

# 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 : HO4-UD-RO-4FT-B-H-835-OPN-ITL89462.011.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89462.011 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/25/17

[ISSUEDATE]08/31/17

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HO4-UD-RO-4ft-B-H-835-OPN

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 44.3 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 46.5 WATTS

[\_ABSOLUTE]LUMENS]5299

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL89462. 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	5299
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
Total Luminaire Watts	44.3
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 w/Sides
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.25 ft
Luminous Height	0.18 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	8450	5479	4884
55	8351	4868	4207
65	8130	4204	3921
75	7650	3906	3534
85	5805	1824	493

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HO4-UD-RO-4FT-B-H-835-OPN-ITL89462.011.IES**

**CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	802.600	802.600	802.600	802.600	802.600
2.5	801.822	801.044	799.489	798.711	797.933
5.0	799.489	797.156	793.267	790.156	790.156
7.5	796.378	791.712	785.490	781.602	780.824
10.0	791.712	783.935	777.713	773.047	770.714
12.5	786.268	774.602	767.603	762.937	759.048
15.0	779.268	763.714	757.492	752.048	748.160
17.5	770.714	752.048	745.827	740.383	737.272
20.0	760.603	739.605	733.383	729.495	724.828
22.5	749.715	725.606	719.385	715.496	711.607
25.0	736.494	710.052	704.608	701.497	698.386
27.5	721.718	694.498	689.054	686.721	683.610
30.0	705.386	676.610	672.722	671.166	668.833
32.5	688.276	658.723	654.834	654.057	652.501
35.0	669.611	639.280	636.947	637.725	636.169
37.5	647.835	619.060	617.504	619.060	617.504
40.0	626.837	598.061	598.839	599.617	598.061
42.5	605.061	575.508	578.619	579.396	577.841
45.0	580.952	552.954	557.620	557.620	555.287
47.5	556.842	528.845	536.622	535.067	531.178
50.0	530.400	504.736	513.291	510.180	506.291
52.5	503.180	479.849	488.404	483.738	479.071
55.0	474.405	453.407	462.739	454.962	458.073
57.5	445.630	427.742	436.297	436.297	442.519
60.0	414.521	401.300	407.522	418.410	426.187
62.5	383.413	373.302	380.302	402.078	410.632
65.0	350.749	345.305	359.303	386.523	395.078
67.5	318.085	317.307	340.638	370.191	379.524
70.0	284.643	288.531	322.751	353.859	361.637
72.5	250.424	258.978	305.641	335.194	341.416
75.0	215.427	231.758	286.198	312.641	316.529
77.5	179.652	210.760	265.200	283.087	284.643
80.0	144.655	191.317	237.980	239.536	233.314
82.5	108.880	171.097	193.650	165.653	148.543
85.0	71.550	140.766	107.324	52.885	37.330
87.5	33.442	68.439	38.886	20.221	10.110
90.0	0.000	41.219	30.331	16.332	6.222
92.5	7.204	36.021	31.390	22.127	15.438
95.0	20.069	48.886	45.284	34.992	28.302
97.5	39.623	66.382	62.779	51.973	43.740
100.0	63.294	86.965	82.334	69.984	61.750
102.5	90.053	114.238	104.975	92.111	82.848
105.0	122.986	144.084	132.249	118.355	108.063
107.5	161.065	179.076	165.182	149.230	137.909
110.0	203.776	218.699	203.262	184.736	172.901
112.5	250.603	261.924	248.030	225.903	213.039
115.0	300.518	308.752	294.858	273.245	259.351
117.5	351.977	357.123	342.200	324.704	310.810
120.0	404.465	406.008	393.144	378.221	365.356
122.5	454.894	453.865	443.573	428.650	419.902
125.0	503.780	500.178	492.459	480.109	472.904
127.5	549.578	546.490	539.286	528.480	522.819
130.0	592.803	588.686	583.026	572.734	568.103
132.5	633.455	629.339	624.707	614.930	609.270

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HO4-UD-RO-4FT-B-H-835-OPN-ITL89462.011.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	671.535	666.903	664.331	653.010	647.349
<b>137.5</b>	707.041	701.895	700.352	689.545	682.856
<b>140.0</b>	739.460	733.285	733.285	722.479	715.789
<b>142.5</b>	769.821	763.646	764.675	754.383	747.179
<b>145.0</b>	798.638	790.919	793.492	784.229	777.025
<b>147.5</b>	824.367	816.133	819.221	810.987	804.298
<b>150.0</b>	847.523	840.319	844.436	835.173	828.998
<b>152.5</b>	869.136	860.388	866.048	857.300	851.640
<b>155.0</b>	886.632	879.942	885.602	876.855	873.252
<b>157.5</b>	904.128	897.438	903.098	894.865	891.778
<b>160.0</b>	920.080	912.875	919.051	911.332	909.273
<b>162.5</b>	932.430	926.255	931.915	926.255	923.682
<b>165.0</b>	943.751	938.605	942.722	939.119	937.061
<b>167.5</b>	953.528	950.440	951.470	950.440	949.411
<b>170.0</b>	961.247	959.188	959.703	959.703	958.674
<b>172.5</b>	966.907	966.393	965.878	966.393	966.393
<b>175.0</b>	971.024	971.538	971.024	971.538	971.538
<b>177.5</b>	973.597	974.111	973.597	973.597	974.111
<b>180.0</b>	974.626	974.626	974.626	974.626	974.626

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HO4-UD-RO-4FT-B-H-835-OPN-ITL89462.011.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	289.74	N.A.	5.50
0-30	616.53	N.A.	11.60
0-40	1018.11	N.A.	19.20
0-60	1862.07	N.A.	35.10
0-80	2512.81	N.A.	47.40
0-90	2624.23	N.A.	49.50
10-90	2548.92	N.A.	48.10
20-40	728.37	N.A.	13.70
20-50	1159.83	N.A.	21.90
40-70	1207.05	N.A.	22.80
60-80	650.73	N.A.	12.30
70-80	287.65	N.A.	5.40
80-90	111.42	N.A.	2.10
90-110	184.18	N.A.	3.50
90-120	471.97	N.A.	8.90
90-130	908.74	N.A.	17.20
90-150	1910.61	N.A.	36.10
90-180	2674.45	N.A.	50.50
110-180	2490.27	N.A.	47.00
0-180	5298.68	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	75.31
10-20	214.42
20-30	326.79
30-40	401.58
40-50	431.46
50-60	412.51
60-70	363.08
70-80	287.65
80-90	111.42
90-100	45.85
100-110	138.33
110-120	287.79
120-130	436.77
130-140	508.68
140-150	493.19
150-160	405.96
160-170	265.55
170-180	92.34

# IES INDOOR REPORT

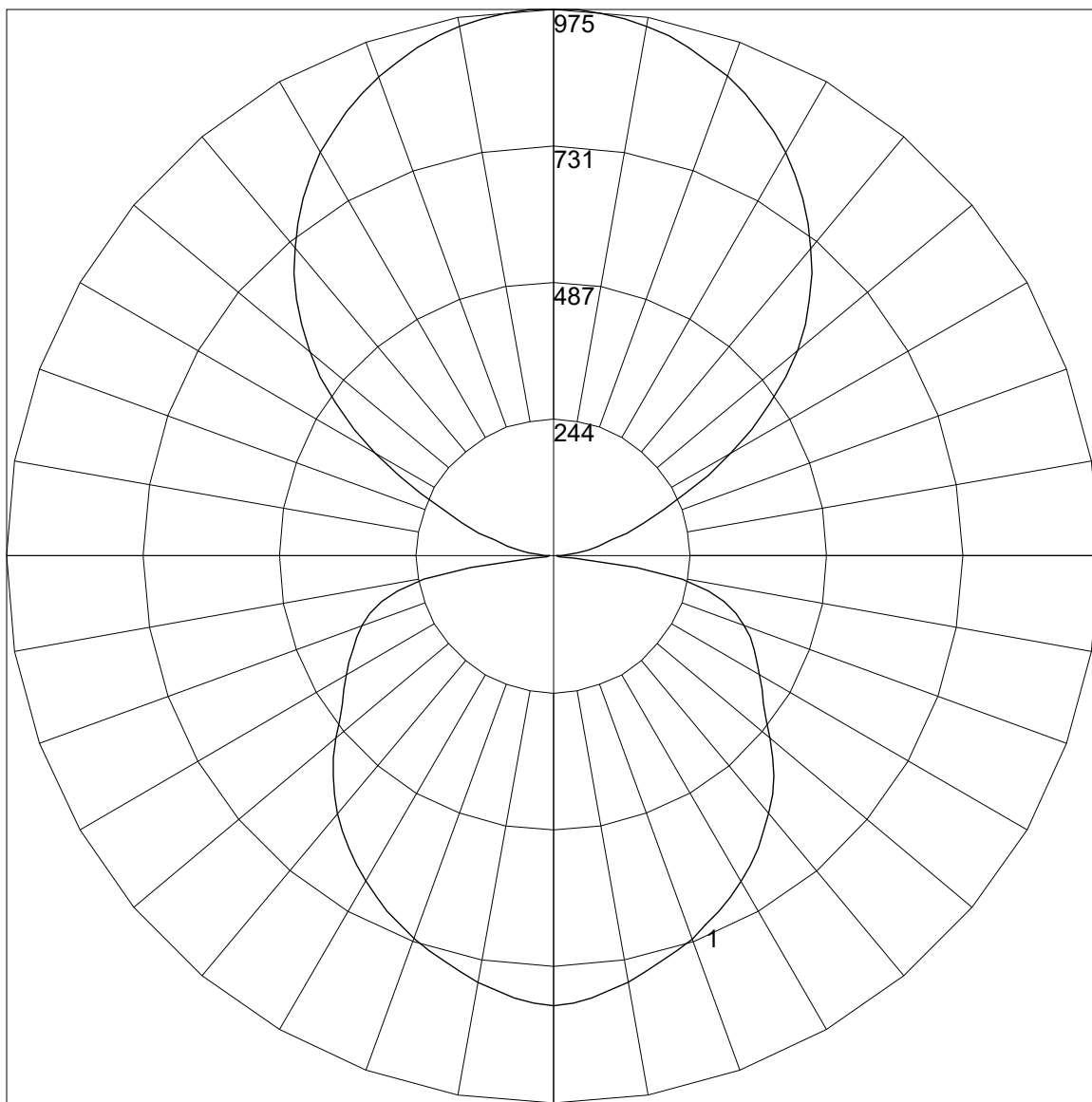
PHOTOMETRIC FILENAME : HO4-UD-RO-4FT-B-H-835-OPN-ITL89462.011.IES

## 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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	92	88	84	89	85	81	78	71	69	66	59	57	55	48	46	45	40
2	87	79	73	67	80	73	67	63	62	57	54	51	48	45	41	39	37	32
3	79	69	61	55	73	64	57	52	54	49	44	45	41	37	36	33	31	26
4	72	61	53	46	66	56	49	43	48	42	37	39	35	32	32	29	26	22
5	66	54	46	39	61	50	43	37	42	36	32	35	31	27	28	25	22	19
6	61	48	40	34	56	45	37	32	38	32	28	32	27	24	26	22	20	17
7	56	44	35	30	52	40	33	28	34	28	24	29	24	21	23	20	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	21	18	15	13
9	48	36	28	23	45	33	26	22	29	23	19	24	20	16	20	16	14	12
10	45	33	26	21	42	31	24	19	26	21	17	22	18	15	18	15	12	10

POLAR GRAPH



Maximum Candela = 974.626 Located At Horizontal Angle = 0, Vertical Angle = 180  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)