

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 1 - WTG01

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June |
|-----------------------------|--|--|--|-------------------------------|---|--------------------------------|
| 1 | 07:27 15:44-16:08/24 16:39 16:40 | 07:13 07:54-08:52/58 17:14 | 06:36 16:41-17:06/25 17:49 07:35-09:09/94 | 06:44 19:24 | 05:57 06:40-08:12/92 19:57 | 05:28 06:33-08:16/103 20:27 |
| 2 | 07:27 15:44-16:08/24 16:40 | 07:12 07:53-08:54/61 17:15 | 06:34 16:42-17:06/24 17:50 07:35-09:09/94 | 06:43 19:25 | 05:56 19:21-19:26/5 19:58 06:40-08:13/93 | 05:27 06:33-08:15/102 20:28 |
| 3 | 07:27 15:44-16:09/25 16:41 | 07:11 07:52-08:55/63 17:16 | 06:33 16:43-17:04/21 17:51 07:34-09:08/94 | 06:41 19:26 | 05:55 19:17-19:29/12 19:59 06:38-08:12/94 | 05:27 06:33-08:16/103 20:29 |
| 4 | 07:27 15:45-16:10/25 16:42 | 07:10 07:50-08:57/67 17:18 | 06:31 16:44-17:01/17 17:52 07:34-09:07/93 | 06:39 19:27 | 05:53 19:15-19:31/16 20:00 06:37-08:13/96 | 05:26 06:33-08:15/102 20:29 |
| 5 | 07:27 15:45-16:11/26 16:42 | 07:09 07:49-08:59/70 17:19 | 06:30 16:48-16:59/11 17:54 07:35-09:07/92 | 06:37 19:28 | 05:52 19:13-19:32/19 20:01 06:37-08:14/97 | 05:26 06:34-08:16/102 20:30 |
| 6 | 07:27 15:44-16:10/26 16:43 | 07:08 07:49-09:00/71 17:20 | 06:28 07:34-09:06/92 17:55 | 06:36 19:29 | 05:51 19:12-19:33/21 20:02 06:37-08:14/97 | 05:26 06:34-08:16/102 20:31 |
| 7 | 07:27 15:45-16:11/26 16:44 | 07:06 16:49-16:52/3 17:22 07:47-09:00/73 | 06:26 07:34-09:05/91 17:56 | 06:34 19:31 | 05:50 19:12-19:34/22 20:03 06:36-08:14/98 | 05:25 06:34-08:16/102 20:31 |
| 8 | 07:27 15:45-16:12/27 16:45 | 07:05 16:45-16:56/11 17:23 07:46-09:02/76 | 06:25 07:35-09:05/90 17:57 | 06:32 19:32 | 05:49 19:10-19:34/24 20:04 06:35-08:14/99 | 05:25 06:34-08:16/102 20:32 |
| 9 | 07:27 15:45-16:13/28 16:46 | 07:04 16:43-16:58/15 17:24 07:45-09:03/78 | 06:23 07:35-09:04/89 17:58 | 06:31 19:33 | 05:47 19:10-19:35/25 20:05 06:34-08:14/100 | 05:25 06:34-08:16/102 20:33 |
| 10 | 07:27 15:46-16:14/28 16:47 | 07:03 16:42-17:00/18 17:25 07:45-09:04/79 | 06:22 07:34-09:02/88 17:59 | 06:29 19:34 | 05:46 19:09-19:35/26 20:06 06:34-08:14/100 | 05:25 06:35-08:16/101 20:33 |
| 11 | 07:26 15:45-16:14/29 16:49 | 07:02 16:41-17:00/19 17:27 07:44-09:05/81 | 06:20 07:35-09:02/87 18:01 | 06:28 19:35 | 05:45 19:09-19:35/26 20:08 06:34-08:15/101 | 05:24 06:35-08:16/101 20:34 |
| 12 | 07:26 15:46-16:15/29 16:50 | 07:00 16:40-17:01/21 17:28 07:43-09:06/83 | 06:18 07:35-09:01/86 18:02 | 06:26 07:26-07:35/9 19:36 | 05:44 19:09-19:36/27 20:09 06:33-08:15/102 | 05:24 06:35-08:16/101 20:34 |
| 13 | 07:26 15:46-16:15/29 16:51 | 06:59 16:40-17:02/22 17:29 07:42-09:07/85 | 06:17 07:35-08:59/84 18:03 | 06:24 07:17-07:43/26 19:37 | 05:43 19:09-19:36/27 20:10 06:33-08:15/102 | 05:24 06:36-08:17/101 20:35 |
| 14 | 07:25 15:46-16:15/29 16:52 | 06:58 16:39-17:02/23 17:30 07:42-09:08/86 | 06:15 07:36-08:58/82 18:04 | 06:23 07:11-07:48/37 19:38 | 05:42 19:09-19:36/27 20:11 06:33-08:15/102 | 05:24 06:36-08:17/101 20:35 |
| 15 | 07:25 15:47-16:16/29 16:53 | 06:57 16:39-17:02/23 17:32 07:40-09:08/88 | 06:13 07:37-08:57/80 18:05 | 06:21 07:08-07:52/44 19:39 | 05:41 19:09-19:36/27 20:12 06:33-08:15/102 | 05:24 06:36-08:17/101 20:36 |
| 16 | 07:25 15:47-16:16/29 16:54 | 06:55 16:40-17:04/24 17:33 07:40-09:09/89 | 06:11 07:37-08:55/78 18:06 | 06:20 07:04-07:54/50 19:40 | 05:40 19:09-19:35/26 20:13 06:32-08:15/103 | 05:24 06:36-08:17/101 20:36 |
| 17 | 07:24 15:47-16:16/29 16:55 | 06:54 16:39-17:05/26 17:34 07:39-09:09/90 | 06:10 07:38-08:54/76 18:07 | 06:18 07:02-07:57/55 19:42 | 05:39 19:09-19:35/26 20:14 06:32-08:15/103 | 05:24 06:36-08:17/101 20:36 |
| 18 | 07:24 15:48-16:17/29 16:56 | 06:52 16:40-17:06/26 17:35 07:39-09:09/90 | 06:08 07:39-08:52/73 18:08 | 06:16 06:59-07:58/59 19:48 | 05:38 19:09-19:35/26 20:15 06:33-08:16/103 | 05:24 06:37-08:17/100 20:37 |
| 19 | 07:23 15:48-16:17/29 16:58 | 06:51 16:40-17:07/27 17:37 07:39-09:10/91 | 06:06 07:39-08:50/71 18:10 | 06:15 06:57-08:01/64 19:44 | 05:37 19:10-19:35/25 20:16 06:32-08:16/104 | 05:24 06:37-08:17/100 20:37 |
| 20 | 07:22 15:49-16:17/28 16:59 | 06:50 16:41-17:08/27 17:38 07:38-09:10/92 | 06:05 07:40-08:48/68 18:11 | 06:13 06:54-08:02/68 19:45 | 05:36 19:11-19:35/24 20:17 06:32-08:16/104 | 05:24 06:37-08:17/100 20:37 |
| 21 | 07:22 15:50-16:17/27 17:00 | 06:48 16:41-17:09/28 17:39 07:38-09:11/93 | 06:03 07:41-08:46/65 18:12 | 06:12 06:53-08:04/71 19:46 | 05:35 19:11-19:34/23 20:18 06:32-08:15/103 | 05:25 06:37-08:17/100 20:38 |
| 22 | 07:21 15:50-16:17/27 17:01 | 06:47 16:40-17:09/29 17:40 07:37-09:10/93 | 06:01 07:42-08:44/62 18:13 | 06:10 06:51-08:04/73 19:47 | 05:34 19:11-19:33/22 20:19 06:32-08:15/103 | 05:25 06:38-08:18/100 20:38 |
| 23 | 07:20 15:51-16:16/25 17:02 | 06:45 16:40-17:10/30 17:42 07:37-09:11/94 | 06:00 07:43-08:41/58 18:14 | 06:09 06:50-08:06/76 19:48 | 05:34 19:13-19:33/20 20:19 06:32-08:16/104 | 05:25 06:38-08:18/100 20:38 |
| 24 | 07:20 15:52-16:17/25 17:04 | 06:44 16:40-17:09/29 17:43 07:36-09:10/94 | 05:58 07:45-08:40/55 18:15 | 06:07 06:48-08:06/78 19:49 | 05:33 19:13-19:33/20 20:20 06:32-08:16/104 | 05:25 06:38-08:18/100 20:38 |
| 25 | 07:19 15:53-16:16/23 17:05 | 06:42 16:39-17:08/29 17:44 07:36-09:11/95 | 05:56 07:46-08:37/51 18:16 | 06:06 06:47-08:08/81 19:50 | 05:32 19:14-19:31/17 20:21 06:32-08:15/103 | 05:26 06:39-08:19/100 20:38 |
| 26 | 07:18 15:54-16:15/21 17:06 | 06:41 16:40-17:09/29 17:45 07:35-09:10/95 | 05:54 07:48-08:34/46 18:17 | 06:04 06:46-08:09/83 19:51 | 05:31 19:16-19:31/15 20:22 06:32-08:16/104 | 05:26 06:38-08:19/101 20:38 |
| 27 | 07:17 15:56-16:14/18 17:07 | 06:39 16:40-17:08/28 17:46 07:35-09:10/95 | 05:53 07:50-08:30/40 18:18 | 06:03 06:44-08:09/85 19:52 | 05:31 19:17-19:30/13 20:23 06:32-08:15/103 | 05:26 06:38-08:19/101 20:38 |
| 28 | 07:17 15:57-16:13/16 17:09 | 06:38 16:41-17:08/27 17:48 07:35-09:10/95 | 05:51 07:53-08:27/34 18:20 | 06:02 06:43-08:10/87 19:54 | 05:30 19:18-19:28/10 20:24 06:32-08:15/103 | 05:27 06:39-08:20/101 20:38 |
| 29 | 07:16 15:59-16:11/12 17:10 | 06:37 16:41-17:08/28 17:47 07:35-09:10/95 | 05:50 07:54-08:30/40 18:21 | 06:01 06:44-08:09/85 19:55 | 05:29 19:20-19:27/7 20:25 06:32-08:16/104 | 05:27 06:39-08:20/101 20:38 |
| 30 | 07:15 16:03-16:08/5 17:11 | 06:36 16:41-17:08/28 17:46 07:35-09:10/95 | 05:49 08:56-09:22/26 19:21 | 06:00 06:42-08:11/89 19:55 | 05:29 06:32-08:15/103 20:26 | 05:28 06:39-08:21/102 20:38 |
| 31 | 07:14 07:55-08:50/55 17:13 | 06:35 16:41-17:08/28 17:45 07:35-09:10/95 | 05:48 09:01-09:15/14 19:22 | 05:59 06:41-08:11/90 19:56 | 05:28 06:33-08:16/103 20:26 | 05:28 06:39-08:21/102 20:38 |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 |
| Sum of minutes with flicker | 1057 | 2839 | 2251 | 1225 | 3707 | 3255 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 1 - WTG01

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | July | August | September | October | November | December |
|-----------------------------|---|---|----------------|--|--|-------------------------------|
| 1 | 05:28 06:39-08:20/101 20:38 19:56-20:01/5 | 05:53 19:20-19:46/26 20:19 06:44-08:25/101 | 06:24 19:35 | 06:55 08:15-09:40/85 18:43 | 06:31 16:11-16:28/17 16:55 07:14-08:33/79 | 07:06 15:27-15:56/29 16:30 |
| 2 | 05:29 06:40-08:21/101 20:38 | 05:54 19:20-19:46/26 20:18 06:44-08:25/101 | 06:25 19:33 | 06:56 08:14-09:40/86 18:41 | 06:32 16:13-16:28/15 16:54 07:15-08:33/78 | 07:07 15:28-15:56/28 16:30 |
| 3 | 05:29 06:39-08:21/102 20:38 | 05:55 19:20-19:46/26 20:16 06:45-08:25/100 | 06:26 19:31 | 06:57 08:13-09:41/88 18:40 | 06:33 16:15-16:25/10 16:53 07:16-08:31/75 | 07:08 15:28-15:56/28 16:30 |
| 4 | 05:30 06:40-08:22/102 20:38 | 05:56 19:20-19:45/25 20:15 06:45-08:25/100 | 06:27 19:30 | 06:59 08:12-09:41/89 18:38 | 06:34 07:17-08:30/73 16:52 | 07:09 15:29-15:56/27 16:29 |
| 5 | 05:30 06:40-08:21/101 20:38 | 05:57 19:21-19:44/23 20:14 06:46-08:24/98 | 06:28 19:28 | 07:00 08:12-09:41/89 18:36 | 06:35 07:19-08:30/71 16:50 | 07:10 15:30-15:56/26 16:29 |
| 6 | 05:31 06:40-08:22/102 20:37 | 05:58 19:22-19:44/22 20:13 06:46-08:24/98 | 06:29 19:26 | 07:01 08:11-09:42/91 18:35 | 06:37 07:19-08:28/69 16:49 | 07:11 15:30-15:57/27 16:29 |
| 7 | 05:31 06:40-08:22/102 20:37 | 05:59 19:22-19:43/21 20:12 06:46-08:24/98 | 06:30 19:24 | 07:02 08:10-09:42/92 18:33 | 06:38 07:21-08:27/66 16:48 | 07:12 15:31-15:57/26 16:29 |
| 8 | 05:32 06:40-08:22/102 20:37 | 06:00 19:23-19:41/18 20:10 06:47-08:23/96 | 06:32 19:23 | 07:03 17:25-17:32/7 18:31 08:09-09:42/93 | 06:39 07:23-08:26/63 16:47 | 07:13 15:32-15:57/25 16:29 |
| 9 | 05:33 06:41-08:23/102 20:36 | 06:01 19:25-19:40/15 20:09 06:47-08:22/95 | 06:33 19:21 | 07:04 17:20-17:35/15 18:30 08:09-09:42/93 | 06:40 07:24-08:24/60 16:46 | 07:14 15:32-15:57/25 16:29 |
| 10 | 05:33 06:40-08:23/103 20:36 | 06:02 19:27-19:38/11 20:08 06:48-08:22/94 | 06:34 19:19 | 07:05 17:19-17:38/19 18:28 08:09-09:43/94 | 06:42 07:25-08:23/58 16:45 | 07:15 15:33-15:57/24 16:29 |
| 11 | 05:34 06:41-08:23/102 20:35 | 06:03 06:48-08:21/93 20:06 | 06:35 19:18 | 07:06 17:17-17:39/22 18:26 08:09-09:43/94 | 06:43 07:28-08:22/54 16:44 | 07:16 15:34-15:58/24 16:29 |
| 12 | 05:35 06:41-08:24/103 20:35 | 06:04 06:49-08:20/91 20:05 | 06:36 19:16 | 07:07 17:15-17:39/24 18:25 08:08-09:43/95 | 06:44 15:35-15:40/5 16:43 07:29-08:20/51 | 07:17 15:35-15:58/23 16:29 |
| 13 | 05:36 06:41-08:24/103 20:34 | 06:05 06:50-08:20/90 20:04 | 06:37 19:14 | 07:08 17:14-17:40/26 18:23 08:08-09:43/95 | 06:45 15:31-15:43/12 16:42 07:31-08:18/47 | 07:18 15:36-15:59/23 16:29 |
| 14 | 05:36 19:30-19:34/4 20:34 06:41-08:24/103 | 06:06 06:50-08:19/89 20:02 | 06:38 19:12 | 07:10 17:13-17:40/27 18:21 08:08-09:42/94 | 06:46 15:29-15:45/16 16:41 07:33-08:16/43 | 07:18 15:36-15:58/22 16:29 |
| 15 | 05:37 19:28-19:37/9 20:33 06:41-08:24/103 | 06:07 06:51-08:18/87 20:01 | 06:39 19:11 | 07:11 17:12-17:40/28 18:20 08:07-09:42/95 | 06:48 15:28-15:47/19 16:40 07:36-08:14/38 | 07:19 15:37-15:58/21 16:29 |
| 16 | 05:38 19:27-19:39/12 20:33 06:41-08:25/104 | 06:08 06:52-08:17/85 19:59 | 06:40 19:09 | 07:12 17:11-17:40/29 18:18 08:08-09:43/95 | 06:49 15:27-15:48/21 16:39 07:39-08:11/32 | 07:20 15:38-15:59/21 16:30 |
| 17 | 05:39 19:26-19:40/14 20:32 06:42-08:25/103 | 06:09 06:53-08:16/83 19:58 | 06:41 19:07 | 07:13 17:12-17:41/29 18:17 08:08-09:42/94 | 06:50 15:26-15:49/23 16:38 07:42-08:08/26 | 07:21 15:38-15:59/21 16:30 |
| 18 | 05:40 19:24-19:40/16 20:31 06:41-08:25/104 | 06:10 06:54-08:14/80 19:57 | 06:42 19:06 | 07:14 17:11-17:41/30 18:15 08:08-09:42/94 | 06:51 15:26-15:51/25 16:37 07:47-08:04/17 | 07:21 15:39-15:59/20 16:30 |
| 19 | 05:40 19:23-19:42/19 20:31 06:41-08:25/104 | 06:11 06:55-08:13/78 19:55 | 06:43 19:04 | 07:15 17:11-17:40/29 18:14 08:07-09:41/94 | 06:53 15:26-15:51/25 16:37 | 07:22 15:40-16:00/20 16:31 |
| 20 | 05:41 19:23-19:43/20 20:30 06:42-08:25/103 | 06:12 06:56-08:11/75 19:54 | 06:44 19:02 | 07:16 17:11-17:39/28 18:12 08:07-09:41/94 | 06:54 15:25-15:52/27 16:36 | 07:22 15:40-16:00/20 16:31 |
| 21 | 05:42 19:22-19:43/21 20:29 06:42-08:25/103 | 06:13 06:57-08:10/73 19:52 | 06:45 19:00 | 07:18 17:11-17:38/27 18:11 08:08-09:41/93 | 06:55 15:25-15:52/27 16:35 | 07:23 15:41-16:01/20 16:32 |
| 22 | 05:43 19:22-19:44/22 20:28 06:42-08:26/104 | 06:14 06:58-08:08/70 19:51 | 06:46 18:59 | 07:19 17:12-17:38/26 18:09 08:08-09:40/92 | 06:56 15:26-15:53/27 16:35 | 07:24 15:41-16:01/20 16:32 |
| 23 | 05:44 19:21-19:45/24 20:27 06:43-08:26/103 | 06:15 07:00-08:06/66 19:49 | 06:47 18:57 | 07:20 17:11-17:37/26 18:08 08:08-09:40/92 | 06:57 15:25-15:54/29 16:34 | 07:24 15:42-16:02/20 16:33 |
| 24 | 05:45 19:21-19:46/25 20:27 06:43-08:26/103 | 06:16 07:01-08:04/63 19:47 | 06:48 18:55 | 07:21 17:10-17:36/26 18:06 08:09-09:39/90 | 06:58 15:25-15:54/29 16:33 | 07:24 15:42-16:02/20 16:33 |
| 25 | 05:46 19:20-19:45/25 20:26 06:42-08:25/103 | 06:17 07:03-08:02/59 19:46 | 06:49 18:53 | 06:22 16:09-16:34/25 17:05 07:10-08:39/89 | 07:00 15:25-15:54/29 16:33 | 07:25 15:42-16:02/20 16:34 |
| 26 | 05:47 19:20-19:45/25 20:25 06:42-08:25/103 | 06:18 07:04-07:58/54 19:44 | 06:50 18:52 | 06:23 16:09-16:33/24 17:03 07:10-08:38/88 | 07:01 15:26-15:55/29 16:32 | 07:25 15:43-16:04/21 16:34 |
| 27 | 05:48 19:20-19:46/26 20:24 06:43-08:26/103 | 06:19 07:06-07:56/50 19:43 | 06:51 18:50 | 06:25 16:09-16:32/23 17:02 07:10-08:37/87 | 07:02 15:26-15:55/29 16:32 | 07:26 15:43-16:04/21 16:35 |
| 28 | 05:49 19:19-19:46/27 20:23 06:43-08:26/103 | 06:20 07:09-07:52/43 19:41 | 06:52 18:48 | 06:26 16:09-16:32/23 17:01 07:11-08:36/85 | 07:03 15:27-15:56/29 16:31 | 07:26 15:43-16:04/21 16:36 |
| 29 | 05:50 19:19-19:46/27 20:22 06:43-08:26/103 | 06:21 07:12-07:48/36 19:39 | 06:53 18:46 | 06:27 16:10-16:32/22 16:59 07:12-08:36/84 | 07:04 15:27-15:56/29 16:31 | 07:26 15:43-16:05/22 16:36 |
| 30 | 05:51 19:19-19:46/27 20:21 06:44-08:26/102 | 06:22 07:17-07:43/26 19:38 | 06:54 18:45 | 06:28 16:10-16:31/21 16:58 07:12-08:35/83 | 07:05 15:27-15:56/29 16:30 | 07:26 15:44-16:06/22 16:37 |
| 31 | 05:52 19:19-19:46/27 20:20 06:44-08:25/101 | 06:23 07:26-07:34/8 19:36 | 06:29 18:45 | 06:29 16:11-16:30/19 16:57 07:13-08:34/81 | 07:06 15:27-15:56/29 16:30 | 07:27 15:44-16:07/23 16:38 |
| Potential sun hours | 461 | 429 | 375 | 345 | 296 | 286 |
| Sum of minutes with flicker | 3556 | 2593 | 1045 | 3383 | 1501 | 710 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 2 - WTG02
 Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time
 N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
 985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June |
|-----------------------------|--|--|--|-------------------------------|---|--|
| 1 | 07:27 15:57-16:13/16 16:39 15:26-15:52/26 | 07:13 16:10-16:29/19 17:14 07:33-08:00/27 | 06:36 16:55-17:10/15 17:49 06:55-07:24/29 | 06:44 19:24 | 05:57 18:23-19:13/50 19:57 | 05:28 19:43-20:00/17 20:27 05:57-06:16/19 |
| 2 | 07:27 15:57-16:14/17 16:40 15:27-15:52/25 | 07:12 16:12-16:28/16 17:15 07:32-08:00/28 | 06:34 06:54-07:25/31 17:50 16:58-17:08/10 | 06:42 18:53-19:00/7 19:25 | 05:56 18:23-19:13/50 19:58 | 05:27 19:43-20:02/19 20:28 05:56-06:16/20 |
| 3 | 07:27 15:57-16:15/18 16:41 15:27-15:52/25 | 07:11 16:14-16:27/13 17:16 07:31-08:00/29 | 06:33 06:52-07:24/32 17:51 | 06:41 18:47-19:02/15 19:26 | 05:55 18:22-19:13/51 19:59 | 05:27 19:43-20:03/20 20:29 05:56-06:17/21 |
| 4 | 07:27 15:57-16:16/19 16:42 15:28-15:53/25 | 07:10 16:18-16:24/6 17:18 07:30-08:01/31 | 06:31 06:50-07:23/33 17:52 | 06:39 18:45-19:05/20 19:27 | 05:53 18:23-19:13/50 20:00 | 05:26 19:42-20:03/21 20:29 05:56-06:17/21 |
| 5 | 07:27 15:57-16:17/20 16:42 15:29-15:53/24 | 07:09 07:29-08:01/32 17:19 | 06:30 06:49-07:23/34 17:54 | 06:37 18:43-19:06/23 19:28 | 05:52 18:23-19:13/50 20:01 | 05:26 19:42-20:04/22 20:30 05:56-06:18/22 |
| 6 | 07:27 15:56-16:17/21 16:43 15:29-15:52/23 | 07:08 07:28-08:01/33 17:20 | 06:28 06:47-07:22/35 17:55 | 06:36 18:41-19:06/25 19:29 | 05:51 18:23-19:12/49 20:02 | 05:26 19:42-20:05/23 20:31 05:56-06:18/22 |
| 7 | 07:27 15:56-16:18/22 16:44 15:30-15:52/22 | 07:06 07:26-08:00/34 17:21 | 06:26 06:47-07:21/34 17:56 | 06:34 18:40-19:08/28 19:31 | 05:50 18:24-19:12/48 20:03 | 05:25 19:41-20:04/23 20:31 05:56-06:19/23 |
| 8 | 07:27 15:56-16:19/23 16:45 15:32-15:52/20 | 07:05 07:26-07:59/33 17:23 | 06:25 06:48-07:21/33 17:57 | 06:32 18:39-19:07/28 19:32 | 05:48 18:23-19:11/48 20:04 | 05:25 19:42-20:05/23 20:32 05:56-06:19/23 |
| 9 | 07:27 15:57-16:20/23 16:46 15:33-15:52/19 | 07:04 07:27-07:59/32 17:24 | 06:23 06:49-07:19/30 17:58 | 06:31 18:38-19:07/29 19:33 | 05:47 18:23-19:11/48 20:05 | 05:25 19:42-20:06/24 20:33 05:56-06:19/23 |
| 10 | 07:26 15:57-16:22/25 16:47 15:35-15:52/17 | 07:03 07:28-07:59/31 17:25 | 06:21 06:49-07:17/28 17:59 | 06:29 18:38-19:08/30 19:34 | 05:46 18:24-19:11/47 20:06 | 05:25 19:42-20:06/24 20:33 05:56-06:20/24 |
| 11 | 07:26 15:56-16:22/26 16:49 15:35-15:50/15 | 07:02 07:30-07:58/28 17:27 | 06:20 06:51-07:16/25 18:01 | 06:28 18:37-19:07/30 19:35 | 05:45 18:24-19:10/46 20:08 | 05:24 19:42-20:07/25 20:34 05:56-06:20/24 |
| 12 | 07:26 15:57-16:24/27 16:50 15:38-15:50/12 | 07:00 07:30-07:56/26 17:28 | 06:18 06:53-07:14/21 18:02 | 06:26 18:38-19:07/29 19:36 | 05:44 18:25-19:10/45 20:09 | 05:24 19:42-20:07/25 20:34 05:56-06:20/24 |
| 13 | 07:26 15:56-16:24/28 16:51 15:39-15:48/9 | 06:59 07:32-07:55/23 17:29 | 06:16 06:55-07:10/15 18:03 | 06:24 18:38-19:06/28 19:37 | 05:43 18:26-19:09/43 20:10 | 05:24 19:42-20:08/26 20:35 05:57-06:21/24 |
| 14 | 07:25 15:57-16:25/28 16:52 | 06:58 16:58-17:04/6 17:30 07:34-07:53/19 | 06:15 07:01-07:05/4 18:04 | 06:23 18:37-19:04/27 19:38 | 05:42 18:26-19:09/43 20:11 | 05:24 19:42-20:08/26 20:35 05:57-06:21/24 |
| 15 | 07:25 15:57-16:26/29 16:53 | 06:56 16:55-17:07/12 17:32 07:36-07:50/14 | 06:13 18:05 | 06:21 18:38-19:03/25 19:39 | 05:41 18:27-19:08/41 20:12 | 05:24 19:42-20:08/26 20:36 05:57-06:21/24 |
| 16 | 07:24 15:57-16:27/30 16:54 | 06:55 16:53-17:10/17 17:33 07:42-07:45/3 | 06:11 18:06 | 06:19 18:38-19:03/25 19:40 | 05:40 18:28-19:07/39 20:13 | 05:24 19:42-20:08/26 20:36 05:57-06:21/24 |
| 17 | 07:24 15:57-16:28/31 16:55 | 06:54 16:52-17:10/18 17:34 | 06:10 18:07 | 06:18 18:36-19:05/29 19:41 | 05:39 18:28-19:06/38 20:14 | 05:24 19:43-20:09/26 20:36 05:57-06:22/25 |
| 18 | 07:24 15:58-16:29/31 16:56 07:45-07:46/1 | 06:52 16:51-17:12/21 17:35 | 06:08 18:08 | 06:16 18:33-19:06/33 19:43 | 05:38 18:29-19:05/36 20:15 | 05:24 19:43-20:09/26 20:37 05:57-06:22/25 |
| 19 | 07:23 15:58-16:29/31 16:58 07:44-07:48/4 | 06:51 16:50-17:13/23 17:37 07:11-07:15/4 | 06:06 18:10 | 06:15 18:32-19:08/36 19:44 | 05:37 18:31-19:05/34 20:16 | 05:24 19:43-20:09/26 20:37 05:57-06:22/25 |
| 20 | 07:22 15:59-16:30/31 16:59 07:44-07:50/6 | 06:50 16:50-17:14/24 17:38 07:09-07:17/8 | 06:05 18:11 | 06:13 18:30-19:09/39 19:45 | 05:36 18:32-19:04/32 20:17 | 05:24 19:43-20:09/26 20:37 05:57-06:22/25 |
| 21 | 07:22 15:59-16:31/32 17:00 07:43-07:51/8 | 06:48 16:49-17:14/25 17:39 07:08-07:19/11 | 06:03 18:12 | 06:12 18:29-19:10/41 19:46 | 05:35 18:33-19:03/30 20:18 | 05:25 19:43-20:09/26 20:38 05:58-06:23/25 |
| 22 | 07:21 15:59-16:31/32 17:01 07:42-07:52/10 | 06:47 16:49-17:15/26 17:40 07:06-07:20/14 | 06:01 18:13 | 06:10 18:28-19:10/42 19:47 | 05:34 18:34-19:02/28 20:18 | 05:25 19:44-20:10/26 20:38 05:58-06:23/25 |
| 23 | 07:20 15:59-16:31/32 17:02 07:41-07:53/12 | 06:45 16:49-17:14/25 17:42 07:05-07:22/17 | 06:00 18:14 | 06:09 18:27-19:11/44 19:48 | 05:33 18:36-19:01/25 20:19 | 05:25 19:44-20:10/26 20:38 05:58-06:23/25 |
| 24 | 07:20 16:01-16:32/31 17:04 07:41-07:55/14 | 06:44 16:49-17:15/26 17:43 07:03-07:22/19 | 05:58 18:15 | 06:07 18:26-19:11/45 19:49 | 05:33 18:37-19:00/23 20:20 | 05:25 19:44-20:10/26 20:38 05:58-06:23/25 |
| 25 | 07:19 16:01-16:32/31 17:05 07:40-07:56/16 | 06:42 16:49-17:14/25 17:44 07:02-07:24/22 | 05:56 18:16 | 06:06 18:25-19:12/47 19:50 | 05:32 18:38-18:58/20 20:21 | 05:26 19:44-20:10/26 20:38 05:59-06:24/25 |
| 26 | 07:18 16:02-16:32/30 17:06 07:39-07:57/18 | 06:41 16:50-17:14/24 17:45 07:00-07:24/24 | 05:54 18:17 | 06:04 18:25-19:13/48 19:51 | 05:31 18:41-18:57/16 20:22 06:03-06:09/6 | 05:26 19:45-20:10/25 20:38 05:59-06:24/25 |
| 27 | 07:17 16:03-16:32/29 17:07 07:38-07:57/19 | 06:39 16:51-17:12/21 17:46 06:58-07:24/26 | 05:53 18:18 | 06:03 18:24-19:13/49 19:52 | 05:31 18:43-18:55/12 20:23 06:00-06:11/11 | 05:26 19:44-20:10/26 20:38 05:59-06:23/24 |
| 28 | 07:17 16:04-16:32/28 17:09 07:37-07:58/21 | 06:38 16:53-17:12/19 17:48 06:57-07:24/27 | 05:51 18:20 | 06:01 18:24-19:13/49 19:54 | 05:30 18:47-18:50/3 06:00-06:13/13 20:24 19:49-19:54/5 | 05:27 19:45-20:11/26 20:38 06:00-06:24/24 |
| 29 | 07:16 16:05-16:31/26 17:10 07:36-07:59/23 | | 06:49 19:21 | 06:00 18:23-19:13/50 19:55 | 05:29 19:47-19:57/10 20:25 05:58-06:13/15 | 05:27 19:45-20:11/26 20:38 06:00-06:24/24 |
| 30 | 07:15 16:06-16:31/25 17:11 07:35-07:59/24 | | 06:48 19:22 | 05:59 18:23-19:13/50 19:56 | 05:29 19:45-19:58/13 20:26 05:57-06:14/17 | 05:28 19:45-20:10/25 20:38 06:00-06:25/25 |
| 31 | 07:14 16:08-16:30/22 17:13 07:34-08:00/26 | | 06:46 19:23 | | 05:28 19:45-20:00/15 20:26 05:57-06:15/18 | |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 |
| Sum of minutes with flicker | 1278 | 961 | 409 | 971 | 1168 | 1441 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 2 - WTG02

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | July | August | September | October | November | December |
|-----------------------------|--|-------------------------------|-------------------------------|--|--|--|
| 1 | 05:28 19:46-20:11/25 20:38 06:00-06:24/24 | 05:53 18:35-19:20/45 20:19 | 06:24 18:36-19:06/30 19:35 | 06:55 07:33-07:52/19 18:43 | 06:31 06:57-07:27/30 16:55 | 07:06 15:38-16:04/26 16:30 15:17-15:32/15 |
| 2 | 05:29 19:46-20:10/24 20:38 06:01-06:25/24 | 05:54 18:35-19:21/46 20:17 | 06:25 18:36-19:05/29 19:33 | 06:56 07:31-07:54/23 18:41 | 06:32 06:57-07:29/32 16:54 | 07:07 15:39-16:04/25 16:30 15:17-15:34/17 |
| 3 | 05:29 19:47-20:11/24 20:38 06:01-06:24/23 | 05:55 18:34-19:21/47 20:16 | 06:26 18:36-19:05/29 19:31 | 06:57 07:29-07:55/26 18:40 | 06:33 06:56-07:29/33 16:53 | 07:08 15:40-16:04/24 16:29 15:16-15:35/19 |
| 4 | 05:30 19:48-20:11/23 20:38 06:02-06:25/23 | 05:56 18:34-19:22/48 20:15 | 06:27 18:36-19:04/28 19:30 | 06:59 07:27-07:56/29 18:38 | 06:34 06:56-07:29/33 16:52 | 07:09 15:40-16:03/23 16:29 15:16-15:36/20 |
| 5 | 05:30 19:47-20:11/24 20:37 06:01-06:24/23 | 05:57 18:34-19:22/48 20:14 | 06:28 18:36-19:04/28 19:28 | 07:00 07:25-07:57/32 18:36 | 06:35 06:58-07:31/33 16:50 | 07:10 15:41-16:03/22 16:29 15:15-15:37/22 |
| 6 | 05:31 19:48-20:11/23 20:37 06:02-06:25/23 | 05:58 18:33-19:22/49 20:13 | 06:29 18:37-19:02/25 19:26 | 07:01 07:24-07:57/33 18:34 | 06:37 06:59-07:31/32 16:49 | 07:11 15:42-16:03/21 16:29 15:15-15:38/23 |
| 7 | 05:31 19:48-20:10/22 20:37 06:02-06:24/22 | 05:59 18:33-19:22/49 20:12 | 06:30 18:38-19:01/23 19:24 | 07:02 07:23-07:58/35 18:33 | 06:38 15:47-15:54/7 16:48 07:00-07:30/30 | 07:12 15:43-16:03/20 16:29 15:15-15:39/24 |
| 8 | 05:32 19:49-20:10/21 20:37 06:03-06:24/21 | 06:00 18:32-19:22/50 20:10 | 06:31 18:39-18:59/20 19:23 | 07:03 07:23-07:58/35 18:31 | 06:39 15:45-15:58/13 16:47 07:02-07:31/29 | 07:13 15:44-16:03/19 16:29 15:15-15:40/25 |
| 9 | 05:33 19:50-20:10/20 20:36 06:04-06:25/21 | 06:01 18:32-19:22/50 20:09 | 06:32 18:41-18:56/15 19:21 | 07:04 07:24-07:58/34 18:29 | 06:40 15:43-15:59/16 16:46 07:03-07:31/28 | 07:14 15:45-16:03/18 16:29 15:15-15:40/25 |
| 10 | 05:33 19:50-20:09/19 20:36 06:03-06:24/21 | 06:02 18:32-19:22/50 20:08 | 06:34 18:45-18:53/8 19:19 | 07:05 07:26-07:59/33 18:28 | 06:42 15:41-16:00/19 16:45 07:04-07:31/27 | 07:15 15:46-16:03/17 16:29 15:16-15:41/25 |
| 11 | 05:34 19:51-20:09/18 20:35 06:04-06:24/20 | 06:03 18:32-19:22/50 20:06 | 06:35 19:18 19:18 | 07:06 07:27-07:58/31 18:26 17:34-17:39/5 | 06:43 15:39-16:01/22 16:44 07:06-07:31/25 | 07:16 15:47-16:03/16 16:29 15:16-15:42/26 |
| 12 | 05:35 19:53-20:09/16 20:35 06:05-06:24/19 | 06:04 18:32-19:22/50 20:05 | 06:36 19:16 19:16 | 07:07 17:30-17:42/12 18:25 07:28-07:58/30 | 06:44 15:38-16:03/25 16:43 07:07-07:31/24 | 07:17 15:48-16:03/15 16:29 15:16-15:43/27 |
| 13 | 05:36 19:53-20:07/14 20:34 06:06-06:23/17 | 06:05 18:32-19:22/50 20:04 | 06:37 19:14 19:14 | 07:08 17:27-17:44/17 18:23 07:29-07:57/28 | 06:45 15:37-16:03/26 16:42 07:08-07:31/23 | 07:18 15:49-16:03/14 16:29 15:17-15:44/27 |
| 14 | 05:36 19:55-20:06/11 20:34 06:06-06:22/16 | 06:06 18:32-19:21/49 20:02 | 06:38 19:12 19:12 | 07:09 17:25-17:45/20 18:21 07:30-07:57/27 | 06:46 15:36-16:04/28 16:41 07:09-07:30/21 | 07:18 15:49-16:03/14 16:29 15:16-15:44/28 |
| 15 | 05:37 19:57-20:05/8 20:33 06:07-06:22/15 | 06:07 18:32-19:21/49 20:01 | 06:39 19:07 19:11 | 07:11 17:23-17:45/22 18:20 07:31-07:56/25 | 06:48 15:36-16:05/29 16:40 07:11-07:30/19 | 07:19 15:50-16:03/13 16:29 15:17-15:44/27 |
| 16 | 05:38 18:54-19:02/8 20:33 06:09-06:21/12 | 06:08 18:32-19:20/48 19:59 | 06:40 19:09 19:09 | 07:12 17:22-17:45/23 18:18 07:33-07:56/23 | 06:49 15:35-16:05/30 16:39 07:12-07:30/18 | 07:20 15:51-16:03/12 16:30 15:18-15:45/27 |
| 17 | 05:39 18:51-19:05/14 20:32 06:11-06:20/9 | 06:09 18:32-19:20/48 19:58 | 06:41 19:07 19:07 | 07:13 17:22-17:46/24 18:17 07:34-07:55/21 | 06:50 15:34-16:05/31 16:38 07:13-07:29/16 | 07:20 15:52-16:03/11 16:30 15:17-15:45/28 |
| 18 | 05:40 18:48-19:07/19 20:31 06:13-06:16/3 | 06:10 18:32-19:19/47 19:57 | 06:42 19:05 19:05 | 07:14 17:21-17:46/25 18:15 07:35-07:54/19 | 06:51 15:35-16:06/31 16:37 07:15-07:29/14 | 07:21 15:53-16:03/10 16:30 15:18-15:46/28 |
| 19 | 05:40 18:47-19:09/22 20:31 | 06:11 18:33-19:18/45 19:55 | 06:43 19:04 19:04 | 07:15 17:20-17:46/26 18:14 07:36-07:52/16 | 06:53 15:34-16:06/32 16:37 07:16-07:28/12 | 07:22 15:54-16:04/10 16:31 15:19-15:47/28 |
| 20 | 05:41 18:46-19:10/24 20:30 | 06:12 18:32-19:16/44 19:54 | 06:44 19:02 19:02 | 07:16 17:20-17:45/25 18:12 07:37-07:50/13 | 06:54 15:34-16:06/32 16:36 07:17-07:27/10 | 07:22 15:54-16:03/9 16:31 15:19-15:47/28 |
| 21 | 05:42 18:45-19:12/27 20:29 | 06:13 18:33-19:15/42 19:52 | 06:45 19:00 19:00 | 07:17 17:19-17:44/25 18:11 07:39-07:49/10 | 06:55 15:34-16:06/32 16:35 07:18-07:26/8 | 07:23 15:55-16:04/9 16:32 15:20-15:48/28 |
| 22 | 05:43 18:44-19:13/29 20:28 | 06:14 18:33-19:14/41 19:50 | 06:46 18:59 18:59 | 07:19 17:20-17:44/24 18:09 07:40-07:47/7 | 06:56 15:35-16:06/31 16:34 07:20-07:26/6 | 07:23 15:55-16:04/9 16:32 15:20-15:48/28 |
| 23 | 05:44 18:43-19:14/31 20:27 | 06:15 18:34-19:12/38 19:49 | 06:47 18:57 18:57 | 07:20 17:20-17:43/23 18:08 07:41-07:44/3 | 06:57 15:35-16:06/31 16:34 07:21-07:25/4 | 07:24 15:56-16:05/9 16:32 15:21-15:49/28 |
| 24 | 05:45 18:42-19:15/33 20:27 | 06:16 18:35-19:11/36 19:47 | 06:48 18:55 18:55 | 07:21 17:21-17:41/20 18:06 | 06:58 15:35-16:06/31 16:33 07:22-07:23/1 | 07:24 15:56-16:06/10 16:33 15:21-15:49/28 |
| 25 | 05:46 18:40-19:15/35 20:26 | 06:17 18:36-19:09/33 19:46 | 06:49 18:53 18:53 | 06:22 16:21-16:40/19 17:05 | 07:00 15:35-16:06/31 16:33 | 07:25 15:56-16:06/10 16:34 15:21-15:49/28 |
| 26 | 05:47 18:39-19:16/37 20:25 | 06:18 18:38-19:07/29 19:44 | 06:50 18:52 18:52 | 06:23 16:24-16:39/15 17:03 07:09-07:17/8 | 07:01 15:35-16:05/30 16:32 | 07:25 15:57-16:07/10 16:34 15:22-15:50/28 |
| 27 | 05:48 18:39-19:17/38 20:24 | 06:19 18:40-19:04/24 19:43 | 06:51 18:50 18:50 | 06:25 16:25-16:36/11 17:02 07:05-07:21/16 | 07:02 15:37-16:06/29 16:32 | 07:26 15:57-16:08/11 16:35 15:22-15:50/28 |
| 28 | 05:49 18:38-19:18/40 20:23 | 06:20 18:39-19:04/25 19:41 | 06:52 18:48 18:48 | 06:26 16:30-16:31/1 17:01 07:02-07:23/21 | 07:03 15:37-16:06/29 16:31 | 07:26 15:56-16:09/13 16:36 15:23-15:50/27 |
| 29 | 05:50 18:37-19:19/42 20:22 | 06:21 18:38-19:05/27 19:39 | 06:53 18:46 18:46 | 06:27 07:01-07:25/24 16:59 | 07:04 15:37-16:05/28 16:31 15:21-15:28/7 | 07:26 15:56-16:09/13 16:36 15:23-15:51/28 |
| 30 | 05:51 18:37-19:19/42 20:21 | 06:22 18:37-19:06/29 19:38 | 06:54 18:45 18:45 | 06:28 07:00-07:26/26 16:58 | 07:05 15:38-16:05/27 16:30 15:19-15:31/12 | 07:26 15:57-16:11/14 16:37 15:25-15:52/27 |
| 31 | 05:52 18:36-19:20/44 20:20 | 06:23 18:37-19:06/29 19:36 | 06:29 16:57 16:57 | 06:29 06:58-07:27/29 16:57 | 16:30 15:19-15:31/12 296 | 07:27 15:57-16:12/15 16:38 15:25-15:52/27 |
| Potential sun hours | 461 | 429 | 375 | 345 | 296 | 286 |
| Sum of minutes with flicker | 1113 | 1315 | 247 | 1013 | 1167 | 1256 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 3 - WTG03

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June | |
|----|--|--|--|--|--|--|--|
| 1 | 07:27 15:33-16:13/40 14:51-15:10/19 16:39 08:11-08:45/34 08:50-09:11/21 07:27 15:34-16:14/40 14:53-15:10/17 16:40 08:12-08:44/32 08:51-09:11/20 | 07:13 15:53-16:50/57 17:14 07:12 15:53-16:51/58 17:15 | 06:36 16:40-17:27/47 17:49 07:39-08:17/38 06:34 16:42-17:29/47 17:50 07:38-08:19/41 | 06:44 17:54-18:57/63 19:24 06:43 17:53-18:55/62 19:25 | 05:57 19:02-19:25/23 19:57 17:53-18:44/51 05:56 19:03-19:25/22 19:58 17:55-18:43/48 | 05:28 19:25-20:01/36 20:27 05:27 19:25-20:01/36 20:28 | |
| 2 | 07:27 15:35-16:15/40 14:55-15:09/14 16:41 08:12-08:43/31 08:53-09:10/17 07:27 15:36-16:16/40 14:57-15:08/11 16:42 08:13-08:41/28 08:54-09:09/15 | 07:11 15:54-16:53/59 17:16 07:10 15:54-16:54/60 17:18 | 06:33 16:42-17:30/48 17:51 07:36-08:20/44 06:31 16:43-17:31/48 17:52 07:34-08:20/46 | 06:41 17:51-18:55/64 19:26 06:39 17:51-18:56/65 19:27 | 05:55 19:03-19:23/20 19:59 17:55-18:41/46 05:54 19:04-19:22/18 20:00 17:57-18:39/42 | 05:27 19:26-20:02/36 20:29 05:26 19:26-20:01/35 20:29 | |
| 3 | 07:27 15:38-16:17/39 15:00-15:06/6 16:43 08:14-08:37/23 08:57-09:08/11 07:27 15:39-16:17/38 08:59-09:05/6 16:44 08:15-08:37/22 | 07:09 15:55-16:56/61 17:19 07:08 15:56-16:57/61 17:20 | 06:30 16:46-17:32/46 17:54 07:33-08:21/48 06:28 16:48-17:33/45 17:55 07:32-08:22/50 | 06:37 17:50-18:56/66 19:28 06:36 17:49-18:56/67 19:29 | 05:52 19:05-19:21/16 20:01 17:59-18:38/39 05:51 19:07-19:20/13 20:02 18:00-18:37/37 | 05:26 19:26-20:02/36 20:30 05:26 19:27-20:03/36 20:31 | |
| 4 | 07:27 15:43-16:18/35 16:44 08:15-08:36/21 07:27 15:44-16:19/35 16:45 08:16-08:36/20 | 07:06 15:56-16:58/62 17:22 07:05 15:57-16:59/62 17:23 | 06:26 17:11-17:34/23 16:59-17:07/8 17:56 07:31-08:22/51 06:25 17:12-17:36/24 17:57 07:31-08:23/52 | 06:34 17:49-18:57/68 19:31 06:32 17:48-18:57/69 19:32 | 05:50 19:09-19:18/9 20:03 18:03-18:35/32 05:49 18:04-18:32/28 20:04 | 05:25 19:28-20:03/35 20:31 05:25 19:27-20:03/36 20:32 | |
| 5 | 07:27 15:45-16:21/36 16:47 08:17-08:36/19 07:27 15:46-16:21/36 16:48 08:18-08:36/18 | 07:04 15:58-17:01/63 17:24 07:03 15:59-17:02/63 17:25 | 06:23 17:12-17:37/25 17:58 07:30-08:22/52 06:20 17:13-17:40/27 18:01 07:29-08:23/54 | 06:31 17:48-18:57/69 19:33 06:29 17:47-18:57/70 19:34 | 05:47 18:07-18:29/22 20:05 05:46 18:10-18:26/16 20:06 | 05:25 19:28-20:03/35 20:33 05:25 19:28-20:04/36 20:33 | |
| 6 | 07:26 15:47-16:22/35 16:49 08:19-08:34/15 07:26 15:48-16:24/36 16:50 08:20-08:34/14 | 07:02 15:59-17:03/64 17:27 07:00 16:01-17:05/64 17:28 | 06:18 17:13-17:40/27 18:02 07:28-08:22/54 06:17 17:13-17:41/28 18:03 07:27-08:22/55 | 06:28 17:46-18:57/71 19:35 06:26 17:46-18:57/71 19:36 | 05:45 19:32-19:42/10 20:07 05:44 19:30-19:44/14 20:09 | 05:25 19:29-20:04/35 20:34 05:24 19:29-20:04/35 20:34 | |
| 7 | 07:26 15:49-16:25/36 16:51 08:21-08:33/12 07:25 15:50-16:26/36 16:52 08:24-08:32/8 | 06:59 16:03-17:06/63 17:29 06:58 16:04-17:07/63 17:30 | 06:17 17:13-17:41/28 18:03 07:27-08:22/55 06:15 17:15-17:43/28 18:04 07:28-08:22/54 | 06:24 17:46-18:56/70 19:37 06:23 17:45-18:56/71 19:38 | 05:43 19:28-19:45/17 20:10 05:42 19:27-19:46/19 20:11 | 05:24 19:30-20:05/35 20:35 05:24 19:30-20:05/35 20:35 | |
| 8 | 07:25 15:51-16:27/36 16:53 07:24 15:53-16:29/36 16:54 | 06:56 16:07-17:09/62 17:32 06:55 16:11-17:11/60 17:33 | 06:13 17:15-17:44/29 18:05 07:27-08:21/54 06:11 17:14-17:45/31 18:06 07:28-08:20/53 | 06:21 17:46-18:56/70 19:39 06:20 17:45-18:55/70 19:40 | 05:41 19:26-19:47/21 20:12 05:40 19:25-19:48/23 20:13 | 05:24 19:30-20:05/35 20:36 05:24 19:30-20:06/36 20:36 | |
| 9 | 07:24 15:53-16:29/36 16:55 07:24 15:53-16:29/36 16:55 | 06:54 16:21-17:11/50 17:34 06:52 16:22-17:13/51 17:35 | 06:10 17:15-17:46/31 18:07 07:27-08:20/53 06:08 17:13-17:47/34 18:08 07:27-08:19/52 | 06:18 17:46-18:55/69 19:41 06:16 17:45-18:54/69 19:43 | 05:39 19:24-19:49/25 20:14 05:38 19:25-19:50/25 20:15 | 05:24 19:30-20:06/36 20:36 05:24 19:30-20:06/36 20:37 | |
| 10 | 07:23 15:53-16:31/38 16:57 07:23 15:52-16:32/40 16:58 | 06:51 16:22-17:14/52 17:37 06:50 16:23-17:16/53 17:38 | 06:06 17:10-17:48/38 18:10 07:27-08:18/51 06:05 17:08-17:49/41 18:11 07:27-08:16/49 | 06:15 17:46-18:54/68 19:44 06:13 19:11-19:20/9 19:45 | 05:37 19:24-19:51/27 20:16 05:36 19:24-19:51/27 20:17 | 05:24 19:30-20:06/36 20:37 05:25 19:30-20:06/36 20:37 | |
| 11 | 07:22 15:52-16:35/43 17:00 07:22 15:52-16:35/43 17:00 | 06:48 16:23-17:16/53 17:39 06:48 16:23-17:16/53 17:39 | 06:03 17:08-17:51/43 18:12 07:28-08:16/48 06:01 17:06-17:52/46 18:13 07:28-08:14/46 | 06:12 19:09-19:23/14 19:46 17:47-18:53/66 06:10 19:06-19:23/17 19:47 17:47-18:52/65 | 05:35 19:23-19:51/28 20:17 05:34 19:23-19:52/29 20:18 | 05:25 19:30-20:06/36 20:38 05:25 19:31-20:07/36 20:38 | |
| 12 | 07:21 15:52-16:36/44 17:01 07:20 15:52-16:37/45 17:03 | 06:47 16:24-17:18/54 17:40 06:45 16:24-17:19/55 17:42 | 06:00 17:05-17:53/48 18:14 07:28-08:13/45 05:58 17:04-17:53/49 18:15 07:30-08:12/42 | 06:09 19:05-19:25/20 19:48 17:47-18:52/65 06:07 19:04-19:25/21 19:49 17:47-18:50/63 | 05:34 19:24-19:54/30 20:19 05:33 19:23-19:55/32 20:20 | 05:25 19:31-20:07/36 20:38 05:25 19:31-20:07/36 20:38 | |
| 13 | 07:20 15:52-16:39/47 17:04 07:19 15:52-16:40/48 17:05 | 06:44 16:26-17:21/55 17:43 07:55-08:03/8 06:42 16:27-17:22/55 17:44 07:50-08:09/19 | 18:16 07:30-08:10/40 05:54 17:02-17:56/54 18:17 07:31-08:07/36 05:53 17:01-17:57/56 | 06:06 19:03-19:26/23 19:50 17:48-18:50/62 06:04 19:03-19:26/23 19:51 17:49-18:49/60 | 05:32 19:23-19:56/33 20:21 05:31 19:24-19:57/33 20:22 | 05:26 19:32-20:08/36 20:38 05:26 19:32-20:08/36 20:38 | |
| 14 | 07:18 15:52-16:42/50 17:06 07:17 15:52-16:43/51 17:08 | 06:41 16:29-17:23/54 17:45 07:46-08:12/26 06:39 16:31-17:24/53 17:46 07:43-08:14/31 | 18:17 07:31-08:07/36 05:51 17:00-17:59/59 06:49 17:58-18:59/61 19:21 08:37-09:00/23 | 06:03 19:02-19:26/24 19:54 17:51-18:47/56 06:00 19:03-19:26/23 05:29 19:24-19:59/35 | 05:31 19:23-19:57/34 20:23 05:30 19:23-19:58/35 20:24 | 05:26 19:32-20:07/35 20:38 05:27 19:33-20:08/35 20:38 | |
| 15 | 07:17 15:52-16:44/52 17:09 07:16 15:52-16:45/53 17:10 | 06:38 16:35-17:26/51 17:48 07:41-08:16/35 06:42 16:27-17:22/55 17:44 07:50-08:09/19 | 18:18 07:32-08:05/33 05:51 17:00-17:59/59 06:49 17:58-18:59/61 19:21 08:37-09:00/23 | 06:02 19:02-19:26/24 19:54 17:51-18:47/56 06:00 19:03-19:26/23 05:29 19:24-19:59/35 | 05:30 19:23-19:58/35 20:24 05:29 19:24-19:59/35 20:25 | 05:27 19:33-20:08/35 20:38 05:28 19:34-20:09/35 20:38 | |
| 16 | 07:15 15:52-16:47/55 17:11 07:14 15:52-16:48/56 17:13 | 06:48 08:40-08:55/15 19:22 17:56-18:58/62 06:46 17:56-18:57/61 19:23 | 06:48 08:40-08:55/15 19:22 17:56-18:58/62 06:46 17:56-18:57/61 19:23 | 05:59 19:02-19:25/23 19:56 17:52-18:45/53 05:28 19:24-20:00/36 20:26 | 05:29 19:24-19:59/35 20:25 05:28 19:24-20:00/36 20:26 | 05:28 19:34-20:09/35 20:38 05:28 19:34-20:09/35 20:38 | |
| 17 | Potential sun hours Sum of minutes with flicker | 295 1747 | 296 1737 | 369 2652 | 400 2184 | 455 1068 | |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 3 - WTG03

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | July | August | September | October | November | December |
|-----------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------------------------------|
| 1 | 05:28 19:33-20:08/35 | 05:53 19:41-19:54/13 | 06:24 17:45-18:55/70 | 06:55 17:53-18:21/28 | 06:31 15:28-16:31/63 | 07:06 15:29-16:05/36 |
| | 20:38 | 20:19 | 19:35 | 18:43 08:07-09:02/55 | 16:55 | 16:30 08:01-08:16/15 |
| 2 | 05:29 19:34-20:09/35 | 05:54 19:44-19:51/7 | 06:25 17:45-18:55/70 | 06:56 17:51-18:19/28 | 06:32 15:27-16:30/63 | 07:07 15:29-16:04/35 |
| | 20:38 | 20:17 18:25-18:33/8 | 19:33 | 18:41 08:07-09:01/54 | 16:54 | 16:30 08:00-08:18/18 |
| 3 | 05:29 19:33-20:08/35 | 05:55 18:19-18:38/19 | 06:26 17:45-18:54/69 | 06:57 17:50-18:17/27 | 06:33 15:26-16:29/63 | 07:08 15:28-16:04/36 |
| | 20:38 | 20:16 | 19:31 | 18:40 08:07-09:01/54 | 16:53 | 16:30 08:00-08:19/19 |
| 4 | 05:30 19:34-20:09/35 | 05:56 18:16-18:41/25 | 06:27 17:45-18:54/69 | 06:59 17:50-18:15/25 | 06:34 15:25-16:27/62 | 07:09 15:28-16:03/35 |
| | 20:38 | 20:15 | 19:30 | 18:38 08:07-09:00/53 | 16:52 | 16:29 08:00-08:20/20 |
| 5 | 05:30 19:33-20:09/36 | 05:57 19:21-19:26/5 | 06:28 17:45-18:53/68 | 06:59 17:48-18:13/24 | 06:35 15:25-16:27/62 | 07:10 15:28-16:03/35 |
| | 20:37 | 20:14 18:14-18:43/29 | 19:28 | 18:36 08:07-08:59/52 | 16:50 | 16:29 08:00-08:21/21 |
| 6 | 05:31 19:33-20:09/36 | 05:58 19:18-19:29/11 | 06:29 17:45-18:52/67 | 07:01 17:47-18:11/24 | 06:37 15:25-16:25/60 | 07:11 15:26-16:03/37 08:45-08:51/6 |
| | 20:37 | 20:13 18:11-18:45/34 | 19:26 | 18:35 08:07-08:59/52 | 16:49 | 16:29 08:00-08:22/22 |
| 7 | 05:31 19:33-20:08/35 | 05:59 19:16-19:30/14 | 06:30 17:45-18:51/66 | 07:02 17:47-18:10/23 | 06:38 15:24-16:24/60 | 07:12 15:24-16:03/39 14:46-14:52/6 |
| | 20:37 | 20:12 18:09-18:47/38 | 19:24 | 18:33 08:07-08:58/51 | 16:48 | 16:29 08:00-08:23/23 08:43-08:54/11 |
| 8 | 05:32 19:33-20:09/36 | 06:00 19:14-19:32/18 | 06:32 17:45-18:50/65 | 07:03 17:22-18:08/46 | 06:39 15:25-16:22/57 | 07:13 15:24-16:03/39 14:44-14:55/11 |
| | 20:37 | 20:10 18:08-18:48/40 | 19:23 | 18:31 08:08-08:57/49 | 16:47 | 16:29 08:00-08:28/28 08:42-08:56/14 |
| 9 | 05:33 19:33-20:09/36 | 06:01 19:13-19:32/19 | 06:33 17:45-18:49/64 | 07:04 17:19-18:06/47 | 06:40 15:24-16:22/58 | 07:14 15:23-16:03/40 14:43-14:57/14 |
| | 20:36 | 20:09 18:06-18:50/44 | 19:21 | 18:30 08:08-08:55/47 | 16:46 | 16:29 08:00-08:31/31 08:41-08:58/17 |
| 10 | 05:33 19:32-20:08/36 | 06:02 19:12-19:33/21 | 06:34 17:46-18:48/62 | 07:05 17:17-18:04/47 | 06:42 15:24-16:20/56 | 07:15 15:23-16:03/40 14:42-14:59/17 |
| | 20:36 | 20:08 18:05-18:51/46 | 19:19 | 18:28 08:10-08:55/45 | 16:45 | 16:29 08:01-08:33/32 08:40-09:00/20 |
| 11 | 05:34 19:33-20:08/35 | 06:03 19:12-19:34/22 | 06:35 17:46-18:49/63 | 07:06 17:16-18:03/47 | 06:43 15:23-16:19/56 | 07:16 15:23-16:03/40 14:42-15:00/18 |
| | 20:35 | 20:06 18:03-18:52/49 | 19:18 | 18:26 08:11-08:54/43 | 16:44 | 16:29 08:01-08:35/34 08:40-09:01/21 |
| 12 | 05:35 19:33-20:08/35 | 06:04 19:11-19:34/23 | 06:36 17:47-18:49/62 | 07:07 17:15-18:02/47 | 06:44 15:24-16:19/55 | 07:17 15:23-16:03/40 14:41-15:01/20 |
| | 20:35 | 20:05 18:02-18:53/51 | 19:16 | 18:25 08:12-08:52/40 | 16:43 | 16:29 08:02-08:36/34 08:40-09:02/22 |
| 13 | 05:36 19:33-20:09/36 | 06:05 19:11-19:34/23 | 06:37 08:32-08:45/13 | 07:08 17:13-18:00/47 | 06:45 15:24-16:17/53 | 07:17 15:23-16:04/41 14:41-15:03/22 |
| | 20:34 | 20:04 18:01-18:54/53 | 19:14 17:47-18:49/62 | 18:23 08:13-08:50/37 | 16:42 | 16:29 08:02-08:37/35 08:40-09:04/24 |
| 14 | 05:36 19:32-20:07/35 | 06:06 19:10-19:34/24 | 06:38 17:48-18:49/61 | 07:09 17:06-17:58/52 | 06:46 15:24-16:16/52 | 07:18 15:23-16:03/40 14:41-15:03/22 |
| | 20:34 | 20:02 17:59-18:54/55 | 19:12 08:27-08:49/22 | 18:21 08:14-08:48/34 | 16:41 | 16:29 08:02-08:38/36 08:39-09:04/25 |
| 15 | 05:37 19:33-20:07/34 | 06:07 19:10-19:34/24 | 06:39 17:49-18:48/59 | 07:11 17:03-17:56/53 | 06:48 15:25-16:16/51 | 07:19 15:23-16:03/40 14:41-15:04/23 |
| | 20:33 | 20:01 17:58-18:55/57 | 19:11 08:24-08:52/28 | 18:20 08:16-08:45/29 | 16:40 | 16:30 08:02-08:39/37 08:40-09:05/25 |
| 16 | 05:38 19:33-20:07/34 | 06:08 19:10-19:33/23 | 06:40 17:50-18:46/56 | 07:12 17:00-17:54/54 | 06:49 15:25-16:15/50 | 07:20 15:24-16:04/40 14:41-15:05/24 |
| | 20:33 | 19:59 17:57-18:56/59 | 19:09 08:22-08:54/32 | 18:18 08:19-08:43/24 | 16:39 | 16:30 08:03-09:06/63 |
| 17 | 05:39 19:33-20:07/34 | 06:09 19:10-19:33/23 | 06:41 17:50-18:45/55 | 07:13 16:59-17:54/55 | 06:50 15:25-16:13/48 | 07:20 15:23-16:04/41 14:41-15:05/24 |
| | 20:32 | 19:58 17:56-18:56/60 | 19:07 08:20-08:55/35 | 18:17 08:23-08:39/16 | 16:38 | 16:30 08:03-09:06/63 |
| 18 | 05:40 19:32-20:05/33 | 06:10 19:10-19:32/22 | 06:42 17:50-18:43/53 | 07:14 16:57-17:52/55 | 06:51 15:26-16:13/47 | 07:21 15:24-16:04/40 14:41-15:06/25 |
| | 20:31 | 19:56 17:55-18:57/62 | 19:05 08:18-08:57/39 | 18:15 | 16:37 | 16:30 08:04-09:07/63 |
| 19 | 05:41 19:33-20:05/32 | 06:11 19:11-19:32/21 | 06:43 17:50-18:41/51 | 07:15 16:56-17:50/54 | 06:52 15:27-16:12/45 | 07:22 15:25-16:05/40 14:42-15:07/25 |
| | 20:31 | 19:55 17:54-18:57/63 | 19:04 08:16-08:58/42 | 18:14 | 16:37 | 16:31 08:04-09:08/64 |
| 20 | 05:41 19:33-20:04/31 | 06:12 19:11-19:30/19 | 06:44 17:51-18:39/48 | 07:16 16:54-17:48/54 | 06:54 15:27-16:11/44 | 07:22 15:25-16:05/40 14:42-15:08/26 |
| | 20:30 | 19:54 17:53-18:57/64 | 19:02 08:15-08:59/44 | 18:12 | 16:36 | 16:31 08:04-09:08/64 |
| 21 | 05:42 19:33-20:03/30 | 06:13 19:12-19:29/17 | 06:45 17:51-18:37/46 | 07:17 16:53-17:47/54 | 06:55 15:27-16:10/43 | 07:23 15:26-16:06/40 14:43-15:09/26 |
| | 20:29 | 19:52 17:52-18:58/66 | 19:00 08:14-08:59/45 | 18:11 | 16:35 | 16:32 08:05-09:09/64 |
| 22 | 05:43 19:34-20:02/28 | 06:14 19:13-19:26/13 | 06:46 17:52-18:36/44 | 07:19 16:53-17:46/53 | 06:56 15:29-16:10/41 | 07:23 15:26-16:06/40 14:43-15:09/26 |
| | 20:28 | 19:50 17:51-18:58/67 | 18:59 08:12-09:00/48 | 18:09 | 16:35 | 16:32 08:05-09:09/64 |
| 23 | 05:44 19:34-20:02/28 | 06:15 19:15-19:23/8 | 06:47 17:52-18:34/42 | 07:20 16:52-17:44/52 | 06:57 15:29-16:09/40 | 07:24 15:27-16:06/39 14:44-15:10/26 |
| | 20:27 | 19:49 17:51-18:58/67 | 18:57 08:11-09:01/50 | 18:08 | 16:34 | 16:33 08:06-09:10/64 |
| 24 | 05:45 19:34-20:01/27 | 06:16 17:50-18:58/68 | 06:48 17:53-18:32/39 | 07:21 16:51-17:42/51 | 06:58 15:30-16:08/38 | 07:24 15:27-16:07/40 14:44-15:09/25 |
| | 20:27 | 19:47 | 18:55 08:10-09:01/51 | 18:06 | 16:33 | 16:33 08:06-09:10/64 |
| 25 | 05:46 19:34-20:00/26 | 06:17 17:48-18:57/69 | 06:49 17:55-18:30/35 | 06:22 15:51-16:41/50 | 07:00 15:31-16:07/36 | 07:25 15:27-16:07/40 14:44-15:09/25 |
| | 20:26 | 19:46 | 18:53 08:10-09:01/51 | 17:05 15:45-15:48/3 | 16:33 | 16:34 08:07-09:10/63 |
| 26 | 05:47 19:35-20:00/25 | 06:18 17:48-18:57/69 | 06:50 17:56-18:29/33 | 06:23 15:39-16:40/61 | 07:01 15:31-16:07/36 | 07:25 15:28-16:08/40 14:46-15:10/24 |
| | 20:25 | 19:44 | 18:52 08:09-09:01/52 | 17:03 | 16:32 | 16:34 08:08-09:11/63 |
| 27 | 05:48 19:35-19:59/24 | 06:19 17:47-18:57/70 | 06:51 17:56-18:27/31 | 06:25 15:36-16:38/62 | 07:02 15:32-16:07/35 | 07:26 15:29-16:09/40 14:46-15:10/24 |
| | 20:24 | 19:43 | 18:50 08:08-09:02/54 | 17:02 | 16:32 | 16:35 08:08-09:11/63 |
| 28 | 05:49 19:36-19:58/22 | 06:20 17:47-18:57/70 | 06:52 17:55-18:25/30 | 06:26 15:34-16:37/63 | 07:03 15:31-16:06/35 | 07:26 15:29-16:09/40 14:47-15:10/23 |
| | 20:23 | 19:41 | 18:48 08:08-09:01/53 | 17:01 | 16:31 | 08:04-08:12/8 |
| 29 | 05:50 19:37-19:57/20 | 06:21 17:46-18:57/71 | 06:53 17:55-18:23/28 | 06:27 15:32-16:35/63 | 07:04 15:30-16:06/36 | 07:26 15:30-16:10/40 14:47-15:10/23 |
| | 20:22 | 19:39 | 18:46 08:08-09:02/54 | 16:59 | 16:31 | 08:03-08:14/11 |
| 30 | 05:51 19:38-19:56/18 | 06:22 17:46-18:56/70 | 06:54 17:53-18:21/28 | 06:28 15:31-16:34/63 | 07:05 15:29-16:05/36 | 07:26 15:30-16:10/40 14:48-15:10/22 |
| | 20:21 | 19:38 | 18:45 08:08-09:02/54 | 16:58 | 16:31 | 08:02-08:15/13 |
| 31 | 05:52 19:39-19:56/17 | 06:23 17:45-18:56/71 | 06:29 15:29-16:33/64 | 06:29 15:29-16:33/64 | 07:06 15:32-16:07/36 | 07:27 15:32-16:12/40 14:50-15:11/21 |
| | 20:20 | 19:36 | 16:57 | 16:57 | 16:30 | 08:10-08:45/35 08:49-09:11/22 |
| Potential sun hours | 461 | 429 | 375 | 345 | 296 | 286 |
| Sum of minutes with flicker | 959 | 1984 | 2363 | 2230 | 1513 | 3347 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

Project:

Queequeg_shadow

Licensed user:

ERM ITALIA S.P.A.
Via San Gregorio, 38
IT-20124 Milano
+39 02 6744 0217
Aurora / aurora.finiugerra@erm.com
Calculated:
26/01/2024 18:31/4.0.531

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 4 - WTG04

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

Table with columns for months (January to June) and rows for each day of the month, containing time intervals and potential sun hours.

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

Day in month Sun rise (hh:mm) Sun set (hh:mm) First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker



SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 4 - WTG04

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

Table with 12 columns: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec. Values: 4.12, 4.66, 5.30, 6.72, 8.25, 9.35, 10.16, 9.45, 7.64, 5.82, 4.65, 3.82

Operational time

Table with 13 columns: N, NNE, ENE, E, ESE, SSE, S, SSW, WSW, W, WNW, NNW, Sum. Values: 985, 358, 99, 45, 45, 1,532, 636, 546, 815, 367, 1,344, 1,988, 8,760

Main data table with columns for months (July to December) and rows for each day (1-31). Columns contain time ranges and numerical values. Summary rows at the bottom show 'Potential sun hours' and 'Sum of minutes with flicker' for each month.

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

Matrix with 2 rows and 3 columns: Day in month, Sun rise (hh:mm), Sun set (hh:mm); First time (hh:mm) with flicker, Last time (hh:mm) with flicker, Minutes with flicker



SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 5 - WTG05

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | January | February | March | April | May | June |
|-----------------------------|--|--|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1 | 07:27 08:24-09:53/89 16:39 07:50-08:10/20 | 07:13 08:45-09:48/63 17:14 07:56-08:12/16 | 06:36 17:49 | 06:44 07:03-07:19/16 19:24 | 05:57 06:17-06:53/36 19:57 | 05:28 19:46-20:01/15 20:27 |
| 2 | 07:27 08:25-09:53/88 16:40 07:50-08:11/21 | 07:12 08:46-09:47/61 17:15 08:00-08:09/9 | 06:34 17:50 | 06:42 07:01-07:17/16 19:25 | 05:56 06:16-06:53/37 19:58 | 05:27 19:45-20:02/17 20:28 |
| 3 | 07:27 08:25-09:53/88 16:41 07:50-08:11/21 | 07:11 08:48-09:46/58 17:16 | 06:33 17:51 | 06:41 06:59-07:15/16 19:26 | 05:55 06:14-06:52/38 19:59 | 05:27 19:45-20:03/18 20:28 |
| 4 | 07:27 08:25-09:53/88 16:41 07:50-08:12/22 | 07:10 08:49-09:44/55 17:18 07:30-07:32/2 | 06:31 17:52 | 06:39 06:58-07:14/16 19:27 | 05:53 06:14-06:51/37 20:00 | 05:26 19:44-20:03/19 20:29 |
| 5 | 07:27 08:25-09:53/88 16:42 07:49-08:12/23 | 07:08 08:51-09:43/52 17:19 07:29-07:34/5 | 06:29 17:53 | 06:37 06:56-07:13/17 19:28 | 05:52 06:14-06:51/37 20:01 | 05:26 19:44-20:04/20 20:30 |
| 6 | 07:27 08:26-09:54/88 16:43 07:49-08:13/24 | 07:07 08:52-09:40/48 17:20 07:27-07:35/8 | 06:28 17:55 | 06:36 06:54-07:13/19 19:29 | 05:51 06:15-06:50/35 20:02 | 05:26 19:44-20:05/21 20:30 |
| 7 | 07:27 08:27-09:54/87 16:44 07:49-08:13/24 | 07:06 08:54-09:38/44 17:21 07:26-07:36/10 | 06:26 17:56 | 06:34 06:53-07:13/20 19:30 | 05:50 06:15-06:48/33 20:03 | 05:25 19:43-20:05/22 20:31 |
| 8 | 07:27 08:28-09:55/87 16:45 07:49-08:14/25 | 07:05 08:57-09:36/39 17:23 07:25-07:38/13 | 06:25 17:57 | 06:32 06:51-07:12/21 19:31 | 05:48 06:15-06:47/32 20:04 | 05:25 19:42-20:06/24 20:32 |
| 9 | 07:26 08:28-09:55/87 16:46 07:49-08:15/26 | 07:04 08:59-09:33/34 17:24 07:24-07:39/15 | 06:23 17:58 | 06:31 06:49-07:11/22 19:33 | 05:47 06:16-06:45/29 20:05 | 05:25 19:42-20:07/25 20:32 |
| 10 | 07:26 08:28-09:55/87 16:47 07:48-08:15/27 | 07:03 09:03-09:29/26 17:25 07:23-07:40/17 | 06:21 17:59 | 06:29 06:48-07:11/23 19:34 | 05:46 06:18-06:44/26 20:06 | 05:25 19:42-20:07/25 20:33 |
| 11 | 07:26 08:29-09:55/86 16:48 07:48-08:16/28 | 07:01 09:08-09:23/15 17:26 07:21-07:39/18 | 06:20 18:00 | 06:27 06:46-07:10/24 19:35 | 05:45 06:19-06:42/23 20:07 | 05:24 19:43-20:08/25 20:33 |
| 12 | 07:26 08:30-09:56/86 16:49 07:48-08:17/29 | 07:00 07:20-07:40/20 17:28 | 06:18 18:01 | 06:26 06:45-07:10/25 19:36 | 05:44 06:20-06:39/19 20:08 | 05:24 19:43-20:09/26 20:34 |
| 13 | 07:25 08:30-09:55/85 16:51 07:47-08:16/29 | 06:59 07:19-07:41/22 17:29 | 06:16 18:03 | 06:24 06:43-07:08/25 19:37 | 05:43 06:22-06:35/13 20:09 | 05:24 19:43-20:09/26 20:34 |
| 14 | 07:25 08:31-09:56/85 16:52 07:47-08:17/30 | 06:58 07:17-07:40/23 17:30 | 06:15 18:04 | 06:22 06:41-07:07/26 19:38 | 05:42 06:25-06:32/7 20:10 | 05:24 19:43-20:10/27 20:35 |
| 15 | 07:25 08:31-09:55/84 16:53 07:46-08:17/31 | 06:56 07:16-07:40/24 17:32 | 06:13 06:32-06:33/1 18:05 | 06:21 06:40-07:06/26 19:39 | 05:41 20:11 20:11 | 05:24 19:43-20:10/27 20:35 |
| 16 | 07:24 08:32-09:56/84 16:54 07:46-08:18/32 | 06:55 07:15-07:41/26 17:33 | 06:11 06:30-06:34/4 18:06 | 06:19 06:38-07:04/26 19:40 | 05:40 20:12 20:12 | 05:24 19:43-20:10/27 20:36 |
| 17 | 07:24 08:32-09:55/83 16:55 07:45-08:18/33 | 06:54 07:13-07:40/27 17:34 | 06:10 06:28-06:34/6 18:07 | 06:18 06:37-07:02/25 19:41 | 05:39 20:13 20:13 | 05:24 19:43-20:11/28 20:36 |
| 18 | 07:23 08:33-09:56/83 16:56 07:45-08:19/34 | 06:52 07:12-07:40/28 17:35 | 06:08 06:27-06:35/8 18:08 | 06:16 06:35-07:01/26 19:42 | 05:38 20:14 20:14 | 05:24 19:43-20:11/28 20:36 |
| 19 | 07:23 08:34-09:55/81 16:57 07:44-08:19/35 | 06:51 07:10-07:38/28 17:36 | 06:06 06:25-06:35/10 18:09 | 06:15 06:34-07:02/28 19:43 | 05:37 20:15 20:15 | 05:24 19:43-20:11/28 20:37 |
| 20 | 07:22 08:34-09:55/81 16:59 07:43-08:18/35 | 06:49 07:11-07:38/27 17:38 | 06:04 06:23-06:34/11 18:11 | 06:13 06:32-07:01/29 19:45 | 05:36 20:16 20:16 | 05:24 19:43-20:11/28 20:37 |
| 21 | 07:22 08:35-09:55/80 17:00 07:44-08:19/35 | 06:48 07:11-07:36/25 17:39 | 06:03 06:22-06:34/12 18:12 | 06:12 06:31-07:01/30 19:46 | 05:35 20:17 20:17 | 05:25 19:43-20:11/28 20:37 |
| 22 | 07:21 08:36-09:55/79 17:01 07:45-08:19/34 | 06:46 07:13-07:35/22 17:40 | 06:01 06:20-06:33/13 18:13 | 06:10 06:29-07:00/31 19:47 | 05:34 20:18 20:18 | 05:25 19:43-20:11/28 20:38 |
| 23 | 07:20 08:36-09:54/78 17:02 07:45-08:19/34 | 06:45 07:14-07:33/19 17:41 | 05:59 06:18-06:32/14 18:14 | 06:09 06:28-07:00/32 19:48 | 05:33 20:19 20:19 | 05:25 19:44-20:12/28 20:38 |
| 24 | 07:20 08:37-09:54/77 17:04 07:45-08:18/33 | 06:43 07:17-07:31/14 17:43 | 05:58 06:16-06:31/15 18:15 | 06:07 06:26-06:59/33 19:49 | 05:33 20:20 20:20 | 05:25 19:44-20:12/28 20:38 |
| 25 | 07:19 08:38-09:54/76 17:05 07:47-08:19/32 | 06:42 07:20-07:27/7 17:44 | 05:56 06:15-06:31/16 18:16 | 06:06 06:25-06:58/33 19:50 | 05:32 20:21 20:21 | 05:26 19:44-20:12/28 20:38 |
| 26 | 07:18 08:39-09:53/74 17:06 07:48-08:18/30 | 06:40 17:45 17:45 | 05:54 06:13-06:29/16 18:17 | 06:04 06:23-06:57/34 19:51 | 05:31 20:22 20:22 | 05:26 19:45-20:12/27 20:38 |
| 27 | 07:17 08:40-09:53/73 17:07 07:49-08:18/29 | 06:39 17:46 17:46 | 05:53 06:11-06:27/16 18:18 | 06:03 06:22-06:56/34 19:52 | 05:30 20:23 20:23 | 05:26 19:45-20:12/27 20:38 |
| 28 | 07:16 08:41-09:52/71 17:09 07:50-08:17/27 | 06:37 17:47 17:47 | 05:51 06:10-06:26/16 18:19 | 06:01 06:21-06:56/35 19:53 | 05:30 20:24 20:24 | 05:27 19:45-20:12/27 20:38 |
| 29 | 07:15 08:42-09:51/69 17:10 07:51-08:16/25 | 06:36 17:48 17:48 | 06:49 07:08-07:21/13 19:20 | 06:00 06:19-06:54/35 19:54 | 05:29 20:24 20:24 | 05:27 19:46-20:12/26 20:38 |
| 30 | 07:15 08:43-09:50/67 17:11 07:52-08:15/23 | 06:35 17:49 17:49 | 06:47 07:06-07:20/14 19:22 | 05:59 06:18-06:54/36 19:55 | 05:29 19:49-19:59/10 20:25 | 05:27 19:46-20:12/26 20:38 |
| 31 | 07:14 08:44-09:49/65 17:12 07:54-08:14/20 | 06:34 17:50 17:50 | 06:46 07:04-07:19/15 19:23 | 05:58 19:54 19:54 | 05:28 19:48-20:01/13 20:26 | 05:27 19:46-20:12/26 20:38 |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 |
| Sum of minutes with flicker | 3395 | 920 | 200 | 779 | 425 | 749 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 5 - WTG05

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | July | August | September | October | November | December |
|-----------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------------------|--|--|
| 1 | 05:28 19:47-20:12/25 20:38 | 05:52 06:30-06:51/21 20:18 | 06:24 06:45-07:09/24 19:34 | 06:55 18:43 | 06:30 08:31-08:59/28 16:55 06:52-07:08/16 | 07:06 08:11-09:37/86 16:30 07:30-07:58/28 |
| 2 | 05:28 19:47-20:12/25 20:38 | 05:53 06:29-06:53/24 20:17 | 06:25 06:46-07:09/23 19:33 | 06:56 18:41 | 06:32 08:29-09:03/34 16:54 06:54-07:08/14 | 07:07 08:11-09:38/87 16:30 07:31-07:58/27 |
| 3 | 05:29 19:47-20:12/25 20:38 | 05:54 06:28-06:55/27 20:16 | 06:26 06:47-07:09/22 19:31 | 06:57 18:39 | 06:33 08:26-09:06/40 16:53 06:55-07:07/12 | 07:08 08:11-09:38/87 16:29 07:32-07:58/26 |
| 4 | 05:29 19:47-20:11/24 20:37 | 05:55 06:27-06:57/30 20:15 | 06:27 06:48-07:09/21 19:29 | 06:58 18:38 | 06:34 08:24-09:08/44 16:51 06:56-07:06/10 | 07:09 08:12-09:39/87 16:29 07:33-07:58/25 |
| 5 | 05:30 19:49-20:12/23 20:37 | 05:56 06:26-06:58/32 20:14 | 06:28 06:49-07:09/20 19:28 | 06:59 18:36 | 06:35 08:21-09:10/49 16:50 06:57-07:04/7 | 07:10 08:12-09:39/87 16:29 07:34-07:58/24 |
| 6 | 05:31 19:50-20:12/22 20:37 | 05:57 06:25-06:59/34 20:13 | 06:29 06:50-07:09/19 19:26 | 07:00 18:34 | 06:36 08:21-09:13/52 16:49 06:59-07:04/5 | 07:11 08:12-09:40/88 16:29 07:35-07:59/24 |
| 7 | 05:31 19:50-20:11/21 20:37 | 05:58 06:24-07:00/36 20:11 | 06:30 06:51-07:08/17 19:24 | 07:02 18:33 | 06:38 08:19-09:14/55 16:48 07:00-07:02/2 | 07:12 08:13-09:40/87 16:29 07:36-07:59/23 |
| 8 | 05:32 19:51-20:11/20 20:36 | 05:59 06:24-07:00/36 20:10 | 06:31 06:52-07:08/16 19:23 | 07:03 18:31 | 06:39 08:17-09:16/59 16:47 | 07:13 08:13-09:41/88 16:29 07:37-07:59/22 |
| 9 | 05:33 19:51-20:10/19 20:36 | 06:00 06:23-07:01/38 20:09 | 06:32 06:53-07:09/16 19:21 | 07:04 18:29 | 06:40 08:17-09:18/61 16:46 07:30-07:40/10 | 07:14 08:13-09:41/88 16:29 07:40-08:00/20 |
| 10 | 05:33 19:52-20:10/18 20:36 | 06:01 06:24-07:02/38 20:07 | 06:33 06:54-07:10/16 19:19 | 07:05 18:28 | 06:41 08:16-09:19/63 16:45 07:27-07:43/16 | 07:15 08:14-09:42/88 16:29 07:39-08:00/21 |
| 11 | 05:34 19:54-20:10/16 20:35 | 06:02 06:25-07:02/37 20:06 | 06:34 06:55-07:11/16 19:17 | 07:06 18:26 | 06:43 08:15-09:20/65 16:44 07:25-07:45/20 | 07:16 08:14-09:43/89 16:29 07:40-08:00/20 |
| 12 | 05:35 19:55-20:10/15 20:35 | 06:04 06:26-07:02/36 20:05 | 06:35 06:56-07:11/15 19:16 | 07:07 18:24 | 06:44 08:15-09:22/67 16:43 07:24-07:47/23 | 07:16 08:15-09:43/88 16:29 07:41-08:01/20 |
| 13 | 05:35 19:56-20:08/12 20:34 | 06:05 06:27-07:02/35 20:03 | 06:36 06:57-07:11/14 19:14 | 07:08 18:23 | 06:45 08:14-09:23/69 16:42 07:23-07:48/25 | 07:17 08:15-09:43/88 16:29 07:41-08:00/19 |
| 14 | 05:36 19:59-20:06/7 20:34 | 06:06 06:28-07:03/35 20:02 | 06:37 06:58-07:11/13 19:12 | 07:09 18:21 | 06:46 08:13-09:24/71 16:41 07:21-07:49/28 | 07:18 08:15-09:44/89 16:29 07:42-08:01/19 |
| 15 | 05:37 20:33 20:33 | 06:07 06:29-07:04/35 20:01 | 06:38 06:59-07:14/15 19:11 | 07:10 18:20 | 06:47 08:13-09:26/73 16:40 07:21-07:51/30 | 07:19 08:16-09:44/88 16:29 07:43-08:01/18 |
| 16 | 05:38 20:32 20:32 | 06:08 06:29-07:03/34 19:59 | 06:39 07:00-07:16/16 19:09 | 07:12 18:18 | 06:49 08:12-09:26/74 16:39 07:21-07:51/30 | 07:20 08:17-09:45/88 16:30 07:44-08:02/18 |
| 17 | 05:39 20:32 20:32 | 06:09 06:30-07:04/34 19:58 | 06:41 07:01-07:17/16 19:07 | 07:13 07:51-08:01/10 18:16 | 06:50 08:11-09:27/76 16:38 07:20-07:52/32 | 07:20 08:17-09:45/88 16:30 07:44-08:01/17 |
| 18 | 05:39 20:31 20:31 | 06:10 06:31-07:04/33 19:56 | 06:42 07:02-07:18/16 19:05 | 07:14 07:47-08:04/17 18:15 | 06:51 08:11-09:28/77 16:37 07:19-07:52/33 | 07:21 08:17-09:46/89 16:30 07:45-08:02/17 |
| 19 | 05:40 20:30 20:30 | 06:11 06:32-07:05/33 19:55 | 06:43 07:03-07:18/15 19:04 | 07:15 07:45-08:05/20 18:13 | 06:52 08:11-09:29/78 16:36 07:20-07:54/34 | 07:22 08:17-09:46/89 16:31 07:45-08:02/17 |
| 20 | 05:41 20:30 20:30 | 06:12 06:33-07:05/32 19:53 | 06:44 07:04-07:19/15 19:02 | 07:16 07:43-08:06/23 18:12 | 06:53 08:11-09:30/79 16:36 07:20-07:54/34 | 07:22 08:18-09:47/89 16:31 07:46-08:03/17 |
| 21 | 05:42 20:29 20:29 | 06:13 06:34-07:05/31 19:52 | 06:45 07:05-07:19/14 19:00 | 07:17 07:41-08:07/26 18:10 | 06:55 08:10-09:30/80 16:35 07:19-07:54/35 | 07:23 08:18-09:47/89 16:31 07:47-08:04/17 |
| 22 | 05:43 20:28 20:28 | 06:14 06:35-07:05/30 19:50 | 06:46 07:06-07:19/13 18:58 | 07:18 07:41-08:09/28 18:09 | 06:56 08:10-09:31/81 16:34 07:19-07:54/35 | 07:23 08:19-09:48/89 16:32 07:47-08:04/17 |
| 23 | 05:44 20:27 20:27 | 06:15 06:36-07:05/29 19:49 | 06:47 07:07-07:19/12 18:57 | 07:20 07:41-08:09/28 18:07 | 06:57 08:11-09:32/81 16:34 07:21-07:56/35 | 07:24 08:19-09:48/89 16:32 07:47-08:04/17 |
| 24 | 05:45 20:26 20:26 | 06:16 06:37-07:04/27 19:47 | 06:48 07:08-07:18/10 18:55 | 07:21 07:42-08:09/27 18:06 | 06:58 08:10-09:33/83 16:33 07:22-07:56/34 | 07:24 08:20-09:49/89 16:33 07:48-08:05/17 |
| 25 | 05:46 20:25 20:25 | 06:17 06:38-07:04/26 19:46 | 06:49 07:09-07:18/9 18:53 | 06:22 06:43-07:09/26 17:05 | 06:59 08:10-09:33/83 16:33 07:23-07:56/33 | 07:25 08:20-09:49/89 16:34 07:48-08:05/17 |
| 26 | 05:47 20:25 20:25 | 06:18 06:39-07:04/25 19:44 | 06:50 07:10-07:17/7 18:51 | 06:23 06:45-07:10/25 17:03 | 07:00 08:10-09:34/84 16:32 07:24-07:56/32 | 07:25 08:20-09:49/89 16:34 07:48-08:05/17 |
| 27 | 05:48 20:24 20:24 | 06:19 06:40-07:06/26 19:42 | 06:51 07:11-07:16/5 18:50 | 06:24 06:46-07:10/24 17:02 | 07:02 08:10-09:34/84 16:32 07:26-07:57/31 | 07:25 08:23-09:51/88 16:35 07:49-08:07/18 |
| 28 | 05:48 20:23 20:23 | 06:20 06:41-07:07/26 19:41 | 06:52 07:12-07:14/2 18:48 | 06:26 06:47-07:10/23 17:00 | 07:03 08:11-09:36/85 16:31 07:27-07:57/30 | 07:26 08:22-09:50/88 16:35 07:49-08:07/18 |
| 29 | 05:49 20:22 20:22 | 06:21 06:42-07:08/26 19:39 | 06:53 18:46 | 06:27 06:48-07:09/21 16:59 | 07:04 08:11-09:36/85 16:31 07:28-07:58/30 | 07:26 08:22-09:51/89 16:36 07:49-08:07/18 |
| 30 | 05:50 20:21 20:21 | 06:22 06:43-07:08/25 19:38 | 06:54 18:44 | 06:28 06:50-07:10/20 16:58 | 07:05 08:11-09:37/86 16:30 07:29-07:58/29 | 07:26 08:23-09:51/88 16:37 07:49-08:08/19 |
| 31 | 05:51 20:19 20:19 | 06:23 06:44-07:09/25 19:36 | 06:29 16:56 | 08:36-08:54/18 06:51-07:09/18 | 07:06 08:12-09:37/86 16:30 07:29-07:58/29 | 07:26 08:23-09:51/88 16:38 07:49-08:08/19 |
| Potential sun hours | 461 | 429 | 375 | 345 | 296 | 286 |
| Sum of minutes with flicker | 297 | 956 | 417 | 354 | 2751 | 3350 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

Project:

Queequeg_shadow

Licensed user:

ERM ITALIA S.P.A.

Via San Gregorio, 38

IT-20124 Milano

+39 02 6744 0217

Aurora / aurora.figuerra@erm.com

Calculated:

26/01/2024 18:31/4.0.531

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 6 - WTG06

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | January | February | March | April | May | June |
|----|--|---|---|--|---|-------------------------------|
| 1 | 07:27 15:36-16:13/37 16:39 08:30-11:12/162 | 07:13 15:54-16:50/56 17:14 08:14-11:19/185 | 06:36 06:55-09:48/173 17:49 15:37-16:56/79 | 06:44 07:03-07:39/36 17:03-18:36/93 | 05:57 06:50-07:39/49 17:06-17:46/93/32 | 05:28 05:50-06:33/43 20:27 |
| 2 | 07:27 15:36-16:14/38 16:40 08:30-11:13/163 | 07:12 15:56-16:51/55 17:15 08:13-11:19/186 | 06:34 06:54-09:48/174 16:59-17:14/15 | 06:42 07:01-07:39/38 08:59-10:05/66 | 05:56 06:51-07:39/48 17:06-49/32 | 05:27 05:49-06:33/44 20:28 |
| 3 | 07:27 15:37-16:15/38 16:41 08:30-11:13/163 | 07:11 15:57-16:53/56 17:16 08:12-11:19/187 | 06:33 06:54-09:47/173 17:02-17:11/9 | 06:41 07:00-07:39/39 09:00-10:03/63 | 05:55 06:51-07:37/46 17:21-18:09/48 | 05:27 05:49-06:33/44 20:28 |
| 4 | 07:27 15:36-16:15/39 16:42 08:31-11:14/163 | 07:10 15:58-16:53/55 17:18 08:11-11:18/187 | 06:31 06:54-09:47/173 17:02-17:32/4 | 06:39 06:58-07:41/43 09:02-10:01/59 | 05:54 06:52-07:36/44 17:23-18:07/44 | 05:27 05:48-06:33/45 20:29 |
| 5 | 07:27 15:36-16:16/40 16:43 08:30-11:13/163 | 07:09 15:59-16:54/55 17:19 08:10-11:18/188 | 06:30 06:56-09:47/171 17:28-17:32/4 | 06:37 06:56-07:42/46 09:03-09:57/54 | 05:52 06:53-07:35/42 17:25-18:05/40 | 05:26 05:48-06:34/46 20:30 |
| 6 | 07:27 15:37-16:17/40 16:44 08:31-11:14/164 | 07:07 15:57-16:54/57 17:20 08:08-11:16/188 | 06:28 06:57-09:46/169 17:24-17:33/9 | 06:36 06:54-07:43/49 09:04-09:54/50 | 05:51 06:54-07:34/40 17:28-18:03/35 | 05:26 05:48-06:34/46 20:31 |
| 7 | 07:27 15:37-16:18/41 16:45 08:31-11:15/164 | 07:06 15:55-16:54/59 17:22 08:07-11:16/189 | 06:26 06:45-09:45/180 17:22-17:34/12 | 06:34 06:55-07:44/49 09:07-09:51/44 | 05:50 06:52-07:33/37 17:30-18:01/31 | 05:25 05:48-06:35/47 20:31 |
| 8 | 07:27 15:37-16:19/42 16:46 08:31-11:15/164 | 07:05 15:54-16:55/61 17:23 08:06-11:15/189 | 06:25 15:38-17:14/96 06:44-09:45/181 | 06:32 06:54-07:45/51 09:09-09:47/38 | 05:49 06:57-07:31/34 17:32-17:57/25 | 05:25 05:48-06:35/47 20:32 |
| 9 | 07:27 15:38-16:21/43 16:47 08:31-11:16/165 | 07:04 15:52-16:55/63 17:24 08:05-11:14/189 | 06:23 15:38-17:17/99 06:42-07:49/67 | 06:31 06:50-06:54/4 17:01-18:33/92 | 05:47 06:58-07:29/31 17:37-17:53/16 | 05:25 05:48-06:35/47 20:32 |
| 10 | 07:26 15:38-16:22/44 16:48 08:31-11:16/165 | 07:03 15:47-16:55/64 17:25 08:04-11:13/189 | 06:21 15:38-17:38/120 07:49-09:43/114 | 06:29 06:48-07:46/58 09:16-09:38/22 | 05:46 06:59-07:27/28 | 05:25 05:48-06:36/48 20:33 |
| 11 | 07:26 15:38-16:23/45 16:49 08:31-11:17/166 | 07:02 15:49-16:55/66 17:27 08:03-11:12/189 | 06:20 15:39-17:40/121 07:49-09:41/112 | 06:28 06:46-07:46/60 17:02-18:32/90 | 05:45 07:01-07:25/24 | 05:25 05:48-06:36/48 20:34 |
| 12 | 07:26 15:39-16:24/45 16:50 08:32-11:17/165 | 07:00 15:48-16:55/67 17:28 08:02-11:11/189 | 06:18 15:39-17:40/121 07:49-09:41/112 | 06:26 06:45-07:47/62 17:03-18:32/89 | 05:44 07:04-07:22/18 | 05:24 05:48-06:36/48 20:34 |
| 13 | 07:26 15:38-16:25/47 16:51 08:31-11:17/166 | 06:59 15:47-16:55/68 17:29 08:02-11:09/187 | 06:16 15:40-17:41/121 07:49-09:40/111 | 06:24 06:43-07:47/64 17:03-18:31/88 | 05:43 07:08-07:18/10 | 05:24 05:49-06:37/48 20:35 |
| 14 | 07:25 15:39-16:26/47 16:52 08:32-11:18/166 | 06:58 15:45-16:53/68 17:30 08:00-11:07/187 | 06:15 15:41-17:41/120 07:50-09:40/110 | 06:23 06:42-07:47/65 17:03-18:30/87 | 05:42 06:02-06:37/35 | 05:24 05:49-06:37/48 20:35 |
| 15 | 07:25 15:39-16:27/48 16:53 08:32-11:18/166 | 06:56 15:44-16:53/69 17:32 08:00-11:06/186 | 06:13 15:42-17:40/118 07:50-09:38/108 | 06:21 06:40-07:47/67 17:04-18:30/86 | 05:41 06:01-06:26/25 | 05:24 05:49-06:37/48 20:35 |
| 16 | 07:24 15:40-16:29/49 16:54 08:32-11:19/167 | 06:55 15:44-16:53/69 07:59-11:04/185 | 06:11 15:42-17:39/117 07:49-09:37/108 | 06:20 06:38-07:47/69 17:04-18:29/85 | 05:40 06:00-06:26/26 | 05:24 05:49-06:37/48 20:36 |
| 17 | 07:24 15:40-16:30/50 16:55 08:32-11:19/167 | 06:54 15:42-16:51/69 07:01-17:11/110 | 06:10 15:43-17:37/114 07:50-09:36/106 | 06:18 06:37-07:47/70 17:05-18:28/83 | 05:39 05:59-06:27/28 | 05:24 05:49-06:38/49 20:36 |
| 18 | 07:23 15:41-16:31/50 16:57 08:33-11:19/166 | 06:52 15:42-16:52/70 06:59-17:13/114 | 06:08 15:45-17:36/111 07:50-09:34/104 | 06:16 06:35-07:47/72 17:05-18:27/82 | 05:38 05:59-06:26/27 | 05:24 05:49-06:38/49 20:37 |
| 19 | 07:23 15:41-16:32/51 16:58 08:33-11:19/167 | 06:51 15:41-16:53/72 06:58-17:14/116 | 06:06 15:46-17:33/107 07:51-09:28/97 | 06:15 06:34-07:47/73 17:06-18:27/81 | 05:37 05:58-06:26/28 | 05:24 05:49-06:38/49 20:37 |
| 20 | 07:22 15:41-16:33/52 16:59 08:32-11:19/167 | 06:49 07:09-07:10/1 07:15-07:45/30 07:56-10:55/179 | 06:05 15:47-17:32/105 07:50-09:31/101 | 06:13 06:32-07:46/74 17:06-18:25/79 | 05:36 05:57-06:25/28 | 05:25 05:49-06:38/49 20:37 |
| 21 | 07:22 15:42-16:35/53 17:00 08:33-11:20/167 | 06:48 07:08-07:46/38 16:56-17:17/21 | 06:03 15:49-17:33/104 07:51-09:30/99 | 06:12 06:31-07:46/75 17:07-18:25/78 | 05:35 05:56-06:25/29 | 05:25 05:50-06:39/49 20:37 |
| 22 | 07:21 15:42-16:36/54 17:01 08:33-11:20/167 | 06:47 07:06-07:48/42 16:56-17:18/22 | 06:01 15:50-17:34/104 07:51-09:28/97 | 06:10 06:29-07:45/76 17:08-18:23/75 | 05:34 05:55-06:25/30 | 05:25 05:50-06:39/49 20:38 |
| 23 | 07:20 15:43-16:36/53 17:03 08:30-11:20/170 | 06:45 07:05-07:48/43 16:55-17:19/24 | 05:59 15:52-17:34/102 07:51-09:26/95 | 06:09 06:28-06:47/19 17:09-18:23/74 | 05:34 05:55-06:27/32 | 05:25 05:50-06:39/49 20:38 |
| 24 | 07:20 15:43-16:37/54 17:04 08:27-11:20/173 | 06:44 07:03-07:50/47 16:56-17:20/24 07:54-09:48/114 | 05:58 15:54-17:34/100 07:52-09:25/93 | 06:07 06:26-07:44/78 17:09-18:21/72 | 05:33 05:54-06:28/34 | 05:25 05:50-06:39/49 20:38 |
| 25 | 07:19 15:45-16:38/53 17:05 08:26-11:21/175 | 06:43 07:01-07:50/49 09:51-10:37/46 | 05:56 15:58-17:35/97 07:53-09:23/90 | 06:06 06:25-07:44/79 17:11-18:20/69 | 05:32 05:53-06:28/35 | 05:26 05:51-06:40/49 20:38 |
| 26 | 07:18 15:46-16:40/54 17:06 08:24-11:21/177 | 06:41 07:00-07:51/51 09:55-10:33/38 | 05:54 16:01-17:35/94 07:53-09:21/88 | 06:04 06:24-07:44/80 17:12-18:20/68 | 05:31 05:53-06:29/36 | 05:26 05:51-06:39/48 20:38 |
| 27 | 07:17 15:46-16:43/57 17:08 08:22-11:20/178 | 06:39 06:58-07:51/53 16:56-17:18/22 07:52-09:48/116 | 05:53 16:05-17:35/90 07:53-09:19/86 | 06:03 06:22-07:42/80 17:13-18:18/65 | 05:31 05:52-06:30/38 | 05:26 05:51-06:39/48 20:38 |
| 28 | 07:16 15:47-16:44/57 17:09 08:20-11:20/180 | 06:37 06:57-07:52/55 16:57-17:18/21 | 05:51 16:02-17:35/88 07:55-09:17/82 | 06:02 06:21-07:42/81 17:14-18:17/63 | 05:30 05:52-06:31/39 | 05:27 05:52-06:40/48 20:38 |
| 29 | 07:16 15:49-16:46/57 17:10 08:18-11:20/182 | 06:36 15:57-16:56/79 07:53-09:48/115 | 06:49 07:08-08:03/55 08:55-10:12/76 | 06:00 06:20-07:42/82 17:16-18:16/60 | 05:29 05:51-06:31/40 | 05:27 05:52-06:40/48 20:38 |
| 30 | 07:15 15:50-16:47/57 17:11 08:17-11:20/183 | 06:35 15:56-16:55/78 10:00-10:26/26 | 06:48 07:06-08:00/54 08:56-10:12/76 | 05:59 06:18-07:40/82 17:16-18:14/58 | 05:29 05:51-06:32/41 | 05:28 05:52-06:40/48 20:38 |
| 31 | 07:14 15:52-16:48/56 17:13 08:15-11:20/185 | 06:34 15:55-16:54/78 10:00-10:26/26 | 06:46 07:05-07:39/34 17:02-18:35/93 | 05:58 06:17-07:39/82 17:16-18:14/58 | 05:28 05:50-06:32/42 | 05:28 05:52-06:40/48 20:38 |
| | Potential sun hours Sum of minutes with flicker | 296 7596 | 369 8239 | 400 4887 | 450 1853 | 454 1426 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 6 - WTG06

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| July | August | September | October | November | December |
|---|--|--|---|---|----------|
| 1 05:28 05:52-06:40/48 20:38 2 05:29 05:53-06:41/48 20:38 3 05:29 05:53-06:40/47 20:37 4 05:30 05:54-06:41/47 20:38 5 05:30 05:53-06:40/47 20:37 6 05:31 05:54-06:41/47 20:37 7 05:32 05:54-06:40/46 20:37 8 05:32 05:55-06:40/45 20:36 9 05:33 05:56-06:41/45 20:36 10 05:34 05:56-06:40/44 20:36 11 05:34 05:57-06:40/43 20:35 12 05:35 05:58-06:40/42 20:35 13 05:36 05:59-06:40/41 20:34 14 05:36 05:59-06:39/40 20:34 15 05:37 06:00-06:39/39 20:33 16 05:38 06:01-06:39/38 20:32 17 05:39 06:02-06:39/37 20:32 18 05:40 06:03-06:39/36 20:31 19 05:41 06:03-06:37/34 20:30 20 05:41 06:04-06:37/33 20:30 21 05:42 06:05-06:36/31 20:29 22 05:43 06:06-06:35/29 20:28 23 05:44 06:07-06:36/29 20:27 24 05:45 06:08-06:36/28 20:26 25 05:46 06:09-06:37/28 20:26 26 05:47 06:09-06:37/28 20:25 27 05:48 06:10-06:36/26 20:24 28 05:49 06:11-06:36/25 20:23 29 05:50 06:12-06:37/25 20:22 30 05:51 06:13-06:49/36 20:21 31 05:52 07:17-07:30/13 20:20 Potential sun hours Sum of minutes with flicker | 05:53 07:14-07:34/20 20:18 06:15-06:52/37 05:54 07:11-07:36/25 20:17 06:16-06:53/37 05:55 07:09-07:38/29 17:52-17:59/7 20:16 06:17-06:54/37 05:56 07:08-07:40/32 17:46-18:05/19 20:15 06:18-06:55/37 05:57 07:06-07:41/35 17:42-18:09/27 20:14 06:19-06:56/37 05:58 07:05-07:43/38 17:39-18:11/32 20:13 06:20-06:56/36 05:59 07:03-07:44/41 17:36-18:14/38 20:11 06:21-06:57/36 06:00 07:02-07:45/43 17:34-18:16/42 20:10 06:22-06:57/35 06:01 07:01-07:46/45 17:32-18:17/45 20:09 06:23-06:57/34 06:02 07:00-07:47/47 17:30-18:19/49 20:08 06:24-06:58/34 06:03 06:59-07:48/49 06:26-06:58/32 20:06 17:28-18:20/52 06:04 06:26-07:48/82 20:05 17:28-18:22/56 06:05 06:58-07:49/51 06:27-06:57/30 20:04 17:25-18:23/58 06:06 06:28-07:49/81 20:02 17:23-18:24/61 06:07 06:29-07:50/81 20:01 17:22-18:25/63 06:08 06:30-07:50/80 19:59 17:20-18:26/66 06:09 07:01-07:51/80 19:58 17:19-18:27/68 06:10 06:32-07:51/79 19:56 17:17-18:27/70 06:11 06:54-07:51/57 06:33-06:53/20 19:55 17:16-18:28/72 06:12 06:34-06:52/18 17:15-18:29/74 19:53 06:53-07:51/58 06:13 06:35-07:51/76 19:52 17:13-18:29/76 06:14 06:36-07:51/75 19:50 17:12-18:30/78 06:15 06:37-07:51/74 19:49 17:11-18:30/79 06:16 06:38-07:51/73 19:47 17:09-18:30/81 06:17 06:39-07:51/72 19:46 17:08-18:30/82 06:18 06:40-07:50/70 19:44 17:07-18:30/83 06:19 06:41-07:49/68 19:43 17:06-18:30/84 06:20 06:42-07:48/66 19:41 17:05-18:31/86 06:21 06:43-07:48/65 19:39 17:04-18:31/87 06:22 06:43-07:47/64 19:38 17:03-18:31/88 06:23 06:44-07:46/62 19:36 17:02-18:31/89 461 1190 4090 | 06:24 06:45-07:45/60 19:34 17:01-18:31/90 06:25 06:46-07:44/58 09:14-09:36/22 19:33 17:00-18:31/91 06:26 06:47-06:51/4 16:59-18:31/92 19:31 06:52-07:43/51 09:10-09:41/31 06:27 06:51-07:42/51 09:06-09:44/38 19:29 16:59-18:30/91 06:28 06:51-07:41/50 09:03-09:47/44 19:28 16:58-18:30/92 06:29 06:51-07:39/48 09:00-09:50/50 19:26 16:57-18:30/93 06:30 06:51-07:37/46 08:58-09:52/54 19:24 16:57-18:30/93 06:31 06:52-07:35/43 08:56-09:54/58 19:23 16:56-18:29/93 06:33 06:53-07:33/40 08:54-09:56/62 19:21 16:56-18:29/93 06:34 06:54-07:32/38 08:52-09:58/66 19:19 16:55-18:28/93 06:35 06:55-07:32/37 08:50-10:00/70 19:18 16:55-18:28/93 06:36 06:56-07:31/35 16:55-18:27/92 19:16 07:33-07:48/15 08:48-10:02/74 06:37 06:57-07:51/54 08:47-10:03/76 19:14 16:54-18:27/93 06:38 06:58-07:53/55 08:45-10:05/80 19:12 16:54-18:26/92 06:39 06:59-07:54/55 08:44-10:06/82 19:11 16:54-18:25/91 06:40 16:54-18:24/90 08:43-10:08/85 19:09 07:00-07:55/55 06:41 16:50-18:23/93 08:41-10:09/88 19:07 07:01-07:56/55 06:42 16:46-18:23/97 08:40-10:10/90 19:05 07:02-07:56/54 06:43 16:42-18:22/108 08:39-10:11/92 19:04 07:03-07:57/54 06:44 16:39-18:20/101 08:38-10:12/94 19:02 07:04-07:57/53 06:45 16:36-18:19/103 08:37-10:13/96 19:00 07:05-07:57/52 06:46 16:34-18:18/104 08:36-10:14/98 18:58 07:06-07:57/51 06:47 16:32-18:17/105 08:35-10:15/100 18:57 07:07-07:57/50 06:48 16:30-18:16/106 08:34-10:16/102 18:55 07:08-07:57/49 06:49 16:28-18:18/110 07:58-08:14/16 18:53 07:09-07:56/47 08:33-10:17/104 06:50 16:26-18:19/113 08:32-10:17/105 18:52 07:10-08:17/67 06:51 16:24-18:20/116 08:31-10:18/107 18:50 07:11-08:19/68 06:52 16:22-18:20/118 08:30-10:18/108 18:48 07:12-08:21/69 06:53 16:21-18:20/119 08:29-10:19/110 18:46 07:13-08:22/69 06:54 16:20-18:20/120 08:29-10:19/110 18:45 07:15-08:24/69 375 6891 | 06:55 16:19-18:20/121 08:29-10:21/112 18:43 07:16-08:25/69 06:56 16:18-18:19/121 08:29-10:21/112 18:41 07:17-08:25/68 06:57 16:17-18:17/120 08:28-10:21/113 18:40 07:18-08:26/68 06:58 16:16-17:56/100 07:19-08:26/67 18:38 17:57-18:15/18 08:27-10:21/114 07:00 16:15-17:52/97 07:20-08:26/66 18:36 17:57-18:13/16 08:27-10:21/114 07:01 07:21-10:21/180 17:58-18:12/14 18:34 16:14-17:48/94 07:02 07:32-10:21/169 17:59-18:10/11 18:33 16:13-17:43/90 07:22-07:31/9 07:03 07:31-10:21/170 18:01-18:08/7 18:31 16:12-17:30/78 07:23-07:25/2 07:04 07:29-10:21/172 18:29 16:11-17:30/79 07:05 07:29-10:21/172 17:40-17:42/2 18:28 16:11-17:29/78 07:06 07:28-10:22/174 17:35-17:47/12 18:26 16:11-17:30/79 07:07 07:28-10:21/173 17:33-17:49/16 18:25 16:11-17:29/78 07:08 07:29-10:21/172 17:31-17:50/19 18:23 16:10-17:29/79 07:09 07:30-08:24/54 17:30-17:51/21 08:25-10:21/116 18:21 16:10-17:28/78 10:37-10:53/16 07:11 07:31-08:23/52 10:30-11:01/31 18:20 16:09-17:51/102 08:25-10:20/115 07:12 07:32-08:22/50 10:25-11:06/41 18:18 16:09-17:51/102 08:25-10:20/115 07:13 07:34-08:22/48 17:28-17:52/24 08:26-10:20/114 18:17 16:10-17:27/77 10:23-11:11/48 07:14 07:35-08:21/46 10:20-11:15/55 18:15 16:10-17:52/102 08:26-10:19/113 07:15 07:36-08:19/43 17:27-17:50/23 18:14 16:10-17:26/76 08:26-11:18/172 07:16 07:37-08:18/41 17:27-17:48/21 18:12 16:10-17:25/75 08:26-11:21/175 07:17 07:38-07:42/4 07:43-08:16/33 08:26-11:23/177 18:11 16:10-17:24/74 17:27-17:47/20 07:19 16:11-17:24/73 17:28-17:46/18 18:09 07:46-08:15/29 08:27-11:26/179 07:20 16:11-17:23/72 17:29-17:44/15 18:08 07:47-08:13/26 08:27-11:28/181 07:21 16:12-17:22/70 17:29-17:42/13 18:06 07:50-08:10/20 08:28-11:30/182 06:22 15:12-16:21/69 16:31-16:41/10 17:05 06:53-07:05/12 07:28-10:32/184 06:23 15:14-16:23/69 07:29-10:35/186 17:03 16:34-16:40/6 06:24 15:14-16:23/69 17:02 07:30-10:36/186 06:26 15:15-16:23/68 17:01 07:31-10:37/187 06:27 15:16-16:23/67 16:59 07:31-10:38/187 06:28 15:18-16:24/66 16:58 07:32-10:41/189 06:29 15:19-16:24/65 16:57 07:33-10:41/188 345 8765 | 06:30 15:20-16:24/64 16:55 07:33-10:42/189 06:32 15:22-16:25/63 16:54 07:35-10:44/189 06:33 15:24-16:24/60 16:53 07:36-10:45/189 06:34 15:25-16:24/59 16:52 07:37-10:46/189 06:35 15:27-16:23/56 16:50 07:39-10:47/188 06:37 15:29-16:24/55 16:49 07:40-10:48/188 06:38 15:27-16:23/56 16:48 07:41-10:48/187 06:39 15:26-16:22/56 16:47 07:42-10:48/186 06:40 15:26-16:22/56 16:46 07:44-10:50/186 06:41 15:24-16:21/57 16:45 07:45-10:50/185 06:43 15:22-16:19/57 16:44 07:46-10:50/184 06:44 15:22-16:19/57 16:43 07:49-10:52/183 06:45 15:20-16:17/57 16:42 07:50-10:52/182 06:46 15:19-16:16/57 16:41 07:52-10:52/180 06:48 15:19-16:16/57 16:40 07:55-10:53/178 06:49 15:18-16:15/54 16:39 07:57-10:54/177 06:50 15:18-16:10/52 16:38 07:59-10:54/175 06:51 15:17-16:11/54 16:37 08:01-10:54/173 06:52 15:18-16:11/53 16:37 08:05-10:55/170 06:54 15:17-16:11/54 16:36 08:08-10:55/167 06:55 15:17-16:10/53 16:35 08:08-10:55/167 06:56 15:17-16:09/52 16:35 08:08-10:55/167 06:57 15:18-16:09/51 16:34 08:09-10:56/167 06:58 15:18-16:08/50 16:33 08:10-10:56/166 06:59 15:18-16:08/50 16:33 08:10-10:57/167 07:01 15:18-16:07/49 16:32 08:10-10:57/167 07:02 15:18-16:06/48 16:32 08:12-10:58/166 07:03 15:19-16:06/47 16:31 08:12-10:58/166 07:05 15:20-16:05/45 16:31 08:13-10:58/165 296 6935 286 6175 | |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
|--------------|------------------|---------------------------------|--------------------------------|----------------------|

Project:

Queequeg_shadow

Licensed user:

ERM ITALIA S.P.A.
Via San Gregorio, 38
IT-20124 Milano
+39 02 6744 0217
Aurora / aurora.finiguerra@erm.com
Calculated:
26/01/2024 18:31/4.0.531

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 7 - WTG07

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

Table with columns for months (January to June) and rows for days (1 to 31), containing sun rise/set times and potential sun hours.

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

Matrix table with columns: Day in month, Sun rise (hh:mm), Sun set (hh:mm), First time (hh:mm) with flicker, Last time (hh:mm) with flicker, Minutes with flicker.

Project:

Queequeg_shadow

Licensed user:

ERM ITALIA S.P.A.

Via San Gregorio, 38

IT-20124 Milano

+39 02 6744 0217

Aurora / aurora.finiugerra@erm.com

Calculated:

26/01/2024 18:31/4.0.531

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 7 - WTG07

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| | | | | | | | | | | | |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| | | | | | | | | | | | | |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | July | August | September | October | November | December |
|----|-------------------------------------|--------------------------------------|----------------------|-------------------------------------|--------------------------------------|--------------------------------------|
| 1 | 05:28 06:07-08:43/156 | 05:53 18:34-19:12/38 19:28-19:50/22 | 06:24 18:39-19:09/30 | 06:55 17:21-18:15/54 | 06:30 15:27-16:31/64 | 07:06 14:37-16:05/88 10:17-12:08/111 |
| 2 | 05:29 06:07-08:44/157 | 05:54 18:33-19:12/39 19:29-19:49/20 | 06:25 18:40-19:08/28 | 06:56 17:18-18:14/56 | 06:32 15:27-16:30/63 | 07:07 14:37-16:04/87 10:17-12:08/111 |
| 3 | 05:29 06:06-08:44/158 | 05:55 18:32-19:13/41 19:30-19:47/17 | 06:26 18:40-19:06/26 | 06:57 17:16-18:12/56 | 06:33 15:25-16:29/64 | 07:08 14:37-16:04/87 10:17-12:09/112 |
| 4 | 05:30 06:07-08:45/158 | 05:56 18:32-19:14/42 19:32-19:45/13 | 06:27 18:41-19:05/24 | 06:58 17:14-18:10/56 | 06:34 15:23-16:27/64 | 07:09 14:37-16:03/86 10:17-12:10/113 |
| 5 | 05:30 06:06-08:44/158 | 05:57 18:31-19:14/43 19:36-19:42/6 | 06:28 18:42-19:03/21 | 07:00 17:12-18:08/56 | 06:35 15:22-16:27/65 14:59-15:09/10 | 07:10 14:38-16:03/85 10:17-12:10/113 |
| 6 | 05:31 06:07-08:45/158 | 05:58 18:30-19:15/45 | 06:29 18:43-19:01/18 | 07:01 17:11-18:05/54 | 06:37 15:20-16:25/65 14:54-15:13/19 | 07:11 14:38-16:03/85 10:17-12:11/114 |
| 7 | 05:31 06:06-08:45/159 | 05:59 18:30-19:15/45 | 06:30 18:45-18:58/13 | 07:02 17:09-18:03/54 | 06:38 15:19-16:24/65 14:51-15:16/25 | 07:12 14:39-16:03/84 10:18-12:12/114 |
| 8 | 05:32 06:06-08:45/159 | 06:00 18:29-19:15/46 | 06:31 19:23 | 07:03 17:08-18:03/55 | 06:39 14:48-16:22/94 10:35-11:32/57 | 07:13 14:39-16:03/84 10:18-12:12/114 |
| 9 | 05:33 06:06-08:46/160 | 06:01 18:28-19:16/48 | 06:33 19:21 | 07:04 17:07-18:02/55 | 06:40 14:47-16:22/95 10:34-11:36/62 | 07:14 14:40-16:03/83 10:18-12:13/115 |
| 10 | 05:33 06:06-08:46/160 | 06:02 18:28-19:16/48 | 06:34 19:19 | 07:05 17:06-18:01/55 09:12-09:29/17 | 06:41 14:45-16:20/95 10:31-11:39/68 | 07:15 14:40-16:03/83 10:19-12:14/115 |
| 11 | 05:34 06:06-08:46/160 | 06:03 18:28-19:16/48 | 06:35 19:18 | 07:06 17:06-18:01/55 09:06-09:35/29 | 06:43 14:43-16:19/96 10:29-11:41/72 | 07:16 14:41-16:03/82 10:19-12:15/116 |
| 12 | 05:35 06:06-08:47/161 | 06:04 18:27-19:16/49 | 06:36 18:00-18:09/9 | 07:07 17:04-18:00/56 09:02-09:38/36 | 06:44 14:42-16:19/97 10:28-11:44/76 | 07:17 14:41-16:03/82 10:20-12:15/116 |
| 13 | 05:36 06:06-08:47/161 | 06:05 18:27-19:16/49 | 06:37 17:55-18:13/18 | 07:08 17:01-17:59/58 08:59-09:41/42 | 06:45 14:41-16:17/96 10:26-11:46/80 | 07:18 14:41-16:03/82 10:19-12:15/116 |
| 14 | 05:36 06:05-08:47/162 | 06:06 18:27-19:16/49 | 06:38 17:52-18:15/23 | 07:09 16:58-17:57/59 08:56-09:44/48 | 06:46 14:40-16:16/96 10:24-11:48/84 | 07:18 14:42-16:03/81 10:20-12:16/116 |
| 15 | 05:37 06:06-08:47/161 | 06:07 18:26-19:16/50 | 06:39 17:50-18:16/26 | 07:11 16:52-17:55/63 08:54-09:46/52 | 06:48 14:40-16:16/96 10:24-11:50/86 | 07:19 14:42-16:03/81 10:20-12:17/117 |
| 16 | 05:38 06:06-08:48/162 | 06:08 18:26-19:15/49 | 06:40 17:48-18:18/30 | 07:12 16:49-17:53/64 08:52-09:48/56 | 06:49 14:39-16:15/96 10:23-11:51/88 | 07:20 14:43-16:04/81 10:21-12:18/117 |
| 17 | 05:39 06:06-08:48/162 | 06:09 18:26-19:15/49 | 06:41 17:46-18:18/32 | 07:13 16:47-17:51/64 08:51-09:50/59 | 06:50 14:38-16:13/95 10:22-11:53/91 | 07:20 14:43-16:04/81 10:21-12:17/116 |
| 18 | 05:40 06:06-08:48/162 | 06:10 18:26-19:15/49 | 06:42 17:45-18:19/34 | 07:14 16:45-17:47/62 08:49-09:52/63 | 06:51 14:37-16:12/95 10:22-11:55/93 | 07:21 14:44-16:04/80 10:22-12:18/116 |
| 19 | 05:41 06:06-08:48/163 | 06:11 18:26-19:14/48 | 06:43 17:44-18:19/35 | 07:15 16:43-17:46/63 08:47-09:53/66 | 06:52 14:37-16:12/95 10:21-11:56/95 | 07:22 14:44-16:04/80 10:22-12:19/117 |
| 20 | 05:41 06:06-08:48/163 | 06:12 18:26-19:14/48 | 06:44 17:42-18:20/38 | 07:16 16:41-17:44/63 08:46-09:54/68 | 06:54 14:37-16:11/94 10:20-11:57/97 | 07:22 14:45-16:05/80 10:22-12:19/117 |
| 21 | 05:42 06:06-08:49/163 | 06:13 18:26-19:13/47 06:57-08:38/101 | 06:45 17:41-18:20/39 | 07:17 16:40-17:44/64 08:44-09:55/71 | 06:55 14:36-16:10/94 10:19-11:58/99 | 07:23 14:45-16:06/81 10:23-12:20/117 |
| 22 | 05:43 06:06-08:49/163 | 06:14 18:26-19:11/45 06:58-08:36/98 | 06:46 17:41-18:20/39 | 07:18 16:39-17:44/65 08:44-09:57/73 | 06:56 14:37-16:10/93 10:19-12:00/101 | 07:23 14:45-16:06/81 10:23-12:20/117 |
| 23 | 05:44 18:48-18:58/10 19:24-19:54/30 | 06:15 18:26-19:10/44 06:59-08:35/96 | 06:47 17:40-18:20/40 | 07:20 16:38-17:44/66 08:42-09:58/76 | 06:57 14:37-16:09/92 10:19-12:01/102 | 07:24 14:46-16:06/80 10:23-12:20/117 |
| 24 | 05:45 18:45-19:01/16 19:24-19:54/30 | 06:16 18:27-19:10/43 07:00-08:33/93 | 06:48 17:39-18:19/40 | 07:21 16:37-17:42/65 08:41-09:59/78 | 06:58 14:36-16:08/92 10:18-12:02/104 | 07:24 14:47-16:07/80 10:24-12:21/117 |
| 25 | 05:46 18:42-19:03/21 19:23-19:53/30 | 06:17 18:27-19:11/44 07:00-08:31/91 | 06:49 17:39-18:19/40 | 07:22 16:36-17:41/65 07:40-09:00/80 | 06:59 14:36-16:07/91 10:18-12:02/104 | 07:25 14:47-16:07/80 10:24-12:21/117 |
| 26 | 05:47 18:41-19:04/23 19:24-19:53/29 | 06:18 18:28-19:11/43 | 06:50 17:39-18:19/40 | 07:23 15:36-16:40/64 | 07:01 14:36-16:07/91 10:17-12:03/106 | 07:25 14:48-16:08/80 10:26-12:22/116 |
| 27 | 05:48 18:39-19:06/27 19:24-19:53/29 | 06:19 18:29-19:11/42 | 06:51 17:38-18:18/40 | 07:24 15:35-16:38/63 | 07:02 14:37-16:07/90 10:18-12:05/107 | 07:25 14:48-16:09/81 10:26-12:23/117 |
| 28 | 05:49 18:38-19:07/29 19:25-19:52/27 | 06:20 18:30-19:11/41 | 06:52 17:30-18:17/47 | 07:25 15:36-16:41/65 | 07:03 14:37-16:06/89 10:18-12:05/107 | 07:26 14:48-16:09/81 10:26-12:23/117 |
| 29 | 05:50 18:37-19:09/32 19:25-19:52/27 | 06:21 18:32-19:10/38 | 06:53 17:25-18:16/51 | 07:26 15:31-16:35/64 | 07:04 14:37-16:06/89 10:17-12:06/109 | 07:26 14:48-16:10/82 10:27-12:23/116 |
| 30 | 05:51 18:36-19:10/34 19:26-19:51/25 | 06:22 18:34-19:10/36 | 06:54 17:22-18:15/53 | 07:27 15:30-16:34/64 | 07:05 14:37-16:05/88 10:17-12:07/110 | 07:26 14:49-16:10/81 10:27-12:23/116 |
| 31 | 05:52 18:35-19:11/36 19:27-19:51/24 | 06:23 18:36-19:09/33 | 06:55 17:22-18:15/53 | 07:28 15:29-16:33/64 | 07:06 14:37-16:05/88 10:17-12:07/110 | 07:27 14:50-16:11/81 10:27-12:23/116 |
| | Potential sun hours 461 | 429 | 375 | 345 | 296 | 286 |
| | Sum of minutes with flicker 6023 | 5290 | 1103 | 3621 | 7819 | 9011 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |



SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 8 - WTG08

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June |
|----|---|--|---|---|--|-------------------------------|
| 1 | 07:26 15:35-16:09/34 16:39 11:24-12:34/70 | 07:12 17:14 | 06:36 16:57-17:27/30 17:49 06:55-07:19/24 | 06:44 17:58-19:03/65 19:24 07:03-07:23/20 | 05:57 19:07-19:26/19 19:56 06:17-06:51/34 | 05:28 19:14-19:40/26 20:27 |
| 2 | 07:27 15:36-16:09/33 16:40 11:25-12:34/69 | 07:12 17:15 | 06:34 16:58-17:28/30 17:50 06:53-07:18/25 | 06:42 17:57-19:03/66 19:25 07:01-07:21/20 | 05:56 17:57-19:03/66 19:58 06:16-06:51/35 | 05:27 19:16-19:40/24 20:27 |
| 3 | 07:27 15:36-16:10/34 16:41 11:26-12:34/68 | 07:10 17:16 | 06:33 17:00-17:30/30 17:51 06:53-07:18/25 | 06:41 17:56-19:04/68 19:26 06:59-07:19/20 | 05:55 19:08-19:32/24 19:59 06:14-06:50/36 | 05:27 19:17-19:40/23 20:28 |
| 4 | 07:27 15:37-16:11/34 16:41 11:27-12:34/67 | 07:09 17:18 | 06:31 17:00-17:30/30 17:52 06:53-07:16/23 | 06:39 17:56-19:05/69 19:27 06:58-07:19/21 | 05:53 19:09-19:36/27 20:00 06:13-06:50/37 | 05:26 19:17-19:39/22 20:29 |
| 5 | 07:27 15:38-16:11/33 16:42 11:28-12:34/66 | 07:08 17:19 | 06:29 16:59-17:30/31 17:53 06:55-07:15/20 | 06:37 17:55-19:07/72 19:28 06:59-07:17/18 | 05:52 19:12-19:38/26 20:01 06:12-06:49/37 | 05:26 19:18-19:39/21 20:30 |
| 6 | 07:27 15:39-16:12/33 16:43 11:30-12:34/64 | 07:07 17:20 | 06:28 17:00-17:31/31 17:55 06:56-07:13/17 | 06:36 17:55-19:07/72 19:29 07:00-07:14/14 | 05:51 19:15-19:39/24 20:02 06:11-06:49/38 | 05:26 19:19-19:39/20 20:30 |
| 7 | 07:27 15:40-16:13/33 16:44 11:31-12:34/63 | 07:06 17:21 | 06:26 17:01-17:30/29 17:56 06:58-07:10/12 | 06:34 17:55-19:07/72 19:30 07:04-07:11/7 | 05:50 19:12-19:39/26 20:03 06:10-06:48/38 | 05:25 19:19-19:38/19 20:31 |
| 8 | 07:26 15:41-16:14/33 16:45 11:33-12:33/60 | 07:05 17:23 | 06:25 17:01-17:30/29 17:57 | 06:32 17:55-19:07/72 19:31 | 05:48 19:12-19:40/28 20:04 06:08-06:47/39 | 05:25 19:20-19:38/18 20:32 |
| 9 | 07:26 15:41-16:14/33 16:46 11:33-12:32/59 | 07:04 17:24 | 06:23 17:03-17:30/27 17:58 | 06:31 17:54-19:06/72 19:32 | 05:47 19:12-19:41/29 20:05 06:07-06:46/39 | 05:25 19:21-19:38/17 20:32 |
| 10 | 07:26 15:42-16:15/33 16:47 11:35-12:32/57 | 07:03 17:25 | 06:21 17:04-17:28/24 17:59 | 06:29 17:55-19:06/71 19:34 | 05:46 19:11-19:42/31 20:06 06:06-06:46/40 | 05:25 19:22-19:37/15 20:33 |
| 11 | 07:26 15:44-16:15/31 16:48 11:37-12:31/54 | 07:01 17:26 | 06:20 17:06-17:27/21 18:00 | 06:27 17:55-19:04/69 19:35 19:09-19:13/4 | 05:45 19:11-19:43/32 20:07 06:05-06:45/40 | 05:24 19:23-19:37/14 20:33 |
| 12 | 07:26 15:43-16:15/32 16:50 11:38-12:29/51 | 07:00 17:28 | 06:18 17:08-17:26/18 18:01 | 06:26 17:54-19:03/69 19:36 19:05-19:13/8 | 05:44 19:10-19:44/34 20:08 06:04-06:44/40 | 05:24 19:24-19:37/13 20:34 |
| 13 | 07:25 15:44-16:16/32 16:51 11:41-12:29/48 | 06:59 17:29 | 06:16 17:09-17:24/15 18:03 | 06:24 17:55-18:44/49 18:46-19:01/15 19:37 19:03-19:15/12 | 05:43 19:10-19:45/35 20:09 06:03-06:43/40 | 05:24 19:24-19:36/12 20:34 |
| 14 | 07:25 15:45-16:17/32 16:52 11:43-12:27/44 | 06:57 17:30 | 06:15 17:12-17:20/8 18:04 | 06:22 17:55-18:43/48 18:47-18:59/12 19:38 19:01-19:16/15 | 05:42 19:10-19:45/35 20:10 06:02-06:41/39 | 05:24 19:25-19:36/11 20:35 |
| 15 | 07:25 15:44-16:17/33 16:53 11:45-12:25/40 | 06:56 17:32 | 06:13 18:05 | 06:21 17:57-18:42/45 19:39 19:00-19:17/17 | 05:41 19:09-19:45/36 20:11 06:01-06:39/38 | 05:24 19:26-19:35/9 20:35 |
| 16 | 07:24 15:45-16:18/33 16:54 11:49-12:23/34 | 06:55 17:00-17:10/10 17:33 | 06:11 18:06 | 06:19 17:57-18:41/44 19:40 18:59-19:18/19 | 05:40 19:09-19:45/36 20:12 06:00-06:37/37 | 05:24 19:27-19:35/8 20:36 |
| 17 | 07:24 15:45-16:18/33 16:55 11:52-12:20/28 | 06:53 16:58-17-11/13 17:34 | 06:10 18:07 | 06:18 17:58-18:40/42 19:41 18:59-19:19/20 | 05:39 19:09-19:44/35 05:59-06:27/28 20:13 06:28-06:33/5 | 05:24 19:28-19:34/6 20:36 |
| 18 | 07:23 15:45-16:18/33 16:56 11:57-12:14/17 | 06:52 16:57-17-13/16 17:35 | 06:08 18:08 | 06:16 17:59-18:38/39 06:35-06:42/7 19:42 18:58-19:20/22 | 05:38 19:09-19:44/35 20:14 05:58-06:27/29 | 05:24 19:29-19:34/5 20:36 |
| 19 | 07:23 15:46-16:18/32 16:58 | 06:51 16:55-17-14/19 17:36 07-10-07-13/3 | 06:06 18:09 | 06:15 18:00-18:37/37 06:34-06:45/11 19:43 18:57-19:20/23 | 05:37 19:09-19:43/34 20:15 06:00-06:27/27 | 05:24 19:29-19:33/4 20:37 |
| 20 | 07:22 15:47-16:18/31 16:59 | 06:49 16:55-17-16/21 17:38 07-09-07-16/7 | 06:04 06:23-06:24/1 18:10 | 06:13 18:01-18:35/34 06:32-06:46/14 19:44 18:58-19:22/24 | 05:36 19:10-19:44/34 20:16 06:00-06:26/26 | 05:24 19:30-19:33/3 20:37 |
| 21 | 07:21 15:47-16:18/31 17:00 | 06:48 16:54-17-16/22 17:39 07-07-07-17/10 | 06:03 17:18-17:33/15 18:12 06:22-06:26/4 | 06:12 18:03-18:34/31 06:31-06:48/17 19:46 18:58-19:23/25 | 05:35 19:10-19:43/33 20:17 06:00-06:26/26 | 05:25 19:30-19:33/3 20:37 |
| 22 | 07:21 15:48-16:19/31 17:01 | 06:46 16:54-17-17/23 17:40 07-06-07-18/12 | 06:01 17:14-17:37/23 06:20-06:27/7 18:13 17:43-17:52/9 | 06:10 18:04-18:31/27 06:29-06:48/19 19:47 18:58-19:24/26 | 05:34 19:10-19:43/33 20:18 06:01-06:25/24 | 05:25 19:31-19:34/3 20:37 |
| 23 | 07:20 15:49-16:18/29 17:02 | 06:45 16:53-17-17/24 17:41 07-04-07-18/14 | 05:59 17:11-17:53/42 18:14 06:18-06:27/9 | 06:09 18:07-18:29/22 06:28-06:49/21 19:48 18:59-19:25/26 | 05:33 19:10-19:42/32 20:19 06:02-06:25/23 | 05:25 19:30-19:34/4 20:38 |
| 24 | 07:19 15:49-16:18/29 17:04 | 06:43 16:54-17-21/27 17:43 07-03-07-19/16 | 05:58 17:08-17:53/45 18:15 06:16-06:27/11 | 06:07 18:10-18:24/14 06:26-06:49/23 19:49 18:59-19:26/27 | 05:33 19:11-19:43/32 20:20 06:02-06:24/22 | 05:25 19:30-19:35/5 20:38 |
| 25 | 07:19 15:50-16:17/27 17:05 | 06:42 16:53-17-22/29 17:44 07-01-07-19/18 | 05:56 17:07-17:54/47 18:16 06:15-06:28/13 | 06:06 19:00-19:27/27 19:50 06:25-06:50/25 | 05:32 19:11-19:42/31 20:21 06:03-06:23/20 | 05:26 19:29-19:35/6 20:38 |
| 26 | 07:18 15:52-16:18/26 17:06 | 06:40 16:54-17-24/30 17:45 07-00-07-20/20 | 05:54 17:05-17:56/51 18:17 06:13-06:28/15 | 06:04 19:01-19:28/27 19:51 06:23-06:50/27 | 05:31 19:11-19:42/31 20:22 06:05-06:23/18 | 05:26 19:29-19:37/8 20:38 |
| 27 | 07:17 15:53-16:17/24 17:07 | 06:39 16:54-17-24/30 17:46 06:58-07-19/21 | 05:52 17:03-17:57/54 18:18 06:11-06:27/16 | 06:03 19:05-19:28/23 19:52 06:22-06:51/29 | 05:31 19:12-19:42/30 20:23 06:05-06:22/17 | 05:26 19:29-19:37/8 20:38 |
| 28 | 07:16 15:54-16:16/22 17:09 | 06:37 16:55-17-25/30 17:47 06:57-07-20/23 | 05:51 17:01-17:58/57 18:19 06:09-06:26/17 | 06:01 19:06-19:28/22 19:53 06:21-06:51/30 | 05:30 19:12-19:42/30 20:23 06:06-06:20/14 | 05:27 19:28-19:38/10 20:38 |
| 29 | 07:15 15:55-16:15/20 17:10 | 06:36 16:56-17-21/27 17:48 06:58-07-19/21 | 05:50 17:00-17:53/54 18:20 06:10-06:27/15 | 06:00 19:05-19:27/22 19:54 06:19-06:50/31 | 05:29 19:13-19:42/29 20:24 06:08-06:19/11 | 05:27 19:28-19:39/11 20:38 |
| 30 | 07:14 15:57-16:14/17 17:11 | 06:35 16:57-17-22/28 17:49 06:59-07-19/21 | 05:49 17:00-17:53/55 18:21 06:11-06:28/14 | 05:59 19:06-19:27/21 19:55 06:18-06:51/33 | 05:29 19:13-19:41/28 20:25 06:10-06:17/7 | 05:27 19:27-19:39/12 20:38 |
| 31 | 07:13 16:00-16:11/11 17:12 | 06:34 16:58-17-23/29 17:50 06:59-07-19/21 | 05:48 17:00-17:53/56 18:22 06:12-06:29/13 | 05:58 19:07-19:28/20 19:56 06:19-06:52/34 | 05:28 19:14-19:41/27 20:26 | 05:27 19:28-19:39/11 20:38 |
| | Potential sun hours 296 Sum of minutes with flicker 1881 | 296 438 | 369 1174 | 400 2113 | 450 1838 | 454 360 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 8 - WTG08

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | July | August | September | October | November | December |
|-----------------------------|-------------------------------|---|---|-------------------------------|-------------------------------|--|
| 1 | 05:28 19:27-19:41/14 20:38 | 05:52 19:21-19:54/33 20:18 06:15-06:55/40 | 06:24 17:54-19:03/69 19:34 19:08-19:12/4 | 06:55 17:47-18:04/17 18:43 | 06:30 16:55 | 07:06 15:26-15:58/32 16:30 11:19-12:13/54 |
| 2 | 05:28 19:26-19:41/15 20:38 | 05:53 19:21-19:53/32 20:17 06:16-06:56/40 | 06:25 17:53-19:04/71 19:33 | 06:56 17:46-18:05/19 18:41 | 06:31 16:54 | 07:07 15:25-15:58/33 16:30 11:18-12:15/57 |
| 3 | 05:29 19:26-19:42/16 20:38 | 05:54 19:22-19:52/30 20:16 06:17-06:57/40 | 06:26 17:52-19:04/72 19:31 | 06:57 17:43-18:06/23 18:39 | 06:33 16:53 | 07:08 15:25-15:58/33 16:29 11:17-12:16/59 |
| 4 | 05:30 19:25-19:43/18 20:37 | 05:55 19:23-19:51/28 20:15 06:18-06:57/39 | 06:27 17:52-19:04/72 19:29 | 06:58 17:41-18:06/25 18:38 | 06:34 16:51 | 07:09 15:25-15:58/33 16:29 11:17-12:17/60 |
| 5 | 05:30 19:25-19:44/19 20:37 | 05:56 19:23-19:50/27 20:14 06:19-06:58/39 | 06:28 17:51-19:04/73 19:28 | 06:59 17:39-18:07/28 18:36 | 06:35 16:50 | 07:10 15:25-15:58/33 16:29 11:16-12:19/63 |
| 6 | 05:31 19:25-19:45/20 20:37 | 05:57 19:24-19:49/25 20:12 06:20-06:58/38 | 06:29 17:51-19:03/72 19:26 | 07:00 17:38-18:07/29 18:34 | 06:36 16:49 | 07:11 15:25-15:58/33 16:29 11:16-12:20/64 |
| 7 | 05:31 19:24-19:45/21 20:37 | 05:58 19:25-19:48/23 20:11 06:21-06:59/38 | 06:30 17:50-19:02/72 19:24 | 07:01 17:36-18:07/31 18:33 | 06:38 16:48 | 07:12 15:25-15:58/33 16:29 11:15-12:21/66 |
| 8 | 05:32 19:24-19:46/22 20:36 | 05:59 19:20-19:47/27 20:10 06:22-06:59/37 | 06:31 17:50-19:00/70 19:22 | 07:03 17:35-18:06/31 18:31 | 06:39 16:47 | 07:13 15:25-15:59/34 16:29 11:15-12:22/67 |
| 9 | 05:33 19:24-19:47/23 20:36 | 06:00 19:18-19:45/27 20:09 06:23-06:59/36 | 06:32 17:50-18:58/68 19:21 | 07:04 17:35-18:05/30 18:29 | 06:40 16:46 | 07:14 15:25-15:59/34 16:29 11:15-12:23/68 |
| 10 | 05:33 19:23-19:47/24 20:35 | 06:01 19:16-19:39/23 20:07 06:24-07:00/36 | 06:33 17:50-18:57/67 19:19 | 07:05 17:34-18:04/30 18:28 | 06:41 16:45 | 07:15 15:26-15:59/33 16:29 11:15-12:24/69 |
| 11 | 05:34 19:23-19:48/25 20:35 | 06:03 19:15-19:34/19 20:06 06:25-07:00/35 | 06:34 17:50-18:55/65 19:17 | 07:06 17:34-18:02/28 18:26 | 06:42 15:31-15:43/12 16:44 | 07:16 15:26-16:00/34 16:29 11:15-12:25/70 |
| 12 | 05:35 19:23-19:49/26 20:34 | 06:04 19:14-19:34/20 20:05 06:26-06:59/33 | 06:35 17:50-18:53/63 19:16 | 07:07 17:30-18:01/31 18:24 | 06:44 15:28-15:45/17 16:43 | 07:16 15:25-15:59/34 16:29 11:15-12:26/71 |
| 13 | 05:35 19:22-19:49/27 20:34 | 06:05 19:13-19:35/22 20:03 06:27-06:59/32 | 06:36 17:50-18:52/62 19:14 | 07:08 17:29-18:00/31 18:23 | 06:45 15:27-15:47/20 16:42 | 07:17 15:26-16:00/34 16:29 11:15-12:27/72 |
| 14 | 05:36 19:22-19:50/28 20:33 | 06:06 19:13-19:35/22 20:02 06:28-06:59/31 | 06:37 17:51-18:49/58 19:12 | 07:09 17:28-17:58/30 18:21 | 06:46 15:26-15:48/22 16:41 | 07:18 15:27-16:00/33 16:29 11:15-12:28/73 |
| 15 | 05:37 19:22-19:51/29 20:33 | 06:07 19:12-19:35/23 20:01 06:29-06:59/30 | 06:38 17:51-18:48/57 19:10 | 07:10 17:26-17:56/30 18:20 | 06:47 15:25-15:49/24 16:40 | 07:19 15:28-16:01/33 16:29 11:15-12:29/74 |
| 16 | 05:38 19:22-19:51/29 20:32 | 06:08 19:10-19:35/25 20:02 06:15-06:30/15 | 06:39 17:52-18:46/54 19:09 | 07:11 17:25-17:55/30 18:18 | 06:49 15:25-15:51/26 16:39 | 07:20 15:28-16:01/33 16:30 11:16-12:30/74 |
| 17 | 05:39 19:21-19:51/30 20:32 | 06:09 19:08-19:34/26 20:02 06:14-06:32/18 | 06:40 17:53-18:45/52 19:07 | 07:13 17:25-17:53/28 18:16 | 06:50 15:24-15:51/27 16:38 | 07:21 15:29-16:02/34 16:30 11:16-12:31/75 |
| 18 | 05:39 19:20-19:52/32 20:31 | 06:10 19:06-19:33/27 19:56 06:31-06:56/25 | 06:42 17:54-18:43/49 19:05 | 07:14 17:24-17:51/27 18:15 | 06:51 15:23-15:52/29 16:37 | 07:22 15:29-16:03/34 16:30 11:16-12:32/75 |
| 19 | 05:40 19:20-19:52/32 20:30 | 06:11 18:15-18:31/16 06:32-06:55/23 19:55 19:05-19:31/26 | 06:43 17:55-18:41/46 19:03 | 07:15 17:25-17:48/23 18:13 | 06:52 15:23-15:52/29 16:37 | 07:23 15:30-16:04/34 16:31 11:17-12:33/75 |
| 20 | 05:41 19:20-19:53/33 20:29 | 06:12 18:12-18:34/22 06:33-06:54/21 19:53 19:03-19:30/27 | 06:44 17:57-18:39/42 19:02 | 07:16 17:25-17:48/23 18:12 | 06:53 15:23-15:54/31 16:36 | 07:24 15:31-16:04/34 16:31 11:17-12:34/75 |
| 21 | 05:42 19:20-19:53/33 20:29 | 06:13 18:09-18:36/27 06:34-06:53/19 19:52 19:03-19:29/26 | 06:45 17:59-18:24/25 07:05-07:13/8 19:00 | 07:17 17:25-17:47/22 18:10 | 06:55 15:23-15:54/31 16:35 | 07:25 15:32-16:04/34 16:31 11:18-12:35/75 |
| 22 | 05:43 19:20-19:54/34 20:28 | 06:14 18:07-18:38/31 06:35-06:51/16 19:50 19:02-19:27/25 | 06:46 18:02-18:20/18 07:06-07:11/5 18:58 | 07:18 17:25-17:45/20 18:09 | 06:56 15:23-15:54/31 16:34 | 07:26 15:33-16:04/34 16:32 11:18-12:36/75 |
| 23 | 05:44 19:20-19:54/34 20:27 | 06:15 18:05-18:39/34 06:36-06:49/13 19:49 19:01-19:26/25 | 06:47 07:07-07:09/2 18:57 | 07:20 17:26-17:44/18 18:07 | 06:57 15:22-15:55/33 16:34 | 07:27 15:34-16:04/34 16:32 11:19-12:37/75 |
| 24 | 05:45 19:19-19:54/35 20:26 | 06:16 18:03-18:40/37 06:37-06:47/10 19:47 19:01-19:24/23 | 06:48 18:55 | 07:21 17:27-17:42/15 18:06 | 06:58 15:23-15:56/33 16:33 | 07:28 15:35-16:05/34 16:33 11:20-12:38/75 |
| 25 | 05:46 19:19-19:54/35 20:25 | 06:17 18:01-18:41/40 06:38-06:44/6 19:46 19:01-19:23/22 | 06:49 18:53 | 07:22 16:28-16:41/13 17:05 | 06:59 15:23-15:56/33 16:33 | 07:29 15:36-16:05/34 16:34 11:21-12:39/75 |
| 26 | 05:47 19:20-19:55/35 20:24 | 06:18 18:00-18:42/42 19:44 19:01-19:21/20 | 06:50 18:51 | 07:23 16:31-16:39/8 17:03 | 07:00 15:23-15:56/33 16:32 | 07:30 15:37-16:05/33 16:34 11:22-12:40/75 |
| 27 | 05:48 19:20-19:55/35 20:23 | 06:19 17:59-18:43/44 19:42 19:01-19:20/19 | 06:51 18:50 | 07:24 16:31-16:39/8 17:02 | 07:01 15:24-15:56/32 16:32 | 07:31 15:38-16:05/33 16:35 11:23-12:41/75 |
| 28 | 05:49 19:20-19:55/35 20:22 | 06:20 17:57-18:43/46 18:53-18:56/3 19:41 19:01-19:18/17 | 06:52 18:48 | 07:25 16:31-16:39/8 17:00 | 07:02 15:24-15:56/32 16:31 | 07:32 15:39-16:05/33 16:36 11:24-12:42/75 |
| 29 | 05:49 19:20-19:55/35 20:21 | 06:21 17:56-18:44/48 18:48-19:00/12 19:39 19:02-19:16/14 | 06:53 17:55-17:58/3 18:46 | 07:26 16:31-16:39/8 16:59 | 07:03 15:25-15:57/32 16:31 | 07:33 15:40-16:05/33 16:37 11:25-12:43/75 |
| 30 | 05:50 19:20-19:55/35 20:20 | 06:22 17:55-18:44/49 18:46-19:02/16 19:38 19:03-19:15/12 | 06:54 17:50-18:02/12 18:44 | 07:27 16:31-16:39/8 16:58 | 07:04 15:25-15:57/32 16:30 | 07:34 15:41-16:05/33 16:38 11:26-12:44/75 |
| 31 | 05:51 19:21-19:55/34 20:19 | 06:23 17:54-19:03/69 19:36 19:05-19:13/8 | 06:55 18:44 | 07:28 16:31-16:39/8 16:56 | 07:05 15:25-15:57/32 16:30 | 07:35 15:42-16:05/33 16:39 11:27-12:45/75 |
| Potential sun hours | 461 | 429 | 375 | 345 | 296 | 286 |
| Sum of minutes with flicker | 1333 | 1991 | 1610 | 937 | 816 | 3329 |

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

| Day in month | Sun rise (hh:mm) Sun set (hh:mm) | First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker | First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker |
|--------------|-------------------------------------|---|---|
|--------------|-------------------------------------|---|---|

Project:

Queequeg_shadow

Licensed user:

ERM ITALIA S.P.A.

Via San Gregorio, 38

IT-20124 Milano

+39 02 6744 0217

Aurora / aurora.fini@erm.com

Calculated:

26/01/2024 18:31/4.0.531

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 9 - WTG09

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | January | February | March | April | May | June |
|-----------------------------|--|-------------------------------|--|---|--|--|
| 1 | 07:26 07:49-08:23/34 16:39 14:51-15:56/65 | 07:13 07:33-08:28/55 17:14 | 06:36 06:55-07:16/21 17:49 | 06:44 07:32-07:50/18 19:24 | 05:57 06:17-07:31/74 19:56 17:45-19:30/105 | 05:28 05:49-07:37/108 17:53-18:57/64 20:27 19:26-19:59/33 |
| 2 | 07:27 07:49-08:23/34 16:40 14:51-15:56/65 | 07:12 07:33-08:27/54 17:15 | 06:34 06:53-07:15/22 17:50 | 06:42 07:37-07:44/7 19:25 | 05:56 06:16-07:32/76 19:58 17:44-19:31/107 | 05:27 05:49-07:38/109 17:54-18:57/63 20:27 19:26-20:01/35 |
| 3 | 07:27 07:49-08:23/34 16:41 14:52-15:57/65 | 07:11 07:34-08:27/53 17:16 | 06:33 06:52-07:15/23 17:51 | 06:41 19:26 | 05:55 06:14-07:32/78 19:59 17:44-19:33/109 | 05:27 05:49-07:38/109 17:55-18:58/63 20:28 19:27-20:02/35 |
| 4 | 07:27 07:49-08:23/34 16:41 14:52-15:57/65 | 07:09 07:34-08:27/53 17:18 | 06:31 06:50-07:14/24 17:52 | 06:39 19:27 | 05:53 06:13-07:33/80 20:00 17:44-19:34/110 | 05:26 05:48-07:37/109 17:55-18:57/62 20:29 19:26-20:02/36 |
| 5 | 07:27 07:49-08:24/35 16:42 14:53-15:57/64 | 07:08 07:36-08:26/50 17:19 | 06:29 06:49-07:13/24 17:53 | 06:37 19:28 | 05:52 06:12-07:33/81 20:01 17:44-19:35/111 | 05:26 05:48-07:38/110 17:56-18:57/61 20:30 19:27-20:03/36 |
| 6 | 07:27 07:49-08:24/35 16:43 14:53-15:57/64 | 07:07 07:36-08:25/49 17:20 | 06:28 06:47-07:11/24 17:55 | 06:36 19:29 | 05:51 06:11-07:34/83 20:02 17:44-19:36/112 | 05:26 05:48-07:38/110 17:57-18:57/60 20:30 19:27-20:04/37 |
| 7 | 07:27 07:49-08:24/35 16:44 14:54-15:57/63 | 07:06 07:38-08:24/46 17:21 | 06:26 06:45-07:09/24 17:56 | 06:34 19:30 | 05:50 06:10-07:34/84 20:03 17:44-19:36/112 | 05:25 05:48-07:37/109 17:56-18:56/60 20:31 19:27-20:04/37 |
| 8 | 07:26 07:49-08:24/35 16:45 14:55-15:58/63 | 07:05 07:40-08:23/43 17:23 | 06:25 06:44-07:11/27 17:57 | 06:32 19:31 | 05:48 06:08-07:34/86 20:04 17:44-19:36/112 | 05:25 05:47-07:38/111 17:57-18:56/59 20:32 19:27-20:05/38 |
| 9 | 07:26 07:49-08:24/35 16:46 14:55-15:57/62 | 07:04 07:42-08:22/40 17:24 | 06:23 06:42-07:11/29 17:58 | 06:31 19:02-19:10/8 19:32 18:23-18:31/8 | 05:47 06:07-07:35/88 20:05 17:44-19:37/113 | 05:25 05:47-07:38/111 17:58-18:56/58 20:32 19:28-20:05/37 |
| 10 | 07:26 07:49-08:22/34 16:47 14:55-15:57/62 | 07:03 07:44-07:53/9 17:25 | 06:21 17:22-17:32/10 17:59 | 06:29 18:59-19:12/13 19:34 18:16-18:39/23 | 05:46 06:06-07:35/89 20:06 17:44-19:37/113 | 05:25 05:47-07:38/111 17:58-18:56/58 20:33 19:28-20:06/38 |
| 11 | 07:26 07:48-08:22/34 16:48 14:56-15:57/61 | 07:01 07:58-08:18/20 17:26 | 06:20 17:18-17:35/17 18:00 06:39-07:12/33 | 06:27 18:57-19:13/16 19:35 18:11-18:42/31 | 05:45 06:05-07:35/90 20:07 17:44-19:37/113 | 05:24 05:47-07:38/111 17:59-18:57/58 20:33 19:29-20:06/37 |
| 12 | 07:26 07:48-08:21/33 16:50 14:56-15:56/60 | 07:00 08:01-08:15/14 17:28 | 06:18 17:17-17:37/20 18:01 06:37-07:12/35 | 06:26 06:45-06:49/4 18:07-18:45/38 19:36 18:55-19:13/18 | 05:44 06:04-07:36/92 20:08 17:45-19:38/113 | 05:24 05:47-07:39/112 18:00-18:57/57 20:34 19:29-20:07/38 |
| 13 | 07:25 07:47-08:19/32 16:51 14:57-15:55/58 | 06:59 17:29 | 06:16 17:15-17:38/23 18:03 06:35-07:12/37 | 06:24 06:43-06:50/7 18:05-18:48/43 19:37 18:55-19:15/20 | 05:43 06:03-07:36/93 20:09 17:45-19:38/113 | 05:24 05:47-07:39/112 18:00-18:57/57 20:35 19:29-20:08/38 |
| 14 | 07:25 07:47-08:20/33 16:52 14:58-15:55/57 | 06:58 17:30 | 06:15 17:13-17:38/25 18:04 06:33-07:11/38 | 06:23 06:41-06:50/9 18:02-18:49/47 19:38 18:54-19:16/22 | 05:42 06:02-07:36/94 20:10 17:45-19:38/113 | 05:24 05:47-07:39/112 18:00-18:57/57 20:35 19:29-20:08/39 |
| 15 | 07:25 07:46-08:21/35 14:59-15:46/47 16:53 15:47-15:52/5 | 06:56 17:32 | 06:13 17:13-17:40/27 18:05 06:32-07:12/40 | 06:21 06:40-06:51/11 18:01-18:51/50 19:39 18:54-19:16/22 | 05:41 06:01-07:36/95 20:11 17:45-19:42/117 | 05:24 05:47-07:39/112 18:01-18:57/56 20:35 19:30-20:08/38 |
| 16 | 07:24 07:46-08:22/36 16:54 15:00-15:47/47 | 06:55 17:33 | 06:11 17:11-17:40/29 18:06 06:30-07:11/41 | 06:19 06:38-06:51/13 17:58-18:52/54 19:40 18:56-19:16/23 | 05:40 06:00-07:36/96 20:12 17:46-19:45/119 | 05:24 05:47-07:39/112 18:01-18:57/56 20:36 19:30-20:08/38 |
| 17 | 07:24 07:45-08:22/37 16:55 15:00-15:46/46 | 06:53 17:34 | 06:10 17:10-17:39/29 18:07 06:28-07:10/42 | 06:18 06:37-06:51/14 19:41 17:57-19:16/79 | 05:39 05:59-07:36/97 17:46-19:00/74 20:13 19:02-19:47/45 | 05:24 05:47-07:39/112 18:01-18:57/56 20:36 19:30-20:09/39 |
| 18 | 07:23 07:45-08:24/39 16:56 15:01-15:46/45 | 06:52 17:35 | 06:08 17:11-17:40/29 18:08 06:27-07:10/43 | 06:16 06:35-06:51/16 19:42 17:55-19:15/80 | 05:38 05:58-07:36/98 17:46-19:00/74 20:14 19:04-19:48/44 | 05:24 05:47-07:39/112 18:02-18:57/55 20:36 19:30-20:09/39 |
| 19 | 07:23 07:44-08:24/40 16:57 15:02-15:46/44 | 06:51 17:37 | 06:06 17:10-17:40/30 18:09 06:25-07:09/44 | 06:15 06:34-06:51/17 19:43 17:54-19:15/81 | 05:37 05:58-07:37/99 17:47-19:01/74 20:15 19:09-19:50/41 | 05:24 05:47-07:39/112 18:02-18:57/55 20:37 19:30-20:09/39 |
| 20 | 07:22 07:43-08:24/41 16:59 15:03-15:46/43 | 06:49 17:38 | 06:04 17:10-17:39/29 18:10 06:23-07:08/45 | 06:13 06:32-06:50/18 06:55-07:07/12 19:44 17:52-19:13/81 | 05:36 05:57-07:37/100 17:47-19:00/73 20:16 19:09-19:51/42 | 05:24 05:47-07:40/113 18:02-18:57/55 20:37 19:30-20:09/39 |
| 21 | 07:21 07:43-08:26/43 17:00 15:04-15:46/42 | 06:48 07:07-07/09/2 17:39 | 06:03 17:09-17:38/29 18:12 06:24-07:08/44 | 06:12 06:31-07:13/42 19:46 17:52-19:13/81 | 05:35 05:56-07:37/101 17:48-19:00/72 20:17 19:09-19:52/43 | 05:25 05:47-07:40/113 18:02-18:57/55 20:37 19:31-20:09/38 |
| 22 | 07:21 07:42-08:26/44 17:01 15:05-15:46/41 | 06:46 07:06-07:12/6 17:40 | 06:01 17:10-17:38/28 18:13 06:24-07:06/42 | 06:10 06:29-07:16/47 19:47 17:50-19:17/87 | 05:34 05:55-07:37/102 17:48-18:59/71 20:18 19:10-19:52/42 | 05:25 05:48-07:41/113 18:03-18:58/55 20:37 19:32-20:10/38 |
| 23 | 07:20 07:41-08:26/45 17:02 15:06-15:45/39 | 06:45 07:04-07:13/9 17:41 | 05:59 17:10-17:37/27 18:14 06:23-07:05/42 | 06:09 06:28-07:19/51 19:48 17:50-19:20/90 | 05:33 05:55-07:38/103 17:48-18:59/71 20:19 19:10-19:52/42 | 05:25 05:48-07:40/112 18:03-18:58/55 20:38 19:31-20:10/39 |
| 24 | 07:19 07:40-08:26/46 17:04 15:07-15:44/37 | 06:43 07:03-07:15/12 17:43 | 05:58 17:11-17:35/24 18:15 06:23-07:03/40 | 06:07 06:26-07:21/55 19:49 17:48-19:21/93 | 05:33 05:54-07:38/104 17:49-18:59/70 20:20 19:12-19:54/42 | 05:25 05:48-07:40/112 18:03-18:58/55 20:38 19:31-20:10/39 |
| 25 | 07:19 07:40-08:26/46 17:05 15:08-15:43/35 | 06:42 07:01-07:15/14 17:44 | 05:56 17:12-17:34/22 18:16 06:24-07:03/39 | 06:06 06:25-07:23/58 19:50 17:48-19:23/95 | 05:32 05:53-07:37/104 17:49-18:59/70 20:21 19:12-19:54/42 | 05:26 05:49-07:40/111 18:03-18:58/55 20:38 19:31-20:10/39 |
| 26 | 07:18 07:39-08:28/49 17:06 15:10-15:43/33 | 06:40 07:00-07:16/16 17:45 | 05:54 17:13-17:32/19 18:17 06:24-07:01/37 | 06:04 06:24-07:24/60 19:51 17:47-19:24/97 | 05:31 05:53-07:38/105 17:51-18:59/68 20:22 19:13-19:54/41 | 05:26 05:49-07:41/112 18:03-18:59/56 20:38 19:32-20:10/38 |
| 27 | 07:17 07:38-08:29/50 17:07 15:12-15:42/30 | 06:39 06:58-07:16/18 17:46 | 05:52 17:15-17:29/14 18:18 06:25-07:00/35 | 06:03 06:22-07:26/64 19:52 17:47-19:25/98 | 05:31 05:52-07:38/106 17:51-18:59/68 20:23 19:14-19:55/41 | 05:26 05:49-07:41/112 18:03-18:59/56 20:38 19:32-20:10/38 |
| 28 | 07:16 07:37-08:28/51 17:09 15:14-15:41/27 | 06:37 06:57-07:16/19 17:47 | 05:51 17:19-17:25/6 18:19 06:25-06:58/33 | 06:01 06:21-07:28/67 19:53 17:46-19:26/100 | 05:30 05:51-07:37/106 17:51-18:58/67 20:24 19:17-19:55/38 | 05:27 05:50-07:42/112 18:04-19:00/56 20:38 19:33-20:11/38 |
| 29 | 07:15 07:36-08:28/52 17:10 15:16-15:39/23 | | 06:49 07:27-07:57/30 19:20 | 06:00 06:19-07:28/69 19:54 17:45-19:25/100 | 05:29 05:51-07:38/107 17:52-18:58/66 20:24 19:17-19:55/38 | 05:27 05:50-07:42/112 18:03-19:00/57 20:38 19:32-20:11/39 |
| 30 | 07:14 07:35-08:28/53 17:11 15:19-15:37/18 | | 06:47 07:28-07:55/27 19:22 | 05:59 06:18-07:29/71 19:55 17:45-19:26/101 | 05:29 05:50-07:37/107 17:52-18:58/66 20:25 19:18-19:57/39 | 05:28 05:51-07:42/111 18:03-19:00/57 20:38 19:32-20:10/38 |
| 31 | 07:13 07:34-08:29/54 17:12 15:23-15:33/10 | | 06:46 07:29-07:52/23 19:23 | | 05:28 05:50-07:38/108 17:53-18:58/65 20:26 19:21-19:59/38 | |
| Potential sun hours | 296 | 296 | 369 | 400 | 450 | 454 |
| Sum of minutes with flicker | 2724 | 606 | 1476 | 2429 | 6387 | 6194 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 9 - WTG09

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | July | August | September | October | November | December | | |
|-----------------------------|--|--|---|---|---|--|--|--|
| 1 | 05:28 05:51-07:43/112 18:03-19:01/58 20:38 19:33-20:11/38 20:38 19:32-20:10/38 20:38 19:32-20:10/38 | 05:52 06:15-07:46/91 20:18 17:55-19:48/113 05:53 06:16-07:46/90 20:17 17:55-19:48/113 | 06:24 18:56-19:12/16 19:34 18:10-18:41/31 06:25 18:57-19:10/13 19:33 18:14-18:37/23 06:26 19:00-19:08/8 19:31 18:21-18:30/9 06:27 19:29 06:28 19:21 06:29 19:26 06:30 19:24 06:31 19:23 06:32 19:21 06:33 07:31-07:36/5 19:19 06:34 07:25-07:41/16 19:17 06:35 07:22-07:44/22 19:16 06:36 07:19-07:46/27 19:14 06:37 07:17-07:47/30 19:12 06:38 18:11-18:12/1 19:10 07:16-07:48/32 06:39 18:05-18:18/13 19:09 07:14-07:49/35 06:41 18:02-18:20/18 19:07 07:13-07:49/36 06:42 18:00-18:21/21 19:05 07:12-07:50/38 06:43 17:58-18:22/24 19:04 07:11-07:50/39 06:44 17:57-18:23/26 19:02 07:10-07:51/41 06:45 17:56-18:23/27 19:00 07:09-07:51/42 06:46 17:55-18:23/28 18:58 07:08-07:52/44 06:47 17:54-18:23/29 18:57 07:08-07:52/44 06:48 17:54-18:23/29 18:56 07:08-07:53/45 06:49 17:53-18:23/30 18:53 07:09-07:53/44 06:50 17:53-18:22/29 18:51 07:10-07:53/43 06:51 17:53-18:21/28 18:50 07:11-07:53/42 | 05:52 06:15-07:46/91 20:18 17:55-19:48/113 05:53 06:16-07:46/90 20:17 17:55-19:48/113 05:54 06:17-07:46/89 20:16 17:55-19:48/113 05:55 06:18-07:45/87 20:15 17:55-19:47/112 05:56 06:19-07:45/86 20:14 17:54-19:47/113 05:57 06:20-07:44/84 20:12 17:54-19:46/112 05:58 06:21-07:43/82 20:11 17:54-19:46/112 05:59 06:22-07:43/81 20:10 17:54-19:45/111 06:01 06:23-07:42/79 20:09 17:54-19:44/110 06:02 06:24-07:41/77 20:07 17:54-19:42/108 06:03 06:25-07:40/75 20:06 17:54-19:39/105 06:04 06:26-07:39/73 20:05 17:54-19:37/103 06:05 06:27-07:38/71 20:03 17:53-19:34/101 06:06 06:28-07:36/68 20:02 17:53-19:33/100 06:07 06:29-07:35/66 20:01 17:53-19:32/99 06:08 06:30-07:32/62 19:59 17:53-19:31/98 06:09 06:31-07:31/60 19:58 17:54-19:30/96 06:10 06:31-07:29/58 17:54-19:05/71 19:56 19:06-19:29/23 06:11 06:32-07:26/54 19:55 17:54-19:27/93 06:12 06:33-07:24/51 19:53 17:55-19:25/90 06:13 06:34-07:20/46 19:52 17:55-19:21/86 06:14 06:35-07:16/41 19:50 17:56-19:17/81 06:15 06:36-06:54/18 07:00-07:09/9 19:49 17:56-19:17/81 06:16 06:37-06:54/17 19:47 17:57-19:18/81 06:17 06:38-06:54/16 19:46 17:58-19:18/80 06:18 06:39-06:53/14 19:44 17:59-19:18/79 06:19 06:40-06:53/13 18:00-18:54/54 19:42 18:55-19:18/23 06:20 06:41-06:52/11 18:02-18:52/50 19:41 18:55-19:17/22 06:21 06:42-06:51/9 18:03-18:50/47 19:39 18:55-19:16/21 06:22 06:43-06:49/6 18:05-18:48/43 19:38 18:55-19:15/20 06:23 06:44-06:48/4 18:07-18:45/38 19:36 18:55-19:13/18 06:24 06:45-06:47/4 18:07-18:45/38 19:35 18:55-19:13/18 | 06:24 18:56-19:12/16 19:34 18:10-18:41/31 06:25 18:57-19:10/13 19:33 18:14-18:37/23 06:26 19:00-19:08/8 19:31 18:21-18:30/9 06:27 19:29 06:28 19:21 06:29 19:26 06:30 19:24 06:31 19:23 06:32 19:21 06:33 07:31-07:36/5 19:19 06:34 07:25-07:41/16 19:17 06:35 07:22-07:44/22 19:16 06:36 07:19-07:46/27 19:14 06:37 07:17-07:47/30 19:12 06:38 18:11-18:12/1 19:10 07:16-07:48/32 06:39 18:05-18:18/13 19:09 07:14-07:49/35 06:41 18:02-18:20/18 19:07 07:13-07:49/36 06:42 18:00-18:21/21 19:05 07:12-07:50/38 06:43 17:58-18:22/24 19:04 07:11-07:50/39 06:44 17:57-18:23/26 19:02 07:10-07:51/41 06:45 17:56-18:23/27 19:00 07:09-07:51/42 06:46 17:55-18:23/28 18:58 07:08-07:52/44 06:47 17:54-18:23/29 18:57 07:08-07:52/44 06:48 17:54-18:23/29 18:56 07:08-07:53/45 06:49 17:53-18:23/30 18:53 07:09-07:53/44 06:50 17:53-18:22/29 18:51 07:10-07:53/43 06:51 17:53-18:21/28 18:50 07:11-07:53/42 | 06:05 17:55-18:16/21 07:15-07:51/36 06:56 17:56-18:14/18 07:16-07:50/34 06:57 17:58-18:11/13 07:18-07:50/32 06:58 18:04-18:06/2 07:19-07:49/30 06:59 07:20-07:48/28 18:36 07:00 07:21-07:46/25 18:34 07:02 07:22-07:46/24 18:33 07:03 07:23-07:47/24 18:31 07:04 07:24-07:48/24 18:29 07:05 07:25-07:48/23 18:28 07:06 07:26-07:48/22 18:26 07:07 07:28-07:49/21 18:24 07:08 07:29-07:49/20 18:23 07:09 07:30-07:49/19 18:21 07:10 07:31-07:48/17 18:20 07:12 07:32-07:47/15 18:18 07:13 07:33-07:46/13 18:16 07:14 07:35-07:46/11 18:15 07:15 07:36-07:44/8 18:13 07:16 07:37-07:42/5 18:12 07:17 07:38-07:39/1 18:10 07:18 07:39-07:40/41 18:09 07:20 18:07 18:06 06:22 17:05 06:23 17:03 06:24 17:02 06:25 17:01 17:00 | 06:30 07:13-07:23/10 16:55 07:25-07:50/25 06:31 07:10-07:51/41 16:54 06:33 07:09-07:53/44 16:53 06:34 07:07-07:54/47 16:51 06:35 07:06-07:55/49 16:50 06:36 07:05-07:56/51 16:49 06:38 07:04-07:57/53 16:48 06:39 07:03-07:57/54 16:47 06:40 07:04-07:58/54 16:46 06:41 07:04-07:59/55 16:45 06:42 07:05-07:59/54 16:44 14:53-15:04/11 06:44 07:07-08:00/53 16:43 14:49-15:08/19 06:45 07:08-08:00/52 16:42 14:48-15:11/23 06:46 07:09-08:00/51 16:41 14:46-15:13/27 06:47 07:10-08:00/50 16:40 14:44-15:14/30 06:49 07:12-08:01/49 16:39 14:43-15:16/33 06:50 07:13-08:00/47 16:38 14:42-15:17/35 06:51 07:14-08:00/46 16:37 14:41-15:18/37 06:52 07:16-08:01/45 16:37 14:40-15:19/39 06:53 07:17-08:01/44 16:36 14:40-15:21/41 06:55 07:18-08:01/43 16:35 14:39-15:21/42 06:56 07:19-08:00/41 16:34 14:39-15:22/43 06:57 07:21-08:01/40 16:34 14:38-15:22/44 06:58 07:22-08:01/39 16:33 14:39-15:24/45 06:59 07:23-08:00/37 16:33 14:38-15:24/46 07:00 07:24-08:00/36 16:32 14:38-15:25/47 07:01 07:25-08:00/35 14:38-15:25/47 16:32 15:25-15:31/5 07:03 07:27-08:00/33 16:31 14:38-15:34/56 07:04 07:28-08:00/32 16:31 14:38-15:36/58 07:05 07:29-08:02/33 16:30 14:38-15:38/60 06:29 07:27-07:48/21 16:56 | 07:06 07:30-08:04/34 16:30 14:38-15:39/61 07:07 07:31-08:05/34 16:30 14:39-15:40/61 07:08 07:32-08:07/35 16:29 14:39-15:41/62 07:09 07:33-08:08/35 16:29 14:39-15:42/63 07:10 07:34-08:09/35 16:29 14:39-15:43/64 07:11 07:35-08:10/35 16:29 14:40-15:43/63 07:12 07:36-08:11/35 16:29 14:40-15:44/64 07:13 07:37-08:11/34 16:29 14:40-15:45/65 07:14 07:38-08:12/34 16:29 14:41-15:46/65 07:15 07:39-08:13/34 16:29 14:41-15:46/65 07:16 07:40-08:14/34 16:29 14:42-15:47/65 07:16 07:40-08:14/34 16:29 14:41-15:47/66 07:17 07:41-08:15/34 16:29 14:42-15:48/66 07:18 07:43-08:15/32 16:29 14:43-15:48/65 07:19 07:44-08:16/32 16:29 14:43-15:49/66 07:19 07:45-08:16/31 16:30 14:43-15:49/66 07:20 07:47-08:17/30 16:30 14:44-15:50/66 07:21 07:48-07:53/5 07:54-08:18/24 16:30 14:45-15:51/66 07:21 07:50-07:52/2 07:54-08:18/24 16:31 14:45-15:51/66 07:22 14:46-15:52/66 16:31 07:54-08:19/25 07:23 14:46-15:52/66 16:31 07:54-08:19/25 07:23 14:47-15:53/66 16:32 07:55-08:20/25 07:24 07:53-07:54/1 07:56-08:21/25 16:33 14:48-15:54/66 07:24 07:52-07:56/4 07:57-08:21/24 16:34 14:48-15:54/66 07:25 07:51-08:21/30 16:34 14:48-15:54/66 07:25 07:51-08:22/31 16:35 14:49-15:55/66 07:26 07:50-08:22/32 16:36 14:49-15:55/66 07:26 07:50-08:22/32 16:36 14:50-15:55/65 07:26 07:49-08:23/34 16:37 14:50-15:55/65 07:26 07:49-08:23/34 16:38 14:50-15:56/66 |
| Potential sun hours | 461 | 429 | 375 | 345 | 296 | 286 | | |
| Sum of minutes with flicker | 6540 | 4608 | 1221 | 524 | 2131 | 2989 | | |

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-Last time (hh:mm) with flicker/Minutes with flicker |
|--------------|------------------|---|
|--------------|------------------|---|

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 10 - WTG10

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June |
|-----------------------------|---|--|---|-------------------------------|--|-------------------------------|
| 1 | 07:27 08:21-08:43/22 14:43-15:57/74 16:39 07:56-08:17/21 | 07:13 07:47-08:54/67 16:32-16:47/15 17:14 15:42-16:29/47 | 06:36 06:57-08:37/100 17:49 16:50-17:12/22 | 06:44 19:24 | 05:57 18:48-19:01/13 19:57 06:21-07:08/47 | 05:28 05:50-06:43/53 20:27 |
| 2 | 07:27 08:22-08:43/21 14:45-15:58/73 16:40 07:56-08:18/22 | 07:12 07:48-08:55/67 16:31-16:48/17 17:15 15:42-16:30/48 | 06:34 06:57-08:33/96 17:12-17:24/12 17:50 16:50-17:10/20 | 06:42 19:25 | 05:56 06:16-07:09/53 19:58 18:54-18:56/2 | 05:27 05:49-06:43/54 20:28 |
| 3 | 07:27 08:23-08:43/20 14:44-15:58/74 16:41 07:56-08:19/23 | 07:11 07:49-08:55/66 17:16 15:42-16:50/68 | 06:33 08:20-08:26/6 17:10-17:28/18 17:51 16:52-17:09/17 06:56-08:15/79 | 06:41 19:26 | 05:55 06:14-07:08/54 19:59 | 05:27 05:49-06:43/54 20:28 |
| 4 | 07:27 08:24-08:43/19 14:45-15:58/73 16:42 07:56-08:20/24 | 07:10 07:51-08:56/65 17:18 15:42-16:51/69 | 06:31 16:54-17:06/12 06:55-08:15/80 17:52 17:07-17:29/22 | 06:39 19:27 | 05:53 06:13-07:08/55 20:00 | 05:26 05:48-06:42/54 20:29 |
| 5 | 07:27 08:24-08:42/18 14:46-15:58/72 16:43 07:55-08:20/25 | 07:09 07:54-08:57/63 17:19 15:42-16:52/70 | 06:30 17:06-17:31/25 06:55-08:15/80 17:54 17:00-17:02/2 | 06:37 06:56-07:01/5 19:28 | 05:52 06:12-07:08/56 20:01 | 05:26 05:48-06:43/55 20:30 |
| 6 | 07:27 08:26-08:42/16 14:46-15:59/73 16:43 07:55-08:21/26 | 07:07 07:56-08:56/60 17:20 15:41-16:52/71 | 06:28 17:05-17:31/26 17:55 06:55-08:15/80 | 06:36 06:54-07:03/9 19:29 | 05:51 06:11-07:08/57 20:02 | 05:26 05:48-06:43/55 20:30 |
| 7 | 07:27 08:27-08:41/14 14:47-15:59/72 16:44 07:55-08:22/27 | 07:06 07:56-08:57/61 17:22 15:41-16:53/72 | 06:26 17:03-17:32/29 17:56 06:54-08:14/80 | 06:34 18:56-19:04/8 19:30 | 05:50 06:10-07:08/58 20:03 | 05:25 05:48-06:43/55 20:31 |
| 8 | 07:27 08:29-08:40/11 14:48-15:59/71 16:45 07:55-08:23/28 | 07:05 07:56-08:57/61 17:23 15:41-16:56/75 | 06:25 17:03-17:34/31 17:57 06:55-08:14/79 | 06:32 18:51-19:07/16 19:32 | 05:49 06:08-07:07/59 20:04 | 05:25 05:47-06:42/55 20:32 |
| 9 | 07:26 08:32-08:39/7 14:49-16:00/71 16:46 07:55-08:24/29 | 07:04 07:56-08:57/61 07:34-07:35/1 17:24 15:41-16:59/78 | 06:23 17:02-17:35/33 17:58 06:55-08:13/78 | 06:31 18:48-19:09/21 19:33 | 05:47 06:07-07:07/60 20:05 | 05:25 05:47-06:43/56 20:32 |
| 10 | 07:26 07:55-08:24/29 16:48 14:50-15:59/69 | 07:03 07:56-08:58/62 07:28-07:41/13 17:25 15:41-17:00/79 | 06:21 17:01-17:35/34 17:59 06:55-08:12/77 | 06:29 18:46-19:11/25 19:34 | 05:46 06:06-07:06/60 20:06 | 05:25 05:47-06:43/56 20:33 |
| 11 | 07:26 07:55-08:25/30 16:49 14:51-16:00/69 | 07:01 07:56-08:57/61 07:25-07:43/18 17:27 15:41-17:02/81 | 06:20 17:01-17:37/36 18:00 06:57-08:12/75 | 06:27 18:44-19:12/28 19:35 | 05:45 06:05-07:06/61 20:07 | 05:25 05:47-06:43/56 20:33 |
| 12 | 07:26 07:48-08:26/38 16:50 14:52-16:00/68 | 07:00 07:56-08:57/61 07:23-07:45/22 17:28 15:41-17:03/82 | 06:18 17:01-17:38/37 18:02 06:58-08:11/73 | 06:26 18:44-19:13/29 19:36 | 05:44 06:04-07:06/62 20:08 | 05:24 05:47-06:43/56 20:34 |
| 13 | 07:25 07:47-08:26/39 16:51 14:52-16:00/68 | 06:59 07:56-08:57/61 07:21-07:47/26 17:29 15:42-17:04/82 | 06:16 17:00-17:39/39 18:03 06:59-08:10/71 | 06:24 18:42-19:13/31 19:37 | 05:43 06:03-07:05/62 20:09 | 05:24 05:47-06:43/56 20:34 |
| 14 | 07:25 07:47-08:29/42 16:52 14:54-16:00/66 | 06:58 07:56-08:56/60 07:18-07:50/32 17:30 15:42-17:04/82 | 06:15 17:01-17:40/39 18:04 07:02-08:10/68 | 06:23 18:41-19:13/32 19:38 | 05:42 06:02-07:05/63 20:10 | 05:24 05:47-06:43/56 20:35 |
| 15 | 07:25 07:45-08:32/46 16:53 14:55-16:00/65 | 06:56 07:57-08:56/59 07:17-07:56/39 17:32 15:42-17:05/83 | 06:13 17:01-17:40/39 07:06-07:09/3 18:05 07:12-08:09/57 | 06:21 18:41-19:14/33 19:39 | 05:41 06:01-07:04/63 20:11 | 05:24 05:47-06:44/57 20:35 |
| 16 | 07:24 07:46-08:34/48 15:30-16:00/30 16:54 14:56-15:29/33 | 06:55 07:16-08:56/100 17:33 15:43-17:06/83 | 06:11 06:30-06:35/5 07:12-08:07/55 18:06 17:01-17:40/39 | 06:19 18:39-19:14/35 19:40 | 05:40 06:00-07:03/63 20:12 | 05:24 05:47-06:44/57 20:36 |
| 17 | 07:24 07:45-08:36/51 15:30-16:00/30 16:55 14:57-15:28/31 | 06:54 07:15-08:55/100 17:34 15:43-17:09/86 | 06:10 16:29-06:39/10 07:13-08:06/53 18:07 17:02-17:40/38 | 06:18 18:39-19:14/35 19:41 | 05:39 05:59-07:03/64 20:13 | 05:24 05:47-06:44/57 20:36 |
| 18 | 07:23 07:45-08:38/53 15:32-16:00/28 16:56 14:59-15:28/29 | 06:52 07:14-08:55/101 16:34-17:11/37 17:35 15:44-16:31/47 | 06:08 06:27-06:40/13 07:14-08:05/51 18:08 17:03-17:41/38 | 06:16 18:39-19:14/35 19:42 | 05:38 05:59-07:03/64 20:14 | 05:24 05:47-06:44/57 20:36 |
| 19 | 07:23 07:44-08:40/56 15:01-15:27/26 16:58 15:33-16:08/35 | 06:51 07:13-08:53/100 16:36-17:12/36 17:37 15:44-16:29/45 | 06:06 06:25-06:41/16 07:14-08:03/49 18:09 17:04-17:40/36 | 06:15 18:39-19:14/35 19:44 | 05:37 05:58-07:02/64 20:15 | 05:24 05:47-06:44/57 20:37 |
| 20 | 07:22 07:43-08:41/58 15:02-15:25/23 16:59 15:33-16:11/38 | 06:49 07:13-08:53/100 16:41-17:13/32 17:38 15:46-16:29/43 | 06:05 06:23-06:41/18 07:15-08:01/46 18:11 17:06-17:39/33 | 06:13 18:38-19:13/35 19:45 | 05:36 05:57-07:01/64 20:16 | 05:23 05:47-06:44/57 20:37 |
| 21 | 07:22 07:43-08:43/60 15:05-15:24/19 17:00 15:36-16:14/38 | 06:48 07:12-08:51/99 16:41-17:14/33 17:39 15:46-16:27/41 | 06:03 06:22-06:42/20 07:17-08:00/43 18:12 17:09-17:39/30 | 06:12 18:39-19:13/34 19:46 | 05:35 05:56-07:00/64 20:17 | 05:23 05:48-06:45/57 20:37 |
| 22 | 07:21 07:43-08:44/61 15:08-15:22/14 17:01 15:37-16:16/39 | 06:47 07:12-08:51/99 16:42-17:15/33 17:40 15:48-16:27/39 | 06:01 06:20-06:42/22 07:18-07:57/39 18:13 17:10-17:38/28 | 06:10 18:38-19:12/34 19:47 | 05:34 05:55-06:59/64 20:18 | 05:23 05:48-06:45/57 20:38 |
| 23 | 07:20 07:43-08:45/62 15:13-15:17/4 17:03 15:38-16:18/40 | 06:45 07:10-08:49/99 16:43-17:14/31 17:42 15:49-16:25/36 | 05:58 06:18-06:42/24 07:19-07:55/36 18:14 17:12-17:36/24 | 06:09 18:39-19:12/33 19:48 | 05:34 05:55-06:59/64 20:19 | 05:23 05:48-06:45/57 20:38 |
| 24 | 07:20 07:42-08:46/64 17:04 15:40-16:19/39 | 06:44 07:05-08:48/103 16:46-17:15/29 17:43 15:51-16:24/33 | 05:56 17:13-17:35/22 18:15 17:13-17:35/22 | 06:07 18:39-19:11/32 19:49 | 05:34 05:54-06:58/64 20:20 | 05:23 05:48-06:45/57 20:38 |
| 25 | 07:19 07:43-08:48/65 17:05 15:45-16:22/37 | 06:42 07:02-08:46/104 16:48-17:14/26 17:44 15:53-16:21/28 | 05:56 06:18-06:41/23 07:24-07:49/25 18:16 17:15-17:34/19 | 06:06 18:40-19:10/30 19:50 | 05:32 05:53-06:56/63 20:21 | 05:23 05:49-06:46/57 20:38 |
| 26 | 07:18 07:43-08:49/66 17:06 15:46-16:23/37 | 06:41 07:01-08:44/103 16:49-17:14/25 17:45 15:56-16:19/23 | 05:54 06:18-06:40/22 07:27-07:44/17 18:17 17:16-17:31/15 | 06:04 18:41-19:10/29 19:51 | 05:31 05:53-06:56/63 20:22 | 05:23 05:49-06:46/57 20:38 |
| 27 | 07:17 07:44-08:50/66 17:07 15:45-16:24/39 | 06:39 06:59-08:42/103 16:48-17:13/25 17:46 15:58-16:15/17 | 05:53 06:18-06:39/21 18:18 17:20-17:26/6 | 06:03 18:41-19:09/27 19:52 | 05:31 05:52-06:54/62 20:23 | 05:23 05:49-06:46/57 20:38 |
| 28 | 07:16 07:44-08:51/67 17:09 15:45-16:25/40 | 06:37 06:58-08:40/102 17:48 16:49-17:13/24 | 05:51 06:19-06:38/19 18:19 | 06:02 18:43-19:07/24 19:53 | 05:30 05:52-06:53/61 20:24 | 05:23 05:50-06:46/56 20:38 |
| 29 | 07:15 07:44-08:52/68 17:10 15:44-16:26/42 | 06:36 06:57-08:39/101 17:49 16:48-17:12/25 | 06:49 07:20-07:36/16 19:21 | 06:00 18:43-19:05/22 19:54 | 05:29 05:51-06:51/60 20:24 | 05:23 05:50-06:46/56 20:38 |
| 30 | 07:15 07:45-08:53/68 17:11 15:43-16:27/44 | 06:35 06:56-08:38/100 17:49 16:48-17:12/25 | 06:48 07:21-07:33/12 19:22 | 05:59 18:45-19:03/18 19:56 | 05:29 05:50-06:48/58 20:25 | 05:23 05:51-06:47/56 20:38 |
| 31 | 07:14 07:46-08:53/67 16:35-16:44/9 17:13 15:43-16:28/45 | 06:34 06:55-08:37/100 17:49 16:50-17:12/22 | 06:46 19:23 | 06:00 18:43-19:05/22 19:54 | 05:28 05:50-06:43/53 20:26 | 05:23 05:50-06:46/56 20:38 |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 454 |
| Sum of minutes with flicker | 3424 | 4370 | 2713 | 1434 | 1880 | 1680 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 10 - WTG10

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

Table with 13 columns: N, NNE, ENE, E, ESE, SSE, S, SSW, WSW, W, WNW, NNW, Sum. Values range from 985 to 8,760.

Main shadow calculation table with columns for months (July to December) and rows for each day. Includes columns for sunrise, sunset, and shadow start/end times.

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-Last time (hh:mm) with flicker/Minutes with flicker
Sun set (hh:mm) First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 11 - WTG11

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

Table with 12 columns: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec. Values: 4.12, 4.66, 5.30, 6.72, 8.25, 9.35, 10.16, 9.45, 7.64, 5.82, 4.65, 3.82

Operational time

Table with 13 columns: N, NNE, ENE, E, ESE, SSE, S, SSW, WSW, W, WNW, NNW, Sum. Values: 985, 358, 99, 45, 45, 1,532, 636, 546, 815, 367, 1,344, 1,988, 8,760

Main data table with columns for months (January to June) and rows for each day of the month, containing time intervals and potential sun hours.

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

Matrix with 2 rows and 3 columns: Day in month, Sun rise (hh:mm) / Sun set (hh:mm), First time (hh:mm) with flicker - Last time (hh:mm) with flicker / Minutes with flicker



SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 12 - WTG12

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

Table with 12 columns (Jan to Dec) and 2 rows of values: 4.12, 4.66, 5.30, 6.72, 8.25, 9.35, 10.16, 9.45, 7.64, 5.82, 4.65, 3.82

Operational time

Table with 13 columns (N, NNE, ENE, E, ESE, SSE, S, SSW, WSW, W, WNW, NNW, Sum) and 2 rows of values: 985, 358, 99, 45, 45, 1,532, 636, 546, 815, 367, 1,344, 1,988, 8,760

Main data table with columns for months (January to June) and rows for each day (1-31) showing time intervals and potential sun hours.

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

Matrix with 2 rows and 4 columns: Day in month, Sun rise (hh:mm), Sun set (hh:mm), First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker



SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 12 - WTG12

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

Table with 12 columns (Jan-Dec) and 2 rows of sunshine probability values.

Operational time

Table with 13 columns (N, NNE, ENE, E, ESE, SSE, S, SSW, WSW, W, WNW, NNW, Sum) and 2 rows of operational time values.

Main data table with columns for months (July-December) and rows for each day of the year, containing sunrise/sunset times and potential sun hours.

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

Day in month Sun rise (hh:mm) Sun set (hh:mm) First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 13 - WTG13

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | January | February | March | April | May | June |
|-----------------------------|--|-------------------------------|-------------------------------|--|--|-------------------------------|
| 1 | 07:27 13:58-14:45/47 08:25-09:03/38 16:39 07:50-08:19/29 15:42-16:08/26 | 07:13 17:14 | 06:36 06:55-07:30/35 17:49 | 06:44 07:03-07:56/53 19:24 | 05:57 06:17-07:52/95 19:57 19:06-19:29/23 | 05:28 06:14-07:49/95 20:27 |
| 2 | 07:27 13:59-14:45/46 08:25-09:03/38 16:40 07:50-08:19/29 15:43-16:10/27 | 07:12 17:15 | 06:34 06:53-07:28/35 17:50 | 06:42 07:01-07:56/55 19:25 | 05:56 06:16-07:52/96 19:58 19:06-19:28/22 | 05:27 06:15-07:49/94 20:28 |
| 3 | 07:27 14:00-14:45/45 08:26-09:03/37 16:41 07:50-08:19/29 15:44-16:10/26 | 07:11 17:16 | 06:33 06:52-07:26/34 17:51 | 06:41 06:59-07:55/56 19:26 | 05:55 06:14-07:51/97 19:59 19:07-19:28/21 | 05:27 06:15-07:50/95 20:28 |
| 4 | 07:27 14:00-14:44/44 08:27-09:03/36 16:41 07:50-08:18/28 15:43-16:10/27 | 07:10 17:18 | 06:31 06:50-07:22/32 17:52 | 06:39 06:58-07:55/57 19:27 | 05:53 06:13-07:51/98 20:00 19:08-19:27/19 | 05:26 06:15-07:49/94 20:29 |
| 5 | 07:27 14:01-14:44/43 08:27-09:02/35 16:42 07:49-08:17/28 15:44-16:10/26 | 07:08 17:19 | 06:29 06:49-07:18/29 17:53 | 06:37 06:56-07:55/59 19:28 | 05:52 06:14-07:50/96 20:01 19:09-19:26/17 | 05:26 06:16-07:49/93 20:30 |
| 6 | 07:27 14:03-14:44/41 08:28-09:02/34 16:43 07:49-08:16/27 15:44-16:11/27 | 07:07 17:20 | 06:28 06:47-07:17/30 17:55 | 06:36 06:54-07:54/60 19:29 | 05:51 06:14-07:50/96 20:02 19:10-19:25/15 | 05:26 06:16-07:49/93 20:30 |
| 7 | 07:27 14:04-14:43/39 08:29-09:02/33 16:44 07:49-08:16/27 15:45-16:11/26 | 07:06 17:21 | 06:26 06:45-07:17/32 17:56 | 06:34 06:53-07:54/61 19:30 | 05:50 06:15-07:49/94 20:03 19:11-19:22/11 | 05:25 06:16-07:49/93 20:31 |
| 8 | 07:27 14:06-14:43/37 08:31-09:02/31 16:45 07:49-08:16/27 15:46-16:12/26 | 07:05 17:23 | 06:25 06:44-07:16/32 17:57 | 06:32 06:51-07:53/62 19:31 | 05:48 06:14-07:49/95 20:04 19:14-19:19/5 | 05:25 06:16-07:49/93 20:32 |
| 9 | 07:26 14:08-14:43/35 08:32-09:02/30 16:46 07:49-08:17/28 15:47-16:12/25 | 07:04 17:24 | 06:23 06:42-07:15/33 17:58 | 06:31 06:49-07:52/63 19:33 | 05:47 06:15-07:49/94 20:05 | 05:25 06:17-07:49/92 20:32 |
| 10 | 07:26 14:09-14:41/32 08:33-09:01/28 16:47 07:49-08:16/27 15:47-16:12/25 | 07:03 17:25 | 06:21 06:40-07:14/34 17:59 | 06:29 06:48-07:52/64 19:34 | 05:46 06:15-07:49/94 20:06 | 05:25 06:17-07:49/92 20:33 |
| 11 | 07:26 14:11-14:41/30 08:34-09:00/26 16:48 07:50-08:17/27 15:47-16:12/25 | 07:01 07:21-07:25/4 17:26 | 06:20 06:39-07:14/35 18:00 | 06:27 06:46-07:50/64 19:35 | 05:45 06:14-07:50/96 20:07 | 05:24 06:18-07:50/92 20:33 |
| 12 | 07:26 14:14-14:40/26 08:36-09:00/24 16:50 07:51-08:17/26 15:49-16:13/24 | 07:00 07:20-07:28/8 17:28 | 06:18 06:37-07:13/36 18:02 | 06:26 06:45-07:51/66 19:36 | 05:44 06:14-07:50/96 20:08 | 05:24 06:18-07:50/92 20:34 |
| 13 | 07:25 14:16-14:38/22 08:37-08:58/21 16:51 07:51-08:17/26 15:49-16:12/23 | 06:59 07:19-07:30/11 17:29 | 06:16 06:35-07:12/37 18:03 | 06:24 06:43-07:51/68 19:37 | 05:43 06:14-07:50/96 20:09 | 05:24 06:18-07:50/92 20:35 |
| 14 | 07:25 14:20-14:36/16 08:40-08:57/17 16:52 07:53-08:17/24 15:50-16:13/23 | 06:58 07:17-07:31/14 17:30 | 06:15 06:34-07:12/38 18:04 | 06:23 06:41-07:52/71 19:38 | 05:42 06:13-07:50/97 20:10 | 05:24 06:19-07:50/91 20:35 |
| 15 | 07:25 14:25-14:30/5 08:43-08:54/11 16:53 07:53-08:17/24 15:50-16:12/22 | 06:56 07:16-07:32/16 17:32 | 06:13 06:32-07:10/38 18:05 | 06:21 06:40-07:53/73 19:39 | 05:41 06:13-07:50/97 20:11 | 05:24 06:19-07:50/91 20:35 |
| 16 | 07:24 07:54-08:17/23 16:54 15:52-16:12/20 | 06:55 07:15-07:34/19 17:33 | 06:11 06:30-07:09/39 18:06 | 06:19 06:38-07:53/75 19:40 | 05:40 06:13-07:50/97 20:12 | 05:24 06:19-07:50/91 20:36 |
| 17 | 07:24 07:55-08:16/21 16:55 15:52-16:11/19 | 06:54 07:13-07:34/21 17:34 | 06:10 06:28-07:07/39 18:07 | 06:18 06:37-07:53/76 19:41 | 05:39 06:13-07:50/97 20:13 | 05:24 06:19-07:50/91 20:36 |
| 18 | 07:23 07:57-08:16/19 16:56 15:54-16:11/17 | 06:52 07:12-07:35/23 17:35 | 06:08 06:27-07:05/38 18:08 | 06:16 06:35-07:53/78 19:42 | 05:38 06:12-07:49/97 20:14 | 05:24 06:20-07:50/90 20:37 |
| 19 | 07:23 07:58-08:15/17 16:58 15:55-16:10/15 | 06:51 07:10-07:35/25 17:37 | 06:06 06:25-07:03/38 18:09 | 06:15 06:34-07:54/80 19:43 | 05:37 06:13-07:50/97 20:15 | 05:24 06:20-07:50/90 20:37 |
| 20 | 07:22 08:00-08:13/13 16:59 15:57-16:09/12 | 06:49 07:09-07:35/26 17:38 | 06:04 06:23-06:59/36 18:11 | 06:13 06:32-07:54/82 19:45 19:15-19:22/7 | 05:36 06:13-07:50/97 20:16 | 05:24 06:20-07:50/90 20:37 |
| 21 | 07:22 08:04-08:12/8 17:00 16:00-16:07/7 | 06:48 07:07-07:35/28 17:39 | 06:03 06:22-06:57/35 18:12 | 06:12 06:31-07:54/83 19:46 19:13-19:24/11 | 05:35 06:13-07:50/97 20:17 | 05:25 06:20-07:50/90 20:37 |
| 22 | 07:21 17:01 | 06:46 07:06-07:35/29 17:40 | 06:01 06:20-06:56/36 18:13 | 06:10 06:29-07:54/85 19:47 19:10-19:24/14 | 05:34 06:13-07:49/96 20:18 | 05:25 06:21-07:51/90 20:38 |
| 23 | 07:20 17:02 | 06:45 07:04-07:35/31 17:41 | 05:59 06:18-06:55/37 18:14 | 06:09 06:28-07:54/86 19:48 19:09-19:26/17 | 05:33 06:13-07:49/96 20:19 | 05:25 06:21-07:51/90 20:38 |
| 24 | 07:20 17:04 | 06:44 07:03-07:35/32 17:43 | 05:58 06:16-06:54/38 18:15 | 06:07 06:26-07:53/87 19:49 19:08-19:26/18 | 05:33 06:13-07:50/97 20:20 | 05:25 06:21-07:51/90 20:38 |
| 25 | 07:19 17:05 | 06:42 07:01-07:34/33 17:44 | 05:56 06:15-06:55/40 18:16 | 06:06 06:25-07:54/89 19:50 19:07-19:27/20 | 05:32 06:13-07:49/96 20:21 | 05:26 06:21-07:51/90 20:38 |
| 26 | 07:18 17:06 | 06:40 07:00-07:34/34 17:45 | 05:54 06:13-06:55/42 18:17 | 06:04 06:24-07:53/89 19:51 19:06-19:28/22 | 05:31 06:14-07:50/96 20:22 | 05:26 06:21-07:52/91 20:38 |
| 27 | 07:17 17:07 | 06:39 06:58-07:32/34 17:46 | 05:53 06:11-06:55/44 18:18 | 06:03 06:22-07:53/91 19:52 19:06-19:29/23 | 05:31 06:14-07:49/95 20:23 | 05:26 06:21-07:52/91 20:38 |
| 28 | 07:16 17:09 | 06:37 06:57-07:32/35 17:47 | 05:51 06:10-06:56/46 18:19 | 06:01 06:21-07:53/92 19:53 19:06-19:30/24 | 05:30 06:13-07:49/96 20:24 | 05:27 06:22-07:53/91 20:38 |
| 29 | 07:15 17:10 | | 06:49 07:08-07:56/48 19:20 | 06:00 06:19-07:52/93 19:54 19:05-19:29/24 | 05:29 06:14-07:49/95 20:24 | 05:27 06:22-07:53/91 20:38 |
| 30 | 07:15 17:11 | | 06:47 07:06-07:56/50 19:22 | 05:59 06:18-07:52/94 19:56 19:06-19:29/23 | 05:29 06:14-07:49/95 20:25 | 05:27 06:21-07:53/92 20:38 |
| 31 | 07:14 17:12 | | 06:46 07:04-07:55/51 19:23 | | 05:28 06:14-07:49/95 20:26 | |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 |
| Sum of minutes with flicker | 1922 | 423 | 1167 | 2415 | 3109 | 2750 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 13 - WTG13

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | July | August | September | October | November | December |
|-----------------------------|----------------------|----------------------|----------------------|----------------------|-------------------------------------|-------------------------------------|
| 1 | 05:28 06:22-07:54/92 | 05:52 06:25-08:00/95 | 06:24 06:45-07:49/64 | 06:55 07:15-07:51/36 | 06:30 | 07:06 13:53-14:23/30 08:16-08:42/26 |
| | 20:38 | 20:18 | 19:34 | 18:43 | 16:55 | 16:30 07:32-07:59/27 15:30-15:54/24 |
| 2 | 05:28 06:22-07:53/91 | 05:53 06:25-08:00/95 | 06:25 06:46-07:50/64 | 06:56 07:17-07:52/35 | 06:32 | 07:07 13:52-14:24/32 08:16-08:44/28 |
| | 20:38 | 20:17 | 19:33 | 18:41 | 16:54 | 16:30 07:32-07:59/27 15:30-15:55/25 |
| 3 | 05:29 06:22-07:54/92 | 05:54 06:26-08:00/94 | 06:26 06:47-07:50/63 | 06:57 07:18-07:52/34 | 06:33 | 07:08 13:51-14:26/35 08:15-08:45/30 |
| | 20:38 | 20:16 | 19:31 | 18:39 | 16:53 | 16:29 07:32-08:00/28 15:30-15:55/25 |
| 4 | 05:29 06:22-07:54/92 | 05:55 06:25-08:00/95 | 06:27 06:48-07:50/62 | 06:58 07:19-07:52/33 | 06:34 | 07:09 13:50-14:27/37 08:15-08:46/31 |
| | 20:37 | 20:15 | 19:29 | 18:38 | 16:51 | 16:29 07:33-08:00/27 15:30-15:56/26 |
| 5 | 05:30 06:22-07:55/93 | 05:56 06:25-08:00/95 | 06:28 06:49-07:50/61 | 06:59 07:20-07:53/33 | 06:35 | 07:10 13:50-14:28/38 08:14-08:47/33 |
| | 20:37 | 20:14 19:23-19:31/8 | 19:28 | 18:36 | 16:50 | 16:29 07:34-08:01/27 15:30-15:56/26 |
| 6 | 05:31 06:23-07:56/93 | 05:57 06:24-07:59/95 | 06:29 06:50-07:50/60 | 07:01 07:21-07:53/32 | 06:36 | 07:11 13:49-14:30/41 08:15-08:48/34 |
| | 20:37 | 20:13 19:21-19:34/13 | 19:26 | 18:34 | 16:49 | 16:29 07:35-08:02/27 15:30-15:57/27 |
| 7 | 05:31 06:22-07:55/93 | 05:58 06:24-08:00/96 | 06:30 06:51-07:50/59 | 07:02 07:22-07:53/31 | 06:38 | 07:12 13:49-14:31/42 08:14-08:49/35 |
| | 20:37 | 20:11 19:19-19:35/16 | 19:24 | 18:33 | 16:48 | 16:29 07:36-08:04/28 15:31-15:57/26 |
| 8 | 05:32 06:22-07:56/94 | 05:59 06:23-08:00/97 | 06:31 06:52-07:49/57 | 07:03 07:23-07:53/30 | 06:39 | 07:13 13:48-14:32/44 08:14-08:50/36 |
| | 20:36 | 20:10 19:18-19:36/18 | 19:23 | 18:31 | 16:47 | 16:29 07:37-08:05/28 15:31-15:58/27 |
| 9 | 05:33 06:23-07:57/94 | 06:00 06:23-08:00/97 | 06:32 06:53-07:49/56 | 07:04 07:24-07:53/29 | 06:40 | 07:14 13:48-14:33/45 08:14-08:51/37 |
| | 20:36 | 20:09 19:17-19:37/20 | 19:21 | 18:29 | 16:46 | 16:29 07:38-08:07/29 15:32-15:58/26 |
| 10 | 05:33 06:22-07:56/94 | 06:02 06:24-08:01/97 | 06:33 06:54-07:49/55 | 07:05 07:25-07:58/33 | 06:41 | 07:15 13:48-14:34/46 08:14-08:52/38 |
| | 20:36 | 20:07 19:15-19:36/21 | 19:19 | 18:28 | 16:45 | 16:29 07:39-08:08/29 15:32-15:59/27 |
| 11 | 05:34 06:22-07:57/95 | 06:03 06:25-08:01/96 | 06:34 06:55-07:48/53 | 07:06 07:27-08:01/34 | 06:43 | 07:16 13:48-14:35/47 08:15-08:53/38 |
| | 20:35 | 20:06 19:14-19:37/23 | 19:17 | 18:26 | 16:44 | 16:29 07:40-08:09/29 15:33-16:00/27 |
| 12 | 05:35 06:23-07:58/95 | 06:04 06:26-08:01/95 | 06:35 06:56-07:48/52 | 07:07 07:28-08:03/35 | 06:44 | 07:17 13:48-14:36/48 08:15-08:54/39 |
| | 20:35 | 20:05 19:14-19:37/23 | 19:16 | 18:24 | 16:43 | 16:29 07:41-08:10/29 15:33-16:00/27 |
| 13 | 05:35 06:22-07:57/95 | 06:05 06:27-08:01/94 | 06:36 06:57-07:47/50 | 07:08 07:29-08:04/35 | 06:45 | 07:17 13:48-14:36/48 08:14-08:54/40 |
| | 20:34 | 20:03 19:13-19:37/24 | 19:14 | 18:23 | 16:42 | 16:29 07:41-08:10/29 15:33-16:00/27 |
| 14 | 05:36 06:22-07:58/96 | 06:06 06:28-08:01/93 | 06:37 06:58-07:46/48 | 07:09 07:30-08:05/35 | 06:46 | 07:18 13:48-14:37/49 08:15-08:55/40 |
| | 20:34 | 20:02 19:13-19:37/24 | 19:12 | 18:21 | 16:41 | 16:29 07:42-08:11/29 15:34-16:00/26 |
| 15 | 05:37 06:23-07:58/95 | 06:07 06:29-08:01/92 | 06:38 06:59-07:45/46 | 07:10 07:31-08:05/34 | 06:47 | 07:19 13:48-14:38/50 08:15-08:56/41 |
| | 20:33 | 20:01 19:13-19:37/24 | 19:11 | 18:20 | 16:40 | 16:29 07:43-08:12/29 15:35-16:01/26 |
| 16 | 05:38 06:23-07:59/96 | 06:08 06:30-08:00/90 | 06:40 07:00-07:44/44 | 07:12 07:32-08:05/33 | 06:49 | 07:20 13:49-14:39/50 08:16-08:57/41 |
| | 20:32 | 19:59 19:13-19:36/23 | 19:09 | 18:18 | 16:39 | 16:30 07:44-08:13/29 15:35-16:02/27 |
| 17 | 05:39 06:23-07:58/95 | 06:09 06:31-08:00/89 | 06:41 07:01-07:43/42 | 07:13 07:34-08:06/32 | 06:50 | 07:20 13:48-14:39/51 08:16-08:57/41 |
| | 20:32 | 19:58 19:13-19:34/21 | 19:07 | 18:17 | 16:38 | 16:30 07:44-08:13/29 15:35-16:02/27 |
| 18 | 05:39 06:22-07:59/97 | 06:10 06:31-07:59/88 | 06:42 07:02-07:42/40 | 07:14 07:35-08:06/31 | 06:51 | 07:21 13:49-14:40/51 08:16-08:58/42 |
| | 20:31 | 19:56 19:13-19:33/20 | 19:05 | 18:15 | 16:37 | 16:30 07:45-08:14/29 15:36-16:02/26 |
| 19 | 05:40 06:23-07:59/96 | 06:11 06:32-07:59/87 | 06:43 07:03-07:41/38 | 07:15 07:36-08:06/30 | 06:52 | 07:22 13:49-14:40/51 08:16-08:58/42 |
| | 20:30 | 19:55 19:14-19:32/18 | 19:04 | 18:13 | 16:37 | 16:31 07:45-08:15/30 15:36-16:02/26 |
| 20 | 05:41 06:23-07:59/96 | 06:12 06:33-07:59/86 | 06:44 07:04-07:42/38 | 07:16 07:37-08:06/29 | 06:54 | 07:22 13:50-14:41/51 08:17-08:59/42 |
| | 20:30 | 19:53 19:14-19:30/16 | 19:02 | 18:12 | 16:36 | 16:31 07:46-08:15/29 15:37-16:03/26 |
| 21 | 05:42 06:23-08:00/97 | 06:13 06:34-07:58/84 | 06:45 07:05-07:42/37 | 07:17 07:38-08:05/27 | 06:55 07:39-07:47/8 | 07:23 13:50-14:41/51 08:18-09:00/42 |
| | 20:29 | 19:52 19:15-19:29/14 | 19:00 | 18:10 | 16:35 15:36-15:42/6 | 16:31 07:47-08:16/29 15:37-16:03/26 |
| 22 | 05:43 06:23-08:00/97 | 06:14 06:35-07:58/83 | 06:46 07:06-07:42/36 | 07:18 07:40-08:06/26 | 06:56 07:37-07:50/13 | 07:23 13:51-14:42/51 08:18-09:00/42 |
| | 20:28 | 19:50 19:17-19:27/10 | 18:58 | 18:09 | 16:34 15:33-15:45/12 | 16:32 07:47-08:16/29 15:38-16:04/26 |
| 23 | 05:44 06:23-08:00/97 | 06:15 06:36-07:57/81 | 06:47 07:07-07:41/34 | 07:20 07:41-08:05/24 | 06:57 07:35-07:52/17 | 07:24 13:51-14:42/51 08:18-09:00/42 |
| | 20:27 | 19:49 19:19-19:26/7 | 18:57 | 18:07 | 16:34 15:32-15:47/15 | 16:32 07:47-08:16/29 15:38-16:04/26 |
| 24 | 05:45 06:23-08:00/97 | 06:16 06:37-07:57/80 | 06:48 07:08-07:45/37 | 07:21 07:42-08:04/22 | 06:58 07:34-07:53/19 | 07:24 13:52-14:43/51 08:19-09:01/42 |
| | 20:26 | 19:47 | 18:55 | 18:06 | 16:33 15:31-15:48/17 | 16:33 07:48-08:17/29 15:39-16:05/26 |
| 25 | 05:46 06:23-08:00/97 | 06:17 06:38-07:56/78 | 06:49 07:09-07:47/38 | 07:22 06:43-07:03/20 | 06:59 07:33-07:54/21 | 07:25 13:52-14:43/51 08:19-09:01/42 |
| | 20:25 | 19:46 | 18:53 | 17:05 | 16:33 15:31-15:49/18 | 16:34 07:48-08:17/29 15:39-16:05/26 |
| 26 | 05:47 06:23-08:00/97 | 06:18 06:39-07:55/76 | 06:50 07:10-07:49/39 | 07:23 06:45-07:03/18 | 07:01 07:32-07:55/23 | 07:25 13:52-14:43/51 08:19-09:01/42 |
| | 20:25 | 19:44 | 18:51 | 17:03 | 16:32 15:30-15:50/20 | 16:34 07:49-08:18/29 15:39-16:06/27 |
| 27 | 05:48 06:23-08:00/97 | 06:19 06:40-07:54/74 | 06:51 07:11-07:50/39 | 07:24 06:46-07:02/16 | 07:02 14:05-14:08/3 08:23-08:34/11 | 07:25 13:54-14:44/50 08:21-09:02/41 |
| | 20:24 | 19:42 | 18:50 | 17:02 | 16:32 07:33-07:57/24 15:29-15:51/22 | 16:35 07:49-08:18/29 15:40-16:07/27 |
| 28 | 05:49 06:24-08:00/96 | 06:20 06:41-07:53/72 | 06:52 07:12-07:50/38 | 07:26 06:47-07:00/13 | 07:03 14:00-14:15/15 08:20-08:37/17 | 07:26 13:54-14:44/50 08:21-09:02/41 |
| | 20:23 | 19:41 | 18:48 | 17:00 | 16:31 07:33-07:57/24 15:30-15:53/23 | 16:36 07:49-08:18/29 15:41-16:07/26 |
| 29 | 05:49 06:24-08:00/96 | 06:21 06:42-07:52/70 | 06:53 07:13-07:51/38 | 07:27 06:48-06:58/10 | 07:04 13:57-14:18/21 08:19-08:39/20 | 07:26 13:55-14:44/49 08:22-09:02/40 |
| | 20:22 | 19:39 | 18:46 | 16:59 | 16:31 07:32-07:58/26 15:30-15:53/23 | 16:36 07:49-08:18/29 15:41-16:07/26 |
| 30 | 05:50 06:24-08:00/96 | 06:22 06:43-07:51/68 | 06:54 07:14-07:51/37 | 07:28 06:50-06:57/7 | 07:05 13:55-14:21/26 08:17-08:41/24 | 07:26 13:55-14:44/49 08:22-09:02/40 |
| | 20:21 | 19:38 | 18:45 | 16:58 | 16:30 07:32-07:58/26 15:30-15:54/24 | 16:37 07:49-08:18/29 15:41-16:08/27 |
| 31 | 05:51 06:24-08:00/96 | 06:23 06:44-07:50/66 | | 06:29 06:51-06:54/3 | | 07:26 13:56-14:44/48 08:23-09:02/39 |
| | 20:20 | 19:36 | | 16:56 | | 16:38 07:50-08:19/29 15:41-16:08/27 |
| Potential sun hours | 461 | 429 | 375 | 345 | 296 | 286 |
| Sum of minutes with flicker | 2947 | 3041 | 1425 | 840 | 518 | 4326 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 14 - WTG14

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | January | February | March | April | May | June | |
|-----------------------------|---|-------------------------------|-------------------------------|----------------|------------------------------|---|-----|
| 1 | 07:27 07:50-08:11/21 16:39 15:18-15:53/35 17:14 | 07:13 17:14 | 06:36 07:00-07:33/33 17:49 | 06:44 19:24 | 05:57 19:57 | 05:28 05:49-05:53/4 20:27 | |
| 2 | 07:27 07:50-08:11/21 16:40 15:19-15:53/34 17:15 | 07:12 17:15 | 06:34 07:00-07:32/32 17:50 | 06:42 19:25 | 05:56 19:58 | 05:27 05:49-05:54/5 20:28 | |
| 3 | 07:27 07:50-08:12/22 16:41 15:20-15:54/34 17:16 | 07:11 17:16 | 06:33 07:02-07:31/29 17:51 | 06:41 19:26 | 05:55 19:59 | 05:27 05:49-05:55/6 20:28 | |
| 4 | 07:27 07:50-08:12/22 16:41 15:21-15:54/33 17:17 | 07:10 17:17 | 06:31 07:02-07:29/27 17:52 | 06:39 19:27 | 05:53 20:00 | 05:26 05:48-05:55/7 20:29 | |
| 5 | 07:27 07:49-08:12/23 16:42 15:21-15:54/33 17:19 | 07:08 17:19 | 06:29 07:04-07:28/24 17:53 | 06:37 19:28 | 05:52 20:01 | 05:26 05:48-05:56/8 20:30 | |
| 6 | 07:27 07:49-08:12/23 16:43 15:22-15:54/32 17:20 | 07:07 17:20 | 06:28 07:06-07:26/20 17:55 | 06:36 19:29 | 05:51 20:02 | 05:26 05:48-05:57/9 20:30 | |
| 7 | 07:27 07:49-08:13/24 16:44 15:23-15:55/32 17:21 | 07:06 17:21 | 06:26 07:08-07:22/14 17:56 | 06:34 19:30 | 05:50 20:03 | 05:25 05:47-05:57/10 20:31 | |
| 8 | 07:27 07:49-08:13/24 16:45 15:24-15:55/31 17:23 | 07:05 17:23 | 06:25 07:15-07:16/1 17:57 | 06:32 19:31 | 05:48 20:04 | 05:25 05:47-05:57/10 20:32 | |
| 9 | 07:26 07:49-08:14/25 16:46 15:25-15:55/30 17:24 | 07:04 17:24 | 06:23 17:58 | 06:31 19:32 | 05:47 20:05 | 05:25 05:47-05:58/11 20:32 | |
| 10 | 07:26 07:48-08:13/25 16:47 15:25-15:55/30 17:25 | 07:03 17:25 | 06:21 17:59 | 06:29 19:34 | 05:46 20:06 | 05:24 05:47-05:58/11 20:33 | |
| 11 | 07:26 07:49-08:14/25 16:48 15:27-15:55/28 17:26 | 07:01 17:26 | 06:20 18:00 | 06:27 19:35 | 05:45 20:07 | 05:24 05:47-05:59/12 20:33 | |
| 12 | 07:26 07:50-08:14/24 16:49 15:28-15:55/27 17:28 | 07:00 17:28 | 06:18 18:01 | 06:26 19:36 | 05:44 20:08 | 05:24 05:47-05:59/12 20:34 | |
| 13 | 07:25 07:50-08:14/24 16:51 15:29-15:54/25 17:29 | 06:59 07:19-07:25/6 17:29 | 06:16 18:03 | 06:24 19:37 | 05:43 20:09 | 05:24 05:47-06:00/13 20:34 | |
| 14 | 07:25 07:51-08:14/23 16:52 15:30-15:54/24 17:30 | 06:58 07:17-07:27/10 17:30 | 06:15 18:04 | 06:22 19:38 | 05:42 20:10 | 05:24 05:47-06:00/13 20:35 | |
| 15 | 07:25 07:52-08:13/21 16:53 15:31-15:53/22 17:31 | 06:56 07:16-07:30/14 17:31 | 06:13 18:05 | 06:21 19:39 | 05:41 20:11 | 05:24 05:47-06:00/13 20:35 | |
| 16 | 07:24 07:53-08:14/21 16:54 15:33-15:53/20 17:33 | 06:55 07:15-07:31/16 17:33 | 06:11 18:06 | 06:19 19:40 | 05:40 20:12 | 05:24 20:05-20:09/4 20:36 05:47-06:00/13 | |
| 17 | 07:24 07:54-08:13/19 16:55 15:35-15:51/16 17:34 | 06:54 07:13-07:32/19 17:34 | 06:10 18:07 | 06:18 19:41 | 05:39 20:13 | 05:24 20:04-20:10/6 20:36 05:47-06:01/14 | |
| 18 | 07:23 07:56-08:13/17 16:56 15:37-15:50/13 17:35 | 06:52 07:12-07:33/21 17:35 | 06:08 18:08 | 06:16 19:42 | 05:38 20:14 | 05:24 20:03-20:10/7 20:36 05:47-06:01/14 | |
| 19 | 07:23 07:57-08:12/15 16:57 15:41-15:47/6 17:36 | 06:51 07:10-07:34/24 17:36 | 06:06 18:09 | 06:15 19:43 | 05:37 20:15 | 05:24 20:03-20:11/8 20:37 05:47-06:01/14 | |
| 20 | 07:22 07:58-08:10/12 16:59 17:38 | 06:49 07:09-07:35/26 17:38 | 06:04 18:10 | 06:13 19:45 | 05:36 20:16 | 05:24 20:03-20:11/8 20:37 05:47-06:01/14 | |
| 21 | 07:22 08:02-08:09/7 17:00 17:39 | 06:48 07:07-07:35/28 17:39 | 06:03 18:12 | 06:12 19:46 | 05:35 20:17 | 05:24 20:03-20:11/8 20:37 05:47-06:01/14 | |
| 22 | 07:21 17:01 17:40 | 06:46 07:06-07:35/29 17:40 | 06:01 18:13 | 06:10 19:47 | 05:34 20:18 | 05:25 20:03-20:11/8 20:38 05:48-06:02/14 | |
| 23 | 07:20 17:02 17:41 | 06:45 07:04-07:35/31 17:41 | 05:59 18:14 | 06:09 19:48 | 05:33 20:19 | 05:25 20:04-20:12/8 20:38 05:48-06:02/14 | |
| 24 | 07:19 17:04 17:43 | 06:43 07:03-07:35/32 17:43 | 05:58 18:15 | 06:07 19:49 | 05:33 20:20 | 05:25 20:04-20:12/8 20:38 05:48-06:02/14 | |
| 25 | 07:19 17:05 17:44 | 06:42 07:01-07:35/34 17:44 | 05:56 18:16 | 06:06 19:50 | 05:32 20:21 | 05:25 20:05-20:11/6 20:38 05:48-06:02/14 | |
| 26 | 07:18 17:06 17:45 | 06:40 07:00-07:35/35 17:45 | 05:54 18:17 | 06:04 19:51 | 05:31 20:22 | 05:26 20:06-20:11/5 20:38 05:49-06:03/14 | |
| 27 | 07:17 17:07 17:46 | 06:39 06:59-07:34/35 17:46 | 05:52 18:18 | 06:03 19:52 | 05:30 20:23 | 05:26 20:07-20:10/3 20:38 05:49-06:02/13 | |
| 28 | 07:16 17:09 17:47 | 06:37 07:00-07:34/34 17:47 | 05:51 18:19 | 06:01 19:53 | 05:30 20:24 | 05:27 05:50-06:03/13 20:38 | |
| 29 | 07:15 17:10 19:20 | | 06:49 19:20 | 06:00 19:54 | 05:29 20:24 | 05:27 05:50-06:03/13 20:38 | |
| 30 | 07:14 17:11 19:22 | | 06:47 19:22 | 05:59 19:55 | 05:29 05:50-05:51/1 20:25 | 05:27 05:50-06:02/12 20:38 | |
| 31 | 07:14 17:12 19:23 | | 06:46 19:23 | | 05:28 05:50-05:52/2 20:26 | | |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 | 427 |
| Sum of minutes with flicker | 943 | 394 | 180 | 0 | 3 | | |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 14 - WTG14

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | July | | August | | September | | October | | November | | December | |
|-----------------------------|-------|----------------|--------|-------|-----------|----------------|---------|----------------|----------|--|----------|----------------|
| 1 | 05:28 | 05:51-06:03/12 | 05:52 | 06:24 | 06:55 | | | | 06:30 | | 07:06 | 07:31-07:56/25 |
| | 20:38 | | 20:18 | 19:34 | 18:43 | | | | 16:55 | | 16:30 | 15:09-15:37/28 |
| 2 | 05:28 | 05:51-06:03/12 | 05:53 | 06:25 | 06:56 | | | | 06:32 | | 07:07 | 07:31-07:56/25 |
| | 20:38 | | 20:17 | 19:33 | 18:41 | | | | 16:54 | | 16:30 | 15:08-15:38/30 |
| 3 | 05:29 | 05:52-06:03/11 | 05:54 | 06:26 | 06:57 | | | | 06:33 | | 07:08 | 07:32-07:57/25 |
| | 20:38 | | 20:16 | 19:31 | 18:39 | | | | 16:53 | | 16:29 | 15:08-15:38/30 |
| 4 | 05:29 | 05:52-06:02/10 | 05:55 | 06:27 | 06:58 | | | | 06:34 | | 07:09 | 07:33-07:57/24 |
| | 20:37 | | 20:15 | 19:29 | 18:38 | | | | 16:51 | | 16:29 | 15:08-15:39/31 |
| 5 | 05:30 | 05:53-06:03/10 | 05:56 | 06:28 | 06:59 | | | | 06:35 | | 07:10 | 07:34-07:58/24 |
| | 20:37 | | 20:14 | 19:28 | 18:36 | | | | 16:50 | | 16:29 | 15:08-15:40/32 |
| 6 | 05:31 | 05:54-06:03/9 | 05:57 | 06:29 | 07:00 | 07:46-07:57/11 | | | 06:36 | | 07:11 | 07:35-07:58/23 |
| | 20:37 | | 20:13 | 19:26 | 18:34 | | | | 16:49 | | 16:29 | 15:08-15:40/32 |
| 7 | 05:31 | 05:54-06:02/8 | 05:58 | 06:30 | 07:02 | 07:43-08:00/17 | | | 06:38 | | 07:12 | 07:36-07:59/23 |
| | 20:37 | | 20:11 | 19:24 | 18:33 | | | | 16:48 | | 16:29 | 15:08-15:41/33 |
| 8 | 05:32 | 05:55-06:03/8 | 05:59 | 06:31 | 07:03 | 07:40-08:02/22 | | | 06:39 | | 07:13 | 07:37-07:59/22 |
| | 20:36 | | 20:10 | 19:23 | 18:31 | | | | 16:47 | | 16:29 | 15:09-15:42/33 |
| 9 | 05:33 | 05:56-06:03/7 | 06:00 | 06:32 | 07:04 | 07:38-08:03/25 | | | 06:40 | | 07:14 | 07:38-08:00/22 |
| | 20:36 | | 20:09 | 19:21 | 18:29 | | | | 16:46 | | 16:29 | 15:09-15:43/34 |
| 10 | 05:33 | 05:56-06:02/6 | 06:01 | 06:33 | 07:05 | 07:36-08:04/28 | | | 06:41 | | 07:15 | 07:39-08:00/21 |
| | 20:36 | | 20:07 | 19:19 | 18:28 | | | | 16:45 | | 16:29 | 15:09-15:43/34 |
| 11 | 05:34 | 05:57-06:01/4 | 06:02 | 06:34 | 07:06 | 07:35-08:05/30 | | | 06:43 | | 07:16 | 07:40-08:01/21 |
| | 20:35 | | 20:06 | 19:17 | 18:26 | | | | 16:44 | | 16:29 | 15:09-15:44/35 |
| 12 | 05:35 | 05:58-06:01/3 | 06:03 | 06:35 | 07:07 | 07:34-08:06/32 | | | 06:44 | | 07:16 | 07:41-08:01/20 |
| | 20:35 | | 20:05 | 19:16 | 18:24 | | | | 16:43 | | 16:29 | 15:10-15:45/35 |
| 13 | 05:35 | 05:58-06:00/2 | 06:05 | 06:36 | 07:08 | 07:33-08:07/34 | | | 06:45 | | 07:17 | 07:41-08:01/20 |
| | 20:34 | | 20:03 | 19:14 | 18:23 | | | | 16:42 | | 16:29 | 15:09-15:45/36 |
| 14 | 05:36 | | 06:06 | 06:37 | 07:09 | 07:33-08:07/34 | | | 06:46 | | 07:18 | 07:42-08:02/20 |
| | 20:34 | | 20:02 | 19:12 | 18:21 | | | | 16:41 | | 16:29 | 15:10-15:45/35 |
| 15 | 05:37 | | 06:07 | 06:38 | 07:10 | 07:32-08:07/35 | | | 06:47 | | 07:19 | 07:43-08:02/19 |
| | 20:33 | | 20:01 | 19:10 | 18:20 | | | | 16:40 | | 16:29 | 15:10-15:46/36 |
| 16 | 05:38 | | 06:08 | 06:39 | 07:12 | 07:32-08:07/35 | | | 06:49 | | 07:20 | 07:44-08:03/19 |
| | 20:32 | | 19:59 | 19:09 | 18:18 | | | | 16:39 | | 16:30 | 15:10-15:46/36 |
| 17 | 05:39 | | 06:09 | 06:40 | 07:13 | 07:33-08:06/33 | | | 06:50 | | 07:20 | 07:44-08:03/19 |
| | 20:32 | | 19:58 | 19:07 | 18:16 | | | | 16:38 | | 16:30 | 15:10-15:47/37 |
| 18 | 05:39 | | 06:10 | 06:42 | 07:14 | 07:35-08:07/32 | | | 06:51 | | 07:21 | 07:45-08:04/19 |
| | 20:31 | | 19:56 | 19:05 | 18:15 | | | | 16:37 | | 16:30 | 15:11-15:48/37 |
| 19 | 05:40 | | 06:11 | 06:43 | 07:15 | 07:36-08:06/30 | | | 06:52 | | 07:22 | 07:45-08:04/19 |
| | 20:30 | | 19:55 | 19:04 | 18:13 | | | | 16:36 | | 16:31 | 15:11-15:48/37 |
| 20 | 05:41 | | 06:12 | 06:44 | 07:16 | 07:37-08:06/29 | | | 06:53 | | 07:22 | 07:46-08:04/18 |
| | 20:30 | | 19:53 | 19:02 | 18:12 | | | | 16:36 | | 16:31 | 15:12-15:49/37 |
| 21 | 05:42 | | 06:13 | 06:45 | 07:17 | 07:38-08:05/27 | | 07:37-07:44/7 | 06:55 | | 07:23 | 07:46-08:04/18 |
| | 20:29 | | 19:52 | 19:00 | 18:10 | | | | 16:35 | | 16:31 | 15:12-15:49/37 |
| 22 | 05:43 | | 06:14 | 06:46 | 07:18 | 07:40-08:05/25 | | 07:34-07:46/12 | 06:56 | | 07:23 | 07:47-08:05/18 |
| | 20:28 | | 19:50 | 18:58 | 18:09 | | | | 16:34 | | 16:32 | 15:13-15:49/36 |
| 23 | 05:44 | | 06:15 | 06:47 | 07:20 | 07:41-08:04/23 | | 07:34-07:49/15 | 06:57 | | 07:24 | 07:47-08:05/18 |
| | 20:27 | | 19:49 | 18:57 | 18:07 | | | 15:18-15:24/6 | 16:34 | | 16:32 | 15:13-15:50/37 |
| 24 | 05:45 | | 06:16 | 06:48 | 07:21 | 07:42-08:03/21 | | 07:33-07:50/17 | 06:58 | | 07:24 | 07:48-08:07/19 |
| | 20:26 | | 19:47 | 18:55 | 18:06 | | | 15:15-15:27/12 | 16:33 | | 16:33 | 15:14-15:51/37 |
| 25 | 05:46 | | 06:17 | 06:49 | 06:22 | 06:43-07:01/18 | | 07:32-07:51/19 | 06:59 | | 07:25 | 07:48-08:07/19 |
| | 20:25 | | 19:46 | 18:53 | 17:05 | | | 15:13-15:29/16 | 16:33 | | 16:33 | 15:14-15:51/37 |
| 26 | 05:47 | | 06:18 | 06:50 | 06:23 | 06:45-07:01/16 | | 07:31-07:52/21 | 07:00 | | 07:25 | 07:48-08:07/19 |
| | 20:24 | | 19:44 | 18:51 | 17:03 | | | 15:11-15:31/20 | 16:32 | | 16:34 | 15:14-15:51/37 |
| 27 | 05:48 | | 06:19 | 06:51 | 06:24 | 06:46-06:59/13 | | 07:32-07:53/21 | 07:02 | | 07:25 | 07:49-08:08/19 |
| | 20:24 | | 19:42 | 18:50 | 17:02 | | | 15:10-15:32/22 | 16:31 | | 16:35 | 15:16-15:52/36 |
| 28 | 05:48 | | 06:20 | 06:52 | 06:25 | 06:47-06:56/9 | | 07:32-07:54/22 | 07:03 | | 07:26 | 07:49-08:08/19 |
| | 20:23 | | 19:41 | 18:48 | 17:00 | | | 15:10-15:34/24 | 16:31 | | 16:35 | 15:16-15:52/36 |
| 29 | 05:49 | | 06:21 | 06:53 | 06:27 | 06:48-06:53/5 | | 07:31-07:55/24 | 07:04 | | 07:26 | 07:49-08:09/20 |
| | 20:22 | | 19:39 | 18:46 | 16:59 | | | 15:10-15:35/25 | 16:31 | | 16:36 | 15:16-15:52/36 |
| 30 | 05:50 | | 06:22 | 06:54 | 06:28 | | | 07:31-07:55/24 | 07:05 | | 07:26 | 07:49-08:09/20 |
| | 20:21 | | 19:38 | 18:44 | 16:58 | | | 15:09-15:36/27 | 16:30 | | 16:37 | 15:17-15:52/35 |
| 31 | 05:51 | | 06:23 | | 06:29 | | | | | | 07:26 | 07:49-08:09/20 |
| | 20:19 | | 19:36 | | 16:56 | | | | | | 16:38 | 15:18-15:53/35 |
| Potential sun hours | 461 | | 429 | | 375 | | 345 | | 296 | | 286 | |
| Sum of minutes with flicker | 102 | | 0 | | 0 | | 584 | | 334 | | 1714 | |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

Project:

Queequeg_shadow

Licensed user:

ERM ITALIA S.P.A.
Via San Gregorio, 38
IT-20124 Milano
+39 02 6744 0217
Aurora / aurora.finiguerra@erm.com
Calculated:
26/01/2024 18:31/4.0.531

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 15 - WTG15

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

Table with 12 columns: Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec. Values: 4.12, 4.66, 5.30, 6.72, 8.25, 9.35, 10.16, 9.45, 7.64, 5.82, 4.65, 3.82

Operational time

Table with 13 columns: N, NNE, ENE, E, ESE, SSE, S, SSW, WSW, W, WNW, NNW, Sum. Values: 985, 358, 99, 45, 45, 1,532, 636, 546, 815, 367, 1,344, 1,988, 8,760

Main data table with columns for months (January to June) and rows for each day (1-31). Each cell contains a time range (hh:mm-ss) and a flicker value.

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

Matrix with 2 rows: Day in month, Sun rise (hh:mm), Sun set (hh:mm); and 2 columns: First time (hh:mm) with flicker, Last time (hh:mm) with flicker/Minutes with flicker



Project:
Queequeg_shadow

Licensed user:
ERM ITALIA S.P.A.
Via San Gregorio, 38
IT-20124 Milano
+39 02 6744 0217
Aurora / aurora.finiugerra@erm.com
Calculated:
26/01/2024 18:31/4.0.531

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 15 - WTG15

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | July | August | September | October | November | December | |
|----|--|-------------------------------------|-------------------------------------|--------------------------------------|-----------------------|-----------------------|-------------|
| 1 | 05:28 05:51-06:33/42 | 05:52 06:15-06:47/32 | 06:24 06:45-07:13/28 | 06:55 07:16-07:32/16 | 06:30 08:33-09:53/80 | 07:06 08:34-10:08/94 | |
| 2 | 20:38 19:43-19:52/9 | 20:19 19:38-19:55/17 | 19:34 18:39-19:12/33 | 18:43 17:05-18:20/75 | 16:55 10:20-12:26/126 | 16:30 10:12-12:43/151 | |
| 3 | 05:28 05:51-06:32/41 | 05:53 06:16-06:48/32 | 06:25 06:46-07:13/27 | 06:56 07:17-07:30/13 | 06:32 08:33-09:55/82 | 07:07 08:35-10:08/93 | |
| 4 | 20:38 19:44-19:49/5 | 20:17 19:38-19:54/16 | 19:33 18:40-19:10/30 | 18:41 17:05-18:19/74 | 16:54 10:20-12:28/128 | 16:30 10:12-12:44/152 | |
| 5 | 05:29 05:52-06:33/41 | 05:54 06:17-06:48/31 | 06:26 06:47-07:12/25 | 06:57 07:50-08:04/14 18:04-18:17/13 | 06:33 08:32-09:55/83 | 07:08 08:35-10:08/93 | |
| 6 | 20:37 19:43-19:52/9 | 20:16 19:39-19:53/14 | 19:31 18:41-19:08/27 | 18:39 07:18-07:27/9 17:04-18:01/57 | 16:53 10:18-12:29/131 | 16:29 10:13-12:44/151 | |
| 7 | 05:30 05:53-06:34/41 | 05:55 06:18-06:49/31 | 06:27 06:48-07:12/24 | 06:58 07:46-08:07/21 17:04-18:01/57 | 06:34 08:31-09:56/85 | 07:09 08:36-10:08/92 | |
| 8 | 20:38 19:44-19:49/5 | 20:15 19:40-19:52/12 | 19:29 18:42-19:07/25 | 18:38 18:08-18:12/4 | 16:51 10:17-12:29/132 | 16:29 10:13-12:44/151 | |
| 9 | 05:30 05:53-06:34/41 | 05:56 06:19-06:49/30 | 06:28 06:49-07:12/23 | 07:00 07:44-08:08/24 | 06:35 08:32-09:57/85 | 07:10 08:36-10:09/93 | |
| 10 | 20:37 19:43-19:52/9 | 20:14 19:41-19:50/9 | 19:28 18:43-19:05/22 | 18:36 17:03-18:00/57 | 16:50 10:17-12:31/134 | 16:29 10:13-12:45/152 | |
| 11 | 05:31 05:54-06:35/41 | 05:57 06:20-06:49/29 06:53-07:00/7 | 06:29 18:38-19:03/25 | 07:01 07:42-08:10/28 | 06:37 08:31-09:58/87 | 07:11 08:37-10:09/92 | |
| 12 | 20:37 19:43-19:53/10 | 20:13 19:43-19:49/6 | 19:26 06:50-07:23/33 | 18:34 17:02-17:59/57 | 16:49 10:15-12:31/136 | 16:29 10:14-12:45/151 | |
| 13 | 05:31 05:54-06:35/41 | 05:58 06:21-06:49/28 06:50-07:04/14 | 06:30 18:35-18:59/24 | 07:02 07:40-08:11/31 | 06:38 08:30-09:58/88 | 07:12 08:37-10:09/92 | |
| 14 | 20:37 19:41-19:54/13 | 20:11 19:46-19:48/2 | 19:24 06:51-07:26/35 | 18:33 17:02-17:58/56 | 16:48 10:14-12:32/138 | 16:29 10:14-12:45/151 | |
| 15 | 05:32 05:55-06:36/41 | 05:59 06:22-07:06/44 | 06:31 18:33-18:50/17 | 07:03 07:39-08:11/32 | 06:39 08:30-09:59/89 | 07:13 08:38-10:10/92 | |
| 16 | 20:36 19:41-19:55/14 | 20:10 06:23-07:08/45 | 19:23 06:52-07:27/35 | 18:31 17:01-17:57/56 | 16:47 10:13-12:32/139 | 16:29 10:15-12:46/151 | |
| 17 | 05:33 05:56-06:37/41 | 06:01 06:23-07:08/45 | 06:32 18:31-18:50/19 | 07:04 07:37-08:12/35 | 06:40 08:30-10:00/90 | 07:14 08:38-10:10/92 | |
| 18 | 20:36 19:41-19:57/16 | 20:09 06:24-07:09/45 | 19:21 06:53-07:28/35 | 18:29 17:01-17:56/55 | 16:46 10:14-12:34/140 | 16:29 10:15-12:46/151 | |
| 19 | 05:33 05:56-06:36/40 | 20:08 06:24-07:09/45 | 06:33 18:30-18:51/21 | 07:05 07:36-08:12/36 | 06:41 08:30-10:00/90 | 07:15 08:39-10:10/91 | |
| 20 | 20:36 19:40-19:57/17 | 20:08 06:24-07:09/45 | 19:19 06:54-07:29/35 | 18:28 17:01-17:54/53 | 16:45 10:13-12:34/141 | 16:29 10:16-12:47/151 | |
| 21 | 05:34 05:57-06:37/40 | 06:03 06:25-07:10/45 | 06:34 18:28-18:51/23 | 07:06 07:36-08:13/37 | 06:43 08:29-10:01/92 | 07:16 08:40-10:11/91 | |
| 22 | 20:35 19:39-19:58/19 | 20:06 06:25-07:10/45 | 19:18 06:55-07:30/35 | 18:26 17:02-17:54/52 | 16:44 10:12-12:34/142 | 16:29 10:16-12:48/152 | |
| 23 | 05:35 05:58-06:38/40 | 06:04 06:26-07:11/45 | 06:35 18:26-18:51/25 06:56-07:00/4 | 07:07 07:36-08:14/38 | 06:44 08:30-10:02/92 | 07:17 08:41-10:11/90 | |
| 24 | 20:35 19:39-19:59/20 | 20:05 06:27-07:11/44 | 19:16 07:01-07:30/29 | 18:24 17:02-17:52/50 | 16:43 10:12-12:35/143 | 16:29 10:17-12:48/151 | |
| 25 | 05:35 05:58-06:37/39 | 06:05 06:27-07:11/44 | 06:37 18:25-18:51/26 | 07:08 07:35-08:13/38 | 06:45 08:29-10:02/93 | 07:17 08:41-10:12/91 | |
| 26 | 20:34 19:38-20:02/22 | 20:04 18:55-19:06/11 | 19:14 07:00-07:31/31 | 18:23 17:02-17:50/48 | 16:42 10:12-12:36/144 | 16:29 10:17-12:49/152 | |
| 27 | 05:36 05:59-06:39/39 | 06:06 06:28-07:12/44 | 06:38 18:24-18:50/26 17:35-17:50/15 | 07:09 07:34-08:13/39 | 06:46 08:29-10:02/93 | 07:18 08:41-10:11/90 | |
| 28 | 20:34 19:38-20:02/22 | 20:02 18:52-19:09/17 | 19:12 06:59-07:34/35 | 18:21 17:02-17:48/46 | 16:41 10:11-12:36/145 | 16:29 10:17-12:48/151 | |
| 29 | 05:37 06:00-06:38/38 | 06:07 06:29-07:12/43 | 06:39 18:23-18:48/25 17:31-17:54/23 | 07:11 07:34-08:13/39 | 06:48 08:30-10:03/93 | 07:19 08:42-10:12/90 | |
| 30 | 20:33 19:38-20:01/23 | 20:01 18:50-19:11/21 | 19:11 06:59-07:36/37 | 18:20 17:02-17:46/44 | 16:40 10:11-12:37/146 | 16:29 10:18-12:49/151 | |
| 31 | 05:38 06:06-06:39/33 19:38-20:01/23 | 06:08 06:30-07:13/43 | 06:40 18:22-18:46/24 18:12-18:21/9 | 07:12 07:34-08:12/38 | 06:49 08:30-10:03/93 | 07:20 08:43-10:13/90 | |
| 32 | 20:33 06:01-06:02/1 | 19:59 18:48-19:12/24 | 19:09 07:00-07:38/38 17:28-17:56/28 | 18:18 17:03-17:45/42 | 16:39 10:11-12:37/146 | 16:30 10:19-12:50/151 | |
| 33 | 05:39 06:06-06:39/33 | 06:09 06:31-07:13/42 | 06:41 18:08-18:45/37 17:25-17:58/33 | 07:13 10:04-10:16/12 17:05-17:44/39 | 06:50 08:29-10:03/94 | 07:20 08:43-10:13/90 | |
| 34 | 20:32 19:36-20:01/25 | 19:58 18:46-19:13/27 | 19:07 07:01-07:39/38 | 18:17 07:34-08:13/39 | 16:38 10:11-12:38/147 | 16:30 10:18-12:50/152 | |
| 35 | 05:39 06:05-06:39/34 | 06:10 06:32-07:13/41 | 06:42 18:06-18:43/37 17:23-17:59/36 | 07:14 09:57-10:23/26 17:05-17:43/38 | 06:51 08:30-10:05/95 | 07:21 08:43-10:13/90 | |
| 36 | 20:31 19:36-20:02/26 | 19:56 18:45-19:14/29 | 19:05 07:02-07:39/37 | 18:15 07:35-08:12/37 | 16:37 10:11-12:39/148 | 16:30 10:19-12:50/151 | |
| 37 | 05:40 06:05-06:39/34 | 06:11 06:33-06:34/1 18:44-19:15/31 | 06:43 18:04-18:41/37 17:21-18:00/39 | 07:15 09:53-10:28/35 17:06-17:41/35 | 06:52 08:30-10:05/95 | 07:22 08:44-10:14/90 | |
| 38 | 20:30 19:36-20:02/26 | 19:55 06:38-07:13/35 | 19:04 07:03-07:40/37 | 18:13 07:36-08:11/35 | 16:37 10:11-12:39/148 | 16:31 10:20-12:51/151 | |
| 39 | 05:41 06:05-06:39/34 | 06:12 06:37-07:13/36 | 06:44 18:02-18:39/37 17:19-18:01/42 | 07:16 09:50-10:31/41 12:14-12:50/36 | 06:54 08:30-10:05/95 | 07:22 08:44-10:14/90 | |
| 40 | 20:30 19:36-20:03/27 | 19:53 18:43-19:15/32 | 19:02 07:04-07:40/36 | 18:12 07:37-08:11/34 17:08-17:39/31 | 16:36 10:10-12:39/149 | 16:31 10:20-12:51/151 | |
| 41 | 05:42 06:06-06:40/34 | 06:13 06:36-07:12/36 | 06:45 17:18-18:37/79 | 07:17 09:47-10:34/47 12:06-12:57/51 | 06:55 08:30-10:05/95 | 07:23 08:45-10:15/90 | |
| 42 | 20:29 19:36-20:03/27 | 19:52 18:42-19:16/34 | 19:00 07:05-07:40/35 | 18:10 07:38-08:10/32 17:09-17:36/27 | 16:35 10:10-12:39/149 | 16:31 10:21-12:52/151 | |
| 43 | 05:43 06:06-06:40/34 | 06:14 06:36-07:12/36 | 06:46 17:16-18:36/80 | 07:19 09:46-10:37/51 12:02-13:04/62 | 06:56 08:31-10:06/95 | 07:23 08:45-10:15/90 | |
| 44 | 20:28 19:36-20:04/28 | 19:50 18:41-19:16/35 | 18:58 07:06-07:40/34 | 18:09 07:40-08:09/29 17:13-17:34/21 | 16:34 10:11-12:40/149 | 16:32 10:21-12:52/151 | |
| 45 | 05:44 06:07-06:40/33 | 06:15 06:36-07:13/37 | 06:47 17:15-18:34/79 | 07:20 09:44-10:39/55 11:50-13:08/78 | 06:57 08:31-10:06/95 | 07:24 08:46-10:16/90 | |
| 46 | 20:27 19:36-20:03/27 | 19:49 18:41-19:16/35 | 18:57 07:07-07:40/33 | 18:08 07:41-08:08/27 17:16-17:30/14 | 16:34 10:11-12:41/150 | 16:32 10:22-12:52/150 | |
| 47 | 05:45 06:08-06:40/32 | 06:16 06:37-07:13/36 | 06:48 18:28-18:32/4 17:14-18:27/73 | 07:21 09:42-10:41/59 11:42-13:11/89 | 06:58 08:31-10:06/95 | 07:24 08:46-10:16/90 | |
| 48 | 20:26 19:35-20:01/26 | 19:47 18:40-19:16/36 | 18:55 07:08-07:39/31 | 18:06 07:42-08:06/24 | 16:33 10:11-12:41/150 | 16:33 10:22-12:53/151 | |
| 49 | 05:46 06:08-06:39/31 | 06:17 06:38-07:13/35 | 06:49 07:09-07:39/30 | 06:22 08:40-09:43/63 10:37-12:13/96 | 06:59 08:32-10:06/94 | 07:25 08:46-10:16/90 | |
| 50 | 20:26 19:35-20:01/26 | 19:46 18:40-19:16/36 | 18:53 17:13-18:27/74 | 17:05 06:43-07:05/22 | 16:33 10:11-12:41/150 | 16:34 10:22-12:53/151 | |
| 51 | 05:47 06:09-06:41/32 | 06:18 06:39-07:13/34 | 06:50 07:10-07:38/28 | 06:23 08:39-09:45/66 10:34-12:17/103 | 07:01 08:32-10:06/94 | 07:25 08:48-10:17/89 | |
| 52 | 20:25 19:36-20:00/24 | 19:44 18:39-19:16/37 | 18:51 17:12-18:26/74 | 17:03 06:45-07:03/18 | 16:32 10:11-12:41/150 | 16:34 10:23-12:55/152 | |
| 53 | 05:48 06:10-06:42/32 | 06:19 06:40-07:13/33 | 06:51 07:11-07:37/26 | 06:24 08:38-09:47/69 10:31-12:19/108 | 07:02 08:33-10:07/94 | 07:25 08:48-10:18/90 | |
| 54 | 20:24 19:36-19:59/23 | 19:43 18:39-19:15/36 | 18:50 17:11-18:26/75 | 17:02 06:46-07:01/15 | 16:32 10:12-12:42/150 | 16:35 10:24-12:55/151 | |
| 55 | 05:49 06:11-06:44/33 | 06:20 06:41-07:13/32 | 06:52 07:12-07:36/24 | 06:26 08:37-09:48/71 10:28-12:20/112 | 07:03 08:33-10:07/94 | 07:26 08:48-10:18/90 | |
| 56 | 20:23 19:36-19:58/22 | 19:41 18:39-19:15/36 | 18:48 17:09-18:25/76 | 17:00 06:47-06:57/10 | 16:31 10:12-12:43/151 | 16:36 10:24-12:55/151 | |
| 57 | 05:50 06:12-06:45/33 | 06:21 06:42-07:13/31 | 06:53 07:13-07:35/22 | 06:27 08:35-09:49/74 | 07:04 08:34-10:07/93 | 07:26 08:48-10:18/90 | |
| 58 | 20:22 19:36-19:57/21 | 19:39 18:39-19:14/35 | 18:46 17:08-18:23/75 | 16:59 10:25-12:22/117 | 16:31 10:12-12:43/151 | 16:36 10:24-12:55/151 | |
| 59 | 05:50 06:13-06:46/33 | 06:22 06:43-07:13/30 | 06:54 07:15-07:34/19 | 06:28 08:35-09:51/76 | 07:05 08:34-10:08/94 | 07:26 08:48-10:19/91 | |
| 60 | 20:21 19:37-19:57/20 | 19:38 18:39-19:14/35 | 18:45 17:07-18:21/74 | 16:58 10:24-12:24/120 | 16:30 10:12-12:43/151 | 16:37 10:24-12:56/152 | |
| 61 | 05:51 06:14-06:47/33 | 06:23 06:44-07:12/28 | | 06:29 08:34-09:52/78 | | 07:27 08:49-10:20/91 | |
| 62 | 20:20 19:37-19:56/19 | 19:36 18:39-19:13/34 | | 16:56 10:22-12:25/123 | | 16:38 10:26-12:57/151 | |
| 63 | Potential sun hours Sum of minutes with flicker | 461 1714 | 429 1812 | 375 2467 | 345 3829 | 296 7041 | 286 7504 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 16 - Coppa del Trota

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| | | | | | | | | | | | |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| | | | | | | | | | | | | |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------------|----------------|----------------|----------------|----------------|------------------------|----------------|------------------------|------------------------|----------------|----------------|----------------|----------------|
| 1 | 07:27 16:39 | 07:13 17:14 | 06:36 17:49 | 06:44 19:24 | 05:57 19:57 | 05:28 20:27 | 05:49-05:58/9 20:38 | 05:52 20:19 | 06:24 19:34 | 06:55 18:43 | 06:30 16:55 | 07:06 16:30 |
| 2 | 07:27 16:40 | 07:12 17:15 | 06:34 17:50 | 06:42 19:25 | 05:56 19:58 | 05:27 20:28 | 05:49-05:58/9 20:38 | 05:52 20:17 | 06:25 19:33 | 06:56 18:41 | 06:32 16:54 | 07:07 16:30 |
| 3 | 07:27 16:40 | 07:11 17:16 | 06:33 17:51 | 06:41 19:26 | 05:55 19:59 | 05:27 20:29 | 05:50-05:58/8 20:38 | 05:54 20:16 | 06:26 19:31 | 06:57 18:39 | 06:33 16:53 | 07:08 16:29 |
| 4 | 07:27 16:41 | 07:10 17:17 | 06:31 17:52 | 06:39 19:27 | 05:53 20:00 | 05:26 20:29 | 05:51-05:56/5 20:38 | 05:55 20:15 | 06:27 19:29 | 06:58 18:38 | 06:34 16:51 | 07:09 16:29 |
| 5 | 07:27 16:42 | 07:09 17:19 | 06:30 17:53 | 06:37 19:28 | 05:52 20:01 | 05:26 20:30 | 05:53-05:55/2 20:38 | 05:56 20:14 | 06:28 19:28 | 06:59 18:36 | 06:35 16:50 | 07:10 16:29 |
| 6 | 07:27 16:43 | 07:07 17:20 | 06:28 17:55 | 06:36 19:29 | 05:51 20:02 | 05:25 20:31 | 05:31 20:37 | 05:57 20:13 | 06:29 19:26 | 07:01 18:34 | 06:37 16:49 | 07:11 16:29 |
| 7 | 07:27 16:44 | 07:06 17:21 | 06:26 17:56 | 06:34 19:30 | 05:50 20:03 | 05:25 20:31 | 05:31 20:37 | 05:58 20:11 | 06:30 19:24 | 07:02 18:33 | 06:38 16:48 | 07:12 16:29 |
| 8 | 07:27 16:45 | 07:05 17:23 | 06:25 17:57 | 06:32 19:31 | 05:48 20:04 | 05:25 20:32 | 05:32 20:36 | 05:59-06:03/4 20:10 | 06:31 19:23 | 07:03 18:31 | 06:39 16:47 | 07:13 16:29 |
| 9 | 07:27 16:46 | 07:04 17:24 | 06:23 17:58 | 06:31 19:33 | 05:47 20:05 | 05:25 20:33 | 05:32 20:36 | 05:58-06:05/7 20:09 | 06:00 19:21 | 06:32 18:29 | 07:04 16:46 | 07:14 16:29 |
| 10 | 07:26 16:47 | 07:03 17:25 | 06:21 17:59 | 06:29 19:34 | 05:46 20:06 | 05:24 20:33 | 05:33 20:36 | 05:56-06:05/9 20:08 | 06:01 19:19 | 06:33 18:28 | 07:05 16:45 | 07:15 16:29 |
| 11 | 07:26 16:48 | 07:02 17:26 | 06:20 18:00 | 06:27 19:35 | 05:45 20:07 | 05:24 20:34 | 05:34 20:35 | 05:57-06:06/9 20:06 | 06:02 19:17 | 06:34 18:26 | 06:43 16:44 | 07:16 16:29 |
| 12 | 07:26 16:49 | 07:00 17:28 | 06:18 18:02 | 06:26 19:36 | 05:44 20:08 | 05:24 20:34 | 05:35 20:35 | 05:58-06:07/9 20:05 | 06:03 19:16 | 06:35 18:24 | 07:07 16:43 | 07:17 16:29 |
| 13 | 07:26 16:51 | 06:59 17:29 | 06:16 18:03 | 06:24 19:37 | 05:43 20:09 | 05:24 20:35 | 05:35 20:34 | 05:58-06:07/9 20:04 | 06:05 19:14 | 06:36 18:23 | 07:08 16:42 | 07:17 16:29 |
| 14 | 07:25 16:52 | 06:58 17:30 | 06:15 18:04 | 06:22 19:38 | 05:42 20:11 | 05:24 20:35 | 05:36 20:34 | 05:59-06:08/9 20:02 | 06:06 19:12 | 06:37 18:21 | 07:09 16:41 | 07:18 16:29 |
| 15 | 07:25 16:53 | 06:56 17:31 | 06:13 18:05 | 06:21 19:39 | 05:41 20:12 | 05:24 20:36 | 05:37 20:33 | 06:00-06:09/9 20:01 | 06:07 19:11 | 06:38 18:20 | 07:10 16:40 | 07:19 16:29 |
| 16 | 07:24 16:54 | 06:55 17:33 | 06:11 18:06 | 06:19 19:40 | 05:40 20:13 | 05:24 20:36 | 05:38 20:33 | 06:01-06:09/8 19:59 | 06:08 19:09 | 06:40 18:18 | 07:12 16:39 | 07:20 16:29 |
| 17 | 07:24 16:55 | 06:54 17:34 | 06:10 18:07 | 06:18 19:41 | 05:39 20:14 | 05:24 20:36 | 05:39 20:32 | 06:01-06:09/8 19:58 | 06:09 19:07 | 06:41 18:16 | 07:13 16:38 | 07:20 16:30 |
| 18 | 07:23 16:56 | 06:52 17:35 | 06:08 18:08 | 06:16 19:42 | 05:38 20:15 | 05:24 20:37 | 05:39 20:31 | 06:02-06:09/7 19:56 | 06:10 19:05 | 06:42 18:15 | 07:14 16:37 | 07:21 16:30 |
| 19 | 07:23 16:57 | 06:51 17:36 | 06:06 18:09 | 06:15 19:44 | 05:37 20:16 | 05:24 20:37 | 05:40 20:30 | 06:03-06:09/6 19:55 | 06:11 19:04 | 06:43 18:13 | 07:15 16:36 | 07:22 16:30 |
| 20 | 07:22 16:59 | 06:49 17:38 | 06:05 18:11 | 06:13 19:45 | 05:36 20:16 | 05:24 20:37 | 05:41 20:30 | 06:04-06:10/6 19:53 | 06:12 19:02 | 06:44 18:12 | 07:16 16:36 | 07:22 16:31 |
| 21 | 07:22 17:00 | 06:48 17:39 | 06:03 18:12 | 06:12 19:46 | 05:35 20:17 | 05:24 20:37 | 05:42 20:29 | 06:05-06:10/5 19:52 | 06:13 19:00 | 06:45 18:10 | 07:17 16:35 | 07:23 16:31 |
| 22 | 07:21 17:01 | 06:47 17:40 | 06:01 18:13 | 06:10 19:47 | 05:34 20:18 | 05:25 20:38 | 05:43 20:28 | 06:06-06:10/4 19:50 | 06:14 18:58 | 06:46 18:09 | 07:19 16:34 | 07:23 16:32 |
| 23 | 07:20 17:02 | 06:45 17:41 | 05:59 18:14 | 06:09 19:48 | 05:33 20:19 | 05:25 20:38 | 05:44 20:27 | 06:07-06:10/3 19:49 | 06:15 18:57 | 06:47 18:07 | 07:20 16:34 | 07:24 16:32 |
| 24 | 07:20 17:04 | 06:44 17:43 | 05:58 18:15 | 06:07 19:49 | 05:33 20:20 | 05:25 20:38 | 05:45 20:26 | 06:07-06:08/1 19:47 | 06:16 18:55 | 06:48 18:06 | 07:21 16:33 | 07:24 16:33 |
| 25 | 07:19 17:05 | 06:42 17:44 | 05:56 18:16 | 06:06 19:50 | 05:32 20:21 | 05:25 20:38 | 05:46 20:26 | 06:07-06:08/1 19:46 | 06:17 18:53 | 06:49 18:05 | 06:22 16:32 | 07:25 16:33 |
| 26 | 07:18 17:06 | 06:41 17:45 | 05:54 18:17 | 06:04 19:51 | 05:31 20:22 | 05:26 20:38 | 05:47 20:25 | 06:18 19:44 | 06:50 18:51 | 06:23 17:03 | 07:01 16:32 | 07:25 16:34 |
| 27 | 07:17 17:07 | 06:39 17:46 | 05:53 18:18 | 06:03 19:52 | 05:30 20:23 | 05:26 20:38 | 05:47 20:24 | 06:19 19:43 | 06:51 18:50 | 06:24 17:02 | 07:02 16:31 | 07:26 16:35 |
| 28 | 07:16 17:09 | 06:37 17:47 | 05:51 18:19 | 06:01 19:53 | 05:30 20:24 | 05:26 20:38 | 05:48 20:23 | 06:20 19:41 | 06:52 18:48 | 06:26 17:00 | 07:03 16:31 | 07:26 16:35 |
| 29 | 07:16 17:10 | 06:49 19:21 | 06:00 19:55 | 06:00 20:25 | 05:29 20:25 | 05:27 20:38 | 05:49 20:22 | 06:21 19:39 | 06:53 18:46 | 06:27 16:59 | 07:04 16:31 | 07:26 16:36 |
| 30 | 07:15 17:11 | 06:47 19:22 | 05:59 19:56 | 05:29 20:25 | 05:50-05:59/9 20:38 | 05:27 20:38 | 05:50 20:21 | 06:22 19:38 | 06:54 18:45 | 06:28 16:58 | 07:05 16:30 | 07:26 16:37 |
| 31 | 07:14 17:12 | 06:46 19:23 | 05:58 19:56 | 05:28 20:26 | 05:50-05:59/9 20:38 | 05:27 20:38 | 05:51 20:20 | 06:23 19:36 | 06:29 18:56 | 06:29 16:56 | 07:27 16:38 | 07:27 16:38 |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 | 461 | 429 | 375 | 344 | 296 | 285 |
| Sum of minutes with flicker | 0 | 0 | 0 | 0 | 78 | 33 | 113 | 0 | 0 | 0 | 0 | 0 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 17 - Coppa del Trota

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

Table with 12 columns (Jan-Dec) and 2 rows of sunshine probability values.

Operational time

Table with 13 columns (N, NNE, ENE, E, ESE, SSE, S, SSW, WSW, W, WNW, NNW, Sum) and 2 rows of operational time values.

Main shadow calculation table with columns for months (January-December) and rows for days (1-31), showing sun rise/set times and minutes with flicker.

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

Matrix defining table layout with columns for Day in month, Sun rise/set, and First/Last time with flicker/Minutes with flicker.



SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 18 - Coppa del Trota
Assumptions for shadow calculations
Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

| | | | | | | | | | | | | |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1 | 07:27 16:39 | 07:13 17:14 | 06:36 17:49 | 06:44 19:24 | 05:57 19:57 | 05:27 20:27 | 05:28 20:38 | 05:52 20:18 | 06:15-06:33/18 | 06:24 19:34 | 06:55 18:43 | 06:30 16:55 |
| 2 | 07:27 16:40 | 07:12 17:15 | 06:34 17:50 | 06:42 19:25 | 05:56 19:58 | 05:27 20:28 | 05:28 20:38 | 05:53 20:17 | 06:16-06:33/17 | 06:25 19:33 | 06:56 18:41 | 06:32 16:54 |
| 3 | 07:27 16:40 | 07:11 17:16 | 06:33 17:51 | 06:41 19:26 | 05:55 19:59 | 06:14-06:18/4 | 05:27 20:28 | 05:54 20:16 | 06:17-06:33/16 | 06:26 19:31 | 06:57 18:39 | 06:33 16:53 |
| 4 | 07:27 16:41 | 07:10 17:17 | 06:31 17:52 | 06:39 19:27 | 05:53 20:00 | 06:13-06:20/7 | 05:26 20:29 | 05:55 20:15 | 06:18-06:33/15 | 06:27 19:29 | 06:58 18:38 | 06:34 16:51 |
| 5 | 07:27 16:42 | 07:09 17:19 | 06:29 17:53 | 06:37 19:28 | 05:52 20:01 | 06:12-06:21/9 | 05:26 20:30 | 05:56 20:14 | 06:19-06:32/13 | 06:28 19:28 | 06:59 18:36 | 06:35 16:50 |
| 6 | 07:27 16:43 | 07:07 17:20 | 06:28 17:55 | 06:36 19:29 | 05:51 20:02 | 06:11-06:22/11 | 05:25 20:31 | 05:57 20:13 | 06:20-06:32/12 | 06:29 19:26 | 07:01 18:34 | 06:37 16:49 |
| 7 | 07:27 16:44 | 07:06 17:21 | 06:26 17:56 | 06:34 19:30 | 05:49 20:03 | 06:09-06:21/12 | 05:25 20:31 | 05:58 20:11 | 06:21-06:31/10 | 06:30 19:24 | 07:02 18:33 | 06:38 16:48 |
| 8 | 07:27 16:45 | 07:05 17:23 | 06:25 17:57 | 06:32 19:31 | 05:48 20:04 | 06:08-06:22/14 | 05:25 20:32 | 05:59 20:10 | 06:22-06:30/8 | 06:31 19:23 | 07:03 18:31 | 06:39 16:47 |
| 9 | 07:27 16:46 | 07:04 17:24 | 06:23 17:58 | 06:31 19:33 | 05:47 20:05 | 06:07-06:22/15 | 05:25 20:32 | 06:00 20:09 | 06:23-06:29/6 | 06:32 19:21 | 07:04 18:29 | 06:40 16:46 |
| 10 | 07:26 16:47 | 07:03 17:25 | 06:21 17:59 | 06:29 19:34 | 05:46 20:06 | 06:06-06:22/16 | 05:24 20:33 | 06:01 20:18 | 06:24-06:27/3 | 06:33 19:19 | 07:05 18:28 | 06:41 16:45 |
| 11 | 07:26 16:48 | 07:01 17:26 | 06:20 18:00 | 06:27 19:35 | 05:45 20:07 | 06:05-06:22/17 | 05:24 20:34 | 06:02 20:06 | | 06:34 19:17 | 07:06 18:26 | 06:43 16:44 |
| 12 | 07:26 16:49 | 07:00 17:28 | 06:18 18:01 | 06:26 19:36 | 05:44 20:08 | 06:04-06:22/18 | 05:24 20:34 | 06:03 20:05 | | 06:35 19:16 | 07:07 18:24 | 06:44 16:43 |
| 13 | 07:26 16:50 | 06:59 17:29 | 06:16 18:03 | 06:24 19:37 | 05:43 20:09 | 06:03-06:22/19 | 05:24 20:35 | 06:04 20:03 | | 06:36 19:14 | 07:08 18:23 | 06:45 16:42 |
| 14 | 07:25 16:52 | 06:58 17:30 | 06:15 18:04 | 06:22 19:38 | 05:42 20:10 | 06:02-06:21/19 | 05:24 20:35 | 06:06 20:02 | | 06:37 19:12 | 07:09 18:21 | 06:46 16:41 |
| 15 | 07:25 16:53 | 06:56 17:31 | 06:13 18:05 | 06:21 19:39 | 05:41 20:11 | 06:01-06:20/19 | 05:24 20:35 | 06:07 20:01 | 06:07-06:10/3 | 06:38 19:11 | 07:10 18:20 | 06:48 16:40 |
| 16 | 07:24 16:54 | 06:55 17:33 | 06:11 18:06 | 06:19 19:40 | 05:40 20:13 | 06:00-06:19/19 | 05:24 20:36 | 06:08 19:59 | 06:05-06:12/7 | 06:39 19:09 | 07:12 18:18 | 06:49 16:39 |
| 17 | 07:24 16:55 | 06:54 17:34 | 06:10 18:07 | 06:18 19:41 | 05:39 20:14 | 05:59-06:18/19 | 05:24 20:36 | 06:09 19:58 | 06:03-06:13/10 | 06:41 19:07 | 07:13 18:16 | 06:50 16:38 |
| 18 | 07:23 16:56 | 06:52 17:35 | 06:08 18:08 | 06:16 19:42 | 05:38 20:14 | 05:58-06:17/19 | 05:24 20:37 | 06:10 19:56 | 06:03-06:14/11 | 06:42 19:05 | 07:14 18:15 | 06:51 16:37 |
| 19 | 07:23 16:57 | 06:51 17:36 | 06:06 18:09 | 06:15 19:44 | 05:37 20:15 | 05:58-06:15/17 | 05:24 20:37 | 06:11 19:55 | 06:03-06:17/14 | 06:43 19:04 | 07:15 18:13 | 06:52 16:36 |
| 20 | 07:22 16:59 | 06:49 17:38 | 06:04 18:11 | 06:13 19:45 | 05:36 20:16 | 05:57-06:11/14 | 05:24 20:37 | 06:12 19:53 | 06:04-06:18/14 | 06:44 19:02 | 07:16 18:12 | 06:54 16:36 |
| 21 | 07:22 17:00 | 06:48 17:39 | 06:03 18:12 | 06:12 19:46 | 05:35 20:17 | 05:56-06:10/14 | 05:24 20:37 | 06:13 19:52 | 06:05-06:20/15 | 06:45 19:00 | 07:17 18:10 | 06:55 16:35 |
| 22 | 07:21 17:01 | 06:46 17:40 | 06:01 18:13 | 06:10 19:47 | 05:34 20:18 | 05:55-06:10/15 | 05:25 20:38 | 06:14 19:50 | 06:06-06:21/15 | 06:46 18:58 | 07:18 18:09 | 06:56 16:34 |
| 23 | 07:20 17:02 | 06:45 17:41 | 05:59 18:14 | 06:09 19:48 | 05:33 20:19 | 05:54-06:09/15 | 05:25 20:38 | 06:15 19:49 | 06:07-06:21/14 | 06:47 18:57 | 07:20 18:07 | 06:57 16:34 |
| 24 | 07:20 17:03 | 06:44 17:43 | 05:58 18:15 | 06:07 19:49 | 05:33 20:20 | 05:54-06:08/14 | 05:25 20:38 | 06:16 19:47 | 06:07-06:21/14 | 06:48 18:55 | 07:21 18:06 | 06:58 16:33 |
| 25 | 07:19 17:05 | 06:42 17:44 | 05:56 18:16 | 06:06 19:50 | 05:32 20:21 | 05:53-06:06/13 | 05:25 20:38 | 06:17 19:46 | 06:08-06:26/18 | 06:49 18:53 | 06:22 17:05 | 06:59 16:32 |
| 26 | 07:18 17:06 | 06:40 17:45 | 05:54 18:17 | 06:04 19:51 | 05:31 20:22 | 05:54-06:04/10 | 05:26 20:38 | 06:18 19:44 | 06:09-06:28/19 | 06:50 18:51 | 06:23 17:03 | 07:01 16:32 |
| 27 | 07:17 17:07 | 06:39 17:46 | 05:53 18:18 | 06:03 19:52 | 05:30 20:23 | 05:55-06:04/9 | 05:26 20:38 | 06:19 19:43 | 06:10-06:29/19 | 06:51 18:50 | 06:24 17:02 | 07:02 16:31 |
| 28 | 07:16 17:09 | 06:37 17:47 | 05:51 18:19 | 06:01 19:53 | 05:30 20:24 | 05:56-06:02/6 | 05:26 20:38 | 06:20 19:41 | 06:11-06:30/19 | 06:52 18:48 | 06:26 17:00 | 07:03 16:31 |
| 29 | 07:16 17:10 | 06:49 19:20 | 06:00 19:54 | 06:00 20:25 | 05:29 20:25 | | 05:27 20:38 | 06:21 19:39 | 06:12-06:31/19 | 06:53 18:46 | 06:27 16:59 | 07:04 16:31 |
| 30 | 07:15 17:11 | 06:47 19:22 | 05:59 19:56 | 05:29 20:25 | 05:29 20:25 | | 05:27 20:38 | 06:22 19:38 | 06:13-06:32/19 | 06:54 18:44 | 06:28 16:58 | 07:05 16:30 |
| 31 | 07:14 17:12 | 06:46 19:23 | 06:06 20:26 | 05:28 20:26 | 05:28 20:26 | | 05:51 20:20 | 06:23 19:36 | 06:14-06:32/18 | 06:29 19:36 | 06:29 16:56 | 07:27 16:38 |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 | 461 | 429 | 375 | 344 | 296 | 285 |
| Sum of minutes with flicker | 0 | 0 | 0 | 0 | 364 | 0 | 248 | 118 | 0 | 0 | 0 | 0 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 19 - Coppa del Trota

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|--|--|--|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 1 | 07:27 16:39 07:27 16:40 | 07:13 17:14 07:12 17:15 | 06:36 17:49 06:34 17:50 | 06:44 19:24 06:42 19:25 | 05:57 19:57 05:56 19:58 | 05:27 20:27 05:27 20:28 | 05:28 20:38 05:51-05:54/3 20:38 | 05:52 20:18 05:53 20:17 | 06:24 19:34 06:25 19:33 | 06:55 18:43 06:56 18:41 | 06:30 16:55 06:32 16:54 | 07:06 16:30 07:07 16:30 |
| 2 | 07:27 16:40 07:27 16:40 | 07:11 17:16 07:11 17:16 | 06:33 17:51 06:33 17:51 | 06:41 19:26 06:41 19:26 | 05:55 19:59 05:55 19:59 | 05:27 20:28 05:27 20:28 | 05:29 20:38 05:52-05:54/2 20:38 | 05:54 20:16 05:54 20:16 | 06:26 19:31 06:26 19:31 | 06:57 18:39 06:57 18:39 | 06:33 16:53 06:33 16:53 | 07:08 16:29 07:08 16:29 |
| 3 | 07:27 16:41 07:27 16:41 | 07:10 17:17 07:09 17:19 | 06:31 17:52 06:29 17:53 | 06:39 19:27 06:37 19:28 | 05:53 20:00 05:52 20:01 | 05:26 20:29 05:26 20:30 | 05:29 20:38 05:52-05:54/2 20:38 | 05:55 20:15 05:56 20:14 | 06:27 19:29 06:28 19:28 | 06:58 18:58 06:59 18:36 | 06:34 16:51 06:35 16:50 | 07:09 16:29 07:10 16:29 |
| 4 | 07:27 16:42 07:27 16:43 | 07:07 17:19 07:07 17:20 | 06:28 17:53 06:28 17:55 | 06:36 19:28 06:36 19:29 | 05:51 20:01 05:51 20:02 | 05:25 20:30 05:25 20:31 | 05:31 20:37 05:53-05:54/1 20:37 | 05:57 20:14 05:57 20:13 | 06:29 19:28 06:29 19:26 | 07:00 18:36 07:00 18:34 | 06:36 16:50 06:36 16:49 | 07:11 16:29 07:11 16:29 |
| 5 | 07:27 16:44 07:27 16:45 | 07:06 17:21 07:05 17:23 | 06:26 17:56 06:25 17:57 | 06:34 19:30 06:32 19:31 | 05:49 20:03 05:48 20:04 | 05:25 20:31 05:47-05:48/1 20:32 | 05:31 20:37 05:47-05:48/1 20:36 | 05:58 20:11 05:59 20:10 | 06:30 19:24 06:31 19:23 | 07:02 18:33 07:03 18:31 | 06:38 16:48 06:39 16:47 | 07:12 16:29 07:13 16:29 |
| 6 | 07:27 16:46 07:27 16:47 | 07:04 17:24 07:04 17:25 | 06:23 17:58 06:23 17:59 | 06:31 19:33 06:31 19:34 | 05:47 20:05 05:46 20:06 | 05:25 20:32 05:47-05:49/2 20:33 | 05:32 20:36 05:47-05:49/2 20:36 | 06:00 20:09 06:01 20:08 | 06:32 19:21 06:33 19:19 | 07:04 18:29 07:05 18:28 | 06:40 16:46 06:41 16:45 | 07:14 16:29 07:15 16:29 |
| 7 | 07:26 16:47 07:26 16:48 | 07:03 17:25 07:01 17:26 | 06:21 17:59 06:20 18:00 | 06:29 19:34 06:27 19:35 | 05:46 20:06 05:45 20:07 | 05:24 20:33 05:47-05:50/3 20:34 | 05:33 20:36 05:47-05:50/3 20:35 | 06:01 20:08 06:02 20:06 | 06:33 19:19 06:34 19:17 | 07:05 18:28 07:06 18:26 | 06:41 16:45 06:43 16:44 | 07:15 16:29 07:16 16:29 |
| 8 | 07:26 16:49 07:26 16:50 | 07:00 17:28 07:00 17:29 | 06:18 18:01 06:18 18:03 | 06:26 19:36 06:26 19:37 | 05:44 20:08 05:43 20:09 | 05:24 20:34 05:47-05:51/4 20:35 | 05:35 20:35 05:47-05:51/4 20:34 | 06:03 20:05 06:04 20:03 | 06:35 19:16 06:36 19:14 | 07:07 18:24 07:08 18:23 | 06:44 16:43 06:45 16:42 | 07:17 16:29 07:17 16:29 |
| 9 | 07:26 16:51 07:26 16:52 | 07:03 17:30 07:03 17:31 | 06:21 18:04 06:21 18:05 | 06:29 19:33 06:29 19:34 | 05:46 20:05 05:45 20:06 | 05:24 20:35 05:47-05:52/5 20:36 | 05:33 20:34 05:47-05:52/5 20:35 | 06:05 20:02 06:05 20:02 | 06:37 19:12 06:37 19:12 | 07:09 18:21 07:09 18:21 | 06:46 16:41 06:46 16:41 | 07:18 16:29 07:19 16:29 |
| 10 | 07:25 16:53 07:25 16:54 | 06:58 17:31 06:56 17:31 | 06:15 18:03 06:15 18:05 | 06:22 19:38 06:21 19:39 | 05:42 20:11 05:40 20:11 | 05:24 20:35 05:47-05:52/5 20:36 | 05:36 20:34 05:47-05:52/5 20:35 | 06:05 20:01 06:06 20:01 | 06:37 19:11 06:38 19:11 | 07:09 18:20 07:10 18:20 | 06:47 16:40 06:48 16:40 | 07:19 16:29 07:20 16:29 |
| 11 | 07:24 16:54 07:24 16:55 | 06:54 17:33 06:54 17:34 | 06:10 18:06 06:10 18:07 | 06:18 19:40 06:18 19:41 | 05:39 20:12 05:39 20:13 | 05:24 20:36 05:47-05:52/5 20:36 | 05:38 20:32 05:47-05:52/5 20:35 | 06:09 19:59 06:09 19:58 | 06:40 19:09 06:40 19:07 | 07:13 18:18 07:13 18:16 | 06:50 16:38 06:50 16:38 | 07:20 16:30 07:20 16:30 |
| 12 | 07:23 16:56 07:23 16:57 | 06:52 17:35 06:52 17:36 | 06:08 18:08 06:08 18:09 | 06:16 19:42 06:15 19:44 | 05:38 20:14 05:37 20:15 | 05:24 20:37 05:47-05:53/6 20:37 | 05:39 20:31 05:47-05:53/6 20:30 | 06:10 19:56 06:11 19:55 | 06:42 19:05 06:43 19:04 | 07:14 18:15 07:15 18:13 | 06:51 16:37 06:52 16:36 | 07:21 16:30 07:22 16:30 |
| 13 | 07:23 16:57 07:23 16:58 | 06:51 17:36 06:49 17:38 | 06:06 18:09 06:04 18:10 | 06:15 19:44 06:13 19:45 | 05:37 20:15 05:36 20:16 | 05:24 20:37 05:47-05:53/6 20:37 | 05:40 20:30 05:47-05:53/6 20:30 | 06:11 19:55 06:12 19:53 | 06:43 19:04 06:44 19:02 | 07:15 18:13 07:16 18:12 | 06:52 16:36 06:54 16:36 | 07:22 16:30 07:22 16:31 |
| 14 | 07:22 16:59 07:22 17:00 | 06:49 17:38 06:48 17:39 | 06:04 18:10 06:03 18:12 | 06:13 19:45 06:12 19:46 | 05:36 20:16 05:35 20:17 | 05:24 20:37 05:47-05:53/6 20:37 | 05:41 20:30 05:47-05:53/6 20:29 | 06:12 19:52 06:13 19:52 | 06:44 19:00 06:45 19:00 | 07:16 18:10 07:17 18:10 | 06:54 16:35 06:55 16:35 | 07:22 16:31 07:23 16:31 |
| 15 | 07:21 17:01 07:21 17:02 | 06:46 17:40 06:45 17:41 | 06:01 18:13 05:59 18:14 | 06:10 19:47 06:09 19:48 | 05:34 20:18 05:33 20:19 | 05:25 20:38 05:48-05:54/6 20:38 | 05:43 20:28 05:44 20:27 | 06:14 19:50 06:15 19:49 | 06:46 18:58 06:47 18:57 | 07:18 18:09 07:20 18:07 | 06:56 16:34 06:57 16:34 | 07:23 16:32 07:24 16:32 |
| 16 | 07:20 17:02 07:20 17:03 | 06:45 17:41 06:44 17:43 | 05:59 18:14 05:58 18:15 | 06:09 19:48 06:07 19:49 | 05:33 20:19 05:32 20:20 | 05:25 20:38 05:48-05:54/6 20:38 | 05:44 20:27 05:45 20:26 | 06:15 19:49 06:16 19:47 | 06:47 18:57 06:48 18:55 | 07:20 18:07 07:21 18:06 | 06:57 16:34 06:58 16:33 | 07:24 16:32 07:24 16:33 |
| 17 | 07:19 17:05 07:19 17:06 | 06:42 17:44 06:42 17:45 | 05:56 18:16 05:56 18:17 | 06:06 19:50 06:06 19:51 | 05:32 20:21 05:31 20:22 | 05:25 20:38 05:48-05:53/5 20:38 | 05:46 20:26 05:45 20:25 | 06:17 19:46 06:18 19:44 | 06:49 18:53 06:50 18:51 | 06:22 17:04 06:23 17:03 | 06:59 16:32 06:59 16:32 | 07:25 16:33 07:25 16:34 |
| 18 | 07:18 17:06 07:18 17:07 | 06:40 17:45 06:39 17:46 | 05:54 18:17 05:52 18:18 | 06:04 19:51 06:03 19:52 | 05:31 20:22 05:30 20:23 | 05:26 20:38 05:49-05:54/5 20:38 | 05:46 20:25 05:47 20:24 | 06:18 19:44 06:19 19:42 | 06:50 18:51 06:51 18:50 | 06:23 17:03 06:24 17:02 | 07:01 16:32 07:02 16:31 | 07:25 16:34 07:25 16:35 |
| 19 | 07:17 17:07 07:17 17:08 | 06:39 17:46 06:39 17:47 | 05:52 18:18 05:51 18:19 | 06:03 19:52 06:01 19:53 | 05:30 20:23 05:30 20:24 | 05:26 20:38 05:49-05:54/5 20:38 | 05:47 20:24 05:48 20:23 | 06:19 19:42 06:20 19:41 | 06:51 18:50 06:52 18:48 | 07:02 17:02 07:03 17:00 | 07:02 16:31 07:03 16:31 | 07:25 16:35 07:26 16:35 |
| 20 | 07:16 17:08 07:16 17:09 | 06:37 17:47 06:37 17:48 | 05:51 18:19 05:50 18:20 | 06:01 19:53 06:00 19:54 | 05:30 20:24 05:29 20:25 | 05:26 20:38 05:50-05:54/4 20:38 | 05:48 20:23 05:49 20:22 | 06:20 19:41 06:21 19:39 | 06:52 18:48 06:53 18:46 | 06:26 17:00 06:27 16:59 | 07:03 16:31 07:04 16:31 | 07:26 16:35 07:26 16:36 |
| 21 | 07:15 17:11 07:15 17:12 | 06:47 19:22 06:47 19:23 | 05:59 19:54 05:59 19:55 | 05:29 20:25 05:29 20:26 | 05:29 20:25 05:50-05:54/4 20:38 | 05:27 20:38 05:50-05:54/4 20:38 | 05:49 20:22 05:50 20:21 | 06:22 19:38 06:23 19:36 | 06:54 18:44 06:54 18:44 | 06:28 16:58 06:29 16:56 | 07:05 16:30 07:05 16:30 | 07:26 16:37 07:26 16:37 |
| 22 | 07:14 17:12 | 06:46 19:23 | 05:58 19:54 | 05:28 20:26 | 05:28 20:26 | 05:50-05:54/4 20:38 | 05:51 20:20 | 06:23 19:36 | 06:29 16:56 | 07:06 16:36 | 07:26 16:38 | |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 | 461 | 429 | 375 | 344 | 296 | 285 |
| Sum of minutes with flicker | 0 | 0 | 0 | 0 | 0 | 108 | 12 | 0 | 0 | 0 | 0 | 0 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 20 - Coppa del Trota

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1 | 07:27 16:39 | 07:13 17:14 | 06:36 17:49 | 06:44 19:24 | 05:57 19:57 | 05:27 20:27 | 05:28 20:38 | 05:52 20:18 | 06:24 19:34 | 06:55 18:43 | 06:30 16:55 | 07:06 16:30 |
| 2 | 07:27 16:39 | 07:12 17:15 | 06:34 17:50 | 06:42 19:25 | 05:56 19:58 | 05:27 20:28 | 05:28 20:38 | 05:53 20:17 | 06:25 19:33 | 06:56 18:41 | 06:32 16:54 | 07:07 16:29 |
| 3 | 07:27 16:40 | 07:11 17:16 | 06:33 17:51 | 06:41 19:26 | 05:54 19:59 | 05:27 20:28 | 05:29 20:38 | 05:54 20:16 | 06:26 19:31 | 06:57 18:39 | 06:33 16:52 | 07:08 16:29 |
| 4 | 07:27 16:41 | 07:10 17:17 | 06:31 17:52 | 06:39 19:27 | 05:53 20:00 | 05:26 20:29 | 05:29 20:38 | 05:55 20:15 | 06:27 19:29 | 06:58 18:38 | 06:34 16:51 | 07:09 16:29 |
| 5 | 07:27 16:42 | 07:09 17:19 | 06:29 17:53 | 06:37 19:28 | 05:52 20:01 | 05:26 20:30 | 05:30 20:37 | 05:56 20:14 | 06:28 19:28 | 06:59 18:36 | 06:35 16:50 | 07:10 16:29 |
| 6 | 07:27 16:43 | 07:07 17:20 | 06:28 17:54 | 06:36 19:29 | 05:51 20:02 | 05:25 20:31 | 05:30 20:37 | 05:57 20:13 | 06:29 19:26 | 07:00 18:34 | 06:36 16:49 | 07:11 16:29 |
| 7 | 07:27 16:44 | 07:06 17:21 | 06:26 17:56 | 06:34 19:30 | 05:49 20:03 | 05:25 20:31 | 05:31 20:37 | 05:58 20:11 | 06:30 19:24 | 07:02 18:33 | 06:38 16:48 | 07:12 16:29 |
| 8 | 07:27 16:45 | 07:05 17:23 | 06:25 17:57 | 06:32 19:31 | 05:48 20:04 | 05:25 20:32 | 05:32 20:36 | 05:59 20:10 | 06:31 19:23 | 07:03 18:31 | 06:39 16:47 | 07:13 16:29 |
| 9 | 07:27 16:46 | 07:04 17:24 | 06:23 17:58 | 06:31 19:33 | 05:47 20:05 | 05:25 20:32 | 05:32 20:36 | 06:00 20:09 | 06:32 19:21 | 07:04 18:29 | 06:40 16:46 | 07:14 16:28 |
| 10 | 07:26 16:47 | 07:03 17:25 | 06:21 17:59 | 06:29 19:34 | 05:46 20:06 | 05:24 20:33 | 05:33 20:36 | 06:01 20:08 | 06:33 19:19 | 07:05 18:28 | 06:41 16:45 | 07:15 16:28 |
| 11 | 07:26 16:48 | 07:01 17:26 | 06:20 18:00 | 06:27 19:35 | 05:45 20:07 | 05:24 20:34 | 05:34 20:35 | 06:02 20:06 | 06:34 19:17 | 07:06 18:26 | 06:43 16:43 | 07:16 16:29 |
| 12 | 07:26 16:49 | 07:00 17:28 | 06:18 18:01 | 06:26 19:36 | 05:44 20:08 | 05:24 20:34 | 05:35 20:35 | 06:03 20:05 | 06:35 19:16 | 07:07 18:24 | 06:44 16:42 | 07:17 16:29 |
| 13 | 07:26 16:50 | 06:59 17:29 | 06:16 18:03 | 06:24 19:37 | 05:43 20:09 | 05:24 20:35 | 05:35 20:34 | 06:04 20:03 | 06:36 19:14 | 07:08 18:23 | 06:45 16:42 | 07:17 16:29 |
| 14 | 07:25 16:52 | 06:58 17:30 | 06:15 18:04 | 06:22 19:38 | 05:42 20:10 | 05:24 20:35 | 05:36 20:34 | 06:05 20:02 | 06:37 19:12 | 07:09 18:21 | 06:46 16:41 | 07:18 16:29 |
| 15 | 07:25 16:53 | 06:56 17:31 | 06:13 18:05 | 06:21 19:39 | 05:40 20:11 | 05:24 20:35 | 05:37 20:33 | 06:07 20:01 | 06:38 19:10 | 07:10 18:20 | 06:48 16:40 | 07:19 16:29 |
| 16 | 07:24 16:54 | 06:55 17:33 | 06:11 18:06 | 06:19 19:40 | 05:39 20:12 | 05:24 20:36 | 05:38 20:32 | 06:08 19:59 | 06:39 19:09 | 07:12 18:18 | 06:49 16:39 | 07:20 16:29 |
| 17 | 07:24 16:55 | 06:54 17:34 | 06:10 18:07 | 06:18 19:41 | 05:38 20:13 | 05:24 20:36 | 05:38 20:32 | 06:09 19:58 | 06:40 19:07 | 07:13 18:16 | 06:50 16:38 | 07:20 16:30 |
| 18 | 07:23 16:56 | 06:52 17:35 | 06:08 18:08 | 06:16 19:42 | 05:38 20:14 | 05:24 20:37 | 05:39 20:31 | 06:10 19:56 | 06:41 19:05 | 07:14 18:15 | 06:51 16:37 | 07:21 16:30 |
| 19 | 07:23 16:57 | 06:51 17:36 | 06:06 18:09 | 06:15 19:43 | 05:37 20:15 | 05:24 20:37 | 05:40 20:30 | 06:11 19:55 | 06:43 19:04 | 07:15 18:13 | 06:52 16:36 | 07:22 16:30 |
| 20 | 07:22 16:59 | 06:49 17:38 | 06:04 18:10 | 06:13 19:45 | 05:36 20:16 | 05:24 20:37 | 05:41 20:30 | 06:12 19:53 | 06:44 19:02 | 07:16 18:12 | 06:54 16:36 | 07:22 16:31 |
| 21 | 07:22 17:00 | 06:48 17:39 | 06:03 18:12 | 06:11 19:46 | 05:35 20:17 | 05:24 20:37 | 05:42 20:29 | 06:13 19:52 | 06:45 19:00 | 07:17 18:10 | 06:55 16:35 | 07:23 16:31 |
| 22 | 07:21 17:01 | 06:46 17:40 | 06:01 18:13 | 06:10 19:47 | 05:34 20:18 | 05:25 20:38 | 05:43 20:28 | 06:14 19:50 | 06:46 18:58 | 07:18 18:09 | 06:56 16:34 | 07:23 16:32 |
| 23 | 07:20 17:02 | 06:45 17:41 | 05:59 18:14 | 06:08 19:48 | 05:33 20:19 | 05:25 20:38 | 05:44 20:27 | 06:15 19:49 | 06:47 18:57 | 07:20 18:07 | 06:57 16:34 | 07:24 16:32 |
| 24 | 07:20 17:03 | 06:43 17:43 | 05:58 18:15 | 06:07 19:49 | 05:32 20:20 | 05:25 20:38 | 05:45 20:26 | 06:16 19:47 | 06:48 18:55 | 07:21 18:06 | 06:58 16:33 | 07:24 16:33 |
| 25 | 07:19 17:06 | 06:42 17:45 | 05:56 18:17 | 06:06 19:50 | 05:32 20:21 | 05:25 20:38 | 05:46 20:26 | 06:17 19:46 | 06:49 18:53 | 07:22 17:04 | 06:59 16:32 | 07:25 16:33 |
| 26 | 07:18 17:07 | 06:40 17:46 | 05:54 18:18 | 06:04 19:51 | 05:31 20:22 | 05:26 20:38 | 05:46 20:25 | 06:18 19:44 | 06:50 18:51 | 07:23 17:03 | 07:01 16:32 | 07:25 16:34 |
| 27 | 07:17 17:07 | 06:39 17:46 | 05:52 18:18 | 06:03 19:52 | 05:30 20:23 | 05:26 20:38 | 05:47 20:24 | 06:19 19:42 | 06:51 18:50 | 07:24 17:02 | 07:02 16:31 | 07:25 16:35 |
| 28 | 07:16 17:08 | 06:37 17:47 | 05:51 18:19 | 06:01 19:53 | 05:30 20:24 | 05:26 20:38 | 05:48 20:23 | 06:20 19:41 | 06:52 18:48 | 07:25 17:00 | 07:03 16:31 | 07:26 16:35 |
| 29 | 07:15 17:10 | | 06:49 19:20 | 06:00 19:54 | 05:29 20:25 | 05:27 20:38 | 05:49 20:22 | 06:21 19:39 | 06:53 18:46 | 07:27 16:59 | 07:04 16:31 | 07:26 16:36 |
| 30 | 07:15 17:11 | | 06:47 19:22 | 05:58 19:56 | 05:29 20:25 | 05:27 20:38 | 05:50 20:21 | 06:22 19:38 | 06:54 18:44 | 07:28 16:58 | 07:05 16:30 | 07:26 16:37 |
| 31 | 07:14 17:12 | | 06:46 19:23 | | 05:28 20:26 | | 05:51 20:20 | 06:23 19:36 | | 06:29 16:56 | | 07:26 16:38 |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 | 461 | 429 | 375 | 344 | 296 | 285 |
| Sum of minutes with flicker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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-Last time (hh:mm) with flicker/Minutes with flicker
Sun set (hh:mm) First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 21 - Parco eolico da 42MW

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1 | 07:27 16:39 | 07:13 17:14 | 06:36 17:49 | 06:44 19:24 | 05:57 19:57 | 05:27 20:27 | 05:28 20:38 | 05:52 20:18 | 06:24 19:34 | 06:55 18:43 | 06:30 16:55 | 07:06 16:30 |
| 2 | 07:27 16:39 | 07:12 17:15 | 06:34 17:50 | 06:42 19:25 | 05:56 19:58 | 05:27 20:28 | 05:28 20:38 | 05:53 20:17 | 06:25 19:33 | 06:56 18:41 | 06:32 16:54 | 07:07 16:29 |
| 3 | 07:27 16:40 | 07:11 17:16 | 06:33 17:51 | 06:41 19:26 | 05:54 19:59 | 05:26 20:28 | 05:29 20:38 | 05:54 20:16 | 06:26 19:31 | 06:57 18:39 | 06:33 16:52 | 07:08 16:29 |
| 4 | 07:27 16:41 | 07:10 17:17 | 06:31 17:52 | 06:39 19:27 | 05:53 20:00 | 05:26 20:29 | 05:29 20:38 | 05:55 20:15 | 06:27 19:29 | 06:58 18:38 | 06:34 16:51 | 07:09 16:29 |
| 5 | 07:27 16:42 | 07:08 17:19 | 06:29 17:53 | 06:37 19:28 | 05:52 20:01 | 05:26 20:30 | 05:30 20:37 | 05:56 20:14 | 06:28 19:28 | 06:59 18:36 | 06:35 16:50 | 07:10 16:29 |
| 6 | 07:27 16:43 | 07:07 17:20 | 06:28 17:54 | 06:35 19:29 | 05:51 20:02 | 05:25 20:31 | 05:30 20:37 | 05:57 20:13 | 06:29 19:26 | 07:00 18:34 | 06:36 16:49 | 07:11 16:29 |
| 7 | 07:27 16:44 | 07:06 17:21 | 06:26 17:56 | 06:34 19:30 | 05:49 20:03 | 05:25 20:31 | 05:31 20:37 | 05:58 20:11 | 06:30 19:24 | 07:02 18:33 | 06:38 16:48 | 07:12 16:29 |
| 8 | 07:27 16:45 | 07:05 17:22 | 06:25 17:57 | 06:32 19:31 | 05:48 20:04 | 05:25 20:32 | 05:32 20:36 | 05:59 20:10 | 06:31 19:23 | 07:03 18:31 | 06:39 16:47 | 07:13 16:28 |
| 9 | 07:27 16:46 | 07:04 17:24 | 06:23 17:58 | 06:31 19:33 | 05:47 20:05 | 05:25 20:32 | 05:32 20:36 | 06:00 20:09 | 06:32 19:21 | 07:04 18:29 | 06:40 16:46 | 07:14 16:28 |
| 10 | 07:26 16:47 | 07:03 17:25 | 06:21 17:59 | 06:29 19:34 | 05:46 20:06 | 05:24 20:33 | 05:33 20:36 | 06:01 20:07 | 06:33 19:19 | 07:05 18:28 | 06:41 16:44 | 07:15 16:28 |
| 11 | 07:26 16:48 | 07:01 17:26 | 06:20 18:00 | 06:27 19:35 | 05:45 20:07 | 05:24 20:34 | 05:34 20:35 | 06:02 20:06 | 06:34 19:17 | 07:06 18:26 | 06:43 16:43 | 07:16 16:28 |
| 12 | 07:26 16:49 | 07:00 17:28 | 06:18 18:01 | 06:26 19:36 | 05:44 20:08 | 05:24 20:34 | 05:34 20:35 | 06:03 20:05 | 06:35 19:16 | 07:07 18:24 | 06:44 16:42 | 07:17 16:29 |
| 13 | 07:26 16:50 | 06:59 17:29 | 06:16 18:03 | 06:24 19:37 | 05:43 20:09 | 05:24 20:35 | 05:35 20:34 | 06:04 20:03 | 06:36 19:14 | 07:08 18:23 | 06:45 16:41 | 07:17 16:29 |
| 14 | 07:25 16:51 | 06:58 17:30 | 06:15 18:04 | 06:22 19:38 | 05:41 20:10 | 05:24 20:35 | 05:36 20:34 | 06:05 20:02 | 06:37 19:12 | 07:09 18:21 | 06:46 16:41 | 07:18 16:29 |
| 15 | 07:25 16:53 | 06:56 17:31 | 06:13 18:05 | 06:21 19:39 | 05:40 20:11 | 05:24 20:35 | 05:37 20:33 | 06:06 20:01 | 06:38 19:10 | 07:10 18:20 | 06:47 16:40 | 07:19 16:29 |
| 16 | 07:24 16:54 | 06:55 17:33 | 06:11 18:06 | 06:19 19:40 | 05:39 20:12 | 05:24 20:36 | 05:38 20:32 | 06:07 19:59 | 06:39 19:09 | 07:12 18:18 | 06:49 16:39 | 07:20 16:29 |
| 17 | 07:24 16:55 | 06:54 17:34 | 06:10 18:07 | 06:18 19:41 | 05:38 20:13 | 05:24 20:36 | 05:38 20:32 | 06:09 19:58 | 06:40 19:07 | 07:13 18:16 | 06:50 16:38 | 07:20 16:30 |
| 18 | 07:23 16:56 | 06:52 17:35 | 06:08 18:08 | 06:16 19:42 | 05:37 20:14 | 05:24 20:37 | 05:39 20:31 | 06:10 19:56 | 06:41 19:05 | 07:14 18:15 | 06:51 16:37 | 07:21 16:30 |
| 19 | 07:23 16:57 | 06:51 17:36 | 06:06 18:09 | 06:15 19:43 | 05:37 20:15 | 05:24 20:37 | 05:40 20:30 | 06:11 19:55 | 06:42 19:03 | 07:15 18:13 | 06:52 16:36 | 07:22 16:30 |
| 20 | 07:22 16:58 | 06:49 17:38 | 06:04 18:10 | 06:13 19:45 | 05:36 20:16 | 05:24 20:37 | 05:41 20:30 | 06:12 19:53 | 06:44 19:02 | 07:16 18:12 | 06:54 16:36 | 07:22 16:31 |
| 21 | 07:22 17:00 | 06:48 17:39 | 06:03 18:12 | 06:11 19:46 | 05:35 20:17 | 05:24 20:37 | 05:42 20:29 | 06:13 19:52 | 06:45 19:00 | 07:17 18:10 | 06:55 16:35 | 07:23 16:31 |
| 22 | 07:21 17:01 | 06:46 17:40 | 06:01 18:13 | 06:10 19:47 | 05:34 20:18 | 05:25 20:38 | 05:43 20:28 | 06:14 19:50 | 06:46 18:58 | 07:18 18:09 | 06:56 16:34 | 07:23 16:32 |
| 23 | 07:20 17:02 | 06:45 17:41 | 05:59 18:14 | 06:08 19:48 | 05:33 20:19 | 05:25 20:38 | 05:44 20:27 | 06:15 19:49 | 06:47 18:57 | 07:20 18:07 | 06:57 16:34 | 07:24 16:32 |
| 24 | 07:20 17:03 | 06:43 17:43 | 05:58 18:15 | 06:07 19:49 | 05:32 20:20 | 05:25 20:38 | 05:45 20:26 | 06:16 19:47 | 06:48 18:55 | 07:21 18:06 | 06:58 16:33 | 07:24 16:33 |
| 25 | 07:19 17:05 | 06:42 17:44 | 05:56 18:16 | 06:05 19:50 | 05:32 20:21 | 05:25 20:38 | 05:45 20:26 | 06:17 19:46 | 06:49 18:53 | 07:22 17:04 | 06:59 16:32 | 07:25 16:33 |
| 26 | 07:18 17:06 | 06:40 17:45 | 05:54 18:17 | 06:04 19:51 | 05:31 20:22 | 05:26 20:38 | 05:46 20:25 | 06:18 19:44 | 06:50 18:51 | 07:23 17:03 | 07:01 16:32 | 07:25 16:34 |
| 27 | 07:17 17:07 | 06:39 17:46 | 05:52 18:18 | 06:03 19:52 | 05:30 20:23 | 05:26 20:38 | 05:47 20:24 | 06:19 19:42 | 06:51 18:50 | 07:24 17:02 | 07:02 16:31 | 07:25 16:35 |
| 28 | 07:16 17:08 | 06:37 17:47 | 05:51 18:19 | 06:01 19:53 | 05:30 20:24 | 05:26 20:38 | 05:48 20:23 | 06:20 19:41 | 06:52 18:48 | 07:25 17:00 | 07:03 16:31 | 07:26 16:35 |
| 29 | 07:15 17:10 | | 06:49 19:20 | 06:00 19:54 | 05:29 20:25 | 05:27 20:38 | 05:49 20:22 | 06:21 19:39 | 06:53 18:46 | 07:27 16:59 | 07:04 16:30 | 07:26 16:36 |
| 30 | 07:15 17:11 | | 06:47 19:22 | 05:58 19:56 | 05:28 20:25 | 05:27 20:38 | 05:50 20:21 | 06:22 19:38 | 06:54 18:44 | 07:28 16:58 | 07:05 16:30 | 07:26 16:37 |
| 31 | 07:14 17:12 | | 06:46 19:23 | | 05:28 20:26 | | 05:51 20:20 | 06:23 19:36 | | 06:29 16:56 | | 07:26 16:38 |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 | 461 | 429 | 375 | 344 | 296 | 285 |
| Sum of minutes with flicker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 22 - Parco eolico da 42MW

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1 | 07:27 16:39 | 07:13 17:13 | 06:36 17:49 | 06:44 19:24 | 05:57 19:57 | 05:27 20:27 | 05:28 20:38 | 05:52 20:18 | 06:24 19:34 | 06:55 18:43 | 06:30 16:55 | 07:06 16:30 |
| 2 | 07:27 16:39 | 07:12 17:15 | 06:34 17:50 | 06:42 19:25 | 05:56 19:58 | 05:27 20:28 | 05:28 20:38 | 05:53 20:17 | 06:25 19:33 | 06:56 18:41 | 06:31 16:54 | 07:07 16:29 |
| 3 | 07:27 16:40 | 07:11 17:16 | 06:33 17:51 | 06:40 19:26 | 05:54 19:59 | 05:26 20:28 | 05:29 20:38 | 05:54 20:16 | 06:26 19:31 | 06:57 18:39 | 06:33 16:52 | 07:08 16:29 |
| 4 | 07:27 16:41 | 07:09 17:17 | 06:31 17:52 | 06:39 19:27 | 05:53 20:00 | 05:26 20:29 | 05:29 20:37 | 05:55 20:15 | 06:27 19:29 | 06:58 18:38 | 06:34 16:51 | 07:09 16:29 |
| 5 | 07:27 16:42 | 07:08 17:19 | 06:29 17:53 | 06:37 19:28 | 05:52 20:01 | 05:26 20:30 | 05:30 20:37 | 05:56 20:14 | 06:28 19:28 | 06:59 18:36 | 06:35 16:50 | 07:10 16:29 |
| 6 | 07:27 16:43 | 07:07 17:20 | 06:28 17:54 | 06:35 19:29 | 05:51 20:02 | 05:25 20:30 | 05:30 20:37 | 05:57 20:13 | 06:29 19:26 | 07:00 18:34 | 06:36 16:49 | 07:11 16:29 |
| 7 | 07:27 16:44 | 07:06 17:21 | 06:26 17:56 | 06:34 19:30 | 05:49 20:03 | 05:25 20:31 | 05:31 20:37 | 05:58 20:11 | 06:30 19:24 | 07:01 18:33 | 06:38 16:48 | 07:12 16:29 |
| 8 | 07:27 16:45 | 07:05 17:22 | 06:24 17:57 | 06:32 19:31 | 05:48 20:04 | 05:25 20:32 | 05:32 20:36 | 05:59 20:10 | 06:31 19:22 | 07:03 18:31 | 06:39 16:47 | 07:13 16:28 |
| 9 | 07:26 16:46 | 07:04 17:24 | 06:23 17:58 | 06:30 19:32 | 05:47 20:05 | 05:25 20:32 | 05:32 20:36 | 06:00 20:09 | 06:32 19:21 | 07:04 18:29 | 06:40 16:46 | 07:14 16:28 |
| 10 | 07:26 16:47 | 07:03 17:25 | 06:21 17:59 | 06:29 19:34 | 05:46 20:06 | 05:24 20:33 | 05:33 20:36 | 06:01 20:07 | 06:33 19:19 | 07:05 18:28 | 06:41 16:44 | 07:15 16:28 |
| 11 | 07:26 16:48 | 07:01 17:26 | 06:20 18:00 | 06:27 19:35 | 05:45 20:07 | 05:24 20:33 | 05:34 20:35 | 06:02 20:06 | 06:34 19:17 | 07:06 18:26 | 06:43 16:43 | 07:16 16:29 |
| 12 | 07:26 16:49 | 07:00 17:28 | 06:18 18:01 | 06:26 19:36 | 05:44 20:08 | 05:24 20:34 | 05:35 20:35 | 06:03 20:05 | 06:35 19:16 | 07:07 18:24 | 06:44 16:42 | 07:16 16:29 |
| 13 | 07:25 16:50 | 06:59 17:29 | 06:16 18:03 | 06:24 19:37 | 05:43 20:09 | 05:24 20:34 | 05:35 20:34 | 06:04 20:03 | 06:36 19:14 | 07:08 18:23 | 06:45 16:41 | 07:17 16:29 |
| 14 | 07:25 16:51 | 06:58 17:30 | 06:15 18:04 | 06:22 19:38 | 05:41 20:10 | 05:24 20:35 | 05:36 20:34 | 06:05 20:02 | 06:37 19:12 | 07:09 18:21 | 06:46 16:41 | 07:18 16:29 |
| 15 | 07:25 16:53 | 06:56 17:31 | 06:13 18:05 | 06:21 19:39 | 05:40 20:11 | 05:24 20:35 | 05:37 20:33 | 06:06 20:01 | 06:38 19:10 | 07:10 18:19 | 06:47 16:40 | 07:19 16:29 |
| 16 | 07:24 16:54 | 06:55 17:33 | 06:11 18:06 | 06:19 19:40 | 05:39 20:12 | 05:24 20:36 | 05:38 20:32 | 06:07 19:59 | 06:39 19:09 | 07:11 18:18 | 06:49 16:39 | 07:20 16:29 |
| 17 | 07:24 16:55 | 06:53 17:34 | 06:09 18:07 | 06:18 19:41 | 05:38 20:13 | 05:24 20:36 | 05:38 20:32 | 06:09 19:58 | 06:40 19:07 | 07:13 18:16 | 06:50 16:38 | 07:20 16:30 |
| 18 | 07:23 16:56 | 06:52 17:35 | 06:08 18:08 | 06:16 19:42 | 05:37 20:14 | 05:24 20:36 | 05:39 20:31 | 06:10 19:56 | 06:41 19:05 | 07:14 18:15 | 06:51 16:37 | 07:21 16:30 |
| 19 | 07:23 16:57 | 06:51 17:36 | 06:06 18:09 | 06:14 19:43 | 05:37 20:15 | 05:24 20:37 | 05:40 20:30 | 06:11 19:55 | 06:42 19:03 | 07:15 18:13 | 06:52 16:36 | 07:22 16:30 |
| 20 | 07:22 16:58 | 06:49 17:38 | 06:04 18:10 | 06:13 19:44 | 05:36 20:16 | 05:24 20:37 | 05:41 20:30 | 06:12 19:53 | 06:43 19:02 | 07:16 18:12 | 06:53 16:36 | 07:22 16:31 |
| 21 | 07:22 17:00 | 06:48 17:39 | 06:03 18:12 | 06:11 19:46 | 05:35 20:17 | 05:24 20:37 | 05:42 20:29 | 06:13 19:52 | 06:45 19:00 | 07:17 18:10 | 06:55 16:35 | 07:23 16:31 |
| 22 | 07:21 17:01 | 06:46 17:40 | 06:01 18:13 | 06:10 19:47 | 05:34 20:18 | 05:25 20:38 | 05:43 20:28 | 06:14 19:50 | 06:46 18:58 | 07:18 18:09 | 06:56 16:34 | 07:23 16:32 |
| 23 | 07:20 17:02 | 06:45 17:41 | 05:59 18:14 | 06:08 19:48 | 05:33 20:19 | 05:25 20:38 | 05:44 20:27 | 06:15 19:49 | 06:47 18:56 | 07:20 18:07 | 06:57 16:34 | 07:24 16:32 |
| 24 | 07:19 17:03 | 06:43 17:42 | 05:58 18:15 | 06:07 19:49 | 05:32 20:20 | 05:25 20:38 | 05:45 20:26 | 06:16 19:47 | 06:48 18:55 | 07:21 18:06 | 06:58 16:33 | 07:24 16:33 |
| 25 | 07:19 17:05 | 06:42 17:44 | 05:56 18:16 | 06:05 19:50 | 05:32 20:21 | 05:25 20:38 | 05:45 20:25 | 06:17 19:46 | 06:49 18:53 | 06:22 17:04 | 06:59 16:32 | 07:25 16:33 |
| 26 | 07:18 17:06 | 06:40 17:45 | 05:54 18:17 | 06:04 19:51 | 05:31 20:22 | 05:26 20:38 | 05:46 20:24 | 06:18 19:44 | 06:50 18:51 | 06:23 17:03 | 07:00 16:32 | 07:25 16:34 |
| 27 | 07:17 17:07 | 06:39 17:46 | 05:52 18:18 | 06:03 19:52 | 05:30 20:23 | 05:26 20:38 | 05:47 20:24 | 06:19 19:42 | 06:51 18:50 | 06:24 17:02 | 07:02 16:31 | 07:25 16:35 |
| 28 | 07:16 17:08 | 06:37 17:47 | 05:51 18:19 | 06:01 19:53 | 05:30 20:24 | 05:26 20:38 | 05:48 20:23 | 06:20 19:41 | 06:52 18:48 | 06:25 17:00 | 07:03 16:31 | 07:26 16:35 |
| 29 | 07:15 17:10 | | 06:49 19:20 | 06:00 19:54 | 05:29 20:24 | 05:27 20:38 | 05:49 20:22 | 06:21 19:39 | 06:53 18:46 | 06:27 16:59 | 07:04 16:30 | 07:26 16:36 |
| 30 | 07:14 17:11 | | 06:47 19:21 | 05:58 19:55 | 05:28 20:25 | 05:27 20:38 | 05:50 20:20 | 06:22 19:38 | 06:54 18:44 | 06:28 16:58 | 07:05 16:30 | 07:26 16:37 |
| 31 | 07:14 17:12 | | 06:46 19:23 | | 05:28 20:26 | | 05:51 20:19 | 06:23 19:36 | | 06:29 16:56 | | 07:26 16:38 |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 | 461 | 429 | 375 | 344 | 296 | 285 |
| Sum of minutes with flicker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 23 - Parco eolico da 42MW

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1 | 07:27 16:39 | 07:13 17:14 | 06:36 17:49 | 06:44 19:24 | 05:57 19:57 | 05:27 20:27 | 05:28 20:38 | 05:52 20:18 | 06:24 19:34 | 06:55 18:43 | 06:30 16:55 | 07:06 16:30 |
| 2 | 07:27 16:39 | 07:12 17:15 | 06:34 17:50 | 06:42 19:25 | 05:56 19:58 | 05:27 20:28 | 05:28 20:38 | 05:53 20:17 | 06:25 19:33 | 06:56 18:41 | 06:32 16:54 | 07:07 16:29 |
| 3 | 07:27 16:40 | 07:11 17:16 | 06:33 17:51 | 06:41 19:26 | 05:54 19:59 | 05:27 20:28 | 05:29 20:38 | 05:54 20:16 | 06:26 19:31 | 06:57 18:39 | 06:33 16:52 | 07:08 16:29 |
| 4 | 07:27 16:41 | 07:10 17:17 | 06:31 17:52 | 06:39 19:27 | 05:53 20:00 | 05:26 20:29 | 05:29 20:37 | 05:55 20:15 | 06:27 19:29 | 06:58 18:38 | 06:34 16:51 | 07:09 16:29 |
| 5 | 07:27 16:42 | 07:08 17:19 | 06:29 17:53 | 06:37 19:28 | 05:52 20:01 | 05:26 20:30 | 05:30 20:37 | 05:56 20:14 | 06:28 19:28 | 06:59 18:36 | 06:35 16:50 | 07:10 16:29 |
| 6 | 07:27 16:43 | 07:07 17:20 | 06:28 17:54 | 06:35 19:29 | 05:51 20:02 | 05:25 20:30 | 05:30 20:37 | 05:57 20:13 | 06:29 19:26 | 07:00 18:34 | 06:36 16:49 | 07:11 16:29 |
| 7 | 07:27 16:44 | 07:06 17:21 | 06:26 17:56 | 06:34 19:30 | 05:49 20:03 | 05:25 20:31 | 05:31 20:37 | 05:58 20:11 | 06:30 19:24 | 07:02 18:33 | 06:38 16:48 | 07:12 16:29 |
| 8 | 07:27 16:45 | 07:05 17:23 | 06:25 17:57 | 06:32 19:31 | 05:48 20:04 | 05:25 20:32 | 05:32 20:36 | 05:59 20:10 | 06:31 19:23 | 07:03 18:31 | 06:39 16:47 | 07:13 16:28 |
| 9 | 07:26 16:46 | 07:04 17:24 | 06:23 17:58 | 06:31 19:32 | 05:47 20:05 | 05:25 20:32 | 05:32 20:36 | 06:00 20:09 | 06:32 19:21 | 07:04 18:29 | 06:40 16:46 | 07:14 16:28 |
| 10 | 07:26 16:47 | 07:03 17:25 | 06:21 17:59 | 06:29 19:34 | 05:46 20:06 | 05:24 20:33 | 05:33 20:36 | 06:01 20:07 | 06:33 19:19 | 07:05 18:28 | 06:41 16:44 | 07:15 16:28 |
| 11 | 07:26 16:48 | 07:01 17:26 | 06:20 18:00 | 06:27 19:35 | 05:45 20:07 | 05:24 20:33 | 05:34 20:35 | 06:02 20:06 | 06:34 19:17 | 07:06 18:26 | 06:43 16:43 | 07:16 16:29 |
| 12 | 07:26 16:49 | 07:00 17:28 | 06:18 18:01 | 06:26 19:36 | 05:44 20:08 | 05:24 20:34 | 05:35 20:35 | 06:03 20:05 | 06:35 19:16 | 07:07 18:24 | 06:44 16:42 | 07:16 16:29 |
| 13 | 07:25 16:50 | 06:59 17:29 | 06:16 18:03 | 06:24 19:37 | 05:43 20:09 | 05:24 20:34 | 05:35 20:34 | 06:04 20:03 | 06:36 19:14 | 07:08 18:23 | 06:45 16:41 | 07:17 16:29 |
| 14 | 07:25 16:52 | 06:58 17:30 | 06:15 18:04 | 06:22 19:38 | 05:41 20:10 | 05:24 20:35 | 05:36 20:34 | 06:05 20:02 | 06:37 19:12 | 07:09 18:21 | 06:46 16:41 | 07:18 16:29 |
| 15 | 07:25 16:53 | 06:56 17:31 | 06:13 18:05 | 06:21 19:39 | 05:40 20:11 | 05:24 20:35 | 05:37 20:33 | 06:06 20:01 | 06:38 19:10 | 07:10 18:20 | 06:47 16:40 | 07:19 16:29 |
| 16 | 07:24 16:54 | 06:55 17:33 | 06:11 18:06 | 06:19 19:40 | 05:39 20:12 | 05:24 20:36 | 05:38 20:32 | 06:08 19:59 | 06:39 19:09 | 07:11 18:18 | 06:49 16:39 | 07:20 16:29 |
| 17 | 07:24 16:55 | 06:54 17:34 | 06:09 18:07 | 06:18 19:41 | 05:38 20:13 | 05:24 20:36 | 05:38 20:32 | 06:09 19:58 | 06:40 19:07 | 07:13 18:16 | 06:50 16:38 | 07:20 16:30 |
| 18 | 07:23 16:56 | 06:52 17:35 | 06:08 18:08 | 06:16 19:42 | 05:38 20:14 | 05:24 20:36 | 05:39 20:31 | 06:10 19:56 | 06:41 19:05 | 07:14 18:15 | 06:51 16:37 | 07:21 16:30 |
| 19 | 07:23 16:57 | 06:51 17:36 | 06:06 18:09 | 06:15 19:43 | 05:37 20:15 | 05:24 20:37 | 05:40 20:30 | 06:11 19:55 | 06:42 19:03 | 07:15 18:13 | 06:52 16:36 | 07:22 16:30 |
| 20 | 07:22 16:59 | 06:49 17:38 | 06:04 18:10 | 06:13 19:45 | 05:36 20:16 | 05:24 20:37 | 05:41 20:30 | 06:12 19:53 | 06:44 19:02 | 07:16 18:12 | 06:53 16:36 | 07:22 16:31 |
| 21 | 07:22 17:00 | 06:48 17:39 | 06:03 18:12 | 06:11 19:46 | 05:35 20:17 | 05:24 20:37 | 05:42 20:29 | 06:13 19:52 | 06:45 19:00 | 07:17 18:10 | 06:55 16:35 | 07:23 16:31 |
| 22 | 07:21 17:01 | 06:46 17:40 | 06:01 18:13 | 06:10 19:47 | 05:34 20:18 | 05:25 20:38 | 05:43 20:28 | 06:14 19:50 | 06:46 18:58 | 07:18 18:09 | 06:56 16:34 | 07:23 16:32 |
| 23 | 07:20 17:02 | 06:45 17:41 | 05:59 18:14 | 06:08 19:48 | 05:33 20:19 | 05:25 20:38 | 05:44 20:27 | 06:15 19:49 | 06:47 18:57 | 07:20 18:07 | 06:57 16:34 | 07:24 16:32 |
| 24 | 07:19 17:03 | 06:43 17:43 | 05:58 18:15 | 06:07 19:49 | 05:32 20:20 | 05:25 20:38 | 05:45 20:26 | 06:16 19:47 | 06:48 18:55 | 07:21 18:06 | 06:58 16:33 | 07:24 16:33 |
| 25 | 07:19 17:05 | 06:42 17:44 | 05:56 18:16 | 06:06 19:50 | 05:32 20:21 | 05:25 20:38 | 05:46 20:25 | 06:17 19:46 | 06:49 18:53 | 06:22 17:04 | 06:59 16:32 | 07:25 16:33 |
| 26 | 07:18 17:06 | 06:40 17:45 | 05:54 18:17 | 06:04 19:51 | 05:31 20:22 | 05:26 20:38 | 05:46 20:25 | 06:18 19:44 | 06:50 18:51 | 06:23 17:03 | 07:00 16:32 | 07:25 16:34 |
| 27 | 07:17 17:07 | 06:39 17:46 | 05:52 18:18 | 06:03 19:52 | 05:30 20:23 | 05:26 20:38 | 05:47 20:24 | 06:19 19:42 | 06:51 18:50 | 06:24 17:02 | 07:02 16:31 | 07:25 16:35 |
| 28 | 07:16 17:08 | 06:37 17:47 | 05:51 18:19 | 06:01 19:53 | 05:30 20:24 | 05:26 20:38 | 05:48 20:23 | 06:20 19:41 | 06:52 18:48 | 06:25 17:00 | 07:03 16:31 | 07:26 16:35 |
| 29 | 07:15 17:10 | | 06:49 19:20 | 06:00 19:54 | 05:29 20:24 | 05:27 20:38 | 05:49 20:22 | 06:21 19:39 | 06:53 18:46 | 06:27 16:59 | 07:04 16:31 | 07:26 16:36 |
| 30 | 07:15 17:11 | | 06:47 19:21 | 05:58 19:55 | 05:28 20:25 | 05:27 20:38 | 05:50 20:21 | 06:22 19:38 | 06:54 18:44 | 06:28 16:58 | 07:05 16:30 | 07:26 16:37 |
| 31 | 07:14 17:12 | | 06:46 19:23 | | 05:28 20:26 | | 05:51 20:19 | 06:23 19:36 | | 06:29 16:56 | | 07:26 16:38 |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 | 461 | 429 | 375 | 345 | 296 | 285 |
| Sum of minutes with flicker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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-Last time (hh:mm) with flicker/Minutes with flicker
Sun set (hh:mm) First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker

Project:

Queequeg_shadow

Licensed user:

ERM ITALIA S.P.A.

Via San Gregorio, 38

IT-20124 Milano

+39 02 6744 0217

Aurora / aurora.fini@erm.com

Calculated:

26/01/2024 18:31/4.0.531

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 24 - Parco eolico da 42MW

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | January | February | March | April | May | June | July | August | September | October | November | December | |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|-------------------------|------------------------|----------------|-------------------------|----------------|-------------------------|----------------|----------------|
| 1 | 07:27 16:39 | 07:13 17:14 | 06:36 17:49 | 06:44 19:24 | 05:57 19:57 | 05:27 20:27 | 05:49-05:56/7 20:38 | 05:28 20:18 | 05:51-06:08/17 20:18 | 05:52 19:34 | 06:15-06:37/22 18:43 | 06:24 16:55 | 06:55 16:30 |
| 2 | 07:27 16:40 | 07:12 17:15 | 06:34 17:50 | 06:42 19:25 | 05:56 19:58 | 06:15-06:18/3 20:28 | 05:27 20:38 | 05:28 20:38 | 05:51-06:08/17 20:38 | 05:53 20:17 | 06:16-06:37/21 19:33 | 06:25 18:41 | 06:56 16:54 |
| 3 | 07:27 16:40 | 07:11 17:16 | 06:33 17:51 | 06:41 19:26 | 05:55 19:59 | 06:14-06:21/7 20:28 | 05:27 20:38 | 05:29 20:38 | 05:52-06:08/16 20:38 | 05:54 20:16 | 06:17-06:36/19 19:31 | 06:26 18:39 | 06:57 16:53 |
| 4 | 07:27 16:41 | 07:10 17:17 | 06:31 17:52 | 06:39 19:27 | 05:53 20:00 | 06:13-06:23/10 20:29 | 05:26 20:38 | 05:29 20:38 | 05:52-06:07/15 20:15 | 05:55 20:15 | 06:18-06:36/18 19:29 | 06:27 18:38 | 06:58 16:51 |
| 5 | 07:27 16:42 | 07:08 17:19 | 06:29 17:53 | 06:37 19:28 | 05:52 20:01 | 06:12-06:24/12 20:30 | 05:26 20:37 | 05:30 20:37 | 05:53-06:07/14 20:14 | 05:56 20:14 | 06:19-06:36/17 19:28 | 06:28 18:36 | 06:59 16:50 |
| 6 | 07:27 16:43 | 07:07 17:20 | 06:28 17:54 | 06:36 19:29 | 05:51 20:02 | 06:11-06:25/14 20:30 | 05:25 20:37 | 05:31 20:37 | 05:54-06:08/14 20:13 | 05:57 20:13 | 06:20-06:35/15 19:26 | 06:29 18:34 | 07:00 16:49 |
| 7 | 07:27 16:44 | 07:06 17:21 | 06:26 17:56 | 06:34 19:30 | 05:49 20:03 | 06:09-06:25/16 20:31 | 05:25 20:37 | 05:31 20:37 | 05:54-06:07/13 20:11 | 05:58 20:11 | 06:21-06:34/13 19:24 | 06:30 18:33 | 07:02 16:48 |
| 8 | 07:27 16:45 | 07:05 17:23 | 06:25 17:57 | 06:32 19:31 | 05:48 20:04 | 06:08-06:25/17 20:32 | 05:25 20:36 | 05:32 20:36 | 05:55-06:07/12 20:10 | 05:59 20:10 | 06:22-06:33/11 19:23 | 06:31 18:31 | 07:03 16:47 |
| 9 | 07:26 16:46 | 07:04 17:24 | 06:23 17:58 | 06:31 19:33 | 05:47 20:05 | 06:07-06:26/19 20:32 | 05:25 20:36 | 05:32 20:36 | 05:55-06:05/10 20:09 | 06:00 20:09 | 06:23-06:32/9 19:21 | 06:32 18:29 | 07:04 16:46 |
| 10 | 07:26 16:47 | 07:03 17:25 | 06:21 17:59 | 06:29 19:34 | 05:46 20:06 | 06:06-06:26/20 20:33 | 05:24 20:36 | 05:33 20:36 | 05:56-06:05/9 20:07 | 06:01 20:07 | 06:24-06:30/6 19:19 | 06:33 18:28 | 07:05 16:45 |
| 11 | 07:26 16:48 | 07:01 17:26 | 06:20 18:00 | 06:27 19:35 | 05:45 20:07 | 06:05-06:26/21 20:33 | 05:24 20:35 | 05:34 20:35 | 05:57-06:05/8 20:06 | 06:02 20:06 | 06:25-06:27/2 19:17 | 06:34 18:26 | 07:06 16:44 |
| 12 | 07:26 16:49 | 07:00 17:28 | 06:18 18:01 | 06:26 19:36 | 05:44 20:08 | 06:04-06:26/22 20:34 | 05:24 20:35 | 05:35 20:35 | 05:58-06:04/6 20:05 | 06:03 20:05 | 06:26-06:33/1 19:16 | 06:35 18:24 | 07:07 16:43 |
| 13 | 07:25 16:50 | 06:59 17:29 | 06:16 18:03 | 06:24 19:37 | 05:43 20:09 | 06:03-06:26/23 20:35 | 05:24 20:35 | 05:35 20:34 | 05:58-06:01/3 20:03 | 06:04 20:03 | 06:27-06:34/0 19:14 | 06:36 18:23 | 07:08 16:42 |
| 14 | 07:25 16:52 | 06:58 17:30 | 06:15 18:04 | 06:22 19:38 | 05:42 20:10 | 06:03-06:26/23 20:35 | 05:24 20:35 | 05:36 20:34 | 06:05-06:05/8 20:02 | 06:05 20:02 | 06:27-06:34/0 19:12 | 06:37 18:21 | 07:09 16:41 |
| 15 | 07:25 16:53 | 06:56 17:31 | 06:13 18:05 | 06:21 19:39 | 05:40 20:11 | 06:03-06:25/22 20:35 | 05:24 20:35 | 05:37 20:33 | 06:07-06:05/8 20:01 | 06:07 20:01 | 06:28-06:30/6 19:10 | 06:38 18:20 | 07:10 16:40 |
| 16 | 07:24 16:54 | 06:55 17:33 | 06:11 18:06 | 06:19 19:40 | 05:39 20:12 | 06:03-06:25/22 20:36 | 05:24 20:36 | 05:38 20:32 | 06:08-06:06/9 19:59 | 06:08 19:59 | 06:29-06:31/5 19:09 | 06:39 18:18 | 07:12 16:39 |
| 17 | 07:24 16:55 | 06:54 17:34 | 06:10 18:07 | 06:18 19:41 | 05:39 20:13 | 06:04-06:24/20 20:36 | 05:24 20:36 | 05:39 20:32 | 06:09-06:06/9 19:58 | 06:09 19:58 | 06:30-06:32/7 19:07 | 06:40 18:13 | 07:13 16:38 |
| 18 | 07:23 16:56 | 06:52 17:35 | 06:08 18:08 | 06:16 19:42 | 05:38 20:14 | 06:04-06:24/20 20:37 | 05:24 20:37 | 05:39 20:31 | 06:10-06:06/9 19:56 | 06:10 19:56 | 06:31-06:33/6 19:05 | 06:41 18:15 | 07:14 16:37 |
| 19 | 07:23 16:57 | 06:51 17:36 | 06:06 18:09 | 06:15 19:43 | 05:37 20:15 | 06:06-06:24/18 20:37 | 05:24 20:37 | 05:40 20:30 | 06:11-06:06/9 19:55 | 06:11 19:55 | 06:32-06:34/4 19:04 | 06:43 18:13 | 07:15 16:36 |
| 20 | 07:22 16:59 | 06:49 17:38 | 06:04 18:10 | 06:13 19:45 | 05:36 20:16 | 06:07-06:23/16 20:37 | 05:24 20:37 | 05:41 20:30 | 06:21-06:28/7 19:53 | 06:12 19:53 | 06:33-06:35/2 19:02 | 06:44 18:12 | 07:16 16:36 |
| 21 | 07:22 17:00 | 06:48 17:39 | 06:03 18:12 | 06:12 19:46 | 05:35 20:17 | 06:07-06:22/15 20:37 | 05:24 20:37 | 05:42 20:29 | 06:20-06:30/10 19:52 | 06:13 19:52 | 06:34-06:36/0 19:00 | 06:45 18:10 | 07:17 16:35 |
| 22 | 07:21 17:01 | 06:46 17:40 | 06:01 18:13 | 06:10 19:47 | 05:34 20:18 | 06:08-06:20/12 20:38 | 05:25 20:38 | 05:43 20:28 | 06:18-06:32/14 19:50 | 06:14 19:50 | 06:35-06:37/0 18:58 | 06:46 18:09 | 07:18 16:34 |
| 23 | 07:20 17:02 | 06:45 17:41 | 05:59 18:14 | 06:09 19:48 | 05:33 20:19 | 06:10-06:19/9 20:38 | 05:25 20:38 | 05:44 20:27 | 06:18-06:33/15 19:49 | 06:15 19:49 | 06:36-06:38/0 18:57 | 06:47 18:07 | 07:20 16:34 |
| 24 | 07:20 17:03 | 06:43 17:43 | 05:58 18:15 | 06:07 19:49 | 05:32 20:20 | 06:14-06:16/2 20:38 | 05:25 20:38 | 05:45 20:26 | 06:16-06:33/17 19:47 | 06:16 19:47 | 06:37-06:39/0 18:55 | 06:48 18:06 | 07:21 16:33 |
| 25 | 07:19 17:05 | 06:42 17:44 | 05:56 18:16 | 06:06 19:50 | 05:32 20:21 | 06:15-06:16/2 20:38 | 05:25 20:38 | 05:46 20:25 | 06:15-06:34/19 19:46 | 06:17 19:46 | 06:38-06:40/0 18:53 | 06:49 17:04 | 07:22 16:32 |
| 26 | 07:18 17:06 | 06:40 17:45 | 05:54 18:17 | 06:04 19:51 | 05:31 20:22 | 06:16-06:17/1 20:38 | 05:26 20:38 | 05:46 20:25 | 06:15-06:35/20 19:44 | 06:18 19:44 | 06:39-06:41/0 18:51 | 06:50 17:03 | 07:23 16:32 |
| 27 | 07:17 17:07 | 06:39 17:46 | 05:52 18:18 | 06:03 19:52 | 05:30 20:23 | 06:17-06:18/0 20:38 | 05:26 20:38 | 05:47 20:24 | 06:14-06:35/21 19:42 | 06:19 19:42 | 06:40-06:42/0 18:50 | 06:51 17:02 | 07:24 16:31 |
| 28 | 07:16 17:08 | 06:37 17:47 | 05:51 18:19 | 06:01 19:53 | 05:30 20:24 | 06:18-06:19/0 20:38 | 05:26 20:38 | 05:48 20:23 | 06:14-06:36/22 19:41 | 06:20 19:41 | 06:41-06:43/0 18:48 | 06:52 17:00 | 07:25 16:31 |
| 29 | 07:15 17:10 | 06:35 17:45 | 05:49 18:19 | 06:00 19:54 | 05:29 20:24 | 06:19-06:20/0 20:38 | 05:27 20:38 | 05:49 20:22 | 06:14-06:36/22 19:39 | 06:21 19:39 | 06:42-06:44/0 18:46 | 06:53 16:59 | 07:26 16:31 |
| 30 | 07:15 17:11 | 06:34 17:44 | 05:48 18:19 | 06:00 19:55 | 05:29 20:25 | 06:20-06:21/0 20:38 | 05:27 20:38 | 05:50 20:21 | 06:13-06:36/23 19:38 | 06:22 19:38 | 06:43-06:45/0 18:44 | 06:54 16:58 | 07:27 16:30 |
| 31 | 07:14 17:12 | 06:46 17:53 | 06:46 19:23 | 06:46 19:23 | 05:28 20:26 | 05:50-05:54/4 20:38 | 05:28 20:38 | 05:51 20:19 | 06:14-06:37/23 19:36 | 06:23 19:36 | 06:44-06:46/0 18:44 | 06:59 16:56 | 07:28 16:38 |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 | 461 | 429 | 375 | 345 | 296 | 286 | |
| Sum of minutes with flicker | 0 | 0 | 0 | 0 | 367 | 492 | 367 | 153 | 0 | 0 | 0 | 0 | |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 25 - Parco eolico da 42MW

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | January | February | March | April | May | June |
|-----------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--|
| 1 | 07:27 07:56-08:21/25 16:39 | 07:13 07:33-07:58/25 17:14 | 06:36 06:55-07:25/30 17:49 | 06:44 19:24 | 05:57 19:57 | 05:28 05:58-06:45/47 20:27 19:34-20:01/27 |
| 2 | 07:27 07:56-08:21/25 16:40 | 07:12 07:32-07:57/25 17:15 | 06:34 06:56-07:25/29 17:50 | 06:42 19:25 | 05:56 19:58 | 05:27 05:58-06:45/47 20:28 19:35-20:02/27 |
| 3 | 07:27 07:57-08:22/25 16:40 | 07:11 07:32-07:57/25 17:16 | 06:33 06:57-07:23/26 17:51 | 06:41 19:26 | 05:55 19:59 | 05:27 05:59-06:46/47 20:28 19:36-20:02/26 |
| 4 | 07:27 07:50-07:53/3 16:41 | 07:10 07:32-07:57/25 17:17 | 06:31 06:58-07:21/23 17:52 | 06:39 06:58-06:59/1 19:27 | 05:53 20:00 | 05:26 05:58-06:45/47 20:29 19:37-20:02/25 |
| 5 | 07:27 07:50-07:55/5 16:42 | 07:09 07:32-07:56/24 17:19 | 06:29 07:03-07:05/2 17:53 | 06:37 06:56-07:02/6 19:28 | 05:52 19:34-19:38/4 20:01 | 05:26 05:59-06:45/46 20:30 19:38-20:03/25 |
| 6 | 07:27 07:49-07:56/7 16:43 | 07:07 07:33-07:55/22 17:20 | 06:28 17:55 | 06:36 06:54-07:02/8 19:29 | 05:51 06:18-06:32/14 20:02 | 05:26 05:59-06:45/46 20:31 19:39-20:03/24 |
| 7 | 07:27 07:49-07:57/8 16:44 | 07:06 07:33-07:53/20 17:21 | 06:26 17:56 | 06:34 06:53-07:04/11 19:30 | 05:50 06:15-06:34/19 20:03 | 05:25 05:59-06:45/46 20:31 19:40-20:02/22 |
| 8 | 07:27 07:49-08:22/33 16:45 | 07:05 07:34-07:53/19 17:23 | 06:25 17:57 | 06:32 06:51-07:04/13 19:31 | 05:48 06:13-06:35/22 20:04 | 05:25 05:59-06:45/46 20:32 19:42-20:03/21 |
| 9 | 07:27 07:49-08:23/34 16:46 | 07:04 07:36-07:52/16 17:24 | 06:23 06:42-06:46/4 17:58 | 06:31 06:49-07:03/14 19:33 | 05:47 06:11-06:37/26 20:05 | 05:25 06:00-06:45/45 20:32 19:42-20:03/21 |
| 10 | 07:26 07:48-08:22/34 16:47 | 07:03 07:38-07:51/13 17:25 | 06:21 06:40-06:49/9 17:59 | 06:29 06:48-07:04/16 19:34 | 05:46 06:10-06:38/28 20:06 | 05:24 06:00-06:45/45 20:33 19:42-20:03/21 |
| 11 | 07:26 07:48-08:22/34 16:48 | 07:01 07:21-07:25/4 17:26 | 06:20 06:39-06:51/12 18:00 | 06:27 06:46-07:03/17 19:35 | 05:45 06:09-06:39/30 20:07 | 05:24 06:00-06:45/45 20:34 19:43-20:04/21 |
| 12 | 07:26 07:48-08:23/35 16:49 | 07:00 07:20-07:27/7 17:28 | 06:18 06:37-06:51/14 18:01 | 06:26 06:45-07:03/18 19:36 | 05:44 06:08-06:40/32 20:08 | 05:24 06:01-06:46/45 20:34 19:43-20:04/21 |
| 13 | 07:26 07:47-08:22/35 16:51 | 06:59 07:19-07:29/10 17:29 | 06:16 06:35-06:52/17 18:03 | 06:24 06:43-07:02/19 19:37 | 05:43 06:06-06:41/35 20:09 | 05:24 06:01-06:46/45 20:35 19:43-20:03/20 |
| 14 | 07:25 07:47-08:04/17 16:52 | 06:58 07:17-07:29/12 17:30 | 06:15 06:34-06:52/18 18:04 | 06:22 06:41-07:01/20 19:38 | 05:42 06:04-06:42/38 20:10 | 05:24 06:01-06:46/45 20:35 19:43-20:03/20 |
| 15 | 07:25 07:46-08:05/19 16:53 | 06:56 07:16-07:30/14 17:31 | 06:13 06:32-06:52/20 18:05 | 06:21 06:40-07:01/21 19:39 | 05:41 06:03-06:42/39 20:11 | 05:24 06:02-06:46/44 20:35 19:43-20:03/20 |
| 16 | 07:24 07:46-08:06/20 16:54 | 06:55 07:15-07:31/16 17:33 | 06:11 06:30-06:52/22 18:06 | 06:19 06:38-07:00/22 19:40 | 05:40 06:02-06:43/41 20:12 | 05:24 06:02-06:46/44 20:36 19:45-20:04/19 |
| 17 | 07:24 07:45-08:06/21 16:55 | 06:54 07:13-07:31/18 17:34 | 06:10 06:29-06:51/22 18:07 | 06:18 06:37-06:59/22 19:41 | 05:39 06:01-06:43/42 20:13 | 05:24 06:02-06:46/44 20:36 19:45-20:04/19 |
| 18 | 07:23 07:45-08:07/22 16:56 | 06:52 07:12-07:31/19 17:35 | 06:08 06:30-06:51/21 18:08 | 06:16 06:37-06:58/21 19:42 | 05:38 06:00-06:43/43 20:14 | 05:24 06:02-06:46/44 20:37 19:45-20:04/19 |
| 19 | 07:23 07:44-08:07/23 16:57 | 06:51 07:10-07:30/20 17:36 | 06:06 06:30-06:49/19 18:09 | 06:15 06:38-06:57/19 19:44 | 05:37 06:00-06:44/44 20:15 | 05:24 06:02-06:46/44 20:37 19:45-20:04/19 |
| 20 | 07:22 07:44-08:08/24 16:59 | 06:49 07:09-07:30/21 17:38 | 06:04 06:31-06:48/17 18:11 | 06:13 06:38-06:55/17 19:45 | 05:36 06:00-06:44/44 20:16 | 05:24 06:02-06:46/44 20:37 19:45-20:04/19 |
| 21 | 07:22 07:43-08:08/25 17:00 | 06:48 07:07-07:29/22 17:39 | 06:03 06:33-06:46/13 18:12 | 06:12 06:40-06:54/14 19:46 | 05:35 05:59-06:44/45 20:17 | 05:24 06:02-06:46/44 20:37 19:45-20:04/19 |
| 22 | 07:21 07:42-08:08/26 17:01 | 06:46 07:06-07:28/22 17:40 | 06:01 06:35-06:43/8 18:13 | 06:10 06:41-06:51/10 19:47 | 05:34 05:58-06:44/46 20:18 | 05:25 06:03-06:47/44 20:38 19:45-20:04/19 |
| 23 | 07:20 07:41-08:08/27 17:02 | 06:45 07:04-07:27/23 17:41 | 05:59 18:14 | 06:09 19:48 | 05:33 05:58-06:44/46 20:19 | 05:25 06:03-06:47/44 20:38 19:46-20:05/19 |
| 24 | 07:20 07:41-08:09/28 17:04 | 06:44 07:03-07:28/25 17:43 | 05:58 18:15 | 06:07 19:49 | 05:33 05:58-06:45/47 20:20 | 05:25 06:03-06:47/44 20:38 19:46-20:05/19 |
| 25 | 07:19 07:40-08:08/28 17:05 | 06:42 07:01-07:27/26 17:44 | 05:56 18:16 | 06:06 19:50 | 05:32 05:58-06:45/47 20:21 | 05:25 06:03-06:47/44 20:38 19:46-20:05/19 |
| 26 | 07:18 07:39-08:08/29 17:06 | 06:40 07:00-07:28/28 17:45 | 05:54 18:17 | 06:04 19:51 | 05:31 05:57-06:44/47 20:22 | 05:26 06:04-06:48/44 20:38 19:47-20:06/19 |
| 27 | 07:17 07:38-08:07/29 17:07 | 06:39 06:58-07:27/29 17:46 | 05:53 18:18 | 06:03 19:52 | 05:30 05:58-06:45/47 20:23 | 05:26 06:04-06:48/44 20:38 19:46-20:06/20 |
| 28 | 07:16 07:37-08:06/29 17:09 | 06:37 06:57-07:27/30 17:47 | 05:51 18:19 | 06:01 19:53 | 05:30 05:57-06:45/48 20:24 | 05:27 06:04-06:49/45 20:38 19:46-20:06/20 |
| 29 | 07:16 07:36-08:05/29 17:10 | | 06:49 19:20 | 06:00 19:54 | 05:29 05:58-06:45/47 20:25 | 05:27 06:04-06:49/45 20:38 19:47-20:07/20 |
| 30 | 07:15 07:35-08:04/29 17:11 | | 06:47 19:22 | 05:59 19:56 | 05:29 05:58-06:45/47 20:25 | 05:27 06:04-06:49/45 20:38 19:46-20:07/21 |
| 31 | 07:14 07:34-08:02/28 17:12 | | 06:46 19:23 | | 05:28 05:58-06:45/47 20:26 | |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 |
| Sum of minutes with flicker | 907 | 568 | 334 | 289 | 1549 | 1980 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 25 - Parco eolico da 42MW

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | July | August | September | October | November | December |
|-----------------------------|--|--|-------------------------------|-------------------------------|-------------------------------|---|
| 1 | 05:28 06:05-06:49/44 20:38 19:47-20:08/21 | 05:52 06:19-06:51/32 20:18 19:38-19:55/17 | 06:24 06:45-07:02/17 19:34 | 06:55 07:16-07:31/15 18:43 | 06:30 07:06-07:20/14 16:55 | 07:06 07:30-08:04/34 16:30 |
| 2 | 05:28 06:04-06:49/45 20:38 19:47-20:07/20 | 05:53 06:20-06:50/30 20:17 19:38-19:54/16 | 06:25 06:46-07:02/16 19:33 | 06:56 07:17-07:30/13 18:41 | 06:32 07:05-07:22/17 16:54 | 07:07 07:31-08:05/34 16:30 |
| 3 | 05:29 06:05-06:50/45 20:38 19:47-20:08/21 | 05:54 06:21-06:48/27 20:16 19:38-19:53/15 | 06:26 06:47-07:01/14 19:31 | 06:57 07:18-07:28/10 18:39 | 06:33 07:04-07:23/19 16:53 | 07:08 07:32-08:06/34 16:29 |
| 4 | 05:29 06:04-06:50/46 20:38 19:47-20:08/21 | 05:55 06:23-06:47/24 20:15 19:39-19:52/13 | 06:27 06:48-07:01/13 19:29 | 06:58 07:19-07:25/6 18:38 | 06:34 07:03-07:23/20 16:51 | 07:09 07:33-08:07/34 16:29 |
| 5 | 05:30 06:05-06:51/46 20:37 19:47-20:09/22 | 05:56 06:24-06:45/21 20:14 19:40-19:50/10 | 06:28 06:49-07:00/11 19:28 | 06:59 07:20-07:25/22 18:36 | 06:35 07:03-07:25/22 16:50 | 07:10 07:34-07:42/8 16:29 07:44-08:08/24 |
| 6 | 05:31 06:05-06:52/47 20:37 19:45-20:09/24 | 05:57 06:26-06:43/17 20:13 19:41-19:49/8 | 06:29 06:50-06:59/9 19:26 | 07:01 07:21-07:26/24 18:34 | 06:36 07:02-07:26/24 16:49 | 07:11 07:35-07:42/7 16:29 07:44-08:08/24 |
| 7 | 05:31 06:05-06:51/46 20:37 19:45-20:09/24 | 05:58 06:29-06:40/11 20:11 19:41-19:47/6 | 06:30 06:51-06:57/6 19:24 | 07:02 07:22-07:27/25 18:33 | 06:38 07:02-07:27/25 16:48 | 07:12 07:36-07:41/5 16:29 07:44-08:08/24 |
| 8 | 05:32 06:05-06:52/47 20:36 19:44-20:09/25 | 05:59 19:44-19:46/2 20:10 | 06:31 06:52-06:54/2 19:23 | 07:03 07:23-07:28/26 18:31 | 06:39 07:01-07:27/26 16:47 | 07:13 07:37-07:40/3 16:29 07:44-08:09/25 |
| 9 | 05:33 06:06-06:53/47 20:36 19:43-20:09/26 | 06:00 06:01 20:09 | 06:32 06:33 19:21 | 07:04 07:34-07:42/8 18:29 | 06:40 07:03-07:28/25 16:46 | 07:14 07:38-07:39/1 16:29 07:45-08:10/25 |
| 10 | 05:33 06:05-06:52/47 20:36 19:43-20:10/27 | 06:01 20:08 | 06:33 19:19 | 07:05 07:32-07:56/24 18:28 | 06:41 07:04-07:29/25 16:45 | 07:15 07:45-08:10/25 16:29 |
| 11 | 05:34 06:06-06:53/47 20:35 19:43-20:10/27 | 06:02 20:06 | 06:34 19:17 | 07:06 07:31-07:58/27 18:26 | 06:43 07:05-07:33/28 16:44 | 07:16 07:46-08:11/25 16:29 |
| 12 | 05:35 06:06-06:53/47 20:35 19:43-20:10/27 | 06:04 20:05 | 06:35 19:16 | 07:07 07:29-07:59/30 18:24 | 06:44 07:07-07:36/29 16:43 | 07:17 07:46-08:16/30 16:29 |
| 13 | 05:35 06:06-06:53/47 20:34 19:42-20:09/27 | 06:05 20:03 | 06:36 19:14 | 07:08 07:29-07:59/30 18:23 | 06:45 07:08-07:37/29 16:42 | 07:17 07:47-08:18/31 16:29 |
| 14 | 05:36 06:06-06:54/48 20:34 19:42-20:08/26 | 06:06 20:02 | 06:37 19:12 | 07:09 07:30-07:59/29 18:21 | 06:46 07:09-07:38/29 16:41 | 07:18 07:46-08:19/33 16:29 |
| 15 | 05:37 06:07-06:54/47 20:33 19:42-20:08/26 | 06:07 20:01 | 06:38 19:11 | 07:10 07:31-07:59/28 18:20 | 06:48 07:11-07:40/29 16:40 | 07:19 07:47-08:20/33 16:29 |
| 16 | 05:38 06:07-06:54/47 20:32 19:42-20:08/26 | 06:08 19:59 | 06:39 19:09 | 07:12 07:32-07:59/27 18:18 | 06:49 07:12-07:41/29 16:39 | 07:20 07:48-08:21/33 16:30 |
| 17 | 05:39 06:07-06:54/47 20:32 19:41-20:06/25 | 06:09 19:58 | 06:41 19:07 | 07:13 07:34-08:00/26 18:16 | 06:50 07:13-07:41/28 16:38 | 07:20 07:48-08:21/33 16:30 |
| 18 | 05:39 06:07-06:54/47 20:31 19:41-20:06/25 | 06:10 19:56 | 06:42 19:05 | 07:14 07:35-07:59/24 18:15 | 06:51 07:15-07:43/28 16:37 | 07:21 07:49-08:22/33 16:30 |
| 19 | 05:40 06:08-06:54/46 20:30 19:41-20:05/24 | 06:11 19:55 | 06:43 19:04 | 07:15 07:36-07:58/22 18:13 | 06:52 07:16-07:43/27 16:36 | 07:22 07:49-08:24/35 16:30 |
| 20 | 05:41 06:08-06:55/47 20:30 19:41-20:05/24 | 06:12 06:49-06:53/4 19:53 | 06:44 19:02 | 07:16 07:37-07:59/22 18:12 | 06:54 07:17-07:43/26 16:36 | 07:22 07:49-08:24/35 16:31 |
| 21 | 05:42 06:09-06:55/46 20:29 19:41-20:04/23 | 06:13 06:45-06:57/12 19:52 | 06:45 07:22-07:27/5 19:00 | 07:17 07:38-08:00/22 18:10 | 06:55 07:18-07:43/25 16:35 | 07:23 07:50-08:25/35 16:31 |
| 22 | 05:43 06:09-06:55/46 20:28 19:41-20:04/23 | 06:14 06:43-06:58/15 19:50 | 06:46 07:18-07:30/12 18:58 | 07:18 07:40-08:01/21 18:09 | 06:56 07:20-07:44/24 16:34 | 07:23 07:50-08:25/35 16:32 |
| 23 | 05:44 06:10-06:55/45 20:27 19:40-20:02/22 | 06:15 06:42-06:59/17 19:49 | 06:47 07:16-07:32/16 18:57 | 07:20 07:41-08:01/20 18:07 | 06:57 07:21-07:44/23 16:34 | 07:24 07:51-08:26/35 16:32 |
| 24 | 05:45 06:10-06:54/44 20:26 19:39-20:01/22 | 06:16 06:41-07:00/19 19:47 | 06:48 07:14-07:32/18 18:55 | 07:21 07:42-08:01/19 18:06 | 06:58 07:22-07:44/22 16:33 | 07:24 07:51-08:26/35 16:33 |
| 25 | 05:46 06:10-06:54/44 20:26 19:38-20:01/23 | 06:17 06:40-07:01/21 19:46 | 06:49 07:13-07:33/20 18:53 | 06:22 06:43-07:00/17 17:05 | 06:59 07:23-07:44/21 16:33 | 07:25 07:52-08:26/34 16:33 |
| 26 | 05:47 06:11-06:54/43 20:25 19:38-20:00/22 | 06:18 06:39-07:01/22 19:44 | 06:50 07:12-07:33/21 18:51 | 06:23 06:45-07:01/16 17:03 | 07:01 07:24-07:44/20 16:32 | 07:25 07:53-08:26/33 16:34 |
| 27 | 05:48 06:12-06:53/41 20:24 19:38-19:59/21 | 06:19 06:40-07:02/22 19:43 | 06:51 07:11-07:33/22 18:50 | 06:24 06:46-07:00/14 17:02 | 07:02 07:26-07:45/19 16:31 | 07:25 07:53-08:26/33 16:35 |
| 28 | 05:48 06:13-06:53/40 20:23 19:38-19:58/20 | 06:20 06:41-07:02/21 19:41 | 06:52 07:12-07:33/21 18:48 | 06:26 06:47-06:59/12 17:00 | 07:03 07:27-07:44/17 16:31 | 07:26 07:53-08:26/33 16:35 |
| 29 | 05:49 06:14-06:53/39 20:22 19:37-19:57/20 | 06:21 06:42-07:02/20 19:39 | 06:53 07:13-07:32/19 18:46 | 06:27 06:48-06:57/9 16:59 | 07:04 07:28-08:03/35 16:31 | 07:26 07:53-08:26/33 16:36 |
| 30 | 05:50 06:15-06:52/37 20:21 19:37-19:57/20 | 06:22 06:43-07:02/19 19:38 | 06:54 07:14-07:31/17 18:45 | 06:28 06:50-06:57/7 16:58 | 07:05 07:29-08:04/35 16:30 | 07:26 07:54-08:25/31 16:37 |
| 31 | 05:51 06:17-06:51/34 20:20 19:37-19:56/19 | 06:23 06:44-07:02/18 19:36 | 06:29 06:51-06:54/3 16:56 | 06:29 06:51-06:54/3 16:56 | 07:08-07:18/10 345 | 07:26 07:55-08:25/30 16:38 |
| Potential sun hours | 461 | 429 | 375 | 345 | 296 | 286 |
| Sum of minutes with flicker | 2112 | 459 | 259 | 522 | 793 | 994 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 26 - San Paolo di Civitate

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1 | 07:27 16:39 | 07:13 17:14 | 06:36 17:49 | 06:44 19:24 | 05:57 19:57 | 05:28 20:27 | 05:28 20:38 | 05:52 20:19 | 06:24 19:34 | 06:55 18:43 | 06:30 16:55 | 07:06 16:30 |
| 2 | 07:27 16:40 | 07:12 17:15 | 06:34 17:50 | 06:42 19:25 | 05:56 19:58 | 05:27 20:28 | 05:28 20:38 | 05:53 20:17 | 06:25 19:33 | 06:56 18:41 | 06:32 16:54 | 07:07 16:30 |
| 3 | 07:27 16:41 | 07:11 17:16 | 06:33 17:51 | 06:41 19:26 | 05:55 19:59 | 05:27 20:29 | 05:29 20:38 | 05:54 20:16 | 06:26 19:31 | 06:57 18:39 | 06:33 16:53 | 07:08 16:29 |
| 4 | 07:27 16:41 | 07:10 17:17 | 06:31 17:52 | 06:39 19:27 | 05:53 20:00 | 05:26 20:29 | 05:29 20:38 | 05:55 20:15 | 06:27 19:29 | 06:58 18:38 | 06:34 16:51 | 07:09 16:29 |
| 5 | 07:27 16:42 | 07:09 17:19 | 06:30 17:53 | 06:37 19:28 | 05:52 20:01 | 05:26 20:30 | 05:30 20:37 | 05:56 20:14 | 06:28 19:28 | 06:59 18:36 | 06:35 16:50 | 07:10 16:29 |
| 6 | 07:27 16:43 | 07:07 17:20 | 06:28 17:55 | 06:36 19:29 | 05:51 20:02 | 05:25 20:31 | 05:31 20:37 | 05:57 20:13 | 06:29 19:26 | 07:01 18:34 | 06:37 16:49 | 07:11 16:29 |
| 7 | 07:27 16:44 | 07:06 17:21 | 06:26 17:56 | 06:34 19:30 | 05:50 20:03 | 05:25 20:31 | 05:31 20:37 | 05:58 20:11 | 06:30 19:24 | 07:02 18:33 | 06:38 16:48 | 07:12 16:29 |
| 8 | 07:27 16:45 | 07:05 17:23 | 06:25 17:57 | 06:32 19:31 | 05:48 20:04 | 05:25 20:32 | 05:32 20:36 | 05:59 20:10 | 06:31 19:23 | 07:03 18:31 | 06:39 16:47 | 07:13 16:29 |
| 9 | 07:27 16:46 | 07:04 17:24 | 06:23 17:58 | 06:31 19:33 | 05:47 20:05 | 05:25 20:33 | 05:32 20:36 | 06:00 20:09 | 06:32 19:21 | 07:04 18:29 | 06:40 16:46 | 07:14 16:29 |
| 10 | 07:26 16:47 | 07:03 17:25 | 06:21 17:59 | 06:29 19:34 | 05:46 20:06 | 05:24 20:33 | 05:33 20:36 | 06:01 20:08 | 06:33 19:19 | 07:05 18:28 | 06:41 16:45 | 07:15 16:29 |
| 11 | 07:26 16:48 | 07:02 17:26 | 06:20 18:00 | 06:27 19:35 | 05:45 20:07 | 05:24 20:34 | 05:34 20:35 | 06:02 20:06 | 06:34 19:17 | 07:06 18:26 | 06:43 16:44 | 07:16 16:29 |
| 12 | 07:26 16:49 | 07:00 17:28 | 06:18 18:02 | 06:26 19:36 | 05:44 20:08 | 05:24 20:34 | 05:35 20:35 | 06:03 20:05 | 06:35 19:16 | 07:07 18:24 | 06:44 16:43 | 07:17 16:29 |
| 13 | 07:26 16:50 | 06:59 17:29 | 06:16 18:03 | 06:24 19:37 | 05:43 20:09 | 05:24 20:35 | 05:35 20:34 | 06:05 20:04 | 06:36 19:14 | 07:08 18:23 | 06:45 16:42 | 07:17 16:29 |
| 14 | 07:25 16:52 | 06:58 17:30 | 06:15 18:04 | 06:22 19:38 | 05:42 20:11 | 05:24 20:35 | 05:36 20:34 | 06:06 20:02 | 06:37 19:12 | 07:09 18:21 | 06:46 16:41 | 07:18 16:29 |
| 15 | 07:25 16:53 | 06:56 17:31 | 06:13 18:05 | 06:21 19:39 | 05:41 20:12 | 05:24 20:36 | 05:37 20:33 | 06:07 20:01 | 06:38 19:11 | 07:10 18:20 | 06:48 16:40 | 07:19 16:29 |
| 16 | 07:24 16:54 | 06:55 17:33 | 06:11 18:06 | 06:19 19:40 | 05:40 20:13 | 05:24 20:36 | 05:38 20:33 | 06:08 19:59 | 06:40 19:09 | 07:12 18:18 | 06:49 16:39 | 07:20 16:29 |
| 17 | 07:24 16:55 | 06:54 17:34 | 06:10 18:07 | 06:18 19:41 | 05:39 20:14 | 05:24 20:36 | 05:39 20:32 | 06:09 19:58 | 06:41 19:07 | 07:13 18:16 | 06:50 16:38 | 07:20 16:30 |
| 18 | 07:23 16:56 | 06:52 17:35 | 06:08 18:08 | 06:16 19:42 | 05:38 20:15 | 05:24 20:37 | 05:39 20:31 | 06:10 19:56 | 06:42 19:05 | 07:14 18:15 | 06:51 16:37 | 07:21 16:30 |
| 19 | 07:23 16:57 | 06:51 17:36 | 06:06 18:09 | 06:15 19:44 | 05:37 20:16 | 05:24 20:37 | 05:40 20:31 | 06:11 19:55 | 06:43 19:04 | 07:15 18:13 | 06:52 16:36 | 07:22 16:30 |
| 20 | 07:22 16:59 | 06:49 17:38 | 06:04 18:11 | 06:13 19:45 | 05:36 20:16 | 05:24 20:37 | 05:41 20:30 | 06:12 19:53 | 06:44 19:02 | 07:16 18:12 | 06:54 16:36 | 07:22 16:31 |
| 21 | 07:22 17:00 | 06:48 17:39 | 06:03 18:12 | 06:12 19:46 | 05:35 20:17 | 05:24 20:37 | 05:42 20:29 | 06:13 19:52 | 06:45 19:00 | 07:17 18:10 | 06:55 16:35 | 07:23 16:31 |
| 22 | 07:21 17:01 | 06:47 17:40 | 06:01 18:13 | 06:10 19:47 | 05:34 20:18 | 05:25 20:38 | 05:43 20:28 | 06:14 19:50 | 06:46 18:58 | 07:19 18:09 | 06:56 16:34 | 07:23 16:32 |
| 23 | 07:20 17:02 | 06:45 17:41 | 05:59 18:14 | 06:09 19:48 | 05:33 20:19 | 05:25 20:38 | 05:44 20:27 | 06:15 19:49 | 06:47 18:57 | 07:20 18:07 | 06:57 16:34 | 07:24 16:32 |
| 24 | 07:20 17:04 | 06:44 17:43 | 05:58 18:15 | 06:07 19:49 | 05:33 20:20 | 05:25 20:38 | 05:45 20:26 | 06:16 19:47 | 06:48 18:55 | 07:21 18:06 | 06:58 16:33 | 07:24 16:33 |
| 25 | 07:19 17:05 | 06:42 17:44 | 05:56 18:16 | 06:06 19:50 | 05:32 20:21 | 05:25 20:38 | 05:46 20:26 | 06:17 19:46 | 06:49 18:53 | 06:22 17:05 | 06:59 16:32 | 07:25 16:33 |
| 26 | 07:18 17:06 | 06:41 17:45 | 05:54 18:17 | 06:04 19:51 | 05:31 20:22 | 05:26 20:38 | 05:47 20:25 | 06:18 19:44 | 06:50 18:51 | 06:23 17:03 | 07:01 16:32 | 07:25 16:34 |
| 27 | 07:17 17:07 | 06:39 17:46 | 05:53 18:18 | 06:03 19:52 | 05:30 20:23 | 05:26 20:38 | 05:47 20:24 | 06:19 19:43 | 06:51 18:50 | 06:24 17:02 | 07:02 16:31 | 07:26 16:35 |
| 28 | 07:16 17:09 | 06:37 17:47 | 05:51 18:19 | 06:01 19:53 | 05:30 20:24 | 05:26 20:38 | 05:48 20:23 | 06:20 19:41 | 06:52 18:48 | 06:26 17:00 | 07:03 16:31 | 07:26 16:35 |
| 29 | 07:16 17:10 | | 06:49 19:21 | 06:00 19:55 | 05:29 20:25 | 05:27 20:38 | 05:49 20:22 | 06:21 19:39 | 06:53 18:46 | 06:27 16:59 | 07:04 16:31 | 07:26 16:36 |
| 30 | 07:15 17:11 | | 06:47 19:22 | 05:59 19:56 | 05:29 20:25 | 05:27 20:38 | 05:50 20:21 | 06:22 19:38 | 06:54 18:45 | 06:28 16:58 | 07:05 16:30 | 07:26 16:37 |
| 31 | 07:14 17:12 | | 06:46 19:23 | | 05:28 20:26 | | 05:51 20:20 | 06:23 19:36 | | 06:29 16:56 | | 07:27 16:38 |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 | 461 | 429 | 375 | 344 | 296 | 285 |
| Sum of minutes with flicker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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-Last time (hh:mm) with flicker/Minutes with flicker
Sun set (hh:mm) First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 27 - San Paolo di Civitate

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June |
|-----------------------------|----------------|----------------|-------------------------------|-------------------------------|--|--------------------------------|
| 1 | 07:27 16:39 | 07:13 17:14 | 06:36 17:49 | 06:44 19:24 | 05:57 06:17-06:49/32 19:57 08:07-09:29/82 | 05:28 06:18-09:51/213 20:27 |
| 2 | 07:27 16:40 | 07:12 17:15 | 06:34 17:50 | 06:42 19:25 | 05:56 06:16-06:48/32 19:58 08:04-09:30/86 | 05:27 06:15-09:52/217 20:28 |
| 3 | 07:27 16:40 | 07:11 17:16 | 06:33 17:51 | 06:41 06:59-07:01/2 19:26 | 05:55 06:14-06:47/33 19:59 08:02-09:32/90 | 05:27 06:13-09:53/220 20:29 |
| 4 | 07:27 16:41 | 07:10 17:17 | 06:31 17:52 | 06:39 06:58-07:03/5 19:27 | 05:53 07:10-07:31/21 08:00-09:34/94 20:00 06:13-06:47/34 | 05:26 06:06-09:52/226 20:29 |
| 5 | 07:27 16:42 | 07:09 17:19 | 06:30 17:53 | 06:37 06:56-07:04/8 19:28 | 05:52 07:06-07:36/30 07:58-09:36/98 20:01 06:14-06:46/32 | 05:26 06:05-09:53/228 20:30 |
| 6 | 07:27 16:43 | 07:07 17:20 | 06:28 17:55 | 06:36 06:54-07:04/10 19:29 | 05:51 07:02-07:40/38 07:57-09:37/100 20:02 06:14-06:45/31 | 05:26 06:04-09:53/229 20:31 |
| 7 | 07:27 16:44 | 07:06 17:21 | 06:26 17:56 | 06:34 06:53-07:05/12 19:30 | 05:50 06:59-07:41/42 07:54-09:38/104 20:03 06:14-06:43/29 | 05:25 06:02-09:53/231 20:31 |
| 8 | 07:27 16:45 | 07:05 17:23 | 06:25 06:44-06:47/3 17:57 | 06:32 06:51-07:05/14 19:32 | 05:48 06:56-07:44/48 07:53-09:39/106 20:04 06:14-06:42/28 | 05:25 06:01-09:53/232 20:32 |
| 9 | 07:27 16:46 | 07:04 17:24 | 06:23 06:42-06:48/6 17:58 | 06:31 06:49-07:04/15 19:33 | 05:47 06:54-07:46/52 07:52-09:40/108 20:05 06:15-06:40/25 | 05:25 06:01-09:53/232 20:33 |
| 10 | 07:26 16:47 | 07:03 17:25 | 06:21 06:40-06:48/8 17:59 | 06:29 06:48-07:04/16 19:34 | 05:46 06:52-07:48/56 07:50-09:41/111 20:06 06:16-06:37/21 | 05:24 06:00-09:54/234 20:33 |
| 11 | 07:26 16:48 | 07:02 17:26 | 06:20 06:39-06:50/11 18:00 | 06:27 06:46-07:03/17 19:35 | 05:45 06:51-09:42/171 20:07 06:17-06:36/19 | 05:24 06:00-09:54/234 20:34 |
| 12 | 07:26 16:49 | 07:00 17:28 | 06:18 06:37-06:49/12 18:02 | 06:26 06:45-07:03/18 19:36 | 05:44 06:49-09:43/174 20:08 06:18-06:34/16 | 05:24 06:00-09:54/234 20:34 |
| 13 | 07:26 16:51 | 06:59 17:29 | 06:16 06:35-06:49/14 18:03 | 06:24 06:43-07:01/18 19:37 | 05:43 06:48-09:44/176 20:09 06:20-06:33/13 | 05:24 06:00-09:55/235 20:35 |
| 14 | 07:25 16:52 | 06:58 17:30 | 06:15 06:34-06:49/15 18:04 | 06:23 06:41-06:59/18 19:38 | 05:42 06:47-09:45/178 20:11 06:22-06:30/8 | 05:24 06:00-09:55/235 20:35 |
| 15 | 07:25 16:53 | 06:56 17:32 | 06:13 06:32-06:48/16 18:05 | 06:21 06:40-06:58/18 19:39 | 05:41 06:45-09:45/180 20:12 | 05:24 05:59-09:55/236 20:36 |
| 16 | 07:24 16:54 | 06:55 17:33 | 06:11 06:30-06:47/17 18:06 | 06:19 06:38-06:53/15 19:40 | 05:40 06:44-09:46/182 20:13 | 05:24 05:59-09:55/236 20:36 |
| 17 | 07:24 16:55 | 06:54 17:34 | 06:10 06:30-06:47/17 18:07 | 06:18 06:37-06:54/17 19:41 | 05:39 06:38-09:46/188 20:14 | 05:24 05:59-09:55/236 20:36 |
| 18 | 07:23 16:56 | 06:52 17:35 | 06:08 06:31-06:45/14 18:08 | 06:16 06:35-06:53/18 19:42 | 05:38 06:34-09:47/193 20:15 | 05:24 05:59-09:55/236 20:37 |
| 19 | 07:23 16:57 | 06:51 17:37 | 06:06 06:33-06:42/9 18:09 | 06:15 06:34-06:53/19 19:44 | 05:37 06:32-09:48/196 20:16 | 05:24 05:59-09:55/236 20:37 |
| 20 | 07:22 16:59 | 06:49 17:38 | 06:05 18:11 | 06:13 06:32-06:51/19 19:45 | 05:36 06:30-09:48/198 20:16 | 05:24 05:59-09:55/236 20:37 |
| 21 | 07:22 17:00 | 06:48 17:39 | 06:03 18:12 | 06:12 06:31-06:51/20 19:46 | 05:35 06:28-09:49/201 20:17 | 05:24 05:59-09:55/236 20:37 |
| 22 | 07:21 17:01 | 06:47 17:40 | 06:01 18:13 | 06:10 06:29-06:49/20 19:47 | 05:34 06:27-09:49/202 20:18 | 05:25 06:00-09:55/235 20:38 |
| 23 | 07:20 17:02 | 06:45 17:41 | 05:59 18:14 | 06:09 06:28-06:48/20 19:48 | 05:33 06:25-09:49/204 20:19 | 05:25 06:00-09:56/236 20:38 |
| 24 | 07:20 17:04 | 06:44 17:43 | 05:58 18:15 | 06:07 06:26-06:48/22 19:49 | 05:33 06:25-09:50/205 20:20 | 05:25 06:00-09:56/236 20:38 |
| 25 | 07:19 17:05 | 06:42 17:44 | 05:56 18:16 | 06:06 06:25-06:49/24 19:50 | 05:32 06:23-09:50/207 20:21 | 05:25 06:00-09:56/236 20:38 |
| 26 | 07:18 17:06 | 06:41 17:45 | 05:54 18:17 | 06:04 06:24-06:50/26 19:51 | 05:31 06:22-09:50/208 20:22 | 05:26 06:01-09:57/236 20:38 |
| 27 | 07:17 17:07 | 06:39 17:46 | 05:53 18:18 | 06:03 06:22-06:49/27 19:52 | 05:30 06:22-09:51/209 20:23 | 05:26 06:01-09:57/236 20:38 |
| 28 | 07:16 17:09 | 06:37 17:47 | 05:51 18:19 | 06:01 06:21-06:49/28 19:53 | 05:30 06:21-09:50/209 20:24 | 05:27 06:01-09:57/236 20:38 |
| 29 | 07:16 17:10 | | 06:49 19:21 | 06:00 06:19-06:49/30 19:55 | 05:29 06:20-09:51/211 20:25 | 05:27 06:03-09:58/235 20:38 |
| 30 | 07:15 17:11 | | 06:47 19:22 | 05:59 06:18-06:49/31 19:56 | 05:29 06:19-09:51/212 20:25 | 05:27 06:03-09:57/234 20:38 |
| 31 | 07:14 17:12 | | 06:46 19:23 | | 05:28 06:19-09:52/213 20:26 | |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 |
| Sum of minutes with flicker | 0 | 0 | 142 | 889 | 5736 | 6972 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 27 - San Paolo di Civitate

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|------|------|------|------|------|-------|------|------|------|------|------|
| 4.12 | 4.66 | 5.30 | 6.72 | 8.25 | 9.35 | 10.16 | 9.45 | 7.64 | 5.82 | 4.65 | 3.82 |

Operational time

| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | July | August | September | October | November | December | |
|----|--|--|-------------------------------|-------------------------------|----------------|----------------|----------|
| 1 | 05:28 06:04-09:58/234 20:38 | 05:52 07:01-09:54/173 20:19 06:28-06:46/18 | 06:24 06:45-07:02/17 19:34 | 06:55 07:16-07:29/13 18:43 | 06:30 16:55 | 07:06 16:30 | |
| 2 | 05:28 06:04-09:58/234 20:38 | 05:53 07:02-07:59/57 08:00-09:53/113 20:17 06:27-06:47/20 | 06:25 06:46-07:02/16 19:33 | 06:56 07:17-07:28/11 18:41 | 06:32 16:54 | 07:07 16:30 | |
| 3 | 05:29 06:06-09:58/232 20:38 | 05:54 07:04-07:58/54 08:01-09:52/111 20:16 06:26-06:49/23 | 06:26 06:47-07:02/15 19:31 | 06:57 07:18-07:27/9 18:39 | 06:33 16:53 | 07:08 16:29 | |
| 4 | 05:29 06:06-09:58/232 20:38 | 05:55 07:06-07:56/50 08:03-09:50/107 20:15 06:25-06:51/26 | 06:27 06:48-07:02/14 19:29 | 06:58 07:19-07:26/7 18:38 | 06:34 16:51 | 07:09 16:29 | |
| 5 | 05:30 06:07-09:59/232 20:37 | 05:56 07:08-07:54/46 08:04-09:49/105 20:14 06:25-06:53/28 | 06:28 06:49-07:01/12 19:28 | 06:59 07:20-07:24/4 18:36 | 06:35 16:50 | 07:10 16:29 | |
| 6 | 05:31 06:09-09:59/230 20:37 | 05:57 07:10-07:51/41 08:06-09:48/102 20:13 06:24-06:54/30 | 06:29 06:50-07:00/10 19:26 | 07:01 07:21-07:22/1 18:34 | 06:37 16:49 | 07:11 16:29 | |
| 7 | 05:31 06:10-09:59/229 20:37 | 05:58 07:13-07:48/35 08:07-09:46/99 20:11 06:24-06:55/31 | 06:30 06:51-06:59/8 19:24 | 07:02 18:33 | 06:38 16:48 | 07:12 16:29 | |
| 8 | 05:32 06:12-09:59/227 20:36 | 05:59 07:17-07:44/27 08:09-09:45/96 20:10 06:23-06:56/33 | 06:31 06:52-06:57/5 19:23 | 07:03 18:31 | 06:39 16:47 | 07:13 16:29 | |
| 9 | 05:33 06:16-09:59/223 20:36 | 06:00 07:22-07:39/17 08:10-09:43/93 20:09 06:23-06:56/33 | 06:32 06:53-06:55/2 19:21 | 07:04 18:29 | 06:40 16:46 | 07:14 16:29 | |
| 10 | 05:33 06:21-09:59/218 20:36 | 06:01 06:24-06:57/33 20:08 08:12-09:41/89 | 06:33 19:19 | 07:05 18:28 | 06:41 16:45 | 07:15 16:29 | |
| 11 | 05:34 06:25-10:00/215 20:35 | 06:02 06:25-06:57/32 20:06 08:14-09:39/85 | 06:34 19:17 | 07:06 18:26 | 06:43 16:44 | 07:16 16:29 | |
| 12 | 05:35 06:27-10:00/213 20:35 | 06:04 06:26-06:57/31 20:05 08:16-09:37/81 | 06:35 19:16 | 07:07 18:24 | 06:44 16:43 | 07:17 16:29 | |
| 13 | 05:35 06:27-09:59/212 20:34 | 06:05 06:27-06:57/30 20:04 08:18-09:33/75 | 06:36 19:14 | 07:08 18:23 | 06:45 16:42 | 07:17 16:29 | |
| 14 | 05:36 06:28-10:00/212 20:34 | 06:06 06:28-06:57/29 20:02 08:21-09:30/69 | 06:37 19:12 | 07:09 18:21 | 06:46 16:41 | 07:18 16:29 | |
| 15 | 05:37 06:30-10:00/210 20:33 | 06:07 06:29-06:57/28 20:01 08:24-09:27/63 | 06:39 19:11 | 07:11 18:20 | 06:48 16:40 | 07:19 16:29 | |
| 16 | 05:38 06:31-10:00/209 20:33 | 06:08 06:30-06:57/27 19:59 08:27-09:23/56 | 06:40 19:09 | 07:12 18:18 | 06:49 16:39 | 07:20 16:30 | |
| 17 | 05:39 06:31-09:59/208 20:32 | 06:09 06:30-06:55/25 19:58 08:31-09:18/47 | 06:41 19:07 | 07:13 18:16 | 06:50 16:38 | 07:20 16:30 | |
| 18 | 05:39 06:32-09:59/207 20:31 | 06:10 06:31-06:55/24 19:56 08:37-09:12/35 | 06:42 19:05 | 07:14 18:15 | 06:51 16:37 | 07:21 16:30 | |
| 19 | 05:40 06:33-09:59/206 20:30 | 06:11 06:32-06:54/22 19:55 08:45-09:03/18 | 06:43 19:04 | 07:15 18:13 | 06:52 16:36 | 07:22 16:30 | |
| 20 | 05:41 06:35-09:59/204 20:30 | 06:12 06:33-06:53/20 19:53 | 06:44 19:02 | 07:16 18:12 | 06:54 16:36 | 07:22 16:31 | |
| 21 | 05:42 06:36-09:59/203 20:29 | 06:13 06:34-06:54/20 19:52 | 06:45 19:00 | 07:17 18:10 | 06:55 16:35 | 07:23 16:31 | |
| 22 | 05:43 06:38-09:59/201 20:28 | 06:14 06:35-06:55/20 19:50 | 06:46 18:58 | 07:19 18:09 | 06:56 16:34 | 07:23 16:32 | |
| 23 | 05:44 06:40-09:59/199 20:27 | 06:15 06:36-06:55/19 19:49 | 06:47 18:57 | 07:20 18:07 | 06:57 16:34 | 07:24 16:32 | |
| 24 | 05:45 06:41-09:58/197 20:26 | 06:16 06:37-06:56/19 19:47 | 06:48 07:18-07:24/6 18:55 | 07:21 18:06 | 06:58 16:33 | 07:24 16:33 | |
| 25 | 05:46 06:43-09:58/195 20:26 | 06:17 06:38-06:56/18 19:46 | 06:49 07:14-07:26/12 18:53 | 07:22 17:05 | 06:59 16:33 | 07:25 16:33 | |
| 26 | 05:47 06:46-09:57/191 20:25 | 06:18 06:39-06:55/16 19:44 | 06:50 07:12-07:28/16 18:51 | 07:23 17:03 | 07:01 16:32 | 07:25 16:34 | |
| 27 | 05:48 06:50-09:57/187 20:24 | 06:19 06:40-06:55/15 19:43 | 06:51 07:11-07:28/17 18:50 | 07:24 17:02 | 07:02 16:31 | 07:26 16:35 | |
| 28 | 05:48 06:55-09:56/181 20:23 | 06:20 06:41-06:59/18 19:41 | 06:52 07:12-07:29/17 18:48 | 07:25 17:00 | 07:03 16:31 | 07:26 16:35 | |
| 29 | 05:49 06:57-09:56/179 20:22 | 06:21 06:42-07:00/18 19:39 | 06:53 07:13-07:29/16 18:46 | 07:26 16:59 | 07:04 16:31 | 07:26 16:36 | |
| 30 | 05:50 06:58-09:55/177 20:21 | 06:22 06:43-07:01/18 19:38 | 06:54 07:14-07:29/15 18:45 | 07:27 16:58 | 07:05 16:30 | 07:26 16:37 | |
| 31 | 05:51 06:59-09:54/175 20:20 | 06:23 06:44-07:02/18 19:36 | | 06:29 16:56 | | 07:27 16:38 | |
| | Potential sun hours Sum of minutes with flicker | 461 6501 | 429 2686 | 375 198 | 344 45 | 296 0 | 285 0 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 28 - San Paolo di Civitate
Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

Table with 13 columns: N, NNE, ENE, E, ESE, SSE, S, SSW, WSW, W, WNW, NNW, Sum. Values: 985, 358, 99, 45, 45, 1,532, 636, 546, 815, 367, 1,344, 1,988, 8,760

Main data table with columns for months (January to June) and rows for each day of the month. Columns contain time ranges and operational status. Summary rows at the bottom show 'Potential sun hours' and 'Sum of minutes with flicker' for each month.

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-Last time (hh:mm) with flicker/Minutes with flicker
Sun set (hh:mm) First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker



SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori WTG: 28 - San Paolo di Civitate
 Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

| | | | | | | | | | | | | |
|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|-------|-------|-------|
| N | NNE | ENE | E | ESE | SSE | S | SSW | WSW | W | WNW | NNW | Sum |
| 985 | 358 | 99 | 45 | 45 | 1,532 | 636 | 546 | 815 | 367 | 1,344 | 1,988 | 8,760 |

| | July | August | September | October | November | December | |
|----|---|---|--------------------------------|---|--|--|-------------|
| 1 | 05:28 05:51-06:23/32 20:38 07:01-08:10/69 | 05:52 06:15-06:23/8 20:19 11:03-11:57/54 | 06:24 10:49-13:41/172 19:34 | 06:55 08:00-09:56/116 18:43 10:50-13:17/147 | 06:30 07:58-09:25/87 16:55 07:03-07:54/51 | 07:06 14:40-15:26/46 10:28-11:34/66 16:30 07:34-09:14/100 | |
| 2 | 05:28 05:51-06:23/32 20:38 07:01-08:09/68 | 05:53 06:16-06:20/4 20:17 11:03-11:59/56 | 06:25 10:49-13:41/172 19:33 | 06:56 07:59-10:00/121 18:41 10:50-13:15/145 | 06:32 07:59-09:26/87 16:54 07:03-07:55/52 | 07:07 14:40-15:27/47 10:27-11:35/68 16:30 07:35-09:14/99 | |
| 3 | 05:29 05:52-06:24/32 20:38 07:02-08:10/68 | 05:54 11:02-12:01/59 20:16 | 06:26 10:49-13:40/171 19:31 | 06:57 07:59-10:03/124 18:39 10:51-13:14/143 | 06:33 07:02-07:56/54 16:53 07:59-09:25/86 | 07:08 14:41-15:27/46 10:27-11:36/69 16:29 07:36-09:14/98 | |
| 4 | 05:29 05:53-06:25/32 20:38 07:03-08:09/66 | 05:55 11:02-12:03/61 20:15 | 06:27 10:48-13:40/172 19:29 | 06:58 07:59-10:05/126 18:38 10:51-13:12/141 | 06:34 07:02-09:25/143 16:51 | 07:09 14:41-15:27/46 10:26-11:37/71 16:29 07:38-09:13/95 | |
| 5 | 05:30 05:53-06:25/32 20:37 07:04-08:09/65 | 05:56 11:01-12:05/64 20:14 | 06:28 10:48-13:39/171 19:28 | 06:59 07:58-10:07/129 18:36 10:52-13:11/139 | 06:35 07:02-09:25/143 16:50 | 07:10 14:41-15:28/47 10:25-11:38/73 16:29 07:39-09:13/94 | |
| 6 | 05:31 05:54-06:26/32 20:37 07:05-08:09/64 | 05:57 11:01-12:08/67 20:13 | 06:29 10:48-13:39/171 19:26 | 07:01 07:58-10:09/131 18:34 10:52-13:09/137 | 06:37 07:01-09:25/144 16:49 | 07:11 14:42-15:28/46 10:25-11:39/74 16:29 07:40-09:13/93 | |
| 7 | 05:31 05:54-06:25/31 20:37 07:06-08:07/61 | 05:58 11:00-12:10/70 20:11 | 06:30 10:48-13:38/170 19:24 | 07:02 07:58-10:11/133 18:33 10:53-13:08/135 | 06:38 07:00-09:24/144 16:48 | 07:12 14:42-15:28/46 10:25-11:40/75 16:29 07:42-09:13/91 | |
| 8 | 05:32 05:55-06:26/31 20:36 07:07-08:07/60 | 05:59 11:00-12:13/73 20:10 | 06:31 10:47-13:38/171 19:23 | 07:03 07:58-10:12/134 07:37-07:44/7 18:31 10:54-13:06/132 | 06:39 07:02-09:24/142 16:47 | 07:13 14:43-15:31/46 10:24-11:41/77 16:29 07:44-09:13/89 | |
| 9 | 05:33 05:56-06:27/31 20:36 07:08-08:07/59 | 06:00 11:00-12:16/76 20:09 | 06:32 10:47-13:37/170 19:21 | 07:04 07:58-10:13/135 07:34-07:47/13 18:29 10:54-13:05/131 | 06:40 07:03-09:24/141 16:46 14:57-15:01/4 | 07:14 14:43-15:29/46 10:24-11:42/78 16:29 07:46-09:12/86 | |
| 10 | 05:33 05:56-06:27/31 20:36 07:09-08:05/56 | 06:02 10:59-12:19/80 20:08 | 06:33 08:32-09:13/41 19:19 | 07:05 07:58-10:15/137 07:33-07:49/16 18:28 10:55-13:03/128 | 06:41 07:04-09:23/139 16:45 14:51-15:07/16 | 07:15 14:44-15:30/46 10:24-11:43/79 16:29 07:48-09:12/84 | |
| 11 | 05:34 05:57-06:28/31 07:11-08:04/53 20:35 11:18-11:25/7 | 06:03 10:59-12:23/84 20:06 | 06:34 08:27-09:15/48 19:18 | 07:06 08:00-10:17/137 07:31-07:50/19 18:26 10:57-13:02/125 | 06:43 07:05-09:23/138 16:44 14:48-15:09/21 | 07:16 14:44-15:30/46 10:25-11:44/79 16:29 08:27-09:12/45 07:49-08:26/37 | |
| 12 | 05:35 05:58-06:28/30 07:12-08:04/52 20:35 11:17-11:27/10 | 06:04 10:58-12:27/89 20:05 | 06:35 08:23-09:17/54 19:16 | 07:07 08:00-10:18/138 07:30-07:51/21 18:24 10:58-13:01/123 | 06:44 07:07-09:23/136 16:43 14:47-15:12/25 | 07:17 14:45-15:31/46 10:25-11:45/80 16:29 08:28-09:13/45 07:49-08:26/37 | |
| 13 | 05:35 05:58-06:28/30 07:13-08:02/49 20:34 11:15-11:28/13 | 06:05 10:58-12:32/94 20:04 | 06:36 08:20-09:19/59 19:14 | 07:08 08:00-10:19/139 07:29-07:51/22 18:23 10:59-12:59/120 | 06:45 07:08-09:22/134 16:42 14:45-15:13/28 | 07:18 14:45-15:31/46 10:25-11:45/80 16:29 08:29-09:13/44 07:50-08:27/37 | |
| 14 | 05:36 05:59-06:29/30 07:15-08:00/45 20:34 11:14-11:30/16 | 06:06 10:57-12:39/102 20:02 | 06:38 08:18-09:21/63 19:12 | 07:09 08:01-10:19/138 07:30-07:51/21 18:21 11:00-12:57/117 | 06:46 07:09-09:21/132 16:41 14:48-15:14/30 | 07:19 14:46-15:32/46 10:25-11:46/81 16:29 08:29-09:12/43 07:50-08:26/36 | |
| 15 | 05:37 06:00-06:29/29 07:17-07:59/42 20:33 11:13-11:32/19 | 06:07 13:14-13:33/19 20:01 | 06:39 08:16-09:22/66 19:11 | 07:11 08:02-10:20/138 07:31-07:51/20 18:20 11:01-12:55/114 | 06:48 07:11-09:22/131 16:40 14:43-15:16/33 | 07:20 14:47-15:32/46 10:26-11:47/81 16:29 08:30-09:12/42 07:51-08:27/36 | |
| 16 | 05:38 06:01-06:30/29 07:20-07:57/37 20:33 11:13-11:33/20 | 06:08 10:55-13:36/161 19:59 | 06:40 08:14-09:23/69 19:09 | 07:12 08:02-10:21/139 07:32-07:50/18 18:18 11:02-12:53/111 | 06:49 07:12-09:21/129 16:39 14:42-15:17/35 | 07:21 14:47-15:32/45 10:26-11:47/81 16:30 08:32-09:13/41 07:52-08:27/35 | |
| 17 | 05:39 06:02-06:30/28 07:22-07:54/32 20:32 11:11-11:34/23 | 06:09 10:55-13:38/163 19:58 | 06:41 08:12-09:25/73 19:07 | 07:13 08:04-10:22/138 07:34-07:51/17 18:17 11:04-12:52/108 | 06:50 07:13-09:20/127 16:38 14:41-15:18/37 | 07:22 14:47-15:32/45 10:25-11:47/82 16:30 08:32-09:12/40 07:52-08:27/35 | |
| 18 | 05:39 06:02-06:29/27 07:25-07:51/26 20:31 11:11-11:35/24 | 06:10 10:54-13:40/166 19:56 | 06:42 08:11-09:26/75 19:05 | 07:14 08:05-10:23/138 07:35-07:50/15 18:15 11:05-12:50/105 | 06:51 07:15-09:20/125 16:37 14:40-15:18/38 | 07:23 14:49-15:34/45 10:27-11:49/82 16:30 08:33-09:13/40 07:53-08:28/35 | |
| 19 | 05:40 06:03-06:30/27 07:30-07:46/16 20:31 11:10-11:37/27 | 06:11 10:54-13:41/167 19:55 | 06:43 08:09-09:26/77 19:04 | 07:15 08:06-10:23/137 07:36-07:49/13 18:14 11:07-12:47/100 | 06:52 07:16-09:19/123 10:49-11:07/18 16:36 14:41-15:20/39 | 07:24 14:49-15:34/45 10:27-11:49/82 16:31 08:34-09:13/49 07:54-08:29/35 | |
| 20 | 05:41 06:04-06:30/26 20:30 11:10-11:38/28 | 06:12 10:54-13:41/167 19:53 | 06:44 08:08-09:27/79 19:02 | 07:16 08:08-10:23/135 07:37-07:47/10 18:12 11:08-12:45/97 | 06:54 14:40-15:20/40 10:44-11:12/28 16:36 07:17-09:19/122 | 07:25 14:49-15:34/45 10:26-11:49/83 16:31 08:34-09:13/49 07:54-08:29/35 | |
| 21 | 05:42 06:05-06:30/25 20:29 11:09-11:40/31 | 06:13 10:53-13:42/169 19:52 | 06:45 08:06-09:28/82 19:00 | 07:17 08:09-10:24/135 07:38-07:46/8 18:10 11:10-12:43/93 | 06:55 14:39-15:21/42 10:41-11:15/34 16:35 07:18-09-18/120 | 07:26 14:49-15:34/46 10:27-11:50/83 16:31 08:35-09-13/47 07:55-08-29/34 | |
| 22 | 05:43 06:06-06:30/24 20:28 11:09-11:41/32 | 06:14 10:53-13:42/169 19:50 | 06:46 08:05-09:29/84 18:58 | 07:19 08:13-10:25/132 07:40-07:44/4 18:09 11:12-12:41/89 | 06:56 14:40-15:22/42 10:40-11:19/39 16:34 07:20-09-18/118 | 07:27 14:49-15:34/46 10:27-11:50/83 16:32 08:35-09-14/39 07:55-08-29/34 | |
| 23 | 05:44 06:07-06:30/23 20:27 11:09-11:43/34 | 06:15 10:52-13:42/170 19:49 | 06:47 08:04-09:29/85 18:57 | 07:20 08:15-10:25/130 18:07 11:14-12:39/85 | 06:57 14:40-15:23/43 10:38-11:21/43 16:34 07:21-09-17/116 | 07:28 14:49-15:34/46 10:28-11:51/83 16:32 08:36-09-15/39 07:56-08-30/34 | |
| 24 | 05:45 06:08-06:30/22 20:26 11:07-11:43/36 | 06:16 10:52-13:42/170 19:47 | 06:48 08:03-09:30/87 18:55 | 07:21 08:19-10:25/126 18:06 11:16-12:36/80 | 06:58 14:39-15:23/44 10:36-11:23/47 16:33 07:22-09-17/115 | 07:29 14:51-15:36/45 10:29-11:51/82 16:33 08:36-09-15/39 07:56-08-31/35 | |
| 25 | 05:46 06:08-06:29/21 20:26 11:07-11:45/38 | 06:17 10:52-13:42/170 19:46 | 06:49 08:02-09:30/88 18:53 | 07:22 07:21-09:25/124 17:05 10:18-11:33/75 | 06:59 14:39-15:23/44 10:35-11:25/50 16:33 07:23-09-16/113 | 07:30 14:51-15:36/45 10:29-11:51/82 16:34 08:36-09-16/40 07:56-08-31/35 | |
| 26 | 05:47 06:09-06:29/20 20:25 11:06-11:47/41 | 06:18 10:51-13:42/171 19:44 | 06:50 08:02-09:30/88 18:51 | 07:23 07:13-09:26/133 17:03 10:21-11:31/70 | 07:01 14:39-15:24/45 10:34-11:27/53 16:32 07:29-09-16/107 | 07:31 14:52-15:37/45 10:30-11:52/82 16:34 08:37-09-17/40 07:57-08-32/35 | |
| 27 | 05:48 06:10-06:28/18 20:24 11:06-11:48/42 | 06:19 10:51-13:42/171 19:43 | 06:51 08:01-09:31/90 18:50 | 07:24 07:09-09:26/137 17:02 10:24-11:27/63 | 07:02 14:40-15:25/45 10:34-11:29/55 16:32 07:30-09-16/106 | 07:32 14:52-15:37/45 10:30-11:52/82 16:35 08:37-09-17/40 07:57-08-32/35 | |
| 28 | 05:49 06:11-06:28/17 20:23 11:04-11:50/45 | 06:20 10:50-13:42/172 19:41 | 06:52 08:00-09:31/91 18:48 | 07:25 07:07-09:26/139 17:00 10:27-11:24/57 | 07:03 14:40-15:25/45 10:33-11:31/58 16:31 07:31-09-16/105 | 07:33 14:52-15:38/46 10:31-11:52/81 16:35 08:36-09-18/42 07:57-08-33/36 | |
| 29 | 05:49 06:12-06:27/15 20:22 11:05-11:52/47 | 06:21 10:50-13:42/172 19:39 | 06:53 08:00-09:31/91 18:46 | 07:26 07:57-09:25/88 07:06-07:52/46 16:59 10:31-11:19/48 | 07:04 14:40-15:26/46 10:31-11:32/61 16:31 07:32-09-15/103 | 07:34 14:52-15:38/46 10:31-11:52/81 16:36 08:36-09-19/43 07:57-08-33/36 | |
| 30 | 05:50 06:13-06:26/13 20:21 11:04-11:53/49 | 06:22 10:50-13:42/172 19:38 | 06:54 07:59-09:50/111 18:45 | 07:28 07:58-09:26/88 07:05-07:53/48 16:58 10:36-11:16/40 | 07:05 14:40-15:26/46 10:30-11:33/63 16:30 07:33-09-15/102 | 07:35 14:53-15:38/45 10:32-11:52/80 16:37 08:36-09-19/43 07:57-08-34/37 | |
| 31 | 05:51 06:14-06:25/11 20:20 11:04-11:55/51 | 06:23 10:49-13:41/172 19:36 | 06:55 10:49-13:17/148 19:36 | 07:29 07:58-09:26/88 07:04-07:54/50 16:56 10:42-11:09/27 | 07:06 14:40-15:26/46 10:30-11:33/63 16:30 07:33-09-15/102 | 07:36 14:54-15:40/46 10:34-11:54/80 16:38 08:37-09-21/44 07:58-08-35/37 | |
| | Potential sun hours Sum of minutes with flicker | 461 2433 | 429 3874 | 375 6560 | 345 7576 | 296 5152 | 286 6398 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
|--------------|------------------|---------------------------------|--------------------------------|----------------------|
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 29 - San Paolo di Civitate

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1 | 07:27 16:39 | 07:13 17:14 | 06:36 17:49 | 06:44 19:24 | 05:57 19:57 | 05:27 20:27 | 05:28 20:38 | 05:52 20:19 | 06:24 19:34 | 06:55 18:43 | 06:30 16:55 | 07:06 16:30 |
| 2 | 07:27 16:40 | 07:12 17:15 | 06:34 17:50 | 06:42 19:25 | 05:56 19:58 | 05:27 20:28 | 05:28 20:38 | 05:53 20:17 | 06:25 19:33 | 06:56 18:41 | 06:32 16:54 | 07:07 16:30 |
| 3 | 07:27 16:40 | 07:11 17:16 | 06:33 17:51 | 06:41 19:26 | 05:55 19:59 | 05:27 20:29 | 05:29 20:38 | 05:54 20:16 | 06:26 19:31 | 06:57 18:39 | 06:33 16:53 | 07:08 16:29 |
| 4 | 07:27 16:41 | 07:10 17:17 | 06:31 17:52 | 06:39 19:27 | 05:53 20:00 | 05:26 20:29 | 05:29 20:38 | 05:55 20:15 | 06:27 19:29 | 06:58 18:38 | 06:34 16:51 | 07:09 16:29 |
| 5 | 07:27 16:42 | 07:09 17:19 | 06:30 17:53 | 06:37 19:28 | 05:52 20:01 | 05:26 20:30 | 05:30 20:37 | 05:56 20:14 | 06:28 19:28 | 06:59 18:36 | 06:35 16:50 | 07:10 16:29 |
| 6 | 07:27 16:43 | 07:07 17:20 | 06:28 17:55 | 06:36 19:29 | 05:51 20:02 | 05:25 20:31 | 05:31 20:37 | 05:57 20:13 | 06:29 19:26 | 07:01 18:34 | 06:37 16:49 | 07:11 16:29 |
| 7 | 07:27 16:44 | 07:06 17:21 | 06:26 17:56 | 06:34 19:30 | 05:49 20:03 | 05:25 20:31 | 05:31 20:37 | 05:58 20:11 | 06:30 19:24 | 07:02 18:33 | 06:38 16:48 | 07:12 16:29 |
| 8 | 07:27 16:45 | 07:05 17:23 | 06:25 17:57 | 06:32 19:31 | 05:48 20:04 | 05:25 20:32 | 05:32 20:36 | 05:59 20:10 | 06:31 19:23 | 07:03 18:31 | 06:39 16:47 | 07:13 16:29 |
| 9 | 07:27 16:46 | 07:04 17:24 | 06:23 17:58 | 06:31 19:33 | 05:47 20:05 | 05:25 20:33 | 05:32 20:36 | 06:00 20:09 | 06:32 19:21 | 07:04 18:29 | 06:40 16:46 | 07:14 16:29 |
| 10 | 07:26 16:47 | 07:03 17:25 | 06:21 17:59 | 06:29 19:34 | 05:46 20:06 | 05:24 20:33 | 05:33 20:36 | 06:01 20:08 | 06:33 19:19 | 07:05 18:28 | 06:41 16:45 | 07:15 16:29 |
| 11 | 07:26 16:48 | 07:02 17:26 | 06:20 18:00 | 06:27 19:35 | 05:45 20:07 | 05:24 20:34 | 05:34 20:35 | 06:02 20:06 | 06:34 19:17 | 07:06 18:26 | 06:43 16:44 | 07:16 16:29 |
| 12 | 07:26 16:49 | 07:00 17:28 | 06:18 18:01 | 06:26 19:36 | 05:44 20:08 | 05:24 20:34 | 05:35 20:35 | 06:03 20:05 | 06:35 19:16 | 07:07 18:24 | 06:44 16:43 | 07:17 16:29 |
| 13 | 07:26 16:50 | 06:59 17:29 | 06:16 18:03 | 06:24 19:37 | 05:43 20:09 | 05:24 20:35 | 05:35 20:34 | 06:04 20:04 | 06:36 19:14 | 07:08 18:23 | 06:45 16:42 | 07:17 16:29 |
| 14 | 07:25 16:52 | 06:58 17:30 | 06:15 18:04 | 06:22 19:38 | 05:42 20:11 | 05:24 20:35 | 05:36 20:34 | 06:06 20:02 | 06:37 19:12 | 07:09 18:21 | 06:46 16:41 | 07:18 16:29 |
| 15 | 07:25 16:53 | 06:56 17:31 | 06:13 18:05 | 06:21 19:39 | 05:41 20:12 | 05:24 20:36 | 05:37 20:33 | 06:07 20:01 | 06:38 19:11 | 07:10 18:20 | 06:48 16:40 | 07:19 16:29 |
| 16 | 07:24 16:54 | 06:55 17:33 | 06:11 18:06 | 06:19 19:40 | 05:39 20:13 | 05:24 20:36 | 05:38 20:33 | 06:08 19:59 | 06:39 19:09 | 07:12 18:18 | 06:49 16:39 | 07:20 16:29 |
| 17 | 07:24 16:55 | 06:54 17:34 | 06:10 18:07 | 06:18 19:41 | 05:39 20:14 | 05:24 20:36 | 05:38 20:32 | 06:09 19:58 | 06:41 19:07 | 07:13 18:16 | 06:50 16:38 | 07:20 16:30 |
| 18 | 07:23 16:56 | 06:52 17:35 | 06:08 18:08 | 06:16 19:42 | 05:38 20:15 | 05:24 20:37 | 05:39 20:31 | 06:10 19:56 | 06:42 19:05 | 07:14 18:15 | 06:51 16:37 | 07:21 16:30 |
| 19 | 07:23 16:57 | 06:51 17:36 | 06:06 18:09 | 06:15 19:44 | 05:37 20:16 | 05:24 20:37 | 05:40 20:31 | 06:11 19:55 | 06:43 19:04 | 07:15 18:13 | 06:52 16:36 | 07:22 16:30 |
| 20 | 07:22 16:59 | 06:49 17:38 | 06:04 18:11 | 06:13 19:45 | 05:36 20:16 | 05:24 20:37 | 05:41 20:30 | 06:12 19:53 | 06:44 19:02 | 07:16 18:12 | 06:54 16:36 | 07:22 16:31 |
| 21 | 07:22 17:00 | 06:48 17:39 | 06:03 18:12 | 06:12 19:46 | 05:35 20:17 | 05:24 20:37 | 05:42 20:29 | 06:13 19:52 | 06:45 19:00 | 07:17 18:10 | 06:55 16:35 | 07:23 16:31 |
| 22 | 07:21 17:01 | 06:47 17:40 | 06:01 18:13 | 06:10 19:47 | 05:34 20:18 | 05:25 20:38 | 05:43 20:28 | 06:14 19:50 | 06:46 18:58 | 07:19 18:09 | 06:56 16:34 | 07:23 16:32 |
| 23 | 07:20 17:02 | 06:45 17:41 | 05:59 18:14 | 06:09 19:48 | 05:33 20:19 | 05:25 20:38 | 05:44 20:27 | 06:15 19:49 | 06:47 18:57 | 07:20 18:07 | 06:57 16:34 | 07:24 16:32 |
| 24 | 07:20 17:03 | 06:44 17:43 | 05:58 18:15 | 06:07 19:49 | 05:32 20:20 | 05:25 20:38 | 05:45 20:26 | 06:16 19:47 | 06:48 18:55 | 07:21 18:06 | 06:58 16:33 | 07:24 16:33 |
| 25 | 07:19 17:05 | 06:42 17:44 | 05:56 18:16 | 06:06 19:50 | 05:32 20:21 | 05:25 20:38 | 05:46 20:26 | 06:17 19:46 | 06:49 18:53 | 07:22 17:05 | 06:59 16:32 | 07:25 16:33 |
| 26 | 07:18 17:06 | 06:41 17:45 | 05:54 18:17 | 06:04 19:51 | 05:31 20:22 | 05:26 20:38 | 05:46 20:25 | 06:18 19:44 | 06:50 18:51 | 07:23 17:03 | 07:01 16:32 | 07:25 16:34 |
| 27 | 07:17 17:07 | 06:39 17:46 | 05:53 18:18 | 06:03 19:52 | 05:30 20:23 | 05:26 20:38 | 05:47 20:24 | 06:19 19:43 | 06:51 18:50 | 07:24 17:02 | 07:02 16:31 | 07:26 16:35 |
| 28 | 07:16 17:08 | 06:37 17:47 | 05:51 18:19 | 06:01 19:53 | 05:30 20:24 | 05:26 20:38 | 05:48 20:23 | 06:20 19:41 | 06:52 18:48 | 07:25 17:00 | 07:03 16:31 | 07:26 16:35 |
| 29 | 07:16 17:10 | | 06:49 19:20 | 06:00 19:55 | 05:29 20:25 | 05:27 20:38 | 05:49 20:22 | 06:21 19:39 | 06:53 18:46 | 06:27 16:59 | 07:04 16:31 | 07:26 16:36 |
| 30 | 07:15 17:11 | | 06:47 19:22 | 05:59 19:56 | 05:29 20:25 | 05:27 20:38 | 05:50 20:21 | 06:22 19:38 | 06:54 18:44 | 06:28 16:58 | 07:05 16:30 | 07:26 16:37 |
| 31 | 07:14 17:12 | | 06:46 19:23 | | 05:28 20:26 | | 05:51 20:20 | 06:23 19:36 | | 06:29 16:56 | | 07:27 16:38 |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 | 461 | 429 | 375 | 344 | 296 | 285 |
| Sum of minutes with flicker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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-Last time (hh:mm) with flicker/Minutes with flicker
Sun set (hh:mm) First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 30 - San Paolo di Civitate

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1 | 07:27 16:39 | 07:13 17:14 | 06:36 17:49 | 06:44 19:24 | 05:57 19:57 | 05:28 20:27 | 05:28 20:38 | 05:52 20:19 | 06:24 19:35 | 06:55 18:43 | 06:31 16:55 | 07:06 16:30 |
| 2 | 07:27 16:40 | 07:12 17:15 | 06:34 17:50 | 06:42 19:25 | 05:56 19:58 | 05:27 20:28 | 05:28 20:38 | 05:53 20:18 | 06:25 19:33 | 06:56 18:41 | 06:32 16:54 | 07:07 16:30 |
| 3 | 07:27 16:41 | 07:11 17:16 | 06:33 17:51 | 06:41 19:26 | 05:55 19:59 | 05:27 20:29 | 05:29 20:38 | 05:54 20:16 | 06:26 19:31 | 06:57 18:39 | 06:33 16:53 | 07:08 16:29 |
| 4 | 07:27 16:41 | 07:10 17:18 | 06:31 17:52 | 06:39 19:27 | 05:53 20:00 | 05:26 20:29 | 05:29 20:38 | 05:55 20:15 | 06:27 19:30 | 06:58 18:38 | 06:34 16:51 | 07:09 16:29 |
| 5 | 07:27 16:42 | 07:09 17:19 | 06:30 17:53 | 06:37 19:28 | 05:52 20:01 | 05:26 20:30 | 05:30 20:38 | 05:56 20:14 | 06:28 19:28 | 07:00 18:36 | 06:35 16:50 | 07:10 16:29 |
| 6 | 07:27 16:43 | 07:08 17:20 | 06:28 17:55 | 06:36 19:29 | 05:51 20:02 | 05:26 20:31 | 05:31 20:37 | 05:57 20:13 | 06:29 19:26 | 07:01 18:34 | 06:37 16:49 | 07:11 16:29 |
| 7 | 07:27 16:44 | 07:06 17:21 | 06:26 17:56 | 06:34 19:31 | 05:50 20:03 | 05:25 20:31 | 05:31 20:37 | 05:58 20:12 | 06:30 19:24 | 07:02 18:33 | 06:38 16:48 | 07:12 16:29 |
| 8 | 07:27 16:45 | 07:05 17:23 | 06:25 17:57 | 06:32 19:32 | 05:48 20:04 | 05:25 20:32 | 05:32 20:37 | 05:59 20:10 | 06:31 19:23 | 07:03 18:31 | 06:39 16:47 | 07:13 16:29 |
| 9 | 07:27 16:46 | 07:04 17:24 | 06:23 17:58 | 06:31 19:33 | 05:47 20:05 | 05:25 20:33 | 05:33 20:36 | 06:01 20:09 | 06:32 19:21 | 07:04 18:29 | 06:40 16:46 | 07:14 16:29 |
| 10 | 07:27 16:47 | 07:03 17:25 | 06:21 17:59 | 06:29 19:34 | 05:46 20:06 | 05:25 20:33 | 05:33 20:36 | 06:02 20:08 | 06:33 19:19 | 07:05 18:28 | 06:42 16:45 | 07:15 16:29 |
| 11 | 07:26 16:48 | 07:02 17:27 | 06:20 18:00 | 06:27 19:35 | 05:45 20:08 | 05:24 20:34 | 05:34 20:35 | 06:03 20:06 | 06:34 19:18 | 07:06 18:26 | 06:43 16:44 | 07:16 16:29 |
| 12 | 07:26 16:49 | 07:00 17:28 | 06:18 18:02 | 06:26 19:36 | 05:44 20:09 | 05:24 20:34 | 05:35 20:35 | 06:04 20:05 | 06:36 19:16 | 07:07 18:25 | 06:44 16:43 | 07:17 16:29 |
| 13 | 07:26 16:51 | 06:59 17:29 | 06:16 18:03 | 06:24 19:37 | 05:43 20:10 | 05:24 20:35 | 05:35 20:34 | 06:05 20:04 | 06:37 19:14 | 07:08 18:23 | 06:45 16:42 | 07:18 16:29 |
| 14 | 07:25 16:52 | 06:58 17:30 | 06:15 18:04 | 06:23 19:38 | 05:42 20:11 | 05:24 20:35 | 05:36 20:34 | 06:06 20:02 | 06:38 19:12 | 07:09 18:21 | 06:46 16:41 | 07:18 16:29 |
| 15 | 07:25 16:53 | 06:56 17:32 | 06:13 18:05 | 06:21 19:39 | 05:41 20:12 | 05:24 20:36 | 05:37 20:33 | 06:07 20:01 | 06:39 19:11 | 07:11 18:20 | 06:48 16:40 | 07:19 16:29 |
| 16 | 07:25 16:54 | 06:55 17:33 | 06:11 18:06 | 06:19 19:40 | 05:40 20:13 | 05:24 20:36 | 05:38 20:33 | 06:08 19:59 | 06:40 19:09 | 07:12 18:18 | 06:49 16:39 | 07:20 16:30 |
| 17 | 07:24 16:55 | 06:54 17:34 | 06:10 18:07 | 06:18 19:41 | 05:39 20:14 | 05:24 20:36 | 05:39 20:32 | 06:09 19:58 | 06:41 19:07 | 07:13 18:17 | 06:50 16:38 | 07:21 16:30 |
| 18 | 07:24 16:56 | 06:52 17:35 | 06:08 18:08 | 06:16 19:43 | 05:38 20:15 | 05:24 20:37 | 05:39 20:31 | 06:10 19:57 | 06:42 19:05 | 07:14 18:15 | 06:51 16:37 | 07:21 16:30 |
| 19 | 07:23 16:58 | 06:51 17:37 | 06:06 18:10 | 06:15 19:44 | 05:37 20:16 | 05:24 20:37 | 05:40 20:31 | 06:11 19:55 | 06:43 19:04 | 07:15 18:13 | 06:53 16:37 | 07:22 16:31 |
| 20 | 07:22 16:59 | 06:50 17:38 | 06:05 18:11 | 06:13 19:45 | 05:36 20:17 | 05:24 20:37 | 05:41 20:30 | 06:12 19:54 | 06:44 19:02 | 07:16 18:12 | 06:54 16:36 | 07:22 16:31 |
| 21 | 07:22 17:00 | 06:48 17:39 | 06:03 18:12 | 06:12 19:46 | 05:35 20:18 | 05:25 20:38 | 05:42 20:29 | 06:13 19:52 | 06:45 19:00 | 07:17 18:10 | 06:55 16:35 | 07:23 16:31 |
| 22 | 07:21 17:01 | 06:47 17:40 | 06:01 18:13 | 06:10 19:47 | 05:34 20:19 | 05:25 20:38 | 05:43 20:28 | 06:14 19:50 | 06:46 18:58 | 07:19 18:09 | 06:56 16:34 | 07:24 16:32 |
| 23 | 07:20 17:02 | 06:45 17:42 | 05:59 18:14 | 06:09 19:48 | 05:33 20:19 | 05:25 20:38 | 05:44 20:27 | 06:15 19:49 | 06:47 18:57 | 07:20 18:08 | 06:57 16:34 | 07:24 16:32 |
| 24 | 07:20 17:04 | 06:44 17:43 | 05:58 18:15 | 06:07 19:49 | 05:33 20:20 | 05:25 20:38 | 05:45 20:27 | 06:16 19:47 | 06:48 18:55 | 07:21 18:06 | 06:58 16:33 | 07:24 16:33 |
| 25 | 07:19 17:05 | 06:42 17:44 | 05:56 18:16 | 06:06 19:50 | 05:32 20:21 | 05:26 20:38 | 05:46 20:26 | 06:17 19:46 | 06:49 18:53 | 07:22 17:05 | 07:00 16:33 | 07:25 16:34 |
| 26 | 07:18 17:06 | 06:41 17:45 | 05:54 18:17 | 06:04 19:51 | 05:31 20:22 | 05:26 20:38 | 05:47 20:25 | 06:18 19:44 | 06:50 18:52 | 07:23 17:03 | 07:01 16:32 | 07:25 16:34 |
| 27 | 07:17 17:07 | 06:39 17:46 | 05:53 18:18 | 06:03 19:52 | 05:30 20:23 | 05:26 20:38 | 05:48 20:24 | 06:19 19:43 | 06:51 18:50 | 07:24 17:02 | 07:02 16:32 | 07:26 16:35 |
| 28 | 07:17 17:09 | 06:38 17:48 | 05:51 18:20 | 06:01 19:54 | 05:30 20:24 | 05:27 20:38 | 05:49 20:23 | 06:20 19:41 | 06:52 18:48 | 07:25 17:00 | 07:03 16:31 | 07:26 16:35 |
| 29 | 07:16 17:10 | | 06:49 19:21 | 06:00 19:55 | 05:29 20:25 | 05:27 20:38 | 05:49 20:22 | 06:21 19:39 | 06:53 18:46 | 07:26 16:59 | 07:04 16:31 | 07:26 16:36 |
| 30 | 07:15 17:11 | | 06:48 19:22 | 05:59 19:56 | 05:29 20:26 | 05:27 20:38 | 05:50 20:21 | 06:22 19:38 | 06:54 18:45 | 07:27 16:58 | 07:05 16:30 | 07:26 16:37 |
| 31 | 07:14 17:12 | | 06:46 19:23 | | 05:28 20:26 | | 05:51 20:20 | 06:23 19:36 | | 06:29 16:56 | | 07:27 16:38 |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 | 461 | 429 | 375 | 344 | 296 | 285 |
| Sum of minutes with flicker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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 | Last time (hh:mm) with flicker | Minutes with flicker |
| | Sun set (hh:mm) | First time (hh:mm) with flicker | Last time (hh:mm) with flicker | Minutes with flicker |

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 31 - San Paolo di Civitate

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1 | 07:27 16:39 | 07:13 17:14 | 06:36 17:49 | 06:44 19:24 | 05:57 19:57 | 05:27 20:27 | 05:28 20:38 | 05:52 20:19 | 06:24 19:34 | 06:55 18:43 | 06:30 16:55 | 07:06 16:30 |
| 2 | 07:27 16:39 | 07:12 17:15 | 06:34 17:50 | 06:42 19:25 | 05:56 19:58 | 05:27 20:28 | 05:28 20:38 | 05:53 20:17 | 06:25 19:33 | 06:56 18:41 | 06:32 16:54 | 07:07 16:29 |
| 3 | 07:27 16:40 | 07:11 17:16 | 06:33 17:51 | 06:41 19:26 | 05:54 19:59 | 05:27 20:29 | 05:29 20:38 | 05:54 20:16 | 06:26 19:31 | 06:57 18:39 | 06:33 16:53 | 07:08 16:29 |
| 4 | 07:27 16:41 | 07:10 17:17 | 06:31 17:52 | 06:39 19:27 | 05:53 20:00 | 05:26 20:29 | 05:29 20:38 | 05:55 20:15 | 06:27 19:29 | 06:58 18:38 | 06:34 16:51 | 07:09 16:29 |
| 5 | 07:27 16:42 | 07:09 17:19 | 06:29 17:53 | 06:37 19:28 | 05:52 20:01 | 05:26 20:30 | 05:30 20:37 | 05:56 20:14 | 06:28 19:28 | 06:59 18:36 | 06:35 16:50 | 07:10 16:29 |
| 6 | 07:27 16:43 | 07:07 17:20 | 06:28 17:55 | 06:36 19:29 | 05:51 20:02 | 05:25 20:31 | 05:30 20:37 | 05:57 20:13 | 06:29 19:26 | 07:01 18:34 | 06:37 16:49 | 07:11 16:29 |
| 7 | 07:27 16:44 | 07:06 17:21 | 06:26 17:56 | 06:34 19:30 | 05:49 20:03 | 05:25 20:31 | 05:31 20:37 | 05:58 20:11 | 06:30 19:24 | 07:02 18:33 | 06:38 16:48 | 07:12 16:29 |
| 8 | 07:27 16:45 | 07:05 17:23 | 06:25 17:57 | 06:32 19:31 | 05:48 20:04 | 05:25 20:32 | 05:32 20:36 | 05:59 20:10 | 06:31 19:23 | 07:03 18:31 | 06:39 16:47 | 07:13 16:29 |
| 9 | 07:27 16:46 | 07:04 17:24 | 06:23 17:58 | 06:31 19:33 | 05:47 20:05 | 05:25 20:33 | 05:32 20:36 | 06:00 20:09 | 06:32 19:21 | 07:04 18:29 | 06:40 16:46 | 07:14 16:28 |
| 10 | 07:26 16:47 | 07:03 17:25 | 06:21 17:59 | 06:29 19:34 | 05:46 20:06 | 05:24 20:33 | 05:33 20:36 | 06:01 20:08 | 06:33 19:19 | 07:05 18:28 | 06:41 16:45 | 07:15 16:28 |
| 11 | 07:26 16:48 | 07:02 17:26 | 06:20 18:00 | 06:27 19:35 | 05:45 20:07 | 05:24 20:34 | 05:34 20:35 | 06:02 20:06 | 06:34 19:17 | 07:06 18:26 | 06:43 16:43 | 07:16 16:29 |
| 12 | 07:26 16:49 | 07:00 17:28 | 06:18 18:01 | 06:26 19:36 | 05:44 20:08 | 05:24 20:34 | 05:35 20:35 | 06:03 20:05 | 06:35 19:16 | 07:07 18:24 | 06:44 16:42 | 07:17 16:29 |
| 13 | 07:26 16:50 | 06:59 17:29 | 06:16 18:03 | 06:24 19:37 | 05:43 20:09 | 05:24 20:35 | 05:35 20:34 | 06:04 20:04 | 06:36 19:14 | 07:08 18:23 | 06:45 16:42 | 07:17 16:29 |
| 14 | 07:25 16:52 | 06:58 17:30 | 06:15 18:04 | 06:22 19:38 | 05:42 20:11 | 05:24 20:35 | 05:36 20:34 | 06:05 20:02 | 06:37 19:12 | 07:09 18:21 | 06:46 16:41 | 07:18 16:29 |
| 15 | 07:25 16:53 | 06:56 17:31 | 06:13 18:05 | 06:21 19:39 | 05:40 20:12 | 05:24 20:36 | 05:37 20:33 | 06:07 20:01 | 06:38 19:11 | 07:10 18:20 | 06:48 16:40 | 07:19 16:29 |
| 16 | 07:24 16:54 | 06:55 17:33 | 06:11 18:06 | 06:19 19:40 | 05:39 20:13 | 05:24 20:36 | 05:38 20:33 | 06:08 19:59 | 06:39 19:09 | 07:12 18:18 | 06:49 16:39 | 07:20 16:29 |
| 17 | 07:24 16:55 | 06:54 17:34 | 06:10 18:07 | 06:18 19:41 | 05:38 20:14 | 05:24 20:36 | 05:38 20:32 | 06:09 19:58 | 06:40 19:07 | 07:13 18:16 | 06:50 16:38 | 07:20 16:30 |
| 18 | 07:23 16:56 | 06:52 17:35 | 06:08 18:08 | 06:16 19:42 | 05:38 20:15 | 05:24 20:37 | 05:39 20:31 | 06:10 19:56 | 06:42 19:05 | 07:14 18:15 | 06:51 16:37 | 07:21 16:30 |
| 19 | 07:23 16:57 | 06:51 17:36 | 06:06 18:09 | 06:15 19:44 | 05:37 20:16 | 05:24 20:37 | 05:40 20:31 | 06:11 19:55 | 06:43 19:04 | 07:15 18:13 | 06:52 16:36 | 07:22 16:30 |
| 20 | 07:22 16:59 | 06:49 17:38 | 06:04 18:11 | 06:13 19:45 | 05:36 20:16 | 05:24 20:37 | 05:41 20:30 | 06:12 19:53 | 06:44 19:02 | 07:16 18:12 | 06:54 16:36 | 07:22 16:31 |
| 21 | 07:22 17:00 | 06:48 17:39 | 06:03 18:12 | 06:12 19:46 | 05:35 20:17 | 05:24 20:37 | 05:42 20:29 | 06:13 19:52 | 06:45 19:00 | 07:17 18:10 | 06:55 16:35 | 07:23 16:31 |
| 22 | 07:21 17:01 | 06:47 17:40 | 06:01 18:13 | 06:10 19:47 | 05:34 20:18 | 05:25 20:38 | 05:43 20:28 | 06:14 19:50 | 06:46 18:58 | 07:19 18:09 | 06:56 16:34 | 07:23 16:32 |
| 23 | 07:20 17:02 | 06:45 17:41 | 05:59 18:14 | 06:08 19:48 | 05:33 20:19 | 05:25 20:38 | 05:44 20:27 | 06:15 19:49 | 06:47 18:57 | 07:20 18:07 | 06:57 16:34 | 07:24 16:32 |
| 24 | 07:20 17:03 | 06:44 17:43 | 05:58 18:15 | 06:07 19:49 | 05:32 20:20 | 05:25 20:38 | 05:45 20:26 | 06:16 19:47 | 06:48 18:55 | 07:21 18:06 | 06:58 16:33 | 07:24 16:33 |
| 25 | 07:19 17:05 | 06:42 17:44 | 05:56 18:16 | 06:06 19:50 | 05:32 20:21 | 05:25 20:38 | 05:46 20:26 | 06:17 19:46 | 06:49 18:53 | 06:22 17:04 | 06:59 16:32 | 07:25 16:33 |
| 26 | 07:18 17:06 | 06:41 17:45 | 05:54 18:17 | 06:04 19:51 | 05:31 20:22 | 05:26 20:38 | 05:46 20:25 | 06:18 19:44 | 06:50 18:51 | 06:23 17:03 | 07:01 16:32 | 07:25 16:34 |
| 27 | 07:17 17:07 | 06:39 17:46 | 05:52 18:18 | 06:03 19:52 | 05:30 20:23 | 05:26 20:38 | 05:47 20:24 | 06:19 19:43 | 06:51 18:50 | 06:24 17:02 | 07:02 16:31 | 07:26 16:35 |
| 28 | 07:16 17:08 | 06:37 17:47 | 05:51 18:19 | 06:01 19:53 | 05:30 20:24 | 05:26 20:38 | 05:48 20:23 | 06:20 19:41 | 06:52 18:48 | 06:26 17:00 | 07:03 16:31 | 07:26 16:35 |
| 29 | 07:16 17:10 | | 06:49 19:20 | 06:00 19:54 | 05:29 20:25 | 05:27 20:38 | 05:49 20:22 | 06:21 19:39 | 06:53 18:46 | 06:27 16:59 | 07:04 16:31 | 07:26 16:36 |
| 30 | 07:15 17:11 | | 06:47 19:22 | 05:58 19:56 | 05:28 20:25 | 05:27 20:38 | 05:50 20:21 | 06:22 19:38 | 06:54 18:44 | 06:28 16:58 | 07:05 16:30 | 07:26 16:37 |
| 31 | 07:14 17:12 | | 06:46 19:23 | | 05:28 20:26 | | 05:51 20:20 | 06:23 19:36 | | 06:29 16:56 | | 07:27 16:38 |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 | 461 | 429 | 375 | 344 | 296 | 285 |
| Sum of minutes with flicker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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-Last time (hh:mm) with flicker/Minutes with flicker
Sun set (hh:mm) First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 32 - San Paolo di Civitate

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1 | 07:27 16:39 | 07:13 17:14 | 06:36 17:49 | 06:44 19:24 | 05:57 19:57 | 05:28 20:27 | 05:28 20:38 | 05:52 20:19 | 06:24 19:34 | 06:55 18:43 | 06:31 16:55 | 07:06 16:30 |
| 2 | 07:27 16:40 | 07:12 17:15 | 06:34 17:50 | 06:42 19:25 | 05:56 19:58 | 05:27 20:28 | 05:28 20:38 | 05:53 20:17 | 06:25 19:33 | 06:56 18:41 | 06:32 16:54 | 07:07 16:30 |
| 3 | 07:27 16:40 | 07:11 17:16 | 06:33 17:51 | 06:41 19:26 | 05:55 19:59 | 05:27 20:29 | 05:29 20:38 | 05:54 20:16 | 06:26 19:31 | 06:57 18:39 | 06:33 16:53 | 07:08 16:29 |
| 4 | 07:27 16:41 | 07:10 17:17 | 06:31 17:52 | 06:39 19:27 | 05:53 20:00 | 05:26 20:29 | 05:29 20:38 | 05:55 20:15 | 06:27 19:29 | 06:58 18:38 | 06:34 16:51 | 07:09 16:29 |
| 5 | 07:27 16:42 | 07:09 17:19 | 06:30 17:53 | 06:37 19:28 | 05:52 20:01 | 05:26 20:30 | 05:30 20:37 | 05:56 20:14 | 06:28 19:28 | 07:00 18:36 | 06:35 16:50 | 07:10 16:29 |
| 6 | 07:27 16:43 | 07:08 17:20 | 06:28 17:55 | 06:36 19:29 | 05:51 20:02 | 05:25 20:31 | 05:31 20:37 | 05:57 20:13 | 06:29 19:26 | 07:01 18:34 | 06:37 16:49 | 07:11 16:29 |
| 7 | 07:27 16:44 | 07:06 17:21 | 06:26 17:56 | 06:34 19:30 | 05:50 20:03 | 05:25 20:31 | 05:31 20:37 | 05:58 20:12 | 06:30 19:24 | 07:02 18:33 | 06:38 16:48 | 07:12 16:29 |
| 8 | 07:27 16:45 | 07:05 17:23 | 06:25 17:57 | 06:32 19:32 | 05:48 20:04 | 05:25 20:32 | 05:32 20:37 | 05:59 20:10 | 06:31 19:23 | 07:03 18:31 | 06:39 16:47 | 07:13 16:29 |
| 9 | 07:27 16:46 | 07:04 17:24 | 06:23 17:58 | 06:31 19:33 | 05:47 20:05 | 05:25 20:33 | 05:32 20:36 | 06:00 20:09 | 06:32 19:21 | 07:04 18:29 | 06:40 16:46 | 07:14 16:29 |
| 10 | 07:26 16:47 | 07:03 17:25 | 06:21 17:59 | 06:29 19:34 | 05:46 20:06 | 05:24 20:33 | 05:33 20:36 | 06:01 20:08 | 06:33 19:19 | 07:05 18:28 | 06:42 16:45 | 07:15 16:29 |
| 11 | 07:26 16:48 | 07:02 17:26 | 06:20 18:00 | 06:27 19:35 | 05:45 20:07 | 05:24 20:34 | 05:34 20:35 | 06:02 20:06 | 06:34 19:18 | 07:06 18:26 | 06:43 16:44 | 07:16 16:29 |
| 12 | 07:26 16:49 | 07:00 17:28 | 06:18 18:02 | 06:26 19:36 | 05:44 20:09 | 05:24 20:34 | 05:35 20:35 | 06:04 20:05 | 06:35 19:16 | 07:07 18:24 | 06:44 16:43 | 07:17 16:29 |
| 13 | 07:26 16:51 | 06:59 17:29 | 06:16 18:03 | 06:24 19:37 | 05:43 20:10 | 05:24 20:35 | 05:35 20:34 | 06:05 20:04 | 06:36 19:14 | 07:08 18:23 | 06:45 16:42 | 07:18 16:29 |
| 14 | 07:25 16:52 | 06:58 17:30 | 06:15 18:04 | 06:23 19:38 | 05:42 20:11 | 05:24 20:35 | 05:36 20:34 | 06:06 20:02 | 06:38 19:12 | 07:09 18:21 | 06:46 16:41 | 07:18 16:29 |
| 15 | 07:25 16:53 | 06:56 17:32 | 06:13 18:05 | 06:21 19:39 | 05:41 20:12 | 05:24 20:36 | 05:37 20:33 | 06:07 20:01 | 06:39 19:11 | 07:11 18:20 | 06:48 16:40 | 07:19 16:29 |
| 16 | 07:24 16:54 | 06:55 17:33 | 06:11 18:06 | 06:19 19:40 | 05:40 20:13 | 05:24 20:36 | 05:38 20:33 | 06:08 19:59 | 06:40 19:09 | 07:12 18:18 | 06:49 16:39 | 07:20 16:29 |
| 17 | 07:24 16:55 | 06:54 17:34 | 06:10 18:07 | 06:18 19:41 | 05:39 20:14 | 05:24 20:36 | 05:39 20:32 | 06:09 19:58 | 06:41 19:07 | 07:13 18:17 | 06:50 16:38 | 07:20 16:30 |
| 18 | 07:24 16:56 | 06:52 17:35 | 06:08 18:08 | 06:16 19:43 | 05:38 20:15 | 05:24 20:37 | 05:39 20:31 | 06:10 19:56 | 06:42 19:05 | 07:14 18:15 | 06:51 16:37 | 07:21 16:30 |
| 19 | 07:23 16:57 | 06:51 17:37 | 06:06 18:09 | 06:15 19:44 | 05:37 20:16 | 05:24 20:37 | 05:40 20:31 | 06:11 19:55 | 06:43 19:04 | 07:15 18:13 | 06:52 16:36 | 07:22 16:30 |
| 20 | 07:22 16:59 | 06:49 17:38 | 06:05 18:11 | 06:13 19:45 | 05:36 20:17 | 05:24 20:37 | 05:41 20:30 | 06:12 19:53 | 06:44 19:02 | 07:16 18:12 | 06:54 16:36 | 07:22 16:31 |
| 21 | 07:22 17:00 | 06:48 17:39 | 06:03 18:12 | 06:12 19:46 | 05:35 20:18 | 05:24 20:38 | 05:42 20:29 | 06:13 19:52 | 06:45 19:00 | 07:17 18:10 | 06:55 16:35 | 07:23 16:31 |
| 22 | 07:21 17:01 | 06:47 17:40 | 06:01 18:13 | 06:10 19:47 | 05:34 20:18 | 05:25 20:38 | 05:43 20:28 | 06:14 19:50 | 06:46 18:58 | 07:19 18:09 | 06:56 16:34 | 07:23 16:32 |
| 23 | 07:20 17:02 | 06:45 17:41 | 05:59 18:14 | 06:09 19:48 | 05:33 20:19 | 05:25 20:38 | 05:44 20:27 | 06:15 19:49 | 06:47 18:57 | 07:20 18:07 | 06:57 16:34 | 07:24 16:32 |
| 24 | 07:20 17:04 | 06:44 17:43 | 05:58 18:15 | 06:07 19:49 | 05:33 20:20 | 05:25 20:38 | 05:45 20:27 | 06:16 19:47 | 06:48 18:55 | 07:21 18:06 | 06:58 16:33 | 07:24 16:33 |
| 25 | 07:19 17:05 | 06:42 17:44 | 05:56 18:16 | 06:06 19:50 | 05:32 20:21 | 05:25 20:38 | 05:46 20:26 | 06:17 19:46 | 06:49 18:53 | 07:22 17:05 | 07:00 16:32 | 07:25 16:33 |
| 26 | 07:18 17:06 | 06:41 17:45 | 05:54 18:17 | 06:04 19:51 | 05:31 20:22 | 05:26 20:38 | 05:47 20:25 | 06:18 19:44 | 06:50 18:51 | 07:23 17:03 | 07:01 16:32 | 07:25 16:34 |
| 27 | 07:17 17:07 | 06:39 17:46 | 05:53 18:18 | 06:03 19:52 | 05:30 20:23 | 05:26 20:38 | 05:47 20:24 | 06:19 19:43 | 06:51 18:50 | 07:24 17:02 | 07:02 16:31 | 07:26 16:35 |
| 28 | 07:17 17:09 | 06:38 17:47 | 05:51 18:19 | 06:01 19:53 | 05:30 20:24 | 05:26 20:38 | 05:48 20:23 | 06:20 19:41 | 06:52 18:48 | 07:25 17:00 | 07:03 16:31 | 07:26 16:35 |
| 29 | 07:16 17:10 | | 06:49 19:21 | 06:00 19:55 | 05:29 20:25 | 05:27 20:38 | 05:49 20:22 | 06:21 19:39 | 06:53 18:46 | 07:27 16:59 | 07:04 16:31 | 07:26 16:36 |
| 30 | 07:15 17:11 | | 06:47 19:22 | 05:59 19:56 | 05:29 20:26 | 05:27 20:38 | 05:50 20:21 | 06:22 19:38 | 06:54 18:45 | 07:28 16:58 | 07:05 16:30 | 07:26 16:37 |
| 31 | 07:14 17:12 | | 06:46 19:23 | | 05:28 20:26 | | 05:51 20:20 | 06:23 19:36 | | 06:29 16:56 | | 07:27 16:38 |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 | 461 | 429 | 375 | 344 | 296 | 285 |
| Sum of minutes with flicker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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-Last time (hh:mm) with flicker/Minutes with flicker
Sun set (hh:mm) First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker

SHADOW - Calendar per WTG

Calculation: WC e RC - Results Tutti Aerogeneratori
Assumptions for shadow calculations

WTG: 33 - San Paolo di Civitate

Sunshine probability S (Average daily sunshine hours) [AMENDOLA]
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
4.12 4.66 5.30 6.72 8.25 9.35 10.16 9.45 7.64 5.82 4.65 3.82

Operational time

N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
985 358 99 45 45 1,532 636 546 815 367 1,344 1,988 8,760

| | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1 | 07:27 16:39 | 07:13 17:14 | 06:36 17:49 | 06:44 19:24 | 05:57 19:57 | 05:28 20:27 | 05:28 20:38 | 05:52 20:19 | 06:24 19:35 | 06:55 18:43 | 06:31 16:55 | 07:06 16:30 |
| 2 | 07:27 16:40 | 07:12 17:15 | 06:34 17:50 | 06:42 19:25 | 05:56 19:58 | 05:27 20:28 | 05:28 20:38 | 05:53 20:18 | 06:25 19:33 | 06:56 18:41 | 06:32 16:54 | 07:07 16:30 |
| 3 | 07:27 16:40 | 07:11 17:16 | 06:33 17:51 | 06:41 19:26 | 05:55 19:59 | 05:27 20:29 | 05:29 20:38 | 05:54 20:16 | 06:26 19:31 | 06:57 18:39 | 06:33 16:53 | 07:08 16:29 |
| 4 | 07:27 16:41 | 07:10 17:18 | 06:31 17:52 | 06:39 19:27 | 05:53 20:00 | 05:26 20:29 | 05:29 20:38 | 05:55 20:15 | 06:27 19:30 | 06:58 18:38 | 06:34 16:51 | 07:09 16:29 |
| 5 | 07:27 16:42 | 07:09 17:19 | 06:30 17:53 | 06:37 19:28 | 05:52 20:01 | 05:26 20:30 | 05:30 20:38 | 05:56 20:14 | 06:28 19:28 | 07:00 18:36 | 06:35 16:50 | 07:10 16:29 |
| 6 | 07:27 16:43 | 07:08 17:20 | 06:28 17:55 | 06:36 19:29 | 05:51 20:02 | 05:26 20:31 | 05:31 20:37 | 05:57 20:13 | 06:29 19:26 | 07:01 18:34 | 06:37 16:49 | 07:11 16:29 |
| 7 | 07:27 16:44 | 07:06 17:21 | 06:26 17:56 | 06:34 19:31 | 05:50 20:03 | 05:25 20:31 | 05:31 20:37 | 05:58 20:12 | 06:30 19:24 | 07:02 18:33 | 06:38 16:48 | 07:12 16:29 |
| 8 | 07:27 16:45 | 07:05 17:23 | 06:25 17:57 | 06:32 19:32 | 05:48 20:04 | 05:25 20:32 | 05:32 20:37 | 05:59 20:10 | 06:31 19:23 | 07:03 18:31 | 06:39 16:47 | 07:13 16:29 |
| 9 | 07:27 16:46 | 07:04 17:24 | 06:23 17:58 | 06:31 19:33 | 05:47 20:05 | 05:25 20:33 | 05:33 20:36 | 06:00 20:09 | 06:32 19:21 | 07:04 18:29 | 06:40 16:46 | 07:14 16:29 |
| 10 | 07:27 16:47 | 07:03 17:25 | 06:21 17:59 | 06:29 19:34 | 05:46 20:06 | 05:24 20:33 | 05:33 20:36 | 06:02 20:08 | 06:33 19:19 | 07:05 18:28 | 06:42 16:45 | 07:15 16:29 |
| 11 | 07:26 16:48 | 07:02 17:26 | 06:20 18:00 | 06:27 19:35 | 05:45 20:08 | 05:24 20:34 | 05:34 20:35 | 06:03 20:06 | 06:34 19:18 | 07:06 18:26 | 06:43 16:44 | 07:16 16:29 |
| 12 | 07:26 16:49 | 07:00 17:28 | 06:18 18:02 | 06:26 19:36 | 05:44 20:09 | 05:24 20:34 | 05:35 20:35 | 06:04 20:05 | 06:35 19:16 | 07:07 18:25 | 06:44 16:43 | 07:17 16:29 |
| 13 | 07:26 16:51 | 06:59 17:29 | 06:16 18:03 | 06:24 19:37 | 05:43 20:10 | 05:24 20:35 | 05:35 20:34 | 06:05 20:04 | 06:37 19:14 | 07:08 18:23 | 06:45 16:42 | 07:18 16:29 |
| 14 | 07:25 16:52 | 06:58 17:30 | 06:15 18:04 | 06:23 19:38 | 05:42 20:11 | 05:24 20:35 | 05:36 20:34 | 06:06 20:02 | 06:38 19:12 | 07:09 18:21 | 06:46 16:41 | 07:18 16:29 |
| 15 | 07:25 16:53 | 06:56 17:32 | 06:13 18:05 | 06:21 19:39 | 05:41 20:12 | 05:24 20:36 | 05:37 20:33 | 06:07 20:01 | 06:39 19:11 | 07:11 18:20 | 06:48 16:40 | 07:19 16:29 |
| 16 | 07:25 16:54 | 06:55 17:33 | 06:11 18:06 | 06:19 19:40 | 05:40 20:13 | 05:24 20:36 | 05:38 20:33 | 06:08 19:59 | 06:40 19:09 | 07:12 18:18 | 06:49 16:39 | 07:20 16:30 |
| 17 | 07:24 16:55 | 06:54 17:34 | 06:10 18:07 | 06:18 19:41 | 05:39 20:14 | 05:24 20:36 | 05:39 20:32 | 06:09 19:58 | 06:41 19:07 | 07:13 18:17 | 06:50 16:38 | 07:21 16:30 |
| 18 | 07:24 16:56 | 06:52 17:35 | 06:08 18:08 | 06:16 19:43 | 05:38 20:15 | 05:24 20:37 | 05:39 20:31 | 06:10 19:57 | 06:42 19:05 | 07:14 18:15 | 06:51 16:37 | 07:21 16:30 |
| 19 | 07:23 16:57 | 06:51 17:37 | 06:06 18:10 | 06:15 19:44 | 05:37 20:16 | 05:24 20:37 | 05:40 20:31 | 06:11 19:55 | 06:43 19:04 | 07:15 18:13 | 06:53 16:36 | 07:22 16:31 |
| 20 | 07:22 16:59 | 06:50 17:38 | 06:05 18:11 | 06:13 19:45 | 05:36 20:17 | 05:24 20:37 | 05:41 20:30 | 06:12 19:54 | 06:44 19:02 | 07:16 18:12 | 06:54 16:36 | 07:22 16:31 |
| 21 | 07:22 17:00 | 06:48 17:39 | 06:03 18:12 | 06:12 19:46 | 05:35 20:18 | 05:24 20:38 | 05:42 20:29 | 06:13 19:52 | 06:45 19:00 | 07:17 18:10 | 06:55 16:35 | 07:23 16:31 |
| 22 | 07:21 17:01 | 06:47 17:40 | 06:01 18:13 | 06:10 19:47 | 05:34 20:19 | 05:25 20:38 | 05:43 20:28 | 06:14 19:50 | 06:46 18:58 | 07:19 18:09 | 06:56 16:34 | 07:24 16:32 |
| 23 | 07:20 17:02 | 06:45 17:41 | 05:59 18:14 | 06:09 19:48 | 05:33 20:19 | 05:25 20:38 | 05:44 20:27 | 06:15 19:49 | 06:47 18:57 | 07:20 18:07 | 06:57 16:34 | 07:24 16:32 |
| 24 | 07:20 17:04 | 06:44 17:43 | 05:58 18:15 | 06:07 19:49 | 05:33 20:20 | 05:25 20:38 | 05:45 20:27 | 06:16 19:47 | 06:48 18:55 | 07:21 18:06 | 06:58 16:33 | 07:24 16:33 |
| 25 | 07:19 17:05 | 06:42 17:44 | 05:56 18:16 | 06:06 19:50 | 05:32 20:21 | 05:25 20:38 | 05:46 20:26 | 06:17 19:46 | 06:49 18:53 | 06:22 17:05 | 07:00 16:33 | 07:25 16:33 |
| 26 | 07:18 17:06 | 06:41 17:45 | 05:54 18:17 | 06:04 19:51 | 05:31 20:22 | 05:26 20:38 | 05:47 20:25 | 06:18 19:44 | 06:50 18:52 | 06:23 17:03 | 07:01 16:32 | 07:25 16:34 |
| 27 | 07:17 17:07 | 06:39 17:46 | 05:53 18:18 | 06:03 19:52 | 05:30 20:23 | 05:26 20:38 | 05:48 20:24 | 06:19 19:43 | 06:51 18:50 | 06:25 17:02 | 07:02 16:32 | 07:26 16:35 |
| 28 | 07:17 17:09 | 06:38 17:48 | 05:51 18:20 | 06:01 19:54 | 05:30 20:24 | 05:27 20:38 | 05:48 20:23 | 06:20 19:41 | 06:52 18:48 | 06:26 17:00 | 07:03 16:31 | 07:26 16:35 |
| 29 | 07:16 17:10 | | 06:49 19:21 | 06:00 19:55 | 05:29 20:25 | 05:27 20:38 | 05:49 20:22 | 06:21 19:39 | 06:53 18:46 | 06:27 16:59 | 07:04 16:31 | 07:26 16:36 |
| 30 | 07:15 17:11 | | 06:47 19:22 | 05:59 19:56 | 05:29 20:26 | 05:27 20:38 | 05:50 20:21 | 06:22 19:38 | 06:54 18:45 | 06:28 16:58 | 07:05 16:30 | 07:26 16:37 |
| 31 | 07:14 17:12 | | 06:46 19:23 | | 05:28 20:26 | | 05:51 20:20 | 06:23 19:36 | | 06:29 16:56 | | 07:27 16:38 |
| Potential sun hours | 295 | 296 | 369 | 400 | 450 | 455 | 461 | 429 | 375 | 344 | 296 | 285 |
| Sum of minutes with flicker | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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-Last time (hh:mm) with flicker/Minutes with flicker
Sun set (hh:mm) First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker