

# 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-V-835-F-DL-ITL90629 ITL85125.012.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90629 ITL85125.012 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/09/18

[ISSUEDATE]08/10/18

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-4-ID-4ft-B-V-835-F-DL

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 55.5 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 57.6 WATTS

[\_ABSOLUTE]LUMENS]6031

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL90629 and 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](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	6031
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	55.5
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.38
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.32 ft
Luminous Height	0.08 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	8673	8045	7871
55	8020	7373	7244
65	7204	6604	6595
75	5940	5689	5866
85	3858	4844	5297

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## CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	1251.000	1251.000	1251.000	1251.000	1251.000
2.5	1249.000	1249.000	1250.000	1251.000	1252.000
5.0	1243.000	1244.000	1247.000	1249.000	1250.000
7.5	1234.000	1237.000	1242.000	1244.000	1246.000
10.0	1222.000	1224.000	1232.000	1236.000	1238.000
12.5	1207.000	1207.000	1220.000	1226.000	1226.000
15.0	1187.000	1188.000	1204.000	1210.000	1210.000
17.5	1164.000	1166.000	1184.000	1192.000	1192.000
20.0	1138.000	1140.000	1160.000	1169.000	1169.000
22.5	1108.000	1112.000	1135.000	1144.000	1143.000
25.0	1077.000	1082.000	1106.000	1116.000	1117.000
27.5	1042.000	1050.000	1077.000	1086.000	1087.000
30.0	1006.000	1015.000	1043.000	1054.000	1056.000
32.5	968.000	979.000	1010.000	1021.000	1022.000
35.0	924.000	940.000	973.000	986.000	987.000
37.5	883.000	903.000	936.000	948.000	953.000
40.0	842.000	862.000	898.000	912.000	915.000
42.5	797.000	820.000	858.000	875.000	878.000
45.0	752.000	779.000	818.000	836.000	841.000
47.5	706.000	737.000	777.000	797.000	803.000
50.0	661.000	694.000	735.000	756.000	763.000
52.5	617.000	650.000	694.000	718.000	724.000
55.0	569.000	604.000	651.000	677.000	683.000
57.5	521.000	561.000	608.000	635.000	644.000
60.0	475.000	517.000	565.000	594.000	605.000
62.5	428.000	471.000	521.000	552.000	562.000
65.0	382.000	425.000	477.000	510.000	520.000
67.5	333.000	382.000	435.000	468.000	480.000
70.0	288.000	336.000	391.000	426.000	440.000
72.5	243.000	293.000	347.000	385.000	398.000
75.0	199.000	249.000	307.000	345.000	358.000
77.5	155.000	208.000	266.000	306.000	320.000
80.0	115.000	169.000	228.000	269.000	284.000
82.5	80.000	134.000	194.000	235.000	251.000
85.0	50.000	104.000	165.000	206.000	219.000
87.5	28.000	80.000	139.000	180.000	192.000
90.0	10.000	61.000	120.000	160.000	173.000
92.5	22.642	48.886	77.702	97.256	103.946
95.0	43.225	68.954	97.771	116.811	122.986
97.5	65.867	90.052	118.354	137.394	143.569
100.0	88.508	112.179	140.482	159.007	165.182
102.5	113.209	134.821	163.123	181.134	186.794
105.0	138.938	160.036	186.794	204.290	209.436
107.5	166.211	185.250	212.523	228.990	233.621
110.0	195.028	211.494	237.223	253.690	258.321
112.5	223.844	239.796	263.982	280.449	284.051
115.0	253.175	267.584	290.226	307.721	309.780
117.5	282.507	295.371	317.498	333.451	336.024
120.0	310.809	323.674	345.286	357.122	361.753
122.5	339.111	351.976	373.074	383.880	388.511
125.0	369.472	383.365	401.376	410.124	415.270
127.5	399.317	412.697	430.707	437.397	442.028
130.0	428.649	442.028	458.495	464.155	468.786
132.5	457.466	469.815	485.768	491.428	494.516

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-V-835-F-DL-ITL90629 ITL85125.012.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	486.797	498.118	513.041	519.216	521.274
<b>137.5</b>	514.584	523.332	539.284	545.459	546.489
<b>140.0</b>	543.916	549.576	565.528	571.703	572.218
<b>142.5</b>	571.189	575.305	590.743	595.889	596.918
<b>145.0</b>	598.462	598.462	616.472	620.074	620.589
<b>147.5</b>	623.676	623.162	640.143	642.716	643.745
<b>150.0</b>	647.347	646.832	660.212	664.843	665.357
<b>152.5</b>	670.503	667.931	680.280	685.426	683.883
<b>155.0</b>	691.601	687.999	698.806	703.951	702.408
<b>157.5</b>	711.156	707.039	716.816	720.418	719.904
<b>160.0</b>	728.651	724.020	732.768	734.826	735.341
<b>162.5</b>	745.118	740.487	748.720	749.749	750.264
<b>165.0</b>	759.527	755.410	761.070	762.614	763.129
<b>167.5</b>	771.362	767.760	771.362	773.420	773.935
<b>170.0</b>	781.139	779.081	780.625	782.168	782.683
<b>172.5</b>	788.343	787.829	788.343	788.858	789.372
<b>175.0</b>	793.489	793.489	794.004	794.004	793.489
<b>177.5</b>	797.606	797.091	797.091	797.091	797.606
<b>180.0</b>	798.635	798.635	798.635	798.635	798.635

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-B-V-835-F-DL-ITL90629 ITL85125.012.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	456.92	N.A.	7.60
0-30	963.80	N.A.	16.00
0-40	1567.07	N.A.	26.00
0-60	2762.54	N.A.	45.80
0-80	3536.61	N.A.	58.60
0-90	3706.67	N.A.	61.50
10-90	3588.16	N.A.	59.50
20-40	1110.15	N.A.	18.40
20-50	1733.27	N.A.	28.70
40-70	1657.18	N.A.	27.50
60-80	774.07	N.A.	12.80
70-80	312.36	N.A.	5.20
80-90	170.06	N.A.	2.80
90-110	300.69	N.A.	5.00
90-120	584.54	N.A.	9.70
90-130	939.60	N.A.	15.60
90-150	1714.03	N.A.	28.40
90-180	2324.79	N.A.	38.50
110-180	2024.1	N.A.	33.60
0-180	6031.46	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	118.51
10-20	338.41
20-30	506.89
30-40	603.26
40-50	623.12
50-60	572.35
60-70	461.71
70-80	312.36
80-90	170.06
90-100	108.34
100-110	192.35
110-120	283.85
120-130	355.05
130-140	392.14
140-150	382.29
150-160	321.10
160-170	214.29
170-180	75.37

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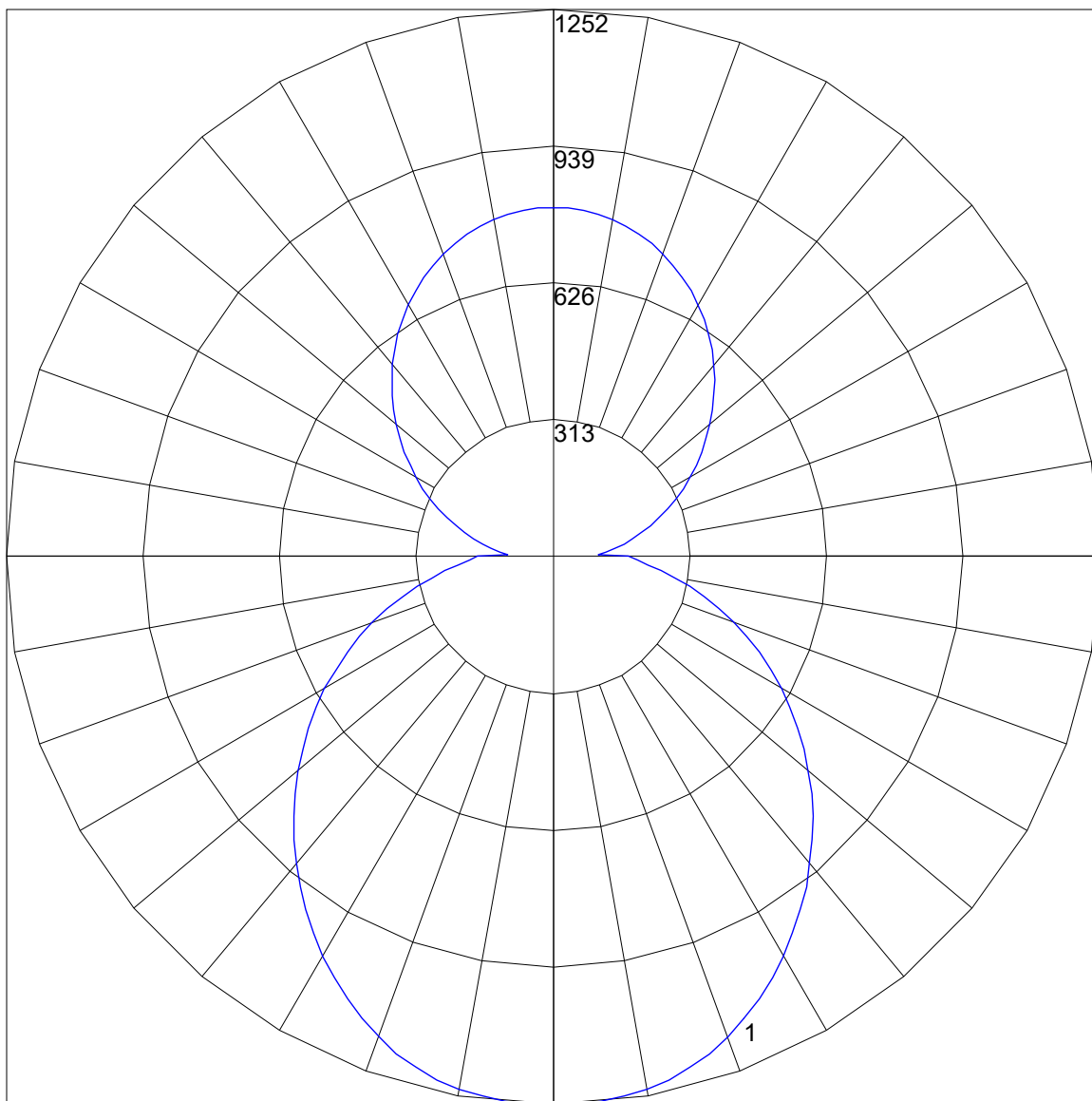
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	61
1	99	95	90	86	93	89	85	81	77	74	72	67	65	63	57	56	54	50
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	47	45	41
3	82	72	64	58	76	67	60	55	59	53	49	51	47	43	44	41	38	34
4	75	63	55	49	70	60	52	46	52	46	42	45	41	37	39	35	32	29
5	69	56	48	42	64	53	45	40	47	40	36	41	36	32	35	31	28	25
6	63	51	42	36	59	48	40	34	42	36	31	37	32	28	32	28	25	22
7	59	46	37	32	55	43	36	30	38	32	27	33	28	25	29	25	22	19
8	54	42	33	28	51	39	32	27	35	29	24	31	26	22	27	23	20	17
9	51	38	30	25	47	36	29	24	32	26	22	28	23	20	25	21	18	16
10	47	35	27	22	44	33	26	21	29	24	20	26	21	18	23	19	16	14

POLAR GRAPH



Maximum Candela = 1252 Located At Horizontal Angle = 90, Vertical Angle = 2.5  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)