

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-V-8-TW-OPEN-ITL85163.912.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85163.912 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-V-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, 42.5 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 46.1 WATTS

[ABSOLUTE]LUMENS]4623

[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	4623
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	42.5
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)	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	5771	5469	5388
55	5391	4998	4909
65	4880	4424	4311
75	4042	3564	3586
85	2391	2418	2778

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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	754.000	754.000	754.000	754.000	754.000
2.5	753.000	753.000	753.000	753.000	753.000
5.0	750.000	750.000	750.000	750.000	750.000
7.5	745.000	745.000	745.000	745.000	746.000
10.0	737.000	736.000	738.000	738.000	738.000
12.5	729.000	727.000	730.000	730.000	729.000
15.0	718.000	714.000	718.000	719.000	718.000
17.5	705.000	701.000	705.000	706.000	705.000
20.0	690.000	685.000	690.000	691.000	691.000
22.5	672.000	667.000	673.000	674.000	673.000
25.0	653.000	649.000	654.000	656.000	655.000
27.5	634.000	629.000	635.000	636.000	636.000
30.0	612.000	608.000	613.000	614.000	613.000
32.5	590.000	586.000	591.000	593.000	591.000
35.0	567.000	563.000	568.000	569.000	568.000
37.5	541.000	538.000	543.000	544.000	543.000
40.0	516.000	513.000	517.000	519.000	518.000
42.5	491.000	488.000	491.000	494.000	492.000
45.0	464.000	462.000	465.000	467.000	466.000
47.5	437.000	435.000	438.000	439.000	438.000
50.0	408.000	407.000	411.000	412.000	411.000
52.5	381.000	380.000	382.000	384.000	384.000
55.0	353.000	352.000	354.000	356.000	356.000
57.5	324.000	324.000	327.000	328.000	328.000
60.0	296.000	295.000	298.000	300.000	300.000
62.5	266.000	267.000	269.000	271.000	272.000
65.0	237.000	238.000	241.000	242.000	243.000
67.5	208.000	209.000	212.000	214.000	214.000
70.0	179.000	181.000	185.000	186.000	188.000
72.5	150.000	153.000	157.000	160.000	163.000
75.0	122.000	126.000	130.000	135.000	138.000
77.5	95.000	99.000	106.000	111.000	113.000
80.0	69.000	74.000	82.000	88.000	90.000
82.5	46.000	51.000	60.000	68.000	71.000
85.0	26.000	32.000	42.000	51.000	54.000
87.5	9.000	16.000	28.000	36.000	39.000
90.0	0.000	6.000	16.000	24.000	27.000
92.5	13.380	180.117	353.029	405.521	358.690
95.0	27.790	213.053	405.521	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	585.638
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	452.865	530.573	556.819
127.5	254.737	363.322	456.983	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-V-8-TW-OPEN-ITL85163.912.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	405.521	483.743	525.942	541.380
142.5	343.252	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-V-8-TW-OPEN-ITL85163.912.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	273.44	N.A.	5.90
0-30	574.32	N.A.	12.40
0-40	928.54	N.A.	20.10
0-60	1603.55	N.A.	34.70
0-80	1979.69	N.A.	42.80
0-90	2027.2	N.A.	43.80
10-90	1956.00	N.A.	42.30
20-40	655.10	N.A.	14.20
20-50	1013.4	N.A.	21.90
40-70	912.90	N.A.	19.70
60-80	376.15	N.A.	8.10
70-80	138.25	N.A.	3.00
80-90	47.51	N.A.	1.00
90-110	759.08	N.A.	16.40
90-120	1170.62	N.A.	25.30
90-130	1558.75	N.A.	33.70
90-150	2204.84	N.A.	47.70
90-180	2595.94	N.A.	56.20
110-180	1836.86	N.A.	39.70
0-180	4623.15	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	71.20
10-20	202.24
20-30	300.88
30-40	354.22
40-50	358.30
50-60	316.71
60-70	237.89
70-80	138.25
80-90	47.51
90-100	334.00
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

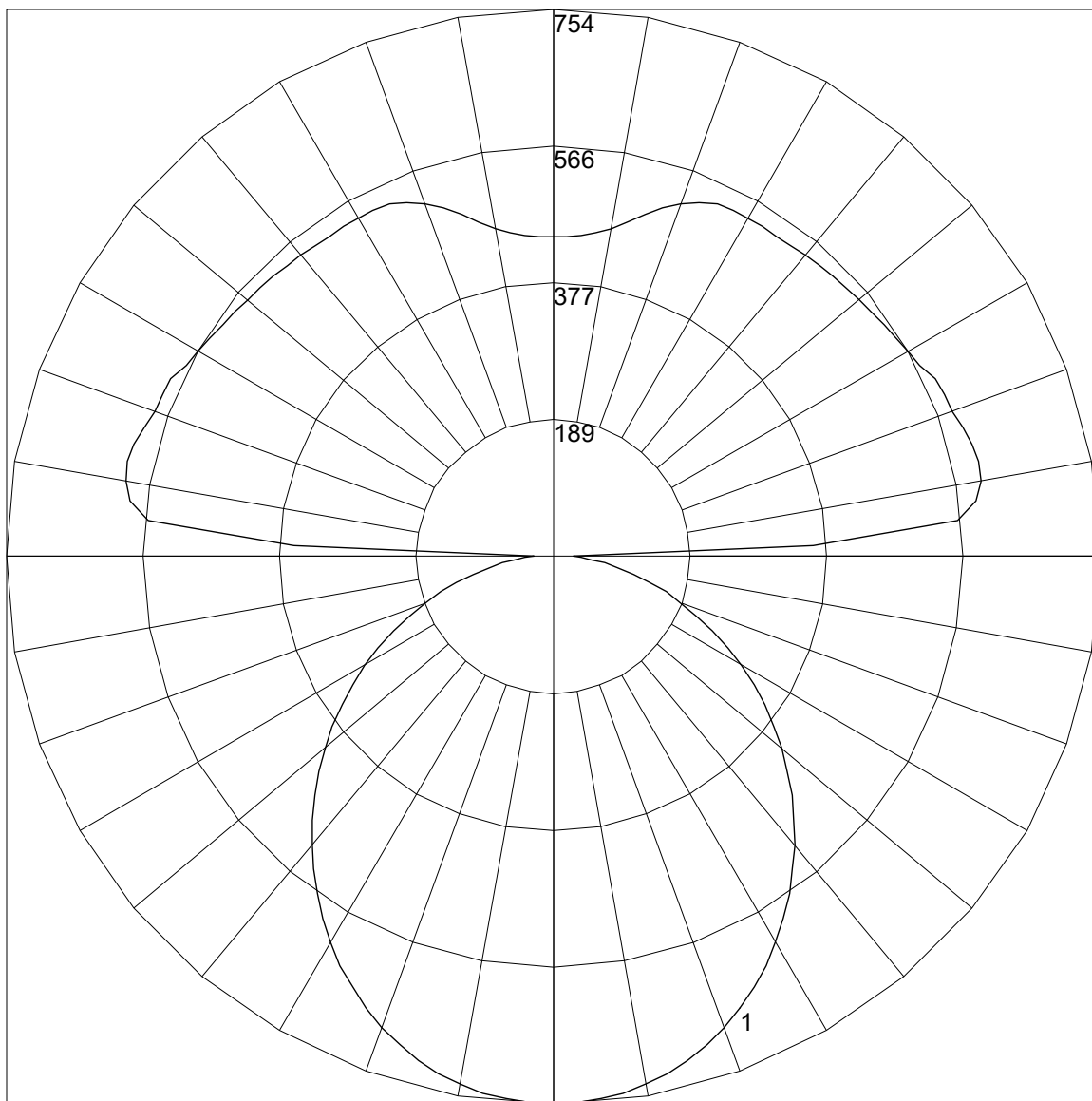
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	50	50	50	44
1	96	92	88	84	88	84	81	78	70	67	65	57	55	53	44	43	42	37
2	88	80	74	69	80	74	68	64	61	57	54	50	47	44	39	37	36	31
3	80	70	63	57	73	65	58	53	54	49	45	44	40	38	34	32	30	26
4	73	62	54	48	66	57	50	45	48	43	38	39	35	32	31	28	26	22
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23	19
6	62	50	42	36	56	46	39	33	38	33	29	31	27	24	25	22	20	17
7	57	45	37	31	52	41	34	29	35	29	25	29	24	21	23	20	18	15
8	53	41	33	28	48	37	31	26	32	26	22	26	22	19	21	18	16	13
9	49	37	30	24	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	18	15	13	11

POLAR GRAPH



Maximum Candela = 754 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)