

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-B-H-835-FTO-ITL88524.011.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL88524.011 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-B-H-835-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 33.5 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 36.9 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]3660

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3660
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	33.5
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	13.898	14.412	12.353	13.383	13.383
95.0	30.369	32.428	33.457	31.398	29.854
97.5	48.899	53.016	59.708	59.193	58.164
100.0	69.487	74.635	83.385	88.532	88.532
102.5	91.621	98.312	112.209	118.901	120.960
105.0	114.783	123.533	143.093	152.872	155.961
107.5	138.975	150.299	175.005	188.903	193.021
110.0	163.681	178.094	208.977	225.448	231.625
112.5	188.388	205.889	242.434	263.538	272.288
115.0	213.609	234.198	276.920	302.656	312.436
117.5	238.831	263.023	311.921	341.775	353.099
120.0	263.538	291.332	345.893	379.865	393.247
122.5	288.244	319.127	379.350	417.439	431.851
125.0	311.921	345.378	410.748	452.955	468.911
127.5	335.084	371.114	440.087	486.927	503.398
130.0	357.732	395.306	467.882	517.295	535.311
132.5	379.350	417.439	492.074	544.061	563.106

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-B-H-835-FTO-ITL88524.011.IES****CANDELA TABULATION - (Cont.)**

135.0	400.454	438.028	513.692	567.223	586.783
137.5	420.013	456.043	532.737	586.783	605.313
140.0	438.543	473.029	548.179	601.710	620.754
142.5	455.529	488.471	561.047	614.063	631.563
145.0	471.485	501.339	570.312	621.269	638.770
147.5	486.412	513.178	577.518	625.902	641.858
150.0	499.280	522.957	582.150	626.931	641.858
152.5	511.119	531.707	584.209	625.387	639.284
155.0	521.413	538.399	585.239	621.784	634.137
157.5	530.163	544.576	585.239	616.122	627.446
160.0	538.399	549.208	583.694	609.945	619.210
162.5	545.090	553.326	581.121	602.224	610.460
165.0	550.752	555.899	578.033	593.989	601.195
167.5	555.385	558.988	574.429	587.298	592.445
170.0	559.503	561.561	571.341	580.091	584.209
172.5	562.076	563.620	568.768	573.915	576.488
175.0	564.135	565.164	566.709	569.282	570.312
177.5	565.679	565.679	566.194	566.709	567.223
180.0	565.679	565.679	565.679	565.679	565.679

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-B-H-835-FTO-ITL88524.011.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	224.70	N.A.	6.10
0-30	470.65	N.A.	12.90
0-40	758.40	N.A.	20.70
0-60	1303.36	N.A.	35.60
0-80	1598.82	N.A.	43.70
0-90	1626.00	N.A.	44.40
10-90	1567.37	N.A.	42.80
20-40	533.70	N.A.	14.60
20-50	823.71	N.A.	22.50
40-70	734.55	N.A.	20.10
60-80	295.46	N.A.	8.10
70-80	105.87	N.A.	2.90
80-90	27.18	N.A.	0.70
90-110	186.27	N.A.	5.10
90-120	452.77	N.A.	12.40
90-130	809.43	N.A.	22.10
90-150	1548.01	N.A.	42.30
90-180	2034.00	N.A.	55.60
110-180	1847.73	N.A.	50.50
0-180	3660.00	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	38.72
100-110	147.55
110-120	266.51
120-130	356.66
130-140	387.11
140-150	351.47
150-160	268.30
160-170	163.42
170-180	54.27

IES INDOOR REPORT

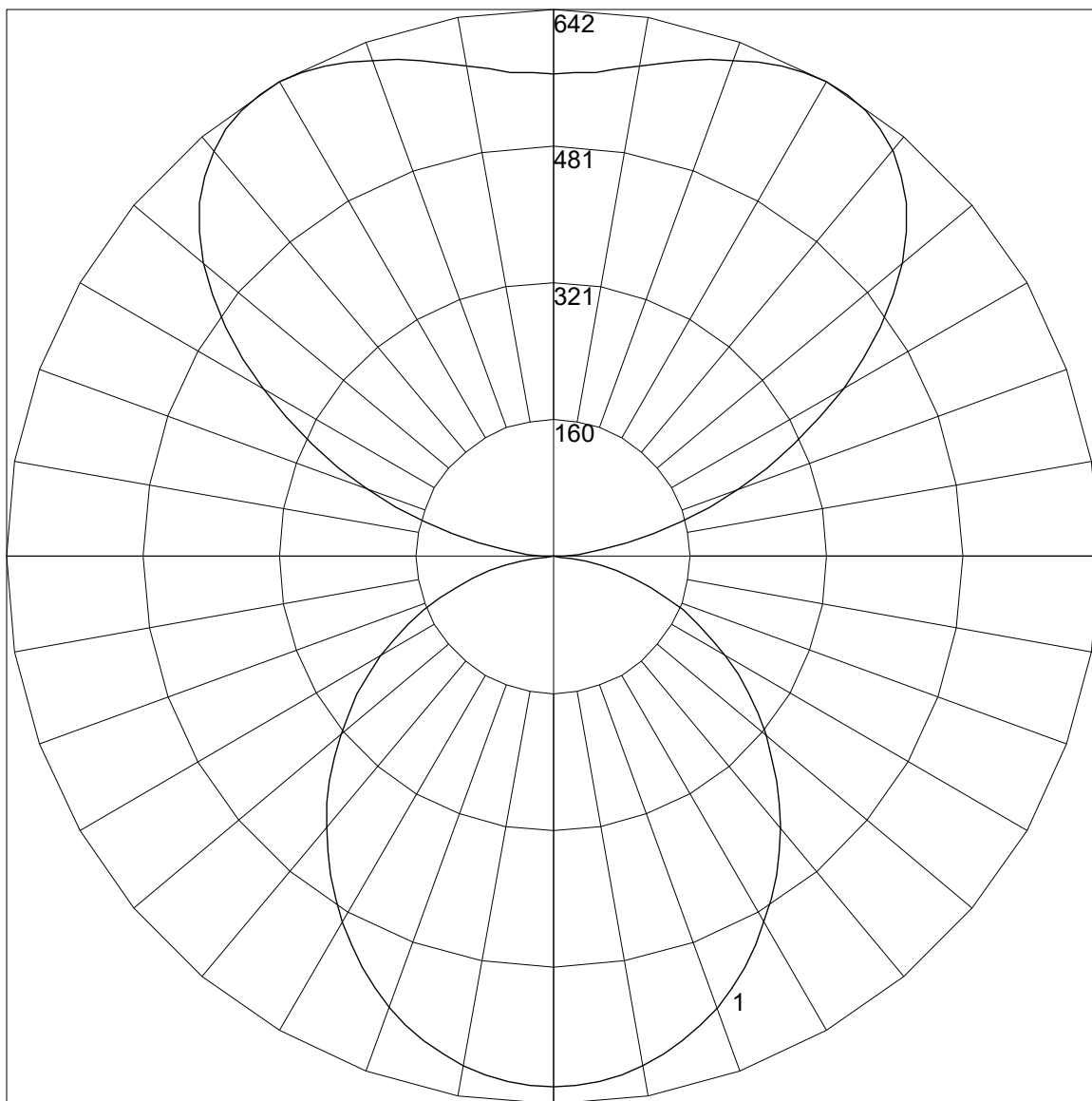
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	92	88	85	88	85	81	78	70	68	66	57	56	54	45	44	43	37
2	88	81	74	69	80	74	69	64	62	58	54	50	47	45	40	38	36	31
3	80	71	63	58	73	65	59	54	54	50	46	44	41	38	35	33	31	26
4	73	63	55	49	67	58	51	45	48	43	39	39	36	33	31	29	26	23
5	67	56	48	42	61	51	44	39	43	38	34	35	31	28	28	25	23	20
6	62	50	42	36	56	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	27	22	19	21	18	16	14
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

POLAR GRAPH



Maximum Candela = 641.858 Located At Horizontal Angle = 90, Vertical Angle = 147.5
1 - Vertical Plane Through Horizontal Angles (90 - 270)