

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-V-H-835-FTO-ITL88524.006.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL88524.006 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-V-H-835-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 51.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 54.2 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]5578

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5578
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	51.6
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	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	27.000	28.000	24.000	26.000	26.000
95.0	59.000	63.000	65.000	61.000	58.000
97.5	95.000	103.000	116.000	115.000	113.000
100.0	135.000	145.000	162.000	172.000	172.000
102.5	178.000	191.000	218.000	231.000	235.000
105.0	223.000	240.000	278.000	297.000	303.000
107.5	270.000	292.000	340.000	367.000	375.000
110.0	318.000	346.000	406.000	438.000	450.000
112.5	366.000	400.000	471.000	512.000	529.000
115.0	415.000	455.000	538.000	588.000	607.000
117.5	464.000	511.000	606.000	664.000	686.000
120.0	512.000	566.000	672.000	738.000	764.000
122.5	560.000	620.000	737.000	811.000	839.000
125.0	606.000	671.000	798.000	880.000	911.000
127.5	651.000	721.000	855.000	946.000	978.000
130.0	695.000	768.000	909.000	1005.000	1040.000
132.5	737.000	811.000	956.000	1057.000	1094.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-V-H-835-FTO-ITL88524.006.IES****CANDELA TABULATION - (Cont.)**

135.0	778.000	851.000	998.000	1102.000	1140.000
137.5	816.000	886.000	1035.000	1140.000	1176.000
140.0	852.000	919.000	1065.000	1169.000	1206.000
142.5	885.000	949.000	1090.000	1193.000	1227.000
145.0	916.000	974.000	1108.000	1207.000	1241.000
147.5	945.000	997.000	1122.000	1216.000	1247.000
150.0	970.000	1016.000	1131.000	1218.000	1247.000
152.5	993.000	1033.000	1135.000	1215.000	1242.000
155.0	1013.000	1046.000	1137.000	1208.000	1232.000
157.5	1030.000	1058.000	1137.000	1197.000	1219.000
160.0	1046.000	1067.000	1134.000	1185.000	1203.000
162.5	1059.000	1075.000	1129.000	1170.000	1186.000
165.0	1070.000	1080.000	1123.000	1154.000	1168.000
167.5	1079.000	1086.000	1116.000	1141.000	1151.000
170.0	1087.000	1091.000	1110.000	1127.000	1135.000
172.5	1092.000	1095.000	1105.000	1115.000	1120.000
175.0	1096.000	1098.000	1101.000	1106.000	1108.000
177.5	1099.000	1099.000	1100.000	1101.000	1102.000
180.0	1099.000	1099.000	1099.000	1099.000	1099.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-V-H-835-FTO-ITL88524.006.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	224.70	N.A.	4.00
0-30	470.65	N.A.	8.40
0-40	758.40	N.A.	13.60
0-60	1303.36	N.A.	23.40
0-80	1598.82	N.A.	28.70
0-90	1626.00	N.A.	29.20
10-90	1567.37	N.A.	28.10
20-40	533.70	N.A.	9.60
20-50	823.71	N.A.	14.80
40-70	734.55	N.A.	13.20
60-80	295.46	N.A.	5.30
70-80	105.87	N.A.	1.90
80-90	27.18	N.A.	0.50
90-110	361.88	N.A.	6.50
90-120	879.65	N.A.	15.80
90-130	1572.56	N.A.	28.20
90-150	3007.47	N.A.	53.90
90-180	3951.65	N.A.	70.80
110-180	3589.77	N.A.	64.40
0-180	5577.65	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	75.22
100-110	286.66
110-120	517.77
120-130	692.92
130-140	752.07
140-150	682.84
150-160	521.26
160-170	317.49
170-180	105.43

IES INDOOR REPORT

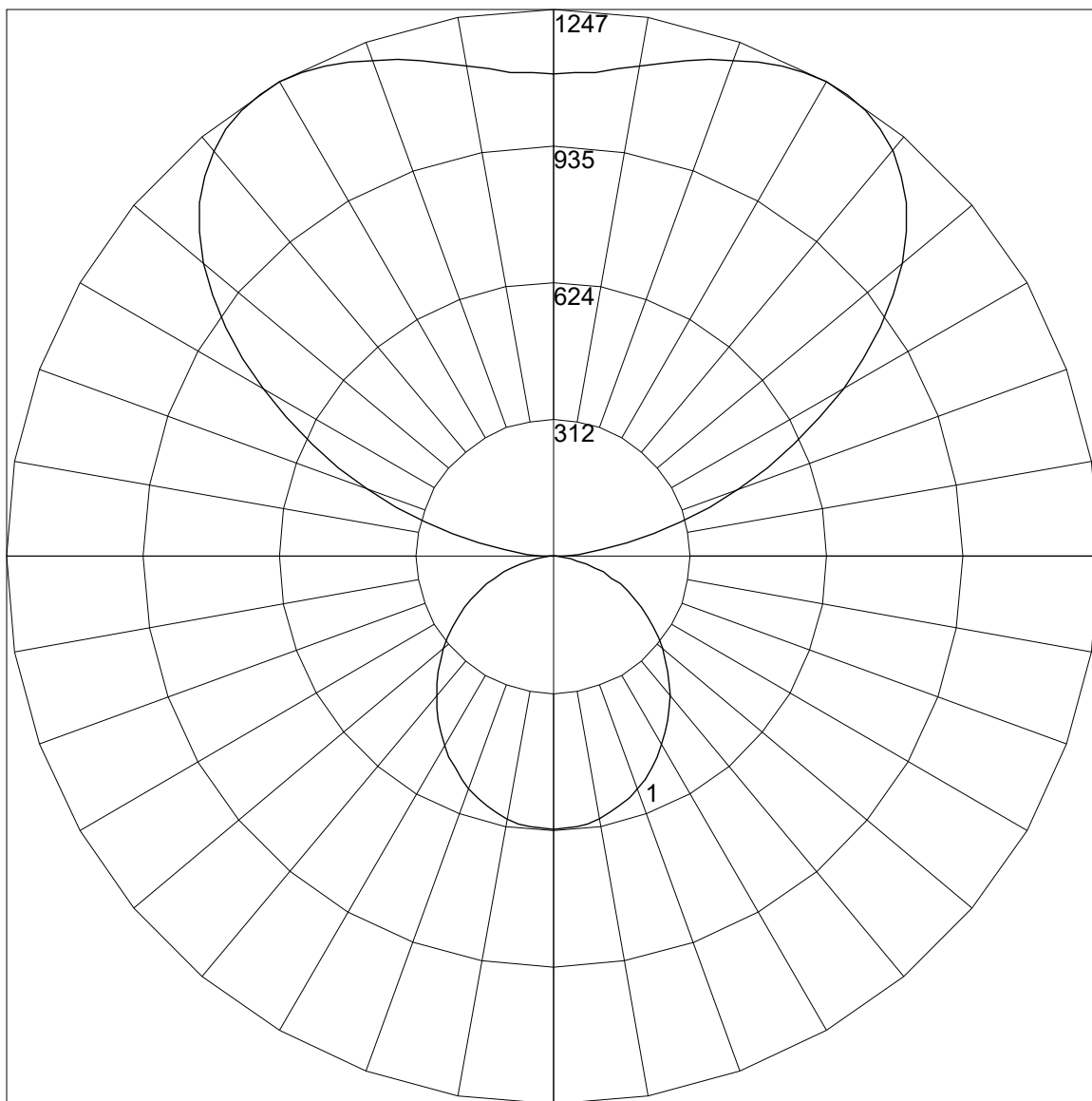
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29
1	93	89	85	82	83	80	77	74	63	61	59	47	46	45	33	32	31	25
2	85	78	72	67	76	70	65	61	55	52	49	41	39	37	29	27	26	21
3	77	68	61	55	69	61	55	50	48	44	41	36	34	31	25	24	22	17
4	71	60	53	47	63	54	48	43	43	38	35	32	29	27	23	21	19	15
5	65	53	46	40	58	48	41	36	38	33	30	29	26	23	20	18	17	13
6	59	48	40	34	53	43	36	31	34	29	26	26	23	20	18	16	15	11
7	55	43	35	30	49	39	32	27	31	26	23	24	20	18	17	15	13	10
8	51	39	31	26	45	35	29	24	28	23	20	22	18	16	15	13	12	9
9	47	35	28	23	42	32	26	21	26	21	18	20	16	14	14	12	10	8
10	44	32	25	21	39	29	23	19	24	19	16	18	15	13	13	11	9	7

POLAR GRAPH



Maximum Candela = 1247 Located At Horizontal Angle = 90, Vertical Angle = 147.5
1 - Vertical Plane Through Horizontal Angles (90 - 270)