

# 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-H-8-35-OPEN-ITL85122.011.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85122.011 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-H-8-35-OPEN

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 33.9 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 37.4 WATTS

[ABSOLUTE]LUMENS]4005

[OTHER]see [www.finelite.com](http://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](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	4005
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	118
Total Luminaire Watts	33.9
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	5952	5894	5813
55	5614	5514	5457
65	5144	5047	4970
75	4357	4263	4199
85	2813	2907	2907

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-B-H-8-35-OPEN-ITL85122.011.IES

## CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	652.556	652.556	652.556	652.556	652.556
2.5	652.556	651.778	652.556	652.556	651.778
5.0	649.444	648.667	648.667	649.444	648.667
7.5	645.556	644.778	644.778	644.778	644.778
10.0	639.333	637.000	638.556	637.778	637.000
12.5	631.556	628.444	630.000	630.000	627.667
15.0	622.222	618.333	620.667	620.667	617.556
17.5	610.556	605.111	608.222	607.444	604.333
20.0	598.111	591.111	594.222	594.222	591.111
22.5	582.556	576.333	578.667	578.667	575.556
25.0	566.222	560.000	562.333	561.556	559.222
27.5	548.333	542.889	544.444	542.889	541.333
30.0	528.889	523.444	525.778	523.444	521.111
32.5	509.445	504.778	505.555	503.222	500.889
35.0	489.222	484.555	485.333	482.222	480.667
37.5	468.222	464.333	464.333	461.222	458.889
40.0	446.445	441.778	442.555	439.445	437.111
42.5	423.889	419.222	420.000	416.111	414.555
45.0	400.555	396.667	396.667	392.778	391.222
47.5	378.778	374.111	373.333	369.445	368.667
50.0	354.667	350.000	349.222	345.333	345.333
52.5	330.555	326.667	325.111	322.000	322.000
55.0	306.445	302.555	301.000	297.889	297.889
57.5	282.333	278.445	277.667	273.778	273.000
60.0	257.445	254.333	252.778	249.667	248.889
62.5	232.556	229.444	227.889	224.778	224.000
65.0	206.889	204.556	203.000	199.889	199.889
67.5	182.000	179.667	178.111	175.778	175.000
70.0	156.333	154.778	153.222	150.889	150.889
72.5	131.444	130.667	129.111	127.556	126.778
75.0	107.333	106.556	105.000	104.222	103.444
77.5	84.000	83.222	82.444	81.667	81.667
80.0	61.444	61.444	60.667	60.667	60.667
82.5	41.222	42.000	41.222	41.222	41.222
85.0	23.333	24.111	24.111	24.111	24.111
87.5	7.778	8.556	8.556	8.556	8.556
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-H-8-35-OPEN-ITL85122.011.IES****CANDELA TABULATION - (Cont.)**

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

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-B-H-8-35-OPEN-ITL85122.011.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	236.17	N.A.	5.90
0-30	494.74	N.A.	12.40
0-40	797.65	N.A.	19.90
0-60	1372.01	N.A.	34.30
0-80	1684.44	N.A.	42.10
0-90	1712.83	N.A.	42.80
10-90	1651.21	N.A.	41.20
20-40	561.48	N.A.	14.00
20-50	866.76	N.A.	21.60
40-70	775.02	N.A.	19.30
60-80	312.43	N.A.	7.80
70-80	111.78	N.A.	2.80
80-90	28.38	N.A.	0.70
90-110	501.97	N.A.	12.50
90-120	898.07	N.A.	22.40
90-130	1283.72	N.A.	32.00
90-150	1919.95	N.A.	47.90
90-180	2292.65	N.A.	57.20
110-180	1790.69	N.A.	44.70
0-180	4005.48	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	61.62
10-20	174.55
20-30	258.57
30-40	302.91
40-50	305.28
50-60	269.08
60-70	200.66
70-80	111.78
80-90	28.38
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

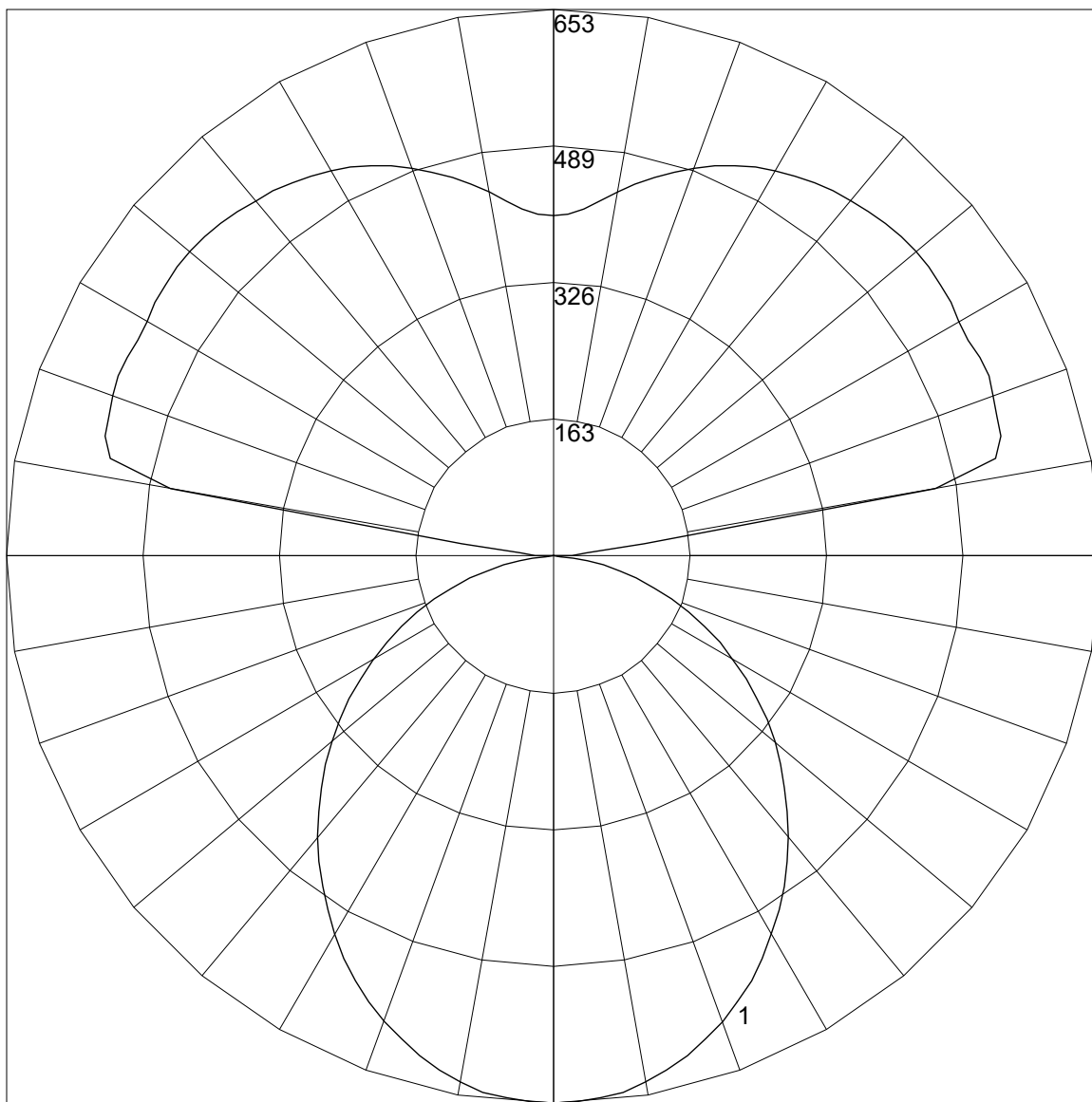
PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-B-H-8-35-OPEN-ITL85122.011.IES

## 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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	43
1	96	92	88	85	88	84	81	78	69	67	65	56	55	53	44	43	42	36
2	88	80	74	69	80	73	68	64	61	57	54	49	47	44	38	37	35	30
3	80	70	63	57	73	65	58	53	54	49	45	43	40	37	34	32	30	25
4	73	62	54	48	66	57	50	45	48	42	38	39	35	32	30	28	26	22
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	27	25	22	19
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	25	22	20	17
7	57	45	37	31	52	41	34	29	35	29	25	28	24	21	23	20	17	15
8	53	41	33	28	48	37	31	26	32	26	22	26	22	19	21	18	16	13
9	49	37	30	25	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 = 652.556 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)