

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-2E-B-8-TW-OPEN-ITL85161.902.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85161.902 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]09/09/15

[ISSUEDATE]04/25/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S12-LED-ID-DCO-4ft-2E-B-8-TW-OPEN

[OTHER]ies file is based on 3500K; see luminaire tech sheet at www.finelite.com for lumen adjustment factors for other CCT's & CRI

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 20.4 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 21.9 WATTS

[ABSOLUTE]LUMENS]2462

[OTHER]see www.finelite.com for source file ITL85161. 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	2462
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	121
Total Luminaire Watts	20.4
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	1773	1780	1851
55	1705	1686	1753
65	1579	1511	1570
75	1347	1227	1310
85	757	859	1059

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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	211.509	211.509	211.509	211.509	211.509
2.5	210.994	210.994	211.509	211.509	211.509
5.0	210.480	210.480	210.994	210.994	210.994
7.5	209.450	209.450	209.965	210.480	210.480
10.0	208.421	207.906	208.936	209.965	209.965
12.5	206.363	205.848	207.906	208.936	208.936
15.0	203.789	203.275	205.848	207.392	207.392
17.5	201.216	200.702	203.789	205.848	206.363
20.0	198.129	197.099	201.216	203.789	204.304
22.5	194.012	193.497	198.129	201.216	202.246
25.0	189.895	189.895	194.526	198.643	199.673
27.5	184.749	185.263	190.924	195.041	196.585
30.0	180.117	180.632	186.292	191.439	192.982
32.5	174.456	176.000	181.661	186.807	188.865
35.0	168.795	170.339	176.515	182.175	184.234
37.5	162.620	164.164	170.854	176.515	179.088
40.0	156.444	157.988	164.678	170.339	173.427
42.5	149.754	151.298	157.988	164.164	166.737
45.0	142.550	144.608	151.298	156.959	160.047
47.5	135.345	136.889	143.579	149.754	152.327
50.0	127.626	129.684	135.860	141.520	144.608
52.5	119.906	121.450	127.626	133.287	135.860
55.0	111.673	113.216	119.392	124.538	127.111
57.5	103.439	104.982	110.643	115.275	117.848
60.0	94.690	96.234	101.380	106.012	108.585
62.5	85.942	87.485	92.117	96.234	98.807
65.0	76.678	78.222	82.339	86.971	88.515
67.5	67.415	68.959	73.076	77.193	78.737
70.0	58.152	59.696	63.298	67.415	68.959
72.5	49.918	50.433	54.035	58.152	59.696
75.0	40.655	41.684	44.772	49.404	50.433
77.5	31.906	32.936	36.538	40.655	42.199
80.0	23.673	24.702	28.819	32.421	33.965
82.5	15.953	16.982	21.099	25.216	26.760
85.0	8.234	10.292	14.924	19.041	20.585
87.5	2.573	5.146	9.778	13.380	14.924
90.0	0.000	2.058	5.661	8.749	10.292
92.5	7.205	131.228	8.234	8.234	8.749
95.0	14.924	168.281	326.784	325.240	166.222
97.5	21.614	190.409	347.883	447.719	478.596
100.0	27.789	202.246	363.322	456.982	487.860
102.5	34.994	207.906	375.158	467.789	497.123
105.0	42.199	215.111	386.480	478.082	507.415
107.5	49.404	255.766	388.538	487.345	516.678
110.0	56.094	245.988	388.023	495.064	524.912
112.5	62.784	236.211	388.023	492.491	527.485
115.0	69.988	233.637	388.023	488.374	521.825
117.5	76.164	230.035	388.538	483.743	515.649
120.0	82.854	226.947	416.327	479.111	509.474
122.5	89.029	224.374	422.503	473.965	502.269
125.0	94.690	221.801	392.140	469.848	495.579
127.5	100.351	219.228	381.848	499.181	489.404
130.0	104.982	215.626	370.526	488.374	521.825
132.5	109.099	212.023	358.175	455.439	501.754

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-2E-B-8-TW-OPEN-ITL85161.902.IES****CANDELA TABULATION - (Cont.)**

135.0	112.702	207.906	346.339	438.971	466.246
137.5	116.304	203.275	333.988	421.988	450.807
140.0	119.392	198.129	321.123	404.491	431.766
142.5	121.965	192.982	307.743	385.450	411.696
145.0	124.023	187.322	293.848	366.409	390.596
147.5	126.082	181.146	279.439	347.368	369.497
150.0	127.111	174.971	264.515	327.298	347.883
152.5	128.140	168.795	249.591	306.713	326.269
155.0	129.170	162.620	233.637	285.614	302.596
157.5	129.684	156.444	217.684	264.515	279.953
160.0	130.199	151.298	202.246	242.901	256.795
162.5	130.713	145.637	186.807	221.801	233.123
165.0	130.713	141.006	172.398	200.187	209.450
167.5	130.713	137.404	160.047	180.117	187.322
170.0	130.199	134.316	148.211	162.620	167.251
172.5	130.199	131.743	139.462	147.696	150.269
175.0	130.199	130.199	133.287	136.374	137.404
177.5	130.199	130.199	130.199	130.713	131.228
180.0	130.199	130.199	130.199	130.199	130.199

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-2E-B-8-TW-OPEN-ITL85161.902.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	78.17	N.A.	3.20
0-30	167.79	N.A.	6.80
0-40	278.07	N.A.	11.30
0-60	500.82	N.A.	20.30
0-80	630.65	N.A.	25.60
0-90	647.56	N.A.	26.30
10-90	627.50	N.A.	25.50
20-40	199.90	N.A.	8.10
20-50	316.27	N.A.	12.80
40-70	304.42	N.A.	12.40
60-80	129.82	N.A.	5.30
70-80	48.16	N.A.	2.00
80-90	16.92	N.A.	0.70
90-110	560.18	N.A.	22.80
90-120	909.79	N.A.	37.00
90-130	1223.52	N.A.	49.70
90-150	1647.25	N.A.	66.90
90-180	1814.48	N.A.	73.70
110-180	1254.31	N.A.	50.90
0-180	2462.05	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	20.06
10-20	58.10
20-30	89.62
30-40	110.28
40-50	116.37
50-60	106.39
60-70	81.67
70-80	48.16
80-90	16.92
90-100	200.90
100-110	359.27
110-120	349.61
120-130	313.73
130-140	249.77
140-150	173.96
150-160	104.60
160-170	49.40
170-180	13.23

IES INDOOR REPORT

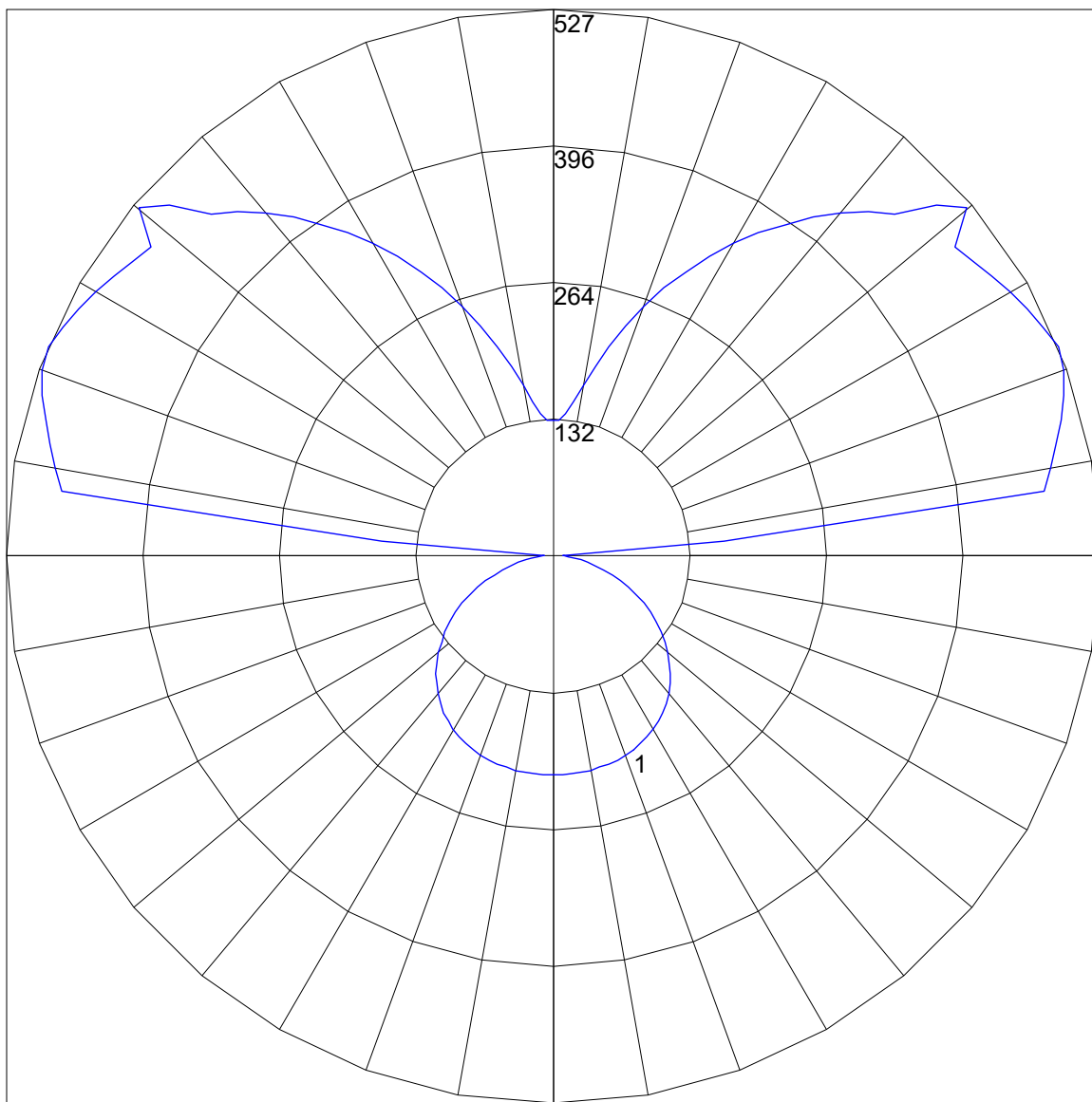
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	91	91	91	91	70	70	70	52	52	52	34	34	34	26
1	92	88	84	81	82	79	75	73	61	59	57	45	44	42	30	29	29	22
2	84	77	71	66	75	69	64	59	53	50	47	39	37	35	26	25	24	18
3	76	67	60	54	68	60	54	49	47	43	39	35	32	29	23	21	20	15
4	70	59	52	46	62	53	47	41	41	37	33	31	28	25	21	19	17	13
5	64	53	45	39	57	47	40	35	37	32	28	27	24	22	18	16	15	11
6	59	47	39	33	52	42	35	30	33	28	24	25	21	19	17	15	13	10
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11	8
8	50	38	31	25	44	34	28	23	27	22	19	20	17	14	14	12	10	8
9	46	35	27	22	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	28	22	18	23	18	15	17	14	12	12	10	8	6

POLAR GRAPH



Maximum Candela = 527.485 Located At Horizontal Angle = 90, Vertical Angle = 112.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)