

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-H-8-35-FTO-ITL85165.014.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85165.014 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-H-8-35-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 30.1 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 33.6 WATTS

[ABSOLUTE]LUMENS]3482

[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	3482
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	116
Total Luminaire Watts	30.1
Ballast Factor	1.00
CIE Type	General Diffuse
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	4459	4263	4200
55	4181	3899	3839
65	3795	3469	3353
75	3170	2793	2809
85	1860	2015	2281

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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	582.556	582.556	582.556	582.556	582.556
2.5	581.778	581.778	581.778	581.778	581.778
5.0	578.667	579.444	579.444	579.444	579.444
7.5	575.556	575.556	575.556	575.556	576.333
10.0	570.111	569.333	570.889	570.889	570.111
12.5	563.111	561.556	563.889	563.889	563.111
15.0	554.556	551.444	555.333	555.333	554.556
17.5	544.444	541.333	546.000	546.000	545.222
20.0	532.778	528.889	533.556	534.333	533.556
22.5	519.556	515.667	521.111	521.889	521.889
25.0	504.778	501.667	506.333	507.889	508.667
27.5	489.222	486.889	490.778	493.889	493.889
30.0	472.889	470.555	474.445	478.333	477.555
32.5	455.000	453.445	458.889	460.445	459.667
35.0	436.333	435.555	441.000	443.333	441.778
37.5	418.445	416.889	422.333	423.889	423.111
40.0	399.000	398.222	402.889	404.445	403.667
42.5	379.555	378.000	382.667	384.222	383.445
45.0	358.555	357.778	362.445	363.222	363.222
47.5	337.555	336.778	340.667	343.000	342.222
50.0	316.555	316.555	319.667	321.222	321.222
52.5	295.555	296.333	297.889	300.222	300.222
55.0	273.778	274.555	276.111	278.445	278.445
57.5	252.000	252.778	254.333	256.667	255.889
60.0	229.444	230.222	232.556	234.889	234.111
62.5	206.889	208.444	210.778	212.333	211.556
65.0	184.333	185.889	189.000	189.778	189.000
67.5	161.778	163.333	166.444	168.000	167.222
70.0	139.222	141.556	144.667	146.222	147.000
72.5	116.667	119.778	122.111	126.778	127.556
75.0	95.667	98.778	101.889	107.333	108.111
77.5	74.667	77.778	82.444	87.889	89.444
80.0	54.444	58.333	64.556	70.778	72.333
82.5	36.556	40.444	48.222	56.000	57.556
85.0	20.222	24.889	35.000	42.778	44.333
87.5	6.222	13.222	23.333	31.111	33.444
90.0	0.000	7.000	17.889	26.444	29.556
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-H-8-35-FTO-ITL85165.014.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-H-8-35-FTO-ITL85165.014.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	211.32	N.A.	6.10
0-30	444.26	N.A.	12.80
0-40	719.22	N.A.	20.70
0-60	1244.75	N.A.	35.70
0-80	1539.33	N.A.	44.20
0-90	1578.52	N.A.	45.30
10-90	1523.5	N.A.	43.80
20-40	507.90	N.A.	14.60
20-50	786.43	N.A.	22.60
40-70	711.51	N.A.	20.40
60-80	294.58	N.A.	8.50
70-80	108.60	N.A.	3.10
80-90	39.19	N.A.	1.10
90-110	185.78	N.A.	5.30
90-120	434.40	N.A.	12.50
90-130	762.68	N.A.	21.90
90-150	1440.86	N.A.	41.40
90-180	1903.62	N.A.	54.70
110-180	1717.84	N.A.	49.30
0-180	3482.14	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	55.02
10-20	156.30
20-30	232.94
30-40	274.95
40-50	278.54
50-60	246.99
60-70	185.98
70-80	108.60
80-90	39.19
90-100	45.03
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

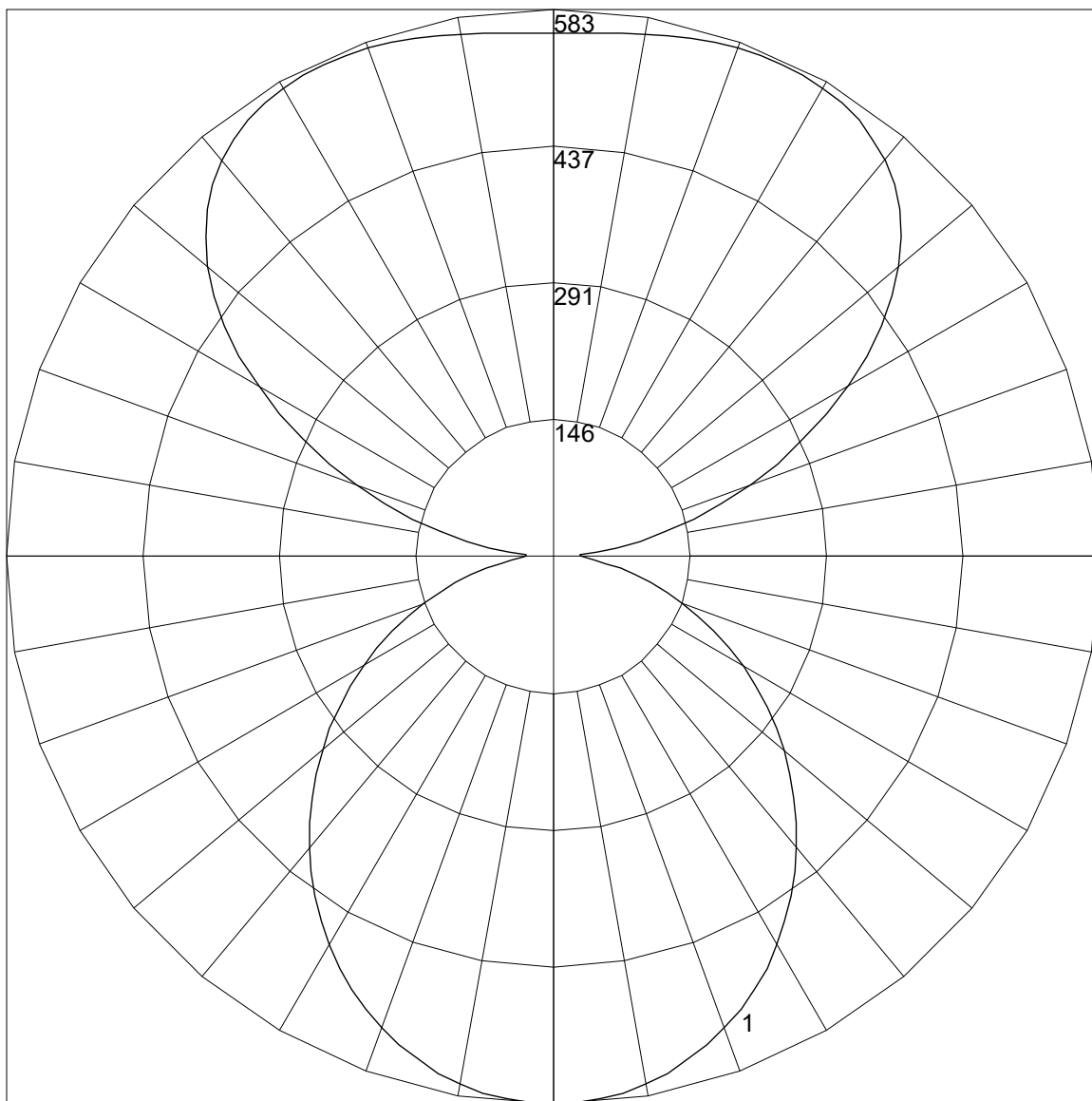
PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-S-H-8-35-FTO-ITL85165.014.IES

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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	97	92	88	85	88	85	81	78	70	68	66	57	56	54	46	44	43	38
2	88	80	74	69	80	74	69	64	62	58	54	50	48	45	40	38	36	32
3	80	71	63	57	73	65	59	53	54	50	46	44	41	38	35	33	31	27
4	73	62	54	48	67	57	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	47	41	61	51	44	39	43	38	33	35	31	28	28	25	23	20
6	62	50	42	36	56	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	31	52	41	34	29	35	30	26	29	25	22	23	20	18	15
8	53	41	33	28	48	38	31	26	32	26	23	27	22	19	22	18	16	14
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	18	16	18	15	13	11

POLAR GRAPH



Maximum Candela = 582.556 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)