

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-8-35-30U70D-ITL85122.208.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85122.208 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-8-35-30U70D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 34.7 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 37.6 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	34.7
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	9730	9635	9503
55	9177	9014	8920
65	8408	8250	8124
75	7123	6968	6865
85	4598	4752	4752

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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	1066.752	1066.752	1066.752	1066.752	1066.752
2.5	1066.752	1065.480	1066.752	1066.752	1065.480
5.0	1061.666	1060.394	1060.394	1061.666	1060.394
7.5	1055.308	1054.037	1054.037	1054.037	1054.037
10.0	1045.137	1041.322	1043.865	1042.594	1041.322
12.5	1032.422	1027.336	1029.879	1029.879	1026.065
15.0	1017.165	1010.807	1014.622	1014.622	1009.536
17.5	998.093	989.193	994.278	993.007	987.921
20.0	977.750	966.306	971.392	971.392	966.306
22.5	952.320	942.149	945.963	945.963	940.877
25.0	925.620	915.448	919.263	917.991	914.177
27.5	896.376	887.476	890.019	887.476	884.933
30.0	864.590	855.690	859.504	855.690	851.875
32.5	832.804	825.175	826.446	822.632	818.818
35.0	799.746	792.117	793.388	788.303	785.760
37.5	765.416	759.059	759.059	753.973	750.159
40.0	729.816	722.187	723.458	718.373	714.558
42.5	692.943	685.315	686.586	680.229	677.686
45.0	654.800	648.442	648.442	642.085	639.542
47.5	619.199	611.570	610.299	603.942	602.670
50.0	579.784	572.155	570.884	564.526	564.526
52.5	540.369	534.011	531.468	526.383	526.383
55.0	500.954	494.596	492.053	486.968	486.968
57.5	461.538	455.181	453.910	447.553	446.281
60.0	420.852	415.766	413.223	408.137	406.866
62.5	380.165	375.079	372.537	367.451	366.179
65.0	338.207	334.393	331.850	326.764	326.764
67.5	297.521	293.706	291.163	287.349	286.077
70.0	255.563	253.020	250.477	246.662	246.662
72.5	214.876	213.605	211.062	208.519	207.247
75.0	175.461	174.190	171.647	170.375	169.104
77.5	137.317	136.046	134.774	133.503	133.503
80.0	100.445	100.445	99.174	99.174	99.174
82.5	67.387	68.659	67.387	67.387	67.387
85.0	38.144	39.415	39.415	39.415	39.415
87.5	12.715	13.986	13.986	13.986	13.986
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-B-8-35-30U70D-ITL85122.208.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-B-8-35-30U70D-ITL85122.208.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	386.08	N.A.	9.70
0-30	808.76	N.A.	20.20
0-40	1303.94	N.A.	32.60
0-60	2242.86	N.A.	56.10
0-80	2753.6	N.A.	68.80
0-90	2800.01	N.A.	70.00
10-90	2699.27	N.A.	67.50
20-40	917.86	N.A.	22.90
20-50	1416.91	N.A.	35.40
40-70	1266.94	N.A.	31.70
60-80	510.74	N.A.	12.80
70-80	182.72	N.A.	4.60
80-90	46.40	N.A.	1.20
90-110	262.74	N.A.	6.60
90-120	470.06	N.A.	11.80
90-130	671.91	N.A.	16.80
90-150	1004.92	N.A.	25.10
90-180	1200.00	N.A.	30.00
110-180	937.27	N.A.	23.40
0-180	4000.01	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	100.73
10-20	285.34
20-30	422.69
30-40	495.18
40-50	499.05
50-60	439.87
60-70	328.02
70-80	182.72
80-90	46.40
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

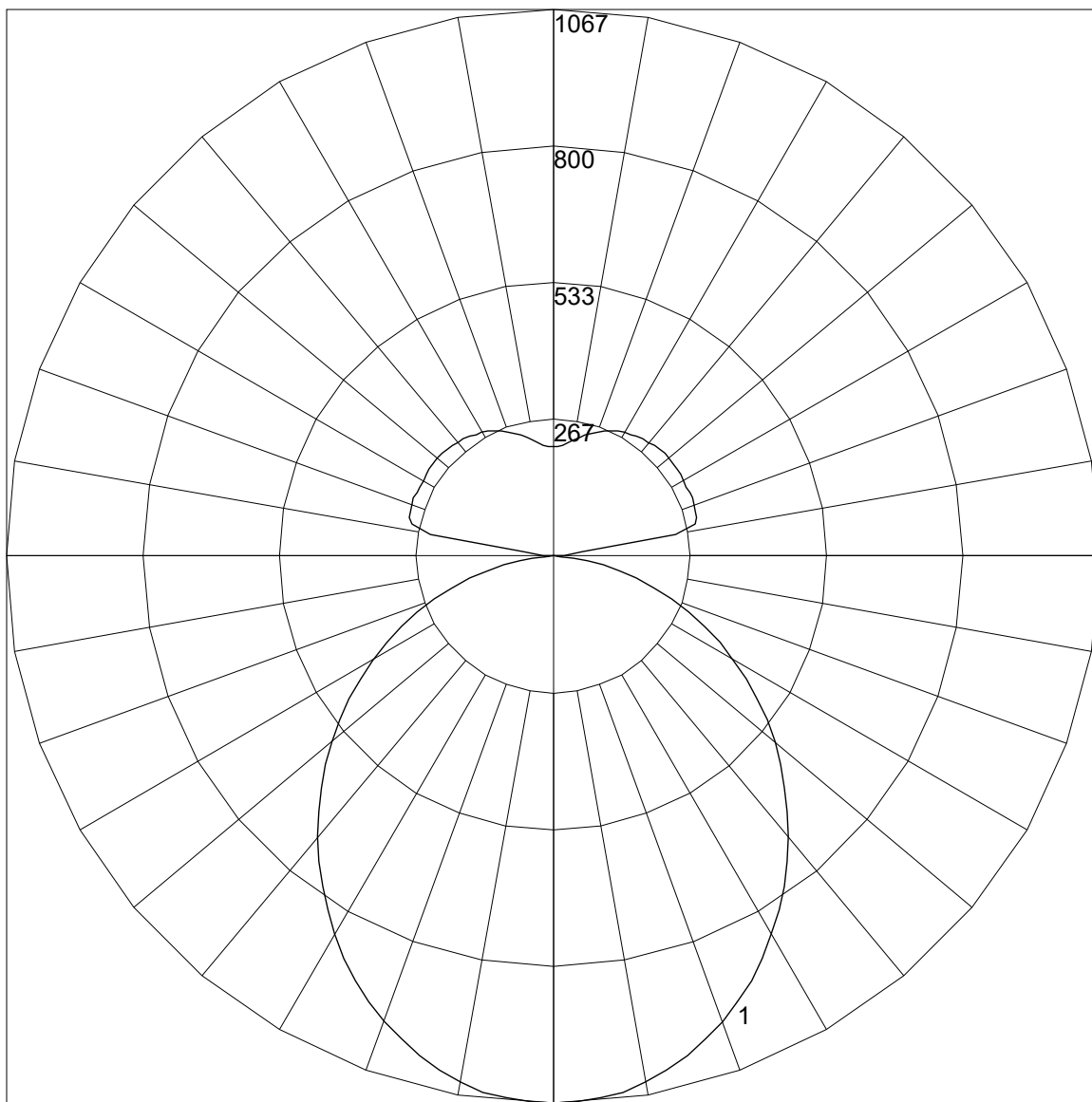
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	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 = 1066.752 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)