

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-WM-ID-LED-DCO-4FT-2E-H-8-35-OPEN-ITL85167.003.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85167.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]09/08/15

[ISSUEDATE]04/27/16

[MANUFAC]FINELITE, INC.

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

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 28.5 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 29.4 WATTS

[ABSOLUTE]LUMENS]3597

[OTHER]see www.finelite.com for source file ITL85167. 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	3597
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	126
Total Luminaire Watts	28.5
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)	0.17 ft
Luminous Width (90-270)	3.32 ft
Luminous Height	0.01 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5970	5960	5727
55	5342	5408	5347
65	4538	4713	4899
75	3312	3581	4153
85	1213	1472	2677

IES INDOOR REPORT

PHOTOMETRIC FILENAME : S12-WM-ID-LED-DCO-4FT-2E-H-8-35-OPEN-ITL85167.003.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0.0	348.444	348.444	348.444	348.444	348.444	348.444	348.444	348.444	348.444
2.5	352.333	352.333	350.778	350.000	347.667	346.111	344.556	343.000	343.000
5.0	355.444	354.667	353.111	350.000	346.111	343.000	339.111	337.556	336.778
7.5	357.000	356.222	353.889	349.222	343.778	338.333	333.667	330.556	329.000
10.0	357.000	356.222	353.111	346.889	339.889	332.889	326.667	322.778	320.444
12.5	356.222	355.444	350.778	343.000	335.222	325.889	318.889	313.444	311.111
15.0	353.111	351.556	346.889	338.333	329.000	318.889	310.333	304.111	301.000
17.5	349.222	347.667	342.222	332.889	323.556	310.333	301.000	294.000	290.111
20.0	343.778	342.222	336.000	326.667	315.778	301.000	291.667	283.889	279.222
22.5	336.778	336.000	329.778	318.889	308.000	292.444	281.556	273.000	268.333
25.0	327.444	326.667	321.222	310.333	298.667	282.333	270.667	261.333	257.444
27.5	318.889	318.111	311.889	301.000	289.333	272.222	259.778	250.444	246.556
30.0	308.000	307.222	301.778	291.667	279.222	262.111	249.667	239.556	235.667
32.5	297.111	295.556	290.889	280.778	267.556	251.222	238.000	227.889	224.000
35.0	284.667	283.889	279.222	269.889	256.667	240.333	227.111	217.000	213.111
37.5	272.222	271.444	266.778	258.222	245.000	228.667	215.444	206.111	202.222
40.0	258.222	258.222	253.556	245.778	233.333	217.778	204.556	195.222	191.333
42.5	244.222	244.222	240.333	233.333	220.889	206.111	193.667	184.333	180.444
45.0	231.000	230.222	227.111	220.111	209.222	194.444	182.000	173.444	170.333
47.5	217.000	216.222	213.889	206.889	196.778	182.778	171.111	162.556	159.444
50.0	201.444	201.444	199.889	193.667	184.333	171.111	159.444	151.667	148.556
52.5	186.667	186.667	185.889	180.444	171.889	159.444	148.556	140.778	138.444
55.0	171.889	171.111	170.333	166.444	158.667	147.000	136.889	129.889	127.556
57.5	157.111	156.333	156.333	152.444	147.000	135.333	126.000	119.000	116.667
60.0	141.556	141.556	141.556	139.222	133.778	123.667	115.111	108.111	105.778
62.5	126.778	126.778	126.778	124.444	120.556	111.222	103.444	98.000	95.667
65.0	112.000	111.222	112.778	110.444	107.333	99.556	92.556	87.111	84.778
67.5	97.222	96.444	98.000	97.222	94.111	87.111	80.889	76.222	73.889
70.0	82.444	82.444	84.000	83.222	81.667	75.444	69.222	66.111	63.778
72.5	67.667	68.444	70.000	70.000	68.444	63.000	59.111	55.222	52.889
75.0	54.444	54.444	56.000	56.778	56.000	52.111	48.222	44.333	42.778
77.5	41.222	42.000	43.556	44.333	44.333	41.222	37.333	34.222	32.667
80.0	28.778	29.556	31.111	31.889	32.667	30.333	27.222	24.889	23.333
82.5	17.889	17.889	20.222	21.000	21.778	21.000	17.889	16.333	16.333
85.0	9.333	9.333	10.111	11.667	12.444	11.667	10.111	10.111	10.111
87.5	3.889	3.111	3.889	3.889	4.667	4.667	3.889	3.889	4.667
90.0	0.778	0.778	0.778	0.000	0.000	0.778	0.778	1.556	1.556
92.5	0.778	0.778	0.778	2.333	8.556	3.889	4.667	4.667	4.667
95.0	2.333	3.111	6.222	176.556	30.333	18.667	8.556	8.556	8.556
97.5	12.444	205.333	372.556	236.444	64.556	41.222	22.556	14.000	13.222
100.0	530.444	500.889	457.333	280.000	101.889	59.111	46.667	31.889	24.889
102.5	555.333	545.222	485.333	325.889	142.333	74.667	70.000	55.222	49.000
105.0	675.111	628.444	509.444	365.556	182.778	91.000	94.111	79.333	73.111
107.5	680.556	642.444	542.111	399.000	221.667	108.111	110.444	101.889	96.444
110.0	696.111	665.000	581.000	430.111	261.333	130.667	126.778	123.667	119.778
112.5	716.333	691.444	619.111	459.667	298.667	160.222	141.556	139.222	138.444
115.0	742.778	724.889	650.222	488.444	335.222	189.778	157.111	154.778	154.000
117.5	774.667	759.111	678.222	516.444	371.000	220.111	173.444	169.556	169.556
120.0	805.000	784.000	695.333	547.556	405.222	252.000	189.778	184.333	183.556
122.5	826.778	805.778	711.667	581.778	439.444	287.778	210.000	199.889	198.333
125.0	847.778	820.556	728.000	615.222	472.111	321.222	237.222	215.444	213.111
127.5	856.333	826.778	743.556	644.778	504.000	353.111	267.556	230.222	227.889
130.0	860.222	834.556	756.778	671.222	533.556	392.000	301.778	251.222	243.444
132.5	866.444	842.333	769.222	693.778	561.556	434.000	332.889	280.000	264.444

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-WM-ID-LED-DCO-4FT-2E-H-8-35-OPEN-ITL85167.003.IES****CANDELA TABULATION - (Cont.)**

135.0	871.111	848.556	780.889	712.444	588.778	467.444	363.222	313.444	294.778
137.5	874.222	854.000	794.889	730.333	613.667	497.000	397.444	346.889	329.778
140.0	876.556	857.111	812.000	746.667	636.222	526.556	430.111	378.778	362.444
142.5	877.333	861.000	830.667	760.667	658.778	556.111	462.000	409.889	395.111
145.0	878.889	866.444	845.444	773.889	679.000	584.111	491.556	441.000	426.222
147.5	882.000	875.778	856.333	785.556	698.444	609.778	528.111	476.000	458.111
150.0	891.333	888.222	863.333	795.667	715.556	634.667	567.778	508.667	493.111
152.5	900.667	895.222	868.000	803.444	731.889	658.000	598.111	536.667	521.889
155.0	905.333	898.333	870.333	810.444	745.111	679.778	625.333	579.444	554.556
157.5	906.111	897.556	872.667	815.111	758.333	699.222	651.000	614.444	598.111
160.0	902.222	894.444	872.667	819.000	769.222	717.889	673.556	642.444	630.000
162.5	897.556	889.000	869.556	819.778	778.556	735.778	695.333	666.556	656.444
165.0	890.556	882.778	864.889	821.333	787.889	752.889	716.333	689.889	680.556
167.5	882.778	874.222	856.333	820.556	793.333	766.889	736.556	713.222	705.444
170.0	868.778	863.333	846.222	820.556	798.778	779.333	756.000	737.333	729.556
172.5	854.778	848.556	834.556	825.222	803.444	787.111	773.889	761.444	756.778
175.0	836.111	833.000	827.556	822.111	806.556	796.444	790.222	781.667	777.778
177.5	828.333	826.778	822.111	815.889	808.889	803.444	799.556	795.667	793.333
180.0	808.889	808.889	808.889	808.889	808.889	808.889	808.889	808.889	808.889

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-WM-ID-LED-DCO-4FT-2E-H-8-35-OPEN-ITL85167.003.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	125.36	N.A.	3.50
0-30	261.49	N.A.	7.30
0-40	419.59	N.A.	11.70
0-60	715.19	N.A.	19.90
0-80	871.89	N.A.	24.20
0-90	885.16	N.A.	24.60
10-90	852.32	N.A.	23.70
20-40	294.23	N.A.	8.20
20-50	452.13	N.A.	12.60
40-70	396.96	N.A.	11.00
60-80	156.70	N.A.	4.40
70-80	55.34	N.A.	1.50
80-90	13.27	N.A.	0.40
90-110	372.24	N.A.	10.30
90-120	761.98	N.A.	21.20
90-130	1202.04	N.A.	33.40
90-150	2069.84	N.A.	57.60
90-180	2711.36	N.A.	75.40
110-180	2339.12	N.A.	65.00
0-180	3596.53	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	32.84
10-20	92.52
20-30	136.13
30-40	158.10
40-50	157.89
50-60	137.70
60-70	101.37
70-80	55.34
80-90	13.27
90-100	72.51
100-110	299.73
110-120	389.74
120-130	440.05
130-140	449.76
140-150	418.04
150-160	342.14
160-170	222.49
170-180	76.89

IES INDOOR REPORT

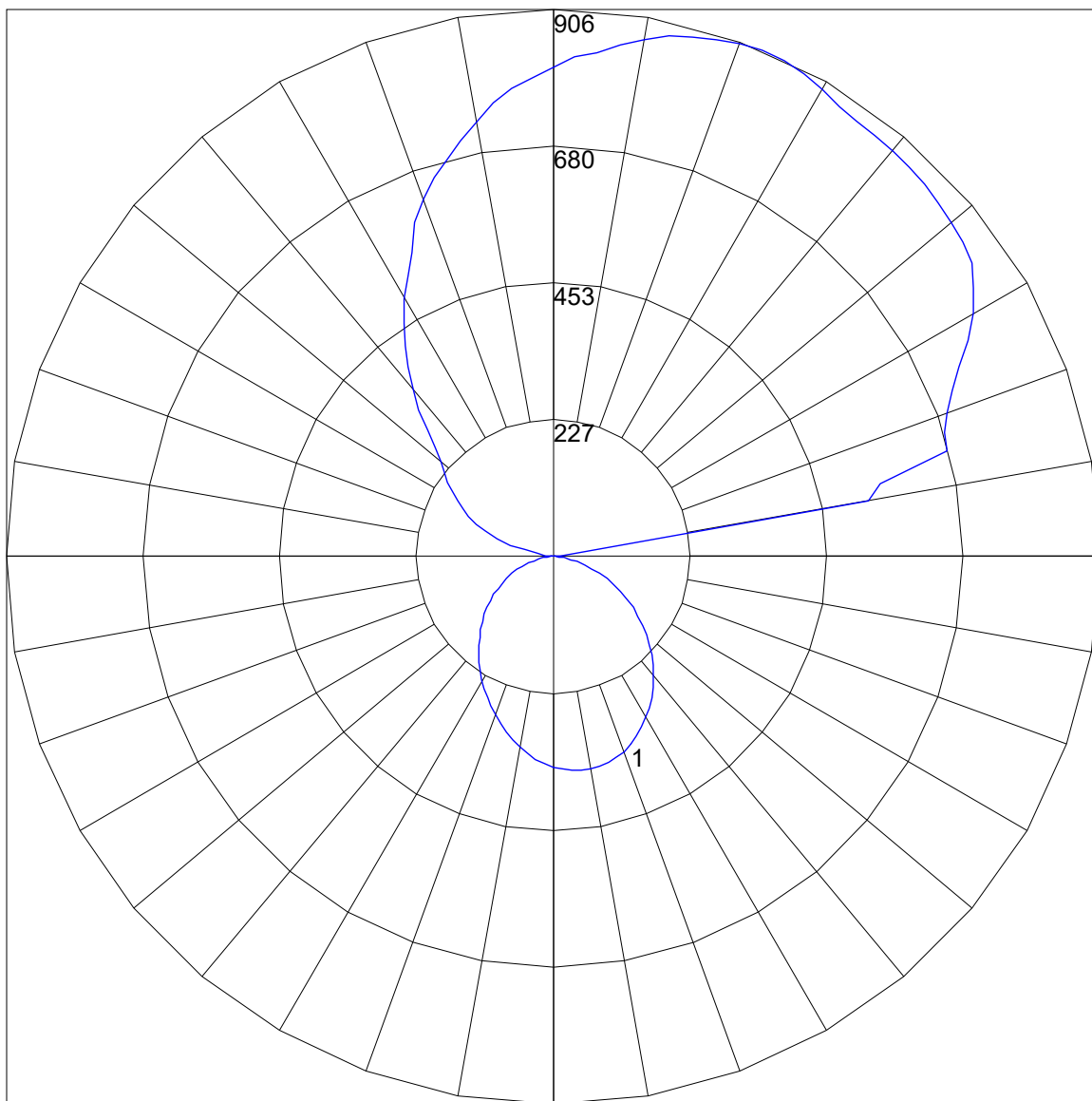
PHOTOMETRIC FILENAME : S12-WM-ID-LED-DCO-4FT-2E-H-8-35-OPEN-ITL85167.003.IES

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	33	33	33	25
1	92	88	84	81	82	78	75	73	61	59	57	44	43	42	29	28	28	21
2	84	77	71	66	74	69	64	60	53	50	47	39	37	35	26	24	23	17
3	76	67	60	55	68	60	54	50	47	43	39	34	32	29	23	21	20	15
4	70	60	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	40	34	52	42	36	31	33	28	25	25	21	19	16	15	13	10
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	12	9
8	50	38	31	26	45	35	28	24	27	23	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	19	15	13	13	11	9	7
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	8	6

POLAR GRAPH



Maximum Candela = 906.111 Located At Horizontal Angle = 0, Vertical Angle = 157.5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)