

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-V-8-TW-FTO-ITL85121.900.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85121.900 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/04/15

[ISSUEDATE]04/15/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S16-LED-ID-DCO-4ft-2E-V-8-TW-FTO

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

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 41.0 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 41.9 WATTS

[OTHER]see www.finelite.com for source file ITL85121. 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

[_ABSOLUTE]LUMENS]4442

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4442
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	41
Ballast Factor	1.00
CIE Type	Semi-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)	3.57 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	5542	5795	6048
55	5349	5624	5862
65	5022	5246	5519
75	4344	4506	4750
85	2893	3134	3134

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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	540	540	540	540	540
2.5	539	539	539	540	540
5.0	538	538	539	539	539
7.5	536	536	537	538	539
10.0	532	533	535	537	537
12.5	528	527	532	535	535
15.0	524	522	529	533	533
17.5	516	515	524	528	529
20.0	509	508	518	524	525
22.5	501	499	510	518	520
25.0	491	489	502	511	513
27.5	480	479	493	502	505
30.0	468	468	482	493	495
32.5	454	455	470	481	485
35.0	440	442	456	468	472
37.5	424	426	441	454	457
40.0	408	410	426	438	443
42.5	391	393	408	420	425
45.0	373	375	390	402	407
47.5	354	356	371	382	387
50.0	334	337	350	362	365
52.5	314	316	329	340	343
55.0	292	295	307	317	320
57.5	271	273	284	293	296
60.0	248	251	260	269	272
62.5	225	227	236	243	246
65.0	202	204	211	218	222
67.5	178	180	186	192	195
70.0	154	155	161	166	169
72.5	129	131	136	140	143
75.0	107	108	111	114	117
77.5	84	85	88	90	92
80.0	62	63	65	67	68
82.5	42	43	44	45	46
85.0	24	25	26	26	26
87.5	8	9	9	9	9
90.0	0	0	0	0	0
92.5	20	20	13	3	2
95.0	43	48	53	53	51
97.5	68	77	92	95	94
100.0	95	109	132	140	141
102.5	123	143	176	193	201
105.0	153	178	224	252	264
107.5	183	217	274	312	326
110.0	215	256	326	373	389
112.5	247	295	379	435	454
115.0	278	334	431	498	519
117.5	309	372	483	558	583
120.0	338	408	533	617	645
122.5	367	443	580	672	703
125.0	393	475	622	723	756
127.5	419	503	660	766	803
130.0	442	529	692	805	844
132.5	462	550	718	836	877

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-V-8-TW-FTO-ITL85121.900.IES****CANDELA TABULATION - (Cont.)**

135.0	481	569	738	860	901
137.5	497	582	751	874	915
140.0	513	593	759	880	922
142.5	526	601	761	880	920
145.0	535	606	757	871	909
147.5	543	607	747	856	892
150.0	550	606	735	836	870
152.5	555	605	720	812	841
155.0	560	601	703	785	811
157.5	563	597	683	755	778
160.0	565	592	664	724	745
162.5	567	588	646	695	712
165.0	567	583	627	665	678
167.5	568	579	610	638	650
170.0	567	575	595	614	622
172.5	567	572	583	594	599
175.0	567	569	575	580	582
177.5	567	567	569	570	571
180.0	567	567	567	567	567

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-V-8-TW-FTO-ITL85121.900.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	200.40	N.A.	4.50
0-30	431.46	N.A.	9.70
0-40	716.24	N.A.	16.10
0-60	1289.75	N.A.	29.00
0-80	1616.4	N.A.	36.40
0-90	1646.55	N.A.	37.10
10-90	1595.25	N.A.	35.90
20-40	515.84	N.A.	11.60
20-50	815.85	N.A.	18.40
40-70	782.12	N.A.	17.60
60-80	326.65	N.A.	7.40
70-80	118.03	N.A.	2.70
80-90	30.15	N.A.	0.70
90-110	286.10	N.A.	6.40
90-120	696.37	N.A.	15.70
90-130	1229.06	N.A.	27.70
90-150	2240.08	N.A.	50.40
90-180	2795.09	N.A.	62.90
110-180	2508.99	N.A.	56.50
0-180	4441.64	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	51.30
10-20	149.10
20-30	231.06
30-40	284.79
40-50	300.01
50-60	273.50
60-70	208.62
70-80	118.03
80-90	30.15
90-100	57.27
100-110	228.83
110-120	410.26
120-130	532.70
130-140	548.82
140-150	462.20
150-160	321.28
160-170	178.26
170-180	55.47

IES INDOOR REPORT

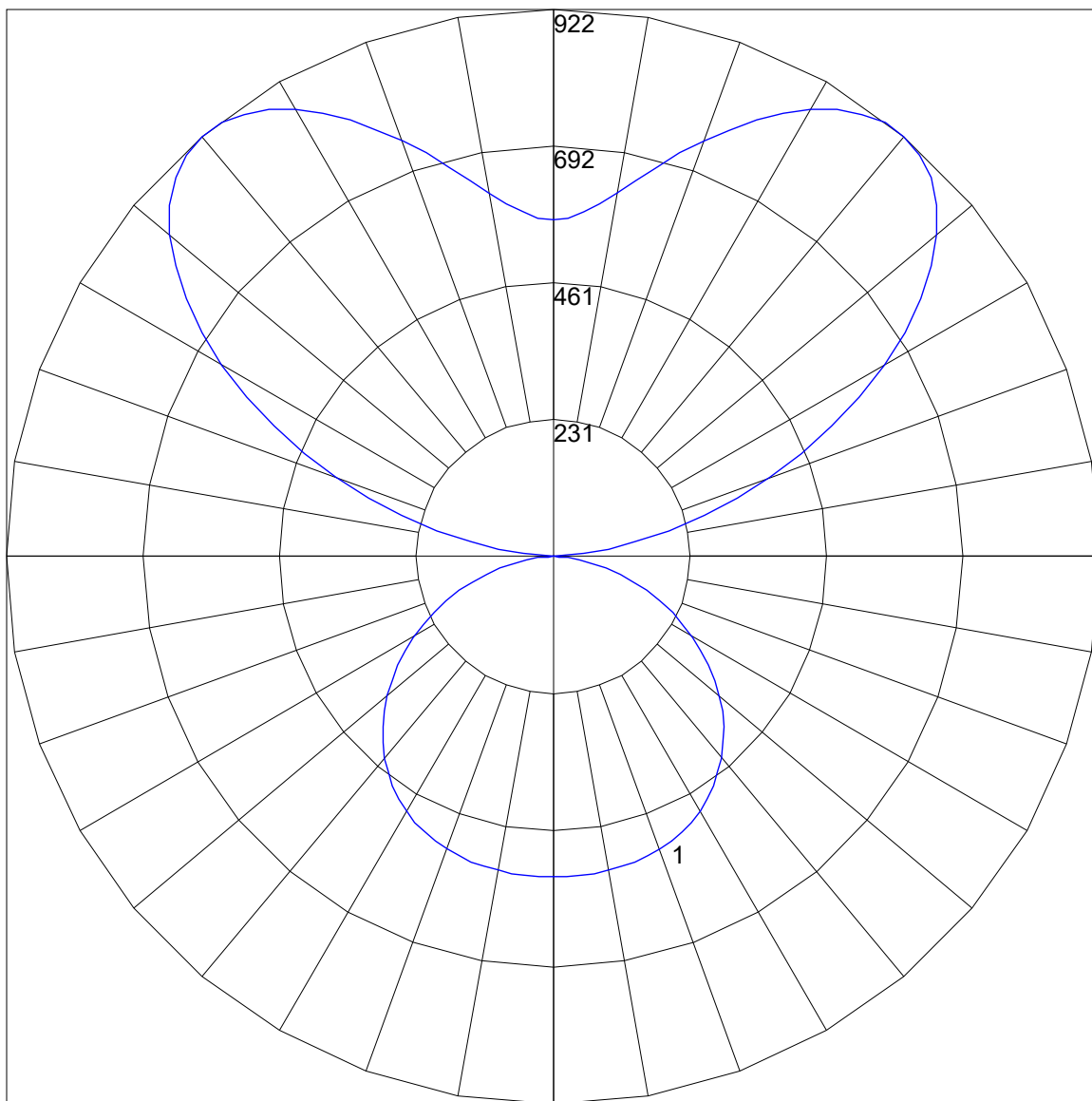
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	44	44	44	37
1	95	90	87	83	86	82	79	76	66	64	62	52	51	49	39	38	37	31
2	86	79	73	68	78	72	66	62	58	54	51	46	43	41	34	32	31	26
3	78	69	62	56	71	63	56	51	51	46	43	40	37	34	30	28	26	21
4	72	61	53	47	65	55	49	43	45	40	36	36	32	29	27	24	22	18
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	24	21	19	16
6	60	48	40	35	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	43	36	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	51	39	32	26	46	36	29	24	30	24	21	24	20	17	18	15	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	16	14	12	10
10	45	33	26	21	40	30	24	19	25	20	16	20	16	14	15	13	11	9

POLAR GRAPH



Maximum Candela = 922 Located At Horizontal Angle = 90, Vertical Angle = 140
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)