

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-S-S-835-TG-ITL90233.002.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90233.002 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[ISSUEDATE]03/23/18
[TESTDATE]03/06/18
[MANUFAC]FINELITE, INC.
[LUMCAT]FINELITE HO4-ID-RO-4ft-S-S-835-TG
[INPUT_ELECTRICAL]120.0 VOLTS, 28.1 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 31.0 WATTS
[ABSOLUTE LUMENS]3446
[OTHER]see www.finelite.com for source file ITL90233. 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

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3446
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	123
Total Luminaire Watts	28.1
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	5197	3312	2944
55	5117	2929	2535
65	4983	2529	2381
75	4676	2398	2245
85	3636	1314	393

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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	494.155	494.155	494.155	494.155	494.155
2.5	493.758	493.362	491.775	490.586	490.586
5.0	492.965	490.586	487.809	485.826	485.033
7.5	490.982	487.016	483.050	479.878	479.878
10.0	488.206	481.861	477.101	473.929	473.135
12.5	484.637	475.515	470.756	467.187	465.600
15.0	480.274	468.773	464.014	460.048	458.462
17.5	475.118	461.238	456.082	452.513	450.530
20.0	469.170	453.306	448.150	444.184	442.598
22.5	461.634	444.581	439.425	435.856	434.269
25.0	453.306	434.666	429.907	426.734	425.544
27.5	444.184	424.751	420.389	417.216	416.026
30.0	434.269	414.043	409.681	407.301	406.508
32.5	423.165	402.542	398.973	396.593	395.800
35.0	411.664	390.644	387.471	385.885	385.092
37.5	400.162	378.350	375.970	374.780	373.987
40.0	386.282	365.262	363.279	362.486	362.089
42.5	372.004	351.381	350.192	349.795	348.209
45.0	357.330	337.104	337.104	336.311	334.724
47.5	341.467	322.034	323.223	321.240	319.654
50.0	324.810	306.963	308.946	306.566	303.790
52.5	308.153	291.496	294.272	290.703	287.530
55.0	290.703	275.632	278.408	273.649	276.029
57.5	272.063	259.372	261.751	262.545	266.114
60.0	253.423	242.715	244.698	252.630	257.389
62.5	235.180	226.058	228.041	243.508	248.664
65.0	214.953	208.608	216.143	234.386	239.939
67.5	195.124	191.158	205.039	225.661	232.007
70.0	174.501	173.708	195.124	217.333	223.282
72.5	153.085	155.068	185.606	208.211	213.367
75.0	131.669	138.808	175.691	197.503	201.073
77.5	109.856	126.513	164.586	182.829	184.019
80.0	88.044	115.409	150.309	160.224	157.051
82.5	66.231	104.304	127.306	120.564	108.666
85.0	44.815	89.233	77.336	44.418	29.744
87.5	24.985	46.401	30.934	24.192	19.036
90.0	12.691	29.348	25.779	20.226	15.864
92.5	22.209	41.642	38.470	34.107	29.744
95.0	38.073	56.713	54.730	50.367	46.401
97.5	53.540	72.180	71.387	67.421	63.455
100.0	69.404	90.027	89.233	85.664	81.698
102.5	88.044	109.063	108.270	105.097	100.735
105.0	108.270	129.686	128.100	125.323	120.564
107.5	129.686	149.912	149.119	145.550	141.187
110.0	151.895	170.535	171.328	167.362	162.603
112.5	175.691	190.365	195.124	189.968	184.812
115.0	199.486	213.367	218.919	212.970	207.815
117.5	224.075	238.352	243.508	237.163	231.610
120.0	249.457	262.545	268.097	261.355	255.406
122.5	275.632	286.737	292.686	286.340	278.805
125.0	301.807	312.119	316.878	311.722	303.394
127.5	328.379	337.104	339.484	337.104	328.776
130.0	354.951	362.486	365.262	362.486	354.158
132.5	382.316	388.265	392.230	387.868	379.936

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CANDELA TABULATION - (Cont.)

135.0	408.887	413.250	418.009	413.250	405.715
137.5	435.459	439.028	441.805	437.839	431.097
140.0	461.634	463.221	466.393	461.634	455.685
142.5	487.413	487.413	490.189	485.430	480.274
145.0	512.002	510.812	513.191	509.225	504.466
147.5	535.004	532.228	535.004	532.228	527.072
150.0	557.213	554.834	557.610	554.437	550.074
152.5	578.233	574.267	578.233	574.663	569.904
155.0	597.666	592.907	597.269	593.700	590.924
157.5	615.116	610.753	613.926	610.753	608.770
160.0	631.376	626.617	630.979	627.410	625.824
162.5	645.653	641.291	645.257	641.687	640.101
165.0	657.948	654.775	656.758	654.775	652.792
167.5	668.259	666.276	667.069	666.276	665.086
170.0	676.984	675.794	676.191	675.794	675.001
172.5	683.330	683.726	682.933	682.933	682.933
175.0	688.485	688.485	688.485	688.485	688.089
177.5	691.658	691.658	691.658	691.262	691.262
180.0	692.451	692.451	692.451	692.451	692.451

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	177.73	N.A.	5.20
0-30	377.34	N.A.	11.00
0-40	621.95	N.A.	18.00
0-60	1132.74	N.A.	32.90
0-80	1530.93	N.A.	44.40
0-90	1607.84	N.A.	46.70
10-90	1561.54	N.A.	45.30
20-40	444.21	N.A.	12.90
20-50	705.76	N.A.	20.50
40-70	730.81	N.A.	21.20
60-80	398.19	N.A.	11.60
70-80	178.18	N.A.	5.20
80-90	76.91	N.A.	2.20
90-110	188.21	N.A.	5.50
90-120	398.97	N.A.	11.60
90-130	676.98	N.A.	19.60
90-150	1314.41	N.A.	38.10
90-180	1838.15	N.A.	53.30
110-180	1649.94	N.A.	47.90
0-180	3446.00	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	46.31
10-20	131.43
20-30	199.61
30-40	244.61
40-50	261.55
50-60	249.24
60-70	220.02
70-80	178.18
80-90	76.91
90-100	56.43
100-110	131.78
110-120	210.76
120-130	278.00
130-140	318.42
140-150	319.02
150-160	273.66
160-170	184.77
170-180	65.32

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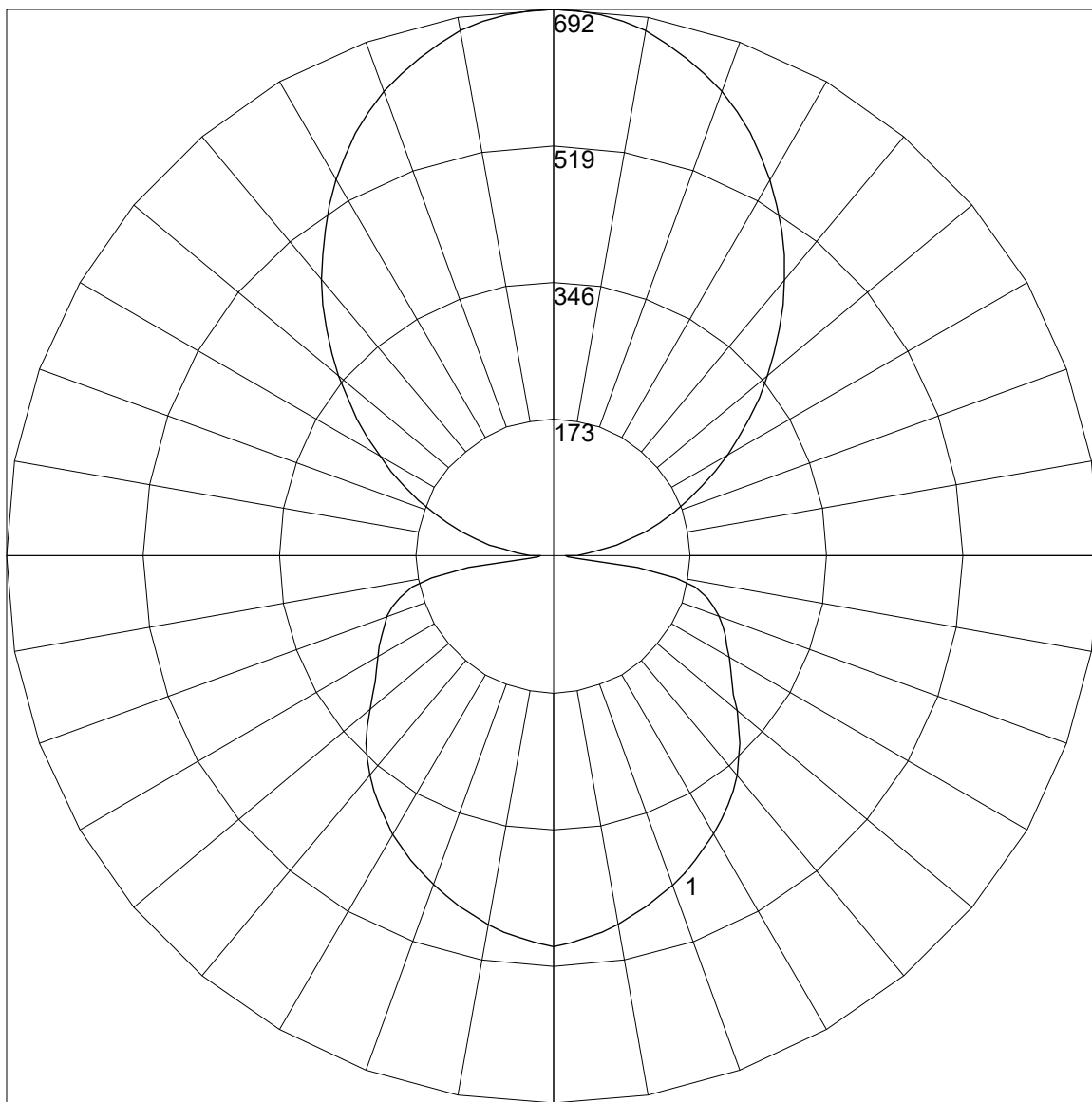
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	98	98	98	98	81	81	81	67	67	67	53	53	53	47
1	96	91	87	83	88	84	80	77	70	67	65	57	55	53	45	44	43	37
2	87	79	72	67	79	72	67	62	60	56	52	49	46	43	39	37	35	30
3	79	69	61	55	72	63	56	51	53	48	43	43	39	36	34	31	29	25
4	72	61	52	46	66	56	48	43	47	41	37	38	34	31	30	27	25	21
5	66	54	45	39	60	50	42	36	41	36	31	34	30	26	27	24	21	18
6	61	48	40	34	55	44	37	31	37	31	27	31	26	23	24	21	19	16
7	56	43	35	29	51	40	33	27	34	28	24	28	23	20	22	19	16	14
8	52	39	31	26	47	36	29	24	31	25	21	25	21	18	20	17	15	12
9	48	36	28	23	44	33	26	21	28	22	19	23	19	16	19	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 = 692.451 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)