

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-V-8-TW-10U90D-ITL87814.900.IES

DESCRIPTION INFORMATION (From Photometric File)

[IESNA:]LM-63-2002

[TEST:]ITL87814.900 Family Correlation File

[TESTLAB:]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE:]07/14/16

[ISSUEDATE:]08/17/16

[MANUFAC:]FINELITE, INC.

[LUMCAT:]S12-LED-ID-DCO-4ft-2E-V-8-TW-10U90D

[OTHER:]ies file is based on 3500K; see luminaire tech sheet at www.finelite.com

for lumen adjustment factors for other CCT's & CRI's

[OTHER:]INPUT ELECTRICAL: 277.0 VOLTS, 41.7 WATTS

[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

[_ABSOLUTELUMENS:]3163

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3163
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	76
Total Luminaire Watts	41.7
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	7499	7316	7400
55	7131	6834	6908
65	6568	6076	6157
75	5600	4935	5119
85	3770	3512	4167

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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	936	936	936	936	936
2.5	936	935	935	935	936
5.0	932	932	932	933	933
7.5	927	927	928	928	929
10.0	920	918	922	923	924
12.5	910	907	912	915	914
15.0	897	894	901	906	905
17.5	882	879	889	894	894
20.0	865	861	873	880	879
22.5	846	842	855	864	864
25.0	825	822	837	846	847
27.5	803	801	816	826	828
30.0	778	777	793	804	806
32.5	752	752	768	780	783
35.0	725	725	742	755	758
37.5	696	696	714	728	731
40.0	666	668	685	699	703
42.5	636	637	656	669	672
45.0	603	605	622	637	640
47.5	571	572	589	603	608
50.0	537	539	556	570	573
52.5	502	504	521	534	538
55.0	467	469	484	497	501
57.5	431	433	446	458	462
60.0	394	396	408	419	423
62.5	357	359	369	380	386
65.0	319	320	331	341	347
67.5	281	283	293	302	308
70.0	243	245	254	263	268
72.5	205	209	217	225	231
75.0	169	172	180	190	197
77.5	134	137	146	157	163
80.0	100	103	115	126	132
82.5	69	73	85	99	104
85.0	41	46	61	75	81
87.5	16	25	41	54	59
90.0	0	11	26	38	42
92.5	3	6	17	27	31
95.0	6	7	14	25	26
97.5	10	12	16	22	24
100.0	14	18	24	26	27
102.5	19	25	30	35	36
105.0	25	29	38	45	47
107.5	30	36	46	55	58
110.0	36	43	55	66	70
112.5	42	49	65	77	81
115.0	48	56	74	87	92
117.5	53	62	83	98	103
120.0	59	69	91	107	114
122.5	66	76	98	116	123
125.0	73	82	103	124	131
127.5	78	86	108	130	138
130.0	82	89	111	134	143
132.5	85	92	114	137	146

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-2E-V-8-TW-10U90D-ITL87814.900.IES****CANDELA TABULATION - (Cont.)**

135.0	88	94	115	138	147
137.5	90	96	116	137	146
140.0	92	97	115	136	144
142.5	94	98	114	133	140
145.0	96	99	113	129	136
147.5	97	100	112	125	131
150.0	99	101	110	121	126
152.5	99	101	109	117	121
155.0	100	101	107	114	116
157.5	101	102	106	111	113
160.0	101	102	105	108	109
162.5	101	102	104	106	107
165.0	101	101	103	104	105
167.5	101	101	102	103	104
170.0	101	101	102	102	102
172.5	101	101	101	101	102
175.0	101	101	101	101	101
177.5	101	101	101	101	101
180.0	101	101	101	101	101

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-2E-V-8-TW-10U90D-ITL87814.900.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	342.77	N.A.	10.80
0-30	727.65	N.A.	23.00
0-40	1190.95	N.A.	37.60
0-60	2102.12	N.A.	66.50
0-80	2622.66	N.A.	82.90
0-90	2692.23	N.A.	85.10
10-90	2603.58	N.A.	82.30
20-40	848.19	N.A.	26.80
20-50	1327.61	N.A.	42.00
40-70	1239.1	N.A.	39.20
60-80	520.54	N.A.	16.50
70-80	192.61	N.A.	6.10
80-90	69.57	N.A.	2.20
90-110	59.15	N.A.	1.90
90-120	130.02	N.A.	4.10
90-130	221.08	N.A.	7.00
90-150	382.12	N.A.	12.10
90-180	471.03	N.A.	14.90
110-180	411.88	N.A.	13.00
0-180	3163.26	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	88.65
10-20	254.12
20-30	384.88
30-40	463.30
40-50	479.42
50-60	431.74
60-70	327.93
70-80	192.61
80-90	69.57
90-100	19.66
100-110	39.50
110-120	70.86
120-130	91.06
130-140	89.32
140-150	71.73
150-160	49.99
160-170	29.26
170-180	9.66

IES INDOOR REPORT

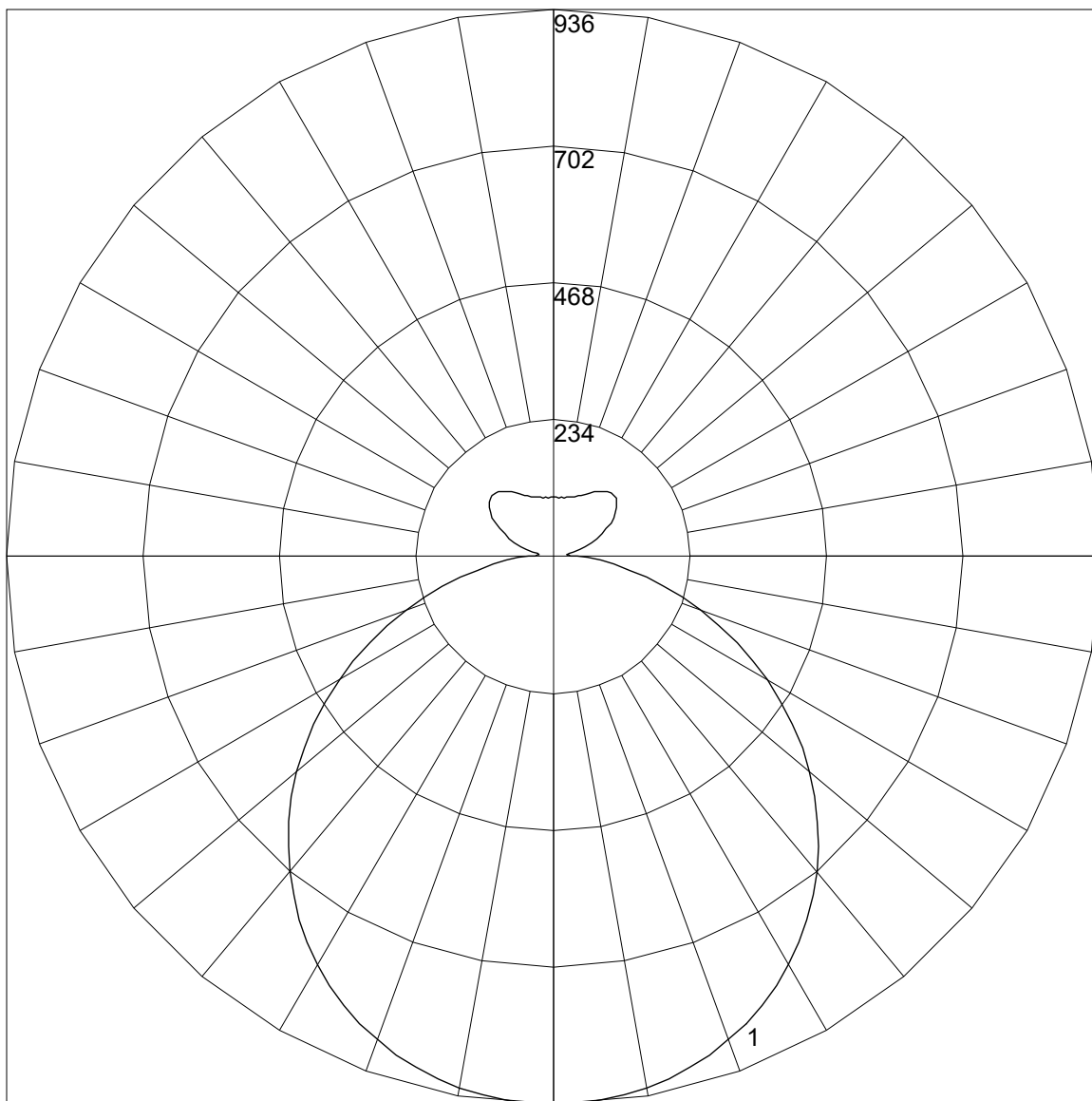
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	64	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 = 936 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)