

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-OPEN-ITL85163.001.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85163.001 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]09/11/15

[ISSUEDATE]04/27/16

[MANUFAC]FINELITE, INC.

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

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 22.8 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 26.4 WATTS

[ABSOLUTE]LUMENS]2894

[OTHER]see www.finelite.com for source file ITL85163. 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	2894
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	127
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	2362	2239	2206
55	2207	2046	2009
65	1997	1811	1765
75	1655	1459	1468
85	979	990	1137

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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	308.655	308.655	308.655	308.655	308.655
2.5	308.246	308.246	308.246	308.246	308.246
5.0	307.018	307.018	307.018	307.018	307.018
7.5	304.971	304.971	304.971	304.971	305.380
10.0	301.696	301.287	302.105	302.105	302.105
12.5	298.421	297.602	298.830	298.830	298.421
15.0	293.918	292.281	293.918	294.327	293.918
17.5	288.596	286.959	288.596	289.006	288.596
20.0	282.456	280.409	282.456	282.865	282.865
22.5	275.088	273.041	275.497	275.906	275.497
25.0	267.310	265.673	267.719	268.538	268.129
27.5	259.532	257.485	259.942	260.351	260.351
30.0	250.526	248.889	250.936	251.345	250.936
32.5	241.520	239.883	241.930	242.749	241.930
35.0	232.105	230.468	232.515	232.924	232.515
37.5	221.462	220.234	222.281	222.690	222.281
40.0	211.228	210.000	211.637	212.456	212.047
42.5	200.994	199.766	200.994	202.222	201.404
45.0	189.942	189.123	190.351	191.170	190.760
47.5	178.889	178.070	179.298	179.708	179.298
50.0	167.018	166.608	168.246	168.655	168.246
52.5	155.965	155.556	156.374	157.193	157.193
55.0	144.503	144.094	144.912	145.731	145.731
57.5	132.632	132.632	133.860	134.269	134.269
60.0	121.170	120.760	121.988	122.807	122.807
62.5	108.889	109.298	110.117	110.936	111.345
65.0	97.018	97.427	98.655	99.064	99.474
67.5	85.146	85.556	86.784	87.602	87.602
70.0	73.275	74.094	75.731	76.140	76.959
72.5	61.404	62.632	64.269	65.497	66.725
75.0	49.942	51.579	53.216	55.263	56.491
77.5	38.889	40.526	43.392	45.439	46.257
80.0	28.246	30.292	33.567	36.023	36.842
82.5	18.830	20.877	24.561	27.836	29.064
85.0	10.643	13.099	17.193	20.877	22.105
87.5	3.684	6.550	11.462	14.737	15.965
90.0	0.000	2.456	6.550	9.825	11.053
92.5	10.643	143.275	280.819	322.573	285.322
95.0	22.105	169.474	322.573	417.953	446.199
97.5	34.795	182.573	340.585	436.374	468.304
100.0	48.304	196.901	349.591	444.561	476.491
102.5	61.813	198.947	353.275	446.608	478.538
105.0	75.731	204.269	354.503	444.971	475.673
107.5	90.058	210.819	358.596	441.287	470.760
110.0	105.205	217.778	354.503	438.830	465.848
112.5	119.123	226.374	352.865	440.058	464.211
115.0	133.041	235.380	352.865	433.099	462.573
117.5	147.368	245.205	353.275	428.596	453.977
120.0	161.287	256.257	355.322	426.140	449.883
122.5	175.205	267.310	357.778	423.684	446.199
125.0	188.304	278.363	360.234	422.047	442.924
127.5	202.632	289.006	363.509	421.228	440.468
130.0	214.912	298.830	366.784	420.000	438.012
132.5	227.602	307.018	370.877	419.181	435.965

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-S-S-8-35-OPEN-ITL85163.001.IES****CANDELA TABULATION - (Cont.)**

135.0	239.474	313.158	374.971	418.772	434.327
137.5	250.936	318.070	379.474	418.363	432.281
140.0	262.398	322.573	384.795	418.363	430.643
142.5	273.041	326.257	388.889	418.772	429.415
145.0	282.865	328.713	392.982	419.591	428.187
147.5	292.281	330.351	395.029	420.819	428.187
150.0	300.877	331.988	394.211	421.637	428.187
152.5	309.064	333.216	391.345	421.228	427.778
155.0	316.433	335.263	387.661	417.134	425.731
157.5	322.982	337.719	381.930	410.585	420.000
160.0	328.713	339.766	375.380	402.398	411.403
162.5	334.035	342.222	368.421	392.164	401.170
165.0	338.129	343.860	361.871	380.292	388.480
167.5	341.813	345.906	357.368	368.830	375.380
170.0	344.678	347.134	354.094	360.643	364.737
172.5	346.725	348.363	352.047	355.731	357.778
175.0	348.363	349.591	350.819	352.456	353.275
177.5	349.591	350.000	350.000	350.819	350.819
180.0	350.000	350.000	350.000	350.000	350.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-S-S-8-35-OPEN-ITL85163.001.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	111.94	N.A.	3.90
0-30	235.10	N.A.	8.10
0-40	380.11	N.A.	13.10
0-60	656.42	N.A.	22.70
0-80	810.40	N.A.	28.00
0-90	829.85	N.A.	28.70
10-90	800.70	N.A.	27.70
20-40	268.17	N.A.	9.30
20-50	414.84	N.A.	14.30
40-70	373.70	N.A.	12.90
60-80	153.98	N.A.	5.30
70-80	56.59	N.A.	2.00
80-90	19.45	N.A.	0.70
90-110	603.03	N.A.	20.80
90-120	930.39	N.A.	32.10
90-130	1239.13	N.A.	42.80
90-150	1753.06	N.A.	60.60
90-180	2064.17	N.A.	71.30
110-180	1461.14	N.A.	50.50
0-180	2894.02	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	29.15
10-20	82.79
20-30	123.17
30-40	145.00
40-50	146.67
50-60	129.65
60-70	97.38
70-80	56.59
80-90	19.45
90-100	264.89
100-110	338.13
110-120	327.36
120-130	308.74
130-140	279.24
140-150	234.69
150-160	174.44
160-170	103.07
170-180	33.60

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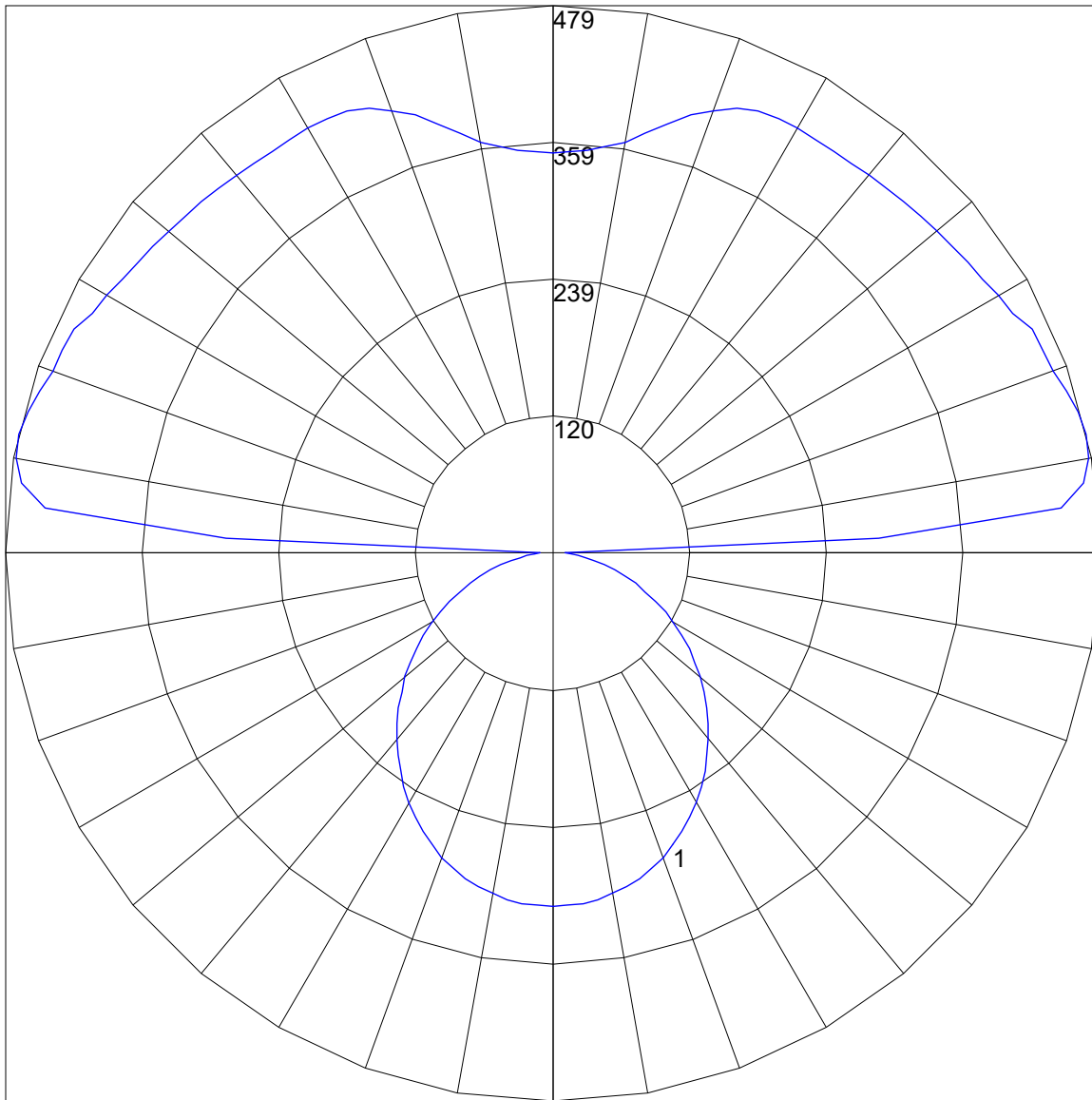
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	91	91	91	91	71	71	71	53	53	53	37	37	37	29
1	93	89	85	81	83	80	76	74	62	60	58	47	45	44	32	31	31	24
2	85	77	71	66	75	69	64	60	55	51	48	41	39	37	28	27	26	20
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	25	23	22	17
4	70	60	52	46	63	54	47	42	43	38	34	32	29	26	22	20	19	14
5	64	53	45	40	57	48	41	36	38	33	29	29	25	23	20	18	16	13
6	59	48	40	34	53	43	36	31	34	29	25	26	22	20	18	16	14	11
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	13	10
8	51	39	31	26	45	35	28	24	28	23	20	21	18	15	15	13	11	9
9	47	35	28	23	42	32	26	21	26	21	17	20	16	14	14	12	10	8
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9	7

POLAR GRAPH



Maximum Candela = 478.538 Located At Horizontal Angle = 90, Vertical Angle = 102.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)