

# 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-S-835-F-MLB-ITL85132-KPL2008-6.007.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132-KPL2008-6.007 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-S-835

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 42.0 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 43.2 WATTS

[ABSOLUTE]LUMENS]3972

[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	3972
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	95
Total Luminaire Watts	42
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	154	92	96
55	68	36	40
65	33	18	20
75	18	10	10
85	6	3	3

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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	3202.124	3202.124	3202.124	3202.124	3202.124
2.5	3121.298	3149.542	3136.181	3132.559	3145.722
5.0	2941.910	2982.925	2963.285	2962.139	2979.470
7.5	2670.697	2721.286	2722.375	2726.039	2738.101
10.0	2321.774	2365.572	2440.704	2459.881	2462.534
12.5	1863.007	1933.788	2110.597	2172.410	2176.511
15.0	1497.215	1572.826	1761.903	1889.135	1862.856
17.5	1126.156	1231.647	1496.147	1530.269	1446.070
20.0	761.583	875.839	1110.470	1149.839	1125.619
22.5	474.493	611.282	815.553	865.016	853.261
25.0	279.383	336.992	559.453	609.223	540.141
27.5	166.081	217.136	333.111	338.731	301.282
30.0	94.121	125.844	198.053	188.557	165.827
32.5	46.397	71.939	101.693	98.091	92.250
35.0	21.907	31.244	54.703	55.165	46.135
37.5	14.633	15.145	27.302	26.750	17.094
40.0	11.670	10.544	13.324	10.855	7.343
42.5	9.161	8.285	6.447	5.243	5.763
45.0	7.176	6.398	4.265	4.016	4.449
47.5	5.665	4.846	3.160	3.037	3.414
50.0	4.261	3.692	2.366	2.292	2.628
52.5	3.328	2.804	1.789	1.768	2.002
55.0	2.579	2.153	1.359	1.339	1.527
57.5	1.985	1.650	1.040	1.019	1.167
60.0	1.527	1.281	0.810	0.794	0.909
62.5	1.191	0.978	0.626	0.614	0.708
65.0	0.925	0.761	0.491	0.479	0.557
67.5	0.716	0.585	0.385	0.372	0.422
70.0	0.548	0.450	0.303	0.291	0.327
72.5	0.413	0.340	0.229	0.221	0.237
75.0	0.299	0.250	0.172	0.168	0.168
77.5	0.213	0.180	0.131	0.127	0.131
80.0	0.139	0.127	0.090	0.086	0.078
82.5	0.090	0.074	0.053	0.045	0.045
85.0	0.037	0.033	0.016	0.020	0.016
87.5	0.008	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-S-835-F-MLB-ITL85132-KPL2008-6.007.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-S-835-F-MLB-ITL85132-KPL2008-6.007.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	733.87	N.A.	18.50
0-30	963.61	N.A.	24.30
0-40	998.97	N.A.	25.20
0-60	1004.94	N.A.	25.30
0-80	1005.81	N.A.	25.30
0-90	1005.85	N.A.	25.30
10-90	740.28	N.A.	18.60
20-40	265.10	N.A.	6.70
20-50	269.45	N.A.	6.80
40-70	6.61	N.A.	0.20
60-80	0.87	N.A.	0.00
70-80	0.23	N.A.	0.00
80-90	0.04	N.A.	0.00
90-110	256.05	N.A.	6.40
90-120	590.90	N.A.	14.90
90-130	1042.54	N.A.	26.20
90-150	2093.49	N.A.	52.70
90-180	2965.95	N.A.	74.70
110-180	2709.9	N.A.	68.20
0-180	3971.8	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	265.56
10-20	468.31
20-30	229.74
30-40	35.35
40-50	4.35
50-60	1.62
60-70	0.64
70-80	0.23
80-90	0.04
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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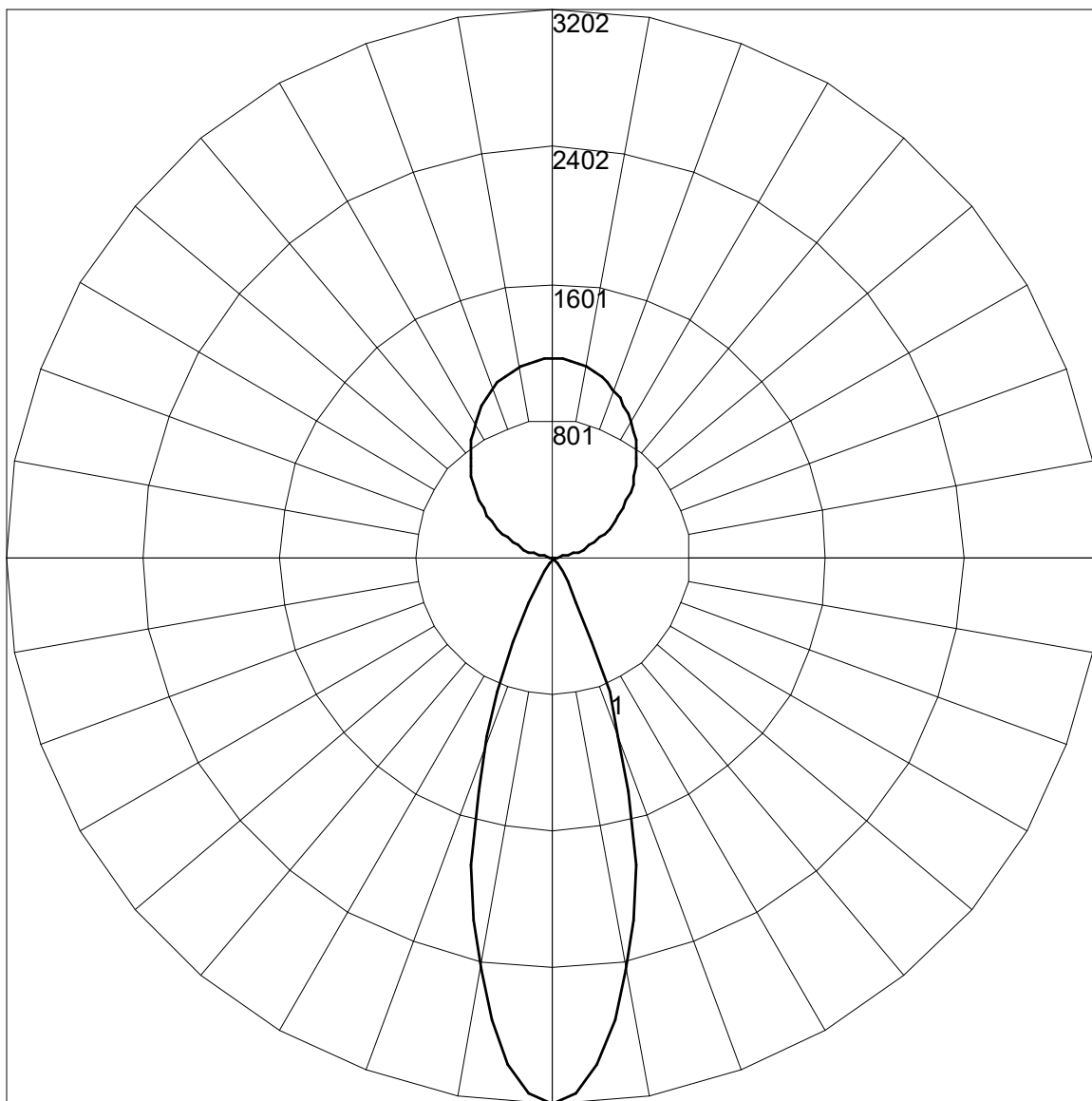
PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-S-835-F-MLB-ITL85132-KPL2008-6.007.IES

## 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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	33	33	33	25
1	94	90	87	84	84	81	78	76	63	61	60	47	46	45	32	31	31	24
2	87	81	76	72	78	73	69	65	57	55	53	43	42	41	30	30	29	23
3	81	73	67	62	72	66	61	57	53	49	47	40	38	37	29	28	27	22
4	75	66	60	55	67	60	55	51	48	45	42	38	36	34	28	27	26	22
5	70	60	54	49	63	55	50	45	45	41	38	35	33	31	26	25	24	21
6	65	56	49	44	59	51	45	41	42	38	35	33	31	29	25	24	23	20
7	61	51	45	40	55	47	41	37	39	35	32	31	29	27	24	23	22	19
8	58	48	41	37	52	44	38	34	36	33	30	30	27	26	23	22	21	19
9	54	44	38	34	49	41	36	32	34	31	28	28	26	24	22	21	20	18
10	51	41	35	31	47	38	33	30	32	29	26	27	24	23	22	20	19	18

POLAR GRAPH



Maximum Candela = 3202.124 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)