

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: P236179

Luminaire Tested: **2SWLED-8SL-LC-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236179
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-L840-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
2FT FIXTURE WITH 1 ROW LED, CLEAR LENS
Light Source: (56) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

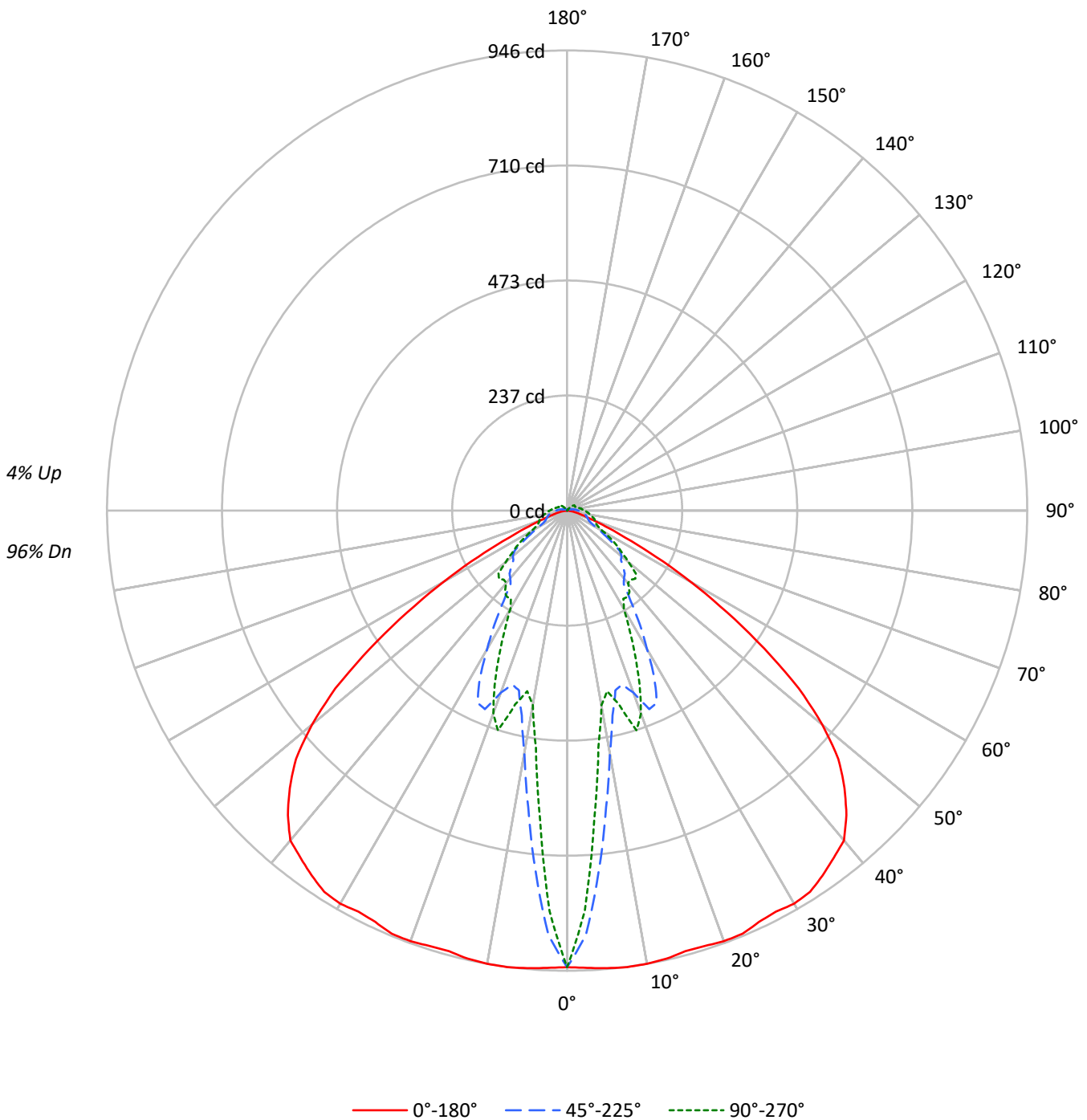
Lumens per Lamp: N/A
Luminaire Lumens: 1113.0 lumens
Efficiency: N/A
Efficacy: 123.9 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 0.27 / 0.77
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 2' x H: 0.15')
CIE Type: Direct

Input Watts (W): 8.98
Input Voltage (V): 120
Input Current (Ain): 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

TEST NUMBER: P236179

CATALOG NUMBER: 2SWLED-8SL-LC-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P236179

CATALOG NUMBER: 2SWLED-8SL-LC-UNV-L840-CD1-U

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	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°	13471	13471	13471
5°	13517	10433	8879
10°	13611	6968	5534
15°	13666	5230	5548
20°	14014	5433	5935
25°	14290	5995	4441
30°	14839	4580	3157
35°	15262	3248	2979
40°	15630	2672	2749
45°	15259	2471	2898
50°	14074	2345	2513
55°	11209	1899	1998
60°	7470	1232	1460
65°	3865	993	1228
70°	1947	986	1231
75°	1125	1000	1249
80°	702	1014	1245
85°	368	1009	1252



TEST NUMBER: P236179

CATALOG NUMBER: 2SWLED-8SL-LC-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.5	6.1
10°-20°	146.1	13.1
20°-30°	201.0	18.1
30°-40°	196.9	17.7
40°-50°	179.8	16.2
50°-60°	130.0	11.7
60°-70°	69.5	6.2
70°-80°	44.5	4.0
80°-90°	29.0	2.6
90°-100°	18.2	1.6
100°-110°	11.4	1.0
110°-120°	7.6	0.7
120°-130°	5.9	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°	414.7	37.3
0°-40°	611.6	55.0
0°-60°	921.5	82.8
0°-90°	1064.5	95.6
90°-120°	37.2	3.3
90°-150°	48.1	4.3
90°-180°	48.0	4.3
0°-180°	1113.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	939	939	939	939	939	
5°	944	870	745	662	637	90
15°	938	575	383	387	412	267
25°	933	368	436	360	331	433
35°	916	388	228	206	216	573
45°	807	185	162	182	198	617
55°	495	99	111	118	124	439
65°	132	43	50	65	66	147
75°	26	25	40	54	55	30
85°	4	14	29	39	41	5
90°	0	10	23	32	35	0
95°	0	7	18	26	31	0
105°	0	4	11	17	23	0
115°	0	2	7	12	18	0
125°	0	1	5	12	18	0
135°	0	0	4	9	11	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



TEST NUMBER: P236179

CATALOG NUMBER: 2SWLED-8SL-LC-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6
2.5°	940.9	937.7	932.7	929.4	923.5	919.8	915.6	907.4	893.1	886.2	874.2
5°	944.2	937.3	923.5	909.2	884.4	870.5	857.2	829.6	796.9	773.0	744.9
7.5°	946.5	935.9	910.1	875.1	829.1	804.8	781.7	736.2	689.3	652.5	614.7
10°	946.0	929.0	885.7	828.2	763.3	730.7	698.0	639.1	584.4	542.5	505.7
12.5°	943.7	919.8	855.8	776.7	691.6	654.3	615.2	548.5	495.6	459.7	431.1
15°	937.7	903.2	816.3	714.6	617.9	575.2	532.8	472.1	429.3	400.3	382.8
17.5°	938.6	892.2	779.0	658.0	546.2	503.4	464.3	411.3	381.0	372.2	374.5
20°	941.9	883.0	742.6	601.8	481.7	442.6	409.0	373.2	364.9	375.0	398.0
22.5°	941.9	866.9	700.3	541.6	425.2	395.2	375.0	362.1	380.5	414.6	441.7
25°	933.1	842.0	649.2	476.7	383.3	367.6	361.2	378.2	422.4	443.1	436.2
27.5°	929.4	818.6	596.8	421.0	361.2	358.9	368.1	413.6	432.5	417.3	388.3
30°	933.1	797.4	542.9	383.3	359.4	373.2	397.1	417.3	396.2	361.7	328.5
32.5°	929.4	771.2	490.9	368.1	377.3	396.2	405.8	381.9	339.6	302.8	278.4
35°	915.6	732.1	445.4	367.2	386.0	387.9	373.6	328.1	283.9	252.1	227.8
37.5°	900.0	693.9	421.0	369.9	362.6	344.6	318.4	272.9	234.2	207.1	191.0
40°	885.3	662.6	411.3	356.6	317.0	287.6	260.9	221.8	192.3	179.0	181.7
42.5°	849.8	629.9	394.3	319.8	261.8	232.8	212.1	181.7	167.9	171.6	175.3
45°	806.6	605.5	364.9	266.4	206.6	185.4	172.1	157.4	156.9	160.6	161.5
47.5°	756.4	581.6	323.9	213.5	162.0	150.5	145.9	143.6	144.9	145.4	150.0
50°	685.1	542.5	271.0	164.3	132.1	129.8	129.8	130.2	131.1	137.1	145.9
52.5°	600.5	496.9	222.2	127.9	113.6	114.1	114.1	116.4	123.3	132.1	136.7
55°	494.6	436.2	184.5	104.9	98.9	99.4	101.2	106.7	111.3	113.2	111.3
57.5°	389.7	368.1	163.3	89.3	86.5	87.4	90.2	91.1	89.7	87.0	86.0
60°	293.1	293.1	150.0	77.8	73.2	72.7	73.2	69.0	66.7	65.8	67.2
62.5°	205.7	225.0	138.0	66.7	57.5	55.2	54.3	52.0	52.0	52.9	55.2
65°	131.6	165.2	121.5	55.7	44.6	43.3	43.3	43.3	44.6	46.9	49.7
67.5°	85.6	114.1	100.3	47.9	37.3	36.8	36.8	38.7	41.0	43.7	46.9
70°	55.7	74.5	78.2	41.9	32.2	32.2	33.1	35.4	38.2	41.4	44.6
72.5°	37.3	48.3	58.4	35.9	28.5	28.5	29.4	32.2	35.4	39.1	42.3
75°	25.8	31.7	40.5	29.9	24.4	25.3	26.2	29.4	33.1	36.8	40.0
77.5°	17.5	20.7	27.1	23.5	20.7	22.1	23.5	26.7	30.4	34.0	37.7
80°	12.0	13.3	17.5	17.5	17.5	18.9	20.7	24.4	28.1	31.3	35.0
82.5°	7.4	8.3	11.0	12.4	14.7	16.1	17.9	21.6	25.3	28.5	31.7
85°	4.1	4.6	6.9	9.2	12.0	13.8	15.6	18.9	22.5	25.8	29.0
87.5°	1.8	2.8	4.1	6.4	10.1	11.5	13.3	16.6	20.2	23.0	26.2
90°	0.5	1.4	2.8	5.1	7.8	9.7	11.5	14.3	17.5	20.2	23.0
92.5°	0.0	0.5	1.8	3.7	6.4	8.3	9.7	12.4	15.2	17.9	20.2
95°	0.0	0.5	1.4	3.2	5.5	6.9	8.3	11.0	13.3	15.6	17.9
97.5°	0.0	0.0	0.9	2.3	4.6	6.0	6.9	9.2	11.5	13.8	15.6
100°	0.0	0.0	0.9	1.8	4.1	5.1	6.0	8.3	10.1	12.0	13.8
102.5°	0.0	0.0	0.5	1.8	3.2	4.1	5.1	7.4	8.7	10.6	12.0
105°	0.0	0.0	0.5	1.4	2.8	3.7	4.6	6.0	7.8	9.2	10.6
107.5°	0.0	0.0	0.5	1.4	2.3	3.2	4.1	5.5	6.9	8.3	9.7
110°	0.0	0.0	0.5	0.9	2.3	2.8	3.2	4.6	6.0	7.4	8.3



TEST NUMBER: P236179

CATALOG NUMBER: 2SWLED-8SL-LC-UNV-L840-CD1-U

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	5.5	6.4	7.4
115°	0.0	0.0	0.0	0.9	1.4	1.8	2.8	3.7	4.6	5.5	6.9
117.5°	0.0	0.0	0.0	0.5	1.4	1.8	2.3	3.2	4.1	5.1	6.0
120°	0.0	0.0	0.0	0.5	0.9	1.4	1.8	2.8	3.7	4.6	5.1
122.5°	0.0	0.0	0.0	0.5	0.9	0.9	1.4	2.3	3.2	4.1	4.6
125°	0.0	0.0	0.0	0.0	0.5	0.9	1.4	1.8	2.8	3.7	4.6
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	2.8	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	2.8
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



TEST NUMBER: P236179

CATALOG NUMBER: 2SWLED-8SL-LC-UNV-L840-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6
2.5°	868.7	852.6	848.9	836.0	832.4	830.5	830.5	822.7	819.5	824.5
5°	726.5	700.3	687.0	667.2	661.7	655.7	650.6	644.2	635.4	637.3
7.5°	587.6	557.7	536.5	519.9	514.0	508.9	502.9	496.5	491.4	491.4
10°	480.8	457.4	443.6	427.9	423.3	418.7	413.2	408.6	404.9	405.8
12.5°	410.0	392.0	383.7	379.1	379.1	377.8	377.8	379.6	381.0	380.1
15°	375.9	376.8	378.7	385.1	387.4	388.8	395.2	402.1	407.2	412.3
17.5°	382.8	396.2	416.4	438.5	443.6	453.2	462.9	466.6	470.7	473.5
20°	428.4	450.9	464.7	464.7	463.8	460.1	453.7	446.3	443.6	443.6
22.5°	453.2	445.9	434.4	420.6	416.9	411.3	402.1	394.3	390.6	389.3
25°	415.0	395.2	378.2	364.4	359.8	352.5	343.3	335.9	332.2	331.3
27.5°	358.9	337.3	322.1	310.1	304.6	299.5	289.4	282.5	279.3	278.8
30°	306.0	286.2	268.7	256.7	252.6	248.9	241.1	236.0	233.7	233.3
32.5°	253.5	236.5	223.2	215.8	214.0	212.1	210.7	212.1	213.5	214.9
35°	209.8	202.0	199.7	202.5	206.1	208.9	212.6	214.0	214.9	216.3
37.5°	190.0	194.6	200.2	203.8	205.2	207.1	209.4	209.8	210.3	210.7
40°	186.3	191.4	194.2	194.6	194.2	194.2	194.2	193.7	194.2	194.6
42.5°	176.7	178.5	177.6	178.1	179.4	181.3	185.4	189.1	191.0	192.8
45°	162.4	164.7	171.2	179.0	181.7	185.0	191.4	195.6	197.4	198.3
47.5°	156.4	164.7	173.0	179.4	181.3	183.6	188.2	191.0	191.4	191.4
50°	154.1	160.6	162.9	165.2	164.3	164.3	163.3	164.3	163.8	164.7
52.5°	139.0	138.5	137.6	138.5	138.5	138.5	139.9	141.3	141.3	142.2
55°	110.0	110.9	112.7	117.3	118.3	119.2	121.9	123.3	123.8	124.2
57.5°	87.4	90.6	94.8	98.9	100.3	101.7	102.6	103.5	103.5	104.4
60°	69.5	73.6	78.2	82.8	83.7	83.7	83.7	84.7	84.2	85.1
62.5°	58.0	63.0	67.6	70.9	71.3	71.3	70.9	71.3	71.8	72.2
65°	52.9	58.4	63.0	64.9	64.9	65.3	65.3	66.3	66.3	66.3
67.5°	51.1	56.6	60.3	61.7	61.7	62.1	62.6	62.6	62.6	62.6
70°	49.2	55.2	57.5	58.9	59.4	59.8	59.8	60.3	60.3	60.7
72.5°	47.9	52.9	54.8	56.1	57.1	57.5	57.5	58.4	58.4	58.9
75°	45.6	49.7	51.5	53.4	54.3	54.8	55.2	55.7	55.2	55.2
77.5°	42.3	46.0	48.3	50.2	50.6	51.1	51.5	51.5	51.5	51.5
80°	39.6	42.3	44.6	46.5	46.9	47.4	47.4	47.9	48.3	48.3
82.5°	35.9	38.7	41.0	42.3	42.8	43.3	43.7	44.6	45.1	45.1
85°	32.7	35.0	36.8	38.7	39.1	39.6	40.5	41.4	41.4	41.4
87.5°	29.0	31.3	33.1	35.0	35.9	36.3	37.3	38.2	38.2	38.7
90°	25.8	27.6	29.9	31.3	32.2	32.7	34.0	35.0	35.4	35.4
92.5°	22.5	24.4	26.7	28.1	29.0	29.9	30.8	32.2	32.7	33.1
95°	19.8	21.6	23.5	25.3	26.2	26.7	28.5	29.9	30.8	30.8
97.5°	17.0	18.9	20.7	22.5	23.5	24.4	25.8	27.6	28.5	29.0
100°	15.2	16.6	18.4	20.2	21.2	22.1	23.9	25.8	26.7	27.1
102.5°	13.3	14.7	16.1	17.9	18.9	19.8	21.6	23.5	24.4	24.8
105°	12.0	12.9	14.3	16.1	17.0	17.9	19.8	21.6	22.5	23.0
107.5°	10.6	12.0	12.9	14.7	15.6	16.1	17.9	19.8	20.7	21.2
110°	9.7	10.6	12.0	13.3	14.3	14.7	16.6	18.4	19.3	19.8



TEST NUMBER: P236179

CATALOG NUMBER: 2SWLED-8SL-LC-UNV-L840-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	8.7	9.7	11.0	12.4	12.9	13.8	15.6	17.0	18.4	18.9
115°	7.8	8.7	10.1	11.5	12.4	12.9	14.7	16.6	17.9	18.4
117.5°	6.9	7.8	9.2	11.0	12.0	12.9	14.7	16.6	17.5	17.9
120°	6.4	7.4	8.7	10.6	11.5	12.4	14.7	16.6	17.5	17.9
122.5°	6.0	6.9	8.7	11.0	12.0	12.9	14.7	16.6	17.9	18.4
125°	5.5	6.9	9.2	11.0	12.4	13.3	15.2	16.6	17.5	17.9
127.5°	5.5	7.4	9.2	11.5	12.4	13.3	15.2	16.6	17.0	17.5
130°	6.0	7.4	9.7	11.5	12.4	12.9	14.3	15.2	15.6	15.6
132.5°	6.0	7.4	9.2	10.6	11.0	11.5	12.4	12.9	13.3	13.3
135°	5.5	6.4	7.8	8.7	9.2	9.7	10.1	10.6	10.6	10.6
137.5°	4.6	5.5	6.4	6.9	7.4	7.4	7.8	7.8	8.3	8.3
140°	3.7	4.1	5.1	5.5	5.5	5.5	6.0	6.0	6.0	6.0
142.5°	2.8	3.2	3.7	4.1	4.1	4.1	4.1	4.1	4.6	4.6
145°	1.8	2.3	2.8	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)