

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-B-835-FTO-ITL88524.008.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL88524.008 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-B-835-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 38.0 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 41.3 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]4150

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4150
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	38
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	3754	3708	3647
55	3525	3468	3402
65	3223	3159	3095
75	2736	2673	2632
85	1861	1861	1799

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-H-B-835-FTO-ITL88524.008.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	411.074	411.074	411.074	411.074	411.074
2.5	410.559	410.559	411.074	410.559	410.559
5.0	408.501	408.501	409.016	408.501	408.501
7.5	405.929	405.929	405.929	405.929	405.929
10.0	402.328	401.813	402.328	401.813	401.299
12.5	397.183	395.639	396.668	396.154	395.639
15.0	391.009	388.951	390.494	389.980	388.951
17.5	383.806	381.234	383.292	382.777	381.234
20.0	376.089	372.488	374.545	374.031	372.488
22.5	366.828	362.712	364.770	364.256	362.712
25.0	356.538	352.423	353.966	353.452	351.908
27.5	345.220	341.104	342.647	341.618	340.075
30.0	333.387	329.785	330.814	329.271	327.727
32.5	321.039	317.438	317.952	316.409	314.865
35.0	308.177	304.575	305.090	303.032	302.003
37.5	294.800	291.199	291.713	289.655	288.112
40.0	281.423	277.822	277.822	275.764	274.221
42.5	267.018	264.445	263.931	261.359	259.815
45.0	252.612	250.040	249.525	246.953	245.410
47.5	237.692	235.634	234.605	232.033	230.489
50.0	222.772	220.714	219.685	216.598	215.569
52.5	207.852	205.280	204.765	201.678	200.649
55.0	192.418	190.360	189.331	186.244	185.729
57.5	176.983	174.925	173.896	170.809	170.295
60.0	161.548	159.490	158.462	155.375	154.860
62.5	145.599	144.056	142.512	139.940	139.940
65.0	129.650	128.621	127.078	124.505	124.505
67.5	113.701	112.672	111.129	109.585	109.071
70.0	97.752	97.238	95.694	94.151	94.151
72.5	82.318	81.803	80.774	79.745	79.231
75.0	67.398	66.883	65.854	64.825	64.825
77.5	52.477	52.992	51.449	51.449	50.934
80.0	39.101	39.101	38.586	38.072	37.557
82.5	26.239	26.753	26.753	26.239	25.724
85.0	15.435	15.435	15.435	14.920	14.920
87.5	5.145	5.145	5.659	5.145	4.630
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-B-835-FTO-ITL88524.008.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-B-835-FTO-ITL88524.008.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	148.70	N.A.	3.60
0-30	311.45	N.A.	7.50
0-40	501.87	N.A.	12.10
0-60	862.50	N.A.	20.80
0-80	1058.01	N.A.	25.50
0-90	1076.00	N.A.	25.90
10-90	1037.2	N.A.	25.00
20-40	353.17	N.A.	8.50
20-50	545.09	N.A.	13.10
40-70	486.09	N.A.	11.70
60-80	195.52	N.A.	4.70
70-80	70.06	N.A.	1.70
80-90	17.99	N.A.	0.40
90-110	281.51	N.A.	6.80
90-120	684.28	N.A.	16.50
90-130	1223.3	N.A.	29.50
90-150	2339.52	N.A.	56.40
90-180	3074.00	N.A.	74.10
110-180	2792.49	N.A.	67.30
0-180	4150.00	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	38.80
10-20	109.90
20-30	162.75
30-40	190.42
40-50	191.92
50-60	168.71
60-70	125.46
70-80	70.06
80-90	17.99
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

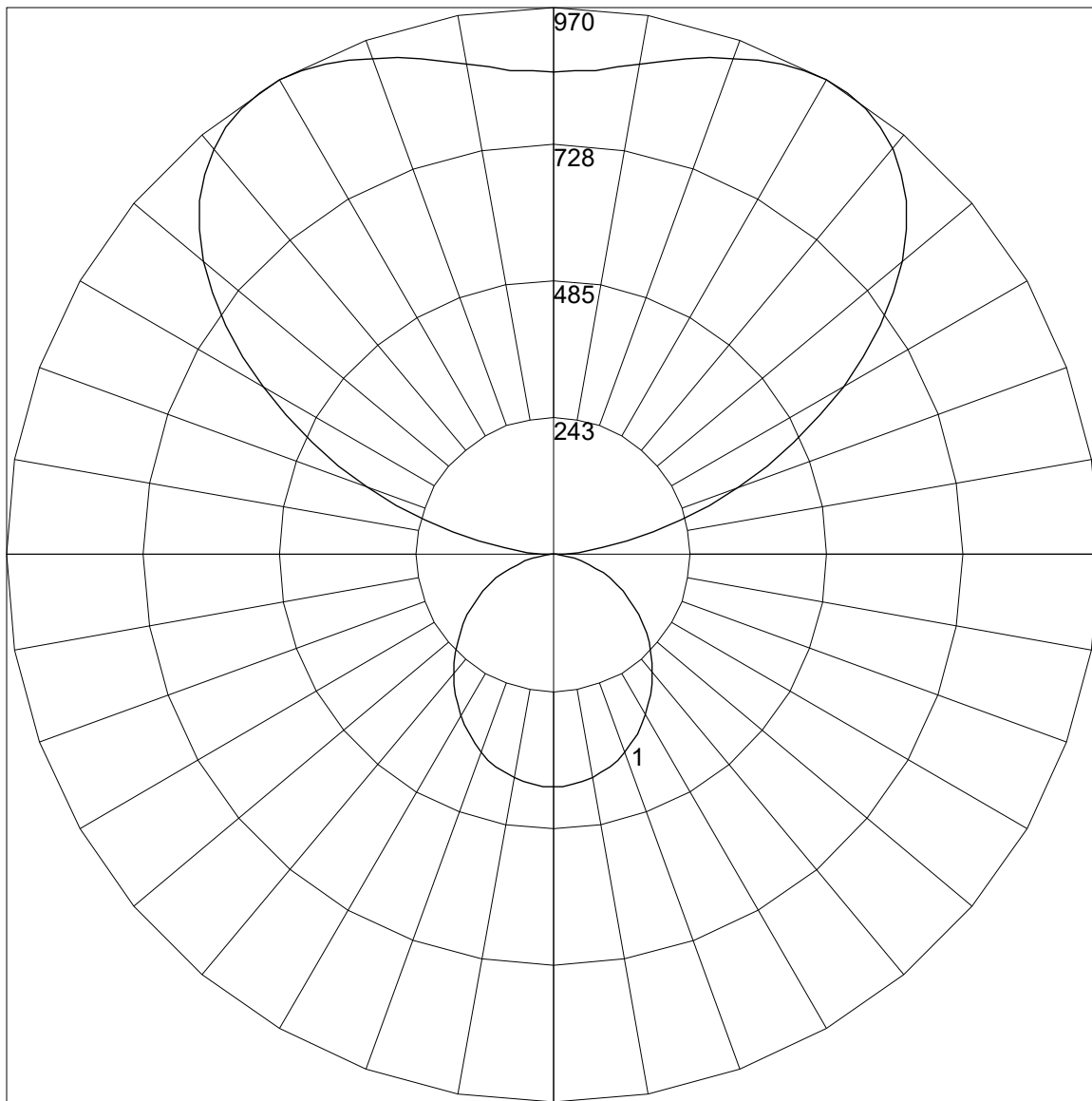
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34	26
1	92	88	84	81	82	79	76	73	61	59	57	45	44	42	30	29	29	22
2	84	77	71	66	75	69	64	60	54	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	60	55	50	47	43	40	35	32	30	23	22	20	15
4	70	60	52	46	62	53	47	42	42	37	34	31	28	26	21	19	18	13
5	64	53	45	39	57	48	41	36	37	33	29	28	24	22	19	17	15	11
6	59	47	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13	10
7	54	43	35	30	48	38	32	27	30	25	22	23	19	17	15	13	12	9
8	50	39	31	26	45	35	28	24	27	23	19	21	17	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7
10	44	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	9	7

POLAR GRAPH



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