

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-4E-H-8-35-30U70D-ITL85122.209.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85122.209 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE] 08/4/15

[ISSUEDATE]08/15/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S16-LED-ID-DCO-4ft-4E-H-8-35-30U70D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 42.9 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 45.5 WATTS

[ABSOLUTE]LUMENS]5000

[OTHER]see www.finelite.com for source file ITL85122. 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	5000
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	117
Total Luminaire Watts	42.9
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.32
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	12162	12044	11879
55	11471	11267	11151
65	10511	10313	10155
75	8904	8710	8581
85	5748	5940	5940

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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	1333.439	1333.439	1333.439	1333.439	1333.439
2.5	1333.439	1331.850	1333.439	1333.439	1331.850
5.0	1327.082	1325.493	1325.493	1327.082	1325.493
7.5	1319.135	1317.546	1317.546	1317.546	1317.546
10.0	1306.421	1301.653	1304.832	1303.242	1301.653
12.5	1290.528	1284.170	1287.349	1287.349	1282.581
15.0	1271.456	1263.509	1268.277	1268.277	1261.920
17.5	1247.616	1236.491	1242.848	1241.259	1234.901
20.0	1222.187	1207.883	1214.240	1214.240	1207.883
22.5	1190.400	1177.686	1182.454	1182.454	1176.097
25.0	1157.025	1144.310	1149.078	1147.489	1142.721
27.5	1120.470	1109.345	1112.524	1109.345	1106.167
30.0	1080.737	1069.612	1074.380	1069.612	1064.844
32.5	1041.004	1031.468	1033.058	1028.290	1023.522
35.0	999.682	990.146	991.736	985.378	982.200
37.5	956.770	948.824	948.824	942.467	937.699
40.0	912.269	902.734	904.323	897.966	893.198
42.5	866.179	856.643	858.233	850.286	847.107
45.0	818.500	810.553	810.553	802.606	799.428
47.5	773.999	764.463	762.874	754.927	753.338
50.0	724.730	715.194	713.605	705.658	705.658
52.5	675.461	667.514	664.336	657.978	657.978
55.0	626.192	618.245	615.067	608.710	608.710
57.5	576.923	568.976	567.387	559.441	557.851
60.0	526.065	519.708	516.529	510.172	508.582
62.5	475.207	468.849	465.671	459.313	457.724
65.0	422.759	417.991	414.813	408.455	408.455
67.5	371.901	367.133	363.954	359.186	357.597
70.0	319.453	316.275	313.096	308.328	308.328
72.5	268.595	267.006	263.827	260.648	259.059
75.0	219.326	217.737	214.558	212.969	211.380
77.5	171.647	170.057	168.468	166.879	166.879
80.0	125.556	125.556	123.967	123.967	123.967
82.5	84.234	85.823	84.234	84.234	84.234
85.0	47.680	49.269	49.269	49.269	49.269
87.5	15.893	17.483	17.483	17.483	17.483
90.0	0.000	0.000	0.000	0.000	0.000
92.5	5.387	20.202	14.141	14.478	14.478
95.0	15.488	91.245	46.801	26.936	25.589
97.5	27.609	106.396	222.220	123.568	72.053
100.0	40.740	117.507	247.136	307.405	303.364
102.5	54.545	125.588	255.217	330.973	354.206
105.0	68.013	137.373	262.287	336.697	361.950
107.5	80.471	148.820	268.348	339.391	363.633
110.0	93.602	158.921	269.695	342.758	365.653
112.5	106.060	168.349	274.408	345.115	368.347
115.0	118.181	177.776	280.469	343.768	367.337
117.5	129.965	187.204	285.856	344.441	365.653
120.0	141.076	195.958	290.570	347.472	366.327
122.5	151.514	204.375	294.610	350.165	368.347
125.0	161.278	212.119	297.640	351.849	369.357
127.5	170.706	219.527	300.671	353.195	370.030
130.0	179.796	226.597	302.691	353.532	370.030
132.5	188.550	232.994	305.048	353.195	369.020

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-4E-H-8-35-30U70D-ITL85122.209.IES****CANDELA TABULATION - (Cont.)**

135.0	196.294	238.718	307.068	352.185	367.000
137.5	203.702	243.769	308.415	350.502	364.980
140.0	211.109	248.483	309.425	348.818	361.950
142.5	217.843	252.523	309.762	346.798	358.919
145.0	224.577	256.227	309.762	344.441	355.552
147.5	230.301	259.594	309.425	341.748	351.849
150.0	235.688	261.614	307.741	337.707	347.135
152.5	240.739	263.634	305.385	333.667	342.421
155.0	245.116	265.317	302.691	328.617	336.361
157.5	249.156	266.328	299.324	322.556	329.963
160.0	252.860	267.001	295.620	315.822	322.556
162.5	255.890	267.001	290.906	308.415	314.475
165.0	258.584	267.001	286.193	300.671	305.385
167.5	260.604	266.664	281.142	292.927	297.304
170.0	262.287	266.328	276.428	284.846	288.213
172.5	263.634	266.328	272.051	277.775	279.796
175.0	264.644	265.654	268.348	271.715	272.388
177.5	265.654	265.991	266.664	267.338	267.338
180.0	265.654	265.654	265.654	265.654	265.654

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-4E-H-8-35-30U70D-ITL85122.209.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	482.59	N.A.	9.70
0-30	1010.96	N.A.	20.20
0-40	1629.93	N.A.	32.60
0-60	2803.58	N.A.	56.10
0-80	3442.01	N.A.	68.80
0-90	3500.01	N.A.	70.00
10-90	3374.09	N.A.	67.50
20-40	1147.33	N.A.	22.90
20-50	1771.14	N.A.	35.40
40-70	1583.68	N.A.	31.70
60-80	638.43	N.A.	12.80
70-80	228.41	N.A.	4.60
80-90	58.00	N.A.	1.20
90-110	328.42	N.A.	6.60
90-120	587.58	N.A.	11.80
90-130	839.89	N.A.	16.80
90-150	1256.15	N.A.	25.10
90-180	1500.00	N.A.	30.00
110-180	1171.58	N.A.	23.40
0-180	5000.01	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	125.91
10-20	356.68
20-30	528.36
30-40	618.97
40-50	623.81
50-60	549.84
60-70	410.02
70-80	228.41
80-90	58.00
90-100	79.38
100-110	249.04
110-120	259.16
120-130	252.32
130-140	227.99
140-150	188.27
150-160	137.28
160-170	80.69
170-180	25.87

IES INDOOR REPORT

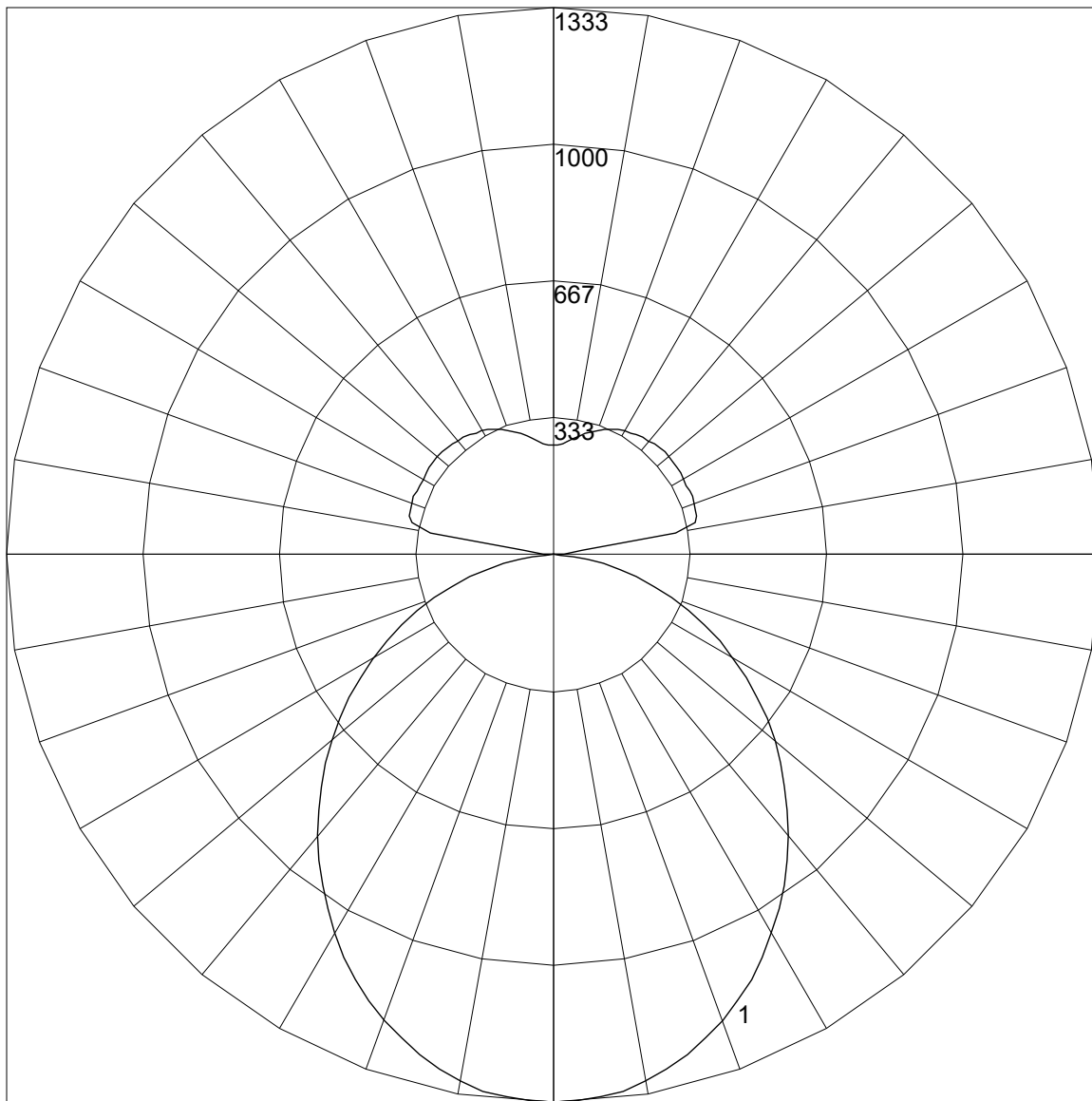
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	70
1	102	98	94	90	97	93	89	86	83	80	78	74	72	70	66	64	63	59
2	93	85	79	74	88	81	75	70	73	68	64	65	62	59	58	55	53	49
3	85	75	67	61	80	71	64	59	64	59	54	57	53	49	51	48	45	42
4	78	67	58	52	73	63	56	50	57	51	46	51	46	42	46	42	39	36
5	71	59	51	45	67	56	49	43	51	45	40	46	41	37	41	37	34	31
6	66	53	45	39	62	51	43	38	46	40	35	42	36	32	37	33	30	27
7	61	48	40	34	58	46	38	33	42	35	31	38	33	29	34	30	26	24
8	57	44	36	30	54	42	35	29	38	32	27	35	29	26	31	27	24	22
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	21	19
10	50	37	30	25	47	35	28	24	32	26	22	30	25	21	27	23	20	18

POLAR GRAPH



Maximum Candela = 1333.439 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)