



Wpd Altilia S.r.l.

Corso d'Italia n. 83 - 00198 ROMA

PROGETTO DEFINITIVO PER LA REALIZZAZIONE DI UN PARCO EOLICO CON POTENZA DI 72,00 MW RICADENTE NEL TERRITORIO DEL COMUNE DI ALTAMURA (BA) IN LOCALITA' "LAMA DI NEBBIA"



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UNI EN ISO 9001:2015
UNI EN ISO 14001:2015
UNI ISO 45001:2018

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V10		STUDIO EVOLEZIONE OMBRA (SHADOW FLICKERING)	20123	D		
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06						

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INDICE

1	PREMESSA.....	2
2	ANALISI DELL'ESPOSIZIONE SOLARE ANNUALE.....	3
3	VALUTAZIONE PREVENTIVA DELLE OMBRE GENERATE	4
	3.1 Worst Case	4
	3.2 Real Case.....	0
4	CONCLUSIONE	46
	TABULATI DI CALCOLO	47

1 PREMESSA

La presente relazione tecnica specialistica descrive l'evoluzione giornaliera delle ombre generate dalle pale eoliche facenti parte del progetto dell'impianto eolico per la produzione di energia elettrica proposto dalla società **Wpd Altilia s.r.l.** con sede in *Corso d'Italia n. 83 - 00198 ROMA*.

La proposta progettuale è finalizzata alla realizzazione di un impianto eolico per la produzione di energia elettrica da fonte rinnovabile eolica, costituito da 12 aerogeneratori, ciascuno di potenza nominale pari a 6,0 MW per una potenza complessiva di 72,00 MW, da realizzarsi nella Provincia di Bari, nel territorio comunale di Altamura, in cui ricadono gli aerogeneratori e l'elettrodotto, e le opere di connessione alla RTN.

Il parco eolico di progetto sarà ubicato in località Lama di Nebbia, nell'area a sud-ovest dell'abitato di Altamura, ad una distanza dal centro abitato di circa 4,3 km.

I terreni sui quali si installerà il parco eolico, interessa una superficie di circa 450 ettari, anche se la quantità di suolo effettivamente occupato è significativamente inferiore e limitato alle aree di piazzole dove verranno installati gli aerogeneratori, come visibile sugli elaborati planimetrici allegati al progetto.

L'area di progetto, intesa sia come quella occupata dai 12 aerogeneratori di progetto, con annessi piazzole e relativi cavidotti di interconnessione interna, e del cavidotto esterno e la sottostazione di consegna interessa il territorio comunale di Altamura censito al NCT ai fogli di mappa nn. 236, 238, 256, 258, 259, 260, 260, e 280.

Di seguito si riporta la tabella riepilogativa, in cui sono indicate per ciascun aerogeneratore le relative coordinate (UTM fuso 33) e le particelle catastali, con riferimento al catasto dei terreni del Comune di Altamura.



Tabella dati geografici e catastali degli Aerogeneratori:

WTG	COORDINATE GEOGRAFICHE		COORDINATE PLANIMETRICHE UTM33 WGS 84		DATI CATASTALI		
	LATITUDINE	LONGITUDINE	NORD (Y)	EST (X)	Comune	foglio n.	part. n.
01	40° 46' 33.7309"	16° 31' 34.6390"	4515016	628799	Altamura	236	446/300
02	40° 46' 14.2361"	16° 31' 30.0979"	4514413	628703	Altamura	236	137
03	40° 45' 56.1586"	16° 31' 4.1358"	4513845	628104	Altamura	256	125/50
04	40° 45' 38.7083"	16° 30' 52.0528"	4513302	627830	Altamura	256	79
05	40° 45' 13.4433"	16° 30' 52.2469"	4512523	627848	Altamura	258	2
06	40° 45' 16.4986"	16° 31' 16.3683"	4512627	628412	Altamura	259	52
07	40° 45' 30.3883"	16° 31' 27.9013"	4513060	628675	Altamura	259	172
08	40° 45' 44.9397"	16° 31' 45.7632"	4513516	629086	Altamura	260	249
09	40° 46' 6.0786"	16° 32' 0.7930"	4514174	629427	Altamura	238	69
10	40° 44' 43.0468"	16° 31' 49.5468"	4511609	629208	Altamura	280	217
11	40° 45' 6.4927"	16° 31' 54.4767"	4512334	629311	Altamura	260	192-562
12	40° 45' 26.9900"	16° 32' 18.7018"	4512976	629868	Altamura	260	201

2 ANALISI DELL'ESPOSIZIONE SOLARE ANNUALE

La posizione occupata nel cielo dal sole è compiutamente individuata mediante la misura di due coordinate angolari, azimut ed elevazione (altezza). L'azimut viene misurato, in senso orario, sul piano orizzontale, a partire dal nord geografico fino al punto sull'orizzonte direttamente sotto all'oggetto; l'elevazione, invece, viene misurata sul piano verticale, partendo da tale punto sino ad arrivare in corrispondenza dell'oggetto. A causa del moto della Terra intorno al sole, tali coordinate variano senza soluzione di continuità e la traiettoria descritta nel cielo dal sole è assimilabile ad un arco; ogni giorno si caratterizza per un proprio arco, il quale si discosta, se pur di poco, da quello del giorno immediatamente precedente e successivo. Ad ogni modo, si può affermare che un certo arco si ripete quasi esattamente ogni anno. Dicesi giorno l'intervallo di tempo nel quale giunge al suolo luce solare diretta per cui, la sua durata è pari al tempo che intercorre tra alba e tramonto.

La durata del giorno non coincide con la durata della luce naturale dato che sia prima dell'alba che dopo il tramonto sono rilevabili due periodi, chiamati entrambi crepuscolo (rispettivamente crepuscolo mattutino e crepuscolo serale o serotino), durante i quali giunge a terra una luce diffusa naturale fornita dai livelli più esterni dell'atmosfera i quali, trovandosi a quote più elevate, ricevono infatti luce solare diretta per un tempo più lungo riflettendola in parte verso la terra. Per quanto detto, la durata dell'illuminazione solare è pari alla somma

della durata del giorno e della durata del crepuscolo mattutino e serale. Se non si verificasse il fenomeno descritto, il passaggio dal giorno alla notte e viceversa avverrebbe in maniera repentina.

3 VALUTAZIONE PREVENTIVA DELLE OMBRE GENERATE

Le turbine eoliche, come altre strutture spiccatamente sviluppate in altezza, proiettano un'ombra sulle aree adiacenti in presenza della luce solare diretta. In particolare si hanno fenomeni quasi statici legati alla presenza della torre fissa ed effetti dinamici legati alla rotazione del rotore con le sue tre pale.

Il primo fenomeno potrebbe avere come conseguenza l'incremento della probabilità di formazione di ghiaccio sulle strade asfaltate soggette a rilevante traffico (se presenti) in particolare nelle prime ed ultime ore del giorno.

Il secondo fenomeno è legato alla presenza di un osservatore posto in modo da vedere interposto il rotore tra sé e il sole. Si precisa che i fenomeni di ombreggiamento descritti attualmente non sono regolati da una specifica normativa.

Ai fini della presente trattazione è stato preso in considerazione un modello tipologico di aerogeneratore avente un'altezza massima (altezza al mozzo + lunghezza della pala) pari a 250 m dato che l'apparecchio effettivamente installato non avrà un'altezza massima superiore a tale valore. È stato stimato l'effetto "flicker" prodotto dall'impianto eolico; trattasi di un fenomeno per cui si genera una intermittenza dell'ombra (una sorta di effetto stroboscopico) a seguito del movimento del rotore dell'aerogeneratore quando in esercizio (in particolare quando il piano del rotore risulta perpendicolare alla congiungente tra l'osservatore e il sole), e che potrebbe risultare spiacevole per un osservatore. Per eseguire tale analisi è stato impiegato il software WindPRO.

3.1 Worst Case

Nel calcolo sono state assunte le seguenti ipotesi ampiamente conservative (caso peggiore – *worst case*):

- Sole splendente tutto il giorno e per tutto l'anno;
- Impianto costantemente in funzione (presenza costante di vento);
- Piano del rotore sempre ortogonale alla congiungente tra l'osservatore e il sole;
- Altezza minima del sole sull'orizzonte pari a 3°;
- Effetto dell'ombra proiettata fino a una distanza di 2000 m dalle torri;
- Totale assenza di ostacoli o schermi vegetazionali presenti negli spazi circostanti i possibili recettori.



Il report di calcolo restituisce un grafico finale che riporta in pianta il numero massimo di ore/anno in cui ad altezza dell'occhio umano si verifica l'effetto flicker descritto. Tale numero è rappresentato graficamente sul territorio con aree di diverse sfumature di colore in base al numero di ore/anno di possibile effetto flicker.

Di seguito viene allegato il calcolo dell'ombra per i fabbricati "civile abitazione", maggiormente coinvolti dall'effetto flicker, presenti nel raggio di 1 km.

Dai tabulati è possibile verificare che, nonostante sono assunte le condizioni peggiorative assolute, cioè:

- cioè sole sempre presente, soleggiamento massimo in tutti i giorni dell'anno;
- pale eoliche sempre in rotazione;
- orientamento delle finestre sempre in direzione delle turbine ("modalità serra")
- dimensione tipica finestra 1,5x1,5 m, in tutte le esposizioni, altezza della finestra da terra 1 m
- altezza occhio umano 1,5 m

l'effetto ombra è modesto per gli immobili presenti nell'area di progetto, infatti

- **la massima durata dell'ombra all'anno è di 295:34 ore/anno con un ombreggiamento giornaliero massimo di 1:42 ore/giorno;**
- **sempre dai tabulati risulta che la media di ombreggiamento sui ricettori è di circa 1 ora/giorno.**

I risultati ottenuti sono riportati nella tavola seguente:

SHADOW - Risultato principale

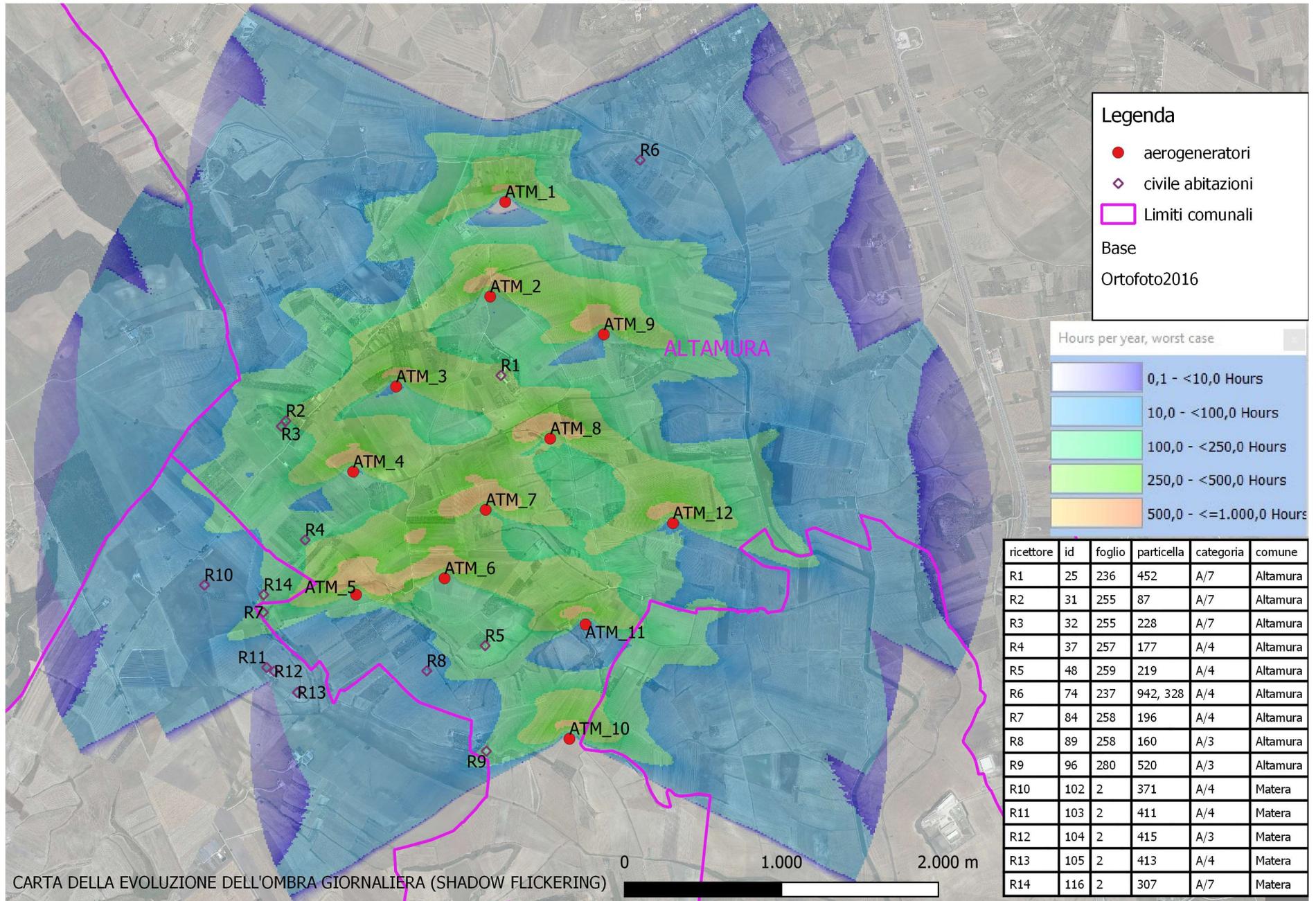
Calcolo: Flicker Altamura su recettori

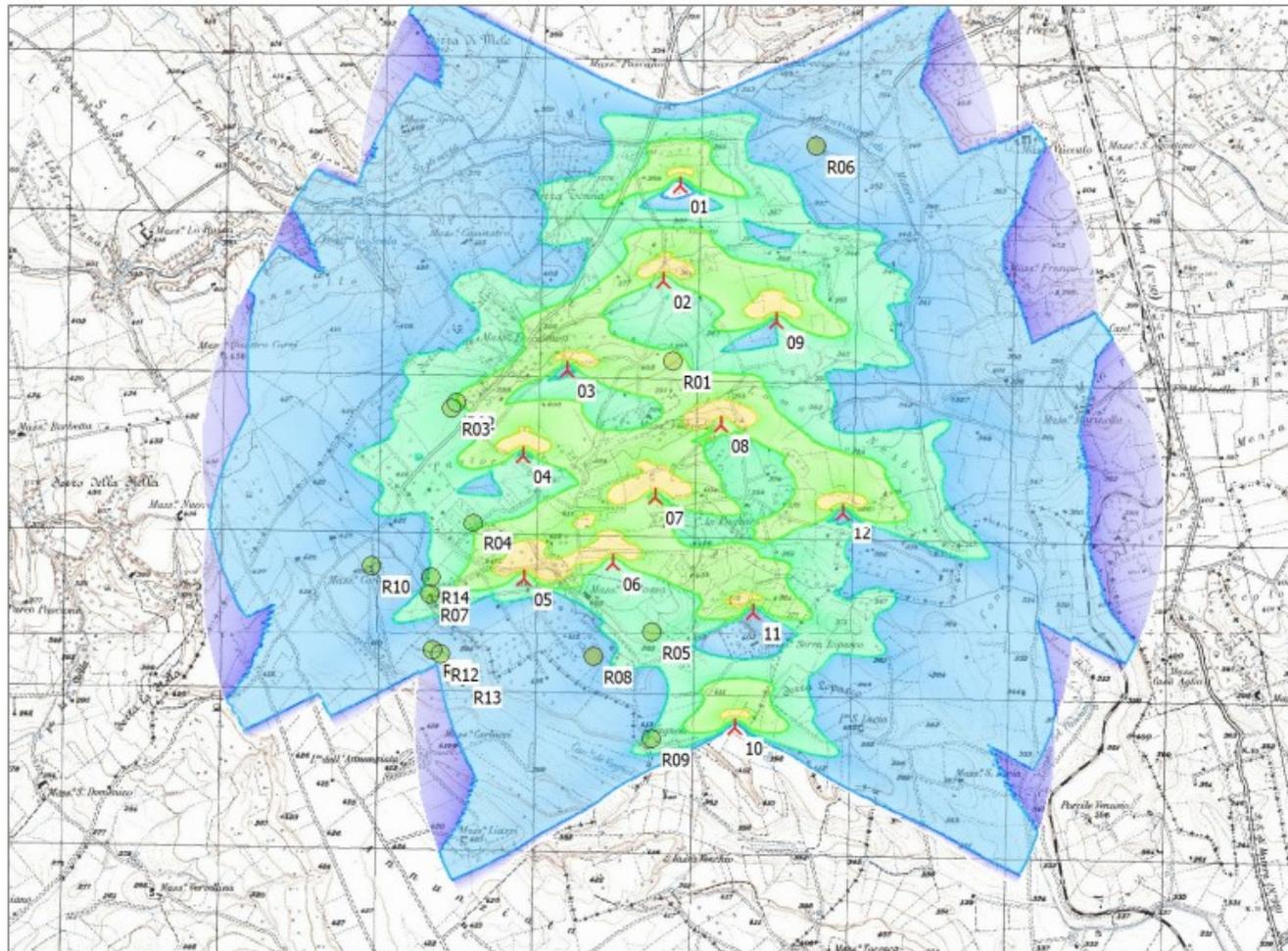
Risultati dei calcoli

Recettore d'ombra

Ombra, caso peggiore

n.	Ore d'ombra per anno [ore/anno]	Giorni con ombra per anno [giorni/anno]	Massima durata dell'ombra per giorno [ore/giorno]
R01	295:34	286	1:42
R02	243:12	286	1:41
R03	206:27	261	1:40
R04	225:37	280	1:23
R05	197:01	206	1:26
R06	59:28	116	0:43
R07	158:43	144	1:23
R08	69:12	165	0:40
R09	139:12	146	1:12
R10	43:30	84	0:56
R11	35:08	88	0:34
R12	29:20	99	0:29
R13	15:07	60	0:23
R14	111:03	138	1:25





Progetto:
Altamura

Ore per anno, caso peggiore

- 0 Hours
- 10 Hours
- 100 Hours
- 250 Hours
- 500 Hours

Ore per anno, caso peggiore

- 0,1 - <10,0 Hours
- 10,0 - <100,0 Hours
- 100,0 - <250,0 Hours
- 250,0 - <500,0 Hours
- 500,0 - <=1.000,0 Hours

SHADOW -
Mappa
Calcolo:
Flicker Altamura su recettori

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Recetto it:
04/02/2021 13:02/3.4.415

Mapa: IGM maps 1:25000 , Scala di stampa 1:40.000, Centro mappa UTM (north)-WGS84 Zone: 33 Est: 628.630 Nord: 4.513.090
 Nuova WTG Recettore d'ombra
 Fonte altimetria: Height Contours: CONTOURLINE_ONLINEDATA_0.wpo (1)

3.2 Real Case

Per quanto concerne l'effetto "flicker", quindi, valutando i risultati ottenuti in relazione al contesto antropico locale, si può ragionevolmente affermare che il fenomeno non ha particolari riflessi negativi sul territorio, dove i primi fabbricati adibiti a civile abitazioni sono in numero limitato e a distanze sempre superiori a diverse centinaia di metri, distanze oltre le quali il fenomeno di ombreggiamento è praticamente modesto, infatti la media di ombreggiamento sui ricettori è di circa 1 ora/giorno.

Pur nelle ipotesi conservative assunte, la probabilità che un osservatore sia soggetto al fenomeno non è significativa, se si riportano i risultati numerici ai casi reali con le dovute attenuazioni di origine morfologica e meteorologica del territorio.

Nel calcolo sono state assunte le seguenti ipotesi (caso reale – *real case*):

- Altezza minima del sole sull'orizzonte pari a 3°;
- Probabilità di eliofania (media ore giornaliere di insolazione) calcolate dalla Stazione meteorologica più vicina "AMENDOLA":

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen	Feb	Mar	Apr	Mag	Giu	Lug	Ago	Set	Ott	Nov	Dic
4,12	4,66	5,30	6,72	8,25	9,35	10,16	9,45	7,64	5,82	4,65	3,82

- Le ore di operatività sono calcolate in base della distribuzione del vento:

Tempo di operatività

N	NNE	ENE	E	ESE	SSE	S	SSO	OSO	O	ONO	NNO	Somma
1.229	573	283	164	231	782	961	432	328	544	685	1.236	7.447

3,0m/s

- Totale assenza di ostacoli o schermi vegetazionali presenti negli spazi circostanti i possibili recettori.

SHADOW - Risultato principale

Calcolo: flickering real case

Assunzioni sui calcoli d'ombra

Distanza massima di influenza
Calcola solo quando oltre il 20% del sole è coperto dalla pala
Consultare la tabella delle WTG

Altezza minima del sole sull'orizzonte 3 °
Passo giornaliero del calcolo 1 giorni
Passo temporale del calcolo 1 minuti

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Le ore di operatività sono calcolate in base della distribuzione del vento:
Default Meteo data description (8)

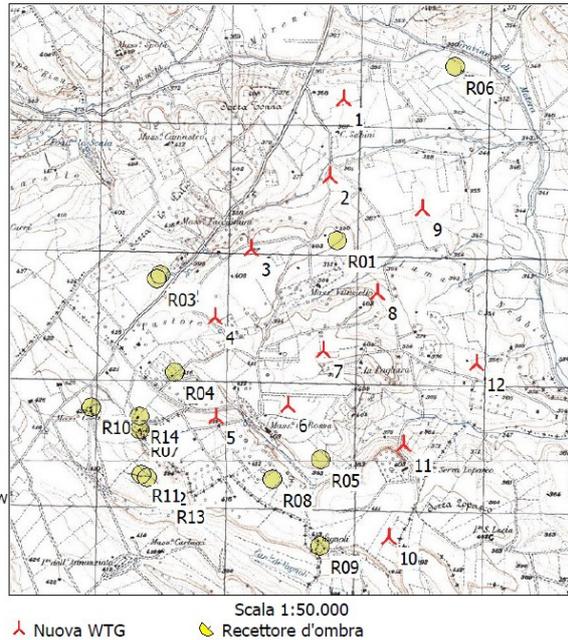
Tempo di operatività
N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

Per evitare di considerare l'ombreggiamento da WTG in realtà non direttamente visibili, prima del calcolo dell'ombra viene eseguito un calcolo ZVI. Quest'ultimo si basa sulle seguenti assunzioni.

Curve altimetriche usate: Height Contours: CONTOURLINE_ONLINEDATA_0.w

Ostacoli usati:
Altezza dell'osservatore, nelle mappe: 1,6 m
Risoluzione del grigliato: 1,0 m

Tutte le coordinate sono in
UTM (north)-WGS84 Zona: 33



Per evitare di considerare l'ombreggiamento da WTG in realtà non direttamente visibili, prima del calcolo dell'ombra viene eseguito un calcolo ZVI.

Il report di calcolo restituisce un grafico finale che riporta in pianta il numero massimo di ore/anno in cui ad altezza dell'occhio umano si verifica l'effetto flicker descritto. Tale numero è rappresentato graficamente sul territorio con aree di diverse sfumature di colore in base al numero di ore/anno di possibile effetto flicker.

Di seguito viene allegato il calcolo dell'ombra per i fabbricati "civile abitazione", maggiormente coinvolti dall'effetto flicker, presenti nel raggio di 1 km.

Il calcolo utilizza valori statistici/calcolati che tiene conto della direzione e intensità del vento nella zona e dell'irraggiamento solare in base alle stagioni.

Per quanto riguarda l'esposizione delle aperture dei recettori sono assunte alcune condizioni peggiorative cioè:

- orientamento delle finestre sempre in direzione delle turbine ("modalità serra")
- dimensione tipica finestra 2 x 2m, in tutte le esposizioni, altezza della finestra da terra 0 m
- altezza occhio umano 1,6 m

l'effetto ombra è modesto per gli immobili presenti nell'area di progetto, infatti

- **la massima durata dell'ombra all'anno è di 79:43 ore/anno;**



- **sempre dai tabulati risulta che il massimo ombreggiamento sui ricettori è di circa 13 minuti al giorno.**
- **il calcolo non tiene conto della vegetazione circostante**

I risultati ottenuti sono riportati nella tavola seguente:

SHADOW - Risultato principale

Calcolo: flikering real case

Risultati dei calcoli

Recettore d'ombra

Ombra, valore atteso

n. Ore d'ombra per anno
[ore/anno]

R01	79:43
R02	68:23
R03	58:10
R04	63:25
R05	58:30
R06	11:20
R07	42:32
R08	18:42
R09	38:27
R10	11:27
R11	9:27
R12	7:50
R13	3:50
R14	30:39

Sono stati analizzati in seguito tutti i casi in cui l'ombreggiamento supera le 30 ore all'anno per verificare nel dettaglio se l'effetto flikering può essere attenuato dall'ombreggiamento di vegetazione circostante, in particolare è stato approfondito lo studio dei seguenti recettori:

- R01 79:43 ore/anno
- R02 68:23 ore/anno
- R03 58:10 ore/anno
- R04 63:25 ore/anno
- R05 58:30 ore/anno
- R07 42:32 ore/anno
- R09 38:27 ore/anno
- R014 30:39 ore/anno

ID. Recettore: R1

DATI GENERALI

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Denominazione **n.d.**

Ubicazione

Località: **A Nord di Mass.a Vitusiello** (da IGM 1:25.000)

Comune: **Altamura**

Provincia: **Bari (BA)**

WTG più vicina

ID. WTG: **02**

Distanza: **503,0 m ca.**

DESCRIZIONE DELLO STATO DI FATTO

Caratteristica tipologica

- **Edifici adibiti a residenza o assimilabili**

Stato di conservazione (analisi visiva dall'esterno)

- **Edificio in ottime/buone/discrete condizioni di conservazione**

Condizioni di utilizzo

- **Continua** (edificio abitato in maniera permanente/ frequentato regolarmente nel tempo)

ESTREMI CATASTALI

Foglio: 236

Part: 452

Sub: 1

Indirizzo: ALTAMURA STRADA COMUNALE ESTERNA VITUSIELLO, SNC Piano T-1

Destinaz. d'uso: A/7

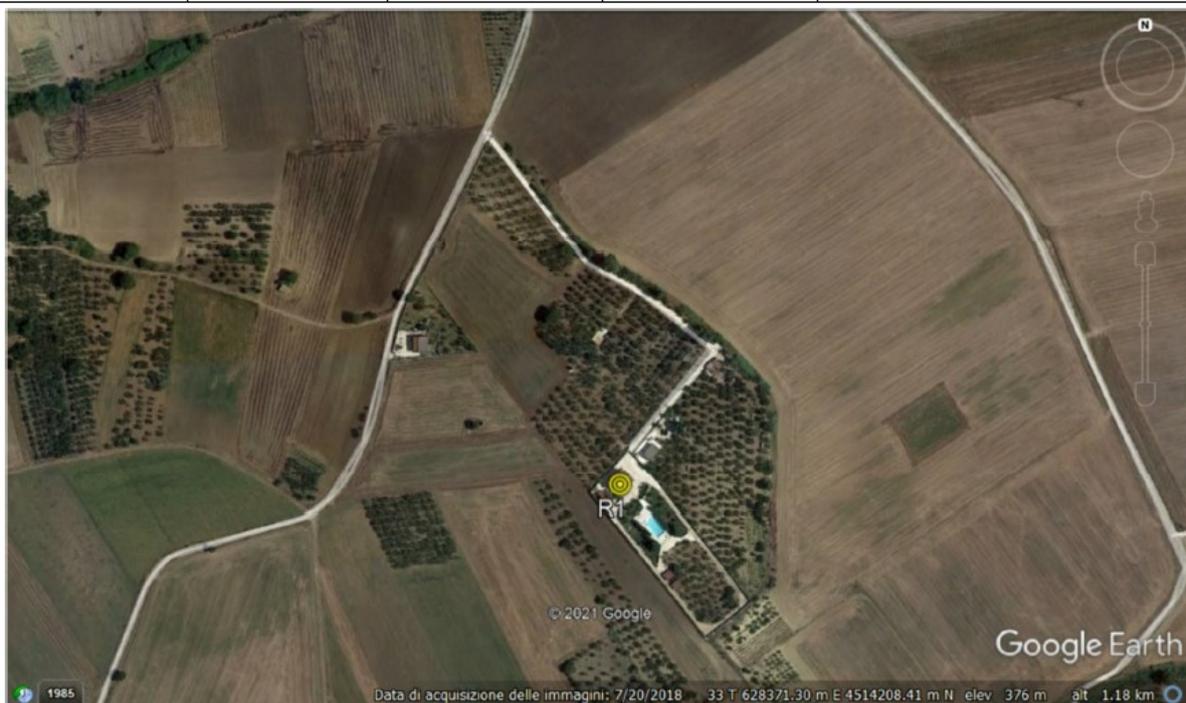


Fonti:

- (1) SISTER Agenzia delle Entrate (link: <https://sister.agenziaentrate.gov.it/Main/index.jsp>);
 (2) Consultazione cartografica catastale – WMS Agenzia delle Entrate (link: <https://www.agenziaentrate.gov.it/portale/it/web/guest/schede/fabbricatiterreni/consultazione-cartografia-catastale/servizio-consultazione-cartografia>).

Elaborazione: QGIS.

UTM WGS84 - Fuso 33		Geografiche WGS84		Quota altimetrica
Est	Nord	Longitudine	Latitudine	(m s.l.m.)
628771.00	4513914.00	16°31'32.6276"	40°45'58.02"	403



Fonte: Google Earth, Data di acquisizione delle immagini: 7/20/2018

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Figura 1: elaborazione tridimensionale del parco eolico in relazione al recettore R01

RILIEVO FOTOGRAFICO

Il fondo in cui è ubicato il recettore è circondato da un muro di cinta con recinzione. Durante i sopralluoghi non è stato consentito l'accesso al fondo. L'edificio non risulta visibile da strada pubblica e pertanto non sono disponibili immagini del recettore.



Figura 2: Punto di Vista n° 1, lato Nord-Ovest



Figura 3: Punto di Vista n° 2, lato Nord Nord-Est

Da ortofoto e rilievo fotografico si è evinto che l'edificio si sviluppa per complessivi n° 2 piani fuori terra ed è completamente circondato da uliveti su tutti i lati, quindi l'effetto flickering che incide sul recettore per 79:43 ore/anno sarà quasi completamente attenuato dalla presenza della vegetazione circostante.



ID. Recettore: R2

DATI GENERALI

Denominazione **n.d.**

Ubicazione

Località: **a Nord di Pastore** (da IGM 1:25.000)

Comune: **Altamura**

Provincia: **Bari (BA)**

WTG più vicina

ID. WTG: **04**

Distanza: **542,4 m ca.**

DESCRIZIONE DELLO STATO DI FATTO

Caratteristica tipologica

- **Edifici adibiti a residenza o assimilabili**

Stato di conservazione (analisi visiva dall'esterno)

- **Edificio in ottime/buone/discrete condizioni di conservazione**

Condizioni di utilizzo

- **Continua** (edificio abitato in maniera permanente/ frequentato regolarmente nel tempo)

ESTREMI CATASTALI

Foglio: 255

Part: 87

Sub: _

Indirizzo: ALTAMURA CONTRADA SELVA, Piano T

Destinaz. d'uso: A/7



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Fonti:
 (1) SISTER Agenzia delle Entrate (link: <https://sister.agenziaentrate.gov.it/Main/index.jsp>);
 (2) Consultazione cartografica catastale – WMS Agenzia delle Entrate (link: <https://www.agenziaentrate.gov.it/portale/it/web/guest/schede/fabbricatiterreni/consultazione-cartografia-catastale/servizio-consultazione-cartografia>).
 Elaborazione: QGIS.

UTM WGS84 - Fuso 33		Geografiche WGS84		Quota altimetrica
Est	Nord	Longitudine	Latitudine	(m s.l.m.)
627400.00	4513627.00	16°30'33.9575"	40°45'49.4844"	416



Fonte: Google Earth, Data di acquisizione delle immagini: 7/20/2018

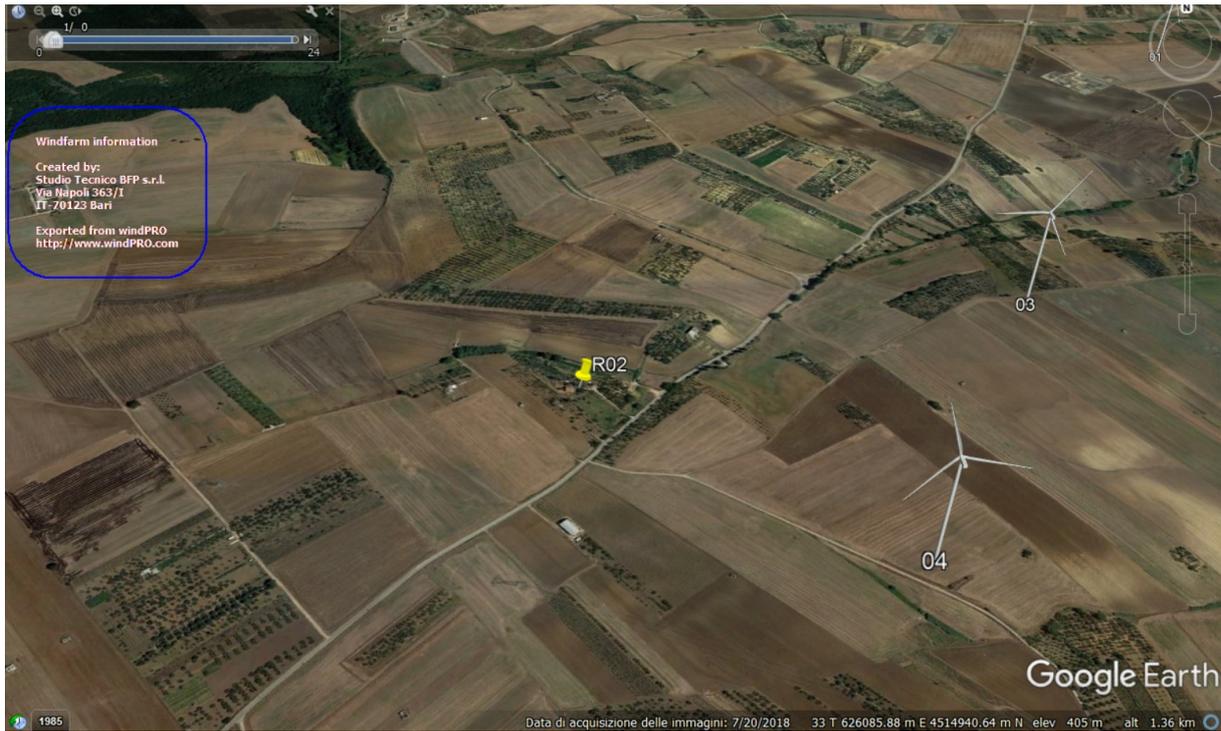


Figura 4: elaborazione tridimensionale del parco eolico in relazione al recettore R02

RILIEVO FOTOGRAFICO

Il fondo in cui è ubicato il recettore è circondato da un muro di cinta con recinzione. Durante i sopralluoghi non è stato consentito l'accesso al fondo. L'edificio risulta parzialmente visibile da strada pubblica e pertanto non sono disponibili immagini dettagliate del recettore. L'edificio si sviluppa per complessivi n° 2 piani fuori terra.



Figura 5: Punto di Vista n° 1, lato Sud e Est

Da ortofoto e rilievo fotografico si è evinto che l'edificio si sviluppa per complessivi n° 2 piani fuori terra ed è completamente circondato da vari alberi su tutti i lati, quindi l'effetto flickering che incide sul recettore per 68:23 ore/anno sarà quasi completamente attenuato dalla presenza della vegetazione circostante.

ID. Recettore: R3

DATI GENERALI

Denominazione n.d.

Ubicazione

Località: **a Nord di Pastore** (da IGM 1:25.000)

Comune: **Altamura**

Provincia: **Bari (BA)**

WTG più vicina

ID. WTG: **04**

Distanza: **544,0 m ca.**

DESCRIZIONE DELLO STATO DI FATTO

Caratteristica tipologica

- **Edifici adibiti a residenza o assimilabili**

Stato di conservazione (analisi visiva dall'esterno)

- **Edificio in ottime/buone/discrete condizioni di conservazione**

Condizioni di utilizzo

- **Discontinua** (edificio frequentato in maniera discontinua e non prolungata nel tempo)

ESTREMI CATASTALI

Foglio: 255

Part: 228

Sub: _

Indirizzo: ALTAMURA STRADA PROVINCIALE 11, Piano T

Destinaz. d'uso: A/7



Fonti:

(1) SISTER Agenzia delle Entrate (link: <https://sister.agenziaentrate.gov.it/Main/index.jsp>);

(2) Consultazione cartografica catastale – WMS Agenzia delle Entrate (link:

<https://www.agenziaentrate.gov.it/portale/it/web/quest/schede/fabbricatiterreni/consultazione-cartografia-catastale/servizio-consultazione-cartografia>).

Elaborazione: QGIS.

UTM WGS84 - Fuso 33		Geografiche WGS84		Quota altimetrica
Est	Nord	Longitudine	Latitudine	(m s.l.m.)
627371.00	4570426.00	16°30'32.696"	40°45'48.3983"	417



E' vietato riprodurre o utilizzare il contenuto senza autorizzazione (art. 2575 c.c.)



Figura 6: elaborazione tridimensionale del parco eolico in relazione al recettore R01

RILIEVO FOTOGRAFICO

Il fondo in cui è ubicato il recettore è circondato da una recinzione. Durante i sopralluoghi non è stato consentito l'accesso al fondo. L'edificio risulta parzialmente visibile da strada pubblica e pertanto non sono disponibili immagini dettagliate del recettore.

L'edificio si sviluppa per complessivi n° 1 piano fuori terra.



Figura 7: Punto di Vista n° 1, lato Sud Sud-Est



Figura 8: Punto di Vista n° 2, lati Nord-Este Sud Sud-Est

E' vietato riprodurre o utilizzare il contenuto senza autorizzazione (art. 2575 c.c.)



Figura 9: Punto di Vista n° 3, lato Sud Sud-Est

Da ortofoto e rilievo fotografico si è evinto che l'edificio si sviluppa per complessivi n° 1 piani fuori terra ed è completamente circondato da uliveti su tutti i lati, quindi l'effetto flickering che incide sul recettore per 58:10 ore/anno sarà quasi completamente attenuato dalla presenza della vegetazione circostante.



ID. Recettore: R4

DATI GENERALI

Denominazione n.d.

Ubicazione

Località: **a Sud di Pastore** (da IGM 1:25.000)

Comune: **Altamura**

Provincia: **Bari (BA)**

WTG più vicina

ID. WTG: **05**

Distanza: **476,3 m ca.**

DESCRIZIONE DELLO STATO DI FATTO

Caratteristica tipologica

- **Edifici adibiti a residenza o assimilabili**

Stato di conservazione (analisi visiva dall'esterno)

- **Edificio parzialmente danneggiato** (es.: presenza di leggere lesioni o danni strutturali, tali da non compromettere la stabilità complessiva della struttura/ copertura, porte e finestre presenti ma parzialmente danneggiate)

Condizioni di utilizzo

- **Assente** (edificio abbandonato: nessuna traccia di frequenza antropica, anche saltuaria)

ESTREMI CATASTALI

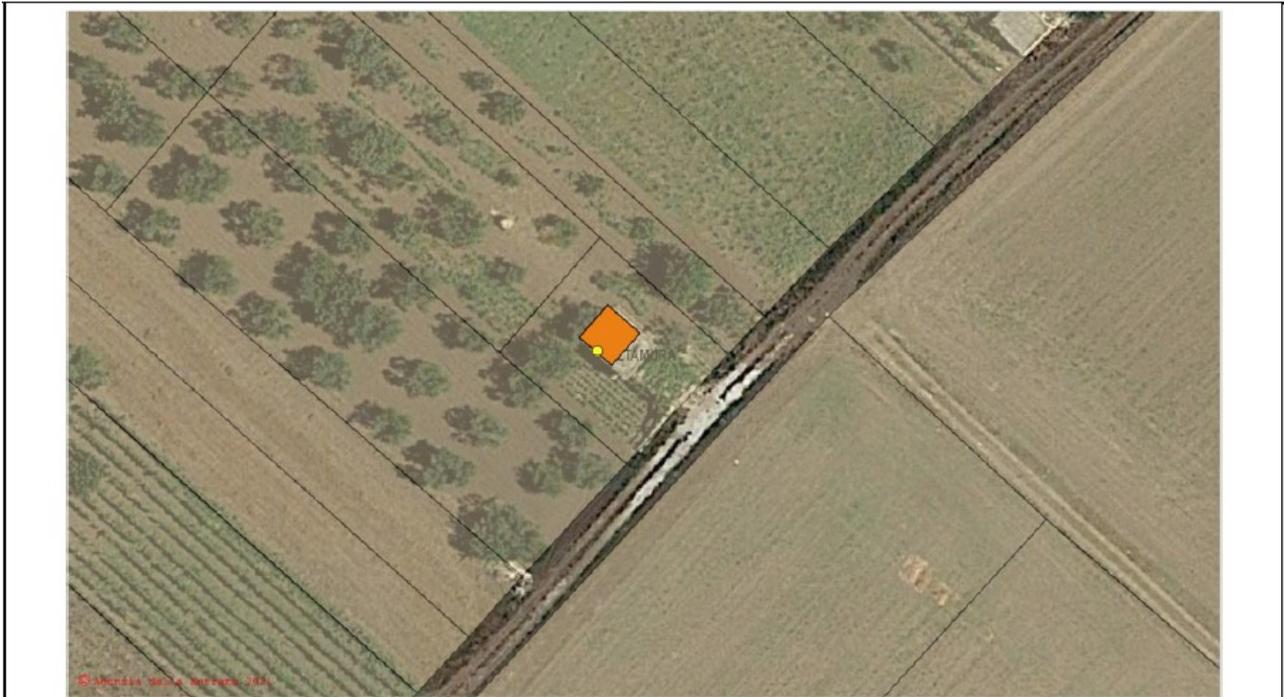
Foglio: 257

Part: 177

Sub: 1

Indirizzo: ALTAMURA CONTRADA SELVA, CS Piano T

Destinaz. d'uso: A/4



Fonti:

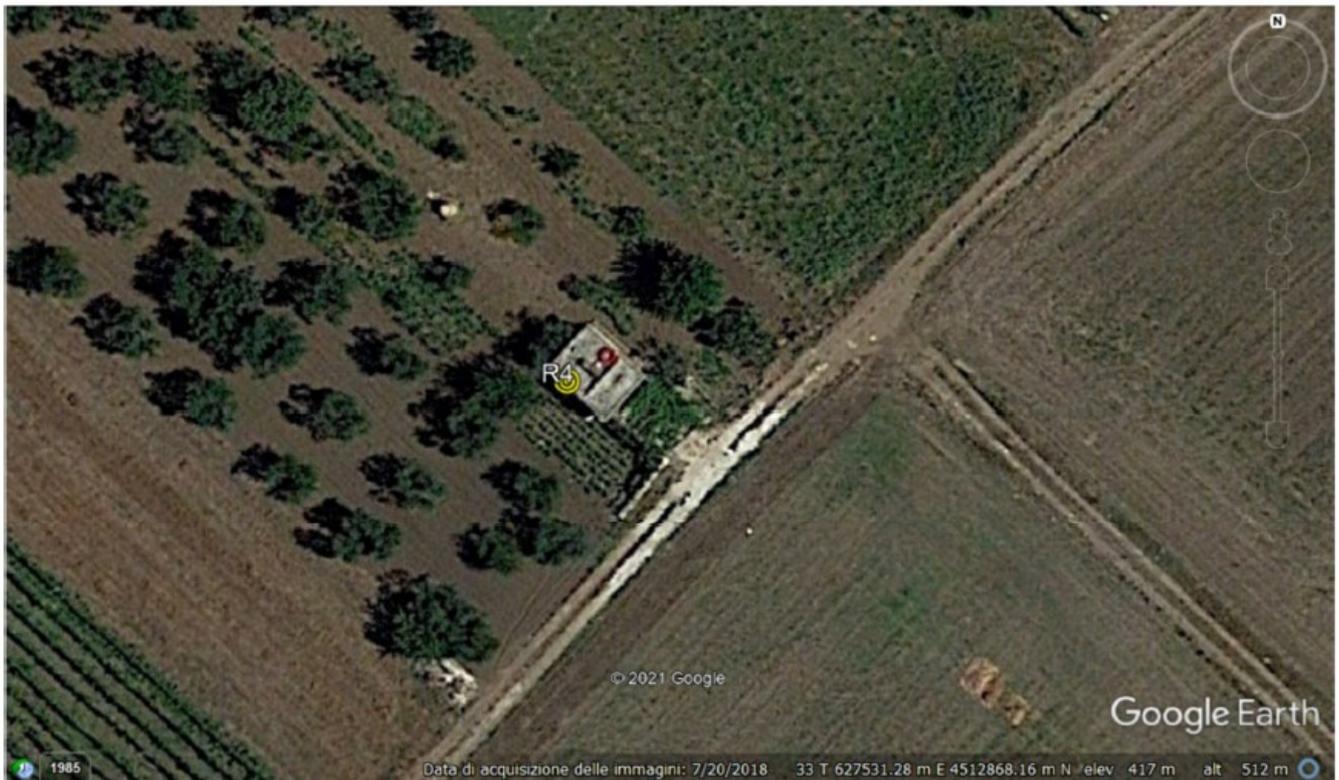
(1) SISTER Agenzia delle Entrate (link: <https://sister.agenziaentrate.gov.it/Main/index.jsp>);

(2) Consultazione cartografica catastale – WMS Agenzia delle Entrate (link:

<https://www.agenziaentrate.gov.it/portale/it/web/guest/schede/fabbricatiterreni/consultazione-cartografia-catastale/servizio-consultazione-cartografia>).

Elaborazione: QGIS.

UTM WGS84 - Fuso 33		Geografiche WGS84		Quota altimetrica
Est	Nord	Longitudine	Latitudine	(m s.l.m.)
627523.00	4512869.00	16°30'38.6455"	40°45'24.8417"	417



E' vietato riprodurre o utilizzare il contenuto senza autorizzazione (art. 2575 c.c.)

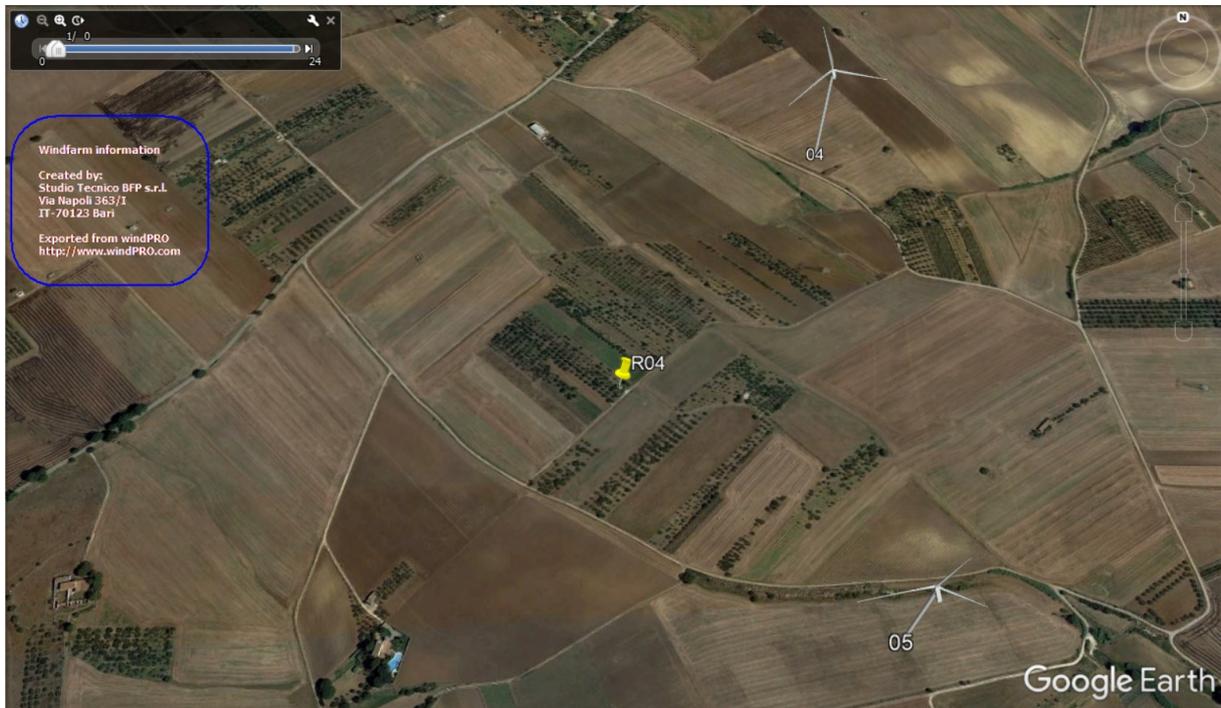


Figura 10: elaborazione tridimensionale del parco eolico in relazione al recettore R01

RILIEVO FOTOGRAFICO

L'edificio si affaccia su strada pubblica e risulta completamente visibile da essa. Sono disponibili immagini dettagliate del recettore. L'edificio si sviluppa per complessivi n° 1 piano fuori terra.



Figura 11: Punto di Vista n° 1, lato Sud-Est



Figura 12: Punto di Vista n° 2, lato Sud-Ovest

E' vietato riprodurre o utilizzare il contenuto senza autorizzazione (art. 2575 c.c.)



Figura 13: Punto di Vista n° 3, lato Nord-Est

Da ortofoto e rilievo fotografico si è evinto che l'edificio si sviluppa per complessivi n° 1 piano fuori terra ed è circondato da uliveti a nord, sud ed ovest, mentre a sud est è ombreggiato da un pergolato con vegetazione rampicante.

L'edificio inoltre risulta abbandonato non c'è nessuna traccia di frequenza antropica, anche saltuaria, quindi l'effetto flickering che incide sul recettore per 63:25 ore/anno oltre ad essere attenuato dalla presenza della vegetazione circostante, non risulta essere un fenomeno che ha conseguenze sulla salute pubblica.



ID. Recettore: R5

DATI GENERALI

Denominazione n.d.

Ubicazione

Località: **a Sud di Mass.a la Rossa** (da IGM 1:25.000)

Comune: **Altamura**

Provincia: **Bari (BA)**

WTG più vicina

ID. WTG: **06**

Distanza: **497,0 m ca.**

DESCRIZIONE DELLO STATO DI FATTO

Caratteristica tipologica

- **Edifici adibiti a residenza o assimilabili**

Stato di conservazione (analisi visiva dall'esterno)

- **Edificio in ottime/buone/discrete condizioni di conservazione**

Condizioni di utilizzo

- **Continua** (edificio abitato in maniera permanente/ frequentato regolarmente nel tempo)

ESTREMI CATASTALI

Foglio: 259

Part: 219

Sub: 1

Indirizzo: ALTAMURA CONTRADA SELVA, Piano T

Destinaz. d'uso: A/7



UTM WGS84 - Fuso 33		Geografiche WGS84		Quota altimetrica
Est	Nord	Longitudine	Latitudine	(m s.l.m.)
628670.00	4512200.00	16°31'27.0513"	40°45'2.5098"	405



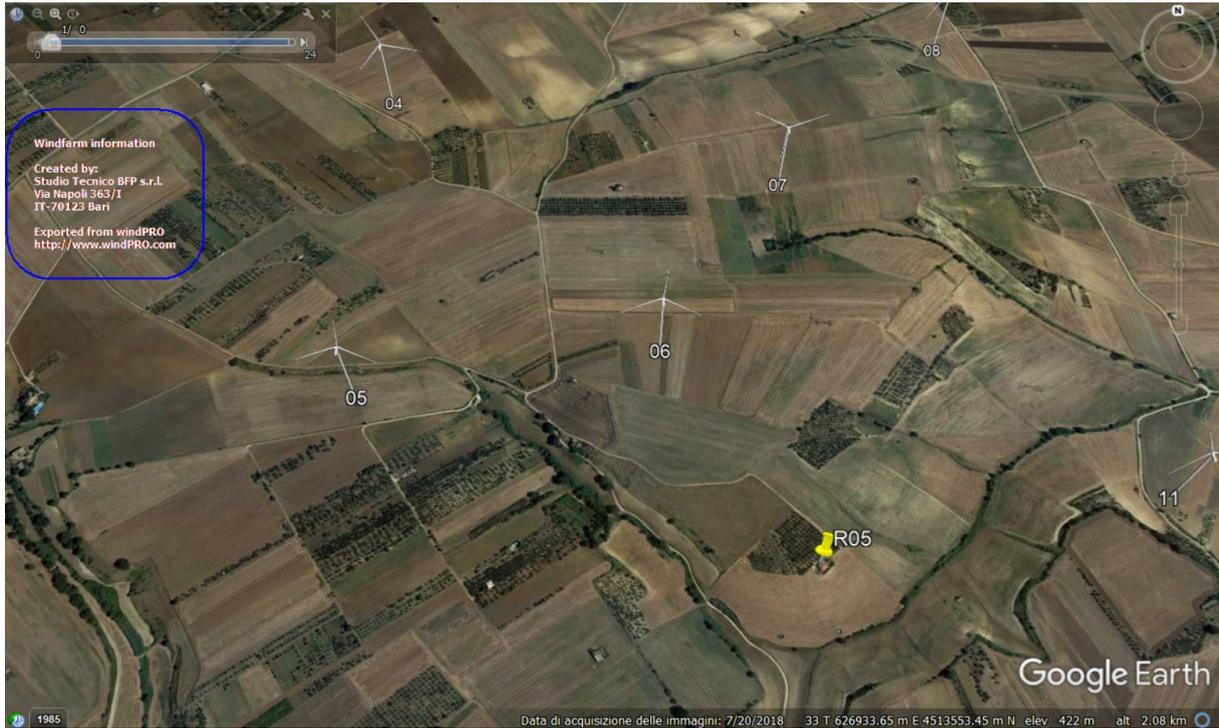


Figura 14: elaborazione tridimensionale del parco eolico in relazione al recettore R05

RILIEVO FOTOGRAFICO

Il fondo in cui è ubicato il recettore è accessibile da una strada privata, all'inizio della quale è presente una barra d'ingresso.

Durante i sopralluoghi non è stato consentito l'accesso al fondo. L'edificio risulta parzialmente visibile da strada pubblica e pertanto non sono disponibili immagini dettagliate del recettore. L'edificio si sviluppa per complessivi n° 2 piani fuori terra.



Figura 15: Punto di Vista n° 1, lato Nord Nord-Ovest



Figura 16: Punto di Vista n° 2, lati Sud-Est e Sud-Ovest

Da ortofoto e rilievo fotografico si è evinto che l'edificio si sviluppa per complessivi n° 2 piani fuori terra ed è circondato da alberi ad altro fusto da nord ad ovest, in direzione delle turbine 05, 06, e 07 che sono quelle più vicine al recettore, quindi l'effetto flickering che incide sul recettore per 58:30 ore/anno sarà quasi completamente attenuato dalla presenza della vegetazione circostante.



ID. Recettore: R7

DATI GENERALI

Denominazione n.d.

Ubicazione

Località: **a Sud-Est di Mass.a Carlucci** (da IGM 1:25.000)

Comune: **Altamura**

Provincia: **Bari (BA)**

WTG più vicina

ID. WTG: **05**

Distanza: **601,6 m ca.**

DESCRIZIONE DELLO STATO DI FATTO

Caratteristica tipologica

- **Edifici adibiti a residenza o assimilabili**

Stato di conservazione (analisi visiva dall'esterno)

- **Edificio parzialmente danneggiato** (es.: presenza di leggere lesioni o danni strutturali, tali da non compromettere la stabilità complessiva della struttura/ copertura, porte e finestre presenti ma parzialmente danneggiate)

Condizioni di utilizzo

- **Discontinua** (edificio frequentato in maniera discontinua e non prolungata nel tempo)

ESTREMI CATASTALI

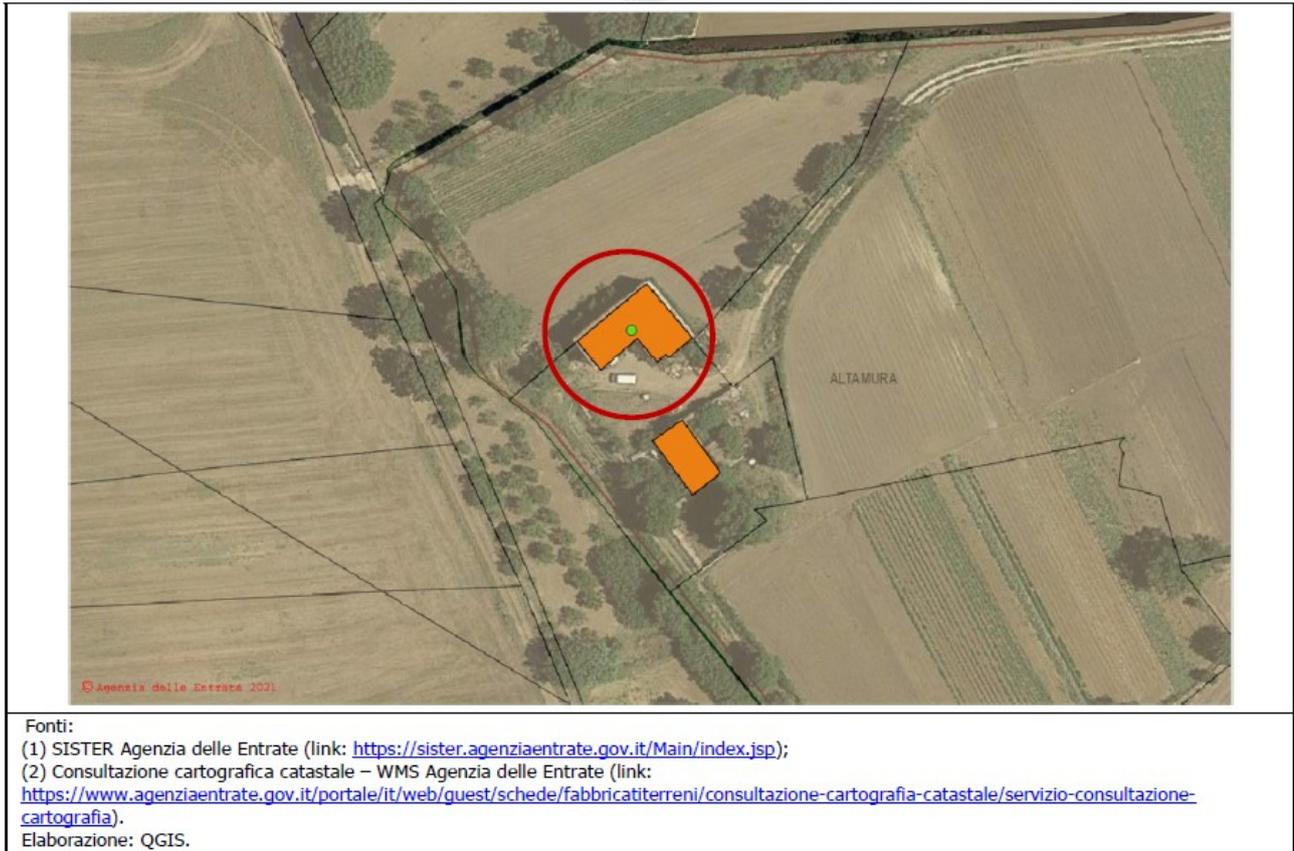
Foglio: 258

Part: 196

Sub: 2

Indirizzo: ALTAMURA CONTRADA LA ROSSA, CS Piano T-1

Destinaz. d'uso: A/4



UTM WGS84 - Fuso 33		Geografiche WGS84		Quota altimetrica
Est	Nord	Longitudine	Latitudine	(m s.l.m.)
627257.0	4512411.00	16°30'26.9693"	40°45'10.1417"	410



Fonte: Google Earth, Data di acquisizione delle immagini: 7/20/2018



Figura 17: elaborazione tridimensionale del parco eolico in relazione al recettore R01

RILIEVO FOTOGRAFICO

Durante i sopralluoghi non è stato consentito l'accesso al fondo. L'edificio risulta parzialmente visibile da strada pubblica e pertanto non sono disponibili immagini dettagliate del recettore. L'edificio si sviluppa per complessivi n° 2 piani fuori terra.



Figura 18: Punto di Vista n° 1, lati Sud Sud-Est e Sud-Ovest



Figura 19: Punto di Vista n° 2, lato Sud-Ovest

Da ortofoto e rilievo fotografico si è evinto che l'edificio si sviluppa per complessivi n° 2 piani fuori terra ed è circondato da vegetazione su quasi tutti i lati, l'effetto flickering che incide sul recettore per 38:27 ore/anno sarà quasi completamente attenuato dalla presenza della vegetazione circostante, sarà leggermente esposto all'effetto flickering dato dalla turbina 05 ad est del fabbricato quindi in orari mattutini.



ID. Recettore: R9

DATI GENERALI

Denominazione n.d.

Ubicazione

Località: **Vagnoli** (da IGM 1:25.000)

Comune: **Altamura**

Provincia: **Bari (BA)**

WTG più vicina

ID. WTG: **10**

Distanza: **535,7 m ca.**

DESCRIZIONE DELLO STATO DI FATTO

Caratteristica tipologica

- **Edifici adibiti a residenza o assimilabili**

Stato di conservazione (analisi visiva dall'esterno)

- **Edificio in ottime/buone/discrete condizioni di conservazione**

Condizioni di utilizzo

- **Continua** (edificio abitato in maniera permanente/ frequentato regolarmente nel tempo)

ESTREMI CATASTALI

Foglio: 280

Part: 520

Sub: 2

Indirizzo: ALTAMURA STRADA COMUNALE ESTERNA VITUSIELLO, SNC Piano T-1-2

Destinaz. d'uso: A/3



Fonti:
 (1) SISTER Agenzia delle Entrate (link: <https://sister.agenziaentrate.gov.it/Main/index.jsp>);
 (2) Consultazione cartografica catastale – WMS Agenzia delle Entrate (link: <https://www.agenziaentrate.gov.it/portale/it/web/guest/schede/fabbricatiterreni/consultazione-cartografia-catastale/servizio-consultazione-cartografia>).
 Elaborazione: QGIS.

UTM WGS84 - Fuso 33		Geografiche WGS84		Quota altimetrica
Est	Nord	Longitudine	Latitudine	(m s.l.m.)
628678.00	4511530.00	16°31'26.8963"	40°44'40.7842"	413

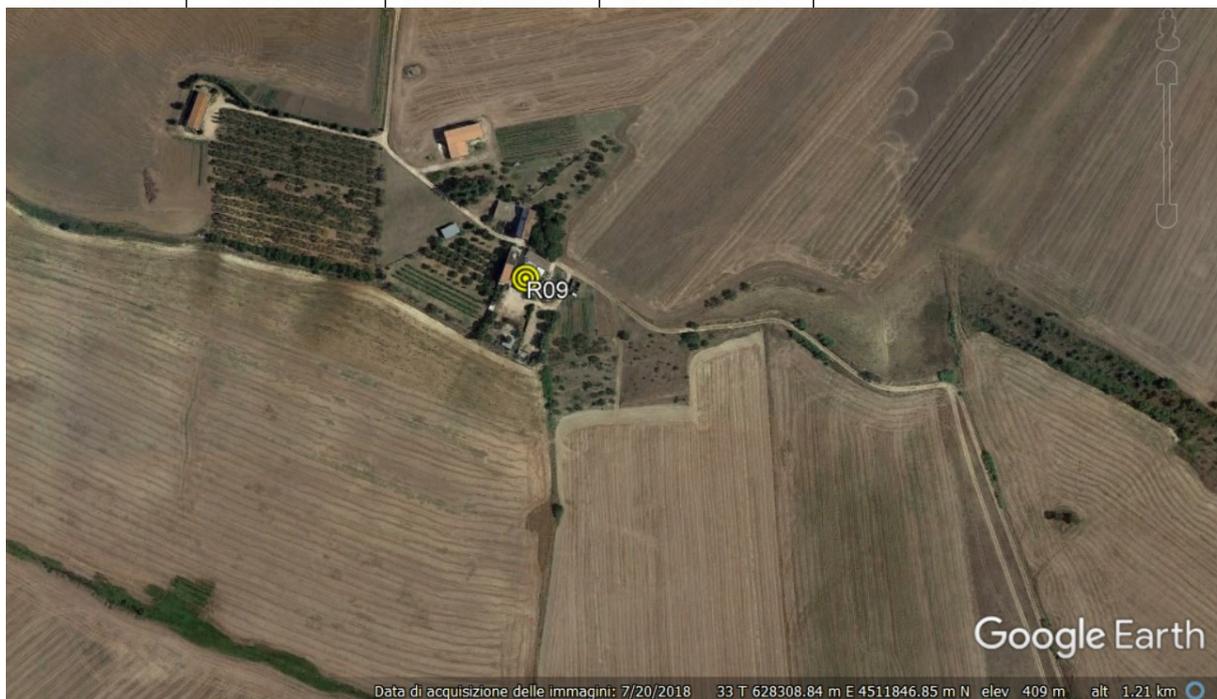




Figura 20: elaborazione tridimensionale del parco eolico in relazione al recettore R09

RILIEVO FOTOGRAFICO

L'edificio si affaccia su strada pubblica e risulta completamente visibile da essa. Sono disponibili immagini dettagliate del recettore. L'edificio si sviluppa per complessivi n° 3 piani fuori terra.



Figura 21: Punto di Vista n° 1, lato Est Sud-Est



Figura 22: Punto di Vista n° 2, lato Est Sud-Est



Figura 23: Punto di Vista n° 3, lato Sud Sud-Ovest



Figura 24: Punto di Vista n° 4, lato Nord Nord-Est

E' vietato riprodurre o utilizzare il contenuto senza autorizzazione (art. 2575 c.c.)



Da ortofoto e rilievo fotografico si è evinto che l'edificio si sviluppa fino a n° 3 piani fuori terra ed è circondato da vegetazione su quasi tutti i lati, l'effetto flickering che incide sul recettore per 30:39 ore/anno sarà quasi completamente attenuato dalla presenza della vegetazione circostante, sarà leggermente esposto all'effetto flickering dato dalla rotazione dell'aerogeneratore 10 ad est del fabbricato, quindi in orari mattutini.

ID. Recettore: R10

DATI GENERALI

Denominazione n.d.

Ubicazione

Località: **Mass.a Carlucci (da IGM 1:25.000)**

Comune: **Altamura**

Provincia: **Bari (BA)**

WTG più vicina

ID. WTG: **05**

Distanza: **969,7 m ca.**

DESCRIZIONE DELLO STATO DI FATTO

Caratteristica tipologica

- **Edifici adibiti a residenza o assimilabili**

Stato di conservazione (analisi visiva dall'esterno)

- stabilità complessiva della struttura e inibirne l'accesso/ copertura assente o parzialmente-totalmente crollata/ porte e finestre completamente danneggiate e/o assenti)

Condizioni di utilizzo

- **Assente** (edificio abbandonato: nessuna traccia di frequenza antropica, anche saltuaria)

ESTREMI CATASTALI

Foglio: 2

Part: 371

Sub: 1

Indirizzo: MATERA CONTRADA ANNUNZIATA, Piano T

Destinaz. d'uso: A/4



Fonti:

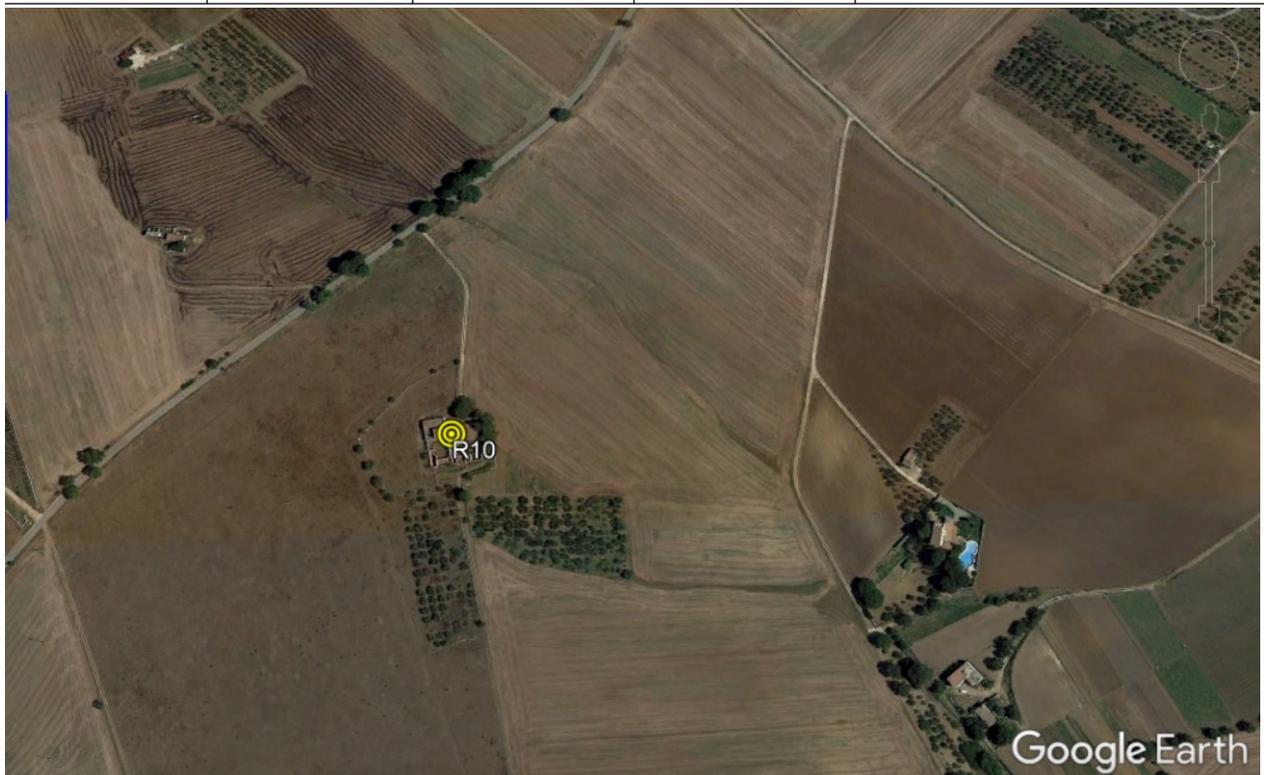
(1) SISTER Agenzia delle Entrate (link: <https://sister.agenziaentrate.gov.it/Main/index.jsp>);

(2) Consultazione cartografica catastale – WMS Agenzia delle Entrate (link:

<https://www.agenziaentrate.gov.it/portale/it/web/guest/schede/fabbricaterreni/consultazione-cartografia-catastale/servizio-consultazione-cartografia>).

Elaborazione: QGIS.

UTM WGS84 - Fuso 33		Geografiche WGS84		Quota altimetrica
Est	Nord	Longitudine	Latitudine	(m s.l.m.)
626881.00	4512583.00	16°30'11.0654"	40°45'15.927"	423



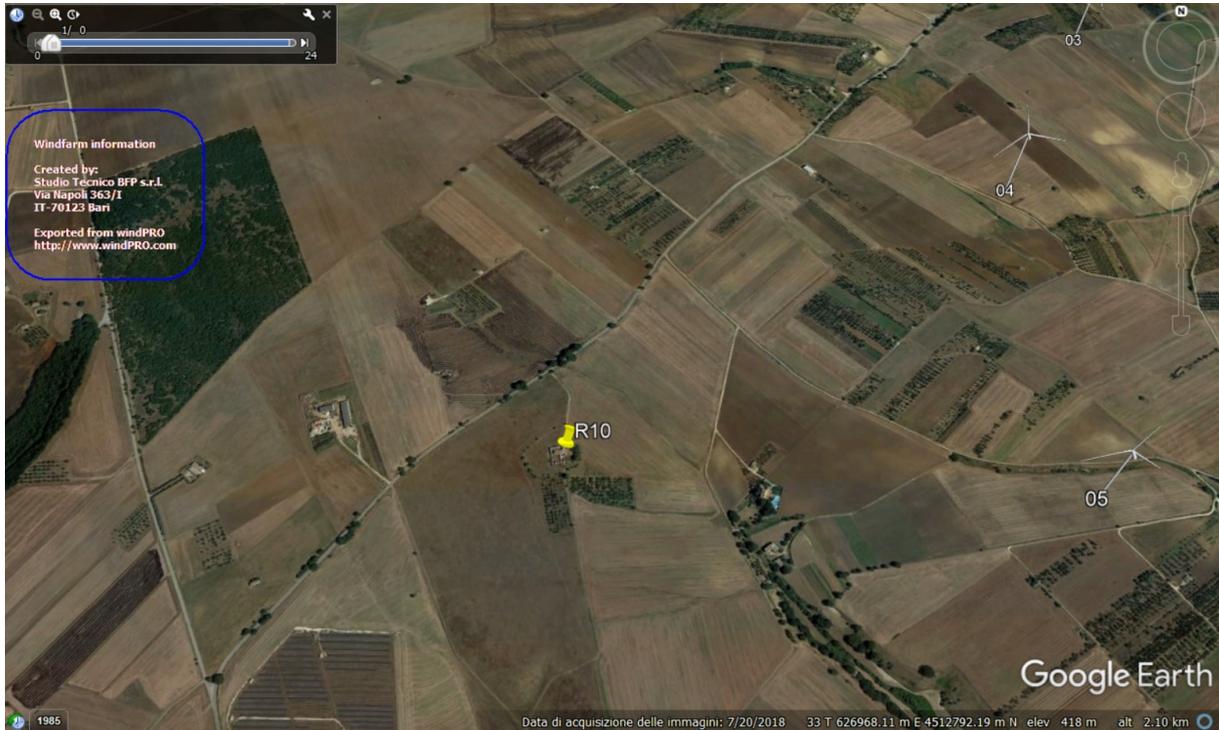


Figura 25: elaborazione tridimensionale del parco eolico in relazione al recettore R10

RILIEVO FOTOGRAFICO

L'edificio si affaccia su strada pubblica e risulta completamente visibile da essa. Il recettore risulta completamente disabitato.

Sono disponibili immagini dettagliate del recettore. L'edificio si sviluppa per complessivi n° 2 piani fuori terra.



Figura 26: Punto di Vista n° 1, lato Nord



Figura 27: Punto di Vista n° 2, lato Est



Figura 28: Punto di Vista n° 3, lato Sud



Figura 29: Punto di Vista n° 4, lato Ovest

E' vietato riprodurre o utilizzare il contenuto senza autorizzazione (art. 2575 c.c.)



Figura 30: Punto di Vista n° 5, lato Ovest



Figura 31: Punto di Vista n° 6, lato Nord

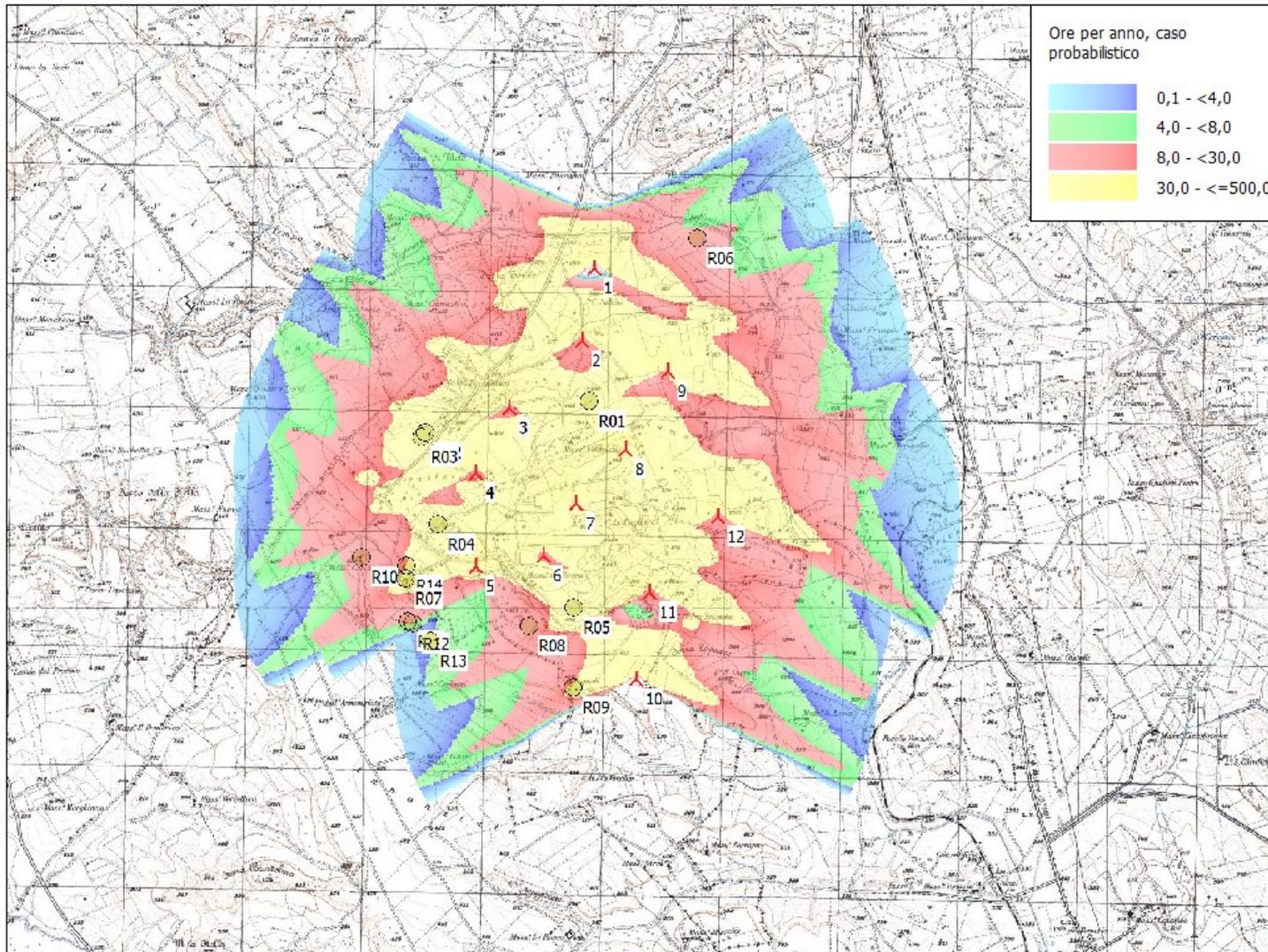
Da ortofoto e rilievo fotografico si è evinto che l'edificio si sviluppa per complessivi n° 2 piano fuori terra ed è circondato da uliveti a sud e ad est.

L'edificio inoltre risulta abbandonato, pericolante e non c'è nessuna traccia di frequenza antropica da diversi anni, quindi l'effetto flickering che incide sul recettore per 42:32 ore/anno oltre ad essere attenuato dalla presenza della vegetazione circostante, non risulta essere un fenomeno che ha conseguenze sulla salute pubblica.



Progetto:

Altamura



SHADOW -
Mappa
Calcolo:
 flikering real case

Utente autorizzato:

Studio Tecnico BFP s.r.l.

Via Napoli 363/I

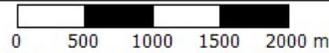
IT-70123 Bari

+39 080 5046361

lariccia / angela-lariccia@hotmail.it

Redatto il:

11/05/2022 16:31/3.4.415

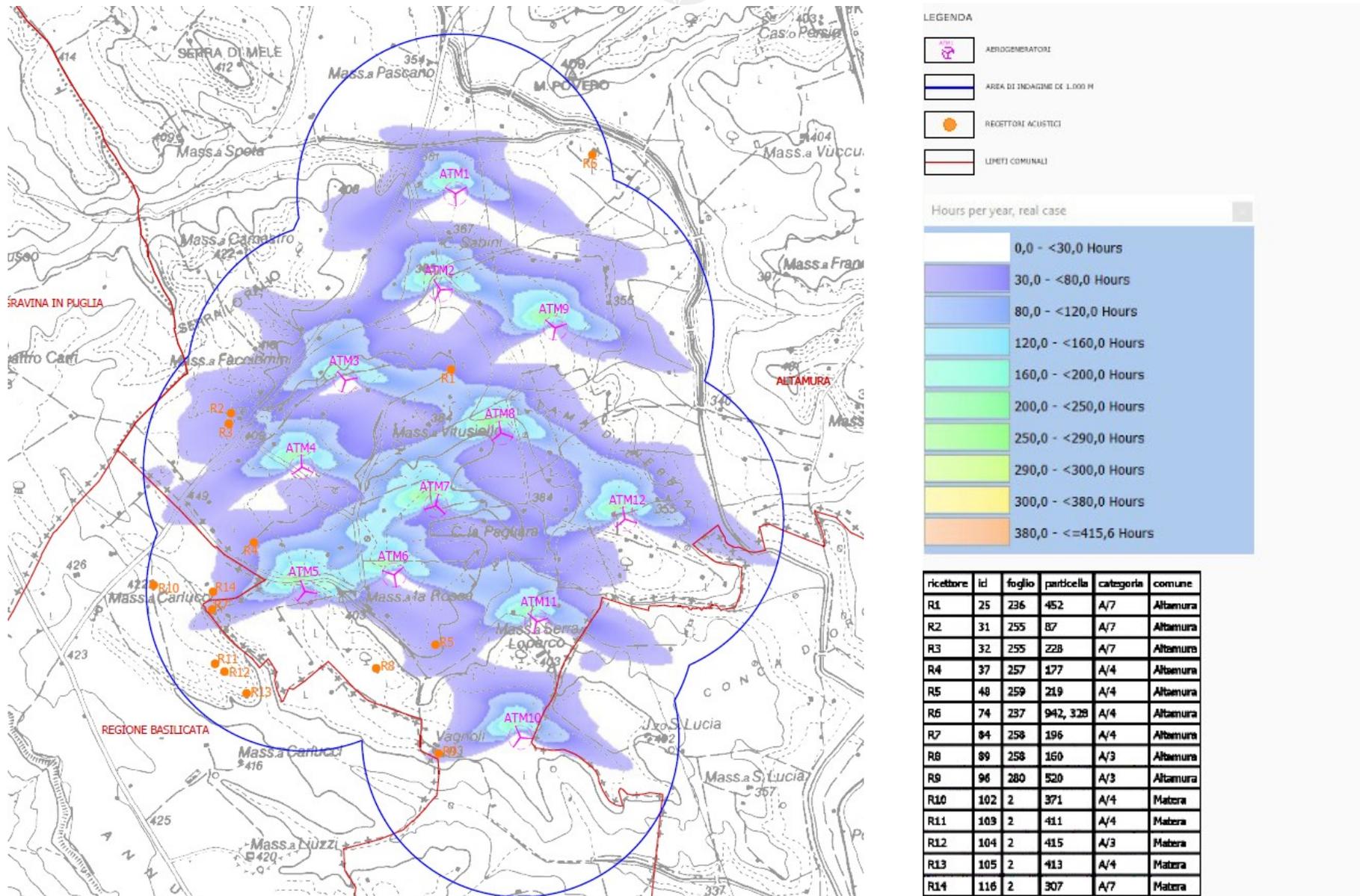


Mappa: IGM maps 1:25000 , Scala di stampa 1:50.000, Centro mappa UTM (north)-WGS84 Zone: 33 Est: 629.180 Nord: 4.513.170

▲ Nuova WTG

● Recettore d'ombra

Fonte altimetria:: Height Contours: CONTOURLINE_ONLINEDATA_0.wpo (1)



E' vietato riprodurre o utilizzare il contenuto senza autorizzazione (art. 2575 c.c.)

4 CONCLUSIONE

Per quanto concerne l'effetto "flicker", quindi, valutando i risultati ottenuti in relazione al contesto antropico locale, si può ragionevolmente affermare che il fenomeno non ha particolari riflessi negativi sul territorio, dove i primi fabbricati adibiti a civile abitazioni sono in numero limitato e a distanze sempre superiori a diverse centinaia di metri, e spesso quasi completamente circondate da vegetazione, oltre le quali il fenomeno di ombreggiamento è praticamente modesto, infatti la media di ombreggiamento sui ricettori è di circa 13 minuti /giorno nell'elaborazione del caso reale e 1 ora/giorno nel caso peggiore.

Pur nelle ipotesi conservative assunte, la probabilità che un osservatore sia soggetto al fenomeno non è significativa, se si riportano i risultati numerici ai casi reali con le dovute attenuazioni di origine morfologica e meteorologica del territorio.

In fase di esercizio per quanto riguarda i recettori R07 ed R09 che sono esposti all'effetto flickering ad est per poco più di 30 ore annue, sarà effettuato un monitoraggio per verificare l' effettivo irraggiamento e la reale esposizione all'effetto flickering.

TABULATI DI CALCOLO

SHADOW - Risultato principale

Calcolo: Flicker Altamura su recettori
Assunzioni sui calcoli d'ombra

Distanza massima di influenza
Calcola solo quando oltre il 20% del sole è coperto dalla pala
Consultare la tabella delle WTG

Altezza minima del sole sull'orizzonte 3 °
Passo giornaliero del calcolo 1 giorni
Passo temporale del calcolo 1 minuti
I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

Il sole splende tutto il dì, dall'alba al tramonto
Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
La turbina è costantemente operativa

Per evitare di considerare l' ombreggiamento da WTG in realtà non direttamente visibili, prima del calcolo dell' ombra viene eseguito un calcolo ZVI. Quest' ultimo si basa sulle seguenti assunzioni.

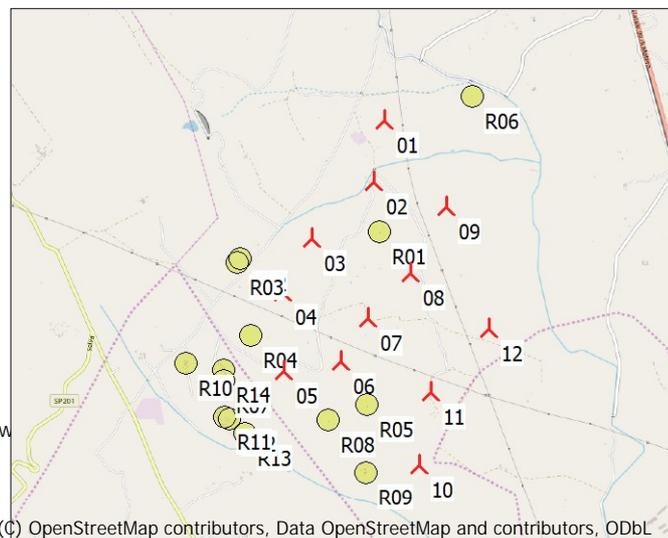
Curve altimetriche usate: Height Contours: CONTOURLINE_ONLINEDATA_0.w

Ostacoli usati:

Altezza dell'osservatore, nelle mappe:: 1,5 m

Risoluzione del grigliato: 1,0 m

Tutte le coordinate sono in
UTM (north)-WGS84 Zona: 33



(C) OpenStreetMap contributors, Data OpenStreetMap and contributors, ODbL

Scala 1:75.000

▲ Nuova WTG

● Recettore d'ombra

WTG

Easting	Northing	Z	Dati/Descrizione	Tipo di WTG		Tipo generatore	Potenza nominale	Diametro rotore	Altezza mozzo	Dati di ombra	
				Valida	Produttore					Distanza di calcolo	giri/min
01	628.799	4.515.016	361,2 Siemens Gamesa S...	Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8
02	628.703	4.514.413	370,0 Siemens Gamesa S...	Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8
03	628.104	4.513.845	406,5 Siemens Gamesa S...	Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8
04	627.830	4.513.302	410,0 Siemens Gamesa S...	Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8
05	627.848	4.512.523	410,0 Siemens Gamesa S...	Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8
06	628.412	4.512.627	410,0 Siemens Gamesa S...	Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8
07	628.675	4.513.060	401,7 Siemens Gamesa S...	Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8
08	629.086	4.513.516	380,0 Siemens Gamesa S...	Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8
09	629.427	4.514.174	360,0 Siemens Gamesa S...	Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8
10	629.208	4.511.609	400,0 Siemens Gamesa S...	Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8
11	629.311	4.512.334	382,6 Siemens Gamesa S...	Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8
12	629.868	4.512.976	363,1 Siemens Gamesa S...	Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8

Recettore d'ombra-Immissione dati

n.	Easting	Northing	Z	Ampiezza	Height	Altezza s.l.t.	Inclinazione della finestra	Modo orientazione	Altezza osservatore
	[m]	[m]	[m]	[m]	[m]	[m]	[°]		[m]
R01	628.771	4.513.915	396,2	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R02	627.401	4.513.628	410,6	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R03	627.372	4.513.593	411,6	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R04	627.524	4.512.870	413,9	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R05	628.671	4.512.200	397,1	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R06	629.659	4.515.281	350,0	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R07	627.257	4.512.412	410,3	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R08	628.299	4.512.040	408,8	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R09	628.679	4.511.531	400,0	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R10	626.882	4.512.584	419,0	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R11	627.279	4.512.062	410,0	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R12	627.326	4.512.038	410,0	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R13	627.475	4.511.900	403,8	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R14	627.260	4.512.523	412,3	2,0	2,0	0,0	90,0	"Modalità serra"	2,0

SHADOW - Risultato principale

Calcolo: Flicker Altamura su recettori

Risultati dei calcoli

Recettore d'ombra

Ombraggio, caso peggiore

n.	Ore d'ombra per anno	Giorni con ombra per anno	Massima durata dell'ombra per giorno
	[ore/anno]	[giorni/anno]	[ore/giorno]
R01	295:34	286	1:42
R02	243:12	286	1:41
R03	206:27	261	1:40
R04	225:37	280	1:23
R05	197:01	206	1:26
R06	59:28	116	0:43
R07	158:43	144	1:23
R08	69:12	165	0:40
R09	139:12	146	1:12
R10	43:30	84	0:56
R11	35:08	88	0:34
R12	29:20	99	0:29
R13	15:07	60	0:23
R14	111:03	138	1:25

Ombreggiamento totale sui recettori d'ombra causato da ciascuna WTG

n.	Nome	Caso peggiore [ore/anno]
01	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (1)	31:10
02	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (2)	33:15
03	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (3)	154:47
04	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (4)	182:55
05	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (5)	392:33
06	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (6)	107:23
07	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (7)	93:30
08	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (8)	138:35
09	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (9)	88:10
10	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (10)	229:38
11	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (11)	131:09
12	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (12)	9:47

I tempi totali possono differire tra le tabelle per turbina e quelle per recettore, in quanto ciascuna WTG può dare ombreggiamento su 2 o più recettori contemporaneamente, e/o un recettore può subire ombreggiamento da 2 o più WTGs contemporaneamente.

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R01 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (1)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

Il sole splende tutto il di, dall'alba al tramonto

Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole

La turbina è costantemente operativa

	Gennaio		Febbraio		Marzo		Aprile		Maggio		Giugno	
1	07:19	08:06 (12)	07:06	09:00 (08)	06:30	06:40	17:33 (03)	05:54		05:26	05:58 (09)	
	16:37	92	09:59 (08)	17:11	91	16:30 (04)	17:45	19:18	56	18:29 (03)	19:50	20:19
2	07:19	08:08 (12)	07:05	09:00 (08)	06:28	06:38	17:32 (03)	05:53		06:24 (09)	05:25	60
	16:38	89	10:00 (08)	17:12	89	16:29 (04)	17:46	19:19	56	18:28 (03)	19:51	7
3	07:19	08:10 (12)	07:04	09:02 (08)	06:27	06:36	17:33 (03)	05:52		06:19 (09)	05:25	59
	16:39	85	10:00 (08)	17:13	85	16:29 (04)	17:47	19:20	56	18:29 (03)	19:52	18
4	07:19	08:40 (08)	07:03	09:04 (08)	06:25	06:35	17:32 (03)	05:50		06:16 (09)	05:24	60
	16:39	80	10:00 (08)	17:15	80	16:29 (04)	17:48	19:21	56	18:28 (03)	19:53	24
5	07:19	08:40 (08)	07:02	09:06 (08)	06:24	06:33	17:31 (03)	05:49		06:13 (09)	05:24	59
	16:40	81	10:01 (08)	17:16	76	16:29 (04)	17:49	19:22	57	18:28 (03)	19:54	29
6	07:19	08:41 (08)	07:00	09:08 (08)	06:22	06:31	17:32 (03)	05:48		06:10 (09)	05:24	59
	16:41	80	10:01 (08)	17:17	71	16:29 (04)	17:50	19:23	56	18:28 (03)	19:55	33
7	07:19	08:42 (08)	06:59	09:11 (08)	06:21	06:30	17:31 (03)	05:47		06:09 (09)	05:24	59
	16:42	80	10:02 (08)	17:18	63	16:28 (04)	17:51	19:25	56	18:27 (03)	19:56	36
8	07:19	08:42 (08)	06:58	09:14 (08)	06:19	06:28	17:32 (03)	05:46		06:07 (09)	05:23	59
	16:43	80	10:02 (08)	17:20	56	16:28 (04)	17:52	19:26	55	18:27 (03)	19:57	39
9	07:19	08:42 (08)	06:57	09:19 (08)	06:18	06:27	17:32 (03)	05:45		06:06 (09)	05:23	59
	16:44	80	10:02 (08)	17:21	44	16:27 (04)	17:54	19:27	54	18:26 (03)	19:58	42
10	07:18	08:43 (08)	06:56	15:59 (04)	06:16	06:25	17:32 (03)	05:43		06:05 (09)	05:23	59
	16:45	79	10:02 (08)	17:22	27	16:26 (04)	17:55	19:28	53	18:25 (03)	19:59	44
11	07:18	08:44 (08)	06:55	16:00 (04)	06:14	06:23	17:33 (03)	05:42		06:04 (09)	05:23	58
	16:46	79	10:03 (08)	17:23	25	16:25 (04)	17:56	19:29	52	18:25 (03)	20:00	46
12	07:18	08:43 (08)	06:54	16:02 (04)	06:13	06:22	17:33 (03)	05:41		06:03 (09)	05:23	58
	16:47	79	10:02 (08)	17:24	21	16:23 (04)	17:57	19:30	50	18:23 (03)	20:01	47
13	07:18	08:44 (08)	06:52	16:05 (04)	06:11	06:20	17:34 (03)	05:40		06:02 (09)	05:22	59
	16:48	83	16:08 (04)	17:26	16	16:21 (04)	17:58	19:31	49	18:23 (03)	20:02	49
14	07:17	08:45 (08)	06:51	16:08 (04)	06:09	06:19	17:34 (03)	05:39		06:02 (09)	05:22	58
	16:50	89	16:12 (04)	17:27	9	16:17 (04)	17:59	19:32	47	18:21 (03)	20:03	50
15	07:17	08:45 (08)	06:50		06:08	06:17	17:35 (03)	05:38		06:01 (09)	05:22	58
	16:51	93	16:14 (04)	17:28		18:00	19:33	46	18:21 (03)	20:04	51	51
16	07:17	08:46 (08)	06:48		06:06	06:16	17:36 (03)	05:37		06:00 (09)	05:22	58
	16:52	95	16:16 (04)	17:29		18:01	19:34	43	18:19 (03)	20:05	53	53
17	07:16	08:47 (08)	06:47		06:05	06:14	17:37 (03)	05:36		06:01 (09)	05:22	58
	16:53	97	16:18 (04)	17:31		18:02	19:35	41	18:18 (03)	20:06	53	53
18	07:16	08:48 (08)	06:46		06:03	06:13	17:38 (03)	05:35		06:00 (09)	05:23	58
	16:54	98	16:20 (04)	17:32		18:03	19:36	38	18:16 (03)	20:07	54	54
19	07:15	08:48 (08)	06:44		06:01	06:11	17:40 (03)	05:34		06:00 (09)	05:23	58
	16:55	99	16:20 (04)	17:33		18:04	19:37	35	18:15 (03)	20:08	55	55
20	07:15	08:48 (08)	06:43		06:00	06:10	17:41 (03)	05:34		05:59 (09)	05:23	59
	16:56	100	16:21 (04)	17:34		18:06	19:38	31	18:12 (03)	20:09	56	56
21	07:14	08:50 (08)	06:42		05:58	06:08	17:43 (03)	05:33		05:58 (09)	05:23	59
	16:58	101	16:23 (04)	17:35		18:07	19:39	27	18:10 (03)	20:10	57	57
22	07:13	08:50 (08)	06:40		05:56	06:07	17:45 (03)	05:32		05:59 (09)	05:23	59
	16:59	102	16:24 (04)	17:36		18:08	19:40	22	18:07 (03)	20:11	57	57
23	07:13	08:50 (08)	06:39		05:55	06:05	17:49 (03)	05:31		05:59 (09)	05:23	59
	17:00	102	16:24 (04)	17:38		18:09	19:41	15	18:04 (03)	20:11	57	57
24	07:12	08:52 (08)	06:37		05:53	06:04	17:50 (03)	05:30		05:58 (09)	05:24	58
	17:01	102	16:26 (04)	17:39		18:10	19:42		20:12	58	06:56 (09)	20:30
25	07:11	08:53 (08)	06:36		05:51	06:02	17:51 (03)	05:29		05:59 (09)	05:24	58
	17:02	102	16:27 (04)	17:40		18:11	19:43		20:13	58	06:57 (09)	20:30
26	07:11	08:53 (08)	06:34		05:50	06:01	17:52 (03)	05:28		05:58 (09)	05:24	58
	17:03	101	16:27 (04)	17:41		18:12	19:44		20:14	58	06:56 (09)	20:30
27	07:10	08:54 (08)	06:33		05:48	06:00	17:53 (03)	05:27		05:58 (09)	05:25	58
	17:05	100	16:28 (04)	17:42		18:13	19:45		20:15	58	06:56 (09)	20:30
28	07:09	08:55 (08)	06:32		05:46	06:00	17:54 (03)	05:26		05:58 (09)	05:25	58
	17:06	98	16:28 (04)	17:43		18:14	19:47		20:16	59	06:57 (09)	20:30
29	07:08	08:56 (08)			06:45	06:57	17:55 (03)	05:25		05:58 (09)	05:25	58
	17:07	97	16:28 (04)		19:15	19:48	18:28 (03)	05:24		20:17	59	06:57 (09)
30	07:07	08:57 (08)			06:43	06:56	17:56 (03)	05:23		05:58 (09)	05:26	59
	17:08	96	16:29 (04)		19:16	19:49	18:29 (03)	05:22		20:17	59	06:57 (09)
31	07:06	08:58 (08)			06:41	06:54	17:57 (03)	05:21		05:58 (09)	05:26	59
	17:10	93	16:29 (04)		19:17	19:50	18:29 (03)	05:20		20:18	59	06:57 (09)
Ore potenziali eliofanìa	298		298		369		398		448		451	1761
Totale, caso peggiore	2832		753		598		1051		1425		451	1761

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento)
Tramonto (hh:mm)Minuti d'ombra Fine ombreggiamento (hh:mm) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R01 - Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (1)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Luglio		Agosto		Settembre		Ottobre		Novembre		Dicembre	
1	05:26	06:05 (09)	05:50	06:14 (09)	06:20	17:32 (03)	06:50	06:24	15:28 (04)	06:58	08:26 (08)	
	20:30	58 07:03 (09)	20:11	47 07:01 (09)	19:28	52 18:24 (03)	18:38	16:52	28 15:56 (04)	16:28	79 09:45 (08)	
2	05:27	06:05 (09)	05:51	06:15 (09)	06:21	17:31 (03)	06:51	06:25	08:47 (08)	06:59	08:26 (08)	
	20:30	58 07:03 (09)	20:10	45 07:00 (09)	19:27	53 18:24 (03)	18:36	16:51	46 15:56 (04)	16:28	79 09:45 (08)	
3	05:27	06:05 (09)	05:52	06:16 (09)	06:22	17:30 (03)	06:52	06:26	08:43 (08)	07:00	08:26 (08)	
	20:29	59 07:04 (09)	20:09	43 06:59 (09)	19:25	54 18:24 (03)	18:35	16:49	57 15:58 (04)	16:27	80 09:46 (08)	
4	05:28	06:05 (09)	05:53	06:17 (09)	06:23	17:29 (03)	06:53	06:27	08:40 (08)	07:01	08:26 (08)	
	20:29	59 07:04 (09)	20:08	41 06:58 (09)	19:23	55 18:24 (03)	18:33	16:48	65 15:58 (04)	16:27	80 09:46 (08)	
5	05:28	06:05 (09)	05:54	06:19 (09)	06:24	17:29 (03)	06:54	06:28	08:37 (08)	07:02	08:27 (08)	
	20:29	59 07:04 (09)	20:07	37 06:56 (09)	19:22	55 18:24 (03)	18:32	16:47	72 15:59 (04)	16:27	80 09:47 (08)	
6	05:29	06:05 (09)	05:55	06:20 (09)	06:25	17:28 (03)	06:55	06:30	08:35 (08)	07:03	08:27 (08)	
	20:29	59 07:04 (09)	20:05	35 06:55 (09)	19:20	56 18:24 (03)	18:30	16:46	77 15:59 (04)	16:27	80 09:47 (08)	
7	05:30	06:06 (09)	05:56	06:21 (09)	06:26	17:27 (03)	06:56	06:31	08:34 (08)	07:04	08:27 (08)	
	20:29	59 07:05 (09)	20:04	31 06:52 (09)	19:19	57 18:24 (03)	18:28	16:45	81 16:00 (04)	16:27	81 09:48 (08)	
8	05:30	06:06 (09)	05:57	06:23 (09)	06:27	17:27 (03)	06:57	06:32	08:33 (08)	07:05	08:28 (08)	
	20:28	59 07:05 (09)	20:03	27 06:50 (09)	19:17	56 18:23 (03)	18:27	16:44	85 16:00 (04)	16:27	81 09:49 (08)	
9	05:31	06:06 (09)	05:58	06:25 (09)	06:28	17:27 (03)	06:58	06:33	08:31 (08)	07:06	08:00 (12)	
	20:28	59 07:05 (09)	20:02	23 06:48 (09)	19:15	56 18:23 (03)	18:25	16:43	89 16:00 (04)	16:27	84 09:49 (08)	
10	05:31	06:06 (09)	05:59	06:29 (09)	06:29	17:25 (03)	06:59	06:34	08:31 (08)	07:07	07:57 (12)	
	20:28	59 07:05 (09)	20:00	15 06:44 (09)	19:14	57 18:22 (03)	18:23	16:42	91 16:01 (04)	16:27	89 09:49 (08)	
11	05:32	06:07 (09)	06:00	06:30 (09)	06:30	17:25 (03)	07:00	06:35	08:30 (08)	07:08	07:57 (12)	
	20:27	59 07:06 (09)	19:59	19:12	56 18:21 (03)	18:22	16:41	94 16:01 (04)	16:27	91 09:49 (08)		
12	05:33	06:06 (09)	06:01	06:31 (09)	06:31	17:25 (03)	07:01	06:37	08:29 (08)	07:09	07:56 (12)	
	20:27	59 07:05 (09)	19:58	19:10	55 18:20 (03)	18:20	16:40	95 16:00 (04)	16:27	93 09:50 (08)		
13	05:34	06:07 (09)	06:02	06:32 (09)	06:32	17:25 (03)	07:02	06:38	08:28 (08)	07:09	07:56 (12)	
	20:26	59 07:06 (09)	19:57	19:09	55 18:20 (03)	18:19	16:39	97 16:00 (04)	16:27	94 09:51 (08)		
14	05:34	06:07 (09)	06:03	06:33 (09)	06:33	17:25 (03)	07:03	06:39	08:28 (08)	07:10	07:56 (12)	
	20:26	59 07:06 (09)	19:55	19:07	54 18:19 (03)	18:17	16:38	99 16:01 (04)	16:27	96 09:51 (08)		
15	05:35	06:07 (09)	06:04	06:34 (09)	06:34	17:25 (03)	07:05	06:40	08:27 (08)	07:11	07:56 (12)	
	20:25	58 07:05 (09)	19:54	19:05	53 18:18 (03)	18:16	16:37	99 16:00 (04)	16:27	96 09:51 (08)		
16	05:36	06:07 (09)	06:05	06:35 (09)	06:35	17:26 (03)	07:06	06:41	08:26 (08)	07:12	07:56 (12)	
	20:24	59 07:06 (09)	19:52	19:03	51 18:17 (03)	18:14	16:36	101 16:00 (04)	16:28	97 09:52 (08)		
17	05:37	06:07 (09)	06:06	06:36 (09)	06:36	17:26 (03)	07:07	06:43	08:26 (08)	07:12	07:57 (12)	
	20:24	59 07:06 (09)	19:51	19:02	50 18:16 (03)	18:13	16:36	102 16:00 (04)	16:28	97 09:53 (08)		
18	05:37	06:08 (09)	06:07	06:37 (09)	06:37	17:27 (03)	07:08	06:44	08:26 (08)	07:13	07:56 (12)	
	20:23	58 07:06 (09)	19:50	19:00	47 18:14 (03)	18:11	16:35	102 16:00 (04)	16:28	98 09:53 (08)		
19	05:38	06:08 (09)	06:08	06:38 (09)	06:38	17:27 (03)	07:09	06:45	08:25 (08)	07:13	07:57 (12)	
	20:23	58 07:06 (09)	19:48	18:58	46 18:13 (03)	18:10	16:34	102 15:59 (04)	16:29	99 09:54 (08)		
20	05:39	06:08 (09)	06:08	17:54 (03)	06:39	17:28 (03)	07:10	06:46	08:25 (08)	07:14	07:57 (12)	
	20:22	57 07:05 (09)	19:47	16 18:10 (03)	18:57	43 18:11 (03)	18:08	16:33	102 15:59 (04)	16:29	99 09:54 (08)	
21	05:40	06:08 (09)	06:09	17:50 (03)	06:40	17:29 (03)	07:11	06:47	08:25 (08)	07:15	07:58 (12)	
	20:21	57 07:05 (09)	19:45	23 18:13 (03)	18:55	40 18:09 (03)	18:07	16:33	101 15:58 (04)	16:30	99 09:55 (08)	
22	05:41	06:09 (09)	06:10	17:48 (03)	06:41	17:31 (03)	07:12	06:48	08:24 (08)	07:15	07:58 (12)	
	20:20	56 07:05 (09)	19:44	28 18:16 (03)	18:53	36 18:07 (03)	18:05	16:32	100 15:57 (04)	16:30	99 09:55 (08)	
23	05:42	06:09 (09)	06:11	17:45 (03)	06:42	17:32 (03)	07:13	06:50	08:25 (08)	07:16	07:59 (12)	
	20:20	56 07:05 (09)	19:42	32 18:17 (03)	18:52	33 18:05 (03)	18:04	16:31	99 15:57 (04)	16:31	99 09:56 (08)	
24	05:43	06:10 (09)	06:12	17:43 (03)	06:43	17:35 (03)	07:14	06:51	08:25 (08)	07:16	07:59 (12)	
	20:19	55 07:05 (09)	19:41	36 18:19 (03)	18:50	27 18:02 (03)	18:02	16:31	98 15:57 (04)	16:31	99 09:56 (08)	
25	05:43	06:10 (09)	06:13	17:41 (03)	06:44	17:38 (03)	06:16	06:52	08:25 (08)	07:17	08:00 (12)	
	20:18	55 07:05 (09)	19:39	38 18:19 (03)	18:48	21 17:59 (03)	17:01	16:30	97 15:56 (04)	16:32	98 09:57 (08)	
26	05:44	06:11 (09)	06:14	17:39 (03)	06:45	17:43 (03)	06:17	06:53	08:24 (08)	07:17	08:01 (12)	
	20:17	54 07:05 (09)	19:38	41 18:20 (03)	18:47	10 17:53 (03)	17:00	16:30	95 15:54 (04)	16:32	97 09:57 (08)	
27	05:45	06:11 (09)	06:15	17:38 (03)	06:46	18:21 (03)	18:45	06:54	08:24 (08)	07:17	08:01 (12)	
	20:16	53 07:04 (09)	19:36	43 18:21 (03)	18:45	16:58	16:58	16:29	93 15:53 (04)	16:33	97 09:57 (08)	
28	05:46	06:11 (09)	06:16	17:36 (03)	06:47	18:22 (03)	18:43	06:55	08:24 (08)	07:18	08:02 (12)	
	20:15	52 07:03 (09)	19:35	46 18:22 (03)	18:43	16:57	12 15:48 (04)	16:29	89 15:51 (04)	16:34	96 09:57 (08)	
29	05:47	06:12 (09)	06:17	17:35 (03)	06:48	18:23 (03)	18:48	06:56	08:25 (08)	07:18	08:03 (12)	
	20:14	51 07:03 (09)	19:33	47 18:22 (03)	18:41	16:56	18 15:51 (04)	16:29	83 15:49 (04)	16:34	96 09:58 (08)	
30	05:48	06:13 (09)	06:18	17:34 (03)	06:49	18:24 (03)	18:49	06:57	08:26 (08)	07:18	08:04 (12)	
	20:13	49 07:02 (09)	19:32	49 18:23 (03)	18:40	16:54	21 15:53 (04)	16:28	78 09:44 (08)	16:35	94 09:59 (08)	
31	05:49	06:13 (09)	06:19	17:33 (03)	06:50	18:25 (03)	18:50	06:58	08:27 (08)	07:19	08:05 (12)	
	20:12	49 07:02 (09)	19:30	50 18:23 (03)	06:51	16:53	25 15:55 (04)	16:28	78 09:44 (08)	16:36	93 09:59 (08)	
Ore potenziali eliofanìa	458		427		375		346		299		289	
Totale, caso peggiore	1760		793		1228		76		2617		2840	

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento)
Tramonto (hh:mm)Minuti d'ombra Fine ombreggiamento (hh:mm) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R02 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (2)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

Il sole splende tutto il di, dall'alba al tramonto

Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole

La turbina è costantemente operativa

	Gennaio		Febbraio		Marzo		Aprile		Maggio		Giugno	
1	07:19	08:17 (04)	07:06	07:26 (07)	06:30	08:23 (04)	06:40	05:54	06:30 (03)	05:26	06:20 (03)	
	16:37	30 08:47 (04)	17:11	87 09:18 (04)	17:45	32 08:55 (04)	19:18	19:50	34 07:04 (03)	20:19	52 07:12 (03)	
2	07:19	08:17 (04)	07:05	07:25 (07)	06:29	08:25 (04)	06:38	05:53	06:27 (03)	05:25	06:20 (03)	
	16:38	31 08:48 (04)	17:12	90 09:18 (04)	17:46	26 08:51 (04)	19:19	19:51	38 07:05 (03)	20:20	53 07:13 (03)	
3	07:19	08:16 (04)	07:04	07:24 (07)	06:27	08:30 (04)	06:36	05:52	06:26 (03)	05:25	06:20 (03)	
	16:39	33 08:49 (04)	17:13	93 09:19 (04)	17:47	17 08:47 (04)	19:20	19:52	40 07:06 (03)	20:20	52 07:12 (03)	
4	07:19	08:16 (04)	07:03	07:22 (07)	06:25		06:35	05:51	06:25 (03)	05:25	05:46 (02)	
	16:40	35 08:51 (04)	17:15	95 09:18 (04)	17:48		19:21	19:53	42 07:07 (03)	20:21	52 07:12 (03)	
5	07:19	08:16 (04)	07:02	07:21 (07)	06:24		06:33	05:49	06:24 (03)	05:24	05:46 (02)	
	16:40	36 08:52 (04)	17:16	97 09:18 (04)	17:49		19:22	19:54	44 07:08 (03)	20:22	54 07:13 (03)	
6	07:19	08:15 (04)	07:01	07:20 (07)	06:22		06:32	05:48	06:23 (03)	05:24	05:45 (02)	
	16:41	38 08:53 (04)	17:17	99 09:18 (04)	17:50		19:24	19:55	46 07:09 (03)	20:22	55 07:12 (03)	
7	07:19	08:15 (04)	06:59	07:20 (07)	06:21		06:30	05:47	06:22 (03)	05:24	05:45 (02)	
	16:42	40 08:55 (04)	17:18	100 09:18 (04)	17:51		19:25	19:56	47 07:09 (03)	20:23	56 07:12 (03)	
8	07:19	08:15 (04)	06:58	07:20 (07)	06:19		06:28	05:46	06:21 (03)	05:23	05:45 (02)	
	16:43	41 08:56 (04)	17:20	100 09:19 (04)	17:53		19:26	19:57	49 07:10 (03)	20:24	56 07:12 (03)	
9	07:19	08:14 (04)	06:57	07:20 (07)	06:18		06:27	05:45	06:20 (03)	05:23	05:45 (02)	
	16:44	43 08:57 (04)	17:21	101 09:19 (04)	17:54		19:27	19:58	50 07:10 (03)	20:24	57 07:12 (03)	
10	07:19	08:14 (04)	06:56	07:20 (07)	06:16		06:25	05:43	06:20 (03)	05:23	05:45 (02)	
	16:45	44 08:58 (04)	17:22	101 09:19 (04)	17:55		19:28	19:59	51 07:11 (03)	20:25	57 07:12 (03)	
11	07:18	08:13 (04)	06:55	07:20 (07)	06:14		06:24	05:42	06:19 (03)	05:23	05:45 (02)	
	16:46	47 09:00 (04)	17:23	99 09:18 (04)	17:56		19:29	20:00	52 07:11 (03)	20:25	59 07:13 (03)	
12	07:18	08:12 (04)	06:54	07:20 (07)	06:13	06:31 (08)	06:22	05:41	06:19 (03)	05:23	05:45 (02)	
	16:47	48 09:00 (04)	17:25	100 09:18 (04)	17:57	3 06:34 (08)	19:30	20:01	52 07:11 (03)	20:26	58 07:13 (03)	
13	07:18	08:12 (04)	06:52	07:21 (07)	06:11	06:30 (08)	06:20	05:40	06:18 (03)	05:23	05:45 (02)	
	16:49	50 09:02 (04)	17:26	98 09:18 (04)	17:58	7 06:37 (08)	19:31	20:02	54 07:12 (03)	20:26	59 07:13 (03)	
14	07:17	08:12 (04)	06:51	07:20 (07)	06:09	06:28 (08)	06:19	05:39	06:18 (03)	05:22	05:45 (02)	
	16:50	51 09:03 (04)	17:27	96 09:16 (04)	17:59	10 06:38 (08)	19:32	20:03	54 07:12 (03)	20:27	58 07:13 (03)	
15	07:17	08:11 (04)	06:50	07:21 (07)	06:08	06:26 (08)	06:17	05:38	06:18 (03)	05:22	05:45 (02)	
	16:51	53 09:04 (04)	17:28	94 09:16 (04)	18:00	13 06:39 (08)	19:33	20:04	54 07:12 (03)	20:27	59 07:13 (03)	
16	07:17	08:11 (04)	06:49	07:22 (07)	06:06	06:25 (08)	06:16	05:37	06:17 (03)	05:22	05:45 (02)	
	16:52	54 09:05 (04)	17:29	91 09:16 (04)	18:01	15 06:40 (08)	19:34	20:05	55 07:12 (03)	20:28	59 07:13 (03)	
17	07:16	08:11 (04)	06:47	07:23 (07)	06:05	06:23 (08)	06:14	05:36	06:18 (03)	05:23	05:45 (02)	
	16:53	55 09:06 (04)	17:31	87 09:14 (04)	18:02	17 06:40 (08)	19:35	20:06	55 07:13 (03)	20:28	59 07:13 (03)	
18	07:16	08:11 (04)	06:46	07:24 (07)	06:03	06:21 (08)	06:13	05:35	06:18 (03)	05:23	05:45 (02)	
	16:54	57 09:08 (04)	17:32	84 09:14 (04)	18:03	19 06:40 (08)	19:36	20:07	55 07:13 (03)	20:28	59 07:13 (03)	
19	07:15	08:10 (04)	06:45	07:27 (07)	06:01	06:20 (08)	06:11	05:35	06:18 (03)	05:23	05:45 (02)	
	16:55	58 09:08 (04)	17:33	77 09:13 (04)	18:05	20 06:40 (08)	19:37	20:08	55 07:13 (03)	20:29	59 07:13 (03)	
20	07:15	08:09 (04)	06:43	07:29 (07)	06:00	06:18 (08)	06:10	05:34	06:17 (03)	05:23	05:45 (02)	
	16:56	60 09:09 (04)	17:34	70 09:12 (04)	18:06	21 06:39 (08)	19:38	20:09	56 07:13 (03)	20:29	59 07:13 (03)	
21	07:14	08:09 (04)	06:42	08:12 (04)	05:58	06:16 (08)	06:08	05:33	06:17 (03)	05:23	05:45 (02)	
	16:58	61 09:10 (04)	17:35	59 09:11 (04)	18:07	22 06:38 (08)	19:39	20:10	55 07:12 (03)	20:29	59 07:13 (03)	
22	07:14	08:09 (04)	06:40	08:12 (04)	05:56	06:17 (08)	06:07	05:32	06:18 (03)	05:23	05:46 (02)	
	16:59	62 09:11 (04)	17:37	57 09:09 (04)	18:08	21 06:38 (08)	19:40	20:11	55 07:13 (03)	20:29	59 07:14 (03)	
23	07:13	08:08 (04)	06:39	08:13 (04)	05:55	06:17 (08)	06:05	05:31	06:18 (03)	05:23	05:46 (02)	
	17:00	63 09:11 (04)	17:38	55 09:08 (04)	18:09	19 06:36 (08)	19:41	20:11	55 07:13 (03)	20:30	59 07:14 (03)	
24	07:12	08:09 (04)	06:37	08:15 (04)	05:53	06:18 (08)	06:04	05:31	06:17 (03)	05:24	05:46 (02)	
	17:01	64 09:13 (04)	17:39	52 09:07 (04)	18:10	16 06:34 (08)	19:42	20:12	55 07:12 (03)	20:30	59 07:14 (03)	
25	07:11	08:08 (04)	06:36	08:16 (04)	05:51	06:20 (08)	06:02	05:30	06:18 (03)	05:24	05:46 (02)	
	17:02	66 09:14 (04)	17:40	48 09:04 (04)	18:11	13 06:33 (08)	19:43	20:13	55 07:13 (03)	20:30	59 07:14 (03)	
26	07:11	08:08 (04)	06:35	08:17 (04)	05:50	06:23 (08)	06:01	05:29	06:18 (03)	05:24	05:47 (02)	
	17:04	66 09:14 (04)	17:41	46 09:03 (04)	18:12	5 06:28 (08)	19:44	20:14	55 07:13 (03)	20:30	59 07:15 (03)	
27	07:10	08:07 (04)	06:33	08:19 (04)	05:48		06:00	05:29	06:19 (03)	05:25	05:47 (02)	
	17:05	68 09:15 (04)	17:42	41 09:00 (04)	18:13		19:46	20:15	54 07:13 (03)	20:30	59 07:15 (03)	
28	07:09	08:07 (04)	06:32	08:20 (04)	05:46		05:58	05:28	06:19 (03)	05:25	05:47 (02)	
	17:06	68 09:15 (04)	17:44	37 08:57 (04)	18:14		19:47	20:16	54 07:13 (03)	20:30	58 07:15 (03)	
29	07:08	08:07 (04)			06:45		05:57	05:27	06:33 (03)	05:27	05:48 (02)	
	17:07	69 09:16 (04)			19:15		19:48	20:17	54 07:12 (03)	20:30	59 07:16 (03)	
30	07:07	07:30 (07)			06:43		05:56	05:27	06:31 (03)	05:26	05:48 (02)	
	17:08	76 09:17 (04)			19:16		19:49	20:17	54 07:13 (03)	20:30	59 07:16 (03)	
31	07:07	07:27 (07)			06:41			05:26	06:20 (03)			
	17:10	83 09:17 (04)			19:17			20:18	53 07:13 (03)			
Ore potenziali eliofanìa	298		298		369		398		448		451	1721
Totale, caso peggiore	1650		2254		296		92		1582			

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento)
Tramonto (hh:mm)Minuti d'ombra Fine ombreggiamento (hh:mm) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R02 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (2)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

Il sole splende tutto il di, dall'alba al tramonto

Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole

La turbina è costantemente operativa

	Luglio		Agosto		Settembre		Ottobre		Novembre		Dicembre	
1	05:26	05:49 (02)	05:50	06:30 (03)	06:20	06:50	07:10 (08)	06:24	06:49 (07)	06:58	07:55 (04)	
	20:30	58 07:17 (03)	20:11	52 07:22 (03)	19:28	18:38	5 07:15 (08)	16:52	101 08:48 (04)	16:28	47 08:42 (04)	
2	05:27	05:49 (02)	05:51	06:30 (03)	06:21	06:51		06:25	06:49 (07)	06:59	07:57 (04)	
	20:30	58 07:17 (03)	20:10	51 07:21 (03)	19:27	18:37		16:51	101 08:48 (04)	16:28	44 08:41 (04)	
3	05:27	05:50 (02)	05:52	06:31 (03)	06:22	06:52		06:26	06:50 (07)	07:00	07:58 (04)	
	20:30	57 07:17 (03)	20:09	50 07:21 (03)	19:25	18:35		16:50	99 08:48 (04)	16:27	43 08:41 (04)	
4	05:28	05:50 (02)	05:53	06:31 (03)	06:23	06:53		06:27	06:50 (07)	07:01	07:59 (04)	
	20:29	57 07:17 (03)	20:08	50 07:21 (03)	19:24	18:33		16:48	100 08:48 (04)	16:27	41 08:40 (04)	
5	05:28	05:51 (02)	05:54	06:32 (03)	06:24	06:54		06:28	06:50 (07)	07:02	08:00 (04)	
	20:29	56 07:18 (03)	20:07	48 07:20 (03)	19:22	18:32		16:47	99 08:48 (04)	16:27	40 08:40 (04)	
6	05:29	05:51 (02)	05:55	06:32 (03)	06:25	06:55		06:30	06:52 (07)	07:03	08:01 (04)	
	20:29	56 07:18 (03)	20:05	47 07:19 (03)	19:20	18:30		16:46	97 08:49 (04)	16:27	38 08:39 (04)	
7	05:30	05:52 (02)	05:56	06:33 (03)	06:26	06:56		06:31	06:53 (07)	07:04	08:03 (04)	
	20:29	54 07:19 (03)	20:04	45 07:18 (03)	19:19	18:28		16:45	95 08:49 (04)	16:27	36 08:39 (04)	
8	05:30	05:53 (02)	05:57	06:33 (03)	06:27	06:57		06:32	06:54 (07)	07:05	08:04 (04)	
	20:28	52 07:19 (03)	20:03	44 07:17 (03)	19:17	18:27		16:44	92 08:48 (04)	16:27	35 08:39 (04)	
9	05:31	06:27 (03)	05:58	06:34 (03)	06:28	06:58		06:33	06:55 (07)	07:06	08:05 (04)	
	20:28	52 07:19 (03)	20:02	41 07:15 (03)	19:15	18:25		16:43	90 08:48 (04)	16:27	33 08:38 (04)	
10	05:32	06:28 (03)	05:59	06:35 (03)	06:29	06:59		06:34	06:57 (07)	07:07	08:06 (04)	
	20:28	52 07:20 (03)	20:01	39 07:14 (03)	19:14	18:24	9 09:16 (04)	16:42	87 08:49 (04)	16:27	31 08:37 (04)	
11	05:32	06:28 (03)	06:00	06:36 (03)	06:30	07:00		06:36	06:58 (07)	07:08	08:07 (04)	
	20:27	52 07:20 (03)	19:59	37 07:13 (03)	19:12	18:22	21 09:22 (04)	16:41	83 08:48 (04)	16:27	30 08:37 (04)	
12	05:33	06:27 (03)	06:01	06:38 (03)	06:31	07:01		06:37	07:01 (07)	07:09	08:09 (04)	
	20:27	53 07:20 (03)	19:58	33 07:11 (03)	19:10	18:20	29 09:27 (04)	16:40	77 08:48 (04)	16:27	28 08:37 (04)	
13	05:34	06:27 (03)	06:02	06:39 (03)	06:32	07:02		06:38	07:39 (04)	07:09	08:10 (04)	
	20:26	54 07:21 (03)	19:57	30 07:09 (03)	19:09	18:19	35 09:30 (04)	16:39	68 08:47 (04)	16:27	27 08:37 (04)	
14	05:34	06:28 (03)	06:03	06:42 (03)	06:33	07:04		06:39	07:40 (04)	07:10	08:11 (04)	
	20:26	53 07:21 (03)	19:55	25 07:07 (03)	19:07	18:17	40 09:32 (04)	16:38	68 08:48 (04)	16:27	26 08:37 (04)	
15	05:35	06:28 (03)	06:04	06:44 (03)	06:34	07:05		06:40	07:40 (04)	07:11	08:12 (04)	
	20:25	54 07:22 (03)	19:54	20 07:04 (03)	19:05	18:16	44 09:34 (04)	16:37	68 08:48 (04)	16:28	24 08:36 (04)	
16	05:36	06:27 (03)	06:05	06:49 (03)	06:35	07:06		06:41	07:41 (04)	07:12	08:13 (04)	
	20:25	54 07:21 (03)	19:53	10 06:59 (03)	19:04	18:14	47 09:35 (04)	16:36	66 08:47 (04)	16:28	23 08:36 (04)	
17	05:37	06:27 (03)	06:06		06:36	07:07		06:43	07:41 (04)	07:12	08:15 (04)	
	20:24	55 07:22 (03)	19:51		19:02	18:13	50 09:37 (04)	16:36	65 08:46 (04)	16:28	21 08:36 (04)	
18	05:38	06:28 (03)	06:07		06:37	07:08 (08)	07:08	08:45 (04)	06:44	07:43 (04)	07:13	08:15 (04)
	20:23	54 07:22 (03)	19:50		19:00	11 07:19 (08)	18:11	53 09:38 (04)	16:35	64 08:47 (04)	16:28	20 08:35 (04)
19	05:38	06:28 (03)	06:08		06:38	07:06 (08)	07:09	08:45 (04)	06:45	07:43 (04)	07:14	08:16 (04)
	20:23	55 07:23 (03)	19:48		18:58	15 07:21 (08)	18:10	55 09:40 (04)	16:34	63 08:46 (04)	16:29	20 08:36 (04)
20	05:39	06:27 (03)	06:09		06:39	07:04 (08)	07:10	08:43 (04)	06:46	07:44 (04)	07:14	08:16 (04)
	20:22	55 07:22 (03)	19:47		18:57	18 07:22 (08)	18:08	58 09:41 (04)	16:33	62 08:46 (04)	16:29	20 08:36 (04)
21	05:40	06:27 (03)	06:10		06:40	07:02 (08)	07:11	08:42 (04)	06:47	07:44 (04)	07:15	08:17 (04)
	20:21	55 07:22 (03)	19:45		18:55	21 07:23 (08)	18:07	60 09:42 (04)	16:33	61 08:45 (04)	16:30	19 08:36 (04)
22	05:41	06:28 (03)	06:11		06:41	07:01 (08)	07:12	07:58 (07)	06:48	07:46 (04)	07:15	08:17 (04)
	20:20	55 07:23 (03)	19:44		18:53	22 07:23 (08)	18:05	74 09:43 (04)	16:32	60 08:46 (04)	16:30	19 08:36 (04)
23	05:42	06:28 (03)	06:12		06:42	07:02 (08)	07:13	07:56 (07)	06:50	07:47 (04)	07:16	08:18 (04)
	20:20	55 07:23 (03)	19:42		18:52	21 07:23 (08)	18:04	79 09:43 (04)	16:31	58 08:45 (04)	16:31	19 08:37 (04)
24	05:43	06:28 (03)	06:13		06:43	07:03 (08)	07:15	07:54 (07)	06:51	07:48 (04)	07:16	08:18 (04)
	20:19	55 07:23 (03)	19:41		18:50	20 07:23 (08)	18:02	85 09:44 (04)	16:31	57 08:45 (04)	16:31	20 08:38 (04)
25	05:44	06:28 (03)	06:13		06:44	07:04 (08)	06:16	06:53 (07)	06:52	07:49 (04)	07:17	08:19 (04)
	20:18	55 07:23 (03)	19:39		18:48	19 07:23 (08)	17:01	89 08:45 (04)	16:30	55 08:44 (04)	16:32	20 08:39 (04)
26	05:44	06:29 (03)	06:14		06:45	07:05 (08)	06:17	06:52 (07)	06:53	07:49 (04)	07:17	08:19 (04)
	20:17	54 07:23 (03)	19:38		18:47	17 07:22 (08)	17:00	92 08:46 (04)	16:30	54 08:43 (04)	16:32	21 08:40 (04)
27	05:45	06:28 (03)	06:15		06:46	07:06 (08)	06:18	06:51 (07)	06:54	07:50 (04)	07:17	08:18 (04)
	20:16	55 07:23 (03)	19:36		18:45	16 07:22 (08)	16:58	94 08:46 (04)	16:29	53 08:43 (04)	16:33	23 08:41 (04)
28	05:46	06:28 (03)	06:16		06:47	07:07 (08)	06:19	06:50 (07)	06:55	07:52 (04)	07:18	08:18 (04)
	20:15	55 07:23 (03)	19:35		18:43	14 07:21 (08)	16:57	96 08:46 (04)	16:29	51 08:43 (04)	16:34	23 08:41 (04)
29	05:47	06:28 (03)	06:17		06:48	07:08 (08)	06:20	06:49 (07)	06:56	07:53 (04)	07:18	08:19 (04)
	20:14	54 07:22 (03)	19:33		18:42	11 07:19 (08)	16:56	98 08:46 (04)	16:29	50 08:43 (04)	16:34	24 08:43 (04)
30	05:48	06:29 (03)	06:18		06:49	07:09 (08)	06:21	06:50 (07)	06:57	07:54 (04)	07:18	08:18 (04)
	20:13	53 07:22 (03)	19:32		18:40	9 07:18 (08)	16:54	98 08:47 (04)	16:28	48 08:42 (04)	16:35	26 08:44 (04)
31	05:49	06:29 (03)	06:19				06:23	06:49 (07)			07:18	08:18 (04)
	20:12	53 07:22 (03)	19:30				16:53	100 08:48 (04)			16:36	27 08:45 (04)
Ore potenziali eliofanìa	458		427		375		346		299	2192		868
Totale, caso peggiore	1690		622		214		1411		2192			868

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento)
Tramonto (hh:mm)Minuti d'ombra Fine ombreggiamento (hh:mm) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R03 - Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (3)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno					
1	07:19	07:06	07:58 (04)	06:30	07:57 (04)	06:40	05:54	06:33 (03)	05:26	06:13 (03)	
	16:37	17:11	59 08:57 (04)	17:45	56 08:53 (04)	19:18	19:50	13 06:46 (03)	20:19	52 07:05 (03)	
2	07:19	07:05	07:57 (04)	06:29	07:57 (04)	06:38	05:53	06:29 (03)	05:25	06:14 (03)	
	16:38	17:12	61 08:58 (04)	17:46	54 08:51 (04)	19:19	19:51	20 06:49 (03)	20:20	52 07:06 (03)	
3	07:19	07:04	07:27 (07)	06:27	07:59 (04)	06:36	05:52	06:26 (03)	05:25	06:13 (03)	
	16:39	17:13	66 08:59 (04)	17:47	51 08:50 (04)	19:20	19:52	26 06:52 (03)	20:20	52 07:05 (03)	
4	07:19	07:03	07:22 (07)	06:25	08:00 (04)	06:35	05:51	06:24 (03)	05:25	06:14 (03)	
	16:40	17:15	76 08:59 (04)	17:48	48 08:48 (04)	19:21	19:53	30 06:54 (03)	20:21	52 07:06 (03)	
5	07:19	07:02	07:21 (07)	06:24	08:01 (04)	06:33	05:49	06:23 (03)	05:24	06:14 (03)	
	16:40	17:16	80 09:00 (04)	17:49	45 08:46 (04)	19:22	19:54	33 06:56 (03)	20:22	52 07:06 (03)	
6	07:19	07:01	07:20 (07)	06:22	08:02 (04)	06:32	05:48	06:21 (03)	05:24	06:14 (03)	
	16:41	17:17	85 09:01 (04)	17:50	42 08:44 (04)	19:24	19:55	36 06:57 (03)	20:22	51 07:05 (03)	
7	07:19	06:59	07:19 (07)	06:21	08:04 (04)	06:30	05:47	06:19 (03)	05:24	06:14 (03)	
	16:42	17:18	88 09:01 (04)	17:51	37 08:41 (04)	19:25	19:56	38 06:57 (03)	20:23	52 07:06 (03)	
8	07:19	06:58	07:18 (07)	06:19	08:07 (04)	06:28	05:46	06:18 (03)	05:23	05:45 (02)	
	16:43	17:20	91 09:02 (04)	17:53	31 08:38 (04)	19:26	19:57	40 06:58 (03)	20:24	52 07:06 (03)	
9	07:19	06:57	07:17 (07)	06:18	08:09 (04)	06:27	05:45	06:17 (03)	05:23	05:45 (02)	
	16:44	17:21	93 09:02 (04)	17:54	25 08:34 (04)	19:27	19:58	42 06:59 (03)	20:24	53 07:06 (03)	
10	07:19	06:56	07:16 (07)	06:16	08:14 (04)	06:25	05:43	06:17 (03)	05:23	05:45 (02)	
	16:45	17:22	96 09:03 (04)	17:55	16 08:30 (04)	19:28	19:59	43 07:00 (03)	20:25	53 07:06 (03)	
11	07:18	06:55	07:15 (07)	06:14		06:24	05:42	06:16 (03)	05:23	05:45 (02)	
	16:46	17:23	97 09:03 (04)	17:56		19:29	20:00	45 07:01 (03)	20:25	54 07:06 (03)	
12	07:18	06:54	07:15 (07)	06:13		06:22	05:41	06:15 (03)	05:23	05:45 (02)	
	16:47	17:25	98 09:03 (04)	17:57		19:30	20:01	46 07:01 (03)	20:26	55 07:07 (03)	
13	07:18	06:52	07:15 (07)	06:11		06:20	05:40	06:14 (03)	05:23	05:45 (02)	
	16:49	17:26	99 09:03 (04)	17:58		19:31	20:02	48 07:02 (03)	20:26	56 07:07 (03)	
14	07:17	06:51	07:14 (07)	06:09	06:28 (08)	06:19	05:39	06:14 (03)	05:23	05:45 (02)	
	16:50	17:27	100 09:03 (04)	17:59	2 06:30 (08)	19:32	20:03	48 07:02 (03)	20:27	56 07:07 (03)	
15	07:17	06:50	07:15 (07)	06:08	06:26 (08)	06:17	05:38	06:13 (03)	05:22	05:45 (02)	
	16:51	17:28	99 09:03 (04)	18:00	6 06:32 (08)	19:33	20:04	50 07:03 (03)	20:27	57 07:07 (03)	
16	07:17	06:49	07:15 (07)	06:06	06:25 (08)	06:16	05:37	06:13 (03)	05:22	05:45 (02)	
	16:52	5 08:26 (04)	17:29	98 09:03 (04)	18:01	9 06:34 (08)	19:34	20:05	50 07:03 (03)	20:28	56 07:07 (03)
17	07:16	06:47	07:15 (07)	06:05	06:23 (08)	06:14	05:36	06:13 (03)	05:23	05:45 (02)	
	16:53	16 08:31 (04)	17:31	97 09:02 (04)	18:02	12 06:35 (08)	19:35	20:06	51 07:04 (03)	20:28	56 07:07 (03)
18	07:16	06:46	07:16 (07)	06:03	06:21 (08)	06:13	05:35	06:13 (03)	05:23	05:45 (02)	
	16:54	22 08:35 (04)	17:32	96 09:02 (04)	18:03	14 06:35 (08)	19:36	20:07	51 07:04 (03)	20:28	57 07:07 (03)
19	07:15	06:45	07:17 (07)	06:01	06:20 (08)	06:11	05:35	06:13 (03)	05:23	05:45 (02)	
	16:55	27 08:37 (04)	17:33	93 09:02 (04)	18:05	16 06:36 (08)	19:37	20:08	51 07:04 (03)	20:29	57 07:07 (03)
20	07:15	06:43	07:17 (07)	06:00	06:18 (08)	06:10	05:34	06:12 (03)	05:23	05:45 (02)	
	16:56	31 08:39 (04)	17:34	92 09:01 (04)	18:06	18 06:36 (08)	19:38	20:09	52 07:04 (03)	20:29	57 07:07 (03)
21	07:14	06:42	07:19 (07)	05:58	06:16 (08)	06:08	05:33	06:12 (03)	05:23	05:45 (02)	
	16:58	34 08:42 (04)	17:35	88 09:01 (04)	18:07	19 06:35 (08)	19:39	20:10	52 07:04 (03)	20:29	57 07:07 (03)
22	07:14	06:40	07:20 (07)	05:56	06:15 (08)	06:07	05:32	06:12 (03)	05:23	05:46 (02)	
	16:59	38 08:44 (04)	17:37	83 09:00 (04)	18:08	20 06:35 (08)	19:40	20:11	53 07:05 (03)	20:29	57 07:08 (03)
23	07:13	06:39	07:23 (07)	05:55	06:13 (08)	06:05	05:31	06:12 (03)	05:23	05:46 (02)	
	17:00	41 08:45 (04)	17:38	78 09:00 (04)	18:09	21 06:34 (08)	19:41	20:11	53 07:05 (03)	20:30	57 07:08 (03)
24	07:12	06:37	07:54 (04)	05:53	06:12 (08)	06:04	05:31	06:12 (03)	05:24	05:46 (02)	
	17:01	44 08:48 (04)	17:39	65 08:59 (04)	18:10	21 06:33 (08)	19:42	20:12	53 07:05 (03)	20:30	57 07:08 (03)
25	07:11	06:36	07:54 (04)	05:51	06:14 (08)	06:02	05:30	06:12 (03)	05:24	05:46 (02)	
	17:02	46 08:49 (04)	17:40	64 08:58 (04)	18:11	18 06:32 (08)	19:43	20:13	53 07:05 (03)	20:30	56 07:08 (03)
26	07:11	06:35	07:55 (04)	05:50	06:14 (08)	06:01	05:29	06:12 (03)	05:24	05:47 (02)	
	17:04	48 08:50 (04)	17:41	62 08:57 (04)	18:12	16 06:30 (08)	19:44	20:14	53 07:05 (03)	20:30	56 07:09 (03)
27	07:10	06:33	07:55 (04)	05:48	06:15 (08)	06:00	05:29	06:13 (03)	05:25	05:47 (02)	
	17:05	50 08:51 (04)	17:42	61 08:56 (04)	18:13	13 06:28 (08)	19:46	20:15	53 07:06 (03)	20:30	56 07:09 (03)
28	07:09	06:32	07:55 (04)	05:46	06:19 (08)	05:58	05:28	06:12 (03)	05:25	05:47 (02)	
	17:06	52 08:52 (04)	17:44	59 08:54 (04)	18:14	6 06:25 (08)	19:47	20:16	53 07:05 (03)	20:30	56 07:09 (03)
29	07:08	06:45		06:45		05:57	05:27	06:12 (03)	05:25	05:48 (02)	
	17:07	55 08:54 (04)		19:15		19:48	20:17	53 07:05 (03)	20:30	56 07:10 (03)	
30	07:07	06:43		06:43		05:56	05:27	06:13 (03)	05:26	05:48 (02)	
	17:08	57 08:56 (04)		19:16		19:49	20:17	52 07:05 (03)	20:30	55 07:10 (03)	
31	07:07	06:41		06:41			05:26	06:13 (03)			
	17:10	59 08:57 (04)		19:17			20:18	53 07:06 (03)			
Ore potenziali eliofanìa	298	298	369	616	398	448	1394	451	1645		
Totale, caso peggiore	625	2324									

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento)
Tramonto (hh:mm)Minuti d'ombra Fine ombreggiamento (hh:mm) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R03 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (3)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Luglio		Agosto		Settembre		Ottobre		Novembre		Dicembre		
1	05:26	05:49 (02)	05:50	06:26 (03)	06:20		06:50		06:24	06:45 (07)	06:58		
	20:30	55 07:10 (03)	20:11	46 07:12 (03)	19:28		18:38		16:52	95 08:32 (04)	16:28		
2	05:27	05:49 (02)	05:51	06:27 (03)	06:21		06:51		06:25	06:46 (07)	06:59		
	20:30	54 07:10 (03)	20:10	44 07:11 (03)	19:27		18:37		16:51	93 08:31 (04)	16:28		
3	05:27	05:50 (02)	05:52	06:27 (03)	06:22		06:52	08:55 (04)	06:26	06:48 (07)	07:00		
	20:30	53 07:11 (03)	20:09	44 07:11 (03)	19:25		18:35	9 09:04 (04)	16:50	91 08:32 (04)	16:27		
4	05:28	05:50 (02)	05:53	06:28 (03)	06:23		06:53	08:48 (04)	06:27	06:49 (07)	07:01		
	20:29	52 07:11 (03)	20:08	42 07:10 (03)	19:24		18:33	22 09:10 (04)	16:48	87 08:31 (04)	16:27		
5	05:28	06:21 (03)	05:54	06:29 (03)	06:24		06:54	08:45 (04)	06:28	06:50 (07)	07:02		
	20:29	51 07:12 (03)	20:07	40 07:09 (03)	19:22		18:32	28 09:13 (04)	16:47	84 08:30 (04)	16:27		
6	05:29	06:20 (03)	05:55	06:30 (03)	06:25		06:55	08:42 (04)	06:30	06:52 (07)	07:03		
	20:29	51 07:11 (03)	20:05	38 07:08 (03)	19:20		18:30	34 09:16 (04)	16:46	80 08:31 (04)	16:27		
7	05:30	06:21 (03)	05:56	06:32 (03)	06:26		06:56	08:39 (04)	06:31	06:53 (07)	07:04		
	20:29	51 07:12 (03)	20:04	34 07:06 (03)	19:19		18:28	39 09:18 (04)	16:45	76 08:30 (04)	16:27		
8	05:30	06:21 (03)	05:57	06:32 (03)	06:27		06:57	08:37 (04)	06:32	07:27 (04)	07:05		
	20:28	52 07:13 (03)	20:03	32 07:04 (03)	19:17		18:27	43 09:20 (04)	16:44	62 08:29 (04)	16:27		
9	05:31	06:20 (03)	05:58	06:34 (03)	06:28		06:58	08:35 (04)	06:33	07:27 (04)	07:06		
	20:28	52 07:12 (03)	20:02	28 07:02 (03)	19:15		18:25	47 09:22 (04)	16:43	61 08:28 (04)	16:27		
10	05:32	06:21 (03)	05:59	06:36 (03)	06:29		06:59	08:33 (04)	06:34	07:29 (04)	07:07		
	20:28	52 07:13 (03)	20:01	24 07:00 (03)	19:14		18:24	50 09:23 (04)	16:42	59 08:28 (04)	16:27		
11	05:32	06:21 (03)	06:00	06:38 (03)	06:30		07:00	08:32 (04)	06:36	07:29 (04)	07:08		
	20:27	53 07:14 (03)	19:59	19 06:57 (03)	19:12		18:22	52 09:24 (04)	16:41	58 08:27 (04)	16:27		
12	05:33	06:21 (03)	06:01	06:43 (03)	06:31		07:01	08:31 (04)	06:37	07:30 (04)	07:09		
	20:27	52 07:13 (03)	19:58	9 06:52 (03)	19:10		18:20	55 09:26 (04)	16:40	56 08:26 (04)	16:27		
13	05:34	06:21 (03)	06:02		06:32		07:02	08:30 (04)	06:38	07:31 (04)	07:09	08:13 (06)	
	20:26	53 07:14 (03)	19:57		19:09		18:19	57 09:27 (04)	16:39	54 08:25 (04)	16:27	3 08:16 (06)	
14	05:34	06:21 (03)	06:03		06:33		07:04	08:29 (04)	06:39	07:33 (04)	07:10	08:12 (06)	
	20:26	53 07:14 (03)	19:55		19:07		18:17	59 09:28 (04)	16:38	52 08:25 (04)	16:27	6 08:18 (06)	
15	05:35	06:22 (03)	06:04		06:34		07:05	08:27 (04)	06:40	07:34 (04)	07:11	08:11 (06)	
	20:25	53 07:15 (03)	19:54		19:05	2 07:10 (08)	18:16	62 09:29 (04)	16:37	50 08:24 (04)	16:28	8 08:19 (06)	
16	05:36	06:21 (03)	06:05		06:35		07:05 (08)	07:06	08:26 (04)	06:41	07:35 (04)	07:12	08:11 (06)
	20:25	53 07:14 (03)	19:53		19:04	12 07:17 (08)	18:14	63 09:29 (04)	16:36	48 08:23 (04)	16:28	10 08:21 (06)	
17	05:37	06:21 (03)	06:06		06:36		07:03 (08)	07:07	08:26 (04)	06:43	07:36 (04)	07:12	08:11 (06)
	20:24	53 07:14 (03)	19:51		19:02	15 07:18 (08)	18:13	64 09:30 (04)	16:36	46 08:22 (04)	16:28	11 08:22 (06)	
18	05:38	06:22 (03)	06:07		06:37		07:01 (08)	07:08	07:58 (07)	06:44	07:38 (04)	07:13	08:11 (06)
	20:23	53 07:15 (03)	19:50		19:00	18 07:19 (08)	18:11	68 09:30 (04)	16:35	44 08:22 (04)	16:28	11 08:22 (06)	
19	05:38	06:22 (03)	06:08		06:38		07:00 (08)	07:09	07:54 (07)	06:45	07:39 (04)	07:14	08:11 (06)
	20:23	53 07:15 (03)	19:48		18:58	20 07:20 (08)	18:10	78 09:31 (04)	16:34	41 08:20 (04)	16:29	12 08:23 (06)	
20	05:39	06:21 (03)	06:09		06:39		06:59 (08)	07:10	07:51 (07)	06:46	07:41 (04)	07:14	08:11 (06)
	20:22	53 07:14 (03)	19:47		18:57	21 07:20 (08)	18:08	85 09:32 (04)	16:33	38 08:19 (04)	16:29	12 08:23 (06)	
21	05:40	06:22 (03)	06:10		06:40		07:00 (08)	07:11	07:49 (07)	06:47	07:43 (04)	07:15	08:12 (06)
	20:21	53 07:15 (03)	19:45		18:55	21 07:21 (08)	18:07	89 09:32 (04)	16:33	34 08:17 (04)	16:30	12 08:24 (06)	
22	05:41	06:22 (03)	06:11		06:41		07:01 (08)	07:12	07:48 (07)	06:48	07:45 (04)	07:15	08:12 (06)
	20:20	53 07:15 (03)	19:44		18:53	19 07:20 (08)	18:05	91 09:32 (04)	16:32	32 08:17 (04)	16:30	12 08:24 (06)	
23	05:42	06:22 (03)	06:12		06:42		07:02 (08)	07:13	07:46 (07)	06:50	07:47 (04)	07:16	08:13 (06)
	20:20	53 07:15 (03)	19:42		18:52	18 07:20 (08)	18:04	95 09:32 (04)	16:31	28 08:15 (04)	16:31	12 08:25 (06)	
24	05:43	06:23 (03)	06:13		06:43		07:03 (08)	07:15	07:45 (07)	06:51	07:50 (04)	07:16	08:13 (06)
	20:19	52 07:15 (03)	19:41		18:50	16 07:19 (08)	18:02	97 09:32 (04)	16:31	22 08:12 (04)	16:31	12 08:25 (06)	
25	05:44	06:23 (03)	06:13		06:44		07:04 (08)	06:16	06:45 (07)	06:52	07:53 (04)	07:17	08:15 (06)
	20:18	52 07:15 (03)	19:39		18:48	15 07:19 (08)	17:01	98 08:33 (04)	16:30	16 08:09 (04)	16:32	11 08:26 (06)	
26	05:44	06:24 (03)	06:14		06:45		07:05 (08)	06:17	06:45 (07)	06:53	07:58 (04)	07:17	08:15 (06)
	20:17	51 07:15 (03)	19:38		18:47	13 07:18 (08)	17:00	99 08:33 (04)	16:30	6 08:04 (04)	16:32	11 08:26 (06)	
27	05:45	06:23 (03)	06:15		06:46		07:06 (08)	06:18	06:44 (07)	06:54		07:17	08:16 (06)
	20:16	51 07:14 (03)	19:36		18:45	10 07:16 (08)	16:58	100 08:33 (04)	16:29		16:33	10 08:26 (06)	
28	05:46	06:24 (03)	06:16		06:47		07:07 (08)	06:19	06:44 (07)	06:55		07:18	08:16 (06)
	20:15	49 07:13 (03)	19:35		18:43	7 07:14 (08)	16:57	99 08:32 (04)	16:29		16:34	9 08:25 (06)	
29	05:47	06:24 (03)	06:17		06:48		07:08 (08)	06:20	06:44 (07)	06:56		07:18	08:19 (06)
	20:14	49 07:13 (03)	19:33		18:42	4 07:12 (08)	16:56	98 08:32 (04)	16:29		16:34	7 08:26 (06)	
30	05:48	06:25 (03)	06:18		06:49		06:21	06:45 (07)	06:57		07:18	08:20 (06)	
	20:13	48 07:13 (03)	19:32		18:40		16:54	98 08:33 (04)	16:28		16:35	5 08:25 (06)	
31	05:49	06:25 (03)	06:19				06:23	06:45 (07)			07:18		
	20:12	47 07:12 (03)	19:30				16:53	96 08:32 (04)			16:36		
Ore potenziali eliofanìa	458		427		375		346		299	1413		289	
Totale, caso peggiore	1610		400		211		1975		1413		174		

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento)
Tramonto (hh:mm)Minuti d'ombra Fine ombreggiamento (hh:mm) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R04 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (4)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio		Febbraio		Marzo		Aprile		Maggio		Giugno	
1	07:19	08:29 (05)	07:06	08:38 (05)	06:30	06:59 (06)	06:40		05:54	06:45 (07)	05:26	
	16:37	77 09:46 (05)	17:11	80 09:58 (05)	17:45	40 07:39 (06)	19:18		19:50	13 06:58 (07)	20:19	
2	07:19	08:30 (05)	07:05	08:38 (05)	06:29	06:58 (06)	06:38		05:53	06:50 (07)	05:25	
	16:38	77 09:47 (05)	17:12	80 09:58 (05)	17:46	41 07:39 (06)	19:19		19:51	1 06:51 (07)	20:20	
3	07:19	08:30 (05)	07:04	08:38 (05)	06:27	06:58 (06)	06:36		05:52		05:25	
	16:39	77 09:47 (05)	17:13	78 09:56 (05)	17:47	41 07:39 (06)	19:20		19:52		20:20	
4	07:19	08:30 (05)	07:03	08:38 (05)	06:25	06:57 (06)	06:35		05:51		05:25	
	16:40	78 09:48 (05)	17:15	78 09:56 (05)	17:48	42 07:39 (06)	19:21		19:53		20:21	
5	07:19	08:31 (05)	07:02	08:39 (05)	06:24	06:57 (06)	06:33		05:49		05:24	
	16:40	78 09:49 (05)	17:16	76 09:55 (05)	17:49	42 07:39 (06)	19:22		19:54		20:22	
6	07:19	08:31 (05)	07:01	08:39 (05)	06:22	06:57 (06)	06:32		05:48	06:08 (08)	05:24	
	16:41	78 09:49 (05)	17:17	76 09:55 (05)	17:50	42 07:39 (06)	19:24		19:55	4 06:12 (08)	20:22	
7	07:19	08:31 (05)	06:59	08:40 (05)	06:21	06:56 (06)	06:30		05:47	06:06 (08)	05:24	
	16:42	79 09:50 (05)	17:18	74 09:54 (05)	17:51	42 07:38 (06)	19:25		19:56	7 06:13 (08)	20:23	
8	07:19	08:32 (05)	06:58	08:41 (05)	06:19	06:57 (06)	06:28		06:51 (07)	05:46	06:05 (08)	05:23
	16:43	79 09:51 (05)	17:20	73 09:54 (05)	17:53	41 07:38 (06)	19:26	11	07:02 (07)	19:57	9 06:14 (08)	20:24
9	07:19	08:31 (05)	06:57	08:42 (05)	06:18	06:56 (06)	06:27		06:47 (07)	05:45	06:04 (08)	05:23
	16:44	80 09:51 (05)	17:21	71 09:53 (05)	17:54	41 07:37 (06)	19:27	18	07:05 (07)	19:58	11 06:15 (08)	20:24
10	07:18	08:32 (05)	06:56	08:43 (05)	06:16	06:57 (06)	06:25		06:46 (07)	05:43	06:03 (08)	05:23
	16:45	80 09:52 (05)	17:22	69 09:52 (05)	17:55	40 07:37 (06)	19:28	21	07:07 (07)	19:59	13 06:16 (08)	20:25
11	07:18	08:32 (05)	06:55	08:43 (05)	06:14	06:57 (06)	06:24		06:43 (07)	05:42	06:02 (08)	05:23
	16:46	80 09:52 (05)	17:23	68 09:51 (05)	17:56	39 07:36 (06)	19:29	25	07:08 (07)	20:00	15 06:17 (08)	20:25
12	07:18	08:32 (05)	06:54	08:44 (05)	06:13	06:57 (06)	06:22		06:41 (07)	05:41	06:01 (08)	05:23
	16:47	80 09:52 (05)	17:25	66 09:50 (05)	17:57	38 07:35 (06)	19:30	27	07:08 (07)	20:01	16 06:17 (08)	20:26
13	07:18	08:32 (05)	06:52	08:45 (05)	06:11	06:58 (06)	06:20		06:40 (07)	05:40	06:00 (08)	05:23
	16:49	81 09:53 (05)	17:26	64 09:49 (05)	17:58	36 07:34 (06)	19:31	30	07:10 (07)	20:02	17 06:17 (08)	20:26
14	07:17	08:33 (05)	06:51	08:45 (05)	06:09	06:59 (06)	06:19		06:39 (07)	05:39	05:59 (08)	05:23
	16:50	81 09:54 (05)	17:27	61 09:46 (05)	17:59	33 07:32 (06)	19:32	31	07:10 (07)	20:03	18 06:17 (08)	20:27
15	07:17	08:32 (05)	06:50	07:09 (11)	06:08	06:59 (06)	06:17		06:39 (07)	05:38	05:58 (08)	05:22
	16:51	82 09:54 (05)	17:28	62 09:45 (05)	18:00	31 07:30 (06)	19:33	32	07:11 (07)	20:04	19 06:17 (08)	20:27
16	07:17	08:33 (05)	06:49	07:08 (11)	06:06	07:01 (06)	06:16		06:37 (07)	05:37	05:57 (08)	05:23
	16:52	82 09:55 (05)	17:29	63 09:44 (05)	18:01	28 07:29 (06)	19:34	33	07:10 (07)	20:05	20 06:17 (08)	20:28
17	07:16	08:33 (05)	06:47	07:06 (11)	06:05	07:02 (06)	06:14		06:37 (07)	05:36	05:57 (08)	05:23
	16:53	82 09:55 (05)	17:31	61 09:41 (05)	18:02	25 07:27 (06)	19:35	34	07:11 (07)	20:06	21 06:18 (08)	20:28
18	07:16	08:34 (05)	06:46	07:05 (11)	06:03	07:04 (06)	06:13		06:36 (07)	05:35	05:56 (08)	05:23
	16:54	82 09:56 (05)	17:32	60 09:39 (05)	18:03	20 07:24 (06)	19:36	34	07:10 (07)	20:07	22 06:18 (08)	20:28
19	07:15	08:33 (05)	06:45	07:04 (11)	06:01	07:08 (06)	06:11		06:36 (07)	05:35	05:55 (08)	05:23
	16:55	83 09:56 (05)	17:33	57 09:37 (05)	18:05	12 07:20 (06)	19:37	35	07:11 (07)	20:08	23 06:18 (08)	20:29
20	07:15	08:33 (05)	06:43	07:02 (11)	06:00		06:10		06:36 (07)	05:34	05:54 (08)	05:23
	16:56	83 09:56 (05)	17:34	54 09:34 (05)	18:06		19:38	34	07:10 (07)	20:09	23 06:17 (08)	20:29
21	07:14	08:34 (05)	06:42	07:01 (11)	05:58		06:08		06:36 (07)	05:33	05:54 (08)	05:23
	16:58	83 09:57 (05)	17:35	60 09:31 (05)	18:07		19:39	34	07:10 (07)	20:10	23 06:17 (08)	20:29
22	07:13	08:34 (05)	06:40	06:59 (11)	05:56		06:07		06:37 (07)	05:32	05:55 (08)	05:23
	16:59	83 09:57 (05)	17:37	58 09:27 (05)	18:08		19:40	33	07:10 (07)	20:11	22 06:17 (08)	20:29
23	07:13	08:34 (05)	06:39	06:58 (11)	05:55		06:05		06:36 (07)	05:31	05:55 (08)	05:23
	17:00	83 09:57 (05)	17:38	51 09:22 (05)	18:09		19:41	32	07:08 (07)	20:11	21 06:16 (08)	20:29
24	07:12	08:35 (05)	06:37	06:57 (11)	05:53		06:04		06:37 (07)	05:31	05:55 (08)	05:24
	17:01	83 09:58 (05)	17:39	38 07:35 (06)	18:10		19:42	31	07:08 (07)	20:12	21 06:16 (08)	20:30
25	07:11	08:35 (05)	06:36	06:57 (11)	05:51		06:02		06:37 (07)	05:30	05:57 (08)	05:24
	17:02	83 09:58 (05)	17:40	38 07:35 (06)	18:11		19:43	30	07:07 (07)	20:13	19 06:16 (08)	20:30
26	07:11	08:35 (05)	06:35	06:59 (11)	05:50		06:01		06:38 (07)	05:29	05:57 (08)	05:24
	17:04	83 09:58 (05)	17:41	38 07:37 (06)	18:12		19:44	28	07:06 (07)	20:14	18 06:15 (08)	20:30
27	07:10	08:35 (05)	06:33	07:00 (11)	05:48		06:00		06:39 (07)	05:29	05:59 (08)	05:25
	17:05	83 09:58 (05)	17:42	37 07:37 (06)	18:13		19:46	26	07:05 (07)	20:15	16 06:15 (08)	20:30
28	07:09	08:35 (05)	06:32	07:00 (06)	05:46		05:58		06:39 (07)	05:28	05:59 (08)	05:25
	17:06	83 09:58 (05)	17:44	38 07:38 (06)	18:14		19:47	24	07:03 (07)	20:16	14 06:13 (08)	20:30
29	07:08	08:36 (05)			06:45		05:57		06:41 (07)	05:27	06:00 (08)	05:25
	17:07	81 09:57 (05)			19:15		19:48	21	07:02 (07)	20:17	12 06:12 (08)	20:30
30	07:07	08:36 (05)			06:43		05:56		06:42 (07)	05:27	06:02 (08)	05:26
	17:08	81 09:57 (05)			19:16		19:49	18	07:00 (07)	20:17	9 06:11 (08)	20:30
31	07:07	08:37 (05)			06:41					05:26	06:04 (08)	
	17:10	81 09:58 (05)			19:17					20:18	6 06:10 (08)	
Ore potenziali eliofanìa	298		298		369		398		448		451	
Totale, caso peggiore	2506		1729		674		642		433			

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento)
Tramonto (hh:mm)Minuti d'ombra Fine ombreggiamento (hh:mm) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R04 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (4)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

Il sole splende tutto il di, dall'alba al tramonto

Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole

La turbina è costantemente operativa

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 20:30	05:50 20:11	06:12 (08) 06:20	06:42 (07) 06:50	07:37 (06) 06:24	08:11 (05) 06:58
2	05:27 20:30	05:51 20:10	06:13 (08) 06:21	06:44 (07) 06:51	07:36 (06) 06:25	08:10 (05) 06:59
3	05:27 20:30	05:52 20:09	06:14 (08) 06:22	06:45 (07) 06:52	07:35 (06) 06:26	08:11 (05) 07:00
4	05:28 20:29	05:53 20:08	06:15 (08) 06:23	06:46 (07) 06:53	07:34 (06) 06:27	08:10 (05) 07:01
5	05:28 20:29	05:54 20:07	06:16 (08) 06:24	06:47 (07) 06:54	07:33 (06) 06:28	08:09 (05) 07:02
6	05:29 20:29	05:55 20:05	06:17 (08) 06:25	06:48 (07) 06:55	07:33 (06) 06:30	08:08 (05) 07:03
7	05:30 20:29	05:56 20:04	06:18 (08) 06:26	06:49 (07) 06:56	07:32 (06) 06:31	08:09 (05) 07:04
8	05:30 20:28	05:57 20:03	06:21 (08) 06:27	06:50 (07) 06:57	07:32 (06) 06:32	08:08 (05) 07:05
9	05:31 20:28	05:58 20:02	06:22 (08) 06:28	06:51 (07) 06:58	07:32 (06) 06:33	08:08 (05) 07:06
10	05:32 20:28	05:59 20:01	06:23 (08) 06:29	06:52 (07) 06:59	07:32 (06) 06:34	08:08 (05) 07:07
11	05:32 20:27	06:00 19:59	06:24 (08) 06:30	06:53 (07) 06:30	07:32 (06) 06:36	08:08 (05) 07:08
12	05:33 20:27	06:13 (08) 19:58	06:25 (07) 06:31	06:54 (07) 06:31	07:33 (06) 06:37	08:08 (05) 07:09
13	05:34 20:26	06:11 (08) 19:57	06:26 (07) 06:32	06:55 (07) 06:32	07:33 (06) 06:38	08:08 (05) 07:09
14	05:34 20:26	06:10 (08) 19:55	06:27 (07) 06:33	06:56 (07) 06:33	07:33 (06) 06:39	08:08 (05) 07:10
15	05:35 20:25	06:09 (08) 19:54	06:28 (07) 06:34	06:57 (07) 06:34	07:34 (06) 06:40	08:08 (05) 07:11
16	05:36 20:25	06:07 (08) 19:53	06:29 (07) 06:35	06:58 (07) 06:35	07:34 (06) 06:41	08:08 (05) 07:12
17	05:37 20:24	06:06 (08) 19:51	06:30 (07) 06:36	06:59 (07) 06:36	07:35 (06) 06:42	08:08 (05) 07:13
18	05:38 20:23	06:06 (08) 19:50	06:31 (07) 06:37	07:00 (07) 06:37	07:35 (06) 06:43	08:09 (05) 07:14
19	05:38 20:23	06:06 (08) 19:48	06:32 (07) 06:38	07:01 (07) 06:38	07:36 (06) 06:44	08:09 (05) 07:15
20	05:39 20:22	06:06 (08) 19:47	06:33 (07) 06:39	07:02 (07) 06:39	07:36 (06) 06:45	08:09 (05) 07:16
21	05:40 20:21	06:05 (08) 19:45	06:34 (07) 06:40	07:03 (07) 06:40	07:37 (06) 06:46	08:09 (05) 07:17
22	05:41 20:20	06:04 (08) 19:44	06:35 (07) 06:41	07:04 (07) 06:41	07:37 (06) 06:47	08:09 (05) 07:18
23	05:42 20:20	06:27 (08) 19:42	06:36 (07) 06:42	07:05 (07) 06:42	07:38 (06) 06:48	08:10 (05) 07:19
24	05:43 20:19	06:05 (08) 19:41	06:37 (07) 06:43	07:06 (07) 06:43	07:38 (06) 06:49	08:10 (05) 07:20
25	05:44 20:18	06:28 (08) 19:39	06:38 (07) 06:44	07:07 (07) 06:44	07:39 (06) 06:50	08:11 (05) 07:21
26	05:44 20:17	06:07 (08) 19:38	06:39 (07) 06:45	07:08 (07) 06:45	07:40 (06) 06:51	08:11 (05) 07:22
27	05:45 20:16	06:29 (08) 19:36	06:40 (07) 06:46	07:09 (07) 06:46	07:41 (06) 06:52	08:12 (05) 07:23
28	05:46 20:15	06:08 (08) 19:35	06:41 (07) 06:47	07:10 (07) 06:47	07:42 (06) 06:53	08:12 (05) 07:24
29	05:47 20:14	06:28 (08) 19:33	06:42 (07) 06:48	07:11 (07) 06:48	07:43 (06) 06:54	08:13 (05) 07:25
30	05:48 20:13	06:10 (08) 19:32	06:43 (07) 06:49	07:12 (07) 06:49	07:44 (06) 06:55	08:13 (05) 07:26
31	05:49 20:12	06:28 (08) 19:30	06:44 (07) 06:50	07:13 (07) 06:50	07:45 (06) 06:56	08:14 (05) 07:27
Ore potenziali eliofanìa	458	427	375	346	299	289
Totale, caso peggiore	355	663	250	1509	2400	2376

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento)
Tramonto (hh:mm)Minuti d'ombra Fine ombreggiamento (hh:mm) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R05 - Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (5)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio		Febbraio		Marzo		Aprile		Maggio		Giugno			
1	07:19		08:30 (10)	07:06	06:30	06:40			05:54	06:32 (11)	05:26	06:42 (11)		
	16:37	49	09:19 (10)	17:11	17:45	19:18			19:50	59	07:31 (11)	20:19	81	19:36 (05)
2	07:19		08:30 (10)	07:05	06:28	06:38			05:53	06:32 (11)	05:25	06:43 (11)		
	16:38	49	09:19 (10)	17:12	17:46	19:19			19:51	60	07:32 (11)	20:20	81	19:37 (05)
3	07:19		08:31 (10)	07:04	06:27	06:36			05:52	06:31 (11)	05:25	06:43 (11)		
	16:39	48	09:19 (10)	17:13	17:47	19:20			19:52	61	07:32 (11)	20:20	80	19:37 (05)
4	07:19		08:31 (10)	07:03	06:25	06:35			05:50	06:31 (11)	05:25	06:45 (11)		
	16:40	48	09:19 (10)	17:15	17:48	19:21			19:53	61	07:32 (11)	20:21	79	19:38 (05)
5	07:19		08:32 (10)	07:02	06:24	06:33			05:49	06:31 (11)	05:24	06:46 (11)		
	16:40	48	09:20 (10)	17:16	17:49	19:22			19:54	61	07:32 (11)	20:22	78	19:38 (05)
6	07:19		08:33 (10)	07:00	06:22	06:32			05:48	06:31 (11)	05:24	06:46 (11)		
	16:41	47	09:20 (10)	17:17	17:50	19:23			19:55	61	07:32 (11)	20:22	76	19:38 (05)
7	07:19		08:34 (10)	06:59	06:21	06:30			05:47	06:30 (11)	05:24	06:47 (11)		
	16:42	46	09:20 (10)	17:18	17:51	19:25			19:56	61	07:31 (11)	20:23	75	19:38 (05)
8	07:19		08:34 (10)	06:58	06:19	06:28			05:46	06:31 (11)	05:23	06:48 (11)		
	16:43	45	09:19 (10)	17:20	17:53	19:26			19:57	60	07:31 (11)	20:24	75	19:39 (05)
9	07:19		08:35 (10)	06:57	06:18	06:27			05:45	06:31 (11)	05:23	06:49 (11)		
	16:44	45	09:20 (10)	17:21	17:54	19:27			19:58	60	07:31 (11)	20:24	74	19:39 (05)
10	07:18		08:36 (10)	06:56	06:16	06:25			05:43	06:31 (11)	05:23	06:50 (11)		
	16:45	44	09:20 (10)	17:22	17:55	19:28			19:59	59	07:30 (11)	20:25	72	19:40 (05)
11	07:18		08:37 (10)	06:55	06:14	06:23			05:42	06:31 (11)	05:23	06:51 (11)		
	16:46	43	09:20 (10)	17:23	17:56	19:29			20:00	59	07:30 (11)	20:25	71	19:40 (05)
12	07:18		08:37 (10)	06:54	06:13	06:22			05:41	06:31 (11)	05:23	06:52 (11)		
	16:47	42	09:19 (10)	17:24	17:57	19:30			20:01	59	07:30 (11)	20:26	71	19:41 (05)
13	07:18		08:38 (10)	06:52	06:11	06:20			05:40	06:31 (11)	05:23	06:52 (11)		
	16:48	41	09:19 (10)	17:26	17:58	19:31			20:02	59	07:30 (11)	20:26	70	19:41 (05)
14	07:17		08:40 (10)	06:51	06:09	06:19		06:58 (11)	05:39	06:31 (11)	05:22	06:53 (11)		
	16:50	40	09:20 (10)	17:27	17:59	19:32	16	07:14 (11)	20:03	58	07:29 (11)	20:27	69	19:41 (05)
15	07:17		08:40 (10)	06:50	06:08	06:17		06:54 (11)	05:38	06:32 (11)	05:22	06:54 (11)		
	16:51	39	09:19 (10)	17:28	18:00	19:33	24	07:18 (11)	20:04	63	19:16 (05)	20:27	67	19:41 (05)
16	07:17		08:42 (10)	06:48	06:06	06:16		06:50 (11)	05:37	06:32 (11)	05:22	06:54 (11)		
	16:52	37	09:19 (10)	17:29	18:01	19:34	30	07:20 (11)	20:05	72	19:21 (05)	20:27	67	19:42 (05)
17	07:16		08:42 (10)	06:47	06:05	06:14		06:48 (11)	05:36	06:33 (11)	05:23	06:55 (11)		
	16:53	35	09:17 (10)	17:31	18:02	19:35	35	07:23 (11)	20:06	76	19:24 (05)	20:28	66	19:42 (05)
18	07:16		08:44 (10)	06:46	06:03	06:13		06:45 (11)	05:35	06:33 (11)	05:23	06:55 (11)		
	16:54	33	09:17 (10)	17:32	18:03	19:36	39	07:24 (11)	20:07	79	19:26 (05)	20:28	66	19:42 (05)
19	07:15		08:45 (10)	06:44	06:01	06:11		06:44 (11)	05:35	06:34 (11)	05:23	06:56 (11)		
	16:55	31	09:16 (10)	17:33	18:04	19:37	42	07:26 (11)	20:08	80	19:27 (05)	20:28	65	19:42 (05)
20	07:15		08:46 (10)	06:43	06:00	06:10		06:42 (11)	05:34	06:34 (11)	05:23	06:56 (11)		
	16:56	28	09:14 (10)	17:34	18:06	19:38	44	07:26 (11)	20:09	82	19:28 (05)	20:29	65	19:42 (05)
21	07:14		08:49 (10)	06:42	05:58	06:08		06:41 (11)	05:33	06:34 (11)	05:23	06:56 (11)		
	16:58	25	09:14 (10)	17:35	18:07	19:39	47	07:28 (11)	20:10	83	19:29 (05)	20:29	65	19:42 (05)
22	07:13		08:51 (10)	06:40	05:56	06:07		06:39 (11)	05:32	06:35 (11)	05:23	06:57 (11)		
	16:59	21	09:12 (10)	17:36	18:08	19:40	49	07:28 (11)	20:10	85	19:31 (05)	20:29	65	19:43 (05)
23	07:13		08:53 (10)	06:39	05:55	06:05		06:38 (11)	05:31	06:36 (11)	05:23	06:57 (11)		
	17:00	16	09:09 (10)	17:38	18:09	19:41	51	07:29 (11)	20:11	84	19:31 (05)	20:29	65	19:43 (05)
24	07:12		08:59 (10)	06:37	05:53	06:04		06:37 (11)	05:31	06:36 (11)	05:24	06:56 (11)		
	17:01	6	09:05 (10)	17:39	18:10	19:42	53	07:30 (11)	20:12	85	19:32 (05)	20:30	66	19:43 (05)
25	07:11			06:36	05:51	06:02		06:36 (11)	05:30	06:37 (11)	05:24	06:56 (11)		
	17:02			17:40	18:11	19:43	54	07:30 (11)	20:13	86	19:33 (05)	20:30	66	19:43 (05)
26	07:11			06:34	05:50	06:01		06:35 (11)	05:29	06:38 (11)	05:24	06:57 (11)		
	17:04			17:41	18:12	19:44	56	07:31 (11)	20:14	84	19:33 (05)	20:30	66	19:44 (05)
27	07:10			06:33	05:48	06:00		06:35 (11)	05:29	06:38 (11)	05:25	06:56 (11)		
	17:05			17:42	18:13	19:45	56	07:31 (11)	20:15	84	19:33 (05)	20:30	68	19:44 (05)
28	07:09			06:32	05:46	05:58		06:33 (11)	05:28	06:39 (11)	05:25	06:55 (11)		
	17:06			17:43	18:14	19:47	58	07:31 (11)	20:16	85	19:35 (05)	20:30	69	19:43 (05)
29	07:08				06:45	05:57		06:33 (11)	05:27	06:39 (11)	05:25	06:56 (11)		
	17:07				19:15	19:48	59	07:32 (11)	20:16	85	19:35 (05)	20:30	69	19:44 (05)
30	07:07				06:43	05:56		06:33 (11)	05:27	06:41 (11)	05:26	06:55 (11)		
	17:08				19:16	19:49	59	07:32 (11)	20:17	84	19:36 (05)	20:30	70	19:44 (05)
31	07:06				06:41				05:26	06:42 (11)				
	17:10				19:17				20:18	83	19:37 (05)			
Ore potenziali eliofanìa	298			298	369	398			448	2218		451	2117	
Totale, caso peggiore	906					772								

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento)
 Tramonto (hh:mm) Minuti d'ombra Fine ombreggiamento (hh:mm) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R05 - Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (5)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:
Il sole splende tutto il di, dall'alba al tramonto
Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
La turbina è costantemente operativa

	Luglio		Agosto		Settembre		Ottobre		Novembre		Dicembre	
1	05:26		06:55 (11)	05:50		06:42 (11)	06:20	06:50	06:24		06:58	08:19 (10)
	20:30	71	19:44 (05)	20:11	59	07:41 (11)	19:28	18:38	16:52		16:28	43 09:02 (10)
2	05:27		06:54 (11)	05:51		06:41 (11)	06:21	06:51	06:25		06:59	08:19 (10)
	20:30	72	19:44 (05)	20:10	60	07:41 (11)	19:27	18:37	16:51		16:28	44 09:03 (10)
3	05:27		06:54 (11)	05:52		06:41 (11)	06:22	06:52	06:26		07:00	08:19 (10)
	20:29	74	19:45 (05)	20:09	60	07:41 (11)	19:25	18:35	16:50		16:27	45 09:04 (10)
4	05:28		06:53 (11)	05:53		06:41 (11)	06:23	06:53	06:27		07:01	08:19 (10)
	20:29	75	19:44 (05)	20:08	60	07:41 (11)	19:23	18:33	16:48		16:27	46 09:05 (10)
5	05:28		06:53 (11)	05:54		06:41 (11)	06:24	06:54	06:28		07:02	08:19 (10)
	20:29	76	19:45 (05)	20:07	61	07:42 (11)	19:22	18:32	16:47		16:27	46 09:05 (10)
6	05:29		06:52 (11)	05:55		06:41 (11)	06:25	06:55	06:30		07:03	08:19 (10)
	20:29	76	19:44 (05)	20:05	61	07:42 (11)	19:20	18:30	16:46		16:27	47 09:06 (10)
7	05:30		06:52 (11)	05:56		06:41 (11)	06:26	06:56	06:31		07:04	08:19 (10)
	20:29	79	19:45 (05)	20:04	61	07:42 (11)	19:19	18:28	16:45		16:27	48 09:07 (10)
8	05:30		06:52 (11)	05:57		06:40 (11)	06:27	06:57	06:32		07:05	08:19 (10)
	20:28	79	19:45 (05)	20:03	61	07:41 (11)	19:17	18:27	16:44		16:27	49 09:08 (10)
9	05:31		06:51 (11)	05:58		06:40 (11)	06:28	06:58	06:33		07:06	08:20 (10)
	20:28	79	19:44 (05)	20:02	61	07:41 (11)	19:15	18:25	16:43		16:27	48 09:08 (10)
10	05:32		06:51 (11)	05:59		06:40 (11)	06:29	06:59	06:34		07:07	08:19 (10)
	20:27	81	19:45 (05)	20:00	60	07:40 (11)	19:14	18:23	16:42		16:27	49 09:08 (10)
11	05:32		06:51 (11)	06:00		06:40 (11)	06:30	07:00	06:35		07:08	08:20 (10)
	20:27	81	19:45 (05)	19:59	60	07:40 (11)	19:12	18:22	16:41		16:27	49 09:09 (10)
12	05:33		06:49 (11)	06:01		06:41 (11)	06:31	07:01	06:37		07:08	08:20 (10)
	20:27	83	19:44 (05)	19:58	59	07:40 (11)	19:10	18:20	16:40		16:27	50 09:10 (10)
13	05:34		06:49 (11)	06:02		06:41 (11)	06:32	07:02	06:38		07:09	08:21 (10)
	20:26	83	19:44 (05)	19:57	59	07:40 (11)	19:09	18:19	16:39		16:27	49 09:10 (10)
14	05:34		06:49 (11)	06:03		06:41 (11)	06:33	07:03	06:39		07:10	08:21 (10)
	20:26	84	19:44 (05)	19:55	58	07:39 (11)	19:07	18:17	16:38		16:27	50 09:11 (10)
15	05:35		06:49 (11)	06:04		06:41 (11)	06:34	07:05	06:40		07:11	08:21 (10)
	20:25	84	19:44 (05)	19:54	58	07:39 (11)	19:05	18:16	16:37		16:28	50 09:11 (10)
16	05:36		06:47 (11)	06:05		06:42 (11)	06:35	07:06	06:41		07:11	08:22 (10)
	20:24	85	19:43 (05)	19:52	56	07:38 (11)	19:03	18:14	16:36		16:28	50 09:12 (10)
17	05:37		06:47 (11)	06:06		06:42 (11)	06:36	07:07	06:43		07:12	08:22 (10)
	20:24	85	19:43 (05)	19:51	55	07:37 (11)	19:02	18:13	16:36		16:28	51 09:13 (10)
18	05:37		06:47 (11)	06:07		06:43 (11)	06:37	07:08	06:44	08:33 (10)	07:13	08:22 (10)
	20:23	85	19:43 (05)	19:50	54	07:37 (11)	19:00	18:11	16:35	6 08:39 (10)	16:28	51 09:13 (10)
19	05:38		06:47 (11)	06:08		06:43 (11)	06:38	07:09	06:45	08:28 (10)	07:13	08:23 (10)
	20:23	85	19:42 (05)	19:48	53	07:36 (11)	18:58	18:10	16:34	16 08:44 (10)	16:29	51 09:14 (10)
20	05:39		06:45 (11)	06:09		06:44 (11)	06:39	07:10	06:46	08:26 (10)	07:14	08:23 (10)
	20:22	85	19:41 (05)	19:47	51	07:35 (11)	18:57	18:08	16:33	21 08:47 (10)	16:29	51 09:14 (10)
21	05:40		06:45 (11)	06:10		06:45 (11)	06:40	07:11	06:47	08:24 (10)	07:15	08:24 (10)
	20:21	84	19:40 (05)	19:45	49	07:34 (11)	18:55	18:07	16:33	25 08:49 (10)	16:30	51 09:15 (10)
22	05:41		06:45 (11)	06:10		06:46 (11)	06:41	07:12	06:48	08:23 (10)	07:15	08:24 (10)
	20:20	83	19:40 (05)	19:44	46	07:32 (11)	18:53	18:05	16:32	27 08:50 (10)	16:30	51 09:15 (10)
23	05:42		06:45 (11)	06:11		06:47 (11)	06:42	07:13	06:49	08:22 (10)	07:16	08:25 (10)
	20:19	82	19:39 (05)	19:42	44	07:31 (11)	18:52	18:04	16:31	31 08:53 (10)	16:31	51 09:16 (10)
24	05:43		06:44 (11)	06:12		06:48 (11)	06:43	07:14	06:51	08:21 (10)	07:16	08:25 (10)
	20:19	82	19:38 (05)	19:41	41	07:29 (11)	18:50	18:02	16:31	33 08:54 (10)	16:31	51 09:16 (10)
25	05:43		06:44 (11)	06:13		06:48 (11)	06:44	06:16	06:52	08:20 (10)	07:17	08:25 (10)
	20:18	79	19:37 (05)	19:39	38	07:26 (11)	18:48	17:01	16:30	35 08:55 (10)	16:32	51 09:16 (10)
26	05:44		06:44 (11)	06:14		06:50 (11)	06:45	06:17	06:53	08:20 (10)	07:17	08:26 (10)
	20:17	77	19:35 (05)	19:38	34	07:24 (11)	18:47	17:00	16:30	37 08:57 (10)	16:32	51 09:17 (10)
27	05:45		06:43 (11)	06:15		06:52 (11)	06:46	06:18	06:54	08:19 (10)	07:17	08:27 (10)
	20:16	73	19:32 (05)	19:36	30	07:22 (11)	18:45	16:58	16:29	39 08:58 (10)	16:33	50 09:17 (10)
28	05:46		06:42 (11)	06:16		06:55 (11)	06:47	06:19	06:55	08:19 (10)	07:18	08:27 (10)
	20:15	70	19:30 (05)	19:35	24	07:19 (11)	18:43	16:57	16:29	40 08:59 (10)	16:34	50 09:17 (10)
29	05:47		06:42 (11)	06:17		06:59 (11)	06:48	06:20	06:56	08:19 (10)	07:18	08:28 (10)
	20:14	57	07:39 (11)	19:33	15	07:14 (11)	18:41	16:56	16:29	41 09:00 (10)	16:34	50 09:18 (10)
30	05:48		06:42 (11)	06:18			06:49	06:21	06:57	08:19 (10)	07:18	08:29 (10)
	20:13	58	07:40 (11)	19:31			18:40	16:54	16:28	42 09:01 (10)	16:35	49 09:18 (10)
31	05:49		06:42 (11)	06:19				06:23			07:18	08:29 (10)
	20:12	58	07:40 (11)	19:30				16:53			16:36	50 09:19 (10)
Ore potenziali eliofania	458			427			375	346	299	393		1522
Totale, caso peggiore	2405			1488								

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R06 - Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (8)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:
Il sole splende tutto il di, dall'alba al tramonto
Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
La turbina è costantemente operativa

	Gennaio		Febbraio		Marzo		Aprile		Maggio		Giugno	
1	07:19	15:18 (02)	07:06		06:30	16:33 (01)	06:40	05:54	05:26			
	16:37	32	15:50 (02)	17:11	17:45	36	17:09 (01)	19:18	19:50	20:19		
2	07:19	15:18 (02)	07:05		06:28	16:31 (01)	06:38	05:53	05:25			
	16:38	32	15:50 (02)	17:12	17:46	38	17:09 (01)	19:19	19:51	20:20		
3	07:19	15:19 (02)	07:04		06:27	16:31 (01)	06:36	05:52	05:25			
	16:39	32	15:51 (02)	17:13	17:47	39	17:10 (01)	19:20	19:52	20:20		
4	07:19	15:19 (02)	07:03		06:25	16:30 (01)	06:35	05:50	05:24			
	16:39	32	15:51 (02)	17:15	17:48	40	17:10 (01)	19:21	19:53	20:21		
5	07:19	15:20 (02)	07:02		06:24	16:29 (01)	06:33	05:49	05:24			
	16:40	31	15:51 (02)	17:16	17:49	42	17:11 (01)	19:22	19:54	20:22		
6	07:19	15:21 (02)	07:00		06:22	16:29 (01)	06:31	05:48	05:24			
	16:41	31	15:52 (02)	17:17	17:50	42	17:11 (01)	19:23	19:55	20:22		
7	07:19	15:22 (02)	06:59		06:21	16:28 (01)	06:30	05:47	05:23			
	16:42	30	15:52 (02)	17:18	17:51	43	17:11 (01)	19:24	19:56	20:23		
8	07:19	15:22 (02)	06:58		06:19	16:28 (01)	06:28	05:46	05:23			
	16:43	31	15:53 (02)	17:19	17:52	43	17:11 (01)	19:26	19:57	20:24		
9	07:19	15:22 (02)	06:57		06:17	16:28 (01)	06:27	05:44	05:23			
	16:44	30	15:52 (02)	17:21	17:54	42	17:10 (01)	19:27	19:58	20:24		
10	07:18	15:23 (02)	06:56		06:16	16:28 (01)	06:25	05:43	05:23			
	16:45	29	15:52 (02)	17:22	17:55	43	17:11 (01)	19:28	19:59	20:25		
11	07:18	15:24 (02)	06:55		06:14	16:28 (01)	06:23	05:42	05:23			
	16:46	29	15:53 (02)	17:23	17:56	42	17:10 (01)	19:29	20:00	20:25		
12	07:18	15:25 (02)	06:54		06:13	16:28 (01)	06:22	05:41	05:22			
	16:47	27	15:52 (02)	17:24	17:57	41	17:09 (01)	19:30	20:01	20:26		
13	07:18	15:26 (02)	06:52		06:11	16:29 (01)	06:20	05:40	05:22			
	16:48	26	15:52 (02)	17:26	17:58	40	17:09 (01)	19:31	20:02	20:26		
14	07:17	15:27 (02)	06:51		06:09	16:29 (01)	06:19	05:39	05:22			
	16:49	25	15:52 (02)	17:27	17:59	39	17:08 (01)	19:32	20:03	20:27		
15	07:17	15:28 (02)	06:50		06:08	16:29 (01)	06:17	05:38	05:22			
	16:51	23	15:51 (02)	17:28	18:00	37	17:06 (01)	19:33	20:04	20:27		
16	07:17	15:30 (02)	06:48		06:06	16:30 (01)	06:16	05:37	05:22			
	16:52	21	15:51 (02)	17:29	18:01	36	17:06 (01)	19:34	20:05	20:28		
17	07:16	15:30 (02)	06:47		06:04	16:31 (01)	06:14	05:36	05:22			
	16:53	20	15:50 (02)	17:30	18:02	33	17:04 (01)	19:35	20:06	20:28		
18	07:16	15:33 (02)	06:46		06:03	16:32 (01)	06:13	05:35	05:22			
	16:54	17	15:50 (02)	17:32	18:03	30	17:02 (01)	19:36	20:07	20:28		
19	07:15	15:34 (02)	06:44		06:01	16:34 (01)	06:11	05:34	05:23			
	16:55	14	15:48 (02)	17:33	18:04	27	17:01 (01)	19:37	20:08	20:29		
20	07:15	15:36 (02)	06:43		06:00	16:36 (01)	06:10	05:34	05:23			
	16:56	10	15:46 (02)	17:34	18:05	22	16:58 (01)	19:38	20:09	20:29		
21	07:14		06:42		05:58	16:38 (01)	06:08	05:33	05:23			
	16:57		17:35		18:07	16	16:54 (01)	19:39	20:10	20:29		
22	07:13		06:40		05:56	16:44 (01)	06:07	05:32	05:23			
	16:59		17:36		18:08	5	16:49 (01)	19:40	20:11	20:29		
23	07:13		06:39	16:45 (01)	05:55		06:05	05:31	05:23			
	17:00		17:38	13	16:58 (01)	18:09	19:41	20:11	20:29			
24	07:12		06:37	16:41 (01)	05:53		06:04	05:30	05:24			
	17:01		17:39	20	17:01 (01)	18:10	19:42	20:12	20:30			
25	07:11		06:36	16:39 (01)	05:51		06:02	05:30	05:24			
	17:02		17:40	25	17:04 (01)	18:11	19:43	20:13	20:30			
26	07:11		06:34	16:36 (01)	05:50		06:01	05:29	05:24			
	17:03		17:41	29	17:05 (01)	18:12	19:44	20:14	20:30			
27	07:10		06:33	16:35 (01)	05:48		06:00	05:28	05:24			
	17:05		17:42	32	17:07 (01)	18:13	19:45	20:15	20:30			
28	07:09		06:31	16:33 (01)	05:46		05:58	05:28	05:25			
	17:06		17:43	34	17:07 (01)	18:14	19:47	20:16	20:30			
29	07:08				06:45		05:57	05:27	05:25			
	17:07				19:15		19:48	20:17	20:30			
30	07:07				06:43		05:56	05:27	05:26			
	17:08				19:16		19:49	20:17	20:30			
31	07:06				06:41			05:26				
	17:10				19:17			20:18				
Ore potenziali eliofania	298		298		369		398	448	451			
Totale, caso peggiore	522		153		776							

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento)
Tramonto (hh:mm) Minuti d'ombra Fine ombreggiamento (hh:mm) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R06 - Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (8)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Luglio	Agosto	Settembre	Settembre	Ottobre	Novembre	Novembre	Dicembre	Dicembre
1	05:26 20:30	05:50 19:28	06:20 19:28		06:50 18:38	17:07 (01) 17:48 (01)	06:24 16:52	06:58 16:28	15:07 (02) 15:35 (02)
2	05:27 20:30	05:51 20:10	06:21 19:27		06:51 18:36	17:07 (01) 17:48 (01)	06:25 16:51	06:59 16:27	15:06 (02) 15:35 (02)
3	05:27 20:29	05:52 20:09	06:22 19:25		06:52 18:35	17:06 (01) 17:48 (01)	06:26 16:49	07:00 16:27	15:06 (02) 15:36 (02)
4	05:28 20:29	05:53 20:08	06:23 19:23		06:53 18:33	17:05 (01) 17:48 (01)	06:27 16:48	07:01 16:27	15:06 (02) 15:37 (02)
5	05:28 20:29	05:54 20:07	06:24 19:22		06:54 18:32	17:05 (01) 17:48 (01)	06:28 16:47	07:02 16:27	15:07 (02) 15:37 (02)
6	05:29 20:29	05:55 20:05	06:25 19:20		06:55 18:30	17:04 (01) 17:47 (01)	06:30 16:46	07:03 16:27	15:07 (02) 15:38 (02)
7	05:29 20:29	05:56 20:04	06:26 19:18		06:56 18:28	17:04 (01) 17:47 (01)	06:31 16:45	07:04 16:27	15:07 (02) 15:38 (02)
8	05:30 20:28	05:57 20:03	06:27 19:17		06:57 18:27	17:04 (01) 17:46 (01)	06:32 16:44	07:05 16:27	15:07 (02) 15:39 (02)
9	05:31 20:28	05:58 20:02	06:28 19:15		06:58 18:25	17:04 (01) 17:45 (01)	06:33 16:43	07:06 16:27	15:08 (02) 15:40 (02)
10	05:31 20:27	05:59 20:00	06:29 19:14		06:59 18:23	17:04 (01) 17:44 (01)	06:34 16:42	07:07 16:27	15:07 (02) 15:39 (02)
11	05:32 20:27	06:00 19:59	06:30 19:12		07:00 18:22	17:04 (01) 17:43 (01)	06:35 16:41	07:08 16:27	15:08 (02) 15:40 (02)
12	05:33 20:27	06:01 19:58	06:31 19:10		07:01 18:20	17:06 (01) 17:43 (01)	06:37 16:40	07:09 16:27	15:08 (02) 15:41 (02)
13	05:33 20:26	06:02 19:57	06:32 19:08		07:02 18:19	17:06 (01) 17:42 (01)	06:38 16:39	07:09 16:27	15:09 (02) 15:42 (02)
14	05:34 20:26	06:03 19:55	06:33 19:07		07:03 18:17	17:07 (01) 17:40 (01)	06:39 16:38	07:10 16:27	15:10 (02) 15:42 (02)
15	05:35 20:25	06:03 19:54	06:34 19:05		07:05 18:16	17:08 (01) 17:39 (01)	06:40 16:37	07:11 16:27	15:09 (02) 15:42 (02)
16	05:36 20:24	06:04 19:52	06:35 19:03		07:06 18:14	17:10 (01) 17:37 (01)	06:41 16:36	07:12 16:28	15:10 (02) 15:43 (02)
17	05:37 20:24	06:05 19:51	06:36 19:02		07:07 18:13	17:11 (01) 17:34 (01)	06:43 16:35	07:12 16:28	15:11 (02) 15:44 (02)
18	05:37 20:23	06:06 19:50	06:37 19:00		07:08 18:11	17:14 (01) 17:31 (01)	06:44 16:35	07:13 16:28	15:11 (02) 15:44 (02)
19	05:38 20:23	06:07 19:48	06:38 18:58		07:09 18:10	17:18 (01) 17:26 (01)	06:45 16:34	07:13 16:29	15:12 (02) 15:44 (02)
20	05:39 20:22	06:08 19:47	06:39 18:57		07:10 18:08		06:46 16:33	07:14 16:29	15:11 (02) 15:44 (02)
21	05:40 20:21	06:09 19:45	06:40 18:55		07:11 18:07		06:47 16:33	07:15 16:29	15:12 (02) 15:45 (02)
22	05:41 20:20	06:10 19:44	06:41 18:53	15	07:12 17:39 (01)		06:48 16:32	07:15 15:12 (02)	15:12 (02) 15:45 (02)
23	05:42 20:20	06:11 19:42	06:42 18:52	20	07:13 17:21 (01)		06:49 16:31	07:16 15:11 (02)	15:13 (02) 15:46 (02)
24	05:42 20:19	06:12 19:41	06:43 18:50	25	07:14 17:18 (01)		06:51 16:31	07:16 15:10 (02)	15:13 (02) 15:46 (02)
25	05:43 20:18	06:13 19:39	06:44 18:48	29	07:15 17:16 (01)		06:52 16:30	07:17 15:09 (02)	15:15 (02) 15:47 (02)
26	05:44 20:17	06:14 19:38	06:45 18:46	32	07:16 17:14 (01)		06:53 16:30	07:17 15:08 (02)	15:15 (02) 15:48 (02)
27	05:45 20:16	06:15 19:36	06:46 18:45	35	07:17 17:12 (01)		06:54 16:29	07:17 15:07 (02)	15:15 (02) 15:48 (02)
28	05:46 20:15	06:16 19:35	06:47 18:43	36	07:18 17:11 (01)		06:55 16:29	07:18 15:06 (02)	15:15 (02) 15:48 (02)
29	05:47 20:14	06:17 19:33	06:48 18:41	39	07:19 17:09 (01)		06:56 16:28	07:18 15:07 (02)	15:16 (02) 15:49 (02)
30	05:48 20:13	06:18 19:31	06:49 18:40	40	07:20 17:08 (01)		06:57 16:28	07:18 15:07 (02)	15:17 (02) 15:49 (02)
31	05:49 20:12	06:19 19:30			06:23 16:53			07:18 16:36	15:17 (02) 15:50 (02)
Ore potenziali eliofanìa	458	427	375		346		299	289	994
Totale, caso peggiore				271	670		182		994

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R07 - Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (10)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile		Maggio		Giugno			
1	07:19	07:06	06:30	06:40		05:54		06:37 (06)	05:26	05:51 (07)	
	16:37	17:11	17:45	19:18		19:50	68	07:45 (05)	20:19	76	07:36 (05)
2	07:19	07:05	06:29	06:38		05:53		06:37 (06)	05:25		05:52 (07)
	16:38	17:12	17:46	19:19		19:51	67	07:44 (05)	20:20	75	07:36 (05)
3	07:19	07:04	06:27	06:36		05:52		06:39 (06)	05:25		05:52 (07)
	16:39	17:13	17:47	19:20		19:52	65	07:44 (05)	20:20	74	07:35 (05)
4	07:19	07:03	06:25	06:35		05:51		06:40 (06)	05:25		05:52 (07)
	16:40	17:15	17:48	19:21		19:53	64	07:44 (05)	20:21	73	07:35 (05)
5	07:19	07:02	06:24	06:33		05:49		06:40 (05)	05:24		05:53 (07)
	16:41	17:16	17:49	19:22		19:54	65	07:45 (05)	20:22	72	07:35 (05)
6	07:19	07:01	06:22	06:32		05:48		06:40 (05)	05:24		05:54 (07)
	16:41	17:17	17:50	19:24		19:55	65	07:45 (05)	20:22	70	07:35 (05)
7	07:19	06:59	06:21	06:30		05:47		06:39 (05)	05:24		05:53 (07)
	16:42	17:18	17:51	19:25		19:56	65	07:44 (05)	20:23	69	07:34 (05)
8	07:19	06:58	06:19	06:28		05:46		06:39 (05)	05:23		05:54 (07)
	16:43	17:20	17:53	19:26		19:57	65	07:44 (05)	20:24	67	07:34 (05)
9	07:19	06:57	06:18	06:27		05:45		06:39 (05)	05:23		05:54 (07)
	16:44	17:21	17:54	19:27		19:58	65	07:44 (05)	20:24	67	07:34 (05)
10	07:18	06:56	06:16	06:25		05:44		06:39 (05)	05:23		05:55 (07)
	16:45	17:22	17:55	19:28		19:59	64	07:43 (05)	20:25	66	07:34 (05)
11	07:18	06:55	06:14	06:24		06:51 (06)	05:42	06:39 (05)	05:23		05:55 (07)
	16:46	17:23	17:56	19:29	6	06:57 (06)	20:00	07:43 (05)	20:25	65	07:34 (05)
12	07:18	06:54	06:13	06:22		06:46 (06)	05:41	06:39 (05)	05:23		05:56 (07)
	16:47	17:25	17:57	19:30	15	07:01 (06)	20:01	07:43 (05)	20:26	64	07:34 (05)
13	07:18	06:52	06:11	06:20		06:44 (06)	05:40	06:01 (07)	05:23		05:56 (07)
	16:49	17:26	17:58	19:31	20	07:04 (06)	20:02	07:43 (05)	20:26	63	07:34 (05)
14	07:17	06:51	06:09	06:19		06:41 (06)	05:39	05:59 (07)	05:23		05:57 (07)
	16:50	17:27	17:59	19:32	38	07:23 (05)	20:03	07:42 (05)	20:27	62	07:34 (05)
15	07:17	06:50	06:08	06:17		06:40 (06)	05:38	05:58 (07)	05:23		05:57 (07)
	16:51	17:28	18:00	19:33	48	07:28 (05)	20:04	07:42 (05)	20:27	61	07:34 (05)
16	07:17	06:49	06:06	06:16		06:38 (06)	05:37	05:57 (07)	05:23		05:57 (07)
	16:52	17:29	18:01	19:34	53	07:31 (05)	20:05	07:42 (05)	20:28	61	07:34 (05)
17	07:16	06:47	06:05	06:14		06:38 (06)	05:36	05:57 (07)	05:23		05:57 (07)
	16:53	17:31	18:02	19:35	55	07:33 (05)	20:06	07:42 (05)	20:28	60	07:34 (05)
18	07:16	06:46	06:03	06:13		06:36 (06)	05:35	05:56 (07)	05:23		05:58 (07)
	16:54	17:32	18:03	19:36	59	07:35 (05)	20:07	07:42 (05)	20:28	59	07:34 (05)
19	07:15	06:45	06:01	06:11		06:36 (06)	05:35	05:55 (07)	05:23		05:58 (07)
	16:55	17:33	18:05	19:37	61	07:37 (05)	20:08	07:41 (05)	20:29	59	07:34 (05)
20	07:15	06:43	06:00	06:10		06:35 (06)	05:34	05:54 (07)	05:23		05:58 (07)
	16:56	17:34	18:06	19:38	63	07:38 (05)	20:09	07:41 (05)	20:29	59	07:34 (05)
21	07:14	06:42	05:58	06:08		06:35 (06)	05:33	05:53 (07)	05:23		05:58 (07)
	16:58	17:35	18:07	19:39	64	07:39 (05)	20:10	07:40 (05)	20:29	59	07:34 (05)
22	07:13	06:40	05:56	06:07		06:35 (06)	05:32	05:53 (07)	05:23		05:59 (07)
	16:59	17:37	18:08	19:40	65	07:40 (05)	20:11	07:40 (05)	20:29	59	07:35 (05)
23	07:13	06:39	05:55	06:05		06:34 (06)	05:31	05:52 (07)	05:23		05:59 (07)
	17:00	17:38	18:09	19:41	67	07:41 (05)	20:11	07:40 (05)	20:29	59	07:35 (05)
24	07:12	06:37	05:53	06:04		06:34 (06)	05:31	05:51 (07)	05:24		05:59 (07)
	17:01	17:39	18:10	19:42	68	07:42 (05)	20:12	07:39 (05)	20:30	59	07:35 (05)
25	07:11	06:36	05:51	06:02		06:34 (06)	05:30	05:51 (07)	05:24		05:58 (07)
	17:02	17:40	18:11	19:43	68	07:42 (05)	20:13	07:39 (05)	20:30	60	07:35 (05)
26	07:11	06:35	05:50	06:01		06:34 (06)	05:29	05:51 (07)	05:24		05:59 (07)
	17:04	17:41	18:12	19:44	69	07:43 (05)	20:14	07:38 (05)	20:30	61	07:36 (05)
27	07:10	06:33	05:48	06:00		06:35 (06)	05:29	05:51 (07)	05:25		05:59 (07)
	17:05	17:42	18:13	19:46	68	07:43 (05)	20:15	07:39 (05)	20:30	61	07:36 (05)
28	07:09	06:32	05:46	05:58		06:34 (06)	05:28	05:51 (07)	05:25		06:00 (07)
	17:06	17:44	18:14	19:47	69	07:43 (05)	20:16	07:38 (05)	20:30	61	07:37 (05)
29	07:08		06:45	05:57		06:35 (06)	05:27	05:51 (07)	05:25		05:59 (07)
	17:07		19:15	19:48	69	07:44 (05)	20:17	07:37 (05)	20:30	63	07:37 (05)
30	07:07		06:43	05:56		06:36 (06)	05:27	05:51 (07)	05:26		05:59 (07)
	17:08		19:16	19:49	68	07:44 (05)	20:17	07:37 (05)	20:30	63	07:37 (05)
31	07:07		06:41				05:26	05:52 (07)			
	17:10		19:17				20:18	07:37 (05)			
Ore potenziali eliofania	298	298	369	398		448			451		1927
Totale, caso peggiore				1093		2291					

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento)
Tramonto (hh:mm) Minuti d'ombra Fine ombreggiamento (hh:mm) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R07 - Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (10)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Luglio		Agosto		Settembre		5	Ottobre	Novembre	Dicembre		
1	05:26	05:59 (07)	05:50	06:49 (05)	06:20	06:51 (06)	06:50	06:24	06:58			
	20:30	65	07:38 (05)	20:11	65	07:54 (05)	19:28	5	06:56 (06)	18:38	16:52	16:28
2	05:27	05:59 (07)	05:51	06:49 (05)	06:21	06:51	06:25	06:59				
	20:30	66	07:38 (05)	20:10	65	07:54 (05)	19:27	18:37	16:51	16:28		
3	05:27	06:00 (07)	05:52	06:49 (05)	06:22	06:52	06:26	07:00				
	20:30	66	07:39 (05)	20:09	65	07:54 (05)	19:25	18:35	16:50	16:27		
4	05:28	05:59 (07)	05:53	06:49 (05)	06:23	06:53	06:27	07:01				
	20:29	67	07:39 (05)	20:08	65	07:54 (05)	19:24	18:33	16:48	16:27		
5	05:28	05:59 (07)	05:54	06:49 (05)	06:24	06:54	06:28	07:02				
	20:29	69	07:40 (05)	20:07	65	07:54 (05)	19:22	18:32	16:47	16:27		
6	05:29	06:00 (07)	05:55	06:49 (05)	06:25	06:55	06:30	07:03				
	20:29	70	07:41 (05)	20:05	65	07:54 (05)	19:20	18:30	16:46	16:27		
7	05:30	05:59 (07)	05:56	06:49 (05)	06:26	06:56	06:31	07:04				
	20:29	71	07:41 (05)	20:04	65	07:54 (05)	19:19	18:28	16:45	16:27		
8	05:30	06:00 (07)	05:57	06:49 (05)	06:27	06:57	06:32	07:05				
	20:28	71	07:42 (05)	20:03	65	07:54 (05)	19:17	18:27	16:44	16:27		
9	05:31	05:59 (07)	05:58	06:49 (06)	06:28	06:58	06:33	07:06				
	20:28	73	07:42 (05)	20:02	64	07:53 (05)	19:15	18:25	16:43	16:27		
10	05:32	05:59 (07)	05:59	06:47 (06)	06:29	06:59	06:34	07:07				
	20:28	75	07:43 (05)	20:01	66	07:53 (05)	19:14	18:24	16:42	16:27		
11	05:32	06:00 (07)	06:00	06:46 (06)	06:30	07:00	06:36	07:08				
	20:27	75	07:44 (05)	19:59	67	07:53 (05)	19:12	18:22	16:41	16:27		
12	05:33	05:59 (07)	06:01	06:44 (06)	06:31	07:01	06:37	07:09				
	20:27	77	07:44 (05)	19:58	68	07:52 (05)	19:10	18:20	16:40	16:27		
13	05:34	05:59 (07)	06:02	06:43 (06)	06:32	07:02	06:38	07:09				
	20:26	78	07:45 (05)	19:57	69	07:52 (05)	19:09	18:19	16:39	16:27		
14	05:34	06:00 (07)	06:03	06:43 (06)	06:33	07:04	06:39	07:10				
	20:26	79	07:46 (05)	19:55	68	07:51 (05)	19:07	18:17	16:38	16:27		
15	05:35	06:00 (07)	06:04	06:42 (06)	06:34	07:05	06:40	07:11				
	20:25	80	07:47 (05)	19:54	69	07:51 (05)	19:05	18:16	16:37	16:28		
16	05:36	06:00 (07)	06:05	06:41 (06)	06:35	07:06	06:41	07:12				
	20:25	81	07:47 (05)	19:53	69	07:50 (05)	19:04	18:14	16:36	16:28		
17	05:37	06:00 (07)	06:06	06:41 (06)	06:36	07:07	06:43	07:12				
	20:24	82	07:48 (05)	19:51	68	07:49 (05)	19:02	18:13	16:36	16:28		
18	05:38	06:00 (07)	06:07	06:40 (06)	06:37	07:08	06:44	07:13				
	20:23	82	07:48 (05)	19:50	68	07:48 (05)	19:00	18:11	16:35	16:28		
19	05:38	06:01 (07)	06:08	06:40 (06)	06:38	07:09	06:45	07:14				
	20:23	82	07:49 (05)	19:48	67	07:47 (05)	18:58	18:10	16:34	16:29		
20	05:39	06:02 (07)	06:09	06:40 (06)	06:39	07:10	06:46	07:14				
	20:22	83	07:50 (05)	19:47	66	07:46 (05)	18:57	18:08	16:33	16:29		
21	05:40	06:02 (07)	06:10	06:40 (06)	06:40	07:11	06:47	07:15				
	20:21	83	07:50 (05)	19:45	65	07:45 (05)	18:55	18:07	16:33	16:30		
22	05:41	06:03 (07)	06:11	06:40 (06)	06:41	07:12	06:48	07:15				
	20:20	82	07:50 (05)	19:44	64	07:44 (05)	18:53	18:05	16:32	16:30		
23	05:42	06:04 (07)	06:12	06:40 (06)	06:42	07:13	06:50	07:16				
	20:20	82	07:51 (05)	19:42	62	07:42 (05)	18:52	18:04	16:31	16:31		
24	05:43	06:05 (07)	06:13	06:40 (06)	06:43	07:15	06:51	07:16				
	20:19	81	07:51 (05)	19:41	60	07:40 (05)	18:50	18:03	16:31	16:31		
25	05:44	06:06 (07)	06:14	06:40 (06)	06:44	07:16	06:52	07:17				
	20:18	80	07:52 (05)	19:39	58	07:38 (05)	18:48	17:01	16:30	16:32		
26	05:44	06:07 (07)	06:15	06:40 (06)	06:45	07:17	06:53	07:17				
	20:17	79	07:52 (05)	19:38	55	07:35 (05)	18:47	17:00	16:30	16:32		
27	05:45	06:08 (07)	06:15	06:40 (06)	06:46	07:18	06:54	07:17				
	20:16	78	07:53 (05)	19:36	52	07:32 (05)	18:45	16:58	16:29	16:33		
28	05:46	06:08 (07)	06:16	06:41 (06)	06:47	07:19	06:55	07:18				
	20:15	76	07:52 (05)	19:35	48	07:29 (05)	18:43	16:57	16:29	16:34		
29	05:47	06:09 (07)	06:17	06:42 (06)	06:48	07:20	06:56	07:18				
	20:14	76	07:53 (05)	19:33	35	07:23 (05)	18:42	16:56	16:29	16:34		
30	05:48	06:10 (07)	06:18	06:44 (06)	06:49	07:21	06:57	07:18				
	20:13	72	07:53 (05)	19:32	19	07:03 (06)	18:40	16:54	16:28	16:35		
31	05:49	06:49 (05)	06:19	06:46 (06)		06:23		07:18				
	20:12	64	07:53 (05)	19:30	15	07:01 (06)		16:53		16:36		
Ore potenziali eliofanìa	458		427		375		346	299	289			
Totale, caso peggiore	2345		1862		5							

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R08 - Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (6)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:
Il sole splende tutto il di, dall'alba al tramonto
Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno				
1	07:19	07:06	07:31 (10)	06:30	06:40	05:54	06:14 (11)	05:26		
	16:37	17:11	26 07:57 (10)	17:45	19:18	19:50	37 06:51 (11)	20:19		
2	07:19	07:05	07:29 (10)	06:28	06:38	05:53	06:14 (11)	05:25		
	16:38	17:12	29 07:58 (10)	17:46	19:19	19:51	38 06:52 (11)	20:20		
3	07:19	07:04	07:29 (10)	06:27	06:36	05:52	06:14 (11)	05:25		
	16:39	17:13	31 08:00 (10)	17:47	19:20	19:52	38 06:52 (11)	20:20		
4	07:19	07:03	07:28 (10)	06:25	06:35	05:51	06:14 (11)	05:25	05:46 (12)	
	16:40	17:15	33 08:01 (10)	17:48	19:21	19:53	38 06:52 (11)	20:21	05:46 (12)	
5	07:19	07:02	07:27 (10)	06:24	06:33	05:49	06:14 (11)	05:24	05:46 (12)	
	16:40	17:16	35 08:02 (10)	17:49	19:22	19:54	38 06:52 (11)	20:22	2 05:48 (12)	
6	07:19	07:00	07:27 (10)	06:22	06:32	05:48	06:14 (11)	05:24	05:45 (12)	
	16:41	17:17	36 08:03 (10)	17:50	19:23	19:55	38 06:52 (11)	20:22	3 05:48 (12)	
7	07:19	06:59	07:26 (10)	06:21	06:30	05:47	06:13 (11)	05:24	05:45 (12)	
	16:42	17:18	38 08:04 (10)	17:51	19:25	19:56	38 06:51 (11)	20:23	4 05:49 (12)	
8	07:19	06:58	07:26 (10)	06:19	06:28	05:46	06:13 (11)	05:23	05:45 (12)	
	16:43	17:20	38 08:04 (10)	17:53	19:26	19:57	38 06:51 (11)	20:24	5 05:50 (12)	
9	07:19	06:57	07:26 (10)	06:18	06:27	05:45	06:13 (11)	05:23	05:45 (12)	
	16:44	17:21	39 08:05 (10)	17:54	19:27	19:58	38 06:51 (11)	20:24	6 05:51 (12)	
10	07:18	06:56	07:25 (10)	06:16	06:25	05:43	06:14 (11)	05:23	05:45 (12)	
	16:45	17:22	39 08:04 (10)	17:55	19:28	19:59	37 06:51 (11)	20:25	6 05:51 (12)	
11	07:18	06:55	07:25 (10)	06:14	06:24	05:42	06:14 (11)	05:23	05:45 (12)	
	16:46	17:23	40 08:05 (10)	17:56	19:29	20:00	36 06:50 (11)	20:25	7 05:52 (12)	
12	07:18	06:54	07:25 (10)	06:13	06:22	05:41	06:14 (11)	05:23	05:45 (12)	
	16:47	17:24	40 08:05 (10)	17:57	19:30	20:01	36 06:50 (11)	20:26	7 05:52 (12)	
13	07:18	06:52	07:26 (10)	06:11	06:20	05:40	06:15 (11)	05:23	05:45 (12)	
	16:49	17:26	39 08:05 (10)	17:58	19:31	20:02	34 06:49 (11)	20:26	8 05:53 (12)	
14	07:17	06:51	07:25 (10)	06:09	06:19	05:39	06:15 (11)	05:23	05:45 (12)	
	16:50	17:27	40 08:05 (10)	17:59	19:32	20:03	34 06:49 (11)	20:27	8 05:53 (12)	
15	07:17	06:50	07:26 (10)	06:08	06:17	05:38	06:16 (11)	05:22	05:45 (12)	
	16:51	17:28	39 08:05 (10)	18:00	19:33	20:04	32 06:48 (11)	20:27	8 05:53 (12)	
16	07:17	06:48	07:26 (10)	06:06	06:16	05:37	06:16 (11)	05:22	05:45 (12)	
	16:52	17:29	39 08:05 (10)	18:01	19:34	20:05	31 06:47 (11)	20:27	9 05:54 (12)	
17	07:16	06:47	07:26 (10)	06:05	06:14	05:36	06:18 (11)	05:23	05:45 (12)	
	16:53	17:31	37 08:03 (10)	18:02	19:35	20:06	29 06:47 (11)	20:28	9 05:54 (12)	
18	07:16	06:46	07:27 (10)	06:03	06:13	05:35	06:18 (11)	05:23	05:45 (12)	
	16:54	17:32	36 08:03 (10)	18:03	19:36	20:07	28 06:46 (11)	20:28	9 05:54 (12)	
19	07:15	06:44	07:28 (10)	06:01	06:11	05:35	06:19 (11)	05:23	05:45 (12)	
	16:55	17:33	35 08:03 (10)	18:04	19:37	20:08	26 06:45 (11)	20:29	9 05:54 (12)	
20	07:15	06:43	07:28 (10)	06:00	06:10	05:34	06:20 (11)	05:23	05:45 (12)	
	16:56	17:34	33 08:01 (10)	18:06	19:38	20:09	24 06:44 (11)	20:29	9 05:54 (12)	
21	07:14	06:42	07:29 (10)	05:58	06:08	05:33	06:21 (11)	05:23	05:45 (12)	
	16:58	17:35	31 08:00 (10)	18:07	19:39	10 06:40 (11)	22 06:43 (11)	20:29	9 05:54 (12)	
22	07:13	06:40	07:30 (10)	05:56	06:07	06:26 (11)	05:32	06:23 (11)	05:23	05:46 (12)
	16:59	17:36	28 07:58 (10)	18:08	19:40	17 06:43 (11)	20:10	19 06:42 (11)	20:29	9 05:55 (12)
23	07:13	06:39	07:32 (10)	05:55	06:05	06:24 (11)	05:31	06:24 (11)	05:23	05:46 (12)
	17:00	17:38	25 07:57 (10)	18:09	19:41	21 06:45 (11)	20:11	16 06:40 (11)	20:29	9 05:55 (12)
24	07:12	06:37	07:33 (10)	05:53	06:04	06:23 (11)	05:31	06:26 (11)	05:24	05:46 (12)
	17:01	17:39	22 07:55 (10)	18:10	19:42	24 06:47 (11)	20:12	12 06:38 (11)	20:30	9 05:55 (12)
25	07:11	06:36	07:36 (10)	05:51	06:02	06:21 (11)	05:30	06:30 (11)	05:24	05:46 (12)
	17:02	17:40	16 07:52 (10)	18:11	19:43	27 06:48 (11)	20:13	6 06:36 (11)	20:30	9 05:55 (12)
26	07:11	06:35	07:40 (10)	05:50	06:01	06:20 (11)	05:29		05:24	05:47 (12)
	17:04	17:41	7 07:47 (10)	18:12	19:44	29 06:49 (11)	20:14		20:30	9 05:56 (12)
27	07:10	06:33		05:48	06:00	06:19 (11)	05:29		05:25	05:47 (12)
	17:05	17:42		18:13	19:45	31 06:50 (11)	20:15		20:30	9 05:56 (12)
28	07:09	07:39 (10)	06:32	05:46	05:58	06:17 (11)	05:28		05:25	05:47 (12)
	17:06	9 07:48 (10)	17:43	18:14	19:47	33 06:50 (11)	20:16		20:30	8 05:55 (12)
29	07:08	07:35 (10)		06:45	05:57	06:16 (11)	05:27		05:25	05:48 (12)
	17:07	16 07:51 (10)		19:15	19:48	35 06:51 (11)	20:16		20:30	8 05:56 (12)
30	07:07	07:33 (10)		06:43	05:56	06:16 (11)	05:27		05:26	05:48 (12)
	17:08	21 07:54 (10)		19:16	19:49	36 06:52 (11)	20:17		20:30	7 05:55 (12)
31	07:06	07:32 (10)		06:41			05:26			
	17:10	24 07:56 (10)		19:17			20:18			
Ore potenziali eliofanìa	298		298	369	398		448		451	
Totale, caso peggiore	70		851		263		763		196	

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R08 - Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (6)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Luglio		Agosto		Settembre		Ottobre		Novembre		Dicembre	
1	05:26	05:49 (12)	05:50	06:25 (11)	06:20	06:50			06:24	06:55 (10)	06:58	
	20:30	7 05:56 (12)	20:11	36 07:01 (11)	19:28	18:38			16:52	39 07:34 (10)	16:28	
2	05:27	05:49 (12)	05:51	06:24 (11)	06:21	06:51			06:25	06:55 (10)	06:59	
	20:30	6 05:55 (12)	20:10	37 07:01 (11)	19:27	18:37			16:51	39 07:34 (10)	16:28	
3	05:27	05:50 (12)	05:52	06:24 (11)	06:22	06:52			06:26	06:56 (10)	07:00	
	20:29	6 05:56 (12)	20:09	37 07:01 (11)	19:25	18:35			16:50	38 07:34 (10)	16:27	
4	05:28	05:50 (12)	05:53	06:24 (11)	06:23	06:53			06:27	06:56 (10)	07:01	
	20:29	5 05:55 (12)	20:08	38 07:02 (11)	19:23	18:33			16:48	37 07:33 (10)	16:27	
5	05:28	05:51 (12)	05:54	06:24 (11)	06:24	06:54			06:28	06:57 (10)	07:02	
	20:29	4 05:55 (12)	20:07	38 07:02 (11)	19:22	18:32			16:47	36 07:33 (10)	16:27	
6	05:29	05:51 (12)	05:55	06:24 (11)	06:25	06:55			06:30	06:57 (10)	07:03	
	20:29	4 05:55 (12)	20:05	38 07:02 (11)	19:20	18:30			16:46	35 07:32 (10)	16:27	
7	05:30	05:52 (12)	05:56	06:23 (11)	06:26	06:56			06:31	06:59 (10)	07:04	
	20:29	3 05:55 (12)	20:04	39 07:02 (11)	19:19	18:28			16:45	33 07:32 (10)	16:27	
8	05:30	05:53 (12)	05:57	06:22 (11)	06:27	06:57			06:32	07:00 (10)	07:05	
	20:28	2 05:55 (12)	20:03	39 07:01 (11)	19:17	18:27			16:44	31 07:31 (10)	16:27	
9	05:31	05:58	05:58	06:22 (11)	06:28	06:58			06:33	07:00 (10)	07:06	
	20:28	20:02	39 07:01 (11)	19:15	18:25	16:43	29 07:29 (10)	16:27				
10	05:32	05:59	06:23 (11)	06:29	06:59	06:34	07:02 (10)	07:07				
	20:27	20:00	38 07:01 (11)	19:14	18:24	16:42	26 07:28 (10)	16:27				
11	05:32	06:00	06:23 (11)	06:30	07:00	06:35	07:04 (10)	07:08				
	20:27	19:59	37 07:00 (11)	19:12	18:22	16:41	23 07:27 (10)	16:27				
12	05:33	06:01	06:23 (11)	06:31	07:01	06:37	07:05 (10)	07:08				
	20:27	19:58	37 07:00 (11)	19:10	18:20	16:40	20 07:25 (10)	16:27				
13	05:34	06:02	06:23 (11)	06:32	07:02	06:38	07:08 (10)	07:09				
	20:26	19:57	36 06:59 (11)	19:09	18:19	16:39	15 07:23 (10)	16:27				
14	05:34	06:03	06:24 (11)	06:33	07:03	06:39	07:12 (10)	07:10				
	20:26	19:55	35 06:59 (11)	19:07	18:17	16:38	9 07:21 (10)	16:27				
15	05:35	06:04	06:25 (11)	06:34	07:05	06:40	07:11 (10)	07:11				
	20:25	19:54	33 06:58 (11)	19:05	18:16	16:37	16:28					
16	05:36	06:05	06:26 (11)	06:35	07:06	06:41	08:10 (10)	07:11				
	20:24	19:52	31 06:57 (11)	19:03	18:14	16:36	12 08:22 (10)	16:28				
17	05:37	06:06	06:27 (11)	06:36	07:07	06:43	08:07 (10)	07:12				
	20:24	19:51	29 06:56 (11)	19:02	18:13	16:36	18 08:25 (10)	16:28				
18	05:38	06:07	06:28 (11)	06:37	07:08	06:44	08:04 (10)	07:13				
	20:23	19:50	26 06:54 (11)	19:00	18:11	16:35	23 08:27 (10)	16:28				
19	05:38	06:38 (11)	06:08	06:29 (11)	06:38	07:09	08:02 (10)	07:13				
	20:23	9 06:47 (11)	19:48	24 06:53 (11)	18:58	18:10	26 08:28 (10)	16:29				
20	05:39	06:35 (11)	06:09	06:30 (11)	06:39	07:10	08:01 (10)	07:14				
	20:22	14 06:49 (11)	19:47	21 06:51 (11)	18:57	18:08	30 08:31 (10)	16:29				
21	05:40	06:33 (11)	06:10	06:32 (11)	06:40	07:11	08:00 (10)	07:15				
	20:21	18 06:51 (11)	19:45	16 06:48 (11)	18:55	18:07	31 08:31 (10)	16:30				
22	05:41	06:32 (11)	06:11	06:36 (11)	06:41	07:12	07:58 (10)	07:15				
	20:20	20 06:52 (11)	19:44	8 06:44 (11)	18:53	18:05	34 08:32 (10)	16:30				
23	05:42	06:31 (11)	06:12	06:42	07:13	07:57 (10)	06:49	07:16				
	20:19	23 06:54 (11)	19:42	18:52	18:04	16:31	36 08:33 (10)	16:31				
24	05:43	06:30 (11)	06:12	06:43	07:14	07:56 (10)	06:51	07:16				
	20:19	25 06:55 (11)	19:41	18:50	18:02	16:31	37 08:33 (10)	16:31				
25	05:44	06:29 (11)	06:13	06:44	06:16	06:52	06:56 (10)	07:17				
	20:18	27 06:56 (11)	19:39	18:48	17:01	16:30	38 07:34 (10)	16:32				
26	05:44	06:29 (11)	06:14	06:45	06:17	06:53	06:56 (10)	07:17				
	20:17	28 06:57 (11)	19:38	18:47	17:00	16:30	38 07:34 (10)	16:32				
27	05:45	06:27 (11)	06:15	06:46	06:18	06:54	06:55 (10)	07:17				
	20:16	30 06:57 (11)	19:36	18:45	16:58	16:29	39 07:34 (10)	16:33				
28	05:46	06:26 (11)	06:16	06:47	06:19	06:55	06:55 (10)	07:18				
	20:15	32 06:58 (11)	19:35	18:43	16:57	16:29	39 07:34 (10)	16:34				
29	05:47	06:26 (11)	06:17	06:48	06:20	06:56	06:54 (10)	07:18				
	20:14	33 06:59 (11)	19:33	18:42	16:56	16:29	40 07:34 (10)	16:34				
30	05:48	06:25 (11)	06:18	06:49	06:21	06:57	06:55 (10)	07:18				
	20:13	35 07:00 (11)	19:32	18:40	16:54	16:28	40 07:35 (10)	16:35				
31	05:49	06:25 (11)	06:19		06:23	06:55 (10)		07:18				
	20:12	35 07:00 (11)	19:30		16:53	16:30	40 07:35 (10)	16:36				
Ore potenziali eliofania	458		427		375	346	521	299	410			289
Totale, caso peggiore	366		712		521	346	521	299	410			289

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento)
 Tramonto (hh:mm) Minuti d'ombra Fine ombreggiamento (hh:mm) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R09 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (7)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile		Maggio		Giugno	
1	07:19 16:37	07:06 17:11	06:30 17:45	06:40 19:18		05:54 19:50		06:48 (10) 20:19	06:55 (10) 54
2	07:19 16:38	07:05 17:12	06:28 17:46	06:38 19:19		05:53 19:51	71	06:48 (10) 20:20	06:56 (10) 53
3	07:19 16:39	07:04 17:13	06:27 17:47	06:36 19:20		05:52 19:52	71	06:48 (10) 20:20	06:56 (10) 53
4	07:19 16:40	07:03 17:15	06:25 17:48	06:35 19:21		05:51 19:53	71	06:48 (10) 20:21	06:57 (10) 52
5	07:19 16:40	07:02 17:16	06:24 17:49	06:33 19:22		05:49 19:54	71	06:48 (10) 20:22	06:58 (10) 51
6	07:19 16:41	07:00 17:17	06:22 17:50	06:32 19:23		05:48 19:55	71	06:48 (10) 20:22	06:58 (10) 49
7	07:19 16:42	06:59 17:18	06:21 17:51	06:30 19:24		05:47 19:56	71	06:47 (10) 20:23	06:59 (10) 48
8	07:19 16:43	06:58 17:20	06:19 17:53	06:28 19:26		05:46 19:57	71	06:47 (10) 20:24	06:59 (10) 48
9	07:19 16:44	06:57 17:21	06:18 17:54	06:27 19:27		05:45 19:58	71	06:47 (10) 20:24	07:00 (10) 47
10	07:18 16:45	06:56 17:22	06:16 17:55	06:25 19:28	16	07:22 (10) 07:38 (10)	05:43 19:59	06:47 (10) 20:25	07:01 (10) 46
11	07:18 16:46	06:55 17:23	06:14 17:56	06:23 19:29	26	07:16 (10) 07:42 (10)	05:42 20:00	06:47 (10) 20:25	07:02 (10) 45
12	07:18 16:47	06:54 17:24	06:13 17:57	06:22 19:30	33	07:12 (10) 07:45 (10)	05:41 20:01	06:47 (10) 20:26	07:02 (10) 45
13	07:18 16:49	06:52 17:26	06:11 17:58	06:20 19:31	38	07:10 (10) 07:48 (10)	05:40 20:02	06:47 (10) 20:26	07:03 (10) 44
14	07:17 16:50	06:51 17:27	06:09 17:59	06:19 19:32	42	07:07 (10) 07:49 (10)	05:39 20:03	06:47 (10) 20:27	07:03 (10) 44
15	07:17 16:51	06:50 17:28	06:08 18:00	06:17 19:33	46	07:05 (10) 07:51 (10)	05:38 20:04	06:47 (10) 20:27	07:04 (10) 43
16	07:17 16:52	06:48 17:29	06:06 18:01	06:16 19:34	49	07:03 (10) 07:52 (10)	05:37 20:05	06:48 (10) 20:27	07:04 (10) 43
17	07:16 16:53	06:47 17:31	06:05 18:02	06:14 19:35	53	07:01 (10) 07:54 (10)	05:36 20:06	06:49 (10) 20:28	07:04 (10) 43
18	07:16 16:54	06:46 17:32	06:03 18:03	06:13 19:36	55	06:59 (10) 07:54 (10)	05:35 20:07	06:49 (10) 20:28	07:04 (10) 43
19	07:15 16:55	06:44 17:33	06:01 18:04	06:11 19:37	58	06:58 (10) 07:56 (10)	05:35 20:08	06:49 (10) 20:28	07:05 (10) 42
20	07:15 16:56	06:43 17:34	06:00 18:06	06:10 19:38	59	06:57 (10) 07:56 (10)	05:34 20:09	06:49 (10) 20:29	07:05 (10) 42
21	07:14 16:58	06:42 17:35	05:58 18:07	06:08 19:39	61	06:56 (10) 07:57 (10)	05:33 20:10	06:49 (10) 20:29	07:05 (10) 42
22	07:13 16:59	06:40 17:36	05:56 18:08	06:07 19:40	63	06:54 (10) 07:57 (10)	05:32 20:10	06:50 (10) 20:29	07:06 (10) 42
23	07:13 17:00	06:39 17:38	05:55 18:09	06:05 19:41	65	06:53 (10) 07:58 (10)	05:31 20:11	06:51 (10) 20:29	07:06 (10) 42
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 19:42	66	06:53 (10) 07:59 (10)	05:31 20:12	06:51 (10) 20:30	07:06 (10) 42
25	07:11 17:02	06:36 17:40	05:51 18:11	06:02 19:43	67	06:51 (10) 07:58 (10)	05:30 20:13	06:52 (10) 20:30	07:05 (10) 43
26	07:11 17:04	06:34 17:41	05:50 18:12	06:01 19:44	68	06:51 (10) 07:59 (10)	05:29 20:14	06:52 (10) 20:30	07:06 (10) 43
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 19:45	69	06:51 (10) 08:00 (10)	05:29 20:15	06:53 (10) 20:30	07:06 (10) 43
28	07:09 17:06	06:31 17:43	05:46 18:14	05:58 19:46	70	06:49 (10) 07:59 (10)	05:28 20:16	06:53 (10) 20:30	07:05 (10) 44
29	07:08 17:07		06:45 19:15	05:57 19:48	70	06:49 (10) 07:59 (10)	05:27 20:16	06:53 (10) 20:30	07:06 (10) 44
30	07:07 17:08		06:43 19:16	05:56 19:49	71	06:49 (10) 08:00 (10)	05:27 20:17	06:54 (10) 20:30	07:05 (10) 45
31	07:06 17:10		06:41 19:17			05:26 20:18	06:55 (10) 07:50 (10)		
Ore potenziali eliofania	298	298	369	398		447		451	
Totale, caso peggiore				1145		2047		1365	

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento)
Tramonto (hh:mm)Minuti d'ombra Fine ombreggiamento (hh:mm) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R09 - Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (7)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Luglio		Agosto		Settembre		Ottobre		Novembre		Dicembre	
1	05:26		07:06 (10)	05:50	06:58 (10)	06:20	07:15 (10)	06:50	06:24	06:58		
	20:30	45	07:51 (10)	20:11	70	08:08 (10)	19:28	26	07:41 (10)	18:38	16:52	16:28
2	05:27		07:05 (10)	05:51	06:57 (10)	06:21	07:20 (10)	06:51	06:25	06:59		
	20:30	46	07:51 (10)	20:10	71	08:08 (10)	19:27	15	07:35 (10)	18:37	16:51	16:28
3	05:27		07:06 (10)	05:52	06:57 (10)	06:22		06:52	06:26	07:00		
	20:29	46	07:52 (10)	20:09	71	08:08 (10)	19:25		18:35	16:50	16:27	
4	05:28		07:05 (10)	05:53	06:57 (10)	06:23		06:53	06:27	07:01		
	20:29	47	07:52 (10)	20:08	72	08:09 (10)	19:23		18:33	16:48	16:27	
5	05:28		07:05 (10)	05:54	06:57 (10)	06:24		06:54	06:28	07:02		
	20:29	48	07:53 (10)	20:07	72	08:09 (10)	19:22		18:32	16:47	16:27	
6	05:29		07:04 (10)	05:55	06:57 (10)	06:25		06:55	06:30	07:03		
	20:29	49	07:53 (10)	20:05	72	08:09 (10)	19:20		18:30	16:46	16:27	
7	05:30		07:04 (10)	05:56	06:57 (10)	06:26		06:56	06:31	07:04		
	20:28	51	07:55 (10)	20:04	72	08:09 (10)	19:19		18:28	16:45	16:27	
8	05:30		07:05 (10)	05:57	06:56 (10)	06:27		06:57	06:32	07:05		
	20:28	51	07:56 (10)	20:03	72	08:08 (10)	19:17		18:27	16:44	16:27	
9	05:31		07:04 (10)	05:58	06:56 (10)	06:28		06:58	06:33	07:06		
	20:28	52	07:56 (10)	20:02	72	08:08 (10)	19:15		18:25	16:43	16:27	
10	05:32		07:04 (10)	05:59	06:56 (10)	06:29		06:59	06:34	07:07		
	20:27	52	07:56 (10)	20:00	72	08:08 (10)	19:14		18:23	16:42	16:27	
11	05:32		07:04 (10)	06:00	06:56 (10)	06:30		07:00	06:35	07:08		
	20:27	53	07:57 (10)	19:59	72	08:08 (10)	19:12		18:22	16:41	16:27	
12	05:33		07:03 (10)	06:01	06:57 (10)	06:31		07:01	06:37	07:08		
	20:27	54	07:57 (10)	19:58	71	08:08 (10)	19:10		18:20	16:40	16:27	
13	05:34		07:03 (10)	06:02	06:57 (10)	06:32		07:02	06:38	07:09		
	20:26	55	07:58 (10)	19:57	70	08:07 (10)	19:09		18:19	16:39	16:27	
14	05:34		07:03 (10)	06:03	06:57 (10)	06:33		07:03	06:39	07:10		
	20:26	56	07:59 (10)	19:55	70	08:07 (10)	19:07		18:17	16:38	16:27	
15	05:35		07:03 (10)	06:04	06:57 (10)	06:34		07:05	06:40	07:11		
	20:25	57	08:00 (10)	19:54	70	08:07 (10)	19:05		18:16	16:37	16:28	
16	05:36		07:02 (10)	06:05	06:58 (10)	06:35		07:06	06:41	07:11		
	20:24	58	08:00 (10)	19:52	68	08:06 (10)	19:03		18:14	16:36	16:28	
17	05:37		07:02 (10)	06:06	06:58 (10)	06:36		07:07	06:43	07:12		
	20:24	59	08:01 (10)	19:51	68	08:06 (10)	19:02		18:13	16:36	16:28	
18	05:38		07:01 (10)	06:07	06:58 (10)	06:37		07:08	06:44	07:13		
	20:23	61	08:02 (10)	19:50	67	08:05 (10)	19:00		18:11	16:35	16:28	
19	05:38		07:01 (10)	06:08	06:59 (10)	06:38		07:09	06:45	07:13		
	20:22	61	08:02 (10)	19:48	65	08:04 (10)	18:58		18:10	16:34	16:29	
20	05:39		07:00 (10)	06:09	06:59 (10)	06:39		07:10	06:46	07:14		
	20:22	62	08:02 (10)	19:47	65	08:04 (10)	18:57		18:08	16:33	16:29	
21	05:40		07:00 (10)	06:10	07:00 (10)	06:40		07:11	06:47	07:15		
	20:21	63	08:03 (10)	19:45	63	08:03 (10)	18:55		18:07	16:33	16:30	
22	05:41		07:00 (10)	06:11	07:01 (10)	06:41		07:12	06:48	07:15		
	20:20	64	08:04 (10)	19:44	61	08:02 (10)	18:53		18:05	16:32	16:30	
23	05:42		07:00 (10)	06:11	07:01 (10)	06:42		07:13	06:49	07:16		
	20:19	64	08:04 (10)	19:42	60	08:01 (10)	18:52		18:04	16:31	16:31	
24	05:43		07:00 (10)	06:12	07:02 (10)	06:43		07:14	06:51	07:16		
	20:19	65	08:05 (10)	19:41	57	07:59 (10)	18:50		18:02	16:31	16:31	
25	05:44		06:59 (10)	06:13	07:02 (10)	06:44		06:16	06:52	07:17		
	20:18	67	08:06 (10)	19:39	55	07:57 (10)	18:48		17:01	16:30	16:32	
26	05:44		06:59 (10)	06:14	07:03 (10)	06:45		06:17	06:53	07:17		
	20:17	67	08:06 (10)	19:38	53	07:56 (10)	18:47		17:00	16:30	16:32	
27	05:45		06:58 (10)	06:15	07:05 (10)	06:46		06:18	06:54	07:17		
	20:16	68	08:06 (10)	19:36	49	07:54 (10)	18:45		16:58	16:29	16:33	
28	05:46		06:58 (10)	06:16	07:06 (10)	06:47		06:19	06:55	07:18		
	20:15	68	08:06 (10)	19:35	46	07:52 (10)	18:43		16:57	16:29	16:34	
29	05:47		06:58 (10)	06:17	07:08 (10)	06:48		06:20	06:56	07:18		
	20:14	69	08:07 (10)	19:33	42	07:50 (10)	18:42		16:56	16:29	16:34	
30	05:48		06:58 (10)	06:18	07:10 (10)	06:49		06:21	06:57	07:18		
	20:13	69	08:07 (10)	19:31	37	07:47 (10)	18:40		16:54	16:28	16:35	
31	05:49		06:58 (10)	06:19	07:12 (10)			06:23		07:18		
	20:12	70	08:08 (10)	19:30	32	07:44 (10)		16:53		16:36		
Ore potenziali eliofania	458		427		375		41	346	299	289		
Totale, caso peggiore	1797		1957		41							

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento)
Tramonto (hh:mm) Minuti d'ombra Fine ombreggiamento (hh:mm) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R10 - Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (11)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno		
1	07:19	07:06	06:30	06:40	07:01 (06)	05:54	06:19 (07)	05:26
	16:37	17:11	17:45	19:18	54 07:55 (05)	19:50	18 06:37 (07)	20:19
2	07:19	07:05	06:29	06:38	07:00 (06)	05:53	06:20 (07)	05:25
	16:38	17:12	17:46	19:19	54 07:54 (05)	19:51	15 06:35 (07)	20:20
3	07:19	07:04	06:27	06:36	07:01 (06)	05:52	06:21 (07)	05:25
	16:39	17:13	17:47	19:20	52 07:53 (05)	19:52	12 06:33 (07)	20:20
4	07:19	07:03	06:25	06:35	07:01 (06)	05:51	06:24 (07)	05:25
	16:40	17:15	17:48	19:21	50 07:51 (05)	19:53	7 06:31 (07)	20:21
5	07:19	07:02	06:24	06:33	07:02 (06)	05:49		05:24
	16:41	17:16	17:49	19:22	48 07:50 (05)	19:54		20:22
6	07:19	07:01	06:22	06:32	07:03 (06)	05:48		05:24
	16:41	17:17	17:50	19:24	43 07:48 (05)	19:55		20:22
7	07:19	06:59	06:21	06:30	07:04 (06)	05:47		05:24
	16:42	17:18	17:51	19:25	35 07:45 (05)	19:56		20:23
8	07:19	06:58	06:19	06:28	07:07 (06)	05:46		05:23
	16:43	17:20	17:53	19:26	24 07:42 (05)	19:57		20:24
9	07:19	06:57	06:18	06:27		05:45		05:23
	16:44	17:21	17:54	19:27		19:58		20:24
10	07:19	06:56	06:16	06:25		05:44		05:23
	16:45	17:22	17:55	19:28		19:59		20:25
11	07:18	06:55	06:14	06:24		05:42		05:23
	16:46	17:23	17:56	19:29		20:00		20:25
12	07:18	06:54	06:13	06:22		05:41		05:23
	16:47	17:25	17:57	19:30		20:01		20:26
13	07:18	06:52	06:11	06:20		05:40		05:23
	16:49	17:26	17:58	19:31		20:02		20:26
14	07:17	06:51	06:10	06:42 (05)	06:19	05:39		05:23
	16:50	17:27	17:59	1 06:43 (05)	19:32	20:03		20:27
15	07:17	06:50	06:08	06:34 (05)	06:17	05:38		05:23
	16:51	17:28	18:00	16 06:50 (05)	19:33	20:04		20:27
16	07:17	06:49	06:06	06:32 (05)	06:16	05:37		05:23
	16:52	17:29	18:01	21 06:53 (05)	19:34	20:05		20:28
17	07:16	06:47	06:05	06:29 (05)	06:14	05:36		05:23
	16:53	17:31	18:02	26 06:55 (05)	19:35	20:06		20:28
18	07:16	06:46	06:03	06:27 (05)	06:13	05:35		05:23
	16:54	17:32	18:03	29 06:56 (05)	19:36	20:07		20:28
19	07:15	06:45	06:01	06:26 (05)	06:11	06:30 (07)	05:35	05:23
	16:55	17:33	18:05	32 06:58 (05)	19:37	5 06:35 (07)	20:08	20:29
20	07:15	06:43	06:00	06:24 (05)	06:10	06:28 (07)	05:34	05:23
	16:56	17:34	18:06	34 06:58 (05)	19:38	9 06:37 (07)	20:09	20:29
21	07:14	06:42	05:58	06:22 (05)	06:08	06:27 (07)	05:33	05:23
	16:58	17:35	18:07	36 06:58 (05)	19:39	11 06:38 (07)	20:10	20:29
22	07:14	06:40	05:56	06:22 (05)	06:07	06:26 (07)	05:32	05:23
	16:59	17:37	18:08	37 06:59 (05)	19:40	13 06:39 (07)	20:11	20:29
23	07:13	06:39	05:55	06:21 (05)	06:05	06:24 (07)	05:31	05:23
	17:00	17:38	18:09	38 06:59 (05)	19:41	15 06:39 (07)	20:11	20:30
24	07:12	06:38	05:53	06:11 (06)	06:04	06:23 (07)	05:31	05:24
	17:01	17:39	18:10	48 06:59 (05)	19:42	17 06:40 (07)	20:12	20:30
25	07:11	06:36	05:51	06:10 (06)	06:03	06:21 (07)	05:30	05:24
	17:02	17:40	18:11	50 07:00 (05)	19:43	18 06:39 (07)	20:13	20:30
26	07:11	06:35	05:50	06:08 (06)	06:01	06:20 (07)	05:29	05:24
	17:04	17:41	18:12	51 06:59 (05)	19:45	19 06:39 (07)	20:14	20:30
27	07:10	06:33	05:48	06:06 (06)	06:00	06:19 (07)	05:29	05:25
	17:05	17:42	18:13	52 06:58 (05)	19:46	20 06:39 (07)	20:15	20:30
28	07:09	06:32	05:46	06:05 (06)	05:58	06:17 (07)	05:28	05:25
	17:06	17:44	18:14	54 06:59 (05)	19:47	21 06:38 (07)	20:16	20:30
29	07:08		06:45	07:03 (06)	05:57	06:18 (07)	05:27	05:25
	17:07		19:15	55 07:58 (05)	19:48	20 06:38 (07)	20:17	20:30
30	07:07		06:43	07:01 (06)	05:56	06:18 (07)	05:27	05:26
	17:09		19:16	56 07:57 (05)	19:49	19 06:37 (07)	20:17	20:30
31	07:07		06:41	07:01 (06)			05:26	
	17:10		19:17	55 07:56 (05)			20:18	
Ore potenziali eliofanìa	298	298	369	398		448		451
Totale, caso peggiore			691	547		52		

Legenda della tabella:

Giorno del mese	Alba (hh:mm)	Inizio ombreggiamento (hh:mm)	(WTG che provoca l'inizio dell'ombreggiamento)
	Tramonto (hh:mm)	Fine ombreggiamento (hh:mm)	(WTG che provoca l'ultimo ombreggiamento)
	Minuti d'ombra		

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R10 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (11)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre		
1	05:26 20:30	05:50 20:11	06:20 19:28	06:50 18:38	06:24 16:52	06:58 16:28		
2	05:27 20:30	05:51 20:10	06:21 19:27	06:51 18:37	06:25 16:51	06:59 16:28		
3	05:27 20:30	05:52 20:09	06:22 19:25	06:52 18:35	06:26 16:50	07:00 16:27		
4	05:28 20:29	05:53 20:08	06:23 19:24	07:04 (06) 07:39 (05)	06:53 18:33	06:27 16:48	07:01 16:27	
5	05:28 20:29	05:54 20:07	06:24 19:22	07:01 (06) 07:42 (05)	06:54 18:32	06:28 16:47	07:02 16:27	
6	05:29 20:29	05:55 20:05	06:25 19:20	06:59 (06) 07:43 (05)	06:55 18:30	06:30 16:46	07:03 16:27	
7	05:30 20:29	05:56 20:04	06:26 19:19	06:57 (06) 07:45 (05)	06:56 18:28	06:31 16:45	07:04 16:27	
8	05:30 20:28	05:57 20:03	06:27 19:17	06:56 (06) 07:46 (05)	06:57 18:27	06:32 16:44	07:05 16:27	
9	05:31 20:28	05:58 20:02	06:28 19:15	06:55 (06) 07:47 (05)	06:58 18:25	06:33 16:43	07:06 16:27	
10	05:32 20:28	05:59 20:01	06:29 (07) 19:14	06:29 19:14	06:59 18:24	06:34 16:42	07:07 16:27	
11	05:32 20:27	06:00 19:59	06:28 (07) 19:12	06:30 19:12	06:53 (06) 07:47 (05)	07:00 18:22	06:36 16:41	07:08 16:27
12	05:33 20:27	06:01 19:58	06:27 (07) 19:10	06:31 19:10	06:53 (06) 07:48 (05)	07:01 18:20	06:37 16:40	07:09 16:27
13	05:34 20:26	06:02 19:57	06:26 (07) 19:09	06:32 19:09	06:52 (06) 07:48 (05)	07:02 18:19	06:38 16:39	07:09 16:27
14	05:34 20:26	06:03 19:55	06:25 (07) 19:07	06:33 19:07	06:53 (06) 07:48 (05)	07:04 18:17	06:39 16:38	07:10 16:27
15	05:35 20:25	06:04 19:54	06:25 (07) 19:05	06:34 19:05	06:54 (06) 07:48 (05)	07:05 18:16	06:40 16:37	07:11 16:28
16	05:36 20:25	06:05 19:53	06:26 (07) 19:04	06:35 19:04	06:55 (06) 07:48 (05)	07:06 18:14	06:41 16:36	07:12 16:28
17	05:37 20:24	06:06 19:51	06:27 (07) 19:02	06:36 19:02	06:56 (06) 07:47 (05)	07:07 18:13	06:43 16:36	07:12 16:28
18	05:38 20:23	06:07 19:50	06:28 (07) 19:00	06:37 19:00	06:57 (06) 07:47 (05)	07:08 18:11	06:44 16:35	07:13 16:28
19	05:38 20:23	06:08 19:48	06:29 (07) 18:58	06:38 18:58	06:58 (06) 07:46 (05)	07:09 18:10	06:45 16:34	07:14 16:29
20	05:39 20:22	06:09 19:47	06:30 (07) 18:57	06:39 18:57	07:00 (06) 07:46 (05)	07:10 18:08	06:46 16:33	07:14 16:29
21	05:40 20:21	06:10 19:45	06:31 (07) 18:55	06:40 18:55	07:07 (05) 07:45 (05)	07:11 18:07	06:47 16:33	07:15 16:30
22	05:41 20:20	06:11 19:44	06:32 (07) 18:53	06:41 18:53	07:08 (05) 07:44 (05)	07:12 18:05	06:48 16:32	07:15 16:30
23	05:42 20:20	06:12 19:42	06:33 (07) 18:52	06:42 18:52	07:08 (05) 07:43 (05)	07:13 18:04	06:50 16:31	07:16 16:31
24	05:43 20:19	06:13 19:41	06:34 (07) 18:50	06:43 18:50	07:09 (05) 07:41 (05)	07:15 18:03	06:51 16:31	07:16 16:31
25	05:44 20:18	06:14 19:39	06:34 (07) 18:48	06:44 18:48	07:10 (05) 07:40 (05)	06:16 17:01	06:52 16:30	07:17 16:32
26	05:44 20:17	06:15 19:38	06:45 18:47	06:45 18:47	07:11 (05) 07:38 (05)	06:17 17:00	06:53 16:30	07:17 16:32
27	05:45 20:16	06:16 19:36	06:46 18:45	06:46 18:45	07:12 (05) 07:36 (05)	06:18 16:58	06:54 16:29	07:17 16:33
28	05:46 20:15	06:16 19:35	06:47 18:43	06:47 18:43	07:15 (05) 07:33 (05)	06:19 16:57	06:55 16:29	07:18 16:34
29	05:47 20:14	06:17 19:33	06:48 18:42	06:48 18:42	07:18 (05) 07:28 (05)	06:20 16:56	06:56 16:29	07:18 16:34
30	05:48 20:13	06:18 19:32	06:49 18:40	06:49 18:40	06:21 16:55	06:57 16:28	07:18 16:35	07:18 16:35
31	05:49 20:12	06:19 19:30			06:23 16:53		07:18 16:36	07:18 16:36
Ore potenziali eliofania	458	427	375	346	299	289		
Totale, caso peggiore		244	1076					

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R11 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (12)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 16:37	07:06 17:11	06:30 17:45	06:49 (10) 07:07 (10)	06:40 19:18	05:54 19:50
2	07:19 16:38	07:05 17:12	06:29 17:46	06:47 (10) 07:06 (10)	06:38 19:19	05:53 19:51
3	07:19 16:39	07:04 17:13	06:27 17:47	06:48 (10) 07:06 (10)	06:36 19:20	05:52 19:52
4	07:19 16:40	07:03 17:15	06:25 17:48	06:48 (10) 07:05 (10)	06:35 19:21	05:51 19:53
5	07:19 16:41	07:02 17:16	06:24 17:49	06:49 (10) 07:04 (10)	06:33 19:22	05:49 19:54
6	07:19 16:42	07:01 17:17	06:22 17:50	06:51 (10) 07:02 (10)	06:32 19:24	05:48 19:55
7	07:19 16:43	06:59 17:18	06:21 17:51	06:54 (10) 06:57 (10)	06:30 19:25	05:47 19:56
8	07:19 16:44	06:58 17:20	06:19 17:53	06:18 19:26	06:28 19:57	05:46 19:58
9	07:19 16:45	06:57 17:21	06:18 17:54	06:18 19:27	06:27 19:58	05:45 19:59
10	07:18 16:46	06:56 17:22	06:16 17:55	06:25 19:28	05:44 19:59	05:44 20:00
11	07:18 16:47	06:55 17:23	06:14 17:56	06:24 19:29	05:42 20:00	05:42 20:01
12	07:18 16:48	06:54 17:24	06:13 17:57	06:22 19:30	05:41 20:01	05:41 20:02
13	07:18 16:49	06:52 17:25	06:11 17:58	06:20 19:31	05:40 20:02	05:40 20:03
14	07:17 16:50	06:51 17:26	06:09 17:59	06:19 19:32	05:39 20:03	05:39 20:04
15	07:17 16:51	06:50 17:27	06:08 18:00	06:17 19:33	05:38 20:04	05:38 20:05
16	07:17 16:52	06:49 17:28	06:06 18:01	06:16 19:34	05:37 20:05	05:37 20:06
17	07:16 16:53	06:47 17:29	06:05 18:02	06:14 19:35	05:36 20:06	05:36 20:07
18	07:16 16:54	06:46 17:30	06:03 18:03	06:13 19:36	05:35 20:07	05:35 20:08
19	07:15 16:55	06:45 17:31	06:01 18:04	06:11 19:37	05:35 20:08	05:35 20:09
20	07:15 16:56	06:43 17:32	06:00 18:05	06:10 19:38	05:34 20:09	05:34 20:10
21	07:14 16:57	06:42 17:33	05:58 18:06	06:08 19:39	05:33 20:10	05:33 20:11
22	07:13 16:58	06:40 17:34	05:56 18:07	06:07 19:40	05:32 20:11	05:32 20:12
23	07:13 17:00	06:39 17:35	06:58 (10) 07:03 (10)	05:55 18:08	06:05 19:41	05:31 20:11
24	07:12 17:01	06:37 17:36	06:57 (10) 07:06 (10)	05:53 18:09	06:04 19:42	05:31 20:12
25	07:11 17:02	06:36 17:37	06:55 (10) 07:06 (10)	05:51 18:10	06:02 19:43	05:30 20:13
26	07:11 17:04	06:35 17:38	06:54 (10) 07:07 (10)	05:50 18:11	06:01 19:44	05:29 20:14
27	07:10 17:05	06:33 17:39	06:52 (10) 07:07 (10)	05:48 18:12	06:00 19:45	05:29 20:15
28	07:09 17:06	06:32 17:40	06:50 (10) 07:07 (10)	05:46 18:13	05:58 19:46	05:28 20:16
29	07:08 17:07	06:31 17:41	06:49 (10) 07:07 (10)	05:45 18:14	05:57 19:47	05:27 20:17
30	07:07 17:09	06:30 17:42	06:48 (10) 07:07 (10)	05:44 18:15	05:56 19:48	05:27 20:18
31	07:07 17:10	06:29 17:43	06:47 (10) 07:07 (10)	05:43 18:16	05:55 19:49	05:26 20:19
Ore potenziali eliofanìa	298	298	369	398	448	451
Totale, caso peggiore		70	101	122	143	143

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R11 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (12)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:
Il sole splende tutto il di, dall'alba al tramonto
Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
La turbina è costantemente operativa

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre			
1	05:26	05:55 (06)	05:50	06:20	06:50	06:24	06:58		
	20:30	06:28 (06)	20:11	19:28	18:38	16:52	16:28		
2	05:27	05:55 (06)	05:51	06:21	06:51	06:25	06:59		
	20:30	06:27 (06)	20:10	19:27	18:37	16:51	16:28		
3	05:27	05:55 (06)	05:52	06:22	06:52	06:26	07:00		
	20:30	06:28 (06)	20:09	19:25	18:35	16:50	16:27		
4	05:28	05:55 (06)	05:53	06:23	06:53	06:27	07:01		
	20:29	06:27 (06)	20:08	19:24	18:33	16:48	16:27		
5	05:28	05:56 (06)	05:54	06:24	06:54	06:28	07:02		
	20:29	06:28 (06)	20:07	19:22	18:32	16:47	16:27		
6	05:29	05:57 (06)	05:55	06:25	06:55	06:30	07:03		
	20:29	06:28 (06)	20:05	19:20	18:30	16:46	16:27		
7	05:30	05:56 (06)	05:56	06:26	06:56	07:28 (10)	06:31	07:04	
	20:29	06:28 (06)	20:04	19:19	18:28	8	07:36 (10)	16:45	16:27
8	05:30	05:57 (06)	05:57	06:27	06:57	07:25 (10)	06:32	07:05	
	20:28	06:28 (06)	20:03	19:17	18:27	13	07:38 (10)	16:44	16:27
9	05:31	05:57 (06)	05:58	06:28	06:58	07:23 (10)	06:33	07:06	
	20:28	06:27 (06)	20:02	19:15	18:25	16	07:39 (10)	16:43	16:27
10	05:32	05:58 (06)	05:59	06:29	06:59	07:22 (10)	06:34	07:07	
	20:28	06:27 (06)	20:01	19:14	18:24	18	07:40 (10)	16:42	16:27
11	05:32	05:59 (06)	06:00	06:30	07:00	07:21 (10)	06:36	07:08	
	20:27	06:28 (06)	19:59	19:12	18:22	19	07:40 (10)	16:41	16:27
12	05:33	05:58 (06)	06:01	06:31	07:01	07:22 (10)	06:37	07:09	
	20:27	06:27 (06)	19:58	19:10	18:20	19	07:41 (10)	16:40	16:27
13	05:34	05:59 (06)	06:02	06:32	07:02	07:23 (10)	06:38	07:09	
	20:26	06:27 (06)	19:57	19:09	18:19	18	07:41 (10)	16:39	16:27
14	05:34	06:00 (06)	06:03	06:33	07:04	07:24 (10)	06:39	07:10	
	20:26	06:27 (06)	19:55	19:07	18:17	16	07:40 (10)	16:38	16:27
15	05:35	06:01 (06)	06:04	06:34	07:05	07:25 (10)	06:40	07:11	
	20:25	06:26 (06)	19:54	19:05	18:16	15	07:40 (10)	16:37	16:28
16	05:36	06:01 (06)	06:05	06:35	07:06	07:26 (10)	06:41	07:12	
	20:25	06:25 (06)	19:53	19:04	18:14	13	07:39 (10)	16:36	16:28
17	05:37	06:02 (06)	06:06	06:36	07:07	07:27 (10)	06:43	07:12	
	20:24	06:25 (06)	19:51	19:02	18:13	10	07:37 (10)	16:36	16:28
18	05:38	06:03 (06)	06:07	06:37	07:08	07:28 (10)	06:44	07:13	
	20:23	06:24 (06)	19:50	19:00	18:11	8	07:36 (10)	16:35	16:28
19	05:38	06:05 (06)	06:08	06:38	07:09	07:30 (10)	06:45	07:14	
	20:23	06:23 (06)	19:48	18:58	18:10	4	07:34 (10)	16:34	16:29
20	05:39	06:06 (06)	06:09	06:39	07:10	06:46	07:14		
	20:22	06:22 (06)	19:47	18:57	18:08	16:33	16:29		
21	05:40	06:07 (06)	06:10	06:40	07:11	06:47	07:15		
	20:21	06:20 (06)	19:45	18:55	18:07	16:33	16:30		
22	05:41	06:10 (06)	06:11	06:41	07:12	06:48	07:15		
	20:20	06:18 (06)	19:44	18:53	18:05	16:32	16:30		
23	05:42	06:12	06:42	07:13	06:50	07:16			
	20:20	19:42	18:52	18:04	16:31	16:31			
24	05:43	06:13	06:43	07:15	06:51	07:16			
	20:19	19:41	18:50	18:03	16:31	16:31			
25	05:44	06:14	06:44	06:16	06:52	07:17			
	20:18	19:39	18:48	17:01	16:30	16:32			
26	05:44	06:15	06:45	06:17	06:53	07:17			
	20:17	19:38	18:47	17:00	16:30	16:32			
27	05:45	06:15	06:46	06:18	06:54	07:17			
	20:16	19:36	18:45	16:58	16:29	16:33			
28	05:46	06:16	06:47	06:19	06:55	07:18			
	20:15	19:35	18:43	16:57	16:29	16:34			
29	05:47	06:17	06:48	06:20	06:56	07:18			
	20:14	19:33	18:42	16:56	16:29	16:34			
30	05:48	06:18	06:49	06:21	06:57	07:18			
	20:13	19:32	18:40	16:54	16:28	16:35			
31	05:49	06:19	06:23	06:23	07:18				
	20:12	19:30	16:53	16:36					
Ore potenziali eliofania	458	427	375	346	299	289			
Totale, caso peggiore	576			177					

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R12 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (13)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:
Il sole splende tutto il di, dall'alba al tramonto
Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 16:37	07:06 17:11	06:30 17:45	06:49 (10) 19:18	06:40 19:50	05:26 20:19
2	07:19 16:38	07:05 17:12	06:29 17:46	06:47 (10) 19:19	06:38 19:51	05:52 (06) 20:20
3	07:19 16:39	07:04 17:13	06:27 17:47	06:46 (10) 19:20	06:36 19:52	05:50 (06) 20:20
4	07:19 16:40	07:03 17:15	06:25 17:48	06:46 (10) 19:21	06:35 19:53	05:50 (06) 20:21
5	07:19 16:41	07:02 17:16	06:24 17:49	06:47 (10) 19:22	06:33 2 06:52 (11) 19:54	05:49 20:22
6	07:19 16:41	07:01 17:17	06:22 17:50	06:48 (10) 19:24	06:32 5 06:55 (11) 19:55	05:48 20:22
7	07:19 16:42	06:59 17:18	06:21 17:51	06:49 (10) 19:25	06:30 8 06:56 (11) 19:56	05:47 20:23
8	07:19 16:43	06:58 17:20	06:19 17:53	06:53 (10) 4 06:57 (10) 19:26	06:28 10 06:57 (11) 19:57	05:46 20:24
9	07:19 16:44	06:57 17:21	06:18 17:54	06:18 19:27	06:27 12 06:57 (11) 19:58	05:45 20:24
10	07:18 16:45	06:56 17:22	06:16 17:55	06:16 19:28	06:25 14 06:58 (11) 19:59	05:44 20:25
11	07:18 16:46	06:55 17:23	06:14 17:56	06:14 19:29	06:24 15 06:57 (11) 20:00	05:42 20:25
12	07:18 16:47	06:54 17:25	06:13 17:57	06:13 19:30	06:22 16 06:56 (11) 20:01	05:41 20:26
13	07:18 16:49	06:52 17:26	06:11 17:58	06:11 19:31	06:20 17 06:56 (11) 20:02	05:40 20:26
14	07:17 16:50	06:51 17:27	06:09 17:59	06:09 19:32	06:19 18 06:55 (11) 20:03	05:39 20:27
15	07:17 16:51	06:50 17:28	06:08 18:00	06:17 19:33	06:38 (11) 16 06:54 (11) 20:04	05:38 20:27
16	07:17 16:52	06:49 17:29	06:06 18:01	06:16 19:34	06:39 (11) 13 06:52 (11) 20:05	05:37 20:28
17	07:16 16:53	06:47 17:31	06:05 18:02	06:14 19:35	06:42 (11) 8 06:50 (11) 20:06	05:36 20:28
18	07:16 16:54	06:46 17:32	06:03 18:03	06:13 19:36	06:13 20:07	05:35 20:28
19	07:15 16:55	06:45 17:33	06:01 18:05	06:11 19:37	06:11 20:08	05:35 20:29
20	07:15 16:56	06:43 17:34	06:00 18:06	06:10 19:38	06:10 20:09	05:34 20:29
21	07:14 16:58	06:42 17:35	05:58 18:07	06:08 19:39	06:08 20:10	05:33 20:29
22	07:13 16:59	06:40 17:37	05:56 18:08	06:07 19:40	06:07 20:11	05:32 20:29
23	07:13 17:00	06:39 17:38	06:58 (10) 05:55 18:09	06:05 19:41	06:05 20:11	05:31 20:29
24	07:12 17:01	06:37 17:39	06:56 (10) 05:53 18:10	06:04 19:42	06:04 20:12	05:24 20:30
25	07:11 17:02	06:36 17:40	06:55 (10) 05:51 18:11	06:02 19:43	06:02 20:13	05:24 20:30
26	07:11 17:04	06:35 17:41	06:54 (10) 05:50 18:12	06:01 19:44	06:01 20:14	05:29 20:30
27	07:10 17:05	06:33 17:42	06:52 (10) 05:48 18:13	06:00 19:46	06:00 20:15	05:29 20:30
28	07:09 17:06	06:32 17:44	06:50 (10) 05:46 18:14	05:58 19:47	05:58 20:16	05:28 20:30
29	07:08 17:07		06:45 19:15	05:57 19:48	05:27 20:17	05:25 20:30
30	07:07 17:09		06:43 19:16	05:56 19:49	05:27 20:17	8 05:56 (06) 20:30
31	07:07 17:10		06:41 19:17		05:26 20:18	12 05:54 (06) 20:30
Ore potenziali eliofanìa	298	298	369	398	448	451
Totale, caso peggiore		62	125	154	20	779

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R12 - Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (13)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:
Il sole splende tutto il di, dall'alba al tramonto
Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
La turbina è costantemente operativa

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre			
1	05:26	05:53 (06)	05:50	06:20	06:41 (11)	06:50	06:24	06:58	
	20:30	06:20 (06)	20:11	19:28	06:56 (11)	18:38	16:52	16:28	
2	05:27	05:53 (06)	05:51	06:21	06:42 (11)	06:51	06:25	06:59	
	20:30	06:19 (06)	20:10	19:27	06:56 (11)	18:37	16:51	16:28	
3	05:27	05:54 (06)	05:52	06:22	06:43 (11)	06:52	06:26	07:00	
	20:30	06:19 (06)	20:09	19:25	06:55 (11)	18:35	16:50	16:27	
4	05:28	05:54 (06)	05:53	06:23	06:44 (11)	06:53	06:27	07:01	
	20:29	06:19 (06)	20:08	19:24	06:54 (11)	18:33	16:48	16:27	
5	05:28	05:55 (06)	05:54	06:24	06:45 (11)	06:54	06:28	07:02	
	20:29	06:19 (06)	20:07	19:22	06:53 (11)	18:32	16:47	16:27	
6	05:29	05:56 (06)	05:55	06:25	06:46 (11)	06:55	07:27 (10)	06:30	07:03
	20:29	06:19 (06)	20:05	19:20	06:52 (11)	18:30	9 07:36 (10)	16:46	16:27
7	05:30	05:56 (06)	05:56	06:26	06:47 (11)	06:56	07:24 (10)	06:31	07:04
	20:29	06:18 (06)	20:04	19:19	06:49 (11)	18:28	14 07:38 (10)	16:45	16:27
8	05:30	05:57 (06)	05:57	06:27		06:57	07:23 (10)	06:32	07:05
	20:28	06:18 (06)	20:03	19:17		18:27	16 07:39 (10)	16:44	16:27
9	05:31	05:57 (06)	05:58	06:28		06:58	07:21 (10)	06:33	07:06
	20:28	06:17 (06)	20:02	19:15		18:25	19 07:40 (10)	16:43	16:27
10	05:32	05:59 (06)	05:59	06:29		06:59	07:20 (10)	06:34	07:07
	20:28	06:17 (06)	20:01	19:14		18:24	20 07:40 (10)	16:42	16:27
11	05:32	06:00 (06)	06:00	06:30		07:00	07:20 (10)	06:36	07:08
	20:27	06:16 (06)	19:59	19:12		18:22	20 07:40 (10)	16:41	16:27
12	05:33	06:01 (06)	06:01	06:31		07:01	07:22 (10)	06:37	07:09
	20:27	06:14 (06)	19:58	19:10		18:20	19 07:41 (10)	16:40	16:27
13	05:34	06:03 (06)	06:02	06:32		07:02	07:23 (10)	06:38	07:09
	20:26	06:13 (06)	19:57	19:09		18:19	17 07:40 (10)	16:39	16:27
14	05:34	06:06 (06)	06:03	06:33		07:04	07:24 (10)	06:39	07:10
	20:26	06:10 (06)	19:55	19:07		18:17	16 07:40 (10)	16:38	16:27
15	05:35		06:04	06:34		07:05	07:25 (10)	06:40	07:11
	20:25		19:54	19:05		18:16	14 07:39 (10)	16:37	16:28
16	05:36		06:05	06:35		07:06	07:26 (10)	06:41	07:12
	20:25		19:52	19:04		18:14	11 07:37 (10)	16:36	16:28
17	05:37		06:06	06:36		07:07	07:27 (10)	06:43	07:12
	20:24		19:51	19:02		18:13	9 07:36 (10)	16:36	16:28
18	05:38		06:07	06:37		07:08	07:28 (10)	06:44	07:13
	20:23		19:50	19:00		18:11	6 07:34 (10)	16:35	16:28
19	05:38		06:08	06:38		07:09		06:45	07:14
	20:23		19:48	18:58		18:10		16:34	16:29
20	05:39		06:09	06:39		07:10		06:46	07:14
	20:22		19:47	18:57		18:08		16:33	16:29
21	05:40		06:10	06:40		07:11		06:47	07:15
	20:21		19:45	18:55		18:07		16:33	16:30
22	05:41		06:11	06:41		07:12		06:48	07:15
	20:20		19:44	18:53		18:05		16:32	16:30
23	05:42		06:12	06:42		07:13		06:50	07:16
	20:20		19:42	18:52		18:04		16:31	16:31
24	05:43		06:13	06:43		07:15		06:51	07:16
	20:19		19:41	18:50		18:03		16:31	16:31
25	05:44		06:14	06:44		06:16		06:52	07:17
	20:18		19:39	18:48		17:01		16:30	16:32
26	05:44		06:15	06:43 (11)	06:45	06:17		06:53	07:17
	20:17		19:38	9 06:52 (11)	18:47	17:00		16:30	16:32
27	05:45		06:15	06:41 (11)	06:46	06:18		06:54	07:17
	20:16		19:36	13 06:54 (11)	18:45	16:58		16:29	16:33
28	05:46		06:16	06:39 (11)	06:47	06:19		06:55	07:18
	20:15		19:35	16 06:55 (11)	18:43	16:57		16:29	16:34
29	05:47		06:17	06:38 (11)	06:48	06:20		06:56	07:18
	20:14		19:33	18 06:56 (11)	18:42	16:56		16:29	16:34
30	05:48		06:18	06:39 (11)	06:49	06:21		06:57	07:18
	20:13		19:32	17 06:56 (11)	18:40	16:54		16:28	16:35
31	05:49		06:19	06:40 (11)		06:23			07:18
	20:12		19:30	16 06:56 (11)		16:53			16:36
Ore potenziali eliofanìa	458		427	375		346		299	289
Totale, caso peggiore	274		89	67		190			

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R13 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (14)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 16:37	07:06 17:11	06:30 17:45	06:40 19:18	05:54 19:50	05:26 20:19
2	07:19 16:38	07:05 17:12	06:29 17:46	06:47 (10) 19:19	05:53 19:51	05:25 20:20
3	07:19 16:39	07:04 17:13	06:27 17:47	06:46 (10) 19:20	05:52 19:52	05:25 20:20
4	07:19 16:40	07:03 17:15	06:25 17:48	06:44 (10) 19:21	05:51 19:53	05:25 20:21
5	07:19 16:41	07:02 17:16	06:24 17:49	06:43 (10) 19:22	05:49 19:54	05:24 20:22
6	07:19 16:41	07:01 17:17	06:22 17:50	06:41 (10) 19:24	05:48 19:55	05:24 20:22
7	07:19 16:42	06:59 17:18	06:21 17:51	06:39 (10) 19:25	05:47 19:56	05:24 20:23
8	07:19 16:43	06:58 17:20	06:19 17:53	06:38 (10) 19:26	05:46 19:57	05:23 20:24
9	07:19 16:44	06:57 17:21	06:18 17:54	06:37 (10) 19:27	05:45 19:58	05:23 20:24
10	07:18 16:45	06:56 17:22	06:16 17:55	06:37 (10) 19:28	05:44 19:59	05:23 20:25
11	07:18 16:46	06:55 17:23	06:14 17:56	06:37 (10) 19:29	05:42 20:00	05:23 20:25
12	07:18 16:47	06:54 17:25	06:13 17:57	06:37 (10) 19:30	05:41 20:01	05:23 20:26
13	07:18 16:49	06:52 17:26	06:11 17:58	06:38 (10) 19:31	05:40 20:02	05:23 20:26
14	07:17 16:50	06:51 17:27	06:09 17:59	06:39 (10) 19:32	05:39 20:03	05:23 20:27
15	07:17 16:51	06:50 17:28	06:08 18:00	06:40 (10) 19:33	06:36 (11) 06:39 (11)	05:23 20:04
16	07:17 16:52	06:49 17:29	06:06 18:01	06:44 (10) 19:34	06:34 (11) 06:41 (11)	05:23 20:05
17	07:16 16:53	06:47 17:31	06:05 18:02	06:14 19:35	06:33 (11) 06:42 (11)	05:23 20:06
18	07:16 16:54	06:46 17:32	06:03 18:03	06:13 19:36	06:31 (11) 06:43 (11)	05:23 20:07
19	07:15 16:55	06:45 17:33	06:01 18:05	06:11 19:37	06:30 (11) 06:44 (11)	05:23 20:08
20	07:15 16:56	06:43 17:34	06:00 18:06	06:10 19:38	06:28 (11) 06:43 (11)	05:23 20:09
21	07:14 16:58	06:42 17:35	05:58 18:07	06:08 19:39	06:27 (11) 06:44 (11)	05:23 20:10
22	07:13 16:59	06:40 17:37	05:56 18:08	06:07 19:40	06:26 (11) 06:44 (11)	05:23 20:11
23	07:13 17:00	06:39 17:38	05:55 18:09	06:05 19:41	06:24 (11) 06:43 (11)	05:23 20:11
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 19:42	06:23 (11) 06:43 (11)	05:24 20:12
25	07:11 17:02	06:36 17:40	05:51 18:11	06:02 19:43	06:22 (11) 06:42 (11)	05:24 20:13
26	07:11 17:04	06:35 17:41	05:50 18:12	06:01 19:44	06:23 (11) 06:41 (11)	05:24 20:14
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 19:46	06:24 (11) 06:40 (11)	05:25 20:15
28	07:09 17:06	06:32 17:44	05:46 18:14	05:58 19:47	06:24 (11) 06:38 (11)	05:25 20:16
29	07:08 17:07		06:45 19:15	05:57 19:48	06:26 (11) 06:36 (11)	05:25 20:17
30	07:07 17:08		06:43 19:16	05:56 19:49		05:26 20:17
31	07:07 17:10		06:41 19:17			05:26 20:18
Ore potenziali eliofanìa	298	298	369	398	448	451
Totale, caso peggiore			240	212		

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R13 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (14)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre		
1	05:26 20:30	05:50 20:11	06:20 19:28	06:50 18:38	07:17 (10) 07:36 (10)	06:24 16:52	06:58 16:28	
2	05:27 20:30	05:51 20:10	06:21 19:27	06:51 18:37	19 21	07:16 (10) 07:37 (10)	06:25 16:51	06:59 16:28
3	05:27 20:29	05:52 20:09	06:22 19:25	06:52 18:35	21	07:15 (10) 07:37 (10)	06:26 16:50	07:00 16:27
4	05:28 20:29	05:53 20:08	06:23 19:24	06:53 18:33	23	07:14 (10) 07:37 (10)	06:27 16:48	07:01 16:27
5	05:28 20:29	05:54 20:07	06:24 19:22	06:54 18:32	22	07:14 (10) 07:36 (10)	06:28 16:47	07:02 16:27
6	05:29 20:29	05:55 20:05	06:25 19:20	06:55 18:30	21	07:15 (10) 07:36 (10)	06:30 16:46	07:03 16:27
7	05:30 20:29	05:56 20:04	06:26 19:19	06:56 18:28	19	07:16 (10) 07:35 (10)	06:31 16:45	07:04 16:27
8	05:30 20:28	05:57 20:03	06:27 19:17	06:57 18:27	17	07:17 (10) 07:34 (10)	06:32 16:44	07:05 16:27
9	05:31 20:28	05:58 20:02	06:28 19:15	06:58 18:25	14	07:18 (10) 07:32 (10)	06:33 16:43	07:06 16:27
10	05:32 20:28	05:59 20:00	06:29 19:14	06:59 18:24	11	07:19 (10) 07:30 (10)	06:34 16:42	07:07 16:27
11	05:32 20:27	06:00 19:59	06:30 19:12	07:00 18:22	8	07:20 (10) 07:28 (10)	06:36 16:41	07:08 16:27
12	05:33 20:27	06:01 19:58	06:31 19:10	07:01 18:20			06:37 16:40	07:09 16:27
13	05:34 20:26	06:02 19:57	06:32 (11) 19:09	07:02 18:19			06:38 16:39	07:09 16:27
14	05:34 20:26	06:03 19:55	06:34 (11) 19:07	07:04 18:17			06:39 16:38	07:10 16:27
15	05:35 20:25	06:04 19:54	06:32 (11) 19:05	07:05 18:16			06:40 16:37	07:11 16:28
16	05:36 20:24	06:05 19:52	06:31 (11) 19:04	07:06 18:14			06:41 16:36	07:12 16:28
17	05:37 20:24	06:06 19:51	06:29 (11) 19:02	07:07 18:13			06:43 16:36	07:12 16:28
18	05:38 20:23	06:07 19:50	06:29 (11) 19:00	07:08 18:11			06:44 16:35	07:13 16:28
19	05:38 20:23	06:08 19:48	06:29 (11) 18:58	07:09 18:10			06:45 16:34	07:13 16:29
20	05:39 20:22	06:09 19:47	06:30 (11) 18:57	07:10 18:08			06:46 16:33	07:14 16:29
21	05:40 20:21	06:10 19:45	06:31 (11) 18:55	07:11 18:07			06:47 16:33	07:15 16:30
22	05:41 20:20	06:11 19:44	06:32 (11) 18:53	07:12 18:05			06:48 16:32	07:15 16:30
23	05:42 20:20	06:12 19:42	06:33 (11) 18:52	07:13 18:04			06:50 16:31	07:16 16:31
24	05:43 20:19	06:13 19:41	06:34 (11) 18:50	07:15 18:03			06:51 16:31	07:16 16:31
25	05:44 20:18	06:14 19:39	06:35 (11) 18:48	07:16 17:01			06:52 16:30	07:17 16:32
26	05:44 20:17	06:15 19:38	06:35 (11) 18:47	07:17 17:00			06:53 16:30	07:17 16:32
27	05:45 20:16	06:15 19:36	06:36 (11) 18:45	07:18 16:58			06:54 16:29	07:17 16:33
28	05:46 20:15	06:16 19:35	06:37 (11) 18:43	07:19 16:57	10	07:22 (10) 07:32 (10)	06:55 16:29	07:18 16:34
29	05:47 20:14	06:17 19:33	06:48 18:42	07:20 (10) 16:56	14	07:20 (10) 07:34 (10)	06:56 16:29	07:18 16:34
30	05:48 20:13	06:18 19:32	06:49 18:40	07:18 (10) 16:54	18	07:18 (10) 07:36 (10)	06:57 16:28	07:18 16:35
31	05:49 20:12	06:19 19:30		06:23 16:53				07:18 16:36
Ore potenziali eliofanìa	458	427	375	346	197		299	289
Totale, caso peggiore		216	42					

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R14 - Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (9) Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno		
1	07:19 16:37	07:06 17:11	06:30 17:45	06:40 19:18	07:04 (06) 08:14 (05)	05:54 19:50	07:17 (05) 08:00 (05)	05:26 20:19
2	07:19 16:38	07:05 17:12	06:29 17:46	06:38 19:19	07:01 (06) 08:14 (05)	05:53 19:51	07:18 (05) 07:58 (05)	05:25 20:20
3	07:19 16:39	07:04 17:13	06:27 17:47	06:36 19:20	06:59 (06) 08:15 (05)	05:52 19:52	06:11 (07) 07:56 (05)	05:25 20:20
4	07:19 16:40	07:03 17:15	06:25 17:48	06:35 19:21	06:57 (06) 08:15 (05)	05:51 19:53	06:10 (07) 07:54 (05)	05:25 20:21
5	07:19 16:41	07:02 17:16	06:24 17:49	06:33 19:22	06:56 (06) 08:16 (05)	05:49 19:54	06:09 (07) 07:52 (05)	05:24 20:22
6	07:19 16:41	07:01 17:17	06:22 17:50	06:32 19:24	06:55 (06) 08:16 (05)	05:48 19:55	06:08 (07) 07:50 (05)	05:24 20:22
7	07:19 16:42	06:59 17:18	06:21 17:51	06:30 19:25	06:53 (06) 08:16 (05)	05:47 19:56	06:06 (07) 07:46 (05)	05:24 20:23
8	07:19 16:43	06:58 17:20	06:19 17:53	06:28 19:26	06:53 (06) 08:17 (05)	05:46 19:57	06:05 (07) 07:42 (05)	05:23 20:24
9	07:19 16:44	06:57 17:21	06:18 17:54	06:27 19:27	06:52 (06) 08:16 (05)	05:45 19:58	06:04 (07) 06:27 (07)	05:23 20:24
10	07:18 16:45	06:56 17:22	06:16 17:55	06:25 19:28	06:52 (06) 08:17 (05)	05:44 19:59	06:03 (07) 06:27 (07)	05:23 20:25
11	07:18 16:46	06:55 17:23	06:14 17:56	06:24 19:29	06:51 (06) 08:16 (05)	05:42 20:00	06:02 (07) 06:28 (07)	05:23 20:25
12	07:18 16:47	06:54 17:25	06:13 17:57	06:22 19:30	06:50 (06) 08:15 (05)	05:41 20:01	06:01 (07) 06:28 (07)	05:23 20:26
13	07:18 16:49	06:52 17:26	06:11 17:58	06:20 19:31	06:51 (06) 08:16 (05)	05:40 20:02	06:01 (07) 06:28 (07)	05:23 20:26
14	07:17 16:50	06:51 17:27	06:09 17:59	06:19 19:32	06:50 (06) 08:15 (05)	05:39 20:03	06:01 (07) 06:28 (07)	05:23 20:27
15	07:17 16:51	06:50 17:28	06:08 18:00	06:17 19:33	06:51 (06) 08:15 (05)	05:38 20:04	06:01 (07) 06:28 (07)	05:23 20:27
16	07:17 16:52	06:49 17:29	06:06 18:01	06:16 19:34	06:51 (06) 08:14 (05)	05:37 20:05	06:00 (07) 06:28 (07)	05:23 20:28
17	07:16 16:53	06:47 17:31	06:05 18:02	06:14 19:35	06:52 (06) 08:14 (05)	05:36 20:06	06:02 (07) 06:28 (07)	05:23 20:28
18	07:16 16:54	06:46 17:32	06:03 18:03	06:13 19:36	06:52 (06) 08:13 (05)	05:35 20:07	06:02 (07) 06:28 (07)	05:23 20:28
19	07:15 16:55	06:45 17:33	06:01 18:05	06:11 19:37	06:53 (06) 08:12 (05)	05:35 20:08	06:02 (07) 06:28 (07)	05:23 20:29
20	07:15 16:56	06:43 17:34	06:00 18:06	06:10 19:38	06:54 (06) 08:11 (05)	05:34 20:09	06:02 (07) 06:27 (07)	05:23 20:29
21	07:14 16:58	06:42 17:35	05:58 18:07	06:08 19:39	06:56 (06) 08:11 (05)	05:33 20:10	06:02 (07) 06:27 (07)	05:23 20:29
22	07:13 16:59	06:40 17:37	05:56 18:08	06:07 19:40	06:59 (06) 08:10 (05)	05:32 20:11	06:03 (07) 06:27 (07)	05:23 20:29
23	07:13 17:00	06:39 17:38	05:55 18:09	06:05 19:41	07:03 (06) 08:09 (05)	05:31 20:11	06:04 (07) 06:26 (07)	05:23 20:29
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 19:42	07:12 (05) 08:08 (05)	05:31 20:12	06:04 (07) 06:25 (07)	05:24 20:30
25	07:11 17:02	06:36 17:40	05:51 18:11	06:02 19:43	07:12 (05) 08:07 (05)	05:30 20:13	06:05 (07) 06:25 (07)	05:24 20:30
26	07:11 17:04	06:35 17:41	05:50 18:12	06:01 19:44	07:13 (05) 08:06 (05)	05:29 20:14	06:06 (07) 06:24 (07)	05:24 20:30
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 19:46	07:14 (05) 08:05 (05)	05:29 20:15	06:07 (07) 06:24 (07)	05:25 20:30
28	07:09 17:06	06:32 17:44	05:46 18:14	05:58 19:47	07:14 (05) 08:03 (05)	05:28 20:16	06:08 (07) 06:23 (07)	05:25 20:30
29	07:08 17:07		06:45 19:15	05:57 19:48	07:15 (05) 08:02 (05)	05:27 20:17	06:09 (07) 06:21 (07)	05:25 20:30
30	07:07 17:08		06:43 19:16	05:56 19:49	07:16 (05) 08:01 (05)	05:27 20:17	06:11 (07) 06:20 (07)	05:26 20:30
31	07:07 17:10		06:41 19:17	05:55 08:13 (05)		05:26 20:18	06:13 (07) 06:19 (07)	
Ore potenziali eliofanìa	298	298	369	398	448	481	451	
Totale, caso peggiore			299	2182	831			

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: Flicker Altamura su recettori Recettore d'ombra: R14 - Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (9) Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre			
1	05:26	05:50	06:12 (07)	06:20	06:50 (06)	06:50	06:24	06:58	
	20:30	20:11	26 06:38 (07)	19:28	85 08:15 (05)	18:38	16:52	16:28	
2	05:27	05:51	06:13 (07)	06:21	06:50 (06)	06:51	06:25	06:59	
	20:30	20:10	25 06:38 (07)	19:27	85 08:15 (05)	18:37	16:51	16:28	
3	05:27	05:52	06:14 (07)	06:22	06:50 (06)	06:52	06:26	07:00	
	20:30	20:09	24 06:38 (07)	19:25	84 08:14 (05)	18:35	16:50	16:27	
4	05:28	05:53	06:15 (07)	06:23	06:50 (06)	06:53	06:27	07:01	
	20:29	20:08	22 06:37 (07)	19:24	84 08:14 (05)	18:33	16:48	16:27	
5	05:28	05:54	06:16 (07)	06:24	06:50 (06)	06:54	06:28	07:02	
	20:29	20:07	35 07:54 (05)	19:22	83 08:13 (05)	18:32	16:47	16:27	
6	05:29	05:55	06:17 (07)	06:25	06:51 (06)	06:55	06:30	07:03	
	20:29	20:05	40 07:58 (05)	19:20	81 08:12 (05)	18:30	16:46	16:27	
7	05:30	05:56	06:18 (07)	06:26	06:51 (06)	06:56	06:31	07:04	
	20:29	20:04	44 08:01 (05)	19:19	80 08:11 (05)	18:28	16:45	16:27	
8	05:30	05:57	06:19 (07)	06:27	06:52 (06)	06:57	06:32	07:05	
	20:28	20:03	45 08:03 (05)	19:17	79 08:11 (05)	18:27	16:44	16:27	
9	05:31	05:58	06:19 (07)	06:28	06:53 (06)	06:58	06:33	07:06	
	20:28	20:02	46 08:04 (05)	19:15	77 08:10 (05)	18:25	16:43	16:27	
10	05:32	05:59	06:21 (07)	06:29	06:54 (06)	06:59	06:34	07:07	
	20:28	20:01	43 08:05 (05)	19:14	74 08:08 (05)	18:24	16:42	16:27	
11	05:32	06:00	07:26 (05)	06:30	06:56 (06)	07:00	06:36	07:08	
	20:27	19:59	41 08:07 (05)	19:12	68 08:06 (05)	18:22	16:41	16:27	
12	05:33	06:01	07:25 (05)	06:31	07:00 (06)	07:01	06:37	07:09	
	20:27	19:58	43 08:08 (05)	19:10	57 08:05 (05)	18:20	16:40	16:27	
13	05:34	06:20 (07)	06:02	07:23 (05)	06:32	07:15 (05)	07:02	06:38	07:09
	20:26	8 06:28 (07)	19:57	46 08:09 (05)	19:09	48 08:03 (05)	18:19	16:39	16:27
14	05:34	06:19 (07)	06:03	07:22 (05)	06:33	07:16 (05)	07:04	06:39	07:10
	20:26	11 06:30 (07)	19:55	48 08:10 (05)	19:07	45 08:01 (05)	18:17	16:38	16:27
15	05:35	06:18 (07)	06:04	07:21 (05)	06:34	07:17 (05)	07:05	06:40	07:11
	20:25	13 06:31 (07)	19:54	50 08:11 (05)	19:05	42 07:59 (05)	18:16	16:37	16:28
16	05:36	06:16 (07)	06:05	07:20 (05)	06:35	07:19 (05)	07:06	06:41	07:12
	20:25	16 06:32 (07)	19:53	52 08:12 (05)	19:04	38 07:57 (05)	18:14	16:36	16:28
17	05:37	06:16 (07)	06:06	07:19 (05)	06:36	07:21 (05)	07:07	06:43	07:12
	20:24	17 06:33 (07)	19:51	54 08:13 (05)	19:02	33 07:54 (05)	18:13	16:36	16:28
18	05:38	06:15 (07)	06:07	07:18 (05)	06:37	07:24 (05)	07:08	06:44	07:13
	20:23	19 06:34 (07)	19:50	55 08:13 (05)	19:00	27 07:51 (05)	18:11	16:35	16:28
19	05:38	06:15 (07)	06:08	07:17 (05)	06:38	07:28 (05)	07:09	06:45	07:14
	20:23	20 06:35 (07)	19:48	57 08:14 (05)	18:58	18 07:46 (05)	18:10	16:34	16:29
20	05:39	06:14 (07)	06:09	07:07 (06)	06:39	07:10	06:46	07:14	
	20:22	22 06:36 (07)	19:47	65 08:15 (05)	18:57	18:08	16:33	16:29	
21	05:40	06:13 (07)	06:10	07:03 (06)	06:40	07:11	06:47	07:15	
	20:21	23 06:36 (07)	19:45	72 08:15 (05)	18:55	18:07	16:33	16:30	
22	05:41	06:13 (07)	06:11	07:01 (06)	06:41	07:12	06:48	07:15	
	20:20	24 06:37 (07)	19:44	75 08:16 (05)	18:53	18:05	16:32	16:30	
23	05:42	06:12 (07)	06:12	06:59 (06)	06:42	07:13	06:50	07:16	
	20:20	25 06:37 (07)	19:42	77 08:16 (05)	18:52	18:04	16:31	16:31	
24	05:43	06:12 (07)	06:13	06:57 (06)	06:43	07:15	06:51	07:16	
	20:19	26 06:38 (07)	19:41	79 08:16 (05)	18:50	18:03	16:31	16:31	
25	05:44	06:12 (07)	06:14	06:56 (06)	06:44	06:16	06:52	07:17	
	20:18	26 06:38 (07)	19:39	80 08:16 (05)	18:48	17:01	16:30	16:32	
26	05:44	06:12 (07)	06:15	06:54 (06)	06:45	06:17	06:53	07:17	
	20:17	27 06:39 (07)	19:38	82 08:16 (05)	18:47	17:00	16:30	16:32	
27	05:45	06:12 (07)	06:15	06:53 (06)	06:46	06:18	06:54	07:17	
	20:16	27 06:39 (07)	19:36	83 08:16 (05)	18:45	16:58	16:29	16:33	
28	05:46	06:11 (07)	06:16	06:52 (06)	06:47	06:19	06:55	07:18	
	20:15	27 06:38 (07)	19:35	84 08:16 (05)	18:43	16:57	16:29	16:34	
29	05:47	06:11 (07)	06:17	06:51 (06)	06:48	06:20	06:56	07:18	
	20:14	28 06:39 (07)	19:33	85 08:16 (05)	18:42	16:56	16:29	16:34	
30	05:48	06:11 (07)	06:18	06:51 (06)	06:49	06:21	06:57	07:18	
	20:13	28 06:39 (07)	19:32	85 08:16 (05)	18:40	16:54	16:28	16:35	
31	05:49	06:11 (07)	06:19	06:50 (06)		06:23		07:18	
	20:12	28 06:39 (07)	19:30	85 08:15 (05)		16:53		16:36	
Ore potenziali eliofania	458	427	375	346	299	289			
Totale, caso peggiore	415	1748	1188						

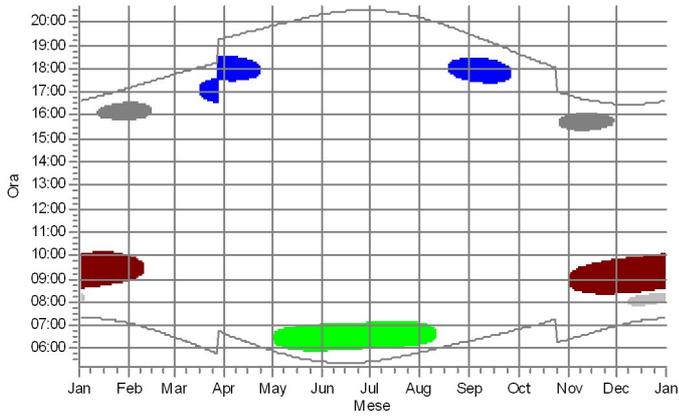
Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

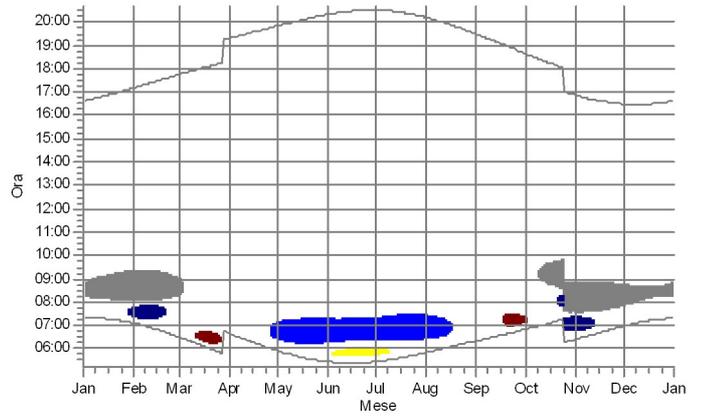
SHADOW - Calendario, grafico

Calcolo: Flicker Altamura su recettori

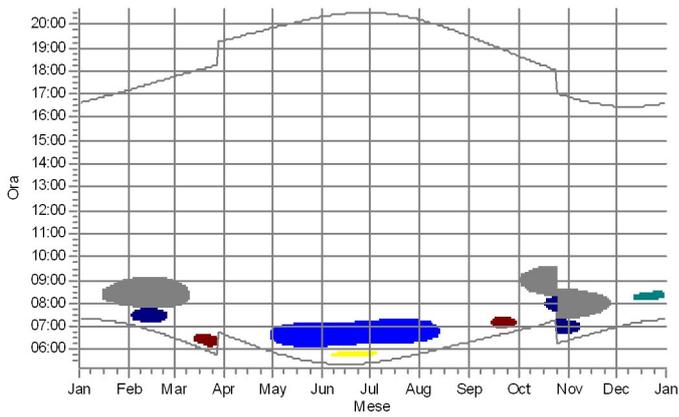
R01: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (1)



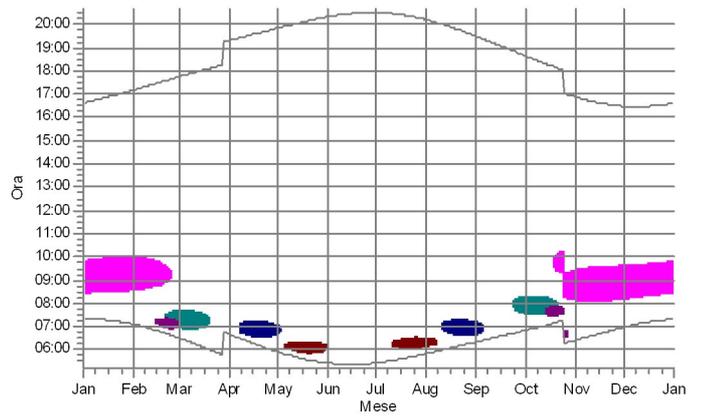
R02: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (2)



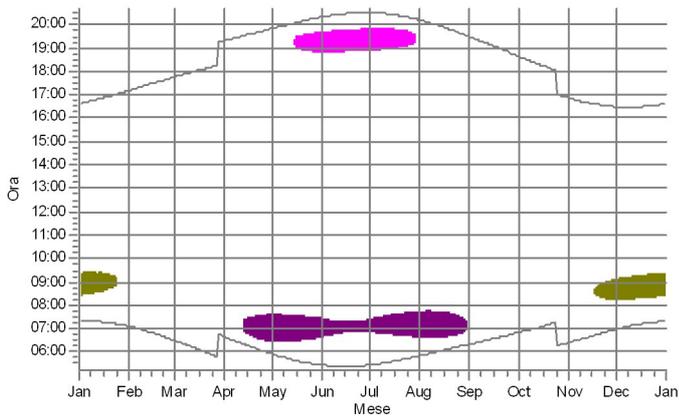
R03: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (3)



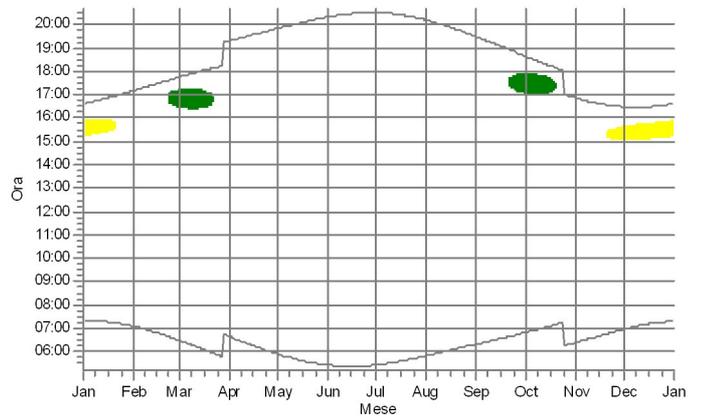
R04: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (4)



R05: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (5)



R06: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (8)



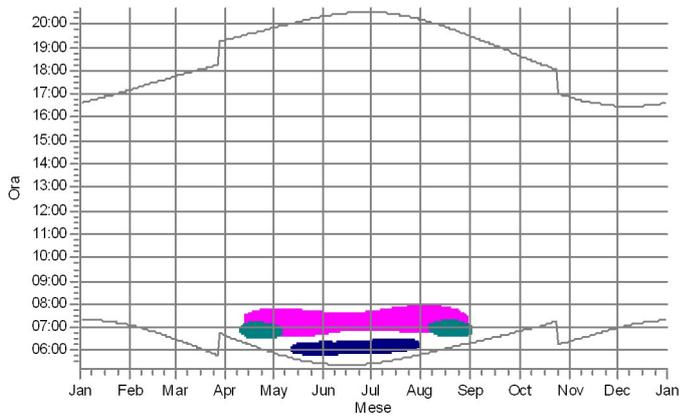
WTG

- | | | | |
|---|--|---|---|
|  | 01: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (1) |  | 07: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (7) |
|  | 02: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (2) |  | 08: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (8) |
|  | 03: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (3) |  | 09: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (9) |
|  | 04: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (4) |  | 10: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (10) |
|  | 05: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (5) |  | 11: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (11) |
|  | 06: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (6) |  | 12: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (12) |

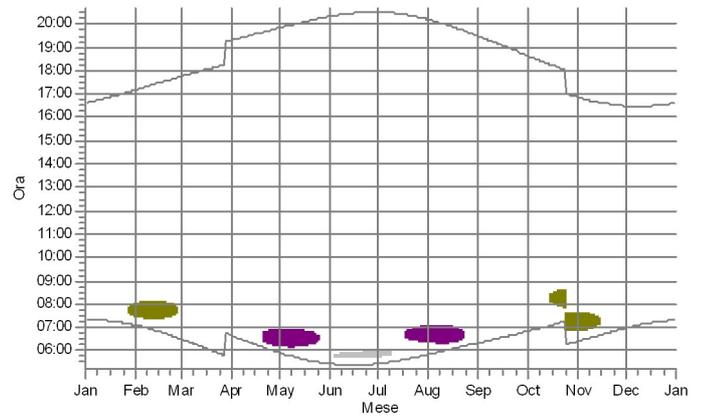
SHADOW - Calendario, grafico

Calcolo: Flicker Altamura su recettori

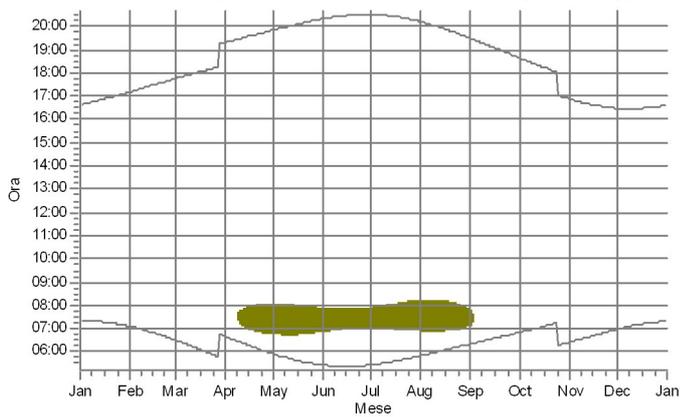
R07: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (10)



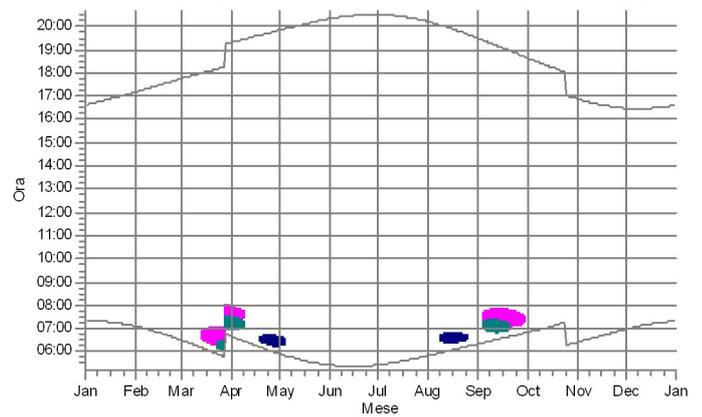
R08: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (6)



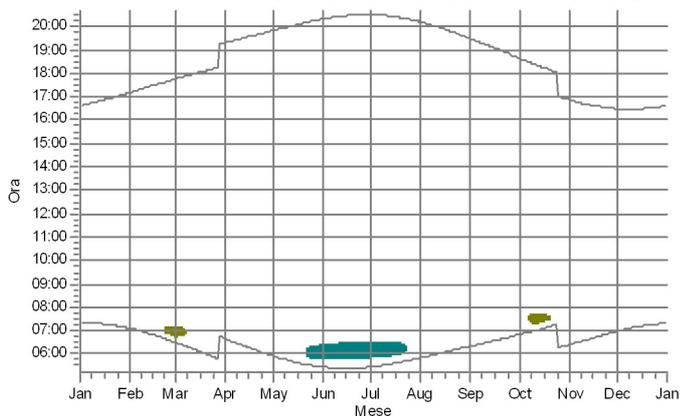
R09: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (7)



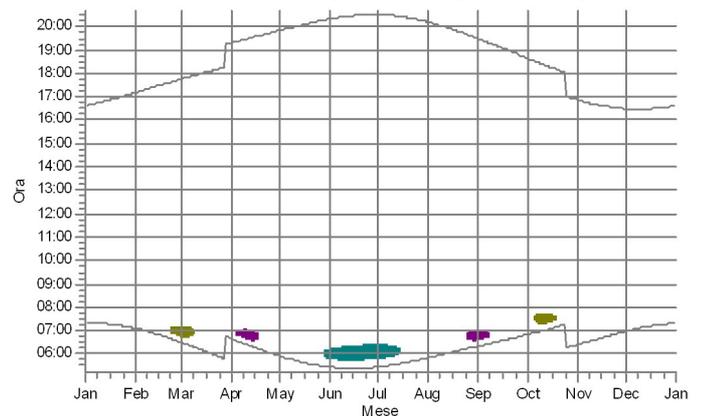
R10: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (11)



R11: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (12)



R12: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (13)



WTG

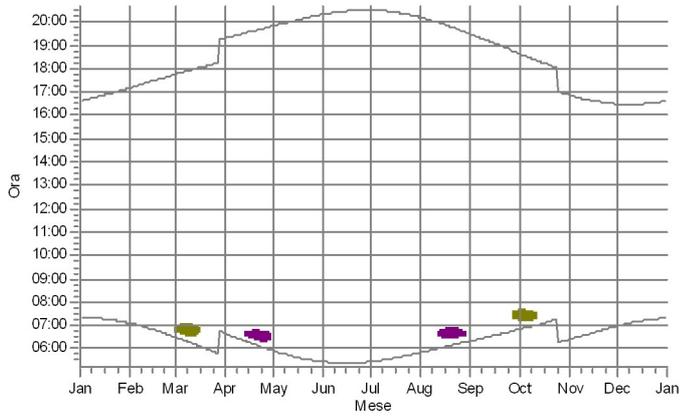
- 05: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (5)
- 06: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (6)
- 07: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (7)

- 10: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (10)
- 11: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (11)
- 12: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (12)

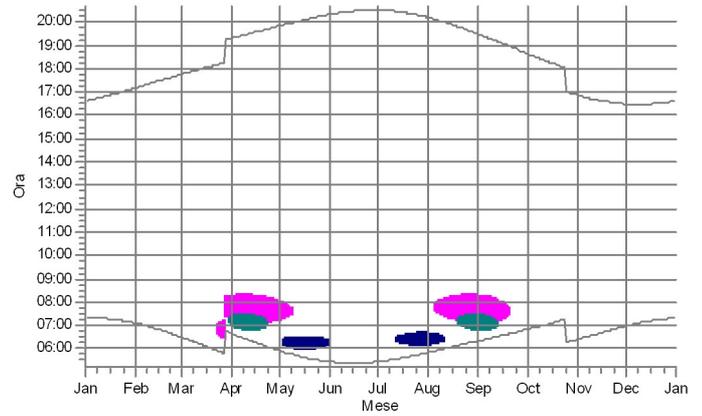
SHADOW - Calendario, grafico

Calcolo: Flicker Altamura su recettori

R13: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (14)



R14: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (9)



WTG

- 05: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (5)
- 06: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (6)
- 07: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (7)

- 10: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (10)
- 11: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (11)

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 01 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (1)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:19 16:37	07:06 17:11	06:30 16:33-17:09/36 17:45	06:40 19:18	05:54 19:50	05:26 20:19	05:26 20:30	05:50 20:11	06:20 19:28	06:50 17:07-17:48/41 18:38	06:24 16:52	06:58 16:28
2	07:19 16:38	07:05 17:12	06:28 16:31-17:09/38 17:46	06:38 19:19	05:53 19:51	05:25 20:20	05:27 20:30	05:51 20:10	06:21 19:27	06:51 17:07-17:48/41 18:36	06:25 16:51	06:59 16:28
3	07:19 16:39	07:04 17:13	06:27 16:31-17:10/39 17:47	06:36 19:20	05:52 19:52	05:25 20:20	05:27 20:30	05:52 20:09	06:22 19:25	06:52 17:06-17:48/42 18:35	06:26 16:49	07:00 16:27
4	07:19 16:39	07:03 17:15	06:25 16:30-17:10/40 17:48	06:35 19:21	05:50 19:53	05:24 20:21	05:28 20:29	05:53 20:08	06:23 19:23	06:53 17:05-17:48/43 18:33	06:27 16:48	07:01 16:27
5	07:19 16:40	07:02 17:16	06:24 16:29-17:11/42 17:49	06:33 19:22	05:49 19:54	05:24 20:22	05:28 20:29	05:54 20:07	06:24 19:22	06:54 17:05-17:48/43 18:32	06:28 16:47	07:02 16:27
6	07:19 16:41	07:01 17:17	06:22 16:29-17:11/42 17:50	06:31 19:23	05:48 19:55	05:24 20:22	05:29 20:29	05:55 20:05	06:25 19:20	06:55 17:04-17:47/43 18:30	06:30 16:46	07:03 16:27
7	07:19 16:42	06:59 17:18	06:21 16:28-17:11/43 17:51	06:30 19:25	05:47 19:56	05:23 20:23	05:29 20:29	05:56 20:04	06:26 19:19	06:56 17:04-17:47/43 18:28	06:31 16:45	07:04 16:27
8	07:19 16:43	06:58 17:20	06:19 16:28-17:11/43 17:52	06:28 19:26	05:46 19:57	05:23 20:24	05:30 20:28	05:57 20:03	06:27 19:17	06:57 17:04-17:46/42 18:27	06:32 16:44	07:05 16:27
9	07:19 16:44	06:57 17:21	06:18 16:28-17:10/42 17:54	06:27 19:27	05:44 19:58	05:23 20:24	05:31 20:28	05:58 20:02	06:28 19:15	06:58 17:04-17:45/41 18:25	06:33 16:43	07:06 16:27
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12	07:18 16:47	06:54 17:24	06:13 16:28-17:09/41 17:57	06:22 19:30	05:41 20:01	05:23 20:26	05:33 20:27	06:01 19:58	06:31 19:10	07:01 17:06-17:43/37 18:20	06:37 16:40	07:09 16:27
13	07:18 16:48	06:52 17:26	06:11 16:29-17:09/40 17:58	06:20 19:31	05:40 20:02	05:22 20:26	05:34 20:26	06:02 19:57	06:32 19:09	07:02 17:06-17:42/36 18:19	06:38 16:39	07:09 16:27
14	07:17 16:49	06:51 17:27	06:09 16:29-17:08/39 17:59	06:19 19:32	05:39 20:03	05:22 20:27	05:34 20:26	06:03 19:55	06:33 19:07	07:03 17:07-17:40/33 18:17	06:39 16:38	07:10 16:27
15	07:17 16:51	06:50 17:28	06:08 16:29-17:06/37 18:00	06:17 19:33	05:38 20:04	05:22 20:27	05:35 20:25	06:04 19:54	06:34 19:05	07:05 17:08-17:39/31 18:16	06:40 16:37	07:11 16:27
16	07:17 16:52	06:49 17:29	06:06 16:30-17:06/36 18:01	06:16 19:34	05:37 20:05	05:22 20:28	05:36 20:25	06:05 19:52	06:35 19:03	07:06 17:10-17:37/27 18:14	06:41 16:36	07:12 16:28
17	07:16 16:53	06:47 17:30	06:05 16:31-17:04/33 18:02	06:14 19:35	05:36 20:06	05:22 20:28	05:37 20:24	06:06 19:51	06:36 19:02	07:07 17:11-17:34/23 18:13	06:43 16:35	07:12 16:28
18	07:16 16:54	06:46 17:32	06:03 16:32-17:02/30 18:03	06:13 19:36	05:35 20:07	05:22 20:28	05:37 20:23	06:07 19:50	06:37 19:00	07:08 17:14-17:31/17 18:11	06:44 16:35	07:13 16:28
19	07:15 16:55	06:44 17:33	06:01 16:34-17:01/27 18:04	06:11 19:37	05:34 20:08	05:23 20:29	05:38 20:23	06:07 19:48	06:38 18:58	07:09 17:18-17:26/8 18:10	06:45 16:34	07:14 16:29
20	07:15 16:56	06:43 17:34	06:00 16:36-16:58/22 18:06	06:10 19:38	05:34 20:09	05:23 20:29	05:39 20:22	06:08 19:47	06:39 18:57	07:10 18:08	06:46 16:33	07:14 16:29
21	07:14 16:57	06:42 17:35	05:58 16:38-16:54/16 18:07	06:08 19:39	05:33 20:10	05:23 20:29	05:40 20:21	06:09 19:45	06:40 18:55	07:11 18:07	06:47 16:33	07:15 16:30
22	07:13 16:59	06:40 17:36	05:56 16:44-16:49/5 18:08	06:07 19:40	05:32 20:11	05:23 20:29	05:41 20:20	06:10 19:44	06:41 18:53	07:12 17:24-17:39/15 18:05	06:48 16:32	07:15 16:30
23	07:13 17:00	06:39 17:38	16:45-16:58/13 18:09	05:55 19:41	05:31 20:11	05:23 20:29	05:42 20:20	06:11 19:42	06:42 18:52	07:13 17:21-17:41/20 18:04	06:50 16:31	07:16 16:31
24	07:12 17:01	06:37 17:39	16:41-17:01/20 18:10	05:53 18:10	06:04 19:42	05:24 20:12	05:43 20:19	06:12 19:41	06:43 18:50	07:14 17:18-17:43/25 18:02	06:51 16:31	07:16 16:31
25	07:11 17:02	06:36 17:40	16:39-17:04/25 18:11	05:51 18:11	06:02 19:43	05:24 20:13	05:43 20:18	06:13 19:39	06:44 18:48	07:15 17:16-17:45/29 18:47	06:52 16:30	07:17 16:32
26	07:11 17:03	06:35 17:41	16:36-17:05/29 18:12	05:50 18:12	06:01 19:44	05:24 20:14	05:44 20:17	06:14 19:38	06:45 18:47	07:16 17:14-17:46/32 18:47	06:53 16:30	07:17 16:32
27	07:10 17:05	06:33 17:42	16:35-17:07/32 18:13	05:48 18:13	06:00 19:45	05:28 20:15	05:45 20:16	06:15 19:36	06:46 18:45	07:17 17:12-17:47/35 18:45	06:54 16:29	07:17 16:33
28	07:09 17:06	06:32 17:43	16:33-17:07/34 18:14	05:46 18:14	05:58 19:47	05:28 20:16	05:46 20:15	06:16 19:35	06:47 18:43	07:18 17:11-17:47/36 18:43	06:55 16:29	07:18 16:34
29	07:08 17:07	06:31 17:44	16:31-17:06/35 18:15	05:45 18:15	05:57 19:48	05:27 20:17	05:47 20:14	06:17 19:33	06:48 18:41	07:19 17:09-17:48/39 18:41	06:56 16:28	07:18 16:34
30	07:07 17:08	06:30 17:45	16:29-17:05/36 18:16	05:44 18:16	05:56 19:49	05:27 20:17	05:48 20:13	06:18 19:32	06:49 18:40	07:20 17:08-17:48/40 18:40	06:57 16:28	07:18 16:35
31	07:07 17:10	06:29 17:46	16:27-17:04/37 18:17	05:43 18:17	05:55 19:50	05:26 20:18	05:49 20:12	06:19 19:30	06:50 18:39	07:21 17:07-17:47/41 18:39	06:58 16:27	07:19 16:36
Ore potenziali eliofanía	298	298	369	398	448	451	458	427	375	346	299	289
Somma minuti d'ombra	0	153	776	0	0	0	0	0	271	670	0	0

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 02 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (2)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:19 15:18-15:50/32 16:37	07:06 17:11 17:45	06:30 19:18 19:50	06:40 19:50 20:19	05:54 20:19 20:26	05:26 20:19 20:26	05:26 20:30 20:30	05:49-05:58/9 20:11	05:50 19:28 18:38	06:20 18:38 16:52	06:50 18:38 16:52	06:24 16:52 16:28
2	07:19 15:18-15:50/32 16:38	07:05 17:12 17:46	06:28 19:19 19:51	06:38 19:51 20:20	05:53 20:20 20:27	05:25 20:20 20:27	05:27 20:30 20:30	05:49-05:57/8 20:10	05:51 19:27 18:36	06:21 18:36 16:51	06:51 18:36 16:51	06:25 16:28 16:28
3	07:19 15:19-15:51/32 16:39	07:04 17:13 17:47	06:27 19:20 19:52	06:36 19:52 20:20	05:52 20:20 20:20	05:25 20:20 20:20	05:27 20:30 20:30	05:50-05:58/8 20:09	05:52 19:25 18:35	06:22 18:35 16:49	06:52 18:35 16:49	06:26 16:27 16:27
4	07:19 15:19-15:51/32 16:39	07:03 17:15 17:48	06:25 19:21 19:53	06:35 19:53 20:21	05:50 20:21 20:22	05:24 20:21 20:22	05:46-05:47/1 20:29	05:28 20:29 20:29	05:50-05:57/7 20:08	05:53 19:23 18:33	06:23 18:33 16:48	06:27 16:48 16:27
5	07:19 15:20-15:51/31 16:40	07:02 17:16 17:49	06:24 19:22 19:54	06:33 19:54 20:22	05:49 20:22 20:22	05:24 20:22 20:22	05:46-05:48/2 20:29	05:28 20:29 20:29	05:51-05:57/6 20:07	05:54 19:22 18:32	06:24 18:32 16:47	06:28 16:47 16:27
6	07:19 15:21-15:52/31 16:41	07:01 17:17 17:50	06:22 19:23 19:55	06:31 19:55 20:22	05:48 20:22 20:22	05:24 20:22 20:22	05:45-05:49/4 20:29	05:29 20:29 20:29	05:51-05:56/5 20:05	05:55 19:20 18:30	06:25 18:30 16:46	06:30 16:46 16:27
7	07:19 15:22-15:52/30 16:42	06:59 17:18 17:51	06:21 19:25 19:57	06:30 19:57 20:23	05:47 20:23 20:23	05:23 20:23 20:23	05:45-05:50/5 20:29	05:30 20:29 20:29	05:52-05:55/3 20:04	05:56 19:19 18:28	06:26 18:28 16:45	06:31 16:45 16:27
8	07:19 15:22-15:53/31 16:43	06:58 17:20 17:52	06:19 19:26 19:58	06:28 19:58 20:24	05:46 20:24 20:24	05:23 20:24 20:24	05:45-05:51/6 20:28	05:30 20:28 20:28	05:53-05:54/1 20:03	05:57 19:17 18:27	06:27 18:27 16:44	06:32 16:44 16:27
9	07:19 15:22-15:52/30 16:44	06:57 17:21 17:54	06:18 19:27 19:59	06:27 19:59 20:25	05:45 20:25 20:25	05:23 20:25 20:25	05:45-05:52/7 20:28	05:31 20:28 20:28	05:58 20:02 19:15	06:28 18:25 16:43	06:58 16:43 16:27	06:33 16:27 16:27
10	07:18 15:23-15:52/29 16:45	06:56 17:22 17:55	06:16 19:28 19:59	06:25 19:59 20:25	05:43 20:25 20:25	05:23 20:25 20:25	05:45-05:53/8 20:28	05:31 20:28 20:28	05:59 20:00 19:14	06:29 18:23 16:42	06:59 16:42 16:27	06:34 16:27 16:27
11	07:18 15:24-15:53/29 16:46	06:55 17:23 17:56	06:14 19:29 19:59	06:23 19:59 20:20	05:42 20:20 20:20	05:23 20:20 20:20	05:45-05:54/9 20:27	05:32 20:27 20:27	06:00 19:59 19:12	06:30 18:22 16:41	07:00 16:41 16:27	06:36 16:41 16:27
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13	07:18 15:26-15:52/26 16:48	06:52 17:26 17:58	06:11 19:31 19:59	06:20 19:59 20:22	05:40 20:22 20:22	05:22 20:22 20:22	05:45-05:55/10 20:26	05:34 20:26 20:26	06:02 19:57 19:09	06:32 18:19 16:39	07:02 16:39 16:27	06:38 16:39 16:27
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17	07:16 15:30-15:50/20 16:53	06:47 17:31 18:02	06:05 19:35 19:59	06:14 19:59 20:06	05:36 20:06 20:06	05:22 20:06 20:06	05:45-05:56/11 20:24	05:37 20:24 20:24	06:06 19:51 19:02	06:36 18:13 16:36	07:07 16:36 16:28	06:43 16:28 16:28
18	07:16 15:33-15:50/17 16:54	06:46 17:32 18:03	06:03 19:36 19:59	06:13 19:59 20:07	05:35 20:07 20:07	05:23 20:07 20:07	05:45-05:56/11 20:23	05:37 20:23 20:23	06:07 19:50 19:00	06:37 18:11 16:35	07:08 16:35 16:28	06:44 16:28 16:28
19	07:15 15:34-15:48/14 16:55	06:44 17:33 18:04	06:01 19:37 19:59	06:11 19:59 20:08	05:34 20:08 20:08	05:23 20:08 20:08	05:45-05:57/12 20:23	05:38 20:23 20:23	06:08 19:48 18:58	06:38 18:10 16:34	07:09 16:34 16:29	06:45 16:29 16:29
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21	07:14 16:57	06:42 17:35 18:07	05:58 19:39 19:59	06:08 19:59 20:10	05:33 20:10 20:10	05:23 20:10 20:10	05:45-05:57/12 20:21	05:40 20:21 20:21	06:09 19:45 18:55	06:40 18:07 16:33	07:11 16:33 16:30	06:47 16:30 16:30
22	07:13 16:59	06:40 17:36 18:08	05:56 19:40 19:59	06:07 19:59 20:11	05:32 20:11 20:11	05:23 20:11 20:11	05:46-05:58/12 20:20	05:41 20:20 20:20	06:10 19:44 18:53	07:12 18:05 16:32	15:12-15:22/10 16:30	06:48 16:32 16:30
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24	07:12 17:01	06:37 17:39 18:10	05:53 19:42 19:59	06:04 19:59 20:12	05:30 20:12 20:12	05:24 20:12 20:12	05:46-05:58/12 20:19	05:43 20:19 20:19	06:12 19:41 18:50	06:43 18:02 16:31	07:15 16:31 16:31	15:10-15:27/17 16:31
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26	07:11 17:03	06:35 17:41 18:12	05:50 19:44 19:59	06:01 19:59 20:14	05:29 20:14 20:14	05:24 20:14 20:14	05:47-05:58/11 20:17	05:44 20:17 20:17	06:14 19:38 18:47	06:45 17:00 16:30	06:17 16:30 16:30	15:08-15:29/21 16:33
27	07:10 17:05	06:33 17:42 18:13	05:48 19:45 19:59	06:00 19:59 20:15	05:28 20:15 20:15	05:25 20:15 20:15	05:47-05:58/11 20:16	05:45 20:16 20:16	06:15 19:36 18:45	06:46 16:58 16:29	06:54 16:29 16:33	15:07-15:30/23 16:33
28	07:09 17:06	06:32 17:43 18:14	05:46 19:47 19:59	05:58 19:59 20:16	05:28 20:16 20:16	05:25 20:16 20:16	05:47-05:57/10 20:15	05:46 20:15 20:15	06:16 19:35 18:43	06:47 16:57 16:29	06:55 16:29 16:34	15:06-15:31/25 16:34
29	07:08 17:07	06:31 17:44 18:15	05:45 19:48 19:59	05:57 19:59 20:17	05:27 20:17 20:17	05:25 20:17 20:17	05:48-05:58/10 20:14	05:47 20:14 20:14	06:17 19:33 18:41	06:48 16:56 16:28	06:20 16:28 16:34	15:07-15:33/26 16:34
30	07:07 17:08	06:30 17:45 18:16	05:44 19:49 19:59	05:56 19:59 20:17	05:27 20:17 20:17	05:26 20:17 20:17	05:48-05:58/10 20:13	05:48 20:13 20:13	06:18 19:32 18:40	06:49 16:54 16:28	06:21 16:28 16:35	15:07-15:34/27 16:35
31	07:06 17:10	06:29 17:46 18:17	05:43 19:50 19:59	05:55 19:59 20:18	05:27 20:18 20:18	05:26 20:18 20:18	05:49-05:59/10 20:12	05:49 20:12 20:12	06:19 19:30 18:48	06:22 16:53 16:28	06:23 16:28 16:36	15:17-15:50/33 16:36
Ore potenziali eliofanía	298	298	369	398	448	451	458	427	375	346	299	289
Somma minuti d'ombra	522	0	0	0	0	250	47	0	0	0	182	994

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 03 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (3)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno		
1	07:19 16:37	07:06 17:11	06:30 17:45	06:40 19:18	17:33-18:29/56 19:18	05:54 19:50	06:30-07:04/34 20:19	05:26 06:13-07:12/59
2	07:19 16:38	07:05 17:12	06:29 17:46	06:38 19:19	17:32-18:28/56 19:19	05:53 19:51	06:27-07:05/38 20:20	05:25 06:14-07:13/59
3	07:19 16:39	07:04 17:13	06:27 17:47	06:36 19:20	17:33-18:29/56 19:20	05:52 19:52	06:26-07:06/40 20:20	05:25 06:13-07:12/59
4	07:19 16:40	07:03 17:15	06:25 17:48	06:35 19:21	17:32-18:28/56 19:21	05:50 19:53	06:24-07:07/43 20:21	05:25 06:14-07:12/58
5	07:19 16:40	07:02 17:16	06:24 17:49	06:33 19:22	17:31-18:28/57 19:22	05:49 19:54	06:23-07:08/45 20:22	05:24 06:14-07:13/59
6	07:19 16:41	07:01 17:17	06:22 17:50	06:32 19:23	17:32-18:28/56 19:23	05:48 19:55	06:21-07:09/48 20:22	05:24 06:14-07:12/58
7	07:19 16:42	06:59 17:18	06:21 17:51	06:30 19:25	17:31-18:27/56 19:25	05:47 19:56	06:19-07:09/50 20:23	05:24 06:14-07:12/58
8	07:19 16:43	06:58 17:20	06:19 17:53	06:28 19:26	17:32-18:27/55 19:26	05:46 19:57	06:18-07:10/52 20:24	05:23 06:15-07:12/57
9	07:19 16:44	06:57 17:21	06:18 17:54	06:27 19:27	17:32-18:26/54 19:27	05:45 19:58	06:17-07:10/53 20:24	05:23 06:15-07:12/57
10	07:18 16:45	06:56 17:22	06:16 17:55	06:25 19:28	17:32-18:25/53 19:28	05:43 19:59	06:17-07:11/54 20:25	05:23 06:16-07:12/56
11	07:18 16:46	06:55 17:23	06:14 17:56	06:23 19:29	17:33-18:25/52 19:29	05:42 20:00	06:16-07:11/55 20:25	05:23 06:16-07:13/57
12	07:18 16:47	06:54 17:24	06:13 17:57	06:22 19:30	17:33-18:23/50 19:30	05:41 20:01	06:15-07:11/56 20:26	05:23 06:17-07:13/56
13	07:18 16:48	06:52 17:26	06:11 17:58	06:20 19:31	17:34-18:23/49 19:31	05:40 20:02	06:14-07:12/58 20:26	05:23 06:17-07:13/56
14	07:17 16:50	06:51 17:27	06:09 17:59	06:19 19:32	17:34-18:21/47 19:32	05:39 20:03	06:14-07:12/58 20:27	05:22 06:17-07:13/56
15	07:17 16:51	06:50 17:28	06:08 18:00	06:17 19:33	17:35-18:21/46 19:33	05:38 20:04	06:13-07:12/59 20:27	05:22 06:17-07:13/56
16	07:17 16:52	06:49 17:29	06:06 18:01	06:16 19:34	17:36-18:19/43 19:34	05:37 20:05	06:13-07:12/59 20:28	05:22 06:18-07:13/55
17	07:16 16:53	06:47 17:31	06:05 18:02	06:14 19:35	17:37-18:18/41 19:35	05:36 20:06	06:13-07:13/60 20:28	05:22 06:18-07:13/55
18	07:16 16:54	06:46 17:32	06:03 18:03	06:13 19:36	17:38-18:16/38 19:36	05:35 20:07	06:13-07:13/60 20:28	05:23 06:18-07:13/55
19	07:15 16:55	06:45 17:33	06:01 18:05	06:11 19:37	17:40-18:15/35 19:37	05:35 20:08	06:13-07:13/60 20:29	05:23 06:18-07:13/55
20	07:15 16:56	06:43 17:34	06:00 18:06	06:10 19:38	17:41-18:12/31 19:38	05:34 20:09	06:12-07:13/61 20:29	05:23 06:18-07:13/55
21	07:14 16:58	06:42 17:35	05:58 18:07	06:08 19:39	17:43-18:10/27 19:39	05:33 20:10	06:12-07:12/60 20:29	05:23 06:18-07:13/55
22	07:13 16:59	06:40 17:36	05:56 18:08	06:07 19:40	17:45-18:07/22 19:40	05:32 20:11	06:12-07:13/61 20:29	05:23 06:19-07:14/55
23	07:13 17:00	06:39 17:38	05:55 18:09	06:05 19:41	17:49-18:04/15 19:41	05:31 20:11	06:12-07:13/61 20:29	05:23 06:19-07:14/55
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 19:42	16:40-17:25/45 19:42	05:31 20:12	06:12-07:12/60 20:30	05:24 06:19-07:14/55
25	07:11 17:02	06:36 17:40	05:51 18:11	06:02 19:43	16:40-17:27/47 19:43	05:30 20:13	06:12-07:13/61 20:30	05:24 06:19-07:14/55
26	07:11 17:04	06:35 17:41	05:50 18:12	06:01 19:44	16:38-17:27/49 19:44	05:29 20:14	06:12-07:13/61 20:30	05:24 06:20-07:15/55
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 19:46	06:41-06:54/13 19:46	05:29 20:15	06:13-07:13/60 20:30	05:25 06:20-07:15/55
28	07:09 17:06	06:32 17:43	05:46 18:14	05:58 19:47	06:36-06:57/21 19:47	05:28 20:16	06:12-07:13/61 20:30	05:25 06:19-07:15/56
29	07:08 17:07		06:45 19:15	05:57 19:48	06:33-07:00/27 19:48	05:27 20:17	06:12-07:12/60 20:30	05:25 06:20-07:16/56
30	07:07 17:08		06:43 19:16	05:56 19:49	17:34-18:28/54 19:49	05:27 20:17	06:13-07:13/60 20:30	05:26 06:20-07:16/56
31	07:07 17:10		06:41 19:17		17:34-18:29/55	05:26 20:18	06:13-07:13/60	
Ore potenziali eliofanía	298	298	369	398	448	451		1689
Somma minuti d'ombra	0	0	598	1143	1708			

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 03 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (3)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 06:20-07:17/57 20:30	05:50 06:26-07:22/56 20:11	06:20 17:32-18:24/52 19:28	06:50 18:38	06:24 16:52	06:58 16:28
2	05:27 06:20-07:17/57 20:30	05:51 06:27-07:21/54 20:10	06:21 17:31-18:24/53 19:27	06:51 18:37	06:25 16:51	06:59 16:28
3	05:27 06:21-07:17/56 20:30	05:52 06:27-07:21/54 20:09	06:22 17:30-18:24/54 19:25	06:52 18:35	06:26 16:50	07:00 16:27
4	05:28 06:20-07:17/57 20:29	05:53 06:28-07:21/53 20:08	06:23 17:29-18:24/55 19:23	06:53 18:33	06:27 16:48	07:01 16:27
5	05:28 06:21-07:18/57 20:29	05:54 06:29-07:20/51 20:07	06:24 17:29-18:24/55 19:22	06:54 18:32	06:28 16:47	07:02 16:27
6	05:29 06:20-07:18/58 20:29	05:55 06:30-07:19/49 20:05	06:25 17:28-18:24/56 19:20	06:55 18:30	06:30 16:46	07:03 16:27
7	05:30 06:21-07:19/58 20:29	05:56 06:32-07:18/46 20:04	06:26 17:27-18:24/57 19:19	06:56 18:28	06:31 16:45	07:04 16:27
8	05:30 06:21-07:19/58 20:28	05:57 06:32-07:17/45 20:03	06:27 17:27-18:23/56 19:17	06:57 18:27	06:32 16:44	07:05 16:27
9	05:31 06:20-07:19/59 20:28	05:58 06:34-07:15/41 20:02	06:28 17:27-18:23/56 19:15	06:58 18:25	06:33 16:43	07:06 16:27
10	05:31 06:21-07:20/59 20:28	05:59 06:35-07:14/39 20:00	06:29 17:25-18:22/57 19:14	06:59 18:23	06:34 16:42	07:07 16:27
11	05:32 06:21-07:20/59 20:27	06:00 06:36-07:13/37 19:59	06:30 17:25-18:21/56 19:12	07:00 18:22	06:36 16:41	07:08 16:27
12	05:33 06:21-07:20/59 20:27	06:01 06:38-07:11/33 19:58	06:31 17:25-18:20/55 19:10	07:01 18:20	06:37 16:40	07:09 16:27
13	05:34 06:21-07:21/60 20:26	06:02 06:39-07:09/30 19:57	06:32 17:25-18:20/55 19:09	07:02 18:19	06:38 16:39	07:09 16:27
14	05:34 06:21-07:21/60 20:26	06:03 06:42-07:07/25 19:55	06:33 17:25-18:19/54 19:07	07:04 18:17	06:39 16:38	07:10 16:27
15	05:35 06:22-07:22/60 20:25	06:04 06:44-07:04/20 19:54	06:34 17:25-18:18/53 19:05	07:05 18:16	06:40 16:37	07:11 16:27
16	05:36 06:21-07:21/60 20:25	06:05 06:49-06:59/10 19:52	06:35 17:26-18:17/51 19:03	07:06 18:14	06:41 16:36	07:12 16:28
17	05:37 06:21-07:22/61 20:24	06:06 19:51	06:36 17:26-18:16/50 19:02	07:07 18:13	06:43 16:36	07:12 16:28
18	05:37 06:22-07:22/60 20:23	06:07 19:50	06:37 17:27-18:14/47 19:00	07:08 18:11	06:44 16:35	07:13 16:28
19	05:38 06:22-07:23/61 20:23	06:08 19:48	06:38 17:27-18:13/46 18:58	07:09 18:10	06:45 16:34	07:14 16:29
20	05:39 06:21-07:22/61 20:22	06:09 17:54-18:10/16 19:47	06:39 17:28-18:11/43 18:57	07:10 18:08	06:46 16:33	07:14 16:29
21	05:40 06:22-07:22/60 20:21	06:10 17:50-18:13/23 19:45	06:40 17:29-18:09/40 18:55	07:11 18:07	06:47 16:33	07:15 16:30
22	05:41 06:22-07:23/61 20:20	06:11 17:48-18:16/28 19:44	06:41 17:31-18:07/36 18:53	07:12 18:05	06:48 16:32	07:15 16:30
23	05:42 06:22-07:23/61 20:20	06:11 17:45-18:17/32 19:42	06:42 17:32-18:05/33 18:52	07:13 18:04	06:50 16:31	07:16 16:31
24	05:43 06:23-07:23/60 20:19	06:12 17:43-18:19/36 19:41	06:43 17:35-18:02/27 18:50	07:15 18:02	06:51 16:31	07:16 16:31
25	05:43 06:23-07:23/60 20:18	06:13 17:41-18:19/38 19:39	06:44 17:38-17:59/21 18:48	06:16 17:01	06:52 16:30	07:17 16:32
26	05:44 06:24-07:23/59 20:17	06:14 17:39-18:20/41 19:38	06:45 17:43-17:53/10 18:47	06:17 17:00	06:53 16:30	07:17 16:32
27	05:45 06:23-07:23/60 20:16	06:15 17:38-18:21/43 19:36	06:46 18:45	06:18 16:58	06:54 16:29	07:17 16:33
28	05:46 06:24-07:23/59 20:15	06:16 17:36-18:22/46 19:35	06:47 18:43	06:19 16:57	06:55 16:29	07:18 16:34
29	05:47 06:24-07:22/58 20:14	06:17 17:35-18:22/47 19:33	06:48 18:42	06:20 16:56	06:56 16:29	07:18 16:34
30	05:48 06:25-07:22/57 20:13	06:18 17:34-18:23/49 19:32	06:49 18:40	06:21 16:54	06:57 16:28	07:18 16:35
31	05:49 06:25-07:22/57 20:12	06:19 17:33-18:23/50 19:30		06:23 16:53		07:18 16:36
Ore potenziali eliofanìa	458	427	375	346	299	289
Somma minuti d'ombra	1829	1092	1228	0	0	0

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 04 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (4)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 08:17-08:47/30 16:37	07:06 07:58-09:18/80 17:11 15:54-16:30/36	06:30 07:57-08:55/58 17:45	06:40 19:18	05:54 19:50	05:26 20:19
2	07:19 08:17-08:48/31 16:38	07:05 07:57-09:18/81 17:12 15:53-16:29/36	06:29 07:57-08:51/54 17:46	06:38 19:19	05:53 19:51	05:25 20:20
3	07:19 08:16-08:49/33 16:39	07:04 07:57-09:19/82 17:13 15:53-16:29/36	06:27 07:59-08:50/51 17:47	06:36 19:20	05:52 19:52	05:25 20:20
4	07:19 08:16-08:51/35 16:40	07:03 07:55-09:18/83 17:15 15:54-16:29/35	06:25 08:00-08:48/48 17:48	06:35 19:21	05:51 19:53	05:25 20:21
5	07:19 08:16-08:52/36 16:40	07:02 07:55-09:18/83 17:16 15:54-16:29/35	06:24 08:01-08:46/45 17:49	06:33 19:22	05:49 19:54	05:24 20:22
6	07:19 08:15-08:53/38 16:41	07:01 07:54-09:18/84 17:17 15:55-16:29/34	06:22 08:02-08:44/42 17:50	06:32 19:24	05:48 19:55	05:24 20:22
7	07:19 08:15-08:55/40 16:42	06:59 07:54-09:18/84 17:18 15:56-16:28/32	06:21 08:04-08:41/37 17:51	06:30 19:25	05:47 19:56	05:24 20:23
8	07:19 08:15-08:56/41 16:43	06:58 07:54-09:19/85 17:20 15:57-16:28/31	06:19 08:07-08:38/31 17:53	06:28 19:26	05:46 19:57	05:23 20:24
9	07:19 08:14-08:57/43 16:44	06:57 07:54-09:19/85 17:21 15:58-16:27/29	06:18 08:09-08:34/25 17:54	06:27 19:27	05:45 19:58	05:23 20:24
10	07:18 08:14-08:58/44 16:45	06:56 07:54-09:19/85 17:22 15:59-16:26/27	06:16 08:14-08:30/16 17:55	06:25 19:28	05:43 19:59	05:23 20:25
11	07:18 08:13-09:00/47 16:46	06:55 07:53-09:18/85 17:23 16:00-16:25/25	06:14 17:56	06:24 19:29	05:42 20:00	05:23 20:25
12	07:18 08:12-09:00/48 16:47	06:54 07:53-09:18/85 17:24 16:02-16:23/21	06:13 17:57	06:22 19:30	05:41 20:01	05:23 20:26
13	07:18 08:12-09:02/50 16:48 16:04-16:08/4	06:52 07:53-09:18/85 17:26 16:05-16:21/16	06:11 17:58	06:20 19:31	05:40 20:02	05:23 20:26
14	07:17 08:12-09:03/51 16:50 16:01-16:12/11	06:51 07:52-09:16/84 17:27 16:08-16:17/9	06:09 17:59	06:19 19:32	05:39 20:03	05:22 20:27
15	07:17 08:11-09:04/53 16:51 15:59-16:14/15	06:50 07:52-09:16/84 17:28	06:08 18:00	06:17 19:33	05:38 20:04	05:22 20:27
16	07:17 08:11-09:05/54 16:52 15:58-16:16/18	06:49 07:53-09:16/83 17:29	06:06 18:01	06:16 19:34	05:37 20:05	05:22 20:28
17	07:16 08:11-09:06/55 16:53 15:57-16:18/21	06:47 07:52-09:14/82 17:31	06:05 18:02	06:14 19:35	05:36 20:06	05:23 20:28
18	07:16 08:11-09:08/57 16:54 15:57-16:20/23	06:46 07:52-09:14/82 17:32	06:03 18:03	06:13 19:36	05:35 20:07	05:23 20:28
19	07:15 08:10-09:08/58 16:55 15:56-16:20/24	06:45 07:53-09:13/80 17:33	06:01 18:05	06:11 19:37	05:35 20:08	05:23 20:29
20	07:15 08:08-09:09/61 16:56 15:55-16:21/26	06:43 07:52-09:12/80 17:34	06:00 18:06	06:10 19:38	05:34 20:09	05:23 20:29
21	07:14 08:08-09:10/62 16:58 15:55-16:23/28	06:42 07:53-09:11/78 17:35	05:58 18:07	06:08 19:39	05:33 20:10	05:23 20:29
22	07:13 08:06-09:11/65 16:59 15:54-16:24/30	06:40 07:53-09:09/76 17:37	05:56 18:08	06:07 19:40	05:32 20:11	05:23 20:29
23	07:13 08:04-09:11/67 17:00 15:53-16:24/31	06:39 07:53-09:08/75 17:38	05:55 18:09	06:05 19:41	05:31 20:11	05:23 20:29
24	07:12 08:04-09:13/69 17:01 15:54-16:26/32	06:37 07:54-09:07/73 17:39	05:53 18:10	06:04 19:42	05:31 20:12	05:24 20:30
25	07:11 08:03-09:14/71 17:02 15:53-16:27/34	06:36 07:54-09:04/70 17:40	05:51 18:11	06:02 19:43	05:30 20:13	05:24 20:30
26	07:11 08:02-09:14/72 17:04 15:53-16:27/34	06:35 07:55-09:03/68 17:41	05:50 18:12	06:01 19:44	05:29 20:14	05:24 20:30
27	07:10 08:01-09:15/74 17:05 15:53-16:28/35	06:33 07:55-09:00/65 17:42	05:48 18:13	06:00 19:46	05:29 20:15	05:25 20:30
28	07:09 08:00-09:15/75 17:06 15:53-16:28/35	06:32 07:55-08:57/62 17:43	05:46 18:14	05:58 19:47	05:28 20:16	05:25 20:30
29	07:08 07:59-09:16/77 17:07 15:52-16:28/36		06:45 19:15	05:57 19:48	05:27 20:17	05:25 20:30
30	07:07 07:59-09:17/78 17:08 15:52-16:29/37		06:43 19:16	05:56 19:49	05:27 20:17	05:26 20:30
31	07:07 07:58-09:17/79 17:10 15:53-16:29/36		06:41 19:17		05:26 20:18	
Ore potenziali eliofanìa	298	298	369	398	448	451
Somma minuti d'ombra	2204	2631	407	0	0	0

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 04 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (4)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 20:30	05:50 20:11	06:20 19:28	06:50 18:38	06:24 07:23-08:48/85 16:52 15:28-15:56/28	06:58 07:55-08:42/47 16:28
2	05:27 20:30	05:51 20:10	06:21 19:27	06:51 18:37	06:25 07:23-08:48/85 16:51 15:27-15:56/29	06:59 07:57-08:41/44 16:28
3	05:27 20:30	05:52 20:09	06:22 19:25	06:52 08:55-09:04/9 18:35	06:26 07:24-08:48/84 16:50 15:27-15:58/31	07:00 07:58-08:41/43 16:27
4	05:28 20:29	05:53 20:08	06:23 19:23	06:53 08:48-09:10/22 18:33	06:27 07:24-08:48/84 16:48 15:26-15:58/32	07:01 07:59-08:40/41 16:27
5	05:28 20:29	05:54 20:07	06:24 19:22	06:54 08:45-09:13/28 18:32	06:28 07:24-08:48/84 16:47 15:25-15:59/34	07:02 08:00-08:40/40 16:27
6	05:29 20:29	05:55 20:05	06:25 19:20	06:55 08:42-09:16/34 18:30	06:30 07:26-08:49/83 16:46 15:24-15:59/35	07:03 08:01-08:39/38 16:27
7	05:30 20:29	05:56 20:04	06:26 19:19	06:56 08:39-09:18/39 18:28	06:31 07:26-08:49/83 16:45 15:25-16:00/35	07:04 08:03-08:39/36 16:27
8	05:30 20:28	05:57 20:03	06:27 19:17	06:57 08:37-09:20/43 18:27	06:32 07:27-08:48/81 16:44 15:24-16:00/36	07:05 08:04-08:39/35 16:27
9	05:31 20:28	05:58 20:02	06:28 19:15	06:58 08:35-09:22/47 18:25	06:33 07:27-08:48/81 16:43 15:24-16:00/36	07:06 08:05-08:38/33 16:27
10	05:32 20:28	05:59 20:01	06:29 19:14	06:59 08:33-09:23/50 18:24	06:34 07:29-08:49/80 16:42 15:25-16:01/36	07:07 08:06-08:37/31 16:27
11	05:32 20:27	06:00 19:59	06:30 19:12	07:00 08:32-09:24/52 18:22	06:36 07:29-08:48/79 16:41 15:24-16:01/37	07:08 08:07-08:37/30 16:27
12	05:33 20:27	06:01 19:58	06:31 19:10	07:01 08:31-09:27/56 18:20	06:37 07:30-08:48/78 16:40 15:24-16:00/36	07:09 08:09-08:37/28 16:27
13	05:34 20:26	06:02 19:57	06:32 19:09	07:02 08:30-09:30/60 18:19	06:38 07:31-08:47/76 16:39 15:24-16:00/36	07:09 08:10-08:37/27 16:27
14	05:34 20:26	06:03 19:55	06:33 19:07	07:04 08:29-09:32/63 18:17	06:39 07:33-08:48/75 16:38 15:25-16:01/36	07:10 08:11-08:37/26 16:27
15	05:35 20:25	06:04 19:54	06:34 19:05	07:05 08:27-09:34/67 18:16	06:40 07:34-08:48/74 16:37 15:26-16:00/34	07:11 08:12-08:36/24 16:28
16	05:36 20:25	06:05 19:52	06:35 19:03	07:06 08:26-09:35/69 18:14	06:41 07:35-08:47/72 16:36 15:26-16:00/34	07:12 08:13-08:36/23 16:28
17	05:37 20:24	06:06 19:51	06:36 19:02	07:07 08:26-09:37/71 18:13	06:43 07:36-08:46/70 16:36 15:26-16:00/34	07:12 08:15-08:36/21 16:28
18	05:38 20:23	06:07 19:50	06:37 19:00	07:08 08:25-09:38/73 18:11	06:44 07:38-08:47/69 16:35 15:28-16:00/32	07:13 08:15-08:35/20 16:28
19	05:38 20:23	06:08 19:48	06:38 18:58	07:09 08:25-09:40/75 18:10	06:45 07:39-08:46/67 16:34 15:28-15:59/31	07:14 08:16-08:36/20 16:29
20	05:39 20:22	06:09 19:47	06:39 18:57	07:10 08:24-09:41/77 18:08	06:46 07:41-08:46/65 16:33 15:29-15:59/30	07:14 08:16-08:36/20 16:29
21	05:40 20:21	06:10 19:45	06:40 18:55	07:11 08:24-09:42/78 18:07	06:47 07:43-08:45/62 16:33 15:30-15:58/28	07:15 08:17-08:36/19 16:30
22	05:41 20:20	06:11 19:44	06:41 18:53	07:12 08:23-09:43/80 18:05	06:48 07:45-08:46/61 16:32 15:31-15:57/26	07:15 08:17-08:36/19 16:30
23	05:42 20:20	06:12 19:42	06:42 18:52	07:13 08:22-09:43/81 18:04	06:50 07:47-08:45/58 16:31 15:33-15:57/24	07:16 08:18-08:37/19 16:31
24	05:43 20:19	06:12 19:41	06:43 18:50	07:15 08:22-09:44/82 18:02	06:51 07:48-08:45/57 16:31 15:34-15:57/23	07:16 08:18-08:38/20 16:31
25	05:43 20:18	06:13 19:39	06:44 18:48	07:16 07:23-08:45/82 17:01	06:52 07:49-08:44/55 16:30 15:35-15:56/21	07:17 08:19-08:39/20 16:32
26	05:44 20:17	06:14 19:38	06:45 18:47	07:17 07:22-08:46/84 17:00	06:53 07:49-08:43/54 16:30 15:36-15:54/18	07:17 08:19-08:40/21 16:32
27	05:45 20:16	06:15 19:36	06:46 18:45	07:18 07:22-08:46/84 16:58	06:54 07:50-08:43/53 16:29 15:38-15:53/15	07:17 08:18-08:41/23 16:33
28	05:46 20:15	06:16 19:35	06:47 18:43	07:19 07:22-08:46/84 16:57 15:36-15:48/12	06:55 07:52-08:43/51 16:29 15:40-15:51/11	07:18 08:18-08:41/23 16:34
29	05:47 20:14	06:17 19:33	06:48 18:42	07:20 07:22-08:46/84 16:56 15:33-15:51/18	06:56 07:53-08:43/50 16:29 15:45-15:49/4	07:18 08:19-08:43/24 16:34
30	05:48 20:13	06:18 19:32	06:49 18:40	07:21 07:23-08:47/84 16:54 15:32-15:53/21	06:57 07:54-08:42/48 16:28	07:18 08:18-08:44/26 16:35
31	05:49 20:12	06:19 19:30		07:23 07:23-08:48/85 16:53 15:30-15:55/25		07:18 08:18-08:45/27 16:36
Ore potenziali eliofanía	458	427	375	346	299	289
Somma minuti d'ombra	0	0	0	1919	2946	868

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 05 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (5)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 08:29-09:46/77 16:37	07:06 08:38-09:58/80 17:11	06:30 17:45	06:40 07:19-08:14/55 19:18	05:54 06:42-08:00/78 19:50	05:26 06:47-07:36/49 20:19 18:53-19:36/43
2	07:19 08:30-09:47/77 16:38	07:05 08:38-09:58/80 17:12	06:29 17:46	06:38 07:19-08:14/55 19:19	05:53 06:40-07:58/78 19:51	05:25 06:48-07:36/48 20:20 18:53-19:37/44
3	07:19 08:30-09:47/77 16:39	07:04 08:38-09:56/78 17:13	06:27 17:47	06:36 07:19-08:15/56 19:20	05:52 06:40-07:56/76 19:52	05:25 06:47-07:35/48 20:20 18:53-19:37/44
4	07:19 08:30-09:48/78 16:40	07:03 08:38-09:56/78 17:15	06:25 17:48	06:35 07:17-08:15/58 19:21	05:51 06:40-07:54/74 19:53	05:25 06:48-07:35/47 20:21 18:53-19:38/45
5	07:19 08:31-09:49/78 16:40	07:02 08:39-09:55/76 17:16	06:24 17:49	06:33 07:17-08:16/59 19:22	05:49 06:40-07:52/72 19:54	05:24 06:49-07:35/46 20:22 18:53-19:38/45
6	07:19 08:31-09:49/78 16:41	07:01 08:39-09:55/76 17:17	06:22 17:50	06:32 07:15-08:16/61 19:23	05:48 06:40-07:50/70 19:55	05:24 06:50-07:35/45 20:22 18:53-19:38/45
7	07:19 08:31-09:50/79 16:42	06:59 08:40-09:54/74 17:18	06:21 17:51	06:30 07:14-08:16/62 19:25	05:47 06:39-07:46/67 19:56	05:24 06:50-07:34/44 20:23 18:53-19:38/45
8	07:19 08:32-09:51/79 16:43	06:58 08:41-09:54/73 17:20	06:19 17:53	06:28 07:14-08:17/63 19:26	05:46 06:39-07:44/65 19:57	05:23 06:51-07:34/43 20:24 18:53-19:39/46
9	07:19 08:31-09:51/80 16:44	06:57 08:42-09:53/71 17:21	06:18 17:54	06:27 07:13-08:16/63 19:27	05:45 06:39-07:44/65 19:58	05:23 06:51-07:34/43 20:24 18:53-19:39/46
10	07:18 08:32-09:52/80 16:45	06:56 08:43-09:52/69 17:22	06:16 17:55	06:25 07:13-08:17/64 19:28	05:43 06:39-07:43/64 19:59	05:23 06:52-07:34/42 20:25 18:54-19:40/46
11	07:18 08:32-09:52/80 16:46	06:55 08:43-09:51/68 17:23	06:14 17:56	06:24 07:12-08:16/64 19:29	05:42 06:39-07:43/64 20:00	05:23 06:53-07:34/41 20:25 18:54-19:40/46
12	07:18 08:32-09:52/80 16:47	06:54 08:44-09:50/66 17:25	06:13 17:57	06:22 07:11-08:15/64 19:30	05:41 06:39-07:43/64 20:01	05:23 06:53-07:34/41 20:26 18:54-19:41/47
13	07:18 08:32-09:53/81 16:49	06:52 08:45-09:49/64 17:26	06:11 17:58	06:20 07:11-08:16/65 19:31	05:40 06:39-07:43/64 20:02	05:23 06:54-07:34/40 20:26 18:54-19:41/47
14	07:17 08:33-09:54/81 16:50	06:51 08:45-09:46/61 17:27	06:09 06:42-06:43/1 17:59	06:19 07:09-08:15/66 19:32	05:39 06:39-07:42/63 20:03	05:23 06:54-07:34/40 20:27 18:54-19:41/47
15	07:17 08:32-09:54/82 16:51	06:50 08:47-09:45/58 17:28	06:08 06:34-06:50/16 18:00	06:17 07:05-08:15/70 19:33	05:38 06:39-07:42/63 20:04 19:10-19:16/6	05:22 06:55-07:34/39 20:27 18:55-19:41/46
16	07:17 08:33-09:55/82 16:52	06:49 08:48-09:44/56 17:29	06:06 06:32-06:53/21 18:01	06:16 07:01-08:14/73 19:34	05:37 06:39-07:42/63 20:05 19:05-19:21/16	05:22 06:55-07:34/39 20:28 18:55-19:42/47
17	07:16 08:33-09:55/82 16:53	06:47 08:49-09:41/52 17:31	06:05 06:29-06:55/26 18:02	06:14 06:58-08:14/76 19:35	05:36 06:40-07:42/62 20:06 19:04-19:24/20	05:23 06:56-07:34/38 20:28 18:55-19:42/47
18	07:16 08:34-09:56/82 16:54	06:46 08:51-09:39/48 17:32	06:03 06:27-06:56/29 18:03	06:13 06:56-08:13/77 19:36	05:35 06:40-07:42/62 20:07 19:02-19:26/24	05:23 06:56-07:34/38 20:28 18:55-19:42/47
19	07:15 08:33-09:56/83 16:55	06:45 08:53-09:37/44 17:33	06:01 06:26-06:58/32 18:05	06:11 06:54-08:12/78 19:37	05:35 06:40-07:41/61 20:08 19:00-19:27/27	05:23 06:56-07:34/38 20:29 18:55-19:42/47
20	07:15 08:33-09:56/83 16:56	06:43 08:55-09:34/39 17:34	06:00 06:24-06:58/34 18:06	06:10 06:52-08:11/79 19:38	05:34 06:41-07:41/60 20:09 18:59-19:28/29	05:23 06:56-07:34/38 20:29 18:55-19:42/47
21	07:14 08:34-09:57/83 16:58	06:42 08:57-09:31/34 17:35	05:58 06:22-06:58/36 18:07	06:08 06:51-08:11/80 19:39	05:33 06:41-07:40/59 20:10 18:58-19:29/31	05:23 06:56-07:34/38 20:29 18:55-19:42/47
22	07:13 08:34-09:57/83 16:59	06:40 09:00-09:27/27 17:37	05:56 06:22-06:59/37 18:08	06:07 06:50-08:10/80 19:40	05:32 06:42-07:40/58 20:11 18:57-19:31/34	05:23 06:57-07:35/38 20:29 18:56-19:43/47
23	07:13 08:34-09:57/83 17:00	06:39 09:05-09:22/17 17:38	05:55 06:21-06:59/38 18:09	06:05 06:48-08:09/81 19:41	05:31 06:42-07:40/58 20:11 18:56-19:31/35	05:23 06:57-07:35/38 20:29 18:56-19:43/47
24	07:12 08:35-09:58/83 17:01	06:37 17:39	05:53 06:20-06:59/39 18:10	06:04 06:47-08:08/81 19:42	05:31 06:42-07:39/57 20:12 18:55-19:32/37	05:24 06:57-07:35/38 20:30 18:56-19:43/47
25	07:11 08:35-09:58/83 17:02	06:36 17:40	05:51 06:20-07:03/43 18:11	06:02 06:45-08:07/82 19:43	05:30 06:43-07:39/56 20:13 18:55-19:33/38	05:24 06:57-07:35/38 20:30 18:56-19:43/47
26	07:11 08:35-09:58/83 17:04	06:35 17:41	05:50 06:19-07:05/46 18:12	06:01 06:45-08:06/81 19:44	05:29 06:43-07:38/55 20:14 18:55-19:33/38	05:24 06:57-07:36/39 20:30 18:57-19:44/47
27	07:10 08:35-09:58/83 17:05	06:33 17:42	05:48 06:18-07:07/49 18:13	06:00 06:44-08:05/81 19:46	05:29 06:44-07:39/55 20:15 18:54-19:33/39	05:25 06:57-07:36/39 20:30 18:57-19:44/47
28	07:09 08:35-09:58/83 17:06	06:32 17:43	05:46 06:19-07:10/51 18:14	05:58 06:43-08:03/80 19:47	05:28 06:44-07:38/54 20:16 18:54-19:35/41	05:25 06:58-07:37/39 20:30 18:56-19:43/47
29	07:08 08:36-09:57/81 17:07		06:45 07:18-08:11/53 19:15	05:57 06:42-08:02/80 19:48	05:27 06:44-07:37/53 20:17 18:53-19:35/42	05:25 06:57-07:37/40 20:30 18:57-19:44/47
30	07:07 08:36-09:57/81 17:08		06:43 07:18-08:12/54 19:16	05:56 06:42-08:01/79 19:49	05:27 06:45-07:37/52 20:17 18:53-19:36/43	05:26 06:57-07:37/40 20:30 18:57-19:44/47
31	07:06 08:37-09:58/81 17:10		06:41 07:19-08:13/54 19:17		05:26 06:47-07:37/50 20:18 18:54-19:37/43	
Ore potenziali eliofanìa	298	298	369	398	448	451
Somma minuti d'ombra	2506	1389	659	2113	2485	2621

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 05 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (5)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 06:57-07:38/41 20:30 18:58-19:44/46	05:50 06:49-07:54/65 20:11	06:20 07:11-08:15/64 19:28	06:50 18:38	06:24 08:11-09:21/70 16:52	06:58 08:14-09:35/81 16:28
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3	05:27 06:57-07:39/42 20:29 18:58-19:45/47	05:52 06:49-07:54/65 20:09	06:22 07:11-08:14/63 19:25	06:52 18:35	06:26 08:11-09:24/73 16:50	07:00 08:15-09:35/80 16:27
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6	05:29 06:56-07:41/45 20:29 18:59-19:44/45	05:55 06:49-07:58/69 20:05	06:25 07:11-08:12/61 19:20	06:55 18:30	06:30 08:08-09:25/77 16:46	07:03 08:17-09:35/78 16:27
7	05:30 06:56-07:41/45 20:29 18:59-19:45/46	05:56 06:49-08:01/72 20:04	06:26 07:12-08:11/59 19:19	06:56 18:28	06:31 08:09-09:27/78 16:45	07:04 08:18-09:36/78 16:27
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9	05:31 06:55-07:42/47 20:28 19:00-19:44/44	05:58 06:49-08:04/75 20:02	06:28 07:13-08:10/57 19:15	06:58 18:25	06:33 08:08-09:27/79 16:43	07:06 08:19-09:36/77 16:27
10	05:32 06:55-07:43/48 20:28 19:00-19:45/45	05:59 06:49-08:05/76 20:00	06:29 07:13-08:08/55 19:14	06:59 18:24	06:34 08:08-09:29/81 16:42	07:07 08:19-09:36/77 16:27
11	05:32 06:55-07:44/49 20:27 19:01-19:45/44	06:00 06:49-08:07/78 19:59	06:30 07:11-08:06/55 19:12	07:00 18:22	06:36 08:08-09:29/81 16:41	07:08 08:19-09:36/77 16:27
12	05:33 06:54-07:44/50 20:27 19:01-19:44/43	06:01 06:49-08:08/79 19:58	06:31 07:10-08:05/55 19:10	07:01 18:20	06:37 08:08-09:29/81 16:40	07:09 08:20-09:37/77 16:27
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14	05:34 06:54-07:46/52 20:26 19:02-19:44/42	06:03 06:50-08:10/80 19:55	06:33 07:09-08:01/52 19:07	07:04 18:17	06:39 08:08-09:30/82 16:38	07:10 08:22-09:38/76 16:27
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16	05:36 06:53-07:47/54 20:24 19:03-19:43/40	06:05 06:51-08:12/81 19:52	06:35 07:08-07:57/49 19:03	07:06 18:14	06:41 08:08-09:31/83 16:36	07:12 08:23-09:38/75 16:28
17	05:37 06:53-07:48/55 20:24 19:04-19:43/39	06:06 06:51-08:13/82 19:51	06:36 07:07-07:54/47 19:02	07:07 18:13	06:43 08:08-09:31/83 16:36	07:12 08:23-09:39/76 16:28
18	05:38 06:53-07:48/55 20:23 19:05-19:43/38	06:07 06:52-08:13/81 19:50	06:37 07:07-07:51/44 19:00	07:08 18:11	06:44 08:09-09:32/83 16:35	07:13 08:23-09:39/76 16:28
19	05:38 06:53-07:49/56 20:23 19:05-19:42/37	06:08 06:53-08:14/81 19:48	06:38 07:07-07:46/39 18:58	07:09 18:10	06:45 08:09-09:32/83 16:34	07:13 08:24-09:39/75 16:29
20	05:39 06:52-07:50/58 20:22 19:05-19:41/36	06:09 06:54-08:15/81 19:47	06:39 07:07-07:46/39 18:57	07:10 18:08	06:46 08:09-09:32/83 16:33	07:14 08:24-09:39/75 16:29
21	05:40 06:51-07:50/59 20:21 19:06-19:40/34	06:10 06:55-08:15/80 19:45	06:40 07:07-07:45/38 18:55	07:11 18:07	06:47 08:09-09:32/83 16:33	07:15 08:25-09:40/75 16:30
22	05:41 06:51-07:50/59 20:20 19:08-19:40/32	06:11 06:56-08:16/80 19:44	06:41 07:08-07:44/36 18:53	07:12 18:05	06:48 08:09-09:32/83 16:32	07:15 08:25-09:40/75 16:30
23	05:42 06:51-07:51/60 20:20 19:09-19:39/30	06:12 06:57-08:16/79 19:42	06:42 07:08-07:43/35 18:52	07:13 18:04	06:50 08:10-09:33/83 16:31	07:16 08:26-09:41/75 16:31
24	05:43 06:51-07:51/60 20:19 19:10-19:38/28	06:13 06:58-08:16/78 19:41	06:43 07:09-07:41/32 18:50	07:15 18:02	06:51 08:11-09:33/82 16:31	07:16 08:26-09:41/75 16:31
25	05:44 06:51-07:52/61 20:18 19:12-19:37/25	06:13 07:00-08:16/76 19:39	06:44 07:10-07:40/30 18:48	08:19 17:01	06:52 08:11-09:33/82 16:30	07:17 08:27-09:43/76 16:32
26	05:44 06:51-07:52/61 20:17 19:13-19:35/22	06:14 07:00-08:16/76 19:38	06:45 07:11-07:38/27 18:47	08:18 17:00	06:53 08:11-09:33/82 16:30	07:17 08:27-09:43/76 16:32
27	05:45 06:51-07:53/62 20:16 19:14-19:32/18	06:15 07:03-08:16/73 19:36	06:46 07:12-07:36/24 18:45	08:16 16:58	06:54 08:12-09:33/81 16:29	07:17 08:28-09:43/75 16:33
28	05:46 06:50-07:52/62 20:15 19:17-19:30/13	06:16 07:06-08:16/70 19:35	06:47 07:15-07:33/18 18:43	08:15 16:57	06:55 08:12-09:33/81 16:29	07:18 08:28-09:43/75 16:34
29	05:47 06:49-07:53/64 20:14	06:17 07:11-08:16/65 19:33	06:48 07:18-07:28/10 18:42	08:14 16:56	06:56 08:13-09:34/81 16:29	07:18 08:29-09:45/76 16:34
30	05:48 06:49-07:53/64 20:13	06:18 07:11-08:16/65 19:32	06:49 18:40	08:13 16:54	06:57 08:14-09:34/80 16:28	07:18 08:29-09:45/76 16:35
31	05:49 06:49-07:53/64 20:12	06:19 07:11-08:15/64 19:30		08:12 16:53		07:18 08:29-09:46/77 16:36
Ore potenziali eliofanía	458	427	375	346	299	289
Somma minuti d'ombra	2712	2300	1342	650	2400	2376

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 06 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (6)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 16:37	07:06 17:11	06:30 17:45	06:40 19:18	07:01-07:26/25 19:50	05:54 20:19
2	07:19 16:38	07:05 17:12	06:28 17:46	06:38 19:19	07:00-07:25/25 19:51	05:53 20:20
3	07:19 16:39	07:04 17:13	06:27 17:47	06:36 19:20	06:59-07:25/26 19:52	05:52 20:20
4	07:19 16:40	07:03 17:15	06:25 17:48	06:35 19:21	06:57-07:24/27 19:53	05:50 20:21
5	07:19 16:40	07:02 17:16	06:24 17:49	06:33 19:22	06:56-07:25/29 19:54	05:49 20:22
6	07:19 16:41	07:00 17:17	06:22 17:50	06:32 19:23	06:55-07:25/30 19:55	05:48 20:22
7	07:19 16:42	06:59 17:18	06:21 17:51	06:30 19:25	06:53-07:25/32 19:56	05:47 20:23
8	07:19 16:43	06:58 17:20	06:19 17:53	06:28 19:26	06:53-07:26/33 19:57	05:46 20:24
9	07:19 16:44	06:57 17:21	06:18 17:54	06:27 19:27	06:52-07:25/33 19:58	05:45 20:24
10	07:18 16:45	06:56 17:22	06:16 17:55	06:25 19:28	06:52-07:26/34 19:59	05:43 20:25
11	07:18 16:46	06:55 17:23	06:14 17:56	06:23 19:29	06:51-07:25/34 20:00	05:42 20:25
12	07:18 16:47	06:54 17:24	06:13 17:57	06:22 19:30	06:46-07:24/38 20:01	05:41 20:26
13	07:18 16:48	06:52 17:26	06:11 17:58	06:20 19:31	06:44-07:24/40 20:02	05:40 20:26
14	07:17 16:50	06:51 17:27	06:09 17:59	06:19 19:32	06:41-07:23/42 20:03	05:39 20:27
15	07:17 16:51	06:50 17:28	06:08 18:00	06:17 19:33	06:40-07:23/43 20:04	05:38 20:27
16	07:17 16:52	06:48 17:29	06:06 18:01	06:16 19:34	06:38-07:22/44 20:05	05:37 20:28
17	07:16 16:53	06:47 17:31	06:05 18:02	06:14 19:35	06:38-07:21/43 20:06	05:36 20:28
18	07:16 16:54	06:46 17:32	06:03 18:03	06:13 19:36	06:36-07:19/43 20:07	05:35 20:28
19	07:15 16:55	06:44 17:33	06:01 18:04	06:11 19:37	06:36-07:19/43 20:08	05:35 20:29
20	07:15 16:56	06:43 17:34	06:00 18:06	06:10 19:38	06:35-07:16/41 20:09	05:34 20:29
21	07:14 16:58	06:42 17:35	05:58 18:07	06:08 19:39	06:35-07:15/40 20:10	05:33 20:29
22	07:13 16:59	06:40 17:36	05:56 18:08	06:07 19:40	06:35-07:12/37 20:10	05:32 20:29
23	07:13 17:00	06:39 17:38	05:55 18:09	06:05 19:41	06:34-07:08/34 20:11	05:31 20:29
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 19:42	06:34-07:08/34 20:12	05:31 20:30
25	07:11 17:02	06:36 17:40	05:51 18:11	06:02 19:43	06:34-07:07/33 20:13	05:30 20:30
26	07:11 17:04	06:35 17:41	05:50 18:12	06:01 19:44	06:34-07:07/33 20:14	05:29 20:30
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 19:45	06:35-07:06/31 20:15	05:29 20:30
28	07:09 17:06	06:32 17:43	05:46 18:14	05:58 19:47	06:34-07:05/31 20:16	05:28 20:30
29	07:08 17:07		06:45 19:15	05:57 19:48	06:35-07:04/29 20:16	05:27 20:30
30	07:07 17:08		06:43 19:16	05:56 19:49	06:36-07:04/28 20:17	05:27 20:30
31	07:06 17:10		06:41 19:17		05:51-06:19/28 20:18	05:26 20:30
Ore potenziali eliofanía	298	298	369	398	448	451
Somma minuti d'ombra	0	228	834	1035	319	1028

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 06 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (6)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 05:53-06:28/35 20:30	05:50 20:11	06:20 06:50-07:24/34 19:28	06:50 07:37-08:14/37 18:38	06:24 16:52	06:58 16:28
2	05:27 05:53-06:27/34 20:30	05:51 20:10	06:21 06:50-07:24/34 19:27	06:51 07:36-08:14/38 18:37	06:25 16:51	06:59 16:28
3	05:27 05:54-06:28/34 20:29	05:52 20:09	06:22 06:50-07:23/33 19:25	06:52 07:35-08:15/40 18:35	06:26 16:50	07:00 16:27
4	05:28 05:54-06:27/33 20:29	05:53 20:08	06:23 06:50-07:23/33 19:23	06:53 07:34-08:15/41 18:33	06:27 16:48	07:01 16:27
5	05:28 05:55-06:28/33 20:29	05:54 20:07	06:24 06:50-07:22/32 19:22	06:54 07:33-08:15/42 18:32	06:28 16:47	07:02 16:27
6	05:29 05:56-06:28/32 20:29	05:55 20:05	06:25 06:51-07:21/30 19:20	06:55 07:33-08:15/42 18:30	06:30 16:45	07:03 16:27
7	05:30 05:56-06:28/32 20:29	05:56 06:55-07:03/8 20:04	06:26 06:51-07:20/29 19:19	06:56 07:32-08:15/43 18:28	06:31 16:45	07:04 16:27
8	05:30 05:57-06:28/31 20:28	05:57 06:52-07:06/14 20:03	06:27 06:52-07:19/27 19:17	06:57 07:32-08:14/42 18:27	06:32 16:44	07:05 16:27
9	05:31 05:57-06:27/30 20:28	05:58 06:49-07:07/18 20:02	06:28 06:53-07:19/26 19:15	06:58 07:32-08:14/42 18:25	06:33 16:43	07:06 16:27
10	05:32 05:58-06:27/29 20:27	05:59 06:47-07:09/22 20:00	06:29 06:54-07:20/26 19:14	06:59 07:32-08:13/41 18:23	06:34 16:42	07:07 16:27
11	05:32 05:59-06:28/29 20:27	06:00 06:46-07:10/24 19:59	06:30 06:53-07:19/26 19:12	07:00 07:32-08:13/41 18:22	06:35 16:41	07:08 16:27
12	05:33 05:58-06:27/29 20:27	06:01 06:44-07:11/27 19:58	06:31 06:53-07:18/25 19:10	07:01 07:33-08:13/40 18:20	06:37 16:40	07:08 16:27
13	05:34 05:59-06:27/28 20:26	06:02 06:43-07:12/29 19:57	06:32 06:52-07:18/26 19:09	07:02 07:33-08:12/39 18:19	06:38 16:39	08:13-08:16/3 16:27
14	05:34 06:00-06:27/27 20:26	06:03 06:43-07:12/29 19:55	06:33 06:53-07:17/24 19:07	07:03 07:33-08:11/38 18:17	06:39 16:38	08:12-08:18/6 16:27
15	05:35 06:01-06:26/25 20:25	06:04 06:42-07:13/31 19:54	06:34 06:54-07:16/22 19:05	07:05 07:34-08:09/35 18:16	06:40 16:37	08:11-08:19/8 16:28
16	05:36 06:01-06:25/24 20:24	06:05 06:41-07:13/32 19:52	06:35 06:55-07:15/20 19:03	07:06 07:35-08:08/33 18:14	06:41 16:36	08:11-08:21/10 16:28
17	05:37 06:02-06:25/23 20:24	06:06 06:41-07:14/33 19:51	06:36 06:56-07:14/18 19:02	07:07 07:36-08:06/30 18:13	06:43 16:36	08:11-08:22/11 16:28
18	05:37 06:03-06:24/21 20:23	06:07 06:40-07:14/34 19:50	06:37 06:57-07:12/15 19:00	07:08 07:37-08:05/28 18:11	06:44 16:35	08:11-08:22/11 16:28
19	05:38 06:05-06:23/18 20:23	06:08 06:40-07:14/34 19:48	06:38 06:58-07:10/12 18:58	07:09 07:39-08:02/23 18:10	06:45 16:34	08:11-08:23/12 16:29
20	05:39 06:06-06:22/16 20:22	06:09 06:40-07:14/34 19:47	06:39 07:00-07:06/6 18:57	07:10 07:42-08:00/18 18:08	06:46 16:33	08:11-08:23/12 16:29
21	05:40 06:07-06:20/13 20:21	06:10 06:40-07:18/38 19:45	06:40 18:55	07:11 07:45-07:56/11 18:07	06:47 16:33	08:12-08:24/12 16:30
22	05:41 06:10-06:18/8 20:20	06:11 06:40-07:20/40 19:44	06:41 18:53	07:12 18:05	06:48 16:32	08:12-08:24/12 16:30
23	05:42 20:19	06:11 06:40-07:21/41 19:42	06:42 18:52	07:13 18:04	06:49 16:31	08:13-08:25/12 16:31
24	05:43 20:19	06:12 06:40-07:23/43 19:41	06:43 07:53-08:02/9 18:50	07:15 18:02	06:51 16:31	08:13-08:25/12 16:31
25	05:43 20:18	06:13 06:40-07:23/43 19:39	06:44 07:48-08:06/18 18:48	06:16 17:01	06:52 16:30	08:15-08:26/11 16:32
26	05:44 20:17	06:14 06:40-07:23/43 19:38	06:45 07:45-08:08/23 18:47	06:17 17:00	06:53 16:30	08:15-08:26/11 16:32
27	05:45 20:16	06:15 06:40-07:24/44 19:36	06:46 07:43-08:10/27 18:45	06:18 16:58	06:54 16:29	08:16-08:26/10 16:33
28	05:46 20:15	06:16 06:41-07:24/43 19:35	06:47 07:41-08:11/30 18:43	06:19 16:57	06:55 16:29	08:16-08:25/9 16:34
29	05:47 20:14	06:17 06:42-07:24/42 19:33	06:48 07:39-08:12/33 18:42	06:20 16:56	06:56 16:29	08:19-08:26/7 16:34
30	05:48 20:13	06:18 06:44-07:24/40 19:32	06:49 07:38-08:13/35 18:40	06:21 16:54	06:57 16:28	08:20-08:25/5 16:35
31	05:49 20:12	06:19 06:46-07:24/38 19:30		06:23 16:53		07:18 16:36
Ore potenziali eliofanía	458	427	375	346	299	289
Somma minuti d'ombra	584	824	673	744	0	174

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 07 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (7)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:
Il sole splende tutto il di, dall'alba al tramonto
Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 16:37	07:06 07:26-07:42/16 17:11	06:30 17:45	06:40 19:18	05:54 06:19-06:37/18 19:50 06:45-06:58/13	05:26 05:51-06:18/27 20:19
2	07:19 16:38	07:05 07:25-07:44/19 17:12	06:28 17:46	06:38 19:19	05:53 06:20-06:35/15 19:51 06:50-06:51/1	05:25 05:52-06:19/27 20:20
3	07:19 16:39	07:04 07:24-07:45/21 17:13	06:27 17:47	06:36 19:20	05:52 06:11-06:20/9 19:52 06:21-06:33/12	05:25 05:52-06:18/26 20:20
4	07:19 16:40	07:03 07:22-07:45/23 17:15	06:25 17:48	06:35 19:21	05:50 06:10-06:22/12 19:53 06:24-06:31/7	05:25 05:52-06:18/26 20:21
5	07:19 16:40	07:02 07:21-07:46/25 17:16	06:24 17:49	06:33 19:22	05:49 06:09-06:24/15 19:54	05:24 05:53-06:19/26 20:22
6	07:19 16:41	07:00 07:20-07:47/27 17:17	06:22 17:50	06:31 19:23	05:48 06:08-06:25/17 19:55	05:24 05:54-06:19/25 20:22
7	07:19 16:42	06:59 07:19-07:48/29 17:18	06:21 17:51	06:30 19:25	05:47 06:06-06:25/19 19:56	05:24 05:53-06:18/25 20:23
8	07:19 16:43	06:58 07:18-07:48/30 17:20	06:19 17:52	06:28 06:51-07:02/11 19:26	05:46 06:05-06:26/21 19:57	05:23 05:54-06:18/24 20:24
9	07:19 16:44	06:57 07:17-07:49/32 17:21	06:18 17:54	06:27 06:47-07:05/18 19:27	05:45 06:04-06:27/23 19:58	05:23 05:54-06:18/24 20:24
10	07:18 16:45	06:56 07:16-07:49/33 17:22	06:16 17:55	06:25 06:46-07:07/21 19:28	05:43 06:03-06:27/24 19:59	05:23 05:55-06:19/24 20:25
11	07:18 16:46	06:55 07:15-07:48/33 17:23	06:14 17:56	06:23 06:43-07:08/25 19:29	05:42 06:02-06:28/26 20:00	05:23 05:55-06:19/24 20:25
12	07:18 16:47	06:54 07:15-07:49/34 17:24	06:13 17:57	06:22 06:41-07:08/27 19:30	05:41 06:01-06:28/27 20:01	05:23 05:56-06:19/23 20:26
13	07:18 16:48	06:52 07:15-07:49/34 17:26	06:11 17:58	06:20 06:40-07:10/30 19:31	05:40 06:01-06:28/27 20:02	05:23 05:56-06:19/23 20:26
14	07:17 16:50	06:51 07:14-07:47/33 17:27	06:09 17:59	06:19 06:39-07:10/31 19:32	05:39 05:59-06:28/29 20:03	05:22 05:57-06:19/22 20:27
15	07:17 16:51	06:50 07:15-07:47/32 17:28	06:08 18:00	06:17 06:39-07:11/32 19:33	05:38 05:58-06:28/30 20:04	05:22 05:57-06:19/22 20:27
16	07:17 16:52	06:48 07:15-07:46/31 17:29	06:06 18:01	06:16 06:37-07:10/33 19:34	05:37 05:57-06:28/31 20:05	05:22 05:57-06:19/22 20:28
17	07:16 16:53	06:47 07:15-07:45/30 17:31	06:05 18:02	06:14 06:37-07:11/34 19:35	05:36 05:57-06:28/31 20:06	05:22 05:57-06:19/22 20:28
18	07:16 16:54	06:46 07:16-07:44/28 17:32	06:03 18:03	06:13 06:36-07:10/34 19:36	05:35 05:56-06:28/32 20:07	05:23 05:58-06:19/21 20:28
19	07:15 16:55	06:44 07:17-07:42/25 17:33	06:01 18:04	06:11 06:30-06:35/5 19:37 06:36-07:11/35	05:35 05:55-06:28/33 20:08	05:23 05:58-06:19/21 20:29
20	07:15 16:56	06:43 07:17-07:40/23 17:34	06:00 18:06	06:10 06:28-07:10/42 19:38	05:34 05:54-06:27/33 20:09	05:23 05:58-06:19/21 20:29
21	07:14 16:58	06:42 07:19-07:39/20 17:35	05:58 18:07	06:08 06:27-07:10/43 19:39	05:33 05:53-06:27/34 20:10	05:23 05:58-06:19/21 20:29
22	07:13 16:59	06:40 07:20-07:36/16 17:36	05:56 18:08	06:07 06:26-07:10/44 19:40	05:32 05:53-06:27/34 20:10	05:23 05:59-06:20/21 20:29
23	07:13 17:00	06:39 07:23-07:34/11 17:38	05:55 18:09	06:05 06:24-07:08/44 19:41	05:31 05:52-06:26/34 20:11	05:23 05:59-06:20/21 20:29
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 06:23-07:08/45 19:42	05:31 05:51-06:25/34 20:12	05:24 05:59-06:20/21 20:30
25	07:11 17:02	06:36 17:40	05:51 18:11	06:02 06:21-07:07/46 19:43	05:30 05:51-06:25/34 20:13	05:24 05:58-06:20/22 20:30
26	07:11 17:04	06:34 17:41	05:50 18:12	06:01 06:20-07:06/46 19:44	05:29 05:51-06:24/33 20:14	05:24 05:59-06:21/22 20:30
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 06:19-07:05/46 19:45	05:29 05:51-06:24/33 20:15	05:25 05:59-06:21/22 20:30
28	07:09 17:06	06:32 17:43	05:46 18:14	05:58 06:17-06:38/21 19:47 06:39-07:03/24	05:28 05:51-06:23/32 20:16	05:25 06:00-06:22/22 20:30
29	07:08 17:07		06:45 19:15	05:57 06:18-06:38/20 19:48 06:41-07:02/21	05:27 05:51-06:21/30 20:16	05:25 05:59-06:22/23 20:30
30	07:07 07:30-07:37/7 17:08		06:43 19:16	05:56 06:18-06:37/19 19:49 06:42-07:00/18	05:27 05:51-06:20/29 20:17	05:26 05:59-06:22/23 20:30
31	07:06 07:27-07:40/13 17:10		06:41 19:17		05:26 05:52-06:19/27 20:18	
Ore potenziali eliofanìa	298	298	369	398	448	451
Somma minuti d'ombra	20	605	0	815	859	693

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 07 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (7)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 05:59-06:23/24 20:30	05:50 06:12-06:38/26 20:11	06:20 06:42-07:07/25 19:28	06:50 18:38	06:24 06:45-07:18/33 16:52	06:58 16:28
2	05:27 05:59-06:23/24 20:30	05:51 06:13-06:38/25 20:10	06:21 06:44-07:05/21 19:27	06:51 18:37	06:25 06:46-07:18/32 16:51	06:59 16:28
3	05:27 06:00-06:24/24 20:29	05:52 06:14-06:38/24 20:09	06:22 06:45-07:03/18 19:25	06:52 18:35	06:26 06:48-07:18/30 16:49	07:00 16:27
4	05:28 05:59-06:23/24 20:29	05:53 06:15-06:37/22 20:08	06:23 06:48-06:59/11 19:23	06:53 18:33	06:27 06:49-07:18/29 16:48	07:01 16:27
5	05:28 05:59-06:24/25 20:29	05:54 06:16-06:37/21 20:07	06:24 19:22	06:54 18:32	06:28 06:50-07:17/27 16:47	07:02 16:27
6	05:29 06:00-06:25/25 20:29	05:55 06:17-06:36/19 20:05	06:25 19:20	06:55 18:30	06:30 06:52-07:17/25 16:45	07:03 16:27
7	05:30 05:59-06:25/26 20:29	05:56 06:18-06:35/17 20:04	06:26 19:19	06:56 18:28	06:31 06:53-07:16/23 16:45	07:04 16:27
8	05:30 06:00-06:25/25 20:28	05:57 06:19-06:33/14 20:03	06:27 19:17	06:57 18:27	06:32 06:54-07:15/21 16:44	07:05 16:27
9	05:31 05:59-06:25/26 20:28	05:58 06:19-06:30/11 20:02	06:28 19:15	06:58 18:25	06:33 06:55-07:14/19 16:43	07:06 16:27
10	05:31 05:59-06:26/27 20:27	05:59 06:21-06:27/6 20:00	06:29 19:14	06:59 18:23	06:34 06:57-07:13/16 16:42	07:07 16:27
11	05:32 06:00-06:26/26 20:27	06:00 06:28-06:44/16 19:59	06:30 19:12	07:00 18:22	06:35 06:58-07:11/13 16:41	07:08 16:27
12	05:33 05:59-06:26/27 20:27	06:01 06:27-06:45/18 19:58	06:31 19:10	07:01 18:20	06:37 07:01-07:08/7 16:40	07:08 16:27
13	05:34 05:59-06:28/29 20:26	06:02 06:26-06:45/19 19:57	06:32 19:09	07:02 18:19	06:38 16:39	07:09 16:27
14	05:34 06:00-06:30/30 20:26	06:03 06:25-06:46/21 19:55	06:33 19:07	07:03 18:17	06:39 16:38	07:10 16:27
15	05:35 06:00-06:31/31 20:25	06:04 06:25-07:11/46 19:54	06:34 19:05	07:05 18:16	06:40 16:37	07:11 16:27
16	05:36 06:00-06:32/32 20:24	06:05 06:26-07:12/46 19:52	06:35 19:02	07:06 18:14	06:41 16:36	07:12 16:28
17	05:37 06:00-06:33/33 20:24	06:06 06:27-07:13/46 19:51	06:36 19:02	07:07 18:13	06:43 16:36	07:12 16:28
18	05:37 06:00-06:34/34 20:23	06:07 06:28-07:13/45 19:50	06:37 19:00	07:08 07:58-08:01/3 18:11	06:44 16:35	07:13 16:28
19	05:38 06:01-06:35/34 20:23	06:08 06:29-07:14/45 19:48	06:38 18:58	07:09 07:54-08:06/12 18:10	06:45 16:34	07:13 16:29
20	05:39 06:02-06:36/34 20:22	06:09 06:30-07:14/44 19:47	06:39 18:57	07:10 07:51-08:08/17 18:08	06:46 16:33	07:14 16:29
21	05:40 06:02-06:36/34 20:21	06:09 06:31-07:15/44 19:45	06:40 18:55	07:11 07:49-08:10/21 18:07	06:47 16:33	07:15 16:30
22	05:41 06:03-06:37/34 20:20	06:10 06:32-07:15/43 19:44	06:41 18:53	07:12 07:48-08:10/22 18:05	06:48 16:32	07:15 16:30
23	05:42 06:04-06:37/33 20:19	06:11 06:33-07:15/42 19:42	06:42 18:52	07:13 07:46-08:12/26 18:04	06:49 16:31	07:16 16:31
24	05:43 06:05-06:38/33 20:19	06:12 06:34-06:39/5 19:41	06:43 18:50	07:14 07:45-08:14/29 18:02	06:51 16:31	07:16 16:31
25	05:43 06:06-06:38/32 20:18	06:13 06:40-07:14/34 19:39	06:44 18:48	06:16 06:45-07:16/31 17:01	06:52 16:30	07:17 16:32
26	05:44 06:07-06:39/32 20:17	06:14 06:39-07:13/34 19:38	06:45 18:47	06:17 06:45-07:16/31 17:00	06:53 16:30	07:17 16:32
27	05:45 06:08-06:39/31 20:16	06:15 06:39-07:12/33 19:36	06:46 18:45	06:18 06:44-07:17/33 16:58	06:54 16:29	07:17 16:33
28	05:46 06:08-06:38/30 20:15	06:16 06:40-07:12/32 19:35	06:47 18:43	06:19 06:44-07:17/33 16:57	06:55 16:29	07:18 16:34
29	05:47 06:09-06:39/30 20:14	06:17 06:40-07:11/31 19:33	06:48 18:41	06:20 06:44-07:17/33 16:56	06:56 16:29	07:18 16:34
30	05:48 06:10-06:39/29 20:13	06:18 06:40-07:10/30 19:32	06:49 18:40	06:21 06:45-07:18/33 16:54	06:57 16:28	07:18 16:35
31	05:49 06:11-06:39/28 20:12	06:19 06:41-07:08/27 19:30		06:23 06:45-07:18/33 16:53		07:18 16:36
Ore potenziali eliofanìa	458	427	375	346	299	289
Somma minuti d'ombra	906	1005	75	357	275	0

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 08 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (8)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:
Il sole splende tutto il di, dall'alba al tramonto
Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 08:38-09:59/81 16:37	07:06 09:00-09:55/55 17:11	06:30 17:45	06:40 19:18	05:54 19:50	05:26 20:19
2	07:19 08:39-10:00/81 16:38	07:05 09:00-09:53/53 17:12	06:28 17:46	06:38 19:19	05:53 19:51	05:25 20:20
3	07:19 08:39-10:00/81 16:39	07:04 09:02-09:51/49 17:13	06:27 17:47	06:36 19:20	05:52 19:52	05:25 20:20
4	07:19 08:40-10:00/80 16:39	07:03 09:04-09:49/45 17:15	06:25 17:48	06:35 19:21	05:50 19:53	05:24 20:21
5	07:19 08:40-10:01/81 16:40	07:02 09:06-09:47/41 17:16	06:24 17:49	06:33 19:22	05:49 19:54	05:24 20:22
6	07:19 08:41-10:01/80 16:41	07:00 09:08-09:45/37 17:17	06:22 17:50	06:31 19:23	05:48 06:08-06:12/4 19:55	05:24 20:22
7	07:19 08:42-10:02/80 16:42	06:59 09:11-09:42/31 17:18	06:21 17:51	06:30 19:24	05:47 06:06-06:13/7 19:56	05:24 20:23
8	07:19 08:42-10:02/80 16:43	06:58 09:14-09:39/25 17:20	06:19 17:52	06:28 19:26	05:46 06:05-06:14/9 19:57	05:23 20:24
9	07:19 08:42-10:02/80 16:44	06:57 09:19-09:34/15 17:21	06:17 17:54	06:27 19:27	05:45 06:04-06:15/11 19:58	05:23 20:24
10	07:18 08:43-10:02/79 16:45	06:56 17:22	06:16 17:55	06:25 19:28	05:43 06:03-06:16/13 19:59	05:23 20:25
11	07:18 08:44-10:03/79 16:46	06:55 17:23	06:14 17:56	06:23 19:29	05:42 06:02-06:17/15 20:00	05:23 20:25
12	07:18 08:43-10:02/79 16:47	06:54 17:24	06:13 06:31-06:34/3 17:57	06:22 19:30	05:41 06:01-06:17/16 20:01	05:23 20:26
13	07:18 08:44-10:03/79 16:48	06:52 17:26	06:11 06:30-06:37/7 17:58	06:20 19:31	05:40 06:00-06:17/17 20:02	05:22 20:26
14	07:17 08:45-10:03/78 16:50	06:51 17:27	06:09 06:28-06:38/10 17:59	06:19 19:32	05:39 05:59-06:17/18 20:03	05:22 20:27
15	07:17 08:45-10:03/78 16:51	06:50 17:28	06:08 06:26-06:39/13 18:00	06:17 19:33	05:38 05:58-06:17/19 20:04	05:22 20:27
16	07:17 08:46-10:03/77 16:52	06:48 17:29	06:06 06:25-06:40/15 18:01	06:16 19:34	05:37 05:57-06:17/20 20:05	05:22 20:27
17	07:16 08:47-10:03/76 16:53	06:47 17:30	06:04 06:23-06:40/17 18:02	06:14 19:35	05:36 05:57-06:18/21 20:06	05:22 20:28
18	07:16 08:48-10:03/75 16:54	06:46 17:32	06:03 06:21-06:40/19 18:03	06:13 19:36	05:35 05:56-06:18/22 20:07	05:23 20:28
19	07:15 08:48-10:03/75 16:55	06:44 17:33	06:01 06:20-06:40/20 18:04	06:11 19:37	05:34 05:55-06:18/23 20:08	05:23 20:29
20	07:15 08:48-10:02/74 16:56	06:43 17:34	06:00 06:18-06:39/21 18:06	06:10 19:38	05:34 05:54-06:17/23 20:09	05:23 20:29
21	07:14 08:50-10:03/73 16:57	06:42 17:35	05:58 06:16-06:38/22 18:07	06:08 19:39	05:33 05:54-06:17/23 20:10	05:23 20:29
22	07:13 08:50-10:02/72 16:59	06:40 17:36	05:56 06:15-06:38/23 18:08	06:07 19:40	05:32 05:55-06:17/22 20:10	05:23 20:29
23	07:13 08:50-10:01/71 17:00	06:39 17:38	05:55 06:13-06:36/23 18:09	06:05 19:41	05:31 05:55-06:16/21 20:11	05:23 20:29
24	07:12 08:52-10:02/70 17:01	06:37 17:39	05:53 06:12-06:34/22 18:10	06:04 19:42	05:30 05:55-06:16/21 20:12	05:24 20:30
25	07:11 08:53-10:01/68 17:02	06:36 17:40	05:51 06:14-06:33/19 18:11	06:02 19:43	05:30 05:57-06:16/19 20:13	05:24 20:30
26	07:11 08:53-10:00/67 17:03	06:34 17:41	05:50 06:14-06:30/16 18:12	06:01 19:44	05:29 05:57-06:15/18 20:14	05:24 20:30
27	07:10 08:54-09:59/65 17:05	06:33 17:42	05:48 06:15-06:28/13 18:13	06:00 19:45	05:28 05:59-06:15/16 20:15	05:25 20:30
28	07:09 08:55-09:58/63 17:06	06:31 17:43	05:46 06:19-06:25/6 18:14	05:58 19:47	05:28 05:59-06:13/14 20:16	05:25 20:30
29	07:08 08:56-09:57/61 17:07		06:45 19:15	05:57 19:48	06:00-06:12/12 20:16	05:25 20:30
30	07:07 08:57-09:56/59 17:08		06:43 19:16	05:56 19:49	06:02-06:11/9 20:17	05:26 20:30
31	07:06 08:58-09:55/57 17:10		06:41 19:17		06:04-06:10/6 20:18	
Ore potenziali eliofanía	298	298	369	398	448	451
Somma minuti d'ombra	2299	351	269	0	419	0

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 08 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (8)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 20:30	05:50 06:12-06:27/15 20:11	06:20 19:28	06:50 07:10-07:15/5 18:38	06:24 16:52	06:58 08:26-09:45/79 16:28
2	05:27 20:30	05:51 06:13-06:27/14 20:10	06:21 19:27	06:51 18:36	06:25 08:47-09:04/17 16:51	06:59 08:26-09:45/79 16:28
3	05:27 20:29	05:52 06:14-06:26/12 20:09	06:22 19:25	06:52 18:35	06:26 08:43-09:09/26 16:49	07:00 08:26-09:46/80 16:27
4	05:28 20:29	05:53 06:15-06:26/11 20:08	06:23 19:23	06:53 18:33	06:27 08:40-09:13/33 16:48	07:01 08:26-09:46/80 16:27
5	05:28 20:29	05:54 06:16-06:25/9 20:07	06:24 19:22	06:54 18:32	06:28 08:37-09:15/38 16:47	07:02 08:27-09:47/80 16:27
6	05:29 20:29	05:55 06:17-06:23/6 20:05	06:25 19:20	06:55 18:30	06:30 08:35-09:17/42 16:46	07:03 08:27-09:47/80 16:27
7	05:30 20:29	05:56 06:18-06:21/3 20:04	06:26 19:19	06:56 18:28	06:31 08:34-09:20/46 16:45	07:04 08:27-09:48/81 16:27
8	05:30 20:28	05:57 20:03	06:27 19:17	06:57 18:27	06:32 08:33-09:22/49 16:44	07:05 08:28-09:49/81 16:27
9	05:31 20:28	05:58 20:02	06:28 19:15	06:58 18:25	06:33 08:31-09:24/53 16:43	07:06 08:28-09:49/81 16:27
10	05:31 20:27	05:59 20:00	06:29 19:14	06:59 18:23	06:34 08:31-09:26/55 16:42	07:07 08:28-09:49/81 16:27
11	05:32 20:27	06:00 19:59	06:30 19:12	07:00 18:22	06:35 08:30-09:27/57 16:41	07:08 08:28-09:49/81 16:27
12	05:33 06:13-06:16/3 20:27	06:01 19:58	06:31 19:10	07:01 18:20	06:37 08:29-09:28/59 16:40	07:08 08:29-09:50/81 16:27
13	05:34 06:11-06:19/8 20:26	06:02 19:57	06:32 19:08	07:02 18:19	06:38 08:28-09:29/61 16:39	07:09 08:30-09:51/81 16:27
14	05:34 06:10-06:21/11 20:26	06:03 19:55	06:33 19:07	07:03 18:17	06:39 08:28-09:31/63 16:38	07:10 08:30-09:51/81 16:27
15	05:35 06:09-06:22/13 20:25	06:04 19:54	06:34 07:10-07:12/2 19:05	07:05 18:16	06:40 08:27-09:32/65 16:37	07:11 08:30-09:51/81 16:27
16	05:36 06:07-06:22/15 20:24	06:05 19:52	06:35 07:05-07:17/12 19:03	07:06 18:14	06:41 08:26-09:33/67 16:36	07:12 08:31-09:52/81 16:28
17	05:37 06:07-06:24/17 20:24	06:06 19:51	06:36 07:03-07:18/15 19:02	07:07 18:13	06:43 08:26-09:34/68 16:36	07:12 08:32-09:53/81 16:28
18	05:37 06:06-06:25/19 20:23	06:07 19:50	06:37 07:01-07:19/18 19:00	07:08 18:11	06:44 08:26-09:36/70 16:35	07:13 08:32-09:53/81 16:28
19	05:38 06:06-06:26/20 20:23	06:07 19:48	06:38 07:00-07:21/21 18:58	07:09 18:10	06:45 08:25-09:36/71 16:34	07:13 08:32-09:54/82 16:29
20	05:39 06:06-06:26/20 20:22	06:08 19:47	06:39 06:59-07:22/23 18:57	07:10 18:08	06:46 08:25-09:37/72 16:33	07:14 08:32-09:54/82 16:29
21	05:40 06:05-06:26/21 20:21	06:09 19:45	06:40 07:00-07:23/23 18:55	07:11 18:07	06:47 08:25-09:38/73 16:33	07:15 08:33-09:55/82 16:30
22	05:41 06:04-06:27/23 20:20	06:10 19:44	06:41 07:01-07:23/22 18:53	07:12 18:05	06:48 08:24-09:38/74 16:32	07:15 08:33-09:55/82 16:30
23	05:42 06:04-06:27/23 20:19	06:11 19:42	06:42 07:02-07:23/21 18:52	07:13 18:04	06:49 08:25-09:40/75 16:31	07:16 08:34-09:56/82 16:31
24	05:43 06:05-06:28/23 20:19	06:12 19:41	06:43 07:03-07:23/20 18:50	07:14 18:02	06:51 08:25-09:40/75 16:31	07:16 08:34-09:56/82 16:31
25	05:43 06:06-06:28/22 20:18	06:13 19:39	06:44 07:04-07:23/19 18:48	06:16 17:01	06:52 08:25-09:41/76 16:30	07:17 08:36-09:57/81 16:32
26	05:44 06:07-06:29/22 20:17	06:14 19:38	06:45 07:05-07:22/17 18:47	06:17 17:00	06:53 08:24-09:41/77 16:30	07:17 08:36-09:57/81 16:32
27	05:45 06:07-06:28/21 20:16	06:15 19:36	06:46 07:06-07:22/16 18:45	06:18 16:58	06:54 08:24-09:42/78 16:29	07:17 08:36-09:57/81 16:33
28	05:46 06:08-06:28/20 20:15	06:16 19:35	06:47 07:07-07:21/14 18:43	06:19 16:57	06:55 08:24-09:42/78 16:29	07:18 08:36-09:57/81 16:34
29	05:47 06:09-06:28/19 20:14	06:17 19:33	06:48 07:08-07:19/11 18:41	06:20 16:56	06:56 08:25-09:44/79 16:28	07:18 08:37-09:58/81 16:34
30	05:48 06:10-06:28/18 20:13	06:18 19:31	06:49 07:09-07:18/9 18:40	06:21 16:54	06:57 08:26-09:44/78 16:28	07:18 08:38-09:59/81 16:35
31	05:49 06:11-06:28/17 20:12	06:19 19:30		06:23 16:53		07:18 08:38-09:59/81 16:36
Ore potenziali eliofanía	458	427	375	346	299	289
Somma minuti d'ombra	355	70	263	5	1775	2509

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 09 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (9) Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:19 16:37	07:06 17:11	06:30 17:45	06:40 19:18	05:54 19:50	05:26 05:58-06:58/60 20:19	05:26 06:05-07:03/58 20:30	05:50 06:14-07:01/47 20:11	06:20 19:28	06:50 18:38	06:24 16:52	06:58 16:28
2	07:19 16:38	07:05 17:12	06:28 17:46	06:38 19:19	05:53 06:24-06:31/7 19:51	05:25 05:59-06:58/59 20:20	05:27 06:05-07:03/58 20:30	05:51 06:15-07:00/45 20:10	06:21 19:27	06:51 18:36	06:25 16:51	06:59 16:28
3	07:19 16:39	07:04 17:13	06:27 17:47	06:36 19:20	05:52 06:19-06:37/18 19:52	05:25 05:58-06:58/60 20:20	05:27 06:05-07:04/59 20:29	05:52 06:16-06:59/43 20:09	06:22 19:25	06:52 18:35	06:26 16:49	07:00 16:27
4	07:19 16:39	07:03 17:15	06:25 17:48	06:35 19:21	05:50 06:16-06:40/24 19:53	05:24 05:59-06:58/59 20:21	05:28 06:05-07:04/59 20:29	05:53 06:17-06:58/41 20:08	06:23 19:23	06:53 18:33	06:27 16:48	07:01 16:27
5	07:19 16:40	07:02 17:16	06:24 17:49	06:33 19:22	05:49 06:13-06:42/29 19:54	05:24 05:59-06:58/59 20:22	05:28 06:05-07:04/59 20:29	05:54 06:19-06:56/37 20:07	06:24 19:22	06:54 18:32	06:28 16:47	07:02 16:27
6	07:19 16:41	07:00 17:17	06:22 17:50	06:31 19:23	05:48 06:10-06:43/33 19:55	05:24 05:59-06:58/59 20:22	05:29 06:05-07:04/59 20:29	05:55 06:20-06:55/35 20:05	06:25 19:20	06:55 18:30	06:30 16:46	07:03 16:27
7	07:19 16:42	06:59 17:18	06:21 17:51	06:30 19:24	05:47 06:09-06:45/36 19:56	05:23 05:59-06:58/59 20:23	05:29 06:06-07:05/59 20:29	05:56 06:21-06:52/31 20:04	06:26 19:18	06:56 18:28	06:31 16:45	07:04 16:27
8	07:19 16:43	06:58 17:19	06:19 17:52	06:28 19:26	05:46 06:07-06:46/39 19:57	05:23 06:00-06:59/59 20:24	05:30 06:06-07:05/59 20:28	05:57 06:23-06:50/27 20:03	06:27 19:17	06:57 18:27	06:32 16:44	07:05 16:27
9	07:19 16:44	06:57 17:21	06:17 17:54	06:27 19:27	05:44 06:06-06:48/42 19:58	05:23 06:00-06:59/59 20:24	05:31 06:06-07:05/59 20:28	05:58 06:25-06:48/23 20:02	06:28 19:15	06:58 18:25	06:33 16:43	07:06 16:27
10	07:18 16:45	06:56 17:22	06:16 17:55	06:25 19:28	05:43 06:05-06:49/44 19:59	05:23 06:00-06:59/59 20:25	05:31 06:06-07:05/59 20:27	05:59 06:29-06:44/15 20:00	06:29 19:14	06:59 18:23	06:34 16:42	07:07 16:27
11	07:18 16:46	06:55 17:23	06:14 17:56	06:23 19:29	05:42 06:04-06:50/46 20:00	05:23 06:01-06:59/58 20:25	05:32 06:07-07:06/59 20:27	06:00 19:59	06:30 19:12	07:00 18:22	06:35 16:41	07:08 16:27
12	07:18 16:47	06:54 17:24	06:13 17:57	06:22 19:30	05:41 06:03-06:50/47 20:01	05:23 06:01-07:00/59 20:26	05:33 06:06-07:05/59 20:27	06:01 19:58	06:31 19:10	07:01 18:20	06:37 16:40	07:08 16:27
13	07:18 16:48	06:52 17:26	06:11 17:58	06:20 19:31	05:40 06:02-06:51/49 20:02	05:22 06:00-06:59/59 20:26	05:34 06:07-07:06/59 20:26	06:02 19:57	06:32 19:08	07:02 18:19	06:38 16:39	07:09 16:27
14	07:17 16:49	06:51 17:27	06:09 17:59	06:19 19:32	05:39 06:02-06:52/50 20:03	05:22 06:01-06:59/58 20:27	05:34 06:07-07:06/59 20:26	06:03 19:55	06:33 19:07	07:03 18:17	06:39 16:38	07:10 16:27
15	07:17 16:51	06:50 17:28	06:08 18:00	06:17 19:33	05:38 06:01-06:52/51 20:04	05:22 06:01-06:59/58 20:27	05:35 06:07-07:05/58 20:25	06:04 19:54	06:34 19:05	07:05 18:16	06:40 16:37	07:11 16:27
16	07:17 16:52	06:48 17:29	06:06 18:01	06:16 19:34	05:37 06:00-06:53/53 20:05	05:22 06:02-07:00/58 20:28	05:36 06:07-07:06/59 20:24	06:05 19:52	06:35 19:03	07:06 18:14	06:41 16:36	07:12 16:28
17	07:16 16:53	06:47 17:30	06:04 18:02	06:14 19:35	05:36 06:01-06:54/53 20:06	05:22 06:02-07:00/58 20:28	05:37 06:07-07:06/59 20:24	06:05 19:51	06:36 19:02	07:07 18:13	06:43 16:35	07:12 16:28
18	07:16 16:54	06:46 17:32	06:03 18:03	06:13 19:36	05:35 06:00-06:54/54 20:07	05:22 06:02-07:00/58 20:28	05:37 06:08-07:06/58 20:23	06:06 19:50	06:37 19:00	07:08 18:11	06:44 16:35	07:13 16:28
19	07:15 16:55	06:44 17:33	06:01 18:04	06:11 19:37	05:34 06:00-06:55/55 20:08	05:23 06:02-07:01/59 20:29	05:38 06:08-07:06/58 20:23	06:07 19:48	06:38 18:58	07:09 18:10	06:45 16:34	07:13 16:29
20	07:15 16:56	06:43 17:34	06:00 18:06	06:10 19:38	05:34 05:59-06:55/56 20:09	05:23 06:02-07:01/59 20:29	05:39 06:08-07:05/57 20:22	06:08 19:47	06:39 18:57	07:10 18:08	06:46 16:33	07:14 16:29
21	07:14 16:57	06:42 17:35	05:58 18:07	06:08 19:39	05:33 05:58-06:55/57 20:10	05:23 06:02-07:01/59 20:29	05:40 06:08-07:05/57 20:21	06:09 19:45	06:40 18:55	07:11 18:07	06:47 16:33	07:15 16:30
22	07:13 16:59	06:40 17:36	05:56 18:08	06:07 19:40	05:32 05:59-06:56/57 20:10	05:23 06:02-07:01/59 20:29	05:41 06:09-07:05/56 20:20	06:10 19:44	06:41 18:53	07:12 18:05	06:48 16:32	07:15 16:30
23	07:13 17:00	06:39 17:38	05:55 18:09	06:05 19:41	05:31 05:59-06:56/57 20:11	05:23 06:03-07:02/59 20:29	05:42 06:09-07:05/56 20:19	06:11 19:42	06:42 18:52	07:13 18:04	06:49 16:31	07:16 16:31
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 19:42	05:30 05:58-06:56/58 20:12	05:24 06:03-07:01/58 20:30	05:43 06:10-07:05/55 20:19	06:12 19:41	06:43 18:50	07:14 18:02	06:51 16:31	07:16 16:31
25	07:11 17:02	06:36 17:40	05:51 18:11	06:02 19:43	05:30 05:59-06:57/58 20:13	05:24 06:03-07:01/58 20:30	05:43 06:10-07:05/55 20:18	06:13 19:39	06:44 18:48	07:15 17:01	06:52 16:30	07:17 16:32
26	07:11 17:03	06:34 17:41	05:50 18:12	06:01 19:44	05:29 05:58-06:56/58 20:14	05:24 06:04-07:02/58 20:30	05:44 06:11-07:05/54 20:17	06:14 19:38	06:45 18:46	07:16 17:00	06:53 16:30	07:17 16:32
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 19:45	05:28 05:58-06:56/58 20:15	05:25 06:04-07:02/58 20:30	05:45 06:11-07:04/53 20:16	06:15 19:36	06:46 18:45	07:17 16:58	06:54 16:29	07:17 16:33
28	07:09 17:06	06:31 17:43	05:46 18:14	05:58 19:47	05:28 05:58-06:57/59 20:16	05:25 06:04-07:02/58 20:30	05:46 06:11-07:03/52 20:15	06:16 19:35	06:47 18:43	07:18 16:57	06:55 16:29	07:18 16:34
29	07:08 17:07		06:45 19:15	05:57 19:48	05:27 05:58-06:57/59 20:16	05:25 06:04-07:03/59 20:30	05:47 06:12-07:03/51 20:14	06:17 19:33	06:48 18:41	07:19 16:56	06:56 16:28	07:18 16:34
30	07:07 17:08		06:43 19:16	05:56 19:49	05:27 05:58-06:57/59 20:17	05:26 06:04-07:03/59 20:30	05:48 06:13-07:02/49 20:13	06:18 19:31	06:49 18:40	07:20 16:54	06:57 16:28	07:18 16:35
31	07:06 17:10		06:41 19:17		05:26 05:58-06:57/59 20:18		05:49 06:13-07:02/49 20:12	06:19 19:30		07:21 16:53		07:18 16:36
Ore potenziali eliofanìa	298	298	369	398	448	451	458	427	375	346	299	289
Somma minuti d'ombra	0	0	0	0	1425	1761	1760	344	0	0	0	0

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 10 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (10)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 08:30-09:19/49 16:37	07:05 07:31-07:57/26 17:11	06:30 06:49-07:07/18 17:45	06:40 19:18	05:54 06:48-07:59/71 19:50	05:26 06:55-07:49/54 20:19
2	07:19 08:30-09:19/49 16:38	07:05 07:29-07:58/29 17:12	06:28 06:47-07:06/19 17:46	06:38 19:19	05:53 06:48-07:59/71 19:51	05:25 06:56-07:49/53 20:20
3	07:19 08:31-09:19/48 16:39	07:04 07:29-08:00/31 17:13	06:27 06:46-07:06/20 17:47	06:36 19:20	05:52 06:48-07:59/71 19:52	05:25 06:56-07:49/53 20:20
4	07:19 08:31-09:19/48 16:40	07:03 07:28-08:01/33 17:15	06:25 06:44-07:05/21 17:48	06:35 19:21	05:50 06:48-07:59/71 19:53	05:25 06:57-07:49/52 20:21
5	07:19 08:32-09:20/48 16:40	07:01 07:27-08:02/35 17:16	06:24 06:43-07:05/22 17:49	06:33 19:22	05:49 06:48-07:59/71 19:54	05:24 06:58-07:49/51 20:22
6	07:19 08:33-09:20/47 16:41	07:00 07:27-08:03/36 17:17	06:22 06:41-07:03/22 17:50	06:31 19:23	05:48 06:48-07:59/71 19:55	05:24 06:58-07:47/49 20:22
7	07:19 08:34-09:20/46 16:42	06:59 07:26-08:04/38 17:18	06:21 06:39-07:01/22 17:51	06:30 19:24	05:47 06:47-07:58/71 19:56	05:24 06:59-07:47/48 20:23
8	07:19 08:34-09:19/45 16:43	06:58 07:26-08:04/38 17:20	06:19 06:38-07:00/22 17:52	06:28 19:26	05:46 06:47-07:58/71 19:57	05:23 06:59-07:47/48 20:24
9	07:19 08:35-09:20/45 16:44	06:57 07:26-08:05/39 17:21	06:17 06:37-06:59/22 17:54	06:27 19:27	05:45 06:47-07:58/71 19:58	05:23 07:00-07:47/47 20:24
10	07:18 08:36-09:20/44 16:45	06:56 07:25-08:04/39 17:22	06:16 06:37-06:59/22 17:55	06:25 07:22-07:38/16 19:28	05:43 06:47-07:58/71 19:59	05:23 07:01-07:47/46 20:25
11	07:18 08:37-09:20/43 16:46	06:55 07:25-08:05/40 17:23	06:14 06:37-06:58/21 17:56	06:23 07:16-07:42/26 19:29	05:42 06:47-07:57/70 20:00	05:23 07:02-07:47/45 20:25
12	07:18 08:37-09:19/42 16:47	06:54 07:25-08:05/40 17:24	06:13 06:37-06:57/20 17:57	06:22 07:12-07:45/33 19:30	05:41 06:47-07:57/70 20:01	05:23 07:02-07:47/45 20:26
13	07:18 08:38-09:19/41 16:48	06:52 07:26-08:05/39 17:26	06:11 06:38-06:56/18 17:58	06:20 07:10-07:48/38 19:31	05:40 06:47-07:57/70 20:02	05:23 07:03-07:47/44 20:26
14	07:17 08:40-09:20/40 16:50	06:51 07:25-08:05/40 17:27	06:09 06:39-06:55/16 17:59	06:19 07:07-07:49/42 19:32	05:39 06:47-07:56/69 20:03	05:22 07:03-07:47/44 20:27
15	07:17 08:40-09:19/39 16:51	06:50 07:26-08:05/39 17:28	06:08 06:40-06:52/12 18:00	06:17 07:05-07:51/46 19:33	05:38 06:47-07:56/69 20:04	05:22 07:04-07:47/43 20:27
16	07:17 08:42-09:19/37 16:52	06:48 07:26-08:05/39 17:29	06:06 06:44-06:49/5 18:01	06:16 07:03-07:52/49 19:34	05:37 06:48-07:55/67 20:05	05:22 07:04-07:47/43 20:27
17	07:16 08:42-09:17/35 16:53	06:47 07:26-08:03/37 17:31	06:04 18:02	06:14 07:01-07:54/53 19:35	05:36 06:49-07:56/67 20:06	05:23 07:04-07:47/43 20:28
18	07:16 08:44-09:17/33 16:54	06:46 07:27-08:03/36 17:32	06:03 18:03	06:13 06:59-07:54/55 19:36	05:35 06:49-07:55/66 20:07	05:23 07:04-07:47/43 20:28
19	07:15 08:45-09:16/31 16:55	06:44 07:28-08:03/35 17:33	06:01 18:04	06:11 06:58-07:56/58 19:37	05:35 06:49-07:55/66 20:08	05:23 07:05-07:47/42 20:28
20	07:15 08:46-09:14/28 16:56	06:43 07:28-08:01/33 17:34	06:00 18:06	06:10 06:57-07:56/59 19:38	05:34 06:49-07:54/65 20:09	05:23 07:05-07:47/42 20:29
21	07:14 08:49-09:14/25 16:58	06:42 07:29-08:00/31 17:35	05:58 18:07	06:08 06:56-07:57/61 19:39	05:33 06:49-07:54/65 20:10	05:23 07:05-07:47/42 20:29
22	07:13 08:51-09:12/21 16:59	06:40 07:30-07:58/28 17:36	05:56 18:08	06:07 06:54-07:57/63 19:40	05:32 06:50-07:54/64 20:10	05:23 07:06-07:48/42 20:29
23	07:13 08:53-09:09/16 17:00	06:39 06:58-07:03/5 17:38	05:55 18:09	06:05 06:53-07:58/65 19:41	05:31 06:51-07:53/62 20:11	05:23 07:06-07:48/42 20:29
24	07:12 08:59-09:05/6 17:01	06:37 06:56-07:06/10 17:39	05:53 18:10	06:04 06:53-07:59/66 19:42	05:31 06:51-07:52/61 20:12	05:24 07:06-07:48/42 20:30
25	07:11 17:02	06:36 06:55-07:06/11 17:40	05:51 18:11	06:02 06:51-07:58/67 19:43	05:30 06:52-07:53/61 20:13	05:24 07:05-07:48/43 20:30
26	07:11 17:04	06:34 06:54-07:07/13 17:41	05:50 18:12	06:01 06:51-07:59/68 19:44	05:29 06:52-07:52/60 20:14	05:24 07:06-07:49/43 20:30
27	07:10 17:05	06:33 06:52-07:07/15 17:42	05:48 18:13	06:00 06:51-08:00/69 19:45	05:29 06:53-07:52/59 20:15	05:25 07:06-07:49/43 20:30
28	07:09 17:06	06:31 06:50-07:07/17 17:43	05:46 18:14	05:58 06:49-07:59/70 19:46	05:28 06:53-07:51/58 20:16	05:25 07:05-07:49/44 20:30
29	07:08 17:07	07:35-07:51/16	06:45 19:15	05:57 06:49-07:59/70 19:48	05:27 06:53-07:50/57 20:16	05:25 07:06-07:50/44 20:30
30	07:07 17:08	07:33-07:54/21	06:43 19:16	05:56 06:49-08:00/71 19:49	05:27 06:54-07:50/56 20:17	05:26 07:05-07:50/45 20:30
31	07:06 17:10	07:32-07:56/24	06:41 19:17		05:26 06:55-07:50/55 20:18	
Ore potenziali eliofanìa	298	298	369	398	447	451
Somma minuti d'ombra	976	922	302	1145	2047	1365

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettoriWTG: 10 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (10 Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 07:06-07:51/45 20:30	05:50 06:58-08:08/70 20:11	06:20 07:15-07:41/26 19:28	06:50 07:17-07:36/19 18:38	06:24 06:55-07:34/39 16:52	06:58 08:19-09:02/43 16:28
2	05:27 07:05-07:51/46 20:30	05:51 06:57-08:08/71 20:10	06:21 07:20-07:35/15 19:27	06:51 07:16-07:37/21 18:36	06:25 06:55-07:34/39 16:51	06:59 08:19-09:03/44 16:28
3	05:27 07:06-07:52/46 20:29	05:52 06:57-08:08/71 20:09	06:22 19:25	06:52 07:15-07:37/22 18:35	06:26 06:56-07:34/38 16:49	07:00 08:19-09:04/45 16:27
4	05:28 07:05-07:52/47 20:29	05:53 06:57-08:09/72 20:08	06:23 19:23	06:53 07:14-07:37/23 18:33	06:27 06:56-07:33/37 16:48	07:01 08:19-09:05/46 16:27
5	05:28 07:05-07:53/48 20:29	05:54 06:57-08:09/72 20:07	06:24 19:22	06:54 07:14-07:36/22 18:32	06:28 06:57-07:33/36 16:47	07:02 08:19-09:05/46 16:27
6	05:29 07:04-07:53/49 20:29	05:55 06:57-08:09/72 20:05	06:25 19:20	06:55 07:15-07:36/21 18:30	06:30 06:57-07:32/35 16:46	07:03 08:19-09:06/47 16:27
7	05:30 07:04-07:55/51 20:28	05:56 06:57-08:09/72 20:04	06:26 19:18	06:56 07:16-07:38/22 18:28	06:31 06:59-07:32/33 16:45	07:04 08:19-09:07/48 16:27
8	05:30 07:05-07:56/51 20:28	05:57 06:56-08:08/72 20:03	06:27 19:17	06:57 07:17-07:39/22 18:27	06:32 07:00-07:31/31 16:44	07:05 08:19-09:08/49 16:27
9	05:31 07:04-07:56/52 20:28	05:58 06:56-08:08/72 20:02	06:28 19:15	06:58 07:18-07:40/22 18:25	06:33 07:00-07:29/29 16:43	07:06 08:20-09:08/48 16:27
10	05:32 07:04-07:56/52 20:27	05:59 06:56-08:08/72 20:00	06:29 19:14	06:59 07:19-07:40/21 18:23	06:34 07:02-07:28/26 16:42	07:07 08:19-09:08/49 16:27
11	05:32 07:04-07:57/53 20:27	06:00 06:56-08:08/72 19:59	06:30 19:12	07:00 07:20-07:40/20 18:22	06:35 07:04-07:27/23 16:41	07:08 08:20-09:09/49 16:27
12	05:33 07:03-07:57/54 20:27	06:01 06:57-08:08/71 19:58	06:31 19:10	07:01 07:22-07:41/19 18:20	06:37 07:05-07:25/20 16:40	07:08 08:20-09:10/50 16:27
13	05:34 07:03-07:58/55 20:26	06:02 06:57-08:07/70 19:56	06:32 19:08	07:02 07:23-07:41/18 18:19	06:38 07:08-07:23/15 16:39	07:09 08:21-09:10/49 16:27
14	05:34 07:03-07:59/56 20:26	06:03 06:57-08:07/70 19:55	06:33 19:07	07:03 07:24-07:40/16 18:17	06:39 07:12-07:21/9 16:38	07:10 08:21-09:11/50 16:27
15	05:35 07:03-08:00/57 20:25	06:04 06:57-08:07/70 19:54	06:34 19:05	07:05 07:25-07:40/15 18:16	06:40 16:37	07:11 08:21-09:11/50 16:28
16	05:36 07:02-08:00/58 20:24	06:05 06:58-08:06/68 19:52	06:35 19:03	07:06 07:26-07:39/13 18:14	06:41 16:36	07:11 08:22-09:12/50 16:28
17	05:37 07:02-08:01/59 20:24	06:06 06:58-08:06/68 19:51	06:36 19:02	07:07 07:27-07:37/10 18:13	06:43 16:36	07:12 08:22-09:13/51 16:28
18	05:37 07:01-08:02/61 20:23	06:07 06:58-08:05/67 19:50	06:37 19:00	07:08 07:28-07:36/8 18:11	06:44 08:33-08:39/6 16:35	07:13 08:22-09:13/51 16:28
19	05:38 07:01-08:02/61 20:22	06:08 06:59-08:04/65 19:48	06:38 18:58	07:09 07:30-07:34/4 18:10	06:45 08:28-08:44/16 16:34	07:13 08:23-09:14/51 16:29
20	05:39 07:00-08:02/62 20:22	06:09 06:59-08:04/65 19:47	06:39 18:57	07:10 08:01-08:31/30 18:08	06:46 08:26-08:47/21 16:33	07:14 08:23-09:14/51 16:29
21	05:40 07:00-08:03/63 20:21	06:09 07:00-08:03/63 19:45	06:40 18:55	07:11 08:00-08:31/31 18:07	06:47 08:24-08:49/25 16:33	07:15 08:24-09:15/51 16:30
22	05:41 07:00-08:04/64 20:20	06:10 07:01-08:02/61 19:44	06:41 18:53	07:12 07:58-08:32/34 18:05	06:48 08:23-08:50/27 16:32	07:15 08:24-09:15/51 16:30
23	05:42 07:00-08:04/64 20:19	06:11 07:01-08:01/60 19:42	06:42 18:52	07:13 07:57-08:33/36 18:04	06:49 08:22-08:53/31 16:31	07:16 08:25-09:16/51 16:31
24	05:43 07:00-08:05/65 20:19	06:12 07:02-07:59/57 19:41	06:43 18:50	07:14 07:56-08:33/37 18:02	06:51 08:21-08:54/33 16:31	07:16 08:25-09:16/51 16:31
25	05:43 06:59-08:06/67 20:18	06:13 07:02-07:57/55 19:39	06:44 18:48	06:16 06:56-07:34/38 17:01	06:52 08:20-08:55/35 16:30	07:16 08:25-09:16/51 16:32
26	05:44 06:59-08:06/67 20:17	06:14 07:03-07:56/53 19:38	06:45 18:47	06:17 06:56-07:34/38 17:00	06:53 08:20-08:57/37 16:30	07:17 08:26-09:17/51 16:32
27	05:45 06:58-08:06/68 20:16	06:15 07:05-07:54/49 19:36	06:46 18:45	06:18 06:55-07:34/39 16:58	06:54 08:19-08:58/39 16:29	07:17 08:27-09:17/50 16:33
28	05:46 06:58-08:06/68 20:15	06:16 07:06-07:52/46 19:35	06:47 07:22-07:32/10 18:43	06:19 06:55-07:34/39 16:57	06:55 08:19-08:59/40 16:29	07:18 08:27-09:17/50 16:34
29	05:47 06:58-08:07/69 20:14	06:17 07:08-07:50/42 19:33	06:48 07:20-07:34/14 18:41	06:20 06:54-07:34/40 16:56	06:56 08:19-09:00/41 16:29	07:18 08:28-09:18/50 16:34
30	05:48 06:58-08:07/69 20:13	06:18 07:10-07:47/37 19:31	06:49 07:18-07:36/18 18:40	06:21 06:55-07:35/40 16:54	06:57 08:19-09:01/42 16:28	07:18 08:29-09:18/49 16:35
31	05:49 06:58-08:08/70 20:12	06:19 07:12-07:44/32 19:30		06:22 06:55-07:35/40 16:53		07:18 08:29-09:19/50 16:36
Ore potenziali eliofanìa	458	427	375	346	299	289
Somma minuti d'ombra	1797	1957	83	859	803	1522

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettori WTG: 11 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (11)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 16:37	07:05 17:11	06:30 17:45	06:40 19:18	05:54 19:50	06:14-07:31/77 20:19
2	07:19 16:38	07:05 17:12	06:28 17:46	06:38 19:19	05:53 19:51	06:14-07:32/78 20:20
3	07:19 16:39	07:04 17:13	06:27 17:47	06:36 19:20	05:52 19:52	06:14-07:32/78 20:20
4	07:19 16:40	07:03 17:15	06:25 17:48	06:35 19:21	05:50 19:53	06:14-07:32/78 20:21
5	07:19 16:40	07:02 17:16	06:24 17:49	06:33 19:22	06:52-06:54/2 19:54	06:14-07:32/78 20:22
6	07:19 16:41	07:00 17:17	06:22 17:50	06:31 19:23	06:50-06:55/5 19:55	06:14-07:32/78 20:22
7	07:19 16:42	06:59 17:18	06:21 17:51	06:30 19:24	06:48-06:56/8 19:56	06:13-07:31/78 20:23
8	07:19 16:43	06:58 17:20	06:19 17:52	06:28 19:26	06:47-06:57/10 19:57	06:13-07:31/78 20:24
9	07:19 16:44	06:57 17:21	06:17 17:54	06:27 19:27	06:45-06:57/12 19:58	06:13-07:31/78 20:24
10	07:18 16:45	06:56 17:22	06:16 17:55	06:25 19:28	06:44-06:58/14 19:59	06:14-07:30/76 20:25
11	07:18 16:46	06:55 17:23	06:14 17:56	06:23 19:29	06:42-06:57/15 20:00	06:14-07:30/76 20:25
12	07:18 16:47	06:54 17:24	06:13 17:57	06:22 19:30	06:40-06:56/16 20:01	06:14-07:30/76 20:26
13	07:18 16:48	06:52 17:26	06:11 17:58	06:20 19:31	06:39-06:56/17 19:31	06:15-07:30/75 20:26
14	07:17 16:50	06:51 17:27	06:09 17:59	06:19 19:32	06:37-06:55/18 20:03	06:15-07:29/74 20:27
15	07:17 16:51	06:50 17:28	06:08 18:00	06:17 19:33	06:36-07:18/42 20:04	06:16-07:29/73 20:27
16	07:17 16:52	06:48 17:29	06:06 18:01	06:16 19:34	06:34-07:20/46 20:05	06:16-07:28/72 20:27
17	07:16 16:53	06:47 17:31	06:04 18:02	06:14 19:35	06:33-07:23/50 20:06	06:18-07:29/71 20:28
18	07:16 16:54	06:46 17:32	06:03 18:03	06:13 19:36	06:31-06:43/12 20:07	06:18-07:28/70 20:28
19	07:15 16:55	06:44 17:33	06:01 18:04	06:11 19:37	06:30-07:26/56 20:08	06:19-07:27/68 20:28
20	07:15 16:56	06:43 17:34	06:00 18:06	06:10 19:38	06:28-07:26/58 20:09	06:20-07:27/67 20:29
21	07:14 16:58	06:42 17:35	05:58 18:07	06:08 19:39	06:27-07:28/61 20:10	06:21-07:26/65 20:29
22	07:13 16:59	06:40 17:36	05:56 18:08	06:07 19:40	06:26-07:28/62 20:11	06:23-07:26/63 20:29
23	07:13 17:00	06:39 17:38	05:55 18:09	06:05 19:41	06:24-07:29/65 20:12	06:24-07:25/61 20:29
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 19:42	06:23-07:30/67 20:13	06:26-07:24/58 20:30
25	07:11 17:02	06:36 17:40	05:51 18:11	06:02 19:43	06:21-07:30/69 20:14	06:30-06:36/6 20:30
26	07:11 17:04	06:34 17:41	05:50 18:12	06:01 19:44	06:20-07:31/71 20:15	06:37-07:25/48 20:30
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 19:45	06:19-07:31/72 20:16	06:38-07:23/45 20:30
28	07:09 17:06	06:31 17:43	05:46 18:14	05:58 19:46	06:17-07:31/74 20:17	06:39-07:23/44 20:30
29	07:08 17:07		06:45 19:15	05:57 19:48	06:16-07:32/76 20:18	06:39-07:22/43 20:30
30	07:07 17:08		06:43 19:16	05:56 19:49	06:16-07:32/76 20:19	06:41-07:22/41 20:30
31	07:06 17:10		06:41 19:17		06:42-07:22/40 20:20	
Ore potenziali eliofanía	298	298	369	398	448	451
Somma minuti d'ombra	0	184	0	1129	2059	730

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettoriWTG: 11 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (11)
Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:
Il sole splende tutto il di, dall'alba al tramonto
Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
La turbina è costantemente operativa

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 06:55-07:20/25 20:30	05:50 06:25-07:41/76 20:11	06:20 06:41-06:56/15 19:28	06:50 18:38	06:24 16:52	06:58 16:28
2	05:27 06:54-07:20/26 20:30	05:51 06:24-07:41/77 20:10	06:21 06:42-06:56/14 19:27	06:51 18:36	06:25 16:51	06:59 16:28
3	05:27 06:54-07:21/27 20:29	05:52 06:24-07:41/77 20:09	06:22 06:43-06:55/12 19:25	06:52 18:35	06:26 16:49	07:00 16:27
4	05:28 06:53-07:22/29 20:29	05:53 06:24-07:41/77 20:08	06:23 06:44-06:54/10 19:23	06:53 18:33	06:27 16:48	07:01 16:27
5	05:28 06:53-07:23/30 20:29	05:54 06:24-07:42/78 20:07	06:24 06:45-06:53/8 19:22	06:54 18:32	06:28 16:47	07:02 16:27
6	05:29 06:52-07:23/31 20:29	05:55 06:24-07:42/78 20:05	06:25 06:46-06:52/6 19:20	06:55 18:30	06:30 16:46	07:03 16:27
7	05:30 06:52-07:25/33 20:28	05:56 06:23-07:42/79 20:04	06:26 06:47-06:49/2 19:18	06:56 18:28	06:31 16:45	07:04 16:27
8	05:30 06:52-07:26/34 20:28	05:57 06:22-07:41/79 20:03	06:27 19:17	06:57 18:27	06:32 16:44	07:05 16:27
9	05:31 06:51-07:26/35 20:28	05:58 06:22-07:41/79 20:02	06:28 19:15	06:58 18:25	06:33 16:43	07:06 16:27
10	05:31 06:51-07:27/36 20:27	05:59 06:23-07:40/77 20:00	06:29 19:14	06:59 18:23	06:34 16:42	07:07 16:27
11	05:32 06:51-07:28/37 20:27	06:00 06:23-07:40/77 19:59	06:30 19:12	07:00 18:22	06:35 16:41	07:08 16:27
12	05:33 06:49-07:29/40 20:27	06:01 06:23-07:40/77 19:58	06:31 19:10	07:01 18:20	06:37 16:40	07:08 16:27
13	05:34 06:49-07:30/41 20:26	06:02 06:23-07:40/77 19:56	06:32 19:08	07:02 18:19	06:38 16:39	07:09 16:27
14	05:34 06:49-07:31/42 20:26	06:03 06:24-07:39/75 19:55	06:33 19:07	07:03 07:34-07:43/9 18:17	06:39 16:38	07:10 16:27
15	05:35 06:49-07:32/43 20:25	06:04 06:25-07:39/74 19:54	06:34 19:05	07:05 07:32-07:45/13 18:16	06:40 16:37	07:11 16:27
16	05:36 06:47-07:32/45 20:24	06:05 06:26-07:38/72 19:52	06:35 19:03	07:06 07:30-07:46/16 18:14	06:41 16:36	07:11 16:28
17	05:37 06:47-07:33/46 20:24	06:06 06:27-07:37/70 19:51	06:36 19:02	07:07 07:28-07:47/19 18:13	06:43 16:36	07:12 16:28
18	05:37 06:47-07:34/47 20:23	06:07 06:28-07:37/69 19:50	06:37 19:00	07:08 07:28-07:47/19 18:11	06:44 16:35	07:13 16:28
19	05:38 06:38-07:35/57 20:22	06:08 06:29-07:36/67 19:48	06:38 18:58	07:09 07:29-07:47/18 18:10	06:45 16:34	07:13 16:29
20	05:39 06:35-07:34/59 20:22	06:08 06:30-07:35/65 19:47	06:39 18:57	07:10 07:31-07:48/17 18:08	06:46 16:33	07:14 16:29
21	05:40 06:33-07:35/62 20:21	06:09 06:31-07:34/63 19:45	06:40 18:55	07:11 07:32-07:48/16 18:07	06:47 16:33	07:15 16:30
22	05:41 06:32-07:36/64 20:20	06:10 06:32-07:32/60 19:44	06:41 18:53	07:12 07:33-07:48/15 18:05	06:48 16:32	07:15 16:30
23	05:42 06:31-07:37/66 20:19	06:11 06:33-07:31/58 19:42	06:42 18:52	07:13 07:34-07:47/13 18:04	06:49 16:31	07:16 16:31
24	05:43 06:30-07:38/68 20:19	06:12 06:34-06:47/13 19:41	06:43 18:50	07:14 07:35-07:46/11 18:02	06:51 16:31	07:16 16:31
25	05:43 06:29-07:38/69 20:18	06:13 06:35-06:46/11 19:39	06:44 18:48	06:16 06:37-06:46/9 17:01	06:52 16:30	07:16 16:32
26	05:44 06:29-07:39/70 20:17	06:14 06:35-07:24/49 19:38	06:45 18:47	06:17 06:38-06:44/6 17:00	06:53 16:30	07:17 16:32
27	05:45 06:27-07:38/71 20:16	06:15 06:36-07:22/46 19:36	06:46 18:45	06:18 06:39-06:42/3 16:58	06:54 16:29	07:17 16:33
28	05:46 06:26-07:39/73 20:15	06:16 06:37-07:19/42 19:35	06:47 18:43	06:19 16:57	06:55 16:29	07:18 16:34
29	05:47 06:26-07:39/73 20:14	06:17 06:38-06:56/18 19:33	06:48 18:41	06:20 16:56	06:56 16:29	07:18 16:34
30	05:48 06:25-07:40/75 20:13	06:18 06:39-06:56/17 19:31	06:49 18:40	06:21 16:54	06:57 16:28	07:18 16:35
31	05:49 06:25-07:40/75 20:12	06:19 06:40-06:56/16 19:30		06:22 16:53		07:18 16:36
Ore potenziali eliofanìa	458	427	375	346	299	289
Somma minuti d'ombra	1529	1987	67	184	0	0

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: Flicker Altamura su recettoriWTG: 12 - Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (12 Assunzioni sui calcoli d'ombra

I tempi calcolati sono relativi al "caso peggiore", sulla base delle seguenti assunzioni:

- Il sole splende tutto il di, dall'alba al tramonto
- Il piano del rotore è sempre perpendicolare alla linea tra WTG e sole
- La turbina è costantemente operativa

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:19 08:06-08:17/11 16:37	07:05 17:11	06:30 17:45	06:40 19:18	05:54 19:50	05:26 20:19	05:26 05:49-05:56/7 20:30	05:50 20:11	06:20 19:28	06:50 18:38	06:24 16:52	06:58 16:28
2	07:19 08:08-08:16/8 16:38	07:05 17:12	06:28 17:46	06:38 19:19	05:53 19:51	05:25 20:20	05:27 05:49-05:55/6 20:30	05:51 20:10	06:21 19:27	06:51 18:36	06:25 16:51	06:59 16:28
3	07:19 08:10-08:14/4 16:39	07:04 17:13	06:27 17:47	06:36 19:20	05:52 19:52	05:25 20:20	05:27 05:50-05:56/6 20:29	05:52 20:09	06:22 19:25	06:52 18:35	06:26 16:49	07:00 16:27
4	07:19 16:39	07:03 17:15	06:25 17:48	06:35 19:21	05:50 19:53	05:24 05:46-05:47/1 20:21	05:28 05:50-05:55/5 20:29	05:53 20:08	06:23 19:23	06:53 18:33	06:27 16:48	07:01 16:27
5	07:19 16:40	07:01 17:16	06:24 17:49	06:33 19:22	05:49 19:54	05:24 05:46-05:48/2 20:22	05:28 05:51-05:55/4 20:29	05:54 20:06	06:24 19:22	06:54 18:32	06:28 16:47	07:02 16:27
6	07:19 16:41	07:00 17:17	06:22 17:50	06:31 19:23	05:48 19:55	05:24 05:45-05:48/3 20:22	05:29 05:51-05:55/4 20:29	05:55 20:05	06:25 19:20	06:55 18:30	06:30 16:46	07:03 16:27
7	07:19 16:42	06:59 17:18	06:21 17:51	06:30 19:24	05:47 19:56	05:23 05:45-05:49/4 20:23	05:30 05:52-05:55/3 20:28	05:56 20:04	06:26 19:18	06:56 18:28	06:31 16:45	07:04 16:27
8	07:19 16:43	06:58 17:19	06:19 17:52	06:28 19:26	05:46 19:57	05:23 05:45-05:50/5 20:24	05:30 05:53-05:55/2 20:28	05:57 20:03	06:27 19:17	06:57 18:27	06:32 16:44	07:05 16:27
9	07:19 16:44	06:57 17:21	06:17 17:54	06:27 19:27	05:44 19:58	05:23 05:45-05:51/6 20:24	05:31 20:28	05:58 20:02	06:28 19:15	06:58 18:25	06:33 16:43	07:06 08:00-08:03/3 16:27
10	07:18 16:45	06:56 17:22	06:16 17:55	06:25 19:28	05:43 19:59	05:23 05:45-05:51/6 20:25	05:31 20:27	05:59 20:00	06:29 19:13	06:59 18:23	06:34 16:42	07:07 07:57-08:05/8 16:27
11	07:18 16:46	06:55 17:23	06:14 17:56	06:23 19:29	05:42 20:00	05:23 05:45-05:52/7 20:25	05:32 20:27	06:00 19:59	06:30 19:12	07:00 18:22	06:35 16:41	07:08 07:57-08:07/10 16:27
12	07:18 16:47	06:54 17:24	06:13 17:57	06:22 19:30	05:41 20:01	05:23 05:45-05:52/7 20:26	05:33 20:27	06:01 19:58	06:31 19:10	06:37 18:20	06:37 16:40	07:08 07:56-08:08/12 16:27
13	07:18 16:48	06:52 17:26	06:11 17:58	06:20 19:31	05:40 20:02	05:22 05:45-05:53/8 20:26	05:34 20:26	06:02 19:56	06:32 19:08	07:02 18:19	06:38 16:39	07:09 07:56-08:09/13 16:27
14	07:17 16:49	06:51 17:27	06:09 17:59	06:19 19:32	05:39 20:03	05:22 05:45-05:53/8 20:27	05:34 20:26	06:03 19:55	06:33 19:07	07:03 18:17	06:39 16:38	07:10 07:56-08:11/15 16:27
15	07:17 16:51	06:50 17:28	06:08 18:00	06:17 19:33	05:38 20:04	05:22 05:45-05:53/8 20:27	05:35 20:25	06:04 19:54	06:34 19:05	07:04 18:16	06:40 16:37	07:11 07:56-08:11/15 16:27
16	07:17 16:52	06:48 17:29	06:06 18:01	06:16 19:34	05:37 20:05	05:22 05:45-05:54/9 20:27	05:36 20:24	06:05 19:52	06:35 19:03	07:06 18:14	06:41 16:36	07:11 07:56-08:12/16 16:28
17	07:16 16:53	06:47 17:30	06:04 18:02	06:14 19:35	05:36 20:06	05:22 05:45-05:54/9 20:28	05:37 20:24	06:05 19:51	06:36 19:02	07:07 18:13	06:42 16:35	07:12 07:57-08:13/16 16:28
18	07:16 16:54	06:46 17:32	06:03 18:03	06:13 19:36	05:35 20:07	05:23 05:45-05:54/9 20:28	05:37 20:23	06:06 19:50	06:37 19:00	07:08 18:11	06:44 16:35	07:13 07:56-08:13/17 16:28
19	07:15 16:55	06:44 17:33	06:01 18:04	06:11 19:37	05:34 20:08	05:23 05:45-05:54/9 20:28	05:38 20:22	06:07 19:48	06:38 18:58	07:09 18:10	06:45 16:34	07:13 07:57-08:14/17 16:29
20	07:15 16:56	06:43 17:34	05:59 18:05	06:10 19:38	05:34 20:09	05:23 05:45-05:54/9 20:29	05:39 20:22	06:08 19:47	06:39 18:57	07:10 18:08	06:46 16:33	07:14 07:57-08:14/17 16:29
21	07:14 16:57	06:42 17:35	05:58 18:07	06:08 19:39	05:33 20:10	05:23 05:45-05:54/9 20:29	05:40 20:21	06:09 19:45	06:40 18:55	07:11 18:07	06:47 16:33	07:15 07:58-08:15/17 16:30
22	07:13 16:59	06:40 17:36	05:56 18:08	06:07 19:40	05:32 20:10	05:23 05:46-05:55/9 20:29	05:41 20:20	06:10 19:44	06:41 18:53	07:12 18:05	06:48 16:32	07:15 07:58-08:15/17 16:30
23	07:13 17:00	06:39 17:38	05:55 18:09	06:05 19:41	05:31 20:11	05:23 05:46-05:55/9 20:29	05:42 20:19	06:11 19:42	06:42 18:52	07:13 18:04	06:49 16:31	07:16 07:59-08:16/17 16:31
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 19:42	05:30 20:12	05:24 05:46-05:55/9 20:30	05:43 20:19	06:12 19:41	06:43 18:50	07:14 18:02	06:51 16:31	07:16 07:59-08:16/17 16:31
25	07:11 17:02	06:36 18:11	05:51 19:43	06:02 19:43	05:30 20:13	05:24 05:46-05:55/9 20:30	05:43 20:18	06:13 19:39	06:44 18:48	07:15 17:01	06:52 16:30	07:16 08:00-08:17/17 16:32
26	07:11 17:03	06:34 18:12	05:50 19:44	06:01 19:44	05:29 20:14	05:24 05:47-05:56/9 20:30	05:44 20:17	06:14 19:38	06:45 18:46	07:16 17:00	06:53 16:30	07:17 08:01-08:17/16 16:32
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 19:45	05:28 20:15	05:25 05:47-05:56/9 20:30	05:45 20:16	06:15 19:36	06:46 18:45	07:17 16:58	06:54 16:29	07:17 08:01-08:17/16 16:33
28	07:09 17:06	06:31 17:43	05:46 18:14	05:58 19:46	05:28 20:16	05:25 05:47-05:55/8 20:30	05:46 20:15	06:16 19:35	06:47 18:43	07:18 16:57	06:55 16:29	07:18 08:02-08:17/15 16:34
29	07:08 17:07		06:45 19:15	05:57 19:48	05:27 20:16	05:25 05:48-05:56/8 20:30	05:47 20:14	06:17 19:33	06:48 18:41	07:19 16:56	06:56 16:28	07:18 08:03-08:18/15 16:34
30	07:07 17:08		06:43 19:16	05:56 19:49	05:27 20:17	05:26 05:48-05:55/7 20:30	05:48 20:13	06:18 19:31	06:49 18:40	07:20 16:54	06:57 16:28	07:18 08:04-08:17/13 16:35
31	07:06 17:10		06:41 19:17		05:26 20:18		05:49 20:12	06:19 19:30	06:22 16:53	07:18 16:36	06:58 16:29	07:18 08:05-08:17/12 16:36
Ore potenziali eliofanía	298	298	369	398	448	451	458	427	375	346	299	331
Somma minuti d'ombra	23	0	0	0	0	196	37	0	0	0	0	0

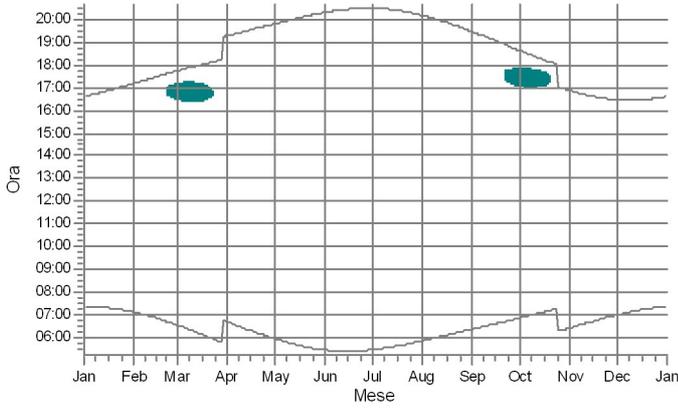
Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

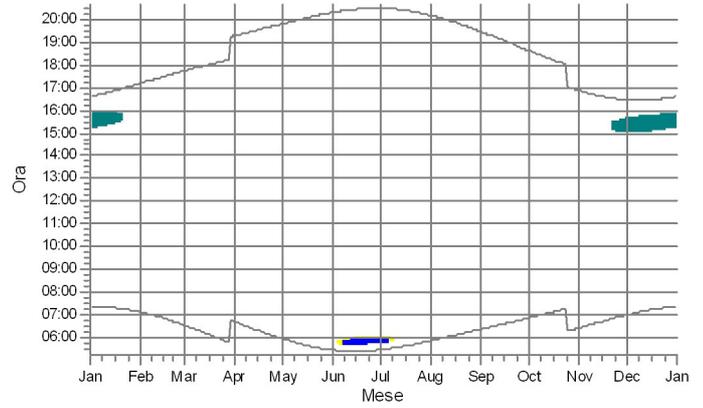
SHADOW - Calendario per WTG, grafico

Calcolo: Flicker Altamura su recettori

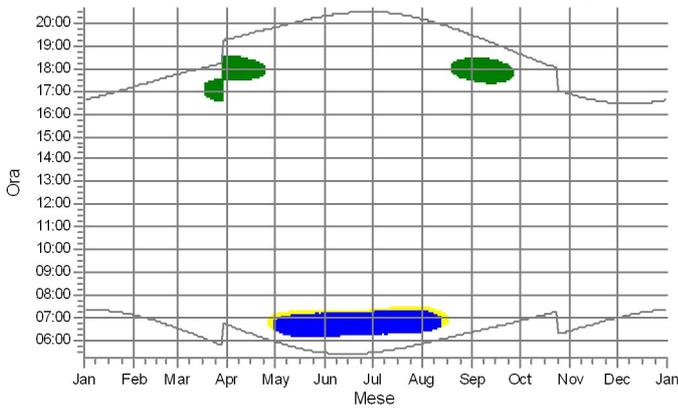
01: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



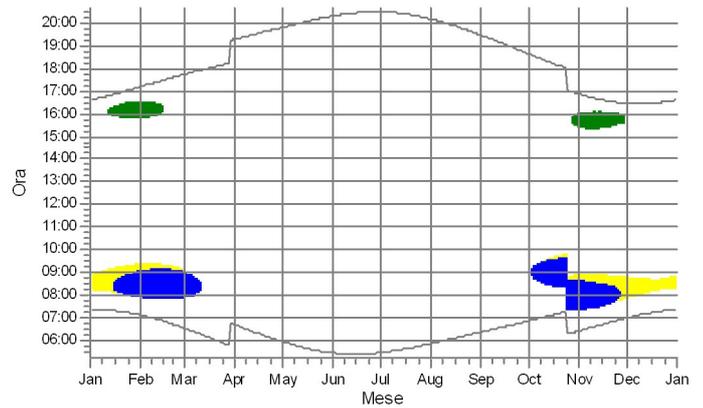
02: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



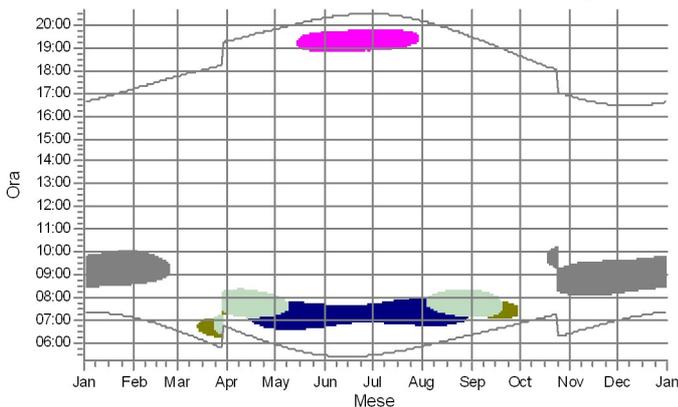
03: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



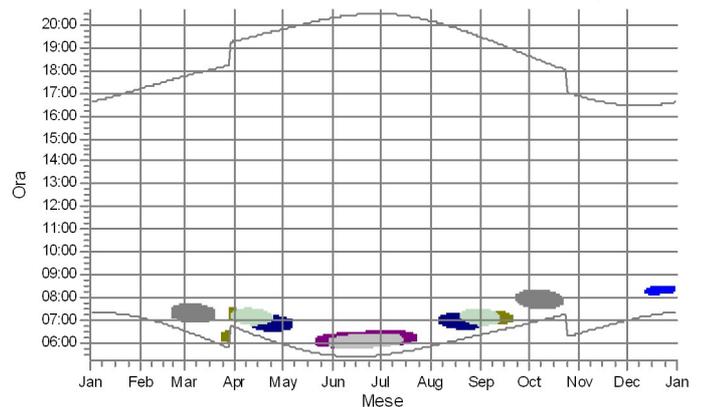
04: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



05: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



06: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



Recettori d'ombra

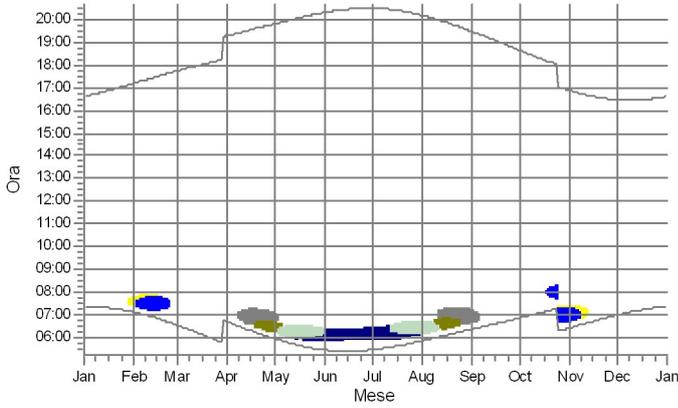
- R01: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (1)
- R02: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (2)
- R03: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (3)
- R04: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (4)
- R05: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (5)
- R06: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (8)

- R07: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (10)
- R10: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (11)
- R11: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (12)
- R12: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (13)
- R14: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (9)

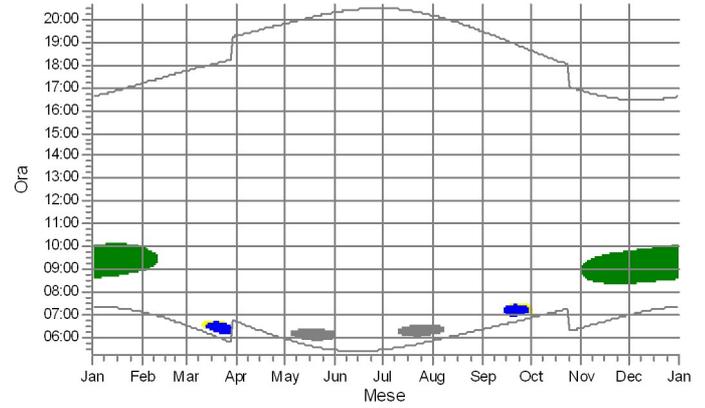
SHADOW - Calendario per WTG, grafico

Calcolo: Flicker Altamura su recettori

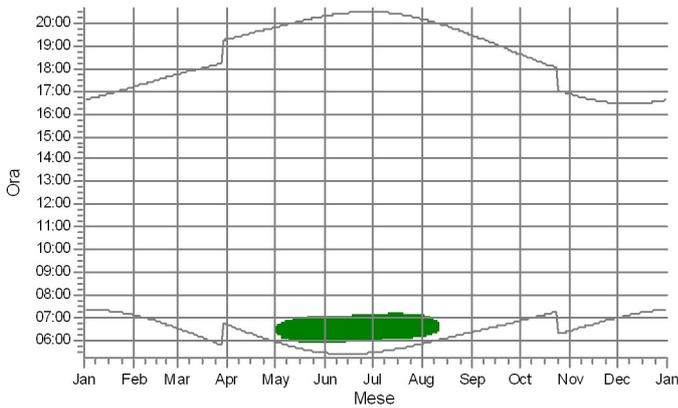
07: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



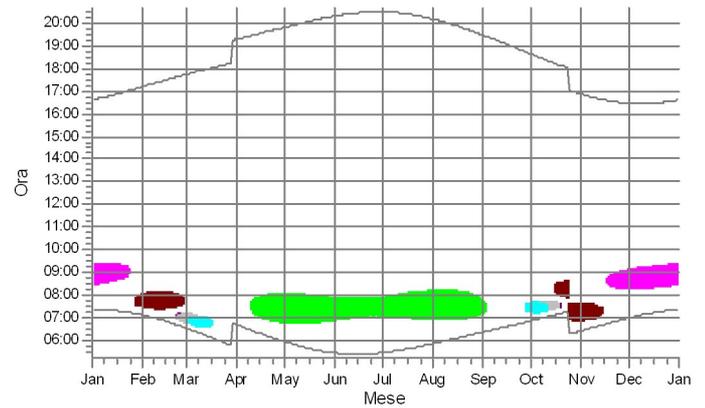
08: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



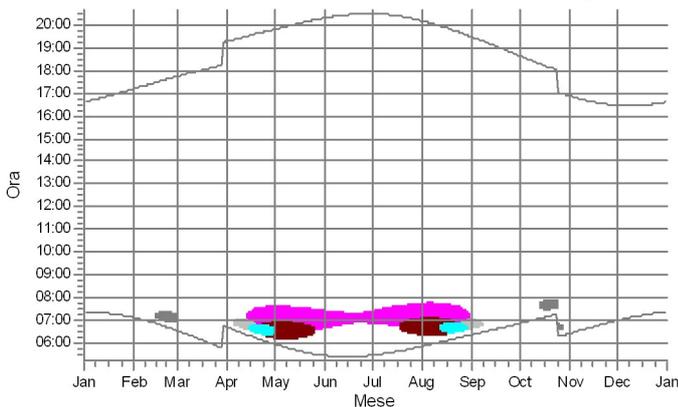
09: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



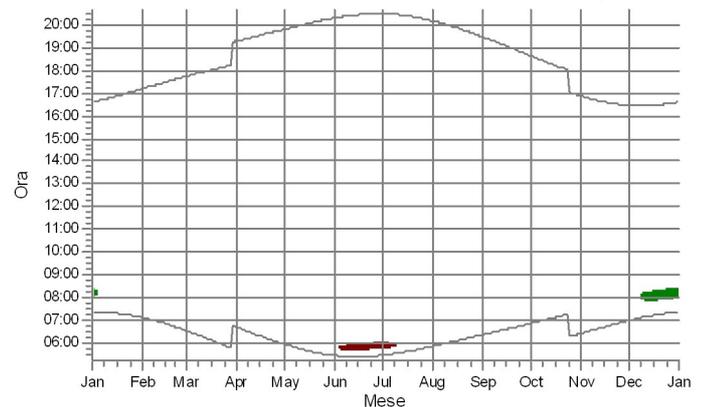
10: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



11: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



12: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0

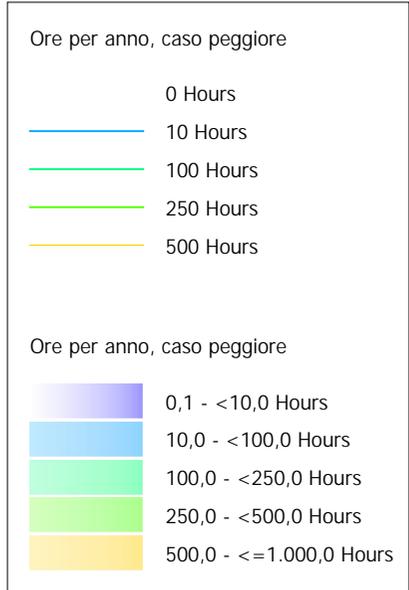
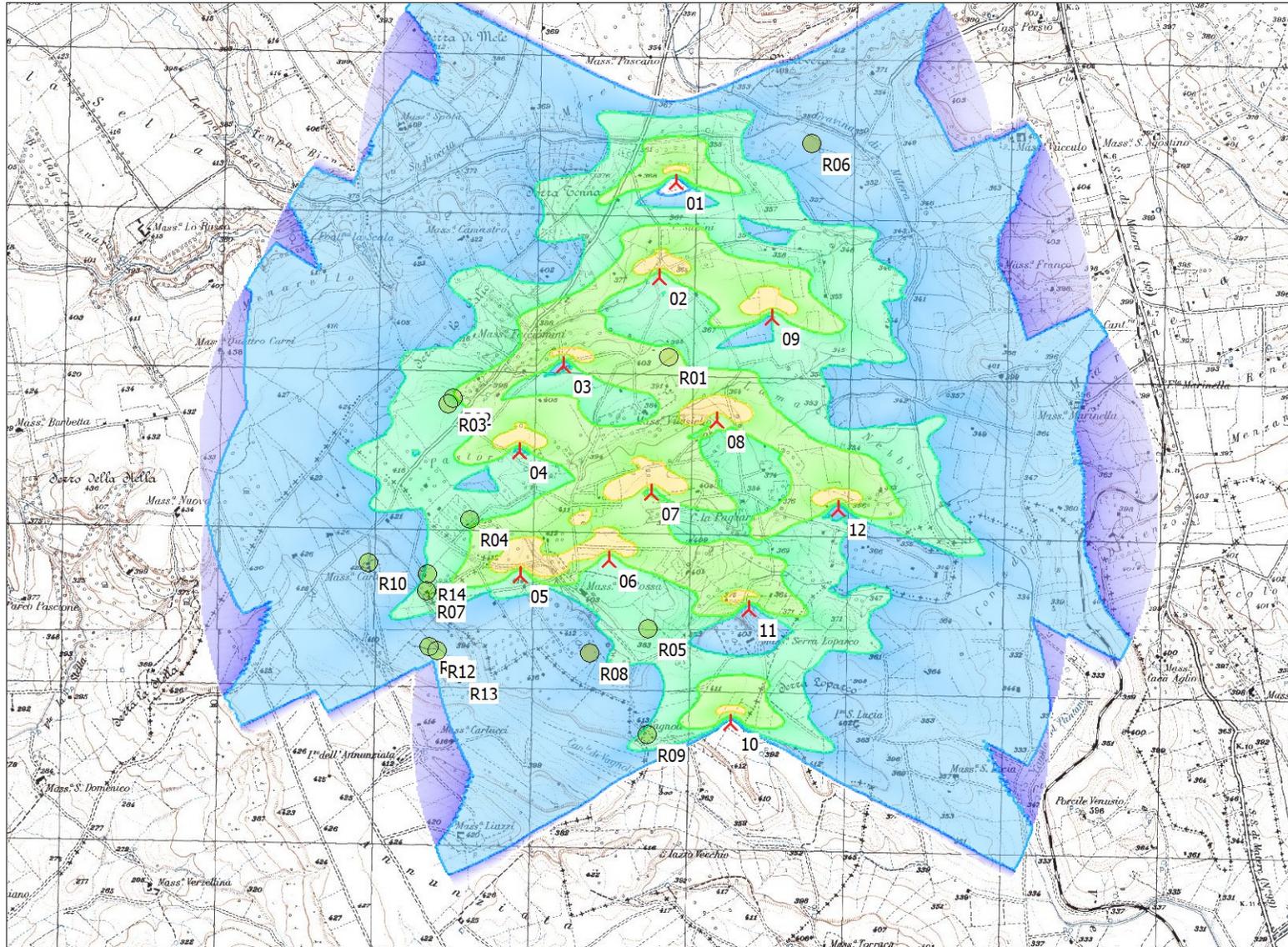


Recettori d'ombra

- R01: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (1)
- R02: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (2)
- R03: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (3)
- R04: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (4)
- R05: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (5)
- R07: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (10)
- R08: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (6)

- R09: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (7)
- R10: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (11)
- R11: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (12)
- R12: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (13)
- R13: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (14)
- R14: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (9)

Progetto:
Altamura



SHADOW -
Mappa
Calcolo:
Flicker Altamura su recettori

Utente autorizzato:
Studio Tecnico BFP s.r.l.
Via Napoli 363/1
IT-70123 Bari
+39 080 5046361
Antonio Crisafulli / crisafulli@studiobfp.com
Redatto il:
04/02/2021 13:02/3.4.415

0 500 1000 1500 2000 m

Mappa: IGM maps 1:25000 , Scala di stampa 1:40.000, Centro mappa UTM (north)-WGS84 Zone: 33 Est: 628.630 Nord: 4.513.090

▲ Nuova WTG

● Recettore d'ombra

Fonte altimetria:: Height Contours: CONTOURLINE_ONLINEDATA_0.wpo (1)

SHADOW - Risultato principale

Calcolo: flickering real case

Assunzioni sui calcoli d'ombra

Distanza massima di influenza
Calcola solo quando oltre il 20% del sole è coperto dalla pala
Consultare la tabella delle WTG

Altezza minima del sole sull'orizzonte 3 °
Passo giornaliero del calcolo 1 giorni
Passo temporale del calcolo 1 minuti

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Le ore di operatività sono calcolate in base della distribuzione del vento:
Default Meteo data description (8)

Tempo di operatività
N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

Per evitare di considerare l' ombreggiamento da WTG in realtà non
direttamente visibili, prima del calcolo dell' ombra viene eseguito un calcolo
ZVI. Quest' ultimo si basa sulle seguenti assunzioni.

Curve altimetriche usate: Height Contours: CONTOURLINE_ONLINEDATA_0.w

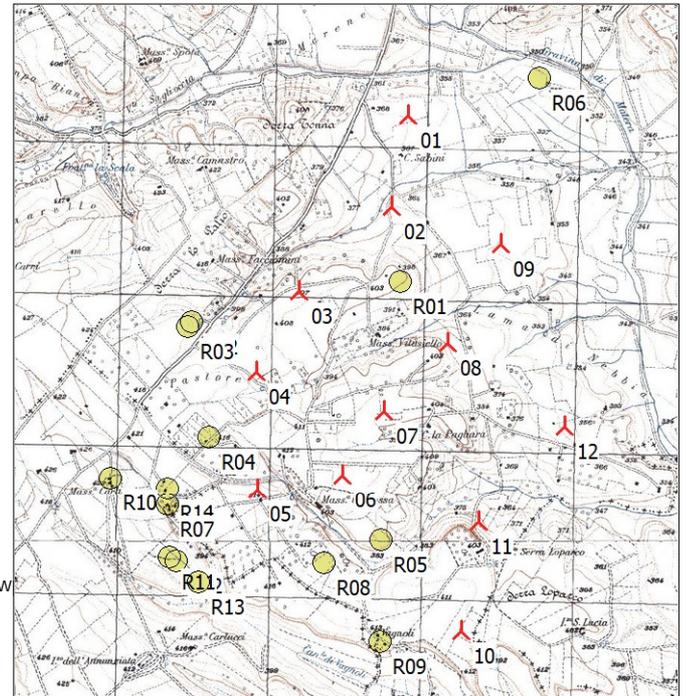
Ostacoli usati:

Altezza dell'osservatore, nelle mappe:: 1,6 m

Risoluzione del grigliato: 1,0 m

Tutte le coordinate sono in
UTM (north)-WGS84 Zona: 33

WTG



Scala 1:50.000
Nuova WTG Recettore d'ombra

	Easting	Northing	Z	Dati/Descrizione	Tipo di WTG		Tipo generatore	Potenza nominale	Diametro rotore	Altezza mozzo	Dati di ombra	
					Valida	Produttore					Distanza di calcolo	giri/min
			[m]				[kW]	[m]	[m]	[m]	[giri/min]	
01	628.799	4.515.016	361,2	Siemens Gamesa S... Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8	
02	628.703	4.514.413	370,0	Siemens Gamesa S... Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8	
03	628.104	4.513.845	406,5	Siemens Gamesa S... Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8	
04	627.830	4.513.302	410,0	Siemens Gamesa S... Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8	
05	627.848	4.512.523	410,0	Siemens Gamesa S... Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8	
06	628.412	4.512.627	410,0	Siemens Gamesa S... Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8	
07	628.675	4.513.060	401,7	Siemens Gamesa S... Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8	
08	629.086	4.513.516	380,0	Siemens Gamesa S... Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8	
09	629.427	4.514.174	360,0	Siemens Gamesa S... Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8	
10	629.208	4.511.609	400,0	Siemens Gamesa S... Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8	
11	629.311	4.512.334	382,6	Siemens Gamesa S... Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8	
12	629.868	4.512.976	363,1	Siemens Gamesa S... Si	Siemens Gamesa	SG 6.0-170-6.200	6.200	170,0	165,0	2.037	8,8	

Recettore d'ombra-Immissione dati

n.	Easting	Northing	Z	Ampiezza	Height	Altezza s.l.t.	Inclinazione della finestra	Modo orientazione	Altezza osservatore
			[m]	[m]	[m]	[m]	[°]		[m]
R01	628.771	4.513.915	396,2	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R02	627.401	4.513.628	410,6	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R03	627.372	4.513.593	411,6	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R04	627.524	4.512.870	413,9	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R05	628.671	4.512.200	397,1	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R06	629.659	4.515.281	350,0	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R07	627.257	4.512.412	410,3	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R08	628.299	4.512.040	408,8	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R09	628.679	4.511.531	400,0	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R10	626.882	4.512.584	419,0	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R11	627.279	4.512.062	410,0	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R12	627.326	4.512.038	410,0	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R13	627.475	4.511.900	403,8	2,0	2,0	0,0	90,0	"Modalità serra"	2,0
R14	627.260	4.512.523	412,3	2,0	2,0	0,0	90,0	"Modalità serra"	2,0

SHADOW - Risultato principale

Calcolo: flikering real case

Risultati dei calcoli

Recettore d'ombra

Ombra, valore atteso

n. Ore d'ombra per anno
[ore/anno]

R01	79:43
R02	68:23
R03	58:10
R04	63:25
R05	58:30
R06	11:20
R07	42:32
R08	18:42
R09	38:27
R10	11:27
R11	9:27
R12	7:50
R13	3:50
R14	30:39

Ombreggiamento totale sui recettori d'ombra causato da ciascuna WTG

n.	Nome	Caso peggiore [ore/anno]	Atteso [ore/anno]
01	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (1)	31:10	6:19
02	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (2)	33:15	6:20
03	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (3)	154:47	39:57
04	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (4)	182:55	49:03
05	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (5)	392:33	113:04
06	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (6)	107:23	28:21
07	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (7)	93:30	24:34
08	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (8)	138:35	38:33
09	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (9)	88:10	23:17
10	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (10)	229:38	62:57
11	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (11)	131:09	34:05
12	Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0 m) (12)	9:47	2:34

I tempi totali possono differire tra le tabelle per turbina e quelle per recettore, in quanto ciascuna WTG può dare ombreggiamento su 2 o più recettori contemporaneamente, e/o un recettore può subire ombreggiamento da 2 o più WTGs contemporaneamente.

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R01 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (1)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio		Febbraio		Marzo		Aprile		Maggio		Giugno	
1	07:19	08:06 (12)	07:06	09:00 (08)	06:30		06:40	17:33 (03)	05:54		05:26	05:58 (09)
	16:37	92 09:59 (08)	17:11	91 16:30 (04)	17:45		19:18	56 18:29 (03)	19:50		20:19	60 06:58 (09)
2	07:19	08:08 (12)	07:05	09:00 (08)	06:28		06:38	17:32 (03)	05:53		06:24 (09)	05:25 05:59 (09)
	16:38	89 10:00 (08)	17:12	89 16:29 (04)	17:46		19:19	56 18:28 (03)	19:51	7	06:31 (09)	20:20 59 06:58 (09)
3	07:19	08:10 (12)	07:04	09:02 (08)	06:27		06:36	17:33 (03)	05:52		06:19 (09)	05:25 05:58 (09)
	16:39	85 10:00 (08)	17:13	85 16:29 (04)	17:47		19:20	56 18:29 (03)	19:52	18	06:37 (09)	20:20 60 06:58 (09)
4	07:19	08:40 (08)	07:03	09:04 (08)	06:25		06:35	17:32 (03)	05:50		06:16 (09)	05:24 05:59 (09)
	16:39	80 10:00 (08)	17:15	80 16:29 (04)	17:48		19:21	56 18:28 (03)	19:53	24	06:40 (09)	20:21 59 06:58 (09)
5	07:19	08:40 (08)	07:02	09:06 (08)	06:24		06:33	17:31 (03)	05:49		06:13 (09)	05:24 05:59 (09)
	16:40	81 10:01 (08)	17:16	76 16:29 (04)	17:49		19:22	57 18:28 (03)	19:54	29	06:42 (09)	20:22 59 06:58 (09)
6	07:19	08:41 (08)	07:00	09:08 (08)	06:22		06:31	17:32 (03)	05:48		06:10 (09)	05:24 05:59 (09)
	16:41	80 10:01 (08)	17:17	71 16:29 (04)	17:50		19:23	56 18:28 (03)	19:55	33	06:43 (09)	20:22 59 06:58 (09)
7	07:19	08:42 (08)	06:59	09:11 (08)	06:21		06:30	17:31 (03)	05:47		06:09 (09)	05:24 05:59 (09)
	16:42	80 10:02 (08)	17:18	63 16:28 (04)	17:51		19:25	56 18:27 (03)	19:56	36	06:45 (09)	20:23 59 06:58 (09)
8	07:19	08:42 (08)	06:58	09:14 (08)	06:19		06:28	17:32 (03)	05:46		06:07 (09)	05:23 06:00 (09)
	16:43	80 10:02 (08)	17:20	56 16:28 (04)	17:52		19:26	55 18:27 (03)	19:57	39	06:46 (09)	20:24 59 06:59 (09)
9	07:19	08:42 (08)	06:57	09:19 (08)	06:18		06:27	17:32 (03)	05:45		06:06 (09)	05:23 06:00 (09)
	16:44	80 10:02 (08)	17:21	44 16:27 (04)	17:54		19:27	54 18:26 (03)	19:58	42	06:48 (09)	20:24 59 06:59 (09)
10	07:18	08:43 (08)	06:56	15:59 (04)	06:16		06:25	17:32 (03)	05:43		06:05 (09)	05:23 06:00 (09)
	16:45	79 10:02 (08)	17:22	27 16:26 (04)	17:55		19:28	53 18:25 (03)	19:59	44	06:49 (09)	20:25 59 06:59 (09)
11	07:18	08:44 (08)	06:55	16:00 (04)	06:14		06:23	17:33 (03)	05:42		06:04 (09)	05:23 06:01 (09)
	16:46	79 10:03 (08)	17:23	25 16:25 (04)	17:56		19:29	52 18:25 (03)	20:00	46	06:50 (09)	20:25 58 06:59 (09)
12	07:18	08:43 (08)	06:54	16:02 (04)	06:13		06:22	17:33 (03)	05:41		06:03 (09)	05:23 06:01 (09)
	16:47	79 10:02 (08)	17:24	21 16:23 (04)	17:57		19:30	50 18:23 (03)	20:01	47	06:50 (09)	20:26 59 07:00 (09)
13	07:18	08:44 (08)	06:52	16:05 (04)	06:11		06:20	17:34 (03)	05:40		06:02 (09)	05:22 06:00 (09)
	16:48	83 16:08 (04)	17:26	16 16:21 (04)	17:58		19:31	49 18:23 (03)	20:02	49	06:51 (09)	20:26 59 06:59 (09)
14	07:17	08:45 (08)	06:51	16:08 (04)	06:09		06:19	17:34 (03)	05:39		06:02 (09)	05:22 06:01 (09)
	16:50	89 16:12 (04)	17:27	9 16:17 (04)	17:59		19:32	47 18:21 (03)	20:03	50	06:52 (09)	20:27 58 06:59 (09)
15	07:17	08:45 (08)	06:50		06:08		06:17	17:35 (03)	05:38		06:01 (09)	05:22 06:01 (09)
	16:51	93 16:14 (04)	17:28		18:00		19:33	46 18:21 (03)	20:04	51	06:52 (09)	20:27 58 06:59 (09)
16	07:17	08:46 (08)	06:48		06:06		06:16	17:36 (03)	05:37		06:00 (09)	05:22 06:02 (09)
	16:52	95 16:16 (04)	17:29		18:01		19:34	43 18:19 (03)	20:05	53	06:53 (09)	20:28 58 07:00 (09)
17	07:16	08:47 (08)	06:47		06:05		06:14	17:37 (03)	05:36		06:01 (09)	05:22 06:02 (09)
	16:53	97 16:18 (04)	17:31		18:02		19:35	41 18:18 (03)	20:06	53	06:54 (09)	20:28 58 07:00 (09)
18	07:16	08:48 (08)	06:46		06:03	16:55 (03)	06:13	17:38 (03)	05:35		06:00 (09)	05:23 06:02 (09)
	16:54	98 16:20 (04)	17:32		18:03	19 17:14 (03)	19:36	38 18:16 (03)	20:07	54	06:54 (09)	20:28 58 07:00 (09)
19	07:15	08:48 (08)	06:44		06:01	16:52 (03)	06:11	17:40 (03)	05:34		06:00 (09)	05:23 06:02 (09)
	16:55	99 16:20 (04)	17:33		18:04	26 17:18 (03)	19:37	35 18:15 (03)	20:08	55	06:55 (09)	20:29 59 07:01 (09)
20	07:15	08:48 (08)	06:43		06:00	16:49 (03)	06:10	17:41 (03)	05:34		05:59 (09)	05:23 06:02 (09)
	16:56	100 16:21 (04)	17:34		18:06	31 17:20 (03)	19:38	31 18:12 (03)	20:09	56	06:55 (09)	20:29 59 07:01 (09)
21	07:14	08:50 (08)	06:42		05:58	16:46 (03)	06:08	17:43 (03)	05:33		05:58 (09)	05:23 06:02 (09)
	16:58	101 16:23 (04)	17:35		18:07	35 17:21 (03)	19:39	27 18:10 (03)	20:10	57	06:55 (09)	20:29 59 07:01 (09)
22	07:13	08:50 (08)	06:40		05:56	16:45 (03)	06:07	17:45 (03)	05:32		05:59 (09)	05:23 06:02 (09)
	16:59	102 16:24 (04)	17:36		18:08	39 17:24 (03)	19:40	22 18:07 (03)	20:11	57	06:56 (09)	20:29 59 07:01 (09)
23	07:13	08:50 (08)	06:39		05:55	16:42 (03)	06:05	17:49 (03)	05:31		05:59 (09)	05:23 06:03 (09)
	17:00	102 16:24 (04)	17:38		18:09	43 17:25 (03)	19:41	15 18:04 (03)	20:11	57	06:56 (09)	20:29 59 07:02 (09)
24	07:12	08:52 (08)	06:37		05:53	16:40 (03)	06:04		05:31		05:58 (09)	05:24 06:03 (09)
	17:01	102 16:26 (04)	17:39		18:10	45 17:25 (03)	19:42		20:12	58	06:56 (09)	20:30 58 07:01 (09)
25	07:11	08:53 (08)	06:36		05:51	16:40 (03)	06:02		05:30		05:59 (09)	05:24 06:03 (09)
	17:02	102 16:27 (04)	17:40		18:11	47 17:27 (03)	19:43		20:13	58	06:57 (09)	20:30 58 07:01 (09)
26	07:11	08:53 (08)	06:34		05:50	16:38 (03)	06:01		05:29		05:58 (09)	05:24 06:04 (09)
	17:03	101 16:27 (04)	17:41		18:12	49 17:27 (03)	19:44		20:14	58	06:56 (09)	20:30 58 07:02 (09)
27	07:10	08:54 (08)	06:33		05:48	16:37 (03)	06:00		05:28		05:58 (09)	05:25 06:04 (09)
	17:05	100 16:28 (04)	17:42		18:13	50 17:27 (03)	19:45		20:15	58	06:56 (09)	20:30 58 07:02 (09)
28	07:09	08:55 (08)	06:32		05:46	16:36 (03)	05:58		05:28		05:58 (09)	05:25 06:04 (09)
	17:06	98 16:28 (04)	17:43		18:14	52 17:28 (03)	19:47		20:16	59	06:57 (09)	20:30 58 07:02 (09)
29	07:08	08:56 (08)			06:45	17:35 (03)	05:57		05:27		05:58 (09)	05:25 06:04 (09)
	17:07	97 16:28 (04)			19:15	53 18:28 (03)	19:48		20:17	59	06:57 (09)	20:30 59 07:03 (09)
30	07:07	08:57 (08)			06:43	17:34 (03)	05:56		05:27		05:58 (09)	05:26 06:04 (09)
	17:08	96 16:29 (04)			19:16	54 18:28 (03)	19:49		20:17	59	06:57 (09)	20:30 59 07:03 (09)
31	07:06	08:58 (08)			06:41	17:34 (03)			05:26		05:58 (09)	
	17:10	93 16:29 (04)			19:17	55 18:29 (03)			20:18	59	06:57 (09)	
Ore potenziali eliofania	298		298		369		398		448		451	
Totale, caso peggiore	2832		753		598		1051		1425		1761	
Probabilità di eliofania	0,43		0,44		0,44		0,51		0,57		0,62	
Tempo di operatività rid.	0,85		0,85		0,85		0,85		0,85		0,85	
Dir. del vento rid.	0,72		0,62		0,54		0,54		0,49		0,49	
Totale ridotto	0,27		0,24		0,21		0,24		0,25		0,27	
Totale effettivo	763		181		125		251		350		470	

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R01 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (1)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio		Agosto		Settembre		Ottobre		Novembre		Dicembre	
1	05:26	06:05 (09)	05:50	06:14 (09)	06:20	17:32 (03)	06:50	06:24	15:28 (04)	06:58	08:26 (08)	
	20:30	58 07:03 (09)	20:11	47 07:01 (09)	19:28	52 18:24 (03)	18:38	16:52	28 15:56 (04)	16:28	79 09:45 (08)	
2	05:27	06:05 (09)	05:51	06:15 (09)	06:21	17:31 (03)	06:51	06:25	08:47 (08)	06:59	08:26 (08)	
	20:30	58 07:03 (09)	20:10	45 07:00 (09)	19:27	53 18:24 (03)	18:36	16:51	46 15:56 (04)	16:28	79 09:45 (08)	
3	05:27	06:05 (09)	05:52	06:16 (09)	06:22	17:30 (03)	06:52	06:26	08:43 (08)	07:00	08:26 (08)	
	20:29	59 07:04 (09)	20:09	43 06:59 (09)	19:25	54 18:24 (03)	18:35	16:49	57 15:58 (04)	16:27	80 09:46 (08)	
4	05:28	06:05 (09)	05:53	06:17 (09)	06:23	17:29 (03)	06:53	06:27	08:40 (08)	07:01	08:26 (08)	
	20:29	59 07:04 (09)	20:08	41 06:58 (09)	19:23	55 18:24 (03)	18:33	16:48	65 15:58 (04)	16:27	80 09:46 (08)	
5	05:28	06:05 (09)	05:54	06:19 (09)	06:24	17:29 (03)	06:54	06:28	08:37 (08)	07:02	08:27 (08)	
	20:29	59 07:04 (09)	20:07	37 06:56 (09)	19:22	55 18:24 (03)	18:32	16:47	72 15:59 (04)	16:27	80 09:47 (08)	
6	05:29	06:05 (09)	05:55	06:20 (09)	06:25	17:28 (03)	06:55	06:30	08:35 (08)	07:03	08:27 (08)	
	20:29	59 07:04 (09)	20:05	35 06:55 (09)	19:20	56 18:24 (03)	18:30	16:46	77 15:59 (04)	16:27	80 09:47 (08)	
7	05:30	06:06 (09)	05:56	06:21 (09)	06:26	17:27 (03)	06:56	06:31	08:34 (08)	07:04	08:27 (08)	
	20:29	59 07:05 (09)	20:04	31 06:52 (09)	19:19	57 18:24 (03)	18:28	16:45	81 16:00 (04)	16:27	81 09:48 (08)	
8	05:30	06:06 (09)	05:57	06:23 (09)	06:27	17:27 (03)	06:57	06:32	08:33 (08)	07:05	08:28 (08)	
	20:28	59 07:05 (09)	20:03	27 06:50 (09)	19:17	56 18:23 (03)	18:27	16:44	85 16:00 (04)	16:27	81 09:49 (08)	
9	05:31	06:06 (09)	05:58	06:25 (09)	06:28	17:27 (03)	06:58	06:33	08:31 (08)	07:06	08:00 (12)	
	20:28	59 07:05 (09)	20:02	23 06:48 (09)	19:15	56 18:23 (03)	18:25	16:43	89 16:00 (04)	16:27	84 09:49 (08)	
10	05:31	06:06 (09)	05:59	06:29 (09)	06:29	17:25 (03)	06:59	06:34	08:31 (08)	07:07	07:57 (12)	
	20:28	59 07:05 (09)	20:00	15 06:44 (09)	19:14	57 18:22 (03)	18:23	16:42	91 16:01 (04)	16:27	89 09:49 (08)	
11	05:32	06:07 (09)	06:00	06:30	06:30	17:25 (03)	07:00	06:35	08:30 (08)	07:08	07:57 (12)	
	20:27	59 07:06 (09)	19:59	19:12	56 18:21 (03)	18:22	16:41	94 16:01 (04)	16:27	91 09:49 (08)		
12	05:33	06:06 (09)	06:01	06:31	06:31	17:25 (03)	07:01	06:37	08:29 (08)	07:09	07:56 (12)	
	20:27	59 07:05 (09)	19:58	19:10	55 18:20 (03)	18:20	16:40	95 16:00 (04)	16:27	93 09:50 (08)		
13	05:34	06:07 (09)	06:02	06:32	06:32	17:25 (03)	07:02	06:38	08:28 (08)	07:09	07:56 (12)	
	20:26	59 07:06 (09)	19:57	19:09	55 18:20 (03)	18:19	16:39	97 16:00 (04)	16:27	94 09:51 (08)		
14	05:34	06:07 (09)	06:03	06:33	06:33	17:25 (03)	07:03	06:39	08:28 (08)	07:10	07:56 (12)	
	20:26	59 07:06 (09)	19:55	19:07	54 18:19 (03)	18:17	16:38	99 16:01 (04)	16:27	96 09:51 (08)		
15	05:35	06:07 (09)	06:04	06:34	06:34	17:25 (03)	07:05	06:40	08:27 (08)	07:11	07:56 (12)	
	20:25	58 07:05 (09)	19:54	19:05	53 18:18 (03)	18:16	16:37	99 16:00 (04)	16:27	96 09:51 (08)		
16	05:36	06:07 (09)	06:05	06:35	06:35	17:26 (03)	07:06	06:41	08:26 (08)	07:12	07:56 (12)	
	20:24	59 07:06 (09)	19:52	19:03	51 18:17 (03)	18:14	16:36	101 16:00 (04)	16:28	97 09:52 (08)		
17	05:37	06:07 (09)	06:06	06:36	06:36	17:26 (03)	07:07	06:43	08:26 (08)	07:12	07:57 (12)	
	20:24	59 07:06 (09)	19:51	19:02	50 18:16 (03)	18:13	16:36	102 16:00 (04)	16:28	97 09:53 (08)		
18	05:37	06:08 (09)	06:07	06:37	06:37	17:27 (03)	07:08	06:44	08:26 (08)	07:13	07:56 (12)	
	20:23	58 07:06 (09)	19:50	19:00	47 18:14 (03)	18:11	16:35	102 16:00 (04)	16:28	98 09:53 (08)		
19	05:38	06:08 (09)	06:08	06:38	06:38	17:27 (03)	07:09	06:45	08:25 (08)	07:13	07:57 (12)	
	20:23	58 07:06 (09)	19:48	18:58	46 18:13 (03)	18:10	16:34	102 15:59 (04)	16:29	99 09:54 (08)		
20	05:39	06:08 (09)	06:08	17:54 (03)	06:39	17:28 (03)	07:10	06:46	08:25 (08)	07:14	07:57 (12)	
	20:22	57 07:05 (09)	19:47	16 18:10 (03)	18:57	43 18:11 (03)	18:08	16:33	102 15:59 (04)	16:29	99 09:54 (08)	
21	05:40	06:08 (09)	06:09	17:50 (03)	06:40	17:29 (03)	07:11	06:47	08:25 (08)	07:15	07:58 (12)	
	20:21	57 07:05 (09)	19:45	23 18:13 (03)	18:55	40 18:09 (03)	18:07	16:33	101 15:58 (04)	16:30	99 09:55 (08)	
22	05:41	06:09 (09)	06:10	17:48 (03)	06:41	17:31 (03)	07:12	06:48	08:24 (08)	07:15	07:58 (12)	
	20:20	56 07:05 (09)	19:44	28 18:16 (03)	18:53	36 18:07 (03)	18:05	16:32	100 15:57 (04)	16:30	99 09:55 (08)	
23	05:42	06:09 (09)	06:11	17:45 (03)	06:42	17:32 (03)	07:13	06:50	08:25 (08)	07:16	07:59 (12)	
	20:20	56 07:05 (09)	19:42	32 18:17 (03)	18:52	33 18:05 (03)	18:04	16:31	99 15:57 (04)	16:31	99 09:56 (08)	
24	05:43	06:10 (09)	06:12	17:43 (03)	06:43	17:35 (03)	07:14	06:51	08:25 (08)	07:16	07:59 (12)	
	20:19	55 07:05 (09)	19:41	36 18:19 (03)	18:50	27 18:02 (03)	18:02	16:31	98 15:57 (04)	16:31	99 09:56 (08)	
25	05:43	06:10 (09)	06:13	17:41 (03)	06:44	17:38 (03)	06:16	06:52	08:25 (08)	07:17	08:00 (12)	
	20:18	55 07:05 (09)	19:39	38 18:19 (03)	18:48	21 17:59 (03)	17:01	16:30	97 15:56 (04)	16:32	98 09:57 (08)	
26	05:44	06:11 (09)	06:14	17:39 (03)	06:45	17:43 (03)	06:17	06:53	08:24 (08)	07:17	08:01 (12)	
	20:17	54 07:05 (09)	19:38	41 18:20 (03)	18:47	10 17:53 (03)	17:00	16:30	95 15:54 (04)	16:32	97 09:57 (08)	
27	05:45	06:11 (09)	06:15	17:38 (03)	06:46	06:18	16:58	06:54	08:24 (08)	07:17	08:01 (12)	
	20:16	53 07:04 (09)	19:36	43 18:21 (03)	18:45	16:57	15:48 (04)	16:29	93 15:53 (04)	16:33	97 09:57 (08)	
28	05:46	06:11 (09)	06:16	17:36 (03)	06:47	06:19	15:36 (04)	06:55	08:24 (08)	07:18	08:02 (12)	
	20:15	52 07:03 (09)	19:35	46 18:22 (03)	18:43	16:57	12 15:48 (04)	16:29	89 15:51 (04)	16:34	96 09:57 (08)	
29	05:47	06:12 (09)	06:17	17:35 (03)	06:48	06:20	15:33 (04)	06:56	08:25 (08)	07:18	08:03 (12)	
	20:14	51 07:03 (09)	19:33	47 18:22 (03)	18:41	16:56	18 15:51 (04)	16:29	83 15:49 (04)	16:34	96 09:58 (08)	
30	05:48	06:13 (09)	06:18	17:34 (03)	06:49	06:21	15:32 (04)	06:57	08:26 (08)	07:18	08:04 (12)	
	20:13	49 07:02 (09)	19:32	49 18:23 (03)	18:40	16:54	21 15:53 (04)	16:28	78 09:44 (08)	16:35	94 09:59 (08)	
31	05:49	06:13 (09)	06:19	17:33 (03)	06:49	06:23	15:30 (04)	06:58	08:27 (08)	07:18	08:05 (12)	
	20:12	49 07:02 (09)	19:30	50 18:23 (03)	06:49	16:53	25 15:55 (04)	06:59	08:28 (08)	07:19	93 09:59 (08)	
Ore potenziali eliofania	458		427		375		346		299		289	
Totale, caso peggiore	1760		793		1228		76		2617		2840	
Probabilità di eliofania	0,69		0,69		0,61		0,52		0,47		0,41	
Tempo di operatività rid.	0,85		0,85		0,85		0,85		0,85		0,85	
Dir. del vento rid.	0,49		0,52		0,54		0,50		0,68		0,76	
Totale ridotto	0,30		0,31		0,29		0,23		0,28		0,27	
Totale effettivo	520		246		354		17		729		779	

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R02 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (2)
Assunzioni sui calcoli d'ombra

Probabilità di eliofanía (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio		Febbraio		Marzo		Aprile		Maggio			Giugno	
1	07:19	08:17 (04)	07:06	07:26 (07)	06:30	08:23 (04)	06:40	05:54	06:30 (03)	05:26	06:20 (03)		
	16:37	30 08:47 (04)	17:11	87 09:18 (04)	17:45	32 08:55 (04)	19:18	19:50	34 07:04 (03)	20:19	52 07:12 (03)		
2	07:19	08:17 (04)	07:05	07:25 (07)	06:29	08:25 (04)	06:38	05:53	06:27 (03)	05:25	06:20 (03)		
	16:38	31 08:48 (04)	17:12	90 09:18 (04)	17:46	26 08:51 (04)	19:19	19:51	38 07:05 (03)	20:20	53 07:13 (03)		
3	07:19	08:16 (04)	07:04	07:24 (07)	06:27	08:30 (04)	06:36	05:52	06:26 (03)	05:25	06:20 (03)		
	16:39	33 08:49 (04)	17:13	93 09:19 (04)	17:47	17 08:47 (04)	19:20	19:52	40 07:06 (03)	20:20	52 07:12 (03)		
4	07:19	08:16 (04)	07:03	07:22 (07)	06:25		06:35	05:51	06:25 (03)	05:25	05:46 (02)		
	16:40	35 08:51 (04)	17:15	95 09:18 (04)	17:48		19:21	19:53	42 07:07 (03)	20:21	52 07:12 (03)		
5	07:19	08:16 (04)	07:02	07:21 (07)	06:24		06:33	05:49	06:24 (03)	05:24	05:46 (02)		
	16:40	36 08:52 (04)	17:16	97 09:18 (04)	17:49		19:22	19:54	44 07:08 (03)	20:22	54 07:13 (03)		
6	07:19	08:15 (04)	07:01	07:20 (07)	06:22		06:32	05:48	06:23 (03)	05:24	05:45 (02)		
	16:41	38 08:53 (04)	17:17	99 09:18 (04)	17:50		19:24	19:55	46 07:09 (03)	20:22	55 07:12 (03)		
7	07:19	08:15 (04)	06:59	07:20 (07)	06:21		06:30	05:47	06:22 (03)	05:24	05:45 (02)		
	16:42	40 08:55 (04)	17:18	100 09:18 (04)	17:51		19:25	19:56	47 07:09 (03)	20:23	56 07:12 (03)		
8	07:19	08:15 (04)	06:58	07:20 (07)	06:19		06:28	05:46	06:21 (03)	05:23	05:45 (02)		
	16:43	41 08:56 (04)	17:20	100 09:19 (04)	17:53		19:26	19:57	49 07:10 (03)	20:24	56 07:12 (03)		
9	07:19	08:14 (04)	06:57	07:20 (07)	06:18		06:27	05:45	06:20 (03)	05:23	05:45 (02)		
	16:44	43 08:57 (04)	17:21	101 09:19 (04)	17:54		19:27	19:58	50 07:10 (03)	20:24	57 07:12 (03)		
10	07:19	08:14 (04)	06:56	07:20 (07)	06:16		06:25	05:43	06:20 (03)	05:23	05:45 (02)		
	16:45	44 08:58 (04)	17:22	101 09:19 (04)	17:55		19:28	19:59	51 07:11 (03)	20:25	57 07:12 (03)		
11	07:18	08:13 (04)	06:55	07:20 (07)	06:14		06:24	05:42	06:19 (03)	05:23	05:45 (02)		
	16:46	47 09:00 (04)	17:23	99 09:18 (04)	17:56		19:29	20:00	52 07:11 (03)	20:25	59 07:13 (03)		
12	07:18	08:12 (04)	06:54	07:20 (07)	06:13		06:22	05:41	06:19 (03)	05:23	05:45 (02)		
	16:47	48 09:00 (04)	17:25	100 09:18 (04)	17:57	3	06:34 (08)	20:01	52 07:11 (03)	20:26	58 07:13 (03)		
13	07:18	08:12 (04)	06:52	07:21 (07)	06:11		06:20	05:40	06:18 (03)	05:23	05:45 (02)		
	16:49	50 09:02 (04)	17:26	98 09:18 (04)	17:58	7	06:37 (08)	20:02	54 07:12 (03)	20:26	59 07:13 (03)		
14	07:17	08:12 (04)	06:51	07:20 (07)	06:09		06:19	05:39	06:18 (03)	05:22	05:45 (02)		
	16:50	51 09:03 (04)	17:27	96 09:16 (04)	17:59	10	06:38 (08)	20:03	54 07:12 (03)	20:27	58 07:13 (03)		
15	07:17	08:11 (04)	06:50	07:21 (07)	06:08		06:17	05:38	06:18 (03)	05:22	05:45 (02)		
	16:51	53 09:04 (04)	17:28	94 09:16 (04)	18:00	13	06:39 (08)	20:04	54 07:12 (03)	20:27	59 07:13 (03)		
16	07:17	08:11 (04)	06:49	07:22 (07)	06:06		06:16	05:37	06:17 (03)	05:22	05:45 (02)		
	16:52	54 09:05 (04)	17:29	91 09:16 (04)	18:01	15	06:40 (08)	20:05	55 07:12 (03)	20:28	59 07:13 (03)		
17	07:16	08:11 (04)	06:47	07:23 (07)	06:05		06:14	05:36	06:18 (03)	05:23	05:45 (02)		
	16:53	55 09:06 (04)	17:31	87 09:14 (04)	18:02	17	06:40 (08)	20:06	55 07:13 (03)	20:28	59 07:13 (03)		
18	07:16	08:11 (04)	06:46	07:24 (07)	06:03		06:13	05:35	06:18 (03)	05:23	05:45 (02)		
	16:54	57 09:08 (04)	17:32	84 09:14 (04)	18:03	19	06:40 (08)	20:07	55 07:13 (03)	20:28	59 07:13 (03)		
19	07:15	08:10 (04)	06:45	07:27 (07)	06:01		06:11	05:35	06:18 (03)	05:23	05:45 (02)		
	16:55	58 09:08 (04)	17:33	77 09:13 (04)	18:05	20	06:40 (08)	20:08	55 07:13 (03)	20:29	59 07:13 (03)		
20	07:15	08:09 (04)	06:43	07:29 (07)	06:00		06:10	05:34	06:17 (03)	05:23	05:45 (02)		
	16:56	60 09:09 (04)	17:34	70 09:12 (04)	18:06	21	06:39 (08)	20:09	56 07:13 (03)	20:29	59 07:13 (03)		
21	07:14	08:09 (04)	06:42	08:12 (04)	05:58		06:08	05:33	06:17 (03)	05:23	05:45 (02)		
	16:58	61 09:10 (04)	17:35	59 09:11 (04)	18:07	22	06:38 (08)	20:10	55 07:12 (03)	20:29	59 07:13 (03)		
22	07:14	08:09 (04)	06:40	08:12 (04)	05:56		06:07	05:32	06:18 (03)	05:23	05:46 (02)		
	16:59	62 09:11 (04)	17:37	57 09:09 (04)	18:08	21	06:38 (08)	20:11	55 07:13 (03)	20:29	59 07:14 (03)		
23	07:13	08:08 (04)	06:39	08:13 (04)	05:55		06:05	05:31	06:18 (03)	05:23	05:46 (02)		
	17:00	63 09:11 (04)	17:38	55 09:08 (04)	18:09	19	06:36 (08)	20:11	55 07:13 (03)	20:30	59 07:14 (03)		
24	07:12	08:09 (04)	06:37	08:15 (04)	05:53		06:04	05:31	06:17 (03)	05:24	05:46 (02)		
	17:01	64 09:13 (04)	17:39	52 09:07 (04)	18:10	16	06:34 (08)	20:12	55 07:12 (03)	20:30	59 07:14 (03)		
25	07:11	08:08 (04)	06:36	08:16 (04)	05:51		06:02	05:30	06:18 (03)	05:24	05:46 (02)		
	17:02	66 09:14 (04)	17:40	48 09:04 (04)	18:11	13	06:33 (08)	20:13	55 07:13 (03)	20:30	59 07:14 (03)		
26	07:11	08:08 (04)	06:35	08:17 (04)	05:50		06:01	05:29	06:18 (03)	05:24	05:47 (02)		
	17:04	66 09:14 (04)	17:41	46 09:03 (04)	18:12	5	06:28 (08)	20:14	55 07:13 (03)	20:30	59 07:15 (03)		
27	07:10	08:07 (04)	06:33	08:19 (04)	05:48		06:00	05:29	06:19 (03)	05:25	05:47 (02)		
	17:05	68 09:15 (04)	17:42	41 09:00 (04)	18:13		19:46	20:15	54 07:13 (03)	20:30	59 07:15 (03)		
28	07:09	08:07 (04)	06:32	08:20 (04)	05:46		05:58	05:28	06:36 (03)	05:25	05:47 (02)		
	17:06	68 09:15 (04)	17:44	37 08:57 (04)	18:14		19:47	20:16	54 07:13 (03)	20:30	58 07:15 (03)		
29	07:08	08:07 (04)			06:45		05:57	05:27	06:33 (03)	05:25	05:48 (02)		
	17:07	69 09:16 (04)			19:15		19:48	20:17	54 07:00 (03)	20:30	59 07:16 (03)		
30	07:07	07:30 (07)			06:43		05:56	05:27	06:31 (03)	05:26	05:48 (02)		
	17:08	76 09:17 (04)			19:16		19:49	20:17	54 07:13 (03)	20:30	59 07:16 (03)		
31	07:07	07:27 (07)			06:41			05:26	06:20 (03)				
	17:10	83 09:17 (04)			19:17			20:18	53 07:13 (03)				
Ore potenziali eliofanía	298		298		369		398	448		451			
Totale, caso peggiore	1650		2254		296		92	1582		1721			
Probabilità di eliofanía	0,43		0,44		0,44		0,51	0,57		0,62			
Tempo di operatività rid.	0,85		0,85		0,85		0,85	0,85		0,85			
Dir. del vento rid.	0,73		0,72		0,63		0,48	0,48		0,48			
Totale ridotto	0,28		0,28		0,24		0,21	0,24		0,26			
Totale effettivo	455		628		72		20	382		454			

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R02 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (2)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività
N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio		Agosto		Settembre		Ottobre		Novembre		Dicembre	
1	05:26	05:49 (02)	05:50	06:30 (03)	06:20		06:50	07:10 (08)	06:24	06:49 (07)	06:58	07:55 (04)
	20:30	58 07:17 (03)	20:11	52 07:22 (03)	19:28		18:38	5 07:15 (08)	16:52	101 08:48 (04)	16:28	47 08:42 (04)
2	05:27	05:49 (02)	05:51	06:30 (03)	06:21		06:51		06:25	06:49 (07)	06:59	07:57 (04)
	20:30	58 07:17 (03)	20:10	51 07:21 (03)	19:27		18:37		16:51	101 08:48 (04)	16:28	44 08:41 (04)
3	05:27	05:50 (02)	05:52	06:31 (03)	06:22		06:52		06:26	06:50 (07)	07:00	07:58 (04)
	20:30	57 07:17 (03)	20:09	50 07:21 (03)	19:25		18:35		16:50	99 08:48 (04)	16:27	43 08:41 (04)
4	05:28	05:50 (02)	05:53	06:31 (03)	06:23		06:53		06:27	06:50 (07)	07:01	07:59 (04)
	20:29	57 07:17 (03)	20:08	50 07:21 (03)	19:24		18:33		16:48	100 08:48 (04)	16:27	41 08:40 (04)
5	05:28	05:51 (02)	05:54	06:32 (03)	06:24		06:54		06:28	06:50 (07)	07:02	08:00 (04)
	20:29	56 07:18 (03)	20:07	48 07:20 (03)	19:22		18:32		16:47	99 08:48 (04)	16:27	40 08:40 (04)
6	05:29	05:51 (02)	05:55	06:32 (03)	06:25		06:55		06:30	06:52 (07)	07:03	08:01 (04)
	20:29	56 07:18 (03)	20:05	47 07:19 (03)	19:20		18:30		16:46	97 08:49 (04)	16:27	38 08:39 (04)
7	05:30	05:52 (02)	05:56	06:33 (03)	06:26		06:56		06:31	06:53 (07)	07:04	08:03 (04)
	20:29	54 07:19 (03)	20:04	45 07:18 (03)	19:19		18:28		16:45	95 08:49 (04)	16:27	36 08:39 (04)
8	05:30	05:53 (02)	05:57	06:33 (03)	06:27		06:57		06:32	06:54 (07)	07:05	08:04 (04)
	20:28	52 07:19 (03)	20:03	44 07:17 (03)	19:17		18:27		16:44	92 08:48 (04)	16:27	35 08:39 (04)
9	05:31	06:27 (03)	05:58	06:34 (03)	06:28		06:58		06:33	06:55 (07)	07:06	08:05 (04)
	20:28	52 07:19 (03)	20:02	41 07:15 (03)	19:15		18:25		16:43	90 08:48 (04)	16:27	33 08:38 (04)
10	05:32	06:28 (03)	05:59	06:35 (03)	06:29		06:59	09:07 (04)	06:34	06:57 (07)	07:07	08:06 (04)
	20:28	52 07:20 (03)	20:01	39 07:14 (03)	19:14		18:24	9 09:16 (04)	16:42	87 08:49 (04)	16:27	31 08:37 (04)
11	05:32	06:28 (03)	06:00	06:36 (03)	06:30		07:00	09:01 (04)	06:36	06:58 (07)	07:08	08:07 (04)
	20:27	52 07:20 (03)	19:59	37 07:13 (03)	19:12		18:22	21 09:22 (04)	16:41	83 08:48 (04)	16:27	30 08:37 (04)
12	05:33	06:27 (03)	06:01	06:38 (03)	06:31		07:01	08:58 (04)	06:37	07:01 (07)	07:09	08:09 (04)
	20:27	53 07:20 (03)	19:58	33 07:11 (03)	19:10		18:20	29 09:27 (04)	16:40	77 08:48 (04)	16:27	28 08:37 (04)
13	05:34	06:27 (03)	06:02	06:39 (03)	06:32		07:02	08:55 (04)	06:38	07:39 (04)	07:09	08:10 (04)
	20:26	54 07:21 (03)	19:57	30 07:09 (03)	19:09		18:19	35 09:30 (04)	16:39	68 08:47 (04)	16:27	27 08:37 (04)
14	05:34	06:28 (03)	06:03	06:42 (03)	06:33		07:04	08:52 (04)	06:39	07:40 (04)	07:10	08:11 (04)
	20:26	53 07:21 (03)	19:55	25 07:07 (03)	19:07		18:17	40 09:32 (04)	16:38	68 08:48 (04)	16:27	26 08:37 (04)
15	05:35	06:28 (03)	06:04	06:44 (03)	06:34		07:05	08:50 (04)	06:40	07:40 (04)	07:11	08:12 (04)
	20:25	54 07:22 (03)	19:54	20 07:04 (03)	19:05		18:16	44 09:34 (04)	16:37	68 08:48 (04)	16:28	24 08:36 (04)
16	05:36	06:27 (03)	06:05	06:49 (03)	06:35		07:06	08:48 (04)	06:41	07:41 (04)	07:12	08:13 (04)
	20:25	54 07:21 (03)	19:53	10 06:59 (03)	19:04		18:14	47 09:35 (04)	16:36	66 08:46 (04)	16:28	23 08:36 (04)
17	05:37	06:27 (03)	06:06		06:36		07:07	08:47 (04)	06:43	07:41 (04)	07:12	08:15 (04)
	20:24	55 07:22 (03)	19:51		19:02		18:13	50 09:37 (04)	16:36	65 08:46 (04)	16:28	21 08:36 (04)
18	05:38	06:28 (03)	06:07		06:37	07:08 (08)	07:08	08:45 (04)	06:44	07:43 (04)	07:13	08:15 (04)
	20:23	54 07:22 (03)	19:50		19:00	11 07:19 (08)	18:11	53 09:38 (04)	16:35	64 08:47 (04)	16:28	20 08:35 (04)
19	05:38	06:28 (03)	06:08		06:38	07:06 (08)	07:09	08:45 (04)	06:45	07:43 (04)	07:14	08:16 (04)
	20:23	55 07:23 (03)	19:48		18:58	15 07:21 (08)	18:10	55 09:40 (04)	16:34	63 08:46 (04)	16:29	20 08:36 (04)
20	05:39	06:27 (03)	06:09		06:39	07:04 (08)	07:10	08:43 (04)	06:46	07:44 (04)	07:14	08:16 (04)
	20:22	55 07:22 (03)	19:47		18:57	18 07:22 (08)	18:08	58 09:41 (04)	16:33	62 08:46 (04)	16:29	20 08:36 (04)
21	05:40	06:27 (03)	06:10		06:40	07:02 (08)	07:11	08:42 (04)	06:47	07:44 (04)	07:15	08:17 (04)
	20:21	55 07:22 (03)	19:45		18:55	21 07:23 (08)	18:07	60 09:42 (04)	16:33	61 08:45 (04)	16:30	19 08:36 (04)
22	05:41	06:28 (03)	06:11		06:41	07:01 (08)	07:12	07:58 (07)	06:48	07:46 (04)	07:15	08:17 (04)
	20:20	55 07:23 (03)	19:44		18:53	22 07:23 (08)	18:05	74 09:43 (04)	16:32	60 08:46 (04)	16:30	19 08:36 (04)
23	05:42	06:28 (03)	06:12		06:42	07:02 (08)	07:13	07:56 (07)	06:50	07:47 (04)	07:16	08:18 (04)
	20:20	55 07:23 (03)	19:42		18:52	21 07:23 (08)	18:04	79 09:43 (04)	16:31	58 08:45 (04)	16:31	19 08:37 (04)
24	05:43	06:28 (03)	06:13		06:43	07:03 (08)	07:15	07:54 (07)	06:51	07:48 (04)	07:16	08:18 (04)
	20:19	55 07:23 (03)	19:41		18:50	20 07:23 (08)	18:02	85 09:44 (04)	16:31	57 08:45 (04)	16:31	20 08:38 (04)
25	05:44	06:28 (03)	06:13		06:44	07:04 (08)	06:16	06:53 (07)	06:52	07:49 (04)	07:17	08:19 (04)
	20:18	55 07:23 (03)	19:39		18:48	19 07:23 (08)	17:01	89 08:45 (04)	16:30	55 08:44 (04)	16:32	20 08:39 (04)
26	05:44	06:29 (03)	06:14		06:45	07:05 (08)	06:17	06:52 (07)	06:53	07:49 (04)	07:17	08:19 (04)
	20:17	54 07:23 (03)	19:38		18:47	17 07:22 (08)	17:00	92 08:46 (04)	16:30	54 08:43 (04)	16:32	21 08:40 (04)
27	05:45	06:28 (03)	06:15		06:46	07:06 (08)	06:18	06:51 (07)	06:54	07:50 (04)	07:17	08:18 (04)
	20:16	55 07:23 (03)	19:36		18:45	16 07:22 (08)	16:58	94 08:46 (04)	16:29	53 08:43 (04)	16:33	23 08:41 (04)
28	05:46	06:28 (03)	06:16		06:47	07:07 (08)	06:19	06:50 (07)	06:55	07:52 (04)	07:18	08:18 (04)
	20:15	55 07:23 (03)	19:35		18:43	14 07:21 (08)	16:57	96 08:46 (04)	16:29	51 08:43 (04)	16:34	23 08:41 (04)
29	05:47	06:28 (03)	06:17		06:48	07:08 (08)	06:20	06:49 (07)	06:56	07:53 (04)	07:18	08:19 (04)
	20:14	54 07:22 (03)	19:33		18:42	11 07:19 (08)	16:56	98 08:46 (04)	16:29	50 08:43 (04)	16:34	24 08:43 (04)
30	05:48	06:29 (03)	06:18		06:49	07:09 (08)	06:21	06:50 (07)	06:57	07:54 (04)	07:18	08:18 (04)
	20:13	53 07:22 (03)	19:32		18:40	9 07:18 (08)	16:54	98 08:47 (04)	16:28	48 08:42 (04)	16:35	26 08:44 (04)
31	05:49	06:29 (03)	06:19				06:23	06:49 (07)			07:18	08:18 (04)
	20:12	53 07:22 (03)	19:30				16:53	100 08:48 (04)			16:36	27 08:45 (04)
Ore potenziali eliofania	458		427		375		346		299		289	
Totale, caso peggiore	1690		622		214		1411		2192		868	
Probabilità di eliofania	0,69		0,69		0,61		0,52		0,47		0,41	
Tempo di operatività rid.	0,85		0,85		0,85		0,85		0,85		0,85	
Dir. del vento rid.	0,48		0,48		0,59		0,73		0,73		0,74	
Totale ridotto	0,29		0,29		0,32		0,33		0,30		0,26	
Totale effettivo	491		180		68		469		655		230	

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R03 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (3)
 Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen	Feb	Mar	Apr	Mag	Giu	Lug	Ago	Set	Ott	Nov	Dic
4,12	4,66	5,30	6,72	8,25	9,35	10,16	9,45	7,64	5,82	4,65	3,82

Tempo di operatività

N	NNE	ENE	E	ESE	SSE	S	SSO	OSO	O	ONO	NNO	Somma
1.229	573	283	164	231	782	961	432	328	544	685	1.236	7.447

3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 16:37	07:06 17:11	07:58 (04) 08:57 (04)	06:30 17:45	07:57 (04) 08:53 (04)	06:40 19:18
2	07:19 16:38	07:05 17:12	07:57 (04) 08:58 (04)	06:29 17:46	07:57 (04) 08:51 (04)	06:38 19:19
3	07:19 16:39	07:04 17:13	07:27 (07) 08:59 (04)	06:27 17:47	07:59 (04) 08:50 (04)	06:36 19:20
4	07:19 16:40	07:03 17:15	07:22 (07) 08:59 (04)	06:25 17:48	08:00 (04) 08:48 (04)	06:35 19:21
5	07:19 16:40	07:02 17:16	07:21 (07) 09:00 (04)	06:24 17:49	08:01 (04) 08:46 (04)	06:33 19:22
6	07:19 16:41	07:01 17:17	07:20 (07) 09:01 (04)	06:22 17:50	08:02 (04) 08:44 (04)	06:32 19:24
7	07:19 16:42	06:59 17:18	07:19 (07) 09:01 (04)	06:21 17:51	08:04 (04) 08:41 (04)	06:30 19:25
8	07:19 16:43	06:58 17:20	07:18 (07) 09:02 (04)	06:19 17:53	08:07 (04) 08:38 (04)	06:28 19:26
9	07:19 16:44	06:57 17:21	07:17 (07) 09:02 (04)	06:18 17:54	08:09 (04) 08:34 (04)	06:27 19:27
10	07:19 16:45	06:56 17:22	07:16 (07) 09:03 (04)	06:16 17:55	08:14 (04) 08:30 (04)	06:25 19:28
11	07:18 16:46	06:55 17:23	07:15 (07) 09:03 (04)	06:14 17:56	08:28 (08) 06:19	06:24 19:29
12	07:18 16:47	06:54 17:25	07:15 (07) 09:03 (04)	06:13 17:57	06:22 19:30	05:41 20:01
13	07:18 16:49	06:52 17:26	07:15 (07) 09:03 (04)	06:11 17:58	06:20 19:31	05:40 20:02
14	07:17 16:50	06:51 17:27	07:14 (07) 09:03 (04)	06:09 17:59	06:19 19:32	05:39 20:03
15	07:17 16:51	06:50 17:28	07:15 (07) 09:03 (04)	06:08 18:00	06:26 (08) 06:32 (08)	06:17 19:33
16	07:17 16:52	08:21 (04) 08:26 (04)	06:49 17:29	07:15 (07) 08:01	06:16 (08) 06:34 (08)	05:37 19:34
17	07:16 16:53	08:15 (04) 08:31 (04)	06:47 17:31	07:15 (07) 08:02	06:23 (08) 06:35 (08)	06:14 19:35
18	07:16 16:54	08:13 (04) 08:35 (04)	06:46 17:32	07:16 (07) 18:03	06:21 (08) 06:35 (08)	06:13 19:36
19	07:15 16:55	08:10 (04) 08:37 (04)	06:45 17:33	07:17 (07) 18:05	06:20 (08) 06:36 (08)	06:11 19:37
20	07:15 16:56	08:08 (04) 08:39 (04)	06:43 17:34	07:17 (07) 18:06	06:18 (08) 06:36 (08)	06:10 19:38
21	07:14 16:58	08:08 (04) 08:42 (04)	06:42 17:35	07:19 (07) 18:07	06:16 (08) 06:35 (08)	06:08 19:39
22	07:14 16:59	08:06 (04) 08:44 (04)	06:40 17:37	07:20 (07) 18:08	06:15 (08) 06:35 (08)	06:07 19:40
23	07:13 17:00	08:04 (04) 08:45 (04)	06:39 17:38	07:23 (07) 18:09	06:13 (08) 06:34 (08)	06:05 19:41
24	07:12 17:01	08:04 (04) 08:48 (04)	06:37 17:39	07:54 (04) 08:59 (04)	06:12 (08) 06:33 (08)	06:04 19:42
25	07:11 17:02	08:03 (04) 08:49 (04)	06:36 17:40	07:54 (04) 08:58 (04)	06:14 (08) 06:32 (08)	06:02 19:43
26	07:11 17:04	08:02 (04) 08:50 (04)	06:35 17:41	07:55 (04) 08:57 (04)	06:14 (08) 06:30 (08)	06:01 19:44
27	07:10 17:05	08:01 (04) 08:51 (04)	06:33 17:42	07:55 (04) 08:56 (04)	06:15 (08) 06:28 (08)	06:00 19:46
28	07:09 17:06	08:00 (04) 08:52 (04)	06:32 17:44	07:55 (04) 08:54 (04)	06:19 (08) 06:25 (08)	05:58 19:47
29	07:08 17:07	07:59 (04) 08:54 (04)	06:45 19:15	06:45 19:15	05:57 19:48	05:27 20:17
30	07:07 17:08	07:59 (04) 08:56 (04)	06:43 19:16	06:43 19:16	05:56 19:49	05:27 20:17
31	07:07 17:10	07:58 (04) 08:57 (04)	06:41 19:17	06:41 19:17	05:26 20:18	06:13 (03) 07:06 (03)
Ore potenziali eliofania	298	298	369	398	448	451
Totale, caso peggiore	625	2324	616		1394	1645
Probabilità di eliofania	0,43	0,44	0,44		0,57	0,62
Tempo di operatività rid.	0,85	0,85	0,85		0,85	0,85
Dir. del vento rid.	0,72	0,71	0,67		0,49	0,49
Totale ridotto	0,27	0,27	0,26		0,24	0,26
Totale effettivo	169	634	161		338	435

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R03 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (3)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività
N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26	05:49 (02)	05:50	06:26 (03)	06:20	06:50
2	05:27	05:49 (02)	05:51	06:27 (03)	06:21	06:51
3	05:27	05:50 (02)	05:52	06:27 (03)	06:22	06:52
4	05:28	05:50 (02)	05:53	06:28 (03)	06:23	06:53
5	05:28	06:21 (03)	05:54	06:29 (03)	06:24	06:54
6	05:29	06:20 (03)	05:55	06:30 (03)	06:25	06:55
7	05:30	06:21 (03)	05:56	06:32 (03)	06:26	06:56
8	05:30	06:21 (03)	05:57	06:32 (03)	06:27	06:57
9	05:31	06:20 (03)	05:58	06:34 (03)	06:28	06:58
10	05:32	06:21 (03)	05:59	06:36 (03)	06:29	06:59
11	05:32	06:21 (03)	06:00	06:38 (03)	06:30	07:00
12	05:33	06:21 (03)	06:01	06:43 (03)	06:31	07:01
13	05:34	06:21 (03)	06:02	06:52 (03)	06:32	07:02
14	05:34	06:21 (03)	06:03	07:10 (08)	07:05	07:07
15	05:35	06:22 (03)	06:04	07:12 (08)	07:06	07:08
16	05:36	06:22 (03)	06:05	07:17 (08)	07:11	07:13
17	05:37	06:22 (03)	06:06	07:03 (08)	07:07	07:09
18	05:38	06:22 (03)	06:07	07:18 (08)	07:12	07:14
19	05:38	06:22 (03)	06:08	07:01 (08)	07:08	07:10
20	05:39	06:21 (03)	06:09	07:19 (08)	07:13	07:15
21	05:40	06:22 (03)	06:10	07:20 (08)	07:14	07:16
22	05:41	06:22 (03)	06:11	07:21 (08)	07:15	07:17
23	05:42	06:22 (03)	06:12	07:22 (08)	07:16	07:18
24	05:43	06:23 (03)	06:13	07:23 (08)	07:17	07:19
25	05:44	06:23 (03)	06:14	07:19 (08)	07:13	07:15
26	05:44	06:24 (03)	06:15	07:04 (08)	07:06	07:08
27	05:45	06:23 (03)	06:16	07:18 (08)	07:12	07:14
28	05:46	06:24 (03)	06:16	07:06 (08)	07:08	07:10
29	05:47	06:24 (03)	06:17	07:16 (08)	07:10	07:12
30	05:48	06:25 (03)	06:18	07:14 (08)	07:08	07:10
31	05:49	06:25 (03)	06:19	07:12 (08)	07:06	07:08
Ore potenziali eliofania	458	427	375	346	299	289
Totale, caso peggiore	1610	400	211	1975	1413	174
Probabilità di eliofania	0,69	0,69	0,61	0,52	0,47	0,41
Tempo di operatività rid.	0,85	0,85	0,85	0,85	0,85	0,85
Dir. del vento rid.	0,49	0,49	0,58	0,71	0,72	0,75
Totale ridotto	0,29	0,29	0,31	0,33	0,29	0,27
Totale effettivo	469	116	66	643	413	46

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra
Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm)
(WTG che provoca l'inizio dell'ombreggiamento)
(WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R04 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (4)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio		Febbraio		Marzo		Aprile		Maggio		Giugno	
1	07:19	08:29 (05)	07:06	08:38 (05)	06:30	06:59 (06)	06:40		05:54		06:45 (07)	05:26
	16:37	77 09:46 (05)	17:11	80 09:58 (05)	17:45	40 07:39 (06)	19:18		19:50	13	06:58 (07)	20:19
2	07:19	08:30 (05)	07:05	08:38 (05)	06:29	06:58 (06)	06:38		05:53		06:50 (07)	05:25
	16:38	77 09:47 (05)	17:12	80 09:58 (05)	17:46	41 07:39 (06)	19:19		19:51	1	06:51 (07)	20:20
3	07:19	08:30 (05)	07:04	08:38 (05)	06:27	06:58 (06)	06:36		05:52			05:25
	16:39	77 09:47 (05)	17:13	78 09:56 (05)	17:47	41 07:39 (06)	19:20		19:52			20:20
4	07:19	08:30 (05)	07:03	08:38 (05)	06:25	06:57 (06)	06:35		05:51			05:25
	16:40	78 09:48 (05)	17:15	78 09:56 (05)	17:48	42 07:39 (06)	19:21		19:53			20:21
5	07:19	08:31 (05)	07:02	08:39 (05)	06:24	06:57 (06)	06:33		05:49			05:24
	16:40	78 09:49 (05)	17:16	76 09:55 (05)	17:49	42 07:39 (06)	19:22		19:54			20:22
6	07:19	08:31 (05)	07:01	08:39 (05)	06:22	06:57 (06)	06:32		05:48		06:08 (08)	05:24
	16:41	78 09:49 (05)	17:17	76 09:55 (05)	17:50	42 07:39 (06)	19:24		19:55	4	06:12 (08)	20:22
7	07:19	08:31 (05)	06:59	08:40 (05)	06:21	06:56 (06)	06:30		05:47		06:06 (08)	05:24
	16:42	79 09:50 (05)	17:18	74 09:54 (05)	17:51	42 07:38 (06)	19:25		19:56	7	06:13 (08)	20:23
8	07:19	08:32 (05)	06:58	08:41 (05)	06:19	06:57 (06)	06:28		06:51 (07)		06:05 (08)	05:23
	16:43	79 09:51 (05)	17:20	73 09:54 (05)	17:53	41 07:38 (06)	19:26	11	06:47 (07)	9	06:14 (08)	20:24
9	07:19	08:31 (05)	06:57	08:42 (05)	06:18	06:56 (06)	06:27		06:47 (07)		06:04 (08)	05:23
	16:44	80 09:51 (05)	17:21	71 09:53 (05)	17:54	41 07:37 (06)	19:27	18	07:05 (07)	11	06:15 (08)	20:24
10	07:18	08:32 (05)	06:56	08:43 (05)	06:16	06:57 (06)	06:25		06:46 (07)		06:03 (08)	05:23
	16:45	80 09:52 (05)	17:22	69 09:52 (05)	17:55	40 07:37 (06)	19:28	21	07:07 (07)	13	06:16 (08)	20:25
11	07:18	08:32 (05)	06:55	08:43 (05)	06:14	06:57 (06)	06:24		06:43 (07)		06:02 (08)	05:23
	16:46	80 09:52 (05)	17:23	68 09:51 (05)	17:56	39 07:36 (06)	19:29	25	07:08 (07)	15	06:17 (08)	20:25
12	07:18	08:32 (05)	06:54	08:44 (05)	06:13	06:57 (06)	06:22		06:41 (07)		06:01 (08)	05:23
	16:47	80 09:52 (05)	17:25	66 09:50 (05)	17:57	38 07:35 (06)	19:30	27	07:08 (07)	16	06:17 (08)	20:26
13	07:18	08:32 (05)	06:52	08:45 (05)	06:11	06:58 (06)	06:20		06:40 (07)		06:00 (08)	05:23
	16:49	81 09:53 (05)	17:26	64 09:49 (05)	17:58	36 07:34 (06)	19:31	30	07:10 (07)	17	06:17 (08)	20:26
14	07:17	08:33 (05)	06:51	08:45 (05)	06:09	06:59 (06)	06:19		06:39 (07)		05:59 (08)	05:23
	16:50	81 09:54 (05)	17:27	61 09:46 (05)	17:59	33 07:32 (06)	19:32	31	07:10 (07)	18	06:17 (08)	20:27
15	07:17	08:32 (05)	06:50	07:09 (11)	06:08	06:59 (06)	06:17		06:39 (07)		05:58 (08)	05:22
	16:51	82 09:54 (05)	17:28	62 09:45 (05)	18:00	31 07:30 (06)	19:33	32	07:11 (07)	19	06:17 (08)	20:27
16	07:17	08:33 (05)	06:49	07:08 (11)	06:06	07:01 (06)	06:16		06:37 (07)		05:57 (08)	05:23
	16:52	82 09:55 (05)	17:29	63 09:44 (05)	18:01	28 07:29 (06)	19:34	33	07:10 (07)	20	06:17 (08)	20:28
17	07:16	08:33 (05)	06:47	07:06 (11)	06:05	07:02 (06)	06:14		06:37 (07)		05:57 (08)	05:23
	16:53	82 09:55 (05)	17:31	61 09:41 (05)	18:02	25 07:27 (06)	19:35	34	07:11 (07)	21	06:18 (08)	20:28
18	07:16	08:34 (05)	06:46	07:05 (11)	06:03	07:04 (06)	06:13		06:36 (07)		05:56 (08)	05:23
	16:54	82 09:56 (05)	17:32	60 09:39 (05)	18:03	20 07:24 (06)	19:36	34	07:10 (07)	22	06:18 (08)	20:28
19	07:15	08:33 (05)	06:45	07:04 (11)	06:01	07:08 (06)	06:11		06:36 (07)		05:55 (08)	05:23
	16:55	83 09:56 (05)	17:33	57 09:37 (05)	18:05	12 07:20 (06)	19:37	35	07:11 (07)	23	06:18 (08)	20:29
20	07:15	08:33 (05)	06:43	07:02 (11)	06:00		06:10		06:36 (07)		05:54 (08)	05:23
	16:56	83 09:56 (05)	17:34	54 09:34 (05)	18:06		19:38	34	07:10 (07)	23	06:17 (08)	20:29
21	07:14	08:34 (05)	06:42	07:01 (11)	05:58		06:08		06:36 (07)		05:54 (08)	05:23
	16:58	83 09:57 (05)	17:35	60 09:31 (05)	18:07		19:39	34	07:10 (07)	23	06:17 (08)	20:29
22	07:13	08:34 (05)	06:40	06:59 (11)	05:56		06:07		06:37 (07)		05:55 (08)	05:23
	16:59	83 09:57 (05)	17:37	58 09:27 (05)	18:08		19:40	33	07:10 (07)	22	06:17 (08)	20:29
23	07:13	08:34 (05)	06:39	06:58 (11)	05:55		06:05		06:36 (07)		05:55 (08)	05:23
	17:00	83 09:57 (05)	17:38	51 09:22 (05)	18:09		19:41	32	07:08 (07)	21	06:16 (08)	20:29
24	07:12	08:35 (05)	06:37	06:57 (11)	05:53		06:04		06:37 (07)		05:55 (08)	05:24
	17:01	83 09:58 (05)	17:39	38 07:35 (06)	18:10		19:42	31	07:08 (07)	20	06:16 (08)	20:30
25	07:11	08:35 (05)	06:36	06:57 (11)	05:51		06:02		06:37 (07)		05:57 (08)	05:24
	17:02	83 09:58 (05)	17:40	38 07:35 (06)	18:11		19:43	30	07:07 (07)	19	06:16 (08)	20:30
26	07:11	08:35 (05)	06:35	06:59 (11)	05:50		06:01		06:38 (07)		05:57 (08)	05:24
	17:04	83 09:58 (05)	17:41	38 07:37 (06)	18:12		19:44	28	07:06 (07)	18	06:15 (08)	20:30
27	07:10	08:35 (05)	06:33	07:00 (11)	05:48		06:00		06:39 (07)		05:59 (08)	05:25
	17:05	83 09:58 (05)	17:42	37 07:37 (06)	18:13		19:46	26	07:05 (07)	16	06:15 (08)	20:30
28	07:09	08:35 (05)	06:32	07:00 (06)	05:46		05:58		06:39 (07)		05:59 (08)	05:25
	17:06	83 09:58 (05)	17:44	38 07:38 (06)	18:14		19:47	24	07:03 (07)	14	06:13 (08)	20:30
29	07:08	08:36 (05)			06:45		05:57		06:41 (07)		05:57 (08)	05:25
	17:07	81 09:57 (05)			19:15		19:48	21	07:02 (07)	12	06:12 (08)	20:30
30	07:07	08:36 (05)			06:43		05:56		06:42 (07)		06:02 (08)	05:26
	17:08	81 09:57 (05)			19:16		19:49	18	07:00 (07)	9	06:11 (08)	20:30
31	07:07	08:37 (05)			06:41						06:04 (08)	
	17:10	81 09:58 (05)			19:17				20:18	6	06:10 (08)	
Ore potenziali eliofania	298		298		369		398		448			451
Totale, caso peggiore	2506		1729		674		642		433			
Probabilità di eliofania	0,43		0,44		0,44		0,51		0,57			
Tempo di operatività rid.	0,85		0,85		0,85		0,85		0,85			
Dir. del vento rid.	0,75		0,73		0,63		0,52		0,49			
Totale ridotto	0,28		0,28		0,24		0,23		0,24			
Totale effettivo	699		478		163		145		105			

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R04 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (4)
 Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
 4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
 1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
 3,0m/s

Luglio		Agosto		Settembre		Ottobre		Novembre		Dicembre		
1	05:26	05:50	06:12 (08)	06:20	06:42 (07)	06:50	07:37 (06)	06:24	08:11 (05)	06:58	08:14 (05)	
	20:30	20:11	15 06:27 (08)	19:28	25 07:07 (07)	18:38	37 08:14 (06)	16:52	70 09:21 (05)	16:28	81 09:35 (05)	
2	05:27	05:51	06:13 (08)	06:21	06:44 (07)	06:51	07:36 (06)	06:25	08:10 (05)	06:59	08:15 (05)	
	20:30	20:10	14 06:27 (08)	19:27	21 07:05 (07)	18:37	38 08:14 (06)	16:51	72 09:22 (05)	16:28	80 09:35 (05)	
3	05:27	05:52	06:14 (08)	06:22	06:45 (07)	06:52	07:35 (06)	06:26	08:11 (05)	07:00	08:15 (05)	
	20:30	20:09	12 06:26 (08)	19:25	18 07:03 (07)	18:35	40 08:15 (06)	16:50	73 09:24 (05)	16:27	80 09:35 (05)	
4	05:28	05:53	06:15 (08)	06:23	06:48 (07)	06:53	07:34 (06)	06:27	08:10 (05)	07:01	08:16 (05)	
	20:29	20:08	11 06:26 (08)	19:24	11 06:59 (07)	18:33	41 08:15 (06)	16:48	74 09:24 (05)	16:27	79 09:35 (05)	
5	05:28	05:54	06:16 (08)	06:24	06:54	06:54	07:33 (06)	06:28	08:09 (05)	07:02	08:16 (05)	
	20:29	20:07	9 06:25 (08)	19:22	18:32	42 08:15 (06)	16:47	76 09:25 (05)	16:27	79 09:35 (05)		
6	05:29	05:55	06:17 (08)	06:25	06:55	06:55	07:33 (06)	06:30	08:08 (05)	07:03	08:17 (05)	
	20:29	20:05	6 06:23 (08)	19:20	18:30	42 08:15 (06)	16:46	77 09:25 (05)	16:27	78 09:35 (05)		
7	05:30	05:56	06:18 (08)	06:26	06:56	06:56	07:32 (06)	06:31	08:09 (05)	07:04	08:18 (05)	
	20:29	20:04	3 06:21 (08)	19:19	18:28	43 08:15 (06)	16:45	78 09:27 (05)	16:27	78 09:36 (05)		
8	05:30	05:57		06:27	06:57	06:57	07:32 (06)	06:32	08:08 (05)	07:05	08:18 (05)	
	20:28	20:03		19:17	18:27	42 08:14 (06)	16:44	79 09:27 (05)	16:27	78 09:36 (05)		
9	05:31	05:58		06:28	06:58	06:58	07:32 (06)	06:33	08:08 (05)	07:06	08:19 (05)	
	20:28	20:02		19:15	18:25	42 08:14 (06)	16:43	79 09:27 (05)	16:27	77 09:36 (05)		
10	05:32	05:59		06:29	06:59	06:59	07:32 (06)	06:34	08:08 (05)	07:07	08:19 (05)	
	20:28	20:01		19:14	18:24	41 08:13 (06)	16:42	81 09:29 (05)	16:27	77 09:36 (05)		
11	05:32	06:00	06:56 (07)	06:30	07:00	07:00	07:32 (06)	06:36	08:08 (05)	07:08	08:19 (05)	
	20:27	19:59	7 07:03 (07)	19:12	18:22	41 08:13 (06)	16:41	81 09:29 (05)	16:27	77 09:36 (05)		
12	05:33	06:13 (08)	06:01	06:52 (07)	06:31	07:01	07:33 (06)	06:37	08:08 (05)	07:09	08:20 (05)	
	20:27	3 06:16 (08)	19:58	14 07:06 (07)	19:10	18:20	40 08:13 (06)	16:40	81 09:29 (05)	16:27	77 09:37 (05)	
13	05:34	06:11 (08)	06:02	06:50 (07)	06:32	07:02	07:33 (06)	06:38	08:08 (05)	07:09	08:21 (05)	
	20:26	8 06:19 (08)	19:57	18 07:08 (07)	19:09	18:19	39 08:12 (06)	16:39	81 09:29 (05)	16:27	76 09:37 (05)	
14	05:34	06:10 (08)	06:03	06:48 (07)	06:33	07:04	07:33 (06)	06:39	08:08 (05)	07:10	08:22 (05)	
	20:26	11 06:21 (08)	19:55	22 07:10 (07)	19:07	18:17	38 08:11 (06)	16:38	82 09:30 (05)	16:27	76 09:38 (05)	
15	05:35	06:09 (08)	06:04	06:46 (07)	06:34	07:05	07:32 (11)	06:40	08:08 (05)	07:11	08:22 (05)	
	20:25	13 06:22 (08)	19:54	25 07:11 (07)	19:05	18:16	37 08:09 (06)	16:37	83 09:31 (05)	16:28	75 09:37 (05)	
16	05:36	06:07 (08)	06:05	06:45 (07)	06:35	07:06	07:30 (11)	06:41	08:08 (05)	07:12	08:23 (05)	
	20:25	15 06:22 (08)	19:53	27 07:12 (07)	19:04	18:14	38 08:08 (06)	16:36	83 09:31 (05)	16:28	75 09:38 (05)	
17	05:37	06:07 (08)	06:06	06:44 (07)	06:36	07:07	07:28 (11)	06:43	08:08 (05)	07:12	08:23 (05)	
	20:24	17 06:24 (08)	19:51	29 07:13 (07)	19:02	18:13	38 08:06 (06)	16:36	83 09:31 (05)	16:28	76 09:39 (05)	
18	05:38	06:06 (08)	06:07	06:43 (07)	06:37	07:08	07:28 (11)	06:44	08:09 (05)	07:13	08:23 (05)	
	20:23	19 06:25 (08)	19:50	30 07:13 (07)	19:00	18:11	37 08:05 (06)	16:35	83 09:32 (05)	16:28	76 09:39 (05)	
19	05:38	06:06 (08)	06:08	06:42 (07)	06:38	07:09	07:29 (11)	06:45	08:09 (05)	07:14	08:24 (05)	
	20:23	20 06:26 (08)	19:48	32 07:14 (07)	18:58	18:10	53 09:54 (05)	16:34	83 09:32 (05)	16:29	75 09:39 (05)	
20	05:39	06:06 (08)	06:09	06:42 (07)	06:39	07:10	07:31 (11)	06:46	08:09 (05)	07:14	08:24 (05)	
	20:22	20 06:26 (08)	19:47	32 07:14 (07)	18:57	18:08	58 10:00 (05)	16:33	83 09:32 (05)	16:29	75 09:39 (05)	
21	05:40	06:05 (08)	06:10	06:41 (07)	06:40	07:11	07:32 (11)	06:47	08:09 (05)	07:15	08:25 (05)	
	20:21	21 06:26 (08)	19:45	34 07:15 (07)	18:55	18:07	60 10:03 (05)	16:33	83 09:32 (05)	16:30	75 09:40 (05)	
22	05:41	06:04 (08)	06:11	06:41 (07)	06:41	07:12	07:33 (11)	06:48	08:09 (05)	07:15	08:25 (05)	
	20:20	23 06:27 (08)	19:44	34 07:15 (07)	18:53	18:05	55 10:05 (05)	16:32	83 09:32 (05)	16:30	75 09:40 (05)	
23	05:42	06:04 (08)	06:12	06:41 (07)	06:42	07:13	07:34 (11)	06:50	08:10 (05)	07:16	08:26 (05)	
	20:20	23 06:27 (08)	19:42	34 07:15 (07)	18:52	18:04	59 10:08 (05)	16:31	83 09:33 (05)	16:31	75 09:41 (05)	
24	05:43	06:05 (08)	06:13	06:40 (07)	06:43	07:15	07:35 (11)	06:51	08:11 (05)	07:16	08:26 (05)	
	20:19	23 06:28 (08)	19:41	34 07:14 (07)	18:50	9 08:02 (06)	18:02	61 10:10 (05)	16:31	82 09:33 (05)	16:31	75 09:41 (05)
25	05:44	06:06 (08)	06:14	06:40 (07)	06:44	07:16	07:36 (11)	06:52	08:11 (05)	07:17	08:27 (05)	
	20:18	22 06:28 (08)	19:39	34 07:14 (07)	18:48	18 08:06 (06)	17:01	62 09:12 (05)	16:30	82 09:33 (05)	16:32	76 09:43 (05)
26	05:44	06:07 (08)	06:14	06:39 (07)	06:45	07:17	07:45 (06)	06:17	08:11 (05)	07:17	08:27 (05)	
	20:17	22 06:29 (08)	19:38	34 07:13 (07)	18:47	23 08:08 (06)	17:00	62 09:14 (05)	16:30	82 09:33 (05)	16:32	76 09:43 (05)
27	05:45	06:07 (08)	06:15	06:39 (07)	06:46	07:18	07:43 (06)	06:18	08:12 (05)	07:17	08:28 (05)	
	20:16	21 06:28 (08)	19:36	33 07:12 (07)	18:45	27 08:10 (06)	16:58	62 09:15 (05)	16:29	81 09:33 (05)	16:33	75 09:43 (05)
28	05:46	06:08 (08)	06:16	06:40 (07)	06:47	07:19	07:41 (06)	06:19	08:15 (05)	07:18	08:28 (05)	
	20:15	20 06:28 (08)	19:35	32 07:12 (07)	18:43	30 08:11 (06)	16:57	61 09:16 (05)	16:29	81 09:33 (05)	16:34	75 09:43 (05)
29	05:47	06:09 (08)	06:17	06:40 (07)	06:48	07:20	07:39 (06)	06:20	08:14 (05)	07:18	08:29 (05)	
	20:14	19 06:28 (08)	19:33	31 07:11 (07)	18:42	33 08:12 (06)	16:56	64 09:18 (05)	16:29	81 09:34 (05)	16:34	76 09:45 (05)
30	05:48	06:10 (08)	06:18	06:40 (07)	06:49	07:21	07:38 (06)	06:21	08:13 (05)	07:18	08:29 (05)	
	20:13	18 06:28 (08)	19:32	30 07:10 (07)	18:40	35 08:13 (06)	16:54	67 09:20 (05)	16:28	80 09:34 (05)	16:35	76 09:45 (05)
31	05:49	06:11 (08)	06:19	06:41 (07)			06:23		08:12 (05)	07:18	08:29 (05)	
	20:12	17 06:28 (08)	19:30	27 07:08 (07)			16:53	69 09:21 (05)		16:36	77 09:46 (05)	
Ore potenziali eliofania	458		427		375		346		299		289	
Totale, caso peggiore	355		663		250		1509		2400		2376	
Probabilità di eliofania	0,69		0,69		0,61		0,52		0,47		0,41	
Tempo di operatività rid.	0,85		0,85		0,85		0,85		0,85		0,85	
Dir. del vento rid.	0,49		0,51		0,60		0,68		0,75		0,75	
Totale ridotto	0,29		0,30		0,31		0,31		0,30		0,27	
Totale effettivo	104		202		79		466		730		635	

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R05 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (5)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio		Febbraio		Marzo		Aprile		Maggio			Giugno		
1	07:19	08:30 (10)	07:06	06:30	06:40				05:54	06:32 (11)	05:26	06:42 (11)		
	16:37	49 09:19 (10)	17:11	17:45	19:18				19:50	59 07:31 (11)	20:19	81 19:36 (05)		
2	07:19	08:30 (10)	07:05	06:28	06:38				05:53	06:32 (11)	05:25	06:43 (11)		
	16:38	49 09:19 (10)	17:12	17:46	19:19				19:51	60 07:32 (11)	20:20	81 19:37 (05)		
3	07:19	08:31 (10)	07:04	06:27	06:36				05:52	06:31 (11)	05:25	06:43 (11)		
	16:39	48 09:19 (10)	17:13	17:47	19:20				19:52	61 07:32 (11)	20:20	80 19:37 (05)		
4	07:19	08:31 (10)	07:03	06:25	06:35				05:50	06:31 (11)	05:25	06:45 (11)		
	16:40	48 09:19 (10)	17:15	17:48	19:21				19:53	61 07:32 (11)	20:21	79 19:38 (05)		
5	07:19	08:32 (10)	07:02	06:24	06:33				05:49	06:31 (11)	05:24	06:46 (11)		
	16:40	48 09:20 (10)	17:16	17:49	19:22				19:54	61 07:32 (11)	20:22	78 19:38 (05)		
6	07:19	08:33 (10)	07:00	06:22	06:32				05:48	06:31 (11)	05:24	06:46 (11)		
	16:41	47 09:20 (10)	17:17	17:50	19:23				19:55	61 07:32 (11)	20:22	76 19:38 (05)		
7	07:19	08:34 (10)	06:59	06:21	06:30				05:47	06:30 (11)	05:24	06:47 (11)		
	16:42	46 09:20 (10)	17:18	17:51	19:25				19:56	61 07:31 (11)	20:23	75 19:38 (05)		
8	07:19	08:34 (10)	06:58	06:19	06:28				05:46	06:31 (11)	05:23	06:48 (11)		
	16:43	45 09:19 (10)	17:20	17:53	19:26				19:57	60 07:31 (11)	20:24	75 19:39 (05)		
9	07:19	08:35 (10)	06:57	06:18	06:27				05:45	06:31 (11)	05:23	06:49 (11)		
	16:44	45 09:20 (10)	17:21	17:54	19:27				19:58	60 07:31 (11)	20:24	74 19:39 (05)		
10	07:18	08:36 (10)	06:56	06:16	06:25				05:43	06:31 (11)	05:23	06:50 (11)		
	16:45	44 09:20 (10)	17:22	17:55	19:28				19:59	59 07:30 (11)	20:25	72 19:40 (05)		
11	07:18	08:37 (10)	06:55	06:14	06:23				05:42	06:31 (11)	05:23	06:51 (11)		
	16:46	43 09:20 (10)	17:23	17:56	19:29				20:00	59 07:30 (11)	20:25	71 19:40 (05)		
12	07:18	08:37 (10)	06:54	06:13	06:22				05:41	06:31 (11)	05:23	06:52 (11)		
	16:47	42 09:19 (10)	17:24	17:57	19:30				20:01	59 07:30 (11)	20:26	71 19:41 (05)		
13	07:18	08:38 (10)	06:52	06:11	06:20				05:40	06:31 (11)	05:23	06:52 (11)		
	16:48	41 09:19 (10)	17:26	17:58	19:31				20:02	59 07:30 (11)	20:26	70 19:41 (05)		
14	07:17	08:40 (10)	06:51	06:09	06:19			06:58 (11)	05:39	06:31 (11)	05:22	06:53 (11)		
	16:50	40 09:20 (10)	17:27	17:59	19:32	16	07:14 (11)	20:03	58	07:29 (11)	20:27	69	19:41 (05)	
15	07:17	08:40 (10)	06:50	06:08	06:17			06:54 (11)	05:38	06:32 (11)	05:22	06:54 (11)		
	16:51	39 09:19 (10)	17:28	18:00	19:33	24	07:18 (11)	20:04	63	19:16 (05)	20:27	67	19:41 (05)	
16	07:17	08:42 (10)	06:48	06:06	06:16			06:50 (11)	05:37	06:32 (11)	05:22	06:54 (11)		
	16:52	37 09:19 (10)	17:29	18:01	19:34	30	07:20 (11)	20:05	72	19:21 (05)	20:27	67	19:42 (05)	
17	07:16	08:42 (10)	06:47	06:05	06:14			06:48 (11)	05:36	06:33 (11)	05:23	06:55 (11)		
	16:53	35 09:17 (10)	17:31	18:02	19:35	35	07:23 (11)	20:06	76	19:24 (05)	20:28	66	19:42 (05)	
18	07:16	08:44 (10)	06:46	06:03	06:13			06:45 (11)	05:35	06:33 (11)	05:23	06:55 (11)		
	16:54	33 09:17 (10)	17:32	18:03	19:36	39	07:24 (11)	20:07	79	19:26 (05)	20:28	66	19:42 (05)	
19	07:15	08:45 (10)	06:44	06:01	06:11			06:44 (11)	05:35	06:34 (11)	05:23	06:56 (11)		
	16:55	31 09:16 (10)	17:33	18:04	19:37	42	07:26 (11)	20:08	80	19:27 (05)	20:28	65	19:42 (05)	
20	07:15	08:46 (10)	06:43	06:00	06:10			06:42 (11)	05:34	06:34 (11)	05:23	06:56 (11)		
	16:56	28 09:14 (10)	17:34	18:06	19:38	44	07:26 (11)	20:09	82	19:28 (05)	20:29	65	19:42 (05)	
21	07:14	08:49 (10)	06:42	05:58	06:08			06:41 (11)	05:33	06:34 (11)	05:23	06:56 (11)		
	16:58	25 09:14 (10)	17:35	18:07	19:39	47	07:28 (11)	20:10	83	19:29 (05)	20:29	65	19:42 (05)	
22	07:13	08:51 (10)	06:40	05:56	06:07			06:39 (11)	05:32	06:35 (11)	05:23	06:57 (11)		
	16:59	21 09:12 (10)	17:36	18:08	19:40	49	07:28 (11)	20:10	85	19:31 (05)	20:29	65	19:43 (05)	
23	07:13	08:53 (10)	06:39	05:55	06:05			06:38 (11)	05:31	06:36 (11)	05:23	06:57 (11)		
	17:00	16 09:09 (10)	17:38	18:09	19:41	51	07:29 (11)	20:11	84	19:31 (05)	20:29	65	19:43 (05)	
24	07:12	08:59 (10)	06:37	05:53	06:04			06:37 (11)	05:31	06:36 (11)	05:24	06:56 (11)		
	17:01	6 09:05 (10)	17:39	18:10	19:42	53	07:30 (11)	20:12	85	19:32 (05)	20:30	66	19:43 (05)	
25	07:11		06:36	05:51	06:02			06:36 (11)	05:30	06:37 (11)	05:24	06:56 (11)		
	17:02		17:40	18:11	19:43	54	07:30 (11)	20:13	86	19:33 (05)	20:30	66	19:43 (05)	
26	07:11		06:34	05:50	06:01			06:35 (11)	05:29	06:38 (11)	05:24	06:57 (11)		
	17:04		17:41	18:12	19:44	56	07:31 (11)	20:14	84	19:33 (05)	20:30	66	19:44 (05)	
27	07:10		06:33	05:48	06:00			06:35 (11)	05:29	06:38 (11)	05:25	06:56 (11)		
	17:05		17:42	18:13	19:45	56	07:31 (11)	20:15	84	19:33 (05)	20:30	68	19:44 (05)	
28	07:09		06:32	05:46	05:58			06:33 (11)	05:28	06:39 (11)	05:25	06:55 (11)		
	17:06		17:43	18:14	19:47	58	07:31 (11)	20:16	85	19:35 (05)	20:30	69	19:43 (05)	
29	07:08			06:45	05:57			06:33 (11)	05:27	06:39 (11)	05:25	06:56 (11)		
	17:07			19:15	19:48	59	07:32 (11)	20:16	85	19:35 (05)	20:30	69	19:44 (05)	
30	07:07			06:43	05:56			06:33 (11)	05:27	06:41 (11)	05:26	06:55 (11)		
	17:08			19:16	19:49	59	07:32 (11)	20:17	84	19:36 (05)	20:30	70	19:44 (05)	
31	07:06			06:41					05:26	06:42 (11)				
	17:10			19:17					20:18	83	19:37 (05)			
Ore potenziali eliofania	298		298	369	398			448			451			
Totale, caso peggiore	906				772			2218			2117			
Probabilità di eliofania	0,43				0,51			0,57			0,62			
Tempo di operatività rid.	0,85				0,85			0,85			0,85			
Dir. del vento rid.	0,76				0,50			0,54			0,61			
Totale ridotto	0,28				0,22			0,27			0,33			
Totale effettivo	254				169			595			697			

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R05 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (5)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio		Agosto		Settembre		Ottobre		Novembre		Dicembre	
1	05:26	06:55 (11)	05:50	06:42 (11)	06:20	06:50	06:24	06:58	08:19 (10)			
	20:30	71 19:44 (05)	20:11	59 07:41 (11)	19:28	18:38	16:52	16:28	43 09:02 (10)			
2	05:27	06:54 (11)	05:51	06:41 (11)	06:21	06:51	06:25	06:59	08:19 (10)			
	20:30	72 19:44 (05)	20:10	60 07:41 (11)	19:27	18:37	16:51	16:28	44 09:03 (10)			
3	05:27	06:54 (11)	05:52	06:41 (11)	06:22	06:52	06:26	07:00	08:19 (10)			
	20:29	74 19:45 (05)	20:09	60 07:41 (11)	19:25	18:35	16:50	16:27	45 09:04 (10)			
4	05:28	06:53 (11)	05:53	06:41 (11)	06:23	06:53	06:27	07:01	08:19 (10)			
	20:29	75 19:44 (05)	20:08	60 07:41 (11)	19:23	18:33	16:48	16:27	46 09:05 (10)			
5	05:28	06:53 (11)	05:54	06:41 (11)	06:24	06:54	06:28	07:02	08:19 (10)			
	20:29	76 19:45 (05)	20:07	61 07:42 (11)	19:22	18:32	16:47	16:27	46 09:05 (10)			
6	05:29	06:52 (11)	05:55	06:41 (11)	06:25	06:55	06:30	07:03	08:19 (10)			
	20:29	76 19:44 (05)	20:05	61 07:42 (11)	19:20	18:30	16:46	16:27	47 09:06 (10)			
7	05:30	06:52 (11)	05:56	06:41 (11)	06:26	06:56	06:31	07:04	08:19 (10)			
	20:29	79 19:45 (05)	20:04	61 07:42 (11)	19:19	18:28	16:45	16:27	48 09:07 (10)			
8	05:30	06:52 (11)	05:57	06:40 (11)	06:27	06:57	06:32	07:05	08:19 (10)			
	20:28	79 19:45 (05)	20:03	61 07:41 (11)	19:17	18:27	16:44	16:27	49 09:08 (10)			
9	05:31	06:51 (11)	05:58	06:40 (11)	06:28	06:58	06:33	07:06	08:20 (10)			
	20:28	79 19:44 (05)	20:02	61 07:41 (11)	19:15	18:25	16:43	16:27	48 09:08 (10)			
10	05:32	06:51 (11)	05:59	06:40 (11)	06:29	06:59	06:34	07:07	08:19 (10)			
	20:27	81 19:45 (05)	20:00	60 07:40 (11)	19:14	18:23	16:42	16:27	49 09:08 (10)			
11	05:32	06:51 (11)	06:00	06:40 (11)	06:30	07:00	06:35	07:08	08:20 (10)			
	20:27	81 19:45 (05)	19:59	60 07:40 (11)	19:12	18:22	16:41	16:27	49 09:09 (10)			
12	05:33	06:49 (11)	06:01	06:41 (11)	06:31	07:01	06:37	07:08	08:20 (10)			
	20:27	83 19:44 (05)	19:58	59 07:40 (11)	19:10	18:20	16:40	16:27	50 09:10 (10)			
13	05:34	06:49 (11)	06:02	06:41 (11)	06:32	07:02	06:38	07:09	08:21 (10)			
	20:26	83 19:44 (05)	19:57	59 07:40 (11)	19:09	18:19	16:39	16:27	49 09:10 (10)			
14	05:34	06:49 (11)	06:03	06:41 (11)	06:33	07:03	06:39	07:10	08:21 (10)			
	20:26	84 19:44 (05)	19:55	58 07:39 (11)	19:07	18:17	16:38	16:27	50 09:11 (10)			
15	05:35	06:49 (11)	06:04	06:41 (11)	06:34	07:05	06:40	07:11	08:21 (10)			
	20:25	84 19:44 (05)	19:54	58 07:39 (11)	19:05	18:16	16:37	16:28	50 09:11 (10)			
16	05:36	06:47 (11)	06:05	06:42 (11)	06:35	07:06	06:41	07:11	08:22 (10)			
	20:24	85 19:43 (05)	19:52	56 07:38 (11)	19:03	18:14	16:36	16:28	50 09:12 (10)			
17	05:37	06:47 (11)	06:06	06:42 (11)	06:36	07:07	06:43	07:12	08:22 (10)			
	20:24	85 19:43 (05)	19:51	55 07:37 (11)	19:02	18:13	16:36	16:28	51 09:13 (10)			
18	05:37	06:47 (11)	06:07	06:43 (11)	06:37	07:08	06:44	07:13	08:22 (10)			
	20:23	85 19:43 (05)	19:50	54 07:37 (11)	19:00	18:11	16:35	6 08:39 (10)	16:28	51	09:13 (10)	
19	05:38	06:47 (11)	06:08	06:43 (11)	06:38	07:09	06:45	08:28 (10)	07:13	08:23 (10)		
	20:23	85 19:42 (05)	19:48	53 07:36 (11)	18:58	18:10	16:34	16 08:44 (10)	16:29	51	09:14 (10)	
20	05:39	06:45 (11)	06:09	06:44 (11)	06:39	07:10	06:46	08:26 (10)	07:14	08:23 (10)		
	20:22	85 19:41 (05)	19:47	51 07:35 (11)	18:57	18:08	16:33	21 08:47 (10)	16:29	51	09:14 (10)	
21	05:40	06:45 (11)	06:10	06:45 (11)	06:40	07:11	06:47	08:24 (10)	07:15	08:24 (10)		
	20:21	84 19:40 (05)	19:45	49 07:34 (11)	18:55	18:07	16:33	25 08:49 (10)	16:30	51	09:15 (10)	
22	05:41	06:45 (11)	06:10	06:46 (11)	06:41	07:12	06:48	08:23 (10)	07:15	08:24 (10)		
	20:20	83 19:40 (05)	19:44	46 07:32 (11)	18:53	18:05	16:32	27 08:50 (10)	16:30	51	09:15 (10)	
23	05:42	06:45 (11)	06:11	06:47 (11)	06:42	07:13	06:49	08:22 (10)	07:16	08:25 (10)		
	20:19	82 19:39 (05)	19:42	44 07:31 (11)	18:52	18:04	16:31	31 08:53 (10)	16:31	51	09:16 (10)	
24	05:43	06:44 (11)	06:12	06:48 (11)	06:43	07:14	06:51	08:21 (10)	07:16	08:25 (10)		
	20:19	82 19:38 (05)	19:41	41 07:29 (11)	18:50	18:02	16:31	33 08:54 (10)	16:31	51	09:16 (10)	
25	05:43	06:44 (11)	06:13	06:48 (11)	06:44	06:16	06:52	08:20 (10)	07:17	08:25 (10)		
	20:18	79 19:37 (05)	19:39	38 07:26 (11)	18:48	17:01	16:30	35 08:55 (10)	16:32	51	09:16 (10)	
26	05:44	06:44 (11)	06:14	06:50 (11)	06:45	06:17	06:53	08:20 (10)	07:17	08:26 (10)		
	20:17	77 19:35 (05)	19:38	34 07:24 (11)	18:47	17:00	16:30	37 08:57 (10)	16:32	51	09:17 (10)	
27	05:45	06:43 (11)	06:15	06:52 (11)	06:46	06:18	06:54	08:19 (10)	07:17	08:27 (10)		
	20:16	73 19:32 (05)	19:36	30 07:22 (11)	18:45	16:58	16:29	39 08:58 (10)	16:33	50	09:17 (10)	
28	05:46	06:42 (11)	06:16	06:55 (11)	06:47	06:19	06:55	08:19 (10)	07:18	08:27 (10)		
	20:15	70 19:30 (05)	19:35	24 07:19 (11)	18:43	16:57	16:29	40 08:59 (10)	16:34	50	09:17 (10)	
29	05:47	06:42 (11)	06:17	06:59 (11)	06:48	06:20	06:56	08:19 (10)	07:18	08:28 (10)		
	20:14	57 07:39 (11)	19:33	15 07:14 (11)	18:41	16:56	16:29	41 09:00 (10)	16:34	50	09:18 (10)	
30	05:48	06:42 (11)	06:18		06:49	06:21	06:57	08:19 (10)	07:18	08:29 (10)		
	20:13	58 07:40 (11)	19:31		18:40	16:54	16:28	42 09:01 (10)	16:35	49	09:18 (10)	
31	05:49	06:42 (11)	06:19			06:23			07:18	08:29 (10)		
	20:12	58 07:40 (11)	19:30			16:53			16:36	50	09:19 (10)	
Ore potenziali eliofania	458		427		375	346	299		289			
Totale, caso peggiore	2405		1488				393		1522			
Probabilità di eliofania	0,69		0,69				0,47		0,41			
Tempo di operatività rid.	0,85		0,85				0,85		0,85			
Dir. del vento rid.	0,57		0,50				0,76		0,76			
Totale ridotto	0,34		0,30				0,31		0,27			
Totale effettivo	824		442				120		409			

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R06 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (8)
Assunzioni sui calcoli d'ombra

Probabilità di eliofanìa (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività
N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio		Febbraio		Marzo		Aprile		Maggio		Giugno	
1	07:19	15:18 (02)	07:06		06:30	16:33 (01)	06:40	05:54	05:26			
	16:37	32 15:50 (02)	17:11		17:45	36 17:09 (01)	19:18	19:50	20:19			
2	07:19	15:18 (02)	07:05		06:28	16:31 (01)	06:38	05:53	05:25			
	16:38	32 15:50 (02)	17:12		17:46	38 17:09 (01)	19:19	19:51	20:20			
3	07:19	15:19 (02)	07:04		06:27	16:31 (01)	06:36	05:52	05:25			
	16:39	32 15:51 (02)	17:13		17:47	39 17:10 (01)	19:20	19:52	20:20			
4	07:19	15:19 (02)	07:03		06:25	16:30 (01)	06:35	05:50	05:24			
	16:39	32 15:51 (02)	17:15		17:48	40 17:10 (01)	19:21	19:53	20:21			
5	07:19	15:20 (02)	07:02		06:24	16:29 (01)	06:33	05:49	05:24			
	16:40	31 15:51 (02)	17:16		17:49	42 17:11 (01)	19:22	19:54	20:22			
6	07:19	15:21 (02)	07:00		06:22	16:29 (01)	06:31	05:48	05:24			
	16:41	31 15:52 (02)	17:17		17:50	42 17:11 (01)	19:23	19:55	20:22			
7	07:19	15:22 (02)	06:59		06:21	16:28 (01)	06:30	05:47	05:23			
	16:42	30 15:52 (02)	17:18		17:51	43 17:11 (01)	19:24	19:56	20:23			
8	07:19	15:22 (02)	06:58		06:19	16:28 (01)	06:28	05:46	05:23			
	16:43	31 15:53 (02)	17:19		17:52	43 17:11 (01)	19:26	19:57	20:24			
9	07:19	15:22 (02)	06:57		06:17	16:28 (01)	06:27	05:44	05:23			
	16:44	30 15:52 (02)	17:21		17:54	42 17:10 (01)	19:27	19:58	20:24			
10	07:18	15:23 (02)	06:56		06:16	16:28 (01)	06:25	05:43	05:23			
	16:45	29 15:52 (02)	17:22		17:55	43 17:11 (01)	19:28	19:59	20:25			
11	07:18	15:24 (02)	06:55		06:14	16:28 (01)	06:23	05:42	05:23			
	16:46	29 15:53 (02)	17:23		17:56	42 17:10 (01)	19:29	20:00	20:25			
12	07:18	15:25 (02)	06:54		06:13	16:28 (01)	06:22	05:41	05:22			
	16:47	27 15:52 (02)	17:24		17:57	41 17:09 (01)	19:30	20:01	20:26			
13	07:18	15:26 (02)	06:52		06:11	16:29 (01)	06:20	05:40	05:22			
	16:48	26 15:52 (02)	17:26		17:58	40 17:09 (01)	19:31	20:02	20:26			
14	07:17	15:27 (02)	06:51		06:09	16:29 (01)	06:19	05:39	05:22			
	16:49	25 15:52 (02)	17:27		17:59	39 17:08 (01)	19:32	20:03	20:27			
15	07:17	15:28 (02)	06:50		06:08	16:29 (01)	06:17	05:38	05:22			
	16:51	23 15:51 (02)	17:28		18:00	37 17:06 (01)	19:33	20:04	20:27			
16	07:17	15:30 (02)	06:48		06:06	16:30 (01)	06:16	05:37	05:22			
	16:52	21 15:51 (02)	17:29		18:01	36 17:06 (01)	19:34	20:05	20:28			
17	07:16	15:30 (02)	06:47		06:04	16:31 (01)	06:14	05:36	05:22			
	16:53	20 15:50 (02)	17:30		18:02	33 17:04 (01)	19:35	20:06	20:28			
18	07:16	15:33 (02)	06:46		06:03	16:32 (01)	06:13	05:35	05:22			
	16:54	17 15:50 (02)	17:32		18:03	30 17:02 (01)	19:36	20:07	20:28			
19	07:15	15:34 (02)	06:44		06:01	16:34 (01)	06:11	05:34	05:23			
	16:55	14 15:48 (02)	17:33		18:04	27 17:01 (01)	19:37	20:08	20:29			
20	07:15	15:36 (02)	06:43		06:00	16:36 (01)	06:10	05:34	05:23			
	16:56	10 15:46 (02)	17:34		18:05	22 16:58 (01)	19:38	20:09	20:29			
21	07:14		06:42		05:58	16:38 (01)	06:08	05:33	05:23			
	16:57		17:35		18:07	16 16:54 (01)	19:39	20:10	20:29			
22	07:13		06:40		05:56	16:44 (01)	06:07	05:32	05:23			
	16:59		17:36		18:08	5 16:49 (01)	19:40	20:11	20:29			
23	07:13		06:39	16:45 (01)	05:55		06:05	05:31	05:23			
	17:00		17:38	13 16:58 (01)	18:09		19:41	20:11	20:29			
24	07:12		06:37	16:41 (01)	05:53		06:04	05:30	05:24			
	17:01		17:39	20 17:01 (01)	18:10		19:42	20:12	20:30			
25	07:11		06:36	16:39 (01)	05:51		06:02	05:30	05:24			
	17:02		17:40	25 17:04 (01)	18:11		19:43	20:13	20:30			
26	07:11		06:34	16:36 (01)	05:50		06:01	05:29	05:24			
	17:03		17:41	29 17:05 (01)	18:12		19:44	20:14	20:30			
27	07:10		06:33	16:35 (01)	05:48		06:00	05:28	05:24			
	17:05		17:42	32 17:07 (01)	18:13		19:45	20:15	20:30			
28	07:09		06:31	16:33 (01)	05:46		05:58	05:28	05:25			
	17:06		17:43	34 17:07 (01)	18:14		19:47	20:16	20:30			
29	07:08				06:45		05:57	05:27	05:25			
	17:07				19:15		19:48	20:17	20:30			
30	07:07				06:43		05:56	05:27	05:26			
	17:08				19:16		19:49	20:17	20:30			
31	07:06				06:41			05:26				
	17:10				19:17			20:18				
Ore potenziali eliofanìa	298		298		369		398	448	451			
Totale, caso peggiore	522		153		776							
Probabilità di eliofanìa	0,43		0,44		0,44							
Tempo di operatività rid.	0,85		0,85		0,85							
Dir. del vento rid.	0,49		0,48		0,48							
Totale ridotto	0,18		0,18		0,18							
Totale effettivo	94		27		141							

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R06 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (8)

Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 20:30	05:50 20:11	06:20 19:28	06:50 18:38	17:07 (01) 17:48 (01)	06:24 16:52
2	05:27 20:30	05:51 20:10	06:21 19:27	06:51 18:36	17:07 (01) 17:48 (01)	06:25 16:51
3	05:27 20:29	05:52 20:09	06:22 19:25	06:52 18:35	17:06 (01) 17:48 (01)	06:26 16:49
4	05:28 20:29	05:53 20:08	06:23 19:23	06:53 18:33	17:05 (01) 17:48 (01)	06:27 16:48
5	05:28 20:29	05:54 20:07	06:24 19:22	06:54 18:32	17:05 (01) 17:48 (01)	06:28 16:47
6	05:29 20:29	05:55 20:05	06:25 19:20	06:55 18:30	17:04 (01) 17:47 (01)	06:30 16:46
7	05:29 20:29	05:56 20:04	06:26 19:18	06:56 18:28	17:04 (01) 17:47 (01)	06:31 16:45
8	05:30 20:28	05:57 20:03	06:27 19:17	06:57 18:27	17:04 (01) 17:46 (01)	06:32 16:44
9	05:31 20:28	05:58 20:02	06:28 19:15	06:58 18:25	17:04 (01) 17:45 (01)	06:33 16:43
10	05:31 20:27	05:59 20:00	06:29 19:14	06:59 18:23	17:04 (01) 17:44 (01)	06:34 16:42
11	05:32 20:27	06:00 19:59	06:30 19:12	07:00 18:22	17:04 (01) 17:43 (01)	06:35 16:41
12	05:33 20:27	06:01 19:58	06:31 19:10	07:01 18:20	17:06 (01) 17:43 (01)	06:37 16:40
13	05:33 20:26	06:02 19:57	06:32 19:08	07:02 18:19	17:06 (01) 17:42 (01)	06:38 16:39
14	05:34 20:26	06:03 19:55	06:33 19:07	07:03 18:17	17:07 (01) 17:40 (01)	06:39 16:38
15	05:35 20:25	06:03 19:54	06:34 19:05	07:05 18:16	17:08 (01) 17:39 (01)	06:40 16:37
16	05:36 20:24	06:04 19:52	06:35 19:03	07:06 18:14	17:10 (01) 17:37 (01)	06:41 16:36
17	05:37 20:24	06:05 19:51	06:36 19:02	07:07 18:13	17:11 (01) 17:34 (01)	06:43 16:35
18	05:37 20:23	06:06 19:50	06:37 19:00	07:08 18:11	17:14 (01) 17:31 (01)	06:44 16:35
19	05:38 20:23	06:07 19:48	06:38 18:58	07:09 18:10	17:18 (01) 17:26 (01)	06:45 16:34
20	05:39 20:22	06:08 19:47	06:39 18:57	07:10 18:08	16:34 16:33	16:34 16:33
21	05:40 20:21	06:09 19:45	06:40 18:55	07:11 18:07	06:47 16:33	06:47 16:29
22	05:41 20:20	06:10 19:44	06:41 18:53	17:24 (01) 17:39 (01)	07:12 18:05	15:12 (02) 16:32
23	05:42 20:20	06:11 19:42	06:42 18:52	17:21 (01) 17:41 (01)	07:13 18:04	15:11 (02) 16:31
24	05:42 20:19	06:12 19:41	06:43 18:50	17:18 (01) 17:43 (01)	07:14 18:02	15:10 (02) 16:31
25	05:43 20:18	06:13 19:39	06:44 18:48	17:16 (01) 17:45 (01)	06:16 17:01	15:09 (02) 16:30
26	05:44 20:17	06:14 19:38	06:45 18:46	17:14 (01) 17:46 (01)	06:17 17:00	15:08 (02) 16:30
27	05:45 20:16	06:15 19:36	06:46 18:45	17:12 (01) 17:47 (01)	06:18 16:58	15:07 (02) 16:29
28	05:46 20:15	06:16 19:35	06:47 18:43	17:11 (01) 17:47 (01)	06:19 16:57	15:06 (02) 16:29
29	05:47 20:14	06:17 19:33	06:48 18:41	17:09 (01) 17:48 (01)	06:20 16:56	15:07 (02) 16:28
30	05:48 20:13	06:18 19:31	06:49 18:40	17:08 (01) 17:48 (01)	06:21 16:54	15:07 (02) 16:28
31	05:49 20:12	06:19 19:30		06:23 16:53		07:18 16:36
Ore potenziali eliofania	458	427	375	346	299	289
Totale, caso peggiore			271	670	182	994
Probabilità di eliofania			0,61	0,52	0,47	0,41
Tempo di operatività rid.			0,85	0,85	0,85	0,85
Dir. del vento rid.			0,48	0,48	0,49	0,49
Totale ridotto			0,25	0,21	0,20	0,17
Totale effettivo			68	143	36	171

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R07 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (10)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività
N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	
1	07:19 16:37	07:06 17:11	06:30 17:45	06:40 19:18	05:54 19:50	06:37 (06) 05:26 05:51 (07)	
2	07:19 16:38	07:05 17:12	06:29 17:46	06:38 19:19	05:53 19:51	68 07:45 (05) 20:19 76 07:36 (05)	
3	07:19 16:39	07:04 17:13	06:27 17:47	06:36 19:20	05:52 19:52	67 07:44 (05) 20:20 75 07:36 (05)	
4	07:19 16:40	07:03 17:15	06:25 17:48	06:35 19:21	05:51 19:53	65 06:39 (06) 05:25 74 07:35 (05)	
5	07:19 16:41	07:02 17:16	06:24 17:49	06:33 19:22	05:49 19:54	64 07:44 (05) 20:21 73 07:35 (05)	
6	07:19 16:41	07:01 17:17	06:22 17:50	06:32 19:24	05:48 19:55	65 07:45 (05) 20:22 72 07:35 (05)	
7	07:19 16:42	06:59 17:18	06:21 17:51	06:30 19:25	05:47 19:56	65 06:39 (05) 05:24 69 07:34 (05)	
8	07:19 16:43	06:58 17:20	06:19 17:53	06:28 19:26	05:46 19:57	65 07:44 (05) 20:24 67 07:34 (05)	
9	07:19 16:44	06:57 17:21	06:18 17:54	06:27 19:27	05:45 19:58	65 06:39 (05) 05:23 67 07:34 (05)	
10	07:18 16:45	06:56 17:22	06:16 17:55	06:25 19:28	05:44 19:59	65 07:44 (05) 05:23 66 07:34 (05)	
11	07:18 16:46	06:55 17:23	06:14 17:56	06:24 19:29	06:51 (06) 06:57 (06)	05:42 20:00	64 07:43 (05) 20:25 65 07:34 (05)
12	07:18 16:47	06:54 17:25	06:13 17:57	06:22 19:30	06:46 (06) 07:01 (06)	05:41 20:01	64 06:39 (05) 05:23 64 07:34 (05)
13	07:18 16:49	06:52 17:26	06:11 17:58	06:20 19:31	06:44 (06) 07:04 (06)	05:40 20:02	68 06:01 (07) 05:23 63 07:34 (05)
14	07:17 16:50	06:51 17:27	06:09 17:59	06:19 19:32	06:41 (06) 07:23 (05)	05:39 20:03	73 07:42 (05) 20:27 62 07:34 (05)
15	07:17 16:51	06:50 17:28	06:08 18:00	06:17 19:33	06:40 (06) 07:28 (05)	05:38 20:04	76 07:42 (05) 20:27 61 07:34 (05)
16	07:17 16:52	06:49 17:29	06:06 18:01	06:16 19:34	06:38 (06) 07:31 (05)	05:37 20:05	78 07:42 (05) 20:28 61 07:34 (05)
17	07:16 16:53	06:47 17:31	06:05 18:02	06:14 19:35	06:38 (06) 07:33 (05)	05:36 20:06	79 07:42 (05) 20:28 60 07:34 (05)
18	07:16 16:54	06:46 17:32	06:03 18:03	06:13 19:36	06:36 (06) 07:35 (05)	05:35 20:07	80 07:42 (05) 20:28 59 07:34 (05)
19	07:15 16:55	06:45 17:33	06:01 18:05	06:11 19:37	06:36 (06) 07:37 (05)	05:35 20:08	81 07:41 (05) 20:29 59 07:34 (05)
20	07:15 16:56	06:43 17:34	06:00 18:06	06:10 19:38	06:35 (06) 07:38 (05)	05:34 20:09	81 07:41 (05) 20:29 59 07:34 (05)
21	07:14 16:58	06:42 17:35	05:58 18:07	06:08 19:39	06:35 (06) 07:39 (05)	05:33 20:10	82 07:40 (05) 20:29 59 07:34 (05)
22	07:13 16:59	06:40 17:37	05:56 18:08	06:07 19:40	06:35 (06) 07:40 (05)	05:32 20:11	82 07:40 (05) 20:29 59 07:35 (05)
23	07:13 17:00	06:39 17:38	05:55 18:09	06:05 19:41	06:34 (06) 07:41 (05)	05:31 20:11	83 07:40 (05) 20:29 59 07:35 (05)
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 19:42	06:34 (06) 07:42 (05)	05:31 20:12	83 07:39 (05) 20:30 59 07:35 (05)
25	07:11 17:02	06:36 17:40	05:51 18:11	06:02 19:43	06:34 (06) 07:42 (05)	05:30 20:13	83 07:39 (05) 20:30 60 07:35 (05)
26	07:11 17:04	06:35 17:41	05:50 18:12	06:01 19:44	06:34 (06) 07:43 (05)	05:29 20:14	82 07:38 (05) 20:30 61 07:36 (05)
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 19:46	06:35 (06) 07:43 (05)	05:29 20:15	82 07:39 (05) 20:30 61 07:36 (05)
28	07:09 17:06	06:32 17:44	05:46 18:14	05:58 19:47	06:34 (06) 07:43 (05)	05:28 20:16	81 07:38 (05) 20:30 61 07:37 (05)
29	07:08 17:07	06:45 19:15	05:57 19:15	05:57 19:48	06:35 (06) 07:44 (05)	05:27 20:17	80 07:37 (05) 20:30 63 07:37 (05)
30	07:07 17:08	06:43 19:16	05:56 19:16	05:56 19:49	06:36 (06) 07:44 (05)	05:27 20:17	79 07:37 (05) 20:30 63 07:37 (05)
31	07:07 17:10	06:41 19:17	05:55 19:17	05:55 19:17	06:36 (06) 07:44 (05)	05:27 20:17	79 07:37 (05) 20:30 63 07:37 (05)
Ore potenziali eliofania	298	298	369	398	448	451	
Totale, caso peggiore				1093	2291	1927	
Probabilità di eliofania				0,51	0,57	0,62	
Tempo di operatività rid.				0,85	0,85	0,85	
Dir. del vento rid.				0,51	0,50	0,50	
Totale ridotto				0,22	0,25	0,27	
Totale effettivo				238	562	512	

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R07 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (10)
Assunzioni sui calcoli d'ombra

Probabilità di eliofanía (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre			
1	05:26	05:59 (07)	05:50	06:49 (05)	06:20	06:51 (06)	06:50	06:24	06:58
	20:30	65 07:38 (05)	20:11	65 07:54 (05)	19:28	5 06:56 (06)	18:38	16:52	16:28
2	05:27	05:59 (07)	05:51	06:49 (05)	06:21		06:51	06:25	06:59
	20:30	66 07:38 (05)	20:10	65 07:54 (05)	19:27		18:37	16:51	16:28
3	05:27	06:00 (07)	05:52	06:49 (05)	06:22		06:52	06:26	07:00
	20:30	66 07:39 (05)	20:09	65 07:54 (05)	19:25		18:35	16:50	16:27
4	05:28	05:59 (07)	05:53	06:49 (05)	06:23		06:53	06:27	07:01
	20:29	67 07:39 (05)	20:08	65 07:54 (05)	19:24		18:33	16:48	16:27
5	05:28	05:59 (07)	05:54	06:49 (05)	06:24		06:54	06:28	07:02
	20:29	69 07:40 (05)	20:07	65 07:54 (05)	19:22		18:32	16:47	16:27
6	05:29	06:00 (07)	05:55	06:49 (05)	06:25		06:55	06:30	07:03
	20:29	70 07:41 (05)	20:05	65 07:54 (05)	19:20		18:30	16:46	16:27
7	05:30	05:59 (07)	05:56	06:49 (05)	06:26		06:56	06:31	07:04
	20:29	71 07:41 (05)	20:04	65 07:54 (05)	19:19		18:28	16:45	16:27
8	05:30	06:00 (07)	05:57	06:49 (05)	06:27		06:57	06:32	07:05
	20:28	71 07:42 (05)	20:03	65 07:54 (05)	19:17		18:27	16:44	16:27
9	05:31	05:59 (07)	05:58	06:49 (06)	06:28		06:58	06:33	07:06
	20:28	73 07:42 (05)	20:02	64 07:53 (05)	19:15		18:25	16:43	16:27
10	05:32	05:59 (07)	05:59	06:47 (06)	06:29		06:59	06:34	07:07
	20:28	75 07:43 (05)	20:01	66 07:53 (05)	19:14		18:24	16:42	16:27
11	05:32	06:00 (07)	06:00	06:46 (06)	06:30		07:00	06:36	07:08
	20:27	75 07:44 (05)	19:59	67 07:53 (05)	19:12		18:22	16:41	16:27
12	05:33	05:59 (07)	06:01	06:44 (06)	06:31		07:01	06:37	07:09
	20:27	77 07:44 (05)	19:58	68 07:52 (05)	19:10		18:20	16:40	16:27
13	05:34	05:59 (07)	06:02	06:43 (06)	06:32		07:02	06:38	07:09
	20:26	78 07:45 (05)	19:57	69 07:52 (05)	19:09		18:19	16:39	16:27
14	05:34	06:00 (07)	06:03	06:43 (06)	06:33		07:04	06:39	07:10
	20:26	79 07:46 (05)	19:55	68 07:51 (05)	19:07		18:17	16:38	16:27
15	05:35	06:00 (07)	06:04	06:42 (06)	06:34		07:05	06:40	07:11
	20:25	80 07:47 (05)	19:54	69 07:51 (05)	19:05		18:16	16:37	16:28
16	05:36	06:00 (07)	06:05	06:41 (06)	06:35		07:06	06:41	07:12
	20:25	81 07:47 (05)	19:53	69 07:50 (05)	19:04		18:14	16:36	16:28
17	05:37	06:00 (07)	06:06	06:41 (06)	06:36		07:07	06:43	07:12
	20:24	82 07:48 (05)	19:51	68 07:49 (05)	19:02		18:13	16:36	16:28
18	05:38	06:00 (07)	06:07	06:40 (06)	06:37		07:08	06:44	07:13
	20:23	82 07:48 (05)	19:50	68 07:48 (05)	19:00		18:11	16:35	16:28
19	05:38	06:01 (07)	06:08	06:40 (06)	06:38		07:09	06:45	07:14
	20:23	82 07:49 (05)	19:48	67 07:47 (05)	18:58		18:10	16:34	16:29
20	05:39	06:02 (07)	06:09	06:40 (06)	06:39		07:10	06:46	07:14
	20:22	83 07:50 (05)	19:47	66 07:46 (05)	18:57		18:08	16:33	16:29
21	05:40	06:02 (07)	06:10	06:40 (06)	06:40		07:11	06:47	07:15
	20:21	83 07:50 (05)	19:45	65 07:45 (05)	18:55		18:07	16:33	16:30
22	05:41	06:03 (07)	06:11	06:40 (06)	06:41		07:12	06:48	07:15
	20:20	82 07:50 (05)	19:44	64 07:44 (05)	18:53		18:05	16:32	16:30
23	05:42	06:04 (07)	06:12	06:40 (06)	06:42		07:13	06:50	07:16
	20:20	82 07:51 (05)	19:42	62 07:42 (05)	18:52		18:04	16:31	16:31
24	05:43	06:05 (07)	06:13	06:40 (06)	06:43		07:15	06:51	07:16
	20:19	81 07:51 (05)	19:41	60 07:40 (05)	18:50		18:03	16:31	16:31
25	05:44	06:06 (07)	06:14	06:40 (06)	06:44		06:16	06:52	07:17
	20:18	80 07:52 (05)	19:39	58 07:38 (05)	18:48		17:01	16:30	16:32
26	05:44	06:07 (07)	06:15	06:40 (06)	06:45		06:17	06:53	07:17
	20:17	79 07:52 (05)	19:38	55 07:35 (05)	18:47		17:00	16:30	16:32
27	05:45	06:08 (07)	06:15	06:40 (06)	06:46		06:18	06:54	07:17
	20:16	78 07:53 (05)	19:36	52 07:32 (05)	18:45		16:58	16:29	16:33
28	05:46	06:08 (07)	06:16	06:41 (06)	06:47		06:19	06:55	07:18
	20:15	76 07:52 (05)	19:35	48 07:29 (05)	18:43		16:57	16:29	16:34
29	05:47	06:09 (07)	06:17	06:42 (06)	06:48		06:20	06:56	07:18
	20:14	76 07:53 (05)	19:33	35 07:23 (05)	18:42		16:56	16:29	16:34
30	05:48	06:10 (07)	06:18	06:44 (06)	06:49		06:21	06:57	07:18
	20:13	72 07:53 (05)	19:32	19 07:03 (06)	18:40		16:54	16:28	16:35
31	05:49	06:49 (05)	06:19	06:46 (06)			06:23		07:18
	20:12	64 07:53 (05)	19:30	15 07:01 (06)			16:53		16:36
Ore potenziali eliofanía	458	427		375			346	299	289
Totale, caso peggiore	2345		1862		5				
Probabilità di eliofanía	0,69		0,69		0,61				
Tempo di operatività rid.	0,85		0,85		0,85				
Dir. del vento rid.	0,50		0,51		0,51				
Totale ridotto	0,29		0,30		0,26				
Totale effettivo	690		550		1				

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R08 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (6)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N	NNE	ENE	E	ESE	SSE	S	SSO	OSO	O	ONO	NNO	Somma
1.229	573	283	164	231	782	961	432	328	544	685	1.236	7.447

3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno						
1	07:19	07:06	07:31 (10)	06:30	06:40	05:54	06:14 (11)	05:26				
	16:37	17:11	26 07:57 (10)	17:45	19:18	19:50	37 06:51 (11)	20:19				
2	07:19	07:05	07:29 (10)	06:28	06:38	05:53	06:14 (11)	05:25				
	16:38	17:12	29 07:58 (10)	17:46	19:19	19:51	38 06:52 (11)	20:20				
3	07:19	07:04	07:29 (10)	06:27	06:36	05:52	06:14 (11)	05:25				
	16:39	17:13	31 08:00 (10)	17:47	19:20	19:52	38 06:52 (11)	20:20				
4	07:19	07:03	07:28 (10)	06:25	06:35	05:51	06:14 (11)	05:25			05:46 (12)	
	16:40	17:15	33 08:01 (10)	17:48	19:21	19:53	38 06:52 (11)	20:21	1	05:47 (12)		
5	07:19	07:02	07:27 (10)	06:24	06:33	05:49	06:14 (11)	05:24			05:46 (12)	
	16:40	17:16	35 08:02 (10)	17:49	19:22	19:54	38 06:52 (11)	20:22	2	05:48 (12)		
6	07:19	07:00	07:27 (10)	06:22	06:32	05:48	06:14 (11)	05:24			05:45 (12)	
	16:41	17:17	36 08:03 (10)	17:50	19:23	19:55	38 06:52 (11)	20:22	3	05:48 (12)		
7	07:19	06:59	07:26 (10)	06:21	06:30	05:47	06:13 (11)	05:24			05:45 (12)	
	16:42	17:18	38 08:04 (10)	17:51	19:25	19:56	38 06:51 (11)	20:23	4	05:49 (12)		
8	07:19	06:58	07:26 (10)	06:19	06:28	05:46	06:13 (11)	05:23			05:45 (12)	
	16:43	17:20	38 08:04 (10)	17:53	19:26	19:57	38 06:51 (11)	20:24	5	05:50 (12)		
9	07:19	06:57	07:26 (10)	06:18	06:27	05:45	06:13 (11)	05:23			05:45 (12)	
	16:44	17:21	39 08:05 (10)	17:54	19:27	19:58	38 06:51 (11)	20:24	6	05:51 (12)		
10	07:18	06:56	07:25 (10)	06:16	06:25	05:43	06:14 (11)	05:23			05:45 (12)	
	16:45	17:22	39 08:04 (10)	17:55	19:28	19:59	37 06:51 (11)	20:25	6	05:51 (12)		
11	07:18	06:55	07:25 (10)	06:14	06:24	05:42	06:14 (11)	05:23			05:45 (12)	
	16:46	17:23	40 08:05 (10)	17:56	19:29	20:00	36 06:50 (11)	20:25	7	05:52 (12)		
12	07:18	06:54	07:25 (10)	06:13	06:22	05:41	06:14 (11)	05:23			05:45 (12)	
	16:47	17:24	40 08:05 (10)	17:57	19:30	20:01	36 06:50 (11)	20:26	7	05:52 (12)		
13	07:18	06:52	07:26 (10)	06:11	06:20	05:40	06:15 (11)	05:23			05:45 (12)	
	16:49	17:26	39 08:05 (10)	17:58	19:31	20:02	34 06:49 (11)	20:26	8	05:53 (12)		
14	07:17	06:51	07:25 (10)	06:09	06:19	05:39	06:15 (11)	05:23			05:45 (12)	
	16:50	17:27	40 08:05 (10)	17:59	19:32	20:03	34 06:49 (11)	20:27	8	05:53 (12)		
15	07:17	06:50	07:26 (10)	06:08	06:17	05:38	06:16 (11)	05:22			05:45 (12)	
	16:51	17:28	39 08:05 (10)	18:00	19:33	20:04	32 06:48 (11)	20:27	8	05:53 (12)		
16	07:17	06:48	07:26 (10)	06:06	06:16	05:37	06:16 (11)	05:22			05:45 (12)	
	16:52	17:29	39 08:05 (10)	18:01	19:34	20:05	31 06:47 (11)	20:27	9	05:54 (12)		
17	07:16	06:47	07:26 (10)	06:05	06:14	05:36	06:18 (11)	05:23			05:45 (12)	
	16:53	17:31	37 08:03 (10)	18:02	19:35	20:06	29 06:47 (11)	20:28	9	05:54 (12)		
18	07:16	06:46	07:27 (10)	06:03	06:13	05:35	06:18 (11)	05:23			05:45 (12)	
	16:54	17:32	36 08:03 (10)	18:03	19:36	20:07	28 06:46 (11)	20:28	9	05:54 (12)		
19	07:15	06:44	07:28 (10)	06:01	06:11	05:35	06:19 (11)	05:23			05:45 (12)	
	16:55	17:33	35 08:03 (10)	18:04	19:37	20:08	26 06:45 (11)	20:29	9	05:54 (12)		
20	07:15	06:43	07:28 (10)	06:00	06:10	05:34	06:20 (11)	05:23			05:45 (12)	
	16:56	17:34	33 08:01 (10)	18:06	19:38	20:09	24 06:44 (11)	20:29	9	05:54 (12)		
21	07:14	06:42	07:29 (10)	05:58	06:08	05:33	06:21 (11)	05:23			05:45 (12)	
	16:58	17:35	31 08:00 (10)	18:07	19:39	20:10	22 06:43 (11)	20:29	9	05:54 (12)		
22	07:13	06:40	07:30 (10)	05:56	06:07	05:32	06:23 (11)	05:23			05:46 (12)	
	16:59	17:36	28 07:58 (10)	18:08	19:40	20:11	19 06:42 (11)	20:29	9	05:55 (12)		
23	07:13	06:39	07:32 (10)	05:55	06:05	05:31	06:24 (11)	05:23			05:46 (12)	
	17:00	17:38	25 07:57 (10)	18:09	19:41	20:11	16 06:40 (11)	20:29	9	05:55 (12)		
24	07:12	06:37	07:33 (10)	05:53	06:04	05:31	06:23 (11)	05:24			05:46 (12)	
	17:01	17:39	22 07:55 (10)	18:10	19:42	20:12	12 06:38 (11)	20:30	9	05:55 (12)		
25	07:11	06:36	07:36 (10)	05:51	06:02	05:30	06:30 (11)	05:24			05:46 (12)	
	17:02	17:40	16 07:52 (10)	18:11	19:43	20:13	6 06:36 (11)	20:30	9	05:55 (12)		
26	07:11	06:35	07:40 (10)	05:50	06:01	05:29		05:24			05:47 (12)	
	17:04	17:41	7 07:47 (10)	18:12	19:44	20:14	29 06:49 (11)	20:30	9	05:56 (12)		
27	07:10	06:33		05:48	06:00	05:29	06:19 (11)	05:25			05:47 (12)	
	17:05	17:42		18:13	19:45	20:15	31 06:50 (11)	20:30	9	05:56 (12)		
28	07:09	07:39 (10)	06:32	05:46	05:58	05:28	06:17 (11)	05:25			05:47 (12)	
	17:06	9 07:48 (10)	17:43	18:14	19:47	20:16	33 06:50 (11)	20:30	8	05:55 (12)		
29	07:08	07:35 (10)		06:45	05:57	05:27	06:16 (11)	05:25			05:48 (12)	
	17:07	16 07:51 (10)		19:15	19:48	20:16	35 06:51 (11)	20:30	8	05:56 (12)		
30	07:07	07:33 (10)		06:43	05:56	05:27	06:16 (11)	05:26			05:48 (12)	
	17:08	21 07:54 (10)		19:16	19:49	20:17	36 06:52 (11)	20:30	7	05:55 (12)		
31	07:06	07:32 (10)		06:41		05:26						
	17:10	24 07:56 (10)		19:17		20:18						
Ore potenziali eliofania	298	298	369	398	448			451				
Totale, caso peggiore	70	851		263	763			196				
Probabilità di eliofania	0,43	0,44		0,51	0,57			0,62				
Tempo di operatività rid.	0,85	0,85		0,85	0,85			0,85				
Dir. del vento rid.	0,69	0,69		0,48	0,48			0,50				
Totale ridotto	0,26	0,26		0,21	0,24			0,27				
Totale effettivo	18	225		56	182			53				

Legenda della tabella:

Giorno del mese	Alba (hh:mm)	Inizio ombreggiamento (hh:mm)	(WTG che provoca l'inizio dell'ombreggiamento)
	Tramonto (hh:mm)	Minuti d'ombra	Fine ombreggiamento (hh:mm)
			(WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R08 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (6)
 Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
 4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
 1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
 3,0m/s

	Luglio		Agosto		Settembre		Ottobre		Novembre		Dicembre	
1	05:26		05:49 (12)	05:50	06:25 (11)	06:20	06:50		06:24	06:55 (10)	06:58	
	20:30	7	05:56 (12)	20:11	36	07:01 (11)	19:28	18:38	16:52	39	07:34 (10)	16:28
2	05:27		05:49 (12)	05:51		06:24 (11)	06:21	06:51	06:25		06:55 (10)	06:59
	20:30	6	05:55 (12)	20:10	37	07:01 (11)	19:27	18:37	16:51	39	07:34 (10)	16:28
3	05:27		05:50 (12)	05:52		06:24 (11)	06:22	06:52	06:26		06:56 (10)	07:00
	20:29	6	05:56 (12)	20:09	37	07:01 (11)	19:25	18:35	16:50	38	07:34 (10)	16:27
4	05:28		05:50 (12)	05:53		06:24 (11)	06:23	06:53	06:27		06:56 (10)	07:01
	20:29	5	05:55 (12)	20:08	38	07:02 (11)	19:23	18:33	16:48	37	07:33 (10)	16:27
5	05:28		05:51 (12)	05:54		06:24 (11)	06:24	06:54	06:28		06:57 (10)	07:02
	20:29	4	05:55 (12)	20:07	38	07:02 (11)	19:22	18:32	16:47	36	07:33 (10)	16:27
6	05:29		05:51 (12)	05:55		06:24 (11)	06:25	06:55	06:30		06:57 (10)	07:03
	20:29	4	05:55 (12)	20:05	38	07:02 (11)	19:20	18:30	16:46	35	07:32 (10)	16:27
7	05:30		05:52 (12)	05:56		06:23 (11)	06:26	06:56	06:31		06:59 (10)	07:04
	20:29	3	05:55 (12)	20:04	39	07:02 (11)	19:19	18:28	16:45	33	07:32 (10)	16:27
8	05:30		05:53 (12)	05:57		06:22 (11)	06:27	06:57	06:32		07:00 (10)	07:05
	20:28	2	05:55 (12)	20:03	39	07:01 (11)	19:17	18:27	16:44	31	07:31 (10)	16:27
9	05:31			05:58		06:22 (11)	06:28	06:58	06:33		07:00 (10)	07:06
	20:28			20:02	39	07:01 (11)	19:15	18:25	16:43	29	07:29 (10)	16:27
10	05:32			05:59		06:23 (11)	06:29	06:59	06:34		07:02 (10)	07:07
	20:27			20:00	38	07:01 (11)	19:14	18:24	16:42	26	07:28 (10)	16:27
11	05:32			06:00		06:23 (11)	06:30	07:00	06:35		07:04 (10)	07:08
	20:27			19:59	37	07:00 (11)	19:12	18:22	16:41	23	07:27 (10)	16:27
12	05:33			06:01		06:23 (11)	06:31	07:01	06:37		07:05 (10)	07:08
	20:27			19:58	37	07:00 (11)	19:10	18:20	16:40	20	07:25 (10)	16:27
13	05:34			06:02		06:23 (11)	06:32	07:02	06:38		07:08 (10)	07:09
	20:26			19:57	36	06:59 (11)	19:09	18:19	16:39	15	07:23 (10)	16:27
14	05:34			06:03		06:24 (11)	06:33	07:03	06:39		07:12 (10)	07:10
	20:26			19:55	35	06:59 (11)	19:07	18:17	16:38	9	07:21 (10)	16:27
15	05:35			06:04		06:25 (11)	06:34	07:05	06:40			07:11
	20:25			19:54	33	06:58 (11)	19:05	18:16	16:37			16:28
16	05:36			06:05		06:26 (11)	06:35	07:06			08:10 (10)	06:41
	20:24			19:52	31	06:57 (11)	19:03	18:14	16:36	12	08:22 (10)	16:36
17	05:37			06:06		06:27 (11)	06:36	07:07	08:07 (10)	06:43		07:12
	20:24			19:51	29	06:56 (11)	19:02	18:13	18:25 (10)	16:36		16:28
18	05:38			06:07		06:28 (11)	06:37	07:08	08:04 (10)	06:44		07:13
	20:23			19:50	26	06:54 (11)	19:00	18:11	23	08:27 (10)	16:35	16:28
19	05:38		06:38 (11)	06:08		06:29 (11)	06:38	07:09	08:02 (10)	06:45		07:13
	20:23	9	06:47 (11)	19:48	24	06:53 (11)	18:58	18:10	26	08:28 (10)	16:34	16:29
20	05:39		06:35 (11)	06:09		06:30 (11)	06:39	07:10	08:01 (10)	06:46		07:14
	20:22	14	06:49 (11)	19:47	21	06:51 (11)	18:57	18:08	30	08:31 (10)	16:33	16:29
21	05:40		06:33 (11)	06:10		06:32 (11)	06:40	07:11		08:00 (10)	06:47	07:15
	20:21	18	06:51 (11)	19:45	16	06:48 (11)	18:55	18:07	31	08:31 (10)	16:33	16:30
22	05:41		06:32 (11)	06:11		06:36 (11)	06:41	07:12		07:58 (10)	06:48	07:15
	20:20	20	06:52 (11)	19:44	8	06:44 (11)	18:53	18:05	34	08:32 (10)	16:32	16:30
23	05:42		06:31 (11)	06:12			06:42	07:13		07:57 (10)	06:49	07:16
	20:19	23	06:54 (11)	19:42			18:52	18:04	36	08:33 (10)	16:31	16:31
24	05:43		06:30 (11)	06:12			06:43	07:14		07:56 (10)	06:51	07:16
	20:19	25	06:55 (11)	19:41			18:50	18:02	37	08:33 (10)	16:31	16:31
25	05:44		06:29 (11)	06:13			06:44	06:16		06:56 (10)	06:52	07:17
	20:18	27	06:56 (11)	19:39			18:48	17:01	38	07:34 (10)	16:30	16:32
26	05:44		06:29 (11)	06:14			06:45	06:17		06:56 (10)	06:53	07:17
	20:17	28	06:57 (11)	19:38			18:47	17:00	38	07:34 (10)	16:30	16:32
27	05:45		06:27 (11)	06:15			06:46	06:18		06:55 (10)	06:54	07:17
	20:16	30	06:57 (11)	19:36			18:45	16:58	39	07:34 (10)	16:29	16:33
28	05:46		06:26 (11)	06:16			06:47	06:19		06:55 (10)	06:55	07:18
	20:15	32	06:58 (11)	19:35			18:43	16:57	39	07:34 (10)	16:29	16:34
29	05:47		06:26 (11)	06:17			06:48	06:20		06:54 (10)	06:56	07:18
	20:14	33	06:59 (11)	19:33			18:42	16:56	40	07:34 (10)	16:29	16:34
30	05:48		06:25 (11)	06:18			06:49	06:21		06:55 (10)	06:57	07:18
	20:13	35	07:00 (11)	19:32			18:40	16:54	40	07:35 (10)	16:28	16:35
31	05:49		06:25 (11)	06:19			06:23	06:23		06:55 (10)		07:18
	20:12	35	07:00 (11)	19:30			16:53	40	07:35 (10)		16:36	16:36
Ore potenziali eliofania	458		427			375		346		299		289
Totale, caso peggiore	366		712			521		410				
Probabilità di eliofania	0,69		0,69			0,52		0,47				
Tempo di operatività rid.	0,85		0,85			0,85		0,85				
Dir. del vento rid.	0,48		0,48			0,69		0,69				
Totale ridotto	0,29		0,29			0,31		0,28				
Totale effettivo	106		204			164		115				

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R09 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (7)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 16:37	07:06 17:11	06:30 17:45	06:40 19:18	05:54 19:50	06:48 (10) 20:19
2	07:19 16:38	07:05 17:12	06:28 17:46	06:38 19:19	05:53 19:51	06:48 (10) 20:20
3	07:19 16:39	07:04 17:13	06:27 17:47	06:36 19:20	05:52 19:52	06:48 (10) 20:20
4	07:19 16:40	07:03 17:15	06:25 17:48	06:35 19:21	05:51 19:53	06:48 (10) 20:21
5	07:19 16:40	07:02 17:16	06:24 17:49	06:33 19:22	05:49 19:54	06:48 (10) 20:22
6	07:19 16:41	07:00 17:17	06:22 17:50	06:32 19:23	05:48 19:55	06:48 (10) 20:22
7	07:19 16:42	06:59 17:18	06:21 17:51	06:30 19:24	05:47 19:56	06:47 (10) 20:23
8	07:19 16:43	06:58 17:20	06:19 17:53	06:28 19:26	05:46 19:57	06:47 (10) 20:24
9	07:19 16:44	06:57 17:21	06:18 17:54	06:27 19:27	05:45 19:58	06:47 (10) 20:24
10	07:18 16:45	06:56 17:22	06:16 17:55	06:25 19:28	05:43 19:59	06:47 (10) 20:25
11	07:18 16:46	06:55 17:23	06:14 17:56	06:23 19:29	05:42 20:00	06:47 (10) 20:25
12	07:18 16:47	06:54 17:24	06:13 17:57	06:22 19:30	05:41 20:01	06:47 (10) 20:26
13	07:18 16:49	06:52 17:26	06:11 17:58	06:20 19:31	05:40 20:02	06:47 (10) 20:26
14	07:17 16:50	06:51 17:27	06:09 17:59	06:19 19:32	05:39 20:03	06:47 (10) 20:27
15	07:17 16:51	06:50 17:28	06:08 18:00	06:17 19:33	05:38 20:04	06:47 (10) 20:27
16	07:17 16:52	06:48 17:29	06:06 18:01	06:16 19:34	05:37 20:05	06:48 (10) 20:27
17	07:16 16:53	06:47 17:31	06:05 18:02	06:14 19:35	05:36 20:06	06:49 (10) 20:28
18	07:16 16:54	06:46 17:32	06:03 18:03	06:13 19:36	05:35 20:07	06:49 (10) 20:28
19	07:15 16:55	06:44 17:33	06:01 18:04	06:11 19:37	05:35 20:08	06:49 (10) 20:28
20	07:15 16:56	06:43 17:34	06:00 18:06	06:10 19:38	05:34 20:09	06:49 (10) 20:29
21	07:14 16:58	06:42 17:35	05:58 18:07	06:08 19:39	05:33 20:10	06:49 (10) 20:29
22	07:13 16:59	06:40 17:36	05:56 18:08	06:07 19:40	05:32 20:10	06:50 (10) 20:29
23	07:13 17:00	06:39 17:38	05:55 18:09	06:05 19:41	05:31 20:11	06:51 (10) 20:29
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 19:42	05:31 20:12	06:51 (10) 20:30
25	07:11 17:02	06:36 17:40	05:51 18:11	06:02 19:43	05:30 20:13	06:52 (10) 20:30
26	07:11 17:04	06:34 17:41	05:50 18:12	06:01 19:44	05:29 20:14	06:52 (10) 20:30
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 19:45	05:29 20:15	06:53 (10) 20:30
28	07:09 17:06	06:31 17:43	05:46 18:14	05:58 19:46	05:28 20:16	06:53 (10) 20:30
29	07:08 17:07	06:45 19:15	05:57 19:15	05:57 19:48	05:27 20:16	06:53 (10) 20:30
30	07:07 17:08	06:43 19:16	05:56 19:16	05:56 19:49	05:27 20:17	06:54 (10) 20:30
31	07:06 17:10	06:41 19:17	06:41 19:17	06:41 19:17	05:26 20:18	06:55 (10) 20:30
Ore potenziali eliofania	298	298	369	398	447	451
Totale, caso peggiore				1145	2047	1365
Probabilità di eliofania				0,51	0,57	0,62
Tempo di operatività rid.				0,85	0,85	0,85
Dir. del vento rid.				0,52	0,52	0,52
Totale ridotto				0,22	0,25	0,28
Totale effettivo				257	519	377

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R09 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (7)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre					
1	05:26	07:06 (10)	05:50	06:58 (10)	06:20	07:15 (10)	06:50	06:24	06:58		
	20:30	45 07:51 (10)	20:11	70 08:08 (10)	19:28	26 07:41 (10)	18:38	16:52	16:28		
2	05:27	07:05 (10)	05:51	06:57 (10)	06:21	07:20 (10)	06:51	06:25	06:59		
	20:30	46 07:51 (10)	20:10	71 08:08 (10)	19:27	15 07:35 (10)	18:37	16:51	16:28		
3	05:27	07:06 (10)	05:52	06:57 (10)	06:22		06:52	06:26	07:00		
	20:29	46 07:52 (10)	20:09	71 08:08 (10)	19:25		18:35	16:50	16:27		
4	05:28	07:05 (10)	05:53	06:57 (10)	06:23		06:53	06:27	07:01		
	20:29	47 07:52 (10)	20:08	72 08:09 (10)	19:23		18:33	16:48	16:27		
5	05:28	07:05 (10)	05:54	06:57 (10)	06:24		06:54	06:28	07:02		
	20:29	48 07:53 (10)	20:07	72 08:09 (10)	19:22		18:32	16:47	16:27		
6	05:29	07:04 (10)	05:55	06:57 (10)	06:25		06:55	06:30	07:03		
	20:29	49 07:53 (10)	20:05	72 08:09 (10)	19:20		18:30	16:46	16:27		
7	05:30	07:04 (10)	05:56	06:57 (10)	06:26		06:56	06:31	07:04		
	20:28	51 07:55 (10)	20:04	72 08:09 (10)	19:19		18:28	16:45	16:27		
8	05:30	07:05 (10)	05:57	06:56 (10)	06:27		06:57	06:32	07:05		
	20:28	51 07:56 (10)	20:03	72 08:08 (10)	19:17		18:27	16:44	16:27		
9	05:31	07:04 (10)	05:58	06:56 (10)	06:28		06:58	06:33	07:06		
	20:28	52 07:56 (10)	20:02	72 08:08 (10)	19:15		18:25	16:43	16:27		
10	05:32	07:04 (10)	05:59	06:56 (10)	06:29		06:59	06:34	07:07		
	20:27	52 07:56 (10)	20:00	72 08:08 (10)	19:14		18:23	16:42	16:27		
11	05:32	07:04 (10)	06:00	06:56 (10)	06:30		07:00	06:35	07:08		
	20:27	53 07:57 (10)	19:59	72 08:08 (10)	19:12		18:22	16:41	16:27		
12	05:33	07:03 (10)	06:01	06:57 (10)	06:31		07:01	06:37	07:08		
	20:27	54 07:57 (10)	19:58	71 08:08 (10)	19:10		18:20	16:40	16:27		
13	05:34	07:03 (10)	06:02	06:57 (10)	06:32		07:02	06:38	07:09		
	20:26	55 07:58 (10)	19:57	70 08:07 (10)	19:09		18:19	16:39	16:27		
14	05:34	07:03 (10)	06:03	06:57 (10)	06:33		07:03	06:39	07:10		
	20:26	56 07:59 (10)	19:55	70 08:07 (10)	19:07		18:17	16:38	16:27		
15	05:35	07:03 (10)	06:04	06:57 (10)	06:34		07:05	06:40	07:11		
	20:25	57 08:00 (10)	19:54	70 08:07 (10)	19:05		18:16	16:37	16:28		
16	05:36	07:02 (10)	06:05	06:58 (10)	06:35		07:06	06:41	07:11		
	20:24	58 08:00 (10)	19:52	68 08:06 (10)	19:03		18:14	16:36	16:28		
17	05:37	07:02 (10)	06:06	06:58 (10)	06:36		07:07	06:43	07:12		
	20:24	59 08:01 (10)	19:51	68 08:06 (10)	19:02		18:13	16:36	16:28		
18	05:38	07:01 (10)	06:07	06:58 (10)	06:37		07:08	06:44	07:13		
	20:23	61 08:02 (10)	19:50	67 08:05 (10)	19:00		18:11	16:35	16:28		
19	05:38	07:01 (10)	06:08	06:59 (10)	06:38		07:09	06:45	07:13		
	20:22	61 08:02 (10)	19:48	65 08:04 (10)	18:58		18:10	16:34	16:29		
20	05:39	07:00 (10)	06:09	06:59 (10)	06:39		07:10	06:46	07:14		
	20:22	62 08:02 (10)	19:47	65 08:04 (10)	18:57		18:08	16:33	16:29		
21	05:40	07:00 (10)	06:10	07:00 (10)	06:40		07:11	06:47	07:15		
	20:21	63 08:03 (10)	19:45	63 08:03 (10)	18:55		18:07	16:33	16:30		
22	05:41	07:00 (10)	06:11	07:01 (10)	06:41		07:12	06:48	07:15		
	20:20	64 08:04 (10)	19:44	61 08:02 (10)	18:53		18:05	16:32	16:30		
23	05:42	07:00 (10)	06:11	07:01 (10)	06:42		07:13	06:49	07:16		
	20:19	64 08:04 (10)	19:42	60 08:01 (10)	18:52		18:04	16:31	16:31		
24	05:43	07:00 (10)	06:12	07:02 (10)	06:43		07:14	06:51	07:16		
	20:19	65 08:05 (10)	19:41	57 07:59 (10)	18:50		18:02	16:31	16:31		
25	05:44	06:59 (10)	06:13	07:02 (10)	06:44		06:16	06:52	07:17		
	20:18	67 08:06 (10)	19:39	55 07:57 (10)	18:48		17:01	16:30	16:32		
26	05:44	06:59 (10)	06:14	07:03 (10)	06:45		06:17	06:53	07:17		
	20:17	67 08:06 (10)	19:38	53 07:56 (10)	18:47		17:00	16:30	16:32		
27	05:45	06:58 (10)	06:15	07:05 (10)	06:46		06:18	06:54	07:17		
	20:16	68 08:06 (10)	19:36	49 07:54 (10)	18:45		16:58	16:29	16:33		
28	05:46	06:58 (10)	06:16	07:06 (10)	06:47		06:19	06:55	07:18		
	20:15	68 08:06 (10)	19:35	46 07:52 (10)	18:43		16:57	16:29	16:34		
29	05:47	06:58 (10)	06:17	07:08 (10)	06:48		06:20	06:56	07:18		
	20:14	69 08:07 (10)	19:33	42 07:50 (10)	18:42		16:56	16:29	16:34		
30	05:48	06:58 (10)	06:18	07:10 (10)	06:49		06:21	06:57	07:18		
	20:13	69 08:07 (10)	19:31	37 07:47 (10)	18:40		16:54	16:28	16:35		
31	05:49	06:58 (10)	06:19	07:12 (10)			06:23		07:18		
	20:12	70 08:08 (10)	19:30	32 07:44 (10)			16:53		16:36		
Ore potenziali eliofania	458		427		375		346		299		289
Totale, caso peggiore	1797		1957		41						
Probabilità di eliofania	0,69		0,69		0,61						
Tempo di operatività rid.	0,85		0,85		0,85						
Dir. del vento rid.	0,52		0,52		0,52						
Totale ridotto	0,31		0,30		0,27						
Totale effettivo	548		595		11						

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R10 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (11)

Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen	Feb	Mar	Apr	Mag	Giu	Lug	Ago	Set	Ott	Nov	Dic
4,12	4,66	5,30	6,72	8,25	9,35	10,16	9,45	7,64	5,82	4,65	3,82

Tempo di operatività

N	NNE	ENE	E	ESE	SSE	S	SSO	OSO	O	ONO	NNO	Somma
1.229	573	283	164	231	782	961	432	328	544	685	1.236	7.447

3,0m/s

	Gennaio	Febbraio	Marzo		Aprile		Maggio		Giugno
1	07:19 16:37	07:06 17:11	06:30 17:45		06:40 19:18	54	07:01 (06) 07:55 (05)	05:54 19:50	06:19 (07) 20:19
2	07:19 16:38	07:05 17:12	06:29 17:46		06:38 19:19	54	07:00 (06) 07:54 (05)	05:53 19:51	06:20 (07) 20:20
3	07:19 16:39	07:04 17:13	06:27 17:47		06:36 19:20	52	07:01 (06) 07:53 (05)	05:52 19:52	06:21 (07) 20:20
4	07:19 16:40	07:03 17:15	06:25 17:48		06:35 19:21	50	07:01 (06) 07:51 (05)	05:51 19:53	06:24 (07) 20:21
5	07:19 16:41	07:02 17:16	06:24 17:49		06:33 19:22	48	07:02 (06) 07:50 (05)	05:49 19:54	06:31 (07) 20:22
6	07:19 16:41	07:01 17:17	06:22 17:50		06:32 19:24	43	07:03 (06) 07:48 (05)	05:48 19:55	06:33 (07) 20:22
7	07:19 16:42	06:59 17:18	06:21 17:51		06:30 19:25	35	07:04 (06) 07:45 (05)	05:47 19:56	06:33 (07) 20:23
8	07:19 16:43	06:58 17:20	06:19 17:53		06:28 19:26	24	07:07 (06) 07:42 (05)	05:46 19:57	06:33 (07) 20:24
9	07:19 16:44	06:57 17:21	06:18 17:54		06:27 19:27		05:45 19:58		06:31 (07) 20:24
10	07:19 16:45	06:56 17:22	06:16 17:55		06:25 19:28		05:44 19:59		06:29 (07) 20:25
11	07:18 16:46	06:55 17:23	06:14 17:56		06:24 19:29		05:42 20:00		06:27 (07) 20:25
12	07:18 16:47	06:54 17:25	06:13 17:57		06:22 19:30		05:41 20:01		06:25 (07) 20:26
13	07:18 16:49	06:52 17:26	06:11 17:58		06:20 19:31		05:40 20:02		06:23 (07) 20:26
14	07:17 16:50	06:51 17:27	06:10 17:59	1	06:19 19:32		05:39 20:03		06:21 (07) 20:27
15	07:17 16:51	06:50 17:28	06:08 18:00	16	06:17 19:33		05:38 20:04		06:19 (07) 20:27
16	07:17 16:52	06:49 17:29	06:06 18:01	21	06:16 19:34		05:37 20:05		06:17 (07) 20:28
17	07:16 16:53	06:47 17:31	06:05 18:02	26	06:14 19:35		05:36 20:06		06:15 (07) 20:28
18	07:16 16:54	06:46 17:32	06:03 18:03	29	06:13 19:36		05:35 20:07		06:13 (07) 20:28
19	07:15 16:55	06:45 17:33	06:01 18:05	32	06:11 19:37	5	06:11 06:35 (07)	05:35 20:08	06:11 (07) 20:29
20	07:15 16:56	06:43 17:34	06:00 18:06	34	06:10 19:38	9	06:10 06:37 (07)	05:34 20:09	06:09 (07) 20:29
21	07:14 16:58	06:42 17:35	05:58 18:07	36	06:08 19:39	11	06:08 06:38 (07)	05:33 20:10	06:07 (07) 20:29
22	07:14 16:59	06:40 17:37	05:56 18:08	37	06:07 19:40	13	06:07 06:39 (07)	05:32 20:11	06:05 (07) 20:29
23	07:13 17:00	06:39 17:38	05:55 18:09	38	06:05 19:41	15	06:05 06:39 (07)	05:31 20:11	06:03 (07) 20:30
24	07:12 17:01	06:38 17:39	05:53 18:10	48	06:04 19:42	17	06:04 06:40 (07)	05:31 20:12	06:01 (07) 20:30
25	07:11 17:02	06:36 17:40	05:51 18:11	50	06:03 19:43	18	06:03 06:41 (07)	05:30 20:13	06:00 (07) 20:30
26	07:11 17:04	06:35 17:41	05:50 18:12	51	06:02 19:44	19	06:02 06:42 (07)	05:29 20:14	06:00 (07) 20:30
27	07:10 17:05	06:33 17:42	05:48 18:13	52	06:01 19:45	20	06:01 06:43 (07)	05:29 20:15	06:00 (07) 20:30
28	07:09 17:06	06:32 17:44	05:46 18:14	54	06:00 19:46	21	06:00 06:44 (07)	05:28 20:16	06:00 (07) 20:30
29	07:08 17:07	06:31 17:45	05:45 18:15	55	05:59 19:47	22	05:59 06:45 (07)	05:27 20:17	06:00 (07) 20:30
30	07:07 17:09	06:30 17:46	05:44 18:16	56	05:58 19:48	23	05:58 06:46 (07)	05:27 20:18	06:00 (07) 20:30
31	07:07 17:10	06:29 17:47	05:43 18:17	55	05:57 19:49	24	05:57 06:47 (07)	05:27 20:19	06:00 (07) 20:30
Ore potenziali eliofania	298	298	369		398		448		451
Totale, caso peggiore			691		547		52		
Probabilità di eliofania			0,44		0,51		0,57		
Tempo di operatività rid.			0,85		0,85		0,85		
Dir. del vento rid.			0,58		0,54		0,48		
Totale ridotto			0,22		0,23		0,23		
Totale effettivo			153		128		12		

Legenda della tabella:

Giorno del mese	Alba (hh:mm)	Inizio ombreggiamento (hh:mm)	(WTG che provoca l'inizio dell'ombreggiamento)
	Tramonto (hh:mm)	Fine ombreggiamento (hh:mm)	(WTG che provoca l'ultimo ombreggiamento)
	Minuti d'ombra		

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R10 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (11)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre	
1	05:26 20:30	05:50 20:11	06:20 19:28	06:50 18:38	06:24 16:52	06:58 16:28	
2	05:27 20:30	05:51 20:10	06:21 19:27	06:51 18:37	06:25 16:51	06:59 16:28	
3	05:27 20:30	05:52 20:09	06:22 19:25	06:52 18:35	06:26 16:50	07:00 16:27	
4	05:28 20:29	05:53 20:08	06:23 19:24	07:04 (06) 07:39 (05)	06:53 18:33	06:27 16:48	07:01 16:27
5	05:28 20:29	05:54 20:07	06:24 19:22	07:01 (06) 07:42 (05)	06:54 18:32	06:28 16:47	07:02 16:27
6	05:29 20:29	05:55 20:05	06:25 19:20	06:59 (06) 07:43 (05)	06:55 18:30	06:30 16:46	07:03 16:27
7	05:30 20:29	05:56 20:04	06:26 19:19	06:57 (06) 07:45 (05)	06:56 18:28	06:31 16:45	07:04 16:27
8	05:30 20:28	05:57 20:03	06:27 19:17	06:56 (06) 07:46 (05)	06:57 18:27	06:32 16:44	07:05 16:27
9	05:31 20:28	05:58 20:02	06:28 (07) 06:41 (07)	06:55 (06) 07:47 (05)	06:58 18:25	06:33 16:43	07:06 16:27
10	05:32 20:28	05:59 20:01	06:29 (07) 06:43 (07)	06:54 (06) 07:48 (05)	06:59 18:24	06:34 16:42	07:07 16:27
11	05:32 20:27	06:00 19:59	06:28 (07) 06:44 (07)	06:53 (06) 07:47 (05)	07:00 18:22	06:36 16:41	07:08 16:27
12	05:33 20:27	06:01 19:58	06:27 (07) 06:45 (07)	06:53 (06) 07:48 (05)	07:01 18:20	06:37 16:40	07:09 16:27
13	05:34 20:26	06:02 19:57	06:26 (07) 06:45 (07)	06:52 (06) 07:48 (05)	07:02 18:19	06:38 16:39	07:09 16:27
14	05:34 20:26	06:03 19:55	06:25 (07) 06:46 (07)	06:53 (06) 07:48 (05)	07:04 18:17	06:39 16:38	07:10 16:27
15	05:35 20:25	06:04 19:54	06:25 (07) 06:46 (07)	06:54 (06) 07:48 (05)	07:05 18:16	06:40 16:37	07:11 16:28
16	05:36 20:25	06:05 19:53	06:26 (07) 06:46 (07)	06:55 (06) 07:48 (05)	07:06 18:14	06:41 16:36	07:12 16:28
17	05:37 20:24	06:06 19:51	06:27 (07) 06:46 (07)	06:56 (06) 07:47 (05)	07:07 18:13	06:43 16:36	07:12 16:28
18	05:38 20:23	06:07 19:50	06:28 (07) 06:46 (07)	06:57 (06) 07:47 (05)	07:08 18:11	06:44 16:35	07:13 16:28
19	05:38 20:23	06:08 19:48	06:29 (07) 06:45 (07)	06:58 (06) 07:46 (05)	07:09 18:10	06:45 16:34	07:14 16:29
20	05:39 20:22	06:09 19:47	06:30 (07) 06:45 (07)	06:59 (06) 07:46 (05)	07:10 18:08	06:46 16:33	07:14 16:29
21	05:40 20:21	06:10 19:45	06:31 (07) 06:44 (07)	07:00 (06) 07:45 (05)	07:11 18:07	06:47 16:33	07:15 16:30
22	05:41 20:20	06:11 19:44	06:32 (07) 06:43 (07)	07:01 (06) 07:44 (05)	07:12 18:05	06:48 16:32	07:15 16:30
23	05:42 20:20	06:12 19:42	06:33 (07) 06:41 (07)	07:02 (06) 07:43 (05)	07:13 18:04	06:50 16:31	07:16 16:31
24	05:43 20:19	06:13 19:41	06:34 (07) 06:39 (07)	07:03 (06) 07:41 (05)	07:15 18:03	06:51 16:31	07:16 16:31
25	05:44 20:18	06:14 19:39	06:44 18:48	07:10 (05) 07:40 (05)	06:16 17:01	06:52 16:30	07:17 16:32
26	05:44 20:17	06:15 19:38	06:45 18:47	07:11 (05) 07:38 (05)	06:17 17:00	06:53 16:30	07:17 16:32
27	05:45 20:16	06:16 19:36	06:46 18:45	07:12 (05) 07:36 (05)	06:18 16:58	06:54 16:29	07:17 16:33
28	05:46 20:15	06:16 19:35	06:47 18:43	07:15 (05) 07:33 (05)	06:19 16:57	06:55 16:29	07:18 16:34
29	05:47 20:14	06:17 19:33	06:48 18:42	07:18 (05) 07:28 (05)	06:20 16:56	06:56 16:29	07:18 16:34
30	05:48 20:13	06:18 19:32	06:49 18:40	06:21 16:55	06:57 16:28	07:18 16:35	07:18 16:35
31	05:49 20:12	06:19 19:30		06:23 16:53	06:28 16:36	07:18 16:36	07:18 16:36
Ore potenziali eliofania	458	427	375	346	299	289	
Totale, caso peggiore		244	1076				
Probabilità di eliofania		0,69	0,61				
Tempo di operatività rid.		0,85	0,85				
Dir. del vento rid.		0,48	0,58				
Totale ridotto		0,28	0,30				
Totale effettivo		68	326				

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R11 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (12)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19	07:06	06:30	06:49 (10)	06:40	05:54
	16:37	17:11	17:45	18	07:07 (10)	19:18
2	07:19	07:05	06:29	06:47 (10)	06:38	05:53
	16:38	17:12	17:46	19	07:06 (10)	19:19
3	07:19	07:04	06:27	06:48 (10)	06:36	05:52
	16:39	17:13	17:47	18	07:06 (10)	19:20
4	07:19	07:03	06:25	06:48 (10)	06:35	05:51
	16:40	17:15	17:48	17	07:05 (10)	19:21
5	07:19	07:02	06:24	06:49 (10)	06:33	05:49
	16:41	17:16	17:49	15	07:04 (10)	19:22
6	07:19	07:01	06:22	06:51 (10)	06:32	05:48
	16:41	17:17	17:50	11	07:02 (10)	19:24
7	07:19	06:59	06:21	06:54 (10)	06:30	05:47
	16:42	17:18	17:51	3	06:57 (10)	19:25
8	07:19	06:58	06:19		06:28	05:46
	16:43	17:20	17:53		19:26	19:57
9	07:19	06:57	06:18		06:27	05:45
	16:44	17:21	17:54		19:27	19:58
10	07:18	06:56	06:16		06:25	05:44
	16:45	17:22	17:55		19:28	19:59
11	07:18	06:55	06:14		06:24	05:42
	16:46	17:23	17:56		19:29	20:00
12	07:18	06:54	06:13		06:22	05:41
	16:47	17:25	17:57		19:30	20:01
13	07:18	06:52	06:11		06:20	05:40
	16:49	17:26	17:58		19:31	20:02
14	07:17	06:51	06:09		06:19	05:39
	16:50	17:27	17:59		19:32	20:03
15	07:17	06:50	06:08		06:17	05:38
	16:51	17:28	18:00		19:33	20:04
16	07:17	06:49	06:06		06:16	05:37
	16:52	17:29	18:01		19:34	20:05
17	07:16	06:47	06:05		06:14	05:36
	16:53	17:31	18:02		19:35	20:06
18	07:16	06:46	06:03		06:13	05:35
	16:54	17:32	18:03		19:36	20:07
19	07:15	06:45	06:01		06:11	05:35
	16:55	17:33	18:05		19:37	20:08
20	07:15	06:43	06:00		06:10	05:34
	16:56	17:34	18:06		19:38	20:09
21	07:14	06:42	05:58		06:08	05:33
	16:58	17:35	18:07		19:39	20:10
22	07:13	06:40	05:56		06:07	05:32
	16:59	17:37	18:08		19:40	20:11
23	07:13	06:39	05:55		06:05	05:31
	17:00	17:38	18:09		19:41	20:11
24	07:12	06:37	05:53		06:04	05:31
	17:01	17:39	18:10		19:42	20:12
25	07:11	06:36	05:51		06:02	05:30
	17:02	17:40	18:11		19:43	20:13
26	07:11	06:35	05:50		06:01	05:29
	17:04	17:41	18:12		19:44	20:14
27	07:10	06:33	05:48		06:00	05:29
	17:05	17:42	18:13		19:46	20:15
28	07:09	06:32	05:46		05:58	05:28
	17:06	17:44	18:14		19:47	20:16
29	07:08		05:45		05:57	05:27
	17:07		19:15		19:48	20:17
30	07:07		05:43		05:56	05:27
	17:09		19:16		19:49	20:17
31	07:07		05:41			05:26
	17:10		19:17			20:18
Ore potenziali eliofania	298	298	369		398	448
Totale, caso peggiore			101			212
Probabilità di eliofania		0,44	0,44			0,57
Tempo di operatività rid.		0,85	0,85			0,85
Dir. del vento rid.		0,62	0,62			0,50
Totale ridotto		0,23	0,24			0,26
Totale effettivo		16	24			52

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R11 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (12)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen	Feb	Mar	Apr	Mag	Giu	Lug	Ago	Set	Ott	Nov	Dic
4,12	4,66	5,30	6,72	8,25	9,35	10,16	9,45	7,64	5,82	4,65	3,82

Tempo di operatività

N	NNE	ENE	E	ESE	SSE	S	SSO	OSO	O	ONO	NNO	Somma
1.229	573	283	164	231	782	961	432	328	544	685	1.236	7.447

3,0m/s

	Luglio		Agosto		Settembre		Ottobre		Novembre		Dicembre	
1	05:26	05:55 (06)	05:50	06:20	06:50				06:24	06:58		
	20:30	33 06:28 (06)	20:11	19:28	18:38				16:52	16:28		
2	05:27	05:55 (06)	05:51	06:21	06:51				06:25	06:59		
	20:30	32 06:27 (06)	20:10	19:27	18:37				16:51	16:28		
3	05:27	05:55 (06)	05:52	06:22	06:52				06:26	07:00		
	20:30	33 06:28 (06)	20:09	19:25	18:35				16:50	16:27		
4	05:28	05:55 (06)	05:53	06:23	06:53				06:27	07:01		
	20:29	32 06:27 (06)	20:08	19:24	18:33				16:48	16:27		
5	05:28	05:56 (06)	05:54	06:24	06:54				06:28	07:02		
	20:29	32 06:28 (06)	20:07	19:22	18:32				16:47	16:27		
6	05:29	05:57 (06)	05:55	06:25	06:55				06:30	07:03		
	20:29	31 06:28 (06)	20:05	19:20	18:30				16:46	16:27		
7	05:30	05:56 (06)	05:56	06:26	06:56			07:28 (10)	06:31	07:04		
	20:29	32 06:28 (06)	20:04	19:19	18:28		8	07:36 (10)	16:45	16:27		
8	05:30	05:57 (06)	05:57	06:27	06:57			07:25 (10)	06:32	07:05		
	20:28	31 06:28 (06)	20:03	19:17	18:27		13	07:38 (10)	16:44	16:27		
9	05:31	05:57 (06)	05:58	06:28	06:58			07:23 (10)	06:33	07:06		
	20:28	30 06:27 (06)	20:02	19:15	18:25		16	07:39 (10)	16:43	16:27		
10	05:32	05:58 (06)	05:59	06:29	06:59			07:22 (10)	06:34	07:07		
	20:28	29 06:27 (06)	20:01	19:14	18:24		18	07:40 (10)	16:42	16:27		
11	05:32	05:59 (06)	06:00	06:30	07:00			07:21 (10)	06:36	07:08		
	20:27	29 06:28 (06)	19:59	19:12	18:22		19	07:40 (10)	16:41	16:27		
12	05:33	05:58 (06)	06:01	06:31	07:01			07:22 (10)	06:37	07:09		
	20:27	29 06:27 (06)	19:58	19:10	18:20		19	07:41 (10)	16:40	16:27		
13	05:34	05:59 (06)	06:02	06:32	07:02			07:23 (10)	06:38	07:09		
	20:26	28 06:27 (06)	19:57	19:09	18:19		18	07:41 (10)	16:39	16:27		
14	05:34	06:00 (06)	06:03	06:33	07:04			07:24 (10)	06:39	07:10		
	20:26	27 06:27 (06)	19:55	19:07	18:17		16	07:40 (10)	16:38	16:27		
15	05:35	06:01 (06)	06:04	06:34	07:05			07:25 (10)	06:40	07:11		
	20:25	25 06:26 (06)	19:54	19:05	18:16		15	07:40 (10)	16:37	16:28		
16	05:36	06:01 (06)	06:05	06:35	07:06			07:26 (10)	06:41	07:12		
	20:25	24 06:25 (06)	19:53	19:04	18:14		13	07:39 (10)	16:36	16:28		
17	05:37	06:02 (06)	06:06	06:36	07:07			07:27 (10)	06:43	07:12		
	20:24	23 06:25 (06)	19:51	19:02	18:13		10	07:37 (10)	16:36	16:28		
18	05:38	06:03 (06)	06:07	06:37	07:08			07:28 (10)	06:44	07:13		
	20:23	21 06:24 (06)	19:50	19:00	18:11		8	07:36 (10)	16:35	16:28		
19	05:38	06:05 (06)	06:08	06:38	07:09			07:30 (10)	06:45	07:14		
	20:23	18 06:23 (06)	19:48	18:58	18:10		4	07:34 (10)	16:34	16:29		
20	05:39	06:06 (06)	06:09	06:39	07:10				06:46	07:14		
	20:22	16 06:22 (06)	19:47	18:57	18:08				16:33	16:29		
21	05:40	06:07 (06)	06:10	06:40	07:11				06:47	07:15		
	20:21	13 06:20 (06)	19:45	18:55	18:07				16:33	16:30		
22	05:41	06:10 (06)	06:11	06:41	07:12				06:48	07:15		
	20:20	8 06:18 (06)	19:44	18:53	18:05				16:32	16:30		
23	05:42		06:12	06:42	07:13				06:50	07:16		
	20:20		19:42	18:52	18:04				16:31	16:31		
24	05:43		06:13	06:43	07:15				06:51	07:16		
	20:19		19:41	18:50	18:03				16:31	16:31		
25	05:44		06:14	06:44	06:16				06:52	07:17		
	20:18		19:39	18:48	17:01				16:30	16:32		
26	05:44		06:15	06:45	06:17				06:53	07:17		
	20:17		19:38	18:47	17:00				16:30	16:32		
27	05:45		06:15	06:46	06:18				06:54	07:17		
	20:16		19:36	18:45	16:58				16:29	16:33		
28	05:46		06:16	06:47	06:19				06:55	07:18		
	20:15		19:35	18:43	16:57				16:29	16:34		
29	05:47		06:17	06:48	06:20				06:56	07:18		
	20:14		19:33	18:42	16:56				16:29	16:34		
30	05:48		06:18	06:49	06:21				06:57	07:18		
	20:13		19:32	18:40	16:54				16:28	16:35		
31	05:49		06:19		06:23					07:18		
	20:12		19:30		16:53					16:36		
Ore potenziali eliofania	458		427		375		346		299		289	
Totale, caso peggiore	576						177					
Probabilità di eliofania	0,69						0,52					
Tempo di operatività rid.	0,85						0,85					
Dir. del vento rid.	0,50						0,62					
Totale ridotto	0,29						0,28					
Totale effettivo	169						49					

Legenda della tabella:

Giorno del mese	Alba (hh:mm)	Inizio ombreggiamento (hh:mm)	(WTG che provoca l'inizio dell'ombreggiamento)
	Tramonto (hh:mm)	Fine ombreggiamento (hh:mm)	(WTG che provoca l'ultimo ombreggiamento)
	Minuti d'ombra		

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R12 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (13)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	
1	07:19 16:37	07:06 17:11	06:30 17:45	06:49 (10) 07:07 (10)	06:40 19:18	05:54 19:50	05:52 (06) 06:07 (06)
2	07:19 16:38	07:05 17:12	06:29 17:46	06:47 (10) 07:06 (10)	06:38 19:19	05:53 19:51	05:52 (06) 06:09 (06)
3	07:19 16:39	07:04 17:13	06:27 17:47	06:46 (10) 07:06 (10)	06:36 19:20	05:52 19:52	05:50 (06) 06:09 (06)
4	07:19 16:40	07:03 17:15	06:25 17:48	06:46 (10) 07:05 (10)	06:35 19:21	05:51 19:53	05:50 (06) 06:11 (06)
5	07:19 16:41	07:02 17:16	06:24 17:49	06:47 (10) 07:05 (10)	06:33 19:22	05:49 19:54	05:50 (06) 06:12 (06)
6	07:19 16:41	07:01 17:17	06:22 17:50	06:48 (10) 07:03 (10)	06:32 19:24	05:48 19:55	05:50 (06) 06:13 (06)
7	07:19 16:42	06:59 17:18	06:21 17:51	06:49 (10) 07:01 (10)	06:30 19:25	05:47 19:56	05:49 (06) 06:13 (06)
8	07:19 16:43	06:58 17:20	06:19 17:53	06:53 (10) 06:57 (10)	06:28 19:26	05:46 19:57	05:49 (06) 06:13 (06)
9	07:19 16:44	06:57 17:21	06:18 17:54	06:57 (10) 07:00 (10)	06:27 19:27	05:45 19:58	05:49 (06) 06:14 (06)
10	07:18 16:45	06:56 17:22	06:16 17:55	06:58 (10) 07:03 (10)	06:25 19:28	05:44 19:59	05:49 (06) 06:15 (06)
11	07:18 16:46	06:55 17:23	06:14 17:56	06:42 (11) 06:57 (11)	05:42 20:00	05:49 20:00	05:49 (06) 06:15 (06)
12	07:18 16:47	06:54 17:25	06:13 17:57	06:40 (11) 06:56 (11)	05:41 20:01	05:49 20:01	05:49 (06) 06:16 (06)
13	07:18 16:49	06:52 17:26	06:11 17:58	06:39 (11) 06:56 (11)	05:40 20:02	05:49 20:02	05:49 (06) 06:16 (06)
14	07:17 16:50	06:51 17:27	06:09 17:59	06:37 (11) 06:55 (11)	05:39 20:03	05:49 20:03	05:49 (06) 06:17 (06)
15	07:17 16:51	06:50 17:28	06:08 18:00	06:38 (11) 06:54 (11)	05:38 20:04	05:49 20:04	05:49 (06) 06:17 (06)
16	07:17 16:52	06:49 17:29	06:06 18:01	06:39 (11) 06:52 (11)	05:37 20:05	05:49 20:05	05:49 (06) 06:17 (06)
17	07:16 16:53	06:47 17:31	06:05 18:02	06:42 (11) 06:50 (11)	05:36 20:06	05:49 20:06	05:49 (06) 06:18 (06)
18	07:16 16:54	06:46 17:32	06:03 18:03	06:13 19:36	05:35 20:07	05:49 20:07	05:49 (06) 06:18 (06)
19	07:15 16:55	06:45 17:33	06:01 18:05	06:11 19:37	05:35 20:08	05:49 20:08	05:49 (06) 06:18 (06)
20	07:15 16:56	06:43 17:34	06:00 18:06	06:10 19:38	05:34 20:09	05:49 20:09	05:49 (06) 06:18 (06)
21	07:14 16:58	06:42 17:35	05:58 18:07	06:08 19:39	05:33 20:10	05:49 20:10	05:49 (06) 06:18 (06)
22	07:13 16:59	06:40 17:37	05:56 18:08	06:07 19:40	05:32 20:11	05:49 20:11	05:50 (06) 06:19 (06)
23	07:13 17:00	06:39 17:38	05:55 18:09	06:05 19:41	05:31 20:11	05:49 20:11	05:50 (06) 06:19 (06)
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 19:42	05:31 20:12	05:49 20:12	05:50 (06) 06:19 (06)
25	07:11 17:02	06:36 17:40	05:51 18:11	06:02 19:43	05:30 20:13	05:49 20:13	05:50 (06) 06:19 (06)
26	07:11 17:04	06:35 17:41	05:50 18:12	06:01 19:44	05:29 20:14	05:49 20:14	05:51 (06) 06:19 (06)
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 19:46	05:29 20:15	05:49 20:15	05:51 (06) 06:19 (06)
28	07:09 17:06	06:32 17:44	05:46 18:14	05:58 19:47	05:28 20:16	05:49 20:16	05:52 (06) 06:20 (06)
29	07:08 17:07		06:45 19:15	05:57 19:48	05:27 20:17	05:49 20:17	05:52 (06) 06:19 (06)
30	07:07 17:09		06:43 19:16	05:56 19:49	05:27 20:17	05:26 20:17	05:52 (06) 06:19 (06)
31	07:07 17:10		06:41 19:17		05:26 20:18	05:54 (06) 06:06 (06)	05:52 (06) 06:19 (06)
Ore potenziali eliofania	298	298	369	398	448	451	779
Totale, caso peggiore		62	125	154	20		0,62
Probabilità di eliofania		0,44	0,44	0,51	0,57		0,85
Tempo di operatività rid.		0,85	0,85	0,85	0,85		0,50
Dir. del vento rid.		0,62	0,62	0,52	0,50		0,27
Totale ridotto		0,23	0,24	0,23	0,24		207
Totale effettivo		15	30	35	5		

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R12 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (13)

Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen	Feb	Mar	Apr	Mag	Giu	Lug	Ago	Set	Ott	Nov	Dic
4,12	4,66	5,30	6,72	8,25	9,35	10,16	9,45	7,64	5,82	4,65	3,82

Tempo di operatività

N	NNE	ENE	E	ESE	SSE	S	SSO	OSO	O	ONO	NNO	Somma
1.229	573	283	164	231	782	961	432	328	544	685	1.236	7.447

3,0m/s

	Luglio		Agosto		Settembre		Ottobre		Novembre		Dicembre	
1	05:26	05:53 (06)	05:50	06:20	06:41 (11)	06:50	06:24	06:58				
	20:30	27 06:20 (06)	20:11	19:28	15 06:56 (11)	18:38	16:52	16:28				
2	05:27	05:53 (06)	05:51	06:21	06:42 (11)	06:51	06:25	06:59				
	20:30	26 06:19 (06)	20:10	19:27	14 06:56 (11)	18:37	16:51	16:28				
3	05:27	05:54 (06)	05:52	06:22	06:43 (11)	06:52	06:26	07:00				
	20:30	25 06:19 (06)	20:09	19:25	12 06:55 (11)	18:35	16:50	16:27				
4	05:28	05:54 (06)	05:53	06:23	06:44 (11)	06:53	06:27	07:01				
	20:29	25 06:19 (06)	20:08	19:24	10 06:54 (11)	18:33	16:48	16:27				
5	05:28	05:55 (06)	05:54	06:24	06:45 (11)	06:54	06:28	07:02				
	20:29	24 06:19 (06)	20:07	19:22	8 06:53 (11)	18:32	16:47	16:27				
6	05:29	05:56 (06)	05:55	06:25	06:46 (11)	06:55	07:27 (10)	06:30	07:03			
	20:29	23 06:19 (06)	20:05	19:20	6 06:52 (11)	18:30	9 07:36 (10)	16:46	16:27			
7	05:30	05:56 (06)	05:56	06:26	06:47 (11)	06:56	07:24 (10)	06:31	07:04			
	20:29	22 06:18 (06)	20:04	19:19	2 06:49 (11)	18:28	14 07:38 (10)	16:45	16:27			
8	05:30	05:57 (06)	05:57	06:27	06:57	06:57	07:23 (10)	06:32	07:05			
	20:28	21 06:18 (06)	20:03	19:17	18:27	16 07:39 (10)	16:44	16:27				
9	05:31	05:57 (06)	05:58	06:28	06:58	06:58	07:21 (10)	06:33	07:06			
	20:28	20 06:17 (06)	20:02	19:15	18:25	19 07:40 (10)	16:43	16:27				
10	05:32	05:59 (06)	05:59	06:29	06:59	06:59	07:20 (10)	06:34	07:07			
	20:28	18 06:17 (06)	20:01	19:14	18:24	20 07:40 (10)	16:42	16:27				
11	05:32	06:00 (06)	06:00	06:30	07:00	07:00	07:20 (10)	06:36	07:08			
	20:27	16 06:16 (06)	19:59	19:12	18:22	20 07:40 (10)	16:41	16:27				
12	05:33	06:01 (06)	06:01	06:31	07:01	07:01	07:22 (10)	06:37	07:09			
	20:27	13 06:14 (06)	19:58	19:10	18:20	19 07:41 (10)	16:40	16:27				
13	05:34	06:03 (06)	06:02	06:32	07:02	07:02	07:23 (10)	06:38	07:09			
	20:26	10 06:13 (06)	19:57	19:09	18:19	17 07:40 (10)	16:39	16:27				
14	05:34	06:06 (06)	06:03	06:33	07:04	07:04	07:24 (10)	06:39	07:10			
	20:26	4 06:10 (06)	19:55	19:07	18:17	16 07:40 (10)	16:38	16:27				
15	05:35	06:04	06:04	06:34	07:05	07:05	07:25 (10)	06:40	07:11			
	20:25	19:54	19:05	19:05	18:16	14 07:39 (10)	16:37	16:28				
16	05:36	06:05	06:05	06:35	07:06	07:06	07:26 (10)	06:41	07:12			
	20:25	19:52	19:04	19:04	18:14	11 07:37 (10)	16:36	16:28				
17	05:37	06:06	06:06	06:36	07:07	07:07	07:27 (10)	06:43	07:12			
	20:24	19:51	19:02	19:02	18:13	9 07:36 (10)	16:36	16:28				
18	05:38	06:07	06:07	06:37	07:08	07:08	07:28 (10)	06:44	07:13			
	20:23	19:50	19:00	19:00	18:11	6 07:34 (10)	16:35	16:28				
19	05:38	06:08	06:08	06:38	07:09	07:09	06:45	07:14				
	20:23	19:48	18:58	18:58	18:10	16:34	16:29					
20	05:39	06:09	06:09	06:39	07:10	07:10	06:46	07:14				
	20:22	19:47	18:57	18:57	18:08	16:33	16:29					
21	05:40	06:10	06:10	06:40	07:11	07:11	06:47	07:15				
	20:21	19:45	18:55	18:55	18:07	16:33	16:30					
22	05:41	06:11	06:11	06:41	07:12	07:12	06:48	07:15				
	20:20	19:44	18:53	18:53	18:05	16:32	16:30					
23	05:42	06:12	06:12	06:42	07:13	07:13	06:50	07:16				
	20:20	19:42	18:52	18:52	18:04	16:31	16:31					
24	05:43	06:13	06:13	06:43	07:15	07:15	06:51	07:16				
	20:19	19:41	18:50	18:50	18:03	16:31	16:31					
25	05:44	06:14	06:14	06:44	06:16	06:16	06:52	07:17				
	20:18	19:39	18:48	18:48	17:01	16:30	16:32					
26	05:44	06:15	06:43 (11)	06:45	06:17	06:17	06:53	07:17				
	20:17	19:38	9 06:52 (11)	18:47	17:00	16:30	16:32					
27	05:45	06:15	06:41 (11)	06:46	06:18	06:18	06:54	07:17				
	20:16	19:36	13 06:54 (11)	18:45	16:58	16:29	16:33					
28	05:46	06:16	06:39 (11)	06:47	06:19	06:19	06:55	07:18				
	20:15	19:35	16 06:55 (11)	18:43	16:57	16:29	16:34					
29	05:47	06:17	06:38 (11)	06:48	06:20	06:20	06:56	07:18				
	20:14	19:33	18 06:56 (11)	18:42	16:56	16:29	16:34					
30	05:48	06:18	06:39 (11)	06:49	06:21	06:21	06:57	07:18				
	20:13	19:32	17 06:56 (11)	18:40	16:54	16:28	16:35					
31	05:49	06:19	06:40 (11)	06:50	06:23	06:23	06:58	07:18				
	20:12	19:30	16 06:56 (11)	18:39	16:53	16:28	16:36					
Ore potenziali eliofania	458	427	375	346	299	289						
Totale, caso peggiore	274	89	67	190								
Probabilità di eliofania	0,69	0,69	0,61	0,52								
Tempo di operatività rid.	0,85	0,85	0,85	0,85								
Dir. del vento rid.	0,50	0,52	0,52	0,62								
Totale ridotto	0,29	0,31	0,27	0,28								
Totale effettivo	81	27	18	53								

Legenda della tabella:

Giorno del mese	Alba (hh:mm)	Inizio ombreggiamento (hh:mm)	(WTG che provoca l'inizio dell'ombreggiamento)
	Tramonto (hh:mm)	Fine ombreggiamento (hh:mm)	(WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R13 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (14)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 16:37	07:06 17:11	06:30 17:45	06:40 19:18	05:54 19:50	05:26 20:19
2	07:19 16:38	07:05 17:12	06:29 17:46	06:47 (10) 06:38 06:52 (10) 19:19	05:53 19:51	05:25 20:20
3	07:19 16:39	07:04 17:13	06:27 17:47	06:46 (10) 06:36 06:56 (10) 19:20	05:52 19:52	05:25 20:20
4	07:19 16:40	07:03 17:15	06:25 17:48	06:44 (10) 06:35 06:57 (10) 19:21	05:51 19:53	05:25 20:21
5	07:19 16:41	07:02 17:16	06:24 17:49	06:43 (10) 19:22 06:59 (10) 19:22	05:49 19:54	05:24 20:22
6	07:19 16:41	07:01 17:17	06:22 17:50	06:41 (10) 06:32 06:59 (10) 19:24	05:48 19:55	05:24 20:22
7	07:19 16:42	06:59 17:18	06:21 17:51	06:39 (10) 06:30 06:59 (10) 19:25	05:47 19:56	05:24 20:23
8	07:19 16:43	06:58 17:20	06:19 17:53	06:38 (10) 06:28 07:00 (10) 19:26	05:46 19:57	05:23 20:24
9	07:19 16:44	06:57 17:21	06:18 17:54	06:37 (10) 06:27 06:59 (10) 19:27	05:45 19:58	05:23 20:24
10	07:18 16:45	06:56 17:22	06:16 17:55	06:37 (10) 06:25 06:59 (10) 19:28	05:44 19:59	05:23 20:25
11	07:18 16:46	06:55 17:23	06:14 17:56	06:37 (10) 06:24 06:58 (10) 19:29	05:42 20:00	05:23 20:25
12	07:18 16:47	06:54 17:25	06:13 17:57	06:37 (10) 06:22 06:57 (10) 19:30	05:41 20:01	05:23 20:26
13	07:18 16:49	06:52 17:26	06:11 17:58	06:38 (10) 06:20 06:56 (10) 19:31	05:40 20:02	05:23 20:26
14	07:17 16:50	06:51 17:27	06:09 17:59	06:39 (10) 19:32 06:55 (10) 19:32	05:39 20:03	05:23 20:27
15	07:17 16:51	06:50 17:28	06:08 18:00	06:40 (10) 06:17 06:52 (10) 19:33	06:36 (11) 05:38 06:39 (11) 20:04	05:23 20:27
16	07:17 16:52	06:49 17:29	06:06 18:01	06:44 (10) 06:16 06:49 (10) 19:34	06:34 (11) 05:37 06:41 (11) 20:05	05:23 20:28
17	07:16 16:53	06:47 17:31	06:05 18:02	06:14 19:35	06:33 (11) 05:36 06:42 (11) 20:06	05:23 20:28
18	07:16 16:54	06:46 17:32	06:03 18:03	06:13 19:36	06:31 (11) 05:35 06:43 (11) 20:07	05:23 20:28
19	07:15 16:55	06:45 17:33	06:01 18:05	06:11 19:37	06:30 (11) 05:35 06:44 (11) 20:08	05:23 20:29
20	07:15 16:56	06:43 17:34	06:00 18:06	06:10 19:38	06:28 (11) 05:34 06:43 (11) 20:09	05:23 20:29
21	07:14 16:58	06:42 17:35	05:58 18:07	06:08 19:39	06:27 (11) 05:33 06:44 (11) 20:10	05:23 20:29
22	07:13 16:59	06:40 17:37	05:56 18:08	06:07 19:40	06:26 (11) 05:32 06:44 (11) 20:11	05:23 20:29
23	07:13 17:00	06:39 17:38	05:55 18:09	06:05 19:41	06:24 (11) 05:31 06:43 (11) 20:11	05:23 20:29
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 19:42	06:23 (11) 05:31 06:43 (11) 20:12	05:24 20:30
25	07:11 17:02	06:36 17:40	05:51 18:11	06:02 19:43	06:22 (11) 05:30 06:42 (11) 20:13	05:24 20:30
26	07:11 17:04	06:35 17:41	05:50 18:12	06:01 19:44	06:23 (11) 05:29 06:41 (11) 20:14	05:24 20:30
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 19:46	06:24 (11) 05:29 06:40 (11) 20:15	05:25 20:30
28	07:09 17:06	06:32 17:44	05:46 18:14	05:58 19:47	06:24 (11) 05:28 06:38 (11) 20:16	05:25 20:30
29	07:08 17:07	06:45 19:15	06:45 19:15	05:57 19:48	06:26 (11) 05:27 06:36 (11) 20:17	05:25 20:30
30	07:07 17:08	06:43 19:16	06:43 19:16	05:56 19:49	05:27 20:17	05:26 20:30
31	07:07 17:10	06:41 19:17	06:41 19:17	05:56 19:49	05:26 20:18	05:26 20:30
Ore potenziali eliofania	298	298	369	398	448	451
Totale, caso peggiore			240	212		
Probabilità di eliofania			0,44	0,51		
Tempo di operatività rid.			0,85	0,85		
Dir. del vento rid.			0,61	0,49		
Totale ridotto			0,23	0,21		
Totale effettivo			56	45		

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R13 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (14)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 20:30	05:50 20:11	06:20 19:28	06:50 18:38	07:17 (10) 19	06:24 16:52
2	05:27 20:30	05:51 20:10	06:21 19:27	06:51 18:37	07:36 (10) 21	06:25 16:51
3	05:27 20:29	05:52 20:09	06:22 19:25	06:52 18:35	07:15 (10) 22	06:26 16:50
4	05:28 20:29	05:53 20:08	06:23 19:24	06:53 18:33	07:14 (10) 23	06:27 16:48
5	05:28 20:29	05:54 20:07	06:24 19:22	06:54 18:32	07:14 (10) 22	06:28 16:47
6	05:29 20:29	05:55 20:05	06:25 19:20	06:55 18:30	07:15 (10) 21	06:30 16:46
7	05:30 20:29	05:56 20:04	06:26 19:19	06:56 18:28	07:16 (10) 19	06:31 16:45
8	05:30 20:28	05:57 20:03	06:27 19:17	06:57 18:27	07:17 (10) 17	06:32 16:44
9	05:31 20:28	05:58 20:02	06:28 19:15	06:58 18:25	07:18 (10) 14	06:33 16:43
10	05:32 20:28	05:59 20:00	06:29 19:14	06:59 18:24	07:19 (10) 11	06:34 16:42
11	05:32 20:27	06:00 19:59	06:30 19:12	07:00 18:22	07:20 (10) 8	06:36 16:41
12	05:33 20:27	06:01 19:58	06:31 19:10	07:01 18:20		06:37 16:40
13	05:34 20:26	06:02 19:57	06:32 (11) 19:09	07:02 18:19		06:38 16:39
14	05:34 20:26	06:03 19:55	06:34 (11) 19:07	07:04 18:17		06:39 16:38
15	05:35 20:25	06:04 19:54	06:32 (11) 19:05	07:05 18:16		06:40 16:37
16	05:36 20:24	06:05 19:52	06:31 (11) 19:04	07:06 18:14		06:41 16:36
17	05:37 20:24	06:06 19:51	06:29 (11) 19:02	07:07 18:13		06:43 16:36
18	05:38 20:23	06:07 19:50	06:29 (11) 19:00	07:08 18:11		06:44 16:35
19	05:38 20:23	06:08 19:48	06:29 (11) 18:58	07:09 18:10		06:45 16:34
20	05:39 20:22	06:09 19:47	06:30 (11) 18:57	07:10 18:08		06:46 16:33
21	05:40 20:21	06:10 19:45	06:31 (11) 18:55	07:11 18:07		06:47 16:33
22	05:41 20:20	06:11 19:44	06:32 (11) 18:53	07:12 18:05		06:48 16:32
23	05:42 20:20	06:12 19:42	06:33 (11) 18:52	07:13 18:04		06:50 16:31
24	05:43 20:19	06:13 19:41	06:34 (11) 18:50	07:15 18:03		06:51 16:31
25	05:44 20:18	06:14 19:39	06:35 (11) 18:48	06:16 17:01		06:52 16:30
26	05:44 20:17	06:15 19:38	06:35 (11) 18:47	06:17 17:00		06:53 16:30
27	05:45 20:16	06:15 19:36	06:36 (11) 18:45	06:18 16:58		06:54 16:29
28	05:46 20:15	06:16 19:35	06:37 (11) 18:43	06:19 16:57	07:22 (10) 10	06:55 16:29
29	05:47 20:14	06:17 19:33	06:48 18:42	07:20 (10) 14	06:20 07:34 (10)	06:56 16:29
30	05:48 20:13	06:18 19:32	06:49 18:40	07:18 (10) 18	06:21 07:36 (10)	06:57 16:28
31	05:49 20:12	06:19 19:30		06:23 16:53		06:58 16:36
Ore potenziali eliofania	458	427	375	346	299	289
Totale, caso peggiore		216	42	197		
Probabilità di eliofania		0,69	0,61	0,52		
Tempo di operatività rid.		0,85	0,85	0,85		
Dir. del vento rid.		0,49	0,61	0,61		
Totale ridotto		0,29	0,32	0,27		
Totale effettivo		62	14	54		

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R14 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (9)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 16:37	07:06 17:11	06:30 17:45	06:40 19:18	07:04 (06) 08:14 (05) 19:50	07:17 (05) 08:00 (05) 20:19
2	07:19 16:38	07:05 17:12	06:29 17:46	06:38 19:19	07:01 (06) 08:14 (05) 19:51	07:18 (05) 07:58 (05) 20:20
3	07:19 16:39	07:04 17:13	06:27 17:47	06:36 19:20	06:59 (06) 08:15 (05) 19:52	06:11 (07) 07:56 (05) 20:20
4	07:19 16:40	07:03 17:15	06:25 17:48	06:35 19:21	06:57 (06) 08:15 (05) 19:53	06:10 (07) 07:54 (05) 20:21
5	07:19 16:41	07:02 17:16	06:24 17:49	06:33 19:22	06:56 (06) 08:16 (05) 19:54	06:09 (07) 07:52 (05) 20:22
6	07:19 16:41	07:01 17:17	06:22 17:50	06:32 19:24	06:55 (06) 08:16 (05) 19:55	06:08 (07) 07:50 (05) 20:22
7	07:19 16:42	06:59 17:18	06:21 17:51	06:30 19:25	06:53 (06) 08:16 (05) 19:56	06:06 (07) 07:46 (05) 20:23
8	07:19 16:43	06:58 17:20	06:19 17:53	06:28 19:26	06:53 (06) 08:17 (05) 19:57	06:05 (07) 07:42 (05) 20:24
9	07:19 16:44	06:57 17:21	06:18 17:54	06:27 19:27	06:52 (06) 08:16 (05) 19:58	06:04 (07) 06:27 (07) 20:24
10	07:18 16:45	06:56 17:22	06:16 17:55	06:25 19:28	06:52 (06) 08:17 (05) 19:59	06:03 (07) 06:27 (07) 20:25
11	07:18 16:46	06:55 17:23	06:14 17:56	06:24 19:29	06:51 (06) 08:16 (05) 20:00	06:02 (07) 06:28 (07) 20:25
12	07:18 16:47	06:54 17:25	06:13 17:57	06:22 19:30	06:50 (06) 08:15 (05) 20:01	06:01 (07) 06:28 (07) 20:26
13	07:18 16:49	06:52 17:26	06:11 17:58	06:20 19:31	06:51 (06) 08:16 (05) 20:02	06:01 (07) 06:28 (07) 20:26
14	07:17 16:50	06:51 17:27	06:09 17:59	06:19 19:32	06:50 (06) 08:15 (05) 20:03	06:01 (07) 06:28 (07) 20:27
15	07:17 16:51	06:50 17:28	06:08 18:00	06:17 19:33	06:51 (06) 08:15 (05) 20:04	06:01 (07) 06:28 (07) 20:27
16	07:17 16:52	06:49 17:29	06:06 18:01	06:16 19:34	06:51 (06) 08:14 (05) 20:05	06:00 (07) 06:28 (07) 20:28
17	07:16 16:53	06:47 17:31	06:05 18:02	06:14 19:35	06:52 (06) 08:14 (05) 20:06	06:02 (07) 06:28 (07) 20:28
18	07:16 16:54	06:46 17:32	06:03 18:03	06:13 19:36	06:52 (06) 08:13 (05) 20:07	06:02 (07) 06:28 (07) 20:28
19	07:15 16:55	06:45 17:33	06:01 18:05	06:11 19:37	06:53 (06) 08:12 (05) 20:08	06:02 (07) 06:28 (07) 20:29
20	07:15 16:56	06:43 17:34	06:00 18:06	06:10 19:38	06:54 (06) 08:11 (05) 20:09	06:02 (07) 06:27 (07) 20:29
21	07:14 16:58	06:42 17:35	05:58 18:07	06:08 19:39	06:56 (06) 08:11 (05) 20:10	06:02 (07) 06:27 (07) 20:29
22	07:13 16:59	06:40 17:37	05:56 18:08	06:07 19:40	06:59 (06) 08:10 (05) 20:11	06:03 (07) 06:27 (07) 20:29
23	07:13 17:00	06:39 17:38	05:55 18:09	06:05 19:41	07:03 (06) 08:09 (05) 20:11	06:04 (07) 06:26 (07) 20:29
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 19:42	07:12 (05) 08:08 (05) 20:12	06:04 (07) 06:25 (07) 20:30
25	07:11 17:02	06:36 17:40	05:51 18:11	06:02 19:43	07:12 (05) 08:07 (05) 20:13	06:05 (07) 06:25 (07) 20:30
26	07:11 17:04	06:35 17:41	05:50 18:12	06:01 19:44	07:13 (05) 08:06 (05) 20:14	06:06 (07) 06:24 (07) 20:30
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 19:45	07:14 (05) 08:05 (05) 20:15	06:07 (07) 06:24 (07) 20:30
28	07:09 17:06	06:32 17:44	05:46 18:14	05:58 19:47	07:14 (05) 08:03 (05) 20:16	06:08 (07) 06:23 (07) 20:30
29	07:08 17:07	06:45 19:15	06:45 19:15	05:57 19:48	07:15 (05) 08:02 (05) 20:17	06:09 (07) 06:21 (07) 20:30
30	07:07 17:08	06:43 19:16	06:43 19:16	05:56 19:49	07:16 (05) 08:01 (05) 20:17	06:11 (07) 06:20 (07) 20:30
31	07:07 17:10	06:41 19:17	06:41 19:17	07:10 (06) 08:13 (05)	05:26 20:18	06:13 (07) 06:19 (07)
Ore potenziali eliofania	298	298	369	398	448	451
Totale, caso peggiore			299	2182	831	
Probabilità di eliofania			0,44	0,51	0,57	
Tempo di operatività rid.			0,85	0,85	0,85	
Dir. del vento rid.			0,57	0,56	0,51	
Totale ridotto			0,22	0,24	0,25	
Totale effettivo			65	530	207	

Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

SHADOW - Calendario

Calcolo: flikering real case Recettore d'ombra: R14 - Shadow Receptor: 2,0 x 2,0 Azimuth: 0,0° Slope: 90,0° (9)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre			
1	05:26	05:50	06:12 (07)	06:20	06:50 (06)	06:50	06:24	06:58	
	20:30	20:11	26 06:38 (07)	19:28	85 08:15 (05)	18:38	16:52	16:28	
2	05:27	05:51	06:13 (07)	06:21	06:50 (06)	06:51	06:25	06:59	
	20:30	20:10	25 06:38 (07)	19:27	85 08:15 (05)	18:37	16:51	16:28	
3	05:27	05:52	06:14 (07)	06:22	06:50 (06)	06:52	06:26	07:00	
	20:30	20:09	24 06:38 (07)	19:25	84 08:14 (05)	18:35	16:50	16:27	
4	05:28	05:53	06:15 (07)	06:23	06:50 (06)	06:53	06:27	07:01	
	20:29	20:08	22 06:37 (07)	19:24	84 08:14 (05)	18:33	16:48	16:27	
5	05:28	05:54	06:16 (07)	06:24	06:50 (06)	06:54	06:28	07:02	
	20:29	20:07	35 07:54 (05)	19:22	83 08:13 (05)	18:32	16:47	16:27	
6	05:29	05:55	06:17 (07)	06:25	06:51 (06)	06:55	06:30	07:03	
	20:29	20:05	40 07:58 (05)	19:20	81 08:12 (05)	18:30	16:46	16:27	
7	05:30	05:56	06:18 (07)	06:26	06:51 (06)	06:56	06:31	07:04	
	20:29	20:04	44 08:01 (05)	19:19	80 08:11 (05)	18:28	16:45	16:27	
8	05:30	05:57	06:19 (07)	06:27	06:52 (06)	06:57	06:32	07:05	
	20:28	20:03	45 08:03 (05)	19:17	79 08:11 (05)	18:27	16:44	16:27	
9	05:31	05:58	06:19 (07)	06:28	06:53 (06)	06:58	06:33	07:06	
	20:28	20:02	46 08:04 (05)	19:15	77 08:10 (05)	18:25	16:43	16:27	
10	05:32	05:59	06:21 (07)	06:29	06:54 (06)	06:59	06:34	07:07	
	20:28	20:01	43 08:05 (05)	19:14	74 08:08 (05)	18:24	16:42	16:27	
11	05:32	06:00	07:26 (05)	06:30	06:56 (06)	07:00	06:36	07:08	
	20:27	19:59	41 08:07 (05)	19:12	68 08:06 (05)	18:22	16:41	16:27	
12	05:33	06:01	07:25 (05)	06:31	07:00 (06)	07:01	06:37	07:09	
	20:27	19:58	43 08:08 (05)	19:10	57 08:05 (05)	18:20	16:40	16:27	
13	05:34	06:20 (07)	06:02	07:23 (05)	06:32	07:15 (05)	07:02	06:38	07:09
	20:26	8 06:28 (07)	19:57	46 08:09 (05)	19:09	48 08:03 (05)	18:19	16:39	16:27
14	05:34	06:19 (07)	06:03	07:22 (05)	06:33	07:16 (05)	07:04	06:39	07:10
	20:26	11 06:30 (07)	19:55	48 08:10 (05)	19:07	45 08:01 (05)	18:17	16:38	16:27
15	05:35	06:18 (07)	06:04	07:21 (05)	06:34	07:17 (05)	07:05	06:40	07:11
	20:25	13 06:31 (07)	19:54	50 08:11 (05)	19:05	42 07:59 (05)	18:16	16:37	16:28
16	05:36	06:16 (07)	06:05	07:20 (05)	06:35	07:19 (05)	07:06	06:41	07:12
	20:25	16 06:32 (07)	19:53	52 08:12 (05)	19:04	38 07:57 (05)	18:14	16:36	16:28
17	05:37	06:16 (07)	06:06	07:19 (05)	06:36	07:21 (05)	07:07	06:43	07:12
	20:24	17 06:33 (07)	19:51	54 08:13 (05)	19:02	33 07:54 (05)	18:13	16:36	16:28
18	05:38	06:15 (07)	06:07	07:18 (05)	06:37	07:24 (05)	07:08	06:44	07:13
	20:23	19 06:34 (07)	19:50	55 08:13 (05)	19:00	27 07:51 (05)	18:11	16:35	16:28
19	05:38	06:15 (07)	06:08	07:17 (05)	06:38	07:28 (05)	07:09	06:45	07:14
	20:23	20 06:35 (07)	19:48	57 08:14 (05)	18:58	18 07:46 (05)	18:10	16:34	16:29
20	05:39	06:14 (07)	06:09	07:07 (06)	06:39		07:10	06:46	07:14
	20:22	22 06:36 (07)	19:47	65 08:15 (05)	18:57		18:08	16:33	16:29
21	05:40	06:13 (07)	06:10	07:03 (06)	06:40		07:11	06:47	07:15
	20:21	23 06:36 (07)	19:45	72 08:15 (05)	18:55		18:07	16:33	16:30
22	05:41	06:13 (07)	06:11	07:01 (06)	06:41		07:12	06:48	07:15
	20:20	24 06:37 (07)	19:44	75 08:16 (05)	18:53		18:05	16:32	16:30
23	05:42	06:12 (07)	06:12	06:59 (06)	06:42		07:13	06:50	07:16
	20:20	25 06:37 (07)	19:42	77 08:16 (05)	18:52		18:04	16:31	16:31
24	05:43	06:12 (07)	06:13	06:57 (06)	06:43		07:15	06:51	07:16
	20:19	26 06:38 (07)	19:41	79 08:16 (05)	18:50		18:03	16:31	16:31
25	05:44	06:12 (07)	06:14	06:56 (06)	06:44		06:16	06:52	07:17
	20:18	26 06:38 (07)	19:39	80 08:16 (05)	18:48		17:01	16:30	16:32
26	05:44	06:12 (07)	06:15	06:54 (06)	06:45		06:17	06:53	07:17
	20:17	27 06:39 (07)	19:38	82 08:16 (05)	18:47		17:00	16:30	16:32
27	05:45	06:12 (07)	06:15	06:53 (06)	06:46		06:18	06:54	07:17
	20:16	27 06:39 (07)	19:36	83 08:16 (05)	18:45		16:58	16:29	16:33
28	05:46	06:11 (07)	06:16	06:52 (06)	06:47		06:19	06:55	07:18
	20:15	27 06:38 (07)	19:35	84 08:16 (05)	18:43		16:57	16:29	16:34
29	05:47	06:11 (07)	06:17	06:51 (06)	06:48		06:20	06:56	07:18
	20:14	28 06:39 (07)	19:33	85 08:16 (05)	18:42		16:56	16:29	16:34
30	05:48	06:11 (07)	06:18	06:51 (06)	06:49		06:21	06:57	07:18
	20:13	28 06:39 (07)	19:32	85 08:16 (05)	18:40		16:54	16:28	16:35
31	05:49	06:11 (07)	06:19	06:50 (06)			06:23		07:18
	20:12	28 06:39 (07)	19:30	85 08:15 (05)			16:53		16:36
Ore potenziali eliofania	458	427		375			346	299	289
Totale, caso peggiore	415		1748		1188				
Probabilità di eliofania	0,69		0,69		0,61				
Tempo di operatività rid.	0,85		0,85		0,85				
Dir. del vento rid.	0,49		0,56		0,56				
Totale ridotto	0,29		0,33		0,29				
Totale effettivo	119		569		349				

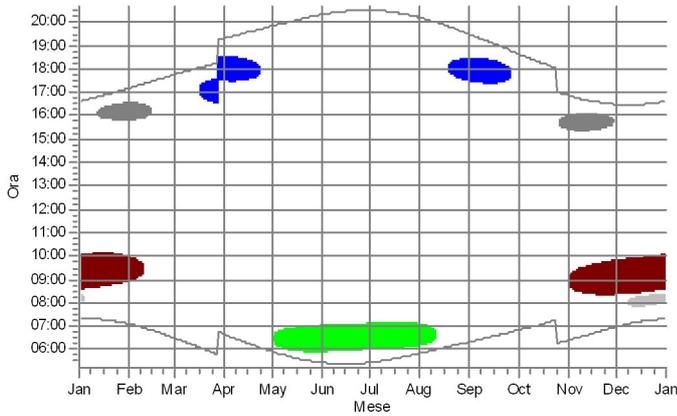
Legenda della tabella:

Giorno del mese Alba (hh:mm) Tramonto (hh:mm) Minuti d'ombra Inizio ombreggiamento (hh:mm) Fine ombreggiamento (hh:mm) (WTG che provoca l'inizio dell'ombreggiamento) (WTG che provoca l'ultimo ombreggiamento)

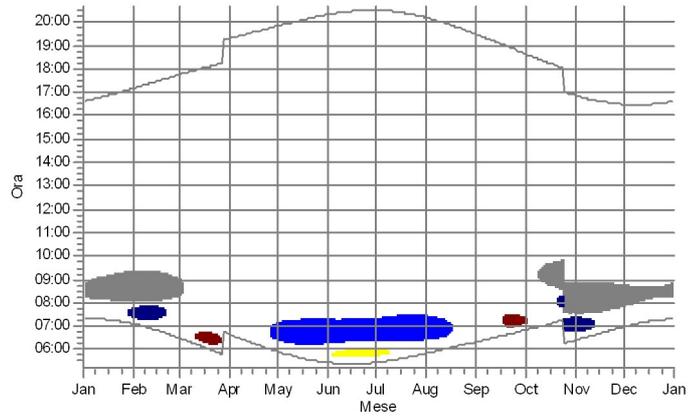
SHADOW - Calendario, grafico

Calcolo: flickering real case

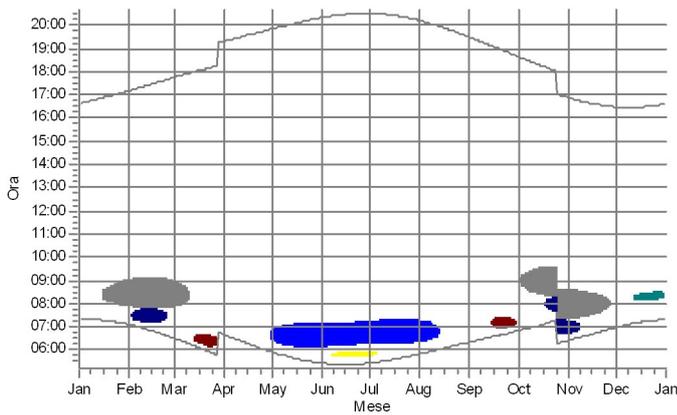
R01: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (1)



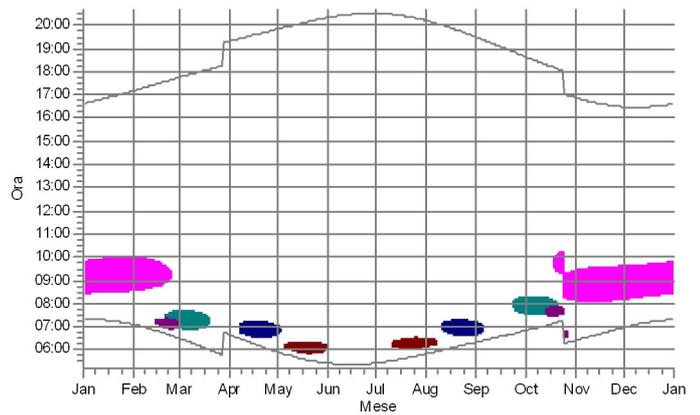
R02: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (2)



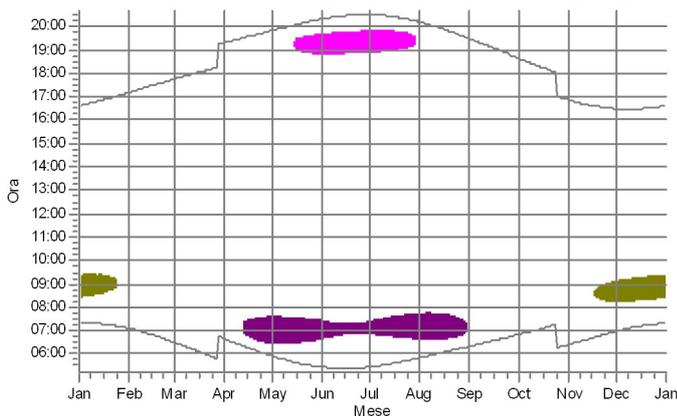
R03: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (3)



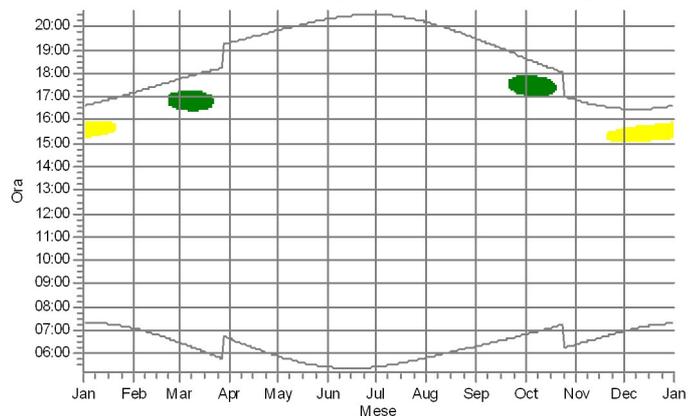
R04: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (4)



R05: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (5)



R06: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (8)



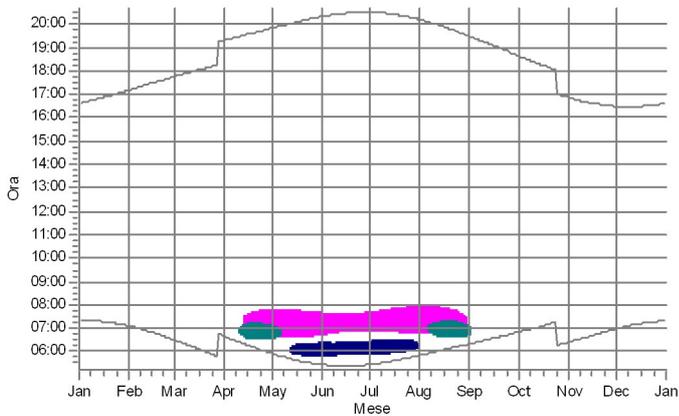
WTG

- | | | | |
|---|--|---|---|
|  | 01: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (1) |  | 07: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (7) |
|  | 02: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (2) |  | 08: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (8) |
|  | 03: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (3) |  | 09: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (9) |
|  | 04: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (4) |  | 10: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (10) |
|  | 05: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (5) |  | 11: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (11) |
|  | 06: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (6) |  | 12: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (12) |

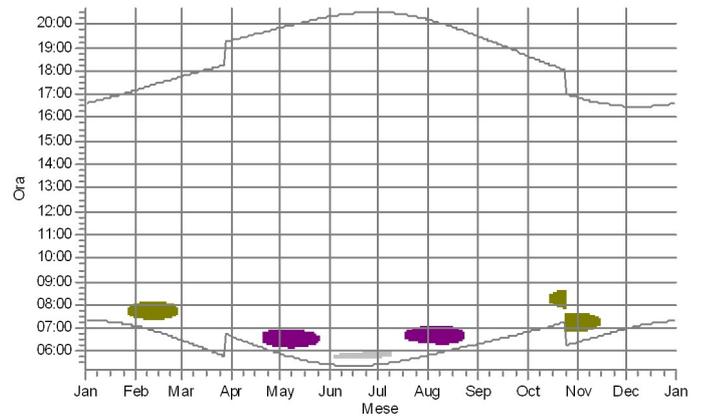
SHADOW - Calendario, grafico

Calcolo: flikering real case

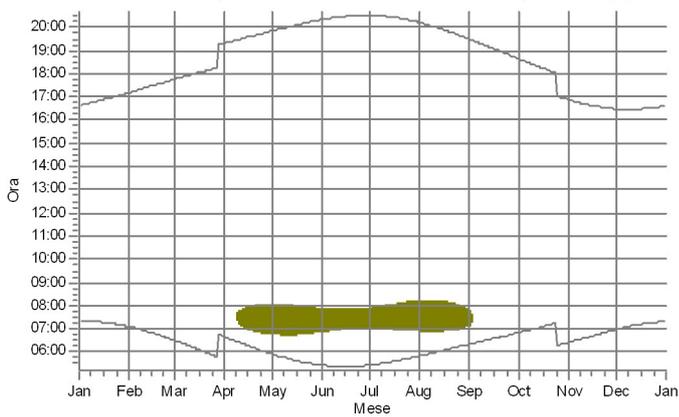
R07: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (10)



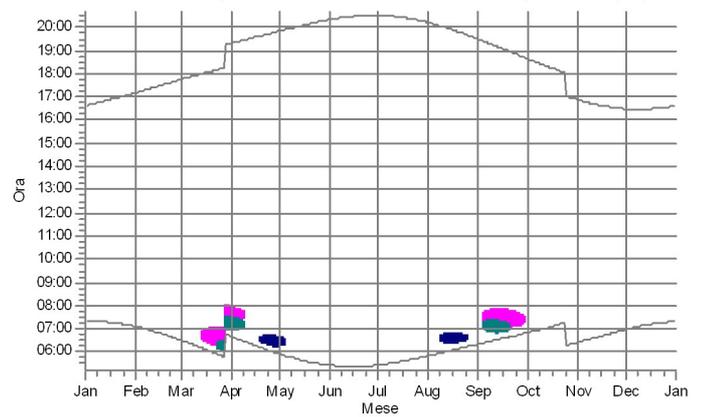
R08: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (6)



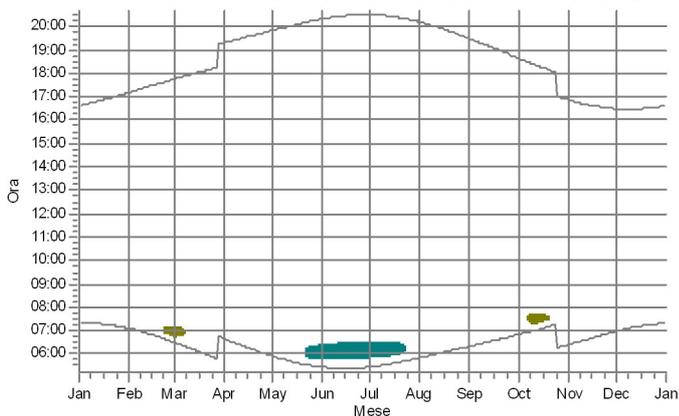
R09: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (7)



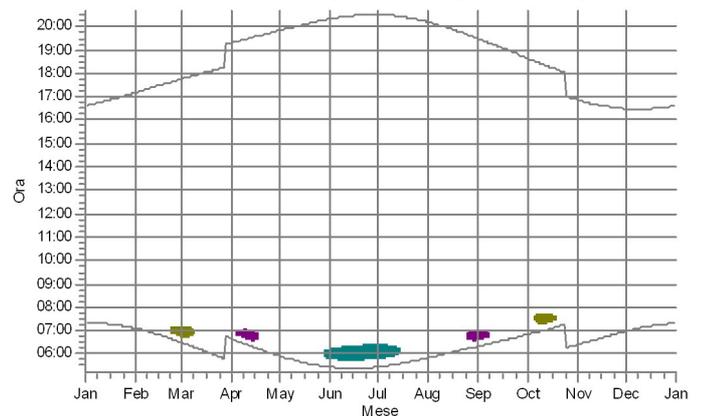
R10: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (11)



R11: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (12)



R12: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (13)



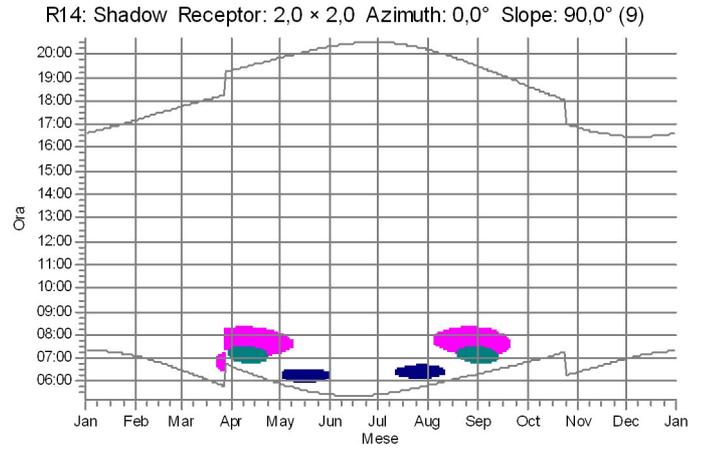
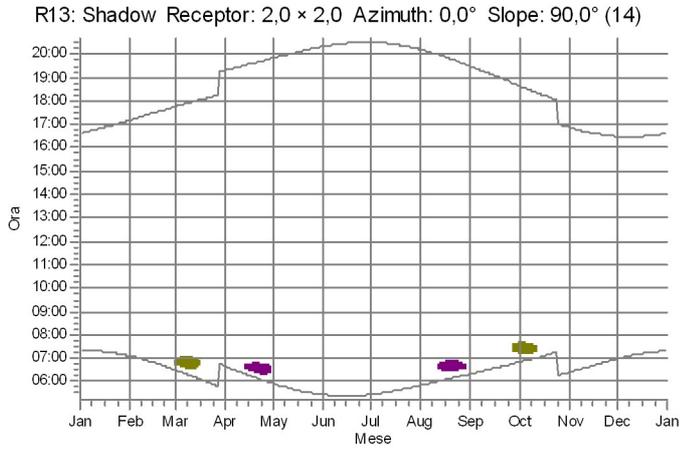
WTG

- 05: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (5)
- 06: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (6)
- 07: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (7)

- 10: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (10)
- 11: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (11)
- 12: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (12)

SHADOW - Calendario, grafico

Calcolo: flikering real case



WTG

- 05: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (5)
- 06: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (6)
- 07: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (7)

- 10: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (10)
- 11: Siemens Gamesa SG 6.0-170 6200 170.0 IO! hub: 165,0 m (TOT: 250,0 m) (11)

SHADOW - Calendario per WTG

Calcolo: flikering real case WTG: 01 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (1)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:19 16:37	07:06 17:11	06:30 16:33-17:09/36	06:40 19:18	05:54 19:50	05:26 20:19	05:26 20:30	05:50 20:11	06:20 18:38	06:50 17:07-17:48/41	06:24 16:52	06:58 16:28
2	07:19 16:38	07:05 17:12	06:28 16:31-17:09/38	06:38 19:19	05:53 19:51	05:25 20:20	05:27 20:30	05:51 20:10	06:21 19:27	06:51 17:07-17:48/41	06:25 16:51	06:59 16:28
3	07:19 16:39	07:04 17:13	06:27 16:31-17:10/39	06:36 19:20	05:52 19:52	05:25 20:20	05:27 20:30	05:52 20:09	06:22 19:25	06:52 17:06-17:48/42	06:26 16:49	07:00 16:27
4	07:19 16:39	07:03 17:15	06:25 16:30-17:10/40	06:35 19:21	05:50 19:53	05:24 20:21	05:28 20:29	05:53 20:08	06:23 19:23	06:53 17:05-17:48/43	06:27 16:48	07:01 16:27
5	07:19 16:40	07:02 17:16	06:24 16:29-17:11/42	06:33 17:49	05:49 19:22	05:24 20:22	05:28 20:29	05:54 20:07	06:24 19:22	06:54 17:05-17:48/43	06:28 16:47	07:02 16:27
6	07:19 16:41	07:01 17:17	06:22 16:29-17:11/42	06:31 19:23	05:48 19:55	05:24 20:22	05:29 20:29	05:55 20:05	06:25 19:20	06:55 17:04-17:47/43	06:30 16:46	07:03 16:27
7	07:19 16:42	06:59 17:18	06:21 16:28-17:11/43	06:30 19:25	05:47 19:56	05:23 20:23	05:29 20:29	05:56 20:04	06:26 19:19	06:56 17:04-17:47/43	06:31 16:45	07:04 16:27
8	07:19 16:43	06:58 17:20	06:19 16:28-17:11/43	06:28 19:26	05:46 19:57	05:23 20:24	05:30 20:28	05:57 20:03	06:27 19:17	06:57 17:04-17:46/42	06:32 16:44	07:05 16:27
9	07:19 16:44	06:57 17:21	06:18 16:28-17:10/42	06:27 19:27	05:44 19:58	05:23 20:24	05:31 20:28	05:58 20:02	06:28 19:15	06:58 17:04-17:45/41	06:33 16:43	07:06 16:27
10	07:18 16:45	06:56 17:22	06:16 16:28-17:11/43	06:25 19:28	05:43 19:59	05:23 20:25	05:31 20:28	05:59 20:00	06:29 19:14	06:59 17:04-17:44/40	06:34 16:42	07:07 16:27
11	07:18 16:46	06:55 17:23	06:14 16:28-17:10/42	06:23 19:29	05:42 20:00	05:23 20:25	05:32 20:27	06:00 19:59	06:30 19:12	07:00 17:04-17:43/39	06:36 16:41	07:08 16:27
12	07:18 16:47	06:54 17:24	06:13 16:28-17:09/41	06:22 19:30	05:41 20:01	05:23 20:26	05:33 20:27	06:01 19:58	06:31 19:10	07:01 17:06-17:43/37	06:37 16:40	07:09 16:27
13	07:18 16:48	06:52 17:26	06:11 16:29-17:09/40	06:20 19:31	05:40 20:02	05:22 20:26	05:34 20:26	06:02 19:57	06:32 19:09	07:02 17:06-17:42/36	06:38 16:39	07:09 16:27
14	07:17 16:49	06:51 17:27	06:09 16:29-17:08/39	06:19 19:32	05:39 20:03	05:22 20:27	05:34 20:26	06:03 19:55	06:33 19:07	07:03 17:07-17:40/33	06:39 16:38	07:10 16:27
15	07:17 16:51	06:50 17:28	06:08 16:29-17:06/37	06:17 19:33	05:38 20:04	05:22 20:27	05:35 20:25	06:04 19:54	06:34 19:05	07:05 17:08-17:39/31	06:40 16:37	07:11 16:27
16	07:17 16:52	06:49 17:29	06:06 16:30-17:06/36	06:16 19:34	05:37 20:05	05:22 20:28	05:36 20:25	06:05 19:52	06:35 19:03	07:06 17:10-17:37/27	06:41 16:36	07:12 16:28
17	07:16 16:53	06:47 17:30	06:05 16:31-17:04/33	06:14 19:35	05:36 20:06	05:22 20:28	05:37 20:24	06:06 19:51	06:36 19:02	07:07 17:11-17:34/23	06:43 16:35	07:12 16:28
18	07:16 16:54	06:46 17:32	06:03 16:32-17:02/30	06:13 19:36	05:35 20:07	05:22 20:28	05:37 20:23	06:07 19:50	06:37 19:00	07:08 17:14-17:31/17	06:44 16:35	07:13 16:28
19	07:15 16:55	06:44 17:33	06:01 16:34-17:01/27	06:11 19:37	05:34 20:08	05:23 20:29	05:38 20:23	06:07 19:48	06:38 18:58	07:09 17:18-17:26/8	06:45 16:34	07:14 16:29
20	07:15 16:56	06:43 17:34	06:00 16:36-16:58/22	06:10 19:38	05:34 20:09	05:23 20:29	05:39 20:22	06:08 19:47	06:39 18:57	07:10 18:08	06:46 16:33	07:14 16:29
21	07:14 16:57	06:42 17:35	05:58 16:38-16:54/16	06:08 19:39	05:33 20:10	05:23 20:29	05:40 20:21	06:09 19:45	06:40 18:55	07:11 18:07	06:47 16:33	07:15 16:30
22	07:13 16:59	06:40 17:36	05:56 16:44-16:49/5	06:07 19:40	05:32 20:11	05:23 20:29	05:41 20:20	06:10 19:44	06:41 18:53	07:12 18:05	06:48 16:32	07:15 16:30
23	07:13 17:00	06:39 17:38	16:45-16:58/13	05:55 18:09	06:05 19:41	05:31 20:11	05:23 20:29	06:11 19:42	06:42 18:52	07:13 18:04	06:50 16:31	07:16 16:31
24	07:12 17:01	06:37 17:39	16:41-17:01/20	05:53 18:10	06:04 19:42	05:30 20:12	05:24 20:30	06:12 19:41	06:43 18:50	07:15 18:02	06:51 16:31	07:16 16:31
25	07:11 17:02	06:36 17:40	16:39-17:04/25	05:51 18:11	06:02 19:43	05:30 20:13	05:24 20:30	06:13 19:39	06:44 18:48	07:16 17:16-17:45/29	06:16 17:01	07:17 16:32
26	07:11 17:03	06:35 17:41	16:36-17:05/29	05:50 18:12	06:01 19:44	05:29 20:14	05:24 20:30	06:14 19:38	06:45 18:47	07:14 17:14-17:46/32	06:17 17:00	07:17 16:32
27	07:10 17:05	06:33 17:42	16:35-17:07/32	05:48 18:13	06:00 19:45	05:28 20:15	05:25 20:30	06:15 19:36	06:46 18:45	07:12 17:12-17:47/35	06:18 16:58	07:17 16:33
28	07:09 17:06	06:32 17:43	16:33-17:07/34	05:46 18:14	05:58 19:47	05:28 20:16	05:25 20:30	06:16 19:35	06:47 18:43	07:11 17:11-17:47/36	06:19 16:57	07:18 16:34
29	07:08 17:07			06:45 19:15	05:57 19:48	05:27 20:17	05:25 20:30	06:17 19:33	06:48 18:41	17:09-17:48/39	06:20 16:56	07:18 16:34
30	07:07 17:08			06:43 19:16	05:56 19:49	05:27 20:17	05:26 20:30	06:18 19:32	06:49 18:40	17:08-17:48/40	06:21 16:54	07:18 16:35
31	07:07 17:10			06:41 19:17		05:26 20:18		06:19 19:30			06:23 16:53	07:18 16:36
Ore potenziali eliofania	298	298	369	398	448	451	458	427	375	346	299	289
Somma minuti d'ombra	0	153	776	0	0	0	0	0	271	670	0	0

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flikering real caseWTG: 02 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (2)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre	
1	07:19 15:18-15:50/32 16:37	07:06 17:11 06:30 17:45	06:40 19:18	05:54 19:50	05:26 20:19	05:26 20:30	05:26 20:30	05:49-05:58/9	05:50 20:11	06:20 19:28	06:50 18:38	06:24 16:52	06:58 15:07-15:35/28 16:28
2	07:19 15:18-15:50/32 16:38	07:05 17:12 06:28 17:46	06:38 19:19	05:53 19:51	05:25 20:20	05:25 20:30	05:27 20:30	05:49-05:57/8	05:51 20:10	06:21 19:27	06:51 18:36	06:25 16:51	06:59 15:06-15:35/29 16:28
3	07:19 15:19-15:51/32 16:39	07:04 17:13 06:27 17:47	06:36 19:20	05:52 19:52	05:25 20:20	05:25 20:30	05:27 20:30	05:50-05:58/8	05:52 20:09	06:22 19:25	06:52 18:35	06:26 16:49	07:00 15:06-15:36/30 16:27
4	07:19 15:19-15:51/32 16:39	07:03 17:15 06:25 17:48	06:35 19:21	05:50 19:53	05:24 20:21	05:24 20:29	05:28 20:29	05:50-05:57/7	05:53 20:08	06:23 19:23	06:53 18:33	06:27 16:48	07:01 15:06-15:37/31 16:27
5	07:19 15:20-15:51/31 16:40	07:02 17:16 06:24 17:49	06:33 19:22	05:49 19:54	05:24 20:22	05:24 20:29	05:28 20:29	05:46-05:48/2	05:54 20:07	06:24 19:22	06:54 18:32	06:28 16:47	07:02 15:07-15:37/30 16:27
6	07:19 15:21-15:52/31 16:41	07:01 17:17 06:22 17:50	06:31 19:23	05:48 19:55	05:24 20:22	05:24 20:29	05:29 20:29	05:45-05:49/4	05:55 20:05	06:25 19:20	06:55 18:30	06:30 16:46	07:03 15:07-15:38/31 16:27
7	07:19 15:22-15:52/30 16:42	06:59 17:18 06:21 17:51	06:30 19:25	05:47 19:56	05:23 20:23	05:23 20:29	05:30 20:29	05:45-05:50/5	05:56 20:04	06:26 19:19	06:56 18:28	06:31 16:45	07:04 15:07-15:38/31 16:27
8	07:19 15:22-15:53/31 16:43	06:58 17:20 06:19 17:52	06:28 19:26	05:46 19:57	05:23 20:24	05:23 20:28	05:30 20:28	05:45-05:51/6	05:57 20:03	06:27 19:17	06:57 18:27	06:32 16:44	07:05 15:07-15:39/32 16:27
9	07:19 15:22-15:52/30 16:44	06:57 17:21 06:18 17:54	06:27 19:27	05:45 19:58	05:23 20:24	05:23 20:28	05:31 20:28	05:45-05:52/7	05:58 20:02	06:28 19:15	06:58 18:25	06:33 16:43	07:06 15:08-15:40/32 16:27
10	07:18 15:23-15:52/29 16:45	06:56 17:22 06:16 17:55	06:25 19:28	05:43 19:59	05:23 20:25	05:23 20:28	05:31 20:28	05:45-05:53/8	05:59 20:00	06:29 19:14	06:59 18:23	06:34 16:42	07:07 15:07-15:39/32 16:27
11	07:18 15:24-15:53/29 16:46	06:55 17:23 06:14 17:56	06:23 19:29	05:42 20:00	05:23 20:25	05:23 20:27	05:32 20:27	05:45-05:54/9	06:00 19:59	06:30 19:12	07:00 18:22	06:36 16:41	07:08 15:08-15:40/32 16:27
12	07:18 15:25-15:52/27 16:47	06:54 17:24 06:13 17:57	06:22 19:30	05:41 20:01	05:23 20:26	05:23 20:27	05:33 20:27	05:45-05:54/9	06:01 19:58	06:31 19:10	07:01 18:20	06:37 16:40	07:09 15:08-15:41/33 16:27
13	07:18 15:26-15:52/26 16:48	06:52 17:26 06:11 17:58	06:20 19:31	05:40 20:02	05:22 20:26	05:22 20:26	05:34 20:26	05:45-05:55/10	06:02 19:57	06:32 19:09	07:02 18:19	06:38 16:39	07:10 15:09-15:42/33 16:27
14	07:17 15:27-15:52/25 16:50	06:51 17:27 06:09 17:59	06:19 19:32	05:39 20:03	05:22 20:27	05:22 20:26	05:34 20:26	05:45-05:55/10	06:03 19:55	06:33 19:07	07:03 18:17	06:39 16:38	07:10 15:10-15:42/32 16:27
15	07:17 15:28-15:51/23 16:51	06:50 17:28 06:08 18:00	06:17 19:33	05:38 20:04	05:22 20:27	05:22 20:25	05:35 20:25	05:45-05:56/11	06:04 19:54	06:34 19:05	07:05 18:16	06:40 16:37	07:11 15:09-15:42/33 16:27
16	07:17 15:30-15:51/21 16:52	06:49 17:29 06:06 18:01	06:16 19:34	05:37 20:05	05:22 20:28	05:22 20:25	05:36 20:25	05:45-05:56/11	06:05 19:52	06:35 19:03	07:06 18:14	06:41 16:36	07:12 15:10-15:43/33 16:28
17	07:16 15:30-15:50/20 16:53	06:47 17:31 06:05 18:02	06:14 19:35	05:36 20:06	05:22 20:28	05:22 20:24	05:37 20:24	05:45-05:56/11	06:06 19:51	06:36 19:02	07:07 18:13	06:43 16:36	07:12 15:11-15:44/33 16:28
18	07:16 15:33-15:50/17 16:54	06:46 17:32 06:03 18:03	06:13 19:36	05:35 20:07	05:23 20:28	05:23 20:23	05:37 20:23	05:45-05:56/11	06:07 19:50	06:37 19:00	07:08 18:11	06:44 16:35	07:13 15:11-15:44/33 16:28
19	07:15 15:34-15:48/14 16:55	06:44 17:33 06:01 18:04	06:11 19:37	05:34 20:08	05:23 20:29	05:23 20:23	05:38 20:23	05:45-05:57/12	06:08 19:48	06:38 18:58	07:09 18:10	06:45 16:34	07:14 15:12-15:44/32 16:29
20	07:15 15:36-15:46/10 16:56	06:43 17:34 06:00 18:06	06:10 19:38	05:34 20:09	05:23 20:29	05:23 20:22	05:39 20:22	05:45-05:57/12	06:08 19:47	06:39 18:57	07:10 18:08	06:46 16:33	07:14 15:11-15:44/33 16:29
21	07:14 16:57	06:42 17:35 05:58 18:07	06:08 19:39	05:33 20:10	05:23 20:29	05:23 20:21	05:40 20:21	05:45-05:57/12	06:09 19:45	06:40 18:55	07:11 18:07	06:47 16:33	07:15 15:12-15:45/33 16:30
22	07:13 16:59	06:40 17:36 05:56 18:08	06:07 19:40	05:32 20:11	05:23 20:29	05:23 20:20	05:41 20:20	05:46-05:58/12	06:10 19:44	06:41 18:53	07:12 18:05	06:48 16:32	07:15 15:12-15:45/33 16:30
23	07:13 17:00	06:39 17:38 05:55 18:09	06:05 19:41	05:31 20:11	05:23 20:29	05:23 20:20	05:42 20:20	05:46-05:58/12	06:11 19:42	06:42 18:52	07:13 18:04	06:50 16:31	07:16 15:13-15:46/33 16:31
24	07:12 17:01	06:37 17:39 05:53 18:10	06:04 19:42	05:30 20:12	05:24 20:30	05:24 20:19	05:43 20:19	05:46-05:58/12	06:12 19:41	06:43 18:50	07:15 18:02	06:51 16:31	07:16 15:13-15:46/33 16:31
25	07:11 17:02	06:36 18:11 05:51 19:43	06:02 19:43	05:30 20:13	05:24 20:30	05:24 20:18	05:43 20:18	05:46-05:57/11	06:13 19:39	06:44 18:48	07:16 17:01	06:52 16:32	07:17 15:15-15:47/32 16:32
26	07:11 17:03	06:35 18:12 05:50 19:44	06:01 19:44	05:29 20:14	05:24 20:30	05:24 20:17	05:44 20:17	05:47-05:58/11	06:14 19:38	06:45 18:47	07:17 17:00	06:53 16:32	07:17 15:15-15:48/33 16:32
27	07:10 17:05	06:33 18:13 05:48 19:45	06:00 19:45	05:28 20:15	05:25 20:30	05:25 20:16	05:45 20:16	05:47-05:58/11	06:15 19:36	06:46 18:45	07:18 16:58	06:54 16:29	07:17 15:15-15:48/33 16:33
28	07:09 17:06	06:32 18:14 05:46 19:47	05:58 19:47	05:28 20:16	05:25 20:30	05:25 20:15	05:46 20:15	05:47-05:57/10	06:16 19:35	06:47 18:43	07:19 16:57	06:55 16:28	07:18 15:15-15:48/33 16:34
29	07:08 17:07	06:31 19:15 05:45 19:48	05:57 20:17	05:27 20:17	05:25 20:30	05:25 20:14	05:47 20:14	05:48-05:58/10	06:17 19:33	06:48 18:41	07:20 16:56	06:56 16:28	07:18 15:16-15:49/33 16:34
30	07:07 17:08	06:30 18:14 05:43 19:49	05:56 19:49	05:27 20:17	05:26 20:30	05:26 20:13	05:48 20:13	05:48-05:58/10	06:18 19:32	06:49 18:40	07:21 16:54	06:57 16:28	07:18 15:17-15:49/32 16:35
31	07:06 17:10	06:29 19:17 05:41 19:51	05:56 20:18	05:26 20:18	05:26 20:30	05:26 20:12	05:49 20:12	05:49-05:58/10	06:19 19:30	06:50 18:39	07:22 16:53	06:58 16:28	07:18 15:17-15:50/33 16:36
Ore potenziali eliofania	298	298	369	398	448	451	458	427	375	346	299	289	994
Somma minuti d'ombra	522	0	0	0	0	250	47	0	0	0	182	0	0

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flikering real caseWTG: 03 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (3)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N	NNE	ENE	E	ESE	SSE	S	SSO	OSO	O	ONO	NNO	Somma
1.229	573	283	164	231	782	961	432	328	544	685	1.236	7.447

3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 16:37	07:06 17:11	06:30 17:45	06:40 19:18	05:54 19:50	06:13-07:12/59 20:19
2	07:19 16:38	07:05 17:12	06:29 17:46	06:38 19:19	05:53 19:51	06:14-07:13/59 20:20
3	07:19 16:39	07:04 17:13	06:27 17:47	06:36 19:20	05:52 19:52	06:13-07:12/59 20:20
4	07:19 16:40	07:03 17:15	06:25 17:48	06:35 19:21	05:50 19:53	06:14-07:12/58 20:21
5	07:19 16:40	07:02 17:16	06:24 17:49	06:33 19:22	05:49 19:54	06:14-07:13/59 20:22
6	07:19 16:41	07:01 17:17	06:22 17:50	06:32 19:23	05:48 19:55	06:14-07:12/58 20:22
7	07:19 16:42	06:59 17:18	06:21 17:51	06:30 19:25	05:47 19:56	06:14-07:12/58 20:23
8	07:19 16:43	06:58 17:20	06:19 17:53	06:28 19:26	05:46 19:57	06:15-07:12/57 20:24
9	07:19 16:44	06:57 17:21	06:18 17:54	06:27 19:27	05:45 19:58	06:15-07:12/57 20:24
10	07:18 16:45	06:56 17:22	06:16 17:55	06:25 19:28	05:43 19:59	06:16-07:12/56 20:25
11	07:18 16:46	06:55 17:23	06:14 17:56	06:23 19:29	05:42 20:00	06:16-07:13/57 20:25
12	07:18 16:47	06:54 17:24	06:13 17:57	06:22 19:30	05:41 20:01	06:17-07:13/56 20:26
13	07:18 16:48	06:52 17:26	06:11 17:58	06:20 19:31	05:40 20:02	06:17-07:13/56 20:26
14	07:17 16:50	06:51 17:27	06:09 17:59	06:19 19:32	05:39 20:03	06:17-07:13/56 20:27
15	07:17 16:51	06:50 17:28	06:08 18:00	06:17 19:33	05:38 20:04	06:17-07:13/56 20:27
16	07:17 16:52	06:49 17:29	06:06 18:01	06:16 19:34	05:37 20:05	06:18-07:13/55 20:28
17	07:16 16:53	06:47 17:31	06:05 18:02	06:14 19:35	05:36 20:06	06:18-07:13/55 20:28
18	07:16 16:54	06:46 17:32	06:03 18:03	06:13 19:36	05:35 20:07	06:18-07:13/55 20:28
19	07:15 16:55	06:45 17:33	06:01 18:05	06:11 19:37	05:35 20:08	06:18-07:13/55 20:29
20	07:15 16:56	06:43 17:34	06:00 18:06	06:10 19:38	05:34 20:09	06:18-07:13/55 20:29
21	07:14 16:58	06:42 17:35	05:58 18:07	06:08 19:39	05:33 20:10	06:18-07:13/55 20:29
22	07:13 16:59	06:40 17:36	05:56 18:08	06:07 19:40	05:32 20:11	06:19-07:14/55 20:29
23	07:13 17:00	06:39 17:38	05:55 18:09	06:05 19:41	05:31 20:11	06:19-07:14/55 20:29
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 19:42	05:31 20:12	06:19-07:14/55 20:30
25	07:11 17:02	06:36 17:40	05:51 18:11	06:02 19:43	05:30 20:13	06:19-07:14/55 20:30
26	07:11 17:04	06:35 17:41	05:50 18:12	06:01 19:44	05:29 20:14	06:20-07:15/55 20:30
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 19:46	05:29 20:15	06:20-07:15/55 20:30
28	07:09 17:06	06:32 17:43	05:46 18:14	05:58 19:47	05:28 20:16	06:19-07:15/56 20:30
29	07:08 17:07	06:31 17:44	05:45 18:15	05:57 19:48	05:27 20:17	06:20-07:16/56 20:30
30	07:07 17:08	06:30 17:45	05:44 18:16	05:56 19:49	05:27 20:17	06:20-07:16/56 20:30
31	07:07 17:10	06:29 17:46	05:43 18:17	05:55 19:50	05:26 20:18	06:13-07:13/60 20:18
Ore potenziali eliofania	298	298	369	398	448	451
Somma minuti d'ombra	0	0	598	1143	1708	1689

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flickering real case WTG: 03 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (3)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 06:20-07:17/57 20:30	05:50 06:26-07:22/56 20:11	06:20 17:32-18:24/52 19:28	06:50 18:38	06:24 16:52	06:58 16:28
2	05:27 06:20-07:17/57 20:30	05:51 06:27-07:21/54 20:10	06:21 17:31-18:24/53 19:27	06:51 18:37	06:25 16:51	06:59 16:28
3	05:27 06:21-07:17/56 20:30	05:52 06:27-07:21/54 20:09	06:22 17:30-18:24/54 19:25	06:52 18:35	06:26 16:50	07:00 16:27
4	05:28 06:20-07:17/57 20:29	05:53 06:28-07:21/53 20:08	06:23 17:29-18:24/55 19:23	06:53 18:33	06:27 16:48	07:01 16:27
5	05:28 06:21-07:18/57 20:29	05:54 06:29-07:20/51 20:07	06:24 17:29-18:24/55 19:22	06:54 18:32	06:28 16:47	07:02 16:27
6	05:29 06:20-07:18/58 20:29	05:55 06:30-07:19/49 20:05	06:25 17:28-18:24/56 19:20	06:55 18:30	06:30 16:46	07:03 16:27
7	05:30 06:21-07:19/58 20:29	05:56 06:32-07:18/46 20:04	06:26 17:27-18:24/57 19:19	06:56 18:28	06:31 16:45	07:04 16:27
8	05:30 06:21-07:19/58 20:28	05:57 06:32-07:17/45 20:03	06:27 17:27-18:23/56 19:17	06:57 18:27	06:32 16:44	07:05 16:27
9	05:31 06:20-07:19/59 20:28	05:58 06:34-07:15/41 20:02	06:28 17:27-18:23/56 19:15	06:58 18:25	06:33 16:43	07:06 16:27
10	05:31 06:21-07:20/59 20:28	05:59 06:35-07:14/39 20:00	06:29 17:25-18:22/57 19:14	06:59 18:23	06:34 16:42	07:07 16:27
11	05:32 06:21-07:20/59 20:27	06:00 06:36-07:13/37 19:59	06:30 17:25-18:21/56 19:12	07:00 18:22	06:36 16:41	07:08 16:27
12	05:33 06:21-07:20/59 20:27	06:01 06:38-07:11/33 19:58	06:31 17:25-18:20/55 19:10	07:01 18:20	06:37 16:40	07:09 16:27
13	05:34 06:21-07:21/60 20:26	06:02 06:39-07:09/30 19:57	06:32 17:25-18:20/55 19:09	07:02 18:19	06:38 16:39	07:09 16:27
14	05:34 06:21-07:21/60 20:26	06:03 06:42-07:07/25 19:55	06:33 17:25-18:19/54 19:07	07:04 18:17	06:39 16:38	07:10 16:27
15	05:35 06:22-07:22/60 20:25	06:04 06:44-07:04/20 19:54	06:34 17:25-18:18/53 19:05	07:05 18:16	06:40 16:37	07:11 16:27
16	05:36 06:21-07:21/60 20:25	06:05 06:49-06:59/10 19:52	06:35 17:26-18:17/51 19:03	07:06 18:14	06:41 16:36	07:12 16:28
17	05:37 06:21-07:22/61 20:24	06:06 19:51	06:36 17:26-18:16/50 19:02	07:07 18:13	06:43 16:36	07:12 16:28
18	05:37 06:22-07:22/60 20:23	06:07 19:50	06:37 17:27-18:14/47 19:00	07:08 18:11	06:44 16:35	07:13 16:28
19	05:38 06:22-07:23/61 20:23	06:08 19:48	06:38 17:27-18:13/46 18:58	07:09 18:10	06:45 16:34	07:14 16:29
20	05:39 06:21-07:22/61 20:22	06:09 17:54-18:10/16 19:47	06:39 17:28-18:11/43 18:57	07:10 18:08	06:46 16:33	07:14 16:29
21	05:40 06:22-07:22/60 20:21	06:10 17:50-18:13/23 19:45	06:40 17:29-18:09/40 18:55	07:11 18:07	06:47 16:33	07:15 16:30
22	05:41 06:22-07:23/61 20:20	06:11 17:48-18:16/28 19:44	06:41 17:31-18:07/36 18:53	07:12 18:05	06:48 16:32	07:15 16:30
23	05:42 06:22-07:23/61 20:20	06:11 17:45-18:17/32 19:42	06:42 17:32-18:05/33 18:52	07:13 18:04	06:50 16:31	07:16 16:31
24	05:43 06:23-07:23/60 20:19	06:12 17:43-18:19/36 19:41	06:43 17:35-18:02/27 18:50	07:15 18:02	06:51 16:31	07:16 16:31
25	05:43 06:23-07:23/60 20:18	06:13 17:41-18:19/38 19:39	06:44 17:38-17:59/21 18:48	06:16 17:01	06:52 16:30	07:17 16:32
26	05:44 06:24-07:23/59 20:17	06:14 17:39-18:20/41 19:38	06:45 17:43-17:53/10 18:47	06:17 17:00	06:53 16:30	07:17 16:32
27	05:45 06:23-07:23/60 20:16	06:15 17:38-18:21/43 19:36	06:46 18:45	06:18 16:58	06:54 16:29	07:17 16:33
28	05:46 06:24-07:23/59 20:15	06:16 17:36-18:22/46 19:35	06:47 18:43	06:19 16:57	06:55 16:29	07:18 16:34
29	05:47 06:24-07:22/58 20:14	06:17 17:35-18:22/47 19:33	06:48 18:42	06:20 16:56	06:56 16:29	07:18 16:34
30	05:48 06:25-07:22/57 20:13	06:18 17:34-18:23/49 19:32	06:49 18:40	06:21 16:54	06:57 16:28	07:18 16:35
31	05:49 06:25-07:22/57 20:12	06:19 17:33-18:23/50 19:30		06:23 16:53		07:18 16:36
Ore potenziali eliofania	458	427	375	346	299	289
Somma minuti d'ombra	1829	1092	1228	0	0	0

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flikering real caseWTG: 04 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (4)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N	NNE	ENE	E	ESE	SSE	S	SSO	OSO	O	ONO	NNO	Somma
1.229	573	283	164	231	782	961	432	328	544	685	1.236	7.447

3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 08:17-08:47/30 16:37	07:06 07:58-09:18/80 17:11 15:54-16:30/36	06:30 07:57-08:55/58 17:45	06:40 07:57-08:51/54 19:18	05:54 19:50 20:19	05:26 20:19
2	07:19 08:17-08:48/31 16:38	07:05 07:57-09:18/81 17:12 15:53-16:29/36	06:29 07:57-08:51/54 17:46	06:38 07:57-08:51/54 19:19	05:53 19:51 20:20	05:25 20:20
3	07:19 08:16-08:49/33 16:39	07:04 07:57-09:19/82 17:13 15:53-16:29/36	06:27 07:59-08:50/51 17:47	06:36 19:20 19:20	05:52 19:52 20:20	05:25 20:20
4	07:19 08:16-08:51/35 16:40	07:03 07:55-09:18/83 17:15 15:54-16:29/35	06:25 08:00-08:48/48 17:48	06:35 19:21 19:21	05:51 19:53 20:21	05:25 20:21
5	07:19 08:16-08:52/36 16:40	07:02 07:55-09:18/83 17:16 15:54-16:29/35	06:24 08:01-08:46/45 17:49	06:33 19:22 19:22	05:49 19:54 20:22	05:24 20:22
6	07:19 08:15-08:53/38 16:41	07:01 07:54-09:18/84 17:17 15:55-16:29/34	06:22 08:02-08:44/42 17:50	06:32 19:24 19:24	05:48 19:55 20:22	05:24 20:22
7	07:19 08:15-08:55/40 16:42	06:59 07:54-09:18/84 17:18 15:56-16:28/32	06:21 08:04-08:41/37 17:51	06:30 19:25 19:25	05:47 19:56 20:23	05:24 20:23
8	07:19 08:15-08:56/41 16:43	06:58 07:54-09:19/85 17:20 15:57-16:28/31	06:19 08:07-08:38/31 17:53	06:28 19:26 19:26	05:46 19:57 20:24	05:23 20:24
9	07:19 08:14-08:57/43 16:44	06:57 07:54-09:19/85 17:21 15:58-16:27/29	06:18 08:09-08:34/25 17:54	06:27 19:27 19:27	05:45 19:58 20:24	05:23 20:24
10	07:18 08:14-08:58/44 16:45	06:56 07:54-09:19/85 17:22 15:59-16:26/27	06:16 08:14-08:30/16 17:55	06:25 19:28 19:28	05:43 19:59 20:25	05:23 20:25
11	07:18 08:13-09:00/47 16:46	06:55 07:53-09:18/85 17:23 16:00-16:25/25	06:14 17:56	06:24 19:29 19:29	05:42 20:00 20:25	05:23 20:25
12	07:18 08:12-09:00/48 16:47	06:54 07:53-09:18/85 17:24 16:02-16:23/21	06:13 17:57	06:22 19:30 19:30	05:41 20:01 20:26	05:23 20:26
13	07:18 08:12-09:02/50 16:48	06:52 07:53-09:18/85 17:26 16:05-16:21/16	06:11 17:58	06:20 19:31 19:31	05:40 20:02 20:26	05:23 20:26
14	07:17 08:12-09:03/51 16:50	06:51 07:52-09:16/84 17:27 16:08-16:17/9	06:09 17:59	06:19 19:32 19:32	05:39 20:03 20:27	05:22 20:27
15	07:17 08:11-09:04/53 16:51	06:50 07:52-09:16/84 17:28	06:08 18:00	06:17 19:33 19:33	05:38 20:04 20:27	05:22 20:27
16	07:17 08:11-09:05/54 16:52	06:49 07:53-09:16/83 17:29	06:06 18:01	06:16 19:34 19:34	05:37 20:05 20:28	05:22 20:28
17	07:16 08:11-09:06/55 16:53	06:47 07:52-09:14/82 17:31	06:05 18:02	06:14 19:35 19:35	05:36 20:06 20:28	05:23 20:28
18	07:16 08:11-09:08/57 16:54	06:46 07:52-09:14/82 17:32	06:03 18:03	06:13 19:36 19:36	05:35 20:07 20:28	05:23 20:28
19	07:15 08:10-09:08/58 16:55	06:45 07:53-09:13/80 17:33	06:01 18:05	06:11 19:37 19:37	05:35 20:08 20:29	05:23 20:29
20	07:15 08:08-09:09/61 16:56	06:43 07:52-09:12/80 17:34	06:00 18:06	06:10 19:38 19:38	05:34 20:09 20:29	05:23 20:29
21	07:14 08:08-09:10/62 16:58	06:42 07:53-09:11/78 17:35	05:58 18:07	06:08 19:39 19:39	05:33 20:10 20:29	05:23 20:29
22	07:13 08:06-09:11/65 16:59	06:40 07:53-09:09/76 17:37	05:56 18:08	06:07 19:40 19:40	05:32 20:11 20:29	05:23 20:29
23	07:13 08:04-09:11/67 17:00	06:39 07:53-09:08/75 17:38	05:55 18:09	06:05 19:41 19:41	05:31 20:11 20:29	05:23 20:29
24	07:12 08:04-09:13/69 17:01	06:37 07:54-09:07/73 17:39	05:53 18:10	06:04 19:42 19:42	05:31 20:12 20:30	05:24 20:30
25	07:11 08:03-09:14/71 17:02	06:36 07:54-09:04/70 17:40	05:51 18:11	06:02 19:43 19:43	05:30 20:13 20:30	05:24 20:30
26	07:11 08:02-09:14/72 17:04	06:35 07:55-09:03/68 17:41	05:50 18:12	06:01 19:44 19:44	05:29 20:14 20:30	05:24 20:30
27	07:10 08:01-09:15/74 17:05	06:33 07:55-09:00/65 17:42	05:48 18:13	06:00 19:46 19:46	05:29 20:15 20:30	05:25 20:30
28	07:09 08:00-09:15/75 17:06	06:32 07:55-08:57/62 17:43	05:46 18:14	05:58 19:47 19:47	05:28 20:16 20:30	05:25 20:30
29	07:08 07:59-09:16/77 17:07	06:31 07:59-09:16/77 17:44	05:45 18:15	05:57 19:48 19:48	05:27 20:17 20:30	05:25 20:30
30	07:07 07:59-09:17/78 17:08	06:30 15:52-16:29/37 17:45	05:43 19:16	05:56 19:49 19:49	05:27 20:17 20:30	05:26 20:30
31	07:07 07:58-09:17/79 17:10	06:29 15:53-16:29/36 17:46	05:41 19:17	05:55 19:50 19:50	05:26 20:18 20:30	05:26 20:30
Ore potenziali eliofania	298	298	369	398	448	451
Somma minuti d'ombra	2204	2631	407	0	0	0

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flikering real case WTG: 04 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (4)
Assunzioni sui calcoli d'ombra Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 20:30	05:50 20:11	06:20 19:28	06:50 18:38	06:24 07:23-08:48/85 16:52 15:28-15:56/28	06:58 07:55-08:42/47 16:28
2	05:27 20:30	05:51 20:10	06:21 19:27	06:51 18:37	06:25 07:23-08:48/85 16:51 15:27-15:56/29	06:59 07:57-08:41/44 16:28
3	05:27 20:30	05:52 20:09	06:22 19:25	06:52 08:55-09:04/9 18:35	06:26 07:24-08:48/84 16:50 15:27-15:58/31	07:00 07:58-08:41/43 16:27
4	05:28 20:29	05:53 20:08	06:23 19:23	06:53 08:48-09:10/22 18:33	06:27 07:24-08:48/84 16:48 15:26-15:58/32	07:01 07:59-08:40/41 16:27
5	05:28 20:29	05:54 20:07	06:24 19:22	06:54 08:45-09:13/28 18:32	06:28 07:24-08:48/84 16:47 15:25-15:59/34	07:02 08:00-08:40/40 16:27
6	05:29 20:29	05:55 20:05	06:25 19:20	06:55 08:42-09:16/34 18:30	06:30 07:26-08:49/83 16:46 15:24-15:59/35	07:03 08:01-08:39/38 16:27
7	05:30 20:29	05:56 20:04	06:26 19:19	06:56 08:39-09:18/39 18:28	06:31 07:26-08:49/83 16:45 15:25-16:00/35	07:04 08:03-08:39/36 16:27
8	05:30 20:28	05:57 20:03	06:27 19:17	06:57 08:37-09:20/43 18:27	06:32 07:27-08:48/81 16:44 15:24-16:00/36	07:05 08:04-08:39/35 16:27
9	05:31 20:28	05:58 20:02	06:28 19:15	06:58 08:35-09:22/47 18:25	06:33 07:27-08:48/81 16:43 15:24-16:00/36	07:06 08:05-08:38/33 16:27
10	05:32 20:28	05:59 20:01	06:29 19:14	06:59 08:33-09:23/50 18:24	06:34 07:29-08:49/80 16:42 15:25-16:01/36	07:07 08:06-08:37/31 16:27
11	05:32 20:27	06:00 19:59	06:30 19:12	07:00 08:32-09:24/52 18:22	06:36 07:29-08:48/79 16:41 15:24-16:01/37	07:08 08:07-08:37/30 16:27
12	05:33 20:27	06:01 19:58	06:31 19:10	07:01 08:31-09:27/56 18:20	06:37 07:30-08:48/78 16:40 15:24-16:00/36	07:09 08:09-08:37/28 16:27
13	05:34 20:26	06:02 19:57	06:32 19:09	07:02 08:30-09:30/60 18:19	06:38 07:31-08:47/76 16:39 15:24-16:00/36	07:09 08:10-08:37/27 16:27
14	05:34 20:26	06:03 19:55	06:33 19:07	07:04 08:29-09:32/63 18:17	06:39 07:33-08:48/75 16:38 15:25-16:01/36	07:10 08:11-08:37/26 16:27
15	05:35 20:25	06:04 19:54	06:34 19:05	07:05 08:27-09:34/67 18:16	06:40 07:34-08:48/74 16:37 15:26-16:00/34	07:11 08:12-08:36/24 16:28
16	05:36 20:25	06:05 19:52	06:35 19:03	07:06 08:26-09:35/69 18:14	06:41 07:35-08:47/72 16:36 15:26-16:00/34	07:12 08:13-08:36/23 16:28
17	05:37 20:24	06:06 19:51	06:36 19:02	07:07 08:26-09:37/71 18:13	06:43 07:36-08:46/70 16:36 15:26-16:00/34	07:12 08:15-08:36/21 16:28
18	05:38 20:23	06:07 19:50	06:37 19:00	07:08 08:25-09:38/73 18:11	06:44 07:38-08:47/69 16:35 15:28-16:00/32	07:13 08:15-08:35/20 16:28
19	05:38 20:23	06:08 19:48	06:38 18:58	07:09 08:25-09:40/75 18:10	06:45 07:39-08:46/67 16:34 15:28-15:59/31	07:14 08:16-08:36/20 16:29
20	05:39 20:22	06:09 19:47	06:39 18:57	07:10 08:24-09:41/77 18:08	06:46 07:41-08:46/65 16:33 15:29-15:59/30	07:14 08:16-08:36/20 16:29
21	05:40 20:21	06:10 19:45	06:40 18:55	07:11 08:24-09:42/78 18:07	06:47 07:43-08:45/62 16:33 15:30-15:58/28	07:15 08:17-08:36/19 16:30
22	05:41 20:20	06:11 19:44	06:41 18:53	07:12 08:23-09:43/80 18:05	06:48 07:45-08:46/61 16:32 15:31-15:57/26	07:15 08:17-08:36/19 16:30
23	05:42 20:20	06:12 19:42	06:42 18:52	07:13 08:22-09:43/81 18:04	06:50 07:47-08:45/58 16:31 15:33-15:57/24	07:16 08:18-08:37/19 16:31
24	05:43 20:19	06:12 19:41	06:43 18:50	07:15 08:22-09:44/82 18:02	06:51 07:48-08:45/57 16:31 15:34-15:57/23	07:16 08:18-08:38/20 16:31
25	05:43 20:18	06:13 19:39	06:44 18:48	07:16 07:23-08:45/82 17:01	06:52 07:49-08:44/55 16:30 15:35-15:56/21	07:17 08:19-08:39/20 16:32
26	05:44 20:17	06:14 19:38	06:45 18:47	07:17 07:22-08:46/84 17:00	06:53 07:49-08:43/54 16:30 15:36-15:54/18	07:17 08:19-08:40/21 16:32
27	05:45 20:16	06:15 19:36	06:46 18:45	07:18 07:22-08:46/84 16:58	06:54 07:50-08:43/53 16:29 15:38-15:53/15	07:17 08:18-08:41/23 16:33
28	05:46 20:15	06:16 19:35	06:47 18:43	07:19 07:22-08:46/84 16:57 15:36-15:48/12	06:55 07:52-08:43/51 16:29 15:40-15:51/11	07:18 08:18-08:41/23 16:34
29	05:47 20:14	06:17 19:33	06:48 18:42	07:20 07:22-08:46/84 16:56 15:33-15:51/18	06:56 07:53-08:43/50 16:29 15:45-15:49/4	07:18 08:19-08:43/24 16:34
30	05:48 20:13	06:18 19:32	06:49 18:40	07:21 07:23-08:47/84 16:54 15:32-15:53/21	06:57 07:54-08:42/48 16:28	07:18 08:18-08:44/26 16:35
31	05:49 20:12	06:19 19:30		07:22 07:23-08:48/85 16:53 15:30-15:55/25		07:18 08:18-08:45/27 16:36
Ore potenziali eliofania	458	427	375	346	299	289
Somma minuti d'ombra	0	0	0	1919	2946	868

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flickering real case WTG: 05 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (5)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio		Febbraio		Marzo		Aprile		Maggio		Giugno	
1	07:19	08:29-09:46/77	07:06	08:38-09:58/80	06:30		06:40	07:19-08:14/55	05:54	06:42-08:00/78	05:26	06:47-07:36/49
	16:37		17:11		17:45		19:18		19:50		20:19	18:53-19:36/43
2	07:19	08:30-09:47/77	07:05	08:38-09:58/80	06:29		06:38	07:19-08:14/55	05:53	06:40-07:58/78	05:25	06:48-07:36/48
	16:38		17:12		17:46		19:19		19:51		20:20	18:53-19:37/44
3	07:19	08:30-09:47/77	07:04	08:38-09:56/78	06:27		06:36	07:19-08:15/56	05:52	06:40-07:56/76	05:25	06:47-07:35/48
	16:39		17:13		17:47		19:20		19:52		20:20	18:53-19:37/44
4	07:19	08:30-09:48/78	07:03	08:38-09:56/78	06:25		06:35	07:17-08:15/58	05:51	06:40-07:54/74	05:25	06:48-07:35/47
	16:40		17:15		17:48		19:21		19:53		20:21	18:53-19:38/45
5	07:19	08:31-09:49/78	07:02	08:39-09:55/76	06:24		06:33	07:17-08:16/59	05:49	06:40-07:52/72	05:24	06:49-07:35/46
	16:40		17:16		17:49		19:22		19:54		20:22	18:53-19:38/45
6	07:19	08:31-09:49/78	07:01	08:39-09:55/76	06:22		06:32	07:15-08:16/61	05:48	06:40-07:50/70	05:24	06:50-07:35/45
	16:41		17:17		17:50		19:23		19:55		20:22	18:53-19:38/45
7	07:19	08:31-09:50/79	06:59	08:40-09:54/74	06:21		06:30	07:14-08:16/62	05:47	06:39-07:46/67	05:24	06:50-07:34/44
	16:42		17:18		17:51		19:25		19:56		20:23	18:53-19:38/45
8	07:19	08:32-09:51/79	06:58	08:41-09:54/73	06:19		06:28	07:14-08:17/63	05:46	06:39-07:44/65	05:23	06:51-07:34/43
	16:43		17:20		17:53		19:26		19:57		20:24	18:53-19:39/46
9	07:19	08:31-09:51/80	06:57	08:42-09:53/71	06:18		06:27	07:13-08:16/63	05:45	06:39-07:44/65	05:23	06:51-07:34/43
	16:44		17:21		17:54		19:27		19:58		20:24	18:53-19:39/46
10	07:18	08:32-09:52/80	06:56	08:43-09:52/69	06:16		06:25	07:13-08:17/64	05:43	06:39-07:43/64	05:23	06:52-07:34/42
	16:45		17:22		17:55		19:28		19:59		20:25	18:54-19:40/46
11	07:18	08:32-09:52/80	06:55	08:43-09:51/68	06:14		06:24	07:12-08:16/64	05:42	06:39-07:43/64	05:23	06:53-07:34/41
	16:46		17:23		17:56		19:29		20:00		20:25	18:54-19:40/46
12	07:18	08:32-09:52/80	06:54	08:44-09:50/66	06:13		06:22	07:11-08:15/64	05:41	06:39-07:43/64	05:23	06:53-07:34/41
	16:47		17:25		17:57		19:30		20:01		20:26	18:54-19:41/47
13	07:18	08:32-09:53/81	06:52	08:45-09:49/64	06:11		06:20	07:11-08:16/65	05:40	06:39-07:43/64	05:23	06:54-07:34/40
	16:49		17:26		17:58		19:31		20:02		20:26	18:54-19:41/47
14	07:17	08:33-09:54/81	06:51	08:45-09:46/61	06:09	06:42-06:43/1	06:19	07:09-08:15/66	05:39	06:39-07:42/63	05:23	06:54-07:34/40
	16:50		17:27		17:59		19:32		20:03		20:27	18:54-19:41/47
15	07:17	08:32-09:54/82	06:50	08:47-09:45/58	06:08	06:34-06:50/16	06:17	07:05-08:15/70	05:38	06:39-07:42/63	05:22	06:55-07:34/39
	16:51		17:28		18:00		19:33		20:04	19:10-19:16/6	20:27	18:55-19:41/46
16	07:17	08:33-09:55/82	06:49	08:48-09:44/56	06:06	06:32-06:53/21	06:16	07:01-08:14/73	05:37	06:39-07:42/63	05:22	06:55-07:34/39
	16:52		17:29		18:01		19:34		20:05	19:05-19:21/16	20:28	18:55-19:42/47
17	07:16	08:33-09:55/82	06:47	08:49-09:41/52	06:05	06:29-06:55/26	06:14	06:58-08:14/76	05:36	06:40-07:42/62	05:23	06:56-07:34/38
	16:53		17:31		18:02		19:35		20:06	19:04-19:24/20	20:28	18:55-19:42/47
18	07:16	08:34-09:56/82	06:46	08:51-09:39/48	06:03	06:27-06:56/29	06:13	06:56-08:13/77	05:35	06:40-07:42/62	05:23	06:56-07:34/38
	16:54		17:32		18:03		19:36		20:07	19:02-19:26/24	20:28	18:55-19:42/47
19	07:15	08:33-09:56/83	06:45	08:53-09:37/44	06:01	06:26-06:58/32	06:11	06:54-08:12/78	05:35	06:40-07:41/61	05:23	06:56-07:34/38
	16:55		17:33		18:05		19:37		20:08	19:00-19:27/27	20:29	18:55-19:42/47
20	07:15	08:33-09:56/83	06:43	08:55-09:34/39	06:00	06:24-06:58/34	06:10	06:52-08:11/79	05:34	06:41-07:41/60	05:23	06:56-07:34/38
	16:56		17:34		18:06		19:38		20:09	18:59-19:28/29	20:29	18:55-19:42/47
21	07:14	08:34-09:57/83	06:42	08:57-09:31/34	05:58	06:22-06:58/36	06:08	06:51-08:11/80	05:33	06:41-07:40/59	05:23	06:56-07:34/38
	16:58		17:35		18:07		19:39		20:10	18:58-19:29/31	20:29	18:55-19:42/47
22	07:13	08:34-09:57/83	06:40	09:00-09:27/27	05:56	06:22-06:59/37	06:07	06:50-08:10/80	05:32	06:42-07:40/58	05:23	06:57-07:35/38
	16:59		17:37		18:08		19:40		20:11	18:57-19:31/34	20:29	18:56-19:43/47
23	07:13	08:34-09:57/83	06:39	09:05-09:22/17	05:55	06:21-06:59/38	06:05	06:48-08:09/81	05:31	06:42-07:40/58	05:23	06:57-07:35/38
	17:00		17:38		18:09		19:41		20:11	18:56-19:31/35	20:29	18:56-19:43/47
24	07:12	08:35-09:58/83	06:37		05:53	06:20-06:59/39	06:04	06:47-08:08/81	05:31	06:42-07:39/57	05:24	06:57-07:35/38
	17:01		17:39		18:10		19:42		20:12	18:55-19:32/37	20:30	18:56-19:43/47
25	07:11	08:35-09:58/83	06:36		05:51	06:20-07:03/43	06:02	06:45-08:07/82	05:30	06:43-07:39/56	05:24	06:57-07:35/38
	17:02		17:40		18:11		19:43		20:13	18:55-19:33/38	20:30	18:56-19:43/47
26	07:11	08:35-09:58/83	06:35		05:50	06:19-07:05/46	06:01	06:45-08:06/81	05:29	06:43-07:38/55	05:24	06:57-07:36/39
	17:04		17:41		18:12		19:44		20:14	18:55-19:33/38	20:30	18:57-19:44/47
27	07:10	08:35-09:58/83	06:33		05:48	06:18-07:07/49	06:00	06:44-08:05/81	05:29	06:44-07:39/55	05:25	06:57-07:36/39
	17:05		17:42		18:13		19:46		20:15	18:54-19:33/39	20:30	18:57-19:44/47
28	07:09	08:35-09:58/83	06:32		05:46	06:19-07:10/51	05:58	06:43-08:03/80	05:28	06:44-07:38/54	05:25	06:58-07:37/39
	17:06		17:43		18:14		19:47		20:16	18:54-19:35/41	20:30	18:56-19:43/47
29	07:08	08:36-09:57/81			06:45	07:18-08:11/53	05:57	06:42-08:02/80	05:27	06:44-07:37/53	05:25	06:57-07:37/40
	17:07				19:15		19:48		20:17	18:53-19:35/42	20:30	18:57-19:44/47
30	07:07	08:36-09:57/81			06:43	07:18-08:12/54	05:56	06:42-08:01/79	05:27	06:45-07:37/52	05:26	06:57-07:37/40
	17:08				19:16		19:49		20:17	18:53-19:36/43	20:30	18:57-19:44/47
31	07:06	08:37-09:58/81			06:41	07:19-08:13/54			05:26	06:47-07:37/50		
	17:10				19:17				20:18	18:54-19:37/43		
Ore potenziali eliofania	298		298		369		398		448		451	
Somma minuti d'ombra	2506		1389		659		2113		2485		2621	

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flikering real caseWTG: 05 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (5)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 06:57-07:38/41 20:30 18:58-19:44/46	05:50 06:49-07:54/65 20:11	06:20 07:11-08:15/64 19:28	06:50 18:38	06:24 08:11-09:21/70 16:52	06:58 08:14-09:35/81 16:28
2	05:27 06:56-07:38/42 20:30 18:58-19:44/46	05:51 06:49-07:54/65 20:10	06:21 07:11-08:15/64 19:27	06:51 18:37	06:25 08:10-09:22/72 16:51	06:59 08:15-09:35/80 16:28
3	05:27 06:57-07:39/42 20:29 18:58-19:45/47	05:52 06:49-07:54/65 20:09	06:22 07:11-08:14/63 19:25	06:52 18:35	06:26 08:11-09:24/73 16:50	07:00 08:15-09:35/80 16:27
4	05:28 06:56-07:39/43 20:29 18:58-19:44/46	05:53 06:49-07:54/65 20:08	06:23 07:11-08:14/63 19:23	06:53 18:33	06:27 08:10-09:24/74 16:48	07:01 08:16-09:35/79 16:27
5	05:28 06:56-07:40/44 20:29 18:59-19:45/46	05:54 06:49-07:54/65 20:07	06:24 07:11-08:13/62 19:22	06:54 18:32	06:28 08:09-09:25/76 16:47	07:02 08:16-09:35/79 16:27
6	05:29 06:56-07:41/45 20:29 18:59-19:44/45	05:55 06:49-07:58/69 20:05	06:25 07:11-08:12/61 19:20	06:55 18:30	06:30 08:08-09:25/77 16:46	07:03 08:17-09:35/78 16:27
7	05:30 06:56-07:41/45 20:29 18:59-19:45/46	05:56 06:49-08:01/72 20:04	06:26 07:12-08:11/59 19:19	06:56 18:28	06:31 08:09-09:27/78 16:45	07:04 08:18-09:36/78 16:27
8	05:30 06:56-07:42/46 20:28 19:00-19:45/45	05:57 06:49-08:03/74 20:03	06:27 07:12-08:11/59 19:17	06:57 18:27	06:32 08:08-09:27/79 16:44	07:05 08:18-09:36/78 16:27
9	05:31 06:55-07:42/47 20:28 19:00-19:44/44	05:58 06:49-08:04/75 20:02	06:28 07:13-08:10/57 19:15	06:58 18:25	06:33 08:08-09:27/79 16:43	07:06 08:19-09:36/77 16:27
10	05:32 06:55-07:43/48 20:28 19:00-19:45/45	05:59 06:49-08:05/76 20:00	06:29 07:13-08:08/55 19:14	06:59 18:24	06:34 08:08-09:29/81 16:42	07:07 08:19-09:36/77 16:27
11	05:32 06:55-07:44/49 20:27 19:01-19:45/44	06:00 06:49-08:07/78 19:59	06:30 07:11-08:06/55 19:12	07:00 18:22	06:36 08:08-09:29/81 16:41	07:08 08:19-09:36/77 16:27
12	05:33 06:54-07:44/50 20:27 19:01-19:44/43	06:01 06:49-08:08/79 19:58	06:31 07:10-08:05/55 19:10	07:01 18:20	06:37 08:08-09:29/81 16:40	07:09 08:20-09:37/77 16:27
13	05:34 06:54-07:45/51 20:26 19:02-19:44/42	06:02 06:50-08:09/79 19:57	06:32 07:09-08:03/54 19:09	07:02 18:19	06:38 08:08-09:29/81 16:39	07:09 08:21-09:37/76 16:27
14	05:34 06:54-07:46/52 20:26 19:02-19:44/42	06:03 06:50-08:10/80 19:55	06:33 07:09-08:01/52 19:07	07:04 18:17	06:39 08:08-09:30/82 16:38	07:10 08:22-09:38/76 16:27
15	05:35 06:54-07:47/53 20:25 19:03-19:44/41	06:04 06:50-08:11/81 19:54	06:34 07:08-07:59/51 19:05	07:05 18:16	06:40 08:08-09:31/83 16:37	07:11 08:22-09:37/75 16:28
16	05:36 06:53-07:47/54 20:24 19:03-19:43/40	06:05 06:51-08:12/81 19:52	06:35 07:08-07:57/49 19:03	07:06 18:14	06:41 08:08-09:31/83 16:36	07:12 08:23-09:38/75 16:28
17	05:37 06:53-07:48/55 20:24 19:04-19:43/39	06:06 06:51-08:13/82 19:51	06:36 07:07-07:54/47 19:02	07:07 18:13	06:43 08:08-09:31/83 16:36	07:12 08:23-09:39/76 16:28
18	05:38 06:53-07:48/55 20:23 19:05-19:43/38	06:07 06:52-08:13/81 19:50	06:37 07:07-07:51/44 19:00	07:08 18:11	06:44 08:09-09:32/83 16:35	07:13 08:23-09:39/76 16:28
19	05:38 06:53-07:49/56 20:23 19:05-19:42/37	06:08 06:53-08:14/81 19:48	06:38 07:07-07:46/39 18:58	07:09 18:10	06:45 08:09-09:32/83 16:34	07:13 08:24-09:39/75 16:29
20	05:39 06:52-07:50/58 20:22 19:05-19:41/36	06:09 06:54-08:15/81 19:47	06:39 07:07-07:46/39 18:57	07:10 18:08	06:46 08:09-09:32/83 16:33	07:14 08:24-09:39/75 16:29
21	05:40 06:51-07:50/59 20:21 19:06-19:40/34	06:10 06:55-08:15/80 19:45	06:40 07:07-07:45/38 18:55	07:11 18:07	06:47 08:09-09:32/83 16:33	07:15 08:25-09:40/75 16:30
22	05:41 06:51-07:50/59 20:20 19:08-19:40/32	06:11 06:56-08:16/80 19:44	06:41 07:08-07:44/36 18:53	07:12 18:05	06:48 08:09-09:32/83 16:32	07:15 08:25-09:40/75 16:30
23	05:42 06:51-07:51/60 20:20 19:09-19:39/30	06:12 06:57-08:16/79 19:42	06:42 07:08-07:43/35 18:52	07:13 18:04	06:50 08:10-09:33/83 16:31	07:16 08:26-09:41/75 16:31
24	05:43 06:51-07:51/60 20:19 19:10-19:38/28	06:13 06:58-08:16/78 19:41	06:43 07:09-07:41/32 18:50	07:15 18:02	06:51 08:11-09:33/82 16:31	07:16 08:26-09:41/75 16:31
25	05:44 06:51-07:52/61 20:18 19:12-19:37/25	06:13 07:00-08:16/76 19:39	06:44 07:10-07:40/30 18:48	07:16 17:01	06:52 08:11-09:33/82 16:30	07:17 08:27-09:43/76 16:32
26	05:44 06:51-07:52/61 20:17 19:13-19:35/22	06:14 07:00-08:16/76 19:38	06:45 07:11-07:38/27 18:47	07:17 17:00	06:53 08:11-09:33/82 16:30	07:17 08:27-09:43/76 16:32
27	05:45 06:51-07:53/62 20:16 19:14-19:32/18	06:15 07:03-08:16/73 19:36	06:46 07:12-07:36/24 18:45	07:18 16:58	06:54 08:12-09:33/81 16:29	07:17 08:28-09:43/75 16:33
28	05:46 06:50-07:52/62 20:15 19:17-19:30/13	06:16 07:06-08:16/70 19:35	06:47 07:15-07:33/18 18:43	07:19 16:57	06:55 08:12-09:33/81 16:29	07:18 08:28-09:43/75 16:34
29	05:47 06:49-07:53/64 20:14	06:17 07:11-08:16/65 19:33	06:48 07:18-07:28/10 18:42	07:20 16:56	06:56 08:13-09:34/81 16:29	07:18 08:29-09:45/76 16:34
30	05:48 06:49-07:53/64 20:13	06:18 07:11-08:16/65 19:32	06:49 18:40	07:21 16:54	06:57 08:14-09:34/80 16:28	07:18 08:29-09:45/76 16:35
31	05:49 06:49-07:53/64 20:12	06:19 07:11-08:15/64 19:30		07:22 16:53		07:18 08:29-09:46/77 16:36
Ore potenziali eliofania	458	427	375	346	299	289
Somma minuti d'ombra	2712	2300	1342	650	2400	2376

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flikering real caseWTG: 06 - Siemens Gamesa SG 6.0-170 6200 170.0 !OI hub: 165,0 m (TOT: 250,0 m) (6)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività
N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 16:37	07:06 17:11	06:30 17:45	06:40 19:18	06:37-07:03/26 19:50	05:26 20:19
2	07:19 16:38	07:05 17:12	06:28 17:46	06:38 19:19	07:00-07:25/25 19:51	05:25 20:20
3	07:19 16:39	07:04 17:13	06:27 17:47	06:36 19:20	06:59-07:25/26 19:52	05:25 20:20
4	07:19 16:40	07:03 17:15	06:25 17:48	06:35 19:21	06:57-07:24/27 19:53	05:25 20:21
5	07:19 16:40	07:02 17:16	06:24 17:49	06:33 19:22	06:56-07:25/29 19:54	05:24 20:22
6	07:19 16:41	07:00 17:17	06:22 17:50	06:32 19:23	06:55-07:25/30 19:55	05:24 20:22
7	07:19 16:42	06:59 17:20	06:21 17:51	06:30 19:25	06:53-07:25/32 19:56	05:24 20:23
8	07:19 16:43	06:58 17:20	06:19 17:53	06:28 19:26	06:53-07:26/33 19:57	05:23 20:24
9	07:19 16:44	06:57 17:21	06:18 17:54	06:27 19:27	06:52-07:25/33 19:58	05:23 20:24
10	07:18 16:45	06:56 17:22	06:16 17:55	06:25 19:28	06:52-07:26/34 19:59	05:23 20:25
11	07:18 16:46	06:55 17:23	06:14 17:56	06:23 19:29	06:51-07:25/34 20:00	05:23 20:25
12	07:18 16:47	06:54 17:24	06:13 17:57	06:22 19:30	06:46-07:24/38 20:01	05:23 20:26
13	07:18 16:48	06:52 17:26	06:11 17:58	06:20 19:31	06:44-07:24/40 20:02	05:23 20:26
14	07:17 16:50	06:51 17:27	06:09 17:59	06:19 19:32	06:41-07:23/42 20:03	05:22 20:27
15	07:17 16:51	06:50 17:28	06:08 18:00	06:17 19:33	06:40-07:23/43 20:04	05:22 20:27
16	07:17 16:52	06:48 17:29	06:06 18:01	06:16 19:34	06:38-07:22/44 20:05	05:22 20:28
17	07:16 16:53	06:47 17:31	06:05 18:02	06:14 19:35	06:38-07:21/43 20:06	05:23 20:28
18	07:16 16:54	06:46 17:32	06:03 18:03	06:13 19:36	06:36-07:19/43 20:07	05:23 20:28
19	07:15 16:55	06:44 17:33	06:01 18:04	06:11 19:37	06:36-07:19/43 20:08	05:23 20:29
20	07:15 16:56	06:43 17:34	06:00 18:06	06:10 19:38	06:35-07:16/41 20:09	05:23 20:29
21	07:14 16:58	06:42 17:35	05:58 18:07	06:08 19:39	06:35-07:15/40 20:10	05:23 20:29
22	07:13 16:59	06:40 17:36	05:56 18:08	06:07 19:40	06:35-07:12/37 20:10	05:23 20:29
23	07:13 17:00	06:39 17:38	05:55 18:09	06:05 19:41	06:34-07:08/34 20:11	05:23 20:29
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 19:42	06:34-07:08/34 20:12	05:24 20:30
25	07:11 17:02	06:36 17:40	05:51 18:11	06:02 19:43	06:34-07:07/33 20:13	05:24 20:30
26	07:11 17:04	06:35 17:41	05:50 18:12	06:01 19:44	06:34-07:07/33 20:14	05:24 20:30
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 19:45	06:35-07:06/31 20:15	05:25 20:30
28	07:09 17:06	06:32 17:43	05:46 18:14	05:58 19:47	06:34-07:05/31 20:16	05:25 20:30
29	07:08 17:07		06:45 19:15	05:57 19:48	06:35-07:04/29 20:16	05:25 20:30
30	07:07 17:08		06:43 19:16	05:56 19:49	06:36-07:04/28 20:17	05:26 20:30
31	07:06 17:10		06:41 19:17		05:51-06:19/28 20:18	
Ore potenziali eliofania	298	298	369	398	448	451
Somma minuti d'ombra	0	228	834	1035	319	1028

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flikering real caseWTG: 06 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (6)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 05:53-06:28/35 20:30	05:50 20:11	06:20 06:50-07:24/34 19:28	06:50 07:37-08:14/37 18:38	06:24 16:52	06:58 16:28
2	05:27 05:53-06:27/34 20:30	05:51 20:10	06:21 06:50-07:24/34 19:27	06:51 07:36-08:14/38 18:37	06:25 16:51	06:59 16:28
3	05:27 05:54-06:28/34 20:29	05:52 20:09	06:22 06:50-07:23/33 19:25	06:52 07:35-08:15/40 18:35	06:26 16:50	07:00 16:27
4	05:28 05:54-06:27/33 20:29	05:53 20:08	06:23 06:50-07:23/33 19:23	06:53 07:34-08:15/41 18:33	06:27 16:48	07:01 16:27
5	05:28 05:55-06:28/33 20:29	05:54 20:07	06:24 06:50-07:22/32 19:22	06:54 07:33-08:15/42 18:32	06:28 16:47	07:02 16:27
6	05:29 05:56-06:28/32 20:29	05:55 20:05	06:25 06:51-07:21/30 19:20	06:55 07:33-08:15/42 18:30	06:30 16:46	07:03 16:27
7	05:30 05:56-06:28/32 20:29	05:56 06:55-07:03/8 20:04	06:26 06:51-07:20/29 19:19	06:56 07:32-08:15/43 18:28	06:31 16:45	07:04 16:27
8	05:30 05:57-06:28/31 20:28	05:57 06:52-07:06/14 20:03	06:27 06:52-07:19/27 19:17	06:57 07:32-08:14/42 18:27	06:32 16:44	07:05 16:27
9	05:31 05:57-06:27/30 20:28	05:58 06:49-07:07/18 20:02	06:28 06:53-07:19/26 19:15	06:58 07:32-08:14/42 18:25	06:33 16:43	07:06 16:27
10	05:32 05:58-06:27/29 20:27	05:59 06:47-07:09/22 20:00	06:29 06:54-07:20/26 19:14	06:59 07:32-08:13/41 18:23	06:34 16:42	07:07 16:27
11	05:32 05:59-06:28/29 20:27	06:00 06:46-07:10/24 19:59	06:30 06:53-07:19/26 19:12	07:00 07:32-08:13/41 18:22	06:35 16:41	07:08 16:27
12	05:33 05:58-06:27/29 20:27	06:01 06:44-07:11/27 19:58	06:31 06:53-07:18/25 19:10	07:01 07:33-08:13/40 18:20	06:37 16:40	07:08 16:27
13	05:34 05:59-06:27/28 20:26	06:02 06:43-07:12/29 19:57	06:32 06:52-07:18/26 19:09	07:02 07:33-08:12/39 18:19	06:38 16:39	07:09 08:13-08:16/3 16:27
14	05:34 06:00-06:27/27 20:26	06:03 06:43-07:12/29 19:55	06:33 06:53-07:17/24 19:07	07:03 07:33-08:11/38 18:17	06:39 16:38	07:10 08:12-08:18/6 16:27
15	05:35 06:01-06:26/25 20:25	06:04 06:42-07:13/31 19:54	06:34 06:54-07:16/22 19:05	07:05 07:34-08:09/35 18:16	06:40 16:37	07:11 08:11-08:19/8 16:28
16	05:36 06:01-06:25/24 20:24	06:05 06:41-07:13/32 19:52	06:35 06:55-07:15/20 19:03	07:06 07:35-08:08/33 18:14	06:41 16:36	07:12 08:11-08:21/10 16:28
17	05:37 06:02-06:25/23 20:24	06:06 06:41-07:14/33 19:51	06:36 06:56-07:14/18 19:02	07:07 07:36-08:06/30 18:13	06:43 16:36	07:12 08:11-08:22/11 16:28
18	05:37 06:03-06:24/21 20:23	06:07 06:40-07:14/34 19:50	06:37 06:57-07:12/15 19:00	07:08 07:37-08:05/28 18:11	06:44 16:35	07:13 08:11-08:22/11 16:28
19	05:38 06:05-06:23/18 20:23	06:08 06:40-07:14/34 19:48	06:38 06:58-07:10/12 18:58	07:09 07:39-08:02/23 18:10	06:45 16:34	07:13 08:11-08:23/12 16:29
20	05:39 06:06-06:22/16 20:22	06:09 06:40-07:14/34 19:47	06:39 07:00-07:06/6 18:57	07:10 07:42-08:00/18 18:08	06:46 16:33	07:14 08:11-08:23/12 16:29
21	05:40 06:07-06:20/13 20:21	06:10 06:40-07:18/38 19:45	06:40 18:55	07:11 07:45-07:56/11 18:07	06:47 16:33	07:15 08:12-08:24/12 16:30
22	05:41 06:10-06:18/8 20:20	06:11 06:40-07:20/40 19:44	06:41 18:53	07:12 18:05	06:48 16:32	07:15 08:12-08:24/12 16:30
23	05:42 20:19	06:11 06:40-07:21/41 19:42	06:42 18:52	07:13 18:04	06:49 16:31	07:16 08:13-08:25/12 16:31
24	05:43 20:19	06:12 06:40-07:23/43 19:41	06:43 07:53-08:02/9 18:50	07:15 18:02	06:51 16:31	07:16 08:13-08:25/12 16:31
25	05:43 20:18	06:13 06:40-07:23/43 19:39	06:44 07:48-08:06/18 18:48	06:16 17:01	06:52 16:30	07:17 08:15-08:26/11 16:32
26	05:44 20:17	06:14 06:40-07:23/43 19:38	06:45 07:45-08:08/23 18:47	06:17 17:00	06:53 16:30	07:17 08:15-08:26/11 16:32
27	05:45 20:16	06:15 06:40-07:24/44 19:36	06:46 07:43-08:10/27 18:45	06:18 16:58	06:54 16:29	07:17 08:16-08:26/10 16:33
28	05:46 20:15	06:16 06:41-07:24/43 19:35	06:47 07:41-08:11/30 18:43	06:19 16:57	06:55 16:29	07:18 08:16-08:25/9 16:34
29	05:47 20:14	06:17 06:42-07:24/42 19:33	06:48 07:39-08:12/33 18:42	06:20 16:56	06:56 16:29	07:18 08:19-08:26/7 16:34
30	05:48 20:13	06:18 06:44-07:24/40 19:32	06:49 07:38-08:13/35 18:40	06:21 16:54	06:57 16:28	07:18 08:20-08:25/5 16:35
31	05:49 20:12	06:19 06:46-07:24/38 19:30		06:23 16:53		07:18 16:36
Ore potenziali eliofania	458	427	375	346	299	289
Somma minuti d'ombra	584	824	673	744	0	174

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flikering real caseWTG: 07 - Siemens Gamesa SG 6.0-170 6200 170.0 !OI hub: 165,0 m (TOT: 250,0 m) (7)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N	NNE	ENE	E	ESE	SSE	S	SSO	OSO	O	ONO	NNO	Somma
1.229	573	283	164	231	782	961	432	328	544	685	1.236	7.447

3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 16:37	07:06 07:26-07:42/16 17:11	06:30 17:45	06:40 19:18	05:54 06:19-06:37/18 19:50 06:45-06:58/13	05:26 05:51-06:18/27 20:19
2	07:19 16:38	07:05 07:25-07:44/19 17:12	06:28 17:46	06:38 19:19	05:53 06:20-06:35/15 19:51 06:50-06:51/1	05:25 05:52-06:19/27 20:20
3	07:19 16:39	07:04 07:24-07:45/21 17:13	06:27 17:47	06:36 19:20	05:52 06:11-06:20/9 19:52 06:21-06:33/12	05:25 05:52-06:18/26 20:20
4	07:19 16:40	07:03 07:22-07:45/23 17:15	06:25 17:48	06:35 19:21	05:50 06:10-06:22/12 19:53 06:24-06:31/7	05:25 05:52-06:18/26 20:21
5	07:19 16:40	07:02 07:21-07:46/25 17:16	06:24 17:49	06:33 19:22	05:49 06:09-06:24/15 19:54	05:24 05:53-06:19/26 20:22
6	07:19 16:41	07:00 07:20-07:47/27 17:17	06:22 17:50	06:31 19:23	05:48 06:08-06:25/17 19:55	05:24 05:54-06:19/25 20:22
7	07:19 16:42	06:59 07:19-07:48/29 17:18	06:21 17:51	06:30 19:25	05:47 06:06-06:25/19 19:56	05:24 05:53-06:18/25 20:23
8	07:19 16:43	06:58 07:18-07:48/30 17:20	06:19 17:52	06:28 06:51-07:02/11 19:26	05:46 06:05-06:26/21 19:57	05:23 05:54-06:18/24 20:24
9	07:19 16:44	06:57 07:17-07:49/32 17:21	06:18 17:54	06:27 06:47-07:05/18 19:27	05:45 06:04-06:27/23 19:58	05:23 05:54-06:18/24 20:24
10	07:18 16:45	06:56 07:16-07:49/33 17:22	06:16 17:55	06:25 06:46-07:07/21 19:28	05:43 06:03-06:27/24 19:59	05:23 05:55-06:19/24 20:25
11	07:18 16:46	06:55 07:15-07:48/33 17:23	06:14 17:56	06:23 06:43-07:08/25 19:29	05:42 06:02-06:28/26 20:00	05:23 05:55-06:19/24 20:25
12	07:18 16:47	06:54 07:15-07:49/34 17:24	06:13 17:57	06:22 06:41-07:08/27 19:30	05:41 06:01-06:28/27 20:01	05:23 05:56-06:19/23 20:26
13	07:18 16:48	06:52 07:15-07:49/34 17:26	06:11 17:58	06:20 06:40-07:10/30 19:31	05:40 06:01-06:28/27 20:02	05:23 05:56-06:19/23 20:26
14	07:17 16:50	06:51 07:14-07:47/33 17:27	06:09 17:59	06:19 06:39-07:10/31 19:32	05:39 05:59-06:28/29 20:03	05:22 05:57-06:19/22 20:27
15	07:17 16:51	06:50 07:15-07:47/32 17:28	06:08 18:00	06:17 06:39-07:11/32 19:33	05:38 05:58-06:28/30 20:04	05:22 05:57-06:19/22 20:27
16	07:17 16:52	06:48 07:15-07:46/31 17:29	06:06 18:01	06:16 06:37-07:10/33 19:34	05:37 05:57-06:28/31 20:05	05:22 05:57-06:19/22 20:28
17	07:16 16:53	06:47 07:15-07:45/30 17:31	06:05 18:02	06:14 06:37-07:11/34 19:35	05:36 05:57-06:28/31 20:06	05:22 05:57-06:19/22 20:28
18	07:16 16:54	06:46 07:16-07:44/28 17:32	06:03 18:03	06:13 06:36-07:10/34 19:36	05:35 05:56-06:28/32 20:07	05:23 05:58-06:19/21 20:28
19	07:15 16:55	06:44 07:17-07:42/25 17:33	06:01 18:04	06:11 06:30-06:35/5 19:37 06:36-07:11/35	05:35 05:55-06:28/33 20:08	05:23 05:58-06:19/21 20:29
20	07:15 16:56	06:43 07:17-07:40/23 17:34	06:00 18:06	06:10 06:28-07:10/42 19:38	05:34 05:54-06:27/33 20:09	05:23 05:58-06:19/21 20:29
21	07:14 16:58	06:42 07:19-07:39/20 17:35	05:58 18:07	06:08 06:27-07:10/43 19:39	05:33 05:53-06:27/34 20:10	05:23 05:58-06:19/21 20:29
22	07:13 16:59	06:40 07:20-07:36/16 17:36	05:56 18:08	06:07 06:26-07:10/44 19:40	05:32 05:53-06:27/34 20:10	05:23 05:59-06:20/21 20:29
23	07:13 17:00	06:39 07:23-07:34/11 17:38	05:55 18:09	06:05 06:24-07:08/44 19:41	05:31 05:52-06:26/34 20:11	05:23 05:59-06:20/21 20:29
24	07:12 17:01	06:37 17:39	05:53 18:10	06:04 06:23-07:08/45 19:42	05:31 05:51-06:25/34 20:12	05:24 05:59-06:20/21 20:30
25	07:11 17:02	06:36 17:40	05:51 18:11	06:02 06:21-07:07/46 19:43	05:30 05:51-06:25/34 20:13	05:24 05:58-06:20/22 20:30
26	07:11 17:04	06:34 17:41	05:50 18:12	06:01 06:20-07:06/46 19:44	05:29 05:51-06:24/33 20:14	05:24 05:59-06:21/22 20:30
27	07:10 17:05	06:33 17:42	05:48 18:13	06:00 06:19-07:05/46 19:45	05:29 05:51-06:24/33 20:15	05:25 05:59-06:21/22 20:30
28	07:09 17:06	06:32 17:43	05:46 18:14	05:58 06:17-06:38/21 19:47 06:39-07:03/24	05:28 05:51-06:23/32 20:16	05:25 06:00-06:22/22 20:30
29	07:08 17:07		06:45 19:15	05:57 06:18-06:38/20 19:48 06:41-07:02/21	05:27 05:51-06:21/30 20:16	05:25 05:59-06:22/23 20:30
30	07:07 07:30-07:37/7 17:08		06:43 19:16	05:56 06:18-06:37/19 19:49 06:42-07:00/18	05:27 05:51-06:20/29 20:17	05:26 05:59-06:22/23 20:30
31	07:06 07:27-07:40/13 17:10		06:41 19:17		05:26 05:52-06:19/27 20:18	
Ore potenziali eliofania	298	298	369	398	448	451
Somma minuti d'ombra	20	605	0	815	859	693

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flickering real case WTG: 07 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (7)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 05:59-06:23/24 20:30	05:50 06:12-06:38/26 20:11	06:20 06:42-07:07/25 19:28	06:50 18:38	06:24 06:45-07:18/33 16:52	06:58 16:28
2	05:27 05:59-06:23/24 20:30	05:51 06:13-06:38/25 20:10	06:21 06:44-07:05/21 19:27	06:51 18:37	06:25 06:46-07:18/32 16:51	06:59 16:28
3	05:27 06:00-06:24/24 20:29	05:52 06:14-06:38/24 20:09	06:22 06:45-07:03/18 19:25	06:52 18:35	06:26 06:48-07:18/30 16:49	07:00 16:27
4	05:28 05:59-06:23/24 20:29	05:53 06:15-06:37/22 20:08	06:23 06:48-06:59/11 19:23	06:53 18:33	06:27 06:49-07:18/29 16:48	07:01 16:27
5	05:28 05:59-06:24/25 20:29	05:54 06:16-06:37/21 20:07	06:24 19:22	06:54 18:32	06:28 06:50-07:17/27 16:47	07:02 16:27
6	05:29 06:00-06:25/25 20:29	05:55 06:17-06:36/19 20:05	06:25 19:20	06:55 18:30	06:30 06:52-07:17/25 16:46	07:03 16:27
7	05:30 05:59-06:25/26 20:29	05:56 06:18-06:35/17 20:04	06:26 19:19	06:56 18:28	06:31 06:53-07:16/23 16:45	07:04 16:27
8	05:30 06:00-06:25/25 20:28	05:57 06:19-06:33/14 20:03	06:27 19:17	06:57 18:27	06:32 06:54-07:15/21 16:44	07:05 16:27
9	05:31 05:59-06:25/26 20:28	05:58 06:19-06:30/11 20:02	06:28 19:15	06:58 18:25	06:33 06:55-07:14/19 16:43	07:06 16:27
10	05:31 05:59-06:26/27 20:27	05:59 06:21-06:27/6 20:00	06:29 19:14	06:59 18:23	06:34 06:57-07:13/16 16:42	07:07 16:27
11	05:32 06:00-06:26/26 20:27	06:00 06:28-06:44/16 19:59	06:30 19:12	07:00 18:22	06:35 06:58-07:11/13 16:41	07:08 16:27
12	05:33 05:59-06:26/27 20:27	06:01 06:27-06:45/18 19:58	06:31 19:10	07:01 18:20	06:37 07:01-07:08/7 16:40	07:08 16:27
13	05:34 05:59-06:28/29 20:26	06:02 06:26-06:45/19 19:57	06:32 19:09	07:02 18:19	06:38 16:39	07:09 16:27
14	05:34 06:00-06:30/30 20:26	06:03 06:25-06:46/21 19:55	06:33 19:07	07:03 18:17	06:39 16:38	07:10 16:27
15	05:35 06:00-06:31/31 20:25	06:04 06:25-07:11/46 19:54	06:34 19:05	07:05 18:16	06:40 16:37	07:11 16:27
16	05:36 06:00-06:32/32 20:24	06:05 06:26-07:12/46 19:52	06:35 19:03	07:06 18:14	06:41 16:36	07:12 16:28
17	05:37 06:00-06:33/33 20:24	06:06 06:27-07:13/46 19:51	06:36 19:02	07:07 18:13	06:43 16:36	07:12 16:28
18	05:37 06:00-06:34/34 20:23	06:07 06:28-07:13/45 19:50	06:37 19:00	07:08 07:58-08:01/3 18:11	06:44 16:35	07:13 16:28
19	05:38 06:01-06:35/34 20:23	06:08 06:29-07:14/45 19:48	06:38 18:58	07:09 07:54-08:06/12 18:10	06:45 16:34	07:13 16:29
20	05:39 06:02-06:36/34 20:22	06:09 06:30-07:14/44 19:47	06:39 18:57	07:10 07:51-08:08/17 18:08	06:46 16:33	07:14 16:29
21	05:40 06:02-06:36/34 20:21	06:09 06:31-07:15/44 19:45	06:40 18:55	07:11 07:49-08:10/21 18:07	06:47 16:33	07:15 16:30
22	05:41 06:03-06:37/34 20:20	06:10 06:32-07:15/43 19:44	06:41 18:53	07:12 07:48-08:10/22 18:05	06:48 16:32	07:15 16:30
23	05:42 06:04-06:37/33 20:19	06:11 06:33-07:15/42 19:42	06:42 18:52	07:13 07:46-08:12/26 18:04	06:49 16:31	07:16 16:31
24	05:43 06:05-06:38/33 20:19	06:12 06:34-06:39/5 19:41	06:43 18:50	07:14 07:45-08:14/29 18:02	06:51 16:31	07:16 16:31
25	05:43 06:06-06:38/32 20:18	06:13 06:40-07:14/34 19:39	06:44 18:48	06:16 06:45-07:16/31 17:01	06:52 16:30	07:17 16:32
26	05:44 06:07-06:39/32 20:17	06:14 06:39-07:13/34 19:38	06:45 18:47	06:17 06:45-07:16/31 17:00	06:53 16:30	07:17 16:32
27	05:45 06:08-06:39/31 20:16	06:15 06:39-07:12/33 19:36	06:46 18:45	06:18 06:44-07:17/33 16:58	06:54 16:29	07:17 16:33
28	05:46 06:08-06:38/30 20:15	06:16 06:40-07:12/32 19:35	06:47 18:43	06:19 06:44-07:17/33 16:57	06:55 16:29	07:18 16:34
29	05:47 06:09-06:39/30 20:14	06:17 06:40-07:11/31 19:33	06:48 18:41	06:20 06:44-07:17/33 16:56	06:56 16:29	07:18 16:34
30	05:48 06:10-06:39/29 20:13	06:18 06:40-07:10/30 19:32	06:49 18:40	06:21 06:45-07:18/33 16:54	06:57 16:28	07:18 16:35
31	05:49 06:11-06:39/28 20:12	06:19 06:41-07:08/27 19:30		06:23 06:45-07:18/33 16:53		07:18 16:36
Ore potenziali eliofania	458	427	375	346	299	289
Somma minuti d'ombra	906	1005	75	357	275	0

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flickering real case WTG: 08 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (8)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N	NNE	ENE	E	ESE	SSE	S	SSO	OSO	O	ONO	NNO	Somma
1.229	573	283	164	231	782	961	432	328	544	685	1.236	7.447

3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 08:38-09:59/81 16:37	07:06 09:00-09:55/55 17:11	06:30 17:45	06:40 19:18	05:54 19:50	05:26 20:19
2	07:19 08:39-10:00/81 16:38	07:05 09:00-09:53/53 17:12	06:28 17:46	06:38 19:19	05:53 19:51	05:25 20:20
3	07:19 08:39-10:00/81 16:39	07:04 09:02-09:51/49 17:13	06:27 17:47	06:36 19:20	05:52 19:52	05:25 20:20
4	07:19 08:40-10:00/80 16:40	07:03 09:04-09:49/45 17:15	06:25 17:48	06:35 19:21	05:50 19:53	05:24 20:21
5	07:19 08:40-10:01/81 16:40	07:02 09:06-09:47/41 17:16	06:24 17:49	06:33 19:22	05:49 19:54	05:24 20:22
6	07:19 08:41-10:01/80 16:41	07:00 09:08-09:45/37 17:17	06:22 17:50	06:31 19:23	05:48 06:08-06:12/4 19:55	05:24 20:22
7	07:19 08:42-10:02/80 16:42	06:59 09:11-09:42/31 17:18	06:21 17:51	06:30 19:24	05:47 06:06-06:13/7 19:56	05:24 20:23
8	07:19 08:42-10:02/80 16:43	06:58 09:14-09:39/25 17:20	06:19 17:52	06:28 19:26	05:46 06:05-06:14/9 19:57	05:23 20:24
9	07:19 08:42-10:02/80 16:44	06:57 09:19-09:34/15 17:21	06:17 17:54	06:27 19:27	05:45 06:04-06:15/11 19:58	05:23 20:24
10	07:18 08:43-10:02/79 16:45	06:56 17:22	06:16 17:55	06:25 19:28	05:43 06:03-06:16/13 19:59	05:23 20:25
11	07:18 08:44-10:03/79 16:46	06:55 17:23	06:14 17:56	06:23 19:29	05:42 06:02-06:17/15 20:00	05:23 20:25
12	07:18 08:43-10:02/79 16:47	06:54 17:24	06:13 06:31-06:34/3 17:57	06:22 19:30	05:41 06:01-06:17/16 20:01	05:23 20:26
13	07:18 08:44-10:03/79 16:48	06:52 17:26	06:11 06:30-06:37/7 17:58	06:20 19:31	05:40 06:00-06:17/17 20:02	05:22 20:26
14	07:17 08:45-10:03/78 16:50	06:51 17:27	06:09 06:28-06:38/10 17:59	06:19 19:32	05:39 05:59-06:17/18 20:03	05:22 20:27
15	07:17 08:45-10:03/78 16:51	06:50 17:28	06:08 06:26-06:39/13 18:00	06:17 19:33	05:38 05:58-06:17/19 20:04	05:22 20:27
16	07:17 08:46-10:03/77 16:52	06:48 17:29	06:06 06:25-06:40/15 18:01	06:16 19:34	05:37 05:57-06:17/20 20:05	05:22 20:27
17	07:16 08:47-10:03/76 16:53	06:47 17:30	06:04 06:23-06:40/17 18:02	06:14 19:35	05:36 05:57-06:18/21 20:06	05:22 20:28
18	07:16 08:48-10:03/75 16:54	06:46 17:32	06:03 06:21-06:40/19 18:03	06:13 19:36	05:35 05:56-06:18/22 20:07	05:23 20:28
19	07:15 08:48-10:03/75 16:55	06:44 17:33	06:01 06:20-06:40/20 18:04	06:11 19:37	05:34 05:55-06:18/23 20:08	05:23 20:29
20	07:15 08:48-10:02/74 16:56	06:43 17:34	06:00 06:18-06:39/21 18:06	06:10 19:38	05:34 05:54-06:17/23 20:09	05:23 20:29
21	07:14 08:50-10:03/73 16:57	06:42 17:35	05:58 06:16-06:38/22 18:07	06:08 19:39	05:33 05:54-06:17/23 20:10	05:23 20:29
22	07:13 08:50-10:02/72 16:59	06:40 17:36	05:56 06:15-06:38/23 18:08	06:07 19:40	05:32 05:55-06:17/22 20:10	05:23 20:29
23	07:13 08:50-10:01/71 17:00	06:39 17:38	05:55 06:13-06:36/23 18:09	06:05 19:41	05:31 05:55-06:16/21 20:11	05:23 20:29
24	07:12 08:52-10:02/70 17:01	06:37 17:39	05:53 06:12-06:34/22 18:10	06:04 19:42	05:30 05:55-06:16/21 20:12	05:24 20:30
25	07:11 08:53-10:01/68 17:02	06:36 17:40	05:51 06:14-06:33/19 18:11	06:02 19:43	05:30 05:57-06:16/19 20:13	05:24 20:30
26	07:11 08:53-10:00/67 17:03	06:34 17:41	05:50 06:14-06:30/16 18:12	06:01 19:44	05:29 05:57-06:15/18 20:14	05:24 20:30
27	07:10 08:54-09:59/65 17:05	06:33 17:42	05:48 06:15-06:28/13 18:13	06:00 19:45	05:28 05:59-06:15/16 20:15	05:25 20:30
28	07:09 08:55-09:58/63 17:06	06:31 17:43	05:46 06:19-06:25/6 18:14	05:58 19:47	05:28 05:59-06:13/14 20:16	05:25 20:30
29	07:08 08:56-09:57/61 17:07		06:45 19:15	05:57 19:48	05:27 06:00-06:12/12 20:16	05:25 20:30
30	07:07 08:57-09:56/59 17:08		06:43 19:16	05:56 19:49	05:27 06:02-06:11/9 20:17	05:26 20:30
31	07:06 08:58-09:55/57 17:10		06:41 19:17		05:26 06:04-06:10/6 20:18	
Ore potenziali eliofania	298	298	369	398	448	451
Somma minuti d'ombra	2299	351	269	0	419	0

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flickering real case WTG: 08 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (8)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 20:30	05:50 06:12-06:27/15 20:11	06:20 19:28	06:50 07:10-07:15/5 18:38	06:24 16:52	06:58 08:26-09:45/79 16:28
2	05:27 20:30	05:51 06:13-06:27/14 20:10	06:21 19:27	06:51 18:36	06:25 08:47-09:04/17 16:51	06:59 08:26-09:45/79 16:28
3	05:27 20:29	05:52 06:14-06:26/12 20:09	06:22 19:25	06:52 18:35	06:26 08:43-09:09/26 16:49	07:00 08:26-09:46/80 16:27
4	05:28 20:29	05:53 06:15-06:26/11 20:08	06:23 19:23	06:53 18:33	06:27 08:40-09:13/33 16:48	07:01 08:26-09:46/80 16:27
5	05:28 20:29	05:54 06:16-06:25/9 20:07	06:24 19:22	06:54 18:32	06:28 08:37-09:15/38 16:47	07:02 08:27-09:47/80 16:27
6	05:29 20:29	05:55 06:17-06:23/6 20:05	06:25 19:20	06:55 18:30	06:30 08:35-09:17/42 16:46	07:03 08:27-09:47/80 16:27
7	05:30 20:29	05:56 06:18-06:21/3 20:04	06:26 19:19	06:56 18:28	06:31 08:34-09:20/46 16:45	07:04 08:27-09:48/81 16:27
8	05:30 20:28	05:57 20:03	06:27 19:17	06:57 18:27	06:32 08:33-09:22/49 16:44	07:05 08:28-09:49/81 16:27
9	05:31 20:28	05:58 20:02	06:28 19:15	06:58 18:25	06:33 08:31-09:24/53 16:43	07:06 08:28-09:49/81 16:27
10	05:31 20:27	05:59 20:00	06:29 19:14	06:59 18:23	06:34 08:31-09:26/55 16:42	07:07 08:28-09:49/81 16:27
11	05:32 20:27	06:00 19:59	06:30 19:12	07:00 18:22	06:35 08:30-09:27/57 16:41	07:08 08:28-09:49/81 16:27
12	05:33 06:13-06:16/3 20:27	06:01 19:58	06:31 19:10	07:01 18:20	06:37 08:29-09:28/59 16:40	07:08 08:29-09:50/81 16:27
13	05:34 06:11-06:19/8 20:26	06:02 19:57	06:32 19:08	07:02 18:19	06:38 08:28-09:29/61 16:39	07:09 08:30-09:51/81 16:27
14	05:34 06:10-06:21/11 20:26	06:03 19:55	06:33 19:07	07:03 18:17	06:39 08:28-09:31/63 16:38	07:10 08:30-09:51/81 16:27
15	05:35 06:09-06:22/13 20:25	06:04 19:54	06:34 07:10-07:12/2 19:05	07:05 18:16	06:40 08:27-09:32/65 16:37	07:11 08:30-09:51/81 16:27
16	05:36 06:07-06:22/15 20:24	06:05 19:52	06:35 07:05-07:17/12 19:03	07:06 18:14	06:41 08:26-09:33/67 16:36	07:12 08:31-09:52/81 16:28
17	05:37 06:07-06:24/17 20:24	06:06 19:51	06:36 07:03-07:18/15 19:02	07:07 18:13	06:43 08:26-09:34/68 16:36	07:12 08:32-09:53/81 16:28
18	05:37 06:06-06:25/19 20:23	06:07 19:50	06:37 07:01-07:19/18 19:00	07:08 18:11	06:44 08:26-09:36/70 16:35	07:13 08:32-09:53/81 16:28
19	05:38 06:06-06:26/20 20:23	06:07 19:48	06:38 07:00-07:21/21 18:58	07:09 18:10	06:45 08:25-09:36/71 16:34	07:13 08:32-09:54/82 16:29
20	05:39 06:06-06:26/20 20:22	06:08 19:47	06:39 06:59-07:22/23 18:57	07:10 18:08	06:46 08:25-09:37/72 16:33	07:14 08:32-09:54/82 16:29
21	05:40 06:05-06:26/21 20:21	06:09 19:45	06:40 07:00-07:23/23 18:55	07:11 18:07	06:47 08:25-09:38/73 16:33	07:15 08:33-09:55/82 16:30
22	05:41 06:04-06:27/23 20:20	06:10 19:44	06:41 07:01-07:23/22 18:53	07:12 18:05	06:48 08:24-09:38/74 16:32	07:15 08:33-09:55/82 16:30
23	05:42 06:04-06:27/23 20:19	06:11 19:42	06:42 07:02-07:23/21 18:52	07:13 18:04	06:49 08:25-09:40/75 16:31	07:16 08:34-09:56/82 16:31
24	05:43 06:05-06:28/23 20:19	06:12 19:41	06:43 07:03-07:23/20 18:50	07:14 18:02	06:51 08:25-09:40/75 16:31	07:16 08:34-09:56/82 16:31
25	05:43 06:06-06:28/22 20:18	06:13 19:39	06:44 07:04-07:23/19 18:48	06:16 17:01	06:52 08:25-09:41/76 16:30	07:17 08:36-09:57/81 16:32
26	05:44 06:07-06:29/22 20:17	06:14 19:38	06:45 07:05-07:22/17 18:47	06:17 17:00	06:53 08:24-09:41/77 16:30	07:17 08:36-09:57/81 16:32
27	05:45 06:07-06:28/21 20:16	06:15 19:36	06:46 07:06-07:22/16 18:45	06:18 16:58	06:54 08:24-09:42/78 16:29	07:17 08:36-09:57/81 16:33
28	05:46 06:08-06:28/20 20:15	06:16 19:35	06:47 07:07-07:21/14 18:43	06:19 16:57	06:55 08:24-09:42/78 16:29	07:18 08:36-09:57/81 16:34
29	05:47 06:09-06:28/19 20:14	06:17 19:33	06:48 07:08-07:19/11 18:41	06:20 16:56	06:56 08:25-09:44/79 16:28	07:18 08:37-09:58/81 16:34
30	05:48 06:10-06:28/18 20:13	06:18 19:31	06:49 07:09-07:18/9 18:40	06:21 16:54	06:57 08:26-09:44/78 16:28	07:18 08:38-09:59/81 16:35
31	05:49 06:11-06:28/17 20:12	06:19 19:30		06:23 16:53		07:18 08:38-09:59/81 16:36
Ore potenziali eliofania	458	427	375	346	299	289
Somma minuti d'ombra	355	70	263	5	1775	2509

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flikering real case WTG: 09 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (9)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre	
1	07:19 16:37 17:11	07:06 17:45 19:18	06:30 17:46 19:19	06:40 19:19 19:51	05:54 19:50 06:24-06:31/7	05:26 20:19 05:25	05:58-06:58/60 20:30 05:59-06:58/59	05:26 20:30 05:27	06:05-07:03/58 20:10 06:05-07:03/58	05:50 20:11 05:51	06:14-07:01/47 19:28 06:15-07:00/45	06:20 18:38 06:21	06:50 16:52 06:51
2	07:19 16:38 17:12	07:05 17:46 19:19	06:28 17:46 19:19	06:38 19:19 19:51	05:53 19:51 06:19-06:37/18	05:25 20:20 05:25	05:58-06:58/60 20:20 05:59-06:58/59	05:27 20:29 05:28	06:05-07:04/59 20:10 06:05-07:04/59	05:52 20:09 05:53	06:16-06:59/43 19:25 06:17-06:58/41	06:22 18:35 06:23	06:52 16:49 06:53
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SHADOW - Calendario per WTG

Calcolo: flikering real caseWTG: 10 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (10)
Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 08:30-09:19/49 16:37	07:05 07:31-07:57/26 17:11	06:30 06:49-07:07/18 17:45	06:40 19:18	05:54 06:48-07:59/71 19:50	05:26 06:55-07:49/54 20:19
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19	07:15 08:45-09:16/31 16:55	06:44 07:28-08:03/35 17:33	06:01 18:04	06:11 06:58-07:56/58 19:37	05:35 06:49-07:55/66 20:08	05:23 07:05-07:47/42 20:28
20	07:15 08:46-09:14/28 16:56	06:43 07:28-08:01/33 17:34	06:00 18:06	06:10 06:57-07:56/59 19:38	05:34 06:49-07:54/65 20:09	05:23 07:05-07:47/42 20:29
21	07:14 08:49-09:14/25 16:58	06:42 07:29-08:00/31 17:35	05:58 18:07	06:08 06:56-07:57/61 19:39	05:33 06:49-07:54/65 20:10	05:23 07:05-07:47/42 20:29
22	07:13 08:51-09:12/21 16:59	06:40 07:30-07:58/28 17:36	05:56 18:08	06:07 06:54-07:57/63 19:40	05:32 06:50-07:54/64 20:10	05:23 07:06-07:48/42 20:29
23	07:13 08:53-09:09/16 17:00	06:39 06:58-07:03/5 17:38	05:55 18:09	06:05 06:53-07:58/65 19:41	05:31 06:51-07:53/62 20:11	05:23 07:06-07:48/42 20:29
24	07:12 08:59-09:05/6 17:01	06:37 06:56-07:06/10 17:39	05:53 18:10	06:04 06:53-07:59/66 19:42	05:31 06:51-07:52/61 20:12	05:24 07:06-07:48/42 20:30
25	07:11 17:02	06:36 06:55-07:06/11 17:40	05:51 18:11	06:02 06:51-07:58/67 19:43	05:30 06:52-07:53/61 20:13	05:24 07:05-07:48/43 20:30
26	07:11 17:04	06:34 06:54-07:07/13 17:41	05:50 18:12	06:01 06:51-07:59/68 19:44	05:29 06:52-07:52/60 20:14	05:24 07:06-07:49/43 20:30
27	07:10 17:05	06:33 06:52-07:07/15 17:42	05:48 18:13	06:00 06:51-08:00/69 19:45	05:29 06:53-07:52/59 20:15	05:25 07:06-07:49/43 20:30
28	07:09 07:39-07:48/9 17:06	06:31 06:50-07:07/17 17:43	05:46 18:14	05:58 06:49-07:59/70 19:46	05:28 06:53-07:51/58 20:16	05:25 07:05-07:49/44 20:30
29	07:08 07:35-07:51/16 17:07		06:45 19:15	05:57 06:49-07:59/70 19:48	05:27 06:53-07:50/57 20:16	05:25 07:06-07:50/44 20:30
30	07:07 07:33-07:54/21 17:08		06:43 19:16	05:56 06:49-08:00/71 19:49	05:27 06:54-07:50/56 20:17	05:26 07:05-07:50/45 20:30
31	07:06 07:32-07:56/24 17:10		06:41 19:17		05:26 06:55-07:50/55 20:18	
Ore potenziali eliofania	298	298	369	398	447	451
Somma minuti d'ombra	976	922	302	1145	2047	1365

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flickering real case WTG: 10 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (10)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività
N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 07:06-07:51/45 20:30	05:50 06:58-08:08/70 20:11	06:20 07:15-07:41/26 19:28	06:50 07:17-07:36/19 18:38	06:24 06:55-07:34/39 16:52	06:58 08:19-09:02/43 16:28
2	05:27 07:05-07:51/46 20:30	05:51 06:57-08:08/71 20:10	06:21 07:20-07:35/15 19:27	06:51 07:16-07:37/21 18:36	06:25 06:55-07:34/39 16:51	06:59 08:19-09:03/44 16:28
3	05:27 07:06-07:52/46 20:29	05:52 06:57-08:08/71 20:09	06:22 19:25	06:52 07:15-07:37/22 18:35	06:26 06:56-07:34/38 16:49	07:00 08:19-09:04/45 16:27
4	05:28 07:05-07:52/47 20:29	05:53 06:57-08:09/72 20:08	06:23 19:23	06:53 07:14-07:37/23 18:33	06:27 06:56-07:33/37 16:48	07:01 08:19-09:05/46 16:27
5	05:28 07:05-07:53/48 20:29	05:54 06:57-08:09/72 20:07	06:24 19:22	06:54 07:14-07:36/22 18:32	06:28 06:57-07:33/36 16:47	07:02 08:19-09:05/46 16:27
6	05:29 07:04-07:53/49 20:29	05:55 06:57-08:09/72 20:05	06:25 19:20	06:55 07:15-07:36/21 18:30	06:30 06:57-07:32/35 16:46	07:03 08:19-09:06/47 16:27
7	05:30 07:04-07:55/51 20:28	05:56 06:57-08:09/72 20:04	06:26 19:18	06:56 07:16-07:38/22 18:28	06:31 06:59-07:32/33 16:45	07:04 08:19-09:07/48 16:27
8	05:30 07:05-07:56/51 20:28	05:57 06:56-08:08/72 20:03	06:27 19:17	06:57 07:17-07:39/22 18:27	06:32 07:00-07:31/31 16:44	07:05 08:19-09:08/49 16:27
9	05:31 07:04-07:56/52 20:28	05:58 06:56-08:08/72 20:02	06:28 19:15	06:58 07:18-07:40/22 18:25	06:33 07:00-07:29/29 16:43	07:06 08:20-09:08/48 16:27
10	05:32 07:04-07:56/52 20:27	05:59 06:56-08:08/72 20:00	06:29 19:14	06:59 07:19-07:40/21 18:23	06:34 07:02-07:28/26 16:42	07:07 08:19-09:08/49 16:27
11	05:32 07:04-07:57/53 20:27	06:00 06:56-08:08/72 19:59	06:30 19:12	07:00 07:20-07:40/20 18:22	06:35 07:04-07:27/23 16:41	07:08 08:20-09:09/49 16:27
12	05:33 07:03-07:57/54 20:27	06:01 06:57-08:08/71 19:58	06:31 19:10	07:01 07:22-07:41/19 18:20	06:37 07:05-07:25/20 16:40	07:08 08:20-09:10/50 16:27
13	05:34 07:03-07:58/55 20:26	06:02 06:57-08:07/70 19:56	06:32 19:08	07:02 07:23-07:41/18 18:19	06:38 07:08-07:23/15 16:39	07:09 08:21-09:10/49 16:27
14	05:34 07:03-07:59/56 20:26	06:03 06:57-08:07/70 19:55	06:33 19:07	07:03 07:24-07:40/16 18:17	06:39 07:12-07:21/9 16:38	07:10 08:21-09:11/50 16:27
15	05:35 07:03-08:00/57 20:25	06:04 06:57-08:07/70 19:54	06:34 19:05	07:05 07:25-07:40/15 18:16	06:40 16:37	07:11 08:21-09:11/50 16:28
16	05:36 07:02-08:00/58 20:24	06:05 06:58-08:06/68 19:52	06:35 19:03	07:06 07:26-07:39/13 18:14	06:41 16:36	07:11 08:22-09:12/50 16:28
17	05:37 07:02-08:01/59 20:24	06:06 06:58-08:06/68 19:51	06:36 19:02	07:07 07:27-07:37/10 18:13	06:43 16:36	07:12 08:22-09:13/51 16:28
18	05:37 07:01-08:02/61 20:23	06:07 06:58-08:05/67 19:50	06:37 19:00	07:08 07:28-07:36/8 18:11	06:44 08:33-08:39/6 16:35	07:13 08:22-09:13/51 16:28
19	05:38 07:01-08:02/61 20:22	06:08 06:59-08:04/65 19:48	06:38 18:58	07:09 07:30-07:34/4 18:10	06:45 08:28-08:44/16 16:34	07:13 08:23-09:14/51 16:29
20	05:39 07:00-08:02/62 20:22	06:09 06:59-08:04/65 19:47	06:39 18:57	07:10 08:01-08:31/30 18:08	06:46 08:26-08:47/21 16:33	07:14 08:23-09:14/51 16:29
21	05:40 07:00-08:03/63 20:21	06:09 07:00-08:03/63 19:45	06:40 18:55	07:11 08:00-08:31/31 18:07	06:47 08:24-08:49/25 16:33	07:15 08:24-09:15/51 16:30
22	05:41 07:00-08:04/64 20:20	06:10 07:01-08:02/61 19:44	06:41 18:53	07:12 07:58-08:32/34 18:05	06:48 08:23-08:50/27 16:32	07:15 08:24-09:15/51 16:30
23	05:42 07:00-08:04/64 20:19	06:11 07:01-08:01/60 19:42	06:42 18:52	07:13 07:57-08:33/36 18:04	06:49 08:22-08:53/31 16:31	07:16 08:25-09:16/51 16:31
24	05:43 07:00-08:05/65 20:19	06:12 07:02-07:59/57 19:41	06:43 18:50	07:14 07:56-08:33/37 18:02	06:51 08:21-08:54/33 16:31	07:16 08:25-09:16/51 16:31
25	05:43 06:59-08:06/67 20:18	06:13 07:02-07:57/55 19:39	06:44 18:48	06:16 06:56-07:34/38 17:01	06:52 08:20-08:55/35 16:30	07:16 08:25-09:16/51 16:32
26	05:44 06:59-08:06/67 20:17	06:14 07:03-07:56/53 19:38	06:45 18:47	06:17 06:56-07:34/38 17:00	06:53 08:20-08:57/37 16:30	07:17 08:26-09:17/51 16:32
27	05:45 06:58-08:06/68 20:16	06:15 07:05-07:54/49 19:36	06:46 18:45	06:18 06:55-07:34/39 16:58	06:54 08:19-08:58/39 16:29	07:17 08:27-09:17/50 16:33
28	05:46 06:58-08:06/68 20:15	06:16 07:06-07:52/46 19:35	06:47 18:43	06:19 06:55-07:34/39 16:57	06:55 08:19-08:59/40 16:29	07:18 08:27-09:17/50 16:34
29	05:47 06:58-08:07/69 20:14	06:17 07:08-07:50/42 19:33	06:48 18:41	06:20 06:54-07:34/40 16:56	06:56 08:19-09:00/41 16:29	07:18 08:28-09:18/50 16:34
30	05:48 06:58-08:07/69 20:13	06:18 07:10-07:47/37 19:31	06:49 18:40	06:21 06:55-07:35/40 16:54	06:57 08:19-09:01/42 16:28	07:18 08:29-09:18/49 16:35
31	05:49 06:58-08:08/70 20:12	06:19 07:12-07:44/32 19:30		06:22 06:55-07:35/40 16:53		07:18 08:29-09:19/50 16:36
Ore potenziali eliofania	458	427	375	346	299	289
Somma minuti d'ombra	1797	1957	83	859	803	1522

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flikering real case WTG: 11 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (11)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività
N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:19 16:37	07:05 17:11	06:30 17:45	06:40 19:18	05:54 19:50	06:14-07:31/77 20:19
2	07:19 16:38	07:05 17:12	06:28 17:46	06:38 19:19	05:53 19:51	06:14-07:32/78 20:20
3	07:19 16:39	07:04 17:13	06:27 17:47	06:36 19:20	05:52 19:52	06:14-07:32/78 20:20
4	07:19 16:40	07:03 17:15	06:25 17:48	06:35 19:21	05:50 19:53	06:14-07:32/78 20:21
5	07:19 16:40	07:02 17:16	06:24 17:49	06:33 19:22	06:52-06:54/2 19:54	06:14-07:32/78 20:22
6	07:19 16:41	07:00 17:17	06:22 17:50	06:31 19:23	06:50-06:55/5 19:55	06:14-07:32/78 20:22
7	07:19 16:42	06:59 17:18	06:21 17:51	06:30 19:24	06:48-06:56/8 19:56	06:13-07:31/78 20:23
8	07:19 16:43	06:58 17:20	06:19 17:52	06:28 19:26	06:47-06:57/10 19:57	06:13-07:31/78 20:24
9	07:19 16:44	06:57 17:21	06:17 17:54	06:27 19:27	06:45-06:57/12 19:58	06:13-07:31/78 20:24
10	07:18 16:45	06:56 17:22	06:16 17:55	06:25 19:28	06:44-06:58/14 19:59	06:14-07:30/76 20:25
11	07:18 16:46	06:55 17:23	06:14 17:56	06:23 19:29	06:42-06:57/15 20:00	06:14-07:30/76 20:25
12	07:18 16:47	06:54 17:24	06:13 17:57	06:22 19:30	06:40-06:56/16 20:01	06:14-07:30/76 20:26
13	07:18 16:48	06:52 17:26	06:11 17:58	06:20 19:31	06:39-06:56/17 20:02	06:15-07:30/75 20:26
14	07:17 16:50	06:51 17:27	06:09 17:59	06:19 19:32	06:37-06:55/18 19:32	06:15-07:29/74 20:03
15	07:17 16:51	06:50 17:28	06:08 18:00	06:17 19:33	06:36-07:18/42 20:04	06:16-07:29/73 20:27
16	07:17 16:52	06:48 17:29	07:08-07:15/7 18:01	06:06 19:34	06:34-07:20/46 20:05	06:16-07:28/72 20:27
17	07:16 16:53	06:47 17:31	07:06-07:15/9 18:02	06:04 19:35	06:14 20:06	06:33-07:23/50 20:28
18	07:16 16:54	06:46 17:32	07:05-07:17/12 18:03	06:03 19:36	06:13 20:07	06:31-06:43/12 20:28
19	07:15 16:55	06:44 17:33	07:04-07:17/13 18:04	06:01 19:37	06:11 20:08	06:30-07:26/56 20:28
20	07:15 16:56	06:43 17:34	07:02-07:17/15 18:06	06:00 19:38	06:10 20:09	06:28-07:26/58 20:29
21	07:14 16:58	06:42 17:35	07:01-07:18/17 18:07	05:58 19:39	06:08 20:10	06:27-07:28/61 20:29
22	07:13 16:59	06:40 17:36	06:59-07:17/18 18:08	05:56 19:40	06:07 20:10	06:26-07:28/62 20:29
23	07:13 17:00	06:39 17:38	06:58-07:17/19 18:09	05:55 19:41	06:05 20:11	06:24-07:29/65 20:29
24	07:12 17:01	06:37 17:39	06:57-07:17/20 18:10	05:53 19:42	06:04 20:12	06:23-07:30/67 20:30
25	07:11 17:02	06:36 17:40	06:57-07:15/18 18:11	05:51 19:43	06:02 20:13	06:21-07:30/69 20:30
26	07:11 17:04	06:34 17:41	06:59-07:14/15 18:12	05:50 19:44	06:01 20:14	06:20-07:31/71 20:30
27	07:10 17:05	06:33 17:42	07:00-07:12/12 18:13	05:48 19:45	06:00 20:15	06:19-07:31/72 20:30
28	07:09 17:06	06:31 17:43	07:03-07:08/5 18:14	05:46 19:46	05:58 20:16	06:17-07:31/74 20:30
29	07:08 17:07			06:45 19:15	05:57 19:48	06:16-07:32/76 20:16
30	07:07 17:08			06:43 19:16	05:56 19:49	06:16-07:32/76 20:17
31	07:06 17:10			06:41 19:17		06:41-07:22/41 20:18
Ore potenziali eliofania	298	298	369	398	448	451
Somma minuti d'ombra	0	184	0	1129	2059	730

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flikering real caseWTG: 11 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (11)
Assunzioni sui calcoli d'ombra

Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]
Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

N	NNE	ENE	E	ESE	SSE	S	SSO	OSO	O	ONO	NNO	Somma
1.229	573	283	164	231	782	961	432	328	544	685	1.236	7.447

3,0m/s

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:26 06:55-07:20/25 20:30	05:50 06:25-07:41/76 20:11	06:20 06:41-06:56/15 19:28	06:50 18:38	06:24 16:52	06:58 16:28
2	05:27 06:54-07:20/26 20:30	05:51 06:24-07:41/77 20:10	06:21 06:42-06:56/14 19:27	06:51 18:36	06:25 16:51	06:59 16:28
3	05:27 06:54-07:21/27 20:29	05:52 06:24-07:41/77 20:09	06:22 06:43-06:55/12 19:25	06:52 18:35	06:26 16:49	07:00 16:27
4	05:28 06:53-07:22/29 20:29	05:53 06:24-07:41/77 20:08	06:23 06:44-06:54/10 19:23	06:53 18:33	06:27 16:48	07:01 16:27
5	05:28 06:53-07:23/30 20:29	05:54 06:24-07:42/78 20:07	06:24 06:45-06:53/8 19:22	06:54 18:32	06:28 16:47	07:02 16:27
6	05:29 06:52-07:23/31 20:29	05:55 06:24-07:42/78 20:05	06:25 06:46-06:52/6 19:20	06:55 18:30	06:30 16:46	07:03 16:27
7	05:30 06:52-07:25/33 20:28	05:56 06:23-07:42/79 20:04	06:26 06:47-06:49/2 19:18	06:56 18:28	06:31 16:45	07:04 16:27
8	05:30 06:52-07:26/34 20:28	05:57 06:22-07:41/79 20:03	06:27 19:17	06:57 18:27	06:32 16:44	07:05 16:27
9	05:31 06:51-07:26/35 20:28	05:58 06:22-07:41/79 20:02	06:28 19:15	06:58 18:25	06:33 16:43	07:06 16:27
10	05:31 06:51-07:27/36 20:27	05:59 06:23-07:40/77 20:00	06:29 19:14	06:59 18:23	06:34 16:42	07:07 16:27
11	05:32 06:51-07:28/37 20:27	06:00 06:23-07:40/77 19:59	06:30 19:12	07:00 18:22	06:35 16:41	07:08 16:27
12	05:33 06:49-07:29/40 20:27	06:01 06:23-07:40/77 19:58	06:31 19:10	07:01 18:20	06:37 16:40	07:08 16:27
13	05:34 06:49-07:30/41 20:26	06:02 06:23-07:40/77 19:56	06:32 19:08	07:02 18:19	06:38 16:39	07:09 16:27
14	05:34 06:49-07:31/42 20:26	06:03 06:24-07:39/75 19:55	06:33 19:07	07:03 07:34-07:43/9 18:17	06:39 16:38	07:10 16:27
15	05:35 06:49-07:32/43 20:25	06:04 06:25-07:39/74 19:54	06:34 19:05	07:05 07:32-07:45/13 18:16	06:40 16:37	07:11 16:27
16	05:36 06:47-07:32/45 20:24	06:05 06:26-07:38/72 19:52	06:35 19:03	07:06 07:30-07:46/16 18:14	06:41 16:36	07:11 16:28
17	05:37 06:47-07:33/46 20:24	06:06 06:27-07:37/70 19:51	06:36 19:02	07:07 07:28-07:47/19 18:13	06:43 16:36	07:12 16:28
18	05:37 06:47-07:34/47 20:23	06:07 06:28-07:37/69 19:50	06:37 19:00	07:08 07:28-07:47/19 18:11	06:44 16:35	07:13 16:28
19	05:38 06:38-07:35/57 20:22	06:08 06:29-07:36/67 19:48	06:38 18:58	07:09 07:29-07:47/18 18:10	06:45 16:34	07:13 16:29
20	05:39 06:35-07:34/59 20:22	06:08 06:30-07:35/65 19:47	06:39 18:57	07:10 07:31-07:48/17 18:08	06:46 16:33	07:14 16:29
21	05:40 06:33-07:35/62 20:21	06:09 06:31-07:34/63 19:45	06:40 18:55	07:11 07:32-07:48/16 18:07	06:47 16:33	07:15 16:30
22	05:41 06:32-07:36/64 20:20	06:10 06:32-07:32/60 19:44	06:41 18:53	07:12 07:33-07:48/15 18:05	06:48 16:32	07:15 16:30
23	05:42 06:31-07:37/66 20:19	06:11 06:33-07:31/58 19:42	06:42 18:52	07:13 07:34-07:47/13 18:04	06:49 16:31	07:16 16:31
24	05:43 06:30-07:38/68 20:19	06:12 06:34-06:47/13 19:41	06:43 18:50	07:14 07:35-07:46/11 18:02	06:51 16:31	07:16 16:31
25	05:43 06:29-07:38/69 20:18	06:13 06:35-06:46/11 19:39	06:44 18:48	06:16 06:37-06:46/9 17:01	06:52 16:30	07:16 16:32
26	05:44 06:29-07:39/70 20:17	06:14 06:35-07:24/49 19:38	06:45 18:47	06:17 06:38-06:44/6 17:00	06:53 16:30	07:17 16:32
27	05:45 06:27-07:38/71 20:16	06:15 06:36-07:22/46 19:36	06:46 18:45	06:18 06:39-06:42/3 16:58	06:54 16:29	07:17 16:33
28	05:46 06:26-07:39/73 20:15	06:16 06:37-07:19/42 19:35	06:47 18:43	06:19 16:57	06:55 16:29	07:18 16:34
29	05:47 06:26-07:39/73 20:14	06:17 06:38-06:56/18 19:33	06:48 18:41	06:20 16:56	06:56 16:29	07:18 16:34
30	05:48 06:25-07:40/75 20:13	06:18 06:39-06:56/17 19:31	06:49 18:40	06:21 16:54	06:57 16:28	07:18 16:35
31	05:49 06:25-07:40/75 20:12	06:19 06:40-06:56/16 19:30		06:22 16:53		07:18 16:36
Ore potenziali eliofania	458	427	375	346	299	289
Somma minuti d'ombra	1529	1987	67	184	0	0

Legenda della tabella:

Giorno del mese Alba (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra
Tramonto (hh:mm) Inizio ombreggiamento (hh:mm)-Fine ombreggiamento (hh:mm)/Minuti d'ombra

SHADOW - Calendario per WTG

Calcolo: flikering real caseWTG: 12 - Siemens Gamesa SG 6.0-170 6200 170.0 IOI hub: 165,0 m (TOT: 250,0 m) (12)
Assunzioni sui calcoli d'ombra Probabilità di eliofania (media ore giornaliere di insolazione) [AMENDOLA]

Gen Feb Mar Apr Mag Giu Lug Ago Set Ott Nov Dic
4,12 4,66 5,30 6,72 8,25 9,35 10,16 9,45 7,64 5,82 4,65 3,82

Tempo di operatività

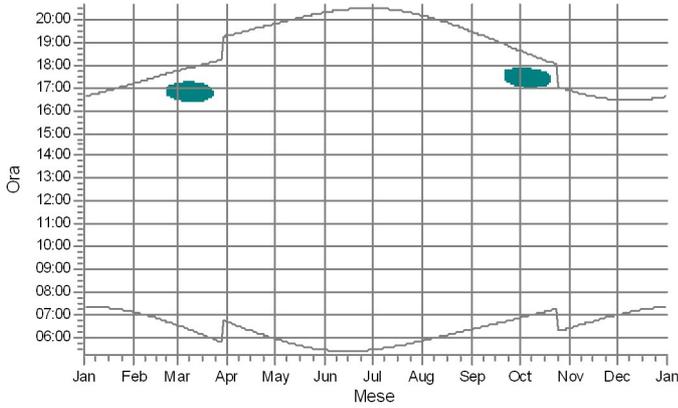
N NNE ENE E ESE SSE S SSO OSO O ONO NNO Somma
1.229 573 283 164 231 782 961 432 328 544 685 1.236 7.447
3,0m/s

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:19 08:06-08:17/11 16:37	07:05 06:30 17:11 17:45	06:40 05:54 19:18 19:50	05:26 05:26 20:19 20:19	05:26 05:26 20:30 20:30	05:26 05:49-05:56/7 20:30	05:50 06:20 20:11 19:28	06:50 06:24 18:38 16:52	06:50 06:24 18:38 16:52	06:24 06:58 16:28 16:28	06:58 06:24 16:52 16:28	06:58 06:24 16:52 16:28
2	07:19 08:08-08:16/8 16:38	07:05 06:28 17:12 17:46	06:38 05:53 19:19 19:51	05:25 05:25 20:20 20:20	05:25 05:25 20:30 20:30	05:27 05:49-05:55/6 20:30	05:51 06:21 20:10 19:27	06:51 06:25 18:36 16:51	06:51 06:25 18:36 16:51	06:25 06:59 16:28 16:28	06:59 06:25 16:28 16:28	06:59 06:25 16:28 16:28
3	07:19 08:10-08:14/4 16:39	07:04 06:27 17:13 17:47	06:36 05:52 19:20 19:52	05:25 05:25 20:20 20:20	05:25 05:25 20:30 20:30	05:27 05:50-05:56/6 20:29	05:52 06:22 20:09 19:25	06:52 06:26 18:35 16:49	06:52 06:26 18:35 16:49	06:26 07:00 16:27 16:27	06:50 06:26 16:27 16:27	06:50 06:26 16:27 16:27
4	07:19 16:39	07:03 06:25 17:15 17:48	06:35 05:50 19:21 19:53	05:24 05:49 20:21 20:21	05:24 05:46-05:47/1 20:29	05:28 05:50-05:55/5 20:29	05:53 06:23 20:08 19:23	06:53 06:27 18:33 16:48	06:53 06:27 18:33 16:48	06:27 07:01 16:27 16:27	06:53 06:27 16:27 16:27	06:53 06:27 16:27 16:27
5	07:19 16:40	07:01 06:24 17:16 17:49	06:33 05:49 19:22 19:54	05:24 05:48 20:22 20:22	05:24 05:46-05:48/2 20:29	05:28 05:51-05:55/4 20:29	05:54 06:24 20:06 19:22	06:54 06:28 18:32 16:47	06:54 06:28 18:32 16:47	06:28 07:02 16:27 16:27	06:54 06:28 16:27 16:27	06:54 06:28 16:27 16:27
6	07:19 16:41	07:00 06:22 17:17 17:50	06:31 05:48 19:23 19:55	05:23 05:45-05:48/3 20:22	05:23 05:45-05:48/3 20:29	05:29 05:51-05:55/4 20:29	05:55 06:25 20:05 19:20	06:55 06:29 18:30 16:46	06:55 06:29 18:30 16:46	06:30 07:04 16:27 16:27	06:55 06:29 16:27 16:27	06:55 06:29 16:27 16:27
7	07:19 16:42	06:59 06:21 17:18 17:51	06:30 05:47 19:24 19:56	05:23 05:45-05:49/4 20:23	05:23 05:45-05:49/4 20:28	05:30 05:52-05:55/3 20:28	05:56 06:26 20:04 19:18	06:56 06:31 18:28 16:45	06:56 06:31 18:28 16:45	06:31 07:04 16:27 16:27	06:56 06:31 16:27 16:27	06:56 06:31 16:27 16:27
8	07:19 16:43	06:58 06:19 17:19 17:52	06:28 05:46 19:26 19:57	05:23 05:45-05:50/5 20:24	05:23 05:45-05:50/5 20:28	05:30 05:53-05:55/2 20:28	05:57 06:27 20:03 19:17	06:57 06:32 18:27 16:44	06:57 06:32 18:27 16:44	06:32 07:05 16:27 16:27	06:57 06:32 16:27 16:27	06:57 06:32 16:27 16:27
9	07:19 16:44	06:57 06:17 17:21 17:54	06:27 05:44 19:27 19:58	05:23 05:45-05:51/6 20:24	05:23 05:45-05:51/6 20:28	05:31 05:53-05:55/2 20:28	05:58 06:28 20:02 19:15	06:58 06:33 18:25 16:43	06:58 06:33 18:25 16:43	06:33 07:07 16:27 16:27	06:58 06:33 16:27 16:27	06:58 06:33 16:27 16:27
10	07:18 16:45	06:56 06:16 17:22 17:55	06:25 05:43 19:28 19:59	05:23 05:45-05:51/6 20:25	05:23 05:45-05:51/6 20:27	05:31 05:53-05:55/2 20:27	05:59 06:29 20:00 19:13	06:59 06:34 18:23 16:42	06:59 06:34 18:23 16:42	06:34 07:07 16:27 16:27	06:59 06:34 16:27 16:27	06:59 06:34 16:27 16:27
11	07:18 16:46	06:55 06:14 17:23 17:56	06:23 05:42 19:29 20:00	05:23 05:45-05:52/7 20:25	05:23 05:45-05:52/7 20:27	05:32 05:54-05:57/1 20:27	06:00 06:30 19:59 19:12	06:30 07:00 18:22 16:41	06:30 07:00 18:22 16:41	06:35 07:08 16:27 16:27	06:55 06:35 16:27 16:27	06:55 06:35 16:27 16:27
12	07:18 16:47	06:54 06:13 17:24 17:57	06:22 05:41 19:30 20:01	05:23 05:45-05:52/7 20:26	05:23 05:45-05:52/7 20:27	05:33 05:55-05:58/2 20:27	06:01 06:31 19:58 19:10	06:31 07:01 18:20 16:40	06:31 07:01 18:20 16:40	06:37 07:08 16:27 16:27	06:54 06:37 16:27 16:27	06:54 06:37 16:27 16:27
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22	07:13 16:59	06:40 05:56 17:36 18:08	06:07 05:32 19:40 20:10	05:23 05:46-05:55/9 20:29	05:23 05:46-05:55/9 20:20	05:41 05:63-05:66/10 20:20	06:10 06:41 19:44 18:53	06:41 07:12 18:05 16:32	06:41 07:12 18:05 16:32	06:48 07:15 16:30 16:30	06:48 07:15 16:30 16:30	06:48 07:15 16:30 16:30
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Ore potenziali eliofania	298	298	369	398	448	451	458	427	375	346	299	289
Somma minuti d'ombra	23	0										

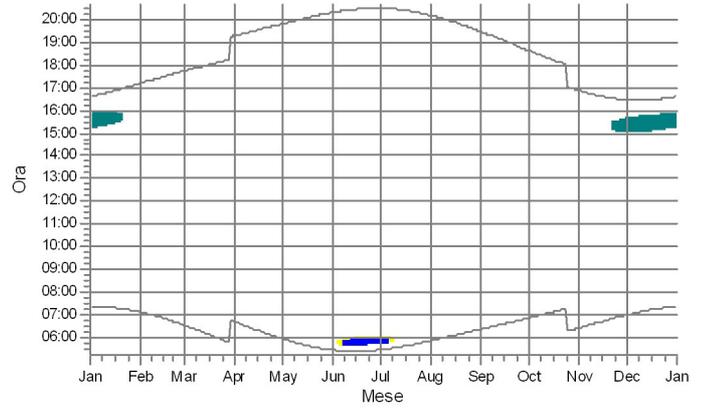
SHADOW - Calendario per WTG, grafico

Calcolo: flickering real case

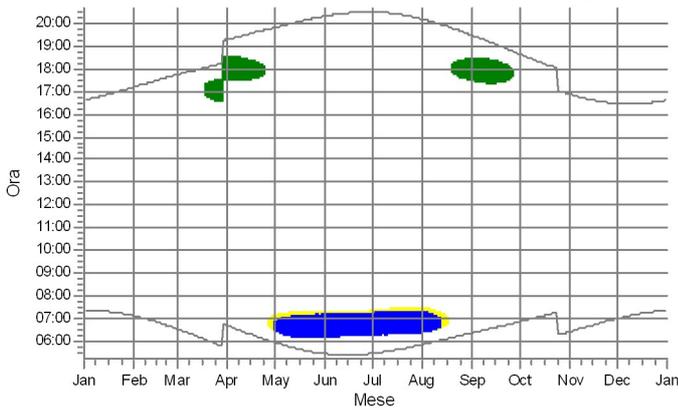
01: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



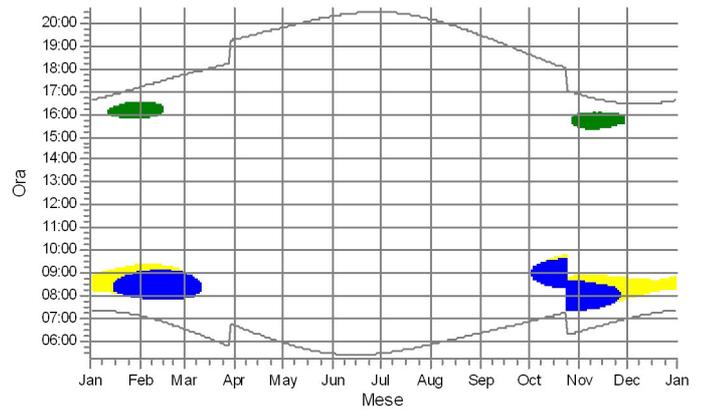
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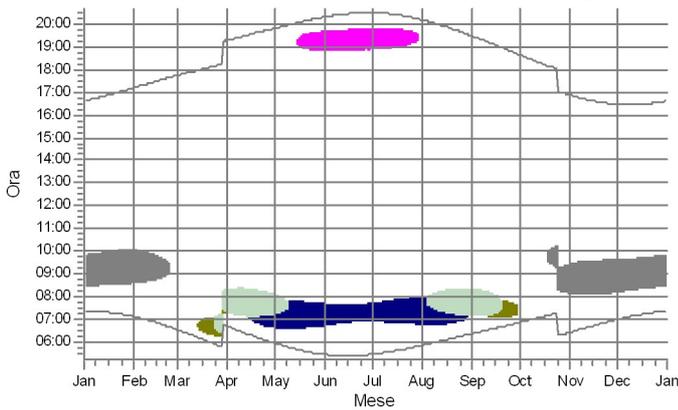
03: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



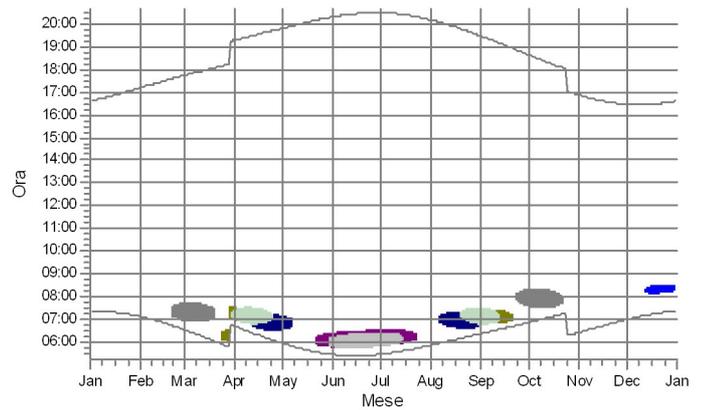
04: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



05: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



06: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



Recettori d'ombra

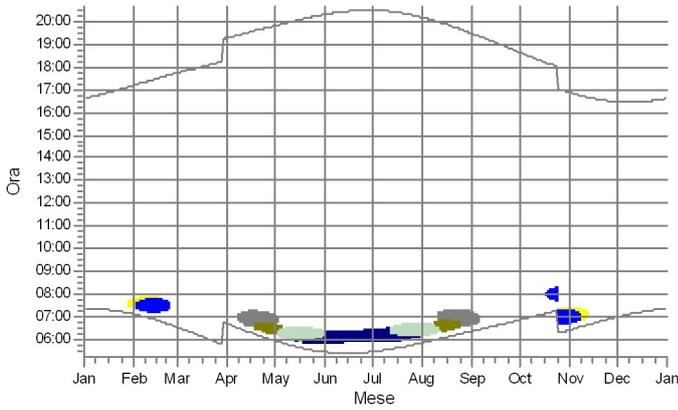
- R01: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (1)
- R02: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (2)
- R03: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (3)
- R04: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (4)
- R05: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (5)
- R06: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (8)

- R07: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (10)
- R10: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (11)
- R11: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (12)
- R12: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (13)
- R14: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (9)

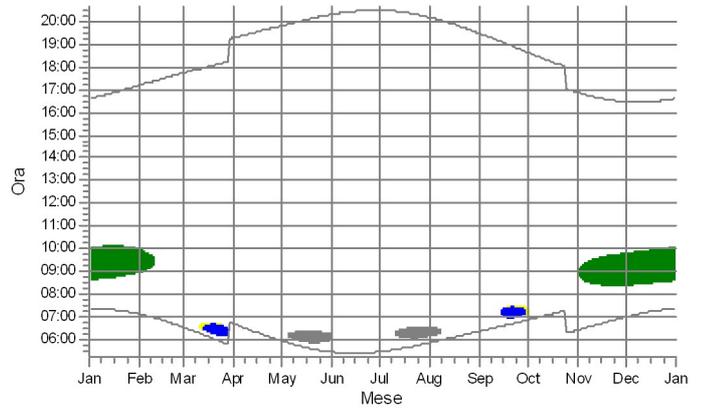
SHADOW - Calendario per WTG, grafico

Calcolo: flikering real case

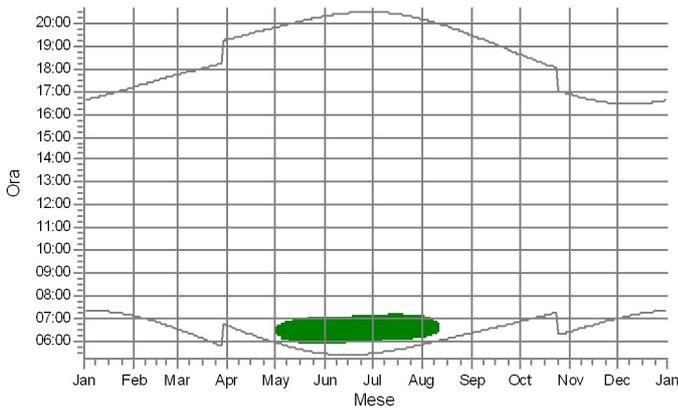
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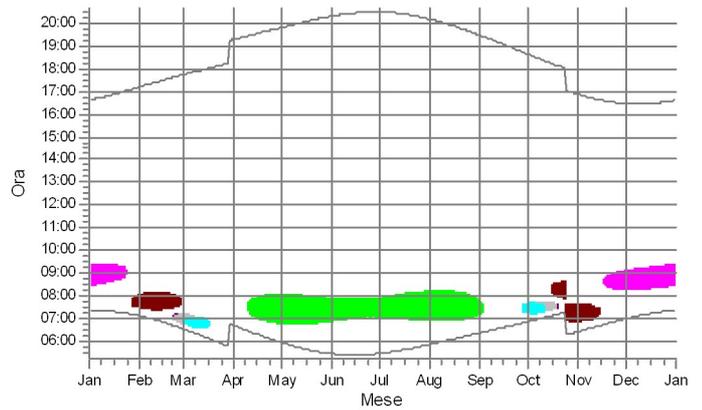
08: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



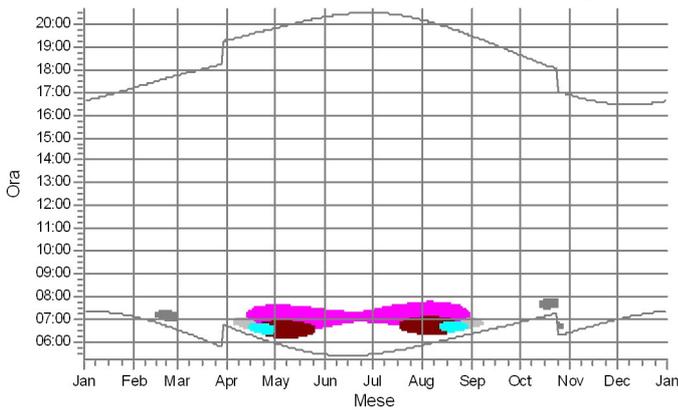
09: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



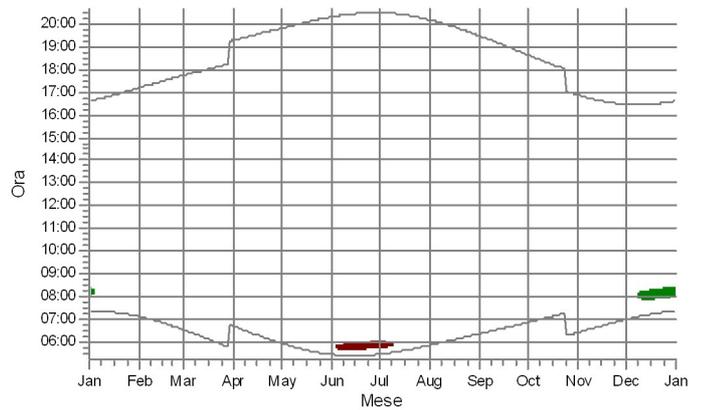
10: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



11: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



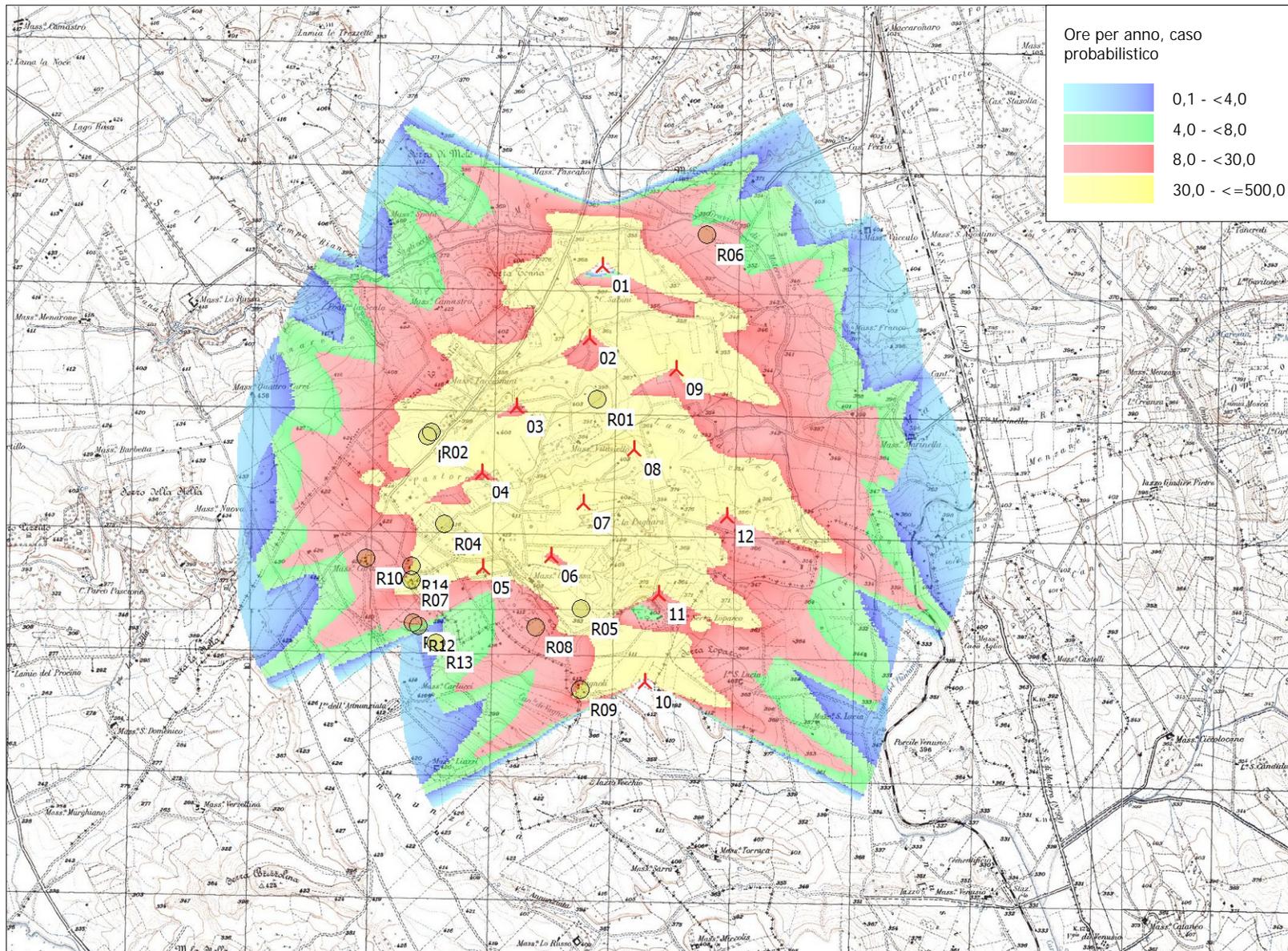
12: Siemens Gamesa SG 6.0-170 6200 170.0 !O! hub: 165,0 m (TOT: 250,0



Recettori d'ombra

- R01: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (1)
- R02: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (2)
- R03: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (3)
- R04: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (4)
- R05: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (5)
- R07: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (10)
- R08: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (6)

- R09: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (7)
- R10: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (11)
- R11: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (12)
- R12: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (13)
- R13: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (14)
- R14: Shadow Receptor: 2,0 × 2,0 Azimuth: 0,0° Slope: 90,0° (9)



SHADOW -
Mappa
Calcolo:
flickering real case

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11/05/2022 16:31/3.4.415

Mappa: IGM maps 1:25000 , Scala di stampa 1:50.000, Centro mappa UTM (north)-WGS84 Zone: 33 Est: 629.180 Nord: 4.513.170

▲ Nuova WTG ● Recettore d'ombra

Fonte altimetria:: Height Contours: CONTOURLINE_ONLINEDATA_0.wpo (1)