

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-2X2-B-835-5157.002.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]HPR-SL-LED-2X2-B-835-5157.002
[TESTLAB] 4141 S. Pulaski Rd. Goniophotometer Lab
[TESTDATE]03/19/2024
[ISSUE DATE]01/05/2024
[MANUFAC]Finelite, Inc.
[LUMCAT]FINELITE HPR-SL-LED-2X2-B-835-5157
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 30.0 WATTS
[ABSOLUTE LUMENS]4314
[OTHER]see www.finelite.com for source file 5157. 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	4314
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	144
Total Luminaire Watts	30
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.32
Spacing Criterion (Diagonal)	1.38
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	2.00 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	3598	3848	4213
55	3387	3667	4036
65	3094	3298	3587
75	2638	2720	2889
85	3053	3748	3488

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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	1509.321	1509.321	1509.321	1509.321	1509.321
2.5	1513.419	1506.961	1504.804	1505.752	1508.261
5.0	1507.302	1500.892	1498.874	1500.260	1502.681
7.5	1497.144	1490.206	1489.369	1491.589	1494.868
10.0	1482.914	1476.015	1476.637	1480.496	1484.234
12.5	1464.790	1458.860	1461.205	1466.670	1471.672
15.0	1443.043	1437.561	1442.178	1450.912	1457.179
17.5	1417.721	1412.959	1420.810	1432.795	1441.112
20.0	1389.096	1385.333	1396.864	1413.334	1423.610
22.5	1356.913	1354.745	1370.392	1391.798	1403.940
25.0	1321.464	1321.242	1342.027	1368.099	1382.735
27.5	1283.302	1284.862	1310.556	1342.523	1360.890
30.0	1242.813	1245.710	1277.129	1315.134	1335.975
32.5	1199.346	1203.751	1239.718	1284.574	1308.298
35.0	1152.659	1159.038	1200.059	1251.234	1277.970
37.5	1103.704	1111.784	1157.620	1213.187	1243.018
40.0	1052.859	1062.506	1111.760	1171.718	1202.567
42.5	1000.089	1010.653	1063.215	1125.382	1157.999
45.0	946.200	957.307	1012.081	1075.547	1108.165
47.5	891.440	903.317	959.169	1022.003	1053.870
50.0	837.763	847.379	902.935	963.772	993.502
52.5	780.658	790.312	844.121	901.341	929.817
55.0	722.645	731.136	782.391	834.508	861.140
57.5	664.137	671.592	718.268	765.358	788.860
60.0	604.415	611.108	653.259	694.252	714.826
62.5	550.069	549.184	586.207	621.602	639.639
65.0	486.345	487.357	518.395	548.757	563.875
67.5	427.237	426.574	452.261	476.745	488.840
70.0	369.633	367.254	387.097	405.784	415.834
72.5	311.296	307.686	322.938	337.346	344.944
75.0	254.006	251.586	261.828	272.148	278.086
77.5	199.240	197.739	203.417	209.769	214.012
80.0	149.220	147.086	149.439	152.546	154.961
82.5	103.361	100.630	100.601	100.033	97.732
85.0	98.968	128.136	121.490	114.408	113.084
87.5	99.796	96.272	89.641	84.689	88.253
90.0	13.858	13.220	13.651	13.568	15.136
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	550.55	N.A.	12.80
0-30	1171.08	N.A.	27.10
0-40	1925.44	N.A.	44.60
0-60	3410.99	N.A.	79.10
0-80	4205.7	N.A.	97.50
0-90	4312.28	N.A.	100.00
10-90	4169.68	N.A.	96.70
20-40	1374.88	N.A.	31.90
20-50	2159.65	N.A.	50.10
40-70	2000.69	N.A.	46.40
60-80	794.70	N.A.	18.40
70-80	279.57	N.A.	6.50
80-90	106.58	N.A.	2.50
90-110	1.88	N.A.	0.00
90-120	1.88	N.A.	0.00
90-130	1.88	N.A.	0.00
90-150	1.88	N.A.	0.00
90-180	1.88	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	4314.16	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	142.60
10-20	407.96
20-30	620.53
30-40	754.35
40-50	784.77
50-60	700.79
60-70	515.13
70-80	279.57
80-90	106.58
90-100	1.88
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

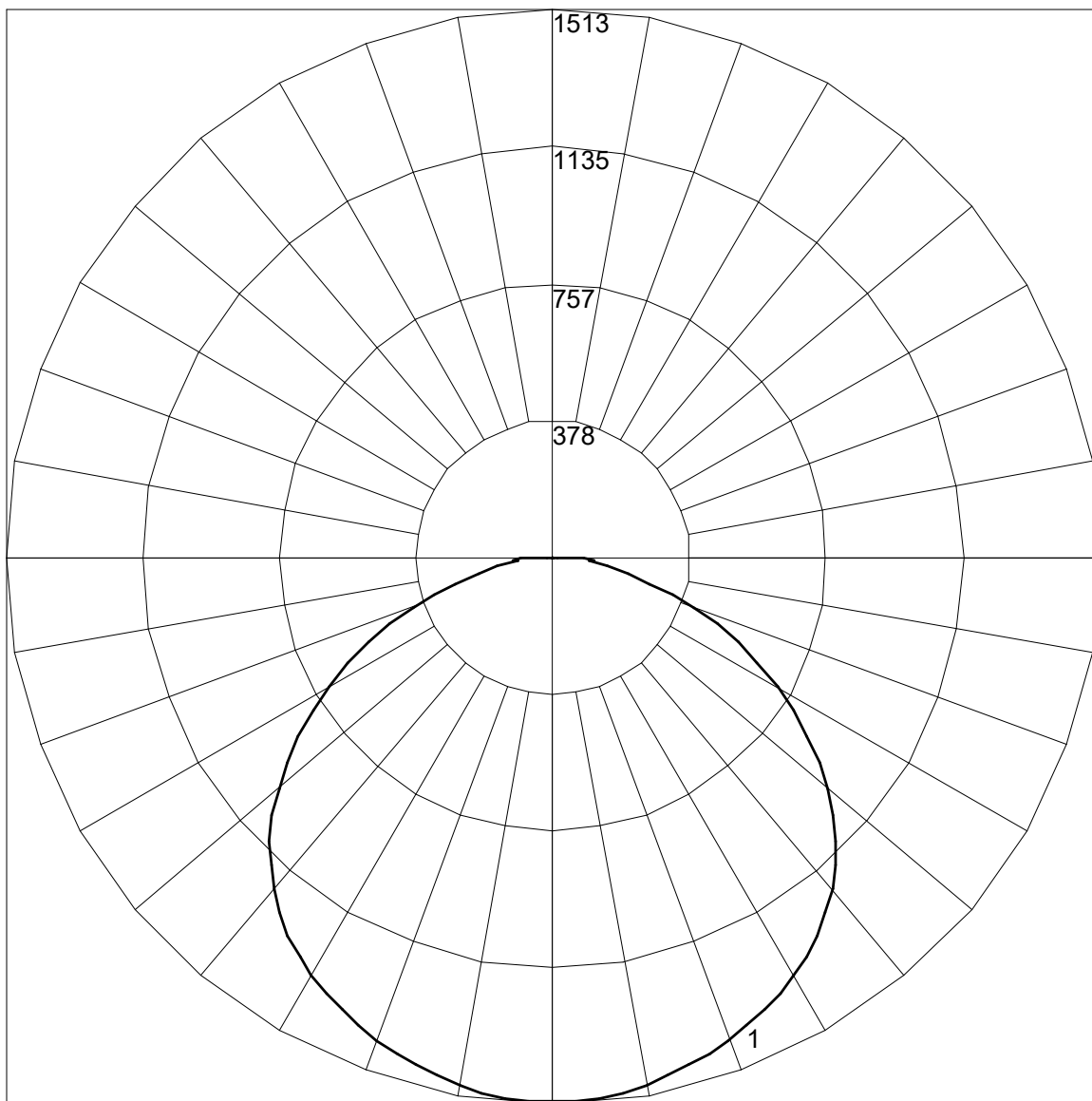
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	84	78	96	88	82	77	85	80	75	82	77	73	79	75	72	69
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	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	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	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	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

POLAR GRAPH



Maximum Candela = 1513.419 Located At Horizontal Angle = 0, Vertical Angle = 2.5
1 - Vertical Plane Through Horizontal Angles (90 - 270)