

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-2E-H-8-35-TDO-ITL87818.003.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL87818.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/15/16

[ISSUE DATE]07/27/16

[MANUFAC]FINELITE, INC.

[LUMCAT]S12-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]2479

[OTHER]see www.finelite.com for source file ITL87818. 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	2479
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	87
Total Luminaire Watts	28.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.38
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	6897	6697	6745
55	6521	6238	6241
65	5989	5525	5506
75	5154	4499	4628
85	3505	3180	3761

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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	864.889	864.889	864.889	864.889	864.889
2.5	864.889	864.889	864.889	864.889	864.889
5.0	861.778	861.778	861.778	862.556	862.556
7.5	855.556	856.333	857.111	857.889	857.889
10.0	849.333	848.556	850.889	851.667	852.444
12.5	840.778	838.444	843.111	844.667	843.889
15.0	829.111	826.000	833.000	835.333	834.556
17.5	815.111	810.444	819.778	823.667	822.111
20.0	798.778	794.111	805.000	810.444	808.889
22.5	780.111	777.000	788.667	794.111	794.111
25.0	760.667	757.556	770.000	777.000	777.000
27.5	739.667	736.556	749.778	757.556	758.333
30.0	717.111	714.778	728.778	737.333	738.889
32.5	693.000	691.444	705.444	714.778	717.111
35.0	667.333	666.556	681.333	690.667	693.000
37.5	640.889	640.889	654.889	665.000	668.111
40.0	612.889	613.667	628.444	637.778	640.889
42.5	584.111	585.667	599.667	609.778	612.889
45.0	554.556	555.333	569.333	580.222	583.333
47.5	523.444	525.000	538.222	549.111	552.222
50.0	491.556	493.889	505.556	516.444	520.333
52.5	459.667	462.000	474.444	484.556	486.889
55.0	427.000	430.111	441.778	450.333	452.667
57.5	393.556	396.667	407.556	415.333	417.667
60.0	359.333	363.222	372.556	380.333	382.667
62.5	325.889	328.222	337.556	344.556	346.111
65.0	290.889	294.000	301.000	308.778	310.333
67.5	255.889	259.000	266.000	273.000	276.111
70.0	220.889	224.000	231.000	238.000	241.111
72.5	189.000	190.556	197.556	204.556	210.000
75.0	155.556	157.889	164.111	172.667	178.111
77.5	122.889	125.222	133.000	142.333	147.778
80.0	92.556	94.111	104.222	113.556	119.000
82.5	63.778	66.111	77.000	88.667	94.889
85.0	38.111	42.000	55.222	67.667	73.111
87.5	14.778	22.556	37.333	49.000	54.444
90.0	0.000	10.111	23.333	33.444	38.111
92.5	0.000	3.111	12.444	21.000	24.889
95.0	0.000	0.000	6.222	14.778	14.778
97.5	0.000	0.000	1.556	4.667	7.000
100.0	0.000	0.000	0.778	1.556	1.556
102.5	0.000	0.000	0.778	0.778	0.778
105.0	0.000	0.000	0.778	0.778	0.778
107.5	0.000	0.000	0.778	0.778	0.778
110.0	0.000	0.000	0.778	0.778	0.778
112.5	0.000	0.778	0.778	0.778	0.778
115.0	0.000	0.778	0.778	1.556	0.778
117.5	0.000	0.778	0.778	1.556	0.778
120.0	0.778	0.778	1.556	1.556	0.778
122.5	0.778	0.778	1.556	1.556	1.556
125.0	0.778	0.778	1.556	1.556	1.556
127.5	0.778	0.778	1.556	1.556	1.556
130.0	0.778	1.556	1.556	1.556	1.556
132.5	1.556	1.556	1.556	1.556	1.556

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-2E-H-8-35-TDO-ITL87818.003.IES****CANDELA TABULATION - (Cont.)**

135.0	1.556	1.556	1.556	1.556	1.556
137.5	1.556	1.556	1.556	1.556	1.556
140.0	1.556	1.556	1.556	1.556	1.556
142.5	1.556	1.556	1.556	1.556	1.556
145.0	1.556	1.556	1.556	1.556	2.333
147.5	1.556	1.556	1.556	1.556	2.333
150.0	1.556	1.556	1.556	1.556	2.333
152.5	1.556	1.556	1.556	1.556	2.333
155.0	1.556	1.556	1.556	1.556	1.556
157.5	1.556	1.556	1.556	1.556	2.333
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 : S12-LED-ID-DCO-4FT-2E-H-8-35-TDO-ITL87818.003.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	316.41	N.A.	12.80
0-30	670.46	N.A.	27.00
0-40	1095.56	N.A.	44.20
0-60	1927.25	N.A.	77.70
0-80	2400.81	N.A.	96.80
0-90	2463.91	N.A.	99.40
10-90	2382.00	N.A.	96.10
20-40	779.15	N.A.	31.40
20-50	1217.46	N.A.	49.10
40-70	1129.84	N.A.	45.60
60-80	473.56	N.A.	19.10
70-80	175.41	N.A.	7.10
80-90	63.10	N.A.	2.50
90-110	9.56	N.A.	0.40
90-120	10.36	N.A.	0.40
90-130	11.50	N.A.	0.50
90-150	13.71	N.A.	0.60
90-180	15.05	N.A.	0.60
110-180	5.50	N.A.	0.20
0-180	2478.96	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	81.91
10-20	234.50
20-30	354.05
30-40	425.10
40-50	438.31
50-60	393.38
60-70	298.15
70-80	175.41
80-90	63.10
90-100	9.00
100-110	0.55
110-120	0.80
120-130	1.14
130-140	1.20
140-150	1.01
150-160	0.75
160-170	0.44
170-180	0.15

IES INDOOR REPORT

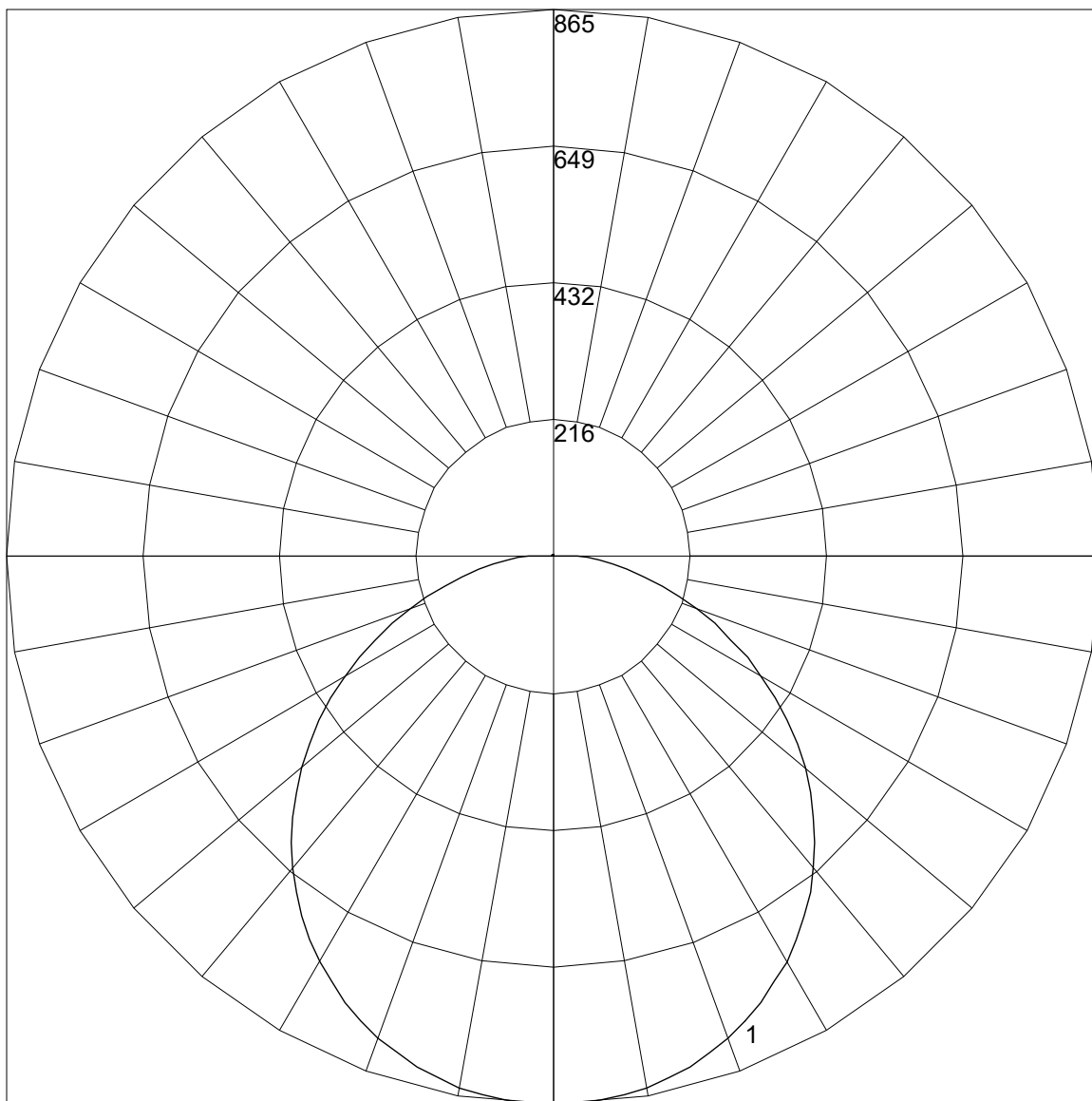
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	101	101	101	99
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	47	73	61	53	46	59	52	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	35	47	40	35	46	40	35	33
8	60	47	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

POLAR GRAPH



Maximum Candela = 864.889 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)