

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-2-ID-4FT-V-S-835-WSO-ITL89456.004.IES

DESCRIPTION INFORMATION (From Photometric File)

I
[TEST]ITL89456.004 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]07/19/17
[ISSUEDATE]08/23/17
[MANUFAC]FINELITE, INC.
[LUMCAT]HP-2-ID-4ft-V-S-835-WSO
[INPUT_ELECTRICAL]120.0 VOLTS, 50.4 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 53.0 WATTS
[OTHER]see www.finelite.com for source file ITL89456. 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
[ABSOLUTE LUMENS]5374

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5374
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	107
Total Luminaire Watts	50.4
Ballast Factor	1.00
CIE Type	Semi-Indirect
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.18 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6979	6584	6197
55	6155	5798	5408
65	5354	5059	4736
75	4491	4323	4083
85	3494	3423	3209

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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	598.153	598.153	598.153	598.153	598.153
2.5	597.334	597.334	596.925	596.925	597.334
5.0	594.059	593.649	592.831	592.421	592.421
7.5	589.146	588.736	586.689	585.052	585.461
10.0	583.414	580.548	578.092	576.454	576.045
12.5	573.588	570.722	567.856	565.400	564.172
15.0	563.353	557.621	556.393	551.889	549.433
17.5	550.661	543.292	540.835	535.103	531.828
20.0	535.922	527.734	524.459	517.499	512.995
22.5	519.546	510.948	505.625	497.847	493.343
25.0	501.122	492.934	485.974	476.967	472.054
27.5	483.517	472.873	465.094	455.268	450.355
30.0	462.637	452.402	442.985	432.341	427.018
32.5	441.348	431.112	421.286	409.413	404.091
35.0	418.830	408.595	398.359	385.667	380.345
37.5	395.903	386.077	375.432	362.331	357.418
40.0	372.157	362.740	352.096	338.585	333.672
42.5	348.411	339.813	329.578	315.658	310.745
45.0	325.074	316.477	306.651	293.549	288.636
47.5	301.328	293.549	284.133	271.032	266.528
50.0	277.992	271.032	262.025	249.742	244.829
52.5	255.474	249.333	240.326	228.862	224.358
55.0	232.547	228.043	219.036	208.391	204.297
57.5	210.848	206.754	198.565	188.740	185.055
60.0	189.558	186.283	178.914	169.907	166.631
62.5	169.088	165.812	159.671	151.892	148.617
65.0	149.026	145.751	140.838	134.288	131.831
67.5	129.784	127.328	122.824	117.502	115.045
70.0	111.360	109.723	105.629	101.125	99.487
72.5	93.346	92.527	89.252	85.977	84.749
75.0	76.560	76.151	73.694	71.238	69.600
77.5	61.003	60.593	58.546	57.318	56.090
80.0	46.264	45.854	44.626	43.398	42.579
82.5	32.753	32.753	31.934	31.115	29.887
85.0	20.061	20.061	19.652	18.833	18.424
87.5	8.188	8.188	7.779	6.960	6.960
90.0	0.000	0.000	0.000	0.000	0.000
92.5	18.000	31.000	31.000	30.000	30.000
95.0	47.000	83.000	83.000	69.000	68.000
97.5	79.000	136.000	167.000	120.000	113.000
100.0	112.000	177.000	332.000	193.000	170.000
102.5	148.000	216.000	459.000	341.000	271.000
105.0	183.000	258.000	532.000	556.000	458.000
107.5	218.000	299.000	577.000	750.000	699.000
110.0	253.000	337.000	617.000	864.000	873.000
112.5	288.000	374.000	664.000	939.000	977.000
115.0	324.000	409.000	720.000	993.000	1048.000
117.5	360.000	444.000	781.000	1044.000	1103.000
120.0	396.000	481.000	831.000	1098.000	1158.000
122.5	429.000	512.000	867.000	1174.000	1216.000
125.0	460.000	542.000	887.000	1257.000	1299.000
127.5	489.000	570.000	899.000	1313.000	1391.000
130.0	513.000	594.000	906.000	1336.000	1457.000
132.5	537.000	616.000	908.000	1327.000	1478.000

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CANDELA TABULATION - (Cont.)

135.0	558.000	634.000	907.000	1299.000	1457.000
137.5	577.000	651.000	904.000	1261.000	1413.000
140.0	596.000	666.000	899.000	1219.000	1357.000
142.5	614.000	680.000	892.000	1172.000	1297.000
145.0	633.000	693.000	885.000	1127.000	1236.000
147.5	649.000	703.000	877.000	1081.000	1174.000
150.0	665.000	714.000	867.000	1040.000	1116.000
152.5	680.000	722.000	855.000	1001.000	1062.000
155.0	694.000	728.000	843.000	963.000	1012.000
157.5	707.000	736.000	832.000	928.000	967.000
160.0	718.000	741.000	819.000	894.000	925.000
162.5	728.000	745.000	806.000	865.000	886.000
165.0	736.000	749.000	793.000	837.000	853.000
167.5	743.000	752.000	783.000	813.000	824.000
170.0	749.000	755.000	776.000	794.000	801.000
172.5	752.000	757.000	768.000	778.000	784.000
175.0	756.000	758.000	763.000	768.000	770.000
177.5	758.000	758.000	760.000	760.000	761.000
180.0	759.000	759.000	759.000	759.000	759.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	212.33	N.A.	4.00
0-30	435.64	N.A.	8.10
0-40	684.48	N.A.	12.70
0-60	1116.22	N.A.	20.80
0-80	1333.86	N.A.	24.80
0-90	1355.93	N.A.	25.20
10-90	1299.77	N.A.	24.20
20-40	472.16	N.A.	8.80
20-50	708.18	N.A.	13.20
40-70	571.18	N.A.	10.60
60-80	217.63	N.A.	4.00
70-80	78.19	N.A.	1.50
80-90	22.07	N.A.	0.40
90-110	525.79	N.A.	9.80
90-120	1219.49	N.A.	22.70
90-130	2012.46	N.A.	37.40
90-150	3325.54	N.A.	61.90
90-180	4017.8	N.A.	74.80
110-180	3492.02	N.A.	65.00
0-180	5373.73	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

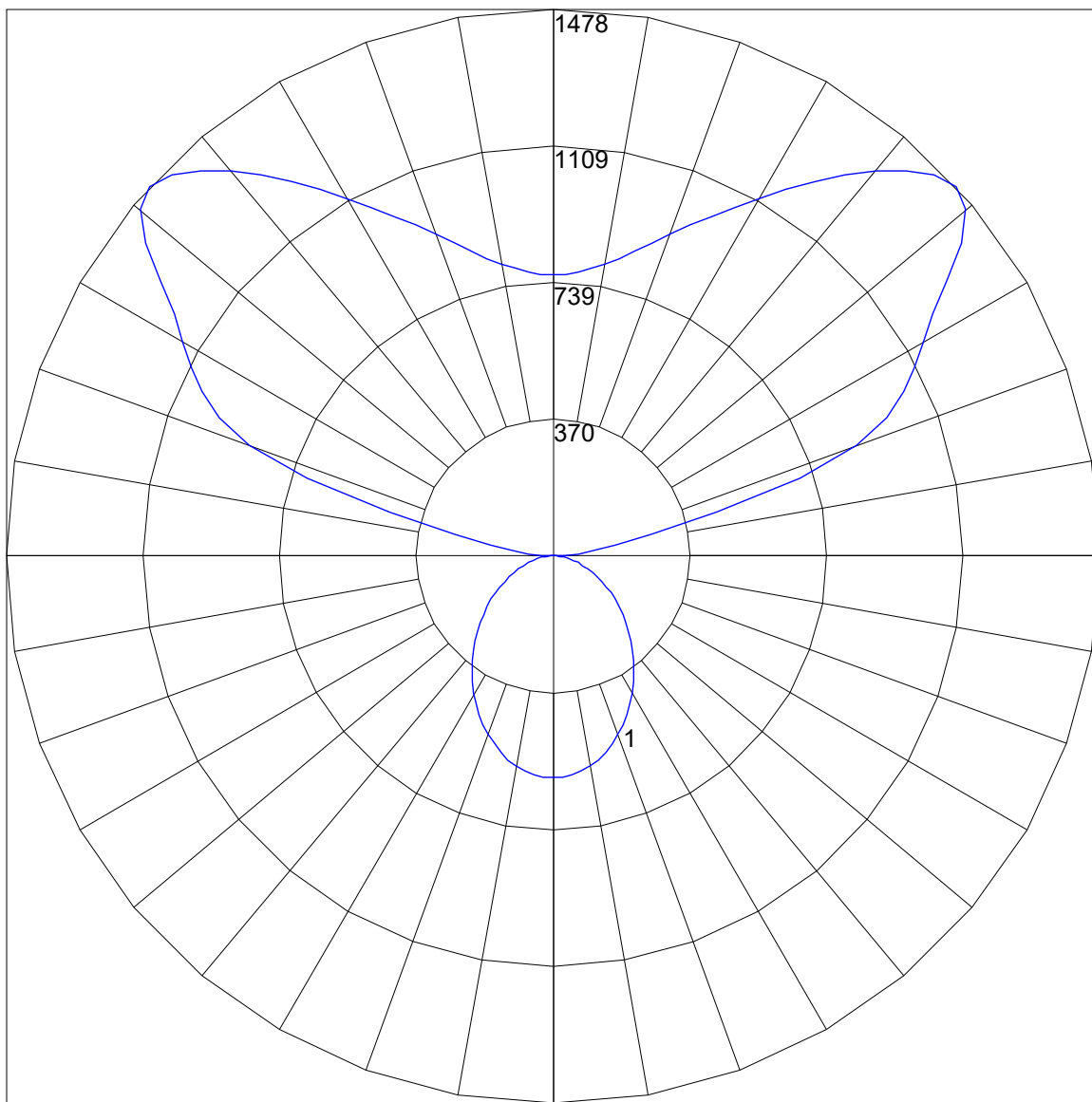
Zone	Lumens
0-10	56.16
10-20	156.17
20-30	223.31
30-40	248.85
40-50	236.03
50-60	195.71
60-70	139.45
70-80	78.19
80-90	22.07
90-100	91.71
100-110	434.08
110-120	693.70
120-130	792.97
130-140	741.14
140-150	571.94
150-160	393.14
160-170	225.92
170-180	73.20

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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	33	33	33	25
1	92	88	85	81	82	79	76	73	61	59	57	45	43	42	30	29	28	21
2	84	77	71	66	75	69	64	60	54	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	61	55	50	47	43	40	35	32	30	23	22	21	16
4	70	60	52	47	62	54	47	42	42	38	34	31	28	26	21	19	18	13
5	64	53	46	40	57	48	41	36	38	33	29	28	25	22	19	17	16	12
6	59	48	40	35	53	43	36	31	34	29	25	25	22	20	17	15	14	10
7	55	43	35	30	49	39	32	27	30	26	22	23	20	17	16	14	12	9
8	51	39	32	26	45	35	29	24	28	23	20	21	18	15	14	12	11	8
9	47	35	28	23	42	32	26	21	25	21	18	19	16	14	13	11	10	8
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	12	10	9	7

POLAR GRAPH



Maximum Candela = 1478 Located At Horizontal Angle = 90, Vertical Angle = 132.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)