

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-H-8-35-TDO-ITL87823.003.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL87823.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/20/16

[ISSUEDATE]07/27/16

[MANUFAC]FINELITE, INC.

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

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 28.5 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 29.2 WATTS

[ABSOLUTE]LUMENS]2537

[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	2537
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	89
Total Luminaire Watts	28.5
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	8655	8794	8874
55	8252	8380	8465
65	7627	7723	7859
75	6590	6684	6747
85	4681	4681	4681

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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	901.444	901.444	901.444	901.444	901.444
2.5	901.444	901.444	901.444	901.444	901.444
5.0	897.556	897.556	897.556	898.333	897.556
7.5	892.111	892.111	892.889	892.889	892.889
10.0	885.111	883.556	885.889	887.444	886.667
12.5	876.556	872.667	877.333	879.667	878.111
15.0	864.111	860.222	866.444	868.778	867.222
17.5	851.667	845.444	853.222	857.111	855.556
20.0	835.333	829.111	838.444	841.556	841.556
22.5	816.667	810.444	820.556	824.444	825.222
25.0	796.444	790.222	801.889	805.778	805.778
27.5	775.444	769.222	780.889	785.556	786.333
30.0	750.556	745.889	757.556	763.000	763.778
32.5	725.667	721.778	732.667	738.889	739.667
35.0	699.222	696.889	707.000	713.222	714.778
37.5	672.000	669.667	681.333	686.778	687.556
40.0	643.222	641.667	652.556	658.778	659.556
42.5	615.222	612.889	623.000	628.444	630.000
45.0	583.333	581.778	592.667	596.556	598.111
47.5	551.444	550.667	560.000	563.889	567.000
50.0	518.778	518.000	527.333	531.222	533.556
52.5	486.111	484.556	492.333	497.000	500.111
55.0	451.111	450.333	458.111	462.000	462.778
57.5	416.889	415.333	421.556	425.444	427.000
60.0	381.889	380.333	385.778	388.889	390.444
62.5	343.000	344.556	348.444	351.556	353.889
65.0	307.222	308.000	311.111	314.222	316.556
67.5	270.667	270.667	274.556	276.111	278.444
70.0	234.111	234.111	236.444	238.778	240.333
72.5	198.333	197.556	201.444	202.222	203.000
75.0	162.556	161.778	164.889	164.889	166.444
77.5	128.333	128.333	129.111	129.889	130.667
80.0	96.444	96.444	96.444	96.444	97.222
82.5	66.111	66.111	66.111	66.111	66.889
85.0	38.889	38.889	38.889	38.889	38.889
87.5	14.778	15.556	14.778	14.778	14.778
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	0.778	0.778	0.000	0.000
102.5	0.778	0.778	0.778	0.778	0.000
105.0	0.778	0.778	0.778	0.778	0.000
107.5	0.778	0.778	0.778	0.778	0.000
110.0	0.778	0.778	0.778	0.778	0.778
112.5	0.778	0.778	0.778	0.778	0.778
115.0	0.778	0.778	0.778	0.778	0.778
117.5	0.778	0.778	0.778	0.778	0.778
120.0	0.778	0.778	1.556	0.778	0.778
122.5	0.778	0.778	1.556	0.778	0.778
125.0	0.778	0.778	1.556	1.556	0.778
127.5	0.778	0.778	0.778	1.556	0.778
130.0	0.778	0.778	0.778	1.556	0.778
132.5	0.778	0.778	0.778	1.556	1.556

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-H-8-35-TDO-ITL87823.003.IES****CANDELA TABULATION - (Cont.)**

135.0	0.778	0.778	0.778	1.556	1.556
137.5	0.778	0.778	0.778	1.556	1.556
140.0	0.778	0.778	1.556	1.556	1.556
142.5	0.778	0.778	1.556	1.556	1.556
145.0	0.778	1.556	1.556	1.556	1.556
147.5	1.556	1.556	1.556	1.556	1.556
150.0	1.556	1.556	1.556	1.556	1.556
152.5	1.556	1.556	1.556	1.556	1.556
155.0	1.556	1.556	1.556	1.556	1.556
157.5	1.556	1.556	1.556	1.556	1.556
160.0	1.556	1.556	1.556	1.556	1.556
162.5	1.556	1.556	1.556	1.556	1.556
165.0	1.556	1.556	1.556	1.556	1.556
167.5	1.556	1.556	1.556	1.556	1.556
170.0	1.556	1.556	1.556	1.556	1.556
172.5	1.556	1.556	1.556	1.556	1.556
175.0	1.556	1.556	1.556	1.556	1.556
177.5	1.556	1.556	1.556	1.556	1.556
180.0	1.556	1.556	1.556	1.556	1.556

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-H-8-35-TDO-ITL87823.003.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	329.50	N.A.	13.00
0-30	698.05	N.A.	27.50
0-40	1139.72	N.A.	44.90
0-60	2003.28	N.A.	79.00
0-80	2485.25	N.A.	98.00
0-90	2531.04	N.A.	99.80
10-90	2445.72	N.A.	96.40
20-40	810.22	N.A.	31.90
20-50	1265.62	N.A.	49.90
40-70	1171.45	N.A.	46.20
60-80	481.97	N.A.	19.00
70-80	174.08	N.A.	6.90
80-90	45.79	N.A.	1.80
90-110	0.75	N.A.	0.00
90-120	1.54	N.A.	0.10
90-130	2.46	N.A.	0.10
90-150	4.18	N.A.	0.20
90-180	5.49	N.A.	0.20
110-180	4.75	N.A.	0.20
0-180	2536.53	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	85.31
10-20	244.19
20-30	368.55
30-40	441.67
40-50	455.40
50-60	408.16
60-70	307.89
70-80	174.08
80-90	45.79
90-100	0.05
100-110	0.69
110-120	0.80
120-130	0.92
130-140	0.84
140-150	0.89
150-160	0.72
160-170	0.44
170-180	0.15

IES INDOOR REPORT

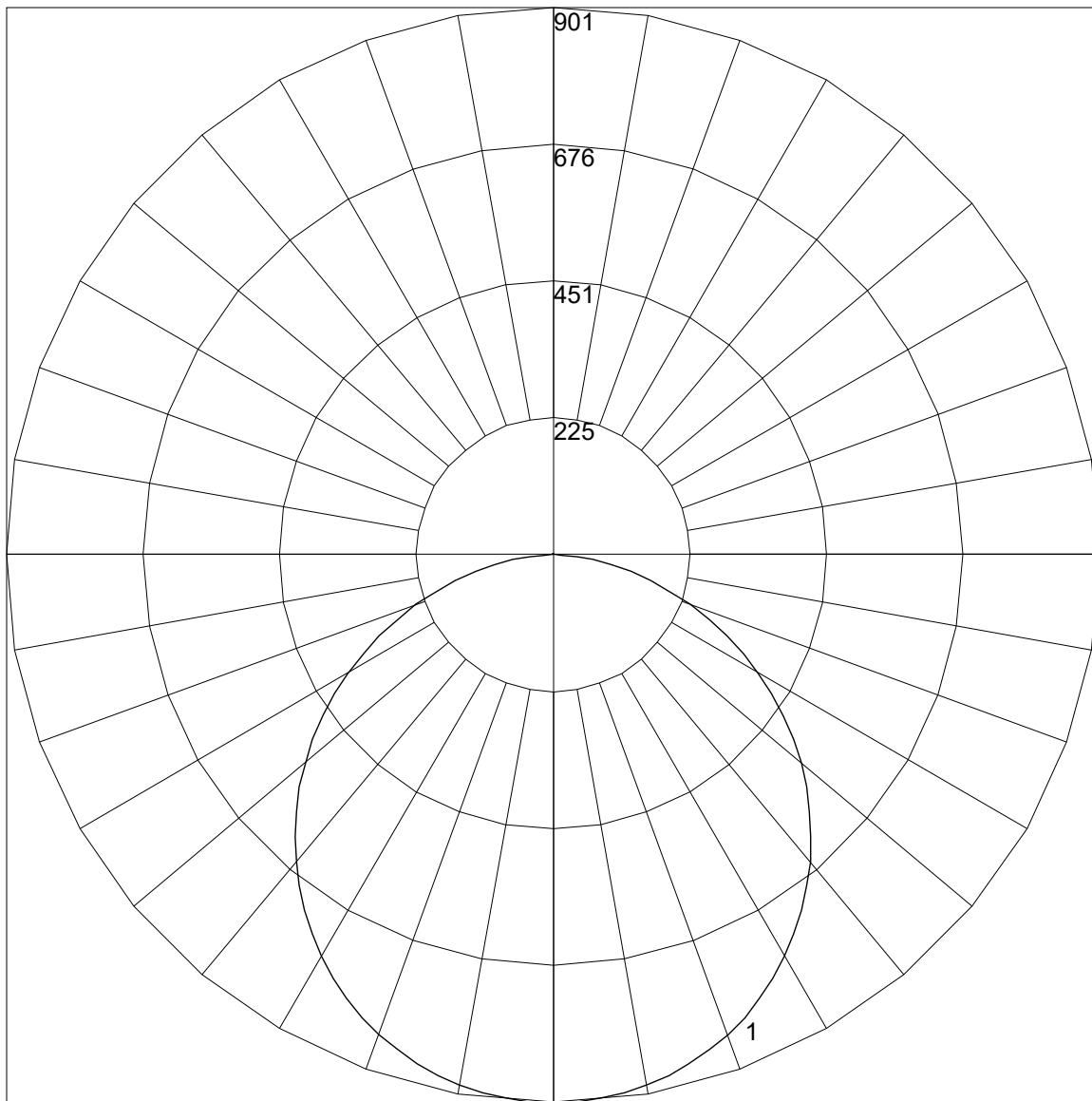
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	69	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 = 901.444 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)