

# 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-V-8-35-ITL85125.009.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST]ITL85125.009 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-V-8-35  
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 65.5 WATTS  
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 67.1 WATTS  
[ABSOLUTE LUMENS]6957  
[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	6957
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	106
Total Luminaire Watts	65.5
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	10114	9973	9796
55	9391	9246	9057
65	8569	8451	8313
75	7495	7495	7463
85	6209	6496	6687

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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	1443.000	1443.000	1443.000	1443.000	1443.000
2.5	1440.000	1440.000	1440.000	1440.000	1440.000
5.0	1433.000	1434.000	1434.000	1433.000	1434.000
7.5	1423.000	1424.000	1423.000	1421.000	1423.000
10.0	1409.000	1406.000	1407.000	1407.000	1405.000
12.5	1392.000	1387.000	1388.000	1388.000	1383.000
15.0	1368.000	1360.000	1365.000	1363.000	1356.000
17.5	1342.000	1331.000	1336.000	1334.000	1327.000
20.0	1311.000	1299.000	1303.000	1300.000	1293.000
22.5	1277.000	1264.000	1267.000	1263.000	1256.000
25.0	1239.000	1225.000	1228.000	1224.000	1216.000
27.5	1198.000	1184.000	1186.000	1181.000	1174.000
30.0	1154.000	1140.000	1141.000	1136.000	1128.000
32.5	1108.000	1097.000	1096.000	1089.000	1082.000
35.0	1062.000	1050.000	1049.000	1040.000	1034.000
37.5	1012.000	1000.000	1001.000	990.000	984.000
40.0	962.000	952.000	951.000	940.000	934.000
42.5	914.000	901.000	898.000	889.000	883.000
45.0	859.000	850.000	847.000	838.000	832.000
47.5	806.000	797.000	795.000	786.000	780.000
50.0	753.000	745.000	742.000	733.000	728.000
52.5	700.000	692.000	691.000	681.000	676.000
55.0	647.000	640.000	637.000	628.000	624.000
57.5	593.000	587.000	584.000	576.000	572.000
60.0	541.000	534.000	532.000	525.000	522.000
62.5	487.000	481.000	479.000	473.000	471.000
65.0	435.000	430.000	429.000	424.000	422.000
67.5	382.000	379.000	378.000	374.000	372.000
70.0	331.000	329.000	329.000	326.000	324.000
72.5	281.000	282.000	280.000	281.000	278.000
75.0	233.000	234.000	233.000	234.000	232.000
77.5	187.000	188.000	190.000	190.000	190.000
80.0	144.000	145.000	147.000	148.000	148.000
82.5	105.000	106.000	107.000	108.000	108.000
85.0	65.000	67.000	68.000	69.000	70.000
87.5	28.000	30.000	31.000	34.000	34.000
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	292.445	291.667
112.5	332.111	330.555	333.667	338.333	334.445
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.)

135.0	749.000	745.111	747.444	745.111	739.667
137.5	794.111	787.889	791.778	788.667	783.222
140.0	839.222	832.222	836.889	833.778	827.556
142.5	880.444	875.000	880.444	875.778	870.333
145.0	924.778	915.444	921.667	917.000	911.556
147.5	964.444	955.111	961.333	956.667	951.222
150.0	1003.333	993.222	999.444	994.778	990.111
152.5	1037.555	1029.778	1036.000	1030.555	1026.667
155.0	1071.000	1063.222	1068.667	1064.000	1060.111
157.5	1103.667	1095.889	1100.555	1095.889	1092.778
160.0	1131.667	1125.445	1130.111	1125.445	1123.111
162.5	1158.111	1151.111	1156.555	1151.889	1150.333
165.0	1179.889	1174.445	1177.555	1175.222	1174.445
167.5	1199.333	1194.667	1197.000	1195.445	1195.445
170.0	1215.667	1212.555	1214.111	1212.555	1212.555
172.5	1227.333	1227.333	1226.555	1226.555	1226.555
175.0	1236.667	1236.667	1236.667	1235.889	1236.667
177.5	1242.111	1242.889	1242.889	1242.889	1242.889
180.0	1244.445	1244.445	1244.445	1244.445	1244.445

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	519.83	N.A.	7.50
0-30	1084.16	N.A.	15.60
0-40	1738.57	N.A.	25.00
0-60	2958.57	N.A.	42.50
0-80	3630.15	N.A.	52.20
0-90	3706.19	N.A.	53.30
10-90	3570.19	N.A.	51.30
20-40	1218.73	N.A.	17.50
20-50	1870.64	N.A.	26.90
40-70	1643.59	N.A.	23.60
60-80	671.58	N.A.	9.70
70-80	247.99	N.A.	3.60
80-90	76.04	N.A.	1.10
90-110	285.32	N.A.	4.10
90-120	660.00	N.A.	9.50
90-130	1162.64	N.A.	16.70
90-150	2311.66	N.A.	33.20
90-180	3251.3	N.A.	46.70
110-180	2965.98	N.A.	42.60
0-180	6957.49	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	136.00
10-20	383.83
20-30	564.33
30-40	654.40
40-50	651.91
50-60	568.09
60-70	423.59
70-80	247.99
80-90	76.04
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

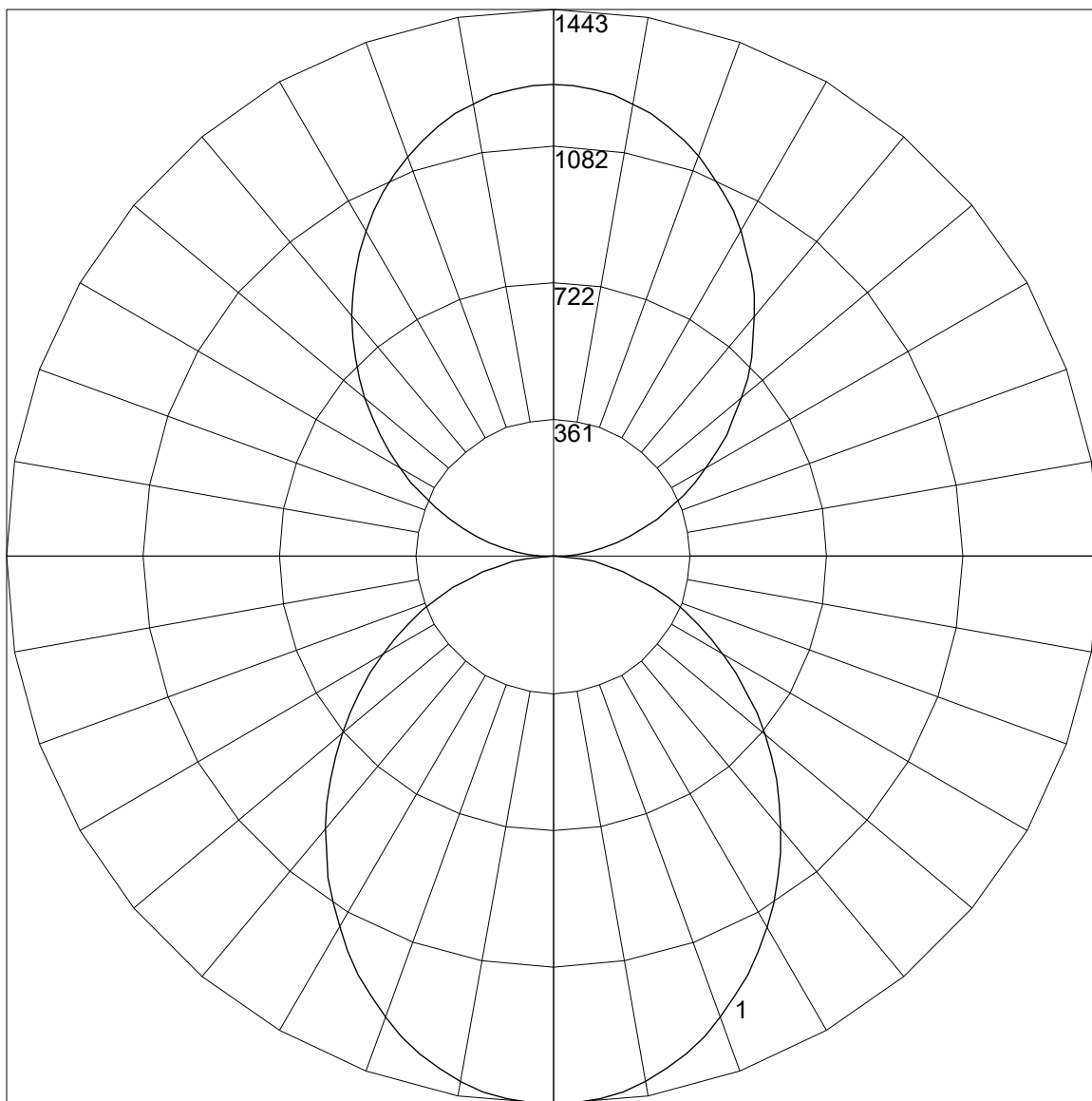
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	53
1	98	94	90	87	91	87	84	81	75	72	70	63	61	59	52	51	50	45
2	90	82	76	71	83	76	71	66	65	61	58	55	52	50	46	44	42	37
3	82	72	65	59	75	67	61	55	58	53	49	49	45	42	41	38	36	32
4	75	64	56	50	69	60	52	47	51	46	41	44	39	36	36	33	31	27
5	69	57	49	43	63	53	46	40	46	40	36	39	35	31	33	29	27	24
6	63	51	43	37	58	48	40	35	41	36	31	35	31	27	30	26	24	21
7	59	46	38	33	54	43	36	31	37	32	28	32	28	24	27	24	21	18
8	54	42	34	29	50	39	32	27	34	29	24	29	25	22	25	21	19	16
9	51	38	31	26	47	36	29	24	31	26	22	27	23	19	23	20	17	15
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	21	18	15	14

POLAR GRAPH



Maximum Candela = 1443 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)