

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-A-2X4-DCO-S-8-35-ITL85145.005.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]ITL85145.005 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]08/20/15
[ISSUEDATE]04/28/16
[MANUFAC]FINELITE, INC.
[LUMCAT]FINELITE HPR-LED-A-2X4-DCO-S-8-35
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 27.0 WATTS
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 28.0 WATTS
[ABSOLUTE]LUMENS]3772
[OTHER]see www.finelite.com for source file ITL85145. 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

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3772
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	140
Total Luminaire Watts	27
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.32
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	1935	1925	1929
55	1750	1745	1731
65	1544	1532	1507
75	1296	1270	1257
85	989	931	854

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	1481.622	1481.622	1481.622	1481.622	1481.622
2.5	1480.540	1480.540	1480.540	1480.000	1480.000
5.0	1475.676	1474.595	1474.595	1474.054	1474.054
7.5	1466.486	1465.405	1464.865	1463.784	1463.243
10.0	1451.351	1450.811	1450.270	1449.730	1447.568
12.5	1433.513	1431.351	1432.432	1430.811	1429.730
15.0	1412.432	1409.189	1410.270	1408.108	1406.486
17.5	1387.027	1384.324	1383.243	1381.081	1381.081
20.0	1357.297	1354.595	1352.432	1350.270	1350.270
22.5	1323.784	1321.081	1319.459	1316.757	1316.757
25.0	1286.486	1283.243	1281.622	1278.919	1279.459
27.5	1245.946	1242.162	1240.000	1237.838	1238.919
30.0	1201.622	1197.838	1196.216	1194.054	1195.135
32.5	1154.054	1150.811	1148.649	1147.027	1148.108
35.0	1104.324	1100.540	1098.919	1097.297	1098.919
37.5	1051.892	1048.649	1047.027	1045.405	1047.568
40.0	997.297	993.513	992.432	991.351	992.973
42.5	941.081	937.838	936.757	935.676	937.838
45.0	883.784	880.000	879.459	878.919	881.081
47.5	824.865	821.622	821.622	821.081	822.703
50.0	765.946	763.243	763.243	762.162	763.784
52.5	707.027	704.324	704.324	705.405	701.081
55.0	648.649	645.946	646.486	645.946	641.622
57.5	590.811	589.730	589.730	587.027	585.405
60.0	532.973	531.892	531.892	528.649	526.486
62.5	476.757	475.676	474.595	471.351	469.730
65.0	421.622	420.541	418.378	414.054	411.351
67.5	367.027	366.486	363.784	359.459	357.297
70.0	314.595	315.135	311.351	307.568	305.405
72.5	264.324	264.865	260.541	258.919	257.838
75.0	216.757	216.216	212.432	209.730	210.270
77.5	171.351	170.270	167.568	165.405	165.405
80.0	129.189	127.568	125.405	123.784	123.784
82.5	90.811	89.730	88.108	84.865	84.865
85.0	55.676	54.054	52.432	49.189	48.108
87.5	23.243	22.162	18.378	16.216	15.676
90.0	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	537.24	N.A.	14.20
0-30	1127.16	N.A.	29.90
0-40	1814.37	N.A.	48.10
0-60	3071.07	N.A.	81.40
0-80	3712.19	N.A.	98.40
0-90	3772.43	N.A.	100.00
10-90	3632.45	N.A.	96.30
20-40	1277.13	N.A.	33.90
20-50	1955.8	N.A.	51.80
40-70	1670.92	N.A.	44.30
60-80	641.13	N.A.	17.00
70-80	226.90	N.A.	6.00
80-90	60.24	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	3772.43	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

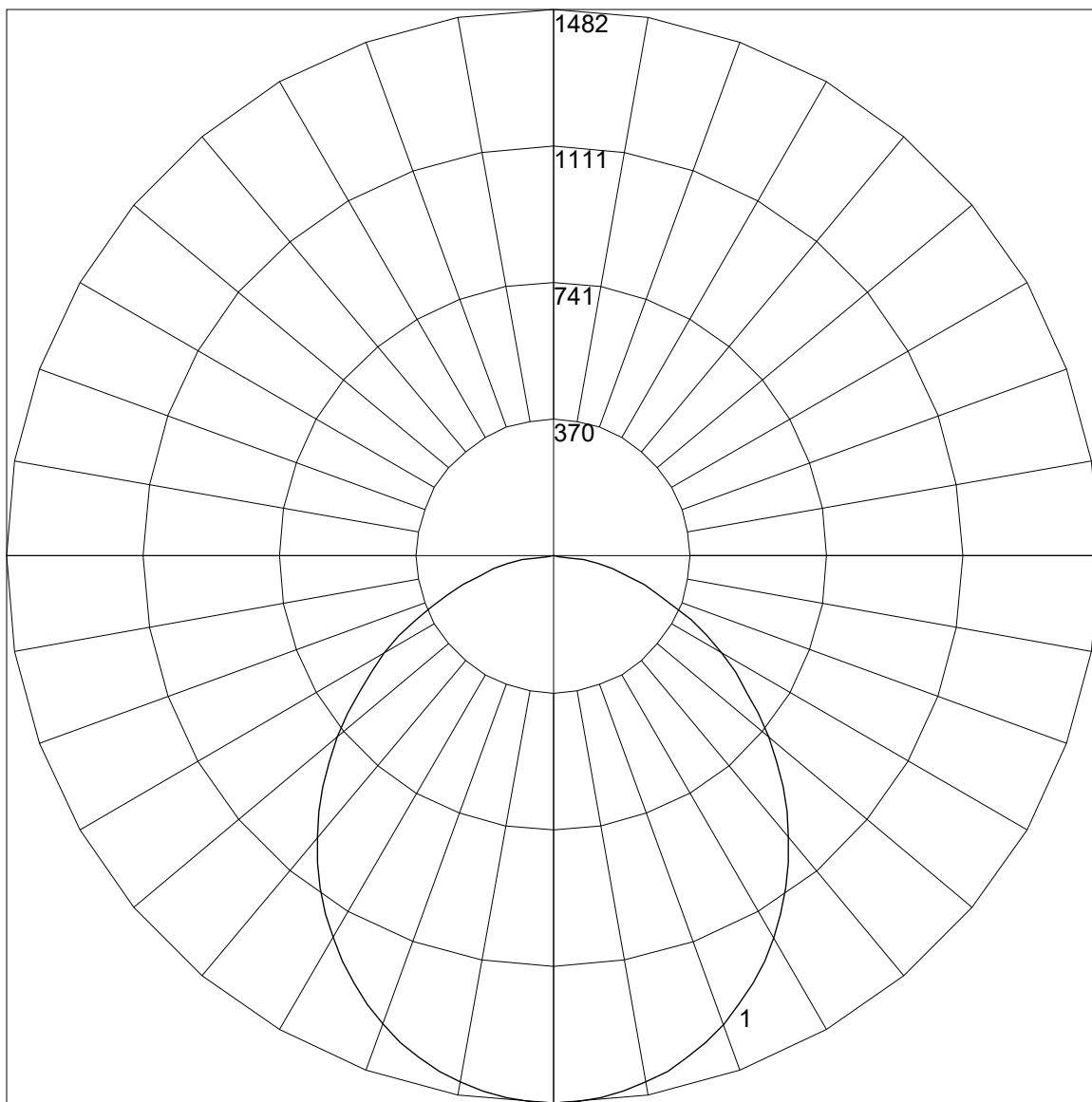
Zone	Lumens
0-10	139.98
10-20	397.25
20-30	589.93
30-40	687.20
40-50	678.68
50-60	578.03
60-70	414.22
70-80	226.90
80-90	60.24
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	60
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	43	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	51	43	38	49	42	38	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

POLAR GRAPH



Maximum Candela = 1481.622 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)