

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-S-8-35-FTO-ITL85165.007.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85165.007 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-S-8-35-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 36.5 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 39.8 WATTS

[ABSOLUTE]LUMENS]4445

[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	4445
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	122
Total Luminaire Watts	36.5
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	2347	2244	2210
55	2200	2052	2021
65	1997	1826	1765
75	1668	1470	1479
85	979	1061	1200

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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	306.608	306.608	306.608	306.608	306.608
2.5	306.199	306.199	306.199	306.199	306.199
5.0	304.561	304.971	304.971	304.971	304.971
7.5	302.924	302.924	302.924	302.924	303.333
10.0	300.058	299.649	300.468	300.468	300.058
12.5	296.374	295.555	296.784	296.784	296.374
15.0	291.871	290.234	292.281	292.281	291.871
17.5	286.550	284.912	287.368	287.368	286.959
20.0	280.409	278.363	280.819	281.228	280.819
22.5	273.450	271.404	274.269	274.678	274.678
25.0	265.673	264.035	266.491	267.310	267.719
27.5	257.485	256.257	258.304	259.942	259.942
30.0	248.889	247.661	249.708	251.754	251.345
32.5	239.474	238.655	241.520	242.339	241.930
35.0	229.649	229.240	232.105	233.333	232.515
37.5	220.234	219.415	222.281	223.099	222.690
40.0	210.000	209.591	212.047	212.865	212.456
42.5	199.766	198.947	201.404	202.222	201.813
45.0	188.714	188.304	190.760	191.170	191.170
47.5	177.661	177.251	179.298	180.526	180.117
50.0	166.608	166.608	168.246	169.064	169.064
52.5	155.556	155.965	156.784	158.012	158.012
55.0	144.094	144.503	145.322	146.550	146.550
57.5	132.632	133.041	133.860	135.088	134.678
60.0	120.760	121.170	122.398	123.626	123.216
62.5	108.889	109.708	110.936	111.754	111.345
65.0	97.017	97.836	99.474	99.883	99.474
67.5	85.146	85.965	87.602	88.421	88.012
70.0	73.275	74.503	76.140	76.959	77.368
72.5	61.404	63.041	64.269	66.725	67.135
75.0	50.351	51.988	53.626	56.491	56.901
77.5	39.298	40.936	43.392	46.257	47.076
80.0	28.655	30.702	33.977	37.252	38.070
82.5	19.240	21.287	25.380	29.474	30.292
85.0	10.643	13.099	18.421	22.515	23.333
87.5	3.275	6.959	12.281	16.374	17.602
90.0	0.000	3.684	9.415	13.918	15.556
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-S-8-35-FTO-ITL85165.007.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-S-8-35-FTO-ITL85165.007.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	111.22	N.A.	2.50
0-30	233.82	N.A.	5.30
0-40	378.53	N.A.	8.50
0-60	655.13	N.A.	14.70
0-80	810.17	N.A.	18.20
0-90	830.80	N.A.	18.70
10-90	801.84	N.A.	18.00
20-40	267.31	N.A.	6.00
20-50	413.91	N.A.	9.30
40-70	374.48	N.A.	8.40
60-80	155.04	N.A.	3.50
70-80	57.16	N.A.	1.30
80-90	20.63	N.A.	0.50
90-110	349.86	N.A.	7.90
90-120	822.26	N.A.	18.50
90-130	1445.99	N.A.	32.50
90-150	2734.52	N.A.	61.50
90-180	3613.76	N.A.	81.30
110-180	3263.9	N.A.	73.40
0-180	4444.56	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	28.96
10-20	82.26
20-30	122.60
30-40	144.71
40-50	146.60
50-60	130.00
60-70	97.89
70-80	57.16
80-90	20.63
90-100	82.44
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

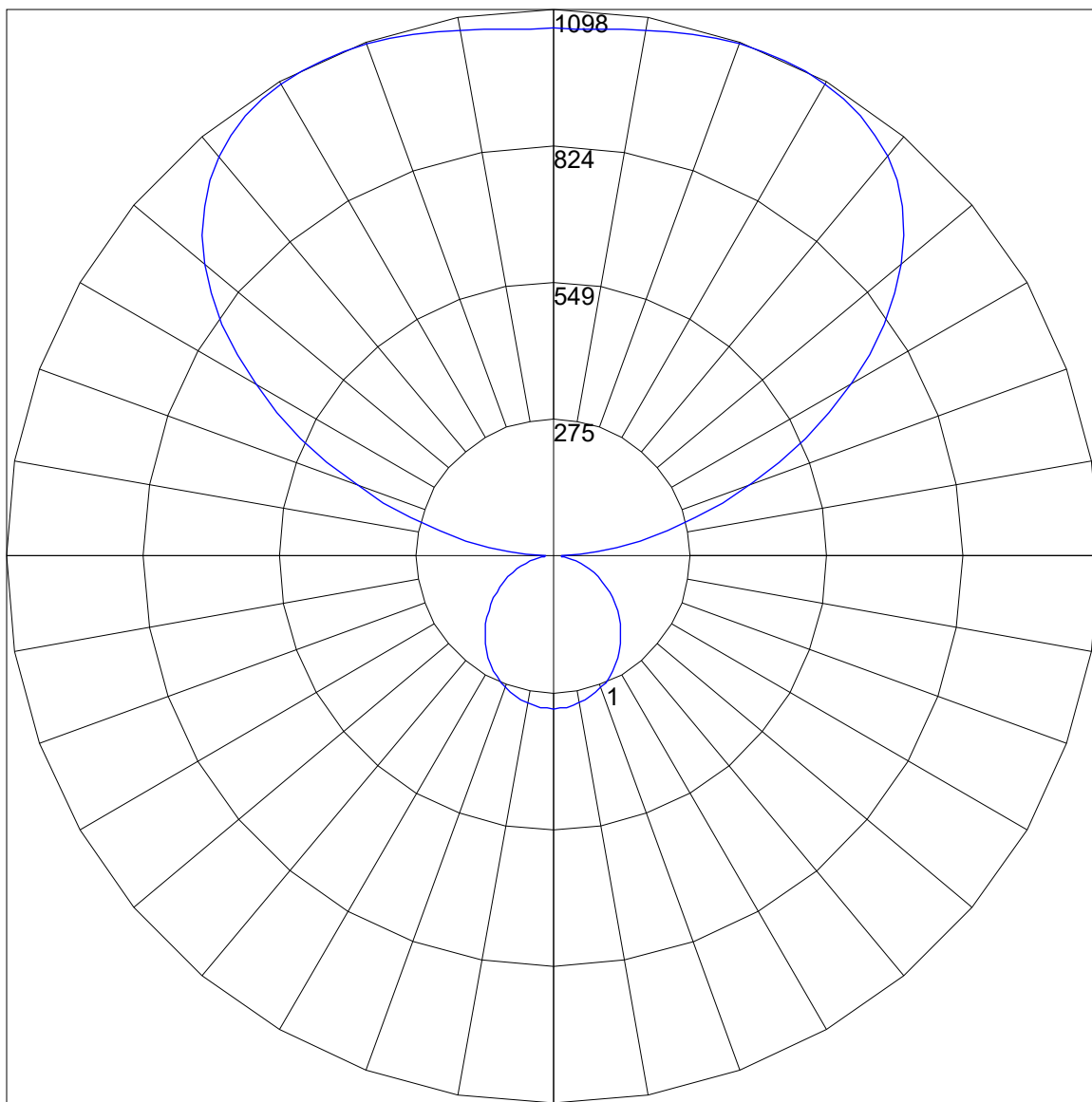
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	100	100	100	100	88	88	88	88	66	66	66	46	46	46	27	27	27	19
1	91	87	83	79	80	76	73	71	57	55	54	40	39	38	24	23	23	16
2	83	75	70	65	72	67	62	58	50	47	44	35	33	31	21	20	19	13
3	75	66	59	54	66	59	53	48	44	40	37	31	29	26	19	17	16	11
4	69	58	51	45	60	52	45	41	39	35	31	27	25	23	17	15	14	9
5	63	52	44	38	55	46	39	35	35	30	27	25	22	19	15	13	12	8
6	58	46	39	33	51	41	35	30	31	27	23	22	19	17	13	12	11	7
7	53	42	34	29	47	37	30	26	28	24	20	20	17	15	12	11	9	6
8	49	38	30	25	43	33	27	23	26	21	18	18	15	13	11	10	8	6
9	46	34	27	22	40	30	24	20	23	19	16	17	14	12	10	9	7	5
10	42	31	24	20	37	28	22	18	21	17	14	15	12	10	10	8	7	5

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.)