

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-3E-B-S-8-35-OPEN-ITL85163.010.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85163.010 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]09/11/15

[ISSUEDATE]04/27/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S12-LED-ID-DCO-4ft-3E-B-S-8-35-OPEN

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 26.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 30.3 WATTS

[ABSOLUTE]LUMENS]3425

[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	3425
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	129
Total Luminaire Watts	26.6
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 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	2362	2239	2206
55	2207	2046	2009
65	1997	1811	1765
75	1655	1459	1468
85	979	990	1137

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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	308.655	308.655	308.655	308.655	308.655
2.5	308.246	308.246	308.246	308.246	308.246
5.0	307.017	307.017	307.017	307.017	307.017
7.5	304.971	304.971	304.971	304.971	305.380
10.0	301.696	301.287	302.105	302.105	302.105
12.5	298.421	297.602	298.830	298.830	298.421
15.0	293.918	292.281	293.918	294.327	293.918
17.5	288.596	286.959	288.596	289.006	288.596
20.0	282.456	280.409	282.456	282.865	282.865
22.5	275.088	273.041	275.497	275.906	275.497
25.0	267.310	265.673	267.719	268.538	268.129
27.5	259.532	257.485	259.942	260.351	260.351
30.0	250.526	248.889	250.936	251.345	250.936
32.5	241.520	239.883	241.930	242.749	241.930
35.0	232.105	230.468	232.515	232.924	232.515
37.5	221.462	220.234	222.281	222.690	222.281
40.0	211.228	210.000	211.637	212.456	212.047
42.5	200.994	199.766	200.994	202.222	201.404
45.0	189.941	189.123	190.351	191.170	190.760
47.5	178.889	178.070	179.298	179.708	179.298
50.0	167.018	166.608	168.246	168.655	168.246
52.5	155.965	155.556	156.374	157.193	157.193
55.0	144.503	144.094	144.912	145.731	145.731
57.5	132.632	132.632	133.860	134.269	134.269
60.0	121.170	120.760	121.988	122.807	122.807
62.5	108.889	109.298	110.117	110.936	111.345
65.0	97.017	97.427	98.655	99.064	99.474
67.5	85.146	85.556	86.784	87.602	87.602
70.0	73.275	74.094	75.731	76.140	76.959
72.5	61.404	62.632	64.269	65.497	66.725
75.0	49.941	51.579	53.216	55.263	56.491
77.5	38.889	40.526	43.392	45.439	46.257
80.0	28.246	30.292	33.567	36.023	36.842
82.5	18.830	20.877	24.561	27.836	29.064
85.0	10.643	13.099	17.193	20.877	22.105
87.5	3.684	6.550	11.462	14.737	15.965
90.0	0.000	2.456	6.550	9.825	11.053
92.5	13.380	180.117	353.029	405.521	358.690
95.0	27.790	213.053	405.521	525.427	560.936
97.5	43.743	229.520	428.164	548.585	588.725
100.0	60.725	247.532	439.485	558.877	599.018
102.5	77.708	250.105	444.117	561.450	601.591
105.0	95.205	256.795	445.661	559.392	597.988
107.5	113.216	265.029	450.807	554.760	591.813
110.0	132.257	273.778	445.661	551.673	585.638
112.5	149.754	284.585	443.602	553.216	583.579
115.0	167.251	295.906	443.602	544.468	581.520
117.5	185.263	308.257	444.117	538.807	570.713
120.0	202.760	322.152	446.690	535.719	565.567
122.5	220.257	336.047	449.778	532.632	560.936
125.0	236.725	349.942	452.865	530.573	556.819
127.5	254.737	363.322	456.983	529.544	553.731
130.0	270.175	375.673	461.099	528.000	550.643
132.5	286.129	385.965	466.246	526.971	548.070

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-B-S-8-35-OPEN-ITL85163.010.IES****CANDELA TABULATION - (Cont.)**

135.0	301.053	393.684	471.392	526.456	546.012
137.5	315.462	399.860	477.053	525.942	543.439
140.0	329.871	405.521	483.743	525.942	541.380
142.5	343.252	410.152	488.889	526.456	539.836
145.0	355.602	413.240	494.035	527.485	538.292
147.5	367.439	415.298	496.608	529.029	538.292
150.0	378.246	417.357	495.579	530.058	538.292
152.5	388.538	418.901	491.977	529.544	537.778
155.0	397.801	421.474	487.345	524.398	535.205
157.5	406.035	424.561	480.140	516.164	528.000
160.0	413.240	427.135	471.906	505.871	517.193
162.5	419.930	430.222	463.158	493.006	504.327
165.0	425.076	432.281	454.924	478.082	488.374
167.5	429.708	434.854	449.263	463.673	471.906
170.0	433.310	436.398	445.146	453.380	458.526
172.5	435.883	437.942	442.573	447.205	449.778
175.0	437.942	439.485	441.029	443.088	444.117
177.5	439.485	440.000	440.000	441.029	441.029
180.0	440.000	440.000	440.000	440.000	440.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-3E-B-S-8-35-OPEN-ITL85163.010.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	111.94	N.A.	3.30
0-30	235.10	N.A.	6.90
0-40	380.11	N.A.	11.10
0-60	656.42	N.A.	19.20
0-80	810.40	N.A.	23.70
0-90	829.85	N.A.	24.20
10-90	800.70	N.A.	23.40
20-40	268.17	N.A.	7.80
20-50	414.84	N.A.	12.10
40-70	373.70	N.A.	10.90
60-80	153.98	N.A.	4.50
70-80	56.59	N.A.	1.70
80-90	19.45	N.A.	0.60
90-110	757.88	N.A.	22.10
90-120	1169.42	N.A.	34.10
90-130	1557.55	N.A.	45.50
90-150	2203.63	N.A.	64.30
90-180	2594.74	N.A.	75.80
110-180	1836.86	N.A.	53.60
0-180	3424.59	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	29.15
10-20	82.79
20-30	123.17
30-40	145.00
40-50	146.67
50-60	129.65
60-70	97.38
70-80	56.59
80-90	19.45
90-100	332.79
100-110	425.08
110-120	411.54
120-130	388.13
130-140	351.05
140-150	295.04
150-160	219.30
160-170	129.57
170-180	42.24

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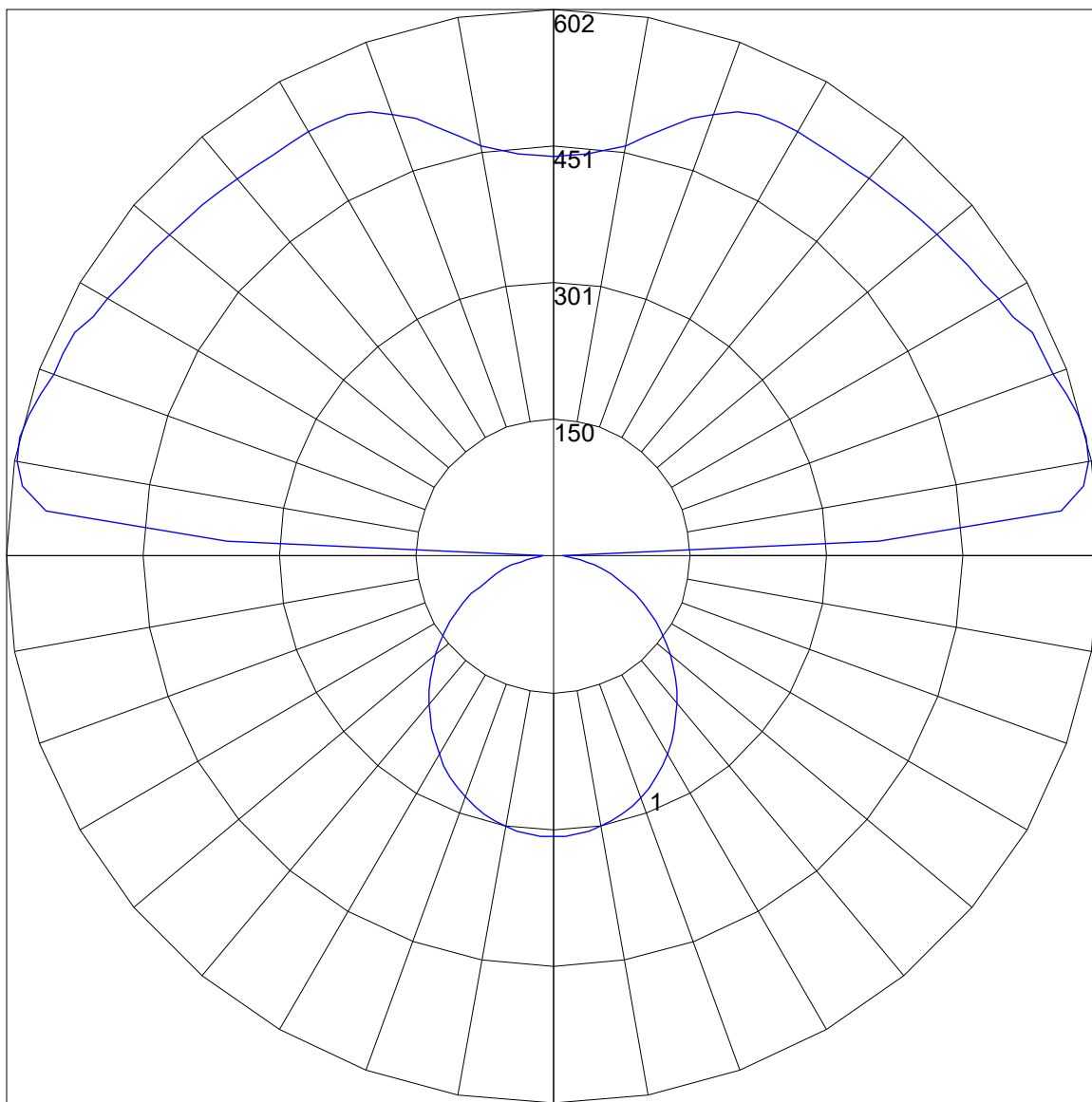
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	69	69	69	50	50	50	32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	56	44	42	41	28	28	27	20
2	84	77	71	66	74	68	63	59	53	49	46	38	36	34	25	24	23	17
3	76	67	60	55	67	60	54	49	46	42	39	34	31	29	22	21	19	14
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	12
5	64	53	45	39	56	47	40	35	37	32	28	27	24	21	18	16	14	11
6	59	47	39	34	52	42	35	31	33	28	24	24	21	19	16	14	13	9
7	54	42	35	29	48	38	31	27	30	25	21	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10	7
9	46	35	28	23	41	31	25	21	25	20	17	18	15	13	12	10	9	7
10	43	32	25	20	38	29	22	18	22	18	15	17	14	12	11	9	8	6

POLAR GRAPH



Maximum Candela = 601.591 Located At Horizontal Angle = 90, Vertical Angle = 102.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)