

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-4FT-B-B-8TW-ITL85125.902.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]ITL85125.902 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]08/06/15
[ISSUE DATE]02/09/17
[MANUFAC]FINELITE, INC.
[LUMCAT]FINELITE HP-4-ID-4ft-B-B-8TW
[OTHER]ies file is based on 3500K; see luminaire tech sheet at www.finelite.com for lumen adjustment factors for other CCT's & CRI
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 40.5 WATTS
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 43.4 WATTS
[ABSOLUTE LUMENS]4058
[OTHER]see www.finelite.com for source file ITL85125. 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	4059
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	100
Total Luminaire Watts	40.5
Ballast Factor	1.00
CIE Type	General Diffuse
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)	0.32 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5205	5132	5041
55	4833	4758	4661
65	4410	4349	4278
75	3857	3857	3841
85	3195	3343	3441

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-B-8TW-ITL85125.902.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	742.596	742.596	742.596	742.596	742.596
2.5	741.053	741.053	741.053	741.053	741.053
5.0	737.450	737.965	737.965	737.450	737.965
7.5	732.304	732.819	732.304	731.275	732.304
10.0	725.099	723.556	724.070	724.070	723.041
12.5	716.351	713.778	714.292	714.292	711.719
15.0	704.000	699.883	702.456	701.427	697.825
17.5	690.620	684.959	687.532	686.503	682.901
20.0	674.667	668.491	670.550	669.006	665.404
22.5	657.170	650.480	652.023	649.965	646.363
25.0	637.614	630.409	631.953	629.895	625.778
27.5	616.515	609.310	610.339	607.766	604.164
30.0	593.871	586.667	587.181	584.608	580.491
32.5	570.199	564.538	564.023	560.421	556.819
35.0	546.526	540.351	539.836	535.205	532.117
37.5	520.795	514.620	515.135	509.474	506.386
40.0	495.064	489.918	489.404	483.743	480.655
42.5	470.363	463.673	462.129	457.497	454.409
45.0	442.058	437.427	435.883	431.251	428.164
47.5	414.784	410.152	409.123	404.491	401.404
50.0	387.509	383.392	381.848	377.216	374.643
52.5	360.234	356.117	355.602	350.456	347.883
55.0	332.959	329.357	327.813	323.181	321.123
57.5	305.170	302.082	300.538	296.421	294.363
60.0	278.409	274.807	273.778	270.175	268.632
62.5	250.620	247.532	246.503	243.415	242.386
65.0	223.860	221.287	220.772	218.199	217.170
67.5	196.585	195.041	194.526	192.468	191.439
70.0	170.339	169.310	169.310	167.766	166.737
72.5	144.608	145.123	144.094	144.608	143.064
75.0	119.906	120.421	119.906	120.421	119.392
77.5	96.234	96.749	97.778	97.778	97.778
80.0	74.105	74.620	75.649	76.164	76.164
82.5	54.035	54.550	55.064	55.579	55.579
85.0	33.450	34.480	34.994	35.509	36.023
87.5	14.409	15.439	15.953	17.497	17.497
90.0	0.000	0.000	0.000	0.000	0.000
92.5	15.439	16.468	17.497	19.556	20.070
95.0	36.538	37.053	39.111	41.684	42.199
97.5	59.181	59.696	62.269	64.842	64.327
100.0	82.339	83.368	85.942	88.515	88.000
102.5	106.012	108.070	110.643	113.216	113.216
105.0	132.257	134.316	136.889	138.947	138.433
107.5	160.047	161.591	163.135	165.193	165.193
110.0	189.895	189.895	191.439	193.497	192.982
112.5	219.743	218.713	220.772	223.860	221.287
115.0	249.591	248.561	249.591	252.164	250.105
117.5	279.439	279.953	280.468	280.982	279.439
120.0	309.801	310.830	310.316	309.801	308.772
122.5	340.678	341.708	341.708	340.164	338.620
125.0	372.070	373.614	373.614	370.526	368.982
127.5	403.462	404.491	405.520	400.889	397.801
130.0	433.825	434.339	435.368	432.281	429.708
132.5	464.702	464.187	464.702	462.643	459.556

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-B-8TW-ITL85125.902.IES

CANDELA TABULATION - (Cont.)

135.0	495.579	493.006	494.550	493.006	489.404
137.5	525.427	521.310	523.883	521.825	518.222
140.0	555.275	550.643	553.731	551.673	547.556
142.5	582.550	578.947	582.550	579.462	575.860
145.0	611.883	605.708	609.825	606.737	603.135
147.5	638.129	631.953	636.070	632.982	629.380
150.0	663.860	657.170	661.287	658.199	655.111
152.5	686.503	681.357	685.474	681.871	679.298
155.0	708.632	703.485	707.088	704.000	701.427
157.5	730.246	725.099	728.187	725.099	723.041
160.0	748.772	744.655	747.743	744.655	743.111
162.5	766.269	761.637	765.240	762.152	761.123
165.0	780.678	777.076	779.135	777.591	777.076
167.5	793.544	790.456	792.000	790.971	790.971
170.0	804.351	802.292	803.322	802.292	802.292
172.5	812.070	812.070	811.556	811.556	811.556
175.0	818.246	818.246	818.246	817.731	818.246
177.5	821.848	822.363	822.363	822.363	822.363
180.0	823.392	823.392	823.392	823.392	823.392

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-B-8TW-ITL85125.902.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	267.52	N.A.	6.60
0-30	557.93	N.A.	13.70
0-40	894.70	N.A.	22.00
0-60	1522.54	N.A.	37.50
0-80	1868.15	N.A.	46.00
0-90	1907.28	N.A.	47.00
10-90	1837.29	N.A.	45.30
20-40	627.19	N.A.	15.50
20-50	962.67	N.A.	23.70
40-70	845.83	N.A.	20.80
60-80	345.61	N.A.	8.50
70-80	127.62	N.A.	3.10
80-90	39.13	N.A.	1.00
90-110	188.78	N.A.	4.70
90-120	436.69	N.A.	10.80
90-130	769.27	N.A.	19.00
90-150	1529.52	N.A.	37.70
90-180	2151.23	N.A.	53.00
110-180	1962.45	N.A.	48.40
0-180	4058.51	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	69.99
10-20	197.53
20-30	290.42
30-40	336.77
40-50	335.49
50-60	292.35
60-70	217.99
70-80	127.62
80-90	39.13
90-100	44.11
100-110	144.67
110-120	247.91
120-130	332.57
130-140	380.47
140-150	379.79
150-160	324.73
160-170	219.37
170-180	77.61

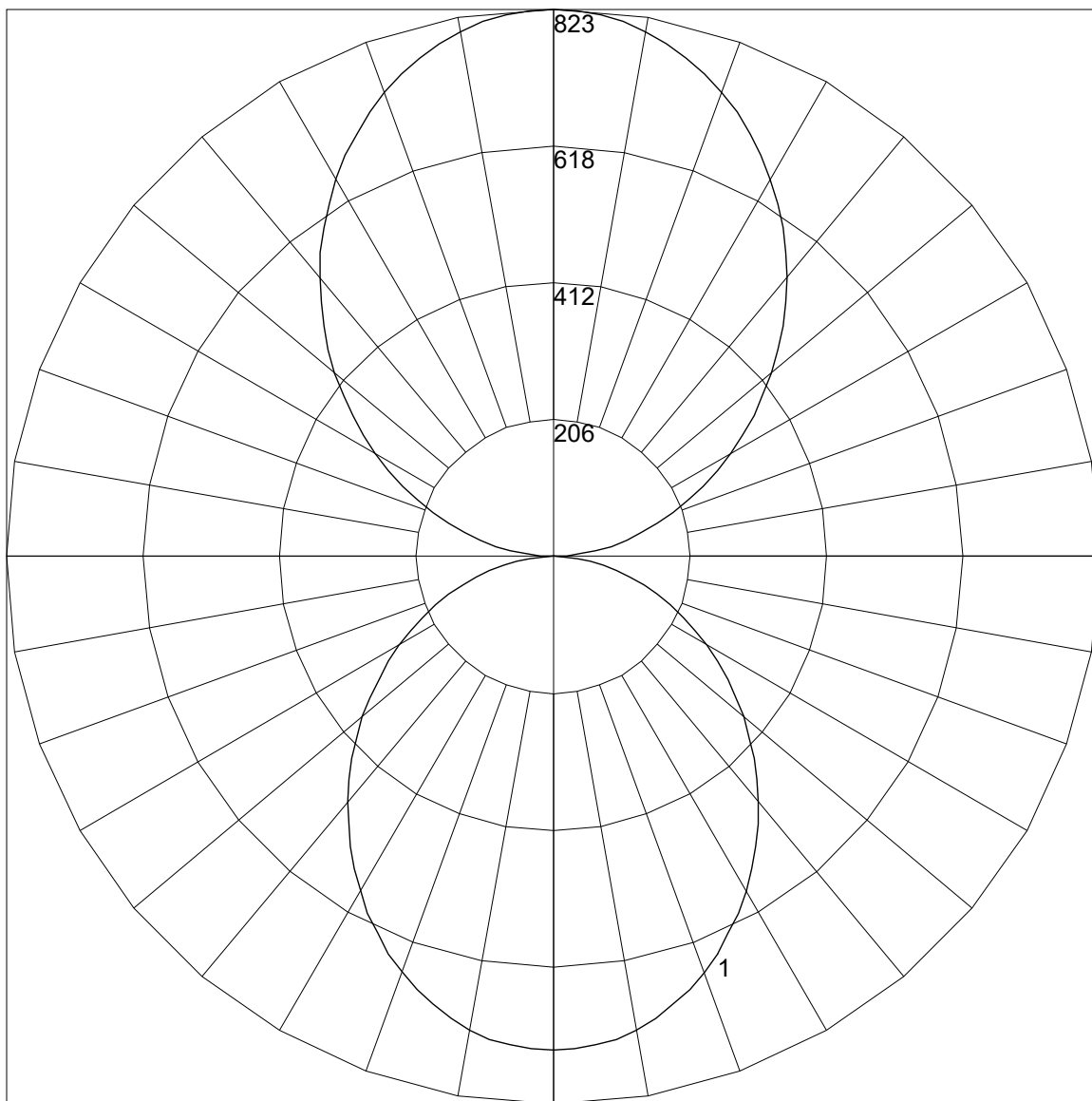
IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-B-8TW-ITL85125.902.IES

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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47
1	97	93	89	85	89	85	82	79	71	69	67	59	57	56	47	46	45	39
2	88	81	75	70	81	75	69	65	63	59	55	52	49	46	41	39	38	33
3	81	71	64	58	74	66	59	54	55	50	47	46	42	39	37	34	32	28
4	74	63	55	49	67	58	51	46	49	44	40	41	37	34	33	30	28	24
5	68	56	48	42	62	52	45	39	44	38	34	36	32	29	30	27	24	21
6	62	50	42	36	57	47	39	34	40	34	30	33	29	25	27	24	21	18
7	58	45	37	32	53	42	35	30	36	30	26	30	26	23	24	21	19	16
8	53	41	33	28	49	38	31	27	33	27	23	27	23	20	22	19	17	15
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15	13
10	46	34	27	22	43	32	26	21	28	22	19	23	19	16	19	16	14	12

POLAR GRAPH



Maximum Candela = 823.392 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)