

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-S-835-FTO-ITL88524.004.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL88524.004 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-S-835-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 44.4 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 47.0 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]4808

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4808
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	44.4
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	2986	2950	2901
55	2804	2759	2707
65	2564	2513	2463
75	2177	2127	2094
85	1480	1480	1431

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-V-S-835-FTO-ITL88524.004.IES****CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	327.025	327.025	327.025	327.025	327.025
2.5	326.616	326.616	327.025	326.616	326.616
5.0	324.979	324.979	325.388	324.979	324.979
7.5	322.932	322.932	322.932	322.932	322.932
10.0	320.067	319.658	320.067	319.658	319.249
12.5	315.974	314.747	315.565	315.156	314.747
15.0	311.063	309.426	310.654	310.244	309.426
17.5	305.333	303.286	304.923	304.514	303.286
20.0	299.193	296.328	297.966	297.556	296.328
22.5	291.826	288.552	290.189	289.780	288.552
25.0	283.640	280.366	281.594	281.185	279.957
27.5	274.636	271.361	272.589	271.771	270.543
30.0	265.222	262.357	263.176	261.948	260.720
32.5	255.399	252.534	252.943	251.715	250.488
35.0	245.167	242.302	242.711	241.074	240.255
37.5	234.525	231.660	232.069	230.432	229.204
40.0	223.883	221.018	221.018	219.381	218.153
42.5	212.423	210.377	209.967	207.921	206.693
45.0	200.963	198.917	198.507	196.461	195.233
47.5	189.094	187.456	186.638	184.591	183.363
50.0	177.224	175.587	174.768	172.313	171.494
52.5	165.355	163.308	162.899	160.443	159.624
55.0	153.076	151.439	150.620	148.164	147.755
57.5	140.797	139.160	138.341	135.885	135.476
60.0	128.518	126.881	126.062	123.607	123.197
62.5	115.830	114.602	113.374	111.328	111.328
65.0	103.142	102.323	101.095	99.049	99.049
67.5	90.454	89.635	88.407	87.180	86.770
70.0	77.766	77.356	76.129	74.901	74.901
72.5	65.487	65.078	64.259	63.441	63.031
75.0	53.617	53.208	52.389	51.571	51.571
77.5	41.748	42.157	40.929	40.929	40.520
80.0	31.106	31.106	30.697	30.288	29.878
82.5	20.874	21.283	21.283	20.874	20.465
85.0	12.279	12.279	12.279	11.870	11.870
87.5	4.093	4.093	4.502	4.093	3.684
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-S-835-FTO-ITL88524.004.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-S-835-FTO-ITL88524.004.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	118.29	N.A.	2.50
0-30	247.77	N.A.	5.20
0-40	399.26	N.A.	8.30
0-60	686.15	N.A.	14.30
0-80	841.69	N.A.	17.50
0-90	856.00	N.A.	17.80
10-90	825.13	N.A.	17.20
20-40	280.96	N.A.	5.80
20-50	433.64	N.A.	9.00
40-70	386.70	N.A.	8.00
60-80	155.54	N.A.	3.20
70-80	55.73	N.A.	1.20
80-90	14.31	N.A.	0.30
90-110	361.88	N.A.	7.50
90-120	879.65	N.A.	18.30
90-130	1572.56	N.A.	32.70
90-150	3007.47	N.A.	62.60
90-180	3951.65	N.A.	82.20
110-180	3589.77	N.A.	74.70
0-180	4807.65	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	30.87
10-20	87.43
20-30	129.48
30-40	151.49
40-50	152.68
50-60	134.21
60-70	99.81
70-80	55.73
80-90	14.31
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

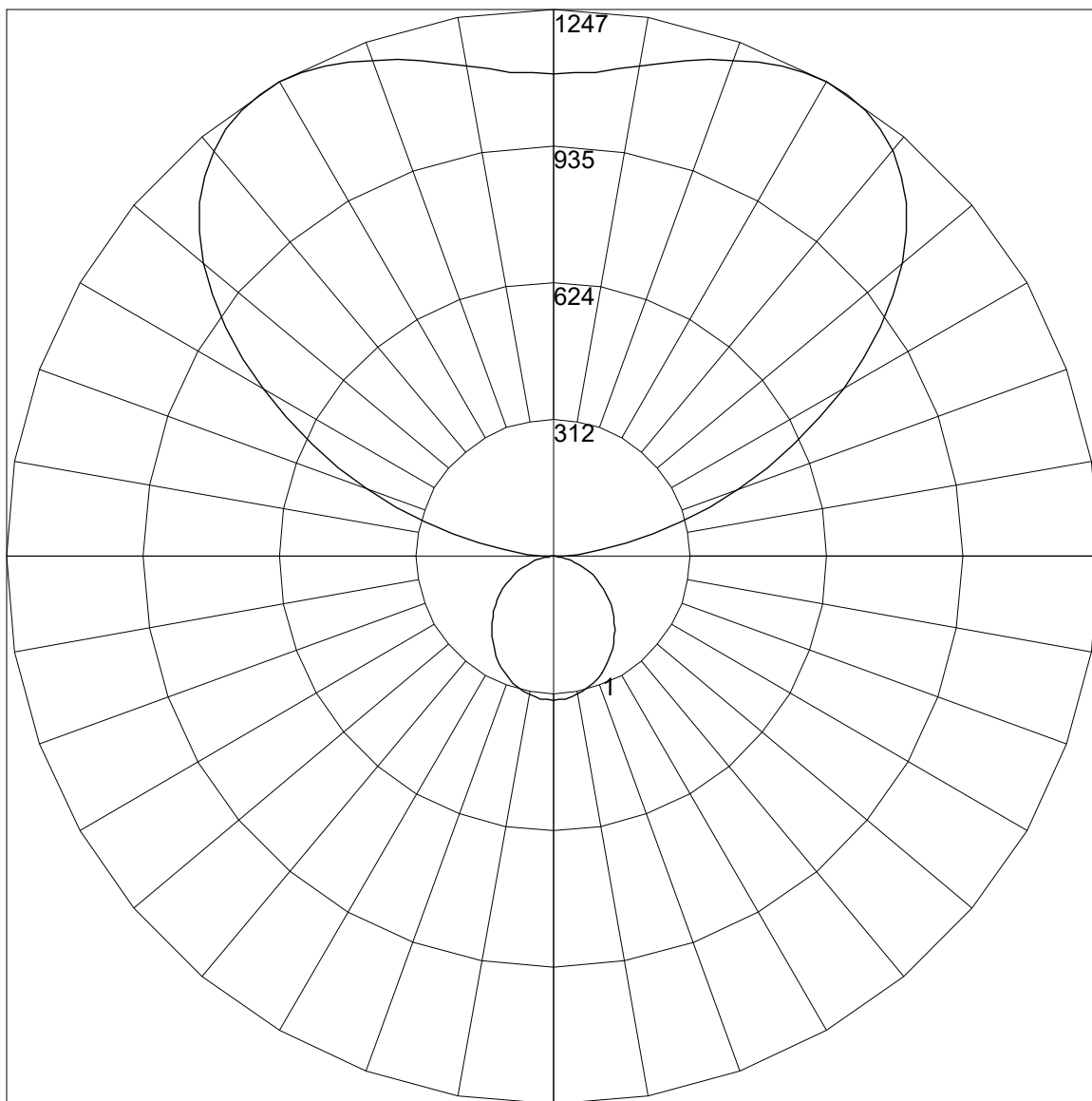
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	99	99	99	99	88	88	88	88	65	65	65	45	45	45	27	27	27	18
1	91	86	83	79	80	76	73	70	57	55	53	40	38	37	23	23	22	15
2	82	75	70	65	72	67	62	58	50	47	44	35	33	31	21	20	19	13
3	75	66	59	54	66	58	53	48	44	40	37	31	28	26	18	17	16	11
4	69	58	51	45	60	52	45	41	39	35	31	27	25	22	16	15	14	9
5	63	52	44	39	55	46	39	35	35	30	27	24	21	19	15	13	12	8
6	58	46	39	33	51	41	35	30	31	27	23	22	19	17	13	12	10	7
7	53	42	34	29	47	37	30	26	28	24	20	20	17	15	12	10	9	6
8	49	38	30	25	43	33	27	23	25	21	18	18	15	13	11	9	8	5
9	46	34	27	22	40	30	24	20	23	19	16	16	14	12	10	8	7	5
10	42	31	24	20	37	28	22	18	21	17	14	15	12	10	9	8	7	4

POLAR GRAPH



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