

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-2E-H-8-35-OPEN-ITL85161.003.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85161.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]09/09/15

[ISSUEDATE]04/25/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S12-LED-ID-DCO-4ft-2E-H-8-35-OPEN

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 28.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 29.4 WATTS

[ABSOLUTE]LUMENS]3721

[OTHER]see www.finelite.com for source file ITL85161. 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	3721
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	130
Total Luminaire Watts	28.6
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	2679	2690	2797
55	2577	2548	2649
65	2386	2284	2374
75	2036	1855	1981
85	1144	1299	1601

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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	319.667	319.667	319.667	319.667	319.667
2.5	318.889	318.889	319.667	319.667	319.667
5.0	318.111	318.111	318.889	318.889	318.889
7.5	316.556	316.556	317.333	318.111	318.111
10.0	315.000	314.222	315.778	317.333	317.333
12.5	311.889	311.111	314.222	315.778	315.778
15.0	308.000	307.222	311.111	313.444	313.444
17.5	304.111	303.333	308.000	311.111	311.889
20.0	299.444	297.889	304.111	308.000	308.778
22.5	293.222	292.444	299.444	304.111	305.667
25.0	287.000	287.000	294.000	300.222	301.778
27.5	279.222	280.000	288.556	294.778	297.111
30.0	272.222	273.000	281.556	289.333	291.667
32.5	263.667	266.000	274.556	282.333	285.444
35.0	255.111	257.444	266.778	275.333	278.444
37.5	245.778	248.111	258.222	266.778	270.667
40.0	236.444	238.778	248.889	257.444	262.111
42.5	226.333	228.667	238.778	248.111	252.000
45.0	215.444	218.556	228.667	237.222	241.889
47.5	204.556	206.889	217.000	226.333	230.222
50.0	192.889	196.000	205.333	213.889	218.556
52.5	181.222	183.556	192.889	201.444	205.333
55.0	168.778	171.111	180.444	188.222	192.111
57.5	156.333	158.667	167.222	174.222	178.111
60.0	143.111	145.444	153.222	160.222	164.111
62.5	129.889	132.222	139.222	145.444	149.333
65.0	115.889	118.222	124.444	131.444	133.778
67.5	101.889	104.222	110.444	116.667	119.000
70.0	87.889	90.222	95.667	101.889	104.222
72.5	75.444	76.222	81.667	87.889	90.222
75.0	61.444	63.000	67.667	74.667	76.222
77.5	48.222	49.778	55.222	61.444	63.778
80.0	35.778	37.333	43.556	49.000	51.333
82.5	24.111	25.667	31.889	38.111	40.444
85.0	12.444	15.556	22.556	28.778	31.111
87.5	3.889	7.778	14.778	20.222	22.556
90.0	0.000	3.111	8.556	13.222	15.556
92.5	10.889	198.333	12.444	12.444	13.222
95.0	22.556	254.333	493.889	491.556	251.222
97.5	32.667	287.778	525.778	676.667	723.333
100.0	42.000	305.667	549.111	690.667	737.333
102.5	52.889	314.222	567.000	707.000	751.333
105.0	63.778	325.111	584.111	722.556	766.889
107.5	74.667	386.556	587.222	736.556	780.889
110.0	84.778	371.778	586.444	748.222	793.333
112.5	94.889	357.000	586.444	744.333	797.222
115.0	105.778	353.111	586.444	738.111	788.667
117.5	115.111	347.667	587.222	731.111	779.333
120.0	125.222	343.000	629.222	724.111	770.000
122.5	134.556	339.111	638.556	716.333	759.111
125.0	143.111	335.222	592.667	710.111	749.000
127.5	151.667	331.333	577.111	754.444	739.667
130.0	158.667	325.889	560.000	738.111	788.667
132.5	164.889	320.444	541.333	688.333	758.333

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-2E-H-8-35-OPEN-ITL85161.003.IES****CANDELA TABULATION - (Cont.)**

135.0	170.333	314.222	523.444	663.444	704.667
137.5	175.778	307.222	504.778	637.778	681.333
140.0	180.444	299.444	485.333	611.333	652.556
142.5	184.333	291.667	465.111	582.556	622.222
145.0	187.444	283.111	444.111	553.778	590.333
147.5	190.556	273.778	422.333	525.000	558.444
150.0	192.111	264.444	399.778	494.667	525.778
152.5	193.667	255.111	377.222	463.556	493.111
155.0	195.222	245.778	353.111	431.667	457.333
157.5	196.000	236.444	329.000	399.778	423.111
160.0	196.778	228.667	305.667	367.111	388.111
162.5	197.556	220.111	282.333	335.222	352.333
165.0	197.556	213.111	260.556	302.556	316.556
167.5	197.556	207.667	241.889	272.222	283.111
170.0	196.778	203.000	224.000	245.778	252.778
172.5	196.778	199.111	210.778	223.222	227.111
175.0	196.778	196.778	201.444	206.111	207.667
177.5	196.778	196.778	196.778	197.556	198.333
180.0	196.778	196.778	196.778	196.778	196.778

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-2E-H-8-35-OPEN-ITL85161.003.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	118.14	N.A.	3.20
0-30	253.59	N.A.	6.80
0-40	420.26	N.A.	11.30
0-60	756.92	N.A.	20.30
0-80	953.14	N.A.	25.60
0-90	978.71	N.A.	26.30
10-90	948.38	N.A.	25.50
20-40	302.12	N.A.	8.10
20-50	478.00	N.A.	12.80
40-70	460.10	N.A.	12.40
60-80	196.21	N.A.	5.30
70-80	72.78	N.A.	2.00
80-90	25.57	N.A.	0.70
90-110	846.63	N.A.	22.80
90-120	1375.02	N.A.	37.00
90-130	1849.18	N.A.	49.70
90-150	2489.59	N.A.	66.90
90-180	2742.35	N.A.	73.70
110-180	1895.71	N.A.	50.90
0-180	3721.05	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	30.32
10-20	87.82
20-30	135.45
30-40	166.67
40-50	175.88
50-60	160.79
60-70	123.43
70-80	72.78
80-90	25.57
90-100	303.64
100-110	542.99
110-120	528.39
120-130	474.16
130-140	377.49
140-150	262.91
150-160	158.09
160-170	74.67
170-180	20.00

IES INDOOR REPORT

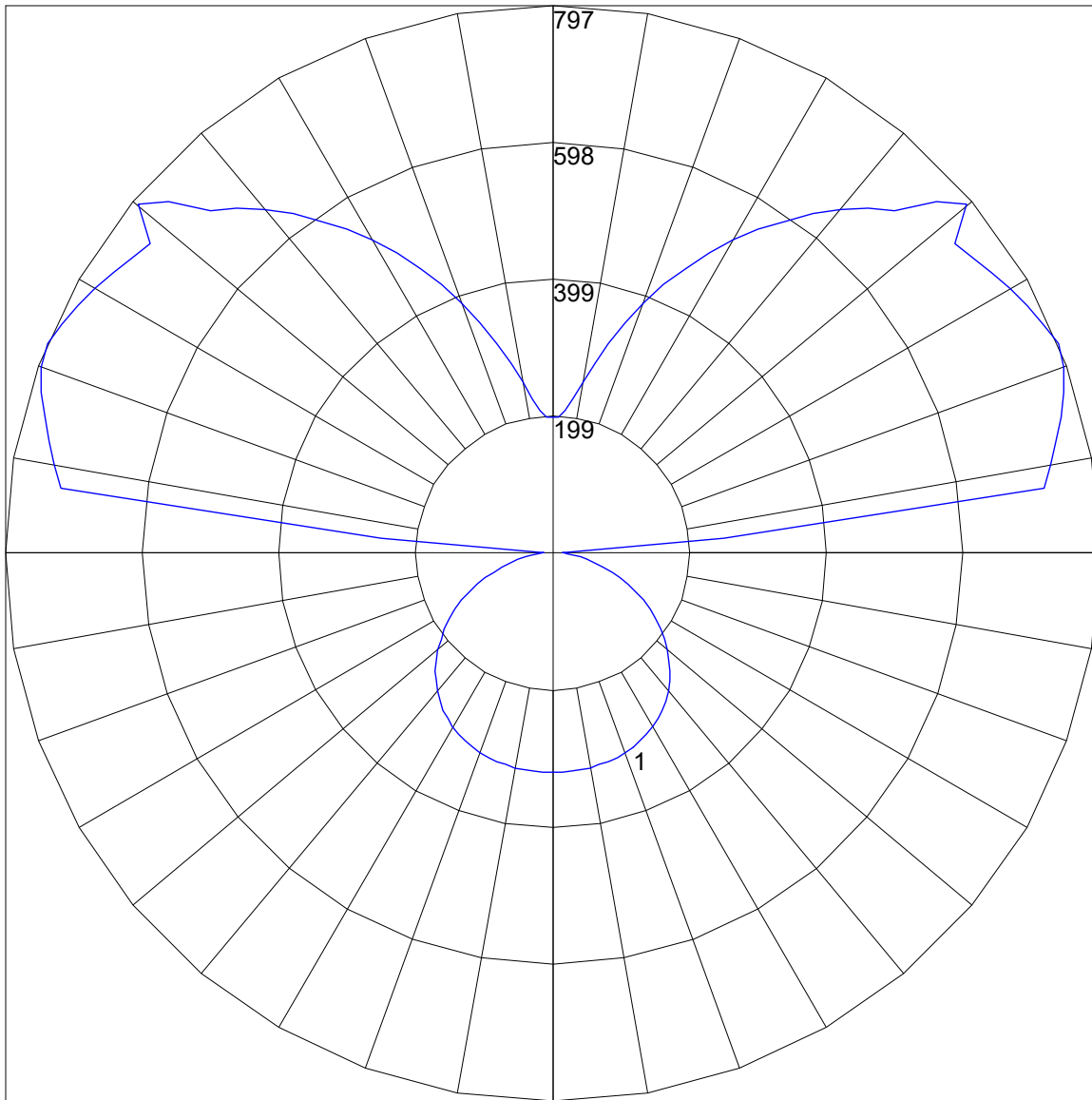
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	102	102	102	102	91	91	91	91	70	70	70	52	52	52	34	34	34	26
1	92	88	84	81	82	79	75	73	61	59	57	45	44	42	30	29	29	22
2	84	77	71	66	75	69	64	59	53	50	47	39	37	35	26	25	24	18
3	76	67	60	54	68	60	54	49	47	43	39	35	32	29	23	21	20	15
4	70	59	52	46	62	53	47	41	41	37	33	31	28	25	21	19	17	13
5	64	53	45	39	57	47	40	35	37	32	28	27	24	22	18	16	15	11
6	59	47	39	33	52	42	35	30	33	28	24	25	21	19	17	15	13	10
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11	8
8	50	38	31	25	44	34	28	23	27	22	19	20	17	14	14	12	10	8
9	46	35	27	22	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	28	22	18	23	18	15	17	14	12	12	10	8	6

POLAR GRAPH



Maximum Candela = 797.222 Located At Horizontal Angle = 90, Vertical Angle = 112.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)