

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 : S12-LED-ID-DCO-4FT-3E-S-B-8-35-FTO-ITL85165.013.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85165.013 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]09/09/15

[ISSUEDATE]04/27/16

[MANUFAC]FINELITE, INC.

[LUMCAT]S12-LED-ID-DCO-4ft-3E-S-B-8-35-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 24.8 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 28.5 WATTS

[ABSOLUTE]LUMENS]2947

[OTHER]see www.finelite.com for source file ITL85165. 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	2947
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	119
Total Luminaire Watts	24.8
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 w/Sides
Luminous Length (0-180)	3.32 ft
Luminous Width (90-270)	0.36 ft
Luminous Height	0.03 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2950	2821	2779
55	2766	2580	2540
65	2511	2295	2219
75	2097	1848	1859
85	1230	1333	1509

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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	385.450	385.450	385.450	385.450	385.450
2.5	384.936	384.936	384.936	384.936	384.936
5.0	382.877	383.392	383.392	383.392	383.392
7.5	380.819	380.819	380.819	380.819	381.333
10.0	377.216	376.702	377.731	377.731	377.216
12.5	372.585	371.555	373.099	373.099	372.585
15.0	366.924	364.865	367.439	367.439	366.924
17.5	360.234	358.175	361.263	361.263	360.748
20.0	352.515	349.942	353.029	353.544	353.029
22.5	343.766	341.193	344.795	345.310	345.310
25.0	333.988	331.930	335.017	336.047	336.561
27.5	323.696	322.152	324.725	326.784	326.784
30.0	312.889	311.345	313.918	316.491	315.977
32.5	301.053	300.023	303.626	304.655	304.140
35.0	288.702	288.187	291.789	293.333	292.304
37.5	276.865	275.836	279.439	280.468	279.953
40.0	264.000	263.485	266.573	267.602	267.088
42.5	251.135	250.105	253.193	254.222	253.708
45.0	237.240	236.725	239.813	240.327	240.327
47.5	223.345	222.830	225.404	226.947	226.433
50.0	209.450	209.450	211.509	212.538	212.538
52.5	195.556	196.070	197.099	198.643	198.643
55.0	181.146	181.661	182.690	184.234	184.234
57.5	166.737	167.251	168.281	169.825	169.310
60.0	151.813	152.327	153.871	155.415	154.901
62.5	136.889	137.918	139.462	140.491	139.977
65.0	121.965	122.994	125.053	125.567	125.053
67.5	107.041	108.070	110.129	111.158	110.643
70.0	92.117	93.661	95.719	96.749	97.263
72.5	77.193	79.251	80.795	83.883	84.398
75.0	63.298	65.357	67.415	71.017	71.532
77.5	49.404	51.462	54.550	58.152	59.181
80.0	36.023	38.596	42.714	46.830	47.860
82.5	24.187	26.760	31.906	37.053	38.082
85.0	13.380	16.468	23.158	28.304	29.333
87.5	4.117	8.748	15.439	20.585	22.129
90.0	0.000	4.632	11.836	17.497	19.556
92.5	13.509	15.965	22.105	27.017	28.246
95.0	28.246	31.930	38.889	44.211	46.667
97.5	44.620	49.941	58.947	65.088	67.953
100.0	62.632	69.591	81.871	90.058	93.743
102.5	82.690	91.696	107.251	118.713	123.626
105.0	103.977	115.029	135.088	149.825	155.556
107.5	126.082	139.591	164.152	182.573	187.895
110.0	149.415	165.380	194.854	216.550	223.099
112.5	171.930	191.579	225.965	250.117	258.713
115.0	196.491	217.778	257.485	284.912	294.327
117.5	221.053	244.386	287.778	319.298	329.123
120.0	245.205	270.994	318.479	352.865	363.509
122.5	269.357	296.784	347.135	384.795	396.667
125.0	293.509	321.754	375.380	414.678	427.368
127.5	316.842	346.316	401.988	442.515	455.614
130.0	339.766	369.240	426.140	467.485	480.585
132.5	362.281	391.345	448.246	489.591	502.690

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-S-B-8-35-FTO-ITL85165.013.IES****CANDELA TABULATION - (Cont.)**

135.0	383.158	411.404	467.895	509.240	521.930
137.5	403.626	430.643	485.497	525.205	537.895
140.0	422.865	447.836	500.643	538.713	550.585
142.5	440.468	462.573	512.924	548.538	560.000
145.0	457.661	477.310	523.977	557.544	567.778
147.5	471.988	489.591	532.164	562.865	572.690
150.0	486.316	501.053	539.532	567.368	575.556
152.5	499.006	510.877	545.263	570.234	577.193
155.0	509.649	519.883	549.357	571.462	578.012
157.5	519.474	527.251	552.632	571.053	577.193
160.0	527.661	534.211	555.088	569.825	575.556
162.5	535.029	539.532	556.725	568.187	573.509
165.0	541.170	544.444	557.544	566.550	570.234
167.5	546.082	548.538	557.953	564.094	567.368
170.0	550.175	551.813	557.544	562.047	564.503
172.5	553.041	554.678	557.544	560.409	562.047
175.0	555.497	556.316	557.544	558.772	559.181
177.5	557.135	557.135	557.135	557.953	557.953
180.0	557.544	557.544	557.544	557.544	557.544

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-S-B-8-35-FTO-ITL85165.013.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	139.82	N.A.	4.70
0-30	293.95	N.A.	10.00
0-40	475.87	N.A.	16.10
0-60	823.59	N.A.	27.90
0-80	1018.5	N.A.	34.60
0-90	1044.44	N.A.	35.40
10-90	1008.03	N.A.	34.20
20-40	336.05	N.A.	11.40
20-50	520.35	N.A.	17.70
40-70	470.78	N.A.	16.00
60-80	194.91	N.A.	6.60
70-80	71.85	N.A.	2.40
80-90	25.93	N.A.	0.90
90-110	185.01	N.A.	6.30
90-120	433.64	N.A.	14.70
90-130	761.92	N.A.	25.90
90-150	1440.09	N.A.	48.90
90-180	1902.85	N.A.	64.60
110-180	1717.84	N.A.	58.30
0-180	2947.29	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	36.40
10-20	103.42
20-30	154.13
30-40	181.92
40-50	184.30
50-60	163.42
60-70	123.06
70-80	71.85
80-90	25.93
90-100	44.26
100-110	140.75
110-120	248.63
120-130	328.28
130-140	354.40
140-150	323.77
150-160	252.11
160-170	157.44
170-180	53.21

IES INDOOR REPORT

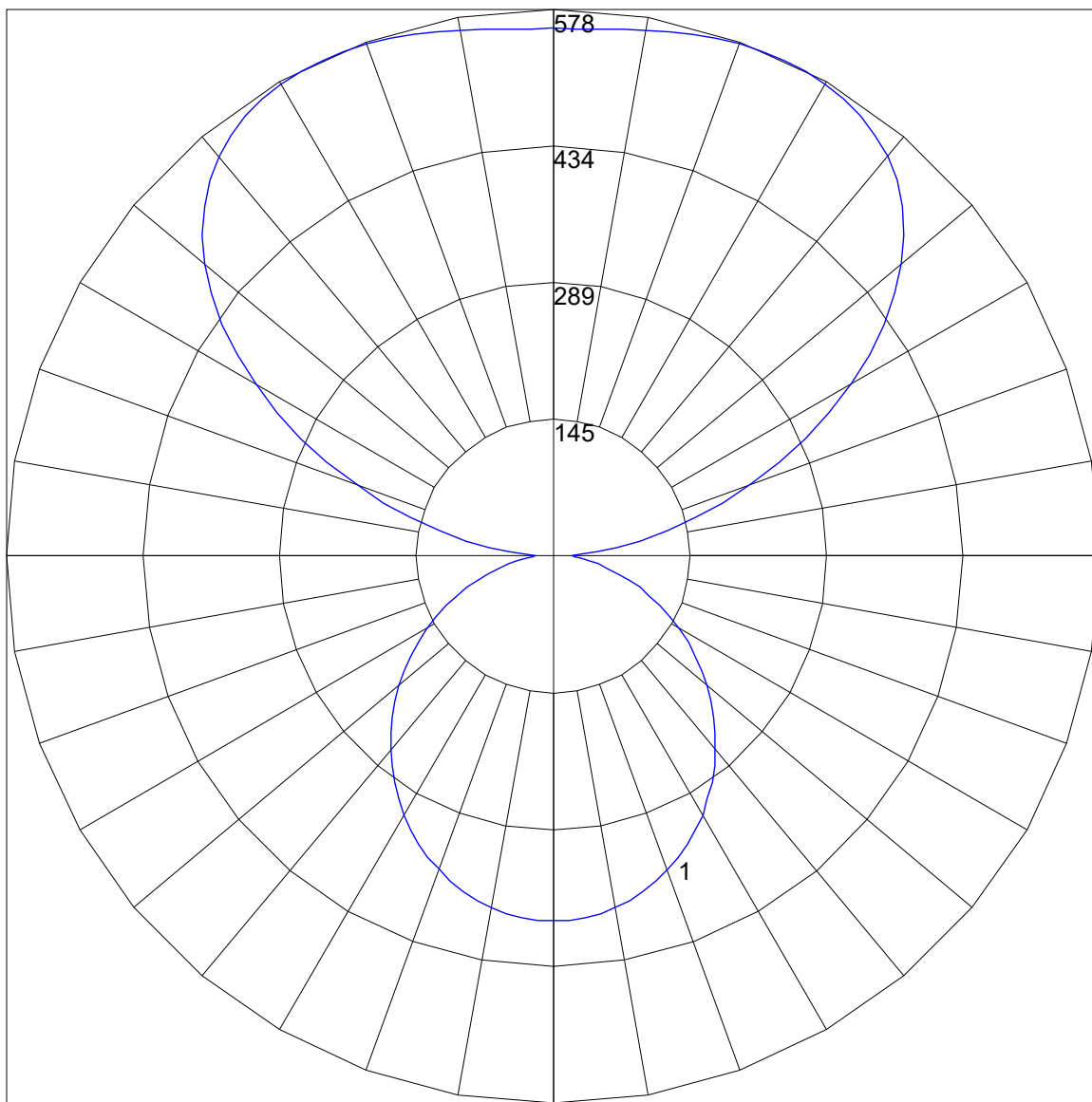
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	94	94	94	94	75	75	75	58	58	58	43	43	43	35
1	94	90	86	83	85	82	78	75	66	63	61	51	50	48	38	37	36	30
2	86	79	73	67	77	71	66	62	57	54	51	45	42	40	33	31	30	25
3	78	69	62	56	70	63	56	51	51	46	42	39	36	34	29	27	25	21
4	71	61	53	47	64	55	49	43	45	40	36	35	32	29	26	24	22	18
5	66	54	46	40	59	49	42	37	40	35	31	31	28	25	23	21	19	15
6	60	48	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17	14
7	56	44	36	30	50	40	33	28	33	27	24	26	22	19	19	17	15	12
8	52	39	32	27	47	36	29	25	30	24	21	23	20	17	18	15	13	11
9	48	36	29	24	43	33	26	22	27	22	19	22	18	15	16	14	12	10
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	13	11	9

POLAR GRAPH



Maximum Candela = 578.012 Located At Horizontal Angle = 90, Vertical Angle = 155
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)