

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-S-V-835-WSO-ITL89456.015.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89456.015 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]07/19/17
[ISSUE DATE]08/23/17
[MANUFAC]FINELITE, INC.
[LUMCAT]HP-2-ID-4ft-S-V-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]4957

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4957
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	98
Total Luminaire Watts	50.4
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.16
Spacing Criterion (90-270)	1.10
Spacing Criterion (Diagonal)	1.24
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	17048	16081	15137
55	15034	14161	13208
65	13076	12358	11567
75	10969	10559	9972
85	8535	8361	7839

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-V-835-WSO-ITL89456.015.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	1461.000	1461.000	1461.000	1461.000	1461.000
2.5	1459.000	1459.000	1458.000	1458.000	1459.000
5.0	1451.000	1450.000	1448.000	1447.000	1447.000
7.5	1439.000	1438.000	1433.000	1429.000	1430.000
10.0	1425.000	1418.000	1412.000	1408.000	1407.000
12.5	1401.000	1394.000	1387.000	1381.000	1378.000
15.0	1376.000	1362.000	1359.000	1348.000	1342.000
17.5	1345.000	1327.000	1321.000	1307.000	1299.000
20.0	1309.000	1289.000	1281.000	1264.000	1253.000
22.5	1269.000	1248.000	1235.000	1216.000	1205.000
25.0	1224.000	1204.000	1187.000	1165.000	1153.000
27.5	1181.000	1155.000	1136.000	1112.000	1100.000
30.0	1130.000	1105.000	1082.000	1056.000	1043.000
32.5	1078.000	1053.000	1029.000	1000.000	987.000
35.0	1023.000	998.000	973.000	942.000	929.000
37.5	967.000	943.000	917.000	885.000	873.000
40.0	909.000	886.000	860.000	827.000	815.000
42.5	851.000	830.000	805.000	771.000	759.000
45.0	794.000	773.000	749.000	717.000	705.000
47.5	736.000	717.000	694.000	662.000	651.000
50.0	679.000	662.000	640.000	610.000	598.000
52.5	624.000	609.000	587.000	559.000	548.000
55.0	568.000	557.000	535.000	509.000	499.000
57.5	515.000	505.000	485.000	461.000	452.000
60.0	463.000	455.000	437.000	415.000	407.000
62.5	413.000	405.000	390.000	371.000	363.000
65.0	364.000	356.000	344.000	328.000	322.000
67.5	317.000	311.000	300.000	287.000	281.000
70.0	272.000	268.000	258.000	247.000	243.000
72.5	228.000	226.000	218.000	210.000	207.000
75.0	187.000	186.000	180.000	174.000	170.000
77.5	149.000	148.000	143.000	140.000	137.000
80.0	113.000	112.000	109.000	106.000	104.000
82.5	80.000	80.000	78.000	76.000	73.000
85.0	49.000	49.000	48.000	46.000	45.000
87.5	20.000	20.000	19.000	17.000	17.000
90.0	0.000	0.000	0.000	0.000	0.000
92.5	7.369	12.692	12.692	12.282	12.282
95.0	19.242	33.981	33.981	28.250	27.840
97.5	32.344	55.680	68.372	49.130	46.264
100.0	45.854	72.466	135.925	79.017	69.600
102.5	60.593	88.433	187.921	139.610	110.951
105.0	74.923	105.629	217.808	227.634	187.511
107.5	89.252	122.415	236.232	307.060	286.180
110.0	103.582	137.972	252.608	353.733	357.418
112.5	117.911	153.121	271.851	384.439	399.997
115.0	132.650	167.450	294.778	406.548	429.065
117.5	147.389	181.780	319.752	427.428	451.583
120.0	162.128	196.928	340.223	449.536	474.101
122.5	175.638	209.620	354.961	480.651	497.847
125.0	188.330	221.902	363.150	514.633	531.828
127.5	200.203	233.366	368.063	537.560	569.494
130.0	210.029	243.192	370.928	546.976	596.515
132.5	219.855	252.199	371.747	543.292	605.113

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-V-835-WSO-ITL89456.015.IES

CANDELA TABULATION - (Cont.)

135.0	228.453	259.568	371.338	531.828	596.515
137.5	236.232	266.528	370.110	516.270	578.501
140.0	244.010	272.669	368.063	499.075	555.574
142.5	251.380	278.401	365.197	479.832	531.009
145.0	259.159	283.724	362.331	461.409	506.035
147.5	265.709	287.818	359.055	442.576	480.651
150.0	272.260	292.321	354.961	425.790	456.905
152.5	278.401	295.596	350.048	409.823	434.797
155.0	284.133	298.053	345.135	394.265	414.326
157.5	289.455	301.328	340.632	379.936	395.903
160.0	293.959	303.375	335.310	366.016	378.707
162.5	298.053	305.013	329.987	354.143	362.740
165.0	301.328	306.651	324.665	342.679	349.230
167.5	304.194	307.879	320.571	332.853	337.357
170.0	306.651	309.107	317.705	325.074	327.940
172.5	307.879	309.926	314.430	318.524	320.980
175.0	309.517	310.335	312.382	314.430	315.248
177.5	310.335	310.335	311.154	311.154	311.564
180.0	310.745	310.745	310.745	310.745	310.745

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-V-835-WSO-ITL89456.015.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	518.61	N.A.	10.50
0-30	1064.05	N.A.	21.50
0-40	1671.87	N.A.	33.70
0-60	2726.4	N.A.	55.00
0-80	3257.97	N.A.	65.70
0-90	3311.88	N.A.	66.80
10-90	3174.72	N.A.	64.00
20-40	1153.26	N.A.	23.30
20-50	1729.75	N.A.	34.90
40-70	1395.13	N.A.	28.10
60-80	531.57	N.A.	10.70
70-80	190.97	N.A.	3.90
80-90	53.91	N.A.	1.10
90-110	215.26	N.A.	4.30
90-120	499.27	N.A.	10.10
90-130	823.93	N.A.	16.60
90-150	1361.52	N.A.	27.50
90-180	1644.94	N.A.	33.20
110-180	1429.68	N.A.	28.80
0-180	4956.82	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

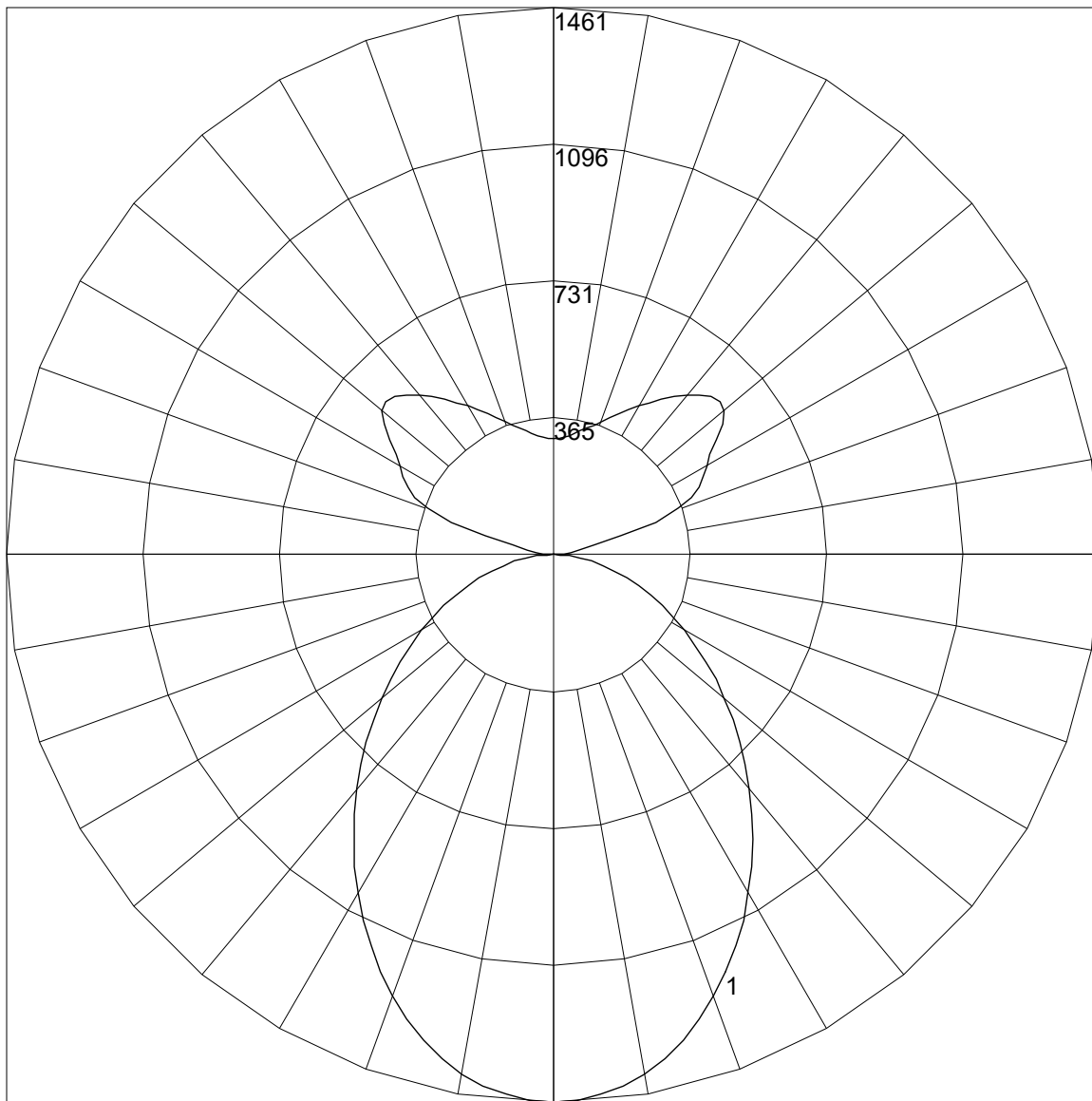
Zone	Lumens
0-10	137.16
10-20	381.45
20-30	545.44
30-40	607.82
40-50	576.50
50-60	478.03
60-70	340.60
70-80	190.97
80-90	53.91
90-100	37.55
100-110	177.72
110-120	284.01
120-130	324.65
130-140	303.43
140-150	234.16
150-160	160.96
160-170	92.50
170-180	29.97

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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	102	97	94	90	96	92	89	86	82	79	77	72	70	69	64	62	61	57
2	93	86	79	74	87	81	75	71	72	68	64	64	61	58	56	54	52	48
3	85	75	68	62	80	71	65	60	64	59	54	57	53	49	50	47	45	41
4	78	67	59	53	73	64	56	51	57	51	47	51	46	43	45	42	39	36
5	72	60	52	46	68	57	50	44	51	45	41	46	41	37	41	37	34	31
6	66	54	46	40	62	52	44	39	46	40	36	42	37	33	37	33	30	28
7	62	49	41	35	58	47	39	34	42	36	32	38	33	29	34	30	27	25
8	57	45	37	32	54	43	36	31	39	33	28	35	30	26	31	27	24	22
9	53	41	33	28	50	39	32	27	36	30	26	32	27	24	29	25	22	20
10	50	38	31	26	47	36	29	25	33	27	23	30	25	22	27	23	20	18

POLAR GRAPH



Maximum Candela = 1461 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)