

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-V-B-8-TW-FTO-ITL85165.905.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85165.905 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-V-B-8-TW-FTO

[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, 51.8 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 55.0 WATTS

[ABSOLUTE]LUMENS]5691

[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	5691
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
Total Luminaire Watts	51.8
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	2950	2821	2779
55	2766	2580	2540
65	2511	2295	2219
75	2097	1848	1859
85	1230	1333	1509

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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	385.450	385.450	385.450	385.450	385.450
2.5	384.936	384.936	384.936	384.936	384.936
5.0	382.877	383.392	383.392	383.392	383.392
7.5	380.819	380.819	380.819	380.819	381.333
10.0	377.216	376.702	377.731	377.731	377.216
12.5	372.585	371.555	373.099	373.099	372.585
15.0	366.924	364.865	367.439	367.439	366.924
17.5	360.234	358.175	361.263	361.263	360.748
20.0	352.515	349.942	353.029	353.544	353.029
22.5	343.766	341.193	344.795	345.310	345.310
25.0	333.988	331.930	335.017	336.047	336.561
27.5	323.696	322.152	324.725	326.784	326.784
30.0	312.889	311.345	313.918	316.491	315.977
32.5	301.053	300.023	303.626	304.655	304.140
35.0	288.702	288.187	291.789	293.333	292.304
37.5	276.865	275.836	279.439	280.468	279.953
40.0	264.000	263.485	266.573	267.602	267.088
42.5	251.135	250.105	253.193	254.222	253.708
45.0	237.240	236.725	239.813	240.327	240.327
47.5	223.345	222.830	225.404	226.947	226.433
50.0	209.450	209.450	211.509	212.538	212.538
52.5	195.556	196.070	197.099	198.643	198.643
55.0	181.146	181.661	182.690	184.234	184.234
57.5	166.737	167.251	168.281	169.825	169.310
60.0	151.813	152.327	153.871	155.415	154.901
62.5	136.889	137.918	139.462	140.491	139.977
65.0	121.965	122.994	125.053	125.567	125.053
67.5	107.041	108.070	110.129	111.158	110.643
70.0	92.117	93.661	95.719	96.749	97.263
72.5	77.193	79.251	80.795	83.883	84.398
75.0	63.298	65.357	67.415	71.017	71.532
77.5	49.404	51.462	54.550	58.152	59.181
80.0	36.023	38.596	42.714	46.830	47.860
82.5	24.187	26.760	31.906	37.053	38.082
85.0	13.380	16.468	23.158	28.304	29.333
87.5	4.117	8.748	15.439	20.585	22.129
90.0	0.000	4.632	11.836	17.497	19.556
92.5	33.000	39.000	54.000	66.000	69.000
95.0	69.000	78.000	95.000	108.000	114.000
97.5	109.000	122.000	144.000	159.000	166.000
100.0	153.000	170.000	200.000	220.000	229.000
102.5	202.000	224.000	262.000	290.000	302.000
105.0	254.000	281.000	330.000	366.000	380.000
107.5	308.000	341.000	401.000	446.000	459.000
110.0	365.000	404.000	476.000	529.000	545.000
112.5	420.000	468.000	552.000	611.000	632.000
115.0	480.000	532.000	629.000	696.000	719.000
117.5	540.000	597.000	703.000	780.000	804.000
120.0	599.000	662.000	778.000	862.000	888.000
122.5	658.000	725.000	848.000	940.000	969.000
125.0	717.000	786.000	917.000	1013.000	1044.000
127.5	774.000	846.000	982.000	1081.000	1113.000
130.0	830.000	902.000	1041.000	1142.000	1174.000
132.5	885.000	956.000	1095.000	1196.000	1228.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-V-B-8-TW-FTO-ITL85165.905.IES****CANDELA TABULATION - (Cont.)**

135.0	936.000	1005.000	1143.000	1244.000	1275.000
137.5	986.000	1052.000	1186.000	1283.000	1314.000
140.0	1033.000	1094.000	1223.000	1316.000	1345.000
142.5	1076.000	1130.000	1253.000	1340.000	1368.000
145.0	1118.000	1166.000	1280.000	1362.000	1387.000
147.5	1153.000	1196.000	1300.000	1375.000	1399.000
150.0	1188.000	1224.000	1318.000	1386.000	1406.000
152.5	1219.000	1248.000	1332.000	1393.000	1410.000
155.0	1245.000	1270.000	1342.000	1396.000	1412.000
157.5	1269.000	1288.000	1350.000	1395.000	1410.000
160.0	1289.000	1305.000	1356.000	1392.000	1406.000
162.5	1307.000	1318.000	1360.000	1388.000	1401.000
165.0	1322.000	1330.000	1362.000	1384.000	1393.000
167.5	1334.000	1340.000	1363.000	1378.000	1386.000
170.0	1344.000	1348.000	1362.000	1373.000	1379.000
172.5	1351.000	1355.000	1362.000	1369.000	1373.000
175.0	1357.000	1359.000	1362.000	1365.000	1366.000
177.5	1361.000	1361.000	1361.000	1363.000	1363.000
180.0	1362.000	1362.000	1362.000	1362.000	1362.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-V-B-8-TW-FTO-ITL85165.905.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	139.82	N.A.	2.50
0-30	293.95	N.A.	5.20
0-40	475.87	N.A.	8.40
0-60	823.59	N.A.	14.50
0-80	1018.5	N.A.	17.90
0-90	1044.44	N.A.	18.40
10-90	1008.03	N.A.	17.70
20-40	336.05	N.A.	5.90
20-50	520.35	N.A.	9.10
40-70	470.78	N.A.	8.30
60-80	194.91	N.A.	3.40
70-80	71.85	N.A.	1.30
80-90	25.93	N.A.	0.50
90-110	449.79	N.A.	7.90
90-120	1057.15	N.A.	18.60
90-130	1859.09	N.A.	32.70
90-150	3515.77	N.A.	61.80
90-180	4646.23	N.A.	81.60
110-180	4196.44	N.A.	73.70
0-180	5690.66	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	36.40
10-20	103.42
20-30	154.13
30-40	181.92
40-50	184.30
50-60	163.42
60-70	123.06
70-80	71.85
80-90	25.93
90-100	105.96
100-110	343.83
110-120	607.36
120-130	801.94
130-140	865.75
140-150	790.93
150-160	615.87
160-170	384.60
170-180	129.99

IES INDOOR REPORT

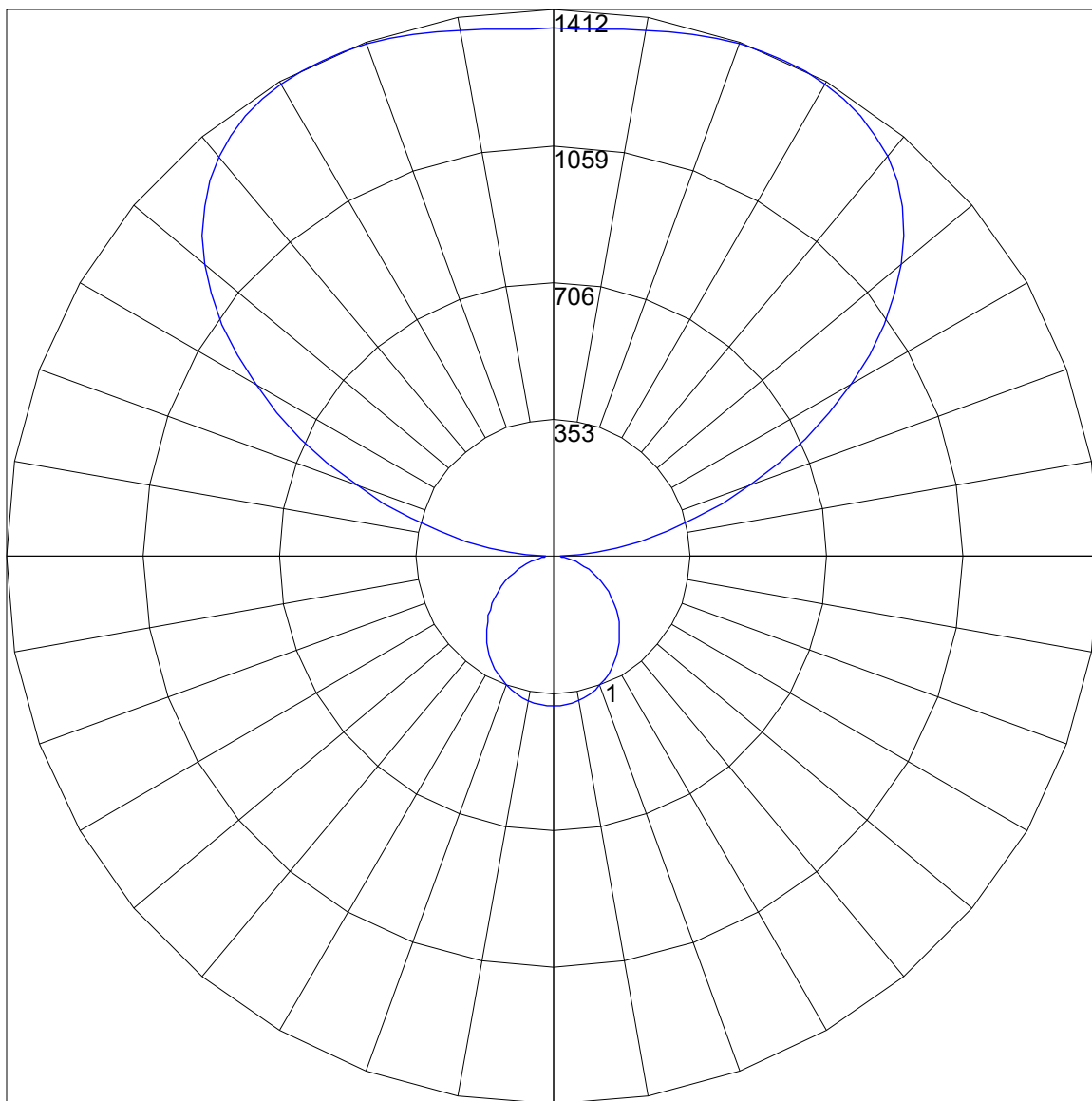
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	100	100	100	100	88	88	88	88	66	66	66	46	46	46	27	27	27	18
1	91	86	83	79	80	76	73	70	57	55	54	40	39	38	24	23	23	15
2	82	75	70	65	72	67	62	58	50	47	44	35	33	31	21	20	19	13
3	75	66	59	54	66	58	53	48	44	40	37	31	28	26	18	17	16	11
4	69	58	51	45	60	52	45	40	39	35	31	27	25	22	16	15	14	9
5	63	52	44	38	55	46	39	35	35	30	27	24	22	19	15	13	12	8
6	58	46	39	33	51	41	34	30	31	27	23	22	19	17	13	12	10	7
7	53	42	34	29	47	37	30	26	28	24	20	20	17	15	12	10	9	6
8	49	37	30	25	43	33	27	23	25	21	18	18	15	13	11	9	8	6
9	46	34	27	22	40	30	24	20	23	19	16	16	14	12	10	9	7	5
10	42	31	24	20	37	28	22	18	21	17	14	15	12	10	9	8	7	5

POLAR GRAPH



Maximum Candela = 1412 Located At Horizontal Angle = 90, Vertical Angle = 155
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)