

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-8-35-10U90D-ITL87814.003.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL87814.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/14/16

[ISSUEDATE]07/27/16

[MANUFAC]FINELITE, INC.

[LUMCAT]S12-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]2460

[OTHER]see www.finelite.com for source file ITL87814. 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	2460
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	86
Total Luminaire Watts	28.5
Ballast Factor	1.00
CIE Type	Semi-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	5833	5690	5755
55	5547	5315	5373
65	5108	4726	4789
75	4355	3838	3981
85	2933	2732	3241

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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	728.000	728.000	728.000	728.000	728.000
2.5	728.000	727.222	727.222	727.222	728.000
5.0	724.889	724.889	724.889	725.667	725.667
7.5	721.000	721.000	721.778	721.778	722.556
10.0	715.556	714.000	717.111	717.889	718.667
12.5	707.778	705.444	709.333	711.667	710.889
15.0	697.667	695.333	700.778	704.667	703.889
17.5	686.000	683.667	691.444	695.333	695.333
20.0	672.778	669.667	679.000	684.444	683.667
22.5	658.000	654.889	665.000	672.000	672.000
25.0	641.667	639.333	651.000	658.000	658.778
27.5	624.556	623.000	634.667	642.444	644.000
30.0	605.111	604.333	616.778	625.333	626.889
32.5	584.889	584.889	597.333	606.667	609.000
35.0	563.889	563.889	577.111	587.222	589.556
37.5	541.333	541.333	555.333	566.222	568.556
40.0	518.000	519.556	532.778	543.667	546.778
42.5	494.667	495.444	510.222	520.333	522.667
45.0	469.000	470.556	483.778	495.444	497.778
47.5	444.111	444.889	458.111	469.000	472.889
50.0	417.667	419.222	432.444	443.333	445.667
52.5	390.444	392.000	405.222	415.333	418.444
55.0	363.222	364.778	376.444	386.556	389.667
57.5	335.222	336.778	346.889	356.222	359.333
60.0	306.444	308.000	317.333	325.889	329.000
62.5	277.667	279.222	287.000	295.556	300.222
65.0	248.111	248.889	257.444	265.222	269.889
67.5	218.556	220.111	227.889	234.889	239.556
70.0	189.000	190.556	197.556	204.556	208.444
72.5	159.444	162.556	168.778	175.000	179.667
75.0	131.444	133.778	140.000	147.778	153.222
77.5	104.222	106.556	113.556	122.111	126.778
80.0	77.778	80.111	89.444	98.000	102.667
82.5	53.667	56.778	66.111	77.000	80.889
85.0	31.889	35.778	47.444	58.333	63.000
87.5	12.444	19.444	31.889	42.000	45.889
90.0	0.000	8.556	20.222	29.556	32.667
92.5	2.333	4.667	13.222	21.000	24.111
95.0	4.667	5.444	10.889	19.444	20.222
97.5	7.778	9.333	12.444	17.111	18.667
100.0	10.889	14.000	18.667	20.222	21.000
102.5	14.778	19.444	23.333	27.222	28.000
105.0	19.444	22.556	29.556	35.000	36.556
107.5	23.333	28.000	35.778	42.778	45.111
110.0	28.000	33.444	42.778	51.333	54.444
112.5	32.667	38.111	50.556	59.889	63.000
115.0	37.333	43.556	57.556	67.667	71.556
117.5	41.222	48.222	64.556	76.222	80.111
120.0	45.889	53.667	70.778	83.222	88.667
122.5	51.333	59.111	76.222	90.222	95.667
125.0	56.778	63.778	80.111	96.444	101.889
127.5	60.667	66.889	84.000	101.111	107.333
130.0	63.778	69.222	86.333	104.222	111.222
132.5	66.111	71.556	88.667	106.556	113.556

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-2E-H-8-35-10U90D-ITL87814.003.IES****CANDELA TABULATION - (Cont.)**

135.0	68.444	73.111	89.444	107.333	114.333
137.5	70.000	74.667	90.222	106.556	113.556
140.0	71.556	75.444	89.444	105.778	112.000
142.5	73.111	76.222	88.667	103.444	108.889
145.0	74.667	77.000	87.889	100.333	105.778
147.5	75.444	77.778	87.111	97.222	101.889
150.0	77.000	78.556	85.556	94.111	98.000
152.5	77.000	78.556	84.778	91.000	94.111
155.0	77.778	78.556	83.222	88.667	90.222
157.5	78.556	79.333	82.444	86.333	87.889
160.0	78.556	79.333	81.667	84.000	84.778
162.5	78.556	79.333	80.889	82.444	83.222
165.0	78.556	78.556	80.111	80.889	81.667
167.5	78.556	78.556	79.333	80.111	80.889
170.0	78.556	78.556	79.333	79.333	79.333
172.5	78.556	78.556	78.556	78.556	79.333
175.0	78.556	78.556	78.556	78.556	78.556
177.5	78.556	78.556	78.556	78.556	78.556
180.0	78.556	78.556	78.556	78.556	78.556

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-2E-H-8-35-10U90D-ITL87814.003.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	266.60	N.A.	10.80
0-30	565.95	N.A.	23.00
0-40	926.30	N.A.	37.60
0-60	1634.98	N.A.	66.50
0-80	2039.85	N.A.	82.90
0-90	2093.96	N.A.	85.10
10-90	2025.01	N.A.	82.30
20-40	659.70	N.A.	26.80
20-50	1032.59	N.A.	42.00
40-70	963.74	N.A.	39.20
60-80	404.86	N.A.	16.50
70-80	149.81	N.A.	6.10
80-90	54.11	N.A.	2.20
90-110	46.01	N.A.	1.90
90-120	101.13	N.A.	4.10
90-130	171.95	N.A.	7.00
90-150	297.21	N.A.	12.10
90-180	366.36	N.A.	14.90
110-180	320.35	N.A.	13.00
0-180	2460.31	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	68.95
10-20	197.65
20-30	299.35
30-40	360.35
40-50	372.89
50-60	335.80
60-70	255.06
70-80	149.81
80-90	54.11
90-100	15.29
100-110	30.72
110-120	55.12
120-130	70.82
130-140	69.47
140-150	55.79
150-160	38.88
160-170	22.76
170-180	7.51

IES INDOOR REPORT

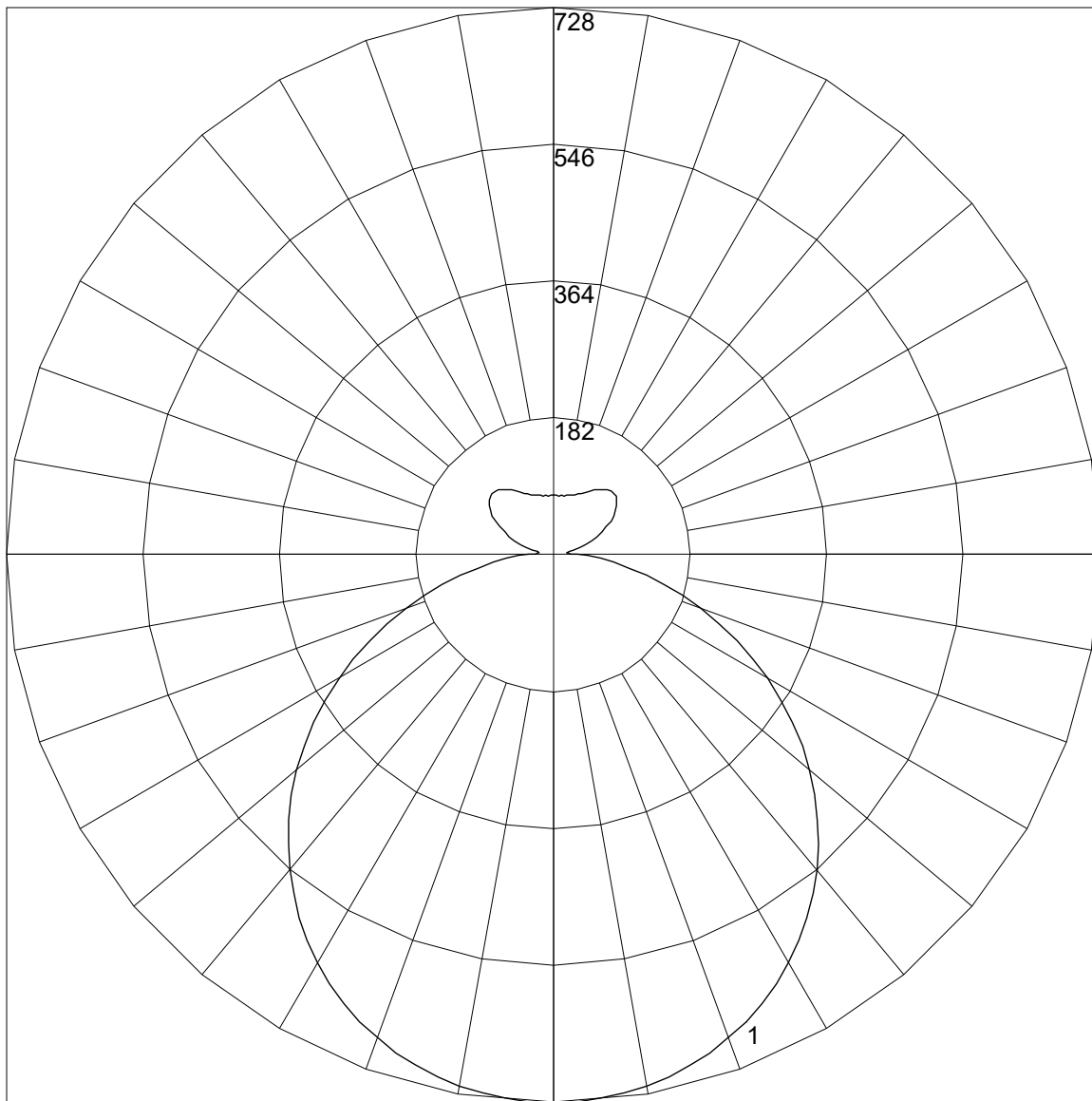
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	116	116	116	116	111	111	111	111	103	103	103	95	95	95	88	88	88	85
1	105	100	96	92	101	97	93	89	90	87	84	83	81	79	77	76	74	71
2	96	87	81	75	92	84	78	73	78	73	69	73	69	65	68	65	62	59
3	87	77	69	62	83	74	67	61	69	63	58	64	59	55	60	56	52	49
4	80	68	59	53	76	65	58	51	61	54	49	57	51	47	53	49	45	42
5	73	60	52	45	70	58	50	44	55	48	42	51	45	41	48	43	39	36
6	67	54	46	39	65	53	44	38	49	42	37	46	40	36	43	38	34	32
7	62	49	41	35	60	48	40	34	45	38	33	42	36	31	40	34	30	28
8	58	45	36	31	56	43	36	30	41	34	29	39	33	28	36	31	27	25
9	54	41	33	28	52	40	32	27	38	31	26	36	30	25	34	28	24	22
10	51	38	30	25	49	37	29	24	35	28	24	33	27	23	31	26	22	20

POLAR GRAPH



Maximum Candela = 728 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)