

Family Correlated Photometric Data

The following photometric information is developed using correlated data. Finelite considers a family to be a group of luminaires where critical performance metrics such as photometric performance, thermal performance, and electrical performance can be accurately projected via a combination of LM79 tests at the luminaire level and well-documented specifications at the component level.

For more information, please download [Finelite's Family Correlated White Paper](#)

Additional links:

- [Solid-State Lighting: Early Lessons Learned on the Way to Market](#)
(U.S. Department of Energy)
- [Lighting Facts®](#)
- [Design Lights Consortium®](#)

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-WS-6W-2D-4FT-H-8-35-ITL86715.003.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]ITL86715.003 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]02/12/16
[ISSUE DATE]03/30/16
[MANUFAC]FINELITE, INC.
[LUMCAT]HP-WS-6W-2D-4ft-H-8-35
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 28.8 WATTS
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 29.2 WATTS
[ABSOLUTE LUMENS]2400
[OTHER]see www.finelite.com for source file ITL86715. For further details on Finelite family correlation files, go to
[more]http://www.finelite.com/download_files/series_downloads/photometry_pdf/FL_Family_Correlation_WhitePaper.pdf

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2400
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	83
Total Luminaire Watts	28.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.52
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.22
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.49 ft
Luminous Width (90-270)	4.00 ft
Luminous Height	0.19 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5018	4754	4316
55	4623	4459	3929
65	4033	3927	3499
75	3348	3146	2923
85	2566	2305	1706

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-WS-6W-2D-4FT-H-8-35-ITL86715.003.IES

CANDELA TABULATION

	<u>0.0</u>	<u>5.0</u>	<u>15.0</u>	<u>25.0</u>	<u>35.0</u>	<u>45.0</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>	<u>85.0</u>
0.0	983.798	983.798	983.798	983.798	983.798	983.798	983.798	983.798	983.798	983.798
2.5	996.241	995.463	994.686	993.130	992.353	990.019	989.242	986.909	985.353	983.798
5.0	1015.684	1014.128	1012.573	1009.462	1004.796	998.574	993.130	986.909	983.020	979.909
7.5	1030.460	1029.682	1027.349	1022.683	1017.239	1008.684	998.574	987.686	979.909	973.688
10.0	1042.903	1042.903	1039.015	1034.349	1026.572	1014.906	1002.463	986.909	972.132	963.577
12.5	1050.681	1049.903	1046.792	1040.570	1031.238	1016.461	1000.130	981.465	962.800	950.356
15.0	1056.902	1055.347	1050.681	1043.681	1033.571	1015.684	996.241	973.688	951.134	934.802
17.5	1058.458	1056.902	1053.791	1044.459	1032.016	1011.795	990.019	963.577	937.913	917.693
20.0	1056.902	1054.569	1049.903	1041.348	1027.349	1004.018	979.909	949.579	921.581	896.695
22.5	1052.236	1049.903	1045.237	1035.126	1018.795	993.908	967.466	934.802	903.694	874.919
25.0	1045.237	1042.903	1038.237	1026.572	1007.907	981.465	951.912	915.360	882.696	850.810
27.5	1035.126	1032.793	1027.349	1014.128	994.686	966.688	933.247	894.362	860.143	825.146
30.0	1023.461	1021.128	1014.128	1000.130	979.132	948.801	913.804	873.364	836.034	797.148
32.5	1008.684	1006.351	997.797	983.020	960.467	929.358	892.029	849.255	809.592	767.596
35.0	992.353	989.242	980.687	963.577	940.246	907.583	867.920	823.590	782.372	738.043
37.5	970.577	969.799	959.689	942.579	917.693	883.474	842.255	797.148	752.819	706.157
40.0	948.801	948.023	937.913	920.026	893.584	858.587	815.036	767.596	723.266	674.271
42.5	927.025	923.914	913.027	894.362	867.920	831.367	787.038	738.043	692.158	640.830
45.0	900.583	896.695	885.807	867.142	839.922	803.370	756.708	707.712	660.272	607.388
47.5	869.475	867.142	855.476	839.145	810.369	772.262	725.600	675.826	626.831	573.169
50.0	836.034	833.701	824.368	806.481	778.483	741.154	693.714	642.385	593.390	538.172
52.5	797.148	795.593	787.038	771.484	745.042	710.045	661.050	611.277	559.948	503.953
55.0	754.375	752.041	745.042	731.043	707.712	673.493	626.831	577.058	524.951	468.957
57.5	710.045	707.712	699.935	687.492	667.272	637.719	591.834	542.061	490.732	433.960
60.0	664.161	661.828	653.273	640.830	621.387	595.723	555.282	506.286	454.958	399.741
62.5	619.054	615.943	607.388	594.167	575.502	553.727	517.174	470.512	419.961	365.522
65.0	572.391	569.281	560.726	546.727	528.062	504.731	476.734	433.960	384.187	331.303
67.5	525.729	522.618	514.841	500.065	483.733	460.402	432.404	396.630	349.190	296.306
70.0	479.844	475.956	468.179	453.402	437.071	413.739	386.520	356.967	313.415	262.087
72.5	434.738	431.627	423.072	408.296	391.186	367.855	339.857	314.193	276.863	227.868
75.0	389.631	386.520	378.743	364.744	346.857	321.192	294.750	272.197	241.089	194.426
77.5	346.079	343.746	335.191	321.970	304.861	279.974	252.754	227.868	203.759	161.763
80.0	304.083	301.750	293.195	283.085	265.198	241.089	213.869	186.649	161.763	129.877
82.5	263.642	261.309	255.865	243.422	227.090	203.759	177.317	149.320	121.322	97.213
85.0	223.979	220.868	216.202	204.537	188.983	167.207	143.098	115.878	84.770	62.994
87.5	185.872	183.539	178.872	167.984	152.430	133.765	108.879	85.548	57.550	23.331
90.0	148.542	146.209	142.320	132.988	118.989	101.879	80.104	59.106	35.774	6.222
92.5	101.879	98.769	95.658	87.103	74.660	59.883	39.663	24.109	12.443	1.555
95.0	51.329	48.995	47.440	41.218	32.664	24.109	17.110	11.666	4.666	0.000
97.5	23.331	22.553	21.776	20.220	18.665	15.554	11.666	6.999	1.555	0.000
100.0	16.332	16.332	15.554	14.776	13.221	10.888	7.777	3.111	0.778	0.000
102.5	12.443	12.443	12.443	11.666	10.110	8.555	4.666	1.555	0.778	0.000
105.0	10.110	10.110	9.332	9.332	7.777	5.444	1.555	0.778	0.000	0.000
107.5	7.777	7.777	7.777	6.999	5.444	1.555	0.778	0.778	0.000	0.000
110.0	6.222	6.222	5.444	3.889	0.778	0.778	0.778	0.000	0.000	0.000
112.5	1.555	1.555	0.778	0.778	0.778	0.778	0.778	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-WS-6W-2D-4FT-H-8-35-ITL86715.003.IES

CANDELA TABULATION - (Cont.)

135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Angles **Horizontal Angles**

	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0.0	983.798	983.798	983.798	983.798	983.798
2.5	982.242	978.354	972.132	968.244	967.466
5.0	977.576	965.911	951.134	937.135	932.469
7.5	970.577	950.356	920.026	895.917	886.585
10.0	958.911	927.025	883.474	846.922	832.923
12.5	944.913	900.583	840.700	793.260	771.484
15.0	928.581	870.253	794.038	734.932	708.490
17.5	910.693	837.589	744.264	674.271	643.940
20.0	888.918	801.815	692.158	612.054	577.835
22.5	865.587	763.707	637.719	549.838	513.286
25.0	840.700	723.266	583.279	488.399	450.292
27.5	813.480	681.270	531.951	427.738	387.297
30.0	784.705	638.496	477.511	368.633	327.414
32.5	753.597	594.167	424.627	311.082	269.864
35.0	720.933	549.838	373.299	255.865	214.647
37.5	687.492	505.509	321.970	202.981	161.763
40.0	653.273	461.180	272.197	153.208	112.767
42.5	618.276	417.628	224.757	105.768	67.660
45.0	582.502	374.854	176.539	62.994	28.775
47.5	546.727	331.303	135.321	25.664	7.777
50.0	510.175	290.084	94.880	7.777	5.444
52.5	474.401	250.421	56.773	6.222	3.889
55.0	438.626	210.758	22.553	4.666	3.111
57.5	402.852	172.651	8.555	3.889	2.333
60.0	367.077	135.321	6.222	3.111	1.555
62.5	332.080	100.324	4.666	2.333	0.778
65.0	297.084	66.883	3.889	1.555	0.778
67.5	262.087	36.552	3.111	1.555	0.000
70.0	228.646	11.666	2.333	0.778	0.000
72.5	195.204	6.222	2.333	0.778	0.000
75.0	162.541	4.666	1.555	0.778	0.000
77.5	131.432	3.889	1.555	0.778	0.000
80.0	101.102	3.111	0.778	0.778	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-WS-6W-2D-4FT-H-8-35-ITL86715.003.IES

CANDELA TABULATION - (Cont.)

82.5	70.771	2.333	0.778	0.000	0.000
85.0	41.996	1.555	0.000	0.000	0.000
87.5	13.221	0.000	0.000	0.000	0.000
90.0	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-WS-6W-2D-4FT-H-8-35-ITL86715.003.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	346.87	N.A.	14.50
0-30	709.50	N.A.	29.60
0-40	1115.67	N.A.	46.50
0-60	1846.72	N.A.	76.90
0-80	2288.65	N.A.	95.30
0-90	2377.67	N.A.	99.10
10-90	2285.42	N.A.	95.20
20-40	768.80	N.A.	32.00
20-50	1159.38	N.A.	48.30
40-70	996.80	N.A.	41.50
60-80	441.93	N.A.	18.40
70-80	176.18	N.A.	7.30
80-90	89.02	N.A.	3.70
90-110	22.44	N.A.	0.90
90-120	22.64	N.A.	0.90
90-130	22.64	N.A.	0.90
90-150	22.64	N.A.	0.90
90-180	22.64	N.A.	0.90
110-180	0.20	N.A.	0.00
0-180	2400.31	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	92.25
10-20	254.62
20-30	362.63
30-40	406.17
40-50	390.59
50-60	340.46
60-70	265.74
70-80	176.18
80-90	89.02
90-100	19.67
100-110	2.77
110-120	0.20
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

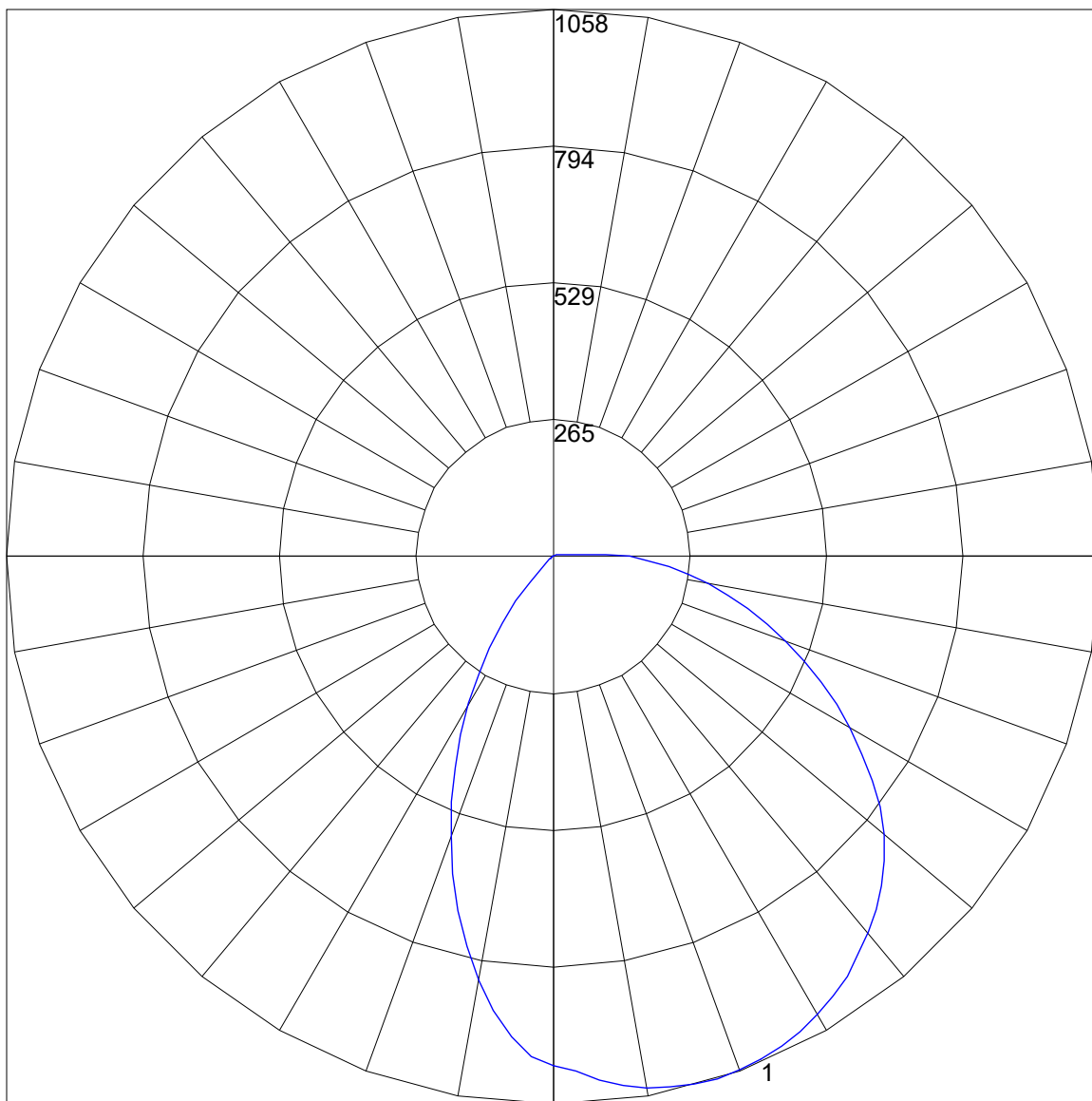
IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-WS-6W-2D-4FT-H-8-35-ITL86715.003.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	108	103	98	94	105	101	96	93	96	93	90	92	89	87	88	86	84	82
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68
3	90	79	71	64	87	78	70	64	74	68	63	72	66	61	69	64	60	58
4	82	70	62	55	80	69	61	55	66	59	54	64	58	53	62	56	52	50
5	76	63	54	48	74	62	54	47	60	52	47	58	51	46	56	50	46	43
6	70	57	48	42	68	56	48	42	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	48	39	33	59	47	39	33	45	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

POLAR GRAPH



Maximum Candela = 1058.458 Located At Horizontal Angle = 0, Vertical Angle = 17.5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)