

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-B-8-35-40U60D-ITL85122.211.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85122.211 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-B-8-35-40U60D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 34.4 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 37.2 WATTS

[ABSOLUTE]LUMENS]4000

[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	4000
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	116
Total Luminaire Watts	34.4
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	8340	8259	8145
55	7866	7726	7646
65	7207	7072	6963
75	6105	5973	5884
85	3942	4073	4073

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-4E-B-8-35-40U60D-ITL85122.211.IES****CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	914.358	914.358	914.358	914.358	914.358
2.5	914.358	913.269	914.358	914.358	913.269
5.0	909.999	908.909	908.909	909.999	908.909
7.5	904.550	903.460	903.460	903.460	903.460
10.0	895.831	892.562	894.742	893.652	892.562
12.5	884.933	880.574	882.754	882.754	879.484
15.0	871.855	866.406	869.676	869.676	865.317
17.5	855.508	847.879	852.239	851.149	846.790
20.0	838.071	828.263	832.622	832.622	828.263
22.5	816.275	807.556	810.826	810.826	806.466
25.0	793.388	784.670	787.939	786.850	783.580
27.5	768.323	760.694	762.874	760.694	758.514
30.0	741.077	733.448	736.718	733.448	730.179
32.5	713.832	707.293	708.383	705.113	701.844
35.0	685.496	678.957	680.047	675.688	673.508
37.5	656.071	650.622	650.622	646.263	642.993
40.0	625.556	619.017	620.107	615.748	612.479
42.5	593.952	587.413	588.502	583.053	580.874
45.0	561.257	555.808	555.808	550.359	548.179
47.5	530.742	524.203	523.113	517.664	516.574
50.0	496.958	490.419	489.329	483.880	483.880
52.5	463.173	457.724	455.545	451.185	451.185
55.0	429.389	423.940	421.760	417.401	417.401
57.5	395.604	390.155	389.065	383.616	382.527
60.0	360.730	356.371	354.191	349.832	348.742
62.5	325.856	321.497	319.317	314.958	313.868
65.0	289.892	286.623	284.443	280.084	280.084
67.5	255.018	251.748	249.569	246.299	245.209
70.0	219.054	216.874	214.694	211.425	211.425
72.5	184.179	183.090	180.910	178.730	177.641
75.0	150.395	149.305	147.126	146.036	144.946
77.5	117.701	116.611	115.521	114.431	114.431
80.0	86.096	86.096	85.006	85.006	85.006
82.5	57.760	58.850	57.760	57.760	57.760
85.0	32.695	33.784	33.784	33.784	33.784
87.5	10.898	11.988	11.988	11.988	11.988
90.0	0.000	0.000	0.000	0.000	0.000
92.5	5.746	21.549	15.084	15.443	15.443
95.0	16.521	97.328	49.921	28.732	27.295
97.5	29.450	113.489	237.035	131.806	76.857
100.0	43.456	125.341	263.611	327.898	323.589
102.5	58.181	133.961	272.231	353.038	377.819
105.0	72.547	146.531	279.773	359.144	386.080
107.5	85.835	158.742	286.238	362.017	387.875
110.0	99.842	169.516	287.674	365.608	390.030
112.5	113.130	179.572	292.702	368.122	392.903
115.0	126.059	189.628	299.167	366.686	391.826
117.5	138.630	199.684	304.913	367.404	390.030
120.0	150.481	209.022	309.941	370.636	390.748
122.5	161.615	218.000	314.251	373.510	392.903
125.0	172.030	226.261	317.483	375.305	393.981
127.5	182.086	234.162	320.715	376.742	394.699
130.0	191.783	241.704	322.870	377.101	394.699
132.5	201.120	248.528	325.384	376.742	393.622

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-4E-B-8-35-40U60D-ITL85122.211.IES****CANDELA TABULATION - (Cont.)**

135.0	209.381	254.633	327.539	375.664	391.467
137.5	217.282	260.020	328.976	373.869	389.312
140.0	225.183	265.048	330.053	372.073	386.080
142.5	232.366	269.358	330.412	369.918	382.847
145.0	239.549	273.308	330.412	367.404	379.256
147.5	245.654	276.900	330.053	364.531	375.305
150.0	251.401	279.055	328.257	360.221	370.277
152.5	256.788	281.210	325.743	355.911	365.249
155.0	261.457	283.005	322.870	350.524	358.785
157.5	265.766	284.083	319.279	344.060	351.961
160.0	269.717	284.801	315.328	336.877	344.060
162.5	272.949	284.801	310.300	328.976	335.440
165.0	275.822	284.801	305.272	320.715	325.743
167.5	277.977	284.442	299.885	312.455	317.124
170.0	279.773	284.083	294.857	303.836	307.427
172.5	281.210	284.083	290.188	296.294	298.449
175.0	282.287	283.365	286.238	289.829	290.547
177.5	283.365	283.724	284.442	285.160	285.160
180.0	283.365	283.365	283.365	283.365	283.365

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-4E-B-8-35-40U60D-ITL85122.211.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	330.92	N.A.	8.30
0-30	693.23	N.A.	17.30
0-40	1117.66	N.A.	27.90
0-60	1922.45	N.A.	48.10
0-80	2360.23	N.A.	59.00
0-90	2400.00	N.A.	60.00
10-90	2313.66	N.A.	57.80
20-40	786.74	N.A.	19.70
20-50	1214.5	N.A.	30.40
40-70	1085.95	N.A.	27.10
60-80	437.78	N.A.	10.90
70-80	156.62	N.A.	3.90
80-90	39.77	N.A.	1.00
90-110	350.31	N.A.	8.80
90-120	626.75	N.A.	15.70
90-130	895.89	N.A.	22.40
90-150	1339.9	N.A.	33.50
90-180	1600.00	N.A.	40.00
110-180	1249.69	N.A.	31.20
0-180	4000.01	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	86.34
10-20	244.58
20-30	362.30
30-40	424.44
40-50	427.76
50-60	377.03
60-70	281.16
70-80	156.62
80-90	39.77
90-100	84.67
100-110	265.65
110-120	276.43
120-130	269.14
130-140	243.19
140-150	200.82
150-160	146.44
160-170	86.07
170-180	27.60

IES INDOOR REPORT

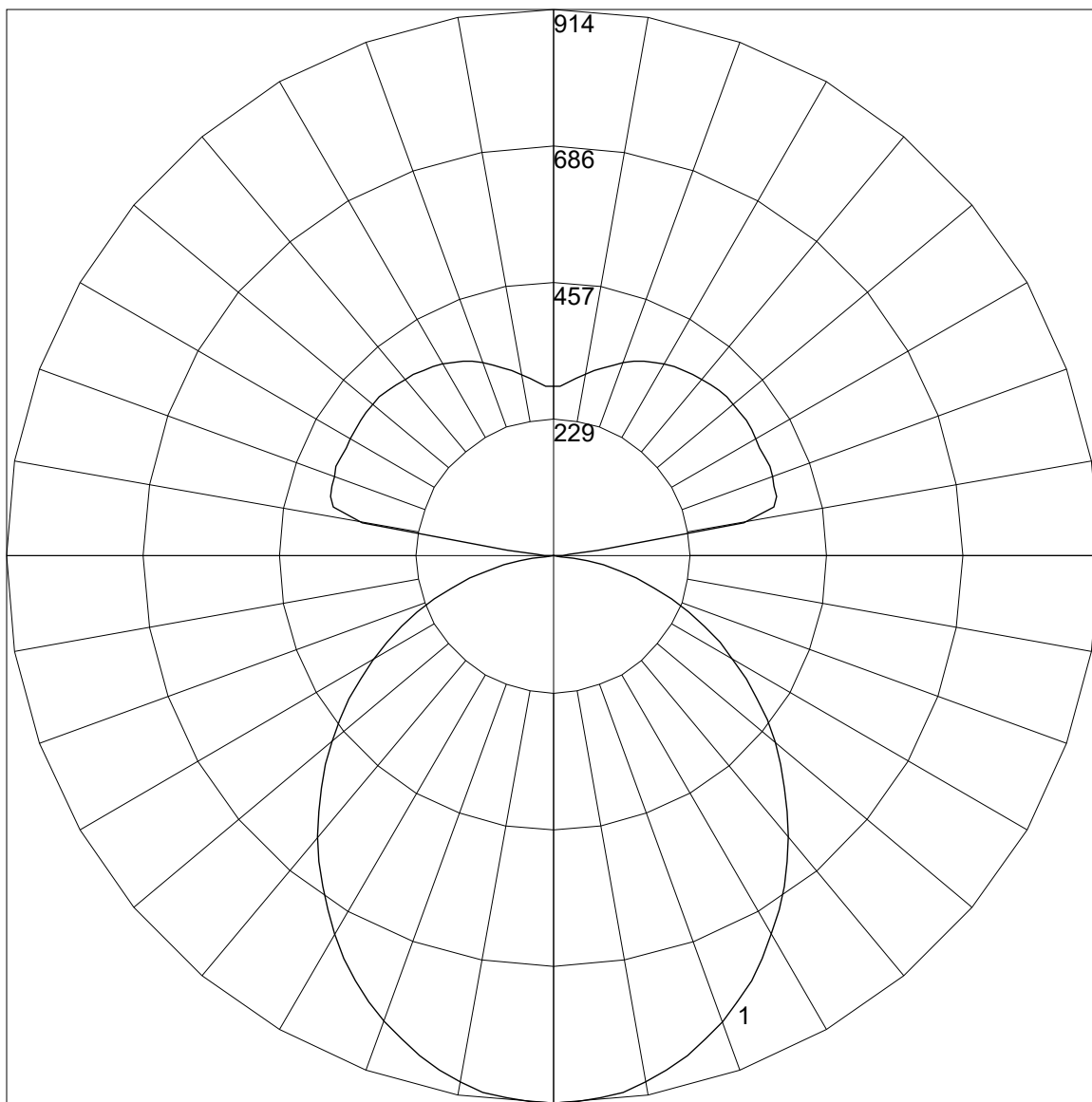
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 = 914.358 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)