

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P236178

Luminaire Tested: **2SWLED-8SL-LC-UNV-L835-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236178
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-4)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2SWLED-8SL-LC-UNV-L835-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
2FT FIXTURE WITH 1 ROW LED, CLEAR LENS
Light Source: (56) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

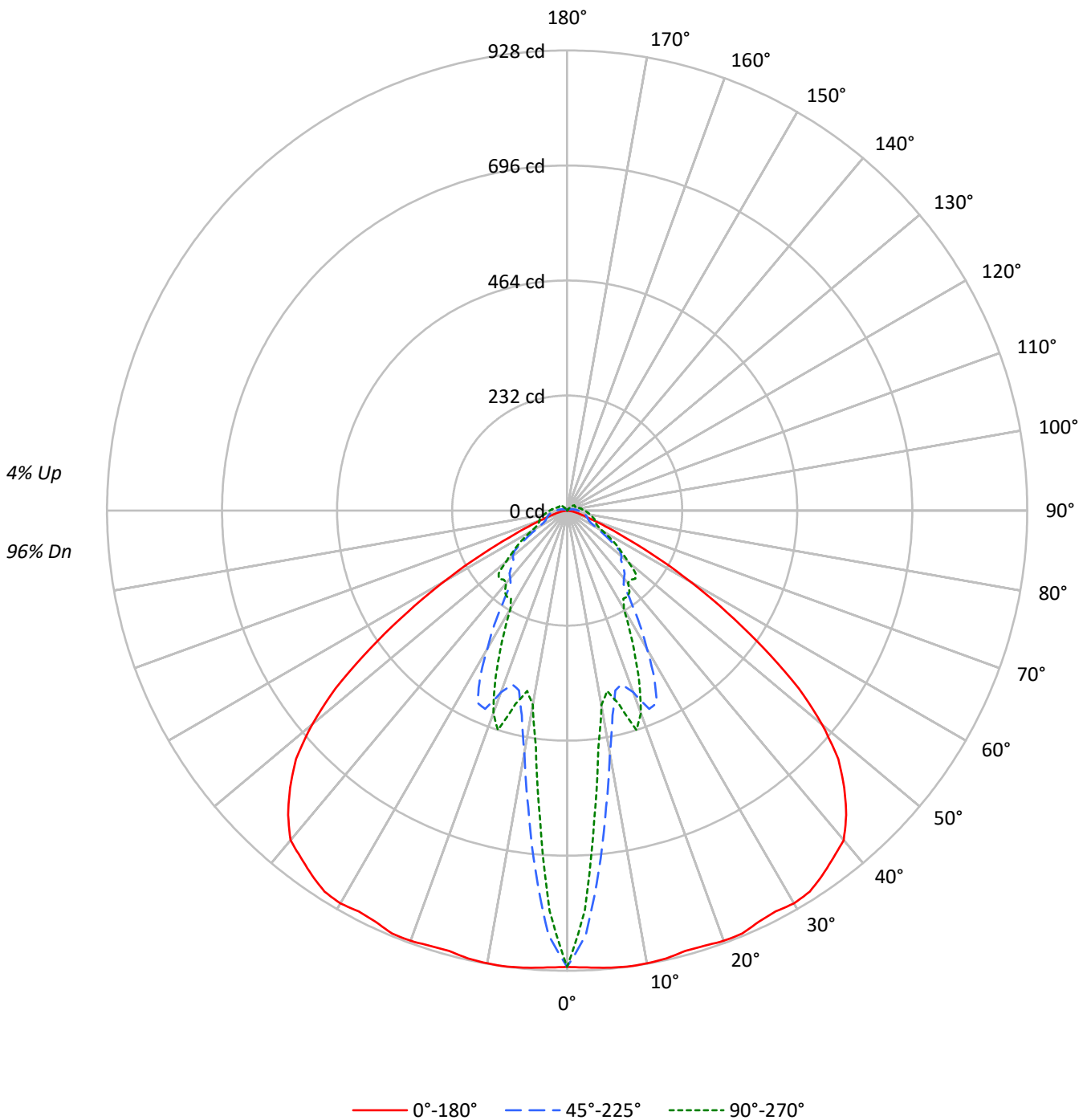
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1091.1 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 0.27 / 0.77
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 2' x H: 0.15')
CIE Type: Direct

Input Watts (W): 8.98
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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
RCR																		
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	96
1	109	105	101	97	106	102	98	95	97	94	91	92	90	88	88	86	85	82
2	100	93	87	82	97	91	85	81	87	82	78	83	79	76	79	76	74	71
3	93	83	76	70	90	82	75	70	78	72	68	75	70	66	72	68	65	62
4	86	75	67	61	83	74	66	61	71	64	60	68	63	58	65	61	57	55
5	80	68	60	54	78	67	59	54	64	58	53	62	56	52	60	55	51	49
6	74	62	54	48	72	61	54	48	59	52	47	57	51	47	55	50	46	44
7	69	57	49	44	68	56	49	43	54	48	43	53	47	42	51	46	42	40
8	65	53	45	40	63	52	45	39	50	44	39	49	43	38	47	42	38	36
9	61	49	41	36	60	48	41	36	47	40	36	45	40	35	44	39	35	33
10	58	45	38	33	56	45	38	33	44	37	33	42	37	33	41	36	32	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13205	13205	13205
5°	13249	10228	8704
10°	13342	6831	5425
15°	13396	5128	5438
20°	13737	5325	5817
25°	14008	5876	4353
30°	14546	4490	3095
35°	14961	3184	2919
40°	15321	2621	2695
45°	14956	2422	2841
50°	13796	2298	2464
55°	10989	1862	1959
60°	7322	1206	1430
65°	3788	973	1202
70°	1909	967	1207
75°	1103	980	1224
80°	684	994	1222
85°	368	988	1228



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.2	6.1
10°-20°	143.2	13.1
20°-30°	197.1	18.1
30°-40°	193.0	17.7
40°-50°	176.3	16.2
50°-60°	127.5	11.7
60°-70°	68.2	6.2
70°-80°	43.6	4.0
80°-90°	28.4	2.6
90°-100°	17.9	1.6
100°-110°	11.2	1.0
110°-120°	7.4	0.7
120°-130°	5.8	0.5
130°-140°	3.7	0.3
140°-150°	1.2	0.1
150°-160°	0.4	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	406.5	37.3
0°-40°	599.5	54.9
0°-60°	903.3	82.8
0°-90°	1043.5	95.6
90°-120°	36.5	3.3
90°-150°	47.2	4.3
90°-180°	48.0	4.4
0°-180°	1091.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	920	920	920	920	920	
5°	926	853	730	649	625	88
15°	919	564	375	380	404	261
25°	915	360	428	353	325	424
35°	898	380	223	202	212	562
45°	791	182	158	178	194	605
55°	485	97	109	116	122	431
65°	129	42	49	64	65	144
75°	25	25	39	53	54	29
85°	4	14	28	38	41	5
90°	0	10	23	32	35	0
95°	0	7	18	26	30	0
105°	0	4	10	17	23	0
115°	0	2	7	12	18	0
125°	0	1	4	12	18	0
135°	0	0	4	9	10	0
145°	0	0	2	3	3	0
155°	0	0	0	1	1	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	920.1	920.1	920.1	920.1	920.1	920.1	920.1	920.1	920.1	920.1	920.1
2.5°	922.3	919.2	914.2	911.1	905.2	901.6	897.5	889.4	875.4	868.7	856.9
5°	925.5	918.7	905.2	891.2	866.9	853.3	840.3	813.2	781.2	757.7	730.2
7.5°	927.8	917.4	892.1	857.9	812.7	788.8	766.3	721.6	675.6	639.6	602.6
10°	927.3	910.6	868.2	811.8	748.3	716.2	684.2	626.5	572.8	531.8	495.7
12.5°	925.1	901.6	838.9	761.3	677.9	641.4	603.0	537.6	485.8	450.6	422.6
15°	919.2	885.4	800.1	700.4	605.7	563.8	522.3	462.8	420.8	392.4	375.3
17.5°	920.1	874.5	763.6	645.0	535.4	493.4	455.1	403.2	373.4	364.9	367.1
20°	923.3	865.5	728.0	589.9	472.2	433.9	401.0	365.8	357.7	367.6	390.1
22.5°	923.3	849.7	686.5	530.9	416.7	387.4	367.6	355.0	373.0	406.4	433.0
25°	914.7	825.4	636.4	467.3	375.7	360.4	354.1	370.7	414.0	434.3	427.6
27.5°	911.1	802.4	585.0	412.7	354.1	351.8	360.8	405.5	424.0	409.1	380.7
30°	914.7	781.6	532.2	375.7	352.3	365.8	389.2	409.1	388.3	354.5	322.0
32.5°	911.1	755.9	481.2	360.8	369.8	388.3	397.8	374.4	332.9	296.8	272.9
35°	897.5	717.6	436.6	359.9	378.4	380.2	366.2	321.6	278.3	247.2	223.3
37.5°	882.2	680.1	412.7	362.6	355.4	337.8	312.1	267.5	229.6	203.0	187.2
40°	867.8	649.5	403.2	349.5	310.8	281.9	255.7	217.4	188.5	175.4	178.2
42.5°	833.0	617.5	386.5	313.5	256.6	228.2	207.9	178.2	164.6	168.2	171.8
45°	790.6	593.6	357.7	261.1	202.5	181.8	168.7	154.3	153.8	157.4	158.3
47.5°	741.5	570.1	317.5	209.3	158.8	147.5	143.0	140.7	142.1	142.5	147.0
50°	671.6	531.8	265.7	161.0	129.4	127.2	127.2	127.6	128.5	134.4	143.0
52.5°	588.6	487.1	217.8	125.4	111.4	111.9	111.9	114.1	120.9	129.4	134.0
55°	484.9	427.6	180.9	102.8	97.0	97.4	99.2	104.6	109.1	111.0	109.1
57.5°	382.0	360.8	160.1	87.5	84.8	85.7	88.4	89.3	88.0	85.2	84.3
60°	287.3	287.3	147.0	76.2	71.7	71.3	71.7	67.7	65.4	64.5	65.8
62.5°	201.6	220.6	135.3	65.4	56.4	54.1	53.2	51.0	51.0	51.9	54.1
65°	129.0	161.9	119.1	54.6	43.7	42.4	42.4	42.4	43.7	46.0	48.7
67.5°	83.9	111.9	98.3	46.9	36.5	36.1	36.1	37.9	40.1	42.8	46.0
70°	54.6	73.1	76.7	41.0	31.6	31.6	32.5	34.7	37.4	40.6	43.7
72.5°	36.5	47.4	57.3	35.2	28.0	28.0	28.9	31.6	34.7	38.3	41.5
75°	25.3	31.1	39.7	29.3	23.9	24.8	25.7	28.9	32.5	36.1	39.2
77.5°	17.1	20.3	26.6	23.0	20.3	21.6	23.0	26.2	29.8	33.4	37.0
80°	11.7	13.1	17.1	17.1	17.1	18.5	20.3	23.9	27.5	30.7	34.3
82.5°	7.2	8.1	10.8	12.2	14.4	15.8	17.6	21.2	24.8	28.0	31.1
85°	4.1	4.5	6.8	9.0	11.7	13.5	15.3	18.5	22.1	25.3	28.4
87.5°	1.8	2.7	4.1	6.3	9.9	11.3	13.1	16.2	19.8	22.6	25.7
90°	0.5	1.4	2.7	5.0	7.7	9.5	11.3	14.0	17.1	19.8	22.6
92.5°	0.0	0.5	1.8	3.6	6.3	8.1	9.5	12.2	14.9	17.6	19.8
95°	0.0	0.5	1.4	3.2	5.4	6.8	8.1	10.8	13.1	15.3	17.6
97.5°	0.0	0.0	0.9	2.3	4.5	5.9	6.8	9.0	11.3	13.5	15.3
100°	0.0	0.0	0.9	1.8	4.1	5.0	5.9	8.1	9.9	11.7	13.5
102.5°	0.0	0.0	0.5	1.8	3.2	4.1	5.0	7.2	8.6	10.4	11.7
105°	0.0	0.0	0.5	1.4	2.7	3.6	4.5	5.9	7.7	9.0	10.4
107.5°	0.0	0.0	0.5	1.4	2.3	3.2	4.1	5.4	6.8	8.1	9.5
110°	0.0	0.0	0.5	0.9	2.3	2.7	3.2	4.5	5.9	7.2	8.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	0.0	0.5	0.9	1.8	2.3	3.2	4.1	5.4	6.3	7.2
115°	0.0	0.0	0.0	0.9	1.4	1.8	2.7	3.6	4.5	5.4	6.8
117.5°	0.0	0.0	0.0	0.5	1.4	1.8	2.3	3.2	4.1	5.0	5.9
120°	0.0	0.0	0.0	0.5	0.9	1.4	1.8	2.7	3.6	4.5	5.0
122.5°	0.0	0.0	0.0	0.5	0.9	0.9	1.4	2.3	3.2	4.1	4.5
125°	0.0	0.0	0.0	0.0	0.5	0.9	1.4	1.8	2.7	3.6	4.5
127.5°	0.0	0.0	0.0	0.5	0.5	0.9	0.9	1.8	2.3	3.2	4.1
130°	0.0	0.0	0.0	0.0	0.5	0.5	0.9	1.4	2.3	3.2	4.1
132.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.9	1.4	2.3	3.2	4.1
135°	0.5	0.5	0.5	0.5	0.5	0.5	0.9	1.4	1.8	2.7	4.1
137.5°	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.9	1.8	2.3	3.2
140°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	1.4	1.8	2.7
142.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	1.4	2.3
145°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	1.4	1.8
147.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	1.4
150°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9
152.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
155°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
157.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
160°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	920.1	920.1	920.1	920.1	920.1	920.1	920.1	920.1	920.1	920.1
2.5°	851.5	835.8	832.1	819.5	815.9	814.1	814.1	806.4	803.3	808.2
5°	712.2	686.5	673.4	654.0	648.6	642.7	637.8	631.4	622.9	624.7
7.5°	576.0	546.6	525.9	509.7	503.8	498.8	493.0	486.7	481.7	481.7
10°	471.3	448.3	434.8	419.5	414.9	410.4	405.0	400.5	396.9	397.8
12.5°	401.9	384.3	376.2	371.6	371.6	370.3	370.3	372.1	373.4	372.5
15°	368.5	369.4	371.2	377.5	379.8	381.1	387.4	394.2	399.2	404.1
17.5°	375.3	388.3	408.2	429.8	434.8	444.3	453.7	457.3	461.4	464.1
20°	419.9	442.0	455.5	455.5	454.6	451.0	444.7	437.5	434.8	434.8
22.5°	444.3	437.0	425.8	412.2	408.6	403.2	394.2	386.5	382.9	381.6
25°	406.8	387.4	370.7	357.2	352.7	345.5	336.5	329.2	325.6	324.7
27.5°	351.8	330.6	315.7	304.0	298.6	293.6	283.7	276.9	273.8	273.3
30°	299.9	280.5	263.4	251.7	247.6	244.0	236.3	231.4	229.1	228.7
32.5°	248.5	231.8	218.7	211.5	209.7	207.9	206.6	207.9	209.3	210.6
35°	205.7	198.0	195.7	198.5	202.1	204.8	208.4	209.7	210.6	212.0
37.5°	186.3	190.8	196.2	199.8	201.2	203.0	205.2	205.7	206.1	206.6
40°	182.7	187.6	190.3	190.8	190.3	190.3	190.3	189.9	190.3	190.8
42.5°	173.2	175.0	174.1	174.5	175.9	177.7	181.8	185.4	187.2	189.0
45°	159.2	161.5	167.8	175.4	178.2	181.3	187.6	191.7	193.5	194.4
47.5°	153.3	161.5	169.6	175.9	177.7	180.0	184.5	187.2	187.6	187.6
50°	151.1	157.4	159.7	161.9	161.0	161.0	160.1	161.0	160.6	161.5
52.5°	136.2	135.8	134.9	135.8	135.8	135.8	137.1	138.5	138.5	139.4
55°	107.8	108.7	110.5	115.0	115.9	116.8	119.5	120.9	121.3	121.8
57.5°	85.7	88.9	92.9	97.0	98.3	99.7	100.6	101.5	101.5	102.4
60°	68.1	72.2	76.7	81.2	82.1	82.1	82.1	83.0	82.5	83.4
62.5°	56.8	61.8	66.3	69.5	69.9	69.9	69.5	69.9	70.4	70.8
65°	51.9	57.3	61.8	63.6	63.6	64.0	64.0	64.9	64.9	64.9
67.5°	50.1	55.5	59.1	60.4	60.4	60.9	61.3	61.3	61.3	61.3
70°	48.3	54.1	56.4	57.7	58.2	58.6	58.6	59.1	59.1	59.5
72.5°	46.9	51.9	53.7	55.0	55.9	56.4	56.4	57.3	57.3	57.7
75°	44.7	48.7	50.5	52.3	53.2	53.7	54.1	54.6	54.1	54.1
77.5°	41.5	45.1	47.4	49.2	49.6	50.1	50.5	50.5	50.5	50.5
80°	38.8	41.5	43.7	45.6	46.0	46.5	46.5	46.9	47.4	47.4
82.5°	35.2	37.9	40.1	41.5	41.9	42.4	42.8	43.7	44.2	44.2
85°	32.0	34.3	36.1	37.9	38.3	38.8	39.7	40.6	40.6	40.6
87.5°	28.4	30.7	32.5	34.3	35.2	35.6	36.5	37.4	37.4	37.9
90°	25.3	27.1	29.3	30.7	31.6	32.0	33.4	34.3	34.7	34.7
92.5°	22.1	23.9	26.2	27.5	28.4	29.3	30.2	31.6	32.0	32.5
95°	19.4	21.2	23.0	24.8	25.7	26.2	28.0	29.3	30.2	30.2
97.5°	16.7	18.5	20.3	22.1	23.0	23.9	25.3	27.1	28.0	28.4
100°	14.9	16.2	18.0	19.8	20.7	21.6	23.5	25.3	26.2	26.6
102.5°	13.1	14.4	15.8	17.6	18.5	19.4	21.2	23.0	23.9	24.4
105°	11.7	12.6	14.0	15.8	16.7	17.6	19.4	21.2	22.1	22.6
107.5°	10.4	11.7	12.6	14.4	15.3	15.8	17.6	19.4	20.3	20.7
110°	9.5	10.4	11.7	13.1	14.0	14.4	16.2	18.0	18.9	19.4



TEST NUMBER: P236178

CATALOG NUMBER: 2SWLED-8SL-LC-UNV-L835-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	8.6	9.5	10.8	12.2	12.6	13.5	15.3	16.7	18.0	18.5
115°	7.7	8.6	9.9	11.3	12.2	12.6	14.4	16.2	17.6	18.0
117.5°	6.8	7.7	9.0	10.8	11.7	12.6	14.4	16.2	17.1	17.6
120°	6.3	7.2	8.6	10.4	11.3	12.2	14.4	16.2	17.1	17.6
122.5°	5.9	6.8	8.6	10.8	11.7	12.6	14.4	16.2	17.6	18.0
125°	5.4	6.8	9.0	10.8	12.2	13.1	14.9	16.2	17.1	17.6
127.5°	5.4	7.2	9.0	11.3	12.2	13.1	14.9	16.2	16.7	17.1
130°	5.9	7.2	9.5	11.3	12.2	12.6	14.0	14.9	15.3	15.3
132.5°	5.9	7.2	9.0	10.4	10.8	11.3	12.2	12.6	13.1	13.1
135°	5.4	6.3	7.7	8.6	9.0	9.5	9.9	10.4	10.4	10.4
137.5°	4.5	5.4	6.3	6.8	7.2	7.2	7.7	7.7	8.1	8.1
140°	3.6	4.1	5.0	5.4	5.4	5.4	5.9	5.9	5.9	5.9
142.5°	2.7	3.2	3.6	4.1	4.1	4.1	4.1	4.1	4.5	4.5
145°	1.8	2.3	2.7	3.2	3.2	3.2	3.2	3.2	3.2	3.2
147.5°	1.4	1.8	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
150°	0.9	1.4	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
152.5°	0.9	0.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
155°	0.9	0.9	0.9	1.4	1.4	1.4	1.4	0.9	1.4	1.4
157.5°	0.5	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
160°	0.5	0.5	0.9	0.9	0.9	0.9	0.5	0.5	0.5	0.5
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)