

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-F-1X4-DD-V-8-TW-ITL85153.903.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85153.903 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/26/15

[ISSUEDATE]04/28/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HPR-LED-F-1X4-DD-V-8-TW

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

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 63.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 62.4 WATTS

[ABSOLUTE]LUMENS]5145

[OTHER]see www.finelite.com for source file ITL85153. 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	5144
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	81
Total Luminaire Watts	63.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.83 ft
Luminous Width (90-270)	0.81 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5924	5837	5758
55	5339	5223	5143
65	4714	4580	4471
75	3997	3839	3720
85	3173	2644	2233

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	2111.789	2111.789	2111.789	2111.789	2111.789
2.5	2108.842	2108.842	2110.315	2110.315	2110.315
5.0	2100.000	2100.000	2100.000	2098.526	2098.526
7.5	2082.315	2082.315	2082.315	2079.368	2080.842
10.0	2061.684	2057.263	2057.263	2057.263	2052.842
12.5	2033.684	2024.842	2027.789	2027.789	2020.421
15.0	2001.263	1986.526	1992.421	1990.947	1980.631
17.5	1958.526	1943.789	1949.684	1946.737	1937.894
20.0	1911.368	1895.158	1899.579	1895.158	1886.315
22.5	1856.842	1843.579	1845.052	1840.631	1830.315
25.0	1800.842	1783.158	1784.631	1778.737	1768.421
27.5	1737.473	1719.789	1719.789	1713.894	1705.052
30.0	1669.684	1653.473	1652.000	1643.158	1635.789
32.5	1597.473	1581.263	1579.789	1569.473	1562.105
35.0	1523.789	1507.579	1504.631	1494.316	1486.947
37.5	1445.684	1432.421	1426.526	1414.737	1408.842
40.0	1367.579	1354.316	1349.895	1336.631	1329.263
42.5	1286.526	1276.210	1268.842	1254.105	1252.631
45.0	1205.473	1195.158	1187.789	1174.526	1171.579
47.5	1124.421	1117.052	1105.263	1094.947	1090.526
50.0	1040.421	1036.000	1024.210	1010.947	1009.474
52.5	960.842	953.474	943.158	928.421	928.421
55.0	881.263	873.895	862.105	850.316	848.842
57.5	803.158	794.316	784.000	772.210	770.737
60.0	725.053	717.684	705.895	695.579	694.105
62.5	646.947	644.000	630.737	618.947	618.947
65.0	573.263	567.368	557.053	545.263	543.789
67.5	499.579	495.158	486.316	477.474	473.053
70.0	428.842	425.895	417.053	408.210	405.263
72.5	362.526	358.105	349.263	341.895	340.421
75.0	297.684	293.263	285.895	278.526	277.053
77.5	238.737	231.368	225.474	219.579	216.632
80.0	181.263	175.368	168.000	162.105	159.158
82.5	128.211	122.316	114.947	109.053	106.105
85.0	79.579	75.158	66.316	60.421	56.000
87.5	35.368	29.474	22.105	20.632	19.158
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	759.51	N.A.	14.80
0-30	1579.88	N.A.	30.70
0-40	2519.19	N.A.	49.00
0-60	4206.83	N.A.	81.80
0-80	5064.78	N.A.	98.50
0-90	5144.37	N.A.	100.00
10-90	4945.33	N.A.	96.10
20-40	1759.67	N.A.	34.20
20-50	2675.05	N.A.	52.00
40-70	2240.96	N.A.	43.60
60-80	857.95	N.A.	16.70
70-80	304.63	N.A.	5.90
80-90	79.59	N.A.	1.50
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	5144.37	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

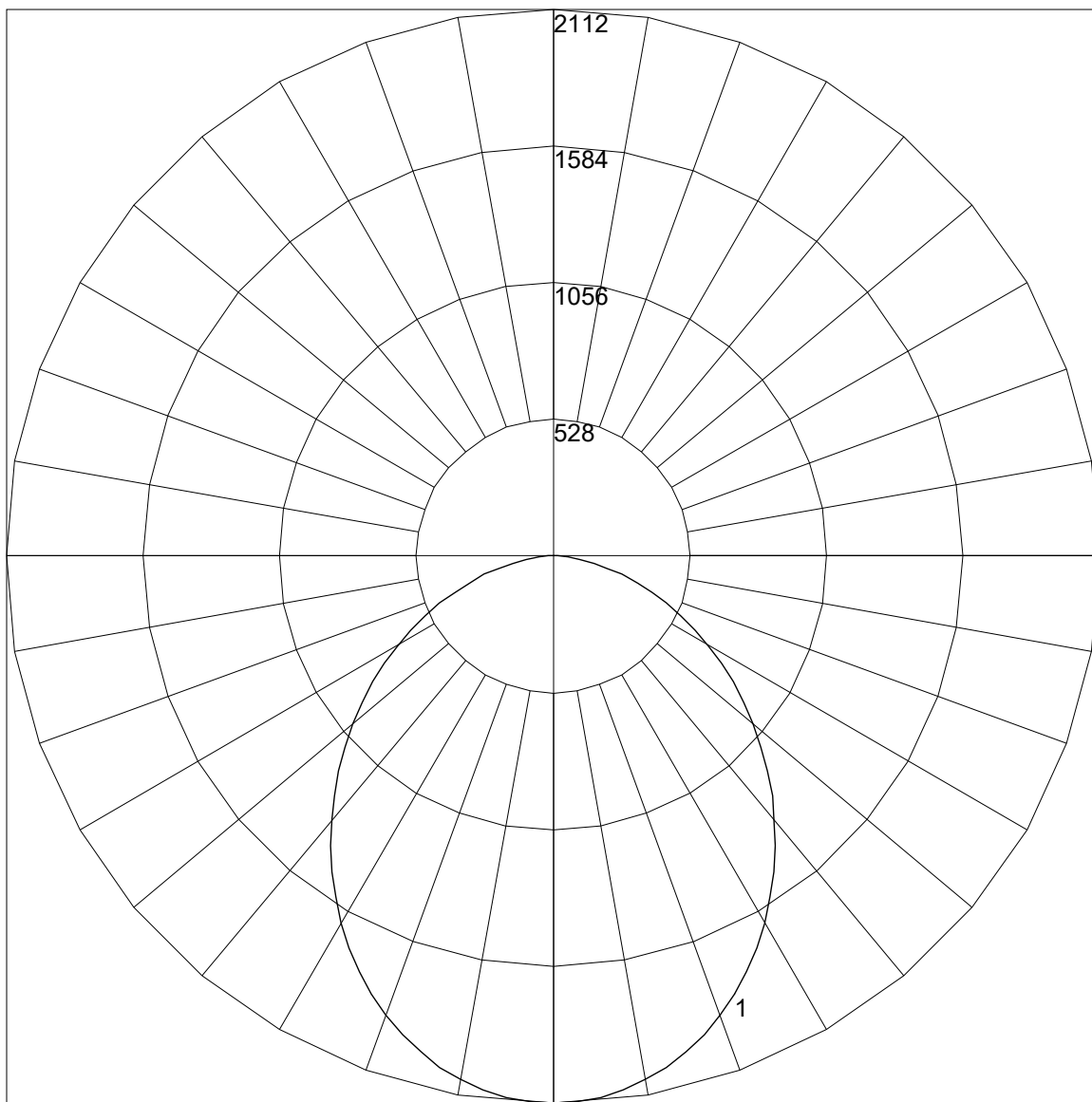
Zone	Lumens
0-10	199.04
10-20	560.47
20-30	820.37
30-40	939.31
40-50	915.38
50-60	772.26
60-70	553.32
70-80	304.63
80-90	79.59
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

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	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	72
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52
5	77	65	56	50	75	64	56	49	62	54	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40
7	67	53	45	39	65	53	44	39	51	44	38	50	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	40	34	46	39	34	44	38	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	54	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28	26

POLAR GRAPH



Maximum Candela = 2111.789 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)