

# 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-V-S-835-F-DSO-ABL-8H-ITL85132-ITL94139.206.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132-ITL94139.206 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-V-S-835-F-DSO-ABL-8H

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 50.9 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 52.8 WATTS

[ABSOLUTE]LUMENS]5153

[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	5154
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	101
Total Luminaire Watts	50.9
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

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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	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	30.000	30.000	30.000	33.000	33.000
95.0	71.000	68.000	68.000	69.000	70.000
97.5	112.000	109.000	107.000	108.000	108.000
100.0	154.000	149.000	149.000	149.000	148.000
102.5	198.000	194.000	192.000	191.000	191.000
105.0	244.000	241.000	236.000	235.000	234.000
107.5	291.000	288.000	282.000	281.000	280.000
110.0	340.000	337.000	332.000	330.000	327.000
112.5	391.000	386.000	383.000	378.000	375.000
115.0	442.000	439.000	437.000	427.000	425.000
117.5	496.000	491.000	491.000	479.000	477.000
120.0	551.000	543.000	545.000	533.000	529.000
122.5	603.000	595.000	599.000	589.000	582.000
125.0	661.000	649.000	653.000	643.000	638.000
127.5	718.000	705.000	707.000	699.000	697.000
130.0	774.000	761.000	763.000	753.000	754.000
132.5	830.000	816.000	819.000	809.000	809.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-V-S-835-F-DSO-ABL-8H-ITL85132-ITL94139.206.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	884.000	871.000	875.000	866.000	866.000
<b>137.5</b>	939.000	926.000	930.000	922.000	921.000
<b>140.0</b>	994.000	981.000	984.000	979.000	976.000
<b>142.5</b>	1046.000	1032.000	1036.000	1031.000	1027.000
<b>145.0</b>	1099.000	1084.000	1088.000	1084.000	1077.000
<b>147.5</b>	1148.000	1133.000	1138.000	1132.000	1125.000
<b>150.0</b>	1195.000	1180.000	1186.000	1179.000	1173.000
<b>152.5</b>	1240.000	1225.000	1231.000	1225.000	1219.000
<b>155.0</b>	1283.000	1268.000	1275.000	1269.000	1263.000
<b>157.5</b>	1320.000	1306.000	1314.000	1308.000	1302.000
<b>160.0</b>	1356.000	1343.000	1350.000	1344.000	1338.000
<b>162.5</b>	1387.000	1376.000	1381.000	1377.000	1373.000
<b>165.0</b>	1415.000	1405.000	1408.000	1406.000	1403.000
<b>167.5</b>	1436.000	1430.000	1432.000	1430.000	1429.000
<b>170.0</b>	1455.000	1452.000	1453.000	1451.000	1450.000
<b>172.5</b>	1471.000	1470.000	1470.000	1469.000	1469.000
<b>175.0</b>	1482.000	1482.000	1482.000	1482.000	1481.000
<b>177.5</b>	1488.000	1489.000	1489.000	1489.000	1488.000
<b>180.0</b>	1492.000	1492.000	1492.000	1492.000	1492.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-V-S-835-F-DSO-ABL-8H-ITL85132-ITL94139.206.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	178.00	N.A.	3.50
0-30	381.83	N.A.	7.40
0-40	625.66	N.A.	12.10
0-60	1079.72	N.A.	21.00
0-80	1316.27	N.A.	25.50
0-90	1340.2	N.A.	26.00
10-90	1294.79	N.A.	25.10
20-40	447.66	N.A.	8.70
20-50	692.11	N.A.	13.40
40-70	605.71	N.A.	11.80
60-80	236.56	N.A.	4.60
70-80	84.90	N.A.	1.60
80-90	23.92	N.A.	0.50
90-110	329.21	N.A.	6.40
90-120	759.73	N.A.	14.70
90-130	1340.41	N.A.	26.00
90-150	2691.63	N.A.	52.20
90-180	3813.36	N.A.	74.00
110-180	3484.15	N.A.	67.60
0-180	5153.56	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	77.06
100-110	252.15
110-120	430.52
120-130	580.67
130-140	672.56
140-150	678.67
150-160	584.78
160-170	396.44
170-180	140.51

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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

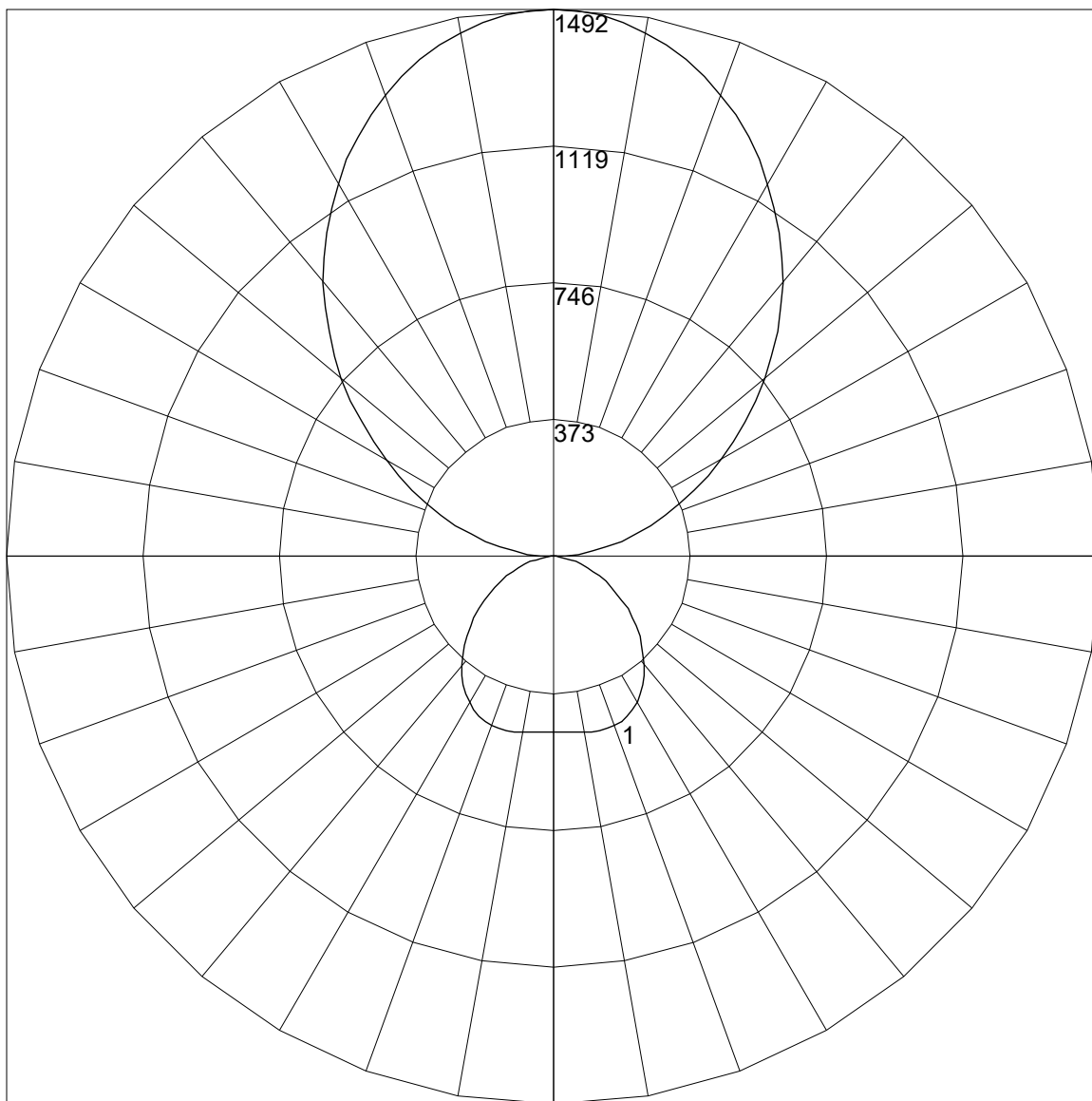
Effective Floor Cavity Reflectance 0.20

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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34	26
1	92	88	85	81	82	79	76	73	61	59	57	45	44	43	30	29	29	22
2	84	77	71	66	75	69	64	60	54	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	60	55	50	47	43	40	35	32	30	23	22	21	16
4	70	60	52	46	62	53	47	42	42	37	34	31	28	26	21	19	18	13
5	64	53	45	39	57	48	41	36	37	33	29	28	25	22	19	17	15	12
6	59	47	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13	10
7	54	43	35	30	48	38	32	27	30	25	22	23	19	17	15	13	12	9
8	50	38	31	26	45	35	28	24	27	23	19	21	17	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7
10	44	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	9	7

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POLAR GRAPH



Maximum Candela = 1492 Located At Horizontal Angle = 0, Vertical Angle = 180

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