

# 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-DSO-ABL-8H-ITL85132-ITL94139.209.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132-ITL94139.209 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-DSO-ABL-8H

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 42.3 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 44.2 WATTS

[ABSOLUTE]LUMENS]4306

[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL85132 and ITL94139. 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	4306
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	102
Total Luminaire Watts	42.3
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	5661	7155	7349
55	5147	6589	6589
65	4618	5854	5692
75	4107	4995	4731
85	3566	3780	3423

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-S-835-F-DSO-ABL-8H-ITL85132-ITL94139.209.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	477.372	477.372	477.372	477.372	477.372
2.5	476.554	476.554	476.963	477.782	477.782
5.0	474.097	474.507	476.554	478.601	479.420
7.5	469.594	471.231	474.916	479.420	481.876
10.0	463.862	465.909	474.097	482.695	485.561
12.5	456.902	459.358	473.278	485.151	488.426
15.0	447.485	451.580	470.822	485.970	490.064
17.5	437.660	442.982	467.547	485.970	490.883
20.0	425.377	433.156	463.452	483.923	489.245
22.5	412.276	421.693	456.493	479.420	485.561
25.0	397.537	410.229	448.714	473.278	479.010
27.5	382.799	397.947	439.707	464.681	470.412
30.0	366.832	384.846	428.243	453.217	457.721
32.5	350.455	370.107	416.370	440.116	443.801
35.0	333.260	354.549	402.860	424.149	426.606
37.5	316.474	338.992	386.893	406.544	407.773
40.0	298.460	322.615	369.697	387.712	386.893
42.5	281.265	305.420	352.093	366.422	364.785
45.0	263.660	287.815	333.260	344.724	342.267
47.5	246.465	270.211	312.789	322.206	319.750
50.0	228.451	252.197	291.909	298.870	294.775
52.5	210.846	233.364	270.620	275.942	271.848
55.0	194.470	214.940	248.922	252.197	248.922
57.5	177.275	196.517	227.223	229.270	223.947
60.0	160.898	177.684	205.524	207.162	201.839
62.5	145.341	159.670	184.644	184.235	180.141
65.0	128.555	142.475	162.945	162.536	158.442
67.5	113.816	124.870	142.475	141.247	137.153
70.0	98.668	108.084	122.823	120.776	117.091
72.5	83.929	91.708	103.581	101.534	98.258
75.0	70.009	75.741	85.157	83.110	80.654
77.5	56.908	61.002	67.553	65.506	63.459
80.0	44.626	46.673	51.586	49.129	47.492
82.5	32.753	33.572	36.028	34.391	33.162
85.0	20.471	21.289	21.699	20.471	19.652
87.5	9.416	9.416	8.598	8.188	7.369
90.0	0.000	0.000	0.000	0.000	0.000
92.5	23.336	23.336	23.336	25.669	25.669
95.0	55.228	52.895	52.895	53.673	54.451
97.5	87.121	84.787	83.232	84.009	84.009
100.0	119.791	115.902	115.902	115.902	115.124
102.5	154.017	150.906	149.350	148.572	148.572
105.0	189.799	187.465	183.576	182.798	182.020
107.5	226.359	224.025	219.358	218.580	217.802
110.0	264.474	262.140	258.251	256.695	254.362
112.5	304.145	300.256	297.922	294.033	291.699
115.0	343.816	341.483	339.927	332.148	330.593
117.5	385.821	381.932	381.932	372.597	371.042
120.0	428.604	422.381	423.936	414.602	411.491
122.5	469.053	462.830	465.941	458.163	452.717
125.0	514.169	504.834	507.946	500.167	496.278
127.5	558.507	548.395	549.951	543.728	542.172
130.0	602.067	591.955	593.511	585.732	586.510
132.5	645.628	634.738	637.071	629.293	629.293

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-S-835-F-DSO-ABL-8H-ITL85132-ITL94139.209.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	687.633	677.520	680.632	673.631	673.631
<b>137.5</b>	730.415	720.303	723.414	717.192	716.414
<b>140.0</b>	773.198	763.086	765.419	761.530	759.196
<b>142.5</b>	813.647	802.757	805.868	801.979	798.867
<b>145.0</b>	854.874	843.206	846.317	843.206	837.761
<b>147.5</b>	892.989	881.321	885.210	880.543	875.098
<b>150.0</b>	929.549	917.881	922.548	917.103	912.436
<b>152.5</b>	964.553	952.885	957.552	952.885	948.217
<b>155.0</b>	998.001	986.333	991.778	987.111	982.443
<b>157.5</b>	1026.782	1015.892	1022.115	1017.447	1012.780
<b>160.0</b>	1054.785	1044.673	1050.118	1045.451	1040.783
<b>162.5</b>	1078.899	1070.342	1074.232	1071.120	1068.009
<b>165.0</b>	1100.679	1092.900	1095.234	1093.678	1091.345
<b>167.5</b>	1117.014	1112.347	1113.903	1112.347	1111.569
<b>170.0</b>	1131.794	1129.460	1130.238	1128.682	1127.904
<b>172.5</b>	1144.239	1143.461	1143.461	1142.684	1142.684
<b>175.0</b>	1152.796	1152.796	1152.796	1152.796	1152.018
<b>177.5</b>	1157.463	1158.241	1158.241	1158.241	1157.463
<b>180.0</b>	1160.575	1160.575	1160.575	1160.575	1160.575

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-S-835-F-DSO-ABL-8H-ITL85132-ITL94139.209.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	178.00	N.A.	4.10
0-30	381.83	N.A.	8.90
0-40	625.66	N.A.	14.50
0-60	1079.72	N.A.	25.10
0-80	1316.27	N.A.	30.60
0-90	1340.2	N.A.	31.10
10-90	1294.79	N.A.	30.10
20-40	447.66	N.A.	10.40
20-50	692.11	N.A.	16.10
40-70	605.71	N.A.	14.10
60-80	236.56	N.A.	5.50
70-80	84.90	N.A.	2.00
80-90	23.92	N.A.	0.60
90-110	256.08	N.A.	5.90
90-120	590.97	N.A.	13.70
90-130	1042.66	N.A.	24.20
90-150	2093.73	N.A.	48.60
90-180	2966.28	N.A.	68.90
110-180	2710.2	N.A.	62.90
0-180	4306.48	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	45.41
10-20	132.59
20-30	203.83
30-40	243.84
40-50	244.45
50-60	209.60
60-70	151.65
70-80	84.90
80-90	23.92
90-100	59.94
100-110	196.14
110-120	334.89
120-130	451.69
130-140	523.16
140-150	527.91
150-160	454.88
160-170	308.38
170-180	109.30

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-S-835-F-DSO-ABL-8H-ITL85132-ITL94139.209.IES

## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

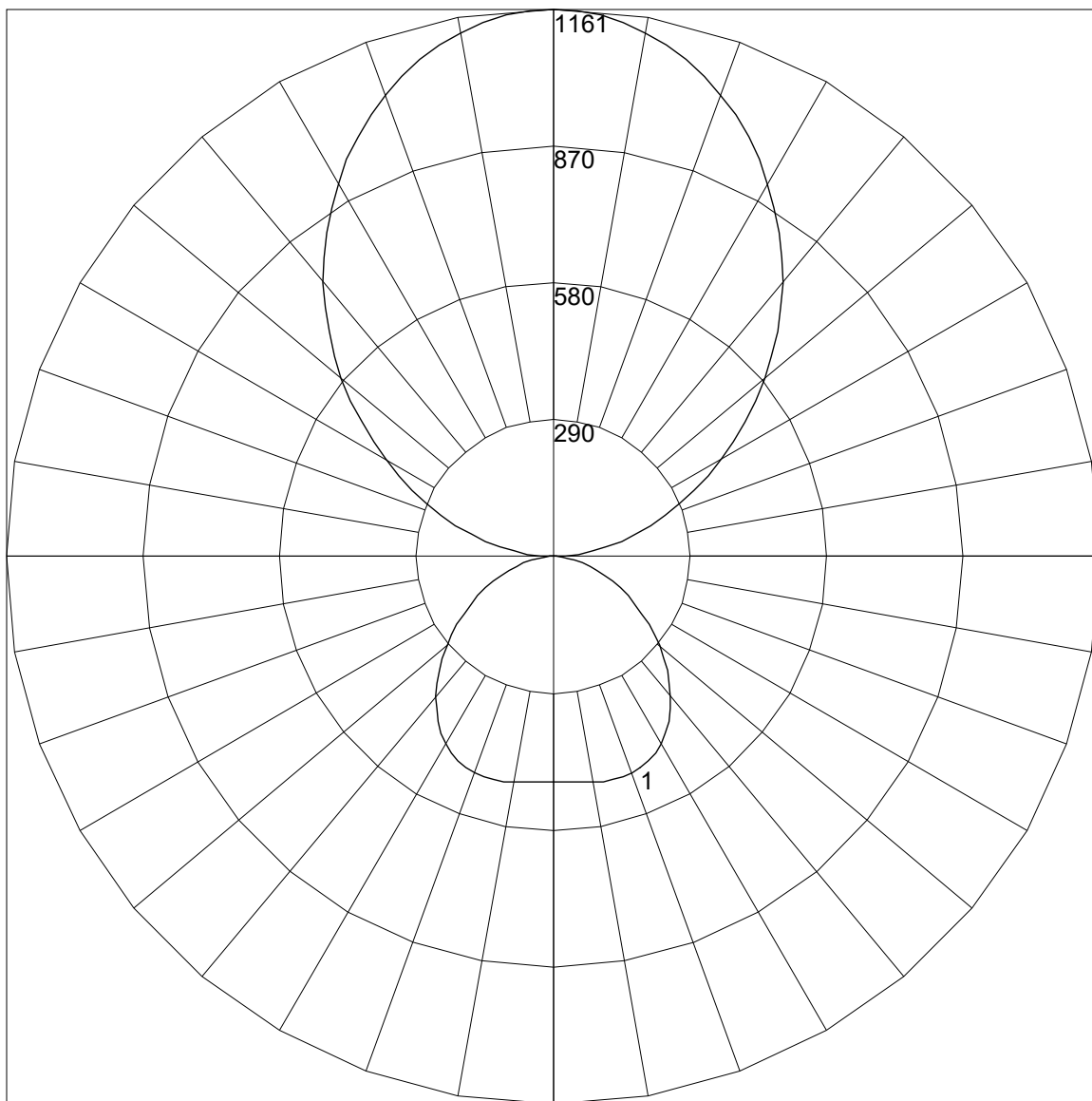
Effective Floor Cavity Reflectance 0.20

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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31
1	94	89	86	82	84	80	77	74	64	62	60	48	47	46	34	33	33	26
2	85	78	72	67	76	70	65	61	56	52	49	42	40	38	30	29	28	22
3	78	68	61	56	69	62	56	51	49	45	41	37	35	32	27	25	23	19
4	71	60	53	47	63	55	48	43	44	39	35	33	30	28	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	32	28	32	27	23	24	21	18	18	15	14	11
8	51	39	32	26	46	36	29	24	29	24	20	22	19	16	16	14	12	10
9	47	36	28	23	43	32	26	22	26	21	18	20	17	14	15	13	11	9
10	44	33	26	21	40	30	23	19	24	19	16	19	15	13	14	11	10	8

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-S-835-F-DSO-ABL-8H-ITL85132-ITL94139.209.IES

POLAR GRAPH



Maximum Candela = 1160.575 Located At Horizontal Angle = 0, Vertical Angle = 180

# 1 - Vertical Plane Through Horizontal Angles (90 - 270)