

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-8-35-10U90D-ITL87819.003.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL87819.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/18/16

[ISSUEDATE]07/26/16

[MANUFAC]FINELITE, INC.

[LUMCAT]S16-LED-ID-DCO-4ft-2E-H-8-35-10U90D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 28.5 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 29.2 WATTS

[ABSOLUTE]LUMENS]2441

[OTHER]see www.finelite.com for source file ITL87819. 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	2441
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	86
Total Luminaire Watts	28.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.28
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	7478	7640	7744
55	7142	7298	7398
65	6642	6758	6835
75	5738	5833	5833
85	4026	4120	4026

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-H-8-35-10U90D-ITL87819.003.IES****CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	774.667	774.667	774.667	774.667	774.667
2.5	774.667	774.667	773.889	773.889	774.667
5.0	771.556	771.556	772.333	772.333	772.333
7.5	766.111	766.889	767.667	768.444	768.444
10.0	760.667	759.889	762.222	763.778	762.222
12.5	752.889	751.333	756.000	756.778	756.778
15.0	743.556	740.444	746.667	748.222	748.222
17.5	732.667	728.778	735.778	738.889	738.111
20.0	718.667	714.778	723.333	727.222	727.222
22.5	703.111	698.444	708.556	713.222	713.222
25.0	686.000	681.333	693.000	697.667	697.667
27.5	667.333	664.222	675.111	680.556	681.333
30.0	647.111	644.778	656.444	661.889	662.667
32.5	626.111	623.000	635.444	641.667	642.444
35.0	604.333	601.222	613.667	620.667	621.444
37.5	581.000	579.444	591.111	598.111	598.889
40.0	556.889	555.333	566.222	574.000	574.778
42.5	531.222	530.444	541.333	548.333	549.889
45.0	504.000	504.000	514.889	521.111	521.889
47.5	478.333	476.778	487.667	493.111	493.889
50.0	448.778	448.778	458.111	464.333	465.111
52.5	420.000	420.000	429.333	434.778	435.556
55.0	390.444	390.444	399.000	404.444	404.444
57.5	360.889	360.889	367.889	374.111	373.333
60.0	329.778	329.778	336.778	341.444	341.444
62.5	298.667	298.667	304.889	308.778	308.778
65.0	267.556	267.556	272.222	275.333	275.333
67.5	235.667	235.667	239.556	241.889	241.889
70.0	203.778	204.556	206.889	209.222	209.222
72.5	171.889	173.444	175.000	176.556	176.556
75.0	141.556	142.333	143.889	144.667	143.889
77.5	111.222	112.778	113.556	113.556	113.556
80.0	83.222	84.778	84.778	84.778	84.778
82.5	57.556	58.333	58.333	58.333	57.556
85.0	33.444	34.222	34.222	34.222	33.444
87.5	12.444	13.222	12.444	13.222	12.444
90.0	0.000	0.000	0.000	0.000	0.000
92.5	1.556	1.556	1.556	1.556	1.556
95.0	3.889	3.889	3.889	3.889	3.889
97.5	6.222	6.222	6.222	7.000	7.000
100.0	9.333	9.333	9.333	9.333	9.333
102.5	12.444	12.444	12.444	12.444	12.444
105.0	16.333	16.333	16.333	16.333	16.333
107.5	19.444	19.444	19.444	19.444	19.444
110.0	23.333	23.333	23.333	23.333	23.333
112.5	26.444	26.444	26.444	26.444	26.444
115.0	30.333	30.333	30.333	30.333	30.333
117.5	33.444	34.222	34.222	33.444	33.444
120.0	37.333	37.333	37.333	37.333	36.556
122.5	40.444	40.444	40.444	40.444	40.444
125.0	44.333	44.333	44.333	43.556	43.556
127.5	47.444	47.444	47.444	47.444	46.667
130.0	50.556	50.556	50.556	50.556	49.778
132.5	53.667	53.667	53.667	53.667	53.667

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-H-8-35-10U90D-ITL87819.003.IES****CANDELA TABULATION - (Cont.)**

135.0	56.778	56.778	56.778	56.778	56.000
137.5	59.889	59.889	59.889	59.889	59.111
140.0	63.000	62.222	62.222	62.222	62.222
142.5	65.333	65.333	65.333	65.333	64.556
145.0	68.444	67.667	67.667	67.667	67.667
147.5	70.778	70.000	70.000	70.000	70.000
150.0	73.111	72.333	72.333	72.333	72.333
152.5	74.667	73.889	74.667	74.667	74.667
155.0	77.000	76.222	77.000	77.000	77.000
157.5	78.556	77.778	78.556	78.556	78.556
160.0	80.111	79.333	80.111	80.111	80.111
162.5	81.667	80.889	81.667	81.667	81.667
165.0	82.444	82.444	82.444	82.444	82.444
167.5	84.000	83.222	83.222	83.222	84.000
170.0	84.778	84.778	84.778	84.778	84.778
172.5	84.778	84.778	84.778	84.778	85.556
175.0	85.556	85.556	85.556	85.556	85.556
177.5	86.333	85.556	85.556	85.556	85.556
180.0	86.333	86.333	86.333	86.333	86.333

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-H-8-35-10U90D-ITL87819.003.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	283.73	N.A.	11.60
0-30	602.18	N.A.	24.70
0-40	985.13	N.A.	40.40
0-60	1736.52	N.A.	71.10
0-80	2157.31	N.A.	88.40
0-90	2197.37	N.A.	90.00
10-90	2124.02	N.A.	87.00
20-40	701.40	N.A.	28.70
20-50	1097.26	N.A.	45.00
40-70	1020.06	N.A.	41.80
60-80	420.79	N.A.	17.20
70-80	152.12	N.A.	6.20
80-90	40.06	N.A.	1.60
90-110	21.54	N.A.	0.90
90-120	51.45	N.A.	2.10
90-130	90.74	N.A.	3.70
90-150	176.83	N.A.	7.20
90-180	243.54	N.A.	10.00
110-180	222.00	N.A.	9.10
0-180	2440.91	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	73.36
10-20	210.37
20-30	318.45
30-40	382.95
40-50	395.86
50-60	355.53
60-70	268.67
70-80	152.12
80-90	40.06
90-100	4.52
100-110	17.02
110-120	29.91
120-130	39.29
130-140	43.73
140-150	42.36
150-160	35.28
160-170	23.30
170-180	8.13

IES INDOOR REPORT

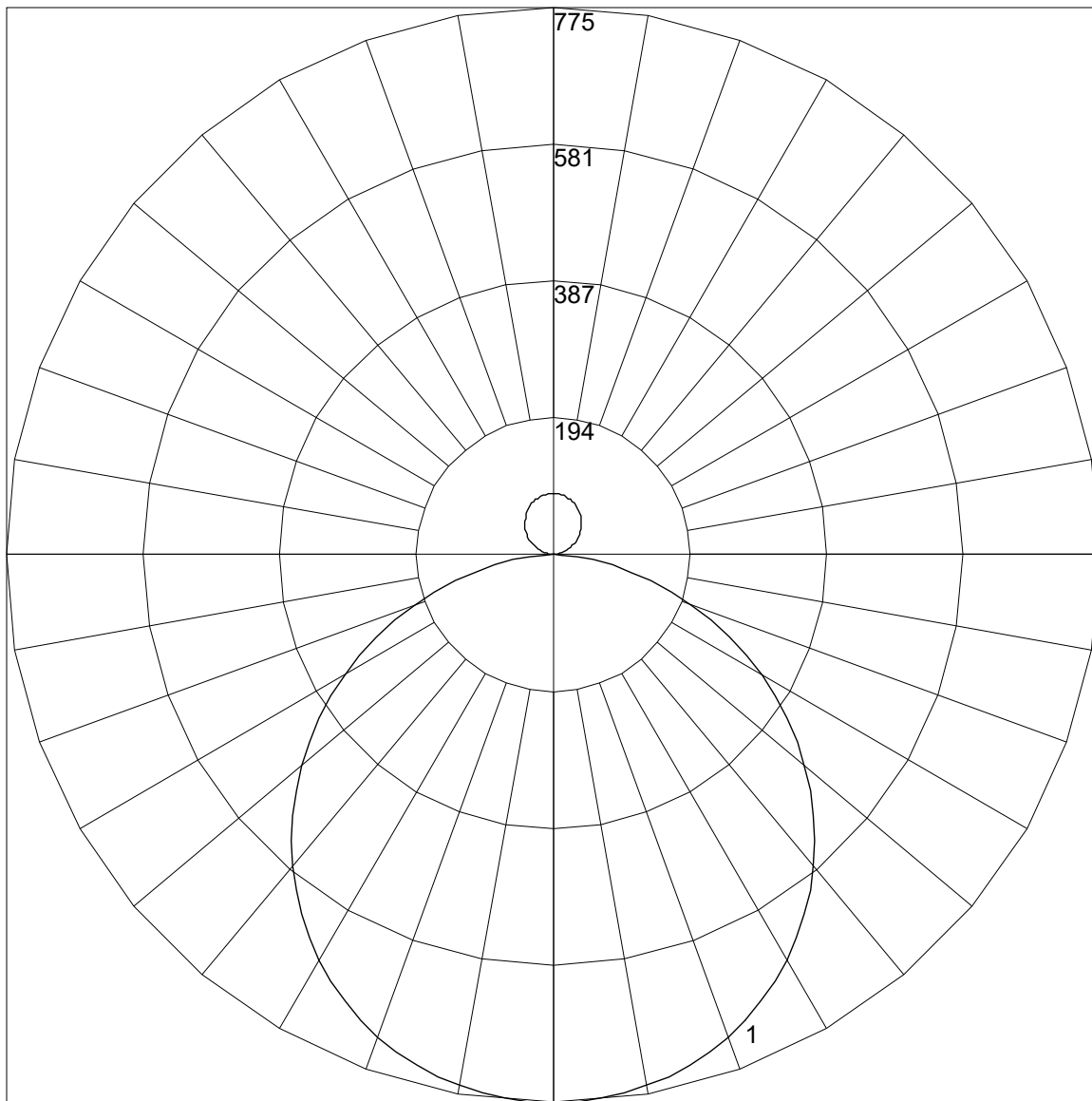
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	90
1	107	102	98	94	103	99	95	91	93	89	87	87	84	82	82	80	78	75
2	97	89	82	76	93	86	80	75	81	76	71	76	72	68	72	68	65	63
3	88	78	70	63	85	76	68	62	71	65	60	67	62	58	63	59	55	53
4	81	69	60	54	78	67	59	53	63	56	51	60	54	49	56	52	47	45
5	74	61	53	46	71	60	52	45	57	49	44	54	47	43	51	45	41	39
6	68	55	46	40	66	54	46	40	51	44	38	48	42	37	46	41	36	34
7	63	50	41	35	61	49	41	35	46	39	34	44	38	33	42	36	32	30
8	59	46	37	31	57	45	37	31	42	35	30	40	34	30	38	33	29	27
9	55	42	34	28	53	41	33	28	39	32	27	37	31	27	36	30	26	24
10	52	39	31	26	50	38	30	25	36	29	25	34	28	24	33	28	24	22

POLAR GRAPH



Maximum Candela = 774.667 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)