

# 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-B-V-835-WSOTG-ITL90232.013.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90232.013 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[ISSUEDATE]03/01/18

[TESTDATE]03/26/18

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HO4-ID-RO-4ft-B-V-835-WSOTG

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 53.5 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 55.6 WATTS

[\_ABSOLUTE]LUMENS]6161

[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	6161
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	115
Total Luminaire Watts	53.5
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.32
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.40
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	14.102	42.832	36.569	30.822	25.076
95.0	23.513	67.909	79.401	42.832	32.914
97.5	37.086	96.650	165.604	85.157	63.208
100.0	52.761	119.634	293.594	159.330	108.660
102.5	69.482	140.528	387.624	297.777	195.381
105.0	86.193	158.812	420.020	520.842	365.167
107.5	103.442	175.005	423.147	715.177	615.919
110.0	120.152	190.680	421.066	810.781	790.924
112.5	137.391	205.827	422.629	845.259	887.573
115.0	155.675	221.502	425.766	841.604	924.660
117.5	176.051	237.695	430.985	822.792	928.314
120.0	192.772	252.843	436.731	798.243	915.259
122.5	206.873	265.381	440.914	773.685	891.746
125.0	219.929	276.873	443.523	747.563	863.543
127.5	232.467	286.284	444.051	719.878	831.675
130.0	243.969	295.157	445.096	691.665	796.670
132.5	253.370	302.995	445.096	665.543	761.147

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HO4-ID-RO-4FT-B-V-835-WSOTG-ITL90232.013.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	262.771	310.315	445.096	640.995	726.152
<b>137.5</b>	272.172	317.106	442.477	616.964	692.710
<b>140.0</b>	281.574	323.370	438.822	592.406	659.797
<b>142.5</b>	292.030	330.162	435.685	568.375	627.939
<b>145.0</b>	301.431	336.426	430.985	544.873	595.543
<b>147.5</b>	309.787	340.609	425.238	522.934	566.294
<b>150.0</b>	319.188	346.355	420.020	502.558	538.081
<b>152.5</b>	327.553	350.538	415.309	483.228	511.959
<b>155.0</b>	335.908	353.675	409.563	464.944	487.929
<b>157.5</b>	343.218	358.375	402.782	447.177	466.507
<b>160.0</b>	349.492	361.502	397.553	431.513	446.660
<b>162.5</b>	356.284	364.122	393.370	418.447	429.939
<b>165.0</b>	361.502	367.249	389.198	406.436	415.309
<b>167.5</b>	366.203	369.868	384.487	397.025	403.299
<b>170.0</b>	369.868	372.477	380.832	389.198	393.370
<b>172.5</b>	372.477	374.568	379.269	383.452	386.061
<b>175.0</b>	374.568	375.614	377.705	379.787	380.315
<b>177.5</b>	375.614	376.132	376.660	377.178	377.178
<b>180.0</b>	376.132	376.132	376.132	376.132	376.132

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HO4-ID-RO-4FT-B-V-835-WSOTG-ITL90232.013.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	422.76	N.A.	6.90
0-30	897.65	N.A.	14.60
0-40	1480.38	N.A.	24.00
0-60	2696.39	N.A.	43.80
0-80	3634.83	N.A.	59.00
0-90	3810.21	N.A.	61.80
10-90	3700.14	N.A.	60.10
20-40	1057.62	N.A.	17.20
20-50	1680.57	N.A.	27.30
40-70	1738.56	N.A.	28.20
60-80	938.44	N.A.	15.20
70-80	415.88	N.A.	6.80
80-90	175.38	N.A.	2.80
90-110	423.90	N.A.	6.90
90-120	921.16	N.A.	15.00
90-130	1370.96	N.A.	22.30
90-150	2014.13	N.A.	32.70
90-180	2350.89	N.A.	38.20
110-180	1926.98	N.A.	31.30
0-180	6161.09	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	79.86
100-110	344.04
110-120	497.25
120-130	449.80
130-140	366.23
140-150	276.93
150-160	190.30
160-170	110.31
170-180	36.16

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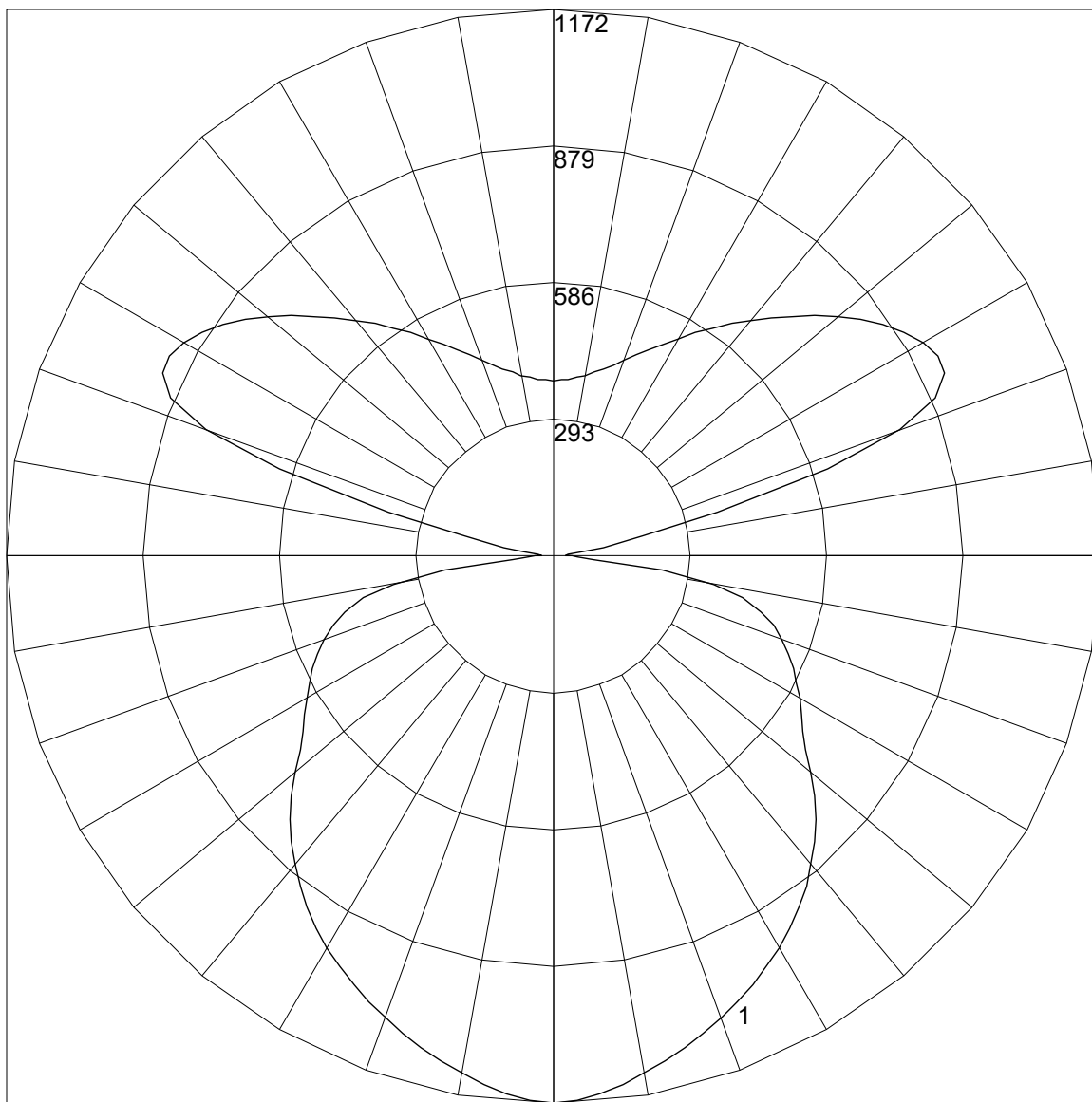
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	99	94	90	86	92	88	84	81	77	74	71	67	64	62	57	55	54	49
2	90	81	74	69	83	76	70	65	66	62	58	57	54	51	49	46	44	40
3	81	71	63	56	76	66	59	53	58	52	48	50	46	42	43	40	37	33
4	74	62	54	47	69	58	51	45	51	45	40	44	39	36	38	34	31	28
5	68	55	47	40	63	52	44	38	46	39	34	40	35	31	34	30	27	24
6	62	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	23	21
7	58	45	36	30	54	42	34	29	37	31	26	32	27	23	28	24	21	18
8	54	41	32	27	50	38	31	25	34	28	23	30	24	21	26	22	18	16
9	50	37	29	24	46	35	28	23	31	25	21	27	22	19	24	20	17	14
10	47	34	26	21	44	32	25	20	29	23	19	25	20	17	22	18	15	13

POLAR GRAPH



Maximum Candela = 1171.573 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)