

# 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-P-ID-4FT-V-B-835-WSO-ABL-8H-ITL94474.005.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL94474.005 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[ISSUEDATE]04/12/21

[TESTDATE]01/22/21

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-2-P-ID-4ft-V-B-835-WSO-ABL-8H

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 53.0 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 53.9 WATTS

[\_ABSOLUTE]LUMENS]5712

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL94474. 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	5712
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	53
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)	3.81 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	8868	8555	8044
55	8185	7641	6726
65	7399	6254	5069
75	6311	4059	2569
85	4803	377	283

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-P-ID-4FT-V-B-835-WSO-ABL-8H-ITL94474.005.IES****CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
<b>0.0</b>	673.069	673.069	673.069	673.069	673.069
<b>2.5</b>	672.555	672.040	672.040	672.040	672.040
<b>5.0</b>	668.953	668.438	667.924	667.924	667.409
<b>7.5</b>	663.807	663.292	662.263	661.234	661.234
<b>10.0</b>	656.603	654.544	654.030	653.001	651.972
<b>12.5</b>	647.855	643.738	644.253	643.738	641.165
<b>15.0</b>	637.049	630.874	632.932	630.874	628.301
<b>17.5</b>	623.670	616.466	618.524	615.436	612.349
<b>20.0</b>	608.232	600.514	602.572	598.455	595.368
<b>22.5</b>	590.737	583.533	584.047	579.931	575.814
<b>25.0</b>	572.726	565.008	565.008	558.833	555.231
<b>27.5</b>	553.687	544.425	544.425	537.735	533.618
<b>30.0</b>	532.589	524.871	522.812	516.123	511.492
<b>32.5</b>	511.492	504.287	501.200	492.967	487.306
<b>35.0</b>	487.821	481.131	477.529	467.752	462.092
<b>37.5</b>	465.694	457.975	454.373	442.538	437.392
<b>40.0</b>	442.023	434.819	430.188	416.809	411.149
<b>42.5</b>	416.809	411.663	404.459	391.080	383.361
<b>45.0</b>	393.138	386.963	379.245	363.807	356.603
<b>47.5</b>	368.953	362.264	353.516	336.535	328.816
<b>50.0</b>	343.739	338.593	326.758	308.747	300.514
<b>52.5</b>	319.554	314.922	301.029	280.446	270.669
<b>55.0</b>	294.339	289.193	274.785	251.629	241.852
<b>57.5</b>	270.669	264.494	248.027	222.813	214.579
<b>60.0</b>	245.454	240.308	220.240	196.055	187.307
<b>62.5</b>	220.240	215.609	191.938	169.296	159.519
<b>65.0</b>	196.055	190.394	165.694	142.538	134.305
<b>67.5</b>	172.384	164.665	139.451	116.809	109.605
<b>70.0</b>	148.199	140.480	114.237	92.624	85.420
<b>72.5</b>	124.528	115.780	89.022	69.983	63.293
<b>75.0</b>	102.401	90.566	65.866	48.370	41.681
<b>77.5</b>	81.303	67.410	44.254	27.787	23.156
<b>80.0</b>	61.235	46.312	23.671	10.292	6.175
<b>82.5</b>	43.225	26.758	6.690	2.573	2.573
<b>85.0</b>	26.244	9.262	2.058	2.058	1.544
<b>87.5</b>	11.321	1.029	1.029	1.029	1.029
<b>90.0</b>	0.000	0.000	0.000	0.000	0.000
<b>92.5</b>	19.000	32.000	51.000	34.000	28.000
<b>95.0</b>	44.000	83.000	157.000	91.000	74.000
<b>97.5</b>	71.000	132.000	285.000	172.000	134.000
<b>100.0</b>	98.000	173.000	458.000	288.000	217.000
<b>102.5</b>	127.000	209.000	608.000	480.000	350.000
<b>105.0</b>	156.000	242.000	711.000	760.000	574.000
<b>107.5</b>	185.000	272.000	757.000	1060.000	883.000
<b>110.0</b>	216.000	302.000	779.000	1311.000	1224.000
<b>112.5</b>	245.000	332.000	793.000	1456.000	1483.000
<b>115.0</b>	276.000	359.000	802.000	1507.000	1632.000
<b>117.5</b>	306.000	387.000	808.000	1515.000	1694.000
<b>120.0</b>	335.000	412.000	813.000	1502.000	1711.000
<b>122.5</b>	360.000	436.000	816.000	1468.000	1701.000
<b>125.0</b>	383.000	457.000	816.000	1417.000	1662.000
<b>127.5</b>	405.000	476.000	814.000	1360.000	1599.000
<b>130.0</b>	425.000	492.000	813.000	1304.000	1519.000
<b>132.5</b>	444.000	507.000	810.000	1247.000	1445.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-P-ID-4FT-V-B-835-WSO-ABL-8H-ITL94474.005.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	462.000	522.000	805.000	1195.000	1372.000
<b>137.5</b>	480.000	536.000	797.000	1144.000	1300.000
<b>140.0</b>	498.000	551.000	788.000	1096.000	1232.000
<b>142.5</b>	514.000	563.000	778.000	1048.000	1167.000
<b>145.0</b>	529.000	574.000	766.000	1000.000	1103.000
<b>147.5</b>	545.000	584.000	753.000	955.000	1043.000
<b>150.0</b>	560.000	594.000	739.000	912.000	984.000
<b>152.5</b>	573.000	604.000	727.000	871.000	931.000
<b>155.0</b>	586.000	612.000	719.000	831.000	882.000
<b>157.5</b>	600.000	621.000	708.000	795.000	834.000
<b>160.0</b>	613.000	630.000	696.000	764.000	792.000
<b>162.5</b>	623.000	636.000	685.000	736.000	757.000
<b>165.0</b>	632.000	641.000	677.000	712.000	728.000
<b>167.5</b>	638.000	644.000	669.000	693.000	702.000
<b>170.0</b>	643.000	647.000	662.000	678.000	683.000
<b>172.5</b>	646.000	649.000	658.000	666.000	669.000
<b>175.0</b>	649.000	650.000	654.000	657.000	659.000
<b>177.5</b>	651.000	650.000	651.000	652.000	653.000
<b>180.0</b>	651.000	651.000	651.000	651.000	651.000

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Zone	Lumens	%Lamp	%Fixt
0-20	241.18	N.A.	4.20
0-30	500.41	N.A.	8.80
0-40	797.76	N.A.	14.00
0-60	1330.16	N.A.	23.30
0-80	1568.73	N.A.	27.50
0-90	1579.09	N.A.	27.60
10-90	1515.75	N.A.	26.50
20-40	556.58	N.A.	9.70
20-50	846.67	N.A.	14.80
40-70	696.85	N.A.	12.20
60-80	238.57	N.A.	4.20
70-80	74.13	N.A.	1.30
80-90	10.36	N.A.	0.20
90-110	668.47	N.A.	11.70
90-120	1548.99	N.A.	27.10
90-130	2378.16	N.A.	41.60
90-150	3541.44	N.A.	62.00
90-180	4133.16	N.A.	72.40
110-180	3464.68	N.A.	60.70
0-180	5712.25	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	63.34
10-20	177.84
20-30	259.24
30-40	297.34
40-50	290.09
50-60	242.32
60-70	164.44
70-80	74.13
80-90	10.36
90-100	119.67
100-110	548.80
110-120	880.52
120-130	829.17
130-140	666.53
140-150	496.76
150-160	336.22
160-170	192.81
170-180	62.69

# IES INDOOR REPORT

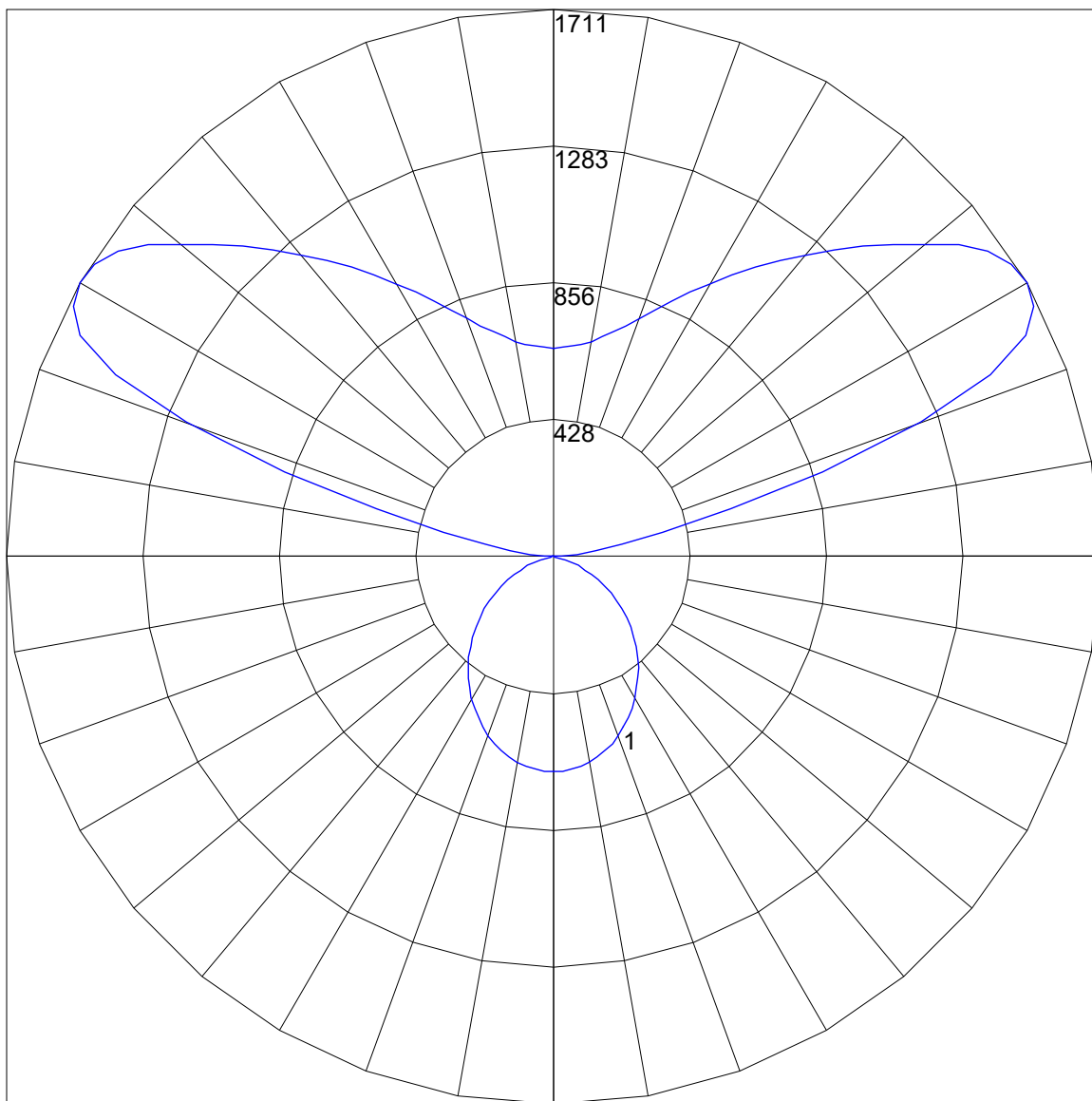
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	91	91	91	91	71	71	71	53	53	53	36	36	36	28
1	93	89	85	82	83	80	77	74	62	60	59	46	45	44	32	31	30	24
2	85	78	72	67	76	70	65	61	55	52	49	41	39	37	28	27	26	20
3	77	68	62	56	69	61	56	51	48	44	41	36	34	31	25	24	22	17
4	71	61	53	47	63	54	48	43	43	38	35	32	29	27	22	21	19	15
5	65	54	46	40	58	49	42	37	38	34	30	29	26	23	20	18	17	13
6	60	48	40	35	53	43	37	32	35	30	26	26	23	20	18	16	15	11
7	55	43	36	30	49	39	33	28	31	26	23	24	20	18	17	15	13	10
8	51	39	32	27	46	36	29	25	28	24	20	22	18	16	15	13	12	9
9	47	36	29	24	42	32	26	22	26	21	18	20	17	14	14	12	11	8
10	44	33	26	21	40	30	24	19	24	19	16	18	15	13	13	11	10	8

POLAR GRAPH



Maximum Candela = 1711 Located At Horizontal Angle = 90, Vertical Angle = 120  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)