

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-4-ID-RG-4FT-H-S-835-TG-F-ITL90353.007.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90353.007 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]04/03/18

[ISSUEDATE]05/18/18

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-4-ID-RG-4ft-H-S-835-TG-F

[_INPUT_ELECTRICAL]120.0 VOLTS, 42.4 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 44.5 WATTS

[_ABSOLUTE]LUMENS]4872

[OTHER]see www.finelite.com for source file ITL90353. 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	4872
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	115
Total Luminaire Watts	42.4
Ballast Factor	1.00
CIE Type	Semi-Indirect
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.33 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4278	3908	3623
55	3987	3438	3069
65	3626	2841	2373
75	3161	1956	1490
85	2309	1270	1193

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	616.803	616.803	616.803	616.803	616.803
2.5	615.575	615.166	615.575	615.575	615.575
5.0	612.710	612.301	612.301	612.710	613.119
7.5	608.208	607.799	607.799	607.799	607.389
10.0	602.478	600.431	601.250	600.022	598.385
12.5	594.292	591.836	591.836	589.381	586.516
15.0	584.878	580.785	580.376	577.102	573.009
17.5	573.418	568.507	566.460	561.958	557.865
20.0	559.911	554.181	550.907	544.768	541.084
22.5	545.177	539.038	533.717	526.350	522.257
25.0	529.215	522.257	515.299	506.294	502.201
27.5	512.024	504.248	495.243	485.420	480.918
30.0	493.197	485.420	474.779	463.728	458.407
32.5	473.551	465.774	453.086	440.808	434.259
35.0	453.905	444.900	430.985	417.478	410.520
37.5	433.440	423.208	407.655	392.511	386.372
40.0	412.157	401.515	383.916	368.772	361.814
42.5	390.874	379.004	360.996	344.215	337.257
45.0	369.181	356.493	337.257	319.248	312.699
47.5	347.489	333.573	313.518	294.690	288.142
50.0	324.978	310.243	288.960	269.723	263.175
52.5	302.058	286.914	264.812	245.575	239.027
55.0	279.137	263.993	240.664	221.427	214.878
57.5	256.626	240.664	216.925	197.688	191.139
60.0	233.706	217.334	193.186	173.949	167.400
62.5	210.785	194.004	169.447	150.619	144.480
65.0	187.046	171.084	146.527	128.108	122.378
67.5	164.535	148.164	123.606	106.416	100.686
70.0	142.024	125.653	101.914	85.133	80.221
72.5	119.923	103.960	81.449	65.896	60.985
75.0	99.867	83.086	61.803	49.115	47.069
77.5	79.403	63.440	44.204	39.292	38.883
80.0	59.757	44.613	31.925	30.697	30.697
82.5	42.566	27.013	22.920	22.102	22.102
85.0	24.558	14.735	13.507	13.097	12.688
87.5	7.777	4.912	4.502	4.502	4.093
90.0	0.000	0.000	0.000	0.000	0.000
92.5	23.334	25.667	28.001	28.778	28.778
95.0	58.334	60.668	63.001	65.335	66.112
97.5	94.113	97.224	101.113	104.224	105.002
100.0	132.225	135.336	140.003	143.892	143.892
102.5	171.892	175.003	180.448	185.115	185.115
105.0	214.671	218.560	223.227	227.893	227.893
107.5	259.005	262.116	266.783	272.228	271.450
110.0	304.895	307.228	311.895	316.562	316.562
112.5	351.563	353.896	358.563	363.229	362.452
115.0	399.786	401.341	406.786	410.675	409.119
117.5	448.009	448.009	454.231	455.787	456.565
120.0	497.010	497.010	501.677	504.010	504.788
122.5	546.789	546.789	549.900	552.233	554.567
125.0	595.012	594.234	597.345	600.456	602.012
127.5	643.235	641.679	645.568	647.902	651.013
130.0	691.458	689.125	693.014	696.125	697.680
132.5	737.348	734.237	738.904	742.792	743.570

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-RG-4FT-H-S-835-TG-F-ITL90353.007.IES****CANDELA TABULATION - (Cont.)**

135.0	785.571	780.127	786.349	790.238	790.238
137.5	832.239	825.239	832.239	834.572	835.350
140.0	875.795	868.795	878.128	878.128	879.684
142.5	920.907	912.351	921.685	921.685	920.129
145.0	965.241	954.352	964.464	963.686	962.130
147.5	1006.464	994.797	1004.909	1004.131	1001.020
150.0	1044.576	1032.909	1043.021	1041.465	1039.909
152.5	1081.132	1070.243	1080.355	1078.021	1075.688
155.0	1115.355	1105.244	1114.578	1113.022	1109.133
157.5	1146.467	1136.356	1145.689	1141.800	1139.467
160.0	1176.023	1167.468	1175.245	1171.356	1167.468
162.5	1201.690	1193.912	1200.135	1196.246	1193.912
165.0	1224.246	1218.024	1221.913	1219.580	1217.246
167.5	1243.691	1239.024	1241.358	1239.802	1238.247
170.0	1259.247	1256.914	1257.692	1256.914	1255.358
172.5	1270.914	1270.914	1270.914	1269.358	1269.358
175.0	1280.248	1280.248	1280.248	1279.470	1279.470
177.5	1286.470	1286.470	1286.470	1286.470	1286.470
180.0	1288.025	1288.025	1288.025	1288.025	1288.025

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	221.15	N.A.	4.50
0-30	458.04	N.A.	9.40
0-40	727.57	N.A.	14.90
0-60	1206.16	N.A.	24.80
0-80	1427.64	N.A.	29.30
0-90	1445.34	N.A.	29.70
10-90	1387.24	N.A.	28.50
20-40	506.42	N.A.	10.40
20-50	767.47	N.A.	15.80
40-70	627.37	N.A.	12.90
60-80	221.47	N.A.	4.50
70-80	72.70	N.A.	1.50
80-90	17.71	N.A.	0.40
90-110	306.69	N.A.	6.30
90-120	708.20	N.A.	14.50
90-130	1242.65	N.A.	25.50
90-150	2449.98	N.A.	50.30
90-180	3426.92	N.A.	70.30
110-180	3120.23	N.A.	64.00
0-180	4872.26	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

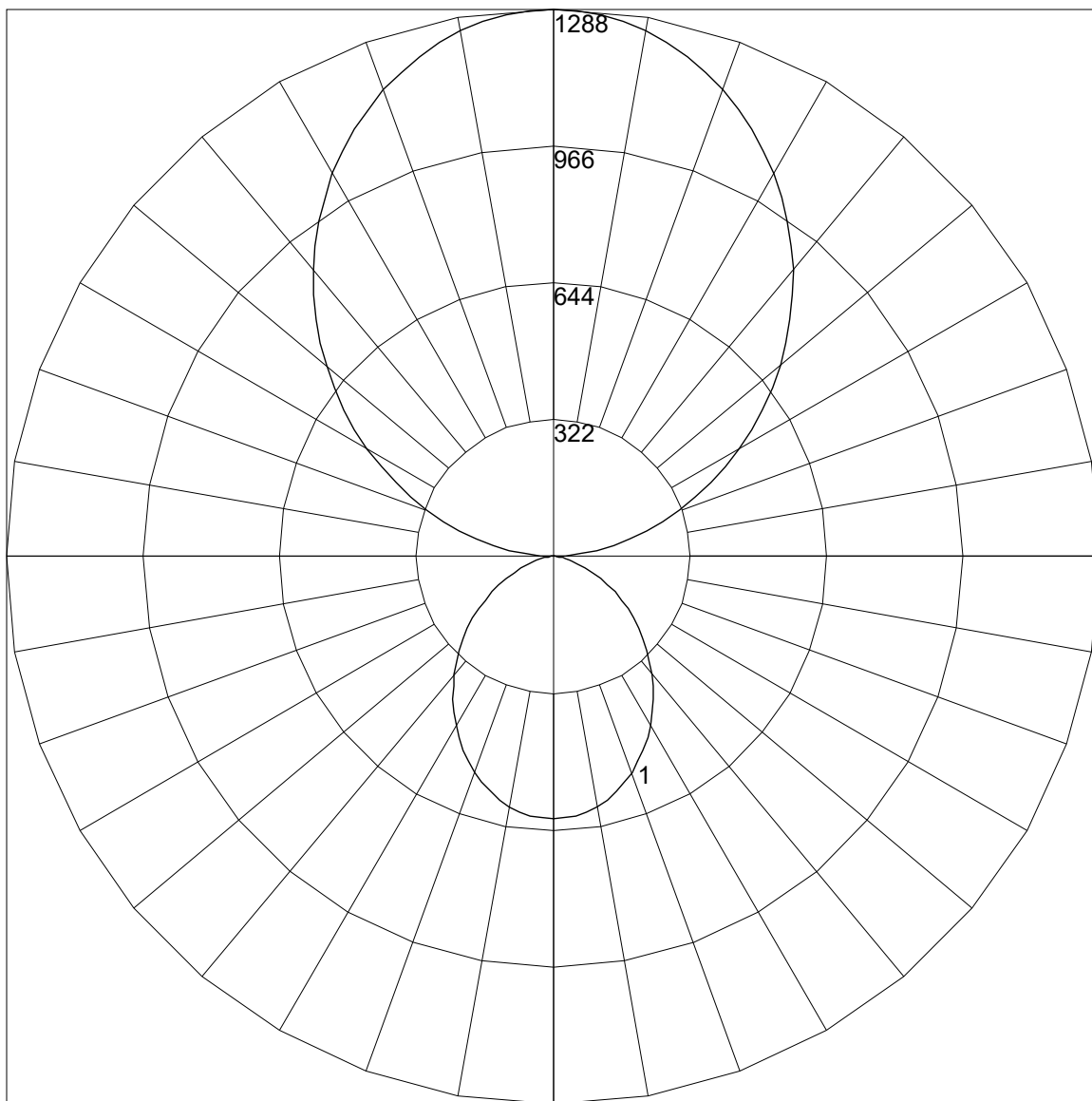
Zone	Lumens
0-10	58.10
10-20	163.05
20-30	236.89
30-40	269.53
40-50	261.05
50-60	217.54
60-70	148.78
70-80	72.70
80-90	17.71
90-100	70.77
100-110	235.92
110-120	401.51
120-130	534.44
130-140	606.23
140-150	601.10
150-160	511.48
160-170	344.00
170-180	121.46

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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	93	89	86	82	84	80	77	74	63	61	59	48	46	45	33	33	32	25
2	85	78	72	67	76	70	65	61	56	52	49	42	40	38	30	28	27	22
3	78	69	62	56	69	62	56	51	49	45	42	37	35	32	26	25	23	18
4	71	61	53	48	64	55	48	43	44	39	35	33	30	28	24	22	20	16
5	65	54	46	41	58	49	42	37	39	34	31	30	27	24	21	19	18	14
6	60	48	41	35	54	44	37	32	35	30	27	27	24	21	19	17	15	12
7	55	44	36	31	50	40	33	28	32	27	23	24	21	19	18	15	14	11
8	51	40	32	27	46	36	29	25	29	24	21	22	19	16	16	14	12	10
9	48	36	29	24	43	33	26	22	26	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8

POLAR GRAPH



Maximum Candela = 1288.025 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)