

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-SL-LED-2X4-H-835-5155.001.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]HPR-SL-LED-2X4-H-835-5155.001
[TESTLAB] 4141 S. Pulaski Rd Goniophotometer Lab
[TESTDATE]01/04/2024
[ISSUEDATE]03/19/2024
[MANUFAC]FINELITE, Inc.
[LUMCAT]FINELITE HPR-SL-LED-2X4-H-835-5155
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 35.2 WATTS
[ABSOLUTELUMENS]5241
[OTHER]see www.finelite.com for source file 5155. 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	5241
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	149
Total Luminaire Watts	35.2
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.34
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	2.00 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2205	2388	2570
55	2085	2287	2455
65	1915	2062	2183
75	1641	1707	1762
85	1173	860	950

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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	1812.947	1812.947	1812.947	1812.947	1812.947
2.5	1811.991	1806.579	1810.776	1815.098	1812.153
5.0	1805.110	1800.116	1805.237	1808.685	1806.315
7.5	1794.298	1789.461	1795.130	1799.687	1798.248
10.0	1778.890	1773.865	1780.888	1787.351	1786.070
12.5	1759.190	1755.328	1763.785	1772.630	1771.441
15.0	1734.589	1731.973	1743.207	1753.609	1755.612
17.5	1706.723	1704.897	1719.511	1733.419	1737.270
20.0	1674.270	1674.392	1691.994	1711.851	1717.900
22.5	1637.309	1640.175	1662.659	1687.859	1696.094
25.0	1597.400	1602.133	1630.866	1661.804	1672.555
27.5	1553.620	1560.923	1596.261	1632.968	1647.163
30.0	1507.213	1516.226	1558.491	1602.133	1618.868
32.5	1455.666	1468.070	1517.788	1567.628	1588.014
35.0	1402.209	1417.095	1472.182	1529.137	1552.692
37.5	1345.618	1362.441	1424.850	1486.815	1511.570
40.0	1286.515	1305.443	1372.291	1438.106	1464.841
42.5	1223.814	1245.765	1316.448	1384.718	1411.230
45.0	1159.671	1182.911	1256.094	1325.584	1352.031
47.5	1096.801	1117.605	1191.675	1259.727	1285.000
50.0	1028.979	1050.344	1123.980	1188.775	1211.881
52.5	959.044	980.980	1052.591	1111.353	1133.028
55.0	889.520	910.240	975.798	1029.666	1047.697
57.5	819.474	836.907	897.022	944.285	960.348
60.0	748.832	762.761	814.951	855.924	869.728
62.5	674.709	687.669	732.350	766.893	778.036
65.0	601.942	612.601	648.346	676.172	686.411
67.5	530.798	538.362	566.990	588.528	596.067
70.0	459.201	463.109	485.793	502.795	508.050
72.5	387.160	388.883	405.749	417.687	421.432
75.0	316.048	317.551	328.613	336.941	339.178
77.5	248.478	248.621	255.251	259.748	260.787
80.0	185.900	184.524	188.384	188.645	188.748
82.5	128.352	126.105	126.381	123.262	121.526
85.0	76.042	64.884	55.747	67.123	61.607
87.5	12.874	12.742	12.361	12.190	12.206
90.0	2.086	1.964	1.843	1.944	2.120
92.5	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000

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CANDELA TABULATION - (Cont.)

135.0	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	663.86	N.A.	12.70
0-30	1416.67	N.A.	27.00
0-40	2338.6	N.A.	44.60
0-60	4172.4	N.A.	79.60
0-80	5160.34	N.A.	98.50
0-90	5240.9	N.A.	100.00
10-90	5069.36	N.A.	96.70
20-40	1674.74	N.A.	32.00
20-50	2641.7	N.A.	50.40
40-70	2473.27	N.A.	47.20
60-80	987.94	N.A.	18.80
70-80	348.47	N.A.	6.60
80-90	80.57	N.A.	1.50
90-110	0.27	N.A.	0.00
90-120	0.27	N.A.	0.00
90-130	0.27	N.A.	0.00
90-150	0.27	N.A.	0.00
90-180	0.27	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	5241.17	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	171.54
10-20	492.32
20-30	752.80
30-40	921.94
40-50	966.96
50-60	866.83
60-70	639.47
70-80	348.47
80-90	80.57
90-100	0.27
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

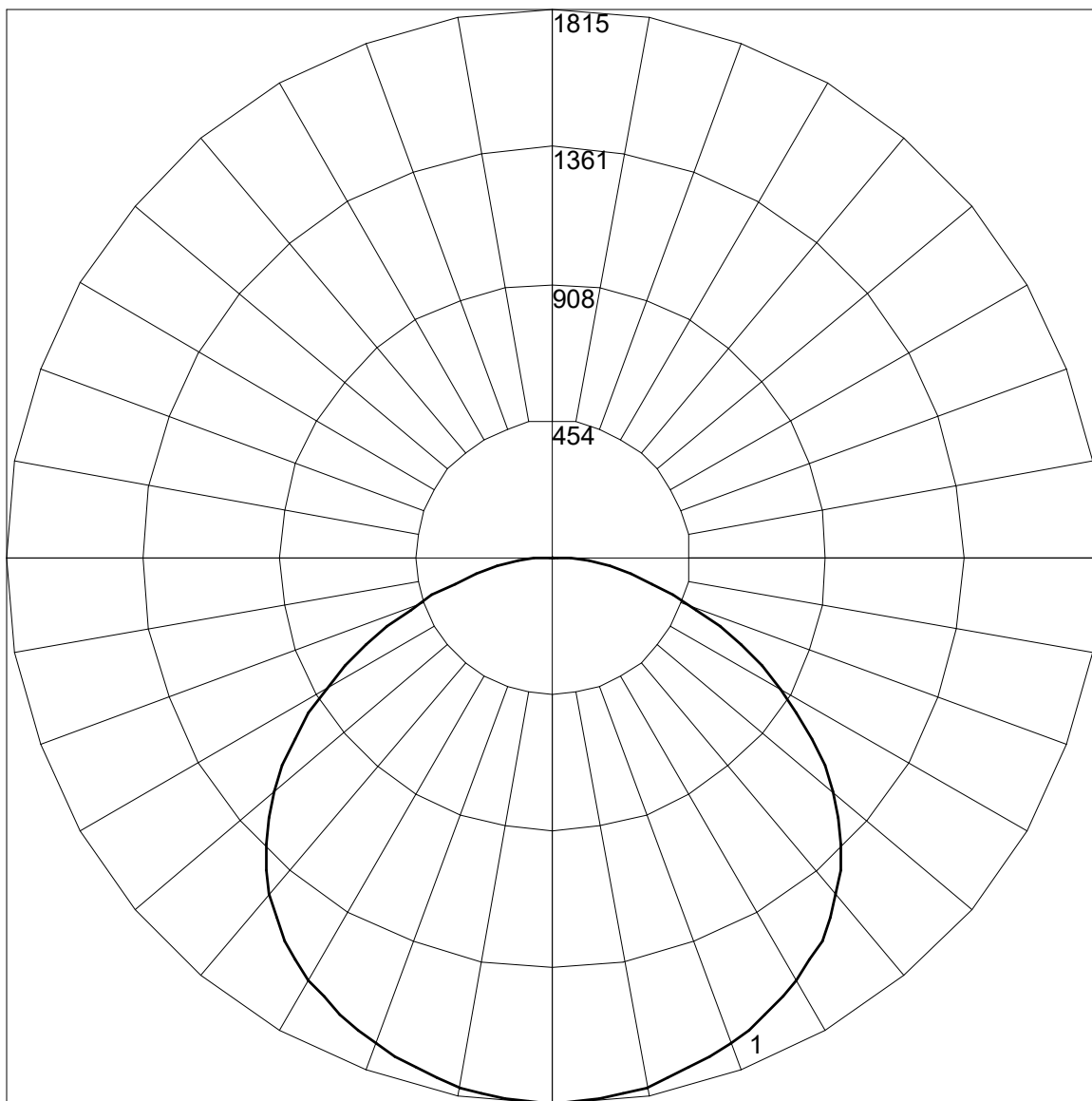
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	95	98	94	92	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	71	65	88	78	70	64	75	69	63	72	67	62	70	65	61	59
4	83	70	62	55	80	69	61	55	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	39	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

POLAR GRAPH



Maximum Candela = 1815.098 Located At Horizontal Angle = 67.5, Vertical Angle = 2.5
1 - Vertical Plane Through Horizontal Angles (90 - 270)