



think energy

WPD TRIOLO S.r.l.

PROGETTO PER LA REALIZZAZIONE DI UN IMPIANTO PER LA PRODUZIONE DI ENERGIA MEDIANTE LO SFRUTTAMENTO DEL VENTO NEL TERRITORIO COMUNALE DI SAN SEVERO (FG)

PROGETTO DEFINITIVO

prima emissione: febbraio 2020

REV. DATA DESCRIZIONE:

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SIA.ES. STUDI SPECIALISTICI  
ES.6 ANALISI DELL'EVOLUZIONE DELL'OMBRA INDOTTA  
DAGLI AEROGENERATORI. SHADOW FLICKERING



## PREMESSA

La presente relazione tecnica specialistica descrive l'evoluzione giornaliera delle ombre generate dalle pale eoliche facenti parte del progetto di un impianto eolico per la produzione di energia elettrica.

La proposta progettuale è finalizzata alla realizzazione di un impianto eolico per la produzione di energia elettrica da fonte rinnovabile eolica, costituito da 29 aerogeneratori, ciascuno di potenza nominale pari a 6,0 MW per una potenza complessiva di 174 MW, da realizzarsi nella Provincia di Foggia, nel territorio comunale di San Severo, in cui insistono gli aerogeneratori, le opere di connessione e la Sottostazione Elettrica.

## DESCRIZIONE DELL' INTERVENTO

L'impianto di produzione sarà costituito da 29 aerogeneratori, ognuno della potenza di 6,0 MW ciascuno per una potenza complessiva di 174 MW. Le turbine in progetto saranno montate su torri tubolari di altezza (base-mozzo) pari a 165 m, con rotori a 3 pale ed aventi diametro massimo di 170 m. La colorazione della torre tubolare e delle pale del rotore sarà bianca e non riflettente.

Il posizionamento degli aerogeneratori nell'area di progetto è tale da evitare il cosiddetto effetto selva. La distanza minima tra aerogeneratori su una stessa fila è superiore a 3d (510 m), mentre la distanza tra aerogeneratori su file diverse è superiore a 5d (850 m). Si riportano di seguito le coordinate degli aerogeneratori di progetto nel sistema di riferimento UTM WGS84 Fuso 33:

WTG	Coordinate UTM WGS84 33N	
	Est	Nord
1	532 143.15	4 610 506.05
2	531 904.54	4 607 705.17
3	533 066.64	4 608 755.75
4	534 900.96	4 610 086.70
5	532 026.36	4 606 000.19
6	532 347.77	4 606 668.16
7	533 101.20	4 607 172.71
8	534 603.92	4 608 654.78
9	531 907.53	4 604 673.79
10	532 936.03	4 605 420.15
11	535 663.06	4 607 254.22
12	539 816.96	4 607 250.04
13	540 240.91	4 607 666.90
14	540 668.28	4 607 968.63
15	540 640.70	4 606 227.63

WTG	Coordinate UTM WGS84 33N	
	Est	Nord
16	540 815.77	4 606 741.84
17	541 278.83	4 607 024.20
18	542 171.68	4 607 731.73
19	541 505.72	4 606 087.10
20	542 238.78	4 606 593.33
21	542 679.06	4 606 940.28
22	541 726.58	4 608 627.91
23	536 614.61	4 611 810.47
24	537 212.18	4 611 205.89
25	537 959.84	4 610 693.16
26	538 797.73	4 611 648.39
27	538 182.53	4 609 756.19
28	538 659.99	4 610 165.40
29	539 637.83	4 610 898.44

## 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.

## 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 200 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. I risultati ottenuti sono riportati in allegato.

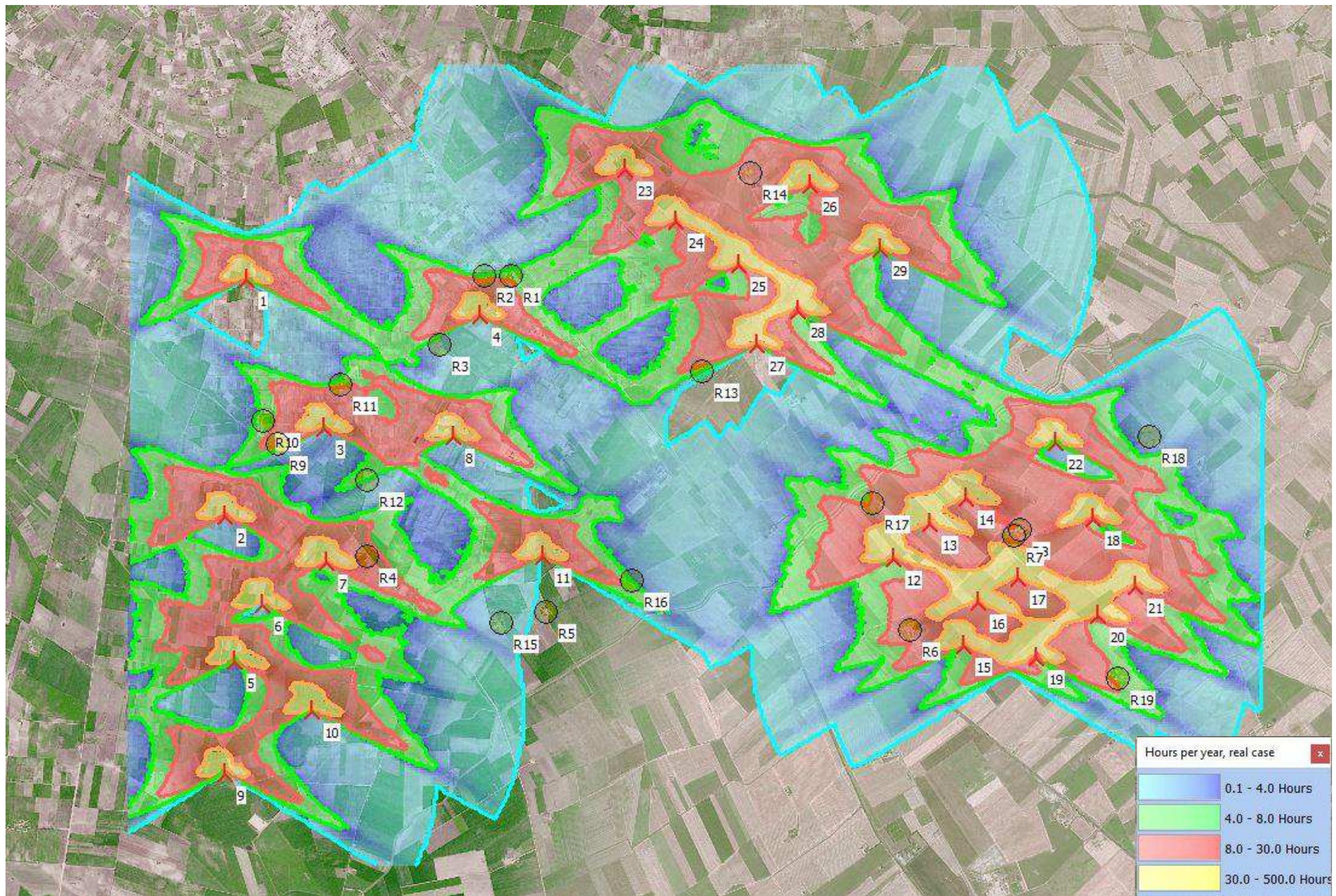
Nel calcolo sono state assunte le seguenti ipotesi ampiamente conservative (caso peggiore – *worst case*):

- 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.

Di seguito si allega il report di calcolo eseguito mediante il software WindPRO nonché del relativo 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.

## 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, distanze oltre le quali il fenomeno di ombreggiamento è praticamente modesto e accettabile. 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.



## SHADOW - Risultato principale

**Calcolo:** Shadow Flickering Analysis

### 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 elofanìa (media ore giornaliera di insolazione) [AMENDOLA]

Gen	Feb	Mar	Apr	Mag	Giu	Lug	Ago	Sot	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:

SanPaolo\_NNW

Tempo di operatività

N	NNE	ENE	E	ESE	SSE	S	SSO	OSO	O	ONO	NNO	Somma
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

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: Project Wizard Elevation Data Grid (SRTM: Shuttle Data) Ostacoli usati:

Eye height for map: 1.5 m

Risoluzione del grigliato: 1.0 m

Ombra topografica inclusa nel calcolo

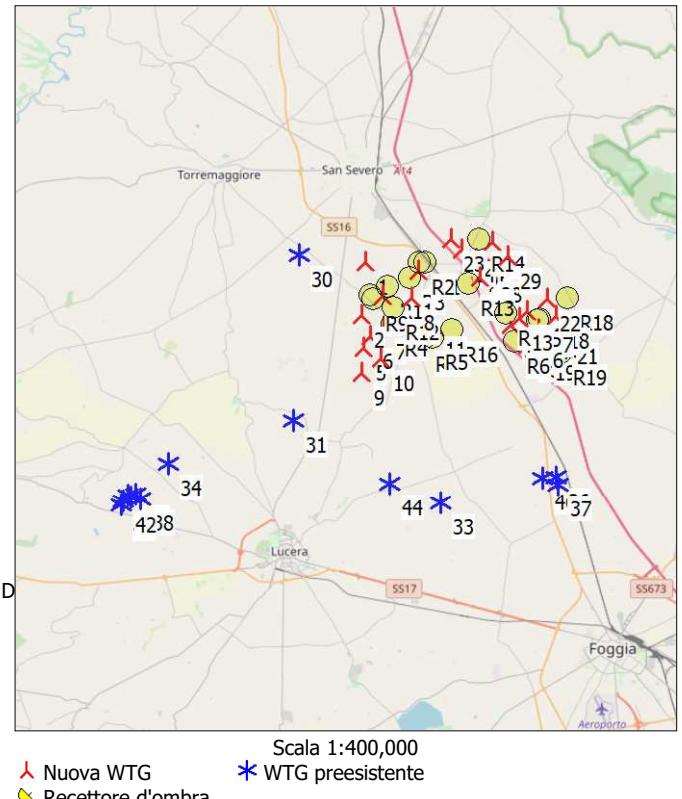
All coordinates are in

UTM (north)-WGS84 Zona: 33

### WTG

Easting	Northing	Z	Dati/Descrizione	Tipo di WTG		Tipologia	Potenza nominale	Diametro rotore	Altezza mozzo	Distanza di calcolo	giri/min
				Valida	Prod.						
1	532,143	4,610,506	79.4 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000	[m]	[kW]	[m]	[m]	[m]	[giri/min]
2	531,905	4,607,705	59.0 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
3	533,067	4,608,756	74.0 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
4	534,901	4,610,087	68.2 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
5	532,026	4,606,000	60.0 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
6	532,348	4,606,668	59.7 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
7	533,101	4,607,173	58.0 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
8	534,604	4,608,655	58.5 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
9	531,908	4,604,674	59.8 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
10	532,936	4,605,420	56.7 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
11	535,663	4,607,254	52.0 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
12	539,817	4,607,250	42.2 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
13	540,241	4,607,667	41.0 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
14	540,668	4,607,969	39.4 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
15	540,641	4,606,228	42.3 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
16	540,816	4,606,742	40.8 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
17	541,279	4,607,024	41.0 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
18	542,172	4,607,732	37.3 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
19	541,506	4,606,087	40.1 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
20	542,239	4,606,593	39.0 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
21	542,679	4,606,940	38.9 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
22	541,727	4,608,628	35.4 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
23	536,615	4,611,810	46.9 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
24	537,212	4,611,206	45.4 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
25	537,960	4,610,693	44.4 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
26	538,798	4,611,648	41.7 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
27	538,183	4,609,756	44.5 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
28	538,660	4,610,165	43.0 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0
29	539,638	4,610,898	37.0 Siemens Gamesa... No	Siemens Gamesa	SG 6.0-170-6,000		6,000	170.0	165.0	2,500	1,120.0

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## SHADOW - Risultato principale

### Calcolo: Shadow Flickering Analysis

...continua dalla pagina precedente

Easting	Northing	Z	Dati/Descrizione	Valida	Prod.	Tipo di WTG	Tipi di ombra					
							Valida	Prod.	Tipo generatore	Potenza nominale	Diametro rotore	
									[kW]	[m]	[m]	
										[m]	[giri/min]	
30	528,613	4,610,893	72.4	PowerWind 56	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
31	528,332	4,602,171	148.0	PowerWind 56	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
32	533,439	4,598,863	80.4	PowerWind 56	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
33	536,153	4,597,889	75.8	PowerWind 56	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
34	521,761	4,599,844	161.4	PowerWind 56	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
35	541,558	4,599,238	51.0	REpower 57/100...	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
36	542,272	4,599,260	52.0	REpower 57/100...	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
37	542,374	4,598,881	51.3	REpower 57/100...	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
38	520,255	4,597,975	248.3	R80680	No	REpower	MM 82-2,000	2,000	82.0	80.0	1,446	17.3
39	519,958	4,598,268	251.9	REpower 57/100...	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
40	519,757	4,598,121	261.0	REpower 57/100...	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
41	519,555	4,598,221	275.8	REpower 57/100...	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
42	519,354	4,597,911	268.0	REpower 57/100...	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
43	519,230	4,597,717	284.4	REpower 57/100...	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
44	533,439	4,598,863	80.4	PowerWind 56	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
45	536,153	4,597,889	75.8	PowerWind 56	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
46	541,558	4,599,238	51.0	REpower 57/100...	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
47	542,272	4,599,260	52.0	REpower 57/100...	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9
48	542,374	4,598,881	51.3	REpower 57/100...	No	REpower	57/1000-1,050/250	1,050	57.0	55.0	2,500	22.9

### Recettore d'ombra-I missione dati

n. Easting Northing Z Ampiezza Altezza Elevation Inclinazione della finestra Modo orientazione Eye height for ZVI

n.	Easting	Northing	Z	Ampiezza	Altezza	Elevation a.g.l.	Inclinazione della finestra	Modo orientazione	Eye height for ZVI		
										[m]	
R1	535,274	4,610,554	66.0	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R10	532,354	4,608,829	73.4	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R11	533,270	4,609,264	68.1	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R12	533,588	4,608,143	68.2	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R13	537,541	4,609,444	49.0	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R14	538,096	4,611,779	46.9	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R15	535,175	4,606,463	55.8	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R16	536,719	4,606,980	52.0	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R17	539,572	4,607,897	43.0	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R18	542,829	4,608,701	39.0	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R19	542,484	4,605,853	39.7	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R2	534,964	4,610,555	68.0	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R3	534,440	4,609,748	73.6	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R4	533,587	4,607,248	59.2	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R5	535,704	4,606,596	53.0	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R6	540,012	4,606,403	46.0	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R7	541,246	4,607,527	42.0	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R8	541,313	4,607,593	43.9	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		
R9	532,523	4,608,570	68.8	1.0	1.0	1.5	90.0	"Modalità serra"	2.5		

### Risultati dei calcoli

#### Recettore d'ombra

#### Ombra, caso peggiore

n.	Ore d'ombra per anno	Giorni con ombra	Massima durata dell'ombra per giorno	Ombra, valore atteso	
				per anno	[ore/anno]
R1	102:31	130	1:09	6:43	
R10	51:38	72	0:58	5:19	
R11	87:09	163	1:04	7:18	
R12	41:43	116	0:36	3:48	
R13	37:02	57	0:48	3:27	
R14	106:07	148	1:08	9:29	
R15	10:49	58	0:18	1:08	
R16	32:18	68	0:37	3:59	
R17	86:18	185	0:54	8:50	
R18	25:02	70	0:35	2:14	

continua alla pagina successiva...

## SHADOW - Risultato principale

### Calcolo: Shadow Flickering Analysis

...continua dalla pagina precedente

		<b>Ombra, caso peggiore</b>		<b>Ombra, valore atteso</b>	
n.	Ore d'ombra per anno	Giorni con ombra per anno	Massima durata dell'ombra per giorno	Ore d'ombra per anno	Ore d'ombra per anno
R19	51:32	129	0:40	6:29	
R2	60:10	83	1:11	5:07	
R3	29:00	98	0:25	2:03	
R4	141:55	207	1:31	12:27	
R5	0:00	0	0:00	0:00	
R6	138:21	174	1:14	13:40	
R7	127:05	196	1:17	12:48	
R8	90:07	163	1:13	8:57	
R9	97:43	118	1:10	9:13	

Ombreggiamento totale sui recettori d'ombra causato da ciascuna WTG

n.	Nome	Caso peggiore [ore/anno]	Atteso [ore/anno]
1	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (180)	5:02	0:39
2	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (181)	18:47	1:54
3	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (182)	217:54	19:04
4	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (183)	171:37	12:39
5	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (184)	12:12	0:42
6	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (185)	16:24	1:08
7	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (186)	104:26	9:47
8	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (187)	52:13	5:02
9	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (188)	0:00	0:00
10	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (189)	3:54	0:15
11	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (190)	41:43	4:54
12	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (191)	15:40	1:12
13	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (192)	90:12	9:39
14	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (193)	26:44	2:32
15	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (194)	64:27	6:41
16	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (195)	66:34	6:45
17	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (196)	60:06	5:39
18	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (197)	56:17	5:27
19	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (198)	48:09	5:36
20	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (199)	15:40	1:32
21	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (200)	21:24	2:11
22	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (201)	26:20	2:27
23	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (202)	11:53	1:11
24	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (203)	43:54	3:06
25	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (204)	0:00	0:00
26	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (205)	47:31	4:51
27	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (206)	37:02	3:27
28	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (207)	0:00	0:00
29	Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (208)	11:44	1:12
30	PowerWind 56	0:00	0:00
31	PowerWind 56	0:00	0:00
32	PowerWind 56	0:00	0:00
33	PowerWind 56	0:00	0:00
34	PowerWind 56	0:00	0:00
35	REpower 57/1000 1050-250 57.0 !-! hub: 55.0 m (TOT: 83.5 m) (6)	0:00	0:00
36	REpower 57/1000 1050-250 57.0 !-! hub: 55.0 m (TOT: 83.5 m) (7)	0:00	0:00
37	REpower 57/1000 1050-250 57.0 !-! hub: 55.0 m (TOT: 83.5 m) (8)	0:00	0:00
38	R80680	0:00	0:00
39	REpower 57/1000 1050-250 57.0 !-! hub: 55.0 m (TOT: 83.5 m) (10)	0:00	0:00
40	REpower 57/1000 1050-250 57.0 !-! hub: 55.0 m (TOT: 83.5 m) (12)	0:00	0:00
41	REpower 57/1000 1050-250 57.0 !-! hub: 55.0 m (TOT: 83.5 m) (13)	0:00	0:00
42	REpower 57/1000 1050-250 57.0 !-! hub: 55.0 m (TOT: 83.5 m) (14)	0:00	0:00
43	REpower 57/1000 1050-250 57.0 !-! hub: 55.0 m (TOT: 83.5 m) (16)	0:00	0:00
44	PowerWind 56	0:00	0:00
45	PowerWind 56	0:00	0:00
46	REpower 57/1000 1050-250 57.0 !-! hub: 55.0 m (TOT: 83.5 m) (71)	0:00	0:00
47	REpower 57/1000 1050-250 57.0 !-! hub: 55.0 m (TOT: 83.5 m) (72)	0:00	0:00
48	REpower 57/1000 1050-250 57.0 !-! hub: 55.0 m (TOT: 83.5 m) (73)	0:00	0:00

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

**SHADOW - Calendario**

**Calcolo:** Shadow Flickering Analysis **Recettore d'ombra:** R1 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (76) **Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giu	Lug	Ago	Sep	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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>  Gennaio</b>	<b>  Febbraio</b>	<b>  Marzo</b>	<b>  Aprile</b>	<b>  Maggio</b>	<b>  Giugno</b>
1   07:26	14:11 (4)   07:12		14:34 (4)   06:35	06:44		05:57
16:39	68	15:19 (4)   17:13	45	15:19 (4)   17:48	19:23	19:56
2   07:26		14:11 (4)   07:11		14:35 (4)   06:34	06:42	05:56
16:39	68	15:19 (4)   17:15	43	15:18 (4)   17:49	19:24	19:57
3   07:26		14:12 (4)   07:10		14:38 (4)   06:32	06:40	05:54
16:40	68	15:20 (4)   17:16	38	15:16 (4)   17:51	19:25	19:58
4   07:26		14:12 (4)   07:09		14:40 (4)   06:30	06:38	05:53
16:41	68	15:20 (4)   17:17	35	15:15 (4)   17:52	19:26	19:59
5   07:26		14:13 (4)   07:08		14:43 (4)   06:29	06:37	05:52
16:42	68	15:21 (4)   17:18	30	15:13 (4)   17:53	19:28	20:00
6   07:26		14:12 (4)   07:07		14:46 (4)   06:27	06:35	05:50
16:43	68	15:20 (4)   17:20	25	15:11 (4)   17:54	19:29	20:01
7   07:26		14:13 (4)   07:06		14:49 (4)   06:26	06:33	05:49
16:44	68	15:21 (4)   17:21	17	15:06 (4)   17:55	19:30	20:02
8   07:26		14:14 (4)   07:04		14:50 (4)   06:24	06:32	05:48
16:45	67	15:21 (4)   17:22		15:07 (4)   17:56	19:31	20:03
9   07:26		14:14 (4)   07:03		14:52 (4)   06:22	06:30	05:47
16:46	68	15:22 (4)   17:24		15:10 (4)   17:58	19:32	20:04
10   07:25		14:14 (4)   07:02		14:54 (4)   06:21	06:29	05:46
16:47	68	15:22 (4)   17:25		15:08 (4)   17:59	19:33	20:05
11   07:25		14:15 (4)   07:01		14:56 (4)   06:19	06:27	05:45
16:48	67	15:22 (4)   17:26		15:13 (4)   18:00	19:34	20:07
12   07:25		14:16 (4)   06:59		14:59 (4)   06:17	06:25	05:43
16:49	67	15:23 (4)   17:27		15:15 (4)   18:01	19:35	20:08
13   07:25		14:16 (4)   06:58		14:57 (4)   06:16	06:24	05:42
16:50	67	15:23 (4)   17:29		15:17 (4)   18:02	19:36	20:09
14   07:24		14:17 (4)   06:57		14:59 (4)   06:14	06:22	05:41
16:51	66	15:23 (4)   17:30		15:18 (4)   18:03	19:37	20:10
15   07:24		14:17 (4)   06:56		14:59 (4)   06:12	06:21	05:40
16:53	66	15:23 (4)   17:31		15:19 (4)   18:04	19:38	20:11
16   07:23		14:18 (4)   06:54		14:59 (4)   06:11	06:19	05:39
16:54	66	15:24 (4)   17:32		15:20 (4)   18:06	19:40	20:12
17   07:23		14:18 (4)   06:53		14:59 (4)   06:09	06:17	05:38
16:55	65	15:23 (4)   17:34		15:21 (4)   18:07	19:41	20:13
18   07:23		14:19 (4)   06:52		14:59 (4)   06:07	06:16	05:37
16:56	65	15:24 (4)   17:35		15:22 (4)   18:08	19:42	20:14
19   07:22		14:20 (4)   06:50		14:59 (4)   06:06	06:14	05:36
16:57	64	15:24 (4)   17:36		15:23 (4)   18:09	19:43	20:15
20   07:21		14:21 (4)   06:49		14:59 (4)   06:04	06:13	05:36
16:58	63	15:24 (4)   17:37		15:24 (4)   18:10	19:44	20:16
21   07:21		14:22 (4)   06:47		14:59 (4)   06:02	06:11	05:35
17:00	62	15:24 (4)   17:39		15:25 (4)   18:11	19:45	20:17
22   07:20		14:22 (4)   06:46		14:59 (4)   06:01	06:10	05:34
17:01	62	15:24 (4)   17:40		15:26 (4)   18:12	19:46	20:17
23   07:19		14:23 (4)   06:44		14:59 (4)   05:59	06:08	05:33
17:02	60	15:23 (4)   17:41		15:27 (4)   18:13	19:47	20:18
24   07:19		14:24 (4)   06:43		14:59 (4)   05:57	06:07	05:32
17:03	60	15:24 (4)   17:42		15:28 (4)   18:14	19:48	20:19
25   07:18		14:25 (4)   06:41		14:59 (4)   05:55	06:05	05:32
17:05	58	15:23 (4)   17:43		15:29 (4)   18:15	19:49	20:20
26   07:17		14:26 (4)   06:40		14:59 (4)   05:54	06:04	05:31
17:06	57	15:23 (4)   17:45		15:30 (4)   18:17	19:50	20:21
27   07:16		14:27 (4)   06:38		14:59 (4)   05:52	06:02	05:30
17:07	55	15:22 (4)   17:46		15:31 (4)   18:18	19:52	20:22
28   07:16		14:28 (4)   06:37		14:59 (4)   05:50	06:01	05:29
17:08	54	15:22 (4)   17:47		15:32 (4)   18:19	19:53	2   06:22 (24)   20:23
29   07:15		14:29 (4)		14:59 (4)   06:49	06:00	06:19 (24)   05:29
17:10	52	15:21 (4)		15:33 (4)   19:20	19:54	5   06:24 (24)   20:24
30   07:14		14:31 (4)		14:59 (4)   06:47	05:58	06:18 (24)   05:28
17:11	49	15:20 (4)		15:34 (4)   19:21	19:55	8   06:26 (24)   20:24
31   07:13		14:32 (4)		14:59 (4)   06:45		05:28
17:12	48	15:20 (4)		15:35 (4)   19:22		20:25
Ore potenziali eliofania	296		296	369	399	450
Totalle, caso peggiore	1952		233		15	190
Probabilità di eliofania	0.43		0.44		0.50	0.57
Tempo di operatività rid.	0.30		0.30		0.30	0.30
Dir. del vento rid.	0.48		0.48		0.49	0.49
Totalle ridotto	0.06		0.06		0.08	0.08
Totalle effettivo	123		15		1	16

**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:** Shadow Flickering Analysis **Recettore d'ombra:** R1 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (76) **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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre	
1   05:28	05:52	06:20 (24)   06:24	06:55	06:30		07:05	13:57 (4)
20:37	20:18	13 06:33 (24)   19:34	18:42	16:55		16:30	67 15:04 (4)
2   05:28	05:53	06:19 (24)   06:25	06:56	06:31		07:06	13:57 (4)
20:37	20:17	15 06:34 (24)   19:32	18:41	16:53		16:29	68 15:05 (4)
3   05:29	05:54	06:18 (24)   06:26	06:57	06:32		07:07	13:57 (4)
20:37	20:15	17 06:35 (24)   19:30	18:39	16:52		16:29	68 15:05 (4)
4   05:29	05:55	06:17 (24)   06:27	06:58	06:33	14:18 (4)   07:08	13:58 (4)	
20:37	20:14	18 06:35 (24)   19:29	18:37	16:51	19 14:37 (4)   16:29	68 15:06 (4)	
5   05:30	05:56	06:18 (24)   06:28	06:59	06:35	14:15 (4)   07:09	13:58 (4)	
20:36	20:13	18 06:36 (24)   19:27	18:36	16:50	26 14:41 (4)   16:29	68 15:06 (4)	
6   05:30	05:57	06:19 (24)   06:29	07:00	06:36	14:12 (4)   07:10	13:58 (4)	
20:36	20:12	17 06:36 (24)   19:25	18:34	16:49	31 14:43 (4)   16:29	68 15:06 (4)	
7   05:31	05:58	06:20 (24)   06:30	07:01	06:37	14:09 (4)   07:11	13:59 (4)	
20:36	20:11	16 06:36 (24)   19:24	18:32	16:48	36 14:45 (4)   16:28	68 15:07 (4)	
8   05:32	05:59	06:21 (24)   06:31	07:02	06:38	14:08 (4)   07:12	13:59 (4)	
20:36	20:09	15 06:36 (24)   19:22	18:31	16:46	39 14:47 (4)   16:28	68 15:07 (4)	
9   05:32	06:00	06:22 (24)   06:32	07:03	06:39	14:06 (4)   07:13	14:00 (4)	
20:35	20:08	14 06:36 (24)   19:20	18:29	16:45	43 14:49 (4)   16:28	68 15:08 (4)	
10   05:33	06:01	06:23 (24)   06:33	07:04	06:41	14:04 (4)   07:14	14:00 (4)	
20:35	20:07	12 06:35 (24)   19:19	18:27	16:44	46 14:50 (4)   16:28	68 15:08 (4)	
11   05:34	06:02	06:24 (24)   06:34	07:05	06:42	14:04 (4)   07:15	14:01 (4)	
20:34	20:05	11 06:35 (24)   19:17	18:26	16:43	48 14:52 (4)   16:28	68 15:09 (4)	
12   05:34	06:03	06:25 (24)   06:35	07:06	06:43	14:02 (4)   07:16	14:01 (4)	
20:34	20:04	9 06:34 (24)   19:15	18:24	16:42	50 14:52 (4)   16:29	69 15:10 (4)	
13   05:35	06:04	06:26 (24)   06:36	07:08	06:44	14:01 (4)   07:16	14:01 (4)	
20:33	20:03	7 06:33 (24)   19:13	18:22	16:41	52 14:53 (4)   16:29	68 15:09 (4)	
14   05:36	06:05	06:27 (24)   06:37	07:09	06:45	14:00 (4)   07:17	14:02 (4)	
20:33	20:01	4 06:31 (24)   19:12	18:21	16:40	54 14:54 (4)   16:29	68 15:10 (4)	
15   05:37	06:06	06:28 (24)   06:38	07:10	06:47	14:00 (4)   07:18	14:02 (4)	
20:32	20:00	1 06:29 (24)   19:10	18:19	16:39	55 14:55 (4)   16:29	69 15:11 (4)	
16   05:38	06:07		06:39	07:11	06:48	13:59 (4)   07:19	14:03 (4)
20:32	19:58		19:08	18:18	16:39	57 14:56 (4)   16:29	68 15:11 (4)
17   05:38	06:08		06:40	07:12	06:49	13:58 (4)   07:19	14:03 (4)
20:31	19:57		19:06	18:16	16:38	58 14:56 (4)   16:30	68 15:11 (4)
18   05:39	06:09		06:41	07:13	06:50	13:58 (4)   07:20	14:04 (4)
20:30	19:56		19:05	18:15	16:37	60 14:58 (4)   16:30	68 15:12 (4)
19   05:40	06:10		06:42	07:14	06:52	13:58 (4)   07:21	14:04 (4)
20:30	19:54		19:03	18:13	16:36	60 14:58 (4)   16:30	68 15:12 (4)
20   05:41	06:11		06:43	07:15	06:53	13:57 (4)   07:21	14:05 (4)
20:29	19:53		19:01	18:11	16:35	62 14:59 (4)   16:31	68 15:13 (4)
21   05:42	06:12		06:44	07:17	06:54	13:57 (4)   07:22	14:06 (4)
20:28	19:51		19:00	18:10	16:35	62 14:59 (4)   16:31	68 15:14 (4)
22   05:43	06:13		06:45	07:18	06:55	13:57 (4)   07:22	14:06 (4)
20:27	19:50		18:58	18:08	16:34	63 15:00 (4)   16:32	68 15:14 (4)
23   05:44	06:14		06:46	07:19	06:56	13:57 (4)   07:23	14:06 (4)
20:26	19:48		18:56	18:07	16:33	64 15:01 (4)   16:32	68 15:14 (4)
24   05:44	06:16		06:47	07:20	06:57	13:56 (4)   07:23	14:07 (4)
20:26	19:47		18:54	18:06	16:33	65 15:01 (4)   16:33	68 15:15 (4)
25   05:45	06:17		06:48	06:21	06:59	13:56 (4)   07:24	14:07 (4)
20:25	19:45		18:53	17:04	16:32	65 15:01 (4)   16:33	68 15:15 (4)
26   05:46	06:18		06:49	06:22	07:00	13:56 (4)   07:24	14:08 (4)
20:24	19:43		18:51	17:03	16:32	66 15:02 (4)   16:34	68 15:16 (4)
27   05:47	06:19		06:50	06:24	07:01	13:57 (4)   07:25	14:08 (4)
20:23	19:42		18:49	17:01	16:31	66 15:03 (4)   16:35	68 15:16 (4)
28   05:48	06:20		06:51	06:25	07:02	13:57 (4)   07:25	14:08 (4)
20:22	19:40		18:47	17:00	16:31	66 15:03 (4)   16:35	68 15:16 (4)
29   05:49	06:21		06:52	06:26	07:03	13:57 (4)   07:25	14:09 (4)
20:21	19:39		18:46	16:59	16:30	67 15:04 (4)   16:36	68 15:17 (4)
30   05:50	06:24 (24)   06:22		06:54	06:27	07:04	13:57 (4)   07:25	14:09 (4)
20:20	7 06:31 (24)   19:37		18:44	16:57	16:30	67 15:04 (4)   16:37	68 15:17 (4)
31   05:51	06:22 (24)   06:23			06:28		07:26	14:10 (4)
20:19	11 06:33 (24)   19:35			16:56		16:37	68 15:18 (4)
Ore potenziali eliofania	461	429		375	345	297	286
Totale, caso peggiore	18		187			1447	2109
Probabilità di eliofania	0.68		0.68			0.47	0.41
Tempo di operatività rid.	0.30		0.30			0.30	0.30
Dir. del vento rid.	0.49		0.49			0.48	0.48
Totale ridotto	0.10		0.10			0.07	0.06
Totale effettivo	2		19			99	128

### 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:** Shadow Flickering Analysis **Recettore:** R10 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (85)  
**Assunzioni sui calcoli d'ombra**

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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Martedì	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1   07:26   07:12   06:35   06:44   07:30 (3)   05:57   05:28   05:52   06:24   07:33 (3)   06:55   06:30   07:05												
16:39   17:14   17:48   19:23   08:23 (3)   19:56   20:26   20:37   19:34   08:12 (3)   18:42   16:55   16:30												
2   07:26   07:11   06:34   06:42   07:31 (3)   05:56   05:27   05:53   06:25   07:31 (3)   06:56   06:31   07:06												
16:40   17:15   17:50   19:24   08:23 (3)   19:57   20:27   20:37   19:32   08:13 (3)   18:41   16:54   16:30												
3   07:26   07:10   06:32   06:40   07:30 (3)   05:54   05:27   05:54   06:26   07:30 (3)   06:57   06:32   07:07												
16:40   17:16   17:51   19:25   08:22 (3)   19:58   20:28   20:37   19:31   08:14 (3)   18:39   16:52   16:29												
4   07:26   07:09   06:31   06:39   07:30 (3)   05:53   05:26   05:55   06:27   07:29 (3)   06:58   06:33   07:08												
16:41   17:17   17:52   19:27   08:21 (3)   19:59   20:28   20:37   19:29   08:14 (3)   18:37   16:51   16:29												
5   07:26   07:08   06:29   06:37   07:31 (3)   05:52   05:26   05:56   06:28   07:28 (3)   06:59   06:35   07:09												
16:42   17:19   17:53   19:28   08:20 (3)   20:00   20:29   20:36   19:27   08:15 (3)   18:36   16:50   16:29												
6   07:26   07:07   06:27   06:35   07:31 (3)   05:51   05:26   05:57   06:29   07:27 (3)   07:00   06:36   07:10												
16:43   17:20   17:54   19:29   08:19 (3)   20:01   20:30   20:36   19:25   08:15 (3)   18:34   16:49   16:29												
7   07:26   07:06   06:26   06:34   07:31 (3)   05:49   05:25   05:58   06:30   07:26 (3)   07:01   06:37   07:11												
16:44   17:21   17:55   19:30   08:18 (3)   20:02   20:30   20:36   19:24   08:16 (3)   18:32   16:48   16:29												
8   07:26   07:04   06:24   06:32   07:32 (3)   05:48   05:25   05:59   06:31   07:25 (3)   07:02   06:38   07:12												
16:45   17:22   17:57   19:31   08:17 (3)   20:03   20:31   20:36   19:22   08:16 (3)   18:31   16:47   16:29												
9   07:26   07:03   06:23   06:30   07:32 (3)   05:47   05:25   05:53   06:32   07:24 (3)   07:03   06:40   07:13												
16:46   17:24   17:58   19:32   08:16 (3)   20:05   20:32   20:35   19:20   08:16 (3)   18:29   16:46   16:29												
10   07:26   07:02   06:21   06:29   07:32 (3)   05:46   05:25   05:57   06:33   07:24 (3)   07:04   06:41   07:14												
16:47   17:25   17:59   19:33   08:14 (3)   20:06   20:32   20:35   19:19   08:16 (3)   18:27   16:44   16:29												
11   07:25   07:01   06:19   06:27   07:34 (3)   05:45   05:24   05:58   06:34   07:23 (3)   07:05   06:42   07:15												
16:48   17:26   18:00   19:34   08:13 (3)   20:07   20:33   20:34   19:17   08:16 (3)   18:26   16:43   16:29												
12   07:25   07:00   06:18   06:25   07:34 (3)   05:44   05:24   05:55   06:35   07:23 (3)   07:07   06:43   07:16												
16:49   17:28   18:01   19:35   08:11 (3)   20:08   20:33   20:34   19:15   08:16 (3)   18:24   16:42   16:29												
13   07:25   06:58   06:16   06:35 (8)   06:24   07:36 (3)   05:43   05:24   06:36   07:22 (3)   07:08   06:44   07:17												
16:51   17:29   18:02   06:36 (8)   19:36   08:09 (3)   20:09   20:34   19:14   08:15 (3)   18:23   16:42   16:29												
14   07:24   06:57   06:14   06:33 (8)   06:22   07:37 (3)   05:42   05:24   06:37   07:22 (3)   07:09   06:46   07:17												
16:52   17:30   18:03   06:35   07:08 (3)   19:37   20:10   20:34   19:12   08:15 (3)   18:21   16:41   16:29												
15   07:24   06:56   06:13   06:31 (8)   06:21   07:39 (3)   05:40   05:24   06:38   07:22 (3)   07:10   06:47   07:18												
16:53   17:31   18:05   07:27   07:12 (3)   19:39   20:11   20:35   19:10   08:15 (3)   18:19   16:40   16:29												
16   07:24   06:54   06:11   06:30 (8)   06:19   07:42 (3)   05:40   05:24   06:39   07:22 (3)   07:11   06:48   07:19												
16:54   17:33   18:06   07:37   07:16 (3)   19:40   19:08   20:12   19:08   08:14 (3)   18:18   16:39   16:29												
17   07:23   06:53   06:09   06:28 (8)   06:18   07:46 (3)   05:39   05:24   06:40   07:22 (3)   07:12   06:49   07:20												
16:55   17:34   18:07   07:43   07:18 (3)   19:41   9   07:55 (3)   19:57   19:07   08:13 (3)   18:16   16:38   16:29												
18   07:23   06:52   06:07   06:26 (8)   06:16   07:58   05:38   05:24   06:41   07:22 (3)   07:13   06:50   07:20												
16:56   17:35   18:08   08:48   07:19 (3)   19:42   20:14   20:36   19:05   08:13 (3)   18:15   16:37   16:29												
19   07:22   06:50   06:06   06:25 (8)   06:14   07:59   05:37   05:24   06:42   07:23 (3)   07:14   06:52   07:21												
16:57   17:36   18:09   05:3   07:21 (3)   19:43   20:15   20:36   19:03   08:12 (3)   18:13   16:36   16:29												
20   07:21   06:49   06:04   06:23 (8)   06:13   07:56   05:36   05:24   06:43   07:14 (8)   07:16   06:53   07:21												
16:59   17:37   18:10   05:5   07:22 (3)   19:44   20:16   20:36   19:01   08:11 (3)   18:12   16:36   16:29												
21   07:21   06:47   06:02   06:22 (8)   06:11   07:55   05:35   05:25   06:44   07:10 (8)   07:17   06:54   07:22												
17:00   17:39   18:11   05:8   07:22 (3)   19:45   20:17   20:37   19:00   08:09 (3)   18:10   16:35   16:31												
22   07:20   06:46   06:01   06:23 (8)   06:10   07:54   05:34   05:25   06:45   07:08 (8)   07:18   06:55   07:22												
17:01   17:40   18:12   05:8   07:23 (3)   19:46   20:18   20:37   18:58   08:08 (3)   18:09   16:34   16:32												
23   07:20   06:44   05:59   06:26 (8)   06:08   07:53   05:33   05:25   06:46   07:07 (8)   07:19   06:56   07:23												
17:02   17:41   18:13   05:4   07:24 (3)   19:47   20:18   20:37   18:56   08:07 (3)   18:07   16:34   16:32												
24   07:19   06:43   05:57   06:35 (3)   06:07   07:53   05:33   05:25   06:47   07:08 (8)   07:20   06:58   07:23												
17:03   17:42   18:15   05:49   07:24 (3)   19:48   20:19   20:37   18:54   08:05 (3)   18:06   16:33   16:33												
25   07:18   06:41   05:56   06:34 (3)   06:05   07:52   05:32   05:26   06:48   07:09 (8)   06:21   06:59   07:24												
17:05   17:44   18:16   05:10   07:24 (3)   19:49   20:20   20:37   18:53   08:03 (3)   17:04   16:32   16:33												
26   07:17   06:40   05:54   06:34 (3)   06:04   07:51   05:31   05:26   06:49   07:48 (3)   06:49   07:00   07:24												
17:06   17:45   18:17   05:1   07:25 (3)   19:51   20:21   20:37   18:51   08:01 (3)   17:03   16:32   16:34												
27   07:17   06:38   05:52   06:33 (3)   06:03   07:50   05:30   05:26   06:49   07:44 (3)   06:50   07:11 (8)   06:24   07:01   07:25												
17:07   17:46   18:18   05:2   07:25 (3)   19:52   20:22   20:37   18:42   08:03 (3)   18:49   38   07:58 (3)   17:02   16:31   16:35												
28   07:16   06:37   05:50   06:32 (3)   06:01   07:50   05:30   05:27   06:50   07:40 (3)   06:52   07:12 (8)   06:25   07:02   07:25												
17:08   17:47   18:19   05:2   07:24 (3)   19:53   20:23   20:37   18:47   08:06 (3)   18:48   31   07:55 (3)   17:00   16:31   16:35												
29   07:15   06:49   06:04   07:31 (3)   06:00   07:59   05:27   05:49   06:21   07:38 (3)   06:53   07:13 (8)   06:26   07:03   07:25												
17:10   19:20   05:3   08:24 (3)   19:54   20:24   20:37   20:21   19:39   30   08:08 (3)   18:46   21   07:51 (3)   16:59   16:31   16:36												
30   07:14   06:47   06:04   07:31 (3)   05:58   05:29   05:27   05:50   06:22   07:36 (3)   06:54   07:14 (8)   06:27   07:04   07:25												
17:11   19:21   05:3   08:24 (3)   19:55   20:25   20:37   20:20   19:37   33   08:09 (3)   18:44   3   07:17 (8)   16:57   16:30   16:37												
31   07:13   06:45   06:04   07:31 (3)   05:28   05:51   06:23   05:28   06:23   07:34 (3)   06:29   06:29   07:26   07:26   07:26												
17:12   19:22   05:2   08:23 (3)   19:55   20:25   20:37   20:19   19:35   37   08:11 (3)   1   16:56   16:56   16:38												
Ore potenziali elofanìa   296   296												

**SHADOW - Calendario**

**Calcolo:** Shadow Flickering Analysis **Recettore: R11** - **Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (86)**  
**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  
437 192 40 16 67 346 208 192 120 99 425 524 2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	
1   07:26	13:08 (3)   07:12		07:32 (8)   06:35	06:44   05:57	05:28	05:49 (4)	
16:39	61	14:09 (3)   17:13	10	07:42 (8)   17:48	19:23   19:56	20:26	06:08 (4)
2   07:26	13:08 (3)   07:11		07:31 (8)   06:34	06:42   05:56	05:27	05:49 (4)	
16:40	61	14:09 (3)   17:15	14	07:45 (8)   17:50	19:24   19:57	20:27	06:09 (4)
3   07:26	13:09 (3)   07:10		07:30 (8)   06:32	06:40   05:54	05:27	05:48 (4)	
16:40	60	14:09 (3)   17:16	16	07:46 (8)   17:51	19:25   19:58	20:28	06:09 (4)
4   07:26	13:10 (3)   07:09		07:29 (8)   06:31	06:39   05:53	05:26	05:48 (4)	
16:41	59	14:09 (3)   17:17	19	07:48 (8)   17:52	19:27   19:59	20:28	06:09 (4)
5   07:26	13:11 (3)   07:08		07:28 (8)   06:29	06:37   05:52	05:26	05:48 (4)	
16:42	58	14:09 (3)   17:19	21	07:49 (8)   17:53	19:28   20:00	20:29	06:10 (4)
6   07:26	13:11 (3)   07:07		07:27 (8)   06:27	06:35   05:51	05:25	05:47 (4)	
16:43	57	14:08 (3)   17:20	23	07:50 (8)   17:54	19:29   20:01	20:30	06:09 (4)
7   07:26	13:13 (3)   07:06		07:26 (8)   06:26	06:34   05:49	05:25	05:47 (4)	
16:44	55	14:08 (3)   17:21	25	07:51 (8)   17:55	19:30   20:02	20:30	06:10 (4)
8   07:26	13:14 (3)   07:04		07:24 (8)   06:24	06:32   05:48	05:25	05:47 (4)	
16:45	54	14:08 (3)   17:22	27	07:51 (8)   17:57	19:31   20:03	20:31	06:10 (4)
9   07:26	13:15 (3)   07:03		07:24 (8)   06:22	06:30   05:47	05:25	05:48 (4)	
16:46	54	14:09 (3)   17:24	27	07:51 (8)   17:58	19:32   20:04	20:32	06:11 (4)
10   07:26	13:17 (3)   07:02		07:24 (8)   06:21	06:29   05:46	05:24	05:48 (4)	
16:47	52	14:09 (3)   17:25	28	07:52 (8)   17:59	19:33   20:06	20:32	06:11 (4)
11   07:25	13:17 (3)   07:01		07:25 (8)   06:19	06:27   05:45	05:24	05:48 (4)	
16:48	51	14:08 (3)   17:26	27	07:52 (8)   18:00	19:34   20:07	20:33	06:11 (4)
12   07:25	13:19 (3)   07:00		07:24 (8)   06:18	06:25   05:44	05:24	05:49 (4)	
16:49	49	14:08 (3)   17:27	27	07:51 (8)   18:01	19:35   20:08	20:33	06:12 (4)
13   07:25	13:20 (3)   06:58		07:25 (8)   06:16	06:24   05:43	05:24	05:48 (4)	
16:50	46	14:06 (3)   17:29	26	07:51 (8)   18:02	19:36   20:09	20:34	06:11 (4)
14   07:24	13:22 (3)   06:57		07:25 (8)   06:14	06:22   05:41	05:24	05:48 (4)	
16:52	44	14:06 (3)   17:30	26	07:51 (8)   18:03	19:37   20:10	20:34	06:11 (4)
15   07:24	13:24 (3)   06:56		07:25 (8)   06:12	06:21   05:40	05:24	05:48 (4)	
16:53	42	14:06 (3)   17:31	25	07:50 (8)   18:04	19:39   20:11	20:35	06:11 (4)
16   07:24	13:26 (3)   06:54		07:26 (8)   06:11	06:19   05:39	05:24	05:48 (4)	
16:54	38	14:04 (3)   17:32	24	07:50 (8)   18:06	19:40   20:12	20:35	06:12 (4)
17   07:23	13:28 (3)   06:53		07:27 (8)   06:09	06:17   05:38	05:24	05:50 (4)	
16:55	35	14:03 (3)   17:34	21	07:48 (8)   18:07	19:41   20:13	20:35	06:13 (4)
18   07:23	13:31 (3)   06:52		07:28 (8)   06:07	06:16   05:38	05:24	05:50 (4)	
16:56	31	14:02 (3)   17:35	19	07:47 (8)   18:08	19:42   20:14	20:36	06:13 (4)
19   07:22	13:33 (3)   06:50		07:31 (8)   06:06	06:14   05:37	05:24	05:50 (4)	
16:57	27	14:00 (3)   17:36	15	07:46 (8)   18:09	19:43   20:15	20:36	06:13 (4)
20   07:21	13:37 (3)   06:49		07:33 (8)   06:04	06:13   05:36	05:24	05:50 (4)	
16:59	21	13:58 (3)   17:37	9	07:42 (8)   18:10	19:44   20:16	20:36	06:13 (4)
21   07:21	13:43 (3)   06:47			06:02   06:11	05:35   05:24	05:50 (4)	
17:00	10	13:53 (3)   17:39		18:11   19:45	20:17   20:37	23   06:13 (4)	
22   07:20		06:46		06:01   06:10	05:34   05:55 (4)	05:25   05:50 (4)	
17:01		17:40		18:12   19:46	20:18   20:37	23   06:13 (4)	
23   07:20		06:44		05:59   06:08	05:33   05:54 (4)	05:25   05:51 (4)	
17:02		17:41		18:13   19:47	20:18   20:37	23   06:14 (4)	
24   07:19		06:43		05:57   06:07	05:32   05:54 (4)	05:25   05:51 (4)	
17:03		17:42		18:14   19:48	20:19   20:37	23   06:14 (4)	
25   07:18		06:41		05:56   06:05	05:32   05:53 (4)	05:25   05:51 (4)	
17:05		17:44		18:16   19:49	20:20   20:37	23   06:14 (4)	
26   07:17		06:40		05:54   06:04	05:31   05:52 (4)	05:26   05:51 (4)	
17:06		17:45		18:17   19:51	20:21   20:37	24   06:15 (4)	
27   07:16		06:38		05:52   06:03	05:30   05:52 (4)	05:26   05:51 (4)	
17:07		17:46		18:18   19:52	20:22   20:37	23   06:14 (4)	
28   07:16		06:37		05:50   06:01	05:30   05:51 (4)	05:27   05:51 (4)	
17:08		17:47		18:19   19:53	20:23   20:37	23   06:14 (4)	
29   07:15				06:49   06:00	05:29   05:51 (4)	05:27   05:52 (4)	
17:10				19:20   19:54	20:24   20:37	23   06:15 (4)	
30   07:14				06:47   05:58	05:29   05:50 (4)	05:27   05:52 (4)	
17:11				19:21   19:55	20:25   20:37	23   06:15 (4)	
31   07:13				06:45   05:28	05:50 (4)		
17:12				19:22   20:25	18   06:08 (4)	62	
Ore potenziali eliofania		296		369   399   450		454	
Totale, caso peggiore		965			123	679	
Probabilità di eliofania		0.43			0.57	0.62	
Tempo di operatività rid.		0.30			0.30	0.30	
Dir. del vento rid.		0.57			0.48	0.48	
Totale ridotto		0.08			0.08	0.09	
Totale effettivo		73			10	62	

**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:** Shadow Flickering Analysis **Recettore:** R11 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (86)  
**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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Luglio	Agosto	Settembre	Ottobre		Novembre		Dicembre	
1   05:28	05:52 (4)	05:52	06:24	06:55		06:30	06:54 (8)	07:05	13:00 (3)
20:37	24	06:16 (4)	20:18	19:34	18:42	16:55	27	07:21 (8)	16:30 50 13:50 (3)
2   05:28	05:52 (4)	05:53	06:25	06:56		06:31	06:54 (8)	07:06	12:59 (3)
20:37	23	06:15 (4)	20:17	19:32	18:41	16:54	27	07:21 (8)	16:30 52 13:51 (3)
3   05:29	05:53 (4)	05:54	06:26	06:57		06:32	06:54 (8)	07:07	12:58 (3)
20:37	23	06:16 (4)	20:15	19:30	18:39	16:52	26	07:20 (8)	16:29 54 13:52 (3)
4   05:29	05:52 (4)	05:55	06:27	06:58		06:33	06:55 (8)	07:08	12:58 (3)
20:37	24	06:16 (4)	20:14	19:29	18:37	16:51	25	07:20 (8)	16:29 54 13:52 (3)
5   05:30	05:53 (4)	05:56	06:28	06:59		06:35	06:57 (8)	07:09	12:58 (3)
20:36	23	06:16 (4)	20:13	19:27	18:36	16:50	23	07:20 (8)	16:29 55 13:53 (3)
6   05:31	05:53 (4)	05:57	06:29	07:00		06:36	06:58 (8)	07:10	12:57 (3)
20:36	23	06:16 (4)	20:12	19:25	18:34	16:49	21	07:19 (8)	16:29 57 13:54 (3)
7   05:31	05:54 (4)	05:58	06:30	07:01		06:37	06:59 (8)	07:11	12:57 (3)
20:36	22	06:16 (4)	20:11	19:24	18:32	16:48	18	07:17 (8)	16:29 58 13:55 (3)
8   05:32	05:55 (4)	05:59	06:31	07:02		06:38	07:01 (8)	07:12	12:57 (3)
20:36	22	06:17 (4)	20:09	19:22	18:31	16:47	16	07:17 (8)	16:29 59 13:56 (3)
9   05:32	05:55 (4)	06:00	06:32	07:03		06:39	07:02 (8)	07:13	12:57 (3)
20:35	21	06:16 (4)	20:08	19:20	18:29	16:45	13	07:15 (8)	16:29 60 13:57 (3)
10   05:33	05:56 (4)	06:01	06:33	07:04		06:41	07:03 (8)	07:14	12:58 (3)
20:35	20	06:16 (4)	20:07	19:19	18:27	16:44	10	07:13 (8)	16:29 60 13:58 (3)
11   05:34	05:57 (4)	06:02	06:34	07:05		06:42		07:15	12:58 (3)
20:34	20	06:17 (4)	20:05	19:17	18:26	16:43		16:29	61 13:59 (3)
12   05:35	05:57 (4)	06:03	06:35	07:07		06:43		07:16	12:58 (3)
20:34	19	06:16 (4)	20:04	19:15	18:24	16:42		16:29	61 13:59 (3)
13   05:35	05:58 (4)	06:04	06:36	07:08		06:44		07:17	12:58 (3)
20:33	18	06:16 (4)	20:03	19:13	18:22	16:41		16:29	62 14:00 (3)
14   05:36	05:59 (4)	06:05	06:37	07:09		06:46		07:17	12:58 (3)
20:33	17	06:16 (4)	20:01	19:12	18:21	16:41		16:29	62 14:00 (3)
15   05:37	06:00 (4)	06:06	06:38	07:10		06:47		07:18	12:58 (3)
20:32	16	06:16 (4)	20:00	19:10	18:19	16:40		16:29	63 14:01 (3)
16   05:38	06:00 (4)	06:07	06:39	07:11		06:48		07:19	12:59 (3)
20:32	15	06:15 (4)	19:59	19:08	18:18	16:39		16:29	63 14:02 (3)
17   05:39	06:01 (4)	06:08	06:40	07:12		06:49		07:19	12:59 (3)
20:31	13	06:14 (4)	19:57	19:07	18:16	16:38		16:30	63 14:02 (3)
18   05:39	06:02 (4)	06:09	06:41	07:13		06:50		07:20	12:59 (3)
20:30	12	06:14 (4)	19:56	19:05	18:15	16:37		16:30	64 14:03 (3)
19   05:40	06:03 (4)	06:10	06:42	07:14		06:52		07:21	13:00 (3)
20:30	10	06:13 (4)	19:54	19:03	18:13	16:36		16:30	64 14:04 (3)
20   05:41	06:04 (4)	06:12	06:43	07:16		06:53		07:21	13:00 (3)
20:29	8	06:12 (4)	19:53	19:01	18:12	16:36		16:31	64 14:04 (3)
21   05:42	06:05 (4)	06:13	06:44	07:17		06:54	13:18 (3)	07:22	13:01 (3)
20:28	5	06:10 (4)	19:51	19:00	18:10	16:35	10	13:28 (3)	16:31 64 14:05 (3)
22   05:43	06:14	06:45	07:18		08:02 (8)	06:55	13:14 (3)	07:22	13:01 (3)
20:27		19:50	18:58	18:09	12	08:14 (8)	16:34	20	13:34 (3) 16:32 64 14:05 (3)
23   05:44	06:15	06:46	07:19		08:00 (8)	06:56	13:10 (3)	07:23	13:02 (3)
20:26		19:48	18:56	18:07	16	08:16 (8)	16:34	27	13:37 (3) 16:32 64 14:06 (3)
24   05:45	06:16	06:47	07:20		07:58 (8)	06:57	13:08 (3)	07:23	13:02 (3)
20:26		19:47	18:54	18:06	19	08:17 (8)	16:33	31	13:39 (3) 16:33 64 14:06 (3)
25   05:46	06:17	06:48	06:21		06:57 (8)	06:59	13:06 (3)	07:24	13:02 (3)
20:25		19:45	18:53	17:04	22	07:19 (8)	16:32	35	13:41 (3) 16:33 64 14:06 (3)
26   05:46	06:18	06:49	06:23		06:56 (8)	07:00	13:04 (3)	07:24	13:03 (3)
20:24		19:43	18:51	17:03	24	07:20 (8)	16:32	38	13:42 (3) 16:34 64 14:07 (3)
27   05:47	06:19	06:50	06:24		06:55 (8)	07:01	13:03 (3)	07:25	13:04 (3)
20:23		19:42	18:49	17:01	25	07:20 (8)	16:31	42	13:45 (3) 16:35 63 14:07 (3)
28   05:48	06:20	06:51	06:25		06:54 (8)	07:02	13:02 (3)	07:25	13:04 (3)
20:22		19:40	18:48	17:00	26	07:20 (8)	16:31	44	13:46 (3) 16:35 63 14:07 (3)
29   05:49	06:21	06:53	06:26		06:54 (8)	07:03	13:01 (3)	07:25	13:05 (3)
20:21		19:39	18:46	16:59	27	07:21 (8)	16:31	46	13:47 (3) 16:36 62 14:07 (3)
30   05:50	06:22	06:54	06:27		06:54 (8)	07:04	13:00 (3)	07:25	13:05 (3)
20:20		19:37	18:44	16:57	27	07:21 (8)	16:30	49	13:49 (3) 16:37 62 14:07 (3)
31   05:51	06:23		06:29		06:53 (8)			07:26	13:07 (3)
20:19		19:35		16:56	28	07:21 (8)			16:38 61 14:08 (3)
Ore potenziali eliofania	461		429	375	345		297		286
Totalle, caso peggiore		378			226		548		1881
Probabilità di eliofania		0.68			0.52		0.47		0.41
Tempo di operatività rid.		0.30			0.30		0.30		0.30
Dir. del vento rid.		0.48			0.72		0.63		0.57
Totalle ridotto		0.10			0.12		0.09		0.07
Totalle effettivo		38			26		50		136

**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:** Shadow Flickering Analysis **Recettore:** R12 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (87)  
**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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>Gennaio</b>	<b>Febbraio</b>	<b>Marzo</b>	<b>Aprile</b>	<b>Maggio</b>	<b>Giugno</b>	
1	07:26   07:12		06:35	17:06 (2)   06:44	05:57	05:28	05:51 (8)
	16:39   17:13		17:48	20   17:26 (2)   19:23	19:56	20:26	06:20 (8)
2	07:26   07:11		06:34		05:56	05:27	05:52 (8)
	16:40   17:15		17:49	22   17:28 (2)   19:24	19:57	20:27	06:21 (8)
3	07:26   07:10	07:30 (11)   06:32		17:06 (2)   06:40	05:54	05:27	05:51 (8)
	16:40   17:16	1   07:31 (11)   17:51		22   17:28 (2)   19:25	19:58	20:28	06:21 (8)
4	07:26   07:09	07:29 (11)   06:31		17:06 (2)   06:39	05:53	05:26	05:51 (8)
	16:41   17:17	4   07:33 (11)   17:52		22   17:28 (2)   19:27	19:59	20:28	06:22 (8)
5	07:26   07:08	07:28 (11)   06:29		17:06 (2)   06:37	05:52	05:26	05:51 (8)
	16:42   17:19	7   07:35 (11)   17:53		21   17:27 (2)   19:28	20:00	20:29	06:23 (8)
6	07:26   07:07	07:27 (11)   06:27		17:07 (2)   06:35	05:51	05:25	05:50 (8)
	16:43   17:20	9   07:36 (11)   17:54		18   17:25 (2)   19:29	20:01	20:30	06:23 (8)
7	07:26   07:06	07:26 (11)   06:26		17:08 (2)   06:34	05:49	05:25	05:50 (8)
	16:44   17:21	10   07:36 (11)   17:55		17   17:25 (2)   19:30	20:02	20:30	06:23 (8)
8	07:26   07:04	07:24 (11)   06:24		17:10 (2)   06:32	05:48	05:25	05:51 (8)
	16:45   17:22	12   07:36 (11)   17:57		12   17:22 (2)   19:31	20:03	20:31	06:24 (8)
9	07:26   07:03	07:23 (11)   06:22		17:12 (2)   06:30	05:47	05:25	05:51 (8)
	16:46   17:24	13   07:36 (11)   17:58		6   17:18 (2)   19:32	20:04	20:32	06:24 (8)
10	07:25   07:02	07:22 (11)   06:21			06:29	05:46	05:24
	16:47   17:25	14   07:36 (11)   17:59			19:33	20:06	06:25 (8)
11	07:25   07:01	07:21 (11)   06:19			06:27	05:45	05:51 (8)
	16:48   17:26	15   07:36 (11)   18:00			19:34	20:07	06:25 (8)
12	07:25   07:00	07:19 (11)   06:17			06:25	05:44	05:51 (8)
	16:49   17:27	16   07:35 (11)   18:01			19:35	20:08	06:26 (8)
13	07:25   06:58	07:21 (11)   06:16			06:24	05:43	05:50 (8)
	16:50   17:29	14   07:35 (11)   18:02			19:36	20:09	06:25 (8)
14	07:24   06:57	07:22 (11)   06:14			06:22	05:41	05:50 (8)
	16:52   17:30	12   07:34 (11)   18:03			19:37	20:10	06:26 (8)
15	07:24   06:56	07:24 (11)   06:12			06:21	05:40	05:51 (8)
	16:53   17:31	6   07:30 (11)   18:04			19:39	20:11	06:26 (8)
16	07:23   06:54				06:19	05:39	05:52 (8)
	16:54   17:32				19:40	20:12	06:27 (8)
17	07:23   06:53				06:17	05:38	05:52 (8)
	16:55   17:34				19:41	20:13	06:27 (8)
18	07:23   06:52				06:16	05:38	05:52 (8)
	16:56   17:35				19:42	20:14	06:27 (8)
19	07:22   06:50				06:14	05:37	05:52 (8)
	16:57   17:36				19:43	20:15	06:27 (8)
20	07:21   06:49				06:13	05:36	05:52 (8)
	16:59   17:37				19:44	20:16	06:28 (8)
21	07:21   06:47				06:11	05:35	05:52 (8)
	17:00   17:39				19:45	20:17	06:28 (8)
22	07:20   06:46				06:10	05:34	05:52 (8)
	17:01   17:40				19:46	20:17	06:28 (8)
23	07:19   06:44	17:14 (2)   05:59			06:08	05:33	05:53 (8)
	17:02   17:41	5   17:19 (2)   18:13			19:47	20:18	06:29 (8)
24	07:19   06:43	17:11 (2)   05:57			06:07	05:32	05:53 (8)
	17:03   17:42	9   17:20 (2)   18:14			19:48	20:19	06:28 (8)
25	07:18   06:41	17:10 (2)   05:56			06:05	05:32	05:53 (8)
	17:05   17:44	12   17:22 (2)   18:16			19:49	20:20	06:28 (8)
26	07:17   06:40	17:08 (2)   05:54			06:04	05:31	05:54 (8)
	17:06   17:45	15   17:23 (2)   18:17			19:50	20:21	06:29 (8)
27	07:16   06:38	17:08 (2)   05:52			06:03	05:30	05:54 (8)
	17:07   17:46	17   17:25 (2)   18:18			19:52	20:22	06:29 (8)
28	07:16   06:37	17:07 (2)   05:50			06:01	05:30	05:54 (8)
	17:08   17:47	18   17:25 (2)   18:19			19:53	20:23	06:29 (8)
29	07:15				06:00	05:29	05:54 (8)
	17:10				19:54	20:24	06:29 (8)
30	07:14				06:47	05:28	05:54 (8)
	17:11				19:55	20:24	06:29 (8)
31	07:13				05:28	05:28 (8)	
	17:12				20:25	28   06:20 (8)	06:29 (8)
	Ore potenziali eliofania	296	296	369	399	450	454
	Totale, caso peggiore		209	160		184	1021
	Probabilità di eliofania		0.44	0.44		0.57	0.62
	Tempo di operatività rid.		0.30	0.30		0.30	0.30
	Dir. del vento rid.		0.63	0.49		0.48	0.48
	Totale ridotto		0.09	0.07		0.08	0.09
	Totale effettivo		18	11		16	94

**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:** Shadow Flickering Analysis **Recettore:** R12 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (87)  
**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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Luglio	Agosto	Settembre	Ottobre		Novembre		Dicembre
1   05:28	05:55 (8)	05:52	06:24	06:55		06:30	06:52 (11)	07:05
20:37	35	06:30 (8)	20:18	19:34	18:42	16:55	14	07:06 (11)
2   05:28	05:55 (8)	05:53	06:25	06:56		06:31	06:53 (11)	07:06
20:37	34	06:29 (8)	20:17	19:32	18:41	16:54	13	07:06 (11)
3   05:29	05:56 (8)	05:54	06:26	06:57		06:32	06:54 (11)	07:07
20:37	34	06:30 (8)	20:15	19:30	18:39	16:52	12	07:06 (11)
4   05:29	05:56 (8)	05:55	06:27	06:58		06:33	06:55 (11)	07:08
20:37	33	06:29 (8)	20:14	19:29	18:37	16:51	10	07:05 (11)
5   05:30	05:56 (8)	05:56	06:28	06:59	17:48 (2)	06:35	06:57 (11)	07:09
20:36	34	06:30 (8)	20:13	19:27	18:36	10	17:58 (2)	16:50
6   05:31	05:56 (8)	05:57	06:29	07:00	17:45 (2)	06:36	06:58 (11)	07:10
20:36	33	06:29 (8)	20:12	19:25	18:34	14	17:59 (2)	16:49
7   05:31	05:57 (8)	05:58	06:30	07:01	17:43 (2)	06:37	06:59 (11)	07:11
20:36	32	06:29 (8)	20:11	19:24	18:32	18	18:01 (2)	16:48
8   05:32	05:58 (8)	05:59	06:31	07:02	17:42 (2)	06:38	07:01 (11)	07:12
20:36	32	06:30 (8)	20:09	19:22	18:31	20	18:02 (2)	16:47
9   05:33	05:58 (8)	06:00	06:32	07:03	17:41 (2)	06:39	1	07:02 (11)
20:35	31	06:29 (8)	20:08	19:20	18:29	22	18:03 (2)	16:45
10   05:33	05:59 (8)	06:01	06:33	07:04	17:40 (2)	06:41		07:14
20:35	30	06:29 (8)	20:07	19:19	18:27	23	18:03 (2)	16:44
11   05:34	06:00 (8)	06:02	06:34	07:05	17:40 (2)	06:42		07:15
20:34	29	06:29 (8)	20:05	19:17	18:26	22	18:02 (2)	16:43
12   05:35	05:59 (8)	06:03	06:35	07:07	17:39 (2)	06:43		07:16
20:34	29	06:28 (8)	20:04	19:15	18:24	22	18:01 (2)	16:42
13   05:35	06:00 (8)	06:04	06:36	07:08	17:39 (2)	06:44		07:16
20:33	28	06:28 (8)	20:03	19:13	18:22	20	17:59 (2)	16:41
14   05:36	06:01 (8)	06:05	06:37	07:09	17:39 (2)	06:46		07:17
20:33	26	06:27 (8)	20:01	19:12	18:21	18	17:57 (2)	16:41
15   05:37	06:03 (8)	06:06	06:38	07:10	17:40 (2)	06:47		07:18
20:32	24	06:27 (8)	20:00	19:10	18:19	17	17:57 (2)	16:40
16   05:38	06:04 (8)	06:07	06:39	07:11	17:41 (2)	06:48		07:19
20:32	22	06:26 (8)	19:59	19:08	18:18	14	17:55 (2)	16:39
17   05:39	06:04 (8)	06:08	06:40	07:12	17:42 (2)	06:49		07:19
20:31	21	06:25 (8)	19:57	19:07	18:16	11	17:53 (2)	16:38
18   05:39	06:06 (8)	06:09	06:41	07:13	17:43 (2)	06:50		07:20
20:30	18	06:24 (8)	19:56	19:05	18:15	8	17:51 (2)	16:37
19   05:40	06:07 (8)	06:10	06:42	07:14	17:46 (2)	06:52		07:21
20:30	16	06:23 (8)	19:54	19:03	18:13	3	17:49 (2)	16:36
20   05:41	06:10 (8)	06:12	06:43	07:16			06:53	07:21
20:29	11	06:21 (8)	19:53	19:01	18:12		16:36	16:31
21   05:42	06:14 (8)	06:13	06:44	07:17			06:54	07:22
20:28	2	06:16 (8)	19:51	19:00	18:10		16:35	16:31
22   05:43		06:14	06:45	07:18			06:55	07:22
20:27		19:50	18:58	18:09			16:34	16:32
23   05:44		06:15	06:46	07:19			06:56	07:23
20:26		19:48	18:56	18:07			16:34	16:32
24   05:45		06:16	06:47	07:20			06:57	07:23
20:26		19:47	18:54	18:06			16:33	16:33
25   05:46		06:17	06:48	06:21			06:59	07:24
20:25		19:45	18:53	17:04			16:32	16:33
26   05:46		06:18	06:49	06:23			07:00	07:24
20:24		19:43	18:51	17:03			16:32	16:34
27   05:47		06:19	06:50	06:24	06:53 (11)	07:01		07:25
20:23		19:42	18:49	17:01	8	07:01 (11)	16:31	16:35
28   05:48		06:20	06:51	06:25	06:51 (11)	07:02		07:25
20:22		19:40	18:48	17:00	12	07:03 (11)	16:31	16:35
29   05:49		06:21	06:53	06:26	06:50 (11)	07:03		07:25
20:21		19:39	18:46	16:59	14	07:04 (11)	16:31	16:36
30   05:50		06:22	06:54	06:27	06:49 (11)	07:04		07:25
20:20		19:37	18:44	16:57	16	07:05 (11)	16:30	16:37
31   05:51		06:23		06:28	06:50 (11)			07:26
20:19		19:35		16:56	15	07:05 (11)		16:38
Ore potenziali eliofania	461	429	375	345		297		286
Totale, caso peggiore	554				307		68	
Probabilità di eliofania	0.68				0.52		0.47	
Tempo di operatività rid.	0.30				0.30		0.30	
Dir. del vento rid.	0.48				0.54		0.71	
Totale ridotto	0.10				0.09		0.10	
Totale effettivo	56				27		7	

**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:** Shadow Flickering Analysis **Recettore:** R13 - **Shadow Receptor:** 1.0 × 1.0 **Azimuth:** 0.0° **Slope:** 0.0° (88)  
**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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marto	Aprile	Maggio		Gugno	Luglio		Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26   07:12   06:35   06:43   05:57						05:26   06:07 (27)   05:28	06:08 (27)   05:52	06:24	06:54	06:30	07:05		
	16:38   17:13   17:48   19:23   19:56						20:26   06:42 (27)   20:37   46	06:54 (27)   20:17	19:34   18:42	16:55	16:30			
2	07:26   07:11   06:34   06:42   05:55						05:27   06:06 (27)   05:28	06:08 (27)   05:53	06:25	06:56	06:31	07:06		
	16:39   17:15   17:49   19:24   19:57						20:27   06:44 (27)   20:37   45	06:53 (27)   20:16	19:32   18:40	16:53	16:29			
3	07:26   07:10   06:32   06:40   05:54						05:26   06:05 (27)   05:29	06:09 (27)   05:54	06:26	06:57	06:32	07:07		
	16:40   17:16   17:50   19:25   19:58						20:27   06:44 (27)   20:37   45	06:54 (27)   20:15	19:30   18:39	16:52	16:29			
4	07:26   07:09   06:30   06:38   05:53						05:26   06:05 (27)   05:29	06:09 (27)   05:55	06:27	06:58	06:33	07:08		
	16:41   17:17   17:52   19:26   19:59						20:28   06:45 (27)   20:36   44	06:53 (27)   20:14	19:29   18:37	16:51	16:29			
5	07:26   07:08   06:29   06:37   05:52						05:26   06:05 (27)   05:30	06:10 (27)   05:56	06:28	06:59	06:34	07:09		
	16:42   17:18   17:53   19:27   20:00						20:29   06:46 (27)   20:30   43	06:53 (27)   20:13	19:27   18:35	16:50	16:29			
6	07:26   07:07   06:27   06:35   05:50						05:25   06:04 (27)   05:30	06:10 (27)   05:57	06:29	07:00	06:36	07:10		
	16:43   17:20   17:54   19:29   20:01						20:29   06:46 (27)   20:36   42	06:52 (27)   20:12	19:25   18:34	16:49	16:29			
7	07:26   07:05   06:26   06:33   05:49						05:25   06:04 (27)   05:31	06:11 (27)   05:58	06:30	07:01	06:37	07:11		
	16:44   17:21   17:55   19:30   20:02						20:30   06:47 (27)   20:36   41	06:52 (27)   20:10	19:24   18:32	16:47	16:28			
8	07:26   07:04   06:24   06:32   05:48						05:25   06:04 (27)   05:32	06:12 (27)   05:59	06:31	07:02	06:38	07:12		
	16:45   17:22   17:56   19:31   20:03						20:31   06:48 (27)   20:35   40	06:52 (27)   20:09	19:22   18:30	16:46	16:28			
9	07:26   07:03   06:22   06:30   05:47						05:24   06:04 (27)   05:32	06:12 (27)   06:00	06:32	07:03	06:39	07:13		
	16:46   17:23   17:57   19:32   20:04						20:31   06:48 (27)   20:35   39	06:51 (27)   20:08	19:20   18:29	16:45	16:28			
10	07:25   07:02   06:21   06:28   05:46						05:24   06:03 (27)   05:33	06:13 (27)   06:01	06:33	07:04	06:40	07:14		
	16:47   17:25   17:59   19:33   20:05						20:32   06:48 (27)   20:35   38	06:51 (27)   20:07	19:18   18:27	16:44	16:28			
11	07:25   07:01   06:19   06:27   05:44						05:24   06:03 (27)   05:34	06:15 (27)   06:02	06:34	07:05	06:42	07:15		
	16:48   17:26   18:00   19:34   20:06						20:32   06:49 (27)   20:34   36	06:51 (27)   20:05	19:17   18:25	16:43	16:28			
12	07:25   06:59   06:17   06:25   05:43						05:24   06:03 (27)   05:34	06:15 (27)   06:03	06:35	07:06	06:43	07:16		
	16:49   17:27   18:01   19:35   20:07						20:33   06:49 (27)   20:34   35	06:50 (27)   20:04	19:15   18:24	16:42	16:28			
13	07:25   06:58   06:16   06:24   05:42						05:24   06:03 (27)   05:35	06:16 (27)   06:04	06:36	07:07	06:44	07:16		
	16:50   17:29   18:02   19:36   20:08						20:33   06:50 (27)   20:33   33	06:49 (27)   20:03	19:13   18:22	16:41	16:29			
14	07:24   06:57   06:14   06:22   05:41						05:24   06:03 (27)   05:33	06:17 (27)   06:05	06:37	07:09	06:45	07:17		
	16:51   17:30   18:03   19:37   20:09						20:34   06:50 (27)   20:33   32	06:49 (27)   20:01	19:12   18:21	16:40	16:29			
15	07:24   06:55   06:12   06:20   05:40						05:24   06:03 (27)   05:37	06:19 (27)   06:06	06:38	07:10	06:47	07:18		
	16:52   17:31   18:04   19:38   20:10						20:34   06:50 (27)   20:32   29	06:48 (27)   20:00	19:10   18:19	16:39	16:29			
16	07:23   06:54   06:11   06:19   05:39						05:24   06:03 (27)   05:37	06:20 (27)   06:07	06:39	07:11	06:48	07:19		
	16:54   17:32   18:05   19:39   20:11						20:35   06:51 (27)   20:31   26	06:46 (27)   19:58	19:08   18:18	16:39	16:29			
17	07:23   06:53   06:09   06:17   05:38						05:24   06:03 (27)   05:38	06:22 (27)   06:08	06:40	07:12	06:49	07:19		
	16:55   17:34   18:07   19:41   20:12						20:35   06:51 (27)   20:31   22	06:44 (27)   19:57	19:06   18:16	16:38	16:30			
18	07:22   06:51   06:07   06:16   05:37						05:24   06:03 (27)   05:39	06:24 (27)   06:09	06:41	07:13	06:50	07:20		
	16:56   17:35   18:08   19:42   20:13						20:36   06:51 (27)   20:30   19	06:43 (27)   19:55	19:05   18:14	16:37	16:30			
19	07:22   06:50   06:06   06:14   05:36						05:24   06:04 (27)   05:40	06:27 (27)   06:10	06:42	07:14	06:51	07:21		
	16:57   17:36   18:09   19:43   20:14						20:36   06:52 (27)   20:29   13	06:40 (27)   19:54	19:03   18:13	16:36	16:30			
20	07:21   06:49   06:04   06:13   05:36						05:24   06:04 (27)   05:41	06:11	06:43	07:15	06:53	07:21		
	16:58   17:37   18:10   19:44   20:15						20:36   06:52 (27)   20:29	19:53	19:01	18:11	16:35	16:31		
21	07:21   06:47   06:02   06:11   05:35						05:24   06:04 (27)   05:42	06:12	06:44	07:17	06:54	07:22		
	17:00   17:38   18:11   19:45   20:16						20:36   06:52 (27)   20:28	19:51	18:59	18:10	16:35	16:31		
22	07:20   06:46   06:00   06:10   05:34						05:24   06:04 (27)   05:43	06:13	06:45	07:18	06:55	07:22		
	17:01   17:40   18:12   19:46   20:17						20:37   06:52 (27)   20:27	19:49	18:58	18:08	16:34	16:32		
23	07:19   06:44   05:59   06:08   05:33						05:25   06:04 (27)   05:43	06:14	06:46	07:19	06:56	07:23		
	17:02   17:41   18:13   19:47   20:18						20:37   06:52 (27)   20:26   48	06:52 (27)   20:26	19:48   18:56	18:07	16:33	16:32		
24	07:19   06:43   05:57   06:07   05:32						05:25   06:05 (27)   05:44	06:15	06:47	07:20	06:57	07:23		
	17:03   17:42   18:14   19:48   20:19   9						20:37   06:53 (27)   20:25   48	06:53 (27)   20:25	19:46   18:54	18:05	16:33	16:33		
25	07:18   06:41   05:55   06:05   05:32						05:25   06:05 (27)   05:45	06:16	06:48	06:21	06:58	07:24		
	17:04   17:43   18:15   19:49   20:20   16						20:37   06:53 (27)   20:25   48	06:53 (27)   20:25	19:45   18:52	17:04	16:32	16:33		
26	07:17   06:40   05:54   06:04   05:31						05:26   06:05 (27)   05:46	06:17	06:49	06:22	07:00	07:24		
	17:06   17:45   18:16   19:50   20:21   21						20:37   06:53 (27)   20:24   48	06:53 (27)   20:24	19:43   18:51	17:03	16:32	16:34		
27	07:16   06:38   05:52   06:02   05:30						05:26   06:06 (27)   05:47	06:18	06:50	06:24	07:01	07:24		
	17:07   17:46   18:18   19:51   20:22   25						20:37   06:53 (27)   20:23   47	06:53 (27)   20:23	19:42   18:49	17:01	16:31	16:34		
28	07:15   06:37   05:50   06:01   05:30						05:26   06:06 (27)   05:48	06:20	06:51	06:25	07:02	07:25		
	17:08   17:47   18:19   19:52   20:23   28						20:37   06:53 (27)   20:22   47	06:53 (27)   20:22	19:40   18:47	17:00	16:31	16:35		
29	07:15   06:49   06:00   05:29   06:09 (27)   05:27						05:27   06:07 (27)   05:49	06:21	06:52	06:26	07:03	07:25		
	17:09   17:48   18:20   19:54   20:24   30						20:37   06:54 (27)   20:21   47	06:54 (27)   20:21	19:38   18:46	16:59	16:30	16:36		
30	07:14   06:47   05:58   05:28   06:08 (27)   05:27						05:27   06:05 (27)   05:50	06:22	06:53	06:27	07:04	07:25		
	17:11   17:49   19:21   19:55   20:24   32						20:37   06:55 (27)   20:20	06:23	06:51	06:28  </td				

**SHADOW - Calendario**

**Calcolo:** Shadow Flickering Analysis **Recettore:** R14 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (89)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>  Gennaio</b>	<b>  Febbraio</b>	<b>  Marzo</b>	<b>  Aprile</b>	<b>  Maggio</b>	<b>  Giugno</b>
1   07:26		07:12	07:39 (29)   06:35		06:43	07:47 (26)   05:57   05:27
16:38		17:13	59 16:33 (24)   17:48		19:23	19:00 (23)   19:56   20:26
2   07:26		07:11	07:40 (29)   06:34		06:42	07:47 (26)   05:55   05:27
16:39		17:14	57 16:33 (24)   17:49		19:24	19:00 (23)   19:57   20:27
3   07:26		07:10	07:41 (29)   06:32		06:40	07:49 (26)   05:54   05:26
16:40		17:16	55 16:33 (24)   17:50		19:25	19:00 (23)   19:58   20:27
4   07:26		07:09	07:43 (29)   06:30		06:38	07:50 (26)   05:53   05:26
16:41		17:17	51 16:33 (24)   17:52		19:26	58 19:00 (23)   19:59   20:28
5   07:26		07:08	07:45 (29)   06:29	07:08 (26)   06:37		07:52 (26)   05:52   05:26
16:42		17:18	47 16:33 (24)   17:53	15 07:23 (26)   19:27	52	18:59 (23)   20:00   20:29
6   07:26		07:07	15:57 (24)   06:27	07:04 (26)   06:35		07:55 (26)   05:50   05:25
16:43		17:20	36 16:33 (24)   17:54	23 07:27 (26)   19:29	46	18:59 (23)   20:01   20:30
7   07:26		07:05	15:57 (24)   06:26	07:01 (26)   06:33		07:59 (26)   05:49   05:25
16:44		17:21	34 16:31 (24)   17:55	29 07:30 (26)   19:30	34	18:57 (23)   20:02   20:30
8   07:26		07:04	15:58 (24)   06:24	06:59 (26)   06:32		18:34 (23)   05:48   05:25
16:45		17:22	33 16:31 (24)   17:56	33 07:32 (26)   19:31	22	18:56 (23)   20:03   20:31
9   07:26		07:03	15:59 (24)   06:22	06:56 (26)   06:30		18:36 (23)   05:47   05:24
16:46		17:23	31 16:30 (24)   17:57	37 07:33 (26)   19:32	19	18:55 (23)   20:04   20:31
10   07:25		07:02	16:01 (24)   06:21	06:55 (26)   06:28		18:37 (23)   05:46   05:24
16:47		17:25	28 16:29 (24)   17:59	40 07:35 (26)   19:33	15	18:52 (23)   20:05   20:32
11   07:25		16:03 (24)   07:01	16:01 (24)   06:19	06:53 (26)   06:27		18:39 (23)   05:44   05:24
16:48	9	16:12 (24)   17:26	27 16:28 (24)   18:00	43 07:36 (26)   19:34	10	18:49 (23)   20:06   20:33
12   07:25		16:02 (24)   06:59	16:03 (24)   06:17	06:51 (26)   06:25		05:43   05:24
16:49	13	16:15 (24)   17:27	23 16:26 (24)   18:01	45 07:36 (26)   19:35		20:07   20:33
13   07:25		16:00 (24)   06:58	16:06 (24)   06:16	06:50 (26)   06:24		05:42   05:24
16:50	16	16:16 (24)   17:28	19 16:25 (24)   18:02	47 07:37 (26)   19:36		20:08   20:34
14   07:24		15:59 (24)   06:57	16:08 (24)   06:14	06:50 (26)   06:22		05:41   05:24
16:51	19	16:18 (24)   17:30	13 16:21 (24)   18:03	48 07:38 (26)   19:37		20:10   20:34
15   07:24		07:45 (29)   06:55		06:12		05:40   05:24
16:52	22	16:19 (24)   17:31		08:04	50 07:38 (26)   19:38	20:11   20:34
16   07:23		07:45 (29)   06:54		06:11	06:47 (26)   06:19	05:39   05:24
16:54	29	16:21 (24)   17:32		18:05	51 07:38 (26)   19:39	20:12   20:35
17   07:23		07:44 (29)   06:53		06:09	06:47 (26)   06:17	05:38   05:24
16:55	33	16:22 (24)   17:33		18:07	52 07:39 (26)   19:41	20:13   20:35
18   07:22		07:44 (29)   06:51		06:07	06:46 (26)   06:16	05:37   05:24
16:56	37	16:24 (24)   17:35		18:08	52 07:38 (26)   19:42	20:14   20:36
19   07:22		07:43 (29)   06:50		06:06	06:45 (26)   06:14	05:36   05:24
16:57	40	16:25 (24)   17:36		18:09	53 07:38 (26)   19:43	20:14   20:36
20   07:21		07:42 (29)   06:49		06:04	06:45 (26)   06:13	05:35   05:24
16:58	44	16:26 (24)   17:37		18:10	53 07:38 (26)   19:44	20:15   20:36
21   07:21		07:42 (29)   06:47		06:02	06:45 (26)   06:11	05:35   05:24
16:59	47	16:27 (24)   17:38		18:11	53 07:38 (26)   19:45	20:16   20:36
22   07:20		07:41 (29)   06:46		06:00	06:44 (26)   06:10	05:34   05:24
17:01	49	16:28 (24)   17:40		18:12	53 07:37 (26)   19:46	20:17   20:37
23   07:19		07:40 (29)   06:44		05:59	06:44 (26)   06:08	05:33   05:25
17:02	52	16:28 (24)   17:41		18:13	52 07:36 (26)   19:47	20:18   20:37
24   07:19		07:39 (29)   06:43		05:57	06:44 (26)   06:07	05:32   05:25
17:03	54	16:29 (24)   17:42		18:14	52 07:36 (26)   19:48	20:19   20:37
25   07:18		07:39 (29)   06:41		05:55	06:44 (26)   06:05	05:31   05:25
17:04	57	16:30 (24)   17:43		18:15	51 07:35 (26)   19:49	20:20   20:37
26   07:17		07:38 (29)   06:40		05:54	06:44 (26)   06:04	05:31   05:25
17:06	59	16:31 (24)   17:44		18:16	58 17:53 (23)   19:50	20:21   20:37
27   07:16		07:37 (29)   06:38		05:52	06:45 (26)   06:02	05:30   05:26
17:07	60	16:31 (24)   17:46		18:18	64 17:57 (23)   19:51	20:22   20:37
28   07:15		07:37 (29)   06:37		05:50	06:45 (26)   06:01	05:29   05:26
17:08	61	16:32 (24)   17:47		18:19	67 17:58 (23)   19:52	20:23   20:37
29   07:15		07:37 (29)   06:37		06:48	07:45 (26)   05:59	05:29   05:27
17:09	61	16:32 (24)		19:20	67 18:58 (23)   19:54	20:24   20:37
30   07:14		07:38 (29)		06:47	07:45 (26)   05:58	05:28   05:27
17:11	60	16:32 (24)		19:21	68 18:59 (23)   19:55	20:24   20:37
31   07:13		07:38 (29)		06:45	07:46 (26)	05:28
17:12	61	16:33 (24)		19:22	67 19:00 (23)	20:25
Ore potenziali eliofania		296		369		450   454
Totalle, caso peggiore		883		513		
Probabilità di eliofania		0.43		0.44		
Tempo di operatività rid.		0.30		0.30		
Dir. del vento rid.		0.56		0.52		
Totalle ridotto		0.07		0.07		
Totalle effettivo		64		35		
				114		
				42		

**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:** Shadow Flickering Analysis **Recettore: R14** - **Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (89)**  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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  
437 192 40 16 67 346 208 192 120 99 425 524 2,665

: Soglia di cut-in dalla curva di potenza

	Luglio	Agosto	Settembre	Ottobre				Novembre				Dicembre			
1	05:28	05:52	06:24	18:38 (23)	06:54	07:31 (26)	06:30	15:29 (24)	07:05	15:45 (24)		9	15:54 (24)		
	20:37	20:18	19:34	11	18:49 (23)	18:42	45	08:16 (26)	16:55	29	15:58 (24)	16:30			
2	05:28	05:53	06:25	18:36 (23)	06:55	07:31 (26)	06:31	15:29 (24)	07:06						
	20:37	20:16	19:32	15	18:51 (23)	18:40	44	08:15 (26)	16:53	31	16:00 (24)	16:29			
3	05:29	05:54	06:26	18:34 (23)	06:57	07:32 (26)	06:32	15:28 (24)	07:07						
	20:37	20:15	19:30	19	18:53 (23)	18:39	41	08:13 (26)	16:52	33	16:01 (24)	16:29			
4	05:29	05:55	06:27	18:32 (23)	06:58	07:33 (26)	06:33	15:27 (24)	07:08						
	20:37	20:14	19:29	22	18:54 (23)	18:37	38	08:11 (26)	16:51	34	16:01 (24)	16:29			
5	05:30	05:56	06:28	07:56 (26)	06:59	07:34 (26)	06:34	07:19 (29)	07:09						
	20:36	20:13	19:27	34	18:54 (23)	18:35	35	08:09 (26)	16:50	38	16:02 (24)	16:29			
6	05:30	05:57	06:29	07:50 (26)	07:00	07:36 (26)	06:36	07:15 (29)	07:10						
	20:36	20:12	19:25	45	18:54 (23)	18:34	31	08:07 (26)	16:49	47	16:03 (24)	16:28			
7	05:31	05:58	06:30	07:47 (26)	07:01	07:38 (26)	06:37	07:12 (29)	07:11						
	20:36	20:10	19:24	52	18:54 (23)	18:32	26	08:04 (26)	16:47	52	16:03 (24)	16:28			
8	05:32	05:59	06:31	07:45 (26)	07:02	07:41 (26)	06:38	07:11 (29)	07:12						
	20:35	20:09	19:22	57	18:54 (23)	18:30	20	08:01 (26)	16:46	55	16:03 (24)	16:28			
9	05:32	06:00	06:32	07:43 (26)	07:03	07:46 (26)	06:39	07:11 (29)	07:13						
	20:35	20:08	19:20	60	18:53 (23)	18:29	9	07:55 (26)	16:45	57	16:04 (24)	16:28			
10	05:33	06:01	06:33	07:41 (26)	07:04		06:41	07:10 (29)	07:14						
	20:35	20:07	19:18	63	18:53 (23)	18:27		16:44	59	16:04 (24)	16:28				
11	05:34	06:02	06:34	07:39 (26)	07:05		06:42	07:09 (29)	07:15						
	20:34	20:05	19:17	65	18:52 (23)	18:25		16:43	60	16:03 (24)	16:28				
12	05:34	06:03	06:35	07:38 (26)	07:06		06:43	07:10 (29)	07:16						
	20:34	20:04	19:15	67	18:52 (23)	18:24		16:42	60	16:04 (24)	16:28				
13	05:35	06:04	06:36	07:36 (26)	07:07		06:44	07:09 (29)	07:16						
	20:33	20:03	19:13	68	18:50 (23)	18:22		16:41	61	16:04 (24)	16:29				
14	05:36	06:05	06:37	07:35 (26)	07:09		06:45	07:09 (29)	07:17						
	20:33	20:01	19:12	67	18:49 (23)	18:21		16:40	61	16:04 (24)	16:29				
15	05:37	06:06	06:38	07:34 (26)	07:10		06:47	07:10 (29)	07:18						
	20:32	20:00	19:10	67	18:47 (23)	18:19		16:39	60	16:04 (24)	16:29				
16	05:37	06:07	06:39	07:33 (26)	07:11		06:48	07:11 (29)	07:19						
	20:33	20:03	19:13	68	18:45 (23)	18:22		16:38	59	16:04 (24)	16:29				
17	05:38	06:08	06:40	07:32 (26)	07:12		06:49	07:12 (29)	07:19						
	20:31	19:57	19:06	60	18:42 (23)	18:16		16:38	57	16:03 (24)	16:29				
18	05:39	06:09	06:41	07:31 (26)	07:13		06:50	07:13 (29)	07:20						
	20:30	19:55	19:05	52	08:23 (26)	18:14		16:37	54	16:03 (24)	16:30				
19	05:40	06:10	06:42	07:31 (26)	07:14		06:51	07:15 (29)	07:21						
	20:29	19:54	19:03	52	08:23 (26)	18:13		16:36	52	16:03 (24)	16:30				
20	05:41	06:11	06:43	07:30 (26)	07:15		06:53	07:16 (29)	07:21						
	20:29	19:53	19:01	53	08:23 (26)	18:11		16:35	49	16:03 (24)	16:31				
21	05:42	06:12	06:44	07:30 (26)	07:17		06:54	07:17 (29)	07:22						
	20:28	19:51	18:59	52	08:22 (26)	18:10		16:35	47	16:02 (24)	16:31				
22	05:43	06:13	06:45	07:29 (26)	07:18		06:55	07:18 (29)	07:22						
	20:27	19:49	18:58	53	08:22 (26)	18:08		16:34	44	16:02 (24)	16:31				
23	05:43	06:14	06:46	07:29 (26)	07:19		06:56	07:20 (29)	07:23						
	20:26	19:48	18:56	53	08:22 (26)	18:07		16:33	40	16:02 (24)	16:32				
24	05:44	06:15	06:47	07:29 (26)	07:20		06:57	07:21 (29)	07:23						
	20:25	19:46	18:54	52	08:21 (26)	18:05		16:33	37	16:01 (24)	16:33				
25	05:45	06:16	06:48	07:28 (26)	06:21		06:58	07:22 (29)	07:24						
	20:25	19:45	18:52	53	08:21 (26)	17:04		16:32	33	16:00 (24)	16:33				
26	05:46	06:17	06:49	07:28 (26)	06:22		07:00	07:23 (29)	07:24						
	20:24	19:43	18:51	52	08:20 (26)	17:03		16:32	30	16:00 (24)	16:34				
27	05:47	06:18	06:50	07:28 (26)	06:24	15:44 (24)	07:01	07:25 (29)	07:24						
	20:23	19:42	18:49	51	08:19 (26)	17:01	2	15:46 (24)	16:31	23	16:00 (24)	16:34			
28	05:48	06:19	06:51	07:30 (26)	06:25	15:37 (24)	07:02	15:39 (24)	07:25						
	20:22	19:40	18:47	50	08:20 (26)	17:00	14	15:51 (24)	16:31	20	15:59 (24)	16:35			
29	05:49	06:20	06:52	07:30 (26)	06:26	15:35 (24)	07:03	15:41 (24)	07:25						
	20:21	19:38	18:46	49	08:19 (26)	16:58	20	15:55 (24)	16:30	16	15:57 (24)	16:36			
30	05:50	06:22	06:53	07:30 (26)	06:27	15:33 (24)	07:04	15:42 (24)	07:25						
	20:20	19:37	18:44	47	08:17 (26)	16:57	23	15:56 (24)	16:30	14	15:56 (24)	16:37			
31	05:51	06:23				06:28	15:31 (24)		07:25						
	20:19	19:35				16:56	15:58 (24)	297	16:37						286
	Ore potenziali eliofania	461	429	375	345										
	Totale, caso peggiore			1505		375		1312							9
	Probabilità di eliofania			0.61		0.52		0.47							0.41
	Tempo di operatività rid.			0.30		0.30		0.30							0.30
	Dir. del vento rid.			0.63		0.60		0.55							0.47
	Totale ridotto			0.12		0.10		0.08							0.06
	Totale effettivo			176		36		102							1

## 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	(WTG che provoca l'ultimo ombreggiamento)

**SHADOW - Calendario**

**Calcolo:** Shadow Flickering Analysis **Recettore:** R15 - **Shadow Receptor:** 1.0 × 1.0 **Azimuth:** 0.0° **Slope:** 0.0° (90)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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  
437 192 40 16 67 346 208 192 120 99 425 524 2,665

: Soglia di cut-in dalla curva di potenza

	<b>Gennaio</b>	<b>Febbraio</b>	<b>Marzo</b>	<b>Aprile</b>	<b>Maggio</b>	<b>Giugno</b>
1	07:26   07:12		16:47 (10)   06:35	06:44   05:57		19:30 (7)   05:27
	16:39   17:13	2	16:49 (10)   17:48	19:23   19:56	2	19:32 (7)   20:26
2	07:26   07:11		16:46 (10)   06:34	06:42   05:56		19:28 (7)   05:27
	16:40   17:15	5	16:51 (10)   17:49	19:24   19:57	6	19:34 (7)   20:27
3	07:26   07:10		16:45 (10)   06:32	06:40   05:54		19:27 (7)   05:27
	16:40   17:16	7	16:52 (10)   17:51	19:25   19:58	8	19:35 (7)   20:27
4	07:26   07:09		16:45 (10)   06:30	06:39   05:53		19:26 (7)   05:26
	16:41   17:17	9	16:54 (10)   17:52	19:26   19:59	10	19:36 (7)   20:28
5	07:26   07:08		16:45 (10)   06:29	06:37   05:52		19:24 (7)   05:26
	16:42   17:19	10	16:55 (10)   17:53	19:28   20:00	12	19:36 (7)   20:29
6	07:26   07:07		16:45 (10)   06:27	06:35   05:51		19:24 (7)   05:25
	16:43   17:20	12	16:57 (10)   17:54	19:29   20:01	13	19:37 (7)   20:30
7	07:26   07:05		16:44 (10)   06:26	06:34   05:49		19:24 (7)   05:25
	16:44   17:21	13	16:57 (10)   17:55	19:30   20:02	15	19:39 (7)   20:30
8	07:26   07:04		16:45 (10)   06:24	06:32   05:48		19:24 (7)   05:25
	16:45   17:22	14	16:59 (10)   17:56	19:31   20:03	16	19:40 (7)   20:31
9	07:26   07:03		16:45 (10)   06:22	06:30   05:47		19:24 (7)   05:25
	16:46   17:24	15	17:00 (10)   17:58	19:32   20:04	17	19:41 (7)   20:31
10	07:25   07:02		16:47 (10)   06:21	06:29   05:46		19:24 (7)   05:24
	16:47   17:25	13	17:00 (10)   17:59	19:33   20:05	18	19:42 (7)   20:32
11	07:25   07:01		16:47 (10)   06:19	06:27   05:45		19:24 (7)   05:24
	16:48   17:26	11	16:58 (10)   18:00	19:34   20:06	18	19:42 (7)   20:33
12	07:25   06:59		16:50 (10)   06:17	06:25   05:44		19:25 (7)   05:24
	16:49   17:27	6	16:56 (10)   18:01	19:35   20:07	16	19:41 (7)   20:33
13	07:25   06:58		16:57 (10)   06:16	06:24   05:42		19:25 (7)   05:24
	16:50   17:29		18:02   19:36	20:09   16		19:41 (7)   20:34
14	07:24   06:57		16:52   17:30	06:14   06:22	14	19:26 (7)   05:24
	16:52   17:30		18:03   19:37	20:10   19:40 (7)		20:34
15	07:24   06:56		16:53   17:31	06:12   06:21	12	19:27 (7)   05:24
	16:53   17:31		18:04   19:38	20:11   19:39 (7)		20:34
16	07:23   06:54		16:54   17:32	06:11   06:19	12	19:28 (7)   05:24
	16:54   17:32		18:06   19:39	20:12   9		19:37 (7)   20:35
17	07:23   06:53		16:55   17:34	06:09   06:17		19:31 (7)   05:24
	16:55   17:34		18:07   19:41	20:13   4		19:35 (7)   20:35
18	07:22   06:51		16:56   17:35	06:07   06:16		19:24 (7)   05:24
	16:56   17:35		18:08   19:42	20:14   16		19:41 (7)   20:34
19	07:22   06:50		16:57   17:36	06:06   06:14		19:26 (7)   05:24
	16:57   17:36		18:09   19:43	20:14   14		19:40 (7)   20:34
20	07:21   06:49		16:59   17:37	06:04   06:13		19:27 (7)   05:24
	16:59   17:37		18:10   19:44	20:15   12		19:39 (7)   20:34
21	07:21   06:47		17:00   17:39	06:02   06:11		19:28 (7)   05:24
	17:00   17:39		18:11   19:45	20:16   12		19:37 (7)   20:35
22	07:20   06:46		17:01   17:40	06:01   06:10		19:29 (7)   05:24
	17:01   17:40		18:12   19:46	20:17   16		19:41 (7)   20:36
23	07:19   06:44		17:02   17:41	05:59   18:13		19:30 (7)   05:25
	17:02   17:41		18:17   19:47	20:18   13		19:42 (7)   20:37
24	07:19   06:43		17:03   17:42	05:57   18:14		19:31 (7)   05:25
	17:03   17:42		18:18   19:48	20:19   13		19:43 (7)   20:37
25	07:18   06:41		17:04   17:43	05:55   18:15		19:32 (7)   05:25
	17:05   17:43		18:20   19:49	20:20   12		19:44 (7)   20:37
26	07:17   06:40		17:06   17:45	05:54   18:17		19:33 (7)   05:26
	17:06   17:45		18:21   19:50	20:21   11		19:45 (7)   20:37
27	07:16   06:38		17:07   17:46	05:52   18:18		19:34 (7)   05:26
	17:07   17:46		18:22   19:51	20:22   10		19:46 (7)   20:37
28	07:15   06:37		17:08   17:47	05:50   18:19		19:35 (7)   05:27
	17:08   17:47		18:23   19:53	20:23   9		19:47 (7)   20:37
29	07:15		17:10	06:49   19:20		19:36 (7)   05:27
	17:10		18:24   19:54	20:24   8		19:48 (7)   20:37
30	07:14		17:11	06:47   19:21		19:37 (7)   05:27
	17:11		18:25   19:55	20:24   7		19:49 (7)   20:37
31	07:13		17:12	06:45   19:22		19:38 (7)   05:27
	17:12		18:26   19:57	20:25   6		19:50 (7)   20:37
Ore potenziali eliofania	296	296	369	399	450	454
Totalle, caso peggiore		117			206	
Probabilità di eliofania		0.44			0.57	
Tempo di operatività rid.		0.30			0.30	
Dir. del vento rid.		0.49			0.68	
Totale ridotto		0.06			0.12	
Totale effettivo		7			24	

**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:** Shadow Flickering Analysis **Recettore:** R15 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (90)  
**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  
437 192 40 16 67 346 208 192 120 99 425 524 2,665

: Soglia di cut-in dalla curva di potenza

	<b>  Luglio</b>		<b>  Agosto</b>		<b>  Settembre Ottobre</b>		<b>  Novembre</b>		<b>  Dicembre</b>
1	05:28		05:52		19:35 (7)   06:24	06:55		06:30	16:15 (10)   07:05
	20:37		20:18	17	19:52 (7)   19:34	18:42		16:55	14   16:29 (10)   16:30
2	05:28		05:53		19:35 (7)   06:25	06:56		06:31	16:15 (10)   07:06
	20:37		20:16	18	19:53 (7)   19:32	18:41		16:54	15   16:30 (10)   16:30
3	05:29		05:54		19:33 (7)   06:26	06:57		06:32	16:14 (10)   07:07
	20:37		20:15	18	19:51 (7)   19:30	18:39		16:52	14   16:28 (10)   16:29
4	05:29		05:55		19:33 (7)   06:27	06:58		06:33	16:14 (10)   07:08
	20:37		20:14	17	19:50 (7)   19:29	18:37		16:51	13   16:27 (10)   16:29
5	05:30		05:56		19:33 (7)   06:28	06:59		06:34	16:15 (10)   07:09
	20:36		20:13	16	19:49 (7)   19:27	18:36		16:50	11   16:26 (10)   16:29
6	05:31		05:57		19:33 (7)   06:29	07:00		06:36	16:14 (10)   07:10
	20:36		20:12	15	19:48 (7)   19:25	18:34		16:49	11   16:25 (10)   16:29
7	05:31		05:58		19:34 (7)   06:30	07:01		06:37	16:15 (10)   07:11
	20:36		20:11	13	19:47 (7)   19:24	18:32		16:48	8   16:23 (10)   16:29
8	05:32		05:59		19:34 (7)   06:31	07:02		06:38	16:15 (10)   07:12
	20:35		20:09	11	19:45 (7)   19:22	18:31		16:47	7   16:22 (10)   16:29
9	05:32		06:00		19:35 (7)   06:32	07:03		06:39	16:17 (10)   07:13
	20:35		20:08	9	19:44 (7)   19:20	18:29		16:45	4   16:21 (10)   16:29
10	05:33		06:01		19:36 (7)   06:33	07:04		06:41	16:18 (10)   07:14
	20:35		20:07	7	19:43 (7)   19:19	18:27		16:44	2   16:20 (10)   16:29
11	05:34		06:02		19:37 (7)   06:34	07:05		06:42	
	20:34		20:05	5	19:42 (7)   19:17	18:26		16:43	
12	05:35		06:03		19:40 (7)   06:35	07:06		06:43	
	20:34		20:04	1	19:41 (7)   19:15	18:24		16:42	
13	05:35		06:04			07:08		06:44	
	20:33		20:03			18:22		16:41	
14	05:36		06:05			07:09		06:45	
	20:33		20:01			18:21		16:40	
15	05:37		06:06			07:10		06:47	
	20:32		20:00			18:19		16:40	
16	05:38		06:07			07:11		06:48	
	20:31		19:58			18:18		16:39	
17	05:38		06:08			07:12		06:49	
	20:31		19:57			18:16		16:38	
18	05:39		06:09			07:13		06:50	
	20:30		19:56			18:15		16:37	
19	05:40		06:10			07:14		06:51	
	20:29		19:54			18:13		16:36	
20	05:41		06:11			07:15		06:53	
	20:29		19:53			18:12		16:36	
21	05:42		06:12			07:17		06:54	
	20:28		19:51			18:10		16:35	
22	05:43		06:14			07:18		06:55	
	20:27		19:50			18:09		16:34	
23	05:44		06:15			07:19		06:56	
	20:26		19:48			18:07		16:34	
24	05:45		06:16			07:20		06:57	
	20:25		19:46			18:06		16:33	
25	05:46		06:17			06:21		06:58	
	20:25		19:45			17:04		16:32	
26	05:46		06:18			06:22		07:00	
	20:24		19:43			17:03		16:32	
27	05:47	19:40 (7)   06:19				06:24		07:01	
	20:23	7   19:47 (7)   19:42				17:01		16:31	
28	05:48	19:38 (7)   06:20				06:25		07:02	
	20:22	11   19:49 (7)   19:40				17:00		16:31	
29	05:49	19:37 (7)   06:21				06:26		07:03	
	20:21	13   19:50 (7)   19:39				16:59		16:31	
30	05:50	19:36 (7)   06:22				06:27	16:19 (10)   07:04		07:25
	20:20	15   19:51 (7)   19:37				16:57	7   16:26 (10)   16:30		16:37
31	05:51	19:36 (7)   06:23				06:28	16:17 (10)		07:25
	20:19	16   19:52 (7)   19:35				16:56	11   16:28 (10)		16:38
Ore potenziali eliofania		461			375	345		297	
Totalle, caso peggiore		62				18		99	
Probabilità di eliofania		0.68				0.52		0.47	
Tempo di operatività rid.		0.30				0.30		0.30	
Dir. del vento rid.		0.68				0.49		0.49	
Totalle ridotto		0.14				0.08		0.07	
Totalle effettivo		9				1		7	

**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:** Shadow Flickering Analysis **Recettore:** R16 - **Shadow Receptor:** 1.0 × 1.0 **Azimuth:** 0.0° **Slope:** 0.0° (91) **Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giugno	Luglio	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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1   07:26	07:12	06:35	06:43	05:57	18:51 (11)   05:27	05:28	05:52	19:00 (11)   06:24	06:54	06:30	07:05	
16:39	17:13	17:48	19:23	19:56	34   19:25 (11)   20:26	20:37	20:17	35   19:35 (11)   19:34	18:42	16:55	16:30	
2   07:26	07:11	06:34	06:42	05:56	18:51 (11)   05:27	05:28	05:53	19:00 (11)   06:25	06:56	06:31	07:06	
16:39	17:15	17:49	19:24	19:57	35   19:26 (11)   20:27	20:37	20:16	36   19:36 (11)   19:32	18:41	16:53	16:29	
3   07:26	07:10	06:32	06:40	05:54	18:51 (11)   05:26	05:29	05:54	19:00 (11)   06:26	06:57	06:32	07:07	
16:40	17:16	17:51	19:25	19:58	35   19:26 (11)   20:27	20:37	20:15	36   19:36 (11)   19:30	18:39	16:52	16:29	
4   07:26	07:09	06:30	06:38	05:53	18:50 (11)   05:26	05:29	05:55	18:59 (11)   06:27	06:58	06:33	07:08	
16:41	17:17	17:52	19:26	19:59	37   19:27 (11)   20:28	20:36	20:14	37   19:36 (11)   19:29	18:37	16:51	16:29	
5   07:26	07:08	06:29	06:37	05:52	18:49 (11)   05:26	05:30	05:56	18:59 (11)   06:28	06:59	06:34	07:09	
16:42	17:18	17:53	19:27	20:00	37   19:28 (11)   20:29	20:36	20:13	37   19:36 (11)   19:27	18:35	16:50	16:29	
6   07:26	07:07	06:27	06:35	05:50	18:49 (11)   05:25	05:30	05:57	18:59 (11)   06:29	07:00	06:36	07:10	
16:43	17:20	17:54	19:29	20:01	37   19:26 (11)   20:29	20:36	20:12	37   19:36 (11)   19:25	18:34	16:49	16:29	
7   07:26	07:05	06:26	06:33	05:49	18:49 (11)   05:25	05:31	05:58	18:59 (11)   06:30	07:01	06:37	07:11	
16:44	17:21	17:55	19:30	20:02	37   19:26 (11)   20:30	20:36	20:10	37   19:36 (11)   19:24	18:32	16:48	16:29	
8   07:26	07:04	06:24	06:32	05:48	18:50 (11)   05:25	05:32	05:59	18:59 (11)   06:31	07:02	06:38	07:12	
16:45	17:22	17:56	19:31	20:03	36   19:26 (11)   20:31	20:35	20:09	37   19:36 (11)   19:22	18:30	16:46	16:28	
9   07:25	07:03	06:22	06:30	05:47	18:50 (11)   05:25	05:32	06:00	18:59 (11)   06:32	07:03	06:39	07:13	
16:46	17:24	17:58	19:32	20:04	36   19:26 (11)   20:31	20:35	20:08	36   19:35 (11)   19:20	18:29	16:45	16:28	
10   07:25	07:02	06:21	06:29	05:46	18:50 (11)   05:24	05:33	06:01	18:59 (11)   06:33	07:04	06:40	07:14	
16:47	17:25	17:59	19:33	20:05	36   19:26 (11)   20:32	20:35	20:07	36   19:35 (11)   19:18	18:27	16:44	16:28	
11   07:25	07:01	06:19	06:27	05:45	18:50 (11)   05:24	05:34	06:02	19:00 (11)   06:34	07:05	06:42	07:15	
16:48	17:26	18:00	19:34	20:06	36   19:26 (11)   20:32	20:34	20:05	35   19:35 (11)   19:17	18:26	16:43	16:29	
12   07:25	06:59	06:17	06:25	05:43	18:51 (11)   05:24	05:35	06:03	19:00 (11)   06:35	07:06	06:43	07:16	
16:49	17:27	18:01	19:35	20:07	35   19:26 (11)   20:33	20:34	20:04	34   19:34 (11)   19:15	18:24	16:42	16:29	
13   07:24	06:58	06:16	06:24	05:42	18:51 (11)   05:24	05:35	06:04	19:00 (11)   06:36	07:07	06:44	07:16	
16:50	17:29	18:02	19:36	20:08	34   19:25 (11)   20:33	20:33	20:03	33   19:33 (11)   19:13	18:22	16:41	16:29	
14   07:24	06:57	06:14	06:22	05:41	18:52 (11)   05:24	05:36	06:05	19:01 (11)   06:37	07:09	06:45	07:17	
16:51	17:30	18:03	19:37	20:09	33   19:25 (11)   20:34	20:33	20:01	31   19:32 (11)   19:12	18:21	16:40	16:29	
15   07:24	06:55	06:12	06:20	05:40	18:52 (11)   05:24	05:37	06:06	19:02 (11)   06:38	07:10	06:47	07:18	
16:53	17:31	18:04	19:38	20:10	32   19:24 (11)   20:34	20:32	20:00	29   19:31 (11)   19:10	18:19	16:39	16:29	
16   07:23	06:54	06:11	06:19	05:39	18:53 (11)   05:24	05:38	06:07	19:02 (11)   06:39	07:11	06:46	07:19	
16:54	17:32	18:05	19:39	20:11	31   19:24 (11)   20:35	20:31	19:58	28   19:30 (11)   19:08	18:18	16:39	16:29	
17   07:23	06:53	06:09	06:17	05:38	18:53 (11)   05:24	05:38	06:08	19:04 (11)   06:40	07:12	06:49	07:19	
16:55	17:34	18:07	19:41	20:12	30   19:23 (11)   20:35	20:31	19:57	24   19:28 (11)   19:06	18:16	16:38	16:30	
18   07:22	06:51	06:07	06:16	05:37	18:54 (11)   05:24	05:39	19:14 (11)   06:09	19:05 (11)   06:41	07:13	06:50	07:20	
16:56	17:35	18:08	19:42	20:13	28   19:22 (11)   20:35	20:30	8   19:22 (11)   19:55	22   19:27 (11)   19:05	18:14	16:37	16:30	
19   07:22	06:50	06:06	06:14	05:37	18:55 (11)   05:24	05:40	19:12 (11)   06:10	19:07 (11)   06:42	07:14	06:51	07:21	
16:57	17:36	18:09	19:43	20:14	26   19:21 (11)   20:36	20:29	13   19:25 (11)   19:54	17   19:24 (11)   19:03	18:13	16:36	16:30	
20   07:21	06:49	06:04	06:13	05:36	18:55 (11)   05:24	05:41	19:10 (11)   06:11	19:10 (11)   06:43	07:15	06:53	07:21	
16:58	17:37	18:10	19:44	20:15	25   19:20 (11)   20:36	20:29	17   19:27 (11)   19:53	11   19:21 (11)   19:01	18:11	16:35	16:31	
21   07:21	06:47	06:02	06:11	05:35	18:57 (11)   05:24	05:42	19:09 (11)   06:12	11   19:20 (11)   19:43	18:11	16:44	07:22	
17:00	17:39	18:11	19:45	20:16	23   19:20 (11)   20:36	20:28	19   19:28 (11)   19:51	18:59   18:10	16:33	16:31		
22   07:20	06:46	06:00	06:10	05:34	18:58 (11)   05:25	05:43	19:07 (11)   06:13	18:58   07:18	16:55	07:22		
17:01	17:40	18:12	19:46	20:17	21   19:19 (11)   20:37	20:27	22   19:29 (11)   19:49	18:58   18:08	16:34	16:32		
23   07:19	06:44	05:59	06:08	19:03 (11)   05:33	18:59 (11)   05:25	05:44	19:06 (11)   06:14	18:56   07:19	16:56	07:23		
17:02	17:41	18:13	19:47	13   19:16 (11)   20:18	18   19:17 (11)   20:37	20:26	24   19:30 (11)   19:48	18:56   18:07	16:33	16:32		
24   07:19	06:43	05:57	06:07	19:01 (11)   05:32	19:01 (11)   05:25	05:45	19:05 (11)   06:15	18:57   07:20	16:57	07:23		
17:03	17:42	18:14	19:48	18   19:19 (11)   20:19	14   19:15 (11)   20:37	20:25	26   19:31 (11)   19:46	18:54   18:06	16:33	16:33		
25   07:18	06:41	05:55	06:05	18:58 (11)   05:32	19:03 (11)   05:25	05:45	19:05 (11)   06:17	18:58   06:21	16:58	07:24		
17:05	17:43	18:15	19:49	22   19:20 (11)   20:20	11   19:14 (11)   20:37	20:24	27   19:32 (11)   19:45	18:53   17:04	16:32	16:33		
26   07:17	06:40	05:54	06:04	18:57 (11)   05:31	19:07 (11)   05:26	05:46	19:04 (11)   06:18	18:59   06:22	16:51	06:25		
17:06	17:45	18:17	19:50	25   19:22 (11)   20:21	3   19:10 (11)   20:37	20:24	29   19:33 (11)   19:43	18:51   17:03	16:32	16:34		
27   07:16	06:38	05:52	06:02	18:55 (11)   05:30	18:55 (11)   05:26	05:47	19:03 (11)   06:19	18:50   06:24	16:54	07:24		
17:07	17:46	18:18	19:51	28   19:23 (11)   20:22	20:37	20:23	31   19:34 (11)   19:42	18:49   17:01	16:31	16:35		
28   07:15	06:37	05:50	06:01	18:54 (11)   05:30	18:54 (11)   05:26	05:48	19:03 (11)   06:20	18:46   16:30	16:36	07:25		
17:08	17:47	18:19	19:52	30   19:24 (11)   20:23	20:37	20:22	31   19:34 (11)   19:40	18:47   17:00	16:31	16:35		
29   07:15	06:34	05:49	06:00	18:53 (11)   05:29	18:53 (11)   05:27	05:49	19:02 (11)   06:21	18:52   06:26	16:52	07:25		
17:10	17:49	18:20	19:54	32   19:25 (11)   20:23	20:37	20:21	33   19:35 (11)   19:38	18:46   16:30	16:36			
30   07:14	06:47	05:58	06:27	18:52 (11)   05:28	18:							

**SHADOW - Calendario**

**Calcolo:** Shadow Flickering Analysis **Recettore: R17** - **Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (92)**  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>  Gennaio</b>		<b>  Febbraio</b>		<b>  Marzo</b>		<b>  Aprile</b>		<b>  Maggio</b>		<b>  Giugno</b>
1   07:26			07:12	07:32 (17)   06:35		07:14 (13)   06:43		07:07 (14)   05:57		06:16 (22)   05:27	
16:38			17:13	20	07:52 (17)   17:48	52	08:06 (13)   19:23	22	07:29 (14)   19:56	8	06:24 (22)   20:26
2   07:26			07:11	07:31 (17)   06:33		07:14 (13)   06:42		07:05 (14)   05:55		06:15 (22)   05:27	
16:39			17:14	21	07:52 (17)   17:49	53	08:07 (13)   19:24	25	07:30 (14)   19:57	10	06:25 (22)   20:27
3   07:26			07:10	07:31 (17)   06:32		07:13 (13)   06:40		07:04 (14)   05:54		06:14 (22)   05:26	
16:40			17:16	21	07:52 (17)   17:50	53	08:06 (13)   19:25	28	07:32 (14)   19:58	11	06:25 (22)   20:27
4   07:26			07:09	07:31 (17)   06:30		07:13 (13)   06:38		07:02 (14)   05:53		06:12 (22)   05:26	
16:41			17:17	21	07:52 (17)   17:52	53	08:06 (13)   19:26	30	07:32 (14)   19:59	13	06:25 (22)   20:28
5   07:26			07:07	07:32 (17)   06:29		07:13 (13)   06:37		07:00 (14)   05:52		06:11 (22)   05:26	
16:42			17:18	20	07:52 (17)   17:53	53	08:06 (13)   19:27	32	07:32 (14)   20:00	14	06:25 (22)   20:29
6   07:26			07:06	07:32 (17)   06:27		07:12 (13)   06:35		07:00 (14)   05:50		06:10 (22)   05:25	
16:43			17:20	19	07:51 (17)   17:54	54	08:06 (13)   19:28	33	07:33 (14)   20:01	15	06:25 (22)   20:29
7   07:26			07:05	07:33 (17)   06:25		07:11 (13)   06:33		06:59 (14)   05:49		06:09 (22)   05:25	
16:44			17:21	17	07:50 (17)   17:55	54	08:05 (13)   19:29	34	07:33 (14)   20:02	16	06:25 (22)   20:30
8   07:26			07:04	07:34 (17)   06:24		07:12 (13)   06:32		06:58 (14)   05:48		06:08 (22)   05:25	
16:45			17:22	16	07:50 (17)   17:56	53	08:05 (13)   19:31	35	07:33 (14)   20:03	16	06:24 (22)   20:31
9   07:25			07:03	07:36 (17)   06:22		07:12 (13)   06:30		06:58 (14)   05:47		06:08 (22)   05:24	
16:46			17:23	12	07:48 (17)   17:57	53	08:05 (13)   19:32	35	07:33 (14)   20:04	16	06:24 (22)   20:31
10   07:25			07:02	07:38 (17)   06:21		07:11 (13)   06:28		06:57 (14)   05:46		06:09 (22)   05:24	
16:47			17:25	8	07:46 (17)   17:59	53	08:04 (13)   19:33	36	07:33 (14)   20:05	14	06:23 (22)   20:32
11   07:25			07:00		06:19		07:12 (13)   06:27		06:56 (14)   05:44		06:10 (22)   05:24
16:48			17:26		18:00	52	08:04 (13)   19:34	36	07:32 (14)   20:06	12	06:22 (22)   20:32
12   07:25			06:59		06:17		07:12 (13)   06:25		06:57 (14)   05:43		06:11 (22)   05:24
16:49			17:27		18:01	50	08:02 (13)   19:35	35	07:32 (14)   20:07	10	06:21 (22)   20:33
13   07:24			06:58		06:16		07:12 (13)   06:24		06:57 (14)   05:42		06:14 (22)   05:24
16:50			17:28		18:02	49	08:01 (13)   19:36	34	07:31 (14)   20:08	5	06:19 (22)   20:33
14   07:24			06:57		06:14		07:13 (13)   06:22		06:57 (14)   05:41		05:24
16:51			17:30		18:03	48	08:01 (13)   19:37	34	07:31 (14)   20:09		20:34
15   07:24			06:55		06:12		07:13 (13)   06:20		06:57 (14)   05:40		05:24
16:52			17:31		18:04	46	07:59 (13)   19:38	33	07:30 (14)   20:10		20:34
16   07:23			06:54		06:11		07:13 (13)   06:19		06:58 (14)   05:39		05:24
16:54			17:32		18:05	45	07:58 (13)   19:39	31	07:29 (14)   20:11		20:35
17   07:23			06:53	07:36 (13)   06:09		07:15 (13)   06:17		06:58 (14)   05:38		05:24	
16:55			17:33	11	07:47 (13)   18:06	42	07:57 (13)   19:40	29	07:27 (14)   20:12		20:35
18   07:22			06:51	07:32 (13)   06:07		07:16 (13)   06:16		06:59 (14)   05:37		05:24	
16:56			17:35	20	07:52 (13)   18:08	39	07:55 (13)   19:41	27	07:26 (14)   20:13		20:35
19   07:22			06:50	07:28 (13)   06:05		07:17 (13)   06:14		07:00 (14)   05:36		05:24	
16:57			17:36	26	07:54 (13)   18:09	36	07:53 (13)   19:43	25	07:25 (14)   20:14		20:36
20   07:21			06:48	07:26 (13)   06:04		07:18 (13)   06:13		07:01 (14)   05:35		05:24	
16:58			17:37	31	07:57 (13)   18:10	32	07:50 (13)   19:44	21	07:22 (14)   20:15		20:36
21   07:21			06:47	07:24 (13)   06:02		07:20 (13)   06:11		07:03 (14)   05:35		05:24	
16:59			17:38	34	07:58 (13)   18:11	28	07:48 (13)   19:45	17	07:20 (14)   20:16		20:36
22   07:20			06:46	07:22 (13)   06:00		07:22 (13)   06:10		07:07 (14)   05:34		05:24	
17:01			17:40	38	08:00 (13)   18:12	23	07:45 (13)   19:46	11	07:18 (14)   20:17		20:36
23   07:19			06:44	07:20 (13)   05:59		07:26 (13)   06:08				05:33	
17:02			17:41	41	08:01 (13)   18:13	14	07:40 (13)   19:47				05:25
24   07:18		07:39 (17)   06:43			07:20 (13)   05:57					20:18	
17:03	1	07:40 (17)   17:42	43	08:03 (13)   18:14						05:32	
25   07:18		07:38 (17)   06:41			07:18 (13)   05:55					20:37	
17:04	6	07:44 (17)   17:43	45	08:03 (13)   18:15						05:31	
26   07:17		07:38 (17)   06:40			07:17 (13)   05:54					20:37	
17:06	9	07:47 (17)   17:44	48	08:05 (13)   18:16						05:31	
27   07:16		07:37 (17)   06:38			07:16 (13)   05:52					20:21	
17:07	11	07:48 (17)   17:46	49	08:05 (13)   18:17						20:21	
28   07:15		07:36 (17)   06:37			07:16 (13)   05:50					20:22	
17:08	13	07:49 (17)   17:47	50	08:06 (13)   18:19						20:22	
29   07:14		07:35 (17)   06:42				06:48		05:59		20:23	
17:09	15	07:50 (17)				19:20		19:53	3	06:22 (22)   20:23	
30   07:14		07:34 (17)				06:47	07:13 (14)   05:58		06:18 (22)   05:28		
17:11	16	07:50 (17)				19:21	10 07:23 (14)   19:55	5	06:23 (22)   20:24		
31   07:13		07:33 (17)				06:45	07:10 (14)		05:28		
17:12	18	07:51 (17)				19:22	17 07:27 (14)		20:25		
Ore potenziali eliofania		296				369		399		450	
Totale, caso peggiore		89				611		1062		160	
Probabilità di eliofania		0.43				0.44		0.50		0.57	
Tempo di operatività rid.		0.30				0.30		0.30		0.30	
Dir. del vento rid.		0.73				0.70		0.68		0.49	
Totale ridotto		0.10				0.09		0.09		0.09	
Totale effettivo		9				58		99		14	

**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:** Shadow Flickering Analysis **Recettore:** R17 - **Shadow Receptor:** 1.0 × 1.0 **Azimuth:** 0.0° **Slope:** 0.0° (92)  
**Assunzioni sui calcoli d'ombra**

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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Luglio		Agosto		Settembre		Ottobre		Novembre		Dicembre
1   05:28			1   05:52	06:20 (22)   06:24		6   06:56 (14)   06:54		7   07:52 (13)   06:29		10   07:06 (17)   07:05	
20:37			20:17	11   06:31 (22)   19:33	36	07:32 (14)   18:42	50	08:42 (13)   16:55	10   07:16 (17)   16:30		
2   05:28			05:53	06:19 (22)   06:25		6   06:56 (14)   06:55		7   07:51 (13)   06:31		10   07:05 (17)   07:06	
20:37			20:16	13   06:32 (22)   19:32	36	07:32 (14)   18:40	51	08:42 (13)   16:53	14   07:19 (17)   16:29		
3   05:29			05:54	06:18 (22)   06:26		6   06:56 (14)   06:56		7   07:50 (13)   06:32		10   07:03 (17)   07:07	
20:37			20:15	15   06:33 (22)   19:30	35	07:31 (14)   18:39	52	08:42 (13)   16:52	17   07:20 (17)   16:29		
4   05:29			05:55	06:18 (22)   06:27		6   06:55 (14)   06:58		7   07:49 (13)   06:33		10   07:02 (17)   07:08	
20:36			20:14	16   06:34 (22)   19:28	35	07:30 (14)   18:37	53	08:42 (13)   16:51	18   07:20 (17)   16:29		
5   05:30			05:56	06:18 (22)   06:28		6   06:55 (14)   06:59		7   07:49 (13)   06:34		10   07:01 (17)   07:09	
20:36			20:13	16   06:34 (22)   19:27	34	07:29 (14)   18:35	53	08:42 (13)   16:50	20   07:21 (17)   16:29		
6   05:30			05:57	06:19 (22)   06:29		6   06:55 (14)   07:00		7   07:48 (13)   06:35		10   07:02 (17)   07:10	
20:36			20:12	15   06:34 (22)   19:25	33	07:28 (14)   18:34	54	08:42 (13)   16:49	20   07:22 (17)   16:28		
7   05:31			05:58	06:20 (22)   06:30		6   06:55 (14)   07:01		7   07:48 (13)   06:37		10   07:01 (17)   07:11	
20:36			20:10	15   06:35 (22)   19:23	32	07:27 (14)   18:32	54	08:42 (13)   16:47	21   07:22 (17)   16:28		
8   05:32			05:59	06:21 (22)   06:31		6   06:56 (14)   07:02		7   07:47 (13)   06:38		10   07:01 (17)   07:12	
20:35			20:09	13   06:34 (22)   19:22	30	07:26 (14)   18:30	54	08:41 (13)   16:46	21   07:22 (17)   16:28		
9   05:32			06:00	06:22 (22)   06:32		6   06:57 (14)   07:03		7   07:47 (13)   06:39		10   07:02 (17)   07:13	
20:35			20:08	12   06:34 (22)   19:20	28	07:25 (14)   18:29	54	08:41 (13)   16:45	21   07:23 (17)   16:28		
10   05:33			06:01	06:23 (22)   06:33		6   06:58 (14)   07:04		7   07:47 (13)   06:40		10   07:03 (17)   07:14	
20:34			20:06	11   06:34 (22)   19:18	25	07:23 (14)   18:27	53	08:40 (13)   16:44	19   07:22 (17)   16:28		
11   05:34			06:02	06:24 (22)   06:34		6   06:59 (14)   07:05		7   07:48 (13)   06:42		10   07:04 (17)   07:15	
20:34			20:05	9   06:33 (22)   19:17	22	07:21 (14)   18:25	52	08:40 (13)   16:43	18   07:22 (17)   16:28		
12   05:34			06:03	06:25 (22)   06:35		6   07:01 (14)   07:06		7   07:48 (13)   06:43		10   07:06 (17)   07:15	
20:34			20:04	7   06:32 (22)   19:15	18	07:19 (14)   18:24	52	08:40 (13)   16:42	16   07:22 (17)   16:28		
13   05:35			06:04	06:26 (22)   06:36		6   07:04 (14)   07:07		7   07:48 (13)   06:44		10   07:07 (17)   07:16	
20:33			20:02	5   06:31 (22)   19:13	11	07:15 (14)   18:22	51	08:39 (13)   16:41	15   07:22 (17)   16:29		
14   05:36			06:05	06:27 (22)   06:37			7   07:08	07:48 (13)   06:45		10   07:08 (17)   07:17	
20:32			20:01	2   06:29 (22)   19:11			8   18:21	50   08:38 (13)   16:40	13   07:21 (17)   16:29		
15   05:37			06:06			9   06:38		10   07:49 (13)   06:46		10   07:09 (17)   07:18	
20:32			20:00			10   19:10	48   08:37 (13)   16:39	11   07:20 (17)   16:29			
16   05:37			06:07			11   06:39		12   07:11	47   07:49 (13)   06:48	10   07:11 (17)   07:18	
20:31			19:58			12   19:08	47   08:36 (13)   16:38	8   07:19 (17)   07:29			
17   05:38			06:08			13   06:40		14   07:12	47   07:51 (13)   06:49	10   07:12 (17)   07:19	
20:31			19:57			14   19:06	44   08:35 (13)   16:38	6   07:18 (17)   07:29			
18   05:39			06:09			15   06:41		16   07:13	44   07:51 (13)   06:50	10   07:13 (17)   07:20	
20:30			19:55			16   19:05	43   08:34 (13)   16:37	1   07:14 (17)   07:30			
19   05:40			06:10			17   06:42		18   07:14	43   07:52 (13)   06:51		10   07:20 (17)   07:20
20:29			19:54			18   19:03	40   08:32 (13)   16:36				10   07:30 (17)   07:30
20   05:41			06:11			19   06:43	37   08:30 (13)   16:35				10   07:21 (17)   07:21
20:29			19:52			20   19:01	37   08:25 (13)   18:11				10   07:31 (17)   07:31
21   05:42			06:12	12   07:11 (14)   06:44		21   08:09 (13)   07:16		22   07:55 (13)   06:54			10   07:22 (17)   07:22
20:28			19:51	12   07:23 (14)   18:59	20	08:29 (13)   18:10	33	08:28 (13)   16:35			10   07:31 (17)   07:31
22   05:43			06:13			23   07:08 (14)   06:45	30   08:05 (13)   07:18	30   07:57 (13)   06:55			10   07:22 (17)   07:22
20:27			19:49	18   07:26 (14)   18:58	27	08:32 (13)   18:08	30   08:27 (13)   16:34				10   07:32 (17)   07:32
23   05:43			06:14			24   07:05 (14)   06:46	30   08:03 (13)   07:19	25   07:59 (13)   06:56			10   07:23 (17)   07:23
20:26			19:48	22   07:27 (14)   18:56	31	08:34 (13)   18:07	25   08:24 (13)   16:33				10   07:33 (17)   07:32
24   05:44			06:15			26   07:04 (14)   06:47	25   08:00 (13)   07:20	25   08:02 (13)   06:57			10   07:23 (17)   07:23
20:25			19:46	25   07:29 (14)   18:54	35	08:35 (13)   18:05	19   08:21 (13)   16:33				10   07:33 (17)   07:33
25   05:45			06:16			27   07:02 (14)   06:48	19   07:59 (13)   06:21	19   07:08 (13)   06:58			10   07:24 (17)   07:24
20:24			19:45	28   07:30 (14)   18:52	38	08:37 (13)   17:04	6   07:14 (13)   16:32				10   07:34 (17)   07:33
26   05:46			06:17			29   07:01 (14)   06:49		10   07:57 (13)   06:22			10   07:24 (17)   07:24
20:23			19:43	29   07:30 (14)   18:51	41	08:38 (13)   17:03		16   07:32 (13)   16:32			10   07:34 (17)   07:34
27   05:47			06:18			30   07:00 (14)   06:50		16   07:55 (13)   06:23			10   07:24 (17)   07:24
20:23			19:42	31   07:31 (14)   18:49	44	08:39 (13)   17:01		16   07:31 (13)   16:31			10   07:34 (17)   07:34
28   05:48			06:19			32   06:59 (14)   06:51		16   07:54 (13)   06:25			10   07:25 (17)   07:25
20:22			19:40	33   07:32 (14)   18:47	45	08:39 (13)   17:00		16   07:31 (13)   16:31			10   07:35 (17)   07:35
29   05:49			06:20			34   06:58 (14)   06:52		16   07:53 (13)   06:26			10   07:25 (17)   07:25
20:21			19:38	34   07:32 (14)   18:46	47	08:40 (13)   16:58		16   07:53 (13)   06:27			10   07:36 (17)   07:36
30   05:50			06:21			35   06:57 (14)   06:53		16   07:53 (13)   06:27			10   07:25 (17)   07:25
20:20			19:37	35   07:32 (14)   18:44	48	08:41 (13)   16:57		16   07:53 (13)   06:30			10   07:37 (17)   07:37
31   05:51			06:22 (22)	35   06:23			16   06:28		16   07:08		10   07:25 (17)   07:25
20:18			7   06:29 (22)	35   19:35			16   16:56		16   07:08		10   07:37 (17)   07:37
							345		297		10   07:26 (17)   07:26
Ore potenziali eliofania			461			429		375			
Totale, caso peggiore			7			462		762		269	
Probabilità di eliofania			0.68			0.68		0.61		0.47	
Tempo di operatività rid.			0.30			0.30		0.30		0.30	
Dir. del vento rid.			0.49			0.54		0.63		0.73	
Totale ridotto			0.10			0.11		0.12		0.11	
Totale effettivo			1			53		90		29	

**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:** Shadow Flickering Analysis **Recettore:** R18 - **Shadow Receptor:** 1.0 × 1.0 **Azimuth:** 0.0° **Slope:** 0.0° (93)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio   Febbraio	Marzo	Aprile	Maggio	Giugno	
1	07:25   07:11	06:35	06:43   18:12 (22)   05:57   05:27			
	16:38   17:13	17:48	19:23   33 18:45 (22)   19:55   20:26			
2	07:26   07:11	06:33	06:41   18:13 (22)   05:55   05:27			
	16:39   17:14	17:49	19:24   30 18:43 (22)   19:57   20:26			
3	07:26   07:09	06:32	06:40   18:13 (22)   05:54   05:26			
	16:40   17:16	17:50	19:25   29 18:42 (22)   19:58   20:27			
4	07:26   07:08	06:30	06:38   18:14 (22)   05:53   05:26			
	16:41   17:17	17:51	19:26   27 18:41 (22)   19:59   20:28			
5	07:26   07:07	06:28	06:36   18:15 (22)   05:51   05:25			
	16:42   17:18	17:53	19:27   24 18:39 (22)   20:00   20:29			
6	07:26   07:06	06:27	06:35   18:16 (22)   05:50   05:25			
	16:43   17:19	17:54	19:28   20 18:36 (22)   20:01   20:29			
7	07:26   07:05	06:25	06:33   18:19 (22)   05:49   05:25			
	16:44   17:21	17:55	19:29   15 18:34 (22)   20:02   20:30			
8	07:25   07:04	06:24	06:31   18:24 (22)   05:48   05:24			
	16:45   17:22	17:56	19:30   5 18:29 (22)   20:03   20:30			
9	07:25   07:03	06:22	06:30	05:47   05:24		
	16:46   17:23	17:57	19:32	20:04   20:31		
10	07:25   07:02	06:20	06:28	05:45   05:24		
	16:47   17:24	17:58	19:33	20:05   20:32		
11	07:25   07:00	06:19	06:27	05:44   05:24		
	16:48   17:26	18:00	19:34	20:06   20:32		
12	07:25   06:59	06:17	06:25	05:43   05:24		
	16:49   17:27	18:01	19:35	20:07   20:33		
13	07:24   06:58	06:15	06:23	05:42   05:24		
	16:50   17:28	18:02	19:36	20:08   20:33		
14	07:24   06:57	06:14	06:22	05:41   05:24		
	16:51   17:30	18:03	19:37	20:09   20:34		
15	07:23   06:55	17:06 (14)   06:12	06:20	05:40   05:24		
	16:52   17:31	2 17:08 (14)   08:04	19:38	20:10   20:34		
16	07:23   06:54	17:03 (14)   06:10	06:19	05:39   05:24		
	16:53   17:32	6 17:00 (14)   08:05	19:39	20:11   20:35		
17	07:23   06:52	17:02 (14)   06:09	9 17:28 (22)   06:17	05:38   05:24		
	16:55   17:33	9 17:11 (14)   08:06	9 17:37 (22)   19:40	20:12   20:35		
18	07:22   06:51	17:02 (14)   06:07	17:24 (22)   06:15	05:37   05:24		
	16:56   17:35	11 17:13 (14)   08:07	17 17:41 (22)   19:41	20:13   20:35		
19	07:22   06:50	17:01 (14)   06:05	17:21 (22)   06:14	05:36   05:24		
	16:57   17:36	12 17:13 (14)   08:09	22 17:43 (22)   19:42	20:14   20:36		
20	07:21   06:48	17:01 (14)   06:04	17:19 (22)   06:12	05:35   05:24		
	16:58   17:37	14 17:15 (14)   08:10	25 17:44 (22)   19:44	20:15   20:36		
21	07:20   06:47	17:01 (14)   06:02	17:18 (22)   06:11	05:34   05:24		
	16:59   17:38	15 17:16 (14)   08:11	28 17:46 (22)   19:45	20:16   20:36		
22	07:20   06:45	17:01 (14)   06:00	17:16 (22)   06:09	05:34   05:24		
	17:01   17:39	17 17:18 (14)   08:12	30 17:46 (22)   19:46	20:17   20:36		
23	07:19   06:44	17:01 (14)   05:58	17:15 (22)   06:08	05:33   05:24		
	17:02   17:41	16 17:17 (14)   08:13	32 17:47 (22)   19:47	20:18   20:36		
24	07:18   06:42	17:03 (14)   05:57	17:14 (22)   06:06	05:32   05:25		
	17:03   17:42	13 17:16 (14)   08:14	33 17:47 (22)   19:48	20:19   20:37		
25	07:18   06:41	17:04 (14)   05:55	17:14 (22)   06:05	05:31   05:25		
	17:04   17:43	10 17:14 (14)   08:15	34 17:48 (22)   19:49	20:20   20:37		
26	07:17   06:39	17:07 (14)   05:53	17:13 (22)   06:04	05:31   05:25		
	17:05   17:44	4 17:11 (14)   08:16	34 17:47 (22)   19:50	20:21   20:37		
27	07:16   06:38		5 05:52   17:12 (22)   06:02	05:30   05:26		
	17:07   17:45		35 17:47 (22)   19:51	20:22   20:37		
28	07:15   06:36		5 05:50   17:12 (22)   06:01	05:29   05:26		
	17:08   17:47		35 17:47 (22)   19:52	20:22   20:37		
29	07:14		6 05:48   18:12 (22)   05:59	05:29   05:26		
	17:09		35 18:47 (22)   19:53	20:23   20:37		
30	07:13		6 05:47   18:12 (22)   05:58	05:28   05:27		
	17:10		34 18:46 (22)   19:54	20:24   20:37		
31	07:12		6 05:45   18:12 (22)	05:28		
	17:12		34 18:46 (22)   19:52	20:25		
Ore potenziali eliofania	296	296	369	399	450	454
Totale, caso peggiore		129	437	183		
Probabilità di eliofania		0.44	0.44	0.50		
Tempo di operatività rid.		0.30	0.30	0.30		
Dir. del vento rid.		0.49	0.57	0.57		
Totale ridotto		0.07	0.08	0.09		
Totale effettivo		8	34	16		

**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:** Shadow Flickering Analysis **Recettore:** R18 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (93)  
**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  
437 192 40 16 67 346 208 192 120 99 425 524 2,665

: Soglia di cut-in dalla curva di potenza

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:27	05:52	06:23	06:54	06:29	07:05
	20:37	20:17	19:33	18:42	16:54	16:29
2	05:28	05:53	06:24	06:55	06:30	07:06
	20:37	20:16	19:32	18:40	16:53	16:29
3	05:28	05:54	06:25	06:56	06:32	07:07
	20:36	20:15	19:30	18:39	16:52	16:29
4	05:29	05:55	06:26	18:21 (22)   06:57	06:33	07:08
	20:36	20:14	19:28	5 18:26 (22)   18:37	16:51	16:29
5	05:30	05:56	06:27	18:16 (22)   06:58	06:34	07:09
	20:36	20:13	19:27	14 18:30 (22)   18:35	16:50	16:28
6	05:30	05:57	06:28	18:13 (22)   07:00	06:35	07:10
	20:36	20:11	19:25	19 18:32 (22)   18:33	16:48	16:28
7	05:31	05:58	06:29	18:10 (22)   07:01	06:37	07:11
	20:35	20:10	19:23	24 18:34 (22)   18:32	16:47	16:28
8	05:31	05:59	06:31	18:09 (22)   07:02	06:38	07:12
	20:35	20:09	19:22	26 18:35 (22)   18:30	16:46	16:28
9	05:32	06:00	06:32	18:07 (22)   07:03	06:39	07:13
	20:35	20:08	19:20	29 18:36 (22)   18:29	16:45	16:28
10	05:33	06:01	06:33	18:06 (22)   07:04	06:40	07:14
	20:34	20:06	19:18	30 18:36 (22)   18:27	16:44	16:28
11	05:33	06:02	06:34	18:05 (22)   07:05	06:41	07:14
	20:34	20:05	19:16	32 18:37 (22)   18:25	16:43	16:28
12	05:34	06:03	06:35	18:04 (22)   07:06	06:43	07:15
	20:33	20:04	19:15	33 18:37 (22)   18:24	16:42	16:28
13	05:35	06:04	06:36	18:03 (22)   07:07	06:44	07:16
	20:33	20:02	19:13	34 18:37 (22)   18:22	16:41	16:28
14	05:36	06:05	06:37	18:02 (22)   07:08	06:45	07:17
	20:32	20:01	19:11	35 18:37 (22)   18:20	16:40	16:29
15	05:36	06:06	06:38	18:02 (22)   07:09	06:46	07:18
	20:32	20:00	19:10	35 18:37 (22)   18:19	16:39	16:29
16	05:37	06:07	06:39	18:01 (22)   07:11	17:37 (14)   06:48	07:18
	20:31	19:58	19:08	35 18:36 (22)   18:17	7 17:44 (14)   16:38	16:29
17	05:38	06:08	06:40	18:01 (22)   07:12	17:34 (14)   06:49	07:19
	20:31	19:57	19:06	35 18:36 (22)   18:16	12 17:46 (14)   16:37	16:29
18	05:39	06:09	06:41	18:01 (22)   07:13	17:34 (14)   06:50	07:20
	20:30	19:55	19:04	34 18:35 (22)   18:14	14 17:48 (14)   16:37	16:30
19	05:40	06:10	06:42	18:01 (22)   07:14	17:33 (14)   06:51	07:20
	20:29	19:54	19:03	33 18:34 (22)   18:13	15 17:48 (14)   16:36	16:30
20	05:41	06:11	06:43	18:01 (22)   07:15	17:32 (14)   06:52	07:21
	20:28	19:52	19:01	32 18:33 (22)   18:11	16 17:48 (14)   16:35	16:30
21	05:41	06:12	06:44	18:01 (22)   07:16	17:31 (14)   06:53	07:21
	20:28	19:51	18:59	31 18:32 (22)   18:10	15 17:46 (14)   16:34	16:31
22	05:42	06:13	06:45	18:02 (22)   07:17	17:31 (14)   06:55	07:22
	20:27	19:49	18:57	29 18:31 (22)   18:08	13 17:44 (14)   16:34	16:31
23	05:43	06:14	06:46	18:03 (22)   07:19	17:32 (14)   06:56	07:22
	20:26	19:48	18:56	26 18:29 (22)   18:07	11 17:43 (14)   16:33	16:32
24	05:44	06:15	06:47	18:04 (22)   07:20	17:32 (14)   06:57	07:23
	20:25	19:46	18:54	23 18:27 (22)   18:05	10 17:42 (14)   16:33	16:32
25	05:45	06:16	06:48	18:06 (22)   06:21	16:32 (14)   06:58	07:23
	20:24	19:45	18:52	19 18:25 (22)   17:04	8 16:40 (14)   16:32	16:33
26	05:46	06:17	06:49	18:09 (22)   06:22	16:33 (14)   06:59	07:24
	20:23	19:43	18:51	12 18:21 (22)   17:02	5 16:38 (14)   16:31	16:34
27	05:47	06:18	06:50		16:36 (14)   07:00	07:24
	20:22	19:41	18:49		2 16:38 (14)   16:31	16:34
28	05:48	06:19	06:51		17:01	
	20:21	19:40	18:47		16:24	07:24
29	05:49	06:20	06:52		17:00	
	20:20	19:38	18:45		16:26	07:25
30	05:50	06:21	06:53		16:58	
	20:19	19:37	18:44		16:30	16:36
31	05:51	06:22			16:57	
	20:18	19:35			16:28	07:25
					16:56	16:37
Ore potenziali eliofania	461	429	375	345	297	286
Totalle, caso peggiore			625	128		
Probabilità di eliofania			0.61	0.52		
Tempo di operatività rid.			0.30	0.30		
Dir. del vento rid.			0.57	0.49		
Totale ridotto			0.11	0.08		
Totale effettivo			66	10		

## 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:** Shadow Flickering Analysis **Recettore:** R19 - **Shadow Receptor:** 1.0 × 1.0 **Azimuth:** 0.0° **Slope:** 0.0° (94)  
**Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giug	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	ONI	NNO	Somma
437	192	40	16	67	346	208	192	120	99	425	524	2,665	

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile		Maggio		Giugno					
1	07:25	07:11	06:35	06:43		05:57		18:44 (19)	05:27		19:53 (16)		
	16:38	17:13	17:48	19:23		19:55	38	19:22 (19)	20:26	8	20:01 (16)		
2	07:25	07:10	06:33	06:42		05:55		18:44 (19)	05:27		19:52 (16)		
	16:39	17:14	17:49	19:24		19:57	39	19:23 (19)	20:26	9	20:01 (16)		
3	07:26	07:09	06:32	06:40		05:54		18:44 (19)	05:26		19:52 (16)		
	16:40	17:16	17:50	19:25		19:58	39	19:23 (19)	20:27	10	20:02 (16)		
4	07:26	07:08	06:30	06:38		05:53		18:43 (19)	05:26		19:52 (16)		
	16:41	17:17	17:51	19:26		19:59	39	19:22 (19)	20:28	11	20:03 (16)		
5	07:26	07:07	06:28	06:37		05:51		18:43 (19)	05:25		19:51 (16)		
	16:42	17:18	17:53	19:27		20:00	40	19:23 (19)	20:28	12	20:03 (16)		
6	07:26	07:06	06:27	06:35		05:50		18:43 (19)	05:25		19:51 (16)		
	16:43	17:19	17:54	19:28		20:01	40	19:23 (19)	20:29	13	20:04 (16)		
7	07:25	07:05	06:25	06:33		05:49		18:43 (19)	05:25		19:51 (16)		
	16:44	17:21	17:55	19:29		20:02	40	19:23 (19)	20:30	13	20:04 (16)		
8	07:25	07:04	06:24	06:32		05:48		18:43 (19)	05:25		19:51 (16)		
	16:45	17:22	17:56	19:30		20:03	40	19:23 (19)	20:30	14	20:05 (16)		
9	07:25	07:03	06:22	06:30		05:47		18:43 (19)	05:24		19:50 (16)		
	16:46	17:23	17:57	19:32		20:04	40	19:23 (19)	20:31	15	20:05 (16)		
10	07:25	07:02	06:20	06:28		05:45		18:44 (19)	05:24		19:50 (16)		
	16:47	17:25	17:58	19:33		20:05	38	19:22 (19)	20:32	16	20:06 (16)		
11	07:25	07:00	06:19	06:27		05:44		18:43 (19)	05:24		19:50 (16)		
	16:48	17:26	18:00	19:34		20:06	38	19:21 (19)	20:32	16	20:06 (16)		
12	07:24	06:59	06:17	06:25		05:43		18:44 (19)	05:24		19:50 (16)		
	16:49	17:27	18:01	19:35		20:07	37	19:21 (19)	20:33	17	20:07 (16)		
13	07:24	06:58	06:15	06:23		05:42		18:44 (19)	05:24		19:50 (16)		
	16:50	17:28	18:02	19:36		20:08	36	19:20 (19)	20:33	17	20:07 (16)		
14	07:24	06:56	06:14	06:22		05:41		18:44 (19)	05:24		19:50 (16)		
	16:51	17:30	18:03	19:37		20:09	36	19:20 (19)	20:34	18	20:08 (16)		
15	07:23	06:55	06:12	06:20	19:10 (15)	05:40		18:45 (19)	05:24		19:51 (16)		
	16:52	17:31	18:04	19:38	6	19:16 (15)	20:10	34	19:19 (19)	20:34	17	20:08 (16)	
16	07:23	06:54	06:10	06:19	19:07 (15)	05:39		18:47 (19)	05:24		19:51 (16)		
	16:53	17:32	18:05	19:39	10	19:17 (15)	20:11	32	19:19 (19)	20:34	18	20:09 (16)	
17	07:23	06:52	06:09	06:17	19:06 (15)	05:38		18:47 (19)	05:24		19:51 (16)		
	16:55	17:33	18:06	19:40	12	19:18 (15)	20:12	32	19:19 (19)	20:35	18	20:09 (16)	
18	07:22	06:51	06:07	06:16	19:04 (15)	05:37		18:48 (19)	05:24		19:51 (16)		
	16:56	17:35	18:07	19:41	15	19:19 (15)	20:13	30	19:18 (19)	20:35	18	20:09 (16)	
19	07:22	06:50	06:05	06:14	19:04 (15)	05:36		18:49 (19)	05:24		19:51 (16)		
	16:57	17:36	18:09	19:42	16	19:20 (15)	20:14	28	19:17 (19)	20:35	18	20:09 (16)	
20	07:21	06:48	06:04	06:12	19:02 (15)	05:35		18:49 (19)	05:24		19:52 (16)		
	16:58	17:37	18:10	19:43	19	19:21 (15)	20:15	27	19:16 (19)	20:36	18	20:10 (16)	
21	07:20	06:47	06:02	06:11	18:59 (19)	05:35		18:50 (19)	05:24		19:52 (16)		
	16:59	17:38	18:11	19:45	23	19:22 (15)	20:16	25	19:15 (19)	20:36	18	20:10 (16)	
22	07:20	06:45	06:00	06:09	18:55 (19)	05:34		18:52 (19)	05:24		19:52 (16)		
	17:01	17:39	18:12	19:46	28	19:23 (15)	20:17	22	19:14 (19)	20:36	18	20:10 (16)	
23	07:19	06:44	05:58	06:08	18:53 (19)	05:33		18:53 (19)	05:25		19:52 (16)		
	17:02	17:41	18:13	19:47	30	19:23 (15)	20:18	20	19:13 (19)	20:36	18	20:10 (16)	
24	07:18	06:42	05:57	06:06	18:51 (19)	05:32		18:55 (19)	05:25		19:53 (16)		
	17:03	17:42	18:14	19:48	32	19:23 (15)	20:19	16	19:11 (19)	20:37	18	20:11 (16)	
25	07:18	06:41	05:55	06:05	18:49 (19)	05:31		18:57 (19)	05:25		19:53 (16)		
	17:04	17:43	18:15	19:49	33	19:22 (15)	20:20	13	19:10 (19)	20:37	18	20:11 (16)	
26	07:17	06:39	05:53	06:04	18:48 (19)	05:31		19:00 (19)	05:25		19:53 (16)		
	17:06	17:44	18:16	19:50	33	19:21 (15)	20:21	7	19:07 (19)	20:37	18	20:11 (16)	
27	07:16	06:38	05:52	06:02	18:47 (19)	05:30						19:54 (16)	
	17:07	17:46	18:17	19:51	33	19:20 (19)	20:21					20:11 (16)	
28	07:15	06:36	05:50	06:01	18:46 (19)	05:29						19:54 (16)	
	17:08	17:47	18:18	19:52	35	19:21 (19)	20:22					20:11 (16)	
29	07:14		06:48	05:59	18:46 (19)	05:29						19:53 (16)	
	17:09		19:20	19:53	36	19:22 (19)	20:23					20:11 (16)	
30	07:13		06:47	05:58	18:44 (19)	05:28		19:56 (16)	05:27			19:54 (16)	
	17:11		19:21	19:54	38	19:22 (19)	20:24	3	19:59 (16)	20:37	17	20:11 (16)	
31	07:12		06:45			05:28		19:54 (16)					
	17:12		19:22			20:25	5	19:59 (16)					
						450			454				
	Ore potenziali eliofania		296	369	399								
	Totale, caso peggiore				399			834					
	Probabilità di eliofania				0.50			0.57					
	Tempo di operatività rid.				0.30			0.30					
	Dir. del vento rid.				0.65			0.65					
	Totale ridotto				0.10			0.11					
	Totale effettivo				40			94					

#### 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:** Shadow Flickering Analysis **Recettore:** R19 - **Shadow Receptor:** 1.0 × 1.0 **Azimuth:** 0.0° **Slope:** 0.0° (94)  
**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  
437 192 40 16 67 346 208 192 120 99 425 524 2,665

: Soglia di cut-in dalla curva di potenza

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1   05:27	19:54 (16)	05:52	18:54 (19)	06:23	06:54	06:29   07:05
20:37	17 20:11 (16)	20:17	37 19:31 (19)	19:33   18:42	16:54	16:29
2   05:28	19:55 (16)	05:53	18:54 (19)	06:24	06:55	06:30   07:06
20:37	16 20:11 (16)	20:16	38 19:32 (19)	19:32   18:40	16:53	16:29
3   05:29	19:55 (16)	05:54	18:53 (19)	06:25	06:56	06:32   07:07
20:36	15 20:10 (16)	20:15	39 19:32 (19)	19:30   18:39	16:52	16:29
4   05:29	19:56 (16)	05:55	18:53 (19)	06:26	06:57	06:33   07:08
20:36	15 20:11 (16)	20:14	39 19:32 (19)	19:28   18:37	16:51	16:29
5   05:30	19:57 (16)	05:56	18:53 (19)	06:28	06:58	06:34   07:09
20:36	14 20:11 (16)	20:13	39 19:32 (19)	19:27   18:35	16:50	16:29
6   05:30	19:57 (16)	05:57	18:53 (19)	06:29	07:00	06:35   07:10
20:36	13 20:10 (16)	20:11	39 19:32 (19)	19:25   18:34	16:48	16:28
7   05:31	19:58 (16)	05:58	18:52 (19)	06:30	07:01	06:37   07:11
20:35	12 20:10 (16)	20:10	40 19:32 (19)	19:23   18:32	16:47	16:28
8   05:31	19:58 (16)	05:59	18:52 (19)	06:31	07:02	06:38   07:12
20:35	11 20:09 (16)	20:09	40 19:32 (19)	19:22   18:30	16:46	16:28
9   05:32	19:59 (16)	06:00	18:52 (19)	06:32	07:03	06:39   07:13
20:35	10 20:09 (16)	20:08	40 19:32 (19)	19:20   18:29	16:45	16:28
10   05:33	20:00 (16)	06:01	18:52 (19)	06:33	07:04	06:40   07:14
20:34	9 20:09 (16)	20:06	40 19:32 (19)	19:18   18:27	16:44	16:28
11   05:34	20:00 (16)	06:02	18:53 (19)	06:34	07:05	06:41   07:14
20:34	8 20:08 (16)	20:05	38 19:31 (19)	19:16   18:25	16:43	16:28
12   05:34	20:02 (16)	06:03	18:53 (19)	06:35	07:06	06:43   07:15
20:33	6 20:08 (16)	20:04	38 19:31 (19)	19:15   18:24	16:42	16:28
13   05:35	20:03 (16)	06:04	18:53 (19)	06:36	07:07	06:44   07:16
20:33	5 20:08 (16)	20:02	37 19:30 (19)	19:13   18:22	16:41	16:28
14   05:36	19:08 (19)	06:05	18:53 (19)	06:37	07:08	06:45   07:17
20:32		20:01	37 19:30 (19)	19:11   18:20	16:40	16:29
15   05:37		06:06	18:54 (19)	06:38	07:09	06:46   07:18
20:32		19:59	35 19:29 (19)	19:10   18:19	16:39	16:29
16   05:37		06:07	18:55 (19)	06:39	07:11	06:47   07:18
20:31		19:58	33 19:28 (19)	19:08   18:17	16:38	16:29
17   05:38		06:08	18:55 (19)	06:40	07:12	06:49   07:19
20:30		19:57	33 19:28 (15)	19:06   18:16	16:38	16:29
18   05:39		19:08 (19)	06:09	18:56 (19)	06:41	07:13   06:50
20:30	10 19:18 (19)	19:55	32 19:28 (15)	19:04   18:14	16:37	16:30
19   05:40	19:06 (19)	06:10	18:57 (19)	06:42	07:14	06:51   07:20
20:29	15 19:21 (19)	19:54	32 19:29 (15)	19:03   18:13	16:36	16:30
20   05:41	19:04 (19)	06:11	18:59 (19)	06:43	07:15	06:52   07:21
20:28	18 19:22 (19)	19:52	30 19:29 (15)	19:01   18:11	16:35	16:31
21   05:42	19:02 (19)	06:12	19:01 (19)	06:44	07:16	06:53   07:21
20:28	21 19:23 (19)	19:51	27 19:28 (15)	18:59   18:10	16:35	16:31
22   05:42	19:01 (19)	06:13	19:04 (19)	06:45	07:17	06:55   07:22
20:27	24 19:25 (19)	19:49	23 19:27 (15)	18:57   18:08	16:34	16:31
23   05:43	19:00 (19)	06:14	19:07 (15)	06:46	07:19	06:56   07:22
20:26	26 19:26 (19)	19:48	18 19:25 (15)	18:56   18:07	16:33	16:32
24   05:44	19:00 (19)	06:15	19:07 (15)	06:47	07:20	06:57   07:23
20:25	27 19:27 (19)	19:46	17 19:24 (15)	18:54   18:05	16:33	16:33
25   05:45	18:59 (19)	06:16	19:08 (15)	06:48	06:21	06:58   07:23
20:24	29 19:28 (19)	19:45	14 19:22 (15)	18:52   17:04	16:32	16:33
26   05:46	18:58 (19)	06:17	19:09 (15)	06:49	06:22	06:59   07:24
20:23	31 19:29 (19)	19:43	12 19:21 (15)	18:51   17:02	16:32	16:34
27   05:47	18:58 (19)	06:18	19:10 (15)	06:50	06:23	07:00   07:24
20:22	32 19:30 (19)	19:41	9 19:19 (15)	18:49   17:01	16:31	16:34
28   05:48	18:56 (19)	06:19	19:13 (15)	06:51	06:24	07:01   07:24
20:21	33 19:29 (19)	19:40	5 19:18 (15)	18:47   17:00	16:31	16:35
29   05:49	18:55 (19)	06:20		06:52	06:26	07:03   07:25
20:20	35 19:30 (19)	19:38		18:45	16:58	16:30   16:36
30   05:50	18:55 (19)	06:21		06:53	06:27	07:04   07:25
20:19	36 19:31 (19)	19:37		18:44	16:57	16:30   16:37
31   05:51	18:54 (19)	06:22			06:28	07:25
20:18	37 19:31 (19)	19:35			16:56	16:37
Ore potenziali eliofania	461	429		375	345	297   286
Totalle, caso peggiore	525		861			
Probabilità di eliofania	0.68		0.68			
Tempo di operatività rid.	0.30		0.30			
Dir. del vento rid.	0.68		0.65			
Totalle ridotto	0.14		0.13			
Totalle effettivo	74		116			

**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:** Shadow Flickering Analysis **Recettore d'ombra:** R2 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (77) **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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1   07:26	12:02 (4)	07:12	06:35	06:44	05:57	06:16 (24)
16:39	68	13:10 (4)	17:13	17:48	19:23	05:27
2   07:26		12:03 (4)	07:11	06:34	06:42	06:30 (24)
16:39	67	13:10 (4)	17:15	17:49	19:24	05:27
3   07:26		12:04 (4)	07:10	06:32	06:40	06:15 (24)
16:40	66	13:10 (4)	17:16	17:51	19:25	05:26
4   07:26		12:05 (4)	07:09	06:30	06:39	06:17 (24)
16:41	65	13:10 (4)	17:17	17:52	19:26	06:28 (24)
5   07:26		12:06 (4)	07:08	06:29	06:37	06:26
16:42	64	13:10 (4)	17:18	17:53	19:28	05:26
6   07:26		12:06 (4)	07:07	06:27	06:35	06:00
16:43	63	13:09 (4)	17:20	17:54	19:29	05:25
7   07:26		12:08 (4)	07:06	06:26	06:34	01:01
16:44	61	13:09 (4)	17:21	17:55	19:30	20:01
8   07:26		12:09 (4)	07:04	06:24	06:32	20:00
16:45	60	13:09 (4)	17:22	17:56	19:31	20:31
9   07:26		12:11 (4)	07:03	06:22	06:30	05:47
16:46	57	13:08 (4)	17:24	17:58	19:32	05:47
10   07:25		12:11 (4)	07:02	06:21	06:29	04:46
16:47	56	13:07 (4)	17:25	17:59	19:33	05:24
11   07:25		12:13 (4)	07:01	06:19	06:27	05:24
16:48	54	13:07 (4)	17:26	18:00	19:34	05:33
12   07:25		12:15 (4)	07:00	06:17	06:25	05:43
16:49	52	13:07 (4)	17:27	18:01	19:35	05:24
13   07:25		12:16 (4)	06:58	06:16	06:24	05:42
16:50	49	13:05 (4)	17:29	18:02	19:36	05:46
14   07:24		12:19 (4)	06:57	06:14	06:22	05:24
16:51	46	13:05 (4)	17:30	18:03	19:37	05:34
15   07:24		12:20 (4)	06:56	06:12	06:21	05:40
16:53	43	13:03 (4)	17:31	18:04	19:38	05:24
16   07:23		12:23 (4)	06:54	06:11	06:19	05:39
16:54	39	13:02 (4)	17:32	18:06	19:40	05:24
17   07:23		12:26 (4)	06:53	06:09	06:17	05:38
16:55	34	13:00 (4)	17:34	18:07	19:41	05:24
18   07:23		12:30 (4)	06:52	06:07	06:16	05:37
16:56	28	12:58 (4)	17:35	18:08	19:42	05:24
19   07:22		12:34 (4)	06:50	06:06	06:14	05:37
16:57	20	12:54 (4)	17:36	18:09	19:43	05:24
20   07:21			06:49	06:04	06:13	05:36
16:58			17:37	18:10	19:44	05:24
21   07:21			06:47	06:02	06:11	05:35
17:00			17:39	18:11	19:45	05:24
22   07:20			06:46	06:01	06:10	05:34
17:01			17:40	18:12	19:46	05:25
23   07:19			06:44	05:59	06:08	05:33
17:02			17:41	18:13	19:47	05:33
24   07:19			06:43	05:57	06:07	05:32
17:03			17:42	18:14	19:48	05:32
25   07:18			06:41	05:55	06:05	05:32
17:05			17:43	18:16	19:49	05:32
26   07:17			06:40	05:54	06:04	05:32
17:06			17:45	18:17	19:50	05:31
27   07:16			06:38	05:52	06:02	05:31
17:07			17:46	18:18	19:52	05:30
28   07:16			06:37	05:50	06:01	05:30
17:08			17:47	18:19	19:53	05:26
29   07:15				06:49	06:00	05:29
17:10				19:20	19:54	05:27
30   07:14				06:47	05:58	05:27
17:11				19:21	19:55	05:27
31   07:13				06:45		05:27
17:12				19:22		05:27
Ore potenziali eliofania	296	296	369	399	450	454
Totale, caso peggiore	992			68	47	
Probabilità di eliofania	0.43			0.50	0.57	
Tempo di operatività rid.	0.30			0.30	0.30	
Dir. del vento rid.	0.65			0.49	0.49	
Totale ridotto	0.09			0.08	0.09	
Totale effettivo	86			5	4	

**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:** Shadow Flickering Analysis **Recettore d'ombra:** R2 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (77) **Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre		
1	05:28	05:52		06:24	06:55	06:30	07:05	11:55 (4)
	20:37	20:18		19:34	18:42	16:55	16:30	54 12:49 (4)
2	05:28	05:53		06:25	06:56	06:31	07:06	11:54 (4)
	20:37	20:17		19:32	18:41	16:53	16:29	56 12:50 (4)
3	05:29	05:54		06:26	06:57	06:32	07:07	11:54 (4)
	20:37	20:15		19:30	18:39	16:52	16:29	57 12:51 (4)
4	05:29	05:55		06:27	06:58	06:33	07:08	11:53 (4)
	20:37	20:14		19:29	18:37	16:51	16:29	60 12:53 (4)
5	05:30	05:56		06:28	06:59	06:35	07:09	11:53 (4)
	20:36	20:13		19:27	18:36	16:50	16:29	61 12:54 (4)
6	05:30	05:57		06:29	07:00	06:36	07:10	11:53 (4)
	20:36	20:12		19:25	18:34	16:49	16:29	62 12:55 (4)
7	05:31	05:58		06:30	07:01	06:37	07:11	11:52 (4)
	20:36	20:11		19:24	18:32	16:48	16:29	64 12:56 (4)
8	05:32	05:59	06:30 (24)	06:31	07:02	06:38	07:12	11:52 (4)
	20:36	20:09	3	06:33 (24)	19:22	18:31	16:46	16:28 65 12:57 (4)
9	05:32	06:00	06:26 (24)	06:32	07:03	06:39	07:13	11:52 (4)
	20:35	20:08	10	06:36 (24)	19:20	18:29	16:45	16:28 66 12:58 (4)
10	05:33	06:01	06:25 (24)	06:33	07:04	06:41	07:14	11:52 (4)
	20:35	20:07	12	06:37 (24)	19:19	18:27	16:44	16:28 67 12:59 (4)
11	05:34	06:02	06:24 (24)	06:34	07:05	06:42	07:15	11:52 (4)
	20:34	20:05	14	06:38 (24)	19:17	18:26	16:43	16:28 68 13:00 (4)
12	05:34	06:03	06:25 (24)	06:35	07:06	06:43	07:16	11:53 (4)
	20:34	20:04	14	06:39 (24)	19:15	18:24	16:42	16:29 67 13:00 (4)
13	05:35	06:04	06:26 (24)	06:36	07:08	06:44	07:16	11:52 (4)
	20:33	20:03	13	06:31 (24)	19:13	18:22	16:41	16:29 68 13:00 (4)
14	05:36	06:05	06:27 (24)	06:37	07:09	06:46	07:17	11:52 (4)
	20:33	20:01	12	06:39 (24)	19:12	18:21	16:40	16:29 69 13:01 (4)
15	05:37	06:06	06:28 (24)	06:38	07:10	06:47	07:18	11:53 (4)
	20:32	20:00	11	06:39 (24)	19:10	18:19	16:39	16:29 69 13:02 (4)
16	05:38	06:07	06:29 (24)	06:39	07:11	06:48	07:19	11:53 (4)
	20:32	19:59	10	06:39 (24)	19:08	18:18	16:39	16:29 70 13:03 (4)
17	05:38	06:08	06:30 (24)	06:40	07:12	06:49	07:19	11:53 (4)
	20:31	19:57	8	06:38 (24)	19:06	18:16	16:38	16:30 70 13:03 (4)
18	05:39	06:09	06:31 (24)	06:41	07:13	06:50	07:20	11:54 (4)
	20:30	19:56	6	06:37 (24)	19:05	18:15	16:37	16:30 70 13:04 (4)
19	05:40	06:10	06:32 (24)	06:42	07:14	06:52	07:21	11:54 (4)
	20:30	19:54	4	06:36 (24)	19:03	18:13	16:36	16:30 71 13:05 (4)
20	05:41	06:11	06:33 (24)	06:43	07:15	06:53	07:21	11:54 (4)
	20:29	19:53	2	06:35 (24)	19:01	18:11	16:35	16:31 71 13:05 (4)
21	05:42	06:12		06:44	07:17	06:54	07:22	11:55 (4)
	20:28	19:51		19:00	18:10	16:35	16:31	71 13:06 (4)
22	05:43	06:13		06:45	07:18	06:55	07:22	11:55 (4)
	20:27	19:50		18:58	18:09	16:34	16:32	71 13:06 (4)
23	05:44	06:14		06:46	07:19	06:56	12:11 (4)	07:23 11:55 (4)
	20:26	19:48		18:56	18:07	16:33	20 12:31 (4)	16:32 71 13:06 (4)
24	05:44	06:16		06:47	07:20	06:57	12:07 (4)	07:23 11:56 (4)
	20:26	19:47		18:54	18:06	16:33	28 12:35 (4)	16:33 71 13:07 (4)
25	05:45	06:17		06:48	06:21	06:59	12:04 (4)	07:24 11:57 (4)
	20:25	19:45		18:53	17:04	16:32	34 12:38 (4)	16:33 70 13:07 (4)
26	05:46	06:18		06:49	06:22	07:00	12:01 (4)	07:24 11:58 (4)
	20:24	19:43		18:51	17:03	16:32	39 12:40 (4)	16:34 70 13:08 (4)
27	05:47	06:19		06:50	06:24	07:01	12:00 (4)	07:25 11:58 (4)
	20:23	19:42		18:49	17:01	16:31	43 12:43 (4)	16:35 70 13:08 (4)
28	05:48	06:20		06:51	06:25	07:02	11:59 (4)	07:25 11:59 (4)
	20:22	19:40		18:47	17:00	16:31	46 12:45 (4)	16:35 69 13:08 (4)
29	05:49	06:21		06:52	06:26	07:03	11:57 (4)	07:25 11:59 (4)
	20:21	19:39		18:46	16:59	16:30	49 12:46 (4)	16:36 69 13:08 (4)
30	05:50	06:22		06:54	06:27	07:04	11:56 (4)	07:25 12:00 (4)
	20:20	19:37		18:44	16:57	16:30	52 12:48 (4)	16:37 68 13:08 (4)
31	05:51	06:23			06:28		07:26	12:01 (4)
	20:19	19:35			16:56		16:38	68 13:09 (4)
Ore potenziali eliofania	461	429		375	345	297	286	
Totalle, caso peggiore						311		2073
Probabilità di eliofania						0.47		0.41
Tempo di operatività rid.						0.30		0.30
Dir. del vento rid.						0.65		0.65
Totale ridotto						0.09		0.08
Totale effettivo						29		172

### 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:** Shadow Flickering Analysis **Recettore d'ombra:** R3 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (78) **Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giu	Lug	Ago	Sep	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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>  Gennaio</b>	<b>  Febbraio</b>	<b>  Marzo</b>	<b>  Aprile</b>	<b>  Maggio</b>	<b>  Giugno</b>
1   07:26	15:52 (3)	07:12	06:35	06:44	05:57	19:26 (1)   05:27
16:39	21	16:13 (3)	17:13	17:48	19:23	19:32 (1)   20:26
2   07:26		15:53 (3)	07:11	06:34	06:42	19:26 (1)   05:27
16:39	21	16:14 (3)	17:15	17:49	19:24	19:34 (1)   20:27
3   07:26		15:53 (3)	07:10	06:32	06:40	19:25 (1)   05:27
16:40	21	16:14 (3)	17:16	17:51	19:25	19:35 (1)   20:28
4   07:26		15:53 (3)	07:09	06:31	06:39	19:25 (1)   05:26
16:41	22	16:15 (3)	17:17	17:52	19:26	19:36 (1)   20:28
5   07:26		15:54 (3)	07:08	06:29	06:37	19:24 (1)   05:26
16:42	22	16:16 (3)	17:19	17:53	19:28	19:36 (1)   20:29
6   07:26		15:53 (3)	07:07	06:27	06:35	19:24 (1)   05:25
16:43	24	16:17 (3)	17:20	17:54	19:29	19:37 (1)   20:30
7   07:26		15:53 (3)	07:06	06:26	06:34	19:24 (1)   05:25
16:44	25	16:18 (3)	17:21	17:55	19:30	19:39 (1)   20:30
8   07:26		15:54 (3)	07:04	06:24	06:32	19:24 (1)   05:25
16:45	24	16:18 (3)	17:22	17:56	19:31	19:40 (1)   20:31
9   07:26		15:55 (3)	07:03	06:22	06:30	19:25 (1)   05:25
16:46	24	16:19 (3)	17:24	17:58	19:32	19:40 (1)   20:32
10   07:25		15:54 (3)	07:02	06:21	06:29	19:25 (1)   05:24
16:47	25	16:19 (3)	17:25	17:59	19:33	19:39 (1)   20:32
11   07:25		15:55 (3)	07:01	06:19	06:27	19:26 (1)   05:24
16:48	25	16:20 (3)	17:26	18:00	19:34	19:38 (1)   20:33
12   07:25		15:56 (3)	07:00	06:17	06:25	19:28 (1)   05:24
16:49	24	16:20 (3)	17:27	18:01	19:35	19:37 (1)   20:33
13   07:25		15:55 (3)	06:58	06:16	06:24	19:30 (1)   05:24
16:50	25	16:20 (3)	17:29	18:02	19:36	19:35 (1)   20:34
14   07:24		15:56 (3)	06:57	06:14	06:22	19:24 (1)   05:24
16:51	25	16:21 (3)	17:30	18:03	19:37	19:38 (1)   20:34
15   07:24		15:56 (3)	06:56	06:12	06:21	19:40 (1)   05:24
16:53	25	16:21 (3)	17:31	18:04	19:38	19:37 (1)   20:35
16   07:23		15:57 (3)	06:54	06:11	06:19	19:30 (1)   05:24
16:54	24	16:21 (3)	17:32	18:06	19:40	19:35 (1)   20:35
17   07:23		15:57 (3)	06:53	06:09	06:17	19:38 (1)   05:24
16:55	24	16:21 (3)	17:34	18:07	19:41	19:38 (1)   20:35
18   07:23		15:59 (3)	06:52	06:07	06:16	19:42 (1)   05:24
16:56	22	16:21 (3)	17:35	18:08	19:42	19:37 (1)   20:36
19   07:22		15:59 (3)	06:50	06:06	06:14	19:45 (1)   05:24
16:57	22	16:21 (3)	17:36	18:09	19:43	19:36 (1)   20:36
20   07:21		16:01 (3)	06:49	06:04	06:13	19:40 (1)   05:24
16:58	20	16:21 (3)	17:37	18:10	19:44	19:36 (1)   20:36
21   07:21		16:01 (3)	06:47	06:02	06:11	19:45 (1)   05:24
17:00	20	16:21 (3)	17:39	18:11	19:45	19:37 (1)   20:36
22   07:20		16:02 (3)	06:46	06:01	06:10	19:45 (1)   05:25
17:01	18	16:20 (3)	17:40	18:12	19:46	19:37 (1)   20:37
23   07:19		16:03 (3)	06:44	05:59	06:08	19:45 (1)   05:25
17:02	16	16:19 (3)	17:41	18:13	19:47	19:37 (1)   20:37
24   07:19		16:06 (3)	06:43	05:57	06:07	19:48 (1)   05:25
17:03	13	16:19 (3)	17:42	18:14	19:48	19:37 (1)   20:37
25   07:18		16:08 (3)	06:41	05:55	06:05	19:48 (1)   05:25
17:05	9	16:17 (3)	17:43	18:16	19:49	19:37 (1)   20:37
26   07:17			06:40	05:54	06:04	19:51 (1)   05:26
17:06			17:45	18:17	19:50	19:37 (1)   20:37
27   07:16			06:38	05:52	06:02	19:52 (1)   05:26
17:07			17:46	18:18	19:52	19:37 (1)   20:37
28   07:16			06:37	05:50	06:01	19:53 (1)   05:26
17:08			17:47	18:19	19:53	19:37 (1)   20:37
29   07:15				06:49	06:00	19:54 (1)   05:27
17:10				19:20	19:54	19:37 (1)   20:37
30   07:14				06:47	05:58	19:29 (1)   05:27
17:11				19:21	19:55	19:32 (1)   20:37
31   07:13				06:45		05:28
17:12				19:22		20:25
Ore potenziali eliofania	296		296	369	399	450
Totalle, caso peggiore	541			3		146
Probabilità di eliofania	0.43			0.50		0.57
Tempo di operatività rid.	0.30			0.30		0.30
Dir. del vento rid.	0.47			0.68		0.68
Totalle ridotto	0.06			0.10		0.11
Totalle effettivo	32			0		17

### 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:** Shadow Flickering Analysis **Recettore:** R5 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 90.0° (80)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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	ONI	NNO	Somma
437	192	40	16	67	346	208	192	120	99	425	524	2,665	

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26   07:12   06:35   06:44   05:57   05:27   05:28   05:52   06:24   06:55   06:30   07:05											
	16:39   17:13   17:48   19:23   19:56   20:26   20:37   20:18   19:34   18:42   16:55   16:30											
2	07:26   07:11   06:34   06:42   05:56   05:27   05:28   05:53   06:25   06:56   06:31   07:06											
	16:40   17:15   17:49   19:24   19:57   20:27   20:37   20:16   19:32   18:41   16:54   16:29											
3	07:26   07:10   06:32   06:40   05:54   05:27   05:29   05:54   06:26   06:57   06:32   07:07											
	16:40   17:16   17:51   19:25   19:58   20:27   20:37   20:15   19:30   18:39   16:52   16:29											
4	07:26   07:09   06:30   06:38   05:53   05:26   05:29   05:55   06:27   06:58   06:33   07:08											
	16:41   17:17   17:52   19:26   19:59   20:28   20:36   20:14   19:29   18:37   16:51   16:29											
5	07:26   07:08   06:29   06:37   05:52   05:26   05:30   05:56   06:28   06:59   06:34   07:09											
	16:42   17:19   17:53   19:27   20:00   20:29   20:36   20:13   19:27   18:36   16:50   16:29											
6	07:26   07:07   06:27   06:35   05:51   05:25   05:31   05:57   06:29   07:00   06:36   07:10											
	16:43   17:20   17:54   19:29   20:01   20:30   20:36   20:12   19:25   18:34   16:49   16:29											
7	07:26   07:05   06:26   06:34   05:49   05:25   05:31   05:58   06:30   07:01   06:37   07:11											
	16:44   17:21   17:55   19:30   20:02   20:30   20:36   20:10   19:24   18:32   16:48   16:29											
8	07:26   07:04   06:24   06:32   05:48   05:25   05:32   05:59   06:31   07:02   06:38   07:12											
	16:45   17:22   17:56   19:31   20:03   20:31   20:35   20:09   19:22   18:31   16:46   16:29											
9	07:26   07:03   06:22   06:30   05:47   05:25   05:32   06:00   06:32   07:03   06:39   07:13											
	16:46   17:24   17:58   19:32   20:04   20:31   20:35   20:08   19:20   18:29   16:45   16:28											
10	07:25   07:02   06:21   06:29   05:46   05:24   05:33   06:01   06:33   07:04   06:41   07:14											
	16:47   17:25   17:59   19:33   20:05   20:32   20:35   20:07   19:19   18:27   16:44   16:29											
11	07:25   07:01   06:19   06:27   05:45   05:24   05:34   06:02   06:34   07:05   06:42   07:15											
	16:48   17:26   18:00   19:34   20:06   20:32   20:34   20:05   19:17   18:26   16:43   16:29											
12	07:25   06:59   06:17   06:25   05:44   05:24   05:35   06:03   06:35   07:06   06:43   07:16											
	16:49   17:27   18:01   19:35   20:07   20:33   20:34   20:04   19:15   18:24   16:42   16:29											
13	07:25   06:58   06:16   06:24   05:42   05:24   05:35   06:04   06:36   07:08   06:44   07:16											
	16:50   17:29   18:02   19:36   20:08   20:33   20:33   20:03   19:13   18:22   16:41   16:29											
14	07:24   06:57   06:14   06:22   05:41   05:24   05:36   06:05   06:37   07:09   06:45   07:17											
	16:52   17:30   18:03   19:37   20:10   20:34   20:33   20:01   19:12   18:21   16:40   16:29											
15	07:24   06:56   06:12   06:21   05:40   05:24   05:37   06:06   06:38   07:10   06:47   07:18											
	16:53   17:31   18:04   19:38   20:11   20:34   20:32   20:00   19:10   18:19   16:40   16:29											
16	07:23   06:54   06:11   06:19   05:39   05:24   05:38   06:07   06:39   07:11   06:48   07:19											
	16:54   17:32   18:06   19:39   20:12   20:35   20:31   20:07   19:19   18:18   16:39   16:29											
17	07:23   06:53   06:09   06:17   05:38   05:24   05:38   06:08   06:40   07:12   06:49   07:19											
	16:55   17:34   18:07   19:41   20:13   20:35   20:31   19:57   19:06   18:16   16:38   16:30											
18	07:22   06:51   06:07   06:16   05:37   05:24   05:39   06:09   06:41   07:13   06:50   07:20											
	16:56   17:35   18:08   19:42   20:13   20:36   20:30   19:56   19:05   18:15   16:37   16:30											
19	07:22   06:50   06:06   06:14   05:37   05:24   05:40   06:10   06:42   07:14   06:51   07:21											
	16:57   17:36   18:09   19:43   20:14   20:36   20:29   19:54   19:03   18:13   16:36   16:30											
20	07:21   06:49   06:04   06:13   05:36   05:24   05:41   06:11   06:43   07:15   06:53   07:21											
	16:58   17:37   18:10   19:44   20:15   20:36   20:29   19:53   19:01   18:11   16:36   16:31											
21	07:21   06:47   06:02   06:11   05:35   05:24   05:42   06:12   06:44   07:17   06:54   07:22											
	17:00   17:39   18:11   19:45   20:16   20:36   20:28   19:51   19:00   18:10   16:35   16:31											
22	07:20   06:46   06:01   06:10   05:34   05:25   05:43   06:13   06:45   07:18   06:55   07:22											
	17:01   17:40   18:12   19:46   20:17   20:37   20:27   19:50   18:58   18:09   16:34   16:32											
23	07:19   06:44   05:59   06:08   05:33   05:25   05:44   06:15   06:46   07:19   06:56   07:23											
	17:02   17:41   18:13   19:47   20:18   20:37   20:26   19:48   18:56   18:07   16:34   16:32											
24	07:19   06:43   05:57   06:07   05:32   05:25   05:45   06:16   06:47   07:20   06:57   07:23											
	17:03   17:42   18:14   19:48   20:19   20:37   20:25   19:46   18:54   18:06   16:33   16:33											
25	07:18   06:41   05:55   06:05   05:32   05:25   05:45   06:17   06:48   06:21   06:58   07:24											
	17:05   17:43   18:15   19:49   20:20   20:37   20:25   19:45   18:53   17:04   16:32   16:33											
26	07:17   06:40   05:54   06:04   05:31   05:26   05:46   06:18   06:49   06:22   07:00   07:24											
	17:06   17:45   18:17   19:50   20:21   20:37   20:24   19:43   18:51   17:03   16:32   16:34											
27	07:16   06:38   05:52   06:02   05:30   05:26   05:47   06:19   06:50   06:24   07:01   07:24											
	17:07   17:46   18:18   19:51   20:22   20:37   20:23   19:42   18:49   17:01   16:31   16:35											
28	07:15   06:37   05:50   06:01   05:30   05:26   05:48   06:20   06:51   06:25   07:02   07:25											
	17:08   17:47   18:19   19:53   20:23   20:37   20:22   19:40   18:47   17:00   16:31   16:35											
29	07:15   06:49   06:00   05:29   05:27   05:49   06:21   06:52   06:26   07:03   07:25											
	17:10   19:20   19:54   20:24   20:37   20:21   19:39   18:46   16:59   16:30   16:36											
30	07:14   06:47   05:58   05:29   05:27   05:50   06:22   06:53   06:27   07:04   07:25											
	17:11   19:21   19:55   20:24   20:37   20:20   19:37   18:44   16:57   16:30   16:37											
31	07:13   06:45   05:28   05:51   06:23   05:51   06:23   05:23   06:28   06:28   07:25											
	17:12   19:22   19:56   20:25   20:37   20:19   19:35   18:44   16:56   16:30   16:38											
Ore potenziali eliofania	296	296	369	399	450	454	461	429	375	345	297	286
Totale, caso peggiore												
Probabilità di eliofania												
Tempo di operatività rid.												
Dir. del vento rid.												
Totale ridotto												
Totale effettivo												

**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:** Shadow Flickering Analysis **Recettore d'ombra:** R6 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (81) **Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giug	Lug	Ago	Sot	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

**SHADOW - Calendario**

**Calcolo:** Shadow Flickering Analysis **Recettore d'ombra:** R6 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (81) **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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1   05:28	05:54 (17)	05:52	06:24	06:54	07:28 (19)	06:29   07:05
20:37	61	06:55 (16)	20:17   19:33	18:42	08:39 (15)   16:55	16:30
2   05:28	05:55 (17)	05:53	06:25	06:53 (20)   06:55	07:26 (19)   06:31	07:06
20:37	61	06:56 (16)	20:16   19:32	10   07:03 (20)   18:40	08:39 (15)   16:53	16:29
3   05:29	05:56 (17)	05:54	06:26	06:50 (20)   06:56	07:25 (19)   06:32	07:07
20:36	60	06:56 (16)	20:15   19:30	13   07:03 (20)   18:39	08:38 (15)   16:52	16:29
4   05:29	05:55 (17)	05:55	06:27	06:49 (20)   06:58	07:24 (19)   06:33	07:08
20:36	61	06:56 (16)	20:14   19:28	15   07:04 (20)   18:37	08:38 (15)   16:51	16:29
5   05:30	05:56 (17)	05:56	06:28	06:48 (20)   06:59	07:24 (19)   06:34	07:09
20:36	60	06:56 (16)	20:13   19:27	16   07:04 (20)   18:35	08:37 (15)   16:50	16:29
6   05:30	05:56 (17)	05:57	06:29	06:49 (20)   07:00	07:23 (19)   06:35	07:10
20:36	60	06:56 (16)	20:12   19:25	15   07:04 (20)   18:34	08:36 (15)   16:49	16:28
7   05:31	05:56 (17)	05:58	06:30	06:50 (20)   07:01	07:23 (19)   06:37	07:11
20:35	60	06:56 (16)	20:10   19:23	14   07:04 (20)   18:32	08:35 (15)   16:47	16:28
8   05:32	05:56 (17)	05:59	06:31	06:51 (20)   07:02	07:23 (19)   06:38	07:12
20:35	60	06:56 (16)	20:09   19:22	13   07:04 (20)   18:30	08:34 (15)   16:46	16:28
9   05:32	05:57 (17)	06:00	06:32	06:52 (20)   07:03	07:23 (19)   06:39	07:13
20:35	59	06:56 (16)	20:08   19:20	11   07:03 (20)   18:29	08:32 (15)   16:45	16:28
10   05:33	05:57 (17)	06:01	06:33	06:53 (20)   07:04	07:24 (19)   06:40	07:14
20:34	60	06:57 (16)	20:06   19:18	9   07:02 (20)   18:27	08:31 (15)   16:44	16:28
11   05:34	05:57 (17)	06:02	06:34	06:54 (20)   07:05	07:26 (19)   06:42	07:14
20:34	59	06:56 (16)	20:05   19:17	20   08:22 (15)   18:25	08:31 (15)   16:43	16:28
12   05:34	05:58 (17)	06:03	06:35	06:55 (20)   07:06	07:27 (19)   06:43	07:15
20:33	58	06:56 (16)	20:04   19:15	25   08:26 (15)   18:24	08:29 (15)   16:42	16:28
13   05:35	05:58 (17)	06:04	06:36	08:01 (15)   07:07	07:28 (19)   06:44	07:16
20:33	58	06:56 (16)	20:02   19:13	28   08:29 (15)   18:22	08:27 (15)   16:41	16:29
14   05:36	05:59 (17)	06:05	06:37	07:59 (15)   07:08	07:29 (19)   06:45	07:17
20:32	58	06:57 (16)	20:01   19:11	32   08:31 (15)   18:21	08:25 (15)   16:40	16:29
15   05:37	05:59 (17)	06:06	06:38	07:56 (15)   07:10	07:50 (15)   06:46	07:18
20:32	57	06:56 (16)	20:00   19:10	37   08:33 (15)   18:19	08:22 (15)   16:39	16:29
16   05:37	06:00 (17)	06:07	06:39	07:54 (15)   07:11	07:52 (15)   06:48	07:18
20:31	56	06:56 (16)	19:58   19:08	40   08:34 (15)   18:17	08:19 (15)   16:38	16:29
17   05:38	06:01 (17)	06:08	06:40	07:53 (15)   07:12	07:56 (15)   06:49	07:19
20:31	55	06:56 (16)	19:57   19:06	42   08:35 (15)   18:16	08:17 (15)   16:38	16:30
18   05:39	06:02 (17)	06:09	06:41	07:51 (15)   07:13	08:02 (15)   06:50	07:20
20:30	54	06:56 (16)	19:55   19:05	45   08:36 (15)   18:14	08:11 (15)   16:37	16:30
19   05:40	06:03 (17)	06:10	06:42	07:50 (15)   07:14	07:55   07:20	
20:29	52	06:55 (16)	19:54   19:03	47   08:37 (15)   18:13	08:36   16:30	
20   05:41	06:04 (17)	06:11	06:43	07:48 (15)   07:15	06:52   07:21	
20:28	51	06:55 (16)	19:52   19:01	50   08:38 (15)   18:11	06:35   16:31	
21   05:42	06:04 (17)	06:12	06:44	07:47 (15)   07:16	06:54   07:22	
20:28	50	06:54 (16)	19:51   18:59	51   08:38 (15)   18:10	06:35   16:31	
22   05:43	06:06 (17)	06:13	06:45	07:46 (15)   07:18	06:55   07:22	
20:27	48	06:54 (16)	19:49   18:58	53   08:39 (15)   18:08	06:34   16:32	
23   05:43	06:09 (17)	06:14	06:46	07:45 (15)   07:19	06:56   07:23	
20:26	44	06:53 (16)	19:48   18:56	54   08:39 (15)   18:07	06:33   16:32	
24   05:44	06:17 (16)	06:15	06:47	07:44 (15)   07:20	06:57   07:23	
20:25	35	06:52 (16)	19:46   18:54	55   08:39 (15)   18:05	06:33   16:33	
25   05:45	06:18 (16)	06:16	06:48	07:44 (15)   06:21	06:58   07:23	
20:24	34	06:52 (16)	19:45   18:52	55   08:39 (15)   17:04	06:32   16:33	
26   05:46	06:19 (16)	06:17	06:49	07:43 (15)   06:22	06:59   07:24	
20:23	32	06:51 (16)	19:43   18:51	57   08:40 (15)   17:03	06:32   16:34	
27   05:47	06:21 (16)	06:18	06:50	07:42 (15)   06:23	07:01   07:24	
20:22	29	06:50 (16)	19:42   18:49	57   08:39 (15)   17:01	06:31   16:34	
28   05:48	06:22 (16)	06:19	06:51	07:36 (19)   06:25	07:02   07:25	
20:21	26	06:48 (16)	19:40   18:47	60   08:39 (15)   17:00	06:31   16:35	
29   05:49	06:24 (16)	06:20	06:52	07:31 (19)   06:26	07:03   07:25	
20:20	23	06:47 (16)	19:38   18:45	68   08:39 (15)   16:58	06:30   16:36	
30   05:50	06:25 (16)	06:21	06:53	07:30 (19)   06:27	07:04   07:25	
20:19	19	06:44 (16)	19:37   18:44	70   08:40 (15)   16:57	06:30   16:37	
31   05:51	06:28 (16)	06:23		06:28		07:25
20:18	13	06:41 (16)	19:35   18:44	16:56		16:37
Ore potenziali eliofania	461	429	375	345	297	286
Totale, caso peggiore	1513		1062	1030		
Probabilità di eliofania	0.68		0.61	0.52		
Tempo di operatività rid.	0.30		0.30	0.30		
Dir. del vento rid.	0.49		0.65	0.66		
Totale ridotto	0.10		0.12	0.11		
Totale effettivo	156		130	109		

**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:** Shadow Flickering Analysis **Recettore d'ombra:** R7 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (82) **Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1   07:25	08:18 (20)	07:12	06:35	06:43	05:57	06:30 (18)   05:27
16:38	59	12:04 (17)   17:13	17:48	19:23	19:56	19:04 (13)   20:26
2   07:26	08:19 (20)	07:11	06:33	06:42	05:55	06:30 (18)   05:27
16:39	57	12:04 (17)   17:14	17:49	19:24	19:57	19:04 (13)   20:26
3   07:26	08:20 (20)	07:10	06:32	17:19 (12)   06:40	05:54	06:30 (18)   05:26
16:40	53	12:03 (17)   17:16	17:50	8 17:27 (12)   19:25	19:58	19:02 (13)   20:27
4   07:26	08:21 (20)	07:08	06:30	17:15 (12)   06:38	05:53	06:29 (18)   05:26
16:41	50	12:03 (17)   17:17	17:51	14 17:29 (12)   19:26	19:59	19:00 (13)   20:28
5   07:26	08:22 (20)	07:07	06:29	17:13 (12)   06:37	05:51	06:29 (18)   05:25
16:42	46	12:02 (17)   17:18	17:53	19 17:32 (12)   19:27	20:00	18:59 (13)   20:29
6   07:26	08:24 (20)	07:06	07:27 (21)	06:27	05:50	06:30 (18)   05:25
16:43	39	12:00 (17)   17:20	6 07:33 (21)	17:54 21	20:01	18:56 (13)   20:29
7   07:26	08:26 (20)	07:05	07:25 (21)	06:25	05:49	06:30 (18)   05:25
16:44	31	11:58 (17)   17:21	12 07:37 (21)	17:55 23	20:02	18:53 (13)   20:30
8   07:25	08:29 (20)	07:04	07:24 (21)	06:24	05:48	06:31 (18)   05:25
16:45	20	11:56 (17)   17:22	15 07:39 (21)	17:56 25	20:03	19:03 (13)   20:31
9   07:25		07:03	07:23 (21)	06:22	18:49 (13)   05:47	06:31 (18)   05:24
16:46		17:23	18 07:41 (21)	17:57 26	19:00 (13)   20:04	07:10 (18)   20:31
10   07:25		07:02	07:21 (21)	06:20	18:45 (13)   05:45	06:32 (18)   05:24
16:47		17:25	20 07:41 (21)	17:58 27	19:03 (13)   20:05	07:09 (18)   20:32
11   07:25		07:00	07:20 (21)	06:19	18:42 (13)   05:44	06:31 (18)   05:24
16:48		17:26	22 07:42 (21)	18:00 27	19:04 (13)   20:06	07:07 (18)   20:32
12   07:25		06:59	07:19 (21)	06:17	18:40 (13)   05:43	06:32 (18)   05:24
16:49		17:27	24 07:43 (21)	18:01 27	19:06 (13)   20:07	07:07 (18)   20:33
13   07:24		06:58	07:19 (21)	06:15	18:38 (13)   05:42	06:32 (18)   05:24
16:50		17:28	25 07:44 (21)	18:02 26	19:07 (13)   20:08	07:06 (18)   20:33
14   07:24		06:57	07:18 (21)	06:14	18:37 (13)   05:41	06:33 (18)   05:24
16:51		17:30	26 07:44 (21)	18:03 25	19:09 (13)   20:09	07:05 (18)   20:34
15   07:24		06:55	07:18 (21)	06:12	18:35 (13)   05:40	06:35 (18)   05:24
16:52		17:31	26 07:44 (21)	18:04 24	19:09 (13)   20:10	07:05 (18)   20:34
16   07:23		06:54	07:18 (21)	06:10	18:34 (13)   05:39	06:36 (18)   05:24
16:53		17:32	25 07:43 (21)	18:05 22	19:09 (13)   20:11	07:04 (18)   20:35
17   07:23		06:53	07:18 (21)	06:09	18:37 (18)   05:38	06:37 (18)   05:24
16:55		17:33	25 07:43 (21)	18:06 20	19:10 (13)   20:12	07:03 (18)   20:35
18   07:22		06:51	07:19 (21)	06:07	18:43 (18)   05:37	06:38 (18)   05:24
16:56		17:35	24 07:43 (21)	18:07 16	19:10 (13)   20:13	07:01 (18)   20:35
19   07:22		06:50	07:19 (21)	06:05	17:13 (12)   06:14	06:41 (18)   05:36
16:57		17:36	23 07:42 (21)	18:09 11	17:24 (12)   19:42	06:39 (18)   05:24
20   07:21		06:48	07:20 (21)	06:04	62 19:10 (13)   20:14	07:00 (18)   20:36
16:58		17:37	22 07:42 (21)	18:10 19:44	66 19:10 (13)   20:15	06:41 (18)   05:24
21   07:20		06:47	07:20 (21)	06:02	66:11 06:38 (18)   05:35	06:58 (18)   20:36
16:59		17:38	20 07:40 (21)	18:11 19:45	68 19:10 (13)   20:16	06:43 (18)   05:24
22   07:20		06:45	07:22 (21)	06:00	68:09 06:36 (18)   05:34	06:56 (18)   20:36
17:01		17:40	17 07:39 (21)	18:12 19:46	72 19:10 (13)   20:17	06:48 (18)   05:24
23   07:19		06:44	07:24 (21)	05:59 06:08	76 06:35 (18)   05:33	06:52 (18)   20:36
17:02		17:41	12 07:36 (21)	18:13 19:47	74 19:09 (13)   20:18	06:35 (18)   05:25
24   07:18		06:43	07:28 (21)	05:57 06:06	75 06:34 (18)   05:32	06:37 (18)   05:25
17:03		17:42	5 07:33 (21)	18:14 19:48	75 19:10 (13)   20:19	06:37 (18)   05:25
25   07:18		06:41		05:55 06:05	76 06:33 (18)   05:31	06:41 (18)   05:25
17:04		17:43		18:15 19:49	76 19:09 (13)   20:20	06:37 (18)   05:25
26   07:17		06:40		05:53 06:04	77 06:32 (18)   05:31	06:37 (18)   05:25
17:06		17:44		18:16 19:50	77 19:09 (13)   20:21	06:37 (18)   05:25
27   07:16		06:38		05:52 06:02	77 06:31 (18)   05:30	06:36 (18)   05:26
17:07		17:46		18:17 19:51	77 19:08 (13)   20:22	06:36 (18)   05:26
28   07:15		06:36		05:50 06:01	78 06:31 (18)   05:29	06:36 (18)   05:26
17:08		17:47		18:18 19:52	78 19:07 (13)   20:22	06:36 (18)   05:26
29   07:14				06:48 05:59	78 06:31 (18)   05:29	06:36 (18)   05:26
17:09				19:20 05:59	78 19:07 (13)   20:23	06:36 (18)   05:26
30   07:13				06:47 05:58	78 06:30 (18)   05:28	06:36 (18)   05:26
17:11				19:21 05:58	78 19:05 (13)   20:24	06:36 (18)   05:26
31   07:13				06:45 05:28		
17:12				19:22 20:25		
Ore potenziali eliofania	296	296	369	399	450	454
Totale, caso peggiore	355	367	361	1185	855	
Probabilità di eliofania	0.43	0.44	0.44	0.50	0.57	
Tempo di operatività rid.	0.30	0.30	0.30	0.30	0.30	
Dir. del vento rid.	0.75	0.71	0.52	0.58	0.53	
Totale ridotto	0.10	0.10	0.07	0.09	0.09	
Totale effettivo	36	35	26	108	80	

**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:** Shadow Flickering Analysis **Recettore d'ombra:** R7 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (82)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1   05:27	05:52	06:42 (18)   06:23	18:41 (13)   06:54	17:47 (12)   06:29	06:51 (21)   07:05	
20:37	20:17	36 07:18 (18)   19:33	22 19:03 (13)   18:42	26 18:13 (12)   16:55	20 07:11 (21)   16:29	
2   05:28	05:53	06:42 (18)   06:24	18:43 (13)   06:55	17:46 (12)   06:31	06:52 (21)   07:06	
20:37	20:16	36 07:18 (18)   19:32	18 19:01 (13)   18:40	27 18:13 (12)   16:53	17 07:09 (21)   16:29	
3   05:29	05:54	06:41 (18)   06:26	18:46 (13)   06:56	17:46 (12)   06:32	06:54 (21)   07:07	
20:36	20:15	38 07:19 (18)   19:30	11 18:57 (13)   18:39	27 18:13 (12)   16:52	15 07:09 (21)   16:29	
4   05:29	05:55	06:41 (18)   06:27		06:57   17:46 (12)   06:33	06:55 (21)   07:08	
20:36	20:14	38 07:19 (18)   19:28		18:37   26 18:12 (12)   16:51	11 07:06 (21)   16:29	19   08:13 (20)
5   05:30	05:56	06:40 (18)   06:28		06:59   17:46 (12)   06:34	06:58 (21)   07:09	08:10 (20)
20:36	20:13	40 07:20 (18)   19:27		18:35   25 18:11 (12)   16:50	4 07:02 (21)   16:29	31   11:39 (17)
6   05:30	05:57	06:40 (18)   06:29		07:00   17:46 (12)   06:35		07:10   08:10 (20)
20:36	20:11	51 19:04 (13)   19:25		18:34   24 18:10 (12)   16:48		16:28   39   11:46 (17)
7   05:31	05:58	06:39 (18)   06:30		07:01   17:47 (12)   06:37		07:11   08:10 (20)
20:35	20:10	58 19:07 (13)   19:23		18:32   22 18:09 (12)   16:47		16:28   43   11:48 (17)
8   05:31	05:59	06:39 (18)   06:31		07:02   17:47 (12)   06:38		07:12   08:09 (20)
20:35	20:09	63 19:09 (13)   19:22		18:30   20 18:07 (12)   16:46		16:28   48   11:50 (17)
9   05:32	06:00	06:39 (18)   06:32		07:03   17:49 (12)   06:39		07:13   08:09 (20)
20:35	20:08	66 19:10 (13)   19:20		18:29   16 18:05 (12)   16:45		16:28   53   11:52 (17)
10   05:33	06:01	06:39 (18)   06:33		07:04   17:51 (12)   06:40		07:14   08:09 (20)
20:34	20:06	69 19:12 (13)   19:18		18:27   11 18:02 (12)   16:44		16:28   57   11:54 (17)
11   05:34	06:02	06:39 (18)   06:34		07:05   06:41		07:14   08:08 (20)
20:34	20:05	71 19:13 (13)   19:17		18:25   06:43		16:28   59   11:54 (17)
12   05:34	06:03	06:38 (18)   06:35		07:06   06:43		07:15   08:08 (20)
20:33	20:04	73 19:13 (13)   19:15		18:24   06:42		16:28   62   11:56 (17)
13   05:35	06:04	06:38 (18)   06:36		07:07   06:44		07:16   08:09 (20)
20:33	20:02	75 19:14 (13)   19:13		18:22   06:41		16:28   63   11:57 (17)
14   05:36	06:05	06:39 (18)   06:37		07:08   06:45		07:17   08:09 (20)
20:32	20:01	76 19:15 (13)   19:11		18:21   06:40		16:29   66   11:59 (17)
15   05:37	06:06	06:39 (18)   06:38		07:09   06:46		07:18   08:10 (20)
20:32	20:00	75 19:15 (13)   19:10		18:19   06:39		16:29   67   12:00 (17)
16   05:37	06:07	06:39 (18)   06:39		07:11   06:48		07:18   08:09 (20)
20:31	19:58	76 19:15 (13)   19:08		18:17   06:38		16:29   68   12:00 (17)
17   05:38	06:08	06:39 (18)   06:40		07:12   06:49		07:19   08:10 (20)
20:31	19:57	77 19:16 (13)   19:06		18:16   06:38		16:29   69   12:01 (17)
18   05:39	06:09	06:40 (18)   06:41		07:13   07:58 (21)   06:50		07:20   08:10 (20)
20:30	19:55	75 19:15 (13)   19:10		18:14   8 08:06 (21)   16:37		16:30   70   12:02 (17)
19   05:40	06:10	06:40 (18)   06:42		07:14   07:54 (21)   06:51		07:20   08:10 (20)
20:29	19:54	76 19:16 (13)   19:03		18:13   15 08:09 (21)   16:36		16:30   71   12:02 (17)
20   05:41	06:11	06:41 (18)   06:43		07:15   07:52 (21)   06:52		07:21   08:11 (20)
20:28	19:52	73 19:16 (13)   19:01		18:11   18 08:10 (21)   16:35		16:31   71   12:03 (17)
21   05:42	06:12	06:42 (18)   06:44		07:16   07:51 (21)   06:54		07:21   08:11 (20)
20:28	19:51	70 19:15 (13)   18:59		18:10   20 08:11 (21)   16:35		16:31   71   12:03 (17)
22   05:42	06:55 (18)   06:13	06:43 (18)   06:45		07:17   07:50 (21)   06:55		07:22   08:12 (20)
20:27	9 07:04 (18)   19:49	69 19:15 (13)   18:58		18:08   23 08:13 (21)   16:34		16:31   71   12:04 (17)
23   05:43	06:53 (18)   06:14	06:44 (18)   06:46		07:19   07:49 (21)   06:56		07:23   08:12 (20)
20:26	14 07:07 (18)   19:48	66 19:15 (13)   18:56		18:07   24 08:13 (21)   16:33		16:32   71   12:04 (17)
24   05:44	06:51 (18)   06:15	06:46 (18)   06:47	17:58 (12)   07:20	07:48 (21)   06:57		07:23   08:12 (20)
20:25	18 07:09 (18)   19:46	61 19:14 (13)   18:54	8 18:06 (12)   18:05	25 08:13 (21)   16:33		16:33   71   12:04 (17)
25   05:45	06:49 (18)   06:16	06:48 (18)   06:48	17:54 (12)   06:21	06:48 (21)   06:58		07:23   08:13 (20)
20:24	22 07:11 (18)   19:45	56 19:14 (13)   18:52	15 18:09 (12)   17:04	25 07:13 (21)   16:32		16:33   71   12:05 (17)
26   05:46	06:48 (18)   06:17	06:51 (18)   06:49	17:52 (12)   06:22	06:47 (21)   06:59		07:24   08:14 (20)
20:23	25 07:13 (18)   19:43	47 19:13 (13)   18:51	18 18:10 (12)   17:03	26 07:13 (21)   16:32		16:34   69   12:05 (17)
27   05:47	06:47 (18)   06:18	18:37 (13)   06:50	17:50 (12)   06:23	06:48 (21)   07:00		07:24   08:14 (20)
20:22	27 07:14 (18)   19:41	35 19:12 (13)   18:49	21 18:11 (12)   17:01	26 07:14 (21)   16:31		16:34   69   12:05 (17)
28   05:48	06:46 (18)   06:19	18:37 (13)   06:51	17:49 (12)   06:25	06:48 (21)   07:02		07:24   08:15 (20)
20:21	29 07:15 (18)   19:40	34 19:11 (13)   18:47	23 18:12 (12)   17:00	25 07:13 (21)   16:31		16:35   68   12:06 (17)
29   05:49	06:44 (18)   06:20	18:38 (13)   06:52	17:48 (12)   06:26	06:48 (21)   07:03		07:25   08:16 (20)
20:20	31 07:15 (18)   19:38	32 19:10 (13)   18:45	24 18:12 (12)   16:58	25 07:13 (21)   16:30		16:36   66   12:06 (17)
30   05:50	06:43 (18)   06:21	18:39 (13)   06:53	17:47 (12)   06:27	06:49 (21)   07:04		07:25   08:16 (20)
20:19	33 07:16 (18)   19:37	29 19:08 (13)   18:44	26 18:13 (12)   16:57	24 07:13 (21)   16:30		16:37   64   12:05 (17)
31   05:51	06:43 (18)   06:22	18:39 (13)	06:28   06:50 (21)	07:25   08:17 (20)		
20:18	34 07:17 (18)   19:35	26 19:05 (13)	16:56   22 07:12 (21)	16:37   63   12:05 (17)		
Ore potenziali eliofania	461	429	375	345	297	286
Totale, caso peggiore	242	1767	186	530	67	1710
Probabilità di eliofania	0.68	0.68	0.61	0.52	0.47	0.41
Tempo di operatività rid.	0.30	0.30	0.30	0.30	0.30	0.30
Dir. del vento rid.	0.51	0.57	0.55	0.63	0.71	0.75
Totale ridotto	0.11	0.12	0.10	0.10	0.10	0.10
Totale effettivo	26	213	19	54	7	164

**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:** Shadow Flickering Analysis **Recettore d'ombra:** R8 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (83)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno
1   07:25	07:12	07:32 (21)   06:35	17:10 (12)   06:43	18:42 (13)   05:57	06:40 (18)   05:27
16:38	17:13	17 07:49 (21)   17:48	17:26 (12)   19:23	18:54 (13)   19:56	07:23 (18)   20:26
2   07:26	07:11	07:31 (21)   06:33	17:08 (12)   06:42	18:38 (13)   05:55	06:41 (18)   05:27
16:39	17:14	20 07:51 (21)   17:49	17:27 (12)   19:24	18:56 (13)   19:57	07:23 (18)   20:26
3   07:26	07:10	07:30 (21)   06:32	17:07 (12)   06:40	18:36 (13)   05:54	06:41 (18)   05:26
16:40	17:16	22 07:52 (21)   17:50	17:29 (12)   19:25	18:59 (13)   19:58	07:22 (18)   20:27
4   07:26	07:08	07:29 (21)   06:30	17:06 (12)   06:38	18:34 (13)   05:53	06:41 (18)   05:26
16:41	17:17	24 07:53 (21)   17:51	17:30 (12)   19:26	19:00 (13)   19:59	07:21 (18)   20:28
5   07:26	07:07	07:27 (21)   06:29	17:06 (12)   06:37	18:32 (13)   05:51	06:42 (18)   05:25
16:42	17:18	25 07:52 (21)   17:53	17:31 (12)   19:27	19:01 (13)   20:00	07:20 (18)   20:29
6   07:26	07:06	07:27 (21)   06:27	17:05 (12)   06:35	18:31 (13)   05:50	06:43 (18)   05:25
16:43	17:19	26 07:53 (21)   17:54	17:31 (12)   19:28	19:02 (13)   20:01	07:19 (18)   20:29
7   07:26	07:05	07:27 (21)   06:25	17:05 (12)   06:33	18:30 (13)   05:49	06:44 (18)   05:25
16:44	17:21	26 07:53 (21)   17:55	17:30 (12)   19:29	19:02 (13)   20:02	07:18 (18)   20:30
8   07:25	07:04	07:27 (21)   06:24	17:05 (12)   06:32	18:28 (13)   05:48	06:45 (18)   05:25
16:45	17:22	27 07:54 (21)   17:56	17:30 (12)   19:30	19:02 (13)   20:03	07:17 (18)   20:31
9   07:25	07:03	07:28 (21)   06:22	17:05 (12)   06:30	18:28 (13)   05:47	06:46 (18)   05:24
16:46	17:23	26 07:54 (21)   17:57	17:30 (12)   19:32	19:03 (13)   20:04	07:16 (18)   20:31
10   07:25	07:02	07:27 (21)   06:20	17:05 (12)   06:28	07:01 (18)   05:45	06:47 (18)   05:24
16:47	17:25	26 07:53 (21)   17:58	17:28 (12)   19:33	19:03 (13)   20:05	07:15 (18)   20:32
11   07:25	07:00	07:28 (21)   06:19	17:06 (12)   06:27	06:56 (18)   05:44	06:47 (18)   05:24
16:48	17:26	25 07:53 (21)   18:00	17:28 (12)   19:34	19:02 (13)   20:06	07:13 (18)   20:32
12   07:25	06:59	07:28 (21)   06:17	17:07 (12)   06:25	06:54 (18)   05:43	06:49 (18)   05:24
16:49	17:27	25 07:53 (21)   18:01	17:26 (12)   19:35	19:03 (13)   20:07	07:11 (18)   20:33
13   07:24	06:58	07:29 (21)   06:15	17:08 (12)   06:23	06:51 (18)   05:42	06:51 (18)   05:24
16:50	17:28	24 07:53 (21)   18:02	17:24 (12)   19:36	19:02 (13)   20:08	07:09 (18)   20:33
14   07:24	06:57	07:29 (21)   06:14	17:10 (12)   06:22	06:50 (18)   05:41	06:54 (18)   05:24
16:51	17:30	22 07:51 (21)   18:03	17:22 (12)   19:37	19:02 (13)   20:09	07:06 (18)   20:34
15   07:24	06:55	07:31 (21)   06:12	17:06 (12)   06:20	06:48 (18)   05:40	05:24
16:52	17:31	20 07:51 (21)   18:04	17:28 (12)   19:38	19:01 (13)   20:10	07:13 (18)   20:34
16   07:23	06:54	07:32 (21)   06:10	17:05 (12)   06:19	06:46 (18)   05:39	05:24
16:53	17:32	17 07:49 (21)   18:05	17:26 (12)   19:39	19:00 (13)   20:11	07:11 (18)   20:35
17   07:23	06:53	07:34 (21)   06:09	17:07 (12)   06:17	06:45 (18)   05:38	05:24
16:55	17:33	13 07:47 (21)   18:06	17:25 (12)   19:40	19:00 (13)   20:12	07:11 (18)   20:35
18   07:22	06:51	07:39 (21)   06:07	17:05 (12)   06:16	06:44 (18)   05:37	05:24
16:56	17:35	4 07:43 (21)   18:07	17:24 (12)   19:41	18:59 (13)   20:13	07:10 (18)   20:35
19   07:22	06:50	07:51 (21)   06:05	17:04 (12)   06:14	06:44 (18)   05:36	05:24
16:57	17:36	07:53 (21)   18:09	17:23 (12)   19:42	18:58 (13)   20:14	07:09 (18)   20:36
20   07:21	06:48	07:29 (21)   06:04	17:03 (12)   06:12	06:42 (18)   05:35	05:24
16:58	17:37	07:53 (21)   18:10	17:22 (12)   19:44	18:57 (13)   20:15	07:08 (18)   20:36
21   07:20	06:47	07:30 (21)   06:02	17:02 (12)   06:11	06:42 (18)   05:35	05:24
16:59	17:38	07:53 (21)   18:11	17:21 (12)   19:45	18:56 (13)   20:16	07:07 (18)   20:36
22   07:20	06:45	07:31 (21)   06:00	17:01 (12)   06:09	06:41 (18)   05:34	05:24
17:01	17:40	07:53 (21)   18:12	17:20 (12)   19:46	18:53 (13)   20:17	07:06 (18)   20:36
23   07:19	06:44	07:32 (21)   05:59	17:00 (12)   06:08	06:41 (18)   05:33	05:25
17:02	17:41	07:54 (21)   18:13	17:19 (12)   19:47	18:52 (13)   20:18	07:05 (18)   20:36
24   07:18	06:43	07:33 (21)   05:57	17:09 (12)   06:06	06:41 (18)   05:32	05:25
17:03	17:42	07:55 (21)   18:14	17:18 (12)   19:48	18:50 (13)   20:19	07:04 (18)   20:37
25   07:18	06:41	07:35 (21)   05:55	17:08 (12)   06:05	06:40 (18)   05:31	05:25
17:04	17:43	07:56 (21)   18:15	17:17 (12)   19:49	18:45 (13)   20:20	07:03 (18)   20:37
26   07:17	06:40	07:36 (21)   05:53	17:07 (12)   06:04	06:40 (18)   05:31	05:25
17:06	17:44	07:57 (21)   18:16	17:16 (12)   19:50	07:25 (18)   20:21	07:02 (18)   20:37
27   07:16	06:38	17:15 (12)   05:52	17:06 (12)   06:02	06:39 (18)   05:30	05:26
17:07	17:46	8 07:23 (12)   18:17	17:15 (12)   19:51	07:25 (18)   20:22	07:01 (18)   20:37
28   07:15	06:36	17:12 (12)   05:50	17:05 (12)   06:01	06:40 (18)   05:29	05:26
17:08	17:47	13 07:25 (12)   18:18	17:14 (12)   19:52	07:25 (18)   20:22	07:00 (18)   20:37
29   07:14	07:36 (21)   06:48	07:26 (21)   05:59	17:04 (12)   06:04	06:40 (18)   05:29	05:27
17:09	7 07:43 (21)   19:20	07:37 (21)   05:53	17:13 (12)   06:14	07:24 (18)   20:23	07:03 (18)   20:37
30   07:13	07:34 (21)   06:47	07:38 (21)   05:58	17:03 (12)   06:04	06:40 (18)   05:28	05:27
17:11	12 07:46 (21)   19:21	07:39 (21)   05:54	17:12 (12)   06:15	07:23 (18)   20:24	07:02 (18)   20:37
31   07:13	07:33 (21)   06:45	07:40 (21)   05:52	17:02 (12)   06:05	06:40 (18)   05:28	
17:12	15 07:48 (21)   19:22	07:41 (21)   05:51	17:11 (12)   06:16	07:24 (18)   20:25	
Ore potenziali eliofania	296	296	369	399	450
Totale, caso peggiore	34	410	299	1505	442
Probabilità di eliofania	0.43	0.44	0.44	0.50	0.57
Tempo di operatività rid.	0.30	0.30	0.30	0.30	0.30
Dir. del vento rid.	0.73	0.71	0.51	0.57	0.53
Totale ridotto	0.10	0.10	0.07	0.09	0.09
Totale effettivo	3	40	21	133	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:** Shadow Flickering Analysis **Recettore d'ombra:** R8 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (83) **Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giu	Lug	Ago	Sep	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



**SHADOW - Calendario**

**Calcolo:** Shadow Flickering Analysis **Recettore d'ombra:** R9 - Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (84) **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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>  Luglio</b>	<b>  Agosto</b>	<b>  Settembre</b>	<b>  Ottobre</b>	<b>  Novembre</b>	<b>Dicembre</b>
1   05:28	06:28 (3)   05:52	06:46 (3)   06:24	06:55   06:30   07:05			
1   20:37	70 07:38 (3)   20:18	42 07:28 (3)   19:34	18:42   16:55   16:30			
2   05:28	06:28 (3)   05:53	06:47 (3)   06:25	06:56   06:31   07:06			
2   20:37	69 07:37 (3)   20:17	40 07:27 (3)   19:32	18:41   16:54   16:30			
3   05:29	06:29 (3)   05:54	06:49 (3)   06:26	06:57   06:32   07:07			
3   20:37	69 07:38 (3)   20:15	36 07:25 (3)   19:31	18:39   16:52   16:29			
4   05:29	06:28 (3)   05:55	06:51 (3)   06:27	06:58   06:33   07:08			
4   20:37	70 07:38 (3)   20:14	32 07:23 (3)   19:29	18:37   16:51   16:29			
5   05:30	06:29 (3)   05:56	06:52 (3)   06:28	06:59   06:35   07:09			
5   20:36	69 07:38 (3)   20:13	27 07:19 (3)   19:27	18:36   16:50   16:29			
6   05:31	06:30 (3)   05:57	06:56 (3)   06:29	07:00 (8)   07:00   06:36   07:10			
6   20:36	69 07:39 (3)   20:12	20 07:16 (3)   19:25	8 07:08 (8)   18:34   16:49   16:29			
7   05:31	06:30 (3)   05:58	07:01 (3)   06:30	06:57 (8)   07:01   06:37   07:11			
7   20:36	68 07:38 (3)   20:11	9 07:10 (3)   19:24	13 07:10 (8)   18:32   16:48   16:29			
8   05:32	06:30 (3)   05:59	06:31   06:31	06:56 (8)   07:02   06:38   07:12			
8   20:36	69 07:39 (3)   20:09	19:22   15 07:11 (8)   18:31   16:47   16:29				
9   05:33	06:30 (3)   06:00	06:32   06:32	06:54 (8)   07:03   06:39   07:13			
9   20:35	68 07:38 (3)   20:08	19:20   17 07:11 (8)   18:29   16:46   16:29				
10   05:33	06:31 (3)   06:01	06:33   06:33	06:54 (8)   07:04   06:41   07:14			
10   20:35	67 07:38 (3)   20:07	19:19   18 07:12 (8)   18:27   16:44   16:29				
11   05:34	06:31 (3)   06:02	06:34   06:34	06:55 (8)   07:05   06:42   07:15			
11   20:34	68 07:39 (3)   20:06	19:17   17 07:12 (8)   18:26   16:43   16:29				
12   05:35	06:32 (3)   06:03	06:35   06:35	06:56 (8)   07:07   06:43   07:16			
12   20:34	67 07:39 (3)   20:04	19:15   15 07:11 (8)   18:24   16:42   16:29				
13   05:35	06:32 (3)   06:04	06:36   06:36	06:57 (8)   07:08   06:44   07:17			
13   20:33	66 07:38 (3)   20:03	19:14   14 07:11 (8)   18:23   16:41   16:29				
14   05:36	06:32 (3)   06:05	06:37   06:37	06:58 (8)   07:09   06:46   07:17			
14   20:33	66 07:38 (3)   20:01	19:12   12 07:10 (8)   18:21   16:41   16:29				
15   05:37	06:33 (3)   06:06	06:38   06:38	06:59 (8)   07:10   06:47   07:18			
15   20:32	65 07:38 (3)   20:00	19:10   10 07:09 (8)   18:19   16:40   16:29				
16   05:38	06:33 (3)   06:07	06:39   06:39	07:00 (8)   07:11   06:48   07:19			
16   20:32	65 07:38 (3)   19:59	19:08   7 07:07 (8)   18:18   16:39   16:30				
17   05:39	06:33 (3)   06:08	06:40   06:40	07:01 (8)   07:12   06:49   07:19			
17   20:31	65 07:38 (3)   19:57	19:07   4 07:05 (8)   18:16   16:38   16:30				
18   05:39	06:34 (3)   06:10	06:41   06:41	07:13   06:50   07:20			
18   20:30	63 07:37 (3)   19:56	19:05   18:15   16:37   16:30				
19   05:40	06:34 (3)   06:11	06:42   06:42	07:14   06:52   07:21			
19   20:30	63 07:37 (3)   19:54	19:03   18:13   16:36   16:31				
20   05:41	06:35 (3)   06:12	06:43   06:43	07:16   06:53   07:21			
20   20:29	62 07:37 (3)   19:53	19:01   18:12   16:36   16:31				
21   05:42	06:36 (3)   06:13	06:44   06:44	07:17   06:54   07:22			
21   20:28	61 07:37 (3)   19:51	19:00   18:10   16:35   16:31				
22   05:43	06:37 (3)   06:14	06:45   06:45	07:18   06:55   07:22			
22   20:27	60 07:37 (3)   19:50	18:58   18:09   16:34   16:32				
23   05:44	06:36 (3)   06:15	06:46   06:46	07:19   06:56   07:23			
23   20:26	59 07:35 (3)   19:48	18:56   18:07   16:34   16:32				
24   05:45	06:37 (3)   06:16	06:47   06:47	07:20   06:57   07:23			
24   20:26	58 07:35 (3)   19:47	18:54   18:06   16:33   16:33				
25   05:46	06:38 (3)   06:17	06:48   06:21	06:21   06:59   07:24			
25   20:25	57 07:35 (3)   19:45	18:53   17:04   16:32   16:33				
26   05:47	06:39 (3)   06:18	06:49   06:23	06:23   07:00   07:24			
26   20:24	55 07:34 (3)   19:44	18:51   17:03   16:32   16:34				
27   05:47	06:40 (3)   06:19	06:50   06:24	06:24   07:01   07:25			
27   20:23	53 07:33 (3)   19:42	18:49   17:02   16:31   16:35				
28   05:48	06:41 (3)   06:20	06:52   06:25	06:25   07:02   07:25			
28   20:22	52 07:33 (3)   19:40	18:48   17:00   16:31   16:35				
29   05:49	06:42 (3)   06:21	06:53   06:26	06:26   07:03   07:25			
29   20:21	50 07:32 (3)   19:39	18:46   16:59   16:31   16:36				
30   05:50	06:43 (3)   06:22	06:54   06:27	06:27   07:04   07:25			
30   20:20	48 07:31 (3)   19:37	18:44   16:57   16:30   16:37				
31   05:51	06:44 (3)   06:23	06:29   07:26   07:26				
31   20:19	45 07:29 (3)   19:35	16:56   16:38   16:38				
Ore potenziali eliofania	461	429	375	345	297	286
Totale, caso peggiore	1936	206	150			
Probabilità di eliofania	0.68	0.68	0.61			
Tempo di operatività rid.	0.30	0.30	0.30			
Dir. del vento rid.	0.49	0.49	0.58			
Totale ridotto	0.10	0.10	0.11			
Totale effettivo	198	21	16			

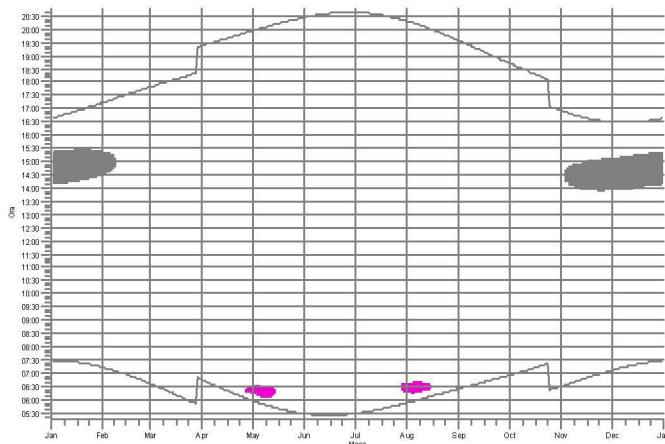
**Legenda della tabella:**

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)

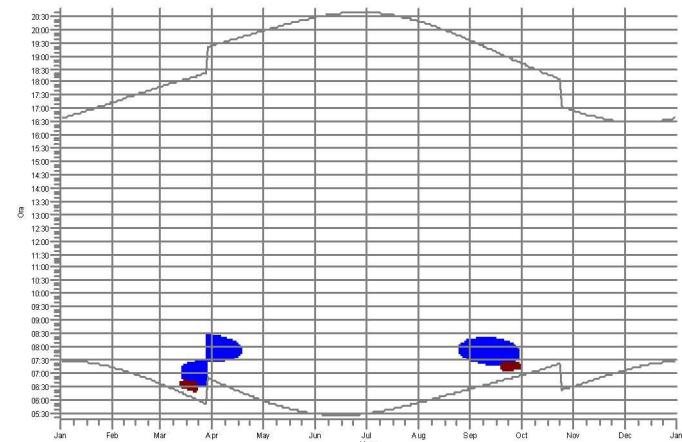
## SHADOW - Calendario, grafico

### Calcolo: Shadow Flickering Analysis

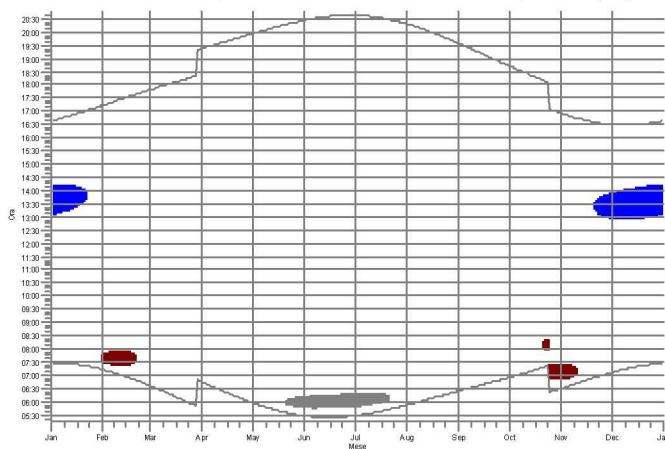
R1: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (76)



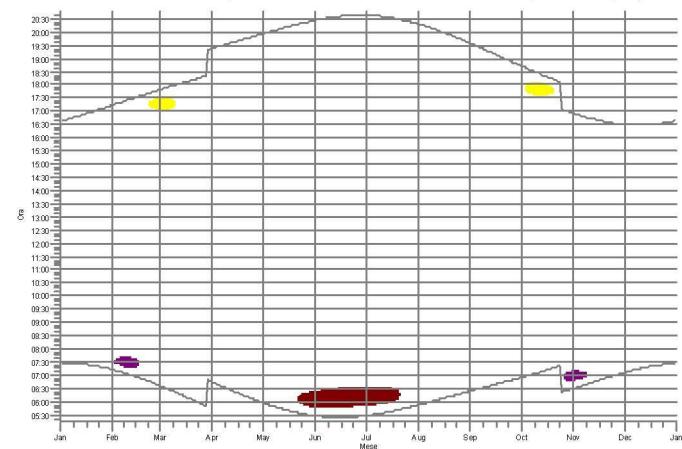
R10: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (85)



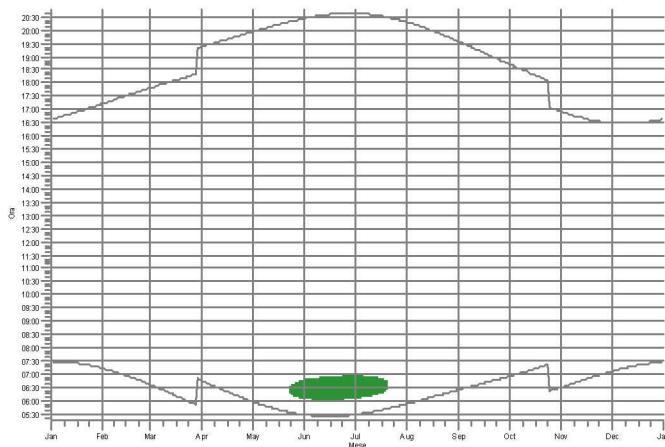
R11: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (86)



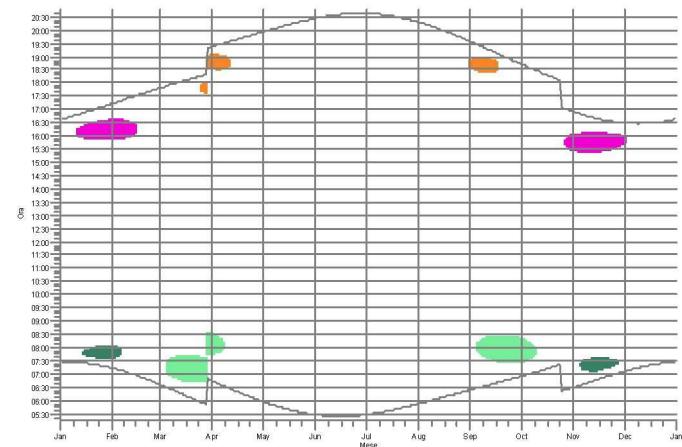
R12: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (87)



R13: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (88)



R14: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (89)



WTG

- 2: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (181)
- 3: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (182)
- 4: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (183)
- 8: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (187)

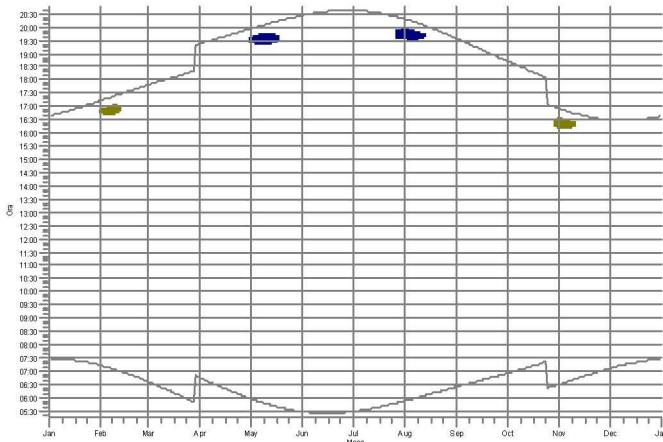
- 11: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (190)
- 23: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (202)
- 24: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (203)
- 26: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (205)

- 27: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (206)
- 29: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (208)

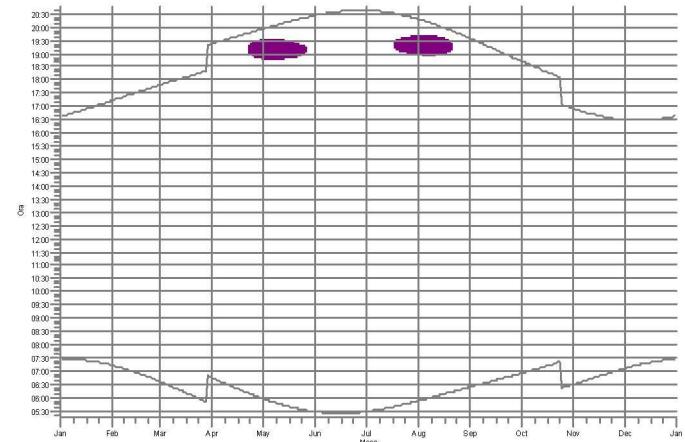
## SHADOW - Calendario, grafico

### Calcolo: Shadow Flickering Analysis

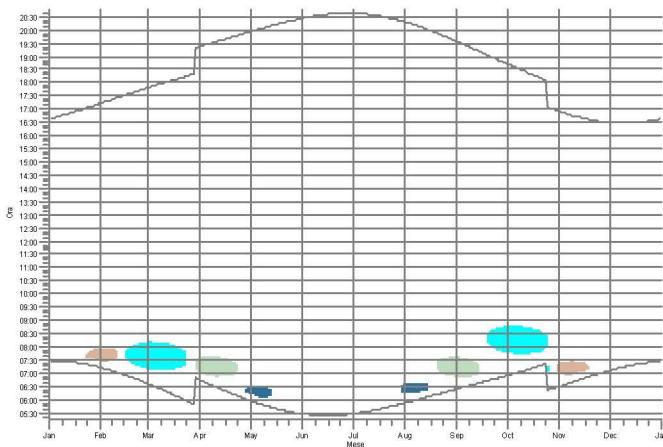
R15: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (90)



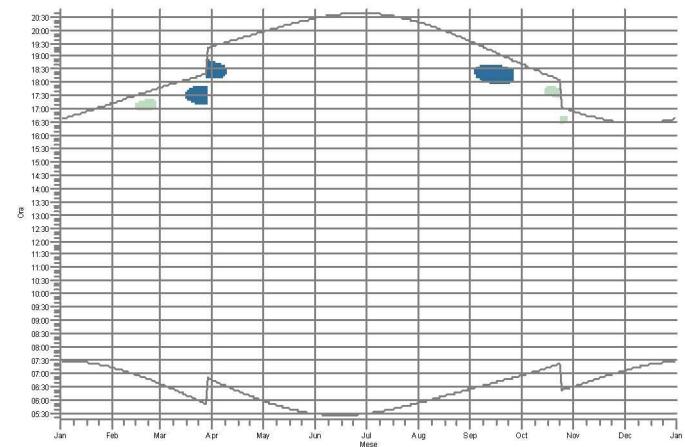
R16: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (91)



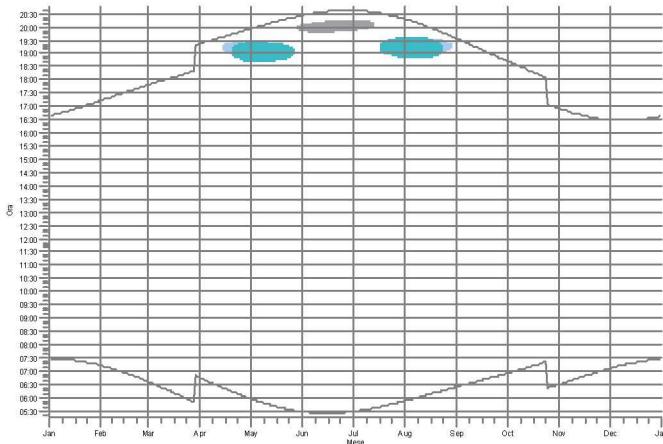
R17: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (92)



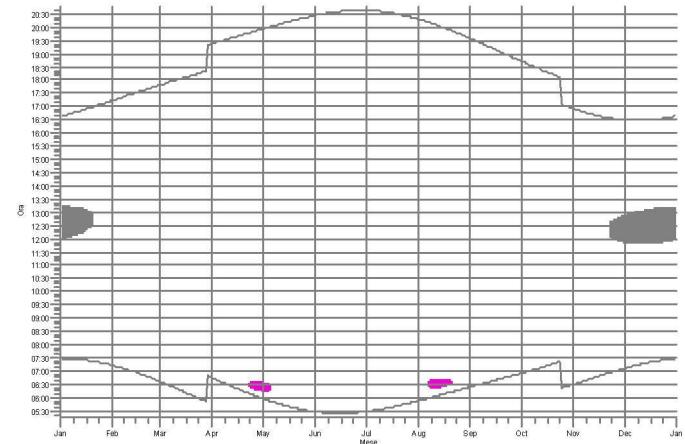
R18: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (93)



R19: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (94)



R2: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (77)



WTG

4: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (183)  
 7: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (186)  
 10: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (189)  
 11: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (190)

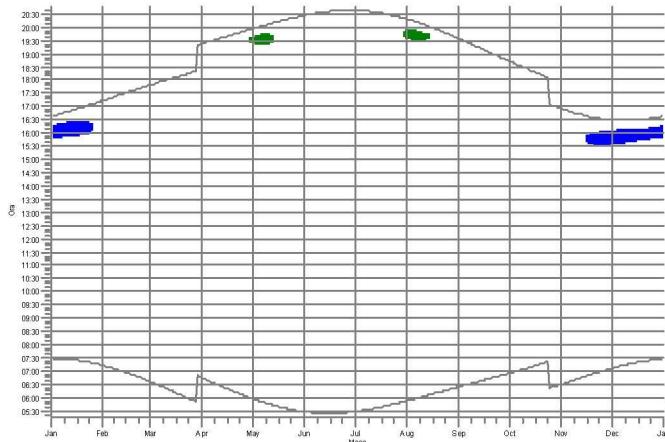
13: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (192)  
 14: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (193)  
 15: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (194)  
 16: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (195)

17: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (196)  
 19: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (198)  
 22: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (201)  
 24: Siemens Gamesa SG 6.0-170 6000 170.0 IOI hub: 165.0 m (TOT: 250.0 m) (203)

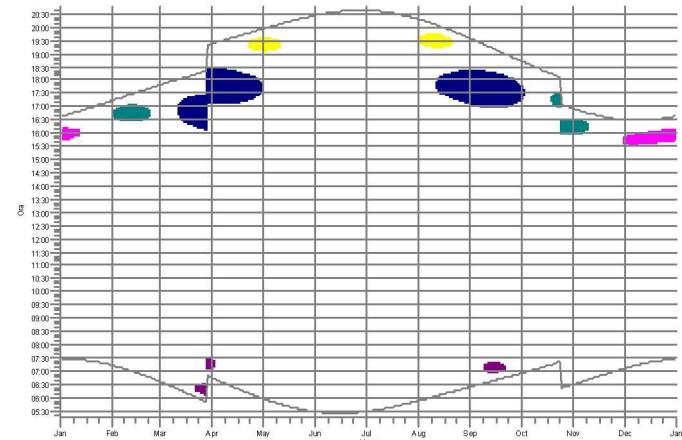
## SHADOW - Calendario, grafico

### Calcolo: Shadow Flickering Analysis

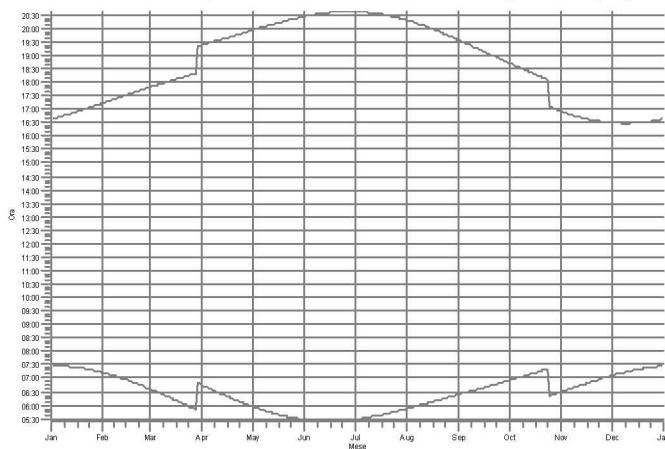
R3: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (78)



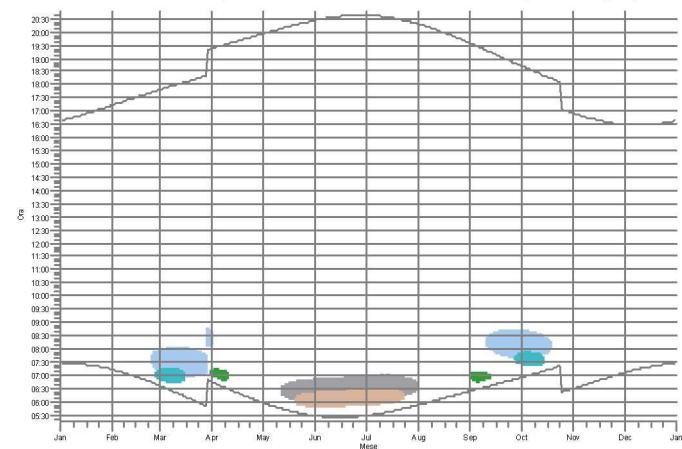
R4: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (79)



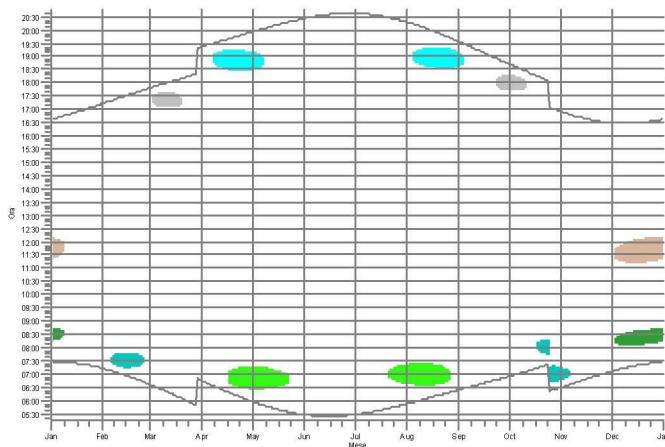
R5: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 90.0° (80)



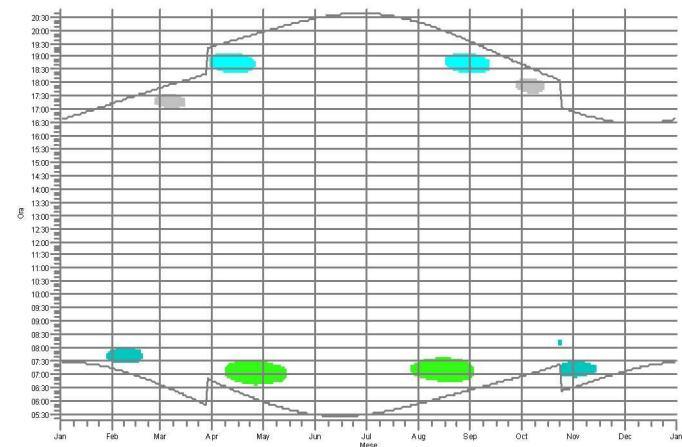
R6: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (81)



R7: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (82)



R8: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (83)



## WTG

- 1: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (180)
- 2: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (181)
- 3: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (182)
- 5: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (184)
- 6: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (185)
- 7: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (186)

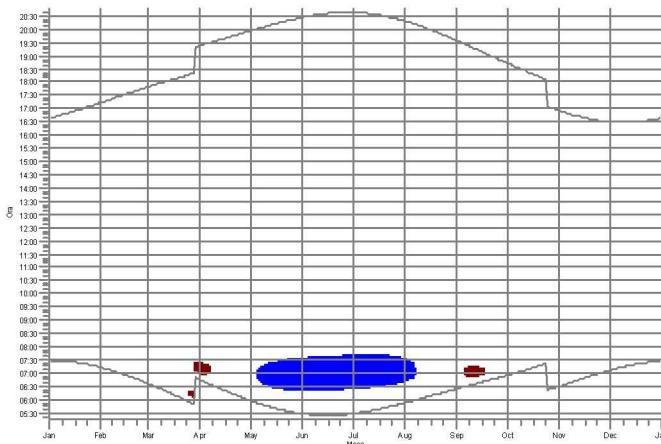
- 11: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (190)
- 12: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (191)
- 13: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (192)
- 15: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (194)
- 16: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (195)
- 17: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (196)

- 18: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (197)
- 19: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (198)
- 20: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (199)
- 21: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (200)

## SHADOW - Calendario, grafico

### Calcolo: Shadow Flickering Analysis

R9: Shadow Receptor: 1.0 × 1.0 Azimuth: 0.0° Slope: 0.0° (84)



WTG

3: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (182)

8: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0 m) (187)

## SHADOW - Calendario per WTG

**Calcolo:** Shadow Flickering Analysis **WTG:** 1 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (180)  
**Assunzioni sui calcoli d'ombra**

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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26   07:12   06:35   06:44				05:57   19:26-19:32/6	05:28   05:28		05:52   19:38-19:48/10	06:24   06:55	06:30   07:05		
	16:39   17:14   17:48   19:23				19:56   20:26   20:37			20:18   19:34   18:42   16:55   16:30				
2	07:26   07:11   06:34   06:42				05:56   19:26-19:34/8	05:27   05:28		05:53   19:36-19:48/12	06:25   06:56	06:31   07:06		
	16:40   17:15   17:50   19:24				19:57   20:27   20:37			20:17   19:32   18:41   16:54   16:30				
3	07:26   07:10   06:32   06:40				05:54   19:25-19:35/10	05:27   05:29		05:54   19:35-19:49/14	06:26   06:57	06:32   07:07		
	16:40   17:16   17:51   19:26				19:58   20:28   20:37			20:16   19:31   18:39   16:52   16:29				
4	07:26   07:09   06:31   06:39				05:53   19:25-19:36/11	05:26   05:29		05:55   19:34-19:50/16	06:27   06:58	06:33   07:08		
	16:41   17:17   17:52   19:27				19:59   20:28   20:37			20:14   19:29   18:37   16:51   16:29				
5	07:26   07:08   06:29   06:37				05:52   19:24-19:36/12	05:26   05:30		05:56   19:34-19:49/15	06:28   06:59	06:35   07:09		
	16:42   17:19   17:53   19:28				20:00   20:29   20:37			20:13   19:27   18:36   16:50   16:29				
6	07:26   07:07   06:27   06:35				05:51   19:24-19:37/13	05:25   05:31		05:57   19:33-19:48/15	06:29   07:00	06:36   07:10		
	16:43   17:20   17:54   19:29				20:01   20:30   20:36			20:12   19:26   18:34   16:49   16:29				
7	07:26   07:06   06:26   06:34				05:49   19:24-19:39/15	05:25   05:31		05:58   19:33-19:47/14	06:30   07:01	06:37   07:11		
	16:44   17:21   17:55   19:30				20:02   20:30   20:36			20:11   19:24   18:32   16:48   16:29				
8	07:26   07:05   06:24   06:32				05:48   19:24-19:40/16	05:25   05:32		05:59   19:33-19:46/13	06:31   07:02	06:38   07:12		
	16:45   17:22   17:57   19:31				20:04   20:31   20:36			20:09   19:22   18:31   16:47   16:29				
9	07:26   07:03   06:23   06:30				05:47   19:25-19:40/15	05:25   05:33		06:00   19:33-19:44/11	06:32   07:03	06:40   07:13		
	16:46   17:24   17:58   19:32				20:05   20:32   20:35			20:08   19:20   18:29   16:46   16:29				
10	07:26   07:02   06:21   06:29				05:46   19:25-19:39/14	05:24   05:33		06:01   19:34-19:43/9	06:33   07:04	06:41   07:14		
	16:47   17:25   17:59   19:33				20:06   20:32   20:35			20:07   19:19   18:27   16:44   16:29				
11	07:25   07:01   06:19   06:27				05:45   19:26-19:38/12	05:24   05:34		06:02   19:34-19:42/8	06:34   07:06	06:42   07:15		
	16:48   17:26   18:00   19:34				20:07   20:33   20:34			20:06   19:17   18:26   16:43   16:29				
12	07:25   07:00   06:18   06:25				05:44   19:28-19:37/9	05:24   05:35		06:03   19:35-19:41/6	06:35   07:07	06:43   07:16		
	16:49   17:28   18:01   19:35				20:08   20:33   20:34			20:04   19:15   18:24   16:42   16:29				
13	07:25   06:58   06:16   06:24				05:43   19:30-19:35/5	05:24   05:35		06:04   19:37-19:39/2	06:36   07:08	06:44   07:17		
	16:50   17:29   18:02   19:36				20:09   20:34   20:33			20:03   19:14   18:23   16:41   16:29				
14	07:24   06:57   06:14   06:22				05:41   05:24   05:36			06:05   06:37   07:09   06:46   07:17				
	16:52   17:30   18:03   19:38				20:10   20:34   20:33			20:01   19:12   18:21   16:41   16:29				
15	07:24   06:56   06:13   06:21				05:40   05:24   05:37			06:06   06:38   07:10   06:47   07:18				
	16:53   17:31   18:05   19:39				20:11   20:35   20:32			20:00   19:10   18:19   16:40   16:29				
16	07:24   06:54   06:11   06:19				05:39   05:24   05:38			06:07   06:39   07:11   06:48   07:19				
	16:54   17:33   18:06   19:40				20:12   20:35   20:32			19:59   19:08   18:18   16:39   16:29				
17	07:23   06:53   06:09   06:18				05:38   05:24   05:39			06:08   06:40   07:12   06:49   07:20				
	16:55   17:34   18:07   19:41				20:13   20:35   20:31			19:57   19:07   18:16   16:38   16:30				
18	07:23   06:52   06:07   06:16				05:38   05:24   05:39			06:10   06:41   07:13   06:50   07:20				
	16:56   17:35   18:08   19:42				20:14   20:36   20:30			19:56   19:05   18:15   16:37   16:30				
19	07:22   06:50   06:06   06:14				05:37   05:24   05:40			06:11   06:42   07:14   06:52   07:21				
	16:57   17:36   18:09   19:43				20:15   20:36   20:30			19:54   19:03   18:13   16:36   16:30				
20	07:22   06:49   06:04   06:13				05:36   05:24   05:41			06:12   06:43   07:16   06:53   07:21				
	16:59   17:37   18:10   19:44				20:16   20:36   20:29			19:53   19:01   18:12   16:36   16:31				
21	07:21   06:47   06:02   06:11				05:35   05:24   05:42			06:13   06:44   07:17   06:54   07:22				
	17:00   17:39   18:11   19:45				20:17   20:37   20:28			19:51   19:00   18:10   16:35   16:31				
22	07:20   06:46   06:01   06:10				05:34   05:25   05:43			06:14   06:45   07:18   06:55   07:23				
	17:01   17:40   18:12   19:46				20:18   20:37   20:27			19:50   18:58   18:09   16:34   16:32				
23	07:20   06:44   05:59   06:08				05:33   05:25   05:44			06:15   06:46   07:19   06:56   07:23				
	17:02   17:41   18:13   19:47				20:19   20:37   20:27			19:48   18:56   18:07   16:34   16:32				
24	07:19   06:43   05:57   06:07				05:33   05:25   05:45			06:16   06:47   07:20   06:58   07:24				
	17:03   17:42   18:15   19:48				20:19   20:37   20:26			19:47   18:54   18:06   16:33   16:33				
25	07:18   06:41   05:56   06:05				05:32   05:25   05:46			06:17   06:48   06:21   06:59   07:24				
	17:05   17:44   18:16   19:49				20:20   20:37   20:25			19:45   18:53   17:04   16:32   16:33				
26	07:17   06:40   05:54   06:04				05:31   05:26   05:46			06:18   06:49   06:23   07:00   07:24				
	17:06   17:45   18:17   19:51				20:21   20:37   20:24			19:44   18:51   17:03   16:32   16:34				
27	07:17   06:38   05:52   06:03				05:30   05:26   05:47			06:19   06:51   06:24   07:01   07:25				
	17:07   17:46   18:18   19:52				20:22   20:37   20:23			19:42   18:49   17:02   16:31   16:35				
28	07:16   06:37   05:50   06:01				05:30   05:27   05:48			06:20   06:52   06:25   07:02   07:25				
	17:08   17:47   18:19   19:53				20:23   20:37   20:22			19:40   18:48   17:00   16:31   16:35				
29	07:15   06:49   06:00   06:00				05:29   05:27   05:49			06:21   06:53   06:26   07:03   07:25				
	17:10   19:20   19:54   20:24				20:24   20:37   20:21			19:39   18:46   16:59   16:31   16:36				
30	07:14   06:47   05:58   06:00				05:29   05:27   05:50			06:22   06:54   06:27   07:04   07:26				
	17:11   19:21   19:55   20:25				20:25   20:37   20:20			19:37   18:44   16:57   16:30   16:37				
31	07:13   06:45   06:04   06:04				05:28   05:27   05:49			06:23   06:59   06:29   07:26				
	17:12   19:22   19:56   20:25				20:25   20:37   20:19			19:35   18:46   16:56   16:33   16:36				
	Ore potenziali eliofania	296	296	369	399	450	454	461	429	375	345	286
	Summa minuti d'ombra	0	0	0	3	146	0	8	145	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:** Shadow Flickering Analysis **WTG:** 2 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (181)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio   Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:26   07:12	06:35 17:06-17:26/20	06:44	05:57 19:09-19:32/23	05:28
	16:39   17:14	17:48	19:23	19:56	20:26
2	07:26   07:11	06:34 17:06-17:28/22	06:42	05:56 19:08-19:31/23	05:27
	16:40   17:15	17:50	19:24	19:57	20:27
3	07:26   07:10	06:32 17:06-17:28/22	06:40	05:54 19:09-19:31/22	05:27
	16:41   17:16	17:51	19:25	19:58	20:28
4	07:26   07:09	06:31 17:06-17:28/22	06:39	05:53 19:09-19:31/22	05:26
	16:41   17:17	17:52	19:27	19:59	20:28
5	07:26   07:08	06:29 17:06-17:27/21	06:37	05:52 19:10-19:31/21	05:26
	16:42   17:19	17:53	19:28	20:00	20:29
6	07:26   07:07	06:27 17:07-17:25/18	06:35	05:51 19:09-19:29/20	05:26
	16:43   17:20	17:54	19:29	20:01	20:30
7	07:26   07:06	06:26 17:08-17:25/17	06:34	05:49 19:10-19:29/19	05:25
	16:44   17:21	17:55	19:30	20:02	20:30
8	07:26   07:04	06:24 17:10-17:22/12	06:32	05:48 19:11-19:28/17	05:25
	16:45   17:22	17:57	19:31	20:03	20:31
9	07:26   07:03	06:23 17:12-17:18/6	06:30	05:47 19:13-19:26/13	05:25
	16:46   17:24	17:58	19:32	20:05	20:32
10	07:26   07:02	06:21	06:29	05:46 19:15-19:24/9	05:25
	16:47   17:25	17:59	19:33	20:06	20:32
11	07:25   07:01	06:19	06:27	05:45	05:24
	16:48   17:26	18:00	19:34	20:07	20:33
12	07:25   07:00	06:18	06:25	05:44	05:24
	16:49   17:28	18:01	19:35	20:08	20:33
13	07:25   06:58	06:16	06:24	05:43	05:24
	16:51   17:29	18:02	19:36	20:09	20:34
14	07:24   06:57	06:14	06:22	05:42	05:24
	16:52   17:30	18:03	19:37	20:10	20:34
15	07:24   06:56	06:13	06:21	05:41	05:24
	16:53   17:31	18:05	19:39	20:11	20:35
16	07:24   06:54	06:11	06:19	05:40	05:24
	16:54   17:33	18:06	19:40	20:12	20:35
17	07:23   06:53	06:09	06:18	05:39	05:24
	16:55   17:34	18:07	19:41	20:13	20:35
18	07:23   06:52	06:07	06:16	05:38	05:24
	16:56   17:35	18:08	19:42	20:14	20:36
19	07:22   06:50	06:06	06:14	05:37	05:24
	16:57   17:36	18:09	19:43	20:15	20:36
20	07:21   06:49	06:04	06:13	05:36	05:24
	16:59   17:38	18:10	19:44	20:16	20:36
21	07:21   06:47	06:02	06:11	05:35	05:25
	17:00   17:39	18:11	19:45	20:17	20:37
22	07:20   06:46	06:01	06:10	05:34	05:25
	17:01   17:40	18:12	19:46	20:18	20:37
23	07:20   06:44 17:14-17:19/5	05:59	06:08 19:16-19:24/8	05:33	05:25
	17:02   17:41	18:13	19:47	20:18	20:37
24	07:19   06:43 17:11-17:20/9	05:57	06:07 19:14-19:26/12	05:33	05:25
	17:04   17:42	18:15	19:48	20:19	20:37
25	07:18   06:41 17:10-17:22/12	05:56	06:05 19:13-19:27/14	05:32	05:26
	17:05   17:44	18:16	19:49	20:20	20:37
26	07:17   06:40 17:08-17:23/15	05:54	06:04 19:11-19:28/17	05:31	05:26
	17:06   17:45	18:17	19:51	20:21	20:37
27	07:17   06:38 17:08-17:25/17	05:52	06:03 19:11-19:29/18	05:30	05:26
	17:07   17:46	18:18	19:52	20:22	20:37
28	07:16   06:37 17:07-17:25/18	05:50	06:01 19:09-19:29/20	05:30	05:27
	17:09   17:47	18:19	19:53	20:23	20:37
29	07:15	06:49	06:00 19:09-19:31/22	05:29	05:27
	17:10	19:20	19:54	20:24	20:37
30	07:14	06:47	05:58 19:09-19:32/23	05:29	05:27
	17:11	19:21	19:55	20:25	20:37
31	07:13	06:45		05:28	
	17:12	19:22		20:25	
Ore potenziali eliofania	296	296	369	399	454
Somma minuti d'ombra	0	76	160	134	189
					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:** Shadow Flickering Analysis **WTG:** 2 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (181)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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	ONI	NNO	Somma
437	192	40	16	67	346	208	192	120	99	425	524	2,665	

: Soglia di cut-in dalla curva di potenza

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:28	05:52	06:24	06:55	06:30	07:05
	20:37	20:18	19:34	18:42	16:55	16:30
2	05:28	05:53	19:27-19:33/6	06:25	06:56	06:31
	20:37	20:17	19:32	18:41	16:54	16:30
3	05:29	05:54	19:25-19:36/11	06:26	06:57	06:32
	20:37	20:15	19:31	18:39	16:52	16:29
4	05:30	05:55	19:22-19:36/14	06:27	06:58	06:33
	20:37	20:14	19:29	18:37	16:51	16:29
5	05:30	05:56	19:21-19:38/17	06:28	06:59 17:48-17:58/10	06:35
	20:36	20:13	19:27	18:36	16:50	16:29
6	05:31	05:57	19:20-19:38/18	06:29	07:00 17:45-17:59/14	06:36
	20:36	20:12	19:26	18:34	16:49	16:29
7	05:31	05:58	19:19-19:39/20	06:30	07:01 17:43-18:01/18	06:37
	20:36	20:11	19:24	18:32	16:48	16:29
8	05:32	05:59	19:18-19:40/22	06:31	07:02 17:42-18:02/20	06:38
	20:36	20:09	19:22	18:31	16:47	16:29
9	05:33	06:00	19:18-19:40/22	06:32	07:03 17:41-18:03/22	06:40
	20:35	20:08	19:20	18:29	16:46	16:29
10	05:33	06:01	19:17-19:40/23	06:33	07:04 17:40-18:03/23	06:41
	20:35	20:07	19:19	18:27	16:45	16:29
11	05:34	06:02	19:17-19:40/23	06:34	07:06 17:40-18:02/22	06:42
	20:34	20:06	19:17	18:26	16:44	16:29
12	05:35	06:03	19:17-19:40/23	06:35	07:07 17:39-18:01/22	06:43
	20:34	20:04	19:15	18:24	16:43	16:29
13	05:35	06:04	19:17-19:39/22	06:36	07:08 17:39-17:59/20	06:44
	20:33	20:03	19:14	18:23	16:42	16:29
14	05:36	06:05	19:17-19:38/21	06:37	07:09 17:39-17:57/18	06:46
	20:33	20:01	19:12	18:21	16:41	16:29
15	05:37	06:06	19:17-19:37/20	06:38	07:10 17:40-17:57/17	06:47
	20:32	20:00	19:10	18:19	16:40	16:29
16	05:38	06:08	19:18-19:35/17	06:39	07:11 17:41-17:55/14	06:48
	20:32	19:59	19:08	18:18	16:39	16:30
17	05:39	06:09	19:18-19:34/16	06:40	07:12 17:42-17:53/11	06:49
	20:31	19:57	19:07	18:16	16:38	16:30
18	05:39	06:10	19:19-19:33/14	06:41	07:13 17:43-17:51/8	06:50
	20:30	19:56	19:05	18:15	16:37	16:30
19	05:40	06:11	19:21-19:31/10	06:42	07:14 17:46-17:49/3	06:52
	20:30	19:54	19:03	18:13	16:36	16:31
20	05:41	06:12	19:23-19:30/7	06:43	07:16	06:53
	20:29	19:53	19:01	18:12	16:36	16:31
21	05:42	06:13	06:44	07:17	06:54	07:22
	20:28	19:51	19:00	18:10	16:35	16:31
22	05:43	06:14	06:45	07:18	06:55	07:22
	20:27	19:50	18:58	18:09	16:34	16:32
23	05:44	06:15	06:46	07:19	06:56	07:23
	20:26	19:48	18:56	18:07	16:34	16:32
24	05:45	06:16	06:47	07:20	06:58	07:23
	20:26	19:47	18:54	18:06	16:33	16:33
25	05:46	06:17	06:48	06:21	06:59	07:24
	20:25	19:45	18:53	17:04	16:33	16:34
26	05:47	06:18	06:49	06:23	07:00	07:24
	20:24	19:44	18:51	17:03	16:32	16:34
27	05:48	06:19	06:51	06:24	07:01	07:25
	20:23	19:42	18:49	17:02	16:32	16:35
28	05:48	06:20	06:52	06:25	07:02	07:25
	20:22	19:40	18:48	17:00	16:31	16:35
29	05:49	06:21	06:53	06:26	07:03	07:25
	20:21	19:39	18:46	16:59	16:31	16:36
30	05:50	06:22	06:54	06:27	07:04	07:25
	20:20	19:37	18:44	16:58	16:30	16:37
31	05:51	06:23		06:29		07:26
	20:19	19:35		16:56		16:38
Ore potenziali eliofania	461	429	375	345	297	286
Somma minuti d'ombra	0	326	0	242	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:** Shadow Flickering Analysis **WTG:** 3 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (182)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>  Gennaio</b>	<b>  Febbraio   Marzo</b>	<b>  Aprile</b>	<b>  Maggio</b>	<b>  Giugno</b>		
1	07:26 15:52-16:13/21   16:39 13:08-14:09/61	07:12   06:35   17:13   17:48	06:44 07:30-08:23/53   19:23   19:56	05:57   19:56   20:26	05:28 06:23-07:30/67   20:26   05:27 06:23-07:31/68		
2	07:26 15:53-16:14/21   16:40 13:08-14:09/61	07:11   06:34   17:15   17:50	06:42 07:31-08:23/52   19:24   19:57	05:56   19:57   20:27	05:27 06:23-07:31/68   20:27   05:27 06:23-07:31/68		
3	07:26 15:53-16:14/21   16:40 13:09-14:09/60	07:10   06:32   17:16   17:51	06:40 07:30-08:22/52   19:25   19:58	05:54   19:58   20:28	05:27 06:23-07:31/68   20:28   05:26 06:23-07:31/68		
4	07:26 15:53-16:15/22   16:41 13:10-14:09/59	07:09   06:31   17:17   17:52	06:39 07:30-08:21/51   19:27   19:59	05:53   19:59   20:28	05:26 06:23-07:31/68   20:28   05:26 06:23-07:31/68		
5	07:26 15:54-16:16/22   16:42 13:11-14:09/58	07:08   06:29   17:19   17:53	06:37 07:31-08:20/49   19:28   20:00	05:52   20:00   20:29	05:26 06:23-07:32/69   20:29   05:25 06:24-07:32/68		
6	07:26 15:53-16:17/24   16:43 13:11-14:08/57	07:07   06:27   17:20   17:54	06:35 07:31-08:19/48   19:29   20:01	05:51 06:49-07:03/14   20:01   20:30	05:25 06:24-07:32/68   20:30   05:26 06:23-07:32/69		
7	07:26 15:53-16:18/25   16:44 13:13-14:08/55	07:06   06:26   17:21   17:55	06:34 07:31-08:18/47   19:30   20:02	05:49 06:45-07:08/23   20:02   20:30	05:25 06:23-07:32/69   20:30   05:26 06:23-07:32/69		
8	07:26 15:54-16:18/24   16:45 13:14-14:08/54	07:04   06:24   17:22   17:57	06:32 07:32-08:17/45   19:31   20:03	05:48 06:42-07:11/29   20:03   20:31	05:25 06:23-07:32/69   20:31   05:25 06:24-07:32/69		
9	07:26 15:55-16:19/24   16:46 13:15-14:09/54	07:03   06:22   17:24   17:58	06:30 07:32-08:16/44   19:32   20:04	05:47 06:39-07:13/34   20:04   20:32	05:25 06:24-07:33/69   20:32   05:25 06:24-07:33/69		
10	07:26 15:54-16:19/25   16:47 13:17-14:09/52	07:02   06:21   17:25   17:59	06:29 07:32-08:14/42   19:33   20:06	05:46 06:38-07:15/37   20:06   20:32	05:24 06:24-07:33/69   20:32   05:24 06:24-07:33/69		
11	07:25 15:55-16:20/25   16:48 13:17-14:08/51	07:01   06:19   17:26   18:00	06:27 07:34-08:13/39   19:34   20:07	05:45 06:36-07:17/41   20:07   20:33	05:24 06:24-07:33/69   20:33   05:24 06:24-07:33/69		
12	07:25 15:56-16:20/24   16:49 13:19-14:08/49	07:00   06:18   17:27   18:01	06:25 07:34-08:11/37   19:35   20:08	05:44 06:34-07:18/44   20:08   20:33	05:24 06:24-07:34/70   20:33   05:24 06:24-07:34/70		
13	07:25 15:55-16:20/25   16:50 13:20-14:06/46	06:58   06:16   17:29   18:02	06:24 07:36-08:09/33   19:36   20:09	05:43 06:33-07:19/46   20:09   20:34	05:24 06:25-07:34/69   20:34   05:24 06:25-07:34/69		
14	07:24 15:56-16:21/25   16:52 13:22-14:06/44	06:57   06:14 06:58-07:08/10   17:30   18:03	06:22 07:37-08:07/30   19:37   20:10	05:41 06:32-07:20/48   20:10   20:34	05:24 06:24-07:33/69   20:34   05:24 06:24-07:33/69		
15	07:24 15:56-16:21/25   16:53 13:24-14:06/42	06:56   06:13 06:52-07:12/20   17:31   18:05	06:21 07:39-08:04/25   19:39   20:11	05:40 06:31-07:21/50   20:11   20:35	05:24 06:25-07:35/70   20:35   05:24 06:25-07:35/70		
16	07:24 15:57-16:21/24   16:54 13:26-14:04/38	06:54   06:11 06:49-07:16/27   17:33   18:06	06:19 07:42-08:01/19   19:40   20:12	05:39 06:30-07:22/52   20:12   20:35	05:24 06:25-07:35/70   20:35   05:24 06:25-07:35/70		
17	07:23 15:57-16:21/24   16:55 13:28-14:03/35	06:53   06:09 06:46-07:18/32   17:34   18:07	06:17 07:46-07:55/9   19:41   20:13	05:38 06:29-07:23/54   20:13   20:35	05:24 06:25-07:35/70   20:35   05:24 06:25-07:35/70		
18	07:23 15:59-16:21/22   16:56 13:31-14:02/31	06:52   06:07 06:44-07:19/35   17:35   18:08	06:16   19:42	05:38 06:28-07:24/56   19:42   20:36	05:24 06:25-07:35/70   20:36   05:24 06:25-07:35/70		
19	07:22 15:59-16:21/22   16:57 13:33-14:00/27	06:50   06:06 06:42-07:21/39   17:36   18:09	06:14   19:43	05:37 06:27-07:24/57   19:43   20:36	05:24 06:25-07:35/70   20:36   05:24 06:25-07:35/70		
20	07:21 16:01-16:21/20   16:59 13:37-13:58/21	06:49   06:04 06:40-07:22/42   17:37   18:10	06:13   19:44	05:36 06:27-07:26/59   19:44   20:36	05:24 06:25-07:35/70   20:36   05:24 06:25-07:35/70		
21	07:21 16:01-16:21/20   17:00 13:43-13:53/10	06:47   06:02 06:39-07:22/43   17:39   18:11	06:11   19:45	05:35 06:26-07:26/60   19:45   20:37	05:24 06:25-07:35/70   20:37   05:24 06:25-07:35/70		
22	07:20 16:02-16:20/18   17:01	06:46   06:01 06:37-07:23/46   17:40   18:12	06:10   19:46	05:34 06:26-07:26/60   19:46   20:37	05:25 06:25-07:35/70   20:37   05:25 06:25-07:35/70		
23	07:20 16:03-16:19/16   17:02	06:44   05:59 06:36-07:24/48   17:41   18:13	06:08   19:47	05:33 06:25-07:27/62   19:47   20:37	05:25 06:26-07:36/70   20:37   05:25 06:26-07:36/70		
24	07:19 16:06-16:19/13   17:03	06:43   05:57 06:35-07:24/49   17:42   18:15	06:07   19:48	05:33 06:25-07:28/63   19:48   20:37	05:25 06:26-07:36/70   20:37   05:25 06:26-07:36/70		
25	07:18 16:08-16:17/9   17:05	06:41   05:56 06:34-07:24/50   17:44   18:16	06:05   19:49	05:32 06:25-07:28/63   19:49   20:37	05:25 06:26-07:36/70   20:37   05:25 06:26-07:36/70		
26	07:17	06:40   05:54 06:34-07:25/51   17:45   18:17	06:04   19:51	05:31 06:24-07:28/64   19:51   20:37	05:26 06:27-07:37/70   20:37   05:26 06:27-07:37/70		
27	07:16	06:38   05:52 06:33-07:25/52   17:46   18:18	06:03   19:52	05:30 06:24-07:29/65   19:52   20:37	05:26 06:27-07:37/70   20:37   05:26 06:27-07:37/70		
28	07:16	06:37   05:50 06:32-07:24/52   17:48   18:19	06:01   19:53	05:30 06:24-07:29/65   19:53   20:37	05:27 06:27-07:36/69   20:37   05:27 06:27-07:36/69		
29	07:15		06:09 07:31-08:24/53   19:20   19:54	06:00   20:24	05:29 06:24-07:30/66   20:24   20:37	05:27 06:28-07:37/69   20:37   05:27 06:28-07:37/69	
30	07:14		06:47 07:31-08:24/53   19:21   19:55	05:58   20:25	05:29 06:23-07:30/67   20:25   20:37	05:27 06:27-07:37/70   20:37   05:27 06:27-07:37/70	
31	07:13		06:45 07:31-08:23/52   19:22   19:56	05:28   20:26	05:28 06:24-07:31/67   20:26   20:37	05:27 06:24-07:31/67   20:37   05:27 06:24-07:31/67	
	17:12				450   454		
Ore potenziali eliofania	296	296	369	399	675	1346	2079
Somma minuti d'ombra	1506	0	754				

**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:** Shadow Flickering Analysis **WTG:** 3 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (182)  
**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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>Luglio</b>	<b>Agosto</b>	<b>Settembre</b>	<b>Ottobre</b>	<b>Novembre</b>	<b>Dicembre</b>
1	05:28 06:28-07:38/70   20:37	05:52 06:46-07:28/42   20:18	06:24 07:33-08:12/39   19:34	06:55   18:42	06:30   16:55	07:05 15:37-16:02/25   16:30 13:00-13:50/50
2	05:28 06:28-07:37/69   20:37	05:53 06:47-07:27/40   20:17	06:25 07:31-08:13/42   19:32	06:56   18:41	06:31   16:54	07:06 15:37-16:02/25   16:30 12:59-13:51/52
3	05:29 06:29-07:38/69   20:37	05:54 06:49-07:25/36   20:15	06:26 07:30-08:14/44   19:30	06:57   18:39	06:32   16:52	07:07 15:38-16:02/24   16:29 12:58-13:52/54
4	05:29 06:28-07:38/70   20:37	05:55 06:51-07:23/32   20:14	06:27 07:29-08:14/45   19:29	06:58   18:37	06:33   16:51	07:08 15:38-16:02/24   16:29 12:58-13:52/54
5	05:30 06:29-07:38/69   20:36	05:56 06:52-07:19/27   20:13	06:28 07:28-08:15/47   19:27	06:59   18:36	06:35   16:50	07:09 15:39-16:03/24   16:29 12:58-13:53/55
6	05:31 06:30-07:39/69   20:36	05:57 06:56-07:16/20   20:12	06:29 07:27-08:15/48   19:25	07:00   18:34	06:36   16:49	07:10 15:39-16:03/24   16:29 12:57-13:54/57
7	05:31 06:30-07:38/68   20:36	05:58 07:01-07:10/9   20:11	06:30 07:26-08:16/50   19:24	07:01   18:32	06:37   16:48	07:11 15:40-16:03/23   16:29 12:57-13:55/58
8	05:32 06:30-07:39/69   20:36	05:59   20:09	06:31 07:25-08:16/51   19:22	07:02   18:31	06:38   16:47	07:12 15:40-16:03/23   16:29 12:57-13:56/59
9	05:33 06:30-07:38/68   20:35	06:00   20:08	06:32 07:24-08:16/52   19:20	07:03   18:29	06:39   16:46	07:13 15:41-16:03/22   16:29 12:57-13:57/60
10	05:33 06:31-07:38/67   20:35	06:01   20:07	06:33 07:24-08:16/52   19:19	07:04   18:27	06:41   16:44	07:14 15:42-16:03/21   16:29 12:58-13:58/60
11	05:34 06:31-07:39/68   20:34	06:02   20:05	06:34 07:23-08:16/53   19:17	07:05   18:26	06:42   16:43	07:15 15:43-16:03/20   16:29 12:58-13:59/61
12	05:35 06:32-07:39/67   20:34	06:03   20:04	06:35 07:23-08:16/53   19:15	07:07   18:24	06:43   16:42	07:16 15:43-16:03/20   16:29 12:58-13:59/61
13	05:35 06:32-07:38/66   20:33	06:04   20:03	06:36 07:22-08:15/53   19:13	07:08   18:22	06:44   16:41	07:17 15:43-16:02/19   16:29 12:58-14:00/62
14	05:36 06:32-07:38/66   20:33	06:05   20:01	06:37 07:22-08:15/53   19:12	07:09   18:21	06:46   16:41	07:17 15:44-16:03/19   16:29 12:58-14:00/62
15	05:37 06:33-07:38/65   20:32	06:06   20:00	06:38 07:22-08:15/53   19:10	07:10   18:19	06:47   16:40	07:18 15:45-16:03/18   16:29 12:58-14:01/63
16	05:38 06:33-07:38/65   20:32	06:07   19:59	06:39 07:22-08:14/52   19:08	07:11   18:18	06:48   16:39	07:19 15:46-16:04/18   16:29 12:59-14:02/63
17	05:39 06:33-07:38/65   20:31	06:08   19:57	06:40 07:22-08:13/51   19:07	07:12   18:16	06:49 15:41-15:50/9   16:38	07:19 15:46-16:03/17   16:30 12:59-14:02/63
18	05:39 06:34-07:37/63   20:30	06:09   19:56	06:41 07:22-08:13/51   19:05	07:13   18:15	06:50 15:40-15:53/13   16:37	07:20 15:47-16:04/17   16:30 12:59-14:03/64
19	05:40 06:34-07:37/63   20:30	06:11   19:54	06:42 07:22-08:12/50   19:03	07:14   18:13	06:52 15:38-15:54/16   16:36	07:21 15:48-16:05/17   16:30 13:00-14:04/64
20	05:41 06:35-07:37/62   20:29	06:12   19:53	06:43 07:23-08:11/48   19:01	07:16   18:12	06:53 15:37-15:55/18   16:36	07:21 15:48-16:05/17   16:31 13:00-14:04/64
21	05:42 06:36-07:37/61   20:28	06:13   19:51	06:44 07:23-08:09/46   19:00	07:17   18:10	06:54 15:36-15:56/20   16:35 13:18-13:28/10	07:22 15:49-16:05/16   16:31 13:01-14:05/64
22	05:43 06:37-07:37/60   20:27	06:14   19:50	06:45 07:24-08:08/44   18:58	07:18   18:09	06:55 15:37-15:57/20   16:34 13:14-13:34/20	07:22 15:49-16:05/16   16:32 13:01-14:05/64
23	05:44 06:36-07:35/59   20:26	06:15   19:48	06:46 07:24-08:07/43   18:56	07:19   18:07	06:56 15:36-15:58/22   16:34 13:10-13:37/27	07:23 15:49-16:06/17   16:32 13:02-14:06/64
24	05:45 06:37-07:35/58   20:26	06:16   19:47	06:47 07:25-08:05/40   18:54	07:20   18:06	06:57 15:36-15:58/22   16:33 13:08-13:39/31	07:23 15:50-16:07/17   16:33 13:02-14:06/64
25	05:46 06:38-07:35/57   20:25	06:17   19:45	06:48 07:26-08:03/37   18:53	07:21   17:04	06:59 15:36-15:59/23   16:32 13:06-13:41/35	07:24 15:50-16:07/17   16:33 13:02-14:06/64
26	05:46 06:39-07:34/55   20:24	06:18   19:43	06:49 07:28-08:01/33   18:51	07:23   17:03	07:00 15:35-15:59/24   16:32 13:02-13:46/44	07:24 15:51-16:08/17   16:34 13:03-14:07/64
27	05:47 06:40-07:33/53   20:23	06:19   19:42	06:50 07:30-07:58/28   18:49	07:24   17:01	07:01 15:36-16:01/25   16:31 13:03-13:45/42	07:25 15:51-16:09/18   16:35 13:04-14:07/63
28	05:48 06:41-07:33/52   20:22	06:20   19:40	06:52 07:32-07:55/23   18:48	07:25   17:00	07:02 15:36-16:01/25   16:31 13:02-13:46/44	07:25 15:51-16:09/18   16:35 13:04-14:07/63
29	05:49 06:42-07:32/50   20:21	06:21   19:39	06:53 07:36-07:51/15   18:46	07:26   16:59	07:03 15:36-16:01/25   16:31 13:01-13:47/46	07:25 15:51-16:10/19   16:36 13:05-14:07/62
30	05:50 06:43-07:31/48   20:20	06:22   19:37	06:54   18:44	07:27   16:57	07:04 15:37-16:01/24   16:30 13:00-13:49/49	07:25 15:51-16:10/19   16:37 13:05-14:07/62
31	05:51 06:44-07:29/45   20:19	06:23   19:35	06:55   18:43	07:28   16:56	07:05 15:38-16:01/24   16:30 13:00-13:49/49	07:26 15:52-16:12/20   16:38 13:07-14:08/61
Ore potenziali eliofania		461	429	375	345	297
Somma minuti d'ombra		1936	362	1296	0	628
						2492

### 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:** Shadow Flickering Analysis **WTG:** 4 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (183)  
**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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>Gennaio</b>	<b>Febbraio</b>	<b>Marzo</b>	<b>Aprile</b>	<b>Maggio</b>	<b>Giugno</b>
1   07:26	12:02-13:10/68	07:12 14:34-15:19/45	06:35	06:44	05:57	05:27 05:49-06:08/19
16:39	14:11-15:19/68	17:13	17:48	19:23	19:56	20:26
2   07:26	12:03-13:10/67	07:11 14:35-15:18/43	06:34	06:42	05:56	05:27 05:49-06:09/20
16:39	14:11-15:19/68	17:15	17:49	19:24	19:57	20:27
3   07:26	12:04-13:10/66	07:10 14:38-15:16/38	06:32	06:40	05:54	05:26 05:48-06:09/21
16:40	14:12-15:20/68	17:16	17:51	19:25	19:58	20:28
4   07:26	12:05-13:10/65	07:09 14:40-15:15/35	06:30	06:39	05:53	05:26 05:48-06:09/21
16:41	14:12-15:20/68	17:17	17:52	19:26	19:59	20:28
5   07:26	12:06-13:10/64	07:08 14:43-15:13/30	06:29	06:37	05:52	05:26 05:48-06:10/22
16:42	14:13-15:21/68	17:18	17:53	19:28	20:00	20:29
6   07:26	12:06-13:09/63	07:07 14:46-15:11/25	06:27	06:35	05:50	05:25 05:47-06:09/22
16:43	14:12-15:20/68	17:20	17:54	19:29	20:01	20:30
7   07:26	12:08-13:09/61	07:06 14:49-15:06/17	06:26	06:34	05:49	05:25 05:47-06:10/23
16:44	14:13-15:21/68	17:21	17:55	19:30	20:02	20:30
8   07:26	12:09-13:09/60	07:04	06:24	06:32	05:48	05:25 05:47-06:10/23
16:45	14:14-15:21/67	17:22	17:56	19:31	20:03	20:31
9   07:26	12:11-13:08/57	07:03	06:22	06:30	05:47	05:25 05:48-06:11/23
16:46	14:14-15:22/68	17:24	17:58	19:32	20:04	20:32
10   07:25	12:11-13:07/56	07:02	06:21	06:29	05:46	05:24 05:48-06:11/23
16:47	14:14-15:22/68	17:25	17:59	19:33	20:05	20:32
11   07:25	12:13-13:07/54	07:01	06:19	06:27	05:45	05:24 05:48-06:11/23
16:48	14:15-15:22/67	17:26	18:00	19:34	20:07	20:33
12   07:25	12:15-13:07/52	06:59	06:17	06:25	05:44	05:24 05:49-06:12/23
16:49	14:16-15:23/67	17:27	18:01	19:35	20:08	20:33
13   07:25	12:16-13:05/49	06:58	06:16	06:24	05:42	05:24 05:48-06:11/23
16:50	14:16-15:23/67	17:29	18:02	19:36	20:09	20:34
14   07:24	12:19-13:05/46	06:57	06:14	06:22	05:41	05:24 05:48-06:11/23
16:51	14:17-15:23/66	17:30	18:03	19:37	20:10	20:34
15   07:24	12:20-13:03/43	06:56	06:12	06:21	05:40	05:24 05:48-06:11/23
16:53	14:17-15:23/66	17:31	18:04	19:38	20:11	20:35
16   07:23	12:23-13:02/39	06:54	06:11	06:19	05:39	05:24 05:48-06:12/24
16:54	14:18-15:24/66	17:32	18:06	19:40	20:12	20:35
17   07:23	12:26-13:00/34	06:53	06:09	06:17	05:38	05:24 05:50-06:13/23
16:55	14:18-15:23/65	17:34	18:07	19:41	20:13	20:35
18   07:23	12:30-12:58/28	06:52	06:07	06:16	05:37	05:24 05:50-06:13/23
16:56	14:19-15:24/65	17:35	18:08	19:42	20:14	20:36
19   07:22	12:34-12:54/20	06:50	06:06	06:14	05:37	05:24 05:50-06:13/23
16:57	14:20-15:24/64	17:36	18:09	19:43	20:15	20:36
20   07:21	14:21-15:24/63	06:49	06:04	06:13	05:36	05:24 05:50-06:13/23
16:58		17:37	18:10	19:44	20:16	20:36
21   07:21	14:22-15:24/62	06:47	06:02	06:11	05:35	05:24 05:50-06:13/23
17:00		17:39	18:11	19:45	20:17	20:36
22   07:20	14:22-15:24/62	06:46	06:01	06:10	05:34 05:55-05:58/3	05:25 05:50-06:13/23
17:01		17:40	18:12	19:46	20:17	20:37
23   07:19	14:23-15:23/60	06:44	05:59	06:08	05:33 05:54-06:01/7	05:25 05:51-06:14/23
17:02		17:41	18:13	19:47	20:18	20:37
24   07:19	14:24-15:24/60	06:43	05:57	06:07	05:32 05:54-06:03/9	05:25 05:51-06:14/23
17:03		17:42	18:14	19:48	20:19	20:37
25   07:18	14:25-15:23/58	06:41	05:55	06:05	05:32 05:53-06:04/11	05:25 05:51-06:14/23
17:05		17:43	18:16	19:49	20:20	20:37
26   07:17	14:26-15:23/57	06:40	05:54	06:04	05:31 05:52-06:05/13	05:26 05:51-06:15/24
17:06		17:45	18:17	19:50	20:21	20:37
27   07:16	14:27-15:22/55	06:38	05:52	06:02	05:30 05:52-06:06/14	05:26 05:51-06:14/23
17:07		17:46	18:18	19:52	20:22	20:37
28   07:16	14:28-15:22/54	06:37	05:50	06:01	05:30 05:51-06:06/15	05:26 05:51-06:14/23
17:08		17:47	18:19	19:53	20:23	20:37
29   07:15	14:29-15:21/52		06:49	06:00	05:29 05:51-06:07/16	05:27 05:52-06:15/23
17:10			19:20	19:54	20:24	20:37
30   07:14	14:31-15:20/49		06:47	05:58	05:28 05:50-06:07/17	05:27 05:52-06:15/23
17:11			19:21	19:55	20:24	20:37
31   07:13	14:32-15:20/48		06:45		05:28 05:50-06:08/18	
17:12			19:22		20:25	
Ore potenziali eliofania	296	296	369	399	450	454
Somma minuti d'ombra	2944	233	0	0	123	679

**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:** Shadow Flickering Analysis **WTG:** 4 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (183)  
**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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:28 05:52-06:16/24   20:37	05:52   20:18	06:24   19:34	06:55   18:42	06:30   16:55	07:05 11:55-12:49/54   16:30 13:57-15:04/67
2	05:28 05:52-06:15/23   20:37	05:53   20:17	06:25   19:32	06:56   18:41	06:31   16:54	07:06 11:54-12:50/56   16:29 13:57-15:05/68
3	05:29 05:53-06:16/23   20:37	05:54   20:15	06:26   19:30	06:57   18:39	06:32   16:52	07:07 11:54-12:51/57   16:29 13:57-15:05/68
4	05:29 05:52-06:16/24   20:37	05:55   20:14	06:27   19:29	06:58   18:37	06:33 14:18-14:37/19   16:51	07:08 11:53-12:53/60   16:29 13:58-15:06/68
5	05:30 05:53-06:16/23   20:36	05:56   20:13	06:28   19:27	06:59   18:36	06:35 14:15-14:41/26   16:50	07:09 11:53-12:54/61   16:29 13:58-15:06/68
6	05:30 05:53-06:16/23   20:36	05:57   20:12	06:29   19:25	07:00   18:34	06:36 14:12-14:43/31   16:49	07:10 11:53-12:55/62   16:29 13:58-15:06/68
7	05:31 05:54-06:16/22   20:36	05:58   20:11	06:30   19:24	07:01   18:32	06:37 14:09-14:45/36   16:48	07:11 11:52-12:56/64   16:29 13:59-15:07/68
8	05:32 05:55-06:17/22   20:36	05:59   20:09	06:31   19:22	07:02   18:31	06:38 14:08-14:47/39   16:46	07:12 11:52-12:57/65   16:28 13:59-15:07/68
9	05:32 05:55-06:16/21   20:35	06:00   20:08	06:32   19:20	07:03   18:29	06:39 14:06-14:49/43   16:45	07:13 11:52-12:58/66   16:28 14:00-15:08/68
10	05:33 05:56-06:16/20   20:35	06:01   20:07	06:33   19:19	07:04   18:27	06:41 14:04-14:50/46   16:44	07:14 11:52-12:59/67   16:28 14:00-15:08/68
11	05:34 05:57-06:17/20   20:34	06:02   20:05	06:34   19:17	07:05   18:26	06:42 14:04-14:52/48   16:43	07:15 11:52-13:00/68   16:28 14:01-15:09/68
12	05:35 05:57-06:16/19   20:34	06:03   20:04	06:35   19:15	07:06   18:24	06:43 14:02-14:52/50   16:42	07:16 11:53-13:00/67   16:29 14:01-15:10/69
13	05:35 05:58-06:16/18   20:33	06:04   20:03	06:36   19:13	07:08   18:22	06:44 14:01-14:53/52   16:41	07:16 11:52-13:00/68   16:29 14:01-15:09/68
14	05:36 05:59-06:16/17   20:33	06:05   20:01	06:37   19:12	07:09   18:21	06:45 14:00-14:54/54   16:40	07:17 11:52-13:01/69   16:29 14:02-15:10/68
15	05:37 06:00-06:16/16   20:32	06:06   20:00	06:38   19:10	07:10   18:19	06:47 14:00-14:55/55   16:40	07:18 11:53-13:02/69   16:29 14:02-15:11/69
16	05:38 06:00-06:15/15   20:32	06:07   19:59	06:39   19:08	07:11   18:18	06:48 13:59-14:56/57   16:39	07:19 11:53-13:03/70   16:29 14:03-15:11/68
17	05:38 06:01-06:14/13   20:31	06:08   19:57	06:40   19:06	07:12   18:16	06:49 13:58-14:56/58   16:38	07:19 11:53-13:03/70   16:30 14:03-15:11/68
18	05:39 06:02-06:14/12   20:30	06:09   19:56	06:41   19:05	07:13   18:15	06:50 13:58-14:58/60   16:37	07:20 11:54-13:04/70   16:30 14:04-15:12/68
19	05:40 06:03-06:13/10   20:30	06:10   19:54	06:42   19:03	07:14   18:13	06:52 13:58-14:58/60   16:36	07:21 11:54-13:05/71   16:30 14:04-15:12/68
20	05:41 06:04-06:12/8   20:29	06:11   19:53	06:43   19:01	07:15   18:11	06:53 13:57-14:59/62   16:35	07:21 11:54-13:05/71   16:31 14:05-15:13/68
21	05:42 06:05-06:10/5   20:28	06:12   19:51	06:44   19:00	07:17   18:10	06:54 13:57-14:59/62   16:35	07:22 11:55-13:06/71   16:31 14:06-15:14/68
22	05:43 06:13   20:27	06:13   19:50	06:45   18:58	07:18   18:09	06:55 13:57-15:00/63   16:34	07:22 11:55-13:06/71   16:32 14:06-15:14/68
23	05:44 06:15   20:26	06:15   19:48	06:46   18:56	07:19   18:07	06:56 12:11-12:31/20   16:33	07:23 11:55-13:06/71   16:32 14:06-15:14/68
24	05:45 06:16   20:26	06:16   19:47	06:47   18:54	07:20   18:06	06:57 12:07-12:35/28   16:33	07:23 11:56-13:07/71   16:33 14:07-15:15/68
25	05:45 06:17   20:25	06:17   19:45	06:48   18:53	06:21   17:04	06:59 12:04-12:38/34   16:32	07:24 11:57-13:07/70   16:33 14:07-15:15/68
26	05:46 06:18   20:24	06:18   19:43	06:49   18:51	06:22   17:03	07:00 12:01-12:40/39   16:32	07:24 11:58-13:08/70   16:34 14:08-15:16/68
27	05:47 06:19   20:23	06:19   19:42	06:50   18:49	06:24   17:01	07:01 12:00-12:43/43   16:31	07:25 11:58-13:08/70   16:35 14:08-15:16/68
28	05:48 06:20   20:22	06:20   19:40	06:51   18:47	06:25   17:00	07:02 11:59-12:45/46   16:31	07:25 11:59-13:08/69   16:35 14:08-15:16/68
29	05:49 06:21   20:21	06:21   19:39	06:52   18:46	06:26   16:59	07:03 11:57-12:46/49   16:30	07:25 11:59-13:08/69   16:36 14:09-15:17/68
30	05:50 06:22   20:20	06:22   19:37	06:54   18:44	06:27   16:57	07:04 11:56-12:48/52   16:30	07:25 12:00-13:08/68   16:37 14:09-15:17/68
31	05:51 06:23   20:19	06:23   19:35	06:56   16:56	06:28   297	07:26 12:01-13:09/68   16:38 14:10-15:18/68	4182
	Ore potenziali eliofania   461		378	0	0	1758
	Summa minuti d'ombra			0	0	286

**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:** Shadow Flickering Analysis **WTG:** 5 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (184)  
**Assunzioni sui calcoli d'ombra**

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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>Gennaio</b>	<b>Febbraio</b>	<b>Marzo</b>	<b>Aprile</b>	<b>Maggio</b>	<b>Giugno</b>	<b>Luglio</b>	<b>Agosto</b>	<b>Settembre</b>	<b>Ottobre</b>	<b>Novembre</b>	<b>Dicembre</b>
1   07:26	15:47-16:06/19	07:12	06:35	06:44	05:57	05:28	05:28	05:52	06:24	06:55	06:30	07:05 15:39-15:46/7
16:39		17:14	17:48	19:23	19:56	20:26	20:37	20:18	19:34	18:42	16:55	16:30
2   07:26	15:48-16:06/18	07:11	06:34	06:42	05:56	05:27	05:28	05:53	06:25	06:56	06:31	07:06 15:38-15:48/10
16:40		17:15	17:50	19:24	19:57	20:27	20:37	20:17	19:32	18:41	16:54	16:30
3   07:26	15:48-16:07/19	07:10	06:32	06:40	05:55	05:27	05:29	05:54	06:26	06:57	06:32	07:07 15:37-15:49/12
16:41		17:16	17:51	19:25	19:58	20:28	20:37	20:15	19:31	18:39	16:52	16:29
4   07:26	15:49-16:07/18	07:09	06:31	06:39	05:53	05:26	05:30	05:55	06:27	06:58	06:33	07:08 15:37-15:50/13
16:41		17:17	17:52	19:27	19:59	20:28	20:37	20:14	19:29	18:37	16:51	16:29
5   07:26	15:49-16:06/17	07:08	06:29	06:37	05:52	05:26	05:30	05:56	06:28	06:59	06:35	07:09 15:36-15:51/15
16:42		17:19	17:53	19:28	20:00	20:29	20:36	20:13	19:27	18:36	16:50	16:29
6   07:26	15:50-16:06/16	07:07	06:27	06:35	05:51	05:26	05:31	05:57	06:29	07:00	06:36	07:10 15:36-15:52/16
16:43		17:20	17:54	19:29	20:01	20:30	20:36	20:12	19:25	18:34	16:49	16:29
7   07:26	15:51-16:06/15	07:06	06:26	06:34	05:49	05:25	05:31	05:58	06:30	07:01	06:37	07:11 15:36-15:53/17
16:44		17:21	17:55	19:30	20:02	20:30	20:36	20:11	19:24	18:32	16:48	16:29
8   07:26	15:53-16:06/13	07:04	06:24	06:32	05:48	05:25	05:32	05:59	06:31	07:02	06:38	07:12 15:36-15:54/18
16:45		17:23	17:57	19:31	20:03	20:31	20:36	20:09	19:22	18:31	16:47	16:29
9   07:26	15:54-16:06/12	07:03	06:23	06:30	05:47	05:25	05:33	06:00	06:32	07:03	06:39	07:13 15:37-15:55/18
16:46		17:24	17:58	19:32	20:04	20:32	20:35	20:08	19:20	18:29	16:46	16:29
10   07:25	15:55-16:05/10	07:02	06:21	06:29	05:46	05:25	05:33	06:01	06:33	07:04	06:41	07:14 15:37-15:55/18
16:47		17:25	17:59	19:33	20:06	20:32	20:35	20:07	19:19	18:27	16:45	16:29
11   07:25	15:57-16:04/7	07:01	06:19	06:27	05:45	05:24	05:34	06:02	06:34	07:05	06:42	07:15 15:37-15:56/19
16:48		17:26	18:00	19:34	20:07	20:34	20:36	20:05	19:17	18:26	16:44	16:29
12   07:25		07:00	06:18	06:26	05:44	05:24	05:35	06:03	06:35	07:07	06:43	07:16 15:38-15:57/19
16:49		17:28	18:01	19:35	20:08	20:33	20:34	20:04	19:15	18:24	16:43	16:29
13   07:25		06:58	06:16	06:24	05:43	05:24	05:36	06:04	06:36	07:08	06:44	07:17 15:37-15:57/20
16:51		17:29	18:02	19:36	20:09	20:34	20:33	20:03	19:14	18:23	16:42	16:29
14   07:24		06:57	06:14	06:22	05:42	05:24	05:36	06:05	06:37	07:09	06:46	07:17 15:38-15:58/20
16:52		17:30	18:03	19:37	20:10	20:34	20:33	20:01	19:12	18:21	16:41	16:29
15   07:24		06:56	06:13	06:21	05:41	05:24	05:37	06:07	06:38	07:10	06:47	07:18 15:38-15:58/20
16:53		17:31	18:05	19:39	20:11	20:35	20:32	20:00	19:10	18:19	16:40	16:29
16   07:24		06:54	06:11	06:19	05:40	05:24	05:38	06:08	06:39	07:11	06:48	07:19 15:39-15:59/20
16:54		17:33	18:06	19:40	20:12	20:35	20:32	20:02	19:59	19:08	18:18	16:39
17   07:23		06:53	06:09	06:18	05:39	05:24	05:39	06:09	06:40	07:12	06:49	07:19 15:39-15:59/20
16:55		17:34	18:07	19:41	20:13	20:35	20:31	20:15	19:57	19:07	18:16	16:38
18   07:23		06:52	06:07	06:16	05:38	05:24	05:39	06:10	06:41	07:13	06:50	07:20 15:40-16:00/20
16:56		17:35	18:08	19:42	20:14	20:36	20:30	20:15	19:05	18:15	16:37	16:30
19   07:22		06:50	06:06	06:14	05:37	05:24	05:40	06:11	06:42	07:14	06:52	07:21 15:39-16:00/21
16:57		17:36	18:09	19:43	20:15	20:36	20:30	20:19	19:54	19:03	18:13	16:36
20   07:21		06:49	06:04	06:13	05:36	05:24	05:41	06:12	06:43	07:16	06:53	07:21 15:40-16:01/21
16:59		17:38	18:10	19:44	20:16	20:36	20:29	20:19	19:53	19:01	18:12	16:36
21   07:21		06:47	06:02	06:11	05:35	05:25	05:42	06:13	06:44	07:17	06:54	07:22 15:41-16:02/21
17:00		17:39	18:11	19:45	20:17	20:36	20:28	20:19	19:51	19:00	18:10	16:35
22   07:20		06:46	06:01	06:10	05:34	05:25	05:43	06:14	06:45	07:18	06:55	07:22 15:41-16:02/21
17:01		17:40	18:12	19:46	20:17	20:37	20:27	20:19	19:50	18:58	18:09	16:34
23   07:20		06:44	05:59	06:08	05:33	05:25	05:44	06:15	06:46	07:19	06:56	07:23 15:41-16:02/21
17:02		17:41	18:13	19:47	20:18	20:37	20:26	20:19	19:48	18:56	18:07	16:34
24   07:19		06:43	05:57	06:07	05:33	05:25	05:45	06:16	06:47	07:20	06:57	07:23 15:42-16:03/21
17:04		17:42	18:15	19:48	20:19	20:37	20:26	20:19	19:47	18:54	18:06	16:33
25   07:18		06:41	05:56	06:06	05:32	05:26	05:46	06:17	06:48	07:21	06:59	07:24 15:43-16:03/20
17:05		17:44	18:16	19:49	20:20	20:37	20:25	20:19	19:45	18:53	17:04	16:33
26   07:17		06:40	05:54	06:04	05:31	05:26	05:47	06:18	06:49	07:23	06:23	07:24 15:44-16:04/20
17:06		17:45	18:17	19:51	20:21	20:37	20:24	20:19	19:43	18:51	17:03	16:32
27   07:16		06:38	05:52	06:03	05:31	05:26	05:48	06:19	06:51	06:24	07:01	07:25 15:44-16:04/20
17:07		17:46	18:18	19:52	20:22	20:37	20:23	20:19	19:42	18:49	17:02	16:32
28   07:16		06:37	05:50	06:01	05:30	05:27	05:48	06:20	06:52	06:25	07:02	07:25 15:44-16:04/20
17:09		17:47	18:19	19:53	20:23	20:37	20:22	20:19	19:40	18:48	17:00	16:31
29   07:15			06:49	06:00	05:29	05:27	05:49	06:21	06:53	06:26	07:03	07:25 15:45-16:05/20
17:10			19:20	19:54	20:24	20:37	20:21	19:39	18:46	16:59	16:31	16:36
30   07:14			06:47	05:58	05:29	05:28	05:50	06:22	06:54	06:27	07:04	07:25 15:45-16:05/20
17:11			19:21	19:55	20:24	20:37	20:20	19:37	18:44	16:58	16:30	16:37
31   07:13			06:45		05:28		05:51	06:23		06:29		07:26 15:46-16:06/20
17:12				19:22		20:25		20:19	19:35	16:56		16:38
Ore potenziali ellofania	296		296	369	399	450	454	461	429	375	345	286
Somma minuti d'ombra	164		0	0	0	0	0	0	0	0	0	568

**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:** Shadow Flickering Analysis **WTG:** 6 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (185)  
**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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26	07:12	06:35	06:44	05:57	05:28	05:28	05:52	06:24	06:55	06:30	15:59-16:27/28
	16:39	17:14	17:48	19:23	19:56	20:26	20:37	20:18	19:34	18:42	16:55	16:30
2	07:26	07:11 16:38-16:48/10	06:34	06:42	05:56	05:27	05:28	05:53	06:25	06:56	06:31	16:00-16:27/27
	16:40	17:15	17:50	19:24	19:57	20:27	20:37	20:17	19:32	18:41	16:54	16:30
3	07:26	07:10 16:36-16:50/14	06:32	06:40	05:54	05:27	05:29	05:54	06:26	06:57	06:32	16:00-16:26/26
	16:41	17:16	17:51	19:25	19:58	20:28	20:37	20:15	19:30	18:39	16:52	16:29
4	07:26	07:09 16:34-16:52/18	06:31	06:39	05:53	05:26	05:30	05:55	06:27	06:58	06:33	16:00-16:25/25
	16:41	17:17	17:52	19:27	19:59	20:28	20:37	20:14	19:29	18:37	16:51	16:29
5	07:26	07:08 16:33-16:54/21	06:29	06:37	05:52	05:26	05:30	05:56	06:28	06:59	06:35	16:02-16:25/23
	16:42	17:19	17:53	19:28	20:00	20:29	20:36	20:13	19:27	18:36	16:50	16:29
6	07:26	07:07 16:32-16:55/23	06:27	06:35	05:51	05:26	05:31	05:57	06:29	07:00	06:36	16:03-16:24/21
	16:43	17:20	17:54	19:29	20:01	20:30	20:36	20:12	19:25	18:34	16:49	16:29
7	07:26	07:06 16:31-16:56/25	06:26	06:34	05:49	05:25	05:31	05:58	06:30	07:01	06:37	16:04-16:22/18
	16:44	17:21	17:55	19:30	20:02	20:30	20:36	20:11	19:24	18:32	16:48	16:29
8	07:26	07:04 16:30-16:57/27	06:24	06:32	05:48	05:25	05:32	05:59	06:31	07:02	06:38	16:07-16:21/14
	16:45	17:22	17:57	19:31	20:03	20:36	20:09	19:22	18:31	16:47	16:29	16:29
9	07:26	07:03 16:30-16:57/27	06:23	06:30	05:47	05:25	05:33	06:00	06:32	07:03	06:39	16:09-16:18/9
	16:46	17:24	17:58	19:32	20:04	20:32	20:35	20:08	19:20	18:29	16:46	16:29
10	07:25	07:02 16:30-16:58/28	06:21	06:29	05:46	05:25	05:33	06:01	06:33	07:04	06:41	07:14
	16:47	17:25	17:59	19:33	20:06	20:32	20:35	20:07	19:19	18:27	16:45	16:29
11	07:25	07:01 16:30-16:59/29	06:19	06:27	05:45	05:24	05:34	06:02	06:34	07:05	06:42	07:15
	16:48	17:26	18:00	19:34	20:07	20:33	20:34	20:05	19:17	18:26	16:44	16:29
12	07:25	07:00 16:29-16:58/29	06:18	06:25	05:44	05:24	05:35	06:03	06:35	07:07	06:43	07:16
	16:49	17:28	18:01	19:35	20:08	20:33	20:34	20:04	19:15	18:24	16:43	16:29
13	07:25	06:58 16:29-16:59/30	06:16	06:24	05:43	05:24	05:35	06:04	06:36	07:08	06:44	07:17
	16:51	17:29	18:02	19:36	20:09	20:34	20:33	20:03	19:14	18:23	16:42	16:29
14	07:24	06:57 16:30-16:59/29	06:14	06:22	05:42	05:24	05:36	06:05	06:37	07:09	06:46	07:17
	16:52	17:30	18:03	19:37	20:10	20:34	20:33	20:01	19:12	18:21	16:41	16:29
15	07:24	06:56 16:30-16:58/28	06:13	06:21	05:41	05:24	05:37	06:06	06:38	07:10	06:47	07:18
	16:53	17:31	18:05	19:39	20:11	20:35	20:32	20:00	19:10	18:19	16:40	16:29
16	07:24	06:54 16:30-16:58/28	06:11	06:19	05:40	05:24	05:38	06:08	06:39	07:11	06:48	07:19
	16:54	17:33	18:06	19:40	20:12	20:35	20:32	19:59	19:08	18:18	16:39	16:30
17	07:23	06:53 16:30-16:57/27	06:09	06:18	05:39	05:24	05:39	06:09	06:40	07:12	06:49	07:19
	16:55	17:34	18:07	19:41	20:13	20:35	20:31	19:57	19:07	18:16	16:38	16:30
18	07:23	06:52 16:31-16:56/25	06:07	06:16	05:38	05:24	05:39	06:10	06:41	07:13	06:50	07:20
	16:56	17:35	18:08	19:42	20:14	20:36	20:30	19:56	19:05	18:15	16:37	16:30
19	07:22	06:50 16:33-16:56/23	06:06	06:14	05:37	05:24	05:40	06:11	06:42	07:14 17:12-17:17/5	06:52	07:21
	16:57	17:36	18:09	19:43	20:15	20:36	20:30	19:54	19:03	18:13	16:36	16:31
20	07:21	06:49 16:34-16:54/20	06:04	06:13	05:36	05:24	05:41	06:12	06:43	07:16 17:07-17:21/14	06:53	07:21
	16:59	17:38	18:10	19:44	20:16	20:36	20:29	19:53	19:01	18:12	16:36	16:31
21	07:21	06:47 16:36-16:52/16	06:02	06:11	05:35	05:25	05:42	06:13	06:44	07:17 17:06-17:24/18	06:54	07:22
	17:00	17:39	18:11	19:45	20:17	20:36	20:28	19:51	19:00	18:10	16:35	16:31
22	07:20	06:46 16:38-16:49/11	06:01	06:10	05:34	05:25	05:43	06:14	06:45	07:18 17:04-17:25/21	06:55	07:22
	17:01	17:40	18:12	19:46	20:17	20:37	20:27	19:50	18:58	18:09	16:34	16:32
23	07:20	06:44	05:59	06:08	05:33	05:25	05:44	06:15	06:46	07:19 17:02-17:26/24	06:56	07:23
	17:02	17:41	18:13	19:47	20:18	20:37	20:26	19:48	18:56	18:07	16:34	16:32
24	07:19	06:43	05:57	06:07	05:33	05:25	05:45	06:16	06:47	07:20 17:01-17:26/25	06:57	07:23
	17:04	17:42	18:15	19:48	20:19	20:37	20:26	19:47	18:54	18:06	16:33	16:33
25	07:18	06:41	05:56	06:05	05:32	05:26	05:46	06:17	06:48	06:21 16:01-16:27/26	06:59	07:24
	17:05	17:44	18:16	19:49	20:20	20:37	20:25	19:45	18:53	17:04	16:33	16:34
26	07:17	06:40	05:54	06:04	05:31	05:26	05:47	06:18	06:49	06:23 16:00-16:28/28	07:00	07:24
	17:06	17:45	18:17	19:51	20:21	20:37	20:24	19:43	18:51	17:03	16:32	16:34
27	07:16	06:38	05:52	06:03	05:30	05:26	05:48	06:19	06:50	06:24 15:59-16:28/29	07:01	07:25
	17:07	17:46	18:18	19:52	20:22	20:37	20:23	19:42	18:49	17:02	16:32	16:35
28	07:16	06:37	05:50	06:01	05:30	05:27	05:48	06:20	06:52	06:25 15:59-16:28/29	07:02	07:25
	17:09	17:47	18:19	19:53	20:23	20:37	20:22	19:40	18:48	17:00	16:31	16:36
29	07:15		06:49	06:00	05:29	05:27	05:49	06:21	06:53	06:26 15:59-16:28/29	07:03	07:25
	17:10		19:20	19:54	20:24	20:37	20:21	19:39	18:46	16:59	16:31	16:36
30	07:14		06:47	05:58	05:29	05:27	05:50	06:22	06:54	06:27 15:59-16:28/29	07:04	07:25
	17:11		19:21	19:55	20:24	20:37	20:20	19:37	18:44	16:58	16:30	16:37
31	07:13		06:45		05:28		05:51	06:23		06:29 15:59-16:27/28		07:26
	17:12		19:22		20:25		20:19	19:35		16:56		16:38
Ore potenziali eliofania	296	296	369	399	450	454	461	429	375	345	297	286
Summa minuti d'ombra	0	488	0	0	0	0	0	0	0	305	191	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:** Shadow Flickering Analysis **WTG:** 7 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (186)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	
1	07:26	07:12	06:35	06:44 17:09-18:23/74	05:57 19:30-19:32/2	05:28	
	16:39	17:14	17:48	19:23	19:56	20:26	
2	07:26	07:11	06:34	06:42 17:09-18:23/74	05:56 19:28-19:34/6	05:27	
	16:40	17:15	17:50	19:24	19:57	20:27	
3	07:26	07:10	06:32	06:40 17:08-18:23/75	05:54 19:27-19:35/8	05:27	
	16:40	17:16	17:51	19:25	19:58	20:28	
4	07:26	07:09	06:31	06:39 17:08-18:22/74	05:53 19:26-19:36/10	05:26	
	16:41	17:17	17:52	19:27	19:59	20:28	
5	07:26	07:08	06:29	06:37 17:08-18:22/74	05:52 19:24-19:36/12	05:26	
	16:42	17:19	17:53	19:28	20:00	20:29	
6	07:26	07:07	06:27	06:35 17:08-18:22/74	05:51 19:24-19:37/13	05:26	
	16:43	17:20	17:54	19:29	20:01	20:30	
7	07:26	07:06	06:26	06:34 17:08-18:21/73	05:49 19:24-19:39/15	05:25	
	16:44	17:21	17:55	19:30	20:02	20:30	
8	07:26	07:04	06:24	06:32 17:08-18:21/73	05:48 19:24-19:40/16	05:25	
	16:45	17:22	17:57	19:31	20:03	20:31	
9	07:26	07:03	06:22	06:30 17:08-18:20/72	05:47 19:24-19:41/17	05:25	
	16:46	17:24	17:58	19:32	20:04	20:32	
10	07:25	07:02	06:21	06:29 17:08-18:19/71	05:46 19:24-19:42/18	05:25	
	16:47	17:25	17:59	19:33	20:06	20:32	
11	07:25	07:01	06:19	06:27 17:09-18:19/70	05:45 19:24-19:42/18	05:24	
	16:48	17:26	18:00	19:34	20:07	20:33	
12	07:25	07:00	06:18 16:42-17:00/18	06:25 17:09-18:18/69	05:44 19:25-19:41/16	05:24	
	16:49	17:28	18:01	19:35	20:08	20:33	
13	07:25	06:58	06:16 16:37-17:05/28	06:24 17:10-18:18/68	05:43 19:25-19:41/16	05:24	
	16:51	17:29	18:02	19:36	20:09	20:34	
14	07:24	06:57	06:14 16:33-17:08/35	06:22 17:10-18:17/67	05:42 19:26-19:40/14	05:24	
	16:52	17:30	18:03	19:37	20:10	20:34	
15	07:24	06:56	06:12 16:30-17:10/40	06:21 17:10-18:16/66	05:41 19:27-19:39/12	05:24	
	16:53	17:31	18:05	19:39	20:11	20:35	
16	07:23	06:54	06:11 16:28-17:13/45	06:19 17:11-18:15/64	05:40 19:28-19:37/9	05:24	
	16:54	17:33	18:06	19:40	20:12	20:35	
17	07:23	06:53	06:09 16:25-17:14/49	06:17 17:12-18:14/62	05:39 19:31-19:35/4	05:24	
	16:55	17:34	18:07	19:41	20:13	20:35	
18	07:23	06:52	06:07 16:23-17:16/53	06:16 17:13-18:13/60	05:38	05:24	
	16:56	17:35	18:08	19:42	20:14	20:36	
19	07:22	06:50	06:06 16:21-17:17/56	06:14 17:13-18:12/59	05:37	05:24	
	16:57	17:36	18:09	19:43	20:15	20:36	
20	07:21	06:49	06:04 16:20-17:18/58	06:13 17:15-18:11/56	05:36	05:24	
	16:59	17:37	18:10	19:44	20:16	20:36	
21	07:21	06:47	06:02 16:18-17:19/61	06:11 17:15-18:09/54	05:35	05:25	
	17:00	17:39	18:11	19:45	20:17	20:36	
22	07:20	06:46	06:01 16:16-17:20/64	06:10 17:17-18:08/51	05:34	05:25	
	17:01	17:40	18:12	19:46	20:17	20:37	
23	07:19	06:44	05:59 16:16-17:21/65	06:08 17:18-18:06/48	05:33	05:25	
	17:02	17:41	18:13	19:47	20:18	20:37	
24	07:19	06:43	05:57 16:15-17:21/66	06:07 17:19-18:05/46	05:33	05:25	
	17:03	17:42	18:14	19:48	20:19	20:37	
25	07:18	06:41	05:56 16:13-17:21/68	06:05 17:21-18:04/43	05:32	05:26	
	17:05	17:44	18:16	19:49	20:20	20:37	
26	07:17	06:40	05:54 16:12-17:22/70	06:04 17:22-18:01/39	05:31	05:26	
	17:06	17:45	18:17	19:50	20:21	20:37	
27	07:16	06:38	05:52 16:12-17:23/71	06:03 17:25-18:00/35	05:30	05:26	
	17:07	17:46	18:18	19:52	20:22	20:37	
28	07:16	06:37	05:50 16:11-17:23/72	06:01 17:26-17:57/31	05:30	05:27	
	17:08	17:47	18:19	19:53	20:23	20:37	
29	07:15		06:49 17:10-18:22/72	06:00 17:30-17:54/24	05:29	05:27	
	17:10		19:20	19:54	20:24	20:37	
30	07:14		06:47 17:10-18:23/73	05:58 17:34-17:50/16	05:29	05:27	
	17:11		19:21	19:55	20:24	20:37	
31	07:13		06:45 17:09-18:23/74		05:28		
	17:12		19:22		20:25		
Ore potenziali eliofania	296	296	369	399	450	454	
Summa minuti d'ombra	0	0	1138	1762	206	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:** Shadow Flickering Analysis **WTG:** 7 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (186)  
**Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giu	Lug	Ago	Sep	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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1   05:28	05:52 19:35-19:52/17	06:24 17:08-18:18/70	06:55 17:19-17:42/23	06:30	07:05	
20:37	20:18	19:34	18:42	16:55	16:30	
2   05:28	05:53 19:35-19:53/18	06:25 17:07-18:18/71	06:56 17:26-17:34/8	06:31	07:06	
20:37	20:17	19:32	18:41	16:54	16:30	
3   05:29	05:54 19:33-19:51/18	06:26 17:06-18:18/72	06:57	06:32	07:07	
20:37	20:15	19:30	18:39	16:52	16:29	
4   05:29	05:55 19:33-19:50/17	06:27 17:05-18:18/73	06:58	06:33	07:08	
20:37	20:14	19:29	18:37	16:51	16:29	
5   05:30	05:56 19:33-19:49/16	06:28 17:05-18:18/73	06:59	06:35	07:09	
20:36	20:13	19:27	18:36	16:50	16:29	
6   05:31	05:57 19:33-19:48/15	06:29 17:04-18:18/74	07:00	06:36	07:10	
20:36	20:12	19:25	18:34	16:49	16:29	
7   05:31	05:58 19:34-19:47/13	06:30 17:03-18:18/75	07:01	06:37	07:11	
20:36	20:11	19:24	18:32	16:48	16:29	
8   05:32	05:59 19:34-19:45/11	06:31 17:03-18:17/74	07:02	06:38	07:12	
20:36	20:09	19:22	18:31	16:47	16:29	
9   05:33	06:00 19:35-19:44/9	06:32 17:02-18:17/75	07:03	06:39	07:13	
20:35	20:08	19:20	18:29	16:46	16:29	
10   05:33	06:01 19:36-19:43/7	06:33 17:02-18:16/74	07:04	06:41	07:14	
20:35	20:07	19:19	18:27	16:44	16:29	
11   05:34	06:02 19:37-19:42/5	06:34 17:02-18:16/74	07:05	06:42	07:15	
20:34	20:05	19:17	18:26	16:43	16:29	
12   05:35	06:03 17:46-17:54/8	06:35 17:01-18:15/74	07:07	06:43	07:16	
20:34	20:04 19:40-19:41/1	19:15	18:24	16:42	16:29	
13   05:35	06:04 17:40-17:59/19	06:36 17:01-18:14/73	07:08	06:44	07:16	
20:33	20:03	19:13	18:22	16:41	16:29	
14   05:36	06:05 17:36-18:02/26	06:37 17:01-18:14/73	07:09	06:46	07:17	
20:33	20:01	19:12	18:21	16:41	16:29	
15   05:37	06:06 17:33-18:05/32	06:38 17:01-18:13/72	07:10	06:47	07:18	
20:32	20:00	19:10	18:19	16:40	16:29	
16   05:38	06:07 17:31-18:07/36	06:39 17:01-18:12/71	07:11	06:48	07:19	
20:32	19:59	19:08	18:18	16:39	16:30	
17   05:39	06:08 17:29-18:08/39	06:40 17:01-18:11/70	07:12	06:49	07:19	
20:31	19:57	19:07	18:16	16:38	16:30	
18   05:39	06:10 17:27-18:10/43	06:41 17:01-18:10/69	07:13	06:50	07:20	
20:30	19:56	19:05	18:15	16:37	16:30	
19   05:40	06:11 17:25-18:11/46	06:42 17:02-18:09/67	07:14	06:52	07:21	
20:30	19:54	19:03	18:13	16:36	16:31	
20   05:41	06:12 17:23-18:12/49	06:43 17:02-18:08/66	07:16	06:53	07:21	
20:29	19:53	19:01	18:12	16:36	16:31	
21   05:42	06:13 17:21-18:13/52	06:44 17:03-18:06/63	07:17	06:54	07:22	
20:28	19:51	19:00	18:10	16:35	16:31	
22   05:43	06:14 17:20-18:14/54	06:45 17:03-18:05/62	07:18	06:55	07:22	
20:27	19:50	18:58	18:09	16:34	16:32	
23   05:44	06:15 17:18-18:15/57	06:46 17:04-18:03/59	07:19	06:56	07:23	
20:26	19:48	18:56	18:07	16:34	16:32	
24   05:45	06:16 17:17-18:16/59	06:47 17:05-18:01/56	07:20	06:57	07:23	
20:26	19:47	18:54	18:06	16:33	16:33	
25   05:46	06:17 17:16-18:16/60	06:48 17:06-18:00/54	07:21	06:59	07:24	
20:25	19:45	18:53	17:04	16:32	16:33	
26   05:47	06:18 17:14-18:17/63	06:49 17:07-17:58/51	07:23	07:00	07:24	
20:24	19:43	18:51	17:03	16:32	16:34	
27   05:47	06:19 17:13-18:17/64	06:50 17:09-17:55/46	07:24	07:01	07:25	
20:23	19:42	18:49	17:02	16:31	16:35	
28   05:48	06:20 17:12-18:18/66	06:52 17:10-17:53/43	07:25	07:02	07:25	
20:22	19:40	18:48	17:00	16:31	16:35	
29   05:49	06:21 17:11-18:18/67	06:53 17:12-17:50/38	07:26	07:03	07:25	
20:21	19:39	18:46	16:59	16:31	16:36	
30   05:50	06:22 17:10-18:18/68	06:54 17:15-17:46/31	07:27	07:04	07:25	
20:20	19:37	18:44	16:57	16:30	16:37	
31   05:51	06:23 17:09-18:18/69		06:29		07:26	
20:19	19:35		16:56		16:38	
Ore potenziali eliofania	461	429	375	345	297	286
Summa minuti d'ombra	62	1124	1943	31	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:** Shadow Flickering Analysis **WTG:** 8 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (187)  
**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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio   Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:26   07:12 07:32-07:42/10	06:35	06:44 07:02-07:18/16	05:57	05:27 05:51-06:20/29
	16:39   17:13	17:48	19:23	19:56	20:26
2	07:26   07:11 07:31-07:45/14	06:34	06:42 07:01-07:19/18	05:56	05:27 05:52-06:21/29
	16:39   17:15	17:49	19:24	19:57	20:27
3	07:26   07:10 07:30-07:46/16	06:32	06:40 07:00-07:17/17	05:54	05:27 05:51-06:21/30
	16:40   17:16	17:51	19:25	19:58	20:28
4	07:26   07:09 07:29-07:48/19	06:30	06:39 07:00-07:16/16	05:53	05:26 05:51-06:22/31
	16:41   17:17	17:52	19:26	19:59	20:28
5	07:26   07:08 07:28-07:49/21	06:29	06:37 07:02-07:15/13	05:52	05:26 05:51-06:23/32
	16:42   17:19	17:53	19:28	20:00	20:29
6	07:26   07:07 07:27-07:50/23	06:27	06:35 07:04-07:12/8	05:51	05:25 05:50-06:23/33
	16:43   17:20	17:54	19:29	20:01	20:30
7	07:26   07:06 07:26-07:51/25	06:26	06:34	05:49	05:25 05:50-06:23/33
	16:44   17:21	17:55	19:30	20:02	20:30
8	07:26   07:04 07:24-07:51/27	06:24	06:32	05:48	05:25 05:51-06:24/33
	16:45   17:22	17:56	19:31	20:03	20:31
9	07:26   07:03 07:24-07:51/27	06:22	06:30	05:47	05:25 05:51-06:24/33
	16:46   17:24	17:58	19:32	20:04	20:31
10	07:25   07:02 07:24-07:52/28	06:21	06:29	05:46	05:24 05:51-06:25/34
	16:47   17:25	17:59	19:33	20:05	20:32
11	07:25   07:01 07:25-07:52/27	06:19	06:27	05:45	05:24 05:51-06:25/34
	16:48   17:26	18:00	19:34	20:07	20:33
12	07:25   06:59 07:24-07:51/27	06:17	06:25	05:44	05:24 05:51-06:26/35
	16:49   17:27	18:01	19:35	20:08	20:33
13	07:25   06:58 07:25-07:51/26	06:16 06:35-06:36/1	06:24	05:42	05:24 05:50-06:25/35
	16:50   17:29	18:02	19:36	20:09	20:34
14	07:24   06:57 07:25-07:51/26	06:14 06:33-06:38/5	06:22	05:41	05:24 05:50-06:26/36
	16:52   17:30	18:03	19:37	20:10	20:34
15	07:24   06:56 07:25-07:50/25	06:12 06:31-06:38/7	06:21	05:40	05:24 05:51-06:26/35
	16:53   17:31	18:04	19:38	20:11	20:35
16	07:23   06:54 07:26-07:50/24	06:11 06:30-06:40/10	06:19	05:39	05:24 05:52-06:27/35
	16:54   17:32	18:06	19:40	20:12	20:35
17	07:23   06:53 07:27-07:48/21	06:09 06:28-06:39/11	06:17	05:38	05:24 05:52-06:27/35
	16:55   17:34	18:07	19:41	20:13	20:35
18	07:22   06:52 07:28-07:47/19	06:07 06:26-06:39/13	06:16	05:37	05:24 05:52-06:27/35
	16:56   17:35	18:08	19:42	20:14	20:36
19	07:22   06:50 07:31-07:46/15	06:06 06:25-06:39/14	06:14	05:37	05:24 05:52-06:27/35
	16:57   17:36	18:09	19:43	20:15	20:36
20	07:21   06:49 07:33-07:42/9	06:04 06:23-06:38/15	06:13	05:36	05:24 05:52-06:28/36
	16:58   17:37	18:10	19:44	20:16	20:36
21	07:21   06:47	06:02 06:22-06:37/15	06:11	05:35	05:24 05:52-06:28/36
	17:00   17:39	18:11	19:45	20:16	20:36
22	07:20   06:46	06:01 06:23-06:35/12	06:10	05:34	05:25 05:52-06:28/36
	17:01   17:40	18:12	19:46	20:17	20:37
23	07:19   06:44	05:59 06:26-06:32/6	06:08	05:33 06:01-06:09/8	05:25 05:53-06:29/36
	17:02   17:41	18:13	19:47	20:18	20:37
24	07:19   06:43	05:57	06:07	05:32 05:59-06:12/13	05:25 05:53-06:28/35
	17:03   17:42	18:14	19:48	20:19	20:37
25	07:18   06:41	05:55	06:05	05:32 05:57-06:14/17	05:25 05:53-06:28/35
	17:05   17:43	18:16	19:49	20:20	20:37
26	07:17   06:40	05:54 06:13-06:16/3	06:04	05:31 05:55-06:15/20	05:26 05:54-06:29/35
	17:06   17:45	18:17	19:50	20:21	20:37
27	07:16   06:38	05:52 06:11-06:17/6	06:02	05:30 05:55-06:17/22	05:26 05:54-06:29/35
	17:07   17:46	18:18	19:52	20:22	20:37
28	07:16   06:37	05:50 06:09-06:18/9	06:01	05:30 05:54-06:17/23	05:26 05:54-06:29/35
	17:08   17:47	18:19	19:53	20:23	20:37
29	07:15	06:49 07:07-07:19/12	06:00	05:29 05:53-06:19/26	05:27 05:54-06:29/35
	17:10	19:20	19:54	20:24	20:37
30	07:14	06:47 07:06-07:19/13	05:58	05:29 05:52-06:19/27	05:27 05:54-06:29/35
	17:11	19:21	19:55	20:24	20:37
31	07:13	06:45 07:04-07:19/15		05:28 05:52-06:20/28	
	17:12	19:22		20:25	
Ore potenziali eliofania	296	296	369	399	454
Somma minuti d'ombra	0	429	167	88	1021

**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:** Shadow Flickering Analysis **WTG:** 8 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (187)  
**Assunzioni sui calcoli d'ombra**

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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>Luglio</b>	<b>Agosto</b>	<b>Settembre</b>	<b>Ottobre</b>	<b>Novembre</b>	<b>Dicembre</b>
1	05:28 05:55-06:30/35   20:37	05:52   20:18	06:24   19:34	06:55   18:42	06:30 06:54-07:21/27   16:55	07:05   16:30
2	05:28 05:55-06:29/34   20:37	05:53   20:17	06:25   19:32	06:56   18:41	06:31 06:54-07:21/27   16:54	07:06   16:29
3	05:29 05:56-06:30/34   20:37	05:54   20:15	06:26   19:30	06:57   18:39	06:32 06:54-07:20/26   16:52	07:07   16:29
4	05:29 05:56-06:29/33   20:37	05:55   20:14	06:27   19:29	06:58   18:37	06:33 06:55-07:20/25   16:51	07:08   16:29
5	05:30 05:56-06:30/34   20:36	05:56   20:13	06:28   19:27	06:59   18:36	06:35 06:57-07:20/23   16:50	07:09   16:29
6	05:31 05:56-06:29/33   20:36	05:57   20:12	06:29 07:00-07:08/8   19:25	07:00   18:34	06:36 06:58-07:19/21   16:49	07:10   16:29
7	05:31 05:57-06:29/32   20:36	05:58   20:11	06:30 06:57-07:10/13   19:24	07:01   18:32	06:37 06:59-07:17/18   16:48	07:11   16:29
8	05:32 05:58-06:30/32   20:35	05:59   20:09	06:31 06:56-07:11/15   19:22	07:02   18:31	06:38 07:01-07:17/16   16:47	07:12   16:29
9	05:32 05:58-06:29/31   20:35	06:00   20:08	06:32 06:54-07:11/17   19:20	07:03   18:29	06:39 07:02-07:15/13   16:45	07:13   16:28
10	05:33 05:59-06:29/30   20:35	06:01   20:07	06:33 06:54-07:12/18   19:19	07:04   18:27	06:41 07:03-07:13/10   16:44	07:14   16:28
11	05:34 06:00-06:29/29   20:34	06:02   20:05	06:34 06:55-07:12/17   19:17	07:05   18:26	06:42   16:43	07:15   16:29
12	05:35 05:59-06:28/29   20:34	06:03   20:04	06:35 06:56-07:11/15   19:15	07:06   18:24	06:43   16:42	07:16   16:29
13	05:35 06:00-06:28/28   20:33	06:04   20:03	06:36 06:57-07:11/14   19:13	07:08   18:22	06:44   16:41	07:16   16:29
14	05:36 06:01-06:27/26   20:33	06:05   20:01	06:37 06:58-07:10/12   19:12	07:09   18:21	06:45   16:40	07:17   16:29
15	05:37 06:03-06:27/24   20:32	06:06   20:00	06:38 06:59-07:09/10   19:10	07:10   18:19	06:47   16:40	07:18   16:29
16	05:38 06:04-06:26/22   20:32	06:07   19:59	06:39 07:00-07:07/7   19:08	07:11   18:18	06:48   16:39	07:19   16:29
17	05:38 06:04-06:25/21   20:31	06:08   19:57	06:40 07:01-07:05/4   19:07	07:12   18:16	06:49   16:38	07:19   16:30
18	05:39 06:06-06:24/18   20:30	06:09   19:56	06:41   19:05	07:13   18:15	06:50   16:37	07:20   16:30
19	05:40 06:07-06:23/16   20:30	06:10   19:54	06:42   19:03	07:14   18:13	06:52   16:36	07:21   16:30
20	05:41 06:10-06:21/11   20:29	06:11   19:53	06:43 07:14-07:17/3   19:01	07:15   18:12	06:53   16:36	07:21   16:31
21	05:42 06:14-06:16/2   20:28	06:12   19:51	06:44 07:10-07:20/10   19:00	07:17   18:10	06:54   16:35	07:22   16:31
22	05:43 06:14-06:16/2   20:27	06:14   19:50	06:45 07:08-07:22/14   18:58	07:18 08:02-08:14/12   18:09	06:55   16:34	07:22   16:32
23	05:44 06:15-06:16/2   20:26	06:15   19:48	06:46 07:07-07:22/15   18:56	07:19 08:00-08:16/16   18:07	06:56   16:34	07:23   16:32
24	05:45 06:16-06:17/2   20:26	06:16   19:47	06:47 07:08-07:22/14   18:54	07:20 07:58-08:17/19   18:06	06:57   16:33	07:23   16:33
25	05:45 06:17-06:18/2   20:25	06:17   19:45	06:48 07:09-07:22/13   18:53	06:21 06:57-07:19/22   17:04	06:59   16:32	07:24   16:33
26	05:46 06:18-06:19/2   20:24	06:18   19:43	06:49 07:10-07:22/12   18:51	06:22 06:56-07:20/24   17:03	07:00   16:32	07:24   16:34
27	05:47 06:19-06:20/2   20:23	06:19   19:42	06:50 07:11-07:21/10   18:49	06:24 06:55-07:20/25   17:01	07:01   16:31	07:25   16:35
28	05:48 06:20-06:20/8   20:22	06:20   19:40	06:51 07:12-07:20/8   18:47	06:25 06:54-07:20/26   17:00	07:02   16:31	07:25   16:35
29	05:49 06:21-06:22/7   20:21	06:21   19:39	06:52 07:13-07:19/6   18:46	06:26 06:54-07:21/27   16:59	07:03   16:30	07:25   16:36
30	05:50 06:22-06:22/7   20:20	06:22   19:37	06:54 07:14-07:17/3   18:44	06:27 06:54-07:21/27   16:57	07:04   16:30	07:25   16:37
31	05:51 06:23-06:23/7   20:19	06:23   19:35		06:28 06:53-07:21/28   16:56		07:26   16:38
	Ore potenziali eliofania   461	429	375	345	297	286
	Somma minuti d'ombra   554	0	258	226	206	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:** Shadow Flickering Analysis **WTG:** 9 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (188)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre	
1	07:26	07:12	06:35	06:44	05:57	05:28	05:28	05:52	06:24	06:55	06:30	07:05	
	16:39	17:14	17:48	19:23	19:56	20:26	20:37	20:18	19:34	18:42	16:55	16:30	
2	07:26	07:11	06:34	06:42	05:56	05:27	05:29	05:53	06:25	06:56	06:31	07:06	
	16:40	17:15	17:50	19:24	19:57	20:27	20:37	20:17	19:32	18:41	16:54	16:30	
3	07:26	07:10	06:32	06:40	05:55	05:27	05:29	05:54	06:26	06:57	06:32	07:07	
	16:41	17:16	17:51	19:25	19:58	20:28	20:37	20:15	19:31	18:39	16:53	16:29	
4	07:26	07:09	06:31	06:39	05:53	05:26	05:30	05:55	06:27	06:58	06:33	07:08	
	16:42	17:17	17:52	19:27	19:59	20:28	20:37	20:14	19:29	18:37	16:51	16:29	
5	07:26	07:08	06:29	06:37	05:52	05:26	05:30	05:56	06:28	06:59	06:35	07:09	
	16:42	17:19	17:53	19:28	20:00	20:29	20:36	20:13	19:27	18:36	16:50	16:29	
6	07:26	07:07	06:27	06:35	05:51	05:26	05:31	05:57	06:29	07:00	06:36	07:10	
	16:43	17:20	17:54	19:29	20:01	20:30	20:36	20:12	19:25	18:34	16:49	16:29	
7	07:26	07:06	06:26	06:34	05:50	05:25	05:31	05:58	06:30	07:01	06:37	07:11	
	16:44	17:21	17:55	19:30	20:02	20:30	20:36	20:11	19:24	18:32	16:48	16:29	
8	07:26	07:04	06:24	06:32	05:48	05:25	05:32	05:59	06:31	07:02	06:38	07:12	
	16:45	17:23	17:57	19:31	20:03	20:31	20:35	20:09	19:22	18:31	16:47	16:29	
9	07:26	07:03	06:23	06:30	05:47	05:25	05:33	06:00	06:32	07:03	06:39	07:13	
	16:46	17:24	17:58	19:32	20:04	20:31	20:35	20:08	19:20	18:29	16:46	16:29	
10	07:25	07:02	06:21	06:29	05:46	05:25	05:33	06:01	06:33	07:04	06:41	07:14	
	16:47	17:25	17:59	19:33	20:06	20:32	20:35	20:07	19:19	18:27	16:45	16:29	
11	07:25	07:01	06:19	06:27	05:45	05:24	05:34	06:02	06:34	07:05	06:42	07:15	
	16:48	17:26	18:00	19:34	20:07	20:33	20:34	20:05	19:17	18:26	16:44	16:29	
12	07:25	07:00	06:18	06:26	05:44	05:24	05:35	06:03	06:35	07:07	06:43	07:16	
	16:50	17:28	18:01	19:35	20:08	20:33	20:34	20:04	19:15	18:24	16:43	16:29	
13	07:25	06:58	06:16	06:24	05:43	05:24	05:36	06:04	06:36	07:08	06:44	07:16	
	16:51	17:29	18:02	19:36	20:09	20:34	20:33	20:03	19:14	18:23	16:42	16:29	
14	07:24	06:57	06:14	06:22	05:42	05:24	05:36	06:06	06:37	07:09	06:46	07:17	
	16:52	17:30	18:03	19:37	20:10	20:34	20:33	20:01	19:12	18:21	16:41	16:29	
15	07:24	06:56	06:13	06:21	05:41	05:24	05:37	06:07	06:38	07:10	06:47	07:18	
	16:53	17:31	18:05	19:39	20:11	20:35	20:32	20:00	19:10	18:19	16:40	16:29	
16	07:23	06:54	06:11	06:19	05:40	05:24	05:38	06:08	06:39	07:11	06:48	07:19	
	16:54	17:33	18:06	19:40	20:12	20:35	20:32	19:59	19:08	18:18	16:39	16:30	
17	07:23	06:53	06:09	06:18	05:39	05:24	05:39	06:09	06:40	07:12	06:49	07:19	
	16:55	17:34	18:07	19:41	20:13	20:35	20:31	19:57	19:07	18:16	16:38	16:30	
18	07:23	06:52	06:07	06:16	05:38	05:24	05:40	06:10	06:41	07:13	06:50	07:20	
	16:56	17:35	18:08	19:42	20:14	20:36	20:30	19:56	19:05	18:15	16:37	16:30	
19	07:22	06:50	06:06	06:14	05:37	05:24	05:40	06:11	06:42	07:14	06:52	07:21	
	16:58	17:36	18:09	19:43	20:15	20:36	20:30	19:54	19:03	18:13	16:36	16:31	
20	07:21	06:49	06:04	06:13	05:36	05:25	05:41	06:12	06:43	07:16	06:53	07:21	
	16:59	17:38	18:10	19:44	20:16	20:36	20:29	19:53	19:01	18:12	16:36	16:31	
21	07:21	06:47	06:02	06:11	05:35	05:25	05:42	06:13	06:44	07:17	06:54	07:22	
	17:00	17:39	18:11	19:45	20:17	20:36	20:28	19:51	19:00	18:10	16:35	16:32	
22	07:20	06:46	06:01	06:10	05:34	05:25	05:43	06:14	06:45	07:18	06:55	07:22	
	17:01	17:40	18:12	19:46	20:17	20:37	20:27	19:50	18:58	18:09	16:34	16:32	
23	07:19	06:44	05:59	06:08	05:33	05:25	05:44	06:15	06:46	07:19	06:56	07:23	
	17:02	17:41	18:13	19:47	20:18	20:37	20:26	19:48	18:56	18:07	16:34	16:32	
24	07:19	06:43	05:57	06:07	05:33	05:25	05:45	06:16	06:47	07:20	06:57	07:23	
	17:04	17:42	18:15	19:48	20:19	20:37	20:26	19:47	18:54	18:06	16:33	16:33	
25	07:18	06:41	05:56	06:06	05:32	05:26	05:46	06:17	06:48	06:21	06:59	07:24	
	17:05	17:44	18:16	19:49	20:20	20:37	20:25	19:45	18:53	17:04	16:33	16:34	
26	07:17	06:40	05:54	06:04	05:31	05:26	05:47	06:18	06:49	06:23	07:00	07:24	
	17:06	17:45	18:17	19:51	20:21	20:37	20:24	19:43	18:51	17:03	16:32	16:34	
27	07:16	06:38	05:52	06:03	05:31	05:26	05:48	06:19	06:51	06:24	07:01	07:25	
	17:07	17:46	18:18	19:52	20:22	20:37	20:23	19:42	18:49	17:02	16:32	16:35	
28	07:16	06:37	05:51	06:01	05:30	05:27	05:49	06:20	06:52	06:25	07:02	07:25	
	17:09	17:47	18:19	19:53	20:23	20:37	20:22	19:40	18:48	17:00	16:31	16:36	
29	07:15		06:49	06:00	05:29	05:27	05:49	06:21	06:53	06:26	07:03	07:25	
	17:10		19:20	19:54	20:24	20:37	20:21	19:39	18:46	16:59	16:31	16:36	
30	07:14		06:47	05:59	05:29	05:28	05:50	06:22	06:54	06:27	07:04	07:25	
	17:11		19:21	19:55	20:24	20:37	20:20	19:37	18:44	16:58	16:30	16:37	
31	07:13		06:45		05:28		05:51	06:23		06:29		07:26	
	17:12		19:22		20:25		20:19	19:35		16:56		16:38	
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345	297
Somma minuti d'ombra			0	0	0	0	0	0	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**

**Calcolo:** Shadow Flickering Analysis **WTG:** 10 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (189)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26	07:12 16:47-16:49/2	06:35	06:44	05:57	05:28	05:28	05:52	06:24	06:55	06:30 16:15-16:29/14	07:05
	16:39	17:14	17:48	19:23	19:56	20:26	20:37	20:18	19:34	18:42	16:55	16:30
2	07:26	07:11 16:46-16:51/5	06:34	06:42	05:56	05:27	05:28	05:53	06:25	06:56	06:31 16:15-16:30/15	07:06
	16:40	17:15	17:50	19:24	19:57	20:27	20:37	20:17	19:32	18:41	16:54	16:30
3	07:26	07:10 16:45-16:52/7	06:32	06:40	05:54	05:27	05:29	05:54	06:26	06:57	06:32 16:14-16:28/14	07:07
	16:41	17:16	17:51	19:25	19:58	20:28	20:37	20:15	19:30	18:39	16:52	16:29
4	07:26	07:09 16:45-16:54/9	06:31	06:39	05:53	05:26	05:30	05:55	06:27	06:58	06:33 16:14-16:27/13	07:08
	16:41	17:17	17:52	19:27	19:59	20:28	20:37	20:14	19:29	18:37	16:51	16:29
5	07:26	07:08 16:45-16:55/10	06:29	06:37	05:52	05:26	05:30	05:56	06:28	06:59	06:35 16:15-16:26/11	07:09
	16:42	17:19	17:53	19:28	20:00	20:29	20:36	20:13	19:27	18:36	16:50	16:29
6	07:26	07:07 16:45-16:57/12	06:27	06:35	05:51	05:26	05:31	05:57	06:29	07:00	06:36 16:14-16:25/11	07:10
	16:43	17:20	17:54	19:29	20:01	20:30	20:36	20:12	19:25	18:34	16:49	16:29
7	07:26	07:06 16:44-16:57/13	06:26	06:34	05:49	05:25	05:31	05:58	06:30	07:01	06:37 16:15-16:23/8	07:11
	16:44	17:21	17:55	19:30	20:02	20:30	20:36	20:11	19:24	18:32	16:48	16:29
8	07:26	07:04 16:45-16:59/14	06:24	06:32	05:48	05:25	05:32	05:59	06:31	07:02	06:38 16:15-16:22/7	07:12
	16:45	17:22	17:57	19:31	20:03	20:35	20:35	20:09	19:22	18:31	16:47	16:29
9	07:26	07:03 16:45-17:00/15	06:22	06:30	05:47	05:25	05:33	06:00	06:32	07:03	06:39 16:17-16:21/4	07:13
	16:46	17:24	17:58	19:32	20:04	20:31	20:35	20:08	19:20	18:29	16:46	16:29
10	07:25	07:02 16:47-17:00/13	06:21	06:29	05:46	05:25	05:33	06:01	06:33	07:04	06:41 16:18-16:20/2	07:14
	16:47	17:25	17:59	19:33	20:05	20:32	20:35	20:07	19:19	18:27	16:45	16:29
11	07:25	07:01 16:47-16:58/11	06:19	06:27	05:45	05:24	05:34	06:02	06:34	07:05	06:42	07:15
	16:48	17:26	18:00	19:34	20:07	20:33	20:34	20:05	19:17	18:26	16:44	16:29
12	07:25	07:00 16:50-16:56/6	06:18	06:25	05:44	05:24	05:35	06:03	06:35	07:07	06:43	07:16
	16:49	17:28	18:01	19:35	20:08	20:33	20:34	20:04	19:15	18:24	16:43	16:29
13	07:25	06:58	06:16	06:24	05:43	05:24	05:35	06:04	06:36	07:08	06:44	07:16
	16:51	17:29	18:02	19:36	20:09	20:34	20:33	20:03	19:13	18:23	16:42	16:29
14	07:24	06:57	06:14	06:22	05:42	05:24	05:36	06:05	06:37	07:09	06:45	07:17
	16:52	17:30	18:03	19:37	20:10	20:34	20:33	20:01	19:12	18:21	16:41	16:29
15	07:24	06:56	06:13	06:21	05:41	05:24	05:37	06:06	06:38	07:10	06:47	07:18
	16:53	17:31	18:05	19:39	20:11	20:34	20:32	20:00	19:10	18:19	16:40	16:29
16	07:23	06:54	06:11	06:19	05:40	05:24	05:38	06:07	06:39	07:11	06:48	07:19
	16:54	17:33	18:06	19:40	20:12	20:35	20:32	20:09	19:15	18:18	16:39	16:30
17	07:23	06:53	06:09	06:18	05:39	05:24	05:39	06:09	06:40	07:12	06:49	07:19
	16:55	17:34	18:07	19:41	20:13	20:35	20:31	19:57	19:07	18:16	16:38	16:30
18	07:22	06:52	06:07	06:16	05:38	05:24	05:39	06:10	06:41	07:13	06:50	07:20
	16:56	17:35	18:08	19:42	20:14	20:36	20:30	19:56	19:05	18:15	16:37	16:30
19	07:22	06:50	06:06	06:14	05:37	05:24	05:40	06:11	06:42	07:14	06:52	07:21
	16:57	17:36	18:09	19:43	20:15	20:36	20:30	19:54	19:03	18:13	16:36	16:31
20	07:21	06:49	06:04	06:13	05:36	05:24	05:41	06:12	06:43	07:16	06:53	07:21
	16:59	17:38	18:10	19:44	20:16	20:36	20:29	19:53	19:01	18:12	16:36	16:31
21	07:21	06:47	06:02	06:11	05:35	05:25	05:42	06:13	06:44	07:17	06:54	07:22
	17:00	17:39	18:11	19:45	20:16	20:36	20:28	19:51	19:00	18:10	16:35	16:31
22	07:20	06:46	06:01	06:10	05:34	05:25	05:43	06:14	06:45	07:18	06:55	07:22
	17:01	17:40	18:12	19:46	20:17	20:37	20:27	19:50	18:58	18:09	16:34	16:32
23	07:19	06:44	05:59	06:08	05:33	05:25	05:44	06:15	06:46	07:19	06:56	07:23
	17:02	17:41	18:13	19:47	20:18	20:37	20:26	19:48	18:56	18:07	16:34	16:32
24	07:19	06:43	05:57	06:07	05:33	05:25	05:45	06:16	06:47	07:20	06:57	07:23
	17:04	17:42	18:15	19:48	20:19	20:37	20:26	19:47	18:54	18:06	16:33	16:33
25	07:18	06:41	05:56	06:05	05:32	05:26	05:46	06:17	06:48	06:21	06:59	07:24
	17:05	17:44	18:16	19:49	20:20	20:37	20:25	19:45	18:53	17:04	16:33	16:34
26	07:17	06:40	05:54	06:04	05:31	05:26	05:47	06:18	06:49	06:23	07:00	07:24
	17:06	17:45	18:17	19:50	20:21	20:37	20:24	19:43	18:51	17:03	16:32	16:34
27	07:16	06:38	05:52	06:03	05:30	05:26	05:48	06:19	06:50	06:24	07:01	07:24
	17:07	17:46	18:18	19:52	20:22	20:37	20:23	19:42	18:49	17:02	16:32	16:35
28	07:16	06:37	05:50	06:01	05:30	05:27	05:48	06:20	06:52	06:25	07:02	07:25
	17:09	17:47	18:19	19:53	20:23	20:37	20:22	19:40	18:48	17:00	16:31	16:36
29	07:15	06:49	06:00	05:29	05:27	05:49	06:21	06:53	06:26	07:03	07:25	
	17:10		19:20	19:54	20:24	20:37	20:21	19:39	18:46	16:59	16:31	16:36
30	07:14	06:47	05:58	05:59	05:27	05:50	06:22	06:54	06:27	16:19-16:26/7	07:04	
	17:11		19:21	19:55	20:24	20:37	20:20	19:37	18:44	16:58	16:30	16:37
31	07:13		06:45		05:28		05:51	06:23		06:28	16:17-16:28/11	
	17:12		19:22		20:25		20:19	19:35		16:56		16:38
Ore potenziali eliofania	296	296	369	399	450	454	461	429	375	345	297	286
Summa minuti d'ombra	0	117	0	0	0	0	0	0	0	18	99	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:** Shadow Flickering Analysis **WTG:** 11 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (190)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio   Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:26   07:12	06:35	06:44 07:09-07:21/12	05:57 18:51-19:25/34	05:27
	16:39   17:13	17:48	19:23	19:56	20:26
2	07:26   07:11	06:34	06:42 07:12-07:19/7	05:56 18:51-19:26/35	05:27
	16:39   17:15	17:49	19:24	19:57	20:27
3	07:26   07:10 07:30-07:31/1	06:32	06:40	05:54 18:51-19:26/35	05:27
	16:40   17:16	17:51	19:25	19:58	20:27
4	07:26   07:09 07:29-07:33/4	06:30	06:38	05:53 18:50-19:27/37	05:26
	16:41   17:17	17:52	19:26	19:59	20:28
5	07:26   07:08 07:28-07:35/7	06:29	06:37	05:52 18:49-19:26/37	05:26
	16:42   17:18	17:53	19:27	20:00	20:29
6	07:26   07:07 07:27-07:36/9	06:27	06:35	05:51 18:49-19:26/37	05:25
	16:43   17:20	17:54	19:29	20:01	20:30
7	07:26   07:05 07:26-07:36/10	06:26	06:34	05:49 18:49-19:26/37	05:25
	16:44   17:21	17:55	19:30	20:02	20:30
8	07:26   07:04 07:24-07:36/12	06:24	06:32	05:48 18:50-19:26/36	05:25
	16:45   17:22	17:56	19:31	20:03	20:31
9	07:26   07:03 07:23-07:36/13	06:22	06:30	05:47 18:50-19:26/36	05:25
	16:46   17:24	17:58	19:32	20:04	20:31
10	07:25   07:02 07:22-07:36/14	06:21	06:29	05:46 18:50-19:26/36	05:24
	16:47   17:25	17:59	19:33	20:05	20:32
11	07:25   07:01 07:21-07:36/15	06:19	06:27	05:45 18:50-19:26/36	05:24
	16:48   17:26	18:00	19:34	20:06	20:33
12	07:25   06:59 07:19-07:35/16	06:17	06:25	05:44 18:51-19:26/35	05:24
	16:49   17:27	18:01	19:35	20:07	20:33
13	07:25   06:58 07:21-07:35/14	06:16	06:24	05:42 18:51-19:25/34	05:24
	16:50   17:29	18:02	19:36	20:08	20:34
14	07:24   06:57 07:22-07:34/12	06:14	06:22	05:41 18:52-19:25/33	05:24
	16:51   17:30	18:03	19:37	20:10	20:34
15	07:24   06:56 07:24-07:30/6	06:12	06:21	05:40 18:52-19:24/32	05:24
	16:53   17:31	18:04	19:38	20:11	20:34
16	07:23   06:54	06:11	06:19	05:39 18:53-19:24/31	05:24
	16:54   17:32	18:06	19:39	20:12	20:35
17	07:23   06:53	06:09	06:17	05:38 18:53-19:23/30	05:24
	16:55   17:34	18:07	19:41	20:13	20:35
18	07:22   06:51	06:07	06:16	05:37 18:54-19:22/28	05:24
	16:56   17:35	18:08	19:42	20:14	20:36
19	07:22   06:50	06:06	06:14	05:37 18:55-19:21/26	05:24
	16:57   17:36	18:09	19:43	20:14	20:36
20	07:21   06:49	06:04	06:13	05:36 18:55-19:20/25	05:24
	16:58   17:37	18:10	19:44	20:15	20:36
21	07:21   06:47	06:02	06:11	05:35 18:57-19:20/23	05:24
	17:00   17:39	18:11	19:45	20:16	20:36
22	07:20   06:46	06:01 06:19-06:22/3	06:10	05:34 18:58-19:19/21	05:25
	17:01   17:40	18:12	19:46	20:17	20:37
23	07:19   06:44	05:59 06:18-06:25/7	06:08 19:03-19:16/13	05:33 18:59-19:17/18	05:25
	17:02   17:41	18:13	19:47	20:18	20:37
24	07:19   06:43	05:57 06:16-06:26/10	06:07 19:01-19:19/18	05:32 19:01-19:15/14	05:25
	17:03   17:42	18:14	19:48	20:19	20:37
25	07:18   06:41	05:55 06:14-06:26/12	06:05 18:58-19:20/22	05:32 19:03-19:14/11	05:25
	17:05   17:43	18:15	19:49	20:20	20:37
26	07:17   06:40	05:54 06:12-06:26/14	06:04 18:57-19:22/25	05:31 19:07-19:10/3	05:26
	17:06   17:45	18:17	19:50	20:21	20:37
27	07:16   06:38	05:52 06:11-06:27/16	06:02 18:55-19:23/28	05:30	05:26
	17:07   17:46	18:18	19:51	20:22	20:37
28	07:15   06:37	05:50 06:09-06:26/17	06:01 18:54-19:24/30	05:30	05:26
	17:08   17:47	18:19	19:53	20:23	20:37
29	07:15	06:49 07:07-07:25/18	06:00 18:53-19:25/32	05:29	05:27
	17:10	19:20	19:54	20:24	20:37
30	07:14	06:47 07:08-07:25/17	05:58 18:52-19:26/34	05:28	05:27
	17:11	19:21	19:55	20:24	20:37
31	07:13	06:45 07:08-07:23/15		05:28	
	17:12	19:22		20:25	
Ore potenziali eliofania	296	296	369	399	454
Somma minuti d'ombra	0	133	129	221	760
					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:** Shadow Flickering Analysis **WTG:** 11 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (190)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1   05:28	05:52 19:00-19:35/35	06:24	06:55	06:30 06:52-07:06/14	07:05
20:37	20:18	19:34	18:42	16:55	16:30
2   05:28	05:53 19:00-19:36/36	06:25	06:56	06:31 06:53-07:06/13	07:06
20:37	20:16	19:32	18:41	16:54	16:29
3   05:29	05:54 19:00-19:36/36	06:26	06:57	06:32 06:54-07:06/12	07:07
20:37	20:15	19:30	18:39	16:52	16:29
4   05:29	05:55 18:59-19:36/37	06:27	06:58	06:33 06:55-07:05/10	07:08
20:37	20:14	19:29	18:37	16:51	16:29
5   05:30	05:56 18:59-19:36/37	06:28	06:59	06:34 06:57-07:05/8	07:09
20:36	20:13	19:27	18:36	16:50	16:29
6   05:31	05:57 18:59-19:36/37	06:29	07:00	06:36 06:58-07:04/6	07:10
20:36	20:12	19:25	18:34	16:49	16:29
7   05:31	05:58 18:59-19:36/37	06:30	07:01	06:37 06:59-07:03/4	07:11
20:36	20:10	19:24	18:32	16:48	16:29
8   05:32	05:59 18:59-19:36/37	06:31	07:02	06:38 07:01-07:02/1	07:12
20:35	20:09	19:22	18:31	16:46	16:28
9   05:32	06:00 18:59-19:35/36	06:32	07:03	06:39	07:13
20:35	20:08	19:20	18:29	16:45	16:28
10   05:33	06:01 18:59-19:35/36	06:33 07:05-07:12/7	07:04	06:41	07:14
20:35	20:07	19:19	18:27	16:44	16:28
11   05:34	06:02 19:00-19:35/35	06:34 07:02-07:14/12	07:05	06:42	07:15
20:34	20:05	19:17	18:26	16:43	16:29
12   05:35	06:03 19:00-19:34/34	06:35 07:00-07:15/15	07:06	06:43	07:16
20:34	20:04	19:15	18:24	16:42	16:29
13   05:35	06:04 19:00-19:33/33	06:36 06:59-07:16/17	07:08	06:44	07:16
20:33	20:03	19:13	18:22	16:41	16:29
14   05:36	06:05 19:01-19:32/31	06:37 06:58-07:16/18	07:09	06:45	07:17
20:33	20:01	19:12	18:21	16:40	16:29
15   05:37	06:06 19:02-19:31/29	06:38 06:59-07:16/17	07:10	06:47	07:18
20:32	20:00	19:10	18:19	16:40	16:29
16   05:38	06:07 19:02-19:30/28	06:39 07:00-07:16/16	07:11	06:48	07:19
20:31	19:58	19:08	18:18	16:39	16:29
17   05:38	06:08 19:04-19:28/24	06:40 07:01-07:15/14	07:12	06:49	07:19
20:31	19:57	19:06	18:16	16:38	16:30
18   05:39	19:14-19:22/8	06:09 19:05-19:27/22	06:41 07:02-07:15/13	07:13	07:20
20:30	19:56	19:05	18:15	16:37	16:30
19   05:40	19:12-19:25/13	06:10 19:07-19:24/17	06:42 07:03-07:13/10	07:14	07:21
20:29	19:54	19:03	18:13	16:36	16:30
20   05:41	19:10-19:27/17	06:11 19:10-19:21/11	06:43 07:04-07:12/8	07:15	07:21
20:29	19:53	19:01	18:11	16:36	16:31
21   05:42	19:09-19:28/19	06:12 06:44 07:05-07:09/4	07:17	06:54	07:22
20:28	19:51	19:00	18:10	16:35	16:31
22   05:43	19:07-19:29/22	06:13 06:45	07:18	06:55	07:22
20:27	19:50	18:58	18:09	16:34	16:32
23   05:44	19:06-19:30/24	06:15 06:46	07:19	06:56	07:23
20:26	19:48	18:56	18:07	16:34	16:32
24   05:45	19:05-19:31/26	06:16 06:47	07:20	06:57	07:23
20:25	19:46	18:54	18:06	16:33	16:33
25   05:45	19:05-19:32/27	06:17 06:48	06:21	06:58	07:24
20:25	19:45	18:53	17:04	16:32	16:33
26   05:46	19:04-19:33/29	06:18 06:49	06:22	07:00	07:24
20:24	19:43	18:51	17:03	16:32	16:34
27   05:47	19:03-19:34/31	06:19 06:50	06:24 06:53-07:01/8	07:01	07:24
20:23	19:42	18:49	17:01	16:31	16:35
28   05:48	19:03-19:34/31	06:20 06:51	06:25 06:51-07:03/12	07:02	07:25
20:22	19:40	18:47	17:00	16:31	16:35
29   05:49	19:02-19:35/33	06:21 06:52	06:26 06:50-07:04/14	07:03	07:25
20:21	19:39	18:46	16:59	16:30	16:36
30   05:50	19:02-19:36/34	06:22 06:53	06:27 06:49-07:05/16	07:04	07:25
20:20	19:37	18:44	16:57	16:30	16:37
31   05:51	19:02-19:36/34	06:23   375	06:28 06:50-07:05/15   345	07:25   297	
Ore potenziali eliofania	461	429	151	65	68
Summa minuti d'ombra	348	628	151	65	68
					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:** Shadow Flickering Analysis **WTG:** 12 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (191)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26	07:12	06:35 17:10-17:26/16	06:43	05:57	05:27	05:28	05:52	06:24	06:54 17:47-18:13/26	06:29	07:05
	16:38	17:13	17:48	19:23	19:56	20:26	20:37	20:17	19:33	18:42	16:55	16:30
2	07:26	07:11	06:33 17:08-17:27/19	06:42	05:55	05:27	05:28	05:53	06:25	06:55 17:45-18:13/28	06:31	07:06
	16:39	17:14	17:49	19:24	19:57	20:26	20:37	20:16	19:32	18:40	16:53	16:29
3	07:26	07:10	06:32 17:07-17:29/22	06:40	05:54	05:26	05:29	05:54	06:26	06:56 17:44-18:13/29	06:32	07:07
	16:40	17:16	17:50	19:25	19:58	20:27	20:37	20:15	19:30	18:39	16:52	16:29
4	07:26	07:09	06:30 17:06-17:30/24	06:38	05:53	05:26	05:29	05:55	06:27	06:58 17:43-18:12/29	06:33	07:08
	16:41	17:17	17:52	19:26	19:59	20:28	20:36	20:14	19:28	18:37	16:51	16:29
5	07:26	07:07	06:29 17:06-17:32/26	06:37	05:52	05:26	05:30	05:56	06:28	06:59 17:42-18:11/29	06:34	07:09
	16:42	17:18	17:53	19:27	20:00	20:29	20:36	20:13	19:27	18:35	16:50	16:29
6	07:26	07:06	06:27 17:05-17:32/27	06:35	05:50	05:25	05:30	05:57	06:29	07:00 17:41-18:10/29	06:35	07:10
	16:43	17:20	17:54	19:28	20:01	20:29	20:36	20:12	19:25	18:34	16:49	16:28
7	07:26	07:05	06:25 17:05-17:33/28	06:33	05:49	05:25	05:31	05:58	06:30	07:01 17:41-18:09/28	06:37	07:11
	16:44	17:21	17:55	19:29	20:02	20:30	20:36	20:10	19:23	18:32	16:47	16:28
8	07:26	07:04	06:24 17:05-17:34/29	06:32	05:48	05:25	05:32	05:59	06:31	07:02 17:41-18:07/26	06:38	07:12
	16:45	17:22	17:56	19:31	20:03	20:31	20:35	20:09	19:22	18:30	16:46	16:28
9	07:25	07:03	06:22 17:05-17:34/29	06:30	05:47	05:24	05:32	06:00	06:32	07:03 17:41-18:05/24	06:39	07:13
	16:46	17:23	17:57	19:32	20:04	20:31	20:35	20:08	19:20	18:29	16:45	16:28
10	07:25	07:02	06:21 17:05-17:34/29	06:28	05:46	05:24	05:33	06:01	06:33	07:04 17:41-18:03/22	06:40	07:14
	16:47	17:25	17:59	19:33	20:05	20:32	20:34	20:06	19:18	18:27	16:44	16:28
11	07:25	07:00	06:19 17:06-17:35/29	06:27	05:44	05:24	05:34	06:02	06:34	07:05 17:42-18:03/21	06:42	07:15
	16:48	17:26	18:00	19:34	20:06	20:32	20:34	20:05	19:17	18:25	16:43	16:28
12	07:25	06:59	06:17 17:07-17:34/27	06:25	05:43	05:24	05:34	06:03	06:35	07:06 17:43-18:01/18	06:43	07:15
	16:49	17:27	18:01	19:35	20:07	20:33	20:34	20:04	19:15	18:24	16:42	16:28
13	07:24	06:58	06:16 17:07-17:33/26	06:24	05:42	05:24	05:35	06:04	06:36	07:07 17:44-17:59/15	06:44	07:16
	16:50	17:28	18:02	19:36	20:08	20:33	20:30	20:02	19:13	18:22	16:41	16:29
14	07:24	06:57	06:14 17:08-17:33/25	06:22	05:41	05:24	05:36	06:05	06:37	07:08 17:46-17:57/11	06:45	07:17
	16:51	17:30	18:03	19:37	20:09	20:34	20:32	20:01	19:11	18:21	16:40	16:29
15	07:24	06:55	06:12 17:08-17:32/24	06:20	05:40	05:24	05:37	06:06	06:38	07:10	06:46	07:18
	16:52	17:31	18:04	19:38	20:10	20:34	20:32	20:00	19:10	18:19	16:39	16:29
16	07:23	06:54	06:10 17:08-17:30/22	06:19	05:39	05:24	05:37	06:07	06:39	07:11	06:48	07:18
	16:54	17:32	18:05	19:39	20:11	20:35	20:31	20:08	19:08	18:17	16:38	16:29
17	07:23	06:53	06:09 17:10-17:30/20	06:17	05:38	05:24	05:38	06:08	06:40	07:12	06:49	07:19
	16:55	17:33	18:06	19:40	20:12	20:35	20:31	19:57	19:06	18:16	16:38	16:30
18	07:22	06:51	06:07 17:11-17:27/16	06:16	05:37	05:24	05:39	06:09	06:41	07:13	06:50	07:20
	16:56	17:35	18:08	19:41	20:13	20:35	20:30	19:55	19:05	18:14	16:37	16:30
19	07:22	06:50	06:05 17:13-17:24/11	06:14	05:36	05:24	05:40	06:10	06:42	07:14	06:51	07:20
	16:57	17:36	18:09	19:43	20:14	20:36	20:29	19:54	19:03	18:13	16:36	16:30
20	07:21	06:48	06:04	06:13	05:35	05:24	05:41	06:11	06:43	07:15	06:52	07:21
	16:58	17:37	18:10	19:44	20:15	20:36	20:29	19:52	19:01	18:11	16:35	16:31
21	07:20	06:47	06:02	06:11	05:35	05:24	05:42	06:12	06:44	07:16	06:54	07:22
	16:59	17:38	18:11	19:45	20:16	20:36	20:28	19:51	18:59	18:10	16:35	16:31
22	07:20	06:46	06:00	06:10	05:34	05:24	05:43	06:13	06:45	07:18	06:55	07:22
	17:01	17:40	18:12	19:46	20:17	20:36	20:27	19:49	18:58	18:08	16:34	16:32
23	07:19	06:44	05:59	06:08	05:33	05:25	05:43	06:14	06:46	07:19	06:56	07:23
	17:02	17:41	18:13	19:47	20:18	20:37	20:26	19:48	18:56	18:07	16:33	16:32
24	07:18	06:43	05:57	06:07	05:32	05:25	05:44	06:15	06:47	17:58-18:06/8	07:20	06:57
	17:03	17:42	18:14	19:48	20:19	20:37	20:25	19:46	18:54	18:05	16:33	16:33
25	07:18	06:41	05:55	06:05	05:31	05:25	05:45	06:16	06:48	17:54-18:09/15	06:21	06:58
	17:04	17:43	18:15	19:49	20:20	20:37	20:24	19:45	18:52	17:04	16:32	16:33
26	07:17	06:40	05:54	06:04	05:31	05:26	05:46	06:17	06:49	17:52-18:10/18	06:22	06:59
	17:06	17:44	18:16	19:50	20:21	20:37	20:23	19:43	18:51	17:03	16:32	16:34
27	07:16	06:38 17:15-17:23/8	05:52	06:02	05:30	05:26	05:47	06:18	06:50	17:50-18:11/21	06:23	07:01
	17:07	17:46	18:17	19:51	20:22	20:37	20:22	19:42	18:49	17:01	16:31	16:34
28	07:15	06:37 17:12-17:25/13	05:50	06:01	05:29	05:26	05:48	06:19	06:51	17:49-18:12/23	06:25	07:02
	17:08	17:47	18:19	19:52	20:22	20:37	20:22	19:40	18:47	17:00	16:31	16:35
29	07:14	06:36	06:48	05:59	05:29	05:27	05:49	06:20	06:52	17:48-18:12/24	06:26	07:03
	17:09	17:48	18:20	19:53	20:23	20:37	20:21	19:38	18:45	16:58	16:30	16:36
30	07:14	06:47	05:58	05:28	05:27	05:50	06:21	06:53	17:47-18:13/26	06:27	07:04	07:25
	17:11	17:49	19:21	19:55	20:24	20:37	20:19	19:37	18:44	16:57	16:30	16:37
31	07:13	06:45	05:56	05:28	05:28	05:51	06:23	06:51	06:23	06:28	07:25	07:25
	17:12	17:49	19:22	19:56	20:25	20:38	20:18	19:35	18:45	16:56	16:30	16:37
Ore potenziali eliofania	296	296	369	399	450	454	461	429	375	345	297	286
Summa minuti d'ombra	0	21	449	0	0	0	0	0	135	335	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:** Shadow Flickering Analysis **WTG:** 13 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (192)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio   Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:25   07:12	06:35 07:14-08:06/52	06:43 18:42-18:54/12	05:57 18:34-19:04/30	05:27
	16:38   17:13	17:48	19:23	19:56	20:26
2	07:26   07:11	06:33 07:14-08:07/53	06:42 18:38-18:56/18	05:55 18:35-19:04/29	05:27
	16:39   17:14	17:49	19:24	19:57	20:26
3	07:26   07:10	06:32 07:13-08:06/53	06:40 18:36-18:59/23	05:54 18:37-19:02/25	05:26
	16:40   17:16	17:50	19:25	19:58	20:27
4	07:26   07:09	06:30 07:13-08:06/53	06:38 18:34-19:00/26	05:53 18:37-19:00/23	05:26
	16:41   17:17	17:52	19:26	19:59	20:28
5	07:26   07:07	06:29 07:13-08:06/53	06:37 18:32-19:01/29	05:52 18:39-18:59/20	05:26
	16:42   17:18	17:53	19:27	20:00	20:29
6	07:26   07:06	06:27 07:12-08:06/54	06:35 18:31-19:02/31	05:50 18:41-18:56/15	05:25
	16:43   17:20	17:54	19:28	20:01	20:29
7	07:26   07:05	06:25 07:11-08:05/54	06:33 18:30-19:02/32	05:49 18:45-18:53/8	05:25
	16:44   17:21	17:55	19:29	20:02	20:30
8	07:25   07:04	06:24 07:12-08:05/53	06:32 18:28-19:02/34	05:48	05:25
	16:45   17:22	17:56	19:31	20:03	20:31
9	07:25   07:03	06:22 07:12-08:05/53	06:30 18:28-19:03/35	05:47	05:24
	16:46   17:23	17:57	19:32	20:04	20:31
10	07:25   07:02	06:20 07:11-08:04/53	06:28 18:27-19:03/36	05:46	05:24
	16:47   17:25	17:58	19:33	20:05	20:32
11	07:25   07:00	06:19 07:12-08:04/52	06:27 18:26-19:04/38	05:44	05:24
	16:48   17:26	18:00	19:34	20:06	20:32
12	07:25   06:59	06:17 07:12-08:02/50	06:25 18:27-19:06/39	05:43	05:24
	16:49   17:27	18:01	19:35	20:07	20:33
13	07:24   06:58	06:16 07:12-08:01/49	06:23 18:26-19:07/41	05:42	05:24
	16:50   17:28	18:02	19:36	20:08	20:33
14	07:24   06:57	06:14 07:13-08:01/48	06:22 18:26-19:09/43	05:41	05:24
	16:51   17:30	18:03	19:37	20:09	20:34
15	07:24   06:55	06:12 07:13-07:59/46	06:20 18:26-19:09/43	05:40	05:24
	16:52   17:31	18:04	19:38	20:10	20:34
16	07:23   06:54	06:10 07:13-07:58/45	06:19 18:26-19:09/43	05:39	05:24
	16:54   17:32	18:05	19:39	20:11	20:35
17	07:23   06:53 07:36-07:47/11	06:09 07:15-07:57/42	06:17 18:26-19:10/44	05:38	05:24
	16:55   17:33	18:06	19:40	20:12	20:35
18	07:22   06:51 07:32-07:52/20	06:07 07:16-07:55/39	06:16 18:26-19:10/44	05:37	05:24
	16:56   17:35	18:08	19:41	20:13	20:35
19	07:22   06:50 07:28-07:54/26	06:05 07:17-07:53/36	06:14 18:28-19:10/42	05:36	05:24
	16:57   17:36	18:09	19:43	20:14	20:36
20	07:21   06:48 07:26-07:57/31	06:04 07:18-07:50/32	06:13 18:28-19:10/42	05:35	05:24
	16:58   17:37	18:10	19:44	20:15	20:36
21	07:20   06:47 07:24-07:58/34	06:02 07:20-07:48/28	06:11 18:29-19:10/41	05:35	05:24
	16:59   17:38	18:11	19:45	20:16	20:36
22	07:20   06:46 07:22-08:00/38	06:00 07:22-07:45/23	06:10 18:30-19:10/40	05:34	05:24
	17:01   17:40	18:12	19:46	20:17	20:36
23	07:19   06:44 07:20-08:01/41	05:59 07:26-07:40/14	06:08 18:31-19:10/39	05:33	05:25
	17:02   17:41	18:13	19:47	20:18	20:37
24	07:18   06:43 07:20-08:03/43	05:57	06:07 18:32-19:10/38	05:32	05:25
	17:03   17:42	18:14	19:48	20:19	20:37
25	07:18   06:41 07:18-08:03/45	05:55	06:05 18:31-19:09/38	05:31	05:25
	17:04   17:43	18:15	19:49	20:20	20:37
26	07:17   06:40 07:17-08:05/48	05:53	06:04 18:32-19:09/37	05:31	05:25
	17:06   17:44	18:16	19:50	20:21	20:37
27	07:16   06:38 07:16-08:05/49	05:52	06:02 18:31-19:08/37	05:30	05:26
	17:07   17:46	18:17	19:51	20:22	20:37
28	07:15   06:36 07:16-08:06/50	05:50	06:01 18:32-19:07/35	05:29	05:26
	17:08   17:47	18:19	19:52	20:22	20:37
29	07:14	06:48	05:59 18:33-19:07/34	05:29	05:27
	17:09	19:20	19:53	20:23	20:37
30	07:13	06:47	05:58 18:33-19:05/32	05:28	05:27
	17:11	19:21	19:54	20:24	20:37
31	07:13	06:45		05:28	
	17:12	19:22		20:25	
Ore potenziali eliofania	296	296	369	399	454
Somma minuti d'ombra	0	436	1035	1066	150
					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:** Shadow Flickering Analysis **WTG:** 13 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (192)  
**Assunzioni sui calcoli d'ombra**

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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>Luglio</b>	<b>Agosto</b>	<b>Settembre</b>	<b>Ottobre</b>	<b>Novembre</b>	<b>Dicembre</b>
1	05:28	05:52	06:24 18:25-19:03/38	06:54 07:52-08:42/50	06:29	07:05
	20:37	20:17	19:33	18:42	16:55	16:30
2	05:28	05:53	06:25 18:25-19:01/36	06:55 07:51-08:42/51	06:31	07:06
	20:37	20:16	19:32	18:40	16:53	16:29
3	05:29	05:54	06:26 18:25-19:00/35	06:56 07:50-08:42/52	06:32	07:07
	20:37	20:15	19:30	18:39	16:52	16:29
4	05:29	05:55	06:27 18:25-18:59/34	06:58 07:49-08:42/53	06:33	07:08
	20:36	20:14	19:28	18:37	16:51	16:29
5	05:30	05:56	06:28 18:26-18:58/32	06:59 07:49-08:42/53	06:34	07:09
	20:36	20:13	19:27	18:35	16:50	16:29
6	05:30	05:57 18:53-19:04/11	06:29 18:26-18:57/31	07:00 07:48-08:42/54	06:35	07:10
	20:36	20:12	19:25	18:34	16:49	16:28
7	05:31	05:58 18:50-19:07/17	06:30 18:27-18:56/29	07:01 07:48-08:42/54	06:37	07:11
	20:36	20:10	19:23	18:32	16:47	16:28
8	05:32	05:59 18:48-19:09/21	06:31 18:28-18:54/26	07:02 07:47-08:41/54	06:38	07:12
	20:35	20:09	19:22	18:30	16:46	16:28
9	05:32	06:00 18:46-19:10/24	06:32 18:29-18:52/23	07:03 07:47-08:41/54	06:39	07:13
	20:35	20:08	19:20	18:29	16:45	16:28
10	05:33	06:01 18:45-19:12/27	06:33 18:31-18:50/19	07:04 07:47-08:40/53	06:40	07:14
	20:34	20:06	19:18	18:27	16:44	16:28
11	05:34	06:02 18:44-19:13/29	06:34 18:33-18:47/14	07:05 07:48-08:40/52	06:42	07:15
	20:34	20:05	19:17	18:25	16:43	16:28
12	05:34	06:03 18:42-19:13/31	06:35	07:06 07:48-08:40/52	06:43	07:15
	20:33	20:04	19:15	18:24	16:42	16:28
13	05:35	06:04 18:41-19:14/33	06:36	07:07 07:48-08:39/51	06:44	07:16
	20:33	20:02	19:13	18:22	16:41	16:29
14	05:36	06:05 18:40-19:15/35	06:37	07:08 07:48-08:38/50	06:45	07:17
	20:32	20:01	19:11	18:21	16:40	16:29
15	05:37	06:06 18:40-19:15/35	06:38	07:10 07:49-08:37/48	06:46	07:18
	20:32	20:00	19:10	18:19	16:39	16:29
16	05:37	06:07 18:39-19:15/36	06:39	07:11 07:49-08:36/47	06:48	07:18
	20:31	19:58	19:08	18:17	16:38	16:29
17	05:38	06:08 18:38-19:16/38	06:40	07:12 07:51-08:35/44	06:49	07:19
	20:31	19:57	19:06	18:16	16:38	16:29
18	05:39	06:09 18:38-19:16/38	06:41	07:13 07:51-08:34/43	06:50	07:20
	20:30	19:55	19:04	18:14	16:37	16:30
19	05:40	06:10 18:37-19:16/39	06:42	07:14 07:52-08:32/40	06:51	07:20
	20:29	19:54	19:03	18:13	16:36	16:30
20	05:41	06:11 18:37-19:16/39	06:43 08:14-08:25/11	07:15 07:53-08:30/37	06:52	07:21
	20:28	19:52	19:01	18:11	16:35	16:31
21	05:42	06:12 18:36-19:15/39	06:44 08:09-08:29/20	07:16 07:55-08:28/33	06:54	07:22
	20:28	19:51	18:59	18:10	16:35	16:31
22	05:43	06:13 18:34-19:15/41	06:45 08:05-08:32/27	07:18 07:57-08:27/30	06:55	07:22
	20:27	19:49	18:58	18:08	16:34	16:31
23	05:43	06:14 18:33-19:15/42	06:46 08:03-08:34/31	07:19 07:59-08:24/25	06:56	07:23
	20:26	19:48	18:56	18:07	16:33	16:32
24	05:44	06:15 18:31-19:14/43	06:47 08:00-08:35/35	07:20 08:02-08:21/19	06:57	07:23
	20:25	19:46	18:54	18:05	16:33	16:33
25	05:45	06:16 18:30-19:14/44	06:48 07:59-08:37/38	06:21 07:08-07:14/6	06:58	07:23
	20:24	19:45	18:52	17:04	16:32	16:33
26	05:46	06:17 18:29-19:13/44	06:49 07:57-08:38/41	06:22	06:59	07:24
	20:23	19:43	18:51	17:03	16:32	16:34
27	05:47	06:18 18:29-19:12/43	06:50 07:55-08:39/44	06:23	07:01	07:24
	20:22	19:42	18:49	17:01	16:31	16:34
28	05:48	06:19 18:28-19:11/43	06:51 07:54-08:39/45	06:25	07:02	07:25
	20:22	19:40	18:47	17:00	16:31	16:35
29	05:49	06:20 18:27-19:10/43	06:52 07:53-08:40/47	06:26	07:03	07:25
	20:20	19:38	18:45	16:58	16:30	16:36
30	05:50	06:21 18:27-19:08/41	06:53 07:53-08:41/48	06:27	07:04	07:25
	20:19	19:37	18:44	16:57	16:30	16:37
31	05:51	06:22 18:25-19:05/40		06:28		07:25
	20:18	19:35		16:56		16:37
Ore potenziali eliofania		461	429	375	345	297
Somma minuti d'ombra		0	916	704	1105	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:** Shadow Flickering Analysis **WTG:** 14 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (193)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio   Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:25   07:12	06:35	06:43 07:07-07:29/22	05:57	05:27
	16:38   17:13	17:48	19:23	19:56	20:26
2	07:26   07:11	06:33	06:42 07:05-07:30/25	05:55	05:27
	16:39   17:14	17:49	19:24	19:57	20:26
3	07:26   07:10	06:32	06:40 07:04-07:32/28	05:54	05:26
	16:40   17:16	17:50	19:25	19:58	20:27
4	07:26   07:09	06:30	06:38 07:02-07:32/30	05:53	05:26
	16:41   17:17	17:52	19:26	19:59	20:28
5	07:26   07:07	06:29	06:37 07:00-07:32/32	05:52	05:25
	16:42   17:18	17:53	19:27	20:00	20:29
6	07:26   07:06	06:27	06:35 07:00-07:33/33	05:50	05:25
	16:43   17:20	17:54	19:28	20:01	20:29
7	07:26   07:05	06:25	06:33 06:59-07:33/34	05:49	05:25
	16:44   17:21	17:55	19:29	20:02	20:30
8	07:25   07:04	06:24	06:32 06:58-07:33/35	05:48	05:25
	16:45   17:22	17:56	19:31	20:03	20:31
9	07:25   07:03	06:22	06:30 06:58-07:33/35	05:47	05:24
	16:46   17:23	17:57	19:32	20:04	20:31
10	07:25   07:02	06:20	06:28 06:57-07:33/36	05:46	05:24
	16:47   17:25	17:58	19:33	20:05	20:32
11	07:25   07:00	06:19	06:27 06:56-07:32/36	05:44	05:24
	16:48   17:26	18:00	19:34	20:06	20:32
12	07:25   06:59	06:17	06:25 06:57-07:32/35	05:43	05:24
	16:49   17:27	18:01	19:35	20:07	20:33
13	07:24   06:58	06:15	06:23 06:57-07:31/34	05:42	05:24
	16:50   17:28	18:02	19:36	20:08	20:33
14	07:24   06:57	06:14	06:22 06:57-07:31/34	05:41	05:24
	16:51   17:30	18:03	19:37	20:09	20:34
15	07:24   06:55 17:06-17:08/2	06:12	06:20 06:57-07:30/33	05:40	05:24
	16:52   17:31	18:04	19:38	20:10	20:34
16	07:23   06:54 17:03-17:09/6	06:10	06:19 06:58-07:29/31	05:39	05:24
	16:54   17:32	18:05	19:39	20:11	20:35
17	07:23   06:53 17:02-17:11/9	06:09	06:17 06:58-07:27/29	05:38	05:24
	16:55   17:33	18:06	19:40	20:12	20:35
18	07:22   06:51 17:02-17:13/11	06:07	06:16 06:59-07:26/27	05:37	05:24
	16:56   17:35	18:07	19:41	20:13	20:35
19	07:22   06:50 17:01-17:13/12	06:05	06:14 07:00-07:25/25	05:36	05:24
	16:57   17:36	18:09	19:43	20:14	20:36
20	07:21   06:48 17:01-17:15/14	06:04	06:12 07:01-07:22/21	05:35	05:24
	16:58   17:37	18:10	19:44	20:15	20:36
21	07:20   06:47 17:01-17:16/15	06:02	06:11 07:03-07:20/17	05:35	05:24
	16:59   17:38	18:11	19:45	20:16	20:36
22	07:20   06:46 17:01-17:18/17	06:00	06:09 07:07-07:18/11	05:34	05:24
	17:01   17:40	18:12	19:46	20:17	20:36
23	07:19   06:44 17:01-17:17/16	05:59	06:08	05:33	05:25
	17:02   17:41	18:13	19:47	20:18	20:37
24	07:18   06:43 17:03-17:16/13	05:57	06:07	05:32	05:25
	17:03   17:42	18:14	19:48	20:19	20:37
25	07:18   06:41 17:04-17:14/10	05:55	06:05	05:31	05:25
	17:04   17:43	18:15	19:49	20:20	20:37
26	07:17   06:40 17:07-17:11/4	05:53	06:04	05:31	05:25
	17:06   17:44	18:16	19:50	20:21	20:37
27	07:16   06:38	05:52	06:02	05:30	05:26
	17:07   17:46	18:17	19:51	20:22	20:37
28	07:15   06:36	05:50	06:01	05:29	05:26
	17:08   17:47	18:19	19:52	20:22	20:37
29	07:14	06:48	05:59	05:29	05:27
	17:09	19:20	19:53	20:23	20:37
30	07:13	06:47 07:13-07:23/10	05:58	05:28	05:27
	17:11	19:21	19:54	20:24	20:37
31	07:13	06:45 07:10-07:27/17	05:28		
	17:12	19:22	0:25		
Ore potenziali eliofania	296	296	369	399	454
Somma minuti d'ombra	0	129	27	643	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:** Shadow Flickering Analysis **WTG:** 14 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (193)  
**Assunzioni sui calcoli d'ombra**

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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>Luglio</b>	<b>Agosto</b>	<b>Settembre</b>	<b>Ottobre</b>	<b>Novembre</b>	<b>Dicembre</b>
1	05:28	05:52	06:23 06:56-07:32/36	06:54	06:29	07:05
	20:37	20:17	19:33	18:42	16:55	16:30
2	05:28	05:53	06:25 06:56-07:32/36	06:55	06:31	07:06
	20:37	20:16	19:32	18:40	16:53	16:29
3	05:29	05:54	06:26 06:56-07:31/35	06:56	06:32	07:07
	20:36	20:15	19:30	18:39	16:52	16:29
4	05:29	05:55	06:27 06:55-07:30/35	06:57	06:33	07:08
	20:36	20:14	19:28	18:37	16:51	16:29
5	05:30	05:56	06:28 06:55-07:29/34	06:59	06:34	07:09
	20:36	20:13	19:27	18:35	16:50	16:29
6	05:30	05:57	06:29 06:55-07:28/33	07:00	06:35	07:10
	20:36	20:12	19:25	18:34	16:48	16:28
7	05:31	05:58	06:30 06:55-07:27/32	07:01	06:37	07:11
	20:36	20:10	19:23	18:32	16:47	16:28
8	05:32	05:59	06:31 06:56-07:26/30	07:02	06:38	07:12
	20:35	20:09	19:22	18:30	16:46	16:28
9	05:32	06:00	06:32 06:57-07:25/28	07:03	06:39	07:13
	20:35	20:08	19:20	18:29	16:45	16:28
10	05:33	06:01	06:33 06:58-07:23/25	07:04	06:40	07:14
	20:34	20:06	19:18	18:27	16:44	16:28
11	05:34	06:02	06:34 06:59-07:21/22	07:05	06:42	07:15
	20:34	20:05	19:17	18:25	16:43	16:28
12	05:34	06:03	06:35 07:01-07:19/18	07:06	06:43	07:15
	20:33	20:04	19:15	18:24	16:42	16:28
13	05:35	06:04	06:36 07:04-07:15/11	07:07	06:44	07:16
	20:33	20:02	19:13	18:22	16:41	16:29
14	05:36	06:05	06:37	07:08	06:45	07:17
	20:32	20:01	19:11	18:21	16:40	16:29
15	05:37	06:06	06:38	07:10	06:46	07:18
	20:32	20:00	19:10	18:19	16:39	16:29
16	05:37	06:07	06:39	07:11 17:37-17:44/7	06:48	07:18
	20:31	19:58	19:08	18:17	16:38	16:29
17	05:38	06:08	06:40	07:12 17:34-17:46/12	06:49	07:19
	20:31	19:57	19:06	18:16	16:38	16:29
18	05:39	06:09	06:41	07:13 17:34-17:48/14	06:50	07:20
	20:30	19:55	19:04	18:14	16:37	16:30
19	05:40	06:10	06:42	07:14 17:33-17:48/15	06:51	07:20
	20:29	19:54	19:03	18:13	16:36	16:30
20	05:41	06:11	06:43	07:15 17:32-17:48/16	06:52	07:21
	20:28	19:52	19:01	18:11	16:35	16:31
21	05:42	06:12 07:11-07:23/12	06:44	07:16 17:31-17:46/15	06:54	07:22
	20:28	19:51	18:59	18:10	16:35	16:31
22	05:42	06:13 07:08-07:26/18	06:45	07:18 17:31-17:44/13	06:55	07:22
	20:27	19:49	18:58	18:08	16:34	16:31
23	05:43	06:14 07:05-07:27/22	06:46	07:19 17:32-17:43/11	06:56	07:23
	20:26	19:48	18:56	18:07	16:33	16:32
24	05:44	06:15 07:04-07:29/25	06:47	07:20 17:32-17:42/10	06:57	07:23
	20:25	19:46	18:54	18:05	16:33	16:33
25	05:45	06:16 07:02-07:30/28	06:48	06:21 16:32-16:40/8	06:58	07:23
	20:24	19:45	18:52	17:04	16:32	16:33
26	05:46	06:17 07:01-07:30/29	06:49	06:22 16:33-16:38/5	06:59	07:24
	20:23	19:43	18:51	17:03	16:32	16:34
27	05:47	06:18 07:00-07:31/31	06:50	06:23 16:36-16:38/2	07:01	07:24
	20:22	19:42	18:49	17:01	16:31	16:34
28	05:48	06:19 06:59-07:32/33	06:51	06:25	07:02	07:25
	20:21	19:40	18:47	17:00	16:31	16:35
29	05:49	06:20 06:58-07:32/34	06:52	06:26	07:03	07:25
	20:20	19:38	18:45	16:58	16:30	16:36
30	05:50	06:21 06:57-07:32/35	06:53	06:27	07:04	07:25
	20:19	19:37	18:44	16:57	16:30	16:37
31	05:51	06:22 06:57-07:32/35		06:28		07:25
	20:18	19:35		16:56		16:37
Ore potenziali eliofania	461	429	375	345	297	286
Somma minuti d'ombra	0	302	375	128	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:** Shadow Flickering Analysis **WTG:** 15 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (194)  
**Assunzioni sui calcoli d'ombra**

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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio   Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:25   07:12	06:35 07:13-07:54/41	06:43 08:16-08:30/14	05:57   05:27	
	16:38   17:13	17:48	19:23	19:56   20:26	
2	07:26   07:11	06:33 07:11-07:55/44	06:42	05:55   05:27	
	16:39   17:14	17:49	19:24	19:57   20:26	
3	07:26   07:10	06:32 07:10-07:57/47	06:40	05:54   05:26	
	16:40   17:16	17:50	19:25	19:58   20:27	
4	07:26   07:08	06:30 07:09-07:57/48	06:38	05:53   05:26	
	16:41   17:17	17:52	19:26	19:59   20:28	
5	07:26   07:07	06:29 07:08-07:59/51	06:37	05:52   05:26	
	16:42   17:18	17:53	19:27	20:00   20:29	
6	07:26   07:06	06:27 07:07-07:59/52	06:35	05:50   05:25	
	16:43   17:20	17:54	19:28	20:01   20:29	
7	07:26   07:05	06:25 07:05-07:59/54	06:33	05:49   05:25	
	16:44   17:21	17:55	19:29	20:02   20:30	
8	07:25   07:04	06:24 07:05-08:00/55	06:32	05:48   05:25	
	16:45   17:22	17:56	19:31	20:03   20:31	
9	07:25   07:03	06:22 07:04-08:00/56	06:30	05:47   05:24	
	16:46   17:23	17:57	19:32	20:04   20:31	
10	07:25   07:02	06:20 07:03-07:59/56	06:28	05:46   05:24	
	16:47   17:25	17:58	19:33	20:05   20:32	
11	07:25   07:00	06:19 07:03-08:00/57	06:27	05:44   05:24	
	16:48   17:26	18:00	19:34	20:06   20:32	
12	07:25   06:59	06:17 07:02-08:00/58	06:25	05:43   05:24	
	16:49   17:27	18:01	19:35	20:07   20:33	
13	07:24   06:58	06:15 07:01-07:59/58	06:23	05:42   05:24	
	16:50   17:28	18:02	19:36	20:08   20:33	
14	07:24   06:57	06:14 07:02-08:00/58	06:22	05:41   05:24	
	16:51   17:30	18:03	19:37	20:09   20:34	
15	07:24   06:55	06:12 07:01-07:59/58	06:20 19:10-19:16/6	05:40   05:24	
	16:52   17:31	18:04	19:38	20:10   20:34	
16	07:23   06:54	06:10 07:01-07:58/57	06:19 19:07-19:17/10	05:39   05:24	
	16:54   17:32	18:05	19:39	20:11   20:35	
17	07:23   06:53	06:09 07:01-07:58/57	06:17 19:06-19:18/12	05:38   05:24	
	16:55   17:33	18:06	19:40	20:12   20:35	
18	07:22   06:51	06:07 07:01-07:57/56	06:16 19:04-19:19/15	05:37   05:24	
	16:56   17:35	18:08	19:41	20:13   20:35	
19	07:22   06:50	06:05 07:01-07:56/55	06:14 19:04-19:20/16	05:36   05:24	
	16:57   17:36	18:09	19:42	20:14   20:36	
20	07:21   06:48	06:04 07:01-07:55/54	06:13 19:02-19:21/19	05:35   05:24	
	16:58   17:37	18:10	19:44	20:15   20:36	
21	07:20   06:47	06:02 07:02-07:55/53	06:11 19:02-19:22/20	05:35   05:24	
	16:59   17:38	18:11	19:45	20:16   20:36	
22	07:20   06:45	06:00 07:02-07:53/51	06:10 19:01-19:23/22	05:34   05:24	
	17:01   17:40	18:12	19:46	20:17   20:36	
23	07:19   06:44	05:59 07:02-07:52/50	06:08 19:02-19:23/21	05:33   05:25	
	17:02   17:41	18:13	19:47	20:18   20:36	
24	07:18   06:43	07:28-07:42/14	05:57 07:03-07:51/48	06:07 19:02-19:23/21	05:32   05:25
	17:03   17:42	18:14	19:48	20:19   20:37	
25	07:18   06:41	07:22-07:46/24	05:55 07:03-07:49/46	06:05 19:02-19:22/20	05:31   05:25
	17:04   17:43	18:15	19:49	20:20   20:37	
26	07:17   06:40	07:20-07:49/29	05:53 07:04-07:47/43	06:04 19:03-19:21/18	05:31   05:26
	17:06   17:44	18:16	19:50	20:21   20:37	
27	07:16   06:38	07:17-07:51/34	05:52 07:05-07:45/40	06:02 19:03-19:19/16	05:30   05:26
	17:07   17:46	18:17	19:51	20:22   20:37	
28	07:15   06:36	07:15-07:53/38	05:50 07:07-07:44/37	06:01 19:04-19:18/14	05:29   05:26
	17:08   17:47	18:19	19:52	20:22   20:37	
29	07:14	06:48 08:08-08:41/33	05:59 19:06-19:17/11	05:29   05:27	
	17:09	19:20	19:53	20:23   20:37	
30	07:13	06:47 08:10-08:38/28	05:58 19:10-19:12/2	05:28   05:27	
	17:11	19:21	19:54	20:24   20:37	
31	07:13	06:45 08:13-08:35/22	399	450   454	
	17:12	19:22			
Ore potenziali eliofania	296	296	1523	257	0
Somma minuti d'ombra	0	139			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:** Shadow Flickering Analysis **WTG:** 15 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (194)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>Luglio</b>	<b>Agosto</b>	<b>Settembre</b>	<b>Ottobre</b>	<b>Novembre</b>	<b>Dicembre</b>
1	05:28	05:52	06:24	06:54 07:42-08:39/57	06:29	07:05
	20:37	20:17	19:33	18:42	16:55	16:30
2	05:28	05:53	06:25	06:55 07:42-08:39/57	06:31	07:06
	20:37	20:16	19:32	18:40	16:53	16:29
3	05:29	05:54	06:26	06:56 07:41-08:38/57	06:32	07:07
	20:36	20:15	19:30	18:39	16:52	16:29
4	05:29	05:55	06:27	06:57 07:41-08:38/57	06:33	07:08
	20:36	20:14	19:28	18:37	16:51	16:29
5	05:30	05:56	06:28	06:59 07:41-08:37/56	06:34	07:09
	20:36	20:13	19:27	18:35	16:50	16:29
6	05:30	05:57	06:29	07:00 07:42-08:36/54	06:35	07:10
	20:36	20:11	19:25	18:34	16:49	16:28
7	05:31	05:58	06:30	07:01 07:42-08:35/53	06:37	07:11
	20:35	20:10	19:23	18:32	16:47	16:28
8	05:32	05:59	06:31	07:02 07:42-08:34/52	06:38	07:12
	20:35	20:09	19:22	18:30	16:46	16:28
9	05:32	06:00	06:32	07:03 07:43-08:32/49	06:39	07:13
	20:35	20:08	19:20	18:29	16:45	16:28
10	05:33	06:01	06:33	07:04 07:43-08:31/48	06:40	07:14
	20:34	20:06	19:18	18:27	16:44	16:28
11	05:34	06:02	06:34 08:09-08:22/13	07:05 07:45-08:31/46	06:41	07:14
	20:34	20:05	19:17	18:25	16:43	16:28
12	05:34	06:03	06:35 08:04-08:26/22	07:06 07:46-08:29/43	06:43	07:15
	20:33	20:04	19:15	18:24	16:42	16:28
13	05:35	06:04 19:17-19:22/5	06:36 08:01-08:29/28	07:07 07:47-08:27/40	06:44	07:16
	20:33	20:02	19:13	18:22	16:41	16:29
14	05:36	06:05 19:14-19:25/11	06:37 07:59-08:31/32	07:08 07:49-08:25/36	06:45	07:17
	20:32	20:01	19:11	18:21	16:40	16:29
15	05:37	06:06 19:12-19:26/14	06:38 07:56-08:33/37	07:10 07:50-08:22/32	06:46	07:18
	20:32	20:00	19:10	18:19	16:39	16:29
16	05:37	06:07 19:10-19:27/17	06:39 07:54-08:34/40	07:11 07:52-08:19/27	06:48	07:18
	20:31	19:58	19:08	18:17	16:38	16:29
17	05:38	06:08 19:09-19:28/19	06:40 07:53-08:35/42	07:12 07:56-08:17/21	06:49	07:19
	20:31	19:57	19:06	18:16	16:38	16:29
18	05:39	06:09 19:09-19:28/19	06:41 07:51-08:36/45	07:13 08:02-08:11/9	06:50	07:20
	20:30	19:55	19:04	18:14	16:37	16:30
19	05:40	06:10 19:08-19:29/21	06:42 07:50-08:37/47	07:14	06:51	07:20
	20:29	19:54	19:03	18:13	16:36	16:30
20	05:41	06:11 19:08-19:29/21	06:43 07:48-08:38/50	07:15	06:52	07:21
	20:28	19:52	19:01	18:11	16:35	16:31
21	05:42	06:12 19:07-19:28/21	06:44 07:47-08:38/51	07:16	06:54	07:21
	20:28	19:51	18:59	18:10	16:35	16:31
22	05:43	06:13 19:07-19:27/20	06:45 07:46-08:39/53	07:17	06:55	07:22
	20:27	19:49	18:58	18:08	16:34	16:32
23	05:43	06:14 19:07-19:25/18	06:46 07:45-08:39/54	07:19	06:56	07:23
	20:26	19:48	18:56	18:07	16:33	16:32
24	05:44	06:15 19:07-19:24/17	06:47 07:44-08:39/55	07:20	06:57	07:23
	20:25	19:46	18:54	18:05	16:33	16:33
25	05:45	06:16 19:08-19:22/14	06:48 07:44-08:39/55	06:21	06:58	07:23
	20:24	19:45	18:52	17:04	16:32	16:33
26	05:46	06:17 19:09-19:21/12	06:49 07:43-08:40/57	06:22	06:59	07:24
	20:23	19:43	18:51	17:03	16:32	16:34
27	05:47	06:18 19:10-19:19/9	06:50 07:42-08:39/57	06:23	07:00	07:24
	20:22	19:41	18:49	17:01	16:31	16:34
28	05:48	06:19 19:13-19:18/5	06:51 07:42-08:39/57	06:25	07:02	07:24
	20:21	19:40	18:47	17:00	16:31	16:35
29	05:49	06:20	06:52 07:41-08:39/58	06:26	07:03	07:25
	20:20	19:38	18:45	16:58	16:30	16:36
30	05:50	06:21	06:53 07:42-08:40/58	06:27	07:04	07:25
	20:19	19:37	18:44	16:57	16:30	16:37
31	05:51	06:22		06:28		07:25
	20:18	19:35		16:56		16:37
Ore potenziali eliofania	461	429	375	345	297	286
Somma minuti d'ombra	0	243	911	794	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:** Shadow Flickering Analysis **WTG:** 16 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (195)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

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

**SHADOW - Calendario per WTG**

**Calcolo:** Shadow Flickering Analysis **WTG:** 17 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (196)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>Gennaio</b>	<b>Febbraio</b>	<b>Marzo</b>	<b>Aprile</b>	<b>Maggio</b>	<b>Giugno</b>
1	07:25 11:25-12:04/39   16:38	07:12 07:32-07:52/20   17:13	06:35   17:48	06:43   19:23	05:57   19:56	05:27 05:50-06:17/27   20:26
2	07:26 11:26-12:04/38   16:39	07:11 07:31-07:52/21   17:14	06:33   17:49	06:42   19:24	05:55   19:57	05:27 05:50-06:18/28   20:26
3	07:26 11:28-12:03/35   16:40	07:10 07:31-07:52/21   17:16	06:32   17:50	06:40   19:25	05:54   19:58	05:26 05:50-06:18/28   20:27
4	07:26 11:29-12:03/34   16:41	07:08 07:31-07:52/21   17:17	06:30   17:51	06:38   19:26	05:53   19:59	05:26 05:50-06:19/29   20:28
5	07:26 11:31-12:02/31   16:42	07:07 07:32-07:52/20   17:18	06:29   17:53	06:37   19:27	05:51   20:00	05:25 05:50-06:19/29   20:29
6	07:26 11:34-12:00/26   16:43	07:06 07:32-07:51/19   17:20	06:27   17:54	06:35   19:28	05:50   20:01	05:25 05:50-06:19/29   20:29
7	07:26 11:37-11:58/21   16:44	07:05 07:33-07:50/17   17:21	06:25   17:55	06:33   19:29	05:49   20:02	05:25 05:50-06:19/29   20:30
8	07:25 11:41-11:56/15   16:45	07:04 07:34-07:50/16   17:22	06:24   17:56	06:32   19:30	05:48   20:03	05:25 05:50-06:20/30   20:31
9	07:25   16:46	07:03 07:36-07:48/12   17:23	06:22   17:57	06:30   19:32	05:47   20:04	05:24 05:50-06:20/30   20:31
10	07:25   16:47	07:02 07:38-07:46/8   17:25	06:20   17:58	06:28   19:33	05:46   20:05	05:24 05:50-06:20/30   20:32
11	07:25   16:48	07:00   17:26	06:19   18:00	06:27   19:34	05:44   20:06	05:24 05:50-06:20/30   20:32
12	07:25   16:49	06:59   17:27	06:17   18:01	06:25   19:35	05:43   20:07	05:24 05:50-06:20/30   20:33
13	07:24   16:50	06:58   17:28	06:15   18:02	06:23   19:36	05:42   20:08	05:24 05:51-06:21/30   20:33
14	07:24   16:51	06:57   17:30	06:14   18:03	06:22   19:37	05:41   20:09	05:24 05:51-06:21/30   20:34
15	07:24   16:52	06:55   17:31	06:12   18:04	06:20   19:38	05:40   20:10	05:24 05:51-06:21/30   20:34
16	07:23   16:54	06:54   17:32	06:10   18:05	06:19   19:39	05:39   20:11	05:24 05:51-06:21/30   20:35
17	07:23   16:55	06:53   17:33	06:09   18:06	06:17   19:40	05:38   20:12	05:24 05:51-06:21/30   20:35
18	07:22   16:56	06:51   17:35	06:07   18:07	06:16   19:41	05:37   20:13	05:24 05:51-06:21/30   20:35
19	07:22   16:57	06:50   17:36	06:05   18:09	06:14   19:42	05:36   20:14	05:24 05:52-06:22/30   20:36
20	07:21   16:58	06:48   17:37	06:04   18:10	06:12   19:44	05:35 06:01-06:04/3   20:15	05:24 05:52-06:23/31   20:36
21	07:20   16:59	06:47   17:38	06:02   18:11	06:11   19:45	05:35 05:57-06:07/10   20:16	05:24 05:52-06:23/31   20:36
22	07:20   17:01	06:45   17:40	06:00   18:12	06:09   19:46	05:34 05:56-06:10/14   20:17	05:24 05:52-06:23/31   20:36
23	07:19   17:02	06:44   17:41	05:59   18:13	06:08   19:47	05:33 05:54-06:11/17   20:18	05:25 05:52-06:23/31   20:36
24	07:18 07:39-07:40/1   17:03	06:43   17:42	05:57   18:14	06:07   19:48	05:32 05:53-06:12/19   20:19	05:25 05:53-06:23/30   20:37
25	07:18 07:38-07:44/6   17:04	06:41   17:43	05:55   18:15	06:05   19:49	05:31 05:53-06:14/21   20:20	05:25 05:53-06:23/30   20:37
26	07:17 07:38-07:47/9   17:06	06:40   17:44	05:53   18:16	06:04   19:50	05:31 05:52-06:14/22   20:21	05:25 05:53-06:23/30   20:37
27	07:16 07:37-07:48/11   17:07	06:38   17:46	05:52   18:17	06:02   19:51	05:30 05:51-06:14/23   20:22	05:26 05:54-06:24/30   20:37
28	07:15 07:36-07:49/13   17:08	06:36   17:47	05:50   18:18	06:01   19:52	05:29 05:51-06:16/25   20:22	05:26 05:54-06:24/30   20:37
29	07:14 07:35-07:50/15   17:09	06:48   19:20	05:48   19:53	05:29 05:50-06:16/26   20:23	05:27 05:55-06:25/30   20:37	
30	07:13 07:34-07:50/16   17:11	06:47   19:21	05:48   19:54	05:28 05:50-06:17/27   20:24	05:27 05:54-06:24/30   20:37	
31	07:13 07:33-07:51/18   17:12	06:45   19:22	05:28   20:25	05:28 05:50-06:17/27   20:25	05:27 05:54-06:24/30   20:37	
Ore potenziali eliofania		296	296	369	399	450
Somma minuti d'ombra		328	175	0	0	893

**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:** Shadow Flickering Analysis **WTG:** 17 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (196)  
**Assunzioni sui calcoli d'ombra**

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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	05:28 05:54-06:24/30   20:37	05:52   20:17	06:23   19:33	06:54   18:42	06:29 07:06-07:16/10   16:55	07:05   16:29
2	05:28 05:55-06:25/30   20:37	05:53   20:16	06:24   19:32	06:55   18:40	06:31 07:05-07:19/14   16:53	07:06   16:29
3	05:29 05:56-06:25/29   20:36	05:54   20:15	06:26   19:30	06:56   18:39	06:32 07:03-07:20/17   16:52	07:07   16:29
4	05:29 05:55-06:25/30   20:36	05:55   20:14	06:27   19:28	06:57   18:37	06:33 07:02-07:20/18   16:51	07:08 11:25-11:39/14   16:29
5	05:30 05:56-06:26/30   20:36	05:56   20:13	06:28   19:27	06:59   18:35	06:34 07:01-07:21/20   16:50	07:09 11:22-11:43/21   16:29
6	05:30 05:56-06:25/29   20:36	05:57   20:11	06:29   19:25	07:00   18:34	06:35 07:02-07:22/20   16:48	07:10 11:20-11:46/26   16:28
7	05:31 05:56-06:26/30   20:35	05:58   20:10	06:30   19:23	07:01   18:32	06:37 07:01-07:22/21   16:47	07:11 11:19-11:48/29   16:28
8	05:32 05:56-06:25/29   20:35	05:59   20:09	06:31   19:22	07:02   18:30	06:38 07:01-07:22/21   16:46	07:12 11:18-11:50/32   16:28
9	05:32 05:57-06:25/28   20:35	06:00   20:08	06:32   19:20	07:03   18:29	06:39 07:02-07:23/21   16:45	07:13 11:17-11:52/35   16:28
10	05:33 05:57-06:26/29   20:34	06:01   20:06	06:33   19:18	07:04   18:27	06:40 07:03-07:22/19   16:44	07:14 11:16-11:54/38   16:28
11	05:34 05:57-06:25/28   20:34	06:02   20:05	06:34   19:17	07:05   18:25	06:41 07:04-07:22/18   16:43	07:14 11:15-11:54/39   16:28
12	05:34 05:58-06:25/27   20:33	06:03   20:04	06:35   19:15	07:06   18:24	06:43 07:06-07:22/16   16:42	07:15 11:15-11:56/41   16:28
13	05:35 05:58-06:25/27   20:33	06:04   20:02	06:36   19:13	07:07   18:22	06:44 07:07-07:22/15   16:41	07:16 11:15-11:57/42   16:29
14	05:36 05:59-06:25/26   20:32	06:05   20:01	06:37   19:11	07:08   18:21	06:45 07:08-07:21/13   16:40	07:17 11:15-11:59/44   16:29
15	05:37 05:59-06:24/25   20:32	06:06   20:00	06:38   19:10	07:09   18:19	06:46 07:09-07:20/11   16:39	07:18 11:15-12:00/45   16:29
16	05:37 06:00-06:24/24   20:31	06:07   19:58	06:39   19:08	07:11   18:17	06:48 07:11-07:19/8   16:38	07:18 11:15-12:00/45   16:29
17	05:38 06:01-06:24/23   20:31	06:08   19:57	06:40   19:06	07:12   18:16	06:49 07:12-07:18/6   16:38	07:19 11:15-12:01/46   16:29
18	05:39 06:02-06:23/21   20:30	06:09   19:55	06:41   19:04	07:13   18:14	06:50 07:13-07:14/1   16:37	07:20 11:16-12:02/46   16:30
19	05:40 06:03-06:23/20   20:29	06:10   19:54	06:42   19:03	07:14   18:13	06:51   16:36	07:20 11:15-12:02/47   16:30
20	05:41 06:04-06:22/18   20:28	06:11   19:52	06:43   19:01	07:15   18:11	06:52   16:35	07:21 11:16-12:03/47   16:31
21	05:42 06:04-06:20/16   20:28	06:12   19:51	06:44   18:59	07:16   18:10	06:54   16:35	07:21 11:16-12:03/47   16:31
22	05:42 06:06-06:19/13   20:27	06:13   19:49	06:45   18:58	07:17   18:08	06:55   16:34	07:22 11:17-12:04/47   16:31
23	05:43 06:09-06:17/8   20:26	06:14   19:48	06:46   18:56	07:19   18:07	06:56   16:33	07:23 11:17-12:04/47   16:32
24	05:44 06:15-06:47   20:25	06:15   19:46	06:47   18:54	07:20   18:05	06:57   16:33	07:23 11:17-12:04/47   16:33
25	05:45 06:16-06:48   20:24	06:16   19:45	06:48   18:52	07:21   17:04	06:58   16:32	07:23 11:18-12:05/47   16:33
26	05:46 06:17-06:49   20:23	06:17   19:43	06:49   18:51	07:22   17:03	06:59   16:32	07:24 11:19-12:05/46   16:34
27	05:47 06:18-06:50   20:22	06:18   19:41	06:50   18:49	07:23   17:01	07:00   16:31	07:24 11:19-12:05/46   16:34
28	05:48 06:19-06:51   20:21	06:19   19:40	06:51   18:47	07:25   17:00	07:02   16:31	07:24 11:21-12:06/45   16:35
29	05:49 06:20-06:52   20:20	06:20   19:38	06:52   18:45	07:26   16:58	07:03   16:30	07:25 11:22-12:06/44   16:36
30	05:50 06:21-06:53   20:19	06:21   19:37	06:53   18:44	07:27   16:57	07:04   16:30	07:25 11:23-12:05/42   16:37
31	05:51 06:22-06:54   20:18	06:22   19:35	06:54   16:56	07:28   297	07:25 11:23-12:05/42   16:37	
Ore potenziali eliofania		461	429	375	345	297
Somma minuti d'ombra		570	0	0	0	269
						1137

### 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:** Shadow Flickering Analysis **WTG:** 18 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (197)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre	
1	07:25	07:12	06:35	06:43	05:57 06:30-07:23/53	05:27	05:27	05:52 06:42-07:22/40	06:23 06:56-07:15/19	06:54	06:29	07:05	
	16:38	17:13	17:48	19:23	19:55	20:26	20:37	20:17	19:33	18:42	16:54	16:29	
2	07:26	07:11	06:33	06:42	05:55 06:30-07:23/53	05:27	05:28	05:53 06:42-07:24/42	06:24 06:59-07:10/11	06:55	06:30	07:06	
	16:39	17:14	17:49	19:24	19:57	20:26	20:37	20:16	19:32	18:40	16:53	16:29	
3	07:26	07:09	06:32	06:40	05:54 06:30-07:22/52	05:26	05:28	05:54 06:41-07:25/44	06:25	06:56	06:32	07:07	
	16:40	17:16	17:50	19:25	19:58	20:27	20:36	20:15	19:30	18:39	16:52	16:29	
4	07:26	07:08	06:30	06:38	05:53 06:29-07:21/52	05:26	05:29	05:55 06:41-07:26/45	06:26	06:57	06:33	07:08	
	16:41	17:17	17:51	19:26	19:59	20:28	20:36	20:14	19:28	18:37	16:51	16:29	
5	07:26	07:07	06:29	06:37	05:51 06:29-07:20/51	05:25	05:30	05:56 06:40-07:27/47	06:27	06:58	06:34	07:09	
	16:42	17:18	17:53	19:27	20:00	20:29	20:36	20:13	19:27	18:35	16:50	16:28	
6	07:26	07:06	06:27	06:35	05:50 06:30-07:19/49	05:25	05:30	05:57 06:40-07:28/48	06:29	07:00	06:35	07:10	
	16:43	17:19	17:54	19:28	20:01	20:29	20:36	20:11	19:25	18:34	16:48	16:28	
7	07:26	07:05	06:25	06:33	05:49 06:30-07:18/48	05:25	05:31	05:58 06:39-07:29/50	06:30	07:01	06:37	07:11	
	16:44	17:21	17:55	19:29	20:02	20:30	20:35	20:10	19:23	18:32	16:47	16:28	
8	07:25	07:04	06:24	06:32	05:48 06:31-07:17/46	05:25	05:31	05:59 06:39-07:30/51	06:31	07:02	06:38	07:12	
	16:45	17:22	17:56	19:30	20:03	20:30	20:35	20:09	19:22	18:30	16:46	16:28	
9	07:25	07:03	06:22	06:30	05:47 06:31-07:16/45	05:24	05:32	06:00 06:39-07:30/51	06:32	07:03	06:39	07:13	
	16:46	17:23	17:57	19:32	20:04	20:31	20:35	20:08	19:20	18:29	16:45	16:28	
10	07:25	07:02	06:20	06:28	07:01-07:12/11	05:45 06:32-07:15/43	05:24	05:33	06:01 06:39-07:31/52	06:33	07:04	06:40	07:14
	16:47	17:25	17:58	19:33	20:05	20:32	20:34	20:06	19:18	18:27	16:44	16:28	
11	07:25	07:00	06:19	06:27	05:44 06:31-07:13/42	05:24	05:33	06:02 06:39-07:31/52	06:34	07:05	06:41	07:14	
	16:48	17:26	18:00	19:34	20:06	20:34	20:34	20:05	19:16	18:25	16:43	16:28	
12	07:25	07:00	06:17	06:25	05:43 06:32-07:11/39	05:24	05:34	06:03 06:38-07:32/54	06:35	07:06	06:43	07:15	
	16:49	17:27	18:01	19:35	20:07	20:33	20:33	20:04	19:15	18:24	16:42	16:28	
13	07:24	06:58	06:15	06:23	05:42 06:32-07:09/37	05:24	05:35	06:04 06:38-07:32/54	06:36	07:07	06:44	07:16	
	16:50	17:28	18:02	19:36	20:08	20:33	20:33	20:02	19:13	18:22	16:41	16:28	
14	07:24	06:57	06:14	06:22	05:41 06:33-07:06/33	05:24	05:36	06:05 06:39-07:32/53	06:37	07:08	06:45	07:17	
	16:51	17:30	18:03	19:37	20:09	20:34	20:32	20:01	19:11	18:20	16:40	16:29	
15	07:23	06:55	06:12	06:20	05:40 06:35-07:05/30	05:24	05:37	06:06 06:39-07:32/53	06:38	07:09	06:46	07:18	
	16:52	17:31	18:04	19:38	20:10	20:34	20:32	20:00	19:10	18:19	16:39	16:29	
16	07:23	06:54	06:10	06:19	05:39 06:36-07:04/28	05:24	05:37	06:07 06:39-07:32/53	06:39	07:11	06:48	07:18	
	16:53	17:32	18:05	19:39	20:11	20:35	20:31	19:58	19:08	18:17	16:38	16:29	
17	07:23	06:53	06:09	06:17	05:38 06:37-07:24/39	05:24	05:38	06:08 06:39-07:32/53	06:40	07:12	06:49	07:19	
	16:55	17:33	18:06	19:40	20:12	20:35	20:31	19:57	19:06	18:16	16:38	16:29	
18	07:22	06:51	06:07	06:16	05:37 06:38-07:01/23	05:24	05:39	06:09 06:40-07:32/52	06:41	07:13	06:50	07:20	
	16:56	17:35	18:07	19:41	20:13	20:35	20:30	19:55	19:04	18:14	16:37	16:30	
19	07:22	06:50	06:05	06:14	05:36 06:39-07:00/21	05:24	05:40	06:10 06:40-07:32/52	06:42	07:14	06:51	07:20	
	16:57	17:36	18:09	19:42	20:14	20:36	20:29	19:54	19:03	18:13	16:36	16:30	
20	07:21	06:48	06:04	06:12	05:36 06:39-07:25/46	05:24	05:41	06:11 06:41-07:31/50	06:43	07:15	06:52	07:21	
	16:58	17:37	18:10	19:44	20:15	20:36	20:28	19:52	19:01	18:11	16:35	16:30	
21	07:20	06:47	06:02	06:11	05:34 06:43-06:56/13	05:24	05:42	06:12 06:42-07:31/49	06:44	07:16	06:54	07:21	
	16:59	17:38	18:11	19:45	20:16	20:36	20:28	19:51	18:59	18:10	16:34	16:31	
22	07:20	06:45	06:00	06:08	05:34 06:48-06:52/4	05:24	05:42	06:13 06:43-07:30/47	06:45	07:17	06:55	07:22	
	17:01	17:39	18:12	19:46	20:17	20:36	20:27	19:49	18:57	18:08	16:34	16:31	
23	07:19	06:44	05:59	06:08	05:33 06:35-07:26/51	05:25	05:43	06:14 06:44-07:30/46	06:46	07:19	06:56	07:22	
	17:02	17:41	18:13	19:47	20:18	20:36	20:26	19:48	18:56	18:07	16:33	16:32	
24	07:18	06:42	05:57	06:06	05:34 06:34-07:26/52	05:25	05:44	06:15 06:46-07:29/43	06:47	07:20	06:57	07:23	
	17:03	17:42	18:14	19:48	20:19	20:37	20:25	19:46	18:54	18:05	16:33	16:32	
25	07:18	06:41	05:55	06:05	05:31 06:33-07:25/52	05:25	05:45	06:16 06:48-07:28/40	06:48	07:21	06:58	07:23	
	17:04	17:43	18:15	19:49	20:20	20:37	20:24	19:45	18:52	17:04	16:32	16:33	
26	07:17	06:39	05:53	06:04	05:32 06:32-07:25/53	05:25	05:46	06:17 06:48-07:27/39	06:49	07:22	06:59	07:24	
	17:05	17:44	18:16	19:50	20:21	20:37	20:23	19:43	18:51	17:02	16:31	16:34	
27	07:16	06:38	05:52	06:02	05:30 06:31-07:25/54	05:26	05:47	06:18 06:49-07:26/37	06:50	06:23	07:00	07:24	
	17:07	17:46	18:17	19:51	20:22	20:37	20:22	19:41	18:49	17:01	16:31	16:34	
28	07:15	06:36	05:50	06:01	05:29 06:31-07:25/54	05:26	05:48	06:19 06:50-07:24/34	06:51	06:24	07:02	07:24	
	17:08	17:47	18:18	19:52	20:22	20:37	20:21	19:40	18:47	17:00	16:31	16:35	
29	07:14	06:48	05:59	06:31-07:24/53	05:29	05:27	05:49 06:44-07:15/31	06:20	06:51-07:23/32	06:52	06:26	07:03	07:25
	17:09	17:40	18:20	19:53	20:23	20:37	20:20	19:38	18:45	16:58	16:30	16:36	
30	07:13	06:47	05:58	06:30-07:23/53	05:28	05:27	05:50 06:43-07:18/35	06:21	06:52-07:21/29	06:53	06:27	07:04	07:25
	17:11	17:41	18:21	19:54	20:24	20:37	20:19	19:37	18:44	16:57	16:30	16:36	
31	07:12	06:45	05:56	06:29	05:28	05:26	05:51 06:43-07:20/37	06:22	06:53-07:18/25	06:28	06:28	07:25	
	17:12	17:42	18:22	19:55	20:25	20:37	20:18	19:35	18:45	16:56	16:30	16:37	
Orre potenziali eliofania	296	296	369	399	450	454	461	429	375	345	297	286	
Somma minuti d'ombra	0	0	0	878	805	0	247	1417	30	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:** Shadow Flickering Analysis **WTG:** 19 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (198)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio   Febbraio	Marzo	Aprile	Maggio	Giugno
1	07:25   07:12	06:35 06:54-07:09/15	06:43	05:57 18:44-19:22/38	05:27
	16:38   17:13	17:48	19:23	19:55	20:26
2	07:26   07:11	06:33 06:52-07:10/18	06:42	05:55 18:44-19:23/39	05:27
	16:39   17:14	17:49	19:24	19:57	20:26
3	07:26   07:09	06:32 06:51-07:12/21	06:40	05:54 18:44-19:23/39	05:26
	16:40   17:16	17:50	19:25	19:58	20:27
4	07:26   07:08	06:30 06:49-07:12/23	06:38	05:53 18:43-19:22/39	05:26
	16:41   17:17	17:51	19:26	19:59	20:28
5	07:26   07:07	06:29 06:48-07:13/25	06:37	05:52 18:43-19:23/40	05:26
	16:42   17:18	17:53	19:27	20:00	20:29
6	07:26   07:06	06:27 06:47-07:12/25	06:35	05:50 18:43-19:23/40	05:25
	16:43   17:20	17:54	19:28	20:01	20:29
7	07:26   07:05	06:25 06:46-07:12/26	06:33	05:49 18:43-19:23/40	05:25
	16:44   17:21	17:55	19:29	20:02	20:30
8	07:25   07:04	06:24 06:47-07:12/25	06:32	05:48 18:43-19:23/40	05:25
	16:45   17:22	17:56	19:30	20:03	20:30
9	07:25   07:03	06:22 06:47-07:12/25	06:30	05:47 18:43-19:23/40	05:24
	16:46   17:23	17:57	19:32	20:04	20:31
10	07:25   07:02	06:20 06:46-07:10/24	06:28	05:46 18:44-19:22/38	05:24
	16:47   17:25	17:58	19:33	20:05	20:32
11	07:25   07:00	06:19 06:47-07:10/23	06:27	05:44 18:43-19:21/38	05:24
	16:48   17:26	18:00	19:34	20:06	20:32
12	07:25   06:59	06:17 06:48-07:09/21	06:25	05:43 18:44-19:21/37	05:24
	16:49   17:27	18:01	19:35	20:07	20:33
13	07:24   06:58	06:15 06:49-07:07/18	06:23	05:42 18:44-19:20/36	05:24
	16:50   17:28	18:02	19:36	20:08	20:33
14	07:24   06:57	06:14 06:51-07:05/14	06:22	05:41 18:44-19:20/36	05:24
	16:51   17:30	18:03	19:37	20:09	20:34
15	07:23   06:55	06:12 06:53-07:01/8	06:20	05:40 18:45-19:19/34	05:24
	16:52   17:31	18:04	19:38	20:10	20:34
16	07:23   06:54	06:10	06:19	05:39 18:47-19:19/32	05:24
	16:54   17:32	18:05	19:39	20:11	20:34
17	07:23   06:53	06:09	06:17	05:38 18:47-19:19/32	05:24
	16:55   17:33	18:06	19:40	20:12	20:35
18	07:22   06:51	06:07	06:16	05:37 18:48-19:18/30	05:24
	16:56   17:35	18:07	19:41	20:13	20:35
19	07:22   06:50	06:05	06:14	05:36 18:49-19:17/28	05:24
	16:57   17:36	18:09	19:42	20:14	20:36
20	07:21   06:48	06:04	06:12	05:35 18:49-19:16/27	05:24
	16:58   17:37	18:10	19:44	20:15	20:36
21	07:20   06:47	06:02	06:11 18:59-19:11/12	05:35 18:50-19:15/25	05:24
	16:59   17:38	18:11	19:45	20:16	20:36
22	07:20   06:45	06:00	06:09 18:55-19:14/19	05:34 18:52-19:14/22	05:24
	17:01   17:40	18:12	19:46	20:17	20:36
23	07:19   06:44	05:59	06:08 18:53-19:16/23	05:33 18:53-19:13/20	05:25
	17:02   17:41	18:13	19:47	20:18	20:36
24	07:18   06:43	05:57	06:07 18:51-19:18/27	05:32 18:55-19:11/16	05:25
	17:03   17:42	18:14	19:48	20:19	20:37
25	07:18   06:41	05:55	06:05 18:49-19:19/30	05:31 18:57-19:10/13	05:25
	17:04   17:43	18:15	19:49	20:20	20:37
26	07:17   06:39	05:53	06:04 18:48-19:20/32	05:31 19:00-19:07/7	05:25
	17:06   17:44	18:16	19:50	20:21	20:37
27	07:16   06:38 07:00-07:02/2	05:52	06:02 18:47-19:20/33	05:30	05:26
	17:07   17:46	18:17	19:51	20:22	20:37
28	07:15   06:36 06:56-07:07/11	05:50	06:01 18:46-19:21/35	05:29	05:26
	17:08   17:47	18:18	19:52	20:22	20:37
29	07:14	06:48	05:59 18:46-19:22/36	05:29	05:27
	17:09	19:20	19:53	20:23	20:37
30	07:13	06:47	05:58 18:44-19:22/38	05:28	05:27
	17:11	19:21	19:54	20:24	20:37
31	07:12	06:45		05:28	
	17:12	19:22		20:25	
Ore potenziali eliofania	296	296	369	399	454
Somma minuti d'ombra	0	13	311	285	826
					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:** Shadow Flickering Analysis **WTG:** 19 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (198)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
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437 192 40 16 67 346 208 192 120 99 425 524 2,665

: Soglia di cut-in dalla curva di potenza

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1   05:28	05:52 18:54-19:31/37	06:23		06:54 07:28-07:48/20	06:29	07:05
20:37	20:17	19:33		18:42	16:55	16:30
2   05:28	05:53 18:54-19:32/38	06:24		06:55 07:26-07:48/22	06:30	07:06
20:37	20:16	19:32		18:40	16:53	16:29
3   05:29	05:54 18:53-19:32/39	06:26		06:56 07:25-07:49/24	06:32	07:07
20:36	20:15	19:30		18:39	16:52	16:29
4   05:29	05:55 18:53-19:32/39	06:27		06:57 07:24-07:49/25	06:33	07:08
20:36	20:14	19:28		18:37	16:51	16:29
5   05:30	05:56 18:53-19:32/39	06:28		06:59 07:24-07:49/25	06:34	07:09
20:36	20:13	19:27		18:35	16:50	16:29
6   05:30	05:57 18:53-19:32/39	06:29		07:00 07:23-07:49/26	06:35	07:10
20:36	20:11	19:25		18:34	16:48	16:28
7   05:31	05:58 18:52-19:32/40	06:30		07:01 07:23-07:48/25	06:37	07:11
20:35	20:10	19:23		18:32	16:47	16:28
8   05:32	05:59 18:52-19:32/40	06:31		07:02 07:23-07:48/25	06:38	07:12
20:35	20:09	19:22		18:30	16:46	16:28
9   05:32	06:00 18:52-19:32/40	06:32		07:03 07:23-07:47/24	06:39	07:13
20:35	20:08	19:20		18:29	16:45	16:28
10   05:33	06:01 18:52-19:32/40	06:33		07:04 07:24-07:46/22	06:40	07:14
20:34	20:06	19:18		18:27	16:44	16:28
11   05:34	06:02 18:53-19:31/38	06:34		07:05 07:26-07:45/19	06:41	07:14
20:34	20:05	19:17		18:25	16:43	16:28
12   05:34	06:03 18:53-19:31/38	06:35		07:06 07:27-07:44/17	06:43	07:15
20:33	20:04	19:15		18:24	16:42	16:28
13   05:35	06:04 18:53-19:30/37	06:36		07:07 07:28-07:42/14	06:44	07:16
20:33	20:02	19:13		18:22	16:41	16:29
14   05:36	06:05 18:53-19:30/37	06:37		07:08 07:29-07:39/10	06:45	07:17
20:32	20:01	19:11		18:21	16:40	16:29
15   05:37	06:06 18:54-19:29/35	06:38		07:09	06:46	07:18
20:32	20:00	19:10		18:19	16:39	16:29
16   05:37	06:07 18:55-19:28/33	06:39		07:11	06:48	07:18
20:31	19:58	19:08		18:17	16:38	16:29
17   05:38	06:08 18:55-19:27/32	06:40		07:12	06:49	07:19
20:31	19:57	19:06		18:16	16:38	16:29
18   05:39	19:08-19:18/10	06:41		07:13	06:50	07:20
20:30	19:55	19:04		18:14	16:37	16:30
19   05:40	19:06-19:21/15	06:42		07:14	06:51	07:20
20:29	19:54	19:03		18:13	16:36	16:30
20   05:41	19:04-19:22/18	06:43		07:15	06:52	07:21
20:28	19:52	19:01		18:11	16:35	16:31
21   05:42	19:02-19:23/21	06:44		07:16	06:53	07:21
20:28	19:51	18:59		18:10	16:35	16:31
22   05:42	19:01-19:25/24	06:45		07:17	06:55	07:22
20:27	19:49	18:57		18:08	16:34	16:31
23   05:43	19:00-19:26/26	06:46		07:19	06:56	07:22
20:26	19:48	18:56		18:07	16:33	16:32
24   05:44	19:00-19:27/27	06:47		07:20	06:57	07:23
20:25	19:46	18:54		18:05	16:33	16:33
25   05:45	18:59-19:28/29	06:48		06:21	06:58	07:23
20:24	19:45	18:52		17:04	16:32	16:33
26   05:46	18:58-19:29/31	06:49		06:22	06:59	07:24
20:23	19:43	18:51		17:03	16:32	16:34
27   05:47	18:58-19:30/32	06:50		06:23	07:00	07:24
20:22	19:41	18:49		17:01	16:31	16:34
28   05:48	18:56-19:29/33	06:51	07:36-07:39/3	06:24	07:02	07:24
20:21	19:40	18:47		17:00	16:31	16:35
29   05:49	18:55-19:30/35	06:52	07:31-07:44/13	06:26	07:03	07:25
20:20	19:38	18:45		16:58	16:30	16:36
30   05:50	18:55-19:31/36	06:53	07:30-07:47/17	06:27	07:04	07:25
20:19	19:37	18:44		16:57	16:30	16:37
31   05:51	18:54-19:31/37	06:52		06:28		07:25
20:18	19:35			16:56		16:37
Ore potenziali eliofania	461	429	375	345	297	286
Somma minuti d'ombra	374	749	33	298	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:** Shadow Flickering Analysis **WTG:** 20 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (199)  
**Assunzioni sui calcoli d'ombra**

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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1   07:25	08:18-08:38/20	07:11	06:35	06:43 07:02-07:08/6	05:57   05:27   05:27   05:52   06:23   06:54   06:29   07:05							
16:38	17:13	17:48		19:23	19:55   20:26   20:37   20:17   19:33   18:42   16:54   16:29							
2   07:25	08:19-08:38/19	07:10	06:33	06:42 07:00-07:09/9	05:55   05:27   05:28   05:53   06:24 06:53-07:03/10   06:55   06:30   07:06							
16:39	17:14	17:49		19:24	19:57   20:26   20:37   20:16   19:32   18:40   16:53   16:29							
3   07:26	08:20-08:38/18	07:09	06:32	06:40 06:59-07:10/11	05:54   05:26   05:28   05:54   06:25 06:50-07:03/13   06:56   06:32   07:07							
16:40	17:16	17:50		19:25	19:58   20:27   20:36   20:15   19:30   18:39   16:52   16:29							
4   07:26	08:21-08:37/16	07:08	06:30	06:38 06:57-07:10/13	05:53   05:26   05:29   05:55   06:26 06:49-07:04/15   06:57   06:33   07:08 08:13-08:18/5							
16:41	17:17	17:51		19:26	19:59   20:28   20:36   20:14   19:28   18:37   16:51   16:29							
5   07:26	08:22-08:37/15	07:07	06:29	06:37 06:55-07:09/14	05:51   05:25   05:30   05:56   06:28 06:48-07:04/16   06:58   06:34   07:09 08:11-08:21/10							
16:42	17:18	17:53		19:27	20:00   20:29   20:36   20:13   19:27   18:35   16:50   16:29							
6   07:26	08:24-08:37/13	07:06	06:27	06:35 06:54-07:09/15	05:50   05:25   05:30   05:57   06:26 06:49-07:04/15   07:00   06:35   07:10 08:10-08:23/13							
16:43	17:19	17:54		19:28	20:01   20:29   20:36   20:11   19:25   18:34   16:48   16:28							
7   07:25	08:26-08:36/10	07:05	06:25	06:33 06:52-07:08/16	05:49   05:25   05:31   05:58   06:30 06:50-07:04/14   07:01   06:37   07:11 08:10-08:24/14							
16:44	17:21	17:55		19:29	20:02   20:30   20:35   20:10   19:23   18:32   16:47   16:28							
8   07:25	08:29-08:34/5	07:04	06:24	06:32 06:52-07:07/15	05:48   05:25   05:31   05:59   06:31 06:51-07:04/13   07:02   06:38   07:12 08:09-08:25/16							
16:45	17:22	17:56		19:30	20:03   20:30   20:35   20:09   19:22   18:30   16:46   16:28							
9   07:25		07:03	06:22	06:30 06:53-07:06/13	05:47   05:24   05:32   06:00   06:32 06:52-07:03/11   07:03   06:39   07:13 08:09-08:27/18							
16:46	17:23	17:57		19:32	20:04   20:31   20:35   20:08   19:20   18:29   16:45   16:28							
10   07:25		07:02	06:20	06:28 06:54-07:04/10	05:45   05:24   05:33   06:01   06:33 06:53-07:02/9   07:04   06:40   07:14 08:09-08:28/19							
16:47	17:25	17:58		19:33	20:05   20:32   20:34   20:06   19:18   18:27   16:44   16:28							
11   07:25		07:00	06:19	06:27	05:44   05:24   05:34   06:02   06:34 06:54-07:01/7   07:05   06:41   07:14 08:08-08:28/20							
16:48	17:26	18:00		19:34	20:06   20:32   20:34   20:05   19:16   18:25   16:43   16:28							
12   07:25		06:59	06:17	06:25	05:43   05:24   05:34   06:03   06:35 06:55-06:58/3   07:06   06:43   07:15 08:08-08:29/21							
16:49	17:27	18:01		19:35	20:07   20:33   20:33   20:04   19:15   18:24   16:42   16:28							
13   07:24		06:58	06:15	06:23	05:42   05:24   05:35   06:04   06:36   07:07   06:44   07:16 08:09-08:30/21							
16:50	17:28	18:02		19:36	20:08   20:33   20:33   20:02   19:13   18:22   16:41   16:28							
14   07:24		06:57	06:14	06:22	05:41   05:24   05:36   06:05   06:37   07:08   06:45   07:17 08:09-08:31/22							
16:51	17:30	18:03		19:37	20:09   20:34   20:32   20:01   19:11   18:20   16:40   16:29							
15   07:23		06:55	06:12	06:20	05:40   05:24   05:37   06:06   06:38   07:09   06:46   07:18 08:09-08:32/22							
16:52	17:31	18:04		19:38	20:10   20:34   20:32   20:00   19:10   18:19   16:39   16:29							
16   07:23		06:54	06:10	06:19	05:39   05:24   05:37   06:07   06:39   07:11   06:47   07:18 08:09-08:32/23							
16:53	17:32	18:05		19:39	20:11   20:34   20:31   20:01   19:09   18:17   16:38   16:29							
17   07:23		06:53	06:09	06:17	05:38   05:24   05:38   06:08   06:40   07:12   06:49   07:19 08:09-08:33/23							
16:55	17:33	18:06		19:40	20:12   20:35   20:30   19:57   19:06   18:16   16:38   16:29							
18   07:22		06:51	06:07	06:16	05:37   05:24   05:39   06:09   06:41   07:13   06:50   07:20 08:09-08:34/24							
16:56	17:35	18:07		19:41	20:13   20:35   20:30   19:55   19:04   18:14   16:37   16:30							
19   07:22		06:50	06:05	06:14	05:36   05:24   05:40   06:10   06:42   07:14   06:51   07:20 08:09-08:34/24							
16:57	17:36	18:09		19:42	20:14   20:35   20:29   19:54   19:03   18:13   16:36   16:30							
20   07:21		06:48	06:04	06:12	05:35   05:24   05:41   06:11   06:43   07:15   06:52   07:21 08:11-08:35/24							
16:58	17:37	18:10		19:44	20:15   20:36   20:28   19:52   19:01   18:11   16:35   16:31							
21   07:20		06:47	06:02	06:11	05:35   05:24   05:42   06:12   06:44   07:16   06:53   07:21 08:11-08:35/24							
16:59	17:38	18:11		19:45	20:16   20:36   20:28   19:51   18:59   18:10   16:35   16:31							
22   07:20		06:45	06:00	06:09	05:34   05:24   05:42   06:13   06:45   07:17   06:55   07:22 08:12-08:36/24							
17:01	17:39	18:12		19:46	20:17   20:36   20:27   19:49   18:57   18:08   16:34   16:31							
23   07:19		06:44	05:59	06:08	05:33   05:25   05:43   06:14   06:46   07:19   06:56   07:22 08:12-08:36/24							
17:02	17:41	18:13		19:47	20:18   20:36   20:26   19:48   18:56   18:07   16:33   16:32							
24   07:18		06:42	05:57	06:06	05:32   05:25   05:44   06:15   06:47   07:20   06:57   07:23 08:12-08:36/24							
17:03	17:42	18:14		19:48	20:19   20:37   20:25   19:46   18:54   18:05   16:33   16:32							
25   07:18		06:41	05:55	06:05	05:31   05:25   05:45   06:16   06:48   06:21   06:58   07:23 08:13-08:37/24							
17:04	17:43	18:15		19:49	20:20   20:37   20:24   19:45   18:52   17:04   16:32   16:33							
26   07:17		06:39	05:53	06:04	05:31   05:25   05:46   06:17   06:49   06:22   06:59   07:24 08:14-08:37/23							
17:06	17:44	18:16		19:50	20:21   20:37   20:23   19:43   18:51   17:02   16:32   16:34							
27   07:16		06:38	05:52	06:02	05:30   05:26   05:47   06:18   06:50   06:23   06:53   07:24 08:14-08:37/23							
17:07	17:46	18:17		19:51	20:22   20:37   20:22   19:41   18:49   17:01   16:31   16:34							
28   07:15		06:36	05:50	06:01	05:29   05:26   05:48   06:19   06:51   06:24   07:02   07:24 08:15-08:38/23							
17:08	17:47	18:18		19:52	20:22   20:37   20:21   19:40   18:47   17:00   16:31   16:35							
29   07:14		06:48	05:59	05:59	05:29   05:27   05:49   06:20   06:52   06:26   07:03   07:25 08:16-08:38/22							
17:09		06:49	05:59	19:20	19:53	20:23   20:37   20:20   19:38   18:45   16:58   16:30   16:36						
30   07:13		06:47	05:58	05:58	05:28   05:27   05:50   06:21   06:53   06:27   07:04   07:25 08:16-08:38/22							
17:11		06:45	05:58	06:45 07:04-07:07/3	05:28   05:27   05:51   06:22   06:53   06:28   07:04   07:25 08:17-08:38/21							
31   07:12		06:45	05:58	19:22	19:54	20:24   20:37   20:19   19:37   18:44   16:57   16:30   16:37						
Orre potenziali eliofania   296		0   369	3	399	450   454   461   429   375	0	0	0	0	126	0	0
Somma minuti d'ombra	116					0	0	0	0	126	0	573

**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:** Shadow Flickering Analysis **WTG:** 21 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (200)  
**Assunzioni sui calcoli d'ombra**

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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1   07:25	07:11 07:32-07:49/17	06:35	06:43	05:57	05:27	05:27	05:52	06:23	06:54	06:29 06:51-07:23/32	07:05	
16:38	17:13	17:48	19:23	19:55	20:26	20:37	20:17	19:33	18:42	16:54	16:29	
2   07:25	07:10 07:31-07:51/20	06:33	06:42	05:55	05:27	05:28	05:53	06:24	06:55	06:30 06:52-07:23/31	07:06	
16:39	17:14	17:49	19:24	19:57	20:26	20:37	20:16	19:32	18:40	16:53	16:29	
3   07:26	07:09 07:30-07:52/22	06:32	06:40	05:54	05:26	05:28	05:54	06:25	06:56	06:32 06:54-07:24/30	07:07	
16:40	17:16	17:50	19:25	19:58	20:27	20:36	20:15	19:30	18:39	16:52	16:29	
4   07:26	07:08 07:29-07:53/24	06:30	06:38	05:53	05:26	05:29	05:55	06:26	06:57	06:33 06:55-07:23/28	07:08	
16:41	17:17	17:51	19:26	19:59	20:28	20:36	20:14	19:28	18:37	16:51	16:29	
5   07:26	07:07 07:27-07:52/25	06:28	06:36	05:51	05:25	05:30	05:56	06:27	06:58	06:34 06:57-07:23/26	07:09	
16:42	17:18	17:53	19:27	20:00	20:29	20:36	20:13	19:27	18:35	16:50	16:28	
6   07:26	07:06 07:27-07:53/26	06:27	06:35	05:50	05:25	05:30	05:57	06:29	07:00	06:35 06:58-07:23/25	07:10	
16:43	17:19	17:54	19:28	20:01	20:29	20:36	20:11	19:25	18:34	16:48	16:28	
7   07:25	07:05 07:25-07:53/28	06:25	06:33	05:49	05:25	05:31	05:58	06:30	07:01	06:37 06:59-07:22/23	07:11	
16:44	17:21	17:55	19:29	20:02	20:30	20:35	20:10	19:23	18:32	16:47	16:28	
8   07:25	07:04 07:24-07:54/30	06:24	06:32	05:48	05:25	05:31	05:59	06:31	07:02	06:38 07:00-07:21/21	07:12	
16:45	17:22	17:56	19:30	20:03	20:30	20:35	20:09	19:22	18:30	16:46	16:28	
9   07:25	07:03 07:23-07:54/31	06:22	06:30	05:47	05:24	05:32	06:00	06:32	07:03	06:39 07:02-07:21/19	07:13	
16:46	17:23	17:57	19:32	20:04	20:31	20:35	20:08	19:20	18:29	16:45	16:28	
10   07:25	07:02 07:21-07:53/32	06:20	06:28	05:45	05:24	05:33	06:01	06:33	07:04	06:40 07:03-07:20/17	07:14	
16:47	17:25	17:58	19:33	20:05	20:32	20:34	20:06	19:18	18:27	16:44	16:28	
11   07:25	07:00 07:20-07:53/33	06:19	06:27	05:44	05:24	05:33	06:02	06:34	07:05	06:41 07:04-07:18/14	07:14	
16:48	17:26	18:00	19:34	20:06	20:32	20:34	20:05	19:16	18:25	16:43	16:28	
12   07:24	06:59 07:19-07:53/34	06:17	06:25	05:43	05:24	05:34	06:03	06:35	07:06	06:43 07:05-07:16/11	07:15	
16:49	17:27	18:01	19:35	20:07	20:33	20:33	20:04	19:15	18:24	16:42	16:28	
13   07:24	06:58 07:19-07:53/34	06:15	06:23	05:42	05:24	05:35	06:04	06:36	07:07	06:44 07:08-07:14/6	07:16	
16:50	17:28	18:02	19:36	20:08	20:33	20:33	20:02	19:13	18:22	16:41	16:28	
14   07:24	06:57 07:18-07:51/33	06:14	06:22	05:41	05:24	05:36	06:05	06:37	07:08	06:45	07:17	
16:51	17:30	18:03	19:37	20:09	20:34	20:32	20:01	19:11	18:20	16:40	16:29	
15   07:23	06:55 07:18-07:51/33	06:12	06:20	05:40	05:24	05:37	06:06	06:38	07:09	06:46	07:18	
16:52	17:31	18:04	19:38	20:10	20:34	20:32	20:00	19:10	18:19	16:39	16:29	
16   07:23	06:54 07:18-07:49/31	06:10	06:19	05:39	05:24	05:37	06:07	06:39	07:11	06:47	07:18	
16:53	17:32	18:05	19:39	20:11	20:34	20:31	20:08	19:08	18:17	16:38	16:29	
17   07:23	06:52 07:18-07:47/29	06:09	06:17	05:38	05:24	05:38	06:08	06:40	07:12	06:49	07:19	
16:55	17:33	18:06	19:40	20:12	20:35	20:30	20:07	19:06	18:16	16:37	16:29	
18   07:22	06:51 07:19-07:43/24	06:07	06:15	05:37	05:24	05:39	06:09	06:41	07:13 07:58-08:06/8	06:50	07:20	
16:56	17:35	18:07	19:41	20:13	20:35	20:30	20:08	19:04	18:14	16:37	16:30	
19   07:22	06:50 07:19-07:42/23	06:05	06:14	05:36	05:24	05:40	06:10	06:42	07:14 07:54-08:09/15	06:51	07:20	
16:57	17:36	18:09	19:42	20:14	20:35	20:29	20:04	19:03	18:13	16:36	16:30	
20   07:21	06:48 07:20-07:42/22	06:04	06:12	05:35	05:24	05:41	06:11	06:43	07:15 07:52-08:10/18	06:52	07:21	
16:58	17:37	18:10	19:43	20:15	20:36	20:28	20:02	19:52	19:01	18:11	16:35	
21   07:20	06:47 07:20-07:40/20	06:02	06:11	05:34	05:24	05:42	06:12	06:44	07:16 07:51-08:11/20	06:53	07:21	
16:59	17:38	18:11	19:45	20:16	20:36	20:28	20:01	19:51	18:59	18:10	16:34	
22   07:20	06:45 07:22-07:39/17	06:00	06:09	05:34	05:24	05:42	06:13	06:45	07:17 07:50-08:13/23	06:55	07:22	
17:01	17:39	18:12	19:46	20:17	20:36	20:27	20:07	19:49	18:57	18:08	16:34	
23   07:19	06:44 07:24-07:36/12	05:58	06:08	05:33	05:25	05:43	06:14	06:46	07:19 07:49-08:13/24	06:56	07:22	
17:02	17:41	18:13	19:47	20:18	20:36	20:26	20:06	19:48	18:56	18:07	16:32	
24   07:18	06:42 07:28-07:33/5	05:57	06:06	05:32	05:25	05:44	06:15	06:47	07:20 07:48-08:14/26	06:57	07:23	
17:03	17:42	18:14	19:48	20:19	20:37	20:25	20:06	19:46	18:54	18:05	16:33	
25   07:18	06:41	05:55	06:05	05:31	05:25	05:45	06:16	06:48	06:21 06:48-07:17/29	06:58	07:23	
17:04	17:43	18:15	19:49	20:20	20:37	20:24	20:07	19:45	18:52	17:04	16:32	
26   07:17	06:39	05:53	06:04	05:31	05:25	05:46	06:17	06:49	06:22 06:47-07:19/32	06:59	07:24	
17:05	17:44	18:16	19:50	20:21	20:37	20:23	20:03	19:43	18:51	17:02	16:31	
27   07:16	06:38	05:52	06:02	05:30	05:26	05:47	06:18	06:50	06:23 06:48-07:21/33	07:00	07:24	
17:07	17:46	18:17	19:51	20:21	20:37	20:22	20:04	19:41	18:49	17:01	16:31	
28   07:15	06:36	05:50	06:01	05:29	05:26	05:48	06:19	06:51	06:24 06:48-07:21/33	07:02	07:24	
17:08	17:47	18:18	19:52	20:22	20:37	20:21	20:04	19:40	18:47	17:00	16:31	
29   07:14 07:36-07:43/7	06:48	05:59	05:29	05:27	05:49	06:20	06:52	06:26	06:48-07:22/34	07:03	07:25	
17:09	17:48	18:19	19:53	20:23	20:37	20:20	20:04	19:38	18:45	16:58	16:36	
30   07:13 07:34-07:46/12	06:47	05:58	05:28	05:27	05:50	06:21	06:53	06:27	06:49-07:23/34	07:04	07:25	
17:11	17:49	18:20	19:54	20:24	20:37	20:19	20:04	19:37	18:44	16:57	16:36	
31   07:12 07:33-07:48/15	06:45	05:28	05:28	05:28	05:51	06:22	06:41	06:27	06:28 06:50-07:23/33	07:05	07:25	
17:12	17:50	18:21	19:22	20:25	20:37	20:18	20:05	19:35	18:46	16:56	16:37	
Ore potenziali elofanìa	296	369	399	450	454	461	429	375	345	297	286	0
Summa minuti d'ombra	34	605	0	0	0	0	0	0	0	362	283	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:** Shadow Flickering Analysis **WTG:** 22 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (201)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo		Aprile		Maggio		Giugno	
1	07:25	07:12	06:35		06:43	18:12-18:45/33	05:57	06:16-06:24/8	05:27	
	16:38	17:13	17:48		19:23		19:56		20:26	
2	07:26	07:11	06:33		06:42	18:13-18:43/30	05:55	06:15-06:25/10	05:27	
	16:39	17:14	17:49		19:24		19:57		20:26	
3	07:26	07:10	06:32		06:40	18:13-18:42/29	05:54	06:14-06:25/11	05:26	
	16:40	17:16	17:50		19:25		19:58		20:27	
4	07:26	07:08	06:30		06:38	18:14-18:41/27	05:53	06:12-06:25/13	05:26	
	16:41	17:17	17:51		19:26		19:59		20:28	
5	07:26	07:07	06:29		06:37	18:15-18:39/24	05:51	06:11-06:25/14	05:25	
	16:42	17:18	17:53		19:27		20:00		20:29	
6	07:26	07:06	06:27		06:35	18:16-18:36/20	05:50	06:10-06:25/15	05:25	
	16:43	17:19	17:54		19:28		20:01		20:29	
7	07:26	07:05	06:25		06:33	18:19-18:34/15	05:49	06:09-06:25/16	05:25	
	16:44	17:21	17:55		19:29		20:02		20:30	
8	07:25	07:04	06:24		06:32	18:24-18:29/5	05:48	06:08-06:24/16	05:25	
	16:45	17:22	17:56		19:30		20:03		20:31	
9	07:25	07:03	06:22		06:30		05:47	06:08-06:24/16	05:24	
	16:46	17:23	17:57		19:32		20:04		20:31	
10	07:25	07:02	06:20		06:28		05:45	06:09-06:23/14	05:24	
	16:47	17:25	17:58		19:33		20:05		20:32	
11	07:25	07:00	06:19		06:27		05:44	06:10-06:22/12	05:24	
	16:48	17:26	18:00		19:34		20:06		20:32	
12	07:25	06:59	06:17		06:25		05:43	06:11-06:21/10	05:24	
	16:49	17:27	18:01		19:35		20:07		20:33	
13	07:24	06:58	06:15		06:23		05:42	06:14-06:19/5	05:24	
	16:50	17:28	18:02		19:36		20:08		20:33	
14	07:24	06:57	06:14		06:22		05:41		05:24	
	16:51	17:30	18:03		19:37		20:09		20:34	
15	07:24	06:55	06:12		06:20		05:40		05:24	
	16:52	17:31	18:04		19:38		20:10		20:34	
16	07:23	06:54	06:10		06:19		05:39		05:24	
	16:53	17:32	18:05		19:39		20:11		20:35	
17	07:23	06:53	06:09	17:28-17:37/9	06:17		05:38		05:24	
	16:55	17:33	18:06		19:40		20:12		20:35	
18	07:22	06:51	06:07	17:24-17:41/17	06:16		05:37		05:24	
	16:56	17:35	18:07		19:41		20:13		20:35	
19	07:22	06:50	06:05	17:21-17:43/22	06:14		05:36		05:24	
	16:57	17:36	18:09		19:42		20:14		20:36	
20	07:21	06:48	06:04	17:19-17:44/25	06:12		05:35		05:24	
	16:58	17:37	18:10		19:44		20:15		20:36	
21	07:20	06:47	06:02	17:18-17:46/28	06:11		05:34		05:24	
	16:59	17:38	18:11		19:45		20:16		20:36	
22	07:20	06:45	06:00	17:16-17:46/30	06:09		05:34		05:24	
	17:01	17:39	18:12		19:46		20:17		20:36	
23	07:19	06:44	05:59	17:15-17:47/32	06:08		05:33		05:25	
	17:02	17:41	18:13		19:47		20:18		20:37	
24	07:18	06:43	05:57	17:14-17:47/33	06:06		05:32		05:25	
	17:03	17:42	18:14		19:48		20:19		20:37	
25	07:18	06:41	05:55	17:14-17:48/34	06:05		05:31		05:25	
	17:04	17:43	18:15		19:49		20:20		20:37	
26	07:17	06:40	05:53	17:13-17:47/34	06:04		05:31		05:25	
	17:06	17:44	18:16		19:50		20:21		20:37	
27	07:16	06:38	05:52	17:12-17:47/35	06:02		05:30		05:26	
	17:07	17:46	18:17		19:51		20:22		20:37	
28	07:15	06:36	05:50	17:12-17:47/35	06:01		05:29		05:26	
	17:08	17:47	18:18		19:52		20:22		20:37	
29	07:14		06:48	18:12-18:47/35	05:59	06:19-06:22/3	05:29		05:27	
	17:09		19:20		19:53		20:23		20:37	
30	07:13		06:47	18:12-18:46/34	05:58	06:18-06:23/5	05:28		05:27	
	17:11		19:21		19:54		20:24		20:37	
31	07:13		06:45	18:12-18:46/34			05:28			
	17:12		19:22				20:25			
Ore potenziali eliofania	296	296	369		399		450		454	0
Summa minuti d'ombra	0	0	437		191		160		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:** Shadow Flickering Analysis **WTG:** 22 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (201)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>Luglio</b>	<b>Agosto</b>	<b>Settembre</b>	<b>Ottobre</b>	<b>Novembre</b>	<b>Dicembre</b>
1	05:27	05:52 06:20-06:31/11	06:23	06:54	06:29	07:05
	20:37	20:17	19:33	18:42	16:54	16:29
2	05:28	05:53 06:19-06:32/13	06:24	06:55	06:31	07:06
	20:37	20:16	19:32	18:40	16:53	16:29
3	05:28	05:54 06:18-06:33/15	06:25	06:56	06:32	07:07
	20:36	20:15	19:30	18:39	16:52	16:29
4	05:29	05:55 06:18-06:34/16	06:26 18:21-18:26/5	06:57	06:33	07:08
	20:36	20:14	19:28	18:37	16:51	16:29
5	05:30	05:56 06:18-06:34/16	06:28 18:16-18:30/14	06:59	06:34	07:09
	20:36	20:13	19:27	18:35	16:50	16:28
6	05:30	05:57 06:19-06:34/15	06:29 18:13-18:32/19	07:00	06:35	07:10
	20:36	20:11	19:25	18:34	16:48	16:28
7	05:31	05:58 06:20-06:35/15	06:30 18:10-18:34/24	07:01	06:37	07:11
	20:35	20:10	19:23	18:32	16:47	16:28
8	05:31	05:59 06:21-06:34/13	06:31 18:09-18:35/26	07:02	06:38	07:12
	20:35	20:09	19:22	18:30	16:46	16:28
9	05:32	06:00 06:22-06:34/12	06:32 18:07-18:36/29	07:03	06:39	07:13
	20:35	20:08	19:20	18:29	16:45	16:28
10	05:33	06:01 06:23-06:34/11	06:33 18:06-18:36/30	07:04	06:40	07:14
	20:34	20:06	19:18	18:27	16:44	16:28
11	05:33	06:02 06:24-06:33/9	06:34 18:05-18:37/32	07:05	06:41	07:14
	20:34	20:05	19:17	18:25	16:43	16:28
12	05:34	06:03 06:25-06:32/7	06:35 18:04-18:37/33	07:06	06:43	07:15
	20:33	20:04	19:15	18:24	16:42	16:28
13	05:35	06:04 06:26-06:31/5	06:36 18:03-18:37/34	07:07	06:44	07:16
	20:33	20:02	19:13	18:22	16:41	16:28
14	05:36	06:05 06:27-06:29/2	06:37 18:02-18:37/35	07:08	06:45	07:17
	20:32	20:01	19:11	18:20	16:40	16:29
15	05:37	06:06	06:38 18:02-18:37/35	07:09	06:46	07:18
	20:32	20:00	19:10	18:19	16:39	16:29
16	05:37	06:07	06:39 18:01-18:36/35	07:11	06:48	07:18
	20:31	19:58	19:08	18:17	16:38	16:29
17	05:38	06:08	06:40 18:01-18:36/35	07:12	06:49	07:19
	20:31	19:57	19:06	18:16	16:38	16:29
18	05:39	06:09	06:41 18:01-18:35/34	07:13	06:50	07:20
	20:30	19:55	19:04	18:14	16:37	16:30
19	05:40	06:10	06:42 18:01-18:34/33	07:14	06:51	07:20
	20:29	19:54	19:03	18:13	16:36	16:30
20	05:41	06:11	06:43 18:01-18:33/32	07:15	06:52	07:21
	20:28	19:52	19:01	18:11	16:35	16:30
21	05:42	06:12	06:44 18:01-18:32/31	07:16	06:54	07:22
	20:28	19:51	18:59	18:10	16:34	16:31
22	05:42	06:13	06:45 18:02-18:31/29	07:17	06:55	07:22
	20:27	19:49	18:57	18:08	16:34	16:31
23	05:43	06:14	06:46 18:03-18:29/26	07:19	06:56	07:23
	20:26	19:48	18:56	18:07	16:33	16:32
24	05:44	06:15	06:47 18:04-18:27/23	07:20	06:57	07:23
	20:25	19:46	18:54	18:05	16:33	16:32
25	05:45	06:16	06:48 18:06-18:25/19	06:21	06:58	07:23
	20:24	19:45	18:52	17:04	16:32	16:33
26	05:46	06:17	06:49 18:09-18:21/12	06:22	06:59	07:24
	20:23	19:43	18:51	17:02	16:31	16:34
27	05:47	06:18	06:50	06:23	07:00	07:24
	20:22	19:41	18:49	17:01	16:31	16:34
28	05:48	06:19	06:51	06:25	07:02	07:24
	20:21	19:40	18:47	17:00	16:31	16:35
29	05:49	06:20	06:52	06:26	07:03	07:25
	20:20	19:38	18:45	16:58	16:30	16:36
30	05:50	06:21	06:53	06:27	07:04	07:25
	20:19	19:37	18:44	16:57	16:30	16:36
31	05:51	06:22-06:29/7	06:22	06:28	07:25	
	20:18	19:35	16:56	16:37		
Ore potenziali eliofania	461	429	375	345	297	286
Summa minuti d'ombra	7	160	625	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:** Shadow Flickering Analysis **WTG:** 23 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (202)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26	07:12	06:35	06:43 18:34-19:00/26	05:57	05:27	05:28	05:52	06:24 18:38-18:49/11	06:55	06:30	07:05
	16:38	17:13	17:48	19:23	19:56	20:26	20:37	20:18	19:34	18:42	16:55	16:30
2	07:26	07:11	06:34	06:42 18:34-19:00/26	05:55	05:27	05:28	05:53	06:25 18:36-18:51/15	06:56	06:31	07:06
	16:39	17:15	17:49	19:24	19:57	20:27	20:37	20:16	19:32	18:41	16:53	16:29
3	07:26	07:10	06:32	06:40 18:34-19:00/26	05:54	05:26	05:29	05:54	06:26 18:34-18:53/19	06:57	06:32	07:07
	16:40	17:16	17:51	19:25	19:58	20:28	20:37	20:15	19:30	18:39	16:52	16:29
4	07:26	07:09	06:30	06:38 18:33-19:00/27	05:53	05:26	05:29	05:55	06:27 18:32-18:54/22	06:58	06:33	07:08
	16:41	17:17	17:52	19:26	19:59	20:28	20:37	20:14	19:29	18:37	16:51	16:29
5	07:26	07:08	06:29	06:37 18:33-18:59/26	05:52	05:26	05:30	05:56	06:28 18:31-18:54/23	06:59	06:34	07:09
	16:42	17:18	17:53	19:27	20:00	20:29	20:36	20:13	19:27	18:35	16:50	16:29
6	07:26	07:07	06:27	06:35 18:34-18:59/25	05:50	05:25	05:30	05:57	06:29 18:29-18:54/25	07:00	06:36	07:10
	16:43	17:20	17:54	19:29	20:01	20:30	20:36	20:12	19:25	18:34	16:49	16:28
7	07:26	07:05	06:26	06:33 18:34-18:57/23	05:49	05:25	05:31	05:58	06:30 18:28-18:54/26	07:01	06:37	07:11
	16:44	17:21	17:55	19:30	20:02	20:30	20:36	20:11	19:24	18:32	16:47	16:28
8	07:26	07:04	06:24	06:32 18:34-18:56/22	05:48	05:25	05:32	05:59	06:31 18:27-18:54/27	07:02	06:38	07:12
	16:45	17:22	17:56	19:31	20:03	20:31	20:35	20:09	19:22	18:30	16:46	16:28
9	07:26	07:03	06:22	06:30 18:36-18:55/19	05:47	05:24	05:32	06:00	06:32 18:27-18:53/26	07:03	06:39	07:13
	16:46	17:23	17:57	19:32	20:04	20:31	20:35	20:08	19:20	18:29	16:45	16:28
10	07:25	07:02	06:21	06:28 18:37-18:52/15	05:46	05:24	05:33	06:01	06:33 18:27-18:53/26	07:04	06:41	07:14
	16:47	17:25	17:59	19:33	20:05	20:32	20:35	20:07	19:19	18:27	16:44	16:28
11	07:25	07:01	06:19	06:27 18:39-18:49/10	05:44	05:24	05:34	06:02	06:34 18:27-18:52/25	07:05	06:42	07:15
	16:48	17:26	18:00	19:34	20:06	20:33	20:34	20:05	19:17	18:26	16:43	16:28
12	07:25	06:59	06:17	06:25	05:43	05:24	05:34	06:03	06:35 18:27-18:52/25	07:06	06:43	07:16
	16:49	17:27	18:01	19:35	20:08	20:33	20:34	20:04	19:15	18:24	16:42	16:28
13	07:25	06:58	06:16	06:24	05:42	05:24	05:35	06:04	06:36 18:27-18:50/23	07:08	06:44	07:16
	16:50	17:29	18:02	19:36	20:09	20:34	20:33	20:03	19:13	18:22	16:41	16:29
14	07:24	06:57	06:14	06:22	05:41	05:24	05:36	06:05	06:37 18:28-18:49/21	07:09	06:45	07:17
	16:51	17:30	18:03	19:37	20:10	20:34	20:33	20:01	19:12	18:21	16:40	16:29
15	07:24	06:56	06:12	06:20	05:40	05:24	05:37	06:06	06:38 18:28-18:47/19	07:10	06:47	07:18
	16:52	17:31	18:04	19:38	20:11	20:35	20:32	20:00	19:10	18:19	16:39	16:29
16	07:23	06:54	06:11	06:19	05:39	05:24	05:37	06:07	06:39 18:30-18:45/15	07:11	06:48	07:19
	16:54	17:32	18:05	19:39	20:12	20:35	20:32	19:58	19:08	18:18	16:39	16:29
17	07:23	06:53	06:09	06:17	05:38	05:24	05:38	06:08	06:40 18:32-18:42/10	07:12	06:49	07:19
	16:55	17:34	18:07	19:41	20:13	20:35	20:31	19:57	19:06	18:16	16:38	16:30
18	07:22	06:51	06:07	06:16	05:37	05:24	05:39	06:09	06:41	07:13	06:50	07:20
	16:56	17:35	18:08	19:42	20:14	20:36	20:30	19:56	19:05	18:14	16:37	16:30
19	07:22	06:50	06:06	06:14	05:36	05:24	05:40	06:10	06:42	07:14	06:51	07:21
	16:57	17:36	18:09	19:43	20:15	20:36	20:30	19:54	19:03	18:13	16:36	16:30
20	07:21	06:49	06:04	06:13	05:36	05:24	05:41	06:11	06:43	07:15	06:53	07:21
	16:58	17:37	18:10	19:44	20:16	20:36	20:29	19:53	19:01	18:11	16:35	16:31
21	07:21	06:47	06:02	06:11	05:35	05:24	05:42	06:12	06:44	07:17	06:54	07:22
	17:00	17:38	18:11	19:45	20:16	20:36	20:28	19:51	18:59	18:10	16:35	16:31
22	07:20	06:46	06:00	06:10	05:34	05:24	05:43	06:13	06:45	07:18	06:55	07:22
	17:01	17:40	18:12	19:46	20:17	20:37	20:27	19:50	18:58	18:08	16:34	16:32
23	07:19	06:44	05:59	06:08	05:33	05:25	05:43	06:14	06:46	07:19	06:56	07:23
	17:02	17:41	18:13	19:47	20:18	20:37	20:26	19:48	18:56	18:07	16:33	16:32
24	07:19	06:43	05:57	06:07	05:32	05:25	05:44	06:15	06:47	07:20	06:57	07:23
	17:03	17:42	18:14	19:48	20:19	20:37	20:26	19:46	18:54	18:06	16:33	16:33
25	07:18	06:41	05:55	06:05	05:32	05:25	05:45	06:16	06:48	06:21	06:59	07:24
	17:04	17:43	18:15	19:49	20:20	20:37	20:25	19:45	18:53	17:04	16:32	16:33
26	07:17	06:40	05:54 17:45-17:53/8	06:04	05:31	05:26	05:46	06:17	06:49	06:22	07:00	07:24
	17:06	17:45	18:17	19:50	20:21	20:37	20:24	19:43	18:51	17:03	16:32	16:34
27	07:16	06:38	05:52 17:42-17:57/15	06:02	05:30	05:26	05:47	06:19	06:50	06:24	07:01	07:25
	17:07	17:46	18:18	19:51	20:22	20:37	20:23	19:42	18:49	17:01	16:31	16:34
28	07:16	06:37	05:50 17:39-17:58/19	06:01	05:29	05:26	05:48	06:20	06:51	06:25	07:02	07:25
	17:08	17:47	18:19	19:53	20:23	20:37	20:22	19:40	18:47	17:00	16:31	16:35
29	07:15		06:49 18:37-18:58/21	06:00	05:29	05:27	05:49	06:21	06:52	06:26	07:03	07:25
	17:09		19:20	19:54	20:24	20:37	20:21	19:39	18:46	16:59	16:30	16:36
30	07:14		06:47 18:36-18:59/23	05:58	05:28	05:27	05:50	06:22	06:53	06:27	07:04	07:25
	17:11		19:21	19:55	20:24	20:37	20:20	19:37	18:44	16:57	16:30	16:37
31	07:13		06:45 18:36-19:00/24		05:28	05:21	05:51	06:23		06:28		07:26
	17:12		19:22		20:25	20:25	20:19	19:35		16:56		16:37
Ore potenziali eliofania	296	296	369	399	450	454	461	429	375	345	297	286
Summa minuti d'ombra	0	0	110	245	0	0	0	0	358	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:** Shadow Flickering Analysis **WTG:** 24 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (203)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>Gennaio</b>	<b>Febbraio</b>	<b>Marzo</b>	<b>Aprile</b>	<b>Maggio</b>	<b>Giugno</b>
1	07:26	07:12 15:54-16:33/39	06:35	06:43	05:57 06:16-06:30/14	05:27
	16:38	17:13	17:48	19:23	19:56	20:26
2	07:26	07:11 15:55-16:33/38	06:34	06:42	05:55 06:15-06:29/14	05:27
	16:39	17:15	17:49	19:24	19:57	20:27
3	07:26	07:10 15:55-16:33/38	06:32	06:40	05:54 06:14-06:28/14	05:26
	16:40	17:16	17:50	19:25	19:58	20:27
4	07:26	07:09 15:56-16:33/37	06:30	06:38	05:53 06:13-06:27/14	05:26
	16:41	17:17	17:52	19:26	19:59	20:28
5	07:26	07:08 15:56-16:33/37	06:29	06:37	05:52 06:11-06:26/15	05:26
	16:42	17:18	17:53	19:27	20:00	20:29
6	07:26	07:07 15:57-16:33/36	06:27	06:35	05:50 06:10-06:26/16	05:25
	16:43	17:20	17:54	19:29	20:01	20:30
7	07:26	07:05 15:57-16:31/34	06:26	06:33	05:49 06:09-06:26/17	05:25
	16:44	17:21	17:55	19:30	20:02	20:30
8	07:26	07:04 15:58-16:31/33	06:24	06:32	05:48 06:08-06:26/18	05:25
	16:45	17:22	17:56	19:31	20:03	20:31
9	07:26	07:03 15:59-16:30/31	06:22	06:30	05:47 06:08-06:26/18	05:24
	16:46	17:23	17:57	19:32	20:04	20:31
10	07:25	07:02 16:01-16:29/28	06:21	06:28	05:46 06:08-06:25/17	05:24
	16:47	17:25	17:59	19:33	20:05	20:32
11	07:25 16:03-16:12/9	07:01 16:01-16:28/27	06:19	06:27	05:44 06:09-06:24/15	05:24
	16:48	17:26	18:00	19:34	20:06	20:33
12	07:25 16:02-16:15/13	06:59 16:03-16:26/23	06:17	06:25	05:43 06:10-06:23/13	05:24
	16:49	17:27	18:01	19:35	20:07	20:33
13	07:25 16:00-16:16/16	06:58 16:06-16:25/19	06:16	06:24	05:42 06:12-06:21/9	05:24
	16:50	17:29	18:02	19:36	20:09	20:34
14	07:24 15:59-16:18/19	06:57 16:08-16:21/13	06:14	06:22	05:41 06:15-06:19/4	05:24
	16:51	17:30	18:03	19:37	20:10	20:34
15	07:24 15:58-16:19/21	06:56	06:12	06:20	05:40	05:24
	16:52	17:31	18:04	19:38	20:11	20:34
16	07:23 15:57-16:21/24	06:54	06:11	06:19	05:39	05:24
	16:54	17:32	18:05	19:39	20:12	20:35
17	07:23 15:56-16:22/26	06:53	06:09	06:17	05:38	05:24
	16:55	17:34	18:07	19:41	20:13	20:35
18	07:22 15:56-16:24/28	06:51	06:07	06:16	05:37	05:24
	16:56	17:35	18:08	19:42	20:14	20:36
19	07:22 15:56-16:25/29	06:50	06:06	06:14	05:36	05:24
	16:57	17:36	18:09	19:43	20:15	20:36
20	07:21 15:55-16:26/31	06:49	06:04	06:13	05:35	05:24
	16:58	17:37	18:10	19:44	20:15	20:36
21	07:21 15:55-16:27/32	06:47	06:02	06:11	05:35	05:24
	17:00	17:38	18:11	19:45	20:16	20:36
22	07:20 15:55-16:28/33	06:46	06:00	06:10	05:34	05:24
	17:01	17:40	18:12	19:46	20:17	20:37
23	07:19 15:54-16:28/34	06:44	05:59	06:08 06:27-06:29/2	05:33	05:25
	17:02	17:41	18:13	19:47	20:18	20:37
24	07:19 15:54-16:29/35	06:43	05:57	06:07 06:26-06:31/5	05:32	05:25
	17:03	17:42	18:14	19:48	20:19	20:37
25	07:18 15:54-16:30/36	06:41	05:55	06:05 06:24-06:31/7	05:32	05:25
	17:04	17:43	18:15	19:49	20:20	20:37
26	07:17 15:54-16:31/37	06:40	05:54	06:04 06:23-06:31/8	05:31	05:26
	17:06	17:45	18:17	19:50	20:21	20:37
27	07:16 15:54-16:31/37	06:38	05:52	06:02 06:22-06:32/10	05:30	05:26
	17:07	17:46	18:18	19:51	20:22	20:37
28	07:15 15:54-16:32/38	06:37	05:50	06:01 06:20-06:31/11	05:29	05:26
	17:08	17:47	18:19	19:53	20:23	20:37
29	07:15 15:54-16:32/38		06:49	06:00 06:19-06:31/12	05:29	05:27
	17:09		19:20	19:54	20:24	20:37
30	07:14 15:54-16:32/38		06:47	05:58 06:18-06:31/13	05:28	05:27
	17:11		19:21	19:55	20:24	20:37
31	07:13 15:54-16:33/39		06:45		05:28	
	17:12		19:22		20:25	
Ore potenziali eliofania	296	296	369	399	450	454
Somma minuti d'ombra	613	433	0	68	198	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:** Shadow Flickering Analysis **WTG:** 24 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (203)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre	
1	05:28	05:52 06:20-06:33/13	06:24	06:54	06:30 15:29-15:58/29	07:05 15:45-15:54/9	
	20:37	20:18	19:34	18:42	16:55	16:30	
2	05:28	05:53 06:19-06:34/15	06:25	06:56	06:31 15:29-16:00/31	07:06	
	20:37	20:16	19:32	18:40	16:53	16:29	
3	05:29	05:54 06:18-06:35/17	06:26	06:57	06:32 15:28-16:01/33	07:07	
	20:37	20:15	19:30	18:39	16:52	16:29	
4	05:29	05:55 06:17-06:35/18	06:27	06:58	06:33 15:27-16:01/34	07:08	
	20:37	20:14	19:29	18:37	16:51	16:29	
5	05:30	05:56 06:18-06:36/18	06:28	06:59	06:34 15:27-16:02/35	07:09	
	20:36	20:13	19:27	18:35	16:50	16:29	
6	05:30	05:57 06:19-06:36/17	06:29	07:00	06:36 15:26-16:03/37	07:10	
	20:36	20:12	19:25	18:34	16:49	16:28	
7	05:31	05:58 06:20-06:36/16	06:30	07:01	06:37 15:26-16:03/37	07:11	
	20:36	20:11	19:24	18:32	16:47	16:28	
8	05:32	05:59 06:21-06:36/15	06:31	07:02	06:38 15:25-16:03/38	07:12	
	20:35	20:09	19:22	18:30	16:46	16:28	
9	05:32	06:00 06:22-06:36/14	06:32	07:03	06:39 15:26-16:04/38	07:13	
	20:35	20:08	19:20	18:29	16:45	16:28	
10	05:33	06:01 06:23-06:37/14	06:33	07:04	06:41 15:25-16:04/39	07:14	
	20:35	20:07	19:18	18:27	16:44	16:28	
11	05:34	06:02 06:24-06:38/14	06:34	07:05	06:42 15:25-16:03/38	07:15	
	20:34	20:05	19:17	18:25	16:43	16:28	
12	05:34	06:03 06:25-06:39/14	06:35	07:06	06:43 15:26-16:04/38	07:16	
	20:34	20:04	19:15	18:24	16:42	16:28	
13	05:35	06:04 06:26-06:39/13	06:36	07:07	06:44 15:26-16:04/38	07:16	
	20:33	20:03	19:13	18:22	16:41	16:29	
14	05:36	06:05 06:27-06:39/12	06:37	07:09	06:45 15:26-16:04/38	07:17	
	20:33	20:01	19:12	18:21	16:40	16:29	
15	05:37	06:06 06:28-06:39/11	06:38	07:10	06:47 15:27-16:04/37	07:18	
	20:32	20:00	19:10	18:19	16:39	16:29	
16	05:37	06:07 06:29-06:39/10	06:39	07:11	06:48 15:27-16:04/37	07:19	
	20:32	19:58	19:08	18:18	16:39	16:29	
17	05:38	06:08 06:30-06:38/8	06:40	07:12	06:49 15:27-16:03/36	07:19	
	20:31	19:57	19:06	18:16	16:38	16:30	
18	05:39	06:09 06:31-06:37/6	06:41	07:13	06:50 15:28-16:03/35	07:20	
	20:30	19:56	19:05	18:14	16:37	16:30	
19	05:40	06:10 06:32-06:36/4	06:42	07:14	06:51 15:29-16:03/34	07:21	
	20:29	19:54	19:03	18:13	16:36	16:30	
20	05:41	06:11 06:33-06:35/2	06:43	07:15	06:53 15:30-16:03/33	07:21	
	20:29	19:53	19:01	18:11	16:35	16:31	
21	05:42	06:12	06:44	07:17	06:54 15:30-16:02/32	07:22	
	20:28	19:51	18:59	18:10	16:35	16:31	
22	05:43	06:13	06:45	07:18	06:55 15:31-16:02/31	07:22	
	20:27	19:50	18:58	18:08	16:34	16:32	
23	05:43	06:14	06:46	07:19	06:56 15:33-16:02/29	07:23	
	20:26	19:48	18:56	18:07	16:33	16:32	
24	05:44	06:15	06:47	07:20	06:57 15:33-16:01/28	07:23	
	20:25	19:46	18:54	18:05	16:33	16:33	
25	05:45	06:16	06:48	06:21	06:58 15:34-16:00/26	07:24	
	20:25	19:45	18:53	17:04	16:32	16:33	
26	05:46	06:17	06:49	06:22	07:00 15:35-16:00/25	07:24	
	20:24	19:43	18:51	17:03	16:32	16:34	
27	05:47	06:18	06:50	06:24 15:44-15:46/2	07:01 15:38-16:00/22	07:24	
	20:23	19:42	18:49	17:01	16:31	16:34	
28	05:48	06:20	06:51	06:25 15:37-15:51/14	07:02 15:39-15:59/20	07:25	
	20:22	19:40	18:47	17:00	16:31	16:35	
29	05:49	06:21	06:52	06:26 15:35-15:55/20	07:03 15:41-15:57/16	07:25	
	20:21	19:39	18:46	16:59	16:30	16:36	
30	05:50	06:24-06:31/7	06:22	06:53	06:27 15:33-15:56/23	07:04 15:42-15:56/14	07:25
	20:20	19:37	18:44	16:57	16:30	16:37	
31	05:51	06:22-06:33/11	06:23		06:28 15:31-15:58/27	07:25	
	20:19	19:35		16:56		16:37	
Ore potenziali eliofania	461	429	375	345	297	286	
Somma minuti d'ombra	18	251	0	86	958	9	

### 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:** Shadow Flickering Analysis **WTG:** 25 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (204)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26	07:12	06:35	06:43	05:57	05:27	05:28	05:52	06:24	06:54	06:30	07:05
	16:38	17:13	17:48	19:23	19:56	20:26	20:37	20:18	19:34	18:42	16:55	16:30
2	07:26	07:11	06:34	06:42	05:55	05:27	05:28	05:53	06:25	06:55	06:31	07:06
	16:39	17:14	17:49	19:24	19:57	20:27	20:37	20:16	19:32	18:40	16:53	16:29
3	07:26	07:10	06:32	06:40	05:54	05:26	05:29	05:54	06:26	06:57	06:32	07:07
	16:40	17:16	17:50	19:25	19:58	20:27	20:37	20:15	19:30	18:39	16:52	16:29
4	07:26	07:09	06:30	06:38	05:53	05:26	05:29	05:55	06:27	06:58	06:33	07:08
	16:41	17:17	17:52	19:26	19:59	20:28	20:37	20:14	19:29	18:37	16:51	16:29
5	07:26	07:08	06:29	06:37	05:52	05:26	05:30	05:56	06:28	06:59	06:34	07:09
	16:42	17:18	17:53	19:27	20:00	20:29	20:36	20:13	19:27	18:35	16:50	16:29
6	07:26	07:07	06:27	06:35	05:50	05:25	05:30	05:57	06:29	07:00	06:36	07:10
	16:43	17:20	17:54	19:29	20:01	20:30	20:36	20:12	19:25	18:34	16:49	16:28
7	07:26	07:05	06:26	06:33	05:49	05:25	05:31	05:58	06:30	07:01	06:37	07:11
	16:44	17:21	17:55	19:30	20:02	20:30	20:36	20:10	19:24	18:32	16:47	16:28
8	07:26	07:04	06:24	06:32	05:48	05:25	05:32	05:59	06:31	07:02	06:38	07:12
	16:45	17:22	17:56	19:31	20:03	20:31	20:35	20:09	19:22	18:30	16:46	16:28
9	07:26	07:03	06:22	06:30	05:47	05:24	05:32	06:00	06:32	07:03	06:39	07:13
	16:46	17:23	17:57	19:32	20:04	20:31	20:35	20:08	19:20	18:29	16:45	16:28
10	07:25	07:02	06:21	06:28	05:46	05:24	05:33	06:01	06:33	07:04	06:40	07:14
	16:47	17:25	17:59	19:33	20:05	20:32	20:35	20:07	19:18	18:27	16:44	16:28
11	07:25	07:01	06:19	06:27	05:44	05:24	05:34	06:02	06:34	07:05	06:42	07:15
	16:48	17:26	18:00	19:34	20:06	20:33	20:34	20:05	19:17	18:25	16:43	16:28
12	07:25	06:59	06:17	06:25	05:43	05:24	05:34	06:03	06:35	07:06	06:43	07:16
	16:49	17:27	18:01	19:35	20:07	20:33	20:34	20:04	19:15	18:24	16:42	16:28
13	07:25	06:58	06:16	06:24	05:42	05:24	05:35	06:04	06:36	07:07	06:44	07:16
	16:50	17:28	18:02	19:36	20:08	20:34	20:33	20:03	19:13	18:22	16:41	16:29
14	07:24	06:57	06:14	06:22	05:41	05:24	05:36	06:05	06:37	07:09	06:45	07:17
	16:51	17:30	18:03	19:37	20:09	20:34	20:33	20:01	19:12	18:21	16:40	16:29
15	07:24	06:55	06:12	06:20	05:40	05:24	05:37	06:06	06:38	07:10	06:47	07:18
	16:52	17:31	18:04	19:38	20:11	20:34	20:32	20:00	19:10	18:19	16:39	16:29
16	07:23	06:54	06:11	06:19	05:39	05:24	05:37	06:07	06:39	07:11	06:48	07:19
	16:54	17:32	18:05	19:39	20:12	20:35	20:31	19:58	19:08	18:17	16:38	16:29
17	07:23	06:53	06:09	06:17	05:38	05:24	05:38	06:08	06:40	07:12	06:49	07:19
	16:55	17:33	18:07	19:41	20:13	20:35	20:31	19:57	19:06	18:16	16:38	16:29
18	07:22	06:51	06:07	06:16	05:37	05:24	05:39	06:09	06:41	07:13	06:50	07:20
	16:56	17:35	18:08	19:42	20:13	20:36	20:30	19:55	19:05	18:14	16:37	16:30
19	07:22	06:50	06:06	06:14	05:36	05:24	05:40	06:10	06:42	07:14	06:51	07:21
	16:57	17:36	18:09	19:43	20:14	20:36	20:29	19:54	19:03	18:13	16:36	16:30
20	07:21	06:49	06:04	06:13	05:35	05:24	05:41	06:11	06:43	07:15	06:53	07:21
	16:58	17:37	18:10	19:44	20:15	20:36	20:29	19:53	19:01	18:11	16:35	16:31
21	07:21	06:47	06:02	06:11	05:35	05:24	05:42	06:12	06:44	07:17	06:54	07:22
	16:59	17:38	18:11	19:45	20:16	20:36	20:28	19:51	18:59	18:10	16:35	16:31
22	07:20	06:46	06:00	06:10	05:34	05:24	05:43	06:13	06:45	07:18	06:55	07:22
	17:01	17:40	18:12	19:46	20:17	20:37	20:27	19:49	18:58	18:08	16:34	16:32
23	07:19	06:44	05:59	06:08	05:33	05:25	05:43	06:14	06:46	07:19	06:56	07:23
	17:02	17:41	18:13	19:47	20:18	20:37	20:26	19:48	18:56	18:07	16:33	16:32
24	07:19	06:43	05:57	06:07	05:32	05:25	05:44	06:15	06:47	07:20	06:57	07:23
	17:03	17:42	18:14	19:48	20:19	20:37	20:25	19:46	18:54	18:05	16:33	16:33
25	07:18	06:41	05:55	06:05	05:31	05:25	05:45	06:16	06:48	06:21	06:58	07:24
	17:04	17:43	18:15	19:49	20:20	20:37	20:25	19:45	18:52	17:04	16:32	16:33
26	07:17	06:40	05:54	06:04	05:31	05:26	05:46	06:17	06:49	06:22	07:00	07:24
	17:06	17:44	18:16	19:50	20:21	20:37	20:24	19:43	18:51	17:03	16:32	16:34
27	07:16	06:38	05:52	06:02	05:30	05:26	05:47	06:18	06:50	06:24	07:01	07:24
	17:07	17:46	18:18	19:51	20:22	20:37	20:23	19:42	18:49	17:01	16:31	16:34
28	07:15	06:37	05:50	06:01	05:29	05:26	05:48	06:19	06:51	06:25	07:02	07:25
	17:08	17:47	18:19	19:52	20:23	20:37	20:22	19:40	18:47	17:00	16:31	16:35
29	07:15		06:48	05:59	05:29	05:27	05:49	06:21	06:52	06:26	07:03	07:25
	17:09		19:20	19:54	20:24	20:37	20:21	19:38	18:46	16:59	16:30	16:36
30	07:14		06:47	05:58	05:28	05:27	05:50	06:22	06:53	06:27	07:04	07:25
	17:11		19:21	19:55	20:24	20:37	20:20	19:37	18:44	16:57	16:30	16:37
31	07:13		06:45		05:28		05:51	06:23		06:28		07:25
	17:12		19:22		20:25		20:19	19:35		16:56		16:37
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345
Somma minuti d'ombra			0	0	0	0	0	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**

**Calcolo:** Shadow Flickering Analysis **WTG:** 27 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (206)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26	07:12	06:35	06:43	05:57	05:27 06:07-06:42/35	05:28 06:08-06:54/46	05:52	06:24	06:54	06:30	07:05
	16:38	17:13	17:48	19:23	19:56	20:26	20:37	20:17	19:34	18:42	16:55	16:30
2	07:26	07:11	06:33	06:42	05:55	05:27 06:06-06:44/38	05:28 06:08-06:53/45	05:53	06:25	06:55	06:31	07:06
	16:39	17:15	17:49	19:24	19:57	20:27	20:37	20:16	19:32	18:40	16:53	16:29
3	07:26	07:10	06:32	06:40	05:54	05:26 06:05-06:44/39	05:29 06:09-06:54/45	05:54	06:26	06:57	06:32	07:07
	16:40	17:16	17:50	19:25	19:58	20:27	20:37	20:15	19:30	18:39	16:52	16:29
4	07:26	07:09	06:30	06:38	05:53	05:26 06:05-06:45/40	05:29 06:09-06:53/44	05:55	06:27	06:58	06:33	07:08
	16:41	17:17	17:52	19:26	19:59	20:28	20:36	20:14	19:29	18:37	16:51	16:29
5	07:26	07:08	06:29	06:37	05:52	05:26 06:05-06:46/41	05:30 06:10-06:53/43	05:56	06:28	06:59	06:34	07:09
	16:42	17:18	17:53	19:27	20:00	20:29	20:36	20:13	19:27	18:35	16:50	16:29
6	07:26	07:06	06:27	06:35	05:50	05:25 06:04-06:46/42	05:30 06:10-06:52/42	05:57	06:29	07:00	06:36	07:10
	16:43	17:20	17:54	19:28	20:01	20:29	20:36	20:12	19:25	18:34	16:49	16:28
7	07:26	07:05	06:26	06:33	05:49	05:25 06:04-06:47/43	05:31 06:11-06:52/41	05:58	06:30	07:01	06:37	07:11
	16:44	17:21	17:55	19:30	20:02	20:30	20:36	20:10	19:24	18:32	16:47	16:28
8	07:26	07:04	06:24	06:32	05:48	05:25 06:04-06:48/44	05:32 06:12-06:52/40	05:59	06:31	07:02	06:38	07:12
	16:45	17:22	17:56	19:31	20:03	20:31	20:35	20:09	19:22	18:30	16:46	16:28
9	07:25	07:03	06:22	06:30	05:47	05:24 06:04-06:48/44	05:32 06:12-06:51/39	06:00	06:32	07:03	06:39	07:13
	16:46	17:23	17:57	19:32	20:04	20:31	20:35	20:08	19:20	18:29	16:45	16:28
10	07:25	07:02	06:21	06:28	05:46	05:24 06:03-06:48/45	05:33 06:13-06:51/38	06:01	06:33	07:04	06:40	07:14
	16:47	17:25	17:59	19:33	20:05	20:32	20:35	20:07	19:18	18:27	16:44	16:28
11	07:25	07:01	06:19	06:27	05:44	05:24 06:03-06:49/46	05:34 06:15-06:51/36	06:02	06:34	07:05	06:42	07:15
	16:48	17:26	18:00	19:34	20:06	20:32	20:34	20:05	19:17	18:25	16:43	16:28
12	07:25	06:59	06:17	06:25	05:43	05:24 06:03-06:49/46	05:34 06:15-06:50/35	06:03	06:35	07:06	06:43	07:16
	16:49	17:27	18:01	19:35	20:07	20:33	20:34	20:04	19:15	18:24	16:42	16:28
13	07:24	06:58	06:16	06:24	05:42	05:24 06:03-06:50/47	05:35 06:16-06:49/33	06:04	06:36	07:07	06:44	07:16
	16:50	17:28	18:02	19:36	20:08	20:33	20:33	20:03	19:13	18:22	16:41	16:29
14	07:24	06:57	06:14	06:22	05:41	05:24 06:03-06:50/47	05:36 06:17-06:49/32	06:05	06:37	07:09	06:45	07:17
	16:51	17:30	18:03	19:37	20:09	20:34	20:33	20:01	19:12	18:21	16:40	16:29
15	07:24	06:55	06:12	06:20	05:40	05:24 06:03-06:50/47	05:37 06:19-06:48/29	06:06	06:38	07:10	06:47	07:18
	16:52	17:31	18:04	19:38	20:10	20:34	20:32	20:00	19:10	18:19	16:39	16:29
16	07:23	06:54	06:11	06:19	05:39	05:24 06:03-06:51/48	05:37 06:20-06:46/26	06:07	06:39	07:11	06:48	07:19
	16:54	17:32	18:05	19:39	20:11	20:35	20:31	20:08	19:15	18:24	16:42	16:28
17	07:23	06:53	06:09	06:17	05:38	05:24 06:03-06:51/48	05:38 06:22-06:44/22	06:08	06:40	07:12	06:49	07:19
	16:55	17:33	18:06	19:40	20:12	20:35	20:31	20:07	19:17	18:26	16:38	16:30
18	07:22	06:51	06:07	06:16	05:37	05:24 06:03-06:51/48	05:39 06:24-06:43/19	06:09	06:41	07:13	06:50	07:20
	16:56	17:35	18:08	19:42	20:13	20:35	20:30	20:05	19:15	18:14	16:37	16:30
19	07:22	06:50	06:06	06:14	05:36	05:24 06:04-06:52/48	05:40 06:27-06:40/13	06:10	06:42	07:14	06:51	07:21
	16:57	17:36	18:09	19:43	20:14	20:36	20:29	20:04	19:15	18:13	16:36	16:30
20	07:21	06:49	06:04	06:13	05:35	05:24 06:04-06:52/48	05:41	06:11	06:43	07:15	06:53	07:21
	16:58	17:37	18:10	19:44	20:15	20:36	20:29	20:02	19:15	18:11	16:35	16:31
21	07:21	06:47	06:02	06:11	05:35	05:24 06:04-06:52/48	05:42	06:12	06:44	07:16	06:54	07:22
	16:59	17:38	18:11	19:45	20:16	20:36	20:28	20:01	19:15	18:10	16:35	16:31
22	07:20	06:46	06:00	06:10	05:34	05:24 06:04-06:52/48	05:43	06:13	06:45	07:18	06:55	07:22
	17:01	17:40	18:12	19:46	20:17	20:37	20:27	20:01	19:15	18:08	16:34	16:32
23	07:19	06:44	05:59	06:08	05:33	05:25 06:04-06:52/48	05:43	06:14	06:46	07:19	06:56	07:23
	17:02	17:41	18:13	19:47	20:18	20:37	20:26	20:01	19:15	18:07	16:33	16:32
24	07:19	06:43	05:57	06:07	05:32 06:19-06:28/9	05:25 06:05-06:53/48	05:44	06:15	06:47	07:20	06:57	07:23
	17:03	17:42	18:14	19:48	20:19	20:37	20:25	20:01	19:15	18:05	16:33	16:33
25	07:18	06:41	05:55	06:05	05:31 06:16-06:32/16	05:25 06:05-06:53/48	05:45	06:16	06:48	06:21	06:58	07:24
	17:04	17:43	18:15	19:49	20:20	20:37	20:24	20:01	19:15	18:05	16:32	16:33
26	07:17	06:40	05:54	06:04	05:31 06:13-06:34/21	05:26 06:05-06:53/48	05:46	06:17	06:49	06:22	07:00	07:24
	17:06	17:44	18:16	19:50	20:21	20:37	20:24	20:01	19:15	18:05	16:32	16:34
27	07:16	06:38	05:52	06:02	05:30 06:11-06:36/25	05:26 06:06-06:53/47	05:47	06:18	06:50	06:24	07:01	07:24
	17:07	17:46	18:18	19:51	20:22	20:37	20:23	20:01	19:15	18:05	16:33	16:34
28	07:15	06:37	05:50	06:01	05:29 06:10-06:38/28	05:26 06:06-06:53/47	05:48	06:19	06:51	06:25	07:02	07:25
	17:08	17:47	18:19	19:52	20:23	20:37	20:22	20:01	19:40	18:47	17:00	16:31
29	07:15	06:36	05:48	05:59	05:29 06:09-06:39/30	05:27 06:07-06:54/47	05:49	06:21	06:52	06:26	07:03	07:25
	17:09	17:49	19:20	19:54	20:23	20:37	20:21	20:01	19:38	18:46	16:59	16:36
30	07:14	06:47	05:58	05:28	05:28 06:08-06:40/32	05:27 06:07-06:53/46	05:50	06:22	06:53	06:27	07:04	07:25
	17:11	17:55	19:21	19:55	20:24	20:37	20:20	20:01	19:37	18:44	16:57	16:37
31	07:13	06:45	05:28	06:07-06:41/34	05:28 06:07-06:41/34	05:51	06:23	06:28	06:28	06:28	07:25	07:25
	17:12	17:52	19:22	19:52	20:25	20:37	20:19	20:01	19:35	16:56	16:56	16:37
Ore potenziali eliofania	296	296	369	399	450	454	461	429	375	345	297	286
Summa minuti d'ombra	0	0	0	0	195	1359	668	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

**Calcolo:** Shadow Flickering Analysis **WTG:** 28 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (207)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26	07:12	06:35	06:43	05:57	05:27	05:28	05:52	06:24	06:54	06:29	07:05
	16:38	17:13	17:48	19:23	19:56	20:26	20:37	20:17	19:34	18:42	16:55	16:30
2	07:26	07:11	06:33	06:42	05:55	05:27	05:28	05:53	06:25	06:55	06:31	07:06
	16:39	17:14	17:49	19:24	19:57	20:27	20:37	20:16	19:32	18:40	16:53	16:29
3	07:26	07:10	06:32	06:40	05:54	05:26	05:29	05:54	06:26	06:57	06:32	07:07
	16:40	17:16	17:50	19:25	19:58	20:27	20:37	20:15	19:30	18:39	16:52	16:29
4	07:26	07:09	06:30	06:38	05:53	05:26	05:29	05:55	06:27	06:58	06:33	07:08
	16:41	17:17	17:52	19:26	19:59	20:28	20:36	20:14	19:29	18:37	16:51	16:29
5	07:26	07:08	06:29	06:37	05:52	05:26	05:30	05:56	06:28	06:59	06:34	07:09
	16:42	17:18	17:53	19:27	20:00	20:29	20:36	20:13	19:27	18:35	16:50	16:29
6	07:26	07:06	06:27	06:35	05:50	05:25	05:30	05:57	06:29	07:00	06:36	07:10
	16:43	17:20	17:54	19:28	20:01	20:29	20:36	20:12	19:25	18:34	16:49	16:28
7	07:26	07:05	06:25	06:33	05:49	05:25	05:31	05:58	06:30	07:01	06:37	07:11
	16:44	17:21	17:55	19:30	20:02	20:30	20:36	20:10	19:24	18:32	16:47	16:28
8	07:26	07:04	06:24	06:32	05:48	05:25	05:32	05:59	06:31	07:02	06:38	07:12
	16:45	17:22	17:56	19:31	20:03	20:31	20:35	20:09	19:22	18:30	16:46	16:28
9	07:25	07:03	06:22	06:30	05:47	05:24	05:32	06:00	06:32	07:03	06:39	07:13
	16:46	17:23	17:57	19:32	20:04	20:31	20:35	20:08	19:20	18:29	16:45	16:28
10	07:25	07:02	06:21	06:28	05:46	05:24	05:33	06:01	06:33	07:04	06:40	07:14
	16:47	17:25	17:59	19:33	20:05	20:32	20:35	20:07	19:18	18:27	16:44	16:28
11	07:25	07:01	06:19	06:27	05:44	05:24	05:34	06:02	06:34	07:05	06:42	07:15
	16:48	17:26	18:00	19:34	20:06	20:32	20:34	20:05	19:17	18:25	16:43	16:28
12	07:25	06:59	06:17	06:25	05:43	05:24	05:34	06:03	06:35	07:06	06:43	07:16
	16:49	17:27	18:01	19:35	20:07	20:33	20:34	20:04	19:15	18:24	16:42	16:28
13	07:24	06:58	06:16	06:24	05:42	05:24	05:35	06:04	06:36	07:07	06:44	07:16
	16:50	17:28	18:02	19:36	20:08	20:33	20:33	20:03	19:13	18:22	16:41	16:29
14	07:24	06:57	06:14	06:22	05:41	05:24	05:36	06:05	06:37	07:09	06:45	07:17
	16:51	17:30	18:03	19:37	20:09	20:34	20:33	20:01	19:12	18:21	16:40	16:29
15	07:24	06:55	06:12	06:20	05:40	05:24	05:37	06:06	06:38	07:10	06:47	07:18
	16:52	17:31	18:04	19:38	20:10	20:34	20:32	20:00	19:10	18:19	16:39	16:29
16	07:23	06:54	06:11	06:19	05:39	05:24	05:37	06:07	06:39	07:11	06:48	07:19
	16:54	17:32	18:05	19:39	20:11	20:35	20:31	19:58	19:08	18:17	16:38	16:29
17	07:23	06:53	06:09	06:17	05:38	05:24	05:38	06:08	06:40	07:12	06:49	07:19
	16:55	17:33	18:06	19:40	20:12	20:35	20:31	19:57	19:06	18:16	16:38	16:29
18	07:22	06:51	06:07	06:16	05:37	05:24	05:39	06:09	06:41	07:13	06:50	07:20
	16:56	17:35	18:08	19:42	20:13	20:35	20:30	19:55	19:05	18:14	16:37	16:30
19	07:22	06:50	06:05	06:14	05:36	05:24	05:40	06:10	06:42	07:14	06:51	07:21
	16:57	17:36	18:09	19:43	20:14	20:36	20:29	19:54	19:03	18:13	16:36	16:30
20	07:21	06:49	06:04	06:13	05:35	05:24	05:41	06:11	06:43	07:15	06:53	07:21
	16:58	17:37	18:10	19:44	20:15	20:36	20:29	19:52	19:01	18:11	16:35	16:31
21	07:21	06:47	06:02	06:11	05:35	05:24	05:42	06:12	06:44	07:16	06:54	07:22
	16:59	17:38	18:11	19:45	20:16	20:36	20:28	19:51	18:59	18:10	16:35	16:31
22	07:20	06:46	06:00	06:10	05:34	05:24	05:43	06:13	06:45	07:18	06:55	07:22
	17:01	17:40	18:12	19:46	20:17	20:37	20:27	19:49	18:58	18:08	16:34	16:31
23	07:19	06:44	05:59	06:08	05:33	05:25	05:43	06:14	06:46	07:19	06:56	07:23
	17:02	17:41	18:13	19:47	20:18	20:37	20:26	19:48	18:56	18:07	16:33	16:32
24	07:19	06:43	05:57	06:07	05:32	05:25	05:44	06:15	06:47	07:20	06:57	07:23
	17:03	17:42	18:14	19:48	20:19	20:37	20:25	19:46	18:54	18:05	16:33	16:33
25	07:18	06:41	05:55	06:05	05:31	05:25	05:45	06:16	06:48	06:21	06:58	07:24
	17:04	17:43	18:15	19:49	20:20	20:37	20:24	19:45	18:52	17:04	16:32	16:33
26	07:17	06:40	05:54	06:04	05:31	05:25	05:46	06:17	06:49	06:22	07:00	07:24
	17:06	17:44	18:16	19:50	20:21	20:37	20:24	19:43	18:51	17:03	16:32	16:34
27	07:16	06:38	05:52	06:02	05:30	05:26	05:47	06:18	06:50	06:23	07:01	07:24
	17:07	17:46	18:18	19:51	20:22	20:37	20:23	19:42	18:49	17:01	16:31	16:34
28	07:15	06:37	05:50	06:01	05:29	05:26	05:48	06:19	06:51	06:25	07:02	07:25
	17:08	17:47	18:19	19:52	20:23	20:37	20:22	19:40	18:47	17:00	16:31	16:35
29	07:15		06:48	05:59	05:29	05:27	05:49	06:20	06:52	06:26	07:03	07:25
	17:09		19:20	19:54	20:23	20:37	20:21	19:38	18:46	16:58	16:30	16:36
30	07:14		06:47	05:58	05:28	05:27	05:50	06:22	06:53	06:27	07:04	07:25
	17:11		19:21	19:55	20:24	20:37	20:20	19:37	18:44	16:57	16:30	16:37
31	07:13		06:45		05:28		05:51	06:23		06:28		07:25
	17:12		19:22		20:25		20:19	19:35		16:56		16:37
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345
Somma minuti d'ombra			0	0	0	0	0	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**

**Calcolo:** Shadow Flickering Analysis **WTG:** 29 - Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0 m) (208)  
**Assunzioni sui calcoli d'ombra**

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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>Gennaio</b>	<b>Febbraio</b>	<b>Marzo</b>	<b>Aprile</b>	<b>Maggio</b>	<b>Giugno</b>	<b>Luglio</b>	<b>Agosto</b>	<b>Settembre</b>	<b>Ottobre</b>	<b>Novembre</b>	<b>Dicembre</b>
1	07:26	07:12 07:39-07:59/20	06:35	06:43	05:57	05:27	05:27	05:52	06:24	06:54	06:29	07:05
	16:38	17:13	17:48	19:23	19:56	20:26	20:37	20:17	19:33	18:42	16:55	16:29
2	07:26	07:11 07:40-07:59/19	06:33	06:42	05:55	05:27	05:28	05:53	06:25	06:55	06:31	07:06
	16:39	17:14	17:49	19:24	19:57	20:27	20:37	20:16	19:32	18:40	16:53	16:29
3	07:26	07:10 07:41-07:58/17	06:32	06:40	05:54	05:26	05:28	05:54	06:26	06:56	06:32	07:07
	16:40	17:16	17:50	19:25	19:58	20:27	20:37	20:15	19:30	18:39	16:52	16:29
4	07:26	07:09 07:43-07:57/14	06:30	06:38	05:53	05:26	05:29	05:55	06:27	06:58	06:33	07:08
	16:41	17:17	17:52	19:26	19:59	20:28	20:36	20:14	19:29	18:37	16:51	16:29
5	07:26	07:08 07:45-07:55/10	06:29	06:37	05:51	05:25	05:30	05:56	06:28	06:59	06:34 07:19-07:22/3	07:09
	16:42	17:18	17:53	19:27	20:00	20:29	20:36	20:13	19:27	18:35	16:50	16:29
6	07:26	07:06	06:27	06:35	05:50	05:25	05:30	05:57	06:29	07:00	06:36 07:15-07:25/10	07:10
	16:43	17:20	17:54	19:28	20:01	20:29	20:36	20:12	19:25	18:34	16:48	16:28
7	07:26	07:05	06:25	06:33	05:49	05:25	05:31	05:58	06:30	07:01	06:37 07:12-07:27/15	07:11
	16:44	17:21	17:55	19:30	20:02	20:30	20:36	20:10	19:23	18:32	16:47	16:28
8	07:26	07:04	06:24	06:32	05:48	05:25	05:31	05:59	06:31	07:02	06:38 07:11-07:28/17	07:12
	16:45	17:22	17:56	19:31	20:03	20:31	20:35	20:09	19:22	18:30	16:46	16:28
9	07:25	07:03	06:22	06:30	05:47	05:24	05:32	06:00	06:32	07:03	06:39 07:11-07:30/19	07:13
	16:46	17:23	17:57	19:32	20:04	20:31	20:35	20:08	19:20	18:29	16:45	16:28
10	07:25	07:02	06:21	06:28	05:45	05:24	05:33	06:01	06:33	07:04	06:40 07:10-07:30/20	07:14
	16:47	17:25	17:59	19:33	20:05	20:32	20:35	20:07	19:18	18:27	16:44	16:28
11	07:25	07:01	06:19	06:27	05:44	05:24	05:34	06:02	06:34	07:05	06:42 07:09-07:31/22	07:15
	16:48	17:26	18:00	19:34	20:06	20:32	20:34	20:05	19:17	18:25	16:43	16:28
12	07:25	06:59	06:17	06:25	05:43	05:24	05:34	06:03	06:35	07:06	06:43 07:10-07:32/22	07:15
	16:49	17:27	18:01	19:35	20:07	20:33	20:34	20:04	19:15	18:24	16:42	16:28
13	07:24	06:58	06:16	06:23	05:42	05:24	05:35	06:04	06:36	07:07	06:44 07:09-07:32/23	07:16
	16:50	17:28	18:02	19:36	20:08	20:33	20:33	20:03	19:13	18:22	16:41	16:28
14	07:24	06:57	06:14	06:22	05:41	05:24	05:36	06:05	06:37	07:08	06:45 07:09-07:32/23	07:17
	16:51	17:30	18:03	19:37	20:09	20:34	20:33	20:01	19:11	18:21	16:40	16:29
15	07:24 07:45-07:46/1	06:55	06:12	06:20	05:40	05:24	05:37	06:06	06:38	07:10	06:46 07:10-07:33/23	07:18
	16:52	17:31	18:04	19:38	20:10	20:34	20:32	20:00	19:10	18:19	16:39	16:29
16	07:23 07:45-07:50/5	06:54	06:11	06:19	05:39	05:24	05:37	06:07	06:39	07:11	06:48 07:11-07:33/22	07:19
	16:53	17:32	18:05	19:39	20:11	20:35	20:31	19:58	19:08	18:17	16:38	16:29
17	07:23 07:44-07:51/7	06:53	06:09	06:17	05:38	05:24	05:38	06:08	06:40	07:12	06:49 07:12-07:33/21	07:19
	16:55	17:33	18:06	19:40	20:12	20:35	20:31	19:57	19:06	18:16	16:38	16:29
18	07:22 07:44-07:53/9	06:51	06:07	06:16	05:37	05:24	05:39	06:09	06:41	07:13	06:50 07:13-07:32/19	07:20
	16:56	17:35	18:08	19:42	20:13	20:35	20:30	19:55	19:05	18:14	16:37	16:30
19	07:22 07:43-07:54/11	06:50	06:05	06:14	05:36	05:24	05:40	06:10	06:42	07:14	06:51 07:15-07:33/18	07:21
	16:57	17:36	18:09	19:43	20:14	20:36	20:29	19:54	19:03	18:13	16:36	16:30
20	07:21 07:42-07:55/13	06:48	06:04	06:13	05:35	05:24	05:41	06:11	06:43	07:15	06:53 07:16-07:32/16	07:21
	16:58	17:37	18:10	19:44	20:15	20:36	20:29	19:52	19:01	18:11	16:35	16:31
21	07:21 07:42-07:57/15	06:47	06:02	06:11	05:35	05:24	05:42	06:12	06:44	07:16	06:54 07:17-07:32/15	07:22
	16:59	17:38	18:11	19:45	20:16	20:36	20:28	19:51	18:59	18:10	16:35	16:31
22	07:20 07:41-07:57/16	06:46	06:00	06:09	05:34	05:24	05:42	06:13	06:45	07:18	06:55 07:18-07:31/13	07:22
	17:01	17:40	18:12	19:46	20:17	20:36	20:27	19:49	18:58	18:08	16:34	16:31
23	07:19 07:40-07:58/18	06:44	05:59	06:08	05:33	05:25	05:43	06:14	06:46	07:19	06:56 07:20-07:31/11	07:23
	17:02	17:41	18:13	19:47	20:18	20:37	20:26	19:48	18:56	18:07	16:33	16:32
24	07:19 07:39-07:58/19	06:43	05:57	06:07	05:32	05:25	05:44	06:15	06:47	07:20	06:57 07:21-07:30/9	07:23
	17:03	17:42	18:14	19:48	20:19	20:37	20:25	19:46	18:54	18:05	16:33	16:32
25	07:18 07:39-08:00/21	06:41	05:55	06:05	05:31	05:25	05:45	06:16	06:48	07:21	06:58 07:22-07:29/7	07:24
	17:04	17:43	18:15	19:49	20:20	20:37	20:24	19:45	18:52	17:04	16:32	16:33
26	07:17 07:38-08:00/22	06:40	05:54	06:04	05:31	05:25	05:46	06:17	06:49	07:22	07:00 07:23-07:28/5	07:24
	17:06	17:44	18:16	19:50	20:21	20:37	20:24	19:43	18:51	17:03	16:32	16:34
27	07:16 07:37-08:00/23	06:38	05:52	06:02	05:30	05:26	05:47	06:18	06:50	06:23	07:01 07:25-07:26/1	07:24
	17:07	17:46	18:17	19:51	20:22	20:37	20:23	19:42	18:49	17:01	16:31	16:34
28	07:15 07:37-08:00/23	06:37	05:50	06:01	05:29	05:26	05:48	06:19	06:51	06:25	07:02	07:25
	17:08	17:47	18:19	19:52	20:23	20:37	20:22	19:40	18:47	17:00	16:31	16:35
29	07:14 07:37-08:00/23		05:48	05:59	05:29	05:27	05:49	06:20	06:52	06:26	07:03	07:25
	17:09		19:20	19:53	20:23	20:37	20:21	19:38	18:45	16:58	16:30	16:36
30	07:14 07:38-08:00/22		06:47	05:58	05:28	05:27	05:50	06:21	06:53	06:27	07:04	07:25
	17:11		19:21	19:55	20:24	20:37	20:20	19:37	18:44	16:57	16:30	16:37
31	07:13 07:38-08:00/22		06:45	05:28	05:51	06:22		06:28				07:25
	17:12		19:22	20:25	20:19	19:35		16:56				16:37
Ore potenziali elofania	296	296	369	399	450	454	461	429	375	345	297	286
Somma minuti d'ombra	270	80	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	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

**Calcolo:** Shadow Flickering Analysis **WTG:** 30 - PowerWind 56**Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giu	Lug	Ago	Sep	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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26	07:12	06:36	06:44	05:57	05:28	05:28	05:52	06:24	06:55	06:30	07:06
	16:39	17:14	17:49	19:23	19:56	20:26	20:37	20:18	19:34	18:43	16:55	16:30
2	07:26	07:11	06:34	06:42	05:56	05:27	05:28	05:53	06:25	06:56	06:31	07:07
	16:40	17:15	17:50	19:25	19:57	20:27	20:37	20:17	19:32	18:41	16:54	16:30
3	07:26	07:10	06:32	06:40	05:55	05:27	05:29	05:54	06:26	06:57	06:32	07:08
	16:41	17:16	17:51	19:26	19:58	20:28	20:37	20:16	19:31	18:39	16:53	16:29
4	07:26	07:09	06:31	06:39	05:53	05:26	05:30	05:55	06:27	06:58	06:34	07:09
	16:41	17:17	17:52	19:27	19:59	20:29	20:37	20:15	19:29	18:38	16:51	16:29
5	07:26	07:08	06:29	06:37	05:52	05:26	05:30	05:56	06:28	06:59	06:35	07:10
	16:42	17:19	17:53	19:28	20:01	20:29	20:37	20:13	19:27	18:36	16:50	16:29
6	07:26	07:07	06:28	06:35	05:51	05:26	05:31	05:57	06:29	07:00	06:36	07:11
	16:43	17:20	17:54	19:29	20:02	20:30	20:36	20:12	19:26	18:34	16:49	16:29
7	07:26	07:06	06:26	06:34	05:50	05:25	05:31	05:58	06:30	07:01	06:37	07:12
	16:44	17:21	17:56	19:30	20:03	20:31	20:36	20:11	19:24	18:32	16:48	16:29
8	07:26	07:05	06:24	06:32	05:48	05:25	05:32	05:59	06:31	07:02	06:38	07:13
	16:45	17:23	17:57	19:31	20:04	20:31	20:36	20:10	19:22	18:31	16:47	16:29
9	07:26	07:04	06:23	06:31	05:47	05:25	05:33	06:00	06:32	07:03	06:40	07:13
	16:46	17:24	17:58	19:32	20:05	20:32	20:35	20:08	19:21	18:29	16:46	16:29
10	07:26	07:02	06:21	06:29	05:46	05:25	05:33	06:01	06:33	07:05	06:41	07:14
	16:47	17:25	17:59	19:33	20:06	20:32	20:35	20:07	19:19	18:28	16:45	16:29
11	07:26	07:01	06:19	06:27	05:45	05:24	05:34	06:02	06:34	07:06	06:42	07:15
	16:48	17:26	18:00	19:34	20:07	20:33	20:35	20:06	19:17	18:26	16:44	16:29
12	07:25	07:00	06:18	06:26	05:44	05:24	05:35	06:04	06:35	07:07	06:43	07:16
	16:50	17:28	18:01	19:36	20:08	20:33	20:34	20:04	19:15	18:24	16:43	16:29
13	07:25	06:59	06:16	06:24	05:43	05:24	05:36	06:05	06:36	07:08	06:45	07:17
	16:51	17:29	18:02	19:37	20:09	20:34	20:34	20:03	19:14	18:23	16:42	16:29
14	07:25	06:57	06:14	06:22	05:42	05:24	05:36	06:06	06:37	07:09	06:46	07:18
	16:52	17:30	18:04	19:38	20:10	20:34	20:33	20:02	19:12	18:21	16:41	16:29
15	07:24	06:56	06:13	06:21	05:41	05:24	05:37	06:07	06:38	07:10	06:47	07:18
	16:53	17:31	18:05	19:39	20:11	20:35	20:33	20:00	19:10	18:19	16:40	16:29
16	07:24	06:55	06:11	06:19	05:40	05:24	05:38	06:08	06:39	07:11	06:48	07:19
	16:54	17:33	18:06	19:40	20:12	20:35	20:32	19:59	19:09	18:18	16:39	16:30
17	07:23	06:53	06:09	06:18	05:39	05:24	05:39	06:09	06:40	07:12	06:49	07:20
	16:55	17:34	18:07	19:41	20:13	20:36	20:31	19:57	19:07	18:16	16:38	16:30
18	07:23	06:52	06:08	06:16	05:38	05:24	05:40	06:10	06:41	07:14	06:51	07:20
	16:56	17:35	18:08	19:42	20:14	20:36	20:31	19:56	19:05	18:15	16:37	16:30
19	07:22	06:50	06:06	06:15	05:37	05:24	05:40	06:11	06:42	07:15	06:52	07:21
	16:58	17:36	18:09	19:43	20:15	20:36	20:30	19:54	19:03	18:13	16:37	16:31
20	07:22	06:49	06:04	06:13	05:36	05:24	05:41	06:12	06:43	07:16	06:53	07:22
	16:59	17:38	18:10	19:44	20:16	20:37	20:29	19:53	19:02	18:12	16:36	16:31
21	07:21	06:48	06:03	06:12	05:35	05:25	05:42	06:13	06:44	07:17	06:54	07:22
	17:00	17:39	18:11	19:45	20:17	20:37	20:28	19:51	19:00	18:10	16:35	16:31
22	07:20	06:46	06:01	06:10	05:34	05:25	05:43	06:14	06:45	07:18	06:55	07:23
	17:01	17:40	18:13	19:46	20:18	20:37	20:28	19:50	18:58	18:09	16:34	16:32
23	07:20	06:45	05:59	06:09	05:33	05:25	05:44	06:15	06:47	07:19	06:57	07:23
	17:02	17:41	18:14	19:47	20:19	20:37	20:27	19:48	18:56	18:07	16:34	16:32
24	07:19	06:43	05:57	06:07	05:33	05:25	05:45	06:16	06:48	07:20	06:58	07:24
	17:04	17:43	18:15	19:49	20:20	20:37	20:26	19:47	18:55	18:06	16:33	16:33
25	07:18	06:42	05:56	06:06	05:32	05:26	05:46	06:17	06:49	06:22	06:59	07:24
	17:05	17:44	18:16	19:50	20:21	20:37	20:25	19:45	18:53	17:04	16:33	16:34
26	07:18	06:40	05:54	06:04	05:31	05:26	05:47	06:18	06:50	06:23	07:00	07:25
	17:06	17:45	18:17	19:51	20:21	20:38	20:24	19:44	18:51	17:03	16:32	16:34
27	07:17	06:39	05:52	06:03	05:31	05:26	05:48	06:19	06:51	06:24	07:01	07:25
	17:07	17:46	18:18	19:52	20:22	20:38	20:23	19:42	18:49	17:02	16:32	16:35
28	07:16	06:37	05:51	06:01	05:30	05:27	05:49	06:20	06:52	06:25	07:02	07:25
	17:09	17:47	18:19	19:53	20:23	20:38	20:22	19:41	18:48	17:00	16:31	16:36
29	07:15		06:49	06:00	05:29	05:27	05:49	06:21	06:53	06:26	07:03	07:25
	17:10		19:20	19:54	20:24	20:38	20:21	19:39	18:46	16:59	16:31	16:36
30	07:14		06:47	05:59	05:29	05:28	05:50	06:22	06:54	06:28	07:04	07:26
	17:11		19:21	19:55	20:25	20:38	20:20	19:37	18:44	16:58	16:30	16:37
31	07:13		06:46		05:28		05:51	06:23		06:29		07:26
	17:12		19:22		20:26		20:19	19:36		16:56		16:38
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345
Somma minuti d'ombra			0	0	0	0	0	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****Calcolo:** Shadow Flickering Analysis **WTG:** 31 - PowerWind 56**Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giu	Lug	Ago	Sep	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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>Gennaio</b>	<b>Febbraio</b>	<b>Marzo</b>	<b>Aprile</b>	<b>Maggio</b>	<b>Giugno</b>	<b>Luglio</b>	<b>Agosto</b>	<b>Settembre</b>	<b>Ottobre</b>	<b>Novembre</b>	<b>Dicembre</b>	
1	07:26	07:12	06:35	06:44	05:57	05:28	05:28	05:53	06:24	06:55	06:30	07:05	
	16:39	17:14	17:49	19:23	19:56	20:26	20:37	20:18	19:34	18:43	16:55	16:30	
2	07:26	07:11	06:34	06:42	05:56	05:27	05:29	05:54	06:25	06:56	06:31	07:06	
	16:40	17:15	17:50	19:25	19:57	20:27	20:37	20:17	19:32	18:41	16:54	16:30	
3	07:26	07:10	06:32	06:41	05:55	05:27	05:29	05:55	06:26	06:57	06:32	07:07	
	16:41	17:16	17:51	19:26	19:58	20:28	20:37	20:16	19:31	18:39	16:53	16:30	
4	07:26	07:09	06:31	06:39	05:53	05:27	05:30	05:56	06:27	06:58	06:33	07:08	
	16:42	17:18	17:52	19:27	19:59	20:28	20:37	20:14	19:29	18:38	16:52	16:29	
5	07:26	07:08	06:29	06:37	05:52	05:26	05:30	05:57	06:28	06:59	06:35	07:09	
	16:43	17:19	17:53	19:28	20:00	20:29	20:36	20:13	19:27	18:36	16:50	16:29	
6	07:26	07:07	06:28	06:36	05:51	05:26	05:31	05:58	06:29	07:00	06:36	07:10	
	16:44	17:20	17:54	19:29	20:01	20:30	20:36	20:12	19:26	18:34	16:49	16:29	
7	07:26	07:06	06:26	06:34	05:50	05:26	05:32	05:59	06:30	07:01	06:37	07:11	
	16:45	17:21	17:56	19:30	20:02	20:30	20:36	20:11	19:24	18:33	16:48	16:29	
8	07:26	07:05	06:24	06:32	05:49	05:25	05:32	06:00	06:31	07:02	06:38	07:12	
	16:46	17:23	17:57	19:31	20:04	20:31	20:36	20:09	19:22	18:31	16:47	16:29	
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	16:47	17:24	17:58	19:32	20:05	20:32	20:35	20:08	19:21	18:29	16:46	16:29	
10	07:26	07:02	06:21	06:29	05:46	05:25	05:34	06:02	06:33	07:05	06:41	07:14	
	16:48	17:25	17:59	19:33	20:06	20:32	20:35	20:07	19:19	18:28	16:45	16:29	
11	07:25	07:01	06:19	06:27	05:45	05:25	05:34	06:03	06:34	07:06	06:42	07:15	
	16:49	17:27	18:00	19:34	20:07	20:33	20:34	20:06	19:17	18:26	16:44	16:29	
12	07:25	07:00	06:18	06:26	05:44	05:25	05:35	06:04	06:35	07:07	06:43	07:16	
	16:50	17:28	18:01	19:35	20:08	20:33	20:34	20:04	19:15	18:24	16:43	16:29	
13	07:25	06:58	06:16	06:24	05:43	05:25	05:36	06:05	06:36	07:08	06:44	07:17	
	16:51	17:29	18:02	19:37	20:09	20:34	20:33	20:03	19:14	18:23	16:42	16:29	
14	07:24	06:57	06:14	06:23	05:42	05:24	05:37	06:06	06:37	07:09	06:46	07:17	
	16:52	17:30	18:04	19:38	20:10	20:34	20:33	20:02	19:12	18:21	16:41	16:29	
15	07:24	06:56	06:13	06:21	05:41	05:24	05:37	06:07	06:38	07:10	06:47	07:18	
	16:53	17:32	18:05	19:39	20:11	20:35	20:32	20:00	19:10	18:20	16:40	16:30	
16	07:24	06:54	06:11	06:19	05:40	05:24	05:38	06:08	06:39	07:11	06:48	07:19	
	16:54	17:33	18:06	19:40	20:12	20:35	20:32	19:59	19:09	18:18	16:39	16:30	
17	07:23	06:53	06:09	06:18	05:39	05:24	05:39	06:09	06:40	07:12	06:49	07:20	
	16:55	17:34	18:07	19:41	20:13	20:35	20:31	19:57	19:07	18:16	16:38	16:30	
18	07:23	06:52	06:08	06:16	05:38	05:25	05:40	06:10	06:41	07:13	06:50	07:20	
	16:57	17:35	18:08	19:42	20:14	20:36	20:30	19:56	19:05	18:15	16:37	16:31	
19	07:22	06:50	06:06	06:15	05:37	05:25	05:41	06:11	06:42	07:15	06:52	07:21	
	16:58	17:37	18:09	19:43	20:15	20:36	20:30	19:54	19:03	18:13	16:37	16:31	
20	07:22	06:49	06:04	06:13	05:36	05:25	05:41	06:12	06:43	07:16	06:53	07:21	
	16:59	17:38	18:10	19:44	20:16	20:36	20:29	19:53	19:02	18:12	16:36	16:31	
21	07:21	06:47	06:03	06:12	05:35	05:25	05:42	06:13	06:44	07:17	06:54	07:22	
	17:00	17:39	18:11	19:45	20:17	20:37	20:28	19:51	19:00	18:10	16:35	16:32	
22	07:20	06:46	06:01	06:10	05:34	05:25	05:43	06:14	06:46	07:18	06:55	07:22	
	17:01	17:40	18:13	19:46	20:18	20:37	20:27	19:50	18:58	18:09	16:35	16:32	
23	07:20	06:45	05:59	06:09	05:34	05:25	05:44	06:15	06:47	07:19	06:56	07:23	
	17:03	17:41	18:14	19:47	20:18	20:37	20:27	19:48	18:56	18:07	16:34	16:33	
24	07:19	06:43	05:57	06:07	05:33	05:26	05:45	06:16	06:48	07:20	06:58	07:23	
	17:04	17:43	18:15	19:48	20:19	20:37	20:26	19:47	18:55	18:06	16:33	16:33	
25	07:18	06:42	05:56	06:06	05:32	05:26	05:46	06:17	06:49	06:22	06:59	07:24	
	17:05	17:44	18:16	19:50	20:20	20:37	20:25	19:45	18:53	17:05	16:33	16:34	
26	07:17	06:40	05:54	06:04	05:31	05:26	05:47	06:18	06:50	06:23	07:00	07:24	
	17:06	17:45	18:17	19:51	20:21	20:37	20:24	19:44	18:51	17:03	16:32	16:34	
27	07:17	06:39	05:52	06:03	05:31	05:27	05:48	06:19	06:51	06:24	07:01	07:25	
	17:08	17:46	18:18	19:52	20:22	20:37	20:23	19:42	18:49	17:02	16:32	16:35	
28	07:16	06:37	05:51	06:01	05:30	05:27	05:49	06:20	06:52	06:25	07:02	07:25	
	17:09	17:47	18:19	19:53	20:23	20:37	20:22	19:40	18:48	17:00	16:31	16:36	
29	07:15		06:49	06:00	05:30	05:27	05:50	06:21	06:53	06:26	07:03	07:25	
	17:10		19:20	19:54	20:24	20:37	20:21	19:39	18:46	16:59	16:31	16:37	
30	07:14		06:47	05:59	05:29	05:28	05:51	06:22	06:54	06:27	07:04	07:25	
	17:11		19:21	19:55	20:25	20:37	20:20	19:37	18:44	16:58	16:31	16:37	
31	07:13		06:46		05:28		05:52	06:23		06:29		07:26	
	17:13		19:22		20:25		20:19	19:36		16:56		16:38	
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345	297
Somma minuti d'ombra			0	0	0	0	0	0	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

**Calcolo:** Shadow Flickering Analysis **WTG:** 32 - PowerWind 56**Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giu	Lug	Ago	Sep	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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26	07:12	06:35	06:44	05:57	05:28	05:28	05:52	06:24	06:55	06:30	07:05
	16:39	17:14	17:48	19:23	19:56	20:26	20:37	20:17	19:34	18:42	16:55	16:30
2	07:26	07:11	06:34	06:42	05:56	05:27	05:29	05:53	06:25	06:56	06:31	07:06
	16:40	17:15	17:50	19:24	19:57	20:27	20:37	20:16	19:32	18:41	16:54	16:30
3	07:26	07:10	06:32	06:40	05:55	05:27	05:29	05:54	06:26	06:57	06:32	07:07
	16:41	17:16	17:51	19:25	19:58	20:27	20:37	20:15	19:30	18:39	16:53	16:30
4	07:26	07:09	06:30	06:39	05:53	05:26	05:30	05:55	06:27	06:58	06:33	07:08
	16:42	17:17	17:52	19:26	19:59	20:28	20:36	20:14	19:29	18:37	16:51	16:29
5	07:26	07:08	06:29	06:37	05:52	05:26	05:30	05:56	06:28	06:59	06:34	07:09
	16:43	17:19	17:53	19:28	20:00	20:29	20:36	20:13	19:27	18:36	16:50	16:29
6	07:26	07:07	06:27	06:35	05:51	05:26	05:31	05:57	06:29	07:00	06:36	07:10
	16:43	17:20	17:54	19:29	20:01	20:29	20:36	20:12	19:25	18:34	16:49	16:29
7	07:26	07:05	06:26	06:34	05:50	05:25	05:31	05:58	06:30	07:01	06:37	07:11
	16:44	17:21	17:55	19:30	20:02	20:30	20:36	20:10	19:24	18:32	16:48	16:29
8	07:26	07:04	06:24	06:32	05:48	05:25	05:32	05:59	06:31	07:02	06:38	07:12
	16:45	17:23	17:57	19:31	20:03	20:31	20:35	20:09	19:22	18:31	16:47	16:29
9	07:25	07:03	06:22	06:30	05:47	05:25	05:33	06:00	06:32	07:03	06:39	07:13
	16:46	17:24	17:58	19:32	20:04	20:31	20:35	20:08	19:20	18:29	16:46	16:29
10	07:25	07:02	06:21	06:29	05:46	05:25	05:33	06:01	06:33	07:04	06:40	07:14
	16:47	17:25	17:59	19:33	20:05	20:32	20:34	20:07	19:19	18:27	16:45	16:29
11	07:25	07:01	06:19	06:27	05:45	05:25	05:34	06:02	06:34	07:05	06:42	07:15
	16:49	17:26	18:00	19:34	20:06	20:32	20:34	20:05	19:17	18:26	16:44	16:29
12	07:25	06:59	06:17	06:26	05:44	05:24	05:35	06:04	06:35	07:06	06:43	07:15
	16:50	17:28	18:01	19:35	20:07	20:33	20:34	20:04	19:15	18:24	16:43	16:29
13	07:24	06:58	06:16	06:24	05:43	05:24	05:36	06:05	06:36	07:08	06:44	07:16
	16:51	17:29	18:02	19:36	20:08	20:33	20:33	20:03	19:13	18:23	16:42	16:29
14	07:24	06:57	06:14	06:22	05:42	05:24	05:36	06:06	06:37	07:09	06:45	07:17
	16:52	17:30	18:03	19:37	20:09	20:34	20:33	20:01	19:12	18:21	16:41	16:29
15	07:24	06:56	06:12	06:21	05:41	05:24	05:37	06:07	06:38	07:10	06:47	07:18
	16:53	17:31	18:05	19:38	20:10	20:34	20:32	20:00	19:10	18:19	16:40	16:30
16	07:23	06:54	06:11	06:19	05:40	05:24	05:38	06:08	06:39	07:11	06:48	07:18
	16:54	17:33	18:06	19:39	20:11	20:35	20:31	19:58	19:08	18:18	16:39	16:30
17	07:23	06:53	06:09	06:18	05:39	05:24	05:39	06:09	06:40	07:12	06:49	07:19
	16:55	17:34	18:07	19:41	20:12	20:35	20:31	19:57	19:07	18:16	16:38	16:30
18	07:22	06:51	06:07	06:16	05:38	05:24	05:40	06:10	06:41	07:13	06:50	07:20
	16:56	17:35	18:08	19:42	20:13	20:35	20:30	19:56	19:05	18:15	16:37	16:30
19	07:22	06:50	06:06	06:14	05:37	05:24	05:40	06:11	06:42	07:14	06:51	07:20
	16:58	17:36	18:09	19:43	20:14	20:36	20:29	19:54	19:03	18:13	16:37	16:31
20	07:21	06:49	06:04	06:13	05:36	05:25	05:41	06:12	06:43	07:15	06:53	07:21
	16:59	17:38	18:10	19:44	20:15	20:36	20:29	19:53	19:01	18:12	16:36	16:31
21	07:21	06:47	06:02	06:11	05:35	05:25	05:42	06:13	06:44	07:17	06:54	07:22
	17:00	17:39	18:11	19:45	20:16	20:36	20:28	19:51	19:00	18:10	16:35	16:32
22	07:20	06:46	06:01	06:10	05:34	05:25	05:43	06:14	06:45	07:18	06:55	07:22
	17:01	17:40	18:12	19:46	20:17	20:36	20:27	19:50	18:58	18:09	16:34	16:32
23	07:19	06:44	05:59	06:08	05:34	05:25	05:44	06:15	06:46	07:19	06:56	07:23
	17:02	17:41	18:13	19:47	20:18	20:37	20:26	19:48	18:56	18:07	16:34	16:33
24	07:19	06:43	05:57	06:07	05:33	05:25	05:45	06:16	06:47	07:20	06:57	07:23
	17:04	17:42	18:14	19:48	20:19	20:37	20:25	19:46	18:54	18:06	16:33	16:33
25	07:18	06:41	05:56	06:06	05:32	05:26	05:46	06:17	06:48	06:21	06:58	07:24
	17:05	17:44	18:16	19:49	20:20	20:37	20:24	19:45	18:53	17:04	16:33	16:34
26	07:17	06:40	05:54	06:04	05:31	05:26	05:47	06:18	06:49	06:22	07:00	07:24
	17:06	17:45	18:17	19:50	20:21	20:37	20:24	19:43	18:51	17:03	16:32	16:34
27	07:16	06:38	05:52	06:03	05:31	05:26	05:48	06:19	06:50	06:24	07:01	07:24
	17:07	17:46	18:18	19:51	20:22	20:37	20:23	19:42	18:49	17:02	16:32	16:35
28	07:15	06:37	05:50	06:01	05:30	05:27	05:49	06:20	06:51	06:25	07:02	07:25
	17:09	17:47	18:19	19:52	20:23	20:37	20:22	19:40	18:48	17:00	16:31	16:36
29	07:15		06:49	06:00	05:29	05:27	05:50	06:21	06:53	06:26	07:03	07:25
	17:10		19:20	19:54	20:23	20:37	20:21	19:39	18:46	16:59	16:31	16:36
30	07:14		06:47	05:59	05:29	05:28	05:51	06:22	06:54	06:27	07:04	07:25
	17:11		19:21	19:55	20:24	20:37	20:20	19:37	18:44	16:58	16:30	16:37
31	07:13		06:45		05:28		05:51	06:23		06:28		07:25
	17:12		19:22		20:25		20:19	19:35		16:56		16:38
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345
Somma minuti d'ombra			0	0	0	0	0	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

**Calcolo:** Shadow Flickering Analysis **WTG:** 33 - PowerWind 56

**Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giu	Lug	Ago	Sep	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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>Gennaio</b>	<b>Febbraio</b>	<b>Marzo</b>	<b>Aprile</b>	<b>Maggio</b>	<b>Giugno</b>	<b>Luglio</b>	<b>Agosto</b>	<b>Settembre</b>	<b>Ottobre</b>	<b>Novembre</b>	<b>Dicembre</b>	
1	07:25	07:12	06:35	06:44	05:57	05:28	05:28	05:52	06:24	06:54	06:29	07:05	
	16:39	17:14	17:48	19:23	19:56	20:26	20:37	20:17	19:34	18:42	16:55	16:30	
2	07:26	07:11	06:34	06:42	05:56	05:27	05:29	05:53	06:25	06:56	06:31	07:06	
	16:40	17:15	17:49	19:24	19:57	20:26	20:37	20:16	19:32	18:41	16:54	16:30	
3	07:26	07:10	06:32	06:40	05:54	05:27	05:29	05:54	06:26	06:57	06:32	07:07	
	16:41	17:16	17:51	19:25	19:58	20:27	20:36	20:15	19:30	18:39	16:52	16:29	
4	07:26	07:09	06:30	06:39	05:53	05:26	05:30	05:55	06:27	06:58	06:33	07:08	
	16:41	17:17	17:52	19:26	19:59	20:28	20:36	20:14	19:29	18:37	16:51	16:29	
5	07:26	07:07	06:29	06:37	05:52	05:26	05:30	05:56	06:28	06:59	06:34	07:09	
	16:42	17:19	17:53	19:27	20:00	20:29	20:36	20:13	19:27	18:36	16:50	16:29	
6	07:26	07:06	06:27	06:35	05:51	05:26	05:31	05:57	06:29	07:00	06:35	07:10	
	16:43	17:20	17:54	19:28	20:01	20:29	20:36	20:12	19:25	18:34	16:49	16:29	
7	07:26	07:05	06:26	06:34	05:49	05:25	05:31	05:58	06:30	07:01	06:37	07:11	
	16:44	17:21	17:55	19:30	20:02	20:30	20:35	20:10	19:24	18:32	16:48	16:29	
8	07:25	07:04	06:24	06:32	05:48	05:25	05:32	05:59	06:31	07:02	06:38	07:12	
	16:45	17:22	17:56	19:31	20:03	20:30	20:35	20:09	19:22	18:31	16:47	16:29	
9	07:25	07:03	06:22	06:30	05:47	05:25	05:33	06:00	06:32	07:03	06:39	07:13	
	16:46	17:24	17:58	19:32	20:04	20:31	20:35	20:08	19:20	18:29	16:46	16:29	
10	07:25	07:02	06:21	06:29	05:46	05:25	05:33	06:01	06:33	07:04	06:40	07:14	
	16:47	17:25	17:59	19:33	20:05	20:32	20:34	20:06	19:18	18:27	16:45	16:29	
11	07:25	07:00	06:19	06:27	05:45	05:25	05:34	06:02	06:34	07:05	06:42	07:14	
	16:48	17:26	18:00	19:34	20:06	20:32	20:34	20:05	19:17	18:26	16:44	16:29	
12	07:25	06:59	06:17	06:25	05:44	05:24	05:35	06:03	06:35	07:06	06:43	07:15	
	16:50	17:28	18:01	19:35	20:07	20:33	20:33	20:04	19:15	18:24	16:43	16:29	
13	07:24	06:58	06:16	06:24	05:43	05:24	05:36	06:04	06:36	07:07	06:44	07:16	
	16:51	17:29	18:02	19:36	20:08	20:33	20:33	20:02	19:13	18:22	16:42	16:29	
14	07:24	06:57	06:14	06:22	05:42	05:24	05:36	06:05	06:37	07:09	06:45	07:17	
	16:52	17:30	18:03	19:37	20:09	20:34	20:32	20:01	19:12	18:21	16:41	16:29	
15	07:24	06:55	06:12	06:21	05:41	05:24	05:37	06:06	06:38	07:10	06:46	07:18	
	16:53	17:31	18:04	19:38	20:10	20:34	20:32	20:00	19:10	18:19	16:40	16:29	
16	07:23	06:54	06:11	06:19	05:40	05:24	05:38	06:07	06:39	07:11	06:48	07:18	
	16:54	17:33	18:05	19:39	20:11	20:34	20:31	19:58	19:08	18:18	16:39	16:30	
17	07:23	06:53	06:09	06:17	05:39	05:24	05:39	06:08	06:40	07:12	06:49	07:19	
	16:55	17:34	18:07	19:40	20:12	20:35	20:31	19:57	19:06	18:16	16:38	16:30	
18	07:22	06:51	06:07	06:16	05:38	05:24	05:40	06:10	06:41	07:13	06:50	07:20	
	16:56	17:35	18:08	19:42	20:13	20:35	20:30	19:55	19:05	18:15	16:37	16:30	
19	07:22	06:50	06:06	06:14	05:37	05:24	05:40	06:11	06:42	07:14	06:51	07:20	
	16:57	17:36	18:09	19:43	20:14	20:36	20:29	19:54	19:03	18:13	16:36	16:31	
20	07:21	06:48	06:04	06:13	05:36	05:25	05:41	06:12	06:43	07:15	06:52	07:21	
	16:59	17:37	18:10	19:44	20:15	20:36	20:28	19:52	19:01	18:12	16:36	16:31	
21	07:20	06:47	06:02	06:11	05:35	05:25	05:42	06:13	06:44	07:16	06:54	07:21	
	17:00	17:39	18:11	19:45	20:16	20:36	20:28	19:51	18:59	18:10	16:35	16:31	
22	07:20	06:46	06:01	06:10	05:34	05:25	05:43	06:14	06:45	07:18	06:55	07:22	
	17:01	17:40	18:12	19:46	20:17	20:36	20:27	19:49	18:58	18:09	16:34	16:32	
23	07:19	06:44	05:59	06:08	05:33	05:25	05:44	06:15	06:46	07:19	06:56	07:22	
	17:02	17:41	18:13	19:47	20:18	20:36	20:26	19:48	18:56	18:07	16:34	16:32	
24	07:18	06:43	05:57	06:07	05:33	05:25	05:45	06:16	06:47	07:20	06:57	07:23	
	17:04	17:42	18:14	19:48	20:19	20:37	20:25	19:46	18:54	18:06	16:33	16:33	
25	07:18	06:41	05:55	06:05	05:32	05:26	05:46	06:17	06:48	06:21	06:58	07:23	
	17:05	17:44	18:15	19:49	20:20	20:37	20:24	19:45	18:53	17:04	16:33	16:34	
26	07:17	06:40	05:54	06:04	05:31	05:26	05:47	06:18	06:49	06:22	06:59	07:24	
	17:06	17:45	18:17	19:50	20:21	20:37	20:23	19:43	18:51	17:03	16:32	16:34	
27	07:16	06:38	05:52	06:03	05:31	05:26	05:48	06:19	06:50	06:23	07:00	07:24	
	17:07	17:46	18:18	19:51	20:22	20:37	20:22	19:42	18:49	17:02	16:32	16:35	
28	07:15	06:37	05:50	06:01	05:30	05:27	05:48	06:20	06:51	06:25	07:02	07:24	
	17:09	17:47	18:19	19:52	20:22	20:37	20:21	19:40	18:47	17:00	16:31	16:36	
29	07:14		06:49	06:00	05:29	05:27	05:49	06:21	06:52	06:26	07:03	07:25	
	17:10		19:20	19:53	20:23	20:37	20:20	19:38	18:46	16:59	16:31	16:36	
30	07:13		06:47	05:58	05:29	05:28	05:50	06:22	06:53	06:27	07:04	07:25	
	17:11		19:21	19:55	20:24	20:37	20:19	19:37	18:44	16:57	16:30	16:37	
31	07:13		06:45		05:28		05:51	06:23		06:28		07:25	
	17:12		19:22		20:25		20:18	19:35		16:56		16:38	
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345	297
Somma minuti d'ombra			0	0	0	0	0	0	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

**Calcolo:** Shadow Flickering Analysis **WTG:** 34 - PowerWind 56

**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26	07:12	06:36	06:44	05:58	05:28	05:29	05:53	06:24	06:55	06:30	07:06
	16:40	17:14	17:49	19:24	19:56	20:26	20:37	20:18	19:34	18:43	16:56	16:31
2	07:26	07:11	06:34	06:43	05:56	05:28	05:29	05:54	06:25	06:56	06:31	07:07
	16:40	17:15	17:50	19:25	19:57	20:27	20:37	20:17	19:33	18:41	16:54	16:30
3	07:26	07:10	06:33	06:41	05:55	05:27	05:30	05:55	06:27	06:57	06:33	07:08
	16:41	17:17	17:51	19:26	19:58	20:28	20:37	20:16	19:31	18:40	16:53	16:30
4	07:26	07:09	06:31	06:39	05:54	05:27	05:30	05:56	06:28	06:58	06:34	07:09
	16:42	17:18	17:52	19:27	20:00	20:29	20:37	20:15	19:29	18:38	16:52	16:30
5	07:26	07:08	06:29	06:38	05:53	05:27	05:31	05:57	06:29	06:59	06:35	07:10
	16:43	17:19	17:54	19:28	20:01	20:29	20:37	20:13	19:28	18:36	16:51	16:30
6	07:26	07:07	06:28	06:36	05:51	05:26	05:31	05:58	06:30	07:01	06:36	07:11
	16:44	17:21	17:55	19:29	20:02	20:30	20:36	20:12	19:26	18:35	16:50	16:30
7	07:26	07:06	06:26	06:34	05:50	05:26	05:32	05:59	06:31	07:02	06:37	07:12
	16:45	17:22	17:56	19:30	20:03	20:31	20:36	20:11	19:24	18:33	16:48	16:29
8	07:26	07:05	06:25	06:33	05:49	05:26	05:33	06:00	06:32	07:03	06:39	07:13
	16:46	17:23	17:57	19:31	20:04	20:31	20:36	20:10	19:23	18:31	16:47	16:29
9	07:26	07:04	06:23	06:31	05:48	05:26	05:33	06:01	06:33	07:04	06:40	07:13
	16:47	17:24	17:58	19:32	20:05	20:32	20:35	20:08	19:21	18:30	16:46	16:29
10	07:26	07:02	06:21	06:29	05:47	05:25	05:34	06:02	06:34	07:05	06:41	07:14
	16:48	17:26	17:59	19:34	20:06	20:32	20:35	20:07	19:19	18:28	16:45	16:29
11	07:26	07:01	06:20	06:28	05:45	05:25	05:35	06:03	06:35	07:06	06:42	07:15
	16:49	17:27	18:01	19:35	20:07	20:33	20:35	20:06	19:17	18:26	16:44	16:29
12	07:25	07:00	06:18	06:26	05:44	05:25	05:35	06:04	06:36	07:07	06:43	07:16
	16:50	17:28	18:02	19:36	20:08	20:33	20:34	20:05	19:16	18:25	16:43	16:30
13	07:25	06:59	06:16	06:24	05:43	05:25	05:36	06:05	06:37	07:08	06:45	07:17
	16:51	17:29	18:03	19:37	20:09	20:34	20:34	20:03	19:14	18:23	16:42	16:30
14	07:25	06:57	06:15	06:23	05:42	05:25	05:37	06:06	06:38	07:09	06:46	07:18
	16:52	17:31	18:04	19:38	20:10	20:34	20:33	20:02	19:12	18:22	16:41	16:30
15	07:24	06:56	06:13	06:21	05:41	05:25	05:38	06:07	06:39	07:10	06:47	07:18
	16:53	17:32	18:05	19:39	20:11	20:35	20:33	20:00	19:11	18:20	16:40	16:30
16	07:24	06:55	06:11	06:20	05:40	05:25	05:39	06:08	06:40	07:11	06:48	07:19
	16:55	17:33	18:06	19:40	20:12	20:35	20:32	19:59	19:09	18:18	16:39	16:30
17	07:23	06:53	06:10	06:18	05:39	05:25	05:39	06:09	06:41	07:13	06:50	07:20
	16:56	17:34	18:07	19:41	20:13	20:36	20:31	19:58	19:07	18:17	16:39	16:31
18	07:23	06:52	06:08	06:17	05:38	05:25	05:40	06:10	06:42	07:14	06:51	07:20
	16:57	17:36	18:08	19:42	20:14	20:36	20:31	19:56	19:05	18:15	16:38	16:31
19	07:22	06:51	06:06	06:15	05:37	05:25	05:41	06:11	06:43	07:15	06:52	07:21
	16:58	17:37	18:10	19:43	20:15	20:36	20:30	19:55	19:04	18:14	16:37	16:31
20	07:22	06:49	06:05	06:14	05:37	05:25	05:42	06:12	06:44	07:16	06:53	07:22
	16:59	17:38	18:11	19:44	20:16	20:37	20:29	19:53	19:02	18:12	16:36	16:32
21	07:21	06:48	06:03	06:12	05:36	05:25	05:43	06:13	06:45	07:17	06:54	07:22
	17:01	17:39	18:12	19:45	20:17	20:37	20:28	19:52	19:00	18:11	16:36	16:32
22	07:21	06:46	06:01	06:11	05:35	05:26	05:44	06:14	06:46	07:18	06:55	07:23
	17:02	17:41	18:13	19:47	20:18	20:37	20:28	19:50	18:58	18:09	16:35	16:33
23	07:20	06:45	05:59	06:09	05:34	05:26	05:44	06:15	06:47	07:19	06:57	07:23
	17:03	17:42	18:14	19:48	20:19	20:37	20:27	19:49	18:57	18:08	16:34	16:33
24	07:19	06:43	05:58	06:08	05:33	05:26	05:45	06:16	06:48	07:21	06:58	07:24
	17:04	17:43	18:15	19:49	20:20	20:37	20:26	19:47	18:55	18:06	16:34	16:34
25	07:18	06:42	05:56	06:06	05:33	05:26	05:46	06:17	06:49	06:22	06:59	07:24
	17:05	17:44	18:16	19:50	20:21	20:37	20:25	19:45	18:53	17:05	16:33	16:34
26	07:18	06:40	05:54	06:05	05:32	05:27	05:47	06:18	06:50	06:23	07:00	07:25
	17:07	17:45	18:17	19:51	20:21	20:38	20:24	19:44	18:52	17:04	16:33	16:35
27	07:17	06:39	05:53	06:03	05:31	05:27	05:48	06:19	06:51	06:24	07:01	07:25
	17:08	17:47	18:18	19:52	20:22	20:38	20:23	19:42	18:50	17:02	16:32	16:36
28	07:16	06:37	05:51	06:02	05:31	05:27	05:49	06:20	06:52	06:25	07:02	07:25
	17:09	17:48	18:19	19:53	20:23	20:38	20:22	19:41	18:48	17:01	16:32	16:36
29	07:15		06:49	06:00	05:30	05:28	05:50	06:21	06:53	06:27	07:03	07:25
	17:10		19:20	19:54	20:24	20:38	20:21	19:39	18:46	16:59	16:31	16:37
30	07:14		06:48	05:59	05:29	05:28	05:51	06:22	06:54	06:28	07:05	07:26
	17:12		19:22	19:55	20:25	20:38	20:20	19:38	18:45	16:58	16:31	16:38
31	07:13		06:46		05:29		05:52	06:23		06:29		07:26
	17:13		19:23		20:26		20:19	19:36		16:57		16:38
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345
Somma minuti d'ombra			0	0	0	0	0	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**

**Calcolo:** Shadow Flickering Analysis **WTG:** 35 - REpower 57/1000 1050-250 57.0 !- hub: 55.0 m (TOT: 83.5 m) (6)  
**Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giug	Lug	Ago	Sot	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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:25	07:11	06:35	06:43	05:57	05:27	05:28	05:52	06:24	06:54	06:29	07:05
	16:39	17:13	17:48	19:23	19:55	20:25	20:36	20:17	19:33	18:42	16:55	16:30
2	07:25	07:10	06:33	06:42	05:55	05:27	05:28	05:53	06:25	06:55	06:30	07:06
	16:39	17:15	17:49	19:24	19:56	20:26	20:36	20:16	19:32	18:40	16:53	16:29
3	07:25	07:09	06:32	06:40	05:54	05:26	05:29	05:54	06:26	06:56	06:32	07:07
	16:40	17:16	17:50	19:25	19:58	20:27	20:36	20:15	19:30	18:39	16:52	16:29
4	07:25	07:08	06:30	06:38	05:53	05:26	05:29	05:55	06:27	06:57	06:33	07:08
	16:41	17:17	17:52	19:26	19:59	20:28	20:36	20:14	19:28	18:37	16:51	16:29
5	07:25	07:07	06:29	06:37	05:52	05:26	05:30	05:56	06:28	06:58	06:34	07:09
	16:42	17:18	17:53	19:27	20:00	20:28	20:36	20:12	19:27	18:35	16:50	16:29
6	07:25	07:06	06:27	06:35	05:50	05:25	05:30	05:57	06:29	07:00	06:35	07:10
	16:43	17:20	17:54	19:28	20:01	20:29	20:36	20:11	19:25	18:34	16:49	16:29
7	07:25	07:05	06:25	06:33	05:49	05:25	05:31	05:58	06:30	07:01	06:36	07:11
	16:44	17:21	17:55	19:29	20:02	20:30	20:35	20:10	19:23	18:32	16:47	16:29
8	07:25	07:04	06:24	06:32	05:48	05:25	05:32	05:59	06:31	07:02	06:38	07:12
	16:45	17:22	17:56	19:30	20:03	20:30	20:35	20:09	19:22	18:30	16:46	16:28
9	07:25	07:03	06:22	06:30	05:47	05:25	05:32	06:00	06:32	07:03	06:39	07:12
	16:46	17:23	17:57	19:32	20:04	20:31	20:35	20:08	19:20	18:29	16:45	16:28
10	07:25	07:01	06:20	06:28	05:46	05:24	05:33	06:01	06:33	07:04	06:40	07:13
	16:47	17:25	17:58	19:33	20:05	20:31	20:34	20:06	19:18	18:27	16:44	16:28
11	07:25	07:00	06:19	06:27	05:45	05:24	05:34	06:02	06:34	07:05	06:41	07:14
	16:48	17:26	18:00	19:34	20:06	20:32	20:34	20:05	19:16	18:25	16:43	16:28
12	07:24	06:59	06:17	06:25	05:43	05:24	05:35	06:03	06:35	07:06	06:43	07:15
	16:49	17:27	18:01	19:35	20:07	20:32	20:33	20:04	19:15	18:24	16:42	16:29
13	07:24	06:58	06:15	06:24	05:42	05:24	05:35	06:04	06:36	07:07	06:44	07:16
	16:50	17:28	18:02	19:36	20:08	20:33	20:33	20:02	19:13	18:22	16:41	16:29
14	07:24	06:56	06:14	06:22	05:41	05:24	05:36	06:05	06:37	07:08	06:45	07:17
	16:51	17:30	18:03	19:37	20:09	20:33	20:32	20:01	19:11	18:21	16:40	16:29
15	07:23	06:55	06:12	06:20	05:40	05:24	05:37	06:06	06:38	07:09	06:46	07:17
	16:53	17:31	18:04	19:38	20:10	20:34	20:32	19:59	19:10	18:19	16:39	16:29
16	07:23	06:54	06:10	06:19	05:39	05:24	05:38	06:07	06:39	07:11	06:47	07:18
	16:54	17:32	18:05	19:39	20:11	20:34	20:31	19:58	19:08	18:17	16:39	16:29
17	07:22	06:52	06:09	06:17	05:38	05:24	05:38	06:08	06:40	07:12	06:49	07:19
	16:55	17:33	18:06	19:40	20:12	20:35	20:30	19:57	19:06	18:16	16:38	16:30
18	07:22	06:51	06:07	06:16	05:37	05:24	05:39	06:09	06:41	07:13	06:50	07:19
	16:56	17:35	18:07	19:41	20:13	20:35	20:30	19:55	19:04	18:14	16:37	16:30
19	07:21	06:50	06:05	06:14	05:36	05:24	05:40	06:10	06:42	07:14	06:51	07:20
	16:57	17:36	18:09	19:42	20:14	20:35	20:29	19:54	19:03	18:13	16:36	16:30
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	17:01	17:40	18:12	19:46	20:17	20:36	20:27	19:49	18:57	18:08	16:34	16:32
23	07:19	06:44	05:59	06:08	05:33	05:25	05:44	06:14	06:46	07:19	06:56	07:22
	17:02	17:41	18:13	19:47	20:18	20:36	20:26	19:48	18:56	18:07	16:33	16:32
24	07:18	06:42	05:57	06:07	05:32	05:25	05:44	06:15	06:47	07:20	06:57	07:23
	17:03	17:42	18:14	19:48	20:19	20:36	20:25	19:46	18:54	18:05	16:33	16:33
25	07:17	06:41	05:55	06:05	05:32	05:25	05:45	06:16	06:48	06:21	06:58	07:23
	17:04	17:43	18:15	19:49	20:20	20:36	20:24	19:45	18:52	17:04	16:32	16:33
26	07:17	06:39	05:53	06:04	05:31	05:26	05:46	06:17	06:49	06:22	06:59	07:24
	17:06	17:44	18:16	19:50	20:20	20:37	20:23	19:43	18:51	17:03	16:32	16:34
27	07:16	06:38	05:52	06:02	05:30	05:26	05:47	06:18	06:50	06:23	07:00	07:24
	17:07	17:46	18:17	19:51	20:21	20:37	20:22	19:41	18:49	17:01	16:31	16:35
28	07:15	06:36	05:50	06:01	05:30	05:26	05:48	06:19	06:51	06:24	07:01	07:24
	17:08	17:47	18:18	19:52	20:22	20:37	20:21	19:40	18:47	17:00	16:31	16:35
29	07:14		06:48	06:00	05:29	05:27	05:49	06:20	06:52	06:26	07:02	07:24
	17:09		19:20	19:53	20:23	20:37	20:20	19:38	18:45	16:59	16:30	16:36
30	07:13		06:47	05:58	05:28	05:27	05:50	06:22	06:53	06:27	07:04	07:25
	17:11		19:21	19:54	20:24	20:37	20:19	19:37	18:44	16:57	16:30	16:37
31	07:12		06:45		05:28		05:51	06:23		06:28		07:25
	17:12		19:22		20:25		20:18	19:35		16:56		16:38
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345
Somma minuti d'ombra			0	0	0	0	0	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**

**Calcolo:** Shadow Flickering Analysis **WTG:** 36 - REpower 57/1000 1050-250 57.0 !- hub: 55.0 m (TOT: 83.5 m) (7)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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  
437 192 40 16 67 346 208 192 120 99 425 524 2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:25   07:11   06:35   06:43   05:57   05:27   05:28   05:52   06:24   06:54   06:29   07:05											
	16:39   17:13   17:48   19:23   19:55   20:25   20:36   20:17   19:33   18:42   16:55   16:30											
2	07:25   07:10   06:33   06:42   05:55   05:27   05:28   05:53   06:25   06:55   06:30   07:06											
	16:39   17:15   17:49   19:24   19:56   20:26   20:36   20:16   19:32   18:40   16:53   16:29											
3	07:25   07:09   06:32   06:40   05:54   05:26   05:29   05:54   06:26   06:56   06:32   07:07											
	16:40   17:16   17:50   19:25   19:57   20:27   20:36   20:15   19:30   18:39   16:52   16:29											
4	07:25   07:08   06:30   06:38   05:53   05:26   05:29   05:55   06:27   06:57   06:33   07:08											
	16:41   17:17   17:51   19:26   19:59   20:28   20:36   20:14   19:28   18:37   16:51   16:29											
5	07:25   07:07   06:28   06:37   05:52   05:26   05:30   05:56   06:28   06:58   06:34   07:09											
	16:42   17:18   17:53   19:27   20:00   20:28   20:36   20:12   19:27   18:35   16:50   16:29											
6	07:25   07:06   06:27   06:35   05:50   05:25   05:30   05:57   06:29   07:00   06:35   07:10											
	16:43   17:20   17:54   19:28   20:01   20:29   20:35   20:11   19:25   18:34   16:49   16:29											
7	07:25   07:05   06:25   06:33   05:49   05:25   05:31   05:58   06:30   07:01   06:36   07:11											
	16:44   17:21   17:55   19:29   20:02   20:30   20:35   20:10   19:23   18:32   16:47   16:28											
8	07:25   07:04   06:24   06:32   05:48   05:25   05:32   05:59   06:31   07:02   06:38   07:12											
	16:45   17:22   17:56   19:30   20:03   20:30   20:35   20:09   19:22   18:30   16:46   16:28											
9	07:25   07:03   06:22   06:30   05:47   05:25   05:32   06:00   06:32   07:03   06:39   07:12											
	16:46   17:23   17:57   19:31   20:04   20:31   20:34   20:07   19:20   18:29   16:45   16:28											
10	07:25   07:01   06:20   06:28   05:46   05:24   05:33   06:01   06:33   07:04   06:40   07:13											
	16:47   17:25   17:58   19:33   20:05   20:31   20:34   20:06   19:18   18:27   16:44   16:28											
11	07:25   07:00   06:19   06:27   05:44   05:24   05:34   06:02   06:34   07:05   06:41   07:14											
	16:48   17:26   18:00   19:34   20:06   20:32   20:34   20:05   19:16   18:25   16:43   16:28											
12	07:24   06:59   06:17   06:25   05:43   05:24   05:34   06:03   06:35   07:06   06:42   07:15											
	16:49   17:27   18:01   19:35   20:07   20:32   20:33   20:04   19:15   18:24   16:42   16:29											
13	07:24   06:58   06:15   06:23   05:42   05:24   05:35   06:04   06:36   07:07   06:44   07:16											
	16:50   17:28   18:02   19:36   20:08   20:33   20:33   20:02   19:13   18:22   16:41   16:29											
14	07:24   06:56   06:14   06:22   05:41   05:24   05:36   06:05   06:37   07:08   06:45   07:17											
	16:51   17:30   18:03   19:37   20:09   20:33   20:32   20:01   19:11   18:21   16:40   16:29											
15	07:23   06:55   06:12   06:20   05:40   05:24   05:37   06:06   06:38   07:09   06:46   07:17											
	16:53   17:31   18:04   19:38   20:10   20:34   20:32   19:59   19:10   18:19   16:39   16:29											
16	07:23   06:54   06:10   06:19   05:39   05:24   05:38   06:07   06:39   07:10   06:47   07:18											
	16:54   17:32   18:05   19:39   20:11   20:34   20:31   19:58   19:08   18:17   16:39   16:29											
17	07:22   06:52   06:09   06:17   05:38   05:24   05:38   06:08   06:40   07:12   06:49   07:19											
	16:55   17:33   18:06   19:40   20:12   20:35   20:30   19:57   19:06   18:16   16:38   16:30											
18	07:22   06:51   06:07   06:16   05:37   05:24   05:39   06:09   06:41   07:13   06:50   07:19											
	16:56   17:35   18:07   19:41   20:13   20:35   20:30   19:55   19:04   18:14   16:37   16:30											
19	07:21   06:50   06:05   06:14   05:36   05:24   05:40   06:10   06:42   07:14   06:51   07:20											
	16:57   17:36   18:09   19:42   20:14   20:35   20:29   19:54   19:03   18:13   16:36   16:30											
20	07:21   06:48   06:04   06:13   05:36   05:24   05:41   06:11   06:43   07:15   06:52   07:21											
	16:58   17:37   18:10   19:43   20:15   20:36   20:28   19:52   19:01   18:11   16:35   16:31											
21	07:20   06:47   06:02   06:11   05:35   05:24   05:42   06:12   06:44   07:16   06:53   07:21											
	17:00   17:38   18:11   19:44   20:16   20:36   20:27   19:51   18:59   18:10   16:35   16:31											
22	07:20   06:45   06:00   06:10   05:34   05:25   05:43   06:13   06:45   07:17   06:54   07:22											
	17:01   17:40   18:12   19:46   20:17   20:36   20:27   19:49   18:57   18:08   16:34   16:32											
23	07:19   06:44   05:59   06:08   05:33   05:25   05:44   06:14   06:46   07:18   06:56   07:22											
	17:02   17:41   18:13   19:47   20:18   20:36   20:26   19:48   18:56   18:07   16:33   16:32											
24	07:18   06:42   05:57   06:07   05:32   05:25   05:44   06:15   06:47   07:20   06:57   07:23											
	17:03   17:42   18:14   19:48   20:19   20:36   20:25   19:46   18:54   18:05   16:33   16:33											
25	07:17   06:41   05:55   06:05   05:32   05:25   05:45   06:16   06:48   06:21   06:58   07:23											
	17:04   17:43   18:15   19:49   20:20   20:36   20:24   19:44   18:52   17:04   16:32   16:33											
26	07:17   06:39   05:53   06:04   05:31   05:26   05:46   06:17   06:49   06:22   06:59   07:24											
	17:06   17:44   18:16   19:50   20:20   20:37   20:23   19:43   18:51   17:03   16:32   16:34											
27	07:16   06:38   05:52   06:02   05:30   05:26   05:47   06:18   06:50   06:23   07:00   07:24											
	17:07   17:46   18:17   19:51   20:21   20:37   20:22   19:41   18:49   17:01   16:31   16:35											
28	07:15   06:36   05:50   06:01   05:30   05:26   05:48   06:19   06:51   06:24   07:01   07:24											
	17:08   17:47   18:18   19:52   20:22   20:37   20:21   19:40   18:47   17:00   16:31   16:35											
29	07:14   06:48   05:59   05:29   05:27   05:49   06:20   06:52   06:26   07:02   07:24											
	17:09   19:20   19:53   20:23   20:37   20:20   19:38   18:45   16:58   16:30   16:36											
30	07:13   06:47   05:58   05:28   05:27   05:50   06:21   06:53   06:27   07:04   07:25											
	17:11   19:21   19:54   20:24   20:37   20:19   19:37   18:44   16:57   16:30   16:37											
31	07:12   06:45   05:55   05:28   05:26   05:51   06:22   06:56   06:28   07:01   07:25											
	17:12   19:22   19:52   20:25   20:25   20:18   19:35   16:56   16:56   16:37											
Ore potenziali eliofania	296	296	369	399	450	454	461	429	375	345	297	286
Somma minuti d'ombra	0	0	0	0	0	0	0	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**

**Calcolo:** Shadow Flickering Analysis **WTG:** 37 - REpower 57/1000 1050-250 57.0 !- hub: 55.0 m (TOT: 83.5 m) (8)  
**Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giugno	Luglio	Ago	Sep	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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:25	07:11	06:35	06:43	05:57	05:27	05:28	05:52	06:24	06:54	06:29	07:05
	16:39	17:13	17:48	19:23	19:55	20:25	20:36	20:17	19:33	18:42	16:55	16:30
2	07:25	07:10	06:33	06:42	05:55	05:27	05:28	05:53	06:25	06:55	06:30	07:06
	16:39	17:15	17:49	19:24	19:56	20:26	20:36	20:16	19:32	18:40	16:53	16:29
3	07:25	07:09	06:32	06:40	05:54	05:26	05:29	05:54	06:26	06:56	06:32	07:07
	16:40	17:16	17:50	19:25	19:57	20:27	20:36	20:15	19:30	18:39	16:52	16:29
4	07:25	07:08	06:30	06:38	05:53	05:26	05:29	05:55	06:27	06:57	06:33	07:08
	16:41	17:17	17:51	19:26	19:59	20:28	20:36	20:14	19:28	18:37	16:51	16:29
5	07:25	07:07	06:28	06:37	05:52	05:26	05:30	05:56	06:28	06:58	06:34	07:09
	16:42	17:18	17:53	19:27	20:00	20:28	20:36	20:12	19:27	18:35	16:50	16:29
6	07:25	07:06	06:27	06:35	05:50	05:25	05:30	05:57	06:29	07:00	06:35	07:10
	16:43	17:20	17:54	19:28	20:01	20:29	20:35	20:11	19:25	18:34	16:49	16:29
7	07:25	07:05	06:25	06:33	05:49	05:25	05:31	05:58	06:30	07:01	06:36	07:11
	16:44	17:21	17:55	19:29	20:02	20:30	20:35	20:10	19:23	18:32	16:47	16:28
8	07:25	07:04	06:24	06:32	05:48	05:25	05:32	05:59	06:31	07:02	06:38	07:12
	16:45	17:22	17:56	19:30	20:03	20:30	20:35	20:09	19:22	18:30	16:46	16:28
9	07:25	07:03	06:22	06:30	05:47	05:25	05:32	06:00	06:32	07:03	06:39	07:12
	16:46	17:23	17:57	19:31	20:04	20:31	20:34	20:07	19:20	18:29	16:45	16:28
10	07:25	07:01	06:20	06:28	05:46	05:24	05:33	06:01	06:33	07:04	06:40	07:13
	16:47	17:25	17:58	19:33	20:05	20:31	20:34	20:06	19:18	18:27	16:44	16:28
11	07:25	07:00	06:19	06:27	05:45	05:24	05:34	06:02	06:34	07:05	06:41	07:14
	16:48	17:26	18:00	19:34	20:06	20:32	20:34	20:05	19:16	18:25	16:43	16:28
12	07:24	06:59	06:17	06:25	05:43	05:24	05:34	06:03	06:35	07:06	06:42	07:15
	16:49	17:27	18:01	19:35	20:07	20:32	20:33	20:04	19:15	18:24	16:42	16:29
13	07:24	06:58	06:15	06:23	05:42	05:24	05:35	06:04	06:36	07:07	06:44	07:16
	16:50	17:28	18:02	19:36	20:08	20:33	20:33	20:02	19:13	18:22	16:41	16:29
14	07:24	06:56	06:14	06:22	05:41	05:24	05:36	06:05	06:37	07:08	06:45	07:17
	16:51	17:30	18:03	19:37	20:09	20:33	20:32	20:01	19:11	18:21	16:40	16:29
15	07:23	06:55	06:12	06:20	05:40	05:24	05:37	06:06	06:38	07:09	06:46	07:17
	16:53	17:31	18:04	19:38	20:10	20:34	20:32	19:59	19:10	18:19	16:39	16:29
16	07:23	06:54	06:10	06:19	05:39	05:24	05:38	06:07	06:39	07:10	06:47	07:18
	16:54	17:32	18:05	19:39	20:11	20:34	20:31	19:58	19:08	18:17	16:39	16:29
17	07:22	06:52	06:09	06:17	05:38	05:24	05:38	06:08	06:40	07:12	06:49	07:19
	16:55	17:33	18:06	19:40	20:12	20:35	20:30	19:57	19:06	18:16	16:38	16:30
18	07:22	06:51	06:07	06:16	05:37	05:24	05:39	06:09	06:41	07:13	06:50	07:19
	16:56	17:35	18:07	19:41	20:13	20:35	20:30	19:55	19:04	18:14	16:37	16:30
19	07:21	06:50	06:05	06:14	05:36	05:24	05:40	06:10	06:42	07:14	06:51	07:20
	16:57	17:36	18:09	19:42	20:14	20:35	20:29	19:54	19:03	18:13	16:36	16:30
20	07:21	06:48	06:04	06:13	05:36	05:24	05:41	06:11	06:43	07:15	06:52	07:21
	16:58	17:37	18:10	19:43	20:15	20:36	20:28	19:52	19:01	18:11	16:35	16:31
21	07:20	06:47	06:02	06:11	05:35	05:24	05:42	06:12	06:44	07:16	06:53	07:21
	17:00	17:38	18:11	19:44	20:16	20:36	20:27	19:51	18:59	18:10	16:35	16:31
22	07:20	06:45	06:00	06:10	05:34	05:25	05:43	06:13	06:45	07:17	06:54	07:22
	17:01	17:40	18:12	19:46	20:17	20:36	20:27	19:49	18:57	18:08	16:34	16:32
23	07:19	06:44	05:59	06:08	05:33	05:25	05:44	06:14	06:46	07:18	06:56	07:22
	17:02	17:41	18:13	19:47	20:18	20:36	20:26	19:48	18:56	18:07	16:33	16:32
24	07:18	06:42	05:57	06:07	05:32	05:25	05:44	06:15	06:47	07:20	06:57	07:23
	17:03	17:42	18:14	19:48	20:19	20:36	20:25	19:46	18:54	18:05	16:33	16:33
25	07:17	06:41	05:55	06:05	05:32	05:25	05:45	06:16	06:48	06:21	06:58	07:23
	17:04	17:43	18:15	19:49	20:20	20:36	20:24	19:44	18:52	17:04	16:32	16:33
26	07:17	06:39	05:53	06:04	05:31	05:26	05:46	06:17	06:49	06:22	06:59	07:23
	17:06	17:44	18:16	19:50	20:20	20:37	20:23	19:43	18:51	17:03	16:32	16:34
27	07:16	06:38	05:52	06:02	05:30	05:26	05:47	06:18	06:50	06:23	07:00	07:24
	17:07	17:46	18:17	19:51	20:21	20:37	20:22	19:41	18:49	17:01	16:31	16:35
28	07:15	06:36	05:50	06:01	05:30	05:26	05:48	06:19	06:51	06:24	07:01	07:24
	17:08	17:47	18:18	19:52	20:22	20:37	20:21	19:40	18:47	17:00	16:31	16:35
29	07:14		06:48	05:59	05:29	05:27	05:49	06:20	06:52	06:26	07:02	07:24
	17:09		19:19	19:53	20:23	20:37	20:20	19:38	18:45	16:58	16:30	16:36
30	07:13		06:47	05:58	05:28	05:27	05:50	06:21	06:53	06:27	07:03	07:25
	17:11		19:21	19:54	20:24	20:37	20:19	19:37	18:44	16:57	16:30	16:37
31	07:12		06:45		05:28		05:51	06:22		06:28		07:25
	17:12		19:22		20:25		20:18	19:35		16:56		16:37
Ore potenziali eliofania	296	296	369	399	450	454	461	429	375	345	297	286
Somma minuti d'ombra	0	0	0	0	0	0	0	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****Calcolo:** Shadow Flickering Analysis **WTG:** 38 - R80680**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>Gennaio</b>	<b>Febbraio</b>	<b>Marzo</b>	<b>Aprile</b>	<b>Maggio</b>	<b>Giugno</b>	<b>Luglio</b>	<b>Agosto</b>	<b>Settembre</b>	<b>Ottobre</b>	<b>Novembre</b>	<b>Dicembre</b>	
1	07:26	07:12	06:36	06:44	05:58	05:28	05:29	05:53	06:25	06:55	06:30	07:06	
	16:40	17:14	17:49	19:24	19:56	20:26	20:37	20:18	19:34	18:43	16:56	16:31	
2	07:26	07:11	06:34	06:43	05:57	05:28	05:29	05:54	06:26	06:56	06:31	07:07	
	16:40	17:16	17:50	19:25	19:57	20:27	20:37	20:17	19:33	18:41	16:54	16:30	
3	07:26	07:10	06:33	06:41	05:55	05:28	05:30	05:55	06:27	06:57	06:33	07:08	
	16:41	17:17	17:51	19:26	19:59	20:28	20:37	20:16	19:31	18:40	16:53	16:30	
4	07:26	07:09	06:31	06:39	05:54	05:27	05:30	05:56	06:28	06:58	06:34	07:09	
	16:42	17:18	17:53	19:27	20:00	20:29	20:37	20:15	19:29	18:38	16:52	16:30	
5	07:26	07:08	06:30	06:38	05:53	05:27	05:31	05:57	06:29	07:00	06:35	07:10	
	16:43	17:19	17:54	19:28	20:01	20:29	20:37	20:13	19:28	18:36	16:51	16:30	
6	07:26	07:07	06:28	06:36	05:51	05:26	05:32	05:58	06:30	07:01	06:36	07:11	
	16:44	17:21	17:55	19:29	20:02	20:30	20:36	20:12	19:26	18:35	16:50	16:30	
7	07:26	07:06	06:26	06:34	05:50	05:26	05:32	05:59	06:31	07:02	06:37	07:12	
	16:45	17:22	17:56	19:30	20:03	20:31	20:36	20:11	19:24	18:33	16:49	16:30	
8	07:26	07:05	06:25	06:33	05:49	05:26	05:33	06:00	06:32	07:03	06:39	07:13	
	16:46	17:23	17:57	19:31	20:04	20:31	20:36	20:10	19:23	18:31	16:47	16:29	
9	07:26	07:04	06:23	06:31	05:48	05:26	05:33	06:01	06:33	07:04	06:40	07:13	
	16:47	17:24	17:58	19:33	20:05	20:32	20:35	20:09	19:21	18:30	16:46	16:29	
10	07:26	07:02	06:21	06:29	05:47	05:25	05:34	06:02	06:34	07:05	06:41	07:14	
	16:48	17:26	17:59	19:34	20:06	20:32	20:35	20:07	19:19	18:28	16:45	16:29	
11	07:26	07:01	06:20	06:28	05:46	05:25	05:35	06:03	06:35	07:06	06:42	07:15	
	16:49	17:27	18:01	19:35	20:07	20:33	20:35	20:06	19:17	18:26	16:44	16:30	
12	07:25	07:00	06:18	06:26	05:44	05:25	05:36	06:04	06:36	07:07	06:44	07:16	
	16:50	17:28	18:02	19:36	20:08	20:33	20:34	20:05	19:16	18:25	16:43	16:30	
13	07:25	06:59	06:16	06:25	05:43	05:25	05:36	06:05	06:37	07:08	06:45	07:17	
	16:51	17:30	18:03	19:37	20:09	20:34	20:34	20:03	19:14	18:23	16:42	16:30	
14	07:25	06:57	06:15	06:23	05:42	05:25	05:37	06:06	06:38	07:09	06:46	07:18	
	16:52	17:31	18:04	19:38	20:10	20:34	20:33	20:02	19:12	18:22	16:41	16:30	
15	07:24	06:56	06:13	06:21	05:41	05:25	05:38	06:07	06:39	07:10	06:47	07:18	
	16:54	17:32	18:05	19:39	20:11	20:35	20:33	20:00	19:11	18:20	16:40	16:30	
16	07:24	06:55	06:11	06:20	05:40	05:25	05:39	06:08	06:40	07:12	06:48	07:19	
	16:55	17:33	18:06	19:40	20:12	20:35	20:32	19:59	19:09	18:18	16:40	16:30	
17	07:23	06:53	06:10	06:18	05:39	05:25	05:39	06:09	06:41	07:13	06:50	07:20	
	16:56	17:35	18:07	19:41	20:13	20:36	20:31	19:58	19:07	18:17	16:39	16:31	
18	07:23	06:52	06:08	06:17	05:38	05:25	05:40	06:10	06:42	07:14	06:51	07:20	
	16:57	17:36	18:08	19:42	20:14	20:36	20:31	19:56	19:05	18:15	16:38	16:31	
19	07:22	06:51	06:06	06:15	05:38	05:25	05:41	06:11	06:43	07:15	06:52	07:21	
	16:58	17:37	18:10	19:43	20:15	20:36	20:30	19:55	19:04	18:14	16:37	16:31	
20	07:22	06:49	06:05	06:14	05:37	05:25	05:42	06:12	06:44	07:16	06:53	07:22	
	16:59	17:38	18:11	19:44	20:16	20:37	20:29	19:53	19:02	18:12	16:36	16:32	
21	07:21	06:48	06:03	06:12	05:36	05:25	05:43	06:13	06:45	07:17	06:54	07:22	
	17:01	17:39	18:12	19:46	20:17	20:37	20:28	19:52	19:00	18:11	16:36	16:32	
22	07:21	06:46	06:01	06:11	05:35	05:26	05:44	06:14	06:46	07:18	06:56	07:23	
	17:02	17:41	18:13	19:47	20:18	20:37	20:28	19:50	18:59	18:09	16:35	16:33	
23	07:20	06:45	06:00	06:09	05:34	05:26	05:45	06:15	06:47	07:20	06:57	07:23	
	17:03	17:42	18:14	19:48	20:19	20:37	20:27	19:49	18:57	18:08	16:34	16:33	
24	07:19	06:43	05:58	06:08	05:33	05:26	05:46	06:16	06:48	07:21	06:58	07:24	
	17:04	17:43	18:15	19:49	20:20	20:37	20:26	19:47	18:55	18:06	16:34	16:34	
25	07:18	06:42	05:56	06:06	05:33	05:26	05:46	06:17	06:49	06:22	06:59	07:24	
	17:06	17:44	18:16	19:50	20:21	20:37	20:25	19:46	18:53	17:05	16:33	16:34	
26	07:18	06:40	05:54	06:05	05:32	05:27	05:47	06:18	06:50	06:23	07:00	07:25	
	17:07	17:45	18:17	19:51	20:21	20:38	20:24	19:44	18:52	17:04	16:33	16:35	
27	07:17	06:39	05:53	06:03	05:31	05:27	05:48	06:19	06:51	06:24	07:01	07:25	
	17:08	17:47	18:18	19:52	20:22	20:38	20:23	19:42	18:50	17:02	16:32	16:36	
28	07:16	06:37	05:51	06:02	05:31	05:27	05:49	06:20	06:52	06:25	07:02	07:25	
	17:09	17:48	18:19	19:53	20:23	20:38	20:22	19:41	18:48	17:01	16:32	16:36	
29	07:15		06:49	06:01	05:30	05:28	05:50	06:22	06:53	06:27	07:03	07:25	
	17:11		19:21	19:54	20:24	20:38	20:21	19:39	18:46	17:00	16:31	16:37	
30	07:14		06:48	05:59	05:29	05:28	05:51	06:23	06:54	06:28	07:05	07:26	
	17:12		19:22	19:55	20:25	20:38	20:20	19:38	18:45	16:58	16:31	16:38	
31	07:13		06:46		05:29		05:52	06:24		06:29		07:26	
	17:13		19:23		20:26		20:19	19:36		16:57		16:39	
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345	297
Somma minuti d'ombra			0	0	0	0	0	0	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

**Calcolo:** Shadow Flickering Analysis **WTG:** 39 - REpower 57/1000 1050-250 57.0 !- hub: 55.0 m (TOT: 83.5 m) (10)

**Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giugno	Luglio	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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26	07:12	06:36	06:44	05:58	05:28	05:29	05:53	06:25	06:55	06:30	07:06
	16:40	17:14	17:49	19:24	19:56	20:26	20:37	20:18	19:34	18:43	16:56	16:31
2	07:26	07:11	06:34	06:43	05:57	05:28	05:29	05:54	06:26	06:56	06:31	07:07
	16:40	17:16	17:50	19:25	19:57	20:27	20:37	20:17	19:33	18:41	16:54	16:30
3	07:26	07:10	06:33	06:41	05:55	05:28	05:30	05:55	06:27	06:57	06:33	07:08
	16:41	17:17	17:51	19:26	19:59	20:28	20:37	20:16	19:31	18:40	16:53	16:30
4	07:26	07:09	06:31	06:39	05:54	05:27	05:30	05:56	06:28	06:58	06:34	07:09
	16:42	17:18	17:53	19:27	20:00	20:29	20:37	20:15	19:29	18:38	16:52	16:30
5	07:26	07:08	06:30	06:38	05:53	05:27	05:31	05:57	06:29	07:00	06:35	07:10
	16:43	17:19	17:54	19:28	20:01	20:29	20:37	20:14	19:28	18:36	16:51	16:30
6	07:26	07:07	06:28	06:36	05:51	05:26	05:32	05:58	06:30	07:01	06:36	07:11
	16:44	17:21	17:55	19:29	20:02	20:30	20:37	20:12	19:26	18:35	16:50	16:30
7	07:26	07:06	06:26	06:34	05:50	05:26	05:32	05:59	06:31	07:02	06:37	07:12
	16:45	17:22	17:56	19:30	20:03	20:31	20:36	20:11	19:24	18:33	16:49	16:30
8	07:26	07:05	06:25	06:33	05:49	05:26	05:33	06:00	06:32	07:03	06:39	07:13
	16:46	17:23	17:57	19:31	20:04	20:31	20:36	20:10	19:23	18:31	16:47	16:30
9	07:26	07:04	06:23	06:31	05:48	05:26	05:33	06:01	06:33	07:04	06:40	07:13
	16:47	17:24	17:58	19:33	20:05	20:32	20:36	20:09	19:21	18:30	16:46	16:29
10	07:26	07:03	06:21	06:29	05:47	05:25	05:34	06:02	06:34	07:05	06:41	07:14
	16:48	17:26	18:00	19:34	20:06	20:32	20:35	20:07	19:19	18:28	16:45	16:29
11	07:26	07:01	06:20	06:28	05:46	05:25	05:35	06:03	06:35	07:06	06:42	07:15
	16:49	17:27	18:01	19:35	20:07	20:33	20:35	20:06	19:18	18:26	16:44	16:30
12	07:25	07:00	06:18	06:26	05:44	05:25	05:36	06:04	06:36	07:07	06:44	07:16
	16:50	17:28	18:02	19:36	20:08	20:34	20:34	20:05	19:16	18:25	16:43	16:30
13	07:25	06:59	06:16	06:25	05:43	05:25	05:36	06:05	06:37	07:08	06:45	07:17
	16:51	17:30	18:03	19:37	20:09	20:34	20:34	20:03	19:14	18:23	16:42	16:30
14	07:25	06:57	06:15	06:23	05:42	05:25	05:37	06:06	06:38	07:09	06:46	07:18
	16:52	17:31	18:04	19:38	20:10	20:34	20:33	20:02	19:12	18:22	16:41	16:30
15	07:24	06:56	06:13	06:21	05:41	05:25	05:38	06:07	06:39	07:10	06:47	07:18
	16:54	17:32	18:05	19:39	20:11	20:35	20:33	20:00	19:11	18:20	16:40	16:30
16	07:24	06:55	06:11	06:20	05:40	05:25	05:39	06:08	06:40	07:12	06:48	07:19
	16:55	17:33	18:06	19:40	20:12	20:35	20:32	19:59	19:09	18:18	16:40	16:30
17	07:23	06:53	06:10	06:18	05:39	05:25	05:39	06:09	06:41	07:13	06:50	07:20
	16:56	17:35	18:07	19:41	20:13	20:36	20:31	19:58	19:07	18:17	16:39	16:31
18	07:23	06:52	06:08	06:17	05:38	05:25	05:40	06:10	06:42	07:14	06:51	07:20
	16:57	17:36	18:08	19:42	20:14	20:36	20:31	19:56	19:05	18:15	16:38	16:31
19	07:22	06:51	06:06	06:15	05:38	05:25	05:41	06:11	06:43	07:15	06:52	07:21
	16:58	17:37	18:10	19:43	20:15	20:36	20:30	19:55	19:04	18:14	16:37	16:31
20	07:22	06:49	06:05	06:14	05:37	05:25	05:42	06:12	06:44	07:16	06:53	07:22
	16:59	17:38	18:11	19:44	20:16	20:37	20:29	19:53	19:02	18:12	16:36	16:32
21	07:21	06:48	06:03	06:12	05:36	05:25	05:43	06:13	06:45	07:17	06:54	07:22
	17:01	17:39	18:12	19:46	20:17	20:37	20:28	19:52	19:00	18:11	16:36	16:32
22	07:21	06:46	06:01	06:11	05:35	05:26	05:44	06:14	06:46	07:18	06:56	07:23
	17:02	17:41	18:13	19:47	20:18	20:37	20:28	19:50	18:59	18:09	16:35	16:33
23	07:20	06:45	06:00	06:09	05:34	05:26	05:45	06:15	06:47	07:20	06:57	07:23
	17:03	17:42	18:14	19:48	20:19	20:37	20:27	19:49	18:57	18:08	16:34	16:33
24	07:19	06:43	05:58	06:08	05:33	05:26	05:46	06:16	06:48	07:21	06:58	07:24
	17:04	17:43	18:15	19:49	20:20	20:37	20:26	19:47	18:55	18:06	16:34	16:34
25	07:18	06:42	05:56	06:06	05:33	05:26	05:46	06:17	06:49	06:22	06:59	07:24
	17:06	17:44	18:16	19:50	20:21	20:37	20:25	19:46	18:53	17:05	16:33	16:34
26	07:18	06:40	05:54	06:05	05:32	05:27	05:47	06:18	06:50	06:23	07:00	07:25
	17:07	17:45	18:17	19:51	20:21	20:38	20:24	19:44	18:52	17:04	16:33	16:35
27	07:17	06:39	05:53	06:03	05:31	05:27	05:48	06:19	06:51	06:24	07:01	07:25
	17:08	17:47	18:18	19:52	20:22	20:38	20:23	19:42	18:50	17:02	16:32	16:36
28	07:16	06:37	05:51	06:02	05:31	05:27	05:49	06:21	06:52	06:25	07:02	07:25
	17:09	17:48	18:19	19:53	20:23	20:38	20:22	19:41	18:48	17:01	16:32	16:36
29	07:15		06:49	06:01	05:30	05:28	05:50	06:22	06:53	06:27	07:03	07:26
	17:11		19:21	19:54	20:24	20:38	20:21	19:39	18:46	17:00	16:31	16:37
30	07:14		06:48	05:59	05:29	05:28	05:51	06:23	06:54	06:28	07:05	07:26
	17:12		19:22	19:55	20:25	20:38	20:20	19:38	18:45	16:58	16:31	16:38
31	07:13		06:46		05:29		05:52	06:24		06:29		07:26
	17:13		19:23		20:26		20:19	19:36		16:57		16:39
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345
Somma minuti d'ombra			0	0	0	0	0	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

**Calcolo:** Shadow Flickering Analysis **WTG:** 40 - REpower 57/1000 1050-250 57.0 !- hub: 55.0 m (TOT: 83.5 m) (12)

**Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giugno	Luglio	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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26	07:12	06:36	06:44	05:58	05:28	05:29	05:53	06:25	06:55	06:30	07:06
	16:40	17:14	17:49	19:24	19:56	20:26	20:37	20:18	19:34	18:43	16:56	16:31
2	07:26	07:11	06:34	06:43	05:57	05:28	05:29	05:54	06:26	06:56	06:31	07:07
	16:41	17:16	17:50	19:25	19:57	20:27	20:37	20:17	19:33	18:41	16:54	16:30
3	07:26	07:10	06:33	06:41	05:55	05:28	05:30	05:55	06:27	06:57	06:33	07:08
	16:41	17:17	17:51	19:26	19:59	20:28	20:37	20:16	19:31	18:40	16:53	16:30
4	07:26	07:09	06:31	06:39	05:54	05:27	05:30	05:56	06:28	06:58	06:34	07:09
	16:42	17:18	17:53	19:27	20:00	20:29	20:37	20:15	19:29	18:38	16:52	16:30
5	07:26	07:08	06:30	06:38	05:53	05:27	05:31	05:57	06:29	07:00	06:35	07:10
	16:43	17:19	17:54	19:28	20:01	20:29	20:37	20:14	19:28	18:36	16:51	16:30
6	07:26	07:07	06:28	06:36	05:51	05:26	05:32	05:58	06:30	07:01	06:36	07:11
	16:44	17:21	17:55	19:29	20:02	20:30	20:37	20:12	19:26	18:35	16:50	16:30
7	07:26	07:06	06:26	06:34	05:50	05:26	05:32	05:59	06:31	07:02	06:37	07:12
	16:45	17:22	17:56	19:30	20:03	20:31	20:36	20:11	19:24	18:33	16:49	16:30
8	07:26	07:05	06:25	06:33	05:49	05:26	05:33	06:00	06:32	07:03	06:39	07:13
	16:46	17:23	17:57	19:31	20:04	20:31	20:36	20:10	19:23	18:31	16:47	16:30
9	07:26	07:04	06:23	06:31	05:48	05:26	05:33	06:01	06:33	07:04	06:40	07:13
	16:47	17:25	17:58	19:33	20:05	20:32	20:36	20:09	19:21	18:30	16:46	16:29
10	07:26	07:03	06:21	06:29	05:47	05:25	05:34	06:02	06:34	07:05	06:41	07:14
	16:48	17:26	18:00	19:34	20:06	20:32	20:35	20:07	19:19	18:28	16:45	16:30
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	16:49	17:27	18:01	19:35	20:07	20:33	20:35	20:06	19:18	18:26	16:44	16:30
12	07:25	07:00	06:18	06:26	05:45	05:25	05:36	06:04	06:36	07:07	06:44	07:16
	16:50	17:28	18:02	19:36	20:08	20:34	20:34	20:05	19:16	18:25	16:43	16:30
13	07:25	06:59	06:16	06:25	05:43	05:25	05:36	06:05	06:37	07:08	06:45	07:17
	16:51	17:30	18:03	19:37	20:09	20:34	20:34	20:03	19:14	18:23	16:42	16:30
14	07:25	06:57	06:15	06:23	05:42	05:25	05:37	06:06	06:38	07:09	06:46	07:18
	16:52	17:31	18:04	19:38	20:10	20:34	20:33	20:02	19:12	18:22	16:41	16:30
15	07:24	06:56	06:13	06:21	05:41	05:25	05:38	06:07	06:39	07:10	06:47	07:18
	16:54	17:32	18:05	19:39	20:11	20:35	20:33	20:00	19:11	18:20	16:40	16:30
16	07:24	06:55	06:11	06:20	05:40	05:25	05:39	06:08	06:40	07:12	06:48	07:19
	16:55	17:33	18:06	19:40	20:12	20:35	20:32	19:59	19:09	18:18	16:40	16:30
17	07:23	06:53	06:10	06:18	05:39	05:25	05:39	06:09	06:41	07:13	06:50	07:20
	16:56	17:35	18:07	19:41	20:13	20:36	20:31	19:58	19:07	18:17	16:39	16:31
18	07:23	06:52	06:08	06:17	05:38	05:25	05:40	06:10	06:42	07:14	06:51	07:20
	16:57	17:36	18:09	19:42	20:14	20:36	20:31	19:56	19:05	18:15	16:38	16:31
19	07:22	06:51	06:06	06:15	05:38	05:25	05:41	06:11	06:43	07:15	06:52	07:21
	16:58	17:37	18:10	19:43	20:15	20:36	20:30	19:55	19:04	18:14	16:37	16:31
20	07:22	06:49	06:05	06:14	05:37	05:25	05:42	06:12	06:44	07:16	06:53	07:22
	16:59	17:38	18:11	19:44	20:16	20:37	20:29	19:53	19:02	18:12	16:36	16:32
21	07:21	06:48	06:03	06:12	05:36	05:25	05:43	06:13	06:45	07:17	06:54	07:22
	17:01	17:39	18:12	19:46	20:17	20:37	20:28	19:52	19:00	18:11	16:36	16:32
22	07:21	06:46	06:01	06:11	05:35	05:26	05:44	06:14	06:46	07:18	06:56	07:23
	17:02	17:41	18:13	19:47	20:18	20:37	20:28	19:50	18:59	18:09	16:35	16:33
23	07:20	06:45	06:00	06:09	05:34	05:26	05:45	06:15	06:47	07:20	06:57	07:23
	17:03	17:42	18:14	19:48	20:19	20:37	20:27	19:49	18:57	18:08	16:34	16:33
24	07:19	06:43	05:58	06:08	05:33	05:26	05:46	06:16	06:48	07:21	06:58	07:24
	17:04	17:43	18:15	19:49	20:20	20:37	20:26	19:47	18:55	18:06	16:34	16:34
25	07:18	06:42	05:56	06:06	05:33	05:26	05:46	06:17	06:49	06:22	06:59	07:24
	17:06	17:44	18:16	19:50	20:21	20:37	20:25	19:46	18:53	17:05	16:33	16:34
26	07:18	06:40	05:55	06:05	05:32	05:27	05:47	06:18	06:50	06:23	07:00	07:25
	17:07	17:45	18:17	19:51	20:21	20:38	20:24	19:44	18:52	17:04	16:33	16:35
27	07:17	06:39	05:53	06:03	05:31	05:27	05:48	06:19	06:51	06:24	07:01	07:25
	17:08	17:47	18:18	19:52	20:22	20:38	20:23	19:42	18:50	17:02	16:32	16:36
28	07:16	06:37	05:51	06:02	05:31	05:28	05:49	06:21	06:52	06:25	07:02	07:25
	17:09	17:48	18:19	19:53	20:23	20:38	20:22	19:41	18:48	17:01	16:32	16:36
29	07:15		06:49	06:01	05:30	05:28	05:50	06:22	06:53	06:27	07:03	07:26
	17:11		19:21	19:54	20:24	20:38	20:21	19:39	18:46	17:00	16:31	16:37
30	07:14		06:48	05:59	05:30	05:28	05:51	06:23	06:54	06:28	07:05	07:26
	17:12		19:22	19:55	20:25	20:38	20:20	19:38	18:45	16:58	16:31	16:38
31	07:13		06:46		05:29		05:52	06:24		06:29		07:26
	17:13		19:23		20:26		20:19	19:36		16:57		16:39
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345
Somma minuti d'ombra			0	0	0	0	0	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

**Calcolo:** Shadow Flickering Analysis **WTG:** 41 - REpower 57/1000 1050-250 57.0 !- hub: 55.0 m (TOT: 83.5 m) (13)

**Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giugno	Luglio	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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26	07:12	06:36	06:44	05:58	05:28	05:29	05:53	06:25	06:55	06:30	07:06
	16:40	17:14	17:49	19:24	19:56	20:26	20:37	20:18	19:34	18:43	16:56	16:31
2	07:26	07:11	06:34	06:43	05:57	05:28	05:29	05:54	06:26	06:56	06:31	07:07
	16:41	17:16	17:50	19:25	19:57	20:27	20:37	20:17	19:33	18:41	16:54	16:30
3	07:26	07:10	06:33	06:41	05:55	05:28	05:30	05:55	06:27	06:57	06:33	07:08
	16:41	17:17	17:51	19:26	19:59	20:28	20:37	20:16	19:31	18:40	16:53	16:30
4	07:26	07:09	06:31	06:39	05:54	05:27	05:30	05:56	06:28	06:58	06:34	07:09
	16:42	17:18	17:53	19:27	20:00	20:29	20:37	20:15	19:29	18:38	16:52	16:30
5	07:26	07:08	06:30	06:38	05:53	05:27	05:31	05:57	06:29	07:00	06:35	07:10
	16:43	17:19	17:54	19:28	20:01	20:29	20:37	20:14	19:28	18:36	16:51	16:30
6	07:26	07:07	06:28	06:36	05:51	05:26	05:32	05:58	06:30	07:01	06:36	07:11
	16:44	17:21	17:55	19:29	20:02	20:30	20:37	20:12	19:26	18:35	16:50	16:30
7	07:26	07:06	06:26	06:34	05:50	05:26	05:32	05:59	06:31	07:02	06:37	07:12
	16:45	17:22	17:56	19:30	20:03	20:31	20:36	20:11	19:24	18:33	16:49	16:30
8	07:26	07:05	06:25	06:33	05:49	05:26	05:33	06:00	06:32	07:03	06:39	07:13
	16:46	17:23	17:57	19:31	20:04	20:31	20:36	20:10	19:23	18:31	16:47	16:30
9	07:26	07:04	06:23	06:31	05:48	05:26	05:33	06:01	06:33	07:04	06:40	07:14
	16:47	17:25	17:58	19:33	20:05	20:32	20:36	20:09	19:21	18:30	16:46	16:30
10	07:26	07:03	06:21	06:29	05:47	05:25	05:34	06:02	06:34	07:05	06:41	07:14
	16:48	17:26	18:00	19:34	20:06	20:32	20:35	20:07	19:19	18:28	16:45	16:30
11	07:26	07:01	06:20	06:28	05:46	05:25	05:35	06:03	06:35	07:06	06:42	07:15
	16:49	17:27	18:01	19:35	20:07	20:33	20:35	20:06	19:18	18:26	16:44	16:30
12	07:25	07:00	06:18	06:26	05:45	05:25	05:36	06:04	06:36	07:07	06:44	07:16
	16:50	17:28	18:02	19:36	20:08	20:34	20:34	20:05	19:16	18:25	16:43	16:30
13	07:25	06:59	06:16	06:25	05:43	05:25	05:36	06:05	06:37	07:08	06:45	07:17
	16:51	17:30	18:03	19:37	20:09	20:34	20:34	20:03	19:14	18:23	16:42	16:30
14	07:25	06:57	06:15	06:23	05:42	05:25	05:37	06:06	06:38	07:09	06:46	07:18
	16:53	17:31	18:04	19:38	20:10	20:34	20:33	20:02	19:12	18:22	16:41	16:30
15	07:24	06:56	06:13	06:21	05:41	05:25	05:38	06:07	06:39	07:10	06:47	07:18
	16:54	17:32	18:05	19:39	20:11	20:35	20:33	20:00	19:11	18:20	16:41	16:30
16	07:24	06:55	06:11	06:20	05:40	05:25	05:39	06:08	06:40	07:12	06:48	07:19
	16:55	17:33	18:06	19:40	20:12	20:35	20:32	19:59	19:09	18:18	16:40	16:30
17	07:23	06:53	06:10	06:18	05:39	05:25	05:39	06:09	06:41	07:13	06:50	07:20
	16:56	17:35	18:07	19:41	20:13	20:36	20:31	19:58	19:07	18:17	16:39	16:31
18	07:23	06:52	06:08	06:17	05:38	05:25	05:40	06:10	06:42	07:14	06:51	07:20
	16:57	17:36	18:09	19:42	20:14	20:36	20:31	19:56	19:05	18:15	16:38	16:31
19	07:22	06:51	06:06	06:15	05:38	05:25	05:41	06:11	06:43	07:15	06:52	07:21
	16:58	17:37	18:10	19:43	20:15	20:36	20:30	19:55	19:04	18:14	16:37	16:31
20	07:22	06:49	06:05	06:14	05:37	05:25	05:42	06:12	06:44	07:16	06:53	07:22
	16:59	17:38	18:11	19:44	20:16	20:37	20:29	19:53	19:02	18:12	16:36	16:32
21	07:21	06:48	06:03	06:12	05:36	05:25	05:43	06:13	06:45	07:17	06:54	07:22
	17:01	17:39	18:12	19:46	20:17	20:37	20:28	19:52	19:00	18:11	16:36	16:32
22	07:21	06:46	06:01	06:11	05:35	05:26	05:44	06:14	06:46	07:18	06:56	07:23
	17:02	17:41	18:13	19:47	20:18	20:37	20:28	19:50	18:59	18:09	16:35	16:33
23	07:20	06:45	06:00	06:09	05:34	05:26	05:45	06:15	06:47	07:20	06:57	07:23
	17:03	17:42	18:14	19:48	20:19	20:37	20:27	19:49	18:57	18:08	16:34	16:33
24	07:19	06:43	05:58	06:08	05:33	05:26	05:46	06:16	06:48	07:21	06:58	07:24
	17:04	17:43	18:15	19:49	20:20	20:37	20:26	19:47	18:55	18:07	16:34	16:34
25	07:18	06:42	05:56	06:06	05:33	05:26	05:46	06:17	06:49	06:22	06:59	07:24
	17:06	17:44	18:16	19:50	20:21	20:38	20:25	19:46	18:53	17:05	16:33	16:34
26	07:18	06:40	05:55	06:05	05:32	05:27	05:47	06:18	06:50	06:23	07:00	07:25
	17:07	17:45	18:17	19:51	20:21	20:38	20:24	19:44	18:52	17:04	16:33	16:35
27	07:17	06:39	05:53	06:03	05:31	05:27	05:48	06:20	06:51	06:24	07:01	07:25
	17:08	17:47	18:18	19:52	20:22	20:38	20:23	19:42	18:50	17:02	16:32	16:36
28	07:16	06:37	05:51	06:02	05:31	05:28	05:49	06:21	06:52	06:25	07:02	07:25
	17:09	17:48	18:20	19:53	20:23	20:38	20:22	19:41	18:48	17:01	16:32	16:36
29	07:15		06:49	06:01	05:30	05:28	05:50	06:22	06:53	06:27	07:03	07:26
	17:11		19:21	19:54	20:24	20:38	20:21	19:39	18:46	17:00	16:31	16:37
30	07:14		06:48	05:59	05:30	05:28	05:51	06:23	06:54	06:28	07:05	07:26
	17:12		19:22	19:55	20:25	20:38	20:20	19:38	18:45	16:58	16:31	16:38
31	07:13		06:46		05:29		05:52	06:24		06:29		07:26
	17:13		19:23		20:26		20:19	19:36		16:57		16:39
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345
Somma minuti d'ombra			0	0	0	0	0	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

**Calcolo:** Shadow Flickering Analysis **WTG:** 42 - REpower 57/1000 1050-250 57.0 !- hub: 55.0 m (TOT: 83.5 m) (14)

**Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giug	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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26	07:12	06:36	06:44	05:58	05:28	05:29	05:53	06:25	06:55	06:30	07:06
	16:40	17:14	17:49	19:24	19:56	20:26	20:37	20:18	19:34	18:43	16:56	16:31
2	07:26	07:11	06:34	06:43	05:57	05:28	05:29	05:54	06:26	06:56	06:31	07:07
	16:41	17:16	17:50	19:25	19:57	20:27	20:37	20:17	19:33	18:41	16:54	16:30
3	07:26	07:10	06:33	06:41	05:55	05:28	05:30	05:55	06:27	06:57	06:33	07:08
	16:41	17:17	17:51	19:26	19:59	20:28	20:37	20:16	19:31	18:40	16:53	16:30
4	07:26	07:09	06:31	06:39	05:54	05:27	05:30	05:56	06:28	06:58	06:34	07:09
	16:42	17:18	17:53	19:27	20:00	20:29	20:37	20:15	19:29	18:38	16:52	16:30
5	07:26	07:08	06:30	06:38	05:53	05:27	05:31	05:57	06:29	07:00	06:35	07:10
	16:43	17:19	17:54	19:28	20:01	20:29	20:37	20:14	19:28	18:36	16:51	16:30
6	07:26	07:07	06:28	06:36	05:51	05:26	05:32	05:58	06:30	07:01	06:36	07:11
	16:44	17:21	17:55	19:29	20:02	20:30	20:37	20:12	19:26	18:35	16:50	16:30
7	07:26	07:06	06:26	06:34	05:50	05:26	05:32	05:59	06:31	07:02	06:37	07:12
	16:45	17:22	17:56	19:30	20:03	20:31	20:36	20:11	19:24	18:33	16:49	16:30
8	07:26	07:05	06:25	06:33	05:49	05:26	05:33	06:00	06:32	07:03	06:39	07:13
	16:46	17:23	17:57	19:31	20:04	20:31	20:36	20:10	19:23	18:31	16:47	16:30
9	07:26	07:04	06:23	06:31	05:48	05:26	05:33	06:01	06:33	07:04	06:40	07:14
	16:47	17:25	17:58	19:33	20:05	20:32	20:36	20:09	19:21	18:30	16:46	16:30
10	07:26	07:03	06:21	06:29	05:47	05:25	05:34	06:02	06:34	07:05	06:41	07:14
	16:48	17:26	18:00	19:34	20:06	20:32	20:35	20:07	19:19	18:28	16:45	16:30
11	07:26	07:01	06:20	06:28	05:46	05:25	05:35	06:03	06:35	07:06	06:42	07:15
	16:49	17:27	18:01	19:35	20:07	20:33	20:35	20:06	19:18	18:26	16:44	16:30
12	07:25	07:00	06:18	06:26	05:45	05:25	05:36	06:04	06:36	07:07	06:44	07:16
	16:50	17:28	18:02	19:36	20:08	20:34	20:34	20:05	19:16	18:25	16:43	16:30
13	07:25	06:59	06:16	06:25	05:43	05:25	05:36	06:05	06:37	07:08	06:45	07:17
	16:51	17:30	18:03	19:37	20:09	20:34	20:34	20:03	19:14	18:23	16:42	16:30
14	07:25	06:57	06:15	06:23	05:42	05:25	05:37	06:06	06:38	07:09	06:46	07:18
	16:53	17:31	18:04	19:38	20:10	20:34	20:33	20:02	19:12	18:22	16:41	16:30
15	07:24	06:56	06:13	06:21	05:41	05:25	05:38	06:07	06:39	07:10	06:47	07:18
	16:54	17:32	18:05	19:39	20:11	20:35	20:33	20:00	19:11	18:20	16:41	16:30
16	07:24	06:55	06:11	06:20	05:40	05:25	05:39	06:08	06:40	07:12	06:48	07:19
	16:55	17:33	18:06	19:40	20:12	20:35	20:32	19:59	19:09	18:18	16:40	16:30
17	07:23	06:53	06:10	06:18	05:39	05:25	05:39	06:09	06:41	07:13	06:50	07:20
	16:56	17:35	18:07	19:41	20:13	20:36	20:31	19:58	19:07	18:17	16:39	16:31
18	07:23	06:52	06:08	06:17	05:38	05:25	05:40	06:10	06:42	07:14	06:51	07:20
	16:57	17:36	18:09	19:42	20:14	20:36	20:31	19:56	19:05	18:15	16:38	16:31
19	07:22	06:51	06:06	06:15	05:38	05:25	05:41	06:11	06:43	07:15	06:52	07:21
	16:58	17:37	18:10	19:43	20:15	20:36	20:30	19:55	19:04	18:14	16:37	16:31
20	07:22	06:49	06:05	06:14	05:37	05:25	05:42	06:12	06:44	07:16	06:53	07:22
	16:59	17:38	18:11	19:44	20:16	20:37	20:29	19:53	19:02	18:12	16:37	16:32
21	07:21	06:48	06:03	06:12	05:36	05:25	05:43	06:13	06:45	07:17	06:54	07:22
	17:01	17:39	18:12	19:46	20:17	20:37	20:28	19:52	19:00	18:11	16:36	16:32
22	07:21	06:46	06:01	06:11	05:35	05:26	05:44	06:14	06:46	07:18	06:56	07:23
	17:02	17:41	18:13	19:47	20:18	20:37	20:28	19:50	18:59	18:09	16:35	16:33
23	07:20	06:45	06:00	06:09	05:34	05:26	05:45	06:15	06:47	07:20	06:57	07:23
	17:03	17:42	18:14	19:48	20:19	20:37	20:27	19:49	18:57	18:08	16:35	16:33
24	07:19	06:43	05:58	06:08	05:33	05:26	05:46	06:16	06:48	07:21	06:58	07:24
	17:04	17:43	18:15	19:49	20:20	20:37	20:26	19:47	18:55	18:07	16:34	16:34
25	07:18	06:42	05:56	06:06	05:33	05:26	05:46	06:17	06:49	06:22	06:59	07:24
	17:06	17:44	18:16	19:50	20:21	20:38	20:25	19:46	18:53	17:05	16:33	16:34
26	07:18	06:40	05:55	06:05	05:32	05:27	05:47	06:18	06:50	06:23	07:00	07:25
	17:07	17:46	18:17	19:51	20:22	20:38	20:24	19:44	18:52	17:04	16:33	16:35
27	07:17	06:39	05:53	06:03	05:31	05:27	05:48	06:20	06:51	06:24	07:01	07:25
	17:08	17:47	18:18	19:52	20:22	20:38	20:23	19:42	18:50	17:02	16:32	16:36
28	07:16	06:37	05:51	06:02	05:31	05:28	05:49	06:21	06:52	06:25	07:02	07:25
	17:09	17:48	18:20	19:53	20:23	20:38	20:22	19:41	18:48	17:01	16:32	16:36
29	07:15		06:49	06:01	05:30	05:28	05:50	06:22	06:53	06:27	07:03	07:26
	17:11		19:21	19:54	20:24	20:38	20:21	19:39	18:46	17:00	16:31	16:37
30	07:14		06:48	05:59	05:30	05:28	05:51	06:23	06:54	06:28	07:05	07:26
	17:12		19:22	19:55	20:25	20:38	20:20	19:38	18:45	16:58	16:31	16:38
31	07:13		06:46		05:29		05:52	06:24		06:29		07:26
	17:13		19:23		20:26		20:19	19:36		16:57		16:39
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345
Somma minuti d'ombra			0	0	0	0	0	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****Calcolo:** Shadow Flickering Analysis **WTG:** 43 - REpower 57/1000 1050-250 57.0 !- hub: 55.0 m (TOT: 83.5 m) (16)**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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  
437 192 40 16 67 346 208 192 120 99 425 524 2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:26   07:12   06:36   06:44   05:58   05:29   05:29   05:53   06:25   06:55   06:30   07:06											
	16:40   17:14   17:49   19:24   19:56   20:26   20:37   20:18   19:34   18:43   16:56   16:31											
2	07:26   07:11   06:34   06:43   05:57   05:28   05:29   05:54   06:26   06:56   06:31   07:07											
	16:41   17:16   17:50   19:25   19:57   20:27   20:37   20:17   19:33   18:41   16:54   16:31											
3	07:26   07:10   06:33   06:41   05:55   05:28   05:30   05:55   06:27   06:57   06:33   07:08											
	16:41   17:17   17:51   19:26   19:59   20:28   20:37   20:16   19:31   18:40   16:53   16:30											
4	07:26   07:09   06:31   06:39   05:54   05:27   05:30   05:56   06:28   06:58   06:34   07:09											
	16:42   17:18   17:53   19:27   20:00   20:29   20:37   20:15   19:29   18:38   16:52   16:30											
5	07:26   07:08   06:30   06:38   05:53   05:27   05:31   05:57   06:29   07:00   06:35   07:10											
	16:43   17:19   17:54   19:28   20:01   20:29   20:37   20:14   19:28   18:36   16:51   16:30											
6	07:26   07:07   06:28   06:36   05:51   05:26   05:32   05:58   06:30   07:01   06:36   07:11											
	16:44   17:21   17:55   19:29   20:02   20:30   20:37   20:12   19:26   18:35   16:50   16:30											
7	07:26   07:06   06:26   06:34   05:50   05:26   05:32   05:59   06:31   07:02   06:37   07:12											
	16:45   17:22   17:56   19:30   20:03   20:31   20:36   20:11   19:24   18:33   16:49   16:30											
8	07:26   07:05   06:25   06:33   05:49   05:26   05:33   06:00   06:32   07:03   06:39   07:13											
	16:46   17:23   17:57   19:31   20:04   20:31   20:36   20:10   19:23   18:31   16:47   16:30											
9	07:26   07:04   06:23   06:31   05:48   05:26   05:34   06:01   06:33   07:04   06:40   07:14											
	16:47   17:25   17:58   19:33   20:05   20:32   20:36   20:09   19:21   18:30   16:46   16:30											
10	07:26   07:03   06:21   06:29   05:47   05:25   05:34   06:02   06:34   07:05   06:41   07:14											
	16:48   17:26   18:00   19:34   20:06   20:32   20:35   20:07   19:19   18:28   16:45   16:30											
11	07:26   07:01   06:20   06:28   05:46   05:25   05:35   06:03   06:35   07:06   06:42   07:15											
	16:49   17:27   18:01   19:35   20:07   20:33   20:35   20:06   19:18   18:26   16:44   16:30											
12	07:25   07:00   06:18   06:26   05:45   05:25   05:36   06:04   06:36   07:07   06:44   07:16											
	16:50   17:28   18:02   19:36   20:08   20:34   20:34   20:05   19:16   18:25   16:43   16:30											
13	07:25   06:59   06:16   06:25   05:43   05:25   05:36   06:05   06:37   07:08   06:45   07:17											
	16:51   17:30   18:03   19:37   20:09   20:34   20:34   20:03   19:14   18:23   16:42   16:30											
14	07:25   06:57   06:15   06:23   05:42   05:25   05:37   06:06   06:38   07:09   06:46   07:18											
	16:53   17:31   18:04   19:38   20:10   20:34   20:33   20:02   19:12   18:22   16:41   16:30											
15	07:24   06:56   06:13   06:21   05:41   05:25   05:38   06:07   06:39   07:10   06:47   07:18											
	16:54   17:32   18:05   19:39   20:11   20:35   20:33   20:00   19:11   18:20   16:41   16:30											
16	07:24   06:55   06:11   06:20   05:40   05:25   05:39   06:08   06:40   07:12   06:48   07:19											
	16:55   17:33   18:06   19:40   20:12   20:35   20:32   19:59   19:09   18:19   16:40   16:30											
17	07:23   06:53   06:10   06:18   05:39   05:25   05:40   06:09   06:41   07:13   06:50   07:20											
	16:56   17:35   18:07   19:41   20:13   20:36   20:31   19:58   19:07   18:17   16:39   16:31											
18	07:23   06:52   06:08   06:17   05:38   05:25   05:40   06:10   06:42   07:14   06:51   07:20											
	16:57   17:36   18:09   19:42   20:14   20:36   20:31   19:56   19:05   18:15   16:38   16:31											
19	07:22   06:51   06:06   06:15   05:38   05:25   05:41   06:11   06:43   07:15   06:52   07:21											
	16:58   17:37   18:10   19:43   20:15   20:36   20:30   19:55   19:04   18:14   16:37   16:31											
20	07:22   06:49   06:05   06:14   05:37   05:25   05:42   06:12   06:44   07:16   06:53   07:22											
	16:59   17:38   18:11   19:44   20:16   20:37   20:29   19:53   19:02   18:12   16:37   16:32											
21	07:21   06:48   06:03   06:12   05:36   05:25   05:43   06:13   06:45   07:17   06:54   07:22											
	17:01   17:39   18:12   19:46   20:17   20:37   20:28   19:52   19:00   18:11   16:36   16:32											
22	07:21   06:46   06:01   06:11   05:35   05:26   05:44   06:14   06:46   07:18   06:56   07:23											
	17:02   17:41   18:13   19:47   20:18   20:37   20:28   19:50   18:59   18:09   16:35   16:33											
23	07:20   06:45   06:00   06:09   05:34   05:26   05:45   06:15   06:47   07:20   06:57   07:23											
	17:03   17:42   18:14   19:48   20:19   20:37   20:27   19:49   18:57   18:08   16:35   16:33											
24	07:19   06:43   05:58   06:08   05:33   05:26   05:46   06:16   06:48   07:21   06:58   07:24											
	17:04   17:43   18:15   19:49   20:20   20:37   20:26   19:47   18:55   18:07   16:34   16:34											
25	07:18   06:42   05:56   06:06   05:33   05:26   05:46   06:17   06:49   06:22   06:59   07:24											
	17:06   17:44   18:16   19:50   20:21   20:38   20:25   19:46   18:53   17:05   16:33   16:34											
26	07:18   06:40   05:55   06:05   05:32   05:27   05:47   06:19   06:50   06:23   07:00   07:25											
	17:07   17:46   18:17   19:51   20:22   20:38   20:24   19:44   18:52   17:04   16:33   16:35											
27	07:17   06:39   05:53   06:03   05:31   05:27   05:48   06:20   06:51   06:24   07:01   07:25											
	17:08   17:47   18:18   19:52   20:22   20:38   20:23   19:42   18:50   17:02   16:32   16:36											
28	07:16   06:37   05:51   06:02   05:31   05:28   05:49   06:21   06:52   06:25   07:02   07:25											
	17:09   17:48   18:20   19:53   20:23   20:38   20:22   19:41   18:48   17:01   16:32   16:36											
29	07:15   06:49   06:01   05:30   05:28   05:50   06:22   06:53   06:27   07:03   07:26											
	17:11   19:21   19:54   20:24   20:38   20:21   19:39   18:47   17:00   16:32   16:37											
30	07:14   06:48   05:59   05:30   05:28   05:51   06:23   06:54   06:28   07:05   07:26											
	17:12   19:22   19:55   20:25   20:38   20:20   19:38   18:45   16:58   16:31   16:38											
31	07:13   06:46   05:46   05:29   05:52   06:24   06:24   06:29   06:29   07:26											
	17:13   19:23   19:56   20:26   20:19   19:36   19:36   16:57   16:57   16:39											
Ore potenziali eliofania	296	296	369	399	450	454	461	429	375	345	297	286
Somma minuti d'ombra	0	0	0	0	0	0	0	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

**Calcolo:** Shadow Flickering Analysis **WTG:** 44 - PowerWind 56

**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	<b>Gennaio</b>	<b>Febbraio</b>	<b>Marzo</b>	<b>Aprile</b>	<b>Maggio</b>	<b>Giugno</b>	<b>Luglio</b>	<b>Agosto</b>	<b>Settembre</b>	<b>Ottobre</b>	<b>Novembre</b>	<b>Dicembre</b>	
1	07:26	07:12	06:35	06:44	05:57	05:28	05:28	05:52	06:24	06:55	06:30	07:05	
	16:39	17:14	17:48	19:23	19:56	20:26	20:37	20:17	19:34	18:42	16:55	16:30	
2	07:26	07:11	06:34	06:42	05:56	05:27	05:29	05:53	06:25	06:56	06:31	07:06	
	16:40	17:15	17:50	19:24	19:57	20:27	20:37	20:16	19:32	18:41	16:54	16:30	
3	07:26	07:10	06:32	06:40	05:55	05:27	05:29	05:54	06:26	06:57	06:32	07:07	
	16:41	17:16	17:51	19:25	19:58	20:27	20:37	20:15	19:30	18:39	16:53	16:30	
4	07:26	07:09	06:30	06:39	05:53	05:26	05:30	05:55	06:27	06:58	06:33	07:08	
	16:42	17:17	17:52	19:26	19:59	20:28	20:36	20:14	19:29	18:37	16:51	16:29	
5	07:26	07:08	06:29	06:37	05:52	05:26	05:30	05:56	06:28	06:59	06:34	07:09	
	16:43	17:19	17:53	19:28	20:00	20:29	20:36	20:13	19:27	18:36	16:50	16:29	
6	07:26	07:07	06:27	06:35	05:51	05:26	05:31	05:57	06:29	07:00	06:36	07:10	
	16:43	17:20	17:54	19:29	20:01	20:29	20:36	20:12	19:25	18:34	16:49	16:29	
7	07:26	07:05	06:26	06:34	05:50	05:25	05:31	05:58	06:30	07:01	06:37	07:11	
	16:44	17:21	17:55	19:30	20:02	20:30	20:36	20:10	19:24	18:32	16:48	16:29	
8	07:26	07:04	06:24	06:32	05:48	05:25	05:32	05:59	06:31	07:02	06:38	07:12	
	16:45	17:23	17:57	19:31	20:03	20:31	20:35	20:09	19:22	18:31	16:47	16:29	
9	07:25	07:03	06:22	06:30	05:47	05:25	05:33	06:00	06:32	07:03	06:39	07:13	
	16:46	17:24	17:58	19:32	20:04	20:31	20:35	20:08	19:20	18:29	16:46	16:29	
10	07:25	07:02	06:21	06:29	05:46	05:25	05:33	06:01	06:33	07:04	06:40	07:14	
	16:47	17:25	17:59	19:33	20:05	20:32	20:34	20:07	19:19	18:27	16:45	16:29	
11	07:25	07:01	06:19	06:27	05:45	05:25	05:34	06:02	06:34	07:05	06:42	07:15	
	16:49	17:26	18:00	19:34	20:06	20:32	20:34	20:05	19:17	18:26	16:44	16:29	
12	07:25	06:59	06:17	06:26	05:44	05:24	05:35	06:04	06:35	07:06	06:43	07:15	
	16:50	17:28	18:01	19:35	20:07	20:33	20:34	20:04	19:15	18:24	16:43	16:29	
13	07:24	06:58	06:16	06:24	05:43	05:24	05:36	06:05	06:36	07:08	06:44	07:16	
	16:51	17:29	18:02	19:36	20:08	20:33	20:33	20:03	19:13	18:23	16:42	16:29	
14	07:24	06:57	06:14	06:22	05:42	05:24	05:36	06:06	06:37	07:09	06:45	07:17	
	16:52	17:30	18:03	19:37	20:09	20:34	20:33	20:01	19:12	18:21	16:41	16:29	
15	07:24	06:56	06:12	06:21	05:41	05:24	05:37	06:07	06:38	07:10	06:47	07:18	
	16:53	17:31	18:05	19:38	20:10	20:34	20:32	20:00	19:10	18:19	16:40	16:30	
16	07:23	06:54	06:11	06:19	05:40	05:24	05:38	06:08	06:39	07:11	06:48	07:18	
	16:54	17:33	18:06	19:39	20:11	20:35	20:31	19:58	19:08	18:18	16:39	16:30	
17	07:23	06:53	06:09	06:18	05:39	05:24	05:39	06:09	06:40	07:12	06:49	07:19	
	16:55	17:34	18:07	19:41	20:12	20:35	20:31	19:57	19:07	18:16	16:38	16:30	
18	07:22	06:51	06:07	06:16	05:38	05:24	05:40	06:10	06:41	07:13	06:50	07:20	
	16:56	17:35	18:08	19:42	20:13	20:35	20:30	19:56	19:05	18:15	16:37	16:30	
19	07:22	06:50	06:06	06:14	05:37	05:24	05:40	06:11	06:42	07:14	06:51	07:20	
	16:58	17:36	18:09	19:43	20:14	20:36	20:29	19:54	19:03	18:13	16:37	16:31	
20	07:21	06:49	06:04	06:13	05:36	05:25	05:41	06:12	06:43	07:15	06:53	07:21	
	16:59	17:38	18:10	19:44	20:15	20:36	20:29	19:53	19:01	18:12	16:36	16:31	
21	07:21	06:47	06:02	06:11	05:35	05:25	05:42	06:13	06:44	07:17	06:54	07:22	
	17:00	17:39	18:11	19:45	20:16	20:36	20:28	19:51	19:00	18:10	16:35	16:32	
22	07:20	06:46	06:01	06:10	05:34	05:25	05:43	06:14	06:45	07:18	06:55	07:22	
	17:01	17:40	18:12	19:46	20:17	20:36	20:27	19:50	18:58	18:09	16:34	16:32	
23	07:19	06:44	05:59	06:08	05:34	05:25	05:44	06:15	06:46	07:19	06:56	07:23	
	17:02	17:41	18:13	19:47	20:18	20:37	20:26	19:48	18:56	18:07	16:34	16:33	
24	07:19	06:43	05:57	06:07	05:33	05:25	05:45	06:16	06:47	07:20	06:57	07:23	
	17:04	17:42	18:14	19:48	20:19	20:37	20:25	19:46	18:54	18:06	16:33	16:33	
25	07:18	06:41	05:56	06:06	05:32	05:26	05:46	06:17	06:48	06:21	06:58	07:24	
	17:05	17:44	18:16	19:49	20:20	20:37	20:24	19:45	18:53	17:04	16:33	16:34	
26	07:17	06:40	05:54	06:04	05:31	05:26	05:47	06:18	06:49	06:22	07:00	07:24	
	17:06	17:45	18:17	19:50	20:21	20:37	20:24	19:43	18:51	17:03	16:32	16:34	
27	07:16	06:38	05:52	06:03	05:31	05:26	05:48	06:19	06:50	06:24	07:01	07:24	
	17:07	17:46	18:18	19:51	20:22	20:37	20:23	19:42	18:49	17:02	16:32	16:35	
28	07:15	06:37	05:50	06:01	05:30	05:27	05:49	06:20	06:51	06:25	07:02	07:25	
	17:09	17:47	18:19	19:52	20:23	20:37	20:22	19:40	18:48	17:00	16:31	16:36	
29	07:15		06:49	06:00	05:29	05:27	05:50	06:21	06:53	06:26	07:03	07:25	
	17:10		19:20	19:54	20:23	20:37	20:21	19:39	18:46	16:59	16:31	16:36	
30	07:14		06:47	05:59	05:29	05:28	05:51	06:22	06:54	06:27	07:04	07:25	
	17:11		19:21	19:55	20:24	20:37	20:20	19:37	18:44	16:58	16:30	16:37	
31	07:13		06:45		05:28		05:51	06:23		06:28		07:25	
	17:12		19:22		20:25		20:19	19:35		16:56		16:38	
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345	297
Somma minuti d'ombra			0	0	0	0	0	0	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

**Calcolo:** Shadow Flickering AnalysisWTG: 45 - PowerWind 56**Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giu	Lug	Ago	Sep	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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:25	07:12	06:35	06:44	05:57	05:28	05:28	05:52	06:24	06:54	06:29	07:05
	16:39	17:14	17:48	19:23	19:56	20:26	20:37	20:17	19:34	18:42	16:55	16:30
2	07:26	07:11	06:34	06:42	05:56	05:27	05:29	05:53	06:25	06:56	06:31	07:06
	16:40	17:15	17:49	19:24	19:57	20:26	20:37	20:16	19:32	18:41	16:54	16:30
3	07:26	07:10	06:32	06:40	05:54	05:27	05:29	05:54	06:26	06:57	06:32	07:07
	16:41	17:16	17:51	19:25	19:58	20:27	20:36	20:15	19:30	18:39	16:52	16:29
4	07:26	07:09	06:30	06:39	05:53	05:26	05:30	05:55	06:27	06:58	06:33	07:08
	16:41	17:17	17:52	19:26	19:59	20:28	20:36	20:14	19:29	18:37	16:51	16:29
5	07:26	07:07	06:29	06:37	05:52	05:26	05:30	05:56	06:28	06:59	06:34	07:09
	16:42	17:19	17:53	19:27	20:00	20:29	20:36	20:13	19:27	18:36	16:50	16:29
6	07:26	07:06	06:27	06:35	05:51	05:26	05:31	05:57	06:29	07:00	06:35	07:10
	16:43	17:20	17:54	19:28	20:01	20:29	20:36	20:12	19:25	18:34	16:49	16:29
7	07:26	07:05	06:26	06:34	05:49	05:25	05:31	05:58	06:30	07:01	06:37	07:11
	16:44	17:21	17:55	19:30	20:02	20:30	20:35	20:10	19:24	18:32	16:48	16:29
8	07:25	07:04	06:24	06:32	05:48	05:25	05:32	05:59	06:31	07:02	06:38	07:12
	16:45	17:22	17:56	19:31	20:03	20:30	20:35	20:09	19:22	18:31	16:47	16:29
9	07:25	07:03	06:22	06:30	05:47	05:25	05:33	06:00	06:32	07:03	06:39	07:13
	16:46	17:24	17:58	19:32	20:04	20:31	20:35	20:08	19:20	18:29	16:46	16:29
10	07:25	07:02	06:21	06:29	05:46	05:25	05:33	06:01	06:33	07:04	06:40	07:14
	16:47	17:25	17:59	19:33	20:05	20:32	20:34	20:06	19:18	18:27	16:45	16:29
11	07:25	07:00	06:19	06:27	05:45	05:25	05:34	06:02	06:34	07:05	06:42	07:14
	16:48	17:26	18:00	19:34	20:06	20:32	20:34	20:05	19:17	18:26	16:44	16:29
12	07:25	06:59	06:17	06:25	05:44	05:24	05:35	06:03	06:35	07:06	06:43	07:15
	16:50	17:28	18:01	19:35	20:07	20:33	20:33	20:04	19:15	18:24	16:43	16:29
13	07:24	06:58	06:16	06:24	05:43	05:24	05:36	06:04	06:36	07:07	06:44	07:16
	16:51	17:29	18:02	19:36	20:08	20:33	20:33	20:02	19:13	18:22	16:42	16:29
14	07:24	06:57	06:14	06:22	05:42	05:24	05:36	06:05	06:37	07:09	06:45	07:17
	16:52	17:30	18:03	19:37	20:09	20:34	20:32	20:01	19:12	18:21	16:41	16:29
15	07:24	06:55	06:12	06:21	05:41	05:24	05:37	06:06	06:38	07:10	06:46	07:18
	16:53	17:31	18:04	19:38	20:10	20:34	20:32	20:00	19:10	18:19	16:40	16:29
16	07:23	06:54	06:11	06:19	05:40	05:24	05:38	06:07	06:39	07:11	06:48	07:18
	16:54	17:33	18:05	19:39	20:11	20:34	20:31	19:58	19:08	18:18	16:39	16:30
17	07:23	06:53	06:09	06:17	05:39	05:24	05:39	06:08	06:40	07:12	06:49	07:19
	16:55	17:34	18:07	19:40	20:12	20:35	20:31	19:57	19:06	18:16	16:38	16:30
18	07:22	06:51	06:07	06:16	05:38	05:24	05:40	06:10	06:41	07:13	06:50	07:20
	16:56	17:35	18:08	19:42	20:13	20:35	20:30	19:55	19:05	18:15	16:37	16:30
19	07:22	06:50	06:06	06:14	05:37	05:24	05:40	06:11	06:42	07:14	06:51	07:20
	16:57	17:36	18:09	19:43	20:14	20:36	20:29	19:54	19:03	18:13	16:36	16:31
20	07:21	06:48	06:04	06:13	05:36	05:25	05:41	06:12	06:43	07:15	06:52	07:21
	16:59	17:37	18:10	19:44	20:15	20:36	20:28	19:52	19:01	18:12	16:36	16:31
21	07:20	06:47	06:02	06:11	05:35	05:25	05:42	06:13	06:44	07:16	06:54	07:21
	17:00	17:39	18:11	19:45	20:16	20:36	20:28	19:51	18:59	18:10	16:35	16:31
22	07:20	06:46	06:01	06:10	05:34	05:25	05:43	06:14	06:45	07:18	06:55	07:22
	17:01	17:40	18:12	19:46	20:17	20:36	20:27	19:49	18:58	18:09	16:34	16:32
23	07:19	06:44	05:59	06:08	05:33	05:25	05:44	06:15	06:46	07:19	06:56	07:22
	17:02	17:41	18:13	19:47	20:18	20:36	20:26	19:48	18:56	18:07	16:34	16:32
24	07:18	06:43	05:57	06:07	05:33	05:25	05:45	06:16	06:47	07:20	06:57	07:23
	17:04	17:42	18:14	19:48	20:19	20:37	20:25	19:46	18:54	18:06	16:33	16:33
25	07:18	06:41	05:55	06:05	05:32	05:26	05:46	06:17	06:48	06:21	06:58	07:23
	17:05	17:44	18:15	19:49	20:20	20:37	20:24	19:45	18:53	17:04	16:33	16:34
26	07:17	06:40	05:54	06:04	05:31	05:26	05:47	06:18	06:49	06:22	06:59	07:24
	17:06	17:45	18:17	19:50	20:21	20:37	20:23	19:43	18:51	17:03	16:32	16:34
27	07:16	06:38	05:52	06:03	05:31	05:26	05:48	06:19	06:50	06:23	07:00	07:24
	17:07	17:46	18:18	19:51	20:22	20:37	20:22	19:42	18:49	17:02	16:32	16:35
28	07:15	06:37	05:50	06:01	05:30	05:27	05:48	06:20	06:51	06:25	07:02	07:24
	17:09	17:47	18:19	19:52	20:22	20:37	20:21	19:40	18:47	17:00	16:31	16:36
29	07:14		06:49	06:00	05:29	05:27	05:49	06:21	06:52	06:26	07:03	07:25
	17:10		19:20	19:53	20:23	20:37	20:20	19:38	18:46	16:59	16:31	16:36
30	07:13		06:47	05:58	05:29	05:28	05:50	06:22	06:53	06:27	07:04	07:25
	17:11		19:21	19:55	20:24	20:37	20:19	19:37	18:44	16:57	16:30	16:37
31	07:13		06:45		05:28		05:51	06:23		06:28		07:25
	17:12		19:22		20:25		20:18	19:35		16:56		16:38
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345
Somma minuti d'ombra			0	0	0	0	0	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**

**Calcolo:** Shadow Flickering Analysis **WTG:** 46 - REpower 57/1000 1050-250 57.0 !-! hub: 55.0 m (TOT: 83.5 m) (71)  
**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:25	07:11	06:35	06:43	05:57	05:27	05:28	05:52	06:24	06:54	06:29	07:05
	16:39	17:13	17:48	19:23	19:55	20:25	20:36	20:17	19:33	18:42	16:55	16:30
2	07:25	07:10	06:33	06:42	05:55	05:27	05:28	05:53	06:25	06:55	06:30	07:06
	16:39	17:15	17:49	19:24	19:56	20:26	20:36	20:16	19:32	18:40	16:53	16:29
3	07:25	07:09	06:32	06:40	05:54	05:26	05:29	05:54	06:26	06:56	06:32	07:07
	16:40	17:16	17:50	19:25	19:58	20:27	20:36	20:15	19:30	18:39	16:52	16:29
4	07:25	07:08	06:30	06:38	05:53	05:26	05:29	05:55	06:27	06:57	06:33	07:08
	16:41	17:17	17:52	19:26	19:59	20:28	20:36	20:14	19:28	18:37	16:51	16:29
5	07:25	07:07	06:29	06:37	05:52	05:26	05:30	05:56	06:28	06:58	06:34	07:09
	16:42	17:18	17:53	19:27	20:00	20:28	20:36	20:12	19:27	18:35	16:50	16:29
6	07:25	07:06	06:27	06:35	05:50	05:25	05:30	05:57	06:29	07:00	06:35	07:10
	16:43	17:20	17:54	19:28	20:01	20:29	20:36	20:11	19:25	18:34	16:49	16:29
7	07:25	07:05	06:25	06:33	05:49	05:25	05:31	05:58	06:30	07:01	06:36	07:11
	16:44	17:21	17:55	19:29	20:02	20:30	20:35	20:10	19:23	18:32	16:47	16:29
8	07:25	07:04	06:24	06:32	05:48	05:25	05:32	05:59	06:31	07:02	06:38	07:12
	16:45	17:22	17:56	19:30	20:03	20:30	20:35	20:09	19:22	18:30	16:46	16:28
9	07:25	07:03	06:22	06:30	05:47	05:25	05:32	06:00	06:32	07:03	06:39	07:12
	16:46	17:23	17:57	19:32	20:04	20:31	20:35	20:08	19:20	18:29	16:45	16:28
10	07:25	07:01	06:20	06:28	05:46	05:24	05:33	06:01	06:33	07:04	06:40	07:13
	16:47	17:25	17:58	19:33	20:05	20:31	20:34	20:06	19:18	18:27	16:44	16:28
11	07:25	07:00	06:19	06:27	05:45	05:24	05:34	06:02	06:34	07:05	06:41	07:14
	16:48	17:26	18:00	19:34	20:06	20:32	20:34	20:05	19:16	18:25	16:43	16:28
12	07:24	06:59	06:17	06:25	05:43	05:24	05:35	06:03	06:35	07:06	06:43	07:15
	16:49	17:27	18:01	19:35	20:07	20:32	20:33	20:04	19:15	18:24	16:42	16:29
13	07:24	06:58	06:15	06:24	05:42	05:24	05:35	06:04	06:36	07:07	06:44	07:16
	16:50	17:28	18:02	19:36	20:08	20:33	20:33	20:02	19:13	18:22	16:41	16:29
14	07:24	06:56	06:14	06:22	05:41	05:24	05:36	06:05	06:37	07:08	06:45	07:17
	16:51	17:30	18:03	19:37	20:09	20:33	20:32	20:01	19:11	18:21	16:40	16:29
15	07:23	06:55	06:12	06:20	05:40	05:24	05:37	06:06	06:38	07:09	06:46	07:17
	16:53	17:31	18:04	19:38	20:10	20:34	20:32	19:59	19:10	18:19	16:39	16:29
16	07:23	06:54	06:10	06:19	05:39	05:24	05:38	06:07	06:39	07:11	06:47	07:18
	16:54	17:32	18:05	19:39	20:11	20:34	20:31	19:58	19:08	18:17	16:39	16:29
17	07:22	06:52	06:09	06:17	05:38	05:24	05:38	06:08	06:40	07:12	06:49	07:19
	16:55	17:33	18:06	19:40	20:12	20:35	20:30	19:57	19:06	18:16	16:38	16:30
18	07:22	06:51	06:07	06:16	05:37	05:24	05:39	06:09	06:41	07:13	06:50	07:19
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20	07:21	06:48	06:04	06:13	05:36	05:24	05:41	06:11	06:43	07:15	06:52	07:21
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	17:00	17:38	18:11	19:45	20:16	20:36	20:27	19:51	18:59	18:10	16:35	16:31
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	17:01	17:40	18:12	19:46	20:17	20:36	20:27	19:49	18:57	18:08	16:34	16:32
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	17:02	17:41	18:13	19:47	20:18	20:36	20:26	19:48	18:56	18:07	16:33	16:32
24	07:18	06:42	05:57	06:07	05:32	05:25	05:44	06:15	06:47	07:20	06:57	07:23
	17:03	17:42	18:14	19:48	20:19	20:36	20:25	19:46	18:54	18:05	16:33	16:33
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30	07:13		06:47	05:58	05:28	05:27	05:50	06:22	06:53	06:27	07:04	07:25
	17:11		19:21	19:54	20:24	20:37	20:19	19:37	18:44	16:57	16:30	16:37
31	07:12		06:45		05:28		05:51	06:23		06:28		07:25
	17:12		19:22		20:25		20:18	19:35		16:56		16:38
Ore potenziali eliofania			296	296	369	399	450	454	461	429	375	345
Somma minuti d'ombra			0	0	0	0	0	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****Calcolo:** Shadow Flickering Analysis **WTG:** 47 - REpower 57/1000 1050-250 57.0 !- hub: 55.0 m (TOT: 83.5 m) (72)**Assunzioni sui calcoli d'ombra**

Probabilità di eliofania (media ore giornaliera 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  
437 192 40 16 67 346 208 192 120 99 425 524 2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:25   07:11   06:35   06:43   05:57   05:27   05:28   05:52   06:24   06:54   06:29   07:05											
	16:39   17:13   17:48   19:23   19:55   20:25   20:36   20:17   19:33   18:42   16:55   16:30											
2	07:25   07:10   06:33   06:42   05:55   05:27   05:28   05:53   06:25   06:55   06:30   07:06											
	16:39   17:15   17:49   19:24   19:56   20:26   20:36   20:16   19:32   18:40   16:53   16:29											
3	07:25   07:09   06:32   06:40   05:54   05:26   05:29   05:54   06:26   06:56   06:32   07:07											
	16:40   17:16   17:50   19:25   19:57   20:27   20:36   20:15   19:30   18:39   16:52   16:29											
4	07:25   07:08   06:30   06:38   05:53   05:26   05:29   05:55   06:27   06:57   06:33   07:08											
	16:41   17:17   17:51   19:26   19:59   20:28   20:36   20:14   19:28   18:37   16:51   16:29											
5	07:25   07:07   06:28   06:37   05:52   05:26   05:30   05:56   06:28   06:58   06:34   07:09											
	16:42   17:18   17:53   19:27   20:00   20:28   20:36   20:12   19:27   18:35   16:50   16:29											
6	07:25   07:06   06:27   06:35   05:50   05:25   05:30   05:57   06:29   07:00   06:35   07:10											
	16:43   17:20   17:54   19:28   20:01   20:29   20:35   20:11   19:25   18:34   16:49   16:29											
7	07:25   07:05   06:25   06:33   05:49   05:25   05:31   05:58   06:30   07:01   06:36   07:11											
	16:44   17:21   17:55   19:29   20:02   20:30   20:35   20:10   19:23   18:32   16:47   16:28											
8	07:25   07:04   06:24   06:32   05:48   05:25   05:32   05:59   06:31   07:02   06:38   07:12											
	16:45   17:22   17:56   19:30   20:03   20:30   20:35   20:09   19:22   18:30   16:46   16:28											
9	07:25   07:03   06:22   06:30   05:47   05:25   05:32   06:00   06:32   07:03   06:39   07:12											
	16:46   17:23   17:57   19:31   20:04   20:31   20:34   20:07   19:20   18:29   16:45   16:28											
10	07:25   07:01   06:20   06:28   05:46   05:24   05:33   06:01   06:33   07:04   06:40   07:13											
	16:47   17:25   17:58   19:33   20:05   20:31   20:34   20:06   19:18   18:27   16:44   16:28											
11	07:25   07:00   06:19   06:27   05:44   05:24   05:34   06:02   06:34   07:05   06:41   07:14											
	16:48   17:26   18:00   19:34   20:06   20:32   20:34   20:05   19:16   18:25   16:43   16:28											
12	07:24   06:59   06:17   06:25   05:43   05:24   05:34   06:03   06:35   07:06   06:42   07:15											
	16:49   17:27   18:01   19:35   20:07   20:32   20:33   20:04   19:15   18:24   16:42   16:29											
13	07:24   06:58   06:15   06:23   05:42   05:24   05:35   06:04   06:36   07:07   06:44   07:16											
	16:50   17:28   18:02   19:36   20:08   20:33   20:33   20:02   19:13   18:22   16:41   16:29											
14	07:24   06:56   06:14   06:22   05:41   05:24   05:36   06:05   06:37   07:08   06:45   07:17											
	16:51   17:30   18:03   19:37   20:09   20:33   20:32   20:01   19:11   18:21   16:40   16:29											
15	07:23   06:55   06:12   06:20   05:40   05:24   05:37   06:06   06:38   07:09   06:46   07:17											
	16:53   17:31   18:04   19:38   20:10   20:34   20:32   19:59   19:10   18:19   16:39   16:29											
16	07:23   06:54   06:10   06:19   05:39   05:24   05:38   06:07   06:39   07:10   06:47   07:18											
	16:54   17:32   18:05   19:39   20:11   20:34   20:31   19:58   19:08   18:17   16:39   16:29											
17	07:22   06:52   06:09   06:17   05:38   05:24   05:38   06:08   06:40   07:12   06:49   07:19											
	16:55   17:33   18:06   19:40   20:12   20:35   20:30   19:57   19:06   18:16   16:38   16:30											
18	07:22   06:51   06:07   06:16   05:37   05:24   05:39   06:09   06:41   07:13   06:50   07:19											
	16:56   17:35   18:07   19:41   20:13   20:35   20:30   19:55   19:04   18:14   16:37   16:30											
19	07:21   06:50   06:05   06:14   05:36   05:24   05:40   06:10   06:42   07:14   06:51   07:20											
	16:57   17:36   18:09   19:42   20:14   20:35   20:29   19:54   19:03   18:13   16:36   16:30											
20	07:21   06:48   06:04   06:13   05:36   05:24   05:41   06:11   06:43   07:15   06:52   07:21											
	16:58   17:37   18:10   19:43   20:15   20:36   20:28   19:52   19:01   18:11   16:35   16:31											
21	07:20   06:47   06:02   06:11   05:35   05:24   05:42   06:12   06:44   07:16   06:53   07:21											
	17:00   17:38   18:11   19:44   20:16   20:36   20:27   19:51   18:59   18:10   16:35   16:31											
22	07:20   06:45   06:00   06:10   05:34   05:25   05:43   06:13   06:45   07:17   06:54   07:22											
	17:01   17:40   18:12   19:46   20:17   20:36   20:27   19:49   18:57   18:08   16:34   16:32											
23	07:19   06:44   05:59   06:08   05:33   05:25   05:44   06:14   06:46   07:18   06:56   07:22											
	17:02   17:41   18:13   19:47   20:18   20:36   20:26   19:48   18:56   18:07   16:33   16:32											
24	07:18   06:42   05:57   06:07   05:32   05:25   05:44   06:15   06:47   07:20   06:57   07:23											
	17:03   17:42   18:14   19:48   20:19   20:36   20:25   19:46   18:54   18:05   16:33   16:33											
25	07:17   06:41   05:55   06:05   05:32   05:25   05:45   06:16   06:48   06:21   06:58   07:23											
	17:04   17:43   18:15   19:49   20:20   20:36   20:24   19:44   18:52   17:04   16:32   16:33											
26	07:17   06:39   05:53   06:04   05:31   05:26   05:46   06:17   06:49   06:22   06:59   07:24											
	17:06   17:44   18:16   19:50   20:20   20:37   20:23   19:43   18:51   17:03   16:32   16:34											
27	07:16   06:38   05:52   06:02   05:30   05:26   05:47   06:18   06:50   06:23   07:00   07:24											
	17:07   17:46   18:17   19:51   20:21   20:37   20:22   19:41   18:49   17:01   16:31   16:35											
28	07:15   06:36   05:50   06:01   05:30   05:26   05:48   06:19   06:51   06:24   07:01   07:24											
	17:08   17:47   18:18   19:52   20:22   20:37   20:21   19:40   18:47   17:00   16:31   16:35											
29	07:14   06:48   05:59   05:29   05:27   05:49   06:20   06:52   06:26   07:02   07:24											
	17:09   19:20   19:53   20:23   20:37   20:20   19:38   18:45   16:58   16:30   16:36											
30	07:13   06:47   05:58   05:28   05:27   05:50   06:21   06:53   06:27   07:04   07:25											
	17:11   19:21   19:54   20:24   20:37   20:19   19:37   18:44   16:57   16:30   16:37											
31	07:12   06:45   05:28   05:28   05:51   06:22   06:22   06:28   06:28   07:25											
	17:12   19:22   20:25   20:25   20:18   19:35   16:56   16:56   16:37											
Ore potenziali eliofania	296	296	369	399	450	454	461	429	375	345	297	286
Somma minuti d'ombra	0	0	0	0	0	0	0	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****Calcolo:** Shadow Flickering Analysis **WTG:** 48 - REpower 57/1000 1050-250 57.0 !- hub: 55.0 m (TOT: 83.5 m) (73)**Assunzioni sui calcoli d'ombra**

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

Gen	Feb	Mar	Apr	Mag	Giugno	Luglio	Ago	Sep	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
437	192	40	16	67	346	208	192	120	99	425	524	2,665

: Soglia di cut-in dalla curva di potenza

	Gennaio	Febbraio	Marzo	Aprile	Maggio	Giugno	Luglio	Agosto	Settembre	Ottobre	Novembre	Dicembre
1	07:25	07:11	06:35	06:43	05:57	05:27	05:28	05:52	06:24	06:54	06:29	07:05
	16:39	17:13	17:48	19:23	19:55	20:25	20:36	20:17	19:33	18:42	16:55	16:30
2	07:25	07:10	06:33	06:42	05:55	05:27	05:28	05:53	06:25	06:55	06:30	07:06
	16:39	17:15	17:49	19:24	19:56	20:26	20:36	20:16	19:32	18:40	16:53	16:29
3	07:25	07:09	06:32	06:40	05:54	05:26	05:29	05:54	06:26	06:56	06:32	07:07
	16:40	17:16	17:50	19:25	19:57	20:27	20:36	20:15	19:30	18:39	16:52	16:29
4	07:25	07:08	06:30	06:38	05:53	05:26	05:29	05:55	06:27	06:57	06:33	07:08
	16:41	17:17	17:51	19:26	19:59	20:28	20:36	20:14	19:28	18:37	16:51	16:29
5	07:25	07:07	06:28	06:37	05:52	05:26	05:30	05:56	06:28	06:58	06:34	07:09
	16:42	17:18	17:53	19:27	20:00	20:28	20:36	20:12	19:27	18:35	16:50	16:29
6	07:25	07:06	06:27	06:35	05:50	05:25	05:30	05:57	06:29	07:00	06:35	07:10
	16:43	17:20	17:54	19:28	20:01	20:29	20:35	20:11	19:25	18:34	16:49	16:29
7	07:25	07:05	06:25	06:33	05:49	05:25	05:31	05:58	06:30	07:01	06:36	07:11
	16:44	17:21	17:55	19:29	20:02	20:30	20:35	20:10	19:23	18:32	16:47	16:28
8	07:25	07:04	06:24	06:32	05:48	05:25	05:32	05:59	06:31	07:02	06:38	07:12
	16:45	17:22	17:56	19:30	20:03	20:30	20:35	20:09	19:22	18:30	16:46	16:28
9	07:25	07:03	06:22	06:30	05:47	05:25	05:32	06:00	06:32	07:03	06:39	07:12
	16:46	17:23	17:57	19:31	20:04	20:31	20:34	20:07	19:20	18:29	16:45	16:28
10	07:25	07:01	06:20	06:28	05:46	05:24	05:33	06:01	06:33	07:04	06:40	07:13
	16:47	17:25	17:58	19:33	20:05	20:31	20:34	20:06	19:18	18:27	16:44	16:28
11	07:25	07:00	06:19	06:27	05:45	05:24	05:34	06:02	06:34	07:05	06:41	07:14
	16:48	17:26	18:00	19:34	20:06	20:32	20:34	20:05	19:16	18:25	16:43	16:28
12	07:24	06:59	06:17	06:25	05:43	05:24	05:34	06:03	06:35	07:06	06:42	07:15
	16:49	17:27	18:01	19:35	20:07	20:32	20:33	20:04	19:15	18:24	16:42	16:29
13	07:24	06:58	06:15	06:23	05:42	05:24	05:35	06:04	06:36	07:07	06:44	07:16
	16:50	17:28	18:02	19:36	20:08	20:33	20:33	20:02	19:13	18:22	16:41	16:29
14	07:24	06:56	06:14	06:22	05:41	05:24	05:36	06:05	06:37	07:08	06:45	07:17
	16:51	17:30	18:03	19:37	20:09	20:33	20:32	20:01	19:11	18:21	16:40	16:29
15	07:23	06:55	06:12	06:20	05:40	05:24	05:37	06:06	06:38	07:09	06:46	07:17
	16:53	17:31	18:04	19:38	20:10	20:34	20:32	19:59	19:10	18:19	16:39	16:29
16	07:23	06:54	06:10	06:19	05:39	05:24	05:38	06:07	06:39	07:10	06:47	07:18
	16:54	17:32	18:05	19:39	20:11	20:34	20:31	19:58	19:08	18:17	16:39	16:29
17	07:22	06:52	06:09	06:17	05:38	05:24	05:38	06:08	06:40	07:12	06:49	07:19
	16:55	17:33	18:06	19:40	20:12	20:35	20:30	19:57	19:06	18:16	16:38	16:30
18	07:22	06:51	06:07	06:16	05:37	05:24	05:39	06:09	06:41	07:13	06:50	07:19
	16:56	17:35	18:07	19:41	20:13	20:35	20:30	19:55	19:04	18:14	16:37	16:30
19	07:21	06:50	06:05	06:14	05:36	05:24	05:40	06:10	06:42	07:14	06:51	07:20
	16:57	17:36	18:09	19:42	20:14	20:35	20:29	19:54	19:03	18:13	16:36	16:30
20	07:21	06:48	06:04	06:13	05:36	05:24	05:41	06:11	06:43	07:15	06:52	07:21
	16:58	17:37	18:10	19:43	20:15	20:36	20:28	19:52	19:01	18:11	16:35	16:31
21	07:20	06:47	06:02	06:11	05:35	05:24	05:42	06:12	06:44	07:16	06:53	07:21
	17:00	17:38	18:11	19:44	20:16	20:36	20:27	19:51	18:59	18:10	16:35	16:31
22	07:20	06:45	06:00	06:10	05:34	05:25	05:43	06:13	06:45	07:17	06:54	07:22
	17:01	17:40	18:12	19:46	20:17	20:36	20:27	19:49	18:57	18:08	16:34	16:32
23	07:19	06:44	05:59	06:08	05:33	05:25	05:44	06:14	06:46	07:18	06:56	07:22
	17:02	17:41	18:13	19:47	20:18	20:36	20:26	19:48	18:56	18:07	16:33	16:32
24	07:18	06:42	05:57	06:07	05:32	05:25	05:44	06:15	06:47	07:20	06:57	07:23
	17:03	17:42	18:14	19:48	20:19	20:36	20:25	19:46	18:54	18:05	16:33	16:33
25	07:17	06:41	05:55	06:05	05:32	05:25	05:45	06:16	06:48	06:21	06:58	07:23
	17:04	17:43	18:15	19:49	20:20	20:36	20:24	19:44	18:52	17:04	16:32	16:33
26	07:17	06:39	05:53	06:04	05:31	05:26	05:46	06:17	06:49	06:22	06:59	07:23
	17:06	17:44	18:16	19:50	20:20	20:37	20:23	19:43	18:51	17:03	16:32	16:34
27	07:16	06:38	05:52	06:02	05:30	05:26	05:47	06:18	06:50	06:23	07:00	07:24
	17:07	17:46	18:17	19:51	20:21	20:37	20:22	19:41	18:49	17:01	16:31	16:35
28	07:15	06:36	05:50	06:01	05:30	05:26	05:48	06:19	06:51	06:24	07:01	07:24
	17:08	17:47	18:18	19:52	20:22	20:37	20:21	19:40	18:47	17:00	16:31	16:35
29	07:14		06:48	05:59	05:29	05:27	05:49	06:20	06:52	06:26	07:02	07:24
	17:09		19:19	19:53	20:23	20:37	20:20	19:38	18:45	16:58	16:30	16:36
30	07:13		06:47	05:58	05:28	05:27	05:50	06:21	06:53	06:27	07:03	07:25
	17:11		19:21	19:54	20:24	20:37	20:19	19:37	18:44	16:57	16:30	16:37
31	07:12		06:45		05:28		05:51	06:22		06:28		07:25
	17:12		19:22		20:25		20:18	19:35		16:56		16:37
Ore potenziali eliofania	296	296	369	399	450	454	461	429	375	345	297	286
Somma minuti d'ombra	0	0	0	0	0	0	0	0	0	0	0	0

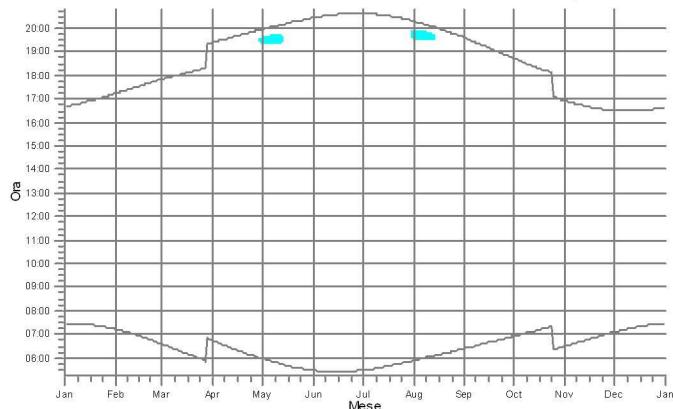
**Legenda della tabella:**

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

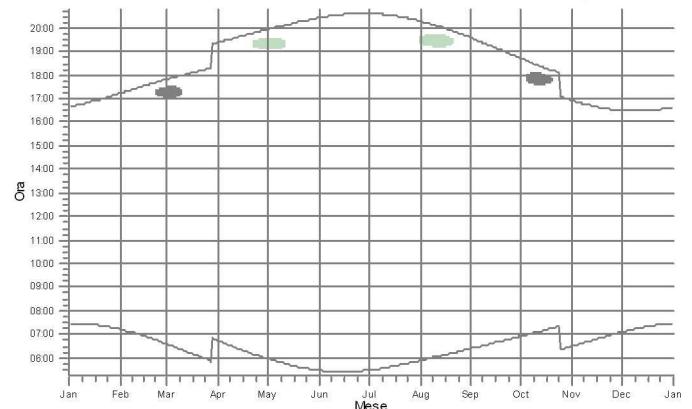
## SHADOW - Calendario per WTG, grafico

Calcolo: Shadow Flickering Analysis

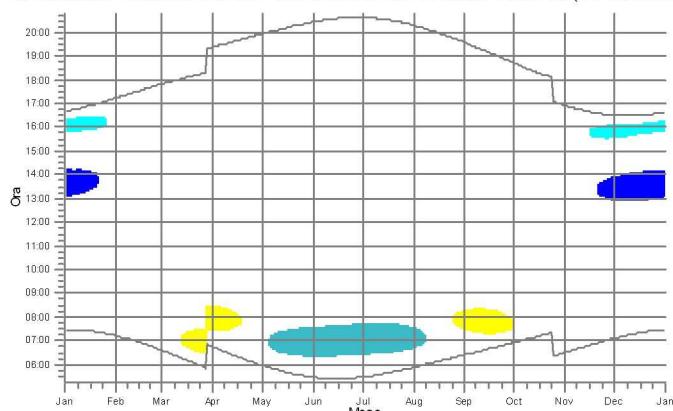
1: Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0



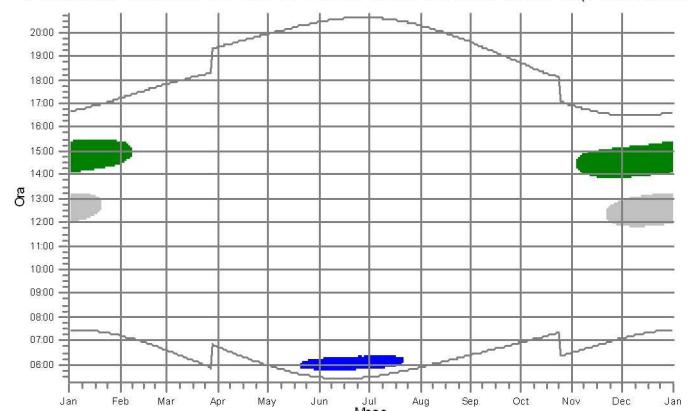
2: Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0



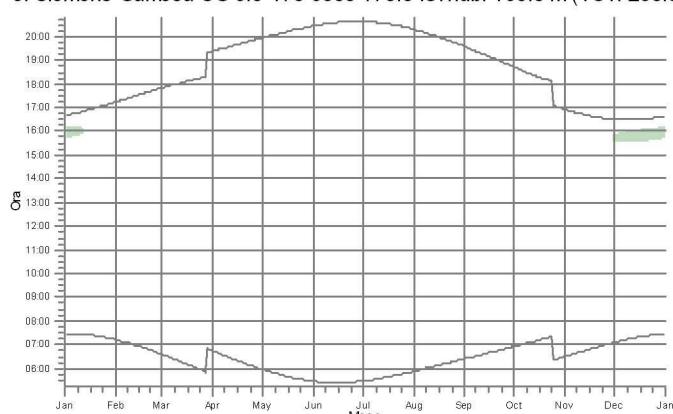
3: Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0



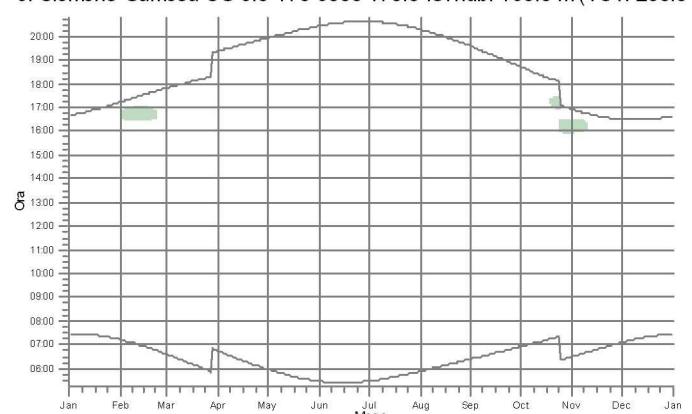
4: Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0



5: Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0



6: Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0



Receptori d'ombra

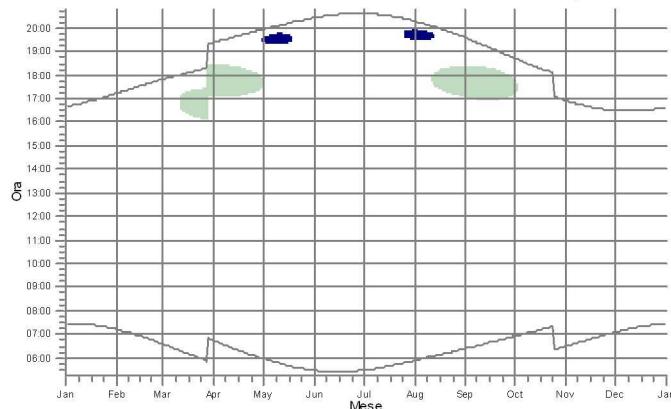
	R1: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (76)
	R10: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (85)
	R11: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (86)
	R12: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (87)

	R2: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (77)
	R3: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (78)
	R4: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (79)
	R9: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (84)

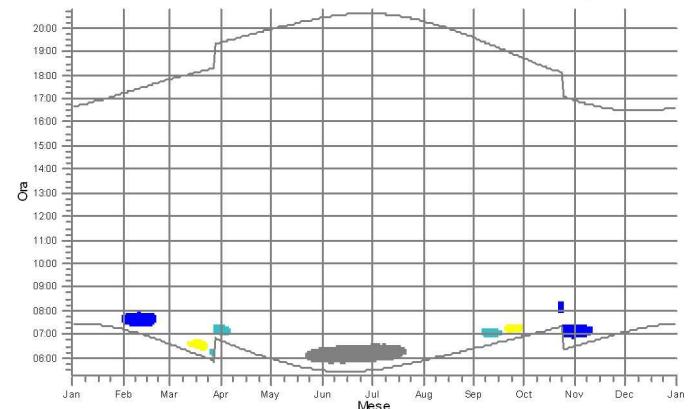
## SHADOW - Calendario per WTG, grafico

Calcolo: Shadow Flickering Analysis

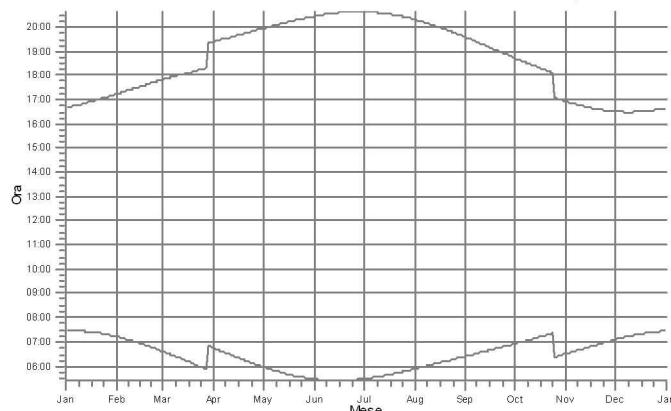
7: Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0



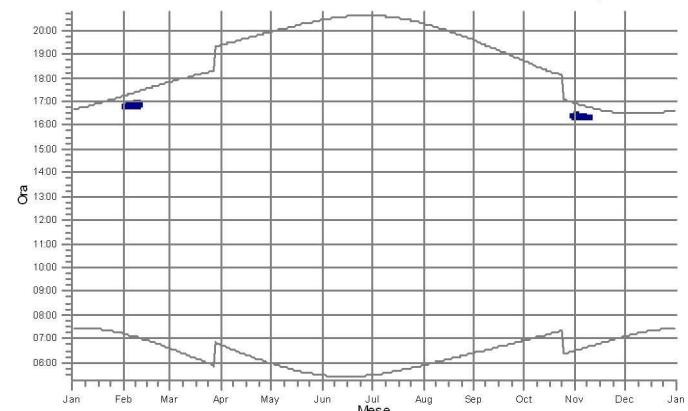
8: Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0



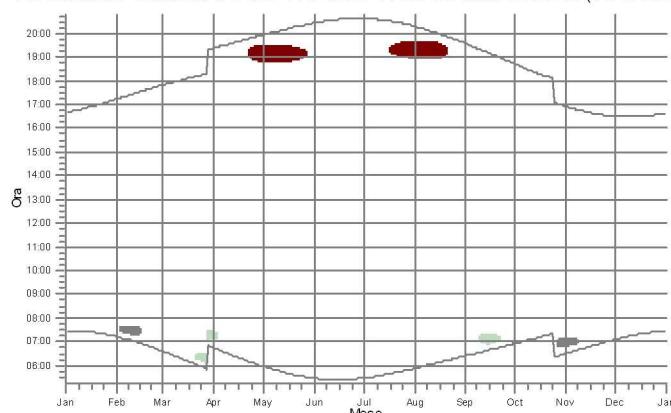
9: Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0



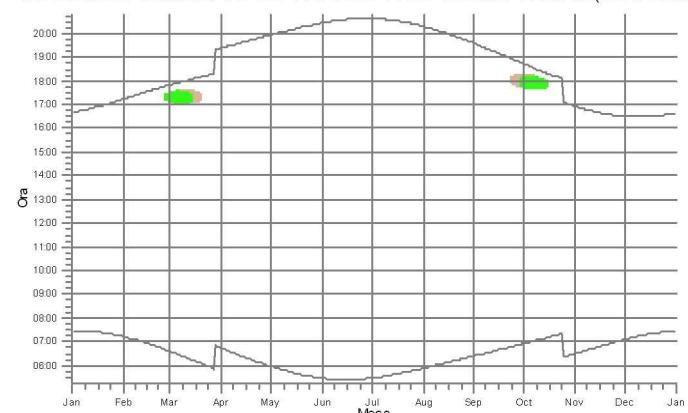
10: Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0



11: Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0



12: Siemens Gamesa SG 6.0-170 6000 170.0 !O! hub: 165.0 m (TOT: 250.0



Recessori d'ombra

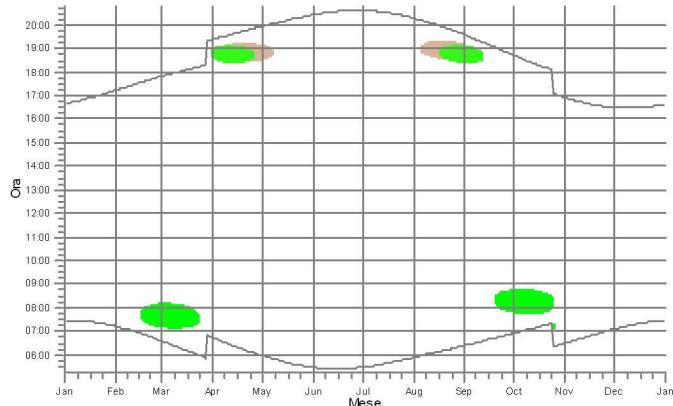
	R10: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (85)
	R11: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (86)
	R12: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (87)
	R15: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (90)
	R16: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (91)

	R4: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (79)
	R7: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (82)
	R8: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (83)
	R9: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (84)

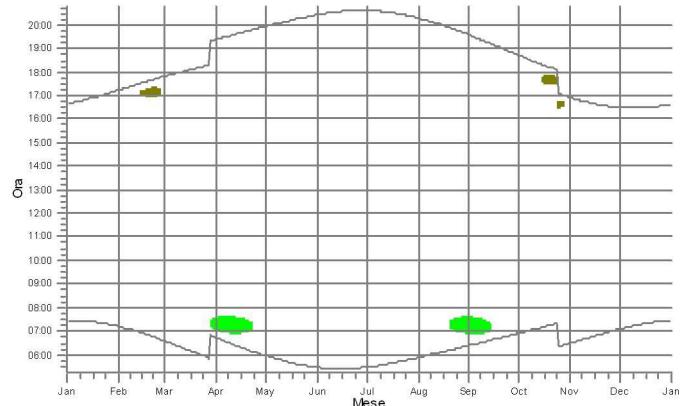
## SHADOW - Calendario per WTG, grafico

Calcolo: Shadow Flickering Analysis

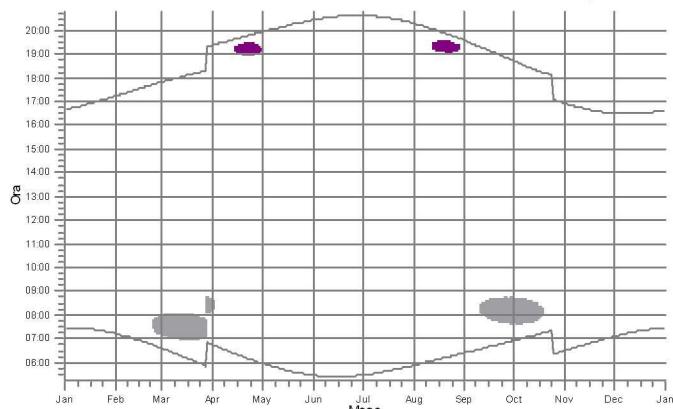
13: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



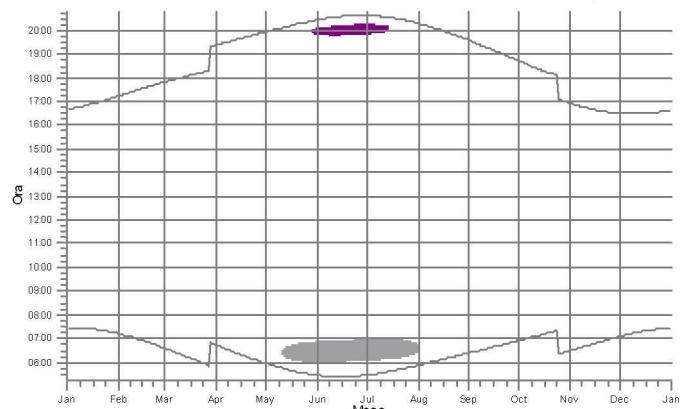
14: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



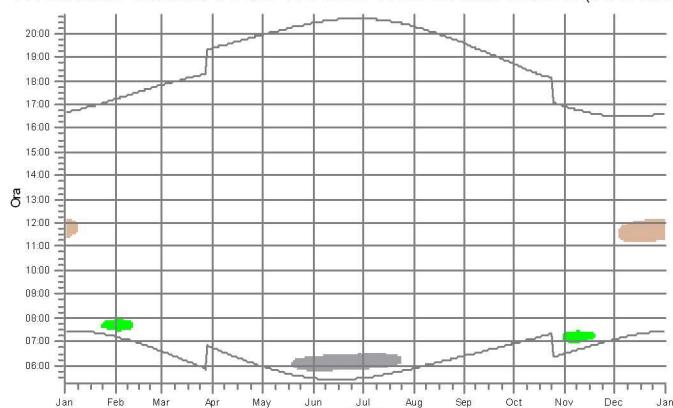
15: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



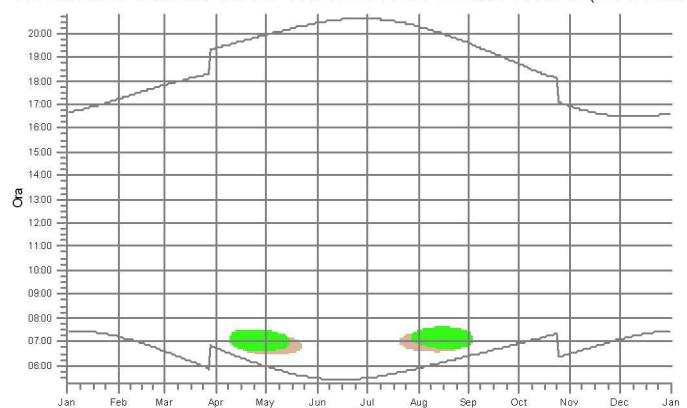
16: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



17: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



18: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



Receptori d'ombra

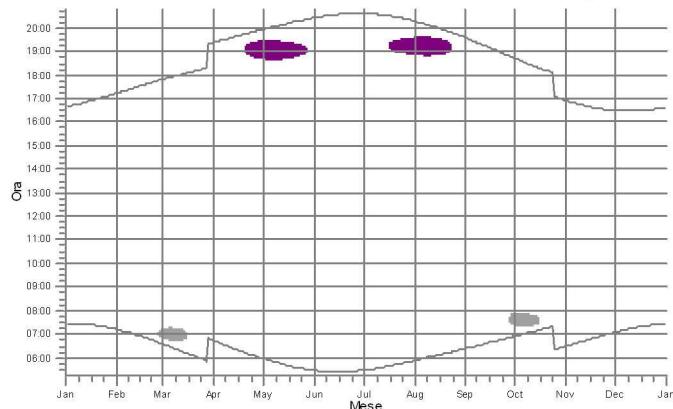
<span style="background-color: green; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	R17: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (92)
<span style="background-color: brown; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	R18: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (93)
<span style="background-color: purple; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	R19: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (94)

<span style="background-color: gray; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	R6: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (81)
<span style="background-color: brown; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	R7: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (82)
<span style="background-color: green; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	R8: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (83)

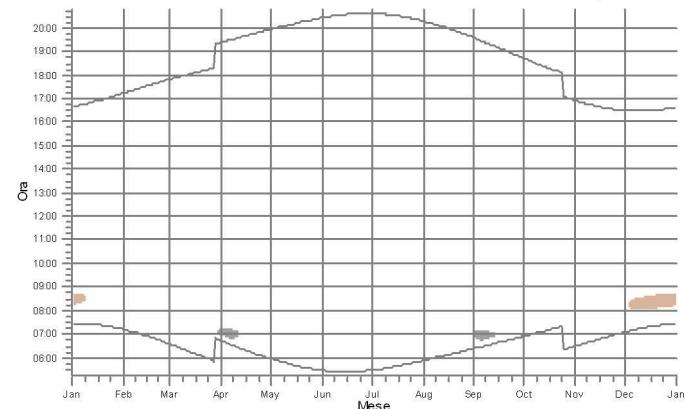
## SHADOW - Calendario per WTG, grafico

Calcolo: Shadow Flickering Analysis

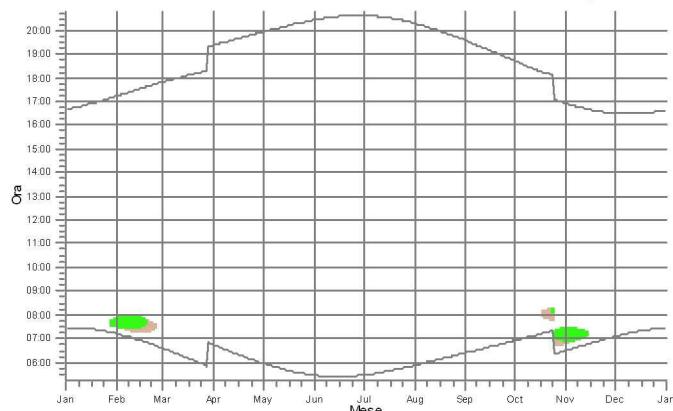
19: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



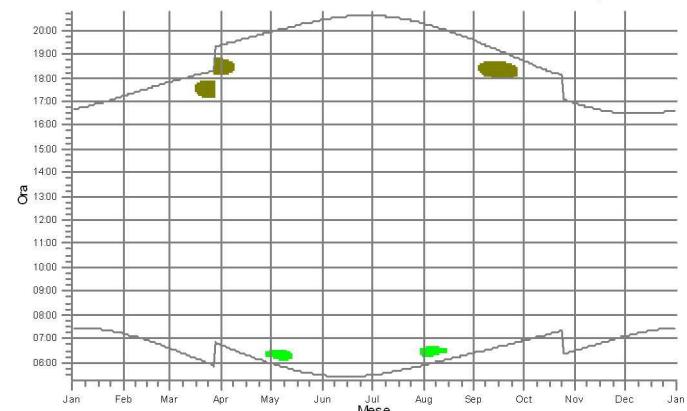
20: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



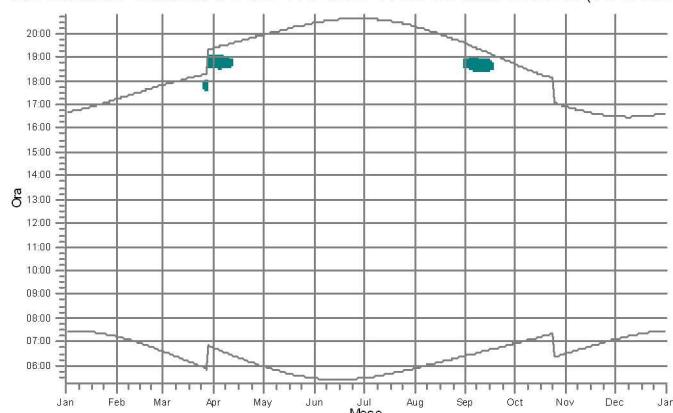
21: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



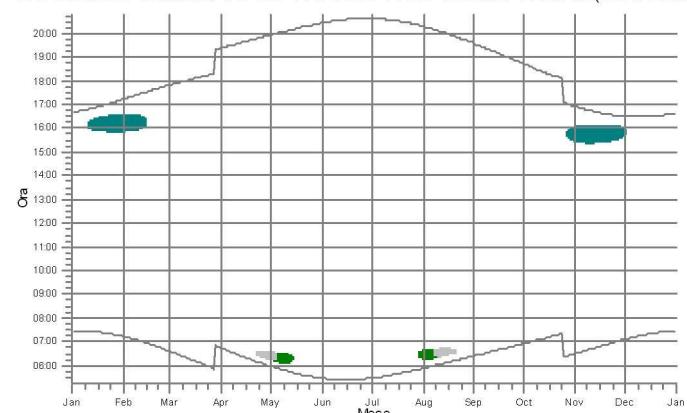
22: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



23: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



24: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



Receptori d'ombra

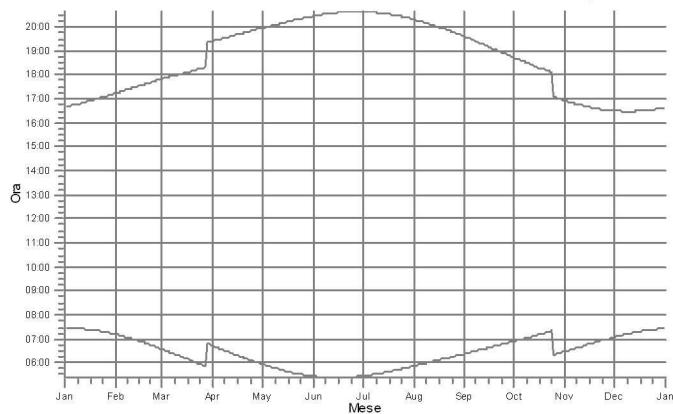
<span style="background-color: darkgreen; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	R1: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (76)
<span style="background-color: darkteal; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	R14: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (89)
<span style="background-color: limegreen; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	R17: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (92)
<span style="background-color: olive; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	R18: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (93)
<span style="background-color: purple; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	R19: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (94)

<span style="background-color: lightgrey; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	R2: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (77)
<span style="background-color: grey; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	R6: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (81)
<span style="background-color: brown; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	R7: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (82)
<span style="background-color: lime; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	R8: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (83)

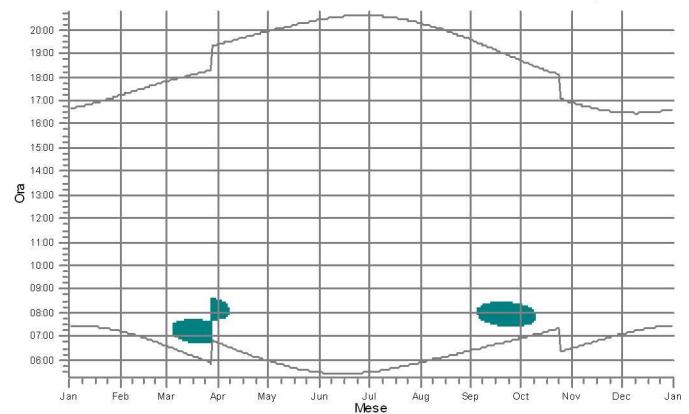
## SHADOW - Calendario per WTG, grafico

**Calcolo:** Shadow Flickering Analysis

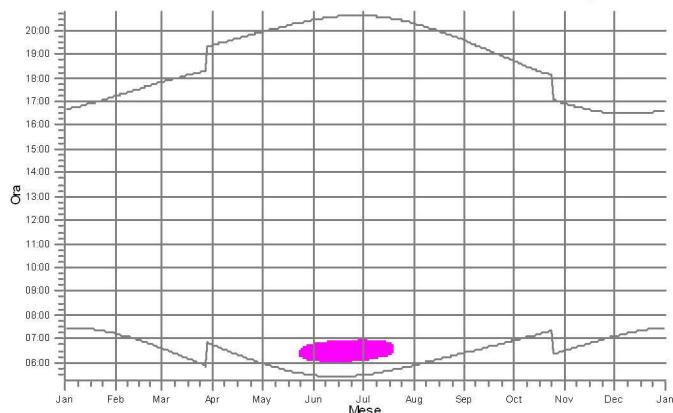
25: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



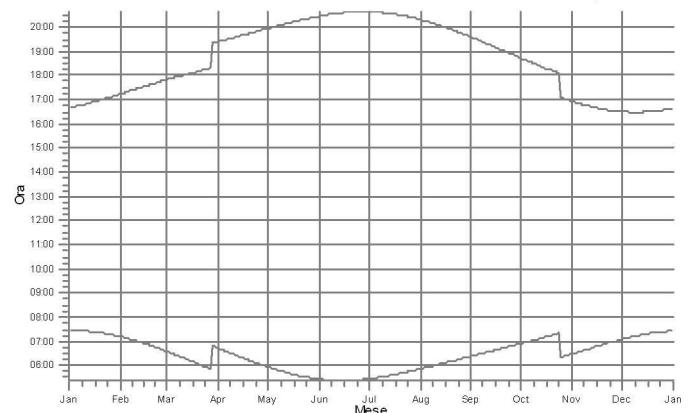
26: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



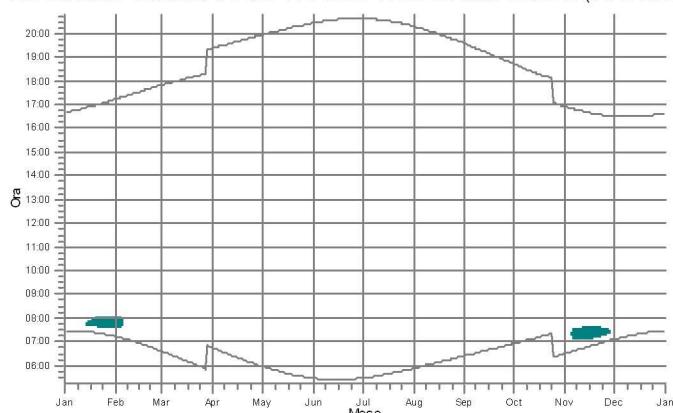
27: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



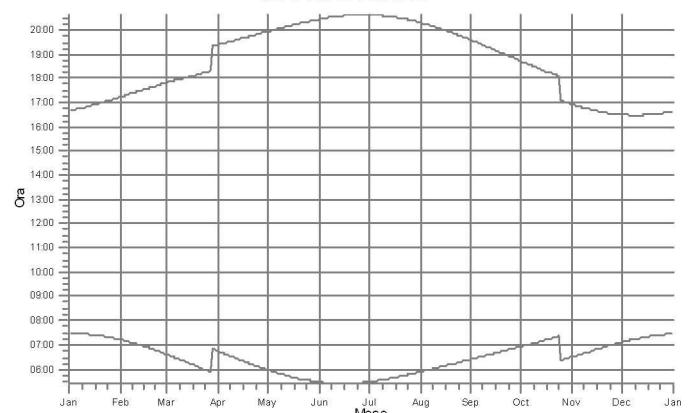
28: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



29: Siemens Gamesa SG 6.0-170 6000 170.0 IO! hub: 165.0 m (TOT: 250.0)



30: PowerWind 56



Receptrori d'ombra

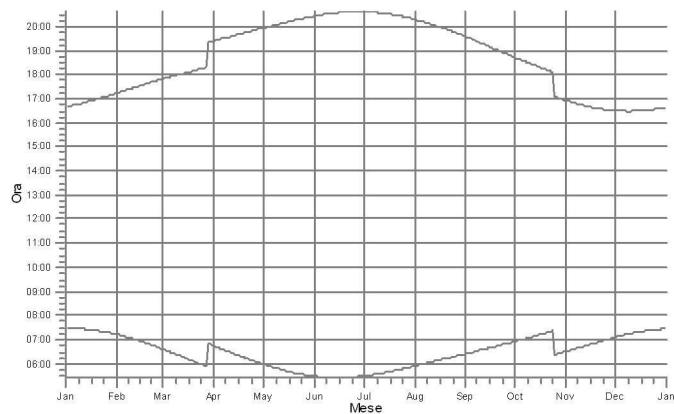
R13: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (88)

R14: Shadow Receptor: 1.0 x 1.0 Azimuth: 0.0° Slope: 0.0° (89)

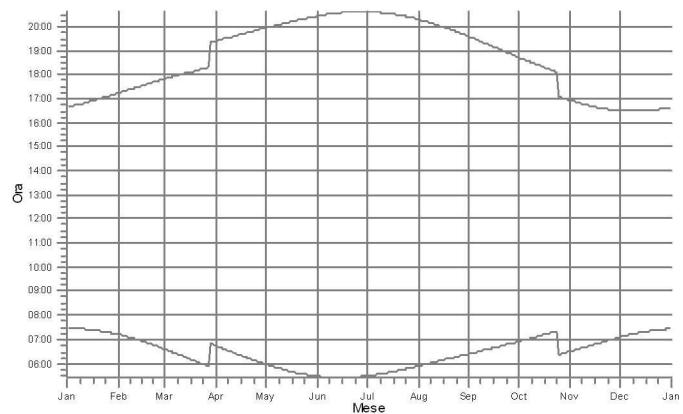
## SHADOW - Calendario per WTG, grafico

Calcolo: Shadow Flickering Analysis

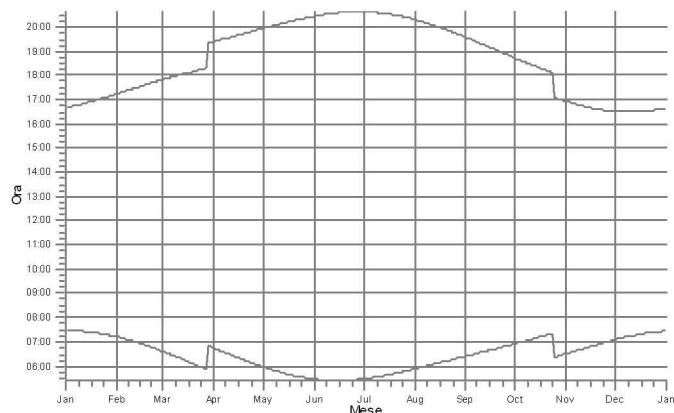
31: PowerWind 56



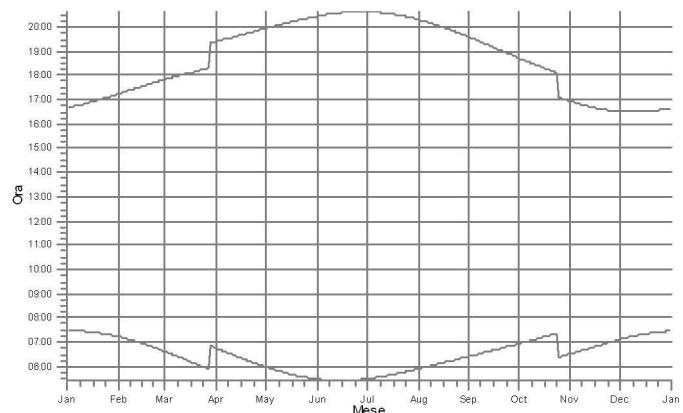
32: PowerWind 56



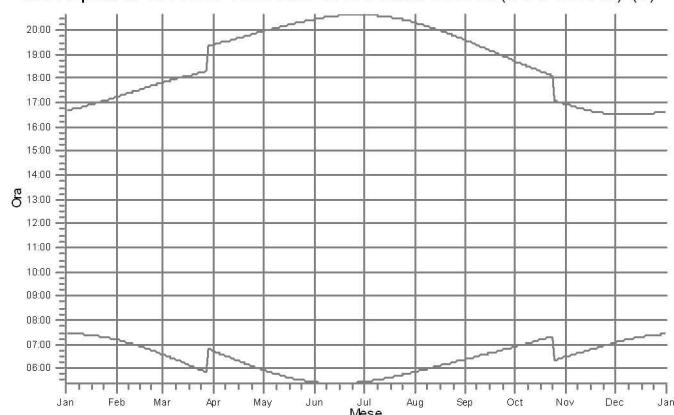
33: PowerWind 56



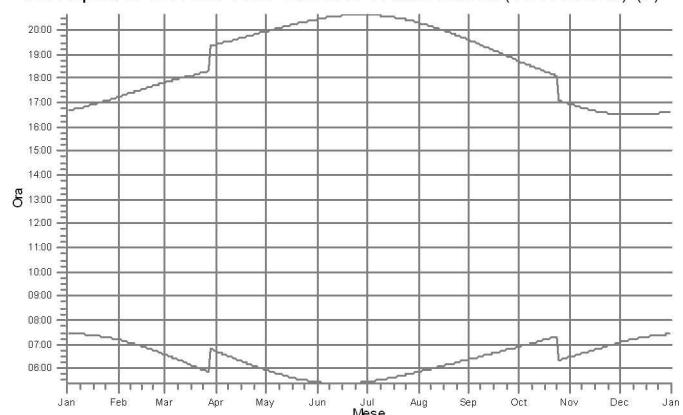
34: PowerWind 56



35: REpower 57/1000 1050-250 57.0 ! hub: 55.0 m (TOT: 83.5 m) (6)



36: REpower 57/1000 1050-250 57.0 ! hub: 55.0 m (TOT: 83.5 m) (7)

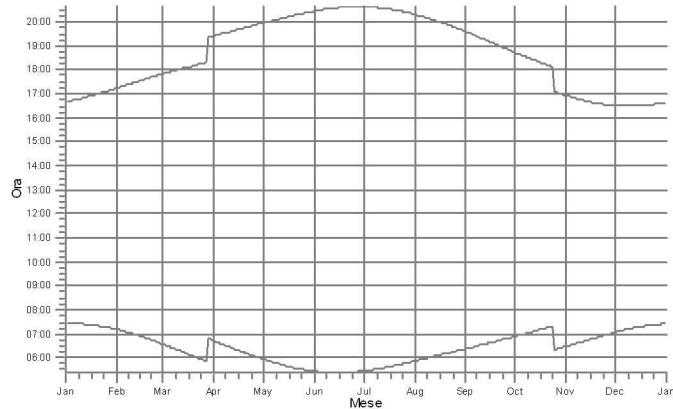


Recettori d'ombra

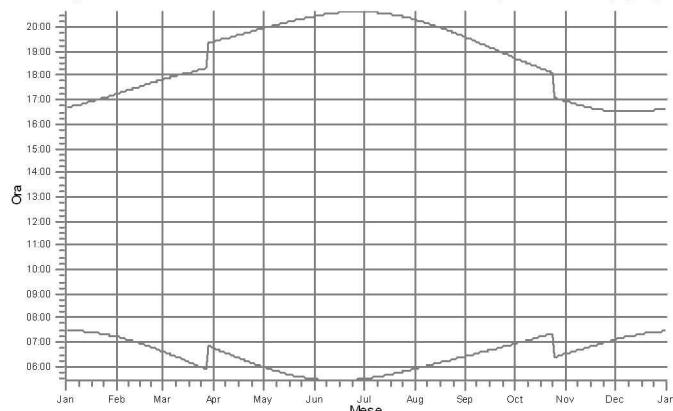
## SHADOW - Calendario per WTG, grafico

**Calcolo:** Shadow Flickering Analysis

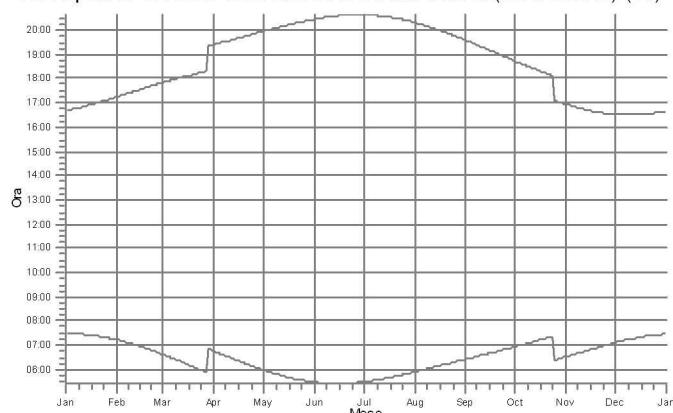
37: REpower 57/1000 1050-250 57.0 ! hub: 55.0 m (TOT: 83.5 m) (8)



39: REpower 57/1000 1050-250 57.0 ! hub: 55.0 m (TOT: 83.5 m) (10)

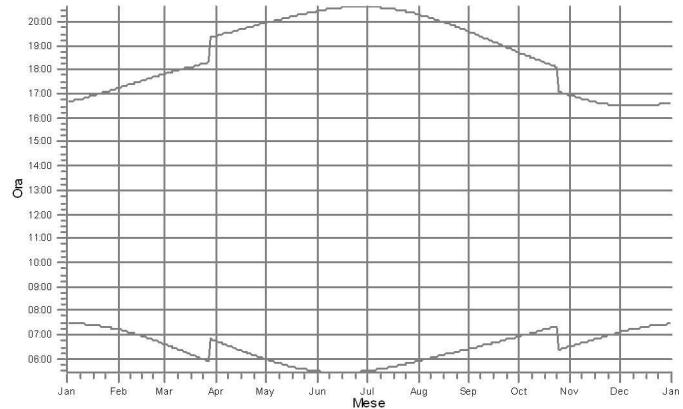


41: REpower 57/1000 1050-250 57.0 ! hub: 55.0 m (TOT: 83.5 m) (13)

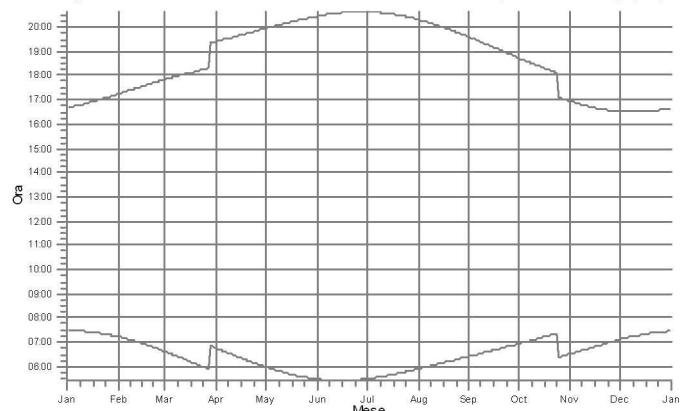


Recessori d'ombra

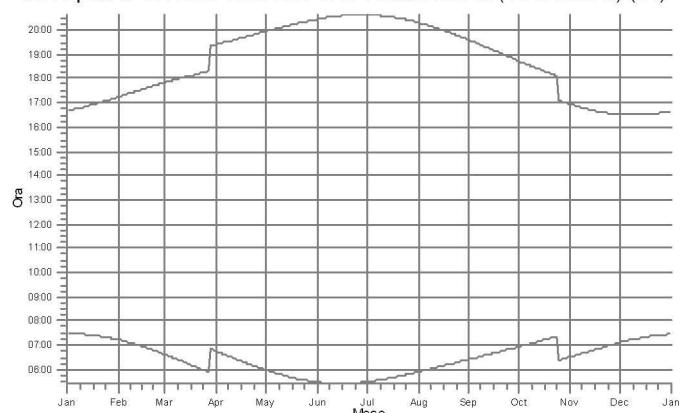
38: R80680



40: REpower 57/1000 1050-250 57.0 ! hub: 55.0 m (TOT: 83.5 m) (12)



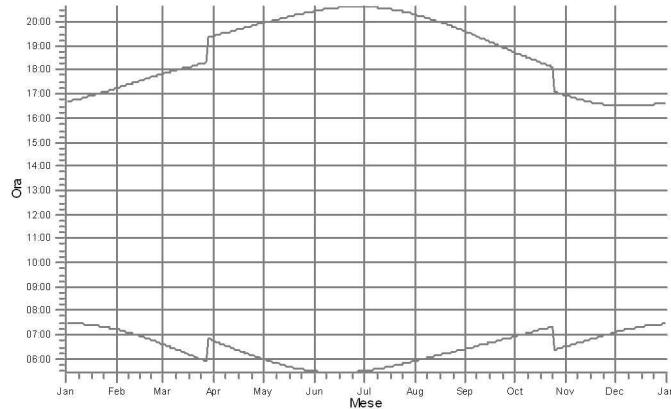
42: REpower 57/1000 1050-250 57.0 ! hub: 55.0 m (TOT: 83.5 m) (14)



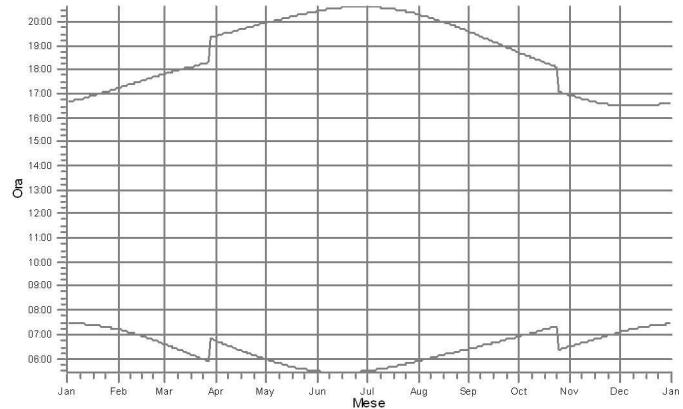
## SHADOW - Calendario per WTG, grafico

**Calcolo:** Shadow Flickering Analysis

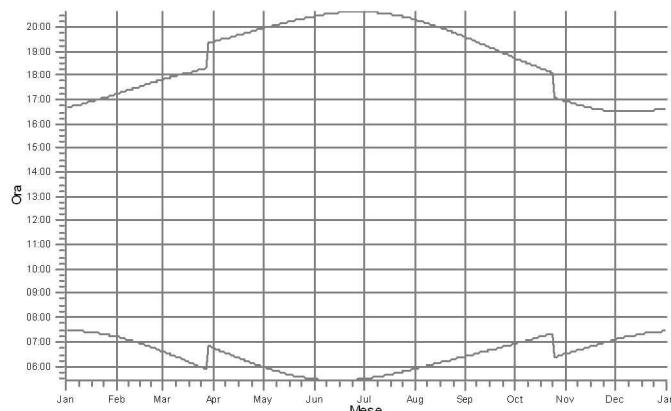
43: REpower 57/1000 1050-250 57.0 ! hub: 55.0 m (TOT: 83.5 m) (16)



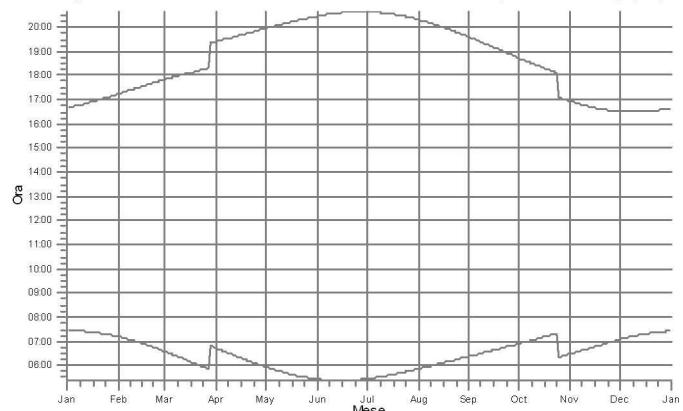
44: PowerWind 56



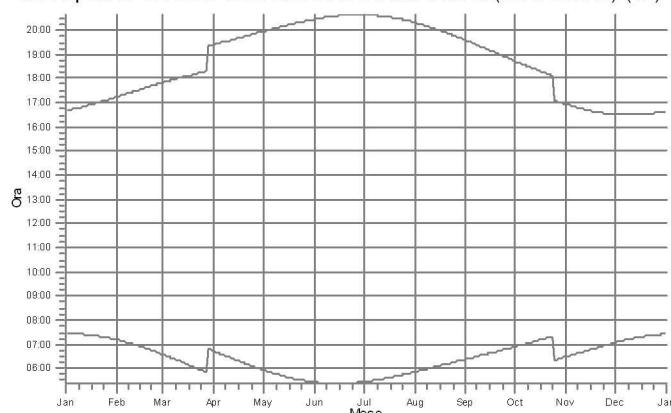
45: PowerWind 56



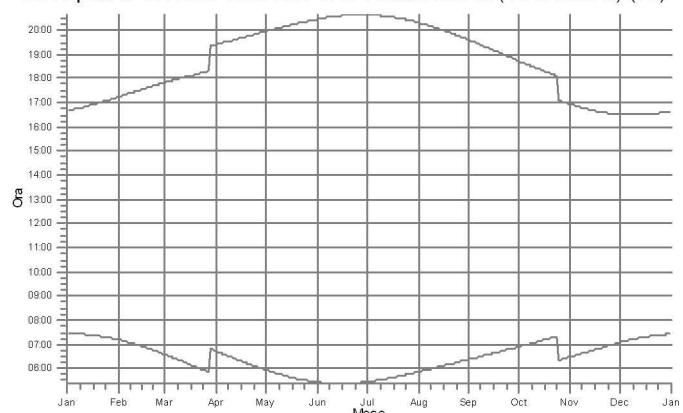
46: REpower 57/1000 1050-250 57.0 ! hub: 55.0 m (TOT: 83.5 m) (71)



47: REpower 57/1000 1050-250 57.0 ! hub: 55.0 m (TOT: 83.5 m) (72)



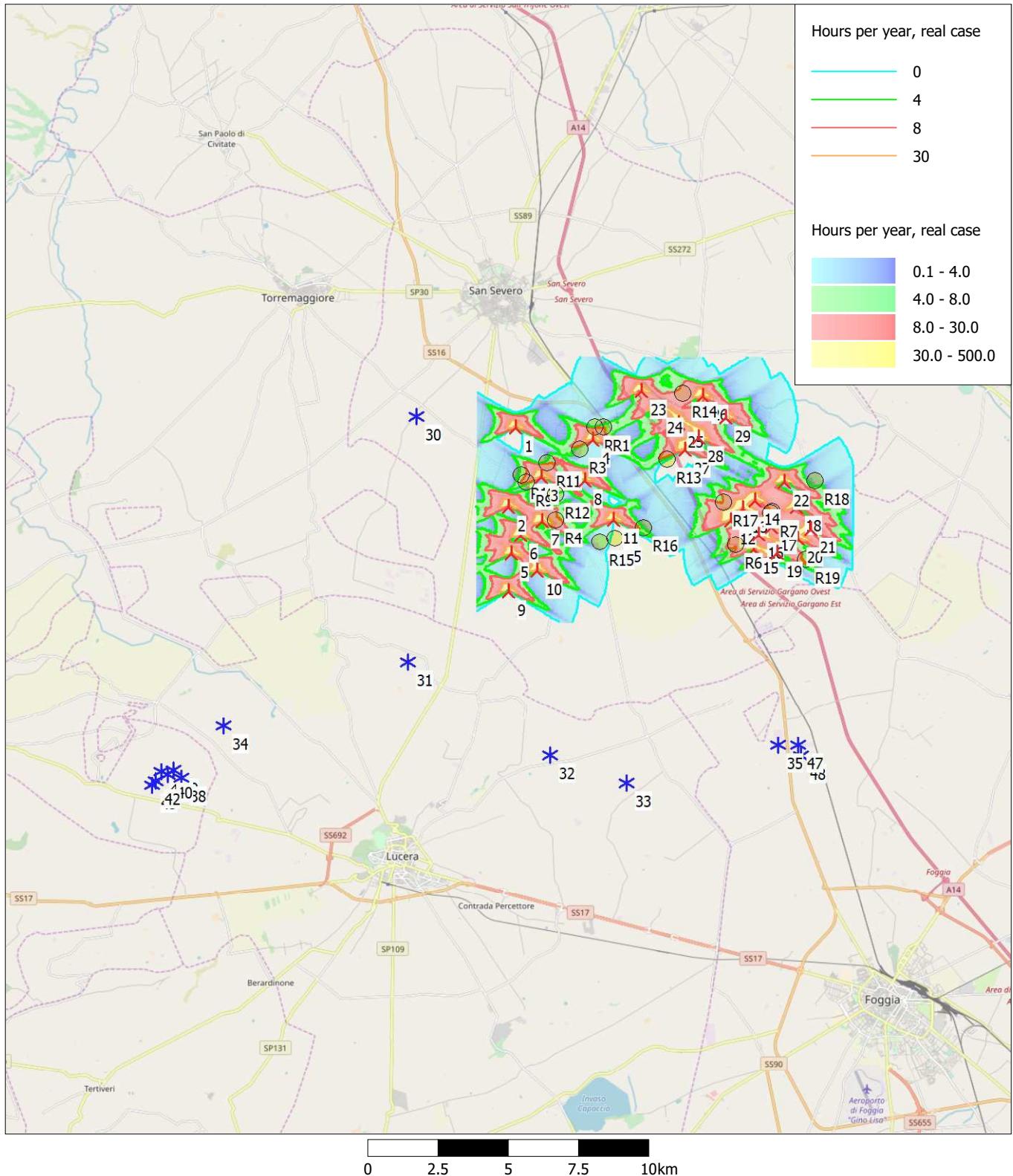
48: REpower 57/1000 1050-250 57.0 ! hub: 55.0 m (TOT: 83.5 m) (73)



Receptrori d'ombra

## SHADOW - Mappa

**Calcolo:** Shadow Flickering Analysis



Mappa: EMD OpenStreetMap , Scala di stampa 1:200,000, Centro mappa UTM (north)-WGS84 Zone: 33 Est: 531,820 Nord: 4,605,379  
x Nuova WTG      \* WTG preesistente      ◆ Recettore d'ombra  
 Flicker map level: Project Wizard Elevation Data Grid (SRTM: Shuttle DTM 1 arc-second)