

# 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-EP-F-2X4-DCO-H-8-35-ITL85146.003.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85146.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/20/15

[ISSUEDATE]04/28/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HPR-LED-EP-F-2X4-DCO-H-8-35

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 40.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 41.4 WATTS

[ABSOLUTE]LUMENS]5001

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL85146. 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	5001
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	123
Total Luminaire Watts	40.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.83 ft
Luminous Width (90-270)	1.81 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2560	2555	2558
55	2429	2419	2400
65	2251	2208	2191
75	1917	1842	1810
85	1268	1199	1158

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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	1841.595	1841.595	1841.595	1841.595	1841.595
2.5	1840.042	1840.042	1839.266	1839.266	1839.266
5.0	1833.058	1833.058	1832.282	1832.282	1832.282
7.5	1821.417	1820.641	1819.865	1819.865	1819.865
10.0	1802.791	1804.344	1803.568	1803.568	1805.120
12.5	1780.286	1781.062	1782.614	1782.614	1781.838
15.0	1754.676	1754.676	1756.228	1756.228	1755.452
17.5	1724.409	1725.185	1725.185	1725.185	1725.185
20.0	1689.486	1690.263	1690.263	1690.263	1690.263
22.5	1651.459	1651.459	1651.459	1652.236	1651.459
25.0	1608.776	1608.776	1608.776	1609.552	1608.776
27.5	1562.988	1562.988	1562.988	1563.764	1562.988
30.0	1514.097	1513.320	1513.320	1514.873	1513.320
32.5	1462.100	1462.876	1462.876	1463.653	1463.653
35.0	1407.776	1407.776	1409.328	1408.552	1408.552
37.5	1351.124	1351.124	1351.900	1351.900	1354.228
40.0	1292.919	1293.695	1292.919	1292.919	1295.247
42.5	1232.386	1231.610	1230.834	1230.834	1232.386
45.0	1169.525	1168.749	1167.197	1167.197	1168.749
47.5	1102.008	1103.560	1100.456	1099.680	1103.560
50.0	1036.819	1036.042	1034.490	1033.714	1037.595
52.5	969.301	966.197	965.421	964.645	967.749
55.0	900.232	898.680	896.351	892.471	889.367
57.5	828.834	827.282	825.730	821.073	817.193
60.0	756.660	754.332	751.228	746.571	743.467
62.5	686.815	682.158	677.502	672.069	668.965
65.0	614.641	611.537	603.000	597.568	598.344
67.5	540.139	537.035	527.722	522.290	522.290
70.0	465.637	462.533	453.996	447.788	446.236
72.5	392.687	389.583	380.270	374.838	373.286
75.0	320.514	316.633	308.097	303.440	302.664
77.5	250.668	246.788	239.803	235.923	234.371
80.0	185.479	181.598	176.166	173.062	172.286
82.5	124.946	121.842	118.737	116.409	115.633
85.0	71.398	69.846	67.517	65.965	65.189
87.5	26.386	27.162	24.834	23.282	23.282
90.0	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HPR-LED-EP-F-2X4-DCO-H-8-35-ITL85146.003.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	669.10	N.A.	13.40
0-30	1410.28	N.A.	28.20
0-40	2291.29	N.A.	45.80
0-60	3992.15	N.A.	79.80
0-80	4918.78	N.A.	98.40
0-90	5000.64	N.A.	100.00
10-90	4826.64	N.A.	96.50
20-40	1622.19	N.A.	32.40
20-50	2522.75	N.A.	50.40
40-70	2298.14	N.A.	46.00
60-80	926.63	N.A.	18.50
70-80	329.35	N.A.	6.60
80-90	81.85	N.A.	1.60
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	5000.64	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	174.00
10-20	495.10
20-30	741.18
30-40	881.02
40-50	900.56
50-60	800.30
60-70	597.28
70-80	329.35
80-90	81.85
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

# IES INDOOR REPORT

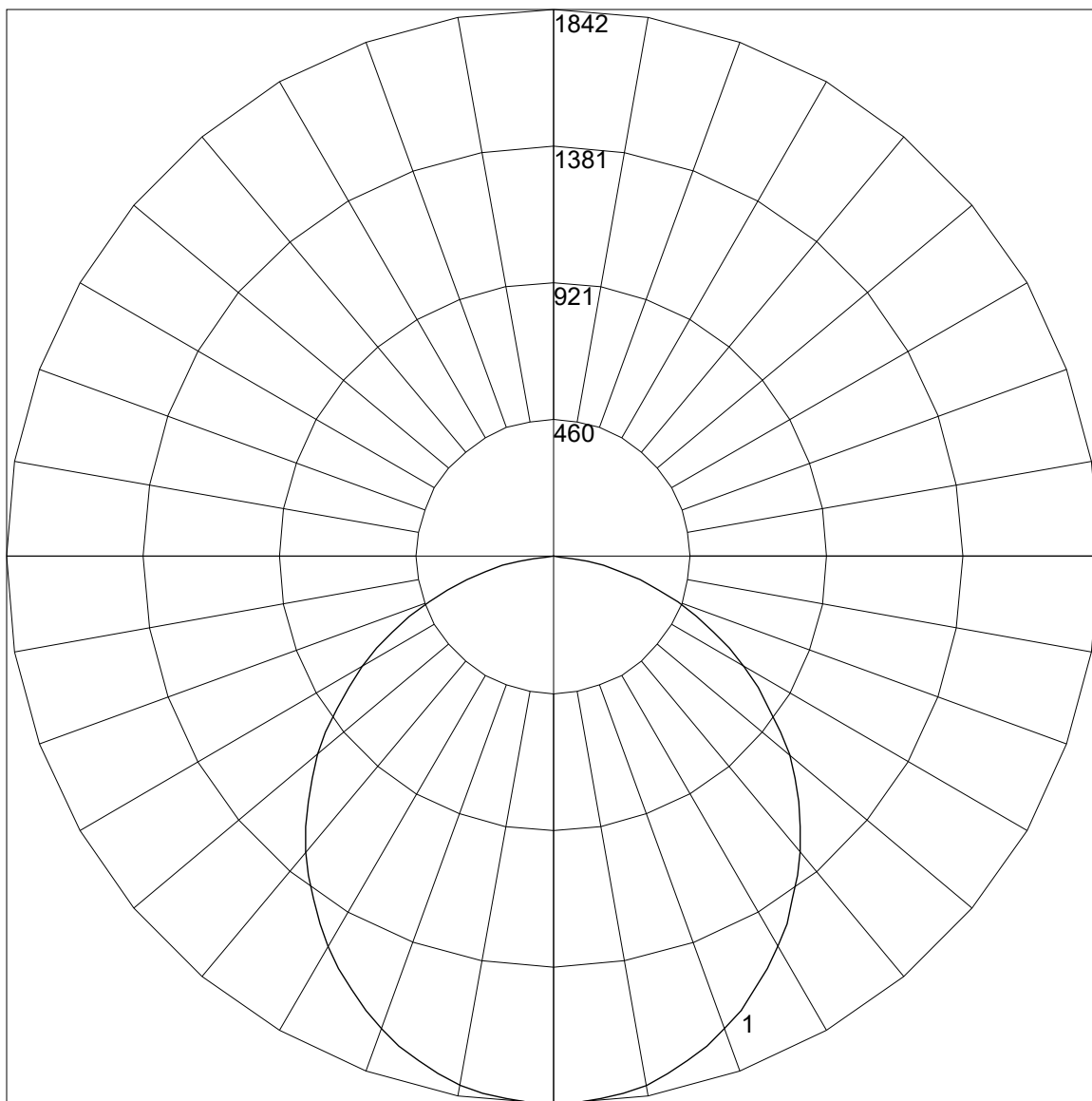
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	96	89	83	78	86	80	76	82	78	74	79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

POLAR GRAPH



Maximum Candela = 1841.595 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)