

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-8-35-30U70D-ITL87821.001.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL87821.001 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/19/16

[ISSUEDATE]07/26/16

[MANUFAC]FINELITE, INC.

[LUMCAT]S16-LED-ID-DCO-4ft-2E-S-8-35-30U70D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 14.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 16.0 WATTS

[_ABSOLUTE]LUMENS]1435

[OTHER]see www.finelite.com for source file ITL87821. 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	1435
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	98
Total Luminaire Watts	14.6
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.40
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	3395	3480	3547
55	3257	3340	3414
65	3028	3100	3171
75	2622	2672	2721
85	1922	1873	1873

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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	347.544	347.544	347.544	347.544	347.544
2.5	347.544	347.134	347.134	347.134	347.134
5.0	345.906	345.906	345.906	346.316	346.316
7.5	344.269	344.269	344.678	345.088	345.088
10.0	341.813	340.994	342.632	343.041	343.041
12.5	338.538	337.310	339.766	340.585	340.175
15.0	334.444	332.398	335.673	337.310	336.901
17.5	329.532	327.485	331.170	333.216	332.807
20.0	323.801	321.345	325.848	328.304	328.304
22.5	316.842	314.386	319.708	322.164	322.573
25.0	309.474	307.018	312.749	316.023	316.433
27.5	301.696	299.649	305.380	308.655	309.064
30.0	293.099	291.053	297.193	300.877	301.696
32.5	283.275	282.047	288.596	292.281	293.099
35.0	273.860	272.632	279.181	282.865	283.684
37.5	263.216	262.398	268.538	272.222	273.450
40.0	252.164	251.345	257.895	261.579	262.807
42.5	240.702	240.702	246.842	250.117	252.164
45.0	228.830	228.830	234.561	238.246	239.064
47.5	216.550	216.959	221.871	225.965	227.193
50.0	203.860	204.269	209.181	212.865	213.684
52.5	190.760	191.579	196.491	199.357	200.175
55.0	178.070	178.070	182.573	185.439	186.667
57.5	164.561	164.561	168.246	171.520	172.339
60.0	150.643	150.643	153.918	156.784	157.602
62.5	136.316	136.725	139.591	141.637	142.865
65.0	121.988	122.398	124.854	126.491	127.719
67.5	107.661	107.661	109.708	111.345	112.573
70.0	92.924	93.333	94.971	96.199	97.018
72.5	78.596	79.006	80.234	81.053	81.871
75.0	64.678	64.678	65.906	66.316	67.135
77.5	50.760	51.579	51.988	51.988	52.807
80.0	38.889	38.480	38.889	38.889	39.298
82.5	26.608	26.608	26.608	26.608	26.608
85.0	15.965	15.556	15.556	15.556	15.556
87.5	6.140	6.140	5.731	5.731	5.731
90.0	0.000	0.000	0.000	0.000	0.000
92.5	2.047	2.047	1.228	0.819	0.819
95.0	5.731	6.140	6.550	6.959	6.959
97.5	9.415	10.643	11.871	13.509	13.918
100.0	13.099	15.146	18.012	20.468	21.287
102.5	17.602	20.058	24.561	28.246	29.474
105.0	22.105	25.789	31.930	36.433	38.480
107.5	27.018	31.520	39.298	45.439	47.895
110.0	31.930	37.661	47.485	54.854	58.129
112.5	37.251	43.801	55.673	64.678	67.953
115.0	42.164	49.942	64.269	74.094	77.778
117.5	47.076	56.082	72.456	83.918	88.012
120.0	51.988	62.222	80.643	93.333	98.246
122.5	56.901	68.363	88.830	102.749	107.661
125.0	61.404	73.684	95.789	110.936	117.076
127.5	65.906	78.596	102.339	118.713	124.854
130.0	70.000	83.099	108.070	125.263	131.404
132.5	73.684	87.193	112.573	130.585	137.134

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-S-8-35-30U70D-ITL87821.001.IES****CANDELA TABULATION - (Cont.)**

135.0	76.959	90.468	116.257	134.678	141.228
137.5	80.234	93.333	119.123	137.544	143.684
140.0	82.690	95.380	120.760	138.772	145.322
142.5	84.737	96.608	121.170	139.181	145.322
145.0	86.784	97.836	121.170	138.363	144.094
147.5	88.421	98.246	119.942	136.316	141.637
150.0	89.649	98.246	118.304	133.860	138.772
152.5	90.468	98.246	116.257	130.175	135.088
155.0	91.287	97.836	113.392	126.082	130.585
157.5	91.696	97.018	110.936	121.579	125.673
160.0	92.105	96.608	108.070	117.076	120.351
162.5	92.515	95.789	104.795	112.164	115.439
165.0	92.515	94.971	101.930	107.661	110.117
167.5	92.924	94.561	99.474	103.567	105.614
170.0	92.924	94.152	97.427	99.883	101.111
172.5	92.924	93.743	95.380	97.018	97.836
175.0	92.924	93.333	94.152	94.971	94.971
177.5	92.924	92.924	93.333	93.333	93.333
180.0	92.924	92.924	92.924	92.924	92.924

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-S-8-35-30U70D-ITL87821.001.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	127.58	N.A.	8.90
0-30	271.48	N.A.	18.90
0-40	445.46	N.A.	31.00
0-60	788.54	N.A.	55.00
0-80	981.52	N.A.	68.40
0-90	999.88	N.A.	69.70
10-90	966.96	N.A.	67.40
20-40	317.88	N.A.	22.20
20-50	498.30	N.A.	34.70
40-70	466.32	N.A.	32.50
60-80	192.98	N.A.	13.40
70-80	69.74	N.A.	4.90
80-90	18.36	N.A.	1.30
90-110	40.90	N.A.	2.90
90-120	102.32	N.A.	7.10
90-130	184.58	N.A.	12.90
90-150	345.02	N.A.	24.00
90-180	434.99	N.A.	30.30
110-180	394.09	N.A.	27.50
0-180	1434.88	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	32.92
10-20	94.65
20-30	143.90
30-40	173.98
40-50	180.42
50-60	162.67
60-70	123.23
70-80	69.74
80-90	18.36
90-100	7.79
100-110	33.11
110-120	61.42
120-130	82.26
130-140	86.56
140-150	73.87
150-160	51.92
160-170	28.98
170-180	9.08

IES INDOOR REPORT

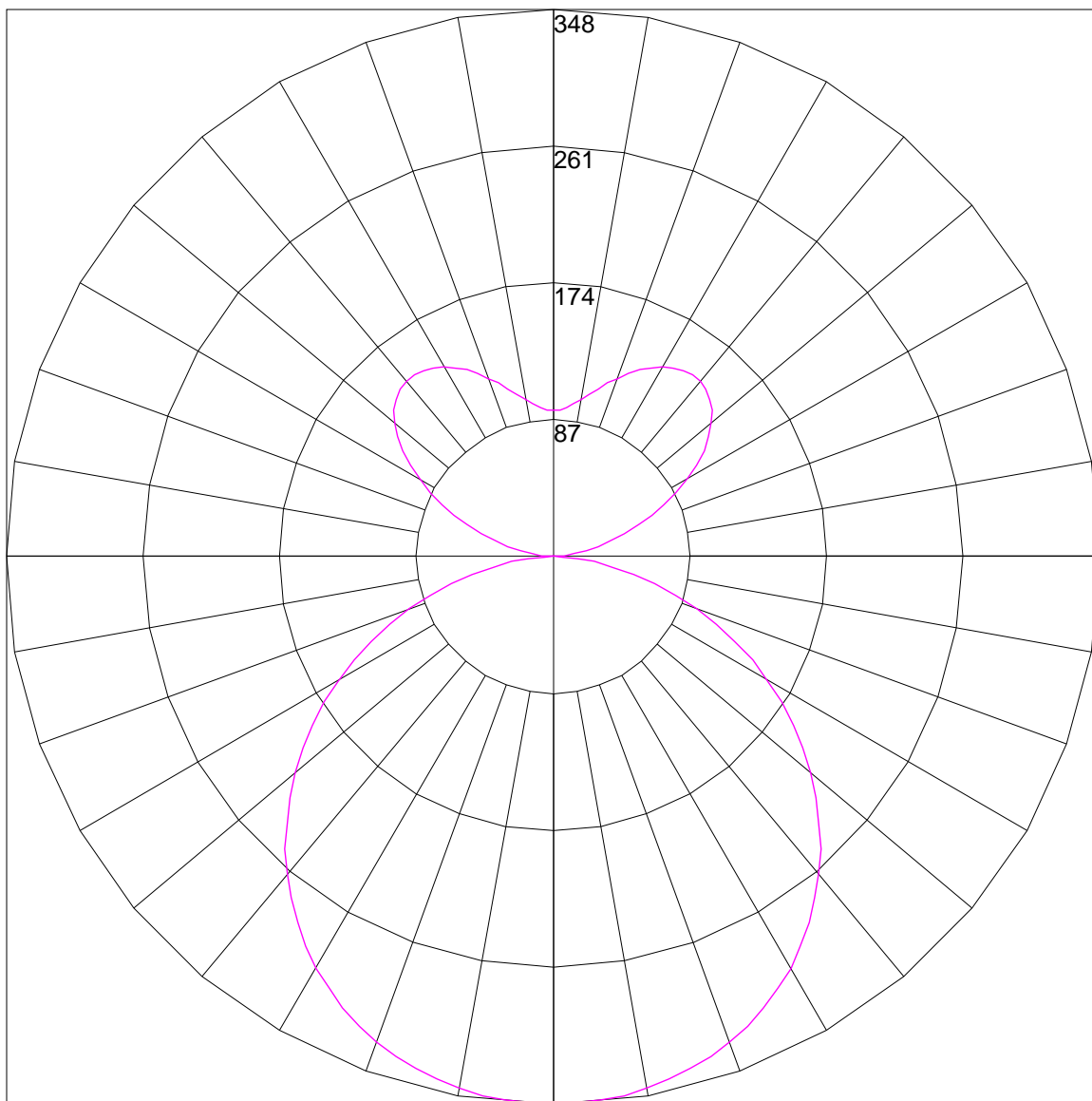
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	70
1	102	97	93	90	96	92	89	85	82	80	77	74	71	70	65	64	62	58
2	93	85	78	73	87	80	75	70	72	68	64	64	61	58	57	55	52	48
3	84	74	67	61	79	71	64	58	63	58	53	57	52	49	50	47	44	41
4	77	66	57	51	73	62	55	49	56	50	45	50	45	41	45	41	38	35
5	71	59	50	44	67	56	48	42	50	44	39	45	40	36	40	36	33	30
6	65	53	44	38	61	50	42	37	45	39	34	41	35	31	37	32	29	26
7	60	48	39	33	57	45	38	32	41	35	30	37	32	28	33	29	26	23
8	56	43	35	30	53	41	34	29	37	31	27	34	29	25	31	26	23	21
9	52	39	32	26	49	38	30	26	34	28	24	31	26	22	28	24	21	19
10	49	36	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19	17

POLAR GRAPH



Maximum Candela = 347.544 Located At Horizontal Angle = 0, Vertical Angle = 0
Vertical Plane Through Horizontal Angles (90 - 270)