

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 : S12-LED-ID-DCO-4FT-3E-B-B-8-TW-OPEN-ITL85163.902.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85163.902 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]09/11/15

[ISSUEDATE]04/27/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S12-LED-ID-DCO-4ft-3E-B-B-8-TW-OPEN

[OTHER]ies file is based on 3500K; see luminaire tech sheet at www.finelite.com for lumen adjustment factors for other CCT's & CRI

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 31.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 35.8 WATTS

[ABSOLUTE]LUMENS]3638

[OTHER]see www.finelite.com for source file ITL85163. 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	3638
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	115
Total Luminaire Watts	31.6
Ballast Factor	1.00
CIE Type	Semi-Indirect
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)	3.32 ft
Luminous Width (90-270)	0.36 ft
Luminous Height	0.03 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2970	2815	2773
55	2774	2572	2526
65	2511	2277	2219
75	2080	1834	1845
85	1230	1245	1430

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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	388.023	388.023	388.023	388.023	388.023
2.5	387.509	387.509	387.509	387.509	387.509
5.0	385.965	385.965	385.965	385.965	385.965
7.5	383.392	383.392	383.392	383.392	383.906
10.0	379.275	378.760	379.789	379.789	379.789
12.5	375.158	374.129	375.673	375.673	375.158
15.0	369.497	367.439	369.497	370.012	369.497
17.5	362.807	360.749	362.807	363.322	362.807
20.0	355.088	352.515	355.088	355.602	355.602
22.5	345.825	343.251	346.339	346.854	346.339
25.0	336.047	333.988	336.561	337.591	337.076
27.5	326.269	323.696	326.784	327.298	327.298
30.0	314.947	312.889	315.462	315.977	315.462
32.5	303.626	301.567	304.140	305.170	304.140
35.0	291.789	289.731	292.304	292.819	292.304
37.5	278.409	276.865	279.439	279.953	279.439
40.0	265.544	264.000	266.058	267.088	266.573
42.5	252.678	251.135	252.678	254.222	253.193
45.0	238.784	237.754	239.298	240.327	239.813
47.5	224.889	223.860	225.404	225.918	225.404
50.0	209.965	209.450	211.509	212.023	211.509
52.5	196.070	195.556	196.585	197.614	197.614
55.0	181.661	181.146	182.175	183.205	183.205
57.5	166.737	166.737	168.281	168.795	168.795
60.0	152.327	151.813	153.357	154.386	154.386
62.5	136.889	137.404	138.433	139.462	139.977
65.0	121.965	122.480	124.023	124.538	125.053
67.5	107.041	107.556	109.099	110.129	110.129
70.0	92.117	93.146	95.205	95.719	96.749
72.5	77.193	78.737	80.795	82.339	83.883
75.0	62.784	64.842	66.901	69.474	71.018
77.5	48.889	50.947	54.550	57.123	58.152
80.0	35.509	38.082	42.199	45.287	46.316
82.5	23.673	26.246	30.877	34.994	36.538
85.0	13.380	16.468	21.614	26.246	27.789
87.5	4.632	8.234	14.409	18.526	20.070
90.0	0.000	3.088	8.234	12.351	13.895
92.5	13.380	180.117	353.029	405.520	358.690
95.0	27.789	213.053	405.520	525.427	560.936
97.5	43.743	229.520	428.164	548.585	588.725
100.0	60.725	247.532	439.485	558.877	599.018
102.5	77.708	250.105	444.117	561.450	601.591
105.0	95.205	256.795	445.661	559.392	597.988
107.5	113.216	265.029	450.807	554.760	591.813
110.0	132.257	273.778	445.661	551.673	585.637
112.5	149.754	284.585	443.602	553.216	583.579
115.0	167.251	295.906	443.602	544.468	581.520
117.5	185.263	308.257	444.117	538.807	570.713
120.0	202.760	322.152	446.690	535.719	565.567
122.5	220.257	336.047	449.778	532.632	560.936
125.0	236.725	349.942	452.866	530.573	556.819
127.5	254.737	363.322	456.982	529.544	553.731
130.0	270.175	375.673	461.099	528.000	550.643
132.5	286.129	385.965	466.246	526.971	548.070

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-B-B-8-TW-OPEN-ITL85163.902.IES****CANDELA TABULATION - (Cont.)**

135.0	301.053	393.684	471.392	526.456	546.012
137.5	315.462	399.860	477.053	525.942	543.439
140.0	329.871	405.520	483.743	525.942	541.380
142.5	343.251	410.152	488.889	526.456	539.836
145.0	355.602	413.240	494.035	527.485	538.292
147.5	367.439	415.298	496.608	529.029	538.292
150.0	378.246	417.357	495.579	530.058	538.292
152.5	388.538	418.901	491.977	529.544	537.778
155.0	397.801	421.474	487.345	524.398	535.205
157.5	406.035	424.561	480.140	516.164	528.000
160.0	413.240	427.135	471.906	505.871	517.193
162.5	419.930	430.222	463.158	493.006	504.327
165.0	425.076	432.281	454.924	478.082	488.374
167.5	429.708	434.854	449.263	463.673	471.906
170.0	433.310	436.398	445.146	453.380	458.526
172.5	435.883	437.942	442.573	447.205	449.778
175.0	437.942	439.485	441.029	443.088	444.117
177.5	439.485	440.000	440.000	441.029	441.029
180.0	440.000	440.000	440.000	440.000	440.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-B-B-8-TW-OPEN-ITL85163.902.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	140.72	N.A.	3.90
0-30	295.56	N.A.	8.10
0-40	477.85	N.A.	13.10
0-60	825.22	N.A.	22.70
0-80	1018.79	N.A.	28.00
0-90	1043.24	N.A.	28.70
10-90	1006.6	N.A.	27.70
20-40	337.13	N.A.	9.30
20-50	521.51	N.A.	14.30
40-70	469.79	N.A.	12.90
60-80	193.57	N.A.	5.30
70-80	71.15	N.A.	2.00
80-90	24.45	N.A.	0.70
90-110	758.09	N.A.	20.80
90-120	1169.63	N.A.	32.10
90-130	1557.76	N.A.	42.80
90-150	2203.85	N.A.	60.60
90-180	2594.95	N.A.	71.30
110-180	1836.86	N.A.	50.50
0-180	3638.19	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	36.64
10-20	104.08
20-30	154.84
30-40	182.29
40-50	184.39
50-60	162.98
60-70	122.42
70-80	71.15
80-90	24.45
90-100	333.01
100-110	425.08
110-120	411.54
120-130	388.13
130-140	351.05
140-150	295.04
150-160	219.30
160-170	129.57
170-180	42.24

IES INDOOR REPORT

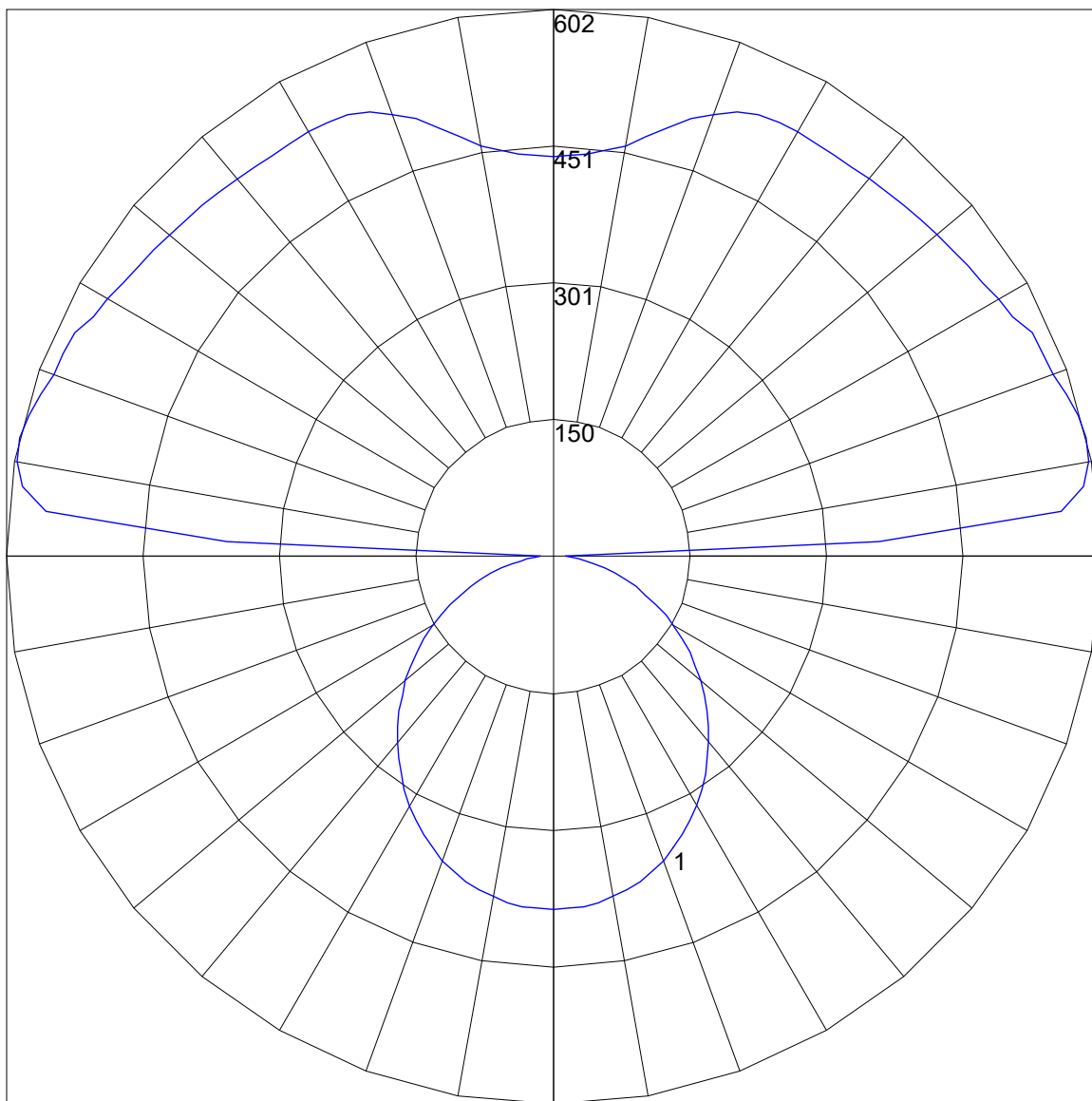
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29
1	93	89	85	81	83	80	76	74	62	60	58	47	45	44	32	31	31	24
2	85	77	71	66	75	69	64	60	55	51	48	41	39	37	28	27	26	20
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	25	23	22	17
4	70	60	52	46	63	54	47	42	43	38	34	32	29	26	22	20	19	14
5	64	53	45	40	57	48	41	36	38	33	29	29	25	23	20	18	16	13
6	59	48	40	34	53	43	36	31	34	29	25	26	22	20	18	16	14	11
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	13	10
8	51	39	31	26	45	35	28	24	28	23	20	21	18	15	15	13	11	9
9	47	35	28	23	42	32	26	21	26	21	17	20	16	14	14	12	10	8
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9	7

POLAR GRAPH



Maximum Candela = 601.591 Located At Horizontal Angle = 90, Vertical Angle = 102.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)