

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-TDO-ITL87818.900.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL87818.900 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/15/16

[ISSUEDATE]08/17/16

[MANUFAC]FINELITE, INC.

[LUMCAT]S12-LED-ID-DCO-4ft-2E-V-8-TW-TDO

[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: 120.0 VOLTS, 40.8 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 41.7 WATTS

[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

[_ABSOLUTELUMENS]3187

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3187
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	78
Total Luminaire Watts	40.8
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	8867	8610	8672
55	8384	8020	8025
65	7700	7104	7079
75	6627	5785	5950
85	4506	4088	4836

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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	1112	1112	1112	1112	1112
2.5	1112	1112	1112	1112	1112
5.0	1108	1108	1108	1109	1109
7.5	1100	1101	1102	1103	1103
10.0	1092	1091	1094	1095	1096
12.5	1081	1078	1084	1086	1085
15.0	1066	1062	1071	1074	1073
17.5	1048	1042	1054	1059	1057
20.0	1027	1021	1035	1042	1040
22.5	1003	999	1014	1021	1021
25.0	978	974	990	999	999
27.5	951	947	964	974	975
30.0	922	919	937	948	950
32.5	891	889	907	919	922
35.0	858	857	876	888	891
37.5	824	824	842	855	859
40.0	788	789	808	820	824
42.5	751	753	771	784	788
45.0	713	714	732	746	750
47.5	673	675	692	706	710
50.0	632	635	650	664	669
52.5	591	594	610	623	626
55.0	549	553	568	579	582
57.5	506	510	524	534	537
60.0	462	467	479	489	492
62.5	419	422	434	443	445
65.0	374	378	387	397	399
67.5	329	333	342	351	355
70.0	284	288	297	306	310
72.5	243	245	254	263	270
75.0	200	203	211	222	229
77.5	158	161	171	183	190
80.0	119	121	134	146	153
82.5	82	85	99	114	122
85.0	49	54	71	87	94
87.5	19	29	48	63	70
90.0	0	13	30	43	49
92.5	0	4	16	27	32
95.0	0	0	8	19	19
97.5	0	0	2	6	9
100.0	0	0	1	2	2
102.5	0	0	1	1	1
105.0	0	0	1	1	1
107.5	0	0	1	1	1
110.0	0	0	1	1	1
112.5	0	1	1	1	1
115.0	0	1	1	2	1
117.5	0	1	1	2	1
120.0	1	1	2	2	1
122.5	1	1	2	2	2
125.0	1	1	2	2	2
127.5	1	1	2	2	2
130.0	1	2	2	2	2
132.5	2	2	2	2	2

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-2E-V-8-TW-TDO-ITL87818.900.IES****CANDELA TABULATION - (Cont.)**

135.0	2	2	2	2	2
137.5	2	2	2	2	2
140.0	2	2	2	2	2
142.5	2	2	2	2	2
145.0	2	2	2	2	3
147.5	2	2	2	2	3
150.0	2	2	2	2	3
152.5	2	2	2	2	3
155.0	2	2	2	2	2
157.5	2	2	2	2	3
160.0	2	2	2	2	2
162.5	2	2	2	2	2
165.0	2	2	2	2	2
167.5	2	2	2	2	2
170.0	2	2	2	2	2
172.5	2	2	2	2	2
175.0	2	2	2	2	2
177.5	2	2	2	2	2
180.0	2	2	2	2	2

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-2E-V-8-TW-TDO-ITL87818.900.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	406.81	N.A.	12.80
0-30	862.02	N.A.	27.00
0-40	1408.58	N.A.	44.20
0-60	2477.89	N.A.	77.70
0-80	3086.76	N.A.	96.80
0-90	3167.88	N.A.	99.40
10-90	3062.57	N.A.	96.10
20-40	1001.77	N.A.	31.40
20-50	1565.3	N.A.	49.10
40-70	1452.65	N.A.	45.60
60-80	608.87	N.A.	19.10
70-80	225.53	N.A.	7.10
80-90	81.13	N.A.	2.50
90-110	12.29	N.A.	0.40
90-120	13.32	N.A.	0.40
90-130	14.79	N.A.	0.50
90-150	17.63	N.A.	0.60
90-180	19.35	N.A.	0.60
110-180	7.06	N.A.	0.20
0-180	3187.23	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	105.31
10-20	301.50
20-30	455.21
30-40	546.56
40-50	563.54
50-60	505.77
60-70	383.34
70-80	225.53
80-90	81.13
90-100	11.57
100-110	0.71
110-120	1.03
120-130	1.47
130-140	1.54
140-150	1.30
150-160	0.96
160-170	0.57
170-180	0.19

IES INDOOR REPORT

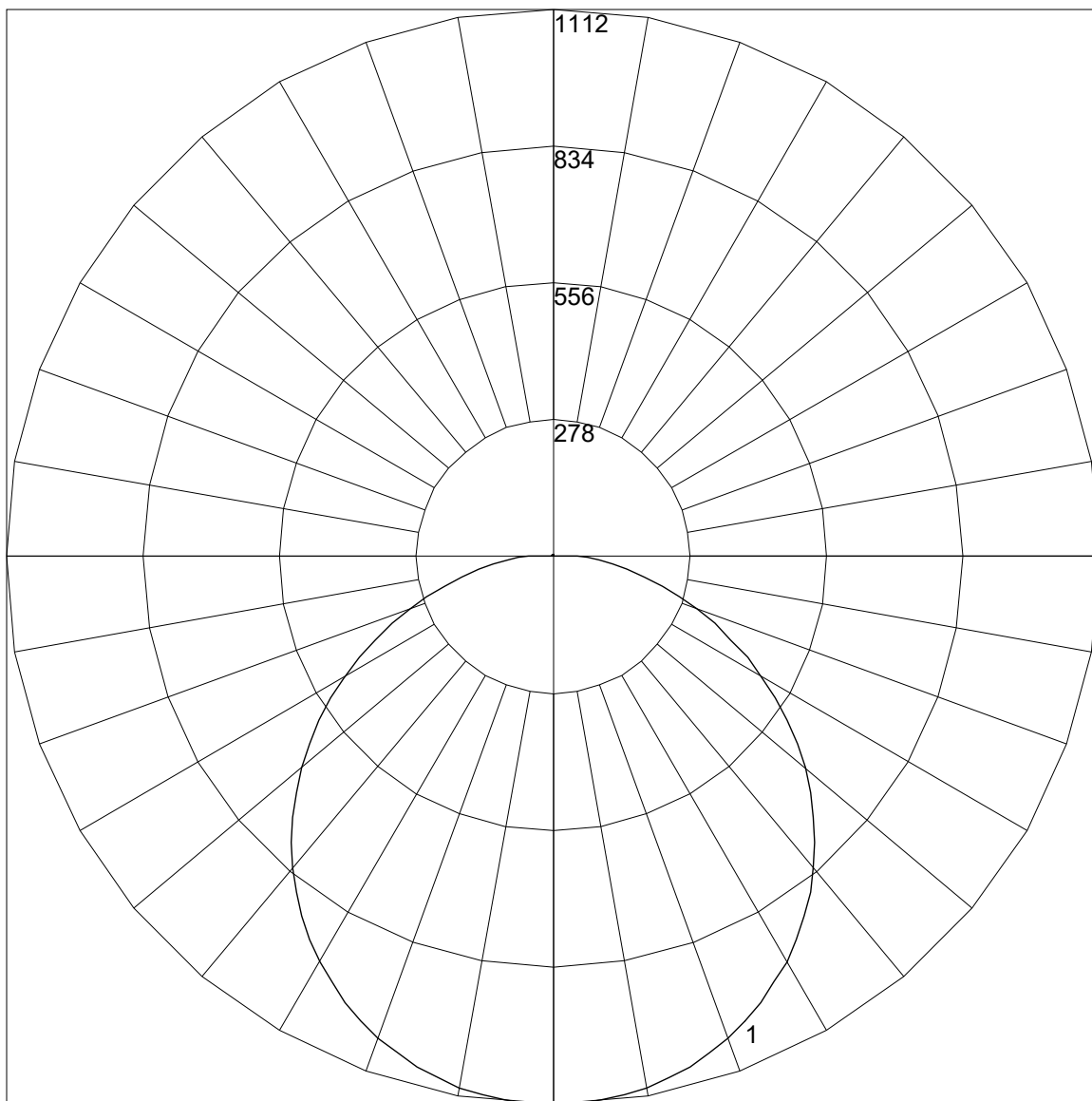
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	106	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	59	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 = 1112 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)