

INTEGRALE RICOSTRUZIONE PARCHI EOLICI

"Faeto-Celle"

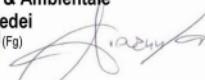
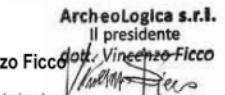
**ADEGUAMENTO TECNICO IMPIANTO EOLICO MEDIANTE INTERVENTO DI REPOWERING
DELLE TORRI ESISTENTI E RIDUZIONE NUMERICA DEGLI AEROGENERATORI**



Edison Rinnovabili SpA

Foro Buonaparte, 31 - 20121 Milano



| | | | | |
|-----------------------------------|--|---|--|--|
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| Opera | Progetto di Integrale Ricostruzione di n. 1 impianto eolico composto da 14 aerogeneratori da 6,6 MW per una potenza complessiva di 92,4 MW nei Comuni di Faeto e Celle di San Vito e relative opere di connessione alla località "Monte S.Vito - Ciuccia - Crepacore" con smantellamento di n. 60 aerogeneratori di potenza in esercizio pari a 33,75 MW. | | | |
| Obiettivo | Nome Elaborato: VIA_03_R2P8522-SHFCk_Shadow flickering | Folder: VIA_03_Relazioni Specialistiche | | |
| | Descrizione Elaborato: | | | |
| | Shadow flickering | | | |
| 00 | Novembre 2023 | Emissione per progetto definitivo | VEGA | Arch. A. Demaio |
| Rev. | Data | Oggetto della revisione | Elaborazione | Verifica |
| Scala: | ---- | Integrale Ricostruzione Faeto - Celle | | Approvazione |
| Formato: | | Codice progetto AU | R2P8522 | |

Integrale Ricostruzione Parco Eolico “Faeto-CelleSV”.

Adeguamento tecnico impianto eolico mediante intervento di Repowering delle torri esistenti e riduzione numerica degli aerogeneratori.

1. PREMESSA

La presente relazione è relativa alla progettazione definitiva in seno al procedimento autorizzativo del “*Progetto per il rifacimento e potenziamento di un parco eolico*” che la **Edison Rinnovabili Spa** intende realizzare nei comuni Faeto e Celle di San Vito (FG), nello specifico la proposta progettuale prevede la dismissione dell’ impianto esistente costituito da n. 60 aerogeneratori (n. 51 WTG modello Enercon E40, diametro 44m, hub 46m e potenza unitaria 600 kW/WTG e n. 9 WTG modello monopala diametro 33m, hub 40 e potenza unitaria 350 kW/WTG) per una potenza complessiva di 33,75 MW, e la realizzazione di un nuovo impianto costituito da n. 14 aerogeneratori di diametro rotore 155m, altezza al mozzo 102,5 m, per una potenza nominale di 6,6 MW e complessiva 92,4 MW)

| Nome WTG | WGS 84 UTM33 | |
|----------|--------------|---------|
| | Est | Nord |
| 1 | 515361 | 4573236 |
| 2 | 514821 | 4573266 |
| 3 | 514522 | 4572869 |
| 4 | 515107 | 4572861 |
| 5 | 515492 | 4572695 |
| 6 | 514194 | 4572505 |
| 7 | 514707 | 4572498 |
| 8 | 515527 | 4572194 |
| 9 | 515893 | 4571874 |
| 10 | 514710 | 4571345 |
| 11 | 515030 | 4571756 |
| 12 | 515294 | 4571114 |
| 13 | 515757 | 4571034 |
| 14 | 515603 | 4570594 |

Il presente elaborato ha lo scopo di valutare in maniera tecnica l'eventuale impatto generato dall'evoluzione dell'ombra derivante dalla futura installazione dell'impianto eolico sopra descritto.

2. LO SHADOW FLICKERING

Per lo studio dello Shadow Flicker è stata presa in considerazione una SIEMENS-GAMESA SG155 che ha le medesime caratteristiche dimensionali dell'aerogeneratore di progetto avente un'altezza al mozzo pari a 102,5 metri ed un diametro del rotore pari a 155 metri.

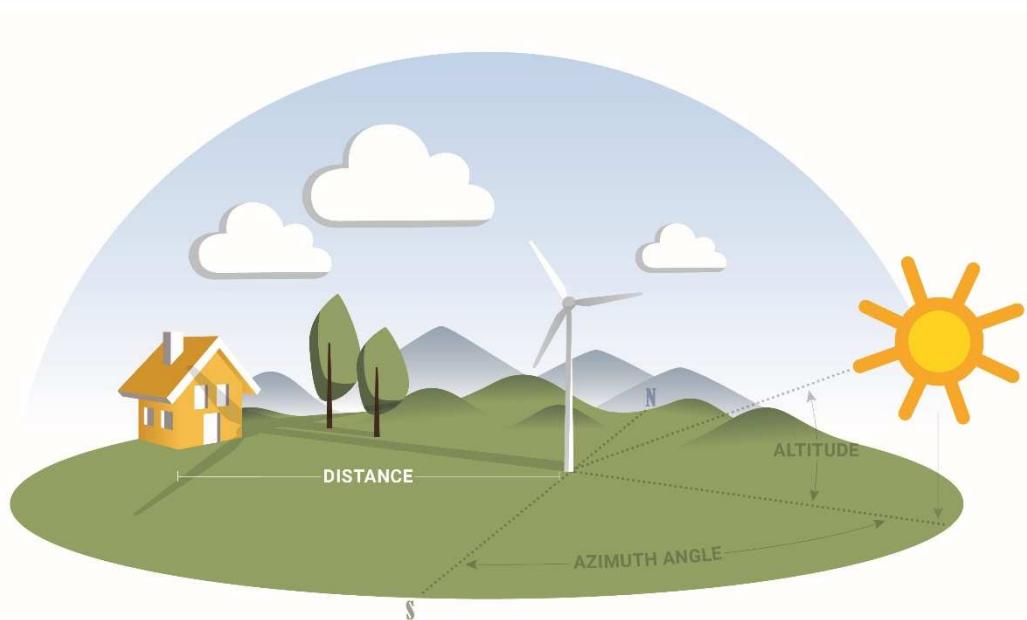
Lo Shadow-Flickering è l'espressione comunemente impiegata in ambito specialistico per descrivere l'effetto stroboscopico delle ombre proiettate dalle pale rotanti degli aerogeneratori eolici quando sussistono le

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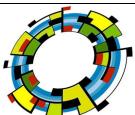
condizioni meteorologiche opportune; infatti la possibilità e la durata di tali effetti dipendono da una serie di condizioni ambientali, tra cui : la posizione del sole, l'ora del giorno, il giorno dell'anno, le condizioni atmosferiche ambientali e la posizione della turbina eolica rispetto ad un recepitore sensibile. La valutazione tecnica è eseguita con l'ausilio di un software di simulazione specifico per la progettazione degli impianti eolici WIND PRO®, costituito da un insieme di moduli di elaborazione orientati alla simulazione di una serie di aspetti che caratterizzano le diverse fasi progettuali. Il modulo SHADOW è quello specifico per la valutazione dell'evoluzione dell'ombra e del flickering. In tale report è riportata:

- *La descrizione del caso studio con le posizioni delle turbine e loro caratteristiche tecniche*
- *Una breve descrizione tecnica del fenomeno di shadow flickering*
- *La descrizione dei recettori soggetti al fenomeno per i quali è stata richiesta questa analisi*
- *Sintesi della metodologia di analisi seguita per lo studio*
- *Sintesi dei risultati ottenuti, con allegati grafici ed analitici di dettaglio che descrivono il fenomeno su ognuno dei recettori e da parte di ognuna delle turbine per tutto l'anno solare.*



3. STUDIO DELL'EVOLUZIONE DELL'OMBRA GIORNALIERA GENERATA DAGLI AEROGENERATORI

Le turbine eoliche, come altre strutture fortemente sviluppate in altezza, proiettano un'ombra sulle aree adiacenti in presenza della luce solare diretta. Per chi vive in tali zone prossime all'insediamento eolico può essere molto fastidioso il cosiddetto fenomeno del "flicker" che consiste in un effetto di lampeggiamento che si verifica quando le pale del rotore in movimento "tagliano" la luce solare in maniera intermittente. Una



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| | |
|-----------------|------------------------|
| Protocollo: | SHFCK |
| Data emissione: | 2023 |
| Committente: | Edison Rinnovabili Spa |
| N° commessa: | 2023-021 |
| File: | Doc_OmbraGiornaliera |

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progettazione attenta a questa problematica permette di evitare questo spiacevole fenomeno semplicemente prevedendo il luogo di incidenza dell'ombra e disponendo le turbine in maniera tale che l'ombra sulle zone sensibili non superi un certo numero di ore all'anno. Il grafico in figura riporta l'evoluzione annuale dell'ombra di una turbina considerando il caso peggiore di pale sempre in rotazione intorno al mozzo, e orientate sempre ortogonalmente al sole durante la sua evoluzione giornaliera.

Come è evidente dal grafico e dalla legenda le ore annue di ombra sono sempre minori con l'aumentare della distanza dal pilone secondo una particolare geometria dettata dalla posizione geografica; da osservare che l'ombra arriva a proiettarsi anche sino ad una distanza di 1 km, anche se solo per pochi minuti all'anno.

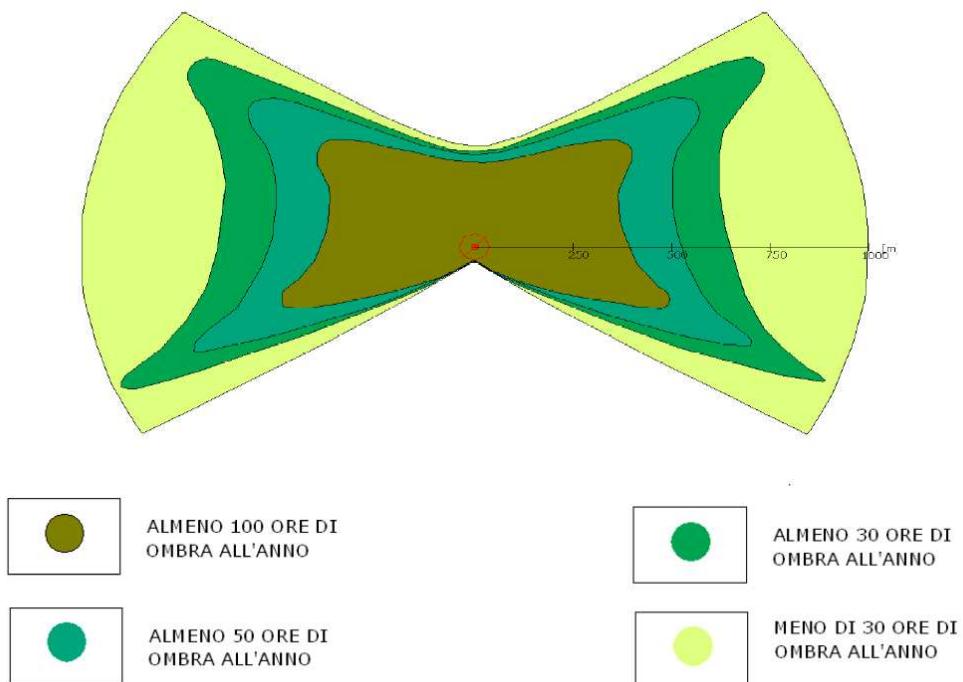


Figura 2: Evoluzione annuale tipo dell'ombra di una pala

Considerati i pochi precedenti esistenti (Germania) e le ipotesi così penalizzanti con cui è stata calcolato tale grafico si è ritenuto opportuno effettuare una sovrapposizione sull'impianto della parte più interna del grafico ovvero dell'area che supera le **100 ore all'anno di ombra dei punti di installazione, intendendo questo come limite da non superarsi.**

In Italia, così come nella maggior parte dei paesi Europei ed extraeuropei non esiste una normativa specifica in relativa al disturbo generato dal fenomeno di Shadow – Flickering. Esistono delle regolamentazioni locali

ma quasi mai comprendono limiti numerici specifici, quanto piuttosto delle raccomandazioni tese a sottolineare che il fenomeno non sia “unreasonable” o “significant”.

4. INDIVIDUAZIONE DEI RECETTORI ED IPOTESI DI CALCOLO

L’analisi di shadow-flickering di cui al presente studio è stata elaborata per specifici 14 recettori che circondano l’impianto; tuttavia, alcune strutture inserite nel modello di simulazione potrebbero essere ruderis non abitati e sostanzialmente privi di caratteristiche minime di abitabilità o agibilità; il che sarà analizzato nel seguito.

Lo studio, i cui risultati in dettaglio sono riportati nei report allegati alla presente relazione, è stato condotto con uno specifico software (WindPRO).

Nello studio ci si è posti nella condizione più sfavorevole possibile, in quanto si è considerato che:

- il sole risplende per tutta la giornata dall’alba al tramonto (cioè si è sempre in assenza di copertura nuvolosa);
- il piano di rotazione delle pale è sempre perpendicolare alla linea che passa per il sole e per l’aerogeneratore (l’aerogeneratore “insegue” il sole);
- l’aerogeneratore è sempre operativo.

Allo stesso tempo, si è trascurata la presenza degli alberi e di altri ostacoli che bordano le strade “intercettando” l’ombra degli aerogeneratori riducendo il fenomeno del flickering sui recettori.

Ciò significa che i risultati forniti dal calcolo sono ampiamente cautelativi.

In base alla metodologia descritta nei paragrafi precedenti, sono stati utilizzati i seguenti dati di input per impostare il modello di simulazione per la valutazione del fenomeno di Shadow-Flickering degli aerogeneratori di progetto:

- a) **Il DTM o Modello del terreno digitale** per caratterizzare l’orografia è stato estrapolato dal grid disponibile in download dal SIT della Regione Puglia, georeferenziato, sovrapposto, confrontato e adeguato con le curve di livello presenti sulla cartografia ufficiale CTR 1:5.000 con uno step di 5 m. Il modello digitale ottenuto copre un’area sufficiente ad inglobare l’area del parco eolico di progetto e trova un ottimo riscontro con l’andamento orografico verificato in sito.
- b) **Posizioni geografiche di recettori con dettaglio dimensionale delle aree più esposte.** Sono i ricettori individuati dallo studio acustico e in quello della gittata massima degli elementi rotanti; essi sono classificati secondo la loro abitabilità e destinazione d’uso. Per tutti i ricettori si è ritenuto opportuno usare l’ipotesi di cautela della modalità “green house mode”. Questa scelta è stata operata poiché in

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talune circostanze anche lo spazio antistante le strutture può essere considerato o adibito a luogo di riposo e relax. La scelta di una singola finestra o di una facciata in alcune condizioni potrebbe risultare riduttiva allo scopo di una vera valutazione d'impatto.

c) Posizioni geografiche delle turbine eoliche e loro caratteristiche dimensionali

Gli aerogeneratori di progetto con le loro caratteristiche dimensionali e tecnologiche

d) Nessun ostacolo naturale o artificiale è stato modellato.

| Ricettore | Name WindPro | | Coordinate | | Ore di ombra | Giorni di ombra x anno | Max ore ombra x giorno |
|-----------|--------------|------|------------|---------|--------------|------------------------|------------------------|
| | ID | Name | E | N | | | |
| R12 | 1 | A | 515448 | 4573583 | 231:30 | 159 | 2:05 |
| R13 | 2 | B | 515462 | 4573569 | 245:12 | 163 | 2:07 |
| R14 | 3 | C | 515085 | 4573247 | 398:15 | 317 | 2:06 |
| R15 | 4 | D | 514918 | 4573437 | 453:18 | 195 | 2:44 |
| R16 | 5 | E | 514897 | 4573394 | 656:31 | 251 | 3:18 |
| R29 | 6 | F | 514411 | 4572830 | 635:32 | 282 | 2:10 |
| R30 | 7 | G | 514529 | 4572445 | 380:26 | 178 | 4:15 |
| R31 | 8 | H | 514666 | 4572282 | 79:48 | 78 | 3:00 |
| R32 | 9 | I | 514718 | 4572266 | 71:46 | 73 | 1:32 |
| R33 | 10 | J | 514695 | 4572299 | 109:14 | 80 | 1:26 |
| R34 | 11 | K | 514574 | 4572137 | 23:10 | 104 | 1:43 |
| R35 | 12 | L | 514739 | 4572132 | 23:02 | 54 | 0:30 |
| R36 | 13 | M | 514923 | 4571642 | 59:19 | 118 | 0:57 |
| R67 | 14 | N | 515916 | 4570243 | 0:00 | 0 | 0:00 |

Tab. 1 – Coordinate ricettori UTM-WGS84

5. I RISULTATI DEL CALCOLO DELL'EVOLUZIONE DELL'OMBRA

Come sopra accennato, nella procedura “Worst case”, (quella di cui ai calcoli effettuati), il fenomeno di shadow/flickering viene calcolato non tenendo conto di una serie di fattori, i cui dati allo stato dell'arte per il sito in questione non sono disponibili. Se fossero considerati tali fattori si potrebbe calcolare il fenomeno di shadow/flickering con la metodologia “real case”, nel qual caso, da quanto riportato nella letteratura specialistica secondo altri casi simili, si avrebbero risultati indicanti una riduzione del fenomeno ad 1/3 dei valori.

Cautelativamente assumiamo per effetto di tali fattori una riduzione del fenomeno del flickering di 1/2.

Dalle simulazioni effettuate, i cui risultati sono riportati nella **Tab. 1**, si evince che gli aerogeneratori di progetto generano maggiormente il fenomeno di shadow/flickering sui recettori evidenziati, considerando

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solo quelli di categoria catastale più interessante per il fenomeno (recettori con categoria catastale A e con più di 30 ore/anno nel “Worst Case”:

R12,R33

Per tali recettori si ha un massimo di ore di ombra calcolato pari a 231:00 ore/anno.

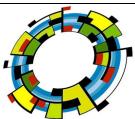
In riferimento alle considerazioni sopra fatte circa i fattori attenuanti, nel “Real Case” tale valore diventa pari alla metà e quindi di 115:00 ore/anno.

Tale valore è certamente di poco superiore alle 100 ore/anno, sopra citato quale limite da non superare e anche se superiore alle 30 ore/anno quale valore ancora più restrittivo che in alcune valutazioni più severe viene considerato, ma si può considerare ininfluente in quanto trattasi di recettori disabitati.

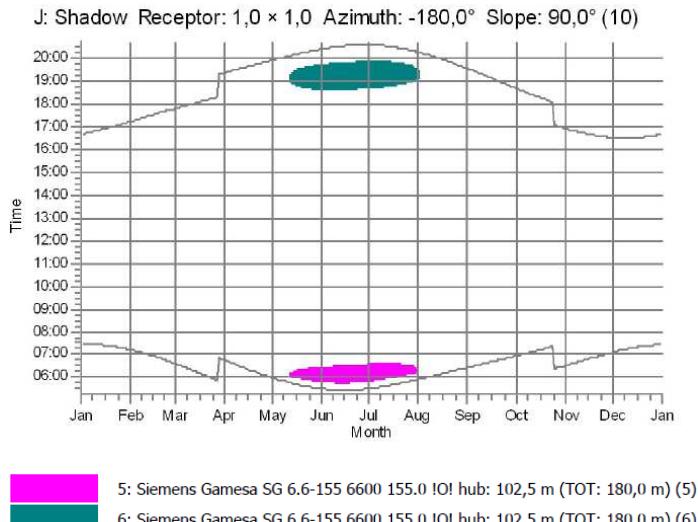
Solo da osservare che:

1. prendendo a riferimento il valore limite di 100 ore/anno, non considerando i fattori di attenuazione del “real case” e considerando tutti i recettori indistintamente, solo il recettori R45 supera tale valore: tuttavia trattasi di recettori classificati come opifici, magazzini, ruderli o in stato di abbandono o comunque disabitati.
2. Considerando i recettori “**R12, R33**” anche senza considerare i fattori di attenuazione il valore massimo delle ore di ombra è di 115:00 fondamentalmente di poco superiore al valore limite di 100 ore/anno e anche se superiore a quello limite assunto in valutazioni più severe di 30 ore/anno si può considerare ininfluente in quanto trattasi di recettori disabitati.

E' stato elaborato un calendario dell'ombra riportato in appendice (rif. Appendice Calendar), che riporta in maniera grafica giorno per giorno, per tutto l'anno, la durata giornaliera del fenomeno, l'orario di inizio e di fine del fenomeno, nelle condizioni di caso reale. Dalla lettura del “Calendar” si legge che il fenomeno dell'ombreggiamento, si esplica sui recettori con intensità maggiore nel periodo compreso tra Giugno-Agosto nelle prime ore del mattino e Giugno-Agosto nelle tarde ore del tramonto. Nella figura che segue è riportato a titolo di esempio il grafico "calendar" di un recettore: le macchie individuano i momenti di shadow, la posizione nel grafico individua tempo e durata del fenomeno, il colore della macchia individua la turbina che causa il fenomeno.



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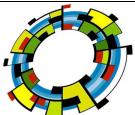
L'allegato 2 riporta il dettaglio analitico di quanto espresso dal grafico precedente con gli specifici orari di inizio e di fine del fenomeno. A seguire è altresì riportata la sintesi grafica annuale (come mostra l'immagine precedente) dell'apporto di ombreggiamento a carico di ogni recettore ed il/gli aerogeneratore/i responsabile/i del fenomeno.

E' stata inoltre elaborata una mappa (report Map, Allegato 3) in cui vengono riportate, con diverse gradazioni di colore, le zone soggette ad una determinata durata del fenomeno dell'ombreggiamento oltre all'estensione areale nella quale il fenomeno risulta significativo.

Il fenomeno dell'ombreggiamento interessa marginalmente tratti di strade provinciali e strade comunali e/o private per un numero di ore all'anno del tutto irrilevanti e cioè pari ad un massimo di 30 ore/anno, ma solo in alcuni tratti. Preme tuttavia evidenziare che nelle simulazioni non si è tenuto conto della possibile presenza di vegetazione capace di offrire un effetto “barriera” ai recettori e/o alle strade limitrofe. Inoltre, la percezione dell'impianto dalla strada risulterebbe essere “in movimento” e quindi legata alla breve permanenza delle automobili in transito, per cui il fastidio indotto sarebbe temporalmente limitato. A questo si aggiunge che le simulazioni sono state effettuate assumendo le “condizioni peggiori”, sovrastimando pertanto l'effetto di flickering.

6. CONCLUSIONI E RACCOMANDAZIONI

In conclusione, si può affermare che i risultati ottenuti dell'elaborazione evidenziano, pur considerando le condizioni più sfavorevoli, che le turbine di progetto generano effetti di shadow flickering **i cui impatti risultano essere nulli per la maggior parte dei recettori individuati, e piuttosto modesti per gli altri e**



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comunque questi sono interessati per un numero massimo di ore l'anno inferiore al limite accettabile sia di tipo ordinario ma anche in valutazioni più severe e restrittive.

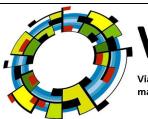
In ogni caso è comunque da rimarcare l'effetto di sovrastima dovuto al grado di cautela utilizzato per la simulazione che non tiene in conto di tutte le possibili fonti di attenuazione dell'effetto cui ogni recettore è (o può essere) soggetto quali presenza di alberi, ostacoli, siepi e quant'altro possa attenuare il fenomeno dell'evoluzione giornaliera dell'ombra.

6. ELENCO ALLEGATI

Di seguito vengono riportati i risultati dello Shadow Flicker elaborati con il software *WindPro*

1. Main result: quadro sintetico dei risultati di calcolo;
2. Calendar: analisi giornaliera dell'effetto “flickering” ricevuto da ogni recettore;
3. Calendar, graphical: grafico dell'analisi giornaliera dell'effetto “flickering” ricevuto da ogni recettore;
4. Calendar per WTG: analisi giornaliera dell'effetto “flickering” indotto da ogni aerogeneratore sui recettori;
5. Calendar per WTG, graphical: grafico dell'analisi giornaliera dell'effetto “flickering” indotto da ogni aerogeneratore sui recettori;
6. Map: mappa delle aree soggette ad ombreggiamento.

Foggia, Dicembre 2023



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Protocollo: SHFCK
Data emissione: 2023
Committente: Edison Rinnovabili Spa
N° commessa: 2023-021
File: Doc_OmbraGiornaliera

SHADOW - Main Result

Calculation: Shadow

Assumptions for shadow calculations

Maximum distance for influence

Calculate only when more than 20 % of sun is covered by the blade
Please look in WTG table

Minimum sun height over horizon for influence 3 °
Day step for calculation 1 days
Time step for calculation 1 minutes

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

- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

A ZVI (Zones of Visual Influence) calculation is performed before flicker calculation so non visible WTG do not contribute to calculated flicker values. A WTG will be visible if it is visible from any part of the receiver window. The ZVI calculation is based on the following assumptions:

Height contours used: Elevation Grid Data Object: IR_FaetoCelle_20km_EMD0

Obstacles used in calculation

Receptor grid resolution: 1,0 m

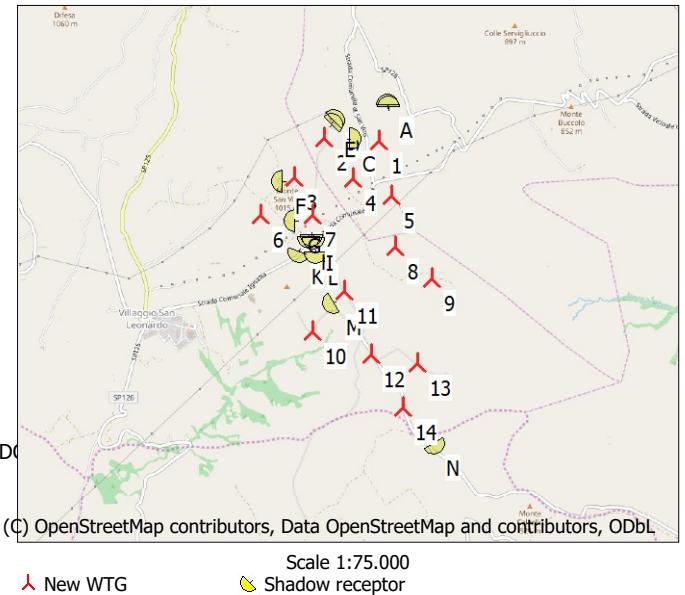
All coordinates are in
UTM (north)-WGS84 Zone: 33

WTGs

| Easting | Northing | Z | Row data/Description [m] | Valid | WTG type Manufacturer. | Type-generator | Power, rated [kW] | Rotor diameter [m] | Hub height [m] | Shadow data | |
|------------|-----------|---------|--------------------------|-------|---------------------------|------------------|-------------------------|--------------------------|----------------------|--------------------------------|------|
| | | | | | | | | | | Calculation distance [m] | RPM |
| 1 515.361 | 4.573.236 | 909,6 | Siemens Gamesa SG 6... | Yes | Siemens Gamesa | SG 6.6-155-6.600 | 6.600 | 155,0 | 102,5 | 2.042 | 11.6 |
| 2 514.821 | 4.573.266 | 925,2 | Siemens Gamesa SG 6... | Yes | Siemens Gamesa | SG 6.6-155-6.600 | 6.600 | 155,0 | 102,5 | 2.042 | 11.6 |
| 3 514.522 | 4.572.869 | 1.011,0 | Siemens Gamesa SG 6... | Yes | Siemens Gamesa | SG 6.6-155-6.600 | 6.600 | 155,0 | 102,5 | 2.042 | 11.6 |
| 4 515.107 | 4.572.861 | 958,3 | Siemens Gamesa SG 6... | Yes | Siemens Gamesa | SG 6.6-155-6.600 | 6.600 | 155,0 | 102,5 | 2.042 | 11.6 |
| 5 515.492 | 4.572.695 | 925,3 | Siemens Gamesa SG 6... | Yes | Siemens Gamesa | SG 6.6-155-6.600 | 6.600 | 155,0 | 102,5 | 2.042 | 11.6 |
| 6 514.194 | 4.572.505 | 978,6 | Siemens Gamesa SG 6... | Yes | Siemens Gamesa | SG 6.6-155-6.600 | 6.600 | 155,0 | 102,5 | 2.042 | 11.6 |
| 7 514.707 | 4.572.498 | 969,7 | Siemens Gamesa SG 6... | Yes | Siemens Gamesa | SG 6.6-155-6.600 | 6.600 | 155,0 | 102,5 | 2.042 | 11.6 |
| 8 515.527 | 4.572.194 | 896,1 | Siemens Gamesa SG 6... | Yes | Siemens Gamesa | SG 6.6-155-6.600 | 6.600 | 155,0 | 102,5 | 2.042 | 11.6 |
| 9 515.893 | 4.571.874 | 863,7 | Siemens Gamesa SG 6... | Yes | Siemens Gamesa | SG 6.6-155-6.600 | 6.600 | 155,0 | 102,5 | 2.042 | 11.6 |
| 10 514.710 | 4.571.345 | 911,3 | Siemens Gamesa SG 6... | Yes | Siemens Gamesa | SG 6.6-155-6.600 | 6.600 | 155,0 | 102,5 | 2.042 | 11.6 |
| 11 515.030 | 4.571.756 | 925,8 | Siemens Gamesa SG 6... | Yes | Siemens Gamesa | SG 6.6-155-6.600 | 6.600 | 155,0 | 102,5 | 2.042 | 11.6 |
| 12 515.294 | 4.571.114 | 931,0 | Siemens Gamesa SG 6... | Yes | Siemens Gamesa | SG 6.6-155-6.600 | 6.600 | 155,0 | 102,5 | 2.042 | 11.6 |
| 13 515.757 | 4.571.034 | 899,8 | Siemens Gamesa SG 6... | Yes | Siemens Gamesa | SG 6.6-155-6.600 | 6.600 | 155,0 | 102,5 | 2.042 | 11.6 |
| 14 515.603 | 4.570.594 | 887,5 | Siemens Gamesa SG 6... | Yes | Siemens Gamesa | SG 6.6-155-6.600 | 6.600 | 155,0 | 102,5 | 2.042 | 11.6 |

Shadow receptor-Input

| No. | Easting | Northing | Z | Width | Height | Elevation a.g.l. | Degrees from south cw | Slope of window | Direction mode | Eye height (ZVI) a.g.l. | [m] |
|-----------|-----------|----------|-----|-------|--------|---------------------|--------------------------|--------------------|-----------------|----------------------------|-----|
| A 515.448 | 4.573.583 | 857,0 | 1,0 | 1,0 | 1,0 | 0,0 | 90,0 | 90,0 | Fixed direction | 2,0 | |
| B 515.462 | 4.573.569 | 859,1 | 1,0 | 1,0 | 1,0 | 0,0 | 90,0 | 90,0 | Fixed direction | 2,0 | |
| C 515.085 | 4.573.247 | 917,5 | 1,0 | 1,0 | 1,0 | 90,0 | 90,0 | 90,0 | Fixed direction | 2,0 | |
| D 514.918 | 4.573.437 | 912,8 | 1,0 | 1,0 | 1,0 | 45,0 | 90,0 | 90,0 | Fixed direction | 2,0 | |
| E 514.897 | 4.573.394 | 915,9 | 1,0 | 1,0 | 1,0 | 45,0 | 90,0 | 90,0 | Fixed direction | 2,0 | |
| F 514.411 | 4.572.830 | 1.021,4 | 1,0 | 1,0 | 1,0 | -90,0 | 90,0 | 90,0 | Fixed direction | 2,0 | |
| G 514.529 | 4.572.445 | 976,1 | 1,0 | 1,0 | 1,0 | -90,0 | 90,0 | 90,0 | Fixed direction | 2,0 | |
| H 514.666 | 4.572.282 | 942,7 | 1,0 | 1,0 | 1,0 | 180,0 | 90,0 | 90,0 | Fixed direction | 2,0 | |
| I 514.718 | 4.572.266 | 939,4 | 1,0 | 1,0 | 1,0 | 180,0 | 90,0 | 90,0 | Fixed direction | 2,0 | |
| J 514.695 | 4.572.299 | 943,2 | 1,0 | 1,0 | 1,0 | 180,0 | 90,0 | 90,0 | Fixed direction | 2,0 | |
| K 514.574 | 4.572.137 | 929,9 | 1,0 | 1,0 | 1,0 | -160,0 | 90,0 | 90,0 | Fixed direction | 2,0 | |
| L 514.739 | 4.572.132 | 932,9 | 1,0 | 1,0 | 1,0 | 180,0 | 90,0 | 90,0 | Fixed direction | 2,0 | |
| M 514.923 | 4.571.642 | 914,9 | 1,0 | 1,0 | 1,0 | -120,0 | 90,0 | 90,0 | Fixed direction | 2,0 | |
| N 515.916 | 4.570.243 | 872,4 | 1,0 | 1,0 | 1,0 | 150,0 | 90,0 | 90,0 | Fixed direction | 2,0 | |



SHADOW - Main Result

Calculation: Shadow

Calculation Results

Shadow receptor

Shadow, worst case

| No. | Shadow hours per year [h/year] | Shadow days per year [days/year] | Max shadow hours per day [h/day] |
|-----|--------------------------------|----------------------------------|----------------------------------|
| A | 231:30 | 159 | 2:05 |
| B | 245:12 | 163 | 2:07 |
| C | 398:15 | 317 | 2:06 |
| D | 453:18 | 195 | 2:44 |
| E | 656:31 | 251 | 3:18 |
| F | 635:32 | 282 | 4:15 |
| G | 380:26 | 178 | 3:00 |
| H | 79:48 | 78 | 1:32 |
| I | 71:46 | 73 | 1:26 |
| J | 109:14 | 80 | 1:43 |
| K | 23:10 | 104 | 0:30 |
| L | 23:02 | 54 | 0:38 |
| M | 59:19 | 118 | 0:57 |
| N | 0:00 | 0 | 0:00 |

Total amount of flickering on the shadow receptors caused by each WTG

| No. | Name | Worst case [h/year] |
|-----|---|---------------------|
| 1 | Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (1) | 175:39 |
| 2 | Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (2) | 1031:20 |
| 3 | Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (3) | 675:31 |
| 4 | Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (4) | 47:48 |
| 5 | Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (5) | 51:38 |
| 6 | Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (6) | 95:51 |
| 7 | Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (7) | 432:14 |
| 8 | Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (8) | 29:38 |
| 9 | Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (9) | 15:31 |
| 10 | Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (10) | 0:00 |
| 11 | Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (11) | 0:00 |
| 12 | Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (12) | 11:43 |
| 13 | Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (13) | 34:45 |
| 14 | Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (14) | 0:00 |

Total times in Receptor wise and WTG wise tables can differ, as a WTG can lead to flicker at 2 or more receptors simultaneously and/or receptors may receive flicker from 2 or more WTGs simultaneously.

SHADOW - Calendar

Calculation: ShadowShadow receptor: A - Shadow Receptor: 1,0 × 1,0 Azimuth: 0,0° Slope: 90,0° (1)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|---------------------|-----------------------|-----------------------|----------------------|-------|-------|------|
| 1 07:26 | 12:08 (1) 07:12 | 12:35 (1) 06:36 | 15:57 (2) 06:45 | 05:59 | 05:29 | |
| 16:41 | 124 15:53 (6) 17:15 | 103 16:05 (3) 17:49 | 45 16:42 (2) 19:24 | 19:56 | 20:26 | |
| 2 07:26 | 12:09 (1) 07:11 | 12:37 (1) 06:34 | 15:58 (2) 06:43 | 05:57 | 05:29 | |
| 16:41 | 123 15:54 (6) 17:16 | 100 16:05 (3) 17:51 | 43 16:41 (2) 19:25 | 19:57 | 20:27 | |
| 3 07:26 | 12:09 (1) 07:10 | 12:39 (1) 06:33 | 15:59 (2) 06:41 | 05:56 | 05:28 | |
| 16:42 | 123 15:54 (6) 17:18 | 95 16:05 (3) 17:52 | 42 16:41 (2) 19:26 | 19:58 | 20:27 | |
| 4 07:26 | 12:10 (1) 07:09 | 12:42 (1) 06:31 | 16:00 (2) 06:40 | 05:55 | 05:28 | |
| 16:43 | 122 15:54 (6) 17:19 | 89 16:04 (3) 17:53 | 39 16:39 (2) 19:27 | 19:59 | 20:28 | |
| 5 07:26 | 12:11 (1) 07:08 | 12:44 (1) 06:30 | 16:01 (2) 06:38 | 05:53 | 05:28 | |
| 16:44 | 122 15:55 (6) 17:20 | 96 16:26 (2) 17:54 | 37 16:38 (2) 19:28 | 20:00 | 20:29 | |
| 6 07:26 | 12:11 (1) 07:07 | 12:47 (1) 06:28 | 16:02 (2) 06:36 | 05:52 | 05:27 | |
| 16:45 | 122 15:55 (6) 17:21 | 98 16:30 (2) 17:55 | 34 16:36 (2) 19:29 | 20:01 | 20:29 | |
| 7 07:26 | 12:12 (1) 07:06 | 12:51 (1) 06:26 | 16:04 (2) 06:35 | 05:51 | 05:27 | |
| 16:46 | 120 15:55 (6) 17:23 | 95 16:33 (2) 17:56 | 30 16:34 (2) 19:30 | 20:03 | 20:30 | |
| 8 07:26 | 12:13 (1) 07:05 | 12:54 (1) 06:25 | 16:06 (2) 06:33 | 05:50 | 05:27 | |
| 16:47 | 120 15:56 (6) 17:24 | 89 16:34 (2) 17:58 | 26 16:32 (2) 19:31 | 20:04 | 20:31 | |
| 9 07:26 | 12:14 (1) 07:04 | 13:00 (1) 06:23 | 16:09 (2) 06:31 | 05:49 | 05:27 | |
| 16:48 | 118 15:56 (6) 17:25 | 79 16:36 (2) 17:59 | 20 16:29 (2) 19:33 | 20:05 | 20:31 | |
| 10 07:25 | 12:13 (1) 07:02 | 13:08 (1) 06:22 | 16:12 (2) 06:30 | 05:47 | 05:26 | |
| 16:49 | 119 15:56 (6) 17:26 | 60 16:38 (2) 18:00 | 12 16:24 (2) 19:34 | 20:06 | 20:32 | |
| 11 07:25 | 12:14 (1) 07:01 | 16:02 (2) 06:20 | 06:28 | 05:46 | 05:26 | |
| 16:50 | 117 15:56 (6) 17:28 | 38 16:40 (2) 18:01 | 19:35 | 20:07 | 20:32 | |
| 12 07:25 | 12:15 (1) 07:00 | 16:00 (2) 06:18 | 06:27 | 05:45 | 05:26 | |
| 16:51 | 116 15:56 (6) 17:29 | 40 16:40 (2) 18:02 | 19:36 | 20:08 | 20:33 | |
| 13 07:25 | 12:15 (1) 06:59 | 15:59 (2) 06:17 | 06:25 | 05:44 | 05:26 | |
| 16:52 | 114 15:55 (6) 17:30 | 42 16:41 (2) 18:03 | 19:37 | 20:09 | 20:33 | |
| 14 07:24 | 12:16 (1) 06:57 | 15:59 (2) 06:15 | 06:23 | 05:43 | 05:26 | |
| 16:53 | 112 15:55 (6) 17:31 | 44 16:43 (2) 18:04 | 19:38 | 20:10 | 20:34 | |
| 15 07:24 | 12:17 (1) 06:56 | 15:59 (2) 06:13 | 06:22 | 05:42 | 05:26 | |
| 16:54 | 112 15:54 (6) 17:33 | 45 16:44 (2) 18:05 | 19:39 | 20:11 | 20:34 | |
| 16 07:23 | 12:18 (1) 06:55 | 15:57 (2) 06:12 | 06:20 | 05:41 | 05:26 | |
| 16:56 | 112 15:54 (3) 17:34 | 47 16:44 (2) 18:07 | 19:40 | 20:12 | 20:35 | |
| 17 07:23 | 12:18 (1) 06:53 | 15:57 (2) 06:10 | 06:19 | 05:40 | 05:26 | |
| 16:57 | 114 15:55 (3) 17:35 | 47 16:44 (2) 18:08 | 19:41 | 20:13 | 20:35 | |
| 18 07:23 | 12:19 (1) 06:52 | 15:56 (2) 06:08 | 06:17 | 05:39 | 05:26 | |
| 16:58 | 116 15:57 (3) 17:36 | 48 16:44 (2) 18:09 | 19:42 | 20:14 | 20:35 | |
| 19 07:22 | 12:20 (1) 06:51 | 15:56 (2) 06:07 | 06:16 | 05:38 | 05:26 | |
| 16:59 | 116 15:58 (3) 17:38 | 49 16:45 (2) 18:10 | 19:43 | 20:15 | 20:36 | |
| 20 07:21 | 12:20 (1) 06:49 | 15:56 (2) 06:05 | 06:14 | 05:37 | 05:26 | |
| 17:00 | 118 15:59 (3) 17:39 | 50 16:46 (2) 18:11 | 19:44 | 20:16 | 20:36 | |
| 21 07:21 | 12:22 (1) 06:48 | 15:56 (2) 06:03 | 06:13 | 05:37 | 05:26 | |
| 17:01 | 118 16:01 (3) 17:40 | 49 16:45 (2) 18:12 | 19:45 | 20:17 | 20:36 | |
| 22 07:20 | 12:22 (1) 06:46 | 15:56 (2) 06:02 | 06:11 | 05:36 | 05:27 | |
| 17:03 | 118 16:01 (3) 17:41 | 50 16:46 (2) 18:13 | 19:46 | 20:17 | 20:36 | |
| 23 07:20 | 12:23 (1) 06:45 | 15:55 (2) 06:00 | 06:10 | 05:35 | 05:27 | |
| 17:04 | 119 16:02 (3) 17:42 | 50 16:45 (2) 18:14 | 19:48 | 20:18 | 20:37 | |
| 24 07:19 | 12:25 (1) 06:43 | 15:56 (2) 05:58 | 06:08 | 05:34 | 05:27 | |
| 17:05 | 117 16:03 (3) 17:44 | 49 16:45 (2) 18:15 | 19:49 | 20:19 | 20:37 | |
| 25 07:18 | 12:26 (1) 06:42 | 15:56 (2) 05:56 | 06:07 | 05:34 | 05:27 | |
| 17:06 | 117 16:04 (3) 17:45 | 49 16:45 (2) 18:16 | 19:50 | 20:20 | 20:37 | |
| 26 07:17 | 12:27 (1) 06:40 | 15:56 (2) 05:55 | 06:05 | 05:33 | 05:28 | |
| 17:08 | 115 16:04 (3) 17:46 | 49 16:45 (2) 18:17 | 19:51 | 20:21 | 20:37 | |
| 27 07:17 | 12:28 (1) 06:39 | 15:56 (2) 05:53 | 06:04 | 05:32 | 05:28 | |
| 17:09 | 114 16:04 (3) 17:47 | 48 16:44 (2) 18:19 | 19:52 | 20:22 | 20:37 | |
| 28 07:16 | 12:29 (1) 06:37 | 15:56 (2) 05:51 | 06:03 | 05:32 | 05:28 | |
| 17:10 | 114 16:05 (3) 17:48 | 47 16:43 (2) 18:20 | 19:53 | 20:23 | 20:37 | |
| 29 07:15 | 12:30 (1) | 06:50 | 06:01 | 05:31 | 05:29 | |
| 17:11 | 111 16:05 (3) | 19:21 | 19:54 | 20:24 | 20:37 | |
| 30 07:14 | 12:32 (1) | 06:48 | 06:00 | 05:30 | 05:29 | |
| 17:13 | 108 16:05 (3) | 19:22 | 19:55 | 20:24 | 20:37 | |
| 31 07:13 | 12:33 (1) | 06:46 | | 05:30 | | |
| 17:14 | 106 16:05 (3) | 19:23 | | 20:25 | | |
| Potential sun hours | 297 | 297 | 369 | 399 | 449 | 453 |
| Total, worst case | 3617 | 1745 | 328 | | | |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: A - Shadow Receptor: 1,0 × 1,0 Azimuth: 0,0° Slope: 90,0° (1)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | | November | | December |
|---------------------|-------|--------|-----------|---------|------|-----------|-----------|-----------|
| 1 | 05:30 | 05:54 | 06:25 | 06:55 | | 06:30 | 12:36 (1) | 07:05 |
| | 20:37 | 20:18 | 19:34 | 18:43 | | 16:56 | 16:08 (2) | 16:32 |
| 2 | 05:30 | 05:55 | 06:26 | 06:56 | | 06:31 | 12:29 (1) | 07:06 |
| | 20:37 | 20:17 | 19:33 | 18:42 | | 16:55 | 80 | 16:06 (2) |
| 3 | 05:31 | 05:56 | 06:27 | 06:58 | 4 | 16:55 (2) | 06:32 | 12:23 (1) |
| | 20:37 | 20:16 | 19:31 | 18:40 | | 16:59 (2) | 16:54 | 07:07 |
| 4 | 05:31 | 05:57 | 06:28 | 06:59 | | 16:48 (2) | 06:34 | 12:20 (1) |
| | 20:36 | 20:14 | 19:29 | 18:38 | 17 | 17:05 (2) | 16:53 | 07:08 |
| 5 | 05:32 | 05:58 | 06:29 | 07:00 | | 16:44 (2) | 06:35 | 12:17 (1) |
| | 20:36 | 20:13 | 19:28 | 18:37 | 24 | 17:08 (2) | 16:51 | 07:09 |
| 6 | 05:32 | 05:59 | 06:30 | 07:01 | | 16:41 (2) | 06:36 | 16:00 (2) |
| | 20:36 | 20:12 | 19:26 | 18:35 | 29 | 17:10 (2) | 16:50 | 16:31 |
| 7 | 05:33 | 06:00 | 06:31 | 07:02 | | 16:39 (2) | 06:37 | 12:11 (1) |
| | 20:36 | 20:11 | 19:24 | 18:33 | 32 | 17:11 (2) | 16:49 | 07:11 |
| 8 | 05:34 | 06:01 | 06:32 | 07:03 | | 16:37 (2) | 06:38 | 12:10 (1) |
| | 20:35 | 20:10 | 19:23 | 18:32 | 35 | 17:12 (2) | 16:48 | 07:12 |
| 9 | 05:34 | 06:02 | 06:33 | 07:04 | | 16:35 (2) | 06:40 | 15:36 (3) |
| | 20:35 | 20:08 | 19:21 | 18:30 | 38 | 17:13 (2) | 16:47 | 16:30 |
| 10 | 05:35 | 06:03 | 06:34 | 07:05 | | 16:33 (2) | 06:41 | 12:06 (1) |
| | 20:35 | 20:07 | 19:19 | 18:28 | 41 | 17:14 (2) | 16:46 | 07:14 |
| 11 | 05:36 | 06:04 | 06:35 | 07:06 | | 16:32 (2) | 06:42 | 15:36 (3) |
| | 20:34 | 20:06 | 19:18 | 18:27 | 42 | 17:14 (2) | 16:45 | 16:30 |
| 12 | 05:36 | 06:05 | 06:36 | 07:07 | | 16:32 (2) | 06:43 | 12:04 (1) |
| | 20:34 | 20:04 | 19:16 | 18:25 | 44 | 17:16 (2) | 16:44 | 07:16 |
| 13 | 05:37 | 06:06 | 06:37 | 07:08 | | 16:30 (2) | 06:44 | 12:02 (1) |
| | 20:33 | 20:03 | 19:14 | 18:24 | 46 | 17:16 (2) | 16:43 | 07:16 |
| 14 | 05:38 | 06:07 | 06:38 | 07:09 | | 16:29 (2) | 06:46 | 15:37 (3) |
| | 20:33 | 20:02 | 19:12 | 18:22 | 47 | 17:16 (2) | 16:42 | 16:31 |
| 15 | 05:39 | 06:08 | 06:39 | 07:10 | | 16:29 (2) | 06:47 | 12:01 (1) |
| | 20:32 | 20:00 | 19:11 | 18:20 | 47 | 17:16 (2) | 16:41 | 07:18 |
| 16 | 05:40 | 06:09 | 06:40 | 07:12 | | 16:28 (2) | 06:48 | 12:00 (1) |
| | 20:32 | 19:59 | 19:09 | 18:19 | 48 | 17:16 (2) | 16:40 | 07:19 |
| 17 | 05:40 | 06:10 | 06:41 | 07:13 | | 16:27 (2) | 06:49 | 15:37 (3) |
| | 20:31 | 19:57 | 19:07 | 18:17 | 49 | 17:16 (2) | 16:40 | 16:32 |
| 18 | 05:41 | 06:11 | 06:42 | 07:14 | | 16:26 (2) | 06:50 | 12:01 (1) |
| | 20:30 | 19:56 | 19:06 | 18:16 | 50 | 17:16 (2) | 16:39 | 07:20 |
| 19 | 05:42 | 06:12 | 06:43 | 07:15 | | 16:27 (2) | 06:52 | 15:37 (3) |
| | 20:30 | 19:55 | 19:04 | 18:14 | 50 | 17:17 (2) | 16:38 | 16:31 |
| 20 | 05:43 | 06:13 | 06:44 | 07:16 | | 16:26 (2) | 06:53 | 12:05 (1) |
| | 20:29 | 19:53 | 19:02 | 18:13 | 50 | 17:16 (2) | 16:37 | 07:21 |
| 21 | 05:44 | 06:14 | 06:45 | 07:17 | | 16:26 (2) | 06:54 | 15:36 (3) |
| | 20:28 | 19:52 | 19:00 | 18:11 | 50 | 17:16 (2) | 16:37 | 16:33 |
| 22 | 05:45 | 06:15 | 06:46 | 07:18 | | 16:26 (2) | 06:55 | 12:05 (1) |
| | 20:27 | 19:50 | 18:59 | 18:10 | 49 | 17:15 (2) | 16:36 | 07:22 |
| 23 | 05:45 | 06:16 | 06:47 | 07:19 | | 16:26 (2) | 06:56 | 15:36 (3) |
| | 20:26 | 19:49 | 18:57 | 18:08 | 49 | 17:15 (2) | 16:35 | 16:32 |
| 24 | 05:46 | 06:17 | 06:48 | 07:21 | | 16:27 (2) | 06:57 | 12:05 (1) |
| | 20:26 | 19:47 | 18:55 | 18:07 | 48 | 17:15 (2) | 16:35 | 07:23 |
| 25 | 05:47 | 06:18 | 06:49 | 06:22 | | 15:27 (2) | 06:59 | 15:34 (3) |
| | 20:25 | 19:45 | 18:54 | 17:06 | 47 | 16:14 (2) | 16:34 | 16:35 |
| 26 | 05:48 | 06:19 | 06:50 | 06:23 | | 15:27 (2) | 07:00 | 12:05 (1) |
| | 20:24 | 19:44 | 18:52 | 17:04 | 46 | 16:13 (2) | 16:34 | 07:24 |
| 27 | 05:49 | 06:20 | 06:51 | 06:24 | | 15:27 (2) | 07:01 | 15:56 (1) |
| | 20:23 | 19:42 | 18:50 | 17:03 | 45 | 16:12 (2) | 16:33 | 07:24 |
| 28 | 05:50 | 06:21 | 06:52 | 06:25 | | 15:29 (2) | 07:02 | 15:56 (1) |
| | 20:22 | 19:41 | 18:48 | 17:01 | 43 | 16:12 (2) | 16:33 | 07:25 |
| 29 | 05:51 | 06:22 | 06:53 | 06:26 | | 15:29 (2) | 07:03 | 15:56 (1) |
| | 20:21 | 19:39 | 18:47 | 17:00 | 42 | 16:11 (2) | 16:32 | 07:25 |
| 30 | 05:52 | 06:23 | 06:54 | 06:28 | | 15:30 (2) | 07:04 | 15:56 (1) |
| | 20:20 | 19:38 | 18:45 | 16:59 | 40 | 16:10 (2) | 16:32 | 07:25 |
| 31 | 05:53 | 06:24 | | | | 15:31 (2) | | 16:40 |
| Potential sun hours | 460 | 428 | 375 | 345 | | 297 | | 287 |
| Total, worst case | | | | | 1189 | | 3203 | 3808 |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: B - Shadow Receptor: 1,0 × 1,0 Azimuth: 0,0° Slope: 90,0° (2)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|---------------------|-----------------------|-----------------------|----------------------|-------|-------|------|
| 1 07:26 | 12:18 (1) 07:12 | 12:41 (1) 06:36 | 16:01 (2) 06:45 | 05:59 | 05:29 | |
| 16:41 | 126 15:56 (6) 17:15 | 113 16:09 (3) 17:49 | 47 16:48 (2) 19:24 | 19:56 | 20:26 | |
| 2 07:26 | 12:18 (1) 07:11 | 12:42 (1) 06:34 | 16:01 (2) 06:43 | 05:57 | 05:29 | |
| 16:41 | 126 15:56 (6) 17:16 | 111 16:09 (3) 17:51 | 46 16:47 (2) 19:25 | 19:57 | 20:27 | |
| 3 07:26 | 12:19 (1) 07:10 | 12:44 (1) 06:33 | 16:02 (2) 06:41 | 05:56 | 05:28 | |
| 16:42 | 126 15:57 (6) 17:18 | 107 16:09 (3) 17:52 | 45 16:47 (2) 19:26 | 19:58 | 20:27 | |
| 4 07:26 | 12:19 (1) 07:09 | 12:46 (1) 06:31 | 16:03 (2) 06:40 | 05:55 | 05:28 | |
| 16:43 | 126 15:57 (6) 17:19 | 104 16:09 (3) 17:53 | 43 16:46 (2) 19:27 | 19:59 | 20:28 | |
| 5 07:26 | 12:20 (1) 07:08 | 12:48 (1) 06:30 | 16:04 (2) 06:38 | 05:53 | 05:28 | |
| 16:44 | 125 15:58 (6) 17:20 | 99 16:08 (3) 17:54 | 41 16:45 (2) 19:28 | 20:00 | 20:29 | |
| 6 07:26 | 12:20 (1) 07:07 | 12:50 (1) 06:28 | 16:05 (2) 06:36 | 05:52 | 05:27 | |
| 16:45 | 126 15:58 (6) 17:21 | 95 16:08 (3) 17:55 | 39 16:44 (2) 19:29 | 20:01 | 20:29 | |
| 7 07:26 | 12:21 (1) 07:06 | 12:52 (1) 06:26 | 16:05 (2) 06:35 | 05:51 | 05:27 | |
| 16:46 | 124 15:58 (6) 17:23 | 90 16:07 (3) 17:56 | 37 16:42 (2) 19:30 | 20:02 | 20:30 | |
| 8 07:26 | 12:22 (1) 07:05 | 12:54 (1) 06:25 | 16:07 (2) 06:33 | 05:50 | 05:27 | |
| 16:47 | 124 15:59 (6) 17:24 | 99 16:32 (2) 17:58 | 34 16:41 (2) 19:31 | 20:04 | 20:31 | |
| 9 07:26 | 12:22 (1) 07:04 | 12:57 (1) 06:23 | 16:09 (2) 06:31 | 05:49 | 05:27 | |
| 16:48 | 124 15:59 (6) 17:25 | 98 16:36 (2) 17:59 | 30 16:39 (2) 19:33 | 20:05 | 20:31 | |
| 10 07:25 | 12:22 (1) 07:02 | 13:01 (1) 06:22 | 16:10 (2) 06:30 | 05:47 | 05:26 | |
| 16:49 | 124 15:59 (6) 17:26 | 95 16:39 (2) 18:00 | 26 16:36 (2) 19:34 | 20:06 | 20:32 | |
| 11 07:25 | 12:23 (1) 07:01 | 13:05 (1) 06:20 | 16:14 (2) 06:28 | 05:46 | 05:26 | |
| 16:50 | 123 15:59 (6) 17:28 | 86 16:41 (2) 18:01 | 20 16:34 (2) 19:35 | 20:07 | 20:32 | |
| 12 07:25 | 12:24 (1) 07:00 | 13:09 (1) 06:18 | 16:18 (2) 06:27 | 05:45 | 05:26 | |
| 16:51 | 121 16:00 (6) 17:29 | 71 16:42 (2) 18:02 | 11 16:29 (2) 19:36 | 20:08 | 20:33 | |
| 13 07:25 | 12:24 (1) 06:59 | 13:16 (1) 06:17 | 06:25 | 05:44 | 05:26 | |
| 16:52 | 120 15:59 (6) 17:30 | 60 16:44 (2) 18:03 | 19:37 | 20:09 | 20:33 | |
| 14 07:24 | 12:25 (1) 06:57 | 16:07 (2) 06:15 | 06:23 | 05:43 | 05:26 | |
| 16:53 | 119 15:59 (6) 17:31 | 38 16:45 (2) 18:04 | 19:38 | 20:10 | 20:34 | |
| 15 07:24 | 12:25 (1) 06:56 | 16:06 (2) 06:13 | 06:22 | 05:42 | 05:26 | |
| 16:54 | 116 15:58 (6) 17:33 | 41 16:47 (2) 18:05 | 19:39 | 20:11 | 20:34 | |
| 16 07:23 | 12:26 (1) 06:55 | 16:04 (2) 06:12 | 06:20 | 05:41 | 05:26 | |
| 16:56 | 115 15:58 (6) 17:34 | 43 16:47 (2) 18:07 | 19:40 | 20:12 | 20:35 | |
| 17 07:23 | 12:26 (1) 06:53 | 16:04 (2) 06:10 | 06:19 | 05:40 | 05:26 | |
| 16:57 | 114 15:57 (6) 17:35 | 44 16:48 (2) 18:08 | 19:41 | 20:13 | 20:35 | |
| 18 07:23 | 12:28 (1) 06:52 | 16:03 (2) 06:08 | 06:17 | 05:39 | 05:26 | |
| 16:58 | 114 15:58 (3) 17:36 | 45 16:48 (2) 18:09 | 19:42 | 20:14 | 20:35 | |
| 19 07:22 | 12:28 (1) 06:51 | 16:02 (2) 06:07 | 06:16 | 05:38 | 05:26 | |
| 16:59 | 116 15:59 (3) 17:38 | 47 16:49 (2) 18:10 | 19:43 | 20:15 | 20:36 | |
| 20 07:21 | 12:28 (1) 06:49 | 16:02 (2) 06:05 | 06:14 | 05:37 | 05:26 | |
| 17:00 | 118 16:00 (3) 17:39 | 48 16:50 (2) 18:11 | 19:44 | 20:16 | 20:36 | |
| 21 07:21 | 12:30 (1) 06:48 | 16:01 (2) 06:03 | 06:13 | 05:37 | 05:26 | |
| 17:01 | 119 16:02 (3) 17:40 | 49 16:50 (2) 18:12 | 19:45 | 20:17 | 20:36 | |
| 22 07:20 | 12:30 (1) 06:46 | 16:02 (2) 06:02 | 06:11 | 05:36 | 05:27 | |
| 17:03 | 120 16:03 (3) 17:41 | 48 16:50 (2) 18:13 | 19:46 | 20:17 | 20:36 | |
| 23 07:20 | 12:31 (1) 06:45 | 16:01 (2) 06:00 | 06:10 | 05:35 | 05:27 | |
| 17:04 | 121 16:04 (3) 17:42 | 49 16:50 (2) 18:14 | 19:48 | 20:18 | 20:37 | |
| 24 07:19 | 12:32 (1) 06:43 | 16:01 (2) 05:58 | 06:08 | 05:34 | 05:27 | |
| 17:05 | 122 16:05 (3) 17:44 | 49 16:50 (2) 18:15 | 19:49 | 20:19 | 20:37 | |
| 25 07:18 | 12:33 (1) 06:42 | 16:01 (2) 05:56 | 06:07 | 05:34 | 05:27 | |
| 17:06 | 121 16:06 (3) 17:45 | 49 16:50 (2) 18:16 | 19:50 | 20:20 | 20:37 | |
| 26 07:17 | 12:34 (1) 06:40 | 16:01 (2) 05:55 | 06:05 | 05:33 | 05:28 | |
| 17:08 | 121 16:07 (3) 17:46 | 49 16:50 (2) 18:17 | 19:51 | 20:21 | 20:37 | |
| 27 07:17 | 12:35 (1) 06:39 | 16:01 (2) 05:53 | 06:04 | 05:32 | 05:28 | |
| 17:09 | 120 16:07 (3) 17:47 | 48 16:49 (2) 18:19 | 19:52 | 20:22 | 20:37 | |
| 28 07:16 | 12:36 (1) 06:37 | 16:01 (2) 05:51 | 06:03 | 05:32 | 05:28 | |
| 17:10 | 120 16:08 (3) 17:48 | 47 16:48 (2) 18:20 | 19:53 | 20:23 | 20:37 | |
| 29 07:15 | 12:37 (1) | 06:50 | 06:01 | 05:31 | 05:29 | |
| 17:11 | 118 16:08 (3) | 19:21 | 19:54 | 20:24 | 20:37 | |
| 30 07:14 | 12:38 (1) | 06:48 | 06:00 | 05:30 | 05:29 | |
| 17:13 | 117 16:08 (3) | 19:22 | 19:55 | 20:24 | 20:37 | |
| 31 07:13 | 12:39 (1) | 06:46 | | 05:30 | | |
| 17:14 | 115 16:08 (3) | 19:23 | | 20:25 | | |
| Potential sun hours | 297 | 297 | 369 | 399 | 449 | 453 |
| Total, worst case | 3741 | 1922 | 419 | | | |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: B - Shadow Receptor: 1,0 × 1,0 Azimuth: 0,0° Slope: 90,0° (2)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | | November | | December |
|---------------------|-------|--------|-----------|---------|------|-----------|-----------|-------------------------------|
| 1 | 05:30 | 05:54 | 06:25 | 06:55 | | 17:02 (2) | 06:30 | 12:30 (1) 07:05 12:05 (1) |
| | 20:37 | 20:18 | 19:34 | 18:43 | 2 | 17:04 (2) | 16:56 95 | 16:08 (2) 16:32 122 15:41 (6) |
| 2 | 05:30 | 05:55 | 06:26 | 06:56 | | 16:54 (2) | 06:31 | 12:27 (1) 07:06 12:05 (1) |
| | 20:37 | 20:17 | 19:33 | 18:42 | 17 | 17:11 (2) | 16:55 98 | 16:05 (2) 16:31 123 15:42 (6) |
| 3 | 05:31 | 05:56 | 06:27 | 06:58 | | 16:50 (2) | 06:32 | 12:24 (1) 07:07 12:06 (1) |
| | 20:37 | 20:16 | 19:31 | 18:40 | 24 | 17:14 (2) | 16:54 98 | 16:01 (2) 16:31 123 15:42 (6) |
| 4 | 05:31 | 05:57 | 06:28 | 06:59 | | 16:47 (2) | 06:34 | 12:22 (1) 07:08 12:06 (1) |
| | 20:36 | 20:14 | 19:29 | 18:38 | 29 | 17:16 (2) | 16:53 90 | 15:37 (3) 16:31 124 15:43 (6) |
| 5 | 05:32 | 05:58 | 06:29 | 07:00 | | 16:45 (2) | 06:35 | 12:19 (1) 07:09 12:06 (1) |
| | 20:36 | 20:13 | 19:28 | 18:37 | 32 | 17:17 (2) | 16:51 96 | 15:38 (3) 16:31 124 15:43 (6) |
| 6 | 05:32 | 05:59 | 06:30 | 07:01 | | 16:43 (2) | 06:36 | 12:17 (1) 07:10 12:06 (1) |
| | 20:36 | 20:12 | 19:26 | 18:35 | 35 | 17:18 (2) | 16:50 100 | 15:38 (3) 16:31 126 15:44 (6) |
| 7 | 05:33 | 06:00 | 06:31 | 07:02 | | 16:41 (2) | 06:37 | 12:15 (1) 07:11 12:07 (1) |
| | 20:36 | 20:11 | 19:24 | 18:33 | 38 | 17:19 (2) | 16:49 104 | 15:38 (3) 16:30 125 15:45 (6) |
| 8 | 05:34 | 06:01 | 06:32 | 07:03 | | 16:39 (2) | 06:38 | 12:14 (1) 07:12 12:07 (1) |
| | 20:35 | 20:10 | 19:23 | 18:32 | 41 | 17:20 (2) | 16:48 109 | 15:40 (3) 16:30 126 15:45 (6) |
| 9 | 05:34 | 06:02 | 06:33 | 07:04 | | 16:38 (2) | 06:40 | 12:13 (1) 07:13 12:08 (1) |
| | 20:35 | 20:08 | 19:21 | 18:30 | 42 | 17:20 (2) | 16:47 111 | 15:40 (3) 16:30 126 15:46 (6) |
| 10 | 05:35 | 06:03 | 06:34 | 07:05 | | 16:37 (2) | 06:41 | 12:11 (1) 07:14 12:08 (1) |
| | 20:35 | 20:07 | 19:19 | 18:28 | 44 | 17:21 (2) | 16:46 113 | 15:39 (3) 16:30 126 15:46 (6) |
| 11 | 05:36 | 06:04 | 06:35 | 07:06 | | 16:36 (2) | 06:42 | 12:11 (1) 07:15 12:09 (1) |
| | 20:34 | 20:06 | 19:18 | 18:27 | 45 | 17:21 (2) | 16:45 115 | 15:40 (3) 16:30 126 15:47 (6) |
| 12 | 05:36 | 06:05 | 06:36 | 07:07 | | 16:35 (2) | 06:43 | 12:10 (1) 07:16 12:08 (1) |
| | 20:34 | 20:04 | 19:16 | 18:25 | 47 | 17:22 (2) | 16:44 117 | 15:40 (3) 16:31 126 15:46 (6) |
| 13 | 05:37 | 06:06 | 06:37 | 07:08 | | 16:35 (2) | 06:44 | 12:09 (1) 07:16 12:09 (1) |
| | 20:33 | 20:03 | 19:14 | 18:24 | 47 | 17:22 (2) | 16:43 118 | 15:40 (3) 16:31 126 15:47 (6) |
| 14 | 05:38 | 06:07 | 06:38 | 07:09 | | 16:34 (2) | 06:46 | 12:08 (1) 07:17 12:10 (1) |
| | 20:33 | 20:02 | 19:12 | 18:22 | 48 | 17:22 (2) | 16:42 119 | 15:39 (3) 16:31 126 15:48 (6) |
| 15 | 05:39 | 06:08 | 06:39 | 07:10 | | 16:33 (2) | 06:47 | 12:08 (1) 07:18 12:10 (1) |
| | 20:32 | 20:00 | 19:11 | 18:20 | 49 | 17:22 (2) | 16:41 120 | 15:40 (3) 16:31 126 15:48 (6) |
| 16 | 05:40 | 06:09 | 06:40 | 07:12 | | 16:33 (2) | 06:48 | 12:07 (1) 07:19 12:10 (1) |
| | 20:32 | 19:59 | 19:09 | 18:19 | 49 | 17:22 (2) | 16:40 121 | 15:40 (3) 16:31 126 15:48 (6) |
| 17 | 05:40 | 06:10 | 06:41 | 07:13 | | 16:32 (2) | 06:49 | 12:06 (1) 07:19 12:11 (1) |
| | 20:31 | 19:57 | 19:07 | 18:17 | 49 | 17:21 (2) | 16:40 121 | 15:39 (3) 16:32 126 15:49 (6) |
| 18 | 05:41 | 06:11 | 06:42 | 07:14 | | 16:32 (2) | 06:50 | 12:06 (1) 07:20 12:12 (1) |
| | 20:30 | 19:56 | 19:06 | 18:16 | 49 | 17:21 (2) | 16:39 122 | 15:39 (3) 16:32 126 15:50 (6) |
| 19 | 05:42 | 06:12 | 06:43 | 07:15 | | 16:32 (2) | 06:52 | 12:06 (1) 07:21 12:12 (1) |
| | 20:30 | 19:55 | 19:04 | 18:14 | 49 | 17:21 (2) | 16:38 121 | 15:39 (3) 16:32 126 15:50 (6) |
| 20 | 05:43 | 06:13 | 06:44 | 07:16 | | 16:32 (2) | 06:53 | 12:05 (1) 07:21 12:13 (1) |
| | 20:29 | 19:53 | 19:02 | 18:13 | 49 | 17:21 (2) | 16:37 120 | 15:38 (3) 16:33 126 15:51 (6) |
| 21 | 05:44 | 06:14 | 06:45 | 07:17 | | 16:32 (2) | 06:54 | 12:05 (1) 07:22 12:12 (1) |
| | 20:28 | 19:52 | 19:00 | 18:11 | 48 | 17:20 (2) | 16:37 119 | 15:37 (3) 16:33 126 15:50 (6) |
| 22 | 05:45 | 06:15 | 06:46 | 07:18 | | 16:32 (2) | 06:55 | 12:05 (1) 07:22 12:13 (1) |
| | 20:27 | 19:50 | 18:59 | 18:10 | 47 | 17:19 (2) | 16:36 118 | 15:37 (3) 16:34 126 15:51 (6) |
| 23 | 05:45 | 06:16 | 06:47 | 07:19 | | 16:32 (2) | 06:56 | 12:05 (1) 07:23 12:14 (1) |
| | 20:26 | 19:49 | 18:57 | 18:08 | 46 | 17:18 (2) | 16:35 116 | 15:36 (3) 16:34 126 15:52 (6) |
| 24 | 05:46 | 06:17 | 06:48 | 07:21 | | 16:33 (2) | 06:57 | 12:05 (1) 07:23 12:15 (1) |
| | 20:26 | 19:47 | 18:55 | 18:07 | 45 | 17:18 (2) | 16:35 114 | 15:35 (3) 16:35 126 15:53 (6) |
| 25 | 05:47 | 06:18 | 06:49 | 07:22 | | 15:34 (2) | 06:59 | 12:04 (1) 07:24 12:15 (1) |
| | 20:25 | 19:45 | 18:54 | 17:06 | 43 | 16:17 (2) | 16:34 114 | 15:35 (6) 16:35 126 15:53 (6) |
| 26 | 05:48 | 06:19 | 06:50 | 07:23 | | 15:34 (2) | 07:00 | 12:04 (1) 07:24 12:15 (1) |
| | 20:24 | 19:44 | 18:52 | 17:04 | 42 | 16:16 (2) | 16:34 114 | 15:36 (6) 16:36 126 15:53 (6) |
| 27 | 05:49 | 06:20 | 06:51 | 07:24 | | 15:35 (2) | 07:01 | 12:04 (1) 07:24 12:16 (1) |
| | 20:23 | 19:42 | 18:50 | 17:03 | 40 | 16:15 (2) | 16:33 116 | 15:37 (6) 16:37 126 15:54 (6) |
| 28 | 05:50 | 06:21 | 06:52 | 07:25 | | 15:37 (2) | 07:02 | 12:05 (1) 07:25 12:16 (1) |
| | 20:22 | 19:41 | 18:48 | 17:01 | 38 | 16:15 (2) | 16:33 119 | 15:39 (6) 16:37 126 15:54 (6) |
| 29 | 05:51 | 06:22 | 06:53 | 07:26 | | 12:44 (1) | 07:03 | 12:05 (1) 07:25 12:17 (1) |
| | 20:21 | 19:39 | 18:47 | 17:00 | 62 | 16:13 (2) | 16:32 120 | 15:40 (6) 16:38 127 15:55 (6) |
| 30 | 05:52 | 06:23 | 06:54 | 07:28 | | 12:38 (1) | 07:04 | 12:05 (1) 07:25 12:17 (1) |
| | 20:20 | 19:38 | 18:45 | 16:59 | 75 | 16:11 (2) | 16:32 121 | 15:41 (6) 16:39 126 15:55 (6) |
| 31 | 05:53 | 06:24 | | 06:29 | | 12:33 (1) | | 07:25 |
| | 20:19 | 19:36 | | 16:58 | 88 | 16:09 (2) | | 16:40 126 15:55 (6) |
| Potential sun hours | 460 | 428 | 375 | 345 | | 297 | | 287 |
| Total, worst case | | | | | 1359 | | 3379 | 3892 |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: C - Shadow Receptor: 1,0 × 1,0 Azimuth: 90,0° Slope: 90,0° (3)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|---------------------|----------------------------|-----------------------------|-----------------------------|-----------------------|-----------------------|---------------|
| 1 07:26 | 12:01 (4) 07:12 | 15:33 (3) 06:36 | 15:39 (3) 06:45 | 17:29 (2) 05:59 | 16:57 (2) 05:29 | 17:05 (2) |
| 16:41 | 28 12:29 (4) 17:15 | 37 16:10 (3) 17:49 | 28 16:07 (3) 19:24 | 71 18:40 (2) 19:56 | 125 19:02 (2) 20:26 | 117 19:02 (2) |
| 2 07:26 | 12:02 (4) 07:11 | 15:32 (3) 06:34 | 15:42 (3) 06:43 | 17:27 (2) 05:57 | 16:57 (2) 05:29 | 17:06 (2) |
| 16:41 | 27 12:29 (4) 17:16 | 39 16:11 (3) 17:51 | 22 16:04 (3) 19:25 | 76 18:43 (2) 19:57 | 126 19:03 (2) 20:27 | 116 19:02 (2) |
| 3 07:26 | 12:02 (4) 07:10 | 15:31 (3) 06:33 | 15:46 (3) 06:41 | 17:24 (2) 05:56 | 16:57 (2) 05:29 | 17:06 (2) |
| 16:42 | 27 12:29 (4) 17:18 | 41 16:12 (3) 17:52 | 15 16:01 (3) 19:26 | 80 18:44 (2) 19:58 | 125 19:02 (2) 20:27 | 116 19:02 (2) |
| 4 07:26 | 12:03 (4) 07:09 | 15:31 (3) 06:31 | 15:40 (3) 06:40 | 17:21 (2) 05:55 | 16:57 (2) 05:28 | 17:07 (2) |
| 16:43 | 26 12:29 (4) 17:19 | 43 16:14 (3) 17:53 | 19:27 85 18:46 (2) 19:59 | 125 19:02 (2) 20:28 | 115 19:02 (2) | |
| 5 07:26 | 12:03 (4) 07:08 | 15:30 (3) 06:30 | 15:38 (3) 06:38 | 17:20 (2) 05:53 | 16:57 (2) 05:28 | 17:08 (2) |
| 16:44 | 26 12:29 (4) 17:20 | 45 16:15 (3) 17:54 | 19:28 88 18:48 (2) 20:00 | 126 19:03 (2) 20:29 | 115 19:03 (2) | |
| 6 07:26 | 12:04 (4) 07:07 | 15:30 (3) 06:28 | 15:36 (3) 06:36 | 17:18 (2) 05:52 | 16:57 (2) 05:27 | 17:07 (2) |
| 16:45 | 25 12:29 (4) 17:21 | 46 16:16 (3) 17:55 | 19:29 91 18:49 (2) 20:01 | 126 19:03 (2) 20:30 | 115 19:02 (2) | |
| 7 07:26 | 12:04 (4) 07:06 | 15:29 (3) 06:26 | 15:35 (3) 06:35 | 17:16 (2) 05:51 | 16:57 (2) 05:27 | 17:08 (2) |
| 16:46 | 25 12:29 (4) 17:23 | 47 16:16 (3) 17:56 | 19:30 94 18:50 (2) 20:03 | 126 19:03 (2) 20:30 | 114 19:02 (2) | |
| 8 07:26 | 12:05 (4) 07:05 | 15:28 (3) 06:25 | 15:33 (3) 06:33 | 17:15 (2) 05:50 | 16:58 (2) 05:27 | 17:08 (2) |
| 16:47 | 25 12:30 (4) 17:24 | 48 16:16 (3) 17:58 | 19:31 96 18:51 (2) 20:04 | 125 19:03 (2) 20:31 | 114 19:02 (2) | |
| 9 07:26 | 12:06 (4) 07:04 | 15:28 (3) 06:23 | 15:31 (3) 06:31 | 17:13 (2) 05:49 | 16:57 (2) 05:27 | 17:09 (2) |
| 16:48 | 24 12:30 (4) 17:25 | 49 16:17 (3) 17:59 | 19:33 99 18:52 (2) 20:05 | 125 19:02 (2) 20:31 | 114 19:03 (2) | |
| 10 07:25 | 12:05 (4) 07:02 | 15:28 (3) 06:22 | 15:30 (3) 06:30 | 17:11 (2) 05:47 | 16:57 (2) 05:26 | 17:10 (2) |
| 16:49 | 24 12:29 (4) 17:26 | 50 16:18 (3) 18:00 | 19:34 102 18:53 (2) 20:06 | 125 19:02 (2) 20:32 | 113 19:03 (2) | |
| 11 07:25 | 12:06 (4) 07:01 | 15:28 (3) 06:20 | 15:28 (3) 06:28 | 17:10 (2) 05:46 | 16:57 (2) 05:26 | 17:09 (2) |
| 16:50 | 23 12:29 (4) 17:28 | 50 16:18 (3) 18:01 | 19:35 104 18:54 (2) 20:07 | 125 19:02 (2) 20:32 | 113 19:02 (2) | |
| 12 07:25 | 12:07 (4) 07:00 | 15:27 (3) 06:18 | 15:27 (3) 06:27 | 17:08 (2) 05:45 | 16:58 (2) 05:26 | 17:09 (2) |
| 16:51 | 21 12:28 (4) 17:29 | 51 16:18 (3) 18:02 | 19:36 106 18:54 (2) 20:08 | 124 19:02 (2) 20:33 | 113 19:02 (2) | |
| 13 07:25 | 12:06 (4) 06:59 | 15:27 (3) 06:17 | 15:25 (3) 06:25 | 17:08 (2) 05:44 | 16:58 (2) 05:26 | 17:10 (2) |
| 16:52 | 21 12:27 (4) 17:30 | 51 16:18 (3) 18:03 | 19:37 108 18:56 (2) 20:09 | 124 19:02 (2) 20:33 | 113 19:03 (2) | |
| 14 07:24 | 12:07 (4) 06:57 | 15:28 (3) 06:15 | 15:23 (3) 06:23 | 17:06 (2) 05:43 | 16:58 (2) 05:26 | 17:10 (2) |
| 16:53 | 20 12:27 (4) 17:31 | 51 16:19 (3) 18:04 | 19:38 110 18:56 (2) 20:10 | 124 19:02 (2) 20:34 | 113 19:03 (2) | |
| 15 07:24 | 12:07 (4) 06:56 | 15:28 (3) 06:13 | 15:22 (3) 06:22 | 17:06 (2) 05:42 | 16:58 (2) 05:26 | 17:11 (2) |
| 16:54 | 19 12:26 (4) 17:33 | 51 16:19 (3) 18:05 | 19:39 111 18:57 (2) 20:11 | 124 19:02 (2) 20:34 | 112 19:03 (2) | |
| 16 07:24 | 12:08 (4) 06:55 | 15:28 (3) 06:12 | 15:20 (3) 06:20 | 17:04 (2) 05:41 | 17:00 (2) 05:26 | 17:11 (2) |
| 16:56 | 18 12:26 (4) 17:34 | 51 16:19 (3) 18:07 | 19:40 113 18:57 (2) 20:12 | 123 19:03 (2) 20:35 | 112 19:03 (2) | |
| 17 07:23 | 12:08 (4) 06:53 | 15:28 (3) 06:10 | 15:19 (3) 06:19 | 17:04 (2) 05:40 | 17:00 (2) 05:26 | 17:11 (2) |
| 16:57 | 16 12:24 (4) 17:35 | 51 16:19 (3) 18:08 | 19:41 115 18:59 (2) 20:13 | 123 19:03 (2) 20:35 | 112 19:03 (2) | |
| 18 07:23 | 12:09 (4) 06:52 | 15:28 (3) 06:08 | 15:20 (3) 06:17 | 17:03 (2) 05:39 | 17:00 (2) 05:26 | 17:12 (2) |
| 16:58 | 14 12:23 (4) 17:36 | 50 16:18 (3) 18:09 | 19:42 116 18:59 (2) 20:14 | 123 19:03 (2) 20:35 | 112 19:04 (2) | |
| 19 07:22 | 12:09 (4) 06:51 | 15:29 (3) 06:07 | 15:21 (3) 06:16 | 17:02 (2) 05:38 | 17:00 (2) 05:26 | 17:12 (2) |
| 16:59 | 13 12:22 (4) 17:38 | 49 16:18 (3) 18:10 | 19:43 118 19:00 (2) 20:15 | 122 19:02 (2) 20:36 | 112 19:04 (2) | |
| 20 07:21 | 12:09 (4) 06:49 | 15:30 (3) 06:05 | 15:14 (3) 06:14 | 17:01 (2) 05:38 | 17:00 (2) 05:26 | 17:12 (2) |
| 17:00 | 11 12:20 (4) 17:39 | 48 16:18 (3) 18:11 | 19:44 118 18:59 (2) 20:16 | 122 19:02 (2) 20:36 | 112 19:04 (2) | |
| 21 07:21 | 12:10 (4) 06:48 | 15:30 (3) 06:03 | 15:13 (3) 06:13 | 17:01 (2) 05:37 | 17:00 (2) 05:26 | 17:12 (2) |
| 17:01 | 8 12:18 (4) 17:40 | 47 16:17 (3) 18:12 | 19:45 119 19:00 (2) 20:17 | 122 19:02 (2) 20:36 | 112 19:04 (2) | |
| 22 07:20 | 12:10 (4) 06:46 | 15:31 (3) 06:02 | 15:11 (3) 06:11 | 17:00 (2) 05:36 | 17:02 (2) 05:27 | 17:12 (2) |
| 17:03 | 6 12:16 (4) 17:41 | 46 16:17 (3) 18:13 | 19:47 120 19:00 (2) 20:17 | 121 19:03 (2) 20:37 | 112 19:04 (2) | |
| 23 07:20 | 12:10 (4) 06:45 | 15:31 (3) 06:00 | 15:10 (3) 06:10 | 17:00 (2) 05:35 | 17:02 (2) 05:27 | 17:13 (2) |
| 17:04 | 2 12:12 (4) 17:42 | 45 16:16 (3) 18:14 | 19:48 121 19:01 (2) 20:18 | 120 19:02 (2) 20:37 | 112 19:05 (2) | |
| 24 07:19 | 12:11 (4) 06:43 | 15:32 (3) 05:58 | 15:08 (3) 06:08 | 16:59 (2) 05:34 | 17:02 (2) 05:27 | 17:13 (2) |
| 17:05 | 17:44 43 16:15 (3) 18:15 | 19:49 122 19:01 (2) 20:19 | 120 19:02 (2) 20:37 | 112 19:05 (2) | | |
| 25 07:18 | 12:11 (4) 06:42 | 15:33 (3) 05:56 | 15:07 (3) 06:07 | 16:59 (2) 05:34 | 17:03 (2) 05:27 | 17:13 (2) |
| 17:06 | 17:45 41 16:14 (3) 18:16 | 19:50 122 19:01 (2) 20:20 | 119 19:02 (2) 20:37 | 112 19:05 (2) | | |
| 26 07:17 | 15:43 (3) 06:40 | 15:35 (3) 05:55 | 16:55 (2) 06:05 | 16:59 (2) 05:33 | 17:03 (2) 05:28 | 17:13 (2) |
| 17:08 | 15 15:58 (3) 17:46 | 38 16:13 (3) 18:17 | 17:18 (2) 19:51 | 123 19:02 (2) 20:21 | 119 19:02 (2) 20:37 | 112 19:05 (2) |
| 27 07:17 | 15:40 (3) 06:39 | 15:36 (3) 05:53 | 16:48 (2) 06:04 | 16:58 (2) 05:32 | 17:03 (2) 05:28 | 17:14 (2) |
| 17:09 | 21 16:01 (3) 17:47 | 35 16:11 (3) 18:19 | 17:25 (2) 19:52 | 123 19:01 (2) 20:22 | 119 19:02 (2) 20:37 | 112 19:06 (2) |
| 28 07:16 | 15:38 (3) 06:37 | 15:37 (3) 05:51 | 16:43 (2) 06:03 | 16:58 (2) 05:32 | 17:04 (2) 05:28 | 17:13 (2) |
| 17:10 | 25 16:03 (3) 17:48 | 32 16:09 (3) 18:20 | 17:29 (2) 19:53 | 124 19:02 (2) 20:23 | 118 19:02 (2) 20:37 | 113 19:06 (2) |
| 29 07:15 | 15:37 (3) 06:36 | 15:50 (3) 06:01 | 17:38 (2) 06:01 | 16:57 (2) 05:31 | 17:04 (2) 05:29 | 17:14 (2) |
| 17:11 | 28 16:05 (3) 17:49 | 55 18:33 (2) 19:54 | 124 19:01 (2) 20:24 | 118 19:02 (2) 20:37 | 113 19:07 (2) | |
| 30 07:14 | 15:35 (3) 06:48 | 17:35 (2) 06:00 | 16:57 (2) 05:30 | 17:05 (2) 05:29 | 17:14 (2) | |
| 17:13 | 32 16:07 (3) 17:50 | 61 18:36 (2) 19:55 | 125 19:02 (2) 20:24 | 117 19:02 (2) 20:37 | 112 19:06 (2) | |
| 31 07:13 | 15:34 (3) 06:46 | 17:32 (2) 05:50 | 15:30 (3) 05:30 | 17:05 (2) 05:27 | | |
| 17:14 | 34 16:08 (3) 17:51 | 66 18:38 (2) 20:25 | 117 19:02 (2) 20:25 | 117 19:02 (2) 20:25 | | |
| Potential sun hours | 297 | 369 | 399 | 449 | 453 | |
| Total, worst case | 604 | 1275 | 353 | 3224 | 3798 | 3395 |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: C - Shadow Receptor: 1,0 × 1,0 Azimuth: 90,0° Slope: 90,0° (3)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | November | December | |
|---------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|--------------|
| 1 05:30 | 17:14 (2) 05:54 | 17:08 (2) 06:25 | 17:09 (2) 06:55 | | | | |
| 20:37 | 113 19:07 (2) 20:18 | 125 19:13 (2) 19:34 | 104 18:53 (2) 18:43 | 06:30 | 14:58 (3) 07:05 | 11:48 (4) | |
| 2 05:30 | 17:14 (2) 05:55 | 17:08 (2) 06:26 | 17:10 (2) 06:56 | 16:56 49 | 15:47 (3) 16:32 | 23 12:11 (4) | |
| 20:37 | 113 19:07 (2) 20:17 | 125 19:13 (2) 19:33 | 102 18:52 (2) 18:42 | 06:31 | 14:58 (3) 07:06 | 11:48 (4) | |
| 3 05:31 | 17:14 (2) 05:56 | 17:08 (2) 06:27 | 17:11 (2) 06:58 | 16:55 49 | 15:47 (3) 16:31 | 24 12:12 (4) | |
| 20:37 | 114 19:08 (2) 20:16 | 125 19:13 (2) 19:31 | 99 18:50 (2) 18:40 | 06:32 | 14:58 (3) 07:07 | 11:49 (4) | |
| 4 05:31 | 17:14 (2) 05:57 | 17:07 (2) 06:28 | 17:12 (2) 06:59 | 16:54 48 | 15:46 (3) 16:31 | 24 12:13 (4) | |
| 20:36 | 114 19:08 (2) 20:14 | 126 19:13 (2) 19:29 | 96 18:48 (2) 18:38 | 06:34 | 14:59 (3) 07:08 | 11:49 (4) | |
| 5 05:32 | 17:14 (2) 05:58 | 17:07 (2) 06:29 | 17:13 (2) 07:00 | 16:53 47 | 15:46 (3) 16:31 | 25 12:14 (4) | |
| 20:36 | 114 19:08 (2) 20:13 | 126 19:13 (2) 19:28 | 94 18:47 (2) 18:37 | 06:35 | 15:00 (3) 07:09 | 11:49 (4) | |
| 6 05:33 | 17:14 (2) 05:59 | 17:07 (2) 06:30 | 17:14 (2) 07:01 | 16:51 45 | 15:45 (3) 16:31 | 25 12:14 (4) | |
| 20:36 | 114 19:08 (2) 20:12 | 126 19:13 (2) 19:26 | 91 18:45 (2) 18:35 | 06:36 | 15:00 (3) 07:10 | 11:50 (4) | |
| 7 05:33 | 17:14 (2) 06:00 | 17:07 (2) 06:31 | 17:15 (2) 07:02 | 16:50 44 | 15:44 (3) 16:31 | 25 12:15 (4) | |
| 20:36 | 115 19:09 (2) 20:11 | 125 19:12 (2) 19:24 | 88 18:43 (2) 18:33 | 06:37 | 15:01 (3) 07:11 | 11:50 (4) | |
| 8 05:34 | 17:14 (2) 06:01 | 17:07 (2) 06:32 | 17:16 (2) 07:03 | 16:49 42 | 15:43 (3) 16:30 | 26 12:16 (4) | |
| 20:35 | 115 19:09 (2) 20:10 | 125 19:12 (2) 19:23 | 85 18:41 (2) 18:32 | 06:38 | 15:02 (3) 07:12 | 11:51 (4) | |
| 9 05:34 | 17:13 (2) 06:02 | 17:06 (2) 06:33 | 17:18 (2) 07:04 | 16:48 41 | 15:43 (3) 16:30 | 26 12:17 (4) | |
| 20:35 | 116 19:09 (2) 20:08 | 126 19:12 (2) 19:21 | 81 18:39 (2) 18:30 | 06:40 | 15:03 (3) 07:13 | 11:51 (4) | |
| 10 05:35 | 17:14 (2) 06:03 | 17:06 (2) 06:34 | 17:20 (2) 07:05 | 16:23 (3) 06:41 | 15:42 (3) 16:30 | 27 12:18 (4) | |
| 20:35 | 116 19:10 (2) 20:07 | 126 19:12 (2) 19:19 | 76 18:36 (2) 18:28 | 9 16:32 (3) 16:46 | 15:04 (3) 07:14 | 11:52 (4) | |
| 11 05:36 | 17:14 (2) 06:04 | 17:06 (2) 06:35 | 17:22 (2) 07:06 | 16:17 (3) 06:42 | 15:41 (3) 16:30 | 27 12:19 (4) | |
| 20:34 | 116 19:10 (2) 20:06 | 125 19:11 (2) 19:18 | 72 18:34 (2) 18:27 | 19 16:36 (3) 16:45 | 15:06 (3) 07:15 | 11:52 (4) | |
| 12 05:37 | 17:13 (2) 06:05 | 17:06 (2) 06:36 | 17:24 (2) 07:07 | 16:35 (3) 16:43 | 15:40 (3) 16:30 | 28 12:20 (4) | |
| 20:34 | 117 19:10 (2) 20:04 | 125 19:11 (2) 19:16 | 67 18:31 (2) 18:25 | 25 16:40 (3) 16:44 | 15:39 (3) 16:31 | 28 12:20 (4) | |
| 13 05:37 | 17:13 (2) 06:06 | 17:06 (2) 06:37 | 17:26 (2) 07:08 | 16:12 (3) 06:44 | 15:09 (3) 07:16 | 11:53 (4) | |
| 20:33 | 117 19:10 (2) 20:03 | 125 19:11 (2) 19:14 | 62 18:28 (2) 18:24 | 29 16:41 (3) 16:43 | 15:37 (3) 16:31 | 28 12:21 (4) | |
| 14 05:38 | 17:13 (2) 06:07 | 17:06 (2) 06:38 | 17:29 (2) 07:09 | 16:10 (3) 06:46 | 15:10 (3) 07:17 | 11:53 (4) | |
| 20:33 | 118 19:11 (2) 20:02 | 124 19:10 (2) 19:12 | 55 18:24 (2) 18:22 | 33 16:43 (3) 16:42 | 15:35 (3) 16:31 | 29 12:22 (4) | |
| 15 05:39 | 17:12 (2) 06:08 | 17:06 (2) 06:39 | 17:31 (2) 07:10 | 16:07 (3) 06:47 | 15:13 (3) 07:18 | 11:54 (4) | |
| 20:32 | 118 19:10 (2) 20:00 | 124 19:10 (2) 19:11 | 48 18:19 (2) 18:20 | 37 16:44 (3) 16:41 | 15:34 (3) 16:31 | 29 12:23 (4) | |
| 16 05:40 | 17:12 (2) 06:09 | 17:05 (2) 06:40 | 17:36 (2) 07:12 | 16:06 (3) 06:48 | 15:16 (3) 07:19 | 11:54 (4) | |
| 20:32 | 119 19:11 (2) 19:59 | 124 19:09 (2) 19:09 | 39 18:15 (2) 18:19 | 39 16:45 (3) 16:40 | 15:31 (3) 16:31 | 28 12:22 (4) | |
| 17 05:40 | 17:12 (2) 06:10 | 17:04 (2) 06:41 | 17:41 (2) 07:13 | 16:04 (3) 06:49 | 15:17 (3) 07:19 | 11:55 (4) | |
| 20:31 | 119 19:11 (2) 19:57 | 124 19:08 (2) 19:07 | 27 18:08 (2) 18:17 | 41 16:45 (3) 16:40 | 16:32 28 12:23 (4) | | |
| 18 05:41 | 17:12 (2) 06:11 | 17:04 (2) 06:42 | | 16:03 (3) 06:50 | 15:20 29 12:24 (4) | | |
| 20:30 | 120 19:12 (2) 19:56 | 123 19:07 (2) 19:06 | | 16:46 (3) 16:39 | 16:32 29 12:24 (4) | | |
| 19 05:42 | 17:12 (2) 06:12 | 17:04 (2) 06:43 | | 16:02 (3) 06:52 | 11:45 (4) 07:21 | 11:55 (4) | |
| 20:30 | 120 19:12 (2) 19:55 | 122 19:06 (2) 19:04 | | 16:47 (3) 16:38 | 11:47 (4) 07:21 | 12:24 (4) | |
| 20 05:43 | 17:11 (2) 06:13 | 17:05 (2) 06:44 | | 16:01 (3) 06:53 | 11:45 (4) 07:21 | 11:56 (4) | |
| 20:29 | 121 19:12 (2) 19:53 | 121 19:06 (2) 19:02 | | 16:48 (3) 16:37 | 6 11:51 (4) 16:33 | 29 12:25 (4) | |
| 21 05:44 | 17:11 (2) 06:14 | 17:05 (2) 06:45 | | 16:00 (3) 06:54 | 11:45 (4) 07:22 | 11:56 (4) | |
| 20:28 | 121 19:12 (2) 19:52 | 120 19:05 (2) 19:00 | | 16:48 (3) 16:37 | 8 11:53 (4) 16:33 | 29 12:25 (4) | |
| 22 05:45 | 17:11 (2) 06:15 | 17:05 (2) 06:46 | | 15:59 (3) 06:55 | 11:46 (4) 07:22 | 11:57 (4) | |
| 20:27 | 121 19:12 (2) 19:50 | 119 19:04 (2) 18:59 | | 16:48 (3) 16:36 | 11 11:57 (4) 16:34 | 29 12:26 (4) | |
| 23 05:46 | 17:11 (2) 06:16 | 17:05 (2) 06:47 | | 15:58 (3) 06:56 | 11:46 (4) 07:23 | 11:57 (4) | |
| 20:26 | 122 19:13 (2) 19:49 | 118 19:03 (2) 18:57 | | 16:48 (3) 16:35 | 13 11:59 (4) 16:34 | 29 12:26 (4) | |
| 24 05:46 | 17:11 (2) 06:17 | 17:05 (2) 06:48 | | 15:58 (3) 06:57 | 11:46 (4) 07:23 | 11:58 (4) | |
| 20:26 | 122 19:13 (2) 19:47 | 117 19:02 (2) 18:55 | | 16:49 (3) 16:35 | 14 12:00 (4) 16:35 | 29 12:27 (4) | |
| 25 05:47 | 17:11 (2) 06:18 | 17:05 (2) 06:49 | | 14:58 (3) 06:59 | 11:46 (4) 07:24 | 11:58 (4) | |
| 20:25 | 122 19:13 (2) 19:45 | 116 19:01 (2) 18:54 | | 15:49 (3) 16:34 | 16 12:02 (4) 16:35 | 29 12:27 (4) | |
| 26 05:48 | 17:10 (2) 06:19 | 17:06 (2) 06:50 | | 14:57 (3) 07:00 | 11:46 (4) 07:24 | 11:59 (4) | |
| 20:24 | 123 19:13 (2) 19:44 | 114 19:00 (2) 18:52 | | 17:04 51 | 15:48 (3) 16:34 | 17 12:03 (4) 16:36 | 28 12:27 (4) |
| 27 05:49 | 17:10 (2) 06:20 | 17:06 (2) 06:51 | | 14:57 (3) 07:01 | 11:46 (4) 07:24 | 12:00 (4) | |
| 20:23 | 123 19:13 (2) 19:42 | 113 18:59 (2) 18:50 | | 16:24 | 15:48 (3) 16:33 | 19 12:05 (4) 16:37 | 28 12:28 (4) |
| 28 05:50 | 17:09 (2) 06:21 | 17:07 (2) 06:52 | | 16:25 | 14:57 (3) 07:02 | 11:47 (4) 07:25 | 12:00 (4) |
| 20:22 | 124 19:13 (2) 19:41 | 111 18:58 (2) 18:48 | | 17:02 52 | 15:49 (3) 16:33 | 20 12:07 (4) 16:37 | 28 12:28 (4) |
| 29 05:51 | 17:09 (2) 06:22 | 17:07 (2) 06:53 | | 16:26 | 14:57 (3) 07:03 | 11:48 (4) 07:25 | 12:00 (4) |
| 20:21 | 124 19:13 (2) 19:39 | 110 18:57 (2) 18:47 | | 17:00 51 | 15:48 (3) 16:32 | 20 12:08 (4) 16:38 | 29 12:29 (4) |
| 30 05:52 | 17:09 (2) 06:23 | 17:08 (2) 06:54 | | 06:28 | 14:57 (3) 07:04 | 11:48 (4) 07:25 | 12:01 (4) |
| 20:20 | 124 19:13 (2) 19:38 | 108 18:56 (2) 18:45 | | 16:59 51 | 15:48 (3) 16:32 | 21 12:09 (4) 16:39 | 28 12:29 (4) |
| 31 05:53 | 17:08 (2) 06:24 | 17:08 (2) 06:54 | | 06:29 | 14:57 (3) | 07:25 | 12:01 (4) |
| 20:19 | 125 19:13 (2) 19:36 | 106 18:54 (2) | | 16:58 50 | 15:47 (3) | 16:40 | 28 12:29 (4) |
| Potential sun hours | 460 | 428 | 375 | 345 | 297 | 287 | |
| Total, worst case | 3680 | 3744 | 1286 | 922 | 763 | 851 | |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: D - Shadow Receptor: 1,0 × 1,0 Azimuth: 45,0° Slope: 90,0° (4)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|---------------------|-----------------------|-----------------------|-----------------------|-------|-------|------|
| 1 07:26 | 12:33 (2) 07:12 | 12:35 (2) 06:36 | 12:45 (2) 06:45 | 05:59 | 05:29 | |
| 16:41 | 147 15:00 (2) 17:15 | 162 15:17 (2) 17:49 | 149 15:14 (2) 19:24 | 19:56 | 20:26 | |
| 2 07:26 | 12:33 (2) 07:11 | 12:35 (2) 06:34 | 12:46 (2) 06:43 | 05:57 | 05:29 | |
| 16:41 | 147 15:00 (2) 17:16 | 163 15:18 (2) 17:51 | 147 15:13 (2) 19:25 | 19:57 | 20:27 | |
| 3 07:26 | 12:33 (2) 07:10 | 12:35 (2) 06:33 | 12:48 (2) 06:41 | 05:56 | 05:29 | |
| 16:42 | 148 15:01 (2) 17:18 | 163 15:18 (2) 17:52 | 145 15:13 (2) 19:26 | 19:58 | 20:27 | |
| 4 07:26 | 12:33 (2) 07:09 | 12:35 (2) 06:31 | 12:49 (2) 06:40 | 05:55 | 05:28 | |
| 16:43 | 148 15:01 (2) 17:19 | 163 15:18 (2) 17:53 | 143 15:12 (2) 19:27 | 19:59 | 20:28 | |
| 5 07:26 | 12:34 (2) 07:08 | 12:35 (2) 06:30 | 12:51 (2) 06:38 | 05:53 | 05:28 | |
| 16:44 | 148 15:02 (2) 17:20 | 164 15:19 (2) 17:54 | 141 15:12 (2) 19:28 | 20:00 | 20:29 | |
| 6 07:26 | 12:34 (2) 07:07 | 12:35 (2) 06:28 | 12:53 (2) 06:36 | 05:52 | 05:27 | |
| 16:45 | 149 15:03 (2) 17:21 | 164 15:19 (2) 17:55 | 138 15:11 (2) 19:29 | 20:01 | 20:30 | |
| 7 07:26 | 12:34 (2) 07:06 | 12:36 (2) 06:26 | 12:54 (2) 06:35 | 05:51 | 05:27 | |
| 16:46 | 150 15:04 (2) 17:23 | 163 15:19 (2) 17:56 | 135 15:09 (2) 19:30 | 20:03 | 20:30 | |
| 8 07:26 | 12:35 (2) 07:05 | 12:35 (2) 06:25 | 12:57 (2) 06:33 | 05:50 | 05:27 | |
| 16:47 | 150 15:05 (2) 17:24 | 164 15:19 (2) 17:58 | 132 15:09 (2) 19:31 | 20:04 | 20:31 | |
| 9 07:26 | 12:35 (2) 07:04 | 12:35 (2) 06:23 | 12:59 (2) 06:32 | 05:49 | 05:27 | |
| 16:48 | 151 15:06 (2) 17:25 | 164 15:19 (2) 17:59 | 129 15:08 (2) 19:33 | 20:05 | 20:31 | |
| 10 07:25 | 12:34 (2) 07:02 | 12:36 (2) 06:22 | 13:01 (2) 06:30 | 05:47 | 05:26 | |
| 16:49 | 151 15:05 (2) 17:26 | 163 15:19 (2) 18:00 | 125 15:06 (2) 19:34 | 20:06 | 20:32 | |
| 11 07:25 | 12:35 (2) 07:01 | 12:36 (2) 06:20 | 13:04 (2) 06:28 | 05:46 | 05:26 | |
| 16:50 | 151 15:06 (2) 17:28 | 164 15:20 (2) 18:01 | 122 15:06 (2) 19:35 | 20:07 | 20:32 | |
| 12 07:25 | 12:35 (2) 07:00 | 12:35 (2) 06:18 | 13:06 (2) 06:27 | 05:45 | 05:26 | |
| 16:51 | 152 15:07 (2) 17:29 | 164 15:19 (2) 18:02 | 118 15:04 (2) 19:36 | 20:08 | 20:33 | |
| 13 07:25 | 12:35 (2) 06:59 | 12:36 (2) 06:17 | 13:09 (2) 06:25 | 05:44 | 05:26 | |
| 16:52 | 152 15:07 (2) 17:30 | 163 15:19 (2) 18:03 | 114 15:03 (2) 19:37 | 20:09 | 20:33 | |
| 14 07:24 | 12:35 (2) 06:57 | 12:36 (2) 06:15 | 13:12 (2) 06:23 | 05:43 | 05:26 | |
| 16:53 | 154 15:09 (2) 17:31 | 164 15:20 (2) 18:04 | 110 15:02 (2) 19:38 | 20:10 | 20:34 | |
| 15 07:24 | 12:35 (2) 06:56 | 12:37 (2) 06:13 | 13:15 (2) 06:22 | 05:42 | 05:26 | |
| 16:54 | 154 15:09 (2) 17:33 | 163 15:20 (2) 18:05 | 106 15:01 (2) 19:39 | 20:11 | 20:34 | |
| 16 07:24 | 12:35 (2) 06:55 | 12:37 (2) 06:12 | 13:18 (2) 06:20 | 05:41 | 05:26 | |
| 16:56 | 155 15:10 (2) 17:34 | 162 15:19 (2) 18:07 | 101 14:59 (2) 19:40 | 20:12 | 20:35 | |
| 17 07:23 | 12:35 (2) 06:53 | 12:37 (2) 06:10 | 13:22 (2) 06:19 | 05:40 | 05:26 | |
| 16:57 | 155 15:10 (2) 17:35 | 162 15:19 (2) 18:08 | 96 14:58 (2) 19:41 | 20:13 | 20:35 | |
| 18 07:23 | 12:36 (2) 06:52 | 12:37 (2) 06:08 | 13:25 (2) 06:17 | 05:39 | 05:26 | |
| 16:58 | 155 15:11 (2) 17:36 | 162 15:19 (2) 18:09 | 91 14:56 (2) 19:42 | 20:14 | 20:35 | |
| 19 07:22 | 12:35 (2) 06:51 | 12:38 (2) 06:07 | 13:28 (2) 06:16 | 05:38 | 05:26 | |
| 16:59 | 156 15:11 (2) 17:38 | 161 15:19 (2) 18:10 | 86 14:54 (2) 19:43 | 20:15 | 20:36 | |
| 20 07:21 | 12:35 (2) 06:49 | 12:39 (2) 06:05 | 13:32 (2) 06:14 | 05:38 | 05:26 | |
| 17:00 | 157 15:12 (2) 17:39 | 160 15:19 (2) 18:11 | 81 14:53 (2) 19:44 | 20:16 | 20:36 | |
| 21 07:21 | 12:35 (2) 06:48 | 12:39 (2) 06:03 | 13:36 (2) 06:13 | 05:37 | 05:26 | |
| 17:01 | 158 15:13 (2) 17:40 | 159 15:18 (2) 18:12 | 75 14:51 (2) 19:45 | 20:17 | 20:36 | |
| 22 07:20 | 12:35 (2) 06:46 | 12:40 (2) 06:02 | 13:39 (2) 06:11 | 05:36 | 05:27 | |
| 17:03 | 158 15:13 (2) 17:41 | 158 15:18 (2) 18:13 | 69 14:48 (2) 19:47 | 20:17 | 20:37 | |
| 23 07:20 | 12:35 (2) 06:45 | 12:40 (2) 06:00 | 13:43 (2) 06:10 | 05:35 | 05:27 | |
| 17:04 | 158 15:13 (2) 17:42 | 157 15:17 (2) 18:14 | 63 14:46 (2) 19:48 | 20:18 | 20:37 | |
| 24 07:19 | 12:36 (2) 06:43 | 12:41 (2) 05:58 | 13:48 (2) 06:08 | 05:34 | 05:27 | |
| 17:05 | 159 15:15 (2) 17:44 | 156 15:17 (2) 18:15 | 56 14:44 (2) 19:49 | 20:19 | 20:37 | |
| 25 07:18 | 12:35 (2) 06:42 | 12:41 (2) 05:56 | 13:52 (2) 06:07 | 05:34 | 05:27 | |
| 17:06 | 160 15:15 (2) 17:45 | 155 15:16 (2) 18:16 | 49 14:41 (2) 19:50 | 20:20 | 20:37 | |
| 26 07:17 | 12:35 (2) 06:40 | 12:43 (2) 05:55 | 13:57 (2) 06:05 | 05:33 | 05:28 | |
| 17:08 | 160 15:15 (2) 17:46 | 153 15:16 (2) 18:17 | 40 14:37 (2) 19:51 | 20:21 | 20:37 | |
| 27 07:17 | 12:35 (2) 06:39 | 12:43 (2) 05:53 | 14:04 (2) 06:04 | 05:32 | 05:28 | |
| 17:09 | 161 15:16 (2) 17:47 | 152 15:15 (2) 18:19 | 29 14:33 (2) 19:52 | 20:22 | 20:37 | |
| 28 07:16 | 12:35 (2) 06:37 | 12:45 (2) 05:51 | 14:13 (2) 06:03 | 05:32 | 05:28 | |
| 17:10 | 161 15:16 (2) 17:48 | 150 15:15 (2) 18:20 | 12 14:25 (2) 19:53 | 20:23 | 20:37 | |
| 29 07:15 | 12:35 (2) | 15:50 | 06:01 | 05:31 | 05:29 | |
| 17:11 | 161 15:16 (2) | 19:21 | 19:54 | 20:24 | 20:37 | |
| 30 07:14 | 12:35 (2) | 15:48 | 06:00 | 05:30 | 05:29 | |
| 17:13 | 162 15:17 (2) | 19:22 | 19:55 | 20:24 | 20:37 | |
| 31 07:13 | 12:35 (2) | 15:46 | 06:01 | 05:30 | | |
| 17:14 | 162 15:17 (2) | 19:23 | 19:53 | 20:25 | | |
| Potential sun hours | 297 | 297 | 369 | 399 | 449 | 453 |
| Total, worst case | 4790 | 4498 | 2802 | | | |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: D - Shadow Receptor: 1,0 × 1,0 Azimuth: 45,0° Slope: 90,0° (4)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | November | December | |
|---------------------|-------|--------|-----------|-----------------------|---------------------------|-----------------------|-----------|
| 1 | 05:30 | 05:54 | 06:25 | 06:55 | 13:47 (2) 06:30 | 12:05 (2) 07:05 | 12:17 (2) |
| | 20:37 | 20:18 | 19:34 | 18:43 | 117 15:44 (2) 16:56 164 | 14:49 (2) 16:32 152 | 14:49 (2) |
| 2 | 05:30 | 05:55 | 06:26 | 06:56 | 13:44 (2) 06:31 | 12:05 (2) 07:06 | 12:17 (2) |
| | 20:37 | 20:17 | 19:33 | 18:42 | 120 15:44 (2) 16:55 164 | 14:49 (2) 16:31 152 | 14:49 (2) |
| 3 | 05:31 | 05:56 | 06:27 | 06:58 | 13:41 (2) 06:32 | 12:05 (2) 07:07 | 12:18 (2) |
| | 20:37 | 20:16 | 19:31 | 18:40 | 124 15:45 (2) 16:54 164 | 14:49 (2) 16:31 151 | 14:49 (2) |
| 4 | 05:31 | 05:57 | 06:28 | 06:59 | 13:38 (2) 06:34 | 12:06 (2) 07:08 | 12:19 (2) |
| | 20:36 | 20:14 | 19:29 | 18:38 | 127 15:45 (2) 16:53 163 | 14:49 (2) 16:31 150 | 14:49 (2) |
| 5 | 05:32 | 05:58 | 06:29 | 07:00 | 13:35 (2) 06:35 | 12:05 (2) 07:09 | 12:19 (2) |
| | 20:36 | 20:13 | 19:28 | 18:37 | 130 15:45 (2) 16:51 164 | 14:49 (2) 16:31 150 | 14:49 (2) |
| 6 | 05:33 | 05:59 | 06:30 | 07:01 | 13:32 (2) 06:36 | 12:05 (2) 07:10 | 12:20 (2) |
| | 20:36 | 20:12 | 19:26 | 18:35 | 134 15:46 (2) 16:50 164 | 14:49 (2) 16:31 149 | 14:49 (2) |
| 7 | 05:33 | 06:00 | 06:31 | 07:02 | 13:30 (2) 06:37 | 12:05 (2) 07:11 | 12:21 (2) |
| | 20:36 | 20:11 | 19:24 | 18:33 | 136 15:46 (2) 16:49 163 | 14:48 (2) 16:30 148 | 14:49 (2) |
| 8 | 05:34 | 06:01 | 06:32 | 07:03 | 13:27 (2) 06:38 | 12:06 (2) 07:12 | 12:21 (2) |
| | 20:35 | 20:10 | 19:23 | 18:32 | 139 15:46 (2) 16:48 163 | 14:49 (2) 16:30 149 | 14:50 (2) |
| 9 | 05:34 | 06:02 | 06:33 | 07:04 | 13:25 (2) 06:40 | 12:06 (2) 07:13 | 12:22 (2) |
| | 20:35 | 20:08 | 19:21 | 18:30 | 142 15:47 (2) 16:47 163 | 14:49 (2) 16:30 148 | 14:50 (2) |
| 10 | 05:35 | 06:03 | 06:34 | 07:05 | 13:23 (2) 06:41 | 12:06 (2) 07:14 | 12:23 (2) |
| | 20:35 | 20:07 | 19:19 | 18:28 | 144 15:47 (2) 16:46 162 | 14:48 (2) 16:30 147 | 14:50 (2) |
| 11 | 05:36 | 06:04 | 06:35 | 07:06 | 13:21 (2) 06:42 | 12:07 (2) 07:15 | 12:24 (2) |
| | 20:34 | 20:06 | 19:18 | 18:27 | 146 15:47 (2) 16:45 162 | 14:49 (2) 16:31 147 | 14:51 (2) |
| 12 | 05:37 | 06:05 | 06:36 | 07:07 | 13:20 (2) 06:43 | 12:07 (2) 07:16 | 12:24 (2) |
| | 20:34 | 20:04 | 19:16 | 18:25 | 148 15:48 (2) 16:44 162 | 14:49 (2) 16:31 146 | 14:50 (2) |
| 13 | 05:37 | 06:06 | 06:37 | 07:08 | 13:18 (2) 06:44 | 12:07 (2) 07:16 | 12:24 (2) |
| | 20:33 | 20:03 | 19:14 | 18:24 | 150 15:48 (2) 16:43 161 | 14:48 (2) 16:31 147 | 14:51 (2) |
| 14 | 05:38 | 06:07 | 06:38 | 07:09 | 13:17 (2) 06:46 | 12:07 (2) 07:17 | 12:25 (2) |
| | 20:33 | 20:02 | 19:12 | 18:22 | 151 15:48 (2) 16:42 161 | 14:48 (2) 16:31 146 | 14:51 (2) |
| 15 | 05:39 | 06:08 | 06:39 | 15:06 (2) 07:10 | 13:15 (2) 06:47 | 12:08 (2) 07:18 | 12:26 (2) |
| | 20:32 | 20:00 | 19:11 | 4 15:10 (2) 18:20 | 153 15:48 (2) 16:41 161 | 14:49 (2) 16:31 146 | 14:52 (2) |
| 16 | 05:40 | 06:09 | 06:40 | 14:53 (2) 07:12 | 13:14 (2) 06:48 | 12:08 (2) 07:19 | 12:26 (2) |
| | 20:32 | 19:59 | 19:09 | 27 15:20 (2) 18:19 | 154 15:48 (2) 16:40 160 | 14:48 (2) 16:31 145 | 14:51 (2) |
| 17 | 05:40 | 06:10 | 06:41 | 14:47 (2) 07:13 | 13:12 (2) 06:49 | 12:08 (2) 07:19 | 12:27 (2) |
| | 20:31 | 19:57 | 19:07 | 37 15:24 (2) 18:17 | 156 15:48 (2) 16:40 160 | 14:48 (2) 16:32 145 | 14:52 (2) |
| 18 | 05:41 | 06:11 | 06:42 | 14:41 (2) 07:14 | 13:11 (2) 06:50 | 12:10 (2) 07:20 | 12:28 (2) |
| | 20:30 | 19:56 | 19:06 | 46 15:27 (2) 18:16 | 157 15:48 (2) 16:39 159 | 14:49 (2) 16:32 145 | 14:53 (2) |
| 19 | 05:42 | 06:12 | 06:43 | 14:35 (2) 07:15 | 13:11 (2) 06:52 | 12:10 (2) 07:21 | 12:28 (2) |
| | 20:30 | 19:55 | 19:04 | 55 15:30 (2) 18:14 | 158 15:49 (2) 16:38 158 | 14:48 (2) 16:32 145 | 14:53 (2) |
| 20 | 05:43 | 06:13 | 06:44 | 14:31 (2) 07:16 | 13:10 (2) 06:53 | 12:10 (2) 07:21 | 12:29 (2) |
| | 20:29 | 19:53 | 19:02 | 61 15:32 (2) 18:13 | 159 15:49 (2) 16:37 158 | 14:48 (2) 16:33 145 | 14:54 (2) |
| 21 | 05:44 | 06:14 | 06:45 | 14:26 (2) 07:17 | 13:09 (2) 06:54 | 12:10 (2) 07:22 | 12:29 (2) |
| | 20:28 | 19:52 | 19:00 | 67 15:33 (2) 18:11 | 160 15:49 (2) 16:37 158 | 14:48 (2) 16:33 145 | 14:54 (2) |
| 22 | 05:45 | 06:15 | 06:46 | 14:21 (2) 07:18 | 13:08 (2) 06:55 | 12:12 (2) 07:22 | 12:30 (2) |
| | 20:27 | 19:50 | 18:59 | 74 15:35 (2) 18:10 | 161 15:49 (2) 16:36 157 | 14:49 (2) 16:34 145 | 14:55 (2) |
| 23 | 05:46 | 06:16 | 06:47 | 14:17 (2) 07:19 | 13:07 (2) 06:56 | 12:12 (2) 07:23 | 12:30 (2) |
| | 20:26 | 19:49 | 18:57 | 79 15:36 (2) 18:08 | 161 15:48 (2) 16:35 156 | 14:48 (2) 16:34 145 | 14:55 (2) |
| 24 | 05:46 | 06:17 | 06:48 | 14:13 (2) 07:21 | 13:08 (2) 06:57 | 12:13 (2) 07:23 | 12:31 (2) |
| | 20:26 | 19:47 | 18:55 | 84 15:37 (2) 18:07 | 161 15:49 (2) 16:35 155 | 14:48 (2) 16:35 145 | 14:56 (2) |
| 25 | 05:47 | 06:18 | 06:49 | 14:09 (2) 06:22 | 12:07 (2) 06:59 | 12:13 (2) 07:24 | 12:31 (2) |
| | 20:25 | 19:45 | 18:54 | 89 15:38 (2) 17:06 | 162 14:49 (2) 16:34 155 | 14:48 (2) 16:35 145 | 14:56 (2) |
| 26 | 05:48 | 06:19 | 06:50 | 14:05 (2) 06:23 | 12:06 (2) 07:00 | 12:13 (2) 07:24 | 12:31 (2) |
| | 20:24 | 19:44 | 18:52 | 94 15:39 (2) 17:04 | 163 14:49 (2) 16:34 155 | 14:48 (2) 16:36 145 | 14:56 (2) |
| 27 | 05:49 | 06:20 | 06:51 | 14:01 (2) 06:24 | 12:06 (2) 07:01 | 12:14 (2) 07:24 | 12:32 (2) |
| | 20:23 | 19:42 | 18:50 | 99 15:40 (2) 17:03 | 163 14:49 (2) 16:33 154 | 14:48 (2) 16:37 145 | 14:57 (2) |
| 28 | 05:50 | 06:21 | 06:52 | 13:57 (2) 06:25 | 12:06 (2) 07:02 | 12:15 (2) 07:25 | 12:32 (2) |
| | 20:22 | 19:41 | 18:48 | 104 15:41 (2) 17:02 | 163 14:49 (2) 16:33 154 | 14:49 (2) 16:37 146 | 14:58 (2) |
| 29 | 05:51 | 06:22 | 06:53 | 13:54 (2) 06:26 | 12:06 (2) 07:03 | 12:16 (2) 07:25 | 12:32 (2) |
| | 20:21 | 19:39 | 18:47 | 108 15:42 (2) 17:00 | 163 14:49 (2) 16:32 153 | 14:49 (2) 16:38 146 | 14:58 (2) |
| 30 | 05:52 | 06:23 | 06:54 | 13:51 (2) 06:28 | 12:05 (2) 07:04 | 12:16 (2) 07:25 | 12:32 (2) |
| | 20:20 | 19:38 | 18:45 | 112 15:43 (2) 16:59 | 164 14:49 (2) 16:32 153 | 14:49 (2) 16:39 146 | 14:58 (2) |
| 31 | 05:53 | 06:24 | | | 16:29 12:05 (2) | 07:25 | |
| | 20:19 | 19:36 | | | 16:58 14:48 (2) | 16:40 147 | 14:59 (2) |
| Potential sun hours | 460 | 428 | 375 | 345 | 297 | 287 | 4553 |
| Total, worst case | | | 1140 | 4629 | 4786 | | |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: E - Shadow Receptor: 1,0 × 1,0 Azimuth: 45,0° Slope: 90,0° (5)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|---------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 1 07:26 | 12:25 (2) 07:12 | 12:19 (2) 06:36 | 12:10 (2) 06:45 | 13:54 (2) 05:59 | 13:54 (2) 05:59 | 13:54 (2) 05:59 |
| 16:41 | 154 | 14:59 (3) 17:15 | 181 | 15:20 (2) 17:49 | 197 | 15:27 (2) 19:24 |
| 2 07:26 | 12:25 (2) 07:11 | 12:19 (2) 06:34 | 12:10 (2) 06:43 | 13:59 (2) 05:57 | 13:59 (2) 05:57 | 13:59 (2) 05:57 |
| 16:41 | 155 | 15:00 (3) 17:16 | 182 | 15:21 (2) 17:51 | 197 | 15:27 (2) 19:25 |
| 3 07:26 | 12:25 (2) 07:10 | 12:18 (2) 06:33 | 12:10 (2) 06:41 | 14:02 (2) 05:56 | 14:02 (2) 05:56 | 14:02 (2) 05:56 |
| 16:42 | 155 | 15:00 (3) 17:18 | 184 | 15:22 (2) 17:52 | 197 | 15:27 (2) 19:26 |
| 4 07:26 | 12:25 (2) 07:09 | 12:18 (2) 06:31 | 12:10 (2) 06:40 | 14:06 (2) 05:55 | 14:06 (2) 05:55 | 14:06 (2) 05:55 |
| 16:43 | 156 | 15:01 (3) 17:19 | 184 | 15:22 (2) 17:53 | 197 | 15:27 (2) 19:27 |
| 5 07:26 | 12:25 (2) 07:08 | 12:18 (2) 06:30 | 12:10 (2) 06:38 | 14:10 (2) 05:53 | 14:10 (2) 05:53 | 14:10 (2) 05:53 |
| 16:44 | 156 | 15:01 (3) 17:20 | 185 | 15:23 (2) 17:54 | 197 | 15:27 (2) 19:28 |
| 6 07:26 | 12:25 (2) 07:07 | 12:18 (2) 06:28 | 12:10 (2) 06:36 | 14:13 (2) 05:52 | 14:13 (2) 05:52 | 14:13 (2) 05:52 |
| 16:45 | 157 | 15:02 (3) 17:21 | 186 | 15:24 (2) 17:55 | 196 | 15:26 (2) 19:29 |
| 7 07:26 | 12:25 (2) 07:06 | 12:17 (2) 06:26 | 12:09 (2) 06:35 | 14:16 (2) 05:51 | 14:16 (2) 05:51 | 14:16 (2) 05:51 |
| 16:46 | 157 | 15:02 (3) 17:23 | 187 | 15:24 (2) 17:56 | 197 | 15:26 (2) 19:30 |
| 8 07:26 | 12:26 (2) 07:05 | 12:16 (2) 06:25 | 12:10 (2) 06:33 | 14:20 (2) 05:50 | 14:20 (2) 05:50 | 14:20 (2) 05:50 |
| 16:47 | 157 | 15:03 (3) 17:24 | 188 | 15:24 (2) 17:58 | 196 | 15:26 (2) 19:31 |
| 9 07:26 | 12:26 (2) 07:04 | 12:16 (2) 06:23 | 12:10 (2) 06:32 | 14:22 (2) 05:49 | 14:22 (2) 05:49 | 14:22 (2) 05:49 |
| 16:48 | 157 | 15:03 (2) 17:25 | 189 | 15:25 (2) 17:59 | 195 | 15:25 (2) 19:33 |
| 10 07:25 | 12:25 (2) 07:02 | 12:16 (2) 06:22 | 12:10 (2) 06:30 | 14:25 (2) 05:47 | 14:25 (2) 05:47 | 14:25 (2) 05:47 |
| 16:49 | 158 | 15:03 (2) 17:26 | 189 | 15:25 (2) 18:00 | 194 | 15:24 (2) 19:34 |
| 11 07:25 | 12:25 (2) 07:01 | 12:16 (2) 06:20 | 12:11 (2) 06:28 | 14:29 (2) 05:46 | 14:29 (2) 05:46 | 14:29 (2) 05:46 |
| 16:50 | 159 | 15:04 (2) 17:28 | 190 | 15:26 (2) 18:01 | 194 | 15:25 (2) 19:35 |
| 12 07:25 | 12:25 (2) 07:00 | 12:15 (2) 06:18 | 12:11 (2) 06:27 | 14:31 (2) 05:45 | 14:31 (2) 05:45 | 14:31 (2) 05:45 |
| 16:51 | 161 | 15:06 (2) 17:29 | 190 | 15:25 (2) 18:02 | 193 | 15:24 (2) 19:36 |
| 13 07:25 | 12:25 (2) 06:59 | 12:15 (2) 06:17 | 12:11 (2) 06:25 | 14:35 (2) 05:44 | 14:35 (2) 05:44 | 14:35 (2) 05:44 |
| 16:52 | 161 | 15:06 (2) 17:30 | 191 | 15:26 (2) 18:03 | 192 | 15:23 (2) 19:37 |
| 14 07:24 | 12:25 (2) 06:57 | 12:14 (2) 06:15 | 12:12 (2) 06:23 | 14:37 (2) 05:43 | 14:37 (2) 05:43 | 14:37 (2) 05:43 |
| 16:53 | 162 | 15:07 (2) 17:31 | 193 | 15:27 (2) 18:04 | 191 | 15:23 (2) 19:38 |
| 15 07:24 | 12:24 (2) 06:56 | 12:14 (2) 06:13 | 12:13 (2) 06:22 | 14:40 (2) 05:42 | 14:40 (2) 05:42 | 14:40 (2) 05:42 |
| 16:54 | 163 | 15:07 (2) 17:33 | 193 | 15:27 (2) 18:05 | 189 | 15:22 (2) 19:39 |
| 16 07:24 | 12:25 (2) 06:55 | 12:13 (2) 06:12 | 12:13 (2) 06:20 | 14:43 (2) 05:41 | 14:43 (2) 05:41 | 14:43 (2) 05:41 |
| 16:56 | 164 | 15:09 (2) 17:34 | 194 | 15:27 (2) 18:07 | 188 | 15:21 (2) 19:40 |
| 17 07:23 | 12:24 (2) 06:53 | 12:13 (2) 06:10 | 12:15 (2) 06:19 | 14:46 (2) 05:40 | 14:46 (2) 05:40 | 14:46 (2) 05:40 |
| 16:57 | 165 | 15:09 (2) 17:35 | 194 | 15:27 (2) 18:08 | 186 | 15:21 (2) 19:41 |
| 18 07:23 | 12:24 (2) 06:52 | 12:13 (2) 06:08 | 12:15 (2) 06:17 | 14:48 (2) 05:39 | 14:48 (2) 05:39 | 14:48 (2) 05:39 |
| 16:58 | 167 | 15:11 (2) 17:36 | 194 | 15:27 (2) 18:09 | 185 | 15:20 (2) 19:42 |
| 19 07:22 | 12:24 (2) 06:51 | 12:13 (2) 06:07 | 12:16 (2) 06:16 | 14:52 (2) 05:38 | 14:52 (2) 05:38 | 14:52 (2) 05:38 |
| 16:59 | 167 | 15:11 (2) 17:38 | 195 | 15:28 (2) 18:10 | 183 | 15:19 (2) 19:43 |
| 20 07:21 | 12:23 (2) 06:49 | 12:13 (2) 06:05 | 12:19 (2) 06:14 | 15:45 (2) 20:15 | 15:45 (2) 20:15 | 15:45 (2) 20:15 |
| 17:00 | 168 | 15:11 (2) 17:39 | 195 | 15:28 (2) 18:11 | 180 | 15:19 (2) 19:44 |
| 21 07:21 | 12:23 (2) 06:48 | 12:12 (2) 06:03 | 12:20 (2) 06:13 | 14:57 (2) 05:37 | 14:57 (2) 05:37 | 14:57 (2) 05:37 |
| 17:01 | 170 | 15:13 (2) 17:40 | 196 | 15:28 (2) 18:12 | 178 | 15:18 (2) 19:45 |
| 22 07:20 | 12:23 (2) 06:46 | 12:12 (2) 06:02 | 12:22 (2) 06:11 | 15:00 (2) 05:36 | 15:00 (2) 05:36 | 15:00 (2) 05:36 |
| 17:03 | 170 | 15:13 (2) 17:41 | 196 | 15:28 (2) 18:13 | 175 | 15:17 (2) 19:47 |
| 23 07:20 | 12:22 (2) 06:45 | 12:11 (2) 06:00 | 12:23 (2) 06:10 | 15:04 (2) 05:35 | 15:04 (2) 05:35 | 15:04 (2) 05:35 |
| 17:04 | 172 | 15:14 (2) 17:42 | 197 | 15:28 (2) 18:14 | 173 | 15:16 (2) 19:48 |
| 24 07:19 | 12:23 (2) 06:43 | 12:11 (2) 05:58 | 12:27 (2) 06:08 | 15:08 (2) 05:34 | 15:08 (2) 05:34 | 15:08 (2) 05:34 |
| 17:05 | 172 | 15:15 (2) 17:44 | 197 | 15:28 (2) 18:15 | 169 | 15:16 (2) 19:49 |
| 25 07:18 | 12:22 (2) 06:42 | 12:11 (2) 05:56 | 12:29 (2) 06:07 | 15:14 (2) 05:34 | 15:14 (2) 05:34 | 15:14 (2) 05:34 |
| 17:06 | 174 | 15:16 (2) 17:45 | 197 | 15:28 (2) 18:16 | 166 | 15:15 (2) 19:50 |
| 26 07:17 | 12:22 (2) 06:40 | 12:11 (2) 05:55 | 12:32 (2) 06:05 | 15:27 (2) 20:20 | 15:27 (2) 20:20 | 15:27 (2) 20:20 |
| 17:08 | 175 | 15:17 (2) 17:46 | 197 | 15:28 (2) 18:17 | 162 | 15:14 (2) 19:51 |
| 27 07:17 | 12:21 (2) 06:39 | 12:10 (2) 05:53 | 12:36 (2) 06:04 | 15:31 (2) 20:19 | 15:31 (2) 20:19 | 15:31 (2) 20:19 |
| 17:09 | 176 | 15:17 (2) 17:47 | 198 | 15:28 (2) 18:19 | 158 | 15:14 (2) 19:52 |
| 28 07:16 | 12:21 (2) 06:37 | 12:11 (2) 05:51 | 12:39 (2) 06:03 | 15:32 (2) 05:32 | 15:32 (2) 05:32 | 15:32 (2) 05:32 |
| 17:10 | 177 | 15:18 (2) 17:48 | 197 | 15:28 (2) 18:20 | 154 | 15:13 (2) 19:53 |
| 29 07:15 | 12:20 (2) | | 12:30 (2) 06:50 | 15:43 (2) 06:01 | | 15:35 (2) 20:18 |
| 17:11 | 178 | 15:18 (2) | 12:21 19:21 | 148 | 16:11 (2) 19:54 | 15:24 (2) 20:37 |
| 30 07:14 | 12:20 (2) | | 12:31 06:48 | 13:47 (2) 06:00 | | 15:30 (2) 05:29 |
| 17:13 | 179 | 15:19 (2) | 12:22 19:22 | 144 | 16:11 (2) 19:55 | 15:24 (2) 20:37 |
| 31 07:13 | 12:19 (2) | | 12:32 06:46 | 13:51 (2) | | 15:30 (2) 05:30 |
| 17:14 | 181 | 15:20 (2) | 12:23 19:23 | 139 | 16:10 (2) | 15:25 (2) 20:25 |
| Potential sun hours | 297 | | 369 | 399 | | 449 453 |
| Total, worst case | 5123 | | 5359 | 5610 | | 1967 |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: E - Shadow Receptor: 1,0 × 1,0 Azimuth: 45,0° Slope: 90,0° (5)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | November | December |
|---------------------|-------|----------------------|-----------|-----------------------|-----------------------|-----------------------|
| 1 05:30 | 05:54 | | 06:25 | 14:27 (2) 06:55 | 12:51 (2) 06:30 | 11:46 (2) 07:05 |
| 20:37 | 20:18 | | 19:34 | 89 15:56 (2) 18:43 | 192 16:03 (2) 16:56 | 189 14:55 (2) 16:32 |
| 2 05:30 | 05:55 | | 06:26 | 14:24 (2) 06:56 | 12:50 (2) 06:31 | 11:46 (2) 07:06 |
| 20:37 | 20:17 | | 19:33 | 93 15:57 (2) 18:42 | 193 16:03 (2) 16:55 | 188 14:54 (2) 16:31 |
| 3 05:31 | 05:56 | | 06:27 | 14:20 (2) 06:58 | 12:49 (2) 06:32 | 11:46 (2) 07:07 |
| 20:37 | 20:16 | | 19:31 | 98 15:58 (2) 18:40 | 194 16:03 (2) 16:54 | 188 14:54 (2) 16:31 |
| 4 05:31 | 05:57 | | 06:28 | 14:17 (2) 06:59 | 12:48 (2) 06:34 | 11:47 (2) 07:08 |
| 20:36 | 20:14 | | 19:29 | 101 15:58 (2) 18:38 | 195 16:03 (2) 16:53 | 187 14:54 (2) 16:31 |
| 5 05:32 | 05:58 | | 06:29 | 14:13 (2) 07:00 | 12:47 (2) 06:35 | 11:48 (2) 07:09 |
| 20:36 | 20:13 | | 19:28 | 106 15:59 (2) 18:37 | 195 16:02 (2) 16:51 | 185 14:53 (2) 16:31 |
| 6 05:33 | 05:59 | | 06:30 | 14:09 (2) 07:01 | 12:46 (2) 06:36 | 11:48 (2) 07:10 |
| 20:36 | 20:12 | | 19:26 | 110 15:59 (2) 18:35 | 196 16:02 (2) 16:50 | 185 14:53 (2) 16:31 |
| 7 05:33 | 06:00 | | 06:31 | 14:05 (2) 07:02 | 12:46 (2) 06:37 | 11:48 (2) 07:11 |
| 20:36 | 20:11 | | 19:24 | 115 16:00 (2) 18:33 | 196 16:02 (2) 16:49 | 184 14:52 (2) 16:30 |
| 8 05:34 | 06:01 | | 06:32 | 14:01 (2) 07:03 | 12:45 (2) 06:38 | 11:49 (2) 07:12 |
| 20:35 | 20:10 | | 19:23 | 119 16:00 (2) 18:32 | 197 16:02 (2) 16:48 | 183 14:52 (2) 16:30 |
| 9 05:34 | 06:02 | | 06:33 | 13:57 (2) 07:04 | 12:44 (2) 06:40 | 11:50 (2) 07:13 |
| 20:35 | 20:08 | | 19:21 | 124 16:01 (2) 18:30 | 197 16:01 (2) 16:47 | 182 14:52 (2) 16:30 |
| 10 05:35 | 06:03 | | 06:34 | 13:52 (2) 07:05 | 12:44 (2) 06:41 | 11:50 (2) 07:14 |
| 20:35 | 20:07 | | 19:19 | 129 16:01 (2) 18:28 | 197 16:01 (2) 16:46 | 181 14:51 (2) 16:30 |
| 11 05:36 | 06:04 | | 06:35 | 13:48 (2) 07:06 | 12:43 (2) 06:42 | 11:51 (2) 07:15 |
| 20:34 | 20:06 | | 19:18 | 134 16:02 (2) 18:27 | 198 16:01 (2) 16:45 | 181 14:52 (2) 16:31 |
| 12 05:37 | 06:05 | | 06:36 | 13:44 (2) 07:07 | 12:44 (2) 06:43 | 11:52 (2) 07:16 |
| 20:34 | 20:04 | | 19:16 | 138 16:02 (2) 18:25 | 197 16:01 (2) 16:44 | 179 14:51 (2) 16:31 |
| 13 05:37 | 06:06 | | 06:37 | 13:39 (2) 07:08 | 12:44 (2) 06:44 | 11:52 (2) 07:16 |
| 20:33 | 20:03 | | 19:14 | 143 16:02 (2) 18:24 | 197 16:01 (2) 16:43 | 178 14:50 (2) 16:31 |
| 14 05:38 | 06:07 | | 06:38 | 13:35 (2) 07:09 | 12:43 (2) 06:46 | 11:53 (2) 07:17 |
| 20:33 | 20:02 | | 19:12 | 148 16:03 (2) 18:22 | 197 16:00 (2) 16:42 | 177 14:50 (2) 16:31 |
| 15 05:39 | 06:08 | | 06:39 | 13:29 (2) 07:10 | 12:43 (2) 06:47 | 11:54 (2) 07:18 |
| 20:32 | 20:00 | | 19:11 | 153 16:02 (2) 18:20 | 197 16:00 (2) 16:41 | 176 14:50 (2) 16:31 |
| 16 05:40 | 06:09 | | 06:40 | 13:25 (2) 07:12 | 12:43 (2) 06:48 | 11:55 (2) 07:19 |
| 20:32 | 19:59 | | 19:09 | 157 16:02 (2) 18:19 | 197 16:00 (2) 16:40 | 175 14:50 (2) 16:31 |
| 17 05:40 | 06:10 | | 06:41 | 13:21 (2) 07:13 | 12:42 (2) 06:49 | 11:55 (2) 07:19 |
| 20:31 | 19:57 | | 19:07 | 161 16:02 (2) 18:17 | 197 15:59 (2) 16:40 | 174 14:49 (2) 16:32 |
| 18 05:41 | 06:11 | 15:18 (2) 06:42 | | 13:17 (2) 07:14 | 12:42 (2) 06:50 | 11:57 (2) 07:20 |
| 20:30 | 19:56 | 16 15:34 (2) 09:06 | | 165 16:02 (2) 18:16 | 197 15:59 (2) 16:39 | 172 14:49 (2) 16:32 |
| 19 05:42 | 06:12 | 15:13 (2) 06:43 | | 13:14 (2) 07:15 | 12:43 (2) 06:52 | 11:57 (2) 07:21 |
| 20:30 | 19:55 | 25 15:38 (2) 09:04 | | 168 16:02 (2) 18:14 | 196 15:59 (2) 16:38 | 172 14:49 (2) 16:32 |
| 20 05:43 | 06:13 | 15:08 (2) 06:44 | | 13:11 (2) 07:16 | 12:43 (2) 06:53 | 11:58 (2) 07:21 |
| 20:29 | 19:53 | 33 15:41 (2) 09:02 | | 172 16:03 (2) 18:13 | 196 15:59 (2) 16:37 | 170 14:48 (2) 16:33 |
| 21 05:44 | 06:14 | 15:04 (2) 06:45 | | 13:08 (2) 07:17 | 12:43 (2) 06:54 | 11:58 (2) 07:22 |
| 20:28 | 19:52 | 39 15:43 (2) 09:00 | | 175 16:03 (2) 18:11 | 195 15:58 (2) 16:37 | 170 14:48 (2) 16:33 |
| 22 05:45 | 06:15 | 15:01 (2) 06:46 | | 13:05 (2) 07:18 | 12:42 (2) 06:55 | 12:00 (2) 07:22 |
| 20:27 | 19:50 | 44 15:45 (2) 08:59 | | 178 16:03 (2) 18:10 | 196 15:58 (2) 16:36 | 168 14:48 (2) 16:34 |
| 23 05:46 | 06:16 | 14:57 (2) 06:47 | | 13:03 (2) 07:19 | 12:42 (2) 06:56 | 12:01 (2) 07:23 |
| 20:26 | 19:49 | 49 15:46 (2) 08:57 | | 180 16:03 (2) 18:08 | 195 15:57 (2) 16:35 | 167 14:48 (2) 16:34 |
| 24 05:46 | 06:17 | 14:54 (2) 06:48 | | 13:00 (2) 07:21 | 12:43 (2) 06:57 | 12:01 (2) 07:23 |
| 20:26 | 19:47 | 54 15:48 (2) 08:55 | | 183 16:03 (2) 18:07 | 195 15:58 (2) 16:35 | 167 14:48 (2) 16:35 |
| 25 05:47 | 06:18 | 14:51 (2) 06:49 | | 12:58 (2) 06:22 | 11:43 (2) 06:59 | 12:02 (2) 07:24 |
| 20:25 | 19:45 | 58 15:49 (2) 08:54 | | 185 16:03 (2) 17:06 | 194 14:57 (2) 16:34 | 165 14:47 (2) 16:35 |
| 26 05:48 | 06:19 | 14:47 (2) 06:50 | | 12:57 (2) 06:23 | 11:43 (2) 07:00 | 12:03 (2) 07:24 |
| 20:24 | 19:44 | 63 15:50 (2) 08:52 | | 186 16:03 (2) 17:04 | 193 14:56 (2) 16:34 | 164 14:47 (2) 16:36 |
| 27 05:49 | 06:20 | 14:44 (2) 06:51 | | 12:55 (2) 06:24 | 11:43 (2) 07:01 | 12:03 (2) 07:24 |
| 20:23 | 19:42 | 68 15:52 (2) 08:50 | | 188 16:03 (2) 17:03 | 193 14:56 (2) 16:33 | 164 14:47 (2) 16:37 |
| 28 05:50 | 06:21 | 14:41 (2) 06:52 | | 12:53 (2) 06:25 | 11:44 (2) 07:02 | 12:05 (2) 07:25 |
| 20:22 | 19:41 | 72 15:53 (2) 08:48 | | 190 16:03 (2) 17:02 | 192 14:56 (2) 16:33 | 162 14:47 (2) 16:37 |
| 29 05:51 | 06:22 | 14:38 (2) 06:53 | | 12:53 (2) 06:26 | 11:44 (2) 07:03 | 12:06 (2) 07:25 |
| 20:21 | 19:39 | 76 15:54 (2) 08:47 | | 191 16:04 (2) 17:00 | 192 14:56 (2) 16:32 | 161 14:47 (2) 16:38 |
| 30 05:52 | 06:23 | 14:34 (2) 06:54 | | 12:52 (2) 06:28 | 11:44 (2) 07:04 | 12:06 (2) 07:25 |
| 20:20 | 19:38 | 81 15:55 (2) 08:45 | | 191 16:03 (2) 16:59 | 191 14:55 (2) 16:32 | 161 14:47 (2) 16:39 |
| 31 05:53 | 06:24 | 14:31 (2) | | 06:29 | 11:45 (2) | 07:25 |
| 20:19 | 19:36 | 84 15:55 (2) | | 16:58 | 190 14:55 (2) | 16:40 |
| Potential sun hours | 460 | 428 | | 375 | 345 | 297 |
| Total, worst case | | | | 4470 | 6047 | 5255 |
| | | | | | | 4798 |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: F - Shadow Receptor: 1,0 × 1,0 Azimuth: -90,0° Slope: 90,0° (6)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|---------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1 07:26 | 08:10 (7) 07:12 | 06:36 | | 06:45 | 07:03 (4) 05:59 | 06:37 (3) 05:29 |
| 16:41 | 69 09:19 (7) 17:15 | 17:50 | | 19:24 | 28 07:31 (4) 19:56 | 207 10:04 (3) 20:26 |
| 2 07:26 | 08:10 (7) 07:11 | 06:34 | | 06:43 | 07:02 (4) 05:57 | 06:36 (3) 05:29 |
| 16:41 | 69 09:19 (7) 17:16 | 17:51 | | 19:25 | 29 07:31 (4) 19:57 | 210 10:06 (3) 20:27 |
| 3 07:26 | 08:11 (7) 07:10 | 06:33 | | 06:41 | 07:00 (4) 05:56 | 06:34 (3) 05:29 |
| 16:42 | 68 09:19 (7) 17:18 | 17:52 | | 19:26 | 30 07:30 (4) 19:58 | 212 10:06 (3) 20:27 |
| 4 07:26 | 08:12 (7) 07:09 | 06:31 | | 06:40 | 06:58 (4) 05:55 | 06:32 (3) 05:28 |
| 16:43 | 67 09:19 (7) 17:19 | 17:53 | | 19:27 | 31 07:29 (4) 19:59 | 215 10:07 (3) 20:28 |
| 5 07:26 | 08:13 (7) 07:08 | 06:30 | | 06:38 | 06:57 (4) 05:53 | 06:31 (3) 05:28 |
| 16:44 | 66 09:19 (7) 17:20 | 17:54 | | 19:28 | 61 08:37 (3) 20:00 | 218 10:09 (3) 20:29 |
| 6 07:26 | 08:14 (7) 07:07 | 06:28 | | 06:36 | 06:55 (4) 05:52 | 06:30 (3) 05:27 |
| 16:45 | 66 09:20 (7) 17:21 | 17:55 | | 19:29 | 86 08:49 (3) 20:01 | 220 10:10 (3) 20:30 |
| 7 07:26 | 08:15 (7) 07:06 | 06:26 | 06:45 (5) 06:35 | | 06:53 (4) 05:51 | 06:29 (3) 05:27 |
| 16:46 | 65 09:20 (7) 17:23 | 17:56 | 2 06:47 (5) 19:30 | 103 08:56 (3) 20:03 | 222 10:11 (3) 20:30 | 253 10:23 (3) |
| 8 07:26 | 08:16 (7) 07:05 | 06:25 | 06:44 (5) 06:33 | | 06:52 (4) 05:50 | 06:28 (3) 05:27 |
| 16:47 | 64 09:20 (7) 17:24 | 17:58 | 3 06:47 (5) 19:31 | 115 09:03 (3) 20:04 | 224 10:12 (3) 20:31 | 253 10:23 (3) |
| 9 07:26 | 08:17 (7) 07:04 | 06:23 | 06:42 (5) 06:32 | | 06:50 (4) 05:49 | 06:27 (3) 05:27 |
| 16:48 | 63 09:20 (7) 17:25 | 17:59 | 4 06:46 (5) 19:33 | 126 09:08 (3) 20:05 | 226 10:13 (3) 20:31 | 254 10:24 (3) |
| 10 07:25 | 08:18 (7) 07:02 | 06:22 | 06:40 (5) 06:30 | | 06:48 (4) 05:48 | 06:07 (1) 05:26 |
| 16:49 | 61 09:19 (7) 17:26 | 18:00 | 5 06:45 (5) 19:34 | 135 09:12 (3) 20:06 | 229 10:13 (3) 20:32 | 254 10:24 (3) |
| 11 07:25 | 08:19 (7) 07:01 | 06:20 | 06:39 (5) 06:28 | | 06:47 (4) 05:46 | 06:06 (1) 05:26 |
| 16:50 | 59 09:18 (7) 17:28 | 18:01 | 6 06:45 (5) 19:35 | 144 09:17 (3) 20:07 | 231 10:14 (3) 20:32 | 254 10:23 (3) |
| 12 07:25 | 08:21 (7) 07:00 | 06:18 | 06:37 (5) 06:27 | | 06:45 (4) 05:45 | 06:05 (1) 05:26 |
| 16:51 | 57 09:18 (7) 17:29 | 18:02 | 7 06:44 (5) 19:36 | 153 09:21 (3) 20:08 | 234 10:15 (3) 20:33 | 255 10:24 (3) |
| 13 07:25 | 08:21 (7) 06:59 | 06:17 | 06:35 (5) 06:25 | | 06:47 (4) 05:44 | 06:04 (1) 05:26 |
| 16:52 | 56 09:17 (7) 17:30 | 18:03 | 7 06:42 (5) 19:37 | 157 09:25 (3) 20:09 | 236 10:15 (3) 20:33 | 254 10:24 (3) |
| 14 07:24 | 08:23 (7) 06:57 | 06:15 | 06:34 (5) 06:24 | | 06:49 (4) 05:43 | 06:03 (1) 05:26 |
| 16:53 | 54 09:17 (7) 17:31 | 18:04 | 7 06:41 (5) 19:38 | 159 09:28 (3) 20:10 | 238 10:16 (3) 20:34 | 254 10:24 (3) |
| 15 07:24 | 08:24 (7) 06:56 | 06:13 | 06:32 (5) 06:22 | | 06:51 (4) 05:42 | 06:02 (1) 05:26 |
| 16:55 | 52 09:16 (7) 17:33 | 18:05 | 7 06:39 (5) 19:39 | 161 09:32 (3) 20:11 | 241 10:17 (3) 20:34 | 254 10:24 (3) |
| 16 07:24 | 08:26 (7) 06:55 | 06:12 | 06:30 (5) 06:20 | | 06:55 (4) 05:41 | 06:02 (1) 05:26 |
| 16:56 | 49 09:15 (7) 17:34 | 18:07 | 6 06:36 (5) 19:40 | 158 09:34 (3) 20:12 | 242 10:18 (3) 20:35 | 254 10:24 (3) |
| 17 07:23 | 08:27 (7) 06:53 | 06:10 | 06:29 (5) 06:19 | | 07:07 (3) 05:40 | 06:01 (1) 05:26 |
| 16:57 | 47 09:14 (7) 17:35 | 18:08 | 4 06:33 (5) 19:41 | 151 09:38 (3) 20:13 | 243 10:18 (3) 20:35 | 254 10:24 (3) |
| 18 07:23 | 08:29 (7) 06:52 | 06:08 | | 06:17 | 07:04 (3) 05:39 | 06:00 (1) 05:26 |
| 16:58 | 44 09:13 (7) 17:36 | 18:09 | 19:42 | 156 09:40 (3) 20:14 | 245 10:19 (3) 20:35 | 255 10:26 (3) |
| 19 07:22 | 08:31 (7) 06:51 | 06:07 | 06:25 (4) 06:16 | | 07:01 (3) 05:38 | 05:59 (1) 05:26 |
| 16:59 | 40 09:11 (7) 17:38 | 18:10 | 3 06:28 (4) 19:43 | 162 09:43 (3) 20:15 | 246 10:19 (3) 20:36 | 255 10:26 (3) |
| 20 07:21 | 08:32 (7) 06:49 | 06:05 | 06:24 (4) 06:14 | | 06:58 (3) 05:38 | 05:58 (1) 05:26 |
| 17:00 | 37 09:09 (7) 17:39 | 18:11 | 6 06:30 (4) 19:44 | 166 09:44 (3) 20:16 | 247 10:19 (3) 20:36 | 255 10:26 (3) |
| 21 07:21 | 08:35 (7) 06:48 | 06:03 | 06:22 (4) 06:13 | | 06:56 (3) 05:37 | 05:57 (1) 05:27 |
| 17:02 | 33 09:08 (7) 17:40 | 18:12 | 9 06:31 (4) 19:45 | 171 09:47 (3) 20:17 | 248 10:19 (3) 20:36 | 255 10:26 (3) |
| 22 07:20 | 08:38 (7) 06:46 | 06:02 | 06:20 (4) 06:11 | | 06:54 (3) 05:36 | 05:57 (1) 05:27 |
| 17:03 | 27 09:05 (7) 17:41 | 18:13 | 11 06:31 (4) 19:47 | 175 09:49 (3) 20:17 | 247 10:20 (3) 20:37 | 255 10:26 (3) |
| 23 07:20 | 08:42 (7) 06:45 | 06:00 | 06:18 (4) 06:10 | | 06:52 (3) 05:35 | 05:56 (1) 05:27 |
| 17:04 | 20 09:02 (7) 17:42 | 18:14 | 13 06:31 (4) 19:48 | 179 09:51 (3) 20:18 | 248 10:20 (3) 20:37 | 255 10:27 (3) |
| 24 07:19 | 08:49 (7) 06:43 | 05:58 | 06:17 (4) 06:08 | | 06:49 (3) 05:34 | 05:55 (1) 05:27 |
| 17:05 | 7 08:56 (7) 17:44 | 18:15 | 16 06:33 (4) 19:49 | 184 09:53 (3) 20:19 | 248 10:20 (3) 20:37 | 255 10:27 (3) |
| 25 07:18 | 06:42 05:57 | | 06:15 (4) 06:07 | | 06:48 (3) 05:34 | 06:14 (3) 05:27 |
| 17:06 | 17:45 18:16 | 18 06:33 (4) 19:50 | 187 09:55 (3) 20:20 | | 247 10:21 (3) 20:37 | 254 10:26 (3) |
| 26 07:17 | 06:40 05:55 | | 06:13 (4) 06:05 | | 06:46 (3) 05:33 | 06:13 (3) 05:28 |
| 17:08 | 17:46 18:17 | 19 06:32 (4) 19:51 | 191 09:57 (3) 20:21 | | 248 10:21 (3) 20:37 | 254 10:26 (3) |
| 27 07:17 | 06:39 05:53 | | 06:12 (4) 06:04 | | 06:44 (3) 05:32 | 06:12 (3) 05:28 |
| 17:09 | 17:47 18:19 | 21 06:33 (4) 19:52 | 194 09:58 (3) 20:22 | | 249 10:21 (3) 20:37 | 254 10:27 (3) |
| 28 07:16 | 06:37 05:51 | | 06:10 (4) 06:03 | | 06:42 (3) 05:32 | 06:12 (3) 05:29 |
| 17:10 | 17:48 18:20 | 23 06:33 (4) 19:53 | 198 10:00 (3) 20:23 | | 250 10:22 (3) 20:37 | 254 10:27 (3) |
| 29 07:15 | 06:50 | | 07:08 (4) 06:01 | | 06:41 (3) 05:31 | 06:12 (3) 05:29 |
| 17:11 | 19:21 24 | 20 07:32 (4) 19:54 | 201 10:02 (3) 20:24 | | 249 10:21 (3) 20:37 | 254 10:28 (3) |
| 30 07:14 | 06:48 | | 07:07 (4) 06:00 | | 06:38 (3) 05:30 | 06:12 (3) 05:29 |
| 17:13 | 19:22 26 | 204 07:33 (4) 19:55 | 204 10:02 (3) 20:24 | | 250 10:22 (3) 20:37 | 254 10:28 (3) |
| 31 07:13 | 06:46 | | 07:05 (4) | | 05:30 | 06:11 (3) |
| 17:14 | 19:23 27 | 27 07:32 (4) 19:56 | | | 20:25 | 251 10:22 (3) |
| Potential sun hours | 297 | 297 | 369 | 399 | 449 | 453 |
| Total, worst case | 1240 | | 274 | 4195 | 7321 | 7614 |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: F - Shadow Receptor: 1,0 × 1,0 Azimuth: -90,0° Slope: 90,0° (6)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | November | December |
|---------------------|-------------------------|-------------------------|-------------------------|-----------------------|-------------------|----------|
| 1 05:30 | 06:14 (3) 05:54 | 06:16 (1) 06:25 | 06:46 (4) 06:55 | 07:16 (5) 06:30 | 07:05 08:01 (7) | |
| 20:37 | 254 10:28 (3) 20:18 | 233 10:25 (3) 19:34 | 144 09:16 (3) 18:43 | 7 07:23 (5) 16:56 | 16:32 09:00 (7) | |
| 2 05:30 | 06:14 (3) 05:55 | 06:17 (1) 06:26 | 06:47 (4) 06:57 | 07:17 (5) 06:31 | 07:06 08:01 (7) | |
| 20:37 | 254 10:28 (3) 20:17 | 230 10:24 (3) 19:33 | 135 09:11 (3) 18:42 | 6 07:23 (5) 16:55 | 16:31 09:02 (7) | |
| 3 05:31 | 06:15 (3) 05:56 | 06:36 (3) 06:27 | 06:48 (4) 06:58 | 07:18 (5) 06:32 | 07:07 08:00 (7) | |
| 20:37 | 254 10:29 (3) 20:16 | 227 10:23 (3) 19:31 | 126 09:06 (3) 18:40 | 6 07:24 (5) 16:54 | 16:31 09:03 (7) | |
| 4 05:31 | 06:15 (3) 05:57 | 06:37 (3) 06:28 | 06:49 (4) 06:59 | 07:19 (5) 06:34 | 07:08 08:00 (7) | |
| 20:37 | 254 10:29 (3) 20:14 | 226 10:23 (3) 19:29 | 115 09:00 (3) 18:38 | 5 07:24 (5) 16:53 | 16:31 09:04 (7) | |
| 5 05:32 | 06:16 (3) 05:58 | 06:38 (3) 06:29 | 06:50 (4) 07:00 | 07:20 (5) 06:35 | 07:09 08:00 (7) | |
| 20:36 | 253 10:29 (3) 20:13 | 224 10:22 (3) 19:28 | 103 08:53 (3) 18:37 | 4 07:24 (5) 16:52 | 16:31 09:05 (7) | |
| 6 05:33 | 06:16 (3) 05:59 | 06:39 (3) 06:30 | 06:51 (4) 07:01 | 07:21 (5) 06:36 | 07:10 08:00 (7) | |
| 20:36 | 253 10:29 (3) 20:12 | 221 10:20 (3) 19:26 | 87 08:45 (3) 18:35 | 2 07:23 (5) 16:50 | 16:31 09:06 (7) | |
| 7 05:33 | 06:17 (3) 06:00 | 06:40 (3) 06:31 | 06:52 (4) 07:02 | 07:22 (5) 06:37 | 07:11 08:00 (7) | |
| 20:36 | 252 10:29 (3) 20:11 | 219 10:19 (3) 19:24 | 63 08:33 (3) 18:33 | 1 07:23 (5) 16:49 | 16:31 09:06 (7) | |
| 8 05:34 | 06:18 (3) 06:01 | 06:41 (3) 06:32 | 06:53 (4) 07:03 | 06:38 07:00 | 07:12 08:00 (7) | |
| 20:35 | 252 10:30 (3) 20:10 | 217 10:18 (3) 19:23 | 31 07:24 (4) 18:32 | 16:48 07:07 | 16:30 09:07 (7) | |
| 9 05:34 | 06:17 (3) 06:02 | 06:42 (3) 06:33 | 06:54 (4) 07:04 | 06:40 07:13 | 07:13 08:00 (7) | |
| 20:35 | 253 10:30 (3) 20:08 | 215 10:17 (3) 19:21 | 31 07:25 (4) 18:30 | 16:47 08:08 (7) | 16:30 09:08 (7) | |
| 10 05:35 | 06:18 (3) 06:03 | 06:44 (3) 06:34 | 06:55 (4) 07:05 | 06:41 07:14 | 08:00 (7) | |
| 20:35 | 252 10:30 (3) 20:07 | 211 10:15 (3) 19:19 | 30 07:25 (4) 18:28 | 16:46 09:09 (7) | 16:30 09:09 (7) | |
| 11 05:36 | 06:19 (3) 06:04 | 06:45 (3) 06:35 | 06:56 (4) 07:06 | 06:42 07:15 | 08:01 (7) | |
| 20:34 | 251 10:30 (3) 20:06 | 209 10:14 (3) 19:18 | 28 07:24 (4) 18:27 | 16:45 09:10 (7) | 16:31 09:10 (7) | |
| 12 05:37 | 06:19 (3) 06:05 | 06:46 (3) 06:36 | 06:57 (4) 07:07 | 06:43 07:16 | 08:00 (7) | |
| 20:34 | 251 10:30 (3) 20:04 | 206 10:12 (3) 19:16 | 27 07:24 (4) 18:25 | 16:44 09:10 (7) | 16:31 09:10 (7) | |
| 13 05:37 | 06:20 (3) 06:06 | 06:47 (3) 06:37 | 06:58 (4) 07:08 | 06:45 07:16 | 08:00 (7) | |
| 20:33 | 250 10:30 (3) 20:03 | 204 10:11 (3) 19:14 | 26 07:24 (4) 18:24 | 16:43 09:11 (7) | 16:31 09:11 (7) | |
| 14 05:38 | 06:21 (3) 06:07 | 06:49 (3) 06:38 | 06:59 (4) 07:09 | 06:46 07:17 | 08:01 (7) | |
| 20:33 | 250 10:31 (3) 20:02 | 200 10:09 (3) 19:13 | 25 07:24 (4) 18:22 | 16:42 09:12 (7) | 16:31 09:12 (7) | |
| 15 05:39 | 06:21 (3) 06:08 | 06:50 (3) 06:39 | 07:00 (4) 07:10 | 06:47 07:18 | 08:01 (7) | |
| 20:32 | 249 10:30 (3) 20:00 | 197 10:07 (3) 19:11 | 23 07:23 (4) 18:21 | 16:41 09:13 (7) | 16:31 09:13 (7) | |
| 16 05:40 | 06:21 (3) 06:09 | 06:52 (3) 06:40 | 07:00 (4) 07:12 | 06:48 07:19 | 08:01 (7) | |
| 20:32 | 249 10:30 (3) 19:59 | 193 10:05 (3) 19:09 | 21 07:21 (4) 18:19 | 16:40 09:13 (7) | 16:31 09:13 (7) | |
| 17 05:40 | 06:22 (3) 06:10 | 06:53 (3) 06:41 | 07:01 (4) 07:13 | 06:49 07:19 | 08:02 (7) | |
| 20:31 | 248 10:30 (3) 19:57 | 190 10:03 (3) 19:07 | 20 07:21 (4) 18:17 | 16:40 09:12 (7) | 16:31 09:12 (7) | |
| 18 05:41 | 06:23 (3) 06:11 | 06:55 (3) 06:42 | 07:02 (4) 07:14 | 06:50 08:02 (7) | 08:23 (7) 07:20 | |
| 20:30 | 248 10:31 (3) 19:56 | 186 10:01 (3) 19:06 | 18 07:20 (4) 18:16 | 16:39 09:15 (7) | 08:31 (7) 16:32 | |
| 19 05:42 | 06:05 (1) 06:12 | 06:55 (3) 06:43 | 07:03 (4) 07:15 | 06:52 08:02 (7) | 08:17 (7) 07:21 | |
| 20:30 | 248 10:31 (3) 19:55 | 183 09:58 (3) 19:04 | 16 07:19 (4) 18:14 | 16:38 09:15 (7) | 08:37 (7) 16:32 | |
| 20 05:43 | 06:05 (1) 06:13 | 06:57 (3) 06:44 | 07:04 (4) 07:16 | 06:53 08:03 (7) | 08:13 (7) 07:21 | |
| 20:29 | 248 10:30 (3) 19:53 | 179 09:56 (3) 19:02 | 14 07:18 (4) 18:13 | 16:37 09:16 (7) | 08:40 (7) 16:33 | |
| 21 05:44 | 06:06 (1) 06:14 | 06:59 (3) 06:45 | 07:05 (4) 07:17 | 06:54 08:03 (7) | 08:11 (7) 07:22 | |
| 20:28 | 248 10:30 (3) 19:52 | 174 09:53 (3) 19:00 | 12 07:17 (4) 18:11 | 16:37 09:16 (7) | 08:43 (7) 16:33 | |
| 22 05:45 | 06:07 (1) 06:15 | 07:01 (3) 06:46 | 07:06 (4) 07:18 | 06:55 08:04 (7) | 08:09 (7) 07:22 | |
| 20:27 | 248 10:30 (3) 19:50 | 170 09:51 (3) 18:59 | 9 07:15 (4) 18:10 | 16:36 09:17 (7) | 08:46 (7) 16:34 | |
| 23 05:46 | 06:08 (1) 06:16 | 07:03 (3) 06:47 | 07:07 (4) 07:20 | 06:56 08:04 (7) | 08:08 (7) 07:23 | |
| 20:26 | 248 10:30 (3) 19:49 | 165 09:48 (3) 18:57 | 7 07:14 (4) 18:09 | 16:35 09:17 (7) | 08:48 (7) 16:34 | |
| 24 05:46 | 06:09 (1) 06:17 | 07:05 (3) 06:48 | 07:08 (4) 07:21 | 06:57 08:05 (7) | 08:06 (7) 07:23 | |
| 20:26 | 247 10:30 (3) 19:47 | 160 09:45 (3) 18:55 | 4 07:12 (4) 18:07 | 16:35 09:18 (7) | 08:50 (7) 16:35 | |
| 25 05:47 | 06:10 (1) 06:18 | 07:07 (3) 06:49 | 07:09 (4) 06:22 | 06:59 08:05 (7) | 08:05 (7) 07:24 | |
| 20:25 | 245 10:29 (3) 19:45 | 155 09:42 (3) 18:54 | 1 07:10 (4) 17:06 | 16:34 09:18 (7) | 08:52 (7) 16:35 | |
| 26 05:48 | 06:11 (1) 06:19 | 07:09 (3) 06:50 | 07:10 (5) 06:23 | 07:00 08:06 (7) | 08:04 (7) 07:24 | |
| 20:24 | 244 10:29 (3) 19:44 | 150 09:39 (3) 18:52 | 3 07:13 (5) 17:04 | 16:34 09:18 (7) | 08:53 (7) 16:36 | |
| 27 05:49 | 06:12 (1) 06:20 | 06:56 (4) 06:51 | 07:11 (5) 06:24 | 07:01 08:07 (7) | 08:03 (7) 07:24 | |
| 20:23 | 243 10:29 (3) 19:42 | 159 09:36 (3) 18:50 | 6 07:17 (5) 17:03 | 16:33 09:19 (7) | 08:55 (7) 16:37 | |
| 28 05:50 | 06:13 (1) 06:21 | 06:52 (4) 06:52 | 07:12 (5) 06:25 | 07:02 08:07 (7) | 08:03 (7) 07:25 | |
| 20:22 | 241 10:28 (3) 19:41 | 160 09:32 (3) 18:48 | 7 07:19 (5) 17:02 | 16:33 09:19 (7) | 08:57 (7) 16:37 | |
| 29 05:51 | 06:13 (1) 06:22 | 06:49 (4) 06:53 | 07:14 (5) 06:27 | 07:03 08:08 (7) | 08:02 (7) 07:25 | |
| 20:21 | 239 10:27 (3) 19:39 | 160 09:29 (3) 18:47 | 7 07:21 (5) 17:00 | 16:32 09:19 (7) | 08:58 (7) 16:38 | |
| 30 05:52 | 06:14 (1) 06:23 | 06:47 (4) 06:54 | 07:15 (5) 06:28 | 07:04 08:08 (7) | 08:02 (7) 07:25 | |
| 20:20 | 237 10:26 (3) 19:38 | 157 09:25 (3) 18:45 | 7 07:22 (5) 16:59 | 16:32 09:19 (7) | 08:59 (7) 16:39 | |
| 31 05:53 | 06:15 (1) 06:24 | 06:45 (4) 06:29 | 16:58 07:25 | 07:25 08:09 (7) | 08:09 (7) 07:25 | |
| 20:19 | 235 10:26 (3) 19:36 | 153 09:21 (3) 18:36 | 16:58 07:25 | 16:40 09:19 (7) | 08:09 (7) 07:25 | |
| Potential sun hours | 460 | 428 | 375 | 297 | 287 | |
| Total, worst case | 7698 | 5933 | 1146 | 31 | 523 | 2157 |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: G - Shadow Receptor: 1,0 × 1,0 Azimuth: -90,0° Slope: 90,0° (7)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|---------------------|---------|----------|-----------------------|----------------------|-----------------------|-------------------|
| 1 | 07:26 | 07:12 | 06:36 | 06:55 (8) 06:45 | 05:59 | 06:18 (5) 05:29 |
| | 16:41 | 17:15 | 17:50 | 13 07:08 (8) 19:24 | 156 19:56 | 08:54 (7) 20:26 |
| 2 | 07:26 | 07:11 | 06:34 | 06:53 (8) 06:43 | 05:57 | 06:17 (5) 05:29 |
| | 16:41 | 17:16 | 17:51 | 14 07:07 (8) 19:25 | 158 19:57 | 08:55 (7) 20:27 |
| 3 | 07:26 | 07:10 | 06:33 | 06:52 (8) 06:41 | 05:56 | 06:15 (5) 05:29 |
| | 16:42 | 17:18 | 17:52 | 14 07:06 (8) 19:26 | 160 19:58 | 08:55 (7) 20:27 |
| 4 | 07:26 | 07:09 | 06:31 | 06:50 (8) 06:40 | 05:55 | 06:14 (5) 05:28 |
| | 16:43 | 17:19 | 17:53 | 13 07:03 (8) 19:27 | 162 19:59 | 08:56 (7) 20:28 |
| 5 | 07:26 | 07:08 | 06:30 | 06:49 (8) 06:38 | 05:53 | 06:14 (5) 05:28 |
| | 16:44 | 17:20 | 17:54 | 12 07:01 (8) 19:28 | 163 20:00 | 08:57 (7) 20:29 |
| 6 | 07:26 | 07:07 | 06:28 | 06:47 (8) 06:36 | 05:52 | 06:16 (5) 05:27 |
| | 16:45 | 17:21 | 17:55 | 10 06:57 (8) 19:29 | 162 20:01 | 08:58 (7) 20:30 |
| 7 | 07:26 | 07:06 | 06:26 | 06:35 | 05:51 | 06:18 (5) 05:27 |
| | 16:46 | 17:23 | 17:56 | 19:30 | 161 20:03 | 08:59 (7) 20:30 |
| 8 | 07:26 | 07:05 | 06:25 | 06:33 | 05:50 | 06:21 (5) 05:27 |
| | 16:47 | 17:24 | 17:58 | 19:31 | 159 20:04 | 09:00 (7) 20:31 |
| 9 | 07:26 | 07:04 | 06:23 | 06:32 | 05:49 | 06:21 (7) 05:27 |
| | 16:48 | 17:25 | 17:59 | 19:33 | 159 20:05 | 09:00 (7) 20:31 |
| 10 | 07:25 | 07:02 | 06:22 | 06:30 | 07:30 (7) 05:48 | 06:19 (7) 05:26 |
| | 16:49 | 17:26 | 18:00 | 19:34 | 31 08:01 (7) 20:06 | 09:00 (7) 20:32 |
| 11 | 07:25 | 07:01 | 06:20 | 06:28 | 07:22 (7) 05:46 | 09:19 (7) 05:26 |
| | 16:50 | 17:28 | 18:01 | 19:35 | 47 08:09 (7) 20:07 | 09:01 (7) 20:32 |
| 12 | 07:25 | 07:00 | 06:18 | 06:27 | 07:16 (7) 05:45 | 06:18 (7) 05:26 |
| | 16:51 | 17:29 | 18:02 | 19:36 | 58 08:14 (7) 20:08 | 09:01 (7) 20:33 |
| 13 | 07:25 | 06:59 | 06:17 | 06:25 | 07:12 (7) 05:44 | 06:17 (7) 05:26 |
| | 16:52 | 17:30 | 18:03 | 19:37 | 67 08:19 (7) 20:09 | 09:01 (7) 20:33 |
| 14 | 07:24 | 06:57 | 06:15 | 06:24 | 07:07 (7) 05:43 | 06:16 (7) 05:26 |
| | 16:53 | 17:31 | 18:04 | 19:38 | 75 08:22 (7) 20:10 | 09:02 (7) 20:34 |
| 15 | 07:24 | 06:56 | 06:13 | 06:22 | 06:41 (5) 05:42 | 06:17 (7) 05:26 |
| | 16:55 | 17:33 | 18:05 | 19:39 | 84 08:26 (7) 20:11 | 09:03 (7) 20:34 |
| 16 | 07:24 | 06:55 | 06:12 | 06:20 | 06:39 (5) 05:41 | 06:16 (7) 05:26 |
| | 16:56 | 17:34 | 18:07 | 19:40 | 94 08:29 (7) 20:12 | 09:04 (7) 20:35 |
| 17 | 07:23 | 06:53 | 06:10 | 06:19 | 06:38 (5) 05:40 | 06:15 (7) 05:26 |
| | 16:57 | 17:35 | 18:08 | 19:41 | 101 08:32 (7) 20:13 | 09:04 (7) 20:35 |
| 18 | 07:23 | 06:52 | 06:08 | 06:17 | 06:36 (5) 05:39 | 06:15 (7) 05:26 |
| | 16:58 | 17:36 | 18:09 | 19:42 | 109 08:34 (7) 20:14 | 09:04 (7) 20:35 |
| 19 | 07:22 | 06:51 | 07:10 (8) 06:07 | 06:16 | 06:35 (5) 05:38 | 06:14 (7) 05:26 |
| | 16:59 | 17:38 | 1 07:11 (8) 18:10 | 116 19:43 | 08:37 (7) 20:15 | 09:04 (7) 20:36 |
| 20 | 07:21 | 06:49 | 07:09 (8) 06:05 | 06:14 | 06:33 (5) 05:38 | 06:13 (7) 05:26 |
| | 17:00 | 17:39 | 3 07:12 (8) 18:11 | 19:44 | 122 08:38 (7) 20:16 | 09:04 (7) 20:36 |
| 21 | 07:21 | 06:48 | 07:07 (8) 06:03 | 06:13 | 06:32 (5) 05:37 | 06:13 (7) 05:27 |
| | 17:02 | 17:40 | 5 07:12 (8) 18:12 | 19:45 | 128 08:41 (7) 20:17 | 09:04 (7) 20:36 |
| 22 | 07:20 | 06:46 | 07:06 (8) 06:02 | 06:11 | 06:30 (5) 05:36 | 06:13 (7) 05:27 |
| | 17:03 | 17:41 | 6 07:12 (8) 18:13 | 19:47 | 132 08:42 (7) 20:17 | 09:05 (7) 20:37 |
| 23 | 07:20 | 06:45 | 07:04 (8) 06:00 | 06:10 | 06:29 (5) 05:35 | 06:12 (7) 05:27 |
| | 17:04 | 17:42 | 8 07:12 (8) 18:14 | 19:48 | 135 08:44 (7) 20:18 | 09:05 (7) 20:37 |
| 24 | 07:19 | 06:43 | 07:03 (8) 05:58 | 06:08 | 06:27 (5) 05:34 | 06:12 (7) 05:27 |
| | 17:05 | 17:44 | 9 07:12 (8) 18:15 | 19:49 | 138 08:45 (7) 20:19 | 09:05 (7) 20:37 |
| 25 | 07:18 | 06:42 | 07:01 (8) 05:57 | 06:07 | 06:26 (5) 05:34 | 06:12 (7) 05:27 |
| | 17:06 | 17:45 | 10 07:11 (8) 18:16 | 19:50 | 141 08:47 (7) 20:20 | 09:06 (7) 20:37 |
| 26 | 07:17 | 06:40 | 07:00 (8) 05:55 | 06:05 | 06:25 (5) 05:33 | 06:11 (7) 05:28 |
| | 17:08 | 17:46 | 11 07:11 (8) 18:17 | 19:51 | 144 08:49 (7) 20:21 | 09:06 (7) 20:37 |
| 27 | 07:17 | 06:39 | 06:58 (8) 05:53 | 06:04 | 06:23 (5) 05:32 | 06:11 (7) 05:28 |
| | 17:09 | 17:47 | 12 07:10 (8) 18:19 | 19:52 | 146 08:49 (7) 20:22 | 09:06 (7) 20:37 |
| 28 | 07:16 | 06:37 | 06:57 (8) 05:51 | 06:03 | 06:22 (5) 05:32 | 06:11 (7) 05:29 |
| | 17:10 | 17:48 | 13 07:10 (8) 18:20 | 19:53 | 149 08:51 (7) 20:23 | 09:07 (7) 20:37 |
| 29 | 07:15 | | | 06:50 | 06:01 | 06:21 (5) 05:31 |
| | 17:11 | | | 19:21 | 151 08:52 (7) 20:24 | 09:06 (7) 20:37 |
| 30 | 07:14 | | | 06:48 | 06:00 | 06:19 (5) 05:30 |
| | 17:13 | | | 19:22 | 154 08:53 (7) 20:24 | 09:07 (7) 20:37 |
| 31 | 07:13 | | | 06:46 | | 05:30 |
| | 17:14 | | | 19:23 | | 06:10 (7) |
| Potential sun hours | 297 | 297 | 369 | 399 | 2322 | 449 |
| Total, worst case | | 78 | 76 | | 5187 | 453 |
| | | | | | | 5380 |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: G - Shadow Receptor: 1,0 × 1,0 Azimuth: -90,0° Slope: 90,0° (7)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | November | December |
|---------------------|-------------------|-------------------|-------------------|-------------------|---------------|-------------------|
| 1 05:30 | 06:15 (7) 05:54 | 06:29 (7) 06:25 | 07:21 (7) 06:55 | | 06:30 07:05 | |
| 20:37 | 179 | 09:14 (7) 20:18 | 162 | 09:11 (7) 19:34 | 47 | 08:08 (7) 18:43 |
| 2 05:30 | | 06:14 (7) 05:55 | | 06:30 (7) 06:26 | | 07:29 (7) 06:57 |
| 20:37 | 180 | 09:14 (7) 20:17 | 161 | 09:11 (7) 19:33 | 31 | 08:00 (7) 18:42 |
| 3 05:31 | 06:15 (7) 05:56 | | 06:30 (7) 06:27 | | | 06:58 07:08 |
| 20:37 | 179 | 09:14 (7) 20:16 | 160 | 09:10 (7) 19:31 | | 18:40 16:54 |
| 4 05:31 | 06:15 (7) 05:57 | | 06:31 (7) 06:28 | | | 06:59 07:08 |
| 20:36 | 179 | 09:14 (7) 20:14 | 159 | 09:10 (7) 19:29 | | 18:38 16:53 |
| 5 05:32 | 06:16 (7) 05:58 | | 06:30 (5) 06:29 | | | 07:00 07:09 |
| 20:36 | 179 | 09:15 (7) 20:13 | 159 | 09:09 (7) 19:28 | | 18:37 16:52 |
| 6 05:33 | 06:16 (7) 05:59 | | 06:27 (5) 06:30 | | | 07:01 06:36 |
| 20:36 | 178 | 09:14 (7) 20:12 | 161 | 09:08 (7) 19:26 | | 18:35 16:50 |
| 7 05:33 | 06:16 (7) 06:00 | | 06:25 (5) 06:31 | | | 07:02 06:37 |
| 20:36 | 179 | 09:15 (7) 20:11 | 162 | 09:07 (7) 19:24 | | 18:33 16:49 |
| 8 05:34 | 06:17 (7) 06:01 | | 06:23 (5) 06:32 | | | 07:03 06:38 |
| 20:35 | 178 | 09:15 (7) 20:10 | 164 | 09:07 (7) 19:23 | | 18:32 16:48 |
| 9 05:34 | 06:17 (7) 06:02 | | 06:24 (5) 06:33 | | | 07:04 06:40 |
| 20:35 | 178 | 09:15 (7) 20:08 | 162 | 09:06 (7) 19:21 | | 18:30 16:47 |
| 10 05:35 | 06:18 (7) 06:03 | | 06:25 (5) 06:34 | | | 07:05 06:41 |
| 20:35 | 177 | 09:15 (7) 20:07 | 160 | 09:05 (7) 19:19 | | 18:28 16:46 |
| 11 05:36 | 06:18 (7) 06:04 | | 06:26 (5) 06:35 | | | 07:06 06:42 |
| 20:34 | 178 | 09:16 (7) 20:06 | 157 | 09:03 (7) 19:18 | | 18:27 16:45 |
| 12 05:37 | 06:18 (7) 06:05 | | 06:27 (5) 06:36 | | | 07:07 06:43 |
| 20:34 | 177 | 09:15 (7) 20:04 | 155 | 09:02 (7) 19:16 | | 18:25 16:44 |
| 13 05:37 | 06:19 (7) 06:06 | | 06:28 (5) 06:37 | | | 07:08 06:44 |
| 20:33 | 176 | 09:15 (7) 20:03 | 153 | 09:01 (7) 19:14 | | 18:24 16:43 |
| 14 05:38 | 06:19 (7) 06:07 | | 06:29 (5) 06:38 | | | 07:09 06:46 |
| 20:33 | 177 | 09:16 (7) 20:02 | 151 | 09:00 (7) 19:12 | | 18:22 16:42 |
| 15 05:39 | 06:19 (7) 06:08 | | 06:30 (5) 06:39 | | | 07:10 06:47 |
| 20:32 | 176 | 09:15 (7) 20:00 | 148 | 08:58 (7) 19:11 | | 18:21 16:41 |
| 16 05:40 | 06:20 (7) 06:09 | | 06:31 (5) 06:40 | | | 07:12 06:48 |
| 20:32 | 175 | 09:15 (7) 19:59 | 146 | 08:57 (7) 19:09 | | 18:19 16:40 |
| 17 05:40 | 06:20 (7) 06:10 | | 06:32 (5) 06:41 | | | 07:13 06:49 |
| 20:31 | 175 | 09:15 (7) 19:57 | 143 | 08:55 (7) 19:07 | | 18:17 16:40 |
| 18 05:41 | 06:21 (7) 06:11 | | 06:33 (5) 06:42 | | | 07:14 06:50 |
| 20:30 | 175 | 09:16 (7) 19:56 | 140 | 08:53 (7) 19:06 | | 18:16 16:39 |
| 19 05:42 | 06:22 (7) 06:12 | | 06:33 (5) 06:43 | | | 07:15 06:52 |
| 20:30 | 174 | 09:16 (7) 19:55 | 137 | 08:50 (7) 19:04 | | 18:14 16:38 |
| 20 05:43 | 06:21 (7) 06:13 | | 06:34 (5) 06:44 | | | 07:16 06:53 |
| 20:29 | 174 | 09:15 (7) 19:53 | 134 | 08:48 (7) 19:02 | | 18:13 16:37 |
| 21 05:44 | 06:22 (7) 06:14 | | 06:35 (5) 06:45 | | | 07:17 06:54 |
| 20:28 | 173 | 09:15 (7) 19:52 | 131 | 08:46 (7) 19:00 | | 18:11 16:37 |
| 22 05:45 | 06:23 (7) 06:15 | | 06:36 (5) 06:46 | | | 07:18 06:55 |
| 20:27 | 172 | 09:15 (7) 19:50 | 126 | 08:44 (7) 18:59 | | 18:10 16:36 |
| 23 05:46 | 06:23 (7) 06:16 | | 06:37 (5) 06:47 | | | 07:19 06:56 |
| 20:26 | 172 | 09:15 (7) 19:49 | 121 | 08:42 (7) 18:57 | | 18:08 16:35 |
| 24 05:46 | 06:24 (7) 06:17 | | 06:38 (5) 06:48 | | | 07:21 06:57 |
| 20:26 | 171 | 09:15 (7) 19:47 | 115 | 08:39 (7) 18:55 | | 18:07 16:35 |
| 25 05:47 | 06:25 (7) 06:18 | | 06:39 (5) 06:49 | | | 06:22 06:59 |
| 20:25 | 170 | 09:15 (7) 19:45 | 108 | 08:37 (7) 18:54 | | 17:06 16:34 |
| 26 05:48 | 06:25 (7) 06:19 | | 06:40 (5) 06:50 | | | 06:23 07:00 |
| 20:24 | 169 | 09:14 (7) 19:44 | 101 | 08:34 (7) 18:52 | | 17:04 16:34 |
| 27 05:49 | 06:26 (7) 06:20 | | 06:41 (5) 06:51 | | | 06:24 07:01 |
| 20:23 | 168 | 09:14 (7) 19:42 | 93 | 08:30 (7) 18:50 | | 17:03 16:33 |
| 28 05:50 | 06:27 (7) 06:21 | | 06:42 (5) 06:52 | | | 06:25 07:02 |
| 20:22 | 167 | 09:14 (7) 19:41 | 84 | 08:27 (7) 18:48 | | 17:02 16:33 |
| 29 05:51 | 06:27 (7) 06:22 | | 07:08 (7) 06:53 | | | 06:26 07:03 |
| 20:21 | 166 | 09:13 (7) 19:39 | 75 | 08:23 (7) 18:47 | | 17:00 16:32 |
| 30 05:52 | 06:27 (7) 06:23 | | 07:12 (7) 06:54 | | | 06:28 07:04 |
| 20:20 | 165 | 09:12 (7) 19:38 | 67 | 08:19 (7) 18:45 | | 16:59 16:32 |
| 31 05:53 | 06:28 (7) 06:24 | | 07:16 (7) | | | 06:29 07:25 |
| 20:19 | 164 | 09:12 (7) 19:36 | 58 | 08:14 (7) | | 16:58 16:40 |
| Potential sun hours | 460 | | 428 | 375 | | 345 297 |
| Total, worst case | 5400 | | 4153 | 78 | | 152 287 |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: H - Shadow Receptor: 1,0 × 1,0 Azimuth: -180,0° Slope: 90,0° (8)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June | July | August | September | October | November | December |
|---------------------|---------|----------|-------|-------|----------------|-----------|--------------|-----------|--------------|-----------|----------|----------|
| 1 07:26 | 07:12 | 06:36 | 06:45 | 05:59 | | 05:29 | 05:51 (5) | 05:30 | 05:53 (5) | 05:54 | 06:25 | 06:55 |
| 16:41 | 17:15 | 17:50 | 19:24 | 19:56 | | 20:26 | 73 19:40 (6) | 20:37 | 89 19:52 (6) | 20:18 | 19:34 | 18:43 |
| 2 07:26 | 07:11 | 06:34 | 06:43 | 05:57 | | 05:29 | 05:51 (5) | 05:30 | 05:53 (5) | 05:55 | 06:26 | 06:57 |
| 16:41 | 17:16 | 17:51 | 19:25 | 19:57 | | 20:27 | 75 19:41 (6) | 20:37 | 88 19:51 (6) | 20:17 | 19:33 | 18:42 |
| 3 07:26 | 07:10 | 06:33 | 06:41 | 05:56 | | 05:29 | 05:50 (5) | 05:31 | 05:54 (5) | 05:56 | 06:27 | 06:58 |
| 16:42 | 17:18 | 17:52 | 19:26 | 19:58 | | 20:27 | 77 19:42 (6) | 20:37 | 86 19:51 (6) | 20:16 | 19:31 | 18:40 |
| 4 07:26 | 07:09 | 06:31 | 06:40 | 05:55 | | 05:28 | 05:50 (5) | 05:31 | 05:54 (5) | 05:57 | 06:28 | 06:59 |
| 16:43 | 17:19 | 17:53 | 19:27 | 19:59 | | 20:28 | 79 19:43 (6) | 20:36 | 86 19:51 (6) | 20:14 | 19:29 | 18:38 |
| 5 07:26 | 07:08 | 06:30 | 06:38 | 05:53 | | 05:28 | 05:50 (5) | 05:32 | 05:55 (5) | 05:58 | 06:29 | 07:00 |
| 16:44 | 17:20 | 17:54 | 19:28 | 20:00 | | 20:29 | 81 19:44 (6) | 20:36 | 84 19:51 (6) | 20:13 | 19:28 | 18:37 |
| 6 07:26 | 07:07 | 06:28 | 06:36 | 05:52 | | 05:27 | 05:49 (5) | 05:33 | 05:55 (5) | 05:59 | 06:30 | 07:01 |
| 16:45 | 17:21 | 17:55 | 19:29 | 20:01 | | 20:29 | 83 19:44 (6) | 20:36 | 83 19:50 (6) | 20:12 | 19:26 | 18:35 |
| 7 07:26 | 07:06 | 06:26 | 06:35 | 05:51 | | 05:27 | 05:49 (5) | 05:33 | 05:56 (5) | 06:00 | 06:31 | 07:02 |
| 16:46 | 17:23 | 17:56 | 19:30 | 20:03 | | 20:30 | 84 19:45 (6) | 20:36 | 82 19:50 (6) | 20:11 | 19:24 | 18:33 |
| 8 07:26 | 07:05 | 06:25 | 06:33 | 05:50 | | 05:27 | 05:49 (5) | 05:34 | 05:57 (5) | 06:01 | 06:32 | 07:03 |
| 16:47 | 17:24 | 17:58 | 19:31 | 20:04 | | 20:31 | 85 19:45 (6) | 20:35 | 80 19:50 (6) | 20:10 | 19:23 | 18:32 |
| 9 07:26 | 07:04 | 06:23 | 06:32 | 05:49 | | 05:27 | 05:49 (5) | 05:34 | 05:57 (5) | 06:02 | 06:33 | 07:04 |
| 16:48 | 17:25 | 17:59 | 19:33 | 20:05 | | 20:31 | 86 19:46 (6) | 20:35 | 77 19:49 (6) | 20:08 | 19:21 | 18:30 |
| 10 07:25 | 07:02 | 06:22 | 06:30 | 05:48 | | 05:26 | 05:49 (5) | 05:35 | 05:58 (5) | 06:03 | 06:34 | 07:05 |
| 16:49 | 17:26 | 18:00 | 19:34 | 20:06 | | 20:32 | 87 19:47 (6) | 20:35 | 76 19:49 (6) | 20:07 | 19:19 | 18:28 |
| 11 07:25 | 07:01 | 06:20 | 06:28 | 05:46 | | 05:26 | 05:48 (5) | 05:36 | 05:59 (5) | 06:04 | 06:35 | 07:06 |
| 16:50 | 17:28 | 18:01 | 19:35 | 20:07 | | 20:32 | 88 19:46 (6) | 20:34 | 74 19:49 (6) | 20:06 | 19:18 | 18:27 |
| 12 07:25 | 07:00 | 06:18 | 06:27 | 05:45 | | 05:26 | 05:48 (5) | 05:37 | 05:59 (5) | 06:05 | 06:36 | 07:07 |
| 16:51 | 17:29 | 18:02 | 19:36 | 20:08 | | 20:33 | 89 19:47 (6) | 20:34 | 72 19:47 (6) | 20:04 | 19:16 | 18:25 |
| 13 07:25 | 06:59 | 06:17 | 06:25 | 05:44 | | 05:26 | 05:48 (5) | 05:37 | 06:00 (5) | 06:06 | 06:37 | 07:08 |
| 16:52 | 17:30 | 18:03 | 19:37 | 20:09 | | 20:33 | 90 19:48 (6) | 20:33 | 69 19:47 (6) | 20:03 | 19:14 | 18:24 |
| 14 07:24 | 06:57 | 06:15 | 06:24 | 05:43 | | 06:03 (5) | 05:26 | 05:48 (5) | 05:38 | 06:01 (5) | 06:07 | 06:38 |
| 16:53 | 17:31 | 18:04 | 19:38 | 20:10 | 2 06:05 (5) | 05:34 | 91 19:48 (6) | 20:33 | 66 19:46 (6) | 20:02 | 19:12 | 18:22 |
| 15 07:24 | 06:56 | 06:13 | 06:22 | 05:42 | | 06:02 (5) | 05:26 | 05:48 (5) | 05:39 | 06:01 (5) | 06:08 | 06:39 |
| 16:55 | 17:33 | 18:05 | 19:39 | 20:11 | 5 06:07 (5) | 05:34 | 91 19:48 (6) | 20:32 | 63 19:44 (6) | 20:00 | 19:11 | 18:21 |
| 16 07:23 | 06:55 | 06:12 | 06:20 | 05:41 | | 06:02 (5) | 05:26 | 05:48 (5) | 05:40 | 06:02 (5) | 06:09 | 06:40 |
| 16:56 | 17:34 | 18:07 | 19:40 | 20:12 | 8 06:10 (5) | 05:35 | 92 19:49 (6) | 20:32 | 59 19:43 (6) | 19:59 | 19:09 | 18:19 |
| 17 07:23 | 06:53 | 06:10 | 06:19 | 05:40 | | 06:01 (5) | 05:26 | 05:48 (5) | 05:40 | 06:03 (5) | 06:10 | 06:41 |
| 16:57 | 17:35 | 18:08 | 19:41 | 20:13 | 10 06:11 (5) | 05:35 | 92 19:49 (6) | 20:31 | 55 19:42 (6) | 19:57 | 19:07 | 18:17 |
| 18 07:23 | 06:52 | 06:08 | 06:17 | 05:39 | | 06:00 (5) | 05:26 | 05:49 (5) | 05:41 | 06:04 (5) | 06:11 | 06:42 |
| 16:58 | 17:36 | 18:09 | 19:42 | 20:14 | 12 06:12 (5) | 05:35 | 92 19:50 (6) | 20:30 | 51 19:41 (6) | 19:56 | 19:06 | 18:16 |
| 19 07:22 | 06:51 | 06:07 | 06:16 | 05:38 | | 05:59 (5) | 05:26 | 05:49 (5) | 05:42 | 06:05 (5) | 06:12 | 06:43 |
| 16:59 | 17:38 | 18:10 | 19:43 | 20:15 | 14 06:13 (5) | 05:36 | 92 19:50 (6) | 20:30 | 46 19:39 (6) | 19:55 | 19:04 | 18:14 |
| 20 07:21 | 06:49 | 06:05 | 06:14 | 05:38 | | 05:58 (5) | 05:26 | 05:49 (5) | 05:43 | 06:05 (5) | 06:13 | 06:44 |
| 17:00 | 17:39 | 18:11 | 19:44 | 20:16 | 16 06:14 (5) | 05:36 | 92 19:50 (6) | 20:29 | 40 19:36 (6) | 19:53 | 19:02 | 18:13 |
| 21 07:21 | 06:48 | 06:03 | 06:13 | 05:37 | | 05:57 (5) | 05:27 | 05:49 (5) | 05:44 | 06:06 (5) | 06:14 | 06:45 |
| 17:02 | 17:40 | 18:12 | 19:45 | 20:17 | 17 06:14 (5) | 05:37 | 92 19:50 (6) | 20:28 | 30 19:32 (6) | 19:52 | 19:00 | 18:11 |
| 22 07:20 | 06:46 | 06:02 | 06:11 | 05:36 | | 05:57 (5) | 05:27 | 05:49 (5) | 05:45 | 06:07 (5) | 06:15 | 06:46 |
| 17:03 | 17:41 | 18:13 | 19:47 | 20:17 | 19 06:16 (5) | 05:36 | 92 19:50 (6) | 20:27 | 18 06:25 (5) | 19:50 | 18:59 | 18:10 |
| 23 07:20 | 06:45 | 06:00 | 06:10 | 05:35 | | 05:56 (5) | 05:27 | 05:50 (5) | 05:46 | 06:08 (5) | 06:16 | 06:47 |
| 17:04 | 17:42 | 18:14 | 19:48 | 20:18 | 34 06:19 (6) | 05:37 | 92 19:51 (6) | 20:26 | 17 06:25 (5) | 19:49 | 18:57 | 18:08 |
| 24 07:19 | 06:43 | 05:58 | 06:08 | 05:34 | | 05:55 (5) | 05:27 | 05:50 (5) | 05:46 | 06:09 (5) | 06:17 | 06:48 |
| 17:05 | 17:44 | 18:15 | 19:49 | 20:19 | 42 06:27 (6) | 05:37 | 92 19:51 (6) | 20:26 | 15 06:24 (5) | 19:47 | 18:55 | 18:07 |
| 25 07:18 | 06:42 | 05:57 | 06:07 | 05:34 | | 05:55 (5) | 05:27 | 05:50 (5) | 05:47 | 06:10 (5) | 06:18 | 06:49 |
| 17:06 | 17:45 | 18:16 | 19:50 | 20:20 | 50 06:31 (6) | 05:37 | 92 19:51 (6) | 20:25 | 13 06:23 (5) | 19:45 | 18:54 | 17:06 |
| 26 07:17 | 06:40 | 05:55 | 06:05 | 05:33 | | 05:54 (5) | 05:28 | 05:50 (5) | 05:48 | 06:11 (5) | 06:19 | 06:50 |
| 17:08 | 17:46 | 18:17 | 19:51 | 20:21 | 54 06:32 (6) | 05:37 | 92 19:51 (6) | 20:24 | 11 06:22 (5) | 19:44 | 18:52 | 17:04 |
| 27 07:17 | 06:39 | 05:53 | 06:04 | 05:32 | | 05:53 (5) | 05:28 | 05:51 (5) | 05:49 | 06:12 (5) | 06:20 | 06:51 |
| 17:09 | 17:47 | 18:19 | 19:52 | 20:22 | 58 06:33 (6) | 05:37 | 91 19:51 (6) | 20:23 | 9 06:21 (5) | 19:42 | 18:50 | 17:03 |
| 28 07:16 | 06:37 | 05:51 | 06:03 | 05:32 | | 05:53 (5) | 05:29 | 05:51 (5) | 05:50 | 06:13 (5) | 06:21 | 06:52 |
| 17:10 | 17:48 | 18:20 | 19:53 | 20:23 | 61 06:35 (6) | 05:37 | 91 19:51 (6) | 20:22 | 7 06:20 (5) | 19:41 | 18:48 | 17:02 |
| 29 07:15 | 06:35 | 05:50 | 06:01 | 05:31 | | 05:52 (5) | 05:29 | 05:52 (5) | 05:51 | 06:13 (5) | 06:22 | 06:53 |
| 17:11 | 17:49 | 18:21 | 19:54 | 20:24 | 65 06:36 (6) | 05:37 | 90 19:52 (6) | 20:21 | 4 06:17 (5) | 19:39 | 18:47 | 17:00 |
| 30 07:14 | 06:48 | 06:00 | 05:30 | 05:22 | | 05:52 (5) | 05:29 | 05:52 (5) | 05:52 | 06:14 (5) | 06:23 | 06:54 |
| 17:13 | 17:52 | 19:22 | 19:55 | 20:24 | 67 06:38 (6) | 05:37 | 89 19:51 (6) | 20:20 | 1 06:15 (5) | 19:38 | 18:45 | 16:59 |
| 31 07:13 | 06:46 | | | 05:30 | | 05:51 (5) | | 05:53 | | 06:24 | | 06:29 |
| 17:14 | 17:53 | 19:23 | | 20:25 | 71 06:39 (6) | 05:37 | 80 19:52 (6) | 20:19 | 1 06:15 (5) | 19:36 | 18:44 | 16:58 |
| Potential sun hours | 297 | 297 | 369 | 399 | 449 | 605 | 453 | 460 | 1551 | 428 | 375 | 345 |
| Total, worst case | | | | | | 2632 | | | | | | 297 |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: I - Shadow Receptor: 1,0 × 1,0 Azimuth: -180,0° Slope: 90,0° (9)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June | July | August | September | October | November | December |
|---------------------|---------|----------|-------|-------------|-------|----------------------|----------------------|----------------------|-----------|-------------|----------|----------|
| 1 | 07:26 | 07:12 | 06:36 | 06:45 | 05:59 | 05:29 | 05:51 (5) 05:30 | 05:53 (5) 05:54 | 06:25 | 06:55 | 06:30 | 07:05 |
| | 16:41 | 17:15 | 17:50 | 19:24 | 19:56 | 20:26 | 67 19:43 (6) 20:37 | 81 19:53 (6) 20:18 | 19:34 | 18:43 | 16:56 | 16:32 |
| 2 | 07:26 | 07:11 | 06:34 | 06:43 | 05:57 | 05:29 | 05:51 (5) 05:30 | 05:53 (5) 05:55 | 06:26 | 06:57 | 06:31 | 07:06 |
| | 16:41 | 17:16 | 17:51 | 19:25 | 19:57 | 20:27 | 69 19:44 (6) 20:37 | 81 19:53 (6) 20:17 | 19:33 | 18:42 | 16:55 | 16:31 |
| 3 | 07:26 | 07:10 | 06:33 | 06:41 | 05:56 | 05:29 | 05:50 (5) 05:31 | 05:54 (5) 05:56 | 06:27 | 06:58 | 06:32 | 07:07 |
| | 16:42 | 17:18 | 17:52 | 19:26 | 19:58 | 20:27 | 71 19:44 (6) 20:37 | 79 19:53 (6) 20:16 | 19:31 | 18:40 | 16:54 | 16:31 |
| 4 | 07:26 | 07:09 | 06:31 | 06:40 | 05:55 | 05:28 | 05:50 (5) 05:31 | 05:54 (5) 05:57 | 06:28 | 06:59 | 06:34 | 07:08 |
| | 16:43 | 17:19 | 17:53 | 19:27 | 19:59 | 20:28 | 73 19:45 (6) 20:36 | 79 19:52 (6) 20:14 | 19:29 | 18:38 | 16:53 | 16:31 |
| 5 | 07:26 | 07:08 | 06:30 | 06:38 | 05:53 | 05:28 | 05:50 (5) 05:32 | 05:55 (5) 05:58 | 06:29 | 07:00 | 06:35 | 07:09 |
| | 16:44 | 17:20 | 17:54 | 19:28 | 20:00 | 20:29 | 74 19:46 (6) 20:36 | 78 19:53 (6) 20:13 | 19:28 | 18:37 | 16:52 | 16:31 |
| 6 | 07:26 | 07:07 | 06:28 | 06:36 | 05:52 | 05:27 | 05:49 (5) 05:33 | 05:55 (5) 05:59 | 06:30 | 07:01 | 06:36 | 07:10 |
| | 16:45 | 17:21 | 17:55 | 19:29 | 20:01 | 20:29 | 76 19:46 (6) 20:36 | 77 19:52 (6) 20:12 | 19:26 | 18:35 | 16:50 | 16:31 |
| 7 | 07:26 | 07:06 | 06:26 | 06:35 | 05:51 | 05:27 | 05:49 (5) 05:33 | 05:56 (5) 06:00 | 06:31 | 07:02 | 06:37 | 07:11 |
| | 16:46 | 17:23 | 17:56 | 19:30 | 20:03 | 20:30 | 77 19:46 (6) 20:36 | 75 19:52 (6) 20:11 | 19:24 | 18:33 | 16:49 | 16:31 |
| 8 | 07:26 | 07:05 | 06:25 | 06:33 | 05:50 | 05:27 | 05:49 (5) 05:34 | 05:57 (5) 06:01 | 06:32 | 07:03 | 06:38 | 07:12 |
| | 16:47 | 17:24 | 17:58 | 19:31 | 20:04 | 20:31 | 78 19:47 (6) 20:35 | 73 19:52 (6) 20:10 | 19:23 | 18:32 | 16:48 | 16:30 |
| 9 | 07:26 | 07:04 | 06:23 | 06:32 | 05:49 | 05:27 | 05:49 (5) 05:34 | 05:57 (5) 06:02 | 06:33 | 07:04 | 06:40 | 07:13 |
| | 16:48 | 17:25 | 17:59 | 19:33 | 20:05 | 20:31 | 79 19:48 (6) 20:35 | 71 19:51 (6) 20:08 | 19:21 | 18:30 | 16:47 | 16:30 |
| 10 | 07:25 | 07:02 | 06:22 | 06:30 | 05:48 | 05:26 | 05:49 (5) 05:35 | 05:58 (5) 06:03 | 06:34 | 07:05 | 06:41 | 07:14 |
| | 16:49 | 17:26 | 18:00 | 19:34 | 20:06 | 20:32 | 80 19:48 (6) 20:35 | 69 19:51 (6) 20:07 | 19:19 | 18:28 | 16:46 | 16:30 |
| 11 | 07:25 | 07:01 | 06:20 | 06:28 | 05:46 | 05:26 | 05:48 (5) 05:36 | 05:59 (5) 06:04 | 06:35 | 07:06 | 06:42 | 07:15 |
| | 16:50 | 17:28 | 18:01 | 19:35 | 20:07 | 20:32 | 81 19:48 (6) 20:34 | 67 19:51 (6) 20:06 | 19:18 | 18:27 | 16:45 | 16:31 |
| 12 | 07:25 | 07:00 | 06:18 | 06:27 | 05:45 | 05:26 | 05:48 (5) 05:37 | 05:59 (5) 06:05 | 06:36 | 07:07 | 06:43 | 07:16 |
| | 16:51 | 17:29 | 18:02 | 19:36 | 20:08 | 20:33 | 81 19:48 (6) 20:34 | 65 19:50 (6) 20:04 | 19:16 | 18:25 | 16:44 | 16:31 |
| 13 | 07:25 | 06:59 | 06:17 | 06:25 | 05:44 | 05:26 | 05:48 (5) 05:37 | 06:00 (5) 06:06 | 06:37 | 07:08 | 06:44 | 07:16 |
| | 16:52 | 17:30 | 18:03 | 19:37 | 20:09 | 20:33 | 83 19:49 (6) 20:33 | 63 19:50 (6) 20:03 | 19:14 | 18:24 | 16:43 | 16:31 |
| 14 | 07:24 | 06:57 | 06:15 | 06:24 | 05:43 | 05:26 | 05:48 (5) 05:38 | 06:01 (5) 06:07 | 06:38 | 07:09 (8) | 07:09 | 06:46 |
| | 16:53 | 17:31 | 18:04 | 19:38 | 20:10 | 20:34 | 83 19:49 (6) 20:33 | 59 19:49 (6) 20:02 | 19:12 | 2 07:11 (8) | 18:22 | 16:42 |
| 15 | 07:24 | 06:56 | 06:13 | 06:22 | 05:42 | 05:26 | 05:48 (5) 05:39 | 06:01 (5) 06:08 | 06:39 | 07:07 (8) | 07:10 | 06:47 |
| | 16:55 | 17:33 | 18:05 | 19:39 | 20:11 | 20:34 | 84 19:50 (6) 20:32 | 57 19:48 (6) 20:00 | 19:11 | 2 07:09 (8) | 18:21 | 16:41 |
| 16 | 07:23 | 06:55 | 06:12 | 06:20 | 05:41 | 05:26 | 05:48 (5) 05:40 | 06:02 (5) 06:09 | 06:40 | 07:04 (8) | 07:12 | 06:48 |
| | 16:56 | 17:34 | 18:07 | 19:40 | 20:12 | 20:35 | 85 19:50 (6) 20:32 | 53 19:47 (6) 19:59 | 19:09 | 1 07:05 (8) | 18:19 | 16:40 |
| 17 | 07:23 | 06:53 | 06:10 | 06:19 | 05:40 | 05:26 | 05:48 (5) 05:40 | 06:03 (5) 06:10 | 06:41 | 07:02 (8) | 07:13 | 06:49 |
| | 16:57 | 17:35 | 18:08 | 19:41 | 20:13 | 20:35 | 85 19:50 (6) 20:31 | 51 19:47 (6) 19:57 | 19:07 | 1 07:03 (8) | 18:17 | 16:40 |
| 18 | 07:23 | 06:52 | 06:08 | 06:17 | 05:39 | 05:26 | 05:49 (5) 05:41 | 06:04 (5) 06:11 | 06:42 | 07:14 | 06:50 | 07:20 |
| | 16:58 | 17:36 | 18:09 | 19:42 | 20:14 | 20:35 | 85 19:51 (6) 20:30 | 46 19:46 (6) 19:56 | 19:06 | 18:16 | 16:39 | 16:32 |
| 19 | 07:22 | 06:51 | 06:07 | 06:16 | 05:38 | 05:26 | 05:49 (5) 05:42 | 06:05 (5) 06:12 | 06:43 | 07:15 | 06:52 | 07:21 |
| | 16:59 | 17:38 | 18:10 | 19:43 | 20:15 | 20:36 | 84 19:51 (6) 20:30 | 41 19:45 (6) 19:55 | 19:04 | 18:14 | 16:38 | 16:32 |
| 20 | 07:21 | 06:49 | 06:05 | 06:14 | 05:38 | 19:14 (6) 05:26 | 05:49 (5) 05:43 | 06:05 (5) 06:13 | 06:44 | 07:16 | 06:53 | 07:21 |
| | 17:00 | 17:39 | 18:11 | 19:44 | 20:16 | 8 19:22 (6) 20:36 | 85 19:51 (6) 20:29 | 36 19:42 (6) 19:53 | 19:02 | 18:13 | 16:37 | 16:33 |
| 21 | 07:21 | 06:48 | 06:03 | 06:13 | 05:37 | 19:09 (6) 05:27 | 05:49 (5) 05:44 | 06:06 (5) 06:14 | 06:45 | 07:17 | 06:54 | 07:22 |
| | 17:02 | 17:40 | 18:12 | 19:45 | 20:17 | 17 19:26 (6) 20:36 | 86 19:52 (6) 20:28 | 30 19:41 (6) 19:52 | 19:00 | 18:11 | 16:37 | 16:33 |
| 22 | 07:20 | 06:46 | 06:02 | 06:11 | 05:36 | 05:27 | 05:49 (5) 05:47 | 06:07 (5) 06:15 | 06:46 | 07:18 | 06:55 | 07:22 |
| | 17:03 | 17:41 | 18:13 | 19:47 | 20:17 | 25 19:30 (6) 20:36 | 86 19:52 (6) 20:27 | 21 19:38 (6) 19:50 | 18:59 | 18:10 | 16:36 | 16:34 |
| 23 | 07:20 | 06:45 | 06:00 | 06:10 | 05:35 | 05:26 | 05:56 (5) 05:27 | 05:50 (5) 05:46 | 06:47 | 07:19 | 06:56 | 07:23 |
| | 17:04 | 17:42 | 18:14 | 19:48 | 20:18 | 32 19:32 (6) 20:37 | 85 19:52 (6) 20:26 | 13 19:35 (6) 19:49 | 18:57 | 18:08 | 16:35 | 16:34 |
| 24 | 07:19 | 06:43 | 05:58 | 06:08 | 05:34 | 05:26 | 05:55 (5) 05:27 | 05:50 (5) 05:46 | 06:17 | 06:48 | 07:21 | 06:57 |
| | 17:05 | 17:44 | 18:15 | 19:49 | 20:19 | 38 19:33 (6) 20:37 | 85 19:52 (6) 20:26 | 19:47 | 18:55 | 18:07 | 16:35 | 16:35 |
| 25 | 07:18 | 06:42 | 05:57 | 06:07 | 05:34 | 05:27 | 05:55 (5) 05:27 | 05:50 (5) 05:47 | 06:18 | 06:49 | 06:22 | 06:59 |
| | 17:06 | 17:45 | 18:16 | 19:50 | 20:20 | 44 19:36 (6) 20:37 | 85 19:52 (6) 20:25 | 19:45 | 18:54 | 17:06 | 16:34 | 16:35 |
| 26 | 07:17 | 06:40 | 05:55 | 06:13 (8) | 06:05 | 05:33 | 05:54 (5) 05:28 | 05:50 (5) 05:48 | 06:19 | 06:50 | 06:23 | 07:00 |
| | 17:08 | 17:46 | 18:17 | 2 06:15 (8) | 09:51 | 20:21 | 48 19:37 (6) 20:37 | 85 19:52 (6) 20:24 | 19:44 | 18:52 | 17:04 | 16:34 |
| 27 | 07:17 | 06:39 | 05:53 | 06:15 (8) | 06:04 | 05:32 | 05:53 (5) 05:28 | 05:51 (5) 05:49 | 06:20 | 06:51 | 06:24 | 07:24 |
| | 17:09 | 17:47 | 18:19 | 2 06:17 (8) | 09:52 | 20:22 | 51 19:37 (6) 20:37 | 85 19:53 (6) 20:23 | 19:42 | 18:50 | 17:03 | 16:33 |
| 28 | 07:16 | 06:37 | 05:51 | 06:16 (8) | 06:03 | 05:32 | 05:53 (5) 05:29 | 05:51 (5) 05:50 | 06:21 | 06:52 | 06:25 | 07:25 |
| | 17:10 | 17:48 | 18:20 | 2 06:18 (8) | 09:53 | 20:23 | 55 19:39 (6) 20:37 | 83 19:52 (6) 20:22 | 19:41 | 18:48 | 17:02 | 16:33 |
| 29 | 07:15 | 06:35 | 05:50 | 07:18 (8) | 06:01 | 05:31 | 05:52 (5) 05:29 | 05:52 (5) 05:51 | 06:22 | 06:53 | 06:26 | 07:25 |
| | 17:11 | 17:49 | 18:21 | 1 07:19 (8) | 09:54 | 20:24 | 58 19:40 (6) 20:37 | 83 19:53 (6) 20:21 | 19:39 | 18:47 | 17:00 | 16:32 |
| 30 | 07:14 | 06:34 | 05:48 | 06:00 | 05:30 | 05:30 | 05:52 (5) 05:29 | 05:52 (5) 05:52 | 06:23 | 06:54 | 06:28 | 07:25 |
| | 17:13 | 17:49 | 18:22 | 19:55 | 20:24 | 61 19:41 (6) 20:37 | 83 19:53 (6) 20:20 | 19:38 | 18:45 | 16:59 | 16:32 | 16:39 |
| 31 | 07:13 | 06:33 | 05:46 | 05:30 | 05:30 | 05:30 | 05:51 (5) | 05:53 | 06:24 | 06:29 | 06:29 | 07:25 |
| | 17:14 | 17:49 | 18:23 | 19:53 | 20:25 | 64 19:41 (6) | 19:53 (6) 20:19 | 19:36 | 18:47 | 16:58 | 16:58 | 16:40 |
| Potential sun hours | 297 | 297 | 369 | 399 | 449 | 501 | 453 | 460 | 428 | 375 | 345 | 287 |
| Total, worst case | | | | 7 | | 501 | 2427 | 1365 | 6 | | | |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: J - Shadow Receptor: 1,0 × 1,0 Azimuth: -180,0° Slope: 90,0° (10)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June | July | August | September | October | November | December |
|---------------------|---------|----------|-------|-------|------------------------|-----------------------|-----------------------|-----------------------|---------------|---------------|---------------|----------|
| 1 07:26 | 07:12 | 06:36 | 06:45 | 05:59 | | 05:29 | 05:51 (5) 05:30 | 05:53 (5) 05:54 | 06:25 06:55 | 06:30 06:30 | 07:05 07:05 | |
| 16:41 | 17:15 | 17:50 | 19:24 | 19:56 | | 20:26 | 91 19:42 (6) 20:37 | 101 19:51 (6) 20:18 | 19:34 18:43 | 16:56 16:32 | | |
| 2 07:26 | 07:11 | 06:34 | 06:43 | 05:57 | | 05:29 | 05:51 (5) 05:30 | 05:53 (5) 05:55 | 06:26 06:57 | 06:31 07:06 | | |
| 16:41 | 17:16 | 17:51 | 19:25 | 19:57 | | 20:27 | 92 19:43 (6) 20:37 | 99 19:50 (6) 20:17 | 19:33 18:42 | 16:55 16:31 | | |
| 3 07:26 | 07:10 | 06:33 | 06:41 | 05:56 | | 05:29 | 05:50 (5) 05:31 | 05:54 (5) 05:56 | 06:27 06:58 | 06:32 07:07 | | |
| 16:42 | 17:18 | 17:52 | 19:26 | 19:58 | | 20:27 | 94 19:43 (6) 20:37 | 99 19:51 (6) 20:16 | 19:31 18:40 | 16:54 16:31 | | |
| 4 07:26 | 07:09 | 06:31 | 06:40 | 05:55 | | 05:28 | 05:50 (5) 05:31 | 05:54 (5) 05:57 | 06:28 06:59 | 06:34 07:08 | | |
| 16:43 | 17:19 | 17:53 | 19:27 | 19:59 | | 20:28 | 95 19:44 (6) 20:36 | 98 19:50 (6) 20:14 | 19:29 18:38 | 16:53 16:31 | | |
| 5 07:26 | 07:08 | 06:30 | 06:38 | 05:53 | | 05:28 | 05:50 (5) 05:32 | 05:55 (5) 05:58 | 06:29 07:00 | 06:35 07:09 | | |
| 16:44 | 17:20 | 17:54 | 19:28 | 20:00 | | 20:29 | 95 19:44 (6) 20:36 | 98 19:51 (6) 20:13 | 19:28 18:37 | 16:52 16:31 | | |
| 6 07:26 | 07:07 | 06:28 | 06:36 | 05:52 | | 05:27 | 05:49 (5) 05:33 | 05:55 (5) 05:59 | 06:30 07:01 | 06:36 07:10 | | |
| 16:45 | 17:21 | 17:55 | 19:29 | 20:01 | | 20:29 | 97 19:44 (6) 20:36 | 97 19:50 (6) 20:12 | 19:26 18:35 | 16:50 16:31 | | |
| 7 07:26 | 07:06 | 06:26 | 06:35 | 05:51 | | 05:27 | 05:49 (5) 05:33 | 05:56 (5) 06:00 | 06:31 07:02 | 06:37 07:11 | | |
| 16:46 | 17:23 | 17:56 | 19:30 | 20:03 | | 20:30 | 98 19:45 (6) 20:36 | 96 19:51 (6) 20:11 | 19:24 18:33 | 16:49 16:31 | | |
| 8 07:26 | 07:05 | 06:25 | 06:33 | 05:50 | | 05:27 | 05:49 (5) 05:34 | 05:57 (5) 06:01 | 06:32 07:03 | 06:38 07:12 | | |
| 16:47 | 17:24 | 17:58 | 19:31 | 20:04 | | 20:31 | 98 19:45 (6) 20:35 | 95 19:51 (6) 20:10 | 19:23 18:32 | 16:48 16:30 | | |
| 9 07:26 | 07:04 | 06:23 | 06:32 | 05:49 | | 05:27 | 05:49 (5) 05:34 | 05:57 (5) 06:02 | 06:33 07:04 | 06:40 07:13 | | |
| 16:48 | 17:25 | 17:59 | 19:33 | 20:05 | | 20:31 | 99 19:46 (6) 20:35 | 94 19:50 (6) 20:08 | 19:21 18:30 | 16:47 16:30 | | |
| 10 07:25 | 07:02 | 06:22 | 06:30 | 05:48 | | 05:26 | 05:49 (5) 05:35 | 05:58 (5) 06:03 | 06:34 07:05 | 06:41 07:14 | | |
| 16:49 | 17:26 | 18:00 | 19:34 | 20:06 | | 20:32 | 99 19:46 (6) 20:35 | 93 19:50 (6) 20:07 | 19:19 18:28 | 16:46 16:30 | | |
| 11 07:25 | 07:01 | 06:20 | 06:28 | 05:46 | | 05:26 | 05:48 (5) 05:36 | 05:59 (5) 06:04 | 06:35 07:06 | 06:42 07:15 | | |
| 16:50 | 17:28 | 18:01 | 19:35 | 20:07 | | 20:32 | 100 19:46 (6) 20:34 | 91 19:50 (6) 20:06 | 19:18 18:27 | 16:45 16:31 | | |
| 12 07:25 | 07:00 | 06:18 | 06:27 | 05:45 | | 05:26 | 05:48 (5) 05:37 | 05:59 (5) 06:05 | 06:36 07:07 | 06:43 07:16 | | |
| 16:51 | 17:29 | 18:02 | 19:36 | 20:08 | | 20:33 | 101 19:46 (6) 20:34 | 90 19:50 (6) 20:04 | 19:16 18:25 | 16:44 16:31 | | |
| 13 07:25 | 06:59 | 06:17 | 06:25 | 05:44 | 06:04 (5) | 05:26 | 05:48 (5) 05:37 | 06:00 (5) 06:06 | 06:37 07:08 | 06:44 07:16 | | |
| 16:52 | 17:30 | 18:03 | 19:37 | 20:09 | 19 19:19 (6) 20:33 | 101 19:46 (6) 20:33 | 89 19:50 (6) 20:07 | 19:19 18:28 | 16:43 16:31 | | | |
| 14 07:24 | 06:57 | 06:15 | 06:24 | 05:43 | | 06:03 (5) | 05:26 | 06:01 (5) 06:07 | 06:38 07:09 | 06:46 07:17 | | |
| 16:53 | 17:31 | 18:04 | 19:38 | 20:10 | 29 19:22 (6) 20:34 | 102 19:47 (6) 20:33 | 87 19:49 (6) 20:02 | 19:12 18:22 | 16:42 16:31 | | | |
| 15 07:24 | 06:56 | 06:13 | 06:22 | 05:42 | | 06:02 (5) | 05:26 | 06:01 (5) 06:08 | 06:39 07:10 | 06:47 07:18 | | |
| 16:55 | 17:33 | 18:05 | 19:39 | 20:11 | 38 19:25 (6) 20:34 | 101 19:47 (6) 20:32 | 85 19:48 (6) 20:00 | 19:11 18:21 | 16:41 16:31 | | | |
| 16 07:23 | 06:55 | 06:12 | 06:20 | 05:41 | | 06:02 (5) | 05:26 | 06:02 (5) 06:09 | 06:40 07:12 | 06:48 07:19 | | |
| 16:56 | 17:34 | 18:07 | 19:40 | 20:12 | 44 19:28 (6) 20:35 | 102 19:47 (6) 20:32 | 83 19:48 (6) 19:59 | 19:09 18:19 | 16:40 16:31 | | | |
| 17 07:23 | 06:53 | 06:10 | 06:19 | 05:40 | | 06:01 (5) | 05:26 | 06:03 (5) 06:10 | 06:41 07:13 | 06:49 07:19 | | |
| 16:57 | 17:35 | 18:08 | 19:41 | 20:13 | 48 19:29 (6) 20:35 | 103 19:48 (6) 20:31 | 81 19:48 (6) 19:57 | 19:07 18:17 | 16:40 16:32 | | | |
| 18 07:23 | 06:52 | 06:08 | 06:17 | 05:39 | | 06:00 (5) | 05:26 | 06:04 (5) 06:11 | 06:42 07:14 | 06:50 07:20 | | |
| 16:58 | 17:36 | 18:09 | 19:42 | 20:14 | 54 19:31 (6) 20:35 | 103 19:49 (6) 20:30 | 79 19:48 (6) 19:56 | 19:06 18:16 | 16:39 16:32 | | | |
| 19 07:22 | 06:51 | 06:07 | 06:16 | 05:38 | | 05:59 (5) | 05:26 | 06:05 (5) 06:12 | 06:43 07:15 | 06:52 07:21 | | |
| 16:59 | 17:38 | 18:10 | 19:43 | 20:15 | 58 19:32 (6) 20:36 | 103 19:49 (6) 20:30 | 76 19:47 (6) 19:55 | 19:04 18:14 | 16:38 16:32 | | | |
| 20 07:21 | 06:49 | 06:05 | 06:14 | 05:38 | | 05:58 (5) | 05:26 | 06:05 (5) 06:13 | 06:44 07:16 | 06:53 07:21 | | |
| 17:00 | 17:39 | 18:11 | 19:44 | 20:16 | 63 19:33 (6) 20:36 | 103 19:49 (6) 20:29 | 74 19:46 (6) 19:53 | 19:02 18:13 | 16:37 16:33 | | | |
| 21 07:21 | 06:48 | 06:03 | 06:13 | 05:37 | | 05:57 (5) | 05:27 | 06:06 (5) 06:14 | 06:45 07:17 | 06:54 07:22 | | |
| 17:02 | 17:40 | 18:12 | 19:45 | 20:17 | 66 19:34 (6) 20:36 | 103 19:49 (6) 20:28 | 70 19:45 (6) 19:52 | 19:00 18:11 | 16:37 16:33 | | | |
| 22 07:20 | 06:46 | 06:02 | 06:11 | 05:36 | | 05:57 (5) | 05:27 | 06:07 (5) 06:15 | 06:46 07:18 | 06:55 07:22 | | |
| 17:03 | 17:41 | 18:13 | 19:47 | 20:17 | 69 19:35 (6) 20:36 | 103 19:49 (6) 20:27 | 68 19:45 (6) 19:50 | 18:59 18:10 | 16:36 16:34 | | | |
| 23 07:20 | 06:45 | 06:00 | 06:10 | 05:35 | | 05:56 (5) | 05:27 | 06:08 (5) 06:16 | 06:47 07:19 | 06:56 07:23 | | |
| 17:04 | 17:42 | 18:14 | 19:48 | 20:18 | 72 19:36 (6) 20:37 | 103 19:50 (6) 20:26 | 65 19:44 (6) 19:49 | 18:57 18:08 | 16:35 16:34 | | | |
| 24 07:19 | 06:43 | 05:58 | 06:08 | 05:34 | | 05:55 (5) | 05:27 | 06:09 (5) 06:17 | 06:48 07:21 | 06:57 07:23 | | |
| 17:05 | 17:44 | 18:15 | 19:49 | 20:19 | 74 19:36 (6) 20:37 | 103 19:50 (6) 20:26 | 61 19:43 (6) 19:47 | 18:55 18:07 | 16:35 16:35 | | | |
| 25 07:18 | 06:42 | 05:57 | 06:07 | 05:34 | | 05:55 (5) | 05:27 | 06:10 (5) 06:18 | 06:49 06:22 | 06:59 07:24 | | |
| 17:06 | 17:45 | 18:16 | 19:50 | 20:20 | 77 19:38 (6) 20:37 | 103 19:50 (6) 20:25 | 56 19:42 (6) 19:45 | 18:54 17:06 | 16:34 16:35 | | | |
| 26 07:17 | 06:40 | 05:55 | 06:05 | 05:33 | | 05:54 (5) | 05:28 | 06:11 (5) 06:19 | 06:50 06:23 | 06:50 07:24 | | |
| 17:08 | 17:46 | 18:17 | 19:51 | 20:21 | 79 19:38 (6) 20:37 | 102 19:49 (6) 20:24 | 52 19:40 (6) 19:44 | 18:52 17:04 | 16:34 16:36 | | | |
| 27 07:17 | 06:39 | 05:53 | 06:04 | 05:32 | | 05:53 (5) | 05:28 | 06:12 (5) 06:20 | 06:51 06:24 | 07:01 07:24 | | |
| 17:09 | 17:47 | 18:19 | 19:52 | 20:22 | 82 19:39 (6) 20:37 | 101 19:50 (6) 20:23 | 47 19:39 (6) 19:42 | 18:50 17:03 | 16:33 16:37 | | | |
| 28 07:16 | 06:37 | 05:51 | 06:03 | 05:32 | | 05:53 (5) | 05:29 | 06:12 (5) 06:21 | 06:52 06:25 | 07:02 07:25 | | |
| 17:10 | 17:48 | 18:20 | 19:53 | 20:23 | 84 19:40 (6) 20:37 | 101 19:50 (6) 20:22 | 40 19:36 (6) 19:41 | 18:48 17:02 | 16:33 16:37 | | | |
| 29 07:15 | | 06:50 | 06:01 | 05:31 | | 05:52 (5) | 05:29 | 06:13 (5) 06:22 | 06:53 06:26 | 07:03 07:25 | | |
| 17:11 | | 19:21 | 19:54 | 20:24 | 86 19:40 (6) 20:37 | 102 19:51 (6) 20:21 | 34 19:34 (6) 19:39 | 18:47 17:00 | 16:32 16:38 | | | |
| 30 07:14 | | 06:48 | 06:00 | 05:30 | | 05:52 (5) | 05:29 | 06:14 (5) 06:23 | 06:54 06:28 | 07:04 07:25 | | |
| 17:13 | | 19:22 | 19:55 | 20:24 | 88 19:41 (6) 20:37 | 101 19:50 (6) 20:20 | 25 19:31 (6) 19:38 | 18:45 16:59 | 16:32 16:39 | | | |
| 31 07:13 | | 06:46 | | 05:30 | | 05:51 (5) | | 06:15 (5) 06:22 | 06:53 06:26 | 07:03 07:25 | | |
| 17:14 | | 19:23 | | 20:25 | 89 19:41 (6) 20:37 | 101 19:50 (6) 20:19 | 13 19:27 (6) 19:36 | 18:47 16:58 | 16:32 16:40 | | | |
| Potential sun hours | 297 | 297 | 369 | 399 | 449 | 453 | 2999 | 2336 | 375 | 345 | 297 | 287 |
| Total, worst case | | | | | | | | | | | | |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: K - Shadow Receptor: 1,0 × 1,0 Azimuth: -160,0° Slope: 90,0° (11)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|---------------------------|---------|---------------------|-------|----------------------|-------------------|--------------------|
| 1 07:26 | 07:12 | | 06:36 | 06:55 (9) 06:45 | 07:03 (8) 05:59 | 05:29 |
| 16:41 | 17:15 | | 17:50 | 5 07:00 (9) 19:24 | 07:25 (8) 19:56 | 20:26 |
| 2 07:26 | 07:11 | | 06:34 | 06:53 (9) 06:43 | 07:02 (8) 05:57 | 05:29 |
| 16:41 | 17:16 | | 17:51 | 6 06:59 (9) 19:25 | 07:25 (8) 19:57 | 20:27 |
| 3 07:26 | 07:10 | | 06:33 | 06:52 (9) 06:41 | 07:00 (8) 05:56 | 05:29 |
| 16:42 | 17:18 | | 17:52 | 7 06:59 (9) 19:26 | 07:25 (8) 19:58 | 20:27 |
| 4 07:26 | 07:09 | | 06:31 | 06:50 (9) 06:40 | 06:58 (8) 05:55 | 05:28 |
| 16:43 | 17:19 | | 17:53 | 8 06:58 (9) 19:27 | 07:24 (8) 19:59 | 20:28 |
| 5 07:26 | 07:08 | | 06:30 | 06:49 (9) 06:38 | 06:57 (8) 05:53 | 05:28 |
| 16:44 | 17:20 | | 17:54 | 9 06:58 (9) 19:28 | 07:24 (8) 20:00 | 20:29 2 05:52 (5) |
| 6 07:26 | 07:07 | | 06:28 | 06:47 (9) 06:36 | 06:55 (8) 05:52 | 05:27 05:49 (5) |
| 16:45 | 17:21 | | 17:55 | 10 06:57 (9) 19:29 | 07:23 (8) 20:01 | 20:29 3 05:52 (5) |
| 7 07:26 | 07:06 | | 06:26 | 06:45 (9) 06:35 | 06:53 (8) 05:51 | 05:27 05:49 (5) |
| 16:46 | 17:23 | | 17:56 | 10 06:55 (9) 19:30 | 07:22 (8) 20:03 | 20:30 5 05:54 (5) |
| 8 07:26 | 07:05 | | 06:25 | 06:44 (9) 06:33 | 06:52 (8) 05:50 | 05:27 05:49 (5) |
| 16:47 | 17:24 | | 17:58 | 9 06:53 (9) 19:31 | 07:21 (8) 20:04 | 20:31 6 05:55 (5) |
| 9 07:26 | 07:04 | | 06:23 | 06:42 (9) 06:32 | 06:50 (8) 05:49 | 05:27 05:49 (5) |
| 16:48 | 17:25 | | 17:59 | 8 06:50 (9) 19:33 | 07:20 (8) 20:05 | 20:31 7 05:56 (5) |
| 10 07:25 | 07:02 | | 06:22 | | 06:48 (8) 05:48 | 05:26 05:49 (5) |
| 16:49 | 17:26 | | 18:00 | | 07:18 (8) 20:06 | 20:32 8 05:57 (5) |
| 11 07:25 | 07:01 | | 06:20 | | 06:50 (8) 05:46 | 05:26 05:48 (5) |
| 16:50 | 17:28 | | 18:01 | | 07:17 (8) 20:07 | 20:32 9 05:57 (5) |
| 12 07:25 | 07:00 | | 06:18 | | 06:51 (8) 05:45 | 05:26 05:48 (5) |
| 16:51 | 17:29 | | 18:02 | | 07:15 (8) 20:08 | 20:33 10 05:58 (5) |
| 13 07:25 | 06:59 | | 06:17 | | 06:53 (8) 05:44 | 05:26 05:48 (5) |
| 16:52 | 17:30 | | 18:03 | | 07:13 (8) 20:09 | 20:33 10 05:58 (5) |
| 14 07:24 | 06:57 | | 06:15 | | 06:55 (8) 05:43 | 05:26 05:48 (5) |
| 16:53 | 17:31 | | 18:04 | | 07:10 (8) 20:10 | 20:34 11 05:59 (5) |
| 15 07:24 | 06:56 | | 06:13 | | 07:00 (8) 05:42 | 05:26 05:48 (5) |
| 16:55 | 17:33 | | 18:05 | | 07:06 (8) 20:11 | 20:34 11 05:59 (5) |
| 16 07:23 | 06:55 | | 06:12 | | 06:20 05:41 | 05:26 05:48 (5) |
| 16:56 | 17:34 | | 18:07 | | 19:40 20:12 | 20:35 11 05:59 (5) |
| 17 07:23 | 06:53 | | 06:10 | | 06:19 05:40 | 05:26 05:48 (5) |
| 16:57 | 17:35 | | 18:08 | | 19:41 20:13 | 20:35 12 06:00 (5) |
| 18 07:23 | 06:52 | | 06:08 | | 06:17 05:39 | 05:26 05:49 (5) |
| 16:58 | 17:36 | | 18:09 | | 19:42 20:14 | 20:35 12 06:01 (5) |
| 19 07:22 | 06:51 | | 06:07 | | 06:16 05:38 | 05:26 05:49 (5) |
| 16:59 | 17:38 | | 18:10 | | 19:43 20:15 | 20:36 12 06:01 (5) |
| 20 07:21 | 06:49 | | 06:05 | | 06:14 05:38 | 05:26 05:49 (5) |
| 17:00 | 17:39 | | 18:11 | | 19:44 20:16 | 20:36 12 06:01 (5) |
| 21 07:21 | 06:48 | | 06:03 | | 06:13 05:37 | 05:27 05:49 (5) |
| 17:02 | 17:40 | | 18:12 | | 19:45 20:17 | 20:36 12 06:01 (5) |
| 22 07:20 | 06:46 | | 06:02 | | 06:11 05:36 | 05:27 05:49 (5) |
| 17:03 | 17:41 | | 18:13 | | 19:47 20:17 | 20:36 12 06:01 (5) |
| 23 07:20 | 06:45 | | 06:00 | | 06:10 05:35 | 05:27 05:50 (5) |
| 17:04 | 17:42 | | 18:14 | | 19:48 20:18 | 20:37 12 06:02 (5) |
| 24 07:19 | 06:43 | | 05:58 | 06:17 (8) 06:08 | 05:34 05:27 | 05:50 (5) |
| 17:05 | 17:44 | | 18:15 | 3 06:20 (8) 19:49 | 20:19 20:37 | 12 06:02 (5) |
| 25 07:18 | 06:42 | | 05:57 | 06:15 (8) 06:07 | 05:34 05:28 | 05:50 (5) |
| 17:06 | 17:45 | | 18:16 | 7 06:22 (8) 19:50 | 20:20 20:37 | 12 06:02 (5) |
| 26 07:17 | 06:40 | | 05:55 | 06:13 (8) 06:05 | 05:33 05:28 | 05:50 (5) |
| 17:08 | 17:46 | | 18:17 | 10 06:23 (8) 19:51 | 20:21 20:37 | 12 06:02 (5) |
| 27 07:17 | 06:39 | 06:58 (9) 05:53 | | 06:12 (8) 06:04 | 05:32 05:28 | 05:51 (5) |
| 17:09 | 17:47 | 2 07:00 (9) 18:19 | | 12 06:24 (8) 19:52 | 20:22 20:37 | 11 06:02 (5) |
| 28 07:16 | 06:37 | 06:57 (9) 05:51 | | 06:10 (8) 06:03 | 05:32 05:29 | 05:51 (5) |
| 17:10 | 17:48 | 3 07:00 (9) 18:20 | | 14 06:24 (8) 19:53 | 20:23 20:37 | 11 06:02 (5) |
| 29 07:15 | | | 06:50 | 07:08 (8) 06:01 | 05:31 05:29 | 05:52 (5) |
| 17:11 | | | 19:21 | 16 07:24 (8) 19:54 | 20:24 20:37 | 10 06:02 (5) |
| 30 07:14 | | | 06:48 | 07:07 (8) 06:00 | 05:30 05:29 | 05:52 (5) |
| 17:13 | | | 19:22 | 18 07:25 (8) 19:55 | 20:24 20:37 | 10 06:02 (5) |
| 31 07:13 | | | 06:46 | 07:05 (8) 05:30 | | |
| 17:14 | | | 19:23 | 20 07:25 (8) 20:25 | | |
| Potential sun hours 297 | | | 369 | | 399 | |
| Total, worst case | | 5 | | 172 | | 361 |
| | | | | | | 449 |
| | | | | | | 453 |
| | | | | | | 255 |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: K - Shadow Receptor: 1,0 × 1,0 Azimuth: -160,0° Slope: 90,0° (11)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | November | December |
|---------------------|---------------------|--------|----------------------|----------------------|---------------------|----------|
| 1 05:30 | 05:53 (5) 05:54 | | 06:25 | 06:49 (8) 06:55 | 06:30 | 07:05 |
| 20:37 | 9 06:02 (5) 20:18 | 19:34 | 27 07:16 (8) 18:43 | | 16:56 | 16:32 |
| 2 05:30 | 05:53 (5) 05:55 | 06:26 | 06:47 (8) 06:57 | | 06:31 | 07:06 |
| 20:37 | 8 06:01 (5) 20:17 | 19:33 | 30 07:17 (8) 18:42 | | 16:55 | 16:31 |
| 3 05:31 | 05:54 (5) 05:56 | 06:27 | 06:48 (8) 06:58 | | 06:32 | 07:07 |
| 20:37 | 8 06:02 (5) 20:16 | 19:31 | 30 07:18 (8) 18:40 | | 16:54 | 16:31 |
| 4 05:31 | 05:54 (5) 05:57 | 06:28 | 06:49 (8) 06:59 | 7 07:19 (9) 06:34 | | 07:08 |
| 20:36 | 7 06:01 (5) 20:14 | 19:29 | 29 07:18 (8) 18:38 | 7 07:26 (9) 16:53 | | 16:31 |
| 5 05:32 | 05:55 (5) 05:58 | 06:29 | 06:50 (8) 07:00 | 9 07:20 (9) 06:35 | | 07:09 |
| 20:36 | 5 06:00 (5) 20:13 | 19:28 | 29 07:19 (8) 18:37 | 9 07:29 (9) 16:52 | | 16:31 |
| 6 05:33 | 05:55 (5) 05:59 | 06:30 | 06:51 (8) 07:01 | 10 07:21 (9) 06:36 | | 07:10 |
| 20:36 | 4 05:59 (5) 20:12 | 19:26 | 28 07:19 (8) 18:35 | 10 07:31 (9) 16:50 | | 16:31 |
| 7 05:33 | 05:56 (5) 06:00 | 06:31 | 06:52 (8) 07:02 | 10 07:22 (9) 06:37 | | 07:11 |
| 20:36 | 3 05:59 (5) 20:11 | 19:24 | 27 07:19 (8) 18:33 | 10 07:32 (9) 16:49 | | 16:31 |
| 8 05:34 | 05:57 (5) 06:01 | 06:32 | 06:53 (8) 07:03 | 9 07:23 (9) 06:38 | | 07:12 |
| 20:35 | 1 05:58 (5) 20:10 | 19:23 | 26 07:19 (8) 18:32 | 9 07:32 (9) 16:48 | | 16:30 |
| 9 05:34 | | 06:02 | 06:33 | 06:54 (8) 07:04 | 07:24 (9) 06:40 | 07:13 |
| 20:35 | | 20:08 | 19:21 | 25 07:19 (8) 18:30 | 9 07:33 (9) 16:47 | 16:30 |
| 10 05:35 | | 06:03 | 06:34 | 06:55 (8) 07:05 | 07:25 (9) 06:41 | 07:14 |
| 20:35 | | 20:07 | 19:19 | 23 07:18 (8) 18:28 | 8 07:33 (9) 16:46 | 16:30 |
| 11 05:36 | | 06:04 | 06:35 | 06:56 (8) 07:06 | 07:26 (9) 06:42 | 07:15 |
| 20:34 | | 20:06 | 19:18 | 22 07:18 (8) 18:27 | 7 07:33 (9) 16:45 | 16:31 |
| 12 05:37 | | 06:05 | 06:36 | 06:57 (8) 07:07 | 07:28 (9) 06:43 | 07:16 |
| 20:34 | | 20:04 | 19:16 | 20 07:17 (8) 18:25 | 6 07:34 (9) 16:44 | 16:31 |
| 13 05:37 | | 06:06 | 06:37 | 06:58 (8) 07:08 | 07:29 (9) 06:44 | 07:16 |
| 20:33 | | 20:03 | 19:14 | 19 07:17 (8) 18:24 | 4 07:33 (9) 16:43 | 16:31 |
| 14 05:38 | | 06:07 | 06:38 | 06:59 (8) 07:09 | 07:30 (9) 06:46 | 07:17 |
| 20:33 | | 20:02 | 19:12 | 17 07:16 (8) 18:22 | 3 07:33 (9) 16:42 | 16:31 |
| 15 05:39 | | 06:08 | 06:39 | 07:00 (8) 07:10 | 07:31 (9) 06:47 | 07:18 |
| 20:32 | | 20:00 | 19:11 | 15 07:15 (8) 18:21 | 1 07:32 (9) 16:41 | 16:31 |
| 16 05:40 | | 06:09 | 06:40 | 07:00 (8) 07:12 | | 06:48 |
| 20:32 | | 19:59 | 19:09 | 13 07:13 (8) 18:19 | | 16:40 |
| 17 05:40 | | 06:10 | 06:41 | 07:01 (8) 07:13 | | 06:49 |
| 20:31 | | 19:57 | 19:07 | 10 07:11 (8) 18:17 | | 16:40 |
| 18 05:41 | | 06:11 | 06:42 | 07:02 (8) 07:14 | | 06:50 |
| 20:30 | | 19:56 | 19:06 | 7 07:09 (8) 18:16 | | 16:39 |
| 19 05:42 | | 06:12 | 06:43 | 07:03 (8) 07:15 | | 06:52 |
| 20:30 | | 19:55 | 19:04 | 4 07:07 (8) 18:14 | | 16:38 |
| 20 05:43 | | 06:13 | 06:44 | 07:04 (8) 07:16 | | 06:53 |
| 20:29 | | 19:53 | 19:02 | 1 07:05 (8) 18:13 | | 16:37 |
| 21 05:44 | | 06:14 | 06:45 | | | 06:54 |
| 20:28 | | 19:52 | 19:00 | | | 16:37 |
| 22 05:45 | | 06:15 | 06:46 | | | 06:55 |
| 20:27 | | 19:50 | 18:59 | | | 16:36 |
| 23 05:46 | | 06:16 | 06:47 | | | 06:56 |
| 20:26 | | 19:49 | 18:57 | | | 16:35 |
| 24 05:46 | | 06:17 | 06:48 | | | 16:34 |
| 20:26 | | 19:47 | 18:55 | | | 16:35 |
| 25 05:47 | | 06:18 | 06:49 | | | 16:35 |
| 20:25 | | 19:45 | 18:54 | | | 16:34 |
| 26 05:48 | | 06:19 | 06:50 | | | 16:35 |
| 20:24 | | 19:44 | 18:52 | | | 16:34 |
| 27 05:49 | | 06:20 | 06:51 | | | 16:34 |
| 20:23 | | 19:42 | 18:50 | | | 16:33 |
| 28 05:50 | | 06:21 | 07:00 (8) 06:52 | | | 16:33 |
| 20:22 | | 19:41 | 7 07:07 (8) 18:48 | | | 16:37 |
| 29 05:51 | | 06:22 | 06:55 (8) 06:53 | | | 16:37 |
| 20:21 | | 19:39 | 16 07:11 (8) 18:47 | | | 16:38 |
| 30 05:52 | | 06:23 | 06:53 (8) 06:54 | | | 16:38 |
| 20:20 | | 19:38 | 20 07:13 (8) 18:45 | | | 16:39 |
| 31 05:53 | | 06:24 | 06:51 (8) | | | 16:40 |
| 20:19 | | 19:36 | 24 07:15 (8) | | | 16:40 |
| Potential sun hours | 460 | 428 | 375 | 402 | 83 | 297 |
| Total, worst case | 45 | 67 | | | | 287 |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: L - Shadow Receptor: 1,0 × 1,0 Azimuth: -180,0° Slope: 90,0° (12)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: M - Shadow Receptor: 1,0 × 1,0 Azimuth: -120,0° Slope: 90,0° (13)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|---------------------|------------|------------|-------|-------|------------------------|------------------------|
| 1 07:26 | 07:48 (13) | 07:12 | 06:36 | 06:45 | 05:59 | 06:18 (9) 05:29 |
| 16:41 | 50 | 09:30 (12) | 17:15 | 17:50 | 19:24 | 06:42 (9) 20:26 |
| 2 07:26 | 07:48 (13) | 07:11 | 06:34 | 06:43 | 05:57 | 06:17 (9) 05:29 |
| 16:41 | 49 | 09:29 (12) | 17:16 | 17:51 | 19:25 | 06:40 (9) 20:27 |
| 3 07:26 | 07:48 (13) | 07:10 | 06:33 | 06:41 | 05:56 | 06:18 (9) 05:29 |
| 16:42 | 46 | 09:28 (12) | 17:18 | 17:52 | 19:26 | 06:38 (9) 20:27 |
| 4 07:26 | 07:48 (13) | 07:09 | 06:31 | 06:40 | 05:55 | 06:21 (9) 05:28 |
| 16:43 | 43 | 09:27 (12) | 17:19 | 17:53 | 19:27 | 06:36 (9) 20:28 |
| 5 07:26 | 07:48 (13) | 07:08 | 06:30 | 06:38 | 05:53 | 06:24 (9) 05:28 |
| 16:44 | 39 | 09:25 (12) | 17:20 | 17:54 | 19:28 | 06:32 (9) 20:29 |
| 6 07:26 | 07:48 (13) | 07:07 | 06:28 | 06:36 | 05:52 | |
| 16:45 | 31 | 08:19 (13) | 17:21 | 17:55 | 19:29 | 20:01 20:29 |
| 7 07:26 | 07:48 (13) | 07:06 | 06:26 | 06:35 | 05:51 | |
| 16:46 | 32 | 08:20 (13) | 17:23 | 17:56 | 19:30 | 20:02 20:30 |
| 8 07:26 | 07:48 (13) | 07:05 | 06:25 | 06:33 | 05:50 | |
| 16:47 | 33 | 08:21 (13) | 17:24 | 17:58 | 19:31 | 20:04 20:31 |
| 9 07:26 | 07:47 (13) | 07:04 | 06:23 | 06:32 | 05:49 | |
| 16:48 | 33 | 08:20 (13) | 17:25 | 17:59 | 19:33 | 20:05 20:31 |
| 10 07:25 | 07:47 (13) | 07:02 | 06:22 | 06:30 | 05:48 | |
| 16:49 | 34 | 08:21 (13) | 17:26 | 18:00 | 19:34 | 20:06 20:32 |
| 11 07:25 | 07:47 (13) | 07:01 | 06:20 | 06:28 | 05:46 | |
| 16:50 | 34 | 08:21 (13) | 17:28 | 18:01 | 19:35 | 20:07 20:32 |
| 12 07:25 | 07:47 (13) | 07:00 | 06:18 | 06:27 | 05:45 | |
| 16:51 | 35 | 08:22 (13) | 17:29 | 18:02 | 19:36 | 20:08 20:33 |
| 13 07:25 | 07:46 (13) | 06:59 | 06:17 | 06:25 | 06:44 (9) 05:44 | |
| 16:52 | 35 | 08:21 (13) | 17:30 | 18:03 | 19:37 | 3 06:47 (9) 20:09 |
| 14 07:24 | 07:47 (13) | 06:57 | 06:15 | 06:24 | 06:42 (9) 05:43 | |
| 16:53 | 35 | 08:22 (13) | 17:31 | 18:04 | 19:38 | 5 06:47 (9) 20:10 |
| 15 07:24 | 07:47 (13) | 06:56 | 06:13 | 06:22 | 06:41 (9) 05:42 | |
| 16:55 | 34 | 08:21 (13) | 17:33 | 18:05 | 19:39 | 8 06:49 (9) 20:11 |
| 16 07:23 | 07:48 (13) | 06:55 | 06:12 | 06:20 | 06:39 (9) 05:41 | |
| 16:56 | 34 | 08:22 (13) | 17:34 | 18:07 | 19:40 | 10 06:49 (9) 20:12 |
| 17 07:23 | 07:49 (13) | 06:53 | 06:10 | 06:19 | 06:38 (9) 05:40 | |
| 16:57 | 32 | 08:21 (13) | 17:35 | 18:08 | 19:41 | 11 06:49 (9) 20:13 |
| 18 07:23 | 07:50 (13) | 06:52 | 06:08 | 06:17 | 06:36 (9) 05:39 | |
| 16:58 | 31 | 08:21 (13) | 17:36 | 18:09 | 19:42 | 13 06:49 (9) 20:14 |
| 19 07:22 | 07:51 (13) | 06:51 | 06:07 | 06:16 | 06:35 (9) 05:38 | |
| 16:59 | 30 | 08:21 (13) | 17:38 | 18:10 | 19:43 | 15 06:50 (9) 20:15 |
| 20 07:21 | 07:51 (13) | 06:49 | 06:05 | 06:14 | 06:33 (9) 05:38 | |
| 17:00 | 29 | 08:20 (13) | 17:39 | 18:11 | 19:44 | 16 06:49 (9) 20:16 |
| 21 07:21 | 07:53 (13) | 06:48 | 06:03 | 06:13 | 06:32 (9) 05:37 | |
| 17:02 | 27 | 08:20 (13) | 17:40 | 18:12 | 19:45 | 17 06:49 (9) 20:16 |
| 22 07:20 | 07:54 (13) | 06:46 | 06:02 | 06:11 | 06:30 (9) 05:36 | |
| 17:03 | 25 | 08:19 (13) | 17:41 | 18:13 | 19:46 | 19 06:49 (9) 20:17 |
| 23 07:20 | 07:55 (13) | 06:45 | 06:00 | 06:10 | 06:29 (9) 05:35 | |
| 17:04 | 23 | 08:18 (13) | 17:42 | 18:14 | 19:48 | 20 06:49 (9) 20:18 |
| 24 07:19 | 07:58 (13) | 06:43 | 05:58 | 06:08 | 06:27 (9) 05:34 | |
| 17:05 | 20 | 08:18 (13) | 17:44 | 18:15 | 19:49 | 21 06:48 (9) 20:19 |
| 25 07:18 | 07:59 (13) | 06:42 | 05:56 | 06:07 | 06:26 (9) 05:34 | |
| 17:06 | 17 | 08:16 (13) | 17:45 | 18:16 | 19:50 | 21 06:47 (9) 20:20 |
| 26 07:17 | 08:02 (13) | 06:40 | 05:55 | 06:05 | 06:25 (9) 05:33 | |
| 17:08 | 11 | 08:13 (13) | 17:46 | 18:17 | 19:51 | 22 06:47 (9) 20:21 |
| 27 07:17 | | 06:39 | 05:53 | 06:04 | 06:23 (9) 05:32 | |
| 17:09 | | 17:47 | 18:19 | 19:52 | 23 06:46 (9) 20:22 | |
| 28 07:16 | | 06:37 | 05:51 | 06:03 | 06:22 (9) 05:32 | |
| 17:10 | | 17:48 | 18:20 | 19:53 | 23 06:45 (9) 20:23 | |
| 29 07:15 | | | 06:50 | 06:01 | 06:21 (9) 05:31 | |
| 17:11 | | | 19:21 | 19:54 | 24 06:45 (9) 20:24 | |
| 30 07:14 | | | 06:48 | 06:00 | 06:19 (9) 05:30 | |
| 17:13 | | | 19:22 | 19:55 | 24 06:43 (9) 20:24 | |
| 31 07:13 | | | 06:46 | | 05:30 | |
| 17:14 | | | 19:23 | | 20:25 | |
| Potential sun hours | 297 | 297 | 369 | 399 | 449 | 453 |
| Total, worst case | 842 | | | 295 | 90 | |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: M - Shadow Receptor: 1,0 × 1,0 Azimuth: -120,0° Slope: 90,0° (13)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | November | December |
|---------------------|-------|--------|--------------|---------|----------|---|
| 1 | 05:30 | 05:54 | 06:25 | 06:55 | 06:30 | 07:05 07:29 (13) |
| | 20:37 | 20:18 | 19:34 | 18:43 | 16:56 | 16:32 34 08:03 (13) |
| 2 | 05:30 | 05:55 | 06:26 | 06:56 | 06:31 | 07:06 07:30 (13) |
| | 20:37 | 20:17 | 19:33 | 18:42 | 16:55 | 16:31 34 08:04 (13) |
| 3 | 05:31 | 05:56 | 06:27 | 06:58 | 06:32 | 07:07 07:31 (13) |
| | 20:37 | 20:16 | 19:31 | 18:40 | 16:54 | 16:31 33 08:04 (13) |
| 4 | 05:31 | 05:57 | 06:28 | 06:59 | 06:34 | 07:08 07:32 (13) |
| | 20:36 | 20:14 | 19:29 | 18:38 | 16:53 | 16:31 33 08:05 (13) |
| 5 | 05:32 | 05:58 | 06:29 | 07:00 | 06:35 | 07:09 07:33 (13) |
| | 20:36 | 20:13 | 19:28 | 18:37 | 16:52 | 16:31 32 08:05 (13) |
| 6 | 05:33 | 05:59 | 06:30 | 07:01 | 06:36 | 07:10 07:34 (13) |
| | 20:36 | 20:12 | 19:26 | 18:35 | 16:50 | 16:31 32 08:06 (13) |
| 7 | 05:33 | 06:00 | 06:31 | 07:02 | 06:37 | 07:11 07:35 (13) |
| | 20:36 | 20:11 | 19:24 | 18:33 | 16:49 | 16:31 37 09:11 (12) |
| 8 | 05:34 | 06:01 | 06:32 (9) | 06:32 | 07:03 | 06:38 07:12 07:36 (13) |
| | 20:35 | 20:10 | 11 06:43 (9) | 19:23 | 18:32 | 16:48 16:30 44 09:15 (12) |
| 9 | 05:34 | 06:02 | 06:29 (9) | 06:33 | 07:04 | 06:40 07:13 07:37 (13) |
| | 20:35 | 20:08 | 17 06:46 (9) | 19:21 | 18:30 | 16:47 16:30 46 09:17 (12) |
| 10 | 05:35 | 06:03 | 06:27 (9) | 06:34 | 07:05 | 06:41 07:14 07:38 (13) |
| | 20:35 | 20:07 | 21 06:48 (9) | 19:19 | 18:28 | 16:46 16:30 49 09:19 (12) |
| 11 | 05:36 | 06:04 | 06:26 (9) | 06:35 | 07:06 | 06:42 07:15 07:39 (13) |
| | 20:34 | 20:06 | 24 06:50 (9) | 19:18 | 18:27 | 16:45 16:31 50 09:21 (12) |
| 12 | 05:37 | 06:05 | 06:27 (9) | 06:36 | 07:07 | 06:43 07:16 07:39 (13) |
| | 20:34 | 20:04 | 24 06:51 (9) | 19:16 | 18:25 | 16:44 16:31 52 09:21 (12) |
| 13 | 05:37 | 06:06 | 06:28 (9) | 06:37 | 07:08 | 06:44 07:16 07:40 (13) |
| | 20:33 | 20:03 | 24 06:52 (9) | 19:14 | 18:24 | 16:43 16:31 53 09:23 (12) |
| 14 | 05:38 | 06:07 | 06:29 (9) | 06:38 | 07:09 | 06:46 07:17 07:41 (13) |
| | 20:33 | 20:02 | 24 06:53 (9) | 19:12 | 18:22 | 16:42 16:31 54 09:24 (12) |
| 15 | 05:39 | 06:08 | 06:30 (9) | 06:39 | 07:10 | 06:47 07:18 07:42 (13) |
| | 20:32 | 20:00 | 23 06:53 (9) | 19:11 | 18:21 | 16:41 16:31 55 09:26 (12) |
| 16 | 05:40 | 06:09 | 06:31 (9) | 06:40 | 07:12 | 06:48 07:35 (13) 07:19 07:42 (13) |
| | 20:31 | 19:59 | 23 06:54 (9) | 19:09 | 18:19 | 16:40 12 07:47 (13) 16:31 56 09:26 (12) |
| 17 | 05:40 | 06:10 | 06:32 (9) | 06:41 | 07:13 | 06:49 07:32 (13) 07:19 07:43 (13) |
| | 20:31 | 19:57 | 22 06:54 (9) | 19:07 | 18:17 | 16:40 17 07:49 (13) 16:32 55 09:27 (12) |
| 18 | 05:41 | 06:11 | 06:32 (9) | 06:42 | 07:14 | 06:50 07:32 (13) 07:20 07:44 (13) |
| | 20:30 | 19:56 | 21 06:53 (9) | 19:06 | 18:16 | 16:39 20 07:52 (13) 16:32 56 09:28 (12) |
| 19 | 05:42 | 06:12 | 06:33 (9) | 06:43 | 07:15 | 06:52 07:30 (13) 07:21 07:44 (13) |
| | 20:29 | 19:55 | 20 06:53 (9) | 19:04 | 18:14 | 16:38 23 07:53 (13) 16:32 56 09:28 (12) |
| 20 | 05:43 | 06:13 | 06:34 (9) | 06:44 | 07:16 | 06:53 07:29 (13) 07:21 07:45 (13) |
| | 20:29 | 19:53 | 19 06:53 (9) | 19:02 | 18:13 | 16:37 25 07:54 (13) 16:33 56 09:29 (12) |
| 21 | 05:44 | 06:14 | 06:35 (9) | 06:45 | 07:17 | 06:54 07:28 (13) 07:22 07:45 (13) |
| | 20:28 | 19:52 | 18 06:53 (9) | 19:00 | 18:11 | 16:37 27 07:55 (13) 16:33 57 09:29 (12) |
| 22 | 05:45 | 06:15 | 06:36 (9) | 06:46 | 07:18 | 06:55 07:27 (13) 07:22 07:46 (13) |
| | 20:27 | 19:50 | 17 06:53 (9) | 18:59 | 18:10 | 16:36 29 07:56 (13) 16:34 57 09:30 (12) |
| 23 | 05:46 | 06:16 | 06:37 (9) | 06:47 | 07:19 | 06:56 07:28 (13) 07:23 07:46 (13) |
| | 20:26 | 19:49 | 16 06:53 (9) | 18:57 | 18:08 | 16:35 30 07:58 (13) 16:34 56 09:30 (12) |
| 24 | 05:46 | 06:17 | 06:38 (9) | 06:48 | 07:21 | 06:57 07:27 (13) 07:23 07:47 (13) |
| | 20:26 | 19:47 | 14 06:52 (9) | 18:55 | 18:07 | 16:35 32 07:59 (13) 16:35 56 09:31 (12) |
| 25 | 05:47 | 06:18 | 06:39 (9) | 06:49 | 06:22 | 06:59 07:27 (13) 07:24 07:47 (13) |
| | 20:25 | 19:45 | 13 06:52 (9) | 18:54 | 17:06 | 16:34 32 07:59 (13) 16:35 56 09:31 (12) |
| 26 | 05:48 | 06:19 | 06:40 (9) | 06:50 | 06:23 | 07:00 07:26 (13) 07:24 07:47 (13) |
| | 20:24 | 19:44 | 11 06:51 (9) | 18:52 | 17:04 | 16:34 34 08:00 (13) 16:36 56 09:31 (12) |
| 27 | 05:49 | 06:20 | 06:41 (9) | 06:51 | 06:24 | 07:01 07:26 (13) 07:24 07:47 (13) |
| | 20:23 | 19:42 | 9 06:50 (9) | 18:50 | 17:03 | 16:33 34 08:00 (13) 16:37 55 09:31 (12) |
| 28 | 05:50 | 06:21 | 06:42 (9) | 06:52 | 06:25 | 07:02 07:27 (13) 07:25 07:48 (13) |
| | 20:22 | 19:41 | 7 06:49 (9) | 18:48 | 17:02 | 16:33 35 08:02 (13) 16:37 56 09:32 (12) |
| 29 | 05:51 | 06:22 | 06:43 (9) | 06:53 | 06:26 | 07:03 07:27 (13) 07:25 07:48 (13) |
| | 20:21 | 19:39 | 5 06:48 (9) | 18:47 | 17:00 | 16:32 35 08:02 (13) 16:38 54 09:31 (12) |
| 30 | 05:52 | 06:23 | 06:44 (9) | 06:54 | 06:28 | 07:04 07:28 (13) 07:25 07:48 (13) |
| | 20:20 | 19:38 | 3 06:47 (9) | 18:45 | 16:59 | 16:32 35 08:03 (13) 16:39 53 09:31 (12) |
| 31 | 05:53 | 06:24 | | | 06:29 | |
| | 20:19 | 19:36 | | 16:58 | | 07:25 16:40 53 09:31 (12) |
| Potential sun hours | 460 | 428 | 375 | 345 | 297 | 287 |
| Total, worst case | | | 386 | | 420 | 1526 |

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

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

SHADOW - Calendar

Calculation: ShadowShadow receptor: N - Shadow Receptor: 1,0 × 1,0 Azimuth: 150,0° Slope: 90,0° (14)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June | July | August | September | October | November | December |
|---------------------|---------|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|
| 1 | 07:26 | 07:12 | 06:36 | 06:45 | 05:59 | 05:29 | 05:30 | 05:54 | 06:25 | 06:55 | 06:30 | 07:05 |
| | 16:41 | 17:15 | 17:49 | 19:24 | 19:56 | 20:26 | 20:37 | 20:18 | 19:34 | 18:43 | 16:56 | 16:32 |
| 2 | 07:26 | 07:11 | 06:34 | 06:43 | 05:57 | 05:29 | 05:30 | 05:55 | 06:26 | 06:56 | 06:31 | 07:06 |
| | 16:41 | 17:16 | 17:51 | 19:25 | 19:57 | 20:27 | 20:37 | 20:17 | 19:33 | 18:42 | 16:55 | 16:31 |
| 3 | 07:26 | 07:10 | 06:33 | 06:41 | 05:56 | 05:29 | 05:31 | 05:56 | 06:27 | 06:57 | 06:32 | 07:07 |
| | 16:42 | 17:18 | 17:52 | 19:26 | 19:58 | 20:27 | 20:37 | 20:15 | 19:31 | 18:40 | 16:54 | 16:31 |
| 4 | 07:26 | 07:09 | 06:31 | 06:40 | 05:55 | 05:28 | 05:31 | 05:57 | 06:28 | 06:59 | 06:34 | 07:08 |
| | 16:43 | 17:19 | 17:53 | 19:27 | 19:59 | 20:28 | 20:36 | 20:14 | 19:29 | 18:38 | 16:53 | 16:31 |
| 5 | 07:26 | 07:08 | 06:30 | 06:38 | 05:53 | 05:28 | 05:32 | 05:58 | 06:29 | 07:00 | 06:35 | 07:09 |
| | 16:44 | 17:20 | 17:54 | 19:28 | 20:00 | 20:29 | 20:36 | 20:13 | 19:28 | 18:37 | 16:51 | 16:31 |
| 6 | 07:26 | 07:07 | 06:28 | 06:36 | 05:52 | 05:27 | 05:33 | 05:59 | 06:30 | 07:01 | 06:36 | 07:10 |
| | 16:45 | 17:21 | 17:55 | 19:29 | 20:01 | 20:29 | 20:36 | 20:12 | 19:26 | 18:35 | 16:50 | 16:31 |
| 7 | 07:26 | 07:06 | 06:26 | 06:35 | 05:51 | 05:27 | 05:33 | 06:00 | 06:31 | 07:02 | 06:37 | 07:11 |
| | 16:46 | 17:23 | 17:56 | 19:30 | 20:02 | 20:30 | 20:36 | 20:11 | 19:24 | 18:33 | 16:49 | 16:31 |
| 8 | 07:26 | 07:05 | 06:25 | 06:33 | 05:50 | 05:27 | 05:34 | 06:01 | 06:32 | 07:03 | 06:38 | 07:12 |
| | 16:47 | 17:24 | 17:58 | 19:31 | 20:03 | 20:31 | 20:35 | 20:09 | 19:23 | 18:32 | 16:48 | 16:30 |
| 9 | 07:25 | 07:03 | 06:23 | 06:31 | 05:49 | 05:27 | 05:34 | 06:02 | 06:33 | 07:04 | 06:40 | 07:13 |
| | 16:48 | 17:25 | 17:59 | 19:32 | 20:04 | 20:31 | 20:35 | 20:08 | 19:21 | 18:30 | 16:47 | 16:30 |
| 10 | 07:25 | 07:02 | 06:21 | 06:30 | 05:48 | 05:26 | 05:35 | 06:03 | 06:34 | 07:05 | 06:41 | 07:14 |
| | 16:49 | 17:26 | 18:00 | 19:34 | 20:06 | 20:32 | 20:34 | 20:07 | 19:19 | 18:28 | 16:46 | 16:30 |
| 11 | 07:25 | 07:01 | 06:20 | 06:28 | 05:46 | 05:26 | 05:36 | 06:04 | 06:35 | 07:06 | 06:42 | 07:15 |
| | 16:50 | 17:28 | 18:01 | 19:35 | 20:07 | 20:32 | 20:34 | 20:06 | 19:18 | 18:27 | 16:45 | 16:31 |
| 12 | 07:25 | 07:00 | 06:18 | 06:27 | 05:45 | 05:26 | 05:37 | 06:05 | 06:36 | 07:07 | 06:43 | 07:15 |
| | 16:51 | 17:29 | 18:02 | 19:36 | 20:08 | 20:33 | 20:34 | 20:04 | 19:16 | 18:25 | 16:44 | 16:31 |
| 13 | 07:25 | 06:59 | 06:17 | 06:25 | 05:44 | 05:26 | 05:37 | 06:06 | 06:37 | 07:08 | 06:44 | 07:16 |
| | 16:52 | 17:30 | 18:03 | 19:37 | 20:09 | 20:33 | 20:33 | 20:03 | 19:14 | 18:24 | 16:43 | 16:31 |
| 14 | 07:24 | 06:57 | 06:15 | 06:23 | 05:43 | 05:26 | 05:38 | 06:07 | 06:38 | 07:09 | 06:46 | 07:17 |
| | 16:53 | 17:31 | 18:04 | 19:38 | 20:10 | 20:34 | 20:33 | 20:02 | 19:12 | 18:22 | 16:42 | 16:31 |
| 15 | 07:24 | 06:56 | 06:13 | 06:22 | 05:42 | 05:26 | 05:39 | 06:08 | 06:39 | 07:10 | 06:47 | 07:18 |
| | 16:55 | 17:33 | 18:05 | 19:39 | 20:11 | 20:34 | 20:32 | 20:00 | 19:11 | 18:20 | 16:41 | 16:31 |
| 16 | 07:23 | 06:55 | 06:12 | 06:20 | 05:41 | 05:26 | 05:40 | 06:09 | 06:40 | 07:11 | 06:48 | 07:19 |
| | 16:56 | 17:34 | 18:07 | 19:40 | 20:12 | 20:35 | 20:31 | 19:59 | 19:09 | 18:19 | 16:40 | 16:31 |
| 17 | 07:23 | 06:53 | 06:10 | 06:19 | 05:40 | 05:26 | 05:40 | 06:10 | 06:41 | 07:13 | 06:49 | 07:19 |
| | 16:57 | 17:35 | 18:08 | 19:41 | 20:13 | 20:35 | 20:31 | 19:57 | 19:07 | 18:17 | 16:40 | 16:32 |
| 18 | 07:22 | 06:52 | 06:08 | 06:17 | 05:39 | 05:26 | 05:41 | 06:11 | 06:42 | 07:14 | 06:50 | 07:20 |
| | 16:58 | 17:36 | 18:09 | 19:42 | 20:14 | 20:35 | 20:30 | 19:56 | 19:06 | 18:16 | 16:39 | 16:32 |
| 19 | 07:22 | 06:51 | 06:07 | 06:16 | 05:38 | 05:26 | 05:42 | 06:12 | 06:43 | 07:15 | 06:52 | 07:20 |
| | 16:59 | 17:38 | 18:10 | 19:43 | 20:15 | 20:36 | 20:29 | 19:54 | 19:04 | 18:14 | 16:38 | 16:32 |
| 20 | 07:21 | 06:49 | 06:05 | 06:14 | 05:38 | 05:26 | 05:43 | 06:13 | 06:44 | 07:16 | 06:53 | 07:21 |
| | 17:00 | 17:39 | 18:11 | 19:44 | 20:15 | 20:36 | 20:29 | 19:53 | 19:02 | 18:13 | 16:37 | 16:33 |
| 21 | 07:21 | 06:48 | 06:03 | 06:13 | 05:37 | 05:27 | 05:44 | 06:14 | 06:45 | 07:17 | 06:54 | 07:22 |
| | 17:02 | 17:40 | 18:12 | 19:45 | 20:16 | 20:36 | 20:28 | 19:51 | 19:00 | 18:11 | 16:37 | 16:33 |
| 22 | 07:20 | 06:46 | 06:02 | 06:11 | 05:36 | 05:27 | 05:45 | 06:15 | 06:46 | 07:18 | 06:55 | 07:22 |
| | 17:03 | 17:41 | 18:13 | 19:46 | 20:17 | 20:36 | 20:27 | 19:50 | 18:59 | 18:10 | 16:36 | 16:34 |
| 23 | 07:19 | 06:45 | 06:00 | 06:10 | 05:35 | 05:27 | 05:46 | 06:16 | 06:47 | 07:19 | 06:56 | 07:23 |
| | 17:04 | 17:42 | 18:14 | 19:47 | 20:18 | 20:37 | 20:26 | 19:48 | 18:57 | 18:08 | 16:35 | 16:34 |
| 24 | 07:19 | 06:43 | 05:58 | 06:08 | 05:34 | 05:27 | 05:46 | 06:17 | 06:48 | 07:21 | 06:57 | 07:23 |
| | 17:05 | 17:44 | 18:15 | 19:49 | 20:19 | 20:37 | 20:25 | 19:47 | 18:55 | 18:07 | 16:35 | 16:35 |
| 25 | 07:18 | 06:42 | 05:56 | 06:07 | 05:34 | 05:27 | 05:47 | 06:18 | 06:49 | 06:22 | 06:59 | 07:24 |
| | 17:06 | 17:45 | 18:16 | 19:50 | 20:20 | 20:37 | 20:25 | 19:45 | 18:54 | 17:06 | 16:34 | 16:35 |
| 26 | 07:17 | 06:40 | 05:55 | 06:05 | 05:33 | 05:28 | 05:48 | 06:19 | 06:50 | 06:23 | 07:00 | 07:24 |
| | 17:08 | 17:46 | 18:17 | 19:51 | 20:21 | 20:37 | 20:24 | 19:44 | 18:52 | 17:04 | 16:34 | 16:36 |
| 27 | 07:16 | 06:39 | 05:53 | 06:04 | 05:32 | 05:28 | 05:49 | 06:20 | 06:51 | 06:24 | 07:01 | 07:24 |
| | 17:09 | 17:47 | 18:18 | 19:52 | 20:22 | 20:37 | 20:23 | 19:42 | 18:50 | 17:03 | 16:33 | 16:37 |
| 28 | 07:16 | 06:37 | 05:51 | 06:03 | 05:32 | 05:29 | 05:50 | 06:21 | 06:52 | 06:25 | 07:02 | 07:25 |
| | 17:10 | 17:48 | 18:20 | 19:53 | 20:23 | 20:37 | 20:22 | 19:41 | 18:48 | 17:02 | 16:33 | 16:37 |
| 29 | 07:15 | 06:30 | 06:01 | 05:31 | 05:29 | 05:51 | 06:22 | 06:53 | 06:26 | 07:03 | 07:25 | |
| | 17:11 | 17:21 | 19:54 | 20:23 | 20:37 | 20:21 | 19:39 | 18:47 | 17:00 | 16:32 | 16:38 | |
| 30 | 07:14 | 06:48 | 06:00 | 05:30 | 05:29 | 05:52 | 06:23 | 06:54 | 06:28 | 07:04 | 07:25 | |
| | 17:13 | 17:22 | 19:55 | 20:24 | 20:37 | 20:20 | 19:37 | 18:45 | 16:59 | 16:32 | 16:39 | |
| 31 | 07:13 | 06:46 | 05:30 | | | | 05:53 | 06:24 | 06:29 | | 07:25 | |
| | 17:14 | 19:23 | | 20:25 | | 20:19 | 19:36 | | 16:58 | | 16:40 | |
| Potential sun hours | 297 | 297 | 369 | 399 | 449 | 453 | 460 | 428 | 375 | 345 | 297 | 287 |
| Total, worst case | | | | | | | | | | | | |

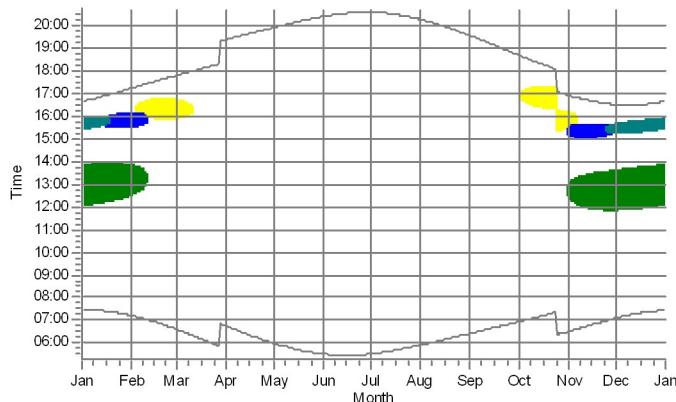
Table layout: For each day in each month the following matrix apply

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

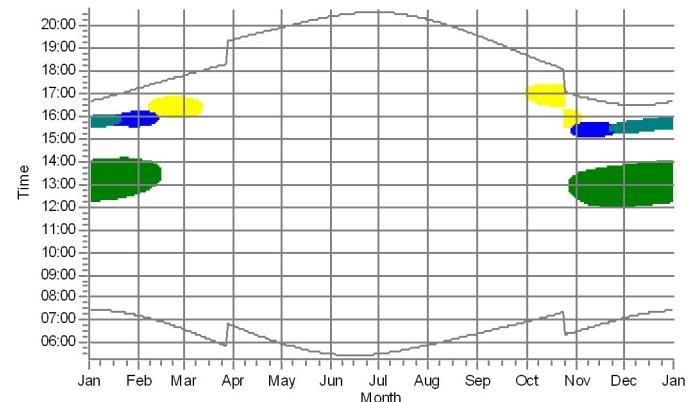
SHADOW - Calendar, graphical

Calculation: Shadow

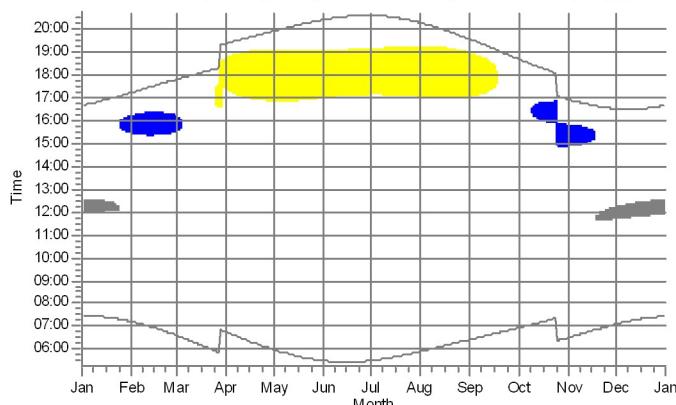
A: Shadow Receptor: 1,0 × 1,0 Azimuth: 0,0° Slope: 90,0° (1)



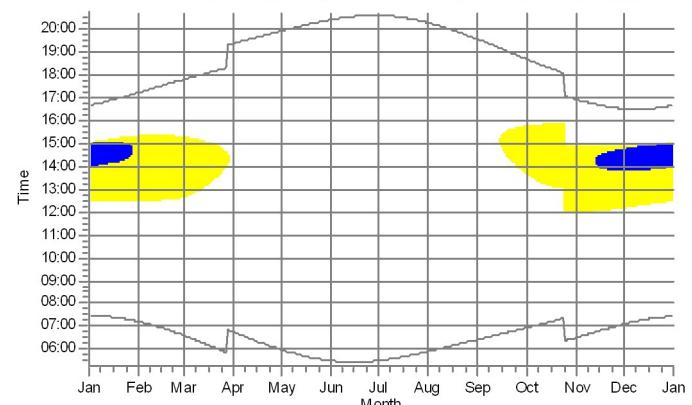
B: Shadow Receptor: 1,0 × 1,0 Azimuth: 0,0° Slope: 90,0° (2)



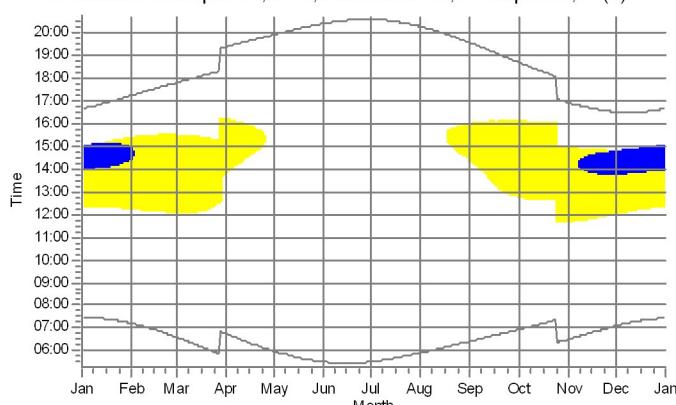
C: Shadow Receptor: 1,0 × 1,0 Azimuth: 90,0° Slope: 90,0° (3)



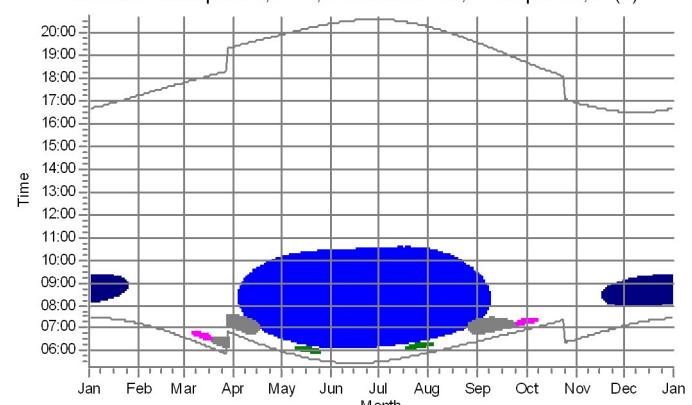
D: Shadow Receptor: 1,0 × 1,0 Azimuth: 45,0° Slope: 90,0° (4)



E: Shadow Receptor: 1,0 × 1,0 Azimuth: 45,0° Slope: 90,0° (5)



F: Shadow Receptor: 1,0 × 1,0 Azimuth: -90,0° Slope: 90,0° (6)



WTGs



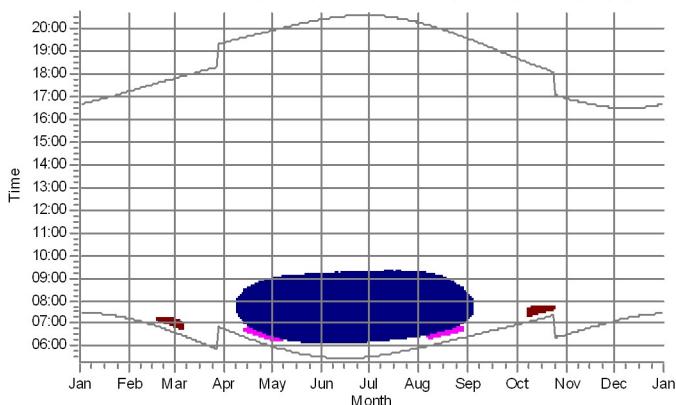
- 1: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (1)
- 2: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (2)
- 3: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (3)
- 4: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (4)

- 5: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (5)
- 6: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (6)
- 7: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (7)

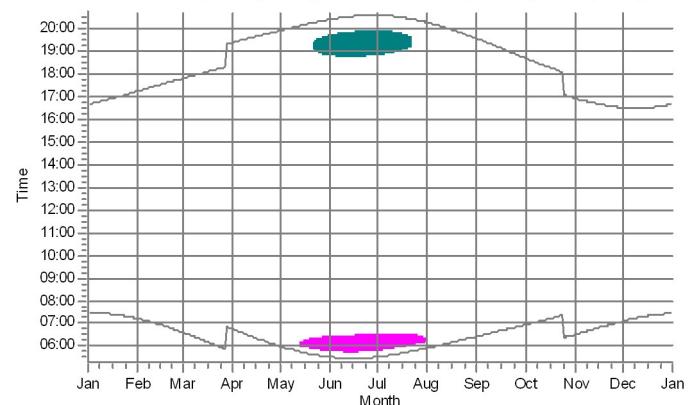
SHADOW - Calendar, graphical

Calculation: Shadow

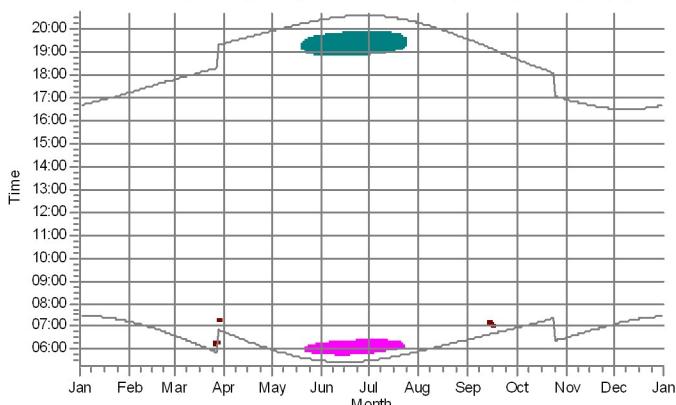
G: Shadow Receptor: 1,0 × 1,0 Azimuth: -90,0° Slope: 90,0° (7)



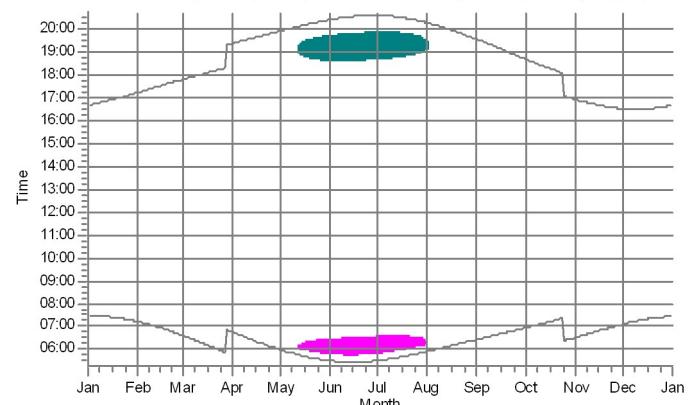
H: Shadow Receptor: 1,0 × 1,0 Azimuth: -180,0° Slope: 90,0° (8)



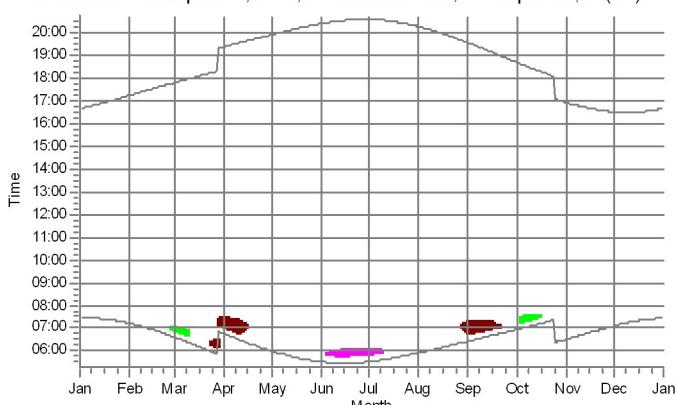
I: Shadow Receptor: 1,0 × 1,0 Azimuth: -180,0° Slope: 90,0° (9)



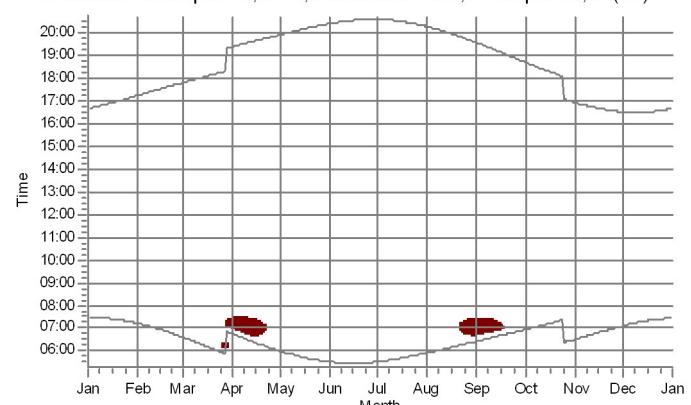
J: Shadow Receptor: 1,0 × 1,0 Azimuth: -180,0° Slope: 90,0° (10)



K: Shadow Receptor: 1,0 × 1,0 Azimuth: -160,0° Slope: 90,0° (11)



L: Shadow Receptor: 1,0 × 1,0 Azimuth: -180,0° Slope: 90,0° (12)



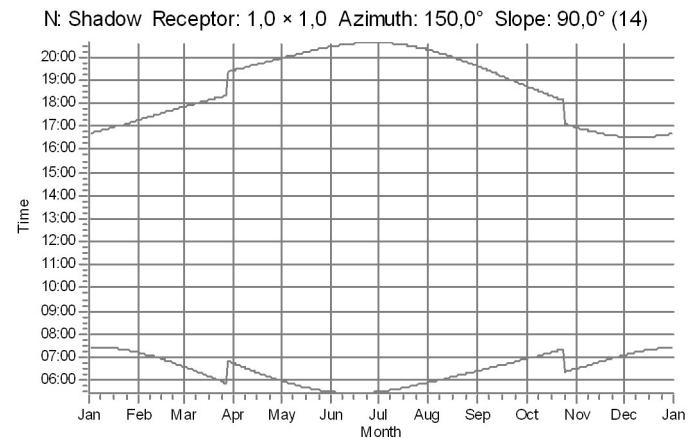
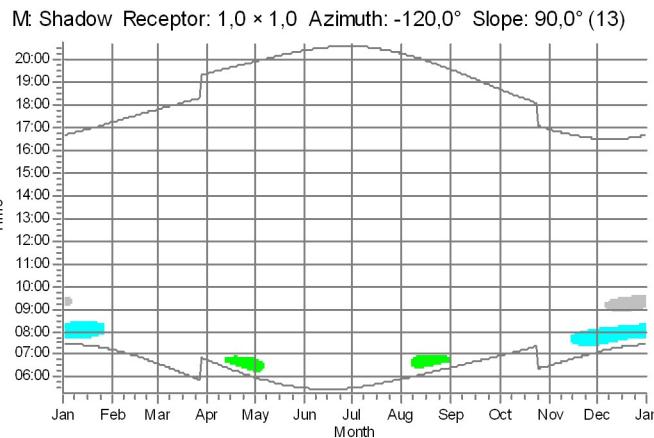
WTGs

- 5: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (5)
- 6: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (6)
- 7: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (7)

- 8: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (8)
- 9: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (9)

SHADOW - Calendar, graphical

Calculation: Shadow



WTGs

9: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (9)
12: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (12)

13: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (13)

SHADOW - Calendar per WTG

Calculation: ShadowWTG: 1 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (1)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|----|--|---------------------------------|------------------|------------------|--------------------------------|------------------|
| 1 | 07:26 12:08-14:01/113 16:41 | 07:12 12:35-14:03/88 17:15 | 06:36 17:49 | 06:45 19:24 | 05:59 19:56 | 05:29 20:26 |
| 2 | 07:26 12:09-14:01/112 16:41 | 07:11 12:37-14:02/85 17:16 | 06:34 17:51 | 06:43 19:25 | 05:57 19:57 | 05:29 20:27 |
| 3 | 07:26 12:09-14:01/112 16:42 | 07:10 12:39-14:01/82 17:18 | 06:33 17:52 | 06:41 19:26 | 05:56 19:58 | 05:28 20:27 |
| 4 | 07:26 12:10-14:02/112 16:43 | 07:09 12:42-14:00/78 17:19 | 06:31 17:53 | 06:40 19:27 | 05:55 19:59 | 05:28 20:28 |
| 5 | 07:26 12:11-14:02/111 16:44 | 07:08 12:44-13:59/75 17:20 | 06:30 17:54 | 06:38 19:28 | 05:53 20:00 | 05:28 20:29 |
| 6 | 07:26 12:11-14:03/112 16:45 | 07:07 12:47-13:58/71 17:21 | 06:28 17:55 | 06:36 19:29 | 05:52 20:01 | 05:27 20:29 |
| 7 | 07:26 12:12-14:03/111 16:46 | 07:06 12:51-13:57/66 17:23 | 06:26 17:56 | 06:35 19:30 | 05:51 20:02 | 05:27 20:30 |
| 8 | 07:26 12:13-14:04/111 16:47 | 07:05 12:54-13:55/61 17:24 | 06:25 17:58 | 06:33 19:31 | 05:50 20:04 | 05:27 20:31 |
| 9 | 07:26 12:14-14:05/111 16:48 | 07:04 12:57-13:53/56 17:25 | 06:23 17:59 | 06:31 19:33 | 05:49 20:05 | 05:27 20:31 |
| 10 | 07:25 12:13-14:04/111 16:49 | 07:02 13:01-13:51/50 17:26 | 06:22 18:00 | 06:30 19:34 | 05:47 06:07-06:08/1 20:06 | 05:26 20:32 |
| 11 | 07:25 12:14-14:05/111 16:50 | 07:01 13:05-13:48/43 17:28 | 06:20 18:01 | 06:28 19:35 | 05:46 06:06-06:07/1 20:07 | 05:26 20:32 |
| 12 | 07:25 12:15-14:05/110 16:51 | 07:00 13:09-13:44/35 17:29 | 06:18 18:02 | 06:27 19:36 | 05:45 06:05-06:07/2 20:08 | 05:26 20:33 |
| 13 | 07:25 12:15-14:05/110 16:52 | 06:59 13:16-13:39/23 17:30 | 06:17 18:03 | 06:25 19:37 | 05:44 06:04-06:07/3 20:09 | 05:26 20:33 |
| 14 | 07:24 12:16-14:06/110 16:53 | 06:57 17:31 | 06:15 18:04 | 06:23 19:38 | 05:43 06:03-06:06/3 20:10 | 05:26 20:34 |
| 15 | 07:24 12:17-14:05/108 16:54 | 06:56 17:33 | 06:13 18:05 | 06:22 19:39 | 05:42 06:02-06:06/4 20:11 | 05:26 20:34 |
| 16 | 07:23 12:18-14:06/108 16:56 | 06:55 17:34 | 06:12 18:07 | 06:20 19:40 | 05:41 06:02-06:06/4 20:12 | 05:26 20:35 |
| 17 | 07:23 12:18-14:06/108 16:57 | 06:53 17:35 | 06:10 18:08 | 06:19 19:41 | 05:40 06:01-06:05/4 20:13 | 05:26 20:35 |
| 18 | 07:23 12:19-14:06/107 16:58 | 06:52 17:36 | 06:08 18:09 | 06:17 19:42 | 05:39 06:00-06:04/4 20:14 | 05:26 20:35 |
| 19 | 07:22 12:20-14:06/106 16:59 | 06:51 17:38 | 06:07 18:10 | 06:16 19:43 | 05:38 05:59-06:03/4 20:15 | 05:26 20:36 |
| 20 | 07:21 12:20-14:06/106 17:00 | 06:49 17:39 | 06:05 18:11 | 06:14 19:44 | 05:37 05:58-06:02/4 20:16 | 05:26 20:36 |
| 21 | 07:21 12:22-14:07/105 17:01 | 06:48 17:40 | 06:03 18:12 | 06:13 19:45 | 05:37 05:57-06:01/4 20:17 | 05:26 20:36 |
| 22 | 07:20 12:22-14:06/104 17:03 | 06:46 17:41 | 06:02 18:13 | 06:11 19:46 | 05:36 05:57-06:00/3 20:17 | 05:27 20:36 |
| 23 | 07:20 12:23-14:06/103 17:04 | 06:45 17:42 | 06:00 18:14 | 06:10 19:48 | 05:35 05:56-05:59/3 20:18 | 05:27 20:37 |
| 24 | 07:19 12:25-14:07/102 17:05 | 06:43 17:44 | 05:58 18:15 | 06:08 19:49 | 05:34 05:55-05:57/2 20:19 | 05:27 20:37 |
| 25 | 07:18 12:26-14:06/100 17:06 | 06:42 17:45 | 05:56 18:16 | 06:07 19:50 | 05:34 05:53 20:20 | 05:27 20:37 |
| 26 | 07:17 12:27-14:06/99 17:08 | 06:40 17:46 | 05:55 18:17 | 06:05 19:51 | 05:33 05:53 20:21 | 05:28 20:37 |
| 27 | 07:17 12:28-14:05/97 17:09 | 06:39 17:47 | 05:53 18:19 | 06:04 19:52 | 05:32 05:52 20:22 | 05:28 20:37 |
| 28 | 07:16 12:29-14:05/96 17:10 | 06:37 17:48 | 05:51 18:20 | 06:03 19:53 | 05:32 05:52 20:23 | 05:28 20:37 |
| 29 | 07:15 12:30-14:04/94 17:11 | 19:21 | 06:50 19:21 | 06:01 19:54 | 05:31 05:29 20:24 | 05:29 20:37 |
| 30 | 07:14 12:32-14:04/92 17:13 | 19:22 | 06:48 19:22 | 06:00 19:55 | 05:30 05:29 20:24 | 05:29 20:37 |
| 31 | 07:13 12:33-14:03/90 17:14 | 19:23 | 06:46 19:23 | 20:25 | 05:30 20:25 | |
| | Potential sun hours Sum of minutes with flicker | 297 3282 | 813 | 0 0 | 46 449 | 0 453 |

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: ShadowWTG: 1 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (1)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | November | December |
|-----------------------------|-----------------------|------------------------------|-----------------------|-----------------------|----------|----------|
| 1 05:30 | 05:54 06:16-06:18/2 | 06:25 06:55 | 06:30 12:30-13:21/51 | 07:05 11:56-13:47/111 | | |
| 2 20:37 | 20:18 19:34 18:43 | 16:56 | 16:32 | | | |
| 2 05:30 | 05:55 06:17-06:18/1 | 06:26 06:56 | 06:31 12:27-13:23/56 | 07:06 11:57-13:47/110 | | |
| 2 20:37 | 20:17 19:33 18:42 | 16:55 | 16:31 | | | |
| 3 05:31 | 05:56 | 06:27 06:58 | 06:32 12:23-13:25/62 | 07:07 11:57-13:48/111 | | |
| 3 20:37 | 20:16 19:31 18:40 | 16:54 | 16:31 | | | |
| 4 05:31 | 05:57 | 06:28 06:59 | 06:34 12:20-13:27/67 | 07:08 11:57-13:48/111 | | |
| 4 20:36 | 20:14 19:29 18:38 | 16:53 | 16:31 | | | |
| 5 05:32 | 05:58 | 06:29 07:00 | 06:35 12:17-13:28/71 | 07:09 11:57-13:48/111 | | |
| 5 20:36 | 20:13 19:28 18:37 | 16:51 | 16:31 | | | |
| 6 05:33 | 05:59 | 06:30 07:01 | 06:36 12:14-13:29/75 | 07:10 11:57-13:49/112 | | |
| 6 20:36 | 20:12 19:26 18:35 | 16:50 | 16:31 | | | |
| 7 05:33 | 06:00 | 06:31 07:02 | 06:37 12:11-13:30/79 | 07:11 11:58-13:49/111 | | |
| 7 20:36 | 20:11 19:24 18:33 | 16:49 | 16:30 | | | |
| 8 05:34 | 06:01 | 06:32 07:03 | 06:38 12:10-13:32/82 | 07:12 11:58-13:50/112 | | |
| 8 20:35 | 20:10 19:23 18:32 | 16:48 | 16:30 | | | |
| 9 05:34 | 06:02 | 06:33 07:04 | 06:40 12:08-13:33/85 | 07:13 11:59-13:50/111 | | |
| 9 20:35 | 20:08 19:21 18:30 | 16:47 | 16:30 | | | |
| 10 05:35 | 06:03 | 06:34 07:05 | 06:41 12:06-13:34/88 | 07:14 11:59-13:51/112 | | |
| 10 20:35 | 20:07 19:19 18:28 | 16:46 | 16:30 | | | |
| 11 05:36 | 06:04 | 06:35 07:06 | 06:42 12:05-13:35/90 | 07:15 12:00-13:52/112 | | |
| 11 20:34 | 20:06 19:18 18:27 | 16:45 | 16:30 | | | |
| 12 05:37 | 06:05 | 06:36 07:07 | 06:43 12:04-13:36/92 | 07:16 11:59-13:51/112 | | |
| 12 20:34 | 20:04 19:16 18:25 | 16:44 | 16:31 | | | |
| 13 05:37 | 06:06 | 06:37 07:08 | 06:44 12:02-13:36/94 | 07:16 12:00-13:52/112 | | |
| 13 20:33 | 20:03 19:14 18:24 | 16:43 | 16:31 | | | |
| 14 05:38 | 06:07 | 06:38 07:09 | 06:46 12:01-13:37/96 | 07:17 12:00-13:53/113 | | |
| 14 20:33 | 20:02 19:12 18:22 | 16:42 | 16:31 | | | |
| 15 05:39 | 06:08 | 06:39 07:10 | 06:47 12:01-13:38/97 | 07:18 12:01-13:53/112 | | |
| 15 20:32 | 20:00 19:11 18:20 | 16:41 | 16:31 | | | |
| 16 05:40 | 06:09 | 06:40 07:12 | 06:48 12:00-13:39/99 | 07:19 12:01-13:53/112 | | |
| 16 20:32 | 19:59 19:09 18:19 | 16:40 | 16:31 | | | |
| 17 05:40 | 06:10 | 06:41 07:13 | 06:49 11:59-13:39/100 | 07:19 12:02-13:54/112 | | |
| 17 20:31 | 19:57 19:07 18:17 | 16:40 | 16:32 | | | |
| 18 05:41 | 06:11 | 06:42 07:14 | 06:50 11:59-13:41/102 | 07:20 12:02-13:55/113 | | |
| 18 20:30 | 19:56 19:06 18:16 | 16:39 | 16:32 | | | |
| 19 05:42 | 06:05-06:06/1 | 06:12 07:15 | 06:52 11:58-13:41/103 | 07:21 12:02-13:55/113 | | |
| 19 20:30 | 19:55 19:04 18:14 | 16:38 | 16:32 | | | |
| 20 05:43 | 06:05-06:07/2 | 06:13 07:16 | 06:53 11:57-13:41/104 | 07:21 12:03-13:56/113 | | |
| 20 20:29 | 19:53 19:02 18:13 | 16:37 | 16:33 | | | |
| 21 05:44 | 06:06-06:09/3 | 06:14 07:17 | 06:54 11:57-13:42/105 | 07:22 12:03-13:56/113 | | |
| 21 20:28 | 19:52 19:00 18:11 | 16:37 | 16:33 | | | |
| 22 05:45 | 06:07-06:11/4 | 06:15 07:18 | 06:55 11:57-13:43/106 | 07:22 12:04-13:57/113 | | |
| 22 20:27 | 19:50 18:59 18:10 | 16:36 | 16:34 | | | |
| 23 05:45 | 06:08-06:12/4 | 06:16 07:19 | 06:56 11:57-13:43/106 | 07:23 12:04-13:57/113 | | |
| 23 20:26 | 19:49 18:57 18:08 | 16:35 | 16:34 | | | |
| 24 05:46 | 06:09-06:13/4 | 06:17 07:21 | 06:57 11:56-13:43/107 | 07:23 12:05-13:58/113 | | |
| 24 20:26 | 19:47 18:55 18:07 | 16:35 | 16:35 | | | |
| 25 05:47 | 06:10-06:14/4 | 06:18 07:22 | 06:59 11:56-13:44/108 | 07:24 12:05-13:58/113 | | |
| 25 20:25 | 19:45 18:54 17:06 | 16:34 | 16:35 | | | |
| 26 05:48 | 06:11-06:15/4 | 06:19 06:23 | 07:00 11:56-13:44/108 | 07:24 12:05-13:58/113 | | |
| 26 20:24 | 19:44 18:52 17:04 | 16:34 | 16:36 | | | |
| 27 05:49 | 06:12-06:16/4 | 06:20 06:24 | 07:01 11:56-13:44/108 | 07:24 12:07-13:59/112 | | |
| 27 20:23 | 19:42 18:50 17:03 | 16:33 | 16:37 | | | |
| 28 05:50 | 06:13-06:17/4 | 06:21 06:25 | 07:02 11:57-13:46/109 | 07:25 12:07-13:59/112 | | |
| 28 20:22 | 19:41 18:48 17:01 | 16:33 | 16:37 | | | |
| 29 05:51 | 06:13-06:16/3 | 06:22 06:26 12:44-13:10/26 | 07:03 11:56-13:46/110 | 07:25 12:07-14:00/113 | | |
| 29 20:21 | 19:39 18:47 17:00 | 16:32 | 16:38 | | | |
| 30 05:52 | 06:14-06:17/3 | 06:23 06:28 12:38-13:15/37 | 07:04 11:56-13:46/110 | 07:25 12:08-14:00/112 | | |
| 30 20:20 | 19:38 18:45 16:59 | 16:32 | 16:39 | | | |
| 31 05:53 | 06:15-06:17/2 | 06:24 06:29 12:33-13:18/45 | 07:25 12:08-14:00/112 | | | |
| 31 20:19 | 19:36 16:58 | | | 16:40 | | |
| Potential sun hours | 460 | 428 375 345 | 297 | 287 | 3475 | |
| Sum of minutes with flicker | 42 | 3 | 0 | 108 | 2770 | |

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: ShadowWTG: 2 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (2)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------|
| 1 07:26 12:25-15:00/155 | 07:12 12:19-15:20/181 | 06:36 12:10-15:27/197 | 06:45 13:54-16:08/134 | 05:59 16:57-19:02/125 | 05:29 17:05-19:02/117 | |
| 16:41 | 17:15 | 17:49 15:57-16:48/51 | 19:24 17:29-18:40/71 | 19:56 | 20:26 | |
| 2 07:26 12:25-15:00/155 | 07:11 12:19-15:21/182 | 06:34 12:10-15:27/197 | 06:43 13:59-16:08/129 | 05:57 16:57-19:03/126 | 05:29 17:06-19:02/116 | |
| 16:41 | 17:16 | 17:51 15:58-16:47/49 | 19:25 17:27-18:43/76 | 19:57 | 20:27 | |
| 3 07:26 12:25-15:01/156 | 07:10 12:18-15:22/184 | 06:33 12:10-15:27/197 | 06:41 14:02-16:07/125 | 05:56 16:57-19:02/125 | 05:29 17:06-19:02/116 | |
| 16:42 | 17:18 | 17:52 15:59-16:47/48 | 19:26 17:24-18:44/80 | 19:58 | 20:27 | |
| 4 07:26 12:25-15:01/156 | 07:09 12:18-15:22/184 | 06:31 12:10-15:27/197 | 06:40 14:06-16:05/119 | 05:55 16:57-19:02/125 | 05:28 17:07-19:02/115 | |
| 16:43 | 17:19 | 17:53 16:00-16:46/46 | 19:27 17:21-18:46/85 | 19:59 | 20:28 | |
| 5 07:26 12:25-15:02/157 | 07:08 12:18-15:23/185 | 06:30 12:10-15:27/197 | 06:38 14:10-16:05/115 | 05:53 16:57-19:03/126 | 05:28 17:08-19:03/115 | |
| 16:44 | 17:20 16:14-16:26/12 | 17:54 16:01-16:45/44 | 19:28 17:20-18:48/88 | 20:00 | 20:29 | |
| 6 07:26 12:25-15:03/158 | 07:07 12:18-15:24/186 | 06:28 12:10-15:26/196 | 06:36 14:13-16:03/110 | 05:52 16:57-19:03/126 | 05:27 17:07-19:02/115 | |
| 16:45 | 17:21 16:10-16:30/20 | 17:55 16:02-16:44/42 | 19:29 17:18-18:49/91 | 20:01 | 20:30 | |
| 7 07:26 12:25-15:04/159 | 07:06 12:17-15:24/187 | 06:26 12:09-15:26/197 | 06:35 14:16-16:02/106 | 05:51 16:57-19:03/126 | 05:27 17:08-19:02/114 | |
| 16:46 | 17:23 16:08-16:33/25 | 17:56 16:04-16:42/38 | 19:30 17:16-18:50/94 | 20:03 | 20:30 | |
| 8 07:26 12:26-15:05/159 | 07:05 12:16-15:24/188 | 06:25 12:10-15:26/196 | 06:33 14:20-16:01/101 | 05:50 16:58-19:03/125 | 05:27 17:08-19:02/114 | |
| 16:47 | 17:24 16:05-16:34/29 | 17:58 16:06-16:41/35 | 19:31 17:15-18:51/96 | 20:04 | 20:31 | |
| 9 07:26 12:26-15:06/160 | 07:04 12:16-15:25/189 | 06:23 12:10-15:25/195 | 06:32 14:22-16:00/98 | 05:49 16:57-19:02/125 | 05:27 17:09-19:03/114 | |
| 16:48 | 17:25 16:04-16:36/32 | 17:59 16:09-16:39/30 | 19:33 17:13-18:52/99 | 20:05 | 20:31 | |
| 10 07:25 12:25-15:05/160 | 07:02 12:16-15:25/189 | 06:22 12:10-15:24/194 | 06:30 14:25-15:58/93 | 05:48 16:57-19:02/125 | 05:26 17:10-19:03/113 | |
| 16:49 | 17:26 16:03-16:39/36 | 18:00 16:10-16:36/26 | 19:34 17:11-18:53/102 | 20:06 | 20:32 | |
| 11 07:25 12:25-15:06/161 | 07:01 12:16-15:26/190 | 06:20 12:11-15:25/194 | 06:28 14:29-15:57/88 | 05:46 16:57-19:02/125 | 05:26 17:09-19:02/113 | |
| 16:50 | 17:28 16:02-16:41/39 | 18:01 16:14-16:34/20 | 19:35 17:10-18:54/104 | 20:07 | 20:32 | |
| 12 07:25 12:25-15:07/162 | 07:00 12:15-15:25/190 | 06:18 12:11-15:24/193 | 06:27 14:31-15:55/84 | 05:45 16:58-19:02/124 | 05:26 17:09-19:02/113 | |
| 16:51 | 17:29 16:00-16:42/42 | 18:02 16:18-16:29/11 | 19:36 17:08-18:54/106 | 20:08 | 20:33 | |
| 13 07:25 12:25-15:07/162 | 06:59 12:15-15:26/191 | 06:17 12:11-15:23/192 | 06:25 14:35-15:55/80 | 05:44 16:58-19:02/124 | 05:26 17:10-19:03/113 | |
| 16:52 | 17:30 15:59-16:44/45 | 18:03 | 19:37 17:08-18:56/108 | 20:09 | 20:33 | |
| 14 07:24 12:25-15:09/164 | 06:57 12:14-15:27/193 | 06:15 12:12-15:23/191 | 06:23 14:37-15:53/76 | 05:43 16:58-19:02/124 | 05:26 17:10-19:03/113 | |
| 16:53 | 17:31 15:59-16:45/46 | 18:04 | 19:38 17:06-18:56/110 | 20:10 | 20:34 | |
| 15 07:24 12:24-15:09/165 | 06:56 12:14-15:27/193 | 06:13 12:13-15:22/189 | 06:22 14:40-15:52/72 | 05:42 16:58-19:02/124 | 05:26 17:11-19:03/112 | |
| 16:54 | 17:33 15:59-16:47/48 | 18:05 | 19:39 17:06-18:57/111 | 20:11 | 20:34 | |
| 16 07:24 12:25-15:10/165 | 06:55 12:13-15:27/194 | 06:12 12:13-15:21/188 | 06:20 14:43-15:50/67 | 05:41 17:00-19:03/123 | 05:26 17:11-19:03/112 | |
| 16:55 | 17:34 15:57-16:47/50 | 18:07 | 19:40 17:04-18:57/113 | 20:12 | 20:35 | |
| 17 07:23 12:24-15:10/166 | 06:53 12:13-15:27/194 | 06:10 12:15-15:21/186 | 06:19 14:46-15:48/62 | 05:40 17:00-19:03/123 | 05:26 17:11-19:03/112 | |
| 16:57 | 17:35 15:57-16:48/51 | 18:08 | 19:41 17:04-18:59/115 | 20:13 | 20:35 | |
| 18 07:23 12:24-15:11/167 | 06:52 12:13-15:27/194 | 06:08 12:15-15:20/185 | 06:17 14:48-15:46/58 | 05:39 17:00-19:03/123 | 05:26 17:12-19:04/112 | |
| 16:58 | 17:36 15:56-16:48/52 | 18:09 | 19:42 17:03-18:59/116 | 20:14 | 20:35 | |
| 19 07:22 12:24-15:11/167 | 06:51 12:13-15:28/195 | 06:07 12:16-15:19/183 | 06:16 14:52-15:55/53 | 05:38 17:00-19:02/122 | 05:26 17:12-19:04/112 | |
| 16:59 | 17:38 15:56-16:49/53 | 18:10 | 19:43 17:02-19:00/118 | 20:15 | 20:36 | |
| 20 07:21 12:23-15:12/169 | 06:49 12:13-15:28/195 | 06:05 12:19-15:19/180 | 06:14 14:54-15:42/48 | 05:38 17:00-19:02/122 | 05:26 17:12-19:04/112 | |
| 17:00 | 17:39 15:56-16:50/54 | 18:11 | 19:44 17:01-18:59/118 | 20:16 | 20:36 | |
| 21 07:21 12:23-15:13/170 | 06:48 12:12-15:28/196 | 06:03 12:20-15:18/178 | 06:13 14:57-15:41/44 | 05:37 17:00-19:02/122 | 05:26 17:12-19:04/112 | |
| 17:01 | 17:40 15:56-16:50/54 | 18:12 | 19:45 17:01-19:00/119 | 20:17 | 20:36 | |
| 22 07:20 12:23-15:13/170 | 06:46 12:12-15:28/196 | 06:02 12:22-15:17/175 | 06:11 15:00-15:38/38 | 05:36 17:02-19:03/121 | 05:27 17:12-19:04/112 | |
| 17:03 | 17:41 15:56-16:50/54 | 18:13 | 19:47 17:00-19:00/120 | 20:17 | 20:37 | |
| 23 07:20 12:22-15:14/172 | 06:45 12:11-15:28/197 | 06:00 12:23-15:16/173 | 06:10 15:04-15:35/31 | 05:35 17:02-19:02/120 | 05:27 17:13-19:05/112 | |
| 17:04 | 17:42 15:55-16:50/55 | 18:14 | 19:48 17:00-19:01/121 | 20:18 | 20:37 | |
| 24 07:19 12:23-15:15/172 | 06:43 12:11-15:28/197 | 05:58 12:27-15:16/169 | 06:08 15:08-15:31/23 | 05:34 17:02-19:02/120 | 05:27 17:13-19:05/112 | |
| 17:05 | 17:44 15:56-16:50/54 | 18:15 | 19:49 16:59-19:01/122 | 20:19 | 20:37 | |
| 25 07:18 12:22-15:16/174 | 06:42 12:11-15:28/197 | 05:56 12:29-15:15/166 | 06:07 15:04-15:27/13 | 05:34 17:03-19:02/119 | 05:27 17:13-19:05/112 | |
| 17:06 | 17:45 15:56-16:50/54 | 18:16 | 19:50 16:59-19:01/122 | 20:20 | 20:37 | |
| 26 07:17 12:22-15:17/175 | 06:40 12:11-15:28/197 | 05:55 12:32-15:14/162 | 06:05 16:59-19:02/123 | 05:33 17:03-19:02/119 | 05:28 17:13-19:05/112 | |
| 17:08 | 17:46 15:56-16:50/54 | 18:17 | 19:51 | 20:21 | 20:37 | |
| 27 07:17 12:21-15:17/176 | 06:39 12:10-15:28/198 | 05:53 12:36-15:14/158 | 06:04 16:58-19:01/123 | 05:32 17:03-19:02/119 | 05:28 17:14-19:06/112 | |
| 17:09 | 17:47 15:56-16:49/53 | 18:19 | 19:48-17:25/37 | 20:22 | 20:37 | |
| 28 07:16 12:21-15:18/177 | 06:37 12:11-15:28/197 | 05:51 12:39-15:13/154 | 06:03 16:58-19:02/124 | 05:32 17:04-19:02/118 | 05:29 17:13-19:06/113 | |
| 17:10 | 17:48 15:56-16:48/52 | 18:20 | 19:53 | 20:23 | 20:37 | |
| 29 07:15 12:20-15:18/178 | | 06:50 13:43-16:11/148 | 06:01 16:57-19:01/124 | 05:31 17:04-19:02/118 | 05:29 17:14-19:07/113 | |
| 17:11 | | 19:21 17:38-18:33/55 | 19:54 | 20:24 | 20:37 | |
| 30 07:14 12:20-15:19/179 | | 06:48 13:47-16:11/144 | 06:00 16:57-19:02/125 | 05:30 17:05-19:02/117 | 05:29 17:14-19:06/112 | |
| 17:13 | | 19:22 17:35-18:36/61 | 19:55 | 20:24 | 20:37 | |
| 31 07:13 12:19-15:20/181 | | 06:46 13:51-16:10/139 | | 05:30 17:05-19:02/117 | | |
| 17:14 | | 19:23 17:32-18:38/66 | | 20:25 | | |
| Potential sun hours | 297 | 297 | 369 | 399 | 449 | 453 |
| Sum of minutes with flicker | 5147 | 6423 | 6338 | 5191 | 3798 | 3395 |

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: ShadowWTG: 2 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (2)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | November | December |
|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1 | 05:30 17:14-19:07/113 | 05:54 17:08-19:13/125 | 06:25 14:27-15:56/89 | 06:55 12:51-16:03/192 | 06:30 11:46-14:55/189 | 07:05 12:07-14:49/162 |
| 20:37 | 20:18 | 19:34 17:09-18:53/104 | 18:43 17:02-17:04/2 | 16:56 15:33-16:08/35 | 16:32 | |
| 2 | 05:30 17:14-19:07/113 | 05:55 17:08-19:13/125 | 06:26 14:24-15:57/93 | 06:57 12:50-16:03/193 | 06:31 11:46-14:54/188 | 07:06 12:08-14:49/161 |
| 20:37 | 20:17 | 19:33 17:10-18:52/102 | 18:42 16:54-17:11/17 | 16:55 15:34-16:06/32 | 16:31 | |
| 3 | 05:31 17:14-19:08/114 | 05:56 17:08-19:13/125 | 06:27 14:20-15:58/98 | 06:58 12:49-16:03/194 | 06:32 11:46-14:54/188 | 07:07 12:09-14:49/160 |
| 20:37 | 20:16 | 19:31 17:11-18:50/99 | 18:40 16:50-17:14/24 | 16:54 15:35-16:04/29 | 16:31 | |
| 4 | 05:31 17:14-19:08/114 | 05:57 17:07-19:13/126 | 06:28 14:17-15:58/101 | 06:59 12:48-16:03/195 | 06:34 11:47-14:54/187 | 07:08 12:10-14:49/159 |
| 20:36 | 20:14 | 19:29 17:12-18:48/96 | 18:38 16:47-17:16/29 | 16:53 15:38-16:03/25 | 16:31 | |
| 5 | 05:32 17:14-19:08/114 | 05:58 17:07-19:13/126 | 06:29 14:13-15:59/106 | 07:00 12:47-16:02/195 | 06:35 11:48-14:53/185 | 07:09 12:10-14:49/159 |
| 20:36 | 20:13 | 19:28 17:13-18:47/94 | 18:37 16:44-17:17/33 | 16:51 15:41-16:00/19 | 16:31 | |
| 6 | 05:33 17:14-19:08/114 | 05:59 17:07-19:13/126 | 06:30 14:09-15:59/110 | 07:01 12:46-16:02/196 | 06:36 11:48-14:53/185 | 07:10 12:11-14:49/158 |
| 20:36 | 20:12 | 19:26 17:14-18:45/91 | 18:35 16:41-17:18/37 | 16:50 15:44-15:55/11 | 16:31 | |
| 7 | 05:33 17:14-19:09/115 | 06:00 17:07-19:12/125 | 06:31 14:05-16:00/115 | 07:02 12:46-16:02/196 | 06:37 11:48-14:52/184 | 07:11 12:12-14:49/157 |
| 20:36 | 20:11 | 19:24 17:15-18:43/88 | 18:33 16:39-17:19/40 | 16:49 | 16:31 | |
| 8 | 05:34 17:14-19:09/115 | 06:01 17:07-19:12/125 | 06:32 14:01-16:00/119 | 07:03 12:45-16:02/197 | 06:38 11:49-14:52/183 | 07:12 12:13-14:50/157 |
| 20:35 | 20:10 | 19:23 17:16-18:41/85 | 18:32 16:37-17:20/43 | 16:48 | 16:30 | |
| 9 | 05:34 17:13-19:09/116 | 06:02 17:06-19:12/126 | 06:33 13:57-16:01/124 | 07:04 12:44-16:01/197 | 06:40 11:50-14:52/182 | 07:13 12:14-14:50/156 |
| 20:35 | 20:08 | 19:21 17:18-18:39/81 | 18:30 16:35-17:20/45 | 16:47 | 16:30 | |
| 10 | 05:35 17:14-19:10/116 | 06:03 17:06-19:12/126 | 06:34 13:52-16:01/129 | 07:05 12:44-16:01/197 | 06:41 11:50-14:51/181 | 07:14 12:15-14:50/155 |
| 20:35 | 20:07 | 19:19 17:20-18:36/76 | 18:28 16:33-17:21/48 | 16:46 | 16:30 | |
| 11 | 05:36 17:14-19:10/116 | 06:04 17:06-19:11/125 | 06:35 13:48-16:02/134 | 07:06 12:43-16:01/198 | 06:42 11:51-14:52/181 | 07:15 12:16-14:51/155 |
| 20:34 | 20:06 | 19:18 17:22-18:34/72 | 18:27 16:32-17:21/49 | 16:45 | 16:31 | |
| 12 | 05:37 17:13-19:10/117 | 06:05 17:06-19:11/125 | 06:36 13:44-16:02/138 | 07:07 12:44-16:01/197 | 06:43 11:52-14:51/179 | 07:16 12:15-14:50/155 |
| 20:34 | 20:04 | 19:16 17:24-18:31/67 | 18:25 16:32-17:22/50 | 16:44 | 16:31 | |
| 13 | 05:37 17:13-19:10/117 | 06:06 17:06-19:11/125 | 06:37 13:39-16:02/143 | 07:08 12:44-16:01/197 | 06:44 11:52-14:50/178 | 07:16 12:16-14:51/155 |
| 20:33 | 20:03 | 19:14 17:26-18:28/62 | 18:24 16:30-17:22/52 | 16:43 | 16:31 | |
| 14 | 05:38 17:13-19:11/118 | 06:07 17:06-19:10/124 | 06:38 13:35-16:03/148 | 07:09 12:43-16:00/197 | 06:46 11:53-14:50/177 | 07:17 12:17-14:51/154 |
| 20:33 | 20:02 | 19:12 17:29-18:24/55 | 18:22 16:29-17:22/53 | 16:42 | 16:31 | |
| 15 | 05:39 17:12-19:10/118 | 06:08 17:06-19:10/124 | 06:39 13:29-16:02/153 | 07:10 12:43-16:00/197 | 06:47 11:54-14:50/176 | 07:18 12:18-14:52/154 |
| 20:32 | 20:00 | 19:11 17:31-18:19/48 | 18:20 16:29-17:22/53 | 16:41 | 16:31 | |
| 16 | 05:40 17:12-19:11/119 | 06:09 17:05-19:09/124 | 06:40 13:25-16:02/157 | 07:12 12:43-16:00/197 | 06:48 11:55-14:50/175 | 07:19 12:18-14:51/153 |
| 20:32 | 19:59 | 19:09 17:36-18:15/39 | 18:19 16:28-17:22/54 | 16:40 | 16:31 | |
| 17 | 05:40 17:12-19:11/119 | 06:10 17:04-19:08/124 | 06:41 13:21-16:02/161 | 07:13 12:42-15:59/197 | 06:49 11:55-14:49/174 | 07:19 12:19-14:52/153 |
| 20:31 | 19:57 | 19:07 17:41-18:08/27 | 18:17 16:27-17:21/54 | 16:40 | 16:32 | |
| 18 | 05:41 17:12-19:12/120 | 06:11 15:18-15:34/16 | 06:42 13:17-16:02/165 | 07:14 12:42-15:59/197 | 06:50 11:57-14:49/172 | 07:20 12:20-14:53/153 |
| 20:30 | 19:56 17:04-19:07/123 | 19:06 | 18:16 16:26-17:21/55 | 16:39 | 16:32 | |
| 19 | 05:42 17:12-19:12/120 | 06:12 15:13-15:38/25 | 06:43 13:14-16:02/168 | 07:15 12:43-15:59/196 | 06:52 11:57-14:49/172 | 07:21 12:20-14:53/153 |
| 20:30 | 19:55 17:04-19:06/122 | 19:04 | 18:14 16:27-17:21/54 | 16:38 | 16:32 | |
| 20 | 05:43 17:11-19:12/121 | 06:13 15:08-15:41/33 | 06:44 13:11-16:03/172 | 07:16 12:43-15:59/196 | 06:53 11:58-14:48/170 | 07:21 12:21-14:54/153 |
| 20:29 | 19:53 17:05-19:06/121 | 19:02 | 18:13 16:26-17:21/55 | 16:37 | 16:33 | |
| 21 | 05:44 17:11-19:12/121 | 06:14 15:04-15:43/39 | 06:45 13:08-16:03/175 | 07:17 12:43-15:58/195 | 06:54 11:58-14:48/170 | 07:22 12:21-14:54/153 |
| 20:28 | 19:52 17:05-19:05/120 | 19:00 | 18:11 16:26-17:20/54 | 16:37 | 16:33 | |
| 22 | 05:45 17:11-19:12/120 | 06:15 15:01-15:45/44 | 06:46 13:05-16:03/178 | 07:18 12:42-15:58/196 | 06:55 12:00-14:49/169 | 07:22 12:22-14:55/153 |
| 20:27 | 19:50 17:05-19:04/119 | 18:59 | 18:10 16:26-17:19/53 | 16:36 | 16:34 | |
| 23 | 05:46 17:11-19:13/122 | 06:16 14:57-15:46/49 | 06:47 13:03-16:03/180 | 07:19 12:42-15:57/195 | 06:56 12:01-14:48/167 | 07:23 12:22-14:55/153 |
| 20:26 | 19:49 17:05-19:03/118 | 18:57 | 18:08 16:26-17:18/52 | 16:35 | 16:34 | |
| 24 | 05:46 17:11-19:13/122 | 06:17 14:54-15:48/54 | 06:48 13:00-16:03/183 | 07:21 12:43-15:58/195 | 06:57 12:01-14:48/167 | 07:23 12:23-14:56/153 |
| 20:26 | 19:47 17:05-19:02/117 | 18:55 | 18:07 16:27-17:18/51 | 16:35 | 16:35 | |
| 25 | 05:47 17:11-19:13/122 | 06:18 14:51-15:49/58 | 06:49 12:58-16:03/185 | 06:22 11:43-14:57/194 | 06:59 12:02-14:48/166 | 07:24 12:23-14:56/153 |
| 20:25 | 19:45 17:05-19:01/116 | 18:54 | 17:06 15:27-16:17/50 | 16:34 | 16:35 | |
| 26 | 05:48 17:10-19:13/123 | 06:19 14:47-15:50/63 | 06:50 12:57-16:03/186 | 06:23 11:43-14:56/193 | 07:00 12:03-14:48/165 | 07:24 12:23-14:56/153 |
| 20:24 | 19:44 17:06-19:00/114 | 18:52 | 17:04 15:27-16:16/49 | 16:34 | 16:36 | |
| 27 | 05:49 17:10-19:13/123 | 06:20 14:44-15:52/68 | 06:51 12:55-16:03/188 | 06:24 11:43-14:56/193 | 07:01 12:03-14:48/165 | 07:24 12:24-14:57/153 |
| 20:23 | 19:42 17:06-18:59/113 | 18:50 | 17:03 15:27-16:15/48 | 16:33 | 16:37 | |
| 28 | 05:50 17:09-19:13/124 | 06:21 14:41-15:53/72 | 06:52 12:53-16:03/190 | 06:25 11:44-14:56/192 | 07:02 12:05-14:49/164 | 07:25 12:24-14:58/154 |
| 20:22 | 19:41 17:07-18:58/111 | 18:48 | 17:02 15:29-16:15/46 | 16:33 | 16:37 | |
| 29 | 05:51 17:09-19:13/124 | 06:22 14:38-15:54/76 | 06:53 12:53-16:04/191 | 06:26 11:44-14:56/192 | 07:03 12:06-14:49/163 | 07:25 12:24-14:58/154 |
| 20:21 | 19:39 17:07-18:57/110 | 18:47 | 17:00 15:29-16:13/44 | 16:32 | 16:38 | |
| 30 | 05:52 17:09-19:13/124 | 06:23 14:34-15:55/81 | 06:54 12:52-16:03/191 | 06:28 11:44-14:55/191 | 07:04 12:06-14:49/163 | 07:25 12:24-14:58/154 |
| 20:20 | 19:38 17:08-18:56/108 | 18:45 | 16:59 15:30-16:11/41 | 16:32 | 16:39 | |
| 31 | 05:53 17:08-19:13/125 | 06:24 14:31-15:55/84 | 06:55 12:51-16:04/192 | 06:29 11:45-14:55/190 | 07:05 12:24-14:59/155 | 07:25 12:24-14:59/155 |
| 20:19 | 19:36 17:08-18:54/106 | 18:43 | 16:58 15:31-16:09/38 | 16:40 | 16:40 | |
| Potential sun hours | 460 | 428 | 375 | 345 | 297 | 287 |
| Sum of minutes with flicker | 3680 | 4506 | 5756 | 7420 | 5416 | 4810 |

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: ShadowWTG: 3 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (3)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|-----------------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|
| 1 07:26 | 14:02-14:59/57 | 07:12 14:35-14:52/17 | 06:36 15:39-16:07/28 | 06:45 | 05:59 06:37-10:04/207 | 05:29 06:11-10:22/251 |
| 16:41 | 17:15 15:33-16:10/37 | 17:50 | 19:24 | 19:56 | 20:26 | |
| 2 07:26 | 14:03-15:00/57 | 07:11 14:41-14:46/5 | 06:34 15:42-16:04/22 | 06:43 | 05:57 06:36-10:06/210 | 05:29 06:11-10:23/252 |
| 16:41 | 17:16 15:32-16:11/39 | 17:51 | 19:25 | 19:57 | 20:27 | |
| 3 07:26 | 14:03-15:00/57 | 07:10 15:31-16:12/41 | 06:33 15:46-16:01/15 | 06:41 | 05:56 06:34-10:06/212 | 05:29 06:10-10:22/252 |
| 16:42 | 17:18 | 17:52 | 19:26 | 19:58 | 20:27 | |
| 4 07:26 | 14:04-15:01/57 | 07:09 15:31-16:14/43 | 06:31 | 06:40 | 05:55 06:32-10:07/215 | 05:28 06:11-10:23/252 |
| 16:43 | 17:19 | 17:53 | 19:27 | 19:59 | 20:28 | |
| 5 07:26 | 14:04-15:01/57 | 07:08 15:30-16:15/45 | 06:30 | 06:38 08:08-08:37/29 | 05:53 06:31-10:09/218 | 05:28 06:11-10:23/252 |
| 16:44 | 17:20 | 17:54 | 19:28 | 20:00 | 20:29 | |
| 6 07:26 | 14:05-15:02/57 | 07:07 15:30-16:16/46 | 06:28 | 06:36 07:56-08:49/53 | 05:52 06:30-10:10/220 | 05:27 06:10-10:23/253 |
| 16:45 | 17:21 | 17:55 | 19:29 | 20:01 | 20:30 | |
| 7 07:26 | 14:05-15:02/57 | 07:06 15:29-16:16/47 | 06:26 | 06:35 07:47-08:56/69 | 05:51 06:29-10:11/222 | 05:27 06:10-10:23/253 |
| 16:46 | 17:23 | 17:56 | 19:30 | 20:03 | 20:30 | |
| 8 07:26 | 14:06-15:03/57 | 07:05 15:28-16:16/48 | 06:25 | 06:33 07:42-09:03/81 | 05:50 06:28-10:12/224 | 05:27 06:10-10:23/253 |
| 16:47 | 17:24 | 17:58 | 19:31 | 20:04 | 20:31 | |
| 9 07:26 | 14:07-15:03/56 | 07:04 15:28-16:17/49 | 06:23 | 06:32 07:36-09:08/92 | 05:49 06:27-10:13/226 | 05:27 06:10-10:24/254 |
| 16:48 | 17:25 | 17:59 | 19:33 | 20:05 | 20:31 | |
| 10 07:25 | 14:07-15:03/56 | 07:02 15:28-16:18/50 | 06:22 | 06:30 07:31-09:12/101 | 05:48 06:25-10:13/228 | 05:26 06:10-10:24/254 |
| 16:49 | 17:26 | 18:00 | 19:34 | 20:06 | 20:32 | |
| 11 07:25 | 14:08-15:03/55 | 07:01 15:28-16:18/50 | 06:20 | 06:28 07:27-09:17/110 | 05:46 06:24-10:14/230 | 05:26 06:09-10:23/254 |
| 16:50 | 17:28 | 18:01 | 19:35 | 20:07 | 20:32 | |
| 12 07:25 | 14:09-15:04/55 | 07:00 15:27-16:18/51 | 06:18 | 06:27 07:22-09:21/119 | 05:45 06:23-10:15/232 | 05:26 06:09-10:24/255 |
| 16:51 | 17:29 | 18:02 | 19:36 | 20:08 | 20:33 | |
| 13 07:25 | 14:09-15:04/55 | 06:59 15:27-16:18/51 | 06:17 | 06:25 07:19-09:25/126 | 05:44 06:22-10:15/233 | 05:26 06:10-10:24/254 |
| 16:52 | 15:42-15:47/5 | 17:30 | 19:37 | 20:09 | 20:33 | |
| 14 07:24 | 14:10-15:04/54 | 06:57 15:28-16:19/51 | 06:15 | 06:24 07:15-09:28/133 | 05:43 06:21-10:16/235 | 05:26 06:10-10:24/254 |
| 16:53 | 15:40-15:51/11 | 17:31 | 19:38 | 20:10 | 20:34 | |
| 15 07:24 | 14:10-15:04/54 | 06:56 15:28-16:19/51 | 06:13 | 06:22 07:13-09:32/139 | 05:42 06:20-10:17/237 | 05:26 06:10-10:24/254 |
| 16:55 | 15:38-15:52/14 | 17:33 | 19:05 | 20:11 | 20:34 | |
| 16 07:24 | 14:11-15:04/53 | 06:55 15:28-16:19/51 | 06:12 | 06:20 07:09-09:34/145 | 05:41 06:20-10:18/238 | 05:26 06:10-10:24/254 |
| 16:56 | 15:37-15:54/17 | 17:34 | 19:40 | 20:12 | 20:35 | |
| 17 07:23 | 14:12-15:04/52 | 06:53 15:28-16:19/51 | 06:10 | 06:19 07:07-09:38/151 | 05:40 06:19-10:18/239 | 05:26 06:10-10:24/254 |
| 16:57 | 15:36-15:55/19 | 17:35 | 19:41 | 20:13 | 20:35 | |
| 18 07:23 | 14:13-15:04/51 | 06:52 15:28-16:18/50 | 06:08 | 06:17 07:04-09:40/156 | 05:39 06:18-10:19/241 | 05:26 06:11-10:26/255 |
| 16:58 | 15:36-15:58/22 | 17:36 | 19:42 | 20:14 | 20:35 | |
| 19 07:22 | 14:13-15:04/51 | 06:51 15:29-16:18/49 | 06:07 | 06:16 07:01-09:43/162 | 05:38 06:17-10:19/242 | 05:26 06:11-10:26/255 |
| 16:59 | 15:35-15:59/24 | 17:38 | 19:43 | 20:15 | 20:36 | |
| 20 07:21 | 14:14-15:04/50 | 06:49 15:30-16:18/48 | 06:05 | 06:14 06:58-09:44/166 | 05:38 06:16-10:19/243 | 05:26 06:11-10:26/255 |
| 17:00 | 15:34-16:00/26 | 17:39 | 19:44 | 20:16 | 20:36 | |
| 21 07:21 | 14:16-15:04/48 | 06:48 15:30-16:17/47 | 06:03 | 06:13 06:56-09:47/171 | 05:37 06:15-10:19/244 | 05:27 06:11-10:26/255 |
| 17:02 | 15:34-16:02/28 | 17:40 | 19:45 | 20:17 | 20:36 | |
| 22 07:20 | 14:16-15:03/47 | 06:46 15:31-16:17/46 | 06:02 | 06:11 06:54-09:49/175 | 05:36 06:16-10:20/244 | 05:27 06:11-10:26/255 |
| 17:03 | 15:34-16:03/29 | 17:41 | 19:47 | 20:17 | 20:37 | |
| 23 07:20 | 14:17-15:03/46 | 06:45 15:31-16:16/45 | 06:00 | 06:10 06:52-09:51/179 | 05:35 06:15-10:20/245 | 05:27 06:12-10:27/255 |
| 17:04 | 15:33-16:04/31 | 17:42 | 19:48 | 20:18 | 20:37 | |
| 24 07:19 | 14:19-15:03/44 | 06:43 15:32-16:15/43 | 05:58 | 06:08 06:49-09:53/184 | 05:34 06:14-10:20/246 | 05:27 06:12-10:27/255 |
| 17:05 | 15:34-16:05/31 | 17:44 | 19:49 | 20:19 | 20:37 | |
| 25 07:18 | 14:20-15:02/42 | 06:42 15:33-16:14/41 | 05:57 | 06:07 06:48-09:55/187 | 05:34 06:14-10:21/247 | 05:27 06:12-10:26/254 |
| 17:06 | 15:34-16:06/32 | 17:45 | 19:50 | 20:20 | 20:37 | |
| 26 07:17 | 14:21-15:02/41 | 06:40 15:35-16:13/38 | 05:55 | 06:05 06:46-09:57/191 | 05:33 06:13-10:21/248 | 05:28 06:12-10:26/254 |
| 17:08 | 15:34-16:07/33 | 17:46 | 19:51 | 20:21 | 20:37 | |
| 27 07:17 | 14:23-15:01/38 | 06:39 15:36-16:11/35 | 05:53 | 06:04 06:44-09:58/194 | 05:32 06:12-10:21/249 | 05:28 06:13-10:27/254 |
| 17:09 | 15:33-16:07/34 | 17:47 | 19:52 | 20:22 | 20:37 | |
| 28 07:16 | 14:24-14:59/35 | 06:37 15:37-16:09/32 | 05:51 | 06:03 06:42-10:00/198 | 05:32 06:12-10:22/250 | 05:29 06:13-10:27/254 |
| 17:10 | 15:33-16:08/35 | 17:48 | 19:53 | 20:23 | 20:37 | |
| 29 07:15 | 14:26-14:58/32 | | 06:50 | 06:01 06:41-10:02/201 | 05:31 06:12-10:21/249 | 05:29 06:14-10:28/254 |
| 17:11 | 15:34-16:08/34 | | 19:21 | 19:54 | 20:24 | 20:37 |
| 30 07:14 | 14:29-14:57/28 | | 06:48 | 06:00 06:38-10:02/204 | 05:30 06:12-10:22/250 | 05:29 06:14-10:28/254 |
| 17:13 | 15:34-16:08/34 | | 19:22 | 19:55 | 20:24 | 20:37 |
| 31 07:13 | 14:31-14:55/24 | | 06:46 | | 05:30 06:11-10:22/251 | |
| 17:14 | 15:34-16:08/34 | | 19:23 | | 20:25 | |
| Potential sun hours 297 | | 297 | 369 | 399 | 449 | 453 |
| Sum of minutes with flicker | | 2016 | 1297 | 65 | 3716 | 7275 |
| | | | | | | 7614 |

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: ShadowWTG: 3 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (3)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | November | December |
|-----------------------------|-----------------------|-----------------------|-----------------------|----------------------|----------------------|----------------------|
| 1 | 05:30 06:14-10:28/254 | 05:54 06:34-10:25/231 | 06:25 07:26-09:16/110 | 06:55 | 06:30 14:58-15:47/49 | 07:05 13:50-14:45/55 |
| | 20:37 | 20:18 | 19:34 | 18:43 | 16:56 | 16:32 |
| 2 | 05:30 06:14-10:28/254 | 05:55 06:35-10:24/229 | 06:26 07:30-09:11/101 | 06:57 | 06:31 14:58-15:47/49 | 07:06 13:50-14:46/56 |
| | 20:37 | 20:17 | 19:33 | 18:42 | 16:55 | 16:31 |
| 3 | 05:31 06:15-10:29/254 | 05:56 06:36-10:23/227 | 06:27 07:34-09:06/92 | 06:58 | 06:32 14:58-15:46/48 | 07:07 13:50-14:46/56 |
| | 20:37 | 20:16 | 19:31 | 18:40 | 16:54 | 16:31 |
| 4 | 05:31 06:15-10:29/254 | 05:57 06:37-10:23/226 | 06:28 07:39-09:00/81 | 06:59 | 06:34 14:59-15:46/47 | 07:08 13:50-14:47/57 |
| | 20:37 | 20:14 | 19:29 | 18:38 | 16:53 | 16:31 |
| 5 | 05:32 06:16-10:29/253 | 05:58 06:38-10:22/224 | 06:29 07:44-08:53/69 | 07:00 | 06:35 15:00-15:45/45 | 07:09 13:51-14:47/56 |
| | 20:36 | 20:13 | 19:28 | 18:37 | 16:52 | 16:31 |
| 6 | 05:33 06:16-10:29/253 | 05:59 06:39-10:20/221 | 06:30 07:51-08:45/54 | 07:01 | 06:36 15:00-15:44/44 | 07:10 13:51-14:48/57 |
| | 20:36 | 20:12 | 19:26 | 18:35 | 16:50 | 16:31 |
| 7 | 05:33 06:17-10:29/252 | 06:00 06:40-10:19/219 | 06:31 08:02-08:33/31 | 07:02 | 06:37 15:01-15:43/42 | 07:11 13:51-14:48/57 |
| | 20:36 | 20:11 | 19:24 | 18:33 | 16:49 | 16:31 |
| 8 | 05:34 06:18-10:30/252 | 06:01 06:41-10:18/217 | 06:32 | 07:03 | 06:38 15:02-15:43/41 | 07:12 13:52-14:49/57 |
| | 20:35 | 20:10 | 19:23 | 18:32 | 16:48 | 16:30 |
| 9 | 05:34 06:17-10:30/253 | 06:02 06:42-10:17/215 | 06:33 | 07:04 | 06:40 14:11-14:18/7 | 07:13 13:52-14:49/57 |
| | 20:35 | 20:08 | 19:21 | 18:30 | 16:47 15:03-15:42/39 | 16:30 |
| 10 | 05:35 06:18-10:30/252 | 06:03 06:44-10:15/211 | 06:34 | 07:05 16:23-16:32/9 | 06:41 14:05-14:23/18 | 07:14 13:53-14:50/57 |
| | 20:35 | 20:07 | 19:19 | 18:28 | 16:46 15:04-15:41/37 | 16:30 |
| 11 | 05:36 06:19-10:30/251 | 06:04 06:45-10:14/209 | 06:35 | 07:06 16:17-16:36/19 | 06:42 14:03-14:27/24 | 07:15 13:53-14:50/57 |
| | 20:34 | 20:06 | 19:18 | 18:27 | 16:45 15:06-15:40/34 | 16:31 |
| 12 | 05:37 06:19-10:30/251 | 06:05 06:46-10:12/206 | 06:36 | 07:07 16:15-16:40/25 | 06:43 14:00-14:29/29 | 07:16 13:53-14:50/57 |
| | 20:34 | 20:04 | 19:16 | 18:25 | 16:44 15:06-15:40/34 | 16:31 |
| 13 | 05:37 06:20-10:30/250 | 06:06 06:47-10:11/204 | 06:37 | 07:08 16:12-16:41/29 | 06:44 13:58-14:30/32 | 07:16 13:53-14:51/58 |
| | 20:33 | 20:03 | 19:14 | 18:24 | 16:43 15:06-15:40/34 | 16:31 |
| 14 | 05:38 06:21-10:31/250 | 06:07 06:49-10:09/200 | 06:38 | 07:09 16:10-16:43/33 | 06:46 13:56-14:31/35 | 07:17 13:54-14:51/57 |
| | 20:33 | 20:02 | 19:12 | 18:22 | 16:42 15:05-15:39/34 | 16:31 |
| 15 | 05:39 06:21-10:30/249 | 06:08 06:50-10:07/197 | 06:39 | 07:10 16:07-16:44/37 | 06:47 13:56-14:34/38 | 07:18 13:55-14:52/57 |
| | 20:32 | 20:00 | 19:11 | 18:21 | 16:41 15:06-15:40/34 | 16:31 |
| 16 | 05:40 06:21-10:30/249 | 06:09 06:52-10:05/193 | 06:40 | 07:12 16:06-16:45/39 | 06:48 13:54-14:35/41 | 07:19 13:55-14:52/57 |
| | 20:32 | 19:59 | 19:09 | 18:19 | 16:40 15:07-15:40/33 | 16:31 |
| 17 | 05:40 06:22-10:30/248 | 06:10 06:53-10:03/190 | 06:41 | 07:13 16:04-16:45/41 | 06:49 13:53-14:35/42 | 07:19 13:55-14:53/58 |
| | 20:31 | 19:57 | 19:07 | 18:17 | 16:40 15:07-15:39/32 | 16:32 |
| 18 | 05:41 06:23-10:31/248 | 06:11 06:55-10:01/186 | 06:42 | 07:14 16:03-16:46/43 | 06:50 13:53-14:37/44 | 07:20 13:56-14:53/57 |
| | 20:30 | 19:56 | 19:06 | 18:16 | 16:39 15:08-15:39/31 | 16:32 |
| 19 | 05:42 06:24-10:31/247 | 06:12 06:55-09:58/183 | 06:43 | 07:15 16:02-16:47/45 | 06:52 13:52-14:38/46 | 07:21 13:56-14:53/57 |
| | 20:30 | 19:55 | 19:04 | 18:14 | 16:38 15:08-15:39/31 | 16:32 |
| 20 | 05:43 06:24-10:30/246 | 06:13 06:57-09:56/179 | 06:44 | 07:16 16:01-16:48/47 | 06:53 13:51-14:38/47 | 07:21 13:57-14:54/57 |
| | 20:29 | 19:53 | 19:02 | 18:13 | 16:37 15:09-15:38/29 | 16:33 |
| 21 | 05:44 06:25-10:30/245 | 06:14 06:59-09:53/174 | 06:45 | 07:17 16:00-16:48/48 | 06:54 13:51-14:39/48 | 07:22 13:57-14:54/57 |
| | 20:28 | 19:52 | 19:00 | 18:11 | 16:37 15:09-15:37/28 | 16:33 |
| 22 | 05:45 06:26-10:30/244 | 06:15 07:01-09:51/170 | 06:46 | 07:18 15:59-16:48/49 | 06:55 13:51-14:41/50 | 07:22 13:58-14:55/57 |
| | 20:27 | 19:50 | 18:59 | 18:10 | 16:36 15:11-15:37/26 | 16:34 |
| 23 | 05:46 06:26-10:30/244 | 06:16 07:03-09:48/165 | 06:47 | 07:20 15:58-16:48/50 | 06:56 13:50-14:41/51 | 07:23 13:58-14:55/57 |
| | 20:26 | 19:49 | 18:57 | 18:08 | 16:35 15:12-15:36/24 | 16:34 |
| 24 | 05:46 06:27-10:30/243 | 06:17 07:05-09:45/160 | 06:48 | 07:21 15:58-16:49/51 | 06:57 13:50-14:42/52 | 07:23 13:59-14:56/57 |
| | 20:26 | 19:47 | 18:55 | 18:07 | 16:35 15:13-15:35/22 | 16:35 |
| 25 | 05:47 06:28-10:29/241 | 06:18 07:07-09:42/155 | 06:49 | 06:22 14:58-15:49/51 | 06:59 13:50-14:42/52 | 07:24 13:59-14:56/57 |
| | 20:25 | 19:45 | 18:54 | 17:06 | 16:34 15:14-15:34/20 | 16:35 |
| 26 | 05:48 06:29-10:29/240 | 06:19 07:09-09:39/150 | 06:50 | 06:23 14:57-15:48/51 | 07:00 13:49-14:42/53 | 07:24 13:59-14:57/58 |
| | 20:24 | 19:44 | 18:52 | 17:04 | 16:34 15:15-15:33/18 | 16:36 |
| 27 | 05:49 06:30-10:29/239 | 06:20 07:11-09:36/145 | 06:51 | 06:24 14:57-15:48/51 | 07:01 13:49-14:43/54 | 07:24 14:00-14:58/58 |
| | 20:23 | 19:42 | 18:50 | 17:03 | 16:33 15:17-15:31/14 | 16:37 |
| 28 | 05:50 06:31-10:28/237 | 06:21 07:14-09:32/138 | 06:52 | 06:25 14:57-15:49/52 | 07:02 13:50-14:44/54 | 07:25 14:01-14:58/57 |
| | 20:22 | 19:41 | 18:48 | 17:02 | 16:33 15:20-15:31/11 | 16:37 |
| 29 | 05:51 06:31-10:27/236 | 06:22 07:16-09:29/133 | 06:53 | 06:27 14:57-15:48/51 | 07:03 13:50-14:45/55 | 07:25 14:01-14:58/57 |
| | 20:21 | 19:39 | 18:47 | 17:00 | 16:32 15:22-15:28/6 | 16:38 |
| 30 | 05:52 06:32-10:26/234 | 06:23 07:19-09:25/126 | 06:54 | 06:28 14:57-15:48/51 | 07:04 13:50-14:45/55 | 07:25 14:01-14:59/58 |
| | 20:20 | 19:38 | 18:45 | 16:59 | 16:32 | 16:40 |
| 31 | 05:53 06:33-10:26/233 | 06:24 07:22-09:21/119 | | 06:29 14:57-15:47/50 | | 07:25 14:02-14:59/57 |
| | 20:19 | 19:36 | | 16:58 | | |
| Potential sun hours | 460 | 428 | 375 | 345 | 297 | 287 |
| Sum of minutes with flicker | 7656 | 5802 | 538 | 922 | 1863 | 1767 |

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: ShadowWTG: 4 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (4)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June | |
|----|------------------------------------|------------------|---------------------------------|---------------------------------|------------------|------------------|-----|
| 1 | 07:26 12:01-12:29/28 16:41 | 07:12 17:15 | 06:36 17:49 | 06:45 07:03-07:31/28 19:24 | 05:59 19:56 | 05:29 20:26 | |
| 2 | 07:26 12:02-12:29/27 16:41 | 07:11 17:16 | 06:34 17:51 | 06:43 07:02-07:31/29 19:25 | 05:57 19:57 | 05:29 20:27 | |
| 3 | 07:26 12:02-12:29/27 16:42 | 07:10 17:18 | 06:33 17:52 | 06:41 07:00-07:30/30 19:26 | 05:56 19:58 | 05:29 20:27 | |
| 4 | 07:26 12:03-12:29/26 16:43 | 07:09 17:19 | 06:31 17:53 | 06:40 06:58-07:29/31 19:27 | 05:55 19:59 | 05:28 20:28 | |
| 5 | 07:26 12:03-12:29/26 16:44 | 07:08 17:20 | 06:30 17:54 | 06:38 06:57-07:29/32 19:28 | 05:53 20:00 | 05:28 20:29 | |
| 6 | 07:26 12:04-12:29/25 16:45 | 07:07 17:21 | 06:28 17:55 | 06:36 06:55-07:28/33 19:29 | 05:52 20:01 | 05:27 20:29 | |
| 7 | 07:26 12:04-12:29/25 16:46 | 07:06 17:23 | 06:26 17:56 | 06:35 06:53-07:27/34 19:30 | 05:51 20:03 | 05:27 20:30 | |
| 8 | 07:26 12:05-12:30/25 16:47 | 07:05 17:24 | 06:25 17:58 | 06:33 06:52-07:26/34 19:31 | 05:50 20:04 | 05:27 20:31 | |
| 9 | 07:26 12:06-12:30/24 16:48 | 07:04 17:25 | 06:23 17:59 | 06:32 06:50-07:24/34 19:33 | 05:49 20:05 | 05:27 20:31 | |
| 10 | 07:25 12:05-12:29/24 16:49 | 07:02 17:26 | 06:22 18:00 | 06:30 06:48-07:22/34 19:34 | 05:47 20:06 | 05:26 20:32 | |
| 11 | 07:25 12:06-12:29/23 16:50 | 07:01 17:28 | 06:20 18:01 | 06:28 06:47-07:21/34 19:35 | 05:46 20:07 | 05:26 20:32 | |
| 12 | 07:25 12:07-12:28/21 16:51 | 07:00 17:29 | 06:18 18:02 | 06:27 06:45-07:19/34 19:36 | 05:45 20:08 | 05:26 20:33 | |
| 13 | 07:25 12:06-12:27/21 16:52 | 06:59 17:30 | 06:17 18:03 | 06:25 06:47-07:18/31 19:37 | 05:44 20:09 | 05:26 20:33 | |
| 14 | 07:24 12:07-12:27/20 16:53 | 06:57 17:31 | 06:15 18:04 | 06:23 06:49-07:15/26 19:38 | 05:43 20:10 | 05:26 20:34 | |
| 15 | 07:24 12:07-12:26/19 16:54 | 06:56 17:33 | 06:13 18:05 | 06:22 06:51-07:13/22 19:39 | 05:42 20:11 | 05:26 20:34 | |
| 16 | 07:23 12:08-12:26/18 16:56 | 06:55 17:34 | 06:12 18:07 | 06:20 06:55-07:08/13 19:40 | 05:41 20:12 | 05:26 20:35 | |
| 17 | 07:23 12:08-12:24/16 16:57 | 06:53 17:35 | 06:10 18:08 | 06:19 19:41 | 05:40 20:13 | 05:26 20:35 | |
| 18 | 07:23 12:09-12:23/14 16:58 | 06:52 17:36 | 06:08 18:09 | 06:17 19:42 | 05:39 20:14 | 05:26 20:35 | |
| 19 | 07:22 12:09-12:22/13 16:59 | 06:51 17:38 | 06:07 06:25-06:28/3 18:10 | 06:16 19:43 | 05:38 20:15 | 05:26 20:36 | |
| 20 | 07:21 12:09-12:20/11 17:00 | 06:49 17:39 | 06:05 06:24-06:30/6 18:11 | 06:14 19:44 | 05:38 20:16 | 05:26 20:36 | |
| 21 | 07:21 12:10-12:18/8 17:01 | 06:48 17:40 | 06:03 06:22-06:31/9 18:12 | 06:13 19:45 | 05:37 20:17 | 05:26 20:36 | |
| 22 | 07:20 12:10-12:16/6 17:03 | 06:46 17:41 | 06:02 06:20-06:31/11 18:13 | 06:11 19:46 | 05:36 20:17 | 05:27 20:36 | |
| 23 | 07:20 12:10-12:12/2 17:04 | 06:45 17:42 | 06:00 06:18-06:31/13 18:14 | 06:10 19:48 | 05:35 20:18 | 05:27 20:37 | |
| 24 | 07:19 17:05 | 06:43 17:44 | 05:58 06:17-06:33/16 18:15 | 06:08 19:49 | 05:34 20:19 | 05:27 20:37 | |
| 25 | 07:18 17:06 | 06:42 17:45 | 05:56 06:15-06:33/18 18:16 | 06:07 19:50 | 05:34 20:20 | 05:27 20:37 | |
| 26 | 07:17 17:08 | 06:40 17:46 | 05:55 06:13-06:32/19 18:17 | 06:05 19:51 | 05:33 20:21 | 05:28 20:37 | |
| 27 | 07:17 17:09 | 06:39 17:47 | 05:53 06:12-06:33/21 18:19 | 06:04 19:52 | 05:32 20:22 | 05:28 20:37 | |
| 28 | 07:16 17:10 | 06:37 17:48 | 05:51 06:10-06:33/23 18:20 | 06:03 19:53 | 05:32 20:23 | 05:29 20:37 | |
| 29 | 07:15 17:11 | 06:30 19:21 | 07:08-07:32/24 19:54 | 06:01 20:24 | 05:31 20:24 | 05:29 20:37 | |
| 30 | 07:14 17:13 | 06:48 19:22 | 07:07-07:33/26 19:55 | 06:00 20:24 | 05:30 20:24 | 05:29 20:37 | |
| 31 | 07:13 17:14 | 06:46 19:23 | 07:05-07:32/27 19:55 | | 05:30 20:25 | | |
| | Potential sun hours 297 | | 297 | 369 | 399 | 449 | 453 |
| | Sum of minutes with flicker 449 | | 0 | 216 | 479 | 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: ShadowWTG: 4 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (4)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | November | December | |
|----|-----------------------------|----------------------|----------------------|---------|----------------------|----------|----------------|
| 1 | 05:30 | 05:54 | 06:25 06:46-07:20/34 | 06:55 | 06:30 | 07:05 | 11:48-12:11/23 |
| | 20:37 | 20:18 | 19:34 | 18:43 | 16:56 | 16:32 | |
| 2 | 05:30 | 05:55 | 06:26 06:47-07:21/34 | 06:56 | 06:31 | 07:06 | 11:48-12:12/24 |
| | 20:37 | 20:17 | 19:33 | 18:42 | 16:55 | 16:31 | |
| 3 | 05:31 | 05:56 | 06:27 06:48-07:22/34 | 06:58 | 06:32 | 07:07 | 11:49-12:13/24 |
| | 20:37 | 20:16 | 19:31 | 18:40 | 16:54 | 16:31 | |
| 4 | 05:31 | 05:57 | 06:28 06:49-07:23/34 | 06:59 | 06:34 | 07:08 | 11:49-12:14/25 |
| | 20:36 | 20:14 | 19:29 | 18:38 | 16:53 | 16:31 | |
| 5 | 05:32 | 05:58 | 06:29 06:50-07:24/34 | 07:00 | 06:35 | 07:09 | 11:49-12:14/25 |
| | 20:36 | 20:13 | 19:28 | 18:37 | 16:51 | 16:31 | |
| 6 | 05:33 | 05:59 | 06:30 06:51-07:24/33 | 07:01 | 06:36 | 07:10 | 11:50-12:15/25 |
| | 20:36 | 20:12 | 19:26 | 18:35 | 16:50 | 16:31 | |
| 7 | 05:33 | 06:00 | 06:31 06:52-07:24/32 | 07:02 | 06:37 | 07:11 | 11:50-12:16/26 |
| | 20:36 | 20:11 | 19:24 | 18:33 | 16:49 | 16:31 | |
| 8 | 05:34 | 06:01 | 06:32 06:53-07:24/31 | 07:03 | 06:38 | 07:12 | 11:51-12:17/26 |
| | 20:35 | 20:10 | 19:23 | 18:32 | 16:48 | 16:30 | |
| 9 | 05:34 | 06:02 | 06:33 06:54-07:25/31 | 07:04 | 06:40 | 07:13 | 11:51-12:18/27 |
| | 20:35 | 20:08 | 19:21 | 18:30 | 16:47 | 16:30 | |
| 10 | 05:35 | 06:03 | 06:34 06:55-07:25/30 | 07:05 | 06:41 | 07:14 | 11:52-12:19/27 |
| | 20:35 | 20:07 | 19:19 | 18:28 | 16:46 | 16:30 | |
| 11 | 05:36 | 06:04 | 06:35 06:56-07:24/28 | 07:06 | 06:42 | 07:15 | 11:52-12:20/28 |
| | 20:34 | 20:06 | 19:18 | 18:27 | 16:45 | 16:31 | |
| 12 | 05:37 | 06:05 | 06:36 06:57-07:24/27 | 07:07 | 06:43 | 07:16 | 11:52-12:20/28 |
| | 20:34 | 20:04 | 19:16 | 18:25 | 16:44 | 16:31 | |
| 13 | 05:37 | 06:06 | 06:37 06:58-07:24/26 | 07:08 | 06:44 | 07:16 | 11:53-12:21/28 |
| | 20:33 | 20:03 | 19:14 | 18:24 | 16:43 | 16:31 | |
| 14 | 05:38 | 06:07 | 06:38 06:59-07:24/25 | 07:09 | 06:46 | 07:17 | 11:53-12:22/29 |
| | 20:33 | 20:02 | 19:12 | 18:22 | 16:42 | 16:31 | |
| 15 | 05:39 | 06:08 | 06:39 07:00-07:23/23 | 07:10 | 06:47 | 07:18 | 11:54-12:23/29 |
| | 20:32 | 20:00 | 19:11 | 18:20 | 16:41 | 16:31 | |
| 16 | 05:40 | 06:09 | 06:40 07:00-07:21/21 | 07:12 | 06:48 | 07:19 | 11:54-12:22/28 |
| | 20:32 | 19:59 | 19:09 | 18:19 | 16:40 | 16:31 | |
| 17 | 05:40 | 06:10 | 06:41 07:01-07:21/20 | 07:13 | 06:49 | 07:19 | 11:55-12:23/28 |
| | 20:31 | 19:57 | 19:07 | 18:17 | 16:40 | 16:32 | |
| 18 | 05:41 | 06:11 | 06:42 07:02-07:20/18 | 07:14 | 06:50 | 07:20 | 11:55-12:24/29 |
| | 20:30 | 19:56 | 19:06 | 18:16 | 16:39 | 16:32 | |
| 19 | 05:42 | 06:12 | 06:43 07:03-07:19/16 | 07:15 | 06:52 11:45-11:47/2 | 07:21 | 11:55-12:24/29 |
| | 20:30 | 19:55 | 19:04 | 18:14 | 16:38 | 16:32 | |
| 20 | 05:43 | 06:13 | 06:44 07:04-07:18/14 | 07:16 | 06:53 11:45-11:51/6 | 07:21 | 11:56-12:25/29 |
| | 20:29 | 19:53 | 19:02 | 18:13 | 16:37 | 16:33 | |
| 21 | 05:44 | 06:14 | 06:45 07:05-07:17/12 | 07:17 | 06:54 11:45-11:53/8 | 07:22 | 11:56-12:25/29 |
| | 20:28 | 19:52 | 19:00 | 18:11 | 16:37 | 16:33 | |
| 22 | 05:45 | 06:15 | 06:46 07:06-07:15/9 | 07:18 | 06:55 11:46-11:57/11 | 07:22 | 11:57-12:26/29 |
| | 20:27 | 19:50 | 18:59 | 18:10 | 16:36 | 16:34 | |
| 23 | 05:46 | 06:16 | 06:47 07:07-07:14/7 | 07:19 | 06:56 11:46-11:59/13 | 07:23 | 11:57-12:26/29 |
| | 20:26 | 19:49 | 18:57 | 18:08 | 16:35 | 16:34 | |
| 24 | 05:46 | 06:17 | 06:48 07:08-07:12/4 | 07:21 | 06:57 11:46-12:00/14 | 07:23 | 11:58-12:27/29 |
| | 20:26 | 19:47 | 18:55 | 18:07 | 16:35 | 16:35 | |
| 25 | 05:47 | 06:18 | 06:49 07:09-07:10/1 | 06:22 | 06:59 11:46-12:02/16 | 07:24 | 11:58-12:27/29 |
| | 20:25 | 19:45 | 18:54 | 17:06 | 16:34 | 16:35 | |
| 26 | 05:48 | 06:19 | 06:50 | 06:23 | 07:00 11:46-12:03/17 | 07:24 | 11:59-12:27/28 |
| | 20:24 | 19:44 | 18:52 | 17:04 | 16:34 | 16:36 | |
| 27 | 05:49 | 06:20 06:56-07:10/14 | 06:51 | 06:24 | 07:01 11:46-12:05/19 | 07:24 | 12:00-12:28/28 |
| | 20:23 | 19:42 | 18:50 | 17:03 | 16:33 | 16:37 | |
| 28 | 05:50 | 06:21 06:52-07:14/22 | 06:52 | 06:25 | 07:02 11:47-12:07/20 | 07:25 | 12:00-12:28/28 |
| | 20:22 | 19:41 | 18:48 | 17:02 | 16:33 | 16:37 | |
| 29 | 05:51 | 06:22 06:49-07:16/27 | 06:53 | 06:26 | 07:03 11:48-12:08/20 | 07:25 | 12:00-12:29/29 |
| | 20:21 | 19:39 | 18:47 | 17:00 | 16:32 | 16:38 | |
| 30 | 05:52 | 06:23 06:47-07:18/31 | 06:54 | 06:28 | 07:04 11:48-12:09/21 | 07:25 | 12:01-12:29/28 |
| | 20:20 | 19:38 | 18:45 | 16:59 | 16:32 | 16:39 | |
| 31 | 05:53 | 06:24 06:45-07:19/34 | | 06:29 | | 07:25 | 12:01-12:29/28 |
| | 20:19 | 19:36 | | 16:58 | | 16:40 | |
| | Potential sun hours | 460 | 428 | 375 | 345 | 297 | 287 |
| | Sum of minutes with flicker | 0 | 128 | 578 | 0 | 167 | 851 |

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: ShadowWTG: 5 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (5)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|----|-----------------------------|-----------------------|-------|------------------------|------------------------|------------------------|
| 1 | 07:26 07:12 | 06:36 | | 06:45 | 05:59 06:18-06:42/24 | 05:29 05:51-06:22/31 |
| | 16:41 17:15 | 17:49 | | 19:24 | 19:56 | 20:26 |
| 2 | 07:26 07:11 | 06:34 | | 06:43 | 05:57 06:17-06:41/24 | 05:29 05:51-06:22/31 |
| | 16:41 17:16 | 17:51 | | 19:25 | 19:57 | 20:27 |
| 3 | 07:26 07:10 | 06:33 | | 06:41 | 05:56 06:15-06:39/24 | 05:29 05:50-06:22/32 |
| | 16:42 17:18 | 17:52 | | 19:26 | 19:58 | 20:27 |
| 4 | 07:26 07:09 | 06:31 | | 06:40 | 05:55 06:14-06:38/24 | 05:28 05:50-06:23/33 |
| | 16:43 17:19 | 17:53 | | 19:27 | 19:59 | 20:28 |
| 5 | 07:26 07:08 | 06:30 | | 06:38 | 05:53 06:14-06:37/23 | 05:28 05:50-06:23/33 |
| | 16:44 17:20 | 17:54 | | 19:28 | 20:00 | 20:29 |
| 6 | 07:26 07:07 | 06:28 | | 06:36 | 05:52 06:16-06:35/19 | 05:27 05:49-06:23/34 |
| | 16:45 17:21 | 17:55 | | 19:29 | 20:01 | 20:29 |
| 7 | 07:26 07:06 | 06:26 06:45-06:47/2 | | 06:35 | 05:51 06:18-06:33/15 | 05:27 05:49-06:23/34 |
| | 16:46 17:23 | 17:56 | | 19:30 | 20:02 | 20:30 |
| 8 | 07:26 07:05 | 06:25 06:44-06:47/3 | | 06:33 | 05:50 06:21-06:30/9 | 05:27 05:49-06:23/34 |
| | 16:47 17:24 | 17:58 | | 19:31 | 20:04 | 20:31 |
| 9 | 07:26 07:03 | 06:23 06:42-06:46/4 | | 06:31 | 05:49 | 05:27 05:49-06:24/35 |
| | 16:48 17:25 | 17:59 | | 19:33 | 20:05 | 20:31 |
| 10 | 07:25 07:02 | 06:22 06:40-06:45/5 | | 06:30 | 05:47 | 05:26 05:49-06:24/35 |
| | 16:49 17:26 | 18:00 | | 19:34 | 20:06 | 20:32 |
| 11 | 07:25 07:01 | 06:20 06:39-06:45/6 | | 06:28 | 05:46 | 05:26 05:48-06:23/35 |
| | 16:50 17:28 | 18:01 | | 19:35 | 20:07 | 20:32 |
| 12 | 07:25 07:00 | 06:18 06:37-06:44/7 | | 06:27 | 05:45 | 05:26 05:48-06:24/36 |
| | 16:51 17:29 | 18:02 | | 19:36 | 20:08 | 20:33 |
| 13 | 07:25 06:59 | 06:17 06:35-06:42/7 | | 06:25 | 05:44 06:04-06:06/2 | 05:26 05:48-06:24/36 |
| | 16:52 17:30 | 18:03 | | 19:37 | 20:09 | 20:33 |
| 14 | 07:24 06:57 | 06:15 06:34-06:41/7 | | 06:23 | 05:43 06:03-06:08/5 | 05:26 05:48-06:24/36 |
| | 16:53 17:31 | 18:04 | | 19:38 | 20:10 | 20:34 |
| 15 | 07:24 06:56 | 06:13 06:32-06:39/7 | | 06:22 06:41-06:43/2 | 05:42 06:02-06:10/8 | 05:26 05:48-06:24/36 |
| | 16:54 17:33 | 18:05 | | 19:39 | 20:11 | 20:34 |
| 16 | 07:23 06:55 | 06:12 06:30-06:36/6 | | 06:20 06:39-06:44/5 | 05:41 06:02-06:12/10 | 05:26 05:48-06:25/37 |
| | 16:56 17:34 | 18:07 | | 19:40 | 20:12 | 20:35 |
| 17 | 07:23 06:53 | 06:10 06:29-06:33/4 | | 06:19 06:38-06:45/7 | 05:40 06:01-06:13/12 | 05:26 05:48-06:25/37 |
| | 16:57 17:35 | 18:08 | | 19:41 | 20:13 | 20:35 |
| 18 | 07:23 06:52 | 06:08 | | 06:17 06:36-06:45/9 | 05:39 06:00-06:14/14 | 05:26 05:49-06:26/37 |
| | 16:58 17:36 | 18:09 | | 19:42 | 20:14 | 20:35 |
| 19 | 07:22 06:51 | 06:07 | | 06:16 06:35-06:46/11 | 05:38 05:59-06:15/16 | 05:26 05:49-06:26/37 |
| | 16:59 17:38 | 18:10 | | 19:43 | 20:15 | 20:36 |
| 20 | 07:21 06:49 | 06:05 | | 06:14 06:33-06:46/13 | 05:38 05:58-06:16/18 | 05:26 05:49-06:26/37 |
| | 17:00 17:39 | 18:11 | | 19:44 | 20:16 | 20:36 |
| 21 | 07:21 06:48 | 06:03 | | 06:13 06:32-06:46/14 | 05:37 05:57-06:16/19 | 05:26 05:49-06:26/37 |
| | 17:01 17:40 | 18:12 | | 19:45 | 20:16 | 20:36 |
| 22 | 07:20 06:46 | 06:02 | | 06:11 06:30-06:46/16 | 05:36 05:57-06:18/21 | 05:27 05:49-06:26/37 |
| | 17:03 17:41 | 18:13 | | 19:46 | 20:17 | 20:36 |
| 23 | 07:20 06:45 | 06:00 | | 06:10 06:29-06:46/17 | 05:35 05:56-06:18/22 | 05:27 05:50-06:27/37 |
| | 17:04 17:42 | 18:14 | | 19:48 | 20:18 | 20:37 |
| 24 | 07:19 06:43 | 05:58 | | 06:08 06:27-06:45/18 | 05:34 05:55-06:18/23 | 05:27 05:50-06:27/37 |
| | 17:05 17:44 | 18:15 | | 19:49 | 20:19 | 20:37 |
| 25 | 07:18 06:42 | 05:56 | | 06:07 06:26-06:45/19 | 05:34 05:55-06:19/24 | 05:27 05:50-06:27/37 |
| | 17:06 17:45 | 18:16 | | 19:50 | 20:20 | 20:37 |
| 26 | 07:17 06:40 | 05:55 | | 06:05 06:25-06:45/20 | 05:33 05:54-06:19/25 | 05:28 05:50-06:27/37 |
| | 17:08 17:46 | 18:17 | | 19:51 | 20:21 | 20:37 |
| 27 | 07:17 06:39 | 05:53 | | 06:04 06:23-06:44/21 | 05:32 05:53-06:19/26 | 05:28 05:51-06:27/36 |
| | 17:09 17:47 | 18:19 | | 19:52 | 20:22 | 20:37 |
| 28 | 07:16 06:37 | 05:51 | | 06:03 06:22-06:44/22 | 05:32 05:53-06:20/27 | 05:28 05:51-06:27/36 |
| | 17:10 17:48 | 18:20 | | 19:53 | 20:23 | 20:37 |
| 29 | 07:15 06:36 | 05:50 | | 06:01 06:21-06:44/23 | 05:31 05:52-06:20/28 | 05:29 05:52-06:28/36 |
| | 17:11 17:49 | 18:21 | | 19:54 | 20:24 | 20:37 |
| 30 | 07:14 06:48 | | | 06:00 06:19-06:42/23 | 05:30 05:52-06:21/29 | 05:29 05:52-06:28/36 |
| | 17:13 17:50 | 19:22 | | 19:55 | 20:24 | 20:37 |
| 31 | 07:13 06:46 | | | | 05:30 05:51-06:21/30 | |
| | 17:14 17:51 | 19:23 | | | 20:25 | |
| | Potential sun hours | 297 | 297 | 369 | 399 | 449 |
| | Sum of minutes with flicker | 0 | 0 | 58 | 240 | 521 |
| | | | | | | 1062 |

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: ShadowWTG: 5 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (5)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | November | December |
|----|--|--------------------------------------|--------------------------------|--------------------------------|------------------|------------------|
| 1 | 05:30 05:53-06:29/36 20:37 | 05:54 20:18 | 06:25 19:34 | 06:55 07:16-07:23/7 18:43 | 06:30 16:56 | 07:05 16:32 |
| 2 | 05:30 05:53-06:28/35 20:37 | 05:55 20:17 | 06:26 19:33 | 06:56 07:17-07:23/6 18:42 | 06:31 16:55 | 07:06 16:31 |
| 3 | 05:31 05:54-06:29/35 20:37 | 05:56 20:16 | 06:27 19:31 | 06:58 07:18-07:24/6 18:40 | 06:32 16:54 | 07:07 16:31 |
| 4 | 05:31 05:54-06:29/35 20:36 | 05:57 20:14 | 06:28 19:29 | 06:59 07:19-07:24/5 18:38 | 06:34 16:53 | 07:08 16:31 |
| 5 | 05:32 05:55-06:29/34 20:36 | 05:58 06:30-06:41/11 20:13 | 06:29 19:28 | 07:00 07:20-07:24/4 18:37 | 06:35 16:51 | 07:09 16:31 |
| 6 | 05:33 05:55-06:29/34 20:36 | 05:59 06:27-06:44/17 20:12 | 06:30 19:26 | 07:01 07:21-07:23/2 18:35 | 06:36 16:50 | 07:10 16:31 |
| 7 | 05:33 05:56-06:29/33 20:36 | 06:00 06:25-06:45/20 20:11 | 06:31 19:24 | 07:02 07:22-07:23/1 18:33 | 06:37 16:49 | 07:11 16:30 |
| 8 | 05:34 05:57-06:30/33 20:35 | 06:01 06:23-06:47/24 20:10 | 06:32 19:23 | 07:03 18:32 | 06:38 16:48 | 07:12 16:30 |
| 9 | 05:34 05:57-06:29/32 20:35 | 06:02 06:24-06:48/24 20:08 | 06:33 19:21 | 07:04 18:30 | 06:40 16:47 | 07:13 16:30 |
| 10 | 05:35 05:58-06:30/32 20:35 | 06:03 06:25-06:49/24 20:07 | 06:34 19:19 | 07:05 18:28 | 06:41 16:46 | 07:14 16:30 |
| 11 | 05:36 05:59-06:30/31 20:34 | 06:04 06:26-06:50/24 20:06 | 06:35 19:18 | 07:06 18:27 | 06:42 16:45 | 07:15 16:30 |
| 12 | 05:37 05:59-06:29/30 20:34 | 06:05 06:27-06:51/24 20:04 | 06:36 19:16 | 07:07 18:25 | 06:43 16:44 | 07:16 16:31 |
| 13 | 05:37 06:00-06:30/30 20:33 | 06:06 06:28-06:51/23 20:03 | 06:37 19:14 | 07:08 18:24 | 06:44 16:43 | 07:16 16:31 |
| 14 | 05:38 06:01-06:30/29 20:33 | 06:07 06:29-06:52/23 20:02 | 06:38 19:12 | 07:09 18:22 | 06:46 16:42 | 07:17 16:31 |
| 15 | 05:39 06:01-06:29/28 20:32 | 06:08 06:30-06:52/22 20:00 | 06:39 19:11 | 07:10 18:20 | 06:47 16:41 | 07:18 16:31 |
| 16 | 05:40 06:02-06:29/27 20:31 | 06:09 06:31-06:52/21 19:59 | 06:40 19:09 | 07:12 18:19 | 06:48 16:40 | 07:19 16:31 |
| 17 | 05:40 06:03-06:29/26 20:31 | 06:10 06:32-06:52/20 19:57 | 06:41 19:07 | 07:13 18:17 | 06:49 16:40 | 07:19 16:32 |
| 18 | 05:41 06:04-06:29/25 20:30 | 06:11 06:33-06:52/19 19:56 | 06:42 19:06 | 07:14 18:16 | 06:50 16:39 | 07:20 16:32 |
| 19 | 05:42 06:05-06:29/24 20:29 | 06:12 06:33-06:51/18 19:54 | 06:43 19:04 | 07:15 18:14 | 06:52 16:38 | 07:21 16:32 |
| 20 | 05:43 06:05-06:28/23 20:29 | 06:13 06:34-06:51/17 19:53 | 06:44 19:02 | 07:16 18:13 | 06:53 16:37 | 07:21 16:33 |
| 21 | 05:44 06:06-06:27/21 20:28 | 06:14 06:35-06:50/15 19:52 | 06:45 19:00 | 07:17 18:11 | 06:54 16:37 | 07:22 16:33 |
| 22 | 05:45 06:07-06:27/20 20:27 | 06:15 06:36-06:50/14 19:50 | 06:46 18:59 | 07:18 18:10 | 06:55 16:36 | 07:22 16:34 |
| 23 | 05:46 06:08-06:27/19 20:26 | 06:16 06:37-06:49/12 19:49 | 06:47 18:57 | 07:19 18:08 | 06:56 16:35 | 07:23 16:34 |
| 24 | 05:46 06:09-06:26/17 20:26 | 06:17 06:38-06:49/11 19:47 | 06:48 18:55 | 07:21 18:07 | 06:57 16:35 | 07:23 16:35 |
| 25 | 05:47 06:10-06:25/15 20:25 | 06:18 06:39-06:48/9 19:45 | 06:49 18:54 | 07:22 17:06 | 06:59 16:34 | 07:24 16:35 |
| 26 | 05:48 06:11-06:25/14 20:24 | 06:19 06:40-06:47/7 19:44 | 06:50 07:10-07:13/3 18:52 | 07:23 17:04 | 07:00 16:34 | 07:24 16:36 |
| 27 | 05:49 06:12-06:24/12 20:23 | 06:20 06:41-06:46/5 19:42 | 06:51 07:11-07:17/6 18:50 | 07:24 17:03 | 07:01 16:33 | 07:24 16:37 |
| 28 | 05:50 06:12-06:21/9 20:22 | 06:21 06:42-06:44/2 19:41 | 06:52 07:12-07:19/7 18:48 | 07:25 17:01 | 07:02 16:33 | 07:25 16:37 |
| 29 | 05:51 06:13-06:20/7 20:21 | 06:22 06:53 07:14-07:21/7 19:39 | 06:54 07:15-07:22/7 18:47 | 07:26 17:00 | 07:03 16:32 | 07:25 16:38 |
| 30 | 05:52 06:14-06:18/4 20:20 | 06:23 06:54 07:15-07:22/7 19:38 | 06:28 18:45 | 07:28 16:59 | 07:04 16:32 | 07:25 16:39 |
| 31 | 05:53 20:19 | 06:24 19:36 | 06:29 16:58 | 07:29 16:40 | 07:25 16:40 | |
| | Potential sun hours Sum of minutes with flicker | 460 750 | 406 428 | 375 375 | 345 345 | 297 287 |
| | | | | 30 | 31 | 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: ShadowWTG: 6 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (6)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|----|--|------------------|------------------|------------------|---------------------------------|---------------------------------|
| 1 | 07:26 15:30-15:56/26 16:41 | 07:12 17:15 | 06:36 17:50 | 06:45 19:24 | 05:59 19:56 | 05:29 18:42-19:43/61 20:26 |
| 2 | 07:26 15:31-15:56/25 16:42 | 07:11 17:16 | 06:34 17:51 | 06:43 19:25 | 05:57 19:57 | 05:29 18:42-19:44/62 20:27 |
| 3 | 07:26 15:31-15:57/26 16:42 | 07:10 17:18 | 06:33 17:52 | 06:41 19:26 | 05:56 19:58 | 05:29 18:41-19:44/63 20:27 |
| 4 | 07:26 15:32-15:57/25 16:43 | 07:09 17:19 | 06:31 17:53 | 06:40 19:27 | 05:55 19:59 | 05:28 18:42-19:45/63 20:28 |
| 5 | 07:26 15:32-15:58/26 16:44 | 07:08 17:20 | 06:30 17:54 | 06:38 19:28 | 05:53 20:00 | 05:28 18:42-19:46/64 20:29 |
| 6 | 07:26 15:33-15:58/25 16:45 | 07:07 17:21 | 06:28 17:55 | 06:36 19:29 | 05:52 20:01 | 05:27 18:41-19:46/65 20:30 |
| 7 | 07:26 15:34-15:58/24 16:46 | 07:06 17:23 | 06:26 17:56 | 06:35 19:30 | 05:51 20:03 | 05:27 18:41-19:46/65 20:30 |
| 8 | 07:26 15:35-15:59/24 16:47 | 07:05 17:24 | 06:25 17:58 | 06:33 19:32 | 05:50 20:04 | 05:27 18:41-19:47/66 20:31 |
| 9 | 07:26 15:36-15:59/23 16:48 | 07:04 17:25 | 06:23 17:59 | 06:32 19:33 | 05:49 20:05 | 05:27 18:42-19:48/66 20:31 |
| 10 | 07:25 15:36-15:59/23 16:49 | 07:02 17:26 | 06:22 18:00 | 06:30 19:34 | 05:48 20:06 | 05:26 18:42-19:48/66 20:32 |
| 11 | 07:25 15:37-15:59/22 16:50 | 07:01 17:28 | 06:20 18:01 | 06:28 19:35 | 05:46 20:07 | 05:26 18:41-19:48/67 20:32 |
| 12 | 07:25 15:38-16:00/22 16:51 | 07:00 17:29 | 06:18 18:02 | 06:27 19:36 | 05:45 20:08 | 05:26 18:41-19:48/67 20:33 |
| 13 | 07:25 15:39-15:59/20 16:52 | 06:59 17:30 | 06:17 18:03 | 06:25 19:37 | 05:44 19:02-19:19/17 20:09 | 05:26 18:41-19:49/68 20:33 |
| 14 | 07:24 15:40-15:59/19 16:53 | 06:57 17:31 | 06:15 18:04 | 06:24 19:38 | 05:43 18:58-19:22/24 20:10 | 05:26 18:41-19:49/68 20:34 |
| 15 | 07:24 15:41-15:58/17 16:55 | 06:56 17:33 | 06:13 18:05 | 06:22 19:39 | 05:42 18:55-19:25/30 20:11 | 05:26 18:42-19:50/68 20:34 |
| 16 | 07:24 15:43-15:58/15 16:56 | 06:55 17:34 | 06:12 18:07 | 06:20 19:40 | 05:41 18:54-19:28/34 20:12 | 05:26 18:42-19:50/68 20:35 |
| 17 | 07:23 15:44-15:57/13 16:57 | 06:53 17:35 | 06:10 18:08 | 06:19 19:41 | 05:40 18:53-19:29/36 20:13 | 05:26 18:42-19:50/68 20:35 |
| 18 | 07:23 15:47-15:56/9 16:58 | 06:52 17:36 | 06:08 18:09 | 06:17 19:42 | 05:39 18:51-19:31/40 20:14 | 05:26 18:43-19:51/68 20:35 |
| 19 | 07:22 15:50-15:53/3 16:59 | 06:51 17:38 | 06:07 18:10 | 06:16 19:43 | 05:38 18:50-19:32/42 20:15 | 05:26 18:43-19:51/68 20:36 |
| 20 | 07:21 17:00 | 06:49 17:39 | 06:05 18:11 | 06:14 19:44 | 05:38 18:48-19:33/45 20:16 | 05:26 18:43-19:51/68 20:36 |
| 21 | 07:21 17:02 | 06:48 17:40 | 06:03 18:12 | 06:13 19:45 | 05:37 18:47-19:34/47 20:17 | 05:27 18:43-19:52/69 20:36 |
| 22 | 07:20 17:03 | 06:46 17:41 | 06:02 18:13 | 06:11 19:47 | 05:36 18:47-19:35/48 20:17 | 05:27 18:43-19:52/69 20:37 |
| 23 | 07:20 17:04 | 06:45 17:42 | 06:00 18:14 | 06:10 19:48 | 05:35 18:46-19:36/50 20:18 | 05:27 18:44-19:52/68 20:37 |
| 24 | 07:19 17:05 | 06:43 17:44 | 05:58 18:15 | 06:08 19:49 | 05:34 18:45-19:36/51 20:19 | 05:27 18:44-19:52/68 20:37 |
| 25 | 07:18 17:06 | 06:42 17:45 | 05:57 18:16 | 06:07 19:50 | 05:34 18:45-19:38/53 20:20 | 05:28 18:44-19:52/68 20:37 |
| 26 | 07:17 17:08 | 06:40 17:46 | 05:55 18:18 | 06:05 19:51 | 05:33 18:44-19:38/54 20:21 | 05:28 18:44-19:52/68 20:37 |
| 27 | 07:17 17:09 | 06:39 17:47 | 05:53 18:19 | 06:04 19:52 | 05:32 18:43-19:39/56 20:22 | 05:28 18:45-19:53/68 20:37 |
| 28 | 07:16 17:10 | 06:37 17:48 | 05:51 18:20 | 06:03 19:53 | 05:32 18:43-19:40/57 20:23 | 05:29 18:45-19:52/67 20:37 |
| 29 | 07:15 17:11 | 06:35 19:21 | 06:01 19:54 | 05:31 20:24 | 05:30 18:42-19:40/58 20:24 | 05:29 18:45-19:53/68 20:37 |
| 30 | 07:14 17:13 | 06:48 19:22 | 06:00 19:55 | 05:31 20:24 | 05:31 18:42-19:41/59 20:25 | 05:29 18:45-19:53/68 20:37 |
| 31 | 07:13 17:14 | 06:46 19:23 | 06:46 19:23 | 05:30 20:25 | 05:30 18:42-19:41/59 449 | 05:29 18:42-19:41/59 453 |
| | Potential sun hours Sum of minutes with flicker | 297 387 | 0 0 | 0 0 | 860 2000 | 453 2000 |

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: ShadowWTG: 6 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (6)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | November | December |
|----|------------------------------------|------------------|------------------|------------------|------------------|---------------------------------|
| 1 | 05:30 18:46-19:53/67 20:37 | 05:54 20:18 | 06:25 19:34 | 06:55 18:43 | 06:30 16:56 | 07:05 15:19-15:41/22 16:32 |
| 2 | 05:30 18:46-19:53/67 20:37 | 05:55 20:17 | 06:26 19:33 | 06:57 18:42 | 06:31 16:55 | 07:06 15:19-15:42/23 16:31 |
| 3 | 05:31 18:47-19:53/66 20:37 | 05:56 20:16 | 06:27 19:31 | 06:58 18:40 | 06:32 16:54 | 07:07 15:19-15:42/23 16:31 |
| 4 | 05:31 18:47-19:52/65 20:37 | 05:57 20:14 | 06:28 19:29 | 06:59 18:38 | 06:34 16:53 | 07:08 15:19-15:43/24 16:31 |
| 5 | 05:32 18:47-19:53/66 20:36 | 05:58 20:13 | 06:29 19:28 | 07:00 18:37 | 06:35 16:52 | 07:09 15:19-15:43/24 16:31 |
| 6 | 05:33 18:47-19:52/65 20:36 | 05:59 20:12 | 06:30 19:26 | 07:01 18:35 | 06:36 16:50 | 07:10 15:19-15:44/25 16:31 |
| 7 | 05:33 18:48-19:52/64 20:36 | 06:00 20:11 | 06:31 19:24 | 07:02 18:33 | 06:37 16:49 | 07:11 15:19-15:45/26 16:31 |
| 8 | 05:34 18:49-19:52/63 20:35 | 06:01 20:10 | 06:32 19:23 | 07:03 18:32 | 06:38 16:48 | 07:12 15:20-15:45/25 16:30 |
| 9 | 05:34 18:48-19:51/63 20:35 | 06:02 20:08 | 06:33 19:21 | 07:04 18:30 | 06:40 16:47 | 07:13 15:20-15:46/26 16:30 |
| 10 | 05:35 18:49-19:51/62 20:35 | 06:03 20:07 | 06:34 19:19 | 07:05 18:28 | 06:41 16:46 | 07:14 15:21-15:46/25 16:31 |
| 11 | 05:36 18:50-19:51/61 20:34 | 06:04 20:06 | 06:35 19:18 | 07:06 18:27 | 06:42 16:45 | 07:15 15:21-15:47/26 16:31 |
| 12 | 05:37 18:50-19:50/60 20:34 | 06:05 20:04 | 06:36 19:16 | 07:07 18:25 | 06:43 16:44 | 07:16 15:21-15:46/25 16:31 |
| 13 | 05:37 18:51-19:50/59 20:33 | 06:06 20:03 | 06:37 19:14 | 07:08 18:24 | 06:45 16:43 | 07:16 15:21-15:47/26 16:31 |
| 14 | 05:38 18:51-19:49/58 20:33 | 06:07 20:02 | 06:38 19:13 | 07:09 18:22 | 06:46 16:42 | 07:17 15:22-15:48/26 16:31 |
| 15 | 05:39 18:51-19:48/57 20:32 | 06:08 20:00 | 06:39 19:11 | 07:10 18:21 | 06:47 16:41 | 07:18 15:23-15:48/25 16:31 |
| 16 | 05:40 18:52-19:48/56 20:32 | 06:09 19:59 | 06:40 19:09 | 07:12 18:19 | 06:48 16:40 | 07:19 15:22-15:48/26 16:31 |
| 17 | 05:40 18:53-19:48/55 20:31 | 06:10 19:57 | 06:41 19:07 | 07:13 18:17 | 06:49 16:40 | 07:19 15:23-15:49/26 16:32 |
| 18 | 05:41 18:54-19:48/54 20:30 | 06:11 19:56 | 06:42 19:06 | 07:14 18:16 | 06:50 16:39 | 07:20 15:24-15:50/26 16:32 |
| 19 | 05:42 18:55-19:47/52 20:30 | 06:12 19:55 | 06:43 19:04 | 07:15 18:14 | 06:52 16:38 | 07:21 15:24-15:50/26 16:32 |
| 20 | 05:43 18:55-19:46/51 20:29 | 06:13 19:53 | 06:44 19:02 | 07:16 18:13 | 06:53 16:37 | 07:21 15:25-15:51/26 16:33 |
| 21 | 05:44 18:56-19:45/49 20:28 | 06:14 19:52 | 06:45 19:00 | 07:17 18:11 | 06:54 16:37 | 07:22 15:25-15:50/25 16:33 |
| 22 | 05:45 18:57-19:45/48 20:27 | 06:15 19:50 | 06:46 18:59 | 07:18 18:10 | 06:55 16:36 | 07:22 15:26-15:51/25 16:34 |
| 23 | 05:46 18:58-19:44/46 20:26 | 06:16 19:49 | 06:47 18:57 | 07:20 18:09 | 06:56 16:35 | 07:23 15:26-15:52/26 16:34 |
| 24 | 05:46 18:59-19:43/44 20:26 | 06:17 19:47 | 06:48 18:55 | 07:21 18:07 | 06:58 16:35 | 07:23 15:27-15:53/26 16:35 |
| 25 | 05:47 19:01-19:42/41 20:25 | 06:18 19:45 | 06:49 18:54 | 07:22 17:06 | 06:59 16:34 | 07:24 15:27-15:53/26 16:35 |
| 26 | 05:48 19:02-19:40/38 20:24 | 06:19 19:44 | 06:50 18:52 | 07:23 17:04 | 06:23 16:34 | 07:24 15:27-15:53/26 16:36 |
| 27 | 05:49 19:04-19:39/35 20:23 | 06:20 19:42 | 06:51 18:50 | 07:24 17:03 | 06:24 16:33 | 07:24 15:28-15:54/26 16:37 |
| 28 | 05:50 19:05-19:36/31 20:22 | 06:21 19:41 | 06:52 18:48 | 07:25 17:02 | 06:25 16:33 | 07:25 15:29-15:54/25 16:37 |
| 29 | 05:51 19:07-19:34/27 20:21 | 06:22 19:39 | 06:53 18:47 | 07:26 17:00 | 06:27 16:32 | 07:25 15:29-15:55/26 16:38 |
| 30 | 05:52 19:10-19:31/21 20:20 | 06:23 19:38 | 06:54 18:45 | 07:28 16:59 | 06:28 16:32 | 07:25 15:29-15:55/26 16:39 |
| 31 | 05:53 19:14-19:27/13 20:19 | 06:24 19:36 | | 06:29 16:58 | | 07:25 15:30-15:55/25 16:40 |
| | Potential sun hours 460 | 1604 428 | 0 375 | 0 345 | 0 297 | 783 287 |
| | Sum of minutes with flicker 117 | 0 | 0 | 0 | 117 | 783 |

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: ShadowWTG: 7 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (7)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|----|--|------------------|------------------|----------------------------------|----------------------------------|----------------------------------|
| 1 | 07:26 08:10-09:19/69 16:41 | 07:12 17:15 | 06:36 17:50 | 06:45 19:24 | 05:59 06:30-08:54/144 19:56 | 05:29 06:10-09:07/177 20:26 |
| 2 | 07:26 08:10-09:19/69 16:41 | 07:11 17:16 | 06:34 17:51 | 06:43 19:25 | 05:57 06:29-08:55/146 19:57 | 05:29 06:10-09:08/178 20:27 |
| 3 | 07:26 08:11-09:19/68 16:42 | 07:10 17:18 | 06:33 17:52 | 06:41 19:26 | 05:56 06:27-08:55/148 19:58 | 05:29 06:10-09:08/178 20:27 |
| 4 | 07:26 08:12-09:19/67 16:43 | 07:09 17:19 | 06:31 17:53 | 06:40 19:27 | 05:55 06:26-08:56/150 19:59 | 05:28 06:10-09:08/178 20:28 |
| 5 | 07:26 08:13-09:19/66 16:44 | 07:08 17:20 | 06:30 17:54 | 06:38 19:28 | 05:53 06:25-08:57/152 20:00 | 05:28 06:10-09:09/179 20:29 |
| 6 | 07:26 08:14-09:20/66 16:45 | 07:07 17:21 | 06:28 17:55 | 06:36 19:29 | 05:52 06:24-08:58/154 20:01 | 05:27 06:10-09:08/178 20:29 |
| 7 | 07:26 08:15-09:20/65 16:46 | 07:06 17:23 | 06:26 17:56 | 06:35 19:30 | 05:51 06:23-08:59/156 20:03 | 05:27 06:10-09:08/178 20:30 |
| 8 | 07:26 08:16-09:20/64 16:47 | 07:05 17:24 | 06:25 17:58 | 06:33 19:31 | 05:50 06:22-09:00/158 20:04 | 05:27 06:10-09:09/179 20:31 |
| 9 | 07:26 08:17-09:20/63 16:48 | 07:04 17:25 | 06:23 17:59 | 06:32 19:33 | 05:49 06:21-09:00/159 20:05 | 05:27 06:10-09:09/179 20:31 |
| 10 | 07:25 08:18-09:19/61 16:49 | 07:02 17:26 | 06:22 18:00 | 06:30 19:34 | 05:48 06:19-09:00/161 20:06 | 05:26 06:10-09:10/180 20:32 |
| 11 | 07:25 08:19-09:18/59 16:50 | 07:01 17:28 | 06:20 18:01 | 06:28 07:22-08:09/47 19:35 | 05:46 06:19-09:01/162 20:07 | 05:26 06:10-09:09/179 20:32 |
| 12 | 07:25 08:21-09:18/57 16:51 | 07:00 17:29 | 06:18 18:02 | 06:27 07:16-08:14/58 19:36 | 05:45 06:18-09:01/163 20:08 | 05:26 06:10-09:09/179 20:33 |
| 13 | 07:25 08:21-09:17/56 16:52 | 06:59 17:30 | 06:17 18:03 | 06:25 07:12-08:19/67 19:37 | 05:44 06:17-09:01/164 20:09 | 05:26 06:10-09:09/179 20:33 |
| 14 | 07:24 08:23-09:17/54 16:53 | 06:57 17:31 | 06:15 18:04 | 06:24 07:07-08:22/75 19:38 | 05:43 06:16-09:02/166 20:10 | 05:26 06:10-09:10/180 20:34 |
| 15 | 07:24 08:24-09:16/52 16:55 | 06:56 17:33 | 06:13 18:05 | 06:22 07:04-08:26/82 19:39 | 05:42 06:17-09:03/166 20:11 | 05:26 06:10-09:10/180 20:34 |
| 16 | 07:24 08:26-09:15/49 16:56 | 06:55 17:34 | 06:12 18:07 | 06:20 07:00-08:29/89 19:40 | 05:41 06:16-09:04/168 20:12 | 05:26 06:10-09:10/180 20:35 |
| 17 | 07:23 08:27-09:14/47 16:57 | 06:53 17:35 | 06:10 18:08 | 06:20 07:22-08:09/47 19:41 | 05:40 06:15-09:04/169 20:13 | 05:26 06:10-09:10/180 20:35 |
| 18 | 07:23 08:29-09:13/44 16:58 | 06:52 17:36 | 06:08 18:09 | 06:17 06:54-08:34/100 19:42 | 05:39 06:15-09:04/169 20:14 | 05:26 06:11-09:11/180 20:35 |
| 19 | 07:22 08:31-09:11/40 16:59 | 06:51 17:38 | 06:07 18:10 | 06:16 06:52-08:37/105 19:43 | 05:38 06:14-09:04/170 20:15 | 05:26 06:11-09:11/180 20:36 |
| 20 | 07:21 08:32-09:09/37 17:00 | 06:49 17:39 | 06:05 18:11 | 06:14 06:49-08:38/109 19:44 | 05:38 06:13-09:04/171 20:16 | 05:26 06:11-09:11/180 20:36 |
| 21 | 07:21 08:35-09:08/33 17:02 | 06:48 17:40 | 06:03 18:12 | 06:13 06:47-08:41/114 19:45 | 05:37 06:13-09:04/171 20:17 | 05:27 06:11-09:11/180 20:36 |
| 22 | 07:20 08:38-09:05/27 17:03 | 06:46 17:41 | 06:02 18:13 | 06:11 06:45-08:42/117 19:47 | 05:36 06:13-09:05/172 20:17 | 05:27 06:11-09:11/180 20:36 |
| 23 | 07:20 08:42-09:02/20 17:04 | 06:45 17:42 | 06:00 18:14 | 06:10 06:43-08:44/121 19:48 | 05:35 06:12-09:05/173 20:18 | 05:27 06:12-09:12/180 20:37 |
| 24 | 07:19 08:49-08:56/7 17:05 | 06:43 17:44 | 05:58 18:15 | 06:08 06:41-08:45/124 19:49 | 05:34 06:12-09:05/173 20:19 | 05:27 06:12-09:12/180 20:37 |
| 25 | 07:18 17:06 | 06:42 17:45 | 05:57 18:16 | 06:07 06:39-08:47/128 19:50 | 05:34 06:12-09:06/174 20:20 | 05:27 06:12-09:12/180 20:37 |
| 26 | 07:17 17:08 | 06:40 17:46 | 05:55 18:17 | 06:05 06:38-08:49/131 19:51 | 05:33 06:11-09:06/175 20:21 | 05:28 06:12-09:12/180 20:37 |
| 27 | 07:17 17:09 | 06:39 17:47 | 05:53 18:19 | 06:04 06:35-08:49/134 19:52 | 05:32 06:11-09:06/175 20:22 | 05:28 06:13-09:13/180 20:37 |
| 28 | 07:16 17:10 | 06:37 17:48 | 05:51 18:20 | 06:03 06:34-08:51/137 19:53 | 05:32 06:11-09:07/176 20:23 | 05:29 06:13-09:13/180 20:37 |
| 29 | 07:15 17:11 | 06:35 17:49 | 05:50 19:21 | 06:02 06:33-08:52/139 19:54 | 05:31 06:10-09:06/176 20:24 | 05:29 06:14-09:14/180 20:37 |
| 30 | 07:14 17:13 | 06:34 17:50 | 05:48 19:22 | 06:00 06:31-08:53/142 19:55 | 05:30 06:11-09:07/176 20:24 | 05:29 06:14-09:13/179 20:37 |
| 31 | 07:13 17:14 | 06:46 19:23 | — 399 | — 449 | 05:30 06:10-09:07/177 453 | — 453 |
| | Potential sun hours Sum of minutes with flicker | 297 | 297 | 0 | 2144 | 5114 |
| | | | | 2144 | | 5380 |

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: ShadowWTG: 7 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (7)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | November | December |
|----|----------------------------------|----------------------------------|---------------------------------|--------------------------|---|---------------------------------|
| 1 | 05:30 06:15-09:14/179 20:37 | 05:54 06:29-09:11/162 20:18 | 06:25 07:21-08:08/47 19:34 | 06:55 18:43 18:42 | 06:30 16:56 16:55 | 07:05 08:01-09:00/59 16:32 |
| 2 | 05:30 06:14-09:14/180 20:37 | 05:55 06:30-09:11/161 20:17 | 06:26 07:29-08:00/31 19:33 | 06:57 18:42 18:42 | 06:31 16:55 16:55 | 07:06 08:01-09:02/61 16:31 |
| 3 | 05:31 06:15-09:14/179 20:37 | 05:56 06:30-09:10/160 20:16 | 06:27 19:31 19:31 | 06:58 18:40 18:40 | 06:32 16:54 16:54 | 07:07 08:00-09:03/63 16:31 |
| 4 | 05:31 06:15-09:14/179 20:36 | 05:57 06:31-09:10/159 20:14 | 06:28 19:29 19:29 | 06:59 18:38 18:38 | 06:34 16:53 16:53 | 07:08 08:00-09:04/64 16:31 |
| 5 | 05:32 06:16-09:15/179 20:36 | 05:58 06:32-09:09/157 20:13 | 06:29 19:28 19:28 | 07:00 18:37 18:37 | 06:35 16:52 16:52 | 07:09 08:00-09:05/65 16:31 |
| 6 | 05:33 06:16-09:14/178 20:36 | 05:59 06:33-09:08/155 20:12 | 06:30 19:26 19:26 | 07:01 18:35 18:35 | 06:36 16:50 16:50 | 07:10 08:00-09:06/66 16:31 |
| 7 | 05:33 06:16-09:15/179 20:36 | 06:00 06:34-09:07/153 20:11 | 06:31 19:24 19:24 | 07:02 18:33 18:33 | 06:37 16:49 16:49 | 07:11 08:00-09:06/66 16:31 |
| 8 | 05:34 06:17-09:15/178 20:35 | 06:01 06:35-09:07/152 20:10 | 06:32 19:23 19:23 | 07:03 18:32 18:32 | 06:38 16:48 16:48 | 07:12 08:00-09:07/67 16:30 |
| 9 | 05:34 06:17-09:15/178 20:35 | 06:02 06:36-09:06/150 20:08 | 06:33 19:21 19:21 | 07:04 18:30 18:30 | 06:40 16:47 16:47 | 07:13 08:00-09:08/68 16:30 |
| 10 | 05:35 06:18-09:15/177 20:35 | 06:03 06:37-09:05/148 20:07 | 06:34 19:19 19:19 | 07:05 18:28 18:28 | 06:41 16:46 16:46 | 07:14 08:00-09:09/69 16:30 |
| 11 | 05:36 06:18-09:16/178 20:34 | 06:04 06:38-09:03/145 20:06 | 06:35 19:18 19:18 | 07:06 18:27 18:27 | 06:42 16:45 16:45 | 07:15 08:01-09:10/69 16:31 |
| 12 | 05:37 06:18-09:15/177 20:34 | 06:05 06:39-09:02/143 20:04 | 06:36 19:16 19:16 | 07:07 18:25 18:25 | 06:43 16:44 16:44 | 07:16 08:00-09:10/70 16:31 |
| 13 | 05:37 06:19-09:15/176 20:33 | 06:06 06:40-09:01/141 20:03 | 06:37 19:14 19:14 | 07:08 18:24 18:24 | 06:44 16:43 16:43 | 07:16 08:00-09:11/71 16:31 |
| 14 | 05:38 06:19-09:16/177 20:33 | 06:07 06:41-09:00/139 20:02 | 06:38 19:12 19:12 | 07:09 18:22 18:22 | 06:46 16:42 16:42 | 07:17 08:01-09:12/71 16:31 |
| 15 | 05:39 06:19-09:15/176 20:32 | 06:08 06:42-08:58/136 20:00 | 06:39 19:11 19:11 | 07:10 18:21 18:21 | 06:47 16:41 16:41 | 07:18 08:01-09:13/72 16:31 |
| 16 | 05:40 06:20-09:15/175 20:32 | 06:09 06:44-08:57/133 19:59 | 06:40 19:06 19:06 | 07:12 18:19 18:19 | 06:48 16:40 16:40 | 07:19 08:01-09:13/72 16:31 |
| 17 | 05:40 06:20-09:15/175 20:31 | 06:10 06:45-08:55/130 19:57 | 06:41 19:07 19:07 | 07:13 18:17 18:17 | 06:49 16:40 16:40 | 07:19 08:02-09:14/72 16:32 |
| 18 | 05:41 06:21-09:16/175 20:30 | 06:11 06:46-08:53/127 19:56 | 06:42 19:06 19:06 | 07:14 18:16 18:16 | 06:50 08:23-08:31/8 16:39 16:39 | 07:20 08:02-09:15/73 16:32 |
| 19 | 05:42 06:22-09:16/174 20:30 | 06:12 06:47-08:50/123 19:55 | 06:43 19:04 19:04 | 07:15 18:14 18:14 | 06:52 08:17-08:37/20 16:38 16:38 | 07:21 08:02-09:15/73 16:32 |
| 20 | 05:43 06:21-09:15/174 20:29 | 06:13 06:48-08:48/120 19:53 | 06:44 19:02 19:02 | 07:16 18:13 18:13 | 06:53 08:13-08:40/27 16:37 16:37 | 07:21 08:03-09:16/73 16:33 |
| 21 | 05:44 06:22-09:15/173 20:28 | 06:14 06:50-08:46/116 19:52 | 06:45 19:00 19:00 | 07:17 18:11 18:11 | 06:54 08:11-08:43/32 16:37 16:37 | 07:22 08:03-09:16/73 16:33 |
| 22 | 05:45 06:23-09:15/172 20:27 | 06:15 06:52-08:44/112 19:50 | 06:46 18:59 18:59 | 07:18 18:10 18:10 | 06:55 08:09-08:46/37 16:36 16:36 | 07:22 08:04-09:17/73 16:34 |
| 23 | 05:46 06:23-09:15/172 20:26 | 06:16 06:53-08:42/109 19:49 | 06:47 18:57 18:57 | 07:19 18:08 18:08 | 06:56 08:08-08:48/40 16:35 16:35 | 07:23 08:04-09:17/73 16:34 |
| 24 | 05:46 06:24-09:15/171 20:26 | 06:17 06:55-08:39/104 19:47 | 06:48 18:55 18:55 | 07:21 18:07 18:07 | 06:57 08:06-08:50/44 16:35 16:35 | 07:23 08:05-09:18/73 16:35 |
| 25 | 05:47 06:25-09:15/170 20:25 | 06:18 06:58-08:37/99 19:45 | 06:49 18:54 18:54 | 07:22 17:06 17:06 | 06:59 08:05-08:52/47 16:34 16:34 | 07:24 08:05-09:18/73 16:35 |
| 26 | 05:48 06:25-09:14/169 20:24 | 06:19 07:00-08:34/94 19:44 | 06:50 18:52 18:52 | 07:23 17:04 17:04 | 07:00 08:04-08:53/49 16:36 16:36 | 07:24 08:06-09:18/72 16:36 |
| 27 | 05:49 06:26-09:14/168 20:23 | 06:20 07:02-08:30/88 19:42 | 06:51 18:50 18:50 | 07:24 17:03 17:03 | 07:01 08:03-08:55/52 16:33 16:33 | 07:24 08:07-09:19/72 16:37 |
| 28 | 05:50 06:27-09:14/167 20:22 | 06:21 07:05-08:27/82 19:41 | 06:52 18:48 18:48 | 07:25 17:02 17:02 | 07:02 08:03-08:57/54 16:37 16:37 | 07:25 08:07-09:19/72 16:37 |
| 29 | 05:51 06:27-09:13/166 20:21 | 06:22 07:08-08:23/75 19:39 | 06:53 18:47 18:47 | 07:26 17:00 17:00 | 07:03 08:02-08:58/56 16:38 16:38 | 07:25 08:08-09:19/71 16:38 |
| 30 | 05:52 06:27-09:12/165 20:20 | 06:23 07:12-08:19/67 19:38 | 06:54 18:45 18:45 | 07:27 16:59 16:59 | 07:04 08:02-08:59/57 16:39 16:39 | 07:25 08:08-09:19/71 16:39 |
| 31 | 05:53 06:28-09:12/164 20:19 | 06:24 07:16-08:14/58 19:36 | 06:55 16:58 16:58 | 07:28 16:40 16:40 | 07:05 08:09-09:19/70 16:40 | 07:25 08:09-09:19/70 16:40 |
| | Potential sun hours | 460 | 428 | 375 | 345 | 287 |
| | Sum of minutes with flicker | 5400 | 3898 | 78 | 0 | 2157 |

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: ShadowWTG: 8 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (8)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|----|------------------------------|----------|----------------------|----------------------|-------|-------|
| 1 | 07:26 07:12 | | 06:36 06:55-07:08/13 | 06:45 07:03-07:25/22 | 05:59 | 05:29 |
| | 16:41 17:15 | | 17:49 | 19:24 | 19:56 | 20:26 |
| 2 | 07:26 07:11 | | 06:34 06:53-07:07/14 | 06:43 07:02-07:26/24 | 05:57 | 05:29 |
| | 16:41 17:16 | | 17:51 | 19:25 | 19:57 | 20:27 |
| 3 | 07:26 07:10 | | 06:33 06:52-07:06/14 | 06:41 07:00-07:27/27 | 05:56 | 05:29 |
| | 16:42 17:18 | | 17:52 | 19:26 | 19:58 | 20:27 |
| 4 | 07:26 07:09 | | 06:31 06:50-07:03/13 | 06:40 06:58-07:27/29 | 05:55 | 05:28 |
| | 16:43 17:19 | | 17:53 | 19:27 | 19:59 | 20:28 |
| 5 | 07:26 07:08 | | 06:30 06:49-07:01/12 | 06:38 06:57-07:27/30 | 05:53 | 05:28 |
| | 16:44 17:20 | | 17:54 | 19:28 | 20:00 | 20:29 |
| 6 | 07:26 07:07 | | 06:28 06:47-06:57/10 | 06:36 06:55-07:27/32 | 05:52 | 05:27 |
| | 16:45 17:21 | | 17:55 | 19:29 | 20:01 | 20:29 |
| 7 | 07:26 07:06 | | 06:26 | 06:35 06:53-07:26/33 | 05:51 | 05:27 |
| | 16:46 17:23 | | 17:56 | 19:30 | 20:02 | 20:30 |
| 8 | 07:26 07:05 | | 06:25 | 06:33 06:52-07:26/34 | 05:50 | 05:27 |
| | 16:47 17:24 | | 17:58 | 19:31 | 20:04 | 20:31 |
| 9 | 07:26 07:03 | | 06:23 | 06:31 06:50-07:25/35 | 05:49 | 05:27 |
| | 16:48 17:25 | | 17:59 | 19:33 | 20:05 | 20:31 |
| 10 | 07:25 07:02 | | 06:22 | 06:30 06:48-07:24/36 | 05:47 | 05:26 |
| | 16:49 17:26 | | 18:00 | 19:34 | 20:06 | 20:32 |
| 11 | 07:25 07:01 | | 06:20 | 06:28 06:47-07:24/37 | 05:46 | 05:26 |
| | 16:50 17:28 | | 18:01 | 19:35 | 20:07 | 20:32 |
| 12 | 07:25 07:00 | | 06:18 | 06:27 06:45-07:22/37 | 05:45 | 05:26 |
| | 16:51 17:29 | | 18:02 | 19:36 | 20:08 | 20:33 |
| 13 | 07:25 06:59 | | 06:17 | 06:25 06:44-07:22/38 | 05:44 | 05:26 |
| | 16:52 17:30 | | 18:03 | 19:37 | 20:09 | 20:33 |
| 14 | 07:24 06:57 | | 06:15 | 06:23 06:42-07:20/38 | 05:43 | 05:26 |
| | 16:53 17:31 | | 18:04 | 19:38 | 20:10 | 20:34 |
| 15 | 07:24 06:56 | | 06:13 | 06:22 06:44-07:20/36 | 05:42 | 05:26 |
| | 16:54 17:33 | | 18:05 | 19:39 | 20:11 | 20:34 |
| 16 | 07:23 06:55 | | 06:12 | 06:20 06:44-07:18/34 | 05:41 | 05:26 |
| | 16:56 17:34 | | 18:07 | 19:40 | 20:12 | 20:35 |
| 17 | 07:23 06:53 | | 06:10 | 06:19 06:46-07:17/31 | 05:40 | 05:26 |
| | 16:57 17:35 | | 18:08 | 19:41 | 20:13 | 20:35 |
| 18 | 07:23 06:52 | | 06:08 | 06:17 06:47-07:14/27 | 05:39 | 05:26 |
| | 16:58 17:36 | | 18:09 | 19:42 | 20:14 | 20:35 |
| 19 | 07:22 06:51 07:10-07:11/1 | | 06:07 | 06:16 06:49-07:12/23 | 05:38 | 05:26 |
| | 16:59 17:38 | | 18:10 | 19:43 | 20:15 | 20:36 |
| 20 | 07:21 06:49 07:09-07:12/3 | | 06:05 | 06:14 06:51-07:09/18 | 05:38 | 05:26 |
| | 17:00 17:39 | | 18:11 | 19:44 | 20:16 | 20:36 |
| 21 | 07:21 06:48 07:07-07:12/5 | | 06:03 | 06:13 06:55-07:05/10 | 05:37 | 05:26 |
| | 17:01 17:40 | | 18:12 | 19:45 | 20:16 | 20:36 |
| 22 | 07:20 06:46 07:06-07:12/6 | | 06:02 | 06:11 | 05:36 | 05:27 |
| | 17:03 17:41 | | 18:13 | 19:46 | 20:17 | 20:36 |
| 23 | 07:20 06:45 07:04-07:12/8 | | 06:00 | 06:10 | 05:35 | 05:27 |
| | 17:04 17:42 | | 18:14 | 19:48 | 20:18 | 20:37 |
| 24 | 07:19 06:43 07:03-07:12/9 | | 05:58 06:17-06:20/3 | 06:08 | 05:34 | 05:27 |
| | 17:05 17:44 | | 18:15 | 19:49 | 20:19 | 20:37 |
| 25 | 07:18 06:42 07:01-07:11/10 | | 05:56 06:15-06:22/7 | 06:07 | 05:34 | 05:27 |
| | 17:06 17:45 | | 18:16 | 19:50 | 20:20 | 20:37 |
| 26 | 07:17 06:40 07:00-07:11/11 | | 05:55 06:13-06:23/10 | 06:05 | 05:33 | 05:28 |
| | 17:08 17:46 | | 18:17 | 19:51 | 20:21 | 20:37 |
| 27 | 07:17 06:39 06:58-07:10/12 | | 05:53 06:12-06:24/12 | 06:04 | 05:32 | 05:28 |
| | 17:09 17:47 | | 18:19 | 19:52 | 20:22 | 20:37 |
| 28 | 07:16 06:37 06:57-07:10/13 | | 05:51 06:10-06:24/14 | 06:03 | 05:32 | 05:29 |
| | 17:10 17:48 | | 18:20 | 19:53 | 20:23 | 20:37 |
| 29 | 07:15 | | 06:50 07:08-07:24/16 | 06:01 | 05:31 | 05:29 |
| | 17:11 | | 19:21 | 19:54 | 20:24 | 20:37 |
| 30 | 07:14 | | 06:48 07:07-07:25/18 | 06:00 | 05:30 | 05:29 |
| | 17:13 | | 19:22 | 19:55 | 20:24 | 20:37 |
| 31 | 07:13 | | 06:46 07:05-07:25/20 | | 05:30 | |
| | 17:14 | | 19:23 | | 20:25 | |
| | Potential sun hours | 297 | 297 | 369 | 399 | 449 |
| | Sum of minutes with flicker | 0 | 78 | 176 | 631 | 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: ShadowWTG: 8 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (8)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | November | December |
|-----------------------------|---------------|----------------|----------------------|----------------------|---------------|----------|
| 1 | 05:30 05:54 | | 06:25 06:46-07:23/37 | 06:55 | 06:30 07:05 | |
| | 20:37 20:18 | | 19:34 | 18:43 | 16:56 16:32 | |
| 2 | 05:30 05:55 | | 06:26 06:47-07:23/36 | 06:56 | 06:31 07:06 | |
| | 20:37 20:17 | | 19:33 | 18:42 | 16:55 16:31 | |
| 3 | 05:31 05:56 | | 06:27 06:48-07:23/35 | 06:58 | 06:32 07:07 | |
| | 20:37 20:15 | | 19:31 | 18:40 | 16:54 16:31 | |
| 4 | 05:31 05:57 | | 06:28 06:49-07:23/34 | 06:59 | 06:34 07:08 | |
| | 20:36 20:14 | | 19:29 | 18:38 | 16:53 16:31 | |
| 5 | 05:32 05:58 | | 06:29 06:50-07:23/33 | 07:00 | 06:35 07:09 | |
| | 20:36 20:13 | | 19:28 | 18:37 | 16:51 16:31 | |
| 6 | 05:33 05:59 | | 06:30 06:51-07:23/32 | 07:01 | 06:36 07:10 | |
| | 20:36 20:12 | | 19:26 | 18:35 | 16:50 16:31 | |
| 7 | 05:33 06:00 | | 06:31 06:52-07:22/30 | 07:02 | 06:37 07:11 | |
| | 20:36 20:11 | | 19:24 | 18:33 | 16:49 16:30 | |
| 8 | 05:34 06:01 | | 06:32 06:53-07:22/29 | 07:03 07:23-07:35/12 | 06:38 07:12 | |
| | 20:35 20:10 | | 19:23 | 18:32 | 16:48 16:30 | |
| 9 | 05:34 06:02 | | 06:33 06:54-07:21/27 | 07:04 07:24-07:37/13 | 06:40 07:13 | |
| | 20:35 20:08 | | 19:21 | 18:30 | 16:47 16:30 | |
| 10 | 05:35 06:03 | | 06:34 06:55-07:19/24 | 07:05 07:25-07:39/14 | 06:41 07:14 | |
| | 20:35 20:07 | | 19:19 | 18:28 | 16:46 16:30 | |
| 11 | 05:36 06:04 | | 06:35 06:56-07:18/22 | 07:06 07:26-07:40/14 | 06:42 07:15 | |
| | 20:34 20:06 | | 19:18 | 18:27 | 16:45 16:31 | |
| 12 | 05:37 06:05 | | 06:36 06:57-07:17/20 | 07:07 07:28-07:41/13 | 06:43 07:16 | |
| | 20:34 20:04 | | 19:16 | 18:25 | 16:44 16:31 | |
| 13 | 05:37 06:06 | | 06:37 06:58-07:17/19 | 07:08 07:29-07:42/13 | 06:44 07:16 | |
| | 20:33 20:03 | | 19:14 | 18:24 | 16:43 16:31 | |
| 14 | 05:38 06:07 | | 06:38 06:59-07:16/17 | 07:09 07:30-07:42/12 | 06:46 07:17 | |
| | 20:33 20:02 | | 19:12 | 18:22 | 16:42 16:31 | |
| 15 | 05:39 06:08 | | 06:39 07:00-07:15/15 | 07:10 07:31-07:43/12 | 06:47 07:18 | |
| | 20:32 20:00 | | 19:11 | 18:20 | 16:41 16:31 | |
| 16 | 05:40 06:09 | | 06:40 07:00-07:13/13 | 07:12 07:32-07:43/11 | 06:48 07:19 | |
| | 20:31 19:59 | | 19:09 | 18:19 | 16:40 16:31 | |
| 17 | 05:40 06:10 | | 06:41 07:01-07:11/10 | 07:13 07:33-07:43/10 | 06:49 07:19 | |
| | 20:31 19:57 | | 19:07 | 18:17 | 16:40 16:32 | |
| 18 | 05:41 06:11 | | 06:42 07:02-07:09/7 | 07:14 07:34-07:42/8 | 06:50 07:20 | |
| | 20:30 19:56 | | 19:06 | 18:16 | 16:39 16:32 | |
| 19 | 05:42 06:12 | | 06:43 07:03-07:07/4 | 07:15 07:36-07:43/7 | 06:52 07:21 | |
| | 20:29 19:54 | | 19:04 | 18:14 | 16:38 16:32 | |
| 20 | 05:43 06:13 | | 06:44 07:04-07:05/1 | 07:16 07:37-07:43/6 | 06:53 07:21 | |
| | 20:29 19:53 | | 19:02 | 18:13 | 16:37 16:33 | |
| 21 | 05:44 06:14 | | 06:45 | 07:17 07:38-07:42/4 | 06:54 07:22 | |
| | 20:28 19:52 | | 19:00 | 18:11 | 16:37 16:33 | |
| 22 | 05:45 06:15 | 06:58-07:10/12 | 06:46 | 07:18 07:39-07:41/2 | 06:55 07:22 | |
| | 20:27 19:50 | | 18:59 | 18:10 | 16:36 16:34 | |
| 23 | 05:46 06:16 | 06:54-07:13/19 | 06:47 | 07:19 07:40-07:41/1 | 06:56 07:23 | |
| | 20:26 19:48 | | 18:57 | 18:08 | 16:35 16:34 | |
| 24 | 05:46 06:17 | 06:52-07:15/23 | 06:48 | 07:21 | 06:57 07:23 | |
| | 20:26 19:47 | | 18:55 | 18:07 | 16:35 16:35 | |
| 25 | 05:47 06:18 | 06:49-07:17/28 | 06:49 | 06:22 | 06:59 07:24 | |
| | 20:25 19:45 | | 18:54 | 17:06 | 16:34 16:35 | |
| 26 | 05:48 06:19 | 06:48-07:19/31 | 06:50 | 06:23 | 07:00 07:24 | |
| | 20:24 19:44 | | 18:52 | 17:04 | 16:34 16:36 | |
| 27 | 05:49 06:20 | 06:46-07:20/34 | 06:51 | 06:24 | 07:01 07:24 | |
| | 20:23 19:42 | | 18:50 | 17:03 | 16:33 16:37 | |
| 28 | 05:50 06:21 | 06:45-07:21/36 | 06:52 | 06:25 | 07:02 07:25 | |
| | 20:22 19:41 | | 18:48 | 17:02 | 16:33 16:37 | |
| 29 | 05:51 06:22 | 06:43-07:21/38 | 06:53 | 06:26 | 07:03 07:25 | |
| | 20:21 19:39 | | 18:47 | 17:00 | 16:32 16:38 | |
| 30 | 05:52 06:23 | 06:44-07:22/38 | 06:54 | 06:28 | 07:04 07:25 | |
| | 20:20 19:38 | | 18:45 | 16:59 | 16:32 16:39 | |
| 31 | 05:53 06:24 | 06:45-07:22/37 | | 06:29 | | 07:25 |
| | 20:19 19:36 | | | 16:58 | | 16:40 |
| Potential sun hours | 460 | 428 | 375 | 345 | 297 | 287 |
| Sum of minutes with flicker | 0 | 296 | 445 | 152 | 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: ShadowWTG: 9 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (9)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June |
|-----------------------------|-----------------------------|----------|----------------------|----------------------|----------------------|-------|
| 1 | 07:26 07:12 | | 06:36 06:55-07:00/5 | 06:45 | 05:59 06:18-06:42/24 | 05:29 |
| | 16:41 17:15 | | 17:49 | 19:24 | 19:56 | 20:26 |
| 2 | 07:26 07:11 | | 06:34 06:53-06:59/6 | 06:43 | 05:57 06:17-06:40/23 | 05:29 |
| | 16:41 17:16 | | 17:51 | 19:25 | 19:57 | 20:27 |
| 3 | 07:26 07:10 | | 06:33 06:52-06:59/7 | 06:41 | 05:56 06:18-06:38/20 | 05:29 |
| | 16:42 17:18 | | 17:52 | 19:26 | 19:58 | 20:27 |
| 4 | 07:26 07:09 | | 06:31 06:50-06:58/8 | 06:40 | 05:55 06:21-06:36/15 | 05:28 |
| | 16:43 17:19 | | 17:53 | 19:27 | 19:59 | 20:28 |
| 5 | 07:26 07:08 | | 06:30 06:49-06:58/9 | 06:38 | 05:53 06:24-06:32/8 | 05:28 |
| | 16:44 17:20 | | 17:54 | 19:28 | 20:00 | 20:29 |
| 6 | 07:26 07:07 | | 06:28 06:47-06:57/10 | 06:36 | 05:52 | 05:27 |
| | 16:45 17:21 | | 17:55 | 19:29 | 20:01 | 20:29 |
| 7 | 07:26 07:06 | | 06:26 06:45-06:55/10 | 06:35 | 05:51 | 05:27 |
| | 16:46 17:23 | | 17:56 | 19:30 | 20:02 | 20:30 |
| 8 | 07:26 07:05 | | 06:25 06:44-06:53/9 | 06:33 | 05:50 | 05:27 |
| | 16:47 17:24 | | 17:58 | 19:31 | 20:03 | 20:31 |
| 9 | 07:26 07:03 | | 06:23 06:42-06:50/8 | 06:31 | 05:49 | 05:27 |
| | 16:48 17:25 | | 17:59 | 19:32 | 20:05 | 20:31 |
| 10 | 07:25 07:02 | | 06:21 | 06:30 | 05:47 | 05:26 |
| | 16:49 17:26 | | 18:00 | 19:34 | 20:06 | 20:32 |
| 11 | 07:25 07:01 | | 06:20 | 06:28 | 05:46 | 05:26 |
| | 16:50 17:28 | | 18:01 | 19:35 | 20:07 | 20:32 |
| 12 | 07:25 07:00 | | 06:18 | 06:27 | 05:45 | 05:26 |
| | 16:51 17:29 | | 18:02 | 19:36 | 20:08 | 20:33 |
| 13 | 07:25 06:59 | | 06:17 | 06:25 06:44-06:47/3 | 05:44 | 05:26 |
| | 16:52 17:30 | | 18:03 | 19:37 | 20:09 | 20:33 |
| 14 | 07:24 06:57 | | 06:15 | 06:23 06:42-06:47/5 | 05:43 | 05:26 |
| | 16:53 17:31 | | 18:04 | 19:38 | 20:10 | 20:34 |
| 15 | 07:24 06:56 | | 06:13 | 06:22 06:41-06:49/8 | 05:42 | 05:26 |
| | 16:54 17:33 | | 18:05 | 19:39 | 20:11 | 20:34 |
| 16 | 07:23 06:55 | | 06:12 | 06:20 06:39-06:49/10 | 05:41 | 05:26 |
| | 16:56 17:34 | | 18:07 | 19:40 | 20:12 | 20:35 |
| 17 | 07:23 06:53 | | 06:10 | 06:19 06:38-06:49/11 | 05:40 | 05:26 |
| | 16:57 17:35 | | 18:08 | 19:41 | 20:13 | 20:35 |
| 18 | 07:22 06:52 | | 06:08 | 06:17 06:36-06:49/13 | 05:39 | 05:26 |
| | 16:58 17:36 | | 18:09 | 19:42 | 20:14 | 20:35 |
| 19 | 07:22 06:51 | | 06:07 | 06:16 06:35-06:50/15 | 05:38 | 05:26 |
| | 16:59 17:38 | | 18:10 | 19:43 | 20:15 | 20:36 |
| 20 | 07:21 06:49 | | 06:05 | 06:14 06:33-06:49/16 | 05:38 | 05:26 |
| | 17:00 17:39 | | 18:11 | 19:44 | 20:16 | 20:36 |
| 21 | 07:21 06:48 | | 06:03 | 06:13 06:32-06:49/17 | 05:37 | 05:26 |
| | 17:01 17:40 | | 18:12 | 19:45 | 20:16 | 20:36 |
| 22 | 07:20 06:46 | | 06:02 | 06:11 06:30-06:49/19 | 05:36 | 05:27 |
| | 17:03 17:41 | | 18:13 | 19:46 | 20:17 | 20:36 |
| 23 | 07:20 06:45 | | 06:00 | 06:10 06:29-06:49/20 | 05:35 | 05:27 |
| | 17:04 17:42 | | 18:14 | 19:48 | 20:18 | 20:37 |
| 24 | 07:19 06:43 | | 05:58 | 06:08 06:27-06:48/21 | 05:34 | 05:27 |
| | 17:05 17:44 | | 18:15 | 19:49 | 20:19 | 20:37 |
| 25 | 07:18 06:42 | | 05:56 | 06:07 06:26-06:47/21 | 05:34 | 05:27 |
| | 17:06 17:45 | | 18:16 | 19:50 | 20:20 | 20:37 |
| 26 | 07:17 06:40 | | 05:55 | 06:05 06:25-06:47/22 | 05:33 | 05:28 |
| | 17:08 17:46 | | 18:17 | 19:51 | 20:21 | 20:37 |
| 27 | 07:17 06:39 06:58-07:00/2 | | 05:53 | 06:04 06:23-06:46/23 | 05:32 | 05:28 |
| | 17:09 17:47 | | 18:18 | 19:52 | 20:22 | 20:37 |
| 28 | 07:16 06:37 06:57-07:00/3 | | 05:51 | 06:03 06:22-06:45/23 | 05:32 | 05:29 |
| | 17:10 17:48 | | 18:20 | 19:53 | 20:23 | 20:37 |
| 29 | 07:15 | | 06:50 | 06:01 06:21-06:45/24 | 05:31 | 05:29 |
| | 17:11 | | 19:21 | 19:54 | 20:23 | 20:37 |
| 30 | 07:14 | | 06:48 | 06:00 06:19-06:43/24 | 05:30 | 05:29 |
| | 17:13 | | 19:22 | 19:55 | 20:24 | 20:37 |
| 31 | 07:13 | | 06:46 | | 05:30 | |
| | 17:14 | | 19:23 | | 20:25 | |
| Potential sun hours | 297 | 297 | 369 | 399 | 449 | 453 |
| Sum of minutes with flicker | 0 | 5 | 72 | 295 | 90 | 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: ShadowWTG: 9 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (9)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | July | August | September | October | November | December |
|----|-----------------------------|----------------------|-----------|----------------------|----------|----------|
| 1 | 05:30 | 05:54 | 06:25 | 06:55 | 06:30 | 07:05 |
| | 20:37 | 20:18 | 19:34 | 18:43 | 16:56 | 16:32 |
| 2 | 05:30 | 05:55 | 06:26 | 06:56 | 06:31 | 07:06 |
| | 20:37 | 20:17 | 19:33 | 18:42 | 16:55 | 16:31 |
| 3 | 05:31 | 05:56 | 06:27 | 06:57 | 06:32 | 07:07 |
| | 20:37 | 20:15 | 19:31 | 18:40 | 16:54 | 16:31 |
| 4 | 05:31 | 05:57 | 06:28 | 06:59 07:19-07:26/7 | 06:34 | 07:08 |
| | 20:36 | 20:14 | 19:29 | 18:38 | 16:53 | 16:31 |
| 5 | 05:32 | 05:58 | 06:29 | 07:00 07:20-07:29/9 | 06:35 | 07:09 |
| | 20:36 | 20:13 | 19:28 | 18:37 | 16:51 | 16:31 |
| 6 | 05:33 | 05:59 | 06:30 | 07:01 07:21-07:31/10 | 06:36 | 07:10 |
| | 20:36 | 20:12 | 19:26 | 18:35 | 16:50 | 16:31 |
| 7 | 05:33 | 06:00 | 06:31 | 07:02 07:22-07:32/10 | 06:37 | 07:11 |
| | 20:36 | 20:11 | 19:24 | 18:33 | 16:49 | 16:30 |
| 8 | 05:34 | 06:01 06:32-06:43/11 | 06:32 | 07:03 07:23-07:32/9 | 06:38 | 07:12 |
| | 20:35 | 20:09 | 19:23 | 18:32 | 16:48 | 16:30 |
| 9 | 05:34 | 06:02 06:29-06:46/17 | 06:33 | 07:04 07:24-07:33/9 | 06:40 | 07:13 |
| | 20:35 | 20:08 | 19:21 | 18:30 | 16:47 | 16:30 |
| 10 | 05:35 | 06:03 06:27-06:48/21 | 06:34 | 07:05 07:25-07:33/8 | 06:41 | 07:14 |
| | 20:35 | 20:07 | 19:19 | 18:28 | 16:46 | 16:30 |
| 11 | 05:36 | 06:04 06:26-06:50/24 | 06:35 | 07:06 07:26-07:33/7 | 06:42 | 07:15 |
| | 20:34 | 20:06 | 19:18 | 18:27 | 16:45 | 16:30 |
| 12 | 05:37 | 06:05 06:27-06:51/24 | 06:36 | 07:07 07:28-07:34/6 | 06:43 | 07:16 |
| | 20:34 | 20:04 | 19:16 | 18:25 | 16:44 | 16:31 |
| 13 | 05:37 | 06:06 06:28-06:52/24 | 06:37 | 07:08 07:29-07:33/4 | 06:44 | 07:16 |
| | 20:33 | 20:03 | 19:14 | 18:24 | 16:43 | 16:31 |
| 14 | 05:38 | 06:07 06:29-06:53/24 | 06:38 | 07:09 07:30-07:33/3 | 06:46 | 07:17 |
| | 20:33 | 20:02 | 19:12 | 18:22 | 16:42 | 16:31 |
| 15 | 05:39 | 06:08 06:30-06:53/23 | 06:39 | 07:10 07:31-07:32/1 | 06:47 | 07:18 |
| | 20:32 | 20:00 | 19:11 | 18:20 | 16:41 | 16:31 |
| 16 | 05:40 | 06:09 06:31-06:54/23 | 06:40 | 07:12 | 06:48 | 07:19 |
| | 20:31 | 19:59 | 19:09 | 18:19 | 16:40 | 16:31 |
| 17 | 05:40 | 06:10 06:32-06:54/22 | 06:41 | 07:13 | 06:49 | 07:19 |
| | 20:31 | 19:57 | 19:07 | 18:17 | 16:40 | 16:32 |
| 18 | 05:41 | 06:11 06:32-06:53/21 | 06:42 | 07:14 | 06:50 | 07:20 |
| | 20:30 | 19:56 | 19:06 | 18:16 | 16:39 | 16:32 |
| 19 | 05:42 | 06:12 06:33-06:53/20 | 06:43 | 07:15 | 06:52 | 07:21 |
| | 20:29 | 19:54 | 19:04 | 18:14 | 16:38 | 16:32 |
| 20 | 05:43 | 06:13 06:34-06:53/19 | 06:44 | 07:16 | 06:53 | 07:21 |
| | 20:29 | 19:53 | 19:02 | 18:13 | 16:37 | 16:33 |
| 21 | 05:44 | 06:14 06:35-06:53/18 | 06:45 | 07:17 | 06:54 | 07:22 |
| | 20:28 | 19:51 | 19:00 | 18:11 | 16:37 | 16:33 |
| 22 | 05:45 | 06:15 06:36-06:53/17 | 06:46 | 07:18 | 06:55 | 07:22 |
| | 20:27 | 19:50 | 18:59 | 18:10 | 16:36 | 16:34 |
| 23 | 05:46 | 06:16 06:37-06:53/16 | 06:47 | 07:19 | 06:56 | 07:23 |
| | 20:26 | 19:48 | 18:57 | 18:08 | 16:35 | 16:34 |
| 24 | 05:46 | 06:17 06:38-06:52/14 | 06:48 | 07:21 | 06:57 | 07:23 |
| | 20:26 | 19:47 | 18:55 | 18:07 | 16:35 | 16:35 |
| 25 | 05:47 | 06:18 06:39-06:52/13 | 06:49 | 06:22 | 06:59 | 07:24 |
| | 20:25 | 19:45 | 18:54 | 17:06 | 16:34 | 16:35 |
| 26 | 05:48 | 06:19 06:40-06:51/11 | 06:50 | 06:23 | 07:00 | 07:24 |
| | 20:24 | 19:44 | 18:52 | 17:04 | 16:34 | 16:36 |
| 27 | 05:49 | 06:20 06:41-06:50/9 | 06:51 | 06:24 | 07:01 | 07:24 |
| | 20:23 | 19:42 | 18:50 | 17:03 | 16:33 | 16:37 |
| 28 | 05:50 | 06:21 06:42-06:49/7 | 06:52 | 06:25 | 07:02 | 07:25 |
| | 20:22 | 19:41 | 18:48 | 17:01 | 16:33 | 16:37 |
| 29 | 05:51 | 06:22 06:43-06:48/5 | 06:53 | 06:26 | 07:03 | 07:25 |
| | 20:21 | 19:39 | 18:47 | 17:00 | 16:32 | 16:38 |
| 30 | 05:52 | 06:23 06:44-06:47/3 | 06:54 | 06:28 | 07:04 | 07:25 |
| | 20:20 | 19:37 | 18:45 | 16:59 | 16:32 | 16:39 |
| 31 | 05:53 | 06:24 | | 06:29 | | 07:25 |
| | 20:19 | 19:36 | | 16:58 | | 16:40 |
| | Potential sun hours | 460 | 428 | 375 | 345 | 297 |
| | Sum of minutes with flicker | 0 | 386 | 0 | 83 | 0 |
| | | | | | 297 | 287 |

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: ShadowWTG: 10 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (10)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

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

SHADOW - Calendar per WTG

Calculation: ShadowWTG: 11 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (11)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

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

SHADOW - Calendar per WTG

Calculation: ShadowWTG: 12 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (12)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June | July | August | September | October | November | December |
|----|---------------------------------|--|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|
| 1 | 07:26 09:09-09:30/21 16:41 | 07:12 06:36 17:15 17:49 19:24 19:56 20:26 20:37 20:18 19:34 18:43 16:56 16:32 | | | | | | | | | | |
| 2 | 07:26 09:10-09:29/19 16:41 | 07:11 06:34 17:16 17:51 19:25 19:57 20:27 20:37 20:17 19:33 18:42 16:55 16:31 | | | | | | | | | | |
| 3 | 07:26 09:12-09:28/16 16:42 | 07:10 06:33 17:18 17:52 19:26 19:58 20:27 20:37 20:15 19:31 18:40 16:54 16:31 | | | | | | | | | | |
| 4 | 07:26 09:14-09:27/13 16:43 | 07:09 06:31 17:19 17:53 19:27 19:59 20:28 20:36 20:14 19:29 18:38 16:53 16:31 | | | | | | | | | | |
| 5 | 07:26 09:17-09:25/8 16:44 | 07:08 06:30 17:20 17:54 19:28 20:00 20:29 20:36 20:13 19:28 18:37 16:52 16:31 | | | | | | | | | | |
| 6 | 07:26 07:07 | 07:07 06:28 17:21 17:55 19:29 20:01 20:29 20:36 20:12 19:26 18:35 16:50 16:31 | | | | | | | | | | |
| 7 | 07:26 07:06 | 07:06 06:26 17:23 17:56 19:30 20:02 20:30 20:36 20:11 19:24 18:33 16:49 16:31 | | | | | | | | | | |
| 8 | 07:26 07:05 | 07:05 06:25 17:24 17:58 19:31 20:04 20:31 20:35 20:09 19:23 18:32 16:48 16:30 | | | | | | | | | | |
| 9 | 07:26 07:03 | 07:03 06:23 17:25 17:59 19:33 20:05 20:31 20:35 20:12 19:26 18:35 16:47 16:30 | | | | | | | | | | |
| 10 | 07:25 07:02 | 07:02 06:22 17:26 18:00 19:34 20:06 20:32 20:35 20:07 19:19 18:28 16:46 16:30 | | | | | | | | | | |
| 11 | 07:25 07:01 | 07:01 06:20 17:28 18:01 19:35 20:07 20:32 20:34 20:06 19:18 18:27 16:45 16:31 | | | | | | | | | | |
| 12 | 07:25 07:00 | 07:00 06:18 17:29 18:02 19:36 20:08 20:31 20:35 20:08 19:21 18:30 16:47 16:30 | | | | | | | | | | |
| 13 | 07:25 06:59 | 06:59 06:17 17:30 18:03 19:37 20:09 20:33 20:35 20:09 19:14 18:24 16:43 16:31 | | | | | | | | | | |
| 14 | 07:24 06:57 | 06:57 06:15 17:31 18:04 19:38 20:10 20:34 20:33 20:02 19:12 18:22 16:42 16:31 | | | | | | | | | | |
| 15 | 07:24 06:56 | 06:56 06:13 17:33 18:05 19:39 20:11 20:34 20:32 20:04 19:16 18:25 16:44 16:31 | | | | | | | | | | |
| 16 | 07:23 06:55 | 06:55 06:12 17:34 18:07 19:40 20:12 20:35 20:31 20:09 19:14 18:24 16:43 16:31 | | | | | | | | | | |
| 17 | 07:23 06:53 | 06:53 06:10 17:35 18:08 19:41 20:13 20:35 20:31 20:02 19:12 18:22 16:42 16:31 | | | | | | | | | | |
| 18 | 07:22 06:52 | 06:52 06:08 17:36 18:09 19:42 20:14 20:35 20:30 19:56 19:06 18:39 16:47 16:30 | | | | | | | | | | |
| 19 | 07:22 06:51 | 06:51 06:07 17:38 18:10 19:43 20:15 20:36 20:29 19:54 19:09 18:19 16:40 16:31 | | | | | | | | | | |
| 20 | 07:21 06:49 | 06:49 06:05 17:39 18:11 19:44 20:16 20:36 20:29 19:53 19:02 18:13 16:37 16:33 | | | | | | | | | | |
| 21 | 07:21 06:48 | 06:48 06:03 17:40 18:12 19:45 20:16 20:36 20:28 19:52 19:00 18:11 16:37 16:33 | | | | | | | | | | |
| 22 | 07:20 06:46 | 06:46 06:02 17:41 18:13 19:46 20:17 20:36 20:27 19:50 18:59 18:10 16:36 16:34 | | | | | | | | | | |
| 23 | 07:20 06:45 | 06:45 06:00 17:42 18:14 19:48 20:18 20:37 20:26 19:48 18:57 18:08 16:35 16:34 | | | | | | | | | | |
| 24 | 07:19 06:43 | 06:43 05:58 17:44 18:15 19:49 20:19 20:37 20:26 19:47 18:55 18:07 16:35 16:35 | | | | | | | | | | |
| 25 | 07:18 06:42 | 06:42 05:56 17:45 18:16 19:50 20:20 20:37 20:25 19:45 18:54 17:06 16:34 16:35 | | | | | | | | | | |
| 26 | 07:17 06:40 | 06:40 05:55 17:46 18:17 19:51 20:21 20:37 20:24 19:44 18:52 17:04 16:34 16:36 | | | | | | | | | | |
| 27 | 07:17 06:39 | 06:39 05:53 17:47 18:19 19:52 20:22 20:37 20:23 19:42 18:50 17:03 16:33 16:37 | | | | | | | | | | |
| 28 | 07:16 06:37 | 06:37 05:51 17:48 18:20 19:53 20:23 20:37 20:22 19:41 18:48 17:02 16:33 16:37 | | | | | | | | | | |
| 29 | 07:15 06:50 | 06:50 06:01 17:49 19:21 19:54 20:24 20:37 20:21 19:39 18:47 17:00 16:32 16:38 | | | | | | | | | | |
| 30 | 07:14 06:48 | 06:48 06:00 17:50 19:22 19:55 20:24 20:37 20:20 19:38 18:45 16:59 16:32 16:39 | | | | | | | | | | |
| 31 | 07:13 06:46 | 06:46 05:30 17:51 19:23 19:58 20:25 20:39 20:19 19:36 18:45 16:58 16:29 16:40 | | | | | | | | | | |
| | Potential sun hours | 297 | 297 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 626 |
| | Sum of minutes with flicker | 77 | 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: ShadowWTG: 13 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (13)

Assumptions for shadow calculations

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

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

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

The WTG is always operating

| | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------------|----------------|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------------|----------------------|
| 1 07:26 | 07:48-08:17/29 | 07:12 | 06:36 | 06:45 | 05:59 | 05:29 | 05:30 | 05:54 | 06:25 | 06:55 | 06:30 | 07:05 07:29-08:03/34 |
| 16:41 | | 17:15 | 17:49 | 19:24 | 19:56 | 20:26 | 20:37 | 20:18 | 19:34 | 18:43 | 16:56 | 16:32 |
| 2 07:26 | 07:48-08:18/30 | 07:11 | 06:34 | 06:43 | 05:57 | 05:29 | 05:30 | 05:55 | 06:26 | 06:56 | 06:31 | 07:06 07:30-08:04/34 |
| 16:41 | | 17:16 | 17:51 | 19:25 | 19:57 | 20:27 | 20:37 | 20:17 | 19:33 | 18:42 | 16:55 | 16:31 |
| 3 07:26 | 07:48-08:18/30 | 07:10 | 06:33 | 06:41 | 05:56 | 05:29 | 05:31 | 05:56 | 06:27 | 06:57 | 06:32 | 07:07 07:31-08:04/33 |
| 16:42 | | 17:18 | 17:52 | 19:26 | 19:58 | 20:27 | 20:37 | 20:15 | 19:31 | 18:40 | 16:54 | 16:31 |
| 4 07:26 | 07:48-08:18/30 | 07:09 | 06:31 | 06:40 | 05:55 | 05:28 | 05:31 | 05:57 | 06:28 | 06:59 | 06:34 | 07:08 07:32-08:05/33 |
| 16:43 | | 17:19 | 17:53 | 19:27 | 19:59 | 20:28 | 20:36 | 20:14 | 19:29 | 18:38 | 16:53 | 16:31 |
| 5 07:26 | 07:48-08:19/31 | 07:08 | 06:30 | 06:38 | 05:53 | 05:28 | 05:32 | 05:58 | 06:29 | 07:00 | 06:35 | 07:09 07:33-08:05/32 |
| 16:44 | | 17:20 | 17:54 | 19:28 | 20:00 | 20:29 | 20:36 | 20:13 | 19:28 | 18:37 | 16:51 | 16:31 |
| 6 07:26 | 07:48-08:19/31 | 07:07 | 06:28 | 06:36 | 05:52 | 05:27 | 05:33 | 05:59 | 06:30 | 07:01 | 06:36 | 07:10 07:34-08:06/32 |
| 16:45 | | 17:21 | 17:55 | 19:29 | 20:01 | 20:29 | 20:36 | 20:12 | 19:26 | 18:35 | 16:50 | 16:31 |
| 7 07:26 | 07:48-08:20/32 | 07:06 | 06:26 | 06:35 | 05:51 | 05:27 | 05:33 | 06:00 | 06:31 | 07:02 | 06:37 | 07:11 07:35-08:06/31 |
| 16:46 | | 17:23 | 17:56 | 19:30 | 20:02 | 20:30 | 20:36 | 20:11 | 19:24 | 18:33 | 16:49 | 16:31 |
| 8 07:26 | 07:48-08:21/33 | 07:05 | 06:25 | 06:33 | 05:50 | 05:27 | 05:34 | 06:01 | 06:32 | 07:03 | 06:38 | 07:12 07:36-08:07/31 |
| 16:47 | | 17:24 | 17:58 | 19:31 | 20:03 | 20:31 | 20:35 | 20:09 | 19:23 | 18:32 | 16:48 | 16:30 |
| 9 07:26 | 07:47-08:20/33 | 07:03 | 06:23 | 06:31 | 05:49 | 05:27 | 05:34 | 06:02 | 06:33 | 07:04 | 06:40 | 07:13 07:37-08:07/30 |
| 16:48 | | 17:25 | 17:59 | 19:32 | 20:05 | 20:31 | 20:35 | 20:08 | 19:21 | 18:30 | 16:47 | 16:30 |
| 10 07:25 | 07:47-08:21/34 | 07:02 | 06:22 | 06:30 | 05:48 | 05:26 | 05:35 | 06:03 | 06:34 | 07:05 | 06:41 | 07:14 07:38-08:08/30 |
| 16:49 | | 17:26 | 18:00 | 19:34 | 20:06 | 20:32 | 20:35 | 20:07 | 19:19 | 18:28 | 16:46 | 16:30 |
| 11 07:25 | 07:47-08:21/34 | 07:01 | 06:20 | 06:28 | 05:46 | 05:26 | 05:36 | 06:04 | 06:35 | 07:06 | 06:42 | 07:15 07:39-08:08/29 |
| 16:50 | | 17:28 | 18:01 | 19:35 | 20:07 | 20:32 | 20:34 | 20:06 | 19:18 | 18:27 | 16:45 | 16:31 |
| 12 07:25 | 07:47-08:22/35 | 07:00 | 06:18 | 06:27 | 05:45 | 05:26 | 05:37 | 06:05 | 06:36 | 07:07 | 06:43 | 07:15 07:39-08:08/29 |
| 16:51 | | 17:29 | 18:02 | 19:36 | 20:08 | 20:33 | 20:34 | 20:04 | 19:16 | 18:25 | 16:44 | 16:31 |
| 13 07:25 | 07:46-08:21/35 | 06:59 | 06:17 | 06:25 | 05:44 | 05:26 | 05:37 | 06:06 | 06:37 | 07:08 | 06:44 | 07:16 07:40-08:08/28 |
| 16:52 | | 17:30 | 18:03 | 19:37 | 20:09 | 20:33 | 20:33 | 20:03 | 19:14 | 18:24 | 16:43 | 16:31 |
| 14 07:24 | 07:47-08:22/35 | 06:57 | 06:15 | 06:23 | 05:43 | 05:26 | 05:38 | 06:07 | 06:38 | 07:09 | 06:46 | 07:17 07:41-08:09/28 |
| 16:53 | | 17:31 | 18:04 | 19:38 | 20:10 | 20:34 | 20:33 | 20:02 | 19:12 | 18:22 | 16:42 | 16:31 |
| 15 07:24 | 07:47-08:21/34 | 06:56 | 06:13 | 06:22 | 05:42 | 05:26 | 05:39 | 06:08 | 06:39 | 07:10 | 06:47 | 07:18 07:42-08:10/28 |
| 16:55 | | 17:33 | 18:05 | 19:39 | 20:11 | 20:34 | 20:32 | 20:00 | 19:11 | 18:20 | 16:41 | 16:31 |
| 16 07:23 | 07:48-08:22/34 | 06:55 | 06:12 | 06:20 | 05:41 | 05:26 | 05:40 | 06:09 | 06:40 | 07:12 | 06:48 | 07:35-07:47/12 |
| 16:56 | | 17:34 | 18:07 | 19:40 | 20:12 | 20:35 | 20:31 | 19:59 | 19:09 | 18:19 | 16:40 | 16:31 |
| 17 07:23 | 07:49-08:21/32 | 06:53 | 06:10 | 06:19 | 05:40 | 05:26 | 05:40 | 06:10 | 06:41 | 07:13 | 06:49 | 07:32-07:49/17 |
| 16:57 | | 17:35 | 18:08 | 19:41 | 20:13 | 20:35 | 20:31 | 19:57 | 19:07 | 18:17 | 16:40 | 16:32 |
| 18 07:22 | 07:50-08:21/31 | 06:52 | 06:08 | 06:17 | 05:39 | 05:26 | 05:41 | 06:11 | 06:42 | 07:14 | 06:50 | 07:32-07:52/20 |
| 16:58 | | 17:36 | 18:09 | 19:42 | 20:14 | 20:35 | 20:30 | 19:56 | 19:06 | 18:16 | 16:39 | 16:32 |
| 19 07:22 | 07:51-08:21/30 | 06:51 | 06:07 | 06:16 | 05:38 | 05:26 | 05:42 | 06:12 | 06:43 | 07:15 | 06:52 | 07:30-07:53/23 |
| 16:59 | | 17:38 | 18:10 | 19:43 | 20:15 | 20:36 | 20:29 | 19:54 | 19:04 | 18:14 | 16:38 | 16:32 |
| 20 07:21 | 07:51-08:20/29 | 06:49 | 06:05 | 06:14 | 05:38 | 05:26 | 05:43 | 06:13 | 06:44 | 07:16 | 06:53 | 07:29-07:54/25 |
| 17:00 | | 17:39 | 18:11 | 19:44 | 20:15 | 20:36 | 20:29 | 19:53 | 19:02 | 18:13 | 16:37 | 16:33 |
| 21 07:21 | 07:53-08:20/27 | 06:48 | 06:03 | 06:13 | 05:37 | 05:26 | 05:44 | 06:14 | 06:45 | 07:17 | 06:54 | 07:28-07:55/27 |
| 17:01 | | 17:40 | 18:12 | 19:45 | 20:16 | 20:36 | 20:28 | 19:51 | 19:00 | 18:11 | 16:37 | 16:33 |
| 22 07:20 | 07:54-08:19/25 | 06:46 | 06:02 | 06:11 | 05:36 | 05:27 | 05:45 | 06:15 | 06:46 | 07:18 | 06:55 | 07:27-07:56/29 |
| 17:03 | | 17:41 | 18:13 | 19:46 | 20:17 | 20:36 | 20:27 | 19:50 | 18:59 | 18:10 | 16:36 | 16:34 |
| 23 07:19 | 07:55-08:18/23 | 06:45 | 06:00 | 06:10 | 05:35 | 05:27 | 05:46 | 06:16 | 06:47 | 07:19 | 06:56 | 07:28-07:58/30 |
| 17:04 | | 17:42 | 18:14 | 19:48 | 20:18 | 20:37 | 20:26 | 19:48 | 18:57 | 18:08 | 16:35 | 16:34 |
| 24 07:19 | 07:58-08:18/20 | 06:43 | 05:58 | 06:08 | 05:34 | 05:27 | 05:46 | 06:17 | 06:48 | 07:21 | 06:57 | 07:27-07:59/32 |
| 17:05 | | 17:44 | 18:15 | 19:49 | 20:19 | 20:37 | 20:25 | 19:47 | 18:55 | 18:07 | 16:35 | 16:35 |
| 25 07:18 | 07:59-08:16/17 | 06:42 | 05:56 | 06:07 | 05:34 | 05:27 | 05:47 | 06:18 | 06:49 | 06:22 | 06:59 | 07:27-07:59/32 |
| 17:06 | | 17:45 | 18:16 | 19:50 | 20:20 | 20:37 | 20:25 | 19:45 | 18:54 | 17:06 | 16:34 | 16:35 |
| 26 07:17 | 08:02-08:13/11 | 06:40 | 05:55 | 06:05 | 05:33 | 05:28 | 05:48 | 06:19 | 06:50 | 06:23 | 07:00 | 07:26-08:00/34 |
| 17:08 | | 17:46 | 18:17 | 19:51 | 20:21 | 20:37 | 20:24 | 19:44 | 18:52 | 17:04 | 16:34 | 16:36 |
| 27 07:16 | | 06:39 | 05:53 | 06:04 | 05:32 | 05:28 | 05:49 | 06:20 | 06:51 | 06:24 | 07:01 | 07:26-08:00/34 |
| 17:09 | | 17:47 | 18:19 | 19:52 | 20:22 | 20:37 | 20:23 | 19:42 | 18:50 | 17:03 | 16:33 | 16:37 |
| 28 07:16 | | 06:37 | 05:51 | 06:03 | 05:32 | 05:29 | 05:50 | 06:21 | 06:52 | 06:25 | 07:02 | 07:27-08:02/35 |
| 17:10 | | 17:48 | 18:20 | 19:53 | 20:23 | 20:37 | 20:22 | 19:41 | 18:48 | 17:02 | 16:33 | 16:37 |
| 29 07:15 | | 06:50 | 06:01 | 05:31 | 05:29 | 05:51 | 06:22 | 06:53 | 06:26 | 07:03 | 07:27-08:02/35 | 07:25 07:48-08:16/28 |
| 17:11 | | 19:21 | 19:54 | 20:23 | 20:37 | 20:21 | 19:39 | 18:47 | 17:00 | 16:32 | | 16:38 |
| 30 07:14 | | 06:48 | 06:00 | 05:30 | 05:29 | 05:52 | 06:23 | 06:54 | 06:28 | 07:04 | 07:28-08:03/35 | 07:25 07:48-08:16/28 |
| 17:13 | | 19:22 | 19:55 | 20:24 | 20:37 | 20:20 | 19:37 | 18:45 | 16:59 | 16:32 | | 16:39 |
| 31 07:13 | | 06:46 | 05:30 | 05:53 | 06:24 | 06:24 | 06:29 | 06:29 | 06:29 | 07:25 | 07:48-08:17/29 | |
| 17:14 | | 19:23 | 19:56 | 20:25 | 20:37 | 20:19 | 19:36 | 18:58 | 16:58 | 16:40 | | |
| Potential sun hours | 297 | 297 | 369 | 399 | 449 | 453 | 460 | 428 | 375 | 345 | 297 | 287 |
| Sum of minutes with flicker | 765 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 420 | 900 |

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: ShadowWTG: 14 - Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) (14)

Assumptions for shadow calculations

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

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

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

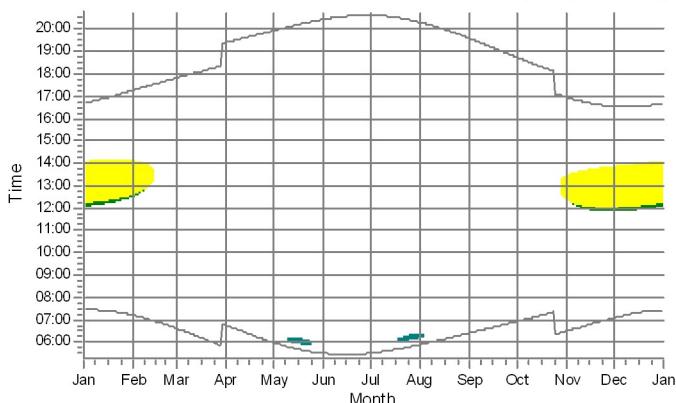
The WTG is always operating

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

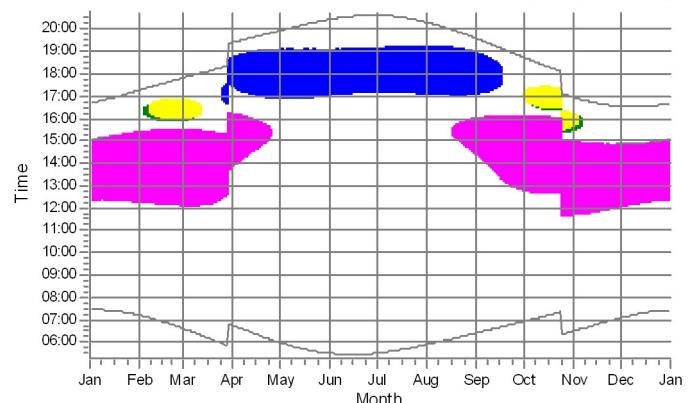
SHADOW - Calendar per WTG, graphical

Calculation: Shadow

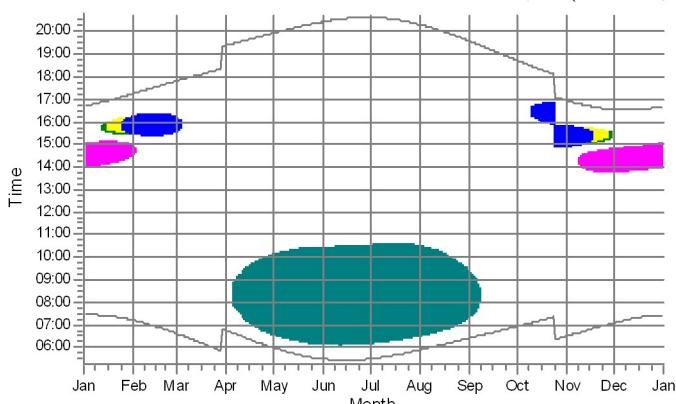
1: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0



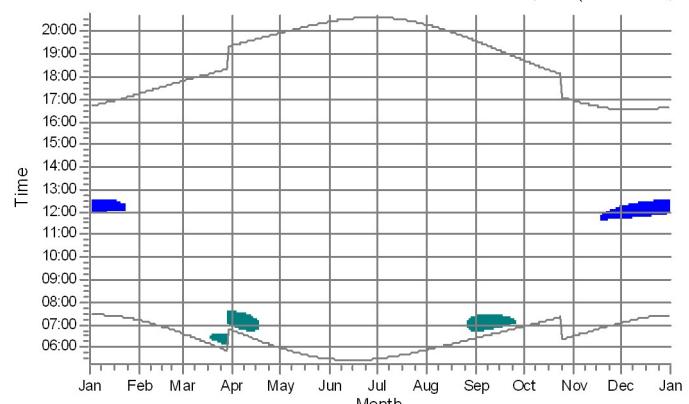
2: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0



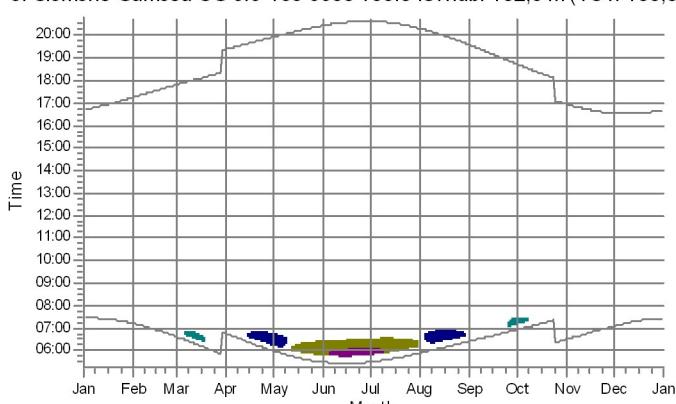
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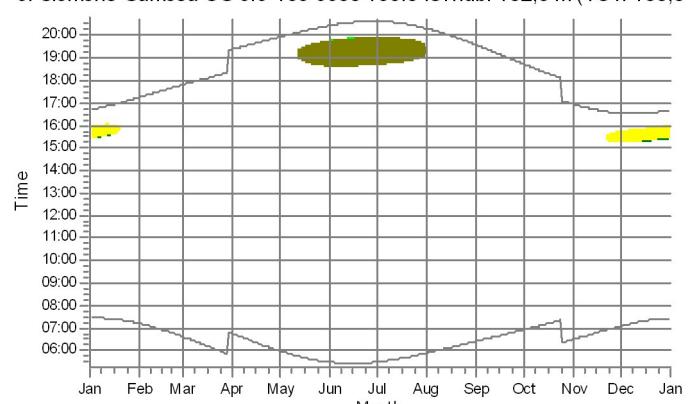
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5: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0



6: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0



Shadow receptors

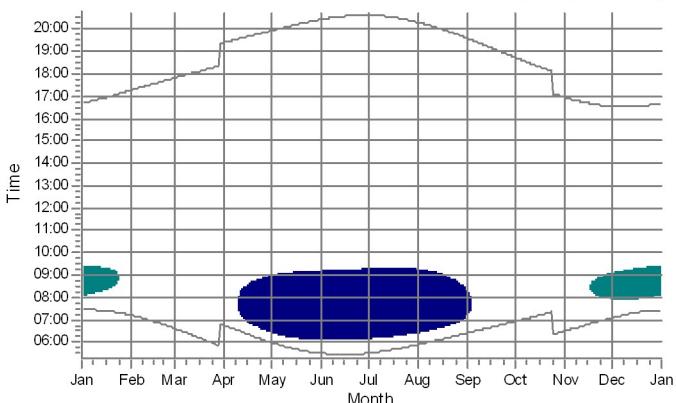
- A: Shadow Receptor: 1,0 x 1,0 Azimuth: 0,0° Slope: 90,0° (1)
- B: Shadow Receptor: 1,0 x 1,0 Azimuth: 0,0° Slope: 90,0° (2)
- C: Shadow Receptor: 1,0 x 1,0 Azimuth: 90,0° Slope: 90,0° (3)
- D: Shadow Receptor: 1,0 x 1,0 Azimuth: 45,0° Slope: 90,0° (4)
- E: Shadow Receptor: 1,0 x 1,0 Azimuth: 45,0° Slope: 90,0° (5)
- F: Shadow Receptor: 1,0 x 1,0 Azimuth: -90,0° Slope: 90,0° (6)

- G: Shadow Receptor: 1,0 x 1,0 Azimuth: -90,0° Slope: 90,0° (7)
- H: Shadow Receptor: 1,0 x 1,0 Azimuth: -180,0° Slope: 90,0° (8)
- I: Shadow Receptor: 1,0 x 1,0 Azimuth: -180,0° Slope: 90,0° (9)
- J: Shadow Receptor: 1,0 x 1,0 Azimuth: -180,0° Slope: 90,0° (10)
- K: Shadow Receptor: 1,0 x 1,0 Azimuth: -160,0° Slope: 90,0° (11)

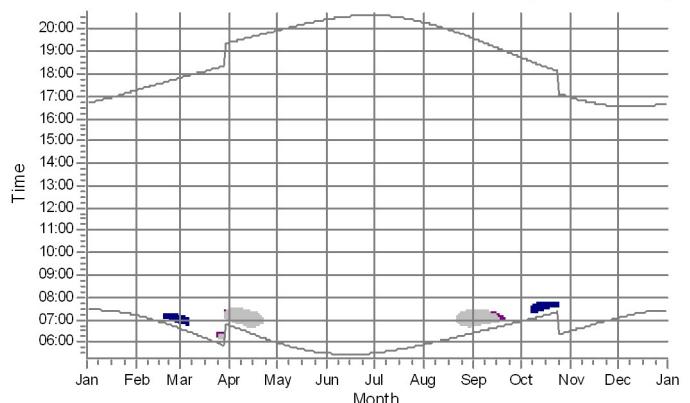
SHADOW - Calendar per WTG, graphical

Calculation: Shadow

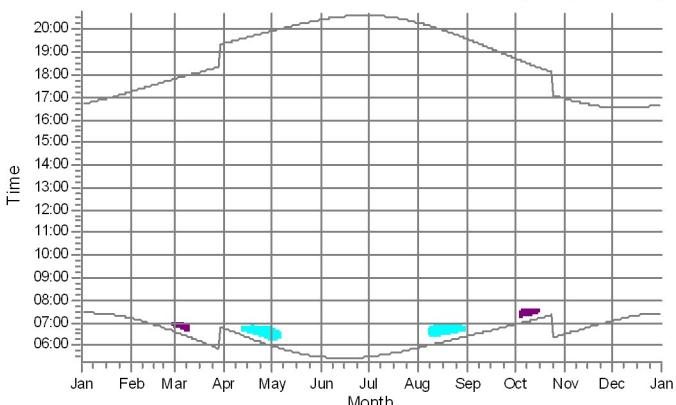
7: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0



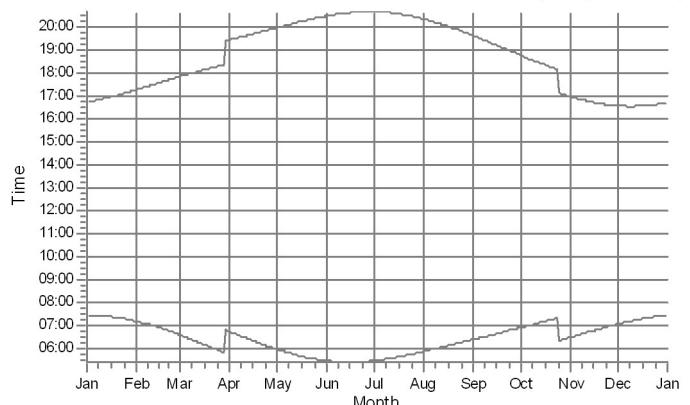
8: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0



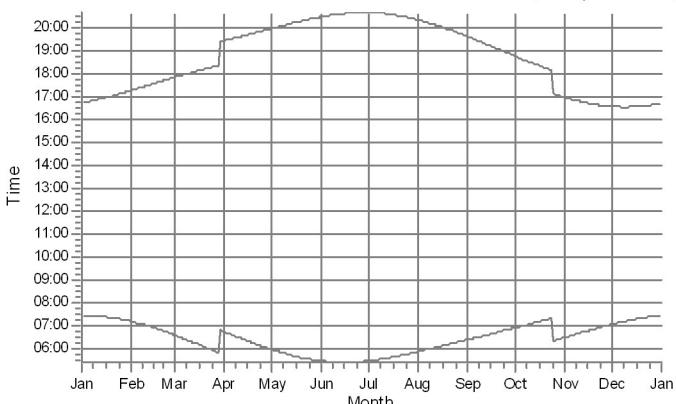
9: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0



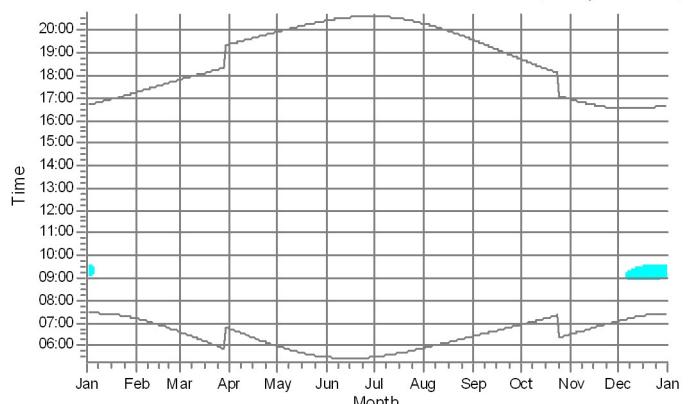
10: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0



11: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0



12: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0



Shadow receptors

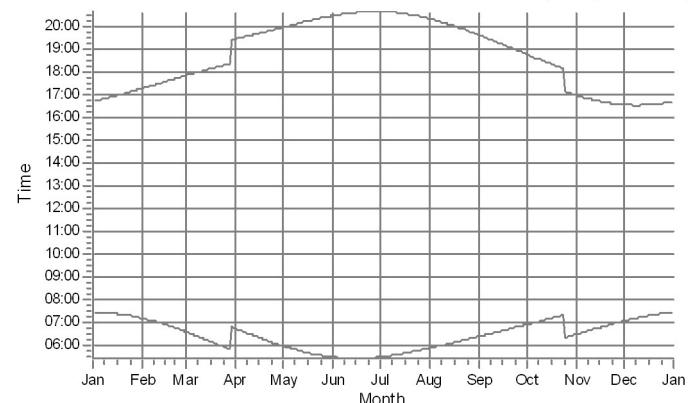
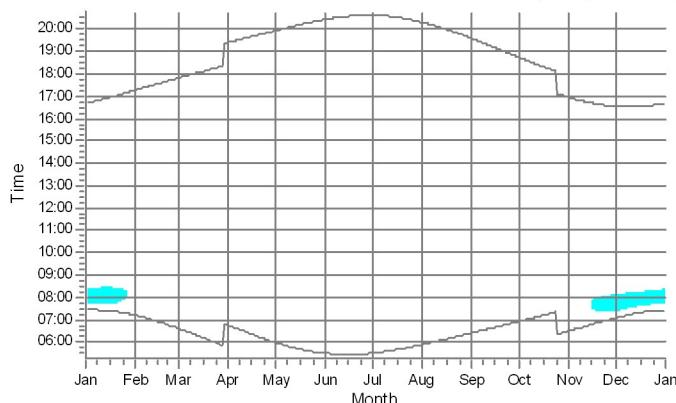
- F: Shadow Receptor: 1,0 × 1,0 Azimuth: -90,0° Slope: 90,0° (6)
- G: Shadow Receptor: 1,0 × 1,0 Azimuth: -90,0° Slope: 90,0° (7)
- I: Shadow Receptor: 1,0 × 1,0 Azimuth: -180,0° Slope: 90,0° (9)

- K: Shadow Receptor: 1,0 × 1,0 Azimuth: -160,0° Slope: 90,0° (11)
- L: Shadow Receptor: 1,0 × 1,0 Azimuth: -180,0° Slope: 90,0° (12)
- M: Shadow Receptor: 1,0 × 1,0 Azimuth: -120,0° Slope: 90,0° (13)

SHADOW - Calendar per WTG, graphical

Calculation: Shadow

13: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m) 14: Siemens Gamesa SG 6.6-155 6600 155.0 !O! hub: 102,5 m (TOT: 180,0 m)

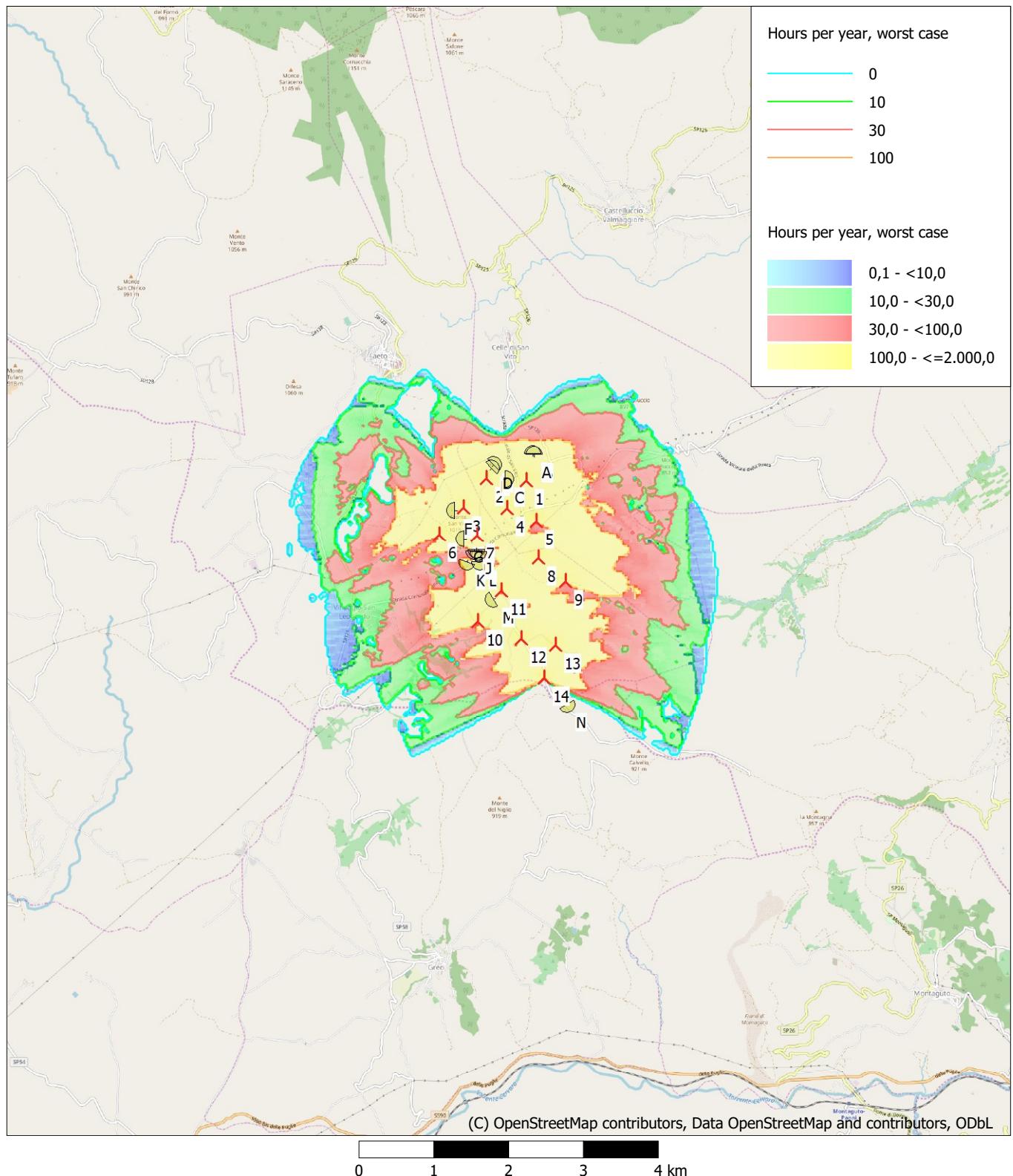


Shadow receptors

M: Shadow Receptor: 1,0 x 1,0 Azimuth: -120,0° Slope: 90,0° (13)

SHADOW - Map

Calculation: Shadow



Map: EMD OpenStreetMap , Print scale 1:75.000, Map center UTM (north)-WGS84 Zone: 33 East: 515.100 North: 4.572.000

New WTG Shadow receptor

Flicker map level: Elevation Grid Data Object: IR_FaetoCelle_20km_EMDGrid_0.wpg (1)

Time step: 4 minutes, Day step: 14 days, Map resolution: 30 m, Visibility resolution: 15 m, Eye height: 1,5 m