

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-S-8-35-OPEN-ITL85122.001.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85122.001 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-S-8-35-OPEN

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 22.7 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 26.3 WATTS

[ABSOLUTE]LUMENS]2725

[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	2725
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
Total Luminaire Watts	22.7
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	3133	3102	3060
55	2955	2902	2872
65	2707	2656	2616
75	2293	2243	2210
85	1481	1530	1530

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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	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	341.403	341.403	341.813	341.403
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	318.480	320.117	319.708	318.070
20.0	314.795	311.111	312.749	312.749	311.111
22.5	306.608	303.333	304.561	304.561	302.924
25.0	298.012	294.737	295.965	295.556	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	231.287	230.058
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	184.211	183.801	181.754	181.754
52.5	173.977	171.930	171.111	169.474	169.474
55.0	161.287	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	95.789	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	42.982	42.982
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	6.550	24.561	17.193	17.602	17.602
95.0	18.830	110.936	56.901	32.749	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	184.211	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	365.556	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-S-8-35-OPEN-ITL85122.001.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	307.018	376.608	421.637	436.374
145.0	273.041	311.520	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	365.556	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	322.982	326.257	330.351	331.170
177.5	322.982	323.392	324.211	325.029	325.029
180.0	322.982	322.982	322.982	322.982	322.982

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-S-S-8-35-OPEN-ITL85122.001.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	124.30	N.A.	4.60
0-30	260.39	N.A.	9.60
0-40	419.82	N.A.	15.40
0-60	722.11	N.A.	26.50
0-80	886.55	N.A.	32.50
0-90	901.49	N.A.	33.10
10-90	869.06	N.A.	31.90
20-40	295.51	N.A.	10.80
20-50	456.19	N.A.	16.70
40-70	407.90	N.A.	15.00
60-80	164.44	N.A.	6.00
70-80	58.83	N.A.	2.20
80-90	14.94	N.A.	0.50
90-110	399.29	N.A.	14.70
90-120	714.38	N.A.	26.20
90-130	1021.14	N.A.	37.50
90-150	1527.23	N.A.	56.00
90-180	1823.7	N.A.	66.90
110-180	1424.41	N.A.	52.30
0-180	2725.19	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	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

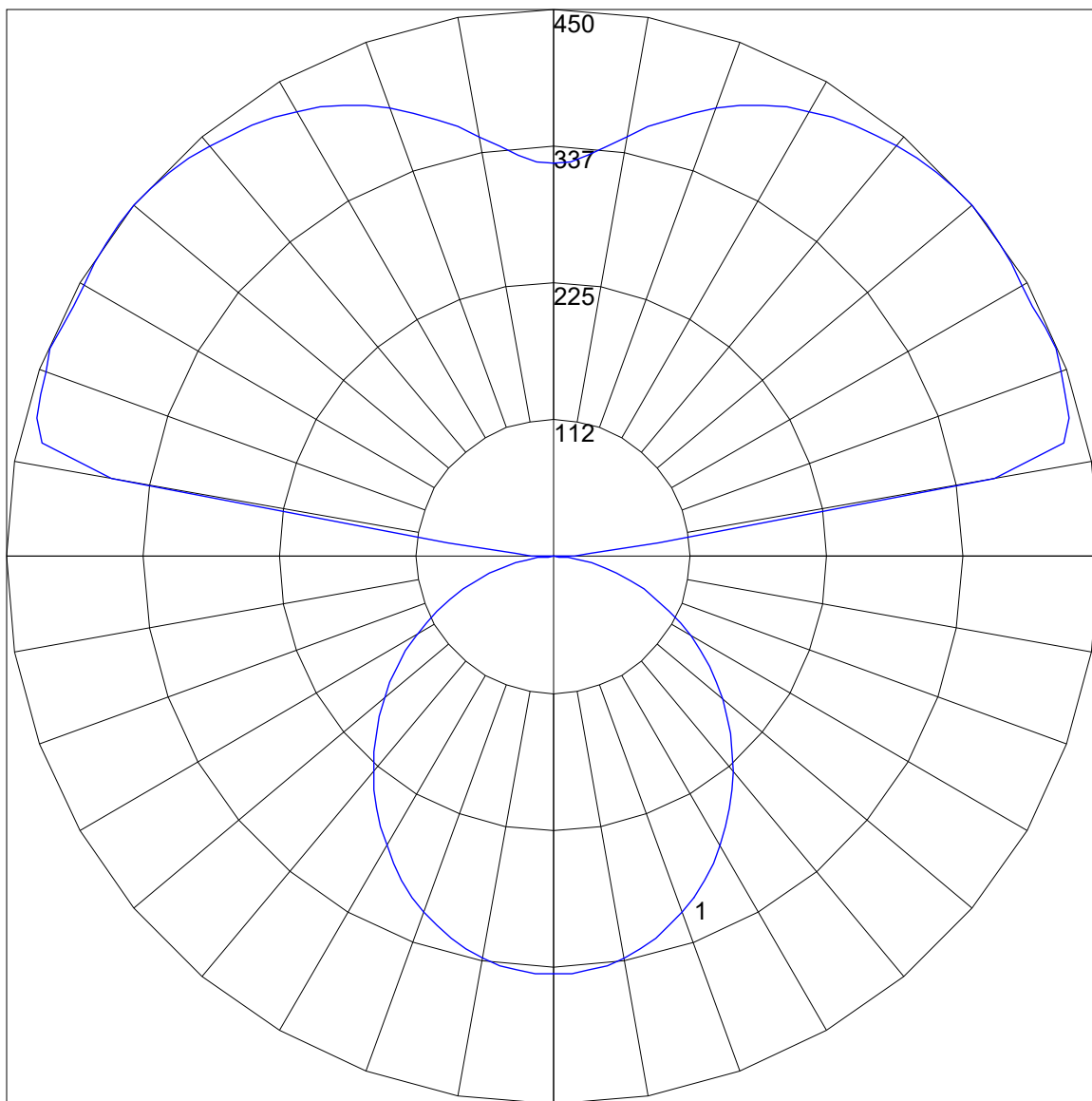
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	36	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18	15
6	60	48	40	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	44	36	30	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	45	33	26	21	40	30	24	20	24	20	16	19	16	13	14	12	10	8

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.)