

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 : S18-LED-ID-DCO-4FT-2E-S-8-35-OPEN-ITL85168.001.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85168.001 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]09/14/15

[ISSUEDATE]04/27/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S18-LED-ID-DCO-4ft-2E-S-8-35-OPEN

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 14.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 16.1 WATTS

[ABSOLUTE]LUMENS]1808

[OTHER]see www.finelite.com for source file ITL85168. 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	1808
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	124
Total Luminaire Watts	14.6
Ballast Factor	1.00
CIE Type	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)	3.71 ft
Luminous Width (90-270)	0.10 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1031	1048	1048
55	993	1013	993
65	917	944	917
75	793	837	793
85	523	654	523

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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	39.708	39.708	39.708	39.708	39.708
2.5	39.708	39.708	39.708	39.708	39.708
5.0	39.298	39.298	39.298	39.298	39.298
7.5	39.298	39.298	39.298	39.298	39.298
10.0	38.889	38.889	38.889	39.298	39.298
12.5	38.480	38.480	38.889	38.889	38.889
15.0	38.070	38.070	38.480	38.480	38.480
17.5	37.661	37.251	38.070	38.070	38.070
20.0	36.842	36.842	37.251	37.251	37.251
22.5	36.023	36.023	36.433	36.842	36.842
25.0	35.205	35.205	35.614	36.023	36.023
27.5	34.386	34.386	34.795	35.205	35.205
30.0	33.567	33.158	33.977	34.386	33.977
32.5	32.339	32.339	32.749	33.158	33.158
35.0	31.111	31.111	31.930	31.930	31.930
37.5	29.883	29.883	30.702	30.702	30.702
40.0	28.655	28.655	29.474	29.474	29.474
42.5	27.427	27.427	27.836	28.246	28.246
45.0	26.199	26.199	26.608	27.018	26.608
47.5	24.561	24.561	25.380	25.380	25.380
50.0	23.333	23.333	23.743	23.743	23.743
52.5	21.696	21.696	22.105	22.515	22.105
55.0	20.468	20.468	20.877	20.877	20.468
57.5	18.830	18.830	19.240	19.240	18.830
60.0	17.193	17.193	17.602	17.602	17.193
62.5	15.556	15.556	15.965	15.965	15.556
65.0	13.918	13.918	14.327	13.918	13.918
67.5	12.281	12.690	12.690	12.281	12.281
70.0	10.643	11.053	11.053	10.643	10.643
72.5	9.006	9.415	9.415	9.006	9.006
75.0	7.368	7.778	7.778	7.368	7.368
77.5	6.140	6.140	6.140	6.140	5.731
80.0	4.503	4.912	4.503	4.503	4.503
82.5	3.275	3.275	3.275	3.275	3.275
85.0	1.637	2.047	2.047	1.637	1.637
87.5	0.409	0.819	0.409	0.409	0.409
90.0	0.000	0.000	0.000	0.000	0.000
92.5	9.415	117.895	9.415	7.368	7.368
95.0	18.830	135.497	260.760	277.953	235.789
97.5	27.836	148.187	272.632	352.047	378.655
100.0	37.251	164.971	283.275	360.234	385.614
102.5	46.667	178.480	292.690	370.058	394.211
105.0	56.901	188.713	304.152	379.064	406.082
107.5	66.725	197.719	315.614	386.023	411.813
110.0	76.959	203.450	325.848	395.848	420.000
112.5	86.784	206.725	335.263	404.444	427.778
115.0	96.199	210.819	342.222	412.222	433.509
117.5	105.614	213.684	346.725	418.772	438.830
120.0	115.029	216.959	350.000	422.456	443.743
122.5	123.626	219.825	350.409	424.094	445.789
125.0	132.222	222.690	347.953	424.912	446.608
127.5	140.000	224.327	344.269	422.865	445.380
130.0	147.778	225.965	341.403	418.363	442.105
132.5	155.556	227.193	337.719	410.585	435.965

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S18-LED-ID-DCO-4FT-2E-S-8-35-OPEN-ITL85168.001.IES****CANDELA TABULATION - (Cont.)**

135.0	162.924	228.012	333.626	401.579	426.140
137.5	169.474	228.421	328.713	393.392	415.088
140.0	176.433	228.421	323.392	384.795	404.854
142.5	182.164	227.602	316.842	374.971	393.801
145.0	187.895	227.193	310.702	365.146	382.749
147.5	192.807	226.374	302.924	354.094	371.287
150.0	197.719	225.556	294.737	342.222	358.596
152.5	201.813	224.737	286.140	329.532	345.906
155.0	205.497	223.918	276.725	316.433	331.170
157.5	209.181	223.099	267.719	302.924	315.614
160.0	212.047	221.871	258.304	288.596	300.058
162.5	214.912	221.053	250.117	274.678	284.094
165.0	216.959	220.643	242.339	260.760	268.538
167.5	219.006	220.643	234.971	248.480	254.211
170.0	220.234	221.053	228.830	237.836	241.930
172.5	221.053	221.462	224.737	229.649	231.696
175.0	222.281	222.281	222.690	224.327	224.737
177.5	222.690	222.690	222.690	222.690	222.690
180.0	222.690	222.690	222.690	222.690	222.690

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S18-LED-ID-DCO-4FT-2E-S-8-35-OPEN-ITL85168.001.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	14.56	N.A.	0.80
0-30	30.99	N.A.	1.70
0-40	50.76	N.A.	2.80
0-60	89.59	N.A.	5.00
0-80	111.61	N.A.	6.20
0-90	113.77	N.A.	6.30
10-90	110.01	N.A.	6.10
20-40	36.19	N.A.	2.00
20-50	56.63	N.A.	3.10
40-70	52.78	N.A.	2.90
60-80	22.02	N.A.	1.20
70-80	8.07	N.A.	0.40
80-90	2.16	N.A.	0.10
90-110	456.16	N.A.	25.20
90-120	760.40	N.A.	42.10
90-130	1047.63	N.A.	57.90
90-150	1477.61	N.A.	81.70
90-180	1694.06	N.A.	93.70
110-180	1237.89	N.A.	68.50
0-180	1807.82	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	3.75
10-20	10.81
20-30	16.42
30-40	19.77
40-50	20.43
50-60	18.40
60-70	13.95
70-80	8.07
80-90	2.16
90-100	165.35
100-110	290.81
110-120	304.24
120-130	287.23
130-140	243.41
140-150	186.57
150-160	125.90
160-170	69.03
170-180	21.52

IES INDOOR REPORT

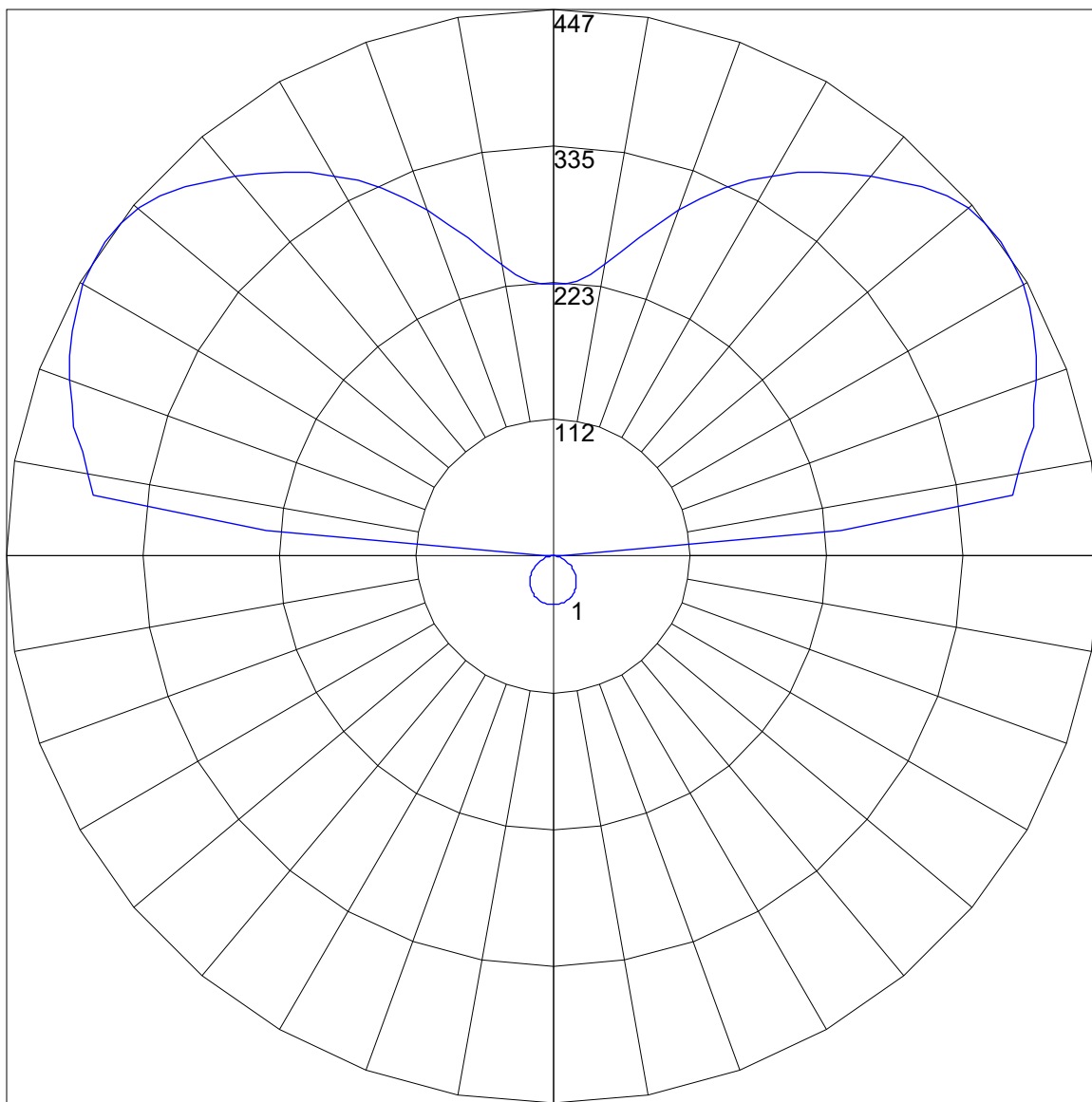
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	97	97	97	97	84	84	84	84	59	59	59	37	37	37	16	16	16	6
1	88	84	80	77	76	73	70	67	51	50	48	32	31	30	14	14	13	5
2	80	73	68	63	69	63	59	55	45	42	40	28	26	25	12	12	11	4
3	73	64	57	52	63	56	50	46	40	36	33	25	23	21	11	10	9	4
4	66	57	49	44	57	49	43	38	35	31	28	22	20	18	10	9	8	3
5	61	50	43	37	52	44	37	33	31	27	24	19	17	15	9	8	7	3
6	56	45	37	32	48	39	33	28	28	24	21	17	15	13	8	7	6	2
7	51	40	33	27	44	35	29	24	25	21	18	16	13	11	7	6	5	2
8	47	36	29	24	41	31	25	21	23	18	16	14	12	10	6	5	5	2
9	44	33	26	21	38	28	23	19	20	16	14	13	11	9	6	5	4	2
10	41	30	23	19	35	26	20	16	19	15	12	12	10	8	5	4	4	2

POLAR GRAPH



Maximum Candela = 446.608 Located At Horizontal Angle = 90, Vertical Angle = 125
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)