

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 : S18-LED-ID-DCO-4FT-2E-V-8-TW-OPEN-ITL85168.900.IES

DESCRIPTION INFORMATION (From Photometric File)

[IESNA]LM-63-2002

[TEST]ITL85168.900 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]09/14/15

[ISSUEDATE]04/15/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S18-LED-ID-DCO-4ft-2E-V-8-TW-OPEN

[OTHER]ies file is based on 3500K; see luminaire tech sheet at www.finelite.com for lumen adjustment factors for other CCT's & C

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 40.9 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 41.9 WATTS

[OTHER]see www.finelite.com for source file ITL85168. 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]4416

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4416
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	40.9
Ballast Factor	1.00
CIE Type	Indirect
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.71 ft
Luminous Width (90-270)	0.10 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2520	2559	2559
55	2427	2475	2427
65	2240	2306	2240
75	1936	2044	1936
85	1278	1597	1278

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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	97	97	97	97	97
2.5	97	97	97	97	97
5.0	96	96	96	96	96
7.5	96	96	96	96	96
10.0	95	95	95	96	96
12.5	94	94	95	95	95
15.0	93	93	94	94	94
17.5	92	91	93	93	93
20.0	90	90	91	91	91
22.5	88	88	89	90	90
25.0	86	86	87	88	88
27.5	84	84	85	86	86
30.0	82	81	83	84	83
32.5	79	79	80	81	81
35.0	76	76	78	78	78
37.5	73	73	75	75	75
40.0	70	70	72	72	72
42.5	67	67	68	69	69
45.0	64	64	65	66	65
47.5	60	60	62	62	62
50.0	57	57	58	58	58
52.5	53	53	54	55	54
55.0	50	50	51	51	50
57.5	46	46	47	47	46
60.0	42	42	43	43	42
62.5	38	38	39	39	38
65.0	34	34	35	34	34
67.5	30	31	31	30	30
70.0	26	27	27	26	26
72.5	22	23	23	22	22
75.0	18	19	19	18	18
77.5	15	15	15	15	14
80.0	11	12	11	11	11
82.5	8	8	8	8	8
85.0	4	5	5	4	4
87.5	1	2	1	1	1
90.0	0	0	0	0	0
92.5	23	288	23	18	18
95.0	46	331	637	679	576
97.5	68	362	666	860	925
100.0	91	403	692	880	942
102.5	114	436	715	904	963
105.0	139	461	743	926	992
107.5	163	483	771	943	1006
110.0	188	497	796	967	1026
112.5	212	505	819	988	1045
115.0	235	515	836	1007	1059
117.5	258	522	847	1023	1072
120.0	281	530	855	1032	1084
122.5	302	537	856	1036	1089
125.0	323	544	850	1038	1091
127.5	342	548	841	1033	1088
130.0	361	552	834	1022	1080
132.5	380	555	825	1003	1065

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S18-LED-ID-DCO-4FT-2E-V-8-TW-OPEN-ITL85168.900.IES****CANDELA TABULATION - (Cont.)**

135.0	398	557	815	981	1041
137.5	414	558	803	961	1014
140.0	431	558	790	940	989
142.5	445	556	774	916	962
145.0	459	555	759	892	935
147.5	471	553	740	865	907
150.0	483	551	720	836	876
152.5	493	549	699	805	845
155.0	502	547	676	773	809
157.5	511	545	654	740	771
160.0	518	542	631	705	733
162.5	525	540	611	671	694
165.0	530	539	592	637	656
167.5	535	539	574	607	621
170.0	538	540	559	581	591
172.5	540	541	549	561	566
175.0	543	543	544	548	549
177.5	544	544	544	544	544
180.0	544	544	544	544	544

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S18-LED-ID-DCO-4FT-2E-V-8-TW-OPEN-ITL85168.900.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	35.58	N.A.	0.80
0-30	75.69	N.A.	1.70
0-40	123.99	N.A.	2.80
0-60	218.85	N.A.	5.00
0-80	272.64	N.A.	6.20
0-90	277.91	N.A.	6.30
10-90	268.75	N.A.	6.10
20-40	88.42	N.A.	2.00
20-50	138.34	N.A.	3.10
40-70	128.94	N.A.	2.90
60-80	53.79	N.A.	1.20
70-80	19.71	N.A.	0.40
80-90	5.27	N.A.	0.10
90-110	1114.34	N.A.	25.20
90-120	1857.55	N.A.	42.10
90-130	2559.21	N.A.	57.90
90-150	3609.58	N.A.	81.70
90-180	4138.34	N.A.	93.70
110-180	3024.00	N.A.	68.50
0-180	4416.25	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	9.17
10-20	26.41
20-30	40.12
30-40	48.30
40-50	49.92
50-60	44.94
60-70	34.08
70-80	19.71
80-90	5.27
90-100	403.93
100-110	710.41
110-120	743.21
120-130	701.66
130-140	594.61
140-150	455.76
150-160	307.56
160-170	168.63
170-180	52.57

IES INDOOR REPORT

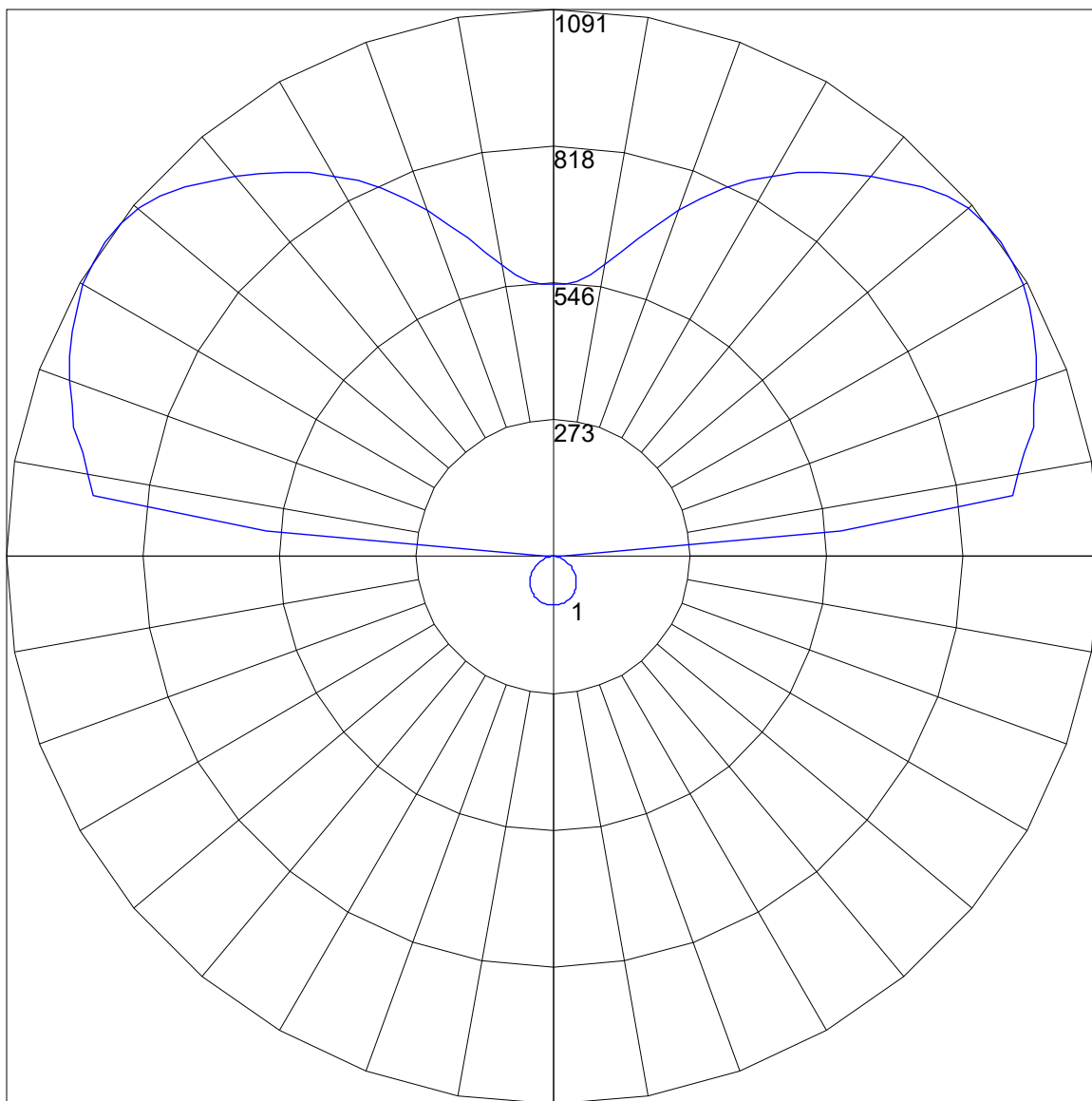
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	97	97	97	97	84	84	84	84	59	59	59	37	37	37	16	16	16	6
1	88	84	80	77	76	73	70	67	51	50	48	32	31	30	14	14	13	5
2	80	73	68	63	69	63	59	55	45	42	40	28	26	25	12	12	11	4
3	73	64	57	52	63	56	50	46	40	36	33	25	23	21	11	10	9	4
4	66	57	49	44	57	49	43	38	35	31	28	22	20	18	10	9	8	3
5	61	50	43	37	52	44	37	33	31	27	24	19	17	15	9	8	7	3
6	56	45	37	32	48	39	33	28	28	24	21	17	15	13	8	7	6	2
7	51	40	33	27	44	35	29	24	25	21	18	16	13	11	7	6	5	2
8	47	36	29	24	41	31	25	21	23	18	16	14	12	10	6	5	5	2
9	44	33	26	21	38	28	23	19	20	16	14	13	11	9	6	5	4	2
10	41	30	23	19	35	26	20	16	19	15	12	12	10	8	5	4	4	2

POLAR GRAPH



Maximum Candela = 1091 Located At Horizontal Angle = 90, Vertical Angle = 125
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)