

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-S-835-FTO-ITL88524.007.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL88524.007 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-S-835-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 35.9 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 39.2 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]3930

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3930
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	35.9
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

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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	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	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-S-835-FTO-ITL88524.007.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-S-835-FTO-ITL88524.007.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	118.29	N.A.	3.00
0-30	247.77	N.A.	6.30
0-40	399.26	N.A.	10.20
0-60	686.15	N.A.	17.50
0-80	841.69	N.A.	21.40
0-90	856.00	N.A.	21.80
10-90	825.13	N.A.	21.00
20-40	280.96	N.A.	7.10
20-50	433.64	N.A.	11.00
40-70	386.70	N.A.	9.80
60-80	155.54	N.A.	4.00
70-80	55.73	N.A.	1.40
80-90	14.31	N.A.	0.40
90-110	281.51	N.A.	7.20
90-120	684.28	N.A.	17.40
90-130	1223.3	N.A.	31.10
90-150	2339.52	N.A.	59.50
90-180	3074.00	N.A.	78.20
110-180	2792.49	N.A.	71.10
0-180	3930.00	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	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

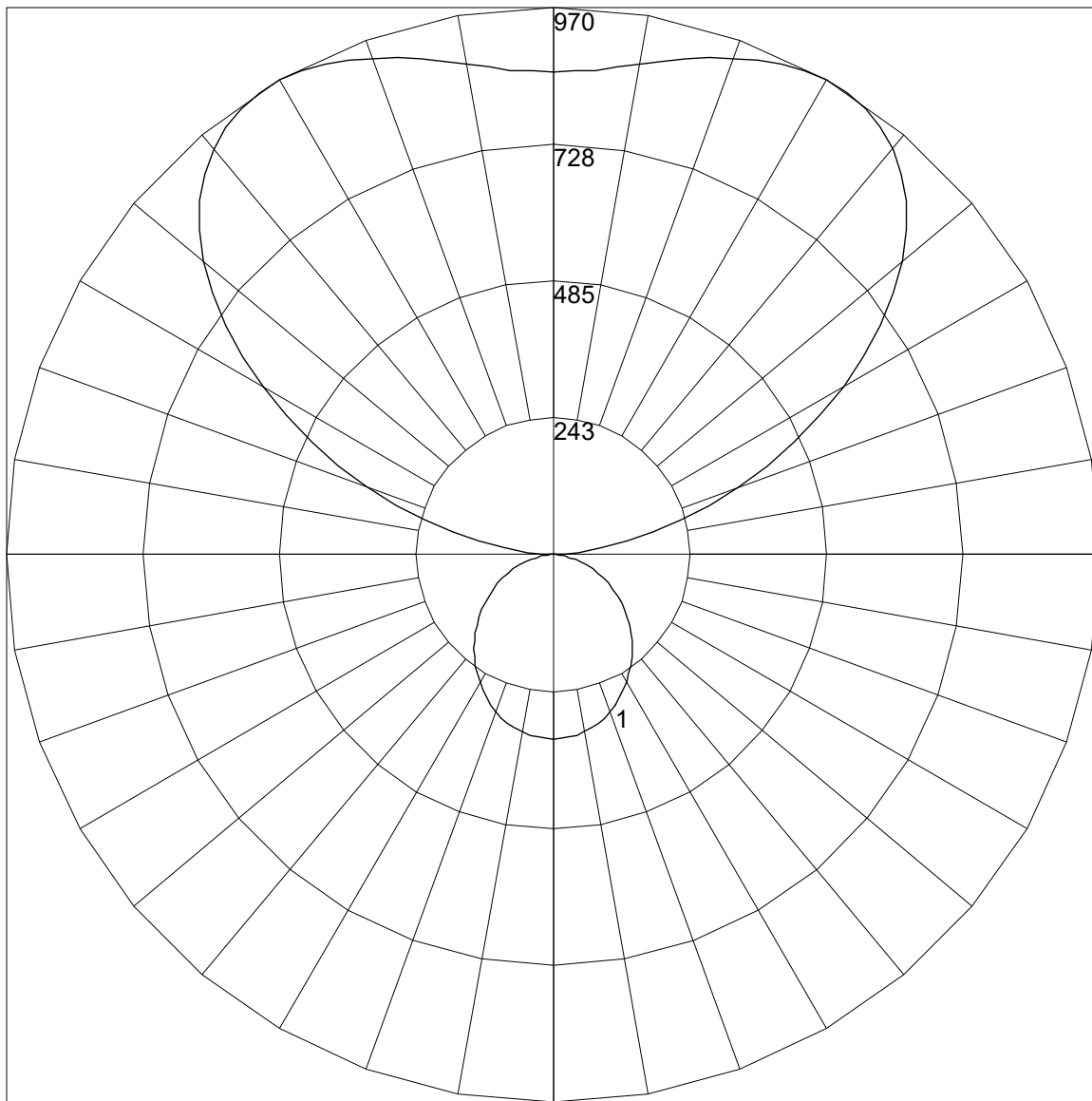
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22
1	91	87	84	80	81	78	74	72	59	57	55	42	41	40	27	26	25	18
2	83	76	70	65	74	68	63	59	52	48	46	37	35	33	23	22	21	15
3	76	67	60	54	67	59	54	49	46	42	38	33	30	28	21	19	18	13
4	69	59	51	46	61	53	46	41	40	36	32	29	26	24	18	17	16	11
5	63	52	45	39	56	47	40	35	36	31	28	26	23	21	17	15	14	10
6	58	47	39	34	51	42	35	30	32	28	24	23	20	18	15	13	12	8
7	54	42	34	29	47	38	31	26	29	24	21	21	18	16	14	12	10	8
8	50	38	31	26	44	34	28	23	26	22	19	19	16	14	13	11	9	7
9	46	35	27	23	41	31	25	21	24	20	16	18	15	12	12	10	8	6
10	43	32	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8	5

POLAR GRAPH



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