

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-1X4-V-835-5156.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]HPR-SL-LED-1X4-V-835-5156
[TESTLAB] 4141 S. Pulaski Rd. Goniophotometer Lab
[ISSUE DATE] 01/09/2024
[MANUFAC] Finelite
[LUMCAT]FINELITE HPR-SL-LED-1X4-V-835
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 46.6 WATTS
[ABSOLUTE LUMENS]6222

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6222
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	134
Total Luminaire Watts	46.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.40
Spacing Criterion (Diagonal)	1.44
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	1.00 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5438	5911	6001
55	5132	5362	5239
65	4714	4579	4281
75	4026	3458	2910
85	2912	1707	1551

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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	2176.470	2176.470	2176.470	2176.470	2176.470
2.5	2175.640	2167.390	2173.335	2174.275	2172.675
5.0	2167.975	2159.775	2166.120	2168.625	2167.350
7.5	2155.110	2146.520	2157.050	2165.235	2165.485
10.0	2139.725	2131.020	2147.975	2162.645	2166.165
12.5	2118.930	2112.245	2137.515	2160.680	2168.260
15.0	2094.090	2089.165	2124.665	2158.635	2170.300
17.5	2063.730	2062.710	2109.580	2155.220	2171.650
20.0	2029.485	2031.580	2092.265	2150.105	2169.520
22.5	1989.710	1996.730	2070.390	2138.890	2161.945
25.0	1945.930	1958.390	2044.155	2120.960	2146.745
27.5	1897.145	1915.170	2012.540	2095.865	2121.235
30.0	1843.590	1865.290	1973.355	2058.285	2082.405
32.5	1785.970	1811.140	1925.955	2009.470	2030.740
35.0	1721.565	1751.020	1869.370	1945.790	1962.365
37.5	1655.370	1685.890	1802.995	1869.090	1880.400
40.0	1584.225	1615.685	1729.325	1782.590	1786.585
42.5	1509.455	1539.580	1645.420	1687.230	1685.360
45.0	1430.280	1460.035	1554.625	1583.730	1578.385
47.5	1352.755	1376.015	1457.060	1474.520	1464.940
50.0	1269.835	1289.200	1357.155	1362.835	1351.385
52.5	1182.040	1198.855	1252.440	1248.245	1234.465
55.0	1094.910	1106.635	1144.055	1133.090	1117.730
57.5	1007.225	1010.115	1035.790	1018.045	1000.798
60.0	918.384	914.821	926.918	903.912	888.384
62.5	826.726	817.273	820.220	791.866	779.220
65.0	740.988	727.208	719.875	688.993	672.946
67.5	649.751	631.788	616.261	582.790	567.106
70.0	561.866	539.998	518.412	481.753	467.637
72.5	474.498	450.572	423.384	386.274	371.699
75.0	387.550	364.127	332.898	295.961	280.176
77.5	306.294	283.115	249.259	214.346	210.821
80.0	230.356	207.825	171.517	162.399	161.095
82.5	159.861	139.291	117.680	114.799	113.576
85.0	94.392	72.862	55.331	50.107	50.265
87.5	15.893	13.609	12.184	11.527	11.553
90.0	1.286	1.117	1.213	1.351	1.716
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	807.54	N.A.	13.00
0-30	1748.94	N.A.	28.10
0-40	2904.97	N.A.	46.70
0-60	5082.8	N.A.	81.70
0-80	6141.98	N.A.	98.70
0-90	6222.28	N.A.	100.00
10-90	6016.1	N.A.	96.70
20-40	2097.43	N.A.	33.70
20-50	3272.33	N.A.	52.60
40-70	2880.49	N.A.	46.30
60-80	1059.18	N.A.	17.00
70-80	356.52	N.A.	5.70
80-90	80.30	N.A.	1.30
90-110	0.18	N.A.	0.00
90-120	0.18	N.A.	0.00
90-130	0.18	N.A.	0.00
90-150	0.18	N.A.	0.00
90-180	0.18	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	6222.46	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	206.18
10-20	601.36
20-30	941.40
30-40	1156.02
40-50	1174.9
50-60	1002.93
60-70	702.66
70-80	356.52
80-90	80.30
90-100	0.18
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

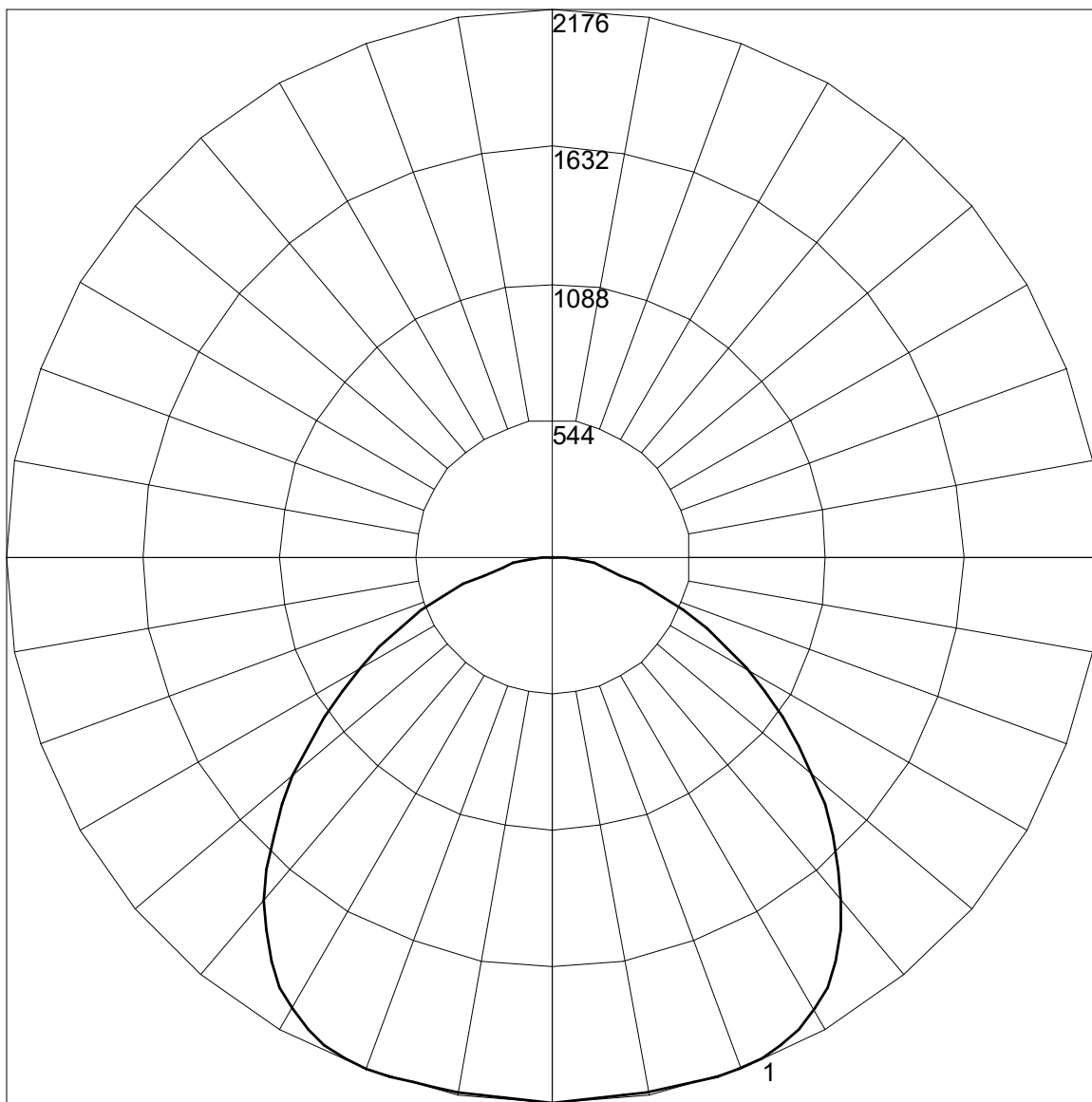
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	65	73	68	63	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

POLAR GRAPH



Maximum Candela = 2176.47 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)