

# 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-8-TW-ITL85132.905.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST]ITL85132.905 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[TESTDATE]08/11/15  
[ISSUEDATE]04/26/16  
[MANUFAC]FINELITE, INC.  
[LUMCAT]FINELITE HP-2-ID-4ft-V-B-8-TW  
[OTHER]ies file is based on 3500K; see luminaire tech sheet at [www.finelite.com](http://www.finelite.com) for lumen adjustment factors for other CCT's & CRI  
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 60.8 WATTS  
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 63.0 WATTS  
[ABSOLUTE]LUMENS]5447  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL85132. 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	5447
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	90
Total Luminaire Watts	60.8
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	8276	7933	7547
55	7533	7165	6797
65	6803	6452	6138
75	6128	5796	5554
85	5379	5199	4930

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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>
<b>0.0</b>	676.211	676.211	676.211	676.211	676.211
<b>2.5</b>	674.667	675.696	675.181	675.181	675.181
<b>5.0</b>	672.094	672.608	671.579	671.064	671.064
<b>7.5</b>	666.433	666.947	665.404	664.889	664.889
<b>10.0</b>	659.228	658.199	657.170	656.655	655.626
<b>12.5</b>	649.450	647.392	646.362	644.819	642.760
<b>15.0</b>	638.643	634.526	633.497	630.409	627.836
<b>17.5</b>	625.263	619.602	618.058	613.427	610.339
<b>20.0</b>	609.825	603.135	600.561	594.901	590.269
<b>22.5</b>	591.813	584.608	581.520	575.345	569.684
<b>25.0</b>	573.287	565.053	560.421	553.731	547.556
<b>27.5</b>	552.187	544.982	539.322	530.573	523.883
<b>30.0</b>	530.573	522.854	516.164	506.386	499.696
<b>32.5</b>	507.415	499.696	492.491	481.684	476.538
<b>35.0</b>	484.772	476.023	468.304	456.468	451.322
<b>37.5</b>	460.585	452.351	443.602	432.281	426.620
<b>40.0</b>	435.883	427.135	419.415	406.550	401.404
<b>42.5</b>	410.667	402.433	394.199	381.333	376.187
<b>45.0</b>	385.450	377.731	369.497	356.632	351.485
<b>47.5</b>	360.234	352.515	344.281	331.930	327.298
<b>50.0</b>	334.503	327.298	319.579	307.228	303.111
<b>52.5</b>	309.287	302.596	294.877	283.555	279.439
<b>55.0</b>	284.585	278.924	270.690	260.398	256.795
<b>57.5</b>	260.398	255.251	247.018	237.754	234.667
<b>60.0</b>	235.696	231.064	223.860	215.111	212.538
<b>62.5</b>	212.538	207.906	201.216	194.526	191.439
<b>65.0</b>	189.380	185.263	179.602	173.427	170.854
<b>67.5</b>	167.766	163.135	159.018	152.842	150.784
<b>70.0</b>	145.637	142.550	137.918	133.801	131.228
<b>72.5</b>	124.538	121.965	118.363	114.760	112.702
<b>75.0</b>	104.468	101.895	98.807	96.234	94.690
<b>77.5</b>	84.912	82.854	80.795	78.737	76.678
<b>80.0</b>	65.871	64.842	62.784	61.240	60.211
<b>82.5</b>	47.860	46.830	45.801	44.772	43.743
<b>85.0</b>	30.877	30.363	29.848	29.333	28.304
<b>87.5</b>	13.895	13.380	13.895	14.409	13.895
<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

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**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

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	241.75	N.A.	4.40
0-30	499.36	N.A.	9.20
0-40	791.57	N.A.	14.50
0-60	1317.36	N.A.	24.20
0-80	1600.82	N.A.	29.40
0-90	1633.73	N.A.	30.00
10-90	1570.07	N.A.	28.80
20-40	549.81	N.A.	10.10
20-50	833.78	N.A.	15.30
40-70	704.04	N.A.	12.90
60-80	283.46	N.A.	5.20
70-80	105.22	N.A.	1.90
80-90	32.91	N.A.	0.60
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.	70.00
110-180	3484.15	N.A.	64.00
0-180	5447.1	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

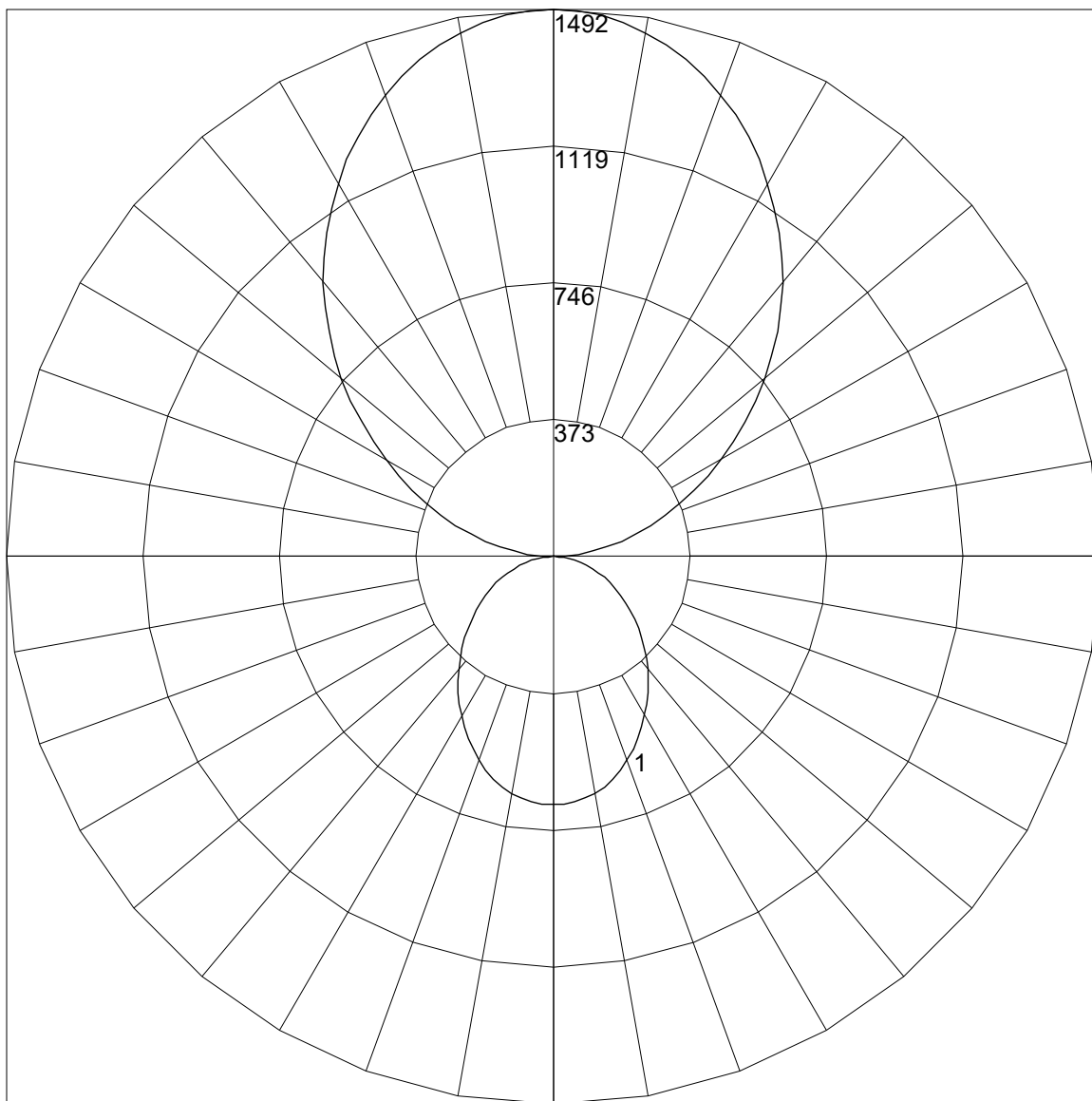
Zone	Lumens
0-10	63.66
10-20	178.09
20-30	257.61
30-40	292.21
40-50	283.97
50-60	241.83
60-70	178.24
70-80	105.22
80-90	32.91
90-100	77.06
100-110	252.15
110-120	430.52
120-130	580.67
130-140	672.56
140-150	678.67
150-160	584.78
160-170	396.44
170-180	140.51

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	93	89	85	82	84	80	77	74	63	61	59	48	46	45	33	33	32	25
2	85	78	72	67	76	70	65	61	55	52	49	42	40	38	29	28	27	21
3	77	68	61	56	69	62	56	51	49	45	41	37	34	32	26	24	23	18
4	71	60	53	47	63	55	48	43	43	39	35	33	30	27	23	21	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	53	44	37	32	35	30	26	27	23	21	19	17	15	12
7	55	43	36	30	49	39	33	28	32	27	23	24	21	18	17	15	14	11
8	51	39	32	27	46	36	29	25	29	24	20	22	19	16	16	14	12	10
9	48	36	29	24	43	32	26	22	26	21	18	20	17	15	15	13	11	9
10	44	33	26	21	40	30	24	20	24	19	16	19	15	13	14	12	10	8

POLAR GRAPH



Maximum Candela = 1492 Located At Horizontal Angle = 0, Vertical Angle = 180  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)