

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-S-8-35-FTO-ITL85165.001.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85165.001 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]09/07/15

[ISSUEDATE]04/27/16

[MANUFAC]FINELITE, INC.

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

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 22.8 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 26.4 WATTS

[ABSOLUTE]LUMENS]2733

[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	2733
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
Total Luminaire Watts	22.8
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	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	295.556	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	188.713	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	97.018	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	37.251	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	13.509	15.965	22.105	27.018	28.246
95.0	28.246	31.930	38.889	44.211	46.667
97.5	44.620	49.942	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	318.480	352.865	363.509
122.5	269.357	296.784	347.134	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-S-8-35-FTO-ITL85165.001.IES****CANDELA TABULATION - (Cont.)**

135.0	383.158	411.403	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	557.134	557.134	557.134	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-S-8-35-FTO-ITL85165.001.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	111.22	N.A.	4.10
0-30	233.82	N.A.	8.60
0-40	378.53	N.A.	13.80
0-60	655.13	N.A.	24.00
0-80	810.17	N.A.	29.60
0-90	830.80	N.A.	30.40
10-90	801.84	N.A.	29.30
20-40	267.31	N.A.	9.80
20-50	413.91	N.A.	15.10
40-70	374.48	N.A.	13.70
60-80	155.04	N.A.	5.70
70-80	57.16	N.A.	2.10
80-90	20.63	N.A.	0.80
90-110	184.70	N.A.	6.80
90-120	433.33	N.A.	15.90
90-130	761.61	N.A.	27.90
90-150	1439.78	N.A.	52.70
90-180	1902.54	N.A.	69.60
110-180	1717.84	N.A.	62.80
0-180	2733.35	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	43.95
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

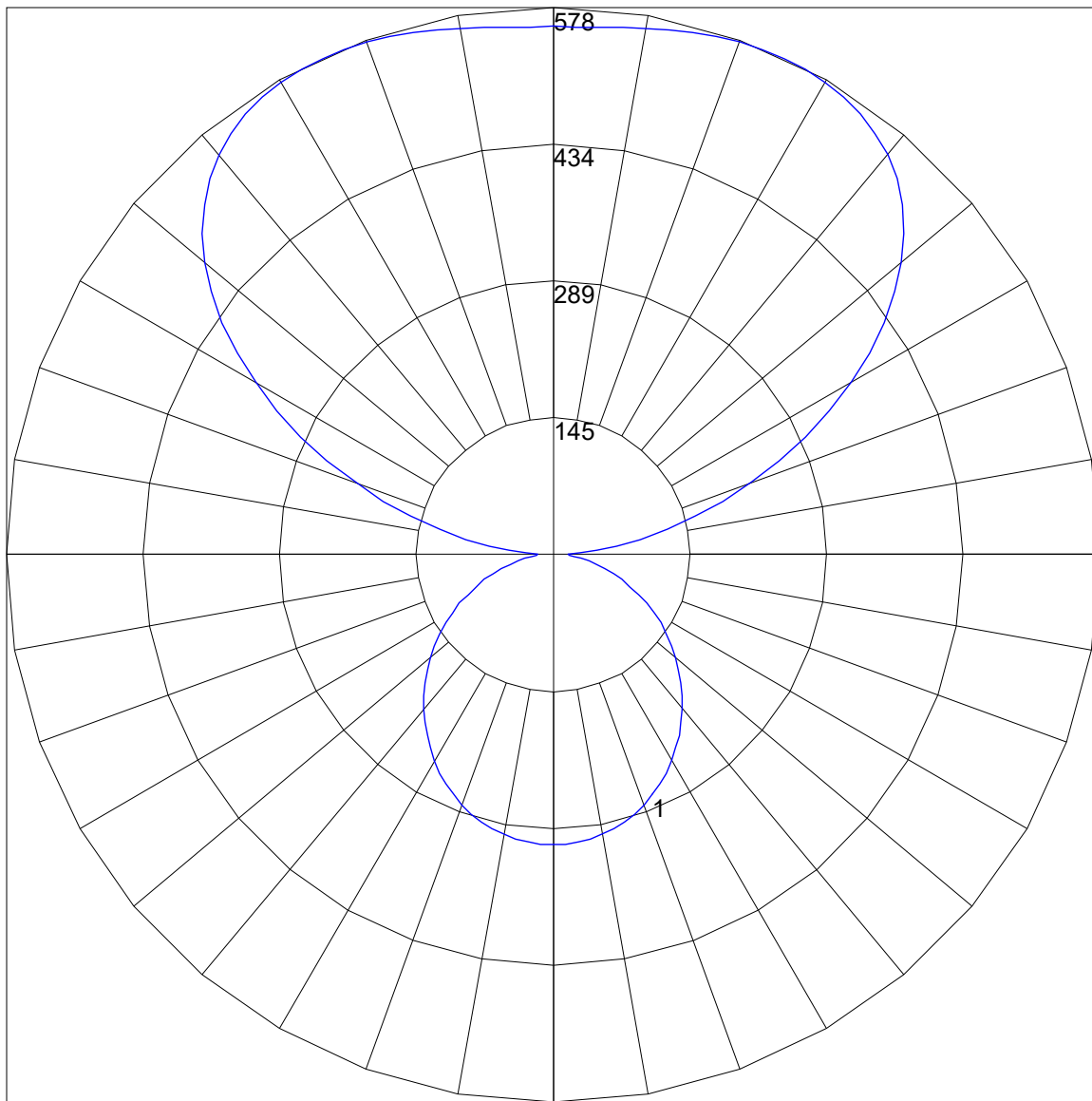
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	102	102	102	102	92	92	92	92	72	72	72	55	55	55	38	38	38	30
1	93	89	85	82	84	80	77	74	63	61	59	48	46	45	33	33	32	25
2	85	78	72	67	76	70	65	61	55	52	49	42	40	37	29	28	27	21
3	77	68	61	55	69	61	55	50	49	44	41	37	34	32	26	24	23	18
4	71	60	52	47	63	54	48	43	43	38	35	33	30	27	23	21	19	15
5	65	53	46	40	58	48	41	36	38	34	30	29	26	23	21	19	17	13
6	60	48	40	34	53	43	36	31	35	30	26	26	23	20	19	17	15	12
7	55	43	35	30	49	39	32	27	31	26	23	24	20	18	17	15	13	10
8	51	39	31	26	46	35	29	24	28	23	20	22	18	16	16	13	12	9
9	47	35	28	23	42	32	26	21	26	21	18	20	17	14	14	12	11	8
10	44	32	25	21	40	29	23	19	24	19	16	18	15	13	13	11	10	7

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.)