

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 : HP-6-EO-D-4FT-X-837-XXIC-ITL89078.202.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89078.202 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]03/21/17
[ISSUEDATE]04/28/2021
[MANUFAC]FINELITE, INC.
[LUMCAT]FINELITE HP-6-EO-D-4ft-X-837-XXIC
[INPUT_ELECTRICAL]120.0 VOLTS, 80.7 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 79.9 WATTS
[ABSOLUTE LUMENS]8809
[OTHER]see www.finelite.com for source file ITL89078. 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	8809
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	80.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.34
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.43 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	17699	17689	17614
55	16833	16820	16754
65	15846	15811	15811
75	14736	14620	14678
85	13610	13094	13094

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	3200.309	3200.309	3200.309	3200.309	3200.309
2.5	3196.687	3195.480	3196.687	3196.687	3196.687
5.0	3185.822	3183.408	3183.408	3184.615	3183.408
7.5	3167.714	3165.299	3164.092	3162.885	3162.885
10.0	3138.741	3131.498	3136.326	3136.326	3132.705
12.5	3098.903	3088.038	3100.110	3098.903	3091.660
15.0	3053.029	3036.128	3055.444	3055.444	3044.579
17.5	2998.705	2980.597	3001.119	3003.534	2990.254
20.0	2937.137	2915.407	2935.930	2941.966	2927.479
22.5	2865.912	2845.389	2867.119	2869.534	2858.669
25.0	2789.858	2774.164	2792.272	2792.272	2782.615
27.5	2707.768	2688.452	2711.389	2712.596	2701.732
30.0	2619.641	2601.533	2622.056	2622.056	2614.813
32.5	2532.722	2510.993	2531.515	2527.894	2521.858
35.0	2434.939	2412.002	2433.731	2428.903	2424.074
37.5	2333.533	2313.011	2333.533	2327.497	2325.083
40.0	2228.506	2209.191	2229.713	2222.470	2220.056
42.5	2122.272	2105.371	2122.272	2118.650	2112.614
45.0	2012.416	1996.722	2011.209	2007.587	2002.758
47.5	1900.145	1885.659	1900.145	1896.524	1896.524
50.0	1786.668	1773.389	1785.461	1781.839	1783.046
52.5	1669.569	1657.497	1668.362	1664.740	1667.154
55.0	1552.470	1541.605	1551.262	1547.641	1545.226
57.5	1432.956	1423.298	1431.749	1432.956	1429.334
60.0	1313.442	1304.992	1312.235	1313.442	1309.821
62.5	1195.136	1186.686	1192.722	1195.136	1191.514
65.0	1076.830	1069.586	1074.415	1073.208	1074.415
67.5	959.730	952.487	956.109	956.109	957.316
70.0	842.631	835.388	837.802	837.802	840.217
72.5	727.946	720.703	723.118	724.325	730.361
75.0	613.262	609.640	608.433	607.226	610.847
77.5	503.406	499.784	500.991	499.784	500.991
80.0	400.793	392.343	392.343	394.757	393.550
82.5	294.559	286.108	286.108	289.730	287.316
85.0	190.739	183.496	183.496	187.117	183.496
87.5	89.333	82.090	83.297	88.126	84.505
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	1162.12	N.A.	13.20
0-30	2445.22	N.A.	27.80
0-40	3962.95	N.A.	45.00
0-60	6894.57	N.A.	78.30
0-80	8603.86	N.A.	97.70
0-90	8809.47	N.A.	100.00
10-90	8507.07	N.A.	96.60
20-40	2800.84	N.A.	31.80
20-50	4348.61	N.A.	49.40
40-70	3994.54	N.A.	45.30
60-80	1709.29	N.A.	19.40
70-80	646.37	N.A.	7.30
80-90	205.61	N.A.	2.30
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	8809.47	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

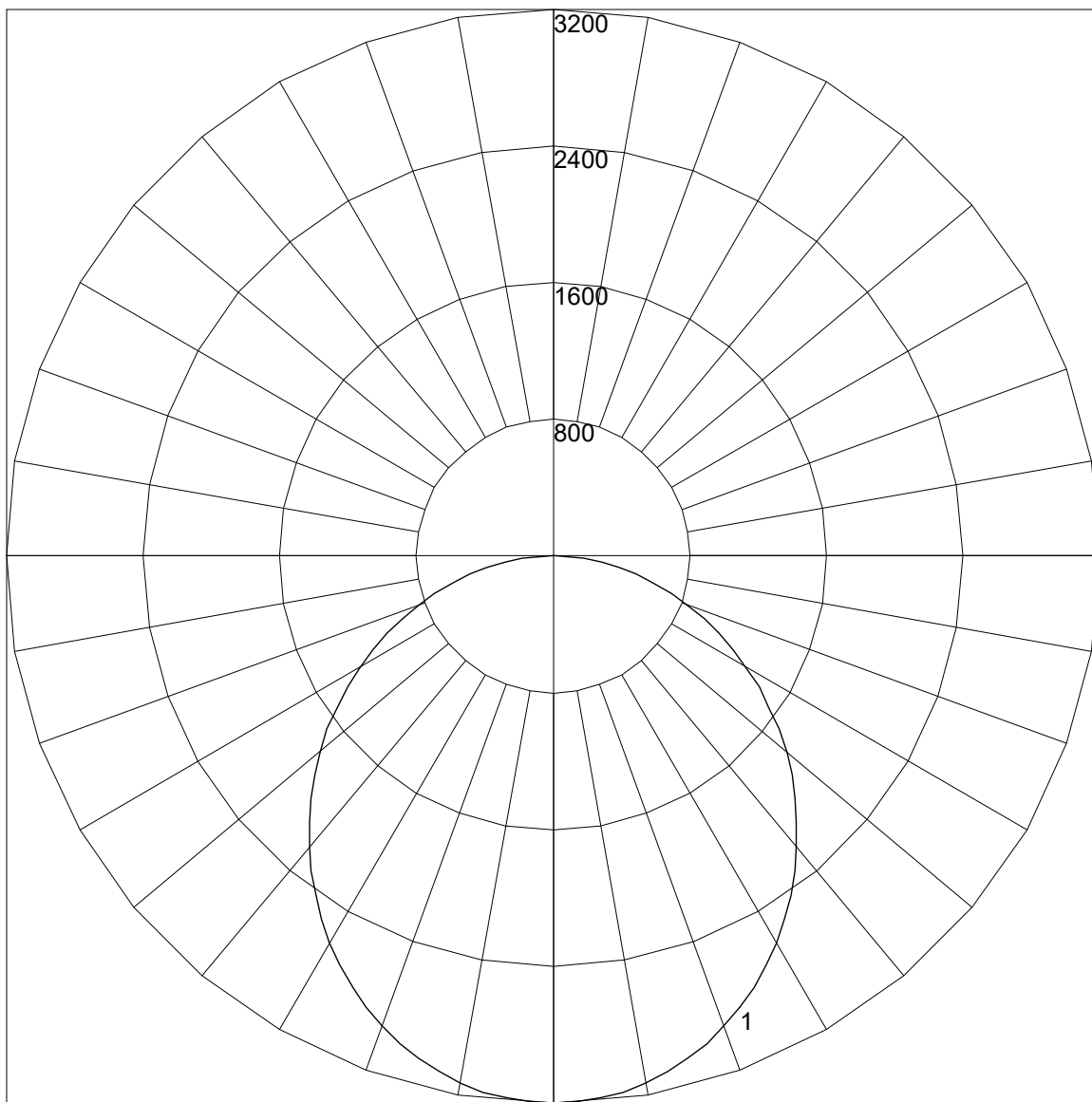
Zone	Lumens
0-10	302.40
10-20	859.71
20-30	1283.1
30-40	1517.74
40-50	1547.77
50-60	1383.84
60-70	1062.92
70-80	646.37
80-90	205.61
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

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	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	99	90	83	78	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	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	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	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	44	37	32	42	36	32	30
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24

POLAR GRAPH



Maximum Candela = 3200.309 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)