

# 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-ID-RO-4FT-V-V-835-WSOTG-ITL90232.001.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL90232.001 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[ISSUEDATE]03/01/18  
[TESTDATE]03/06/18  
[MANUFAC]FINELITE, INC.  
[LUMCAT]FINELITE HO4-ID-RO-4ft-V-V-835-WSOTG  
[INPUT\_ELECTRICAL]120.0 VOLTS, 71.4 WATTS, 0.596 AMPS  
[INPUT\_ELECTRICAL]277.0 VOLTS, 73.1 WATTS, 0.275 AMPS  
[ABSOLUTE LUMENS]8372  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL90232. 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	8372
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	117
Total Luminaire Watts	71.4
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	12301	7920	7009
55	12152	6984	6014
65	11861	6034	5643
75	11032	5639	5158
85	8566	2864	1141

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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>
0.0	1171.573	1171.573	1171.573	1171.573	1171.573
2.5	1171.573	1170.558	1169.543	1168.527	1167.512
5.0	1168.527	1165.482	1160.406	1156.345	1155.330
7.5	1162.436	1157.360	1148.223	1142.132	1141.116
10.0	1156.345	1146.192	1135.025	1128.934	1123.857
12.5	1148.223	1130.964	1120.812	1112.690	1106.599
15.0	1138.071	1115.736	1103.553	1096.446	1090.355
17.5	1126.903	1098.477	1086.294	1079.187	1073.096
20.0	1110.659	1078.172	1065.989	1057.868	1052.791
22.5	1093.401	1057.868	1045.685	1037.563	1032.487
25.0	1074.111	1035.533	1023.350	1017.258	1012.182
27.5	1051.776	1011.167	998.984	993.908	990.863
30.0	1029.441	986.802	975.634	971.573	968.528
32.5	1003.045	959.390	950.253	947.208	945.177
35.0	974.619	930.964	923.858	921.827	918.781
37.5	947.208	901.522	896.446	894.416	891.370
40.0	914.720	868.020	867.005	864.974	860.913
42.5	882.233	836.548	837.563	834.517	830.457
45.0	845.685	800.000	806.091	802.030	796.954
47.5	809.137	765.482	772.589	766.497	761.421
50.0	771.573	729.949	737.056	729.949	721.827
52.5	731.979	693.401	701.523	690.355	682.233
55.0	690.355	655.837	663.959	651.776	654.822
57.5	647.715	617.259	625.380	623.350	631.472
60.0	603.045	577.665	584.771	600.000	610.152
62.5	557.360	537.056	545.177	577.665	588.832
65.0	511.675	496.447	515.736	555.330	568.528
67.5	463.959	454.822	489.340	534.010	546.193
70.0	414.213	412.183	463.959	510.660	522.842
72.5	364.467	368.528	439.594	485.279	495.431
75.0	310.660	329.949	413.198	454.822	461.929
77.5	261.929	300.507	383.756	414.213	416.243
80.0	209.137	272.081	345.178	355.330	348.223
82.5	157.360	242.639	284.264	255.837	235.533
85.0	105.584	202.030	168.528	111.675	86.294
87.5	54.822	101.523	75.127	62.944	52.792
90.0	12.183	67.005	59.898	49.746	39.594
92.5	27.411	83.249	71.066	59.898	48.731
95.0	45.685	131.980	154.315	83.249	63.959
97.5	72.081	187.817	321.827	165.482	122.843
100.0	102.538	232.487	570.558	309.645	211.167
102.5	135.025	273.096	753.299	578.680	379.695
105.0	167.513	308.629	816.243	1012.182	709.644
107.5	201.015	340.101	822.335	1389.847	1196.954
110.0	233.502	370.558	818.274	1575.634	1537.055
112.5	267.005	400.000	821.319	1642.639	1724.872
115.0	302.538	430.457	827.411	1635.532	1796.954
117.5	342.132	461.929	837.563	1598.984	1804.060
120.0	374.619	491.370	848.731	1551.268	1778.680
122.5	402.030	515.736	856.852	1503.553	1732.994
125.0	427.411	538.071	861.929	1452.791	1678.172
127.5	451.776	556.345	862.944	1398.984	1616.243
130.0	474.111	573.604	864.974	1344.162	1548.223
132.5	492.386	588.832	864.974	1293.401	1479.187

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HO4-ID-RO-4FT-V-V-835-WSOTG-ITL90232.001.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	510.660	603.045	864.974	1245.685	1411.167
<b>137.5</b>	528.934	616.243	859.898	1198.984	1346.192
<b>140.0</b>	547.208	628.426	852.792	1151.269	1282.233
<b>142.5</b>	567.512	641.624	846.700	1104.568	1220.304
<b>145.0</b>	585.787	653.807	837.563	1058.883	1157.360
<b>147.5</b>	602.030	661.929	826.396	1016.243	1100.507
<b>150.0</b>	620.304	673.096	816.243	976.649	1045.685
<b>152.5</b>	636.548	681.218	807.106	939.086	994.923
<b>155.0</b>	652.792	687.309	795.939	903.553	948.223
<b>157.5</b>	667.005	696.446	782.741	869.035	906.599
<b>160.0</b>	679.188	702.538	772.589	838.578	868.020
<b>162.5</b>	692.386	707.614	764.467	813.198	835.533
<b>165.0</b>	702.538	713.705	756.345	789.847	807.106
<b>167.5</b>	711.675	718.781	747.208	771.573	783.756
<b>170.0</b>	718.781	723.858	740.101	756.345	764.467
<b>172.5</b>	723.858	727.918	737.056	745.177	750.254
<b>175.0</b>	727.918	729.949	734.010	738.071	739.086
<b>177.5</b>	729.949	730.964	731.979	732.995	732.995
<b>180.0</b>	730.964	730.964	730.964	730.964	730.964

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HO4-ID-RO-4FT-V-V-835-WSOTG-ITL90232.001.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	422.76	N.A.	5.00
0-30	897.65	N.A.	10.70
0-40	1480.38	N.A.	17.70
0-60	2696.39	N.A.	32.20
0-80	3634.83	N.A.	43.40
0-90	3810.21	N.A.	45.50
10-90	3700.14	N.A.	44.20
20-40	1057.62	N.A.	12.60
20-50	1680.57	N.A.	20.10
40-70	1738.56	N.A.	20.80
60-80	938.44	N.A.	11.20
70-80	415.88	N.A.	5.00
80-90	175.38	N.A.	2.10
90-110	817.25	N.A.	9.80
90-120	1783.59	N.A.	21.30
90-130	2657.73	N.A.	31.70
90-150	3907.63	N.A.	46.70
90-180	4562.08	N.A.	54.50
110-180	3744.83	N.A.	44.70
0-180	8372.29	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	110.07
10-20	312.69
20-30	474.89
30-40	582.73
40-50	622.95
50-60	593.05
60-70	522.56
70-80	415.88
80-90	175.38
90-100	148.65
100-110	668.60
110-120	966.34
120-130	874.13
130-140	711.72
140-150	538.18
150-160	369.82
160-170	214.36
170-180	70.26

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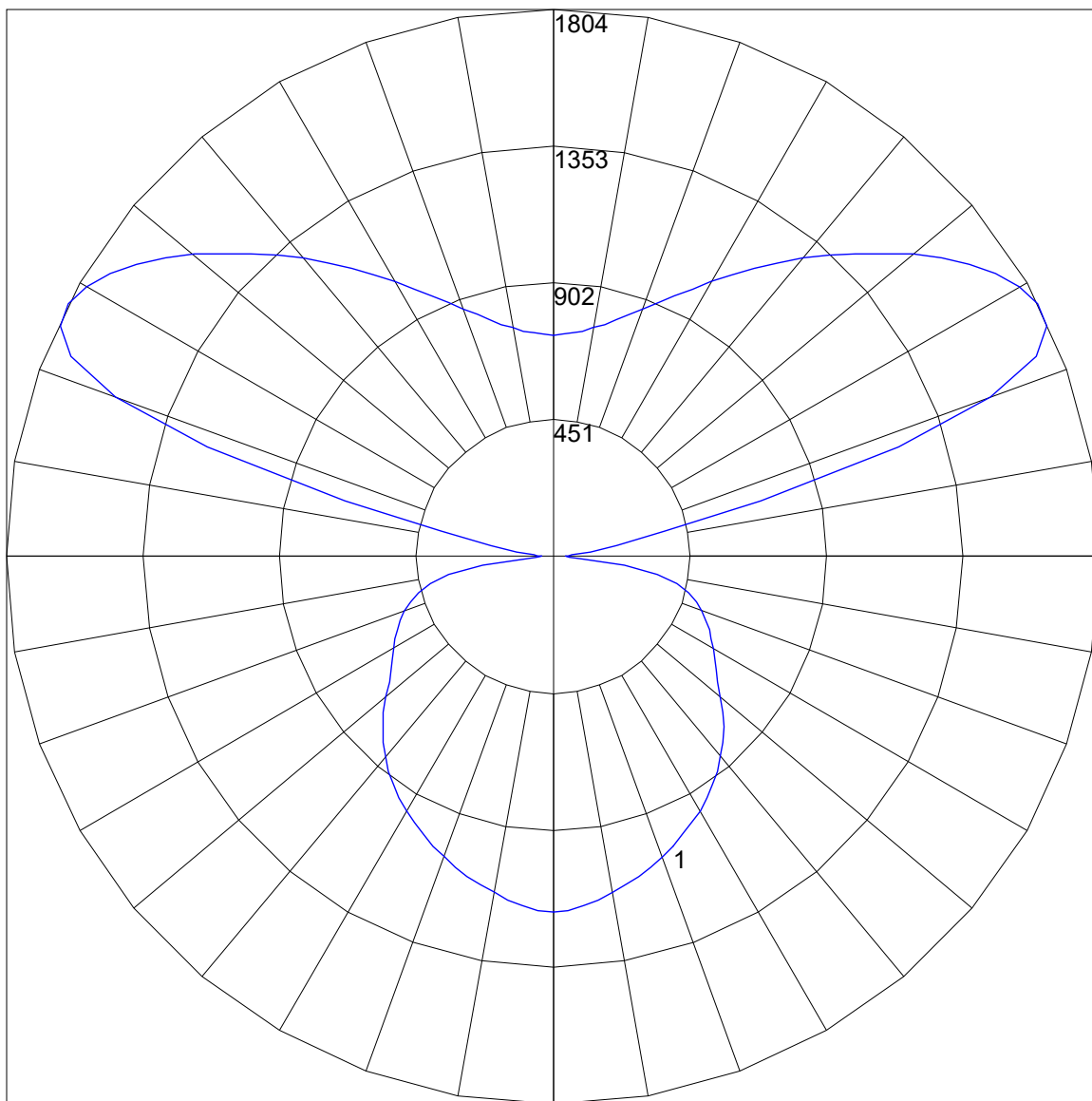
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	96	91	87	83	88	83	80	77	69	67	64	56	54	53	44	43	42	36
2	87	79	72	67	79	72	67	62	60	56	52	49	46	43	38	36	34	29
3	79	69	61	55	72	63	56	51	52	47	43	43	39	36	33	31	29	24
4	72	61	52	46	65	56	48	43	46	41	36	38	34	30	30	27	24	20
5	66	54	45	39	60	49	42	36	41	36	31	34	29	26	27	23	21	17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18	15
7	56	43	35	29	51	40	33	27	33	28	24	27	23	20	22	19	16	13
8	52	39	31	26	47	36	29	24	30	25	21	25	21	18	20	17	14	12
9	48	36	28	23	44	33	26	21	28	22	19	23	19	16	18	15	13	11
10	45	33	25	20	41	30	24	19	26	20	17	21	17	14	17	14	12	10

POLAR GRAPH



Maximum Candela = 1804.06 Located At Horizontal Angle = 90, Vertical Angle = 117.5  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)