

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 : S16-LED-ID-DCO-4FT-2E-S-8-35-TDO-ITL87823.001.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL87823.001 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/20/16

[ISSUEDATE]07/26/16

[MANUFAC]FINELITE, INC.

[LUMCAT]S16-LED-ID-DCO-4ft-2E-S-8-35-TDO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 14.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 16.0 WATTS

[ABSOLUTE]LUMENS]1335

[OTHER]see www.finelite.com for source file ITL87823. 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	1335
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	91
Total Luminaire Watts	14.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.38
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.58 ft
Luminous Width (90-270)	0.29 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4555	4628	4671
55	4343	4410	4455
65	4014	4065	4136
75	3468	3518	3551
85	2464	2464	2464

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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	474.444	474.444	474.444	474.444	474.444
2.5	474.444	474.444	474.444	474.444	474.444
5.0	472.398	472.398	472.398	472.807	472.398
7.5	469.532	469.532	469.942	469.942	469.942
10.0	465.848	465.029	466.257	467.076	466.667
12.5	461.345	459.298	461.754	462.982	462.164
15.0	454.795	452.749	456.023	457.251	456.433
17.5	448.246	444.971	449.064	451.111	450.292
20.0	439.649	436.374	441.287	442.924	442.924
22.5	429.825	426.550	431.871	433.918	434.327
25.0	419.181	415.906	422.047	424.094	424.094
27.5	408.129	404.854	410.994	413.450	413.860
30.0	395.029	392.573	398.713	401.579	401.988
32.5	381.930	379.883	385.614	388.889	389.298
35.0	368.012	366.784	372.105	375.380	376.199
37.5	353.684	352.456	358.596	361.462	361.871
40.0	338.538	337.719	343.450	346.725	347.134
42.5	323.801	322.573	327.895	330.760	331.579
45.0	307.018	306.199	311.930	313.977	314.795
47.5	290.234	289.825	294.737	296.784	298.421
50.0	273.041	272.632	277.544	279.591	280.819
52.5	255.848	255.029	259.123	261.579	263.216
55.0	237.427	237.018	241.111	243.158	243.567
57.5	219.415	218.596	221.871	223.918	224.737
60.0	200.994	200.175	203.041	204.678	205.497
62.5	180.526	181.345	183.392	185.029	186.257
65.0	161.696	162.105	163.743	165.380	166.608
67.5	142.456	142.456	144.503	145.322	146.550
70.0	123.216	123.216	124.444	125.673	126.491
72.5	104.386	103.977	106.023	106.433	106.842
75.0	85.556	85.146	86.784	86.784	87.602
77.5	67.544	67.544	67.953	68.363	68.772
80.0	50.760	50.760	50.760	50.760	51.170
82.5	34.795	34.795	34.795	34.795	35.205
85.0	20.468	20.468	20.468	20.468	20.468
87.5	7.778	8.187	7.778	7.778	7.778
90.0	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.409	0.409	0.000	0.000
102.5	0.409	0.409	0.409	0.409	0.000
105.0	0.409	0.409	0.409	0.409	0.000
107.5	0.409	0.409	0.409	0.409	0.000
110.0	0.409	0.409	0.409	0.409	0.409
112.5	0.409	0.409	0.409	0.409	0.409
115.0	0.409	0.409	0.409	0.409	0.409
117.5	0.409	0.409	0.409	0.409	0.409
120.0	0.409	0.409	0.819	0.409	0.409
122.5	0.409	0.409	0.819	0.409	0.409
125.0	0.409	0.409	0.819	0.819	0.409
127.5	0.409	0.409	0.409	0.819	0.409
130.0	0.409	0.409	0.409	0.819	0.409
132.5	0.409	0.409	0.409	0.819	0.819

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-S-8-35-TDO-ITL87823.001.IES****CANDELA TABULATION - (Cont.)**

135.0	0.409	0.409	0.409	0.819	0.819
137.5	0.409	0.409	0.409	0.819	0.819
140.0	0.409	0.409	0.819	0.819	0.819
142.5	0.409	0.409	0.819	0.819	0.819
145.0	0.409	0.819	0.819	0.819	0.819
147.5	0.819	0.819	0.819	0.819	0.819
150.0	0.819	0.819	0.819	0.819	0.819
152.5	0.819	0.819	0.819	0.819	0.819
155.0	0.819	0.819	0.819	0.819	0.819
157.5	0.819	0.819	0.819	0.819	0.819
160.0	0.819	0.819	0.819	0.819	0.819
162.5	0.819	0.819	0.819	0.819	0.819
165.0	0.819	0.819	0.819	0.819	0.819
167.5	0.819	0.819	0.819	0.819	0.819
170.0	0.819	0.819	0.819	0.819	0.819
172.5	0.819	0.819	0.819	0.819	0.819
175.0	0.819	0.819	0.819	0.819	0.819
177.5	0.819	0.819	0.819	0.819	0.819
180.0	0.819	0.819	0.819	0.819	0.819

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-S-8-35-TDO-ITL87823.001.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	173.42	N.A.	13.00
0-30	367.40	N.A.	27.50
0-40	599.85	N.A.	44.90
0-60	1054.36	N.A.	79.00
0-80	1308.03	N.A.	98.00
0-90	1332.12	N.A.	99.80
10-90	1287.22	N.A.	96.40
20-40	426.43	N.A.	31.90
20-50	666.11	N.A.	49.90
40-70	616.55	N.A.	46.20
60-80	253.67	N.A.	19.00
70-80	91.62	N.A.	6.90
80-90	24.10	N.A.	1.80
90-110	0.39	N.A.	0.00
90-120	0.81	N.A.	0.10
90-130	1.29	N.A.	0.10
90-150	2.20	N.A.	0.20
90-180	2.89	N.A.	0.20
110-180	2.50	N.A.	0.20
0-180	1335.01	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	44.90
10-20	128.52
20-30	193.97
30-40	232.46
40-50	239.68
50-60	214.82
60-70	162.05
70-80	91.62
80-90	24.10
90-100	0.03
100-110	0.36
110-120	0.42
120-130	0.48
130-140	0.44
140-150	0.47
150-160	0.38
160-170	0.23
170-180	0.08

IES INDOOR REPORT

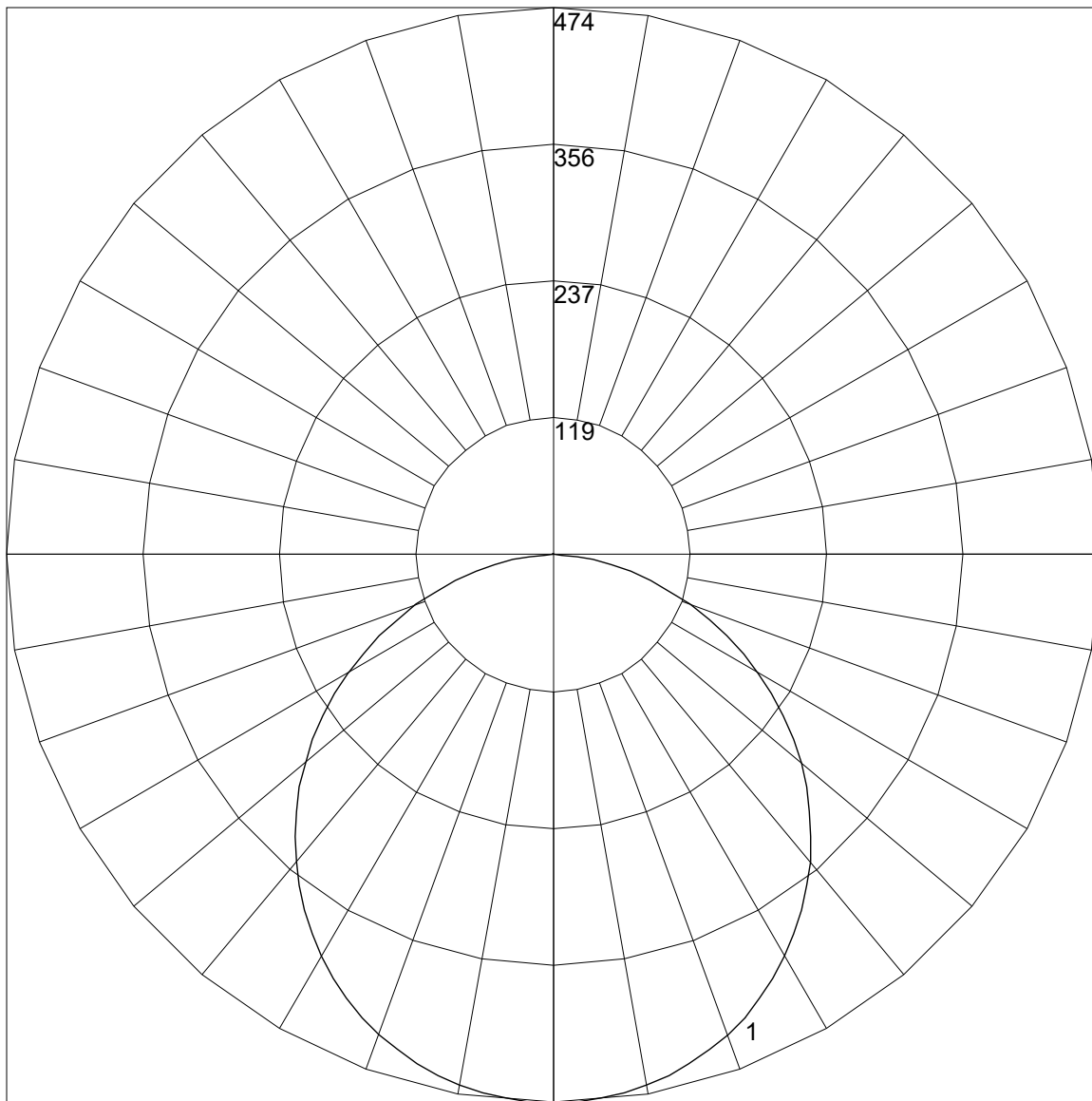
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38
7	65	51	43	36	63	51	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

POLAR GRAPH



Maximum Candela = 474.444 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)