

# 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-H-H-8-35-ITL85125.003.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST]ITL85125.003 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[TESTDATE]08/06/15  
[ISSUE DATE]04/21/16  
[MANUFAC]FINELITE, INC.  
[LUMCAT]FINELITE HP-4-ID-4ft-H-H-8-35  
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 56.8 WATTS  
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 58.4 WATTS  
[ABSOLUTE LUMENS]6134  
[OTHER]see [www.finelite.com](http://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](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	6134
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	56.8
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	7866	7757	7619
55	7304	7191	7045
65	6665	6573	6466
75	5829	5829	5804
85	4829	5052	5201

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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	1122.333	1122.333	1122.333	1122.333	1122.333
2.5	1120.000	1120.000	1120.000	1120.000	1120.000
5.0	1114.556	1115.333	1115.333	1114.556	1115.333
7.5	1106.778	1107.556	1106.778	1105.222	1106.778
10.0	1095.889	1093.556	1094.333	1094.333	1092.778
12.5	1082.667	1078.778	1079.556	1079.556	1075.667
15.0	1064.000	1057.778	1061.667	1060.111	1054.667
17.5	1043.778	1035.222	1039.111	1037.556	1032.111
20.0	1019.667	1010.333	1013.444	1011.111	1005.667
22.5	993.222	983.111	985.444	982.333	976.889
25.0	963.667	952.778	955.111	952.000	945.778
27.5	931.778	920.889	922.444	918.556	913.111
30.0	897.556	886.667	887.444	883.556	877.333
32.5	861.778	853.222	852.444	847.000	841.556
35.0	826.000	816.667	815.889	808.889	804.222
37.5	787.111	777.778	778.556	770.000	765.333
40.0	748.222	740.444	739.667	731.111	726.444
42.5	710.889	700.778	698.444	691.444	686.778
45.0	668.111	661.111	658.778	651.778	647.111
47.5	626.889	619.889	618.333	611.333	606.667
50.0	585.667	579.444	577.111	570.111	566.222
52.5	544.444	538.222	537.444	529.667	525.778
55.0	503.222	497.778	495.444	488.444	485.333
57.5	461.222	456.556	454.222	448.000	444.889
60.0	420.778	415.333	413.778	408.333	406.000
62.5	378.778	374.111	372.556	367.889	366.333
65.0	338.333	334.444	333.667	329.778	328.222
67.5	297.111	294.778	294.000	290.889	289.333
70.0	257.444	255.889	255.889	253.556	252.000
72.5	218.556	219.333	217.778	218.556	216.222
75.0	181.222	182.000	181.222	182.000	180.444
77.5	145.444	146.222	147.778	147.778	147.778
80.0	112.000	112.778	114.333	115.111	115.111
82.5	81.667	82.444	83.222	84.000	84.000
85.0	50.556	52.111	52.889	53.667	54.444
87.5	21.778	23.333	24.111	26.444	26.444
90.0	0.000	0.000	0.000	0.000	0.000
92.5	23.333	24.889	26.444	29.556	30.333
95.0	55.222	56.000	59.111	63.000	63.778
97.5	89.444	90.222	94.111	98.000	97.222
100.0	124.444	126.000	129.889	133.778	133.000
102.5	160.222	163.333	167.222	171.111	171.111
105.0	199.889	203.000	206.889	210.000	209.222
107.5	241.889	244.222	246.556	249.667	249.667
110.0	287.000	287.000	289.333	292.444	291.667
112.5	332.111	330.556	333.667	338.333	334.444
115.0	377.222	375.667	377.222	381.111	378.000
117.5	422.333	423.111	423.889	424.667	422.333
120.0	468.222	469.778	469.000	468.222	466.667
122.5	514.889	516.444	516.444	514.111	511.778
125.0	562.333	564.667	564.667	560.000	557.667
127.5	609.778	611.333	612.889	605.889	601.222
130.0	655.667	656.444	658.000	653.333	649.444
132.5	702.333	701.556	702.333	699.222	694.556

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**CANDELA TABULATION - (Cont.)**

<b>135.0</b>	749.000	745.111	747.444	745.111	739.667
<b>137.5</b>	794.111	787.889	791.778	788.667	783.222
<b>140.0</b>	839.222	832.222	836.889	833.778	827.556
<b>142.5</b>	880.444	875.000	880.444	875.778	870.333
<b>145.0</b>	924.778	915.444	921.667	917.000	911.556
<b>147.5</b>	964.444	955.111	961.333	956.667	951.222
<b>150.0</b>	1003.333	993.222	999.444	994.778	990.111
<b>152.5</b>	1037.556	1029.778	1036.000	1030.556	1026.667
<b>155.0</b>	1071.000	1063.222	1068.667	1064.000	1060.111
<b>157.5</b>	1103.667	1095.889	1100.556	1095.889	1092.778
<b>160.0</b>	1131.667	1125.444	1130.111	1125.444	1123.111
<b>162.5</b>	1158.111	1151.111	1156.556	1151.889	1150.333
<b>165.0</b>	1179.889	1174.444	1177.556	1175.222	1174.444
<b>167.5</b>	1199.333	1194.667	1197.000	1195.444	1195.444
<b>170.0</b>	1215.667	1212.556	1214.111	1212.556	1212.556
<b>172.5</b>	1227.333	1227.333	1226.556	1226.556	1226.556
<b>175.0</b>	1236.667	1236.667	1236.667	1235.889	1236.667
<b>177.5</b>	1242.111	1242.889	1242.889	1242.889	1242.889
<b>180.0</b>	1244.444	1244.444	1244.444	1244.444	1244.444

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	404.31	N.A.	6.60
0-30	843.24	N.A.	13.70
0-40	1352.22	N.A.	22.00
0-60	2301.11	N.A.	37.50
0-80	2823.45	N.A.	46.00
0-90	2882.59	N.A.	47.00
10-90	2776.81	N.A.	45.30
20-40	947.90	N.A.	15.50
20-50	1454.95	N.A.	23.70
40-70	1278.35	N.A.	20.80
60-80	522.34	N.A.	8.50
70-80	192.88	N.A.	3.10
80-90	59.14	N.A.	1.00
90-110	285.32	N.A.	4.70
90-120	660.00	N.A.	10.80
90-130	1162.64	N.A.	19.00
90-150	2311.66	N.A.	37.70
90-180	3251.3	N.A.	53.00
110-180	2965.98	N.A.	48.40
0-180	6133.89	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	105.78
10-20	298.53
20-30	438.92
30-40	508.98
40-50	507.04
50-60	441.85
60-70	329.46
70-80	192.88
80-90	59.14
90-100	66.67
100-110	218.65
110-120	374.68
120-130	502.64
130-140	575.02
140-150	574.00
150-160	490.79
160-170	331.54
170-180	117.30

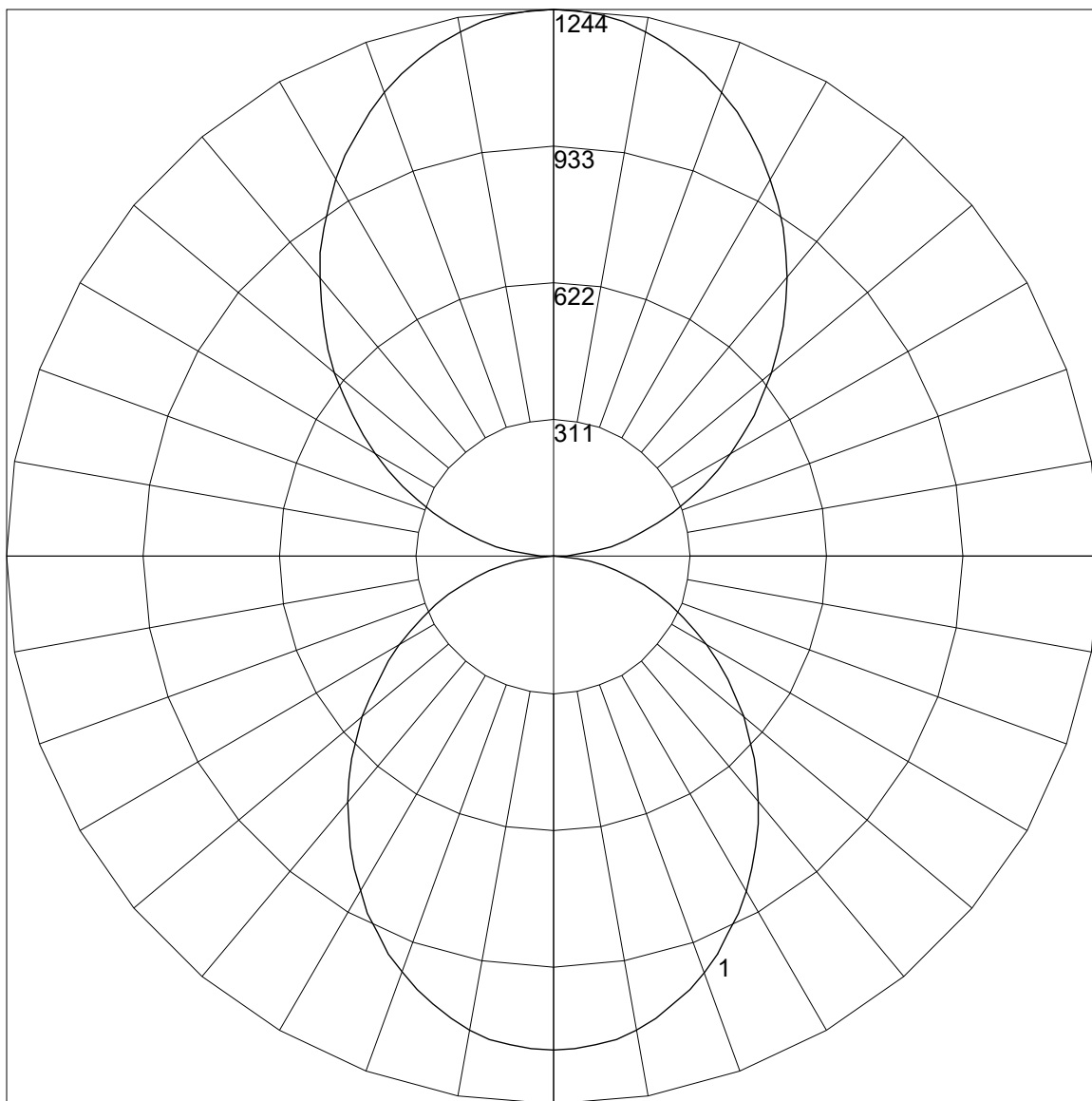
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	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 = 1244.444 Located At Horizontal Angle = 0, Vertical Angle = 180  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)