

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-8-35-40U60D-ITL85163.210.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85163.210 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-8-35-40U60D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 26.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 29.6 WATTS

[_ABSOLUTE]LUMENS]3002

[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	3002
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	26.6
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 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	5124	4857	4785
55	4787	4439	4359
65	4333	3928	3829
75	3590	3165	3184
85	2123	2148	2467

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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	669.561	669.561	669.561	669.561	669.561
2.5	668.673	668.673	668.673	668.673	668.673
5.0	666.009	666.009	666.009	666.009	666.009
7.5	661.569	661.569	661.569	661.569	662.457
10.0	654.465	653.577	655.353	655.353	655.353
12.5	647.361	645.585	648.249	648.249	647.361
15.0	637.592	634.040	637.592	638.481	637.592
17.5	626.048	622.496	626.048	626.936	626.048
20.0	612.728	608.288	612.728	613.616	613.616
22.5	596.744	592.304	597.632	598.520	597.632
25.0	579.872	576.320	580.760	582.536	581.648
27.5	563.000	558.559	563.888	564.775	564.775
30.0	543.463	539.911	544.351	545.239	544.351
32.5	523.927	520.375	524.815	526.591	524.815
35.0	503.503	499.951	504.391	505.279	504.391
37.5	480.414	477.750	482.190	483.078	482.190
40.0	458.214	455.550	459.102	460.878	459.990
42.5	436.014	433.350	436.014	438.678	436.902
45.0	412.038	410.262	412.925	414.702	413.813
47.5	388.061	386.285	388.949	389.837	388.949
50.0	362.309	361.421	364.973	365.861	364.973
52.5	338.332	337.445	339.221	340.997	340.997
55.0	313.468	312.580	314.356	316.132	316.132
57.5	287.716	287.716	290.380	291.268	291.268
60.0	262.851	261.964	264.627	266.404	266.404
62.5	236.211	237.099	238.875	240.651	241.539
65.0	210.459	211.347	214.011	214.899	215.787
67.5	184.707	185.595	188.258	190.035	190.035
70.0	158.954	160.730	164.282	165.170	166.946
72.5	133.202	135.866	139.418	142.082	144.746
75.0	108.337	111.889	115.442	119.882	122.546
77.5	84.361	87.913	94.129	98.569	100.345
80.0	61.273	65.713	72.817	78.145	79.921
82.5	40.849	45.289	53.281	60.385	63.049
85.0	23.088	28.416	37.297	45.289	47.953
87.5	7.992	14.208	24.864	31.968	34.633
90.0	0.000	5.328	14.208	21.312	23.976
92.5	6.188	83.300	163.268	187.545	165.887
95.0	12.852	98.532	187.545	242.999	259.421
97.5	20.230	106.148	198.017	253.709	272.273
100.0	28.084	114.478	203.253	258.469	277.033
102.5	35.938	115.668	205.395	259.659	278.223
105.0	44.030	118.762	206.109	258.707	276.557
107.5	52.360	122.570	208.489	256.565	273.701
110.0	61.166	126.616	206.109	255.137	270.845
112.5	69.258	131.614	205.157	255.851	269.893
115.0	77.350	136.850	205.157	251.805	268.941
117.5	85.680	142.563	205.395	249.187	263.943
120.0	93.772	148.988	206.585	247.759	261.563
122.5	101.864	155.415	208.013	246.331	259.421
125.0	109.480	161.840	209.441	245.379	257.517
127.5	117.810	168.029	211.345	244.903	256.089
130.0	124.950	173.741	213.249	244.189	254.661
132.5	132.328	178.501	215.629	243.713	253.471

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-S-8-35-40U60D-ITL85163.210.IES****CANDELA TABULATION - (Cont.)**

135.0	139.231	182.071	218.009	243.475	252.519
137.5	145.894	184.927	220.627	243.237	251.329
140.0	152.559	187.545	223.721	243.237	250.377
142.5	158.746	189.687	226.101	243.475	249.663
145.0	164.458	191.115	228.481	243.951	248.949
147.5	169.933	192.067	229.671	244.665	248.949
150.0	174.931	193.019	229.195	245.141	248.949
152.5	179.691	193.733	227.529	244.903	248.711
155.0	183.975	194.923	225.387	242.523	247.521
157.5	187.783	196.351	222.055	238.715	244.189
160.0	191.115	197.541	218.247	233.955	239.191
162.5	194.209	198.969	214.201	228.005	233.241
165.0	196.589	199.921	210.393	221.103	225.863
167.5	198.731	201.111	207.775	214.439	218.247
170.0	200.397	201.825	205.871	209.679	212.059
172.5	201.587	202.539	204.681	206.823	208.013
175.0	202.539	203.253	203.967	204.919	205.395
177.5	203.253	203.491	203.491	203.967	203.967
180.0	203.491	203.491	203.491	203.491	203.491

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-S-8-35-40U60D-ITL85163.210.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	242.82	N.A.	8.10
0-30	510.01	N.A.	17.00
0-40	824.56	N.A.	27.50
0-60	1423.97	N.A.	47.40
0-80	1757.99	N.A.	58.60
0-90	1800.18	N.A.	60.00
10-90	1736.95	N.A.	57.90
20-40	581.74	N.A.	19.40
20-50	899.91	N.A.	30.00
40-70	810.66	N.A.	27.00
60-80	334.02	N.A.	11.10
70-80	122.77	N.A.	4.10
80-90	42.19	N.A.	1.40
90-110	351.93	N.A.	11.70
90-120	542.26	N.A.	18.10
90-130	721.76	N.A.	24.00
90-150	1020.56	N.A.	34.00
90-180	1201.44	N.A.	40.00
110-180	849.51	N.A.	28.30
0-180	3001.62	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	63.23
10-20	179.59
20-30	267.19
30-40	314.55
40-50	318.17
50-60	281.24
60-70	211.25
70-80	122.77
80-90	42.19
90-100	155.33
100-110	196.59
110-120	190.33
120-130	179.50
130-140	162.35
140-150	136.45
150-160	101.42
160-170	59.93
170-180	19.53

IES INDOOR REPORT

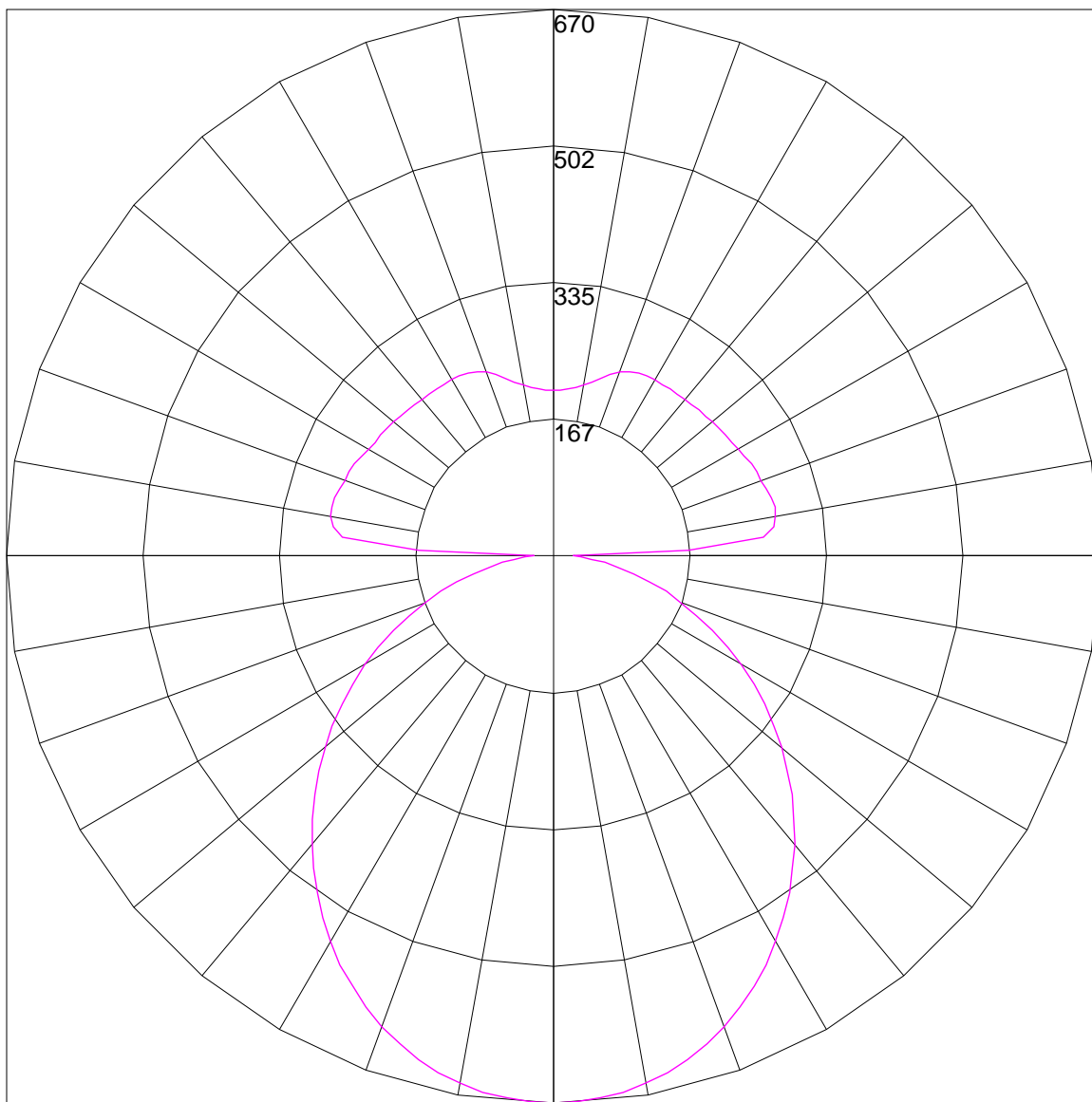
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	65	65	65	60
1	100	95	91	88	93	89	86	83	78	75	73	67	65	63	57	56	55	50
2	91	83	77	71	85	78	72	68	68	64	60	59	56	53	50	48	46	42
3	83	73	65	59	77	68	62	56	60	55	50	52	48	45	45	42	39	35
4	76	65	56	50	70	61	53	48	53	47	43	46	42	38	40	36	34	30
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	26
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	32	29	26	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23	20
8	55	42	35	29	51	40	33	28	36	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	21	27	22	19	23	20	17	15

POLAR GRAPH



Maximum Candela = 669.561 Located At Horizontal Angle = 0, Vertical Angle = 0
Vertical Plane Through Horizontal Angles (90 - 270)