

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-2E-B-8-TW-FTO-ITL85121.902.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85121.902 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/04/15

[ISSUEDATE]04/21/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S16-LED-ID-DCO-4ft-2E-B-8-TW-FTO

[OTHER]ies file is based on 3500K; see luminaire tech sheet at www.finelite.com for lumen adjustment factors for other CCT's & CRI

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 20.4 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 21.8 WATTS

[ABSOLUTE]LUMENS]2286

[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	2286
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	112
Total Luminaire Watts	20.4
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	2852	2982	3112
55	2753	2894	3017
65	2584	2700	2840
75	2235	2319	2444
85	1489	1613	1613

IES INDOOR REPORT

PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-B-8-TW-FTO-ITL85121.902.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	277.895	277.895	277.895	277.895	277.895
2.5	277.380	277.380	277.380	277.895	277.895
5.0	276.865	276.865	277.380	277.380	277.380
7.5	275.836	275.836	276.351	276.865	277.380
10.0	273.778	274.292	275.322	276.351	276.351
12.5	271.719	271.205	273.778	275.322	275.322
15.0	269.661	268.632	272.234	274.292	274.292
17.5	265.544	265.029	269.661	271.719	272.234
20.0	261.942	261.427	266.573	269.661	270.175
22.5	257.825	256.795	262.456	266.573	267.602
25.0	252.678	251.649	258.339	262.971	264.000
27.5	247.018	246.503	253.708	258.339	259.883
30.0	240.842	240.842	248.047	253.708	254.737
32.5	233.637	234.152	241.871	247.532	249.591
35.0	226.433	227.462	234.667	240.842	242.901
37.5	218.199	219.228	226.947	233.637	235.181
40.0	209.965	210.994	219.228	225.404	227.977
42.5	201.216	202.246	209.965	216.140	218.713
45.0	191.953	192.982	200.702	206.877	209.450
47.5	182.175	183.205	190.924	196.585	199.158
50.0	171.883	173.427	180.117	186.292	187.836
52.5	161.591	162.620	169.310	174.971	176.515
55.0	150.269	151.813	157.988	163.135	164.678
57.5	139.462	140.491	146.152	150.784	152.327
60.0	127.626	129.170	133.801	138.433	139.977
62.5	115.789	116.819	121.450	125.053	126.596
65.0	103.953	104.982	108.585	112.187	114.246
67.5	91.602	92.632	95.719	98.807	100.351
70.0	79.251	79.766	82.854	85.427	86.971
72.5	66.386	67.415	69.988	72.047	73.591
75.0	55.064	55.579	57.123	58.667	60.211
77.5	43.228	43.743	45.287	46.316	47.345
80.0	31.906	32.421	33.450	34.480	34.994
82.5	21.614	22.129	22.643	23.158	23.673
85.0	12.351	12.865	13.380	13.380	13.380
87.5	4.117	4.632	4.632	4.632	4.632
90.0	0.000	0.000	0.000	0.000	0.000
92.5	10.292	10.292	6.690	1.544	1.029
95.0	22.129	24.702	27.275	27.275	26.246
97.5	34.994	39.626	47.345	48.889	48.374
100.0	48.889	56.094	67.930	72.047	72.561
102.5	63.298	73.591	90.573	99.322	103.439
105.0	78.737	91.602	115.275	129.684	135.860
107.5	94.175	111.673	141.006	160.561	167.766
110.0	110.643	131.743	167.766	191.953	200.187
112.5	127.111	151.813	195.041	223.860	233.637
115.0	143.064	171.883	221.801	256.281	267.088
117.5	159.018	191.439	248.561	287.158	300.023
120.0	173.942	209.965	274.292	317.520	331.930
122.5	188.865	227.977	298.480	345.825	361.778
125.0	202.246	244.444	320.094	372.070	389.053
127.5	215.626	258.854	339.649	394.199	413.240
130.0	227.462	272.234	356.117	414.269	434.339
132.5	237.754	283.041	369.497	430.222	451.322

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-B-8-TW-FTO-ITL85121.902.IES****CANDELA TABULATION - (Cont.)**

135.0	247.532	292.819	379.789	442.573	463.673
137.5	255.766	299.509	386.480	449.778	470.877
140.0	264.000	305.170	390.596	452.866	474.480
142.5	270.690	309.287	391.626	452.866	473.450
145.0	275.322	311.860	389.567	448.234	467.789
147.5	279.439	312.374	384.421	440.515	459.041
150.0	283.041	311.860	378.246	430.222	447.719
152.5	285.614	311.345	370.526	417.871	432.795
155.0	288.187	309.287	361.778	403.977	417.357
157.5	289.731	307.228	351.485	388.538	400.374
160.0	290.760	304.655	341.708	372.585	383.392
162.5	291.789	302.596	332.444	357.661	366.409
165.0	291.789	300.023	322.667	342.222	348.912
167.5	292.304	297.965	313.918	328.327	334.503
170.0	291.789	295.906	306.199	315.977	320.094
172.5	291.789	294.363	300.023	305.684	308.257
175.0	291.789	292.819	295.906	298.480	299.509
177.5	291.789	291.789	292.819	293.333	293.848
180.0	291.789	291.789	291.789	291.789	291.789

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-B-8-TW-FTO-ITL85121.902.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	103.13	N.A.	4.50
0-30	222.04	N.A.	9.70
0-40	368.59	N.A.	16.10
0-60	663.73	N.A.	29.00
0-80	831.83	N.A.	36.40
0-90	847.35	N.A.	37.10
10-90	820.95	N.A.	35.90
20-40	265.46	N.A.	11.60
20-50	419.85	N.A.	18.40
40-70	402.49	N.A.	17.60
60-80	168.10	N.A.	7.40
70-80	60.74	N.A.	2.70
80-90	15.52	N.A.	0.70
90-110	147.23	N.A.	6.40
90-120	358.36	N.A.	15.70
90-130	632.50	N.A.	27.70
90-150	1152.79	N.A.	50.40
90-180	1438.41	N.A.	62.90
110-180	1291.18	N.A.	56.50
0-180	2285.76	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	26.40
10-20	76.73
20-30	118.91
30-40	146.56
40-50	154.39
50-60	140.75
60-70	107.36
70-80	60.74
80-90	15.52
90-100	29.47
100-110	117.76
110-120	211.13
120-130	274.14
130-140	282.43
140-150	237.86
150-160	165.34
160-170	91.74
170-180	28.55

IES INDOOR REPORT

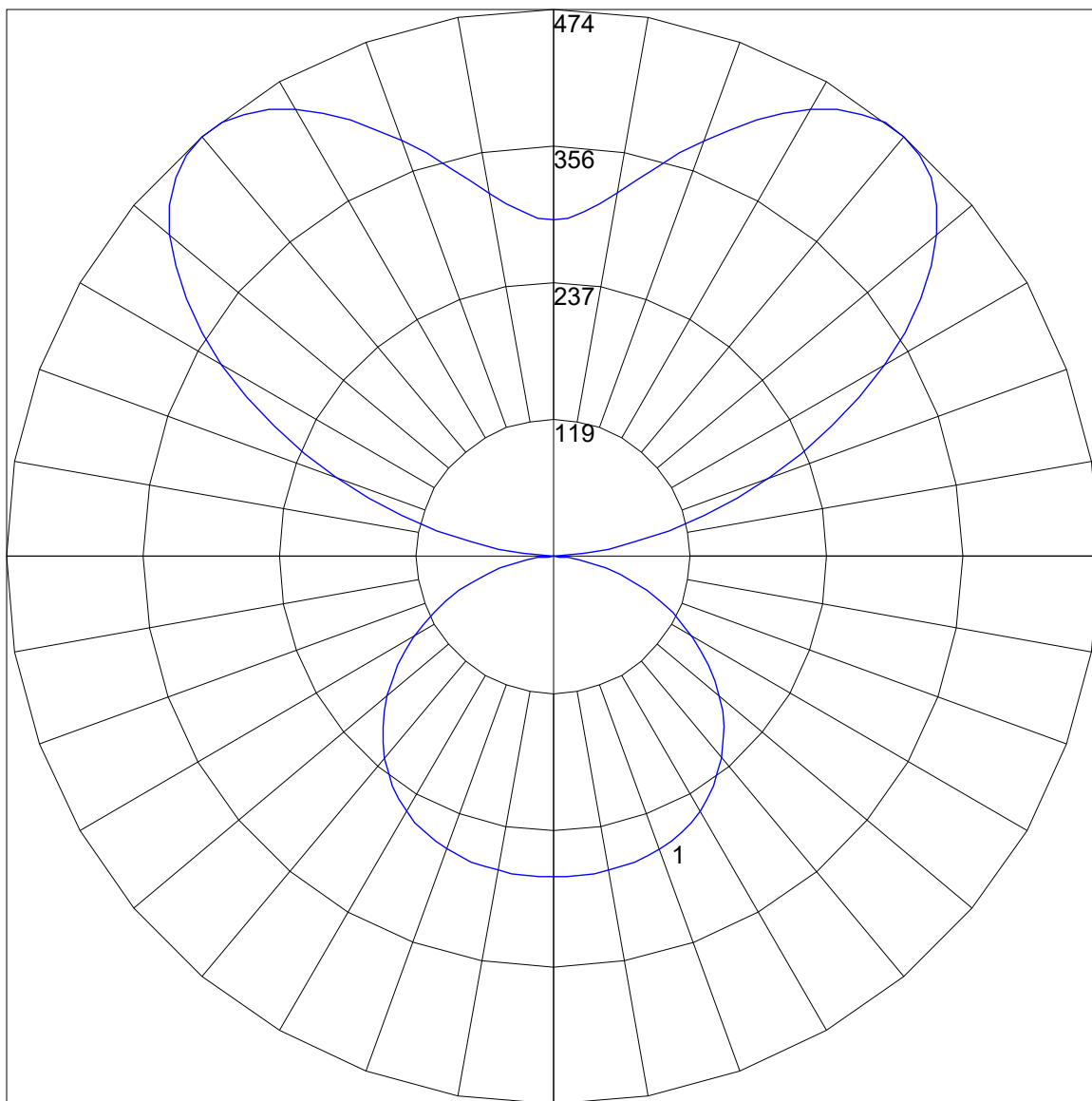
PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-B-8-TW-FTO-ITL85121.902.IES

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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	44	44	44	37
1	95	90	87	83	86	82	79	76	66	64	62	52	51	49	39	38	37	31
2	86	79	73	68	78	72	66	62	58	54	51	46	43	41	34	32	31	26
3	78	69	62	56	71	63	56	51	51	46	43	40	37	34	30	28	26	21
4	72	61	53	47	65	55	49	43	45	40	36	36	32	29	27	24	22	18
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	24	21	19	16
6	60	48	40	35	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	43	36	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	51	39	32	26	46	36	29	24	30	24	21	24	20	17	18	15	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	16	14	12	10
10	45	33	26	21	40	30	24	19	25	20	16	20	16	14	15	13	11	9

POLAR GRAPH



Maximum Candela = 474.48 Located At Horizontal Angle = 90, Vertical Angle = 140
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)