

# 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-F-ABL-8H-ITL85132.207.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132.207 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/11/15

[ISSUEDATE]06/24/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-2-ID-4ft-H-S-835-F-F-ABL-8H

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 42.8 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 44.9 WATTS

[ABSOLUTE]LUMENS]4266

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL85132. 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](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	4266
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	100
Total Luminaire Watts	42.8
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	6583	6311	6003
55	5992	5699	5407
65	5412	5132	4882
75	4874	4610	4418
85	4278	4136	3922

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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	537.895	537.895	537.895	537.895	537.895
2.5	536.667	537.485	537.076	537.076	537.076
5.0	534.620	535.029	534.211	533.801	533.801
7.5	530.117	530.526	529.298	528.889	528.889
10.0	524.386	523.567	522.749	522.339	521.520
12.5	516.608	514.971	514.152	512.924	511.287
15.0	508.012	504.737	503.918	501.462	499.415
17.5	497.368	492.865	491.637	487.953	485.497
20.0	485.088	479.766	477.719	473.216	469.532
22.5	470.760	465.029	462.573	457.661	453.158
25.0	456.023	449.474	445.789	440.468	435.555
27.5	439.240	433.509	429.006	422.047	416.725
30.0	422.047	415.906	410.585	402.807	397.485
32.5	403.626	397.485	391.754	383.158	379.064
35.0	385.614	378.655	372.515	363.099	359.006
37.5	366.374	359.825	352.865	343.860	339.357
40.0	346.725	339.766	333.626	323.392	319.298
42.5	326.667	320.117	313.567	303.333	299.240
45.0	306.608	300.468	293.918	283.684	279.591
47.5	286.550	280.409	273.860	264.035	260.351
50.0	266.082	260.351	254.210	244.386	241.111
52.5	246.023	240.702	234.561	225.556	222.281
55.0	226.374	221.871	215.322	207.135	204.269
57.5	207.135	203.041	196.491	189.123	186.667
60.0	187.485	183.801	178.070	171.111	169.064
62.5	169.064	165.380	160.059	154.737	152.281
65.0	150.643	147.368	142.865	137.953	135.906
67.5	133.450	129.766	126.491	121.579	119.942
70.0	115.848	113.392	109.708	106.433	104.386
72.5	99.064	97.017	94.152	91.287	89.649
75.0	83.099	81.053	78.597	76.550	75.322
77.5	67.544	65.906	64.269	62.632	60.994
80.0	52.398	51.579	49.941	48.714	47.895
82.5	38.070	37.252	36.433	35.614	34.795
85.0	24.561	24.152	23.743	23.333	22.515
87.5	11.053	10.643	11.053	11.462	11.053
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	264.445	262.111	258.222	256.667	254.333
112.5	304.111	300.222	297.889	294.000	291.667
115.0	343.778	341.445	339.889	332.111	330.555
117.5	385.778	381.889	381.889	372.555	371.000
120.0	428.555	422.333	423.889	414.555	411.445
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	558.444	548.333	549.889	543.667	542.111
130.0	602.000	591.889	593.444	585.667	586.444
132.5	645.556	634.667	637.000	629.222	629.222

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-S-835-F-F-ABL-8H-ITL85132.207.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	687.556	677.444	680.556	673.556	673.556
<b>137.5</b>	730.333	720.222	723.333	717.111	716.333
<b>140.0</b>	773.111	763.000	765.333	761.444	759.111
<b>142.5</b>	813.556	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	880.444	875.000
<b>150.0</b>	929.444	917.778	922.444	917.000	912.333
<b>152.5</b>	964.444	952.778	957.444	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	1044.555	1050.000	1045.333	1040.667
<b>162.5</b>	1078.778	1070.222	1074.111	1071.000	1067.889
<b>165.0</b>	1100.555	1092.778	1095.111	1093.555	1091.222
<b>167.5</b>	1116.889	1112.222	1113.778	1112.222	1111.445
<b>170.0</b>	1131.667	1129.333	1130.111	1128.555	1127.778
<b>172.5</b>	1144.111	1143.333	1143.333	1142.555	1142.555
<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>	1160.445	1160.445	1160.445	1160.445	1160.445

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-S-835-F-F-ABL-8H-ITL85132.207.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	192.30	N.A.	4.50
0-30	397.22	N.A.	9.30
0-40	629.65	N.A.	14.80
0-60	1047.9	N.A.	24.60
0-80	1273.38	N.A.	29.90
0-90	1299.56	N.A.	30.50
10-90	1248.92	N.A.	29.30
20-40	437.35	N.A.	10.30
20-50	663.24	N.A.	15.50
40-70	560.03	N.A.	13.10
60-80	225.48	N.A.	5.30
70-80	83.69	N.A.	2.00
80-90	26.18	N.A.	0.60
90-110	256.05	N.A.	6.00
90-120	590.90	N.A.	13.90
90-130	1042.54	N.A.	24.40
90-150	2093.49	N.A.	49.10
90-180	2965.95	N.A.	69.50
110-180	2709.9	N.A.	63.50
0-180	4265.51	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	50.64
10-20	141.66
20-30	204.91
30-40	232.44
40-50	225.88
50-60	192.36
60-70	141.78
70-80	83.69
80-90	26.18
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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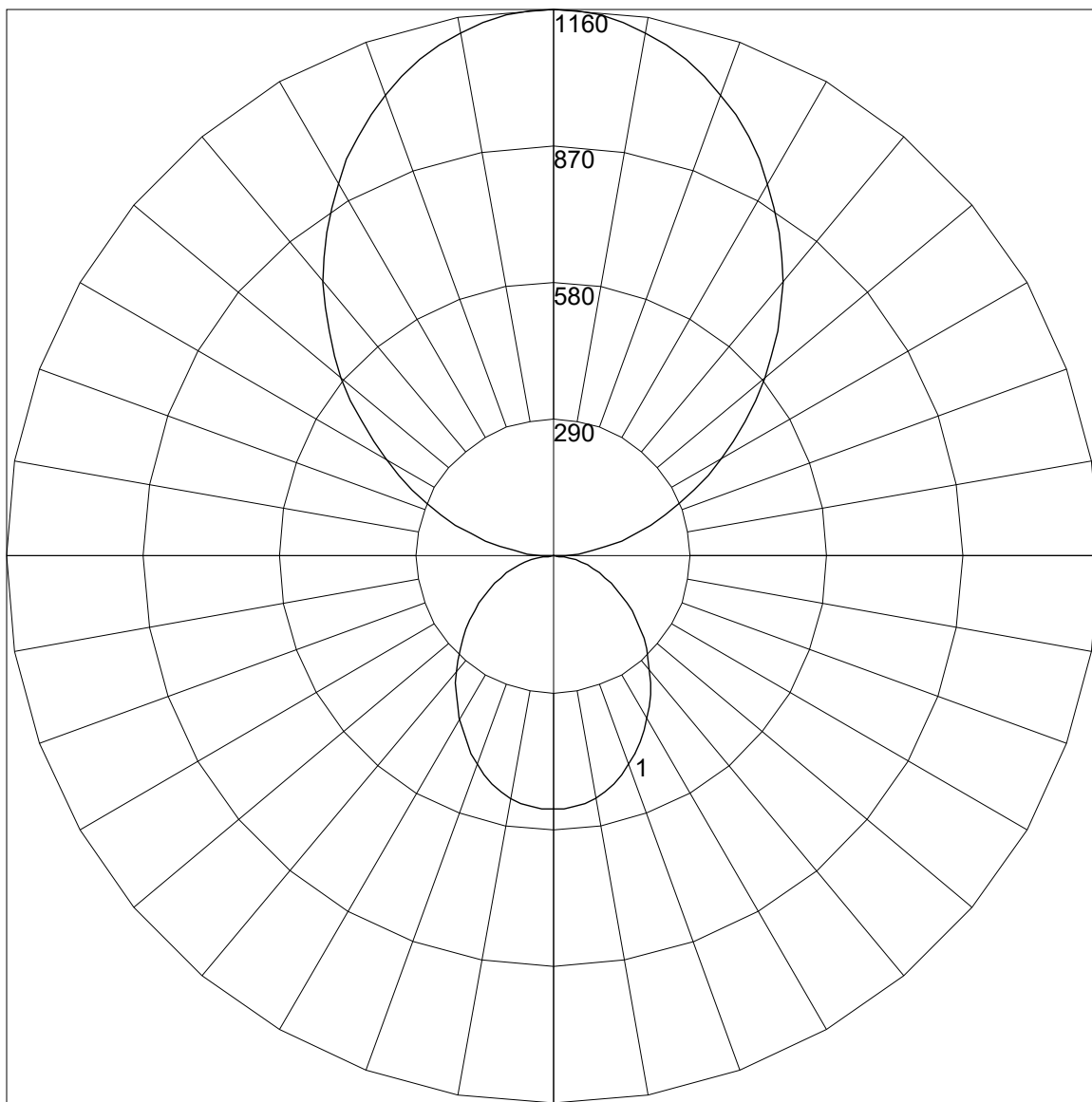
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	55	55	55	38	38	38	30
1	93	89	85	82	84	80	77	74	63	61	59	48	47	45	34	33	32	26
2	85	78	72	67	76	70	65	61	56	52	49	42	40	38	30	28	27	22
3	78	68	61	56	69	62	56	51	49	45	41	37	34	32	26	25	23	18
4	71	61	53	47	63	55	48	43	44	39	35	33	30	27	24	22	20	16
5	65	54	46	40	58	49	42	37	39	34	30	30	26	24	21	19	17	14
6	60	48	40	35	54	44	37	32	35	30	26	27	23	21	19	17	15	12
7	55	43	36	30	49	39	33	28	32	27	23	24	21	18	18	15	14	11
8	51	39	32	27	46	36	29	25	29	24	20	22	19	16	16	14	12	10
9	48	36	29	24	43	33	26	22	26	22	18	20	17	15	15	13	11	9
10	44	33	26	21	40	30	24	20	24	20	16	19	16	13	14	12	10	8

POLAR GRAPH



Maximum Candela = 1160.445 Located At Horizontal Angle = 0, Vertical Angle = 180  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)