

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-8-35-40U60D-ITL85122.212.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85122.212 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-8-35-40U60D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 42.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 45.0 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	42.6
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	10425	10324	10182
55	9832	9657	9558
65	9009	8840	8704
75	7632	7466	7355
85	4927	5091	5091

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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	1142.948	1142.948	1142.948	1142.948	1142.948
2.5	1142.948	1141.586	1142.948	1142.948	1141.586
5.0	1137.499	1136.137	1136.137	1137.499	1136.137
7.5	1130.688	1129.325	1129.325	1129.325	1129.325
10.0	1119.789	1115.703	1118.427	1117.065	1115.703
12.5	1106.167	1100.717	1103.442	1103.442	1099.355
15.0	1089.819	1083.008	1087.095	1087.095	1081.646
17.5	1069.385	1059.849	1065.298	1063.936	1058.487
20.0	1047.589	1035.328	1040.777	1040.777	1035.328
22.5	1020.343	1009.445	1013.532	1013.532	1008.083
25.0	991.736	980.837	984.924	983.562	979.475
27.5	960.403	950.867	953.592	950.867	948.143
30.0	926.346	916.811	920.897	916.811	912.724
32.5	892.290	884.116	885.478	881.391	877.304
35.0	856.870	848.697	850.059	844.610	841.885
37.5	820.089	813.278	813.278	807.829	803.742
40.0	781.945	773.772	775.134	769.685	765.598
42.5	742.439	734.266	735.628	728.817	726.092
45.0	701.571	694.760	694.760	687.948	685.224
47.5	663.428	655.254	653.891	647.080	645.718
50.0	621.197	613.023	611.661	604.850	604.850
52.5	578.966	572.155	569.431	563.981	563.981
55.0	536.736	529.925	527.200	521.751	521.751
57.5	494.505	487.694	486.332	479.521	478.158
60.0	450.913	445.464	442.739	437.290	435.928
62.5	407.320	401.871	399.146	393.697	392.335
65.0	362.365	358.278	355.553	350.104	350.104
67.5	318.772	314.685	311.961	307.874	306.512
70.0	273.817	271.092	268.368	264.281	264.281
72.5	230.224	228.862	226.137	223.413	222.051
75.0	187.994	186.631	183.907	182.545	181.182
77.5	147.126	145.763	144.401	143.039	143.039
80.0	107.620	107.620	106.257	106.257	106.257
82.5	72.201	73.563	72.201	72.201	72.201
85.0	40.868	42.230	42.230	42.230	42.230
87.5	13.623	14.985	14.985	14.985	14.985
90.0	0.000	0.000	0.000	0.000	0.000
92.5	7.183	26.936	18.855	19.304	19.304
95.0	20.651	121.660	62.401	35.914	34.119
97.5	36.812	141.862	296.294	164.757	96.071
100.0	54.321	156.677	329.514	409.873	404.486
102.5	72.727	167.451	340.289	441.298	472.274
105.0	90.684	183.163	349.716	448.930	482.599
107.5	107.294	198.427	357.797	452.521	484.844
110.0	124.802	211.895	359.593	457.010	487.538
112.5	141.413	224.465	365.878	460.153	491.129
115.0	157.574	237.035	373.959	458.357	489.782
117.5	173.287	249.605	381.141	459.255	487.538
120.0	188.102	261.277	387.426	463.296	488.436
122.5	202.018	272.500	392.813	466.887	491.129
125.0	215.037	282.826	396.854	469.132	492.476
127.5	227.607	292.702	400.894	470.927	493.374
130.0	239.728	302.130	403.588	471.376	493.374
132.5	251.401	310.659	406.730	470.927	492.027

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-4E-H-8-35-40U60D-ITL85122.212.IES****CANDELA TABULATION - (Cont.)**

135.0	261.726	318.291	409.424	469.580	489.333
137.5	271.603	325.025	411.220	467.336	486.640
140.0	281.479	331.310	412.566	465.091	482.599
142.5	290.458	336.697	413.015	462.398	478.559
145.0	299.436	341.635	413.015	459.255	474.070
147.5	307.068	346.125	412.566	455.664	469.132
150.0	314.251	348.818	410.322	450.277	462.847
152.5	320.985	351.512	407.179	444.889	456.562
155.0	326.821	353.757	403.588	438.155	448.481
157.5	332.208	355.103	399.099	430.075	439.951
160.0	337.146	356.001	394.160	421.096	430.075
162.5	341.187	356.001	387.875	411.220	419.300
165.0	344.778	356.001	381.590	400.894	407.179
167.5	347.472	355.552	374.856	390.569	396.405
170.0	349.716	355.103	368.571	379.795	384.284
172.5	351.512	355.103	362.735	370.367	373.061
175.0	352.859	354.206	357.797	362.286	363.184
177.5	354.206	354.654	355.552	356.450	356.450
180.0	354.206	354.206	354.206	354.206	354.206

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-4E-H-8-35-40U60D-ITL85122.212.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	413.65	N.A.	8.30
0-30	866.53	N.A.	17.30
0-40	1397.08	N.A.	27.90
0-60	2403.06	N.A.	48.10
0-80	2950.29	N.A.	59.00
0-90	3000.01	N.A.	60.00
10-90	2892.08	N.A.	57.80
20-40	983.43	N.A.	19.70
20-50	1518.12	N.A.	30.40
40-70	1357.44	N.A.	27.10
60-80	547.23	N.A.	10.90
70-80	195.78	N.A.	3.90
80-90	49.72	N.A.	1.00
90-110	437.89	N.A.	8.80
90-120	783.44	N.A.	15.70
90-130	1119.86	N.A.	22.40
90-150	1674.87	N.A.	33.50
90-180	2000.00	N.A.	40.00
110-180	1562.11	N.A.	31.20
0-180	5000.01	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	107.93
10-20	305.73
20-30	452.88
30-40	530.55
40-50	534.69
50-60	471.29
60-70	351.45
70-80	195.78
80-90	49.72
90-100	105.83
100-110	332.06
110-120	345.54
120-130	336.42
130-140	303.99
140-150	251.03
150-160	183.04
160-170	107.59
170-180	34.50

IES INDOOR REPORT

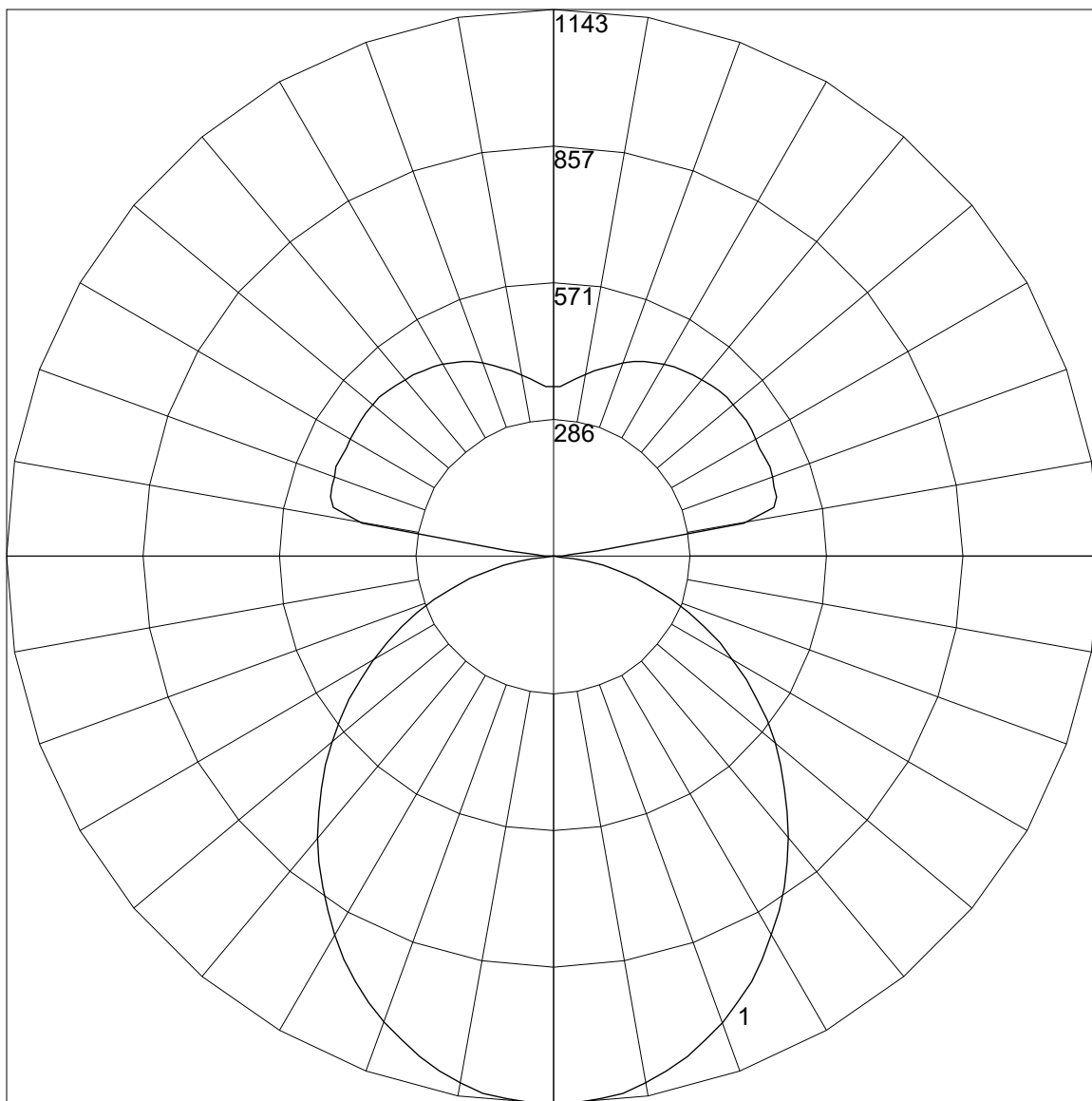
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	65	65	65	60
1	100	96	92	88	93	89	86	83	78	75	73	67	66	64	58	56	55	51
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	51	48	46	42
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	36
4	76	65	57	51	71	61	54	48	54	48	43	47	42	39	40	37	34	31
5	70	58	50	44	65	54	47	41	48	42	37	42	37	33	36	33	30	27
6	64	52	44	38	60	49	41	36	43	37	33	38	33	29	33	29	26	23
7	60	47	39	33	55	44	37	32	39	33	29	34	30	26	30	26	23	21
8	55	43	35	29	52	40	33	28	36	30	26	32	27	23	28	24	21	18
9	52	39	31	26	48	37	30	25	33	27	23	29	24	21	25	22	19	17
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	24	20	17	15

POLAR GRAPH



Maximum Candela = 1142.948 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)