

# 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-B-835-F-MLW-ITL85132-ITL92590.005.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132-ITL92590.005 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/11/15

[ISSUEDATE]02/03/23

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-2-ID-4ft-V-B-835-F-MLW

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 54.4 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 55.2 WATTS

[ABSOLUTE]LUMENS]5450

[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL85132 and ITL92590. 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	5453
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	100
Total Luminaire Watts	54.4
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	2089	2012	2056
55	1758	1649	1635
65	1498	1387	1331
75	1298	1178	1087
85	1076	986	807

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-V-B-835-F-MLW-ITL85132-ITL92590.005.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>	4112.015	4112.015	4112.015	4112.015	4112.015
<b>2.5</b>	4038.402	4041.491	4036.858	4039.432	4035.314
<b>5.0</b>	3844.847	3840.214	3843.303	3838.670	3840.214
<b>7.5</b>	3520.025	3523.113	3562.236	3557.603	3566.869
<b>10.0</b>	3047.462	3093.792	3196.232	3239.473	3236.384
<b>12.5</b>	2520.848	2591.887	2780.809	2893.545	2874.498
<b>15.0</b>	2043.138	2103.367	2345.825	2512.097	2474.519
<b>17.5</b>	1579.841	1675.589	1927.829	2053.434	1969.011
<b>20.0</b>	1126.326	1251.930	1542.778	1604.551	1564.398
<b>22.5</b>	744.878	875.631	1158.242	1245.238	1194.276
<b>25.0</b>	499.331	580.150	834.963	887.985	788.634
<b>27.5</b>	347.987	392.773	581.180	574.488	502.934
<b>30.0</b>	249.151	281.581	377.844	365.490	335.118
<b>32.5</b>	179.141	205.910	246.062	251.210	239.885
<b>35.0</b>	142.078	154.432	181.201	188.407	175.023
<b>37.5</b>	126.634	128.694	144.137	145.166	135.386
<b>40.0</b>	115.824	115.824	119.942	118.913	116.339
<b>42.5</b>	106.558	106.043	103.984	105.014	105.014
<b>45.0</b>	97.292	96.778	93.689	95.233	95.748
<b>47.5</b>	88.541	88.026	85.453	85.967	86.482
<b>50.0</b>	80.820	80.305	77.216	77.731	77.731
<b>52.5</b>	73.098	72.583	69.495	69.495	69.495
<b>55.0</b>	66.406	65.376	62.288	61.773	61.773
<b>57.5</b>	59.714	58.684	56.110	55.081	55.081
<b>60.0</b>	53.022	52.507	49.933	48.904	48.904
<b>62.5</b>	47.359	46.844	44.271	43.241	42.212
<b>65.0</b>	41.697	40.667	38.608	37.578	37.064
<b>67.5</b>	36.034	35.519	33.975	32.431	31.916
<b>70.0</b>	31.401	30.886	28.827	27.798	26.768
<b>72.5</b>	26.768	26.253	24.709	23.165	22.650
<b>75.0</b>	22.135	21.620	20.076	19.047	18.532
<b>77.5</b>	17.502	17.502	15.958	14.928	14.414
<b>80.0</b>	12.869	13.384	12.355	11.325	10.810
<b>82.5</b>	9.266	9.266	8.751	8.236	7.722
<b>85.0</b>	6.177	5.662	5.662	5.148	4.633
<b>87.5</b>	2.574	2.574	2.574	2.574	2.059
<b>90.0</b>	0.000	0.000	0.000	0.000	0.000
<b>92.5</b>	30.000	30.000	30.000	33.000	33.000
<b>95.0</b>	71.000	68.000	68.000	69.000	70.000
<b>97.5</b>	112.000	109.000	107.000	108.000	108.000
<b>100.0</b>	154.000	149.000	149.000	149.000	148.000
<b>102.5</b>	198.000	194.000	192.000	191.000	191.000
<b>105.0</b>	244.000	241.000	236.000	235.000	234.000
<b>107.5</b>	291.000	288.000	282.000	281.000	280.000
<b>110.0</b>	340.000	337.000	332.000	330.000	327.000
<b>112.5</b>	391.000	386.000	383.000	378.000	375.000
<b>115.0</b>	442.000	439.000	437.000	427.000	425.000
<b>117.5</b>	496.000	491.000	491.000	479.000	477.000
<b>120.0</b>	551.000	543.000	545.000	533.000	529.000
<b>122.5</b>	603.000	595.000	599.000	589.000	582.000
<b>125.0</b>	661.000	649.000	653.000	643.000	638.000
<b>127.5</b>	718.000	705.000	707.000	699.000	697.000
<b>130.0</b>	774.000	761.000	763.000	753.000	754.000
<b>132.5</b>	830.000	816.000	819.000	809.000	809.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-V-B-835-F-MLW-ITL85132-ITL92590.005.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-B-835-F-MLW-ITL85132-ITL92590.005.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	972.45	N.A.	17.80
0-30	1324.69	N.A.	24.30
0-40	1441.53	N.A.	26.40
0-60	1572.86	N.A.	28.80
0-80	1633.41	N.A.	30.00
0-90	1639.61	N.A.	30.10
10-90	1294.35	N.A.	23.70
20-40	469.08	N.A.	8.60
20-50	543.34	N.A.	10.00
40-70	170.33	N.A.	3.10
60-80	60.55	N.A.	1.10
70-80	21.56	N.A.	0.40
80-90	6.20	N.A.	0.10
90-110	329.21	N.A.	6.00
90-120	759.73	N.A.	13.90
90-130	1340.41	N.A.	24.60
90-150	2691.63	N.A.	49.40
90-180	3813.36	N.A.	69.90
110-180	3484.15	N.A.	63.90
0-180	5452.97	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	345.26
10-20	627.19
20-30	352.24
30-40	116.84
40-50	74.26
50-60	57.07
60-70	38.99
70-80	21.56
80-90	6.20
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

# IES INDOOR REPORT

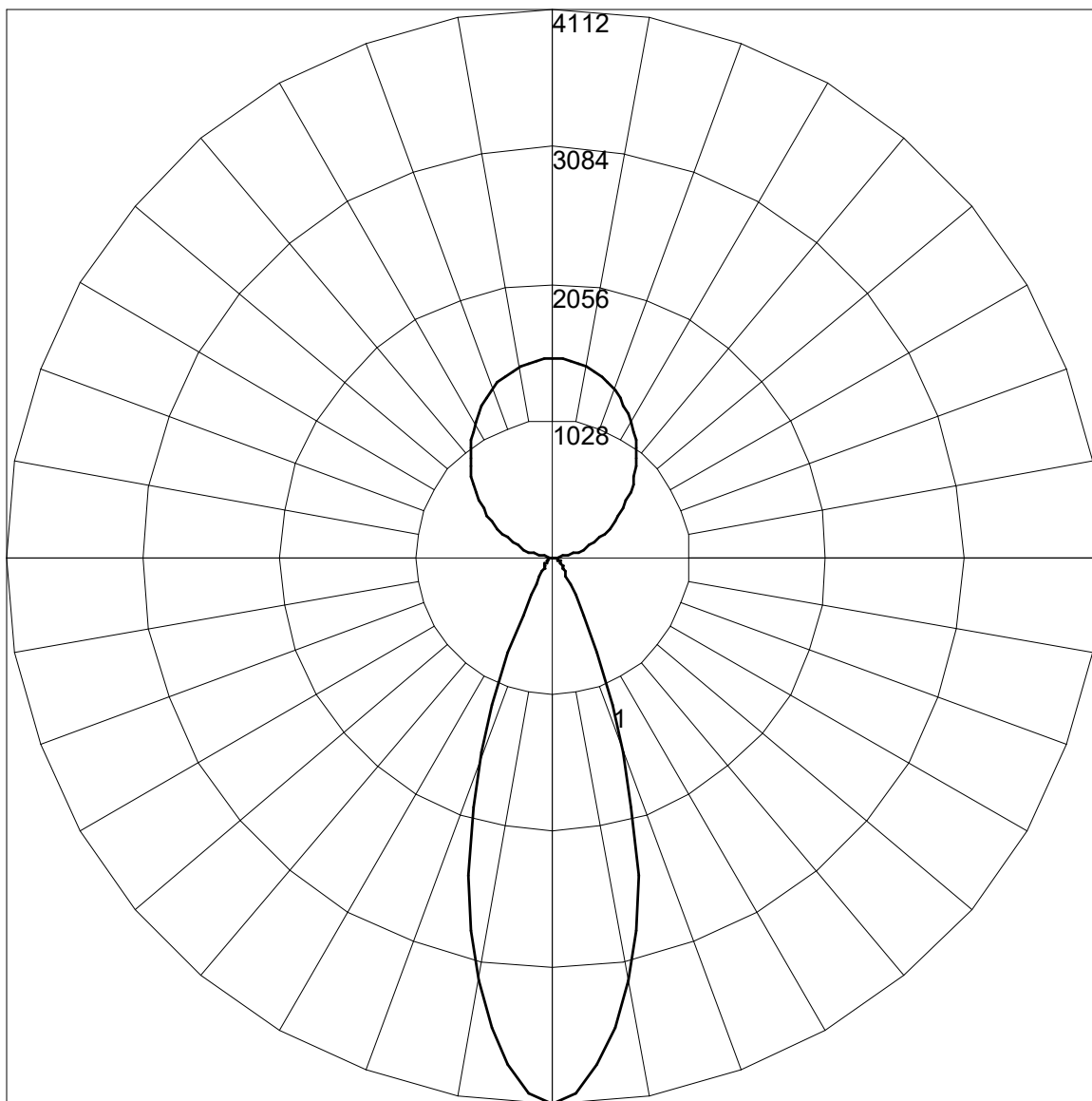
PHOTOMETRIC FILENAME : HP-2-ID-4FT-V-B-835-F-MLW-ITL85132-ITL92590.005.IES

## 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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	38	38	38	30
1	95	91	88	85	85	82	79	77	65	64	62	50	49	48	36	35	35	28
2	88	82	76	72	79	74	70	66	59	56	54	46	44	43	33	33	32	26
3	81	73	67	62	73	67	62	57	54	51	48	42	40	38	31	30	29	25
4	75	66	60	55	68	61	55	51	50	46	43	39	37	35	30	28	27	23
5	70	61	54	49	64	55	50	45	46	42	39	37	34	32	28	27	26	22
6	66	56	49	44	59	51	45	41	42	38	35	34	32	30	27	25	24	21
7	62	51	44	40	56	47	41	37	39	35	32	32	30	28	26	24	23	20
8	58	47	41	36	53	44	38	34	37	33	30	31	28	26	24	23	22	19
9	54	44	38	33	50	41	35	32	35	31	28	29	26	24	23	22	21	19
10	51	41	35	31	47	38	33	29	33	29	26	27	25	23	22	21	20	18

POLAR GRAPH



Maximum Candela = 4112.015 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)