

# 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-V-S-8-35-OPEN-ITL85122.004.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85122.004 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-V-S-8-35-OPEN

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 44.8 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 47.7 WATTS

[ABSOLUTE]LUMENS]5357

[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	5357
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
Total Luminaire Watts	44.8
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
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	3133	3102	3060
55	2955	2902	2872
65	2707	2656	2616
75	2293	2243	2210
85	1481	1530	1530

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-V-S-8-35-OPEN-ITL85122.004.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	343.450	343.450	343.450	343.450	343.450
2.5	343.450	343.041	343.450	343.450	343.041
5.0	341.813	341.404	341.404	341.813	341.404
7.5	339.766	339.357	339.357	339.357	339.357
10.0	336.491	335.263	336.082	335.673	335.263
12.5	332.398	330.760	331.579	331.579	330.351
15.0	327.485	325.439	326.667	326.667	325.029
17.5	321.345	318.479	320.117	319.708	318.070
20.0	314.795	311.111	312.748	312.748	311.111
22.5	306.608	303.333	304.561	304.561	302.924
25.0	298.012	294.737	295.965	295.555	294.327
27.5	288.596	285.731	286.550	285.731	284.912
30.0	278.363	275.497	276.725	275.497	274.269
32.5	268.129	265.673	266.082	264.854	263.626
35.0	257.485	255.029	255.439	253.801	252.982
37.5	246.433	244.386	244.386	242.749	241.520
40.0	234.971	232.515	232.924	231.286	230.059
42.5	223.099	220.643	221.053	219.006	218.187
45.0	210.819	208.772	208.772	206.725	205.906
47.5	199.357	196.901	196.491	194.444	194.035
50.0	186.667	184.210	183.801	181.754	181.754
52.5	173.977	171.930	171.111	169.474	169.474
55.0	161.286	159.240	158.421	156.784	156.784
57.5	148.596	146.550	146.140	144.094	143.684
60.0	135.497	133.860	133.041	131.404	130.994
62.5	122.398	120.760	119.942	118.304	117.895
65.0	108.889	107.661	106.842	105.205	105.205
67.5	95.790	94.561	93.743	92.515	92.105
70.0	82.281	81.462	80.643	79.415	79.415
72.5	69.181	68.772	67.953	67.135	66.725
75.0	56.491	56.082	55.263	54.854	54.444
77.5	44.211	43.801	43.392	42.983	42.983
80.0	32.339	32.339	31.930	31.930	31.930
82.5	21.696	22.105	21.696	21.696	21.696
85.0	12.281	12.690	12.690	12.690	12.690
87.5	4.094	4.503	4.503	4.503	4.503
90.0	0.000	0.000	0.000	0.000	0.000
92.5	16.000	60.000	42.000	43.000	43.000
95.0	46.000	271.000	139.000	80.000	76.000
97.5	82.000	316.000	660.000	367.000	214.000
100.0	121.000	349.000	734.000	913.000	901.000
102.5	162.000	373.000	758.000	983.000	1052.000
105.0	202.000	408.000	779.000	1000.000	1075.000
107.5	239.000	442.000	797.000	1008.000	1080.000
110.0	278.000	472.000	801.000	1018.000	1086.000
112.5	315.000	500.000	815.000	1025.000	1094.000
115.0	351.000	528.000	833.000	1021.000	1091.000
117.5	386.000	556.000	849.000	1023.000	1086.000
120.0	419.000	582.000	863.000	1032.000	1088.000
122.5	450.000	607.000	875.000	1040.000	1094.000
125.0	479.000	630.000	884.000	1045.000	1097.000
127.5	507.000	652.000	893.000	1049.000	1099.000
130.0	534.000	673.000	899.000	1050.000	1099.000
132.5	560.000	692.000	906.000	1049.000	1096.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-V-S-8-35-OPEN-ITL85122.004.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	583.000	709.000	912.000	1046.000	1090.000
<b>137.5</b>	605.000	724.000	916.000	1041.000	1084.000
<b>140.0</b>	627.000	738.000	919.000	1036.000	1075.000
<b>142.5</b>	647.000	750.000	920.000	1030.000	1066.000
<b>145.0</b>	667.000	761.000	920.000	1023.000	1056.000
<b>147.5</b>	684.000	771.000	919.000	1015.000	1045.000
<b>150.0</b>	700.000	777.000	914.000	1003.000	1031.000
<b>152.5</b>	715.000	783.000	907.000	991.000	1017.000
<b>155.0</b>	728.000	788.000	899.000	976.000	999.000
<b>157.5</b>	740.000	791.000	889.000	958.000	980.000
<b>160.0</b>	751.000	793.000	878.000	938.000	958.000
<b>162.5</b>	760.000	793.000	864.000	916.000	934.000
<b>165.0</b>	768.000	793.000	850.000	893.000	907.000
<b>167.5</b>	774.000	792.000	835.000	870.000	883.000
<b>170.0</b>	779.000	791.000	821.000	846.000	856.000
<b>172.5</b>	783.000	791.000	808.000	825.000	831.000
<b>175.0</b>	786.000	789.000	797.000	807.000	809.000
<b>177.5</b>	789.000	790.000	792.000	794.000	794.000
<b>180.0</b>	789.000	789.000	789.000	789.000	789.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-V-S-8-35-OPEN-ITL85122.004.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	124.30	N.A.	2.30
0-30	260.39	N.A.	4.90
0-40	419.82	N.A.	7.80
0-60	722.11	N.A.	13.50
0-80	886.55	N.A.	16.60
0-90	901.49	N.A.	16.80
10-90	869.06	N.A.	16.20
20-40	295.51	N.A.	5.50
20-50	456.19	N.A.	8.50
40-70	407.90	N.A.	7.60
60-80	164.44	N.A.	3.10
70-80	58.83	N.A.	1.10
80-90	14.94	N.A.	0.30
90-110	975.41	N.A.	18.20
90-120	1745.12	N.A.	32.60
90-130	2494.51	N.A.	46.60
90-150	3730.81	N.A.	69.60
90-180	4455.04	N.A.	83.20
110-180	3479.63	N.A.	65.00
0-180	5356.53	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	32.43
10-20	91.87
20-30	136.09
30-40	159.43
40-50	160.67
50-60	141.62
60-70	105.61
70-80	58.83
80-90	14.94
90-100	235.75
100-110	739.67
110-120	769.71
120-130	749.39
130-140	677.14
140-150	559.16
150-160	407.74
160-170	239.65
170-180	76.85

# IES INDOOR REPORT

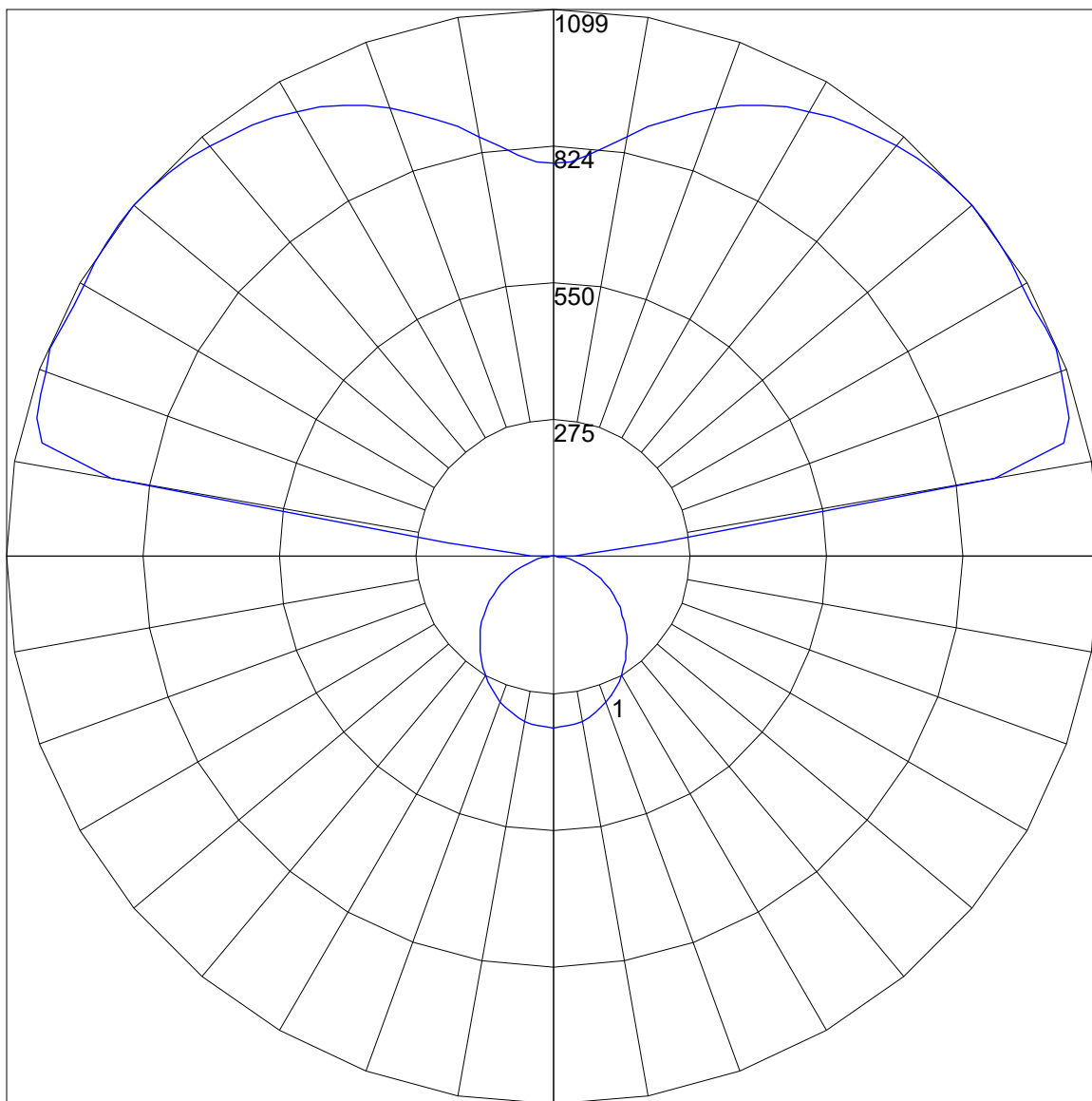
PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-V-S-8-35-OPEN-ITL85122.004.IES

## 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	99	99	99	99	87	87	87	87	65	65	65	44	44	44	26	26	26	17
1	90	86	83	79	79	76	73	70	57	55	53	39	38	37	23	22	22	14
2	82	75	69	65	72	66	62	58	50	46	44	34	32	31	20	19	18	12
3	75	66	59	54	66	58	52	48	44	40	37	30	28	26	18	16	15	10
4	68	58	51	45	60	51	45	40	39	34	31	27	24	22	16	14	13	9
5	63	52	44	38	55	46	39	34	34	30	27	24	21	19	14	13	11	7
6	57	46	38	33	50	41	34	30	31	26	23	21	19	16	13	11	10	7
7	53	41	34	29	46	37	30	26	28	23	20	19	17	14	12	10	9	6
8	49	37	30	25	43	33	27	23	25	21	18	18	15	13	11	9	8	5
9	45	34	27	22	40	30	24	20	23	19	16	16	13	11	10	8	7	5
10	42	31	24	20	37	28	22	18	21	17	14	15	12	10	9	7	6	4

POLAR GRAPH



Maximum Candela = 1099 Located At Horizontal Angle = 90, Vertical Angle = 127.5  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)