

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-S-8-35-FTO-ITL85165.004.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85165.004 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-S-8-35-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 45.1 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 47.8 WATTS

[ABSOLUTE]LUMENS]5477

[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	5477
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	121
Total Luminaire Watts	45.1
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	295.555	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	188.714	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	97.017	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	37.252	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	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-S-8-35-FTO-ITL85165.004.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-S-8-35-FTO-ITL85165.004.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	111.22	N.A.	2.00
0-30	233.82	N.A.	4.30
0-40	378.53	N.A.	6.90
0-60	655.13	N.A.	12.00
0-80	810.17	N.A.	14.80
0-90	830.80	N.A.	15.20
10-90	801.84	N.A.	14.60
20-40	267.31	N.A.	4.90
20-50	413.91	N.A.	7.60
40-70	374.48	N.A.	6.80
60-80	155.04	N.A.	2.80
70-80	57.16	N.A.	1.00
80-90	20.63	N.A.	0.40
90-110	449.48	N.A.	8.20
90-120	1056.85	N.A.	19.30
90-130	1858.79	N.A.	33.90
90-150	3515.47	N.A.	64.20
90-180	4645.92	N.A.	84.80
110-180	4196.44	N.A.	76.60
0-180	5476.72	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	105.65
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

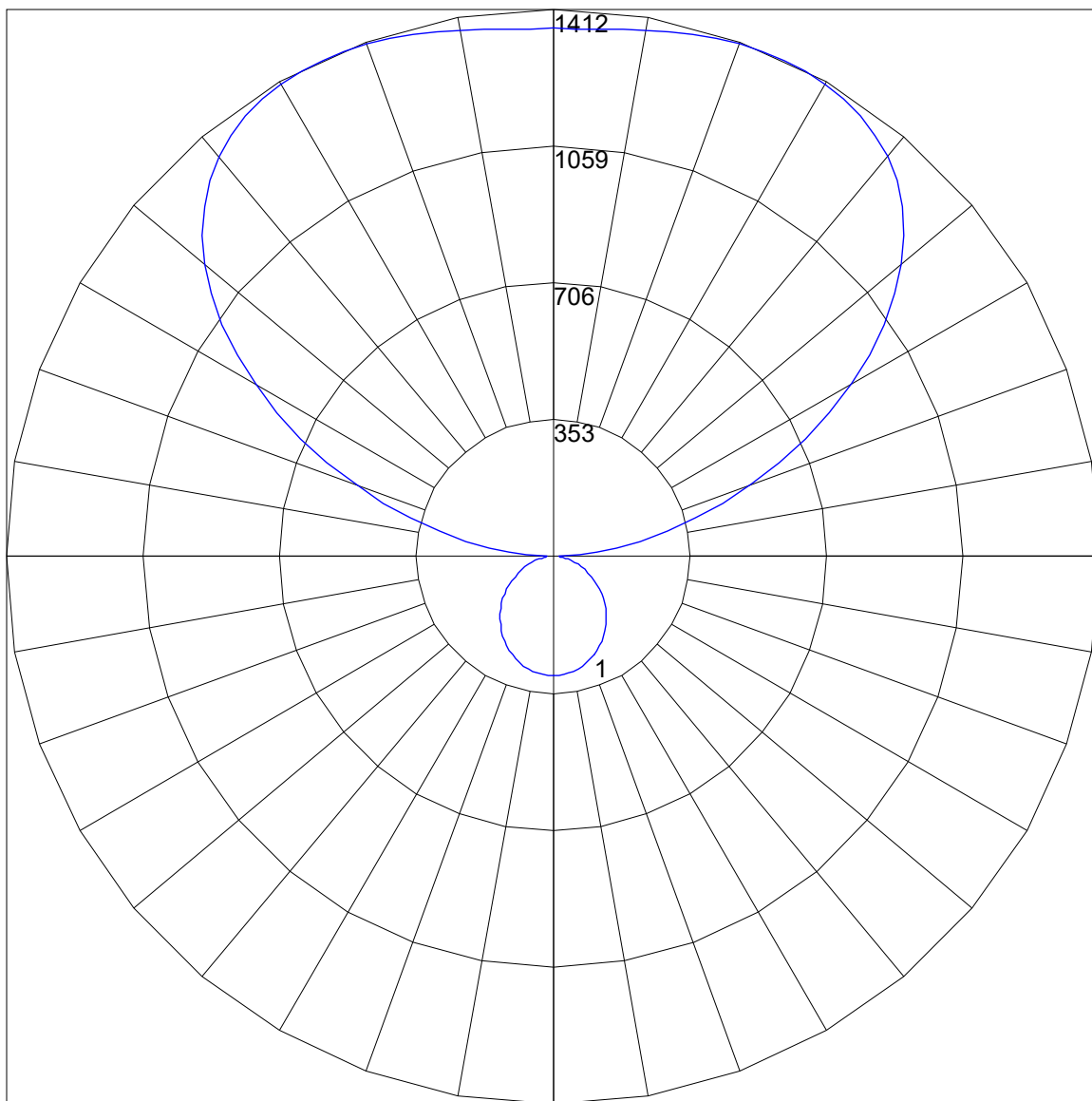
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	99	99	99	99	87	87	87	87	64	64	64	43	43	43	24	24	24	15
1	90	86	82	79	79	75	72	70	56	54	52	38	37	36	21	21	20	13
2	82	75	69	64	71	66	61	57	49	46	43	33	31	30	19	18	17	11
3	75	66	59	53	65	58	52	47	43	39	36	29	27	25	16	15	14	9
4	68	58	50	45	59	51	45	40	38	34	30	26	23	21	15	13	12	8
5	62	51	44	38	54	45	39	34	34	29	26	23	20	18	13	12	11	7
6	57	46	38	33	50	40	34	29	30	26	22	21	18	16	12	10	9	6
7	53	41	34	28	46	36	30	25	27	23	20	19	16	14	11	9	8	5
8	49	37	30	25	43	33	27	22	25	20	17	17	14	12	10	8	7	5
9	45	34	27	22	40	30	24	20	22	18	15	16	13	11	9	8	7	4
10	42	31	24	19	37	27	21	17	21	16	14	14	12	10	8	7	6	4

POLAR GRAPH



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