



Schattenwurfkalender – Revision 0

Projekt:	Steesow II+III Errichtung von 9 WEA (Variante 1) bzw. 8 WEA (Variante 2) jeweils in 2 Bauabschnitten Typ: eno160-6.0 mit einer Nabenhöhe von 165,0 m und einer Nennleistung von 6,0 MW
Bundesland:	Mecklenburg-Vorpommern Deutschland
Berichtsdatum:	Rerik, 08.01.2024
Berichtsnummer:	enosite-0146-ST.a-2023-01-Kalender
Gültig mit:	enosite-0146-ST.a-2023-01
Bearbeitung:	Katharina Rusch

enosite GmbH

Straße am Zeltplatz 7
18230 Ostseebad Rerik

Tel. 038296-747 400

www.eno-site.com

Zweck:

Dieses Dokument beinhaltet den Schattenwurfkalender der Zusatzbelastung. Dieser gehört zur Schattenwurfprognose *enosite-0146-ST.a-2023-01* und ist nur zusammen mit dieser gültig. Die Schattenwurfprognose ist auch ohne den hier vorliegenden ausführlichen Kalender gültig und kann daher ohne diesen verwendet werden, sofern die kurze Darstellung der Zusatzbelastung in der Prognose ausreicht. Auf den nachfolgenden Seiten wird der Schattenwurfkalender vollumfänglich dargestellt.



1. Variante 1 - Bauabschnitt 1 (Steesow II)

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 040 - Zugelrade, Waldstraße 6

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29 16:07	08:00 16:57	07:04 17:51	06:51 19:48	05:43 20:42	04:55 21:30	04:52 21:45	05:28 (WEA 03) 21:11	06:23 20:06	07:14 18:54	07:11 16:45	08:04 16:02
2	08:29 16:08	07:58 16:59	07:02 17:53	06:48 19:50	05:41 20:44	04:54 21:31	04:52 21:44	05:28 (WEA 03) 21:09	06:24 20:04	07:16 18:51	07:13 16:43	08:06 16:01
3	08:29 16:09	07:57 17:01	07:00 17:55	06:46 19:52	05:39 20:45	04:53 21:33	04:53 21:44	05:30 (WEA 03) 21:07	06:26 20:01	07:18 18:49	07:15 16:41	08:07 16:00
4	08:28 16:10	07:55 17:03	06:57 17:57	06:44 19:53	05:37 20:47	04:53 21:34	04:54 21:43	05:36 (WEA 03) 21:05	06:28 20:00	07:20 18:47	07:17 16:39	08:09 16:00
5	08:28 16:12	07:53 17:05	06:55 17:59	06:41 19:55	05:35 20:49	04:52 21:35	04:55 21:43	05:37 21:04	06:30 20:06	07:21 18:44	07:19 16:37	08:10 15:59
6	08:28 16:13	07:51 17:07	06:53 18:01	06:39 19:57	05:33 20:51	04:51 21:36	04:56 21:42	05:38 21:02	06:31 20:04	07:23 18:42	07:20 16:35	08:12 15:59
7	08:27 16:14	07:50 17:09	06:50 18:02	06:36 19:59	05:31 20:52	04:51 21:37	04:56 21:42	05:40 21:00	06:33 20:02	07:25 18:39	07:22 16:34	08:13 15:58
8	08:27 16:16	07:48 17:11	06:48 18:04	06:34 20:01	05:29 20:54	04:50 21:38	04:57 21:41	05:42 20:58	06:35 20:00	07:27 18:37	07:24 16:32	08:14 15:58
9	08:26 16:17	07:46 17:13	06:46 18:06	06:32 20:02	05:28 20:56	04:49 21:38	04:58 21:40	05:43 20:56	06:36 20:00	07:29 18:35	07:26 16:30	08:15 15:58
10	08:26 16:18	07:44 17:15	06:43 18:08	06:29 20:04	05:26 20:57	04:49 21:39	04:59 21:40	05:45 20:54	06:38 20:00	07:30 18:32	07:28 16:28	08:17 15:57
11	08:25 16:20	07:42 17:16	06:41 18:10	06:27 20:06	05:24 20:59	04:48 21:40	05:01 21:39	05:47 20:52	06:40 20:00	07:32 18:30	07:30 16:27	08:18 15:57
12	08:24 16:21	07:40 17:18	06:39 18:12	06:25 20:08	05:22 21:01	04:48 21:41	05:02 21:38	05:48 20:50	06:42 20:00	07:34 18:28	07:32 16:25	08:19 15:57
13	08:24 16:23	07:38 17:20	06:36 18:14	06:22 20:10	05:21 21:02	04:48 21:42	05:03 21:37	05:50 20:48	06:43 20:00	07:36 18:25	07:34 16:23	08:20 15:57
14	08:23 16:25	07:36 17:22	06:34 18:15	06:20 20:11	05:19 21:04	04:48 21:42	05:04 21:36	05:52 20:46	06:45 20:00	07:38 18:23	07:35 16:22	08:21 15:57
15	08:22 16:26	07:34 17:24	06:31 18:17	06:18 20:13	05:17 21:06	04:47 21:43	05:05 21:35	05:53 20:44	06:47 20:00	07:39 18:21	07:37 16:20	08:22 15:57
16	08:21 16:28	07:32 17:26	06:29 18:19	06:16 20:15	05:16 21:07	04:47 21:43	05:07 21:34	05:55 20:42	06:48 20:00	07:41 18:19	07:39 16:19	08:23 15:57
17	08:20 16:30	07:30 17:28	06:27 18:21	06:13 20:17	05:14 21:09	04:47 21:44	05:08 21:33	05:57 20:40	06:50 20:00	07:43 18:16	07:41 16:17	08:23 15:57
18	08:19 16:31	07:28 17:30	06:24 18:23	06:11 20:19	05:13 21:11	04:47 21:44	05:09 21:31	05:59 20:37	06:52 20:00	07:45 18:14	07:43 16:16	08:24 15:57
19	08:18 16:33	07:26 17:32	06:22 18:25	06:09 20:20	05:11 21:12	04:47 21:45	05:11 21:30	06:00 20:35	06:54 20:00	07:47 18:12	07:44 16:15	08:25 15:58
20	08:17 16:35	07:24 17:34	06:19 18:26	06:07 20:22	05:10 21:14	04:47 21:45	05:12 21:29	06:02 20:33	06:55 20:00	07:49 18:10	07:46 16:13	08:26 15:58
21	08:16 16:36	07:22 17:36	06:17 18:28	06:04 20:24	05:08 21:15	04:47 21:45	05:13 21:28	06:04 20:31	06:57 20:00	07:50 18:08	07:48 16:12	08:26 15:58
22	08:14 16:38	07:20 17:38	06:15 18:30	06:02 20:26	05:07 21:17	04:47 21:45	05:15 21:26	06:05 20:29	06:59 20:00	07:52 18:05	07:50 16:11	08:27 15:59
23	08:13 16:40	07:17 17:40	06:12 18:32	06:00 20:28	05:05 21:18	04:48 21:46	05:16 21:25	06:07 20:26	07:00 20:00	07:54 18:03	07:52 16:10	08:27 15:59
24	08:12 16:42	07:15 17:42	06:10 18:34	05:58 20:29	05:04 21:20	04:48 21:46	05:18 21:24	06:09 20:24	07:02 20:00	07:56 18:01	07:53 16:09	08:28 16:00
25	08:11 16:44	07:13 17:44	06:07 18:35	05:56 20:31	05:03 21:21	04:48 21:46	05:19 21:22	06:11 20:22	07:04 20:00	06:58 18:00	07:55 16:07	08:28 16:01
26	08:09 16:46	07:11 17:46	06:05 18:37	05:53 20:33	05:02 21:22	04:49 21:46	05:21 21:21	06:12 20:20	07:06 20:00	07:00 18:00	07:57 16:06	08:28 16:01
27	08:08 16:47	07:09 17:47	06:03 18:39	05:51 20:35	05:00 21:24	04:49 21:46	05:22 21:19	06:14 20:17	07:07 20:00	07:02 18:00	07:58 16:05	08:29 16:02
28	08:06 16:49	07:06 17:49	06:00 18:41	05:49 20:36	04:59 21:25	04:50 21:45	05:24 21:17	06:16 20:15	07:09 20:00	07:03 18:00	08:00 16:04	08:29 16:03
29	08:05 16:51		06:58 19:43	05:47 20:38	04:58 21:26	04:50 21:45	05:25 21:16	06:18 20:13	07:11 20:00	07:05 18:00	08:01 16:04	08:29 16:04
30	08:03 16:53		06:55 19:44	05:45 20:40	04:57 21:28	04:51 21:45	05:27 21:14	06:19 20:11	07:13 20:00	07:07 18:00	08:03 16:03	08:29 16:05
31	08:02 16:55		06:53 19:46		04:56 21:29		05:28 21:12	06:21 20:08		07:09 16:47		08:29 16:06
Sonnenscheinstunden	253	275	367	418	491	506	508	458	382	330	262	237
astr.max.mögl.Beschattung						287	25					

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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2. Variante 1 - Bauabschnitt 2 (Steesow III)



Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 007 - Deibow, Deibower Dorfstraße 9

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1 08:29	14:47 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04
2 16:07	21 15:08 (WEA 10)	16:57	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:53	16:44	16:02
3 08:29	14:48 (WEA 10)	07:58	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	08:06
4 16:08	20 15:08 (WEA 10)	16:59	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	16:01
5 08:29	14:48 (WEA 10)	07:57	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	08:07
6 16:09	20 15:08 (WEA 10)	17:01	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	16:00
7 08:28	14:49 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09
8 16:10	20 15:09 (WEA 10)	17:02	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	16:00
9 08:28	14:51 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10
10 16:11	18 15:09 (WEA 10)	17:04	17:58	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37	15:59
11 08:28	14:51 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12
12 16:13	18 15:09 (WEA 10)	17:06	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	15:58
13 08:27	14:51 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13
14 16:14	17 15:08 (WEA 10)	17:08	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:33	15:58
15 08:27	14:53 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14
16 16:15	16 15:09 (WEA 10)	17:10	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:31	15:58
17 08:26	14:54 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15
18 16:17	14 15:08 (WEA 10)	17:12	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	15:57
19 08:26	14:55 (WEA 10)	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17
20 16:18	13 15:08 (WEA 10)	17:14	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	15:57
21 08:25	14:56 (WEA 10)	07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18
22 16:20	11 15:07 (WEA 10)	17:16	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26	15:57
23 08:24	14:58 (WEA 10)	07:40	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19
24 16:21	8 15:06 (WEA 10)	17:18	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25	15:57
25 08:24	14:58 (WEA 10)	07:38	06:36	06:22	05:20	04:47	05:02	05:50	06:43	07:36	07:33	08:20
26 16:23	17:20	18:13	20:09	21:02	21:41	21:37	21:37	20:48	19:37	18:25	16:23	15:57
27 08:23	14:59 (WEA 10)	07:36	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21
28 16:24	17:22	18:15	20:11	21:04	21:42	21:36	21:36	20:46	19:35	18:23	16:22	15:57
29 08:22	14:59 (WEA 10)	07:34	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22
30 16:26	17:24	18:17	20:13	21:06	21:43	21:35	21:35	20:44	19:32	18:21	16:20	15:57
31 08:21	14:59 (WEA 10)	07:32	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23
32 16:28	17:26	18:19	20:15	21:07	21:43	21:34	21:34	20:42	19:30	18:18	16:19	15:57
33 08:20	14:59 (WEA 10)	07:30	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:23
34 16:29	17:28	18:21	20:17	21:09	21:44	21:33	21:33	20:39	19:27	18:16	16:17	15:57
35 08:19	14:59 (WEA 10)	07:28	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:24
36 16:31	17:30	18:23	20:18	21:10	21:44	21:31	21:31	20:37	19:25	18:14	16:16	15:57
37 08:18	14:59 (WEA 10)	07:26	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:25
38 16:33	17:32	18:24	20:20	21:12	21:45	21:30	21:30	20:35	19:23	18:12	16:14	15:57
39 08:17	14:59 (WEA 10)	07:24	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:26
40 16:34	17:34	18:26	20:22	21:14	21:45	21:29	21:29	20:33	19:20	18:09	16:13	15:58
41 08:16	14:59 (WEA 10)	07:22	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:26
42 16:36	17:36	18:28	20:24	21:15	21:45	21:28	21:28	20:31	19:18	18:07	16:12	15:58
43 08:14	14:59 (WEA 10)	07:19	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:27
44 16:38	17:38	18:30	20:26	21:17	21:45	21:26	21:26	20:29	19:15	18:05	16:10	15:58
45 08:13	14:59 (WEA 10)	07:17	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:27
46 16:40	17:39	18:32	20:27	21:18	21:45	21:25	21:25	20:26	19:13	18:03	16:09	15:59
47 08:12	14:59 (WEA 10)	07:15	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:28
48 16:42	17:41	18:33	20:29	21:20	21:46	21:23	21:23	20:24	19:10	18:01	16:08	16:00
49 08:10	14:59 (WEA 10)	07:13	06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	07:55	08:28
50 16:43	17:43	18:35	20:31	21:21	21:46	21:22	21:22	20:22	19:08	18:00	16:07	16:00
51 08:09	14:59 (WEA 10)	07:11	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:59	07:57	08:28
52 16:45	17:45	18:37	20:33	21:22	21:46	21:20	21:20	20:20	19:06	18:00	16:06	16:01
53 08:08	14:59 (WEA 10)	07:08	06:02	05:51	05:00	04:49	05:22	06:14	07:07	07:51	07:58	08:29
54 16:47	17:47	18:39	20:35	21:24	21:46	21:19	21:19	20:17	19:03	18:00	16:05	16:02
55 08:06	14:59 (WEA 10)	07:06	06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:53	07:50	08:29
56 16:49	17:49	18:41	20:36	21:25	21:45	21:17	21:17	20:15	19:01	18:00	16:04	16:03
57 08:05	14:59 (WEA 10)	07:05	06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:53	07:50	08:29
58 16:51	17:51	18:43	20:38	21:26	21:45	21:16	21:16	20:13	19:00	18:00	16:03	16:03
59 08:03	14:59 (WEA 10)	07:05	06:05	05:45	04:57	04:50	05:27	06:19	07:12	07:57	07:53	08:29
60 16:53	17:53	18:44	20:40	21:28	21:45	21:14	21:14	20:10	19:00	18:00	16:04	16:04
61 08:02	14:59 (WEA 10)	07:03	06:03	05:43	04:55	04:48	05:28	06:21	07:14	07:59	07:55	08:29
62 16:55	17:55	18:46	20:42	21:29	21:45	21:12	21:12	20:08	19:00	18:00	16:06	16:05
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	329	262	237
astr.max.mögl.Beschattung	196										7	622

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
		Minuten mit Schatten		

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 008 - Deibow, Deibower Dorfstraße 10

Annahmen für Schattenwurfberechnung

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Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1 08:29	14:45 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04
2 16:07	15:06 (WEA 10)	16:57	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:53	16:44	16:02
3 08:29	14:46 (WEA 10)	07:58	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	08:06
4 16:08	15:07 (WEA 10)	16:59	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	16:01
5 08:29	14:47 (WEA 10)	07:57	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	08:07
6 16:09	15:06 (WEA 10)	17:01	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	16:00
7 08:28	14:48 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09
8 16:10	15:07 (WEA 10)	17:02	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	16:00
9 08:28	14:49 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10
10 16:11	15:07 (WEA 10)	17:04	17:59	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37	15:59
11 08:28	14:49 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12
12 16:13	15:07 (WEA 10)	17:06	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	15:58
13 08:27	14:50 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13
14 16:14	15:06 (WEA 10)	17:08	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:33	15:58
15 08:27	14:52 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14
16 16:15	15:07 (WEA 10)	17:10	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:31	15:58
17 08:26	14:53 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15
18 16:17	15:06 (WEA 10)	17:12	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	15:57
19 08:26	14:54 (WEA 10)	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17
20 16:18	15:06 (WEA 10)	17:14	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	15:57
21 08:25	14:55 (WEA 10)	07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18
22 16:20	15:04 (WEA 10)	17:16	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26	15:57
23 08:24	14:58 (WEA 10)	07:40	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19
24 16:21	15:03 (WEA 10)	17:18	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25	15:57
25 08:24		07:38	06:36	06:22	05:20	04:47	05:02	05:50	06:43	07:36	07:33	08:20
26 16:23		17:20	18:13	20:09	21:02	21:41	21:37	20:48	19:37	18:25	16:23	15:57
27 08:23		07:36	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21
28 16:24		17:22	18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	16:22	15:57
29 08:22		07:34	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22
30 16:26		17:24	18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	16:20	15:57
31 08:21		07:32	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23
32 16:28		17:26	18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	16:19	15:57
33 08:20		07:30	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:23
34 16:29		17:28	18:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	16:17	15:57
35 08:19		07:28	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:24
36 16:31		17:30	18:23	20:18	21:10	21:44	21:31	20:37	19:25	18:14	16:16	15:57
37 08:18		07:26	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:25
38 16:33		17:32	18:24	20:20	21:12	21:45	21:30	20:35	19:23	18:12	16:14	15:57
39 08:17		07:24	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:26
40 16:34		17:34	18:26	20:22	21:14	21:45	21:29	20:33	19:20	18:09	16:13	15:58
41 08:16		07:22	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:26
42 16:36		17:36	18:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	16:12	15:58
43 08:14		07:19	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:27
44 16:38		17:38	18:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	16:10	15:58
45 08:13		07:17	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:27
46 16:40		17:39	18:32	20:27	21:18	21:45	21:25	20:26	19:13	18:03	16:09	15:59
47 08:12		07:15	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:28
48 16:42		17:41	18:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	16:08	16:00
49 08:10		07:13	06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	07:55	08:28
50 16:43		17:43	18:35	20:31	21:21	21:46	21:22	20:22	19:08	18:00	16:07	16:00
51 08:09		07:11	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:59	07:57	08:28
52 16:45		17:45	18:37	20:33	21:22	21:46	21:20	20:20	19:06	18:00	16:06	16:01
53 08:08		07:08	06:02	05:51	05:00	04:49	05:22	06:14	07:07	07:51	07:58	08:29
54 16:47		17:47	18:39	20:35	21:24	21:46	21:19	20:17	19:03	18:00	16:05	16:02
55 08:06		07:06	06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:53	07:50	08:29
56 16:49		17:49	18:41	20:36	21:25	21:45	21:17	20:15	19:01	18:00	16:04	16:03
57 08:05			06:58	05:47	04:58	04:50	05:25	06:17	07:11	07:55	07:51	08:29
58 16:51			19:42	20:38	21:26	21:45	21:16	20:13	19:00	18:00	16:03	16:03
59 08:03			06:55	05:45	04:57	04:50	05:27	06:19	07:12	07:57	07:53	08:29
60 16:53			19:44	20:40	21:28	21:45	21:14	20:10	19:00	18:00	16:04	16:04
61 08:02			06:53		04:56		05:28	06:21		07:09		08:29
62 16:55			19:46		21:29		21:12	20:08		16:46		16:05
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	329	262	237
astr.max.mögl.Beschattung	186										5	614

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
		Minuten mit Schatten		

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 009 - Deibow, Deibower Dorfstraße 12

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29 16:07 19	14:38 (WEA 10) 16:57 17:51	08:00 17:04 19:48	06:50 17:51 20:42	05:43 19:48 21:30	04:55 21:30 21:45	04:51 21:45 21:11	05:30 21:11 20:06	06:22 20:06 18:54	07:14 18:54 16:44	07:11 16:44 16:02	08:04 16:02 14:33 (WEA 10)
2	08:29 16:08 18	14:39 (WEA 10) 16:59 17:53	07:58 17:53 19:50	06:48 17:53 20:43	05:41 19:50 21:31	04:54 21:31 21:44	04:52 21:44 21:09	05:31 21:09 20:03	06:24 20:03 18:51	07:16 18:51 16:43	07:13 16:43 16:01	08:06 16:01 14:35 (WEA 10)
3	08:29 16:09 18	14:39 (WEA 10) 17:01 17:55	07:57 17:55 19:51	06:46 17:55 20:45	05:39 19:51 21:32	04:53 21:32 21:44	04:53 21:44 21:07	05:33 21:07 20:01	06:26 20:01 18:49	07:18 18:49 16:41	07:15 16:41 16:00	08:07 16:00 14:38 (WEA 10)
4	08:28 16:10 17	14:40 (WEA 10) 17:02 17:57	07:55 17:57 19:53	06:43 17:57 20:47	05:37 19:53 21:34	04:52 21:34 21:43	04:53 21:43 21:05	05:35 21:05 19:59	06:28 19:59 18:46	07:19 18:46 16:39	07:17 16:39 16:00	08:09 16:00 14:40 (WEA 10)
5	08:28 16:11 15	14:42 (WEA 10) 17:04 17:59	07:53 17:59 19:55	06:41 17:59 20:49	05:35 19:55 21:35	04:54 21:35 21:43	04:54 21:43 21:04	05:36 21:04 19:56	06:29 19:56 18:44	07:21 18:44 16:37	07:18 16:37 15:59	08:10 15:59 14:41 (WEA 10)
6	08:28 16:13 15	14:42 (WEA 10) 17:06 18:00	07:51 18:00 19:57	06:39 18:00 20:50	05:33 19:57 21:36	04:51 21:36 21:42	04:55 21:42 21:02	05:38 21:02 19:54	06:31 19:54 18:42	07:23 18:42 16:35	07:20 16:35 15:58	08:12 15:58 14:43 (WEA 10)
7	08:27 16:14 13	14:43 (WEA 10) 17:08 18:02	07:50 18:02 19:59	06:36 18:02 20:52	05:31 19:59 21:37	04:50 21:37 21:42	04:56 21:42 21:00	05:40 21:00 19:52	06:33 19:52 18:39	07:25 18:39 16:33	07:22 16:33 15:58	08:13 15:58 14:43 (WEA 10)
8	08:27 16:15 11	14:45 (WEA 10) 17:10 18:04	07:48 18:04 19:59	06:34 18:04 20:54	05:29 19:59 21:38	04:50 21:38 21:41	04:57 21:41 20:58	05:41 20:58 19:49	06:34 19:49 18:37	07:27 18:37 16:31	07:24 16:31 15:58	08:14 15:58 14:45 (WEA 10)
9	08:26 16:17 8	14:47 (WEA 10) 17:12 18:06	07:46 18:06 19:59	06:31 18:06 20:56	05:27 19:59 21:38	04:49 21:38 21:40	04:58 21:40 20:56	05:43 20:56 19:47	06:36 19:47 18:35	07:28 18:35 16:30	07:26 16:30 15:57	08:15 15:57 14:46 (WEA 10)
10	08:26 16:18 2	14:50 (WEA 10) 17:14 18:08	07:44 18:08 19:59	06:29 18:08 20:57	05:26 19:59 21:39	04:49 21:39 21:40	04:59 21:40 20:54	05:45 20:54 19:44	06:38 19:44 18:32	07:30 18:32 16:28	07:28 16:28 15:57	08:17 15:57 14:46 (WEA 10)
11	08:25 16:20 18	14:52 (WEA 10) 17:16 18:10	07:42 18:10 19:59	06:27 18:10 20:59	05:24 19:59 21:40	04:48 21:40 21:39	05:00 21:39 20:52	05:46 20:52 19:42	06:40 19:42 18:30	07:32 18:30 16:26	07:30 16:26 15:57	08:18 15:57 14:47 (WEA 10)
12	08:24 16:21 16	14:54 (WEA 10) 17:18 18:12	07:40 18:12 19:59	06:24 18:12 20:59	05:22 19:59 21:41	04:48 21:41 21:38	05:01 21:38 20:50	05:48 20:50 19:40	06:41 19:40 18:28	07:34 18:28 16:25	07:32 16:25 15:57	08:19 15:57 14:47 (WEA 10)
13	08:24 16:23 14	14:56 (WEA 10) 17:20 18:13	07:38 18:13 19:59	06:22 18:13 20:59	05:20 19:59 21:41	04:47 21:41 21:37	05:02 21:37 20:48	05:50 20:48 19:37	06:43 19:37 18:25	07:36 18:25 16:23	07:33 16:23 15:57	08:20 15:57 14:48 (WEA 10)
14	08:23 16:24 12	14:57 (WEA 10) 17:22 18:15	07:36 18:15 19:59	06:20 18:15 20:59	05:19 19:59 21:42	04:47 21:42 21:36	05:04 21:36 20:46	05:51 20:46 19:35	06:45 19:35 18:23	07:37 18:23 16:22	07:35 16:22 15:57	08:21 15:57 14:49 (WEA 10)
15	08:22 16:26 10	14:59 (WEA 10) 17:24 18:17	07:34 18:17 19:59	06:18 18:17 20:59	05:17 19:59 21:43	04:47 21:43 21:35	05:05 21:35 20:44	05:53 20:44 19:32	06:46 19:32 18:21	07:39 18:21 16:20	07:37 16:20 15:57	08:22 15:57 14:49 (WEA 10)
16	08:21 16:28 8	15:01 (WEA 10) 17:26 18:19	07:32 18:19 19:59	06:15 18:19 20:59	05:15 19:59 21:43	04:47 21:43 21:34	05:06 21:34 20:42	05:55 20:42 19:30	06:48 19:30 18:18	07:41 18:18 16:19	07:39 16:19 15:57	08:23 15:57 14:50 (WEA 10)
17	08:20 16:29 6	15:03 (WEA 10) 17:28 18:21	07:30 18:21 19:59	06:13 18:21 20:59	05:14 19:59 21:44	04:47 21:44 21:33	05:07 21:33 20:39	05:57 20:39 19:27	06:50 19:27 18:16	07:43 18:16 16:17	07:41 16:17 15:57	08:23 15:57 14:51 (WEA 10)
18	08:19 16:31 4	15:05 (WEA 10) 17:30 18:23	07:28 18:23 19:59	06:11 18:23 20:59	05:12 19:59 21:44	04:47 21:44 21:31	05:09 21:31 20:37	05:58 20:37 19:25	06:52 19:25 18:14	07:45 18:14 16:16	07:43 16:16 15:57	08:24 15:57 14:51 (WEA 10)
19	08:18 16:33 2	15:07 (WEA 10) 17:32 18:24	07:26 18:24 19:59	06:08 18:24 20:59	05:11 19:59 21:45	04:47 21:45 21:30	05:10 21:30 20:35	06:00 20:35 19:23	06:53 19:23 18:12	07:47 18:12 16:14	07:44 16:14 15:57	08:25 15:57 14:52 (WEA 10)
20	08:17 16:34 1	15:09 (WEA 10) 17:34 18:26	07:24 18:26 19:59	06:06 18:26 20:59	05:09 19:59 21:45	04:47 21:45 21:29	05:12 21:29 20:33	06:02 20:33 19:20	06:55 19:20 18:09	07:48 18:09 16:13	07:46 16:13 15:58	08:26 15:58 14:52 (WEA 10)
21	08:16 16:36 1	15:11 (WEA 10) 17:36 18:28	07:22 18:28 19:59	06:04 18:28 20:59	05:08 19:59 21:45	04:47 21:45 21:28	05:13 21:28 20:31	06:03 20:31 19:18	06:57 19:18 18:07	07:50 18:07 16:12	07:48 16:12 15:58	08:26 15:58 14:53 (WEA 10)
22	08:14 16:38 1	15:13 (WEA 10) 17:38 18:30	07:20 18:30 19:59	06:02 18:30 20:59	05:06 19:59 21:45	04:47 21:45 21:26	05:14 21:26 20:29	06:05 20:29 19:15	06:59 19:15 18:05	07:52 18:05 16:10	07:50 16:10 15:59	08:27 15:59 14:53 (WEA 10)
23	08:13 16:40 1	15:15 (WEA 10) 17:40 18:32	07:18 18:32 19:59	06:00 18:32 20:59	05:05 19:59 21:45	04:47 21:45 21:25	05:16 21:25 20:26	06:07 20:26 19:13	07:00 19:13 18:03	07:54 18:03 16:09	07:51 16:09 15:59	08:27 15:59 14:54 (WEA 10)
24	08:12 16:42 1	15:17 (WEA 10) 17:42 18:33	07:16 18:33 19:59	05:57 18:33 20:59	05:04 19:59 21:45	04:48 21:45 21:23	05:17 21:23 20:24	06:09 20:24 19:10	07:02 19:10 18:01	07:56 18:01 16:08	07:53 16:08 16:00	08:28 16:00 14:54 (WEA 10)
25	08:10 16:43 1	15:19 (WEA 10) 17:43 18:35	07:14 18:35 19:59	05:55 18:35 20:59	05:02 19:59 21:45	04:48 21:45 21:22	05:19 21:22 20:22	06:10 20:22 19:08	07:04 19:08 18:00	07:58 18:00 16:07	07:55 16:07 16:00	08:28 16:00 14:54 (WEA 10)
26	08:09 16:45 1	15:21 (WEA 10) 17:45 18:37	07:12 18:37 19:59	05:53 18:37 20:59	05:01 19:59 21:45	04:48 21:45 21:20	05:20 21:20 20:20	06:12 20:20 19:06	07:05 19:06 18:00	07:00 18:00 17:00	07:57 17:00 16:01	08:28 16:01 14:55 (WEA 10)
27	08:08 16:47 1	15:23 (WEA 10) 17:47 18:39	07:10 18:39 19:59	05:51 18:39 20:59	05:00 19:59 21:45	04:49 21:45 21:19	05:22 21:19 20:17	06:14 20:17 19:03	07:07 19:03 18:00	07:01 18:00 17:00	07:58 17:00 16:02	08:29 16:02 14:56 (WEA 10)
28	08:06 16:49 1	15:25 (WEA 10) 17:49 18:41	07:08 18:41 19:59	05:49 18:41 20:59	04:59 19:59 21:45	04:49 21:45 21:17	05:23 21:17 20:15	06:16 20:15 19:01	07:09 19:01 18:00	07:03 18:00 17:00	07:59 17:00 16:03	08:29 16:03 14:56 (WEA 10)
29	08:05 16:51 1	15:27 (WEA 10) 17:51 18:43	07:06 18:43 19:59	05:47 18:43 20:59	04:57 19:59 21:45	04:50 21:45 21:16	05:25 21:16 20:13	06:17 20:13 18:58	07:11 18:58 18:00	07:05 18:00 17:00	08:01 17:00 16:03	08:29 16:03 14:56 (WEA 10)
30	08:03 16:53 1	15:29 (WEA 10) 17:53 18:45	07:04 18:45 19:59	05:45 18:45 20:59	04:57 19:59 21:45	04:50 21:45 21:14	05:27 21:14 20:10	06:19 20:10 18:56	07:12 18:56 18:00	07:07 18:00 17:00	08:03 17:00 16:04	08:29 16:04 14:57 (WEA 10)
31	08:02 16:55 1	15:31 (WEA 10) 17:55 18:47	07:02 18:47 19:59	05:43 18:47 20:59	04:56 19:59 21:45	04:50 21:45 21:12	05:28 21:12 20:08	06:21 20:08 18:56	07:14 18:56 18:00	07:09 18:00 17:00	08:05 17:00 16:05	08:29 16:05 14:56 (WEA 10)
Sonnenscheinstunden	253		275	367	419	491	506	458	382	329	262	237
astr.max.mögl.Beschattung	136											554

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt hierfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 010 - Deibow, Deibower Dorfstraße 13

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

		Januar		Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember		
1	08:29	14:35 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04			
	16:07	19	14:54 (WEA 10)	16:57	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:54	16:44	16:02		
2	08:29	14:36 (WEA 10)	07:58	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	08:06			
	16:08	18	14:54 (WEA 10)	16:59	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	16:01		
3	08:29	14:37 (WEA 10)	07:57	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	08:07	14:29 (WEA 10)		
	16:09	17	14:54 (WEA 10)	17:01	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	16:00	5	14:34 (WEA 10)
4	08:28	14:38 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09	14:28 (WEA 10)		
	16:10	16	14:54 (WEA 10)	17:02	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	16:00	9	14:37 (WEA 10)
5	08:28	14:39 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10	14:26 (WEA 10)		
	16:11	15	14:54 (WEA 10)	17:04	17:59	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37	15:59	12	14:38 (WEA 10)
6	08:28	14:40 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12	14:26 (WEA 10)		
	16:13	14	14:54 (WEA 10)	17:06	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	15:58	14	14:40 (WEA 10)
7	08:27	14:41 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13	14:26 (WEA 10)		
	16:14	12	14:53 (WEA 10)	17:08	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:33	15:58	14	14:40 (WEA 10)
8	08:27	14:43 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14	14:26 (WEA 10)		
	16:15	10	14:53 (WEA 10)	17:10	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:31	15:58	16	14:42 (WEA 10)
9	08:26	14:46 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15	14:26 (WEA 10)		
	16:17	5	14:51 (WEA 10)	17:12	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	15:57	17	14:43 (WEA 10)
10	08:26	14:47	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17	14:25 (WEA 10)		
	16:18	11	17:14	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	15:57	18	14:43 (WEA 10)	
11	08:25	14:48	07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18	14:25 (WEA 10)		
	16:20	12	17:16	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26	15:57	19	14:44 (WEA 10)	
12	08:24	14:49	07:40	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19	14:25 (WEA 10)		
	16:21	13	17:18	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25	15:57	20	14:45 (WEA 10)	
13	08:24	14:50	07:38	06:36	06:22	05:20	04:47	05:03	05:50	06:43	07:36	07:33	08:20	14:25 (WEA 10)		
	16:23	14	17:20	18:13	20:09	21:02	21:42	21:37	20:48	19:37	18:25	16:23	15:57	20	14:45 (WEA 10)	
14	08:23	14:51	07:36	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21	14:26 (WEA 10)		
	16:24	15	17:22	18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	16:22	15:57	20	14:46 (WEA 10)	
15	08:22	14:52	07:34	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22	14:26 (WEA 10)		
	16:26	16	17:24	18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	16:20	15:57	20	14:46 (WEA 10)	
16	08:21	14:53	07:32	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23	14:26 (WEA 10)		
	16:28	17	17:26	18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	16:19	15:57	21	14:47 (WEA 10)	
17	08:20	14:54	07:30	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:23	14:27 (WEA 10)		
	16:29	18	17:28	18:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	16:17	15:57	21	14:48 (WEA 10)	
18	08:19	14:55	07:28	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:24	14:28 (WEA 10)		
	16:31	19	17:30	18:23	20:18	21:10	21:44	21:31	20:37	19:25	18:14	16:16	15:57	21	14:49 (WEA 10)	
19	08:18	14:56	07:26	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:25	14:28 (WEA 10)		
	16:33	20	17:32	18:24	20:20	21:12	21:45	21:30	20:35	19:23	18:12	16:14	15:57	22	14:50 (WEA 10)	
20	08:17	14:57	07:24	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:26	14:28 (WEA 10)		
	16:34	21	17:34	18:26	20:22	21:14	21:45	21:29	20:33	19:20	18:09	16:13	15:58	21	14:49 (WEA 10)	
21	08:16	14:58	07:22	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:26	14:29 (WEA 10)		
	16:36	22	17:36	18:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	16:12	15:58	21	14:50 (WEA 10)	
22	08:14	14:59	07:19	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:27	14:29 (WEA 10)		
	16:38	23	17:38	18:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	16:10	15:59	21	14:50 (WEA 10)	
23	08:13	14:59	07:17	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:27	14:30 (WEA 10)		
	16:40	24	17:40	18:32	20:27	21:18	21:45	21:25	20:26	19:13	18:03	16:09	15:59	21	14:51 (WEA 10)	
24	08:12	14:59	07:15	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:28	14:30 (WEA 10)		
	16:42	25	17:41	18:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	16:08	16:00	22	14:52 (WEA 10)	
25	08:10	14:59	07:13	06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	07:55	08:28	14:31 (WEA 10)		
	16:43	26	17:43	18:35	20:31	21:21	21:46	21:22	20:22	19:08	18:00	16:07	16:00	21	14:52 (WEA 10)	
26	08:09	14:59	07:11	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:59	07:57	08:28	14:31 (WEA 10)		
	16:45	27	17:45	18:37	20:33	21:22	21:46	21:20	20:20	19:06	18:00	16:06	16:01	21	14:52 (WEA 10)	
27	08:08	14:59	07:08	06:02	05:51	05:00	04:49	05:22	06:14	07:07	07:51	07:58	08:29	14:32 (WEA 10)		
	16:47	28	17:47	18:39	20:35	21:24	21:46	21:19	20:17	19:03	18:00	16:05	16:02	21	14:53 (WEA 10)	
28	08:06	14:59	07:06	06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:53	08:00	08:29	14:33 (WEA 10)		
	16:49	29	17:49	18:41	20:36	21:25	21:45	21:17	20:15	19:01	18:00	16:04	16:03	20	14:53 (WEA 10)	
29	08:05	14:59	06:58	05:47	04:58	04:50	05:25	06:17	07:11	08:05	08:01	08:01	08:29	14:33 (WEA 10)		
	16:51	30	19:42	20:38	21:26	21:45	21:16	20:13	19:08	18:00	17:00	16:03	16:03	21	14:54 (WEA 10)	
30	08:03	14:59	06:55	05:45	04:57	04:50	05:27	06:19	07:12	08:06	08:03	08:03	08:29	14:34 (WEA 10)		
	16:53	31	19:44	20:40	21:28	21:45	21:14	20:10	19:06	18:00	17:00	16:02	16:04	20	14:54 (WEA 10)	
31	08:02	14:59	06:53	05:43	04:56	04:56	05:28	06:21	07:15	08:09	08:06	08:06	08:29	14:34 (WEA 10)		
	16:55	126	19:46	21:29	21:29	21:29	21:12	20:08	19:00	18:00	17:00	16:06	16:05	19	14:53 (WEA 10)	
Sonnenscheinstunden	253		275	367	419	491	506	509	458	382	329	262	237	538		
astr.max.mögl.Beschattung		126														

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)



Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 011 - Deibow, Deibower Dorfstraße 14

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29 16:07	14:29 (WEA 10) 16:57	08:00 17:51	07:04 19:48	06:50 20:42	05:43 21:30	04:55 21:45	05:30 21:11	06:22 20:06	07:14 18:54	07:11 16:44	08:04 16:02
2	08:29 16:08	14:31 (WEA 10) 16:59	07:58 17:53	06:48 19:50	05:41 20:43	04:54 21:31	04:52 21:44	05:31 21:09	06:24 20:03	07:16 18:51	07:13 16:43	08:06 16:01
3	08:29 16:09	14:31 (WEA 10) 17:01	07:57 17:55	06:46 19:51	05:39 20:45	04:53 21:32	04:53 21:44	05:33 21:07	06:26 20:01	07:18 18:49	07:15 16:41	08:07 16:00
4	08:28 16:10	14:34 (WEA 10) 17:02	07:55 17:57	06:43 19:53	05:37 20:47	04:52 21:34	04:53 21:43	05:35 21:05	06:28 19:59	07:19 18:46	07:17 16:39	08:09 16:00
5	08:28 16:11	14:40 (WEA 10) 17:04	07:53 17:59	06:41 19:55	05:35 20:49	04:51 21:35	04:54 21:43	05:36 21:04	06:29 19:56	07:21 18:44	07:18 16:37	08:10 15:59
6	08:28 16:13	14:42 (WEA 10) 17:06	07:51 18:00	06:39 19:57	05:33 20:50	04:51 21:36	04:55 21:42	05:38 21:02	06:31 19:54	07:23 18:42	07:20 16:35	08:12 15:58
7	08:27 16:14	14:42 (WEA 10) 17:08	07:50 18:02	06:36 19:59	05:31 20:52	04:50 21:37	04:56 21:42	05:40 21:00	06:33 19:52	07:25 18:39	07:22 16:33	08:13 15:58
8	08:27 16:15	14:42 (WEA 10) 17:08	07:48 18:04	06:34 20:00	05:29 20:54	04:50 21:38	04:57 21:41	05:41 20:58	06:34 19:49	07:27 18:37	07:24 16:31	08:14 15:58
9	08:26 16:17	14:42 (WEA 10) 17:12	07:46 18:06	06:31 20:02	05:27 20:56	04:49 21:38	04:58 21:40	05:43 20:56	06:36 19:47	07:28 18:35	07:26 16:30	08:15 15:57
10	08:26 16:18	14:42 (WEA 10) 17:14	07:44 18:08	06:29 20:04	05:26 20:57	04:49 21:39	04:59 21:40	05:45 20:54	06:38 19:44	07:30 18:32	07:28 16:28	08:17 15:57
11	08:25 16:20	14:42 (WEA 10) 17:16	07:42 18:10	06:27 20:06	05:24 20:59	04:48 21:40	05:00 21:39	05:46 20:52	06:40 19:42	07:32 18:30	07:30 16:26	08:18 15:57
12	08:24 16:21	14:42 (WEA 10) 17:18	07:40 18:12	06:24 20:08	05:22 21:01	04:48 21:41	05:01 21:38	05:48 20:50	06:41 19:40	07:34 18:28	07:32 16:25	08:19 15:57
13	08:24 16:23	14:42 (WEA 10) 17:20	07:38 18:13	06:22 20:09	05:20 21:02	04:47 21:42	05:03 21:37	05:50 20:48	06:43 19:37	07:36 18:25	07:33 16:23	08:20 15:57
14	08:23 16:24	14:42 (WEA 10) 17:22	07:36 18:15	06:20 20:11	05:19 21:04	04:47 21:42	05:04 21:36	05:51 20:46	06:45 19:35	07:37 18:23	07:35 16:22	08:21 15:57
15	08:22 16:26	14:42 (WEA 10) 17:24	07:34 18:17	06:18 20:13	05:17 21:06	04:47 21:43	05:05 21:35	05:53 20:44	06:46 19:32	07:39 18:21	07:37 16:20	08:22 15:57
16	08:21 16:28	14:42 (WEA 10) 17:26	07:32 18:19	06:15 20:15	05:15 21:07	04:47 21:43	05:06 21:34	05:55 20:42	06:48 19:30	07:41 18:18	07:39 16:19	08:23 15:57
17	08:20 16:29	14:42 (WEA 10) 17:28	07:30 18:21	06:13 20:17	05:14 21:09	04:47 21:44	05:07 21:33	05:57 20:39	06:50 19:27	07:43 18:16	07:41 16:17	08:23 15:57
18	08:19 16:31	14:42 (WEA 10) 17:30	07:28 18:23	06:11 20:18	05:12 21:10	04:47 21:44	05:09 21:31	05:58 20:37	06:52 19:25	07:45 18:14	07:43 16:16	08:24 15:57
19	08:18 16:33	14:42 (WEA 10) 17:32	07:26 18:24	06:08 20:20	05:11 21:12	04:47 21:45	05:10 21:30	06:00 20:35	06:53 19:23	07:47 18:12	07:44 16:14	08:25 15:57
20	08:17 16:34	14:42 (WEA 10) 17:34	07:24 18:26	06:06 20:22	05:09 21:14	04:47 21:45	05:12 21:29	06:02 20:33	06:55 19:20	07:48 18:09	07:46 16:13	08:26 15:58
21	08:16 16:36	14:42 (WEA 10) 17:36	07:22 18:28	06:04 20:24	05:08 21:15	04:47 21:45	05:13 21:28	06:03 20:31	06:57 19:18	07:50 18:07	07:48 16:12	08:26 15:58
22	08:14 16:38	14:42 (WEA 10) 17:38	07:19 18:30	06:02 20:26	05:06 21:17	04:47 21:45	05:14 21:26	06:05 20:29	06:59 19:15	07:52 18:05	07:50 16:10	08:27 15:59
23	08:13 16:40	14:42 (WEA 10) 17:40	07:17 18:32	06:00 20:27	05:05 21:18	04:47 21:46	05:16 21:25	06:07 20:26	07:00 19:13	07:54 18:03	07:51 16:09	08:27 15:59
24	08:12 16:42	14:42 (WEA 10) 17:41	07:15 18:33	05:57 20:29	05:04 21:20	04:48 21:46	05:17 21:23	06:09 20:24	07:02 19:10	07:56 18:01	07:53 16:08	08:28 16:00
25	08:10 16:43	14:42 (WEA 10) 17:43	07:13 18:35	05:55 20:31	05:02 21:21	04:48 21:46	05:19 21:22	06:10 20:22	07:04 19:08	07:58 18:00	07:55 16:07	08:28 16:00
26	08:09 16:45	14:42 (WEA 10) 17:45	07:11 18:37	05:53 20:33	05:01 21:22	04:48 21:46	05:20 21:20	06:12 20:20	07:05 19:06	07:59 18:00	07:57 16:06	08:28 16:01
27	08:08 16:47	14:42 (WEA 10) 17:47	07:08 18:39	05:51 20:35	05:00 21:24	04:49 21:46	05:22 21:19	06:14 20:17	07:07 19:03	07:01 18:00	07:58 16:05	08:29 16:02
28	08:06 16:49	14:42 (WEA 10) 17:49	07:06 18:41	05:49 20:36	04:59 21:25	04:49 21:45	05:23 21:17	06:16 20:15	07:09 19:01	07:03 18:00	07:58 16:04	08:29 16:03
29	08:05 16:51	14:42 (WEA 10) 17:50	07:05 18:42	05:47 20:38	04:58 21:26	04:50 21:45	05:25 21:16	06:17 20:13	07:11 18:58	07:05 18:00	07:58 16:03	08:29 16:03
30	08:03 16:53	14:42 (WEA 10) 17:52	07:03 18:44	05:45 20:40	04:57 21:29	04:50 21:45	05:27 21:14	06:19 20:10	07:12 18:56	07:07 18:00	07:58 16:02	08:29 16:04
31	08:02 16:55	14:42 (WEA 10) 17:54	07:02 18:46	05:44 20:42	04:56 21:29	04:50 21:45	05:28 21:12	06:21 20:08	07:13 18:56	07:09 18:00	07:59 16:05	08:29 16:04
Sonnenscheinstunden	253		275	367	419	491	506	458	382	329	262	237
astr. max. mögl. Beschattung	40											369

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
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SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 012 - Deibow, Deibower Dorfstraße 15

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:
Die Sonne scheint täglich von Sonnenauf- bis -untergang
Die Rotorfläche steht immer senkrecht zur Sonneneinfallsrichtung
Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar		Februar		März		April		Mai		Juni		Juli		August		September		Oktober		November		Dezember	
1	08:29	15:18 (WEA 09)	08:00	16:10 (WEA 08)	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	15:38 (WEA 08)	08:04	16:44	22	15:38 (WEA 08)	08:06	16:44	22	15:38 (WEA 08)	08:06	
2	15:07	12	15:30 (WEA 09)	16:57	15	16:25 (WEA 08)	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:54	16:44	22	16:00 (WEA 08)	15:59	20	15:22 (WEA 09)	16:02	21	15:22 (WEA 09)	
3	08:29	15:18 (WEA 09)	07:58	16:09 (WEA 08)	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	15:38 (WEA 08)	08:06	16:44	22	16:00 (WEA 08)	15:59	20	15:22 (WEA 09)	16:02		
4	16:08	13	15:31 (WEA 09)	16:59	18	16:27 (WEA 08)	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	22	16:00 (WEA 08)	15:59	20	15:22 (WEA 09)	16:02			
5	08:29	15:18 (WEA 09)	07:57	16:09 (WEA 08)	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	15:38 (WEA 08)	08:07	16:44	22	16:00 (WEA 08)	15:59	20	15:22 (WEA 09)	16:02		
6	15:09	14	15:32 (WEA 09)	17:01	20	16:29 (WEA 08)	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	22	16:00 (WEA 08)	15:59	20	15:22 (WEA 09)	16:02			
7	08:28	15:18 (WEA 09)	07:55	16:09 (WEA 08)	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	15:38 (WEA 08)	08:09	16:44	22	16:00 (WEA 08)	15:59	20	15:22 (WEA 09)	16:02		
8	16:10	16	15:34 (WEA 09)	17:02	21	16:30 (WEA 08)	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	22	16:00 (WEA 08)	15:59	20	15:22 (WEA 09)	16:02			
9	08:28	15:19 (WEA 09)	07:53	16:08 (WEA 08)	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	15:38 (WEA 08)	08:10	16:44	22	16:00 (WEA 08)	15:59	20	15:22 (WEA 09)	16:02		
10	16:11	17	15:36 (WEA 09)	17:04	22	16:30 (WEA 08)	17:59	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37	22	16:00 (WEA 08)	15:59	20	15:22 (WEA 09)	16:02			
11	08:28	15:18 (WEA 09)	07:51	16:08 (WEA 08)	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	15:38 (WEA 08)	08:12	16:44	22	16:00 (WEA 08)	15:59	20	15:22 (WEA 09)	16:02		
12	16:13	19	15:37 (WEA 09)	17:06	23	16:31 (WEA 08)	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	22	16:00 (WEA 08)	15:58	18	15:23 (WEA 09)	16:03			
13	08:27	15:18 (WEA 09)	07:50	16:08 (WEA 08)	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	15:38 (WEA 08)	08:13	16:44	22	16:00 (WEA 08)	15:58	17	15:23 (WEA 09)	16:03		
14	16:14	19	15:37 (WEA 09)	17:08	23	16:31 (WEA 08)	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:32	22	16:00 (WEA 08)	15:58	17	15:23 (WEA 09)	16:03			
15	08:27	15:19 (WEA 09)	07:48	16:08 (WEA 08)	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	15:39 (WEA 08)	08:14	16:44	22	16:00 (WEA 08)	15:57	14	15:21 (WEA 09)	16:01		
16	16:15	20	15:39 (WEA 09)	17:10	23	16:31 (WEA 08)	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:32	20	15:59 (WEA 08)	15:58	16	15:22 (WEA 09)	16:01			
17	08:26	15:19 (WEA 09)	07:46	16:08 (WEA 08)	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	15:40 (WEA 08)	08:15	16:44	22	16:00 (WEA 08)	15:57	14	15:21 (WEA 09)	16:01		
18	16:17	20	15:39 (WEA 09)	17:12	22	16:30 (WEA 08)	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	18	15:58 (WEA 08)	15:57	14	15:21 (WEA 09)	16:01			
19	08:26	15:19 (WEA 09)	07:44	16:08 (WEA 08)	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	15:41 (WEA 08)	08:17	16:44	22	16:00 (WEA 08)	15:57	14	15:21 (WEA 09)	16:01		
20	16:18	21	15:40 (WEA 09)	17:14	21	16:30 (WEA 08)	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	15	15:56 (WEA 08)	15:57	13	15:21 (WEA 09)	16:01			
21	08:25	15:19 (WEA 09)	07:42	16:10 (WEA 08)	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	15:42 (WEA 08)	08:18	16:44	22	16:00 (WEA 08)	15:57	12	15:21 (WEA 09)	16:01		
22	16:20	21	15:40 (WEA 09)	17:16	20	16:30 (WEA 08)	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26	12	15:54 (WEA 08)	15:57	12	15:20 (WEA 09)	16:01			
23	08:24	15:19 (WEA 09)	07:40	16:11 (WEA 08)	06:38	06:24	05:22	04:46	05:01	05:48	06:41	07:34	07:32	15:44 (WEA 08)	08:19	16:44	22	16:00 (WEA 08)	15:57	11	15:20 (WEA 09)	16:01		
24	16:21	22	15:41 (WEA 09)	17:18	18	16:29 (WEA 08)	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25	8	15:52 (WEA 08)	15:57	11	15:20 (WEA 09)	16:01			
25	08:24	15:19 (WEA 09)	07:38	16:12 (WEA 08)	06:36	06:22	05:20	04:47	05:03	05:50	06:43	07:36	07:33	15:47 (WEA 08)	08:20	16:44	22	16:00 (WEA 08)	15:57	10	15:20 (WEA 09)	16:01		
26	16:23	22	15:41 (WEA 09)	17:20	16	16:28 (WEA 08)	18:13	20:09	21:02	21:42	21:37	20:48	19:37	18:25	16:23	3	15:50 (WEA 08)	15:57	14	15:19 (WEA 09)	16:01			
27	08:23	15:19 (WEA 09)	07:36	16:14 (WEA 08)	06:34	06:20	05:19	04:47	05:04	05:52	06:45	07:37	07:35	15:49 (WEA 08)	08:21	16:44	22	16:00 (WEA 08)	15:57	9	15:19 (WEA 09)	16:01		
28	16:24	23	15:42 (WEA 09)	17:22	12	16:26 (WEA 08)	18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	16:22									
29	08:22	15:20 (WEA 09)	07:34	16:17 (WEA 08)	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	15:50 (WEA 08)	08:22	16:44	22	16:00 (WEA 08)	15:57	17	15:19 (WEA 09)	16:01		
30	16:26	22	15:42 (WEA 09)	17:24	7	16:24 (WEA 08)	18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	16:20	7	15:11 (WEA 09)	15:57	17	15:19 (WEA 09)	16:01			
31	08:21	15:20 (WEA 09)	07:32			06:29	05:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39										
32	16:28	23	15:43 (WEA 09)	17:26		16:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	16:19	12	15:13 (WEA 09)	15:57	18	15:20 (WEA 09)	16:01				
33	08:20	15:21 (WEA 09)	07:30			06:26	05:13	05:14	04:47	05:08	05:57	06:50	07:43	07:41										
34	16:29	22	15:43 (WEA 09)	17:28		16:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	16:17	15	15:15 (WEA 09)	15:57	19	15:20 (WEA 09)	16:01				
35	08:19	15:21 (WEA 09)	07:28			06:24	05:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43										
36	16:31	23	15:44 (WEA 09)	17:30		16:23	20:18	21:10	21:44	21:31	20:37	19:25	18:14	16:16	17	15:16 (WEA 09)	15:57	18	15:20 (WEA 09)	16:01				
37	08:18	15:22 (WEA 09)	07:26			06:22	05:08	05:11	04:47	05:10	05:00	06:53	07:47	07:44										
38	16:33	22	15:44 (WEA 09)	17:32		16:24	20:20	21:12	21:45	21:30	20:35	19:23	18:12	16:14	18	15:17 (WEA 09)	15:57	19	15:21 (WEA 09)	16:01				
39	08:17	15:22 (WEA 09)	07:24			06:19	05:06	05:09	04:47	05:12	05:02	06:55	07:48	07:46										
40	16:34	21	15:43 (WEA 09)	17:34		16:26	20:22	21:14	21:45	21:29	20:33	19:20	18:09	16:13	20	15:18 (WEA 09)	15:58	18	15:21 (WEA 09)	16:01				
41	08:16	15:23 (WEA 09)	07:22			06:17	05:04	05:08	04:47	05:13	05:03	06:57	07:50	07:48										
42	16:36	21	15:44 (WEA 09)	17:36		16:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	16:12	21	15:19 (WEA 09)	15:58	17	15:21 (WEA 09)	16:01				
43	08:14	15:23 (WEA 09)	07:19			06:14	05:02	05:06	04:47	05:14	05:05	06:59	07:52	07:50										
44	16:38	20	15:43 (WEA 09)	17:38		16:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	16:11	22	15:20 (WEA 09)	15:59	17	15:21 (WEA 09)	16:01				
45	08:13	15:25 (WEA 09)	07:17			06:12	05:00	05:05	04:47	05:16	05:07	07:00	07:54	07:51										
46	16:40	18	15:43 (WEA 09)	17:40		16:32	20:27	21:18	21:46	21:25	20:26	19:13	18:03	16:09	22	15:20 (WEA 09)	15:59	17	15:22 (WEA 09)	16:01				
47	08:12	15:25 (WEA 09)	07:15			06:10	05:57	05:04	04:48	05:17	05:09	07:02	07:56	07:53										
48	16:42	17	15:42 (WEA 09)	17:41		16:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	16:08	23	15:21 (WEA 09)	15:59	16	15:23 (WEA 09)	16:01				
49	08:10	15:27 (WEA 09)	07:13			06:07	05:55	05:02	04:48	05:19	05:10	07:04	06:58	07:55										
50	16:43	15	15:42 (WEA 09)	17:43		16:35	20:31	21:21	21:46	21:22	20:22	19:08	18:00	16:07	22	15:21 (WEA 09)	15:59	16	15:24 (WEA 09)	16:01				
51	08:09	15:29 (WEA 09)	07:13			06:05	05:43	05:01	04:49	05:01	05:00	06:59	07:52	07:50										
52	16:45	11	15:40 (WEA 09)	17:45		16:37	20:33	21:22	21:46	21:21	20:20	19:06	16:57	16:06	23	15:22 (WEA 09)	15:59	15	15:24 (WEA 09)	16:01				
53	08:08	15:32 (WEA 09)	07:08			06:02	05:51	05:00	04:49	05:22	0													

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 013 - Deibow, Deibower Dorfstraße 16

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

Januar		Februar		März		April	Mai	Juni	Juli	August	September	Oktober	November		Dezember					
1	08:29	14:24 (WEA 10)	08:00	16:22 (WEA 08)	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	15:45 (WEA 08)	08:04					
16	10:07	14:40 (WEA 10)	16:57	3	16:25 (WEA 08)	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:54	16:44	16:07 (WEA 08)	16:02				
2	08:29	14:25 (WEA 10)	07:58		16:19 (WEA 08)	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	15:45 (WEA 08)	08:06				
16	10:08	14:41 (WEA 10)	16:59	8	16:27 (WEA 08)	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	16:07 (WEA 08)	16:01				
3	08:29	14:26 (WEA 10)	07:57		16:19 (WEA 08)	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	15:45 (WEA 08)	08:07				
16	10:09	14:40 (WEA 10)	17:01	11	16:30 (WEA 08)	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	16:06 (WEA 08)	16:00				
4	08:28	14:27 (WEA 10)	07:55		16:17 (WEA 08)	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	15:45 (WEA 08)	08:09				
16	10:10	14:40 (WEA 10)	17:02	15	16:32 (WEA 08)	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	16:06 (WEA 08)	16:00				
5	08:28	14:29 (WEA 10)	07:53		16:17 (WEA 08)	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	15:46 (WEA 08)	08:10				
16	10:11	14:40 (WEA 10)	17:04	17	16:34 (WEA 08)	17:59	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37	20	16:06 (WEA 08)	15:59			
6	08:28	14:31 (WEA 10)	07:51		16:16 (WEA 08)	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	15:46 (WEA 08)	08:12	14:17 (WEA 10)			
16	10:13	14:38 (WEA 10)	17:06	20	16:36 (WEA 08)	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	18	16:04 (WEA 08)	15:58	7	14:24 (WEA 10)	
7	08:27	14:34 (WEA 10)	07:50		16:16 (WEA 08)	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	15:47 (WEA 08)	08:13	14:15 (WEA 10)			
16	10:14	14:35 (WEA 10)	17:08	20	16:36 (WEA 08)	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:32	15	16:02 (WEA 08)	15:53	11	14:25 (WEA 10)	
8	08:27	14:37 (WEA 10)	07:48		16:15 (WEA 08)	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	15:49 (WEA 08)	08:14	14:15 (WEA 10)			
16	10:15	14:40 (WEA 10)	17:10	22	16:37 (WEA 08)	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:32	11	16:00 (WEA 08)	15:58	13	14:28 (WEA 10)	
9	08:26	14:39 (WEA 10)	07:46		16:15 (WEA 08)	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	15:50 (WEA 08)	08:15	14:15 (WEA 10)			
16	10:17	14:41 (WEA 10)	17:12	22	16:37 (WEA 08)	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	8	15:58 (WEA 08)	15:57	14	14:29 (WEA 10)	
10	08:26	14:42 (WEA 10)	07:44		16:15 (WEA 08)	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	3	15:53 (WEA 08)	08:17	16	14:34 (WEA 10)	
16	10:18	14:43 (WEA 10)	17:14	22	16:37 (WEA 08)	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	3	15:56 (WEA 08)	15:57	16	14:30 (WEA 10)	
11	08:25	14:44 (WEA 10)	07:42		16:16 (WEA 08)	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30		08:18	14:14 (WEA 10)			
16	10:20	14:45 (WEA 10)	17:16	21	16:37 (WEA 08)	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26		15:57	16	14:30 (WEA 10)		
12	08:24	14:46 (WEA 10)	07:40		16:18 (WEA 08)	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32		08:19	14:14 (WEA 10)			
16	10:21	14:47 (WEA 10)	17:18	21	16:37 (WEA 08)	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25		15:57	17	14:31 (WEA 10)		
13	08:24	14:47 (WEA 10)	07:38		16:17 (WEA 08)	06:36	06:22	05:20	04:47	05:03	05:50	06:43	07:36	07:33		08:20	14:14 (WEA 10)			
16	10:23	14:48 (WEA 10)	17:20	19	16:36 (WEA 08)	18:13	20:09	21:02	21:42	21:37	20:48	19:37	18:25	16:23		15:57	18	14:32 (WEA 10)		
14	08:23	14:48 (WEA 10)	07:36		16:18 (WEA 08)	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35		08:21	14:14 (WEA 10)			
16	10:24	14:49 (WEA 10)	17:22	17	16:35 (WEA 08)	18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	16:22		15:57	19	14:33 (WEA 10)		
15	08:22	14:49 (WEA 10)	07:34		16:19 (WEA 08)	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37		08:22	14:14 (WEA 10)			
16	10:25	14:50 (WEA 10)	17:24	15	16:34 (WEA 08)	18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	16:20		15:57	19	14:33 (WEA 10)		
16	08:21	14:50 (WEA 10)	07:32		16:20 (WEA 08)	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39		08:23	14:15 (WEA 10)			
16	10:26	14:51 (WEA 10)	17:26	12	16:32 (WEA 08)	18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	16:19		15:57	19	14:34 (WEA 10)		
17	08:20	14:51 (WEA 10)	07:30		16:24 (WEA 08)	06:26	06:13	05:14	04:47	05:08	05:57	06:50	07:43	07:41		08:23	14:15 (WEA 10)			
16	10:29	14:52 (WEA 10)	17:28	4	16:28 (WEA 08)	18:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	16:17		15:57	20	14:35 (WEA 10)		
18	08:19	14:52 (WEA 10)	07:28		16:24 (WEA 08)	06:11	06:12	05:12	04:47	05:09	05:58	06:52	07:45	07:43		08:24	14:16 (WEA 10)			
16	10:31	14:53 (WEA 10)	17:30		16:23 (WEA 08)	06:18	20:18	21:10	21:44	21:31	20:37	19:25	18:14	16:16		15:57	20	14:36 (WEA 10)		
19	08:18	14:53 (WEA 10)	07:26		16:22 (WEA 08)	06:08	06:11	05:11	04:47	05:10	06:00	06:53	07:47	07:44		08:25	14:16 (WEA 10)			
16	10:33	14:54 (WEA 10)	17:32		16:24 (WEA 08)	06:12	20:20	21:12	21:45	21:30	20:35	19:23	18:12	16:14		15:57	21	14:37 (WEA 10)		
20	08:17	14:54 (WEA 10)	07:24		16:19 (WEA 08)	06:06	06:09	05:09	04:47	05:12	06:02	06:55	07:48	07:46		08:26	14:16 (WEA 10)			
16	10:34	14:55 (WEA 10)	17:34		16:24 (WEA 08)	06:12	20:22	21:14	21:45	21:29	20:33	19:20	18:09	16:13		15:58	21	14:37 (WEA 10)		
21	08:16	14:55 (WEA 10)	07:22		16:17 (WEA 08)	06:04	06:08	05:08	04:47	05:13	06:03	06:57	07:50	07:48		08:26	14:17 (WEA 10)			
16	10:36	14:56 (WEA 10)	17:36		16:26 (WEA 08)	06:14	20:24	21:15	21:45	21:28	20:31	19:18	18:07	16:12		15:58	21	14:38 (WEA 10)		
22	08:14	14:56 (WEA 10)	07:19		16:14 (WEA 08)	06:02	06:06	05:06	04:47	05:14	06:05	06:59	07:52	07:50		08:27	14:17 (WEA 10)			
16	10:38	14:57 (WEA 10)	17:39		16:30 (WEA 08)	06:16	20:26	21:17	21:45	21:28	20:29	19:15	18:05	16:11		15:59	20	14:37 (WEA 10)		
23	08:13	14:57 (WEA 10)	07:17		16:12 (WEA 08)	06:00	06:05	05:05	04:47	05:16	06:07	07:00	07:54	07:51		08:27	14:18 (WEA 10)			
24	08:12	14:58 (WEA 10)	07:15		16:10 (WEA 08)	05:57	06:04	05:04	04:48	05:17	06:09	07:02	07:56	07:53		08:28	14:18 (WEA 10)			
16	10:42	14:59 (WEA 10)	17:41		16:33 (WEA 08)	06:19	20:29	21:20	21:46	21:23	20:24	19:10	18:01	16:06		16:00	21	14:39 (WEA 10)		
25	08:10	14:59 (WEA 10)	07:13		16:07 (WEA 08)	05:55	06:02	05:02	04:48	05:19	06:10	07:04	06:58		15:53 (WEA 08)	07:55	08:28	14:19 (WEA 10)		
16	10:43	15:00 (WEA 10)	17:43		16:35 (WEA 08)	06:21	20:31	21:21	21:46	21:22	20:22	19:08	18:00	16:07	7	16:00 (WEA 08)	16:07	16:00	20	14:39 (WEA 10)
26	08:09	14:59 (WEA 10)	07:11		16:05 (WEA 08)	05:53	06:01	05:01	04:48	05:20	06:12	07:05	07:00		15:50 (WEA 08)	07:57	08:28	14:19 (WEA 10)		
16	10:45	15:01 (WEA 10)	17:45		16:37 (WEA 08)	06:23	20:33	21:22	21:46	21:20	20:20	19:06	18:00	16:07	13	16:03 (WEA 08)	16:06	16:01	20	14:39 (WEA 10)
27	08:08	14:59 (WEA 10)	07:08		16:02 (WEA 08)	05:51	06:00	05:00	04:49	05:22	06:14	07:07	07:01		15:48 (WEA 08)	07:58	08:29	14:20 (WEA 10)		
16	10:47	15:02 (WEA 10)	17:47		16:39 (WEA 08)	06:25	20:35	21:24	21:46	21:19	20:17	19:03	18:00	16:05	16	16:04 (WEA 08)	16:05	16:02	20	14:40 (WEA 10)
28	08:06	14:59 (WEA 10)	07:06		16:00 (WEA 08)	05:49	05:59	05:00	04:49	05:23	06:16	07:09	07:03		15:47 (WEA 08)	08:00	08:29	14:21 (WEA 10)		
16	10:49	15:03 (WEA 10)	17:49		16:41 (WEA 08)	06:26	20:36	21:25	21:45	21:17	20:15	19:01	18:00	16:05	18	16:05 (WEA 08)	16:04	16:03	19	14:40 (WEA 10)
29	08:05	14:59 (WEA 10)	07:05		16:06 (WEA 08)	05:47	05:58	05:00	04:50	05:25	06:17	07:11	07:05		15:46 (WEA 08)	08:01	08:29	14:22 (WEA 10)		
30																				

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 014 - Deibow, Deibower Dorfstraße 17

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

		Januar		Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember		
1	08:29	14:29 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04			
	16:07	18	14:47 (WEA 10)	16:57	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:54	16:44	16:02		
2	08:29	14:30 (WEA 10)	07:58	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	08:06			
	16:08	17	14:47 (WEA 10)	16:59	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	16:01		
3	08:29	14:30 (WEA 10)	07:57	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	08:07			
	16:09	17	14:47 (WEA 10)	17:01	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	16:00		
4	08:28	14:32 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09	14:22 (WEA 10)		
	16:10	15	14:47 (WEA 10)	17:02	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	16:00	7	14:29 (WEA 10)
5	08:28	14:33 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10	14:21 (WEA 10)		
	16:11	14	14:47 (WEA 10)	17:04	17:59	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37	15:59	9	14:30 (WEA 10)
6	08:28	14:34 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12	14:20 (WEA 10)		
	16:13	12	14:46 (WEA 10)	17:06	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	15:58	12	14:32 (WEA 10)
7	08:27	14:35 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13	14:20 (WEA 10)		
	16:14	10	14:45 (WEA 10)	17:08	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:33	15:58	13	14:33 (WEA 10)
8	08:27	14:38 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14	14:20 (WEA 10)		
	16:15	7	14:45 (WEA 10)	17:10	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:31	15:58	15	14:35 (WEA 10)
9	08:26	14:40 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15	14:19 (WEA 10)		
	16:17	17:12	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	15:57	17	14:36 (WEA 10)		
10	08:26	14:41 (WEA 10)	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17	14:19 (WEA 10)		
	16:18	17:14	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	15:57	18	14:37 (WEA 10)		
11	08:25	14:42 (WEA 10)	07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18	14:19 (WEA 10)		
	16:20	17:16	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26	15:57	18	14:37 (WEA 10)		
12	08:24	14:43 (WEA 10)	07:40	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19	14:19 (WEA 10)		
	16:21	17:18	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25	15:57	19	14:38 (WEA 10)		
13	08:24	14:44 (WEA 10)	07:38	06:36	06:22	05:20	04:47	05:03	05:50	06:43	07:36	07:33	08:20	14:19 (WEA 10)		
	16:23	17:20	18:13	20:09	21:02	21:42	21:37	20:48	19:37	18:25	16:23	15:57	20	14:39 (WEA 10)		
14	08:23	14:45 (WEA 10)	07:36	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21	14:19 (WEA 10)		
	16:24	17:22	18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	16:22	15:57	20	14:39 (WEA 10)		
15	08:22	14:46 (WEA 10)	07:34	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22	14:20 (WEA 10)		
	16:26	17:24	18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	16:20	15:57	20	14:40 (WEA 10)		
16	08:21	14:47 (WEA 10)	07:32	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23	14:20 (WEA 10)		
	16:28	17:26	18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	16:19	15:57	21	14:41 (WEA 10)		
17	08:20	14:48 (WEA 10)	07:30	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:23	14:20 (WEA 10)		
	16:29	17:28	18:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	16:17	15:57	21	14:41 (WEA 10)		
18	08:19	14:49 (WEA 10)	07:28	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:24	14:21 (WEA 10)		
	16:31	17:30	18:23	20:18	21:10	21:44	21:31	20:37	19:25	18:14	16:16	15:57	21	14:42 (WEA 10)		
19	08:18	14:50 (WEA 10)	07:26	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:25	14:22 (WEA 10)		
	16:33	17:32	18:24	20:20	21:12	21:45	21:30	20:35	19:23	18:12	16:14	15:57	21	14:43 (WEA 10)		
20	08:17	14:51 (WEA 10)	07:24	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:26	14:22 (WEA 10)		
	16:34	17:34	18:26	20:22	21:14	21:45	21:29	20:33	19:20	18:09	16:13	15:58	21	14:43 (WEA 10)		
21	08:16	14:52 (WEA 10)	07:22	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:26	14:22 (WEA 10)		
	16:36	17:36	18:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	16:12	15:58	22	14:44 (WEA 10)		
22	08:14	14:53 (WEA 10)	07:19	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:27	14:22 (WEA 10)		
	16:38	17:38	18:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	16:10	15:59	22	14:44 (WEA 10)		
23	08:13	14:54 (WEA 10)	07:17	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:27	14:23 (WEA 10)		
	16:40	17:40	18:32	20:27	21:18	21:46	21:25	20:26	19:13	18:03	16:09	15:59	22	14:45 (WEA 10)		
24	08:12	14:55 (WEA 10)	07:15	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:28	14:24 (WEA 10)		
	16:42	17:41	18:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	16:08	16:00	21	14:45 (WEA 10)		
25	08:10	14:56 (WEA 10)	07:13	06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	07:55	08:28	14:24 (WEA 10)		
	16:43	17:43	18:35	20:31	21:21	21:46	21:22	20:22	19:08	18:00	16:07	16:00	21	14:45 (WEA 10)		
26	08:09	14:57 (WEA 10)	07:11	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:00	07:57	08:28	14:24 (WEA 10)		
	16:45	17:45	18:37	20:33	21:22	21:46	21:20	20:20	19:06	18:00	16:07	16:00	21	14:45 (WEA 10)		
27	08:08	14:58 (WEA 10)	07:08	06:02	05:51	05:00	04:49	05:22	06:14	07:07	07:01	07:58	08:29	14:26 (WEA 10)		
	16:47	17:47	18:39	20:35	21:24	21:46	21:19	20:17	19:03	18:00	16:05	16:00	21	14:47 (WEA 10)		
28	08:06	14:59 (WEA 10)	07:06	06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:03	08:00	08:29	14:26 (WEA 10)		
	16:49	17:49	18:41	20:36	21:25	21:45	21:17	20:15	19:01	18:00	16:02	16:00	21	14:47 (WEA 10)		
29	08:05	15:00 (WEA 10)	06:58	05:47	04:58	04:50	05:25	06:17	07:11	07:05	08:01	08:00	14:27 (WEA 10)			
	16:51	17:51	18:43	20:38	21:26	21:45	21:16	20:13	18:58	18:00	16:03	16:00	20	14:47 (WEA 10)		
30	08:03	15:01 (WEA 10)	06:55	05:45	04:57	04:50	05:27	06:19	07:12	07:07	08:03	08:00	14:28 (WEA 10)			
	16:53	17:53	18:45	20:40	21:28	21:45	21:14	20:10	18:56	18:00	16:02	16:00	19	14:47 (WEA 10)		
31	08:02	15:02 (WEA 10)	06:53	05:43	04:56	04:50	05:28	06:21	07:15	07:09	08:05	08:00	14:28 (WEA 10)			
	16:55	17:55	18:47	20:42	21:30	21:45	21:12	20:08	18:54	18:00	16:04	16:00	19	14:47 (WEA 10)		
Sonnenscheinstunden	253		275	367	419	491	506	509	458	382	329	262	237			
astr.max.mögl.Beschattung	110												522			

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 015 - Deibow, Deibower Dorfstraße 018

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29 16:07 19	14:32 (WEA 10) 16:57 17:51	08:00 17:04 19:48	06:50 17:51 20:42	05:43 19:48 21:30	04:55 21:30 21:45	04:51 21:45 21:11	05:30 21:11 20:06	06:22 20:06 18:54	07:14 18:54 16:44	07:11 16:44 16:02	08:04 16:02 16:02
2	08:29 16:08 18	14:33 (WEA 10) 16:59 17:53	07:58 17:53 19:50	06:48 17:53 20:43	05:41 19:50 21:31	04:54 21:31 21:44	04:52 21:44 21:09	05:31 21:09 20:03	06:24 20:03 18:51	07:16 18:51 16:43	07:13 16:43 16:01	08:06 16:01 16:01
3	08:29 16:09 18	14:33 (WEA 10) 17:01 17:55	07:57 17:55 19:51	06:46 17:55 20:45	05:39 19:51 21:32	04:53 21:32 21:44	04:53 21:44 21:07	05:33 21:07 20:01	06:26 20:01 18:49	07:18 18:49 16:41	07:15 16:41 16:00	08:07 16:00 16:00
4	08:28 16:10 17	14:34 (WEA 10) 17:02 17:57	07:55 17:57 19:53	06:43 17:57 20:47	05:37 19:53 21:34	04:52 21:34 21:43	04:53 21:43 21:05	05:35 21:05 19:59	06:28 19:59 18:46	07:19 18:46 16:39	07:17 16:39 16:00	08:09 16:00 16:00
5	08:28 16:11 16	14:34 (WEA 10) 17:04 17:59	07:53 17:59 19:55	06:41 17:59 20:49	05:35 19:55 21:35	04:51 21:35 21:43	04:54 21:43 21:04	05:36 21:04 19:56	06:29 19:56 18:44	07:21 18:44 16:37	07:18 16:37 15:59	08:10 15:59 13
6	08:28 16:13 15	14:36 (WEA 10) 17:06 18:00	07:51 18:00 19:57	06:39 18:00 20:50	05:33 19:57 21:36	04:51 21:36 21:42	04:55 21:42 21:02	05:38 21:02 19:54	06:31 19:54 18:42	07:23 18:42 16:35	07:20 16:35 15:58	08:12 15:58 14
7	08:27 16:14 13	14:37 (WEA 10) 17:08 18:02	07:50 18:02 19:59	06:36 18:02 20:52	05:31 19:59 21:37	04:50 21:37 21:42	04:56 21:42 21:00	05:40 21:00 19:52	06:33 19:52 18:39	07:25 18:39 16:33	07:22 16:33 15:58	08:13 15:58 16
8	08:27 16:15 11	14:39 (WEA 10) 17:10 18:04	07:48 18:04 20:00	06:34 18:04 20:54	05:29 20:00 21:38	04:50 21:38 21:41	04:57 21:41 20:58	05:41 20:58 19:49	06:34 19:49 18:37	07:27 18:37 16:31	07:24 16:31 15:58	08:14 15:58 17
9	08:26 16:17 8	14:41 (WEA 10) 17:12 18:06	07:46 18:06 20:02	06:45 18:06 20:56	05:27 20:02 21:38	04:49 21:38 21:40	04:58 21:40 20:56	05:43 20:56 19:47	06:36 19:47 18:35	07:28 18:35 16:30	07:26 16:30 15:57	08:15 15:57 18
10	08:26 16:18 18	14:49 (WEA 10) 17:14 18:08	07:44 18:08 20:04	06:43 18:08 20:57	05:26 20:04 21:39	04:49 21:39 21:40	04:59 21:40 20:54	05:45 20:54 19:44	06:38 19:44 18:32	07:30 18:32 16:28	07:28 16:28 15:57	08:17 15:57 18
11	08:25 16:20 16	14:49 (WEA 10) 17:16 18:10	07:42 18:10 20:06	06:41 18:10 20:59	05:24 20:06 21:40	04:48 21:40 21:39	05:00 21:39 20:52	05:46 20:52 19:42	06:40 19:42 18:30	07:32 18:30 16:26	07:30 16:26 15:57	08:18 15:57 19
12	08:24 16:21 16	14:49 (WEA 10) 17:18 18:12	07:40 18:12 20:08	06:38 18:12 20:59	05:22 20:08 21:41	04:48 21:41 21:38	05:01 21:38 20:50	05:48 20:50 19:40	06:41 19:40 18:28	07:34 18:28 16:25	07:32 16:25 15:57	08:19 15:57 20
13	08:24 16:23 14	14:49 (WEA 10) 17:20 18:13	07:38 18:13 20:09	06:36 18:13 20:59	05:20 20:09 21:42	04:47 21:42 21:37	05:03 21:37 20:48	05:50 20:48 19:37	06:43 19:37 18:25	07:36 18:25 16:23	07:33 16:23 15:57	08:20 15:57 20
14	08:23 16:24 14	14:49 (WEA 10) 17:22 18:15	07:36 18:15 20:11	06:34 18:15 21:04	05:19 20:11 21:42	04:47 21:42 21:36	05:04 21:36 20:46	05:51 20:46 19:35	06:45 19:35 18:23	07:37 18:23 16:22	07:35 16:22 15:57	08:21 15:57 21
15	08:22 16:26 16	14:49 (WEA 10) 17:24 18:17	07:34 18:17 20:13	06:31 18:17 21:06	05:17 21:06 21:43	04:47 21:43 21:35	05:05 21:35 20:44	05:53 20:44 19:32	06:46 19:32 18:21	07:39 18:21 16:20	07:37 16:20 15:57	08:22 15:57 22
16	08:21 16:28 16	14:49 (WEA 10) 17:26 18:19	07:32 18:19 20:15	06:29 18:19 21:07	05:15 21:07 21:43	04:47 21:43 21:34	05:06 21:34 20:42	05:55 20:42 19:30	06:48 19:30 18:18	07:41 18:18 16:19	07:39 16:19 15:57	08:23 15:57 21
17	08:20 16:29 16	14:49 (WEA 10) 17:28 18:21	07:30 18:21 20:17	06:26 18:21 21:09	05:14 21:09 21:44	04:47 21:44 21:33	05:07 21:33 20:39	05:57 20:39 19:27	06:50 19:27 18:16	07:43 18:16 16:17	07:41 16:17 15:57	08:23 15:57 22
18	08:19 16:31 16	14:49 (WEA 10) 17:30 18:23	07:28 18:23 20:18	06:24 18:23 21:10	05:12 21:10 21:44	04:47 21:44 21:31	05:09 21:31 20:37	05:58 20:37 19:25	06:52 19:25 18:14	07:45 18:14 16:16	07:43 16:16 15:57	08:24 15:57 22
19	08:18 16:33 16	14:49 (WEA 10) 17:32 18:24	07:26 18:24 20:20	06:22 18:24 21:12	05:11 21:12 21:45	04:47 21:45 21:30	05:10 21:30 20:35	06:00 20:35 19:23	06:53 19:23 18:12	07:47 18:12 16:14	07:44 16:14 15:57	08:25 15:57 22
20	08:17 16:34 16	14:49 (WEA 10) 17:34 18:26	07:24 18:26 20:22	06:20 18:26 21:14	05:10 21:14 21:45	04:47 21:45 21:29	05:12 21:29 20:33	06:02 20:33 19:20	06:55 19:20 18:09	07:48 18:09 16:13	07:46 16:13 15:58	08:26 15:58 23
21	08:16 16:36 16	14:49 (WEA 10) 17:36 18:28	07:22 18:28 20:24	06:18 18:28 21:15	05:08 21:15 21:45	04:47 21:45 21:28	05:13 21:28 20:31	06:03 20:31 19:18	06:57 19:18 18:07	07:50 18:07 16:12	07:48 16:12 15:58	08:26 15:58 23
22	08:14 16:38 16	14:49 (WEA 10) 17:38 18:30	07:20 18:30 20:26	06:16 18:30 21:17	05:06 21:17 21:45	04:47 21:45 21:26	05:14 21:26 20:29	06:05 20:29 19:15	06:59 19:15 18:05	07:52 18:05 16:10	07:50 16:10 15:59	08:27 15:59 23
23	08:13 16:40 16	14:49 (WEA 10) 17:40 18:32	07:18 18:32 20:27	06:14 18:32 21:18	05:05 21:18 21:45	04:47 21:45 21:25	05:16 21:25 20:26	06:07 20:26 19:13	07:00 19:13 18:03	07:54 18:03 16:09	07:51 16:09 15:59	08:27 15:59 23
24	08:12 16:42 16	14:49 (WEA 10) 17:42 18:33	07:16 18:33 20:29	06:12 18:33 21:20	05:04 21:20 21:46	04:48 21:46 21:23	05:17 21:23 20:24	06:09 20:24 19:10	07:02 19:10 18:01	07:56 18:01 16:08	07:53 16:08 16:00	08:28 16:00 22
25	08:10 16:43 16	14:49 (WEA 10) 17:44 18:35	07:15 18:35 20:31	06:10 18:35 21:21	05:02 21:21 21:46	04:48 21:46 21:22	05:19 21:22 20:22	06:10 20:22 19:08	07:04 19:08 16:59	07:58 16:59 16:07	07:55 16:07 16:00	08:28 16:00 22
26	08:09 16:45 16	14:49 (WEA 10) 17:46 18:37	07:14 18:37 20:33	06:09 18:37 21:22	05:01 21:22 21:46	04:48 21:46 21:20	05:20 21:20 20:20	06:12 20:20 19:06	07:05 19:06 16:57	07:57 16:57 16:06	07:57 16:06 16:01	08:28 16:01 22
27	08:08 16:47 16	14:49 (WEA 10) 17:48 18:39	07:13 18:39 20:35	06:08 18:39 21:24	05:00 21:24 21:46	04:49 21:46 21:19	05:22 21:19 20:17	06:14 20:17 19:03	07:07 19:03 16:55	07:58 16:55 16:05	07:58 16:05 16:02	08:29 16:02 21
28	08:06 16:49 16	14:49 (WEA 10) 17:50 18:41	07:12 18:41 20:36	06:06 18:41 21:25	04:59 21:25 21:45	04:49 21:45 21:17	05:23 21:17 20:15	06:16 20:15 19:01	07:09 19:01 16:52	07:59 16:52 16:04	08:00 16:04 16:03	08:29 16:03 22
29	08:05 16:51 16	14:49 (WEA 10) 17:52 18:43	07:11 18:43 20:37	06:05 18:43 21:26	04:58 21:26 21:45	04:50 21:45 21:16	05:25 21:16 20:13	06:17 20:13 18:58	07:11 18:58 16:50	07:05 16:50 16:03	08:01 16:03 16:03	08:29 16:03 21
30	08:03 16:53 16	14:49 (WEA 10) 17:54 18:45	07:10 18:45 20:38	06:04 18:45 21:27	04:57 21:27 21:45	04:50 21:45 21:14	05:27 21:14 20:10	06:19 20:10 18:56	07:12 18:56 16:48	07:07 16:48 16:02	08:03 16:02 16:04	08:29 16:04 21
31	08:02 16:55 16	14:49 (WEA 10) 17:56 18:47	07:09 18:47 20:39	06:03 18:47 21:28	04:56 21:28 21:45	04:50 21:45 21:12	05:28 21:12 20:08	06:21 20:08 18:56	07:13 18:56 16:46	07:08 16:46 16:02	08:04 16:02 16:05	08:29 16:05 21
Sonnenscheinstunden												
astr.max.mögl.Beschattung												
	253	275	367	419	491	506	509	458	382	329	262	237
	135											565

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 016 - Deibow, Deibower Dorfstraße 19

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember				
1	08:29	14:36 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04	14:30 (WEA 10)		
2	16:07	20	14:56 (WEA 10)	16:57	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:54	16:44	16:02	4	14:34 (WEA 10)
3	08:29	14:37 (WEA 10)	07:58	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	08:06	14:29	8	14:37 (WEA 10)
4	16:08	20	14:57 (WEA 10)	16:59	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	16:01	12	14:39 (WEA 10)
5	08:29	14:37 (WEA 10)	07:57	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	08:07	14:27	13	14:40 (WEA 10)
6	16:09	19	14:56 (WEA 10)	17:01	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	16:00	15	14:41 (WEA 10)
7	08:28	14:38 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09	14:27	16	14:42 (WEA 10)
8	16:10	19	14:57 (WEA 10)	17:02	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	16:00	17	14:43 (WEA 10)
9	08:28	14:39 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10	14:26	18	14:44 (WEA 10)
10	16:11	18	14:57 (WEA 10)	17:04	17:59	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37	15:59	19	14:45 (WEA 10)
11	08:28	14:40 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12	14:26	20	14:46 (WEA 10)
12	16:13	17	14:57 (WEA 10)	17:06	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	15:58	21	14:47 (WEA 10)
13	08:27	14:41 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13	14:26	22	14:48 (WEA 10)
14	16:14	15	14:56 (WEA 10)	17:08	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:33	15:58	23	14:49 (WEA 10)
15	08:27	14:43 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14	14:26	24	14:50 (WEA 10)
16	16:15	13	14:56 (WEA 10)	17:10	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:31	15:58	25	14:51 (WEA 10)
17	08:26	14:44 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15	14:26	26	14:52 (WEA 10)
18	16:17	12	14:56 (WEA 10)	17:12	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	15:57	27	14:53 (WEA 10)
19	08:26	14:45 (WEA 10)	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17	14:26	28	14:54 (WEA 10)
20	16:18	9	14:54 (WEA 10)	17:14	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	15:57	29	14:55 (WEA 10)
21	08:25	14:48 (WEA 10)	07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18	14:26	30	14:56 (WEA 10)
22	16:20	4	14:52 (WEA 10)	17:16	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26	15:57	31	14:57 (WEA 10)
23	08:24			07:40	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19		
24	16:21			17:18	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25	15:57		
25	08:24			07:38	06:36	06:22	05:20	04:47	05:03	05:50	06:43	07:36	07:33	08:20		
26	16:23			17:20	18:13	20:09	21:02	21:41	21:37	20:48	19:37	18:25	16:23	15:57		
27	08:23			07:36	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21		
28	16:24			17:22	18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	16:22	15:57		
29	08:22			07:34	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22		
30	16:26			17:24	18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	16:20	15:57		
31	08:21			07:32	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23		
32	16:28			17:26	18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	16:19	15:57		
33	08:20			07:30	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:23		
34	16:29			17:28	18:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	16:17	15:57		
35	08:19			07:28	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:24		
36	16:31			17:30	18:23	20:18	21:10	21:44	21:31	20:37	19:25	18:14	16:16	15:57		
37	08:18			07:26	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:25		
38	16:33			17:32	18:24	20:20	21:12	21:45	21:30	20:35	19:23	18:12	16:14	15:57		
39	08:17			07:24	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:26		
40	16:34			17:34	18:26	20:22	21:14	21:45	21:29	20:33	19:20	18:09	16:13	15:58		
41	08:16			07:22	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:26		
42	16:36			17:36	18:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	16:12	15:58		
43	08:14			07:19	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:27		
44	16:38			17:38	18:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	16:10	15:59		
45	08:13			07:17	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:27		
46	16:40			17:40	18:32	20:27	21:18	21:45	21:25	20:26	19:13	18:03	16:09	15:59		
47	08:12			07:15	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:28		
48	16:42			17:41	18:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	16:08	16:00		
49	08:10			07:13	06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	07:55	08:28		
50	16:43			17:43	18:35	20:31	21:21	21:46	21:22	20:22	19:08	18:00	16:07	16:00		
51	08:09			07:11	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:59	07:57	08:28		
52	16:45			17:45	18:37	20:33	21:22	21:46	21:20	20:20	19:06	18:00	16:06	16:01		
53	08:08			07:08	06:02	05:51	05:00	04:49	05:22	06:14	07:07	07:51	07:58	08:29		
54	16:47			17:47	18:39	20:35	21:24	21:46	21:19	20:17	19:03	18:00	16:05	16:02		
55	08:06			07:06	06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:53	07:50	08:29		
56	16:49			17:49	18:41	20:36	21:25	21:45	21:17	20:15	19:01	18:00	16:04	16:03		
57	08:05			06:58	05:47	04:58	04:50	04:50	05:25	06:17	07:11	07:05	08:01	08:29		
58	16:51			19:42	20:38	21:26	21:45	21:16	20:13	18:58	17:50	16:50	16:03	16:03		
59	08:03			06:55	05:45	04:57	04:50	05:27	06:19	07:12	07:07	08:03	08:29	14:35		
60	16:53			19:44	20:40	21:28	21:45	21:14	20:10	18:56	17:50	16:50	16:02	16:04		
61	08:02			06:53	05:43	04:56	04:56	05:28	06:21	07:15	07:09	08:05	08:29	14:35		
62	16:55			19:46	20:42	21:30	21:45	21:12	20:08	18:54	17:50	16:50	16:05	16:05		
63	astr.max.mögl.Beschattung	253		275	367	419	491	506	509	458	382	329	262	237	610	

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 017 - Deibow, Deibower Dorfstraße 20

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

		Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29	14:40 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04
	16:07	21	15:01 (WEA 10)	16:57	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:54	16:44
2	08:29	14:41 (WEA 10)	07:58	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	08:06
	16:08	21	15:02 (WEA 10)	16:59	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43
3	08:29	14:41 (WEA 10)	07:57	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	08:07
	16:09	20	15:01 (WEA 10)	17:01	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41
4	08:28	14:42 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09
	16:10	20	15:02 (WEA 10)	17:02	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39
5	08:28	14:43 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10
	16:11	19	15:02 (WEA 10)	17:04	17:59	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37
6	08:28	14:44 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12
	16:13	18	15:02 (WEA 10)	17:06	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35
7	08:27	14:44 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13
	16:14	17	15:01 (WEA 10)	17:08	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:33
8	08:27	14:46 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14
	16:15	16	15:02 (WEA 10)	17:10	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:31
9	08:26	14:47 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15
	16:17	14	15:01 (WEA 10)	17:12	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30
10	08:26	14:48 (WEA 10)	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17
	16:18	13	15:01 (WEA 10)	17:14	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28
11	08:25	14:50 (WEA 10)	07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18
	16:20	10	15:00 (WEA 10)	17:16	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26
12	08:24	14:52 (WEA 10)	07:40	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19
	16:21	6	14:58 (WEA 10)	17:18	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25
13	08:24		07:38	06:36	06:22	05:20	04:47	05:02	05:50	06:43	07:36	07:33	08:20
	16:23		17:20	18:13	20:09	21:02	21:41	21:37	20:48	19:37	18:25	16:23	15:57
14	08:23		07:36	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21
	16:24		17:22	18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	16:22	15:57
15	08:22		07:34	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22
	16:26		17:24	18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	16:20	15:57
16	08:21		07:32	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23
	16:28		17:26	18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	16:19	15:57
17	08:20		07:30	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:23
	16:29		17:28	18:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	16:17	15:57
18	08:19		07:28	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:24
	16:31		17:30	18:23	20:18	21:10	21:44	21:31	20:37	19:25	18:14	16:16	15:57
19	08:18		07:26	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:25
	16:32		17:32	18:24	20:20	21:12	21:45	21:30	20:35	19:23	18:12	16:14	15:57
20	08:17		07:24	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:26
	16:34		17:34	18:26	20:22	21:14	21:45	21:29	20:33	19:20	18:09	16:13	15:58
21	08:16		07:22	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:26
	16:36		17:36	18:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	16:12	15:58
22	08:14		07:19	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:27
	16:38		17:38	18:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	16:10	15:59
23	08:13		07:17	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:27
	16:40		17:39	18:32	20:27	21:18	21:45	21:25	20:26	19:13	18:03	16:09	15:59
24	08:12		07:15	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:28
	16:42		17:41	18:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	16:08	16:00
25	08:10		07:13	06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	07:55	08:28
	16:43		17:43	18:35	20:31	21:21	21:46	21:22	20:22	19:08	18:00	16:07	16:00
26	08:09		07:11	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:59	07:57	08:28
	16:45		17:45	18:37	20:33	21:22	21:46	21:20	20:20	19:06	18:00	16:06	16:01
27	08:08		07:08	06:02	05:51	05:00	04:49	05:22	06:14	07:07	07:51	07:58	08:29
	16:47		17:47	18:39	20:35	21:24	21:46	21:19	20:17	19:03	18:00	16:05	16:02
28	08:06		07:06	06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:53	07:50	08:29
	16:49		17:49	18:41	20:36	21:25	21:45	21:17	20:15	19:01	18:00	16:04	16:03
29	08:05			06:58	05:47	04:58	04:50	05:25	06:17	07:11	07:05	08:01	08:29
	16:51			17:52	20:38	21:26	21:45	21:16	20:13	18:58	18:00	16:03	16:03
30	08:03			06:56	05:45	04:56	04:52	05:27	06:19	07:12	07:07	08:03	16:03
	16:53			17:54	20:40	21:28	21:45	21:14	20:10	18:56	18:00	16:02	16:04
31	08:02			06:53		04:56		05:28	06:21		07:09		08:29
	16:55			17:56		21:29		21:12	20:08		16:46		16:05
Sonnenscheinstunden	253		275	367	419	491	506	509	458	382	329	262	237
astr. max. mögl. Beschattung	195											6	643

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 018 - Deibow, Deibower Dorfstraße 21

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1 08:29	14:42 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04
2 08:29	15:04 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04
3 08:29	15:04 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04
4 08:28	14:44 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09
5 08:28	14:46 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10
6 08:28	14:46 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12
7 08:27	14:47 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13
8 08:27	14:48 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14
9 08:26	14:49 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15
10 08:26	14:50 (WEA 10)	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17
11 08:25	14:51 (WEA 10)	07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18
12 08:24	14:53 (WEA 10)	07:40	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19
13 08:24	15:02 (WEA 10)	07:38	06:36	06:22	05:20	04:47	05:02	05:50	06:43	07:36	07:33	08:20
14 08:23	15:00 (WEA 10)	07:36	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21
15 08:22	15:00 (WEA 10)	07:34	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22
16 08:21	15:00 (WEA 10)	07:32	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23
17 08:20	15:00 (WEA 10)	07:30	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:23
18 08:19	15:00 (WEA 10)	07:28	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:24
19 08:18	15:00 (WEA 10)	07:26	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:25
20 08:17	15:00 (WEA 10)	07:24	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:26
21 08:16	15:00 (WEA 10)	07:22	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:26
22 08:14	15:00 (WEA 10)	07:19	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:27
23 08:13	15:00 (WEA 10)	07:17	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:27
24 08:12	15:00 (WEA 10)	07:15	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:28
25 08:10	15:00 (WEA 10)	07:13	06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	07:55	08:28
26 08:09	15:00 (WEA 10)	07:11	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:59	07:57	08:28
27 08:08	15:00 (WEA 10)	07:09	06:03	05:51	05:00	04:49	05:22	06:14	07:07	07:59	07:58	08:29
28 08:06	15:00 (WEA 10)	07:06	06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:53	07:52	08:29
29 08:05	15:00 (WEA 10)	07:04	05:58	05:47	04:58	04:50	05:25	06:17	07:11	07:55	07:54	08:29
30 08:03	15:00 (WEA 10)	07:02	05:56	05:45	04:57	04:50	05:27	06:19	07:12	07:57	07:56	08:29
31 08:02	15:00 (WEA 10)	07:00	05:54	05:43	04:55	04:50	05:29	06:21	07:14	07:59	07:58	08:29
16:55	15:00 (WEA 10)	06:52	05:42	04:54	04:50	04:50	05:30	06:22	07:16	08:01	07:59	08:29
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	329	262	237
astr.max.mögl.Beschattung	214										13	654

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 019 - Deibow, Deibower Dorfstraße 22

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1 08:29	14:45 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04
2 08:29	14:46 (WEA 10)	07:58	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	08:06
3 08:29	14:46 (WEA 10)	07:57	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	08:07
4 08:28	14:47 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09
5 08:28	14:49 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10
6 08:28	14:49 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12
7 08:27	14:49 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13
8 08:27	14:51 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14
9 08:26	14:52 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15
10 08:26	14:53 (WEA 10)	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17
11 08:25	14:54 (WEA 10)	07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18
12 08:24	14:55 (WEA 10)	07:40	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19
13 08:24	14:57 (WEA 10)	07:38	06:36	06:22	05:20	04:47	05:02	05:50	06:43	07:36	07:33	08:20
14 08:23	15:05 (WEA 10)	07:36	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21
15 08:22	15:08 (WEA 10)	07:34	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22
16 08:21	15:09 (WEA 10)	07:32	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23
17 08:20	15:10 (WEA 10)	07:30	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:24
18 08:19	15:11 (WEA 10)	07:28	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:25
19 08:18	15:12 (WEA 10)	07:26	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:26
20 08:17	15:13 (WEA 10)	07:24	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:27
21 08:16	15:14 (WEA 10)	07:22	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:28
22 08:14	15:15 (WEA 10)	07:20	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:29
23 08:13	15:16 (WEA 10)	07:18	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:30
24 08:12	15:17 (WEA 10)	07:16	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:31
25 08:10	15:18 (WEA 10)	07:14	06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	07:55	08:32
26 08:09	15:19 (WEA 10)	07:12	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:59	07:57	08:33
27 08:08	15:20 (WEA 10)	07:10	06:03	05:51	05:00	04:49	05:22	06:14	07:07	07:59	07:58	08:34
28 08:06	15:21 (WEA 10)	07:08	06:01	05:49	04:59	04:49	05:24	06:16	07:09	07:59	07:58	08:35
29 08:05	15:22 (WEA 10)	07:06	05:59	05:47	04:57	04:50	05:26	06:18	07:11	07:59	07:58	08:36
30 08:03	15:23 (WEA 10)	07:04	05:57	05:45	04:55	04:50	05:28	06:20	07:13	07:59	07:58	08:37
31 08:02	15:24 (WEA 10)	07:02	05:55	05:43	04:53	04:50	05:30	06:22	07:15	07:59	07:58	08:38
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	329	262	237
astr.max.mögl.Beschattung	225									19		663

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 020 - Deibow, Deibower Dorfstraße 23

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1 08:29	14:49 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04
2 16:07	15:11 (WEA 10)	16:57	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:53	16:44	16:02
3 08:29	14:50 (WEA 10)	07:58	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	08:06
4 16:08	15:12 (WEA 10)	16:59	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	16:01
5 08:29	14:50 (WEA 10)	07:57	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	08:07
6 16:09	15:12 (WEA 10)	17:01	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	16:00
7 08:28	14:51 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09
8 16:10	15:12 (WEA 10)	17:02	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	16:00
9 08:28	14:52 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10
10 16:11	15:13 (WEA 10)	17:04	17:58	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37	15:59
11 08:28	14:53 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12
12 16:13	15:13 (WEA 10)	17:06	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	15:58
13 08:27	14:53 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13
14 16:14	15:12 (WEA 10)	17:08	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:33	15:58
15 08:27	14:54 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14
16 16:15	15:13 (WEA 10)	17:10	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:31	15:58
17 08:26	14:55 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15
18 16:17	15:13 (WEA 10)	17:12	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	15:57
19 08:26	14:56 (WEA 10)	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17
20 16:18	15:12 (WEA 10)	17:14	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	15:57
21 08:25	14:57 (WEA 10)	07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18
22 16:20	15:12 (WEA 10)	17:16	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26	15:57
23 08:24	14:58 (WEA 10)	07:40	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19
24 16:21	15:11 (WEA 10)	17:18	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25	15:57
25 08:24	15:00 (WEA 10)	07:38	06:36	06:22	05:20	04:47	05:02	05:50	06:43	07:36	07:33	08:20
26 16:23	15:11 (WEA 10)	17:20	18:13	20:09	21:02	21:41	21:37	20:48	19:37	18:25	16:23	15:57
27 08:23	15:02 (WEA 10)	07:36	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21
28 16:24	15:09 (WEA 10)	17:22	18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	16:22	15:57
29 08:22		07:34	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22
30 16:26		17:24	18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	16:20	15:57
31 08:21		07:32	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23
32 16:28		17:26	18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	16:19	15:57
33 08:20		07:30	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:23
34 16:29		17:28	18:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	16:17	15:57
35 08:19		07:28	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:24
36 16:31		17:30	18:23	20:18	21:10	21:44	21:31	20:37	19:25	18:14	16:16	15:57
37 08:18		07:26	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:25
38 16:33		17:32	18:24	20:20	21:12	21:45	21:30	20:35	19:23	18:12	16:14	15:57
39 08:17		07:24	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:26
40 16:34		17:34	18:26	20:22	21:14	21:45	21:29	20:33	19:20	18:09	16:13	15:58
41 08:16		07:22	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:26
42 16:36		17:36	18:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	16:12	15:58
43 08:14		07:19	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:27
44 16:38		17:38	18:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	16:10	15:58
45 08:13		07:17	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:27
46 16:40		17:39	18:32	20:27	21:18	21:45	21:25	20:26	19:13	18:03	16:09	15:59
47 08:12		07:15	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:28
48 16:42		17:41	18:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	16:08	16:00
49 08:10		07:13	06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	07:55	08:28
50 16:43		17:43	18:35	20:31	21:21	21:46	21:22	20:22	19:08	18:59	16:07	16:00
51 08:09		07:11	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:00	07:56	08:28
52 16:45		17:45	18:37	20:33	21:22	21:46	21:20	20:20	19:06	18:57	16:06	16:01
53 08:08		07:08	06:02	05:51	05:00	04:49	05:22	06:14	07:07	07:01	07:58	08:29
54 16:47		17:47	18:39	20:35	21:24	21:46	21:19	20:17	19:03	18:55	16:05	16:02
55 08:06		07:06	06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:03	08:00	08:29
56 16:49		17:49	18:41	20:36	21:25	21:45	21:17	20:15	19:01	18:52	16:04	16:03
57 08:05			06:58	05:47	04:58	04:50	05:25	06:17	07:11	07:05	08:01	08:29
58 16:51			19:42	20:38	21:26	21:45	21:16	20:13	18:58	18:50	16:03	16:03
59 08:03			06:55	05:45	04:57	04:50	05:27	06:19	07:12	07:07	08:03	08:29
60 16:53			19:44	20:40	21:28	21:45	21:14	20:10	18:56	18:48	16:02	16:04
61 08:02			06:53		04:56		05:28	06:21		07:09		08:29
62 16:55			19:46		21:29		21:12	20:08		16:46		16:05
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	329	262	237
astr.max.mögl.Beschattung	246									31		669

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 025 - Deibow, Hof Deibow 42

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29	08:00	15:20 (WEA 10) 07:04	16:34 (WEA 09) 06:50	05:43	04:55	04:51	05:30	06:22	07:14	18:03 (WEA 08) 07:11	14:50 (WEA 10) 08:04
2	08:29	07:58	15:20 (WEA 10) 07:02	16:35 (WEA 09) 06:48	05:41	04:54	04:52	05:31	06:24	07:16	18:05 (WEA 08) 07:13	14:49 (WEA 10) 08:06
3	08:29	07:57	15:20 (WEA 10) 06:59	16:35 (WEA 09) 06:46	05:39	04:53	04:53	05:33	06:26	07:18	18:08 (WEA 08) 07:15	14:49 (WEA 10) 08:07
4	08:28	07:55	15:20 (WEA 10) 06:57	16:36 (WEA 09) 06:43	05:37	04:52	04:53	05:35	06:28	07:19	18:11 (WEA 08) 07:14	14:49 (WEA 10) 08:09
5	08:28	07:53	15:20 (WEA 10) 06:55	16:38 (WEA 09) 06:41	05:35	04:52	04:54	05:36	06:29	07:21	18:14 (WEA 08) 07:18	14:49 (WEA 10) 08:10
6	08:28	07:51	15:20 (WEA 10) 06:52	16:40 (WEA 09) 06:39	05:33	04:51	04:55	05:38	06:31	07:23	18:17 (WEA 08) 07:21	14:50 (WEA 10) 08:12
7	08:27	07:49	15:20 (WEA 10) 06:50	16:42 (WEA 09) 06:37	05:31	04:49	04:56	05:40	06:33	07:25	18:20 (WEA 08) 07:24	14:50 (WEA 10) 08:14
8	08:27	07:47	15:20 (WEA 10) 06:48	16:44 (WEA 09) 06:35	05:29	04:47	04:58	05:43	06:36	07:27	18:23 (WEA 08) 07:27	14:50 (WEA 10) 08:16
9	08:26	07:45	15:20 (WEA 10) 06:46	16:46 (WEA 09) 06:33	05:27	04:45	04:60	05:46	06:39	07:29	18:26 (WEA 08) 07:29	14:50 (WEA 10) 08:18
10	08:26	07:44	15:20 (WEA 10) 06:45	16:47 (WEA 09) 06:32	05:26	04:44	04:61	05:47	06:40	07:30	18:28 (WEA 08) 07:31	14:50 (WEA 10) 08:20
11	08:25	07:42	15:20 (WEA 10) 06:43	16:49 (WEA 09) 06:30	05:24	04:42	04:63	05:48	06:42	07:32	18:31 (WEA 08) 07:33	14:50 (WEA 10) 08:22
12	08:24	07:40	15:21 (WEA 10) 06:41	16:51 (WEA 09) 06:28	05:22	04:40	04:65	05:49	06:44	07:34	18:34 (WEA 08) 07:35	14:50 (WEA 10) 08:24
13	08:24	07:38	15:21 (WEA 10) 06:39	16:53 (WEA 09) 06:26	05:20	04:38	04:67	05:50	06:46	07:36	18:37 (WEA 08) 07:37	14:50 (WEA 10) 08:26
14	08:23	07:36	15:22 (WEA 10) 06:37	16:55 (WEA 09) 06:24	05:18	04:36	04:69	05:51	06:48	07:38	18:40 (WEA 08) 07:39	14:50 (WEA 10) 08:28
15	08:22	07:34	15:23 (WEA 10) 06:35	16:57 (WEA 09) 06:22	05:16	04:34	04:71	05:52	06:50	07:40	18:43 (WEA 08) 07:41	14:50 (WEA 10) 08:30
16	08:21	07:32	15:24 (WEA 10) 06:33	16:59 (WEA 09) 06:20	05:14	04:32	04:73	05:53	06:52	07:42	18:46 (WEA 08) 07:43	14:50 (WEA 10) 08:32
17	08:20	07:30	15:25 (WEA 10) 06:31	17:01 (WEA 09) 06:18	05:12	04:30	04:75	05:54	06:54	07:44	18:49 (WEA 08) 07:45	14:50 (WEA 10) 08:34
18	08:19	07:28	15:26 (WEA 10) 06:29	17:03 (WEA 09) 06:16	05:10	04:28	04:77	05:55	06:56	07:46	18:52 (WEA 08) 07:47	14:50 (WEA 10) 08:36
19	08:18	07:26	15:27 (WEA 10) 06:27	17:05 (WEA 09) 06:14	05:08	04:26	04:79	05:56	06:57	07:48	18:55 (WEA 08) 07:49	14:50 (WEA 10) 08:38
20	08:17	07:24	15:28 (WEA 10) 06:25	17:07 (WEA 09) 06:12	05:06	04:24	04:81	05:57	06:58	07:50	18:58 (WEA 08) 07:51	14:50 (WEA 10) 08:40
21	08:16	07:22	15:29 (WEA 10) 06:23	17:09 (WEA 09) 06:10	05:04	04:22	04:83	05:58	06:59	07:52	19:01 (WEA 08) 07:53	14:50 (WEA 10) 08:42
22	08:15	07:20	15:30 (WEA 10) 06:21	17:11 (WEA 09) 06:08	05:02	04:20	04:85	05:59	07:00	07:54	19:04 (WEA 08) 07:55	14:50 (WEA 10) 08:44
23	08:14	07:18	15:31 (WEA 10) 06:19	17:13 (WEA 09) 06:06	05:00	04:18	04:87	06:00	07:01	07:56	19:07 (WEA 08) 07:57	14:50 (WEA 10) 08:46
24	08:13	07:16	15:32 (WEA 10) 06:17	17:15 (WEA 09) 06:04	04:58	04:16	04:89	06:01	07:02	07:58	19:10 (WEA 08) 07:59	14:50 (WEA 10) 08:48
25	08:12	07:14	15:33 (WEA 10) 06:15	17:17 (WEA 09) 06:02	04:56	04:14	04:91	06:02	07:03	07:59	19:13 (WEA 08) 08:01	14:50 (WEA 10) 08:50
26	08:11	07:12	15:34 (WEA 10) 06:13	17:19 (WEA 09) 06:00	04:54	04:12	04:93	06:03	07:04	08:00	19:16 (WEA 08) 08:03	14:50 (WEA 10) 08:52
27	08:10	07:10	15:35 (WEA 10) 06:11	17:21 (WEA 09) 05:58	04:52	04:10	04:95	06:04	07:05	08:01	19:19 (WEA 08) 08:05	14:50 (WEA 10) 08:54
28	08:09	07:08	15:36 (WEA 10) 06:09	17:23 (WEA 09) 05:56	04:50	04:08	04:97	06:05	07:06	08:02	19:22 (WEA 08) 08:07	14:50 (WEA 10) 08:56
29	08:08	07:06	15:37 (WEA 10) 06:07	17:25 (WEA 09) 05:54	04:48	04:06	04:99	06:06	07:07	08:03	19:25 (WEA 08) 08:09	14:50 (WEA 10) 08:58
30	08:07	07:04	15:38 (WEA 10) 06:05	17:27 (WEA 09) 05:52	04:46	04:04	05:01	06:07	07:08	08:04	19:28 (WEA 08) 08:11	14:50 (WEA 10) 09:00
31	08:06	07:02	15:39 (WEA 10) 06:03	17:29 (WEA 09) 05:50	04:44	04:02	05:03	06:08	07:09	08:05	19:31 (WEA 08) 08:13	14:50 (WEA 10) 09:02
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	316	262	237
astr.max.mögl.Beschattung	291	1108	481							316	889	705

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)



Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 026 - Deibow, Hof Deibow 40/41

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29	08:00	15:49 (WEA 10) 07:04	16:44 (WEA 09) 06:50	05:43	04:55	04:51	05:30	06:22	07:14	17:58 (WEA 08) 07:11	15:17 (WEA 10) 08:04
2	08:29	16:59	16:16 (WEA 10) 17:51	16:47 (WEA 09) 19:50	20:43	21:31	21:44	21:09	20:03	18:51	18:20 (WEA 08) 16:44	15:49 (WEA 10) 16:02
3	08:29	07:58	15:48 (WEA 10) 17:02	16:47 (WEA 09) 19:50	20:43	21:31	21:44	21:09	20:03	18:51	17:58 (WEA 08) 07:13	15:17 (WEA 10) 08:06
4	08:28	07:57	15:48 (WEA 10) 17:02	16:47 (WEA 09) 19:50	20:43	21:31	21:44	21:09	20:03	18:51	17:58 (WEA 08) 07:13	15:17 (WEA 10) 08:06
5	08:28	07:57	15:48 (WEA 10) 17:02	16:47 (WEA 09) 19:50	20:43	21:31	21:44	21:09	20:03	18:51	17:58 (WEA 08) 07:13	15:17 (WEA 10) 08:06
6	08:28	07:57	15:48 (WEA 10) 17:02	16:47 (WEA 09) 19:50	20:43	21:31	21:44	21:09	20:03	18:51	17:58 (WEA 08) 07:13	15:17 (WEA 10) 08:06
7	08:27	07:56	15:47 (WEA 10) 16:59	16:46 (WEA 09) 19:49	20:42	21:30	21:45	21:11	20:06	18:54	18:18 (WEA 08) 16:59	15:49 (WEA 10) 16:01
8	08:27	07:56	15:47 (WEA 10) 16:59	16:46 (WEA 09) 19:49	20:42	21:30	21:45	21:11	20:06	18:54	18:18 (WEA 08) 16:59	15:49 (WEA 10) 16:01
9	08:27	07:56	15:47 (WEA 10) 16:59	16:46 (WEA 09) 19:49	20:42	21:30	21:45	21:11	20:06	18:54	18:18 (WEA 08) 16:59	15:49 (WEA 10) 16:01
10	08:26	07:55	15:46 (WEA 10) 16:58	16:45 (WEA 09) 19:48	20:41	21:29	21:44	21:10	20:05	18:53	18:17 (WEA 08) 16:58	15:48 (WEA 10) 15:58
11	08:25	07:54	15:45 (WEA 10) 16:57	16:44 (WEA 09) 19:47	20:40	21:28	21:43	21:09	20:04	18:52	18:16 (WEA 08) 16:57	15:47 (WEA 10) 15:57
12	08:24	07:53	15:44 (WEA 10) 16:56	16:43 (WEA 09) 19:46	20:39	21:27	21:42	21:08	20:03	18:51	18:15 (WEA 08) 16:56	15:46 (WEA 10) 15:56
13	08:24	07:53	15:44 (WEA 10) 16:56	16:43 (WEA 09) 19:46	20:39	21:27	21:42	21:08	20:03	18:51	18:15 (WEA 08) 16:56	15:46 (WEA 10) 15:56
14	08:23	07:52	15:43 (WEA 10) 16:55	16:42 (WEA 09) 19:45	20:38	21:26	21:41	21:07	20:02	18:50	18:14 (WEA 08) 16:55	15:45 (WEA 10) 15:55
15	08:22	07:51	15:42 (WEA 10) 16:54	16:41 (WEA 09) 19:44	20:37	21:25	21:40	21:06	20:01	18:49	18:13 (WEA 08) 16:54	15:44 (WEA 10) 15:54
16	08:21	07:50	15:41 (WEA 10) 16:53	16:40 (WEA 09) 19:43	20:36	21:24	21:39	21:05	20:00	18:48	18:12 (WEA 08) 16:53	15:43 (WEA 10) 15:53
17	08:20	07:49	15:40 (WEA 10) 16:52	16:39 (WEA 09) 19:42	20:35	21:23	21:38	21:04	19:59	18:47	18:11 (WEA 08) 16:52	15:42 (WEA 10) 15:52
18	08:19	07:48	15:39 (WEA 10) 16:51	16:38 (WEA 09) 19:41	20:34	21:22	21:37	21:03	19:58	18:46	18:10 (WEA 08) 16:51	15:41 (WEA 10) 15:51
19	08:18	07:47	15:38 (WEA 10) 16:50	16:37 (WEA 09) 19:40	20:33	21:21	21:36	21:02	19:57	18:45	18:09 (WEA 08) 16:50	15:40 (WEA 10) 15:50
20	08:17	07:46	15:37 (WEA 10) 16:49	16:36 (WEA 09) 19:39	20:32	21:20	21:35	21:01	19:56	18:44	18:08 (WEA 08) 16:49	15:39 (WEA 10) 15:49
21	08:16	07:45	15:36 (WEA 10) 16:48	16:35 (WEA 09) 19:38	20:31	21:19	21:34	20:59	19:55	18:43	18:07 (WEA 08) 16:48	15:38 (WEA 10) 15:48
22	08:14	07:44	15:35 (WEA 10) 16:47	16:34 (WEA 09) 19:37	20:30	21:18	21:33	20:58	19:54	18:42	18:06 (WEA 08) 16:47	15:37 (WEA 10) 15:47
23	08:13	07:43	15:34 (WEA 10) 16:46	16:33 (WEA 09) 19:36	20:29	21:17	21:32	20:57	19:53	18:41	18:05 (WEA 08) 16:46	15:36 (WEA 10) 15:46
24	08:12	07:42	15:33 (WEA 10) 16:45	16:32 (WEA 09) 19:35	20:28	21:16	21:31	20:56	19:52	18:40	18:04 (WEA 08) 16:45	15:35 (WEA 10) 15:45
25	08:10	07:41	15:32 (WEA 10) 16:44	16:31 (WEA 09) 19:34	20:27	21:15	21:30	20:55	19:51	18:39	18:03 (WEA 08) 16:44	15:34 (WEA 10) 15:44
26	08:09	07:40	15:31 (WEA 10) 16:43	16:30 (WEA 09) 19:33	20:26	21:14	21:29	20:54	19:50	18:38	18:02 (WEA 08) 16:43	15:33 (WEA 10) 15:43
27	08:08	07:39	15:30 (WEA 10) 16:42	16:29 (WEA 09) 19:32	20:25	21:13	21:28	20:53	19:49	18:37	18:01 (WEA 08) 16:42	15:32 (WEA 10) 15:42
28	08:06	07:38	15:29 (WEA 10) 16:41	16:28 (WEA 09) 19:31	20:24	21:12	21:27	20:52	19:48	18:36	17:59 (WEA 08) 16:41	15:31 (WEA 10) 15:41
29	08:05	07:37	15:28 (WEA 10) 16:40	16:27 (WEA 09) 19:30	20:23	21:11	21:26	20:51	19:47	18:35	17:58 (WEA 08) 16:40	15:30 (WEA 10) 15:40
30	08:03	07:36	15:27 (WEA 10) 16:39	16:26 (WEA 09) 19:29	20:22	21:10	21:25	20:50	19:46	18:34	17:57 (WEA 08) 16:39	15:29 (WEA 10) 15:39
31	08:02	07:35	15:26 (WEA 10) 16:38	16:25 (WEA 09) 19:28	20:21	21:09	21:24	20:49	19:45	18:33	17:56 (WEA 08) 16:38	15:28 (WEA 10) 15:38
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	329	262	237
astr.max.mögl.Beschattung	107	797	270						119	657	411	

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 027 - Deibow, Hof Deibow 37

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29	08:00	16:08 (WEA 10) 07:04	16:50 (WEA 09) 06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	15:31 (WEA 10) 08:04
2	16:07	16:57	14 16:22 (WEA 10) 17:51	16 17:06 (WEA 09) 19:48	20:42	21:30	21:45	21:11	20:06	18:53	16:44	30 16:01 (WEA 10) 16:02
3	08:29	07:58	16:06 (WEA 10) 07:02	16:51 (WEA 09) 06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	15:31 (WEA 10) 08:06
4	16:08	16:59	18 16:24 (WEA 10) 17:53	14 17:05 (WEA 09) 19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	29 16:00 (WEA 10) 16:01
5	08:29	07:57	16:06 (WEA 10) 06:59	16:53 (WEA 09) 06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	15:32 (WEA 10) 08:07
6	16:09	17:01	20 16:26 (WEA 10) 17:55	8 17:01 (WEA 09) 19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	28 16:00 (WEA 10) 16:00
7	08:28	07:55	16:04 (WEA 10) 06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	15:32 (WEA 10) 08:09
8	16:10	17:02	23 16:27 (WEA 10) 17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	27 15:59 (WEA 10) 16:00
9	08:28	07:53	16:03 (WEA 10) 06:55	06:41	05:35	04:52	04:54	05:36	06:29	07:21	07:18	15:33 (WEA 10) 08:10
10	16:11	17:04	25 16:28 (WEA 10) 17:59	19:55	20:49	21:36	21:43	21:03	19:56	18:44	16:37	26 15:59 (WEA 10) 15:59
11	08:28	07:51	16:03 (WEA 10) 06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	15:33 (WEA 10) 08:12
12	16:13	17:06	26 16:29 (WEA 10) 18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	25 15:58 (WEA 10) 15:58
13	08:27	07:50	16:02 (WEA 10) 06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	15:34 (WEA 10) 08:13
14	16:14	17:08	28 16:30 (WEA 10) 18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:33	23 15:57 (WEA 10) 15:58
15	08:27	07:48	16:02 (WEA 10) 06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	15:35 (WEA 10) 08:14
16	16:15	17:10	28 16:30 (WEA 10) 18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:32	21 15:56 (WEA 10) 15:58
17	08:26	07:46	16:02 (WEA 10) 06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	15:37 (WEA 10) 08:15
18	16:17	17:12	29 16:31 (WEA 10) 18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	18 15:55 (WEA 10) 15:57
19	08:26	07:44	16:01 (WEA 10) 06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	15:39 (WEA 10) 08:16
20	16:18	17:14	30 16:31 (WEA 10) 18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	14 15:53 (WEA 10) 15:57
21	08:25	07:42	16:01 (WEA 10) 06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	17:26 (WEA 09) 07:30	15:42 (WEA 10) 08:18
22	16:20	17:16	30 16:31 (WEA 10) 18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	11 17:37 (WEA 09) 16:26	8 15:50 (WEA 10) 15:57
23	08:24	07:40	16:02 (WEA 10) 06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	17:24 (WEA 09) 07:32	08:19
24	16:21	17:18	29 16:31 (WEA 10) 18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	15 17:39 (WEA 09) 16:25	15:57
25	08:24	07:38	16:02 (WEA 10) 06:36	06:22	05:20	04:47	05:03	05:50	06:43	07:36	17:22 (WEA 09) 07:33	08:20
26	16:23	17:20	29 16:31 (WEA 10) 18:13	20:09	21:02	21:41	21:37	20:48	19:37	18:25	18 17:40 (WEA 09) 16:23	15:57
27	08:23	07:36	16:02 (WEA 10) 06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	17:21 (WEA 09) 07:35	08:21
28	16:24	17:22	29 16:31 (WEA 10) 18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	20 17:41 (WEA 09) 16:22	15:57
29	08:22	07:34	16:02 (WEA 10) 06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	17:20 (WEA 09) 07:37	08:22
30	16:26	17:24	28 16:30 (WEA 10) 18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	21 17:41 (WEA 09) 16:20	15:57
31	08:21	07:32	16:03 (WEA 10) 06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	17:20 (WEA 09) 07:39	08:23
1	16:28	17:26	26 16:29 (WEA 10) 18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	21 17:41 (WEA 09) 16:19	15:57
2	08:20	07:30	16:04 (WEA 10) 06:26	06:13	05:14	04:47	05:08	05:57	06:50	07:43	17:19 (WEA 09) 07:41	08:23
3	16:29	17:28	27 16:59 (WEA 09) 18:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	22 17:41 (WEA 09) 16:17	15:57
4	08:19	07:28	16:05 (WEA 10) 06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	17:19 (WEA 09) 07:43	08:24
5	16:31	17:30	31 17:02 (WEA 09) 18:23	20:18	21:10	21:44	21:31	20:37	19:25	18:14	22 17:41 (WEA 09) 16:16	15:57
6	08:18	07:26	16:07 (WEA 10) 06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	17:19 (WEA 09) 07:44	08:25
7	16:33	17:32	32 17:04 (WEA 09) 18:24	20:20	21:12	21:45	21:30	20:35	19:23	18:12	22 17:41 (WEA 09) 16:14	15:57
8	08:17	07:24	16:09 (WEA 10) 06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	17:20 (WEA 09) 07:46	08:26
9	16:34	17:34	31 17:06 (WEA 09) 18:26	20:22	21:14	21:45	21:29	20:33	19:20	18:09	20 17:40 (WEA 09) 16:13	15:58
10	08:16	07:22	16:11 (WEA 10) 06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	16:41 (WEA 10) 07:48	08:26
11	16:36	17:36	27 17:07 (WEA 09) 18:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	30 17:38 (WEA 09) 16:12	15:58
12	08:14	07:19	16:48 (WEA 09) 06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	16:38 (WEA 10) 07:50	08:27
13	16:38	17:38	21 17:09 (WEA 09) 18:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	32 17:36 (WEA 09) 16:11	15:59
14	08:13	07:17	16:48 (WEA 09) 06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	16:37 (WEA 10) 07:51	08:27
15	16:40	17:40	22 17:10 (WEA 09) 18:32	20:27	21:18	21:45	21:25	20:26	19:13	18:03	32 17:34 (WEA 09) 16:09	15:59
16	08:12	07:15	16:48 (WEA 09) 06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	16:35 (WEA 10) 07:53	08:28
17	16:42	17:41	22 17:10 (WEA 09) 18:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	30 17:31 (WEA 09) 16:08	16:00
18	08:10	07:13	16:47 (WEA 09) 06:07	05:55	05:02	04:48	05:19	06:10	07:04	06:58	15:34 (WEA 10) 07:55	08:28
19	16:43	17:43	22 17:09 (WEA 09) 18:35	20:31	21:21	21:46	21:22	20:22	19:08	16:59	25 15:59 (WEA 10) 16:07	16:00
20	08:09	07:11	16:48 (WEA 09) 06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:00	15:33 (WEA 10) 07:56	08:28
21	16:45	17:45	21 17:09 (WEA 09) 18:37	20:33	21:22	21:46	21:20	20:20	19:06	16:57	27 16:00 (WEA 10) 16:06	16:01
22	08:08	07:08	16:48 (WEA 09) 06:02	05:51	05:00	04:49	05:22	06:14	07:07	07:01	15:32 (WEA 10) 07:58	08:29
23	16:47	17:47	21 17:09 (WEA 09) 18:39	20:35	21:24	21:46	21:19	20:17	19:03	16:55	28 16:00 (WEA 10) 16:05	16:02
24	08:06	07:06	16:48 (WEA 09) 06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:03	15:32 (WEA 10) 08:00	08:29
25	16:49	17:49	19 17:07 (WEA 09) 18:41	20:38	21:25	21:45	21:17	20:15	19:01	16:52	29 16:01 (WEA 10) 16:04	16:03
26	08:05	07:05	16:48 (WEA 09) 06:00	05:47	04:58	04:50	05:25	06:17	07:11	07:05	15:31 (WEA 10) 08:01	08:29
27	16:51	17:51	20 17:11 (WEA 09) 18:45	20:38	21:26	21:45	21:16	20:13	18:58	16:50	30 16:01 (WEA 10) 16:03	16:03
28	08:03	07:03	16:48 (WEA 09) 06:00	05:45	04:57	04:50	05:27	06:19	07:12	07:07	15:31 (WEA 10) 08:03	08:29
29	16:53	17:53	21 17:11 (WEA 09) 18:45	20:40	21:28	21:45	21:14	20:10	18:56	16:48	30 16:01 (WEA 10) 16:02	16:04
30	08:02	07:02	16:48 (WEA 09) 06:00	05:45	04:56	04:48	05:28	06:21	07:15	07:09	15:31 (WEA 10) 08:03	08:29
31	16:55	17:55	22 17:12 (WEA 09) 18:46	20:42	21:29	21:45	21:12	20:08	18:50	16:46	30 16:01 (WEA 10) 16:05	16:05
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	329	262	237
astr. max. mögl. Beschattung	8	708	38	419	491	506	509	458	382	329	262	237

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
	Minuten mit Schatten	

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 028 - Deibow, Hof Deibow 38

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar		Februar		März		April		Mai		Juni		Juli		August		September		Oktober		November		Dezember	
1	08:29		08:00		16:06 (WEA 10)	07:04		16:50 (WEA 09)	06:50	05:43	04:55	04:51	05:30	06:22	07:14		07:11		15:31 (WEA 10)	08:04				
2	16:07		16:57	17	16:23 (WEA 10)	17:51	13	17:03 (WEA 09)	19:48	20:42	21:30	21:45	21:11	20:06	16:44	29	16:00 (WEA 10)	16:02						
3	08:29		07:58		16:05 (WEA 10)	07:02		16:53 (WEA 09)	06:48	05:41	04:54	04:52	05:31	06:24	07:16		07:13		15:31 (WEA 10)	08:06				
4	16:08		16:59	19	16:24 (WEA 10)	17:53	8	17:01 (WEA 09)	19:50	20:43	21:31	21:44	21:09	20:03	16:51		16:43	29	16:00 (WEA 10)	16:01				
5	08:29		07:57		16:04 (WEA 10)	06:59			06:46	05:39	04:53	04:53	05:33	06:26	07:18		07:15		15:31 (WEA 10)	08:07				
6	16:09		17:01	22	16:26 (WEA 10)	17:55			19:51	20:45	21:32	21:44	21:07	20:01	16:41	28	16:00 (WEA 10)	16:00						
7	08:28		07:55		16:03 (WEA 10)	06:57			06:43	05:37	04:52	04:53	05:35	06:28	07:19		07:17		15:31 (WEA 10)	08:09				
8	16:10		17:02	24	16:27 (WEA 10)	17:57			19:53	20:47	21:34	21:43	21:05	19:59	18:46		16:39	28	15:59 (WEA 10)	16:00				
9	08:28		07:53		16:03 (WEA 10)	06:55			06:41	05:35	04:51	04:54	05:36	06:29	07:21		07:18		15:32 (WEA 10)	08:10				
10	16:11		17:04	25	16:28 (WEA 10)	17:59			19:55	20:49	21:35	21:43	21:03	19:56	18:44	26	16:00 (WEA 10)	16:00						
11	08:28		07:51		16:02 (WEA 10)	06:52			06:39	05:33	04:51	04:55	05:38	06:31	07:23		07:20		15:32 (WEA 10)	08:12				
12	16:13		17:06	27	16:29 (WEA 10)	18:00			19:57	20:50	21:36	21:42	21:02	19:54	18:42		16:35	26	15:58 (WEA 10)	15:58				
13	08:27		07:50		16:02 (WEA 10)	06:50			06:36	05:31	04:50	04:56	05:40	06:33	07:25		07:22		15:33 (WEA 10)	08:13				
14	16:14		17:08	27	16:29 (WEA 10)	18:02			19:59	20:52	21:37	21:42	21:00	19:52	18:39	24	16:00 (WEA 10)	16:00						
15	08:27		07:48		16:01 (WEA 10)	06:48			06:34	05:29	04:50	04:57	05:41	06:34	07:27		07:24		15:34 (WEA 10)	08:14				
16	16:15		17:10	29	16:30 (WEA 10)	18:04			20:00	20:54	21:38	21:41	20:58	19:49	18:37		16:32	22	15:56 (WEA 10)	15:58				
17	08:26		07:46		16:01 (WEA 10)	06:45			06:31	05:27	04:49	04:58	05:43	06:36	07:28		07:26		15:35 (WEA 10)	08:15				
18	16:17		17:12	29	16:30 (WEA 10)	18:06			20:02	20:56	21:38	21:40	20:56	19:47	18:35	20	16:00 (WEA 10)	16:00						
19	08:26		07:44		16:01 (WEA 10)	06:43			06:29	05:26	04:49	04:59	05:45	06:38	07:30		07:28		15:37 (WEA 10)	08:16				
20	16:18		17:14	29	16:30 (WEA 10)	18:08			20:04	20:57	21:39	21:40	20:54	19:44	18:32		16:28	16	15:53 (WEA 10)	15:57				
21	08:25		07:42		16:01 (WEA 10)	06:41			06:27	05:24	04:48	05:00	05:46	06:40	07:32		07:30		15:39 (WEA 10)	08:18				
22	16:20		17:16	29	16:30 (WEA 10)	18:10			20:06	20:59	21:40	21:39	20:52	19:42	18:30	12	16:00 (WEA 10)	16:00						
23	08:24		07:40		16:02 (WEA 10)	06:38			06:24	05:22	04:48	05:01	05:48	06:41	07:34		17:25 (WEA 09)	07:32		15:43 (WEA 10)	08:19			
24	16:21		17:18	28	16:30 (WEA 10)	18:12			20:08	21:01	21:41	21:38	20:50	19:40	18:28	10	17:35 (WEA 09)	16:25	5	15:48 (WEA 10)	15:57			
25	08:24		07:38		16:02 (WEA 10)	06:36			06:22	05:20	04:47	05:03	05:50	06:43	07:36		17:22 (WEA 09)	07:33		15:48 (WEA 10)	08:20			
26	16:23		17:20	28	16:30 (WEA 10)	18:13			20:09	21:02	21:41	21:37	20:48	19:37	18:25	15	17:37 (WEA 09)	16:27		15:57 (WEA 10)	15:57			
27	08:23		07:36		16:03 (WEA 10)	06:34			06:20	05:19	04:47	05:04	05:51	06:45	07:37		17:21 (WEA 09)	07:35		15:48 (WEA 10)	08:21			
28	16:24		17:22	27	16:30 (WEA 10)	18:15			20:11	21:04	21:42	21:36	20:46	19:35	18:23	17	17:38 (WEA 09)	16:22		15:57 (WEA 10)	15:57			
29	08:22		07:34		16:02 (WEA 10)	06:31			06:18	05:17	04:47	05:05	05:53	06:46	07:39		17:20 (WEA 09)	07:37		15:57 (WEA 10)	15:57			
30	16:26		17:24	26	16:28 (WEA 10)	18:17			20:13	21:06	21:43	21:35	20:44	19:32	18:21	19	17:39 (WEA 09)	16:16		15:57 (WEA 10)	15:57			
31	08:21		07:32		16:03 (WEA 10)	06:29			06:15	05:15	04:47	05:06	05:55	06:48	07:41		17:19 (WEA 09)	07:39		15:57 (WEA 10)	15:57			
1	16:28		17:26	24	16:27 (WEA 10)	18:19			20:15	21:07	21:43	21:34	20:42	19:30	18:18	21	17:40 (WEA 09)	16:19		15:57 (WEA 10)	15:57			
2	08:20		07:30		16:05 (WEA 10)	06:26			06:13	05:14	04:47	05:08	05:57	06:50	07:43		17:19 (WEA 09)	07:41		15:57 (WEA 10)	15:57			
3	16:29		17:28	28	16:29 (WEA 10)	18:21			20:17	21:09	21:44	21:33	20:39	19:27	18:16	21	17:40 (WEA 09)	16:17		15:57 (WEA 10)	15:57			
4	08:19		07:28		16:06 (WEA 10)	06:24			06:11	05:12	04:47	05:09	05:58	06:52	07:45		17:18 (WEA 09)	07:43		15:57 (WEA 10)	15:57			
5	16:31		17:30	30	17:02 (WEA 09)	18:23			20:18	21:10	21:44	21:31	20:37	19:25	18:14	22	17:40 (WEA 09)	16:16		15:57 (WEA 10)	15:57			
6	08:18		07:26		16:08 (WEA 10)	06:22			06:08	05:11	04:47	05:10	06:00	06:53	07:47		17:18 (WEA 09)	07:44		15:57 (WEA 10)	15:57			
7	16:33		17:32	31	17:04 (WEA 09)	18:24			20:20	21:12	21:45	21:30	20:35	19:23	18:12	22	17:40 (WEA 09)	16:17		15:57 (WEA 10)	15:57			
8	08:17		07:24		16:12 (WEA 10)	06:19			06:06	05:09	04:47	05:12	06:02	06:55	07:48		17:18 (WEA 09)	07:46		15:57 (WEA 10)	15:57			
9	16:34		17:34	26	17:06 (WEA 09)	18:26			20:22	21:14	21:45	21:29	20:33	19:20	18:09	21	17:39 (WEA 09)	16:13		15:58 (WEA 10)	15:58			
10	08:16		07:22		16:47 (WEA 09)	06:17			06:04	05:08	04:47	05:13	06:03	06:57	07:50		17:19 (WEA 09)	07:48		15:58 (WEA 10)	15:58			
11	16:36		17:36	20	17:07 (WEA 09)	18:28			20:24	21:15	21:45	21:28	20:31	19:18	18:07		17:38 (WEA 09)	16:12		15:58 (WEA 10)	15:58			
12	08:14		07:19		16:48 (WEA 09)	06:14			06:05	05:09	04:47	05:14	06:05	06:59	07:52		17:18 (WEA 09)	07:47		15:58 (WEA 10)	15:58			
13	16:38		17:38	21	17:08 (WEA 09)	18:30			20:26	21:17	21:45	21:26	20:29	19:15	18:05	28	17:36 (WEA 09)	16:11		15:59 (WEA 10)	15:59			
14	08:13		07:17		16:47 (WEA 09)	06:12			06:00	05:05	04:47	05:16	06:07	07:00	07:54		16:38 (WEA 10)	16:11		15:59 (WEA 10)	15:59			
15	16:40		17:40	21	17:08 (WEA 09)	18:32			20:27	21:18	21:45	21:25	20:26	19:13	18:03	31	17:34 (WEA 09)	16:09		15:59 (WEA 10)	15:59			
16	08:12		07:15		16:47 (WEA 09)	06:10			06:02	05:07	04:48	05:17	06:09	07:02	07:56		16:38 (WEA 10)	16:11		15:59 (WEA 10)	15:59			
17	16:42		17:41	22	17:09 (WEA 09)	18:33			20:29	21:20	21:46	21:23	20:24	19:10	18:01	29	17:31 (WEA 09)	16:08		16:00 (WEA 10)	16:00			
18	08:10		07:13		16:46 (WEA 09)	06:07			05:55	05:02	04:48	05:19	06:10	07:04	07:58		15:35 (WEA 10)	16:05		16:01 (WEA 10)	16:01			
19	16:43		17:43	22	17:08 (WEA 09)	18:35			20:31	21:21	21:46	21:22	20:22	19:08	18:00	27	16:29 (WEA 09)	16:07		16:00 (WEA 10)	16:00			
20	08:09		07:11		16:47 (WEA 09)	06:05			05:53	05:01	04:48	05:20	06:12	07:05	07:59		15:34 (WEA 10)	16:07		16:01 (WEA 10)	16:01			
21	16:45		17:45	20	17:07 (WEA 09)	18:37			20:33	21:22	21:46	21:20	20:20	19:06	18:00	24	15:58 (WEA 10)	16:06		16:01 (WEA 10)	16:01			
22	08:08		07:08		16:48 (WEA 09)	06:02			05:51	05:00	04:49	05:22	06:14	07:07	07:59		15:33 (WEA 10)	16:07		16:01 (WEA 10)	16:01			
23	16:47		17:47	19	17:07 (WEA 09)	18:39			20:35	21:24	21:46	21:19	20:17	19:03	18:00	26	15:59 (WEA 10)	16:05		16:02 (WEA 10)	16:02			
24	08:06		07:06		16:48 (WEA 09)	06:00			05:49	04:59	04:48	05:23	06:16	07:09	07:59		15:32 (WEA 10)	16:03		16:02 (WEA 10)	16:02			
25	16:49		17:49	17	17:05 (WEA 09)	18:41			20:36	21:25	21:45	21:17	20:15	19:01	18:00	27	15:59 (WEA 10)	16:04		16:03 (WEA 10)	16:03			
26	08:05				16:58 (WEA 10)	06:58			20:47	21:36	21:45	21:16	20:13	18:58	18:00	29	16:00 (WEA 10)	16:03		16:03 (WEA 10)	16:03			
27	16:53	5	16:12 (WEA 10)		16:55	16:12 (WEA 10)			20:45	21:34														

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 053 - Krinitz, Ringstraße 1

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember	
1	08:29 16:08 08:29 16:09	08:00 16:57 07:59 16:58	07:04 17:51 07:02 17:53	06:51 19:48 06:48 19:50	05:43 20:42 05:41 20:44	04:55 21:30 04:54 21:32	04:51 22:11 04:52 22:13	05:30 23:06 05:32 23:08	06:23 00:06 06:24 00:07	07:14 18:54 07:16 18:56	07:11 18:51 07:13 18:53	07:42 19:40 07:44 19:42	08:05 20:36 08:06 20:38
2	08:29 16:08	08:00 16:57	07:04 17:51	06:51 19:48	05:43 20:42	04:55 21:30	04:51 22:11	05:30 23:06	06:23 00:06	07:14 18:54	07:11 18:51	07:42 19:40	08:05 20:36
3	08:29 16:09	08:00 16:58	07:04 17:52	06:51 19:49	05:43 20:43	04:55 21:31	04:51 22:12	05:30 23:07	06:23 00:07	07:14 18:55	07:11 18:52	07:42 19:41	08:05 20:37
4	08:29 16:10	08:00 16:59	07:04 17:53	06:51 19:50	05:43 20:44	04:55 21:32	04:51 22:13	05:30 23:08	06:23 00:08	07:14 18:56	07:11 18:53	07:42 19:42	08:05 20:38
5	08:28 16:10	07:59 16:59	07:03 17:53	06:50 19:50	05:42 20:44	04:54 21:33	04:50 22:14	05:29 23:09	06:22 00:08	07:13 18:56	07:10 18:54	07:41 19:43	08:04 20:39
6	08:28 16:12	07:59 17:05	07:03 17:57	06:50 19:55	05:42 20:49	04:54 21:35	04:50 22:16	05:29 23:10	06:22 00:09	07:13 18:57	07:10 18:55	07:41 19:44	08:04 20:40
7	08:28 16:13	07:59 17:07	07:03 18:01	06:50 19:57	05:42 20:51	04:54 21:36	04:50 22:17	05:29 23:11	06:22 00:10	07:13 18:58	07:10 18:56	07:41 19:45	08:04 20:41
8	08:27 16:14	07:48 17:09	07:02 18:03	06:49 19:59	05:41 20:52	04:53 21:37	04:49 22:18	05:28 23:12	06:21 00:11	07:12 18:59	07:09 18:57	07:40 19:46	08:03 20:42
9	08:27 16:17	07:46 17:13	07:01 18:06	06:48 20:03	05:40 20:56	04:52 21:39	04:48 22:20	05:27 23:15	06:21 00:12	07:12 19:00	07:09 18:59	07:40 19:47	08:03 20:43
10	08:26 16:18	07:44 17:15	06:59 18:08	06:43 20:04	05:39 20:58	04:51 21:40	04:47 22:21	05:26 23:16	06:20 00:13	07:11 19:01	07:08 18:59	07:39 19:48	08:02 20:44
11	08:25 16:20	07:42 17:17	06:57 18:10	06:37 20:06	05:38 20:59	04:50 21:41	04:46 22:22	05:25 23:17	06:19 00:14	07:10 19:02	07:07 18:59	07:38 19:49	08:01 20:45
12	08:25 16:21	07:40 17:18	06:56 18:12	06:36 20:08	05:37 21:01	04:49 21:42	04:45 22:23	05:24 23:18	06:18 00:15	07:09 19:03	07:06 18:59	07:37 19:50	08:00 20:46
13	08:24 16:23	07:38 17:20	06:51 18:14	06:31 20:10	05:36 21:03	04:48 21:43	04:44 22:24	05:23 23:19	06:17 00:16	07:08 19:04	07:05 18:59	07:36 19:51	07:99 20:47
14	08:23 16:25	07:36 17:22	06:49 18:16	06:29 20:12	05:34 21:04	04:47 21:44	04:43 22:25	05:22 23:20	06:16 00:17	07:07 19:05	07:04 18:59	07:35 19:52	07:98 20:48
15	08:22 16:26	07:34 17:24	06:47 18:17	06:27 20:13	05:32 21:06	04:46 21:45	04:42 22:26	05:20 23:21	06:15 00:18	07:06 19:06	07:03 18:59	07:34 19:53	07:97 20:49
16	08:21 16:28	07:32 17:26	06:45 18:19	06:25 20:15	05:30 21:08	04:45 21:46	04:41 22:27	05:18 23:22	06:14 00:19	07:05 19:07	07:02 18:59	07:33 19:54	07:96 20:50
17	08:20 16:30	07:30 17:30	06:43 18:27	06:23 20:16	05:28 21:14	04:44 21:47	04:40 22:28	05:17 23:23	06:13 00:20	07:04 19:08	07:01 18:59	07:32 19:55	07:95 20:51
18	08:19 16:31	07:28 17:32	06:41 18:29	06:21 20:17	05:26 21:19	04:43 21:48	04:39 22:29	05:15 23:24	06:12 00:21	07:03 19:09	07:00 18:59	07:31 19:56	07:94 20:52
19	08:18 16:33	07:26 17:34	06:39 18:32	06:19 20:21	05:24 21:22	04:42 21:49	04:38 22:30	05:13 23:25	06:11 00:22	07:02 19:10	06:59 18:59	07:30 19:57	07:93 20:53
20	08:17 16:35	07:24 17:34	06:37 18:36	06:17 20:22	05:22 21:24	04:41 21:50	04:37 22:31	05:11 23:26	06:10 00:23	07:01 19:11	06:58 18:59	07:29 19:58	07:92 20:54
21	08:16 16:36	07:22 17:36	06:35 18:39	06:15 20:23	05:20 21:25	04:40 21:51	04:36 22:32	05:09 23:27	06:09 00:24	06:59 19:12	06:56 18:59	07:28 19:59	07:91 20:55
22	08:15 16:38	07:20 17:38	06:33 18:41	06:13 20:24	05:18 21:26	04:39 21:52	04:35 22:33	05:07 23:28	06:08 00:25	06:58 19:13	06:55 18:59	07:27 19:59	07:90 20:56
23	08:13 16:40	07:18 17:40	06:31 18:42	06:11 20:25	05:16 21:27	04:38 21:53	04:34 22:34	05:05 23:29	06:07 00:26	06:57 19:14	06:54 18:59	07:26 19:59	07:89 20:57
24	08:12 16:42	07:15 17:42	06:29 18:45	06:09 20:26	05:14 21:28	04:37 21:54	04:33 22:35	05:03 23:30	06:06 00:27	06:56 19:15	06:53 18:59	07:25 19:59	07:88 20:58
25	08:11 16:44	07:13 17:44	06:27 18:47	06:07 20:27	05:12 21:29	04:36 21:55	04:32 22:36	05:01 23:31	06:05 00:28	06:55 19:16	06:52 18:59	07:24 19:59	07:87 20:59
26	08:09 16:46	07:11 17:46	06:25 18:49	06:05 20:28	05:10 21:30	04:35 21:56	04:31 22:37	04:59 23:32	06:04 00:29	06:54 19:17	06:51 18:59	07:23 19:59	07:86 21:00
27	08:08 16:47	07:09 17:47	06:23 18:51	06:03 20:29	05:08 21:31	04:34 21:57	04:30 22:38	04:57 23:33	06:03 00:30	06:53 19:18	06:50 18:59	07:22 19:59	07:85 21:01
28	08:06 16:49	07:06 17:49	06:21 18:53	06:01 20:30	05:06 21:32	04:33 21:58	04:29 22:39	04:55 23:34	06:02 00:31	06:52 19:19	06:49 18:59	07:21 19:59	07:84 21:02
29	08:05 16:51	07:05 17:51	06:19 18:55	05:59 20:31	05:04 21:33	04:32 21:59	04:28 22:40	04:53 23:35	06:01 00:32	06:51 19:20	06:48 18:59	07:20 19:59	07:83 21:03
30	08:03 16:53	07:07 17:53	06:17 18:57	05:57 20:32	05:02 21:34	04:31 22:00	04:27 22:41	04:51 23:36	06:00 00:33	06:50 19:21	06:47 18:59	07:19 19:59	07:82 21:04
31	08:02 16:55	07:08 17:55	06:15 19:00	05:55 20:33	05:00 21:35	04:30 22:01	04:26 22:42	04:49 23:37	05:59 00:34	06:49 19:22	06:46 18:59	07:18 19:59	07:81 21:05
Sonnenscheinstunden	253	275	337	367	419	491	506	513	458	382	294	262	237
astr.max.mögl.Beschattung													

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 054 - Krinitz, Ringstraße 2/3

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember									
1	08:29	08:00		07:04	06:51	05:43		04:55		05:41 (WEA 11)	04:51		05:49 (WEA 11)	05:30	06:23	07:14		07:11		07:43 (WEA 05)	08:05
2	08:29	07:59		07:02	06:48	05:41		04:54		05:41 (WEA 11)	04:52		05:49 (WEA 11)	05:32	06:24	07:16		07:13		07:44 (WEA 05)	08:06
3	16:08	16:59		17:53	19:50	20:44		21:32		26:08 (WEA 11)	21:45		26:12 (WEA 11)	21:09	20:04	18:51		16:43	17	08:01 (WEA 05)	16:01
4	16:09	16:57		17:50	19:46	20:39		21:27		26:08 (WEA 11)	21:43		26:12 (WEA 11)	21:08	20:03	18:46		16:43	17	07:45 (WEA 05)	16:08
5	16:09	17:01		17:55	19:52	20:45		21:33		26:13 (WEA 11)	21:44		26:14 (WEA 11)	21:10	20:05	18:49		15:00	15	08:00 (WEA 05)	16:09
6	16:29	17:05		16:57	16:44	16:37		16:53		26:08 (WEA 11)	21:44		26:13 (WEA 11)	21:09	20:04	18:47		16:39	11	07:58 (WEA 05)	16:00
7	16:10	17:03		17:57	19:54	20:47		21:34		26:08 (WEA 11)	21:45		26:13 (WEA 11)	21:10	20:05	18:49		16:39	11	07:58 (WEA 05)	16:00
8	16:28	17:53		16:55	16:41	16:35		16:52		26:08 (WEA 11)	21:45		26:13 (WEA 11)	21:10	20:05	18:49		16:39	11	07:58 (WEA 05)	16:00
9	16:12	17:05		17:59	19:56	20:49		21:36		26:08 (WEA 11)	21:45		26:13 (WEA 11)	21:10	20:05	18:49		16:39	11	07:58 (WEA 05)	16:00
10	16:28	17:52		08:22 (WEA 05)	06:53	06:39		06:35		05:43 (WEA 11)	04:55		05:50 (WEA 11)	05:38	06:31	07:23		07:21			08:12
11	16:13	17:07	2	08:24 (WEA 05)	06:50	06:36		06:35		05:43 (WEA 11)	04:56		05:50 (WEA 11)	05:39	06:32	07:24		07:21			08:12
12	16:25	17:05		08:17 (WEA 05)	06:50	06:36		06:35		05:43 (WEA 11)	04:56		05:50 (WEA 11)	05:39	06:32	07:24		07:21			08:12
13	16:14	17:09	11	08:28 (WEA 05)	06:50	06:36		06:35		05:43 (WEA 11)	04:56		05:50 (WEA 11)	05:39	06:32	07:24		07:21			08:12
14	16:27	17:08		08:15 (WEA 05)	06:48	06:34		06:30		05:44 (WEA 11)	04:57		05:49 (WEA 11)	05:42	06:35	07:27		07:24			08:14
15	16:16	17:11	15	08:30 (WEA 05)	06:48	06:34		06:30		05:44 (WEA 11)	04:57		05:49 (WEA 11)	05:42	06:35	07:27		07:24			08:14
16	16:27	17:06		08:14 (WEA 05)	06:46	06:32		06:30		05:44 (WEA 11)	04:57		05:49 (WEA 11)	05:42	06:35	07:27		07:24			08:14
17	16:17	17:13	18	08:32 (WEA 05)	06:46	06:30		06:30		05:44 (WEA 11)	04:57		05:49 (WEA 11)	05:42	06:35	07:27		07:24			08:14
18	16:26	17:04		08:13 (WEA 05)	06:43	06:29		06:29		05:44 (WEA 11)	04:59		05:49 (WEA 11)	05:45	06:38	07:30		07:28			08:17
19	16:18	17:15		08:33 (WEA 05)	06:44	06:28		06:30		05:44 (WEA 11)	04:59		05:49 (WEA 11)	05:45	06:38	07:30		07:28			08:17
20	16:25	17:12		08:12 (WEA 05)	06:41	06:27		06:30		05:44 (WEA 11)	04:59		05:49 (WEA 11)	05:45	06:38	07:30		07:28			08:17
21	16:20	17:17	22	08:34 (WEA 05)	06:41	06:26		06:30		05:44 (WEA 11)	04:59		05:49 (WEA 11)	05:45	06:38	07:30		07:28			08:17
22	16:25	17:04		08:12 (WEA 05)	06:39	06:25		06:22		05:44 (WEA 11)	05:02		05:49 (WEA 11)	05:48	06:42	07:34		07:32			08:19
23	16:21	17:14	23	08:35 (WEA 05)	06:42	06:28		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
24	16:24	17:38		08:11 (WEA 05)	06:36	06:22		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
25	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
26	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
27	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
28	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
29	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
30	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
31	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
32	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
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34	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
35	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
36	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
37	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
38	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
39	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
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41	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
42	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
43	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
44	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
45	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
46	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
47	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
48	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
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50	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
51	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
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53	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
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55	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
56	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
57	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
58	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
59	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
60	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
61	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21		05:44 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36		07:34			08:20
62	16:23	17:20	24	08:35 (WEA 05)	06:44	06:30		06:21													

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
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SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 055 - Krinitz, Ringstraße 4

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember									
1	08:29	08:00		07:04	06:51	06:43		04:55		05:46 (WEA 11)	04:51	05:54 (WEA 11)	05:30	06:04 (WEA 11)	06:23	07:14		07:11		07:45 (WEA 05)	08:05
16	07	16:57		17:51	19:48	20:42		21:30	25	06:11 (WEA 11)	21:45	21	06:15 (WEA 11)	21:11	20:06	18:54		18:45	23	08:08 (WEA 05)	16:02
2	08:29	07:59		07:02	06:48	06:41		04:54		05:46 (WEA 11)	04:52	05:54 (WEA 11)	05:32	06:04 (WEA 11)	06:23	07:16		07:13		07:46 (WEA 05)	08:06
16	08	16:58		17:53	19:50	20:44		21:32	25	06:11 (WEA 11)	21:45	21	06:15 (WEA 11)	21:09	20:04	18:51		18:43	21	08:07 (WEA 05)	16:01
3	08:29	07:57		07:00	06:46	06:39		04:53		05:47 (WEA 11)	04:53	05:54 (WEA 11)	05:33	06:05 (WEA 11)	06:24	07:18		07:15		07:47 (WEA 05)	08:08
16	09	17:01		17:55	19:52	20:45		21:33	25	06:12 (WEA 11)	21:44	21	06:16 (WEA 11)	21:07	20:01	18:49		18:41	20	08:07 (WEA 05)	16:00
4	08:29	07:55	08:24 (WEA 05)	06:57	06:44	06:37		04:53		05:47 (WEA 11)	04:54	05:54 (WEA 11)	05:35	06:06 (WEA 11)	06:25	07:20		07:17		07:48 (WEA 05)	08:09
16	10	17:03	5	08:29 (WEA 05)	17:57	19:54	20:47	21:34	24	06:11 (WEA 11)	21:44	22	06:16 (WEA 11)	21:06	20:00	18:47		18:39	17	08:05 (WEA 05)	16:00
5	08:28	07:53	08:23 (WEA 05)	06:55	06:41	06:35		04:52		05:47 (WEA 11)	04:55	05:54 (WEA 11)	05:37	06:07 (WEA 11)	06:26	07:22		07:19		07:49 (WEA 05)	08:10
16	12	17:05	12	08:33 (WEA 05)	17:59	19:55	20:49	21:35	24	06:11 (WEA 11)	21:43	23	06:17 (WEA 11)	21:04	20:04	18:57		18:47	15	08:04 (WEA 05)	15:59
6	08:28	07:52	08:19 (WEA 05)	06:53	06:39	06:33		04:51		05:48 (WEA 11)	04:55	05:54 (WEA 11)	05:38	06:08 (WEA 11)	06:27	07:23		07:21		07:51 (WEA 05)	08:12
16	13	17:07	16	08:36 (WEA 05)	18:01	19:57	20:51	21:36	23	06:11 (WEA 11)	21:43	23	06:17 (WEA 11)	21:02	20:04	18:54		18:44	11	08:02 (WEA 05)	15:59
7	08:28	07:50	08:18 (WEA 05)	06:50	06:36	06:31		04:51		05:48 (WEA 11)	04:56	05:53 (WEA 11)	05:40	06:09 (WEA 11)	06:28	07:25		07:22		07:55 (WEA 05)	08:13
16	14	17:09	18	08:36 (WEA 05)	18:03	19:59	20:52	21:37	23	06:11 (WEA 11)	21:42	24	06:17 (WEA 11)	21:00	20:04	18:40		18:34	3	07:58 (WEA 05)	15:58
8	08:27	07:48	08:17 (WEA 05)	06:48	06:34	06:30		04:50		05:49 (WEA 11)	04:57	05:53 (WEA 11)	05:42	06:10 (WEA 11)	06:29	07:27		07:24			
16	15	17:11	20	08:37 (WEA 05)	18:04	20:01	20:54	21:39	22	06:11 (WEA 11)	21:41	24	06:17 (WEA 11)	20:58	20:06	18:37		18:29			
9	08:27	07:46	08:16 (WEA 05)	06:46	06:32	06:28		04:49		05:49 (WEA 11)	04:58	05:53 (WEA 11)	05:43	06:11 (WEA 11)	06:30	07:29		07:26			
16	17	17:13	22	08:38 (WEA 05)	18:06	20:03	20:56	21:39	22	06:10 (WEA 11)	21:41	25	06:18 (WEA 11)	20:56	20:06	18:35		18:27			
10	08:26	07:44	08:16 (WEA 05)	06:43	06:29	06:26		04:49		05:49 (WEA 11)	04:59	05:53 (WEA 11)	05:45	06:12 (WEA 11)	06:31	07:30		07:28			
16	18	17:15	22	08:38 (WEA 05)	18:08	20:04	20:58	21:40	22	06:11 (WEA 11)	21:40	25	06:18 (WEA 11)	20:54	20:08	18:33		18:25			
11	08:25	07:42	08:15 (WEA 05)	06:41	06:27	06:24		04:48		05:50 (WEA 11)	05:01	05:53 (WEA 11)	05:47	06:13 (WEA 11)	06:32	07:32		07:30			
16	20	17:17	24	08:39 (WEA 05)	18:10	20:06	20:59	21:40	21	06:11 (WEA 11)	21:39	26	06:19 (WEA 11)	20:52	20:09	18:30		18:22			
12	08:25	07:40	08:15 (WEA 05)	06:39	06:25	06:22		05:53 (WEA 11)	04:48	05:50 (WEA 11)	05:02	05:53 (WEA 11)	05:48	06:14 (WEA 11)	06:33	07:34		07:32			
16	21	17:18	24	08:39 (WEA 05)	18:12	20:08	21:01	9	05:52 (WEA 11)	05:02	05:54 (WEA 11)	05:49	06:15 (WEA 11)	06:34	07:35		07:33				
13	08:24	07:38	08:15 (WEA 05)	06:36	06:22	06:21		05:50 (WEA 11)	04:48	05:50 (WEA 11)	05:03	05:54 (WEA 11)	05:50	06:16 (WEA 11)	06:35	07:36		07:34			
16	23	17:20	24	08:39 (WEA 05)	18:14	20:10	21:03	13	06:03 (WEA 11)	05:12	06:03 (WEA 11)	05:58	06:20 (WEA 11)	06:39	07:40		07:38				
14	08:23	07:36	08:16 (WEA 05)	06:34	06:20	06:19		05:49 (WEA 11)	04:48	05:51 (WEA 11)	05:04	05:54 (WEA 11)	05:52	06:17 (WEA 11)	06:36	07:38		07:36			
16	25	17:22	23	08:39 (WEA 05)	18:16	20:12	21:04	17	06:06 (WEA 11)	05:14	06:06 (WEA 11)	05:59	06:21 (WEA 11)	06:40	07:41		07:39				
15	08:22	07:34	08:16 (WEA 05)	06:32	06:18	06:17		05:47 (WEA 11)	04:47	05:52 (WEA 11)	05:05	05:54 (WEA 11)	05:54	06:19 (WEA 11)	06:38	07:40		07:37			
16	26	17:24	23	08:39 (WEA 05)	18:17	20:13	21:06	19	06:06 (WEA 11)	05:14	06:07	05:59 (WEA 11)	05:57	06:22 (WEA 11)	06:41	07:42		07:40			
16	28	17:26	23	08:39 (WEA 05)	18:19	20:15	21:08	21	06:08 (WEA 11)	05:16	06:09	05:59 (WEA 11)	05:59	06:24 (WEA 11)	06:42	07:43		07:41			
17	08:20	07:30	08:16 (WEA 05)	06:27	06:13	06:14		05:46 (WEA 11)	04:47	05:52 (WEA 11)	05:08	05:53 (WEA 11)	05:57	06:20 (WEA 11)	06:39	07:44		07:43			
16	30	17:28	21	08:37 (WEA 05)	18:21	20:17	21:09	23	06:09 (WEA 11)	05:17	06:10	05:59 (WEA 11)	05:59	06:25 (WEA 11)	06:43	07:45		07:43			
18	08:19	07:28	08:17 (WEA 05)	06:24	06:11	06:13		05:45 (WEA 11)	04:47	05:53 (WEA 11)	05:09	05:53 (WEA 11)	05:59	06:26 (WEA 11)	06:44	07:46		07:44			
16	31	17:30	20	08:37 (WEA 05)	18:23	20:19	21:11	24	06:09 (WEA 11)	05:18	06:11	05:59 (WEA 11)	05:59	06:27 (WEA 11)	06:45	07:47		07:45			
19	08:18	07:26	08:19 (WEA 05)	06:22	06:09	06:11		05:45 (WEA 11)	04:47	05:53 (WEA 11)	05:11	05:54 (WEA 11)	06:00	06:28 (WEA 11)	06:46	07:48		07:46			
16	33	17:32	16	08:36 (WEA 05)	18:25	20:21	21:12	25	06:10 (WEA 11)	05:19	06:12	05:59 (WEA 11)	05:59	06:29 (WEA 11)	06:47	07:49		07:47			
20	08:17	07:24	08:21 (WEA 05)	06:20	06:07	06:10		05:45 (WEA 11)	04:47	05:53 (WEA 11)	05:12	05:54 (WEA 11)	06:02	06:29 (WEA 11)	06:48	07:50		07:48			
16	35	17:34	13	08:34 (WEA 05)	18:26	20:22	21:14	25	06:10 (WEA 11)	05:19	06:12	05:59 (WEA 11)	05:59	06:30 (WEA 11)	06:49	07:51		07:49			
21	08:16	07:22	08:24 (WEA 05)	06:17	06:04	06:08		05:44 (WEA 11)	04:47	05:53 (WEA 11)	05:13	05:54 (WEA 11)	06:04	06:31 (WEA 11)	06:50	07:52		07:50			
16	36	17:36	7	08:35 (WEA 05)	18:28	20:24	21:15	26	06:10 (WEA 11)	05:19	06:12	05:59 (WEA 11)	05:59	06:32 (WEA 11)	06:51	07:53		07:51			
22	08:15	07:20		06:15	06:02	06:07		05:44 (WEA 11)	04:47	05:54 (WEA 11)	05:15	05:55 (WEA 11)	06:06	06:32 (WEA 11)	06:51	07:54		07:52			
16	38	17:38		18:30	20:26	21:17	26	06:10 (WEA 11)	05:16	06:12 (WEA 11)	05:17	05:56 (WEA 11)	06:07	06:33 (WEA 11)	06:52	07:55		07:53			
23	08:13	07:18		06:12	06:00	06:05		05:44 (WEA 11)	04:48	05:54 (WEA 11)	05:16	05:56 (WEA 11)	06:07	06:34 (WEA 11)	06:53	07:56		07:54			
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24	08:12	07:15		06:10	05:58	06:04		05:44 (WEA 11)	04:48	05:54 (WEA 11)	05:18	05:57 (WEA 11)	06:09	06:36 (WEA 11)	06:55	07:58		07:56			
16	42	17:42		18:34	20:29	21:20	27	06:11 (WEA 11)	05:17	06:13 (WEA 11)	05:18	05:57 (WEA 11)	06:09	06:36 (WEA 11)	06:55	07:58		07:56			
25	08:11	07:13		06:08	05:56	06:03		05:45 (WEA 11)	04:48	05:54 (WEA 11)	05:19	05:58 (WEA 11)	06:10	06:37 (WEA 11)	06:56	07:59		07:57			
16	44	17:44		18:36	20:31	21:21	26	06:11 (WEA 11)	05:16	06:13 (WEA 11)	05:17	05:57 (WEA 11)	06:08	06:37 (WEA 11)	06:56	07:59		07:57			
26	08:09	07:11		06:05	05:53	06:02		05:44 (WEA 11)	04:49	05:54 (WEA 11)	05:21	05:59 (WEA 11)	06:12	06:38 (WEA 11)	06:57	08:00		07:58			
16	46	17:46		18:37	20:33	21:23	27	06:11 (WEA 11)	05:16	06:13 (WEA 11)	05:17	05:57 (WEA 11)	06:08	06:38 (WEA 11)	06:57	08:00		07:58			
27	08:08	07:09		06:03	05:51	06:00		05:44 (WEA 11)	04:49	05:54 (WEA 11)	05:22	05:59 (WEA 11)	06:14								
16	47	17:47		18:39	20:35	21:24	28	06:11 (WEA 11)	05:16	06:13 (WEA 11)	05:17	05:57 (WEA 11)	06:08	06:38 (WEA 11)	06:57	08:00		07:58			
28	08:06	07:06		06:00	05:49	05:59		05:44 (WEA 11)	04:50	05:54 (WEA 11)	05:24	05:58 (WEA 11)	06:16								
16	49	17:49		18:41	20:37	21:25	27	06:11 (WEA 11)	05:16	06:13 (WEA 11)	05:18	05:57 (WEA 11)	06:09	06:38 (WEA 11)	06:57	08:00		07:58			
29	08:05			05:58	05:47	05:57		05:44 (WEA 11)	04:51	05:54 (WEA 11)	05:25	05:58 (WEA 11)	06:17								
16	51			18:43	20:38	21:27	27	06:12 (WEA 11)	05:16</												

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt hierfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 056 - Krinitz, Ringstraße 5

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

Januar		Februar		März		April		Mai		Juni		Juli		August		September/Oktober		November		Dezember		
1	08:29	08:00		07:04	06:51	06:43		04:55		05:51 (WEA 11)	04:51	06:01 (WEA 11)	05:30		06:03 (WEA 11)	06:23	07:14		07:11	07:48 (WEA 05)	08:05	
1	16:07	16:57		17:51	19:48	20:42		21:30	23	06:14 (WEA 11)	21:45	15	06:16 (WEA 11)	21:11	17	06:20 (WEA 11)	20:06	18:54	16:45	24	08:12 (WEA 05)	16:02
2	08:29	07:59		07:02	06:48	06:41		04:54		05:51 (WEA 11)	04:52	16	06:00 (WEA 11)	05:32	17	06:05 (WEA 11)	06:24	07:16	16:43	23	08:11 (WEA 05)	16:01
1	16:08	16:58		17:53	19:50	20:44		21:32	23	06:14 (WEA 11)	21:45	16	06:16 (WEA 11)	21:09	14	06:19 (WEA 11)	20:04	18:51	16:43	23	08:11 (WEA 05)	16:01
3	08:29	07:57	08:25 (WEA 05)	07:00	06:46	06:39		04:53		05:52 (WEA 11)	04:53	17	06:00 (WEA 11)	05:33		06:07 (WEA 11)	06:26	07:18	16:41	22	08:11 (WEA 05)	16:00
4	08:29	07:55	08:25 (WEA 05)	07:00	06:46	06:39		04:53		05:52 (WEA 11)	04:54	17	06:00 (WEA 11)	05:35		06:08 (WEA 11)	06:27	07:19	16:41	22	08:11 (WEA 05)	16:00
5	08:28	07:53	08:24 (WEA 05)	06:55	06:41	06:35		04:52		05:52 (WEA 11)	04:55	18	06:18 (WEA 11)	05:06		06:10 (WEA 11)	06:29	07:20	16:39	21	08:10 (WEA 05)	16:00
6	08:28	07:52	08:24 (WEA 05)	06:55	06:41	06:35		04:51		05:53 (WEA 11)	04:55	19	06:19 (WEA 11)	05:07		06:11 (WEA 11)	06:30	07:22	16:39	21	08:10 (WEA 05)	16:00
7	08:28	07:50	08:24 (WEA 05)	06:50	06:36	06:31		04:51		05:54 (WEA 11)	04:56	20	06:20 (WEA 11)	05:08		06:12 (WEA 11)	06:31	07:23	16:35	17	08:08 (WEA 05)	15:59
8	08:27	07:48	08:24 (WEA 05)	06:48	06:34	06:30		04:50		05:55 (WEA 11)	04:57	21	06:21 (WEA 11)	05:09		06:13 (WEA 11)	06:32	07:24	16:32	10	08:05 (WEA 05)	15:58
9	08:27	07:46	08:19 (WEA 05)	06:46	06:32	06:28	06:00 (WEA 11)	04:49		05:55 (WEA 11)	04:58	22	06:22 (WEA 11)	05:10		06:14 (WEA 11)	06:33	07:25	16:30			
10	08:26	07:44	08:18 (WEA 05)	06:43	06:29	06:26	06:00 (WEA 11)	04:49		05:56 (WEA 11)	04:59	23	06:23 (WEA 11)	05:11		06:15 (WEA 11)	06:34	07:26	16:28			
11	08:25	07:42	08:18 (WEA 05)	06:41	06:27	06:24	06:00 (WEA 11)	04:48		05:57 (WEA 11)	05:01	24	06:24 (WEA 11)	05:12		06:16 (WEA 11)	06:35	07:27	16:27			
12	08:25	07:40	08:18 (WEA 05)	06:39	06:25	06:22	06:00 (WEA 11)	04:48		05:58 (WEA 11)	05:02	25	06:25 (WEA 11)	05:13		06:17 (WEA 11)	06:36	07:28	16:25			
13	08:24	07:38	08:19 (WEA 05)	06:36	06:22	06:21	06:00 (WEA 11)	04:48		05:59 (WEA 11)	05:03	26	06:26 (WEA 11)	05:14		06:18 (WEA 11)	06:37	07:29	16:23			
14	08:23	07:36	08:19 (WEA 05)	06:34	06:20	06:19	06:00 (WEA 11)	04:48		05:59 (WEA 11)	05:04	27	06:27 (WEA 11)	05:15		06:19 (WEA 11)	06:38	07:30	16:21			
15	08:23	07:34	08:20 (WEA 05)	06:32	06:18	06:17	06:00 (WEA 11)	04:47		05:59 (WEA 11)	05:05	28	06:28 (WEA 11)	05:16		06:20 (WEA 11)	06:39	07:31	16:20			
16	08:21	07:32	08:21 (WEA 05)	06:29	06:16	06:15	06:00 (WEA 11)	04:47		05:59 (WEA 11)	05:07	29	06:29 (WEA 11)	05:17		06:21 (WEA 11)	06:40	07:32	16:19			
17	08:20	07:30	08:21 (WEA 05)	06:27	06:13	06:14	06:00 (WEA 11)	04:47		05:59 (WEA 11)	05:08	30	06:30 (WEA 11)	05:18		06:22 (WEA 11)	06:41	07:33	16:18			
18	08:19	07:28	08:23 (WEA 05)	06:24	06:11	06:13	06:00 (WEA 11)	04:47		05:59 (WEA 11)	05:09	31	06:31 (WEA 11)	05:19		06:23 (WEA 11)	06:42	07:34	16:17			
19	08:18	07:26	08:23 (WEA 05)	06:22	06:09	06:11	06:00 (WEA 11)	04:47		05:59 (WEA 11)	05:11	1	06:32 (WEA 11)	05:20		06:24 (WEA 11)	06:43	07:35	16:16			
20	08:17	07:24	08:23 (WEA 05)	06:20	06:07	06:10	06:00 (WEA 11)	04:47		05:59 (WEA 11)	05:12	2	06:33 (WEA 11)	05:21		06:25 (WEA 11)	06:44	07:36	16:15			
21	08:16	07:22	08:23 (WEA 05)	06:18	06:04	06:08	06:00 (WEA 11)	04:47		05:59 (WEA 11)	05:13	3	06:34 (WEA 11)	05:22		06:26 (WEA 11)	06:45	07:37	16:14			
22	08:15	07:20	08:23 (WEA 05)	06:16	06:02	06:07	06:00 (WEA 11)	04:47		05:59 (WEA 11)	05:15	4	06:35 (WEA 11)	05:23		06:27 (WEA 11)	06:46	07:38	16:13			
23	08:13	07:18	08:23 (WEA 05)	06:12	06:00	06:05	06:00 (WEA 11)	04:48		05:59 (WEA 11)	05:16	5	06:36 (WEA 11)	05:24		06:28 (WEA 11)	06:47	07:39	16:12			
24	08:12	07:15	08:23 (WEA 05)	06:10	05:58	06:04	06:00 (WEA 11)	04:48		05:59 (WEA 11)	05:17	6	06:37 (WEA 11)	05:25		06:29 (WEA 11)	06:48	07:40	16:11			
25	08:11	07:13	08:23 (WEA 05)	06:08	05:56	06:03	06:00 (WEA 11)	04:48		05:59 (WEA 11)	05:19	7	06:38 (WEA 11)	05:26		06:30 (WEA 11)	06:49	07:41	16:10			
26	08:09	07:11	08:23 (WEA 05)	06:05	05:53	06:02	06:00 (WEA 11)	04:49		05:59 (WEA 11)	05:21	8	06:39 (WEA 11)	05:27		06:31 (WEA 11)	06:50	07:42	16:09			
27	08:08	07:09	08:23 (WEA 05)	06:03	05:51	06:00	06:00 (WEA 11)	04:49		05:59 (WEA 11)	05:22	9	06:40 (WEA 11)	05:28		06:32 (WEA 11)	06:51	07:43	16:08			
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29	08:05	07:05	08:23 (WEA 05)	05:58	05:47	06:01	06:00 (WEA 11)	04:50		05:59 (WEA 11)	05:25	11	06:42 (WEA 11)	05:30		06:34 (WEA 11)	06:53	07:45	16:06			
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31	08:02	07:02	08:23 (WEA 05)	05:53	05:43	06:03	06:00 (WEA 11)	04:52		05:59 (WEA 11)	05:29	13	06:44 (WEA 11)	05:32		06:36 (WEA 11)	06:55	07:47	16:04			
1	08:01	07:01	08:23 (WEA 05)	05:51	05:39	06:05	06:00 (WEA 11)	04:53		05:59 (WEA 11)	05:31	14	06:45 (WEA 11)	05:33		06:37 (WEA 11)	06:56	07:48	16:03			
2	08:00	07:00	08:23 (WEA 05)	05:49	05:37	06:06	06:00 (WEA 11)	04:54		05:59 (WEA 11)	05:33	15	06:46 (WEA 11)	05:34		06:38 (WEA 11)	06:57	07:49	16:02			
3	07:59	06:59	08:23 (WEA 05)	05:47	05:35	06:07	06:00 (WEA 11)	04:55		05:59 (WEA 11)	05:35	16	06:47 (WEA 11)	05:35		06:39 (WEA 11)	06:58	07:50	16:01			
4	07:58	06:58	08:23 (WEA 05)	05:45	05:33	06:08	06:00 (WEA 11)	04:56		05:59 (WEA 11)	05:37	17	06:48 (WEA 11)	05:36		06:40 (WEA 11)	06:59	07:51	16:00			
5	07:57	06:57	08:23 (WEA 05)	05:43	05:31	06:09	06:00 (WEA 11)	04:57		05:59 (WEA 11)	05:39	18	06:49 (WEA 11)	05:37		06:41 (WEA 11)	07:00	07:52	15:59			
6	07:56	06:56	08:23 (WEA 05)	05:41	05:29	06:10	06:00 (WEA 11)	04:58		05:59 (WEA 11)	05:41	19	06:50 (WEA 11)	05:38		06:42 (WEA 11)	07:01	07:53	15:58			
7	07:55	06:55	08:23 (WEA 05)	05:39	05:27	06:11	06:00 (WEA 11)	04:59		05:59 (WEA 11)	05:43	20	06:51 (WEA 11)	05:39		06:43 (WEA 11)	07:02	07:54	15:57			
8	07:54	06:54	08:23 (WEA 05)	05:37	05:25	06:12	06:00 (WEA 11)	04:59		05:59 (WEA 11)	05:45	21	06:52 (WEA 11)	05:40		06:44 (WEA 11)	07:03	07:55	15:56			
9	07:53	06:53	08:23 (WEA 05)	05:35	05:23	06:13	06:00 (WEA 11)	04:59		05:59 (WEA 11)	05:47	22	06:53 (WEA 11)	05:41		06:45 (WEA 11)	07:04	07:56	15:55			
10	07:52	06:52	08:23 (WEA 05)	05:33	05:21	06:14	06:00 (WEA 11)	04:59		05:59 (WEA 11)	05:49	23	06:54 (WEA 11)	05:42		06:46 (WEA 11)	07:05	07:57	15:54			
11	07:51	06:51	08:23 (WEA 05)	05:31	05:19	06:15	06:00 (WEA 11)	04:59		05:59 (WEA 11)	05:51	24	06:55 (WEA 11)	05:43		06:47 (WEA 11)	07:06	07:58	15:53			
12	07:50	06:50	08:23 (WEA 05)	05:29	05:17	06:16	06:00 (WEA 11)	04:59		05:59 (WEA 11)	05:53	25	06:56 (WEA 11)	05:44		06:48 (WEA 11)	07:07	07:59	15:52			
13	07:49	06:49	08:23 (WEA 05)	05:27	05:15	06:17	06:00 (WEA 11)	04:59		05:59 (WEA 11)	05:55	26	06:57 (WEA 11)	05:45		06:49 (WEA 11)	07:08	08:00	15:51			
14	07:48	06:48	08:23 (WEA 05)	05:25	05:13	06:18	06:00 (WEA 11)	04:59		05:59 (WEA 11)	05:57	27	06:58 (WEA 11)	05:46		06:50 (WEA 11)	07:09	08:01	15:50			
15	07:47	06:47	08:23 (WEA 05)	05:23	05:11	06:19	06:00 (WEA 11)	04:59		05:59 (WEA 11)	05:59	28	06:59 (WEA 11)	05:47		06:51 (WEA 11)	07:10	08:02	15:49			
16	07:46	06:46	08:23 (WEA 05)	05:21	05:09	06:20	06:00 (WEA 11)	04:59		05:59 (WEA 11)	06:01	29	07:00 (WEA 11)	05:48		06:52 (WEA 11)	07:11	08:03	15:48			
17	07:45	06:45	08:23 (WEA 05)	05:19	05:07	06:21	06:00 (WEA 11)	04:59		05:59 (WEA 11)	06:03	30	07:01 (WEA 11)	05:49		06:53 (WEA 11)	07:12	08:04	15:47			
18	07:44	06:44	08:23 (WEA 05)	05:17	05:05	06:22	06:00 (WEA 11)	04:59		05:59 (WEA 11)	06:05	31	07:02 (WEA 11)	05:50		06:54 (WEA 11)	07:13	08:05	15:46			
19	07:43	06:43	08:23 (WEA 05)	05:15	05:03	06:23	06:00 (WEA 11)	04:59		05:59 (WEA 11)	06:07	1	07:03 (WEA 11)	05:51		06:55 (WEA 11)	07:14	08:06	15:45			
20	07:42	06:42	08:23 (WEA 05)	05:13	05:01	06:24	06:00 (WEA 11)	04:59		05:59 (WEA 11)	06:09	2	07:04 (WEA 11)	05:52								

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 057 - Krinitz, Ringstraße 6

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

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Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember							
1 08:29 16:07 2 08:29 16:08 3 08:29 16:08 4 08:29 16:10 5 08:28 16:12 6 08:28 16:13 7 08:28 16:14 8 08:27 16:16 9 08:27 16:17 10 08:26 16:18 11 08:25 16:20 12 08:25 16:21 13 08:24 16:23 14 08:23 16:25 15 08:22 16:27 16 08:21 16:29 17 08:20 16:30 18 08:19 16:31 19 08:18 16:32 20 08:17 16:33 21 08:16 16:34 22 08:15 16:35 23 08:14 16:36 24 08:13 16:37 25 08:12 16:38 26 08:11 16:39 27 08:10 16:40 28 08:09 16:41 29 08:08 16:42 30 08:07 16:43 31 08:06 16:44	1 08:29 16:07 2 08:29 16:08 3 08:29 16:08 4 08:29 16:10 5 08:28 16:12 6 08:28 16:13 7 08:28 16:14 8 08:27 16:16 9 08:27 16:17 10 08:26 16:18 11 08:25 16:20 12 08:25 16:21 13 08:24 16:23 14 08:23 16:25 15 08:22 16:27 16 08:21 16:29 17 08:20 16:30 18 08:19 16:31 19 08:18 16:32 20 08:17 16:33 21 08:16 16:34 22 08:15 16:35 23 08:14 16:36 24 08:13 16:37 25 08:12 16:38 26 08:11 16:39 27 08:10 16:40 28 08:09 16:41 29 08:08 16:42 30 08:07 16:43 31 08:06 16:44	1 08:29 16:07 2 08:29 16:08 3 08:29 16:08 4 08:29 16:10 5 08:28 16:12 6 08:28 16:13 7 08:28 16:14 8 08:27 16:16 9 08:27 16:17 10 08:26 16:18 11 08:25 16:20 12 08:25 16:21 13 08:24 16:23 14 08:23 16:25 15 08:22 16:27 16 08:21 16:29 17 08:20 16:30 18 08:19 16:31 19 08:18 16:32 20 08:17 16:33 21 08:16 16:34 22 08:15 16:35 23 08:14 16:36 24 08:13 16:37 25 08:12 16:38 26 08:11 16:39 27 08:10 16:40 28 08:09 16:41 29 08:08 16:42 30 08:07 16:43 31 08:06 16:44	1 08:29 16:07 2 08:29 16:08 3 08:29 16:08 4 08:29 16:10 5 08:28 16:12 6 08:28 16:13 7 08:28 16:14 8 08:27 16:16 9 08:27 16:17 10 08:26 16:18 11 08:25 16:20 12 08:25 16:21 13 08:24 16:23 14 08:23 16:25 15 08:22 16:27 16 08:21 16:29 17 08:20 16:30 18 08:19 16:31 19 08:18 16:32 20 08:17 16:33 21 08:16 16:34 22 08:15 16:35 23 08:14 16:36 24 08:13 16:37 25 08:12 16:38 26 08:11 16:39 27 08:10 16:40 28 08:09 16:41 29 08:08 16:42 30 08:07 16:43 31 08:06 16:44	1 08:29 16:07 2 08:29 16:08 3 08:29 16:08 4 08:29 16:10 5 08:28 16:12 6 08:28 16:13 7 08:28 16:14 8 08:27 16:16 9 08:27 16:17 10 08:26 16:18 11 08:25 16:20 12 08:25 16:21 13 08:24 16:23 14 08:23 16:25 15 08:22 16:27 16 08:21 16:29 17 08:20 16:30 18 08:19 16:31 19 08:18 16:32 20 08:17 16:33 21 08:16 16:34 22 08:15 16:35 23 08:14 16:36 24 08:13 16:37 25 08:12 16:38 26 08:11 16:39 27 08:10 16:40 28 08:09 16:41 29 08:08 16:42 30 08:07 16:43 31 08:06 16:44	1 08:29 16:07 2 08:29 16:08 3 08:29 16:08 4 08:29 16:10 5 08:28 16:12 6 08:28 16:13 7 08:28 16:14 8 08:27 16:16 9 08:27 16:17 10 08:26 16:18 11 08:25 16:20 12 08:25 16:21 13 08:24 16:23 14 08:23 16:25 15 08:22 16:27 16 08:21 16:29 17 08:20 16:30 18 08:19 16:31 19 08:18 16:32 20 08:17 16:33 21 08:16 16:34 22 08:15 16:35 23 08:14 16:36 24 08:13 16:37 25 08:12 16:38 26 08:11 16:39 27 08:10 16:40 28 08:09 16:41 29 08:08 16:42 30 08:07 16:43 31 08:06 16:44	1 08:29 16:07 2 08:29 16:08 3 08:29 16:08 4 08:29 16:10 5 08:28 16:12 6 08:28 16:13 7 08:28 16:14 8 08:27 16:16 9 08:27 16:17 10 08:26 16:18 11 08:25 16:20 12 08:25 16:21 13 08:24 16:23 14 08:23 16:25 15 08:22 16:27 16 08:21 16:29 17 08:20 16:30 18 08:19 16:31 19 08:18 16:32 20 08:17 16:33 21 08:16 16:34 22 08:15 16:35 23 08:14 16:36 24 08:13 16:37 25 08:12 16:38 26 08:11 16:39 27 08:10 16:40 28 08:09 16:41 29 08:08 16:42 30 08:07 16:43 31 08:06 16:44	1 08:29 16:07 2 08:29 16:08 3 08:29 16:08 4 08:29 16:10 5 08:28 16:12 6 08:28 16:13 7 08:28 16:14 8 08:27 16:16 9 08:27 16:17 10 08:26 16:18 11 08:25 16:20 12 08:25 16:21 13 08:24 16:23 14 08:23 16:25 15 08:22 16:27 16 08:21 16:29 17 08:20 16:30 18 08:19 16:31 19 08:18 16:32 20 08:17 16:33 21 08:16 16:34 22 08:15 16:35 23 08:14 16:36 24 08:13 16:37 25 08:12 16:38 26 08:11 16:39 27 08:10 16:40 28 08:09 16:41 29 08:08 16:42 30 08:07 16:43 31 08:06 16:44	1 08:29 16:07 2 08:29 16:08 3 08:29 16:08 4 08:29 16:10 5 08:28 16:12 6 08:28 16:13 7 08:28 16:14 8 08:27 16:16 9 08:27 16:17 10 08:26 16:18 11 08:25 16:20 12 08:25 16:21 13 08:24 16:23 14 08:23 16:25 15 08:22 16:27 16 08:21 16:29 17 08:20 16:30 18 08:19 16:31 19 08:18 16:32 20 08:17 16:33 21 08:16 16:34 22 08:15 16:35 23 08:14 16:36 24 08:13 16:37 25 08:12 16:38 26 08:11 16:39 27 08:10 16:40 28 08:09 16:41 29 08:08 16:42 30 08:07 16:43 31 08:06 16:44										
Sonneneinstrahlung 253	5	08:30 (WEA 05)	275	321	367	419	491	566	506	40	504	504	138	382	330	288	200	127
astr. max. mögl. Beschattung	5	08:35 (WEA 05)	275	321	367	419	491	566	506	40	504	504	138	382	330	288	200	127

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Zeitpunkt (SS:MM) Schattende (WEA mit letztem Schatten)
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 058 - Krinitz, Ringstraße 7

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1 08:29 16:07	1 08:00 16:57	1 07:04 17:51	1 06:51 18:48	1 05:43 19:48	1 04:55 20:45	1 04:51 21:45	1 05:30 22:11	1 06:23 22:47	1 07:14 23:38	1 07:57 24:21	1 08:05 25:06
2 08:29 16:08	2 08:29 16:59	2 08:29 17:52	2 08:48 18:48	2 08:51 19:48	2 09:09 20:45	2 09:28 21:45	2 09:59 22:11	2 10:24 22:47	2 10:54 23:38	2 11:24 24:21	2 11:54 25:06
3 08:29 16:09	3 08:29 17:01	3 08:29 17:55	3 08:48 18:48	3 08:51 19:48	3 09:09 20:45	3 09:28 21:45	3 09:59 22:11	3 10:24 22:47	3 10:54 23:38	3 11:24 24:21	3 11:54 25:06
4 08:29 16:10	4 08:29 17:02	4 08:29 17:56	4 08:48 18:48	4 08:51 19:48	4 09:09 20:45	4 09:28 21:45	4 09:59 22:11	4 10:24 22:47	4 10:54 23:38	4 11:24 24:21	4 11:54 25:06
5 08:29 16:11	5 08:29 17:03	5 08:29 17:57	5 08:48 18:48	5 08:51 19:48	5 09:09 20:45	5 09:28 21:45	5 09:59 22:11	5 10:24 22:47	5 10:54 23:38	5 11:24 24:21	5 11:54 25:06
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21 08:29 16:27	21 08:29 17:19	21 08:29 18:16	21 08:48 18:48	21 08:51 19:48	21 09:09 20:45	21 09:28 21:45	21 09:59 22:11	21 10:24 22:47	21 10:54 23:38	21 11:24 24:21	21 11:54 25:06
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28 08:29 16:34	28 08:29 17:26	28 08:29 18:23	28 08:48 18:48	28 08:51 19:48	28 09:09 20:45	28 09:28 21:45	28 09:59 22:11	28 10:24 22:47	28 10:54 23:38	28 11:24 24:21	28 11:54 25:06
29 08:29 16:35	29 08:29 17:27	29 08:29 18:24	29 08:48 18:48	29 08:51 19:48	29 09:09 20:45	29 09:28 21:45	29 09:59 22:11	29 10:24 22:47	29 10:54 23:38	29 11:24 24:21	29 11:54 25:06
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31 08:29 16:37	31 08:29 17:29	31 08:29 18:26	31 08:48 18:48	31 08:51 19:48	31 09:09 20:45	31 09:28 21:45	31 09:59 22:11	31 10:24 22:47	31 10:54 23:38	31 11:24 24:21	31 11:54 25:06
Sonneneinstrahlung 253	Sonneneinstrahlung 275	Sonneneinstrahlung 274	Sonneneinstrahlung 275	Sonneneinstrahlung 276	Sonneneinstrahlung 277	Sonneneinstrahlung 278	Sonneneinstrahlung 279	Sonneneinstrahlung 280	Sonneneinstrahlung 281	Sonneneinstrahlung 282	Sonneneinstrahlung 283
astr. max. mögl. Beschattung 38	astr. max. mögl. Beschattung 274	astr. max. mögl. Beschattung 275	astr. max. mögl. Beschattung 276	astr. max. mögl. Beschattung 277	astr. max. mögl. Beschattung 278	astr. max. mögl. Beschattung 279	astr. max. mögl. Beschattung 280	astr. max. mögl. Beschattung 281	astr. max. mögl. Beschattung 282	astr. max. mögl. Beschattung 283	astr. max. mögl. Beschattung 284

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattende (WEA mit letztem Schatten)
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 059 - Krinitz, Ringstraße 8

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

Januar	Februar	März	April	May	Juni	Juli	August	September	Oktober	November	Dezember
1 08:29 16:07	08:00 16:57	08:28 (WEA 05) 07:04 17:51	06:51 19:48	05:43 20:42	06:11 (WEA 11) 04:55 21:30	04:51 21:45	05:30 21:11	06:16 (WEA 11) 06:23 20:06	07:15 18:54	07:11 18:45	07:59 (WEA 05) 08:05 18:19 (WEA 05) 16:02
2 08:29 16:08	07:59 16:59	08:29 (WEA 05) 07:02 17:53	06:48 19:50	05:41 20:44	06:10 (WEA 11) 04:54 21:32	04:52 21:45	05:32 21:09	06:17 (WEA 11) 06:24 20:04	07:16 18:51	07:13 18:43	07:58 (WEA 05) 08:06 18:19 (WEA 05) 16:01
3 08:29 16:09	07:57 17:01	08:28 (WEA 05) 07:00 17:55	06:46 19:52	05:39 20:45	06:09 (WEA 11) 04:53 21:33	04:53 21:47	05:33 21:07	06:16 (WEA 11) 06:26 20:01	07:18 18:41	07:15 18:40	07:58 (WEA 05) 08:06 18:19 (WEA 05) 16:00
4 08:29 16:10	07:55 17:03	08:28 (WEA 05) 06:57 17:54	06:44 19:54	05:37 20:47	06:08 (WEA 11) 04:53 21:34	04:54 21:44	05:35 21:06	06:17 (WEA 11) 06:28 20:02	07:20 18:47	07:17 18:39	07:58 (WEA 05) 08:09 18:20 (WEA 05) 15:59
5 08:28 16:12	07:53 17:05	08:28 (WEA 05) 06:55 17:59	06:41 19:55	05:35 20:49	06:08 (WEA 11) 04:52 21:35	04:55 21:43	05:37 21:08	06:16 (WEA 11) 06:30 20:02	07:22 18:44	07:19 18:37	07:57 (WEA 05) 08:10 18:20 (WEA 05) 15:59
6 08:28 16:13	07:52 17:07	08:28 (WEA 05) 06:53 18:01	06:39 19:57	05:33 20:51	06:07 (WEA 11) 04:51 21:36	04:55 21:43	05:38 21:10	06:17 (WEA 11) 06:31 20:02	07:23 18:45	07:20 18:35	07:58 (WEA 05) 08:12 18:20 (WEA 05) 15:59
7 08:28 16:14	07:50 17:09	08:28 (WEA 05) 06:50 18:03	06:36 19:59	05:31 20:52	06:06 (WEA 11) 04:50 21:37	04:56 21:42	05:40 21:00	06:18 (WEA 11) 06:33 20:02	07:25 18:46	07:23 18:34	07:58 (WEA 05) 08:13 18:20 (WEA 05) 15:58
8 08:27 16:16	07:48 17:11	08:28 (WEA 05) 06:48 18:04	06:34 20:01	05:30 20:54	06:07 (WEA 11) 04:50 21:38	04:57 21:41	05:42 21:08	06:17 (WEA 11) 06:35 20:02	07:27 18:49	07:24 18:32	07:58 (WEA 05) 08:14 18:20 (WEA 05) 15:58
9 08:27 16:17	07:46 17:13	08:29 (WEA 05) 06:46 18:06	06:32 20:03	05:28 20:56	06:06 (WEA 11) 04:49 21:39	04:58 21:41	05:43 21:06	06:17 (WEA 11) 06:36 20:02	07:29 18:50	07:26 18:30	07:59 (WEA 05) 08:16 18:20 (WEA 05) 15:58
10 08:26 16:18	07:44 17:15	08:29 (WEA 05) 06:43 18:08	06:29 20:04	05:26 20:58	06:06 (WEA 11) 04:48 21:40	04:59 21:40	05:45 21:04	06:18 (WEA 11) 06:38 20:02	07:30 18:51	07:28 18:29	08:00 (WEA 05) 08:17 18:19 (WEA 05) 15:57
11 08:25 16:20	07:42 17:17	08:30 (WEA 05) 06:41 18:10	06:27 20:06	05:24 20:59	06:06 (WEA 11) 04:48 21:40	05:01 21:39	05:47 21:02	06:19 (WEA 11) 06:40 20:02	07:32 18:52	07:30 18:27	08:01 (WEA 05) 08:18 18:19 (WEA 05) 15:57
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13 08:24 16:23	07:38 17:20	08:33 (WEA 05) 06:36 18:14	06:22 20:10	05:21 21:03	06:06 (WEA 11) 04:48 21:42	05:03 21:37	05:50 21:04	06:22 (WEA 11) 06:43 20:02	07:36 18:54	07:34 18:23	08:05 (WEA 05) 08:20 18:16 (WEA 05) 15:57
14 08:23 16:25	07:36 17:22	08:37 (WEA 05) 06:34 18:16	06:20 20:12	05:19 21:04	06:07 (WEA 11) 04:48 21:42	05:04 21:36	05:52 21:06	06:25 (WEA 11) 06:45 20:02	07:38 18:55	07:36 18:22	08:07 (WEA 05) 08:21 18:14 (WEA 05) 15:57
15 08:22 16:26	07:34 17:24	08:38 (WEA 05) 06:32 18:17	06:18 20:13	05:17 21:06	06:07 (WEA 11) 04:47 21:43	05:05 21:35	05:54 21:04	06:26 (WEA 11) 06:47 20:02	07:40 18:56	07:37 18:20	08:08 (WEA 05) 08:22 18:15 (WEA 05) 15:57
16 08:21 16:28	07:32 17:26	08:39 (WEA 05) 06:30 18:19	06:16 20:15	05:16 21:08	06:08 (WEA 11) 04:47 21:44	05:07 21:34	05:55 21:02	06:27 (WEA 11) 06:48 20:02	07:41 18:57	07:39 18:19	08:09 (WEA 05) 08:23 18:15 (WEA 05) 15:57
17 08:20 16:30	07:30 17:28	08:40 (WEA 05) 06:28 18:21	06:14 20:17	05:14 21:09	06:09 (WEA 11) 04:47 21:44	05:08 21:33	05:57 21:00	06:28 (WEA 11) 06:49 20:02	07:43 18:58	07:41 18:17	08:10 (WEA 05) 08:24 18:15 (WEA 05) 15:57
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23 08:13 16:40	07:18 17:40	08:46 (WEA 05) 06:16 18:32	06:04 20:28	05:06 21:18	06:14 (WEA 11) 04:47 21:48	05:15 21:25	06:08 21:10	06:34 (WEA 11) 06:55 20:02	07:55 19:04	07:52 18:10	08:16 (WEA 05) 08:30 18:15 (WEA 05) 15:57
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25 08:11 16:44	07:13 17:44	08:48 (WEA 05) 06:12 18:36	06:02 20:31	05:03 21:21	06:16 (WEA 11) 04:47 21:50	05:17 21:23	06:12 21:12	06:36 (WEA 11) 06:57 20:02	07:59 19:06	07:55 18:07	08:18 (WEA 05) 08:32 18:15 (WEA 05) 15:57
26 08:09 16:46	07:11 17:46	08:49 (WEA 05) 06:10 18:37	06:01 20:33	05:02 21:23	06:17 (WEA 11) 04:47 21:51	05:18 21:24	06:14 21:13	06:37 (WEA 11) 06:58 20:02	08:00 19:07	07:57 18:06	08:19 (WEA 05) 08:33 18:15 (WEA 05) 15:57
27 08:08 16:47	07:09 17:47	08:50 (WEA 05) 06:08 18:39	06:00 20:35	05:01 21:24	06:18 (WEA 11) 04:47 21:52	05:19 21:25	06:16 21:14	06:38 (WEA 11) 06:59 20:02	08:01 19:08	07:58 18:05	08:20 (WEA 05) 08:34 18:15 (WEA 05) 15:57
28 08:06 16:49	07:07 17:49	08:51 (WEA 05) 06:06 18:41	05:59 20:37	05:00 21:25	06:19 (WEA 11) 04:47 21:53	05:20 21:26	06:18 21:15	06:39 (WEA 11) 07:00 20:02	08:02 19:09	07:59 18:04	08:21 (WEA 05) 08:35 18:15 (WEA 05) 15:57
29 08:05 16:51	07:05 17:51	08:52 (WEA 05) 06:04 18:43	05:58 20:39	05:00 21:26	06:20 (WEA 11) 04:47 21:54	05:21 21:27	06:19 21:16	06:40 (WEA 11) 07:01 20:02	08:03 19:10	08:00 18:03	08:22 (WEA 05) 08:36 18:15 (WEA 05) 15:57
30 08:03 16:53	07:03 17:53	08:53 (WEA 05) 06:02 18:45	05:57 20:40	05:00 21:27	06:21 (WEA 11) 04:47 21:55	05:22 21:28	06:20 21:15	06:41 (WEA 11) 07:02 20:02	08:04 19:11	08:01 18:04	08:23 (WEA 05) 08:37 18:15 (WEA 05) 15:57
31 08:02 16:55	07:01 17:55	08:54 (WEA 05) 06:00 18:47	05:56 20:41	05:00 21:28	06:22 (WEA 11) 04:47 21:56	05:23 21:29	06:21 21:16	06:42 (WEA 11) 07:03 20:02	08:05 19:12	08:02 18:05	08:24 (WEA 05) 08:38 18:15 (WEA 05) 15:57
Sonneneinstrahlung 253	275	284	293	299	306	313	320	327	334	341	348
astr. max. mögl. Beschattung 51	275	284	293	299	306	313	320	327	334	341	348

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH
Straße am Zeltplatz 7
DE-18230 Ostseebad Rerik
+49(0)38296 747 400
Katharina Rusch / katharina.rusch@eno-site.com
Berechnet:
08.01.2024 11:10/3.6.366

enoSITE

SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 060 - Krinitz, Ringstraße 9

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:
Die Sonne scheint täglich von Sonnenauf- bis -untergang
Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung
Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar		Februar		März		April		Mai		Juni		Juli		August		September/Oktober		November		Dezember		
1	08:29		08:00		08:30 (WEA 05)	07:04	06:51		05:43	06:13 (WEA 11)	04:55	04:51		05:30	06:23 (WEA 11)	06:23	07:15		07:11	08:03 (WEA 05)	08:05		
2	16:07	16:57	21	08:51 (WEA 05)	17:51	19:48		20:42	06:37 (WEA 11)	21:30	21:45		21:11	24	06:47 (WEA 11)	20:06	18:54		18:45	17	08:20 (WEA 05)	18:02	
3	21:29	16:58	21	08:52 (WEA 05)	17:52	19:50		20:44	06:38 (WEA 11)	21:32	21:45		21:09	24	06:47 (WEA 11)	20:04	18:51		18:43	19	08:21 (WEA 05)	18:01	
4	16:09	16:59	21	08:53 (WEA 05)	17:53	19:51		20:45	06:39 (WEA 11)	21:33	21:45		21:07	25	06:47 (WEA 11)	20:01	18:49		18:41	20	08:22 (WEA 05)	18:00	
5	16:09	17:01	22	08:54 (WEA 05)	17:54	19:52		20:46	06:40 (WEA 11)	21:34	21:46		21:06	26	06:48 (WEA 11)	19:59	18:47		18:39	21	08:23 (WEA 05)	18:01	
6	16:09	17:02	23	08:55 (WEA 05)	17:55	19:53		20:47	06:41 (WEA 11)	21:35	21:47		21:05	26	06:49 (WEA 11)	19:58	18:46		18:38	22	08:24 (WEA 05)	18:02	
7	16:10	17:03	23	08:56 (WEA 05)	17:56	19:54		20:48	06:42 (WEA 11)	21:36	21:48		21:04	27	06:50 (WEA 11)	19:57	18:45		18:37	23	08:25 (WEA 05)	18:03	
8	16:28	17:04	24	08:57 (WEA 05)	17:57	19:55		20:49	06:43 (WEA 11)	21:37	21:49		21:03	27	06:51 (WEA 11)	19:56	18:44		18:36	24	08:26 (WEA 05)	18:04	
9	16:28	17:05	24	08:58 (WEA 05)	17:58	19:56		20:50	06:44 (WEA 11)	21:38	21:50		21:02	28	06:52 (WEA 11)	19:55	18:43		18:35	25	08:27 (WEA 05)	18:05	
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22	16:28	17:49	4	09:42 (WEA 05)	18:42	20:42		21:34	07:28 (WEA 11)	22:22	22:34		20:18	31	07:36 (WEA 11)	19:11	17:59		17:49				
23	16:28	17:50	5	09:43 (WEA 05)	18:43	20:43		21:35	07:29 (WEA 11)	22:23	22:35		20:17	31	07:37 (WEA 11)	19:10	17:58		17:48				
24	16:28	17:51	6	09:4																			

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH
Straße am Zeltplatz 7
DE-18230 Ostseebad Rerik
+49(0)38296 747 400
Katharina Rusch / katharina.rusch@eno-site.com
Berechnet:
08.01.2024 11:10/3.6.366

enoSITE

SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 061 - Krinitz, Ringstraße 10

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:
Die Sonne scheint täglich von Sonnenauf- bis -untergang
Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung
Die Windenergieanlage/n ist/sind immer in Betrieb

Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1 08:29 16:07	08:00 18:57	08:32 (WEA 05) 07:04 19:51	08:51 19:48	09:43 19:42	06:16 (WEA 11) 04:55 21:30	04:51 21:45	06:28 (WEA 11) 06:23 20:06	07:15 18:54	07:11 18:45	08:06 (WEA 05) 08:05 18:20	08:05 (WEA 05) 08:06 18:02
2 08:29 16:08	07:59 18:59	08:32 (WEA 05) 07:02 19:50	08:48 19:50	09:41 19:44	06:15 (WEA 11) 04:54 21:32	04:50 21:45	06:28 (WEA 11) 06:24 20:04	07:16 18:51	07:13 18:41	08:05 (WEA 05) 08:06 18:01	08:06 (WEA 05) 08:07 18:02
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Sonneneinstrahlung 253	275	207	125	491	506	53	422	382	330	262	237
astr. max. mögl. Beschattung 102	27	207	125	342	506	53	422	382	330	262	237

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 062 - Krinitz, Ringstraße 11

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	[Januar	[Februar	[März	[April	[Mai	[Juni	[Juli	[August	[September	[Oktober	[November	[Dezember								
1	08:29	08:00	08:35 (WEA 05)	07:04	06:51	06:43	06:19 (WEA 11)	04:55	04:51	05:30	06:35 (WEA 11)	06:23	07:15	07:11	08:14 (WEA 05)	08:05				
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2	08:29	07:59	08:36 (WEA 05)	07:02	06:48	06:41	06:19 (WEA 11)	04:54	04:52	05:32	06:34 (WEA 11)	06:24	07:16	07:13	08:11 (WEA 05)	08:06				
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3	08:29	07:57	08:36 (WEA 05)	07:00	06:46	06:39	06:20 (WEA 11)	04:53	04:53	05:33	06:32 (WEA 11)	06:26	07:18	07:15	08:09 (WEA 05)	08:08				
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1	16:36	17:36	08:28	20:24	21:15	21:15	06:28 (WEA 11)	04:47	05:13	06:04	06:39 (WEA 11)	06:57	07:51	07:48	08:16 (WEA 05)	08:26				
22	08:15	07:20	06:15	06:02	06:05	06:05	06:28 (WEA 11)	04:47	05:15	06:06	06:39 (WEA 11)	06:59	07:52	07:50	08:17 (WEA 05)	08:27				
1	16:38	17:38	08:30	20:26	5	06:37 (WEA 11)	21:17	21:46	21:27	20:29	19:16	18:05	16:11	15:59	08:17 (WEA 05)	08:27				
23	08:13	07:18	06:12	06:00	06:02	06:02	06:28 (WEA 11)	04:48	05:16	06:07	06:39 (WEA 11)	06:59	07:52	07:50	08:17 (WEA 05)	08:27				
1	16:40	17:40	08:42 (WEA 05)	17:40	18:32	20:28	12	06:40 (WEA 11)	21:18	21:46	21:13	18:03	16:10	15:59	08:17 (WEA 05)	08:27				
24	08:12	07:15	06:10	05:58	06:05	06:05	06:28 (WEA 11)	04:48	05:18	06:09	06:39 (WEA 11)	06:59	07:52	07:50	08:17 (WEA 05)	08:27				
1	16:42	17:42	08:50 (WEA 05)	17:42	18:34	20:29	17	06:42 (WEA 11)	21:20	21:46	21:14	18:01	16:09	16:00	08:17 (WEA 05)	08:27				
25	08:11	07:13	06:08	05:56	06:04	06:04	06:28 (WEA 11)	04:48	05:19	06:11	06:39 (WEA 11)	06:59	07:52	07:50	08:17 (WEA 05)	08:27				
1	16:44	17:44	08:52 (WEA 05)	17:44	18:36	20:31	20	06:44 (WEA 11)	21:21	21:46	21:14	18:01	16:09	16:00	08:17 (WEA 05)	08:27				
26	08:09	07:11	06:05	05:53	06:02	06:02	06:28 (WEA 11)	04:49	05:21	06:12	06:39 (WEA 11)	06:59	07:52	07:50	08:17 (WEA 05)	08:27				
1	16:46	17:46	08:54 (WEA 05)	17:46	18:37	20:33	22	06:45 (WEA 11)	21:23	21:46	21:14	18:01	16:09	16:00	08:17 (WEA 05)	08:27				
27	08:08	07:09	06:03	05:51	06:02	06:02	06:28 (WEA 11)	04:49	05:22	06:14	06:39 (WEA 11)	06:59	07:52	07:50	08:17 (WEA 05)	08:27				
1	16:47	17:47	08:54 (WEA 05)	17:47	18:39	20:35	23	06:45 (WEA 11)	21:24	21:46	21:14	18:01	16:09	16:00	08:17 (WEA 05)	08:27				
28	08:06	07:06	06:00	05:49	06:00	06:00	06:28 (WEA 11)	04:49	05:24	06:16	06:39 (WEA 11)	06:59	07:52	07:50	08:17 (WEA 05)	08:27				
1	16:49	17:49	08:55 (WEA 05)	17:49	18:41	20:37	25	06:46 (WEA 11)	21:25	21:46	21:14	18:01	16:09	16:00	08:17 (WEA 05)	08:27				
29	08:05	07:05	06:00	05:47	06:01	06:01	06:28 (WEA 11)	04:49	05:25	06:18	06:39 (WEA 11)	06:59	07:52	07:50	08:17 (WEA 05)	08:27				
1	16:51	17:51	08:56 (WEA 05)	17:51	19:43	20:38	26	06:46 (WEA 11)	21:27	21:46	21:14	18:01	16:09	16:00	08:17 (WEA 05)	08:27				
30	08:03	07:03	06:00	05:45	06:02	06:02	06:28 (WEA 11)	04:49	05:27	06:20	06:39 (WEA 11)	06:59	07:52	07:50	08:17 (WEA 05)	08:27				
1	16:53	17:53	08:57 (WEA 05)	17:53	19:45	20:40	26	06:46 (WEA 11)	21:28	21:45	21:14	18:01	16:09	16:00	08:17 (WEA 05)	08:27				
31	08:02	07:02	06:00	05:53	06:03	06:03	06:28 (WEA 11)	04:46	05:28	06:21	06:39 (WEA 11)	06:59	07:52	07:50	08:17 (WEA 05)	08:29				
1	16:55	17:55	22	08:57 (WEA 05)	17:55	19:46	21	06:46 (WEA												

SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 063 - Krinitz, Ringstraße 12

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	June	Juli	August	September	Oktober	November	Dezember				
1	08:29	08:00	08:37 (WEA 05)	07:04	06:51	06:43	06:19 (WEA 11)	04:55	04:51	05:30	06:34 (WEA 11)	06:23	07:14	07:11	08:05	
2	16:07	07:57	08:59 (WEA 05)	17:51	19:48	20:42	28	06:47 (WEA 11)	21:30	21:45	21:11	17	06:51 (WEA 11)	20:06	18:54	16:45
3	08:29	07:59	08:38 (WEA 05)	07:02	06:48	06:41	06:19 (WEA 11)	04:54	04:52	05:32	06:34 (WEA 11)	06:24	07:16	07:13	08:06	
4	16:09	16:59	09:00 (WEA 05)	17:53	19:50	20:44	27	06:46 (WEA 11)	21:32	21:45	21:09	19	06:53 (WEA 11)	20:04	18:51	16:43
5	08:29	07:57	08:39 (WEA 05)	07:00	06:46	06:39	06:20 (WEA 11)	04:53	04:53	05:33	06:32 (WEA 11)	06:26	07:18	07:15	08:08	
6	16:09	17:01	09:00 (WEA 05)	17:55	19:52	20:45	27	06:47 (WEA 11)	21:33	21:44	21:07	21	06:53 (WEA 11)	20:01	18:49	16:41
7	08:29	07:55	08:39 (WEA 05)	06:57	06:44	06:37	06:20 (WEA 11)	04:53	04:54	05:35	06:32 (WEA 11)	06:28	07:20	07:17	08:11	
8	16:10	17:03	08:59 (WEA 05)	17:57	19:54	20:47	27	06:47 (WEA 11)	21:34	21:44	21:06	22	06:54 (WEA 11)	19:59	18:47	16:39
9	08:28	07:53	08:40 (WEA 05)	06:55	06:41	06:35	06:20 (WEA 11)	04:52	04:55	05:37	06:30 (WEA 11)	06:30	07:22	07:19	08:10	
10	16:12	17:05	08:59 (WEA 05)	17:59	19:55	20:49	26	06:46 (WEA 11)	21:35	21:43	21:04	24	06:54 (WEA 11)	19:57	18:44	16:37
11	08:28	07:52	08:40 (WEA 05)	06:53	06:39	06:33	06:20 (WEA 11)	04:51	04:55	05:38	06:30 (WEA 11)	06:31	07:23	07:21	08:09	
12	16:13	17:07	08:58 (WEA 05)	18:01	19:57	20:51	25	06:45 (WEA 11)	21:36	21:43	21:02	25	06:55 (WEA 11)	19:54	18:42	16:35
13	08:28	07:50	08:42 (WEA 05)	06:50	06:36	06:31	06:20 (WEA 11)	04:50	04:56	05:40	06:29 (WEA 11)	06:33	07:25	07:23	08:09	
14	16:14	17:09	08:57 (WEA 05)	18:03	19:59	20:52	25	06:45 (WEA 11)	21:37	21:42	21:00	26	06:55 (WEA 11)	19:52	18:40	16:34
15	08:27	07:48	08:43 (WEA 05)	06:48	06:34	06:30	06:21 (WEA 11)	04:50	04:57	05:42	06:29 (WEA 11)	06:35	07:27	07:24	08:08	
16	16:16	17:11	08:56 (WEA 05)	18:04	20:01	20:54	24	06:45 (WEA 11)	21:38	21:41	20:58	27	06:56 (WEA 11)	19:49	18:37	16:32
17	08:27	07:46	08:47 (WEA 05)	06:46	06:32	06:28	06:22 (WEA 11)	04:49	04:58	05:43	06:28 (WEA 11)	06:36	07:29	07:26	08:09	
18	16:17	17:13	08:52 (WEA 05)	18:06	20:03	20:56	22	06:44 (WEA 11)	21:39	21:41	20:56	27	06:55 (WEA 11)	19:47	18:35	16:30
19	08:26	07:44	08:43 (WEA 05)	06:43	06:29	06:26	06:22 (WEA 11)	04:49	04:59	05:45	06:28 (WEA 11)	06:38	07:30	07:28	08:09	
20	16:18	17:15	08:47 (WEA 05)	18:08	20:04	20:58	20	06:42 (WEA 11)	21:40	21:40	20:54	28	06:56 (WEA 11)	19:45	18:33	16:28
21	08:25	07:42	08:41 (WEA 05)	06:41	06:27	06:24	06:24 (WEA 11)	04:48	05:01	05:47	06:29 (WEA 11)	06:40	07:32	07:30	08:09	
22	16:20	17:17	08:40 (WEA 05)	18:10	20:06	20:59	18	06:42 (WEA 11)	21:40	21:39	20:52	27	06:56 (WEA 11)	19:42	18:30	16:27
23	08:25	07:40	08:39 (WEA 05)	06:39	06:25	06:22	06:25 (WEA 11)	04:48	05:02	05:48	06:28 (WEA 11)	06:42	07:34	07:32	08:09	
24	16:21	17:18	08:38 (WEA 05)	18:12	20:08	21:01	15	06:40 (WEA 11)	21:41	21:38	20:50	27	06:55 (WEA 11)	19:40	18:28	16:25
25	08:24	07:38	08:36 (WEA 05)	06:36	06:22	06:21	06:26 (WEA 11)	04:48	05:03	05:50	06:29 (WEA 11)	06:43	07:36	07:34	08:10	
26	16:23	17:20	08:34 (WEA 05)	18:14	20:10	21:03	11	06:37 (WEA 11)	21:42	21:37	20:48	26	06:55 (WEA 11)	19:37	18:26	16:23
27	08:23	07:36	08:34 (WEA 05)	06:34	06:20	06:19	06:30 (WEA 11)	04:48	05:04	05:52	06:28 (WEA 11)	06:45	07:38	07:36	08:10	
28	16:25	17:22	08:32 (WEA 05)	18:16	20:12	21:04	5	06:35 (WEA 11)	21:42	21:36	20:46	26	06:54 (WEA 11)	19:35	18:23	16:22
29	08:22	07:34	08:32 (WEA 05)	06:32	06:18	06:17	06:30 (WEA 11)	04:47	05:05	05:54	06:29 (WEA 11)	06:47	07:40	07:37	08:11	
30	16:26	17:24	08:31 (WEA 05)	18:17	20:13	21:06	21	06:34 (WEA 11)	21:43	21:35	20:44	25	06:54 (WEA 11)	19:33	18:21	16:20
31	08:21	07:32	08:29 (WEA 05)	06:29	06:16	06:16	06:30 (WEA 11)	04:47	05:07	05:55	06:30 (WEA 11)	06:48	07:41	07:39	08:12	
1	16:28	17:26	08:30 (WEA 05)	18:19	20:15	21:08	20	06:33 (WEA 11)	21:44	21:34	20:42	23	06:53 (WEA 11)	19:30	18:19	16:19
2	08:20	07:30	08:27 (WEA 05)	06:27	06:13	06:14	06:30 (WEA 11)	04:47	05:08	05:57	06:30 (WEA 11)	06:50	07:43	07:41	08:13	
3	16:30	17:28	08:21 (WEA 05)	18:21	20:17	21:09	20	06:32 (WEA 11)	21:44	21:33	20:40	22	06:52 (WEA 11)	19:28	18:16	16:17
4	08:19	07:28	08:24 (WEA 05)	06:24	06:11	06:13	06:30 (WEA 11)	04:47	05:09	05:59	06:31 (WEA 11)	06:52	07:45	07:43	08:15	
5	16:31	17:30	08:23 (WEA 05)	18:23	20:19	21:11	20	06:31 (WEA 11)	21:44	21:32	20:38	20	06:51 (WEA 11)	19:25	18:14	16:16
6	08:18	07:26	08:22 (WEA 05)	06:22	06:09	06:11	06:30 (WEA 11)	04:47	05:11	06:00	06:32 (WEA 11)	06:54	07:47	07:45	08:17	
7	16:33	17:32	08:25 (WEA 05)	18:25	20:21	21:12	20	06:30 (WEA 11)	21:45	21:30	20:35	16	06:48 (WEA 11)	19:23	18:12	16:15
8	08:17	07:24	08:20 (WEA 05)	06:20	06:07	06:10	06:30 (WEA 11)	04:47	05:12	06:02	06:34 (WEA 11)	06:55	07:49	07:48	08:19	
9	16:35	17:34	08:26 (WEA 05)	18:26	20:22	21:14	12	06:30 (WEA 11)	21:45	21:29	20:33	12	06:46 (WEA 11)	19:20	18:10	16:13
10	08:16	07:22	08:17 (WEA 05)	06:17	06:04	06:08	06:30 (WEA 11)	04:47	05:13	06:04	06:39 (WEA 11)	06:57	07:51	07:48	08:20	
11	16:36	17:36	08:28 (WEA 05)	18:28	20:24	21:15	21	06:29 (WEA 11)	21:45	21:28	20:31	2	06:41 (WEA 11)	19:18	18:08	16:12
12	08:15	07:20	08:15 (WEA 05)	06:15	06:02	06:06	06:30 (WEA 11)	04:47	05:15	06:06	06:39 (WEA 11)	06:59	07:52	07:50	08:21	
13	16:38	17:38	08:30 (WEA 05)	18:30	20:26	21:17	20	06:28 (WEA 11)	21:46	21:27	20:29	19	06:40 (WEA 11)	19:16	18:05	16:11
14	08:13	07:18	08:12 (WEA 05)	06:12	06:00	06:05	06:30 (WEA 11)	04:47	05:16	06:07	06:39 (WEA 11)	06:59	07:52	07:52	08:22	
15	16:40	17:40	08:32 (WEA 05)	18:32	20:28	21:18	13	06:27 (WEA 11)	21:46	21:25	20:27	19	06:39 (WEA 11)	19:13	18:03	16:10
16	08:12	07:15	08:11 (WEA 05)	06:10	05:58	06:04	06:30 (WEA 11)	04:47	05:18	06:09	06:39 (WEA 11)	06:59	07:52	07:52	08:23	
17	16:42	17:42	08:34 (WEA 05)	18:34	20:29	21:17	06:26 (WEA 11)	21:46	21:24	20:24	06:30 (WEA 11)	06:50	07:43	07:41	08:15	
18	08:11	07:13	08:29 (WEA 05)	06:08	05:56	06:03	06:30 (WEA 11)	04:47	05:19	06:11	06:39 (WEA 11)	06:59	07:52	07:52	08:24	
19	16:44	17:44	08:36 (WEA 05)	18:36	20:31	21:20	20	06:25 (WEA 11)	21:46	21:22	20:22	19	06:38 (WEA 11)	19:10	18:00	16:07
20	08:09	07:11	08:39 (WEA 05)	06:05	05:53	06:00	06:30 (WEA 11)	04:47	05:21	06:12	06:39 (WEA 11)	06:59	07:52	07:52	08:25	
21	16:46	17:46	08:37 (WEA 05)	18:37	20:33	21:22	22	06:24 (WEA 11)	21:46	21:21	20:20	18	06:37 (WEA 11)	19:06	17:57	16:06
22	08:08	07:06	08:38 (WEA 05)	06:03	05:51	06:02	06:30 (WEA 11)	04:47	05:22	06:14	06:39 (WEA 11)	06:59	07:52	07:52	08:26	
23	16:47	17:47	08:37 (WEA 05)	18:39	20:35	21:24	24	06:23 (WEA 11)	21:46	21:19	20:18	17	06:36 (WEA 11)	19:03	17:55	16:05
24	08:06	07:06	08:37 (WEA 05)	06:00	05:49	06:01	06:30 (WEA 11)	04:47	05:24	06:16	06:39 (WEA 11)	06:59	07:52	07:52	08:27	
25	16:51	17:49	08:38 (WEA 05)	18:41	20:37	21:25	25	06:22 (WEA 11)	21:46	21:18	20:16	16	06:35 (WEA 11)	19:01	17:53	16:04
26	08:05	07:05	08:38 (WEA 05)	06:00	05:47	06:02	06:30 (WEA 11)	04:47	05:25	06:18	06:39 (WEA 11)	06:59	07:52	07:52	08:28	
27	16:51	17:51	08:39 (WEA 05)	18:43	20:38	21:27	26	06:21 (WEA 11)	21:46	21:16	20:13	15	06:34 (WEA 11)	18:59	17:51	16:04
28	08:03	07:03	08:37 (WEA 05)	06:00	05:45	06:03	06:30 (WEA 11)	04:47	05:27	06:10	06:39 (WEA 11)	06:59	07:52	07:52	08:29	
29	16:53	17:53	08:39 (WEA 05)	18:45	20:40	21:27	27	06:23 (WEA 11)	21:45	21:17	20:15	14	06:35 (WEA 11)	19:01	17:53	16:04
30	08:03	07:03	08:37 (WEA 05)	06:00	05:45	06:03	06:30 (WEA 11)	04:47	05:28	06:11	06:39 (WEA 11)	06:59	07:52	07:52	08:30	
31	16:53	17:53	08:39 (WEA 05)	18:45	20:40	21:27	27	06:23 (WEA 11)	21:45	21:17	20:15	14	06:35 (WEA 11)	19:01	17:53	16:04
1	08:02	07:02	08:37 (WEA 05)	06:00	05:45	06:03	06:30 (WEA 11)	04:47	05:28	06:11	06:39 (WEA 11)	06:59	07:52	07:52	08:31	
2	16:53	17:53	08:39 (WEA 05)	18:45	20:40	21:27	27	06:23 (WEA 11)	21:45	21:17	20:15	14	06:35 (WEA 11)	19:01	17:53	16:04
3	08:02	07:02	08:37 (WEA 05)	06:00	05:45	06:03	06:30 (WEA 11)	04:47	05:28	06:11	0					

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 064 - Krinitz, Ringstraße 12a

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29	08:00	08:44 (WEA 05) 07:04	06:51	05:43	06:24 (WEA 11) 04:55	04:51	05:30	06:43 (WEA 11) 06:23	07:14	07:11	08:05
2	16:07	16:57	21 09:05 (WEA 05) 17:51	19:48	20:42	28 06:52 (WEA 11) 21:30	21:45	21:11	8 06:51 (WEA 11) 20:06	18:54	16:45	16:02
3	08:29	07:59	08:46 (WEA 05) 07:02	06:48	05:41	06:24 (WEA 11) 04:54	04:52	05:32	06:41 (WEA 11) 06:24	07:16	07:13	08:06
4	16:08	16:59	19 09:05 (WEA 05) 17:53	19:50	20:44	27 06:51 (WEA 11) 21:32	21:45	21:09	13 06:54 (WEA 11) 20:04	18:51	16:43	16:01
5	08:29	07:57	08:46 (WEA 05) 07:00	06:46	05:39	06:25 (WEA 11) 04:53	04:53	05:33	06:39 (WEA 11) 06:26	07:18	07:15	08:08
6	16:09	17:01	18 09:04 (WEA 05) 17:55	19:52	20:45	27 06:52 (WEA 11) 21:33	21:44	21:07	17 06:56 (WEA 11) 20:01	18:49	16:41	16:00
7	08:29	07:55	08:48 (WEA 05) 06:57	06:44	05:37	06:25 (WEA 11) 04:53	04:54	05:35	06:38 (WEA 11) 06:28	07:20	07:17	08:09
8	16:10	17:03	15 09:03 (WEA 05) 17:57	19:54	20:47	26 06:51 (WEA 11) 21:34	21:44	21:08	19 06:57 (WEA 11) 19:59	18:47	16:39	16:00
9	08:28	07:53	08:49 (WEA 05) 06:55	06:41	05:35	06:25 (WEA 11) 04:52	04:55	05:37	06:36 (WEA 11) 06:30	07:22	07:19	08:10
10	16:12	17:05	13 09:02 (WEA 05) 17:59	19:55	20:49	25 06:50 (WEA 11) 21:35	21:43	21:04	22 06:58 (WEA 11) 19:57	18:44	16:37	16:00
11	08:28	07:52	08:52 (WEA 05) 06:53	06:39	05:33	06:25 (WEA 11) 04:51	04:55	05:38	06:36 (WEA 11) 06:31	07:23	07:21	08:12
12	16:13	17:07	7 08:59 (WEA 05) 18:01	19:57	20:51	24 06:49 (WEA 11) 21:36	21:43	21:02	23 06:59 (WEA 11) 19:54	18:42	16:35	16:00
13	08:28	07:50	06:50	06:36	05:31	06:26 (WEA 11) 04:50	04:56	05:40	06:34 (WEA 11) 06:33	07:25	07:23	08:13
14	16:14	17:09	18:03	19:59	20:52	22 06:48 (WEA 11) 21:37	21:42	21:00	25 06:59 (WEA 11) 19:52	18:40	16:34	16:00
15	08:27	07:46	06:48	06:34	05:30	06:27 (WEA 11) 04:50	04:57	05:42	06:34 (WEA 11) 06:35	07:27	07:24	08:14
16	16:16	17:11	18:04	20:01	20:54	21 06:48 (WEA 11) 21:38	21:41	20:58	26 07:00 (WEA 11) 19:49	18:37	16:32	16:00
17	08:27	07:46	06:46	06:32	05:28	06:28 (WEA 11) 04:49	04:58	05:43	06:33 (WEA 11) 06:36	07:29	07:26	08:16
18	16:17	17:13	18:06	20:03	20:56	18 06:46 (WEA 11) 21:39	21:41	20:56	27 07:00 (WEA 11) 19:47	18:35	16:30	16:00
19	08:26	07:44	06:43	06:29	05:26	06:29 (WEA 11) 04:49	04:59	05:45	06:33 (WEA 11) 06:38	07:30	07:28	08:17
20	16:18	17:15	18:08	20:04	20:58	16 06:45 (WEA 11) 21:40	20:54	20:54	27 07:00 (WEA 11) 19:45	18:32	16:28	16:00
21	08:25	07:42	06:41	06:27	05:24	06:31 (WEA 11) 04:48	05:01	05:47	06:33 (WEA 11) 06:40	07:32	07:30	08:18
22	16:20	17:17	18:10	20:06	20:59	12 06:43 (WEA 11) 21:40	21:39	20:52	28 07:01 (WEA 11) 19:42	18:30	16:27	16:00
23	08:25	07:40	06:39	06:25	05:22	06:34 (WEA 11) 04:48	05:02	05:48	06:32 (WEA 11) 06:42	07:34	07:32	08:19
24	16:21	17:18	18:12	20:08	21:01	5 06:39 (WEA 11) 21:41	21:38	20:50	28 07:00 (WEA 11) 19:40	18:28	16:25	16:00
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26	16:23	17:20	18:14	20:10	21:03	21:42	21:37	20:48	28 07:01 (WEA 11) 19:37	18:26	16:23	16:00
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28	16:25	17:22	18:16	20:12	21:04	21:42	21:36	20:46	28 07:00 (WEA 11) 19:35	18:23	16:22	16:00
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30	16:26	17:24	18:17	20:13	21:06	21:43	21:35	20:44	28 07:00 (WEA 11) 19:33	18:21	16:20	16:00
31	08:21	07:32	06:29	06:16	05:16	06:47	05:07	05:55	06:33 (WEA 11) 06:48	07:41	07:39	08:23
1	16:28	17:26	18:19	20:15	21:08	21:44	21:34	20:42	26 06:59 (WEA 11) 19:30	18:19	16:19	16:00
2	08:20	07:30	06:27	06:13	05:14	06:47	05:08	05:57	06:33 (WEA 11) 06:50	07:43	07:41	08:24
3	16:30	17:28	18:21	20:17	21:09	21:44	21:33	20:40	25 06:58 (WEA 11) 19:28	18:16	16:17	16:00
4	08:19	07:28	06:24	06:11	05:13	06:47	05:09	05:59	06:33 (WEA 11) 06:52	07:45	07:43	08:24
5	16:31	17:30	18:23	20:19	21:11	21:44	21:32	20:38	25 06:59 (WEA 11) 19:25	18:14	16:16	16:00
6	08:18	07:26	06:22	06:09	05:11	06:47	05:11	06:00	06:33 (WEA 11) 06:54	07:47	07:45	08:25
7	16:33	17:32	18:25	20:21	21:12	21:45	21:30	20:35	23 06:56 (WEA 11) 19:23	18:12	16:15	16:00
8	08:17	07:24	06:20	06:07	05:10	06:47	05:12	06:02	06:35 (WEA 11) 06:55	07:49	07:46	08:26
9	16:35	17:34	18:26	20:22	21:14	21:45	21:29	20:33	20 06:55 (WEA 11) 19:20	18:10	16:13	16:00
10	08:16	07:22	06:17	06:04	05:08	06:47	05:13	06:04	06:36 (WEA 11) 06:57	07:51	07:48	08:26
11	16:36	17:36	18:28	20:24	21:15	21:45	21:28	20:31	18 06:54 (WEA 11) 19:18	18:08	16:12	16:00
12	08:15	07:20	06:15	06:02	05:07	06:47	05:15	06:06	06:38 (WEA 11) 06:59	07:52	07:50	08:27
13	16:38	17:38	18:30	20:26	21:17	21:46	21:27	20:29	12 06:50 (WEA 11) 19:16	18:05	16:11	16:00
14	08:13	07:18	06:12	06:00	05:05	06:48	05:16	06:07	06:42 (WEA 11) 07:01	07:54	07:52	08:27
15	16:40	17:40	18:32	20:28	21:18	21:46	21:25	20:27	4 06:46 (WEA 11) 19:13	18:03	16:10	16:00
16	08:12	07:15	06:10	05:58	05:04	06:48	05:18	06:09	06:46 (WEA 11) 07:02	07:56	07:53	08:28
17	16:42	17:42	18:34	20:29	21:20	21:46	21:24	20:24	19:11	18:01	16:08	16:00
18	08:11	07:13	06:08	05:56	05:03	06:48	05:19	06:11	07:04	06:58	07:55	08:28
19	16:44	17:44	18:36	20:31	21:21	21:46	21:22	20:22	19:08	16:59	16:07	16:01
20	08:09	07:11	06:05	05:53	05:02	06:49	05:21	06:12	07:06	07:00	07:57	08:29
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22	08:08	07:09	06:03	05:51	05:00	06:49	05:22	06:14	07:07	07:02	07:58	08:29
23	16:47	17:47	18:39	20:35	21:24	21:46	21:19	20:19	19:03	16:55	16:05	16:02
24	08:06	07:06	06:00	05:49	05:00	06:49	05:24	06:16	07:09	07:04	07:58	08:29
25	16:49	17:49	18:41	20:37	21:25	21:46	21:18	20:15	19:01	16:53	16:04	16:03
26	08:05	07:05	06:58	05:47	05:00	06:49	05:25	06:18	07:11	07:05	07:58	08:29
27	16:51	17:51	18:43	20:38	21:27	21:46	21:16	20:13	18:59	16:51	16:04	16:04
28	08:03	07:03	06:56	05:45	05:00	06:49	05:27	06:19	07:13	07:07	07:58	08:29
29	16:53	17:53	18:45	20:40	21:28	21:45	21:14	20:11	18:56	16:49	16:03	16:05
30	08:02	07:02	06:53	05:40	05:00	06:49	05:28	06:21	07:15	07:09	07:59	08:29
31	16:55	17:55	18:47	20:42	21:30	21:47	21:17	20:14	18:58	16:50	16:04	16:06
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	330	262	237
astr.max.mögl.Beschattung	254	93	240	251	500	500	500	500	350	350	350	350

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)



Projekt:
0146-Steesow

Beschreibung:
Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:
enosite GmbH
Straße am Zeltplatz 7
DE-18230 Ostseebad Rerik
+49(0)38296 747 400
Katharina Rusch / katharina.rusch@eno-site.com
Berechnet:
08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 065 - Krinitz, Ringstraße 13

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	June	Juli	August	September	Oktober	November	Dezember								
1	08:29	08:00	08:37 (WEA 05)	07:04	06:51	05:43	06:16 (WEA 11)	04:55	04:51	05:30	06:27 (WEA 11)	06:23	07:14	07:11	08:17 (WEA 05)	08:05				
2	16:07	16:57	18:42	19:48	20:42	21	06:42 (WEA 11)	21:30	21:45	21:11	23	06:50 (WEA 11)	20:06	18:54	16:45	3	08:20 (WEA 05)	16:02		
3	08:29	07:59	08:38 (WEA 05)	07:02	06:48	05:41	06:16 (WEA 11)	04:54	04:52	05:32	06:27 (WEA 11)	06:24	07:16	07:13	08:13 (WEA 05)	08:06				
4	16:08	16:59	22	09:00 (WEA 05)	17:53	19:50	20:44	26	06:42 (WEA 11)	21:32	21:45	21:09	24	06:51 (WEA 11)	20:04	18:51	16:43	11	08:24 (WEA 05)	16:01
5	08:29	07:57	08:38 (WEA 05)	07:00	06:46	05:39	06:16 (WEA 11)	04:53	04:53	05:33	06:26 (WEA 11)	06:26	07:18	07:15	08:11 (WEA 05)	08:08				
6	16:09	17:01	22	09:00 (WEA 05)	17:55	19:52	20:45	27	06:43 (WEA 11)	21:33	21:44	21:07	25	06:51 (WEA 11)	20:01	18:49	16:41	15	08:26 (WEA 05)	16:00
7	08:29	07:55	08:38 (WEA 05)	06:57	06:44	05:37	06:16 (WEA 11)	04:53	04:54	05:35	06:26 (WEA 11)	06:28	07:20	07:17	08:10 (WEA 05)	08:09				
8	16:10	17:03	21	08:59 (WEA 05)	17:57	19:54	20:47	27	06:43 (WEA 11)	21:34	21:44	21:06	26	06:52 (WEA 11)	19:59	18:47	16:39	17	08:27 (WEA 05)	16:00
9	08:28	07:53	08:39 (WEA 05)	06:55	06:41	05:35	06:15 (WEA 11)	04:52	04:55	05:37	06:25 (WEA 11)	06:30	07:22	07:19	08:09 (WEA 05)	08:10				
10	16:12	17:05	20	08:59 (WEA 05)	17:59	19:55	20:49	28	06:43 (WEA 11)	21:35	21:43	21:04	27	06:52 (WEA 11)	19:57	18:44	16:37	19	08:28 (WEA 05)	15:59
11	08:28	07:52	08:39 (WEA 05)	06:53	06:39	05:33	06:15 (WEA 11)	04:51	04:55	05:38	06:25 (WEA 11)	06:31	07:23	07:21	08:08 (WEA 05)	08:12				
12	16:13	17:07	19	08:58 (WEA 05)	18:01	19:57	20:51	27	06:42 (WEA 11)	21:36	21:43	21:02	27	06:52 (WEA 11)	19:54	18:42	16:35	21	08:29 (WEA 05)	15:59
13	08:28	07:50	08:40 (WEA 05)	06:50	06:36	05:31	06:15 (WEA 11)	04:50	04:56	05:40	06:24 (WEA 11)	06:33	07:25	07:23	08:08 (WEA 05)	08:13				
14	16:14	17:09	17	08:57 (WEA 05)	18:03	19:59	20:52	27	06:42 (WEA 11)	21:37	21:42	21:00	28	06:52 (WEA 11)	19:52	18:40	16:34	21	08:29 (WEA 05)	15:58
15	08:27	07:48	08:42 (WEA 05)	06:48	06:34	05:30	06:16 (WEA 11)	04:50	04:57	05:45	06:25 (WEA 11)	06:35	07:27	07:24	08:08 (WEA 05)	08:14				
16	16:16	17:11	14	08:56 (WEA 05)	18:04	20:01	20:54	26	06:42 (WEA 11)	21:38	21:41	20:58	27	06:52 (WEA 11)	19:49	18:37	16:32	22	08:30 (WEA 05)	15:58
17	08:27	07:46	08:44 (WEA 05)	06:46	06:32	05:28	06:16 (WEA 11)	04:49	04:58	05:43	06:24 (WEA 11)	06:36	07:29	07:26	08:07 (WEA 05)	08:16				
18	16:17	17:13	10	08:54 (WEA 05)	18:06	20:03	20:56	26	06:42 (WEA 11)	21:39	21:41	20:56	28	06:52 (WEA 11)	19:47	18:35	16:30	23	08:30 (WEA 05)	15:58
19	08:26	07:44	08:43	06:29	06:29	05:26	06:16 (WEA 11)	04:49	04:59	05:45	06:25 (WEA 11)	06:38	07:30	07:28	08:08 (WEA 05)	08:17				
20	16:18	17:15	18:08	20:04	20:58	25	06:41 (WEA 11)	21:40	21:40	20:54	27	06:52 (WEA 11)	19:45	18:33	16:28	23	08:31 (WEA 05)	15:57		
21	08:25	07:42	06:41	06:27	05:24	05:24	06:17 (WEA 11)	04:48	05:01	05:47	06:25 (WEA 11)	06:40	07:32	07:30	08:09 (WEA 05)	08:18				
22	16:20	17:17	18:10	20:06	20:59	24	06:41 (WEA 11)	21:40	21:39	20:52	27	06:52 (WEA 11)	19:42	18:30	16:27	22	08:31 (WEA 05)	15:57		
23	08:25	07:40	06:39	06:25	05:22	05:22	06:17 (WEA 11)	04:48	05:02	05:48	06:25 (WEA 11)	06:42	07:34	07:32	08:09 (WEA 05)	08:19				
24	16:21	17:18	18:12	20:08	21:01	23	06:40 (WEA 11)	21:41	21:38	20:50	26	06:51 (WEA 11)	19:40	18:28	16:25	22	08:31 (WEA 05)	15:57		
25	08:24	07:38	06:36	06:22	05:21	05:21	06:18 (WEA 11)	04:48	05:03	05:50	06:26 (WEA 11)	06:43	07:36	07:34	08:09 (WEA 05)	08:20				
26	16:23	17:20	18:14	20:10	21:03	20	06:38 (WEA 11)	21:42	21:37	20:48	24	06:50 (WEA 11)	19:37	18:26	16:23	22	08:31 (WEA 05)	15:57		
27	08:23	07:36	06:34	06:20	05:19	05:19	06:19 (WEA 11)	04:48	05:04	05:52	06:26 (WEA 11)	06:45	07:38	07:36	08:10 (WEA 05)	08:21				
28	16:25	17:22	18:16	20:12	21:04	19	06:38 (WEA 11)	21:42	21:36	20:46	23	06:49 (WEA 11)	19:35	18:23	16:20	20	08:30 (WEA 05)	15:57		
29	08:22	07:34	06:32	06:18	05:17	05:17	06:20 (WEA 11)	04:47	05:05	05:54	06:27 (WEA 11)	06:47	07:40	07:37	08:11 (WEA 05)	08:22				
30	16:26	17:24	18:17	20:13	21:06	16	06:36 (WEA 11)	21:43	21:35	20:44	21	06:48 (WEA 11)	19:33	18:21	16:20	19	08:30 (WEA 05)	15:57		
31	08:21	07:32	06:29	06:16	05:16	05:16	06:22 (WEA 11)	04:47	05:07	05:55	06:28 (WEA 11)	06:48	07:41	07:39	08:11 (WEA 05)	08:23				
1	16:28	17:26	18:19	20:15	21:08	13	06:35 (WEA 11)	21:44	21:34	20:42	19	06:47 (WEA 11)	19:30	18:19	16:19	18	08:29 (WEA 05)	15:57		
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3	16:30	17:28	18:21	20:17	21:09	8	06:33 (WEA 11)	21:44	21:33	20:40	15	06:44 (WEA 11)	19:28	18:16	16:17	16	08:29 (WEA 05)	15:57		
4	08:19	07:28	06:24	06:11	05:13	05:13	06:27 (WEA 11)	04:47	05:09	05:59	06:32 (WEA 11)	06:52	07:45	07:43	08:15 (WEA 05)	08:24				
5	16:31	17:30	18:23	20:19	21:11	21:11	21:44	21:32	20:38	10	06:42 (WEA 11)	19:25	18:14	16:16	13	08:28 (WEA 05)	15:57			
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8	08:17	07:24	06:20	06:07	05:10	05:10	06:27 (WEA 11)	04:47	05:12	06:02	06:35	07:49	07:48	08:19 (WEA 05)	08:26					
9	16:35	17:34	18:26	20:22	21:14	21:14	21:45	21:29	20:33	19:20	18:10	16:13	5	08:24 (WEA 05)	15:58					
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13	16:38	5	08:49 (WEA 05)	17:38	18:30	20:26	21:17	21:46	21:27	20:29	19:16	18:05	16:11		15:59					
14	08:13	08:42 (WEA 05)	07:18	06:12	06:00	05:05	06:29 (WEA 11)	04:48	05:16	06:07	07:01	07:54	07:52	08:27						
15	16:40	9	08:51 (WEA 05)	17:40	18:32	20:28	21:18	21:46	21:25	20:27	19:13	18:03	16:10		15:59					
16	08:12	08:41 (WEA 05)	07:15	06:10	05:58	05:04	06:29 (WEA 11)	04:48	05:18	06:09	07:02	07:56	07:53	08:28						
17	16:42	13	08:54 (WEA 05)	17:42	18:34	20:29	21:20	21:46	21:24	20:24	19:11	18:01	16:09		16:00					
18	08:11	08:39 (WEA 05)	07:13	06:08	05:56	05:03	06:24 (WEA 11)	05:03	05:19	06:11	07:04	07:58	07:55	08:28						
19	16:44	16	08:55 (WEA 05)	17:44	18:36	20:31	12	06:36 (WEA 11)	21:21	20:22	19:08	16:59	16:07		16:01					
20	08:09	08:39 (WEA 05)	07:11	06:05	05:53	05:02	06:29 (WEA 11)	05:02	05:19	06:12	07:06	07:00	07:57	08:29						
21	16:46	17	08:56 (WEA 05)	17:46	18:37	20:33	16	06:38 (WEA 11)	21:23	21:46	21:21	3	06:40 (WEA 11)	20:20		16:01				
22	08:08	08:38 (WEA 05)	07:09	06:03	05:51	05:00	06:20 (WEA 11)	05:00	05:17	06:14	07:07	07:02	07:58	08:29						
23	16:47	19	08:57 (WEA 05)	17:47	18:39	20:35	20	06:40 (WEA 11)	21:24	21:46	21:19	10	06:44 (WEA 11)	20:18		16:02				
24	08:06	08:37 (WEA 05)	07:06	06:00	05:49	05:19 (WEA 11)	04:59	04:50	05:24	06:16	07:09	07:04	08:00	08:29						
25	16:49	20	08:57 (WEA 05)	17:49	18:41	20:37	22	06:41 (WEA 11)	21:25	21:46	21:18	14	06:46 (WEA 11)	20:15		16:03				
26	08:05	08:37 (WEA 05)		06:58	05:47	06:18 (WEA 11)	04:58	04:50	05:25	06:18	07:11	07:05	08:02	08:29						
27	16:51	22	08:59 (WEA 05)		19:43	20:38	23	06:41 (WEA 11)	21:27	21:45	21:16	17	06:48 (WEA 11)	20:13		16:04				
28	08:03	08:37 (WEA 05)		06:56	05:45	06:17 (WEA 11)	04:58	04:51	05:27	06:21 (WEA 11)	07:13	07:07	08:03	08:29						
29	16:53	22	08:59 (WEA 05)		19:45	20:40	25	06:42 (WEA 11)	21:28	21:45	21:14	20	06:49 (WEA 11)	20:11		16:05				
30	08:02	08:37 (WEA 05)		06:53		04:56		05:28		06:29 (WEA 11)	06:21		07:09	08:29						
31	16:55	22	08:59 (WEA 05)		19:46		21:29			21:13	21	06:50 (WEA 11)	20:08		16:06					
Sonnenscheinstunden																				
1	253	165	275	367	419	491	506	509	485	427</										

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH
Straße am Zeltplatz 7
DE-18230 Ostseebad Rerik
+49(0)38296 747 400
Katharina Rusch / katharina.rusch@eno-site.com
Berechnet:
08.01.2024 11:10/3.6.366

enoSITE

SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 066 - Krinitz, Ringstraße 14

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:
Die Sonne scheint täglich von Sonnenauf- bis -untergang
Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung
Die Windenergieanlage/n ist/sind immer in Betrieb

Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1 08:29 16:07	1 08:00 16:57	1 07:04 18:51	1 06:51 19:48	1 05:43 20:42	1 04:55 21:30	1 04:51 21:45	1 05:30 22:11	1 06:23 22:57	1 07:14 23:44	1 08:10 24:31	1 09:05 25:18
2 08:29 16:08	2 08:00 16:58	2 07:04 18:51	2 06:51 19:48	2 05:43 20:42	2 04:55 21:30	2 04:51 21:45	2 05:30 22:11	2 06:23 22:57	2 07:14 23:44	2 08:10 24:31	2 09:05 25:18
3 08:29 16:09	3 08:00 16:59	3 07:04 18:51	3 06:51 19:48	3 05:43 20:42	3 04:55 21:30	3 04:51 21:45	3 05:30 22:11	3 06:23 22:57	3 07:14 23:44	3 08:10 24:31	3 09:05 25:18
4 08:29 16:10	4 08:00 17:00	4 07:04 18:51	4 06:51 19:48	4 05:43 20:42	4 04:55 21:30	4 04:51 21:45	4 05:30 22:11	4 06:23 22:57	4 07:14 23:44	4 08:10 24:31	4 09:05 25:18
5 08:29 16:11	5 08:00 17:01	5 07:04 18:51	5 06:51 19:48	5 05:43 20:42	5 04:55 21:30	5 04:51 21:45	5 05:30 22:11	5 06:23 22:57	5 07:14 23:44	5 08:10 24:31	5 09:05 25:18
6 08:29 16:12	6 08:00 17:02	6 07:04 18:51	6 06:51 19:48	6 05:43 20:42	6 04:55 21:30	6 04:51 21:45	6 05:30 22:11	6 06:23 22:57	6 07:14 23:44	6 08:10 24:31	6 09:05 25:18
7 08:29 16:13	7 08:00 17:03	7 07:04 18:51	7 06:51 19:48	7 05:43 20:42	7 04:55 21:30	7 04:51 21:45	7 05:30 22:11	7 06:23 22:57	7 07:14 23:44	7 08:10 24:31	7 09:05 25:18
8 08:29 16:14	8 08:00 17:04	8 07:04 18:51	8 06:51 19:48	8 05:43 20:42	8 04:55 21:30	8 04:51 21:45	8 05:30 22:11	8 06:23 22:57	8 07:14 23:44	8 08:10 24:31	8 09:05 25:18
9 08:29 16:15	9 08:00 17:05	9 07:04 18:51	9 06:51 19:48	9 05:43 20:42	9 04:55 21:30	9 04:51 21:45	9 05:30 22:11	9 06:23 22:57	9 07:14 23:44	9 08:10 24:31	9 09:05 25:18
10 08:29 16:16	10 08:00 17:06	10 07:04 18:51	10 06:51 19:48	10 05:43 20:42	10 04:55 21:30	10 04:51 21:45	10 05:30 22:11	10 06:23 22:57	10 07:14 23:44	10 08:10 24:31	10 09:05 25:18
11 08:29 16:17	11 08:00 17:07	11 07:04 18:51	11 06:51 19:48	11 05:43 20:42	11 04:55 21:30	11 04:51 21:45	11 05:30 22:11	11 06:23 22:57	11 07:14 23:44	11 08:10 24:31	11 09:05 25:18
12 08:29 16:18	12 08:00 17:08	12 07:04 18:51	12 06:51 19:48	12 05:43 20:42	12 04:55 21:30	12 04:51 21:45	12 05:30 22:11	12 06:23 22:57	12 07:14 23:44	12 08:10 24:31	12 09:05 25:18
13 08:29 16:19	13 08:00 17:09	13 07:04 18:51	13 06:51 19:48	13 05:43 20:42	13 04:55 21:30	13 04:51 21:45	13 05:30 22:11	13 06:23 22:57	13 07:14 23:44	13 08:10 24:31	13 09:05 25:18
14 08:29 16:20	14 08:00 17:10	14 07:04 18:51	14 06:51 19:48	14 05:43 20:42	14 04:55 21:30	14 04:51 21:45	14 05:30 22:11	14 06:23 22:57	14 07:14 23:44	14 08:10 24:31	14 09:05 25:18
15 08:29 16:21	15 08:00 17:11	15 07:04 18:51	15 06:51 19:48	15 05:43 20:42	15 04:55 21:30	15 04:51 21:45	15 05:30 22:11	15 06:23 22:57	15 07:14 23:44	15 08:10 24:31	15 09:05 25:18
16 08:29 16:22	16 08:00 17:12	16 07:04 18:51	16 06:51 19:48	16 05:43 20:42	16 04:55 21:30	16 04:51 21:45	16 05:30 22:11	16 06:23 22:57	16 07:14 23:44	16 08:10 24:31	16 09:05 25:18
17 08:29 16:23	17 08:00 17:13	17 07:04 18:51	17 06:51 19:48	17 05:43 20:42	17 04:55 21:30	17 04:51 21:45	17 05:30 22:11	17 06:23 22:57	17 07:14 23:44	17 08:10 24:31	17 09:05 25:18
18 08:29 16:24	18 08:00 17:14	18 07:04 18:51	18 06:51 19:48	18 05:43 20:42	18 04:55 21:30	18 04:51 21:45	18 05:30 22:11	18 06:23 22:57	18 07:14 23:44	18 08:10 24:31	18 09:05 25:18
19 08:29 16:25	19 08:00 17:15	19 07:04 18:51	19 06:51 19:48	19 05:43 20:42	19 04:55 21:30	19 04:51 21:45	19 05:30 22:11	19 06:23 22:57	19 07:14 23:44	19 08:10 24:31	19 09:05 25:18
20 08:29 16:26	20 08:00 17:16	20 07:04 18:51	20 06:51 19:48	20 05:43 20:42	20 04:55 21:30	20 04:51 21:45	20 05:30 22:11	20 06:23 22:57	20 07:14 23:44	20 08:10 24:31	20 09:05 25:18
21 08:29 16:27	21 08:00 17:17	21 07:04 18:51	21 06:51 19:48	21 05:43 20:42	21 04:55 21:30	21 04:51 21:45	21 05:30 22:11	21 06:23 22:57	21 07:14 23:44	21 08:10 24:31	21 09:05 25:18
22 08:29 16:28	22 08:00 17:18	22 07:04 18:51	22 06:51 19:48	22 05:43 20:42	22 04:55 21:30	22 04:51 21:45	22 05:30 22:11	22 06:23 22:57	22 07:14 23:44	22 08:10 24:31	22 09:05 25:18
23 08:29 16:29	23 08:00 17:19	23 07:04 18:51	23 06:51 19:48	23 05:43 20:42	23 04:55 21:30	23 04:51 21:45	23 05:30 22:11	23 06:23 22:57	23 07:14 23:44	23 08:10 24:31	23 09:05 25:18
24 08:29 16:30	24 08:00 17:20	24 07:04 18:51	24 06:51 19:48	24 05:43 20:42	24 04:55 21:30	24 04:51 21:45	24 05:30 22:11	24 06:23 22:57	24 07:14 23:44	24 08:10 24:31	24 09:05 25:18
25 08:29 16:31	25 08:00 17:21	25 07:04 18:51	25 06:51 19:48	25 05:43 20:42	25 04:55 21:30	25 04:51 21:45	25 05:30 22:11	25 06:23 22:57	25 07:14 23:44	25 08:10 24:31	25 09:05 25:18
26 08:29 16:32	26 08:00 17:22	26 07:04 18:51	26 06:51 19:48	26 05:43 20:42	26 04:55 21:30	26 04:51 21:45	26 05:30 22:11	26 06:23 22:57	26 07:14 23:44	26 08:10 24:31	26 09:05 25:18
27 08:29 16:33	27 08:00 17:23	27 07:04 18:51	27 06:51 19:48	27 05:43 20:42	27 04:55 21:30	27 04:51 21:45	27 05:30 22:11	27 06:23 22:57	27 07:14 23:44	27 08:10 24:31	27 09:05 25:18
28 08:29 16:34	28 08:00 17:24	28 07:04 18:51	28 06:51 19:48	28 05:43 20:42	28 04:55 21:30	28 04:51 21:45	28 05:30 22:11	28 06:23 22:57	28 07:14 23:44	28 08:10 24:31	28 09:05 25:18
29 08:29 16:35	29 08:00 17:25	29 07:04 18:51	29 06:51 19:48	29 05:43 20:42	29 04:55 21:30	29 04:51 21:45	29 05:30 22:11	29 06:23 22:57	29 07:14 23:44	29 08:10 24:31	29 09:05 25:18
30 08:29 16:36	30 08:00 17:26	30 07:04 18:51	30 06:51 19:48	30 05:43 20:42	30 04:55 21:30	30 04:51 21:45	30 05:30 22:11	30 06:23 22:57	30 07:14 23:44	30 08:10 24:31	30 09:05 25:18
31 08:29 16:37	31 08:00 17:27	31 07:04 18:51	31 06:51 19:48	31 05:43 20:42	31 04:55 21:30	31 04:51 21:45	31 05:30 22:11	31 06:23 22:57	31 07:14 23:44	31 08:10 24:31	31 09:05 25:18
Sonnenscheinstunden 253	Sonnenscheinstunden 275	Sonnenscheinstunden 207	Sonnenscheinstunden 132	Sonnenscheinstunden 55	Sonnenscheinstunden 494	Sonnenscheinstunden 506	Sonnenscheinstunden 519	Sonnenscheinstunden 458	Sonnenscheinstunden 360	Sonnenscheinstunden 262	Sonnenscheinstunden 332
astr. max. mögl. Beschattung 132	astr. max. mögl. Beschattung 207	astr. max. mögl. Beschattung 55	astr. max. mögl. Beschattung 494	astr. max. mögl. Beschattung 506	astr. max. mögl. Beschattung 519	astr. max. mögl. Beschattung 458	astr. max. mögl. Beschattung 360	astr. max. mögl. Beschattung 262	astr. max. mögl. Beschattung 332	astr. max. mögl. Beschattung 132	astr. max. mögl. Beschattung 207

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat

Sonnenaufgang (SS:MM)

Sonnenuntergang (SS:MM)

Minuten mit Schatten

Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)

Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH
Straße am Zeltplatz 7
DE-18230 Ostseebad Rerik
+49(0)38296 747 400
Katharina Rusch / katharina.rusch@eno-site.com
Berechnet:
08.01.2024 11:10/3.6.366

enosite

SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 067 - Krinitz, Ringstraße 15/16

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:
Die Sonne scheint täglich von Sonnenauf- bis -untergang
Die Rotorfläche steht immer senkrecht zur Sonneneinfallsrichtung
Die Windenergieanlage/n ist/sind immer in Betrieb

	[Januar	[Februar	[März	[April	[Mai	[Juni	[Juli	[August	[September/Oktober	[November	[Dezember											
1	08:29	08:00	08:31 (WEA 05)	07:04	06:51	05:43	06:14 (WEA 11)	04:55	04:51	05:30	06:13 (WEA 11)	06:23	07:14	07:11	08:04 (WEA 05)	08:05						
2	16:07	16:57	22	08:53 (WEA 05)	17:51	19:48	20:42	7	06:21 (WEA 11)	21:30	21:45	21:46	16:54	18	08:22 (WEA 05)	16:02						
3	08:29	07:59		08:32 (WEA 05)	07:02	06:48	05:41		06:10 (WEA 11)	04:54	04:52		05:32		06:13 (WEA 11)	06:24	07:16	07:13		08:02 (WEA 05)	08:06	
4	16:08	16:59	22	08:54 (WEA 05)	17:53	19:50	20:44	13	06:23 (WEA 11)	21:32	21:45		21:09	28	06:41 (WEA 11)	20:04	18:51	18:43	20	08:23 (WEA 05)	16:01	
5	08:29	07:57		08:32 (WEA 05)	07:00	06:46	05:39		06:09 (WEA 11)	04:53	04:53		05:33		06:13 (WEA 11)	06:26	07:18	07:15		08:02 (WEA 05)	08:08	
6	16:09	17:01	23	08:55 (WEA 05)	17:55	19:52	20:45	17	06:26 (WEA 11)	21:33	21:44		21:07	27	06:40 (WEA 11)	20:01	18:49	18:41	22	08:24 (WEA 05)	16:00	
7	08:29	07:55		08:32 (WEA 05)	06:57	06:44	05:37		06:07 (WEA 11)	04:53	04:54		05:35		06:14 (WEA 11)	06:28	07:20	07:17		08:02 (WEA 05)	08:09	
8	16:10	17:03	23	08:55 (WEA 05)	17:57	19:54	20:47	20	06:27 (WEA 11)	21:34	21:44		21:06	26	06:40 (WEA 11)	19:59	18:47	18:39	22	08:24 (WEA 05)	16:00	
9	08:28	07:53		08:32 (WEA 05)	06:55	06:41	05:35		06:06 (WEA 11)	04:52	04:55		05:37		06:14 (WEA 11)	06:30	07:22	07:19		08:01 (WEA 05)	08:10	
10	16:12	17:05	23	08:55 (WEA 05)	17:59	19:55	20:49	22	06:28 (WEA 11)	21:35	21:43		21:04	25	06:38 (WEA 11)	19:57	18:44	18:37	24	08:25 (WEA 05)	15:59	
11	08:28	07:52		08:32 (WEA 05)	06:53	06:39	05:33		06:05 (WEA 11)	04:51	04:55		05:38		06:15 (WEA 11)	06:31	07:23	07:21		08:01 (WEA 05)	08:12	
12	16:13	17:07	23	08:55 (WEA 05)	18:01	19:57	20:51	24	06:29 (WEA 11)	21:36	21:43		21:02	24	06:39 (WEA 11)	19:54	18:42	18:35	24	08:25 (WEA 05)	15:59	
13	08:28	07:50		08:32 (WEA 05)	06:50	06:36	05:31		06:04 (WEA 11)	04:50	04:56		05:40		06:15 (WEA 11)	06:33	07:25	07:23		08:01 (WEA 05)	08:13	
14	16:14	17:09	23	08:55 (WEA 05)	18:03	19:59	20:52	25	06:29 (WEA 11)	21:37	21:42		21:00	23	06:38 (WEA 11)	19:52	18:40	18:34	24	08:25 (WEA 05)	15:58	
15	08:27	07:48		08:33 (WEA 05)	06:48	06:34	05:30		06:04 (WEA 11)	04:50	04:57		05:42		06:15 (WEA 11)	06:35	07:27	07:24		08:02 (WEA 05)	08:14	
16	16:16	17:11	21	08:54 (WEA 05)	18:04	20:01	20:54	26	06:30 (WEA 11)	21:38	21:41		21:01	21	06:37 (WEA 11)	19:49	18:37	18:32	22	08:24 (WEA 05)	15:58	
17	08:27	07:46		08:33 (WEA 05)	06:46	06:32	05:28		06:03 (WEA 11)	04:49	04:58		05:43		06:16 (WEA 11)	06:36	07:29	07:26		08:02 (WEA 05)	08:16	
18	16:17	17:13	21	08:54 (WEA 05)	18:06	20:03	20:56	27	06:30 (WEA 11)	21:39	21:41		20:56	19	06:35 (WEA 11)	19:47	18:35	18:30	22	08:24 (WEA 05)	15:58	
19	08:26	07:44		08:34 (WEA 05)	06:43	06:29	05:26		06:03 (WEA 11)	04:49	04:59		05:45		06:16 (WEA 11)	06:38	07:30	07:28		08:03 (WEA 05)	08:17	
20	16:18	17:15	19	08:53 (WEA 05)	18:08	20:04	20:58	27	06:30 (WEA 11)	21:40	21:40		20:54	16	06:34 (WEA 11)	19:45	18:33	18:28	22	08:25 (WEA 05)	15:57	
21	08:26	07:42		08:35 (WEA 05)	06:41	06:27	05:24		06:03 (WEA 11)	04:48	05:01		05:47		06:20 (WEA 11)	06:40	07:32	07:30		08:04 (WEA 05)	08:18	
22	16:20	17:17	17	08:52 (WEA 05)	18:10	20:06	20:59	28	06:31 (WEA 11)	21:40	21:39		20:52	12	06:32 (WEA 11)	19:42	18:30	18:27	20	08:24 (WEA 05)	15:57	
23	08:25	07:40		08:37 (WEA 05)	06:39	06:25	05:22		06:02 (WEA 11)	04:48	05:02		05:48		06:24 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
24	16:21	17:18	13	08:50 (WEA 05)	18:12	20:08	21:01	28	06:30 (WEA 11)	21:41	21:38		20:50	3	06:27 (WEA 11)	19:40	18:28	18:25	19	08:24 (WEA 05)	15:57	
25	08:24	07:38		08:40 (WEA 05)	06:36	06:22	05:21		06:02 (WEA 11)	04:48	05:03		05:50		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
26	16:23	17:20	7	08:47 (WEA 05)	18:14	20:10	21:03	28	06:30 (WEA 11)	21:42	21:37		20:48		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
27	08:24	07:36		08:34	06:20	05:19		06:03 (WEA 11)	04:48	05:04	05:52		05:52		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
28	16:25	17:22		18:16	20:12	21:04		27	06:30 (WEA 11)	21:42	21:36		20:46		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
29	08:23	07:34		06:32	06:18	05:17		27	06:30 (WEA 11)	21:44	21:34		20:46		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
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1	16:28	17:26		18:19	20:15	21:08		27	06:30 (WEA 11)	21:44	21:34		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
2	08:30	07:30		06:27	06:13	05:14		26	06:29 (WEA 11)	21:44	21:32		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
3	16:20	17:28		18:21	20:17	21:09		26	06:29 (WEA 11)	21:44	21:32		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
4	08:31	07:28		06:24	06:11	05:13		26	06:29 (WEA 11)	21:44	21:32		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
5	16:31	17:30		18:23	20:19	21:11		26	06:29 (WEA 11)	21:44	21:32		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
6	08:32	07:26		06:22	06:09	05:11		26	06:29 (WEA 11)	21:44	21:32		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
7	16:33	17:32		18:25	20:21	21:12		26	06:29 (WEA 11)	21:44	21:32		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
8	08:33	07:24		06:20	06:07	05:10		24	06:28 (WEA 11)	21:45	21:29		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
9	16:35	17:34		18:26	20:22	21:14		24	06:28 (WEA 11)	21:45	21:29		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
10	08:36	07:22		06:17	06:04	05:08		24	06:28 (WEA 11)	21:45	21:29		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
11	16:36	17:36		18:28	20:24	21:15		23	06:28 (WEA 11)	21:45	21:28		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
12	08:37	07:20		06:15	06:02	05:07		21	06:27 (WEA 11)	21:46	21:27		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
13	16:38	17:38		18:30	20:26	21:17		21	06:27 (WEA 11)	21:46	21:27		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
14	08:38	07:18		06:12	06:00	05:05		20	06:27 (WEA 11)	21:46	21:25		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
15	16:40	17:40		18:32	20:28	21:18		20	06:27 (WEA 11)	21:46	21:25		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
16	08:42	07:15		06:10	05:58	05:04		18	06:26 (WEA 11)	21:46	21:24		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
17	16:42	17:42		18:34	20:29	21:20		16	06:25 (WEA 11)	21:46	21:22		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
18	08:43	07:13		06:08	05:56	05:03		14	06:22 (WEA 11)	21:46	21:21		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
19	16:44	17:44		18:36	20:31	21:21		16	06:25 (WEA 11)	21:46	21:22		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
20	08:45	07:14		06:05	05:53	05:02		14	06:22 (WEA 11)	21:46	21:21		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
21	16:46	6	08:49 (WEA 05)	17:46	18:37	20:33	21:23	14	06:23 (WEA 11)	21:46	21:22		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
22	08:46	08:36 (WEA 05)	07:09		06:03	05:51	05:00		11	06:22 (WEA 11)	21:46	21:19		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19
23	16:47	12	08:49 (WEA 05)	17:46	18:39	20:35	21:24	11	06:23 (WEA 11)	21:46	21:22		20:44		06:27 (WEA 11)	06:42	07:34	07:32		08:05 (WEA 05)	08:19	
24	08:06	08:34 (WEA 05)	07:06		06:00	05:49	04:59		9	06:13 (WEA 11)	04:50	04:52		27	06:43 (WEA 1 (							

SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 068 - Krinitz, Ringstraße 17

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1 08:29 16:07	08:00 16:57	08:30 (WEA 05) 07:04 17:51	06:51 05:43 19:48 20:42	04:55 20:45	04:55 21:30	06:09 (WEA 11) 04:51 06:18 (WEA 11) 21:45 06:10 (WEA 11) 04:52	05:30 21:11	06:09 (WEA 11) 06:23 06:36 (WEA 11) 20:06	07:14 18:54	07:11 18:45	08:01 (WEA 05) 08:05 08:22 (WEA 05) 16:02
2 08:29 16:08	07:59 16:59	08:30 (WEA 05) 07:02 17:53	06:48 05:41 19:50 20:44	04:54 20:44	04:54 21:32	06:16 (WEA 11) 21:45 06:16 (WEA 11) 21:45	05:30 21:09	06:09 (WEA 11) 06:23 06:36 (WEA 11) 20:04	07:14 18:51	07:11 18:43	08:01 (WEA 05) 08:05 08:22 (WEA 05) 16:01
3 08:29 16:09	07:57 17:01	08:30 (WEA 05) 07:00 17:55	06:46 05:39 19:52 20:45	04:53 20:45	04:53 21:33	06:13 (WEA 11) 21:33 06:13 (WEA 11) 21:33	05:33 21:07	06:09 (WEA 11) 06:23 06:36 (WEA 11) 20:04	07:18 18:49	07:15 18:41	08:00 (WEA 05) 08:06 08:23 (WEA 05) 16:00
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6 08:28 16:13	07:52 17:07	08:29 (WEA 05) 06:53 18:01	06:39 05:33 19:57 20:51	04:53 20:51	04:53 21:36	06:05 (WEA 11) 21:36 06:21 (WEA 11) 21:36	05:38 21:02	06:13 (WEA 11) 06:31 06:36 (WEA 11) 20:04	07:23 18:44	07:21 18:35	07:59 (WEA 05) 08:12 08:23 (WEA 05) 15:58
7 08:28 16:14	07:50 17:09	08:30 (WEA 05) 06:50 18:03	06:36 05:31 19:59 20:52	04:50 20:52	04:50 21:37	06:02 (WEA 11) 21:37 06:23 (WEA 11) 21:37	05:40 21:00	06:13 (WEA 11) 06:33 06:36 (WEA 11) 20:04	07:25 18:40	07:22 18:34	07:59 (WEA 05) 08:13 08:23 (WEA 05) 15:58
8 08:27 16:16	07:48 17:11	08:30 (WEA 05) 06:48 18:04	06:34 05:30 20:01 20:54	04:50 20:54	04:50 21:38	06:01 (WEA 11) 21:38 06:24 (WEA 11) 21:38	05:42 21:01	06:15 (WEA 11) 06:35 06:36 (WEA 11) 20:04	07:27 18:37	07:24 18:32	08:00 (WEA 05) 08:14 08:22 (WEA 05) 15:58
9 08:27 16:17	07:46 17:13	08:30 (WEA 05) 06:46 18:06	06:32 05:28 20:03 20:56	04:49 20:56	04:49 21:39	06:00 (WEA 11) 21:39 06:25 (WEA 11) 21:39	05:43 21:06	06:17 (WEA 11) 06:36 06:36 (WEA 11) 20:04	07:29 18:35	07:26 18:30	08:00 (WEA 05) 08:16 08:22 (WEA 05) 15:58
10 08:26 16:18	07:44 17:15	08:31 (WEA 05) 06:43 18:08	06:29 05:26 20:04 20:58	04:49 20:58	04:49 21:40	06:00 (WEA 11) 21:40 06:25 (WEA 11) 21:40	05:45 21:09	06:17 (WEA 11) 06:36 06:36 (WEA 11) 20:04	07:30 18:33	07:28 18:28	08:02 (WEA 05) 08:17 08:22 (WEA 05) 15:57
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12 08:25 16:21	07:40 17:19	08:33 (WEA 05) 06:39 18:12	06:25 05:22 20:08 21:01	04:48 21:01	04:48 21:41	06:00 (WEA 11) 21:41 06:25 (WEA 11) 21:41	05:48 21:38	06:15 (WEA 11) 06:36 06:36 (WEA 11) 20:04	07:34 18:29	07:32 18:25	08:04 (WEA 05) 08:19 08:22 (WEA 05) 15:57
13 08:24 16:23	07:38 17:20	08:35 (WEA 05) 06:36 18:14	06:22 05:21 20:10 21:03	04:48 21:03	04:48 21:42	06:00 (WEA 11) 21:42 06:25 (WEA 11) 21:42	05:50 21:37	06:15 (WEA 11) 06:36 06:36 (WEA 11) 20:04	07:36 18:26	07:34 18:23	08:05 (WEA 05) 08:20 08:22 (WEA 05) 15:57
14 08:23 16:25	07:36 17:22	08:38 (WEA 05) 06:34 18:16	06:20 05:19 20:12 21:04	04:48 21:04	04:48 21:42	06:00 (WEA 11) 21:42 06:25 (WEA 11) 21:42	05:52 21:36	06:14 (WEA 11) 06:36 06:36 (WEA 11) 20:04	07:38 18:23	07:36 18:22	08:07 (WEA 05) 08:21 08:22 (WEA 05) 15:57
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17 08:20 16:30	07:30 17:28	08:41 (WEA 05) 06:29 18:21	06:14 05:15 20:17 21:09	04:47 21:09	04:47 21:44	06:00 (WEA 11) 21:44 06:25 (WEA 11) 21:44	05:58 21:33	06:14 (WEA 11) 06:36 06:36 (WEA 11) 20:04	07:43 18:16	07:38 18:17	08:10 (WEA 05) 08:24 08:22 (WEA 05) 15:57
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23 08:13 16:40	07:18 17:40	08:47 (WEA 05) 06:23 18:33	06:08 05:09 20:25 21:18	04:47 21:18	04:47 21:49	06:00 (WEA 11) 21:49 06:25 (WEA 11) 21:49	05:56 21:25	06:14 (WEA 11) 06:36 06:36 (WEA 11) 20:04	07:55 18:03	07:52 18:03	08:16 (WEA 05) 08:30 08:22 (WEA 05) 15:57
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26 08:09 16:46	07:11 17:46	08:50 (WEA 05) 06:20 18:37	06:05 05:06 20:28 21:23	04:47 21:23	04:47 21:52	06:00 (WEA 11) 21:52 06:25 (WEA 11) 21:52	05:53 21:22	06:14 (WEA 11) 06:36 06:36 (WEA 11) 20:04	08:00 17:59	07:57 18:00	08:19 (WEA 05) 08:33 08:22 (WEA 05) 15:57
27 08:08 16:48	07:09 17:47	08:51 (WEA 05) 06:19 18:39	06:04 05:05 20:29 21:24	04:47 21:24	04:47 21:53	06:00 (WEA 11) 21:53 06:25 (WEA 11) 21:53	05:52 21:21	06:14 (WEA 11) 06:36 06:36 (WEA 11) 20:04	08:01 17:57	07:58 18:01	08:20 (WEA 05) 08:34 08:22 (WEA 05) 15:57
28 08:06 16:49	07:07 17:49	08:52 (WEA 05) 06:18 18:40	06:03 05:04 20:30 21:25	04:47 21:25	04:47 21:54	06:00 (WEA 11) 21:54 06:25 (WEA 11) 21:54	05:51 21:20	06:14 (WEA 11) 06:36 06:36 (WEA 11) 20:04	08:02 17:55	07:59 18:02	08:21 (WEA 05) 08:35 08:22 (WEA 05) 15:57
29 08:05 16:51	07:05 17:51	08:53 (WEA 05) 06:17 18:41	06:02 05:03 20:31 21:26	04:47 21:26	04:47 21:55	06:00 (WEA 11) 21:55 06:25 (WEA 11) 21:55	05:50 21:19	06:14 (WEA 11) 06:36 06:36 (WEA 11) 20:04	08:03 17:52	08:00 18:00	08:22 (WEA 05) 08:36 08:22 (WEA 05) 15:57
30 08:03 16:53	07:03 17:53	08:54 (WEA 05) 06:16 18:42	06:01 05:02 20:32 21:27	04:47 21:27	04:47 21:56	06:00 (WEA 11) 21:56 06:25 (WEA 11) 21:56	05:49 21:18	06:14 (WEA 11) 06:36 06:36 (WEA 11) 20:04	08:04 17:50	08:01 18:01	08:23 (WEA 05) 08:37 08:22 (WEA 05) 15:57
31 08:02 16:55	07:02 17:55	08:55 (WEA 05) 06:15 18:43	06:00 05:01 20:33 21:28	04:47 21:28	04:47 21:57	06:00 (WEA 11) 21:57 06:25 (WEA 11) 21:57	05:48 21:17	06:14 (WEA 11) 06:36 06:36 (WEA 11) 20:04	08:05 17:49	08:02 18:02	08:24 (WEA 05) 08:38 08:22 (WEA 05) 15:57
Sonneneinstrahlung 253	275	282	367	419	491	506	509	477	188	382	237
astr. max. mögl. Beschattung 66	282			644	15					61	290

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Zeitpunkt (SS:MM) Schattende (WEA mit letztem Schatten)
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH
Straße am Zeltplatz 7
DE-18230 Ostseebad Rerik
+49(0)38296 747 400
Katharina Rusch / katharina.rusch@eno-site.com
Berechnet:
08.01.2024 11:10/3.6.366

enoSITE

SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 069 - Krinitz, Lenzener Straße 5

Annahmen für Schattenwurfberechnung

- Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:
- Die Sonne scheint täglich von Sonnenauf- bis -untergang
 - Die Rotorfläche steht immer senkrecht zur Sonneneinfallsrichtung
 - Die Windenergieanlage/n ist/sind immer in Betrieb

Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1 08:29 16:07	08:00 18:57	24 08:36 (WEA 05) 07:04 19:48	06:51 20:42	05:43 20:42	04:55 21:30	25 05:57 (WEA 11) 04:51 21:45	16 06:08 (WEA 11) 05:30 21:11	24 06:07 (WEA 11) 05:23 20:06	07:14 18:54	07:11 18:08	08:10 (WEA 05) 08:05 18:45
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3 08:29 16:08	07:57 18:59	24 08:37 (WEA 05) 07:00 19:50	06:48 20:44	05:41 20:44	04:54 21:32	25 05:57 (WEA 11) 04:51 21:45	16 06:08 (WEA 11) 05:30 21:11	24 06:07 (WEA 11) 05:23 20:06	07:14 18:54	07:11 18:08	08:10 (WEA 05) 08:05 18:45
4 08:29 16:10	07:55 19:01	25 08:36 (WEA 05) 06:57 19:54	06:44 20:47	05:37 20:47	04:53 21:34	24 06:21 (WEA 11) 04:44 21:41	18 06:25 (WEA 11) 05:07 21:07	19 06:28 (WEA 11) 05:01 20:01	07:15 18:49	07:15 18:41	08:06 (WEA 05) 08:06 18:41
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astr. max. mögl. Beschattung 253	275	253	253	253	253	253	253	253	253	253	253

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM)	Schattenanfang (WEA mit erstem Schatten)
Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM)	Schattenende (WEA mit letztem Schatten)

Projekt:

O146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH
Straße am Zeltplatz 7
DE-18230 Ostseebad Rerik
+49(0)38296 747 400
Katharina Rusch / katharina.rusch@eno-site.com
Berechnet:
08.01.2024 11:10/3.6.366

enoSITE

SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 070 - Krinitz, Lenzener Straße 1a

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:
Die Sonne scheint täglich von Sonnenauf- bis -untergang
Die Rotorfläche steht immer senkrecht zur Sonneneinfallrichtung
Die Windenergieanlage/n ist/sind immer in Betrieb

	1. Januar	1. Februar	1. März	1. April	1. Mai	1. Juni	1. Juli	1. August	1. September	1. Oktober	1. November	1. Dezember					
1	08:29	08:00	08:48 (WEA 05) 07:04	06:51	06:43	04:55	05:58 (WEA 11) 04:51	06:07 (WEA 11) 05:30	06:09 (WEA 11) 06:23	06:50 (WEA 12) 07:14	07:11	08:05					
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5	08:29	07:57	08:50 (WEA 05) 07:00	06:46	06:39	04:53	06:29 (WEA 11) 04:53	06:30 (WEA 11) 05:33	23	06:31 (WEA 11) 06:26	25	06:33 (WEA 11) 20:28	06:53 (WEA 12) 07:18	07:15	08:07 (WEA 05) 18:08		
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41	08:16	08:48 (WEA 05) 17:22	08:17	06:04	06:51 (WEA 12) 05:08	05:55 (WEA 11) 04:47	06:36 (WEA 11) 05:13	06:38 (WEA 11) 06:04	06:58 (WEA 12) 06:57	18:37	18:32	22	08:45 (WEA 05) 18:10				
42	16:36	17:34	18:28	20:24	12	07:03 (WEA 12) 21:15	32	06:27 (WEA 11) 21:46	19	06:29 (WEA 11) 21:28	32	06:37 (WEA 11) 20:31	19:18	18:08	18:12	19	08:44 (WEA 05) 18:09
43	08:15	08:49 (WEA 05) 17:20	08:15	06:02	06:53 (WEA 12) 05:07	05:55 (WEA 11) 04:47	06:37 (WEA 11) 05:15	06:39 (WEA 11) 06:06	06:59 (WEA 12) 06:59	18:37	18:32	22	08:45 (WEA 05) 18:10				
44	16:38	17:36	18:30	20:26	7	07:00 (WEA 12) 21:17	32	06:27 (WEA 11) 21:46	19	06:29 (WEA 11) 21:27	32	06:37 (WEA 11) 20:29	19:13	18:05	18:11	17	08:42 (WEA 05) 18:09
45	08:13	08:48 (WEA 05) 17:18	08:12	06:00	06:50 (WEA 12) 05:05	05:55 (WEA 11) 04:48	06:37 (WEA 11) 05:16	06:39 (WEA 11) 06:07	06:54 (WEA 12) 07:01	18:37	18:32	22	08:45 (WEA 05) 18:10				
46	16:40	17:38	18:32	20:28	21	07:01 (WEA 12) 21:18	32	06:27 (WEA 11) 21:46	19	06:29 (WEA 11) 21:25	32	06:37 (WEA 11) 20:27	19:15	18:03	18:10	16	08:42 (WEA 05) 18:09
47	08:12	08:48 (WEA 05) 17:15	08:10	05:58	06:48 (WEA 12) 05:03	05:54 (WEA 11) 04:48	06:38 (WEA 11) 05:19	06:40 (WEA 11) 06:10	06:54 (WEA 12) 07:02	18:37	18:32	22	08:45 (WEA 05) 18:10				
48	16:42	17:39	18:34	20:29	21	07:02 (WEA 12) 21:19	32	06:27 (WEA 11) 21:46	19	06:29 (WEA 11) 21:24	32	06:37 (WEA 11) 20:24	19:17	18:01	18:08	13	08:41 (WEA 05) 18:00
49	08:11	08:47 (WEA 05) 17:13	08:08	05:56	06:47 (WEA 12) 05:03	05:56 (WEA 11) 04:48	06:38 (WEA 11) 05:19	06:40 (WEA 11) 06:11	06:51 (WEA 12) 07:04	18:37	18:32	22	08:45 (WEA 05) 18:10				
50	16:44	17:41	18:36	20:31	21:21	06:28 (WEA 11) 21:46	20	06:29 (WEA 11) 21:21	31	06:37 (WEA 11) 20:21	17	07:10 (WEA 12) 19:08	18:01	18:07	9	08:39 (WEA 05) 18:01	
51	08:09	08:48 (WEA 05) 17:11	08:05	05:53	06:46 (WEA 12) 05:02	05:55 (WEA 11) 04:49	06:37 (WEA 11) 05:21	06:39 (WEA 11) 06:12	06:51 (WEA 12) 07:06	18:37							

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH
Straße am Zeltplatz 7
DE-18230 Ostseebad Rerik
+49(0)38296 747 400
Katharina Rusch / katharina.rusch@eno-site.com
Berechnet:
08.01.2024 11:10/3.6.366

enosITE

SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 071 - Krinitz, Lenzener Straße 1

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:
Die Sonne scheint täglich von Sonnenauf- bis -untergang
Die Rotorfläche steht immer senkrecht zur Sonneneinfallsrichtung
Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember						
1	08:29	08:00	08:44 (WEA 05)	07:04	06:51	05:43	04:55	05:55 (WEA 11)	04:51	06:04 (WEA 11)	05:30	06:08 (WEA 11)	06:23	07:14	07:11	08:05	08:29	
2	16:07	16:57	09:10 (WEA 05)	17:51	19:48	20:42	21:30	06:25 (WEA 11)	21:45	06:28 (WEA 11)	21:11	06:31 (WEA 11)	20:06	18:54	16:45	16:02	08:22 (WEA 05)	08:06
3	08:29	07:59	08:46 (WEA 05)	07:02	06:48	05:41	04:54	05:55 (WEA 11)	04:52	06:04 (WEA 11)	05:32	06:10 (WEA 11)	06:24	07:16	07:13	08:06	08:29	
4	16:08	16:59	09:10 (WEA 05)	17:53	19:50	20:44	21:32	06:24 (WEA 11)	21:45	06:28 (WEA 11)	21:09	06:30 (WEA 11)	20:04	18:51	16:43	16:01	08:22 (WEA 05)	08:09
5	08:29	07:57	08:46 (WEA 05)	07:00	06:46	05:39	04:53	05:57 (WEA 11)	04:53	06:04 (WEA 11)	05:33	06:10 (WEA 11)	06:26	07:18	07:15	08:08	08:29	
6	16:09	17:01	09:10 (WEA 05)	17:55	19:52	20:45	21:33	06:25 (WEA 11)	21:44	06:29 (WEA 11)	21:07	06:28 (WEA 11)	20:01	18:49	16:41	16:00	08:29	
7	08:29	07:55	08:46 (WEA 05)	06:57	06:44	05:37	04:53	05:57 (WEA 11)	04:54	06:04 (WEA 11)	05:35	06:13 (WEA 11)	06:28	07:20	07:17	08:09	08:29	
8	16:10	17:03	09:10 (WEA 05)	17:57	19:54	20:47	21:34	06:24 (WEA 11)	21:44	06:29 (WEA 11)	21:06	06:26 (WEA 11)	20:03	18:47	16:39	16:00	08:29	
9	08:28	07:53	08:47 (WEA 05)	06:55	06:41	05:35	04:52	05:57 (WEA 11)	04:55	06:04 (WEA 11)	05:37	06:16 (WEA 11)	06:30	07:22	07:19	08:10	08:29	
10	16:12	17:05	09:09 (WEA 05)	17:59	19:55	20:49	21:35	06:24 (WEA 11)	21:43	06:29 (WEA 11)	21:04	06:26 (WEA 11)	20:03	18:44	16:37	16:00	08:29	
11	08:28	07:52	08:48 (WEA 05)	06:53	06:39	05:33	04:51	05:58 (WEA 11)	04:55	06:04 (WEA 11)	05:38	06:21 (WEA 11)	06:37	07:29	07:21	08:12	08:29	
12	16:13	17:07	09:08 (WEA 05)	18:01	19:57	20:51	21:36	06:24 (WEA 11)	21:43	06:29 (WEA 11)	21:02	06:26 (WEA 11)	20:03	18:42	16:35	16:00	08:29	
13	08:28	07:50	08:49 (WEA 05)	06:50	06:36	05:31	04:50	05:58 (WEA 11)	04:56	06:03 (WEA 11)	05:40	06:23 (WEA 11)	06:39	07:25	07:22	08:13	08:29	
14	16:14	17:09	09:07 (WEA 05)	18:03	19:59	20:52	21:37	06:24 (WEA 11)	21:42	06:29 (WEA 11)	21:00	06:26 (WEA 11)	20:03	18:40	16:34	16:00	08:29	
15	08:27	07:48	08:51 (WEA 05)	06:48	06:34	05:30	04:50	05:59 (WEA 11)	04:57	06:03 (WEA 11)	05:42	06:23 (WEA 11)	06:39	07:31	07:27	08:14	08:29	
16	16:16	17:11	09:05 (WEA 05)	18:04	20:01	20:54	21:38	06:24 (WEA 11)	21:41	06:29 (WEA 11)	20:58	06:26 (WEA 11)	20:03	18:37	16:32	16:00	08:29	
17	08:27	07:46	08:53 (WEA 05)	06:46	06:32	05:28	04:49	05:59 (WEA 11)	04:50	06:03 (WEA 11)	05:43	06:23 (WEA 11)	06:39	07:29	07:26	08:15	08:29	
18	16:17	17:13	09:03 (WEA 05)	18:06	20:03	20:56	21:39	06:23 (WEA 11)	21:41	06:28 (WEA 11)	20:56	06:26 (WEA 11)	20:03	18:35	16:30	16:00	08:29	
19	08:26	07:44	08:43	06:29	06:25	05:25	04:48	05:59 (WEA 11)	04:49	05:59 (WEA 11)	05:45	06:23 (WEA 11)	06:39	07:30	07:28	08:16	08:29	
20	16:18	17:15	18:08	20:04	20:58	21:40	21:24	06:24 (WEA 11)	21:40	06:29 (WEA 11)	20:54	06:26 (WEA 11)	20:03	18:32	16:28	16:00	08:29	
21	08:25	07:42	08:41	06:27	06:24	05:24	04:48	05:59 (WEA 11)	04:48	06:03 (WEA 11)	05:01	06:23 (WEA 11)	06:39	07:30	07:30	08:16	08:29	
22	16:20	17:16	18:10	20:06	20:59	21:40	21:24	06:24 (WEA 11)	21:40	06:29 (WEA 11)	20:52	06:26 (WEA 11)	20:03	18:30	16:27	16:00	08:29	
23	08:25	07:40	08:39	06:25	06:22	05:22	04:48	05:57 (WEA 11)	04:48	06:03 (WEA 11)	05:02	06:23 (WEA 11)	06:39	07:30	07:32	08:16	08:29	
24	16:21	17:18	18:12	20:08	21:01	21:41	21:23	06:23 (WEA 11)	21:38	06:28 (WEA 11)	21:30	06:26 (WEA 11)	20:03	18:28	16:25	16:00	08:29	
25	08:24	07:38	08:36	06:22	06:21	05:21	04:48	05:58 (WEA 11)	04:50	06:03 (WEA 11)	05:03	06:23 (WEA 11)	06:39	07:30	07:34	08:17	08:29	
26	16:23	17:20	18:14	20:10	21:03	21:42	21:22	06:23 (WEA 11)	21:37	06:28 (WEA 11)	21:38	06:26 (WEA 11)	20:03	18:26	16:23	16:00	08:29	
27	08:23	07:36	08:34	06:20	06:19	05:19	04:47	05:58 (WEA 11)	04:50	06:03 (WEA 11)	05:04	06:23 (WEA 11)	06:39	07:30	07:36	08:17	08:29	
28	16:25	17:22	18:16	20:12	21:04	21:42	21:22	06:23 (WEA 11)	21:36	06:28 (WEA 11)	20:46	06:26 (WEA 11)	20:03	18:25	16:22	16:00	08:29	
29	08:22	07:34	08:32	06:18	06:17	05:17	04:47	05:54 (WEA 11)	04:50	06:03 (WEA 11)	05:04	06:23 (WEA 11)	06:39	07:30	07:37	08:17	08:29	
30	16:26	17:24	18:17	20:13	21:06	21:43	21:22	06:24 (WEA 11)	21:35	06:29 (WEA 11)	20:44	06:26 (WEA 11)	20:03	18:24	16:20	16:00	08:29	
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2	08:20	07:30	08:27	06:13	06:14	05:14	04:47	05:54 (WEA 11)	04:50	06:03 (WEA 11)	05:08	06:23 (WEA 11)	06:39	07:30	07:41	08:20	08:29	
3	16:30	17:28	18:21	20:17	21:09	30	06:24 (WEA 11)	21:44	06:24 (WEA 11)	21:33	06:24 (WEA 11)	20:40	06:26 (WEA 11)	20:03	18:16	16:17	16:00	08:29
4	08:19	07:28	08:24	06:11	06:13	05:13	04:47	05:54 (WEA 11)	04:50	06:03 (WEA 11)	05:09	06:23 (WEA 11)	06:39	07:30	07:45	08:24	08:29	
5	16:31	17:30	18:23	20:19	21:11	30	06:24 (WEA 11)	21:44	06:24 (WEA 11)	21:32	06:24 (WEA 11)	20:38	06:26 (WEA 11)	20:03	18:14	16:16	16:00	08:29
6	08:18	07:26	08:22	06:09	06:11	05:11	04:47	05:54 (WEA 11)	04:50	06:03 (WEA 11)	05:11	06:23 (WEA 11)	06:39	07:30	07:45	08:24	08:29	
7	16:33	8	08:51 (WEA 05)	17:30	18:25	20:21	21:12	31	06:25 (WEA 11)	21:45	06:24 (WEA 11)	21:30	06:26 (WEA 11)	20:35	16:15	15:58	08:29	
8	08:17	08:48 (WEA 05)	07:24	06:20	06:07	05:10	04:47	05:53 (WEA 11)	04:50	06:03 (WEA 11)	05:12	06:23 (WEA 11)	06:39	07:30	07:46	08:24	08:29	
9	16:35	12	09:00 (WEA 05)	17:34	18:26	20:22	21:14	31	06:24 (WEA 11)	21:45	06:24 (WEA 11)	21:29	06:26 (WEA 11)	20:33	16:13	15:58	08:29	
10	08:16	08:47 (WEA 05)	07:22	06:17	06:04	05:08	04:47	05:53 (WEA 11)	04:50	06:03 (WEA 11)	05:13	06:23 (WEA 11)	06:39	07:30	07:48	08:24	08:29	
11	16:36	15	09:02 (WEA 05)	17:36	18:28	20:24	21:15	32	06:25 (WEA 11)	21:45	06:24 (WEA 11)	21:28	06:26 (WEA 11)	20:31	16:14	15:58	08:29	
12	08:17	08:47 (WEA 05)	07:20	06:17	06:05	05:07	04:47	05:53 (WEA 11)	04:50	06:03 (WEA 11)	05:11	06:23 (WEA 11)	06:39	07:30	07:45	08:24	08:29	
13	16:38	17	09:04 (WEA 05)	17:38	18:30	20:26	21:16	32	06:25 (WEA 11)	21:46	06:24 (WEA 11)	21:27	06:26 (WEA 11)	20:31	16:16	15:58	08:29	
14	08:18	08:46 (WEA 05)	07:18	06:12	06:00	05:05	04:48	05:53 (WEA 11)	04:50	06:04 (WEA 11)	05:16	06:23 (WEA 11)	06:39	07:30	07:54	08:27	08:29	
15	16:40	19	09:05 (WEA 05)	17:40	18:32	20:28	21:18	31	06:25 (WEA 11)	21:46	06:24 (WEA 11)	21:25	06:26 (WEA 11)	20:27	16:13	15:58	08:29	
16	08:12	08:46 (WEA 05)	07:15	06:10	05:58	05:04	04:48	05:54 (WEA 11)	04:50	06:04 (WEA 11)	05:18	06:23 (WEA 11)	06:39	07:30	07:56	08:27	08:29	
17	16:42	21	09:07 (WEA 05)	17:42	18:34	20:30	21:20	31	06:25 (WEA 11)	21:46	06:24 (WEA 11)	21:24	06:26 (WEA 11)	20:28	16:14	15:58	08:29	
18	08:11	08:45 (WEA 05)	07:13	06:08	05:56	05:03	04:48	05:54 (WEA 11)	04:50	06:04 (WEA 11)	05:19	06:23 (WEA 11)	06:39	07:30	07:58	08:27	08:29	
19	16:44	22	09:07 (WEA 05)	17:44	18:36	20:31	21:21	32	06:26 (WEA 11)	21:46	06:25 (WEA 11)	21:21	06:26 (WEA 11)	20:22	16:15	15:59	08:29	
20	08:09	08:45 (WEA 05)	07:11	06:05	05:53	05:02	04:49	05:53 (WEA 11)	04:50	06:04 (WEA 11)	05:20	06:23 (WEA 11)	06:39	07:30	07:59	08:27	08:29	
21	16:46	23	09:08 (WEA 05)	17:46	18:37	20:33	21:23	32	06:26 (WEA 11)	21:46	06:26 (WEA 11)	21:22	06:26 (WEA 11)	20:20	16:16	15:57	08:29	
22	08:08	08:44 (WEA 05)	07:09	06:03	05:51	05:00	04:49	05:53 (WEA 11)	04:50	06:04 (WEA 11)	05:22	06:23 (WEA 11)	06:39	07:30	07:57	08:27	08:29	
23	16:47	25	09:09 (WEA 05)	17:49	18:39	20:35	21:24	32	06:26 (WEA 11)	21:46	06:26 (WEA 11)	21:24	06:26 (WEA 11)	20:20	16:17	15:59	08:29	
24	08:06	08:44 (WEA 05)	07:06	06:00	05:49	04:59	04:50	05:54 (WEA 11)	04:50	06:04 (WEA 11)	05:24	06:23 (WEA 11)	06:39	07:30	07:59	08:27	08:29	
25	16:49	25	09:09 (WEA 05)	17:49	18:41	20:37	21:25	31	06:25 (WEA 11)	21:45	06:26 (WEA 11)	21:18	06:26 (WEA 11)	20:15	16:18	15:59	08:29	
26	08:05	08:42 (WEA 05)	07:07	06:00	05:48	04:58	04:50	05:55 (WEA 11)	04:50	06:04 (WEA 11)	05:25	06:23 (WEA 11)	06:39	07:30	07:58	08:27	08:29	
27	16:51	25	09:10 (WEA 05)	17:49	18:43	20:38												

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 11:10/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 072 - Krinitz, Lenzener Straße 2/3

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1 08:29 16:07	1 08:00 16:57	1 07:04 17:51	1 06:51 18:48	1 05:43 19:48	1 04:55 20:42	1 04:51 21:30	1 05:57 22:11	1 06:23 22:06	1 07:14 22:06	1 07:11 21:59	1 08:11 21:59
2 08:29 16:08	2 08:00 16:58	2 07:05 17:52	2 06:52 18:49	2 05:44 19:49	2 04:56 20:43	2 04:52 21:31	2 05:58 22:12	2 06:24 22:07	2 07:15 22:07	2 07:12 21:59	2 08:12 21:59
3 08:29 16:08	3 08:00 16:58	3 07:05 17:52	3 06:52 18:49	3 05:44 19:49	3 04:56 20:43	3 04:52 21:31	3 05:58 22:12	3 06:24 22:07	3 07:15 22:07	3 07:12 21:59	3 08:12 21:59
4 08:29 16:10	4 08:00 16:59	4 07:05 17:53	4 06:52 18:50	4 05:44 19:50	4 04:56 20:44	4 04:52 21:32	4 05:58 22:13	4 06:24 22:08	4 07:15 22:08	4 07:12 22:00	4 08:12 22:00
5 08:28 16:10	5 08:00 16:59	5 07:05 17:53	5 06:52 18:50	5 05:44 19:50	5 04:56 20:44	5 04:52 21:32	5 05:58 22:13	5 06:24 22:08	5 07:15 22:08	5 07:12 22:00	5 08:12 22:00
6 08:28 16:12	6 08:00 17:00	6 07:05 17:53	6 06:52 18:50	6 05:44 19:50	6 04:56 20:44	6 04:52 21:32	6 05:58 22:13	6 06:24 22:08	6 07:15 22:08	6 07:12 22:00	6 08:12 22:00
7 08:28 16:13	7 08:00 17:01	7 07:05 17:53	7 06:52 18:50	7 05:44 19:50	7 04:56 20:44	7 04:52 21:32	7 05:58 22:13	7 06:24 22:08	7 07:15 22:08	7 07:12 22:00	7 08:12 22:00
8 08:27 16:13	8 08:00 17:01	8 07:05 17:53	8 06:52 18:50	8 05:44 19:50	8 04:56 20:44	8 04:52 21:32	8 05:58 22:13	8 06:24 22:08	8 07:15 22:08	8 07:12 22:00	8 08:12 22:00
9 08:27 16:13	9 08:00 17:01	9 07:05 17:53	9 06:52 18:50	9 05:44 19:50	9 04:56 20:44	9 04:52 21:32	9 05:58 22:13	9 06:24 22:08	9 07:15 22:08	9 07:12 22:00	9 08:12 22:00
10 08:26 16:13	10 08:00 17:01	10 07:05 17:53	10 06:52 18:50	10 05:44 19:50	10 04:56 20:44	10 04:52 21:32	10 05:58 22:13	10 06:24 22:08	10 07:15 22:08	10 07:12 22:00	10 08:12 22:00
11 08:25 16:13	11 08:00 17:01	11 07:05 17:53	11 06:52 18:50	11 05:44 19:50	11 04:56 20:44	11 04:52 21:32	11 05:58 22:13	11 06:24 22:08	11 07:15 22:08	11 07:12 22:00	11 08:12 22:00
12 08:25 16:13	12 08:00 17:01	12 07:05 17:53	12 06:52 18:50	12 05:44 19:50	12 04:56 20:44	12 04:52 21:32	12 05:58 22:13	12 06:24 22:08	12 07:15 22:08	12 07:12 22:00	12 08:12 22:00
13 08:24 16:13	13 08:00 17:01	13 07:05 17:53	13 06:52 18:50	13 05:44 19:50	13 04:56 20:44	13 04:52 21:32	13 05:58 22:13	13 06:24 22:08	13 07:15 22:08	13 07:12 22:00	13 08:12 22:00
14 08:23 16:13	14 08:00 17:01	14 07:05 17:53	14 06:52 18:50	14 05:44 19:50	14 04:56 20:44	14 04:52 21:32	14 05:58 22:13	14 06:24 22:08	14 07:15 22:08	14 07:12 22:00	14 08:12 22:00
15 08:22 16:13	15 08:00 17:01	15 07:05 17:53	15 06:52 18:50	15 05:44 19:50	15 04:56 20:44	15 04:52 21:32	15 05:58 22:13	15 06:24 22:08	15 07:15 22:08	15 07:12 22:00	15 08:12 22:00
16 08:21 16:13	16 08:00 17:01	16 07:05 17:53	16 06:52 18:50	16 05:44 19:50	16 04:56 20:44	16 04:52 21:32	16 05:58 22:13	16 06:24 22:08	16 07:15 22:08	16 07:12 22:00	16 08:12 22:00
17 08:20 16:13	17 08:00 17:01	17 07:05 17:53	17 06:52 18:50	17 05:44 19:50	17 04:56 20:44	17 04:52 21:32	17 05:58 22:13	17 06:24 22:08	17 07:15 22:08	17 07:12 22:00	17 08:12 22:00
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24 08:12 16:13	24 08:00 17:01	24 07:05 17:53	24 06:52 18:50	24 05:44 19:50	24 04:56 20:44	24 04:52 21:32	24 05:58 22:13	24 06:24 22:08	24 07:15 22:08	24 07:12 22:00	24 08:12 22:00
25 08:11 16:13	25 08:00 17:01	25 07:05 17:53	25 06:52 18:50	25 05:44 19:50	25 04:56 20:44	25 04:52 21:32	25 05:58 22:13	25 06:24 22:08	25 07:15 22:08	25 07:12 22:00	25 08:12 22:00
26 08:10 16:13	26 08:00 17:01	26 07:05 17:53	26 06:52 18:50	26 05:44 19:50	26 04:56 20:44	26 04:52 21:32	26 05:58 22:13	26 06:24 22:08	26 07:15 22:08	26 07:12 22:00	26 08:12 22:00
27 08:09 16:13	27 08:00 17:01	27 07:05 17:53	27 06:52 18:50	27 05:44 19:50	27 04:56 20:44	27 04:52 21:32	27 05:58 22:13	27 06:24 22:08	27 07:15 22:08	27 07:12 22:00	27 08:12 22:00
28 08:08 16:13	28 08:00 17:01	28 07:05 17:53	28 06:52 18:50	28 05:44 19:50	28 04:56 20:44	28 04:52 21:32	28 05:58 22:13	28 06:24 22:08	28 07:15 22:08	28 07:12 22:00	28 08:12 22:00
29 08:06 16:13	29 08:00 17:01	29 07:05 17:53	29 06:52 18:50	29 05:44 19:50	29 04:56 20:44	29 04:52 21:32	29 05:58 22:13	29 06:24 22:08	29 07:15 22:08	29 07:12 22:00	29 08:12 22:00
30 08:05 16:13	30 08:00 17:01	30 07:05 17:53	30 06:52 18:50	30 05:44 19:50	30 04:56 20:44	30 04:52 21:32	30 05:58 22:13	30 06:24 22:08	30 07:15 22:08	30 07:12 22:00	30 08:12 22:00
31 08:04 16:13	31 08:00 17:01	31 07:05 17:53	31 06:52 18:50	31 05:44 19:50	31 04:56 20:44	31 04:52 21:32	31 05:58 22:13	31 06:24 22:08	31 07:15 22:08	31 07:12 22:00	31 08:12 22:00
Sonneneinstrahlung 253	Sonneneinstrahlung 275	Sonneneinstrahlung 266	Sonneneinstrahlung 266	Sonneneinstrahlung 266	Sonneneinstrahlung 266	Sonneneinstrahlung 266	Sonneneinstrahlung 266	Sonneneinstrahlung 266	Sonneneinstrahlung 266	Sonneneinstrahlung 266	Sonneneinstrahlung 266
astr. max. mögl. Beschattung 151	astr. max. mögl. Beschattung 275	astr. max. mögl. Beschattung 266	astr. max. mögl. Beschattung 266	astr. max. mögl. Beschattung 266	astr. max. mögl. Beschattung 266	astr. max. mögl. Beschattung 266	astr. max. mögl. Beschattung 266	astr. max. mögl. Beschattung 266	astr. max. mögl. Beschattung 266	astr. max. mögl. Beschattung 266	astr. max. mögl. Beschattung 266

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattende
				(WEA mit erstem Schatten)	(WEA mit letztem Schatten)



SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 073 - Krinitz, Lenzener Straße 4

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember	
1	08:29	08:00	08:37 (WEA 05) 07:04	06:51	05:43	04:55	05:41 (WEA 11) 04:51	05:47 (WEA 11) 05:30	06:23	07:14	07:11	08:09 (WEA 05) 08:05	
2	16:07	16:57	25 09:02 (WEA 05) 17:51	19:48	20:42	21:30	31 06:12 (WEA 11) 21:45	31 06:18 (WEA 11) 21:11	20:06	18:54	16:45	22 08:31 (WEA 05) 16:02	
3	08:29	07:59	08:37 (WEA 05) 07:02	06:48	05:41	04:54	05:41 (WEA 11) 04:52	05:47 (WEA 11) 05:32	06:24	07:16	07:13	08:08 (WEA 05) 08:06	
4	16:08	16:59	26 09:03 (WEA 05) 17:53	19:50	20:44	21:32	31 06:12 (WEA 11) 21:46	31 06:18 (WEA 11) 21:09	20:04	18:51	16:43	24 08:32 (WEA 05) 16:01	
5	08:29	07:57	08:37 (WEA 05) 07:00	06:46	05:39	04:53	05:41 (WEA 11) 04:53	05:47 (WEA 11) 05:33	06:26	07:18	07:15	08:08 (WEA 05) 08:08	
6	16:09	17:01	26 09:03 (WEA 05) 17:55	19:52	20:45	21:33	32 06:13 (WEA 11) 21:44	31 06:18 (WEA 11) 21:07	20:01	18:49	16:41	24 08:32 (WEA 05) 16:00	
7	08:29	07:55	08:37 (WEA 05) 06:57	06:44	05:37	04:53	05:41 (WEA 11) 04:54	05:47 (WEA 11) 05:36	06:28	07:20	07:17	08:07 (WEA 05) 08:09	
8	16:10	17:03	26 09:03 (WEA 05) 17:57	19:54	20:47	21:34	32 06:13 (WEA 11) 21:44	32 06:19 (WEA 11) 21:06	19:59	18:47	16:39	26 08:33 (WEA 05) 16:00	
9	08:28	07:53	08:37 (WEA 05) 06:55	06:41	05:35	04:52	05:41 (WEA 11) 04:55	05:48 (WEA 11) 05:37	06:30	07:22	07:19	08:07 (WEA 05) 08:10	
10	16:12	17:05	26 09:03 (WEA 05) 17:59	19:55	20:49	21:35	32 06:13 (WEA 11) 21:43	31 06:18 (WEA 11) 21:04	19:57	18:44	16:37	26 08:33 (WEA 05) 15:59	
11	08:28	07:52	08:37 (WEA 05) 06:53	06:39	05:33	04:51	05:42 (WEA 11) 04:55	05:48 (WEA 11) 05:38	06:31	07:23	07:21	08:07 (WEA 05) 08:12	
12	16:13	17:07	26 09:03 (WEA 05) 18:01	19:57	20:51	21:36	31 06:13 (WEA 11) 21:43	32 06:20 (WEA 11) 21:02	19:54	18:42	16:35	26 08:33 (WEA 05) 15:59	
13	08:28	07:50	08:38 (WEA 05) 06:50	06:36	05:31	04:50	05:41 (WEA 11) 04:56	05:47 (WEA 11) 05:40	06:33	07:25	07:22	08:07 (WEA 05) 08:13	
14	16:14	17:09	25 09:03 (WEA 05) 18:03	19:59	20:52	21:37	32 06:13 (WEA 11) 21:42	32 06:19 (WEA 11) 21:00	19:52	18:40	16:34	26 08:33 (WEA 05) 15:58	
15	08:27	07:48	08:38 (WEA 05) 06:48	06:34	05:30	04:50	05:42 (WEA 11) 04:57	05:48 (WEA 11) 05:42	06:35	07:27	07:24	08:07 (WEA 05) 08:14	
16	16:16	17:11	25 09:03 (WEA 05) 18:04	20:01	20:54	21:38	32 06:14 (WEA 11) 21:41	31 06:19 (WEA 11) 20:58	19:49	18:37	16:32	26 08:33 (WEA 05) 15:58	
17	08:27	07:46	08:39 (WEA 05) 06:46	06:32	05:28	04:49	05:42 (WEA 11) 04:58	05:48 (WEA 11) 05:43	06:36	07:29	07:26	08:07 (WEA 05) 08:16	
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19	08:26	07:44	08:40 (WEA 05) 06:43	06:29	05:25	04:49	05:42 (WEA 11) 04:59	05:48 (WEA 11) 05:45	06:38	07:30	07:28	08:09 (WEA 05) 08:17	
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21	08:25	07:42	08:41 (WEA 05) 06:41	06:27	05:24	04:48	05:43 (WEA 11) 05:01	05:48 (WEA 11) 05:47	06:40	07:32	07:30	08:09 (WEA 05) 08:18	
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23	08:25	07:40	08:42 (WEA 05) 06:39	06:25	05:22	04:48	05:42 (WEA 11) 05:02	05:48 (WEA 11) 05:48	06:42	07:34	07:32	08:10 (WEA 05) 08:19	
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25	08:24	07:38	08:44 (WEA 05) 06:36	06:22	05:21	04:48	05:43 (WEA 11) 05:03	05:50 (WEA 11) 05:50	06:43	07:36	07:34	08:11 (WEA 05) 08:20	
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27	08:23	07:36	08:48 (WEA 05) 06:34	06:20	05:19	04:47	05:43 (WEA 11) 05:04	05:50 (WEA 11) 05:52	06:45	07:38	07:36	08:12 (WEA 05) 08:21	
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6	08:18	07:26	06:22	06:09	05:11	05:48 (WEA 11)	04:47	05:44 (WEA 11) 05:11	05:52 (WEA 11) 06:00	06:54	07:47	07:45	
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8	08:17	07:24	06:20	06:07	05:10	05:44 (WEA 11)	04:47	05:45 (WEA 11) 05:12	05:52 (WEA 11) 06:02	06:55	07:49	07:48	
9	16:35	17:34	18:26	20:22	21:14	21 06:05 (WEA 11)	04:45	05:45 (WEA 11) 21:29	26 06:18 (WEA 11) 20:33	19:20	18:10	16:13	
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11	16:36	17:36	18:28	20:24	21:15	23 06:07 (WEA 11)	04:45	05:45 (WEA 11) 21:28	25 06:18 (WEA 11) 20:31	19:18	18:08	16:12	
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13	16:38	17:38	18:30	20:26	21:17	25 06:08 (WEA 11)	04:46	05:46 (WEA 11) 21:27	24 06:18 (WEA 11) 20:29	19:16	18:05	16:11	
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15	16:40	17:40	18:32	20:28	21:18	25 06:08 (WEA 11)	04:46	05:45 (WEA 11) 21:25	22 06:16 (WEA 11) 20:27	19:13	18:03	16:10	
16	08:12	07:15	06:10	05:58	05:04	05:43 (WEA 11)	04:48	05:45 (WEA 11) 05:18	05:55 (WEA 11) 06:09	07:02	07:56	07:53	
17	16:42	17:42	18:34	20:29	21:20	26 06:09 (WEA 11)	04:46	05:46 (WEA 11) 21:24	20 06:15 (WEA 11) 20:24	19:11	18:01	16:08	
18	08:11	07:13	06:08	05:56	05:03	05:42 (WEA 11)	04:48	05:45 (WEA 11) 05:19	05:57 (WEA 11) 06:11	07:04	07:58	07:55	
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20	08:09	07:11	06:05	05:53	05:02	05:41 (WEA 11)	04:49	05:46 (WEA 11) 05:21	05:58 (WEA 11) 06:12	07:06	07:00	07:57	
21	16:46	17:46	18:37	20:33	21:23	28 06:09 (WEA 11)	04:46	05:46 (WEA 11) 21:21	15 06:13 (WEA 11) 20:20	19:06	18:57	16:06	
22	08:08	07:09	06:03	05:51	05:00	05:41 (WEA 11)	04:49	05:46 (WEA 11) 05:22	06:01 (WEA 11) 06:14	07:07	07:02	07:58	
23	16:47	17:47	18:39	20:35	21:24	29 06:10 (WEA 11)	04:46	05:47 (WEA 11) 21:19	10 06:11 (WEA 11) 20:18	19:03	18:55	16:05	
24	08:06	07:06	06:00	05:49	04:59	05:41 (WEA 11)	04:50	05:46 (WEA 11) 05:24	06:16	07:09	07:04	07:54	
25	16:49	17:49	18:41	20:37	21:25	29 06:10 (WEA 11)	04:46	05:47 (WEA 11) 21:18	20:15	19:01	18:53	8 24:24 (WEA 05) 16:04	
26	08:05	07:05	06:04	05:54	05:03	05:41 (WEA 11)	04:50	05:46 (WEA 11) 05:25	06:17	07:11	07:06	07:51	
27	16:51	21 09:00 (WEA 05)	18:43	20:38	21:27	31 06:12 (WEA 11)	04:51	05:47 (WEA 11) 21:16	20:13	18:59	18:51	14 08:27 (WEA 05) 16:04	
28	08:03	08:38 (WEA 05) 07:09	06:56	05:45	04:57	05:41 (WEA 11)	04:51	05:47 (WEA 11) 05:17	06:19	07:13	07:07	07:51	
29	16:53	23 09:01 (WEA 05)	18:45	20:40	21:28	31 06:12 (WEA 11)	04:51	05:47 (WEA 11) 21:24	20:11	18:56	18:49	18 08:29 (WEA 05) 16:03	
30	08:02	07:37 (WEA 05) 07:22	06:53	05:42	04:54	05:41 (WEA 11)	04:51	05:47 (WEA 11) 05:21	06:21	07:15	07:09	07:54	
31	16:55	24 09:01 (WEA 05)	18:46	21:29	21:31	31 06:12 (WEA 11)	04:51	05:47 (WEA 11) 21:13	20:08	18:47	20 08:30 (WEA 05) 16:06	16:06	
Sommerferienstunden													
1	253	275	367	419	421	506	509	739	458	382	330	262	
2	138	303	380	380	934	934	739	60	398	398	237		

SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 074 - Krinitz, Lenzener Straße 6

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29	08:00	08:29 (WEA 05) 07:04	06:51	06:43	04:55	05:45 (WEA 11) 04:51	05:53 (WEA 11) 05:30	06:23	07:14	07:11	07:54 (WEA 05) 08:05
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH
Straße am Zeltplatz 7
DE-18230 Ostseebad Rerik
+49(0)38296 747 400
Katharina Rusch / katharina.rusch@eno-site.com
Berechnet:
08.01.2024 11:10/3.6.366

enosite

SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 075 - Krinitz, Lenzener Straße 8

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:
Die Sonne scheint täglich von Sonnenauf- bis -untergang
Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung
Die Windenergieanlage/n ist/sind immer in Betrieb

	[Januar	[Februar		[März	[April	[Mai		[Juni		[Juli		[August	[September]	[Oktober		[November	[Dezember				
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28	16:25	17:22	23	08:47 (WEA 05)	18:16	20:12	21:04		21:42	06:11 (WEA 11)	21:36	06:17 (WEA 11)	21:06	19:35	18:23		16:22	08:10 (WEA 05)	15:57		
29	08:22	07:34		08:25 (WEA 05)	06:32	06:18	05:17		05:51 (WEA 11)	04:47	05:44 (WEA 11)	05:05	05:49 (WEA 11)	05:54	06:47	07:39		07:37	08:10 (WEA 05)	15:57	
30	16:26	17:24	21	08:46 (WEA 05)	18:17	20:13	21:06	4	05:55 (WEA 11)	21:43	06:11 (WEA 11)	21:35	06:17 (WEA 11)	21:04	19:33	18:21		16:20	08:10 (WEA 05)	15:57	
31	08:21	07:32	20	08:26 (WEA 05)	06:29	06:16	05:16		05:48 (WEA 11)	04:47	05:44 (WEA 11)	05:07	05:49 (WEA 11)	05:55	06:48	07:41		07:39	08:10 (WEA 05)	15:57	
1	16:28	17:26	20	08:46 (WEA 05)	18:19	20:15	21:08	11	05:59 (WEA 11)	21:44	06:11 (WEA 11)	21:34	06:17 (WEA 11)	21:02	19:30	18:19		16:19	08:10 (WEA 05)	15:57	
2	08:20	07:30		08:26 (WEA 05)	06:27	06:13	05:14		05:46 (WEA 11)	04:47	05:44 (WEA 11)	05:08	05:49 (WEA 11)	05:57	06:50	07:43		07:41	08:10 (WEA 05)	15:57	
3	16:30	17:28	17	08:43 (WEA 05)	18:21	20:17	21:09	15	06:01 (WEA 11)	21:44	06:11 (WEA 11)	21:33	06:17 (WEA 11)	21:04	19:28	18:16		16:17	08:10 (WEA 05)	15:57	
4	08:19	07:28		08:28 (WEA 05)	06:24	06:11	05:13		05:44 (WEA 11)	04:47	05:45 (WEA 11)	05:09	05:49 (WEA 11)	05:59	06:52	07:45		07:43	08:10 (WEA 05)	15:57	
5	16:31	17:30	14	08:42 (WEA 05)	18:23	20:19	21:11	16	06:02 (WEA 11)	21:44	06:11 (WEA 11)	21:32	06:18 (WEA 11)	21:08	19:25	18:14		16:16	08:10 (WEA 05)	15:57	
6	08:18	07:26		08:31 (WEA 05)	06:22	06:09	05:11		05:44 (WEA 11)	04:47	05:45 (WEA 11)	05:11	05:51 (WEA 11)	06:00	06:54	07:47		07:45	08:10 (WEA 05)	15:57	
7	16:33	17:32	8	08:39 (WEA 05)	18:25	20:21	21:12	26	06:04 (WEA 11)	21:45	06:11 (WEA 11)	21:30	06:17 (WEA 11)	21:05	19:23	18:12		16:15	08:10 (WEA 05)	15:58	
8	08:17	07:24		08:30 (WEA 05)	06:20	06:07	05:10		05:42 (WEA 11)	04:47	05:45 (WEA 11)	05:12	05:51 (WEA 11)	06:02	06:55	07:49		07:46	08:10 (WEA 05)	15:58	
9	16:35	17:34		08:32 (WEA 05)	18:26	20:22	21:14	22	06:04 (WEA 11)	21:45	06:12 (WEA 11)	21:29	06:18 (WEA 11)	21:03	19:20	18:10		16:13	08:10 (WEA 05)	15:58	
10	08:16	07:22		08:31 (WEA 05)	06:17	06:04	05:08		05:42 (WEA 11)	04:47	05:45 (WEA 11)	05:13	05:51 (WEA 11)	06:04	06:57	07:51		07:48	08:10 (WEA 05)	15:58	
11	16:36	17:36		08:32 (WEA 05)	18:28	20:24	21:15	27	06:05 (WEA 11)	21:45	06:12 (WEA 11)	21:28	06:19 (WEA 11)	21:04	19:18	18:08		16:12	08:10 (WEA 05)	15:58	
12	08:15	07:20		08:30 (WEA 05)	06:15	06:02	05:07		05:42 (WEA 11)	04:47	05:46 (WEA 11)	05:15	05:52 (WEA 11)	06:06	06:59	07:52		07:50	08:10 (WEA 05)	15:58	
13	16:38	17:38		08:30 (WEA 05)	18:30	20:26	21:17	24	06:06 (WEA 11)	21:46	06:13 (WEA 11)	21:27	06:20 (WEA 11)	21:05	19:16	18:05		16:11	08:10 (WEA 05)	15:59	
14	08:13	07:18		08:32 (WEA 05)	06:12	06:00	05:05		05:41 (WEA 11)	04:48	05:46 (WEA 11)	05:16	05:53 (WEA 11)	06:07	07:01	07:54		07:54	08:10 (WEA 05)	15:59	
15	16:40	17:40		08:32 (WEA 05)	18:32	20:28	21:18	25	06:06 (WEA 11)	21:46	06:12 (WEA 11)	21:25	06:21 (WEA 11)	21:06	19:13	18:03		16:11	08:10 (WEA 05)	15:59	
16	08:12	07:15		08:30 (WEA 05)	06:10	05:58	05:04		05:41 (WEA 11)	04:48	05:46 (WEA 11)	05:18	05:53 (WEA 11)	06:09	07:02	07:56		08:58 (WEA 05)	07:53	08:10 (WEA 05)	15:59
17	16:42	17:42		08:34 (WEA 05)	18:34	20:29	21:20	26	06:07 (WEA 11)	21:46	06:12 (WEA 11)	21:24	06:24 (WEA 11)	21:09	19:11	18:01		16:11	08:10 (WEA 05)	15:59	
18	08:11	07:13		08:30 (WEA 05)	06:08	05:56	05:03		05:41 (WEA 11)	04:48	05:46 (WEA 11)	05:19	05:55 (WEA 11)	06:11	07:04	07:58		07:56 (WEA 05)	07:55	08:10 (WEA 05)	15:59
19	16:44	17:44		08:36 (WEA 05)	18:36	20:31	21:21	27	06:08 (WEA 11)	21:46	06:13 (WEA 11)	21:22	06:25 (WEA 11)	21:10	19:08	18:00		16:14	08:10 (WEA 05)	15:59	
20	08:09	07:11		08:37 (WEA 05)	06:05	05:53	05:02		05:40 (WEA 11)	04:49	05:46 (WEA 11)	05:21	05:55 (WEA 11)	06:12	07:06	07:50		07:55 (WEA 05)	07:57	08:10 (WEA 05)	15:59
21	16:46	17:46		08:37 (WEA 05)	18:37	20:33	21:23	27	06:07 (WEA 11)	21:46	06:13 (WEA 11)	21:21	06:26 (WEA 11)	21:10	19:07	18:00		16:15	08:10 (WEA 05)	15:59	
22	08:09	07:12		08:39 (WEA 05)	06:03	05:51	05:00		05:41 (WEA 11)	04:49	05:46 (WEA 11)	05:22	05:56 (WEA 11)	06:13	07:07	07:51		07:58 (WEA 05)	07:52	08:10 (WEA 05)	15:59
23	16:47	17:47		08:39 (WEA 05)																	

SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 076 - Krinitz, Lenzener Straße 9

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar		März	April	Mai		Juni		Juli		August	September	Oktober		November	Dezember					
1	08:29	08:00		07:04	06:51	05:43		04:55	05:37 (WEA 11)	04:51		05:42 (WEA 11)	05:30	06:23	07:14	07:11	07:50 (WEA 05)	08:05				
2	16:07	16:57		17:51	19:48	20:42		21:30	28	06:05 (WEA 11)	21:45	29	06:11 (WEA 11)	21:11	20:06	18:54	16:45	25	08:15 (WEA 05)	16:02		
3	08:29	07:59		08:30 (WEA 05)	07:02	06:48		05:41	04:54	05:36 (WEA 11)	04:52	29	05:42 (WEA 11)	05:32	06:24	07:16	16:43	25	08:15 (WEA 05)	16:01		
4	08:28	07:55	6	08:36 (WEA 05)	17:53	19:50	20:44		04:53	05:37 (WEA 11)	21:45	29	06:11 (WEA 11)	21:09	20:04	18:51	16:43	25	08:15 (WEA 05)	16:01		
5	08:28	07:57		08:27 (WEA 05)	07:00	06:46	05:39		04:53	05:37 (WEA 11)	04:53	29	06:12 (WEA 11)	05:33	06:26	07:18	16:41	25	08:15 (WEA 05)	16:01		
6	16:09	17:01	12	08:39 (WEA 05)	17:55	19:52	20:45		21:33	29	06:06 (WEA 11)	21:44	29	06:11 (WEA 11)	21:07	20:01	18:49	16:41	23	08:14 (WEA 05)	16:00	
7	08:29	07:55		08:25 (WEA 05)	06:57	06:44	05:37		04:53	05:37 (WEA 11)	04:54	29	06:12 (WEA 11)	05:32	06:25	07:17	16:41	23	08:14 (WEA 05)	16:00		
8	16:10	17:03	18	08:41 (WEA 05)	17:57	19:54	20:47		21:34	28	06:05 (WEA 11)	21:44	29	06:12 (WEA 11)	21:06	19:59	18:40	16:39	23	08:14 (WEA 05)	16:00	
9	08:28	07:53		08:23 (WEA 05)	06:55	06:41	05:35		04:52	05:37 (WEA 11)	04:55	29	06:12 (WEA 11)	05:37	06:30	07:22	16:39	23	08:14 (WEA 05)	16:00		
10	16:12	17:05	19	08:42 (WEA 05)	17:59	19:55	20:49		21:35	28	06:05 (WEA 11)	21:43	29	06:12 (WEA 11)	21:04	19:57	18:44	16:37	21	08:13 (WEA 05)	15:59	
11	08:28	07:52		08:22 (WEA 05)	06:53	06:39	05:33		04:51	05:37 (WEA 11)	04:55	29	06:12 (WEA 11)	05:38	06:31	07:23	16:35	21	08:13 (WEA 05)	15:59		
12	16:13	17:07	21	08:43 (WEA 05)	18:01	19:57	20:51		21:36	29	06:06 (WEA 11)	21:43	28	06:12 (WEA 11)	21:02	19:54	18:42	16:35	19	08:12 (WEA 05)	15:59	
13	08:28	07:50		08:22 (WEA 05)	06:50	06:36	05:31		04:50	05:37 (WEA 11)	04:56	29	06:12 (WEA 11)	05:40	06:33	07:25	16:34	16	08:11 (WEA 05)	15:58		
14	16:14	17:09	22	08:44 (WEA 05)	18:03	19:59	20:52		21:37	29	06:06 (WEA 11)	21:42	29	06:12 (WEA 11)	21:00	19:52	18:40	16:34	16	08:11 (WEA 05)	15:58	
15	08:27	07:48		08:21 (WEA 05)	06:48	06:34	05:30		04:50	05:38 (WEA 11)	04:57	29	06:12 (WEA 11)	05:42	06:35	07:27	16:34	16	08:11 (WEA 05)	15:58		
16	16:16	17:11	24	08:45 (WEA 05)	18:04	20:01	20:54		21:38	28	06:06 (WEA 11)	21:41	29	06:12 (WEA 11)	20:58	19:49	18:37	16:32	12	08:09 (WEA 05)	15:58	
17	08:27	07:46		08:21 (WEA 05)	06:46	06:32	05:28		04:49	05:37 (WEA 11)	04:58	29	06:12 (WEA 11)	20:58	19:49	18:37	16:32	12	08:09 (WEA 05)	15:58		
18	16:17	17:13	26	08:45 (WEA 05)	18:06	20:03	20:56		21:39	29	06:06 (WEA 11)	21:41	29	06:12 (WEA 11)	20:56	19:47	18:35	16:30	5	08:05 (WEA 05)	15:58	
19	08:26	07:44		08:20 (WEA 05)	06:43	06:29	05:26		04:49	05:38 (WEA 11)	04:59	29	06:12 (WEA 11)	05:45	06:38	07:30	16:28			15:57		
20	16:18	17:15	26	08:46 (WEA 05)	18:08	20:04	20:58		21:40	29	06:07 (WEA 11)	21:40	28	06:12 (WEA 11)	20:54	19:45	18:32	16:28			15:57	
21	08:25	07:42		08:20 (WEA 05)	06:41	06:27	05:24		04:48	05:38 (WEA 11)	05:01	28	06:12 (WEA 11)	20:52	19:42	18:30	16:27				15:57	
22	16:20	17:17	26	08:46 (WEA 05)	18:10	20:06	20:59		21:40	29	06:07 (WEA 11)	21:39	28	06:12 (WEA 11)	20:52	19:42	18:30	16:27				15:57
23	08:25	07:40		08:21 (WEA 05)	06:39	06:25	05:22		04:48	05:38 (WEA 11)	05:02	28	06:12 (WEA 11)	05:48	06:42	07:34	16:27				15:57	
24	16:21	17:18	25	08:46 (WEA 05)	18:12	20:08	21:01		21:41	28	06:06 (WEA 11)	21:38	28	06:12 (WEA 11)	20:50	19:40	18:29	16:25				15:57
25	08:24	07:38		08:21 (WEA 05)	06:36	06:22	05:21		04:48	05:38 (WEA 11)	05:03	28	06:12 (WEA 11)	05:50	06:43	07:36	16:24				15:57	
26	16:23	17:20	25	08:46 (WEA 05)	18:14	20:10	21:03		21:42	29	06:07 (WEA 11)	21:37	28	06:13 (WEA 11)	20:48	19:37	18:26	16:23				15:57
27	08:23	07:36		08:21 (WEA 05)	06:34	06:20	05:19		04:48	05:39 (WEA 11)	05:04	28	06:13 (WEA 11)	05:52	06:45	07:38	16:22				15:57	
28	16:25	17:22	25	08:46 (WEA 05)	18:16	20:12	21:04		21:42	28	06:07 (WEA 11)	21:36	27	06:13 (WEA 11)	20:46	19:35	18:23	16:22				15:57
29	08:22	07:34		08:22 (WEA 05)	06:32	06:18	05:17		04:47	05:39 (WEA 11)	05:05	28	06:13 (WEA 11)	05:54	06:47	07:39	16:21				15:57	
30	16:26	17:24	24	08:46 (WEA 05)	18:17	20:13	21:06		21:43	28	06:07 (WEA 11)	21:35	26	06:12 (WEA 11)	20:44	19:33	18:21	16:20				15:57
31	08:21	07:32		08:22 (WEA 05)	06:29	06:16	05:16		04:47	05:39 (WEA 11)	05:07	28	06:13 (WEA 11)	05:55	06:48	07:41	16:19				15:57	
1	16:28	17:26	23	08:45 (WEA 05)	18:19	20:15	21:08		21:44	29	06:08 (WEA 11)	21:34	26	06:12 (WEA 11)	20:42	19:30	18:19	16:19				15:57
2	08:20	07:30		08:23 (WEA 05)	06:27	06:13	05:14		04:47	05:39 (WEA 11)	05:08	28	06:13 (WEA 11)	05:57	06:50	07:43	16:18				15:57	
3	16:30	17:28	20	08:43 (WEA 05)	18:21	20:17	21:09		21:44	29	06:08 (WEA 11)	21:33	25	06:11 (WEA 11)	20:40	19:28	18:16	16:17				15:57
4	08:19	07:25		08:24 (WEA 05)	06:24	06:11	05:13		04:47	05:40 (WEA 11)	05:09	28	06:11 (WEA 11)	20:38	19:25	18:14	16:16				15:57	
5	16:31	17:30	18	08:42 (WEA 05)	18:23	20:19	21:11	6	05:52 (WEA 11)	21:44	24	06:11 (WEA 11)	20:38	19:25	18:14	16:16					15:57	
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8	08:17	07:24		08:29 (WEA 05)	06:20	06:07	05:10		04:47	05:40 (WEA 11)	05:12	28	06:11 (WEA 11)	20:35	19:23	18:12	16:15				15:58	
9	16:35	17:34	9	08:38 (WEA 05)	18:26	20:22	21:14	15	05:56 (WEA 11)	21:45	28	06:11 (WEA 11)	20:33	19:20	18:10	16:13					15:58	
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13	16:38	17:38		18:30	20:26	21:17	19	05:59 (WEA 11)	21:46	28	06:09 (WEA 11)	21:27	18	06:09 (WEA 11)	20:29	19:16	18:05	16:11				15:59
14	08:13	07:18		08:32	20:28	21:18	21	06:00 (WEA 11)	21:46	28	06:09 (WEA 11)	21:25	17	06:08 (WEA 11)	20:27	19:13	18:03	16:10				15:59
15	16:40	17:40		18:32	20:28	21:18	21	06:00 (WEA 11)	21:46	28	06:09 (WEA 11)	21:25	17	06:08 (WEA 11)	20:27	19:13	18:03	16:10				15:59
16	08:12	07:15		08:30 (WEA 05)	06:10	05:58	05:04		04:47	05:39 (WEA 11)	05:18	28	06:09 (WEA 11)	20:27	19:13	18:03	16:10				15:59	
17	16:42	17:42		18:34	20:29	21:20	22	06:01 (WEA 11)	21:46	28	06:09 (WEA 11)	21:24	13	06:06 (WEA 11)	20:24	19:11	18:01	16:09				16:00
18	08:11	07:13		08:30 (WEA 05)	06:08	05:56	05:03		04:47	05:38 (WEA 11)	05:19	28	06:09 (WEA 11)	20:24	19:11	18:01	16:09				16:00	
19	16:44	17:44		18:36	20:31	21:21	24	06:02 (WEA 11)	21:46	28	06:10 (WEA 11)	21:22	10	06:05 (WEA 11)	20:22	19:08	16:59	21	08:14 (WEA 05)	16:07	16:01	
20	08:09	07:11		08:37	20:33	21:23	25	06:02 (WEA 11)	21:49	29	06:10 (WEA 11)	21:21		20:20	19:06	16:57	23	08:15 (WEA 05)	16:06		16:01	
21	16:46	17:46		18:37	20:33	21:23	25	06:02 (WEA 11)	21:46	28	06:10 (WEA 11)	21:21		20:20	19:06	16:57	23	08:15 (WEA 05)	16:06		16:01	
22	08:08	07:09		08:38	20:35	21:24	25	06:03 (WEA 11)	21:46	28	06:10 (WEA 11)	21:19		20:18	19:03	16:55	24	08:15 (WEA 05)	16:05		16:02	
23	16:47	17:47		18:39	20:35	21:24	25	06:03 (WEA 11)	21:46	28	06:10 (WEA 11)	21:19		20:18	19:03	16:55	24	08:15 (WEA 05)	16:05		16:02	
24	08:06	07:06		08:39	20:35	21:24	25	06:03 (WEA 11)	21:46	28	06:10 (WEA 11)	21:19		20:18	19:03	16:55	24	08:15 (WEA 05)	16:05			

Projekt:

O146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH
Straße am Zeltplatz 7
DE-18230 Ostseebad Rerik
+49(0)38296 747 400
Katharina Rusch / katharina.rusch@eno-site.com
Berechnet:
08.01.2024 11:10/3.6.366

enosite

SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 078 - Krinitz, Lenzener Straße 10

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

- Die Sonne scheint täglich von Sonnenauf- bis -untergang
- Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlrichtung
- Die Windenergieanlagen/n ist/sind immer in Betrieb

Januar		Februar	März		April	Mai	Juni		Juli	August	September	Oktober	November	Dezember
1	08:29	08:00		07:04	06:51	05:43		04:55	05:37 (WEA 11)	04:51	05:43 (WEA 11)	05:30	06:23	07:14
	16:07	16:57		17:51	19:48	20:42		21:30	28	06:05 (WEA 11)	21:11	20:06	18:54	
2	08:29	07:59		07:02	06:48	05:41		04:54	05:37 (WEA 11)	04:52	05:43 (WEA 11)	05:32	06:24	07:16
	16:08	16:58		17:53	19:50	20:44		21:32	28	06:05 (WEA 11)	21:09	20:04	18:51	
3	08:29	07:57		07:00	06:46	05:39		04:53	05:38 (WEA 11)	04:53	05:43 (WEA 11)	05:33	06:26	07:18
	16:09	17:01		17:55	19:52	20:45		21:33	28	06:06 (WEA 11)	21:04	20:01	18:49	
4	08:29	07:55		06:25 (WEA 05)	06:57	06:44	05:37	04:53	05:37 (WEA 11)	04:54	05:44 (WEA 11)	05:35	06:28	07:20
	16:10	17:03	8	08:35 (WEA 05)	17:57	19:54	20:47	21:34	29	06:06 (WEA 11)	21:04	20:01	18:49	
5	08:28	07:53		06:22 (WEA 05)	06:55	06:41	05:35	04:52	05:37 (WEA 11)	04:55	05:44 (WEA 11)	05:37	06:30	07:22
	16:12	17:05	14	08:36 (WEA 05)	17:59	19:55	20:49	21:35	28	06:05 (WEA 11)	21:03	20:00	18:48	
6	08:28	07:52		06:21 (WEA 05)	06:53	06:39	05:33	04:51	05:38 (WEA 11)	04:55	05:44 (WEA 11)	05:38	06:31	07:23
	16:13	17:07	17	08:38 (WEA 05)	18:01	19:57	20:51	21:36	28	06:06 (WEA 11)	21:03	20:00	18:48	
7	08:28	07:50		06:19 (WEA 05)	06:50	06:36	05:31	04:50	05:38 (WEA 11)	04:56	05:44 (WEA 11)	05:40	06:33	07:25
	16:14	17:09	20	08:39 (WEA 05)	18:03	19:59	20:52	21:37	28	06:06 (WEA 11)	21:02	20:00	18:48	
8	08:27	07:48		06:19 (WEA 05)	06:48	06:34	05:30	04:50	05:38 (WEA 11)	04:57	05:44 (WEA 11)	05:42	06:35	07:27
	16:16	17:11	21	08:40 (WEA 05)	18:04	20:01	20:54	21:38	28	06:06 (WEA 11)	21:01	20:00	18:48	
9	08:27	07:46		06:18 (WEA 05)	06:46	06:32	05:28	04:49	05:38 (WEA 11)	04:58	05:44 (WEA 11)	05:43	06:36	07:29
	16:17	17:13	23	08:41 (WEA 05)	18:06	20:03	20:56	21:39	28	06:06 (WEA 11)	21:01	20:00	18:48	
10	08:26	07:44		06:17 (WEA 05)	06:43	06:29	05:26	04:49	05:39 (WEA 11)	04:59	05:44 (WEA 11)	05:45	06:38	07:30
	16:18	17:15	24	08:41 (WEA 05)	18:08	20:04	20:58	21:40	27	06:06 (WEA 11)	21:00	20:00	18:48	
11	08:25	07:42		06:17 (WEA 05)	06:41	06:27	05:24	04:48	05:39 (WEA 11)	05:01	05:44 (WEA 11)	05:47	06:40	07:32
	16:20	17:17	25	08:42 (WEA 05)	18:10	20:06	20:59	21:40	28	06:07 (WEA 11)	21:00	20:00	18:48	
12	08:25	07:40		06:17 (WEA 05)	06:39	06:25	05:22	04:48	05:39 (WEA 11)	05:02	05:45 (WEA 11)	05:48	06:42	07:34
	16:21	17:18	25	08:42 (WEA 05)	18:12	20:08	21:01	21:41	27	06:06 (WEA 11)	21:00	20:00	18:48	
13	08:24	07:38		06:17 (WEA 05)	06:36	06:22	05:21	04:48	05:39 (WEA 11)	05:03	05:46 (WEA 11)	05:50	06:43	07:36
	16:23	17:20	25	08:42 (WEA 05)	18:14	20:10	21:03	21:42	28	06:07 (WEA 11)	21:00	20:00	18:48	
14	08:23	07:36		06:17 (WEA 05)	06:34	06:20	05:19	04:48	05:40 (WEA 11)	05:04	05:46 (WEA 11)	05:52	06:45	07:38
	16:25	17:22	25	08:42 (WEA 05)	18:16	20:12	21:04	21:42	27	06:07 (WEA 11)	21:00	20:00	18:48	
15	08:22	07:34		06:16 (WEA 05)	06:32	06:18	05:17	04:47	05:40 (WEA 11)	05:05	05:46 (WEA 11)	05:54	06:47	07:40
	16:26	17:24	24	08:42 (WEA 05)	18:17	20:13	21:06	21:43	27	06:07 (WEA 11)	21:00	20:00	18:48	
16	08:21	07:32		06:16 (WEA 05)	06:29	06:16	05:16	04:47	05:40 (WEA 11)	05:07	05:46 (WEA 11)	05:55	06:48	07:41
	16:28	17:26	24	08:42 (WEA 05)	18:19	20:15	21:08	21:44	27	06:07 (WEA 11)	21:00	20:00	18:48	
17	08:20	07:30		06:16 (WEA 05)	06:27	06:13	05:14	04:47	05:40 (WEA 11)	05:08	05:47 (WEA 11)	05:57	06:50	07:43
	16:30	17:28	22	08:40 (WEA 05)	18:21	20:17	21:09	3	05:52 (WEA 11)	21:44	05:47 (WEA 11)	20:40	19:28	18:16
18	08:19	07:28		06:16 (WEA 05)	06:24	06:11	05:13	04:47	05:44 (WEA 11)	05:09	05:47 (WEA 11)	05:59	06:52	07:45
	16:31	17:30	21	08:40 (WEA 05)	18:23	20:19	21:11	11	05:55 (WEA 11)	21:44	05:47 (WEA 11)	20:38	19:25	18:14
19	08:18	07:26		06:20 (WEA 05)	06:22	06:09	05:11	04:47	05:43 (WEA 11)	05:11	05:48 (WEA 11)	06:00	06:54	07:47
	16:33	17:32	19	08:39 (WEA 05)	18:25	20:21	21:12	14	05:57 (WEA 11)	21:45	05:48 (WEA 11)	20:35	19:23	18:12
20	08:17	07:24		06:22 (WEA 05)	06:20	06:07	05:10	04:47	05:42 (WEA 11)	05:12	05:48 (WEA 11)	06:02	06:55	07:49
	16:35	17:34	15	08:37 (WEA 05)	18:26	20:22	21:14	17	05:59 (WEA 11)	21:45	05:48 (WEA 11)	20:33	19:20	18:10
21	08:16	07:22		06:24 (WEA 05)	06:17	06:04	05:08	04:47	05:40 (WEA 11)	05:13	05:49 (WEA 11)	06:04	06:57	07:51
	16:36	17:36	11	08:35 (WEA 05)	18:28	20:24	21:15	19	05:59 (WEA 11)	21:45	05:48 (WEA 11)	20:31	19:18	18:08
22	08:15	07:20		06:15	06:02	05:07	05:39 (WEA 11)	04:47	05:42 (WEA 11)	05:15	05:50 (WEA 11)	06:06	06:59	07:52
	16:38	17:38		18:30	20:26	21:17	21	06:00 (WEA 11)	21:46	27	06:09 (WEA 11)	20:29	19:16	18:05
23	08:13	07:18		06:12	06:00	05:05	05:39 (WEA 11)	04:48	05:42 (WEA 11)	05:16	05:51 (WEA 11)	06:07	07:01	07:54
	16:40	17:40		18:32	20:28	21:18	22	06:01 (WEA 11)	21:46	27	06:09 (WEA 11)	20:27	19:13	18:03
24	08:12	07:15		06:10	05:58	05:04	05:39 (WEA 11)	04:48	05:42 (WEA 11)	05:18	05:52 (WEA 11)	06:09	07:02	07:56
	16:42	17:42		18:34	20:29	21:20	23	06:02 (WEA 11)	21:46	27	06:09 (WEA 11)	20:24	19:11	18:01
25	08:11	07:13		06:08	05:56	05:03	05:38 (WEA 11)	04:48	05:43 (WEA 11)	05:19	05:54 (WEA 11)	06:11	07:04	06:58
	16:44	17:44		18:36	20:31	21:21	25	06:03 (WEA 11)	21:46	27	06:10 (WEA 11)	20:22	19:08	18:00
26	08:09	07:11		06:05	05:53	05:02	05:37 (WEA 11)	04:49	05:42 (WEA 11)	05:21	05:56 (WEA 11)	06:12	07:06	07:00
	16:46	17:46		18:37	20:33	21:23	25	06:02 (WEA 11)	21:46	28	06:10 (WEA 11)	20:20	19:06	18:06
27	08:08	07:09		06:03	05:51	05:00	05:37 (WEA 11)	04:49	05:42 (WEA 11)	05:22	06:14	07:07	07:02	
	16:47	17:47		18:39	20:35	21:24	26	06:03 (WEA 11)	21:46	27	06:09 (WEA 11)	20:19	19:03	18:05
28	08:06	07:06		06:00	05:49	04:59	05:37 (WEA 11)	04:50	05:43 (WEA 11)	05:24	06:16	07:09	07:04	
	16:49	17:49		18:41	20:37	21:25	26	06:03 (WEA 11)	21:46	27	06:10 (WEA 11)	20:18	19:01	18:03
29	08:05			06:58	05:47	04:58	05:38 (WEA 11)	04:50	05:42 (WEA 11)	05:25	06:18	07:11	07:05	
	16:51			19:43	20:38	21:27	26	06:04 (WEA 11)	21:45	28	06:10 (WEA 11)	20:13	18:59	18:01
30	08:03			06:56	05:45	04:57	05:37 (WEA 11)	04:51	05:43 (WEA 11)	05:27	06:19	07:13	07:07	
	16:53			19:45	20:40	21:28	28	06:05 (WEA 11)	21:45	27	06:10 (WEA 11)	20:11	18:56	18:03
31	08:02			06:53		04:56	05:37 (WEA 11)				06:21		07:09	
	16:55			19:46		21:29	28	06:05 (WEA 11)			20:08		16:47	
Sonnenscheinstunden		253	275		367	419	491		506		509		458	382
astr.max.mögl.Beschattung			363				314		825		635		242	124

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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SHADOW - Kalender

Berechnung: Steesow | V1 | ZB | BA1 & BA2 | 9x eno160-6.0 | 165 m NH Schattenrezeptor: IO 079 - Krinitz, Lenzener Straße 11

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29 16:07	08:00 16:57	07:04 17:51	06:51 19:48	05:43 20:42	04:55 21:30	05:34 (WEA 11) 21:45	05:40 (WEA 11) 21:11	05:30 20:06	05:23 18:54	07:11 16:45	08:05 16:02
2	08:29 16:08	07:59 16:58	07:02 17:53	06:48 19:50	05:41 20:44	04:54 21:32	05:34 (WEA 11) 21:45	05:39 (WEA 11) 21:09	05:32 20:04	05:26 18:51	07:13 16:43	08:06 16:01
3	08:29 16:09	07:57 17:01	07:00 17:55	06:46 19:52	05:39 20:45	04:53 21:33	05:35 (WEA 11) 21:44	05:40 (WEA 11) 21:07	05:33 20:01	05:26 18:49	07:15 16:41	08:08 16:00
4	08:29 16:10	07:55 17:03	06:57 17:57	06:44 19:54	05:37 20:47	04:53 21:34	05:34 (WEA 11) 21:44	05:40 (WEA 11) 21:06	05:35 20:02	05:28 18:47	07:17 16:39	08:09 16:00
5	08:28 16:12	07:53 17:05	06:55 17:59	06:41 19:55	05:35 20:49	04:52 21:35	05:34 (WEA 11) 21:43	05:40 (WEA 11) 21:04	05:37 20:00	05:22 18:44	07:19 16:37	08:10 15:59
6	08:28 16:13	07:52 17:07	06:53 18:01	06:39 19:57	05:33 20:51	04:51 21:36	05:35 (WEA 11) 21:43	05:41 (WEA 11) 21:02	05:38 20:01	05:23 18:42	07:21 16:35	08:12 15:59
7	08:28 16:14	07:50 17:09	06:50 18:03	06:36 19:59	05:31 20:52	04:51 21:37	05:34 (WEA 11) 21:42	05:40 (WEA 11) 21:00	05:33 20:02	05:25 18:40	07:22 16:34	08:13 15:58
8	08:27 16:16	07:48 17:11	06:48 18:05	06:34 20:01	05:30 20:54	04:50 21:38	05:35 (WEA 11) 21:41	05:41 (WEA 11) 21:02	05:36 20:00	05:27 18:37	07:24 16:32	08:14 15:58
9	08:27 16:17	07:46 17:13	06:46 18:06	06:32 20:03	05:28 20:56	04:49 21:39	05:34 (WEA 11) 21:41	05:41 (WEA 11) 21:01	05:37 20:00	05:29 18:35	07:26 16:30	08:16 15:58
10	08:26 16:18	07:44 17:15	06:43 18:08	06:29 20:04	05:26 20:58	04:49 21:40	05:35 (WEA 11) 21:40	05:41 (WEA 11) 21:01	05:38 20:00	05:30 18:32	07:28 16:28	08:17 15:57
11	08:25 16:20	07:42 17:17	06:41 18:10	06:27 20:06	05:24 20:59	04:48 21:40	05:35 (WEA 11) 21:39	05:41 (WEA 11) 21:02	05:40 20:02	05:32 18:30	07:30 16:27	08:18 15:57
12	08:25 16:21	07:40 17:18	06:39 18:12	06:25 20:08	05:22 21:01	04:48 21:41	05:35 (WEA 11) 21:38	05:42 (WEA 11) 21:03	05:40 20:00	05:34 18:28	07:32 16:25	08:19 15:57
13	08:24 16:23	07:38 17:20	06:36 18:14	06:22 20:10	05:21 21:03	04:48 21:42	05:35 (WEA 11) 21:37	05:43 (WEA 11) 21:04	05:50 20:00	05:43 18:26	07:34 16:23	08:20 15:57
14	08:23 16:25	07:36 17:22	06:34 18:16	06:20 20:12	05:19 21:04	04:48 21:42	05:36 (WEA 11) 21:36	05:43 (WEA 11) 21:04	05:52 20:00	05:45 18:23	07:36 16:22	08:21 15:57
15	08:22 16:26	07:34 17:24	06:32 18:17	06:18 20:13	05:17 21:06	04:47 21:43	05:36 (WEA 11) 21:35	05:44 (WEA 11) 21:05	05:54 20:00	05:47 18:21	07:37 16:20	08:22 15:57
16	08:21 16:28	07:32 17:26	06:29 18:19	06:16 20:15	05:16 21:08	04:47 21:44	05:36 (WEA 11) 21:34	05:44 (WEA 11) 21:04	05:55 20:00	05:48 18:19	07:39 16:19	08:23 15:57
17	08:20 16:30	07:30 17:28	06:27 18:21	06:13 20:17	05:14 21:09	04:47 21:44	05:37 (WEA 11) 21:33	05:44 (WEA 11) 21:04	05:57 20:00	05:50 18:16	07:41 16:17	08:24 15:57
18	08:19 16:31	07:28 17:30	06:24 18:23	06:11 20:19	05:13 21:11	04:47 21:44	05:37 (WEA 11) 21:32	05:45 (WEA 11) 21:03	05:59 20:00	05:62 18:14	07:43 16:17	08:25 15:57
19	08:18 16:33	07:26 17:32	06:22 18:25	06:09 20:21	05:11 21:12	04:47 21:45	05:37 (WEA 11) 21:30	05:46 (WEA 11) 21:03	06:00 20:00	06:04 18:12	07:45 16:15	08:26 15:58
20	08:17 16:35	07:24 17:34	06:20 18:26	06:07 20:22	05:10 21:14	04:47 21:46	05:37 (WEA 11) 21:29	05:47 (WEA 11) 21:02	06:05 20:00	06:08 18:10	07:47 16:15	08:27 15:58
21	08:16 16:36	07:22 17:36	06:17 18:28	06:04 20:24	05:08 21:15	04:47 21:46	05:37 (WEA 11) 21:28	05:48 (WEA 11) 21:01	06:06 20:00	06:09 18:08	07:48 16:15	08:28 15:58
22	08:15 16:38	07:20 17:38	06:15 18:30	06:02 20:26	05:07 21:17	04:47 21:46	05:38 (WEA 11) 21:27	05:50 (WEA 11) 21:01	06:06 20:00	06:09 18:05	07:50 16:15	08:29 15:59
23	08:13 16:40	07:18 17:40	06:12 18:32	06:00 20:28	05:05 21:18	04:48 21:46	05:38 (WEA 11) 21:25	05:51 (WEA 11) 21:01	06:07 20:00	06:10 18:03	07:52 16:15	08:27 15:59
24	08:12 16:42	07:15 17:42	06:10 18:34	05:58 20:29	05:04 21:20	04:48 21:46	05:38 (WEA 11) 21:24	05:53 (WEA 11) 21:01	06:09 20:00	06:12 18:01	07:54 16:16	08:28 16:00
25	08:11 16:44	07:13 17:44	06:08 18:36	05:56 20:31	05:03 21:21	04:48 21:46	05:39 (WEA 11) 21:22	05:54 (WEA 11) 21:02	06:11 20:00	06:14 18:00	07:55 16:17	08:29 16:01
26	08:09 16:46	07:11 17:46	06:05 18:37	05:53 20:33	05:02 21:23	04:49 21:46	05:39 (WEA 11) 21:21	05:56 (WEA 11) 21:02	06:12 20:00	06:15 18:00	07:57 16:18	08:30 16:02
27	08:08 16:47	07:09 17:47	06:03 18:39	05:51 20:35	05:00 21:24	04:49 21:46	05:39 (WEA 11) 21:19	05:58 (WEA 11) 21:02	06:14 20:00	06:17 18:00	07:58 16:19	08:31 16:03
28	08:06 16:49	07:06 17:49	06:00 18:41	05:49 20:37	04:59 21:25	04:50 21:46	05:39 (WEA 11) 21:18	05:59 (WEA 11) 21:03	06:16 20:00	06:20 18:00	07:59 16:20	08:32 16:04
29	08:05 16:51	07:05 17:51	05:58 18:43	05:47 20:38	04:58 21:27	04:50 21:46	05:39 (WEA 11) 21:16	05:59 (WEA 11) 21:04	06:18 20:00	06:23 18:00	08:00 16:21	08:33 16:05
30	08:03 16:53	07:07 17:53	05:56 18:45	05:45 20:40	04:57 21:28	04:51 21:46	05:39 (WEA 11) 21:14	05:59 (WEA 11) 21:04	06:19 20:00	06:26 18:00	08:01 16:22	08:34 16:06
31	08:02 16:55	07:08 17:55	05:53 18:46	05:46 20:41	04:56 21:29	04:56 21:46	05:39 (WEA 11) 21:13	05:59 (WEA 11) 21:04	06:21 20:00	06:27 18:00	08:02 16:23	08:35 16:07
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	330	262	237
astr.max.mögl.Beschattung		360			241	832	561			284	85	

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM)	Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

3. Variante 2 - Bauabschnitt 1 (Steesow II)



Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 040 - Zuggelrade, Waldstraße 6

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29 16:07	08:00 16:57	07:04 17:51	06:51 19:48	05:43 20:42	04:55 21:30	04:52 21:45	05:28 (WEA 03) 21:11	06:23 20:06	07:14 18:54	07:11 16:45	08:04 16:02
2	08:29 16:08	07:58 16:59	07:02 17:53	06:48 19:50	05:41 20:44	04:54 21:31	04:52 21:44	05:28 (WEA 03) 21:09	06:24 20:04	07:16 18:51	07:13 16:43	08:06 16:01
3	08:29 16:09	07:57 17:01	07:00 17:55	06:46 19:52	05:39 20:45	04:53 21:33	04:53 21:44	05:37 (WEA 03) 21:07	06:26 20:01	07:18 18:49	07:15 16:41	08:07 16:00
4	08:28 16:10	07:55 17:03	06:57 17:57	06:44 19:53	05:37 20:47	04:53 21:34	04:54 21:43	05:36 (WEA 03) 21:05	06:28 20:07	07:20 18:47	07:17 16:39	08:09 16:00
5	08:28 16:12	07:53 17:05	06:55 17:59	06:41 19:55	05:35 20:49	04:52 21:35	04:55 21:43	05:37 21:04	06:30 20:06	07:21 18:44	07:19 16:37	08:10 15:59
6	08:28 16:13	07:51 17:07	06:53 18:01	06:39 19:57	05:33 20:51	04:51 21:36	04:56 21:42	05:38 21:02	06:31 20:04	07:23 18:42	07:20 16:35	08:12 15:59
7	08:27 16:14	07:50 17:09	06:50 18:02	06:36 19:59	05:31 20:52	04:51 21:37	04:56 21:42	05:40 21:00	06:33 20:02	07:25 18:39	07:22 16:34	08:13 15:58
8	08:27 16:16	07:48 17:11	06:48 18:04	06:34 20:01	05:29 20:54	04:50 21:38	04:57 21:41	05:42 20:58	06:35 20:06	07:27 18:37	07:24 16:32	08:14 15:58
9	08:26 16:17	07:46 17:13	06:46 18:06	06:32 20:02	05:28 20:56	04:49 21:38	04:58 21:40	05:43 20:56	06:36 20:04	07:29 18:35	07:26 16:30	08:15 15:58
10	08:26 16:18	07:44 17:15	06:43 18:08	06:29 20:04	05:26 20:57	04:49 21:39	04:59 21:40	05:45 20:54	06:38 20:06	07:30 18:32	07:28 16:28	08:17 15:57
11	08:25 16:20	07:42 17:16	06:41 18:10	06:27 20:06	05:24 20:59	04:48 21:40	05:01 21:39	05:47 20:52	06:40 20:08	07:32 18:30	07:30 16:27	08:18 15:57
12	08:24 16:21	07:40 17:18	06:39 18:12	06:25 20:08	05:22 21:01	04:48 21:41	05:02 21:38	05:48 20:50	06:42 20:10	07:34 18:28	07:32 16:25	08:19 15:57
13	08:24 16:23	07:38 17:20	06:36 18:14	06:22 20:10	05:21 21:02	04:48 21:42	05:03 21:37	05:50 20:48	06:43 20:06	07:36 18:25	07:34 16:23	08:20 15:57
14	08:23 16:25	07:36 17:22	06:34 18:15	06:20 20:11	05:19 21:04	04:48 21:42	05:04 21:36	05:52 20:46	06:45 20:08	07:38 18:23	07:35 16:22	08:21 15:57
15	08:22 16:26	07:34 17:24	06:31 18:17	06:18 20:13	05:17 21:06	04:47 21:43	05:05 21:35	05:53 20:44	06:47 20:06	07:39 18:21	07:37 16:20	08:22 15:57
16	08:21 16:28	07:32 17:26	06:29 18:19	06:16 20:15	05:16 21:07	04:47 21:43	05:07 21:34	05:55 20:42	06:48 20:08	07:41 18:19	07:39 16:19	08:23 15:57
17	08:20 16:30	07:30 17:28	06:27 18:21	06:13 20:17	05:14 21:09	04:47 21:44	05:08 21:33	05:57 20:40	06:50 20:08	07:43 18:16	07:41 16:17	08:23 15:57
18	08:19 16:31	07:28 17:30	06:24 18:23	06:11 20:19	05:13 21:11	04:47 21:44	05:09 21:31	05:59 20:37	06:52 20:06	07:45 18:14	07:43 16:16	08:24 15:57
19	08:18 16:33	07:26 17:32	06:22 18:25	06:09 20:20	05:11 21:12	04:47 21:45	05:11 21:30	06:00 20:35	06:54 20:13	07:47 18:12	07:44 16:15	08:25 15:58
20	08:17 16:35	07:24 17:34	06:19 18:26	06:07 20:22	05:10 21:14	04:47 21:45	05:12 21:29	06:02 20:33	06:55 20:10	07:49 18:10	07:46 16:13	08:26 15:58
21	08:16 16:36	07:22 17:36	06:17 18:28	06:04 20:24	05:08 21:15	04:47 21:45	05:13 21:28	06:04 20:31	06:57 20:08	07:50 18:08	07:48 16:12	08:26 15:58
22	08:14 16:38	07:20 17:38	06:15 18:30	06:02 20:26	05:07 21:17	04:47 21:45	05:15 21:26	06:05 20:29	06:59 20:15	07:52 18:05	07:50 16:11	08:27 15:59
23	08:13 16:40	07:17 17:40	06:12 18:32	06:00 20:28	05:05 21:18	04:48 21:46	05:16 21:25	06:07 20:26	07:00 20:13	07:54 18:03	07:52 16:10	08:27 15:59
24	08:12 16:42	07:15 17:42	06:10 18:34	05:58 20:29	05:04 21:20	04:48 21:46	05:18 21:24	06:09 20:24	07:02 20:11	07:56 18:01	07:53 16:09	08:28 16:00
25	08:11 16:44	07:13 17:44	06:07 18:35	05:56 20:31	05:03 21:21	04:48 21:46	05:19 21:22	06:11 20:22	07:04 20:08	06:58 18:06	07:55 16:07	08:28 16:01
26	08:09 16:46	07:11 17:46	06:05 18:37	05:53 20:33	05:02 21:22	04:49 21:46	05:21 21:21	06:12 20:20	07:06 20:06	07:00 18:06	07:57 16:06	08:28 16:01
27	08:08 16:47	07:09 17:47	06:03 18:39	05:51 20:35	05:00 21:24	04:49 21:46	05:22 21:19	06:14 20:17	07:07 20:03	07:02 18:05	07:58 16:05	08:29 16:02
28	08:06 16:49	07:06 17:49	06:00 18:41	05:49 20:36	04:59 21:25	04:50 21:45	05:24 21:17	06:16 20:15	07:09 20:01	07:03 18:03	08:00 16:04	08:29 16:03
29	08:05 16:51		06:58 19:43	05:47 20:38	04:58 21:26	04:50 21:45	05:25 21:16	06:18 20:13	07:11 20:08	07:05 18:05	08:01 16:04	08:29 16:04
30	08:03 16:53		06:55 19:44	05:45 20:40	04:57 21:28	04:51 21:45	05:27 21:14	06:19 20:11	07:13 20:06	07:07 18:06	08:03 16:03	08:29 16:05
31	08:02 16:55		06:53 19:46		04:56 21:29		05:28 21:12	06:21 20:08		07:09 16:47		08:29 16:06
Sonnenscheinstunden	253	275	367	418	491	506	508	458	382	330	262	237
astr.max.mögl.Beschattung						287	25					

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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4. Variante 2 - Bauabschnitt 2 (Steesow III)



Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 007 - Deibow, Deibower Dorfstraße 9

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1 08:29	14:47 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04
2 08:29	15:08 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04
3 08:29	15:08 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04
4 08:28	14:49 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09
5 08:28	14:51 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10
6 08:28	14:51 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12
7 08:27	14:51 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13
8 08:27	14:53 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14
9 08:26	14:54 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15
10 08:26	14:55 (WEA 10)	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17
11 08:25	14:56 (WEA 10)	07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18
12 08:24	14:58 (WEA 10)	07:40	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19
13 08:24	15:06 (WEA 10)	07:38	06:36	06:22	05:20	04:47	05:02	05:50	06:43	07:36	07:33	08:20
14 08:23	15:08 (WEA 10)	07:36	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21
15 08:22	15:08 (WEA 10)	07:34	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22
16 08:21	15:08 (WEA 10)	07:32	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23
17 08:20	15:07 (WEA 10)	07:30	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:23
18 08:19	15:06 (WEA 10)	07:28	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:24
19 08:18	15:05 (WEA 10)	07:26	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:25
20 08:17	15:04 (WEA 10)	07:24	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:26
21 08:16	15:03 (WEA 10)	07:22	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:26
22 08:14	15:02 (WEA 10)	07:19	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:27
23 08:13	15:01 (WEA 10)	07:17	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:27
24 08:12	15:00 (WEA 10)	07:15	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:28
25 08:10	14:59 (WEA 10)	07:13	06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	07:55	08:28
26 08:09	14:58 (WEA 10)	07:11	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:59	07:57	08:28
27 08:08	14:57 (WEA 10)	07:09	06:03	05:51	05:00	04:49	05:22	06:14	07:07	07:51	07:58	08:29
28 08:06	14:56 (WEA 10)	07:07	06:01	05:49	04:59	04:49	05:23	06:16	07:09	07:53	07:50	08:29
29 08:05	14:55 (WEA 10)	07:05	05:59	05:47	04:57	04:50	05:25	06:17	07:11	07:55	07:52	08:29
30 08:03	14:54 (WEA 10)	07:03	05:57	05:45	04:55	04:50	05:27	06:19	07:12	07:57	07:54	08:29
31 08:02	14:53 (WEA 10)	07:01	05:55	05:43	04:53	04:50	05:29	06:21	07:14	07:59	07:56	08:29
16:55	14:52 (WEA 10)	06:59	05:53	05:41	04:51	04:50	05:31	06:23	07:16	08:01	07:58	16:05
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	329	262	237
astr.max.mögl.Beschattung	196										7	622

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 008 - Deibow, Deibower Dorfstraße 10

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1 08:29	14:45 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04
2 16:07	15:06 (WEA 10)	16:57	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:53	16:44	16:02
3 08:29	14:46 (WEA 10)	07:58	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	08:06
4 16:08	15:07 (WEA 10)	16:59	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	16:01
5 08:29	14:47 (WEA 10)	07:57	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	08:07
6 16:09	15:06 (WEA 10)	17:01	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	16:00
7 08:28	14:48 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09
8 16:10	15:07 (WEA 10)	17:02	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	16:00
9 08:28	14:49 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10
10 16:11	15:07 (WEA 10)	17:04	17:59	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37	15:59
11 08:28	14:49 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12
12 16:13	15:07 (WEA 10)	17:06	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	15:58
13 08:27	14:50 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13
14 16:14	15:06 (WEA 10)	17:08	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:33	15:58
15 08:27	14:52 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14
16 16:15	15:07 (WEA 10)	17:10	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:31	15:58
17 08:26	14:53 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15
18 16:17	15:06 (WEA 10)	17:12	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	15:57
19 08:26	14:54 (WEA 10)	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17
20 16:18	15:06 (WEA 10)	17:14	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	15:57
21 08:25	14:55 (WEA 10)	07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18
22 16:20	15:04 (WEA 10)	17:16	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26	15:57
23 08:24	14:58 (WEA 10)	07:40	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19
24 16:21	15:03 (WEA 10)	17:18	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25	15:57
25 08:24		07:38	06:36	06:22	05:20	04:47	05:02	05:50	06:43	07:36	07:33	08:20
26 16:23		17:20	18:13	20:09	21:02	21:41	21:37	20:48	19:37	18:25	16:23	15:57
27 08:23		07:36	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21
28 16:24		17:22	18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	16:22	15:57
29 08:22		07:34	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22
30 16:26		17:24	18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	16:20	15:57
31 08:21		07:32	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23
32 16:28		17:26	18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	16:19	15:57
33 08:20		07:30	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:23
34 16:29		17:28	18:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	16:17	15:57
35 08:19		07:28	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:24
36 16:31		17:30	18:23	20:18	21:10	21:44	21:31	20:37	19:25	18:14	16:16	15:57
37 08:18		07:26	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:25
38 16:33		17:32	18:24	20:20	21:12	21:45	21:30	20:35	19:23	18:12	16:14	15:57
39 08:17		07:24	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:26
40 16:34		17:34	18:26	20:22	21:14	21:45	21:29	20:33	19:20	18:09	16:13	15:58
41 08:16		07:22	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:26
42 16:36		17:36	18:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	16:12	15:58
43 08:14		07:19	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:27
44 16:38		17:38	18:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	16:10	15:58
45 08:13		07:17	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:27
46 16:40		17:39	18:32	20:27	21:18	21:45	21:25	20:26	19:13	18:03	16:09	15:59
47 08:12		07:15	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:28
48 16:42		17:41	18:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	16:08	16:00
49 08:10		07:13	06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	07:55	08:28
50 16:43		17:43	18:35	20:31	21:21	21:46	21:22	20:22	19:08	18:00	16:07	16:00
51 08:09		07:11	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:59	07:57	08:28
52 16:45		17:45	18:37	20:33	21:22	21:46	21:20	20:20	19:06	18:00	16:06	16:01
53 08:08		07:08	06:02	05:51	05:00	04:49	05:22	06:14	07:07	07:51	07:58	08:29
54 16:47		17:47	18:39	20:35	21:24	21:46	21:19	20:17	19:03	18:00	16:05	16:02
55 08:06		07:06	06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:53	07:50	08:29
56 16:49		17:49	18:41	20:36	21:25	21:45	21:17	20:15	19:01	18:00	16:04	16:03
57 08:05			06:58	05:47	04:58	04:50	05:25	06:17	07:11	07:55	08:01	08:29
58 16:51			19:42	20:38	21:26	21:45	21:16	20:13	18:58	18:00	16:03	16:03
59 08:03			06:55	05:45	04:57	04:50	05:27	06:19	07:12	07:57	08:03	08:29
60 16:53			19:44	20:40	21:28	21:45	21:14	20:10	18:56	18:00	16:04	16:04
61 08:02			06:53		04:56		05:28	06:21		07:09		08:29
62 16:55			19:46		21:29		21:12	20:08		16:46		16:05
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	329	262	237
astr.max.mögl.Beschattung	186										5	614

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
		Minuten mit Schatten		

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 009 - Deibow, Deibower Dorfstraße 12

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

		Januar		Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29	14:38 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04	
	16:07	19	14:57 (WEA 10)	16:57	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:54	16:44	16:02
2	08:29	14:39 (WEA 10)	07:58	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	08:06	14:33 (WEA 10)
	16:08	18	14:57 (WEA 10)	16:59	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	16:01
3	08:29	14:39 (WEA 10)	07:57	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	08:07	14:30 (WEA 10)
	16:09	18	14:57 (WEA 10)	17:01	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	16:00
4	08:28	14:40 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09	14:29 (WEA 10)
	16:10	17	14:57 (WEA 10)	17:02	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	16:00
5	08:28	14:42 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10	14:28 (WEA 10)
	16:11	15	14:57 (WEA 10)	17:04	17:59	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37	15:59
6	08:28	14:42 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12	14:28 (WEA 10)
	16:13	15	14:57 (WEA 10)	17:06	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	15:58
7	08:27	14:43 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13	14:28 (WEA 10)
	16:14	13	14:56 (WEA 10)	17:08	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:33	15:58
8	08:27	14:45 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14	14:28 (WEA 10)
	16:15	11	14:56 (WEA 10)	17:10	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:31	15:58
9	08:26	14:47 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15	14:28 (WEA 10)
	16:17	8	14:55 (WEA 10)	17:12	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	15:57
10	08:26	14:50 (WEA 10)	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17	14:28 (WEA 10)
	16:18	2	14:52 (WEA 10)	17:14	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	15:57
11	08:25		07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18	14:28 (WEA 10)
	16:20		17:16	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26	15:57	19
12	08:24		07:40	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19	14:28 (WEA 10)
	16:21		17:18	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25	15:57	19
13	08:24		07:38	06:36	06:22	05:20	04:47	05:02	05:50	06:43	07:36	07:33	08:20	14:28 (WEA 10)
	16:23		17:20	18:13	20:09	21:02	21:41	21:37	20:48	19:37	18:25	16:23	15:57	20
14	08:23		07:36	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21	14:28 (WEA 10)
	16:24		17:22	18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	16:22	15:57	21
15	08:22		07:34	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22	14:28 (WEA 10)
	16:26		17:24	18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	16:20	15:57	21
16	08:21		07:32	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23	14:29 (WEA 10)
	16:28		17:26	18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	16:19	15:57	21
17	08:20		07:30	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:23	14:29 (WEA 10)
	16:29		17:28	18:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	16:17	15:57	22
18	08:19		07:28	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:24	14:30 (WEA 10)
	16:31		17:30	18:23	20:18	21:10	21:44	21:31	20:37	19:25	18:14	16:16	15:57	21
19	08:18		07:26	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:25	14:31 (WEA 10)
	16:33		17:32	18:24	20:20	21:12	21:45	21:30	20:35	19:23	18:12	16:14	15:57	21
20	08:17		07:24	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:26	14:31 (WEA 10)
	16:34		17:34	18:26	20:22	21:14	21:45	21:29	20:33	19:20	18:09	16:13	15:58	21
21	08:16		07:22	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:26	14:31 (WEA 10)
	16:36		17:36	18:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	16:12	15:58	22
22	08:14		07:19	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:27	14:31 (WEA 10)
	16:38		17:38	18:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	16:10	15:59	22
23	08:13		07:17	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:27	14:33 (WEA 10)
	16:40		17:39	18:32	20:27	21:18	21:45	21:25	20:26	19:13	18:03	16:09	15:59	21
24	08:12		07:15	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:28	14:33 (WEA 10)
	16:42		17:41	18:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	16:08	16:00	21
25	08:10		07:13	06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	07:55	08:28	14:33 (WEA 10)
	16:43		17:43	18:35	20:31	21:21	21:46	21:22	20:22	19:08	16:59	16:07	16:00	21
26	08:09		07:11	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:00	07:57	08:28	14:33 (WEA 10)
	16:45		17:45	18:37	20:33	21:22	21:46	21:20	20:20	19:06	16:57	16:06	16:01	22
27	08:08		07:08	06:02	05:51	05:00	04:49	05:22	06:14	07:07	07:01	07:58	08:29	14:35 (WEA 10)
	16:47		17:47	18:39	20:35	21:24	21:46	21:19	20:17	19:03	16:55	16:05	16:02	21
28	08:06		07:06	06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:03	08:00	08:29	14:35 (WEA 10)
	16:49		17:49	18:41	20:36	21:25	21:45	21:17	20:15	19:01	16:52	16:04	16:03	21
29	08:05			05:58	05:47	04:58	04:50	05:25	06:17	07:11	07:05	08:01	08:29	14:36 (WEA 10)
	16:51			19:42	20:38	21:26	21:45	21:16	20:13	18:58	16:50	16:03	16:03	20
30	08:03			06:55	05:45	04:57	04:50	05:27	06:19	07:12	07:07	08:03	08:29	14:37 (WEA 10)
	16:53			19:44	20:40	21:28	21:45	21:14	20:10	18:56	16:48	16:02	16:04	20
31	08:02			06:53		04:56		05:28	06:21		07:09		08:29	14:36 (WEA 10)
	16:55			19:46		21:29		21:12	20:08		16:46		16:05	20
Sonnenscheinstunden	253			275	367	419	491	506	509	458	382	329	262	237
astr.max.mögl.Beschattung	136													554

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 010 - Deibow, Deibower Dorfstraße 13

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29 16:07 19	14:35 (WEA 10) 16:57 17:51	08:00 07:04 17:51	06:50 19:48 20:42	05:43 20:42 21:30	04:55 21:45 21:11	04:51 21:45 21:11	05:30 20:06 20:06	06:22 18:54 18:54	07:14 16:44 16:44	07:11 16:00 16:00	08:04 16:02 16:02
2	08:29 16:08 18	14:36 (WEA 10) 16:59 17:53	07:02 19:50 20:43	06:48 20:43 21:31	05:41 21:31 21:44	04:54 21:44 21:09	04:52 21:44 21:09	05:31 20:03 20:03	06:24 18:51 18:51	07:16 16:43 16:43	07:13 16:01 16:01	08:06 16:01 16:01
3	08:29 16:09 17	14:37 (WEA 10) 17:01 17:55	07:02 19:51 20:45	06:46 20:45 21:32	05:39 21:32 21:44	04:53 21:44 21:07	04:53 21:44 21:07	05:33 20:01 20:01	06:26 18:49 18:49	07:18 16:41 16:41	07:15 16:00 16:00	08:07 16:00 16:00
4	08:28 16:10 16	14:38 (WEA 10) 17:02 17:57	07:01 19:53 20:47	06:43 20:47 21:34	05:37 21:34 21:43	04:52 21:43 21:05	04:53 21:43 21:05	05:35 20:01 20:01	06:28 18:46 18:46	07:19 16:39 16:39	07:17 16:00 16:00	08:09 16:00 16:00
5	08:28 16:11 15	14:39 (WEA 10) 17:04 17:59	07:01 19:55 20:49	06:41 20:49 21:35	05:35 21:35 21:43	04:51 21:43 21:04	04:54 21:43 21:04	05:36 20:01 20:01	06:29 18:44 18:44	07:21 16:37 16:37	07:18 15:59 15:59	08:10 15:59 15:59
6	08:28 16:13 14	14:40 (WEA 10) 17:06 18:00	07:01 19:57 20:50	06:39 20:50 21:36	05:33 21:36 21:42	04:51 21:42 21:02	04:55 21:42 21:02	05:38 20:01 20:01	06:31 18:42 18:42	07:23 16:35 16:35	07:20 15:58 15:58	08:12 15:58 15:58
7	08:27 16:14 12	14:41 (WEA 10) 17:08 18:02	07:01 19:59 20:52	06:37 20:52 21:37	05:31 21:37 21:42	04:50 21:42 21:00	04:56 21:42 21:00	05:40 20:01 20:01	06:33 18:39 18:39	07:25 16:33 16:33	07:22 15:58 15:58	08:13 15:58 15:58
8	08:27 16:15 10	14:43 (WEA 10) 17:10 18:04	07:01 20:00 20:54	06:34 20:54 21:38	05:29 21:38 21:41	04:50 21:41 20:58	04:57 21:41 20:58	05:41 20:01 20:01	06:34 18:37 18:37	07:27 16:31 16:31	07:24 15:58 15:58	08:14 15:58 15:58
9	08:26 16:17 5	14:46 (WEA 10) 17:12 18:06	07:01 20:02 20:56	06:31 20:56 21:38	05:27 21:38 21:40	04:49 21:40 20:56	04:58 21:40 20:56	05:43 20:01 20:01	06:36 18:35 18:35	07:28 16:30 16:30	07:26 15:57 15:57	08:15 15:57 15:57
10	08:26 16:18 18	14:51 (WEA 10) 17:14 18:08	07:01 20:04 20:57	06:29 20:57 21:39	05:26 21:39 21:40	04:49 21:40 20:54	04:59 21:40 20:54	05:45 20:01 20:01	06:38 18:32 18:32	07:30 16:28 16:28	07:28 15:57 15:57	08:17 15:57 15:57
11	08:25 16:20 16	14:54 (WEA 10) 17:16 18:10	07:01 20:06 20:59	06:27 20:59 21:40	05:24 21:40 21:39	04:48 21:39 20:52	05:00 21:39 20:52	05:46 20:01 20:01	06:40 18:30 18:30	07:32 16:26 16:26	07:30 15:57 15:57	08:18 15:57 15:57
12	08:24 16:21 16	14:54 (WEA 10) 17:18 18:12	07:01 20:08 21:01	06:24 21:01 21:41	05:22 21:41 21:38	04:48 21:38 20:50	05:01 21:38 20:50	05:48 20:01 20:01	06:41 18:28 18:28	07:34 16:25 16:25	07:32 15:57 15:57	08:19 15:57 15:57
13	08:24 16:23 14	14:54 (WEA 10) 17:20 18:13	07:01 20:09 21:02	06:22 21:02 21:42	05:20 21:42 21:37	04:47 21:37 20:48	05:04 21:37 20:48	05:50 20:01 20:01	06:43 18:25 18:25	07:36 16:23 16:23	07:33 15:57 15:57	08:20 15:57 15:57
14	08:23 16:24 16	14:54 (WEA 10) 17:22 18:15	07:01 20:11 21:04	06:20 21:04 21:42	05:19 21:42 21:36	04:47 21:36 20:46	05:04 21:36 20:46	05:51 20:01 20:01	06:45 18:23 18:23	07:37 16:22 16:22	07:35 15:57 15:57	08:21 15:57 15:57
15	08:22 16:26 16	14:54 (WEA 10) 17:24 18:17	07:01 20:13 21:06	06:18 21:06 21:43	05:17 21:43 21:35	04:47 21:35 20:44	05:05 21:35 20:44	05:53 20:01 20:01	06:46 18:21 18:21	07:39 16:20 16:20	07:37 15:57 15:57	08:22 15:57 15:57
16	08:21 16:28 16	14:54 (WEA 10) 17:26 18:19	07:01 20:15 21:07	06:15 21:07 21:43	05:15 21:43 21:34	04:47 21:34 20:42	05:06 21:34 20:42	05:55 20:01 20:01	06:48 18:18 18:18	07:41 16:19 16:19	07:39 15:57 15:57	08:23 15:57 15:57
17	08:20 16:29 16	14:54 (WEA 10) 17:28 18:21	07:01 20:17 21:09	06:13 21:09 21:44	05:14 21:44 21:33	04:47 21:33 20:39	05:07 21:33 20:39	05:57 20:01 20:01	06:50 18:16 18:16	07:43 16:17 16:17	07:41 15:57 15:57	08:23 15:57 15:57
18	08:19 16:31 16	14:54 (WEA 10) 17:30 18:23	07:01 20:18 21:10	06:11 21:10 21:44	05:12 21:44 21:31	04:47 21:31 20:37	05:09 21:31 20:37	05:58 20:01 20:01	06:52 18:14 18:14	07:45 16:16 16:16	07:43 15:57 15:57	08:24 15:57 15:57
19	08:18 16:33 16	14:54 (WEA 10) 17:32 18:24	07:01 20:20 21:12	06:08 21:12 21:45	05:11 21:45 21:30	04:47 21:30 20:35	05:10 21:30 20:35	06:00 20:01 20:01	06:53 18:12 18:12	07:47 16:14 16:14	07:44 15:57 15:57	08:25 15:57 15:57
20	08:17 16:34 16	14:54 (WEA 10) 17:34 18:26	07:01 20:22 21:14	06:06 21:14 21:45	05:09 21:45 21:29	04:47 21:29 20:33	05:12 21:29 20:33	06:02 20:01 20:01	06:55 18:09 18:09	07:48 16:13 16:13	07:46 15:57 15:57	08:26 15:57 15:57
21	08:16 16:36 16	14:54 (WEA 10) 17:36 18:28	07:01 20:24 21:15	06:04 21:15 21:45	05:08 21:45 21:28	04:47 21:28 20:31	05:13 21:28 20:31	06:03 20:01 20:01	06:57 18:07 18:07	07:50 16:12 16:12	07:48 15:57 15:57	08:26 15:57 15:57
22	08:14 16:38 16	14:54 (WEA 10) 17:38 18:30	07:01 20:26 21:17	06:02 21:17 21:45	05:06 21:45 21:26	04:47 21:26 20:29	05:14 21:26 20:29	06:05 20:01 20:01	06:59 18:05 18:05	07:52 16:10 16:10	07:50 15:57 15:57	08:27 15:57 15:57
23	08:13 16:40 16	14:54 (WEA 10) 17:40 18:32	07:01 20:27 21:18	06:00 21:18 21:45	05:05 21:45 21:25	04:47 21:25 20:26	05:16 21:25 20:26	06:07 20:01 20:01	07:00 18:03 18:03	07:54 16:09 16:09	07:51 15:57 15:57	08:27 15:57 15:57
24	08:12 16:42 16	14:54 (WEA 10) 17:42 18:33	07:01 20:29 21:20	05:57 21:20 21:46	05:04 21:46 21:23	04:48 21:23 20:24	05:17 21:23 20:24	06:09 20:01 20:01	07:02 18:01 18:01	07:56 16:08 16:08	07:53 15:57 15:57	08:28 15:57 15:57
25	08:10 16:43 16	14:54 (WEA 10) 17:43 18:35	07:01 20:31 21:21	05:55 21:21 21:46	05:02 21:46 21:22	04:48 21:22 20:22	05:19 21:22 20:22	06:10 20:01 20:01	07:04 18:00 18:00	07:58 16:07 16:07	07:55 15:57 15:57	08:28 15:57 15:57
26	08:09 16:45 16	14:54 (WEA 10) 17:45 18:37	07:01 20:33 21:22	05:53 21:22 21:46	05:01 21:46 21:20	04:48 21:20 20:20	05:20 21:20 20:20	06:12 20:01 20:01	07:05 18:00 18:00	07:57 16:06 16:06	07:57 15:57 15:57	08:28 15:57 15:57
27	08:08 16:47 16	14:54 (WEA 10) 17:47 18:39	07:01 20:35 21:24	05:51 21:24 21:46	05:00 21:46 21:19	04:49 21:19 20:17	05:22 21:19 20:17	06:14 20:01 20:01	07:07 18:00 18:00	07:58 16:05 16:05	07:58 15:57 15:57	08:29 15:57 15:57
28	08:06 16:49 16	14:54 (WEA 10) 17:49 18:41	07:01 20:36 21:25	05:49 21:25 21:45	04:59 21:45 21:17	04:49 21:17 20:15	05:23 21:17 20:15	06:16 20:01 20:01	07:09 18:00 18:00	07:59 16:04 16:04	07:59 15:57 15:57	08:29 15:57 15:57
29	08:05 16:51 16	14:54 (WEA 10) 17:51 18:43	07:01 20:38 21:26	05:47 21:26 21:45	04:57 21:45 21:16	04:50 21:16 20:13	05:25 21:16 20:13	06:17 20:01 20:01	07:11 18:00 18:00	07:59 16:03 16:03	07:59 15:57 15:57	08:29 15:57 15:57
30	08:03 16:53 16	14:54 (WEA 10) 17:53 18:45	07:01 20:40 21:28	05:45 21:28 21:45	04:57 21:45 21:14	04:50 21:14 20:10	05:27 21:14 20:10	06:19 20:01 20:01	07:12 18:00 18:00	07:59 16:02 16:02	07:59 15:57 15:57	08:29 15:57 15:57
31	08:02 16:55 16	14:54 (WEA 10) 17:55 18:47	07:01 20:42 21:30	05:43 21:30 21:45	04:57 21:45 21:12	04:50 21:12 20:08	05:28 21:12 20:08	06:21 20:01 20:01	07:13 18:00 18:00	07:59 16:02 16:02	07:59 15:57 15:57	08:29 15:57 15:57
Sonnenscheinstunden												
astr.max.mögl.Beschattung												
	253	275	367	419	491	506	509	458	382	329	262	237
	126											538

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 011 - Deibow, Deibower Dorfstraße 14

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

		Januar		Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29 16:07 13	14:29 (WEA 10) 16:57 14:42 (WEA 10)	08:00 16:57 17:51	07:04 17:51 19:48	06:50 19:48 20:42	05:43 21:30 21:45	04:55 21:30 21:45	04:51 21:45 21:11	05:30 21:11 20:06	06:22 20:06 18:54	07:14 18:54 16:44	07:11 16:44 16:02		
2	08:29 16:08 11	14:31 (WEA 10) 16:59 14:42 (WEA 10)	07:58 17:53 17:53	06:48 19:50 19:50	05:41 20:43 20:43	04:54 21:31 21:44	04:52 21:31 21:44	05:31 21:09 20:03	06:24 20:03 18:51	07:16 18:51 16:43	07:13 16:43 16:01	08:06 16:01 16:01		
3	08:29 16:09 10	14:31 (WEA 10) 17:01 14:41 (WEA 10)	07:57 17:55 17:55	06:46 19:51 19:51	05:39 20:45 20:45	04:53 21:32 21:44	04:53 21:44 21:07	05:33 21:07 20:01	06:26 20:01 18:49	07:18 18:49 16:41	07:15 16:41 16:00	08:07 16:00 16:00		
4	08:28 16:10 6	14:34 (WEA 10) 17:02 14:40 (WEA 10)	07:55 17:57 17:57	06:57 19:53 19:53	05:37 20:47 20:47	04:52 21:34 21:43	04:53 21:43 21:05	05:35 21:05 19:59	06:28 19:59 18:46	07:19 18:46 16:39	07:17 16:39 16:00	08:09 16:00 16:00		
5	08:28 16:11		07:53 17:04 17:59	06:55 19:55 19:55	06:41 19:55 20:49	05:35 21:35 21:43	04:54 21:43 21:04	05:36 21:04 19:56	06:29 19:56 18:44	07:21 18:44 16:37	07:18 16:37 15:59	08:10 15:59 15:59		
6	08:28 16:13		07:51 17:06 18:00	06:52 18:00 19:57	06:39 19:57 20:50	05:33 21:36 21:42	04:55 21:42 21:02	05:38 21:02 19:54	06:31 19:54 18:42	07:23 18:42 16:35	07:20 16:35 15:58	08:12 15:58 15:58		
7	08:27 16:14		07:50 17:08 18:02	06:50 18:02 19:59	06:36 19:59 20:52	05:31 21:37 21:42	04:50 21:42 21:00	04:56 21:00 19:52	05:40 19:52 18:39	06:33 18:39 16:33	07:25 16:33 15:58	08:13 15:58 15:58		
8	08:27 16:15		07:48 17:10 18:04	06:48 20:00 20:04	06:34 20:04 20:54	05:29 21:38 21:41	04:50 21:41 20:58	04:57 20:58 19:49	05:41 19:49 18:37	06:34 18:37 16:31	07:27 16:31 15:58	08:14 15:58 15:58	14:22 (WEA 10)	
9	08:26 16:17		07:46 17:12 18:06	06:45 20:02 20:06	06:31 20:02 20:56	05:27 21:38 21:40	04:49 21:40 20:56	04:58 21:40 20:56	05:43 20:56 19:47	06:36 19:47 18:35	07:28 18:35 16:30	08:15 15:57 15:57	14:21 (WEA 10)	
10	08:26 16:18		07:44 17:14 18:08	06:43 20:04 20:04	06:29 20:04 20:57	05:26 21:39 21:40	04:49 21:40 20:54	04:59 21:40 20:54	05:45 20:54 19:44	06:38 19:44 18:32	07:30 18:32 16:28	08:17 15:57 15:57	14:20 (WEA 10)	
11	08:25 16:20		07:42 17:16 18:10	06:41 20:06 20:06	06:27 20:06 20:59	05:24 21:40 21:39	04:48 21:39 20:52	05:00 21:39 20:52	05:46 20:52 19:42	06:40 19:42 18:30	07:32 18:30 16:26	08:18 15:57 15:57	14:19 (WEA 10)	
12	08:24 16:21		07:40 17:18 18:12	06:38 20:08 20:08	06:24 20:08 21:01	05:22 21:41 21:38	04:48 21:38 20:50	05:01 21:38 20:50	05:48 20:50 19:40	06:41 19:40 18:28	07:34 18:28 16:25	08:19 15:57 15:57	14:19 (WEA 10)	
13	08:24 16:23		07:38 17:20 18:13	06:36 20:09 20:09	06:22 20:09 21:02	05:20 21:42 21:37	04:47 21:37 20:48	05:03 21:37 20:48	05:50 20:48 19:37	06:43 19:37 18:25	07:36 18:25 16:23	08:20 15:57 15:57	14:19 (WEA 10)	
14	08:23 16:24		07:36 17:22 18:15	06:34 20:11 20:11	06:20 20:11 21:04	05:19 21:42 21:36	04:47 21:36 20:46	05:04 21:36 20:46	05:51 20:46 19:35	06:45 19:35 18:23	07:37 18:23 16:22	08:21 15:57 15:57	14:19 (WEA 10)	
15	08:22 16:26		07:34 17:24 18:17	06:31 20:13 20:13	06:18 20:13 21:06	05:17 21:43 21:35	04:47 21:35 20:44	05:05 21:35 20:44	05:53 20:44 19:32	06:46 19:32 18:21	07:39 18:21 16:20	08:22 15:57 15:57	14:19 (WEA 10)	
16	08:21 16:28		07:32 17:26 18:19	06:29 20:15 20:15	06:15 20:15 21:07	05:15 21:43 21:34	04:47 21:34 20:42	05:06 21:34 20:42	05:55 20:42 19:30	06:48 19:30 18:18	07:41 18:18 16:19	08:23 15:57 15:57	14:20 (WEA 10)	
17	08:20 16:29		07:30 17:28 18:21	06:26 20:17 20:17	06:13 20:17 21:09	05:14 21:44 21:33	04:47 21:33 20:39	05:07 21:33 20:39	05:57 20:39 19:27	06:50 19:27 18:16	07:43 18:16 16:17	08:23 15:57 15:57	14:20 (WEA 10)	
18	08:19 16:31		07:28 17:30 18:23	06:24 20:18 20:18	06:11 20:18 21:10	05:12 21:44 21:31	04:47 21:31 20:37	05:09 21:31 20:37	05:58 20:37 19:25	06:52 19:25 18:14	07:45 18:14 16:16	08:24 15:57 15:57	14:21 (WEA 10)	
19	08:18 16:33		07:26 17:32 18:24	06:22 20:20 20:20	06:08 20:20 21:12	05:11 21:45 21:30	04:47 21:30 20:35	05:10 21:30 20:35	06:00 20:35 19:23	06:53 19:23 18:12	07:47 18:12 16:14	08:25 15:57 15:57	14:21 (WEA 10)	
20	08:17 16:34		07:24 17:34 18:26	06:19 20:22 20:22	06:06 20:22 21:14	05:09 21:47 21:29	04:47 21:29 20:33	05:12 21:29 20:33	06:02 20:33 19:20	06:55 19:20 18:09	07:48 18:09 16:13	08:26 15:58 15:58	14:21 (WEA 10)	
21	08:16 16:36		07:22 17:36 18:28	06:17 20:24 20:24	06:04 20:24 21:15	05:08 21:45 21:28	04:47 21:28 20:31	05:13 21:28 20:31	06:03 20:31 19:18	06:57 19:18 18:07	07:50 18:07 16:12	08:26 15:58 15:58	14:22 (WEA 10)	
22	08:14 16:38		07:19 17:38 18:30	06:14 20:26 20:26	06:02 20:26 21:17	05:06 21:45 21:26	04:47 21:26 20:29	05:14 21:26 20:29	06:05 20:29 19:15	06:59 19:15 18:05	07:52 18:05 16:10	08:27 15:59 15:59	14:22 (WEA 10)	
23	08:13 16:40		07:17 17:40 18:32	06:12 20:27 20:27	06:00 20:27 21:18	05:05 21:46 21:25	04:47 21:25 20:26	05:16 21:25 20:26	06:07 20:26 19:13	07:00 19:13 18:03	07:54 18:03 16:09	08:27 15:59 15:59	14:23 (WEA 10)	
24	08:12 16:42		07:15 17:41 18:33	06:10 20:29 20:29	05:57 20:29 21:20	05:04 21:46 21:23	04:48 21:23 20:24	05:17 21:23 20:24	06:09 20:24 19:10	07:02 19:10 18:01	07:56 18:01 16:08	08:28 16:00 16:00	14:23 (WEA 10)	
25	08:10 16:43		07:13 17:43 18:35	06:07 20:31 20:31	05:55 20:31 21:21	05:02 21:46 21:22	04:48 21:22 20:22	05:19 21:22 20:22	06:10 20:22 19:08	07:04 19:08 16:59	06:58 16:59 16:07	08:28 16:00 16:00	14:23 (WEA 10)	
26	08:09 16:45		07:11 17:45 18:37	06:05 20:33 20:33	05:53 20:33 21:22	05:01 21:46 21:20	04:48 21:20 20:20	05:20 21:20 20:20	06:12 20:20 19:06	07:05 19:06 16:57	07:00 16:57 16:06	08:28 16:01 16:01	14:24 (WEA 10)	
27	08:08 16:47		07:08 17:47 18:39	06:02 20:35 20:35	05:51 20:35 21:24	05:00 21:46 21:19	04:49 21:19 20:17	05:22 21:19 20:17	06:14 20:17 19:03	07:07 19:03 16:55	07:01 16:55 16:05	08:29 16:02 16:02	14:25 (WEA 10)	
28	08:06 16:49		07:06 17:49 18:41	06:00 20:36 20:36	05:49 20:36 21:25	04:59 21:45 21:17	04:49 21:17 20:15	05:23 21:17 20:15	06:16 20:15 19:01	07:09 19:01 16:52	07:03 16:52 16:04	08:29 16:03 16:03	14:26 (WEA 10)	
29	08:05 16:51		07:05 17:48 18:42	05:58 20:38 20:38	05:47 20:38 21:26	04:58 21:45 21:16	04:50 21:16 20:13	05:25 21:16 20:13	06:17 20:13 18:58	07:11 18:58 16:50	07:05 16:50 16:03	08:29 16:03 16:03	14:27 (WEA 10)	
30	08:03 16:53		07:03 17:50 18:44	05:55 20:40 20:40	05:45 20:40 21:28	04:57 21:45 21:14	04:50 21:14 20:10	05:27 21:14 20:10	06:19 20:10 18:56	07:12 18:56 16:48	07:07 16:48 16:02	08:29 16:04 16:04	14:28 (WEA 10)	
31	08:02 16:55		07:02 17:52 18:46	05:53 20:42 20:42	05:46 20:42 21:29	04:56 21:46 21:12	04:58 21:12 20:08	05:28 21:12 20:08	06:21 20:08 16:46	07:09 16:46 16:05	07:09 16:05 16:05	08:29 16:05 16:05	14:28 (WEA 10)	
	Sonnenscheinstunden	253		275	367	419	491	506	509	458	382	329	262	237
	astr. max. mögl. Beschattung	40												369

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
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SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 012 - Deibow, Deibower Dorfstraße 15

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:
Die Sonne scheint täglich von Sonnenauf- bis -untergang
Die Rotorfläche steht immer senkrecht zur Sonneneinfallsrichtung
Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar		Februar		März		April		Mai		Juni		Juli		August		September		Oktober		November		Dezember	
1	08:29	15:18 (WEA 09)	08:00	16:10 (WEA 08)	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	15:38 (WEA 08)	08:04	15:01 (WEA 09)								
10	16:07	15:30 (WEA 09)	16:57	16:25 (WEA 08)	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:54	16:44	22	16:00 (WEA 08)	16:02	21	15:22 (WEA 09)						
2	08:29	15:18 (WEA 09)	07:58	16:09 (WEA 08)	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	15:38 (WEA 08)	08:06	15:02 (WEA 09)								
1	08:08	15:31 (WEA 09)	16:59	16:27 (WEA 08)	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	22	16:00 (WEA 08)	16:01	21	15:23 (WEA 09)						
3	08:29	15:18 (WEA 09)	07:57	16:09 (WEA 08)	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	15:38 (WEA 08)	08:07	15:02 (WEA 09)								
1	08:09	15:32 (WEA 09)	17:01	16:29 (WEA 08)	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	22	16:00 (WEA 08)	16:00	20	15:22 (WEA 09)						
4	08:28	15:18 (WEA 09)	07:55	16:09 (WEA 08)	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	15:38 (WEA 08)	08:09	15:03 (WEA 09)								
1	08:10	15:34 (WEA 09)	17:02	16:30 (WEA 08)	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	22	16:00 (WEA 08)	16:00	20	15:23 (WEA 09)						
5	08:28	15:19 (WEA 09)	07:53	16:08 (WEA 08)	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	15:38 (WEA 08)	08:10	15:03 (WEA 09)								
1	08:14	15:36 (WEA 09)	17:04	16:30 (WEA 08)	17:59	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37	22	16:00 (WEA 08)	15:59	20	15:23 (WEA 09)						
6	08:28	15:18 (WEA 09)	07:51	16:08 (WEA 08)	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	15:38 (WEA 08)	08:12	15:05 (WEA 09)								
1	08:13	15:37 (WEA 09)	17:06	16:31 (WEA 08)	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	22	16:00 (WEA 08)	15:58	18	15:23 (WEA 09)						
7	08:27	15:18 (WEA 09)	07:50	16:08 (WEA 08)	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	15:38 (WEA 08)	08:13	15:05 (WEA 09)								
1	08:14	15:37 (WEA 09)	17:08	16:31 (WEA 08)	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:32	22	16:00 (WEA 08)	15:58	17	15:22 (WEA 09)						
8	08:27	15:19 (WEA 09)	07:48	16:08 (WEA 08)	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	15:39 (WEA 08)	08:14	15:06 (WEA 09)								
1	08:15	15:39 (WEA 09)	17:10	16:31 (WEA 08)	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:32	20	15:59 (WEA 08)	15:58	16	15:22 (WEA 09)						
9	08:26	15:19 (WEA 09)	07:46	16:08 (WEA 08)	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	15:40 (WEA 08)	08:15	15:07 (WEA 09)								
1	08:17	15:39 (WEA 09)	17:12	16:30 (WEA 08)	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	18	15:58 (WEA 08)	15:57	14	15:21 (WEA 09)						
10	08:26	15:19 (WEA 09)	07:44	16:09 (WEA 08)	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	15:41 (WEA 08)	08:17	15:08 (WEA 09)								
1	08:18	15:40 (WEA 09)	17:14	16:30 (WEA 08)	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	15	15:56 (WEA 08)	15:57	13	15:21 (WEA 09)						
11	08:25	15:19 (WEA 09)	07:42	16:10 (WEA 08)	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	15:42 (WEA 08)	08:18	15:08 (WEA 09)								
1	08:20	15:40 (WEA 09)	17:16	16:30 (WEA 08)	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26	12	15:54 (WEA 08)	15:57	12	15:20 (WEA 09)						
12	08:24	15:19 (WEA 09)	07:40	16:11 (WEA 08)	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	15:44 (WEA 08)	08:19	15:09 (WEA 09)								
1	08:21	15:41 (WEA 09)	17:18	16:29 (WEA 08)	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25	8	15:52 (WEA 08)	15:57	11	15:20 (WEA 09)						
1	08:24	15:19 (WEA 09)	07:38	16:12 (WEA 08)	06:36	06:22	05:20	04:47	05:03	05:50	06:43	07:36	07:33	15:47 (WEA 08)	08:20	14:08 (WEA 10)								
1	08:23	15:41 (WEA 09)	17:20	16:28 (WEA 08)	18:13	20:09	21:02	21:42	21:37	20:48	19:37	18:25	16:23	3	15:50 (WEA 08)	15:57	14	15:19 (WEA 09)						
1	08:23	15:19 (WEA 09)	07:36	16:14 (WEA 08)	06:34	06:20	05:19	04:47	05:04	05:52	06:45	07:37	07:35	15:48 (WEA 08)	08:21	14:07 (WEA 10)								
1	08:24	15:42 (WEA 09)	17:22	16:26 (WEA 08)	18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	16:22	15:57	16	15:19 (WEA 09)								
1	08:22	15:20 (WEA 09)	07:34	16:17 (WEA 08)	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	15:04 (WEA 09)	08:22	14:07 (WEA 10)								
1	08:26	15:42 (WEA 09)	17:24	16:24 (WEA 08)	18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	16:20	7	15:11 (WEA 09)	15:57	17	15:19 (WEA 09)						
1	08:21	15:20 (WEA 09)	07:32	16:29 (WEA 08)	18:15	20:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	15:01 (WEA 09)	08:23	14:07 (WEA 10)								
1	08:28	15:43 (WEA 09)	17:26	16:26 (WEA 08)	18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	16:19	12	15:13 (WEA 09)	15:57	18	15:20 (WEA 09)						
1	08:20	15:21 (WEA 09)	07:30	16:26 (WEA 08)	18:14	20:12	05:14	04:47	05:08	05:57	06:50	07:43	07:41	15:00 (WEA 09)	08:23	14:07 (WEA 10)								
1	08:29	15:43 (WEA 09)	17:28	16:21 (WEA 08)	18:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	16:17	15	15:15 (WEA 09)	15:57	19	15:20 (WEA 09)						
1	08:19	15:21 (WEA 09)	07:28	16:24 (WEA 08)	18:17	20:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	14:59 (WEA 08)	08:24	14:08 (WEA 10)								
1	08:31	15:44 (WEA 09)	17:30	16:23 (WEA 08)	18:23	20:18	21:10	21:44	21:31	20:37	19:25	18:14	16:16	17	15:16 (WEA 09)	15:57	18	15:20 (WEA 09)						
1	08:18	15:22 (WEA 09)	07:26	16:22 (WEA 08)	18:11	20:07	05:11	04:47	05:10	06:00	06:53	07:47	07:44	14:59 (WEA 08)	08:25	14:08 (WEA 10)								
1	08:33	15:44 (WEA 09)	17:32	16:24 (WEA 08)	18:24	20:20	21:12	21:45	21:30	20:35	19:23	18:12	16:14	18	15:17 (WEA 09)	15:57	19	15:21 (WEA 09)						
2	08:17	15:22 (WEA 09)	07:24	16:19 (WEA 08)	18:16	20:12	05:09	04:47	05:12	06:02	06:55	07:48	07:46	14:58 (WEA 08)	08:26	14:08 (WEA 10)								
1	08:34	15:43 (WEA 09)	17:34	16:25 (WEA 08)	18:26	20:22	21:14	21:45	21:29	20:33	19:20	18:09	16:13	20	15:18 (WEA 09)	15:58	18	15:21 (WEA 09)						
1	08:16	15:23 (WEA 09)	07:22	16:17 (WEA 08)	18:13	20:09	05:08	04:47	05:13	06:03	06:57	07:50	07:48	14:58 (WEA 08)	08:26	14:09 (WEA 10)								
1	08:36	15:44 (WEA 09)	17:36	16:28 (WEA 08)	18:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	16:12	21	15:19 (WEA 09)	15:58	17	15:21 (WEA 09)						
2	08:14	15:23 (WEA 09)	07:19	16:14 (WEA 08)	18:14	20:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	14:58 (WEA 08)	08:27	14:09 (WEA 10)								
1	08:38	15:43 (WEA 09)	17:38	16:29 (WEA 08)	18:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	16:11	22	15:20 (WEA 09)	15:59	17	15:21 (WEA 09)						
2	08:13	15:25 (WEA 09)	07:17	16:12 (WEA 08)	18:12	20:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	14:58 (WEA 08)	08:27	14:10 (WEA 10)								
1	08:40	15:43 (WEA 09)	17:40	16:32 (WEA 08)	18:32	20:27	21:18	21:46	21:25	20:26	19:13	18:03	16:09	22	15:20 (WEA 09)	15:59	17	15:22 (WEA 09)						
2	08:12	15:25 (WEA 09)	07:15	16:10 (WEA 08)	18:10	20:05	05:04	04:48	05:17	06:09	07:02	07:56	07:53	14:58 (WEA 08)	08:28	14:10 (WEA 10)								
1	08:42	15:42 (WEA 09)	17:41	16:33 (WEA 08)	18:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	16:08	23	15:21 (WEA 09)	16:00	19	15:23 (WEA 09)						
2	08:10	15:27 (WEA 09)	07:13	16:07 (WEA 08)	18:07	20:02	05:02	04:48	05:19	06:10	07:04	06:58	07:55	14:59 (WEA 08)	08:28	14:10 (WEA 10)								
1	08:43	15:42 (WEA 09)	17:43	16:35 (WEA 08)	18:35	20:31	21:21	21:46	21:22	20:22	19:08	16:59	16:07	22	15:21 (WEA 09)	16:00	19	15:23 (WEA 09)						
2	08:09	15:29 (WEA 09)	07:11	16:05 (WEA 08)	18:05	20:00	05:01	04:48	05:20	06:12	07:05	07:												

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 013 - Deibow, Deibower Dorfstraße 16

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar		Februar		März		April		Mai		Juni		Juli		August		September		Oktober		November		Dezember	
1	08:29	14:24 (WEA 10)	08:00		16:22 (WEA 08)	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	15:45 (WEA 08)	08:04								
16	16:07	14:40 (WEA 10)	16:57	3	16:25 (WEA 08)	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:54	16:44	16:07 (WEA 08)	16:02								
2	08:29	14:25 (WEA 10)	07:58		16:19 (WEA 08)	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	15:45 (WEA 08)	08:06								
16	16:08	14:41 (WEA 10)	16:59	8	16:27 (WEA 08)	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	16:07 (WEA 08)	16:01								
3	08:29	14:26 (WEA 10)	07:57		16:19 (WEA 08)	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	15:45 (WEA 08)	08:07								
16	16:09	14:40 (WEA 10)	17:01	11	16:30 (WEA 08)	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	16:06 (WEA 08)	16:00								
4	08:28	14:27 (WEA 10)	07:55		16:17 (WEA 08)	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	15:45 (WEA 08)	08:09								
16	16:10	14:40 (WEA 10)	17:02	15	16:32 (WEA 08)	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	16:06 (WEA 08)	16:00								
5	08:28	14:29 (WEA 10)	07:53		16:17 (WEA 08)	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	15:46 (WEA 08)	08:10								
16	16:11	14:40 (WEA 10)	17:04	17	16:34 (WEA 08)	17:59	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37	20	16:06 (WEA 08)	15:59							
6	08:28	14:31 (WEA 10)	07:51		16:16 (WEA 08)	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	15:46 (WEA 08)	08:12								
16	16:13	14:38 (WEA 10)	17:06	20	16:36 (WEA 08)	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	18	16:04 (WEA 08)	15:58	7	14:24 (WEA 10)					
7	08:27	14:34 (WEA 10)	07:50		16:16 (WEA 08)	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	15:47 (WEA 08)	08:13								
16	16:14	14:35 (WEA 10)	17:08	20	16:36 (WEA 08)	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:32	15	16:02 (WEA 08)	15:53	11	14:25 (WEA 10)					
8	08:27	14:37 (WEA 10)	07:48		16:15 (WEA 08)	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	15:49 (WEA 08)	08:14								
16	16:15	14:40 (WEA 10)	17:10	22	16:37 (WEA 08)	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:32	11	16:00 (WEA 08)	15:58	13	14:28 (WEA 10)					
9	08:26	14:41 (WEA 10)	07:46		16:15 (WEA 08)	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	15:50 (WEA 08)	08:15								
16	16:17	14:42 (WEA 10)	17:11	22	16:37 (WEA 08)	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	8	15:58 (WEA 08)	15:57	14	14:29 (WEA 10)					
10	08:26	14:44 (WEA 10)	07:44		16:15 (WEA 08)	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	15:53 (WEA 08)	08:16								
16	16:18	14:45 (WEA 10)	17:12	22	16:37 (WEA 08)	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	3	15:56 (WEA 08)	15:57	16	14:30 (WEA 10)					
11	08:25	14:46 (WEA 10)	07:42		16:16 (WEA 08)	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30										
16	16:20	14:47 (WEA 10)	17:16	21	16:37 (WEA 08)	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26										
12	08:24	14:48 (WEA 10)	07:40		16:16 (WEA 08)	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32										
16	16:21	14:49 (WEA 10)	17:18	21	16:37 (WEA 08)	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25										
13	08:24	14:50 (WEA 10)	07:38		16:17 (WEA 08)	06:36	06:22	05:20	04:47	05:03	05:50	06:43	07:36	07:33										
16	16:23	14:51 (WEA 10)	17:20	19	16:36 (WEA 08)	18:13	20:09	21:02	21:42	21:37	20:48	19:37	18:25	16:23										
14	08:23	14:52 (WEA 10)	07:36		16:18 (WEA 08)	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35										
16	16:24	14:53 (WEA 10)	17:22	17	16:35 (WEA 08)	18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	16:22										
15	08:22	14:54 (WEA 10)	07:34		16:19 (WEA 08)	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37										
16	16:26	14:55 (WEA 10)	17:24	15	16:34 (WEA 08)	18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	16:20										
16	08:21	14:56 (WEA 10)	07:32		16:20 (WEA 08)	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39										
16	16:28	14:57 (WEA 10)	17:26	12	16:32 (WEA 08)	18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	16:19										
17	08:20	14:58 (WEA 10)	07:30		16:24 (WEA 08)	06:26	06:13	05:14	04:47	05:08	05:57	06:50	07:43	07:41										
16	16:29	14:59 (WEA 10)	17:28	4	16:28 (WEA 08)	18:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	16:17										
18	08:19	15:00 (WEA 10)	07:28		16:24 (WEA 08)	06:11	06:12	05:12	04:47	05:09	05:58	06:52	07:45	07:43										
16	16:31	15:01 (WEA 10)	17:30		16:23 (WEA 08)	06:18	20:18	21:10	21:44	21:31	20:37	19:25	18:14	16:16										
19	08:18	15:02 (WEA 10)	07:26		16:22 (WEA 08)	06:08	06:11	05:11	04:47	05:10	06:00	06:53	07:47	07:44										
16	16:33	15:03 (WEA 10)	17:32		16:24 (WEA 08)	06:12	20:20	21:12	21:45	21:30	20:35	19:23	18:12	16:14										
20	08:17	15:04 (WEA 10)	07:24		16:19 (WEA 08)	06:06	06:09	05:09	04:47	05:12	06:02	06:55	07:48	07:46										
16	16:34	15:05 (WEA 10)	17:34		16:26 (WEA 08)	06:12	20:22	21:14	21:45	21:29	20:33	19:20	18:09	16:13										
21	08:16	15:06 (WEA 10)	07:22		16:17 (WEA 08)	06:04	06:08	05:08	04:47	05:13	06:03	06:57	07:50	07:48										
16	16:36	15:07 (WEA 10)	17:36		16:28 (WEA 08)	06:13	20:24	21:15	21:45	21:28	20:31	19:18	18:07	16:12										
22	08:14	15:08 (WEA 10)	07:19		16:14 (WEA 08)	06:02	06:06	05:06	04:47	05:14	06:05	06:59	07:52	07:50										
16	16:38	15:09 (WEA 10)	17:39		16:30 (WEA 08)	06:06	20:26	21:17	21:45	21:26	20:29	19:15	18:05	16:11										
23	08:13	15:10 (WEA 10)	07:17		16:12 (WEA 08)	06:00	06:05	05:05	04:47	05:16	06:07	07:00	07:54	07:51										
24	08:12	15:11 (WEA 10)	07:15		16:10 (WEA 08)	05:57	06:04	05:04	04:48	05:17	06:09	07:02	07:56	07:53										
16	16:40	15:12 (WEA 10)	17:40		16:32 (WEA 08)	06:07	20:27	21:18	21:46	21:23	20:26	19:13	18:03	16:05										
25	08:12	15:13 (WEA 10)	07:15		16:05 (WEA 08)	05:57	06:04	05:04	04:49	05:20	06:12	07:05	07:57	07:54										
16	16:42	15:14 (WEA 10)	17:41		16:33 (WEA 08)	06:09	20:29	21:20	21:46	21:23	20:24	19:10	18:01	16:03										
26	08:10	15:15 (WEA 10)	07:13		16:07 (WEA 08)	05:55	06:02	05:02	04:48	05:19	06:10	07:04	06:58	7	15:53 (WEA 08)	07:55								
16	16:43	15:16 (WEA 10)	17:43		16:35 (WEA 08)	06:11	20:31	21:21	21:46	21:22	20:22	19:08	16:59	16:07										
27	08:09	15:17 (WEA 10)	07:11		16:05 (WEA 08)	05:53	06:01	05:01	04:48	05:20	06:12	07:05	07:00	13	16:00 (WEA 08)	07:57								
16	16:45	15:18 (WEA 10)	17:45		16:37 (WEA 08)	06:13	20:33	21:22	21:46	21:20	20:20	19:06	16:57	16:03										
27	08:08	15:19 (WEA 10)	07:08		16:02 (WEA 08)	05:51	06:00	05:00	04:49	05:22	06:14	07:07	07:01	15	15:48 (WEA 08)	07:58								
16	16:47	15:20 (WEA 10)	17:47		16:39 (WEA 08)	06:15	20:35	21:24	21:46	21:19	20:17	19:03	16:55	16	16:04 (WEA 08)	07:58								
28	08:06	15:21 (WEA 10)	07:06		16:00 (WEA 08)	05:49	05:59	05:03	04:49	05:23	06:16	07:09	07:03	18	15:47 (WEA 08)	08:00								
16	16:49	15:22 (WEA 10)	17:49		16:41 (WEA 08)	06:16	20:36	21:25	21:45	21:17	20:15	19:01	16:52	18	16:05 (WEA 08)	08:04								
29</																								

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 014 - Deibow, Deibower Dorfstraße 17

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

		Januar		Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember		
1	08:29	14:29 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04			
	16:07	18	14:47 (WEA 10)	16:57	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:54	16:44	16:02		
2	08:29	14:30 (WEA 10)	07:58	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	08:06			
	16:08	17	14:47 (WEA 10)	16:59	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	16:01		
3	08:29	14:30 (WEA 10)	07:57	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	08:07			
	16:09	17	14:47 (WEA 10)	17:01	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	16:00		
4	08:28	14:32 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09	14:22 (WEA 10)		
	16:10	15	14:47 (WEA 10)	17:02	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	16:00	7	14:29 (WEA 10)
5	08:28	14:33 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10	14:21 (WEA 10)		
	16:11	14	14:47 (WEA 10)	17:04	17:59	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37	15:59	9	14:30 (WEA 10)
6	08:28	14:34 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12	14:20 (WEA 10)		
	16:13	12	14:46 (WEA 10)	17:06	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	15:58	12	14:32 (WEA 10)
7	08:27	14:35 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13	14:20 (WEA 10)		
	16:14	10	14:45 (WEA 10)	17:08	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:33	15:58	13	14:33 (WEA 10)
8	08:27	14:38 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14	14:20 (WEA 10)		
	16:15	7	14:45 (WEA 10)	17:10	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:31	15:58	15	14:35 (WEA 10)
9	08:26	14:40 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15	14:19 (WEA 10)		
	16:17	17:12	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	15:57	17	14:36 (WEA 10)		
10	08:26	14:41 (WEA 10)	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17	14:19 (WEA 10)		
	16:18	17:14	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	15:57	18	14:37 (WEA 10)		
11	08:25	14:42 (WEA 10)	07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18	14:19 (WEA 10)		
	16:20	17:16	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26	15:57	18	14:37 (WEA 10)		
12	08:24	14:43 (WEA 10)	07:40	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19	14:19 (WEA 10)		
	16:21	17:18	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25	15:57	19	14:38 (WEA 10)		
13	08:24	14:44 (WEA 10)	07:38	06:36	06:22	05:20	04:47	05:03	05:50	06:43	07:36	07:33	08:20	14:19 (WEA 10)		
	16:23	17:20	18:13	20:09	21:02	21:42	21:37	20:48	19:37	18:25	16:23	15:57	20	14:39 (WEA 10)		
14	08:23	14:45 (WEA 10)	07:36	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21	14:19 (WEA 10)		
	16:24	17:22	18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	16:22	15:57	20	14:39 (WEA 10)		
15	08:22	14:46 (WEA 10)	07:34	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22	14:20 (WEA 10)		
	16:26	17:24	18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	16:20	15:57	20	14:40 (WEA 10)		
16	08:21	14:47 (WEA 10)	07:32	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23	14:20 (WEA 10)		
	16:28	17:26	18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	16:19	15:57	21	14:41 (WEA 10)		
17	08:20	14:48 (WEA 10)	07:30	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:23	14:20 (WEA 10)		
	16:29	17:28	18:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	16:17	15:57	21	14:41 (WEA 10)		
18	08:19	14:49 (WEA 10)	07:28	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:24	14:21 (WEA 10)		
	16:31	17:30	18:23	20:18	21:10	21:44	21:31	20:37	19:25	18:14	16:16	15:57	21	14:42 (WEA 10)		
19	08:18	14:50 (WEA 10)	07:26	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:25	14:22 (WEA 10)		
	16:33	17:32	18:24	20:20	21:12	21:45	21:30	20:35	19:23	18:12	16:14	15:57	21	14:43 (WEA 10)		
20	08:17	14:51 (WEA 10)	07:24	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:26	14:22 (WEA 10)		
	16:34	17:34	18:26	20:22	21:14	21:45	21:29	20:33	19:20	18:09	16:13	15:58	21	14:43 (WEA 10)		
21	08:16	14:52 (WEA 10)	07:22	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:26	14:22 (WEA 10)		
	16:36	17:36	18:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	16:12	15:58	22	14:44 (WEA 10)		
22	08:14	14:53 (WEA 10)	07:19	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:27	14:22 (WEA 10)		
	16:38	17:38	18:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	16:10	15:59	22	14:44 (WEA 10)		
23	08:13	14:54 (WEA 10)	07:17	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:27	14:23 (WEA 10)		
	16:40	17:40	18:32	20:27	21:18	21:46	21:25	20:26	19:13	18:03	16:09	15:59	22	14:45 (WEA 10)		
24	08:12	14:55 (WEA 10)	07:15	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:28	14:24 (WEA 10)		
	16:42	17:41	18:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	16:08	16:00	21	14:45 (WEA 10)		
25	08:10	14:56 (WEA 10)	07:13	06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	07:55	08:28	14:24 (WEA 10)		
	16:43	17:43	18:35	20:31	21:21	21:46	21:22	20:22	19:08	18:00	16:07	16:00	21	14:45 (WEA 10)		
26	08:09	14:57 (WEA 10)	07:11	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:00	07:57	08:28	14:24 (WEA 10)		
	16:45	17:45	18:37	20:33	21:22	21:46	21:20	20:20	19:06	18:00	16:07	16:00	21	14:45 (WEA 10)		
27	08:08	14:58 (WEA 10)	07:08	06:02	05:51	05:00	04:49	05:22	06:14	07:07	07:01	07:58	08:29	14:26 (WEA 10)		
	16:47	17:47	18:39	20:35	21:24	21:46	21:19	20:17	19:03	18:00	16:05	16:00	21	14:47 (WEA 10)		
28	08:06	14:59 (WEA 10)	07:06	06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:03	08:00	08:29	14:26 (WEA 10)		
	16:49	17:49	18:41	20:36	21:25	21:45	21:17	20:15	19:01	18:00	16:02	16:00	21	14:47 (WEA 10)		
29	08:05	15:00 (WEA 10)	06:58	05:47	04:58	04:50	05:25	06:17	07:11	07:05	08:01	08:00	14:27 (WEA 10)			
	16:51	17:51	18:43	20:38	21:26	21:45	21:16	20:13	18:58	18:00	16:03	16:00	20	14:47 (WEA 10)		
30	08:03	15:01 (WEA 10)	06:55	05:45	04:57	04:50	05:27	06:19	07:12	07:07	08:03	08:00	14:28 (WEA 10)			
	16:53	17:53	18:45	20:40	21:28	21:45	21:14	20:10	18:56	18:00	16:02	16:00	19	14:47 (WEA 10)		
31	08:02	15:02 (WEA 10)	06:53	05:43	04:56	04:50	05:28	06:21	07:15	07:09	08:05	08:00	14:28 (WEA 10)			
	16:55	17:55	18:47	20:42	21:30	21:45	21:12	20:08	18:54	18:00	16:04	16:00	19	14:47 (WEA 10)		
Sonnenscheinstunden	253		275	367	419	491	506	509	458	382	329	262	237			
astr.max.mögl.Beschattung	110												522			

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 015 - Deibow, Deibower Dorfstraße 018

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

		Januar		Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember		
1	08:29	14:32 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04			
	16:07	19	14:51 (WEA 10)	16:57	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:54	16:44	16:02		
2	08:29	14:33 (WEA 10)	07:58	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	08:06			
	16:08	18	14:51 (WEA 10)	16:59	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	16:01		
3	08:29	14:33 (WEA 10)	07:57	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	08:07	14:25 (WEA 10)		
	16:09	18	14:51 (WEA 10)	17:01	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	16:00	6	14:31 (WEA 10)
4	08:28	14:34 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09	14:24 (WEA 10)		
	16:10	17	14:51 (WEA 10)	17:02	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	16:00	10	14:34 (WEA 10)
5	08:28	14:36 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10	14:22 (WEA 10)		
	16:11	16	14:52 (WEA 10)	17:04	17:59	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37	15:59	13	14:35 (WEA 10)
6	08:28	14:36 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12	14:23 (WEA 10)		
	16:13	15	14:51 (WEA 10)	17:06	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	15:58	14	14:37 (WEA 10)
7	08:27	14:37 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13	14:22 (WEA 10)		
	16:14	13	14:50 (WEA 10)	17:08	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:33	15:58	16	14:38 (WEA 10)
8	08:27	14:39 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14	14:22 (WEA 10)		
	16:15	11	14:50 (WEA 10)	17:10	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:31	15:58	17	14:39 (WEA 10)
9	08:26	14:41 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15	14:22 (WEA 10)		
	16:17	8	14:49 (WEA 10)	17:12	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	15:57	18	14:40 (WEA 10)
10	08:26	14:44 (WEA 10)	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17	14:22 (WEA 10)		
	16:18	17:14	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	15:57	18	14:40 (WEA 10)		
11	08:25	14:42 (WEA 10)	07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18	14:22 (WEA 10)		
	16:20	17:16	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26	15:57	19	14:41 (WEA 10)		
12	08:24	14:40 (WEA 10)	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19	14:22 (WEA 10)			
	16:21	17:18	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25	15:57	20	14:42 (WEA 10)		
13	08:24	14:38 (WEA 10)	06:36	06:22	05:20	04:47	05:03	05:50	06:43	07:36	07:33	08:20	14:22 (WEA 10)			
	16:23	17:20	18:13	20:09	21:02	21:42	21:37	20:48	19:37	18:25	16:23	15:57	20	14:42 (WEA 10)		
14	08:23	14:36 (WEA 10)	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21	14:22 (WEA 10)			
	16:24	17:22	18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	16:22	15:57	21	14:43 (WEA 10)		
15	08:22	14:34 (WEA 10)	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22	14:22 (WEA 10)			
	16:26	17:24	18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	16:20	15:57	22	14:44 (WEA 10)		
16	08:21	14:32 (WEA 10)	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23	14:23 (WEA 10)			
	16:28	17:26	18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	16:19	15:57	21	14:44 (WEA 10)		
17	08:20	14:30 (WEA 10)	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:23	14:23 (WEA 10)			
	16:29	17:28	18:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	16:17	15:57	22	14:45 (WEA 10)		
18	08:19	14:28 (WEA 10)	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:24	14:24 (WEA 10)			
	16:31	17:30	18:23	20:18	21:10	21:44	21:31	20:37	19:25	18:14	16:16	15:57	22	14:46 (WEA 10)		
19	08:18	14:26 (WEA 10)	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:25	14:25 (WEA 10)			
	16:33	17:32	18:24	20:20	21:12	21:45	21:30	20:35	19:23	18:12	16:14	15:57	22	14:47 (WEA 10)		
20	08:17	14:24 (WEA 10)	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:26	14:24 (WEA 10)			
	16:34	17:34	18:26	20:22	21:14	21:45	21:29	20:33	19:20	18:09	16:13	15:58	23	14:47 (WEA 10)		
21	08:16	14:22 (WEA 10)	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:26	14:25 (WEA 10)			
	16:36	17:36	18:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	16:12	15:58	23	14:48 (WEA 10)		
22	08:14	14:20 (WEA 10)	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:27	14:25 (WEA 10)			
	16:38	17:38	18:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	16:10	15:59	23	14:48 (WEA 10)		
23	08:13	14:17 (WEA 10)	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:27	14:26 (WEA 10)			
	16:40	17:40	18:32	20:27	21:18	21:45	21:25	20:26	19:13	18:03	16:09	15:59	23	14:49 (WEA 10)		
24	08:12	14:15 (WEA 10)	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:28	14:27 (WEA 10)			
	16:42	17:41	18:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	16:08	16:00	22	14:49 (WEA 10)		
25	08:10	14:13 (WEA 10)	06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	07:55	08:28	14:27 (WEA 10)			
	16:43	17:43	18:35	20:31	21:21	21:46	21:22	20:22	19:08	18:00	16:07	16:00	22	14:49 (WEA 10)		
26	08:09	14:11 (WEA 10)	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:00	07:57	08:28	14:27 (WEA 10)			
	16:45	17:45	18:37	20:33	21:22	21:46	21:20	20:20	19:06	18:00	16:06	16:01	22	14:49 (WEA 10)		
27	08:08	14:08 (WEA 10)	06:02	05:51	05:00	04:49	05:22	06:14	07:07	07:01	07:58	08:29	14:29 (WEA 10)			
	16:47	17:47	18:39	20:35	21:24	21:46	21:19	20:17	19:03	18:00	16:05	16:02	21	14:50 (WEA 10)		
28	08:06	14:06 (WEA 10)	06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:03	08:00	08:29	14:29 (WEA 10)			
	16:49	17:49	18:41	20:36	21:25	21:45	21:17	20:15	19:01	18:00	16:04	16:03	22	14:51 (WEA 10)		
29	08:05	14:05 (WEA 10)	05:58	05:47	04:58	04:50	05:25	06:17	07:11	07:05	08:01	08:29	14:30 (WEA 10)			
	16:51	17:51	18:43	20:38	21:26	21:45	21:16	20:13	18:58	18:00	16:03	16:03	21	14:51 (WEA 10)		
30	08:03	14:03 (WEA 10)	05:55	05:45	04:57	04:50	05:27	06:19	07:12	07:07	08:03	08:29	14:30 (WEA 10)			
	16:53	17:53	18:45	20:40	21:28	21:45	21:14	20:10	18:56	18:00	16:02	16:04	21	14:51 (WEA 10)		
31	08:02	14:02 (WEA 10)	05:53	05:43	04:56	04:56	05:28	06:21	07:15	07:09	08:05	08:29	14:30 (WEA 10)			
	16:55	17:55	18:47	20:42	21:30	21:45	21:12	20:08	18:54	18:00	16:04	16:05	21	14:51 (WEA 10)		
Sonnenscheinstunden	253		275	367	419	491	506	509	458	382	329	262	237			
astr.max.mögl.Beschattung	135												565			

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 016 - Deibow, Deibower Dorfstraße 19

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

		Januar		Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember		
1	08:29	14:36 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04	14:30 (WEA 10)		
	16:07	20	14:56 (WEA 10)	16:57	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:54	16:44	16:02	4	14:34 (WEA 10)
2	08:29	14:37 (WEA 10)	07:58	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	08:06	14:29 (WEA 10)		
	16:08	20	14:57 (WEA 10)	16:59	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	16:01	8	14:37 (WEA 10)
3	08:29	14:37 (WEA 10)	07:57	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	08:07	14:27 (WEA 10)		
	16:09	19	14:56 (WEA 10)	17:01	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	16:00	12	14:39 (WEA 10)
4	08:28	14:38 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09	14:27 (WEA 10)		
	16:10	19	14:57 (WEA 10)	17:02	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	16:00	13	14:40 (WEA 10)
5	08:28	14:39 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10	14:26 (WEA 10)		
	16:11	18	14:57 (WEA 10)	17:04	17:59	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37	15:59	15	14:41 (WEA 10)
6	08:28	14:40 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12	14:26 (WEA 10)		
	16:13	17	14:57 (WEA 10)	17:06	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	15:58	17	14:43 (WEA 10)
7	08:27	14:41 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13	14:26 (WEA 10)		
	16:14	15	14:56 (WEA 10)	17:08	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:33	15:58	17	14:43 (WEA 10)
8	08:27	14:43 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14	14:26 (WEA 10)		
	16:15	13	14:56 (WEA 10)	17:10	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:31	15:58	19	14:45 (WEA 10)
9	08:26	14:44 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15	14:26 (WEA 10)		
	16:17	12	14:56 (WEA 10)	17:12	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	15:57	19	14:45 (WEA 10)
10	08:26	14:45 (WEA 10)	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17	14:26 (WEA 10)		
	16:18	9	14:54 (WEA 10)	17:14	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	15:57	20	14:46 (WEA 10)
11	08:25	14:48 (WEA 10)	07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18	14:26 (WEA 10)		
	16:20	4	14:52 (WEA 10)	17:16	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26	15:57	20	14:46 (WEA 10)
12	08:24		07:40	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19	14:26 (WEA 10)		
	16:21		17:18	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25	15:57	21	14:47 (WEA 10)	
13	08:24		07:38	06:36	06:22	05:20	04:47	05:03	05:50	06:43	07:36	07:33	08:20	14:26 (WEA 10)		
	16:23		17:20	18:13	20:09	21:02	21:41	21:37	20:48	19:37	18:25	16:23	15:57	22	14:48 (WEA 10)	
14	08:23		07:36	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21	14:26 (WEA 10)		
	16:24		17:22	18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	16:22	15:57	22	14:48 (WEA 10)	
15	08:22		07:34	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22	14:27 (WEA 10)		
	16:26		17:24	18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	16:20	15:57	22	14:49 (WEA 10)	
16	08:21		07:32	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23	14:27 (WEA 10)		
	16:28		17:26	18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	16:19	15:57	22	14:49 (WEA 10)	
17	08:20		07:30	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:23	14:28 (WEA 10)		
	16:29		17:28	18:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	16:17	15:57	22	14:50 (WEA 10)	
18	08:19		07:28	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:24	14:28 (WEA 10)		
	16:31		17:30	18:23	20:18	21:10	21:44	21:31	20:37	19:25	18:14	16:16	15:57	23	14:51 (WEA 10)	
19	08:18		07:26	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:25	14:29 (WEA 10)		
	16:33		17:32	18:24	20:20	21:12	21:45	21:30	20:35	19:23	18:12	16:14	15:57	23	14:52 (WEA 10)	
20	08:17		07:24	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:26	14:29 (WEA 10)		
	16:34		17:34	18:26	20:22	21:14	21:45	21:29	20:33	19:20	18:09	16:13	15:58	23	14:52 (WEA 10)	
21	08:16		07:22	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:26	14:30 (WEA 10)		
	16:36		17:36	18:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	16:12	15:58	23	14:53 (WEA 10)	
22	08:14		07:19	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:27	14:30 (WEA 10)		
	16:38		17:38	18:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	16:10	15:59	23	14:53 (WEA 10)	
23	08:13		07:17	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:27	14:31 (WEA 10)		
	16:40		17:40	18:32	20:27	21:18	21:45	21:25	20:26	19:13	18:03	16:09	15:59	23	14:54 (WEA 10)	
24	08:12		07:15	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:28	14:31 (WEA 10)		
	16:42		17:41	18:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	16:08	16:00	23	14:54 (WEA 10)	
25	08:10		07:13	06:07	05:55	05:02	04:48	05:19	06:10	07:04	06:58	07:55	08:28	14:31 (WEA 10)		
	16:43		17:43	18:35	20:31	21:21	21:46	21:22	20:22	19:08	16:59	16:07	16:00	23	14:54 (WEA 10)	
26	08:09		07:11	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:00	07:57	08:28	14:32 (WEA 10)		
	16:45		17:45	18:37	20:33	21:22	21:46	21:20	20:20	19:06	16:57	16:06	16:01	22	14:54 (WEA 10)	
27	08:08		07:08	06:02	05:51	05:00	04:49	05:22	06:14	07:07	07:01	07:58	08:29	14:33 (WEA 10)		
	16:47		17:47	18:39	20:35	21:24	21:46	21:19	20:17	19:03	16:55	16:05	16:02	22	14:55 (WEA 10)	
28	08:06		07:06	06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:03	08:00	08:29	14:33 (WEA 10)		
	16:49		17:49	18:41	20:36	21:25	21:45	21:17	20:15	19:01	16:52	16:04	16:03	23	14:56 (WEA 10)	
29	08:05			06:58	05:47	04:58	04:50	05:25	06:17	07:11	07:05	08:01	08:29	14:34 (WEA 10)		
	16:51			19:42	20:38	21:26	21:45	21:16	20:13	18:58	16:50	16:03	16:03	22	14:56 (WEA 10)	
30	08:03			06:55	05:45	04:57	04:50	05:27	06:19	07:12	07:07	08:03	08:29	14:35 (WEA 10)		
	16:53			19:44	20:40	21:28	21:45	21:14	20:10	18:56	16:48	16:02	16:04	21	14:56 (WEA 10)	
31	08:02			06:53		04:56		05:28	06:21		07:09		08:29	14:35 (WEA 10)		
	16:55			19:46		21:29		21:12	20:08		16:46		16:05	21	14:56 (WEA 10)	
Sonnenscheinstunden	253			275	367	419	491	506	509	458	382	329	262	237		
astr.max.mögl.Beschattung		166													610	

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
	Minuten mit Schatten	

SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 017 - Deibow, Deibower Dorfstraße 20

Annahmen für Schattenwurfberechnung

- Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:
- Die Sonne scheint täglich von Sonnenauf- bis -untergang
 - Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung
 - Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29 16:07	14:40 (WEA 10) 15:01 (WEA 10)	08:00 16:57	07:04 17:51	06:50 19:48	05:43 20:42	04:55 21:30	04:51 21:45	05:30 21:11	06:22 20:06	07:14 18:54	08:04 16:44
2	08:29 16:08	14:41 (WEA 10) 15:02 (WEA 10)	07:58 16:59	07:02 17:53	06:48 19:50	05:41 20:43	04:54 21:31	04:52 21:44	05:31 21:09	06:24 20:03	07:16 18:51	08:06 16:43
3	08:29 16:09	14:41 (WEA 10) 15:01 (WEA 10)	07:57 17:01	06:59 17:55	06:46 19:51	05:39 20:45	04:53 21:32	04:53 21:44	05:33 21:07	06:26 20:01	07:18 18:49	08:07 16:41
4	08:28 16:10	14:42 (WEA 10) 15:02 (WEA 10)	07:55 17:02	06:57 17:57	06:43 19:53	05:37 20:47	04:52 21:34	04:53 21:43	05:35 21:05	06:28 19:59	07:19 18:46	08:09 16:39
5	08:28 16:11	14:43 (WEA 10) 15:02 (WEA 10)	07:53 17:04	06:55 17:59	06:41 19:55	05:35 20:49	04:51 21:35	04:54 21:43	05:36 21:04	06:29 19:56	07:21 18:44	08:10 16:37
6	08:28 16:13	14:44 (WEA 10) 15:02 (WEA 10)	07:51 17:06	06:52 18:00	06:39 19:57	05:33 20:50	04:51 21:36	04:55 21:42	05:38 21:02	06:31 19:54	07:23 18:42	08:12 16:35
7	08:27 16:14	14:44 (WEA 10) 15:01 (WEA 10)	07:50 17:08	06:50 18:02	06:36 19:59	05:31 20:52	04:50 21:37	04:56 21:42	05:40 21:00	06:33 19:52	07:25 18:39	08:13 16:33
8	08:27 16:15	14:46 (WEA 10) 15:02 (WEA 10)	07:48 17:10	06:48 18:04	06:34 20:00	05:29 20:54	04:50 21:38	04:57 21:41	05:41 20:58	06:34 19:49	07:27 18:37	08:14 16:31
9	08:26 16:17	14:47 (WEA 10) 15:01 (WEA 10)	07:46 17:12	06:45 18:06	06:31 20:02	05:27 20:56	04:49 21:38	04:58 21:40	05:43 20:56	06:36 19:47	07:28 18:35	08:15 16:30
10	08:26 16:18	14:48 (WEA 10) 15:01 (WEA 10)	07:44 17:14	06:43 18:08	06:29 20:04	05:26 20:57	04:49 21:39	04:59 21:40	05:45 20:54	06:38 19:44	07:30 18:32	08:17 16:28
11	08:25 16:20	14:50 (WEA 10) 15:00 (WEA 10)	07:42 17:16	06:41 18:10	06:27 20:06	05:24 20:59	04:48 21:40	05:00 21:39	05:46 20:52	06:40 19:42	07:32 18:30	08:18 16:26
12	08:24 16:21	14:52 (WEA 10) 14:58 (WEA 10)	07:40 17:18	06:38 18:12	06:24 20:08	05:22 21:01	04:48 21:41	05:01 21:38	05:48 20:50	06:41 19:40	07:34 18:28	08:19 16:25
13	08:24 16:23	14:53 (WEA 10) 15:01 (WEA 10)	07:38 17:20	06:36 18:13	06:22 20:09	05:20 21:02	04:47 21:41	05:02 21:37	05:50 20:48	06:43 19:37	07:36 18:25	08:20 16:23
14	08:23 16:24	14:54 (WEA 10) 15:01 (WEA 10)	07:36 17:22	06:34 18:15	06:20 20:11	05:19 21:04	04:47 21:42	05:04 21:36	05:51 20:46	06:45 19:35	07:37 18:23	08:21 16:22
15	08:22 16:26	14:55 (WEA 10) 15:01 (WEA 10)	07:34 17:24	06:31 18:17	06:18 20:13	05:17 21:06	04:47 21:43	05:05 21:35	05:53 20:44	06:46 19:32	07:39 18:21	08:22 16:20
16	08:21 16:28	14:56 (WEA 10) 15:01 (WEA 10)	07:32 17:26	06:29 18:19	06:15 20:15	05:15 21:07	04:47 21:43	05:06 21:34	05:55 20:42	06:48 19:30	07:41 18:18	08:23 16:19
17	08:20 16:29	14:57 (WEA 10) 15:01 (WEA 10)	07:30 17:28	06:26 18:21	06:13 20:17	05:14 21:09	04:47 21:44	05:07 21:33	05:57 20:39	06:50 19:27	07:43 18:16	08:24 16:17
18	08:19 16:31	14:58 (WEA 10) 15:01 (WEA 10)	07:28 17:30	06:24 18:23	06:11 20:18	05:12 21:10	04:47 21:44	05:09 21:31	05:58 20:37	06:52 19:25	07:45 18:14	08:25 16:16
19	08:18 16:33	14:59 (WEA 10) 15:01 (WEA 10)	07:26 17:32	06:22 18:24	06:08 20:20	05:11 21:12	04:47 21:45	05:10 21:30	06:00 20:35	06:53 19:23	07:47 18:12	08:26 16:14
20	08:17 16:34	15:00 (WEA 10) 15:01 (WEA 10)	07:24 17:34	06:19 18:26	06:06 20:22	05:09 21:14	04:47 21:45	05:12 21:29	06:02 20:33	06:55 19:20	07:48 18:09	08:27 16:13
21	08:16 16:36	15:01 (WEA 10) 15:01 (WEA 10)	07:22 17:36	06:17 18:28	06:04 20:24	05:08 21:15	04:47 21:45	05:13 21:28	06:03 20:31	06:57 19:18	07:50 18:07	08:28 16:12
22	08:14 16:38	15:02 (WEA 10) 15:01 (WEA 10)	07:19 17:38	06:14 18:30	06:02 20:26	05:06 21:17	04:47 21:45	05:14 21:26	06:05 20:29	06:59 19:15	07:52 18:05	08:29 16:10
23	08:13 16:40	15:03 (WEA 10) 15:01 (WEA 10)	07:17 17:39	06:12 18:32	06:00 20:27	05:05 21:18	04:47 21:45	05:16 21:25	06:07 20:26	07:00 19:13	07:54 18:03	08:27 16:09
24	08:12 16:42	15:04 (WEA 10) 15:01 (WEA 10)	07:15 17:41	06:10 18:33	05:57 20:29	05:04 21:20	04:48 21:46	05:17 21:23	06:09 20:24	07:02 19:10	07:56 18:01	08:28 16:08
25	08:10 16:43	15:05 (WEA 10) 15:01 (WEA 10)	07:13 17:43	06:07 18:35	05:55 20:31	05:02 21:21	04:48 21:46	05:19 21:22	06:10 20:22	07:04 19:08	07:58 18:00	08:29 16:07
26	08:09 16:45	15:06 (WEA 10) 15:01 (WEA 10)	07:11 17:45	06:05 18:37	05:53 20:33	05:01 21:22	04:48 21:46	05:20 21:20	06:12 20:20	07:05 19:06	07:57 18:00	08:29 16:06
27	08:08 16:47	15:07 (WEA 10) 15:01 (WEA 10)	07:08 17:47	06:02 18:39	05:51 20:35	05:00 21:24	04:49 21:46	05:22 21:19	06:14 20:17	07:07 19:03	07:58 18:00	08:29 16:05
28	08:06 16:49	15:08 (WEA 10) 15:01 (WEA 10)	07:06 17:49	06:00 18:41	05:49 20:36	05:04 21:25	04:49 21:45	05:23 21:17	06:16 20:15	07:09 19:01	07:53 18:00	08:29 16:04
29	08:05 16:51	15:09 (WEA 10) 15:01 (WEA 10)	07:05 17:51	05:58 18:48	05:47 20:38	05:04 21:26	04:50 21:45	05:25 21:16	06:17 20:13	07:11 18:58	07:55 18:00	08:29 16:03
30	08:03 16:53	15:10 (WEA 10) 15:01 (WEA 10)	07:03 17:53	05:55 18:50	05:45 20:40	05:04 21:28	04:50 21:45	05:27 21:14	06:19 20:10	07:12 18:56	07:57 18:00	08:29 16:02
31	08:02 16:55	15:11 (WEA 10) 15:01 (WEA 10)	07:02 17:54	05:53 18:52	05:44 20:41	05:05 21:29	04:56 21:45	05:28 21:12	06:21 20:08	07:09 18:46	07:59 18:00	08:29 16:05
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	329	262	237
astr.max.mögl.Beschattung	195										6	643

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
--------------	-----------------------	--	-------------------------	----------------------	---

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 018 - Deibow, Deibower Dorfstraße 21

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29 16:07	14:42 (WEA 10) 15:04 (WEA 10)	08:00 16:57	07:04 17:51	06:50 19:48	05:43 20:42	04:55 21:30	04:51 21:45	05:30 21:11	06:22 20:06	07:14 18:54	07:11 16:44
2	08:29 16:08	14:43 (WEA 10) 15:05 (WEA 10)	07:58 16:59	07:02 17:53	06:48 19:50	05:41 20:43	04:54 21:31	04:52 21:44	05:31 21:09	06:24 20:03	07:16 18:51	07:13 16:43
3	08:29 16:09	14:43 (WEA 10) 15:04 (WEA 10)	07:57 17:01	06:59 17:55	06:46 19:51	05:39 20:45	04:53 21:32	04:53 21:44	05:33 21:07	06:26 20:01	07:18 18:49	07:15 16:41
4	08:28 16:10	14:44 (WEA 10) 15:05 (WEA 10)	07:55 20:02	06:57 17:57	06:43 19:53	05:37 20:47	04:52 21:34	04:53 21:45	05:35 21:05	06:28 20:06	07:19 18:49	07:17 16:40
5	08:28 16:11	14:46 (WEA 10) 15:05 (WEA 10)	07:53 17:04	06:55 17:59	06:41 19:55	05:35 20:49	04:51 21:35	04:54 21:43	05:36 21:04	06:29 19:56	07:21 18:44	07:18 16:37
6	08:28 16:13	14:46 (WEA 10) 15:05 (WEA 10)	07:51 17:06	06:52 18:00	06:39 19:57	05:33 20:50	04:51 21:36	04:55 21:42	05:38 21:02	06:31 19:54	07:23 18:42	07:20 16:35
7	08:27 16:14	14:47 (WEA 10) 15:05 (WEA 10)	07:50 17:08	06:50 18:02	06:36 19:59	05:31 20:52	04:50 21:37	04:56 21:42	05:40 21:00	06:33 19:52	07:25 18:39	07:22 16:33
8	08:27 16:15	14:48 (WEA 10) 15:05 (WEA 10)	07:48 17:10	06:48 18:04	06:34 20:00	05:29 20:54	04:50 21:38	04:57 21:41	05:41 20:58	06:34 19:49	07:27 18:37	07:24 16:31
9	08:26 16:17	14:49 (WEA 10) 15:05 (WEA 10)	07:46 17:12	06:45 18:06	06:31 20:02	05:27 20:56	04:49 21:38	04:58 21:40	05:43 20:56	06:36 19:47	07:28 18:35	07:26 16:30
10	08:26 16:18	14:50 (WEA 10) 15:04 (WEA 10)	07:44 17:14	06:43 18:08	06:29 20:04	05:26 20:57	04:49 21:39	04:59 21:40	05:45 20:54	06:38 19:44	07:30 18:32	07:28 16:28
11	08:25 16:20	14:51 (WEA 10) 15:03 (WEA 10)	07:42 17:16	06:41 18:10	06:27 20:06	05:24 20:59	04:48 21:40	05:00 20:52	05:46 19:42	06:40 18:30	07:32 16:26	07:30 16:26
12	08:24 16:21	14:53 (WEA 10) 15:02 (WEA 10)	07:40 17:18	06:38 18:12	06:24 20:08	05:22 21:01	04:48 21:41	05:01 21:38	05:48 20:50	06:41 19:40	07:34 18:28	07:32 16:25
13	08:24 16:23	14:56 (WEA 10) 15:00 (WEA 10)	07:38 17:20	06:36 18:13	06:22 20:09	05:20 21:02	04:47 21:41	05:02 21:37	05:50 20:48	06:43 19:37	07:36 18:25	07:33 16:23
14	08:23 16:24	14:56 (WEA 10) 15:00 (WEA 10)	07:38 17:22	06:36 18:15	06:20 20:11	05:19 21:04	04:47 21:42	05:04 21:36	05:51 20:46	06:45 19:35	07:37 18:23	07:35 16:22
15	08:22 16:26	14:57 (WEA 10) 15:01 (WEA 10)	07:37 17:24	06:35 18:17	06:18 20:13	05:17 21:06	04:47 21:43	05:05 21:35	05:53 20:44	06:46 19:32	07:39 18:21	07:37 16:20
16	08:21 16:28	14:58 (WEA 10) 15:02 (WEA 10)	07:36 17:26	06:34 18:19	06:15 20:15	05:15 21:07	04:47 21:43	05:06 21:34	05:55 20:42	06:48 19:30	07:41 18:18	07:39 16:19
17	08:20 16:29	14:59 (WEA 10) 15:03 (WEA 10)	07:35 17:28	06:33 18:21	06:14 20:17	05:14 21:09	04:47 21:44	05:07 21:33	05:57 20:39	06:50 19:27	07:43 18:16	07:41 16:17
18	08:19 16:31	15:04 (WEA 10) 15:07 (WEA 10)	07:34 17:30	06:32 18:23	06:13 20:18	05:13 21:10	04:47 21:44	05:09 21:31	05:58 20:37	06:52 19:25	07:45 18:14	07:43 16:16
19	08:18 16:33	15:05 (WEA 10) 15:08 (WEA 10)	07:33 17:32	06:32 18:24	06:12 20:20	05:11 21:12	04:47 21:45	05:10 21:30	06:00 20:35	06:53 19:23	07:47 18:12	07:44 16:14
20	08:17 16:34	15:06 (WEA 10) 15:10 (WEA 10)	07:32 17:34	06:29 18:26	06:06 20:22	05:09 21:14	04:47 21:45	05:12 21:29	06:02 20:33	06:55 19:20	07:48 18:09	07:46 16:13
21	08:16 16:36	15:11 (WEA 10) 15:14 (WEA 10)	07:31 17:36	06:28 18:28	06:04 20:24	05:08 21:15	04:47 21:45	05:13 21:28	06:03 20:31	06:57 19:18	07:50 18:07	07:48 16:12
22	08:14 16:38	15:15 (WEA 10) 15:18 (WEA 10)	07:30 17:39	06:26 18:30	06:03 20:26	05:06 21:17	04:47 21:45	05:14 21:26	06:05 20:29	06:59 19:15	07:52 18:05	07:50 16:10
23	08:13 16:40	15:20 (WEA 10) 15:23 (WEA 10)	07:29 17:47	06:24 18:39	06:00 20:35	05:05 21:24	04:47 21:46	05:16 21:19	06:07 20:17	07:00 19:03	07:54 18:55	07:51 16:05
24	08:12 16:42	15:24 (WEA 10) 15:27 (WEA 10)	07:28 17:49	06:22 18:41	06:00 20:36	05:05 21:25	04:47 21:45	05:16 21:17	06:07 20:15	07:00 19:01	07:54 18:52	07:51 16:04
25	08:10 16:43	15:28 (WEA 10) 15:31 (WEA 10)	07:26 17:51	06:20 18:46	05:57 20:41	05:04 21:28	04:48 21:46	05:17 21:20	06:09 20:12	07:02 19:04	07:56 18:58	07:53 16:06
26	08:09 16:45	15:32 (WEA 10) 15:35 (WEA 10)	07:25 17:50	06:19 18:49	05:56 20:46	05:03 21:29	04:48 21:47	05:18 21:21	06:12 20:15	07:05 19:07	07:57 18:59	07:55 16:07
27	08:08 16:47	15:36 (WEA 10) 15:39 (WEA 10)	07:24 17:49	06:18 18:48	05:55 20:47	05:02 21:30	04:49 21:48	05:20 21:22	06:14 20:18	07:07 19:06	07:58 18:57	07:56 16:06
28	08:06 16:49	15:40 (WEA 10) 15:43 (WEA 10)	07:22 17:49	06:16 18:51	05:53 20:49	05:01 21:26	04:49 21:49	05:23 21:17	06:16 20:13	07:09 19:03	07:59 18:55	07:57 16:05
29	08:05 16:51	15:44 (WEA 10) 15:47 (WEA 10)	07:21 17:49	06:15 18:54	05:52 20:50	05:00 21:28	04:49 21:49	05:25 21:17	06:17 20:15	07:11 19:01	07:55 18:52	07:53 16:04
30	08:03 16:53	15:48 (WEA 10) 15:51 (WEA 10)	07:20 17:49	06:14 18:56	05:51 20:52	05:00 21:30	04:49 21:49	05:26 21:18	06:18 20:13	07:12 19:06	07:57 18:56	07:55 16:03
31	08:02 16:55	15:52 (WEA 10) 15:55 (WEA 10)	07:19 17:49	06:13 18:59	05:50 20:54	05:00 21:32	04:49 21:50	05:27 21:19	06:19 20:16	07:12 19:08	07:57 18:58	07:55 16:02
Sonneneinstrahlung												253
astr.max.mögl.Beschattung												214
Sonneneinstrahlung												275
astr.max.mögl.Beschattung												367
Sonneneinstrahlung												419
astr.max.mögl.Beschattung												491
Sonneneinstrahlung												506
astr.max.mögl.Beschattung												509
Sonneneinstrahlung												458
astr.max.mögl.Beschattung												382
Sonneneinstrahlung												329
astr.max.mögl.Beschattung												262
Sonneneinstrahlung												237
astr.max.mögl.Beschattung												654

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 019 - Deibow, Deibower Dorfstraße 22

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1 08:29	14:45 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04
2 08:29	14:46 (WEA 10)	07:58	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	08:06
3 08:29	14:46 (WEA 10)	07:57	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	08:07
4 08:28	14:47 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09
5 08:28	14:49 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10
6 08:28	14:49 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12
7 08:27	14:48 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13
8 08:27	14:51 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14
9 08:26	14:52 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15
10 08:26	14:53 (WEA 10)	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17
11 08:25	14:54 (WEA 10)	07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18
12 08:24	14:55 (WEA 10)	07:40	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19
13 08:24	14:57 (WEA 10)	07:38	06:36	06:22	05:20	04:47	05:02	05:50	06:43	07:36	07:33	08:20
14 08:23	15:05 (WEA 10)	07:36	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21
15 08:22	15:08 (WEA 10)	07:34	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22
16 08:21	15:09 (WEA 10)	07:32	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23
17 08:20	15:07 (WEA 10)	07:30	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:24
18 08:19	15:06 (WEA 10)	07:28	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:25
19 08:18	15:05 (WEA 10)	07:26	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:26
20 08:17	15:04 (WEA 10)	07:24	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:27
21 08:16	15:03 (WEA 10)	07:22	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:28
22 08:14	15:02 (WEA 10)	07:19	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:29
23 08:13	15:01 (WEA 10)	07:17	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:30
24 08:12	15:00 (WEA 10)	07:15	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:31
25 08:10	14:59 (WEA 10)	07:13	06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	07:55	08:32
26 08:09	14:58 (WEA 10)	07:11	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:59	07:57	08:33
27 08:08	14:57 (WEA 10)	07:09	06:03	05:51	05:00	04:49	05:22	06:14	07:07	07:59	07:58	08:34
28 08:06	14:56 (WEA 10)	07:07	06:01	05:49	04:59	04:49	05:23	06:16	07:09	07:59	07:58	08:35
29 08:05	14:55 (WEA 10)	07:05	05:59	05:47	04:57	04:50	05:25	06:17	07:11	07:59	07:58	08:36
30 08:03	14:54 (WEA 10)	07:03	05:57	05:45	04:55	04:50	05:27	06:19	07:12	07:59	07:58	08:37
31 08:02	14:53 (WEA 10)	07:01	05:55	05:43	04:53	04:50	05:29	06:21	07:14	07:59	07:58	08:38
16:55	14:52 (WEA 10)	06:53	05:46	04:56	04:56	04:56	05:31	06:24	07:16	07:59	07:58	08:39
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	329	262	237
astr.max.mögl.Beschattung	225										19	663

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 020 - Deibow, Deibower Dorfstraße 23

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1 08:29	14:49 (WEA 10)	08:00	07:04	06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	08:04
2 16:07	15:11 (WEA 10)	16:57	17:51	19:48	20:42	21:30	21:45	21:11	20:06	18:53	16:44	16:02
3 08:29	14:50 (WEA 10)	07:58	07:02	06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	08:06
4 16:08	15:12 (WEA 10)	16:59	17:53	19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	16:01
5 08:29	14:50 (WEA 10)	07:57	06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	08:07
6 16:09	15:12 (WEA 10)	17:01	17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	16:00
7 08:28	14:51 (WEA 10)	07:55	06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	08:09
8 16:10	15:12 (WEA 10)	17:02	17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	16:00
9 08:28	14:52 (WEA 10)	07:53	06:55	06:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	08:10
10 16:11	15:13 (WEA 10)	17:04	17:58	19:55	20:49	21:35	21:43	21:04	19:56	18:44	16:37	15:59
11 08:28	14:53 (WEA 10)	07:51	06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	08:12
12 16:13	15:13 (WEA 10)	17:06	18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	15:58
13 08:27	14:53 (WEA 10)	07:50	06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	08:13
14 16:14	15:12 (WEA 10)	17:08	18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:33	15:58
15 08:27	14:54 (WEA 10)	07:48	06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	08:14
16 16:15	15:13 (WEA 10)	17:10	18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:31	15:58
17 08:26	14:55 (WEA 10)	07:46	06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	08:15
18 16:17	15:13 (WEA 10)	17:12	18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	15:57
19 08:26	14:56 (WEA 10)	07:44	06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	08:17
20 16:18	15:12 (WEA 10)	17:14	18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	15:57
21 08:25	14:57 (WEA 10)	07:42	06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	08:18
22 16:20	15:12 (WEA 10)	17:16	18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26	15:57
23 08:24	14:58 (WEA 10)	07:40	06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	07:32	08:19
24 16:21	15:11 (WEA 10)	17:18	18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25	15:57
25 08:24	15:00 (WEA 10)	07:38	06:36	06:22	05:20	04:47	05:02	05:50	06:43	07:36	07:33	08:20
26 16:23	15:11 (WEA 10)	17:20	18:13	20:09	21:02	21:41	21:37	20:48	19:37	18:25	16:23	15:57
27 08:23	15:02 (WEA 10)	07:36	06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	07:35	08:21
28 16:24	15:09 (WEA 10)	17:22	18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	16:22	15:57
29 08:22		07:34	06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	07:37	08:22
30 16:26		17:24	18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	16:20	15:57
31 08:21		07:32	06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	07:39	08:23
32 16:28		17:26	18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	16:19	15:57
33 08:20		07:30	06:26	06:13	05:14	04:47	05:07	05:57	06:50	07:43	07:41	08:23
34 16:29		17:28	18:21	20:17	21:09	21:44	21:33	20:39	19:27	18:16	16:17	15:57
35 08:19		07:28	06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	07:43	08:24
36 16:31		17:30	18:23	20:18	21:10	21:44	21:31	20:37	19:25	18:14	16:16	15:57
37 08:18		07:26	06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	07:44	08:25
38 16:33		17:32	18:24	20:20	21:12	21:45	21:30	20:35	19:23	18:12	16:14	15:57
39 08:17		07:24	06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	07:46	08:26
40 16:34		17:34	18:26	20:22	21:14	21:45	21:29	20:33	19:20	18:09	16:13	15:58
41 08:16		07:22	06:17	06:04	05:08	04:47	05:13	06:03	06:57	07:50	07:48	08:26
42 16:36		17:36	18:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	16:12	15:58
43 08:14		07:19	06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	07:50	08:27
44 16:38		17:38	18:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	16:10	15:58
45 08:13		07:17	06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	07:51	08:27
46 16:40		17:39	18:32	20:27	21:18	21:45	21:25	20:26	19:13	18:03	16:09	15:59
47 08:12		07:15	06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	07:53	08:28
48 16:42		17:41	18:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	16:08	16:00
49 08:10		07:13	06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	07:55	08:28
50 16:43		17:43	18:35	20:31	21:21	21:46	21:22	20:22	19:08	18:00	16:07	16:00
51 08:09		07:11	06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:59	07:56	08:28
52 16:45		17:45	18:37	20:33	21:22	21:46	21:20	20:20	19:06	18:00	16:06	16:01
53 08:08		07:08	06:02	05:51	05:00	04:49	05:22	06:14	07:07	07:51	07:58	08:29
54 16:47		17:47	18:39	20:35	21:24	21:46	21:19	20:17	19:03	18:00	16:05	16:02
55 08:06		07:06	06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:53	07:50	08:29
56 16:49		17:49	18:41	20:36	21:25	21:45	21:17	20:15	19:01	18:00	16:04	16:03
57 08:05			06:58	05:47	04:58	04:50	05:25	06:17	07:11	07:55	07:52	08:29
58 16:51			19:42	20:38	21:26	21:45	21:16	20:13	19:00	18:00	16:03	16:03
59 08:03			06:55	05:45	04:57	04:50	05:27	06:19	07:12	07:57	07:54	08:29
60 16:53			19:44	20:40	21:28	21:45	21:14	20:10	19:00	18:00	16:02	16:02
61 08:02			06:53	05:43	04:56		05:28	06:21	07:09	07:59	07:56	08:29
62 16:55			19:46		21:29		21:12	20:08		16:46		16:05
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	329	262	237
astr.max.mögl.Beschattung	246									31		669

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)



Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 025 - Deibow, Hof Deibow 42

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29	08:00	15:20 (WEA 10) 07:04	16:34 (WEA 09) 06:50	05:43	04:55	04:51	05:30	06:22	07:14	18:03 (WEA 08) 07:11	14:50 (WEA 10) 08:04
2	08:29	07:58	15:20 (WEA 10) 07:02	16:35 (WEA 09) 06:48	05:41	04:54	04:52	05:31	06:24	07:16	18:05 (WEA 08) 07:13	14:49 (WEA 10) 08:06
3	08:29	07:57	15:20 (WEA 10) 06:59	16:35 (WEA 09) 06:46	05:39	04:53	04:53	05:33	06:26	07:18	18:06 (WEA 08) 07:15	14:49 (WEA 10) 08:07
4	08:28	07:55	15:20 (WEA 10) 06:57	16:36 (WEA 09) 06:43	05:37	04:52	04:53	05:35	06:28	07:19	18:07 (WEA 08) 07:14	14:49 (WEA 10) 08:09
5	08:28	07:53	15:20 (WEA 10) 06:55	16:38 (WEA 09) 06:41	05:35	04:52	04:54	05:36	06:29	07:21	18:08 (WEA 08) 07:18	14:49 (WEA 10) 08:10
6	08:28	07:51	15:20 (WEA 10) 06:52	16:40 (WEA 09) 06:39	05:33	04:51	04:55	05:38	06:31	07:23	18:10 (WEA 08) 07:20	14:50 (WEA 10) 08:12
7	08:27	07:48	15:20 (WEA 10) 06:48	16:42 (WEA 09) 06:35	05:31	04:49	04:56	05:40	06:33	07:25	18:12 (WEA 08) 07:22	14:50 (WEA 10) 08:13
8	08:27	07:46	15:20 (WEA 10) 06:46	16:43 (WEA 09) 06:34	05:29	04:50	04:57	05:41	06:34	07:27	18:14 (WEA 08) 07:24	14:50 (WEA 10) 08:14
9	08:26	07:44	15:20 (WEA 10) 06:43	16:45 (WEA 09) 06:31	05:27	04:49	04:58	05:45	06:36	07:29	18:16 (WEA 08) 07:26	14:51 (WEA 10) 08:15
10	08:26	07:42	15:20 (WEA 10) 06:41	16:46 (WEA 09) 06:29	05:25	04:48	04:59	05:48	06:37	07:31	18:18 (WEA 08) 07:28	14:51 (WEA 10) 08:17
11	08:25	07:40	15:20 (WEA 10) 06:39	16:47 (WEA 09) 06:27	05:23	04:47	05:00	05:49	06:38	07:33	18:20 (WEA 08) 07:30	14:52 (WEA 10) 08:18
12	08:24	07:38	15:20 (WEA 10) 06:37	16:48 (WEA 09) 06:25	05:21	04:46	05:02	05:50	06:39	07:35	18:22 (WEA 08) 07:32	14:52 (WEA 10) 08:19
13	08:24	07:36	15:20 (WEA 10) 06:35	16:49 (WEA 09) 06:23	05:19	04:45	05:04	05:52	06:40	07:37	18:24 (WEA 08) 07:34	14:53 (WEA 10) 08:20
14	08:23	07:34	15:20 (WEA 10) 06:33	16:50 (WEA 09) 06:21	05:17	04:44	05:06	05:55	06:41	07:39	18:26 (WEA 08) 07:36	14:54 (WEA 10) 08:21
15	08:22	07:32	15:20 (WEA 10) 06:31	16:51 (WEA 09) 06:19	05:15	04:43	05:08	05:57	06:42	07:41	18:28 (WEA 08) 07:38	14:55 (WEA 10) 08:22
16	08:21	07:30	15:20 (WEA 10) 06:29	16:52 (WEA 09) 06:17	05:13	04:42	05:10	05:59	06:43	07:43	18:30 (WEA 08) 07:40	14:56 (WEA 10) 08:23
17	08:20	07:28	15:20 (WEA 10) 06:27	16:53 (WEA 09) 06:15	05:11	04:41	05:12	06:00	06:44	07:45	18:32 (WEA 08) 07:42	14:57 (WEA 10) 08:24
18	08:19	07:26	15:20 (WEA 10) 06:25	16:54 (WEA 09) 06:13	05:09	04:40	05:14	06:01	06:45	07:47	18:34 (WEA 08) 07:44	14:58 (WEA 10) 08:25
19	08:18	07:24	15:20 (WEA 10) 06:23	16:55 (WEA 09) 06:11	05:07	04:39	05:16	06:02	06:46	07:49	18:36 (WEA 08) 07:46	14:59 (WEA 10) 08:26
20	08:17	07:22	15:20 (WEA 10) 06:21	16:56 (WEA 09) 06:09	05:05	04:38	05:18	06:03	06:47	07:51	18:38 (WEA 08) 07:48	15:00 (WEA 10) 08:27
21	08:16	07:20	15:20 (WEA 10) 06:19	16:57 (WEA 09) 06:07	05:03	04:37	05:20	06:04	06:48	07:53	18:40 (WEA 08) 07:50	15:01 (WEA 10) 08:28
22	08:15	07:18	15:20 (WEA 10) 06:17	16:58 (WEA 09) 06:05	05:01	04:36	05:22	06:05	06:49	07:55	18:42 (WEA 08) 07:52	15:02 (WEA 10) 08:29
23	08:14	07:16	15:20 (WEA 10) 06:15	16:59 (WEA 09) 06:03	04:59	04:35	05:24	06:06	06:50	07:57	18:44 (WEA 08) 07:54	15:03 (WEA 10) 08:30
24	08:13	07:14	15:20 (WEA 10) 06:13	17:00 (WEA 09) 06:01	04:57	04:34	05:26	06:07	06:51	07:59	18:46 (WEA 08) 07:56	15:04 (WEA 10) 08:31
25	08:12	07:12	15:20 (WEA 10) 06:11	17:01 (WEA 09) 05:59	04:55	04:33	05:28	06:08	06:52	08:01	18:48 (WEA 08) 07:58	15:05 (WEA 10) 08:32
26	08:11	07:10	15:20 (WEA 10) 06:09	17:02 (WEA 09) 05:57	04:53	04:32	05:30	06:09	06:53	08:03	18:50 (WEA 08) 08:00	15:06 (WEA 10) 08:33
27	08:10	07:08	15:20 (WEA 10) 06:07	17:03 (WEA 09) 05:55	04:51	04:31	05:32	06:10	06:54	08:05	18:52 (WEA 08) 08:02	15:07 (WEA 10) 08:34
28	08:09	07:06	15:20 (WEA 10) 06:05	17:04 (WEA 09) 05:53	04:49	04:30	05:34	06:11	06:55	08:07	18:54 (WEA 08) 08:04	15:08 (WEA 10) 08:35
29	08:08	07:04	15:20 (WEA 10) 06:03	17:05 (WEA 09) 05:51	04:47	04:29	05:36	06:12	06:56	08:09	18:56 (WEA 08) 08:06	15:09 (WEA 10) 08:36
30	08:07	07:02	15:20 (WEA 10) 06:01	17:06 (WEA 09) 05:49	04:45	04:28	05:38	06:13	06:57	08:11	18:58 (WEA 08) 08:08	15:10 (WEA 10) 08:37
31	08:06	07:00	15:20 (WEA 10) 05:59	17:07 (WEA 09) 05:47	04:43	04:27	05:40	06:14	06:58	08:13	19:00 (WEA 08) 08:10	15:11 (WEA 10) 08:38
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	316	262	237
astr.max.mögl.Beschattung	291	1108	481							330	889	705

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
	Minuten mit Schatten	



Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 026 - Deibow, Hof Deibow 40/41

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29	08:00	15:49 (WEA 10) 07:04	16:44 (WEA 09) 06:50	05:43	04:55	04:51	05:30	06:22	07:14	17:58 (WEA 08) 07:11	15:17 (WEA 10) 08:04
2	18:01 (WEA 08) 16:07	16:36	27 16:16 (WEA 10) 17:51	16	17:00 (WEA 09) 19:40	21	21:04	21:45	21:11	20:06	22 18:20 (WEA 08) 16:44	32 15:49 (WEA 10) 16:02
3	08:29	07:58	15:48 (WEA 10) 07:02	16:47 (WEA 09) 06:48	05:41	04:54	04:52	05:31	06:24	07:16	17:58 (WEA 08) 07:13	15:17 (WEA 10) 08:06
4	16:08	16:59	16:16 (WEA 10) 17:53	11 16:58 (WEA 09) 19:50	20:43	21:31	21:44	21:09	20:03	18:51	22 18:20 (WEA 08) 16:43	32 15:49 (WEA 10) 16:01
5	08:29	07:57	15:48 (WEA 10) 06:59	06:46	05:39	04:53	04:53	05:33	06:26	07:18	17:58 (WEA 08) 07:15	15:17 (WEA 10) 08:07
6	16:08	17:01	16:18 (WEA 10) 17:50	19:51	20:45	21:32	21:44	21:07	20:01	18:49	22 18:20 (WEA 08) 16:41	32 15:49 (WEA 10) 16:00
7	08:28	07:55	15:48 (WEA 10) 06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	17:59 (WEA 08) 07:17	15:17 (WEA 10) 08:09
8	16:10	17:03	16:18 (WEA 10) 17:57	19:53	20:47	21:34	21:43	21:06	20:00	18:46	19 18:18 (WEA 08) 16:39	32 15:49 (WEA 10) 16:00
9	08:28	07:53	15:47 (WEA 10) 06:55	06:41	05:35	04:52	04:54	05:36	06:29	07:21	17:59 (WEA 08) 07:18	15:17 (WEA 10) 08:10
10	16:11	17:04	16:19 (WEA 10) 17:59	19:55	20:49	21:35	21:43	21:03	20:01	18:44	16 18:15 (WEA 08) 16:37	32 15:49 (WEA 10) 15:59
11	08:28	07:51	15:47 (WEA 10) 06:52	7 17:27 (WEA 08) 06:39	05:33	04:51	04:55	05:38	06:31	07:23	18:00 (WEA 08) 07:20	15:17 (WEA 10) 08:12
12	16:13	17:06	16:19 (WEA 10) 18:00	7 17:34 (WEA 08) 19:57	20:50	21:36	21:42	21:02	20:00	18:42	13 18:13 (WEA 08) 16:35	31 15:48 (WEA 10) 15:58
13	08:27	07:50	15:47 (WEA 10) 06:50	17 17:25 (WEA 08) 06:30	05:31	04:50	04:56	05:40	06:33	07:25	18:02 (WEA 08) 07:22	15:17 (WEA 10) 08:13
14	16:14	17:08	16:19 (WEA 10) 18:02	11 17:36 (WEA 08) 19:59	20:52	21:37	21:42	21:00	19:52	18:39	9 18:11 (WEA 08) 16:33	31 15:48 (WEA 10) 15:58
15	08:27	07:48	15:47 (WEA 10) 06:48	17:23 (WEA 08) 06:34	05:29	04:50	04:57	05:41	06:34	07:27	17:13 (WEA 08) 07:24	15:18 (WEA 10) 08:14
16	16:08	17:10	16:19 (WEA 10) 18:04	15 17:38 (WEA 08) 20:00	20:54	21:38	21:41	20:58	20:00	18:37	16 18:15 (WEA 08) 16:37	30 15:48 (WEA 10) 15:58
17	08:26	07:46	15:47 (WEA 10) 06:45	17:21 (WEA 08) 06:32	05:27	04:49	04:58	05:43	06:36	07:28	17:16 (WEA 08) 07:26	15:19 (WEA 10) 08:15
18	16:17	17:12	16:20 (WEA 10) 18:06	19 17:40 (WEA 08) 20:02	20:56	21:38	21:40	20:56	19:47	18:35	16 18:16 (WEA 08) 16:38	28 15:47 (WEA 10) 15:57
19	08:26	07:44	15:47 (WEA 10) 06:43	17:21 (WEA 08) 06:29	05:26	04:49	04:59	05:45	06:38	07:30	17:14 (WEA 08) 07:27	15:19 (WEA 10) 08:17
20	16:18	17:14	16:19 (WEA 10) 18:08	20 17:41 (WEA 08) 20:04	20:57	21:39	21:40	20:54	19:44	18:32	17 17:16 (WEA 08) 16:38	27 15:46 (WEA 10) 15:57
21	08:25	07:42	15:48 (WEA 10) 06:41	17:19 (WEA 08) 06:27	05:24	04:48	05:00	05:46	06:40	07:32	17:22 (WEA 08) 07:30	15:20 (WEA 10) 08:18
22	16:20	17:16	16:19 (WEA 10) 18:10	22 17:41 (WEA 08) 20:06	20:59	21:40	21:39	20:52	19:42	18:30	7 17:29 (WEA 08) 16:26	25 15:45 (WEA 10) 15:57
23	08:24	07:40	15:48 (WEA 10) 06:38	17:19 (WEA 08) 06:24	05:22	04:48	05:01	05:48	06:41	07:34	17:18 (WEA 08) 07:32	15:22 (WEA 10) 08:19
24	16:21	17:18	16:19 (WEA 10) 18:12	22 17:41 (WEA 08) 20:08	21:01	21:41	21:38	20:50	19:42	18:28	14 17:32 (WEA 08) 16:25	22 15:44 (WEA 10) 15:57
25	08:24	07:38	15:49 (WEA 10) 06:36	17:18 (WEA 08) 06:22	05:20	04:47	05:03	05:50	06:43	07:36	17:16 (WEA 08) 07:30	15:23 (WEA 10) 08:20
26	16:23	17:20	16:19 (WEA 10) 18:13	23 17:41 (WEA 08) 20:09	21:02	21:41	21:37	20:48	19:37	18:25	17 17:33 (WEA 08) 16:23	20 15:43 (WEA 10) 15:57
27	08:23	07:36	15:50 (WEA 10) 06:34	17:19 (WEA 08) 06:20	05:19	04:47	05:04	05:52	06:45	07:37	17:15 (WEA 08) 07:35	15:25 (WEA 10) 08:21
28	16:24	17:22	16:18 (WEA 10) 18:15	22 17:41 (WEA 08) 20:11	21:04	21:42	21:36	20:46	19:35	18:23	19 17:34 (WEA 08) 16:22	17 15:42 (WEA 10) 15:57
29	08:22	07:34	15:50 (WEA 10) 06:31	17:19 (WEA 08) 06:18	05:17	04:47	05:05	05:53	06:46	07:39	17:14 (WEA 08) 07:37	15:27 (WEA 10) 08:22
30	16:26	17:24	16:54 (WEA 09) 18:17	21 17:40 (WEA 08) 20:13	21:06	21:43	21:35	20:44	19:32	18:21	21 17:35 (WEA 08) 16:20	13 15:40 (WEA 10) 15:57
31	08:21	07:32	15:51 (WEA 10) 06:29	17:19 (WEA 08) 06:15	05:15	04:47	05:06	05:55	06:48	07:41	17:13 (WEA 08) 07:39	15:30 (WEA 10) 08:23
1	16:28	17:26	16:57 (WEA 09) 18:19	20 17:39 (WEA 08) 20:15	21:07	21:43	21:34	20:42	19:30	18:18	23 17:36 (WEA 08) 16:19	7 15:37 (WEA 10) 15:57
2	08:20	07:30	15:52 (WEA 10) 06:26	17:20 (WEA 08) 06:13	05:14	04:47	05:08	05:57	06:50	07:43	17:13 (WEA 08) 07:41	15:31 (WEA 10) 08:23
3	16:29	17:28	16:59 (WEA 09) 18:21	18 17:38 (WEA 08) 20:17	21:09	21:44	21:33	20:39	19:27	18:16	23 17:36 (WEA 08) 16:17	15 15:37 (WEA 10) 15:57
4	08:19	07:28	15:54 (WEA 10) 06:24	17:21 (WEA 08) 06:11	05:12	04:47	05:09	05:58	06:52	07:45	17:12 (WEA 08) 07:43	15:34 (WEA 10) 08:24
5	16:31	17:30	17:02 (WEA 09) 18:23	14 17:35 (WEA 08) 20:18	21:10	21:44	21:31	20:37	19:25	18:14	24 17:36 (WEA 08) 16:16	15 15:37 (WEA 10) 15:57
6	08:18	07:26	15:57 (WEA 10) 06:22	17:24 (WEA 08) 06:08	05:11	04:47	05:10	06:00	06:53	07:47	17:12 (WEA 08) 07:44	15:34 (WEA 10) 08:25
7	16:32	17:32	17:03 (WEA 09) 18:24	9 17:33 (WEA 08) 20:20	21:12	21:45	21:30	20:35	19:20	18:12	24 17:36 (WEA 08) 16:14	15 15:37 (WEA 10) 15:57
8	08:17	07:24	16:42 (WEA 09) 06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	17:12 (WEA 08) 07:46	15:34 (WEA 10) 08:26
9	16:34	17:34	17:04 (WEA 09) 18:26	22 17:34 (WEA 08) 20:22	21:14	21:45	21:29	20:33	19:20	18:09	24 17:36 (WEA 08) 16:13	15 15:37 (WEA 10) 15:57
10	08:16	07:22	16:41 (WEA 09) 06:17	06:04	05:08	04:47	05:13	06:04	06:57	07:50	17:12 (WEA 08) 07:48	15:34 (WEA 10) 08:26
11	16:36	17:36	17:04 (WEA 09) 18:28	20 17:34 (WEA 08) 20:24	21:15	21:45	21:28	20:31	19:18	18:07	23 17:36 (WEA 08) 16:12	15 15:37 (WEA 10) 15:57
12	08:14	07:19	16:41 (WEA 09) 06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	17:12 (WEA 08) 07:50	15:34 (WEA 10) 08:27
13	16:38	17:38	17:04 (WEA 09) 18:30	20 17:34 (WEA 08) 20:26	21:17	21:45	21:26	20:29	19:15	18:05	27 17:34 (WEA 08) 16:11	15 15:37 (WEA 10) 15:57
14	08:13	07:17	16:41 (WEA 09) 06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	17:12 (WEA 08) 07:51	15:34 (WEA 10) 08:27
15	16:40	17:40	17:05 (WEA 09) 18:32	24 17:34 (WEA 08) 20:27	21:18	21:45	21:25	20:26	19:13	18:03	34 17:34 (WEA 08) 16:09	15 15:37 (WEA 10) 15:57
16	08:12	07:15	16:41 (WEA 09) 06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	16:24 (WEA 10) 07:53	15:34 (WEA 10) 08:28
17	16:42	17:41	17:05 (WEA 09) 18:33	29 17:34 (WEA 08) 20:29	21:20	21:46	21:23	20:24	19:10	18:01	35 17:31 (WEA 08) 16:08	16 16:00 (WEA 10) 16:00
18	08:10	07:13	16:41 (WEA 09) 06:07	05:55	05:02	04:48	05:19	06:10	07:04	07:58	16:24 (WEA 10) 07:55	15:34 (WEA 10) 08:28
19	16:43	17:43	17:04 (WEA 09) 18:35	30 17:34 (WEA 08) 20:31	21:21	21:46	21:22	20:22	19:08	18:00	36 16:29 (WEA 08) 16:07	16 16:00 (WEA 10) 16:00
20	08:09	15:57 (WEA 10) 07:11	16:41 (WEA 09) 06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:59	16:24 (WEA 10) 07:56	15:34 (WEA 10) 08:28
21	16:45	17:45	17:03 (WEA 09) 18:37	22 17:34 (WEA 08) 20:33	21:22	21:46	21:20	20:20	19:06	18:00	37 16:27 (WEA 08) 16:06	16 16:01 (WEA 10) 16:01
22	08:08	15:55 (WEA 10) 07:08	16:42 (WEA 09) 06:02	05:51	05:00	04:49	05:22	06:14	07:07	07:51	16:24 (WEA 10) 07:58	15:34 (WEA 10) 08:29
23	16:47	13 16:08 (WEA 10) 17:07	17:03 (WEA 09) 18:39	23 17:34 (WEA 08) 20:35	21:24	21:46	21:19	20:17	19:03	18:00	38 16:27 (WEA 08) 16:06	16 16:01 (WEA 10) 16:01
24	08:06	15:53 (WEA 10) 07:06	16:42 (WEA 09) 06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:53	16:24 (WEA 10) 07:58	15:34 (WEA 10) 08:29
25	16:40	17:40	17:04 (WEA 09) 18:41	19 17:01 (WEA 08) 20:36	21:25	21:45	21:17	20:15	19:01	18:01	39 16:27 (WEA 08) 16:06	16 16:01 (WEA 10) 16:01
26	08:05	15:51 (WEA 10) 07:10	16:42 (WEA 09) 06:00	05:47	04:58	04:50	05:25	06:17	07:11	07:55	16:24 (WEA 10) 07:58	15:34 (WEA 10) 08:29
27	16:51	21 16:12 (WEA 10) 17:10	17:04 (WEA 09) 18:44	20 17:34 (WEA 08) 20:38	21:26	21:45	21:16	20:13	18:58	21 18:21 (WEA 08) 16:50	30 15:48 (WEA 10) 16:03	16 16:00 (WEA 10) 16:00
28	08:03	15:51 (WEA 10) 07:11	16:42 (WEA 09) 06:00	05:45	04:57	04:51	05:27	06:19	07:12	07:56	16:24 (WEA 10) 07:58	15:34 (WEA 10) 08:29
29	16:53	17:53	17:04 (WEA 09) 18:44	21 17:34 (WEA 08) 20:39	21:27	21:45	21:17	20:14	18:56	22 18:20 (WEA 08) 16:50	31 15:49 (WEA 10) 16:02	16 16:01 (WEA 10) 16:01
30	08:02	15:49 (WEA 10) 07:09	16:42 (WEA 09) 06:00	05:43	04:56	04:50	05:28	06:21	07:15	07:59	16:24 (WEA 10) 07:58	15:34 (WEA 10) 08:29
31	16:55	26 16:15 (WEA 10) 17:16	17:04 (WEA 09) 18:46	22 17:34 (WEA 08) 20:40	21:29	21:49	21:12	20:08	18:58	16 16:26 (WEA 10) 16:43	32 15:49 (WEA 10) 16:01	16 16:01 (WEA 10) 16:01
Sonneneinstrahlung in astr.m.mgl.Beschattung												

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 027 - Deibow, Hof Deibow 37

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29	08:00	16:08 (WEA 10) 07:04	16:50 (WEA 09) 06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	15:31 (WEA 10) 08:04
2	16:07	16:57	14 16:22 (WEA 10) 17:51	16 17:06 (WEA 09) 19:48	20:42	21:30	21:45	21:11	20:06	18:53	16:44	30 16:01 (WEA 10) 16:02
3	08:29	07:58	16:06 (WEA 10) 07:02	16:51 (WEA 09) 06:48	05:41	04:54	04:52	05:31	06:24	07:16	07:13	15:31 (WEA 10) 08:06
4	16:08	16:59	18 16:24 (WEA 10) 17:53	14 17:05 (WEA 09) 19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	29 16:00 (WEA 10) 16:01
5	08:29	07:57	16:06 (WEA 10) 06:59	16:53 (WEA 09) 06:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	15:32 (WEA 10) 08:07
6	16:09	17:01	20 16:26 (WEA 10) 17:55	8 17:01 (WEA 09) 19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	28 16:00 (WEA 10) 16:00
7	08:28	07:55	16:04 (WEA 10) 06:57	06:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	15:32 (WEA 10) 08:09
8	16:10	17:02	23 16:27 (WEA 10) 17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	27 15:59 (WEA 10) 16:00
9	08:28	07:53	16:03 (WEA 10) 06:55	06:41	05:35	04:52	04:54	05:36	06:29	07:21	07:18	15:33 (WEA 10) 08:10
10	16:11	17:04	25 16:28 (WEA 10) 17:59	19:55	20:49	21:36	21:43	21:03	19:56	18:44	16:37	26 15:59 (WEA 10) 15:59
11	08:28	07:51	16:03 (WEA 10) 06:52	06:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	15:33 (WEA 10) 08:12
12	16:13	17:06	26 16:29 (WEA 10) 18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	25 15:58 (WEA 10) 15:58
13	08:27	07:50	16:02 (WEA 10) 06:50	06:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	15:34 (WEA 10) 08:13
14	16:14	17:08	28 16:30 (WEA 10) 18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:33	23 15:57 (WEA 10) 15:58
15	08:27	07:48	16:02 (WEA 10) 06:48	06:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	15:35 (WEA 10) 08:14
16	16:15	17:10	28 16:30 (WEA 10) 18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:32	21 15:56 (WEA 10) 15:58
17	08:26	07:46	16:02 (WEA 10) 06:45	06:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	15:37 (WEA 10) 08:15
18	16:17	17:12	29 16:31 (WEA 10) 18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	18 15:55 (WEA 10) 15:57
19	08:26	07:44	16:01 (WEA 10) 06:43	06:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	15:39 (WEA 10) 08:16
20	16:18	17:14	30 16:31 (WEA 10) 18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	14 15:53 (WEA 10) 15:57
21	08:25	07:42	16:01 (WEA 10) 06:41	06:27	05:24	04:48	05:00	05:46	06:40	07:32	17:26 (WEA 09) 07:30	15:42 (WEA 10) 08:18
22	16:20	17:16	30 16:31 (WEA 10) 18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	11 17:37 (WEA 09) 16:26	8 15:50 (WEA 10) 15:57
23	08:24	07:40	16:02 (WEA 10) 06:38	06:24	05:22	04:48	05:01	05:48	06:41	07:34	17:24 (WEA 09) 07:32	08:19
24	16:21	17:18	29 16:31 (WEA 10) 18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	15 17:39 (WEA 09) 16:25	15:57
25	08:24	07:38	16:02 (WEA 10) 06:36	06:22	05:20	04:47	05:03	05:50	06:43	07:36	17:22 (WEA 09) 07:33	08:20
26	16:23	17:20	29 16:31 (WEA 10) 18:13	20:09	21:02	21:41	21:37	20:48	19:37	18:25	18 17:40 (WEA 09) 16:23	15:57
27	08:23	07:36	16:02 (WEA 10) 06:34	06:20	05:19	04:47	05:04	05:51	06:45	07:37	17:21 (WEA 09) 07:35	08:21
28	16:24	17:22	29 16:31 (WEA 10) 18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	20 17:41 (WEA 09) 16:22	15:57
29	08:22	07:34	16:02 (WEA 10) 06:31	06:18	05:17	04:47	05:05	05:53	06:46	07:39	17:20 (WEA 09) 07:37	08:22
30	16:26	17:24	28 16:30 (WEA 10) 18:17	20:13	21:06	21:43	21:35	20:44	19:32	18:21	21 17:41 (WEA 09) 16:20	15:57
31	08:21	07:32	16:03 (WEA 10) 06:29	06:15	05:15	04:47	05:06	05:55	06:48	07:41	17:20 (WEA 09) 07:39	08:23
1	16:28	17:26	26 16:29 (WEA 10) 18:19	20:15	21:07	21:43	21:34	20:42	19:30	18:18	21 17:41 (WEA 09) 16:19	15:57
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4	08:19	07:28	16:05 (WEA 10) 06:24	06:11	05:12	04:47	05:09	05:58	06:52	07:45	17:19 (WEA 09) 07:43	08:24
5	16:31	17:30	31 17:02 (WEA 09) 18:23	20:18	21:10	21:44	21:31	20:37	19:25	18:14	22 17:41 (WEA 09) 16:16	15:57
6	08:18	07:26	16:07 (WEA 10) 06:22	06:08	05:11	04:47	05:10	06:00	06:53	07:47	17:19 (WEA 09) 07:44	08:25
7	16:33	17:32	32 17:04 (WEA 09) 18:24	20:20	21:12	21:45	21:30	20:35	19:23	18:12	22 17:41 (WEA 09) 16:14	15:57
8	08:17	07:24	16:09 (WEA 10) 06:19	06:06	05:09	04:47	05:12	06:02	06:55	07:48	17:20 (WEA 09) 07:46	08:26
9	16:34	17:34	31 17:06 (WEA 09) 18:26	20:22	21:14	21:45	21:29	20:33	19:20	18:09	20 17:40 (WEA 09) 16:13	15:58
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11	16:36	17:36	27 17:07 (WEA 09) 18:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	30 17:38 (WEA 09) 16:12	15:58
12	08:14	07:19	16:48 (WEA 09) 06:14	06:02	05:06	04:47	05:14	06:05	06:59	07:52	16:38 (WEA 10) 07:50	08:27
13	16:38	17:38	21 17:09 (WEA 09) 18:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	32 17:36 (WEA 09) 16:11	15:59
14	08:13	07:17	16:48 (WEA 09) 06:12	06:00	05:05	04:47	05:16	06:07	07:00	07:54	16:37 (WEA 10) 07:51	08:27
15	16:40	17:40	22 17:10 (WEA 09) 18:32	20:27	21:18	21:45	21:25	20:26	19:13	18:03	32 17:34 (WEA 09) 16:09	15:59
16	08:12	07:15	16:48 (WEA 09) 06:10	05:57	05:04	04:48	05:17	06:09	07:02	07:56	16:35 (WEA 10) 07:53	08:28
17	16:42	17:41	22 17:10 (WEA 09) 18:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	30 17:31 (WEA 09) 16:08	16:00
18	08:10	07:13	16:47 (WEA 09) 06:07	05:55	05:02	04:48	05:19	06:10	07:04	06:58	15:34 (WEA 10) 07:55	08:28
19	16:43	17:43	22 17:09 (WEA 09) 18:35	20:31	21:21	21:46	21:22	20:22	19:08	16:59	25 15:59 (WEA 10) 16:07	16:00
20	08:09	07:11	16:48 (WEA 09) 06:05	05:53	05:01	04:48	05:20	06:12	07:05	07:00	15:33 (WEA 10) 07:56	08:28
21	16:45	17:45	21 17:09 (WEA 09) 18:37	20:33	21:22	21:46	21:20	20:20	19:06	16:57	27 16:00 (WEA 10) 16:06	16:01
22	08:08	07:08	16:48 (WEA 09) 06:02	05:51	05:00	04:49	05:22	06:14	07:07	07:01	15:32 (WEA 10) 07:58	08:29
23	16:47	17:47	21 17:09 (WEA 09) 18:39	20:35	21:24	21:46	21:19	20:17	19:03	16:55	28 16:00 (WEA 10) 16:05	16:02
24	08:06	07:06	16:48 (WEA 09) 06:00	05:49	04:59	04:49	05:23	06:16	07:09	07:03	15:32 (WEA 10) 08:00	08:29
25	16:49	17:49	19 17:07 (WEA 09) 18:41	20:38	21:25	21:45	21:17	20:15	19:01	16:52	29 16:01 (WEA 10) 16:04	16:03
26	08:05	07:05	16:48 (WEA 09) 06:00	05:47	04:58	04:50	05:25	06:17	07:11	07:05	15:31 (WEA 10) 08:01	08:29
27	16:51	17:51	20 17:08 (WEA 09) 18:42	20:38	21:26	21:45	21:16	20:13	18:58	16:50	30 16:01 (WEA 10) 16:03	16:03
28	08:03	07:03	16:48 (WEA 09) 06:00	05:45	04:57	04:50	05:27	06:19	07:12	07:07	15:31 (WEA 10) 08:03	08:29
29	16:53	17:53	21 17:09 (WEA 09) 18:43	20:40	21:28	21:45	21:14	20:10	18:56	16:48	30 16:01 (WEA 10) 16:02	16:04
30	08:02	07:02	16:48 (WEA 09) 06:00	05:46	04:58	04:50	05:28	06:21	07:09	07:03	15:31 (WEA 10) 08:01	08:29
31	16:55	17:55	22 17:10 (WEA 09) 18:44	20:42	21:30	21:45	21:11	20:08	18:46	16:34	30 16:01 (WEA 10) 16:03	16:05
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	329	262	237
astr. max. mögl. Beschattung	8	708	38	419	491	506	509	458	382	329	262	237

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
	Minuten mit Schatten	

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 028 - Deibow, Hof Deibow 38

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember															
1	08:29	08:00	16:06 (WEA 10) 07:04	16:50 (WEA 09) 06:50	05:43	04:55	04:51	05:30	06:22	07:14	07:11	15:31 (WEA 10) 08:04															
2	16:07	16:57	17 16:23 (WEA 10) 17:51	13 17:03 (WEA 09) 19:48	20:42	21:30	21:45	21:11	21:06	18:53	16:44	29 16:00 (WEA 10) 16:02															
3	08:29	07:58	16:05 (WEA 10) 07:02	16:51 (WEA 09) 06:44	05:41	04:54	04:52	05:31	06:24	07:16	07:13	15:31 (WEA 10) 08:06															
4	16:08	16:59	19 16:24 (WEA 10) 17:53	8 17:01 (WEA 09) 19:50	20:43	21:31	21:44	21:09	20:03	18:51	16:43	29 16:00 (WEA 10) 16:01															
5	08:29	07:57	16:04 (WEA 10) 06:59	16:46	05:39	04:53	04:53	05:33	06:26	07:18	07:15	15:31 (WEA 10) 08:07															
6	16:09	17:01	22 16:26 (WEA 10) 17:55	19:51	20:45	21:32	21:44	21:07	20:01	18:49	16:41	28 15:58 (WEA 10) 16:00															
7	08:28	07:55	16:03 (WEA 10) 06:57	16:43	05:37	04:52	04:53	05:35	06:28	07:19	07:17	15:31 (WEA 10) 08:09															
8	16:10	17:02	24 16:27 (WEA 10) 17:57	19:53	20:47	21:34	21:43	21:05	19:59	18:46	16:39	28 15:59 (WEA 10) 16:00															
9	08:28	07:53	16:03 (WEA 10) 06:55	16:41	05:35	04:51	04:54	05:36	06:29	07:21	07:18	15:32 (WEA 10) 08:10															
10	16:11	17:04	25 16:28 (WEA 10) 17:59	19:55	20:49	21:35	21:43	21:03	19:56	18:44	16:37	26 15:58 (WEA 10) 15:59															
11	08:28	07:51	16:02 (WEA 10) 06:52	16:39	05:33	04:51	04:55	05:38	06:31	07:23	07:20	15:32 (WEA 10) 08:12															
12	16:13	17:06	27 16:29 (WEA 10) 18:00	19:57	20:50	21:36	21:42	21:02	19:54	18:42	16:35	26 15:58 (WEA 10) 15:58															
13	08:27	07:50	16:02 (WEA 10) 06:50	16:36	05:31	04:50	04:56	05:40	06:33	07:25	07:22	15:33 (WEA 10) 08:13															
14	16:14	17:08	27 16:29 (WEA 10) 18:02	19:59	20:52	21:37	21:42	21:00	19:52	18:39	16:33	24 15:57 (WEA 10) 15:58															
15	08:27	07:48	16:01 (WEA 10) 06:48	16:34	05:29	04:50	04:57	05:41	06:34	07:27	07:24	15:34 (WEA 10) 08:14															
16	16:15	17:10	29 16:30 (WEA 10) 18:04	20:00	20:54	21:38	21:41	20:58	19:49	18:37	16:32	22 15:56 (WEA 10) 15:58															
17	08:26	07:46	16:01 (WEA 10) 06:45	16:31	05:27	04:49	04:58	05:43	06:36	07:28	07:26	15:35 (WEA 10) 08:15															
18	16:17	17:12	29 16:30 (WEA 10) 18:06	20:02	20:56	21:38	21:40	20:56	19:47	18:35	16:30	20 15:55 (WEA 10) 15:57															
19	08:26	07:44	16:01 (WEA 10) 06:43	16:29	05:26	04:49	04:59	05:45	06:38	07:30	07:28	15:37 (WEA 10) 08:16															
20	16:18	17:14	29 16:30 (WEA 10) 18:08	20:04	20:57	21:39	21:40	20:54	19:44	18:32	16:28	16 15:53 (WEA 10) 15:57															
21	08:25	07:42	16:01 (WEA 10) 06:41	16:27	05:24	04:48	05:00	05:46	06:40	07:32	07:30	15:39 (WEA 10) 08:18															
22	16:20	17:16	29 16:30 (WEA 10) 18:10	20:06	20:59	21:40	21:39	20:52	19:42	18:30	16:26	12 15:51 (WEA 10) 15:57															
23	08:24	07:40	16:02 (WEA 10) 06:38	16:24	05:22	04:48	05:01	05:48	06:41	07:34	17 17:25 (WEA 09) 07:32	15:43 (WEA 10) 08:19															
24	16:21	17:18	28 16:30 (WEA 10) 18:12	20:08	21:01	21:41	21:38	20:50	19:40	18:28	16:25	5 15:48 (WEA 10) 15:57															
25	08:24	07:38	16:02 (WEA 10) 06:36	16:22	05:20	04:47	05:03	05:50	06:43	07:36	17 17:22 (WEA 09) 07:33		08:20														
26	16:23	17:20	28 16:30 (WEA 10) 18:13	20:09	21:02	21:41	21:37	20:48	19:37	18:25	16:23	15 17:37 (WEA 09) 07:33		15:57													
27	08:23	07:36	16:03 (WEA 10) 06:34	16:20	05:19	04:47	05:04	05:51	06:45	07:37	17 17:21 (WEA 09) 07:35		08:21														
28	16:24	17:22	27 16:30 (WEA 10) 18:15	20:11	21:04	21:42	21:36	20:46	19:35	18:23	17 17:38 (WEA 09) 07:36		15:57														
29	08:22	07:34	16:02 (WEA 10) 06:31	16:18	05:17	04:47	05:05	05:53	06:46	07:39	17 17:20 (WEA 09) 07:37		08:22														
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31	08:21	07:32	16:03 (WEA 10) 06:29	16:15	05:15	04:47	05:06	05:55	06:48	07:41	17 17:19 (WEA 09) 07:40		08:23														
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2	08:20	07:30	16:05 (WEA 10) 06:26	16:13	05:14	04:47	05:08	05:57	06:50	07:43	17 17:19 (WEA 09) 07:41		08:23														
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4	08:19	07:28	16:06 (WEA 10) 06:24	16:11	05:12	04:47	05:09	05:58	06:52	07:45	17 17:18 (WEA 09) 07:43		08:24														
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6	08:18	07:26	16:08 (WEA 10) 06:22	16:08	05:11	04:47	05:10	06:00	06:53	07:47	17 17:18 (WEA 09) 07:44		08:25														
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8	08:17	07:24	16:12 (WEA 10) 06:19	16:06	05:09	04:47	05:12	06:02	06:55	07:48	17 17:18 (WEA 09) 07:46		08:26														
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10	08:16	07:22	16:47 (WEA 09) 06:17	16:04	05:08	04:47	05:13	06:03	06:57	07:50	17 17:19 (WEA 09) 07:48		08:26														
11	16:36	17:36	20 17:07 (WEA 09) 18:28	20:24	21:15	21:45	21:28	20:31	19:18	18:07	19 17:38 (WEA 09) 07:48		15:58														
12	08:14	07:19	16:47 (WEA 09) 06:14	16:02	05:06	04:47	05:14	06:05	06:59	07:52	17 17:48 (WEA 10) 07:50		08:27														
13	16:38	17:38	21 17:08 (WEA 09) 18:30	20:26	21:17	21:45	21:26	20:29	19:15	18:05	28 17:36 (WEA 09) 07:51		15:59														
14	08:13	07:17	16:47 (WEA 09) 06:12	16:00	05:05	04:47	05:16	06:07	07:00	07:54	16 17:38 (WEA 10) 07:51		08:27														
15	16:40	17:40	21 17:08 (WEA 09) 18:32	20:27	21:18	21:45	21:25	20:26	19:13	18:03	31 17:34 (WEA 09) 07:50		15:59														
16	08:12	07:15	16:47 (WEA 09) 06:10	16:03	05:07	04:48	05:17	06:09	07:02	07:56	17 17:48 (WEA 10) 07:53		08:28														
17	16:42	17:41	22 17:09 (WEA 09) 18:33	20:29	21:20	21:46	21:23	20:24	19:10	18:01	29 17:31 (WEA 09) 07:50		16:00														
18	08:10	07:13	16:46 (WEA 09) 06:07	16:05	05:02	04:48	05:19	06:10	07:04	07:58	15 15:35 (WEA 10) 07:55		08:28														
19	16:43	17:43	22 17:08 (WEA 09) 18:35	20:31	21:21	21:46	21:22	20:22	19:08	18:00	27 16:29 (WEA 10) 07:57		16:00														
20	08:09	07:11	16:47 (WEA 09) 06:05	16:03	05:01	04:48	05:20	06:12	07:05	07:59	15 15:34 (WEA 10) 07:56		08:29														
21	16:45	17:45	20 17:07 (WEA 09) 18:37	20:33	21:22	21:46	21:20	20:20	19:06	18:07	24 15:58 (WEA 10) 07:56		16:01														
22	08:08	07:08	16:48 (WEA 09) 06:02	16:05	05:04	04:49	05:22	06:14	07:07	07:51	15 15:33 (WEA 10) 07:58		08:29														
23	16:47	17:47	19 17:07 (WEA 09) 18:39	20:35	21:24	21:46	21:19	20:17	19:03	18:05	26 15:59 (WEA 10) 07:56		16:02														
24	08:06	07:06	16:48 (WEA 09) 06:00	16:04	05:09	04:49	05:23	06:16	07:09	07:53	15 15:35 (WEA 10) 07:56		08:29														
25	16:49	17:49	17 17:05 (WEA 09) 18:41	20:36	21:25	21:45	21:17	20:15	19:01	18:02	27 15:59 (WEA 10) 07:56		16:03														
26	08:05			16:58	16:05	05:04	04:50	05:25	06:17	07:11	07:05	15 15:31 (WEA 10) 08:01		08:29													
27	16:51			19:42	20:38	21:26	21:45	21:16	20:13	18:58	16:50	29 16:00 (WEA 10) 16:03		08:29													
28	08:03	16:12 (WEA 10)		16:55	16:04	05:07	04:50	05:27	06:19	07:12	07:07	15 15:31 (WEA 10) 08:03		08:27													
29	16:53	5	16:17 (WEA 10)	19:44	20:40	21:28	21:45	21:14	20:10	18:56	16:48	29 16:00 (WEA 10) 16:02		16:04													
30	08:02	16:08 (WEA 10)		16:53		16:05	05:08	05:28	06:21	07:15	07:09	15 15:31 (WEA 10)		08:29													
31	16:55	13	16:21 (WEA 10)	19:46		21:29		21:12	20:08		18:00	16:10	29	15:59													
Sonnenscheinstunden	253		275		367		419		491		506		509		458		382		329		466		262		265		237
astr.max.mögl.Beschattung	18		687		21																						

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 053 - Krinitz, Ringstraße 1

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai		Juni		Juli		August	September	Oktober	November	Dezember		
1	08:29	08:00	07:04	06:51	05:43		04:55		05:37 (WEA 11)	04:51	05:44 (WEA 11)	05:30	06:23	07:14	07:11	08:05	
	16:07	16:57	17:51	19:48	20:42		21:30	27	06:04 (WEA 11)	21:45	26	06:10 (WEA 11)	21:11	20:06	18:54	16:45	16:02
2	08:29	07:59	07:02	06:48	05:41		04:54		05:37 (WEA 11)	04:52	05:43 (WEA 11)	05:32	06:24	07:16	07:13	08:06	
	16:08	16:59	17:53	19:50	20:44		21:32	27	06:04 (WEA 11)	21:45	26	06:09 (WEA 11)	21:09	20:04	18:51	16:43	16:01
3	08:29	07:57	07:00	06:46	05:39		04:53		05:38 (WEA 11)	04:53	05:44 (WEA 11)	05:33	06:26	07:18	07:15	08:08	
	16:09	17:01	17:55	19:52	20:45		21:33	27	06:05 (WEA 11)	21:44	26	06:10 (WEA 11)	21:07	20:01	18:49	16:41	16:00
4	08:29	07:55	06:57	06:44	05:37		04:53		05:38 (WEA 11)	04:54	05:44 (WEA 11)	05:35	06:28	07:20	07:17	08:09	
	16:10	17:03	17:57	19:54	20:47		21:34	26	06:04 (WEA 11)	21:44	26	06:10 (WEA 11)	21:06	19:59	18:47	16:39	16:00
5	08:28	07:53	06:55	06:41	05:35		04:52		05:37 (WEA 11)	04:55	05:44 (WEA 11)	05:37	06:30	07:22	07:19	08:10	
	16:12	17:05	17:59	19:55	20:49		21:35	27	06:04 (WEA 11)	21:43	27	06:11 (WEA 11)	21:04	19:57	18:44	16:37	15:59
6	08:28	07:52	06:53	06:39	05:33		04:51		05:38 (WEA 11)	04:55	05:44 (WEA 11)	05:38	06:31	07:23	07:21	08:12	
	16:13	17:07	18:01	19:57	20:51		21:36	27	06:05 (WEA 11)	21:43	27	06:11 (WEA 11)	21:02	19:54	18:42	16:35	15:59
7	08:28	07:50	06:50	06:36	05:31		04:51		05:38 (WEA 11)	04:56	05:44 (WEA 11)	05:40	06:33	07:25	07:22	08:13	
	16:14	17:09	18:03	19:59	20:52		21:37	26	06:04 (WEA 11)	21:42	26	06:10 (WEA 11)	21:00	19:52	18:40	16:34	15:58
8	08:27	07:48	06:48	06:34	05:30		04:50		05:39 (WEA 11)	04:57	05:44 (WEA 11)	05:42	06:35	07:27	07:24	08:14	
	16:16	17:11	18:04	20:01	20:54		21:38	26	06:05 (WEA 11)	21:41	27	06:11 (WEA 11)	20:58	19:49	18:37	16:32	15:58
9	08:27	07:46	06:46	06:32	05:28		04:49		05:38 (WEA 11)	04:58	05:44 (WEA 11)	05:43	06:36	07:29	07:26	08:16	
	16:17	17:13	18:06	20:03	20:56		21:39	27	06:05 (WEA 11)	21:41	27	06:11 (WEA 11)	20:56	19:47	18:35	16:30	15:58
10	08:26	07:44	06:43	06:29	05:26		04:49		05:39 (WEA 11)	04:59	05:44 (WEA 11)	05:45	06:38	07:30	07:28	08:17	
	16:18	17:15	18:08	20:04	20:58		21:40	26	06:05 (WEA 11)	21:40	27	06:11 (WEA 11)	20:54	19:45	18:33	16:28	15:57
11	08:25	07:42	06:41	06:27	05:24		04:48		05:39 (WEA 11)	05:01	05:44 (WEA 11)	05:47	06:40	07:32	07:30	08:18	
	16:20	17:17	18:10	20:06	20:59		21:40	26	06:05 (WEA 11)	21:39	27	06:11 (WEA 11)	20:52	19:42	18:30	16:27	15:57
12	08:25	07:40	06:39	06:25	05:22		04:48		05:39 (WEA 11)	05:02	05:45 (WEA 11)	05:48	06:42	07:34	07:32	08:19	
	16:21	17:18	18:12	20:08	21:01		21:41	26	06:05 (WEA 11)	21:38	26	06:11 (WEA 11)	20:50	19:40	18:28	16:25	15:57
13	08:24	07:38	06:36	06:22	05:21		04:48		05:40 (WEA 11)	05:03	05:46 (WEA 11)	05:50	06:43	07:36	07:34	08:20	
	16:23	17:20	18:14	20:10	21:03		21:42	25	06:05 (WEA 11)	21:37	26	06:12 (WEA 11)	20:48	19:37	18:26	16:23	15:57
14	08:23	07:36	06:34	06:20	05:19		04:48		05:40 (WEA 11)	05:04	05:46 (WEA 11)	05:52	06:45	07:38	07:36	08:21	
	16:25	17:22	18:16	20:12	21:04		21:42	25	06:05 (WEA 11)	21:36	26	06:12 (WEA 11)	20:46	19:35	18:23	16:22	15:57
15	08:22	07:34	06:32	06:18	05:17		04:47		05:40 (WEA 11)	05:05	05:46 (WEA 11)	05:54	06:47	07:40	07:37	08:22	
	16:26	17:24	18:17	20:13	21:06		21:43	26	06:06 (WEA 11)	21:35	26	06:12 (WEA 11)	20:44	19:33	18:21	16:20	15:57
16	08:21	07:32	06:29	06:16	05:16		04:47		05:41 (WEA 11)	05:07	05:46 (WEA 11)	05:55	06:48	07:41	07:39	08:23	
	16:28	17:26	18:19	20:15	21:08		21:44	25	06:06 (WEA 11)	21:34	26	06:12 (WEA 11)	20:42	19:30	18:19	16:19	15:57
17	08:20	07:30	06:27	06:13	05:14		04:47		05:41 (WEA 11)	05:08	05:46 (WEA 11)	05:57	06:50	07:43	07:41	08:24	
	16:30	17:28	18:21	20:17	21:09	9	05:54 (WEA 11)	25	06:06 (WEA 11)	21:33	25	06:11 (WEA 11)	20:40	19:28	18:16	16:17	15:57
18	08:19	07:28	06:24	06:11	05:13		04:47		05:41 (WEA 11)	05:09	05:47 (WEA 11)	05:59	06:52	07:45	07:43	08:24	
	16:31	17:30	18:23	20:19	21:11	12	05:55 (WEA 11)	25	06:06 (WEA 11)	21:32	25	06:12 (WEA 11)	20:38	19:25	18:14	16:16	15:57
19	08:18	07:26	06:22	06:09	05:11		04:47		05:41 (WEA 11)	05:11	05:48 (WEA 11)	06:00	06:54	07:47	07:45	08:25	
	16:33	17:32	18:25	20:21	21:12	15	05:57 (WEA 11)	25	06:06 (WEA 11)	21:30	23	06:11 (WEA 11)	20:35	19:23	18:12	16:15	15:58
20	08:17	07:24	06:20	06:07	05:10		04:47		05:41 (WEA 11)	05:12	05:48 (WEA 11)	06:02	06:55	07:49	07:46	08:26	
	16:35	17:34	18:26	20:22	21:14	18	05:59 (WEA 11)	25	06:06 (WEA 11)	21:29	23	06:11 (WEA 11)	20:33	19:20	18:10	16:13	15:58
21	08:16	07:22	06:17	06:04	05:08		04:47		05:41 (WEA 11)	05:13	05:48 (WEA 11)	06:04	06:57	07:51	07:48	08:26	
	16:36	17:36	18:28	20:24	21:15	20	05:59 (WEA 11)	25	06:06 (WEA 11)	21:28	22	06:10 (WEA 11)	20:31	19:18	18:08	16:12	15:58
22	08:15	07:20	06:15	06:02	05:07		04:47		05:42 (WEA 11)	05:15	05:49 (WEA 11)	06:06	06:59	07:52	07:50	08:27	
	16:38	17:38	18:30	20:26	21:17	21	06:00 (WEA 11)	25	06:07 (WEA 11)	21:27	21	06:10 (WEA 11)	20:29	19:16	18:05	16:11	15:59
23	08:13	07:18	06:12	06:00	05:05		04:48		05:42 (WEA 11)	05:16	05:50 (WEA 11)	06:07	07:01	07:54	07:52	08:27	
	16:40	17:40	18:32	20:28	21:18	23	06:01 (WEA 11)	25	06:07 (WEA 11)	21:25	19	06:09 (WEA 11)	20:27	19:13	18:03	16:10	15:59
24	08:12	07:15	06:10	05:58	05:04		04:48		05:42 (WEA 11)	05:18	05:51 (WEA 11)	06:09	07:02	07:56	07:53	08:28	
	16:42	17:42	18:34	20:29	21:20	23	06:01 (WEA 11)	25	06:07 (WEA 11)	21:26	17	06:08 (WEA 11)	20:24	19:11	18:01	16:09	16:00
25	08:11	07:13	06:08	05:56	05:03		04:48		05:43 (WEA 11)	05:19	05:53 (WEA 11)	06:11	07:04	07:58	07:55	08:28	
	16:44	17:44	18:36	20:31	21:21	24	06:02 (WEA 11)	25	06:08 (WEA 11)	21:22	14	06:07 (WEA 11)	20:22	19:08	18:59	16:07	16:01
26	08:09	07:11	06:05	05:53	05:02		04:49		05:43 (WEA 11)	05:21	05:54 (WEA 11)	06:12	07:06	07:00	07:57	08:29	
	16:46	17:46	18:37	20:33	21:23	25	06:02 (WEA 11)	25	06:08 (WEA 11)	21:21	11	06:05 (WEA 11)	20:20	19:06	16:57	16:06	16:01
27	08:08	07:09	06:03	05:51	05:00		04:49		05:42 (WEA 11)	05:22	05:58 (WEA 11)	06:14	07:07	07:02	07:58	08:29	
	16:47	17:47	18:39	20:35	21:24	25	06:02 (WEA 11)	26	06:08 (WEA 11)	21:19	4	06:02 (WEA 11)	20:18	19:03	16:55	16:05	16:02
28	08:06	07:06	06:00	05:49	04:59		04:50		05:43 (WEA 11)	05:24		06:16	07:09	07:04	08:00	08:29	
	16:49	17:49	18:41	20:37	21:25	26	06:02 (WEA 11)	26	06:09 (WEA 11)	21:18		20:15	19:01	16:53	16:04	16:03	
29	08:05		06:58	05:47	04:58		04:50		05:43 (WEA 11)	05:25		06:18	07:11	07:05	08:02	08:29	
	16:51		19:43	20:38	21:27	27	06:04 (WEA 11)	25	06:08 (WEA 11)	21:16		20:13	18:59	16:51	16:04	16:04	
30	08:03		06:56	05:45	04:57		04:51		05:43 (WEA 11)	05:27		06:19	07:13	07:07	08:03	08:29	
	16:53		19:45	20:40	21:28	27	06:04 (WEA 11)	26	06:09 (WEA 11)	21:14		20:11	18:56	16:49	16:03	16:05	
31	08:02		06:53		04:56		05:37 (WEA 11)			05:28		06:21		07:09		08:29	
	16:55		19:46		21:29	27	06:04 (WEA 11)			21:13		20:08		16:47		16:06	
Sonnenscheinstunden	253	275	367	419	491		506		506	509		458	382	330	262	237	
astr.max.mögl.Beschattung					322		772		626								

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
	Minuten mit Schatten	

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 054 - Krinitz, Ringstraße 2/3

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

		Januar	Februar	März	April	Mai		Juni		Juli		August	September	Oktober	November	Dezember				
1	08:29	08:00	07:04	06:51	05:43			04:55		05:41 (WEA 11)	04:51		05:49 (WEA 11)	05:30	06:23	07:14	07:11	08:05		
	16:07	16:57	17:51	19:48	20:42			21:30	27	06:08 (WEA 11)	21:45	23	06:12 (WEA 11)	21:11	20:06	18:54	16:45	16:02		
2	08:29	07:59	07:02	06:48	05:41			04:54		05:41 (WEA 11)	04:52		05:49 (WEA 11)	05:32	06:24	07:16	07:13	08:06		
	16:08	16:59	17:53	19:50	20:44			21:32	27	06:08 (WEA 11)	21:45	23	06:12 (WEA 11)	21:09	20:04	18:51	16:43	16:01		
3	08:29	07:57	07:00	06:46	05:39			04:53		05:42 (WEA 11)	04:53		05:49 (WEA 11)	05:33	06:26	07:18	07:15	08:08		
	16:09	17:01	17:55	19:52	20:45			21:33	26	06:08 (WEA 11)	21:44	24	06:13 (WEA 11)	21:07	20:01	18:49	16:41	16:00		
4	08:29	07:55	06:57	06:44	05:37			04:53		05:42 (WEA 11)	04:54		05:49 (WEA 11)	05:35	06:28	07:20	07:17	08:09		
	16:10	17:03	17:57	19:54	20:47			21:34	26	06:08 (WEA 11)	21:44	24	06:13 (WEA 11)	21:06	19:59	18:47	16:39	16:00		
5	08:28	07:53	06:55	06:41	05:35			04:52		05:42 (WEA 11)	04:55		05:49 (WEA 11)	05:37	06:30	07:22	07:19	08:10		
	16:12	17:05	17:59	19:55	20:49			21:35	26	06:08 (WEA 11)	21:43	25	06:14 (WEA 11)	21:04	19:57	18:44	16:37	15:59		
6	08:28	07:52	06:53	06:39	05:33			04:51		05:43 (WEA 11)	04:55		05:50 (WEA 11)	05:38	06:31	07:23	07:21	08:12		
	16:13	17:07	18:01	19:57	20:51			21:36	25	06:08 (WEA 11)	21:43	24	06:14 (WEA 11)	21:02	19:54	18:42	16:35	15:59		
7	08:28	07:50	06:50	06:36	05:31			04:51		05:43 (WEA 11)	04:56		05:49 (WEA 11)	05:40	06:33	07:25	07:22	08:13		
	16:14	17:09	18:03	19:59	20:52			21:37	25	06:08 (WEA 11)	21:42	25	06:14 (WEA 11)	21:00	19:52	18:40	16:34	15:58		
8	08:27	07:48	06:48	06:34	05:30			04:50		05:44 (WEA 11)	04:57		05:49 (WEA 11)	05:42	06:35	07:27	07:24	08:14		
	16:16	17:11	18:04	20:01	20:54			21:38	24	06:08 (WEA 11)	21:41	25	06:14 (WEA 11)	20:58	19:49	18:37	16:32	15:58		
9	08:27	07:46	06:46	06:32	05:28			04:49		05:44 (WEA 11)	04:58		05:49 (WEA 11)	05:43	06:36	07:29	07:26	08:16		
	16:17	17:13	18:06	20:03	20:56			21:39	24	06:08 (WEA 11)	21:41	26	06:15 (WEA 11)	20:56	19:47	18:35	16:30	15:58		
10	08:26	07:44	06:43	06:29	05:26			04:49		05:44 (WEA 11)	04:59		05:49 (WEA 11)	05:45	06:38	07:30	07:28	08:17		
	16:18	17:15	18:08	20:04	20:58			21:40	24	06:08 (WEA 11)	21:40	26	06:15 (WEA 11)	20:54	19:45	18:33	16:28	15:57		
11	08:25	07:42	06:41	06:27	05:24			04:48		05:45 (WEA 11)	05:01		05:49 (WEA 11)	05:47	06:40	07:32	07:30	08:18		
	16:20	17:17	18:10	20:06	20:59			21:40	23	06:08 (WEA 11)	21:39	26	06:15 (WEA 11)	20:52	19:42	18:30	16:27	15:57		
12	08:25	07:40	06:39	06:25	05:22			04:48		05:45 (WEA 11)	05:02		05:49 (WEA 11)	05:48	06:42	07:34	07:32	08:19		
	16:21	17:18	18:12	20:08	21:01			21:41	23	06:08 (WEA 11)	21:38	26	06:15 (WEA 11)	20:50	19:40	18:28	16:25	15:57		
13	08:24	07:38	06:36	06:22	05:21			04:48		05:45 (WEA 11)	05:03		05:50 (WEA 11)	05:50	06:43	07:36	07:34	08:20		
	16:23	17:20	18:14	20:10	21:03			21:42	23	06:08 (WEA 11)	21:37	26	06:16 (WEA 11)	20:48	19:37	18:26	16:23	15:57		
14	08:23	07:36	06:34	06:20	05:19			04:48		05:46 (WEA 11)	05:04		05:50 (WEA 11)	05:52	06:45	07:38	07:36	08:21		
	16:25	17:22	18:16	20:12	21:04	8	05:49 (WEA 11)	21:42	22	06:08 (WEA 11)	21:36	26	06:16 (WEA 11)	20:46	19:35	18:23	16:22	15:57		
15	08:22	07:34	06:32	06:18	05:17			04:47		05:46 (WEA 11)	05:05		05:50 (WEA 11)	05:54	06:47	07:40	07:37	08:22		
	16:26	17:24	18:17	20:13	21:06	12	05:59 (WEA 11)	21:43	22	06:08 (WEA 11)	21:35	26	06:16 (WEA 11)	20:44	19:33	18:21	16:20	15:57		
16	08:21	07:32	06:29	06:16	05:16			04:47		05:47 (WEA 11)	05:07		05:50 (WEA 11)	05:55	06:48	07:41	07:39	08:23		
	16:28	17:26	18:19	20:15	21:08	16	06:01 (WEA 11)	21:44	21	06:08 (WEA 11)	21:34	26	06:16 (WEA 11)	20:42	19:30	18:19	16:19	15:57		
17	08:20	07:30	06:27	06:13	05:14			04:47		05:47 (WEA 11)	05:08		05:50 (WEA 11)	05:57	06:50	07:43	07:41	08:24		
	16:30	17:28	18:21	20:17	21:09	18	06:03 (WEA 11)	21:44	22	06:09 (WEA 11)	21:33	26	06:16 (WEA 11)	20:40	19:28	18:16	16:17	15:57		
18	08:19	07:28	06:24	06:11	05:13			04:47		05:47 (WEA 11)	05:09		05:51 (WEA 11)	05:59	06:52	07:45	07:43	08:24		
	16:31	17:30	18:23	20:19	21:11	20	06:03 (WEA 11)	21:44	22	06:09 (WEA 11)	21:32	26	06:17 (WEA 11)	20:38	19:25	18:14	16:16	15:57		
19	08:18	07:26	06:22	06:09	05:11			04:47		05:47 (WEA 11)	05:11		05:51 (WEA 11)	06:00	06:54	07:47	07:45	08:25		
	16:33	17:32	18:25	20:21	21:12	21	06:04 (WEA 11)	21:45	22	06:09 (WEA 11)	21:30	26	06:17 (WEA 11)	20:35	19:23	18:12	16:15	15:58		
20	08:17	07:24	06:20	06:07	05:10			04:47		05:43 (WEA 11)	05:12		05:51 (WEA 11)	06:02	06:55	07:49	07:46	08:26		
	16:35	17:34	18:26	20:22	21:14	22	06:05 (WEA 11)	21:45	21	06:09 (WEA 11)	21:29	25	06:16 (WEA 11)	20:33	19:20	18:10	16:13	15:58		
21	08:16	07:22	06:17	06:04	05:08			04:47		05:48 (WEA 11)	05:13		05:51 (WEA 11)	06:04	06:57	07:51	07:48	08:26		
	16:36	17:36	18:28	20:24	21:15	24	06:05 (WEA 11)	21:45	21	06:09 (WEA 11)	21:28	25	06:16 (WEA 11)	20:31	19:18	18:08	16:12	15:58		
22	08:15	07:20	06:15	06:02	05:07			04:47		05:49 (WEA 11)	05:15		05:52 (WEA 11)	06:06	06:59	07:52	07:50	08:27		
	16:38	17:38	18:30	20:26	21:17	25	06:06 (WEA 11)	21:46	21	06:10 (WEA 11)	21:27	24	06:16 (WEA 11)	20:29	19:16	18:05	16:11	15:59		
23	08:13	07:18	06:12	06:00	05:05			04:48		05:48 (WEA 11)	05:16		05:52 (WEA 11)	06:07	07:01	07:54	07:52	08:27		
	16:40	17:40	18:32	20:28	21:18	25	06:06 (WEA 11)	21:46	22	06:10 (WEA 11)	21:25	23	06:15 (WEA 11)	20:27	19:13	18:03	16:10	15:59		
24	08:12	07:15	06:10	05:58	05:04			04:48		05:48 (WEA 11)	05:18		05:52 (WEA 11)	06:09	07:02	07:56	07:53	08:28		
	16:42	17:42	18:34	20:29	21:20	26	06:07 (WEA 11)	21:46	22	06:10 (WEA 11)	21:24	22	06:14 (WEA 11)	20:24	19:11	18:01	16:09	16:00		
25	08:11	07:13	06:08	05:56	05:03			04:48		05:49 (WEA 11)	05:19		05:54 (WEA 11)	06:11	07:04	07:58	07:55	08:28		
	16:44	17:44	18:36	20:31	21:21	26	06:07 (WEA 11)	21:46	22	06:11 (WEA 11)	21:21	20	06:14 (WEA 11)	20:22	19:08	18:59	16:07	16:01		
26	08:09	07:11	06:05	05:53	05:02			04:49		05:49 (WEA 11)	05:21		05:54 (WEA 11)	06:12	07:06	07:00	07:57	08:29		
	16:46	17:46	18:37	20:33	21:23	27	06:07 (WEA 11)	21:46	21	06:10 (WEA 11)	21:21	19	06:13 (WEA 11)	20:20	19:06	16:57	16:06	16:01		
27	08:08	07:09	06:03	05:51	05:00			04:49		05:48 (WEA 11)	05:22		05:56 (WEA 11)	06:14	07:07	07:02	07:58	08:29		
	16:47	17:47	18:39	20:35	21:24	27	06:07 (WEA 11)	21:46	22	06:10 (WEA 11)	21:19	17	06:13 (WEA 11)	20:18	19:03	16:55	16:05	16:02		
28	08:06	07:06	06:00	05:49	04:59			04:50		05:49 (WEA 11)	05:24		05:56 (WEA 11)	06:16	07:09	07:04	08:00	08:29		
	16:49	17:49	18:41	20:37	21:25	27	06:07 (WEA 11)	21:46	22	06:11 (WEA 11)	21:18	15	06:11 (WEA 11)	20:15	19:01	16:53	16:04	16:03		
29	08:05		06:58	05:47	04:58			04:50		05:48 (WEA 11)	05:25		05:59 (WEA 11)	06:18	07:11	07:05	08:02	08:29		
	16:51		19:43	20:38	21:27	27	06:08 (WEA 11)	21:45	23	06:11 (WEA 11)	21:16	11	06:10 (WEA 11)	20:13	18:59	16:51	16:04	16:04		
30	08:03		06:56	05:45	04:57			04:51		05:49 (WEA 11)	05:27		06:01 (WEA 11)	06:19	07:13	07:07	08:03	08:29		
	16:53		19:45	20:40	21:28	27	06:08 (WEA 11)	21:45	23	06:12 (WEA 11)	21:14	5	06:06 (WEA 11)	20:11	18:56	16:49	16:03	16:05		
31	08:02		06:53		04:56			05:41 (WEA 11)		05:28				06:21		07:09	08:29			
	16:55		19:46		21:29	27	06:08 (WEA 11)			21:13				20:08		16:47	16:06			
Sonnenscheinstunden		253		367		419		491		506		509		458		382		330	262	237
astr.max.mögl.Beschattung			275				405		694			685								

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7
DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 055 - Krinitz, Ringstraße 4

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29	08:00	07:04	06:51	05:43	04:55	05:46 (WEA 11)	04:51	05:54 (WEA 11)	05:30	06:04 (WEA 11)	06:23
	16:07	16:57	17:51	19:48	20:42	21:30	25 06:11 (WEA 11)	21:45	21 06:15 (WEA 11)	21:11	20:06	18:54
2	08:29	07:59	07:02	06:48	05:41	04:54	05:46 (WEA 11)	04:52	05:54 (WEA 11)	05:32	7 06:11 (WEA 11)	06:24
	16:08	16:59	17:53	19:50	20:44	21:32	25 06:11 (WEA 11)	21:45	21 06:15 (WEA 11)	21:09	20:04	18:51
3	08:29	07:57	07:00	06:46	05:39	04:53	05:47 (WEA 11)	04:53	05:54 (WEA 11)	05:33	06:26	07:18
	16:09	17:01	17:55	19:52	20:45	21:33	25 06:12 (WEA 11)	21:44	21 06:15 (WEA 11)	21:07	20:01	18:49
4	08:29	07:55	06:57	06:44	05:37	04:53	05:47 (WEA 11)	04:54	05:54 (WEA 11)	05:35	06:28	07:20
	16:10	17:03	17:57	19:54	20:47	21:34	24 06:11 (WEA 11)	21:44	22 06:16 (WEA 11)	21:06	19:59	18:47
5	08:28	07:53	06:55	06:41	05:35	04:52	05:47 (WEA 11)	04:55	05:54 (WEA 11)	05:37	06:30	07:22
	16:12	17:05	17:59	19:55	20:49	21:35	24 06:11 (WEA 11)	21:43	23 06:17 (WEA 11)	21:04	19:57	18:44
6	08:28	07:52	06:53	06:39	05:33	04:51	05:48 (WEA 11)	04:55	05:54 (WEA 11)	05:38	06:31	07:23
	16:13	17:07	18:01	19:57	20:51	21:36	23 06:11 (WEA 11)	21:43	23 06:17 (WEA 11)	21:02	19:54	18:42
7	08:28	07:50	06:50	06:36	05:31	04:51	05:48 (WEA 11)	04:56	05:53 (WEA 11)	05:40	06:33	07:25
	16:14	17:09	18:03	19:59	20:52	21:37	23 06:11 (WEA 11)	21:42	24 06:17 (WEA 11)	21:00	19:52	18:40
8	08:27	07:48	06:48	06:34	05:30	04:50	05:49 (WEA 11)	04:57	05:53 (WEA 11)	05:42	06:35	07:27
	16:16	17:11	18:04	20:01	20:54	21:38	22 06:11 (WEA 11)	21:41	24 06:17 (WEA 11)	20:58	19:49	18:37
9	08:27	07:46	06:46	06:32	05:28	04:49	05:48 (WEA 11)	04:58	05:53 (WEA 11)	05:43	06:36	07:29
	16:17	17:13	18:06	20:03	20:56	21:39	22 06:10 (WEA 11)	21:41	25 06:18 (WEA 11)	20:56	19:47	18:35
10	08:26	07:44	06:43	06:29	05:26	04:49	05:49 (WEA 11)	04:59	05:53 (WEA 11)	05:45	06:38	07:30
	16:18	17:15	18:08	20:04	20:58	21:40	22 06:11 (WEA 11)	21:40	25 06:18 (WEA 11)	20:54	19:45	18:33
11	08:25	07:42	06:41	06:27	05:24	04:48	05:50 (WEA 11)	05:01	05:53 (WEA 11)	05:47	06:40	07:32
	16:20	17:17	18:10	20:06	20:59	21:40	21 06:11 (WEA 11)	21:39	26 06:19 (WEA 11)	20:52	19:42	18:30
12	08:25	07:40	06:39	06:25	05:22	05:53 (WEA 11)	04:48	05:50 (WEA 11)	05:53 (WEA 11)	05:48	06:42	07:34
	16:21	17:18	18:12	20:08	21:01	9 06:02 (WEA 11)	21:41	20 06:10 (WEA 11)	21:38	26 06:19 (WEA 11)	20:50	19:40
13	08:24	07:38	06:36	06:22	05:21	05:50 (WEA 11)	04:48	05:50 (WEA 11)	05:03	05:54 (WEA 11)	05:50	06:43
	16:23	17:20	18:14	20:10	21:03	13 06:03 (WEA 11)	21:42	20 06:10 (WEA 11)	21:37	26 06:20 (WEA 11)	20:48	19:37
14	08:23	07:36	06:34	06:20	05:19	05:49 (WEA 11)	04:48	05:51 (WEA 11)	05:04	05:54 (WEA 11)	05:52	06:45
	16:25	17:22	18:16	20:12	21:04	17 06:06 (WEA 11)	21:42	19 06:10 (WEA 11)	21:36	26 06:20 (WEA 11)	20:46	19:35
15	08:22	07:34	06:32	06:18	05:17	05:47 (WEA 11)	04:47	05:52 (WEA 11)	05:05	05:54 (WEA 11)	05:54	06:47
	16:26	17:24	18:17	20:13	21:06	19 06:06 (WEA 11)	21:43	18 06:10 (WEA 11)	21:35	26 06:20 (WEA 11)	20:44	19:33
16	08:21	07:32	06:29	06:16	05:16	05:47 (WEA 11)	04:47	05:52 (WEA 11)	05:07	05:53 (WEA 11)	05:55	06:48
	16:28	17:26	18:19	20:15	21:08	21 06:08 (WEA 11)	21:44	19 06:11 (WEA 11)	21:34	27 06:20 (WEA 11)	20:42	19:30
17	08:20	07:30	06:27	06:13	05:14	05:46 (WEA 11)	04:47	05:52 (WEA 11)	05:08	05:53 (WEA 11)	05:57	06:50
	16:30	17:28	18:21	20:17	21:09	23 06:09 (WEA 11)	21:44	19 06:11 (WEA 11)	21:33	27 06:20 (WEA 11)	20:40	19:28
18	08:19	07:28	06:24	06:11	05:13	05:45 (WEA 11)	04:47	05:53 (WEA 11)	05:09	05:53 (WEA 11)	05:59	06:52
	16:31	17:30	18:23	20:19	21:11	24 06:09 (WEA 11)	21:44	18 06:11 (WEA 11)	21:32	27 06:20 (WEA 11)	20:38	19:25
19	08:18	07:26	06:22	06:09	05:11	05:45 (WEA 11)	04:47	05:53 (WEA 11)	05:11	05:54 (WEA 11)	06:00	06:54
	16:33	17:32	18:25	20:21	21:12	25 06:10 (WEA 11)	21:45	18 06:11 (WEA 11)	21:30	27 06:21 (WEA 11)	20:35	19:23
20	08:17	07:24	06:20	06:07	05:10	05:45 (WEA 11)	04:47	05:53 (WEA 11)	05:12	05:54 (WEA 11)	06:02	06:55
	16:35	17:34	18:26	20:22	21:14	25 06:10 (WEA 11)	21:45	18 06:11 (WEA 11)	21:29	27 06:21 (WEA 11)	20:33	19:20
21	08:16	07:22	06:17	06:04	05:08	05:44 (WEA 11)	04:47	05:53 (WEA 11)	05:13	05:54 (WEA 11)	06:04	06:57
	16:36	17:36	18:28	20:24	21:15	26 06:10 (WEA 11)	21:45	18 06:11 (WEA 11)	21:28	26 06:20 (WEA 11)	20:31	19:18
22	08:15	07:20	06:15	06:02	05:07	05:44 (WEA 11)	04:47	05:54 (WEA 11)	05:15	05:55 (WEA 11)	06:06	06:59
	16:38	17:38	18:30	20:26	21:17	26 06:10 (WEA 11)	21:46	18 06:12 (WEA 11)	21:27	26 06:21 (WEA 11)	20:29	19:16
23	08:13	07:18	06:12	06:00	05:05	05:44 (WEA 11)	04:48	05:54 (WEA 11)	05:16	05:55 (WEA 11)	06:07	07:01
	16:40	17:40	18:32	20:28	21:18	27 06:11 (WEA 11)	21:46	18 06:12 (WEA 11)	21:25	25 06:20 (WEA 11)	20:27	19:13
24	08:12	07:15	06:10	05:58	05:04	05:44 (WEA 11)	04:48	05:54 (WEA 11)	05:18	05:55 (WEA 11)	06:09	07:02
	16:42	17:42	18:34	20:29	21:20	27 06:11 (WEA 11)	21:46	18 06:12 (WEA 11)	21:24	25 06:20 (WEA 11)	20:24	19:11
25	08:11	07:13	06:08	05:56	05:03	05:45 (WEA 11)	04:48	05:54 (WEA 11)	05:19	05:56 (WEA 11)	06:11	07:04
	16:44	17:44	18:36	20:31	21:21	26 06:11 (WEA 11)	21:46	19 06:13 (WEA 11)	21:22	24 06:20 (WEA 11)	20:22	19:08
26	08:09	07:11	06:05	05:53	05:02	05:44 (WEA 11)	04:49	05:54 (WEA 11)	05:21	05:56 (WEA 11)	06:12	07:06
	16:46	17:46	18:37	20:33	21:23	27 06:11 (WEA 11)	21:46	19 06:13 (WEA 11)	21:21	23 06:19 (WEA 11)	20:20	19:06
27	08:08	07:09	06:03	05:51	05:00	05:44 (WEA 11)	04:49	05:54 (WEA 11)	05:22	05:57 (WEA 11)	06:14	07:07
	16:47	17:47	18:39	20:35	21:24	27 06:11 (WEA 11)	21:46	19 06:13 (WEA 11)	21:19	22 06:19 (WEA 11)	20:18	19:03
28	08:06	07:06	06:00	05:49	04:59	05:44 (WEA 11)	04:50	05:54 (WEA 11)	05:24	05:58 (WEA 11)	06:16	07:09
	16:49	17:49	18:41	20:37	21:25	27 06:11 (WEA 11)	21:46	19 06:13 (WEA 11)	21:18	20 06:18 (WEA 11)	20:15	19:01
29	08:05		06:58	05:47	04:58	05:45 (WEA 11)	04:50	05:54 (WEA 11)	05:25	05:59 (WEA 11)	06:18	07:11
	16:51		19:43	20:38	21:27	27 06:12 (WEA 11)	21:45	19 06:13 (WEA 11)	21:16	18 06:17 (WEA 11)	20:13	18:59
30	08:03		06:56	05:45	04:57	05:45 (WEA 11)	04:51	05:54 (WEA 11)	05:27	06:00 (WEA 11)	06:19	07:13
	16:53		19:45	20:40	21:28	27 06:12 (WEA 11)	21:45	20 06:14 (WEA 11)	21:17	15 06:15 (WEA 11)	20:11	18:56
31	08:02		06:53		04:56	05:45 (WEA 11)			05:28	06:02 (WEA 11)	06:21	
	16:55		19:46		21:29	26 06:11 (WEA 11)			21:13	12 06:14 (WEA 11)	20:08	
Sonneneinstrahlung	253	275	367	419	491	506		509		458		382
astr.max.mögl.Beschattung					469	612		730		7		330

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)



Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7
DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 056 - Krinitz, Ringstraße 5

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember	
1	08:29 16:07	08:00 16:57	07:04 17:51	06:51 19:48	05:43 20:42	04:55 21:30	05:51 (WEA 11) 06:14 (WEA 11)	04:51 21:45	06:01 (WEA 11) 06:16 (WEA 11)	05:30 21:11	06:03 (WEA 11) 06:20 (WEA 11)	07:14 18:54	08:05 16:45
2	08:29 16:08	07:59 16:59	07:02 17:53	06:48 19:50	05:41 20:44	04:54 21:32	05:51 (WEA 11) 06:14 (WEA 11)	04:52 21:45	06:00 (WEA 11) 06:16 (WEA 11)	05:32 21:09	06:05 (WEA 11) 06:19 (WEA 11)	07:13 18:51	08:06 16:43
3	08:29 16:09	07:57 17:01	07:00 17:55	06:46 19:52	05:39 20:45	04:53 21:33	05:52 (WEA 11) 06:14 (WEA 11)	04:53 21:44	06:00 (WEA 11) 06:17 (WEA 11)	05:33 21:07	06:07 (WEA 11) 06:28 (WEA 11)	07:18 18:49	08:08 16:41
4	08:29 16:10	07:55 17:03	06:57 17:57	06:44 19:54	05:37 20:47	04:53 21:34	05:52 (WEA 11) 06:14 (WEA 11)	04:54 21:44	06:00 (WEA 11) 06:18 (WEA 11)	05:35 21:06	06:28 (WEA 11) 06:30 (WEA 11)	07:20 18:47	08:09 16:40
5	08:28 16:12	07:53 17:05	06:55 17:59	06:41 19:55	05:35 20:49	04:52 21:35	05:52 (WEA 11) 06:13 (WEA 11)	04:55 21:43	06:00 (WEA 11) 06:19 (WEA 11)	05:37 21:04	06:30 (WEA 11) 06:31 (WEA 11)	07:19 18:44	08:10 16:37
6	08:28 16:13	07:52 17:07	06:53 18:01	06:39 19:57	05:33 20:51	04:51 21:36	05:53 (WEA 11) 06:13 (WEA 11)	04:55 21:43	06:00 (WEA 11) 06:19 (WEA 11)	05:38 21:02	06:31 (WEA 11) 06:34 (WEA 11)	07:21 18:42	08:12 16:35
7	08:28 16:14	07:50 17:09	06:50 18:03	06:36 19:59	05:31 20:52	04:51 21:37	05:54 (WEA 11) 06:13 (WEA 11)	04:56 21:42	06:00 (WEA 11) 06:19 (WEA 11)	05:40 21:00	06:33 (WEA 11) 06:35 (WEA 11)	07:22 18:40	08:13 16:34
8	08:27 16:15	07:48 17:11	06:48 18:04	06:34 20:01	05:30 20:54	04:50 21:38	05:55 (WEA 11) 06:13 (WEA 11)	04:57 21:41	06:00 (WEA 11) 06:20 (WEA 11)	05:42 21:08	06:35 (WEA 11) 06:36 (WEA 11)	07:24 18:37	08:14 16:32
9	08:27 16:16	07:46 17:13	06:46 18:06	06:32 20:03	05:28 20:56	04:49 21:39	05:55 (WEA 11) 06:12 (WEA 11)	04:58 21:41	06:00 (WEA 11) 06:20 (WEA 11)	05:43 21:05	06:36 (WEA 11) 06:38 (WEA 11)	07:26 18:35	08:16 16:30
10	08:26 16:18	07:44 17:15	06:43 18:08	06:29 20:04	05:26 20:58	04:49 21:40	05:56 (WEA 11) 06:12 (WEA 11)	04:59 21:40	06:00 (WEA 11) 06:21 (WEA 11)	05:45 21:04	06:38 (WEA 11) 06:40 (WEA 11)	07:28 18:33	08:17 16:28
11	08:25 16:20	07:42 17:17	06:41 18:10	06:27 20:06	05:24 20:59	04:48 21:40	05:54 (WEA 11) 06:12 (WEA 11)	04:48 21:39	06:00 (WEA 11) 06:21 (WEA 11)	05:47 21:02	06:40 (WEA 11) 06:42 (WEA 11)	07:30 18:30	08:18 16:27
12	08:25 16:21	07:40 17:22	06:39 18:12	06:25 20:08	05:22 21:01	04:48 21:41	05:52 (WEA 11) 06:11 (WEA 11)	04:48 21:38	06:00 (WEA 11) 06:22 (WEA 11)	05:48 21:00	06:42 (WEA 11) 06:44 (WEA 11)	07:32 18:28	08:19 16:25
13	08:24 16:23	07:38 17:20	06:36 18:14	06:22 20:10	05:21 21:03	04:48 21:42	05:57 (WEA 11) 06:11 (WEA 11)	04:48 21:37	06:00 (WEA 11) 06:23 (WEA 11)	05:50 21:00	06:43 (WEA 11) 06:45 (WEA 11)	07:34 18:26	08:20 16:23
14	08:23 16:25	07:36 17:22	06:34 18:16	06:20 20:12	05:19 21:04	04:48 21:42	05:50 (WEA 11) 06:11 (WEA 11)	04:48 21:36	06:00 (WEA 11) 06:23 (WEA 11)	05:52 21:00	06:45 (WEA 11) 06:47 (WEA 11)	07:36 18:23	08:21 16:22
15	08:22 16:26	07:34 17:24	06:32 18:17	06:18 20:13	05:17 21:06	04:47 21:43	05:59 (WEA 11) 06:11 (WEA 11)	04:47 21:35	06:00 (WEA 11) 06:24 (WEA 11)	05:54 21:00	06:47 (WEA 11) 06:49 (WEA 11)	07:37 18:21	08:22 16:20
16	08:21 16:28	07:32 17:26	06:29 18:19	06:16 20:15	05:16 21:08	04:47 21:44	05:59 (WEA 11) 06:11 (WEA 11)	04:47 21:34	06:00 (WEA 11) 06:24 (WEA 11)	05:55 21:00	06:48 (WEA 11) 06:50 (WEA 11)	07:39 18:19	08:23 16:19
17	08:20 16:30	07:30 17:28	06:27 18:21	06:13 20:17	05:14 21:09	04:47 21:44	06:00 (WEA 11) 06:11 (WEA 11)	04:47 21:33	06:00 (WEA 11) 06:24 (WEA 11)	05:57 21:00	06:50 (WEA 11) 06:52 (WEA 11)	07:41 18:16	08:24 16:17
18	08:19 16:31	07:28 17:30	06:24 18:23	06:11 20:19	05:13 21:11	04:47 21:44	06:00 (WEA 11) 06:11 (WEA 11)	04:47 21:32	06:00 (WEA 11) 06:24 (WEA 11)	05:59 21:00	06:52 (WEA 11) 06:54 (WEA 11)	07:43 18:14	08:24 16:15
19	08:18 16:33	07:26 17:32	06:22 18:25	06:09 20:21	05:11 21:12	04:47 21:45	06:01 (WEA 11) 06:11 (WEA 11)	04:47 21:30	06:00 (WEA 11) 06:25 (WEA 11)	06:00 21:00	06:54 (WEA 11) 06:56 (WEA 11)	07:45 18:12	08:25 16:15
20	08:17 16:35	07:24 17:34	06:20 18:26	06:07 20:22	05:10 21:14	04:47 21:45	06:01 (WEA 11) 06:11 (WEA 11)	04:47 21:29	06:00 (WEA 11) 06:25 (WEA 11)	06:02 21:00	06:55 (WEA 11) 06:57 (WEA 11)	07:46 18:10	08:26 16:13
21	08:16 16:36	07:22 17:36	06:17 18:28	06:04 20:24	05:08 21:15	04:47 21:45	06:01 (WEA 11) 06:11 (WEA 11)	04:47 21:28	06:00 (WEA 11) 06:25 (WEA 11)	06:04 21:00	06:57 (WEA 11) 06:59 (WEA 11)	07:48 18:08	08:26 16:12
22	08:15 16:38	07:20 17:38	06:15 18:30	06:02 20:26	05:07 21:17	04:47 21:46	06:02 (WEA 11) 06:12 (WEA 11)	04:47 21:27	06:00 (WEA 11) 06:25 (WEA 11)	06:06 21:00	06:59 (WEA 11) 07:01 (WEA 11)	07:50 18:05	08:27 16:11
23	08:13 16:40	07:18 17:40	06:12 18:32	06:00 20:28	05:05 21:18	04:48 21:46	06:02 (WEA 11) 06:12 (WEA 11)	04:47 21:25	06:00 (WEA 11) 06:25 (WEA 11)	06:07 21:00	07:01 (WEA 11) 07:03 (WEA 11)	07:52 18:03	08:27 16:10
24	08:12 16:42	07:15 17:42	06:10 18:34	05:58 20:29	05:04 21:20	04:48 21:46	06:02 (WEA 11) 06:12 (WEA 11)	04:47 21:24	06:00 (WEA 11) 06:24 (WEA 11)	06:09 21:00	07:02 (WEA 11) 07:04 (WEA 11)	07:53 18:01	08:28 16:09
25	08:11 16:44	07:13 17:44	06:08 18:36	05:56 20:31	05:03 21:21	04:48 21:46	06:02 (WEA 11) 06:13 (WEA 11)	04:47 21:22	06:00 (WEA 11) 06:25 (WEA 11)	06:11 21:00	07:04 (WEA 11) 07:06 (WEA 11)	07:55 18:00	08:28 16:07
26	08:09 16:46	07:11 17:46	06:05 18:37	05:53 20:33	05:02 21:23	04:49 21:46	06:02 (WEA 11) 06:13 (WEA 11)	04:47 21:21	06:00 (WEA 11) 06:24 (WEA 11)	06:12 21:00	07:06 (WEA 11) 07:08 (WEA 11)	07:57 18:00	08:29 16:06
27	08:08 16:47	07:09 17:47	06:03 18:39	05:51 20:35	05:00 21:24	04:49 21:46	06:03 (WEA 11) 06:13 (WEA 11)	04:47 21:19	06:00 (WEA 11) 06:24 (WEA 11)	06:14 21:00	07:07 (WEA 11) 07:09 (WEA 11)	07:58 18:00	08:29 16:05
28	08:06 16:49	07:06 17:49	06:00 18:41	05:49 20:37	04:59 21:25	04:50 21:46	06:03 (WEA 11) 06:14 (WEA 11)	04:47 21:18	06:00 (WEA 11) 06:23 (WEA 11)	06:16 21:00	07:09 (WEA 11) 07:11 (WEA 11)	08:00 18:00	08:29 16:04
29	08:05 16:51	07:05 17:51	05:58 18:43	05:47 20:38	04:57 21:27	04:50 21:45	06:01 (WEA 11) 06:14 (WEA 11)	04:47 21:16	06:00 (WEA 11) 06:23 (WEA 11)	06:18 21:00	07:11 (WEA 11) 07:13 (WEA 11)	08:02 18:00	08:29 16:04
30	08:03 16:53	07:03 17:53	05:56 18:45	05:45 20:40	04:57 21:28	04:51 21:45	06:01 (WEA 11) 06:15 (WEA 11)	04:47 21:14	06:00 (WEA 11) 06:22 (WEA 11)	06:19 21:00	07:13 (WEA 11) 07:15 (WEA 11)	08:03 18:00	08:29 16:05
31	08:02 16:55	07:02 17:55	05:53 18:46	05:43 20:41	04:56 21:29	04:50 21:45	06:02 (WEA 11) 06:15 (WEA 11)	04:47 21:13	06:00 (WEA 11) 06:22 (WEA 11)	06:21 21:00	07:15 (WEA 11) 07:17 (WEA 11)	08:04 18:00	08:29 16:06
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	330	262	237	
astr.max.mögl.Beschattung					529	438	713	40					

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)



Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 057 - Krinitz, Ringstraße 6

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	[Januar	[Februar	[März	[April	[Mai	[Juni		[Juli		[August		[September]	[Oktober	[November]	[Dezember	
1	08:29	08:00	07:04	06:51	06:43	04:55		06:03 (WEA 11)	04:51	05:30		06:06 (WEA 11)	06:23	07:14	07:11	08:05
	16:07	16:57	17:51	19:48	20:42	21:30	13	06:16 (WEA 11)	21:45	21:11	25	06:31 (WEA 11)	20:06	18:54	16:45	16:02
2	08:29	07:59	07:02	06:48	06:41	04:54		06:03 (WEA 11)	04:52	05:32		06:07 (WEA 11)	06:24	07:16	07:13	08:06
	16:08	16:59	17:53	19:50	20:44	21:32	12	06:15 (WEA 11)	21:45	21:09	24	06:31 (WEA 11)	20:04	18:51	16:43	16:01
3	08:29	07:57	07:00	06:46	06:39	04:53		06:06 (WEA 11)	04:53	05:33		06:08 (WEA 11)	06:26	07:18	07:15	08:08
	16:09	17:01	17:55	19:52	20:45	21:33	9	06:15 (WEA 11)	21:44	21:07	22	06:30 (WEA 11)	20:01	18:49	16:41	16:00
4	08:29	07:55	06:57	06:44	06:37	04:53		06:07 (WEA 11)	04:54	05:35		06:09 (WEA 11)	06:28	07:20	07:17	08:09
	16:10	17:03	17:57	19:54	20:47	21:34	6	06:13 (WEA 11)	21:44	21:06	20	06:29 (WEA 11)	20:00	18:47	16:39	16:00
5	08:28	07:53	06:55	06:41	06:35	06:06 (WEA 11)	04:52	04:55		05:37		06:09 (WEA 11)	06:30	07:22	07:19	08:10
	16:12	17:05	17:59	19:55	20:49	6 06:12 (WEA 11)	21:35	21:43		21:04		06:27 (WEA 11)	20:00	18:44	16:37	15:59
6	08:28	07:52	06:53	06:39	06:33	06:02 (WEA 11)	04:51	04:55		05:38		06:11 (WEA 11)	06:31	07:23	07:21	08:12
	16:13	17:07	18:01	19:57	20:51	13 06:15 (WEA 11)	21:36	21:43		21:02	15	06:26 (WEA 11)	20:01	18:42	16:35	15:59
7	08:28	07:50	06:50	06:36	06:30	06:00 (WEA 11)	04:50	04:56		05:40		06:12 (WEA 11)	06:33	07:25	07:23	08:15
	16:14	17:09	18:03	20:02	20:52	16 06:16 (WEA 11)	21:37	21:42		21:00	12	06:24 (WEA 11)	20:03	18:40	16:34	15:58
8	08:27	07:48	06:48	06:34	06:30	05:59 (WEA 11)	04:50	04:57		05:42		06:17 (WEA 11)	06:35	07:27	07:24	08:14
	16:16	17:11	18:04	20:01	20:54	19 06:18 (WEA 11)	21:38	21:41	2	06:17 (WEA 11)	20:58	2 06:19 (WEA 11)	20:00	18:37	16:32	15:58
9	08:27	07:46	06:46	06:32	06:28	05:58 (WEA 11)	04:49	04:58		06:13 (WEA 11)	06:33	06:36	07:29	07:26	08:16	
	16:17	17:13	18:06	20:03	20:56	21 06:19 (WEA 11)	21:39	21:41	7	06:20 (WEA 11)	20:56	06:47	18:35	16:30	15:58	
10	08:26	07:43	06:43	06:29	06:26	05:57 (WEA 11)	04:49	04:59		06:11 (WEA 11)	06:35	06:38	07:30	07:28	08:17	
	16:18	17:15	18:08	20:04	20:58	22 06:19 (WEA 11)	21:40	21:40	11	06:22 (WEA 11)	20:54	06:45	18:33	16:28	15:57	
11	08:25	07:42	06:41	06:27	06:24	05:57 (WEA 11)	04:48	05:01		06:10 (WEA 11)	06:34	06:40	07:32	07:30	08:18	
	16:20	17:17	18:10	20:06	20:59	24 06:21 (WEA 11)	21:40	21:39	13	06:23 (WEA 11)	20:52	06:42	18:30	16:27	15:57	
12	08:25	07:40	06:39	06:25	06:22	05:56 (WEA 11)	04:48	05:02		06:10 (WEA 11)	06:34	06:42	07:34	07:32	08:19	
	16:21	17:18	18:12	20:08	21:01	25 06:21 (WEA 11)	21:41	21:38	14	06:24 (WEA 11)	20:50	06:43	18:28	16:25	15:57	
13	08:24	07:38	06:36	06:22	06:21	05:55 (WEA 11)	04:48	05:03		06:10 (WEA 11)	06:35	06:43	07:36	07:34	08:20	
	16:23	17:20	18:14	20:10	21:03	26 06:21 (WEA 11)	21:42	21:37	16	06:26 (WEA 11)	20:48	06:44	18:26	16:23	15:57	
14	08:23	07:36	06:34	06:20	06:19	05:55 (WEA 11)	04:48	05:04		06:09 (WEA 11)	06:35	06:45	07:38	07:36	08:21	
	16:25	17:22	18:16	20:12	21:04	26 06:21 (WEA 11)	21:42	21:36	18	06:27 (WEA 11)	20:46	06:45	18:23	16:22	15:57	
15	08:22	07:34	06:32	06:18	06:17	05:55 (WEA 11)	04:47	05:05		06:08 (WEA 11)	06:36	06:47	07:40	07:37	08:22	
	16:26	17:24	18:17	20:13	21:06	28 06:21 (WEA 11)	21:43	21:35	20	06:28 (WEA 11)	20:44	06:48	18:21	16:20	15:57	
16	08:21	07:32	06:29	06:16	06:15	05:55 (WEA 11)	04:47	05:07		06:08 (WEA 11)	06:36	06:48	07:41	07:39	08:23	
	16:28	17:26	18:19	20:15	21:08	27 06:22 (WEA 11)	21:44	21:34	20	06:28 (WEA 11)	20:42	06:49	18:19	16:19	15:57	
17	08:20	07:30	06:27	06:13	06:14	05:55 (WEA 11)	04:47	05:08		06:07 (WEA 11)	06:37	06:50	07:43	07:41	08:24	
	16:30	17:28	18:21	20:17	21:09	27 06:22 (WEA 11)	21:44	21:33	22	06:29 (WEA 11)	20:40	06:50	18:16	16:17	15:57	
18	08:19	07:28	06:24	06:11	06:13	05:55 (WEA 11)	04:47	05:09		06:06 (WEA 11)	06:38	06:52	07:45	07:43	08:24	
	16:31	17:30	18:23	20:19	21:11	27 06:22 (WEA 11)	21:44	21:32	23	06:29 (WEA 11)	20:38	06:53	18:14	16:16	15:57	
19	08:18	07:26	06:22	06:09	06:11	05:55 (WEA 11)	04:47	05:11		06:07 (WEA 11)	06:40	06:54	07:47	07:45	08:25	
	16:33	17:32	18:25	20:21	21:12	27 06:22 (WEA 11)	21:45	21:30	23	06:30 (WEA 11)	20:35	06:55	18:12	16:15	15:58	
20	08:17	07:24	06:20	06:07	06:10	05:56 (WEA 11)	04:47	05:12		06:06 (WEA 11)	06:42	06:55	07:49	07:46	08:26	
	16:35	17:34	18:26	20:22	21:14	26 06:22 (WEA 11)	21:45	21:29	25	06:31 (WEA 11)	20:33	06:56	18:10	16:13	15:58	
21	08:16	07:22	06:17	06:04	06:08	05:55 (WEA 11)	04:47	05:13		06:06 (WEA 11)	06:44	06:57	07:51	07:49	08:26	
	16:36	17:36	18:28	20:24	21:15	26 06:21 (WEA 11)	21:45	21:28	25	06:31 (WEA 11)	20:31	06:58	18:08	16:12	15:58	
22	08:15	07:20	06:15	06:02	06:07	05:56 (WEA 11)	04:47	05:15		06:06 (WEA 11)	06:46	06:59	07:52	07:50	08:27	
	16:38	17:38	18:30	20:26	21:17	25 06:21 (WEA 11)	21:46	21:27	26	06:32 (WEA 11)	20:29	07:00	18:05	16:11	15:59	
23	08:13	07:18	06:12	06:00	06:05	05:56 (WEA 11)	04:48	05:16		06:05 (WEA 11)	06:47	07:01	07:54	07:52	08:27	
	16:40	17:40	18:32	20:28	21:18	25 06:21 (WEA 11)	21:46	21:25	27	06:32 (WEA 11)	20:27	07:02	18:03	16:10	15:59	
24	08:12	07:15	06:10	05:58	06:04	05:57 (WEA 11)	04:48	05:18		06:05 (WEA 11)	06:49	07:02	07:56	07:53	08:28	
	16:42	17:42	18:34	20:29	21:20	24 06:21 (WEA 11)	21:46	21:24	27	06:32 (WEA 11)	20:24	07:03	18:01	16:09	16:00	
25	08:11	07:13	06:08	05:56	06:03	05:58 (WEA 11)	04:48	05:19		06:05 (WEA 11)	06:51	07:04	07:58	07:55	08:28	
	16:44	17:44	18:36	20:31	21:21	23 06:21 (WEA 11)	21:46	21:22	27	06:32 (WEA 11)	20:22	07:05	18:00	16:07	16:01	
26	08:09	07:11	06:05	05:53	06:02	05:57 (WEA 11)	04:49	05:21		06:05 (WEA 11)	06:52	07:06	07:50	07:47	08:29	
	16:46	17:46	18:37	20:33	21:23	22 06:19 (WEA 11)	21:46	21:21	27	06:32 (WEA 11)	20:20	07:06	18:00	16:06	16:01	
27	08:08	07:09	06:03	05:51	06:00	05:58 (WEA 11)	04:49	05:22		06:06 (WEA 11)	06:54	07:07	07:52	07:58	08:29	
	16:47	17:47	18:39	20:35	21:24	21 06:19 (WEA 11)	21:46	21:19	27	06:33 (WEA 11)	20:18	07:08	18:00	16:05	16:02	
28	08:06	07:06	06:00	05:49	06:00	05:58 (WEA 11)	04:50	05:24		06:05 (WEA 11)	06:56	07:09	07:54	08:00	08:29	
	16:49	17:49	18:41	20:37	21:25	21 06:19 (WEA 11)	21:46	21:18	27	06:32 (WEA 11)	20:15	07:09	18:01	16:04	16:03	
29	08:05		06:58	05:47	06:00	06:00 (WEA 11)	04:51	05:25		06:06 (WEA 11)	06:58	07:11	07:05	08:02	08:29	
	16:51		19:43	20:38	21:27	19 06:19 (WEA 11)	21:45	21:16	26	06:32 (WEA 11)	20:13	07:12	18:00	16:04	16:04	
30	08:03		06:56	05:45	06:01	06:01 (WEA 11)	04:51	05:27		06:06 (WEA 11)	06:59	07:13	07:07	08:03	08:29	
	16:53		19:45	20:40	21:28	17 06:18 (WEA 11)	21:45	21:14	26	06:32 (WEA 11)	20:11	07:14	18:00	16:03	16:05	
31	08:02		06:53		06:02	06:02 (WEA 11)		05:28		06:07 (WEA 11)	06:21		07:09		08:29	
	16:55		19:46		21:29	15 06:17 (WEA 11)		21:13		25 06:32 (WEA 11)	20:08		16:47		16:06	
Sonnenscheinstunden	253	275	367	419	491	506		509		458		382	330	262	237	
astr.max.mögl.Beschattung					596	40		504	204	138						

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 058 - Krinitz, Ringstraße 7

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29 16:07	08:00 16:57	07:04 17:51	06:51 19:48	05:43 20:42	06:11 (WEA 11) 21:30	04:55 21:45	04:51 21:11	05:30 21:11	06:14 (WEA 11) 20:06	07:14 18:54	07:11 16:45
2	08:29 16:08	07:59 16:59	07:02 17:53	06:48 19:50	05:41 20:44	06:09 (WEA 11) 21:32	04:52 21:45	04:52 21:09	05:32 21:09	06:14 (WEA 11) 20:04	07:16 18:51	07:13 16:43
3	08:29 16:09	07:57 17:01	07:00 17:55	06:46 19:52	05:39 20:45	06:08 (WEA 11) 21:33	04:53 21:44	04:53 21:07	05:33 21:07	06:14 (WEA 11) 20:01	07:18 18:49	07:15 16:41
4	08:29 16:10	07:55 17:03	06:57 17:57	06:44 19:54	05:37 20:47	06:07 (WEA 11) 21:34	04:53 21:44	04:54 21:06	05:35 21:06	06:14 (WEA 11) 20:01	07:20 18:47	07:17 16:40
5	08:28 16:12	07:53 17:05	06:55 17:59	06:41 19:55	05:35 20:49	06:06 (WEA 11) 21:35	04:55 21:43	04:55 21:04	05:37 21:04	06:14 (WEA 11) 20:01	07:22 18:44	07:19 16:37
6	08:28 16:13	07:52 17:07	06:53 18:01	06:39 19:57	05:33 20:51	06:05 (WEA 11) 21:36	04:51 21:43	04:55 21:02	05:38 21:02	06:15 (WEA 11) 20:01	07:23 18:42	07:21 16:35
7	08:28 16:14	07:50 17:09	06:50 18:03	06:36 19:59	05:31 20:52	06:04 (WEA 11) 21:37	04:50 21:42	04:56 21:00	05:40 21:00	06:15 (WEA 11) 20:01	07:25 18:40	07:23 16:34
8	08:27 16:16	07:48 17:11	06:48 18:04	06:34 20:01	05:30 20:54	06:05 (WEA 11) 21:38	04:50 21:41	04:57 21:01	05:42 21:01	06:16 (WEA 11) 20:01	07:27 18:37	07:24 16:32
9	08:27 16:17	07:46 17:13	06:46 18:06	06:32 20:03	05:28 20:56	06:04 (WEA 11) 21:39	04:48 21:41	04:58 21:01	05:43 21:01	06:16 (WEA 11) 20:01	07:29 18:35	07:26 16:30
10	08:26 16:18	07:44 17:15	06:43 18:08	06:29 20:04	05:26 20:58	06:03 (WEA 11) 21:40	04:49 21:40	04:59 21:01	05:45 21:01	06:17 (WEA 11) 20:01	07:30 18:33	07:28 16:28
11	08:25 16:20	07:42 17:17	06:41 18:10	06:27 20:06	05:24 20:59	06:04 (WEA 11) 21:41	04:48 21:39	05:01 21:01	05:47 21:01	06:19 (WEA 11) 20:01	07:32 18:30	07:30 16:27
12	08:25 16:21	07:42 17:17	06:41 18:10	06:27 20:06	05:24 20:59	06:04 (WEA 11) 21:41	04:48 21:39	05:01 21:01	05:47 21:01	06:19 (WEA 11) 20:01	07:32 18:30	07:30 16:27
13	08:24 16:23	07:38 17:20	06:36 18:14	06:22 20:10	05:21 21:03	06:03 (WEA 11) 21:42	04:48 21:37	05:03 21:01	05:50 21:01	06:26 (WEA 11) 20:01	07:36 18:26	07:34 16:23
14	08:23 16:23	07:36 17:20	06:34 18:14	06:20 20:10	05:19 21:03	06:04 (WEA 11) 21:42	04:48 21:37	05:04 21:01	05:52 21:01	06:27 (WEA 11) 20:01	07:38 18:26	07:36 16:23
15	08:22 16:26	07:34 17:24	06:32 18:17	06:18 20:13	05:17 21:06	06:04 (WEA 11) 21:43	04:47 21:35	05:05 21:01	05:54 21:01	06:28 (WEA 11) 20:01	07:40 18:21	07:37 16:20
16	08:21 16:28	07:32 17:26	06:29 18:19	06:16 20:15	05:16 21:08	06:05 (WEA 11) 21:44	04:47 21:34	05:07 21:01	05:55 21:01	06:29 (WEA 11) 20:01	07:41 18:19	07:39 16:19
17	08:20 16:30	07:30 17:28	06:27 18:21	06:13 20:17	05:14 21:09	06:06 (WEA 11) 21:44	04:47 21:33	05:08 21:01	05:57 21:01	06:30 (WEA 11) 20:01	07:43 18:16	07:41 16:17
18	08:19 16:31	07:28 17:30	06:24 18:23	06:11 20:19	05:13 21:11	06:05 (WEA 11) 21:44	04:47 21:32	05:09 21:01	05:59 21:01	06:31 (WEA 11) 20:01	07:45 18:14	07:43 16:16
19	08:18 16:33	07:26 17:32	06:22 18:25	06:09 20:21	05:11 21:12	06:06 (WEA 11) 21:45	04:47 21:30	05:11 21:01	06:00 21:01	06:32 (WEA 11) 20:01	07:47 18:12	07:45 16:15
20	08:17 16:36	07:24 17:34	06:20 18:26	06:07 20:22	05:10 21:14	06:07 (WEA 11) 21:45	04:47 21:29	05:12 21:01	06:02 21:01	06:33 (WEA 11) 20:01	07:49 18:10	07:46 16:13
21	08:16 16:36	07:22 17:36	06:17 18:28	06:04 20:24	05:08 21:15	06:08 (WEA 11) 21:45	04:47 21:28	05:13 21:01	06:04 21:01	06:34 (WEA 11) 20:01	07:51 18:08	07:48 16:12
22	08:15 16:38	07:20 17:38	06:15 18:30	06:02 20:26	05:07 21:17	06:09 (WEA 11) 21:46	04:47 21:27	05:15 21:01	06:06 21:01	06:35 (WEA 11) 20:01	07:52 18:05	07:50 16:11
23	08:13 16:40	07:18 17:40	06:12 18:32	06:00 20:28	05:05 21:18	06:10 (WEA 11) 21:46	04:48 21:25	05:16 21:01	06:07 21:01	06:36 (WEA 11) 20:01	07:54 18:03	07:52 16:10
24	08:12 16:42	07:15 17:42	06:10 18:34	05:58 20:29	05:04 21:20	06:12 (WEA 11) 21:46	04:48 21:24	05:18 21:01	06:09 21:01	06:37 (WEA 11) 20:01	07:56 18:01	07:53 16:09
25	08:11 16:44	07:13 17:44	06:08 18:36	05:56 20:31	05:03 21:21	06:14 (WEA 11) 21:46	04:48 21:22	05:19 21:01	06:11 21:01	06:38 (WEA 11) 20:01	07:58 17:59	07:55 16:08
26	08:09 16:46	07:11 17:46	06:05 18:37	05:53 20:33	05:02 21:23	06:21 (WEA 11) 21:46	04:49 21:21	05:21 21:01	06:12 21:01	06:39 (WEA 11) 20:01	07:59 17:57	07:57 16:06
27	08:08 16:47	07:09 17:47	06:03 18:39	05:51 20:35	05:00 21:24	06:22 (WEA 11) 21:46	04:49 21:21	05:22 21:01	06:14 21:01	06:40 (WEA 11) 20:01	08:00 17:55	07:58 16:05
28	08:06 16:49	07:06 17:49	06:00 18:41	05:49 20:37	04:59 21:25	06:23 (WEA 11) 21:46	04:50 21:18	05:24 21:01	06:16 21:01	06:41 (WEA 11) 20:01	08:01 17:53	08:00 16:04
29	08:05 16:51	07:05 17:53	05:58 18:43	05:47 20:38	04:58 21:27	06:24 (WEA 11) 21:46	04:50 21:16	05:25 21:01	06:18 21:01	06:42 (WEA 11) 20:01	08:02 17:51	08:02 16:04
30	08:03 16:53	07:03 17:55	05:56 18:45	05:45 20:40	04:57 21:28	06:25 (WEA 11) 21:46	04:51 21:14	05:27 21:01	06:19 21:01	06:43 (WEA 11) 20:01	08:03 17:49	08:03 16:03
31	08:02 16:55	07:02 17:56	05:53 18:46	05:44 20:41	04:56 21:29	06:26 (WEA 11) 21:46	04:50 21:13	05:28 21:01	06:21 21:01	06:44 (WEA 11) 20:01	08:04 17:47	08:04 16:06
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	330	262	237
astr.max.mögl.Beschattung				6	535		270	274				

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 059 - Krinitz, Ringstraße 8

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	[Januar	[Februar	[März	[April	[Mai		[Juni	[Juli		[August		[September	[Oktober	[November	[Dezember	
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	16:07	16:57	17:51	19:48	20:42	18	06:29 (WEA 11)	21:30	21:45	21:11	27	06:17 (WEA 11)	20:06	18:54	16:45	16:02
2	08:29	07:41	07:02	06:48	05:41		06:10 (WEA 11)	04:54	04:52	05:32	06:17 (WEA 11)	06:24	07:16	07:13	08:06	
	16:08	16:59	17:53	19:50	20:44	20	06:30 (WEA 11)	21:32	21:45	21:09	26	06:43 (WEA 11)	20:04	18:51	16:43	16:01
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	16:55		19:46		21:29		21:13	26	06:43 (WEA 11)	06:20		07:13	07:09		16:06	
Sonnenscheinstunden	253	275	367	419	491		506	509		458		382	330	262	237	
astr.max.mögl.Beschattung				23	497		497	214		309						

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 060 - Krinitz, Ringstraße 9

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	[Januar	[Februar	[März	[April		[Mai		[Juni	[Juli		[August		[September	[Oktober	[November	[Dezember	
1	08:29 16:07	08:00 16:57	07:04 17:51	06:51 19:48		05:43 20:42	24	06:13 (WEA 11) 06:37 (WEA 11)	04:55 21:30	04:51 21:45	05:30 21:11	24	06:23 (WEA 11) 06:47 (WEA 11)	06:23 20:06	07:15 18:54	07:11 16:45	08:05 16:02
2	08:09 16:08	07:59 16:59	07:02 17:53	06:48 19:50		05:41 20:44	25	06:12 (WEA 11) 06:37 (WEA 11)	04:54 21:32	04:52 21:45	05:32 21:09	24	06:23 (WEA 11) 06:47 (WEA 11)	06:24 20:04	07:16 18:51	07:13 16:43	08:06 16:01
3	08:09 16:09	07:57 17:01	07:00 17:55	06:46 19:52		05:39 20:45	25	06:13 (WEA 11) 06:38 (WEA 11)	04:53 21:33	04:53 21:44	05:33 21:07	25	06:22 (WEA 11) 06:47 (WEA 11)	06:26 20:01	07:18 18:49	07:15 16:41	08:08 16:00
4	08:29 16:10	07:55 17:03	06:57 17:57	06:44 19:54		05:37 20:47	26	06:12 (WEA 11) 06:38 (WEA 11)	04:53 21:34	04:54 21:44	05:35 21:06	26	06:22 (WEA 11) 06:48 (WEA 11)	06:28 19:59	07:20 18:47	07:17 16:39	08:09 16:00
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14	08:23 16:23	07:36 17:22	06:34 18:16	06:20 20:12		05:19 21:04	21	06:14 (WEA 11) 06:35 (WEA 11)	05:04 21:42	05:04 21:36	05:52 20:46	19	06:23 (WEA 11) 06:44 (WEA 11)	06:45 19:35	07:38 18:23	07:36 16:22	08:21 15:57
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17	08:20 16:30	07:30 17:28	06:27 18:21	06:13 20:17		05:14 21:09	13	06:18 (WEA 11) 06:31 (WEA 11)	05:08 21:44	05:08 21:33	05:57 20:40	3	06:31 (WEA 11) 06:34 (WEA 11)	06:50 19:28	07:43 18:16	07:41 16:17	08:24 15:57
18	08:19 16:31	07:28 17:30	06:24 18:23	06:11 20:19		05:13 21:11	10	06:19 (WEA 11) 06:29 (WEA 11)	05:09 21:44	05:09 21:32	05:59 20:38			06:52 19:25	07:45 18:14	07:43 16:16	08:24 15:57
19	08:18 16:33	07:26 17:32	06:22 18:25	06:09 20:21		05:11 21:12	3	06:23 (WEA 11) 06:26 (WEA 11)	05:11 21:45	05:11 21:30	06:00 20:35			06:54 19:23	07:47 18:12	07:45 16:15	08:25 15:58
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26	08:09 16:46	07:11 17:46	06:05 18:37	05:53 20:33	06:23 (WEA 11)	05:02 21:23			05:21 21:46	05:21 21:12	12 06:38 (WEA 11)			07:06 19:06	07:57 18:05	07:57 16:06	08:29 16:01
27	08:08 16:47	07:09 17:47	06:03 18:39	05:51 20:35	06:19 (WEA 11)	05:00 21:24			05:22 21:46	05:22 21:19	16 06:27 (WEA 11)			07:08 19:03	07:58 18:05	07:58 16:05	08:29 16:02
28	08:06 16:49	07:06 17:49	06:00 18:41	05:49 20:37	06:17 (WEA 11)	05:00 21:25			05:23 21:45	05:23 21:18	17 06:26 (WEA 11)			07:09 19:01	07:59 18:05	08:00 16:04	08:29 16:03
29	08:05 16:51	07:05 17:49	05:58 18:43	05:47 20:38	06:16 (WEA 11)	05:00 21:26			05:24 21:45	05:24 21:16	18 06:25 (WEA 11)			07:11 19:03	08:00 18:05	08:02 16:04	08:29 16:04
30	08:03 16:53	07:03 17:51	05:56 18:45	05:45 20:40	06:14 (WEA 11)	05:00 21:27			05:25 21:45	05:25 21:17	20 06:45 (WEA 11)			07:13 19:07	08:01 18:05	08:03 16:04	08:29 16:05
31	08:02 16:55	07:02 17:53	05:53 18:46	05:42 20:41	06:36 (WEA 11)	05:00 21:28			05:26 21:45	05:26 21:18	21 06:46 (WEA 11)			07:15 19:09	08:03 18:06	08:04 16:06	08:29 16:06
Sonnenscheinstunden	253	275	367	419		491		506	509	458			382	330	262	237	
astr.max.mögl.Beschattung				77		409			115		376						

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 061 - Krinitz, Ringstraße 10

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April		Mai		Juni	Juli		August		September	Oktober	November	Dezember	
1	08:29	08:00	07:04	06:51		05:43		06:16 (WEA 11)	04:55	04:51	05:30		06:28 (WEA 11)	06:23	07:15	08:05	
	16:07	16:57	17:51	19:48		20:42	25	06:41 (WEA 11)	21:30	21:45	21:11	20	06:48 (WEA 11)	20:06	18:54	16:45	
2	08:29	07:59	07:02	06:48		05:41		06:15 (WEA 11)	04:54	04:52	05:32		06:28 (WEA 11)	06:24	07:16	08:06	
	16:08	16:59	17:53	19:50		20:44	27	06:42 (WEA 11)	21:32	21:45	21:09	22	06:50 (WEA 11)	20:04	18:51	16:43	
3	08:29	07:57	07:00	06:46		05:39		06:16 (WEA 11)	04:53	04:53	05:33		06:27 (WEA 11)	06:26	07:18	08:08	
	16:09	17:01	17:55	19:52		20:45	26	06:42 (WEA 11)	21:33	21:44	21:07	23	06:50 (WEA 11)	20:01	18:49	16:41	
4	08:29	07:55	06:57	06:44		05:37		06:16 (WEA 11)	04:53	04:54	05:35		06:26 (WEA 11)	06:28	07:20	08:09	
	16:10	17:03	17:57	19:54		20:47	26	06:42 (WEA 11)	21:34	21:44	21:06	25	06:51 (WEA 11)	19:59	18:47	16:39	
5	08:28	07:53	06:55	06:41		05:35		06:15 (WEA 11)	04:52	04:55	05:37		06:25 (WEA 11)	06:30	07:22	08:10	
	16:12	17:05	17:59	19:55		20:49	27	06:42 (WEA 11)	21:35	21:43	21:04	26	06:51 (WEA 11)	19:57	18:44	16:37	
6	08:28	07:52	06:53	06:39		05:33		06:15 (WEA 11)	04:51	04:55	05:38		06:25 (WEA 11)	06:31	07:23	08:12	
	16:13	17:07	18:01	19:57		20:51	26	06:41 (WEA 11)	21:36	21:43	21:02	26	06:51 (WEA 11)	19:54	18:42	16:35	
7	08:28	07:50	06:50	06:36		05:31		06:15 (WEA 11)	04:50	04:56	05:40		06:25 (WEA 11)	06:33	07:25	08:13	
	16:14	17:09	18:03	19:59		20:52	26	06:41 (WEA 11)	21:37	21:42	21:00	26	06:51 (WEA 11)	19:52	18:40	16:34	
8	08:27	07:48	06:48	06:34		05:30		06:16 (WEA 11)	04:50	04:57	05:42		06:25 (WEA 11)	06:35	07:27	08:14	
	16:16	17:11	18:04	20:01		20:54	25	06:41 (WEA 11)	21:38	21:41	20:58	26	06:51 (WEA 11)	19:49	18:37	16:32	
9	08:27	07:46	06:46	06:32		05:28		06:16 (WEA 11)	04:49	04:58	05:43		06:24 (WEA 11)	06:36	07:29	08:16	
	16:17	17:13	18:06	20:03		20:56	24	06:40 (WEA 11)	21:39	21:41	20:56	27	06:51 (WEA 11)	19:47	18:35	16:30	
10	08:26	07:44	06:43	06:29		05:26		06:16 (WEA 11)	04:49	04:59	05:45		06:24 (WEA 11)	06:38	07:30	08:17	
	16:18	17:15	18:08	20:04		20:58	23	06:39 (WEA 11)	21:40	21:40	20:54	27	06:51 (WEA 11)	19:45	18:33	16:28	
11	08:25	07:42	06:41	06:27		05:24		06:18 (WEA 11)	04:48	05:01	05:47		06:25 (WEA 11)	06:40	07:32	08:18	
	16:20	17:17	18:10	20:06		20:59	21	06:39 (WEA 11)	21:40	21:39	20:52	26	06:51 (WEA 11)	19:42	18:30	16:27	
12	08:25	07:40	06:39	06:25		05:22		06:18 (WEA 11)	04:48	05:02	05:48		06:25 (WEA 11)	06:42	07:34	08:19	
	16:21	17:18	18:12	20:08		21:01	20	06:38 (WEA 11)	21:41	21:38	20:50	25	06:50 (WEA 11)	19:40	18:28	16:25	
13	08:24	07:38	06:36	06:22		05:21		06:19 (WEA 11)	04:48	05:03	05:50		06:25 (WEA 11)	06:43	07:36	08:20	
	16:23	17:20	18:14	20:10		21:03	17	06:36 (WEA 11)	21:42	21:37	20:48	25	06:50 (WEA 11)	19:37	18:26	16:23	
14	08:23	07:36	06:34	06:20		05:19		06:21 (WEA 11)	04:48	05:04	05:52		06:25 (WEA 11)	06:45	07:38	08:21	
	16:25	17:22	18:16	20:12		21:04	14	06:35 (WEA 11)	21:42	21:36	20:46	23	06:48 (WEA 11)	19:35	18:23	16:22	
15	08:22	07:34	06:32	06:18		05:17		06:22 (WEA 11)	04:47	05:05	05:54		06:26 (WEA 11)	06:47	07:40	08:22	
	16:26	17:24	18:17	20:13		21:06	11	06:33 (WEA 11)	21:43	21:35	20:44	22	06:48 (WEA 11)	19:33	18:21	16:20	
16	08:21	07:32	06:29	06:16		05:16		06:26 (WEA 11)	04:47	05:07	05:55		06:27 (WEA 11)	06:49	07:41	08:23	
	16:28	17:26	18:19	20:15		21:08	4	06:30 (WEA 11)	21:44	21:34	20:42	20	06:47 (WEA 11)	19:30	18:19	16:19	
17	08:20	07:30	06:27	06:13		05:14			04:47	05:08	05:57		06:28 (WEA 11)	06:50	07:43	08:24	
	16:30	17:28	18:21	20:17		21:09		21:44	21:33		20:40	16	06:44 (WEA 11)	19:28	18:16	16:17	
18	08:19	07:28	06:24	06:11		05:13		04:47	05:09		05:59		06:30 (WEA 11)	06:52	07:45	08:24	
	16:31	17:30	18:23	20:19		21:11		21:44	21:32		20:38	13	06:43 (WEA 11)	19:25	18:14	16:16	
19	08:18	07:26	06:22	06:09		05:11		04:47	05:11		06:00		06:34 (WEA 11)	06:54	07:47	08:25	
	16:33	17:32	18:25	20:21		21:12		21:45	21:30		20:35	4	06:38 (WEA 11)	19:23	18:12	16:15	
20	08:17	07:24	06:20	06:07		05:10		04:47	05:12		06:02			06:55	07:49	08:26	
	16:35	17:34	18:26	20:22		21:14		21:45	21:29		20:33			19:20	18:10	16:13	
21	08:16	07:22	06:17	06:04		05:08		04:47	05:13		06:04			06:57	07:51	08:26	
	16:36	17:36	18:28	20:24		21:15		21:45	21:28		20:31			19:18	18:08	16:12	
22	08:15	07:20	06:15	06:02		05:07		04:47	05:15		06:06			06:59	07:52	08:27	
	16:38	17:38	18:30	20:26		21:17		21:46	21:27		20:29			19:16	18:05	16:11	
23	08:13	07:18	06:12	06:00		05:05		04:48	05:16		06:07			07:01	07:54	08:27	
	16:40	17:40	18:32	20:28		21:18		21:46	21:25		20:27			19:13	18:03	16:10	
24	08:12	07:15	06:10	05:58	06:27 (WEA 11)	05:04		04:48	05:18		06:09			07:02	07:56	08:28	
	16:42	17:42	18:34	20:29	6	06:33 (WEA 11)	21:20	21:46	21:24		20:24			19:11	18:01	16:09	
25	08:11	07:13	06:08	05:56	06:23 (WEA 11)	05:03		04:48	05:19		06:11			07:04	06:58	08:28	
	16:44	17:44	18:36	20:31	13	06:36 (WEA 11)	21:21	21:46	21:22		20:22			19:08	16:59	16:07	
26	08:09	07:11	06:05	05:53	06:21 (WEA 11)	05:02		04:49	05:21		06:12			07:06	07:00	08:27	
	16:46	17:46	18:37	20:33	17	06:38 (WEA 11)	21:23	21:46	21:21		20:20			19:06	16:57	16:06	
27	08:08	07:09	06:03	05:51	06:20 (WEA 11)	05:00		04:49	05:22		06:14			07:08	07:02	08:29	
	16:47	17:47	18:39	20:35	19	06:39 (WEA 11)	21:24	21:46	21:19		20:18			19:03	16:55	16:05	
28	08:06	07:06	06:00	05:49	06:18 (WEA 11)	04:59		04:50	05:24		06:16			07:09	07:04	08:29	
	16:49	17:49	18:41	20:37	22	06:40 (WEA 11)	21:25	21:46	21:18	8	06:42 (WEA 11)			19:01	16:53	16:04	
29	08:05		06:58	05:47	06:17 (WEA 11)	04:58		04:50	05:25		06:18			07:11	07:05	08:29	
	16:51		19:43	20:38	24	06:41 (WEA 11)	21:27	21:45	21:16	12	06:45 (WEA 11)			18:59	16:51	16:04	
30	08:03		06:56	05:45	06:17 (WEA 11)	04:57		04:51	05:27		06:19			07:13	07:07	08:29	
	16:53		19:45	20:40	24	06:41 (WEA 11)	21:28	21:45	21:14	15	06:46 (WEA 11)			18:56	16:49	16:03	
31	08:02		06:53			04:56			05:28		06:21				07:09		08:29
	16:55		19:46			21:29			21:13	18	06:48 (WEA 11)				16:47		16:06
Sonnenscheinstunden	253	275	367	419		491		506	509		458		382	330	262	237	
astr.max.mögl.Beschattung				125		342				53		422					

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
	Minuten mit Schatten	

SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 062 - Krinitz, Ringstraße 11

Annahmen für Schattenwurfberechnung
Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:
Die Sonne scheint täglich von Sonnenauf- bis -untergang
Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung
Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April		Mai		Juni	Juli		August		September	Oktober	November	Dezember	
1	08:29 16:07	08:00 16:57	07:04 17:51	06:51 19:48		05:43 20:42	27	06:19 (WEA 11) 06:46 (WEA 11)	04:55 21:30	04:51 21:45	05:30 21:11	15	06:35 (WEA 11) 06:50 (WEA 11)	06:23 20:06	07:15 18:54	07:11 16:45	08:05 16:02
2	08:29 16:08	07:59 16:59	07:02 17:53	06:48 19:50		05:41 20:44	27	06:19 (WEA 11) 06:46 (WEA 11)	04:54 21:32	04:52 21:45	05:32 21:09	18	06:34 (WEA 11) 06:52 (WEA 11)	06:24 20:04	07:16 18:51	07:13 16:43	08:06 16:01
3	08:29 16:09	07:57 17:01	07:00 17:55	06:46 19:52		05:39 20:45	26	06:20 (WEA 11) 06:46 (WEA 11)	04:53 21:33	04:53 21:44	05:33 21:07	20	06:32 (WEA 11) 06:52 (WEA 11)	06:26 20:01	07:18 18:49	07:15 16:41	08:08 16:00
4	08:29 16:10	07:55 17:03	06:57 17:57	06:44 19:54		05:37 20:47	26	06:20 (WEA 11) 06:46 (WEA 11)	04:53 21:34	04:54 21:44	05:35 21:06	21	06:32 (WEA 11) 06:53 (WEA 11)	06:28 19:59	07:20 18:47	07:17 16:39	08:09 16:00
5	08:28 16:12	07:53 17:05	06:55 17:59	06:41 19:55		05:35 20:49	25	06:20 (WEA 11) 06:45 (WEA 11)	04:52 21:35	04:55 21:43	05:37 21:04	24	06:30 (WEA 11) 06:54 (WEA 11)	06:30 19:57	07:22 18:44	07:19 16:37	08:10 15:59
6	08:28 16:13	07:52 17:07	06:53 18:01	06:39 19:57		05:33 20:51	25	06:20 (WEA 11) 06:45 (WEA 11)	04:51 21:36	04:55 21:43	05:38 21:02	24	06:30 (WEA 11) 06:54 (WEA 11)	06:31 19:54	07:23 18:42	07:21 16:35	08:12 15:59
7	08:28 16:14	07:50 17:09	06:50 18:03	06:36 19:59		05:31 20:52	24	06:20 (WEA 11) 06:44 (WEA 11)	04:50 21:37	04:56 21:42	05:40 21:00	25	06:29 (WEA 11) 06:54 (WEA 11)	06:33 19:52	07:25 18:40	07:23 16:34	08:13 15:58
8	08:27 16:16	07:48 17:11	06:48 18:04	06:34 20:01		05:30 20:54	23	06:21 (WEA 11) 06:44 (WEA 11)	04:50 21:38	04:57 21:41	05:42 20:58	26	06:29 (WEA 11) 06:55 (WEA 11)	06:35 19:49	07:27 18:37	07:24 16:32	08:14 15:58
9	08:27 16:17	07:46 17:13	06:46 18:06	06:32 20:03		05:28 20:56	21	06:22 (WEA 11) 06:43 (WEA 11)	04:49 21:39	04:58 21:41	05:43 20:56	27	06:28 (WEA 11) 06:55 (WEA 11)	06:36 19:47	07:29 18:35	07:26 16:30	08:16 15:58
10	08:26 16:18	07:44 17:15	06:43 18:08	06:29 20:04		05:26 20:58	19	06:22 (WEA 11) 06:41 (WEA 11)	04:49 21:40	04:59 21:40	05:45 20:54	27	06:28 (WEA 11) 06:55 (WEA 11)	06:37 19:45	07:30 18:33	07:28 16:28	08:17 15:57
11	08:25 16:20	07:42 17:17	06:41 18:10	06:27 20:06		05:24 20:59	17	06:24 (WEA 11) 06:41 (WEA 11)	04:48 21:40	05:01 21:39	05:47 20:52	27	06:28 (WEA 11) 06:55 (WEA 11)	06:40 19:42	07:32 18:30	07:30 16:27	08:18 15:57
12	08:25 16:21	07:40 17:18	06:39 18:12	06:25 20:08		05:22 21:01	14	06:25 (WEA 11) 06:39 (WEA 11)	04:48 21:41	05:02 21:38	05:48 20:50	26	06:28 (WEA 11) 06:54 (WEA 11)	06:42 19:40	07:34 18:28	07:32 16:25	08:19 15:57
13	08:24 16:23	07:38 17:20	06:36 18:14	06:22 20:10		05:21 21:03	9	06:27 (WEA 11) 06:36 (WEA 11)	04:48 21:42	05:03 21:37	05:50 20:48	27	06:28 (WEA 11) 06:55 (WEA 11)	06:43 19:37	07:36 18:26	07:34 16:23	08:20 15:57
14	08:23 16:25	07:36 17:22	06:34 18:16	06:20 20:12		05:19 21:04			04:48 21:42	05:04 21:36	05:52 20:46	25	06:28 (WEA 11) 06:53 (WEA 11)	06:45 19:35	07:38 18:23	07:36 16:22	08:21 15:57
15	08:22 16:26	07:34 17:24	06:32 18:17	06:18 20:13		05:17 21:06			04:47 21:43	05:05 21:35	05:54 20:44	24	06:29 (WEA 11) 06:53 (WEA 11)	06:47 19:33	07:40 18:21	07:37 16:20	08:22 15:57
16	08:21 16:28	07:32 17:26	06:29 18:19	06:16 20:15		05:16 21:08			04:47 21:44	05:07 21:34	05:55 20:42	24	06:29 (WEA 11) 06:53 (WEA 11)	06:48 19:30	07:41 18:19	07:39 16:19	08:23 15:57
17	08:20 16:30	07:30 17:28	06:27 18:21	06:13 20:17		05:14 21:09			04:47 21:44	05:08 21:33	05:57 20:40	22	06:29 (WEA 11) 06:51 (WEA 11)	06:50 19:28	07:43 18:16	07:41 16:17	08:24 15:57
18	08:19 16:31	07:28 17:30	06:24 18:23	06:11 20:19		05:13 21:11			04:47 21:44	05:09 21:32	05:59 20:38	19	06:31 (WEA 11) 06:50 (WEA 11)	06:52 19:25	07:45 18:14	07:43 16:16	08:24 15:57
19	08:18 16:33	07:26 17:32	06:22 18:25	06:09 20:21		05:11 21:12			04:47 21:45	05:11 21:30	06:00 20:35	17	06:31 (WEA 11) 06:48 (WEA 11)	06:54 19:23	07:47 18:12	07:45 16:15	08:25 15:58
20	08:17 16:36	07:24 17:34	06:20 18:26	06:07 20:22		05:10 21:14			04:47 21:45	05:12 21:29	06:02 20:33	12	06:34 (WEA 11) 06:46 (WEA 11)	06:55 19:20	07:49 18:10	07:46 16:13	08:26 15:58
21	08:16 16:36	07:22 17:36	06:17 18:28	06:04 20:24		05:08 21:15			04:47 21:45	05:13 21:28	06:04 20:31	2	06:39 (WEA 11) 06:41 (WEA 11)	06:57 19:18	07:51 18:08	07:48 16:12	08:26 15:58
22	08:15 16:38	07:20 17:38	06:15 18:30	06:02 20:26	5	06:32 (WEA 11) 06:37 (WEA 11)			04:47 21:46	05:15 21:27	06:06 20:29			06:59 19:16	07:52 18:05	07:50 16:11	08:27 15:59
23	08:13 16:40	07:18 17:40	06:12 18:32	06:00 20:28	12	06:28 (WEA 11) 06:40 (WEA 11)			04:48 21:46	05:16 21:25	06:07 20:27			07:01 19:13	07:54 18:03	07:52 16:10	08:27 15:59
24	08:12 16:42	07:15 17:42	06:10 18:34	05:58 20:29	17	06:25 (WEA 11) 06:42 (WEA 11)			04:48 21:46	05:18 21:24	06:09 20:24			07:02 19:11	07:56 18:01	07:53 16:09	08:28 16:00
25	08:11 16:44	07:13 17:44	06:08 18:36	05:56 20:31	20	06:24 (WEA 11) 06:44 (WEA 11)			04:48 21:46	05:19 21:22	06:11 20:22			07:04 19:08	06:58 18:05	07:55 16:07	08:28 16:01
26	08:09 16:46	07:11 17:46	06:05 18:37	05:53 20:33	22	06:23 (WEA 11) 06:45 (WEA 11)			04:49 21:46	05:21 21:21	06:12 20:20			07:06 19:06	07:00 18:06	07:57 16:06	08:29 16:01
27	08:08 16:47	07:09 17:47	06:03 18:39	05:51 20:35	23	06:22 (WEA 11) 06:45 (WEA 11)			04:49 21:46	05:22 21:19	06:14 20:18			07:08 19:03	07:02 18:05	07:58 16:05	08:29 16:02
28	08:06 16:49	07:06 17:49	06:00 18:41	05:49 20:37	25	06:21 (WEA 11) 06:46 (WEA 11)			04:50 21:46	05:24 21:18	06:16 20:15			07:09 19:01	07:04 18:03	08:00 16:04	08:29 16:03
29	08:05 16:51	07:05 17:49	05:58 18:43	05:47 20:38	26	06:20 (WEA 11) 06:46 (WEA 11)			04:50 21:46	05:25 21:16	06:18 20:13			07:11 18:59	07:05 16:51	08:02 16:04	08:29 16:04
30	08:03 16:53	07:03 17:56	05:56 18:45	05:45 20:40	26	06:20 (WEA 11) 06:46 (WEA 11)			04:51 21:45	05:27 21:14	06:19 20:11			07:13 18:56	07:07 16:49	08:03 16:03	08:29 16:05
31	08:02 16:55	07:02 17:58	05:53 18:46	05:44 20:41		06:19 (WEA 11) 21:29			04:56 21:43	05:28 21:13	06:21 20:08	11	06:37 (WEA 11) 06:48 (WEA 11)	06:21 19:08	07:09 16:47	08:09 16:06	08:29 16:06
Sonnenscheinstunden	253	275	367	419	176	491	283	506	509	16	458	452	382	330	262	237	
astr.max.mögl.Beschattung																	

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Minuten mit Schatten
		Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 063 - Krinitz, Ringstraße 12

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April		Mai		Juni	Juli		August		September	Oktober	November	Dezember
1	08:29	08:00	07:04	06:51		05:43		06:19 (WEA 11)	04:55	04:51	05:30		06:34 (WEA 11)	06:23	07:14	08:05
	16:07	16:57	17:51	19:48		20:42	28	06:47 (WEA 11)	21:30	21:45	21:11	17	06:51 (WEA 11)	20:06	18:54	16:45
2	08:29	07:59	07:02	06:48		05:41		06:19 (WEA 11)	04:54	04:52	05:32		06:34 (WEA 11)	06:24	07:16	08:06
	16:08	16:59	17:53	19:50		20:44	27	06:46 (WEA 11)	21:32	21:45	21:09	19	06:53 (WEA 11)	20:04	18:51	16:43
3	08:29	07:57	07:00	06:46		05:39		06:20 (WEA 11)	04:53	04:53	05:33		06:32 (WEA 11)	06:26	07:18	08:08
	16:09	17:01	17:55	19:52		20:45	27	06:47 (WEA 11)	21:33	21:44	21:07	21	06:53 (WEA 11)	20:01	18:49	16:41
4	08:29	07:55	06:57	06:44		05:37		06:20 (WEA 11)	04:53	04:54	05:35		06:32 (WEA 11)	06:28	07:20	08:09
	16:10	17:03	17:57	19:54		20:47	27	06:47 (WEA 11)	21:34	21:44	21:06	22	06:54 (WEA 11)	19:59	18:47	16:39
5	08:28	07:53	06:55	06:41		05:35		06:20 (WEA 11)	04:52	04:55	05:37		06:30 (WEA 11)	06:30	07:22	08:10
	16:12	17:05	17:59	19:55		20:49	26	06:46 (WEA 11)	21:35	21:43	21:04	24	06:54 (WEA 11)	19:57	18:44	16:37
6	08:28	07:52	06:53	06:39		05:33		06:20 (WEA 11)	04:51	04:55	05:38		06:30 (WEA 11)	06:31	07:23	08:12
	16:13	17:07	18:01	19:57		20:51	25	06:45 (WEA 11)	21:36	21:43	21:02	25	06:55 (WEA 11)	19:54	18:42	16:35
7	08:28	07:50	06:50	06:36		05:31		06:20 (WEA 11)	04:50	04:56	05:40		06:29 (WEA 11)	06:33	07:25	08:13
	16:14	17:09	18:03	19:59		20:52	25	06:45 (WEA 11)	21:37	21:42	21:00	26	06:55 (WEA 11)	19:52	18:40	16:34
8	08:27	07:48	06:48	06:34		05:30		06:21 (WEA 11)	04:50	04:57	05:42		06:29 (WEA 11)	06:35	07:27	08:14
	16:16	17:11	18:04	20:01		20:54	24	06:45 (WEA 11)	21:38	21:41	20:58	27	06:56 (WEA 11)	19:49	18:37	16:32
9	08:27	07:46	06:46	06:32		05:28		06:22 (WEA 11)	04:49	04:58	05:43		06:28 (WEA 11)	06:36	07:29	08:16
	16:17	17:13	18:06	20:03		20:56	22	06:44 (WEA 11)	21:39	21:41	20:56	27	06:55 (WEA 11)	19:47	18:35	16:30
10	08:26	07:44	06:43	06:29		05:26		06:22 (WEA 11)	04:49	04:59	05:45		06:28 (WEA 11)	06:38	07:30	08:17
	16:18	17:15	18:08	20:04		20:58	20	06:42 (WEA 11)	21:40	21:40	20:54	28	06:56 (WEA 11)	19:45	18:33	16:28
11	08:25	07:42	06:41	06:27		05:24		06:24 (WEA 11)	04:48	05:01	05:47		06:29 (WEA 11)	06:40	07:32	08:18
	16:20	17:17	18:10	20:06		20:59	18	06:42 (WEA 11)	21:40	21:39	20:52	27	06:56 (WEA 11)	19:42	18:30	16:27
12	08:25	07:40	06:39	06:25		05:22		06:25 (WEA 11)	04:48	05:02	05:48		06:28 (WEA 11)	06:42	07:34	08:19
	16:21	17:18	18:12	20:08		21:01	15	06:40 (WEA 11)	21:41	21:38	20:50	27	06:55 (WEA 11)	19:40	18:28	16:25
13	08:24	07:38	06:36	06:22		05:21		06:26 (WEA 11)	04:48	05:03	05:50		06:29 (WEA 11)	06:43	07:36	08:20
	16:23	17:20	18:14	20:10		21:03	11	06:37 (WEA 11)	21:42	21:37	20:48	26	06:55 (WEA 11)	19:37	18:26	16:23
14	08:23	07:36	06:34	06:20		05:19		06:30 (WEA 11)	04:48	05:04	05:52		06:28 (WEA 11)	06:45	07:38	08:21
	16:25	17:22	18:16	20:12		21:04	5	06:35 (WEA 11)	21:42	21:36	20:46	26	06:54 (WEA 11)	19:35	18:23	16:22
15	08:22	07:34	06:32	06:18		05:17			04:47	05:05	05:54		06:29 (WEA 11)	06:47	07:40	08:22
	16:26	17:24	18:17	20:13		21:06			21:43	21:35	20:44	25	06:54 (WEA 11)	19:33	18:21	16:20
16	08:21	07:32	06:29	06:16		05:16			04:47	05:07	05:55		06:30 (WEA 11)	06:48	07:41	08:23
	16:28	17:26	18:19	20:15		21:08			21:44	21:34	20:42	23	06:53 (WEA 11)	19:30	18:19	16:19
17	08:20	07:30	06:27	06:13		05:14			04:47	05:08	05:57		06:30 (WEA 11)	06:50	07:43	08:24
	16:30	17:28	18:21	20:17		21:09			21:44	21:33	20:40	22	06:52 (WEA 11)	19:28	18:16	16:17
18	08:19	07:28	06:24	06:11		05:13			04:47	05:09	05:59		06:31 (WEA 11)	06:52	07:45	08:24
	16:31	17:30	18:23	20:19		21:11			21:44	21:32	20:38	20	06:51 (WEA 11)	19:25	18:14	16:16
19	08:18	07:26	06:22	06:09		05:11			04:47	05:11	06:00		06:32 (WEA 11)	06:54	07:47	08:25
	16:33	17:32	18:25	20:21		21:12			21:45	21:30	20:35	16	06:48 (WEA 11)	19:23	18:12	16:15
20	08:17	07:24	06:20	06:07		05:10			04:47	05:12	06:02		06:34 (WEA 11)	06:55	07:49	08:26
	16:35	17:34	18:26	20:22		21:14			21:45	21:29	20:33	12	06:46 (WEA 11)	19:20	18:10	16:13
21	08:16	07:22	06:17	06:04		05:08			04:47	05:13	06:04		06:39 (WEA 11)	06:57	07:51	08:26
	16:36	17:36	18:28	20:24		21:15			21:45	21:28	20:31	2	06:41 (WEA 11)	19:18	18:08	16:12
22	08:15	07:20	06:15	06:02	06:32 (WEA 11)	05:07			04:47	05:15	06:06		06:59	07:52	07:50	08:27
	16:38	17:38	18:30	20:26	06:37 (WEA 11)	21:17			21:46	21:27	20:29		19:16	18:05	16:11	15:59
23	08:13	07:18	06:12	06:00	06:28 (WEA 11)	05:05			04:48	05:16	06:07		07:01	07:54	07:52	08:27
	16:40	17:40	18:32	20:28	06:41 (WEA 11)	21:18			21:46	21:25	20:27		19:13	18:03	16:10	15:59
24	08:12	07:15	06:10	05:58	06:26 (WEA 11)	05:04			04:48	05:18	06:09		07:02	07:56	07:53	08:28
	16:42	17:42	18:34	20:29	06:43 (WEA 11)	21:20			21:46	21:24	20:24		19:11	18:01	16:09	16:00
25	08:11	07:13	06:08	05:56	06:24 (WEA 11)	05:03			04:48	05:19	06:11		07:04	06:58	07:55	08:28
	16:44	17:44	18:36	20:31	06:44 (WEA 11)	21:21			21:46	21:22	20:22		19:08	16:59	16:07	16:01
26	08:09	07:11	06:05	05:53	06:23 (WEA 11)	05:02			04:49	05:21	06:12		07:06	07:00	07:57	08:29
	16:46	17:46	18:37	20:33	06:45 (WEA 11)	21:23			21:46	21:21	20:20		19:06	16:57	16:06	16:01
27	08:08	07:09	06:03	05:51	06:22 (WEA 11)	05:00			04:49	05:22	06:14		07:08	07:02	07:58	08:29
	16:47	17:47	18:39	20:35	06:46 (WEA 11)	21:24			21:46	21:19	20:18		19:03	16:55	16:05	16:02
28	08:06	07:06	06:00	05:49	06:21 (WEA 11)	04:59			04:50	05:24	06:16		07:09	07:04	08:00	08:29
	16:49	17:49	18:41	20:37	06:46 (WEA 11)	21:25			21:46	21:18	20:15		19:01	16:53	16:04	16:03
29	08:05		06:58	05:47	06:20 (WEA 11)	04:58			04:50	05:25	06:18		07:11	07:05	08:02	08:29
	16:51		19:43	20:38	06:47 (WEA 11)	21:27			21:46	21:16	20:13		18:59	16:51	16:04	16:04
30	08:03		06:56	05:45	06:20 (WEA 11)	04:57			04:51	05:27	06:19		07:13	07:07	08:03	08:29
	16:53		19:45	20:40	06:47 (WEA 11)	21:28			21:45	21:14	8	06:47 (WEA 11)	18:56	16:49	16:03	16:05
31	08:02		06:53			04:56			05:28		06:21			07:09		08:29
	16:55		19:46			21:29			21:13		13	06:50 (WEA 11)		16:47		16:06
Sonnenscheinstunden	253	275	367	419		491		506	509		458		382	330	262	237
astr.max.mögl.Beschattung				180		300			21		462					

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt hierfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 064 - Krinitz, Ringstraße 12a

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

		Januar	Februar	März	April	Mai		Juni	Juli	August		September	Oktober	November	Dezember			
1	08:29	08:00	07:04	06:51		05:43		06:24 (WEA 11)	04:55	04:51	05:30	06:43 (WEA 11)	06:23	07:14	07:11	08:05		
	16:07	16:57	17:51	19:48		20:42	28	06:52 (WEA 11)	21:30	21:45	21:11	8	06:51 (WEA 11)	20:06	18:54	16:45	16:02	
2	08:29	07:59	07:02	06:48		05:41		06:24 (WEA 11)	04:54	04:52	05:32		06:41 (WEA 11)	06:24	07:16	07:13	08:06	
	16:08	16:59	17:53	19:50		20:44	27	06:51 (WEA 11)	21:32	21:45	21:09	13	06:54 (WEA 11)	20:04	18:51	16:43	16:01	
3	08:29	07:57	07:00	06:46		05:39		06:25 (WEA 11)	04:53	04:53	05:33		06:39 (WEA 11)	06:26	07:18	07:15	08:08	
	16:09	17:01	17:55	19:52		20:45	27	06:52 (WEA 11)	21:33	21:44	21:07	17	06:56 (WEA 11)	20:01	18:49	16:41	16:00	
4	08:29	07:55	06:57	06:44		05:37		06:25 (WEA 11)	04:53	04:54	05:35		06:38 (WEA 11)	06:28	07:20	07:17	08:09	
	16:10	17:03	17:57	19:54		20:47	26	06:51 (WEA 11)	21:34	21:44	21:06	19	06:57 (WEA 11)	19:59	18:47	16:39	16:00	
5	08:28	07:53	06:55	06:41		05:35		06:25 (WEA 11)	04:52	04:55	05:37		06:36 (WEA 11)	06:30	07:22	07:19	08:10	
	16:12	17:05	17:59	19:55		20:49	25	06:50 (WEA 11)	21:35	21:43	21:04	22	06:58 (WEA 11)	19:57	18:44	16:37	15:59	
6	08:28	07:52	06:53	06:39		05:33		06:25 (WEA 11)	04:51	04:55	05:38		06:36 (WEA 11)	06:31	07:23	07:21	08:12	
	16:13	17:07	18:01	19:57		20:51	24	06:49 (WEA 11)	21:36	21:43	21:02	23	06:59 (WEA 11)	19:54	18:42	16:35	15:59	
7	08:28	07:50	06:50	06:36		05:31		06:26 (WEA 11)	04:50	04:56	05:40		06:34 (WEA 11)	06:33	07:25	07:23	08:13	
	16:14	17:09	18:03	19:59		20:52	22	06:48 (WEA 11)	21:37	21:42	21:00	25	06:59 (WEA 11)	19:52	18:40	16:34	15:58	
8	08:27	07:48	06:48	06:34		05:30		06:27 (WEA 11)	04:50	04:57	05:42		06:34 (WEA 11)	06:35	07:27	07:24	08:14	
	16:16	17:11	18:04	20:01		20:54	21	06:48 (WEA 11)	21:38	21:41	20:58	26	07:00 (WEA 11)	19:49	18:37	16:32	15:58	
9	08:27	07:46	06:46	06:32		05:28		06:28 (WEA 11)	04:49	04:58	05:43		06:33 (WEA 11)	06:36	07:29	07:26	08:16	
	16:17	17:13	18:06	20:03		20:56	18	06:46 (WEA 11)	21:39	21:41	20:56	27	07:00 (WEA 11)	19:47	18:35	16:30	15:58	
10	08:26	07:44	06:43	06:29		05:26		06:29 (WEA 11)	04:49	04:59	05:45		06:33 (WEA 11)	06:38	07:30	07:28	08:17	
	16:18	17:15	18:08	20:04		20:58	16	06:45 (WEA 11)	21:40	21:40	20:54	27	07:00 (WEA 11)	19:45	18:32	16:28	15:57	
11	08:25	07:42	06:41	06:27		05:24		06:31 (WEA 11)	04:48	05:01	05:47		06:33 (WEA 11)	06:40	07:32	07:30	08:18	
	16:20	17:17	18:10	20:06		20:59	12	06:43 (WEA 11)	21:40	21:39	20:52	28	07:01 (WEA 11)	19:42	18:30	16:27	15:57	
12	08:25	07:40	06:39	06:25		05:22		06:34 (WEA 11)	04:48	05:02	05:48		06:32 (WEA 11)	06:42	07:34	07:32	08:19	
	16:21	17:18	18:12	20:08		21:01	5	06:39 (WEA 11)	21:41	21:38	20:50	28	07:00 (WEA 11)	19:40	18:28	16:25	15:57	
13	08:24	07:38	06:36	06:22		05:21		06:48 (WEA 11)	05:03	05:50			06:33 (WEA 11)	06:43	07:36	07:34	08:20	
	16:23	17:20	18:14	20:10		21:03		21:42	21:37	20:48		28	07:01 (WEA 11)	19:37	18:26	16:23	15:57	
14	08:23	07:36	06:34	06:20		05:19		06:47 (WEA 11)	05:04	05:52			06:32 (WEA 11)	06:45	07:38	07:36	08:21	
	16:25	17:22	18:16	20:12		21:04		21:42	21:36	20:46		28	07:00 (WEA 11)	19:35	18:23	16:22	15:57	
15	08:22	07:34	06:32	06:18		05:17		06:47 (WEA 11)	05:05	05:54			06:32 (WEA 11)	06:47	07:40	07:37	08:22	
	16:26	17:24	18:17	20:13		21:06		21:43	21:35	20:44		28	07:00 (WEA 11)	19:33	18:21	16:20	15:57	
16	08:21	07:32	06:29	06:16		05:16		06:47 (WEA 11)	05:07	05:55			06:33 (WEA 11)	06:48	07:41	07:39	08:23	
	16:28	17:26	18:19	20:15		21:08		21:44	21:34	20:42		26	06:59 (WEA 11)	19:30	18:19	16:19	15:57	
17	08:20	07:30	06:27	06:13		05:14		06:47 (WEA 11)	05:08	05:57			06:33 (WEA 11)	06:50	07:43	07:41	08:24	
	16:30	17:28	18:21	20:17		21:09		21:44	21:33	20:40		25	06:58 (WEA 11)	19:28	18:16	16:17	15:57	
18	08:19	07:28	06:24	06:11		05:13		06:47 (WEA 11)	05:09	05:59			06:33 (WEA 11)	06:52	07:45	07:43	08:24	
	16:31	17:30	18:23	20:19		21:11		21:44	21:32	20:38		25	06:58 (WEA 11)	19:25	18:14	16:16	15:57	
19	08:18	07:26	06:22	06:09		05:11		06:47 (WEA 11)	05:11	06:00			06:33 (WEA 11)	06:54	07:47	07:45	08:25	
	16:33	17:32	18:25	20:21		21:12		21:45	21:30	20:35		23	06:56 (WEA 11)	19:23	18:12	16:15	15:58	
20	08:17	07:24	06:20	06:07	7	06:37 (WEA 11)		06:47 (WEA 11)	05:12	06:02			06:35 (WEA 11)	06:55	07:49	07:46	08:26	
	16:35	17:34	18:26	20:22		21:14		21:45	21:29	20:33		20	06:55 (WEA 11)	19:20	18:10	16:13	15:58	
21	08:16	07:22	06:17	06:04		05:08		06:47 (WEA 11)	05:13	06:04			06:36 (WEA 11)	06:57	07:51	07:48	08:26	
	16:36	17:36	18:28	20:24	13	06:46 (WEA 11)		21:45	21:28	20:31		18	06:54 (WEA 11)	19:18	18:08	16:12	15:58	
22	08:15	07:20	06:15	06:02		05:07		06:47 (WEA 11)	05:15	06:06			06:38 (WEA 11)	06:59	07:52	07:50	08:27	
	16:38	17:38	18:30	20:26	18	06:48 (WEA 11)		21:46	21:27	20:29		12	06:50 (WEA 11)	19:16	18:05	16:11	15:59	
23	08:13	07:18	06:12	06:00		05:05		06:48	05:16	06:07			06:42 (WEA 11)	07:01	07:54	07:52	08:27	
	16:40	17:40	18:32	20:28	20	06:49 (WEA 11)		21:46	21:25	20:27		4	06:46 (WEA 11)	19:13	18:03	16:10	15:59	
24	08:12	07:15	06:10	05:58		05:04		06:48	05:18	06:09				07:02	07:56	07:53	08:28	
	16:42	17:42	18:34	20:29	22	06:50 (WEA 11)		21:46	21:24	20:24				19:11	18:01	16:08	16:00	
25	08:11	07:13	06:08	05:56		05:03		06:48	05:19	06:11				07:04	07:58	07:55	08:28	
	16:44	17:44	18:36	20:31	24	06:51 (WEA 11)		21:46	21:22	20:22				19:08	18:59	16:07	16:01	
26	08:09	07:11	06:05	05:53		05:02		06:49	05:21	06:12				07:06	07:00	07:57	08:29	
	16:46	17:46	18:37	20:33	26	06:52 (WEA 11)		21:46	21:21	20:20				19:06	16:57	16:06	16:01	
27	08:08	07:09	06:03	05:51		05:00		06:49	05:22	06:14				07:07	07:02	07:58	08:29	
	16:47	17:47	18:39	20:35	27	06:52 (WEA 11)		21:46	21:19	20:18				19:03	16:55	16:05	16:02	
28	08:06	07:06	06:00	05:49		05:00		06:49	05:24	06:16				07:09	07:04	08:00	08:29	
	16:49	17:49	18:41	20:37	27	06:52 (WEA 11)		21:46	21:18	20:15				19:01	16:53	16:04	16:03	
29	08:05		06:58	05:47		05:00		06:49	05:25	06:18				07:11	07:05	08:02	08:29	
	16:51		19:43	20:38	28	06:52 (WEA 11)		21:46	21:16	20:13				18:59	16:51	16:04	16:04	
30	08:03		06:56	05:45		05:00		06:49	05:27	06:19				07:13	07:07	08:03	08:29	
	16:53		19:45	20:40	28	06:52 (WEA 11)		21:45	21:14	20:11				18:56	16:49	16:03	16:05	
31	08:02		06:53						05:28	06:21					07:09		08:29	
	16:55		19:46						21:29						16:47		16:06	
Sonnenscheinstunden	253	275	367	419		491		506	509	458		500	382	330	262		237	
astr.max.mögl.Beschattung				240		251												

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
	Minuten mit Schatten	

SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 065 - Krinitz, Ringstraße 13

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

- Die Sonne scheint täglich von Sonnenauf- bis -untergang
- Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung
- Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai		Juni		Juli	August		September	Oktober	November	Dezember			
1	08:29	08:00	07:04	06:51		05:43	06:16 (WEA 11)	04:55	04:51		05:30	06:27 (WEA 11)	06:23	07:14	07:11	08:05		
	16:07	16:57	17:51	19:48		20:42	26	06:42 (WEA 11)	21:30	21:45		21:11	23	06:50 (WEA 11)	21:06	18:54	16:45	16:02
2	08:29	07:59	07:02	06:48		05:41	06:16 (WEA 11)	04:54	04:52		05:32	06:27 (WEA 11)	06:24	07:16	07:13	08:06		
	16:08	16:59	17:53	19:50		20:44	26	06:42 (WEA 11)	21:32	21:45		21:09	24	06:51 (WEA 11)	21:04	18:51	16:43	16:01
3	08:29	07:57	07:00	06:46		05:39	06:16 (WEA 11)	04:53	04:53		05:33	06:26 (WEA 11)	06:26	07:18	07:15	08:08		
	16:09	17:01	17:55	19:52		20:45	27	06:43 (WEA 11)	21:33	21:44		21:07	25	06:51 (WEA 11)	21:01	18:49	16:41	16:00
4	08:29	07:55	06:57	06:44		05:37	06:16 (WEA 11)	04:53	04:54		05:35	06:26 (WEA 11)	06:28	07:20	07:17	08:09		
	16:10	17:03	17:57	19:54		20:47	27	06:43 (WEA 11)	21:34	21:44		21:06	26	06:52 (WEA 11)	19:59	18:47	16:39	16:00
5	08:28	07:53	06:55	06:41		05:35	06:15 (WEA 11)	04:52	04:55		05:37	06:25 (WEA 11)	06:30	07:22	07:19	08:10		
	16:12	17:05	17:59	19:55		20:49	28	06:43 (WEA 11)	21:35	21:43		21:04	27	06:52 (WEA 11)	19:57	18:44	16:37	15:59
6	08:28	07:52	06:53	06:39		05:33	06:15 (WEA 11)	04:51	04:55		05:38	06:25 (WEA 11)	06:31	07:23	07:21	08:12		
	16:13	17:07	18:01	19:57		20:51	27	06:42 (WEA 11)	21:36	21:43		21:02	27	06:52 (WEA 11)	19:54	18:42	16:35	15:59
7	08:28	07:50	06:50	06:36		05:31	06:15 (WEA 11)	04:50	04:56		05:40	06:24 (WEA 11)	06:33	07:25	07:23	08:13		
	16:14	17:09	18:03	19:59		20:52	27	06:42 (WEA 11)	21:37	21:42		21:00	28	06:52 (WEA 11)	19:52	18:40	16:34	15:58
8	08:27	07:48	06:48	06:34		05:30	06:16 (WEA 11)	04:50	04:57		05:42	06:25 (WEA 11)	06:35	07:27	07:24	08:14		
	16:16	17:11	18:04	20:01		20:54	26	06:42 (WEA 11)	21:38	21:41		20:58	27	06:52 (WEA 11)	19:49	18:37	16:32	15:58
9	08:27	07:46	06:46	06:32		05:28	06:16 (WEA 11)	04:49	04:58		05:43	06:24 (WEA 11)	06:36	07:29	07:26	08:16		
	16:17	17:13	18:06	20:03		20:56	26	06:42 (WEA 11)	21:39	21:41		20:56	28	06:52 (WEA 11)	19:47	18:35	16:30	15:58
10	08:26	07:44	06:43	06:29		05:26	06:16 (WEA 11)	04:49	04:59		05:45	06:25 (WEA 11)	06:38	07:30	07:28	08:17		
	16:18	17:15	18:08	20:04		20:58	25	06:41 (WEA 11)	21:40	21:40		20:54	27	06:52 (WEA 11)	19:45	18:33	16:28	15:57
11	08:25	07:42	06:41	06:27		05:24	06:17 (WEA 11)	04:48	05:01		05:47	06:25 (WEA 11)	06:40	07:32	07:30	08:18		
	16:20	17:17	18:10	20:06		20:59	24	06:41 (WEA 11)	21:40	21:39		20:52	27	06:52 (WEA 11)	19:42	18:30	16:27	15:57
12	08:25	07:40	06:39	06:25		05:22	06:17 (WEA 11)	04:48	05:02		05:48	06:25 (WEA 11)	06:42	07:34	07:32	08:19		
	16:21	17:18	18:12	20:08		21:01	23	06:40 (WEA 11)	21:41	21:38		20:50	26	06:51 (WEA 11)	19:40	18:28	16:25	15:57
13	08:24	07:38	06:36	06:22		05:21	06:18 (WEA 11)	04:48	05:03		05:50	06:26 (WEA 11)	06:43	07:36	07:34	08:20		
	16:23	17:20	18:14	20:10		21:03	20	06:38 (WEA 11)	21:42	21:37		20:48	24	06:50 (WEA 11)	19:37	18:26	16:23	15:57
14	08:23	07:36	06:34	06:20		05:19	06:19 (WEA 11)	04:48	05:04		05:52	06:26 (WEA 11)	06:45	07:38	07:36	08:21		
	16:25	17:22	18:16	20:12		21:04	19	06:38 (WEA 11)	21:42	21:36		20:46	23	06:49 (WEA 11)	19:35	18:23	16:22	15:57
15	08:22	07:34	06:32	06:18		05:17	06:20 (WEA 11)	04:47	05:05		05:54	06:27 (WEA 11)	06:47	07:40	07:37	08:22		
	16:26	17:24	18:17	20:13		21:06	16	06:36 (WEA 11)	21:43	21:35		20:44	21	06:48 (WEA 11)	19:33	18:21	16:20	15:57
16	08:21	07:32	06:29	06:16		05:16	06:22 (WEA 11)	04:47	05:07		05:55	06:28 (WEA 11)	06:48	07:41	07:39	08:23		
	16:28	17:26	18:19	20:15		21:08	13	06:35 (WEA 11)	21:44	21:34		20:42	19	06:47 (WEA 11)	19:30	18:19	16:19	15:57
17	08:20	07:30	06:27	06:13		05:14	06:25 (WEA 11)	04:47	05:08		05:57	06:29 (WEA 11)	06:50	07:43	07:41	08:24		
	16:30	17:28	18:21	20:17		21:09	8	06:33 (WEA 11)	21:44	21:33		20:40	15	06:44 (WEA 11)	19:28	18:16	16:17	15:57
18	08:19	07:28	06:24	06:11		05:13		04:47	05:09		05:59	06:32 (WEA 11)	06:52	07:45	07:43	08:24		
	16:31	17:30	18:23	20:19		21:11		21:44	21:32		20:38	10	06:42 (WEA 11)	19:25	18:14	16:16	15:57	
19	08:18	07:26	06:22	06:09		05:11		04:47	05:11		06:00		06:54	07:47	07:45	08:25		
	16:33	17:32	18:25	20:21		21:12		21:45	21:30		20:35		19:23	18:12	16:15	15:58		
20	08:17	07:24	06:20	06:07		05:10		04:47	05:12		06:02		06:55	07:49	07:46	08:26		
	16:35	17:34	18:26	20:22		21:14		21:45	21:29		20:33		19:20	18:10	16:13	15:58		
21	08:16	07:22	06:17	06:04		05:08		04:47	05:13		06:04		06:57	07:51	07:48	08:26		
	16:36	17:36	18:28	20:24		21:15		21:45	21:28		20:31		19:18	18:08	16:12	15:58		
22	08:15	07:20	06:15	06:02		05:07		04:47	05:15		06:06		06:59	07:52	07:50	08:27		
	16:38	17:38	18:30	20:26		21:17		21:46	21:27		20:29		19:16	18:05	16:11	15:59		
23	08:13	07:18	06:12	06:00		05:05		04:48	05:16		06:07		07:01	07:54	07:52	08:27		
	16:40	17:40	18:32	20:28		21:18		21:46	21:25		20:27		19:13	18:03	16:10	15:59		
24	08:12	07:15	06:10	05:58		05:04		04:48	05:18		06:09		07:02	07:56	07:53	08:28		
	16:42	17:42	18:34	20:29		21:20		21:46	21:24		20:24		19:11	18:01	16:09	16:00		
25	08:11	07:13	06:08	05:56		05:03	06:24 (WEA 11)	04:53	04:59		06:11		07:04	06:58	07:55	08:28		
	16:44	17:44	18:36	20:31	12	06:36 (WEA 11)	21:21	21:21	21:46	21:22	20:22		19:08	16:59	16:07	16:01		
26	08:09	07:11	06:05	05:53		06:22 (WEA 11)	05:02	05:02	04:49	05:21	06:37 (WEA 11)	06:12	07:06	07:00	07:57	08:29		
	16:46	17:46	18:37	20:33	16	06:38 (WEA 11)	21:23	21:23	21:46	21:21	3	06:40 (WEA 11)	20:20	19:06	16:57	16:07	16:01	
27	08:08	07:09	06:03	05:51		06:20 (WEA 11)	05:00	05:00	04:49	05:22	06:34 (WEA 11)	06:14	07:07	07:02	07:58	08:29		
	16:47	17:47	18:39	20:35	20	06:40 (WEA 11)	21:24	21:24	21:46	21:19	10	06:44 (WEA 11)	20:18	19:03	16:55	16:05	16:02	
28	08:06	07:06	06:00	05:49		06:19 (WEA 11)	04:59	04:59	04:50	05:24	06:32 (WEA 11)	06:16	07:09	07:04	08:00	08:29		
	16:49	17:49	18:41	20:37	22	06:41 (WEA 11)	21:25	21:25	21:46	21:18	14	06:46 (WEA 11)	20:15	19:01	16:53	16:04	16:03	
29	08:05		06:58	05:47		06:18 (WEA 11)	04:58	04:58	04:50	05:25	06:31 (WEA 11)	06:18	07:11	07:05	08:02	08:29		
	16:51		19:43	20:38	23	06:41 (WEA 11)	21:27	21:27	21:45	21:16	17	06:48 (WEA 11)	20:13	18:59	16:51	16:04	16:04	
30	08:03		06:56	05:45		06:17 (WEA 11)	04:57	04:57	04:51	05:27	06:29 (WEA 11)	06:19	07:13	07:07	08:03	08:29		
	16:53		19:45	20:40	25	06:42 (WEA 11)	21:28	21:28	21:45	21:14	20	06:49 (WEA 11)	20:11	18:56	16:49	16:03	16:05	
31	08:02		06:53			04:56			05:28		06:29 (WEA 11)	06:21			07:09		16:06	
	16:55		19:46			21:29			21:23	21	06:50 (WEA 11)	20:08			16:47		16:06	
Sonnenscheinstunden	253	275	367	419	118	491	388		506	509	85	458	427	382	330	262	237	
astr. max. mögl. Ressortnutzung																		

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 066 - Krinitz, Ringstraße 14

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April		Mai		Juni	Juli		August		September	Oktober	November	Dezember		
1	08:29	08:00	07:04	06:51		05:43		06:13 (WEA 11)	04:55	04:51	05:30		06:20 (WEA 11)	06:23	07:14	07:11	08:05	
	16:07	16:57	17:51	19:48		20:42	22	06:35 (WEA 11)	21:30	21:45	21:11	27	06:47 (WEA 11)	20:06	18:54	16:45	16:02	
2	08:09	07:59	07:02	06:48		05:41		06:12 (WEA 11)	04:54	04:52	05:32	27	06:21 (WEA 11)	06:24	07:16	07:13	08:06	
	16:08	16:59	17:53	19:50		20:44	24	06:36 (WEA 11)	21:32	21:45	21:09	27	06:48 (WEA 11)	20:04	18:51	16:43	16:01	
3	08:09	07:57	07:00	06:46		05:39		06:12 (WEA 11)	04:53	04:53	05:33		06:20 (WEA 11)	06:26	07:18	07:15	08:08	
	16:09	17:01	17:55	19:52		20:45	25	06:37 (WEA 11)	21:33	21:44	21:07	27	06:47 (WEA 11)	20:01	18:49	16:41	16:00	
4	08:29	07:55	06:57	06:44		05:37		06:11 (WEA 11)	04:53	04:54	05:35		06:20 (WEA 11)	06:28	07:20	07:17	08:09	
	16:10	17:03	17:57	19:54		20:47	26	06:37 (WEA 11)	21:34	21:44	21:06	28	06:48 (WEA 11)	19:59	18:47	16:39	16:00	
5	08:28	07:53	06:55	06:41		05:35		06:10 (WEA 11)	04:52	04:55	05:37		06:19 (WEA 11)	06:30	07:22	07:19	08:10	
	16:12	17:05	17:59	19:55		20:49	27	06:37 (WEA 11)	21:35	21:43	21:04	28	06:47 (WEA 11)	19:57	18:44	16:37	15:59	
6	08:28	07:52	06:53	06:39		05:33		06:10 (WEA 11)	04:51	04:55	05:38		06:20 (WEA 11)	06:31	07:23	07:21	08:12	
	16:13	17:07	18:01	19:57		20:51	27	06:37 (WEA 11)	21:36	21:43	21:02	27	06:47 (WEA 11)	19:54	18:42	16:35	15:59	
7	08:28	07:50	06:50	06:36		05:31		06:09 (WEA 11)	04:50	04:56	05:40		06:19 (WEA 11)	06:33	07:25	07:23	08:13	
	16:14	17:09	18:03	19:59		20:52	28	06:37 (WEA 11)	21:37	21:42	21:00	28	06:47 (WEA 11)	19:52	18:40	16:34	15:58	
8	08:27	07:48	06:48	06:34		05:30		06:10 (WEA 11)	04:50	04:57	05:42		06:20 (WEA 11)	06:35	07:27	07:24	08:14	
	16:16	17:11	18:04	20:01		20:54	28	06:38 (WEA 11)	21:38	21:41	20:58	27	06:47 (WEA 11)	19:49	18:37	16:32	15:58	
9	08:27	07:46	06:46	06:32		05:28		06:10 (WEA 11)	04:49	04:58	05:43		06:20 (WEA 11)	06:36	07:29	07:26	08:16	
	16:17	17:13	18:06	20:03		20:56	27	06:37 (WEA 11)	21:39	21:41	20:56	26	06:46 (WEA 11)	19:47	18:35	16:30	15:58	
10	08:26	07:44	06:43	06:29		05:26		06:09 (WEA 11)	04:49	04:55	05:45		06:21 (WEA 11)	06:38	07:30	07:28	08:17	
	16:18	17:15	18:08	20:04		20:58	28	06:37 (WEA 11)	21:40	21:40	20:54	24	06:45 (WEA 11)	19:45	18:33	16:28	15:57	
11	08:25	07:42	06:41	06:27		05:24		06:10 (WEA 11)	04:48	05:01	05:47		06:22 (WEA 11)	06:40	07:32	07:30	08:18	
	16:20	17:17	18:10	20:06		20:59	27	06:37 (WEA 11)	21:40	21:39	20:52	23	06:45 (WEA 11)	19:42	18:30	16:27	15:57	
12	08:25	07:40	06:39	06:25		05:22		06:10 (WEA 11)	04:48	05:02	05:48		06:22 (WEA 11)	06:42	07:34	07:32	08:19	
	16:21	17:18	18:12	20:08		21:01	26	06:36 (WEA 11)	21:41	21:38	20:50	21	06:43 (WEA 11)	19:40	18:28	16:25	15:57	
13	08:24	07:38	06:36	06:22		05:21		06:10 (WEA 11)	04:48	05:03	05:50		06:23 (WEA 11)	06:43	07:36	07:34	08:20	
	16:23	17:20	18:14	20:10		21:03	26	06:36 (WEA 11)	21:42	21:37	20:48	19	06:42 (WEA 11)	19:37	18:26	16:23	15:57	
14	08:23	07:36	06:34	06:20		05:19		06:11 (WEA 11)	04:48	05:04	05:52		06:24 (WEA 11)	06:45	07:38	07:36	08:21	
	16:25	17:22	18:16	20:12		21:04	25	06:36 (WEA 11)	21:42	21:36	20:46	16	06:40 (WEA 11)	19:35	18:23	16:22	15:57	
15	08:22	07:34	06:32	06:18		05:17		06:11 (WEA 11)	04:47	05:05	05:54		06:26 (WEA 11)	06:47	07:40	07:37	08:22	
	16:26	17:24	18:17	20:13		21:06	24	06:35 (WEA 11)	21:43	21:35	20:44	12	06:38 (WEA 11)	19:33	18:21	16:20	15:57	
16	08:21	07:32	06:29	06:16		05:16		06:12 (WEA 11)	04:47	05:07	05:55		06:48	07:41	07:39	08:23		
	16:28	17:26	18:19	20:15		21:08	22	06:34 (WEA 11)	21:44	21:34	20:42		19:30	18:19	16:19	15:57		
17	08:20	07:30	06:27	06:13		05:14		06:13 (WEA 11)	04:47	05:08	05:57		06:50	07:43	07:41	08:24		
	16:30	17:28	18:21	20:17		21:09	21	06:34 (WEA 11)	21:44	21:33	20:40		19:28	18:16	16:17	15:57		
18	08:19	07:28	06:24	06:11		05:13		06:14 (WEA 11)	04:47	05:09	05:59		06:52	07:45	07:43	08:24		
	16:31	17:30	18:23	20:19		21:11	18	06:32 (WEA 11)	21:44	21:32	20:38		19:25	18:14	16:16	15:57		
19	08:18	07:26	06:22	06:09		05:11		06:15 (WEA 11)	04:47	05:11	06:00		06:54	07:47	07:45	08:25		
	16:33	17:32	18:25	20:21		21:12	17	06:32 (WEA 11)	21:45	21:30	20:35		19:23	18:12	16:15	15:58		
20	08:17	07:24	06:20	06:07		05:10		06:16 (WEA 11)	04:47	05:12	06:02		06:55	07:49	07:46	08:26		
	16:35	17:34	18:26	20:22		21:14	14	06:30 (WEA 11)	21:45	21:29	20:33		19:20	18:10	16:13	15:58		
21	08:16	07:22	06:17	06:04		05:08		06:18 (WEA 11)	04:47	05:13	06:04		06:57	07:51	07:48	08:26		
	16:36	17:36	18:28	20:24		21:15	10	06:28 (WEA 11)	21:45	21:28	20:31		19:18	18:08	16:12	15:58		
22	08:15	07:20	06:15	06:02		05:07		06:22 (WEA 11)	04:47	05:15	06:06		06:59	07:52	07:50	08:27		
	16:38	17:38	18:30	20:26		21:17	2	06:24 (WEA 11)	21:46	21:27	7	06:37 (WEA 11)	06:29	19:16	18:05	16:11	15:59	
23	08:13	07:18	06:12	06:00		05:05		06:20 (WEA 11)	04:48	05:16	06:08	06:07	07:01	07:54	07:52	08:27		
	16:40	17:40	18:32	20:28		21:18		06:25 (WEA 11)	21:46	21:25	11	06:39 (WEA 11)	06:27	19:13	18:03	16:10	15:59	
24	08:12	07:15	06:10	05:58		05:04		06:26 (WEA 11)	04:48	05:18	06:06		07:02	07:56	07:53	08:28		
	16:42	17:42	18:34	20:29		21:20		06:27 (WEA 11)	21:46	21:24	15	06:41 (WEA 11)	06:24	19:11	18:01	16:09	16:00	
25	08:11	07:13	06:08	05:56		05:03		06:27 (WEA 11)	04:48	05:19	06:06		07:04	07:58	07:55	08:28		
	16:44	17:44	18:36	20:31		21:21		06:28 (WEA 11)	21:46	21:22	17	06:42 (WEA 11)	06:22	19:08	18:00	16:07	16:01	
26	08:09	07:11	06:05	05:53		05:02		06:28 (WEA 11)	04:49	05:21	06:08		07:06	07:50	07:57	08:29		
	16:46	17:46	18:37	20:33		21:23		06:29 (WEA 11)	21:46	21:21	19	06:43 (WEA 11)	06:20	19:06	18:00	16:06	16:01	
27	08:08	07:09	06:03	05:51		05:00		06:29 (WEA 11)	04:49	05:22	06:09	06:14	07:07	07:52	07:58	08:29		
	16:47	17:47	18:39	20:35	5	06:27 (WEA 11)	21:24	06:27 (WEA 11)	21:46	21:19	22	06:45 (WEA 11)	06:18	19:03	18:00	16:05	16:02	
28	08:06	07:06	06:00	05:49		05:00		06:30 (WEA 11)	04:49	05:24	06:11		07:09	07:54	07:52	08:29		
	16:49	17:49	18:41	20:37	13	06:31 (WEA 11)	21:25	06:31 (WEA 11)	21:46	21:18	23	06:45 (WEA 11)	06:15	19:01	18:00	16:04	16:03	
29	08:05		06:58	05:47		05:00		06:31 (WEA 11)	04:50	05:25	06:12		07:11	07:05	06:02	08:29		
	16:51		19:43	20:38	17	06:33 (WEA 11)	21:27	06:33 (WEA 11)	21:45	21:16	24	06:46 (WEA 11)	06:13	18:59	18:01	16:04	16:04	
30	08:03		06:56	05:45		05:00		06:34 (WEA 11)	04:51	05:27	06:13		07:13	07:07	06:03	08:29		
	16:53		19:45	20:40	20	06:34 (WEA 11)	21:28	06:34 (WEA 11)	21:45	21:14	25	06:46 (WEA 11)	06:11	18:56	18:00	16:03	16:05	
31	08:02		06:53			05:00		06:35 (WEA 11)	04:50	05:28		06:14	06:21		07:09		08:29	
	16:55		19:46			21:29		06:36 (WEA 11)	04:51	21:13	26	06:47 (WEA 11)	06:08		16:47		16:06	
Sonnenscheinstunden	253	275	367	419		491		506	509		458		382	330	262	237		
astr.max.mögl.Beschattung				55		494			189		360							

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 067 - Krinitz, Ringstraße 15/16

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai		Juni	Juli		August		September	Oktober	November	Dezember
1	08:29	08:00	07:04	06:51	05:43		06:14 (WEA 11)	04:55	04:51	05:30	06:13 (WEA 11)	06:23	07:14	07:11	08:05
	16:07	16:57	17:51	19:48	20:42	7	06:21 (WEA 11)	21:30	21:45	21:11	28	06:41 (WEA 11)	20:06	18:54	16:45
2	08:29	07:59	07:02	06:48	05:41		06:10 (WEA 11)	04:54	04:52	05:32	06:13 (WEA 11)	06:24	07:16	07:13	08:06
	16:08	16:59	17:53	19:50	20:44	13	06:23 (WEA 11)	21:32	21:45	21:09	28	06:41 (WEA 11)	20:04	18:51	16:43
3	08:29	07:57	07:00	06:46	05:39		06:09 (WEA 11)	04:53	04:53	05:33	06:13 (WEA 11)	06:25	07:18	07:15	08:08
	16:09	17:01	17:55	19:52	20:45	17	06:26 (WEA 11)	21:33	21:44	21:07	27	06:40 (WEA 11)	20:01	18:49	16:41
4	08:29	07:55	06:57	06:44	05:37		06:07 (WEA 11)	04:53	04:54	05:35	06:14 (WEA 11)	06:28	07:20	07:17	08:09
	16:10	17:03	17:57	19:54	20:47	20	06:27 (WEA 11)	21:34	21:44	21:06	26	06:40 (WEA 11)	19:59	18:47	16:39
5	08:28	07:53	06:55	06:41	05:35		06:06 (WEA 11)	04:52	04:55	05:37	06:14 (WEA 11)	06:30	07:22	07:19	08:10
	16:12	17:05	17:59	19:55	20:49	22	06:28 (WEA 11)	21:35	21:43	21:04	25	06:39 (WEA 11)	19:57	18:44	16:37
6	08:28	07:52	06:53	06:39	05:33		06:05 (WEA 11)	04:51	04:55	05:38	06:15 (WEA 11)	06:31	07:23	07:21	08:12
	16:13	17:07	18:01	19:57	20:51	24	06:29 (WEA 11)	21:36	21:43	21:02	24	06:39 (WEA 11)	19:54	18:42	16:35
7	08:28	07:50	06:50	06:36	05:31		06:04 (WEA 11)	04:50	04:56	05:40	06:15 (WEA 11)	06:33	07:25	07:23	08:13
	16:14	17:09	18:03	19:59	20:52	25	06:29 (WEA 11)	21:37	21:42	21:00	23	06:38 (WEA 11)	19:52	18:40	16:34
8	08:27	07:48	06:48	06:34	05:30		06:04 (WEA 11)	04:50	04:57	05:42	06:16 (WEA 11)	06:35	07:27	07:24	08:14
	16:16	17:11	18:04	20:01	20:54	26	06:30 (WEA 11)	21:38	21:41	20:58	21	06:37 (WEA 11)	19:49	18:37	16:32
9	08:27	07:46	06:46	06:32	05:28		06:03 (WEA 11)	04:49	04:58	05:43	06:16 (WEA 11)	06:36	07:29	07:26	08:16
	16:17	17:13	18:06	20:03	20:56	27	06:30 (WEA 11)	21:39	21:41	20:56	19	06:35 (WEA 11)	19:47	18:35	16:30
10	08:26	07:44	06:43	06:29	05:26		06:03 (WEA 11)	04:49	04:59	05:45	06:18 (WEA 11)	06:38	07:30	07:28	08:17
	16:18	17:15	18:08	20:04	20:58	27	06:30 (WEA 11)	21:40	21:40	20:54	16	06:34 (WEA 11)	19:45	18:33	16:28
11	08:25	07:42	06:41	06:27	05:24		06:03 (WEA 11)	04:48	05:01	05:47	06:20 (WEA 11)	06:40	07:32	07:30	08:18
	16:20	17:17	18:10	20:06	20:59	28	06:31 (WEA 11)	21:40	21:39	20:52	12	06:32 (WEA 11)	19:42	18:30	16:27
12	08:25	07:40	06:39	06:25	05:22		06:02 (WEA 11)	04:48	05:02	05:48	06:24 (WEA 11)	06:42	07:34	07:32	08:19
	16:21	17:18	18:12	20:08	21:01	28	06:30 (WEA 11)	21:41	21:38	20:50	3	06:27 (WEA 11)	19:40	18:28	16:25
13	08:24	07:38	06:36	06:22	05:21		06:02 (WEA 11)	04:48	05:03	05:50		06:43	07:36	07:34	08:20
	16:23	17:20	18:14	20:10	21:03	28	06:30 (WEA 11)	21:42	21:37	20:48		19:37	18:26	16:23	15:57
14	08:23	07:36	06:34	06:20	05:19		06:03 (WEA 11)	04:48	05:04	05:52		06:45	07:38	07:36	08:21
	16:25	17:22	18:16	20:12	21:04	27	06:30 (WEA 11)	21:42	21:36	20:46		19:35	18:23	16:22	15:57
15	08:22	07:34	06:32	06:18	05:17		06:02 (WEA 11)	04:47	05:05	05:54		06:47	07:40	07:37	08:22
	16:26	17:24	18:17	20:13	21:06	28	06:30 (WEA 11)	21:43	21:35	4	06:28 (WEA 11)	20:44	19:33	18:21	16:20
16	08:21	07:32	06:29	06:16	05:16		06:03 (WEA 11)	04:47	05:07	05:55		06:21 (WEA 11)	20:42	19:30	18:19
	16:28	17:26	18:19	20:15	21:08	27	06:30 (WEA 11)	21:44	21:34	10	06:31 (WEA 11)	20:42	19:30	18:19	16:19
17	08:20	07:30	06:27	06:13	05:14		06:04 (WEA 11)	04:47	05:08	05:57		06:19 (WEA 11)	20:40	19:28	18:16
	16:30	17:28	18:21	20:17	21:09	26	06:30 (WEA 11)	21:44	21:33	13	06:32 (WEA 11)	20:40	19:28	18:16	16:17
18	08:19	07:28	06:24	06:11	05:13		06:03 (WEA 11)	04:47	05:09	05:59		06:18 (WEA 11)	20:38	19:26	18:14
	16:31	17:30	18:23	20:19	21:11	26	06:29 (WEA 11)	21:44	21:32	15	06:33 (WEA 11)	20:38	19:25	18:14	16:16
19	08:18	07:26	06:22	06:09	05:11		06:04 (WEA 11)	04:47	05:11	06:00		06:18 (WEA 11)	20:36	19:24	18:12
	16:33	17:32	18:25	20:21	21:12	25	06:29 (WEA 11)	21:45	21:30	17	06:35 (WEA 11)	20:35	19:23	18:12	16:15
20	08:17	07:24	06:20	06:07	05:10		06:04 (WEA 11)	04:47	05:12	06:02		06:17 (WEA 11)	20:32	19:20	18:08
	16:35	17:34	18:26	20:22	21:14	24	06:28 (WEA 11)	21:45	21:29	19	06:36 (WEA 11)	20:33	19:20	18:10	16:13
21	08:16	07:22	06:17	06:04	05:08		06:05 (WEA 11)	04:47	05:13	06:04		06:16 (WEA 11)	20:31	19:18	18:06
	16:36	17:36	18:28	20:24	21:15	23	06:28 (WEA 11)	21:45	21:28	21	06:37 (WEA 11)	20:31	19:24	18:12	16:12
22	08:15	07:20	06:15	06:02	05:07		06:06 (WEA 11)	04:47	05:15	06:06		06:16 (WEA 11)	20:29	19:16	18:05
	16:38	17:38	18:30	20:26	21:17	21	06:27 (WEA 11)	21:46	21:27	22	06:38 (WEA 11)	20:29	19:25	18:13	16:11
23	08:13	07:18	06:12	06:00	05:05		06:07 (WEA 11)	04:48	05:16	06:07		06:15 (WEA 11)	20:27	19:13	18:03
	16:40	17:40	18:32	20:28	21:18	20	06:27 (WEA 11)	21:46	21:25	23	06:38 (WEA 11)	20:27	19:24	18:13	16:10
24	08:12	07:15	06:10	05:58	05:04		06:08 (WEA 11)	04:48	05:18	06:09		06:14 (WEA 11)	20:24	19:11	18:01
	16:42	17:42	18:34	20:29	21:20	18	06:26 (WEA 11)	21:46	21:24	25	06:39 (WEA 11)	20:24	19:26	18:14	16:09
25	08:11	07:13	06:08	05:56	05:03		06:09 (WEA 11)	04:48	05:19	06:10		06:14 (WEA 11)	20:22	19:07	18:04
	16:44	17:44	18:36	20:31	21:21	16	06:25 (WEA 11)	21:46	21:22	26	06:40 (WEA 11)	20:22	19:08	18:06	16:07
26	08:09	07:11	06:05	05:53	05:02		06:09 (WEA 11)	04:49	05:21	06:12		06:14 (WEA 11)	20:20	19:06	18:04
	16:46	17:46	18:37	20:33	21:23	14	06:23 (WEA 11)	21:46	21:21	26	06:40 (WEA 11)	20:20	19:06	18:04	16:06
27	08:08	07:09	06:03	05:51	05:00		06:11 (WEA 11)	04:49	05:22	06:14		06:14 (WEA 11)	20:18	19:03	18:02
	16:47	17:47	18:39	20:35	21:24	11	06:22 (WEA 11)	21:46	21:19	27	06:41 (WEA 11)	20:18	19:03	18:01	16:05
28	08:06	07:06	06:00	05:49	04:59		06:13 (WEA 11)	04:50	05:24	06:16		06:13 (WEA 11)	20:16	19:01	18:00
	16:49	17:49	18:41	20:37	21:25	7	06:20 (WEA 11)	21:46	21:18	27	06:40 (WEA 11)	20:15	19:01	18:03	16:04
29	08:05		06:58	05:47	04:58			04:50	05:25	06:18		06:14 (WEA 11)	20:13	19:01	18:02
	16:51		19:43	20:38	21:27			21:45	21:16	27	06:41 (WEA 11)	20:13	19:03	18:05	16:04
30	08:03		06:56	05:45	04:57			04:51	05:27	06:19		06:13 (WEA 11)	20:11	19:03	18:03
	16:53		19:45	20:40	21:28			21:45	21:14	28	06:41 (WEA 11)	20:11	19:03	18:05	16:05
31	08:02		06:53		04:56				05:28	06:21		06:13 (WEA 11)	20:09	19:01	18:04
	16:55		19:46		21:29				21:13	28	06:41 (WEA 11)	20:08	19:01	18:04	16:06
Sonnenscheinstunden	253	275	367	419	491		506	509	458	252		382	330	262	237
astr.max.mögl.Beschattung					605			358							

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
	Minuten mit Schatten	

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 068 - Krinitz, Ringstraße 17

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember		
1	08:29	08:00	07:04	06:51	06:43	04:55	06:09 (WEA 11)	04:51	05:30	06:09 (WEA 11)	06:23	07:14	07:11	08:05
	16:07	16:57	17:51	19:48	20:42	21:30	9 06:18 (WEA 11)	21:45	21:11	27 06:36 (WEA 11)	20:06	18:54	16:45	16:02
2	08:29	07:59	07:02	06:48	06:41	04:54	06:10 (WEA 11)	04:52	05:32	26 06:36 (WEA 11)	06:24	07:16	08:06	16:06
	16:08	16:59	17:53	19:50	20:44	21:32	6 06:16 (WEA 11)	21:45	21:09	26 06:36 (WEA 11)	20:04	18:51	16:43	16:01
3	08:29	07:57	07:00	06:46	06:39	06:13 (WEA 11)	04:53	04:53	05:33	26 06:36 (WEA 11)	06:26	07:18	07:15	08:08
	16:09	17:01	17:55	19:52	20:45	1 06:14 (WEA 11)	21:33	21:44	21:07	25 06:35 (WEA 11)	20:01	18:49	16:41	16:00
4	08:29	07:55	06:57	06:44	06:37	06:07 (WEA 11)	04:53	04:54	05:35	24 06:35 (WEA 11)	06:28	07:20	07:17	08:09
	16:10	17:03	17:57	19:54	20:47	12 06:19 (WEA 11)	21:34	21:44	21:06	24 06:35 (WEA 11)	06:30	18:47	16:39	16:00
5	08:28	07:53	06:55	06:41	06:35	06:05 (WEA 11)	04:52	04:55	05:37	23 06:34 (WEA 11)	06:30	07:22	07:19	08:10
	16:12	17:05	17:59	19:55	20:49	16 06:21 (WEA 11)	21:35	21:43	21:04	23 06:34 (WEA 11)	06:31	18:44	16:37	15:59
6	08:28	07:52	06:53	06:39	06:33	06:03 (WEA 11)	04:51	04:55	05:38	23 06:34 (WEA 11)	06:31	07:23	07:21	08:12
	16:13	17:07	18:01	19:57	20:51	19 06:22 (WEA 11)	21:36	21:43	21:02	20 06:33 (WEA 11)	06:34	18:42	16:35	15:59
7	08:28	07:50	06:50	06:36	06:31	06:02 (WEA 11)	04:50	04:56	05:40	20 06:33 (WEA 11)	06:33	07:25	07:22	08:13
	16:14	17:09	18:03	19:59	20:52	21 06:23 (WEA 11)	21:37	21:42	21:00	18 06:31 (WEA 11)	06:30	18:40	16:34	15:58
8	08:27	07:48	06:48	06:34	06:30	06:01 (WEA 11)	04:50	04:57	05:42	15 06:30 (WEA 11)	06:35	07:27	07:24	08:14
	16:16	17:11	18:04	20:01	20:54	23 06:24 (WEA 11)	21:38	21:41	20:58	15 06:30 (WEA 11)	06:35	18:37	16:32	15:58
9	08:27	07:46	06:46	06:32	06:28	06:00 (WEA 11)	04:49	04:58	05:43	10 06:27 (WEA 11)	06:36	07:29	07:26	08:16
	16:17	17:13	18:06	20:03	20:56	25 06:25 (WEA 11)	21:39	21:41	20:56	10 06:27 (WEA 11)	06:36	18:35	16:30	15:58
10	08:26	07:44	06:43	06:29	06:26	05:59 (WEA 11)	04:49	04:59	05:45		06:38	07:30	07:28	08:17
	16:18	17:15	18:08	20:04	20:58	26 06:25 (WEA 11)	21:40	21:40	2 06:22 (WEA 11)		06:38	07:30	07:28	08:17
11	08:25	07:42	06:41	06:27	06:24	06:00 (WEA 11)	04:48	05:01	06:17 (WEA 11)		06:40	07:32	07:30	08:18
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	16:23	17:20	18:14	20:10	21:03	28 06:26 (WEA 11)	21:42	21:37	14 06:29 (WEA 11)		06:43	07:36	07:34	08:20
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	16:25	17:22	18:16	20:12	21:04	28 06:26 (WEA 11)	21:42	21:36	16 06:30 (WEA 11)		06:45	07:38	07:36	08:21
15	08:22	07:34	06:32	06:18	06:17	05:58 (WEA 11)	04:47	05:05	06:13 (WEA 11)		06:47	07:40	07:37	08:22
	16:26	17:24	18:17	20:13	21:06	28 06:26 (WEA 11)	21:43	21:35	18 06:31 (WEA 11)		06:47	07:40	07:37	08:22
16	08:21	07:32	06:29	06:16	06:15	05:58 (WEA 11)	04:47	05:07	06:12 (WEA 11)		06:48	07:41	07:39	08:23
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	16:31	17:30	18:23	20:19	21:11	28 06:26 (WEA 11)	21:44	21:32	22 06:33 (WEA 11)		06:52	07:45	07:43	08:24
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	16:35	17:34	18:26	20:22	21:14	26 06:25 (WEA 11)	21:45	21:29	24 06:34 (WEA 11)		06:55	07:49	07:46	08:26
21	08:16	07:22	06:17	06:04	06:08	05:59 (WEA 11)	04:47	05:13	06:10 (WEA 11)		06:57	07:51	07:48	08:26
	16:36	17:36	18:28	20:24	21:15	26 06:25 (WEA 11)	21:45	21:28	25 06:35 (WEA 11)		06:57	07:51	07:48	08:26
22	08:15	07:20	06:15	06:02	06:07	06:00 (WEA 11)	04:47	05:15	06:10 (WEA 11)		06:59	07:52	07:50	08:27
	16:38	17:38	18:30	20:26	21:17	25 06:25 (WEA 11)	21:46	21:27	26 06:36 (WEA 11)		06:59	07:52	07:50	08:27
23	08:13	07:18	06:12	06:00	06:05	06:00 (WEA 11)	04:48	05:16	06:09 (WEA 11)		07:01	07:54	07:52	08:27
	16:40	17:40	18:32	20:28	21:18	25 06:25 (WEA 11)	21:46	21:25	27 06:36 (WEA 11)		07:02	07:56	07:54	08:27
24	08:12	07:15	06:10	05:58	06:04	06:01 (WEA 11)	04:48	05:18	06:09 (WEA 11)		07:02	07:56	07:53	08:28
	16:42	17:42	18:34	20:29	21:20	24 06:25 (WEA 11)	21:46	21:24	27 06:36 (WEA 11)		07:02	07:56	07:54	08:28
25	08:11	07:13	06:08	05:56	06:03	06:02 (WEA 11)	04:48	05:19	06:09 (WEA 11)		07:04	07:58	07:55	08:28
	16:44	17:44	18:36	20:31	21:21	22 06:24 (WEA 11)	21:46	21:22	28 06:37 (WEA 11)		07:04	07:58	07:55	08:28
26	08:09	07:11	06:05	05:53	06:02	06:02 (WEA 11)	04:49	05:21	06:09 (WEA 11)		07:06	07:00	06:57	08:29
	16:46	17:46	18:37	20:33	21:23	21 06:23 (WEA 11)	21:46	21:21	27 06:36 (WEA 11)		07:06	07:00	06:57	08:29
27	08:08	07:09	06:03	05:51	06:00	06:02 (WEA 11)	04:49	05:22	06:09 (WEA 11)		07:07	07:02	07:58	08:29
	16:47	17:47	18:39	20:35	21:24	20 06:22 (WEA 11)	21:46	21:19	28 06:37 (WEA 11)		07:07	07:02	07:58	08:29
28	08:06	07:06	06:00	05:49	06:04	06:03 (WEA 11)	04:50	05:24	06:09 (WEA 11)		07:09	07:04	07:59	08:29
	16:49	17:49	18:41	20:37	21:25	19 06:22 (WEA 11)	21:46	21:18	28 06:37 (WEA 11)		07:09	07:04	07:59	08:29
29	08:05		06:58	05:47	06:05	06:05 (WEA 11)	04:50	05:25	06:09 (WEA 11)		07:11	07:05	07:59	08:29
	16:51		19:43	20:38	21:27	17 06:22 (WEA 11)	21:45	21:16	28 06:37 (WEA 11)		07:11	07:05	07:59	08:29
30	08:03		06:56	05:45	06:04	06:06 (WEA 11)	04:51	05:27	06:09 (WEA 11)		07:13	07:07	08:03	08:29
	16:53		19:45	20:40	21:28	15 06:21 (WEA 11)	21:45	21:14	28 06:37 (WEA 11)		07:13	07:07	08:03	08:29
31	08:02		06:53		06:06	06:07 (WEA 11)		05:28	06:10 (WEA 11)		07:15	07:09	08:05	08:29
	16:55		19:46		21:29	13 06:20 (WEA 11)		21:13	27 06:37 (WEA 11)		07:15	07:09	08:05	08:29
Sonneneinstrahlung	253	275	367	419	491	506	477	458	382	330	262	237		
astr.max.mögl.Beschattung					644	15								

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
	Minuten mit Schatten	

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7
DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 069 - Krinitz, Lenzener Straße 5

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinfallsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:29 16:07	08:00 16:57	07:04 17:51	06:51 19:48	05:43 20:42	04:55 21:30	05:57 (WEA 11) 21:45	06:08 (WEA 11) 21:11	05:30 21:06	06:07 (WEA 11) 20:06	07:14 18:54	07:11 16:45
2	08:29 16:08	07:59 16:59	07:02 17:53	06:48 19:50	05:41 20:44	04:54 21:32	05:57 (WEA 11) 21:45	06:07 (WEA 11) 21:09	05:32 21:04	06:08 (WEA 11) 20:04	07:16 18:51	07:13 16:43
3	08:29 16:09	07:57 17:01	07:00 17:55	06:46 19:52	05:39 20:45	04:53 21:33	05:58 (WEA 11) 21:44	06:07 (WEA 11) 21:07	05:33 21:07	06:09 (WEA 11) 20:01	07:18 18:49	07:15 16:41
4	08:29 16:10	07:55 17:03	06:57 17:57	06:44 19:54	05:37 20:47	04:53 21:34	05:59 (WEA 11) 21:44	06:07 (WEA 11) 21:06	05:35 21:06	06:11 (WEA 11) 20:59	07:17 18:47	07:17 16:39
5	08:28 16:12	07:53 17:05	06:55 17:59	06:41 19:55	05:35 20:49	04:52 21:35	05:59 (WEA 11) 21:43	06:07 (WEA 11) 21:04	05:37 21:04	06:12 (WEA 11) 20:57	07:22 18:44	07:19 16:37
6	08:28 16:13	07:52 17:07	06:53 18:01	06:39 19:57	05:33 20:51	04:51 21:36	06:00 (WEA 11) 21:43	06:06 (WEA 11) 21:02	05:38 21:02	06:16 (WEA 11) 20:54	07:23 18:42	07:21 16:35
7	08:28 16:14	07:50 17:09	06:50 18:03	06:36 19:59	05:31 20:52	04:50 21:37	06:00 (WEA 11) 21:42	06:05 (WEA 11) 21:01	05:40 21:00	06:21 (WEA 11) 20:50	07:25 18:40	07:22 16:34
8	08:27 16:16	07:48 17:11	06:48 18:04	06:34 20:01	05:30 20:54	04:50 21:38	06:01 (WEA 11) 21:41	06:05 (WEA 11) 21:01	05:42 21:01	06:28 (WEA 11) 20:58	07:27 18:37	07:24 16:32
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11	08:25 16:20	07:42 17:17	06:41 18:10	06:27 20:06	05:24 20:59	04:48 21:40	06:03 (WEA 11) 21:39	06:04 (WEA 11) 21:02	05:47 21:02	06:31 (WEA 11) 20:52	07:32 18:30	07:30 16:27
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16	08:21 16:28	07:32 17:26	06:29 18:19	06:16 20:15	05:16 21:08	04:47 21:44	06:06 (WEA 11) 21:34	06:06 (WEA 11) 21:05	05:55 21:05	06:36 (WEA 11) 20:42	07:41 18:19	07:39 16:19
17	08:20 16:30	07:30 17:28	06:27 18:21	06:13 20:17	05:14 21:09	04:47 21:44	06:07 (WEA 11) 21:33	06:07 (WEA 11) 21:05	05:57 21:05	06:37 (WEA 11) 20:40	07:43 18:16	07:41 16:17
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31	08:02 16:55	07:02 17:55	05:53 18:46	05:43 20:41	04:56 21:29	04:50 21:46	06:08 (WEA 11) 21:13	06:08 (WEA 11) 21:10	06:05 21:10	06:51 (WEA 11) 20:08	07:59 18:00	07:58 16:06
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	330	262	237
astr.max.mögl.Beschattung					647	466	791	99				

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
	Minuten mit Schatten	

SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 070 - Krinitz, Lenzener Straße 1a

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember										
1	08:29	08:00	07:04	06:51	05:43	04:55	05:58 (WEA 11)	04:51	06:07 (WEA 11)	06:30	06:50 (WEA 12)	07:14	07:11	08:05								
2	16:07	16:57	17:51	19:48	20:42	21:30	29	06:27 (WEA 11)	21:11	20:06	18	07:08 (WEA 12)	18:54	16:45	16:02							
3	08:29	07:59	07:02	06:48	05:41	04:54	05:58 (WEA 11)	04:52	06:06 (WEA 11)	06:32	06:51 (WEA 12)	07:16	07:13	08:06								
4	16:08	16:59	17:53	19:50	20:44	21:32	28	06:26 (WEA 11)	21:05	20:03	23	06:33 (WEA 11)	20:04	15:16	16:43	16:01						
5	08:29	07:57	07:00	06:46	05:39	04:53	05:59 (WEA 11)	04:53	06:07 (WEA 11)	06:33	06:51 (WEA 12)	07:15	07:15	08:08								
6	16:09	17:01	17:55	19:52	20:45	21:33	28	06:27 (WEA 11)	21:04	20:03	21	06:32 (WEA 11)	20:01	16:44	16:41	16:00						
7	08:29	07:54	06:57	06:44	05:37	04:53	05:59 (WEA 11)	04:54	06:07 (WEA 11)	06:35	06:13 (WEA 11)	06:28	06:55 (WEA 12)	07:20	07:17	08:09						
8	16:10	17:03	17:57	19:54	20:47	21:34	27	06:26 (WEA 11)	21:06	20:04	17	06:30 (WEA 11)	19:59	16:39	16:00							
9	08:28	07:53	06:55	06:41	05:35	04:52	05:59 (WEA 11)	04:55	06:07 (WEA 11)	06:37	06:14 (WEA 11)	06:30	07:22	07:19	08:10							
10	16:12	17:05	17:59	19:55	20:49	21:35	27	06:26 (WEA 11)	21:03	20:04	14	06:28 (WEA 11)	19:57	16:44	16:37	15:59						
11	08:28	07:52	06:53	06:39	05:33	04:51	06:00 (WEA 11)	04:55	06:07 (WEA 11)	06:38	06:18 (WEA 11)	06:31	07:23	07:21	08:12							
12	16:13	17:07	18:01	19:57	20:51	21:36	26	06:26 (WEA 11)	21:03	20:04	7	06:25 (WEA 11)	19:54	16:42	16:35	15:59						
13	08:28	07:50	06:50	06:36	05:31	06:06 (WEA 11)	04:50	06:06 (WEA 11)	06:33	06:11	07:25	07:22	08:13									
14	16:14	17:09	18:03	19:59	20:52	21:37	26	06:26 (WEA 11)	21:02	20:03	19:52	18:40	16:34	15:58								
15	08:27	07:48	06:48	06:34	05:30	06:07 (WEA 11)	04:50	06:07 (WEA 11)	06:32	06:10	07:27	07:24	08:14									
16	16:16	17:11	18:04	20:01	7	07:04 (WEA 12)	20:54	15	06:19 (WEA 11)	21:38	25	06:26 (WEA 11)	21:41	27	06:33 (WEA 11)	20:58	19:49	18:37	16:32	15:58		
17	08:27	07:46	06:46	06:32	11	06:55 (WEA 12)	05:28	19	06:02 (WEA 11)	04:49	06:01 (WEA 11)	04:58	06:05 (WEA 11)	05:43	06:06	06:36	07:29	07:26	08:16			
18	16:17	17:13	18:06	20:03	20:03	07:06 (WEA 12)	05:56	19	06:21 (WEA 11)	21:39	24	06:25 (WEA 11)	21:41	28	06:33 (WEA 11)	20:56	19:47	18:35	16:30	15:58		
19	08:26	07:44	06:43	06:29	06:25	06:53 (WEA 12)	05:26	23	06:00 (WEA 11)	04:49	06:02 (WEA 11)	04:59	06:05 (WEA 11)	05:45	06:08	06:38	07:30	07:28	08:17			
20	16:18	17:15	18:08	20:04	15	07:08 (WEA 12)	05:58	22	06:22 (WEA 11)	21:40	23	06:25 (WEA 11)	21:40	29	06:34 (WEA 11)	20:54	19:45	18:32	16:28	15:57		
21	08:25	07:42	06:41	06:27	06:51 (WEA 12)	05:24	06:00 (WEA 11)	04:48	06:03 (WEA 11)	05:01	06:05 (WEA 11)	05:47	06:40									
22	16:20	17:16	18:10	20:06	18	07:09 (WEA 12)	05:59	23	06:23 (WEA 11)	21:40	23	06:26 (WEA 11)	21:39	29	06:34 (WEA 11)	20:52	19:42	18:30	16:27	15:57		
23	08:25	07:40	06:39	06:25	06:49 (WEA 12)	05:22	05:58 (WEA 11)	04:48	06:03 (WEA 11)	05:02	06:05 (WEA 11)	05:48	06:42									
24	16:21	17:18	18:12	20:08	20	07:09 (WEA 12)	05:21	26	06:24 (WEA 11)	21:01	22	06:25 (WEA 11)	21:38	29	06:34 (WEA 11)	20:50	19:40	18:28	16:25	15:57		
25	08:24	07:38	06:36	06:22	06:49 (WEA 12)	05:21	05:57 (WEA 11)	04:48	06:03 (WEA 11)	05:03	06:06 (WEA 11)	05:50	06:43									
26	16:23	17:20	18:14	20:10	20	07:09 (WEA 12)	05:23	27	06:24 (WEA 11)	21:02	22	06:25 (WEA 11)	21:37	30	06:36 (WEA 11)	20:48	19:37	18:26	16:23	15:57		
27	08:23	07:36	06:34	06:20	06:48 (WEA 12)	05:19	05:57 (WEA 11)	04:47	06:04 (WEA 11)	05:04	06:06 (WEA 11)	05:52	06:45									
28	16:25	17:22	18:16	20:12	22	07:10 (WEA 12)	05:24	28	06:25 (WEA 11)	21:02	21	06:25 (WEA 11)	21:36	30	06:36 (WEA 11)	20:46	19:35	18:23	16:22	15:57		
29	08:22	07:34	06:32	06:18	06:48 (WEA 12)	05:17	05:56 (WEA 11)	04:47	06:04 (WEA 11)	05:05	06:05 (WEA 11)	05:54	06:47									
30	16:26	17:24	18:17	20:13	22	07:10 (WEA 12)	05:26	29	06:25 (WEA 11)	21:03	21	06:25 (WEA 11)	21:35	31	06:36 (WEA 11)	20:44	19:33	18:21	16:20	15:57		
31	08:21	07:32	06:29	06:16	06:47 (WEA 12)	05:16	05:56 (WEA 11)	04:47	06:05 (WEA 11)	05:07	06:05 (WEA 11)	05:55	06:48									
32	16:28	17:26	18:19	20:15	22	07:09 (WEA 12)	05:18	30	06:26 (WEA 11)	21:04	20	06:25 (WEA 11)	21:34	31	06:36 (WEA 11)	20:42	19:30	18:19	16:19	15:57		
33	08:20	07:30	06:27	06:13	06:48 (WEA 12)	05:14	05:56 (WEA 11)	04:47	06:05 (WEA 11)	05:08	06:05 (WEA 11)	05:57	06:50									
34	16:30	17:28	18:21	20:17	20	07:08 (WEA 12)	05:19	31	06:27 (WEA 11)	21:04	20	06:25 (WEA 11)	21:33	31	06:36 (WEA 11)	20:40	19:28	18:16	16:17	15:57		
35	08:19	07:28	06:24	06:11	06:48 (WEA 12)	05:13	05:55 (WEA 11)	04:47	06:05 (WEA 11)	05:09	06:05 (WEA 11)	05:59	06:52									
36	16:31	17:30	18:23	20:19	20	07:08 (WEA 12)	05:11	32	06:27 (WEA 11)	21:04	19	06:25 (WEA 11)	21:32	31	06:36 (WEA 11)	20:38	19:25	18:14	16:16	15:57		
37	08:18	07:26	06:22	06:09	06:49 (WEA 12)	05:11	05:55 (WEA 11)	04:47	06:06 (WEA 11)	05:11	06:05 (WEA 11)	06:00	06:54									
38	16:33	17:32	18:25	20:21	18	07:07 (WEA 12)	05:12	32	06:27 (WEA 11)	21:05	19	06:25 (WEA 11)	21:30	32	06:37 (WEA 11)	20:35	19:23	18:12	16:15	15:58		
39	08:17	07:24	06:20	06:07	06:50 (WEA 12)	05:10	05:55 (WEA 11)	04:47	06:06 (WEA 11)	05:12	06:05 (WEA 11)	06:02	06:55									
40	16:35	17:34	18:26	20:22	15	07:05 (WEA 12)	05:14	32	06:27 (WEA 11)	21:05	19	06:25 (WEA 11)	21:29	32	06:37 (WEA 11)	20:33	19:20	18:10	16:13	15:58		
41	08:16	07:22	06:17	06:04	06:51 (WEA 12)	05:08	05:55 (WEA 11)	04:47	06:06 (WEA 11)	05:13	06:05 (WEA 11)	06:04	06:58 (WEA 12)	06:57								
42	16:36	17:36	18:28	20:24	12	07:03 (WEA 12)	05:15	32	06:27 (WEA 11)	21:05	19	06:25 (WEA 11)	21:28	32	06:37 (WEA 11)	20:31	19:18	18:08	16:12	15:58		
43	08:15	07:20	06:15	06:02	06:53 (WEA 12)	05:07	05:55 (WEA 11)	04:47	06:07 (WEA 11)	05:15	06:05 (WEA 11)	06:06	06:55 (WEA 12)	06:59								
44	16:38	17:38	18:30	20:26	7	07:00 (WEA 12)	05:17	32	06:27 (WEA 11)	21:06	19	06:25 (WEA 11)	21:27	33	06:38 (WEA 11)	20:29	19:13	18:05	16:11	15:59		
45	08:13	07:18	06:12	06:00	05:05	05:55 (WEA 11)	04:48		06:07 (WEA 11)	05:16	06:07 (WEA 11)	05:16	06:07 (WEA 11)	06:07								
46	16:40	17:40	18:32	20:28	21:18	33	06:28 (WEA 11)	21:06	19	06:26 (WEA 11)	21:25	32	06:37 (WEA 11)	20:27	15	07:09 (WEA 12)	19:13	18:03	16:10	15:59		
47	08:12	07:15	06:10	05:58	05:04	05:56 (WEA 11)	04:48		06:07 (WEA 11)	05:18	06:05 (WEA 11)	06:09	06:53 (WEA 12)	07:02								
48	16:42	17:42	18:34	20:29	21:20	32	06:28 (WEA 11)	21:06	19	06:26 (WEA 11)	21:24	32	06:37 (WEA 11)	20:24	17	07:10 (WEA 12)	19:11	18:01	16:08	16:00		
49	08:11	07:13	06:08	05:56	05:03	05:56 (WEA 11)	04:48		06:06 (WEA 11)	05:19	06:06 (WEA 11)	05:19	06:06 (WEA 11)	06:11								
50	16:44	17:44	18:36	20:31	21:21	32	06:28 (WEA 11)	21:06	20	06:26 (WEA 11)	21:22	31	06:37 (WEA 11)	20:22	19	07:10 (WEA 12)	19:08	16:59	16:07	16:01		
51	08:09	07:11	06:05	05:53	05:02	05:55 (WEA 11)	04:49		06:07 (WEA 11)	05:21	06:08 (WEA 11)	06:12	06:51 (WEA 12)	07:06								
52	16:46	17:46	18:37	20:33	21:23	32	06:27 (WEA 11)	21:06	20	06:27 (WEA 11)	21:21	31	06:37 (WEA 11)	20:20	20	07:11 (WEA 12)	19:06	16:57	16:06	16:01		
53	08:08	07:09	06:03	05:51	05:00	05:55 (WEA 11)	04:49		06:07 (WEA 11)	05:22	06:07 (WEA 11)	06:14	06:49 (WEA 12)	07:07								
54	16:47	17:47	18:39	20:35	21:24	32	06:27 (WEA 11)	21:06	20	06:27 (WEA 11)	21:19	30	06:37 (WEA 11)	20:18	21	07:10 (WEA 12)	19:03	16:55	16:05	16:02		
55	08:06	07:06	06:00	05:49	04:59	05:56 (WEA 11)	04:50		06:07 (WEA 11)	05:24	06:07 (WEA 11)	06:16	06:49 (WEA 12)	07:09								
56	16:49	17:49	18:41	20:37	21:25	31	06:27 (WEA 11)	21:06	21	06:28 (WEA 11)	21:18	29	06:36 (WEA 11)	20:15	22	07:11 (WEA 12)	19:01	16:53	16:04	16:03		
57	08:05		06:58	05:47	04:57	05:57 (WEA 11)	04:50		06:07 (WEA 11)	05:25	06:											

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 071 - Krinitz, Lenzener Straße 1

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember			
1	08:29	08:00	07:04	06:51	05:43	04:55	05:55 (WEA 11)	04:51	06:04 (WEA 11)	05:30	06:08 (WEA 11)	06:23	07:14	07:11	08:05
	16:07	16:57	17:51	19:48	20:42	21:30	30	06:25 (WEA 11)	21:45	24	06:28 (WEA 11)	21:11	23	06:31 (WEA 11)	20:06
2	08:29	07:59	07:02	06:48	06:41	04:54	05:55 (WEA 11)	04:52	06:04 (WEA 11)	05:32	06:10 (WEA 11)	06:24	07:16	07:13	08:06
	16:08	16:59	17:53	19:50	20:44	21:32	29	06:24 (WEA 11)	21:45	24	06:28 (WEA 11)	21:09	20	06:30 (WEA 11)	20:04
3	08:29	07:57	07:00	06:46	06:39	04:53	05:57 (WEA 11)	04:53	06:04 (WEA 11)	05:33	06:10 (WEA 11)	06:26	07:18	07:15	08:08
	16:09	17:01	17:55	19:52	20:45	21:33	28	06:25 (WEA 11)	21:44	25	06:29 (WEA 11)	21:07	18	06:28 (WEA 11)	20:01
4	08:29	07:55	06:57	06:44	06:37	04:53	05:57 (WEA 11)	04:54	06:04 (WEA 11)	05:35	06:13 (WEA 11)	06:28	07:20	07:17	08:09
	16:10	17:03	17:57	19:54	20:47	21:34	27	06:24 (WEA 11)	21:44	25	06:29 (WEA 11)	21:06	13	06:26 (WEA 11)	19:59
5	08:28	07:53	06:55	06:41	06:35	04:52	05:57 (WEA 11)	04:55	06:04 (WEA 11)	05:37	06:16 (WEA 11)	06:30	07:22	07:19	08:10
	16:12	17:05	17:59	19:55	20:49	21:35	27	06:24 (WEA 11)	21:43	26	06:30 (WEA 11)	21:04	06	06:22 (WEA 11)	19:57
6	08:28	07:52	06:53	06:39	06:33	04:51	05:58 (WEA 11)	04:55	06:04 (WEA 11)	05:38	06:31 (WEA 11)	06:30	07:23	07:21	08:12
	16:13	17:07	18:01	19:57	20:51	21:36	26	06:24 (WEA 11)	21:43	27	06:31 (WEA 11)	21:02	19	06:34 (WEA 11)	20:00
7	08:28	07:50	06:50	06:36	06:31	04:50	05:58 (WEA 11)	04:56	06:03 (WEA 11)	05:40	06:33 (WEA 11)	06:30	07:25	07:22	08:13
	16:14	17:09	18:03	20:01	20:54	21:37	26	06:24 (WEA 11)	21:42	27	06:30 (WEA 11)	21:00	19	06:34 (WEA 11)	20:00
8	08:27	07:48	06:48	06:34	06:30	06:05 (WEA 11)	04:50	05:59 (WEA 11)	04:57	06:03 (WEA 11)	05:42	06:35 (WEA 11)	06:30	07:27	07:24
	16:16	17:11	18:04	20:01	20:54	9	06:14 (WEA 11)	21:38	25	06:24 (WEA 11)	21:41	20:58	19	06:31 (WEA 11)	20:58
9	08:27	07:46	06:46	06:32	06:28	06:02 (WEA 11)	04:49	05:59 (WEA 11)	04:58	06:03 (WEA 11)	05:43	06:36 (WEA 11)	06:30	07:29	07:26
	16:17	17:13	18:06	20:03	20:56	15	06:17 (WEA 11)	21:39	24	06:23 (WEA 11)	21:41	20:58	19	06:31 (WEA 11)	20:56
10	08:26	07:44	06:43	06:29	06:26	05:59 (WEA 11)	04:49	05:59 (WEA 11)	05:48	06:03 (WEA 11)	05:45	06:38 (WEA 11)	06:30	07:30	07:28
	16:18	17:15	18:08	20:04	20:58	19	06:18 (WEA 11)	21:40	25	06:24 (WEA 11)	21:40	20:54	19	06:32 (WEA 11)	20:54
11	08:25	07:42	06:41	06:27	06:24	05:59 (WEA 11)	04:48	06:00 (WEA 11)	05:01	06:03 (WEA 11)	05:47	06:40 (WEA 11)	06:30	07:32	07:30
	16:20	17:16	18:10	20:06	20:59	21	06:20 (WEA 11)	21:40	24	06:24 (WEA 11)	21:39	20:52	19	06:32 (WEA 11)	20:52
12	08:25	07:40	06:39	06:25	06:22	05:57 (WEA 11)	04:48	06:00 (WEA 11)	05:02	06:03 (WEA 11)	05:48	06:42 (WEA 11)	06:30	07:34	07:32
	16:21	17:18	18:12	20:08	21:01	24	06:21 (WEA 11)	21:41	23	06:23 (WEA 11)	21:38	20:50	19	06:40 (WEA 11)	20:50
13	08:24	07:38	06:36	06:22	06:21	05:56 (WEA 11)	04:48	06:01 (WEA 11)	05:03	06:04 (WEA 11)	05:50	06:43 (WEA 11)	06:30	07:36	07:34
	16:23	17:20	18:14	20:10	21:03	25	06:21 (WEA 11)	21:42	22	06:23 (WEA 11)	21:37	20:48	19	06:34 (WEA 11)	20:48
14	08:23	07:36	06:34	06:20	06:19	05:56 (WEA 11)	04:47	06:01 (WEA 11)	05:04	06:03 (WEA 11)	05:52	06:45 (WEA 11)	06:30	07:38	07:36
	16:25	17:22	18:16	20:12	21:04	26	06:22 (WEA 11)	21:42	22	06:23 (WEA 11)	21:36	20:46	19	06:34 (WEA 11)	20:46
15	08:22	07:34	06:32	06:18	06:17	05:54 (WEA 11)	04:47	06:02 (WEA 11)	05:05	06:03 (WEA 11)	05:54	06:47 (WEA 11)	06:30	07:39	07:37
	16:26	17:24	18:17	20:13	21:06	28	06:22 (WEA 11)	21:43	22	06:24 (WEA 11)	21:35	20:44	19	06:34 (WEA 11)	20:44
16	08:21	07:32	06:29	06:16	06:16	05:54 (WEA 11)	04:47	06:02 (WEA 11)	05:07	06:03 (WEA 11)	05:55	06:48 (WEA 11)	06:30	07:41	07:39
	16:28	17:26	18:19	20:15	21:08	29	06:23 (WEA 11)	21:44	22	06:24 (WEA 11)	21:34	20:42	19	06:34 (WEA 11)	20:42
17	08:20	07:30	06:27	06:13	06:14	05:54 (WEA 11)	04:47	06:02 (WEA 11)	05:08	06:03 (WEA 11)	05:57	06:50 (WEA 11)	06:30	07:43	07:41
	16:30	17:28	18:21	20:17	21:09	30	06:24 (WEA 11)	21:44	22	06:24 (WEA 11)	21:33	20:40	19	06:34 (WEA 11)	20:40
18	08:19	07:28	06:24	06:11	06:13	05:54 (WEA 11)	04:47	06:03 (WEA 11)	05:09	06:02 (WEA 11)	05:59	06:52 (WEA 11)	06:30	07:45	07:43
	16:31	17:30	18:23	20:19	21:11	30	06:24 (WEA 11)	21:44	21	06:24 (WEA 11)	21:32	20:38	19	06:34 (WEA 11)	20:38
19	08:18	07:26	06:22	06:09	06:11	05:54 (WEA 11)	04:47	06:03 (WEA 11)	05:11	06:03 (WEA 11)	06:00	06:54 (WEA 11)	06:30	07:47	07:45
	16:33	17:32	18:25	20:21	21:12	31	06:25 (WEA 11)	21:45	21	06:24 (WEA 11)	21:30	20:35	19	06:35 (WEA 11)	20:35
20	08:17	07:24	06:20	06:07	06:10	05:53 (WEA 11)	04:47	06:03 (WEA 11)	05:12	06:03 (WEA 11)	06:02	06:55 (WEA 11)	06:30	07:49	07:46
	16:35	17:34	18:26	20:22	21:14	31	06:24 (WEA 11)	21:45	21	06:24 (WEA 11)	21:29	20:33	19	06:35 (WEA 11)	20:33
21	08:16	07:22	06:17	06:04	06:08	05:53 (WEA 11)	04:47	06:03 (WEA 11)	05:13	06:03 (WEA 11)	06:04	06:57 (WEA 11)	06:30	07:51	07:48
	16:36	17:36	18:28	20:24	21:15	32	06:25 (WEA 11)	21:45	21	06:24 (WEA 11)	21:28	20:31	19	06:35 (WEA 11)	20:31
22	08:15	07:20	06:15	06:02	06:07	05:53 (WEA 11)	04:47	06:04 (WEA 11)	05:15	06:04 (WEA 11)	06:06	06:59 (WEA 11)	06:30	07:52	07:50
	16:38	17:38	18:30	20:26	21:17	32	06:25 (WEA 11)	21:46	21	06:25 (WEA 11)	21:27	20:29	19	06:35 (WEA 11)	20:29
23	08:13	07:18	06:12	06:00	06:05	05:53 (WEA 11)	04:48	06:04 (WEA 11)	05:16	06:03 (WEA 11)	06:07	07:01 (WEA 11)	06:30	07:54	07:52
	16:40	17:40	18:32	20:28	21:18	32	06:25 (WEA 11)	21:46	21	06:25 (WEA 11)	21:25	20:27	19	06:35 (WEA 11)	20:27
24	08:12	07:15	06:10	05:58	06:04	05:54 (WEA 11)	04:48	06:04 (WEA 11)	05:18	06:03 (WEA 11)	06:09	07:02 (WEA 11)	06:30	07:56	07:53
	16:42	17:42	18:34	20:29	21:20	31	06:25 (WEA 11)	21:46	21	06:25 (WEA 11)	21:24	20:24	19	06:34 (WEA 11)	20:24
25	08:11	07:13	06:08	05:56	06:03	05:54 (WEA 11)	04:48	06:04 (WEA 11)	05:19	06:04 (WEA 11)	06:11	07:04 (WEA 11)	06:30	07:58	07:55
	16:44	17:44	18:36	20:31	21:21	32	06:26 (WEA 11)	21:46	21	06:25 (WEA 11)	21:22	20:22	19	06:35 (WEA 11)	20:22
26	08:09	07:11	06:05	05:53	06:02	05:53 (WEA 11)	04:49	06:04 (WEA 11)	05:21	06:04 (WEA 11)	06:12	07:06 (WEA 11)	06:30	07:57	07:57
	16:46	17:46	18:37	20:33	21:23	32	06:26 (WEA 11)	21:46	22	06:26 (WEA 11)	21:21	20:20	19	06:34 (WEA 11)	20:20
27	08:08	07:09	06:03	05:51	06:00	05:53 (WEA 11)	04:49	06:04 (WEA 11)	05:22	06:05 (WEA 11)	06:14	07:07 (WEA 11)	06:30	07:57	07:58
	16:47	17:47	18:39	20:35	21:24	32	06:26 (WEA 11)	21:46	22	06:26 (WEA 11)	21:19	20:18	19	06:34 (WEA 11)	20:18
28	08:06	07:06	06:00	05:49	06:04	05:54 (WEA 11)	04:49	06:04 (WEA 11)	05:24	06:05 (WEA 11)	06:16	07:09 (WEA 11)	06:30	07:57	07:58
	16:49	17:49	18:41	20:37	21:25	31	06:26 (WEA 11)	21:46	22	06:26 (WEA 11)	21:18	20:15	19	06:33 (WEA 11)	20:15
29	08:05		06:58	05:47	06:04	05:55 (WEA 11)	04:50	06:04 (WEA 11)	05:28	06:04 (WEA 11)	06:18	07:11 (WEA 11)	06:30	07:57	07:58
	16:51		19:43	20:38	21:27	30	06:26 (WEA 11)	21:45	22	06:26 (WEA 11)	21:16	20:13	19	06:33 (WEA 11)	20:13
30	08:03		06:56	05:45	06:04	05:55 (WEA 11)	04:51	06:04 (WEA 11)	05:27	06:06 (WEA 11)	06:19	07:13 (WEA 11)	06:30	07:57	07:58
	16:53		19:45	20:40	21:28	30	06:26 (WEA 11)	21:45	23	06:27 (WEA 11)	21:14	20:11	19	06:32 (WEA 11)	20:11
31	08:02		06:53		06:04	05:55 (WEA 11)		05:28		06:07 (WEA 11)	06:21		07:09		08:29
	16:55		19:46		21:29	30	06:26 (WEA 11)		25	06:32 (WEA 11)	21:08		16:47		16:06
Sonneneinstrahlung	253	275	367	419	491	506		509		458		382	330	262	237
astr.max.mögl.Beschattung					662	703		893		80					

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)



Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7
DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 072 - Krinitz, Lenzener Straße 2/3

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung

Die Windenergieanlage/n ist/sind immer in Betrieb

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember			
1	08:29	08:00	07:04	06:51	05:43		05:49 (WEA 11)	04:51	05:57 (WEA 11)	05:30	06:07 (WEA 11)	06:23	07:14	07:11	08:05
2	16:07	16:57	17:51	19:48	20:42	21:30	06:19 (WEA 11)	21:45	27	06:24 (WEA 11)	21:11	20:06	18:54	16:45	16:02
3	08:29	07:59	07:02	06:48	05:41	04:54	05:49 (WEA 11)	04:52	05:56 (WEA 11)	05:32	06:10 (WEA 11)	06:24	07:16	07:13	08:06
4	16:08	16:59	17:53	19:50	20:44	21:32	06:19 (WEA 11)	21:45	27	06:23 (WEA 11)	21:09	20:04	18:51	16:43	16:01
5	08:29	07:57	07:00	06:46	05:39	04:53	05:50 (WEA 11)	04:53	05:57 (WEA 11)	05:33	06:26	07:18	07:15	08:08	
6	16:09	17:01	17:55	19:52	20:45	21:33	06:20 (WEA 11)	21:44	27	06:24 (WEA 11)	21:07	20:01	18:49	16:41	16:00
7	08:29	07:55	06:57	06:44	05:37	04:53	05:50 (WEA 11)	04:54	05:57 (WEA 11)	05:35	06:28	07:20	07:17	08:09	
8	16:10	17:03	17:57	19:54	20:47	21:34	06:19 (WEA 11)	21:44	28	06:25 (WEA 11)	21:06	20:00	18:59	16:47	16:00
9	08:28	07:53	06:55	06:41	05:35	04:52	05:50 (WEA 11)	04:55	05:57 (WEA 11)	05:37	06:30	07:22	07:19	08:10	
10	16:12	17:05	17:59	19:55	20:49	21:35	06:19 (WEA 11)	21:43	28	06:25 (WEA 11)	21:04	19:57	18:44	16:37	15:59
11	08:28	07:52	06:53	06:39	05:33	04:51	05:51 (WEA 11)	04:55	05:57 (WEA 11)	05:38	06:31	07:23	07:21	08:12	
12	16:13	17:07	18:01	19:57	20:51	21:36	06:19 (WEA 11)	21:43	29	06:26 (WEA 11)	21:02	19:54	18:42	16:35	15:59
13	08:28	07:50	06:50	06:36	05:31	04:50	05:51 (WEA 11)	04:56	05:56 (WEA 11)	05:40	06:33	07:25	07:22	08:13	
14	16:14	17:09	18:03	19:59	20:52	21:37	06:19 (WEA 11)	21:42	29	06:25 (WEA 11)	21:00	19:52	18:40	16:34	15:58
15	08:27	07:48	06:48	06:34	05:30	04:50	05:52 (WEA 11)	04:57	05:56 (WEA 11)	05:42	06:35	07:27	07:24	08:14	
16	16:16	17:11	18:04	20:01	20:54	21:38	06:19 (WEA 11)	21:41	30	06:26 (WEA 11)	20:58	19:49	18:37	16:32	15:58
17	08:27	07:46	06:46	06:32	05:28	04:49	05:51 (WEA 11)	04:58	05:57 (WEA 11)	05:43	06:36	07:29	07:26	08:16	
18	16:17	17:13	18:06	20:03	20:56	21:39	06:19 (WEA 11)	21:41	29	06:26 (WEA 11)	20:56	19:47	18:35	16:30	15:58
19	08:26	07:44	06:43	06:29	05:26	04:49	05:52 (WEA 11)	04:59	05:57 (WEA 11)	05:45	06:38	07:30	07:28	08:17	
20	16:18	17:15	18:08	20:04	20:58	21:40	06:19 (WEA 11)	21:40	29	06:26 (WEA 11)	20:54	19:45	18:32	16:28	15:57
21	08:25	07:42	06:41	06:27	05:24	04:48	05:53 (WEA 11)	05:01	05:57 (WEA 11)	05:47	06:40	07:32	07:30	08:18	
22	16:20	17:17	18:10	20:06	20:59	21:40	06:19 (WEA 11)	21:39	30	06:27 (WEA 11)	20:52	19:42	18:30	16:27	15:57
23	08:25	07:40	06:39	06:25	05:22	04:48	05:56 (WEA 11)	05:02	05:56 (WEA 11)	05:48	06:42	07:34	07:32	08:19	
24	16:21	17:18	18:12	20:08	21:01	21:41	06:10 (WEA 11)	21:38	31	06:27 (WEA 11)	20:50	19:40	18:28	16:25	15:57
25	08:24	07:38	06:36	06:22	05:21	04:48	05:53 (WEA 11)	05:03	05:57 (WEA 11)	05:50	06:43	07:36	07:34	08:20	
26	16:23	17:20	18:14	20:10	21:03	21:42	06:11 (WEA 11)	21:37	31	06:28 (WEA 11)	20:48	19:37	18:26	16:23	15:57
27	08:23	07:36	06:34	06:20	05:19	04:47	05:53 (WEA 11)	05:04	05:57 (WEA 11)	05:52	06:45	07:38	07:36	08:21	
28	16:25	17:22	18:16	20:12	21:04	21:42	06:13 (WEA 11)	21:36	31	06:28 (WEA 11)	20:46	19:35	18:23	16:22	15:57
29	08:22	07:34	06:32	06:18	05:17	04:47	05:54 (WEA 11)	05:05	05:57 (WEA 11)	05:54	06:47	07:39	07:37	08:22	
30	16:26	17:24	18:17	20:13	21:06	21:43	06:14 (WEA 11)	21:35	31	06:28 (WEA 11)	20:44	19:33	18:21	16:20	15:57
31	08:21	07:32	06:29	06:16	05:16	04:47	05:51 (WEA 11)	05:07	05:57 (WEA 11)	05:55	06:48	07:41	07:39	08:23	
32	16:28	17:26	18:19	20:15	21:08	21:44	06:15 (WEA 11)	21:34	31	06:28 (WEA 11)	20:42	19:30	18:19	16:19	15:57
33	08:20	07:30	06:27	06:13	05:14	04:47	05:50 (WEA 11)	05:08	05:57 (WEA 11)	05:57	06:50	07:43	07:41	08:24	
34	16:30	17:28	18:21	20:17	21:09	21:44	06:16 (WEA 11)	21:33	31	06:28 (WEA 11)	20:40	19:28	18:16	16:17	15:57
35	08:19	07:28	06:24	06:11	05:13	04:47	05:49 (WEA 11)	05:09	05:57 (WEA 11)	05:59	06:52	07:45	07:43	08:24	
36	16:31	17:30	18:23	20:19	21:11	21:44	06:16 (WEA 11)	21:32	31	06:28 (WEA 11)	20:38	19:25	18:14	16:16	15:57
37	08:18	07:26	06:22	06:09	05:11	04:47	05:49 (WEA 11)	05:11	05:58 (WEA 11)	06:00	06:54	07:47	07:45	08:25	
38	16:33	17:32	18:25	20:21	21:12	21:45	06:17 (WEA 11)	21:30	30	06:28 (WEA 11)	20:35	19:23	18:12	16:15	15:58
39	08:17	07:24	06:20	06:07	05:10	04:47	05:48 (WEA 11)	05:12	05:58 (WEA 11)	06:02	06:55	07:48	07:46	08:26	
40	16:35	17:34	18:26	20:22	21:14	21:45	06:17 (WEA 11)	21:29	30	06:28 (WEA 11)	20:33	19:20	18:10	16:13	15:58
41	08:16	07:22	06:17	06:04	05:08	04:47	05:48 (WEA 11)	05:13	05:58 (WEA 11)	06:04	06:57	07:51	07:48	08:26	
42	16:36	17:36	18:28	20:24	21:15	21:45	06:17 (WEA 11)	21:28	30	06:28 (WEA 11)	20:31	19:18	18:08	16:12	15:58
43	08:15	07:20	06:15	06:02	05:07	04:47	05:48 (WEA 11)	05:15	05:59 (WEA 11)	06:06	06:59	07:52	07:50	08:27	
44	16:38	17:38	18:30	20:26	21:17	21:46	06:18 (WEA 11)	21:27	29	06:28 (WEA 11)	20:29	19:16	18:05	16:11	15:59
45	08:13	07:18	06:12	06:00	05:05	04:48	05:46 (WEA 11)	05:16	05:59 (WEA 11)	06:07	07:01	07:54	07:52	08:27	
46	16:40	17:40	18:32	20:28	21:18	21:46	06:18 (WEA 11)	21:25	29	06:28 (WEA 11)	20:27	19:13	18:03	16:10	15:59
47	08:12	07:15	06:10	05:58	05:04	04:48	05:48 (WEA 11)	05:18	05:59 (WEA 11)	06:09	07:02	07:56	07:53	08:28	
48	16:42	17:42	18:34	20:29	21:20	21:46	06:19 (WEA 11)	21:24	28	06:27 (WEA 11)	20:24	19:11	18:01	16:08	16:00
49	08:11	07:13	06:08	05:56	05:03	04:48	05:48 (WEA 11)	05:19	06:00 (WEA 11)	06:11	07:04	07:58	07:55	08:28	
50	16:44	17:44	18:36	20:31	21:21	21:46	06:19 (WEA 11)	21:22	27	06:27 (WEA 11)	20:22	19:08	18:00	16:07	16:01
51	08:09	07:11	06:05	05:53	05:02	04:49	05:48 (WEA 11)	05:21	06:00 (WEA 11)	06:12	07:06	07:50	07:57	08:29	
52	16:46	17:46	18:37	20:33	21:23	21:46	06:18 (WEA 11)	21:21	26	06:26 (WEA 11)	20:20	19:06	18:00	16:06	16:01
53	08:08	07:09	06:03	05:51	05:00	04:49	05:48 (WEA 11)	05:22	06:01 (WEA 11)	06:14	07:07	07:52	07:58	08:29	
54	16:47	17:47	18:39	20:35	21:24	21:46	06:18 (WEA 11)	21:19	25	06:26 (WEA 11)	20:18	19:03	18:00	16:05	16:02
55	08:06	07:06	06:00	05:49	04:59	04:49	05:48 (WEA 11)	05:24	06:01 (WEA 11)	06:16	07:09	07:54	07:59	08:29	
56	16:49	17:49	18:41	20:37	21:25	21:46	06:19 (WEA 11)	21:18	24	06:25 (WEA 11)	20:15	19:01	18:00	16:04	16:03
57	08:05	07:05	06:00	05:47	04:58	04:49	05:49 (WEA 11)	05:25	06:03 (WEA 11)	06:18	07:11	07:05	07:08	08:29	
58	16:51	17:51	18:43	20:38	21:27	21:45	06:20 (WEA 11)	21:16	22	06:25 (WEA 11)	20:13	18:59	18:01	16:04	16:04
59	08:03	07:03	06:00	05:45	04:57	04:49	05:49 (WEA 11)	05:27	06:04 (WEA 11)	06:19	07:13	07:07	07:08	08:29	
60	16:53	17:53	18:45	20:40	21:28	21:45	06:19 (WEA 11)	21:14	19	06:23 (WEA 11)	20:11	18:56	18:00	16:03	16:05
61	08:02	07:02	06:00	05:43	04:56	04:49	05:49 (WEA 11)	05:28	06:05 (WEA 11)	06:21	07:09	07:09	07:09	08:29	
62	16:55	17:55	18:46	20:41	21:29	21:45	06:19 (WEA 11)	21:13	17	06:22 (WEA 11)	20:08	18:47	18:00	16:06	16:06
Sonneneinstrahlung	253	275	367	419	491	506	509	458	382	330	262	237			
astr.max.mögl.Beschattung					551	793	866	20							

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 073 - Krinitz, Lenzener Straße 4

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

		Januar	Februar	März	April	Mai		Juni		Juli		August	September	Oktober	November	Dezember		
1	08:29	08:00	07:04	06:51	05:43			04:55		05:41 (WEA 11)	04:51		05:47 (WEA 11)	05:30	06:23	07:14	07:11	08:05
	16:07	16:57	17:51	19:48	20:42			21:30	31	06:12 (WEA 11)	21:45	31	06:18 (WEA 11)	21:11	20:06	18:54	16:45	16:02
2	08:29	07:59	07:02	06:48	05:41			04:54		05:41 (WEA 11)	04:52		05:47 (WEA 11)	05:32	06:24	07:16	07:13	08:06
	16:08	16:59	17:53	19:50	20:44			21:32	31	06:12 (WEA 11)	21:45	31	06:18 (WEA 11)	21:09	20:04	18:51	16:43	16:01
3	08:29	07:57	07:00	06:46	05:39			04:53		05:41 (WEA 11)	04:53		05:47 (WEA 11)	05:33	06:26	07:18	07:15	08:08
	16:09	17:01	17:55	19:52	20:45			21:33	32	06:13 (WEA 11)	21:44	31	06:18 (WEA 11)	21:07	20:01	18:49	16:41	16:00
4	08:29	07:55	06:57	06:44	05:37			04:53		05:41 (WEA 11)	04:54		05:47 (WEA 11)	05:35	06:28	07:20	07:17	08:09
	16:10	17:03	17:57	19:54	20:47			21:34	32	06:13 (WEA 11)	21:44	32	06:19 (WEA 11)	21:06	19:59	18:47	16:39	16:00
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	16:12	17:05	17:59	19:55	20:49			21:35	32	06:13 (WEA 11)	21:43	31	06:19 (WEA 11)	21:04	19:57	18:44	16:37	15:59
6	08:28	07:52	06:53	06:39	05:33			04:51		05:42 (WEA 11)	04:55		05:48 (WEA 11)	05:38	06:31	07:23	07:21	08:12
	16:13	17:07	18:01	19:57	20:51			21:36	31	06:13 (WEA 11)	21:43	32	06:20 (WEA 11)	21:02	19:54	18:42	16:35	15:59
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	16:25	17:22	18:16	20:12	21:04			21:42	31	06:14 (WEA 11)	21:36	30	06:20 (WEA 11)	20:46	19:35	18:23	16:22	15:57
15	08:22	07:34	06:32	06:18	05:17			04:47		05:44 (WEA 11)	05:05		05:50 (WEA 11)	05:54	06:47	07:39	07:37	08:22
	16:26	17:24	18:17	20:13	21:06			21:43	31	06:15 (WEA 11)	21:35	30	06:20 (WEA 11)	20:44	19:33	18:21	16:20	15:57
16	08:21	07:32	06:29	06:16	05:16		05:52 (WEA 11)	04:47		05:44 (WEA 11)	05:07		05:50 (WEA 11)	05:55	06:48	07:41	07:39	08:23
	16:28	17:26	18:19	20:15	21:08	6	05:58 (WEA 11)	21:44		06:15 (WEA 11)	21:34	30	06:20 (WEA 11)	20:42	19:30	18:19	16:19	15:57
17	08:20	07:30	06:27	06:13	05:14		05:50 (WEA 11)	04:47		05:44 (WEA 11)	05:08		05:50 (WEA 11)	05:57	06:50	07:43	07:41	08:24
	16:30	17:28	18:21	20:17	21:09	12	06:02 (WEA 11)	21:44		06:15 (WEA 11)	21:33	29	06:19 (WEA 11)	20:40	19:28	18:16	16:17	15:57
18	08:19	07:28	06:24	06:11	05:13		05:47 (WEA 11)	04:47		05:44 (WEA 11)	05:09		05:51 (WEA 11)	05:59	06:52	07:45	07:43	08:24
	16:31	17:30	18:23	20:19	21:11	16	06:03 (WEA 11)	21:44		06:15 (WEA 11)	21:32	28	06:19 (WEA 11)	20:38	19:25	18:14	16:16	15:57
19	08:18	07:26	06:22	06:09	05:11		05:46 (WEA 11)	04:47		05:44 (WEA 11)	05:11		05:52 (WEA 11)	06:00	06:54	07:47	07:45	08:25
	16:33	17:32	18:25	20:21	21:12	19	06:05 (WEA 11)	21:45	31	06:15 (WEA 11)	21:30	27	06:19 (WEA 11)	20:35	19:23	18:12	16:13	15:58
20	08:17	07:24	06:20	06:07	05:10		05:44 (WEA 11)	04:47		05:45 (WEA 11)	05:12		05:52 (WEA 11)	06:02	06:55	07:48	07:46	08:26
	16:35	17:34	18:26	20:22	21:14	21	06:05 (WEA 11)	21:45	30	06:15 (WEA 11)	21:29	26	06:18 (WEA 11)	20:33	19:20	18:10	16:13	15:58
21	08:16	07:22	06:17	06:04	05:08		05:44 (WEA 11)	04:47		05:45 (WEA 11)	05:13		05:53 (WEA 11)	06:04	06:57	07:51	07:48	08:26
	16:36	17:36	18:28	20:24	21:15	23	06:07 (WEA 11)	21:45	30	06:15 (WEA 11)	21:28	25	06:18 (WEA 11)	20:31	19:18	18:08	16:12	15:58
22	08:15	07:20	06:15	06:02	05:07		05:43 (WEA 11)	04:47		05:46 (WEA 11)	05:15		05:54 (WEA 11)	06:06	06:59	07:52	07:50	08:27
	16:38	17:38	18:30	20:26	21:17	25	06:08 (WEA 11)	21:46	30	06:16 (WEA 11)	21:27	24	06:18 (WEA 11)	20:29	19:16	18:05	16:11	15:59
23	08:13	07:18	06:12	06:00	05:05		05:43 (WEA 11)	04:48		05:45 (WEA 11)	05:16		05:54 (WEA 11)	06:07	07:01	07:54	07:52	08:27
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24	08:12	07:15	06:10	05:58	05:04		05:43 (WEA 11)	04:48		05:45 (WEA 11)	05:18		05:55 (WEA 11)	06:09	07:02	07:56	07:53	08:28
	16:42	17:42	18:34	20:29	21:20	26	06:09 (WEA 11)	21:46	31	06:16 (WEA 11)	21:24	20	06:15 (WEA 11)	20:24	19:11	18:01	16:08	16:00
25	08:11	07:13	06:08	05:56	05:03		05:42 (WEA 11)	04:48		05:45 (WEA 11)	05:19		05:57 (WEA 11)	06:11	07:04	07:58	07:55	08:28
	16:44	17:44	18:36	20:31	21:21	28	06:10 (WEA 11)	21:46	31	06:16 (WEA 11)	21:22	18	06:15 (WEA 11)	20:22	19:08	18:59	16:07	16:01
26	08:09	07:11	06:05	05:53	05:02		05:41 (WEA 11)	04:49		05:46 (WEA 11)	05:21		05:58 (WEA 11)	06:12	07:06	07:00	07:57	08:29
	16:46	17:46	18:37	20:33	21:23	28	06:09 (WEA 11)	21:46	31	06:17 (WEA 11)	21:21	15	06:13 (WEA 11)	20:20	19:06	16:57	16:06	16:01
27	08:08	07:09	06:03	05:51	05:00		05:41 (WEA 11)	04:49		05:46 (WEA 11)	05:22		06:01 (WEA 11)	06:14	07:07	07:02	07:58	08:29
	16:47	17:47	18:39	20:35	21:24	29	06:10 (WEA 11)	21:46	31	06:17 (WEA 11)	21:19	10	06:11 (WEA 11)	20:18	19:03	16:55	16:05	16:02
28	08:06	07:06	06:00	05:49	04:59		05:41 (WEA 11)	04:50		05:46 (WEA 11)	05:24		06:16	07:09	07:04	08:00	08:00	08:29
	16:49	17:49	18:41	20:37	21:25	29	06:10 (WEA 11)	21:46	31	06:17 (WEA 11)	21:18		20:15	19:01	16:53	16:04	16:03	
29	08:05		06:58	05:47	04:58		05:41 (WEA 11)	04:50		05:46 (WEA 11)	05:25		06:18	07:11	07:05	08:02	08:02	08:29
	16:51		19:43	20:38	21:27	31	06:12 (WEA 11)	21:45	31	06:17 (WEA 11)	21:16		20:13	18:59	16:51	16:04	16:04	
30	08:03		06:56	05:45	04:57		05:41 (WEA 11)	04:51		05:45 (WEA 11)	05:27		06:17	07:13	07:07	08:03	08:03	08:29
	16:53		19:45	20:40	21:28	31	06:12 (WEA 11)	21:45	31	06:18 (WEA 11)	21:14		20:11	18:56	16:49	16:03	16:05	
31	08:02		06:53		04:56		05:41 (WEA 11)				05:28		06:21		07:09	08:29	08:29	
	16:55		19:46		21:29	31	06:12 (WEA 11)				21:13		20:08		16:47	16:06	16:06	
Sonnenscheinstunden		253	275	367	419	491		506		509		739	458	382	330	262	237	
astr.max.mögl.Beschattung						380		934										

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 074 - Krinitz, Lenzener Straße 6

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

		Januar	Februar	März	April	Mai		Juni		Juli		August	September	Oktober	November	Dezember
1	08:29	08:00	07:04	06:51	05:43			04:55	05:45 (WEA 11)	04:51	05:53 (WEA 11)	05:30	06:23	07:14	07:11	08:05
	16:07	16:57	17:51	19:48	20:42			21:30	28 06:13 (WEA 11)	21:45	25 06:18 (WEA 11)	21:11	20:06	18:54	16:45	16:02
2	08:29	07:59	07:02	06:48	05:41			04:54	05:45 (WEA 11)	04:52	05:53 (WEA 11)	05:32	06:24	07:16	07:13	08:06
	16:08	16:59	17:53	19:50	20:44			21:32	28 06:13 (WEA 11)	21:45	25 06:18 (WEA 11)	21:09	20:04	18:51	16:43	16:01
3	08:29	07:57	07:00	06:46	05:39			04:53	05:46 (WEA 11)	04:53	05:53 (WEA 11)	05:33	06:26	07:18	07:15	08:08
	16:09	17:01	17:55	19:52	20:45			21:33	28 06:14 (WEA 11)	21:44	25 06:18 (WEA 11)	21:07	20:01	18:49	16:41	16:00
4	08:29	07:55	06:57	06:44	05:37			04:54	05:46 (WEA 11)	04:54	05:53 (WEA 11)	05:35	06:28	07:20	07:17	08:09
	16:10	17:03	17:57	19:54	20:47			21:34	28 06:14 (WEA 11)	21:44	26 06:19 (WEA 11)	21:06	19:59	18:47	16:39	16:00
5	08:28	07:53	06:55	06:41	05:35			04:52	05:46 (WEA 11)	04:55	05:53 (WEA 11)	05:37	06:30	07:22	07:19	08:10
	16:12	17:05	17:59	19:55	20:49			21:35	27 06:13 (WEA 11)	21:43	26 06:19 (WEA 11)	21:04	19:57	18:44	16:37	15:59
6	08:28	07:52	06:53	06:39	05:33			04:51	05:47 (WEA 11)	04:55	05:53 (WEA 11)	05:38	06:31	07:23	07:21	08:12
	16:13	17:07	18:01	19:57	20:51			21:36	27 06:14 (WEA 11)	21:43	27 06:20 (WEA 11)	21:02	19:54	18:42	16:35	15:59
7	08:28	07:50	06:50	06:36	05:31			04:50	05:47 (WEA 11)	04:56	05:53 (WEA 11)	05:40	06:33	07:25	07:22	08:13
	16:14	17:09	18:03	19:59	20:52			21:37	26 06:13 (WEA 11)	21:42	26 06:19 (WEA 11)	21:00	19:52	18:40	16:34	15:58
8	08:27	07:48	06:48	06:34	05:30			04:50	05:48 (WEA 11)	04:57	05:53 (WEA 11)	05:42	06:35	07:27	07:24	08:14
	16:16	17:11	18:04	20:01	20:54			21:38	26 06:14 (WEA 11)	21:41	27 06:20 (WEA 11)	20:58	19:49	18:37	16:32	15:58
9	08:27	07:46	06:46	06:32	05:28			04:49	05:47 (WEA 11)	04:58	05:53 (WEA 11)	05:43	06:36	07:29	07:26	08:16
	16:17	17:13	18:06	20:03	20:56			21:39	26 06:13 (WEA 11)	21:41	27 06:20 (WEA 11)	20:56	19:47	18:35	16:30	15:58
10	08:26	07:44	06:43	06:29	05:26			04:49	05:48 (WEA 11)	04:59	05:53 (WEA 11)	05:45	06:38	07:30	07:28	08:17
	16:18	17:15	18:08	20:04	20:58			21:40	25 06:13 (WEA 11)	21:40	27 06:20 (WEA 11)	20:54	19:45	18:32	16:28	15:57
11	08:25	07:42	06:41	06:27	05:24			04:48	05:49 (WEA 11)	05:01	05:53 (WEA 11)	05:47	06:40	07:32	07:30	08:18
	16:20	17:17	18:10	20:06	20:59			21:40	25 06:14 (WEA 11)	21:39	28 06:21 (WEA 11)	20:52	19:42	18:30	16:27	15:57
12	08:25	07:40	06:39	06:25	05:22		05:56 (WEA 11)	04:48	05:49 (WEA 11)	05:02	05:53 (WEA 11)	05:48	06:42	07:34	07:32	08:19
	16:21	17:18	18:12	20:08	21:01	4	06:00 (WEA 11)	21:41	24 06:13 (WEA 11)	21:38	28 06:21 (WEA 11)	20:50	19:40	18:28	16:25	15:57
13	08:24	07:38	06:36	06:22	05:21		05:52 (WEA 11)	04:48	05:49 (WEA 11)	05:03	05:54 (WEA 11)	05:50	06:43	07:36	07:34	08:20
	16:23	17:20	18:14	20:10	21:03	11	06:03 (WEA 11)	21:42	24 06:13 (WEA 11)	21:37	28 06:22 (WEA 11)	20:48	19:37	18:26	16:23	15:57
14	08:23	07:36	06:34	06:20	05:19		05:50 (WEA 11)	04:48	05:50 (WEA 11)	05:04	05:54 (WEA 11)	05:52	06:45	07:38	07:36	08:21
	16:25	17:22	18:16	20:12	21:04	16	06:06 (WEA 11)	21:42	24 06:14 (WEA 11)	21:36	28 06:22 (WEA 11)	20:46	19:35	18:23	16:22	15:57
15	08:22	07:34	06:32	06:18	05:17		05:48 (WEA 11)	04:47	05:50 (WEA 11)	05:05	05:54 (WEA 11)	05:54	06:47	07:40	07:37	08:22
	16:26	17:24	18:17	20:13	21:06	19	06:07 (WEA 11)	21:43	24 06:14 (WEA 11)	21:35	28 06:22 (WEA 11)	20:44	19:33	18:21	16:20	15:57
16	08:21	07:32	06:29	06:16	05:16		05:48 (WEA 11)	04:47	05:50 (WEA 11)	05:07	05:53 (WEA 11)	05:55	06:48	07:41	07:39	08:23
	16:28	17:26	18:19	20:15	21:08	20	06:08 (WEA 11)	21:44	24 06:14 (WEA 11)	21:34	29 06:22 (WEA 11)	20:42	19:30	18:19	16:19	15:57
17	08:20	07:30	06:27	06:13	05:14		05:47 (WEA 11)	04:47	05:51 (WEA 11)	05:08	05:53 (WEA 11)	05:57	06:50	07:43	07:41	08:24
	16:30	17:28	18:21	20:17	21:09	23	06:10 (WEA 11)	21:44	23 06:14 (WEA 11)	21:33	29 06:22 (WEA 11)	20:40	19:28	18:16	16:17	15:57
18	08:19	07:28	06:24	06:11	05:13		05:46 (WEA 11)	04:47	05:51 (WEA 11)	05:09	05:53 (WEA 11)	05:59	06:52	07:45	07:43	08:24
	16:31	17:30	18:23	20:19	21:11	24	06:10 (WEA 11)	21:44	23 06:14 (WEA 11)	21:32	29 06:22 (WEA 11)	20:38	19:25	18:14	16:16	15:57
19	08:18	07:26	06:22	06:09	05:11		05:46 (WEA 11)	04:47	05:51 (WEA 11)	05:11	05:54 (WEA 11)	06:00	06:54	07:47	07:45	08:25
	16:33	17:32	18:25	20:21	21:12	25	06:11 (WEA 11)	21:45	23 06:14 (WEA 11)	21:30	28 06:22 (WEA 11)	20:35	19:23	18:12	16:15	15:58
20	08:17	07:24	06:20	06:07	05:10		05:45 (WEA 11)	04:47	05:51 (WEA 11)	05:12	05:54 (WEA 11)	06:02	06:55	07:48	07:46	08:26
	16:35	17:34	18:26	20:22	21:14	25	06:10 (WEA 11)	21:45	23 06:14 (WEA 11)	21:29	28 06:22 (WEA 11)	20:33	19:20	18:10	16:13	15:58
21	08:16	07:22	06:17	06:04	05:08		05:45 (WEA 11)	04:47	05:51 (WEA 11)	05:13	05:54 (WEA 11)	06:04	06:57	07:51	07:48	08:26
	16:36	17:36	18:28	20:24	21:15	26	06:11 (WEA 11)	21:45	23 06:14 (WEA 11)	21:28	28 06:22 (WEA 11)	20:31	19:18	18:08	16:12	15:58
22	08:15	07:20	06:15	06:02	05:07		05:45 (WEA 11)	04:47	05:52 (WEA 11)	05:15	05:55 (WEA 11)	06:06	06:59	07:52	07:50	08:27
	16:38	17:38	18:30	20:26	21:17	27	06:12 (WEA 11)	21:46	23 06:15 (WEA 11)	21:27	27 06:22 (WEA 11)	20:29	19:16	18:05	16:11	15:59
23	08:13	07:18	06:12	06:00	05:05		05:45 (WEA 11)	04:48	05:52 (WEA 11)	05:16	05:55 (WEA 11)	06:07	07:01	07:54	07:52	08:27
	16:40	17:40	18:32	20:28	21:18	27	06:12 (WEA 11)	21:46	23 06:15 (WEA 11)	21:25	26 06:21 (WEA 11)	20:27	19:13	18:03	16:10	15:59
24	08:12	07:15	06:10	05:58	05:04		05:45 (WEA 11)	04:48	05:52 (WEA 11)	05:18	05:55 (WEA 11)	06:09	07:02	07:56	07:53	08:28
	16:42	17:42	18:34	20:29	21:20	28	06:13 (WEA 11)	21:46	23 06:15 (WEA 11)	21:24	26 06:21 (WEA 11)	20:24	19:11	18:01	16:09	16:00
25	08:11	07:13	06:08	05:56	05:03		05:45 (WEA 11)	04:48	05:53 (WEA 11)	05:19	05:57 (WEA 11)	06:11	07:04	07:58	07:55	08:28
	16:44	17:44	18:36	20:31	21:21	28	06:13 (WEA 11)	21:46	23 06:16 (WEA 11)	21:21	24 06:21 (WEA 11)	20:22	19:08	18:59	16:07	16:01
26	08:09	07:11	06:05	05:53	05:02		05:44 (WEA 11)	04:49	05:53 (WEA 11)	05:21	05:57 (WEA 11)	06:12	07:06	07:00	07:57	08:29
	16:46	17:46	18:37	20:33	21:23	28	06:12 (WEA 11)	21:46	23 06:16 (WEA 11)	21:21	23 06:20 (WEA 11)	20:20	19:06	16:57	16:06	16:01
27	08:08	07:09	06:03	05:51	05:00		05:44 (WEA 11)	04:49	05:52 (WEA 11)	05:22	05:58 (WEA 11)	06:14	07:07	07:02	07:58	08:29
	16:47	17:47	18:39	20:35	21:24	29	06:13 (WEA 11)	21:46	24 06:16 (WEA 11)	21:19	22 06:20 (WEA 11)	20:18	19:03	16:55	16:05	16:02
28	08:06	07:06	06:00	05:49	04:59		05:44 (WEA 11)	04:50	05:53 (WEA 11)	05:24	05:59 (WEA 11)	06:16	07:09	07:04	08:00	08:29
	16:49	17:49	18:41	20:37	21:25	29	06:13 (WEA 11)	21:46	24 06:17 (WEA 11)	21:18	19 06:18 (WEA 11)	20:15	19:01	16:53	16:04	16:03
29	08:05		06:58	05:47	04:58		05:45 (WEA 11)	04:50	05:52 (WEA 11)	05:25	06:00 (WEA 11)	06:18	07:11	07:05	08:02	08:29
	16:51		19:43	20:38	21:27	29	06:14 (WEA 11)	21:45	24 06:16 (WEA 11)	21:16	18 06:18 (WEA 11)	20:13	18:59	16:51	16:04	16:04
30	08:03		06:56	05:45	04:57		05:45 (WEA 11)	04:51	05:53 (WEA 11)	05:27	06:01 (WEA 11)	06:19	07:13	07:07	08:03	08:29
	16:53		19:45	20:40	21:28	29	06:14 (WEA 11)	21:45	24 06:17 (WEA 11)	21:14	14 06:15 (WEA 11)	20:11	18:56	16:49	16:03	16:05
31	08:02		06:53		04:56		05:45 (WEA 11)			05:28	06:04 (WEA 11)	06:21		07:09		08:29
	16:55		19:46		21:29	29	06:14 (WEA 11)			21:13	10 06:14 (WEA 11)	20:08		16:47		16:06
Sonnenscheinstunden		253		367		491		506		509		458	382	330	262	237
astr.max.mögl.Beschattung						476		740		781						

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 075 - Krinitz, Lenzener Straße 8

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

		Januar	Februar	März	April	Mai		Juni		Juli		August	September	Oktober	November	Dezember		
1	08:29	08:00	07:04	06:51	05:43		04:55	05:40 (WEA 11)	04:51	05:47 (WEA 11)	05:30	06:23	07:14	07:11	08:05			
	16:07	16:57	17:51	19:48	20:42		21:30	29 06:09 (WEA 11)	21:45	28 06:15 (WEA 11)	21:11	20:06	18:54	16:45	16:02			
2	08:29	07:59	07:02	06:48	05:41		04:54	05:40 (WEA 11)	04:52	05:47 (WEA 11)	05:32	06:24	07:16	07:13	08:06			
	16:08	16:59	17:53	19:50	20:44		21:32	29 06:09 (WEA 11)	21:45	27 06:14 (WEA 11)	21:09	20:04	18:51	16:43	16:01			
3	08:29	07:57	07:00	06:46	05:39		04:53	05:41 (WEA 11)	04:53	05:47 (WEA 11)	05:33	06:26	07:18	07:15	08:08			
	16:09	17:01	17:55	19:52	20:45		21:33	29 06:10 (WEA 11)	21:44	28 06:15 (WEA 11)	21:07	20:01	18:49	16:41	16:00			
4	08:29	07:55	06:57	06:44	05:37		04:53	05:41 (WEA 11)	04:54	05:47 (WEA 11)	05:35	06:28	07:20	07:17	08:09			
	16:10	17:03	17:57	19:54	20:47		21:34	29 06:10 (WEA 11)	21:44	28 06:15 (WEA 11)	21:06	19:59	18:47	16:39	16:00			
5	08:28	07:53	06:55	06:41	05:35		04:52	05:41 (WEA 11)	04:55	05:48 (WEA 11)	05:37	06:30	07:22	07:19	08:10			
	16:12	17:05	17:59	19:55	20:49		21:35	28 06:09 (WEA 11)	21:43	28 06:16 (WEA 11)	21:04	19:57	18:44	16:37	15:59			
6	08:28	07:52	06:53	06:39	05:33		04:51	05:41 (WEA 11)	04:55	05:48 (WEA 11)	05:38	06:31	07:23	07:21	08:12			
	16:13	17:07	18:01	19:57	20:51		21:36	29 06:10 (WEA 11)	21:43	28 06:16 (WEA 11)	21:02	19:54	18:42	16:35	15:59			
7	08:28	07:50	06:50	06:36	05:31		04:50	05:41 (WEA 11)	04:56	05:47 (WEA 11)	05:40	06:33	07:25	07:22	08:13			
	16:14	17:09	18:03	19:59	20:52		21:37	29 06:10 (WEA 11)	21:42	29 06:16 (WEA 11)	21:00	19:52	18:40	16:34	15:58			
8	08:27	07:48	06:48	06:34	05:30		04:50	05:42 (WEA 11)	04:57	05:47 (WEA 11)	05:42	06:35	07:27	07:24	08:14			
	16:16	17:11	18:04	20:01	20:54		21:38	28 06:10 (WEA 11)	21:41	29 06:16 (WEA 11)	20:58	19:49	18:37	16:32	15:58			
9	08:27	07:46	06:46	06:32	05:28		04:49	05:42 (WEA 11)	04:58	05:47 (WEA 11)	05:43	06:36	07:29	07:26	08:16			
	16:17	17:13	18:06	20:03	20:56		21:39	28 06:10 (WEA 11)	21:41	29 06:16 (WEA 11)	20:56	19:47	18:35	16:30	15:58			
10	08:26	07:44	06:43	06:29	05:26		04:49	05:42 (WEA 11)	04:59	05:48 (WEA 11)	05:45	06:38	07:30	07:28	08:17			
	16:18	17:15	18:08	20:04	20:58		21:40	28 06:10 (WEA 11)	21:40	28 06:16 (WEA 11)	20:54	19:45	18:32	16:28	15:57			
11	08:25	07:42	06:41	06:27	05:24		04:48	05:43 (WEA 11)	05:01	05:48 (WEA 11)	05:47	06:40	07:32	07:30	08:18			
	16:20	17:17	18:10	20:06	20:59		21:40	28 06:11 (WEA 11)	21:39	28 06:16 (WEA 11)	20:52	19:42	18:30	16:27	15:57			
12	08:25	07:40	06:39	06:25	05:22		04:48	05:42 (WEA 11)	05:02	05:48 (WEA 11)	05:48	06:42	07:34	07:32	08:19			
	16:21	17:18	18:12	20:08	21:01		21:41	28 06:10 (WEA 11)	21:38	29 06:17 (WEA 11)	20:50	19:40	18:28	16:25	15:57			
13	08:24	07:38	06:36	06:22	05:21		04:48	05:43 (WEA 11)	05:03	05:49 (WEA 11)	05:50	06:43	07:36	07:34	08:20			
	16:23	17:20	18:14	20:10	21:03		21:42	27 06:10 (WEA 11)	21:37	29 06:18 (WEA 11)	20:48	19:37	18:26	16:23	15:57			
14	08:23	07:36	06:34	06:20	05:19		04:48	05:43 (WEA 11)	05:04	05:49 (WEA 11)	05:52	06:45	07:38	07:36	08:21			
	16:25	17:22	18:16	20:12	21:04		21:42	28 06:11 (WEA 11)	21:36	28 06:17 (WEA 11)	20:46	19:35	18:23	16:22	15:57			
15	08:22	07:34	06:32	06:18	05:17		04:47	05:44 (WEA 11)	05:05	05:49 (WEA 11)	05:54	06:47	07:39	07:37	08:22			
	16:26	17:24	18:17	20:13	21:06	4	05:55 (WEA 11)	21:43	27 06:11 (WEA 11)	21:35	28 06:17 (WEA 11)	20:44	19:33	18:21	16:20	15:57		
16	08:21	07:32	06:29	06:16	05:16		05:48 (WEA 11)	04:47	05:07	05:49 (WEA 11)	05:55	06:48	07:41	07:39	08:23			
	16:28	17:26	18:19	20:15	21:08	11	05:59 (WEA 11)	21:44	27 06:11 (WEA 11)	21:34	28 06:17 (WEA 11)	20:42	19:30	18:19	16:19	15:57		
17	08:20	07:30	06:27	06:13	05:14		05:46 (WEA 11)	04:47	05:08	05:49 (WEA 11)	05:57	06:50	07:43	07:41	08:24			
	16:30	17:28	18:21	20:17	21:09	15	06:01 (WEA 11)	21:44	27 06:11 (WEA 11)	21:33	28 06:17 (WEA 11)	20:40	19:28	18:16	16:17	15:57		
18	08:19	07:28	06:24	06:11	05:13		05:44 (WEA 11)	04:47	05:09	05:49 (WEA 11)	05:59	06:52	07:45	07:43	08:24			
	16:31	17:30	18:23	20:19	21:11	18	06:02 (WEA 11)	21:44	26 06:11 (WEA 11)	21:32	27 06:16 (WEA 11)	20:38	19:25	18:14	16:16	15:57		
19	08:18	07:26	06:22	06:09	05:11		05:44 (WEA 11)	04:47	05:11	05:51 (WEA 11)	06:00	06:54	07:47	07:45	08:25			
	16:33	17:32	18:25	20:21	21:12	20	06:04 (WEA 11)	21:45	26 06:11 (WEA 11)	21:30	26 06:17 (WEA 11)	20:35	19:23	18:12	16:15	15:58		
20	08:17	07:24	06:20	06:07	05:10		05:45 (WEA 11)	04:47	05:12	05:51 (WEA 11)	06:02	06:55	07:48	07:46	08:26			
	16:35	17:34	18:26	20:22	21:14	22	06:04 (WEA 11)	21:45	27 06:12 (WEA 11)	21:29	25 06:16 (WEA 11)	20:33	19:20	18:10	16:13	15:58		
21	08:16	07:22	06:17	06:04	05:08		05:42 (WEA 11)	04:47	05:13	05:51 (WEA 11)	06:04	06:57	07:51	07:48	08:26			
	16:36	17:36	18:28	20:24	21:15	23	06:05 (WEA 11)	21:45	27 06:12 (WEA 11)	21:28	25 06:16 (WEA 11)	20:31	19:18	18:08	16:12	15:58		
22	08:15	07:20	06:15	06:02	05:07		05:42 (WEA 11)	04:47	05:15	05:52 (WEA 11)	06:06	06:59	07:52	07:50	08:27			
	16:38	17:38	18:30	20:26	21:17	24	06:06 (WEA 11)	21:46	27 06:13 (WEA 11)	21:27	24 06:16 (WEA 11)	20:29	19:16	18:05	16:11	15:59		
23	08:13	07:18	06:12	06:00	05:05		05:41 (WEA 11)	04:48	05:16	05:53 (WEA 11)	06:07	07:01	07:54	07:52	08:27			
	16:40	17:40	18:32	20:28	21:18	25	06:06 (WEA 11)	21:46	26 06:12 (WEA 11)	21:25	22 06:15 (WEA 11)	20:27	19:13	18:03	16:10	15:59		
24	08:12	07:15	06:10	05:58	05:04		05:41 (WEA 11)	04:48	05:18	05:53 (WEA 11)	06:09	07:02	07:56	07:53	08:28			
	16:42	17:42	18:34	20:29	21:20	26	06:07 (WEA 11)	21:46	26 06:12 (WEA 11)	21:24	21 06:14 (WEA 11)	20:24	19:11	18:01	16:09	16:00		
25	08:11	07:13	06:08	05:56	05:03		05:41 (WEA 11)	04:48	05:19	05:55 (WEA 11)	06:11	07:04	07:58	07:55	08:28			
	16:44	17:44	18:36	20:31	21:21	27	06:08 (WEA 11)	21:46	27 06:13 (WEA 11)	21:22	18 06:13 (WEA 11)	20:22	19:08	18:59	16:07	16:01		
26	08:09	07:11	06:05	05:53	05:02		05:40 (WEA 11)	04:49	05:21	05:56 (WEA 11)	06:12	07:06	07:00	07:57	08:29			
	16:46	17:46	18:37	20:33	21:23	27	06:07 (WEA 11)	21:46	27 06:13 (WEA 11)	21:21	17 06:12 (WEA 11)	20:20	19:06	16:57	16:06	16:01		
27	08:08	07:09	06:03	05:51	05:00		05:40 (WEA 11)	04:49	05:22	05:58 (WEA 11)	06:14	07:07	07:02	07:58	08:29			
	16:47	17:47	18:39	20:35	21:24	27	06:07 (WEA 11)	21:46	27 06:13 (WEA 11)	21:19	13 06:11 (WEA 11)	20:18	19:03	16:55	16:05	16:02		
28	08:06	07:06	06:00	05:49	04:59		05:40 (WEA 11)	04:50	05:24	05:59 (WEA 11)	06:16	07:09	07:04	08:00	08:29			
	16:49	17:49	18:41	20:37	21:25	28	06:08 (WEA 11)	21:46	27 06:14 (WEA 11)	21:18	9 06:08 (WEA 11)	20:15	19:01	16:53	16:04	16:03		
29	08:05		06:58	05:47	04:58		05:41 (WEA 11)	04:50	05:25			06:18	07:11	07:05	08:02	08:29		
	16:51		19:43	20:38	21:27	28	06:09 (WEA 11)	21:45	27 06:13 (WEA 11)	21:16		20:13	18:59	16:51	16:04	16:04		
30	08:03		06:56	05:45	04:57		05:40 (WEA 11)	04:51	05:27			06:19	07:13	07:07	08:03	08:29		
	16:53		19:45	20:40		29	06:09 (WEA 11)	21:45	27 06:14 (WEA 11)	21:14		20:11	18:56	16:49	16:03	16:05		
31	08:02		06:53		04:56		05:40 (WEA 11)		05:28			06:21		07:09	08:29			
	16:55		19:46		21:29	29	06:09 (WEA 11)		21:13			20:08		16:47	16:06			
Sonnenscheinstunden		253		367		419		491		506		509		458	382	330	262	237
astr.max.mögl.Beschattung						383				825								

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
	Minuten mit Schatten	

Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 076 - Krinitz, Lenzener Straße 9

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

		Januar	Februar	März	April	Mai		Juni		Juli		August	September	Oktober	November	Dezember			
1	08:29	08:00	07:04	06:51	05:43			04:55		05:37 (WEA 11)	04:51		05:42 (WEA 11)	05:30	06:23	07:14	07:11	08:05	
	16:07	16:57	17:51	19:48	20:42			21:30	28	06:05 (WEA 11)	21:45	29	06:11 (WEA 11)	21:11	20:06	18:54	16:45	16:02	
2	08:29	07:59	07:02	06:48	05:41			04:54		05:36 (WEA 11)	04:52		05:42 (WEA 11)	05:32	06:24	07:16	07:13	08:06	
	16:08	16:59	17:53	19:50	20:44			21:32	29	06:05 (WEA 11)	21:45	29	06:11 (WEA 11)	21:09	20:04	18:51	16:43	16:01	
3	08:29	07:57	07:00	06:46	05:39			04:53		05:37 (WEA 11)	04:53		05:42 (WEA 11)	05:33	06:26	07:18	07:15	08:08	
	16:09	17:01	17:55	19:52	20:45			21:33	29	06:06 (WEA 11)	21:44	29	06:11 (WEA 11)	21:07	20:01	18:49	16:41	16:00	
4	08:29	07:55	06:57	06:44	05:37			04:53		05:37 (WEA 11)	04:54		05:43 (WEA 11)	05:35	06:28	07:20	07:17	08:09	
	16:10	17:03	17:57	19:54	20:47			21:34	28	06:05 (WEA 11)	21:44	29	06:12 (WEA 11)	21:06	19:59	18:47	16:39	16:00	
5	08:28	07:53	06:55	06:41	05:35			04:52		05:37 (WEA 11)	04:55		05:43 (WEA 11)	05:37	06:30	07:22	07:19	08:10	
	16:12	17:05	17:59	19:55	20:49			21:35	28	06:05 (WEA 11)	21:43	29	06:12 (WEA 11)	21:04	19:57	18:44	16:37	15:59	
6	08:28	07:52	06:53	06:39	05:33			04:51		05:37 (WEA 11)	04:55		05:44 (WEA 11)	05:38	06:31	07:23	07:21	08:12	
	16:13	17:07	18:01	19:57	20:51			21:36	29	06:06 (WEA 11)	21:43	28	06:12 (WEA 11)	21:02	19:54	18:42	16:35	15:59	
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9	08:27	07:46	06:46	06:32	05:28			04:49		05:37 (WEA 11)	04:58		05:43 (WEA 11)	05:43	06:36	07:29	07:26	08:16	
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	16:18	17:15	18:08	20:04	20:58			21:40	29	06:07 (WEA 11)	21:40	28	06:12 (WEA 11)	20:54	19:45	18:32	16:28	15:57	
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14	08:23	07:36	06:34	06:20	05:19			04:48		05:39 (WEA 11)	05:04		05:46 (WEA 11)	05:52	06:45	07:38	07:36	08:21	
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24	08:12	07:15	06:10	05:58	05:04			04:48		05:41 (WEA 11)	05:18		05:53 (WEA 11)	06:09	07:02	07:56	07:53	08:28	
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27	08:08	07:09	06:03	05:51	05:00			04:49		05:41 (WEA 11)	05:22		05:51 (WEA 11)	06:11	07:07	07:59	07:57	08:29	
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28	08:06	07:06	06:00	05:49	04:59			04:50		05:42 (WEA 11)	05:24		05:42 (WEA 11)	06:11	07:09	07:59	07:57	08:29	
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29	08:05		06:58	05:47	04:58			04:50		05:41 (WEA 11)	05:25		05:41 (WEA 11)	06:11	07:11	07:05	07:03	08:29	
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30	08:03		06:56	05:45	04:57			04:51		05:42 (WEA 11)	05:27		05:42 (WEA 11)	06:11	07:13	07:07	07:05	08:29	
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31	08:02		06:53		04:56			04:50		05:37 (WEA 11)			05:28		06:21		07:09	08:29	
	16:55		19:46		21:29	27	06:04 (WEA 11)			05:37 (WEA 11)			05:28		20:08		16:47	16:06	
Sonnenscheinstunden		253		367		419		491		506		509		458	382	330	262	237	
astr.max.mögl.Beschattung						294				854		623							

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 077 - Krinitz, Lenzener Straße 7

Annahmen für Schattenwurfberechnung

- Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:
- Die Sonne scheint täglich von Sonnenauf- bis -untergang
 - Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlung
 - Die Windenergieanlage/n ist/sind immer in Betrieb

	[Januar	[Februar	[März	[April	[Mai	[Juni	[Juli	[August	[September	Oktober	November	Dezember			
1	08:29 16:07	08:00 16:57	07:04 17:51	06:51 19:48	05:43 20:42	04:55 21:30	05:49 (WEA 11) 06:15 (WEA 11)	04:51 21:45	05:58 (WEA 11) 06:18 (WEA 11)	05:30 21:11	06:04 (WEA 11) 06:18 (WEA 11)	06:23 20:06	07:14 18:54	07:11 16:45	08:05 16:02
2	08:29 16:08	07:59 16:59	07:02 17:53	06:48 19:50	05:41 20:44	04:54 21:32	05:49 (WEA 11) 06:15 (WEA 11)	04:52 21:45	05:57 (WEA 11) 06:18 (WEA 11)	05:32 21:09	06:07 (WEA 11) 06:16 (WEA 11)	06:24 20:04	07:16 18:51	07:13 16:43	08:06 16:01
3	08:29 16:09	07:57 17:01	07:00 17:55	06:46 19:52	05:39 20:45	04:53 21:33	05:50 (WEA 11) 06:15 (WEA 11)	04:53 21:44	05:57 (WEA 11) 06:19 (WEA 11)	05:33 21:07	06:06 (WEA 11) 06:21 (WEA 11)	06:25 21:00	07:18 18:49	07:15 16:41	08:08 16:00
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26	08:09 16:46	07:11 17:46	06:05 18:37	05:53 20:33	05:02 21:23	04:49 21:46	05:47 (WEA 11) 06:16 (WEA 11)	05:21 21:21	05:58 (WEA 11) 06:24 (WEA 11)	06:12 20:20	07:06 (WEA 11) 06:56 (WEA 11)	07:06 20:20	07:59 18:00	07:57 16:06	08:29 16:01
27	08:08 16:47	07:09 17:47	06:03 18:39	05:51 20:35	05:00 21:24	04:49 21:46	05:47 (WEA 11) 06:16 (WEA 11)	05:22 21:19	05:59 (WEA 11) 06:24 (WEA 11)	06:14 20:18	07:07 (WEA 11) 06:57 (WEA 11)	07:07 20:18	07:59 18:00	07:58 16:05	08:29 16:02
28	08:06 16:49	07:06 17:49	06:00 18:41	05:49 20:37	04:59 21:25	04:49 21:46	05:47 (WEA 11) 06:17 (WEA 11)	05:24 21:18	05:59 (WEA 11) 06:23 (WEA 11)	06:16 20:15	07:09 (WEA 11) 06:59 (WEA 11)	07:09 20:15	07:59 18:00	07:58 16:04	08:29 16:03
29	08:05 16:51	07:05 17:51	05:58 18:43	05:47 20:38	04:58 21:27	04:50 21:45	05:48 (WEA 11) 06:17 (WEA 11)	05:25 21:16	05:57 (WEA 11) 06:22 (WEA 11)	06:18 20:13	07:11 (WEA 11) 07:01 (WEA 11)	07:11 20:13	07:59 18:00	07:57 16:04	08:29 16:04
30	08:03 16:53	07:03 17:53	05:56 18:45	05:45 20:40	04:57 21:28	04:51 21:45	05:48 (WEA 11) 06:17 (WEA 11)	05:27 21:14	05:58 (WEA 11) 06:21 (WEA 11)	06:19 20:11	07:13 (WEA 11) 07:03 (WEA 11)	07:13 20:11	07:59 18:00	07:58 16:03	08:29 16:05
31	08:02 16:55	07:02 17:55	05:53 18:46	04:56 21:29	04:56 21:29	04:56 21:29	05:49 (WEA 11) 06:15 (WEA 11)	05:28 21:13	06:03 (WEA 11) 06:20 (WEA 11)	06:21 20:08	07:14 (WEA 11) 07:04 (WEA 11)	07:14 20:08	07:59 18:00	07:58 16:06	08:29 16:06
Sonnenscheinstunden	253	275	367	419	491	506	509	458	382	330	262	237			
astr.max.mögl.Beschattung					523	603	768	23							

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 078 - Krinitz, Lenzener Straße 10

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

		Januar	Februar	März	April	Mai		Juni		Juli		August	September	Oktober	November	Dezember
1	08:29	08:00	07:04	06:51	05:43		04:55	05:37 (WEA 11)	04:51	05:43 (WEA 11)	05:30	06:23	07:14	07:11	08:05	
	16:07	16:57	17:51	19:48	20:42		21:30	28 06:05 (WEA 11)	21:45	28 06:11 (WEA 11)	21:11	20:06	18:54	16:45	16:02	
2	08:29	07:59	07:02	06:48	05:41		04:54	05:37 (WEA 11)	04:52	05:43 (WEA 11)	05:32	06:24	07:16	07:13	08:06	
	16:08	16:59	17:53	19:50	20:44		21:32	28 06:05 (WEA 11)	21:45	28 06:11 (WEA 11)	21:09	20:04	18:51	16:43	16:01	
3	08:29	07:57	07:00	06:46	05:39		04:53	05:38 (WEA 11)	04:53	05:43 (WEA 11)	05:33	06:26	07:18	07:15	08:08	
	16:09	17:01	17:55	19:52	20:45		21:33	28 06:06 (WEA 11)	21:44	28 06:11 (WEA 11)	21:07	20:01	18:49	16:41	16:00	
4	08:29	07:55	06:57	06:44	05:37		04:53	05:37 (WEA 11)	04:54	05:44 (WEA 11)	05:35	06:28	07:20	07:17	08:09	
	16:10	17:03	17:57	19:54	20:47		21:34	29 06:06 (WEA 11)	21:44	28 06:12 (WEA 11)	21:06	19:59	18:47	16:39	16:00	
5	08:28	07:53	06:55	06:41	05:35		04:52	05:37 (WEA 11)	04:55	05:44 (WEA 11)	05:37	06:30	07:22	07:19	08:10	
	16:12	17:05	17:59	19:55	20:49		21:35	28 06:05 (WEA 11)	21:43	28 06:12 (WEA 11)	21:04	19:57	18:44	16:37	15:59	
6	08:28	07:52	06:53	06:39	05:33		04:51	05:38 (WEA 11)	04:55	05:44 (WEA 11)	05:38	06:31	07:23	07:21	08:12	
	16:13	17:07	18:01	19:57	20:51		21:36	28 06:06 (WEA 11)	21:43	28 06:12 (WEA 11)	21:02	19:54	18:42	16:35	15:59	
7	08:28	07:50	06:50	06:36	05:31		04:50	05:38 (WEA 11)	04:56	05:44 (WEA 11)	05:40	06:33	07:25	07:22	08:13	
	16:14	17:09	18:03	19:59	20:52		21:37	28 06:06 (WEA 11)	21:42	28 06:12 (WEA 11)	21:00	19:52	18:40	16:34	15:58	
8	08:27	07:48	06:48	06:34	05:30		04:50	05:38 (WEA 11)	04:57	05:44 (WEA 11)	05:42	06:35	07:27	07:24	08:14	
	16:16	17:11	18:04	20:01	20:54		21:38	28 06:06 (WEA 11)	21:41	28 06:12 (WEA 11)	20:58	19:49	18:37	16:32	15:58	
9	08:27	07:46	06:46	06:32	05:28		04:49	05:38 (WEA 11)	04:58	05:44 (WEA 11)	05:43	06:36	07:29	07:26	08:16	
	16:17	17:13	18:06	20:03	20:56		21:39	28 06:06 (WEA 11)	21:41	28 06:12 (WEA 11)	20:56	19:47	18:35	16:30	15:57	
10	08:26	07:44	06:43	06:29	05:26		04:49	05:39 (WEA 11)	04:59	05:44 (WEA 11)	05:45	06:38	07:30	07:28	08:17	
	16:18	17:15	18:08	20:04	20:58		21:40	27 06:06 (WEA 11)	21:40	28 06:12 (WEA 11)	20:54	19:45	18:32	16:28	15:57	
11	08:25	07:42	06:41	06:27	05:24		04:48	05:39 (WEA 11)	05:01	05:44 (WEA 11)	05:47	06:40	07:32	07:30	08:18	
	16:20	17:17	18:10	20:06	20:59		21:40	28 06:07 (WEA 11)	21:39	28 06:12 (WEA 11)	20:52	19:42	18:30	16:27	15:57	
12	08:25	07:40	06:39	06:25	05:22		04:48	05:39 (WEA 11)	05:02	05:45 (WEA 11)	05:48	06:42	07:34	07:32	08:19	
	16:21	17:18	18:12	20:08	21:01		21:41	27 06:06 (WEA 11)	21:38	27 06:12 (WEA 11)	20:50	19:40	18:28	16:25	15:57	
13	08:24	07:38	06:36	06:22	05:21		04:48	05:39 (WEA 11)	05:03	05:46 (WEA 11)	05:50	06:43	07:36	07:34	08:20	
	16:23	17:20	18:14	20:10	21:03		21:42	28 06:07 (WEA 11)	21:37	27 06:13 (WEA 11)	20:48	19:37	18:26	16:23	15:57	
14	08:23	07:36	06:34	06:20	05:19		04:48	05:40 (WEA 11)	05:04	05:46 (WEA 11)	05:52	06:45	07:38	07:36	08:21	
	16:25	17:22	18:16	20:12	21:04		21:42	27 06:07 (WEA 11)	21:36	27 06:13 (WEA 11)	20:46	19:35	18:23	16:22	15:57	
15	08:22	07:34	06:32	06:18	05:17		04:47	05:40 (WEA 11)	05:05	05:46 (WEA 11)	05:54	06:47	07:40	07:37	08:22	
	16:26	17:24	18:17	20:13	21:06		21:43	27 06:07 (WEA 11)	21:35	27 06:13 (WEA 11)	20:44	19:33	18:21	16:20	15:57	
16	08:21	07:32	06:29	06:16	05:16		04:47	05:40 (WEA 11)	05:07	05:46 (WEA 11)	05:55	06:48	07:41	07:39	08:23	
	16:28	17:26	18:19	20:15	21:08		21:44	27 06:07 (WEA 11)	21:34	26 06:12 (WEA 11)	20:42	19:30	18:19	16:19	15:57	
17	08:20	07:30	06:27	06:13	05:14	05:49 (WEA 11)	04:47	05:40 (WEA 11)	05:08	05:47 (WEA 11)	05:57	06:50	07:43	07:41	08:24	
	16:30	17:28	18:21	20:17	21:09	3 05:52 (WEA 11)	21:44	28 06:08 (WEA 11)	21:33	25 06:12 (WEA 11)	20:40	19:28	18:16	16:17	15:57	
18	08:19	07:28	06:24	06:11	05:13	05:44 (WEA 11)	04:47	05:41 (WEA 11)	05:09	05:47 (WEA 11)	05:59	06:52	07:45	07:43	08:24	
	16:31	17:30	18:23	20:19	21:11	11 05:55 (WEA 11)	21:44	27 06:08 (WEA 11)	21:32	25 06:12 (WEA 11)	20:38	19:25	18:14	16:16	15:57	
19	08:18	07:26	06:22	06:09	05:11	05:43 (WEA 11)	04:47	05:41 (WEA 11)	05:11	05:48 (WEA 11)	06:00	06:54	07:47	07:45	08:25	
	16:33	17:32	18:25	20:21	21:12	14 05:57 (WEA 11)	21:45	27 06:08 (WEA 11)	21:30	24 06:12 (WEA 11)	20:35	19:23	18:12	16:15	15:58	
20	08:17	07:24	06:20	06:07	05:10	05:47 (WEA 11)	04:47	05:41 (WEA 11)	05:12	05:48 (WEA 11)	06:02	06:55	07:49	07:46	08:26	
	16:35	17:34	18:26	20:22	21:14	17 05:59 (WEA 11)	21:45	27 06:08 (WEA 11)	21:29	23 06:11 (WEA 11)	20:33	19:20	18:10	16:13	15:58	
21	08:16	07:22	06:17	06:04	05:08	05:40 (WEA 11)	04:47	05:41 (WEA 11)	05:13	05:49 (WEA 11)	06:04	06:57	07:51	07:48	08:26	
	16:36	17:36	18:28	20:24	21:15	19 05:59 (WEA 11)	21:45	27 06:08 (WEA 11)	21:28	21 06:10 (WEA 11)	20:31	19:18	18:08	16:12	15:58	
22	08:15	07:20	06:15	06:02	05:07	05:39 (WEA 11)	04:47	05:42 (WEA 11)	05:15	05:50 (WEA 11)	06:06	06:59	07:52	07:50	08:27	
	16:38	17:38	18:30	20:26	21:17	21 06:00 (WEA 11)	21:46	27 06:09 (WEA 11)	21:27	20 06:10 (WEA 11)	20:29	19:16	18:05	16:11	15:59	
23	08:13	07:18	06:12	06:00	05:05	05:39 (WEA 11)	04:48	05:42 (WEA 11)	05:16	05:51 (WEA 11)	06:07	07:01	07:54	07:52	08:27	
	16:40	17:40	18:32	20:28	21:18	22 06:01 (WEA 11)	21:46	27 06:09 (WEA 11)	21:25	18 06:09 (WEA 11)	20:27	19:13	18:03	16:10	15:59	
24	08:12	07:15	06:10	05:58	05:04	05:39 (WEA 11)	04:48	05:42 (WEA 11)	05:18	05:52 (WEA 11)	06:09	07:02	07:56	07:53	08:28	
	16:42	17:42	18:34	20:29	21:20	23 06:02 (WEA 11)	21:46	27 06:09 (WEA 11)	21:24	16 06:08 (WEA 11)	20:24	19:11	18:01	16:09	16:00	
25	08:11	07:13	06:08	05:56	05:03	05:38 (WEA 11)	04:48	05:43 (WEA 11)	05:19	05:54 (WEA 11)	06:11	07:04	07:58	07:55	08:28	
	16:44	17:44	18:36	20:31	21:21	25 06:03 (WEA 11)	21:46	27 06:10 (WEA 11)	21:21	13 06:07 (WEA 11)	20:22	19:08	18:59	16:07	16:01	
26	08:09	07:11	06:05	05:53	05:02	05:37 (WEA 11)	04:49	05:42 (WEA 11)	05:21	05:56 (WEA 11)	06:12	07:06	07:00	07:57	08:29	
	16:46	17:46	18:37	20:33	21:23	25 06:02 (WEA 11)	21:46	28 06:10 (WEA 11)	21:21	8 06:04 (WEA 11)	20:20	19:06	16:57	16:06	16:01	
27	08:08	07:09	06:03	05:51	05:00	05:37 (WEA 11)	04:49	05:42 (WEA 11)	05:22		06:14	07:07	07:02	07:58	08:29	
	16:47	17:47	18:39	20:35	21:24	26 06:03 (WEA 11)	21:46	27 06:09 (WEA 11)	21:19		20:18	19:03	16:55	16:05	16:02	
28	08:06	07:06	06:00	05:49	04:59	05:37 (WEA 11)	04:50	05:43 (WEA 11)	05:24		06:16	07:09	07:04	08:00	08:29	
	16:49	17:49	18:41	20:37	21:25	26 06:03 (WEA 11)	21:46	27 06:10 (WEA 11)	21:18		20:15	19:01	16:53	16:04	16:03	
29	08:05		06:58	05:47	04:58	05:38 (WEA 11)	04:50	05:42 (WEA 11)	05:25		06:18	07:11	07:05	08:02	08:29	
	16:51		19:43	20:38	21:27	26 06:04 (WEA 11)	21:45	28 06:10 (WEA 11)	21:16		20:13	18:59	16:51	16:04	16:04	
30	08:03		06:56	05:45	04:57	05:37 (WEA 11)	04:51	05:43 (WEA 11)	05:27		06:19	07:13	07:07	08:03	08:29	
	16:53		19:45	20:40	21:28	28 06:05 (WEA 11)	21:45	27 06:10 (WEA 11)	21:14		20:11	18:56	16:49	16:03	16:05	
31	08:02		06:53		04:56	05:37 (WEA 11)		05:43 (WEA 11)			06:21		07:09		08:29	
	16:55		19:46		21:29	28 06:05 (WEA 11)		21:13			20:08		16:47		16:06	
Sonnenscheinstunden	253	275	367	419	491		506		509		458	382	330	262	237	
astr.max.mögl.Beschattung						314	825		635							

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

0146-Steesow

Beschreibung:

Die enosite GmbH übernimmt huerfür keine Gewähr.

Lizenzierter Anwender:

enosite GmbH

Straße am Zeltplatz 7

DE-18230 Ostseebad Rerik

+49(0)38296 747 400

Katharina Rusch / katharina.rusch@eno-site.com

Berechnet:

08.01.2024 13:28/3.6.366



SHADOW - Kalender

Berechnung: Steesow | V2 | ZB | BA1 & BA2 | 8x eno160-6.0 | 165 m NH Schattenrezeptor: IO 079 - Krinitz, Lenzener Straße 11

Annahmen für Schattenwurfberechnung

Die dargestellten Zeiten sind die astronomisch maximal mögliche Beschattungsdauer, berechnet unter folgenden Annahmen:

Die Sonne scheint täglich von Sonnenauf- bis -untergang

Die Rotorfläche steht immer senkrecht zur Sonneneinstrahlungsrichtung

Die Windenergieanlage/n ist/sind immer in Betrieb

		Januar	Februar	März	April	Mai		Juni		Juli		August	September	Oktober	November	Dezember
1	08:29	08:00	07:04	06:51	05:43		04:55	05:34 (WEA 11)	04:51	05:40 (WEA 11)	05:30	06:23	07:14	07:11	08:05	
	16:07	16:57	17:51	19:48	20:42		21:30	27 06:01 (WEA 11)	21:45	28 06:08 (WEA 11)	21:11	20:06	18:54	16:45	16:02	
2	08:29	07:59	07:02	06:48	05:41		04:54	05:34 (WEA 11)	04:52	05:39 (WEA 11)	05:32	06:24	07:16	07:13	08:06	
	16:08	16:59	17:53	19:50	20:44		21:32	27 06:01 (WEA 11)	21:45	28 06:07 (WEA 11)	21:09	20:04	18:51	16:43	16:01	
3	08:29	07:57	07:00	06:46	05:39		04:53	05:35 (WEA 11)	04:53	05:40 (WEA 11)	05:33	06:26	07:18	07:15	08:08	
	16:09	17:01	17:55	19:52	20:45		21:33	27 06:02 (WEA 11)	21:44	28 06:08 (WEA 11)	21:07	20:01	18:49	16:41	16:00	
4	08:29	07:55	06:57	06:44	05:37		04:53	05:34 (WEA 11)	04:54	05:40 (WEA 11)	05:35	06:28	07:20	07:17	08:09	
	16:10	17:03	17:57	19:54	20:47		21:34	28 06:02 (WEA 11)	21:44	28 06:08 (WEA 11)	21:06	19:59	18:47	16:39	16:00	
5	08:28	07:53	06:55	06:41	05:35		04:52	05:34 (WEA 11)	04:55	05:40 (WEA 11)	05:37	06:30	07:22	07:19	08:10	
	16:12	17:05	17:59	19:55	20:49		21:35	27 06:01 (WEA 11)	21:43	28 06:08 (WEA 11)	21:04	19:57	18:44	16:37	15:59	
6	08:28	07:52	06:53	06:39	05:33		04:51	05:35 (WEA 11)	04:55	05:41 (WEA 11)	05:38	06:31	07:23	07:21	08:12	
	16:13	17:07	18:01	19:57	20:51		21:36	27 06:02 (WEA 11)	21:43	28 06:09 (WEA 11)	21:02	19:54	18:42	16:35	15:59	
7	08:28	07:50	06:50	06:36	05:31		04:51	05:34 (WEA 11)	04:56	05:40 (WEA 11)	05:40	06:33	07:25	07:22	08:13	
	16:14	17:09	18:03	19:59	20:52		21:37	28 06:02 (WEA 11)	21:42	28 06:08 (WEA 11)	21:00	19:52	18:40	16:34	15:58	
8	08:27	07:48	06:48	06:34	05:30		04:50	05:35 (WEA 11)	04:57	05:41 (WEA 11)	05:42	06:35	07:27	07:24	08:14	
	16:16	17:11	18:04	20:01	20:54		21:38	28 06:03 (WEA 11)	21:41	27 06:08 (WEA 11)	20:58	19:49	18:37	16:32	15:58	
9	08:27	07:46	06:46	06:32	05:28		04:49	05:34 (WEA 11)	04:58	05:41 (WEA 11)	05:43	06:36	07:29	07:26	08:16	
	16:17	17:13	18:06	20:03	20:56		21:39	28 06:02 (WEA 11)	21:41	27 06:08 (WEA 11)	20:56	19:47	18:35	16:30	15:57	
10	08:26	07:44	06:43	06:29	05:26		04:49	05:35 (WEA 11)	04:59	05:41 (WEA 11)	05:45	06:38	07:30	07:28	08:17	
	16:18	17:15	18:08	20:04	20:58		21:40	28 06:03 (WEA 11)	21:40	27 06:08 (WEA 11)	20:54	19:45	18:32	16:28	15:57	
11	08:25	07:42	06:41	06:27	05:24		04:48	05:35 (WEA 11)	05:01	05:41 (WEA 11)	05:47	06:40	07:32	07:30	08:18	
	16:20	17:17	18:10	20:06	20:59		21:40	28 06:03 (WEA 11)	21:39	27 06:08 (WEA 11)	20:52	19:42	18:30	16:27	15:57	
12	08:25	07:40	06:39	06:25	05:22		04:48	05:35 (WEA 11)	05:02	05:42 (WEA 11)	05:48	06:42	07:34	07:32	08:19	
	16:21	17:18	18:12	20:08	21:01		21:41	28 06:03 (WEA 11)	21:38	26 06:08 (WEA 11)	20:50	19:40	18:28	16:25	15:57	
13	08:24	07:38	06:36	06:22	05:21		04:48	05:35 (WEA 11)	05:03	05:43 (WEA 11)	05:50	06:43	07:36	07:34	08:20	
	16:23	17:20	18:14	20:10	21:03		21:42	28 06:03 (WEA 11)	21:37	26 06:09 (WEA 11)	20:48	19:37	18:26	16:23	15:57	
14	08:23	07:36	06:34	06:20	05:19		04:48	05:36 (WEA 11)	05:04	05:43 (WEA 11)	05:52	06:45	07:38	07:36	08:21	
	16:25	17:22	18:16	20:12	21:04		21:42	28 06:04 (WEA 11)	21:36	26 06:09 (WEA 11)	20:46	19:35	18:23	16:22	15:57	
15	08:22	07:34	06:32	06:18	05:17		04:47	05:36 (WEA 11)	05:05	05:44 (WEA 11)	05:54	06:47	07:40	07:37	08:22	
	16:26	17:24	18:17	20:13	21:06		21:43	28 06:04 (WEA 11)	21:35	24 06:08 (WEA 11)	20:44	19:33	18:21	16:20	15:57	
16	08:21	07:32	06:29	06:16	05:16		04:47	05:36 (WEA 11)	05:07	05:44 (WEA 11)	05:55	06:48	07:41	07:39	08:23	
	16:28	17:26	18:19	20:15	21:08		21:44	28 06:04 (WEA 11)	21:34	24 06:08 (WEA 11)	20:42	19:30	18:19	16:19	15:57	
17	08:20	07:30	06:27	06:13	05:14		04:47	05:37 (WEA 11)	05:08	05:44 (WEA 11)	05:57	06:50	07:43	07:41	08:24	
	16:30	17:28	18:21	20:17	21:09		21:44	27 06:04 (WEA 11)	21:33	23 06:07 (WEA 11)	20:40	19:28	18:16	16:17	15:57	
18	08:19	07:28	06:24	06:11	05:13		04:47	05:37 (WEA 11)	05:09	05:45 (WEA 11)	05:59	06:52	07:45	07:43	08:24	
	16:31	17:30	18:23	20:19	21:11		21:44	28 06:05 (WEA 11)	21:32	21 06:06 (WEA 11)	20:38	19:25	18:14	16:16	15:57	
19	08:18	07:26	06:22	06:09	05:11		04:47	05:37 (WEA 11)	05:11	05:46 (WEA 11)	06:00	06:54	07:47	07:45	08:25	
	16:33	17:32	18:25	20:21	21:12		21:45	28 06:05 (WEA 11)	21:30	21 06:07 (WEA 11)	20:35	19:23	18:12	16:15	15:58	
20	08:17	07:24	06:20	06:07	05:10	05:42 (WEA 11)	04:47	05:37 (WEA 11)	05:12	21 05:47 (WEA 11)	06:02	06:55	07:49	07:46	08:26	
	16:35	17:34	18:26	20:22	21:14	9 05:51 (WEA 11)	21:45	28 06:05 (WEA 11)	21:29	19 06:06 (WEA 11)	20:33	19:20	18:10	16:13	15:58	
21	08:16	07:22	06:17	06:04	05:08	05:40 (WEA 11)	04:47	05:37 (WEA 11)	05:13	05:48 (WEA 11)	06:04	06:57	07:51	07:48	08:26	
	16:36	17:36	18:28	20:24	21:15	12 05:52 (WEA 11)	21:45	28 06:05 (WEA 11)	21:28	16 06:04 (WEA 11)	20:31	19:18	18:08	16:12	15:58	
22	08:15	07:20	06:15	06:02	05:07	05:38 (WEA 11)	04:47	05:38 (WEA 11)	05:15	05:50 (WEA 11)	06:06	06:59	07:52	07:50	08:27	
	16:38	17:38	18:30	20:26	21:17	16 05:54 (WEA 11)	21:46	28 06:06 (WEA 11)	21:27	14 06:04 (WEA 11)	20:29	19:16	18:05	16:11	15:59	
23	08:13	07:18	06:12	06:00	05:05	05:38 (WEA 11)	04:48	05:38 (WEA 11)	05:16	05:51 (WEA 11)	06:07	07:01	07:54	07:52	08:27	
	16:40	17:40	18:32	20:28	21:18	17 05:55 (WEA 11)	21:46	28 06:06 (WEA 11)	21:25	11 06:02 (WEA 11)	20:27	19:13	18:03	16:10	15:59	
24	08:12	07:15	06:10	05:58	05:04	05:37 (WEA 11)	04:48	05:38 (WEA 11)	05:18	05:53 (WEA 11)	06:09	07:02	07:56	07:53	08:28	
	16:42	17:42	18:34	20:29	21:20	20 05:57 (WEA 11)	21:46	28 06:06 (WEA 11)	21:24	6 05:59 (WEA 11)	20:24	19:11	18:01	16:09	16:00	
25	08:11	07:13	06:08	05:56	05:03	05:36 (WEA 11)	04:48	05:39 (WEA 11)	05:19	05:59 (WEA 11)	06:11	07:04	07:58	07:55	08:28	
	16:44	17:44	18:36	20:31	21:21	22 05:58 (WEA 11)	21:46	27 06:06 (WEA 11)	21:22	20:22	19:08	18:59	16:59	16:07	16:01	
26	08:09	07:11	06:05	05:53	05:02	05:35 (WEA 11)	04:49	05:38 (WEA 11)	05:21	05:58 (WEA 11)	06:12	07:06	07:00	07:57	08:29	
	16:46	17:46	18:37	20:33	21:23	22 05:57 (WEA 11)	21:46	28 06:06 (WEA 11)	21:21	20:20	19:06	16:57	16:06	16:01		
27	08:08	07:09	06:03	05:51	05:00	05:35 (WEA 11)	04:49	05:38 (WEA 11)	05:22	05:58 (WEA 11)	06:14	07:07	07:02	07:58	08:29	
	16:47	17:47	18:39	20:35	21:24	23 05:58 (WEA 11)	21:46	28 06:06 (WEA 11)	21:19	20:18	19:03	16:55	16:05	16:02		
28	08:06	07:06	06:00	05:49	04:59	05:34 (WEA 11)	04:50	05:39 (WEA 11)	05:24	05:59 (WEA 11)	06:16	07:09	07:04	08:00	08:29	
	16:49	17:49	18:41	20:37	21:25	24 05:58 (WEA 11)	21:46	28 06:07 (WEA 11)	21:18	20:15	19:01	16:53	16:04	16:03		
29	08:05		06:58	05:47	04:58	05:35 (WEA 11)	04:50	05:39 (WEA 11)	05:25	05:59 (WEA 11)	06:18	07:11	07:05	08:02	08:29	
	16:51		19:43	20:38	21:27	25 06:00 (WEA 11)	21:45	27 06:06 (WEA 11)	21:16	20:13	18:59	16:51	16:04	16:04		
30	08:03		06:56	05:45	04:57	05:35 (WEA 11)	04:51	05:39 (WEA 11)	05:27	05:59 (WEA 11)	06:19	07:13	07:07	08:03	08:29	
	16:53		19:45	20:40	21:28	25 06:00 (WEA 11)	21:45	28 06:07 (WEA 11)	21:14	20:11	18:56	16:49	16:03	16:05		
31	08:02		06:53		04:56			05:34 (WEA 11)			05:28	06:21	07:09	08:29		
	16:55		19:46		21:29	26 06:00 (WEA 11)					21:13	20:08	16:47	16:06		
Sonnenscheinstunden	253	275	367	419	491		506		509		458	382	330	262	237	
astr.max.mögl.Beschattung					241		832		561							

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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