

# 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 : HPR-LED-F-1X4-DCO-V-8-35-ITL85141.003.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST]ITL85141.003 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[TESTDATE]08/18/15  
[ISSUEDATE]04/28/16  
[MANUFAC]FINELITE, INC.  
[LUMCAT]FINELITE HPR-LED-F-1X4-DCO-V-8-35  
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 58.1 WATTS  
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 57.3 WATTS  
[ABSOLUTE]LUMENS]5873  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL85141. 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	5873
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	101
Total Luminaire Watts	58.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.83 ft
Luminous Width (90-270)	0.81 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6911	6737	6498
55	6285	5990	5695
65	5594	5205	4769
75	4735	4181	3646
85	3824	2236	1765

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	2394.736	2394.736	2394.736	2394.736	2394.736
2.5	2393.263	2393.263	2394.736	2393.263	2393.263
5.0	2381.473	2382.947	2384.421	2384.421	2384.421
7.5	2365.263	2366.736	2369.684	2369.684	2369.684
10.0	2343.157	2340.210	2347.579	2349.052	2344.631
12.5	2310.736	2309.263	2318.105	2321.052	2313.684
15.0	2273.894	2269.473	2282.736	2282.736	2276.842
17.5	2228.210	2222.315	2238.526	2237.052	2228.210
20.0	2178.105	2172.210	2185.473	2181.052	2173.684
22.5	2125.052	2116.210	2126.526	2122.105	2110.315
25.0	2063.158	2052.842	2061.684	2052.842	2042.526
27.5	1993.894	1983.579	1992.421	1979.158	1964.421
30.0	1921.684	1911.368	1914.315	1898.105	1881.894
32.5	1842.105	1833.263	1831.789	1811.158	1794.947
35.0	1759.579	1752.210	1744.842	1721.263	1703.579
37.5	1675.579	1666.737	1654.947	1626.947	1609.263
40.0	1587.158	1578.316	1563.579	1531.158	1514.947
42.5	1495.789	1488.421	1466.316	1433.894	1416.210
45.0	1404.421	1394.105	1369.052	1336.631	1320.421
47.5	1313.052	1304.210	1274.737	1237.895	1221.684
50.0	1220.210	1211.368	1178.947	1142.105	1124.421
52.5	1128.842	1120.000	1084.631	1046.316	1034.526
55.0	1036.000	1024.210	987.368	952.000	938.737
57.5	944.631	932.842	898.947	860.631	844.421
60.0	856.210	842.947	807.579	769.263	753.053
62.5	766.316	754.526	719.158	677.895	664.631
65.0	679.368	667.579	632.210	590.947	579.158
67.5	593.895	583.579	548.210	506.947	496.631
70.0	509.895	501.053	464.210	427.368	417.053
72.5	428.842	421.474	386.105	352.210	341.895
75.0	352.210	344.842	310.947	280.000	271.158
77.5	280.000	272.632	240.210	213.684	203.368
80.0	216.632	203.368	172.421	147.368	138.526
82.5	153.263	138.526	109.053	91.368	84.000
85.0	95.789	81.053	56.000	47.158	44.211
87.5	42.737	26.526	19.158	17.684	16.211
90.0	0.000	0.000	0.000	0.000	0.000

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	867.84	N.A.	14.80
0-30	1813.22	N.A.	30.90
0-40	2898.87	N.A.	49.40
0-60	4837.46	N.A.	82.40
0-80	5794.67	N.A.	98.70
0-90	5873.19	N.A.	100.00
10-90	5646.85	N.A.	96.10
20-40	2031.04	N.A.	34.60
20-50	3084.89	N.A.	52.50
40-70	2563.72	N.A.	43.70
60-80	957.21	N.A.	16.30
70-80	332.08	N.A.	5.70
80-90	78.52	N.A.	1.30
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	5873.19	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	226.34
10-20	641.50
20-30	945.38
30-40	1085.65
40-50	1053.85
50-60	884.73
60-70	625.13
70-80	332.08
80-90	78.52
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

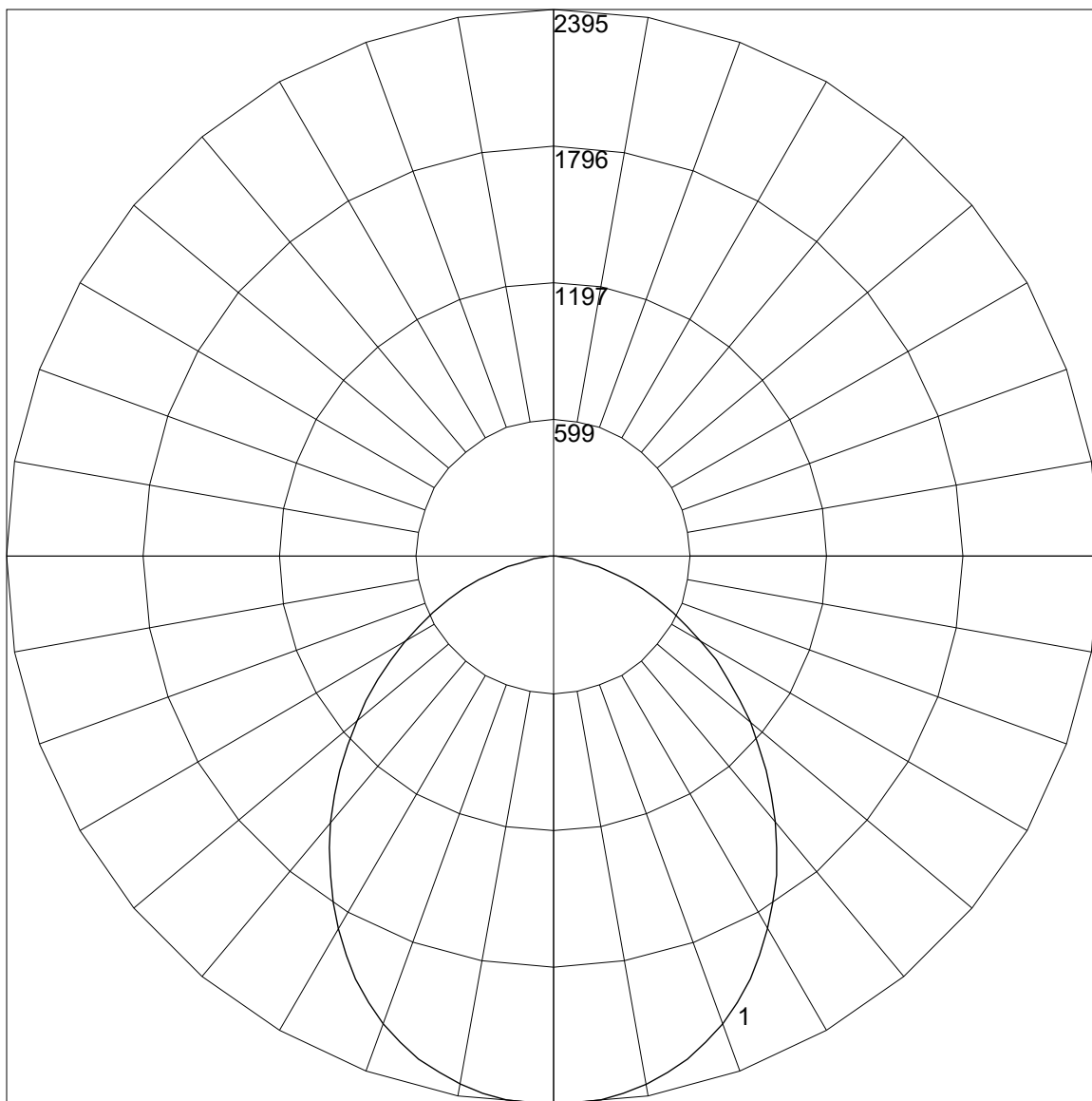
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77	83	79	76	80	77	74	72
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61
4	84	73	64	58	82	71	63	57	69	62	56	66	60	56	64	59	55	53
5	78	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	48	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	45	39	34	32
9	58	45	37	32	57	44	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	28	38	33	28	27

POLAR GRAPH



Maximum Candela = 2394.736 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)