

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-B-S-8-35-FTO-ITL85165.010.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85165.010 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-B-S-8-35-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 26.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 30.3 WATTS

[ABSOLUTE]LUMENS]3222

[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	3222
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	121
Total Luminaire Watts	26.6
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	16.983	20.070	27.790	33.965	35.509
95.0	35.509	40.140	48.889	55.579	58.667
97.5	56.094	62.784	74.105	81.825	85.427
100.0	78.737	87.485	102.924	113.216	117.848
102.5	103.953	115.275	134.830	149.240	155.415
105.0	130.714	144.608	169.825	188.351	195.556
107.5	158.503	175.485	206.363	229.520	236.210
110.0	187.836	207.906	244.959	272.234	280.468
112.5	216.140	240.842	284.070	314.433	325.240
115.0	247.018	273.778	323.696	358.175	370.012
117.5	277.895	307.228	361.778	401.404	413.754
120.0	308.257	340.678	400.374	443.602	456.983
122.5	338.620	373.099	436.398	483.743	498.667
125.0	368.983	404.491	471.906	521.310	537.263
127.5	398.316	435.368	505.357	556.304	572.772
130.0	427.135	464.187	535.719	587.696	604.164
132.5	455.439	491.977	563.509	615.485	631.953

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-B-S-8-35-FTO-ITL85165.010.IES****CANDELA TABULATION - (Cont.)**

135.0	481.684	517.193	588.211	640.187	656.140
137.5	507.415	541.380	610.339	660.257	676.211
140.0	531.602	562.994	629.380	677.240	692.164
142.5	553.731	581.520	644.819	689.591	704.000
145.0	575.345	600.047	658.713	700.912	713.778
147.5	593.357	615.485	669.006	707.602	719.953
150.0	611.368	629.895	678.269	713.263	723.556
152.5	627.322	642.246	685.474	716.865	725.614
155.0	640.702	653.567	690.620	718.409	726.643
157.5	653.053	662.830	694.737	717.895	725.614
160.0	663.345	671.579	697.825	716.351	723.556
162.5	672.608	678.269	699.883	714.292	720.982
165.0	680.327	684.444	700.912	712.234	716.865
167.5	686.503	689.591	701.427	709.146	713.263
170.0	691.649	693.708	700.912	706.573	709.661
172.5	695.251	697.310	700.912	704.515	706.573
175.0	698.339	699.368	700.912	702.456	702.971
177.5	700.398	700.398	700.398	701.427	701.427
180.0	700.912	700.912	700.912	700.912	700.912

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-B-S-8-35-FTO-ITL85165.010.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	111.22	N.A.	3.50
0-30	233.82	N.A.	7.30
0-40	378.53	N.A.	11.70
0-60	655.13	N.A.	20.30
0-80	810.17	N.A.	25.10
0-90	830.80	N.A.	25.80
10-90	801.84	N.A.	24.90
20-40	267.31	N.A.	8.30
20-50	413.91	N.A.	12.80
40-70	374.48	N.A.	11.60
60-80	155.04	N.A.	4.80
70-80	57.16	N.A.	1.80
80-90	20.63	N.A.	0.60
90-110	231.89	N.A.	7.20
90-120	544.45	N.A.	16.90
90-130	957.15	N.A.	29.70
90-150	1809.71	N.A.	56.20
90-180	2391.46	N.A.	74.20
110-180	2159.57	N.A.	67.00
0-180	3222.26	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	54.95
100-110	176.94
110-120	312.56
120-130	412.69
130-140	445.53
140-150	407.03
150-160	316.94
160-170	197.92
170-180	66.89

IES INDOOR REPORT

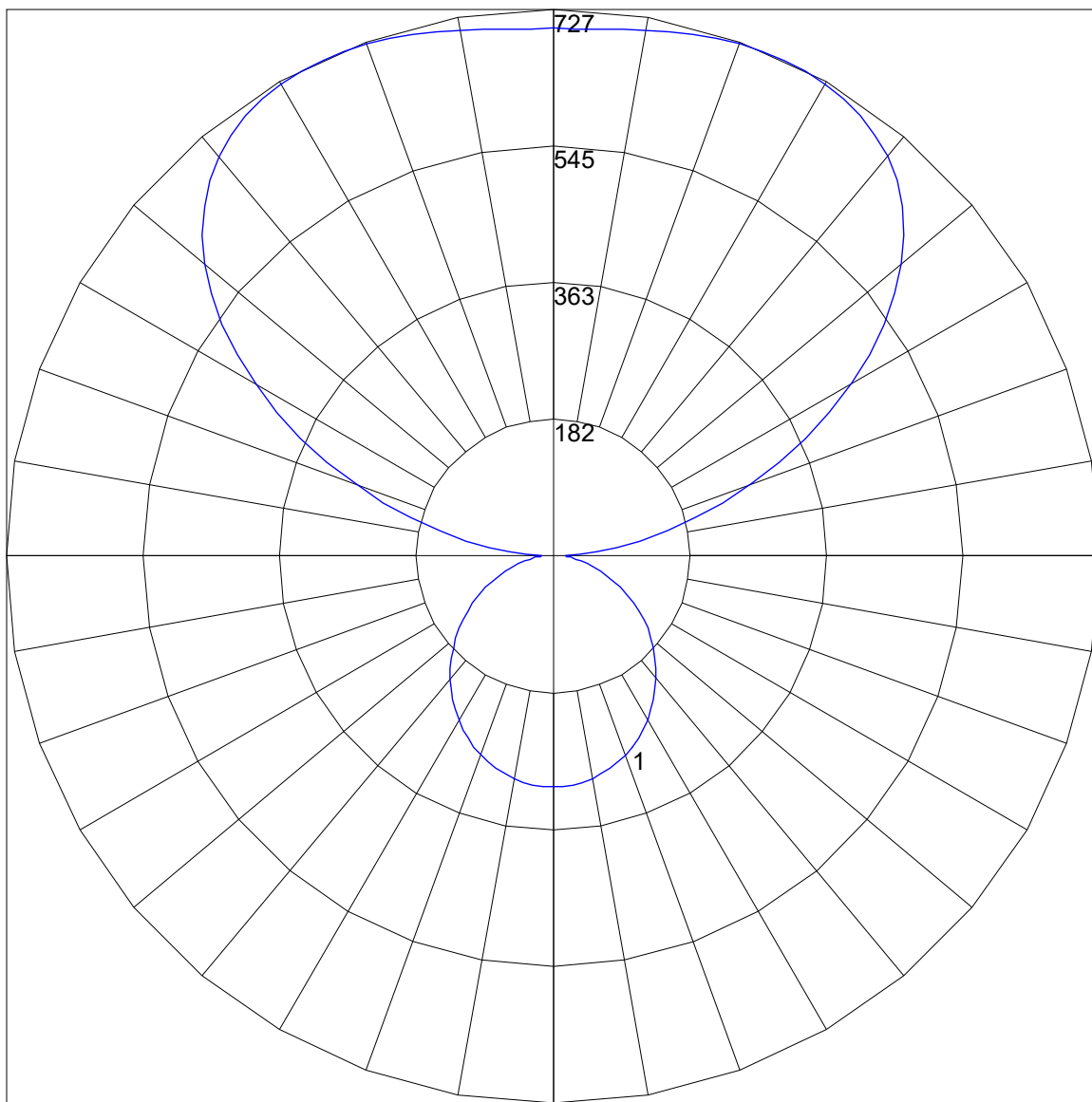
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	90	90	90	90	70	70	70	51	51	51	34	34	34	26
1	92	88	84	81	82	79	75	73	61	59	57	45	43	42	30	29	28	22
2	84	77	71	66	75	69	64	59	53	50	47	39	37	35	26	25	24	18
3	76	67	60	55	68	60	54	49	47	43	39	35	32	30	23	21	20	15
4	70	59	52	46	62	53	47	42	42	37	33	31	28	25	21	19	17	13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	17	15	11
6	59	47	39	34	52	42	36	31	33	28	25	25	21	19	17	15	13	10
7	54	42	35	29	48	38	32	27	30	25	22	22	19	17	15	13	12	9
8	50	38	31	26	45	35	28	24	27	22	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	19	15	13	13	11	9	7
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	8	6

POLAR GRAPH



Maximum Candela = 726.643 Located At Horizontal Angle = 90, Vertical Angle = 155
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)