

# 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-H-B-835-F-MLB-ITL85132-KPL2008-6.008.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132-KPL2008-6.008 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/11/15

[ISSUEDATE]02/10/17

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-2-ID-4ft-H-B-835

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 46.0 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 46.8 WATTS

[ABSOLUTE LUMENS]4231

[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL85132 and KPL2008-6. For further details on Finelite family correlation files, go

[more][http://www.finelite.com/download\\_files/series\\_downloads/photometry\\_pdf/FL\\_Family\\_Correlation\\_WhitePaper.pdf](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	4230
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	91
Total Luminaire Watts	46.7
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	194	115	120
55	86	45	51
65	42	22	25
75	22	13	12
85	8	4	4

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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	4024.747	4024.747	4024.747	4024.747	4024.747
2.5	3923.156	3958.656	3941.863	3937.310	3953.856
5.0	3697.684	3749.235	3724.550	3723.110	3744.893
7.5	3356.797	3420.382	3421.751	3426.355	3441.517
10.0	2918.236	2973.285	3067.719	3091.823	3095.156
12.5	2341.612	2430.577	2652.808	2730.500	2735.655
15.0	1881.849	1976.884	2214.535	2374.452	2341.422
17.5	1415.464	1548.057	1880.506	1923.393	1817.564
20.0	957.233	1100.841	1395.749	1445.232	1414.790
22.5	596.390	768.320	1025.068	1087.238	1072.463
25.0	351.156	423.564	703.176	765.732	678.903
27.5	208.747	272.918	418.687	425.751	378.681
30.0	118.300	158.173	248.933	236.997	208.428
32.5	58.317	90.421	127.818	123.291	115.949
35.0	27.535	39.271	68.756	69.337	57.987
37.5	18.393	19.036	34.316	33.622	21.485
40.0	14.668	13.253	16.746	13.644	9.230
42.5	11.514	10.413	8.103	6.591	7.244
45.0	9.019	8.041	5.361	5.047	5.592
47.5	7.120	6.091	3.972	3.817	4.291
50.0	5.356	4.641	2.974	2.881	3.303
52.5	4.183	3.524	2.248	2.223	2.516
55.0	3.241	2.706	1.708	1.682	1.919
57.5	2.495	2.073	1.307	1.281	1.466
60.0	1.919	1.610	1.019	0.998	1.142
62.5	1.497	1.230	0.787	0.772	0.890
65.0	1.163	0.957	0.617	0.602	0.700
67.5	0.900	0.736	0.484	0.468	0.530
70.0	0.689	0.566	0.381	0.365	0.412
72.5	0.520	0.427	0.288	0.278	0.298
75.0	0.376	0.314	0.216	0.211	0.211
77.5	0.268	0.226	0.165	0.159	0.165
80.0	0.175	0.159	0.113	0.108	0.098
82.5	0.113	0.093	0.067	0.057	0.057
85.0	0.046	0.041	0.021	0.026	0.021
87.5	0.010	0.000	0.000	0.000	0.000
90.0	0.000	0.000	0.000	0.000	0.000
92.5	23.333	23.333	23.333	25.667	25.667
95.0	55.222	52.889	52.889	53.667	54.444
97.5	87.111	84.778	83.222	84.000	84.000
100.0	119.778	115.889	115.889	115.889	115.111
102.5	154.000	150.889	149.333	148.556	148.556
105.0	189.778	187.444	183.556	182.778	182.000
107.5	226.333	224.000	219.333	218.556	217.778
110.0	264.444	262.111	258.222	256.667	254.333
112.5	304.111	300.222	297.889	294.000	291.667
115.0	343.778	341.444	339.889	332.111	330.556
117.5	385.778	381.889	381.889	372.556	371.000
120.0	428.556	422.333	423.889	414.556	411.444
122.5	469.000	462.778	465.889	458.111	452.667
125.0	514.111	504.778	507.889	500.111	496.222
127.5	558.445	548.333	549.889	543.667	542.111
130.0	602.000	591.889	593.445	585.667	586.445
132.5	645.555	634.667	637.000	629.222	629.222

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-B-835-F-MLB-ITL85132-KPL2008-6.008.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	687.555	677.445	680.555	673.555	673.555
<b>137.5</b>	730.333	720.222	723.333	717.111	716.333
<b>140.0</b>	773.111	763.000	765.333	761.445	759.111
<b>142.5</b>	813.555	802.667	805.778	801.889	798.778
<b>145.0</b>	854.778	843.111	846.222	843.111	837.667
<b>147.5</b>	892.889	881.222	885.111	880.445	875.000
<b>150.0</b>	929.445	917.778	922.445	917.000	912.333
<b>152.5</b>	964.445	952.778	957.445	952.778	948.111
<b>155.0</b>	997.889	986.222	991.667	987.000	982.333
<b>157.5</b>	1026.667	1015.778	1022.000	1017.333	1012.667
<b>160.0</b>	1054.667	1044.556	1050.000	1045.333	1040.667
<b>162.5</b>	1078.778	1070.222	1074.111	1071.000	1067.889
<b>165.0</b>	1100.556	1092.778	1095.111	1093.556	1091.222
<b>167.5</b>	1116.889	1112.222	1113.778	1112.222	1111.444
<b>170.0</b>	1131.667	1129.333	1130.111	1128.556	1127.778
<b>172.5</b>	1144.111	1143.333	1143.333	1142.556	1142.556
<b>175.0</b>	1152.667	1152.667	1152.667	1152.667	1151.889
<b>177.5</b>	1157.333	1158.111	1158.111	1158.111	1157.333
<b>180.0</b>	1160.444	1160.444	1160.444	1160.444	1160.444

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-B-835-F-MLB-ITL85132-KPL2008-6.008.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	922.40	N.A.	21.80
0-30	1211.17	N.A.	28.60
0-40	1255.6	N.A.	29.70
0-60	1263.11	N.A.	29.90
0-80	1264.2	N.A.	29.90
0-90	1264.25	N.A.	29.90
10-90	930.46	N.A.	22.00
20-40	333.20	N.A.	7.90
20-50	338.67	N.A.	8.00
40-70	8.31	N.A.	0.20
60-80	1.09	N.A.	0.00
70-80	0.29	N.A.	0.00
80-90	0.05	N.A.	0.00
90-110	256.05	N.A.	6.10
90-120	590.90	N.A.	14.00
90-130	1042.54	N.A.	24.60
90-150	2093.49	N.A.	49.50
90-180	2965.95	N.A.	70.10
110-180	2709.9	N.A.	64.10
0-180	4230.2	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	333.79
10-20	588.62
20-30	288.76
30-40	44.44
40-50	5.47
50-60	2.03
60-70	0.80
70-80	0.29
80-90	0.05
90-100	59.94
100-110	196.12
110-120	334.85
120-130	451.64
130-140	523.10
140-150	527.85
150-160	454.83
160-170	308.34
170-180	109.29

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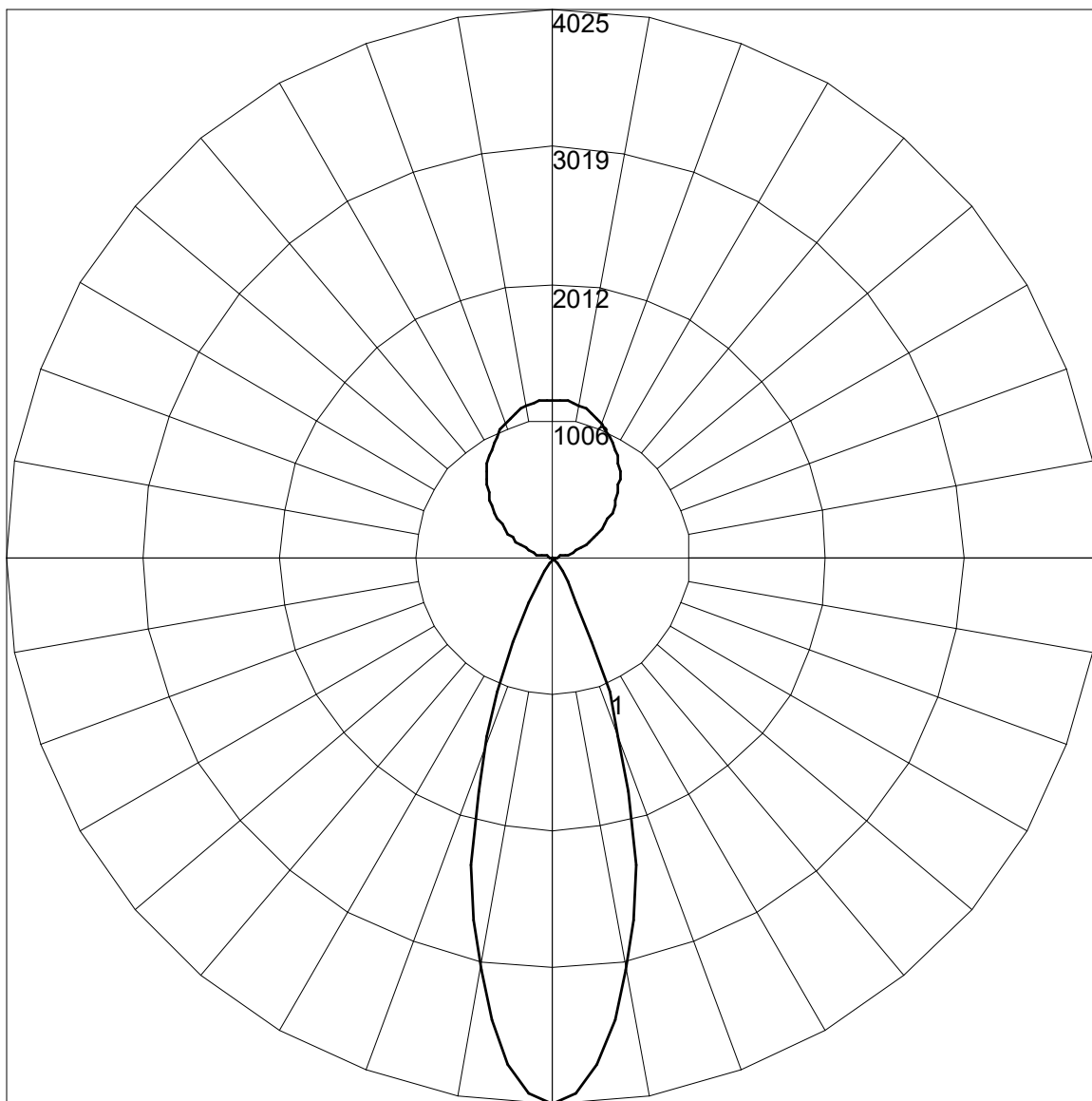
PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-B-835-F-MLB-ITL85132-KPL2008-6.008.IES

## 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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	38	38	38	30
1	95	92	88	86	85	83	80	78	66	64	63	50	49	49	36	36	35	29
2	88	82	78	74	80	75	71	67	60	58	55	47	45	44	34	34	33	28
3	82	75	69	64	74	68	63	59	55	52	50	44	42	40	33	32	31	27
4	77	68	62	57	69	62	57	53	51	48	45	41	39	37	31	30	30	26
5	72	63	56	51	65	57	52	48	48	44	41	39	36	34	30	29	28	25
6	67	58	51	46	61	53	48	44	45	41	38	36	34	32	29	28	27	24
7	63	53	47	42	58	49	44	40	42	38	35	35	32	30	28	27	26	23
8	60	50	43	39	55	46	41	37	39	35	33	33	30	29	27	25	24	22
9	56	47	40	36	52	43	38	34	37	33	31	31	29	27	26	24	23	21
10	54	44	38	34	49	41	36	32	35	31	29	30	27	26	25	24	23	21

POLAR GRAPH



Maximum Candela = 4024.747 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)