

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-2X2-CS-H-8-35-ITL86019.003.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]ITL86019.003 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]11/30/15
[ISSUE DATE]04/28/16
[MANUFACTURER]FINELITE, INC.
[LUMCAT]FINELITE HPR-LED-2X2-CS-H-8-35
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 42.9 WATTS
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 43.4 WATTS
[ABSOLUTE LUMENS]4709
[OTHER]see www.finelite.com for source file ITL86098. 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	4709
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
Total Luminaire Watts	42.9
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)	1.82 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	4983	4959	5015
55	4667	4667	4754
65	4276	4317	4441
75	3631	3805	4036
85	2552	3183	3240

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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	1761.464	1761.464	1761.464	1761.464	1761.464
2.5	1759.928	1759.928	1760.696	1759.928	1759.928
5.0	1753.786	1753.786	1753.786	1753.018	1753.786
7.5	1741.500	1742.268	1742.268	1741.500	1741.500
10.0	1726.143	1726.911	1724.607	1723.839	1721.536
12.5	1703.107	1704.643	1703.107	1700.036	1699.268
15.0	1676.232	1677.000	1674.696	1672.393	1671.625
17.5	1643.982	1645.518	1642.446	1640.143	1640.143
20.0	1608.661	1609.428	1606.357	1604.053	1604.053
22.5	1567.964	1568.732	1564.893	1564.893	1564.125
25.0	1526.500	1525.732	1521.125	1522.661	1520.357
27.5	1478.893	1478.125	1474.286	1475.821	1473.518
30.0	1428.982	1426.678	1424.375	1426.678	1425.143
32.5	1376.000	1373.696	1371.393	1373.696	1374.464
35.0	1319.178	1319.178	1314.571	1319.178	1321.482
37.5	1263.125	1261.589	1258.518	1263.893	1267.732
40.0	1204.000	1199.393	1200.928	1206.303	1210.911
42.5	1144.875	1141.803	1138.732	1147.178	1149.482
45.0	1082.678	1075.768	1077.303	1086.518	1089.589
47.5	1018.946	1015.107	1014.339	1023.553	1027.393
50.0	954.446	950.607	952.143	960.589	966.732
52.5	888.411	885.339	887.643	896.089	902.232
55.0	822.375	819.303	822.375	831.589	837.732
57.5	755.571	752.500	757.875	766.321	772.464
60.0	688.768	684.929	692.607	701.054	707.196
62.5	621.964	616.589	626.571	635.018	641.929
65.0	555.161	550.554	560.536	569.750	576.661
67.5	487.589	484.518	493.732	505.250	511.393
70.0	421.554	418.482	427.696	439.214	444.589
72.5	352.446	354.750	364.732	376.250	382.393
75.0	288.714	291.786	302.536	314.821	320.964
77.5	227.286	231.893	243.411	254.929	261.839
80.0	169.696	175.839	187.357	198.107	204.250
82.5	115.179	122.089	135.911	142.821	145.893
85.0	68.339	75.250	85.232	85.232	86.768
87.5	27.643	33.018	36.089	37.625	39.161
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	638.50	N.A.	13.60
0-30	1339.83	N.A.	28.50
0-40	2164.61	N.A.	46.00
0-60	3737.55	N.A.	79.40
0-80	4615.52	N.A.	98.00
0-90	4708.61	N.A.	100.00
10-90	4542.14	N.A.	96.50
20-40	1526.11	N.A.	32.40
20-50	2360.65	N.A.	50.10
40-70	2128.84	N.A.	45.20
60-80	877.97	N.A.	18.60
70-80	322.07	N.A.	6.80
80-90	93.10	N.A.	2.00
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	4708.61	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	166.47
10-20	472.03
20-30	701.33
30-40	824.78
40-50	834.54
50-60	738.40
60-70	555.90
70-80	322.07
80-90	93.10
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

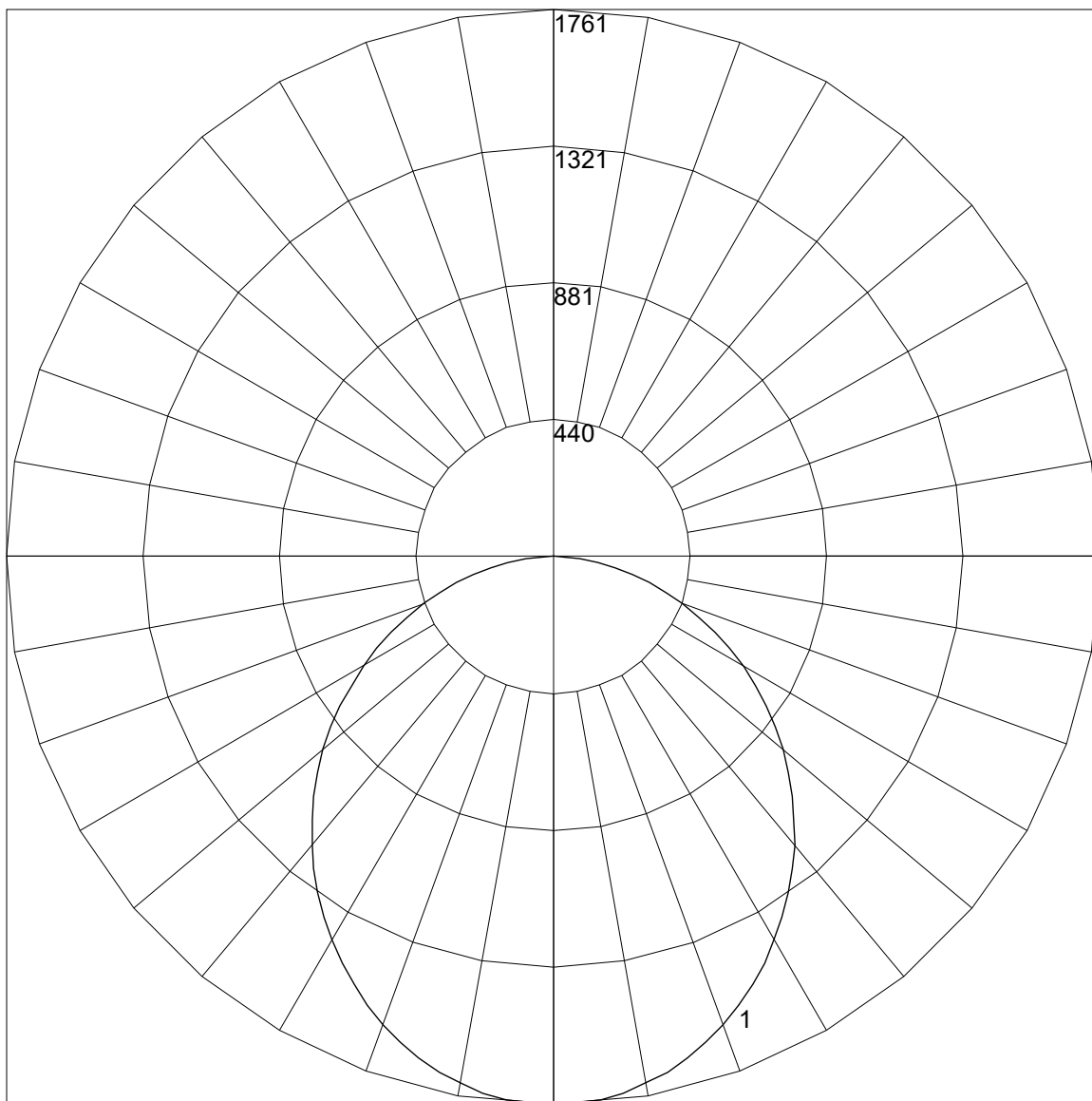
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	75	82	78	74	79	75	72	70
3	90	80	72	65	88	78	71	65	75	69	63	72	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	51
5	76	63	54	48	74	62	54	47	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	39	33	45	38	33	44	37	33	43	37	32	30
9	57	43	35	30	55	43	35	30	42	35	30	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 = 1761.464 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)