

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-3E-S-S-835-FTO-ITL88524.001.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL88524.001 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]10/18/16

[ISSUEDATE]01/05/17

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S16-LED-ID-DCO-4ft-3E-S-S-835-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 22.4 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 25.9 WATTS

[OTHER]see www.finelite.com for source file ITL88524. 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

[_ABSOLUTE]LUMENS]2474

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2474
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
Total Luminaire Watts	22.4
Ballast Factor	1.00
CIE Type	Semi-Indirect
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
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	2987	2950	2902
55	2805	2760	2707
65	2565	2514	2463
75	2177	2127	2094
85	1481	1481	1431

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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	327.110	327.110	327.110	327.110	327.110
2.5	326.701	326.701	327.110	326.701	326.701
5.0	325.063	325.063	325.472	325.063	325.063
7.5	323.016	323.016	323.016	323.016	323.016
10.0	320.150	319.741	320.150	319.741	319.331
12.5	316.056	314.828	315.647	315.237	314.828
15.0	311.143	309.506	310.734	310.325	309.506
17.5	305.412	303.365	305.002	304.593	303.365
20.0	299.271	296.405	298.043	297.633	296.405
22.5	291.902	288.627	290.264	289.855	288.627
25.0	283.714	280.439	281.667	281.257	280.029
27.5	274.707	271.432	272.660	271.841	270.613
30.0	265.291	262.425	263.244	262.016	260.787
32.5	255.465	252.599	253.009	251.781	250.552
35.0	245.230	242.364	242.774	241.136	240.317
37.5	234.586	231.720	232.129	230.492	229.264
40.0	223.941	221.076	221.076	219.438	218.210
42.5	212.478	210.431	210.022	207.975	206.747
45.0	201.015	198.968	198.559	196.512	195.283
47.5	189.142	187.505	186.686	184.639	183.411
50.0	177.270	175.632	174.814	172.357	171.538
52.5	165.397	163.350	162.941	160.485	159.666
55.0	153.115	151.478	150.659	148.203	147.793
57.5	140.833	139.196	138.377	135.921	135.511
60.0	128.551	126.914	126.095	123.639	123.229
62.5	115.860	114.632	113.404	111.357	111.357
65.0	103.169	102.350	101.122	99.075	99.075
67.5	90.477	89.658	88.430	87.202	86.793
70.0	77.786	77.376	76.148	74.920	74.920
72.5	65.504	65.094	64.276	63.457	63.047
75.0	53.631	53.222	52.403	51.584	51.584
77.5	41.759	42.168	40.940	40.940	40.531
80.0	31.114	31.114	30.705	30.296	29.886
82.5	20.879	21.289	21.289	20.879	20.470
85.0	12.282	12.282	12.282	11.873	11.873
87.5	4.094	4.094	4.503	4.094	3.685
90.0	0.000	0.000	0.000	0.000	0.000
92.5	11.054	11.463	9.826	10.644	10.644
95.0	24.155	25.792	26.611	24.973	23.745
97.5	38.893	42.168	47.490	47.081	46.262
100.0	55.269	59.363	66.323	70.417	70.417
102.5	72.873	78.195	89.249	94.571	96.209
105.0	91.296	98.256	113.813	121.592	124.048
107.5	110.538	119.545	139.196	150.250	153.525
110.0	130.189	141.652	166.216	179.317	184.230
112.5	149.840	163.760	192.827	209.612	216.572
115.0	169.901	186.277	220.257	240.727	248.505
117.5	189.961	209.203	248.096	271.841	280.848
120.0	209.612	231.720	275.116	302.137	312.781
122.5	229.264	253.828	301.727	332.023	343.486
125.0	248.096	274.707	326.701	360.271	372.963
127.5	266.519	295.177	350.036	387.292	400.393
130.0	284.533	314.419	372.144	411.446	425.775
132.5	301.727	332.023	391.386	432.735	447.883

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-S-S-835-FTO-ITL88524.001.IES****CANDELA TABULATION - (Cont.)**

135.0	318.513	348.399	408.581	451.158	466.715
137.5	334.070	362.728	423.728	466.715	481.454
140.0	348.808	376.238	436.010	478.588	493.736
142.5	362.318	388.520	446.245	488.413	502.333
145.0	375.010	398.755	453.614	494.145	508.065
147.5	386.882	408.171	459.346	497.830	510.521
150.0	397.117	415.950	463.031	498.648	510.521
152.5	406.534	422.909	464.668	497.420	508.474
155.0	414.721	428.232	465.487	494.554	504.380
157.5	421.681	433.144	465.487	490.051	499.058
160.0	428.232	436.829	464.259	485.138	492.507
162.5	433.554	440.104	462.212	478.997	485.548
165.0	438.057	442.151	459.755	472.447	478.178
167.5	441.742	444.608	456.890	467.125	471.219
170.0	445.017	446.655	454.433	461.393	464.668
172.5	447.064	448.292	452.386	456.480	458.527
175.0	448.702	449.520	450.749	452.796	453.614
177.5	449.930	449.930	450.339	450.749	451.158
180.0	449.930	449.930	449.930	449.930	449.930

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-S-S-835-FTO-ITL88524.001.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	118.33	N.A.	4.80
0-30	247.83	N.A.	10.00
0-40	399.36	N.A.	16.10
0-60	686.33	N.A.	27.70
0-80	841.91	N.A.	34.00
0-90	856.22	N.A.	34.60
10-90	825.35	N.A.	33.40
20-40	281.04	N.A.	11.40
20-50	433.75	N.A.	17.50
40-70	386.80	N.A.	15.60
60-80	155.58	N.A.	6.30
70-80	55.75	N.A.	2.30
80-90	14.31	N.A.	0.60
90-110	148.15	N.A.	6.00
90-120	360.13	N.A.	14.60
90-130	643.81	N.A.	26.00
90-150	1231.26	N.A.	49.80
90-180	1617.8	N.A.	65.40
110-180	1469.65	N.A.	59.40
0-180	2474.03	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	30.88
10-20	87.45
20-30	129.51
30-40	151.53
40-50	152.72
50-60	134.25
60-70	99.83
70-80	55.75
80-90	14.31
90-100	30.80
100-110	117.36
110-120	211.97
120-130	283.68
130-140	307.90
140-150	279.56
150-160	213.40
160-170	129.98
170-180	43.16

IES INDOOR REPORT

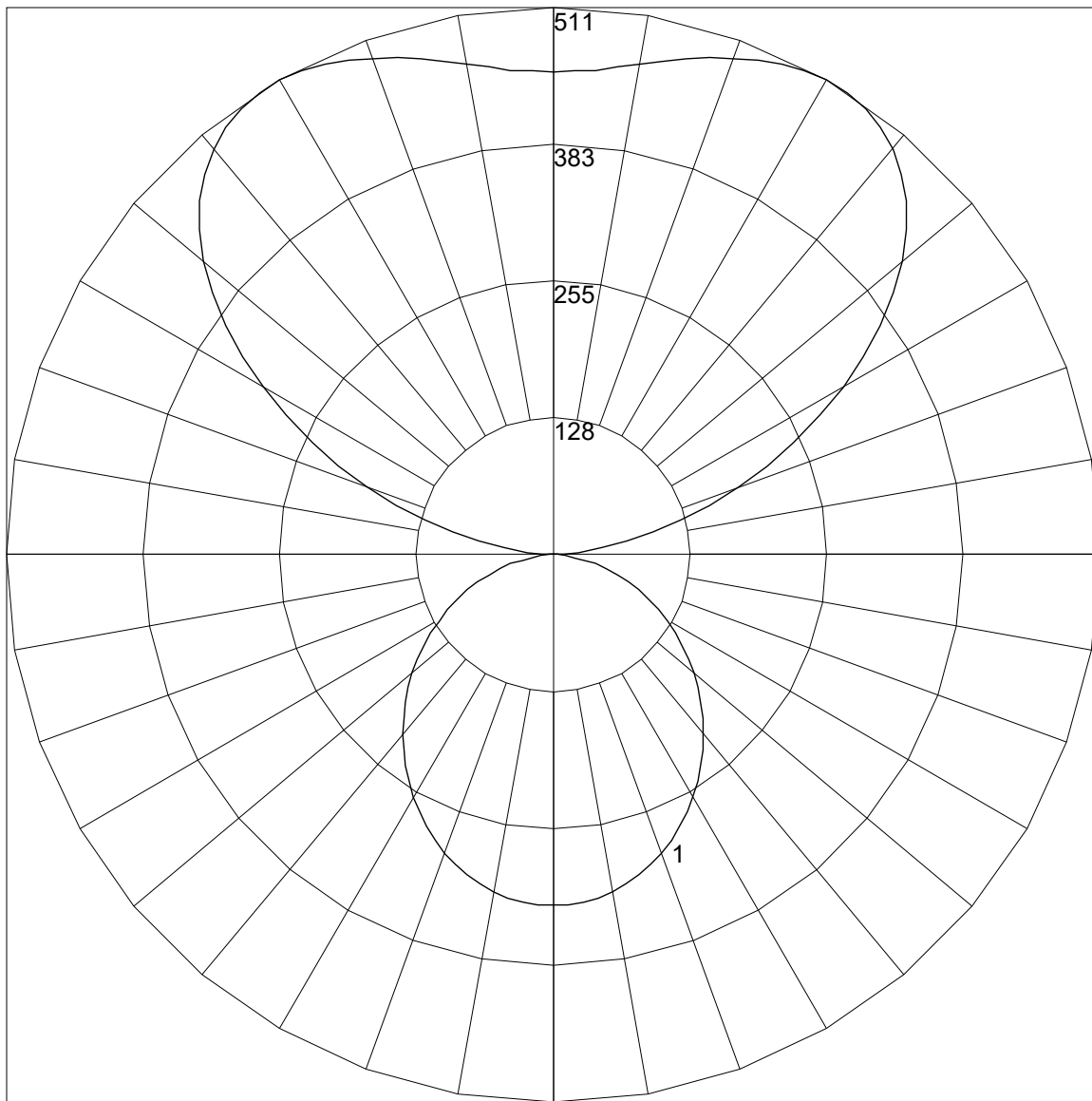
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42	35
1	94	90	86	83	85	82	78	75	65	63	61	51	49	48	37	36	35	29
2	86	79	73	68	77	71	66	62	57	54	51	44	42	40	33	31	30	24
3	78	69	62	56	70	63	56	52	50	46	42	39	36	34	29	27	25	21
4	72	61	53	47	64	55	49	44	45	40	36	35	32	29	26	24	22	18
5	66	54	46	41	59	49	42	37	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17	13
7	56	44	36	31	50	40	33	28	32	27	24	26	22	19	19	17	15	12
8	52	40	32	27	47	36	29	25	30	25	21	23	20	17	18	15	13	11
9	48	36	29	24	43	33	26	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	13	11	9

POLAR GRAPH



Maximum Candela = 510.521 Located At Horizontal Angle = 90, Vertical Angle = 147.5
1 - Vertical Plane Through Horizontal Angles (90 - 270)