

# 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-H-835-WSOTG-ITL90232.012.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90232.012 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-H-835-WSOTG

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 45.1 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 47.2 WATTS

[\_ABSOLUTE]LUMENS]5313

[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	5313
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	118
Total Luminaire Watts	45.1
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	9568	6161	5452
55	9453	5432	4678
65	9226	4694	4389
75	8581	4386	4012
85	6662	2227	887

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	911.289	911.289	911.289	911.289	911.289
2.5	911.289	910.497	909.705	908.913	908.132
5.0	908.913	906.548	902.599	899.441	898.649
7.5	904.182	900.233	893.127	888.385	887.594
10.0	899.441	891.543	882.863	878.121	874.172
12.5	893.127	879.695	871.807	865.482	860.751
15.0	885.228	867.858	858.375	852.852	848.111
17.5	876.538	854.426	844.954	839.421	834.690
20.0	863.908	838.639	829.157	822.842	818.893
22.5	850.477	822.842	813.370	807.045	803.096
25.0	835.482	805.472	795.990	791.259	787.309
27.5	818.101	786.517	777.045	773.096	770.720
30.0	800.731	767.563	758.883	755.715	753.350
32.5	780.203	746.243	739.137	736.771	735.188
35.0	758.091	724.132	718.609	717.025	714.660
37.5	736.771	701.228	697.279	695.705	693.340
40.0	711.502	675.177	674.386	672.802	669.644
42.5	686.233	650.690	651.482	649.117	645.959
45.0	657.797	622.264	627.005	623.847	619.898
47.5	629.370	595.411	600.944	596.203	592.254
50.0	600.152	567.776	573.309	567.776	561.462
52.5	569.360	539.350	545.665	536.985	530.660
55.0	536.985	510.132	516.447	506.974	509.340
57.5	503.817	480.122	486.436	484.863	491.177
60.0	469.066	449.330	454.853	466.700	474.599
62.5	433.533	417.736	424.061	449.330	458.010
65.0	398.000	386.152	401.157	431.949	442.223
67.5	360.883	353.777	380.619	415.370	424.842
70.0	322.193	320.609	360.883	397.208	406.680
72.5	283.492	286.650	341.929	377.462	385.360
75.0	241.645	256.650	321.401	353.777	359.299
77.5	203.736	233.746	298.497	322.193	323.766
80.0	162.670	211.634	268.487	276.386	270.863
82.5	122.396	188.731	221.107	198.995	183.208
85.0	82.122	157.147	131.086	86.863	67.127
87.5	42.640	78.964	58.437	48.964	41.066
90.0	9.472	52.122	46.589	38.690	30.802
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-H-835-WSOTG-ITL90232.012.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**  
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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	328.84	N.A.	6.20
0-30	698.22	N.A.	13.10
0-40	1151.49	N.A.	21.70
0-60	2097.34	N.A.	39.50
0-80	2827.28	N.A.	53.20
0-90	2963.7	N.A.	55.80
10-90	2878.08	N.A.	54.20
20-40	822.65	N.A.	15.50
20-50	1307.2	N.A.	24.60
40-70	1352.31	N.A.	25.50
60-80	729.95	N.A.	13.70
70-80	323.49	N.A.	6.10
80-90	136.42	N.A.	2.60
90-110	422.36	N.A.	7.90
90-120	919.61	N.A.	17.30
90-130	1369.42	N.A.	25.80
90-150	2012.59	N.A.	37.90
90-180	2349.34	N.A.	44.20
110-180	1926.98	N.A.	36.30
0-180	5313.05	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	85.62
10-20	243.22
20-30	369.39
30-40	453.27
40-50	484.55
50-60	461.30
60-70	406.46
70-80	323.49
80-90	136.42
90-100	78.32
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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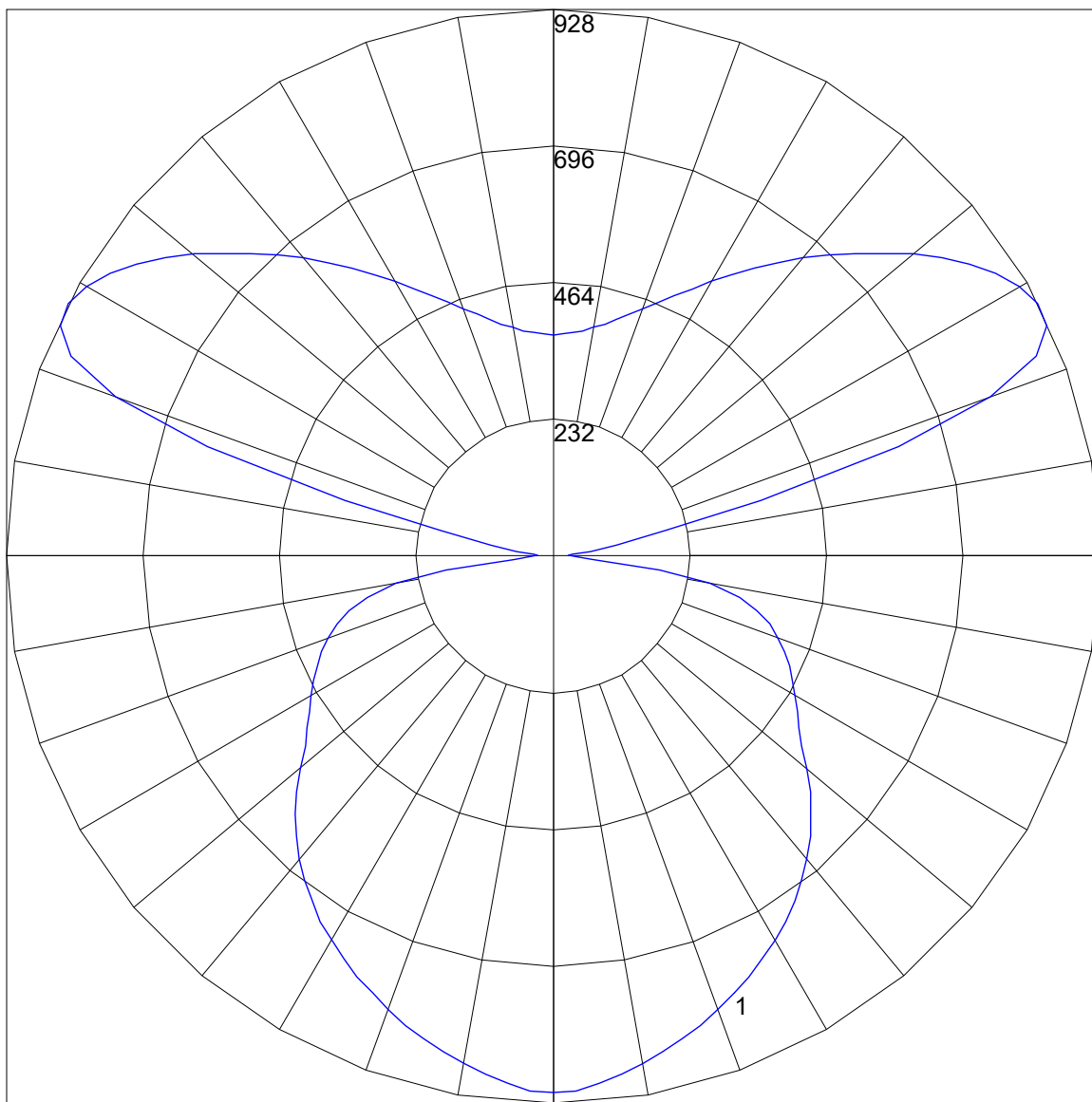
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	109	109	109	109	101	101	101	101	87	87	87	73	73	73	61	61	61	56
1	98	93	89	85	91	86	83	79	74	71	69	63	61	59	52	51	49	44
2	88	80	74	68	82	75	69	64	64	59	56	54	51	48	45	43	40	36
3	80	70	62	56	74	65	58	52	56	50	46	47	43	40	39	36	34	30
4	73	62	53	47	68	57	50	44	49	43	39	42	37	34	35	31	29	25
5	67	55	46	40	62	51	43	38	44	38	33	37	33	29	31	28	25	21
6	62	49	40	34	57	46	38	32	39	33	29	34	29	25	28	24	21	19
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19	16
8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17	15
9	49	36	29	23	46	34	27	22	30	24	20	26	21	18	22	18	15	13
10	46	33	26	21	43	31	25	20	27	22	18	24	19	16	20	16	14	12

POLAR GRAPH



Maximum Candela = 928.314 Located At Horizontal Angle = 90, Vertical Angle = 117.5  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)