

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-8-35-20U80D-ITL85122.205.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85122.205 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-8-35-20U80D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 34.9 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 37.3 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)	115
Total Luminaire Watts	34.9
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	11120	11012	10861
55	10488	10301	10195
65	9610	9429	9284
75	8141	7964	7846
85	5255	5430	5430

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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	1219.145	1219.145	1219.145	1219.145	1219.145
2.5	1219.145	1217.691	1219.145	1219.145	1217.691
5.0	1213.332	1211.879	1211.879	1213.332	1211.879
7.5	1206.067	1204.613	1204.613	1204.613	1204.613
10.0	1194.442	1190.083	1192.989	1191.536	1190.083
12.5	1179.911	1174.099	1177.005	1177.005	1172.646
15.0	1162.474	1155.208	1159.568	1159.568	1153.755
17.5	1140.678	1130.506	1136.318	1134.865	1129.053
20.0	1117.428	1104.350	1110.163	1110.163	1104.350
22.5	1088.366	1076.742	1081.101	1081.101	1075.288
25.0	1057.851	1046.226	1050.586	1049.133	1044.773
27.5	1024.430	1014.259	1017.165	1014.259	1011.352
30.0	988.103	977.931	982.290	977.931	973.572
32.5	951.775	943.057	944.510	940.151	935.792
35.0	913.995	905.277	906.730	900.917	898.011
37.5	874.762	867.496	867.496	861.684	857.324
40.0	834.075	825.356	826.810	820.997	816.638
42.5	791.935	783.217	784.670	777.404	774.498
45.0	748.343	741.077	741.077	733.812	730.905
47.5	707.656	698.937	697.484	690.219	688.766
50.0	662.610	653.891	652.438	645.173	645.173
52.5	617.564	610.299	607.393	601.580	601.580
55.0	572.518	565.253	562.347	556.534	556.534
57.5	527.472	520.207	518.754	511.488	510.035
60.0	480.974	475.161	472.255	466.443	464.990
62.5	434.475	428.662	425.756	419.944	418.491
65.0	386.523	382.163	379.257	373.445	373.445
67.5	340.024	335.664	332.758	328.399	326.946
70.0	292.072	289.165	286.259	281.900	281.900
72.5	245.573	244.119	241.213	238.307	236.854
75.0	200.527	199.074	196.167	194.714	193.261
77.5	156.934	155.481	154.028	152.575	152.575
80.0	114.794	114.794	113.341	113.341	113.341
82.5	77.014	78.467	77.014	77.014	77.014
85.0	43.593	45.046	45.046	45.046	45.046
87.5	14.531	15.984	15.984	15.984	15.984
90.0	0.000	0.000	0.000	0.000	0.000
92.5	2.873	10.774	7.542	7.722	7.722
95.0	8.260	48.664	24.960	14.366	13.648
97.5	14.725	56.745	118.517	65.903	38.428
100.0	21.728	62.671	131.806	163.949	161.794
102.5	29.091	66.980	136.115	176.519	188.910
105.0	36.273	73.265	139.887	179.572	193.040
107.5	42.918	79.371	143.119	181.008	193.938
110.0	49.921	84.758	143.837	182.804	195.015
112.5	56.565	89.786	146.351	184.061	196.452
115.0	63.030	94.814	149.583	183.343	195.913
117.5	69.315	99.842	152.457	183.702	195.015
120.0	75.241	104.511	154.971	185.318	195.374
122.5	80.807	109.000	157.125	186.755	196.452
125.0	86.015	113.130	158.742	187.653	196.990
127.5	91.043	117.081	160.358	188.371	197.350
130.0	95.891	120.852	161.435	188.550	197.350
132.5	100.560	124.264	162.692	188.371	196.811

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-4E-B-8-35-20U80D-ITL85122.205.IES****CANDELA TABULATION - (Cont.)**

135.0	104.690	127.317	163.770	187.832	195.733
137.5	108.641	130.010	164.488	186.934	194.656
140.0	112.592	132.524	165.027	186.036	193.040
142.5	116.183	134.679	165.206	184.959	191.424
145.0	119.775	136.654	165.206	183.702	189.628
147.5	122.827	138.450	165.027	182.266	187.653
150.0	125.700	139.527	164.129	180.111	185.139
152.5	128.394	140.605	162.872	177.956	182.625
155.0	130.728	141.503	161.435	175.262	179.392
157.5	132.883	142.041	159.639	172.030	175.981
160.0	134.858	142.400	157.664	168.438	172.030
162.5	136.475	142.400	155.150	164.488	167.720
165.0	137.911	142.400	152.636	160.358	162.872
167.5	138.989	142.221	149.942	156.228	158.562
170.0	139.887	142.041	147.429	151.918	153.714
172.5	140.605	142.041	145.094	148.147	149.224
175.0	141.143	141.682	143.119	144.915	145.274
177.5	141.682	141.862	142.221	142.580	142.580
180.0	141.682	141.682	141.682	141.682	141.682

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-4E-B-8-35-20U80D-ITL85122.205.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	441.23	N.A.	11.00
0-30	924.30	N.A.	23.10
0-40	1490.22	N.A.	37.30
0-60	2563.27	N.A.	64.10
0-80	3146.98	N.A.	78.70
0-90	3200.01	N.A.	80.00
10-90	3084.88	N.A.	77.10
20-40	1048.99	N.A.	26.20
20-50	1619.33	N.A.	40.50
40-70	1447.93	N.A.	36.20
60-80	583.71	N.A.	14.60
70-80	208.83	N.A.	5.20
80-90	53.03	N.A.	1.30
90-110	175.16	N.A.	4.40
90-120	313.37	N.A.	7.80
90-130	447.94	N.A.	11.20
90-150	669.95	N.A.	16.70
90-180	800.00	N.A.	20.00
110-180	624.84	N.A.	15.60
0-180	4000.01	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	115.12
10-20	326.11
20-30	483.07
30-40	565.91
40-50	570.34
50-60	502.71
60-70	374.88
70-80	208.83
80-90	53.03
90-100	42.33
100-110	132.82
110-120	138.22
120-130	134.57
130-140	121.59
140-150	100.41
150-160	73.22
160-170	43.03
170-180	13.80

IES INDOOR REPORT

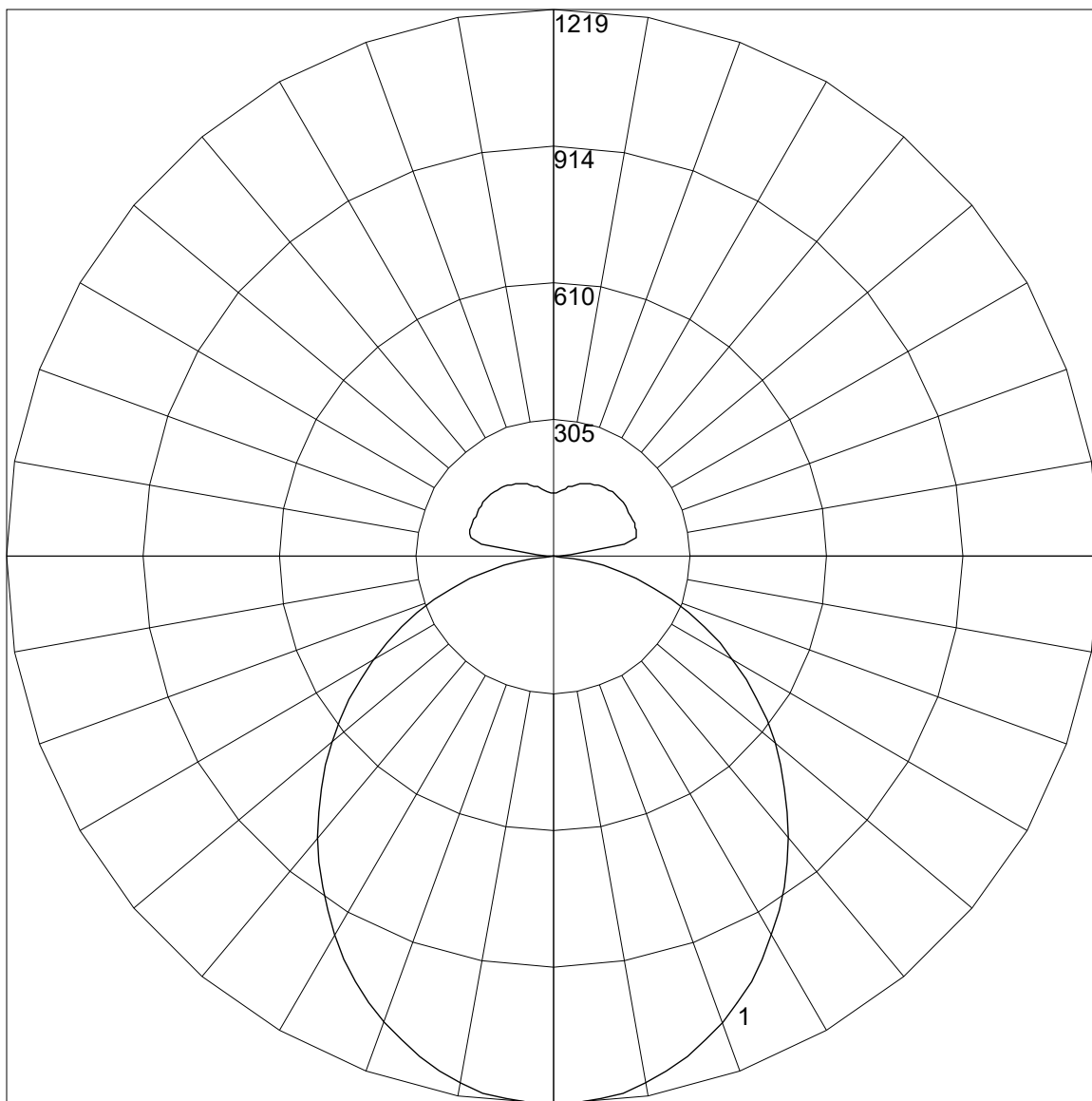
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	114	114	114	114	109	109	109	109	100	100	100	91	91	91	84	84	84	80
1	104	100	96	92	100	96	92	89	88	85	82	81	78	76	74	72	71	67
2	95	87	81	75	91	84	78	73	77	72	68	71	67	64	65	62	59	56
3	87	77	69	63	83	74	67	61	68	62	57	63	58	54	58	54	51	48
4	80	68	60	53	76	65	58	52	60	54	49	56	51	46	51	47	44	41
5	73	61	52	46	70	59	51	45	54	48	42	50	45	40	46	42	38	35
6	67	55	46	40	64	53	45	39	49	42	37	45	40	35	42	37	33	31
7	63	50	41	35	60	48	40	34	45	38	33	41	36	31	38	34	30	28
8	58	45	37	31	56	44	36	31	41	34	29	38	32	28	35	30	27	25
9	54	41	34	28	52	40	33	28	37	31	26	35	29	25	33	28	24	22
10	51	38	31	25	49	37	30	25	35	28	24	32	27	23	30	25	22	20

POLAR GRAPH



Maximum Candela = 1219.145 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)