LZ22)	20:03	07:28 (LZ21)	20:37			20:55
25	07:34	06:54	16:52 (LZ30)	06:06		17:27 (LZ22)	06:12	06:56 (LZ21)	05:36			05:28
	17:09	17:52	17:15 (LZ30)	18:27	25	17:52 (LZ22)	20:04	07:28 (LZ21)	20:38			20:56
26	07:33	06:53	16:53 (LZ30)	06:04		17:26 (LZ22)	06:10	06:56 (LZ21)	05:35			05:28
	17:11	17:53	17:15 (LZ30)	18:28	27	17:53 (LZ22)	20:05	07:27 (LZ21)	20:38			20:56
27	07:32	06:51	16:53 (LZ30)	06:02		17:24 (LZ22)	06:09	06:57 (LZ21)	05:34			05:29
	17:12	17:54	17:14 (LZ30)	18:29	29	17:53 (LZ22)	20:06	07:27 (LZ21)	20:39			20:56
28	07:32	06:50	16:54 (LZ30)	06:00		17:23 (LZ22)	06:07	06:57 (LZ21)	05:33			05:29
	17:13	17:55	17:13 (LZ30)	18:30	30	17:53 (LZ22)	20:07	07:25 (LZ21)	20:40			20:56
29	07:31			06:58		18:23 (LZ22)	06:06	06:58 (LZ21)	05:33			05:30
	17:15			19:32	30	18:53 (LZ22)	20:09	07:25 (LZ21)	20:41			20:56
30	07:30			06:56		18:23 (LZ22)	06:04	06:59 (LZ21)	05:32			05:30
	17:16			19:33	30	18:53 (LZ22)	20:10	07:24 (LZ21)	20:42			20:56
31	07:29			06:55		18:22 (LZ22)			05:31			
	17:18			19:34	31	18:53 (LZ22)			20:43			
Potential sun hours	289	293		369			402		456			462
Total, worst case		272		287			758		70			

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: ZeM_03 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 85.1° Slope: 90.0° (50)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:55	05:57 20:34	06:32 19:47	07:12 (LZ21) 18:52	06:44 17:01	07:22 16:34
2	05:31 20:55	05:58 20:33	06:33 19:45	07:07 18:50	06:45 17:00	07:23 16:33
3	05:32 20:55	05:59 20:32	06:34 19:43	18:27 (LZ22) 18:39 (LZ22)	07:08 18:49	06:47 16:59
4	05:32 20:55	06:00 20:30	06:35 19:42	18:24 (LZ22) 18:41 (LZ22)	07:09 18:47	06:48 16:57
5	05:33 20:55	06:01 20:29	06:36 19:40	18:22 (LZ22) 18:42 (LZ22)	07:10 18:45	06:49 16:56
6	05:33 20:54	06:02 20:28	06:37 19:38	18:20 (LZ22) 18:43 (LZ22)	07:12 18:43	06:51 16:55
7	05:34 20:54	06:03 20:26	06:38 19:36	18:18 (LZ22) 18:44 (LZ22)	07:13 18:41	06:52 16:54
8	05:35 20:54	06:05 20:25	06:40 19:34	18:17 (LZ22) 18:44 (LZ22)	07:14 18:40	06:53 16:52
9	05:36 20:53	06:06 20:24	06:41 19:33	18:16 (LZ22) 18:45 (LZ22)	07:15 18:38	06:55 16:51
10	05:36 20:53	06:07 20:22	06:42 19:31	18:15 (LZ22) 18:45 (LZ22)	07:16 18:36	06:56 16:50
11	05:37 20:52	06:08 20:21	06:43 19:29	18:14 (LZ22) 18:44 (LZ22)	07:18 18:34	17:33 (LZ30) 17:41 (LZ30)
12	05:38 20:52	06:09 20:19	06:44 19:27	18:14 (LZ22) 18:44 (LZ22)	07:19 18:33	17:30 (LZ30) 17:43 (LZ30)
13	05:39 20:51	06:10 20:18	06:45 19:25	18:14 (LZ22) 18:45 (LZ22)	07:20 18:31	17:29 (LZ30) 17:46 (LZ30)
14	05:39 20:50	06:11 20:16	06:46 19:23	18:14 (LZ22) 18:44 (LZ22)	07:21 18:29	17:27 (LZ30) 17:46 (LZ30)
15	05:40 20:50	06:12 20:15	06:47 19:22	18:14 (LZ22) 18:43 (LZ22)	07:23 18:28	17:25 (LZ30) 17:47 (LZ30)
16	05:41 20:49	06:14 20:13	06:49 19:20	18:14 (LZ22) 18:42 (LZ22)	07:24 18:26	17:24 (LZ30) 17:47 (LZ30)
17	05:42 20:48	06:15 20:12	06:50 19:18	18:14 (LZ22) 18:41 (LZ22)	07:25 18:24	17:24 (LZ30) 17:48 (LZ30)
18	05:43 20:48	06:16 20:10	06:51 19:16	18:14 (LZ22) 18:40 (LZ22)	07:26 18:23	17:24 (LZ30) 17:47 (LZ30)
19	05:44 20:47	06:17 20:09	06:52 19:14	18:15 (LZ22) 18:38 (LZ22)	07:27 18:21	17:23 (LZ30) 17:47 (LZ30)
20	05:45 20:46	06:18 20:07	06:53 19:12	18:16 (LZ22) 18:36 (LZ22)	07:29 18:19	17:24 (LZ30) 17:47 (LZ30)
21	05:46 20:45	06:19 20:05	06:54 19:11	18:18 (LZ22) 18:33 (LZ22)	07:30 18:18	17:24 (LZ30) 17:46 (LZ30)
22	05:47 20:44	06:20 20:04	06:55 19:09	18:22 (LZ22) 18:30 (LZ22)	07:31 18:16	17:24 (LZ30) 17:45 (LZ30)
23	05:48 20:43	06:21 20:02	06:57 19:07	07:33 18:15	17:25 (LZ30) 17:45 (LZ30)	07:13 16:38
24	05:49 20:43	06:23 20:01	06:58 19:05	07:34 18:13	17:26 (LZ30) 17:44 (LZ30)	07:14 16:37
25	05:50 20:42	06:24 19:59	06:59 19:03	06:35 17:12	16:27 (LZ30) 16:42 (LZ30)	07:15 16:37
26	05:51 20:41	06:25 19:57	07:00 19:01	06:36 17:10	16:29 (LZ30) 16:40 (LZ30)	07:16 16:36
27	05:52 20:40	06:26 19:56	07:01 19:00	06:38 17:09	07:18 16:36	07:42 16:38
28	05:53 20:38	06:27 19:54	07:02 18:58	06:39 17:07	07:19 16:35	07:43 16:39
29	05:54 20:37	06:28 19:52	07:03 18:56	06:40 17:06	07:20 16:35	07:43 16:39
30	05:55 20:36	06:29 19:50	07:05 18:54	06:42 17:04	07:21 16:34	07:43 16:40
31	05:56 20:35	06:31 19:49	07:07 18:52	06:43 17:03	07:43 16:41	07:43 16:41
Potential sun hours	468	433	376	342	291	279
Total, worst case		617	487	303		

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: ZeM_04 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 74.0° Slope: 90.0° (67)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	January	February	March	April	May	June
1	07:44 16:42	07:28 17:19	06:48 17:57	06:53 19:35	06:03 20:11	18:49 (LZ22) 20:44
2	07:44 16:43	07:26 17:20	06:46 17:58	06:51 19:36	06:02 20:12	18:51 (LZ22) 20:45
3	07:44 16:44	07:25 17:22	06:45 17:59	17:22 (LZ30) 19:38	06:00 20:13	18:51 (LZ22) 20:45
4	07:44 16:45	07:24 17:23	06:43 18:01	17:19 (LZ30) 19:39	05:59 20:15	06:32 (LZ21) 20:46
5	07:44 16:46	07:23 17:24	06:41 18:02	17:16 (LZ30) 19:40	05:57 20:16	06:30 (LZ21) 20:47
6	07:44 16:47	07:22 17:26	06:39 18:03	17:14 (LZ30) 19:41	05:56 20:17	06:29 (LZ21) 20:48
7	07:43 16:48	07:21 17:27	06:38 18:04	17:13 (LZ30) 19:42	05:55 20:18	06:27 (LZ21) 20:48
8	07:43 16:49	07:19 17:29	06:36 18:06	17:13 (LZ30) 19:44	05:53 20:19	06:26 (LZ21) 20:49
9	07:43 16:50	07:18 17:30	06:34 18:07	17:12 (LZ30) 19:45	05:52 20:20	06:25 (LZ21) 20:50
10	07:43 16:51	07:17 17:31	06:32 18:08	17:11 (LZ30) 19:46	05:51 20:22	06:24 (LZ21) 20:50
11	07:42 16:52	07:15 17:33	06:31 18:09	17:11 (LZ30) 19:47	05:50 20:23	06:24 (LZ21) 20:51
12	07:42 16:53	07:14 17:34	06:29 18:11	17:10 (LZ30) 19:48	19:03 (LZ22) 20:24	06:24 (LZ21) 20:51
13	07:42 16:54	07:13 17:35	06:27 18:12	17:11 (LZ30) 19:50	19:08 (LZ22) 20:25	06:22 (LZ21) 20:52
14	07:41 16:56	07:11 17:37	06:25 18:13	17:11 (LZ30) 19:51	19:12 (LZ22) 20:26	06:22 (LZ21) 20:52
15	07:41 16:57	07:10 17:38	06:24 18:14	17:12 (LZ30) 19:52	18:55 (LZ22) 20:27	06:22 (LZ21) 20:53
16	07:40 16:58	07:08 17:40	06:22 18:16	17:13 (LZ30) 19:53	18:53 (LZ22) 20:28	06:22 (LZ21) 20:53
17	07:40 16:59	07:07 17:41	06:20 18:17	17:14 (LZ30) 19:54	18:52 (LZ22) 20:29	06:22 (LZ21) 20:54
18	07:39 17:00	07:05 17:42	06:18 18:18	17:17 (LZ30) 19:56	18:50 (LZ22) 20:30	06:22 (LZ21) 20:54
19	07:39 17:02	07:04 17:44	06:16 18:19	17:28 (LZ30) 19:57	19:18 (LZ22) 20:31	06:23 (LZ21) 20:54
20	07:38 17:03	07:02 17:45	06:15 18:21	06:20 19:58	18:48 (LZ22) 20:32	06:23 (LZ21) 20:55
21	07:37 17:04	07:01 17:46	06:13 18:22	06:18 19:59	19:19 (LZ22) 20:33	06:23 (LZ21) 20:55
22	07:37 17:06	06:59 17:48	06:11 18:23	06:17 20:00	18:46 (LZ22) 20:35	06:23 (LZ21) 20:55
23	07:36 17:07	06:58 17:49	06:09 18:24	06:15 20:01	19:18 (LZ22) 20:36	06:23 (LZ21) 20:55
24	07:35 17:08	06:56 17:50	06:07 18:25	06:14 20:03	18:46 (LZ22) 20:37	06:23 (LZ21) 20:55
25	07:34 17:09	06:54 17:52	06:06 18:27	06:12 20:04	19:18 (LZ22) 20:38	06:24 (LZ21) 20:56
26	07:33 17:11	06:53 17:53	06:04 18:28	06:10 20:05	18:46 (LZ22) 20:38	06:24 (LZ21) 20:56
27	07:32 17:12	06:51 17:54	06:02 18:29	06:09 20:06	19:17 (LZ22) 20:39	06:25 (LZ21) 20:56
28	07:32 17:13	06:50 17:55	06:00 18:30	06:07 20:07	18:47 (LZ22) 20:40	06:26 (LZ21) 20:56
29	07:31 17:15		06:58 19:32	06:06 20:09	19:16 (LZ22) 20:41	06:26 (LZ21) 20:56
30	07:30 17:16		06:56 19:33	06:04 20:10	18:49 (LZ22) 20:42	06:27 (LZ21) 20:56
31	07:29 17:18		06:55 19:34		05:31 20:43	06:27 (LZ21) 20:56
Potential sun hours	289	293	369	402	456	462
Total, worst case			321	505	843	143

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		



SHADOW - Calendar

Calculation: Worst Case Shadow receptor: ZeM_04 - Shadow Receptor: 1.0 ? 1.0 Azimuth: 74.0° Slope: 90.0° (67)
Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset

The rotor plane is always perpendicular to the line from the WTG to the sun

The WTG is always operating

	July	August	September	October	November	December
1	05:31 20:55	05:57 20:34	06:32 (LZ21) 19:47	07:06 18:52	17:50 (LZ30) 17:01	06:44 16:34
2	05:31 20:55	06:43 (LZ21) 20:33	06:34 (LZ21) 19:45	07:07 18:50	17:49 (LZ30) 17:00	06:45 16:33
3	05:32 20:55	06:46 (LZ21) 20:32	07:02 (LZ21) 19:43	07:08 18:49	17:49 (LZ30) 16:59	06:47 16:33
4	05:32 20:55	06:49 (LZ21) 20:30	07:01 (LZ21) 19:42	07:09 18:47	17:49 (LZ30) 16:57	06:48 16:33
5	05:33 20:55	06:40 (LZ21) 20:29	06:35 (LZ21) 19:40	07:09 18:45	17:49 (LZ30) 16:56	06:48 16:33
6	05:33 20:54	06:50 (LZ21) 20:28	06:37 (LZ21) 19:38	07:10 18:43	17:49 (LZ30) 16:55	06:49 16:32
7	05:33 20:54	06:51 (LZ21) 20:26	07:00 (LZ21) 19:36	07:12 18:41	17:49 (LZ30) 16:54	06:51 16:32
8	05:34 20:54	06:53 (LZ21) 20:25	06:38 (LZ21) 19:34	07:13 18:40	17:50 (LZ30) 16:53	06:52 16:32
9	05:34 20:53	06:38 (LZ21) 20:24	06:59 (LZ21) 19:33	07:14 18:38	18:13 (LZ30) 16:51	06:53 16:32
10	05:35 20:53	06:38 (LZ21) 20:22	06:40 (LZ21) 19:31	07:15 18:36	17:52 (LZ30) 16:50	06:55 16:32
11	05:36 20:52	06:36 (LZ21) 20:21	06:43 (LZ21) 19:29	07:16 18:34	17:54 (LZ30) 16:49	06:56 16:32
12	05:36 20:52	06:56 (LZ21) 20:19	06:41 19:27	07:18 18:33	18:08 (LZ30) 16:48	06:57 16:32
13	05:37 20:51	06:57 (LZ21) 20:18	06:43 (LZ21) 19:25	07:19 18:31	18:06 (LZ30) 16:47	06:59 16:32
14	05:38 20:50	06:58 (LZ21) 20:16	06:44 19:23	07:20 18:29	18:06 (LZ30) 16:46	07:00 16:32
15	05:39 20:50	06:59 (LZ21) 20:15	06:46 19:22	07:21 18:28	18:06 (LZ30) 16:45	07:01 16:32
16	05:40 20:49	06:34 (LZ21) 20:14	06:47 19:20	07:23 18:26	18:06 (LZ30) 16:44	07:03 16:33
17	05:41 20:48	07:00 (LZ21) 20:13	06:49 19:18	07:24 18:25	18:06 (LZ30) 16:43	07:04 16:33
18	05:42 20:48	06:34 (LZ21) 20:12	06:50 19:16	07:25 18:23	18:06 (LZ30) 16:42	07:05 16:33
19	05:43 20:47	06:34 (LZ21) 20:11	06:51 19:15	07:26 18:22	18:06 (LZ30) 16:41	07:06 16:34
20	05:43 20:47	06:34 (LZ21) 20:10	06:51 19:14	07:27 18:21	18:06 (LZ30) 16:41	07:07 16:34
21	05:44 20:46	06:34 (LZ21) 20:09	06:52 19:13	07:29 18:19	18:06 (LZ30) 16:40	07:09 16:34
22	05:45 20:46	06:34 (LZ21) 20:08	06:53 19:12	07:30 18:18	18:06 (LZ30) 16:39	07:10 16:34
23	05:46 20:45	06:33 (LZ21) 20:07	06:54 19:11	07:31 18:16	18:06 (LZ30) 16:38	07:12 16:35
24	05:47 20:44	06:32 (LZ21) 20:06	06:55 19:09	07:33 18:15	18:06 (LZ30) 16:37	07:13 16:35
25	05:48 20:43	06:32 (LZ21) 20:05	06:57 19:07	07:34 18:13	18:06 (LZ30) 16:36	07:14 16:36
26	05:49 20:43	06:32 (LZ21) 20:04	06:58 19:05	07:34 18:13	18:06 (LZ30) 16:35	07:14 16:36
27	05:50 20:42	06:32 (LZ21) 19:59	06:59 19:03	07:35 18:12	18:06 (LZ30) 16:34	07:15 16:37
28	05:51 20:41	06:32 (LZ21) 19:57	07:00 19:01	07:36 18:11	18:06 (LZ30) 16:33	07:16 16:37
29	05:52 20:40	06:32 (LZ21) 19:56	07:01 19:00	07:38 18:10	18:06 (LZ30) 16:32	07:18 16:38
30	05:53 20:38	06:32 (LZ21) 19:54	07:02 18:58	07:39 18:09	18:06 (LZ30) 16:31	07:19 16:39
31	05:54 20:37	06:33 (LZ21) 19:52	07:03 18:56	07:40 18:08	18:06 (LZ30) 16:30	07:20 16:40
Potential sun hours	468	433	376	342	291	279
Total, worst case	709	806	110	219		

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)