

# 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-B-V-835-F-DSO-ABL-8H-ITL85132-ITL94139.210.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132-ITL94139.210 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-B-V-835-F-DSO-ABL-8H

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 54.1 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 55.3 WATTS

[ABSOLUTE]LUMENS]5235

[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	5236
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	97
Total Luminaire Watts	54.1
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.16
Spacing Criterion (90-270)	1.40
Spacing Criterion (Diagonal)	1.42
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	13827	17477	17949
55	12573	16093	16093
65	11280	14298	13902
75	10031	12201	11556
85	8710	9232	8361

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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	1166.000	1166.000	1166.000	1166.000	1166.000
2.5	1164.000	1164.000	1165.000	1167.000	1167.000
5.0	1158.000	1159.000	1164.000	1169.000	1171.000
7.5	1147.000	1151.000	1160.000	1171.000	1177.000
10.0	1133.000	1138.000	1158.000	1179.000	1186.000
12.5	1116.000	1122.000	1156.000	1185.000	1193.000
15.0	1093.000	1103.000	1150.000	1187.000	1197.000
17.5	1069.000	1082.000	1142.000	1187.000	1199.000
20.0	1039.000	1058.000	1132.000	1182.000	1195.000
22.5	1007.000	1030.000	1115.000	1171.000	1186.000
25.0	971.000	1002.000	1096.000	1156.000	1170.000
27.5	935.000	972.000	1074.000	1135.000	1149.000
30.0	896.000	940.000	1046.000	1107.000	1118.000
32.5	856.000	904.000	1017.000	1075.000	1084.000
35.0	814.000	866.000	984.000	1036.000	1042.000
37.5	773.000	828.000	945.000	993.000	996.000
40.0	729.000	788.000	903.000	947.000	945.000
42.5	687.000	746.000	860.000	895.000	891.000
45.0	644.000	703.000	814.000	842.000	836.000
47.5	602.000	660.000	764.000	787.000	781.000
50.0	558.000	616.000	713.000	730.000	720.000
52.5	515.000	570.000	661.000	674.000	664.000
55.0	475.000	525.000	608.000	616.000	608.000
57.5	433.000	480.000	555.000	560.000	547.000
60.0	393.000	434.000	502.000	506.000	493.000
62.5	355.000	390.000	451.000	450.000	440.000
65.0	314.000	348.000	398.000	397.000	387.000
67.5	278.000	305.000	348.000	345.000	335.000
70.0	241.000	264.000	300.000	295.000	286.000
72.5	205.000	224.000	253.000	248.000	240.000
75.0	171.000	185.000	208.000	203.000	197.000
77.5	139.000	149.000	165.000	160.000	155.000
80.0	109.000	114.000	126.000	120.000	116.000
82.5	80.000	82.000	88.000	84.000	81.000
85.0	50.000	52.000	53.000	50.000	48.000
87.5	23.000	23.000	21.000	20.000	18.000
90.0	0.000	0.000	0.000	0.000	0.000
92.5	15.437	15.437	15.437	16.980	16.980
95.0	36.533	34.990	34.990	35.504	36.019
97.5	57.630	56.087	55.057	55.572	55.572
100.0	79.242	76.669	76.669	76.669	76.154
102.5	101.882	99.824	98.795	98.280	98.280
105.0	125.551	124.008	121.435	120.920	120.406
107.5	149.736	148.192	145.105	144.590	144.075
110.0	174.949	173.405	170.832	169.803	168.260
112.5	201.191	198.618	197.075	194.502	192.958
115.0	227.433	225.890	224.861	219.715	218.686
117.5	255.219	252.647	252.647	246.472	245.443
120.0	283.520	279.403	280.433	274.258	272.200
122.5	310.277	306.160	308.218	303.073	299.471
125.0	340.121	333.946	336.004	330.859	328.286
127.5	369.450	362.761	363.790	359.674	358.645
130.0	398.266	391.576	392.606	387.460	387.974
132.5	427.081	419.877	421.421	416.275	416.275

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-V-835-F-DSO-ABL-8H-ITL85132-ITL94139.210.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	454.867	448.177	450.236	445.605	445.605
<b>137.5</b>	483.167	476.478	478.536	474.420	473.905
<b>140.0</b>	511.468	504.778	506.322	503.749	502.206
<b>142.5</b>	538.225	531.021	533.079	530.506	528.448
<b>145.0</b>	565.496	557.778	559.836	557.778	554.176
<b>147.5</b>	590.709	582.991	585.564	582.476	578.874
<b>150.0</b>	614.893	607.175	610.262	606.660	603.573
<b>152.5</b>	638.048	630.330	633.417	630.330	627.243
<b>155.0</b>	660.174	652.456	656.058	652.970	649.883
<b>157.5</b>	679.213	672.009	676.125	673.038	669.951
<b>160.0</b>	697.737	691.047	694.649	691.562	688.475
<b>162.5</b>	713.688	708.028	710.601	708.542	706.484
<b>165.0</b>	728.095	722.950	724.494	723.464	721.921
<b>167.5</b>	738.901	735.814	736.843	735.814	735.299
<b>170.0</b>	748.678	747.134	747.648	746.619	746.105
<b>172.5</b>	756.910	756.396	756.396	755.881	755.881
<b>175.0</b>	762.571	762.571	762.571	762.571	762.056
<b>177.5</b>	765.658	766.172	766.172	766.172	765.658
<b>180.0</b>	767.716	767.716	767.716	767.716	767.716

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-V-835-F-DSO-ABL-8H-ITL85132-ITL94139.210.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	434.77	N.A.	8.30
0-30	932.63	N.A.	17.80
0-40	1528.2	N.A.	29.20
0-60	2637.24	N.A.	50.40
0-80	3215.04	N.A.	61.40
0-90	3273.48	N.A.	62.50
10-90	3162.56	N.A.	60.40
20-40	1093.43	N.A.	20.90
20-50	1690.51	N.A.	32.30
40-70	1479.46	N.A.	28.30
60-80	577.80	N.A.	11.00
70-80	207.38	N.A.	4.00
80-90	58.43	N.A.	1.10
90-110	169.40	N.A.	3.20
90-120	390.92	N.A.	7.50
90-130	689.71	N.A.	13.20
90-150	1384.99	N.A.	26.50
90-180	1962.19	N.A.	37.50
110-180	1792.79	N.A.	34.20
0-180	5235.66	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	110.92
10-20	323.86
20-30	497.85
30-40	595.58
40-50	597.08
50-60	511.96
60-70	370.42
70-80	207.38
80-90	58.43
90-100	39.65
100-110	129.74
110-120	221.53
120-130	298.79
130-140	346.07
140-150	349.21
150-160	300.90
160-170	203.99
170-180	72.30

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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

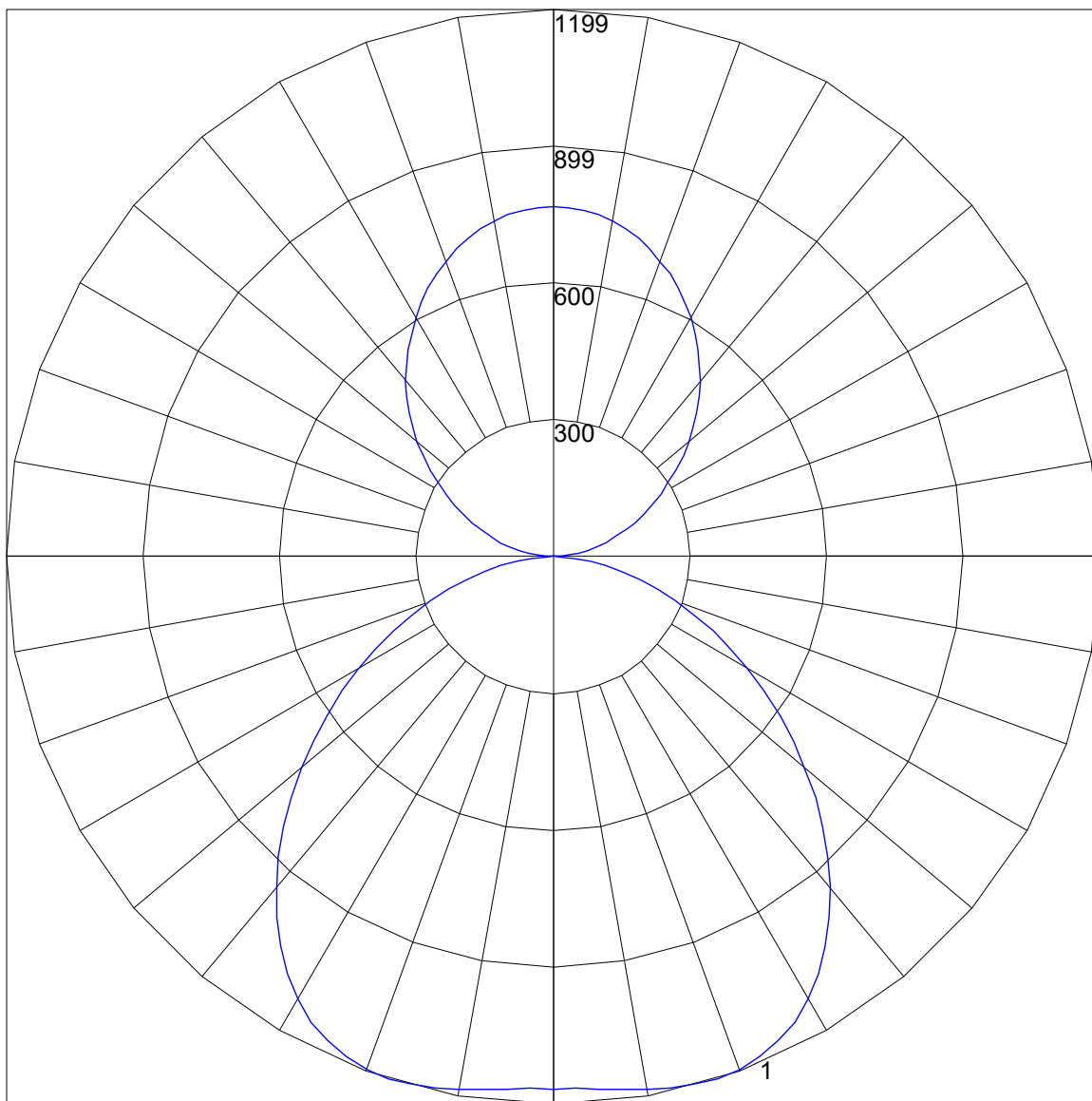
Effective Floor Cavity Reflectance 0.20

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	63
1	101	96	92	89	94	90	87	84	79	77	74	69	67	65	60	58	57	53
2	92	84	78	72	86	79	73	69	69	65	62	61	57	55	53	50	48	44
3	84	74	66	60	78	69	63	57	61	56	52	54	50	46	47	44	41	37
4	76	65	57	51	71	62	54	49	54	49	44	48	43	40	42	38	35	32
5	70	58	50	44	66	55	47	42	49	43	38	43	38	34	37	34	31	28
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27	24
7	60	47	39	33	56	45	37	32	40	34	29	35	30	27	31	27	24	21
8	56	43	35	30	52	41	33	28	36	30	26	32	27	24	28	24	21	19
9	52	39	32	26	49	37	30	25	33	27	23	30	25	21	26	22	19	17
10	48	36	29	24	45	34	27	23	31	25	21	27	23	19	24	20	18	16

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## POLAR GRAPH



Maximum Candela = 1199 Located At Horizontal Angle = 90, Vertical Angle = 17.5

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