

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-S-8-35-40U60D-ITL85122.210.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85122.210 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-S-8-35-40U60D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 26.4 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 29.7 WATTS

[ABSOLUTE]LUMENS]3000

[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	3000
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	114
Total Luminaire Watts	26.4
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	6255	6194	6109
55	5899	5794	5735
65	5405	5304	5223
75	4579	4480	4413
85	2956	3055	3055

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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	685.769	685.769	685.769	685.769	685.769
2.5	685.769	684.951	685.769	685.769	684.951
5.0	682.499	681.682	681.682	682.499	681.682
7.5	678.413	677.595	677.595	677.595	677.595
10.0	671.874	669.422	671.056	670.239	669.422
12.5	663.700	660.431	662.065	662.065	659.613
15.0	653.891	649.805	652.257	652.257	648.987
17.5	641.631	635.909	639.179	638.362	635.092
20.0	628.553	621.197	624.466	624.466	621.197
22.5	612.206	605.667	608.119	608.119	604.850
25.0	595.041	588.502	590.955	590.137	587.685
27.5	576.242	570.520	572.155	570.520	568.886
30.0	555.808	550.086	552.538	550.086	547.634
32.5	535.374	530.470	531.287	528.835	526.383
35.0	514.122	509.218	510.035	506.766	505.131
37.5	492.053	487.967	487.967	484.697	482.245
40.0	469.167	464.263	465.080	461.811	459.359
42.5	445.464	440.559	441.377	437.290	435.655
45.0	420.943	416.856	416.856	412.769	411.134
47.5	398.057	393.152	392.335	388.248	387.431
50.0	372.718	367.814	366.997	362.910	362.910
52.5	347.380	343.293	341.658	338.389	338.389
55.0	322.042	317.955	316.320	313.051	313.051
57.5	296.703	292.616	291.799	287.712	286.895
60.0	270.548	267.278	265.643	262.374	261.557
62.5	244.392	241.123	239.488	236.218	235.401
65.0	217.419	214.967	213.332	210.063	210.063
67.5	191.263	188.811	187.177	184.724	183.907
70.0	164.290	162.655	161.021	158.569	158.569
72.5	138.135	137.317	135.683	134.048	133.230
75.0	112.796	111.979	110.344	109.527	108.710
77.5	88.275	87.458	86.641	85.823	85.823
80.0	64.572	64.572	63.754	63.754	63.754
82.5	43.320	44.138	43.320	43.320	43.320
85.0	24.521	25.338	25.338	25.338	25.338
87.5	8.174	8.991	8.991	8.991	8.991
90.0	0.000	0.000	0.000	0.000	0.000
92.5	4.310	16.162	11.313	11.582	11.582
95.0	12.390	72.996	37.441	21.549	20.471
97.5	22.087	85.117	177.776	98.854	57.643
100.0	32.592	94.006	197.709	245.924	242.691
102.5	43.636	100.471	204.173	264.779	283.365
105.0	54.410	109.898	209.830	269.358	289.560
107.5	64.376	119.056	214.678	271.513	290.906
110.0	74.882	127.137	215.756	274.206	292.523
112.5	84.848	134.679	219.527	276.092	294.678
115.0	94.545	142.221	224.375	275.014	293.869
117.5	103.972	149.763	228.685	275.553	292.523
120.0	112.861	156.766	232.456	277.977	293.061
122.5	121.211	163.500	235.688	280.132	294.678
125.0	129.022	169.695	238.112	281.479	295.486
127.5	136.564	175.621	240.537	282.556	296.024
130.0	143.837	181.278	242.153	282.826	296.024
132.5	150.840	186.396	244.038	282.556	295.216

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-4E-S-8-35-40U60D-ITL85122.210.IES****CANDELA TABULATION - (Cont.)**

135.0	157.036	190.975	245.654	281.748	293.600
137.5	162.962	195.015	246.732	280.401	291.984
140.0	168.887	198.786	247.540	279.055	289.560
142.5	174.274	202.018	247.809	277.439	287.135
145.0	179.662	204.981	247.809	275.553	284.442
147.5	184.241	207.675	247.540	273.398	281.479
150.0	188.550	209.291	246.193	270.166	277.708
152.5	192.591	210.907	244.308	266.934	273.937
155.0	196.093	212.254	242.153	262.893	269.089
157.5	199.325	213.062	239.459	258.045	263.971
160.0	202.288	213.601	236.496	252.658	258.045
162.5	204.712	213.601	232.725	246.732	251.580
165.0	206.867	213.601	228.954	240.537	244.308
167.5	208.483	213.331	224.914	234.341	237.843
170.0	209.830	213.062	221.143	227.877	230.570
172.5	210.907	213.062	217.641	222.220	223.836
175.0	211.715	212.523	214.678	217.372	217.911
177.5	212.523	212.793	213.331	213.870	213.870
180.0	212.523	212.523	212.523	212.523	212.523

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-4E-S-8-35-40U60D-ITL85122.210.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	248.19	N.A.	8.30
0-30	519.92	N.A.	17.30
0-40	838.25	N.A.	27.90
0-60	1441.84	N.A.	48.10
0-80	1770.17	N.A.	59.00
0-90	1800.00	N.A.	60.00
10-90	1735.25	N.A.	57.80
20-40	590.06	N.A.	19.70
20-50	910.87	N.A.	30.40
40-70	814.46	N.A.	27.10
60-80	328.34	N.A.	10.90
70-80	117.47	N.A.	3.90
80-90	29.83	N.A.	1.00
90-110	262.74	N.A.	8.80
90-120	470.06	N.A.	15.70
90-130	671.91	N.A.	22.40
90-150	1004.92	N.A.	33.50
90-180	1200.00	N.A.	40.00
110-180	937.27	N.A.	31.20
0-180	3000.00	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	64.76
10-20	183.44
20-30	271.73
30-40	318.33
40-50	320.82
50-60	282.77
60-70	210.87
70-80	117.47
80-90	29.83
90-100	63.50
100-110	199.24
110-120	207.33
120-130	201.85
130-140	182.39
140-150	150.62
150-160	109.83
160-170	64.55
170-180	20.70

IES INDOOR REPORT

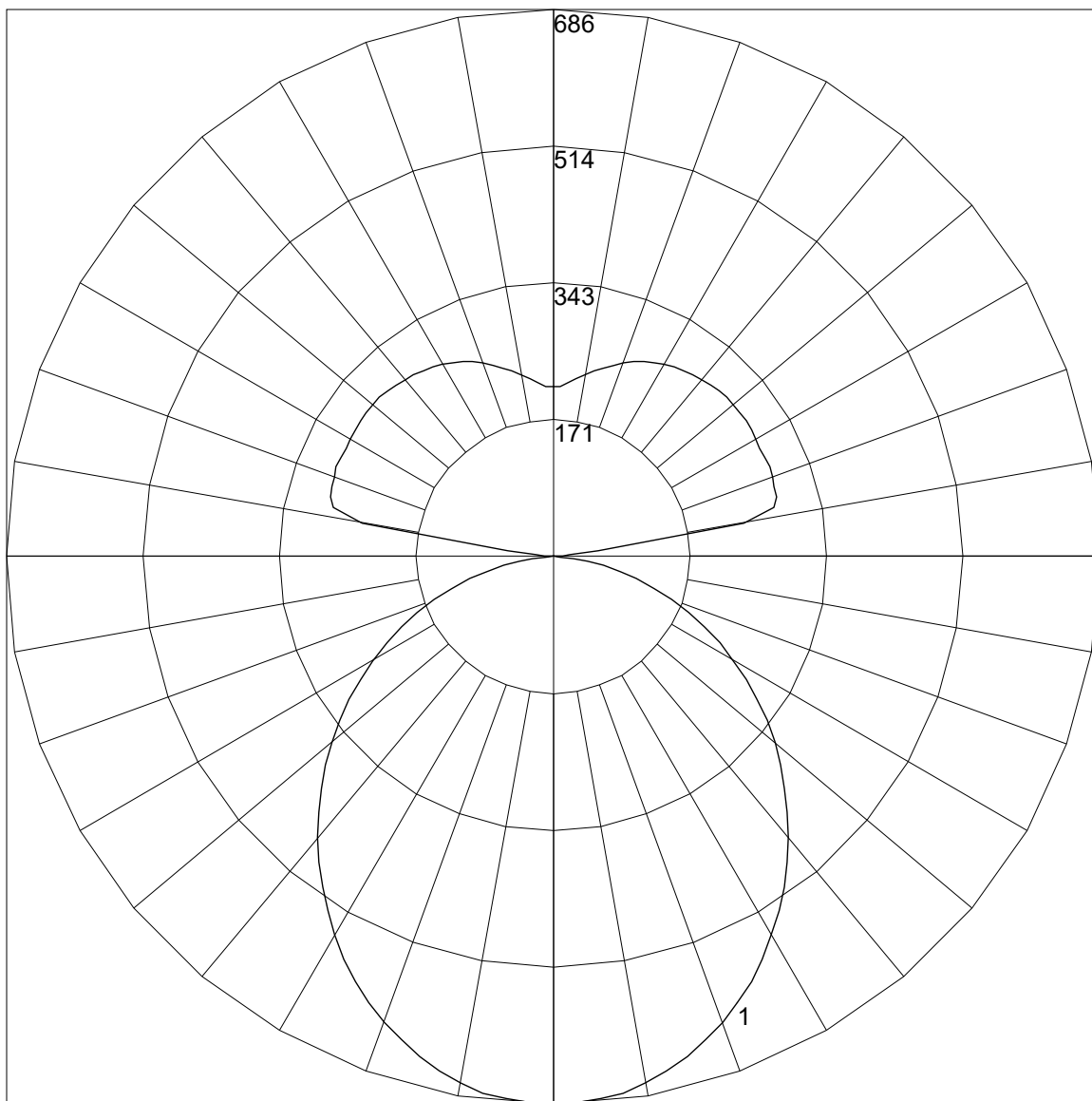
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 = 685.769 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)