

# 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-B-8-TW-ITL85146.902.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85146.902 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-B-8-TW

[OTHER]ies file is based on 3500K; see luminaire tech sheet at [www.finelite.com](http://www.finelite.com) for lumen adjustment factors for other CCT's & CRI

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 38.7 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 39.8 WATTS

[ABSOLUTE]LUMENS]4379

[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	4379
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	38.7
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	2242	2237	2240
55	2127	2118	2101
65	1971	1934	1919
75	1678	1613	1585
85	1110	1050	1014

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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	1612.541	1612.541	1612.541	1612.541	1612.541
2.5	1611.182	1611.182	1610.502	1610.502	1610.502
5.0	1605.066	1605.066	1604.386	1604.386	1604.386
7.5	1594.873	1594.193	1593.514	1593.514	1593.514
10.0	1578.564	1579.923	1579.243	1579.243	1580.602
12.5	1558.857	1559.537	1560.896	1560.896	1560.216
15.0	1536.432	1536.432	1537.792	1537.792	1537.112
17.5	1509.931	1510.610	1510.610	1510.610	1510.610
20.0	1479.351	1480.031	1480.031	1480.031	1480.031
22.5	1446.054	1446.054	1446.054	1446.734	1446.054
25.0	1408.680	1408.680	1408.680	1409.359	1408.680
27.5	1368.587	1368.587	1368.587	1369.266	1368.587
30.0	1325.776	1325.097	1325.097	1326.456	1325.097
32.5	1280.247	1280.927	1280.927	1281.606	1281.606
35.0	1232.680	1232.680	1234.039	1233.359	1233.359
37.5	1183.073	1183.073	1183.753	1183.753	1185.792
40.0	1132.108	1132.788	1132.108	1132.108	1134.147
42.5	1079.104	1078.425	1077.745	1077.745	1079.104
45.0	1024.062	1023.382	1022.023	1022.023	1023.382
47.5	964.942	966.301	963.583	962.904	966.301
50.0	907.861	907.181	905.822	905.143	908.541
52.5	848.741	846.023	845.344	844.664	847.382
55.0	788.263	786.903	784.865	781.467	778.749
57.5	725.745	724.386	723.027	718.950	715.552
60.0	662.548	660.510	657.792	653.714	650.996
62.5	601.390	597.313	593.236	588.479	585.761
65.0	538.193	535.475	528.000	523.243	523.923
67.5	472.958	470.239	462.085	457.328	457.328
70.0	407.722	405.004	397.529	392.093	390.734
72.5	343.846	341.127	332.973	328.216	326.857
75.0	280.649	277.251	269.776	265.699	265.019
77.5	219.490	216.093	209.977	206.579	205.220
80.0	162.409	159.012	154.255	151.537	150.857
82.5	109.405	106.687	103.969	101.931	101.251
85.0	62.517	61.158	59.120	57.761	57.081
87.5	23.104	23.784	21.745	20.386	20.386
90.0	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HPR-LED-EP-F-2X4-DCO-B-8-TW-ITL85146.902.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	585.88	N.A.	13.40
0-30	1234.87	N.A.	28.20
0-40	2006.31	N.A.	45.80
0-60	3495.62	N.A.	79.80
0-80	4307.00	N.A.	98.40
0-90	4378.67	N.A.	100.00
10-90	4226.31	N.A.	96.50
20-40	1420.43	N.A.	32.40
20-50	2208.98	N.A.	50.40
40-70	2012.3	N.A.	46.00
60-80	811.38	N.A.	18.50
70-80	288.38	N.A.	6.60
80-90	71.67	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	4378.67	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	152.36
10-20	433.52
20-30	648.99
30-40	771.44
40-50	788.55
50-60	700.76
60-70	522.99
70-80	288.38
80-90	71.67
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

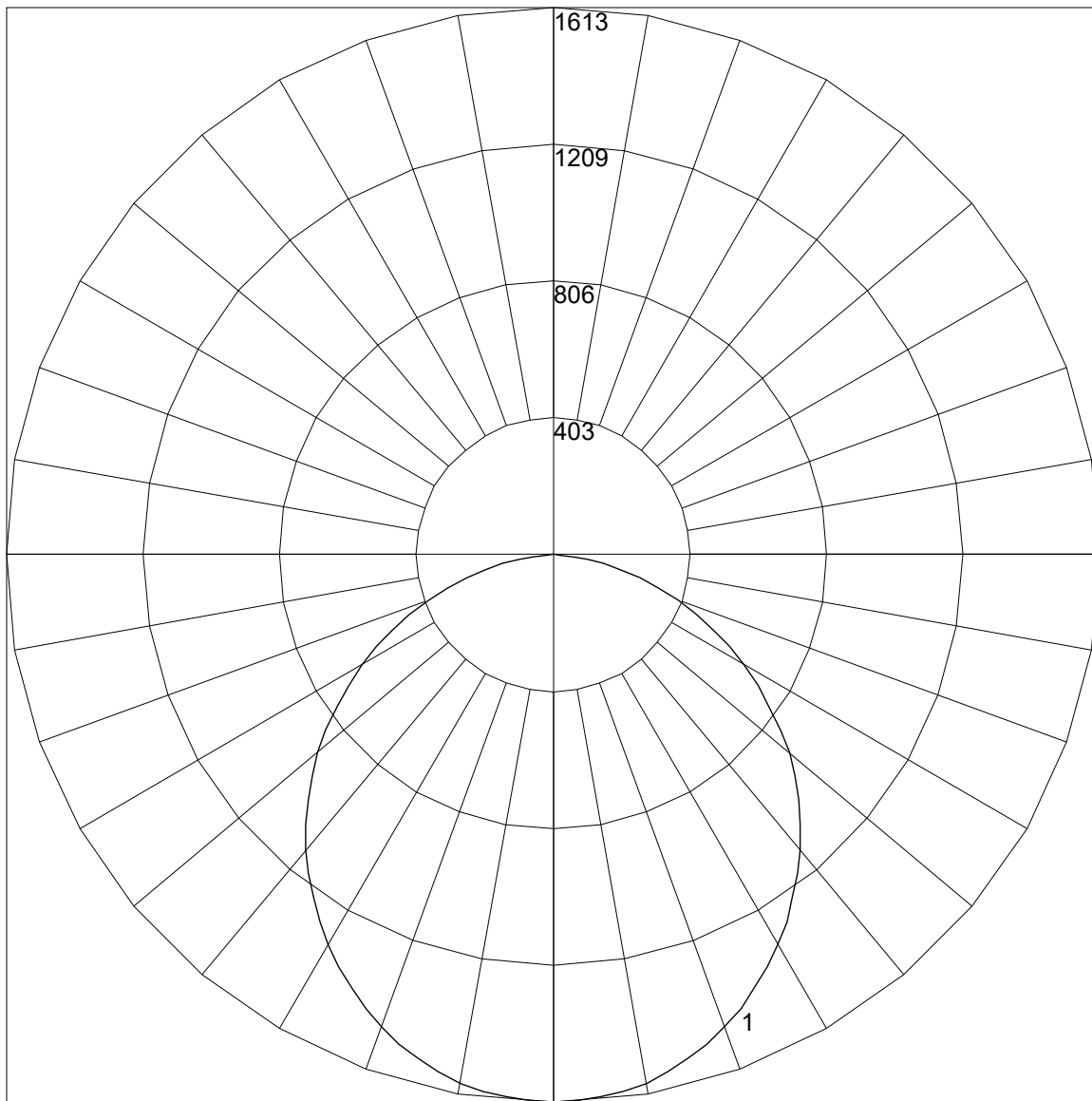
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 = 1612.541 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)