

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1213363

Luminaire Tested: 4SNLED-LD5-18SL-LN-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213363
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33519)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-18SL-LN-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

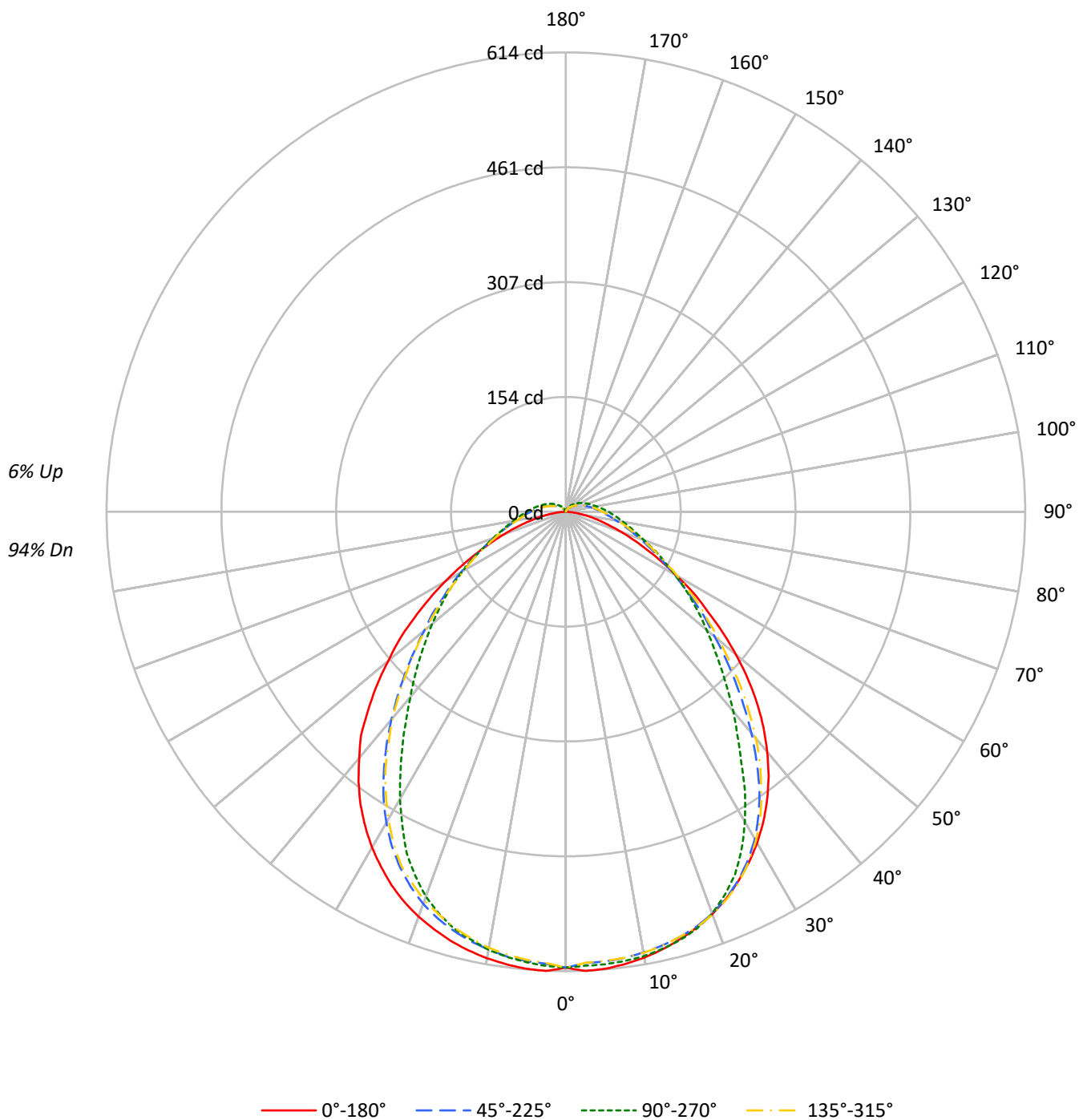
Lumens per Lamp: N/A
Luminaire Lumens: 1542.0 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 13
Input Voltage (V): NR
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: 24 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96
1	107	103	98	95	104	100	96	92	94	91	88	89	87	85	85	83	81
2	98	90	84	78	95	88	82	77	83	78	74	79	75	72	75	72	69
3	90	80	72	66	87	78	71	65	74	68	63	71	66	61	67	63	60
4	83	72	63	57	80	70	62	56	67	60	55	64	58	53	61	56	52
5	77	64	56	50	74	63	55	49	60	53	48	58	52	47	55	50	46
6	71	58	50	44	69	57	49	43	55	48	42	52	46	42	50	45	41
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37
8	62	49	41	35	60	48	40	35	46	39	34	44	38	34	43	37	33
9	58	45	37	32	56	44	37	31	42	36	31	41	35	30	40	34	30
10	54	42	34	29	53	41	34	29	39	33	28	38	32	28	37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4924	4924	4924	4924
5°	4959	4767	4959	4746
10°	4937	4640	4945	4576
15°	4905	4502	4927	4385
20°	4867	4323	4896	4141
25°	4790	4059	4842	3820
30°	4687	3670	4749	3398
35°	4530	3194	4617	2974
40°	4303	2793	4417	2592
45°	4004	2429	4134	2289
50°	3595	2134	3754	2026
55°	3110	1884	3335	1789
60°	2616	1654	2852	1559
65°	2143	1463	2360	1356
70°	1706	1298	1910	1200
75°	1339	1199	1510	1103
80°	969	1157	1138	1057
85°	594	1164	799	1069

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 4134 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.8	3.7
10°-20°	165.6	10.7
20°-30°	245.5	15.9
30°-40°	272.7	17.7
40°-50°	247.2	16.0
50°-60°	191.6	12.4
60°-70°	130.1	8.4
70°-80°	82.8	5.4
80°-90°	52.9	3.4
90°-100°	35.7	2.3
100°-110°	24.4	1.6
110°-120°	16.3	1.1
120°-130°	10.1	0.7
130°-140°	5.6	0.4
140°-150°	2.6	0.2
150°-160°	1.0	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	468.9	30.4
0°-40°	741.6	48.1
0°-60°	1180.4	76.6
0°-90°	1446.2	93.8
90°-120°	76.4	5.0
90°-150°	94.8	6.1
90°-180°	96.0	6.2
0°-180°	1542.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	609	609	609	609	609	
5°	613	607	613	604	613	58
15°	591	592	594	577	591	167
25°	545	535	551	503	545	251
35°	469	409	478	381	469	293
45°	361	292	373	276	361	277
55°	231	205	247	195	231	208
65°	120	138	132	128	120	120
75°	48	92	54	85	48	52
85°	9	66	12	61	9	10
90°	0	57	1	52	0	1
95°	0	49	0	46	0	0
105°	0	36	0	34	0	0
115°	0	27	0	25	0	0
125°	0	20	0	18	0	0
135°	0	14	0	11	0	0
145°	0	9	0	6	0	0
155°	0	5	0	2	0	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°	25°	30°	35°	40°	45°	50°
0°	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3
2.5°	614.3	613.7	613.0	612.0	613.0	615.7	614.0	610.3	609.6	603.6	606.3
5°	613.0	612.0	611.3	610.3	611.7	615.0	613.3	610.0	609.0	603.3	606.3
7.5°	609.6	609.0	608.0	608.0	609.3	612.7	611.3	607.6	607.0	601.3	604.6
10°	605.0	604.6	603.9	603.9	605.3	609.3	607.6	604.3	603.6	598.2	601.9
12.5°	598.9	599.3	598.2	598.2	600.3	604.3	602.9	599.3	598.6	593.9	597.6
15°	591.2	591.5	590.9	591.2	593.2	597.9	596.2	592.9	592.2	588.5	591.5
17.5°	582.5	582.8	582.8	582.5	584.8	589.5	588.2	585.2	584.2	581.2	584.8
20°	572.4	572.4	572.4	572.4	575.1	579.8	578.1	575.8	573.8	571.4	574.5
22.5°	560.0	559.7	560.0	561.0	563.7	567.4	566.4	563.7	560.7	559.4	561.7
25°	545.0	546.0	546.3	547.3	550.7	553.7	552.7	550.0	545.3	544.3	545.0
27.5°	529.2	529.9	530.9	530.5	535.2	538.3	536.2	533.9	527.2	526.2	525.5
30°	511.4	512.4	513.1	512.8	516.5	519.8	517.8	514.8	505.7	505.1	499.7
32.5°	491.3	492.3	493.0	493.0	498.4	499.7	496.0	491.7	482.0	479.6	474.9
35°	469.2	470.2	470.6	470.6	475.9	475.6	470.9	464.9	454.1	451.1	443.1
37.5°	445.4	446.1	446.4	448.4	450.8	448.8	442.7	435.0	427.0	418.6	409.9
40°	418.6	419.6	420.3	421.6	424.0	421.6	412.9	403.5	394.8	385.4	376.7
42.5°	391.1	394.1	393.5	393.1	394.5	388.1	381.4	370.7	362.0	352.2	343.5
45°	361.3	361.0	362.6	363.3	363.0	357.6	348.2	338.5	329.8	319.7	312.4
47.5°	329.8	329.5	330.8	331.5	329.5	323.8	316.4	305.3	298.0	289.2	283.5
50°	296.6	296.6	298.6	296.6	295.6	289.9	283.9	272.8	267.1	259.4	256.1
52.5°	263.4	266.4	264.4	263.8	262.8	257.1	252.4	243.3	238.6	235.3	231.3
55°	230.6	233.9	232.6	231.6	231.3	226.6	222.2	215.5	212.5	210.1	207.8
57.5°	202.8	202.4	201.8	200.8	201.1	197.4	193.0	189.4	188.0	187.0	187.7
60°	170.6	173.3	172.3	172.6	172.9	172.3	168.6	166.2	166.6	166.9	167.9
62.5°	144.1	146.5	148.1	146.8	147.5	148.5	146.5	145.8	147.1	148.5	149.8
65°	119.6	122.0	123.7	123.3	125.3	127.4	127.0	127.7	130.7	132.4	134.1
67.5°	97.5	99.9	102.2	102.6	105.6	108.6	109.9	112.3	115.6	118.0	120.0
70°	78.4	80.4	83.1	84.8	88.8	92.8	95.2	99.9	101.9	105.2	106.6
72.5°	61.3	63.0	66.7	70.7	74.1	79.1	83.8	87.8	90.8	94.5	96.2
75°	47.9	48.6	52.6	57.3	62.0	67.7	72.7	77.1	81.1	84.8	87.5
77.5°	35.2	36.2	39.9	46.3	51.6	57.6	63.3	68.0	72.4	76.1	79.8
80°	24.5	26.5	30.5	36.9	42.9	49.6	55.0	60.3	65.0	68.7	72.4
82.5°	15.8	17.4	23.1	29.5	35.9	42.6	48.3	53.6	58.7	62.7	66.0
85°	8.7	11.1	16.8	23.5	29.8	36.5	42.6	47.9	53.0	56.6	60.0
87.5°	3.4	6.7	12.1	18.4	24.8	31.2	37.5	42.6	47.6	51.6	54.6
90°	0.0	4.0	9.0	15.4	21.8	28.2	34.2	39.5	44.2	47.9	51.3
92.5°	0.3	2.7	7.0	12.4	18.4	24.5	30.2	35.5	40.2	43.9	46.9
95°	0.3	2.0	5.7	10.7	16.1	21.8	27.1	32.2	36.5	40.2	43.2
97.5°	0.3	1.3	4.7	9.4	14.1	19.8	24.8	29.5	33.5	37.2	39.5
100°	0.3	1.3	4.0	8.0	12.7	17.8	22.5	27.1	30.8	33.9	36.5
102.5°	0.3	1.0	3.4	7.0	11.4	15.8	20.4	24.8	28.2	31.2	33.9
105°	0.3	1.0	3.0	6.0	10.1	14.4	18.4	22.5	26.1	28.8	31.2
107.5°	0.3	0.7	2.7	5.0	8.7	13.1	17.1	20.4	23.8	26.5	28.8
110°	0.3	0.7	2.3	4.7	7.7	11.7	15.4	18.8	21.8	24.5	26.5

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.3	0.7	2.0	4.4	7.0	10.4	14.1	17.1	20.1	22.5	24.5
115°	0.3	0.7	2.0	4.0	6.4	9.0	12.4	15.8	18.1	20.8	22.5
117.5°	0.3	0.7	1.7	3.4	6.0	8.4	11.4	14.1	16.8	19.1	20.8
120°	0.3	0.7	1.7	3.0	5.4	7.7	10.1	12.7	15.4	17.1	18.8
122.5°	0.3	0.7	1.3	3.0	4.7	7.0	9.0	11.4	13.7	15.8	17.4
125°	0.3	0.7	1.3	2.7	4.4	6.4	8.4	10.1	12.4	14.1	15.8
127.5°	0.3	0.7	1.3	2.3	4.0	5.7	7.7	9.4	11.1	12.7	14.1
130°	0.3	0.7	1.0	2.0	3.7	5.0	6.7	8.7	10.1	11.4	12.7
132.5°	0.3	0.7	1.0	2.0	3.0	4.4	6.0	7.7	9.0	10.4	11.4
135°	0.3	0.7	1.0	1.7	2.7	4.0	5.0	6.7	8.0	9.4	10.4
137.5°	0.3	0.7	1.0	1.7	2.3	3.4	4.4	5.7	7.0	8.0	9.4
140°	0.3	0.7	1.0	1.3	2.0	3.0	4.0	4.7	6.0	7.0	8.0
142.5°	0.3	0.7	1.0	1.3	2.0	2.7	3.4	4.0	5.0	6.0	7.0
145°	0.3	0.7	1.0	1.3	1.7	2.3	3.0	3.7	4.0	5.0	5.7
147.5°	0.3	0.7	1.0	1.3	1.3	2.0	2.7	3.0	3.7	4.0	4.7
150°	0.3	0.7	1.0	1.0	1.3	1.7	2.3	2.7	3.0	3.7	4.0
152.5°	0.3	0.7	1.0	1.0	1.3	1.7	2.0	2.3	2.7	3.0	3.4
155°	0.3	0.7	1.0	1.0	1.0	1.3	1.7	2.0	2.3	2.7	3.0
157.5°	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.7	2.0	2.0	2.3
160°	0.7	0.7	0.7	1.0	1.0	1.0	1.3	1.3	1.7	1.7	2.0
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3
2.5°	605.6	606.6	609.6	609.6	609.0	608.3	608.3	607.3	608.0	609.3	608.6
5°	605.6	606.6	609.6	609.6	609.0	608.3	608.0	607.0	608.0	609.3	608.6
7.5°	603.6	605.0	608.0	608.0	607.3	607.0	606.3	605.6	606.6	608.0	607.3
10°	600.9	602.3	605.3	605.3	604.6	604.6	603.6	602.9	604.3	605.3	605.0
12.5°	596.9	598.6	601.3	600.9	600.3	600.6	599.6	598.2	599.6	600.6	600.9
15°	591.2	593.2	595.9	595.2	594.2	594.9	593.2	592.2	593.2	595.2	594.9
17.5°	583.8	585.2	587.2	587.2	586.2	585.5	584.8	583.8	584.5	585.8	586.2
20°	573.4	575.1	576.1	575.1	574.8	573.8	572.4	571.4	572.8	574.8	575.1
22.5°	559.7	560.0	562.4	560.0	558.4	558.0	556.7	554.7	556.7	558.4	558.7
25°	542.6	544.3	543.3	539.3	539.3	536.6	535.9	534.9	535.2	538.3	539.6
27.5°	520.8	521.5	518.8	515.5	512.4	510.8	508.4	508.8	508.8	512.8	514.1
30°	497.0	493.3	491.0	485.6	483.3	479.3	478.6	478.6	477.9	479.9	486.0
32.5°	468.5	463.5	459.8	454.8	450.8	446.8	444.7	445.8	445.4	450.4	452.5
35°	437.4	434.4	426.7	420.3	417.9	411.9	411.9	408.9	410.9	416.6	418.9
37.5°	404.5	399.8	393.5	386.4	384.8	380.1	378.4	376.7	381.1	382.1	384.4
40°	371.0	366.7	360.6	353.9	353.9	348.2	348.2	348.2	348.6	350.6	354.9
42.5°	339.2	334.5	329.1	324.4	323.8	319.4	319.4	319.1	319.7	321.4	325.4
45°	308.3	304.7	299.0	296.6	296.9	292.3	293.3	292.3	293.6	295.3	296.6
47.5°	279.9	277.5	275.2	271.8	270.8	270.5	268.8	267.5	269.8	269.8	271.8
50°	253.4	252.0	250.7	248.7	249.0	247.7	245.7	245.7	247.3	247.7	249.0
52.5°	230.3	228.6	226.9	227.2	227.6	226.9	225.9	224.9	225.9	226.6	228.2
55°	207.1	205.8	207.5	206.8	207.5	206.8	206.1	205.4	207.1	206.1	207.8
57.5°	186.3	187.7	188.4	187.0	188.0	187.4	187.7	186.7	188.0	188.7	188.4
60°	167.2	169.3	168.2	168.6	169.9	169.3	167.9	168.9	170.3	170.6	170.3
62.5°	149.8	152.2	153.2	152.5	152.8	152.2	153.2	151.8	153.5	154.2	153.2
65°	134.1	136.7	137.4	137.4	137.4	136.7	137.7	138.1	138.8	138.8	138.1
67.5°	120.7	123.0	123.7	124.3	123.7	123.0	123.0	123.3	124.7	125.3	124.7
70°	108.6	110.9	111.3	111.3	111.6	112.3	110.9	111.6	112.6	112.9	112.6
72.5°	98.2	100.5	101.2	100.9	101.2	101.6	101.6	100.9	101.9	102.6	102.6
75°	89.8	91.2	91.8	91.8	92.2	92.5	92.5	92.2	92.8	93.2	93.5
77.5°	82.1	83.1	84.1	84.1	84.5	84.1	84.8	84.8	85.1	85.5	85.8
80°	74.4	75.7	76.4	76.8	77.4	77.8	77.8	77.8	78.1	78.4	78.4
82.5°	68.4	69.4	70.4	71.4	71.4	71.7	71.7	71.7	72.1	72.1	72.4
85°	62.3	63.7	64.7	65.4	65.7	66.0	66.0	66.4	66.4	66.4	66.7
87.5°	57.0	58.7	59.3	60.0	60.3	61.0	61.0	61.0	61.3	61.3	61.3
90°	53.3	55.0	55.6	56.3	56.6	57.0	57.0	57.3	57.3	57.6	57.6
92.5°	48.9	50.6	51.9	51.9	52.3	53.0	52.6	52.6	53.0	53.3	53.3
95°	45.6	46.9	47.9	48.3	48.6	48.6	48.6	48.9	48.6	48.9	48.9
97.5°	41.6	42.9	43.9	44.6	44.9	44.9	44.9	45.2	44.9	45.2	45.2
100°	38.2	39.5	40.6	40.9	41.6	41.6	41.6	41.6	41.6	41.6	41.9
102.5°	35.5	36.9	37.5	37.9	38.2	38.5	38.5	38.5	38.5	38.9	38.9
105°	32.8	34.2	34.9	35.2	35.5	35.9	35.9	35.9	36.2	36.2	35.9
107.5°	30.5	31.5	32.2	32.8	33.2	33.2	33.5	33.5	33.5	33.5	33.5
110°	28.2	29.2	30.2	30.8	30.8	31.2	31.2	31.5	31.5	31.2	31.5

TEST NUMBER: P1213363

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	25.8	27.1	27.8	28.5	28.8	29.2	29.2	29.2	29.2	29.2	29.2
115°	23.8	25.1	25.8	26.5	26.8	27.1	27.1	27.1	27.1	27.1	27.1
117.5°	22.1	23.5	24.1	24.5	24.8	25.1	25.5	25.5	25.5	25.5	25.1
120°	20.4	21.4	22.1	22.8	23.1	23.5	23.5	23.5	23.5	23.5	23.5
122.5°	18.8	19.8	20.4	21.1	21.4	21.8	21.8	21.8	21.8	21.8	21.8
125°	17.1	18.1	18.8	19.4	19.8	20.1	20.1	20.1	20.1	20.1	20.1
127.5°	15.4	16.4	17.4	17.8	18.1	18.4	18.4	18.4	18.8	18.4	18.4
130°	13.7	14.7	15.8	16.1	16.4	16.8	17.1	17.1	17.1	17.1	16.8
132.5°	12.4	13.4	14.1	14.4	15.1	15.1	15.4	15.4	15.4	15.4	15.1
135°	11.4	12.1	12.7	13.1	13.7	13.7	13.7	14.1	14.1	13.7	13.4
137.5°	10.1	10.7	11.4	11.7	12.1	12.4	12.4	12.7	12.4	12.4	12.4
140°	9.4	9.7	10.4	10.7	11.1	11.1	11.1	11.4	11.4	11.1	11.1
142.5°	8.0	8.7	9.4	9.7	10.1	10.1	10.1	10.1	10.1	10.1	10.1
145°	6.7	7.7	8.0	8.7	8.7	9.0	9.0	9.0	9.0	9.0	8.7
147.5°	5.7	6.4	7.4	7.7	7.7	8.0	8.0	8.0	8.0	8.0	7.7
150°	4.4	5.0	6.0	6.7	6.7	7.0	7.0	7.0	7.0	6.7	6.7
152.5°	3.7	4.4	4.7	5.4	5.7	5.7	5.7	6.0	5.7	5.7	5.7
155°	3.4	3.7	4.0	4.4	4.7	5.0	5.0	5.0	5.0	4.7	4.7
157.5°	2.7	3.0	3.4	3.7	4.0	4.4	4.4	4.4	4.4	4.4	4.0
160°	2.0	2.3	2.7	2.7	3.0	3.4	3.7	3.4	3.4	3.4	3.4
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: P1213363

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3
2.5°	608.0	607.6	608.6	607.0	601.9	603.3	602.6	605.6	606.3	607.0	610.0
5°	608.0	607.6	608.3	607.0	601.6	602.6	601.9	605.0	605.6	606.0	609.0
7.5°	606.6	606.3	607.3	605.6	599.9	601.3	600.3	603.3	603.6	603.9	606.6
10°	603.9	603.6	604.3	602.9	597.2	598.6	597.2	600.3	600.3	600.9	602.9
12.5°	599.9	599.3	600.6	598.9	592.6	594.2	593.6	595.6	595.9	596.2	598.2
15°	594.2	593.6	594.6	593.6	587.9	588.2	587.2	590.2	590.5	589.9	591.9
17.5°	585.8	585.2	587.2	586.5	580.8	582.2	581.8	582.5	583.5	581.8	584.5
20°	575.5	576.1	576.8	577.1	572.8	572.8	572.4	573.8	574.8	573.4	575.5
22.5°	560.0	561.7	563.7	564.4	561.4	561.0	563.1	562.4	563.4	562.7	564.1
25°	540.6	544.0	546.0	548.0	546.3	547.0	550.0	550.7	550.7	550.3	551.7
27.5°	516.5	520.8	524.5	528.9	527.2	528.5	533.6	534.2	535.6	534.2	536.9
30°	487.6	491.7	498.7	505.1	505.7	507.8	514.8	515.5	519.2	517.8	518.8
32.5°	458.8	460.8	468.9	475.2	479.3	484.3	492.0	493.3	498.4	499.4	499.4
35°	422.6	428.3	435.7	444.7	449.8	455.1	465.5	467.5	474.9	477.3	479.9
37.5°	392.1	397.5	402.2	411.6	420.6	426.7	435.0	440.1	447.8	452.1	455.5
40°	359.6	364.0	369.0	378.4	386.1	395.1	403.5	409.6	419.3	424.3	428.7
42.5°	328.8	332.1	337.5	344.2	352.2	362.3	370.3	377.4	387.8	394.8	399.8
45°	301.3	303.3	308.0	313.0	320.1	330.5	338.2	347.2	355.6	363.0	369.0
47.5°	275.5	278.2	280.5	283.9	290.2	296.6	305.7	314.4	322.8	330.8	336.8
50°	251.7	251.7	255.4	257.7	262.1	267.8	274.8	280.9	291.2	296.9	304.7
52.5°	228.6	229.9	231.9	233.3	236.6	240.3	246.0	251.0	259.7	265.1	272.5
55°	208.1	209.5	210.5	211.1	213.2	217.5	219.5	223.5	229.6	233.9	240.3
57.5°	188.7	189.4	190.4	190.7	191.0	193.7	195.4	196.4	202.4	206.8	212.2
60°	170.9	170.9	171.9	171.6	171.3	172.6	172.3	173.3	177.0	179.6	182.0
62.5°	154.2	154.2	154.5	153.8	153.5	153.5	152.2	153.2	154.2	154.5	156.2
65°	138.8	140.4	139.1	139.4	137.4	136.7	136.1	134.1	133.7	132.4	133.1
67.5°	125.0	126.4	125.0	125.0	123.3	122.0	120.3	117.0	116.0	113.3	112.6
70°	114.0	112.9	113.6	112.6	110.6	108.9	106.6	103.9	100.5	97.2	94.8
72.5°	103.2	103.2	102.6	101.6	100.5	97.2	94.5	91.5	87.5	83.1	79.8
75°	92.8	93.2	93.2	92.2	90.5	87.5	84.5	80.1	75.7	70.7	66.4
77.5°	85.5	85.5	85.5	83.8	82.1	79.4	75.7	71.1	66.4	60.3	55.3
80°	78.4	78.1	78.1	76.1	74.4	71.4	67.7	63.0	58.0	51.6	45.9
82.5°	72.7	72.4	71.7	70.0	67.7	64.7	61.0	56.0	50.6	44.9	37.9
85°	66.7	66.4	65.7	64.0	61.7	59.0	55.0	49.9	44.6	38.2	31.5
87.5°	61.3	61.0	60.0	59.0	56.3	53.3	49.3	44.6	38.9	32.8	26.1
90°	57.6	57.0	56.3	55.0	52.6	49.3	45.2	40.2	34.5	28.5	21.8
92.5°	53.3	53.0	51.9	50.6	48.6	45.2	41.2	36.5	30.8	25.1	18.8
95°	48.9	48.6	47.9	46.6	44.6	41.6	37.9	33.2	27.8	22.1	16.4
97.5°	44.9	44.9	43.9	42.9	40.6	38.2	34.5	30.2	25.1	20.1	14.7
100°	41.6	41.6	40.6	39.2	37.5	35.2	31.5	27.5	22.8	18.1	12.7
102.5°	38.5	38.2	37.5	36.2	34.5	32.2	28.8	25.1	20.8	16.1	11.4
105°	35.9	35.5	34.9	33.5	32.2	29.5	26.8	23.1	18.8	14.4	10.1
107.5°	33.2	32.8	32.5	31.2	29.5	27.1	24.5	20.8	17.1	13.1	9.0
110°	30.8	30.5	29.8	28.5	26.8	24.8	22.1	19.1	15.4	11.7	8.0

TEST NUMBER: P1213363

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	28.8	28.5	27.8	26.5	25.1	22.8	20.4	17.1	14.1	10.7	7.0
115°	26.8	26.5	25.8	24.5	22.8	20.8	18.4	15.8	12.4	9.4	6.4
117.5°	24.8	24.5	23.8	22.8	21.1	19.1	16.8	14.1	11.1	8.7	5.7
120°	23.1	22.5	21.8	20.8	19.1	17.4	15.1	12.7	10.1	7.7	5.0
122.5°	21.4	20.8	20.1	19.1	17.4	15.8	13.4	11.4	9.4	7.0	4.7
125°	19.4	19.1	18.4	17.4	15.8	14.1	12.4	10.4	8.4	6.4	4.0
127.5°	17.8	17.4	16.8	15.4	14.1	12.7	11.1	9.4	7.4	5.4	3.7
130°	16.4	15.8	15.1	14.1	13.1	11.7	10.1	8.4	6.7	4.7	3.4
132.5°	14.7	14.1	13.4	12.7	11.7	10.4	9.0	7.4	6.0	4.4	3.0
135°	13.4	12.7	12.1	11.4	10.4	9.4	8.0	6.7	5.4	4.0	2.7
137.5°	11.7	11.4	11.1	10.4	9.4	8.4	7.4	5.7	4.7	3.7	2.3
140°	10.7	10.4	10.1	9.0	8.4	7.4	6.4	5.0	4.0	3.0	2.0
142.5°	9.7	9.4	8.7	8.0	7.4	6.7	5.4	4.7	3.7	2.7	2.0
145°	8.4	8.0	7.7	7.0	6.4	5.4	4.7	4.0	3.4	2.3	1.7
147.5°	7.7	7.4	6.7	6.0	5.4	4.7	4.4	3.7	2.7	2.0	1.3
150°	6.4	6.0	5.7	5.0	4.7	4.4	3.7	3.0	2.3	1.7	1.3
152.5°	5.4	5.0	4.7	4.7	4.0	3.7	3.0	2.7	2.0	1.7	1.0
155°	4.7	4.7	4.4	4.0	3.4	3.0	2.7	2.0	1.7	1.3	1.0
157.5°	4.0	3.7	3.4	3.4	3.0	2.7	2.0	1.7	1.3	1.3	1.0
160°	3.4	3.0	3.0	2.7	2.3	2.0	1.7	1.7	1.3	1.0	1.0
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: P1213363

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3
2.5°	610.3	606.6	610.0	614.3	614.3	613.7	613.0	614.3	617.7	616.3	612.3
5°	609.3	605.6	608.6	613.0	613.0	612.0	611.3	612.3	616.0	614.3	610.6
7.5°	607.3	603.9	606.0	610.0	610.0	609.0	608.3	609.6	612.7	611.0	607.0
10°	603.6	599.9	602.3	606.0	605.6	605.0	603.9	605.6	608.3	606.0	601.3
12.5°	598.9	595.2	597.2	600.6	600.3	598.9	598.2	599.3	601.6	600.3	595.2
15°	592.6	588.9	590.5	593.9	592.9	591.9	590.5	590.9	593.9	591.5	586.2
17.5°	584.8	580.8	582.2	585.2	584.2	583.2	581.5	581.8	585.2	581.8	576.1
20°	575.5	571.1	572.1	575.8	574.1	572.4	570.8	570.8	574.1	570.4	564.1
22.5°	565.4	561.0	561.7	564.4	563.1	560.0	558.4	559.4	561.0	556.4	549.7
25°	553.0	547.3	548.3	551.0	550.0	546.0	544.3	545.0	544.3	540.6	533.6
27.5°	538.6	532.6	533.2	534.9	533.6	529.9	527.9	528.2	526.9	522.2	514.1
30°	520.5	517.5	517.1	518.1	516.1	512.4	510.1	509.4	509.1	502.4	492.7
32.5°	502.1	499.4	497.7	499.0	496.7	493.0	489.0	489.0	485.6	479.3	470.9
35°	483.3	478.9	477.3	478.3	475.6	470.9	467.5	465.9	460.8	452.8	443.7
37.5°	459.2	456.1	454.1	455.1	452.1	448.8	442.4	440.7	435.4	424.3	412.9
40°	433.0	430.7	428.7	429.7	426.3	421.3	415.6	412.9	406.9	394.5	385.4
42.5°	404.9	403.9	401.5	405.2	398.5	393.5	387.8	383.4	377.4	364.0	353.6
45°	375.0	377.4	372.0	373.0	368.7	364.3	358.3	351.9	345.9	333.1	321.4
47.5°	343.5	345.2	341.5	342.2	337.5	333.5	328.1	320.1	313.4	302.3	291.9
50°	311.0	310.4	310.4	309.7	306.0	301.0	295.6	288.2	281.5	271.5	262.8
52.5°	276.5	277.8	278.5	280.2	275.5	272.5	264.1	257.7	252.7	242.3	234.9
55°	243.3	248.0	246.7	247.3	242.0	239.6	232.9	227.9	220.5	214.5	209.8
57.5°	213.2	214.2	214.8	215.8	213.5	208.8	203.4	199.4	193.7	188.7	185.3
60°	184.0	184.0	184.3	186.0	183.7	179.6	175.6	172.6	168.6	165.6	163.6
62.5°	156.5	158.9	159.2	157.9	154.8	152.8	150.1	148.5	145.8	144.8	144.1
65°	131.0	131.0	131.0	131.7	130.0	128.7	127.0	126.7	127.7	126.4	127.0
67.5°	109.6	108.6	107.9	108.3	107.6	106.9	106.6	107.6	109.6	109.6	111.3
70°	91.2	89.2	87.8	87.8	87.8	88.1	89.2	91.2	94.5	95.9	98.2
72.5°	76.1	71.7	69.7	69.7	70.0	71.4	74.4	78.1	81.1	83.8	86.8
75°	61.7	57.3	54.3	54.0	54.6	56.6	61.0	64.3	69.4	73.1	76.8
77.5°	49.9	44.6	40.9	40.6	41.6	44.6	49.9	54.3	60.0	64.0	68.0
80°	39.9	33.9	30.8	28.8	30.5	34.2	40.2	45.6	50.9	56.3	61.3
82.5°	31.8	26.1	21.4	19.4	21.4	26.5	32.2	38.5	43.9	49.6	54.6
85°	25.1	19.1	13.7	11.7	14.1	19.4	25.8	32.2	38.2	43.9	48.9
87.5°	19.8	13.7	8.4	5.7	8.7	14.4	20.4	26.8	33.2	38.9	43.9
90°	15.4	9.7	4.7	0.7	5.0	10.4	16.4	22.5	28.8	34.5	39.5
92.5°	13.1	7.4	2.7	0.0	3.0	7.7	13.4	19.4	25.1	30.8	35.9
95°	11.1	6.0	2.0	0.0	2.0	6.0	11.1	16.4	22.1	27.8	32.8
97.5°	9.4	4.7	1.3	0.0	1.3	4.7	9.0	14.4	19.4	24.8	29.5
100°	8.0	4.0	1.0	0.0	1.0	3.7	7.7	12.4	17.4	22.5	26.8
102.5°	7.0	3.4	0.7	0.0	0.7	3.0	6.4	10.7	15.1	19.8	24.1
105°	6.0	2.7	0.7	0.0	0.3	2.3	5.4	9.4	13.4	17.8	21.8
107.5°	5.4	2.3	0.7	0.0	0.3	2.0	4.7	8.0	12.1	15.8	19.4
110°	4.7	2.0	0.7	0.0	0.3	1.3	4.0	7.0	10.4	14.1	17.8

TEST NUMBER: P1213363

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	4.0	1.7	0.3	0.0	0.0	1.0	3.4	6.0	9.0	12.7	15.8
115°	3.7	1.7	0.3	0.0	0.0	0.7	2.7	5.4	8.0	11.4	14.1
117.5°	3.4	1.3	0.3	0.0	0.3	0.7	2.3	4.7	7.0	9.7	12.7
120°	3.0	1.3	0.3	0.0	0.3	0.3	1.7	4.0	6.0	8.7	11.1
122.5°	2.7	1.3	0.3	0.0	0.3	0.3	1.3	3.4	5.4	7.7	9.7
125°	2.3	1.0	0.7	0.3	0.3	0.3	1.0	2.7	4.7	6.4	8.7
127.5°	2.3	1.0	0.7	0.3	0.3	0.3	0.7	2.3	3.7	5.7	7.7
130°	2.0	1.0	0.7	0.3	0.3	0.3	0.3	1.7	3.4	4.7	6.4
132.5°	1.7	1.0	0.7	0.3	0.3	0.3	0.3	1.0	2.3	4.0	5.4
135°	1.7	1.0	0.7	0.3	0.3	0.3	0.3	0.7	1.7	3.0	4.4
137.5°	1.3	0.7	0.7	0.3	0.3	0.3	0.3	0.3	1.3	2.3	3.4
140°	1.3	0.7	0.7	0.3	0.3	0.3	0.3	0.3	1.0	1.7	2.7
142.5°	1.0	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.7	1.3	2.0
145°	1.0	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.7	1.3
147.5°	1.0	1.0	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.7	1.0
150°	1.0	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7
152.5°	1.0	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7
155°	1.0	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.7
157.5°	1.0	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7
160°	1.0	0.7	0.7	0.3	0.7	0.3	0.7	0.7	0.7	0.7	0.7
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: P1213363

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3
2.5°	611.0	604.6	608.0	607.0	608.3	611.0	610.6	610.0	610.0	609.0	607.6
5°	609.0	602.9	606.0	604.3	606.0	608.3	608.0	607.0	607.6	606.0	604.3
7.5°	605.0	599.6	602.3	600.9	602.3	604.6	603.6	603.3	603.9	601.3	600.3
10°	600.3	594.2	597.2	595.6	597.2	598.9	598.2	596.9	598.2	595.6	594.6
12.5°	592.9	587.9	589.9	589.2	590.2	591.9	590.5	589.5	590.2	587.9	585.8
15°	584.8	579.8	581.5	580.5	581.2	583.2	580.8	580.5	579.8	577.5	576.8
17.5°	574.5	569.8	571.4	569.8	570.8	570.1	569.8	568.1	568.1	565.4	563.4
20°	561.7	557.7	556.7	555.3	556.7	555.3	553.3	552.0	551.7	549.0	547.3
22.5°	547.0	542.3	542.9	539.3	539.6	537.6	534.2	532.9	531.6	528.5	526.2
25°	529.2	524.5	521.2	518.8	515.8	515.5	511.1	507.8	507.4	503.7	503.4
27.5°	509.1	503.7	501.1	495.4	491.7	488.7	485.0	481.6	479.9	475.9	473.2
30°	486.0	479.9	473.2	469.2	463.5	461.2	454.8	450.8	449.4	445.1	443.1
32.5°	459.8	453.5	448.1	440.4	434.0	430.7	424.3	420.3	418.6	413.9	411.2
35°	431.3	424.3	417.9	410.6	405.5	399.8	392.1	388.1	384.4	382.7	380.7
37.5°	401.5	393.8	386.4	379.1	374.7	368.0	361.3	358.6	354.3	352.6	350.6
40°	370.7	363.0	355.9	348.9	343.9	337.8	331.8	330.8	326.1	324.4	323.1
42.5°	340.2	332.1	324.1	319.1	315.4	309.3	305.3	304.3	300.3	299.3	299.3
45°	312.7	302.6	295.9	291.6	288.6	283.5	280.2	279.5	276.2	275.5	275.5
47.5°	283.2	273.8	268.8	266.1	263.4	259.7	257.7	257.7	254.4	253.7	253.4
50°	255.7	247.0	243.3	240.6	240.3	237.6	235.9	235.3	235.3	232.9	233.3
52.5°	229.6	225.2	222.2	220.5	218.5	216.8	215.5	215.5	214.5	212.8	213.5
55°	205.4	200.4	200.8	199.4	198.4	197.4	197.7	195.7	195.4	194.1	195.1
57.5°	181.3	181.3	180.6	179.6	178.0	178.6	178.6	178.6	177.0	176.0	177.0
60°	160.9	161.9	160.2	161.2	160.5	160.9	160.2	160.2	159.2	158.9	159.2
62.5°	142.8	144.5	143.8	145.1	144.5	144.8	145.5	144.1	143.4	142.8	143.4
65°	126.7	128.7	128.4	129.4	129.7	130.0	130.4	129.7	129.0	128.4	128.0
67.5°	112.6	114.6	116.0	116.3	116.6	117.6	117.3	116.6	116.0	115.0	114.6
70°	99.9	102.6	104.2	104.9	106.2	105.6	105.6	105.2	104.6	103.6	103.2
72.5°	89.2	92.2	93.8	94.5	95.9	95.9	95.5	95.2	94.5	93.5	93.2
75°	79.8	82.4	84.8	86.1	87.1	87.1	86.8	86.5	85.8	85.1	84.8
77.5°	72.4	74.7	76.8	78.4	79.1	79.4	79.1	78.4	78.4	78.1	77.8
80°	65.0	67.7	69.7	71.4	72.4	72.4	72.1	72.4	71.7	71.4	71.1
82.5°	58.7	61.7	64.0	65.7	66.4	66.7	66.4	66.7	66.0	66.0	66.0
85°	53.0	56.0	58.7	60.0	61.0	61.3	61.3	61.3	61.0	61.0	61.0
87.5°	48.3	51.3	54.0	55.3	56.3	56.6	56.6	57.0	56.3	56.3	56.3
90°	43.9	46.9	49.6	50.9	51.9	52.6	52.6	53.0	52.6	52.3	52.3
92.5°	39.9	43.2	45.9	47.3	48.3	49.3	49.3	49.6	48.9	48.9	48.9
95°	36.5	39.9	42.2	43.9	44.9	45.6	45.9	45.9	45.6	45.6	45.6
97.5°	33.5	36.5	38.9	40.6	41.6	41.9	42.2	42.6	42.2	42.2	42.2
100°	30.5	33.5	35.9	37.2	38.5	38.9	39.2	39.5	39.5	39.2	39.2
102.5°	27.8	30.8	32.8	34.5	35.5	36.2	36.5	36.5	36.5	36.5	36.5
105°	25.1	28.2	30.2	31.8	32.8	33.5	33.9	34.2	34.2	33.9	33.9
107.5°	22.8	25.5	27.8	29.2	30.5	31.2	31.5	31.5	31.8	31.5	31.5
110°	20.4	23.5	25.5	26.8	28.2	28.8	29.2	29.5	29.5	29.5	29.5

TEST NUMBER: P1213363

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	18.8	21.1	23.1	24.5	25.8	26.5	26.8	27.1	27.5	27.1	27.1
115°	16.8	19.1	21.1	22.5	23.5	24.1	24.8	25.1	25.1	25.5	25.1
117.5°	15.1	17.1	19.1	20.4	21.4	22.5	22.8	23.1	23.5	23.1	23.1
120°	13.4	15.4	17.1	18.4	19.4	20.4	20.8	21.1	21.4	21.1	21.1
122.5°	12.1	13.7	15.4	16.8	17.8	18.4	19.1	19.1	19.4	19.4	19.4
125°	10.7	12.4	13.7	15.1	16.1	16.8	17.1	17.4	17.4	17.8	17.8
127.5°	9.4	10.7	12.4	13.4	14.4	15.1	15.4	15.8	15.8	16.1	16.1
130°	8.0	9.4	10.7	11.7	12.7	13.4	13.7	14.1	14.4	14.4	14.4
132.5°	7.0	8.4	9.4	10.4	11.1	11.7	12.4	12.7	12.7	12.7	12.7
135°	5.7	7.0	8.0	9.0	9.7	10.4	10.7	11.4	11.4	11.4	11.4
137.5°	4.7	6.0	7.0	7.7	8.4	9.0	9.4	9.7	10.1	10.1	10.1
140°	3.7	4.7	5.7	6.7	7.4	7.7	8.4	8.4	8.7	8.7	8.7
142.5°	2.7	3.7	4.4	5.4	6.0	6.7	7.0	7.4	7.4	7.4	7.4
145°	2.0	2.7	3.4	4.0	5.0	5.4	5.7	6.0	6.4	6.4	6.4
147.5°	1.3	2.0	2.3	3.0	3.7	4.4	4.7	5.0	5.4	5.4	5.4
150°	1.0	1.3	2.0	2.3	2.7	3.4	4.0	4.0	4.4	4.4	4.0
152.5°	0.7	1.0	1.3	1.7	2.0	2.3	3.0	3.0	3.4	3.4	3.4
155°	0.7	0.7	0.7	1.0	1.3	1.7	2.0	2.3	2.3	2.3	2.3
157.5°	0.7	0.7	0.7	0.7	0.7	1.0	1.3	1.7	1.7	1.7	1.7
160°	0.7	0.7	0.3	0.3	0.7	0.7	0.7	0.7	1.0	1.0	1.0
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: P1213363

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3	609.3
2.5°	608.6	609.3	609.3	608.6	608.3	609.6	608.0	601.6	603.6	604.3	606.3
5°	605.6	606.3	606.3	606.3	605.6	607.0	605.3	598.9	601.3	602.3	603.6
7.5°	601.3	601.6	602.3	601.9	601.3	603.3	601.6	595.2	596.9	598.6	600.3
10°	595.6	595.6	595.9	596.6	595.9	597.6	595.9	590.2	591.9	592.9	594.9
12.5°	587.9	588.5	588.9	588.5	588.2	589.5	588.9	583.5	584.2	586.2	588.2
15°	577.5	577.5	579.1	578.5	578.5	579.8	580.5	574.5	575.5	578.5	580.5
17.5°	564.7	565.1	566.4	567.1	566.7	569.1	569.4	564.7	564.4	568.1	570.1
20°	548.3	549.0	550.7	552.0	552.0	554.7	555.7	552.7	553.0	557.0	557.7
22.5°	528.2	528.2	531.2	533.2	534.9	536.6	539.6	536.9	536.9	542.3	545.3
25°	503.4	505.7	506.8	510.8	513.1	517.8	520.5	520.8	521.2	526.2	528.2
27.5°	475.9	476.6	479.6	484.3	487.0	491.3	496.4	497.4	499.0	505.7	508.8
30°	444.7	446.8	448.1	454.8	458.5	464.2	470.6	472.9	474.2	483.3	487.0
32.5°	412.9	413.6	419.3	423.0	427.3	433.4	440.7	445.1	447.8	457.1	462.5
35°	381.1	382.4	387.1	391.8	396.2	402.2	409.9	415.9	420.6	429.0	436.0
37.5°	351.9	355.3	356.3	361.0	364.3	370.3	375.7	384.4	389.1	397.8	406.9
40°	325.8	326.8	327.4	332.1	334.5	340.2	347.9	353.6	360.0	366.3	377.0
42.5°	300.0	300.6	301.6	304.3	307.0	311.0	316.7	322.4	329.1	338.5	345.5
45°	276.2	276.8	277.5	279.2	281.5	285.2	288.9	292.9	299.6	307.7	315.0
47.5°	254.0	255.4	255.4	255.7	257.4	260.4	263.1	268.1	271.8	276.2	284.5
50°	232.9	233.9	234.3	234.3	235.3	237.3	238.0	241.3	244.7	248.7	254.7
52.5°	213.2	213.2	212.8	214.2	214.2	215.5	215.8	217.8	220.2	224.6	227.2
55°	194.4	194.4	195.4	194.7	194.7	195.4	195.1	195.4	197.4	200.1	202.4
57.5°	176.3	176.0	177.0	176.3	176.0	176.6	177.3	176.0	176.3	179.0	179.0
60°	158.2	158.5	159.5	158.9	158.9	158.9	158.2	157.5	156.9	158.5	159.2
62.5°	143.8	142.8	143.8	142.8	143.4	143.1	142.4	141.1	141.4	140.8	140.1
65°	128.7	128.7	129.0	128.0	128.7	128.7	127.7	127.4	125.3	124.7	123.0
67.5°	115.6	115.6	116.0	115.3	115.3	115.6	114.6	113.6	111.6	110.6	108.3
70°	104.2	104.2	104.2	103.9	103.9	103.9	103.2	101.9	99.9	98.2	95.2
72.5°	93.8	94.2	93.8	93.8	94.8	93.8	92.8	91.5	89.8	86.5	83.8
75°	85.5	85.8	85.5	85.5	85.5	85.1	84.8	82.8	80.8	78.1	74.1
77.5°	78.1	78.1	78.4	78.1	78.1	77.8	76.8	75.1	72.7	70.4	65.7
80°	71.1	71.4	71.7	72.1	71.4	71.1	70.0	68.7	65.7	63.0	58.3
82.5°	66.0	65.7	66.0	66.4	65.7	65.4	64.3	62.7	60.3	56.6	51.9
85°	61.0	60.7	60.7	61.0	60.7	60.0	59.0	57.3	55.0	51.3	46.6
87.5°	56.0	56.3	56.6	56.3	56.0	55.3	54.3	52.6	49.9	46.9	41.9
90°	52.3	52.3	52.3	52.3	51.9	51.3	50.3	48.3	45.9	42.2	37.9
92.5°	48.9	48.9	48.9	48.9	48.6	47.6	46.6	44.9	42.2	38.5	34.5
95°	45.6	45.9	45.6	45.6	44.9	44.6	42.9	41.2	38.9	35.2	30.8
97.5°	41.9	42.2	41.9	41.9	41.6	40.9	39.9	37.9	35.5	32.2	28.2
100°	39.2	39.2	38.9	38.9	38.5	37.9	36.5	34.9	32.5	29.2	25.1
102.5°	36.2	36.5	36.2	36.2	35.5	34.9	33.9	32.2	29.8	26.5	22.8
105°	33.9	33.9	33.5	33.5	32.8	32.2	31.2	29.2	27.1	24.1	20.4
107.5°	31.5	31.5	31.2	31.2	30.5	29.8	28.5	26.8	24.8	21.8	18.4
110°	29.2	29.2	29.2	28.8	28.2	27.1	26.1	24.5	22.5	19.8	16.4



TEST NUMBER: P1213363

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	27.5	27.1	26.8	26.5	25.8	25.1	23.8	22.1	20.1	17.8	14.7
115°	25.1	25.1	24.8	24.5	23.8	22.8	21.8	20.4	18.4	15.8	13.1
117.5°	23.1	23.1	22.8	22.5	21.8	20.8	19.8	18.4	16.4	14.1	11.7
120°	21.1	21.1	20.8	20.4	19.8	18.8	18.1	16.4	14.7	12.4	10.4
122.5°	19.4	19.1	19.1	18.4	18.1	17.1	16.1	14.7	13.1	11.1	9.0
125°	17.4	17.4	17.1	16.8	16.4	15.4	14.4	13.1	11.4	9.7	8.0
127.5°	15.8	15.8	15.4	15.1	14.7	13.7	12.7	11.7	10.1	8.4	6.7
130°	14.1	14.1	13.7	13.4	13.1	12.1	11.4	10.1	8.7	7.4	5.7
132.5°	12.7	12.7	12.4	12.1	11.4	10.7	10.1	8.7	7.7	6.4	5.0
135°	11.4	11.1	11.1	10.7	10.1	9.4	8.7	7.7	6.4	5.4	4.0
137.5°	10.1	9.7	9.4	9.0	8.7	8.0	7.4	6.7	5.7	4.4	3.4
140°	8.7	8.4	8.4	8.0	7.4	7.0	6.4	5.4	4.7	3.7	2.7
142.5°	7.4	7.4	7.0	6.7	6.4	6.0	5.4	4.7	3.7	3.0	2.0
145°	6.4	6.0	6.0	5.7	5.4	4.7	4.4	3.7	3.0	2.3	1.7
147.5°	5.0	5.0	5.0	4.7	4.4	4.0	3.7	3.0	2.3	1.7	1.0
150°	4.0	4.0	4.0	3.7	3.4	3.0	2.7	2.3	1.7	1.0	0.7
152.5°	3.4	3.4	3.0	3.0	2.7	2.3	2.0	1.7	1.0	0.7	0.7
155°	2.3	2.3	2.3	2.0	2.0	1.7	1.3	1.0	0.7	0.7	0.7
157.5°	1.7	1.7	1.7	1.3	1.3	1.0	1.0	0.7	0.7	0.7	0.7
160°	1.0	1.0	1.0	1.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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: P1213363

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	609.3	609.3	609.3	609.3	609.3	609.3	609.3
2.5°	605.3	605.0	607.6	607.6	604.6	609.3	614.3
5°	603.3	602.9	605.6	605.6	602.9	607.6	613.0
7.5°	599.3	599.6	602.3	602.9	599.6	603.9	609.6
10°	594.9	594.6	597.6	598.2	595.6	599.6	605.0
12.5°	587.9	587.9	590.9	591.9	589.2	593.9	598.9
15°	580.5	580.5	582.5	584.2	581.8	586.2	591.2
17.5°	571.1	570.8	572.8	574.8	572.4	577.1	582.5
20°	559.0	559.0	561.4	563.7	562.1	566.4	572.4
22.5°	546.3	545.0	549.0	550.7	549.7	554.0	560.0
25°	530.2	529.9	533.9	536.2	534.9	539.6	545.0
27.5°	512.8	512.4	516.5	519.5	518.8	523.2	529.2
30°	491.7	493.3	497.0	502.1	500.4	505.1	511.4
32.5°	469.5	471.2	475.6	480.9	481.3	485.0	491.3
35°	443.1	447.4	450.4	457.5	458.8	462.5	469.2
37.5°	415.3	420.3	426.7	432.0	434.7	437.7	445.4
40°	384.1	391.5	398.5	404.9	408.2	411.2	418.6
42.5°	355.9	361.6	368.3	374.7	380.7	383.4	391.1
45°	324.1	330.8	336.8	344.5	350.6	353.6	361.3
47.5°	292.9	299.6	307.7	313.0	319.4	322.4	329.8
50°	263.1	269.1	275.8	282.2	287.6	290.2	296.6
52.5°	233.6	240.0	246.3	250.4	256.1	258.1	263.4
55°	207.5	211.8	217.5	219.9	225.6	226.9	230.6
57.5°	182.3	185.3	187.4	191.4	195.4	198.4	202.8
60°	159.5	160.9	162.2	164.6	167.9	168.9	170.6
62.5°	139.1	138.8	141.4	142.1	142.4	145.8	144.1
65°	121.0	121.3	119.0	118.0	119.3	120.3	119.6
67.5°	105.9	103.9	101.9	99.5	97.5	98.5	97.5
70°	91.2	89.5	86.1	82.8	81.4	79.4	78.4
72.5°	79.4	75.4	72.1	67.7	65.4	63.0	61.3
75°	70.4	64.7	60.0	55.3	51.9	48.6	47.9
77.5°	61.0	55.6	50.3	45.2	40.2	36.5	35.2
80°	53.6	48.6	42.2	36.2	30.8	26.1	24.5
82.5°	46.9	41.6	35.2	28.8	22.8	17.8	15.8
85°	41.2	35.5	29.2	22.8	16.8	11.4	8.7
87.5°	36.9	30.5	24.1	18.1	11.7	6.4	3.4
90°	32.8	26.8	20.8	14.4	8.4	3.4	0.0
92.5°	29.2	23.5	17.4	11.7	6.4	2.0	0.3
95°	25.8	20.8	14.7	9.4	4.7	1.3	0.3
97.5°	23.1	18.1	12.7	7.7	3.7	1.0	0.3
100°	20.8	15.8	11.1	6.4	3.0	0.7	0.3
102.5°	18.4	14.1	9.4	5.4	2.3	0.3	0.3
105°	16.4	12.4	8.0	4.7	2.0	0.3	0.3
107.5°	14.7	11.1	7.0	4.0	1.3	0.3	0.3
110°	13.1	9.4	6.0	3.4	1.0	0.3	0.3



TEST NUMBER: P1213363

CATALOG NUMBER: 4SNLED-LD5-18SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	11.7	8.4	5.4	2.7	0.7	0.3	0.3
115°	10.4	7.4	4.7	2.3	0.7	0.3	0.3
117.5°	9.0	6.4	4.0	1.7	0.3	0.3	0.3
120°	8.0	5.7	3.4	1.3	0.3	0.3	0.3
122.5°	7.0	4.7	2.7	1.0	0.3	0.3	0.3
125°	6.0	4.0	2.3	0.7	0.3	0.3	0.3
127.5°	5.0	3.4	1.7	0.7	0.3	0.3	0.3
130°	4.4	2.7	1.3	0.3	0.3	0.3	0.3
132.5°	3.7	2.0	1.0	0.3	0.3	0.3	0.3
135°	3.0	1.7	0.7	0.3	0.3	0.3	0.3
137.5°	2.3	1.3	0.7	0.3	0.3	0.3	0.3
140°	1.7	1.0	0.3	0.3	0.3	0.3	0.3
142.5°	1.3	0.7	0.3	0.3	0.3	0.3	0.3
145°	1.0	0.7	0.3	0.3	0.3	0.3	0.3
147.5°	0.7	0.7	0.7	0.7	0.3	0.3	0.3
150°	0.7	0.7	0.3	0.3	0.7	0.3	0.3
152.5°	0.7	0.3	0.3	0.3	0.7	0.3	0.3
155°	0.7	0.7	0.7	0.7	0.7	0.7	0.3
157.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7
160°	0.7	0.7	0.7	0.7	0.7	0.7	0.7
162.5°	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
167.5°	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
172.5°	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
177.5°	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

(END OF REPORT)