

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-H-B-8-35-FTO-ITL85165.008.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85165.008 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-H-B-8-35-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 38.5 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 42.0 WATTS

[ABSOLUTE]LUMENS]4659

[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	4659
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	121
Total Luminaire Watts	38.5
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

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-H-B-8-35-FTO-ITL85165.008.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	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	25.667	30.333	42.000	51.333	53.667
95.0	53.667	60.667	73.889	84.000	88.667
97.5	84.778	94.889	112.000	123.667	129.111
100.0	119.000	132.222	155.556	171.111	178.111
102.5	157.111	174.222	203.778	225.556	234.889
105.0	197.556	218.556	256.667	284.667	295.555
107.5	239.556	265.222	311.889	346.889	357.000
110.0	283.889	314.222	370.222	411.445	423.889
112.5	326.667	364.000	429.333	475.222	491.555
115.0	373.333	413.778	489.222	541.333	559.222
117.5	420.000	464.333	546.778	606.667	625.333
120.0	465.889	514.889	605.111	670.444	690.667
122.5	511.778	563.889	659.556	731.111	753.667
125.0	557.667	611.333	713.222	787.889	812.000
127.5	602.000	658.000	763.778	840.778	865.667
130.0	645.556	701.556	809.667	888.222	913.111
132.5	688.333	743.556	851.667	930.222	955.111

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-H-B-8-35-FTO-ITL85165.008.IES****CANDELA TABULATION - (Cont.)**

135.0	728.000	781.667	889.000	967.556	991.667
137.5	766.889	818.222	922.444	997.889	1022.000
140.0	803.444	850.889	951.222	1023.556	1046.111
142.5	836.889	878.889	974.556	1042.222	1064.000
145.0	869.556	906.889	995.556	1059.333	1078.778
147.5	896.778	930.222	1011.111	1069.445	1088.111
150.0	924.000	952.000	1025.111	1078.000	1093.555
152.5	948.111	970.667	1036.000	1083.445	1096.667
155.0	968.333	987.778	1043.778	1085.778	1098.222
157.5	987.000	1001.778	1050.000	1085.000	1096.667
160.0	1002.556	1015.000	1054.667	1082.667	1093.555
162.5	1016.556	1025.111	1057.778	1079.555	1089.667
165.0	1028.222	1034.445	1059.333	1076.445	1083.445
167.5	1037.555	1042.222	1060.111	1071.778	1078.000
170.0	1045.333	1048.445	1059.333	1067.889	1072.555
172.5	1050.778	1053.889	1059.333	1064.778	1067.889
175.0	1055.445	1057.000	1059.333	1061.667	1062.445
177.5	1058.555	1058.555	1058.555	1060.111	1060.111
180.0	1059.333	1059.333	1059.333	1059.333	1059.333

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-H-B-8-35-FTO-ITL85165.008.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	139.82	N.A.	3.00
0-30	293.95	N.A.	6.30
0-40	475.87	N.A.	10.20
0-60	823.59	N.A.	17.70
0-80	1018.5	N.A.	21.90
0-90	1044.44	N.A.	22.40
10-90	1008.03	N.A.	21.60
20-40	336.05	N.A.	7.20
20-50	520.35	N.A.	11.20
40-70	470.78	N.A.	10.10
60-80	194.91	N.A.	4.20
70-80	71.85	N.A.	1.50
80-90	25.93	N.A.	0.60
90-110	350.17	N.A.	7.50
90-120	822.56	N.A.	17.70
90-130	1446.29	N.A.	31.00
90-150	2734.82	N.A.	58.70
90-180	3614.07	N.A.	77.60
110-180	3263.9	N.A.	70.10
0-180	4658.5	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	82.75
100-110	267.42
110-120	472.39
120-130	623.73
130-140	673.36
140-150	615.16
150-160	479.01
160-170	299.13
170-180	101.10

IES INDOOR REPORT

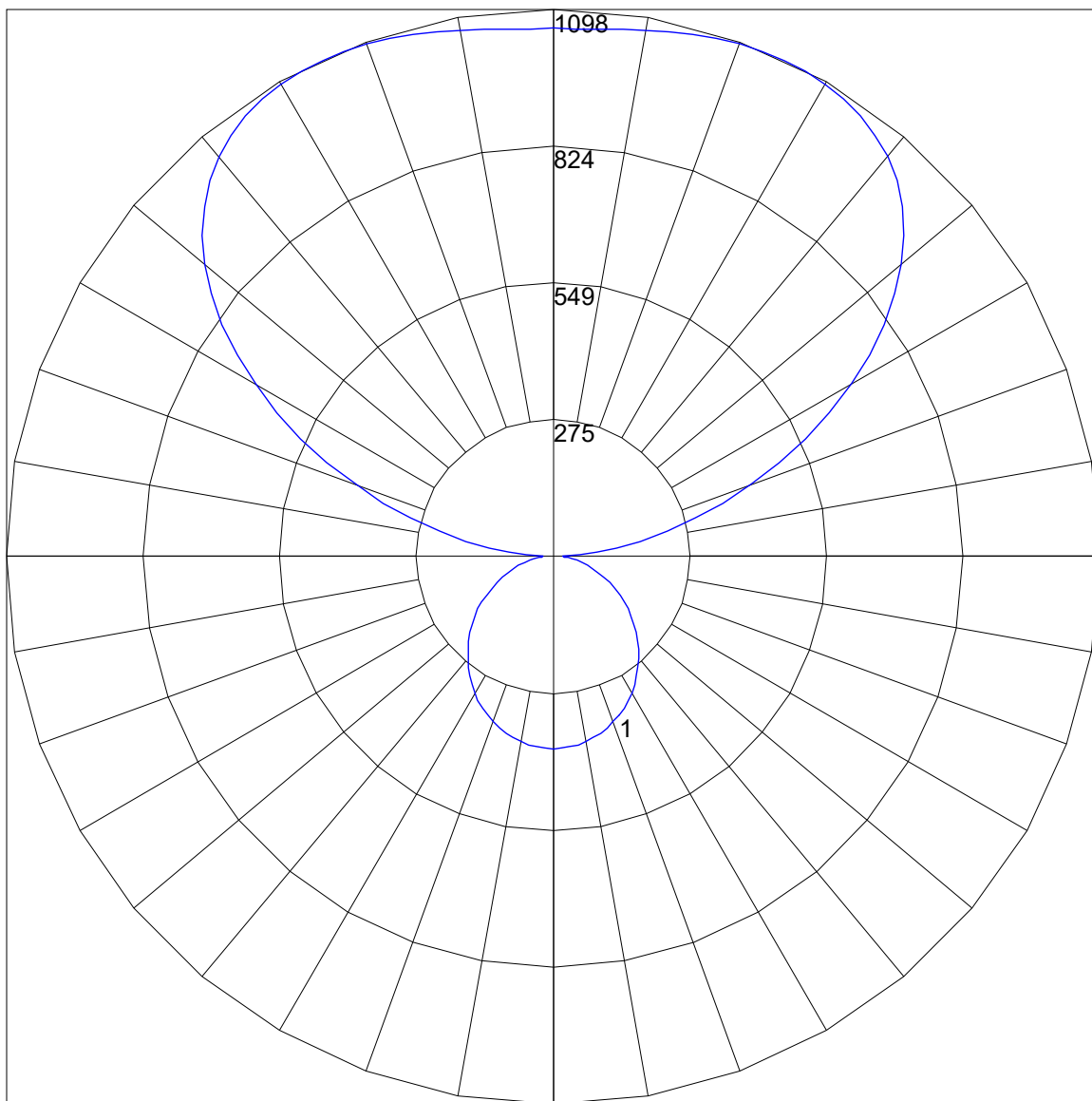
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	22
1	92	87	84	80	81	78	74	72	59	57	55	42	41	40	27	26	26	19
2	83	76	70	65	74	68	63	59	52	49	46	37	35	33	24	23	22	16
3	76	67	60	54	67	59	54	49	46	42	38	33	30	28	21	20	18	13
4	69	59	51	46	61	53	46	41	40	36	32	29	26	24	19	17	16	11
5	63	52	45	39	56	47	40	35	36	31	28	26	23	21	17	15	14	10
6	58	47	39	33	51	42	35	30	32	28	24	23	20	18	15	13	12	9
7	54	42	34	29	47	38	31	26	29	24	21	21	18	16	14	12	11	8
8	50	38	31	25	44	34	28	23	26	22	18	19	16	14	13	11	9	7
9	46	34	27	22	41	31	25	20	24	20	16	18	15	12	12	10	8	6
10	43	31	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8	6

POLAR GRAPH



Maximum Candela = 1098.222 Located At Horizontal Angle = 90, Vertical Angle = 155
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)