

Shadow Flicker Results (100 m diameter blades) - Receptor Locations

Map_ID	Site Address	Worst-Case Analysis ⁽¹⁾		Probable Case Scenario ⁽²⁾				Dates of Predicted Shadow Flicker	Land use	Approximate Distance to Wind Turbine 1	Approximate Distance to Wind Turbine 2
		Hours Per Year	Max minutes (min/day)	Hours Per Year	Max minutes (min/day)	% of Sun Hours/Year ⁽³⁾	% of Hours/Year ⁽⁴⁾				
FP	177 NEW HAVEN RD	65:45:00	46	32:52:30	23	0.737%	0.375%	10/30-2/12	Residential	1698	2320
FO	177 NEW HAVEN RD	65:25:00	52	32:42:30	26	0.734%	0.373%	11/9-2/2	Residential	1554	2272
C	213 NEW HAVEN RD	64:47:00	62	32:23:30	31	0.726%	0.370%	3/9-4/18; 8/25-10/4	Residential	1680	1181
DG	207 NEW HAVEN RD	60:46:00	54	30:23:00	27	0.682%	0.347%	1/15-2/27; 10/15-11/27	Commercial	1483	1409
DH	187 NEW HAVEN RD	57:16:00	57	28:38:00	28.5	0.642%	0.327%	2/4-3/14; 9/30-11/7	Residential	1331	1819
K	4 GEORGE ST	53:03:00	52	26:31:30	26	0.595%	0.303%	4/7-5/16; 7/28-9/5	Residential	2130	1477
B	3 GEORGE ST	49:20:00	52	24:40:00	26	0.554%	0.282%	3/27-5/1; 8/12-9/17	Residential	2015	1430
AI	28 LEE RD	47:45:00	37	23:52:30	18.5	0.536%	0.272%	5/5-8/8	Residential	2959	2209
L	6 GEORGE ST	44:27:00	49	22:13:30	24.5	0.499%	0.254%	4/3-5/7; 8/5-9/9	Residential	2193	1567
M	8 GEORGE ST	43:37:00	46	21:48:30	23	0.489%	0.249%	4/1-5/3; 6/3-7/9; 8/10-9/11	Residential	2255	1655
FN	220 COOK RD	41:37:00	34	20:48:30	17	0.467%	0.237%	5/5-8/7	Commercial	3139	2390
O	5 GEORGE ST	36:49:00	47	18:24:30	23.5	0.413%	0.210%	3/22-4/20; 8/23-9/22	Residential	2148	1620
AB	27 LEE RD	35:24:00	35	17:42:00	17.5	0.397%	0.202%	4/8-5/2; 5/25-7/18; 8/11-9/4	Residential	2791	2191
AC	29 LEE RD	33:32:00	33	16:46:00	16.5	0.376%	0.191%	4/10-5/2; 5/24-7/20; 8/10-9/2	Residential	2965	2364
U	19 LEE RD	31:51:00	42	15:55:30	21	0.357%	0.182%	4/1-4/29; 8/13-9/11	Residential	2401	1818
AE	22 LEE RD	31:13:00	39	15:36:30	19.5	0.350%	0.178%	4/16-5/16; 7/27-2/27	Residential	2677	2012
T	17 LEE RD	29:11:00	41	14:35:30	20.5	0.327%	0.166%	3/24-4/19; 8/24-9/19	Residential	2361	1836
Z	21 LEE RD	29:08:00	40	14:34:00	20	0.327%	0.166%	4/6-5/3; 8/9-9/6	Residential	2544	1941
S	15 LEE RD	27:34:00	41	13:47:00	20.5	0.309%	0.157%	3/18-4/12; 8/31-9/25	Residential	2342	1864
AF	24 LEE RD	26:53:00	36	13:26:30	18	0.301%	0.153%	4/18-5/16; 7/28-2/25	Residential	2848	2186
DW	22 MEADOW LA	26:03:00	27	13:01:30	13.5	0.292%	0.149%	11/12-1/30	Residential	2852	3020
DP	24 WOODCREST DR	22:50	30	11:25:00	15	0.256%	0.130%	1/10-2/8; 11/3-12/2	Residential	2557	2651
CQ	14 WOODCREST DR	22:23	34	11:11:30	17	0.251%	0.128%	2/1-2/25; 10/17-11/10	Residential	2325	2254
DN	20 WOODCREST DR	22:06	32	11:03:00	16	0.248%	0.126%	1/19-2/14; 10/28-11/23	Residential	2456	2492
CR	16 WOODCREST DR	22:01	34	11:00:30	17	0.247%	0.126%	1/28-2/21; 10/21-11/14	Residential	2364	2330
DO	22 WOODCREST DR	22:00	30	11:00:00	15	0.247%	0.126%	1/14-2/10; 11/1-11/28	Residential	2530	2601
DM	18 WOODCREST DR	21:59	33	10:59:30	16.5	0.246%	0.125%	1/23-2/17; 10/24-11/19	Residential	2407	2411
CL	2 WOODCREST DR	19:19	34	9:39:30	17	0.217%	0.110%	2/24-3/17; 9/25-10/17	Residential	2501	2238
EY	36 WOODCREST DR	18:54	27	9:27:00	13.5	0.212%	0.108%	12/29-2/2; 11/9-12/14	Residential	2647	3129
CK	11 HEMLOCK RD	17:49	33	8:54:30	16.5	0.200%	0.102%	2/26-3/18; 9/25-10/15	Residential	2592	2327
EL	47 WOODCREST DR	16:29	32	8:14:30	16	0.185%	0.094%	2/8-3/2; 10/12-11/3	Residential	2256	2578
CF	10 HEMLOCK RD	15:35	31	7:47:30	15.5	0.177%	0.090%	3/4-3/24; 9/21-10/10	Residential	2765	2466
CG	12 HEMLOCK RD	15:18	30	7:39:00	15	0.172%	0.087%	2/28-3/18; 9/25-10/14	Residential	2770	2507
VA	10 ROBINMARK RD	14:53	21	7:26:30	10.5	0.167%	0.085%	11/26-1/16	Residential	3658	3908
EM	51 WOODCREST DR	14:31	30	7:15:30	15	0.163%	0.083%	2/17-3/9; 10/4-10/25	Residential	2314	2557
CH	16 HEMLOCK RD	13:03	28	6:31:30	14	0.146%	0.074%	2/24-3/14; 10/1-10/18	Residential	2952	2740
CU	23 HEMLOCK RD	12:58	27	6:29:00	13.5	0.145%	0.074%	2/16-3/5; 10/8-10/26	Residential	2956	2817
CW	2 MEADOW LA	11:50	27	5:55:00	13.5	0.133%	0.068%	2/21-3/9; 10/4-10/21	Residential	3084	2908
CZ	8 MEADOW LA	11:31	26	5:45:30	13	0.129%	0.066%	2/11-2/27; 10/14-10/31	Residential	3133	3052
CX	4 MEADOW LA	11:30	26	5:45:00	13	0.129%	0.066%	2/18-3/6; 10/8-10/24	Residential	3110	2967
CE	8 HEMLOCK RD	11:26	25	5:43:00	12.5	0.128%	0.065%	4/19-5/8; 8/4-8/24	Residential	2756	2406
CY	6 MEADOW LA	11:25	26	5:42:30	13	0.128%	0.065%	2/15-3/3; 10/10-10/27	Residential	3143	3025

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		Hours Per Year	Max minutes (min/day)	Hours Per Year	Max minutes (min/day)	% of Sun Hours/Year ⁽³⁾	% of Hours/Year ⁽⁴⁾				
EA	28 WOODCREST DR	10:20	21	5:10:00	10.5	0.114%	0.059%	12/4-1/8	Residential	2876	3178
AN	7 RADIO TOWER RD	9:33	23	4:46:30	11.5	0.107%	0.054%	6/6-7/6	Residential	2912	2066
TP	20 ELAINE CT	9:31	15	4:45:30	7.5	0.107%	0.054%	11/28-1/14	Residential	3902	4394
ZW	15 VALLEY LA	7:46	17	3:53:00	8.5	0.087%	0.044%	2/24-3/6; 3/20-3/29; 9/15-9/23; 10/7-10/17	Residential	4696	4564
ZV	16 VALLEY LA	7:28	17	3:44:00	8.5	0.084%	0.043%	2/23-3/5; 3/18-3/26; 9/17-9/25; 10/9-10/19	Residential	4748	4634
ZU	45 BARBARA AVE	7:05	17	3:32:30	8.5	0.079%	0.040%	2/22-3/4; 3/17-3/26; 9/18-9/26; 10/9-10/19	Residential	4829	4717
AM	3 RADIO TOWER RD	6:52	20	3:26:00	10	0.077%	0.039%	6/9-7/4	Residential	2785	1932
ZT	46 BARBARA AVE	6:40	16	3:20:00	8	0.075%	0.038%	2/23-3/4; 3/17-3/25; 9/18-9/26; 10/9-10/19	Residential	4928	4814
ZS	47 BARBARA AVE	6:21	16	3:10:30	8	0.071%	0.036%	2/24-3/5; 3/18-3/25; 9/18-9/26; 10/9-10/18	Residential	5080	4962
/I	189 COOK RD	5:57	19	2:58:30	9.5	0.067%	0.034%	4/5-4/18; 8/24-9/7	Residential	3501	3239
[Q	240 COOK RD	5:40	19	2:50:00	9.5	0.063%	0.032%	3/2-3/13; 9/30-10/11	Residential	4328	4132
[A	7 VALLEY LA	5:39	18	2:49:30	9	0.063%	0.032%	2/18-3/1; 10/12-10/23	Residential	4378	4295
[M	18 SADDLE CT	5:38	18	2:49:00	9	0.063%	0.032%	2/23-3/6; 10/7-10/18	Residential	4359	4228
ZZ	18 DEERFIELD DR	5:30	18	2:45:00	9	0.062%	0.031%	2/20-3/3; 10/11-10/22	Residential	4444	4348
[P	10 VALLEY LA	5:30	18	2:45:00	9	0.062%	0.031%	3/2-3/12; 10/1-10/12	Residential	4387	4198
[O	33 VALLEY LA	5:24	18	2:42:00	9	0.061%	0.031%	2/28-3/10; 10/3-10/14	Residential	4444	4273
[X	32 VALLEY LA	5:22	18	2:41:00	9	0.060%	0.031%	3/6-3/16; 9/27-10/8	Residential	4458	4232
[N	34 VALLEY LA	5:21	18	2:40:30	9	0.060%	0.030%	2/25-3/8; 10/6-10/16	Residential	4471	4328
ZY	17 VALLEY LA	5:11	18	2:35:30	9	0.058%	0.029%	2/21-3/4; 10/10-10/20	Residential	4530	4425
ZR	43 BARBARA AVE	5:09	17	2:34:30	8.5	0.058%	0.029%	2/19-3/1; 10/2-10/23	Residential	4590	4508
ZD	61 BARBARA AVE	5:08	17	2:34:00	8.5	0.058%	0.029%	2/14-2/24; 10/17-10/28	Residential	4623	4588
ZX	VALLEY LN	4:58	17	2:29:00	8.5	0.056%	0.028%	3/1-3/11; 10/3-10/13	Residential	4637	4465
WV	138 HOWARD AVE	4:42	16	2:21:00	8	0.053%	0.027%	1/28-2/9; 11/2-11/13	Residential	4969	5070
WK	125 HOWARD AVE	4:35	15	2:17:30	7.5	0.051%	0.026%	1/27-2/8; 11/3-11/15	Residential	5040	5150
^G	43 CANDEE RD	4:32	13	2:16:00	6.5	0.051%	0.026%	5/8-5/21; 6/11-6/29; 7/1; 7/23-8/5	Commercial	6163	5464
WM	ENGLEWOOD AVE	4:27	15	2:13:30	7.5	0.050%	0.025%	1/25-2/6; 11/5-11/17	Residential	5160	5289
WW	106 HOWARD AVE	4:27	16	2:13:30	8	0.050%	0.025%	1/31-2/11; 10/31-11/11	Residential	5047	5132
WL	123 ENGLEWOOD AVE	4:26	15	2:13:00	7.5	0.050%	0.025%	1/27-2/7; 11/4--11/14	Residential	5107	5223
WQ	124 HOWARD AVE	4:20	15	2:10:00	7.5	0.049%	0.025%	1/29-2/9; 11/2-11/13	Residential	5104	5204
WN	110 ENGLEWOOD AVE	4:15	15	2:07:30	7.5	0.048%	0.024%	1/26-2/6; 11/4-11/16	Residential	5212	5334
ZE	BARBARA AVE	4:14	16	2:07:00	8	0.048%	0.024%	2/20-3/1; 10/12-10/22	Residential	4994	4911
WP	108 ENGLEWOOD AVE	4:12	15	2:06:00	7.5	0.047%	0.024%	1/29-2/9; 11/2-11/13	Residential	5181	5282
UZ	29 STEPHEN CT	4:09	14	2:04:30	7	0.046%	0.024%	2/1-2/13; 10/29-11/10	Residential	3746	4053
WO	109 ENGLEWOOD AVE	4:01	14	2:00:30	7	0.045%	0.023%	1/27-2/7; 11/3-11/15	Residential	5277	5390
LM	61 EDWARDS ROAD	3:56	13	1:58:00	6.5	0.044%	0.022%	5/5-5/16; 7/27-8/7	Residential	6395	6221
YL	48 BARBARA AVE	3:41	15	1:50:30	7.5	0.041%	0.021%	2/19-2/28; 10/13-10/22	Residential	5278	5206

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		Hours Per Year	Max minutes (min/day)	Hours Per Year	Max minutes (min/day)	% of Sun Hours/Year ⁽³⁾	% of Hours/Year ⁽⁴⁾				
^Q	43 CANDEE RD	3:11	12	1:35:30	6	0.035%	0.018%	5/3-5/14; 7/30-8/10	Commercial	6250	5578
TY	16 STEPHEN CT	2:44	11	1:22:00	5.5	0.031%	0.016%	1/27-2/6; 11/4-11/15	Residential	4294	4625
GE	21 COACHLIGHT CIR	1:34	8	0:47:00	4	0.018%	0.009%	2/11-2/18; 10/23-10/31	Residential	4522	5054
GK	26 COACHLIGHT CIR	1:33	8	0:46:30	4	0.017%	0.009%	2/17-2/24; 10/17-10/24	Residential	4231	4704
GG	17 COACHLIGHT CIR	1:30	8	0:45:00	4	0.017%	0.009%	2/12-2/19; 10/23-10/30	Residential	4761	5292
GL	24 COACHLIGHT CIR	1:29	8	0:44:30	4	0.016%	0.008%	2/17-2/24; 10/18-10/25	Residential	4379	4858
GM	22 COACHLIGHT CIR	1:23	7	0:41:30	3.5	0.015%	0.008%	2/17-2/24; 10/18-10/25	Residential	4548	5034
FY	15 COACHLIGHT CIR	1:21	8	0:40:30	4	0.015%	0.008%	2/12-2/18; 10/23-10/30	Residential	4915	5452
FW	9 COACHLIGHT CIR	1:19	8	0:39:30	4	0.015%	0.007%	2/12-2/18; 10/24-10/30	Residential	5214	5758
FX	11 COACHLIGHT CIR	1:17	8	0:38:30	4	0.014%	0.007%	2/12-2/18; 10/24-10/30	Residential	5061	5602
GN	20 COACHLIGHT CIR	1:17	7	0:38:30	3.5	0.014%	0.007%	2/17-2/23; 10/18-10/25	Residential	4684	5174
GO	18 COACHLIGHT CIR	1:14	7	0:37:00	3.5	0.014%	0.007%	2/17-2/23; 10/19-10/25	Residential	4822	5315
GQ	12 COACHLIGHT CIR	1:05	7	0:32:30	3.5	0.012%	0.006%	2/17-2/23; 10/19-10/25	Residential	5088	5588
GP	16 COACHLIGHT CIR	1:04	7	0:32:00	3.5	0.012%	0.006%	2/18-2/23; 10/18-10/24	Residential	4974	5465
AL	3 RADIO TOWER RD	0:18	4	0:09:00	2	0.003%	0.002%	6/19-7/23	Residential	2723	1861

Notes: ⁽¹⁾ Calculations developed from WindPRO SHADOW module using conservative simplifications and assumptions, including but not limited to: the sun is always shining, the wind is always blowing, the blades are always turning and receptors are perpendicular to the turbines.

⁽²⁾ Calculations based on incorporation of 50% reduction value to account for operational and/or climate-related conditions that limit those times when shadows may be cast.

⁽³⁾ Calculations of potential sun hours per year based on WindPRO Calendar values (4,457 hours annually, worst-case).

⁽⁴⁾ Calculations of hours per year based on maximum of 8,760 hours per year.