

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-H-V-835-FTO-ITL88524.009.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL88524.009 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-H-V-835-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 47.7 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 50.6 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]5165

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5165
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	47.7
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	7296	7207	7088
55	6851	6741	6613
65	6265	6141	6017
75	5318	5196	5115
85	3617	3617	3496

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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	799.000	799.000	799.000	799.000	799.000
2.5	798.000	798.000	799.000	798.000	798.000
5.0	794.000	794.000	795.000	794.000	794.000
7.5	789.000	789.000	789.000	789.000	789.000
10.0	782.000	781.000	782.000	781.000	780.000
12.5	772.000	769.000	771.000	770.000	769.000
15.0	760.000	756.000	759.000	758.000	756.000
17.5	746.000	741.000	745.000	744.000	741.000
20.0	731.000	724.000	728.000	727.000	724.000
22.5	713.000	705.000	709.000	708.000	705.000
25.0	693.000	685.000	688.000	687.000	684.000
27.5	671.000	663.000	666.000	664.000	661.000
30.0	648.000	641.000	643.000	640.000	637.000
32.5	624.000	617.000	618.000	615.000	612.000
35.0	599.000	592.000	593.000	589.000	587.000
37.5	573.000	566.000	567.000	563.000	560.000
40.0	547.000	540.000	540.000	536.000	533.000
42.5	519.000	514.000	513.000	508.000	505.000
45.0	491.000	486.000	485.000	480.000	477.000
47.5	462.000	458.000	456.000	451.000	448.000
50.0	433.000	429.000	427.000	421.000	419.000
52.5	404.000	399.000	398.000	392.000	390.000
55.0	374.000	370.000	368.000	362.000	361.000
57.5	344.000	340.000	338.000	332.000	331.000
60.0	314.000	310.000	308.000	302.000	301.000
62.5	283.000	280.000	277.000	272.000	272.000
65.0	252.000	250.000	247.000	242.000	242.000
67.5	221.000	219.000	216.000	213.000	212.000
70.0	190.000	189.000	186.000	183.000	183.000
72.5	160.000	159.000	157.000	155.000	154.000
75.0	131.000	130.000	128.000	126.000	126.000
77.5	102.000	103.000	100.000	100.000	99.000
80.0	76.000	76.000	75.000	74.000	73.000
82.5	51.000	52.000	52.000	51.000	50.000
85.0	30.000	30.000	30.000	29.000	29.000
87.5	10.000	10.000	11.000	10.000	9.000
90.0	0.000	0.000	0.000	0.000	0.000
92.5	21.003	21.781	18.670	20.226	20.226
95.0	45.896	49.008	50.564	47.452	45.118
97.5	73.901	80.124	90.237	89.459	87.903
100.0	105.017	112.796	126.020	133.799	133.799
102.5	138.467	148.579	169.583	179.696	182.807
105.0	173.472	186.697	216.257	231.037	235.705
107.5	210.034	227.148	264.487	285.490	291.714
110.0	247.373	269.154	315.829	340.721	350.056
112.5	284.712	311.161	366.392	398.286	411.511
115.0	322.830	353.946	418.512	457.407	472.187
117.5	360.947	397.508	471.409	516.528	533.641
120.0	398.286	440.293	522.751	574.092	594.318
122.5	435.626	482.300	573.314	630.879	652.660
125.0	471.409	521.973	620.766	684.555	708.670
127.5	506.415	560.868	665.107	735.896	760.789
130.0	540.643	597.429	707.114	781.792	809.019
132.5	573.314	630.879	743.675	822.243	851.026

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-H-V-835-FTO-ITL88524.009.IES****CANDELA TABULATION - (Cont.)**

135.0	605.208	661.995	776.347	857.249	886.809
137.5	634.769	689.222	805.130	886.809	914.814
140.0	662.773	714.893	828.467	909.369	938.151
142.5	688.444	738.230	847.914	928.038	954.487
145.0	712.559	757.677	861.916	938.929	965.378
147.5	735.118	775.569	872.807	945.930	970.045
150.0	754.566	790.349	879.808	947.486	970.045
152.5	772.458	803.574	882.920	945.152	966.155
155.0	788.016	813.687	884.476	939.707	958.376
157.5	801.240	823.021	884.476	931.150	948.264
160.0	813.687	830.022	882.142	921.815	935.817
162.5	823.799	836.246	878.252	910.146	922.593
165.0	832.356	840.135	873.585	897.700	908.591
167.5	839.357	844.803	868.140	887.587	895.366
170.0	845.580	848.692	863.472	876.697	882.920
172.5	849.470	851.804	859.583	867.362	871.251
175.0	852.582	854.137	856.471	860.361	861.916
177.5	854.915	854.915	855.693	856.471	857.249
180.0	854.915	854.915	854.915	854.915	854.915

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-H-V-835-FTO-ITL88524.009.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	289.02	N.A.	5.60
0-30	605.36	N.A.	11.70
0-40	975.48	N.A.	18.90
0-60	1676.42	N.A.	32.50
0-80	2056.45	N.A.	39.80
0-90	2091.41	N.A.	40.50
10-90	2015.99	N.A.	39.00
20-40	686.46	N.A.	13.30
20-50	1059.49	N.A.	20.50
40-70	944.80	N.A.	18.30
60-80	380.03	N.A.	7.40
70-80	136.17	N.A.	2.60
80-90	34.96	N.A.	0.70
90-110	281.51	N.A.	5.40
90-120	684.28	N.A.	13.20
90-130	1223.3	N.A.	23.70
90-150	2339.52	N.A.	45.30
90-180	3074.00	N.A.	59.50
110-180	2792.49	N.A.	54.10
0-180	5165.41	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	75.42
10-20	213.60
20-30	316.34
30-40	370.12
40-50	373.03
50-60	327.92
60-70	243.85
70-80	136.17
80-90	34.96
90-100	58.52
100-110	222.99
110-120	402.77
120-130	539.02
130-140	585.04
140-150	531.18
150-160	405.49
160-170	246.97
170-180	82.02

IES INDOOR REPORT

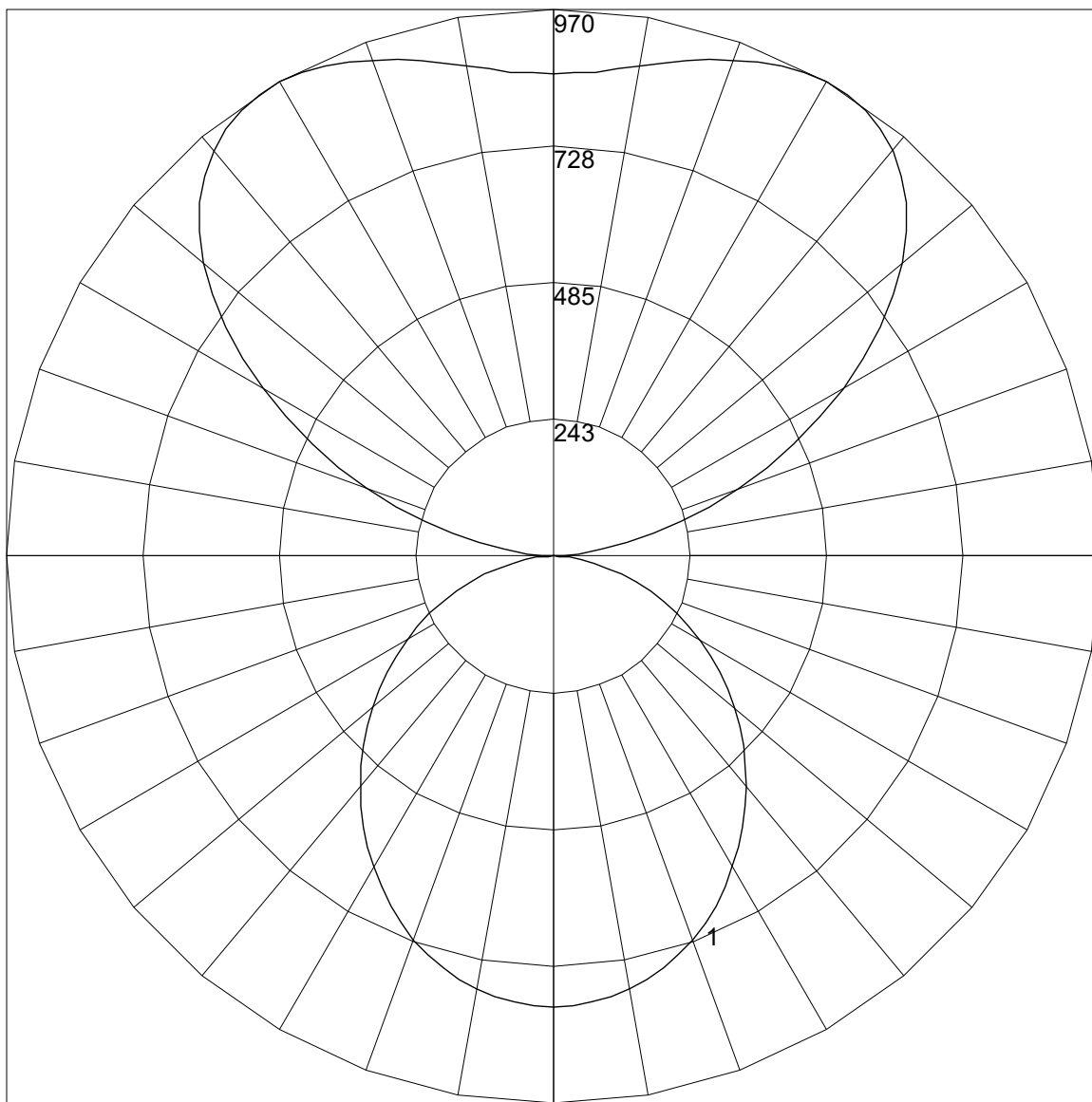
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	47	47	47	40
1	96	91	88	84	87	83	80	77	68	66	64	55	53	52	42	41	40	34
2	87	80	74	69	79	73	68	63	60	56	53	48	45	43	37	35	34	29
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	33	30	29	24
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	25	21
5	67	55	47	41	60	51	44	38	42	37	33	34	30	27	26	24	21	18
6	61	49	41	36	56	45	38	33	38	32	28	30	27	24	24	21	19	16
7	57	44	37	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14
8	52	40	33	27	48	37	30	26	31	26	22	25	21	18	20	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	17	18	16	13	11
10	46	34	27	22	41	31	25	20	26	21	18	21	18	15	17	14	12	10

POLAR GRAPH



Maximum Candela = 970.045 Located At Horizontal Angle = 90, Vertical Angle = 147.5
1 - Vertical Plane Through Horizontal Angles (90 - 270)