

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 : S16-LED-ID-DCO-4FT-3E-B-V-8-TW-OPEN-ITL85122.912.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85122.912 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/03/15

[ISSUEDATE]04/27/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S16-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, 42.3 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 45.9 WATTS

[ABSOLUTE]LUMENS]4495

[OTHER]see www.finelite.com for source file ITL85122. 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	4495
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	106
Total Luminaire Watts	42.3
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
Luminous Length (0-180)	3.57 ft
Luminous Width (90-270)	0.29 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7652	7578	7474
55	7217	7089	7016
65	6613	6489	6389
75	5602	5480	5399
85	3617	3737	3737

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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	839.000	839.000	839.000	839.000	839.000
2.5	839.000	838.000	839.000	839.000	838.000
5.0	835.000	834.000	834.000	835.000	834.000
7.5	830.000	829.000	829.000	829.000	829.000
10.0	822.000	819.000	821.000	820.000	819.000
12.5	812.000	808.000	810.000	810.000	807.000
15.0	800.000	795.000	798.000	798.000	794.000
17.5	785.000	778.000	782.000	781.000	777.000
20.0	769.000	760.000	764.000	764.000	760.000
22.5	749.000	741.000	744.000	744.000	740.000
25.0	728.000	720.000	723.000	722.000	719.000
27.5	705.000	698.000	700.000	698.000	696.000
30.0	680.000	673.000	676.000	673.000	670.000
32.5	655.000	649.000	650.000	647.000	644.000
35.0	629.000	623.000	624.000	620.000	618.000
37.5	602.000	597.000	597.000	593.000	590.000
40.0	574.000	568.000	569.000	565.000	562.000
42.5	545.000	539.000	540.000	535.000	533.000
45.0	515.000	510.000	510.000	505.000	503.000
47.5	487.000	481.000	480.000	475.000	474.000
50.0	456.000	450.000	449.000	444.000	444.000
52.5	425.000	420.000	418.000	414.000	414.000
55.0	394.000	389.000	387.000	383.000	383.000
57.5	363.000	358.000	357.000	352.000	351.000
60.0	331.000	327.000	325.000	321.000	320.000
62.5	299.000	295.000	293.000	289.000	288.000
65.0	266.000	263.000	261.000	257.000	257.000
67.5	234.000	231.000	229.000	226.000	225.000
70.0	201.000	199.000	197.000	194.000	194.000
72.5	169.000	168.000	166.000	164.000	163.000
75.0	138.000	137.000	135.000	134.000	133.000
77.5	108.000	107.000	106.000	105.000	105.000
80.0	79.000	79.000	78.000	78.000	78.000
82.5	53.000	54.000	53.000	53.000	53.000
85.0	30.000	31.000	31.000	31.000	31.000
87.5	10.000	11.000	11.000	11.000	11.000
90.0	0.000	0.000	0.000	0.000	0.000
92.5	8.234	30.877	21.614	22.129	22.129
95.0	23.672	139.462	71.532	41.170	39.111
97.5	42.199	162.620	339.649	188.865	110.129
100.0	62.269	179.602	377.731	469.848	463.673
102.5	83.368	191.953	390.082	505.871	541.380
105.0	103.953	209.965	400.889	514.620	553.216
107.5	122.994	227.462	410.152	518.737	555.789
110.0	143.064	242.901	412.211	523.883	558.877
112.5	162.105	257.310	419.415	527.485	562.994
115.0	180.632	271.719	428.678	525.427	561.450
117.5	198.643	286.129	436.912	526.456	558.877
120.0	215.626	299.509	444.117	531.088	559.906
122.5	231.579	312.374	450.292	535.205	562.994
125.0	246.503	324.211	454.924	537.778	564.538
127.5	260.912	335.532	459.555	539.836	565.567
130.0	274.807	346.339	462.643	540.351	565.567
132.5	288.187	356.117	466.246	539.836	564.023

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-B-V-8-TW-OPEN-ITL85122.912.IES****CANDELA TABULATION - (Cont.)**

135.0	300.023	364.865	469.333	538.292	560.936
137.5	311.345	372.585	471.392	535.719	557.848
140.0	322.667	379.789	472.936	533.146	553.216
142.5	332.959	385.965	473.450	530.058	548.585
145.0	343.252	391.626	473.450	526.456	543.439
147.5	352.000	396.772	472.936	522.339	537.778
150.0	360.234	399.860	470.363	516.164	530.573
152.5	367.953	402.947	466.760	509.988	523.368
155.0	374.643	405.521	462.643	502.269	514.105
157.5	380.819	407.064	457.497	493.006	504.327
160.0	386.479	408.094	451.836	482.713	493.006
162.5	391.111	408.094	444.632	471.392	480.655
165.0	395.228	408.094	437.427	459.555	466.760
167.5	398.316	407.579	429.708	447.719	454.409
170.0	400.889	407.064	422.503	435.368	440.515
172.5	402.947	407.064	415.813	424.561	427.649
175.0	404.491	406.035	410.152	415.298	416.327
177.5	406.035	406.550	407.579	408.608	408.608
180.0	406.035	406.035	406.035	406.035	406.035

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-B-V-8-TW-OPEN-ITL85122.912.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	303.65	N.A.	6.80
0-30	636.09	N.A.	14.20
0-40	1025.55	N.A.	22.80
0-60	1764.01	N.A.	39.20
0-80	2165.71	N.A.	48.20
0-90	2202.2	N.A.	49.00
10-90	2122.98	N.A.	47.20
20-40	721.90	N.A.	16.10
20-50	1114.4	N.A.	24.80
40-70	996.45	N.A.	22.20
60-80	401.70	N.A.	8.90
70-80	143.71	N.A.	3.20
80-90	36.49	N.A.	0.80
90-110	501.97	N.A.	11.20
90-120	898.07	N.A.	20.00
90-130	1283.72	N.A.	28.60
90-150	1919.95	N.A.	42.70
90-180	2292.65	N.A.	51.00
110-180	1790.69	N.A.	39.80
0-180	4494.86	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	79.23
10-20	224.42
20-30	332.44
30-40	389.46
40-50	392.50
50-60	345.96
60-70	257.99
70-80	143.71
80-90	36.49
90-100	121.32
100-110	380.65
110-120	396.11
120-130	385.65
130-140	348.47
140-150	287.76
150-160	209.83
160-170	123.33
170-180	39.55

IES INDOOR REPORT

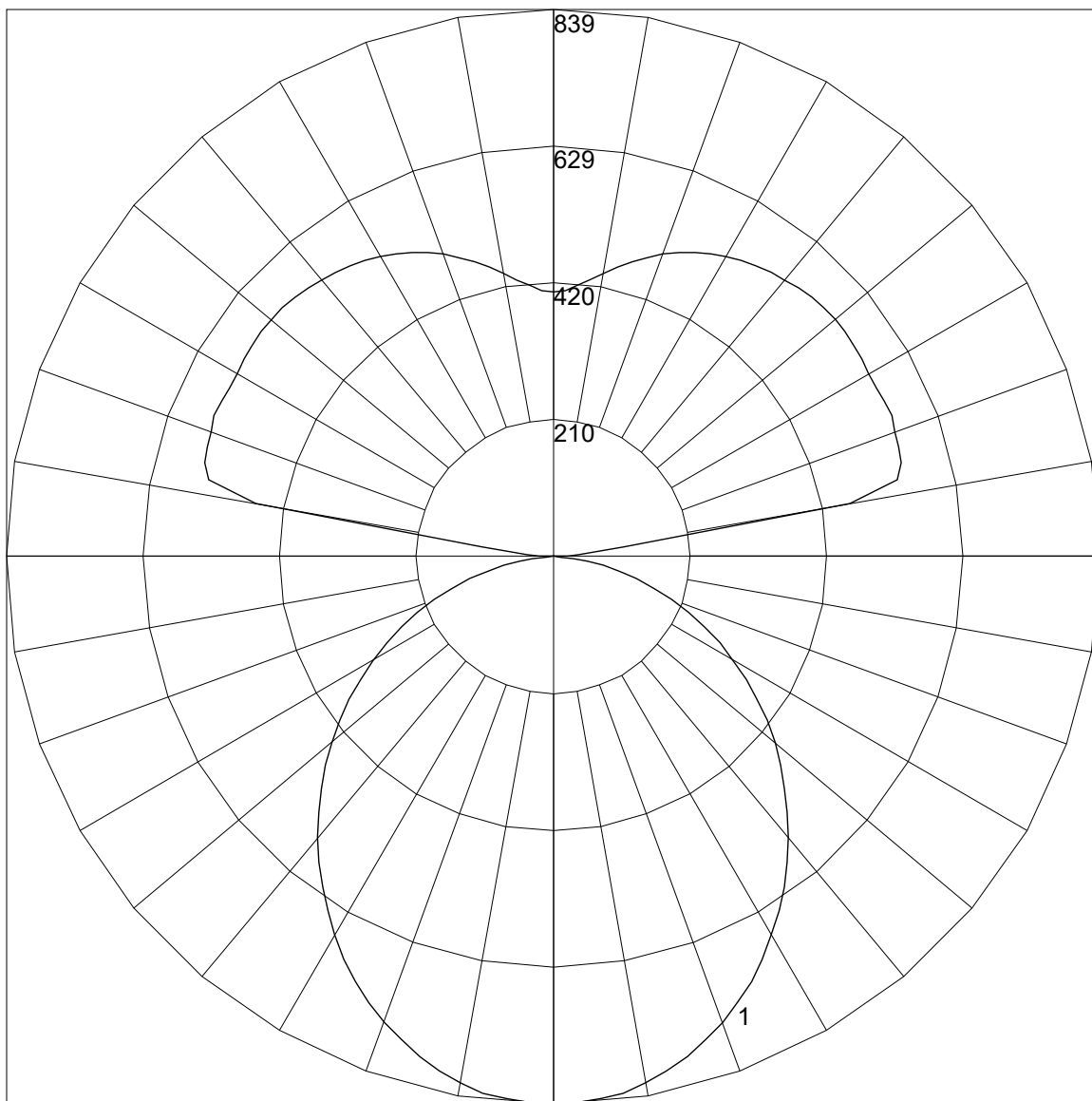
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49
1	98	93	89	86	90	86	83	80	73	70	68	60	59	57	49	48	47	41
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	39	35
3	81	71	64	58	74	66	60	55	56	51	47	47	43	40	38	35	33	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	31	27	25	22
6	63	51	42	37	57	47	40	34	40	34	30	34	29	26	28	24	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	25	22	20	17
8	54	41	34	28	49	39	32	27	33	28	24	28	24	21	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14	12

POLAR GRAPH



Maximum Candela = 839 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)