

# 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-A-2X4-DCO-V-8-35-ITL85146.004.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85146.004 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/20/15

[ISSUEDATE]04/15/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HPR-LED-EP-A-2X4-DCO-V-8-35

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 55.1 WATTS, 0.461 AMPS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 54.5 WATTS, 0.203 AMPS

[ABSOLUTE]LUMENS]6444

[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	6444
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	117
Total Luminaire Watts	55.1
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	3299	3292	3296
55	3130	3117	3092
65	2901	2846	2824
75	2470	2374	2332
85	1634	1545	1492

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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>
<b>0.0</b>	2373	2373	2373	2373	2373
<b>2.5</b>	2371	2371	2370	2370	2370
<b>5.0</b>	2362	2362	2361	2361	2361
<b>7.5</b>	2347	2346	2345	2345	2345
<b>10.0</b>	2323	2325	2324	2324	2326
<b>12.5</b>	2294	2295	2297	2297	2296
<b>15.0</b>	2261	2261	2263	2263	2262
<b>17.5</b>	2222	2223	2223	2223	2223
<b>20.0</b>	2177	2178	2178	2178	2178
<b>22.5</b>	2128	2128	2128	2129	2128
<b>25.0</b>	2073	2073	2073	2074	2073
<b>27.5</b>	2014	2014	2014	2015	2014
<b>30.0</b>	1951	1950	1950	1952	1950
<b>32.5</b>	1884	1885	1885	1886	1886
<b>35.0</b>	1814	1814	1816	1815	1815
<b>37.5</b>	1741	1741	1742	1742	1745
<b>40.0</b>	1666	1667	1666	1666	1669
<b>42.5</b>	1588	1587	1586	1586	1588
<b>45.0</b>	1507	1506	1504	1504	1506
<b>47.5</b>	1420	1422	1418	1417	1422
<b>50.0</b>	1336	1335	1333	1332	1337
<b>52.5</b>	1249	1245	1244	1243	1247
<b>55.0</b>	1160	1158	1155	1150	1146
<b>57.5</b>	1068	1066	1064	1058	1053
<b>60.0</b>	975	972	968	962	958
<b>62.5</b>	885	879	873	866	862
<b>65.0</b>	792	788	777	770	771
<b>67.5</b>	696	692	680	673	673
<b>70.0</b>	600	596	585	577	575
<b>72.5</b>	506	502	490	483	481
<b>75.0</b>	413	408	397	391	390
<b>77.5</b>	323	318	309	304	302
<b>80.0</b>	239	234	227	223	222
<b>82.5</b>	161	157	153	150	149
<b>85.0</b>	92	90	87	85	84
<b>87.5</b>	34	35	32	30	30
<b>90.0</b>	0	0	0	0	0

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HPR-LED-EP-A-2X4-DCO-V-8-35-ITL85146.004.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	862.17	N.A.	13.40
0-30	1817.22	N.A.	28.20
0-40	2952.46	N.A.	45.80
0-60	5144.12	N.A.	79.80
0-80	6338.14	N.A.	98.40
0-90	6443.61	N.A.	100.00
10-90	6219.4	N.A.	96.50
20-40	2090.29	N.A.	32.40
20-50	3250.71	N.A.	50.40
40-70	2961.29	N.A.	46.00
60-80	1194.02	N.A.	18.50
70-80	424.38	N.A.	6.60
80-90	105.47	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	6443.61	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	224.21
10-20	637.96
20-30	955.05
30-40	1135.24
40-50	1160.42
50-60	1031.23
60-70	769.63
70-80	424.38
80-90	105.47
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

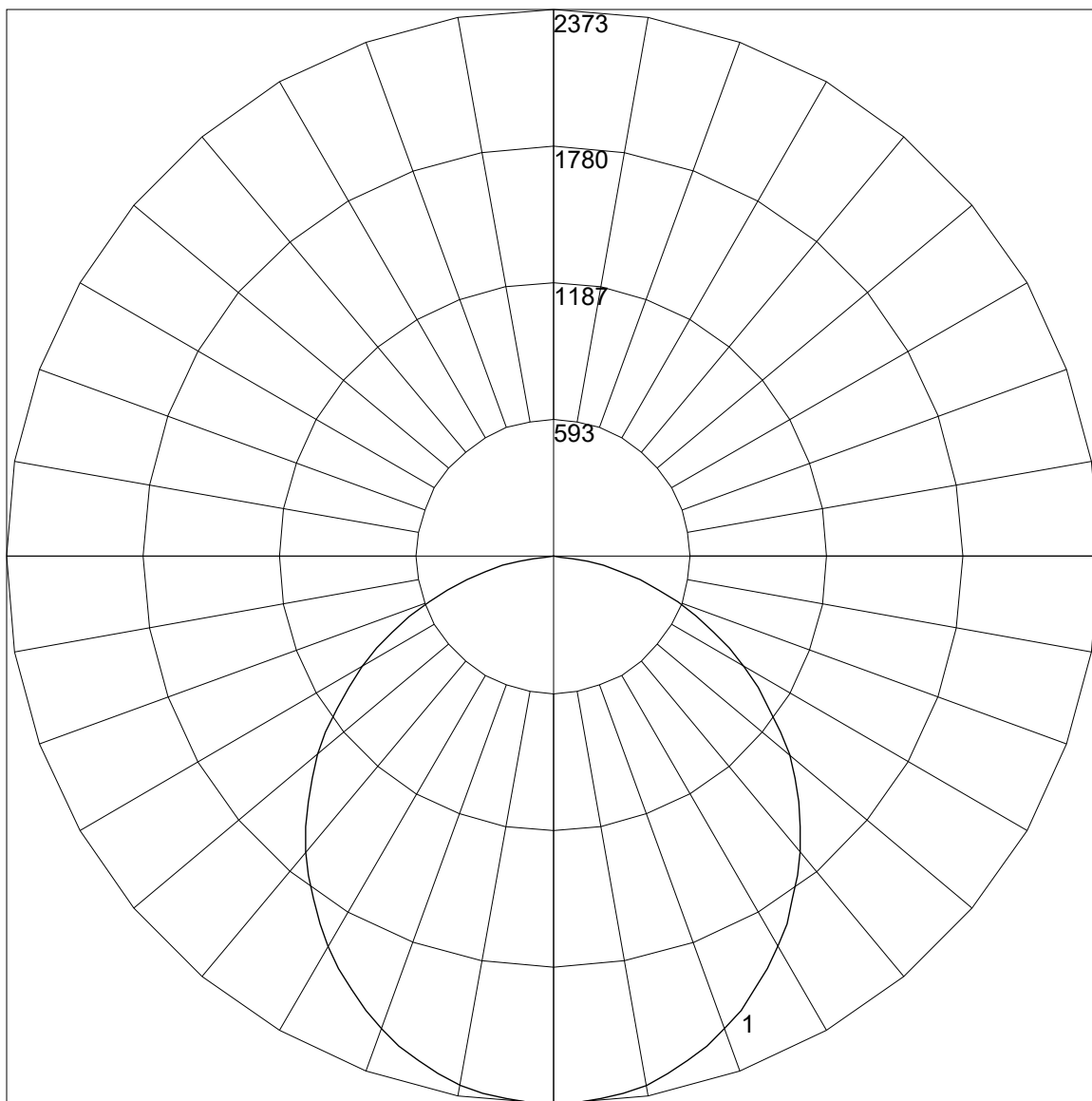
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 = 2373 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)