

# 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-S-B-8-35-ITL85132.013.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST]ITL85132.013 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-S-B-8-35  
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 32.9 WATTS  
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 35.5 WATTS  
[ABSOLUTE]LUMENS]3195  
[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	3195
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	97
Total Luminaire Watts	32.9
Ballast Factor	1.00
CIE Type	General Diffuse
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>	12.281	12.281	12.281	13.509	13.509
<b>95.0</b>	29.064	27.836	27.836	28.246	28.655
<b>97.5</b>	45.848	44.620	43.801	44.211	44.211
<b>100.0</b>	63.041	60.994	60.994	60.994	60.585
<b>102.5</b>	81.053	79.415	78.597	78.187	78.187
<b>105.0</b>	99.883	98.655	96.608	96.199	95.790
<b>107.5</b>	119.123	117.895	115.439	115.029	114.620
<b>110.0</b>	139.181	137.953	135.906	135.088	133.860
<b>112.5</b>	160.059	158.012	156.784	154.737	153.509
<b>115.0</b>	180.936	179.708	178.889	174.795	173.977
<b>117.5</b>	203.041	200.994	200.994	196.082	195.263
<b>120.0</b>	225.556	222.281	223.099	218.187	216.550
<b>122.5</b>	246.842	243.567	245.205	241.111	238.246
<b>125.0</b>	270.585	265.673	267.310	263.216	261.170
<b>127.5</b>	293.918	288.596	289.415	286.140	285.322
<b>130.0</b>	316.842	311.521	312.339	308.246	308.655
<b>132.5</b>	339.766	334.035	335.263	331.170	331.170

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**CANDELA TABULATION - (Cont.)**

<b>135.0</b>	361.871	356.550	358.187	354.503	354.503
<b>137.5</b>	384.386	379.064	380.702	377.427	377.017
<b>140.0</b>	406.901	401.579	402.807	400.760	399.532
<b>142.5</b>	428.187	422.456	424.094	422.047	420.409
<b>145.0</b>	449.883	443.743	445.380	443.743	440.877
<b>147.5</b>	469.942	463.801	465.848	463.392	460.526
<b>150.0</b>	489.181	483.041	485.497	482.632	480.175
<b>152.5</b>	507.602	501.462	503.918	501.462	499.006
<b>155.0</b>	525.205	519.064	521.930	519.474	517.018
<b>157.5</b>	540.351	534.620	537.895	535.439	532.982
<b>160.0</b>	555.088	549.766	552.632	550.175	547.719
<b>162.5</b>	567.778	563.275	565.322	563.684	562.047
<b>165.0</b>	579.240	575.146	576.374	575.556	574.327
<b>167.5</b>	587.836	585.380	586.199	585.380	584.971
<b>170.0</b>	595.614	594.386	594.795	593.977	593.567
<b>172.5</b>	602.164	601.754	601.754	601.345	601.345
<b>175.0</b>	606.667	606.667	606.667	606.667	606.257
<b>177.5</b>	609.123	609.532	609.532	609.532	609.123
<b>180.0</b>	610.760	610.760	610.760	610.760	610.760

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	241.75	N.A.	7.60
0-30	499.36	N.A.	15.60
0-40	791.57	N.A.	24.80
0-60	1317.36	N.A.	41.20
0-80	1600.82	N.A.	50.10
0-90	1633.73	N.A.	51.10
10-90	1570.07	N.A.	49.10
20-40	549.81	N.A.	17.20
20-50	833.78	N.A.	26.10
40-70	704.04	N.A.	22.00
60-80	283.46	N.A.	8.90
70-80	105.22	N.A.	3.30
80-90	32.91	N.A.	1.00
90-110	134.76	N.A.	4.20
90-120	311.00	N.A.	9.70
90-130	548.70	N.A.	17.20
90-150	1101.84	N.A.	34.50
90-180	1561.03	N.A.	48.90
110-180	1426.26	N.A.	44.60
0-180	3194.76	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	31.55
100-110	103.22
110-120	176.24
120-130	237.70
130-140	275.32
140-150	277.82
150-160	239.38
160-170	162.28
170-180	57.52

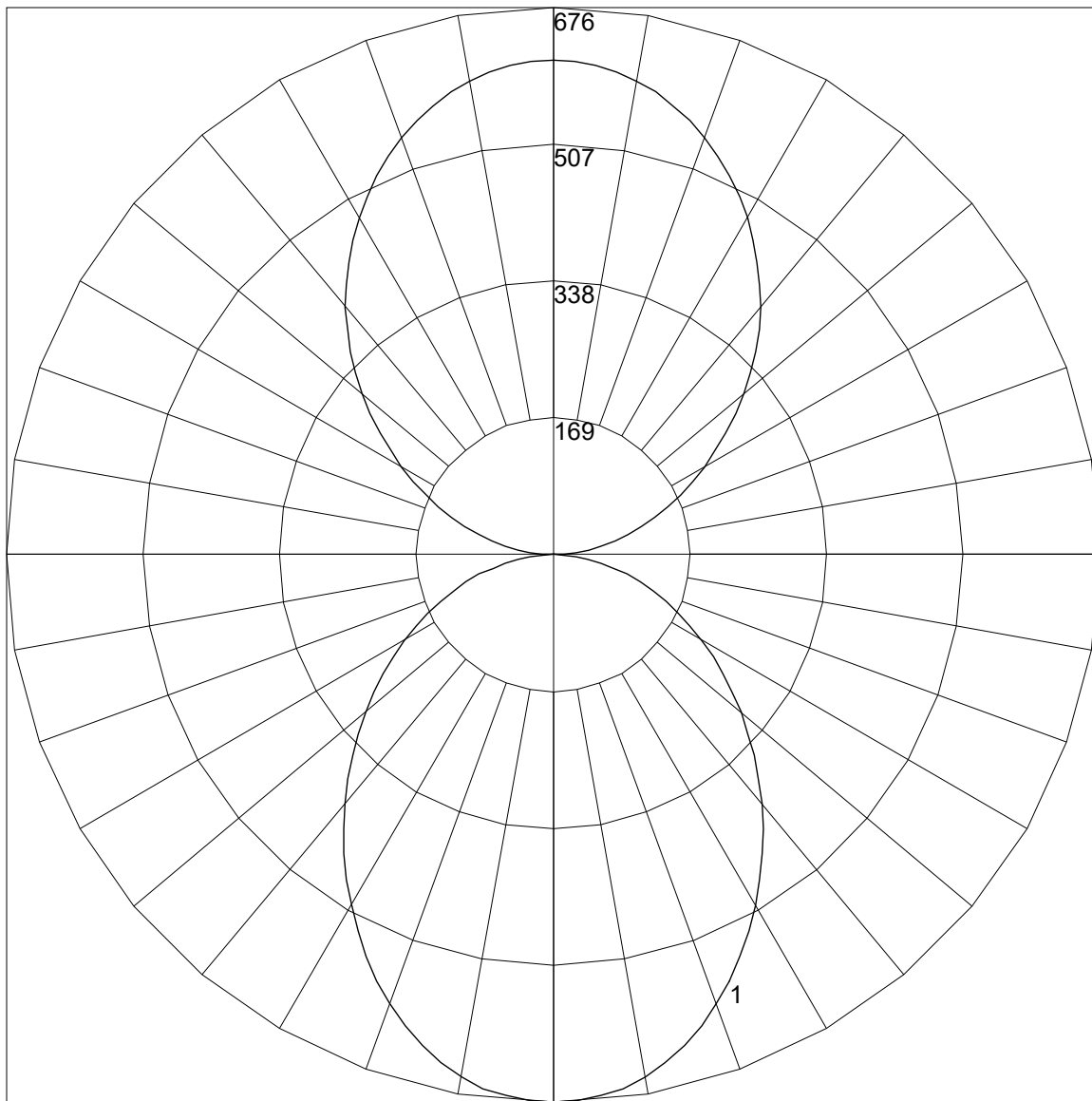
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	98	94	90	86	90	87	83	80	74	71	69	62	60	58	51	49	48	43
2	89	82	76	71	82	76	71	66	65	61	57	54	51	49	45	43	41	36
3	82	72	65	59	75	67	60	55	57	52	48	48	44	41	40	37	35	31
4	75	64	56	50	69	59	52	47	51	45	41	43	39	36	35	33	30	27
5	69	57	49	43	63	53	46	40	46	40	36	39	34	31	32	29	26	23
6	63	51	43	37	58	48	41	35	41	35	31	35	31	27	29	26	23	20
7	59	46	38	33	54	43	36	31	37	32	28	32	27	24	27	23	21	18
8	54	42	34	29	50	39	32	28	34	28	25	29	25	22	25	21	19	16
9	51	38	31	26	47	36	29	25	31	26	22	27	23	19	23	19	17	15
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	21	18	15	13

POLAR GRAPH



Maximum Candela = 676.211 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)