

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-S-B-8-35-OPEN-ITL85122.013.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85122.013 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-S-B-8-35-OPEN

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 24.7 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 28.4 WATTS

[ABSOLUTE]LUMENS]2957

[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	2957
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
Total Luminaire Watts	24.7
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	3938	3900	3846
55	3714	3648	3611
65	3403	3339	3288
75	2883	2820	2779
85	1861	1923	1923

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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	431.766	431.766	431.766	431.766	431.766
2.5	431.766	431.252	431.766	431.766	431.252
5.0	429.708	429.193	429.193	429.708	429.193
7.5	427.135	426.620	426.620	426.620	426.620
10.0	423.017	421.474	422.503	421.988	421.474
12.5	417.871	415.813	416.842	416.842	415.298
15.0	411.696	409.123	410.667	410.667	408.608
17.5	403.977	400.374	402.433	401.918	399.860
20.0	395.743	391.111	393.170	393.170	391.111
22.5	385.450	381.333	382.877	382.877	380.819
25.0	374.643	370.526	372.070	371.555	370.012
27.5	362.807	359.205	360.234	359.205	358.175
30.0	349.942	346.339	347.883	346.339	344.795
32.5	337.076	333.988	334.503	332.959	331.415
35.0	323.696	320.608	321.123	319.064	318.035
37.5	309.801	307.228	307.228	305.170	303.626
40.0	295.392	292.304	292.819	290.760	289.216
42.5	280.468	277.380	277.895	275.322	274.292
45.0	265.029	262.456	262.456	259.883	258.854
47.5	250.620	247.532	247.018	244.444	243.930
50.0	234.667	231.579	231.064	228.491	228.491
52.5	218.714	216.140	215.111	213.053	213.053
55.0	202.760	200.187	199.158	197.099	197.099
57.5	186.807	184.234	183.719	181.146	180.632
60.0	170.339	168.281	167.251	165.193	164.678
62.5	153.871	151.813	150.784	148.725	148.210
65.0	136.889	135.345	134.316	132.257	132.257
67.5	120.421	118.877	117.848	116.304	115.790
70.0	103.439	102.409	101.380	99.836	99.836
72.5	86.971	86.456	85.427	84.398	83.883
75.0	71.017	70.503	69.474	68.959	68.444
77.5	55.579	55.064	54.550	54.035	54.035
80.0	40.655	40.655	40.140	40.140	40.140
82.5	27.275	27.790	27.275	27.275	27.275
85.0	15.439	15.953	15.953	15.953	15.953
87.5	5.146	5.661	5.661	5.661	5.661
90.0	0.000	0.000	0.000	0.000	0.000
92.5	6.550	24.561	17.193	17.602	17.602
95.0	18.830	110.936	56.901	32.748	31.111
97.5	33.567	129.357	270.175	150.234	87.602
100.0	49.532	142.865	300.468	373.743	368.830
102.5	66.316	152.690	310.292	402.398	430.643
105.0	82.690	167.018	318.889	409.357	440.058
107.5	97.836	180.936	326.257	412.632	442.105
110.0	113.801	193.216	327.895	416.725	444.561
112.5	128.947	204.678	333.626	419.591	447.836
115.0	143.684	216.140	340.994	417.953	446.608
117.5	158.012	227.602	347.544	418.772	444.561
120.0	171.520	238.246	353.275	422.456	445.380
122.5	184.210	248.480	358.187	425.731	447.836
125.0	196.082	257.895	361.871	427.778	449.064
127.5	207.544	266.901	365.555	429.415	449.883
130.0	218.596	275.497	368.012	429.825	449.883
132.5	229.240	283.275	370.877	429.415	448.655

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-S-B-8-35-OPEN-ITL85122.013.IES****CANDELA TABULATION - (Cont.)**

135.0	238.655	290.234	373.333	428.187	446.199
137.5	247.661	296.374	374.971	426.140	443.743
140.0	256.667	302.105	376.199	424.094	440.058
142.5	264.854	307.017	376.608	421.637	436.374
145.0	273.041	311.521	376.608	418.772	432.281
147.5	280.000	315.614	376.199	415.497	427.778
150.0	286.550	318.070	374.152	410.585	422.047
152.5	292.690	320.526	371.287	405.673	416.316
155.0	298.012	322.573	368.012	399.532	408.947
157.5	302.924	323.801	363.918	392.164	401.170
160.0	307.427	324.620	359.415	383.977	392.164
162.5	311.111	324.620	353.684	374.971	382.339
165.0	314.386	324.620	347.953	365.555	371.287
167.5	316.842	324.211	341.813	356.140	361.462
170.0	318.889	323.801	336.082	346.316	350.409
172.5	320.526	323.801	330.760	337.719	340.175
175.0	321.754	322.983	326.257	330.351	331.170
177.5	322.983	323.392	324.211	325.029	325.029
180.0	322.983	322.983	322.983	322.983	322.983

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-S-B-8-35-OPEN-ITL85122.013.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	156.26	N.A.	5.30
0-30	327.35	N.A.	11.10
0-40	527.77	N.A.	17.80
0-60	907.79	N.A.	30.70
0-80	1114.52	N.A.	37.70
0-90	1133.3	N.A.	38.30
10-90	1092.53	N.A.	36.90
20-40	371.50	N.A.	12.60
20-50	573.49	N.A.	19.40
40-70	512.79	N.A.	17.30
60-80	206.72	N.A.	7.00
70-80	73.96	N.A.	2.50
80-90	18.78	N.A.	0.60
90-110	399.29	N.A.	13.50
90-120	714.38	N.A.	24.20
90-130	1021.14	N.A.	34.50
90-150	1527.23	N.A.	51.60
90-180	1823.7	N.A.	61.70
110-180	1424.41	N.A.	48.20
0-180	2957.00	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	40.77
10-20	115.49
20-30	171.08
30-40	200.42
40-50	201.99
50-60	178.04
60-70	132.77
70-80	73.96
80-90	18.78
90-100	96.50
100-110	302.79
110-120	315.08
120-130	306.77
130-140	277.19
140-150	228.90
150-160	166.91
160-170	98.10
170-180	31.46

IES INDOOR REPORT

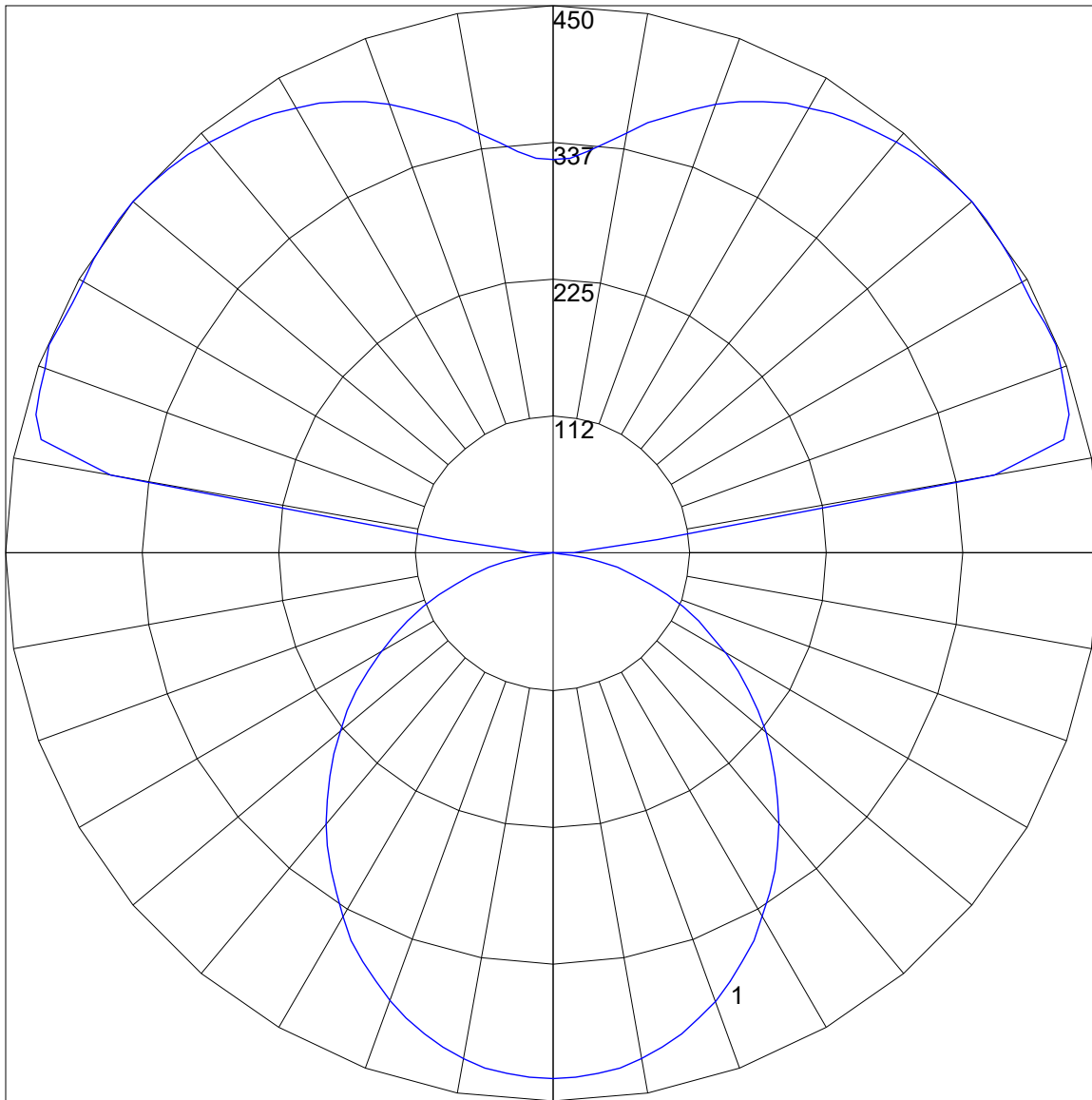
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	95	91	87	84	86	83	79	77	67	65	63	53	52	50	40	39	38	32
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	35	34	32	27
3	79	70	62	57	71	64	57	52	52	47	44	41	38	35	31	29	27	23
4	72	62	54	48	65	56	49	44	46	41	37	37	33	30	28	25	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	23	20	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	40	34	29	33	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	30	25	22	25	21	18	19	16	14	12
9	48	36	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13	11
10	45	33	26	22	41	31	24	20	26	21	17	21	17	14	16	14	12	10

POLAR GRAPH



Maximum Candela = 449.883 Located At Horizontal Angle = 90, Vertical Angle = 127.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)