

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-H-835-FTO-ITL88524.014.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL88524.014 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-H-835-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 29.7 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 33.1 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]3244

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3244
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	29.7
Ballast Factor	1.00
CIE Type	General Diffuse
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	5672	5603	5511
55	5326	5241	5141
65	4871	4774	4678
75	4135	4040	3977
85	2812	2812	2718

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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	621.195	621.195	621.195	621.195	621.195
2.5	620.418	620.418	621.195	620.418	620.418
5.0	617.308	617.308	618.085	617.308	617.308
7.5	613.421	613.421	613.421	613.421	613.421
10.0	607.978	607.201	607.978	607.201	606.423
12.5	600.204	597.871	599.426	598.649	597.871
15.0	590.874	587.764	590.097	589.319	587.764
17.5	579.990	576.102	579.212	578.435	576.102
20.0	568.328	562.885	565.995	565.218	562.885
22.5	554.333	548.114	551.223	550.446	548.114
25.0	538.784	532.564	534.896	534.119	531.787
27.5	521.680	515.460	517.792	516.237	513.905
30.0	503.798	498.356	499.911	497.578	495.246
32.5	485.139	479.697	480.474	478.142	475.809
35.0	465.702	460.260	461.037	457.927	456.373
37.5	445.488	440.046	440.823	437.713	435.381
40.0	425.274	419.832	419.832	416.722	414.389
42.5	403.505	399.618	398.840	394.953	392.620
45.0	381.736	377.848	377.071	373.184	370.851
47.5	359.189	356.079	354.524	350.637	348.305
50.0	336.643	333.533	331.978	327.313	325.758
52.5	314.096	310.209	309.431	304.767	303.212
55.0	290.772	287.662	286.108	281.443	280.665
57.5	267.448	264.338	262.784	258.119	257.341
60.0	244.124	241.014	239.459	234.795	234.017
62.5	220.023	217.690	215.358	211.471	211.471
65.0	195.921	194.367	192.034	188.147	188.147
67.5	171.820	170.265	167.933	165.600	164.823
70.0	147.719	146.941	144.609	142.276	142.276
72.5	124.394	123.617	122.062	120.507	119.730
75.0	101.848	101.071	99.516	97.961	97.961
77.5	79.302	80.079	77.747	77.747	76.969
80.0	59.087	59.087	58.310	57.532	56.755
82.5	39.651	40.428	40.428	39.651	38.873
85.0	23.324	23.324	23.324	22.547	22.547
87.5	7.775	7.775	8.552	7.775	6.997
90.0	0.000	0.000	0.000	0.000	0.000
92.5	11.055	11.465	9.827	10.646	10.646
95.0	24.157	25.795	26.614	24.976	23.748
97.5	38.898	42.173	47.496	47.087	46.268
100.0	55.276	59.370	66.331	70.425	70.425
102.5	72.882	78.205	89.260	94.583	96.221
105.0	91.307	98.268	113.827	121.606	124.063
107.5	110.551	119.559	139.213	150.268	153.543
110.0	130.205	141.669	166.236	179.339	184.252
112.5	149.858	163.780	192.851	209.638	216.599
115.0	169.921	186.299	220.284	240.756	248.536
117.5	189.984	209.228	248.126	271.874	280.882
120.0	209.638	231.748	275.150	302.173	312.819
122.5	229.292	253.858	301.764	332.063	343.528
125.0	248.126	274.740	326.740	360.315	373.008
127.5	266.551	295.213	350.079	387.339	400.441
130.0	284.567	314.457	372.189	411.497	425.827
132.5	301.764	332.063	391.433	432.788	447.937

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-S-H-835-FTO-ITL88524.014.IES****CANDELA TABULATION - (Cont.)**

135.0	318.551	348.441	408.630	451.213	466.772
137.5	334.111	362.772	423.780	466.772	481.512
140.0	348.851	376.284	436.063	478.646	493.796
142.5	362.363	388.567	446.300	488.473	502.394
145.0	375.055	398.803	453.670	494.205	508.127
147.5	386.930	408.221	459.402	497.890	510.583
150.0	397.166	416.000	463.087	498.709	510.583
152.5	406.583	422.961	464.725	497.481	508.536
155.0	414.772	428.284	465.544	494.615	504.441
157.5	421.733	433.197	465.544	490.111	499.119
160.0	428.284	436.882	464.315	485.197	492.567
162.5	433.607	440.158	462.268	479.056	485.607
165.0	438.111	442.205	459.812	472.504	478.237
167.5	441.796	444.662	456.945	467.182	471.276
170.0	445.071	446.709	454.489	461.449	464.725
172.5	447.118	448.347	452.441	456.536	458.583
175.0	448.756	449.575	450.804	452.851	453.670
177.5	449.985	449.985	450.394	450.804	451.213
180.0	449.985	449.985	449.985	449.985	449.985

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-S-H-835-FTO-ITL88524.014.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	224.70	N.A.	6.90
0-30	470.65	N.A.	14.50
0-40	758.40	N.A.	23.40
0-60	1303.36	N.A.	40.20
0-80	1598.82	N.A.	49.30
0-90	1626.00	N.A.	50.10
10-90	1567.37	N.A.	48.30
20-40	533.70	N.A.	16.50
20-50	823.71	N.A.	25.40
40-70	734.55	N.A.	22.60
60-80	295.46	N.A.	9.10
70-80	105.87	N.A.	3.30
80-90	27.18	N.A.	0.80
90-110	148.17	N.A.	4.60
90-120	360.17	N.A.	11.10
90-130	643.88	N.A.	19.80
90-150	1231.41	N.A.	38.00
90-180	1618.00	N.A.	49.90
110-180	1469.83	N.A.	45.30
0-180	3244.00	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	58.64
10-20	166.07
20-30	245.94
30-40	287.75
40-50	290.02
50-60	254.94
60-70	189.59
70-80	105.87
80-90	27.18
90-100	30.80
100-110	117.37
110-120	212.00
120-130	283.71
130-140	307.93
140-150	279.59
150-160	213.43
160-170	129.99
170-180	43.17

IES INDOOR REPORT

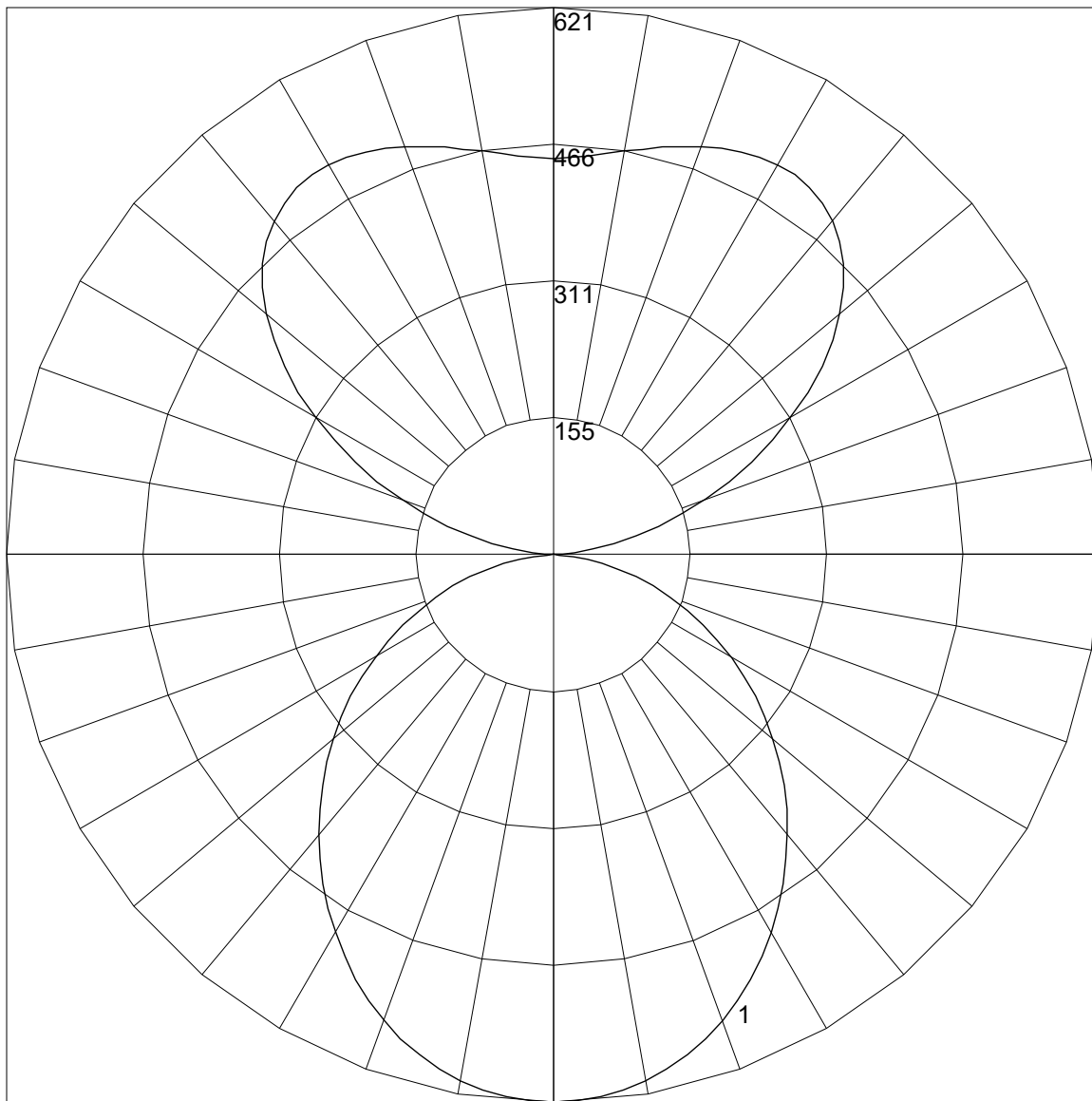
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	90	86	90	86	83	80	73	71	68	61	59	58	50	49	47	42
2	89	82	75	70	82	76	70	66	64	60	57	53	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	52	48	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	41	42	38	35	35	32	29	26
5	68	57	48	42	63	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22	19
7	58	46	38	32	53	43	35	30	37	31	27	31	27	23	26	22	20	17
8	54	42	34	28	50	39	32	27	33	28	24	28	24	21	24	20	18	15
9	50	38	30	25	46	35	29	24	31	25	21	26	22	19	22	19	16	14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13

POLAR GRAPH



Maximum Candela = 621.195 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)