

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-DCO-H-837-XXIC-ITL85141.202.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85141.202 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]08/18/15
[ISSUEDATE]05/17/2021
[MANUFAC]FINELITE, INC.
[LUMCAT]FINELITE HPR-LED-F-1X4-DCO-H-837-XXIC
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 40.6 WATTS
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 40.2 WATTS
[ABSOLUTE]LUMENS]3878
[OTHER]see www.finelite.com for source file ITL85141. 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	3878
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	96
Total Luminaire Watts	40.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.30
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	4564	4449	4291
55	4150	3956	3761
65	3694	3437	3149
75	3127	2761	2407
85	2525	1476	1166

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	1581.382	1581.382	1581.382	1581.382	1581.382
2.5	1580.408	1580.408	1581.382	1580.408	1580.408
5.0	1572.623	1573.596	1574.569	1574.569	1574.569
7.5	1561.918	1562.892	1564.838	1564.838	1564.838
10.0	1547.321	1545.375	1550.241	1551.214	1548.294
12.5	1525.912	1524.938	1530.777	1532.724	1527.858
15.0	1501.583	1498.663	1507.422	1507.422	1503.529
17.5	1471.415	1467.522	1478.227	1477.254	1471.415
20.0	1438.327	1434.435	1443.193	1440.274	1435.408
22.5	1403.294	1397.455	1404.267	1401.347	1393.562
25.0	1362.421	1355.609	1361.448	1355.609	1348.797
27.5	1316.683	1309.871	1315.709	1306.951	1297.219
30.0	1268.998	1262.186	1264.132	1253.427	1242.723
32.5	1216.447	1210.608	1209.635	1196.011	1185.306
35.0	1161.951	1157.085	1152.219	1136.648	1124.971
37.5	1106.481	1100.642	1092.856	1074.366	1062.688
40.0	1048.091	1042.252	1032.521	1011.111	1000.406
42.5	987.755	982.889	968.292	946.883	935.205
45.0	927.419	920.607	904.064	882.654	871.949
47.5	867.084	861.245	841.782	817.453	806.748
50.0	805.775	799.936	778.526	754.197	742.519
52.5	745.439	739.600	716.244	690.942	683.157
55.0	684.130	676.345	652.016	628.660	619.902
57.5	623.794	616.009	593.626	568.324	557.619
60.0	565.405	556.646	533.291	507.988	497.284
62.5	506.042	498.257	474.901	447.653	438.894
65.0	448.626	440.841	417.485	390.236	382.451
67.5	392.183	385.371	362.015	334.766	327.954
70.0	336.713	330.874	306.545	282.216	275.404
72.5	283.189	278.323	254.967	232.585	225.773
75.0	232.585	227.719	205.336	184.900	179.061
77.5	184.900	180.034	158.625	141.108	134.296
80.0	143.054	134.296	113.859	97.316	91.477
82.5	101.208	91.477	72.014	60.336	55.470
85.0	63.255	53.524	36.980	31.141	29.195
87.5	28.222	17.517	12.651	11.678	10.705
90.0	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HPR-LED-F-1X4-DCO-H-837-XXIC-ITL85141.202.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	573.08	N.A.	14.80
0-30	1197.38	N.A.	30.90
0-40	1914.29	N.A.	49.40
0-60	3194.45	N.A.	82.40
0-80	3826.55	N.A.	98.70
0-90	3878.4	N.A.	100.00
10-90	3728.94	N.A.	96.10
20-40	1341.21	N.A.	34.60
20-50	2037.13	N.A.	52.50
40-70	1692.97	N.A.	43.70
60-80	632.10	N.A.	16.30
70-80	219.29	N.A.	5.70
80-90	51.85	N.A.	1.30
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	3878.4	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	149.46
10-20	423.62
20-30	624.29
30-40	716.92
40-50	695.92
50-60	584.24
60-70	412.81
70-80	219.29
80-90	51.85
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

IES INDOOR REPORT

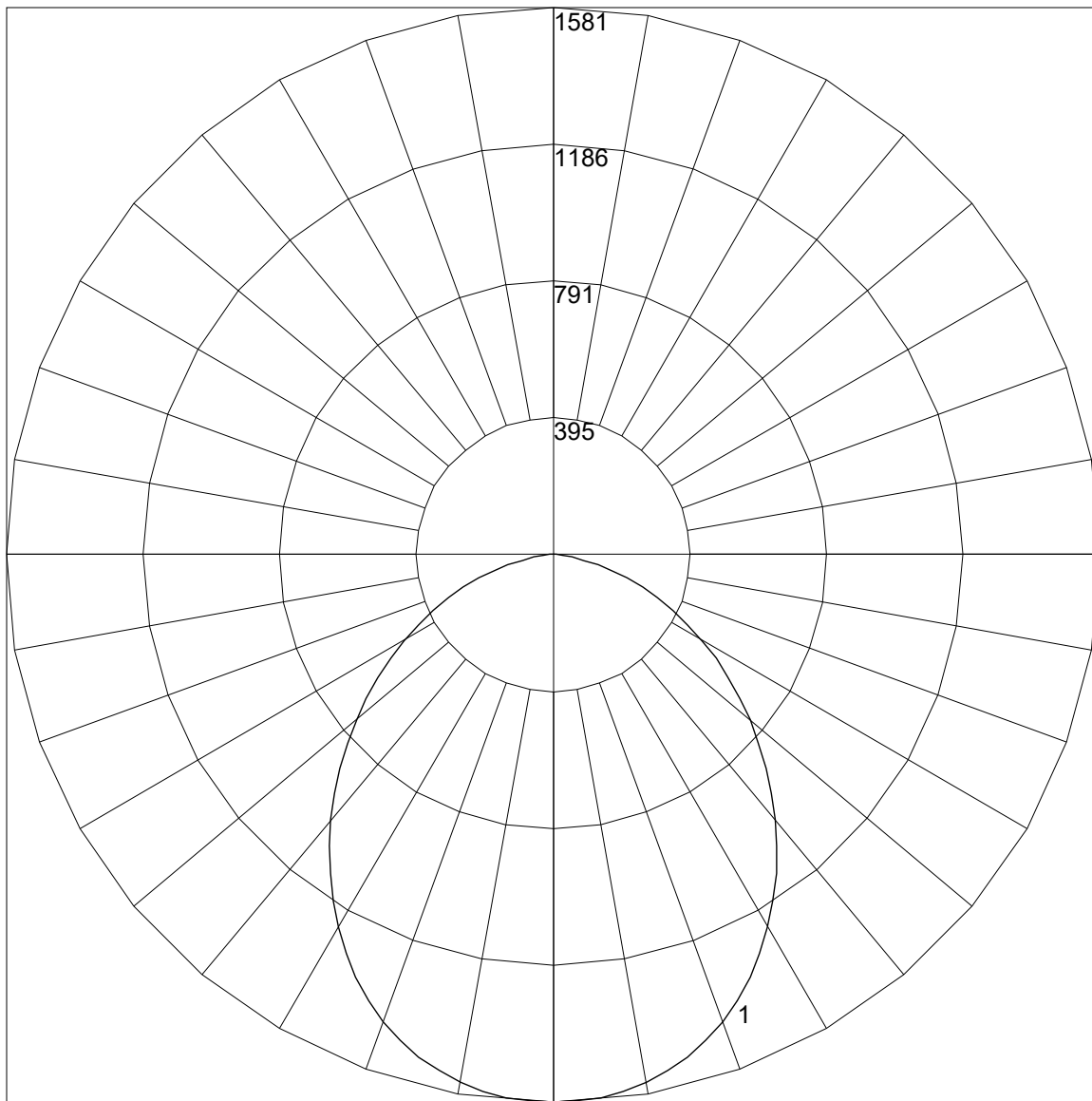
PHOTOMETRIC FILENAME : HPR-LED-F-1X4-DCO-H-837-XXIC-ITL85141.202.IES

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	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77	84	79	76	81	77	74	72
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61
4	84	73	64	58	82	71	63	57	69	62	56	66	60	56	64	59	55	53
5	78	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	48	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	45	39	34	32
9	58	45	37	32	57	44	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	28	38	33	28	27

POLAR GRAPH



Maximum Candela = 1581.382 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)