



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 16:42	07:28 17:19	06:48 17:57	07:52 (LZ06) 08:40 (LZ06)	06:53 19:35	07:17 (LZ02) 20:11	
2	07:44 16:43	07:27 17:20	06:46 17:58	07:51 (LZ06) 08:40 (LZ06)	06:51 19:36	07:15 (LZ02) 20:12	
3	07:44 16:44	07:25 17:22	06:45 17:59	07:50 (LZ06) 08:40 (LZ06)	06:49 19:38	07:15 (LZ02) 20:14	
4	07:44 16:45	07:24 17:23	06:43 18:01	07:50 (LZ06) 08:41 (LZ06)	06:48 19:39	07:14 (LZ02) 20:15	
5	07:44 16:46	07:23 17:24	06:41 18:02	07:50 (LZ06) 08:41 (LZ06)	06:46 19:40	07:13 (LZ02) 20:16	
6	07:44 16:47	07:22 17:26	06:40 18:03	07:49 (LZ06) 08:40 (LZ06)	06:44 19:41	07:13 (LZ02) 20:17	
7	07:44 16:48	07:21 17:27	06:38 18:04	07:48 (LZ06) 08:40 (LZ06)	06:42 19:42	07:12 (LZ02) 20:18	
8	07:43 16:49	07:19 17:29	06:36 18:06	07:49 (LZ06) 08:40 (LZ06)	06:40 19:44	07:13 (LZ02) 20:19	
9	07:43 16:50	07:18 17:30	06:34 18:07	07:49 (LZ06) 08:39 (LZ06)	06:39 19:45	07:14 (LZ02) 20:20	
10	07:43 16:51	07:17 17:31	06:33 18:08	07:48 (LZ06) 08:38 (LZ06)	06:37 19:46	07:14 (LZ02) 20:22	
11	07:43 16:52	07:15 17:33	06:31 18:10	07:48 (LZ06) 08:37 (LZ06)	06:35 19:47	07:15 (LZ02) 20:23	
12	07:42 16:53	07:14 17:34	06:29 18:11	07:48 (LZ06) 08:36 (LZ06)	06:33 19:48	07:19 (LZ02) 20:24	
13	07:42 16:54	07:13 17:35	06:27 18:12	07:49 (LZ06) 08:36 (LZ06)	06:32 19:50		05:47 20:25
14	07:42 16:56	07:11 17:37	06:25 18:13	07:49 (LZ06) 08:35 (LZ06)	06:30 19:51		05:46 20:53
15	07:41 16:57	07:10 17:38	06:24 18:15	07:50 (LZ06) 08:33 (LZ06)	06:28 19:52		05:45 20:27
16	07:41 16:58	07:08 17:40	06:22 18:16	07:50 (LZ06) 08:32 (LZ06)	06:27 19:53		05:44 20:28
17	07:40 16:59	07:07 17:41	06:20 18:17	07:51 (LZ06) 08:30 (LZ06)	06:25 19:54		05:43 20:29
18	07:39 17:00	07:05 17:42	08:17 (LZ06) 08:18 (LZ06)	06:18 18:18	07:53 (LZ06) 08:29 (LZ06)	06:23 19:56	05:42 20:31
19	07:39 17:02	07:04 17:44	08:09 (LZ06) 08:26 (LZ06)	06:16 18:19	07:54 (LZ06) 08:27 (LZ06)	06:22 19:57	05:41 20:32
20	07:38 17:03	07:02 17:45	08:06 (LZ06) 08:30 (LZ06)	06:15 18:21	07:55 (LZ06) 08:24 (LZ06)	06:20 19:58	05:40 20:33
21	07:38 17:04	07:01 17:46	08:03 (LZ06) 08:32 (LZ06)	06:13 18:22	07:57 (LZ06) 08:21 (LZ06)	06:18 19:59	05:39 20:34
22	07:37 17:06	06:59 17:48	08:00 (LZ06) 08:33 (LZ06)	06:11 18:23	07:59 (LZ06) 08:17 (LZ06)	06:17 20:00	05:38 20:35
23	07:36 17:07	06:58 17:49	07:59 (LZ06) 08:35 (LZ06)	06:09 18:24	08:05 (LZ06) 08:11 (LZ06)	06:15 20:02	05:37 20:36
24	07:35 17:08	06:56 17:50	07:57 (LZ06) 08:36 (LZ06)	06:07 18:26		06:14 20:03	05:36 20:37
25	07:34 17:09	06:55 17:52	07:56 (LZ06) 08:38 (LZ06)	06:06 18:27		06:12 20:04	05:36 20:38
26	07:34 17:11	06:53 17:53	07:55 (LZ06) 08:38 (LZ06)	06:04 18:28		06:10 20:05	05:35 20:39
27	07:33 17:12	06:51 17:54	07:54 (LZ06) 08:39 (LZ06)	06:02 18:29		06:09 20:06	05:34 20:40
28	07:32 17:13	06:50 17:55	07:52 (LZ06) 08:39 (LZ06)	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	07:21 (LZ02) 07:30 (LZ02)	06:04 20:10	05:32 20:42
31	07:29 17:18			06:55 19:34	07:19 (LZ02) 07:32 (LZ02)		05:31 20:43
Potential sun hours	289	293	369	402	209	456	462
Total, worst case		356	985				

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_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	08:28 (LZ06) 17:01	06:44 16:34
2	05:31 20:55	05:58 20:33	06:33 19:45	07:13 (LZ02) 18:50	08:27 (LZ06) 17:00	06:46 16:33
3	05:32 20:55	05:59 20:32	06:34 19:43	07:12 (LZ02) 18:49	08:26 (LZ06) 16:59	06:47 16:33
4	05:32 20:55	06:00 20:30	06:35 19:42	07:10 (LZ02) 18:47	08:26 (LZ06) 16:57	06:48 16:33
5	05:33 20:55	06:01 20:29	06:36 19:40	07:10 (LZ02) 18:45	08:26 (LZ06) 16:56	06:50 16:32
6	05:33 20:54	06:02 20:28	06:37 19:38	07:09 (LZ02) 18:43	08:25 (LZ06) 16:55	06:51 16:32
7	05:34 20:54	06:03 20:26	06:38 19:36	07:08 (LZ02) 18:42	08:25 (LZ06) 16:54	06:52 16:32
8	05:35 20:54	06:05 20:25	06:40 19:34	07:08 (LZ02) 18:40	08:24 (LZ06) 16:53	06:53 16:32
9	05:35 20:53	06:06 20:24	06:41 19:33	07:08 (LZ02) 18:38	08:25 (LZ06) 16:51	06:55 16:32
10	05:36 20:53	06:07 20:22	06:42 19:31	07:08 (LZ02) 18:36	08:25 (LZ06) 16:50	06:56 16:32
11	05:37 20:52	06:08 20:21	06:43 19:29	07:09 (LZ02) 18:35	08:25 (LZ06) 16:49	06:57 16:32
12	05:38 20:52	06:09 20:19	06:44 19:27	07:11 (LZ02) 18:33	08:25 (LZ06) 16:48	06:59 16:32
13	05:39 20:51	06:10 20:18	06:45 19:25	07:12 (LZ02) 18:31	08:26 (LZ06) 16:47	07:00 16:32
14	05:39 20:51	06:11 20:16	06:46 19:24	07:22 (LZ02) 18:29	09:13 (LZ06) 16:46	07:01 16:32
15	05:40 20:50	06:12 20:15	06:47 19:22	07:23 18:28	09:12 (LZ06) 16:45	07:03 16:32
16	05:41 20:49	06:14 20:13	06:49 19:20	07:24 18:26	09:11 (LZ06) 16:44	07:04 16:33
17	05:42 20:49	06:15 20:12	06:50 19:18	07:25 18:24	09:09 (LZ06) 16:43	07:05 16:33
18	05:43 20:48	06:16 20:10	06:51 19:16	07:26 18:23	09:09 (LZ06) 16:42	07:07 16:33
19	05:44 20:47	06:17 20:09	06:52 19:14	07:28 18:21	09:07 (LZ06) 16:41	07:08 16:34
20	05:45 20:46	06:18 20:07	06:53 19:12	07:29 18:19	09:05 (LZ06) 16:40	07:09 16:34
21	05:46 20:45	06:19 20:06	06:54 19:11	07:30 18:18	09:04 (LZ06) 16:39	07:10 16:34
22	05:47 20:45	06:20 20:04	06:55 19:09	08:46 (LZ06) 18:16	09:01 (LZ06) 16:38	07:12 16:35
23	05:48 20:44	06:21 20:02	06:57 19:07	09:02 (LZ06) 18:15	08:36 (LZ06) 16:37	07:13 16:35
24	05:49 20:43	06:23 20:01	06:58 19:05	09:06 (LZ06) 18:13	08:58 (LZ06) 16:36	07:14 16:36
25	05:50 20:42	06:24 19:59	06:59 19:03	09:10 (LZ06) 17:12	08:40 (LZ06) 16:35	07:15 16:37
26	05:51 20:41	06:25 19:57	07:00 19:01	09:11 (LZ06) 17:10	09:09 (LZ06) 16:34	07:17 16:37
27	05:52 20:40	06:26 19:56	07:01 19:00	09:12 (LZ06) 17:09	09:07 (LZ06) 16:33	07:18 16:38
28	05:53 20:39	06:27 19:54	07:02 18:58	09:13 (LZ06) 17:07	09:05 (LZ06) 16:32	07:19 16:39
29	05:54 20:38	06:28 19:52	07:03 18:56	09:14 (LZ06) 17:06	08:32 (LZ06) 16:31	07:20 16:39
30	05:55 20:36	06:29 19:50	07:05 18:54	09:15 (LZ06) 17:04	08:30 (LZ06) 16:30	07:21 16:40
31	05:56 20:35	06:31 19:49	07:19 (LZ02) 07:25 (LZ02)	09:16 (LZ06) 17:03	08:55 (LZ06) 16:29	07:22 16:41
Potential sun hours	468	434	376	342	291	278
Total, worst case		6	576	990		

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_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) 46 08:44 (LZ06)	06:03 20:11	05:31 20:44	05:57 20:56	06:32 19:47	07:51 (LZ06) 52 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) 47 08:44 (LZ06)	06:02 20:12	05:30 20:45	05:58 20:55	06:33 19:45	07:50 (LZ06) 53 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) 48 08:45 (LZ06)	06:00 20:13	05:30 20:46	05:59 20:55	06:34 19:43	07:50 (LZ06) 52 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) 50 08:45 (LZ06)	05:59 20:15	05:29 20:46	06:00 20:55	06:35 19:42	07:50 (LZ06) 52 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) 51 08:45 (LZ06)	05:57 20:16	05:29 20:47	06:01 20:55	06:36 19:40	07:50 (LZ06) 51 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) 52 08:45 (LZ06)	05:56 20:17	05:28 20:48	06:02 20:54	06:37 19:38	07:50 (LZ06) 51 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) 51 08:44 (LZ06)	05:55 20:18	05:28 20:49	06:03 20:54	06:38 19:36	07:49 (LZ06) 51 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) 52 08:45 (LZ06)	05:53 20:19	05:28 20:49	06:05 20:54	06:40 19:34	07:50 (LZ06) 49 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) 52 08:44 (LZ06)	05:52 20:20	05:28 20:50	06:06 20:53	06:41 19:33	07:50 (LZ06) 48 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) 53 08:44 (LZ06)	05:51 20:22	05:27 20:50	06:07 20:53	06:42 19:31	07:50 (LZ06) 47 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) 52 08:43 (LZ06)	05:50 20:23	05:27 20:51	06:08 20:21	06:43 19:29	07:50 (LZ06) 46 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) 52 08:43 (LZ06)	05:48 20:24	05:27 20:52	06:09 20:19	06:44 19:27	07:52 (LZ06) 44 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) 51 08:42 (LZ06)	05:47 20:25	05:27 20:51	06:10 20:18	06:45 19:25	07:53 (LZ06) 41 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) 50 08:41 (LZ06)	05:46 20:26	05:27 20:51	06:11 20:16	06:46 19:24	07:54 (LZ06) 38 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) 49 08:41 (LZ06)	05:45 20:27	05:27 20:50	06:12 20:15	06:47 14 08:26 (LZ06)	07:55 (LZ06) 35 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) 49 08:40 (LZ06)	05:44 20:28	05:27 20:53	06:14 20:13	06:49 20 08:29 (LZ06)	07:56 (LZ06) 32 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) 47 08:38 (LZ06)	05:43 20:29	05:27 20:54	06:15 20:12	06:50 25 08:31 (LZ06)	07:58 (LZ06) 27 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) 46 08:38 (LZ06)	05:42 20:31	05:27 20:54	06:16 20:10	06:51 29 08:33 (LZ06)	08:00 (LZ06) 22 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) 44 08:36 (LZ06)	05:41 20:32	05:27 20:54	06:17 20:09	06:52 33 08:36 (LZ06)	08:04 (LZ06) 13 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) 42 08:36 (LZ06)	05:40 20:33	05:27 20:55	06:18 20:07	06:53 36 08:37 (LZ06)	08:01 (LZ06) 12 08:19 (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) 40 08:34 (LZ06)	05:39 20:34	05:27 20:55	06:19 20:06	06:54 38 08:38 (LZ06)	08:00 (LZ06) 11 08:18 (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) 38 08:32 (LZ06)	05:38 20:35	05:27 20:55	06:20 20:04	06:55 41 08:39 (LZ06)	07:58 (LZ06) 10 08:17 (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) 35 08:31 (LZ06)	05:37 20:36	05:27 20:55	06:22 20:02	06:57 43 08:40 (LZ06)	07:57 (LZ06) 9 07:56 (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) 31 08:28 (LZ06)	05:36 20:37	05:28 20:56	06:23 20:01	06:58 44 08:41 (LZ06)	07:56 (LZ06) 8 07:55 (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	06:12 20:04	07:59 (LZ06) 28 08:27 (LZ06)	05:36 20:38	05:28 20:56	06:24 19:59	06:59 46 08:42 (LZ06)	07:55 (LZ06) 7 07:54 (LZ06)	06:35 17:12	07:15 16:37	07:42 16:37
26	07:34 17:11	06:53 17:53	06:04 18:28	06:10 20:05	07:10 (LZ06) 24 07:36 (LZ06)	06:00 20:39	05:28 20:56	06:25 19:57	07:00 47 08:41 (LZ06)	07:54 (LZ06) 6 07:53 (LZ06)	06:36 17:10	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	07:07 (LZ06) 31 07:38 (LZ06)	06:09 20:40	05:29 20:56	06:26 19:56	07:01 49 08:42 (LZ06)	07:53 (LZ06) 5 07:52 (LZ06)	06:38 17:09	07:18 16:36	07:43 16:38
28	07:32 17:13	06:50 17:55	06:00 18:30	06:07 20:08	07:05 (LZ06) 35 07:40 (LZ06)	06:07 20:40	05:29 20:56	06:27 19:54	07:02 50 08:42 (LZ06)	07:52 (LZ06) 4 07:52 (LZ06)	06:39 17:07	07:19 16:35	07:43 16:39
29	07:31 17:15	06:48 17:57	05:58 18:31	06:06 20:09	08:04 (LZ06) 38 08:42 (LZ06)	06:06 20:41	05:30 20:56	06:28 19:52	07:03 50 08:42 (LZ06)	07:52 (LZ06) 3 07:51 (LZ06)	06:40 17:06	07:20 16:35	07:43 16:39
30	07:30 17:16	06:47 17:58	05:57 18:32	06:04 20:10	08:02 (LZ06) 41 08:43 (LZ06)	06:04 20:42	05:30 20:56	06:29 19:50	07:05 51 08:42 (LZ06)	07:51 (LZ06) 2 07:51 (LZ06)	06:42 17:04	07:21 16:34	07:43 16:40
31	07:29 17:18	06:46 17:59	05:56 18:33	06:03 20:11	08:00 (LZ06) 43 08:43 (LZ06)	06:03 20:43	05:31 20:56	06:31 19:49	07:06 52 08:43 (LZ06)	07:51 (LZ06) 1 07:51 (LZ06)	06:43 17:03	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	05:31 20:44
2	07:44 16:43	07:27 17:20	08:04 (LZ17) 17:58	06:46 19:36	06:02 20:12	05:30 20:45
3	07:44 16:44	07:25 17:22	08:05 (LZ17) 17:59	06:45 19:38	06:00 20:13	05:30 20:46
4	07:44 16:45	07:24 17:23	08:06 (LZ17) 18:01	06:43 19:39	05:59 20:15	05:29 20:46
5	07:44 16:46	07:23 17:24	08:07 (LZ17) 18:02	06:41 19:40	05:57 20:16	05:29 20:47
6	07:44 16:47	07:22 17:26	08:10 (LZ17) 18:03	06:39 19:41	05:56 20:17	05:28 20:48
7	07:44 16:48	07:21 17:27	08:13 (LZ17) 18:04	06:38 19:42	05:55 20:18	05:28 20:48
8	07:43 16:49	07:19 17:29	08:15 (LZ17) 18:06	06:36 19:44	05:53 20:19	05:28 20:49
9	07:43 16:50	07:18 17:30	08:13 (LZ17) 18:07	06:34 19:45	05:52 20:20	05:28 20:50
10	07:43 16:51	07:17 17:31	08:11 (LZ17) 18:08	06:33 19:46	05:51 20:22	05:27 20:50
11	07:43 16:52	07:15 17:33	08:10 (LZ17) 18:10	06:31 19:47	05:50 20:23	05:27 20:51
12	07:42 16:53	07:14 17:34	08:09 (LZ17) 18:11	06:30 19:48	05:48 20:24	05:27 20:52
13	07:42 16:54	07:13 17:35	08:08 (LZ17) 18:12	06:29 19:50	05:47 20:25	05:27 20:52
14	07:41 16:56	07:11 17:37	08:07 (LZ17) 18:13	06:28 19:51	05:46 20:26	05:27 20:53
15	07:41 16:57	07:10 17:38	08:06 (LZ17) 18:14	06:27 19:52	05:45 20:27	05:27 20:53
16	07:41 16:58	07:08 17:40	08:05 (LZ17) 18:16	06:26 19:53	05:44 20:28	05:27 20:53
17	07:40 16:59	07:07 17:41	08:04 (LZ17) 18:17	06:25 19:54	05:43 20:29	05:27 20:54
18	07:39 17:00	08:08 (LZ17) 17:42	08:03 (LZ17) 18:18	06:23 19:56	05:42 20:30	05:27 20:54
19	07:39 17:02	08:06 (LZ17) 17:44	08:02 (LZ17) 18:19	06:22 19:57	05:41 20:32	05:27 20:54
20	07:38 17:03	08:04 (LZ17) 17:45	08:01 (LZ17) 18:21	06:20 19:58	05:40 20:33	05:27 20:55
21	07:37 17:04	08:03 (LZ17) 17:46	08:00 (LZ17) 18:22	06:18 19:59	05:39 20:34	05:27 20:55
22	07:37 17:06	08:03 (LZ17) 17:48	07:59 (LZ17) 18:23	06:17 20:00	05:38 20:35	05:27 20:55
23	07:36 17:07	08:03 (LZ17) 17:49	07:58 (LZ17) 18:24	06:15 20:02	05:37 20:36	05:27 20:55
24	07:35 17:08	08:02 (LZ17) 17:50	07:57 (LZ17) 18:26	06:14 20:03	05:36 20:37	05:28 20:56
25	07:34 17:09	08:02 (LZ17) 17:52	07:56 (LZ17) 18:27	06:12 20:04	05:36 20:38	05:28 20:56
26	07:34 17:11	08:02 (LZ17) 17:53	07:55 (LZ17) 18:28	06:10 20:05	05:35 20:39	05:28 20:56
27	07:33 17:12	08:02 (LZ17) 17:54	07:54 (LZ17) 18:29	06:09 20:06	05:34 20:40	05:29 20:56
28	07:32 17:13	08:02 (LZ17) 17:55	07:53 (LZ17) 18:30	06:07 20:08	05:33 20:40	05:29 20:56
29	07:31 17:15	08:02 (LZ17) 17:56	07:52 (LZ17) 18:32	06:06 20:09	05:33 20:41	05:30 20:56
30	07:30 17:16	08:03 (LZ17) 17:57	07:51 (LZ17) 18:33	06:04 20:10	05:32 20:42	05:30 20:56
31	07:29 17:18	08:03 (LZ17) 17:58	07:50 (LZ17) 18:34	06:03 20:11	05:31 20:43	05:30 20:56
Potential sun hours	289	293	369	402	456	462
Total, worst case	255	104		1038	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) 05:57 08:25 (LZ06) 20:34	07:31 (LZ06) 06:32 08:39 (LZ06) 19:47	07:06 18:52	06:44 17:01	07:22 16:34
2	05:31 20:55	07:36 (LZ06) 05:58 08:25 (LZ06) 20:33	07:31 (LZ06) 06:33 08:39 (LZ06) 19:45	07:07 18:50	06:46 17:00	07:24 16:33
3	05:32 20:55	07:37 (LZ06) 05:59 08:25 (LZ06) 20:32	07:31 (LZ06) 06:34 08:39 (LZ06) 19:43	07:08 18:49	06:47 16:59	07:25 16:33
4	05:32 20:55	07:36 (LZ06) 06:00 08:25 (LZ06) 20:30	07:31 (LZ06) 06:35 08:39 (LZ06) 19:42	07:09 18:47	06:48 16:57	07:26 16:33
5	05:33 20:55	07:36 (LZ06) 06:01 08:26 (LZ06) 20:29	06:54 (LZ02) 06:36 08:40 (LZ06) 19:40	07:11 18:45	06:50 16:56	07:27 16:32
6	05:33 20:54	07:37 (LZ06) 06:02 08:27 (LZ06) 20:28	06:51 (LZ02) 06:37 08:40 (LZ06) 19:38	07:12 18:43	06:51 16:55	07:28 16:32
7	05:34 20:54	07:36 (LZ06) 06:03 08:27 (LZ06) 20:26	06:49 (LZ02) 06:38 08:40 (LZ06) 19:36	07:13 18:42	06:52 16:54	07:29 16:32
8	05:35 20:54	07:36 (LZ06) 06:05 08:28 (LZ06) 20:25	06:48 (LZ02) 06:40 08:40 (LZ06) 19:34	07:14 18:40	06:53 16:52	07:30 16:32
9	05:35 20:53	07:36 (LZ06) 06:06 08:29 (LZ06) 20:24	06:47 (LZ02) 06:41 08:40 (LZ06) 19:33	07:15 18:38	06:55 16:51	07:31 16:32
10	05:36 20:53	07:35 (LZ06) 06:07 08:29 (LZ06) 20:22	06:46 (LZ02) 06:42 08:39 (LZ06) 19:31	07:16 18:36	06:56 16:50	07:32 16:32
11	05:37 20:52	07:35 (LZ06) 06:08 08:30 (LZ06) 20:21	06:45 (LZ02) 06:43 08:39 (LZ06) 19:29	07:18 18:35	06:57 16:49	07:33 16:32
12	05:38 20:52	07:35 (LZ06) 06:09 08:31 (LZ06) 20:19	06:44 (LZ02) 06:44 08:38 (LZ06) 19:27	07:19 18:33	06:59 16:48	07:34 16:32
13	05:39 20:51	07:35 (LZ06) 06:10 08:31 (LZ06) 20:18	06:44 (LZ02) 06:45 08:38 (LZ06) 19:25	07:20 18:31	07:00 16:47	07:34 16:32
14	05:39 20:51	07:34 (LZ06) 06:11 08:31 (LZ06) 20:16	06:44 (LZ02) 06:46 08:37 (LZ06) 19:24	07:21 18:29	07:01 16:46	07:35 16:32
15	05:40 20:50	07:34 (LZ06) 06:12 08:32 (LZ06) 20:15	06:43 (LZ02) 06:47 08:36 (LZ06) 19:22	07:23 18:28	07:03 16:45	07:36 16:32
16	05:41 20:49	07:34 (LZ06) 06:14 08:33 (LZ06) 20:13	06:43 (LZ02) 06:49 08:36 (LZ06) 19:20	07:24 18:26	07:04 16:44	07:37 16:33
17	05:42 20:49	07:34 (LZ06) 06:15 08:33 (LZ06) 20:12	06:43 (LZ02) 06:50 08:35 (LZ06) 19:18	07:25 18:24	07:05 16:43	07:37 16:33
18	05:43 20:48	07:34 (LZ06) 06:16 08:34 (LZ06) 20:10	06:44 (LZ02) 06:51 08:34 (LZ06) 19:16	07:26 18:23	07:07 16:42	07:38 16:33
19	05:44 20:47	07:34 (LZ06) 06:17 08:35 (LZ06) 20:09	06:45 (LZ02) 06:52 08:34 (LZ06) 19:14	07:28 18:21	07:08 16:41	07:39 16:34
20	05:45 20:46	07:34 (LZ06) 06:18 08:35 (LZ06) 20:07	06:46 (LZ02) 06:53 08:33 (LZ06) 19:12	07:29 18:19	07:09 16:40	07:39 16:34
21	05:46 20:45	07:34 (LZ06) 06:19 08:36 (LZ06) 20:06	06:47 (LZ02) 06:54 08:31 (LZ06) 19:11	07:30 18:18	07:10 16:39	07:40 16:34
22	05:47 20:45	07:33 (LZ06) 06:20 08:36 (LZ06) 20:04	06:49 (LZ02) 06:55 08:30 (LZ06) 19:09	07:31 18:16	07:12 16:39	07:40 16:35
23	05:48 20:44	07:32 (LZ06) 06:21 08:36 (LZ06) 20:02	07:40 (LZ06) 06:57 08:28 (LZ06) 19:07	07:33 18:15	07:13 16:38	07:41 16:35
24	05:49 20:43	07:32 (LZ06) 06:23 08:37 (LZ06) 20:01	07:41 (LZ06) 06:58 08:26 (LZ06) 19:05	07:34 18:13	07:14 16:37	07:41 16:36
25	05:50 20:42	07:32 (LZ06) 06:24 08:37 (LZ06) 19:59	07:42 (LZ06) 06:59 08:24 (LZ06) 19:03	06:35 17:12	07:15 16:37	07:42 16:37
26	05:51 20:41	07:32 (LZ06) 06:25 08:37 (LZ06) 19:57	07:44 (LZ06) 07:00 08:22 (LZ06) 19:01	06:36 17:10	07:17 16:36	07:42 16:37
27	05:52 20:40	07:32 (LZ06) 06:26 08:38 (LZ06) 19:56	07:46 (LZ06) 07:01 08:19 (LZ06) 19:00	06:38 17:09	07:18 16:36	07:42 16:38
28	05:53 20:39	07:32 (LZ06) 06:27 08:38 (LZ06) 19:54	07:49 (LZ06) 07:02 08:15 (LZ06) 18:58	06:39 17:07	07:19 16:35	07:43 16:39
29	05:54 20:37	07:32 (LZ06) 06:28 08:38 (LZ06) 19:52	07:53 (LZ06) 07:03 08:11 (LZ06) 18:56	06:40 17:06	07:20 16:35	07:43 16:39
30	05:55 20:36	07:31 (LZ06) 06:29 08:39 (LZ06) 19:50	07:05 18:54	06:42 17:04	07:21 16:34	07:43 16:40
31	05:56 20:35	07:31 (LZ06) 06:31 08:39 (LZ06) 19:49		06:43 17:03		07:43 16:41
Potential sun hours	468	434	376	342	291	278
Total, worst case	1804	1971			364	

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	07:56 (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	06:52 (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		1965

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		06:57 (LZ06)	05:57		06:36 (LZ02)	06:32		07:06				06:44		07:23 (LZ17)	07:22		08:55 (LZ16)
	20:56	65	08:02 (LZ06)	20:34	52	07:49 (LZ06)	19:47		18:52				17:01	21	07:44 (LZ17)	16:34	8	09:03 (LZ16)
2	05:31		06:56 (LZ06)	05:58		06:36 (LZ02)	06:33		07:07				06:46		07:22 (LZ17)	07:24		08:53 (LZ16)
	20:55	66	08:02 (LZ06)	20:33	49	07:47 (LZ06)	19:45		18:50				17:00	22	07:44 (LZ17)	16:33	13	09:06 (LZ16)
3	05:32		06:57 (LZ06)	05:59		06:35 (LZ02)	06:34		07:08				06:47		07:23 (LZ17)	07:25		08:52 (LZ16)
	20:55	65	08:02 (LZ06)	20:32	44	07:44 (LZ06)	19:43		18:49				16:59	22	07:45 (LZ17)	16:33	15	09:07 (LZ16)
4	05:32		06:57 (LZ06)	06:00		06:35 (LZ02)	06:35		07:09				06:48		07:22 (LZ17)	07:26		08:51 (LZ16)
	20:55	65	08:02 (LZ06)	20:30	36	07:40 (LZ06)	19:42		18:47				16:57	23	07:45 (LZ17)	16:33	18	09:09 (LZ16)
5	05:33		06:58 (LZ06)	06:01		06:35 (LZ02)	06:36		07:11				06:50		07:23 (LZ17)	07:27		08:51 (LZ16)
	20:55	65	08:03 (LZ06)	20:29	23	06:58 (LZ02)	19:40		18:45				16:56	22	07:45 (LZ17)	16:32	19	09:10 (LZ16)
6	05:33		06:58 (LZ06)	06:02		06:35 (LZ02)	06:37		07:12				06:51		07:22 (LZ17)	07:28		08:50 (LZ16)
	20:54	65	08:03 (LZ06)	20:28	22	06:57 (LZ02)	19:38		18:43				16:55	23	07:45 (LZ17)	16:32	21	09:11 (LZ16)
7	05:34		06:58 (LZ06)	06:03		06:35 (LZ02)	06:38		07:13				06:52		07:23 (LZ17)	07:29		08:50 (LZ16)
	20:54	64	08:02 (LZ06)	20:26	22	06:57 (LZ02)	19:36		18:42				16:54	22	07:45 (LZ17)	16:32	22	09:12 (LZ16)
8	05:35		06:59 (LZ06)	06:05		06:35 (LZ02)	06:40		07:14				06:53		07:24 (LZ17)	07:30		08:50 (LZ16)
	20:54	64	08:03 (LZ06)	20:25	22	06:57 (LZ02)	19:34		18:40				16:52	20	07:44 (LZ17)	16:32	23	09:13 (LZ16)
9	05:36		06:59 (LZ06)	06:06		06:35 (LZ02)	06:41		07:15				06:55		07:24 (LZ17)	07:31		08:50 (LZ16)
	20:53	64	08:03 (LZ06)	20:24	21	06:56 (LZ02)	19:33		18:38				16:51	19	07:43 (LZ17)	16:32	24	09:14 (LZ16)
10	05:36		06:59 (LZ06)	06:07		06:36 (LZ02)	06:42		07:16				06:56		07:25 (LZ17)	07:32		08:50 (LZ16)
	20:53	63	08:02 (LZ06)	20:22	20	06:56 (LZ02)	19:31		18:36				16:50	18	07:43 (LZ17)	16:32	25	09:15 (LZ16)
11	05:37		06:59 (LZ06)	06:08		06:36 (LZ02)	06:43		07:18				06:57		07:26 (LZ17)	07:33		08:50 (LZ16)
	20:52	64	08:03 (LZ06)	20:21	19	06:55 (LZ02)	19:29		18:35				16:49	16	07:42 (LZ17)	16:32	26	09:16 (LZ16)
12	05:38		07:00 (LZ06)	06:09		06:37 (LZ02)	06:44		07:19				06:59		07:28 (LZ17)	07:33		08:50 (LZ16)
	20:52	63	08:03 (LZ06)	20:19	17	06:54 (LZ02)	19:27		18:33				16:48	13	07:41 (LZ17)	16:32	27	09:17 (LZ16)
13	05:39		07:01 (LZ06)	06:10		06:38 (LZ02)	06:45		07:20				07:00		07:30 (LZ17)	07:34		08:51 (LZ16)
	20:51	62	08:03 (LZ06)	20:18	14	06:52 (LZ02)	19:25		18:31				16:47	9	07:39 (LZ17)	16:32	27	09:18 (LZ16)
14	05:39		07:00 (LZ06)	06:11		06:39 (LZ02)	06:46		07:21				07:01			07:35		08:50 (LZ16)
	20:51	62	08:02 (LZ06)	20:16	11	06:50 (LZ02)	19:24		18:29				16:46			16:32	28	09:18 (LZ16)
15	05:40		07:01 (LZ06)	06:12		06:43 (LZ02)	06:47		07:23				07:03			07:36		08:51 (LZ16)
	20:50	61	08:02 (LZ06)	20:15	3	06:46 (LZ02)	19:22		18:28				16:45			16:32	27	09:18 (LZ16)
16	05:41		07:02 (LZ06)	06:14			06:49		07:24				07:04			07:37		08:51 (LZ16)
	20:49	60	08:02 (LZ06)	20:13			19:20		18:26				16:44			16:33	28	09:19 (LZ16)
17	05:42		07:02 (LZ06)	06:15			06:50		07:25				07:05			07:37		08:52 (LZ16)
	20:49	60	08:02 (LZ06)	20:12			19:18		18:24				16:43			16:33	28	09:20 (LZ16)
18	05:43		07:03 (LZ06)	06:16			06:51		07:26				07:07			07:38		08:52 (LZ16)
	20:48	59	08:02 (LZ06)	20:10			19:16		18:23				16:42			16:33	28	09:20 (LZ16)
19	05:44		07:04 (LZ06)	06:17			06:52		07:28				07:08			07:39		08:53 (LZ16)
	20:47	58	08:02 (LZ06)	20:09			19:14		18:21				16:41			16:34	28	09:21 (LZ16)
20	05:45		07:04 (LZ06)	06:18			06:53		07:29				07:09			07:39		08:52 (LZ16)
	20:46	57	08:01 (LZ06)	20:07			19:12		18:19				16:40			16:34	29	09:21 (LZ16)
21	05:46		07:05 (LZ06)	06:19			06:54		07:30				07:10			07:40		08:53 (LZ16)
	20:45	56	08:01 (LZ06)	20:06			19:11		18:18				16:39			16:34	29	09:22 (LZ16)
22	05:47		07:05 (LZ06)	06:20			06:55		07:31				07:12			07:40		08:53 (LZ16)
	20:45	55	08:00 (LZ06)	20:04			19:09		18:16				16:39			16:35	29	09:22 (LZ16)
23	05:48		07:06 (LZ06)	06:21			06:57		07:33				07:13			07:41		08:54 (LZ16)
	20:44	53	07:59 (LZ06)	20:02			19:07		18:15				16:38			16:35	29	09:23 (LZ16)
24	05:49		07:06 (LZ06)	06:23			06:58		07:34				07:14			07:41		08:54 (LZ16)
	20:43	53	07:59 (LZ06)	20:01			19:05		18:13				16:37			16:36	29	09:23 (LZ16)
25	05:50		07:07 (LZ06)	06:24			06:59		06:35				07:15			07:42		08:56 (LZ16)
	20:42	51	07:58 (LZ06)	19:59			19:03		17:12				16:37			16:37	28	09:24 (LZ16)
26	05:51		07:08 (LZ06)	06:25			07:00		06:36				07:17			07:42		08:56 (LZ16)
	20:41	49	07:57 (LZ06)	19:57			19:01		17:10				16:36			16:37	28	09:24 (LZ16)
27	05:52		06:43 (LZ02)	06:26			07:01		06:38				07:18			07:42		08:56 (LZ16)
	20:40	53	07:56 (LZ06)	19:56			19:00		17:09				16:36			16:38	28	09:24 (LZ16)
28	05:53		06:40 (LZ02)	06:27			07:02		06:39				07:19			07:43		08:57 (LZ16)
	20:39	57	07:55 (LZ06)	19:54			18:58		17:07				16:35			16:39	27	09:24 (LZ16)
29	05:54		06:39 (LZ02)	06:28			07:03		06:40				07:20			07:43		08:57 (LZ16)
	20:37	56	07:54 (LZ06)	19:52			18:56		17:06				16:35			16:39	28	09:25 (LZ16)
30	05:55		06:38 (LZ02)	06:29			07:05		06:42				07:21			07:43		08:59 (LZ16)
	20:36	56	07:53 (LZ06)	19:50			18:54		17:04				16:34			16:40	27	09:26 (LZ16)
31	05:56		06:37 (LZ02)	06:31					06:43				07:24 (LZ17)			07:43		08:59 (LZ16)
	20:35	54	07:51 (LZ06)	19:49					17:03				07:44 (LZ17)			16:41	27	09:26 (LZ16)
Potential sun hours	468			434			376		342				291			278		
Total, worst case		1845			375			66		250				773				

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_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	09:02 (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	679	296			372	911

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: 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	26	07:20 (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		08:37 (LZ16)	07:39		08:38 (LZ16)
	20:46	10	06:44 (LZ02)	20:07			19:12		18:19				16:40	15	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		470			147				195				397				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
	16:42	17:19	09:09 (LZ16)	17:57	07:49 (LZ17)	19:35
2	07:44	07:27	08:34 (LZ16)	06:46	07:33 (LZ17)	06:51
	16:43	17:20	09:09 (LZ16)	17:58	07:46 (LZ17)	19:36
3	07:44	07:25	08:33 (LZ16)	06:45	07:35 (LZ17)	06:49
	16:44	17:22	09:08 (LZ16)	17:59	07:43 (LZ17)	19:38
4	07:44	08:39 (LZ16)	07:24	08:34 (LZ16)	06:43	06:48
	16:45	08:46 (LZ16)	17:23	09:08 (LZ16)	18:01	19:39
5	07:44	08:37 (LZ16)	07:23	08:35 (LZ16)	06:41	06:46
	16:46	08:48 (LZ16)	17:24	09:07 (LZ16)	18:02	19:40
6	07:44	08:36 (LZ16)	07:22	08:37 (LZ16)	06:39	06:44
	16:47	08:50 (LZ16)	17:26	09:06 (LZ16)	18:03	19:41
7	07:44	08:35 (LZ16)	07:21	08:37 (LZ16)	06:38	06:42
	16:48	08:52 (LZ16)	17:27	09:05 (LZ16)	18:04	19:42
8	07:43	08:35 (LZ16)	07:19	08:39 (LZ16)	06:36	06:40
	16:49	08:53 (LZ16)	17:29	09:04 (LZ16)	18:06	19:44
9	07:43	08:34 (LZ16)	07:18	08:41 (LZ16)	06:34	06:39
	16:50	08:54 (LZ16)	17:30	09:02 (LZ16)	18:07	19:45
10	07:43	08:33 (LZ16)	07:17	08:42 (LZ16)	06:33	06:37
	16:51	08:56 (LZ16)	17:31	09:00 (LZ16)	18:08	19:46
11	07:43	08:33 (LZ16)	07:15	08:46 (LZ16)	06:31	06:35
	16:52	08:57 (LZ16)	17:33	08:56 (LZ16)	18:10	19:47
12	07:42	08:32 (LZ16)	07:14	06:29	06:33	06:33
	16:53	08:58 (LZ16)	17:34	18:11	19:48	20:24
13	07:42	08:32 (LZ16)	07:13	06:27	06:32	06:32
	16:54	09:00 (LZ16)	17:35	18:12	19:50	20:25
14	07:41	08:32 (LZ16)	07:11	06:25	06:30	06:30
	16:56	09:00 (LZ16)	17:37	18:13	19:51	20:26
15	07:41	08:32 (LZ16)	07:10	06:24	06:28	06:28
	16:57	09:02 (LZ16)	17:38	18:15	19:52	20:27
16	07:41	08:31 (LZ16)	07:08	06:22	06:27	06:27
	16:58	09:02 (LZ16)	17:40	18:16	19:53	20:28
17	07:40	08:31 (LZ16)	07:07	07:35 (LZ17)	06:20	06:25
	16:59	09:03 (LZ16)	17:41	07:46 (LZ17)	18:17	19:54
18	07:39	08:31 (LZ16)	07:05	07:34 (LZ17)	06:18	06:23
	17:00	09:04 (LZ16)	17:42	07:49 (LZ17)	18:18	19:56
19	07:39	08:31 (LZ16)	07:04	07:32 (LZ17)	06:16	06:22
	17:02	09:05 (LZ16)	17:44	07:50 (LZ17)	18:19	19:57
20	07:38	08:30 (LZ16)	07:02	07:31 (LZ17)	06:15	06:20
	17:03	09:05 (LZ16)	17:45	07:51 (LZ17)	18:21	19:58
21	07:37	08:31 (LZ16)	07:01	07:30 (LZ17)	06:13	06:18
	17:04	09:07 (LZ16)	17:46	07:52 (LZ17)	18:22	19:59
22	07:37	08:31 (LZ16)	06:59	07:29 (LZ17)	06:11	06:17
	17:06	09:07 (LZ16)	17:48	07:52 (LZ17)	18:23	20:00
23	07:36	08:31 (LZ16)	06:58	07:29 (LZ17)	06:09	06:15
	17:07	09:08 (LZ16)	17:49	07:52 (LZ17)	18:24	20:02
24	07:35	08:31 (LZ16)	06:56	07:29 (LZ17)	06:07	06:14
	17:08	09:08 (LZ16)	17:50	07:52 (LZ17)	18:26	20:03
25	07:34	08:31 (LZ16)	06:55	07:29 (LZ17)	06:06	06:12
	17:09	09:08 (LZ16)	17:52	07:51 (LZ17)	18:27	20:04
26	07:33	08:31 (LZ16)	06:53	07:29 (LZ17)	06:04	06:10
	17:11	09:09 (LZ16)	17:53	07:52 (LZ17)	18:28	20:05
27	07:33	08:31 (LZ16)	06:51	07:29 (LZ17)	06:02	06:09
	17:12	09:09 (LZ16)	17:54	07:50 (LZ17)	18:29	20:06
28	07:32	08:31 (LZ16)	06:50	07:30 (LZ17)	06:00	06:07
	17:13	09:09 (LZ16)	17:55	07:49 (LZ17)	18:30	20:08
29	07:31	08:31 (LZ16)		06:58	06:58	06:06
	17:15	09:09 (LZ16)		19:32	20:09	20:41
30	07:30	08:32 (LZ16)		06:57	06:57	06:04
	17:16	09:09 (LZ16)		19:33	20:10	20:42
31	07:29	08:32 (LZ16)		06:55		05:31
	17:18	09:09 (LZ16)		19:34		20:43
Potential sun hours	289	293	369	402	456	462
Total, worst case	820	543	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)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		



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	982		278	137
Total, worst case				292					

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_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	05:32 20:55	05:59 20:32	06:34 19:43	07:08 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	06:35 19:42	07:09 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	06:36 19:40	07:11 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	06:37 19:38	07:12 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	06:38 19:36	07:13 18:42	7 08:04 (LZ17)
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	06:40 19:40	07:14 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	06:41 19:33	07:15 18:38	17 08:15 (LZ17)
10	07:43 16:51	07:17 17:31	08:18 (LZ16) 18:08	06:33 18:08	07:40 (LZ17) 19:46	06:42 20:22	05:27 20:50	05:37 20:53	06:07 20:22	06:42 19:31	07:17 18:36	18 08:16 (LZ17)
11	07:43 16:52	07:15 17:33	08:18 (LZ16) 18:10	06:31 18:10	07:41 (LZ17) 19:47	06:43 20:23	05:27 20:51	05:37 20:52	06:08 20:21	06:43 19:29	07:18 18:35	21 08:17 (LZ17)
12	07:42 16:53	07:14 17:34	08:19 (LZ16) 18:11	06:29 18:11	07:42 (LZ17) 19:48	06:44 20:24	05:27 20:52	05:38 20:52	06:09 20:19	06:44 19:27	07:19 18:33	22 08:18 (LZ17)
13	07:42 16:54	07:13 17:35	08:19 (LZ16) 18:12	06:27 18:12	07:43 (LZ17) 19:49	06:45 20:25	05:27 20:52	05:39 20:51	06:10 20:18	06:45 19:25	07:20 18:31	23 08:19 (LZ17)
14	07:41 16:56	07:11 17:37	08:20 (LZ16) 18:13	06:25 18:13	07:44 (LZ17) 19:50	06:46 20:26	05:27 20:53	05:41 20:51	06:11 20:16	06:46 19:24	07:21 18:29	24 08:20 (LZ17)
15	07:41 16:57	07:10 17:38	08:21 (LZ16) 18:15	06:24 18:15	07:45 (LZ17) 19:51	06:47 20:27	05:27 20:53	05:42 20:50	06:12 20:15	06:47 19:22	07:22 18:28	25 08:21 (LZ17)
16	07:41 16:58	07:08 17:40	08:22 (LZ16) 18:16	06:22 18:16	07:46 (LZ17) 19:52	06:48 20:28	05:27 20:53	05:43 20:49	06:14 20:13	06:49 19:20	07:24 18:26	26 08:22 (LZ17)
17	07:40 16:59	07:07 17:41	08:23 (LZ16) 18:17	06:20 18:17	07:47 (LZ17) 19:53	06:49 20:29	05:27 20:54	05:44 20:49	06:15 20:12	06:50 19:18	07:25 18:24	27 08:23 (LZ17)
18	07:39 17:00	07:05 17:42	08:25 (LZ16) 18:18	06:18 18:18	07:48 (LZ17) 19:54	06:50 20:30	05:27 20:54	05:45 20:48	06:16 20:10	06:51 19:16	07:26 18:23	28 08:24 (LZ17)
19	07:39 17:02	07:04 17:44	08:26 (LZ16) 18:19	06:16 18:19	07:49 (LZ17) 19:55	06:51 20:32	05:27 20:54	05:46 20:47	06:17 20:09	06:52 19:14	07:28 18:21	29 08:25 (LZ17)
20	07:38 17:03	07:02 17:45	08:34 (LZ16) 18:21	06:15 18:21	07:50 (LZ17) 19:56	06:52 20:33	05:27 20:55	05:47 20:46	06:18 20:07	06:53 19:12	07:29 18:19	30 08:26 (LZ17)
21	07:37 17:04	07:01 17:46	08:36 (LZ16) 18:22	06:13 18:22	07:51 (LZ17) 19:57	06:53 20:34	05:27 20:55	05:48 20:45	06:19 20:06	06:54 19:11	07:30 18:18	31 08:27 (LZ17)
22	07:37 17:06	06:59 17:48	07:29 (LZ17) 18:23	06:11 18:23	07:52 (LZ17) 19:58	06:54 20:35	05:27 20:55	05:49 20:45	06:20 20:04	06:55 19:09	07:31 18:16	1 09:01 (LZ16)
23	07:36 17:07	06:58 17:49	07:27 (LZ17) 18:24	06:09 18:24	07:53 (LZ17) 19:59	06:55 20:36	05:28 20:55	05:48 20:44	06:22 20:02	06:57 19:07	07:32 18:15	2 09:02 (LZ16)
24	07:35 17:08	06:56 17:50	07:25 (LZ17) 18:26	06:07 18:26	07:54 (LZ17) 19:59	06:56 20:37	05:28 20:56	05:49 20:43	06:23 20:01	06:58 19:05	07:34 18:13	3 09:03 (LZ16)
25	07:34 17:09	06:55 17:52	07:24 (LZ17) 18:27	06:06 18:27	07:55 (LZ17) 19:59	06:57 20:38	05:28 20:56	05:50 20:42	06:24 19:59	06:59 19:03	07:35 18:12	4 09:04 (LZ16)
26	07:33 17:11	06:53 17:53	07:23 (LZ17) 18:28	06:04 18:28	07:56 (LZ17) 19:59	06:58 20:39	05:28 20:56	05:51 20:41	06:25 19:57	07:00 19:01	07:36 18:10	5 09:05 (LZ16)
27	07:33 17:12	06:51 17:54	07:22 (LZ17) 18:29	06:02 18:29	07:57 (LZ17) 19:59	06:59 20:40	05:29 20:56	05:52 20:40	06:26 19:56	07:01 19:00	07:38 18:09	6 09:06 (LZ16)
28	07:32 17:14	06:50 17:55	07:21 (LZ17) 18:30	06:00 18:30	07:58 (LZ17) 19:59	06:59 20:41	05:29 20:56	05:53 20:40	06:27 19:54	07:02 18:58	07:39 18:07	7 09:07 (LZ16)
29	07:31 17:15	06:48 17:57	07:20 (LZ17) 18:31	05:58 18:31	07:59 (LZ17) 19:59	06:59 20:42	05:29 20:56	05:54 20:41	06:28 19:52	07:03 18:56	07:40 18:06	8 09:08 (LZ16)
30	07:30 17:16	06:47 18:00	07:19 (LZ17) 18:32	05:57 18:32	08:00 (LZ17) 19:59	06:59 20:43	05:29 20:56	05:55 20:42	06:29 19:50	07:05 18:54	07:41 18:07	9 09:09 (LZ16)
31	07:29 17:18	06:46 18:01	07:18 (LZ17) 18:33	05:56 18:33	08:01 (LZ17) 19:59	06:59 20:44	05:29 20:56	05:56 20:43	06:31 19:49	06:43 18:54	07:42 18:08	10 09:10 (LZ16)
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	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	07:06 18:52	18:06 (LZ07) 18:25 (LZ07)	06:44 17:01	07:23 16:34
2	07:44 16:43	07:27 17:20	06:46 17:58	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	18:06 (LZ07) 18:24 (LZ07)	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	06:00 20:14	05:30 20:46	05:32 20:55	05:59 20:32	06:34 19:44	07:08 18:49	18:07 (LZ07) 18:22 (LZ07)	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	05:59 20:15	05:29 20:46	05:32 20:55	06:00 20:30	06:35 19:42	07:09 18:47	18:10 (LZ07) 18:20 (LZ07)	06:48 16:57	07:26 16:33
5	07:44 16:46	07:23 17:25	06:41 18:02	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	06:50 16:56	07:27 16:33	
6	07:44 16:47	07:22 17:26	06:40 18:03	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	06:51 16:55	07:28 16:32	
7	07:44 16:48	07:21 17:27	06:38 18:05	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	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	05:54 20:19	05:28 20:49	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	07:43 16:50	07:18 17:30	06:34 18:07	06:39 17:40 (LZ07)	05:52 20:21	05:28 20:50	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	07:43 16:51	07:17 17:31	06:33 18:08	06:37 17:43 (LZ07)	05:51 20:22	05:27 20:50	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	07:43 16:52	07:16 17:33	06:31 18:10	06:35 17:28 (LZ07)	05:50 20:23	05:27 20:51	05:37 20:52	06:08 20:21	06:43 19:29	07:18 18:35	06:57 16:49	07:33 16:32	
12	07:42 16:53	07:14 17:34	06:29 18:11	06:34 17:46 (LZ07)	05:49 20:24	05:27 20:52	05:38 20:52	06:09 20:19	06:44 19:27	07:19 18:33	06:59 16:58	07:34 16:32	
13	07:42 16:54	07:13 17:35	06:27 18:12	06:32 17:46 (LZ07)	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	07:42 16:56	07:11 17:37	06:25 18:13	06:30 17:47 (LZ07)	05:46 20:26	05:27 20:53	05:39 20:51	06:11 20:17	06:46 19:24	07:21 18:29	07:01 16:46	07:35 16:32	
15	07:41 16:57	07:10 17:38	06:24 18:15	06:28 17:44 (LZ07)	05:45 20:27	05:27 20:53	05:40 20:50	06:13 20:15	06:48 19:22	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 17:46 (LZ07)	05:44 20:28	05:27 20:53	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	06:25 17:45 (LZ07)	05:43 20:29	05:27 20:54	05:42 20:49	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	07:06 17:42	06:18 18:18	06:23 17:45 (LZ07)	05:42 20:31	05:27 20:54	05:43 20:48	06:16 20:10	06:51 19:16	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 17:44 (LZ07)	05:41 20:32	05:27 20:55	05:44 20:47	06:17 20:09	06:52 19:14	07:28 18:21	07:08 16:41	07:39 16:34	
20	07:38 17:03	07:03 17:45	06:15 18:21	06:20 17:43 (LZ07)	05:40 20:33	05:27 20:55	05:45 20:46	06:18 20:07	06:53 19:13	07:29 18:19	07:09 16:40	07:39 16:34	
21	07:38 17:04	07:01 17:46	06:13 18:22	06:18 17:41 (LZ07)	05:39 20:34	05:27 20:55	05:46 20:45	06:19 20:06	06:54 19:11	18:16 (LZ07) 18:23 (LZ07)	07:30 18:18	07:40 16:34	2 15:19 (LZ15)
22	07:37 17:06	06:59 17:48	06:11 18:23	06:17 17:38 (LZ07)	05:38 20:35	05:27 20:55	05:47 20:45	06:20 20:04	06:55 19:09	18:12 (LZ07) 18:26 (LZ07)	07:31 18:16	07:40 16:35	3 15:20 (LZ15)
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	18:10 (LZ07) 18:27 (LZ07)	07:33 18:15	07:41 16:36	3 15:23 (LZ15)
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	18:09 (LZ07) 18:27 (LZ07)	07:34 18:13	07:41 16:37	2 15:23 (LZ15)
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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	18:06 (LZ07) 18:28 (LZ07)	06:37 17:10	07:42 16:37	
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28	07:32 17:14	06:50 17:56	06:00 18:30	06:07 20:08	05:33 20:41	05:29 20:56	05:53 20:39	06:27 19:54	07:02 18:58	18:06 (LZ07) 18:28 (LZ07)	06:39 17:07	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	18:06 (LZ07) 18:27 (LZ07)	06:40 17:06	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 19:51	07:05 18:54	18:06 (LZ07) 18:26 (LZ07)	06:42 17:04	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		06:43 17:03		07:44 16:41	
Potential sun hours	289	293	369	402	456	462	468	434	376	342	291	278	10
Total, worst case			242						183	62			

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	July	August	September	October	November	December	
1	07:44 16:42	15:26 (LZ15) 15:51 (LZ15)	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	07:06 18:52	06:44 17:01	
2	07:44 16:42	15:27 (LZ15) 15:51 (LZ15)	07:27 17:20	06:46 17:58	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	06:46 17:00	
3	07:44 16:44	15:28 (LZ15) 15:52 (LZ15)	07:25 17:22	06:45 17:59	06:49 19:38	06:00 20:14	05:30 20:46	05:32 20:55	05:59 20:32	06:34 19:44	07:08 18:49	06:47 16:59	
4	07:44 16:45	15:28 (LZ15) 15:52 (LZ15)	07:24 17:23	06:43 18:01	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	06:48 16:57	
5	07:44 16:46	15:28 (LZ15) 15:51 (LZ15)	07:23 17:25	06:41 18:02	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	06:50 16:56	
6	07:44 16:47	15:29 (LZ15) 15:51 (LZ15)	07:22 17:26	06:40 18:03	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	06:51 16:55	
7	07:44 16:48	15:31 (LZ15) 15:52 (LZ15)	07:21 17:27	06:38 18:05	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	06:52 16:54	
8	07:43 16:49	15:32 (LZ15) 15:52 (LZ15)	07:19 17:29	06:36 18:06	06:40 19:44	05:54 20:19	05:28 20:49	05:35 20:54	06:05 20:25	06:40 19:35	07:14 18:40	06:54 16:52	
9	07:43 16:50	15:32 (LZ15) 15:51 (LZ15)	07:18 17:30	06:34 18:07	06:39 19:45	05:52 20:21	05:28 20:50	05:36 20:53	06:06 20:24	06:41 19:33	07:15 18:38	06:55 16:51	
10	07:43 16:51	15:34 (LZ15) 15:51 (LZ15)	07:17 17:31	06:33 18:08	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	06:56 16:50	
11	07:43 16:52	15:35 (LZ15) 15:51 (LZ15)	07:16 17:33	06:31 18:10	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	06:57 16:49	
12	07:42 16:53	15:36 (LZ15) 15:49 (LZ15)	07:14 17:34	06:29 18:11	06:34 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	06:59 16:48	
13	07:42 16:54	15:39 (LZ15) 15:49 (LZ15)	07:13 17:35	06:27 18:12	06:32 19:50	05:47 20:25	05:27 20:52	05:39 20:51	06:10 19:25	06:45 19:25	07:20 18:31	07:00 16:47	
14	07:42 16:56	15:42 (LZ15) 15:46 (LZ15)	07:11 17:37	06:25 18:13	06:30 19:51	05:46 20:26	05:27 20:53	05:39 20:51	06:11 19:24	06:46 19:24	07:21 18:29	07:01 16:46	
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16	07:41 16:58	15:45 (LZ15) 17:40	07:08 18:16	06:22 18:12	17:39 (LZ07) 17:51 (LZ07)	06:27 19:53	05:44 20:28	05:41 20:53	06:14 20:49	06:49 19:20	18:24 (LZ07) 18:37 (LZ07)	07:24 18:26	07:04 16:44
17	07:40 16:59	15:46 (LZ15) 17:41	07:07 18:17	06:20 18:16	17:36 (LZ07) 17:52 (LZ07)	06:25 19:54	05:43 20:29	05:42 20:54	06:15 20:49	06:50 19:18	18:22 (LZ07) 18:39 (LZ07)	07:25 18:24	07:05 16:43
18	07:39 17:00	15:47 (LZ15) 17:42	07:06 18:18	06:18 18:18	17:36 (LZ07) 17:54 (LZ07)	06:23 19:56	05:42 20:31	05:43 20:54	06:16 20:48	06:51 19:16	18:21 (LZ07) 18:39 (LZ07)	07:26 18:23	07:07 16:42
19	07:39 17:02	15:48 (LZ15) 17:44	07:05 18:19	06:16 18:19	17:34 (LZ07) 17:54 (LZ07)	06:22 19:57	05:41 20:32	05:44 20:55	06:17 20:47	06:52 19:14	18:19 (LZ07) 18:39 (LZ07)	07:28 18:21	07:08 16:41
20	07:38 17:03	15:49 (LZ15) 17:45	07:04 18:21	06:15 18:21	17:33 (LZ07) 17:55 (LZ07)	06:20 19:58	05:40 20:33	05:45 20:55	06:18 20:46	06:53 19:13	18:18 (LZ07) 18:39 (LZ07)	07:29 18:19	07:09 16:40
21	07:38 17:04	15:50 (LZ15) 17:46	07:03 18:22	06:13 18:22	17:33 (LZ07) 17:54 (LZ07)	06:18 19:59	05:39 20:34	05:46 20:55	06:19 20:45	06:54 19:11	18:19 (LZ07) 18:40 (LZ07)	07:30 18:18	07:10 16:40
22	07:37 17:06	15:51 (LZ15) 17:48	07:02 18:23	06:11 18:23	17:32 (LZ07) 17:54 (LZ07)	06:17 20:00	05:38 20:35	05:47 20:55	06:20 20:45	06:55 19:09	18:18 (LZ07) 18:40 (LZ07)	07:31 18:16	07:12 16:39
23	07:36 17:07	15:52 (LZ15) 17:49	07:01 18:24	06:10 18:24	17:33 (LZ07) 17:54 (LZ07)	06:15 20:02	05:37 20:36	05:48 20:55	06:22 20:44	06:57 19:07	18:18 (LZ07) 18:39 (LZ07)	07:33 18:15	07:13 16:38
24	07:35 17:08	15:53 (LZ15) 17:50	06:59 18:26	06:09 18:26	17:33 (LZ07) 17:53 (LZ07)	06:14 20:03	05:36 20:37	05:49 20:56	06:23 20:43	06:58 19:05	18:18 (LZ07) 18:38 (LZ07)	07:34 18:13	07:14 16:37
25	07:34 17:10	15:54 (LZ15) 17:52	06:58 18:27	06:06 18:27	17:33 (LZ07) 17:52 (LZ07)	06:12 20:04	05:36 20:38	05:48 20:56	06:24 20:42	06:59 19:59	18:18 (LZ07) 18:37 (LZ07)	07:35 17:12	07:15 16:37
26	07:34 17:11	15:55 (LZ15) 17:53	06:57 18:28	06:04 18:28	17:34 (LZ07) 17:51 (LZ07)	06:11 20:05	05:35 20:39	05:47 20:56	06:25 20:41	07:00 19:57	18:18 (LZ07) 18:35 (LZ07)	07:37 17:10	07:17 16:36
27	07:33 17:12	15:56 (LZ15) 17:54	06:56 18:29	06:02 18:29	17:35 (LZ07) 17:49 (LZ07)	06:09 20:06	05:34 20:40	05:49 20:56	06:26 20:40	07:01 19:56	18:19 (LZ07) 18:33 (LZ07)	07:38 17:09	07:18 16:36
28	07:32 17:14	15:57 (LZ15) 17:56	06:55 18:30	06:00 18:30	17:37 (LZ07) 17:46 (LZ07)	06:07 20:08	05:33 20:41	05:49 20:56	06:27 20:39	07:02 19:54	18:22 (LZ07) 18:31 (LZ07)	07:39 17:07	07:19 16:35
29	07:31 17:15	15:58 (LZ15) 17:57	06:54 18:31	05:58 18:31	17:47 (LZ07) 17:56 (LZ07)	06:06 20:09	05:33 20:42	05:54 20:57	06:28 20:42	07:04 19:52	18:32 (LZ07) 18:41 (LZ07)	07:40 17:06	07:20 16:35
30	07:30 17:16	15:59 (LZ15) 17:58	06:53 18:32	05:57 18:32	17:48 (LZ07) 17:57 (LZ07)	06:05 20:10	05:32 20:43	05:55 20:58	06:29 20:43	07:05 19:53	18:33 (LZ07) 18:42 (LZ07)	07:41 17:07	07:21 16:34
31	07:29 17:18	16:00 (LZ15) 18:00	06:52 18:33	05:56 18:33	17:49 (LZ07) 17:58 (LZ07)	06:04 20:11	05:31 20:44	05:56 20:59	06:31 20:44	07:06 19:54	18:34 (LZ07) 18:43 (LZ07)	07:42 17:08	07:22 16:33
Potential sun hours	289	262	293	369	402	456	462	468	434	376	342	291	278
Total, worst case										239		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)





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	18:41 (LZ07)	05:31
	16:42	15:56 (LZ15)	17:19	17:57	18:49 (LZ07)	20:11
2	07:44	15:28 (LZ15)	07:27	06:46	06:02	05:30
	16:43	15:56 (LZ15)	17:20	17:58	20:12	20:45
3	07:44	15:28 (LZ15)	07:25	06:45	06:00	05:30
	16:44	15:56 (LZ15)	17:22	17:59	20:14	20:46
4	07:44	15:29 (LZ15)	07:24	06:43	05:59	05:29
	16:45	15:57 (LZ15)	17:23	18:01	20:15	20:46
5	07:44	15:29 (LZ15)	07:23	06:41	05:57	05:29
	16:46	15:56 (LZ15)	17:25	18:02	20:16	20:47
6	07:44	15:29 (LZ15)	07:22	06:40	05:56	05:29
	16:47	15:57 (LZ15)	17:26	18:03	20:17	20:48
7	07:44	15:30 (LZ15)	07:21	06:38	05:55	05:28
	16:48	15:57 (LZ15)	17:27	18:05	20:18	20:49
8	07:43	15:31 (LZ15)	07:19	06:36	05:54	05:28
	16:49	15:58 (LZ15)	17:29	18:06	20:19	20:49
9	07:43	15:31 (LZ15)	07:18	06:34	05:52	05:28
	16:50	15:57 (LZ15)	17:30	18:07	20:21	20:50
10	07:43	15:32 (LZ15)	07:17	06:33	05:51	05:27
	16:51	15:57 (LZ15)	17:31	18:08	20:22	20:50
11	07:43	15:34 (LZ15)	07:16	06:31	05:50	05:27
	16:52	15:58 (LZ15)	17:33	18:10	20:23	20:51
12	07:42	15:34 (LZ15)	07:14	06:29	05:49	05:27
	16:53	15:57 (LZ15)	17:34	18:11	20:24	20:52
13	07:42	15:36 (LZ15)	07:13	06:27	05:47	05:27
	16:54	15:57 (LZ15)	17:36	18:12	20:25	20:52
14	07:42	15:36 (LZ15)	07:11	06:25	05:46	05:27
	16:56	15:57 (LZ15)	17:37	18:13	20:26	20:53
15	07:41	15:38 (LZ15)	07:10	06:24	05:45	05:27
	16:57	15:57 (LZ15)	17:38	18:15	20:27	20:53
16	07:41	15:39 (LZ15)	07:08	06:22	05:44	05:27
	16:58	15:56 (LZ15)	17:40	18:16	20:28	20:53
17	07:40	15:41 (LZ15)	07:07	06:20	05:43	05:27
	16:59	15:55 (LZ15)	17:41	18:17	20:29	20:54
18	07:39	15:43 (LZ15)	07:06	06:18	05:42	05:27
	17:00	15:53 (LZ15)	17:42	18:18	20:31	20:54
19	07:39	15:47 (LZ15)	07:04	06:16	05:41	05:27
	17:02	15:50 (LZ15)	17:44	18:19	20:32	20:55
20	07:38		07:03	06:15	05:40	05:27
	17:03		17:45	18:21	20:33	20:55
21	07:38		07:01	06:13	05:39	05:27
	17:04		17:46	18:22	20:34	20:55
22	07:37		06:59	06:11	05:38	05:27
	17:06		17:48	18:23	20:35	20:55
23	07:36		06:58	06:09	05:37	05:28
	17:07		17:49	18:24	20:36	20:55
24	07:35		06:56	06:07	05:36	05:28
	17:08		17:50	18:26	20:37	20:56
25	07:34		06:55	06:06	05:36	05:28
	17:10		17:52	18:27	20:38	20:56
26	07:34		06:53	06:04	05:35	05:28
	17:11		17:53	18:28	20:39	20:56
27	07:33		06:51	06:02	05:34	05:29
	17:12		17:54	18:29	20:40	20:56
28	07:32		06:50	06:00	05:33	05:29
	17:14		17:56	18:30	20:41	20:56
29	07:31			06:58	05:33	05:30
	17:15			19:32	20:41	20:56
30	07:30			06:57	05:32	05:30
	17:16			19:33	20:42	20:56
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	425		239	8		

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) 18:42 (LZ07)	07:18 18:35	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	18:31 (LZ07) 18:44 (LZ07)	07:19 18:33	06:59 16:48	07:34 16:32 28 15:18 (LZ15)
13	05:39 20:51	06:10 20:18	06:45 19:25	18:29 (LZ07) 18:46 (LZ07)	07:20 18:31	07:00 16:47	07:34 16:32 29 15:18 (LZ15)
14	05:39 20:51	06:11 20:17	06:46 19:24	18:27 (LZ07) 18:46 (LZ07)	07:21 18:29	07:01 16:46	07:35 16:32 29 15:18 (LZ15)
15	05:40 20:50	06:13 20:15	06:48 19:22	18:26 (LZ07) 18:47 (LZ07)	07:23 18:28	07:03 16:45	07:36 16:32 28 15:19 (LZ15)
16	05:41 20:49	06:14 20:14	06:49 19:20	18:25 (LZ07) 18:47 (LZ07)	07:24 18:26	07:04 16:44	07:37 16:33 29 15:19 (LZ15)
17	05:42 20:49	06:15 20:12	06:50 19:18	18:24 (LZ07) 18:46 (LZ07)	07:25 18:24	07:05 16:43	07:37 16:33 29 15:20 (LZ15)
18	05:43 20:48	06:16 20:10	06:51 19:16	18:24 (LZ07) 18:46 (LZ07)	07:26 18:23	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) 18:45 (LZ07)	07:28 18:21	07:08 16:41	07:39 16:34 29 15:21 (LZ15)
20	05:45 20:46	06:18 20:07	06:53 19:13	18:23 (LZ07) 18:44 (LZ07)	07:29 18:19	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) 18:44 (LZ07)	07:30 18:18	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) 18:43 (LZ07)	07:31 18:16	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) 18:41 (LZ07)	07:33 18:15	07:13 16:38	15:24 (LZ15) 15:27 (LZ15)
24	05:49 20:43	06:23 20:01	06:58 19:05	18:27 (LZ07) 18:38 (LZ07)	07:34 18:13	07:14 16:37	15:20 (LZ15) 15:30 (LZ15)
25	05:50 20:42	06:24 19:59	06:59 19:03	06:35 17:12	07:15 16:37	10 15:30 (LZ15) 14 15:32 (LZ15)	16:36 16:37 29 15:52 (LZ15)
26	05:51 20:41	06:25 19:57	07:00 19:01	06:37 17:10	07:17 16:36	15:18 (LZ15) 17 15:35 (LZ15)	07:42 16:37 29 15:53 (LZ15)
27	05:52 20:40	06:26 19:56	07:01 19:00	06:38 17:09	07:18 16:36	15:17 (LZ15) 19 15:36 (LZ15)	07:43 16:38 29 15:53 (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) 21 15:37 (LZ15)	07:43 16:39 29 15:53 (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) 21 15:37 (LZ15)	07:43 16:39 29 15:55 (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) 23 15:39 (LZ15)	07:43 16:40 29 15:55 (LZ15)
31	05:56 20:35	06:31 19:49		06:43 17:03			07:44 16:41 28 15:55 (LZ15)
Potential sun hours	468	434	376	342	291	278	
Total, worst case			251		128	875	

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		
2	07:44 16:43	15:39 (LZ15) 16:06 (LZ15)	07:27 17:20	06:46 17:58	18:43 (LZ07) 19:05 (LZ07)	06:03 20:11
3	07:44 16:44	15:39 (LZ15) 16:07 (LZ15)	07:25 17:22	06:45 17:59	18:43 (LZ07) 19:04 (LZ07)	06:02 20:12
4	07:44 16:45	15:39 (LZ15) 16:08 (LZ15)	07:24 17:23	06:43 18:01	18:44 (LZ07) 19:02 (LZ07)	05:59 20:15
5	07:44 16:46	15:39 (LZ15) 16:08 (LZ15)	07:23 17:25	06:41 18:02	18:45 (LZ07) 19:00 (LZ07)	05:57 20:16
6	07:44 16:47	15:39 (LZ15) 16:08 (LZ15)	07:22 17:26	06:40 18:03	18:46 (LZ07) 19:01 (LZ07)	05:56 20:17
7	07:44 16:48	15:40 (LZ15) 16:09 (LZ15)	07:21 17:27	06:38 18:05	18:50 (LZ07) 19:42	05:55 20:18
8	07:43 16:49	15:40 (LZ15) 16:10 (LZ15)	07:19 17:29	06:36 18:06	18:54 (LZ07) 19:44	05:54 20:19
9	07:43 16:50	15:40 (LZ15) 16:10 (LZ15)	07:18 17:30	06:34 18:07		05:52 20:21
10	07:43 16:51	15:41 (LZ15) 16:11 (LZ15)	07:17 17:31	06:33 18:08		05:51 20:22
11	07:43 16:52	15:42 (LZ15) 16:11 (LZ15)	07:16 17:33	06:31 18:10		05:50 20:23
12	07:42 16:53	15:41 (LZ15) 16:11 (LZ15)	07:14 17:34	06:29 18:11		05:49 20:24
13	07:42 16:54	15:42 (LZ15) 16:12 (LZ15)	07:13 17:36	06:27 18:12		05:47 20:25
14	07:42 16:56	15:42 (LZ15) 16:12 (LZ15)	07:11 17:37	06:25 18:13		05:46 20:26
15	07:41 16:57	15:43 (LZ15) 16:13 (LZ15)	07:10 17:38	06:24 18:15		05:45 20:27
16	07:41 16:58	15:43 (LZ15) 16:12 (LZ15)	07:08 17:40	06:22 18:16		05:44 20:28
17	07:40 16:59	15:45 (LZ15) 16:13 (LZ15)	07:07 17:41	06:20 18:17		05:43 20:29
18	07:39 17:00	15:45 (LZ15) 16:13 (LZ15)	07:06 17:42	06:18 18:18		05:42 20:31
19	07:39 17:02	15:45 (LZ15) 16:13 (LZ15)	07:04 17:44	06:16 18:19		05:41 20:32
20	07:38 17:03	15:46 (LZ15) 16:12 (LZ15)	07:03 17:45	06:15 18:21		05:40 20:33
21	07:38 17:04	15:47 (LZ15) 16:13 (LZ15)	07:01 17:46	06:13 18:22		05:39 20:34
22	07:37 17:06	15:48 (LZ15) 16:12 (LZ15)	06:59 17:48	06:11 18:23		05:38 20:35
23	07:36 17:07	15:49 (LZ15) 16:12 (LZ15)	06:58 17:49	06:09 18:24		05:37 20:36
24	07:35 17:08	15:50 (LZ15) 16:11 (LZ15)	06:56 17:50	06:07 18:26	17:54 (LZ07) 17:59 (LZ07)	06:14 20:03
25	07:34 17:10	15:51 (LZ15) 16:10 (LZ15)	06:55 17:52	06:06 18:27	17:50 (LZ07) 18:02 (LZ07)	06:12 20:04
26	07:34 17:11	15:53 (LZ15) 16:09 (LZ15)	06:53 17:53	06:04 18:28	17:48 (LZ07) 18:04 (LZ07)	06:11 20:05
27	07:33 17:12	15:55 (LZ15) 16:07 (LZ15)	06:51 17:54	06:02 18:29	17:46 (LZ07) 18:05 (LZ07)	06:09 20:06
28	07:32 17:14	16:00 (LZ15) 16:03 (LZ15)	06:50 17:56	06:00 18:30	17:45 (LZ07) 18:05 (LZ07)	06:07 20:08
29	07:31 17:15			06:58 19:32	18:45 (LZ07) 19:06 (LZ07)	06:06 20:09
30	07:30 17:16			06:57 19:33	18:44 (LZ07) 19:06 (LZ07)	06:05 20:10
31	07:29 17:18			06:55 19:34	18:43 (LZ07) 19:05 (LZ07)	06:04 20:11
Potential sun hours	289	293	369	402	456	462
Total, worst case	721		137	112		

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

	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 29 15:24 (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 30 15:24 (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 30 15:24 (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 29 15:25 (LZ15)
5	05:33 20:55	06:01 20:29	06:36 19:40	18:47 (LZ07) 07:11 18:50 (LZ07) 18:45	06:50 16:56	07:27 16:33 29 15:25 (LZ15)
6	05:34 20:54	06:02 20:28	06:37 19:38	18:43 (LZ07) 07:12 18:54 (LZ07) 18:43	06:51 16:55	07:28 16:32 29 15:25 (LZ15)
7	05:34 20:54	06:04 20:26	06:39 19:36	18:40 (LZ07) 07:13 18:55 (LZ07) 18:42	06:52 16:54	07:29 16:32 29 15:26 (LZ15)
8	05:35 20:54	06:05 20:25	06:40 19:35	18:38 (LZ07) 07:14 18:56 (LZ07) 18:40	06:54 16:52	07:30 16:32 29 15:26 (LZ15)
9	05:36 20:53	06:06 20:24	06:41 19:33	18:37 (LZ07) 07:15 18:57 (LZ07) 18:38	06:55 16:51	07:31 16:32 28 15:27 (LZ15)
10	05:36 20:53	06:07 20:22	06:42 19:31	18:36 (LZ07) 07:17 18:57 (LZ07) 18:36	06:56 16:50	07:32 16:32 28 15:28 (LZ15)
11	05:37 20:52	06:08 20:21	06:43 19:29	18:36 (LZ07) 07:18 18:58 (LZ07) 18:35	06:57 16:49	07:33 16:32 28 15:28 (LZ15)
12	05:38 20:52	06:09 20:19	06:44 19:27	18:35 (LZ07) 07:19 18:58 (LZ07) 18:33	06:59 16:48	07:34 16:32 27 15:29 (LZ15)
13	05:39 20:51	06:10 20:18	06:45 19:25	18:35 (LZ07) 07:20 18:57 (LZ07) 18:31	07:00 16:47	07:34 16:32 27 15:30 (LZ15)
14	05:39 20:51	06:11 20:17	06:46 19:24	18:35 (LZ07) 07:21 18:56 (LZ07) 18:29	07:01 16:46	15:31 (LZ15) 07:35 15:36 (LZ15) 16:32 26 15:30 (LZ15)
15	05:40 20:50	06:13 20:15	06:48 19:22	18:35 (LZ07) 07:23 18:55 (LZ07) 18:28	07:03 16:45	15:28 (LZ15) 07:36 15:40 (LZ15) 16:33 26 15:31 (LZ15)
16	05:41 20:49	06:14 20:14	06:49 19:20	18:35 (LZ07) 07:24 18:54 (LZ07) 18:26	07:04 16:44	15:26 (LZ15) 07:37 15:42 (LZ15) 16:33 27 15:31 (LZ15)
17	05:42 20:49	06:15 20:12	06:50 19:18	18:36 (LZ07) 07:25 18:52 (LZ07) 18:24	07:05 16:43	15:25 (LZ15) 07:37 15:44 (LZ15) 16:33 26 15:32 (LZ15)
18	05:43 20:48	06:16 20:10	06:51 19:16	18:37 (LZ07) 07:26 18:50 (LZ07) 18:23	07:07 16:42	15:24 (LZ15) 07:38 15:45 (LZ15) 16:33 26 15:32 (LZ15)
19	05:44 20:47	06:17 20:09	06:52 19:14	18:39 (LZ07) 07:28 18:47 (LZ07) 18:21	07:08 16:41	15:23 (LZ15) 07:39 15:46 (LZ15) 16:34 26 15:33 (LZ15)
20	05:45 20:46	06:18 20:07	06:53 19:13	07:29 18:19	16:40	15:23 (LZ15) 07:39 15:47 (LZ15) 16:34 26 15:33 (LZ15)
21	05:46 20:45	06:19 20:06	06:54 19:11	07:30 18:18	07:10 16:40	15:22 (LZ15) 07:40 15:48 (LZ15) 16:34 26 15:34 (LZ15)
22	05:47 20:45	06:20 20:04	06:55 19:09	07:31 18:16	07:12 16:39	15:22 (LZ15) 07:40 15:48 (LZ15) 16:35 26 15:34 (LZ15)
23	05:48 20:44	06:22 20:02	06:57 19:07	07:33 18:15	07:13 16:38	15:22 (LZ15) 07:41 15:50 (LZ15) 16:35 26 15:35 (LZ15)
24	05:49 20:43	06:23 20:01	06:58 19:05	07:34 18:13	07:14 16:37	15:22 (LZ15) 07:41 15:50 (LZ15) 16:36 26 15:35 (LZ15)
25	05:50 20:42	06:24 19:59	06:59 19:03	06:35 17:12	07:15 16:37	15:22 (LZ15) 07:42 15:50 (LZ15) 16:37 26 15:36 (LZ15)
26	05:51 20:41	06:25 19:57	07:00 19:01	06:37 17:10	07:17 16:36	15:22 (LZ15) 07:42 15:51 (LZ15) 16:37 26 15:36 (LZ15)
27	05:52 20:40	06:26 19:56	07:01 19:00	06:38 17:09	07:18 16:36	15:22 (LZ15) 07:43 15:52 (LZ15) 16:38 26 15:36 (LZ15)
28	05:53 20:39	06:27 19:54	07:02 18:58	06:39 17:07	07:19 16:35	15:22 (LZ15) 07:43 15:52 (LZ15) 16:39 27 15:36 (LZ15)
29	05:54 20:38	06:28 19:52	07:04 18:56	06:40 17:06	07:20 16:35	15:22 (LZ15) 07:43 15:52 (LZ15) 16:39 26 15:38 (LZ15)
30	05:55 20:36	06:29 19:51	07:05 18:54	06:42 17:04	07:21 16:34	15:23 (LZ15) 07:43 15:53 (LZ15) 16:40 27 15:38 (LZ15)
31	05:56 20:35	06:31 19:49		06:43 17:03		07:43 16:41 27 15:38 (LZ15)
Potential sun hours	468	434	376	342	291	278
Total, worst case			252		405	844

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	05:31
	16:42		17:19	30 16:33 (LZ15)	17:57	19:35		20:11	20:44
2	07:44		07:27	16:03 (LZ15)	06:46	06:51		06:02	05:30
	16:43		17:20	30 16:33 (LZ15)	17:58	19:36		20:12	20:45
3	07:44		07:25	16:03 (LZ15)	06:45	06:49		19:04 (LZ07)	06:00
	16:44		17:22	29 16:32 (LZ15)	17:59	19:38	8	19:12 (LZ07)	20:14
4	07:44		07:24	16:04 (LZ15)	06:43	06:48		19:01 (LZ07)	05:59
	16:45		17:23	27 16:31 (LZ15)	18:01	19:39	13	19:14 (LZ07)	20:15
5	07:44		07:23	16:06 (LZ15)	06:41	06:46		18:59 (LZ07)	05:57
	16:46		17:25	25 16:31 (LZ15)	18:02	19:40	17	19:16 (LZ07)	20:16
6	07:44		07:22	16:07 (LZ15)	06:40	06:44		18:57 (LZ07)	05:56
	16:47		17:26	23 16:30 (LZ15)	18:03	19:41	19	19:16 (LZ07)	20:17
7	07:44		07:21	16:08 (LZ15)	06:38	06:42		18:56 (LZ07)	05:55
	16:48		17:27	20 16:28 (LZ15)	18:05	19:42	20	19:16 (LZ07)	20:18
8	07:43		07:19	16:10 (LZ15)	06:36	06:40		18:56 (LZ07)	05:54
	16:49		17:29	17 16:27 (LZ15)	18:06	19:44	21	19:17 (LZ07)	20:19
9	07:43		07:18	16:13 (LZ15)	06:34	06:39		18:55 (LZ07)	05:52
	16:50		17:30	12 16:25 (LZ15)	18:07	19:45	22	19:17 (LZ07)	20:21
10	07:43		07:17		06:33	06:37		18:54 (LZ07)	05:51
	16:51		17:31		18:08	19:46	23	19:17 (LZ07)	20:22
11	07:43		07:16		06:31	06:35		18:55 (LZ07)	05:50
	16:52	7 16:15 (LZ15)	17:33		18:10	19:47	22	19:17 (LZ07)	20:23
12	07:42		07:14		06:29	06:34		18:55 (LZ07)	05:49
	16:53	11 16:17 (LZ15)	17:34		18:11	19:48	21	19:16 (LZ07)	20:24
13	07:42		07:13		06:27	06:32		18:55 (LZ07)	05:47
	16:54	15 16:20 (LZ15)	17:36		18:12	19:50	20	19:15 (LZ07)	20:25
14	07:42		07:11		06:25	06:30		18:55 (LZ07)	05:46
	16:56	17 16:21 (LZ15)	17:37		18:13	19:51	19	19:14 (LZ07)	20:26
15	07:41		07:10		06:24	06:28		18:56 (LZ07)	05:45
	16:57	19 16:23 (LZ15)	17:38		18:15	19:52	17	19:13 (LZ07)	20:27
16	07:41		07:08		06:22	06:27		18:57 (LZ07)	05:44
	16:58	21 16:24 (LZ15)	17:40		18:16	19:53	14	19:11 (LZ07)	20:28
17	07:40		07:07		06:20	06:25		18:59 (LZ07)	05:43
	16:59	23 16:26 (LZ15)	17:41		18:17	19:54	9	19:08 (LZ07)	20:29
18	07:39		07:06		06:18	06:23		05:42	05:27
	17:00	24 16:26 (LZ15)	17:42		18:18	19:56		20:31	20:54
19	07:39		07:04		06:16	06:22		05:41	05:27
	17:02	26 16:27 (LZ15)	17:44		18:19	19:57		20:32	20:55
20	07:38		07:03		06:15	06:20		05:40	05:27
	17:03	27 16:28 (LZ15)	17:45		18:21	19:58		20:33	20:55
21	07:38		07:01		06:13	06:18		05:39	05:27
	17:04	28 16:29 (LZ15)	17:46		18:22	19:59		20:34	20:55
22	07:37		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		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		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		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		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		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		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				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				06:57	06:05		05:32	05:30
	17:16	31 16:33 (LZ15)			19:33	20:10		20:42	20:56
31	07:29				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	525		213			265			

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 20:56	05:57 20:34	06:32 19:47	18:54 (LZ07) 19:16 (LZ07)	07:06 18:52	06:44 17:01	15:46 (LZ15) 15:50 (LZ15)	07:23 16:34	15:50 (LZ15) 15:57 (LZ15)
2	05:31 20:55	05:58 20:33	06:33 19:45	18:53 (LZ07) 19:16 (LZ07)	07:07 18:51	06:46 17:00	15:42 (LZ15) 15:55 (LZ15)	07:24 16:33	
3	05:32 20:55	05:59 20:32	06:34 19:44	18:53 (LZ07) 19:15 (LZ07)	07:08 18:49	06:47 16:59	15:39 (LZ15) 15:57 (LZ15)	07:25 16:33	
4	05:32 20:55	06:00 20:30	06:35 19:42	18:53 (LZ07) 19:14 (LZ07)	07:09 18:47	06:48 16:57	15:37 (LZ15) 15:58 (LZ15)	07:26 16:33	
5	05:33 20:55	06:01 20:29	06:36 19:40	18:53 (LZ07) 19:14 (LZ07)	07:11 18:45	06:50 16:56	15:37 (LZ15) 16:00 (LZ15)	07:27 16:33	
6	05:34 20:54	06:02 20:28	06:37 19:38	18:53 (LZ07) 19:12 (LZ07)	07:12 18:43	06:51 16:55	15:35 (LZ15) 16:01 (LZ15)	07:28 16:32	
7	05:34 20:54	06:04 20:26	06:39 19:36	18:54 (LZ07) 19:11 (LZ07)	07:13 18:42	06:52 16:54	15:35 (LZ15) 16:02 (LZ15)	07:29 16:32	
8	05:35 20:54	06:05 20:25	06:40 19:35	18:55 (LZ07) 19:09 (LZ07)	07:14 18:40	06:54 16:52	15:34 (LZ15) 16:03 (LZ15)	07:30 16:32	
9	05:36 20:53	06:06 20:24	06:41 19:33	18:57 (LZ07) 19:06 (LZ07)	07:15 18:38	06:55 16:51	15:33 (LZ15) 16:03 (LZ15)	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	15:34 (LZ15) 16:04 (LZ15)	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	15:33 (LZ15) 16:04 (LZ15)	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	15:33 (LZ15) 16:05 (LZ15)	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	15:33 (LZ15) 16:05 (LZ15)	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	15:33 (LZ15) 16:04 (LZ15)	07:35 16:32	
15	05:40 20:50	06:13 20:15	06:48 19:22		07:23 18:28	07:03 16:45	15:34 (LZ15) 16:05 (LZ15)	07:36 16:33	
16	05:41 20:49	06:14 20:14	06:49 19:20		07:24 18:26	07:04 16:44	15:33 (LZ15) 16:05 (LZ15)	07:37 16:33	
17	05:42 20:49	06:15 20:12	06:50 19:18		07:25 18:24	07:05 16:43	15:34 (LZ15) 16:05 (LZ15)	07:37 16:33	
18	05:43 20:48	06:16 20:10	06:51 19:16		07:26 18:23	07:07 16:42	15:35 (LZ15) 16:05 (LZ15)	07:38 16:33	
19	05:44 20:47	06:17 20:09	06:52 19:14		07:28 18:21	07:08 16:41	15:35 (LZ15) 16:04 (LZ15)	07:39 16:34	
20	05:45 20:46	06:18 20:07	06:53 19:13		07:29 18:19	07:09 16:40	15:36 (LZ15) 16:05 (LZ15)	07:39 16:34	
21	05:46 20:45	06:19 20:06	06:54 19:11		07:30 18:18	07:10 16:40	15:36 (LZ15) 16:04 (LZ15)	07:40 16:35	
22	05:47 20:45	06:20 20:04	06:55 19:09		07:31 18:16	07:12 16:39	15:37 (LZ15) 16:04 (LZ15)	07:40 16:35	
23	05:48 20:44	06:22 20:02	06:57 19:07		07:33 18:15	07:13 16:38	15:38 (LZ15) 16:04 (LZ15)	07:41 16:35	
24	05:49 20:43	06:23 20:01	06:58 19:05		07:34 18:13	07:14 16:37	15:39 (LZ15) 16:03 (LZ15)	07:41 16:36	
25	05:50 20:42	06:24 19:59	06:59 19:03		06:35 17:12	07:15 16:37	15:40 (LZ15) 16:03 (LZ15)	07:42 16:37	
26	05:51 20:41	06:25 19:57	19:02 (LZ07) 19:11 (LZ07)	07:00 19:01	06:36 17:10	07:17 16:36	15:42 (LZ15) 16:03 (LZ15)	07:42 16:37	
27	05:52 20:40	06:26 19:56	18:59 (LZ07) 19:13 (LZ07)	07:01 19:00	06:38 17:09	07:18 16:36	15:43 (LZ15) 16:02 (LZ15)	07:43 16:38	
28	05:53 20:39	06:27 19:54	18:57 (LZ07) 19:14 (LZ07)	07:02 18:58	06:39 17:07	07:19 16:35	15:44 (LZ15) 16:01 (LZ15)	07:43 16:39	
29	05:54 20:38	06:28 19:52	18:56 (LZ07) 19:15 (LZ07)	07:04 18:56	06:40 17:06	07:20 16:35	15:45 (LZ15) 16:00 (LZ15)	07:43 16:39	
30	05:55 20:36	06:29 19:51	18:55 (LZ07) 19:16 (LZ07)	07:05 18:54	06:42 17:04	07:21 16:34	15:48 (LZ15) 15:59 (LZ15)	07:43 16:40	
31	05:56 20:35	06:31 19:49	18:55 (LZ07) 19:16 (LZ07)		06:43 17:03			07:43 16:41	
Potential sun hours	468	434	376	342	291	278			
Total, worst case		101	168		740	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)	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

	January	February	March	April	May	June	July	August	September	October	November	December				
1	07:44	07:28	16:41 (LZ15)	06:48	06:53	06:03	05:31	05:31	05:57	06:32	07:06	06:44	15:59 (LZ15)	07:22		
	16:42	17:19	5	16:46 (LZ15)	17:57	19:35	20:11	20:44	20:56	20:34	19:47	18:52	17:01	28	16:27 (LZ15)	16:34
2	07:44	07:27		16:37 (LZ15)	06:46	06:51	06:02	05:30	05:31	05:58	06:33	07:07	06:46		16:00 (LZ15)	07:24
	16:43	17:20	13	16:50 (LZ15)	17:58	19:36	20:12	20:45	20:55	20:33	19:45	18:51	17:00	28	16:28 (LZ15)	16:33
3	07:44	07:25		16:35 (LZ15)	06:45	06:49	06:00	05:30	05:32	05:59	06:34	07:08	06:47		16:00 (LZ15)	07:25
	16:44	17:22	16	16:51 (LZ15)	17:59	19:38	20:14	20:46	20:55	20:32	19:43	18:49	16:59	27	16:27 (LZ15)	16:33
4	07:44	07:24		16:34 (LZ15)	06:43	06:48	05:59	05:29	05:32	06:00	06:35	07:09	06:48		16:01 (LZ15)	07:26
	16:45	17:23	19	16:53 (LZ15)	18:01	19:39	20:15	20:46	20:55	20:30	19:42	18:47	16:57	25	16:26 (LZ15)	16:33
5	07:44	07:23		16:33 (LZ15)	06:41	06:46	05:57	05:29	05:33	06:01	06:36	07:11	06:50		16:02 (LZ15)	07:27
	16:46	17:25	22	16:55 (LZ15)	18:02	19:40	20:16	20:47	20:55	20:29	19:40	18:45	16:56	24	16:26 (LZ15)	16:33
6	07:44	07:22		16:32 (LZ15)	06:40	06:44	05:56	05:29	05:34	06:02	06:37	07:12	06:51		16:03 (LZ15)	07:28
	16:47	17:26	24	16:56 (LZ15)	18:03	19:41	20:17	20:48	20:54	20:28	19:38	18:43	16:55	21	16:24 (LZ15)	16:32
7	07:44	07:21		16:31 (LZ15)	06:38	06:42	05:55	05:28	05:34	06:04	06:39	07:13	06:52		16:05 (LZ15)	07:29
	16:48	17:27	25	16:56 (LZ15)	18:05	19:42	20:18	20:49	20:54	20:26	19:36	18:42	16:54	19	16:24 (LZ15)	16:32
8	07:43	07:19		16:31 (LZ15)	06:36	06:40	05:54	05:28	05:35	06:05	06:40	07:14	06:54		16:06 (LZ15)	07:30
	16:49	17:29	26	16:57 (LZ15)	18:06	19:44	20:19	20:49	20:54	20:25	19:35	18:40	16:52	16	16:22 (LZ15)	16:32
9	07:43	07:18		16:31 (LZ15)	06:34	06:39	05:52	05:28	05:36	06:06	06:41	07:15	06:55		16:08 (LZ15)	07:31
	16:50	17:30	27	16:58 (LZ15)	18:07	19:45	20:21	20:50	20:53	20:24	19:33	18:38	16:51	11	16:19 (LZ15)	16:32
10	07:43	07:17		16:30 (LZ15)	06:33	06:37	05:51	05:27	05:36	06:07	06:42	07:17	06:56		16:12 (LZ15)	07:32
	16:51	17:31	28	16:58 (LZ15)	18:08	19:46	20:22	20:50	20:53	20:22	19:31	18:36	16:50	4	16:16 (LZ15)	16:32
11	07:43	07:15		16:30 (LZ15)	06:31	06:35	05:50	05:27	05:37	06:08	06:43	07:18	06:57			07:33
	16:52	17:33	28	16:58 (LZ15)	18:10	19:47	20:23	20:51	20:52	20:21	19:29	18:35	16:49			16:32
12	07:42	07:14		16:30 (LZ15)	06:29	06:34	05:49	05:27	05:38	06:09	06:44	07:19	06:59			07:34
	16:53	17:34	29	16:59 (LZ15)	18:11	19:48	20:24	20:52	20:52	20:19	19:27	18:33	16:48			16:32
13	07:42	07:13		16:30 (LZ15)	06:27	06:32	05:47	05:27	05:39	06:10	06:45	07:20	07:00			07:34
	16:54	17:35	28	16:58 (LZ15)	18:12	19:50	20:25	20:52	20:51	20:18	19:25	18:31	16:47			16:32
14	07:42	07:11		16:30 (LZ15)	06:25	06:30	05:46	05:27	05:39	06:11	06:46	07:21	07:01			07:35
	16:56	17:37	29	16:59 (LZ15)	18:13	19:51	20:26	20:53	20:51	20:17	19:24	18:29	16:46			16:32
15	07:41	07:10		16:30 (LZ15)	06:24	06:28	05:45	05:27	05:40	06:13	06:48	07:23	07:03			07:36
	16:57	17:38	28	16:58 (LZ15)	18:15	19:52	20:27	20:53	20:50	20:15	19:22	18:28	16:45			16:33
16	07:41	07:08		16:31 (LZ15)	06:22	06:27	05:44	05:27	05:41	06:14	06:49	07:24	07:04			07:37
	16:58	17:40	27	16:58 (LZ15)	18:16	19:53	20:28	20:53	20:49	20:13	19:20	18:26	16:44			16:33
17	07:40	07:07		16:32 (LZ15)	06:20	06:25	05:43	05:27	05:42	06:15	06:50	07:25	07:05			07:37
	16:59	17:41	24	16:56 (LZ15)	18:17	19:54	20:29	20:54	20:49	20:12	19:18	18:24	16:43			16:33
18	07:39	07:06		16:33 (LZ15)	06:18	06:23	05:42	05:27	05:43	06:16	06:51	07:26	07:07			07:38
	17:00	17:42	23	16:56 (LZ15)	18:18	19:56	20:31	20:54	20:48	20:10	19:16	18:23	16:42			16:33
19	07:39	07:04		16:34 (LZ15)	06:16	06:22	05:41	05:27	05:44	06:17	06:52	07:28	07:08			07:39
	17:02	17:44	20	16:54 (LZ15)	18:19	19:57	20:32	20:55	20:47	20:09	19:14	18:21	16:41			16:34
20	07:38	07:02		16:36 (LZ15)	06:15	06:20	05:40	05:27	05:45	06:18	06:53	07:29				07:39
	17:03	17:45	17	16:53 (LZ15)	18:21	19:58	20:33	20:55	20:46	20:07	19:13	18:19	7	17:19 (LZ15)		16:40
21	07:38	07:01		16:38 (LZ15)	06:13	06:18	05:39	05:27	05:46	06:19	06:54	07:30				16:34
	17:04	17:46	12	16:50 (LZ15)	18:22	19:59	20:34	20:55	20:45	20:06	19:11	18:18	14	17:22 (LZ15)		16:40
22	07:37	06:59		16:43 (LZ15)	06:11	06:17	05:38	05:27	05:47	06:20	06:55	07:31				16:40
	17:06	17:48	1	16:44 (LZ15)	18:23	20:00	20:35	20:55	20:45	20:04	19:09	18:16	18	17:23 (LZ15)		16:35
23	07:36	06:58			06:09	06:15	05:37	05:28	05:48	06:22	06:57	07:33				07:41
	17:07	17:49			18:24	20:02	20:36	20:55	20:44	20:02	19:07	18:15	21	17:25 (LZ15)		16:35
24	07:35	06:56			06:07	06:14	05:36	05:28	05:49	06:23	06:58	07:34				07:41
	17:08	17:50			18:26	20:03	20:37	20:56	20:43	20:01	19:05	18:13	24	17:26 (LZ15)		16:36
25	07:34	06:55			06:06	06:12	05:36	05:28	05:50	06:24	06:59	06:35				07:42
	17:10	17:52			18:27	20:04	20:38	20:56	20:42	19:59	19:03	17:12	25	16:26 (LZ15)		16:37
26	07:34	06:53			06:04	06:11	05:35	05:28	05:51	06:25	07:00	06:36				07:42
	17:11	17:53			18:28	20:05	20:39	20:56	20:41	19:57	19:01	17:10	26	16:27 (LZ15)		16:37
27	07:33	06:51			06:02	06:09	05:34	05:29	05:52	06:26	07:01	06:38				07:43
	17:12	17:54			18:29	20:06	20:40	20:56	20:40	19:56	19:00	17:09	27	16:27 (LZ15)		16:38
28	07:32	06:50			06:00	06:07	05:33	05:29	05:53	06:27	07:02	06:39				07:43
	17:14	17:56			18:30	20:08	20:40	20:56	20:39	19:54	18:58	17:07	28	16:28 (LZ15)		16:39
29	07:31				06:58	06:06	05:33	05:30	05:54	06:28	07:04	06:40				07:43
	17:15				19:32	20:09	20:41	20:56	20:38	19:52	18:56	17:06	29	16:28 (LZ15)		16:39
30	07:30				06:57	06:05	05:32	05:30	05:55	06:29	07:05	06:42				07:43
	17:16				19:33	20:10	20:42	20:56	20:36	19:51	18:54	17:04	29	16:28 (LZ15)		16:40
31	07:29				06:55		05:31		05:56	06:31		06:43				07:43
	17:18				19:34		20:43		20:35	19:49		17:03	28	16:28 (LZ15)		16:41
Potential sun hours	289	293		369	402	456	462	468	434	376	342		291		278	
Total, worst case		471										276	203			

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

	January	February	March	April	May	June	July	August	September	October	November	December		
1	07:44	07:28	06:48	06:53	06:03	05:31	05:31	05:57	06:32	07:06	06:44	16:09 (LZ15)	07:22	
	16:42	17:19	17:57	19:35	20:11	20:44	20:56	20:34	19:47	18:52	17:01	23 16:32 (LZ15)	16:34	
2	07:44	07:27	06:46	06:51	06:02	05:30	05:31	05:58	06:33	07:07	06:46	16:10 (LZ15)	07:24	
	16:43	17:20	17:58	19:36	20:12	20:45	20:55	20:33	19:45	18:51	17:00	22 16:32 (LZ15)	16:33	
3	07:44	07:25	06:45	06:49	06:00	05:30	05:32	05:59	06:34	07:08	06:47	16:10 (LZ15)	07:25	
	16:44	17:22	17:59	19:38	20:14	20:46	20:55	20:32	19:43	18:49	16:59	21 16:31 (LZ15)	16:33	
4	07:44	07:24	16:49 (LZ15)	06:43	06:48	05:59	05:29	05:32	06:00	06:35	07:09	06:48	16:11 (LZ15)	07:26
	16:45	17:23	3 16:52 (LZ15)	18:01	19:39	20:15	20:46	20:55	20:30	19:42	18:47	16:57	18 16:29 (LZ15)	16:33
5	07:44	07:23	16:45 (LZ15)	06:41	06:46	05:57	05:29	05:33	06:01	06:36	07:11	06:50	16:13 (LZ15)	07:27
	16:46	17:24	11 16:56 (LZ15)	18:02	19:40	20:16	20:47	20:55	20:29	19:40	18:45	16:56	15 16:15 (LZ15)	16:33
6	07:44	07:22	16:43 (LZ15)	06:40	06:44	05:56	05:29	05:33	06:02	06:37	07:12	06:51	16:15 (LZ15)	07:28
	16:47	17:26	16 16:59 (LZ15)	18:03	19:41	20:17	20:48	20:54	20:28	19:38	18:43	16:55	11 16:26 (LZ15)	16:32
7	07:44	07:21	16:41 (LZ15)	06:38	06:42	05:55	05:28	05:34	06:04	06:39	07:13	06:52		07:29
	16:48	17:27	19 17:00 (LZ15)	18:05	19:42	20:18	20:49	20:54	20:26	19:36	18:42	16:54		16:32
8	07:43	07:19	16:40 (LZ15)	06:36	06:40	05:53	05:28	05:35	06:05	06:40	07:14	06:54		07:30
	16:49	17:29	21 17:01 (LZ15)	18:06	19:44	20:19	20:49	20:54	20:25	19:35	18:40	16:52		16:32
9	07:43	07:18	16:40 (LZ15)	06:34	06:39	05:52	05:28	05:36	06:06	06:41	07:15	06:55		07:31
	16:50	17:30	22 17:02 (LZ15)	18:07	19:45	20:21	20:50	20:53	20:24	19:33	18:38	16:51		16:32
10	07:43	07:17	16:39 (LZ15)	06:33	06:37	05:51	05:27	05:36	06:07	06:42	07:17	06:56		07:32
	16:51	17:31	23 17:02 (LZ15)	18:08	19:46	20:22	20:50	20:53	20:22	19:31	18:36	16:50		16:32
11	07:43	07:15	16:39 (LZ15)	06:31	06:35	05:50	05:27	05:37	06:08	06:43	07:18	06:57		07:33
	16:52	17:33	24 17:03 (LZ15)	18:10	19:47	20:23	20:51	20:52	20:21	19:29	18:35	16:49		16:32
12	07:42	07:14	16:39 (LZ15)	06:29	06:33	05:49	05:27	05:38	06:09	06:44	07:19	06:59		07:34
	16:53	17:34	25 17:04 (LZ15)	18:11	19:48	20:24	20:52	20:52	20:19	19:27	18:33	16:48		16:32
13	07:42	07:13	16:38 (LZ15)	06:27	06:32	05:47	05:27	05:39	06:10	06:45	07:20	07:00		07:34
	16:54	17:35	26 17:04 (LZ15)	18:12	19:50	20:25	20:52	20:51	20:18	19:25	18:31	16:47		16:32
14	07:42	07:11	16:39 (LZ15)	06:25	06:30	05:46	05:27	05:39	06:11	06:46	07:21	07:01		07:35
	16:56	17:37	25 17:04 (LZ15)	18:13	19:51	20:26	20:53	20:51	20:17	19:24	18:29	16:46		16:32
15	07:41	07:10	16:38 (LZ15)	06:24	06:28	05:45	05:27	05:40	06:12	06:48	07:23	07:03		07:36
	16:57	17:38	26 17:04 (LZ15)	18:15	19:52	20:27	20:53	20:50	20:15	19:22	18:28	16:45		16:32
16	07:41	07:08	16:39 (LZ15)	06:22	06:27	05:44	05:27	05:41	06:14	06:49	07:24	07:04		07:37
	16:58	17:40	25 17:04 (LZ15)	18:16	19:53	20:28	20:53	20:49	20:13	19:20	18:26	16:44		16:33
17	07:40	07:07	16:39 (LZ15)	06:20	06:25	05:43	05:27	05:42	06:15	06:50	07:25	07:05		07:37
	16:59	17:41	24 17:03 (LZ15)	18:17	19:54	20:29	20:54	20:49	20:12	19:18	18:24	16:43		16:33
18	07:39	07:06	16:40 (LZ15)	06:18	06:23	05:42	05:27	05:43	06:16	06:51	07:26	07:07		07:38
	17:00	17:42	23 17:03 (LZ15)	18:18	19:56	20:31	20:54	20:48	20:10	19:16	18:23	16:42		16:33
19	07:39	07:04	16:41 (LZ15)	06:16	06:22	05:41	05:27	05:44	06:17	06:52	07:28	07:08		07:39
	17:02	17:44	20 17:01 (LZ15)	18:19	19:57	20:32	20:55	20:47	20:09	19:14	18:21	16:41		16:34
20	07:38	07:02	16:42 (LZ15)	06:15	06:20	05:40	05:27	05:45	06:18	06:53	07:29	17:17 (LZ15)	07:09	16:34
	17:03	17:45	18 17:00 (LZ15)	18:21	19:58	20:33	20:55	20:46	20:07	19:13	18:19	10 17:27 (LZ15)	16:40	16:34
21	07:38	07:01	16:44 (LZ15)	06:13	06:18	05:39	05:27	05:46	06:19	06:54	07:30	17:14 (LZ15)	07:10	07:40
	17:04	17:46	14 16:58 (LZ15)	18:22	19:59	20:34	20:55	20:45	20:06	19:11	18:18	15 17:29 (LZ15)	16:40	16:34
22	07:37	06:59	16:46 (LZ15)	06:11	06:17	05:38	05:27	05:47	06:20	06:55	07:31	17:12 (LZ15)	07:12	07:40
	17:06	17:48	9 16:55 (LZ15)	18:23	20:00	20:35	20:55	20:45	20:04	19:09	18:16	18 17:30 (LZ15)	16:39	16:35
23	07:36	06:58		06:09	06:15	05:37	05:28	05:48	06:22	06:57	07:33	17:11 (LZ15)	07:13	07:41
	17:07	17:49		18:24	20:02	20:36	20:55	20:44	20:02	19:07	18:15	21 17:32 (LZ15)	16:38	16:35
24	07:35	06:56		06:07	06:14	05:36	05:28	05:49	06:23	06:58	07:34	17:10 (LZ15)	07:14	07:41
	17:08	17:50		18:26	20:03	20:37	20:56	20:43	20:01	19:05	18:13	22 17:32 (LZ15)	16:37	16:36
25	07:34	06:55		06:06	06:12	05:36	05:28	05:50	06:24	06:59	06:35	16:08 (LZ15)	07:15	07:42
	17:10	17:52		18:27	20:04	20:38	20:56	20:42	19:59	19:03	17:12	25 16:33 (LZ15)	16:37	16:37
26	07:34	06:53		06:04	06:11	05:35	05:28	05:51	06:25	07:00	06:36	16:09 (LZ15)	07:17	07:42
	17:11	17:53		18:28	20:05	20:39	20:56	20:41	19:57	19:01	17:10	24 16:33 (LZ15)	16:36	16:37
27	07:33	06:51		06:02	06:09	05:34	05:29	05:52	06:26	07:01	06:38	16:08 (LZ15)	07:18	07:43
	17:12	17:54		18:29	20:06	20:40	20:56	20:40	19:56	19:00	17:09	25 16:33 (LZ15)	16:36	16:38
28	07:32	06:50		06:00	06:07	05:33	05:29	05:53	06:27	07:02	06:39	16:08 (LZ15)	07:19	07:43
	17:14	17:56		18:30	20:08	20:40	20:56	20:39	19:54	18:58	17:07	26 16:34 (LZ15)	16:35	16:39
29	07:31			06:58	06:06	05:33	05:30	05:54	06:28	07:04	06:40	16:08 (LZ15)	07:20	07:43
	17:15			19:32	20:09	20:41	20:56	20:38	19:52	18:56	17:06	25 16:33 (LZ15)	16:35	16:39
30	07:30			06:57	06:05	05:32	05:30	05:55	06:29	07:05	06:42	16:08 (LZ15)	07:21	07:43
	17:16			19:33	20:10	20:42	20:56	20:36	19:50	18:54	17:04	25 16:33 (LZ15)	16:34	16:40
31	07:29			06:55		05:31		05:56	06:31		06:43	16:09 (LZ15)		07:43
	17:18			19:34		20:43		20:35	19:49		17:03	24 16:33 (LZ15)		16:41
Potential sun hours	289	293		369	402	456	462	468	434	376	342	260	291	278
Total, worst case		374										110		

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) 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) 17:01	06:44 16:34
2	07:44 16:43	07:27 17:20	06:46 17:58	07:15 (LZ16) 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) 17:00	06:46 16:33
3	07:44 16:44	07:25 17:22	06:45 17:59	07:14 (LZ16) 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) 16:59	06:47 16:33
4	07:44 16:45	07:22 17:23	06:43 18:01	07:14 (LZ16) 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) 16:57	06:48 16:33
5	07:44 16:46	07:23 17:24	06:41 18:02	07:13 (LZ16) 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) 16:56	06:50 16:33
6	07:44 16:47	07:22 17:26	06:40 18:03	07:12 (LZ16) 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) 16:51	07:28 16:32
7	07:44 16:48	07:21 17:27	06:38 18:05	07:12 (LZ16) 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) 16:54	07:29 16:32
8	07:43 16:49	07:19 17:29	06:36 18:06	07:12 (LZ16) 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) 16:52	07:30 16:32
9	07:43 16:50	07:18 17:30	06:34 18:07	07:12 (LZ16) 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) 16:51	07:31 16:32
10	07:43 16:51	07:17 17:31	06:33 18:08	07:12 (LZ16) 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) 16:50	07:32 16:32
11	07:43 16:52	07:15 17:33	06:31 18:10	07:13 (LZ16) 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) 16:49	07:33 16:32
12	07:42 16:53	07:14 17:34	06:29 18:11	07:13 (LZ16) 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) 16:48	07:33 16:32
13	07:42 16:54	07:13 17:35	06:27 18:12	07:15 (LZ16) 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) 16:47	07:34 16:32
14	07:42 16:56	07:11 17:37	06:25 18:13	07:17 (LZ16) 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) 16:46	07:35 16:32
15	07:41 16:57	07:10 17:38	06:24 18:15	07:32 (LZ16) 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) 16:45	07:36 16:32
16	07:41 16:58	07:08 17:40	06:22 18:16	07:19 (LZ16) 19:52	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) 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	08:02 (LZ16) 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	08:13 (LZ16) 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	08:14 (LZ16) 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	08:15 (LZ16) 16:40	07:40 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	08:16 (LZ16) 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	08:17 (LZ16) 16:39	07:41 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	08:18 (LZ16) 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	08:19 (LZ16) 16:37	07:42 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 18:12	08:20 (LZ16) 16:36	07:43 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 18:10	08:21 (LZ16) 16:35	07:44 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	07:37 18:09	08:22 (LZ16) 16:34	07:45 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	07:38 18:06	08:23 (LZ16) 16:33	07:46 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	07:39 18:05	08:24 (LZ16) 16:32	07:47 16:40
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	07:40 18:04	08:25 (LZ16) 16:31	07:48 16:41
31	07:29 17:18		06:55 19:34		05:31 20:43		05:56 20:35	06:31 19:49		06:43 17:03		07:49 16:42
Potential sun hours	289	293	369	402	456	462	468	434	376	342	291	278
Total, worst case		45	350						35	367		

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	08:49 (LZ66) 08:53 (LZ66)	07:28 17:19	06:48 17:57	06:53 19:35	05:31 20:11
2	07:44 16:43	07:27 17:21	06:46 17:58	07:17 (LZ64) 07:38 (LZ64)	06:51 19:37	06:02 20:12
3	07:44 16:44	07:25 17:22	06:45 18:00	07:17 (LZ64) 07:37 (LZ64)	06:49 19:38	06:00 20:14
4	07:44 16:45	07:24 17:23	06:43 18:01	07:19 (LZ64) 07:36 (LZ64)	06:48 19:39	05:59 20:15
5	07:44 16:46	07:23 17:25	06:41 18:02	07:20 (LZ64) 07:34 (LZ64)	06:46 19:40	05:58 20:16
6	07:44 16:47	07:22 17:26	06:40 18:03	07:21 (LZ64) 07:42 (LZ65)	06:44 19:41	05:56 20:17
7	07:44 16:48	07:21 17:27	06:38 18:05	07:24 (LZ65) 07:45 (LZ65)	06:42 19:43	05:55 20:18
8	07:43 16:49	07:19 17:29	06:36 18:06	07:22 (LZ65) 07:47 (LZ65)	06:41 19:44	05:54 20:19
9	07:43 16:50	07:18 17:30	06:34 18:07	07:20 (LZ65) 07:49 (LZ65)	06:39 19:45	05:52 20:21
10	07:43 16:51	07:17 17:32	06:33 18:08	07:18 (LZ65) 07:50 (LZ65)	06:37 19:46	05:51 20:22
11	07:43 16:52	07:16 17:33	06:31 18:10	07:16 (LZ65) 07:50 (LZ65)	06:35 19:47	05:50 20:23
12	07:42 16:53	07:14 17:34	06:29 18:11	07:15 (LZ65) 07:52 (LZ65)	06:34 19:48	05:49 20:24
13	07:42 16:55	07:13 17:36	06:27 18:12	07:14 (LZ65) 07:52 (LZ65)	06:32 19:50	05:48 20:25
14	07:41 16:56	07:11 17:37	06:26 18:13	07:13 (LZ65) 07:52 (LZ65)	06:30 19:51	05:46 20:26
15	07:41 16:57	07:10 17:38	06:24 18:15	07:12 (LZ65) 07:52 (LZ65)	06:29 19:52	05:45 20:27
16	07:41 16:58	07:09 17:40	06:22 18:16	07:11 (LZ65) 07:52 (LZ65)	06:27 19:53	05:44 20:28
17	07:40 16:59	07:07 17:41	06:20 18:17	07:12 (LZ65) 07:53 (LZ65)	06:25 19:54	05:43 20:29
18	07:39 17:01	07:06 17:42	06:18 18:18	07:11 (LZ65) 07:52 (LZ65)	06:24 19:56	05:42 20:30
19	07:39 17:02	07:04 17:44	06:17 18:20	07:11 (LZ65) 07:52 (LZ65)	06:22 19:57	05:41 20:32
20	07:38 17:03	07:03 17:45	06:15 18:21	07:10 (LZ65) 07:51 (LZ65)	06:20 19:58	05:40 20:33
21	07:37 17:05	07:01 17:46	06:13 18:22	07:10 (LZ65) 07:50 (LZ65)	06:19 19:59	05:39 20:34
22	07:37 17:06	06:59 17:48	06:11 18:23	07:10 (LZ65) 07:49 (LZ65)	06:17 20:00	05:38 20:35
23	07:36 17:07	06:58 17:49	06:09 18:24	07:11 (LZ65) 07:49 (LZ65)	06:15 20:02	05:37 20:36
24	07:35 17:08	06:56 17:50	06:08 18:26	07:11 (LZ65) 07:48 (LZ65)	06:14 20:03	05:37 20:37
25	07:34 17:10	06:55 17:52	06:06 18:27	07:11 (LZ65) 07:46 (LZ65)	06:12 20:04	05:36 20:38
26	07:34 17:11	06:53 17:53	06:04 18:28	07:12 (LZ65) 07:45 (LZ65)	06:11 20:05	05:35 20:39
27	07:33 17:12	06:51 17:54	06:02 18:29	07:12 (LZ65) 07:43 (LZ65)	06:09 20:06	05:34 20:40
28	07:32 17:14	06:50 17:56	06:00 18:30	07:14 (LZ65) 07:42 (LZ65)	06:08 20:08	05:34 20:40
29	07:31 17:15		06:58 19:32	08:16 (LZ65) 08:39 (LZ65)	06:06 20:09	05:33 20:41
30	07:30 17:16		06:57 19:33	08:18 (LZ65) 08:36 (LZ65)	06:05 20:10	05:32 20:42
31	07:29 17:18		06:55 19:34	08:21 (LZ65) 08:32 (LZ65)		05:32 20:43
Potential sun hours	289	293	369	402	456	462
Total, worst case	4	119	947			

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) 08:22 (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) 08:10 (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			651	436		232

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_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	27	08:49 (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		07:06 (LZ65)	05:36		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			456		666			462	
Total, worst case	681					253		714									

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	15 07:47 (LZ64)	17:02	16:34	27 08:31 (LZ66)		
2	05:31	05:58	07:19 (LZ65)	06:33	07:07	07:34 (LZ64)	06:46	07:24	08:04 (LZ66)		
	20:55	20:33	36 07:55 (LZ65)	19:45	18:51	10 07:44 (LZ64)	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	22 08:32 (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	4 08:14 (LZ66)	16:32	22 08:33 (LZ66)	
14	05:40	06:12	07:12 (LZ65)	06:47	07:21		07:01	08:06 (LZ66)	07:35	08:11 (LZ66)	
	20:51	20:17	47 07:59 (LZ65)	19:24	18:30		16:46	11 08:17 (LZ66)	16:33	21 08:32 (LZ66)	
15	05:41	06:13	07:12 (LZ65)	06:48	07:23		07:03	08:05 (LZ66)	07:36	08:12 (LZ66)	
	20:50	20:15	46 07:58 (LZ65)	19:22	18:28		16:45	15 08:20 (LZ66)	16:33	21 08:33 (LZ66)	
16	05:41	06:14	07:13 (LZ65)	06:49	07:24		07:04	08:03 (LZ66)	07:37	08:13 (LZ66)	
	20:49	20:13	46 07:59 (LZ65)	19:20	18:26		16:44	18 08:21 (LZ66)	16:33	20 08:33 (LZ66)	
17	05:42	06:15	07:13 (LZ65)	06:50	07:25		07:05	08:03 (LZ66)	07:37	08:13 (LZ66)	
	20:49	20:12	46 07:59 (LZ65)	19:18	18:25		16:43	20 08:23 (LZ66)	16:33	20 08:33 (LZ66)	
18	05:43	06:16	07:13 (LZ65)	06:51	07:26		07:07	08:02 (LZ66)	07:38	08:14 (LZ66)	
	20:48	20:10	45 07:58 (LZ65)	19:16	18:23		16:42	22 08:24 (LZ66)	16:34	20 08:34 (LZ66)	
19	05:44	06:17	07:13 (LZ65)	06:52	07:28		07:08	08:01 (LZ66)	07:39	08:15 (LZ66)	
	20:47	20:09	45 07:58 (LZ65)	19:14	9 07:48 (LZ64)	18:21	16:41	23 08:24 (LZ66)	16:34	19 08:34 (LZ66)	
20	05:45	06:18	07:13 (LZ65)	06:53	07:29		07:09	08:01 (LZ66)	07:39	08:15 (LZ66)	
	20:46	20:07	44 07:57 (LZ65)	19:13	14 07:51 (LZ64)	18:20	16:41	25 08:26 (LZ66)	16:34	19 08:34 (LZ66)	
21	05:46	06:19	07:13 (LZ65)	06:54	07:30		07:10	08:01 (LZ66)	07:40	08:16 (LZ66)	
	20:45	20:06	43 07:56 (LZ65)	19:11	17 07:52 (LZ64)	18:18	16:40	25 08:26 (LZ66)	16:35	19 08:35 (LZ66)	
22	05:47	06:21	07:13 (LZ65)	06:56	07:31		07:12	08:00 (LZ66)	07:40	08:16 (LZ66)	
	20:44	20:04	42 07:55 (LZ65)	19:09	19 07:52 (LZ64)	18:16	16:39	27 08:27 (LZ66)	16:35	19 08:35 (LZ66)	
23	05:48	06:22	07:14 (LZ65)	06:57	07:32		07:13	08:01 (LZ66)	07:41	08:17 (LZ66)	
	20:44	20:02	40 07:54 (LZ65)	19:07	21 07:53 (LZ64)	18:15	16:38	27 08:28 (LZ66)	16:36	19 08:36 (LZ66)	
24	05:49	07:32 (LZ65)	06:23	06:58	07:31		07:14	08:01 (LZ66)	07:41	08:17 (LZ66)	
	20:43	9 07:41 (LZ65)	20:01	19:05	22 07:53 (LZ64)	18:13	16:38	27 08:28 (LZ66)	16:36	19 08:36 (LZ66)	
25	05:50	07:29 (LZ65)	06:24	06:59	07:30		07:15	08:01 (LZ66)	07:42	08:17 (LZ66)	
	20:42	15 07:44 (LZ65)	19:59	19:03	23 07:53 (LZ64)	17:12	16:37	27 08:28 (LZ66)	16:37	20 08:37 (LZ66)	
26	05:51	07:27 (LZ65)	06:25	07:00	07:30		07:17	08:02 (LZ66)	07:42	08:18 (LZ66)	
	20:41	19 07:46 (LZ65)	19:57	19:02	22 07:52 (LZ64)	17:10	16:36	27 08:29 (LZ66)	16:38	20 08:38 (LZ66)	
27	05:52	07:25 (LZ65)	06:26	07:01	07:29		07:18	08:02 (LZ66)	07:42	08:18 (LZ66)	
	20:40	23 07:48 (LZ65)	19:56	19:00	22 07:51 (LZ64)	17:09	16:36	27 08:29 (LZ66)	16:38	20 08:38 (LZ66)	
28	05:53	07:24 (LZ65)	06:27	07:02	07:30		07:19	08:02 (LZ66)	07:43	08:18 (LZ66)	
	20:39	26 07:50 (LZ65)	19:54	18:58	22 07:52 (LZ64)	17:07	16:35	27 08:29 (LZ66)	16:39	21 08:39 (LZ66)	
29	05:54	07:23 (LZ65)	06:29	07:04	07:31		07:20	08:02 (LZ66)	07:43	08:18 (LZ66)	
	20:37	28 07:51 (LZ65)	19:52	18:56	19 07:50 (LZ64)	17:06	16:35	28 08:30 (LZ66)	16:40	21 08:39 (LZ66)	
30	05:55	07:21 (LZ65)	06:30	07:05	07:31		07:21	08:02 (LZ66)	07:43	08:19 (LZ66)	
	20:36	31 07:52 (LZ65)	19:51	18:54	18 07:49 (LZ64)	17:04	16:34	28 08:30 (LZ66)	16:40	22 08:41 (LZ66)	
31	05:56	07:20 (LZ65)	06:31	07:06		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		681

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	08:09 (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 06:00
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)	20:13 05:59
5	07:44 16:46	07:23 17:25	08:08 (LZ66) 08:41 (LZ66)	06:41 18:02	24 07:40 (LZ64) 07:15 (LZ64)	20:15 05:58
6	07:44 16:47	07:22 17:26	08:09 (LZ66) 08:41 (LZ66)	06:40 18:03	25 07:40 (LZ64) 07:15 (LZ64)	20:16 05:56
7	07:43 16:48	07:21 17:27	08:09 (LZ66) 08:40 (LZ66)	06:38 18:05	24 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	24 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	23 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	22 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	20 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	17 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		20:26 05:45
16	07:41 16:58	07:08 17:40	07:31 (LZ67) 08:27 (LZ66)	06:22 18:16		20:27 05:44
17	07:40 16:59	07:07 17:41	07:29 (LZ67) 07:46 (LZ67)	06:20 18:17		20:28 05:43
18	07:39 17:01	07:06 17:42	07:29 (LZ67) 07:48 (LZ67)	06:18 18:18		20:29 05:42
19	07:39 17:02	07:04 17:44	07:27 (LZ67) 07:48 (LZ67)	06:17 18:20		20:30 05:41
20	07:38 17:03	07:03 08:18 (LZ66)	07:27 (LZ67) 07:49 (LZ67)	06:15 18:21		20:32 05:40
21	07:37 17:05	07:01 08:25 (LZ66)	07:27 (LZ67) 07:49 (LZ67)	06:13 18:22		20:33 05:39
22	07:37 17:06	06:59 08:14 (LZ66)	07:26 (LZ67) 07:48 (LZ67)	06:11 18:23		20:34 05:38
23	07:36 17:07	06:58 08:13 (LZ66)	07:27 (LZ67) 07:49 (LZ67)	06:09 18:24		20:35 05:37
24	07:35 17:08	06:56 08:12 (LZ66)	07:27 (LZ67) 07:48 (LZ67)	06:08 18:26		20:36 05:36
25	07:34 17:10	06:55 08:11 (LZ66)	07:28 (LZ67) 07:48 (LZ67)	06:06 18:27		20:37 05:35
26	07:33 17:11	06:53 08:10 (LZ66)	07:28 (LZ67) 07:47 (LZ67)	06:04 18:28		20:38 05:34
27	07:33 17:12	06:51 08:09 (LZ66)	07:29 (LZ67) 07:45 (LZ67)	06:02 18:29		20:39 05:33
28	07:32 17:14	06:50 08:09 (LZ66)	07:31 (LZ67) 07:44 (LZ67)	06:00 18:30		20:40 05:32
29	07:31 17:15	06:49 08:09 (LZ66)	06:58 19:32	07:24 (LZ64) 07:36 (LZ64)		20:41 05:31
30	07:30 17:16	06:48 08:09 (LZ66)	06:57 19:33	07:22 (LZ64) 07:38 (LZ64)		20:42 05:30
31	07:29 17:18	06:47 08:08 (LZ66)	06:55 19:34	07:20 (LZ64) 07:39 (LZ64)		20:43 05:29
Potential sun hours	289	293	369	402	456	462
Total, worst case	277	685	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)	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

	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	07:57 (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	08:07 (LZ66) 16:35
22	05:47 20:44	06:21 20:04	06:56 19:09	07:31 18:16	07:57 (LZ67) 16:39	07:54 (LZ66) 16:35
23	05:48 20:44	06:22 20:02	06:57 19:07	07:33 18:15	08:18 (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	07:59 (LZ67) 16:38	07:43 (LZ66) 16:36
25	05:50 20:42	06:24 19:59	06:59 19:03	06:35 17:12	08:17 (LZ67) 16:37	07:15 (LZ66) 16:37
26	05:51 20:41	06:25 19:57	07:00 19:02	06:37 17:10	07:01 (LZ67) 16:36	07:17 (LZ66) 16:38
27	05:52 20:40	06:26 19:56	07:01 19:00	06:38 17:09	07:04 (LZ67) 16:36	07:18 (LZ66) 16:38
28	05:53 20:39	06:27 19:54	07:02 18:58	06:39 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	06:40 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	06:42 17:04	08:06 (LZ66) 16:34	07:21 (LZ66) 16:41
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) 16:42
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	08:11 (LZ73) 07:14	06:29 18:11	06:58 (LZ67) 19:48	05:49 20:24	06:51 20:52
13	07:42 16:55	08:08 (LZ73) 07:13	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) 07:11	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) 07:10	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) 07:08	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) 07:07	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) 07:06	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) 07:04	06:17 18:19	07:04 (LZ67) 19:57	05:41 20:32	06:44 20:54
20	07:38 17:03	08:04 (LZ73) 07:03	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) 07:01	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) 06:59	06:11 18:23	06:17 20:00	06:44 (LZ64) 20:35	06:41 20:55
23	07:36 17:07	08:04 (LZ73) 06:58	06:09 18:24	06:15 20:02	06:42 (LZ64) 20:36	06:40 20:55
24	07:35 17:08	08:04 (LZ73) 06:56	06:08 18:26	06:14 20:03	06:42 (LZ64) 20:37	06:39 20:55
25	07:34 17:10	08:04 (LZ73) 06:55	06:06 18:27	06:12 20:04	06:40 (LZ64) 20:38	06:38 20:56
26	07:33 17:11	08:05 (LZ73) 06:53	06:04 18:28	06:11 20:05	06:40 (LZ64) 20:39	06:37 20:56
27	07:33 17:12	08:05 (LZ73) 06:51	06:02 18:29	06:09 20:06	06:39 (LZ64) 20:39	06:36 20:56
28	07:32 17:14	08:06 (LZ73) 06:50	06:00 18:30	06:08 20:08	06:39 (LZ64) 20:40	06:35 20:56
29	07:31 17:15	08:06 (LZ73) 06:48	05:58 18:32	06:06 20:09	06:39 (LZ64) 20:41	06:34 20:56
30	07:30 17:16	08:07 (LZ73) 06:47	05:57 18:33	06:05 20:10	06:39 (LZ64) 20:42	06:33 20:56
31	07:29 17:18	08:08 (LZ73) 06:46	05:55 18:34	06:04 20:11	06:39 (LZ64) 20:43	06:32 20:56
Potential sun hours	289	293	369	402	456	462
Total, worst case	365	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) 08:43 (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	871	410		

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	09:00 (LZ74)	17:19	17:57	19:35	07:51 (LZ66)	20:11	20:44	06:21 (LZ64)	20	
2	07:44	08:29 (LZ74)	07:27	06:46	06:51	07:17 (LZ67)	06:02	05:31	06:00 (LZ64)		
	16:43	09:01 (LZ74)	17:21	17:58	19:36	07:55 (LZ66)	20:12	20:45	06:21 (LZ64)	21	
3	07:44	08:30 (LZ74)	07:25	06:45	06:49	07:16 (LZ67)	06:00	05:30	06:00 (LZ64)		
	16:44	09:01 (LZ74)	17:22	18:00	19:38	07:58 (LZ66)	20:13	20:45	06:22 (LZ64)	22	
4	07:44	08:29 (LZ74)	07:24	06:43	06:48	07:15 (LZ67)	05:59	05:30	06:01 (LZ64)		
	16:45	09:01 (LZ74)	17:23	18:01	19:39	08:00 (LZ66)	20:15	20:46	06:23 (LZ64)	22	
5	07:44	08:30 (LZ74)	07:23	06:41	06:46	07:14 (LZ67)	05:58	05:29	06:00 (LZ64)		
	16:46	09:02 (LZ74)	17:25	18:02	19:40	08:01 (LZ66)	20:16	20:47	06:22 (LZ64)	22	
6	07:44	08:30 (LZ74)	07:22	06:40	06:44	07:13 (LZ67)	05:56	05:29	06:00 (LZ64)		
	16:47	09:02 (LZ74)	17:26	18:03	19:41	08:02 (LZ66)	20:17	20:48	06:23 (LZ64)	23	
7	07:43	08:31 (LZ74)	07:21	06:38	06:42	07:13 (LZ67)	05:55	05:28	06:00 (LZ64)		
	16:48	09:03 (LZ74)	17:27	18:05	19:42	08:03 (LZ66)	20:18	20:48	06:24 (LZ64)	24	
8	07:43	08:32 (LZ74)	07:19	06:36	06:41	07:12 (LZ67)	05:54	05:28	06:00 (LZ64)		
	16:49	09:04 (LZ74)	17:29	18:06	19:44	08:04 (LZ66)	20:19	20:49	06:23 (LZ64)	23	
9	07:43	08:31 (LZ74)	07:18	06:34	06:39	07:12 (LZ67)	05:52	05:28	06:00 (LZ64)		
	16:50	09:03 (LZ74)	17:30	18:07	19:45	08:04 (LZ66)	20:20	20:50	06:24 (LZ64)	24	
10	07:43	08:32 (LZ74)	07:17	06:33	06:37	07:12 (LZ67)	05:51	05:28	06:00 (LZ64)		
	16:51	09:04 (LZ74)	17:32	18:08	19:46	08:04 (LZ66)	20:22	20:50	06:24 (LZ64)	24	
11	07:43	08:33 (LZ74)	07:15	06:31	06:35	07:13 (LZ67)	05:50	05:27	06:00 (LZ64)		
	16:52	09:05 (LZ74)	17:33	18:10	19:47	08:04 (LZ66)	20:23	20:51	06:25 (LZ64)	25	
12	07:42	08:33 (LZ74)	07:14	06:29	06:34	07:13 (LZ67)	05:49	05:27	06:00 (LZ64)		
	16:54	09:05 (LZ74)	17:34	18:11	19:48	08:04 (LZ66)	20:24	20:51	06:25 (LZ64)	25	
13	07:42	08:34 (LZ74)	07:13	06:27	06:32	07:14 (LZ67)	05:48	05:27	06:01 (LZ64)		
	16:55	09:05 (LZ74)	17:36	18:12	19:50	08:04 (LZ66)	20:25	20:52	06:26 (LZ64)	25	
14	07:41	08:34 (LZ74)	07:11	06:26	06:30	07:16 (LZ67)	05:46	05:27	06:01 (LZ64)		
	16:56	09:05 (LZ74)	17:37	18:13	19:51	08:04 (LZ66)	20:26	20:52	06:26 (LZ64)	25	
15	07:41	08:35 (LZ74)	07:10	06:24	06:29	07:18 (LZ67)	05:45	05:27	06:01 (LZ64)		
	16:57	09:06 (LZ74)	17:38	18:15	19:52	08:04 (LZ66)	20:27	20:53	06:26 (LZ64)	25	
16	07:40	08:35 (LZ74)	07:08	06:22	06:27	07:21 (LZ66)	05:44	05:27	06:01 (LZ64)		
	16:58	09:05 (LZ74)	17:40	18:16	19:53	08:03 (LZ66)	20:28	20:53	06:26 (LZ64)	25	
17	07:40	08:36 (LZ74)	07:07	06:20	06:25	07:21 (LZ66)	05:43	05:27	06:01 (LZ64)		
	16:59	09:05 (LZ74)	17:41	18:17	19:54	08:03 (LZ66)	20:29	20:54	06:27 (LZ64)	26	
18	07:39	08:37 (LZ74)	07:06	06:18	06:24	07:21 (LZ66)	05:42	05:27	06:01 (LZ64)		
	17:01	09:06 (LZ74)	17:42	18:18	19:56	08:02 (LZ66)	20:30	20:54	06:27 (LZ64)	26	
19	07:39	08:37 (LZ74)	07:04	06:17	06:22	07:21 (LZ66)	05:41	05:27	06:01 (LZ64)		
	17:02	09:05 (LZ74)	17:44	18:20	19:57	08:01 (LZ66)	20:31	20:54	06:27 (LZ64)	26	
20	07:38	08:38 (LZ74)	07:02	06:15	06:20	07:22 (LZ66)	05:40	05:27	06:01 (LZ64)		
	17:03	09:05 (LZ74)	17:45	18:21	19:58	08:01 (LZ66)	20:33	20:55	06:27 (LZ64)	26	
21	07:37	08:39 (LZ74)	07:01	06:13	06:19	07:21 (LZ66)	05:39	05:27	06:01 (LZ64)		
	17:05	09:04 (LZ74)	17:46	18:22	19:59	07:59 (LZ66)	20:34	20:55	06:27 (LZ64)	26	
22	07:37	08:41 (LZ74)	06:59	06:11	06:17	07:22 (LZ66)	05:38	05:28	06:02 (LZ64)		
	17:06	09:04 (LZ74)	17:48	18:23	20:00	07:59 (LZ66)	20:35	20:55	06:28 (LZ64)	26	
23	07:36	08:42 (LZ74)	06:58	06:09	06:15	07:23 (LZ66)	05:38	05:28	06:02 (LZ64)		
	17:07	09:03 (LZ74)	17:49	18:24	20:02	07:57 (LZ66)	20:36	20:55	06:28 (LZ64)	26	
24	07:35	08:43 (LZ74)	06:56	06:08	06:14	07:24 (LZ66)	05:37	05:28	06:02 (LZ64)		
	17:08	09:02 (LZ74)	17:50	18:26	20:03	07:57 (LZ66)	20:37	20:55	06:28 (LZ64)	26	
25	07:34	08:45 (LZ74)	06:55	06:06	06:12	07:24 (LZ66)	05:36	05:28	06:02 (LZ64)		
	17:10	09:01 (LZ74)	17:52	18:27	20:04	07:55 (LZ66)	20:38	20:56	06:28 (LZ64)	26	
26	07:33	08:47 (LZ74)	06:53	06:04	06:11	07:26 (LZ66)	05:35	05:29	06:03 (LZ64)		
	17:11	08:59 (LZ74)	17:53	18:28	20:05	07:54 (LZ66)	20:39	20:56	06:29 (LZ64)	26	
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	07:51 (LZ66)	20:39	20:56	06:28 (LZ64)	25	
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	07:50 (LZ66)	20:40	20:56	06:29 (LZ64)	25	
29	07:31			06:58	06:06	07:31 (LZ66)	05:33	05:30	06:04 (LZ64)		
	17:15			19:32	20:09	07:46 (LZ66)	20:41	20:56	06:29 (LZ64)	25	
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	06:19 (LZ64)	24	
31	07:29			06:55		07:21 (LZ67)		05:32	06:01 (LZ64)		
	17:18			19:34	13	07:34 (LZ67)		20:43	06:19 (LZ64)		
Potential sun hours	289		293	369		402		456		462	
Total, worst case	734		349	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)
	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

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	32	08:47 (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		08:19 (LZ74)
	20:53	21	06:29 (LZ64)	20:22		19:31	07:50 (LZ66)	18:36				16:50			16:32	31	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		08:23 (LZ74)
	20:48			20:10	08:02 (LZ66)	19:16		18:23	21		08:29 (LZ73)	16:42	19	08:36 (LZ74)	16:34	30	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	30	08:54 (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	30	08:54 (LZ74)
23	05:48			06:22	07:25 (LZ66)	06:57		07:33			08:06 (LZ73)	07:13		08:14 (LZ74)	07:41		08:25 (LZ74)
	20:44			20:02	08:05 (LZ66)	19:07		18:15	25		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		353			386				963		

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	06:17 18:20	06:22 19:57	06:49 (LZ67) 07:04 (LZ67)	05:41 20:31
20	07:38 17:03	07:02 17:45	06:15 18:21	06:20 19:58	06:48 (LZ67) 07:06 (LZ67)	05:40 20:33
21	07:37 17:05	07:01 17:46	06:13 18:22	06:19 19:59	06:46 (LZ67) 07:07 (LZ67)	05:39 20:34
22	07:37 17:06	06:59 17:48	06:11 18:23	06:17 20:00	06:45 (LZ67) 07:08 (LZ67)	05:38 20:35
23	07:36 17:07	06:58 17:49	06:09 18:24	06:15 20:02	06:44 (LZ67) 07:08 (LZ67)	05:38 20:36
24	07:35 17:08	06:56 17:50	06:08 18:26	06:14 20:03	06:44 (LZ67) 07:08 (LZ67)	05:37 20:37
25	07:34 17:10	06:55 17:52	06:06 18:27	06:12 20:04	06:43 (LZ67) 07:08 (LZ67)	05:36 20:38
26	07:33 17:11	06:53 17:53	06:04 18:28	06:11 20:05	06:43 (LZ67) 07:08 (LZ67)	05:35 20:39
27	07:33 17:12	06:51 17:54	06:02 18:29	06:09 20:06	06:42 (LZ67) 07:08 (LZ67)	05:34 20:39
28	07:32 17:14	06:50 17:56	06:00 18:30	06:08 20:08	06:43 (LZ67) 07:08 (LZ67)	05:34 20:40
29	07:31 17:15	06:48 17:57	05:58 19:32	06:06 20:09	06:42 (LZ67) 07:07 (LZ67)	05:33 20:41
30	07:30 17:17	06:43 17:58	06:57 19:33	06:05 20:10	06:43 (LZ67) 07:07 (LZ67)	05:32 20:42
31	07:29 17:18	06:42 17:59	06:55 19:34	06:04 20:11	06:42 (LZ67) 07:07 (LZ67)	05:31 20:43
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)
	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

	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 25	07:45 (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 07:45 (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 07:46 (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 07:48 (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 07:48 (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 07:51 (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 07:52 (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 07:54 (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 07:59 (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 6	07:10 07:46 (LZ74) 16:35
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 7	07:12 07:48 (LZ74) 16:35
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 33	07:13 16:38 8	07:13 07:49 (LZ74) 16:36
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 34	07:14 16:37 9	07:14 07:50 (LZ74) 16:36
25	05:50 20:42 42	06:46 (LZ66) 07:28 (LZ66) 19:59	06:24 06:55 (LZ67) 19:03	07:35 17:12 20	07:15 16:36 10	07:15 07:51 (LZ74) 16:37
26	05:51 20:41 41	06:46 (LZ66) 07:27 (LZ66) 19:57	07:00 19:02 11	07:36 17:10 21	07:16 16:35 11	07:16 07:52 (LZ74) 16:38
27	05:52 20:40 41	06:46 (LZ66) 07:27 (LZ66) 19:56	07:01 19:00 12	07:37 17:09 22	07:17 16:34 12	07:17 07:53 (LZ74) 16:39
28	05:53 20:39 40	06:47 (LZ66) 07:27 (LZ66) 19:54	07:02 18:58 13	07:38 17:07 23	07:18 16:33 13	07:18 07:54 (LZ74) 16:40
29	05:54 20:37 40	06:47 (LZ66) 07:27 (LZ66) 19:52	07:04 18:56 20	07:39 17:06 24	07:19 16:32 14	07:19 07:55 (LZ74) 16:41
30	05:55 20:36 38	06:48 (LZ66) 07:26 (LZ66) 19:51	07:05 18:54 21	07:40 17:04 25	07:20 16:31 15	07:20 07:56 (LZ74) 16:42
31	05:56 20:35 37	06:48 (LZ66) 07:25 (LZ66) 19:49	07:06 18:53 22	07:41 17:03 26	07:21 16:30 16	07:21 07:57 (LZ74) 16:43
Potential sun hours	468	433	376	342	291	279
Total, worst case	1269	590	71	493	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)	Minutes with flicker	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	05:27 20:53
16	07:41 16:58	07:09 17:40	06:22 18:16	07:24 (LZ26) 06:27	05:44	05:27 20:54
17	07:40 16:59	07:07 17:41	06:20 18:17	07:35 (LZ26) 06:25	05:43	05:27 20:54
18	07:40 17:01	07:06 17:43	06:19 18:18	06:24	05:42	05:27 20:54
19	07:39 17:02	07:04 17:44	06:17 18:20	06:22	05:41	05:27 20:55
20	07:38 17:03	07:03 17:45	06:15 18:21	06:20	05:40	05:27 20:55
21	07:38 17:05	07:01 17:47	06:13 18:22	06:19	05:39	05:27 20:55
22	07:37 17:06	07:00 17:48	06:11 18:23	06:17	05:38	05:28 20:55
23	07:36 17:07	06:58 17:49	06:09 18:25	06:15	05:37	05:28 20:56
24	07:35 17:08	06:56 17:51	06:08 18:26	06:14	05:37	05:28 20:56
25	07:35 17:10	06:55 17:52	06:06 18:27	06:12	05:36	05:28 20:56
26	07:34 17:11	06:53 17:53	06:04 18:28	06:11	05:35	05:29 20:56
27	07:33 17:12	06:52 17:54	06:02 18:29	06:09	05:34	06:01 (LZ13) 05:29
28	07:32 17:14	06:50 17:56	06:00 18:31	06:08	05:34	6 06:07 (LZ13) 05:29
29	07:31 17:15	06:49 17:57	05:59 18:32	06:06	05:33	10 06:09 (LZ13) 05:30
30	07:30 17:17	06:48 17:58	05:57 18:33	06:05	05:32	13 06:10 (LZ13) 05:30
31	07:29 17:18	06:47 17:59	05:55 18:34	06:04	05:32	15 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 20:56	05:59 (LZ13) 20:34	06:32 19:47	07:17 (LZ25) 18:53	07:06 18:53	07:57 (LZ26) 17:02
2	05:31 20:56	05:58 (LZ13) 20:33	06:33 19:45	07:15 (LZ25) 18:51	07:07 18:51	07:56 (LZ26) 17:00
3	05:32 20:55	05:59 (LZ13) 20:32	06:34 19:44	07:14 (LZ25) 18:49	07:08 18:49	07:56 (LZ26) 16:59
4	05:33 20:55	06:00 (LZ13) 20:31	06:35 19:42	07:13 (LZ25) 18:47	07:10 18:47	07:55 (LZ26) 16:58
5	05:33 20:55	06:23 (LZ13) 20:29	06:36 19:40	07:12 (LZ25) 18:45	07:11 18:45	07:54 (LZ26) 16:56
6	05:34 20:55	06:22 (LZ13) 20:28	06:37 19:38	07:11 (LZ25) 18:44	07:10 18:44	07:53 (LZ26) 16:55
7	05:34 20:54	06:01 (LZ13) 20:27	06:39 19:37	07:11 (LZ25) 18:42	07:13 18:42	07:52 (LZ26) 16:54
8	05:35 20:54	06:23 (LZ13) 20:25	06:40 19:35	07:10 (LZ25) 18:40	07:14 18:40	07:53 (LZ26) 16:53
9	05:36 20:53	06:02 (LZ13) 20:24	06:41 19:33	07:11 (LZ25) 18:38	07:16 18:38	07:53 (LZ26) 16:52
10	05:37 20:53	06:03 (LZ13) 20:23	06:42 19:31	07:11 (LZ25) 18:37	07:17 18:37	07:53 (LZ26) 16:50
11	05:37 20:52	06:03 (LZ13) 20:21	06:43 19:29	07:11 (LZ25) 18:35	07:18 18:35	07:53 (LZ26) 16:49
12	05:38 20:52	06:04 (LZ13) 20:20	06:44 19:27	07:12 (LZ25) 18:33	07:19 18:33	07:54 (LZ26) 16:48
13	05:39 20:51	06:05 (LZ13) 20:18	06:46 19:26	07:13 (LZ25) 18:31	07:20 18:31	07:54 (LZ26) 16:47
14	05:40 20:51	06:06 (LZ13) 20:17	06:47 19:24	07:14 (LZ25) 18:30	07:22 18:30	07:55 (LZ26) 16:46
15	05:41 20:50	06:07 (LZ13) 20:15	06:48 19:22	07:17 (LZ25) 18:28	07:23 18:28	07:56 (LZ26) 16:45
16	05:41 20:49	06:19 (LZ13) 20:14	06:49 19:22	07:25 (LZ25) 18:28	07:24 18:26	08:17 (LZ26) 16:44
17	05:42 20:49	06:08 (LZ13) 20:12	06:50 19:20	07:24 18:26	07:25 18:25	08:16 (LZ26) 16:43
18	05:43 20:48	06:12 (LZ13) 20:11	06:50 19:18	07:25 (LZ25) 18:25	08:01 (LZ26) 18:25	07:06 16:43
19	05:44 20:47	06:16 20:10	06:51 19:16	07:27 18:23	07:07 18:23	07:08 16:42
20	05:45 20:46	06:17 20:09	06:52 19:15	07:28 18:21	07:08 18:21	07:09 16:41
21	05:46 20:46	06:18 20:08	06:53 19:13	07:29 18:20	07:09 18:20	07:10 16:41
22	05:47 20:45	06:20 20:06	06:55 19:11	07:30 18:18	07:11 18:18	07:11 16:40
23	05:48 20:44	06:21 20:04	06:56 19:09	07:32 18:16	07:12 18:16	07:12 16:39
24	05:49 20:43	06:22 20:03	06:57 19:07	07:33 18:15	07:13 18:15	07:13 16:38
25	05:50 20:42	06:23 20:01	06:58 19:05	07:34 18:13	07:14 18:13	07:14 16:38
26	05:51 20:41	06:24 19:59	06:59 19:04	07:35 17:12	07:15 17:12	07:15 16:37
27	05:52 20:40	06:25 19:58	07:00 19:02	07:37 17:10	07:17 17:10	07:17 16:36
28	05:53 20:39	06:26 19:56	07:01 19:00	08:09 (LZ26) 17:09	06:38 17:09	07:18 16:36
29	05:54 20:38	06:27 19:55	07:03 18:58	08:16 (LZ26) 17:07	06:39 17:07	07:19 16:35
30	05:55 20:37	06:29 19:54	07:04 18:56	08:19 (LZ26) 17:06	06:41 17:06	07:20 16:35
31	05:56 20:35	06:30 19:51	07:05 18:54	08:21 (LZ26) 17:04	06:42 17:04	07:22 16:34
Potential sun hours	468	433	376	342	291	279
Total, worst case	307	24	388	460		

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

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	05:54 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	08:06 (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	08:03 (LZ35) 18:10	06:35 19:47	05:50 20:23	07:00 (LZ25) 20:51
12	07:42 16:53	07:14 17:34	08:00 (LZ35) 18:11	06:34 19:49	05:49 20:24	07:00 (LZ25) 20:52
13	07:42 16:55	07:13 17:36	08:00 (LZ35) 18:12	06:32 19:50	05:48 20:25	07:00 (LZ25) 20:52
14	07:42 16:56	07:12 17:37	08:00 (LZ35) 18:14	06:30 19:51	05:46 20:26	07:00 (LZ25) 20:53
15	07:41 16:57	07:10 17:38	08:00 (LZ35) 18:15	06:29 19:52	07:00 (LZ25) 20:27	07:00 (LZ25) 20:53
16	07:41 16:58	07:09 17:40	08:00 (LZ35) 18:16	06:27 19:53	07:09 (LZ25) 20:29	07:00 (LZ25) 20:54
17	07:40 16:59	07:07 17:41	08:00 (LZ35) 18:17	06:25 19:55	07:12 (LZ25) 20:30	07:00 (LZ25) 20:54
18	07:40 17:01	07:06 17:43	08:00 (LZ35) 18:18	06:24 19:56	07:14 (LZ25) 20:31	07:00 (LZ25) 20:54
19	07:39 17:02	07:04 17:44	08:00 (LZ35) 18:18	06:22 19:57	07:15 (LZ25) 20:32	07:00 (LZ25) 20:55
20	07:38 17:03	07:03 17:45	08:00 (LZ35) 18:20	06:20 19:58	07:16 (LZ25) 20:33	07:00 (LZ25) 20:55
21	07:38 17:05	07:01 17:47	08:00 (LZ35) 18:21	06:19 19:59	07:17 (LZ25) 20:34	07:00 (LZ25) 20:55
22	07:37 17:06	07:00 17:48	08:00 (LZ35) 18:22	06:17 20:01	07:17 (LZ25) 20:35	07:00 (LZ25) 20:55
23	07:36 17:07	06:58 17:49	08:00 (LZ35) 18:23	06:15 20:02	07:18 (LZ25) 20:36	07:00 (LZ25) 20:56
24	07:35 17:08	06:56 17:51	08:00 (LZ35) 18:25	06:14 20:03	07:17 (LZ25) 20:37	07:00 (LZ25) 20:56
25	07:35 17:10	06:55 17:52	08:00 (LZ35) 18:26	06:12 20:04	07:18 (LZ25) 20:38	07:00 (LZ25) 20:56
26	07:34 17:11	06:53 17:53	08:00 (LZ35) 18:27	06:11 20:05	07:17 (LZ25) 20:39	07:00 (LZ25) 20:56
27	07:33 17:12	06:52 17:54	08:00 (LZ35) 18:28	06:09 20:07	07:17 (LZ25) 20:40	07:00 (LZ25) 20:56
28	07:32 17:14	06:50 17:56	08:00 (LZ35) 18:29	06:08 20:08	07:16 (LZ25) 20:41	07:00 (LZ25) 20:56
29	07:31 17:15	06:48 17:57	08:00 (LZ35) 18:31	06:06 20:09	07:16 (LZ25) 20:42	07:00 (LZ25) 20:56
30	07:30 17:17	06:46 17:59	08:00 (LZ35) 18:32	06:05 20:10	07:15 (LZ25) 20:43	07:00 (LZ25) 20:56
31	07:29 17:18	06:45 18:00	08:00 (LZ35) 18:33	06:04 20:11	07:15 (LZ25) 20:44	07:00 (LZ25) 20:56
Potential sun hours	289	293	369	402	456	462
Total, worst case	238	108	644	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) 07:58 (LZ26)	06:44 17:02	07:23 16:34	
2	05:31 20:56	05:58 20:33		06:33 19:45		07:07 18:51		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		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) 07:47 (LZ35)	07:26 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) 07:50 (LZ35)	07:27 16:33
6	05:34 20:55	06:03 20:28	07:07 (LZ25)	06:38 19:38	07:57 (LZ26)	07:12 18:44		06:51 16:55	07:36 (LZ35) 07:51 (LZ35)	07:28 16:33
7	05:34 20:54	06:04 20:27	07:04 (LZ25) 07:17 (LZ25)	06:39 19:37	07:54 (LZ26) 08:13 (LZ26)	07:13 18:42		06:52 16:54	07:36 (LZ35) 07:53 (LZ35)	07:29 16:32
8	05:35 20:54	06:05 20:25	07:02 (LZ25) 07:19 (LZ25)	06:40 19:35	07:51 (LZ26) 08:15 (LZ26)	07:14 18:40		06:54 16:53	07:34 (LZ35) 07:53 (LZ35)	07:30 16:32
9	05:36 20:53	06:06 20:24	07:00 (LZ25) 07:20 (LZ25)	06:41 19:33	07:50 (LZ26) 08:17 (LZ26)	07:16 18:38		06:55 16:52	07:34 (LZ35) 07:55 (LZ35)	07:31 16:32
10	05:37 20:53	06:07 20:23	06:59 (LZ25) 07:21 (LZ25)	06:42 19:31	07:48 (LZ26) 08:18 (LZ26)	07:17 18:37		06:56 16:50	07:34 (LZ35) 07:55 (LZ35)	07:32 16:32
11	05:37 20:52	06:08 20:21	06:58 (LZ25) 07:22 (LZ25)	06:43 19:29	07:46 (LZ26) 08:19 (LZ26)	07:18 18:35		06:58 16:49	07:33 (LZ35) 07:55 (LZ35)	07:33 16:32
12	05:38 20:52	06:09 20:20	06:57 (LZ25) 07:22 (LZ25)	06:44 19:27	07:45 (LZ26) 08:19 (LZ26)	07:19 18:33		06:59 16:48	07:34 (LZ35) 07:56 (LZ35)	07:34 16:32
13	05:39 20:51	06:10 20:18	06:56 (LZ25) 07:23 (LZ25)	06:45 19:26	07:44 (LZ26) 08:20 (LZ26)	07:20 18:31		07:00 16:47	07:33 (LZ35) 07:56 (LZ35)	07:35 16:32
14	05:40 20:51	06:12 20:17	06:55 (LZ25) 07:23 (LZ25)	06:47 19:24	07:43 (LZ26) 08:20 (LZ26)	07:22 18:30		07:02 16:46	07:34 (LZ35) 07:56 (LZ35)	07:35 16:33
15	05:41 20:50	06:13 20:15	06:55 (LZ25) 07:24 (LZ25)	06:48 19:22	07:42 (LZ26) 08:20 (LZ26)	07:23 18:28		07:03 16:45	07:34 (LZ35) 07:56 (LZ35)	07:36 16:33
16	05:41 20:49	06:14 20:14	06:55 (LZ25) 07:24 (LZ25)	06:49 19:20	07:41 (LZ26) 08:20 (LZ26)	07:24 18:26		07:04 16:44	07:34 (LZ35) 07:55 (LZ35)	07:37 16:33
17	05:42 20:49	06:15 20:12	06:55 (LZ25) 07:24 (LZ25)	06:50 19:18	07:40 (LZ26) 08:20 (LZ26)	07:25 18:25		07:05 16:43	07:36 (LZ35) 07:56 (LZ35)	07:38 16:33
18	05:43 20:48	06:16 20:11	06:54 (LZ25) 07:24 (LZ25)	06:51 19:16	07:40 (LZ26) 08:19 (LZ26)	07:27 18:23		07:07 16:42	07:36 (LZ35) 07:55 (LZ35)	07:38 16:34
19	05:44 20:47	06:17 20:09	06:54 (LZ25) 07:24 (LZ25)	06:52 19:15	07:39 (LZ26) 08:19 (LZ26)	07:28 18:21		07:08 16:41	07:37 (LZ35) 07:55 (LZ35)	07:39 16:34
20	05:45 20:46	06:18 20:07	06:54 (LZ25) 07:23 (LZ25)	06:53 19:13	07:40 (LZ26) 08:19 (LZ26)	07:29 18:20		07:09 16:41	07:38 (LZ35) 07:54 (LZ35)	07:39 16:34
21	05:46 20:46	06:20 20:06	06:54 (LZ25) 07:22 (LZ25)	06:55 19:11	07:40 (LZ26) 08:19 (LZ26)	07:30 18:18		07:11 16:40	07:39 (LZ35) 07:53 (LZ35)	07:40 16:35
22	05:47 20:45	06:21 20:04	06:54 (LZ25) 07:22 (LZ25)	06:56 19:09	07:40 (LZ26) 08:18 (LZ26)	07:32 18:16		07:12 16:39	07:41 (LZ35) 07:53 (LZ35)	07:41 16:35
23	05:48 20:44	06:22 20:03	06:55 (LZ25) 07:21 (LZ25)	06:57 19:07	07:40 (LZ26) 08:17 (LZ26)	07:33 18:15		07:13 16:38	07:43 (LZ35) 07:51 (LZ35)	07:41 16:36
24	05:49 20:43	06:23 20:01	06:55 (LZ25) 07:19 (LZ25)	06:58 19:05	07:40 (LZ26) 08:16 (LZ26)	07:34 18:13		07:14 16:38	07:42 (LZ35) 07:50 (LZ35)	07:42 16:36
25	05:50 20:42	06:24 19:59	06:56 (LZ25) 07:18 (LZ25)	06:59 19:04	07:40 (LZ26) 08:14 (LZ26)	06:35 17:12		07:16 16:37	07:42 (LZ35) 07:50 (LZ35)	07:42 16:37
26	05:51 20:41	06:25 19:58	06:57 (LZ25) 07:16 (LZ25)	07:00 19:02	07:41 (LZ26) 08:13 (LZ26)	06:37 17:10		07:17 16:36	07:42 (LZ35) 07:50 (LZ35)	07:42 16:38
27	05:52 20:40	06:26 19:56	06:59 (LZ25) 07:14 (LZ25)	07:01 19:00	07:43 (LZ26) 08:12 (LZ26)	06:38 17:09		07:18 16:36	07:43 (LZ35) 07:50 (LZ35)	07:43 16:38
28	05:53 20:39	06:27 19:54	07:02 (LZ25) 07:11 (LZ25)	07:03 18:58	07:44 (LZ26) 08:10 (LZ26)	06:39 17:07		07:19 16:35	07:43 (LZ35) 07:50 (LZ35)	07:43 16:39
29	05:54 20:38	06:29 19:52		07:04 18:56	07:45 (LZ26) 08:07 (LZ26)	06:41 17:06		07:20 16:35	07:43 (LZ35) 07:50 (LZ35)	07:43 16:40
30	05:55 20:37	06:30 19:51		07:05 18:54	07:48 (LZ26) 08:04 (LZ26)	06:42 17:04		07:22 16:34	07:43 (LZ35) 07:50 (LZ35)	07:43 16:40
31	05:56 20:35	06:31 19:49				06:43 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) 08:00 (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) 08:01 (LZ26)
23	07:36 17:07	06:58 17:49	08:11 (LZ35) 18:25	06:09 18:25	06:15 20:02	08:02 (LZ26) 08:02 (LZ26)
24	07:35 17:08	06:56 17:51	08:12 (LZ35) 18:26	06:08 18:26	06:14 20:03	08:03 (LZ26) 08:03 (LZ26)
25	07:35 17:10	06:55 17:52	08:13 (LZ35) 18:27	06:06 18:27	06:12 20:04	08:04 (LZ26) 08:04 (LZ26)
26	07:34 17:11	06:53 17:53	08:14 (LZ35) 18:28	06:04 18:28	06:11 20:05	08:05 (LZ26) 08:05 (LZ26)
27	07:33 17:12	06:52 17:54	08:15 (LZ35) 18:29	06:02 18:29	06:09 20:07	08:06 (LZ26) 08:06 (LZ26)
28	07:32 17:14	06:50 17:56	08:16 (LZ35) 18:31	06:00 18:31	06:08 20:08	08:07 (LZ26) 08:07 (LZ26)
29	07:31 17:15	06:48 17:57	08:17 (LZ35) 18:32	05:59 18:32	06:06 20:09	08:08 (LZ26) 08:08 (LZ26)
30	07:30 17:17	06:46 17:58	08:18 (LZ35) 18:33	05:57 18:33	06:05 20:10	08:09 (LZ26) 08:09 (LZ26)
31	07:29 17:18	06:44 17:59	08:19 (LZ35) 18:34	05:55 18:34	06:04 20:11	08:10 (LZ26) 08:10 (LZ26)
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	07:37 (LZ26) 18:21	07:08 16:41	07:39 16:34
20	05:45 20:46	06:18 20:07	06:53 19:13	07:39 (LZ26) 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	07:45 (LZ26) 19:07	07:33 18:15	07:13 16:38	07:41 16:36
24	05:49 20:43	06:23 20:01	07:42 (LZ26) 19:05	07:34 18:13	07:14 16:38	07:42 16:36
25	05:50 20:42	06:24 19:59	07:39 (LZ26) 19:04	06:59 17:12	07:16 16:37	07:42 16:37
26	05:51 20:41	06:25 19:58	07:37 (LZ26) 19:02	07:00 17:10	07:17 16:36	07:42 16:38
27	05:52 20:40	06:26 19:56	07:36 (LZ26) 19:00	06:38 17:09	07:18 16:36	07:43 16:38
28	05:53 20:39	06:27 19:54	07:35 (LZ26) 18:58	06:39 17:07	07:19 16:35	07:43 16:39
29	05:54 20:38	06:29 19:52	07:34 (LZ26) 18:56	06:41 17:06	07:30 (LZ35) 16:35	07:43 16:40
30	05:55 20:37	06:30 19:51	07:33 (LZ26) 18:54	06:42 17:04	07:29 (LZ35) 16:34	07:43 16:40
31	05:56 20:35	06:31 19:49	07:31 (LZ26) 18:09	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)	Minutes with flicker	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:

11/09/2024 12:51 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	10 19:52 (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		398		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)		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)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)



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
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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 20:45	06:17 20:08	06:52 19:14	07:27 18:21	07:07 16:41	07:38 16:34
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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
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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: 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 18	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) 20:50
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) 20:51
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) 20:51
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) 20:52
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) 20:52
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) 20:53
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) 20:53
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) 20:54
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) 20:54
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) 20:54
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) 20:55
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) 20:55
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) 20:55
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) 20:55
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) 20:55
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) 20:55
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) 20:55
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) 20:56
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) 20:56
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) 20:56
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) 20:56
Potential sun hours	289	293	369	402	456	462
Total, worst case	249	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) 18:04	07:21 16:34	07:43 16:40
31	05:56 20:35	06:31 19:49	07:22 (LZ40) 19:41	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	707

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			06:12		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			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 16:42	07:27 17:19	16:15 (LZ54) 16:30 (LZ54)	06:48 17:57	06:53 19:35	05:31 20:44
2	07:44 16:43	07:26 17:20	16:16 (LZ54) 16:27 (LZ54)	06:46 17:58	06:51 19:36	05:30 20:45
3	07:44 16:44	07:25 17:22	16:19 (LZ54) 16:24 (LZ54)	06:45 17:59	06:49 19:37	05:30 20:45
4	07:44 16:45	07:24 17:23	06:43 18:01	06:47 19:39	05:59 20:15	05:29 20:46
5	07:44 16:46	07:23 17:24	06:41 18:02	06:46 19:40	05:57 20:16	05:29 20:47
6	07:43 16:47	07:22 17:26	06:39 18:03	06:44 19:41	05:56 20:17	05:29 20:48
7	07:43 16:48	07:20 17:27	06:38 18:04	17:30 (LZ47) 17:39 (LZ47)	06:42 19:42	05:55 20:18
8	07:43 16:49	07:19 17:29	06:36 18:06	17:28 (LZ47) 17:42 (LZ47)	06:40 19:44	05:53 20:19
9	07:43 16:50	16:12 (LZ54) 16:17 (LZ54)	06:34 18:07	17:26 (LZ47) 17:43 (LZ47)	06:39 19:45	05:52 20:20
10	07:43 16:51	16:11 (LZ54) 16:20 (LZ54)	07:17 17:31	06:32 18:08	06:37 19:46	05:51 20:21
11	07:42 16:52	9 16:09 (LZ54) 16:21 (LZ54)	07:15 17:33	06:31 18:09	06:35 19:47	05:50 20:23
12	07:42 16:53	12 16:09 (LZ54) 16:23 (LZ54)	07:14 17:34	06:29 18:11	06:33 19:48	05:49 20:24
13	07:42 16:54	14 16:09 (LZ54) 16:24 (LZ54)	07:13 17:35	06:27 18:12	06:32 19:49	05:47 20:25
14	07:41 16:56	15 16:08 (LZ54) 16:25 (LZ54)	07:11 17:37	06:25 18:13	06:30 19:51	05:46 20:26
15	07:41 16:57	17 16:07 (LZ54) 16:26 (LZ54)	07:10 17:38	06:24 18:14	06:28 19:52	05:45 20:27
16	07:40 16:58	19 16:08 (LZ54) 16:27 (LZ54)	07:08 17:40	06:22 18:16	06:27 19:53	05:44 20:28
17	07:40 16:59	21 16:07 (LZ54) 16:28 (LZ54)	07:07 17:41	06:20 18:17	06:25 19:54	05:43 20:29
18	07:39 17:00	23 16:08 (LZ54) 16:29 (LZ54)	07:05 17:42	06:18 18:18	06:23 19:55	05:42 20:30
19	07:39 17:02	21 16:07 (LZ54) 16:30 (LZ54)	07:04 17:44	06:16 18:19	06:22 19:57	05:41 20:31
20	07:38 17:03	23 16:07 (LZ54) 16:30 (LZ54)	07:02 17:45	06:15 18:21	06:20 19:58	05:40 20:32
21	07:37 17:04	23 16:07 (LZ54) 16:30 (LZ54)	07:01 17:46	06:13 18:22	06:18 19:59	05:39 20:33
22	07:37 17:06	24 16:08 (LZ54) 16:32 (LZ54)	06:59 17:48	06:11 18:23	06:17 20:00	05:38 20:34
23	07:36 17:07	24 16:08 (LZ54) 16:32 (LZ54)	06:58 17:49	06:09 18:24	06:15 20:01	05:37 20:35
24	07:35 17:08	24 16:08 (LZ54) 16:32 (LZ54)	06:56 17:50	06:07 18:25	06:14 20:03	05:36 20:36
25	07:34 17:09	24 16:08 (LZ54) 16:32 (LZ54)	06:54 17:52	06:05 18:27	06:12 20:04	05:36 20:37
26	07:33 17:11	23 16:09 (LZ54) 16:32 (LZ54)	06:53 17:53	06:04 18:28	06:10 20:05	05:35 20:38
27	07:32 17:12	23 16:09 (LZ54) 16:32 (LZ54)	06:51 17:54	06:02 18:29	06:09 20:06	05:34 20:39
28	07:32 17:14	22 16:10 (LZ54) 16:32 (LZ54)	06:50 17:55	06:00 18:30	06:07 20:07	05:33 20:40
29	07:31 17:15	21 16:11 (LZ54) 16:32 (LZ54)	06:58 17:56	06:58 19:31	06:06 20:09	05:33 20:41
30	07:30 17:16	19 16:12 (LZ54) 16:31 (LZ54)	06:56 17:57	06:56 19:33	06:04 20:10	05:32 20:42
31	07:29 17:18	17 16:13 (LZ54) 16:30 (LZ54)	06:55 17:58	06:55 19:34	05:31 20:43	05:30 20:44
Potential sun hours	289	293	369	402	456	462
Total, worst case	442	31	251			

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_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 18:52	18:02 (LZ47) 18:24 (LZ47)	06:44 17:01	07:22 16:34	15:51 (LZ54) 16:03 (LZ54)
2	05:31 20:55	05:58 20:33	06:33 19:45	07:07 18:50	18:02 (LZ47) 18:23 (LZ47)	06:45 17:00	07:23 16:33	15:54 (LZ54) 16:03 (LZ54)
3	05:32 20:55	05:59 20:31	06:34 19:43	07:08 18:49	18:02 (LZ47) 18:22 (LZ47)	06:47 16:59	07:25 16:33	15:56 (LZ54) 16:01 (LZ54)
4	05:32 20:55	06:00 20:30	06:35 19:42	07:09 18:47	18:02 (LZ47) 18:21 (LZ47)	06:48 16:57	07:26 16:33	
5	05:33 20:54	06:01 20:29	06:36 19:40	07:10 18:45	18:04 (LZ47) 18:20 (LZ47)	06:49 16:56	07:27 16:33	
6	05:34 20:54	06:02 20:28	06:37 19:38	07:12 18:43	18:05 (LZ47) 18:17 (LZ47)	06:51 16:55	07:28 16:32	
7	05:34 20:54	06:04 20:26	06:38 19:36	07:13 18:41	18:09 (LZ47) 18:13 (LZ47)	06:52 16:54	07:29 16:32	
8	05:35 20:53	06:05 20:25	06:40 19:34	07:14 18:40		06:53 15:50 (LZ54)	07:30 16:32	
9	05:36 20:53	06:06 20:24	06:41 19:33	07:15 18:38		6 15:56 (LZ54) 15:46 (LZ54)	07:31 16:32	
10	05:36 20:53	06:07 20:22	06:42 19:31	07:16 18:36		12 15:58 (LZ54) 15:45 (LZ54)	07:32 16:32	
11	05:37 20:52	06:08 20:21	06:43 19:29	07:18 18:34		16 16:01 (LZ54) 15:44 (LZ54)	07:32 16:32	
12	05:38 20:52	06:09 20:19	06:44 19:27	07:19 18:33		17 16:01 (LZ54) 15:43 (LZ54)	07:33 16:32	
13	05:39 20:51	06:10 20:18	06:45 19:25	07:20 18:31		19 16:02 (LZ54) 15:43 (LZ54)	07:34 16:32	
14	05:39 20:50	06:11 20:16	06:46 19:23	07:21 18:29		21 16:04 (LZ54) 16:47	07:35 16:32	
15	05:40 20:50	06:12 20:15	06:47 19:22	07:22 18:28		22 16:04 (LZ54) 16:46	07:36 16:32	
16	05:41 20:49	06:14 20:13	06:49 19:20	07:24 18:26		23 16:05 (LZ54) 16:45	07:36 16:33	
17	05:42 20:48	06:15 20:12	06:50 19:18	07:25 18:24		24 16:05 (LZ54) 16:43	07:37 16:33	
18	05:43 20:48	06:16 20:10	06:51 19:16	07:26 18:23		24 15:42 (LZ54) 16:42	07:38 16:33	
19	05:44 20:47	06:17 20:09	06:52 19:14	07:27 18:21		24 15:42 (LZ54) 16:41	07:38 16:34	
20	05:45 20:46	06:18 20:07	06:53 19:12	07:29 18:19		24 15:43 (LZ54) 16:40	07:39 16:34	
21	05:46 20:45	06:19 20:05	06:54 19:11	07:30 18:18		23 16:07 (LZ54) 16:40	07:40 16:34	
22	05:47 20:44	06:20 20:04	06:55 19:09	07:31 18:16		23 15:43 (LZ54) 16:39	07:40 16:35	
23	05:48 20:43	06:21 20:02	06:57 19:07	18:12 (LZ47) 18:20 (LZ47)		23 15:44 (LZ54) 16:38	07:41 16:35	
24	05:49 20:42	06:23 20:01	06:58 19:05	18:09 (LZ47) 18:22 (LZ47)		21 15:45 (LZ54) 16:37	07:41 16:36	
25	05:50 20:42	06:24 19:59	06:59 19:03	18:07 (LZ47) 18:23 (LZ47)		21 15:45 (LZ54) 16:37	07:42 16:37	
26	05:51 20:41	06:25 19:57	07:00 19:01	18:05 (LZ47) 18:24 (LZ47)		19 15:46 (LZ54) 16:36	07:42 16:37	
27	05:52 20:39	06:26 19:55	07:01 19:00	18:04 (LZ47) 18:24 (LZ47)		19 15:47 (LZ54) 16:36	07:42 16:38	
28	05:53 20:38	06:27 19:54	07:02 18:58	18:03 (LZ47) 18:24 (LZ47)		17 15:48 (LZ54) 16:35	07:43 16:39	
29	05:54 20:37	06:28 19:52	07:03 18:56	18:03 (LZ47) 18:25 (LZ47)		16 15:49 (LZ54) 16:35	07:43 16:39	
30	05:55 20:36	06:29 19:50	07:05 18:54	18:02 (LZ47) 18:25 (LZ47)		14 15:50 (LZ54) 16:34	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			142	114	451	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: 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		07:27	16:32 (LZ54)	06:48		06:53	06:03	05:31
	16:42		17:19	19 16:51 (LZ54)	17:57		19:35	20:11	20:44
2	07:44		07:26	16:31 (LZ54)	06:46		06:51	06:02	05:30
	16:43		17:20	20 16:51 (LZ54)	17:58		19:36	20:12	20:45
3	07:44		07:25	16:31 (LZ54)	06:45		06:49	06:00	05:30
	16:44		17:22	21 16:52 (LZ54)	17:59		19:37	20:13	20:45
4	07:44		07:24	16:30 (LZ54)	06:43		06:47	05:59	05:29
	16:45		17:23	23 16:53 (LZ54)	18:01		19:39	20:15	20:46
5	07:44		07:23	16:31 (LZ54)	06:41		06:46	05:57	05:29
	16:46		17:24	22 16:53 (LZ54)	18:02		19:40	20:16	20:47
6	07:43		07:22	16:31 (LZ54)	06:39		06:44	05:56	05:29
	16:47		17:26	23 16:54 (LZ54)	18:03		19:41	20:17	20:48
7	07:43		07:20	16:30 (LZ54)	06:38		06:42	05:55	05:28
	16:48		17:27	23 16:53 (LZ54)	18:04		19:42	20:18	20:48
8	07:43		07:19	16:31 (LZ54)	06:36		06:40	05:53	05:28
	16:49		17:29	22 16:53 (LZ54)	18:06		19:43	20:19	20:49
9	07:43		07:18	16:32 (LZ54)	06:34		06:39	05:52	05:28
	16:50		17:30	22 16:54 (LZ54)	18:07		19:45	20:20	20:50
10	07:43		07:17	16:31 (LZ54)	06:32		06:37	05:51	05:27
	16:51		17:31	22 16:53 (LZ54)	18:08		19:46	20:21	20:50
11	07:42		07:15	16:33 (LZ54)	06:31		06:35	05:50	05:27
	16:52		17:33	19 16:52 (LZ54)	18:09		19:47	20:23	20:51
12	07:42		07:14	16:33 (LZ54)	06:29		06:33	05:49	05:27
	16:53		17:34	18 16:51 (LZ54)	18:11		19:48	20:24	20:51
13	07:42		07:13	16:35 (LZ54)	06:27		06:32	05:47	05:27
	16:54		17:35	15 16:50 (LZ54)	18:12		19:49	20:25	20:52
14	07:41		07:11	16:37 (LZ54)	06:25		06:30	05:46	05:27
	16:56		17:37	11 16:48 (LZ54)	18:13		19:51	20:26	20:52
15	07:41		07:10		06:24		06:28	05:45	05:27
	16:57		17:38		18:14		19:52	20:27	20:53
16	07:40		07:08		06:22	17:41 (LZ47)	06:27	05:44	05:27
	16:58		17:40		18:16	11 17:52 (LZ47)	19:53	20:28	20:53
17	07:40		07:07		06:20	17:39 (LZ47)	06:25	05:43	05:27
	16:59		17:41		18:17	15 17:54 (LZ47)	19:54	20:29	20:54
18	07:39		07:05		06:18	17:37 (LZ47)	06:23	05:42	05:27
	17:00		17:42		18:18	18 17:55 (LZ47)	19:55	20:30	20:54
19	07:39		07:04		06:16	17:37 (LZ47)	06:22	05:41	05:27
	17:02		17:44		18:19	19 17:56 (LZ47)	19:57	20:31	20:54
20	07:38		07:02		06:15	17:36 (LZ47)	06:20	05:40	05:27
	17:03		17:45		18:21	20 17:56 (LZ47)	19:58	20:32	20:55
21	07:37		07:01		06:13	17:35 (LZ47)	06:18	05:39	05:27
	17:04		17:46		18:22	21 17:56 (LZ47)	19:59	20:33	20:55
22	07:37		06:59		06:11	17:34 (LZ47)	06:17	05:38	05:27
	17:06		17:48		18:23	21 17:55 (LZ47)	20:00	20:34	20:55
23	07:36		06:58		06:09	17:34 (LZ47)	06:15	05:37	05:28
	17:07		17:49		18:24	21 17:55 (LZ47)	20:01	20:35	20:55
24	07:35		06:56		06:07	17:35 (LZ47)	06:14	05:36	05:28
	17:08		17:50		18:25	20 17:55 (LZ47)	20:03	20:36	20:55
25	07:34		06:54		06:05	17:35 (LZ47)	06:12	05:36	05:28
	17:09		17:52		18:27	19 17:54 (LZ47)	20:04	20:37	20:55
26	07:33		06:53		06:04	17:36 (LZ47)	06:10	05:35	05:28
	17:11		17:53		18:28	16 17:52 (LZ47)	20:05	20:38	20:56
27	07:32		06:51		06:02	17:37 (LZ47)	06:09	05:34	05:29
	17:12		17:54		18:29	13 17:50 (LZ47)	20:06	20:39	20:56
28	07:32	16:38 (LZ54)	06:50		06:00	17:39 (LZ47)	06:07	05:33	05:29
	17:14	5 16:43 (LZ54)	17:55		18:30	8 17:47 (LZ47)	20:07	20:40	20:56
29	07:31	16:35 (LZ54)			06:58		06:06	05:33	05:30
	17:15	11 16:46 (LZ54)			19:31		20:09	20:41	20:56
30	07:30	16:34 (LZ54)			06:56		06:04	05:32	05:30
	17:16	14 16:48 (LZ54)			19:33		20:10	20:42	20:55
31	07:29	16:33 (LZ54)			06:55			05:31	
	17:18	17 16:50 (LZ54)			19:34			20:43	
Potential sun hours	289		293		369		402	456	462
Total, worst case	47		280		222				

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

	July	August	September	October	November	December	
1	05:31 20:55	05:57 20:34	06:32 19:47	07:06 18:52	06:44 17:01	16:01 (LZ54) 16:22 (LZ54)	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	16:00 (LZ54) 16:22 (LZ54)	07:23 16:33
3	05:32 20:55	05:59 20:31	06:34 19:43	07:08 18:49	06:47 16:59	16:01 (LZ54) 16:23 (LZ54)	07:24 16:33
4	05:32 20:55	06:00 20:30	06:35 19:42	07:09 18:47	06:48 16:57	16:00 (LZ54) 16:23 (LZ54)	07:26 16:33
5	05:33 20:54	06:01 20:29	06:36 19:40	07:10 18:45	06:49 16:56	16:01 (LZ54) 16:24 (LZ54)	07:27 16:33
6	05:34 20:54	06:02 20:28	06:37 19:38	07:12 18:43	06:51 16:55	16:00 (LZ54) 16:23 (LZ54)	07:28 16:32
7	05:34 20:54	06:04 20:26	06:38 19:36	07:13 18:41	06:52 16:54	16:00 (LZ54) 16:23 (LZ54)	07:29 16:32
8	05:35 20:53	06:05 20:25	06:40 19:34	07:14 18:40	06:53 16:52	16:01 (LZ54) 16:23 (LZ54)	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	16:02 (LZ54) 16:22 (LZ54)	07:31 16:32
10	05:36 20:53	06:07 20:22	06:42 19:31	07:16 18:36	06:56 16:50	16:03 (LZ54) 16:22 (LZ54)	07:32 16:32
11	05:37 20:52	06:08 20:21	06:43 19:29	07:18 18:34	06:57 16:49	16:04 (LZ54) 16:20 (LZ54)	07:32 16:32
12	05:38 20:52	06:09 20:19	06:44 19:27	07:19 18:33	06:59 16:48	16:05 (LZ54) 16:19 (LZ54)	07:33 16:32
13	05:39 20:51	06:10 20:18	06:45 19:25	07:20 18:31	07:00 16:47	16:07 (LZ54) 16:18 (LZ54)	07:34 16:32
14	05:39 20:50	06:11 20:16	06:46 19:23	07:21 18:29	07:01 16:46	16:10 (LZ54) 16:14 (LZ54)	07:35 16:32
15	05:40 20:50	06:12 20:15	06:47 19:22	18:30 (LZ47) 18:28	07:03 16:45		07:36 16:32
16	05:41 20:49	06:14 20:13	06:49 19:20	18:27 (LZ47) 18:26	07:04 16:44		07:36 16:33
17	05:42 20:48	06:15 20:12	06:50 19:18	18:24 (LZ47) 18:24	07:05 16:43		07:37 16:33
18	05:43 20:48	06:16 20:10	06:51 19:16	18:23 (LZ47) 18:23	07:06 16:42		07:38 16:33
19	05:44 20:47	06:17 20:09	06:52 19:14	18:22 (LZ47) 18:21	07:08 16:41		07:38 16:34
20	05:45 20:46	06:18 20:07	06:53 19:12	18:21 (LZ47) 18:19	07:09 16:40		07:39 16:34
21	05:46 20:45	06:19 20:05	06:54 19:11	18:20 (LZ47) 18:18	07:10 16:40		07:40 16:34
22	05:47 20:44	06:20 20:04	06:55 19:09	18:20 (LZ47) 18:16	07:11 16:39		07:40 16:35
23	05:48 20:43	06:21 20:02	06:56 19:07	18:20 (LZ47) 18:15	07:13 16:38		07:41 16:35
24	05:49 20:42	06:23 20:01	06:58 19:05	18:20 (LZ47) 18:13	07:14 16:37		07:41 16:36
25	05:50 20:41	06:24 19:59	06:59 19:03	18:20 (LZ47) 17:12	07:15 16:37		07:42 16:37
26	05:51 20:40	06:25 19:57	07:00 19:01	18:21 (LZ47) 17:10	07:16 16:36		07:42 16:37
27	05:52 20:39	06:26 19:55	07:01 19:00	18:22 (LZ47) 17:09	06:38 16:09 (LZ54) 16:15 (LZ54)	07:18 16:36	07:42 16:38
28	05:53 20:38	06:27 19:54	07:02 18:58	18:25 (LZ47) 17:07	06:39 16:06 (LZ54) 16:17 (LZ54)	07:19 16:35	07:43 16:39
29	05:54 20:37	06:28 19:52	07:03 18:56	18:31 (LZ47) 17:06	16:39 16:04 (LZ54) 16:20 (LZ54)	16:35 16:35	16:39 07:43
30	05:55 20:36	06:29 19:50	07:05 18:54	17:06 16:42	16 16:03 (LZ54) 16:21 (LZ54)	16:35 07:21 16:34	16:39 07:43 16:40
31	05:56 20:35	06:31 19:49		06:43 17:03	16:02 (LZ54) 20 16:22 (LZ54)		07:43 16:41
Potential sun hours	468	433	376	342	291		279
Total, worst case			226	71	263		

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 16:42	07:27 17:19	06:48 17:57			06:53 19:35	21	07:49 (LZ21) 08:10 (LZ21)	06:03 20:11	05:31 20:44	05:31 20:55	05:57 20:34		06:32 19:47	44	07:34 (LZ21) 08:18 (LZ21)	07:06 18:52	06:44 17:01	07:22 16:34
2	07:44 16:43	07:26 17:20	06:46 17:58			06:51 19:36	26	07:46 (LZ21) 08:12 (LZ21)	06:02 20:12	05:30 20:45	05:31 20:55	05:58 20:33		06:33 19:45	43	07:34 (LZ21) 08:17 (LZ21)	07:07 18:50	06:45 17:00	07:23 16:33
3	07:44 16:44	07:25 17:22	06:45 17:59			06:49 19:38	29	07:44 (LZ21) 08:13 (LZ21)	06:00 20:13	05:30 20:45	05:32 20:55	05:59 20:31		06:34 19:43	42	07:34 (LZ21) 08:16 (LZ21)	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			06:47 19:39	34	07:42 (LZ21) 08:16 (LZ21)	05:59 20:15	05:29 20:46	05:32 20:55	06:00 20:30		06:35 19:42	41	07:34 (LZ21) 08:15 (LZ21)	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	35	07:41 (LZ21) 08:16 (LZ21)	05:57 20:16	05:29 20:47	05:33 20:55	06:01 20:29		06:36 19:40	39	07:35 (LZ21) 08:14 (LZ21)	07:10 18:45	06:49 16:56	07:27 16:32
6	07:44 16:47	07:22 17:26	06:39 18:03			06:44 19:41	38	07:39 (LZ21) 08:17 (LZ21)	05:56 20:17	05:28 20:48	05:33 20:54	06:02 20:28		06:37 19:38	38	07:35 (LZ21) 08:13 (LZ21)	07:12 18:43	06:51 16:55	07:28 16:32
7	07:43 16:48	07:21 17:27	06:38 18:04			06:42 19:42	39	07:38 (LZ21) 08:17 (LZ21)	05:55 20:18	05:28 20:48	05:34 20:54	06:03 20:26		06:38 19:36	35	07:36 (LZ21) 08:11 (LZ21)	07:13 18:41	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	41	07:37 (LZ21) 08:18 (LZ21)	05:53 20:19	05:28 20:49	05:35 20:54	06:05 20:25		06:40 19:34	34	07:36 (LZ21) 08:10 (LZ21)	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	42	07:36 (LZ21) 08:18 (LZ21)	05:52 20:20	05:28 20:50	05:35 20:53	06:06 20:24		06:41 19:33	30	07:38 (LZ21) 08:08 (LZ21)	07:15 18:38	06:55 16:51	07:31 16:32
10	07:43 16:51	07:17 17:31	06:32 18:08			06:37 19:46	43	07:35 (LZ21) 08:18 (LZ21)	05:51 20:22	05:27 20:50	05:36 20:53	06:07 20:22		06:42 19:31	27	07:39 (LZ21) 08:06 (LZ21)	07:16 18:36	06:56 16:50	07:32 16:32
11	07:42 16:52	07:15 17:33	06:31 18:09			06:35 19:47	44	07:34 (LZ21) 08:18 (LZ21)	05:50 20:23	05:27 20:51	05:37 20:52	06:08 20:21		06:43 19:29	22	07:41 (LZ21) 08:03 (LZ21)	07:18 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	44	07:34 (LZ21) 08:18 (LZ21)	05:48 20:24	05:27 20:51	05:38 20:52	06:09 20:19		06:44 19:27	15	07:44 (LZ21) 07:59 (LZ21)	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	45	07:33 (LZ21) 08:18 (LZ21)	05:47 20:25	05:27 20:52	05:39 20:51	06:10 20:18	07:54 (LZ21) 08:04 (LZ21)	06:45 19:25		07:20 18:31	07:00 16:47	07:34 16:32	
14	07:41 16:55	07:11 17:37	06:25 18:13			06:30 19:51	44	07:33 (LZ21) 08:17 (LZ21)	05:46 20:26	05:27 20:52	05:39 20:50	06:11 20:16	07:50 (LZ21) 08:08 (LZ21)	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	06:24 18:14			06:28 19:52	44	07:33 (LZ21) 08:17 (LZ21)	05:45 20:27	05:27 20:53	05:40 20:50	06:12 20:15	07:47 (LZ21) 08:10 (LZ21)	06:47 19:22		07:22 18:28	07:03 16:45	07:36 16:32	
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23	07:36 17:07	06:58 17:49	06:09 18:24			06:15 20:01	36	07:35 (LZ21) 08:11 (LZ21)	05:37 20:36	05:27 20:55	05:48 20:43	06:21 20:02	07:37 (LZ21) 08:18 (LZ21)	06:56 19:07		07:33 18:15	07:13 16:38	07:41 16:35	
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25	07:34 17:09	06:54 17:51	06:05 18:27			06:12 20:04	32	07:36 (LZ21) 08:08 (LZ21)	05:36 20:37	05:28 20:56	05:50 20:42	06:24 19:59	07:36 (LZ21) 08:18 (LZ21)	06:59 19:03		06:35 17:12	07:15 16:37	07:42 16:37	
26	07:33 17:11	06:53 17:53	06:04 18:28			06:10 20:05	29	07:37 (LZ21) 08:06 (LZ21)	05:35 20:38	05:28 20:56	05:51 20:41	06:25 19:57	07:35 (LZ21) 08:19 (LZ21)	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	25	07:39 (LZ21) 08:04 (LZ21)	05:34 20:39	05:29 20:56	05:52 20:40	06:26 19:56	07:35 (LZ21) 08:18 (LZ21)	07:01 19:00		06:38 17:09	07:18 16:36	07:42 16:38	
28	07:32 17:13	06:50 17:55	06:00 18:30			06:07 20:07	22	07:40 (LZ21) 08:02 (LZ21)	05:33 20:40	05:29 20:56	05:53 20:38	06:27 19:54	07:34 (LZ21) 08:18 (LZ21)	07:02 18:58		06:39 17:07	07:19 16:35	07:43 16:39	
29	07:31 17:15	06:48 17:53	06:58 18:31			06:06 20:09	16	07:43 (LZ21) 07:59 (LZ21)	05:33 20:41	05:30 20:56	05:54 20:37	06:28 19:52	07:34 (LZ21) 08:18 (LZ21)	07:03 18:56		06:40 17:06	07:20 16:35	07:43 16:39	
30	07:30 17:16	06:46 17:53	06:56 18:32			06:04 20:10	8	07:47 (LZ21) 07:55 (LZ21)	05:32 20:42	05:30 20:56	05:55 20:36	06:29 19:50	07:33 (LZ21) 08:18 (LZ21)	07:05 18:54		06:42 17:04	07:21 16:34	07:43 16:40	
31	07:29 17:18	06:45 17:54	06:55 18:33	07:53 (LZ21) 08:07 (LZ21)	14	06:04 20:09		06:07 20:10	05:31 20:43	05:31 20:56	06:31 20:35	06:31 19:49	07:33 (LZ21) 08:17 (LZ21)	07:05 18:54		06:43 17:03	07:21 16:41	07:43 16:41	
Potential sun hours	289	293	369			402		456	462	468	433	376	410	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: 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	July	August	September	October	November	December				
1	07:44	07:27	06:48	06:53	06:03	07:03 (LZ21)	05:31	07:09 (LZ21)	05:31	07:21 (LZ21)	05:57	07:10 (LZ21)	06:32	07:06	06:44	07:22
	16:42	17:19	17:57	19:35	20:11	44 07:47 (LZ21)	20:44	32 07:41 (LZ21)	20:55	19 07:40 (LZ21)	20:34	48 07:58 (LZ21)	19:47	18:52	17:01	16:34
2	07:44	07:26	06:46	06:51	06:02	07:03 (LZ21)	05:30	07:09 (LZ21)	05:31	07:20 (LZ21)	05:58	07:10 (LZ21)	06:33	07:07	06:45	07:23
	16:43	17:20	17:58	19:36	20:12	45 07:48 (LZ21)	20:45	31 07:40 (LZ21)	20:53	20 07:40 (LZ21)	20:33	48 07:58 (LZ21)	19:45	18:51	17:00	16:33
3	07:44	07:25	06:45	06:49	06:00	07:02 (LZ21)	05:30	07:10 (LZ21)	05:32	07:20 (LZ21)	05:59	07:10 (LZ21)	06:34	07:08	06:47	07:25
	16:44	17:22	17:59	19:38	20:13	45 07:47 (LZ21)	20:45	30 07:40 (LZ21)	20:55	21 07:41 (LZ21)	20:31	48 07:58 (LZ21)	19:43	18:49	16:59	16:33
4	07:44	07:24	06:43	06:47	05:59	07:01 (LZ21)	05:29	07:10 (LZ21)	05:32	07:19 (LZ21)	06:00	07:10 (LZ21)	06:35	07:09	06:48	07:26
	16:45	17:23	18:01	19:39	20:15	47 07:48 (LZ21)	20:46	29 07:39 (LZ21)	20:55	23 07:42 (LZ21)	20:30	48 07:58 (LZ21)	19:42	18:47	16:57	16:33
5	07:44	07:23	06:41	06:46	05:57	07:01 (LZ21)	05:29	07:11 (LZ21)	05:33	07:19 (LZ21)	06:01	07:10 (LZ21)	06:36	07:10	06:49	07:27
	16:46	17:24	18:02	19:40	20:16	47 07:48 (LZ21)	20:47	28 07:39 (LZ21)	20:55	24 07:43 (LZ21)	20:29	48 07:58 (LZ21)	19:40	18:45	16:56	16:32
6	07:44	07:22	06:39	06:44	05:56	07:01 (LZ21)	05:28	07:13 (LZ21)	05:33	07:19 (LZ21)	06:02	07:11 (LZ21)	06:37	07:12	06:51	07:28
	16:47	17:26	18:03	19:41	20:17	48 07:49 (LZ21)	20:48	25 07:38 (LZ21)	20:54	25 07:44 (LZ21)	20:28	48 07:59 (LZ21)	19:38	18:43	16:52	16:32
7	07:43	07:21	06:38	06:42	05:55	07:00 (LZ21)	05:28	07:13 (LZ21)	05:34	07:18 (LZ21)	06:03	07:11 (LZ21)	06:38	07:13	06:52	07:29
	16:48	17:27	18:04	19:42	20:18	48 07:48 (LZ21)	20:48	24 07:37 (LZ21)	20:54	26 07:44 (LZ21)	20:26	47 07:58 (LZ21)	19:36	18:41	16:54	16:32
8	07:43	07:19	06:36	06:40	05:53	07:00 (LZ21)	05:28	07:14 (LZ21)	05:35	07:18 (LZ21)	06:05	07:11 (LZ21)	06:40	07:14	06:53	07:30
	16:49	17:29	18:06	19:44	20:19	48 07:48 (LZ21)	20:49	23 07:37 (LZ21)	20:54	28 07:46 (LZ21)	20:25	47 07:58 (LZ21)	19:34	18:40	16:52	16:32
9	07:43	07:18	06:34	06:39	05:52	07:00 (LZ21)	05:28	07:15 (LZ21)	05:35	07:18 (LZ21)	06:06	07:11 (LZ21)	06:41	07:15	06:55	07:31
	16:50	17:30	18:07	19:45	20:20	49 07:49 (LZ21)	20:50	22 07:37 (LZ21)	20:53	29 07:47 (LZ21)	20:24	46 07:57 (LZ21)	19:33	18:38	16:51	16:32
10	07:43	07:17	06:32	06:37	05:51	07:00 (LZ21)	05:27	07:16 (LZ21)	05:36	07:17 (LZ21)	06:07	07:11 (LZ21)	06:42	07:16	06:56	07:32
	16:51	17:31	18:08	19:46	20:22	49 07:49 (LZ21)	20:50	20 07:36 (LZ21)	20:53	30 07:47 (LZ21)	20:22	46 07:57 (LZ21)	19:32	18:37	16:52	16:32
11	07:42	07:15	06:31	06:35	05:50	07:00 (LZ21)	05:27	07:16 (LZ21)	05:37	07:16 (LZ21)	06:08	07:12 (LZ21)	06:43	07:18	06:57	07:32
	16:52	17:33	18:09	19:47	20:23	49 07:49 (LZ21)	20:51	19 07:35 (LZ21)	20:52	32 07:48 (LZ21)	20:21	44 07:56 (LZ21)	19:29	18:34	16:49	16:32
12	07:42	07:14	06:29	06:33	05:48	06:59 (LZ21)	05:27	07:17 (LZ21)	05:38	07:16 (LZ21)	06:09	07:12 (LZ21)	06:44	07:19	06:59	07:33
	16:53	17:34	18:11	19:48	20:24	49 07:48 (LZ21)	20:51	17 07:34 (LZ21)	20:52	33 07:49 (LZ21)	20:19	43 07:55 (LZ21)	19:27	18:33	16:48	16:32
13	07:42	07:13	06:27	06:32	05:47	06:59 (LZ21)	05:27	07:18 (LZ21)	05:39	07:16 (LZ21)	06:10	07:13 (LZ21)	06:45	07:20	07:00	07:34
	16:54	17:35	18:12	19:50	20:25	49 07:48 (LZ21)	20:52	16 07:34 (LZ21)	20:51	34 07:50 (LZ21)	20:18	41 07:54 (LZ21)	19:25	18:31	16:47	16:32
14	07:41	07:11	06:25	06:30	05:46	06:59 (LZ21)	05:27	07:19 (LZ21)	05:39	07:15 (LZ21)	06:11	07:13 (LZ21)	06:46	07:21	07:01	07:35
	16:55	17:37	18:13	19:51	20:26	48 07:47 (LZ21)	20:52	15 07:34 (LZ21)	20:50	35 07:50 (LZ21)	20:16	40 07:53 (LZ21)	19:23	18:29	16:46	16:32
15	07:41	07:10	06:24	06:28	05:45	07:00 (LZ21)	05:27	07:19 (LZ21)	05:40	07:14 (LZ21)	06:12	07:14 (LZ21)	06:47	07:22	07:03	07:36
	16:57	17:38	18:14	19:52	20:27	47 07:47 (LZ21)	20:53	14 07:33 (LZ21)	20:50	37 07:51 (LZ21)	20:15	38 07:52 (LZ21)	19:22	18:28	16:45	16:32
16	07:40	07:08	06:22	06:27	05:44	07:00 (LZ21)	05:27	07:20 (LZ21)	05:41	07:14 (LZ21)	06:14	07:15 (LZ21)	06:49	07:24	07:04	07:37
	16:58	17:39	18:16	19:53	20:28	47 07:47 (LZ21)	20:53	13 07:33 (LZ21)	20:49	38 07:52 (LZ21)	20:13	36 07:51 (LZ21)	19:20	18:26	16:44	16:33
17	07:40	07:07	06:20	06:25	05:43	07:00 (LZ21)	05:27	07:21 (LZ21)	05:42	07:14 (LZ21)	06:15	07:16 (LZ21)	06:50	07:25	07:05	07:37
	16:59	17:41	18:17	19:54	20:29	47 07:47 (LZ21)	20:54	12 07:33 (LZ21)	20:48	39 07:53 (LZ21)	20:12	33 07:49 (LZ21)	19:18	18:24	16:43	16:33
18	07:39	07:05	06:18	06:23	05:42	07:00 (LZ21)	05:27	07:21 (LZ21)	05:43	07:14 (LZ21)	06:16	07:17 (LZ21)	06:51	07:26	07:06	07:38
	17:00	17:42	18:18	19:55	20:30	46 07:46 (LZ21)	20:54	11 07:32 (LZ21)	20:48	39 07:53 (LZ21)	20:10	30 07:47 (LZ21)	19:16	18:23	16:42	16:33
19	07:39	07:04	06:16	06:22	05:41	07:00 (LZ21)	05:27	07:23 (LZ21)	05:44	07:13 (LZ21)	06:17	07:19 (LZ21)	06:52	07:27	07:08	07:39
	17:02	17:44	18:19	19:57	20:31	46 07:46 (LZ21)	20:54	10 07:33 (LZ21)	20:47	41 07:54 (LZ21)	20:09	26 07:45 (LZ21)	19:14	18:21	16:41	16:34
20	07:38	07:02	06:15	06:20	05:40	07:02 (LZ21)	05:27	07:23 (LZ21)	05:45	07:13 (LZ21)	06:18	07:22 (LZ21)	06:53	07:29	07:09	07:39
	17:03	17:45	18:21	19:58	20:32	44 07:46 (LZ21)	20:55	10 07:33 (LZ21)	20:46	42 07:55 (LZ21)	20:07	21 07:43 (LZ21)	19:12	18:19	16:40	16:34
21	07:37	07:01	06:13	06:18	05:39	07:02 (LZ21)	05:27	07:23 (LZ21)	05:46	07:12 (LZ21)	06:19	07:26 (LZ21)	06:54	07:30	07:10	07:40
	17:04	17:46	18:22	19:59	20:34	44 07:46 (LZ21)	20:55	10 07:33 (LZ21)	20:45	43 07:55 (LZ21)	20:05	13 07:39 (LZ21)	19:11	18:18	16:39	16:34
22	07:37	06:59	06:11	06:17	05:38	07:02 (LZ21)	05:27	07:23 (LZ21)	05:47	07:12 (LZ21)	06:20		06:55	07:31	07:12	07:40
	17:05	17:48	18:23	20:00	20:35	43 07:45 (LZ21)	20:54	10 07:33 (LZ21)	20:44	43 07:55 (LZ21)	20:04		19:09	18:16	16:39	16:35
23	07:36	06:58	06:09	06:15	05:37	07:02 (LZ21)	05:27	07:23 (LZ21)	05:48	07:11 (LZ21)	06:21		06:56	07:33	07:13	07:41
	17:07	17:49	18:24	20:01	20:36	43 07:45 (LZ21)	20:55	10 07:33 (LZ21)	20:43	45 07:56 (LZ21)	20:02		19:07	18:15	16:38	16:35
24	07:35	06:56	06:07	06:14	05:36	07:03 (LZ21)	05:28	07:24 (LZ21)	05:49	07:11 (LZ21)	06:23		06:58	07:34	07:14	07:41
	17:08	17:50	18:25	20:03	20:37	41 07:44 (LZ21)	20:55	10 07:34 (LZ21)	20:43	45 07:56 (LZ21)	20:01		19:05	18:13	16:37	16:36
25	07:34	06:54	06:05	06:12	05:36	07:01 (LZ21)	05:28	07:23 (LZ21)	05:50	07:11 (LZ21)	06:24		06:59	06:35	07:15	07:42
	17:09	17:51	18:27	20:04	20:38	40 07:44 (LZ21)	20:56	11 07:34 (LZ21)	20:42	46 07:57 (LZ21)	19:59		19:03	17:12	16:37	16:37
26	07:33	06:53	06:04	06:10	05:35	07:04 (LZ21)	05:28	07:22 (LZ21)	05:51	07:11 (LZ21)	06:25		07:00	06:36	07:16	07:42
	17:11	17:53	18:28	20:05	20:39	40 07:44 (LZ21)	20:58	13 07:35 (LZ21)	20:41	46 07:57 (LZ21)	19:57		19:01	17:10	16:36	16:37
27	07:32	06:51	06:02	06:09	05:34	07:05 (LZ21)	05:29	07:23 (LZ21)	05:52	07:10 (LZ21)	06:26		07:01	06:38	07:18	07:42
	17:12	17:54	18:29	20:06	20:40	36 07:44 (LZ21)	20:56	13 07:36 (LZ21)	20:40	47 07:57 (LZ21)	19:56		19:00	17:09	16:36	16:38
28	07:32	06:50	06:00	06:07	05:33	07:06 (LZ21)	05:29	07:22 (LZ21)	05:53	07:10 (LZ21)	06:27		07:02	06:39	07:19	07:43
	17:13	17:55	18:30	20:07	20:40	37 07:43 (LZ21)	20:56	15 07:37 (LZ21)	20:38	48 07:58 (LZ21)	19:54		18:58	17:07	16:35	16:39
29	07:31		06:58	06:06	05:33	07:06 (LZ21)	05:30	07:22 (LZ21)	05:54	07:10 (LZ21)	06:28		07:03	06:40	07:20	07:43
	17:15		19:31	20:09	20:41	41 07:46 (LZ21)	20:56	16 07:38 (LZ21)	20:37	48 07:58 (LZ21)	19:52		18:56	17:06	16:35	16:39
30	07:30		06:56	06:04	05:32	07:07 (LZ21)	05:30	07:21 (LZ21)	05:55	07:10 (LZ21)	06:29					



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	July	August	September	October	November	December
1	07:44 16:42	07:28 17:19	06:48 17:57	16:56 (LZ30) 17:12 (LZ30)	06:53 19:35	18:22 (LZ22) 18:52 (LZ22)	06:03 20:11	05:31 20:44	05:31 20:55	05:57 20:34	06:32 19:47	07:06 18:52
2	07:44 16:43	07:26 17:20	06:46 17:58	16:58 (LZ30) 17:09 (LZ30)	06:51 19:36	18:22 (LZ22) 18:52 (LZ22)	06:02 20:12	05:30 20:45	05:31 20:55	05:58 20:33	06:33 19:45	07:07 18:50
3	07:44 16:44	07:25 17:22	06:45 17:59		06:49 19:38	18:22 (LZ22) 18:51 (LZ22)	06:00 20:13	05:30 20:45	05:32 20:55	05:59 20:32	06:34 19:43	07:08 18:49
4	07:44 16:45	07:24 17:23	06:43 18:01		06:47 19:39	18:23 (LZ22) 18:50 (LZ22)	05:59 20:15	05:29 20:46	05:32 20:55	06:00 20:30	06:35 19:42	07:09 18:47
5	07:44 16:46	07:23 17:24	06:41 18:02		06:46 19:40	18:23 (LZ22) 18:49 (LZ22)	05:57 20:16	05:29 20:47	05:33 20:55	06:01 20:29	06:36 19:40	07:10 18:45
6	07:44 16:47	07:22 17:26	06:39 18:03		06:44 19:41	18:24 (LZ22) 18:47 (LZ22)	05:56 20:17	05:29 20:48	05:33 20:54	06:02 20:28	06:37 19:38	07:12 18:43
7	07:43 16:48	07:21 17:27	06:38 18:04		06:42 19:42	18:25 (LZ22) 18:45 (LZ22)	05:55 20:18	05:28 20:48	05:34 20:54	06:03 20:26	06:38 19:36	07:13 18:41
8	07:43 16:49	07:19 17:29	06:36 18:06		06:40 19:44	18:27 (LZ22) 18:44 (LZ22)	05:53 20:19	05:28 20:49	05:35 20:54	06:05 20:25	06:40 19:34	07:14 18:40
9	07:43 16:50	07:18 17:30	06:34 18:07		06:39 19:45	18:29 (LZ22) 18:41 (LZ22)	05:52 20:20	05:28 20:50	05:36 20:53	06:06 20:24	06:41 19:33	07:15 18:38
10	07:43 16:51	07:17 17:31	06:32 18:08		06:37 19:46		05:51 20:22	05:27 20:50	05:36 20:53	06:07 20:22	06:42 19:31	07:16 18:36
11	07:43 16:52	07:15 17:33	06:31 18:09		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 18:34
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 20:52	06:09 20:19	06:44 19:27	07:19 18:33
13	07:42 16:54	07:13 17:35	06:27 18:12		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
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
15	07:41 16:57	07:10 17:38	06:24 18:14		06:28 19:52		05:45 20:27	05:27 20:53	05:40 20:50	06:12 20:15	06:47 19:22	07:22 18:28
16	07:40 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
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 20:48	06:15 20:12	06:50 19:18	07:25 18:24
18	07:39 17:00	07:05 17:42	06:18 18:18		06:23 19:56		05:42 20:30	05:27 20:54	05:43 20:48	06:16 20:10	06:51 19:16	07:26 18:23
19	07:39 17:02	07:04 17:44	06:16 18:19		06:22 19:57		05:41 20:31	05:27 20:54	05:44 20:47	06:17 20:09	06:52 19:14	07:27 18:21
20	07:38 17:03	07:02 17:45	06:15 18:21		06:20 19:58		05:40 20:32	05:27 20:55	05:45 20:46	06:18 20:07	06:53 19:12	07:29 18:19
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 20:05	06:54 19:11	07:30 18:18
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 20:44	06:20 20:04	06:55 19:09	07:31 18:16
23	07:36 17:07	06:58 17:49	06:09 18:24		06:15 20:01		05:37 20:36	05:28 20:55	05:48 20:43	06:21 20:02	06:57 19:07	07:33 18:15
24	07:35 17:08	06:56 17:50	06:07 18:25		06:14 20:03		05:36 20:37	05:28 20:55	05:49 20:43	06:23 20:01	06:58 19:05	07:34 18:13
25	07:34 17:09	06:54 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 18:12
26	07:33 17:11	06:53 17:53	06:04 18:28		06:10 20:05		05:35 20:38	05:28 20:56	05:51 20:41	06:25 19:57	07:00 19:01	07:36 18:11
27	07:32 17:12	06:51 17:54	06:02 18:29		06:09 20:06		05:34 20:39	05:29 20:56	05:52 20:40	06:26 19:56	07:01 19:00	07:38 18:09
28	07:32 17:13	06:50 17:55	06:00 18:30		06:07 20:07		05:33 20:40	05:29 20:56	05:53 20:38	06:27 19:54	07:02 18:58	07:39 18:07
29	07:31 17:15		06:58 18:32		06:06 20:09		05:33 20:41	05:30 20:56	05:54 20:37	06:28 19:52	07:03 18:56	07:40 18:06
30	07:30 17:16		06:56 18:23		06:04 20:10		05:32 20:42	05:30 20:56	05:55 20:36	06:29 19:50	07:05 18:54	07:41 18:04
31	07:29 17:18		06:55 18:22		06:43 20:11		05:31 20:43	05:30 20:56	05:56 20:35	06:31 19:49	07:06 18:53	07:42 18:03
Potential sun hours	289	293	369	402	456	462	468	433	376	481	342	291
Total, worst case		272	287	214							303	279

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) 17:29 (LZ30)	06:49 19:38	18:51 (LZ22) 20:45
4	07:44 16:45	07:24 17:23	06:43 18:01	17:19 (LZ30) 17:32 (LZ30)	06:47 19:39	18:53 (LZ22) 20:46
5	07:44 16:46	07:23 17:24	06:41 18:02	17:16 (LZ30) 17:34 (LZ30)	06:46 19:40	18:56 (LZ22) 20:47
6	07:44 16:47	07:22 17:26	06:39 18:03	17:14 (LZ30) 17:35 (LZ30)	06:44 19:41	05:29 20:48
7	07:43 16:48	07:21 17:27	06:38 18:04	17:13 (LZ30) 17:35 (LZ30)	06:42 19:42	05:28 20:48
8	07:43 16:49	07:19 17:29	06:36 18:06	17:13 (LZ30) 17:37 (LZ30)	06:40 19:44	05:28 20:49
9	07:43 16:50	07:18 17:30	06:34 18:07	17:12 (LZ30) 17:37 (LZ30)	06:39 19:45	05:28 20:50
10	07:43 16:51	07:17 17:31	06:32 18:08	17:11 (LZ30) 17:36 (LZ30)	06:37 19:46	05:27 20:50
11	07:42 16:52	07:15 17:33	06:31 18:09	17:11 (LZ30) 17:36 (LZ30)	06:35 19:47	05:27 20:51
12	07:42 16:53	07:14 17:34	06:29 18:11	17:10 (LZ30) 17:35 (LZ30)	06:33 19:48	05:27 20:51
13	07:42 16:54	07:13 17:35	06:27 18:12	17:11 (LZ30) 17:36 (LZ30)	06:32 19:50	05:27 20:52
14	07:41 16:56	07:11 17:37	06:25 18:13	17:11 (LZ30) 17:35 (LZ30)	06:30 19:51	05:27 20:52
15	07:41 16:57	07:10 17:38	06:24 18:14	17:12 (LZ30) 17:33 (LZ30)	06:28 19:52	05:27 20:53
16	07:40 16:58	07:08 17:40	06:22 18:16	17:13 (LZ30) 17:32 (LZ30)	06:27 19:53	05:27 20:53
17	07:40 16:59	07:07 17:41	06:20 18:17	17:14 (LZ30) 17:30 (LZ30)	06:25 19:54	05:27 20:54
18	07:39 17:00	07:05 17:42	06:18 18:18	17:17 (LZ30) 17:28 (LZ30)	06:23 19:56	05:27 20:54
19	07:39 17:02	07:04 17:44	06:16 18:19	06:22 19:57	18:48 (LZ22) 19:18 (LZ22)	05:27 20:54
20	07:38 17:03	07:02 17:45	06:15 18:21	06:20 19:58	18:48 (LZ22) 19:19 (LZ22)	05:27 20:55
21	07:37 17:04	07:01 17:46	06:13 18:22	06:18 19:59	18:47 (LZ22) 19:19 (LZ22)	05:27 20:55
22	07:37 17:06	06:59 17:48	06:11 18:23	06:17 20:00	18:46 (LZ22) 19:18 (LZ22)	05:27 20:55
23	07:36 17:07	06:58 17:49	06:09 18:24	06:15 20:01	18:47 (LZ22) 19:19 (LZ22)	05:28 20:55
24	07:35 17:08	06:56 17:50	06:07 18:25	06:14 20:03	18:46 (LZ22) 19:18 (LZ22)	05:28 20:55
25	07:34 17:09	06:54 17:52	06:06 18:27	06:12 20:04	18:47 (LZ22) 19:18 (LZ22)	05:28 20:56
26	07:33 17:11	06:53 17:53	06:04 18:28	06:10 20:05	18:46 (LZ22) 19:17 (LZ22)	05:28 20:56
27	07:32 17:12	06:51 17:54	06:02 18:29	06:09 20:06	18:47 (LZ22) 19:17 (LZ22)	05:29 20:56
28	07:32 17:13	06:50 17:55	06:00 18:30	06:07 20:07	18:47 (LZ22) 19:16 (LZ22)	05:29 20:56
29	07:31 17:15		06:58 19:32	06:06 20:09	18:48 (LZ22) 19:16 (LZ22)	05:30 20:56
30	07:30 17:16		06:56 19:33	06:04 20:10	18:49 (LZ22) 19:15 (LZ22)	05:30 20:56
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			321	505	91	

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_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 19:47	07:06 18:52	17:50 (LZ30) 18:15 (LZ30)	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	25 17:49 (LZ30) 26 18:15 (LZ30)	06:45 17:00	07:23 16:33	
3	05:32 20:55	05:59 20:32	06:34 19:43	07:08 18:49	25 17:49 (LZ30) 25 18:14 (LZ30)	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	25 17:49 (LZ30) 25 18:14 (LZ30)	06:48 16:57	07:26 16:33	
5	05:33 20:55	06:01 20:29	06:36 19:40	07:10 18:45	25 17:49 (LZ30) 25 18:14 (LZ30)	06:49 16:56	07:27 16:33	
6	05:33 20:54	06:02 20:28	06:37 19:38	07:12 18:43	24 17:49 (LZ30) 24 18:13 (LZ30)	06:51 16:55	07:28 16:32	
7	05:34 20:54	06:03 20:26	19:10 (LZ22) 19:12 (LZ22)	06:38 19:36	07:13 18:41	17:50 (LZ30) 18:11 (LZ30)	06:52 16:54	07:29 16:32
8	05:35 20:54	06:05 20:25	19:05 (LZ22) 19:17 (LZ22)	06:40 19:34	07:14 18:40	17:50 (LZ30) 18:10 (LZ30)	06:53 16:52	07:30 16:32
9	05:36 20:53	06:06 20:24	19:02 (LZ22) 19:19 (LZ22)	06:41 19:33	07:15 18:38	17:52 (LZ30) 18:08 (LZ30)	06:55 16:51	07:31 16:32
10	05:36 20:53	06:07 20:22	19:00 (LZ22) 19:20 (LZ22)	06:42 19:31	16 07:16 12 18:06 (LZ30)	17:54 (LZ30) 18:06 (LZ30)	06:56 16:50	07:32 16:32
11	05:37 20:52	06:08 20:21	18:59 (LZ22) 19:22 (LZ22)	06:43 19:29	07:18 18:34		06:57 16:49	07:32 16:32
12	05:38 20:52	06:09 20:19	18:58 (LZ22) 19:22 (LZ22)	06:44 19:27	07:19 18:33		06:59 16:48	07:33 16:32
13	05:39 20:51	06:10 20:18	18:56 (LZ22) 19:23 (LZ22)	06:45 19:25	07:20 18:31		07:00 16:47	07:34 16:32
14	05:39 20:50	06:11 20:16	18:55 (LZ22) 19:24 (LZ22)	06:46 19:23	07:21 18:29		07:01 16:46	07:35 16:32
15	05:40 20:50	06:12 20:15	18:54 (LZ22) 19:24 (LZ22)	06:47 19:22	07:23 18:28		07:03 16:45	07:36 16:32
16	05:41 20:49	06:14 20:13	18:54 (LZ22) 19:24 (LZ22)	06:49 19:20	07:24 18:26		07:04 16:44	07:37 16:33
17	05:42 20:48	06:15 20:12	18:53 (LZ22) 19:24 (LZ22)	06:50 19:18	07:25 18:24		07:05 16:43	07:37 16:33
18	05:43 20:48	06:16 20:10	18:52 (LZ22) 19:24 (LZ22)	06:51 19:16	07:26 18:23		07:06 16:42	07:38 16:33
19	05:44 20:47	06:17 20:09	18:53 (LZ22) 19:25 (LZ22)	06:52 19:14	07:27 18:21		07:08 16:41	07:39 16:34
20	05:45 20:46	06:18 20:07	18:53 (LZ22) 19:25 (LZ22)	06:53 19:12	07:29 18:19		07:09 16:40	07:39 16:34
21	05:46 20:45	06:19 20:05	18:52 (LZ22) 19:24 (LZ22)	06:54 19:11	07:30 18:18		07:10 16:39	07:40 16:34
22	05:47 20:44	06:20 20:04	18:52 (LZ22) 19:24 (LZ22)	06:55 19:09	07:31 18:16		07:12 16:39	07:40 16:35
23	05:48 20:43	06:21 20:02	18:52 (LZ22) 19:23 (LZ22)	06:57 19:07	07:33 18:15		07:13 16:38	07:41 16:35
24	05:49 20:43	06:23 20:01	18:52 (LZ22) 19:22 (LZ22)	06:58 19:05	07:34 18:13		07:14 16:37	07:41 16:36
25	05:50 20:42	06:24 19:59	18:52 (LZ22) 19:21 (LZ22)	06:59 19:03	18:00 (LZ30) 18:09 (LZ30)	06:35 17:12	07:15 16:37	07:42 16:37
26	05:51 20:41	06:25 19:57	18:53 (LZ22) 19:20 (LZ22)	07:00 19:01	9 17:57 (LZ30) 15 18:12 (LZ30)	06:36 17:10	07:16 16:36	07:42 16:37
27	05:52 20:40	06:26 19:56	18:54 (LZ22) 19:19 (LZ22)	07:01 19:00	17:55 (LZ30) 18 18:13 (LZ30)	06:38 17:09	07:18 16:36	07:42 16:38
28	05:53 20:38	06:27 19:54	18:54 (LZ22) 19:17 (LZ22)	07:02 18:58	17:53 (LZ30) 21 18:14 (LZ30)	06:39 17:07	07:19 16:35	07:43 16:39
29	05:54 20:37	06:28 19:52	18:56 (LZ22) 19:15 (LZ22)	07:03 18:56	17:52 (LZ30) 23 18:15 (LZ30)	06:40 17:06	07:20 16:35	07:43 16:39
30	05:55 20:36	06:29 19:50	18:58 (LZ22) 19:12 (LZ22)	07:05 18:54	17:51 (LZ30) 24 18:15 (LZ30)	06:42 17:04	07:21 16:34	07:43 16:40
31	05:56 20:35	06:31 19:49	19:02 (LZ22) 19:07 (LZ22)			06:43 17:03		07:43 16:41
Potential sun hours	468	433	376	342		291	279	
Total, worst case		608	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)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)