

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 : S12-LED-ID-DCO-4FT-4E-S-8-35-10U90D-ITL85163.201.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85163.201 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]09/11/15

[ISSUEDATE]08/15/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S12-LED-ID-DCO-4ft-4E-S-8-35-10U90D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 27.9 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 30.6 WATTS

[ABSOLUTE]LUMENS]3003

[OTHER]see www.finelite.com for source file ITL85163. 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

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3003
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	27.9
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.34
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	3.32 ft
Luminous Width (90-270)	0.36 ft
Luminous Height	0.03 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7686	7285	7177
55	7180	6658	6538
65	6500	5893	5743
75	5384	4747	4776
85	3185	3221	3700

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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	1004.341	1004.341	1004.341	1004.341	1004.341
2.5	1003.009	1003.009	1003.009	1003.009	1003.009
5.0	999.013	999.013	999.013	999.013	999.013
7.5	992.353	992.353	992.353	992.353	993.685
10.0	981.697	980.365	983.029	983.029	983.029
12.5	971.041	968.377	972.373	972.373	971.041
15.0	956.389	951.061	956.389	957.721	956.389
17.5	939.072	933.744	939.072	940.404	939.072
20.0	919.092	912.432	919.092	920.424	920.424
22.5	895.116	888.456	896.448	897.780	896.448
25.0	869.808	864.480	871.140	873.804	872.472
27.5	844.499	837.839	845.831	847.163	847.163
30.0	815.195	809.867	816.527	817.859	816.527
32.5	785.890	780.562	787.222	789.886	787.222
35.0	755.254	749.926	756.586	757.918	756.586
37.5	720.622	716.625	723.286	724.618	723.286
40.0	687.321	683.325	688.653	691.317	689.985
42.5	654.021	650.025	654.021	658.017	655.353
45.0	618.056	615.392	619.388	622.052	620.720
47.5	582.092	579.428	583.424	584.756	583.424
50.0	543.463	542.131	547.459	548.791	547.459
52.5	507.499	506.167	508.831	511.495	511.495
55.0	470.202	468.870	471.534	474.198	474.198
57.5	431.574	431.574	435.570	436.902	436.902
60.0	394.277	392.945	396.941	399.605	399.605
62.5	354.317	355.649	358.313	360.977	362.309
65.0	315.688	317.020	321.016	322.348	323.680
67.5	277.060	278.392	282.388	285.052	285.052
70.0	238.431	241.095	246.423	247.755	250.419
72.5	199.803	203.799	209.127	213.123	217.119
75.0	162.506	167.834	173.162	179.822	183.819
77.5	126.542	131.870	141.194	147.854	150.518
80.0	91.909	98.569	109.225	117.218	119.882
82.5	61.273	67.933	79.921	90.577	94.573
85.0	34.633	42.625	55.945	67.933	71.929
87.5	11.988	21.312	37.297	47.953	51.949
90.0	0.000	7.992	21.312	31.968	35.965
92.5	1.547	20.825	40.817	46.886	41.472
95.0	3.213	24.633	46.886	60.750	64.855
97.5	5.058	26.537	49.504	63.427	68.068
100.0	7.021	28.620	50.813	64.617	69.258
102.5	8.985	28.917	51.349	64.915	69.556
105.0	11.008	29.691	51.527	64.677	69.139
107.5	13.090	30.643	52.122	64.141	68.425
110.0	15.292	31.654	51.527	63.784	67.711
112.5	17.315	32.904	51.289	63.963	67.473
115.0	19.338	34.213	51.289	62.951	67.235
117.5	21.420	35.641	51.349	62.297	65.986
120.0	23.443	37.247	51.646	61.940	65.391
122.5	25.466	38.854	52.003	61.583	64.855
125.0	27.370	40.460	52.360	61.345	64.379
127.5	29.453	42.007	52.836	61.226	64.022
130.0	31.238	43.435	53.312	61.047	63.665
132.5	33.082	44.625	53.907	60.928	63.368

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-S-8-35-10U90D-ITL85163.201.IES****CANDELA TABULATION - (Cont.)**

135.0	34.808	45.518	54.502	60.869	63.130
137.5	36.474	46.232	55.157	60.809	62.832
140.0	38.140	46.886	55.930	60.809	62.594
142.5	39.687	47.422	56.525	60.869	62.416
145.0	41.115	47.779	57.120	60.988	62.237
147.5	42.483	48.017	57.418	61.166	62.237
150.0	43.733	48.255	57.299	61.285	62.237
152.5	44.923	48.433	56.882	61.226	62.178
155.0	45.994	48.731	56.347	60.631	61.880
157.5	46.946	49.088	55.514	59.679	61.047
160.0	47.779	49.385	54.562	58.489	59.798
162.5	48.552	49.742	53.550	57.001	58.310
165.0	49.147	49.980	52.598	55.276	56.466
167.5	49.683	50.278	51.944	53.610	54.562
170.0	50.099	50.456	51.468	52.420	53.015
172.5	50.397	50.635	51.170	51.706	52.003
175.0	50.635	50.813	50.992	51.230	51.349
177.5	50.813	50.873	50.873	50.992	50.992
180.0	50.873	50.873	50.873	50.873	50.873

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-S-8-35-10U90D-ITL85163.201.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	364.23	N.A.	12.10
0-30	765.01	N.A.	25.50
0-40	1236.84	N.A.	41.20
0-60	2135.95	N.A.	71.10
0-80	2636.99	N.A.	87.80
0-90	2700.27	N.A.	89.90
10-90	2605.43	N.A.	86.80
20-40	872.61	N.A.	29.10
20-50	1349.86	N.A.	45.00
40-70	1215.99	N.A.	40.50
60-80	501.03	N.A.	16.70
70-80	184.16	N.A.	6.10
80-90	63.28	N.A.	2.10
90-110	90.24	N.A.	3.00
90-120	137.83	N.A.	4.60
90-130	182.70	N.A.	6.10
90-150	257.40	N.A.	8.60
90-180	302.62	N.A.	10.10
110-180	212.38	N.A.	7.10
0-180	3002.89	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	94.84
10-20	269.39
20-30	400.78
30-40	471.83
40-50	477.26
50-60	421.86
60-70	316.88
70-80	184.16
80-90	63.28
90-100	41.10
100-110	49.15
110-120	47.58
120-130	44.88
130-140	40.59
140-150	34.11
150-160	25.36
160-170	14.98
170-180	4.88

IES INDOOR REPORT

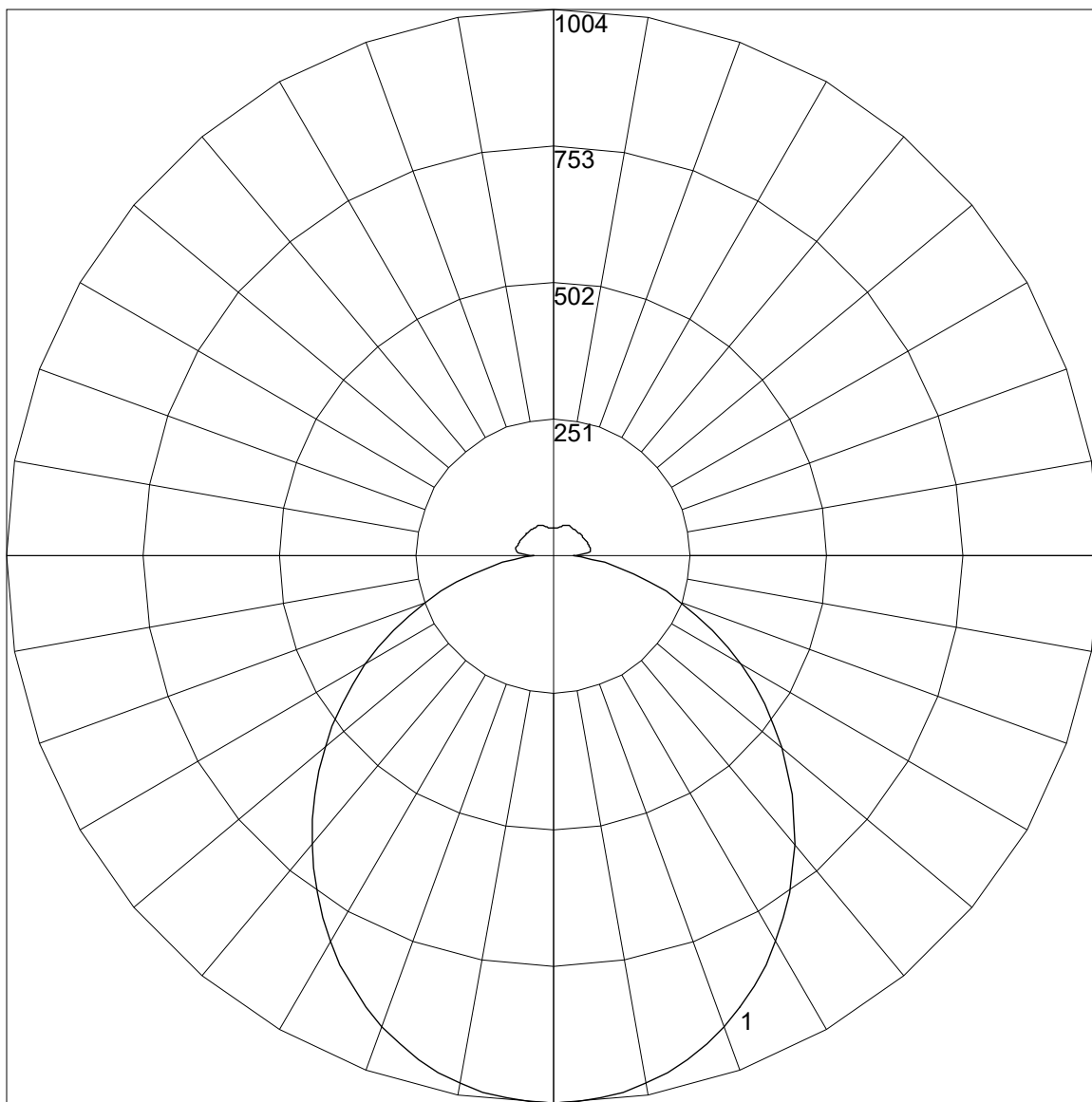
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	90
1	106	102	97	94	103	98	95	91	92	89	86	87	84	82	82	80	78	75
2	97	89	82	76	93	86	80	75	81	76	71	76	72	68	72	68	65	63
3	88	78	70	64	85	76	68	62	71	65	60	67	62	58	63	59	55	53
4	81	69	61	54	78	67	59	53	63	57	51	60	54	49	57	52	48	45
5	74	62	53	46	72	60	52	46	57	50	44	54	48	43	51	46	42	39
6	69	56	47	41	66	54	46	40	51	44	39	49	43	38	46	41	37	34
7	64	50	42	36	61	49	41	35	47	40	34	44	38	33	42	37	33	30
8	59	46	38	32	57	45	37	32	43	36	31	41	35	30	39	33	29	27
9	55	42	34	29	53	41	34	28	39	33	28	38	31	27	36	30	26	25
10	52	39	31	26	50	38	31	26	36	30	25	35	29	25	33	28	24	22

POLAR GRAPH



Maximum Candela = 1004.341 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)