

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: P1213011

Luminaire Tested: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213011
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33518)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

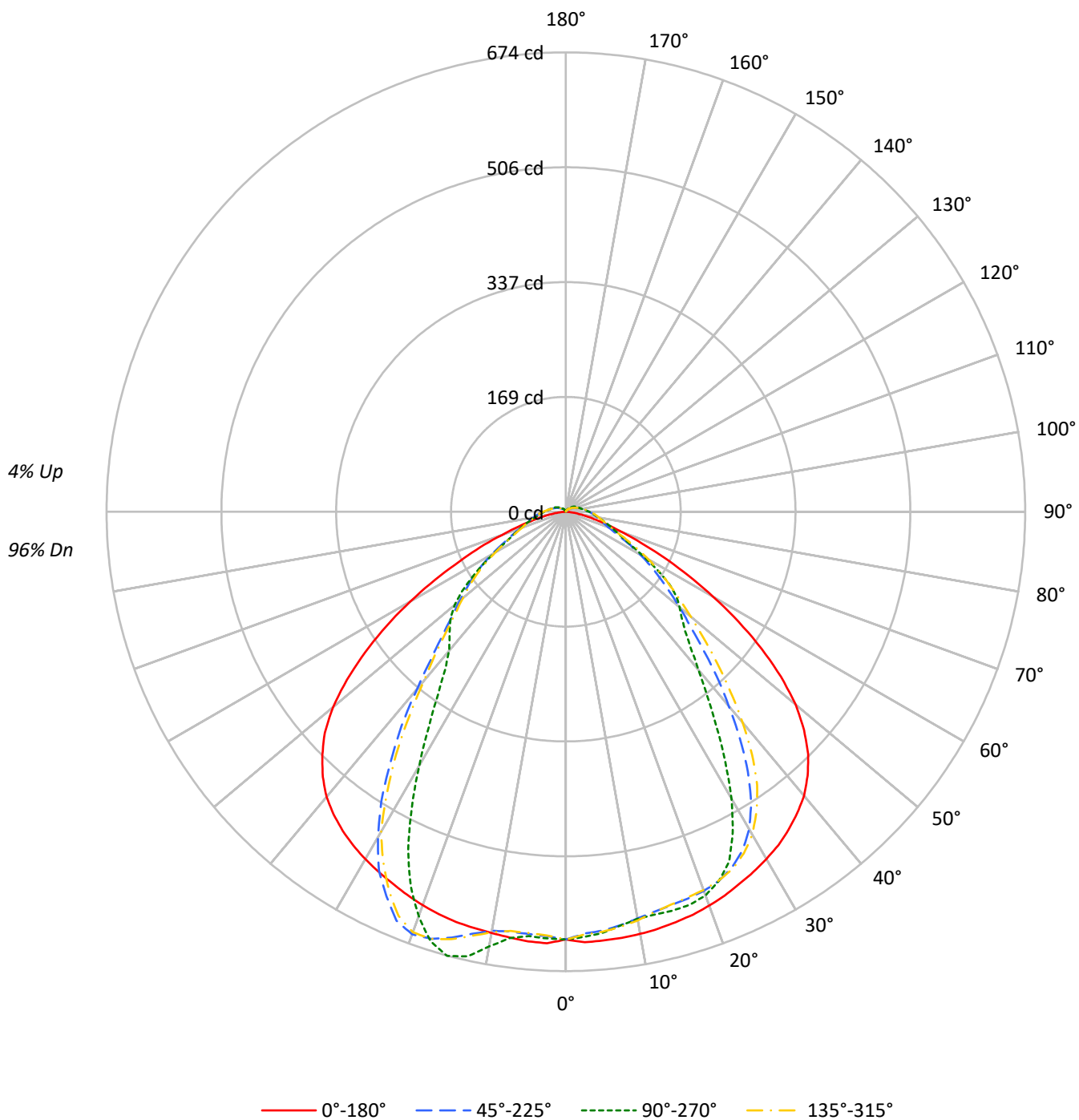
Lumens per Lamp: N/A
Luminaire Lumens: 1496.0 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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

TEST NUMBER: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

Luminous Intensity Polar Plot



TEST NUMBER: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

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	115	115	115	115	109	109	109	103	103	103	98	98	98
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	84
2	100	93	86	81	97	90	85	80	86	82	77	82	79	75	79	76	73
3	92	83	75	69	89	81	74	68	77	71	67	74	69	65	71	67	63
4	85	74	66	60	83	73	65	59	70	63	58	67	61	57	64	60	56
5	79	67	59	52	76	66	58	52	63	56	51	61	55	50	59	53	49
6	73	61	52	46	71	60	52	46	57	51	45	55	49	45	54	48	44
7	68	55	47	42	66	54	47	41	53	46	41	51	45	40	49	44	40
8	64	51	43	37	62	50	42	37	48	42	37	47	41	36	45	40	36
9	60	47	39	34	58	46	39	34	45	38	33	43	37	33	42	37	33
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5071	5071	5071	5071
5°	5108	4870	5118	4908
10°	5131	4668	5121	4984
15°	5171	4605	5169	5127
20°	5228	4532	5222	4777
25°	5293	4299	5290	4155
30°	5392	3726	5395	3302
35°	5498	3013	5513	2550
40°	5591	2426	5615	2137
45°	5571	2055	5600	2001
50°	5332	1892	5406	1850
55°	4730	1700	4849	1546
60°	3836	1302	4040	1194
65°	2853	996	3073	944
70°	1939	860	2187	822
75°	1269	775	1476	733
80°	818	723	961	665
85°	424	722	553	659

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 5600 cd/sqm

TEST NUMBER: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.6	4.0
10°-20°	177.4	11.9
20°-30°	269.6	18.0
30°-40°	289.2	19.3
40°-50°	251.0	16.8
50°-60°	186.0	12.4
60°-70°	106.6	7.1
70°-80°	59.0	3.9
80°-90°	35.9	2.4
90°-100°	23.4	1.6
100°-110°	15.7	1.0
110°-120°	10.6	0.7
120°-130°	6.5	0.4
130°-140°	3.4	0.2
140°-150°	1.5	0.1
150°-160°	0.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	506.6	33.9
0°-40°	795.8	53.2
0°-60°	1232.9	82.4
0°-90°	1434.5	95.9
90°-120°	49.6	3.3
90°-150°	61.0	4.1
90°-180°	61.0	4.1
0°-180°	1496.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	628	628	628	628	628	
5°	631	620	633	625	631	60
15°	623	606	623	674	623	176
25°	602	567	602	548	602	278
35°	570	386	571	326	570	356
45°	503	247	505	241	503	385
55°	351	185	360	169	351	311
65°	159	94	172	89	159	160
75°	45	60	53	56	45	52
85°	6	41	8	38	6	8
90°	0	34	1	32	0	0
95°	0	28	0	27	0	0
105°	0	21	0	20	0	0
115°	0	17	0	16	0	0
125°	0	13	0	11	0	0
135°	0	8	0	7	0	0
145°	0	5	1	4	0	0
155°	1	2	1	2	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: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5
2.5°	632.1	630.5	629.8	628.5	629.5	633.4	630.8	626.6	626.9	619.4	623.3
5°	631.4	629.5	628.5	627.2	627.9	631.4	628.8	624.6	624.3	616.8	620.4
7.5°	630.5	628.5	626.9	625.9	626.2	629.2	625.9	621.1	620.1	612.0	615.2
10°	628.8	627.5	625.3	623.6	623.3	626.6	621.4	616.5	614.2	605.8	609.1
12.5°	626.6	624.6	622.3	619.4	619.1	621.1	616.8	610.0	607.8	601.0	604.5
15°	623.3	621.1	618.5	615.2	613.6	614.9	609.7	603.5	603.2	597.4	602.3
17.5°	619.8	616.5	613.6	609.1	606.8	607.8	603.5	598.0	598.7	595.1	600.6
20°	614.9	611.3	606.8	602.3	599.0	600.6	597.7	593.5	594.5	591.9	596.7
22.5°	609.4	604.5	599.0	593.8	591.2	593.5	591.2	587.7	588.0	586.4	589.3
25°	602.3	596.7	590.3	583.8	582.5	584.1	582.8	579.9	578.6	576.0	577.3
27.5°	595.8	589.6	581.5	574.7	572.4	575.7	572.8	567.9	564.3	560.8	558.2
30°	588.3	580.9	571.8	564.0	562.1	563.4	559.1	551.7	542.3	537.7	530.6
32.5°	580.2	570.5	559.1	550.4	549.1	548.1	540.3	529.6	515.1	506.0	495.0
35°	569.5	558.8	545.2	534.5	532.6	527.1	514.4	500.1	481.3	465.8	447.0
37.5°	557.5	544.9	530.6	516.4	510.8	499.8	482.0	467.1	438.6	419.8	397.1
40°	543.9	528.7	511.2	494.0	484.9	467.1	446.7	424.6	397.1	371.8	352.7
42.5°	525.1	508.9	488.2	469.0	453.5	429.8	405.8	374.7	349.4	328.0	308.6
45°	502.7	483.3	459.3	436.3	416.5	388.3	360.1	329.0	307.9	283.0	269.7
47.5°	473.9	452.8	427.2	401.6	375.7	344.6	315.1	285.2	264.2	246.3	236.6
50°	439.9	420.4	392.2	361.7	333.2	300.8	271.3	248.9	228.5	217.5	210.0
52.5°	397.7	379.6	350.7	317.7	290.1	258.3	231.4	213.3	198.7	190.6	188.0
55°	350.7	334.8	306.3	275.5	247.3	218.1	197.7	181.8	172.4	167.6	167.9
57.5°	300.5	288.2	261.3	233.7	207.1	185.1	166.6	154.0	146.8	146.5	147.5
60°	250.2	241.2	217.8	194.2	170.8	153.0	139.4	130.6	126.1	126.4	126.1
62.5°	202.3	193.8	177.0	157.5	139.1	127.1	114.7	111.2	107.3	107.0	107.0
65°	159.2	152.7	139.1	125.1	111.2	103.4	97.2	93.0	90.1	89.5	89.8
67.5°	119.6	117.0	107.6	98.2	89.5	84.6	79.4	78.4	76.2	76.2	76.8
70°	89.1	87.2	82.0	76.5	72.9	69.7	67.1	67.1	66.8	66.4	68.1
72.5°	64.5	64.8	63.2	59.0	58.7	58.0	57.4	58.3	58.7	59.6	61.6
75°	45.4	46.4	46.4	45.7	47.0	48.6	49.6	51.2	53.2	54.5	56.7
77.5°	32.1	32.1	33.7	35.7	38.2	41.2	43.8	46.0	48.6	50.2	52.2
80°	20.7	21.7	24.3	27.9	31.4	35.3	38.9	41.8	44.4	47.0	48.3
82.5°	12.3	13.9	17.2	21.7	26.3	31.1	34.7	38.2	41.2	43.8	44.7
85°	6.2	8.4	12.3	17.2	22.0	27.2	31.8	35.0	38.2	40.5	41.8
87.5°	1.9	4.5	8.8	13.3	18.5	23.7	28.5	32.1	35.0	37.0	38.2
90°	0.0	2.3	6.2	11.0	15.9	21.1	25.6	29.5	32.4	34.0	35.0
92.5°	0.0	1.3	4.9	9.1	13.6	18.8	23.3	26.9	29.5	31.1	31.8
95°	0.3	1.0	3.6	7.5	12.0	16.9	21.1	24.3	26.9	28.5	28.8
97.5°	0.3	0.6	2.9	6.2	10.4	14.9	19.1	22.4	24.3	25.9	26.3
100°	0.3	0.6	2.3	5.5	9.1	13.3	17.2	20.1	22.4	23.7	24.0
102.5°	0.3	0.3	1.9	4.5	8.1	11.7	15.2	18.2	20.1	21.4	22.0
105°	0.3	0.3	1.6	3.9	7.1	10.4	13.6	16.5	18.2	19.4	20.1
107.5°	0.3	0.3	1.3	3.2	6.2	9.1	12.3	14.6	16.5	17.8	18.5
110°	0.3	0.3	1.0	2.9	5.2	8.1	10.7	13.0	14.9	16.2	16.9

TEST NUMBER: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.3	0.3	1.0	2.6	4.5	7.1	9.4	11.7	13.3	14.6	15.6
115°	0.3	0.3	1.0	2.3	4.2	6.2	8.4	10.4	12.0	13.3	14.3
117.5°	0.3	0.3	1.0	1.9	3.6	5.5	7.5	9.4	10.7	12.0	13.0
120°	0.3	0.3	0.6	1.6	3.2	4.9	6.5	8.1	9.7	11.0	12.0
122.5°	0.3	0.3	0.6	1.6	2.6	4.2	5.8	7.1	8.8	9.7	10.7
125°	0.3	0.3	0.6	1.3	2.3	3.9	5.2	6.5	7.5	8.8	9.7
127.5°	0.3	0.3	0.6	1.3	1.9	3.2	4.5	5.8	6.8	7.8	8.4
130°	0.3	0.3	0.6	1.0	1.6	2.6	3.9	4.9	6.2	6.8	7.5
132.5°	0.3	0.3	0.3	1.0	1.3	1.9	2.9	4.2	5.2	6.2	6.5
135°	0.3	0.3	0.3	0.6	1.3	1.6	2.3	3.2	4.2	5.2	5.8
137.5°	0.3	0.3	0.3	0.6	1.0	1.6	1.9	2.6	3.6	4.2	5.2
140°	0.3	0.3	0.3	0.6	1.0	1.3	1.6	2.3	2.9	3.6	4.2
142.5°	0.3	0.3	0.3	0.6	0.6	1.0	1.3	1.9	2.3	2.9	3.6
145°	0.3	0.3	0.3	0.6	0.6	1.0	1.3	1.6	1.9	2.3	2.9
147.5°	0.3	0.3	0.3	0.6	0.6	0.6	1.0	1.3	1.6	1.9	2.3
150°	0.6	0.6	0.6	0.6	0.6	0.6	1.0	1.0	1.3	1.6	1.9
152.5°	0.6	0.6	0.6	0.6	0.6	0.6	1.0	1.0	1.0	1.3	1.6
155°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.0	1.0	1.3	1.3
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5
2.5°	622.0	622.7	626.6	626.2	625.6	624.9	624.9	624.3	624.9	626.6	625.9
5°	618.8	619.8	622.7	622.3	621.7	621.4	621.1	620.1	620.7	623.0	622.3
7.5°	612.9	613.9	616.5	615.2	614.2	614.9	613.3	612.3	613.6	615.9	615.5
10°	606.8	607.4	610.7	610.0	608.4	608.7	607.1	606.5	608.1	609.4	609.7
12.5°	602.6	604.8	607.8	607.4	607.1	607.4	605.8	605.2	606.1	607.4	607.1
15°	601.6	604.5	607.8	607.8	608.1	608.4	606.8	605.8	606.8	607.8	607.4
17.5°	600.6	604.2	607.1	606.8	607.1	607.8	605.2	604.5	605.8	607.1	606.5
20°	597.4	600.6	602.6	601.9	601.9	602.3	599.0	599.0	601.0	601.9	602.3
22.5°	588.3	592.2	592.2	590.6	590.6	589.3	588.3	586.4	588.6	590.3	591.6
25°	574.7	576.3	574.4	570.8	568.9	567.2	562.7	566.6	566.6	571.5	573.1
27.5°	555.6	552.0	546.5	539.0	537.4	532.2	529.3	530.3	531.9	538.7	543.9
30°	524.1	513.4	504.0	500.8	493.7	488.5	483.3	485.9	488.8	492.7	503.4
32.5°	482.6	472.3	457.0	451.5	444.1	437.6	431.4	435.3	440.5	443.1	454.8
35°	435.0	422.7	408.7	399.3	391.6	388.0	380.2	385.7	391.2	393.2	403.2
37.5°	384.4	371.8	359.5	351.4	343.9	341.6	336.5	340.3	344.6	347.5	355.9
40°	336.5	324.8	315.4	309.9	304.7	302.7	300.8	302.4	305.7	307.9	314.4
42.5°	295.3	285.9	279.4	276.2	272.6	270.0	270.3	271.0	272.6	277.5	280.4
45°	259.3	253.8	249.6	248.9	246.7	246.3	246.0	247.3	248.3	251.2	253.5
47.5°	230.5	228.2	227.2	228.5	229.5	228.2	228.8	230.5	232.4	232.4	232.1
50°	207.8	208.4	209.7	212.6	214.6	215.2	215.9	217.8	218.1	218.8	217.8
52.5°	189.3	189.9	193.5	198.0	200.3	201.3	202.6	204.5	204.5	205.2	203.9
55°	170.5	171.5	175.0	179.6	181.5	182.8	184.1	185.4	186.4	187.7	186.7
57.5°	149.8	152.7	154.9	156.2	157.5	158.5	159.5	159.8	161.7	162.1	163.7
60°	127.7	128.4	130.6	130.3	129.3	131.9	130.6	132.9	135.2	138.1	138.4
62.5°	106.6	107.0	108.6	107.9	109.2	108.9	109.9	109.9	111.5	112.8	114.4
65°	90.1	90.4	91.7	91.7	91.4	92.4	93.4	94.0	94.0	95.0	96.3
67.5°	77.8	78.8	80.1	80.7	81.4	81.4	82.3	82.7	83.3	83.6	84.3
70°	69.4	70.7	72.0	72.6	72.9	73.6	73.9	73.9	74.6	74.9	75.5
72.5°	63.2	64.5	65.5	65.5	66.1	66.4	66.4	66.8	67.1	67.7	68.4
75°	58.0	59.0	59.6	59.3	59.3	59.3	59.6	59.6	60.3	60.9	61.6
77.5°	53.2	54.1	54.1	53.5	53.5	53.5	53.5	53.8	54.1	54.8	55.4
80°	49.6	49.6	49.3	49.3	48.6	48.3	48.3	48.6	48.6	49.3	50.2
82.5°	45.7	45.7	45.4	45.1	44.7	44.4	44.4	44.7	45.1	45.4	46.0
85°	42.1	42.1	41.5	41.5	41.2	41.2	41.2	41.2	41.5	41.8	42.5
87.5°	38.6	38.2	37.9	37.6	37.6	37.6	37.6	37.6	37.9	38.6	38.9
90°	35.0	34.7	34.4	34.4	34.0	34.0	34.4	34.4	34.7	35.0	35.3
92.5°	31.8	31.4	31.1	31.1	30.8	30.8	31.1	30.8	31.4	31.4	31.8
95°	28.8	28.5	28.2	28.2	28.2	28.2	28.2	28.2	28.5	28.5	28.8
97.5°	26.3	25.9	25.6	25.6	25.9	25.6	25.9	25.9	25.9	26.3	26.6
100°	24.0	23.7	23.7	24.0	23.7	23.7	24.0	24.0	24.0	24.0	24.3
102.5°	22.0	22.0	22.0	22.0	22.0	22.0	22.4	22.4	22.4	22.4	22.7
105°	20.1	20.4	20.4	20.4	20.7	20.7	20.7	21.1	21.1	21.1	21.1
107.5°	18.8	19.1	19.1	19.4	19.4	19.8	19.8	19.8	19.8	20.1	20.1
110°	17.5	17.8	18.2	18.5	18.5	18.8	18.8	18.8	18.8	18.8	18.8

TEST NUMBER: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	16.2	16.5	16.9	17.5	17.8	17.8	17.8	17.8	18.2	18.2	17.8
115°	14.9	15.6	15.9	16.5	16.9	16.9	17.2	17.2	17.2	17.2	16.9
117.5°	13.6	14.6	14.9	15.6	15.9	15.9	16.2	16.2	16.2	16.2	15.9
120°	12.6	13.3	13.9	14.3	14.6	14.9	14.9	15.2	15.2	15.2	14.9
122.5°	11.7	12.3	13.0	13.3	13.6	13.9	13.9	13.9	13.9	13.9	13.9
125°	10.4	11.0	11.7	12.0	12.3	12.6	12.6	13.0	13.0	13.0	12.6
127.5°	9.4	10.0	10.4	11.0	11.3	11.3	11.7	11.7	11.7	11.7	11.3
130°	8.1	8.8	9.4	9.7	10.0	10.0	10.4	10.4	10.4	10.4	10.4
132.5°	7.1	7.8	8.1	8.8	8.8	9.1	9.1	9.4	9.4	9.4	9.1
135°	6.5	6.8	7.1	7.8	7.8	8.1	8.1	8.1	8.1	8.1	8.1
137.5°	5.8	6.2	6.5	6.8	6.8	7.1	7.1	7.1	7.1	7.5	7.1
140°	4.9	5.5	5.8	5.8	6.2	6.2	6.2	6.5	6.5	6.5	6.2
142.5°	4.2	4.5	4.9	5.2	5.5	5.5	5.5	5.5	5.8	5.5	5.5
145°	3.2	3.9	4.2	4.5	4.9	4.9	4.9	4.9	4.9	4.9	4.9
147.5°	2.6	2.9	3.6	3.9	3.9	4.2	4.2	4.2	4.2	4.2	4.2
150°	2.3	2.3	2.9	3.2	3.6	3.6	3.6	3.6	3.6	3.6	3.6
152.5°	1.6	1.9	2.3	2.6	2.9	2.9	2.9	2.9	2.9	2.9	2.9
155°	1.6	1.6	1.9	1.9	2.3	2.3	2.3	2.3	2.6	2.3	2.3
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5
2.5°	624.9	624.6	625.9	624.6	618.1	620.7	619.8	623.3	623.6	624.6	627.9
5°	621.7	621.7	623.3	622.0	615.9	618.5	618.1	621.7	622.3	623.0	626.6
7.5°	615.2	615.5	617.8	616.8	610.4	614.2	613.9	618.1	619.4	620.7	624.0
10°	609.1	608.7	611.3	610.4	604.2	608.7	608.4	612.6	614.6	616.8	620.7
12.5°	605.8	604.8	605.8	604.8	598.0	601.6	601.9	606.8	609.1	612.0	616.5
15°	605.8	604.2	604.2	602.3	594.5	596.7	597.1	600.3	603.2	606.1	611.7
17.5°	605.2	603.5	603.2	601.6	593.2	593.2	592.9	595.1	596.7	599.7	605.5
20°	601.6	601.0	600.6	599.7	591.9	590.6	589.9	589.9	590.9	591.9	597.7
22.5°	592.2	592.9	593.5	594.1	588.0	585.7	586.0	585.4	584.4	584.4	589.3
25°	574.7	577.9	580.5	583.5	579.9	578.3	580.2	579.2	577.6	576.3	580.5
27.5°	546.8	553.6	559.1	566.3	566.6	565.3	570.5	569.8	569.5	567.6	570.8
30°	508.3	518.9	526.4	536.8	545.5	546.8	555.6	556.9	558.2	557.2	560.4
32.5°	461.6	476.2	488.8	505.0	513.4	520.9	533.2	538.4	543.6	545.2	548.8
35°	410.7	427.2	442.1	460.0	473.2	489.5	504.4	512.1	523.8	528.3	533.5
37.5°	362.4	377.9	392.5	410.4	431.8	448.6	467.1	484.6	500.5	507.0	514.7
40°	319.6	332.2	346.2	361.7	381.2	403.2	423.3	447.6	466.4	479.4	490.7
42.5°	287.2	293.3	305.3	319.3	334.8	357.2	377.6	404.9	427.5	446.0	464.8
45°	258.3	261.3	270.0	277.5	293.3	313.1	334.8	361.4	385.1	408.7	431.4
47.5°	233.7	237.3	241.5	246.0	257.4	273.9	292.7	316.7	340.3	367.9	393.8
50°	217.2	218.1	218.8	220.7	227.5	238.9	254.1	274.5	297.2	326.7	354.3
52.5°	202.6	202.6	200.6	199.7	202.3	209.4	218.1	232.7	256.1	283.3	312.5
55°	187.0	184.1	183.5	180.2	180.9	184.1	188.3	199.7	218.8	242.1	270.3
57.5°	165.3	164.0	164.0	162.7	160.1	161.7	162.7	170.8	184.4	204.5	229.2
60°	140.4	139.7	141.3	141.6	139.4	140.4	140.0	144.9	154.6	170.8	191.2
62.5°	115.4	118.3	118.6	119.9	118.6	118.3	119.9	124.1	129.0	141.3	157.2
65°	96.9	98.5	98.9	100.5	99.8	99.8	101.1	104.4	107.3	115.7	128.0
67.5°	84.9	84.3	84.6	85.6	84.6	84.3	85.2	87.2	89.5	94.6	103.4
70°	75.5	74.9	74.9	74.9	73.6	72.6	72.9	73.6	74.6	77.5	83.0
72.5°	68.4	68.4	67.4	66.4	65.5	64.8	64.2	63.5	63.2	64.2	67.1
75°	61.9	62.2	61.9	60.9	59.6	58.3	57.0	55.8	54.1	53.5	53.8
77.5°	56.1	56.4	56.7	56.4	55.1	53.5	51.5	49.6	47.3	45.1	43.8
80°	50.9	51.5	51.9	51.5	50.6	49.3	47.0	44.7	41.5	38.6	35.3
82.5°	46.4	47.3	47.6	47.6	47.0	45.7	43.1	40.5	37.0	33.1	28.8
85°	42.8	43.4	44.1	44.1	43.8	42.5	39.9	37.0	33.4	28.8	24.3
87.5°	39.2	39.5	40.2	40.8	40.2	38.9	36.6	33.4	29.8	25.3	20.1
90°	35.7	36.0	36.6	37.3	37.0	35.7	33.7	30.8	26.9	22.0	16.9
92.5°	32.1	32.7	33.1	33.4	33.7	32.7	31.1	28.2	24.3	19.4	14.6
95°	29.5	29.5	30.1	30.5	30.8	29.8	28.5	25.6	22.0	17.5	12.6
97.5°	26.9	26.9	27.6	27.6	27.9	27.2	25.9	23.3	19.8	15.6	10.7
100°	24.3	24.6	25.0	25.3	25.3	25.0	23.7	21.1	17.8	13.9	9.4
102.5°	22.7	22.7	23.0	23.0	23.3	22.7	21.4	19.1	15.9	12.3	8.1
105°	21.1	21.1	21.4	21.4	21.1	20.4	19.1	17.2	14.3	10.7	7.1
107.5°	19.8	19.8	19.8	19.8	19.4	18.8	17.5	15.2	12.6	9.7	6.5
110°	18.8	18.5	18.5	18.2	17.8	16.9	15.6	13.6	11.3	8.4	5.5

TEST NUMBER: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	17.8	17.5	17.2	16.9	16.2	15.2	13.9	12.3	10.0	7.5	4.9
115°	16.9	16.5	16.2	15.6	14.9	13.9	12.6	11.0	8.8	6.5	4.2
117.5°	15.9	15.6	14.9	14.3	13.6	12.6	11.3	9.7	7.8	5.8	3.9
120°	14.6	14.3	13.9	13.3	12.6	11.3	10.0	8.8	6.8	5.2	3.2
122.5°	13.6	13.3	12.6	12.3	11.3	10.4	9.1	7.8	6.2	4.5	2.9
125°	12.3	12.0	11.7	11.0	10.4	9.1	8.1	6.8	5.5	3.9	2.3
127.5°	11.3	11.0	10.4	9.7	9.1	8.1	7.1	6.2	4.9	3.2	2.3
130°	10.0	9.7	9.4	8.8	8.1	7.1	6.5	5.2	4.2	2.9	1.9
132.5°	8.8	8.8	8.4	7.8	7.1	6.5	5.5	4.5	3.6	2.6	1.6
135°	8.1	7.8	7.5	6.8	6.5	5.5	4.9	3.9	2.9	2.3	1.3
137.5°	7.1	6.8	6.5	6.2	5.5	4.9	4.2	3.2	2.6	1.9	1.3
140°	6.2	5.8	5.8	5.2	4.9	4.2	3.6	2.9	2.3	1.6	1.0
142.5°	5.5	5.2	4.9	4.5	4.2	3.6	2.9	2.3	1.9	1.3	1.0
145°	4.9	4.5	4.2	3.9	3.6	2.9	2.6	1.9	1.6	1.3	1.0
147.5°	3.9	3.9	3.6	3.2	2.9	2.6	2.3	1.9	1.3	1.0	0.6
150°	3.2	3.2	2.9	2.6	2.6	2.3	1.9	1.6	1.3	1.0	0.6
152.5°	2.9	2.6	2.6	2.3	2.3	1.9	1.6	1.3	1.0	1.0	0.6
155°	2.3	2.3	2.3	1.9	1.9	1.6	1.3	1.3	1.0	0.6	0.6
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5
2.5°	628.5	624.6	627.9	633.7	633.0	632.4	631.7	633.0	637.3	635.0	631.4
5°	627.5	623.6	627.2	632.7	632.4	631.4	630.8	632.1	636.3	634.0	630.1
7.5°	625.6	622.0	624.6	630.1	630.1	629.5	628.8	630.1	634.0	632.1	628.2
10°	622.3	619.8	622.3	627.5	627.9	626.6	625.9	627.5	631.4	630.5	627.2
12.5°	619.8	617.2	620.1	625.3	625.6	624.3	623.3	625.3	630.5	631.1	630.1
15°	616.2	613.9	617.5	623.0	623.0	622.0	622.0	624.6	631.7	634.7	636.3
17.5°	611.0	609.4	613.6	619.1	619.4	618.8	619.1	624.3	633.7	640.8	645.4
20°	604.5	603.9	608.4	614.2	615.2	615.5	617.2	624.9	637.9	647.6	652.2
22.5°	596.7	597.1	602.3	608.4	609.7	610.7	613.9	624.9	641.1	651.5	653.5
25°	588.0	589.0	594.5	601.9	603.5	605.5	611.0	625.3	642.1	648.9	645.7
27.5°	578.6	580.5	587.7	595.4	597.4	600.6	607.8	623.3	637.6	637.9	625.9
30°	568.9	571.1	579.6	588.6	591.9	595.1	603.9	618.8	626.6	616.2	595.1
32.5°	557.8	561.1	569.5	580.5	584.4	588.6	597.4	610.0	607.1	584.7	554.6
35°	543.9	548.4	558.2	571.1	574.7	580.2	586.4	589.3	576.3	544.6	510.5
37.5°	526.7	533.5	544.9	559.8	563.7	567.2	568.9	560.8	534.8	500.5	465.1
40°	507.0	517.3	529.6	546.2	550.1	550.1	544.2	527.1	494.3	449.3	410.0
42.5°	483.0	495.6	511.2	527.7	531.6	527.1	513.1	483.0	445.7	395.5	354.0
45°	453.8	470.7	488.2	505.3	507.3	497.2	472.3	434.0	388.0	341.3	301.8
47.5°	419.1	441.2	460.3	479.7	477.1	460.3	426.9	383.5	334.8	290.8	259.0
50°	380.2	406.1	427.5	446.0	440.5	417.2	377.9	332.6	284.3	246.7	220.4
52.5°	338.7	368.5	389.9	404.9	397.4	369.5	326.4	283.0	243.4	209.1	191.6
55°	295.6	325.8	347.8	359.5	349.7	319.6	277.1	237.6	200.3	178.0	167.6
57.5°	253.8	282.0	302.7	312.1	299.8	269.7	230.5	197.1	170.2	151.4	146.2
60°	213.6	236.6	256.4	263.5	250.2	222.4	188.6	162.1	142.3	129.3	126.7
62.5°	176.3	195.1	210.7	216.2	203.2	181.5	152.3	132.6	118.6	112.2	108.9
65°	145.5	156.6	172.4	171.5	163.7	143.6	122.2	108.3	99.2	95.0	93.0
67.5°	114.4	124.5	134.5	135.8	126.1	112.2	98.2	88.2	83.3	81.0	80.1
70°	88.5	95.9	102.1	100.5	95.3	86.5	77.8	72.3	70.3	69.4	69.4
72.5°	68.7	72.6	75.5	73.6	70.3	65.8	61.6	59.3	59.6	60.3	60.9
75°	53.2	54.1	54.8	52.8	52.2	49.3	48.9	49.3	51.2	53.2	54.1
77.5°	40.8	39.5	38.6	36.6	37.0	36.6	38.2	40.8	43.8	46.7	49.3
80°	31.4	28.5	26.3	24.3	25.3	26.9	30.1	34.0	37.9	41.2	44.4
82.5°	24.3	20.1	16.9	14.9	16.9	19.4	23.7	28.5	33.1	36.6	40.2
85°	18.8	13.9	10.0	8.1	10.0	13.9	18.5	24.0	28.8	32.7	36.3
87.5°	14.6	10.0	5.5	3.2	5.5	9.7	14.9	20.1	25.0	29.5	33.1
90°	11.7	6.8	2.6	0.6	2.9	6.8	11.7	16.9	21.7	26.6	30.1
92.5°	9.4	4.9	1.3	0.0	1.6	5.2	9.7	14.6	19.4	24.0	27.6
95°	7.8	3.9	1.0	0.0	1.3	3.9	7.8	12.6	17.2	21.7	24.6
97.5°	6.5	2.9	0.6	0.0	0.6	3.2	6.5	10.7	15.2	19.4	22.4
100°	5.5	2.6	0.6	0.0	0.6	2.6	5.5	9.4	13.3	17.2	20.1
102.5°	4.5	1.9	0.3	0.3	0.3	1.9	4.9	8.1	11.7	15.2	18.2
105°	4.2	1.6	0.3	0.3	0.3	1.6	4.2	7.1	10.4	13.6	16.2
107.5°	3.6	1.3	0.3	0.3	0.3	1.3	3.6	6.2	9.4	12.3	14.6
110°	2.9	1.3	0.3	0.3	0.3	1.3	2.9	5.5	8.1	10.7	13.0

TEST NUMBER: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	2.6	1.0	0.3	0.3	0.3	1.0	2.6	4.9	7.1	9.7	11.7
115°	2.3	1.0	0.3	0.3	0.3	1.0	2.3	4.2	6.2	8.4	10.4
117.5°	1.9	1.0	0.3	0.3	0.3	0.6	1.9	3.6	5.5	7.5	9.4
120°	1.6	0.6	0.3	0.3	0.3	0.6	1.6	3.2	4.9	6.5	8.1
122.5°	1.6	0.6	0.3	0.3	0.3	0.6	1.3	2.6	4.2	5.5	7.1
125°	1.3	0.6	0.3	0.3	0.3	0.3	1.3	2.3	3.6	4.9	6.2
127.5°	1.3	0.6	0.3	0.3	0.3	0.3	1.0	1.9	2.9	4.2	5.5
130°	1.0	0.6	0.3	0.3	0.3	0.3	0.6	1.6	2.6	3.6	4.5
132.5°	1.0	0.6	0.3	0.3	0.3	0.3	0.6	1.3	1.9	2.9	3.9
135°	1.0	0.3	0.3	0.3	0.3	0.3	0.3	1.0	1.6	2.3	2.9
137.5°	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.6	1.3	1.6	2.6
140°	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.6	1.0	1.3	1.9
142.5°	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.6	1.0	1.6
145°	0.6	0.3	0.3	0.6	0.6	0.3	0.3	0.6	0.6	1.0	1.3
147.5°	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.6	1.0
150°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.0
152.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
155°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5
2.5°	630.8	623.3	627.2	625.9	627.2	630.5	630.1	629.2	629.8	628.2	626.6
5°	629.5	622.0	625.9	624.3	625.9	629.2	628.5	627.5	628.5	626.6	624.9
7.5°	627.9	621.1	625.6	625.3	628.2	632.4	632.7	632.7	635.0	632.1	630.8
10°	627.9	624.3	630.5	632.7	640.2	645.7	646.3	647.6	651.5	650.9	647.6
12.5°	634.7	634.0	643.1	648.6	655.4	663.2	667.4	668.7	671.3	669.3	668.1
15°	643.4	646.7	656.7	662.9	670.3	676.2	677.1	677.8	679.7	676.8	674.5
17.5°	655.1	657.0	665.1	667.7	672.6	673.6	672.3	669.0	669.0	662.5	660.6
20°	660.6	659.6	662.9	658.7	656.7	650.9	645.4	639.2	638.9	632.1	631.4
22.5°	655.7	649.3	642.4	632.1	627.5	619.1	611.7	608.1	605.8	597.1	594.8
25°	638.6	622.7	612.6	600.3	589.3	579.6	572.4	565.0	557.8	550.7	547.5
27.5°	608.7	593.8	577.6	560.4	545.2	530.3	518.3	510.8	504.0	494.6	489.8
30°	572.1	551.4	533.5	517.0	492.0	473.9	463.8	448.9	443.7	439.5	430.5
32.5°	529.0	504.0	479.7	457.4	431.8	414.9	401.6	390.6	387.3	376.3	373.7
35°	481.3	448.6	421.1	399.0	380.5	360.1	349.1	341.6	335.2	327.7	326.4
37.5°	425.3	395.8	364.7	345.2	330.6	313.1	304.7	299.5	296.6	291.1	290.1
40°	368.9	339.4	318.0	298.5	289.5	280.1	273.9	271.6	270.3	268.4	266.4
42.5°	317.7	291.7	276.5	263.5	259.6	255.1	253.5	254.8	253.5	252.8	252.5
45°	274.2	254.4	243.8	239.9	238.9	237.6	238.9	241.2	241.5	240.8	240.8
47.5°	234.7	225.3	220.7	221.4	223.0	224.0	226.2	229.2	229.8	228.2	228.8
50°	208.7	203.2	202.3	204.9	208.4	209.7	212.3	214.6	214.3	213.6	213.0
52.5°	184.4	182.8	185.4	188.0	191.9	192.5	193.5	194.5	194.2	192.9	192.2
55°	164.0	165.3	167.6	168.6	171.5	171.1	171.5	171.5	170.2	169.5	168.6
57.5°	145.5	145.9	147.2	147.5	149.1	148.5	148.1	147.5	145.5	145.2	144.2
60°	126.7	126.1	129.0	126.7	128.0	126.7	126.4	124.8	122.8	122.5	121.9
62.5°	108.9	107.6	109.6	108.6	109.2	107.9	107.3	105.3	103.7	103.4	103.1
65°	93.0	92.4	94.3	94.0	94.6	93.0	92.4	91.1	89.8	89.5	89.1
67.5°	79.7	81.4	82.3	82.3	83.0	82.7	81.0	80.7	80.4	79.1	79.1
70°	70.0	71.0	72.9	73.3	72.9	73.6	72.3	72.0	71.6	71.0	70.7
72.5°	62.2	63.5	65.5	65.8	65.5	65.5	64.8	64.5	64.5	63.5	63.5
75°	56.1	57.7	59.3	59.3	59.3	58.7	58.0	58.0	57.4	57.0	56.4
77.5°	50.9	52.8	54.1	53.8	53.5	52.8	52.8	51.9	50.9	50.9	50.2
80°	47.0	48.3	49.3	48.9	48.6	47.6	47.3	46.4	45.7	44.7	44.7
82.5°	42.8	44.4	45.1	44.7	44.1	43.1	42.8	42.1	41.5	41.2	40.5
85°	39.2	40.8	41.2	40.5	39.9	39.2	38.9	38.6	38.2	37.6	37.6
87.5°	35.7	37.3	37.3	37.0	36.3	36.0	35.7	35.3	35.0	34.7	34.4
90°	32.7	34.0	34.0	33.7	33.4	33.1	32.7	32.4	32.1	31.8	31.8
92.5°	29.8	31.1	31.1	30.8	30.5	30.1	30.1	29.8	29.5	29.2	28.8
95°	27.2	28.5	28.5	28.5	28.2	27.9	27.9	27.6	27.2	27.2	26.9
97.5°	24.6	25.9	25.9	25.9	25.6	25.3	25.3	25.0	25.0	25.0	24.6
100°	22.4	23.3	23.7	23.7	23.3	23.3	23.3	23.0	23.0	23.0	22.7
102.5°	20.1	21.1	21.7	21.7	21.7	21.4	21.4	21.4	21.4	21.4	21.1
105°	18.2	19.1	19.8	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
107.5°	16.5	17.5	18.2	18.5	18.8	18.8	19.1	19.1	19.1	19.1	19.1
110°	14.9	15.9	16.9	17.2	17.5	17.8	17.8	18.2	17.8	17.8	17.8

TEST NUMBER: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	13.3	14.6	15.2	15.9	16.2	16.5	16.9	16.9	16.9	16.9	16.9
115°	12.0	13.3	13.9	14.6	15.2	15.6	15.6	15.9	15.9	15.9	15.6
117.5°	10.7	12.0	12.6	13.3	13.6	14.3	14.6	14.6	14.6	14.6	14.3
120°	9.7	10.7	11.3	12.0	12.6	13.0	13.3	13.3	13.3	13.3	13.3
122.5°	8.4	9.4	10.4	11.0	11.3	11.7	12.0	12.0	12.0	12.0	12.0
125°	7.5	8.4	9.1	9.7	10.0	10.7	10.7	10.7	10.7	10.7	10.7
127.5°	6.5	7.5	8.1	8.8	9.1	9.4	9.7	9.7	9.7	9.7	9.7
130°	5.5	6.5	7.1	7.8	8.1	8.4	8.4	8.8	8.8	8.8	8.8
132.5°	4.9	5.5	6.2	6.8	7.1	7.5	7.5	7.8	7.8	7.8	7.8
135°	3.9	4.9	5.2	5.8	6.2	6.5	6.5	6.8	6.8	6.8	6.8
137.5°	3.2	3.9	4.5	5.2	5.5	5.5	5.8	5.8	6.2	6.2	6.2
140°	2.6	2.9	3.9	4.2	4.5	4.9	5.2	5.2	5.2	5.2	5.2
142.5°	1.9	2.6	2.9	3.6	3.9	4.2	4.5	4.5	4.5	4.5	4.5
145°	1.6	1.9	2.3	2.9	3.2	3.6	3.9	3.9	3.9	3.9	3.9
147.5°	1.3	1.6	1.9	2.3	2.6	2.9	3.2	3.2	3.2	3.2	3.2
150°	1.0	1.3	1.6	1.6	1.9	2.3	2.6	2.9	2.9	2.9	2.9
152.5°	1.0	1.0	1.3	1.3	1.6	1.9	2.3	2.3	2.3	2.3	2.3
155°	0.6	1.0	1.0	1.0	1.3	1.3	1.6	1.9	1.9	1.9	1.9
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5
2.5°	627.5	628.8	628.2	627.2	626.9	628.5	626.9	619.4	622.3	622.7	624.9
5°	626.6	627.5	626.9	626.2	625.3	627.2	625.3	617.5	620.4	620.7	623.0
7.5°	633.0	633.4	633.4	631.7	629.2	630.1	627.5	618.8	620.4	620.4	622.0
10°	649.3	649.9	650.9	646.7	643.4	640.8	637.3	626.6	626.2	623.6	623.6
12.5°	670.3	668.7	667.1	665.1	662.5	659.3	654.1	641.5	637.3	633.0	628.8
15°	676.5	675.8	675.5	674.5	672.9	671.9	668.1	655.4	649.3	644.1	636.6
17.5°	660.3	661.6	665.8	666.1	668.1	671.9	671.3	662.5	657.0	654.8	645.7
20°	631.1	631.4	636.6	638.9	647.3	653.8	658.7	657.7	656.4	659.0	652.2
22.5°	596.1	598.4	603.9	607.4	615.5	623.0	630.8	635.0	641.8	652.5	651.2
25°	548.4	551.4	559.1	565.0	576.3	587.7	598.0	605.5	613.6	634.0	640.8
27.5°	491.4	495.9	506.0	511.8	527.7	539.4	554.3	568.9	580.2	603.5	617.5
30°	431.4	435.3	446.0	454.1	467.7	483.6	502.4	523.2	542.0	565.6	583.1
32.5°	375.4	379.6	388.3	395.5	410.7	424.0	444.7	470.3	487.8	520.6	543.9
35°	326.4	330.3	336.5	342.6	355.3	368.9	386.7	411.7	434.0	468.1	497.6
37.5°	292.0	292.7	296.3	299.8	309.2	319.6	333.5	355.6	376.3	413.0	445.4
40°	267.4	267.4	269.4	270.3	274.5	280.7	289.5	306.6	323.8	351.7	391.2
42.5°	252.2	251.5	251.5	251.9	251.5	254.4	259.6	267.7	283.0	306.0	336.8
45°	240.8	239.5	238.6	236.3	235.0	235.0	235.3	238.2	247.0	261.9	286.9
47.5°	228.2	227.9	226.2	223.7	221.4	219.8	217.2	216.2	218.8	227.2	244.1
50°	213.6	212.0	210.4	208.4	205.8	204.2	199.3	199.7	197.4	201.3	210.0
52.5°	192.2	190.9	190.3	188.6	187.7	187.0	183.1	179.2	178.3	178.9	182.2
55°	168.6	169.2	166.6	167.9	167.6	164.7	163.0	160.1	159.2	158.8	160.4
57.5°	143.9	144.6	142.9	144.2	144.2	142.6	141.6	141.6	139.4	137.4	139.7
60°	121.6	120.3	121.2	122.8	122.8	121.9	121.2	121.2	119.6	119.0	120.6
62.5°	103.4	102.1	103.1	104.7	105.0	104.4	103.7	103.7	101.8	101.8	103.1
65°	89.5	89.8	89.5	90.8	90.8	91.1	90.4	89.8	87.5	88.5	88.2
67.5°	79.4	79.1	79.1	80.4	80.1	80.7	80.1	79.1	77.5	76.2	75.8
70°	71.0	70.7	70.7	71.3	71.6	71.6	71.3	70.7	68.4	67.1	66.1
72.5°	63.5	63.2	63.5	63.9	64.2	64.5	64.2	63.5	61.6	60.0	58.3
75°	56.7	56.4	57.4	57.4	57.7	57.7	58.0	57.7	56.1	54.1	52.2
77.5°	49.9	50.2	51.2	51.5	52.2	52.5	52.8	52.8	51.2	49.6	47.0
80°	44.4	45.1	45.7	46.0	46.7	47.6	48.0	48.3	47.0	45.4	42.5
82.5°	40.5	40.8	41.5	41.8	42.8	43.1	43.4	44.1	43.4	41.8	38.6
85°	37.3	37.6	38.2	38.2	38.9	39.5	39.9	40.2	39.9	38.2	35.0
87.5°	34.4	34.7	35.0	35.3	35.7	36.0	36.3	36.6	36.3	34.7	31.8
90°	31.8	31.8	32.1	32.1	32.4	32.7	33.4	33.4	33.1	31.8	28.8
92.5°	28.8	29.2	29.2	29.5	29.8	30.1	30.5	30.5	30.1	28.8	26.3
95°	26.9	26.9	27.2	27.2	27.6	27.6	27.9	27.9	27.6	26.3	23.7
97.5°	24.6	24.6	24.6	24.6	25.0	25.0	25.3	25.3	25.0	23.7	21.4
100°	22.7	22.7	22.7	22.7	22.7	23.0	23.0	23.0	22.7	21.4	19.1
102.5°	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	20.4	19.4	17.2
105°	20.1	20.1	20.1	19.8	19.8	19.8	19.4	19.4	18.5	17.5	15.6
107.5°	18.8	18.8	18.8	18.5	18.5	18.2	17.8	17.8	16.9	15.9	13.9
110°	17.8	17.8	17.8	17.5	17.2	16.9	16.5	16.2	15.2	13.9	12.3



TEST NUMBER: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	16.9	16.9	16.5	16.5	16.2	15.9	15.2	14.9	13.9	12.6	11.0
115°	15.6	15.6	15.6	15.2	14.9	14.6	14.3	13.6	12.6	11.3	9.7
117.5°	14.3	14.3	14.3	13.9	13.6	13.3	13.0	12.3	11.3	10.0	8.8
120°	13.0	13.0	13.0	12.6	12.3	12.0	11.7	11.0	10.0	9.1	7.5
122.5°	12.0	12.0	11.7	11.3	11.0	10.7	10.4	9.7	9.1	7.8	6.5
125°	10.7	10.7	10.4	10.4	10.0	9.7	9.4	8.8	7.8	6.8	5.8
127.5°	9.7	9.4	9.4	9.4	9.1	8.8	8.1	7.8	6.8	5.8	4.9
130°	8.4	8.4	8.4	8.1	8.1	7.8	7.1	6.5	5.8	5.2	4.2
132.5°	7.5	7.5	7.5	7.5	7.1	6.8	6.2	5.8	5.2	4.2	3.6
135°	6.8	6.8	6.5	6.5	6.2	5.8	5.5	4.9	4.2	3.6	2.9
137.5°	5.8	5.8	5.8	5.5	5.5	5.2	4.5	4.2	3.9	3.2	2.6
140°	5.2	5.2	4.9	4.9	4.5	4.5	4.2	3.6	3.2	2.6	2.3
142.5°	4.5	4.5	4.2	4.2	3.9	3.9	3.6	3.2	2.6	2.3	1.6
145°	3.9	3.9	3.6	3.6	3.6	3.2	2.9	2.6	2.3	1.9	1.6
147.5°	3.2	3.2	3.2	2.9	2.9	2.6	2.6	2.3	1.9	1.6	1.3
150°	2.9	2.9	2.6	2.6	2.6	2.3	1.9	1.9	1.6	1.3	1.0
152.5°	2.3	2.3	2.3	2.3	1.9	1.9	1.6	1.6	1.3	1.0	1.0
155°	1.9	1.9	1.9	1.6	1.6	1.6	1.3	1.3	1.0	1.0	0.6
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	627.5	627.5	627.5	627.5	627.5	627.5	627.5
2.5°	624.0	623.6	626.6	626.2	622.3	628.2	632.1
5°	622.3	622.0	624.6	625.3	621.1	627.2	631.4
7.5°	621.1	620.7	623.6	624.6	620.4	625.9	630.5
10°	621.4	619.8	622.3	623.0	619.1	624.9	628.8
12.5°	623.6	619.8	620.7	620.7	617.2	622.3	626.6
15°	629.2	621.1	619.8	618.8	614.2	619.1	623.3
17.5°	635.3	624.3	619.8	616.5	611.0	615.2	619.8
20°	641.5	627.9	620.4	615.2	607.8	611.7	614.9
22.5°	644.4	631.1	621.1	613.3	603.9	605.8	609.4
25°	640.5	629.8	619.8	610.4	599.0	599.3	602.3
27.5°	626.2	623.3	616.8	607.4	595.1	593.5	595.8
30°	601.9	610.0	610.4	603.5	590.6	587.3	588.3
32.5°	567.9	586.0	596.7	595.4	584.1	579.6	580.2
35°	528.7	551.4	574.7	582.5	574.4	570.8	569.5
37.5°	481.7	512.1	543.3	562.4	561.1	558.8	557.5
40°	429.8	466.4	503.4	533.9	543.3	543.3	543.9
42.5°	374.4	417.2	457.7	496.3	518.3	523.2	525.1
45°	320.9	364.0	408.1	452.5	482.0	497.2	502.7
47.5°	272.3	315.7	357.5	406.1	445.4	465.1	473.9
50°	230.8	263.2	307.3	355.6	398.4	422.7	439.9
52.5°	196.4	221.7	260.3	305.3	348.4	381.8	397.7
55°	167.6	184.8	217.5	256.4	297.6	332.2	350.7
57.5°	143.3	156.9	179.2	211.7	246.3	280.7	300.5
60°	121.9	131.3	146.5	172.1	201.6	231.1	250.2
62.5°	103.4	109.6	119.6	138.4	161.4	184.4	202.3
65°	89.1	91.7	97.2	108.9	126.4	143.9	159.2
67.5°	75.2	76.8	81.0	88.2	96.9	109.6	119.6
70°	64.8	64.8	65.2	69.4	73.9	82.0	89.1
72.5°	56.4	55.4	53.5	54.5	55.4	60.0	64.5
75°	49.6	47.3	44.1	42.8	42.1	42.8	45.4
77.5°	43.8	40.5	36.6	33.4	30.8	29.8	32.1
80°	38.9	35.0	30.5	26.3	22.0	19.8	20.7
82.5°	35.0	30.1	25.3	20.4	15.6	12.3	12.3
85°	30.8	26.3	21.1	15.9	11.0	6.8	6.2
87.5°	27.9	23.0	17.5	12.6	7.8	3.6	1.9
90°	25.0	20.1	14.9	10.0	5.5	1.6	0.0
92.5°	22.4	17.8	13.0	8.1	3.9	1.0	0.0
95°	20.1	15.9	11.0	6.8	3.2	0.6	0.3
97.5°	17.8	13.9	9.7	5.5	2.3	0.6	0.3
100°	16.2	12.3	8.4	4.5	1.9	0.3	0.3
102.5°	14.3	11.0	7.1	3.9	1.6	0.3	0.3
105°	12.6	9.7	6.2	3.2	1.3	0.3	0.3
107.5°	11.3	8.4	5.5	2.9	1.3	0.3	0.3
110°	10.0	7.5	4.9	2.6	1.0	0.3	0.3

TEST NUMBER: P1213011

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	9.1	6.5	4.2	2.3	0.6	0.3	0.3
115°	7.8	5.8	3.6	1.9	0.6	0.3	0.3
117.5°	6.8	4.9	3.2	1.6	0.6	0.3	0.3
120°	5.8	4.2	2.6	1.3	0.3	0.3	0.3
122.5°	5.2	3.6	2.3	1.3	0.3	0.3	0.3
125°	4.5	3.2	1.9	1.0	0.3	0.3	0.3
127.5°	3.9	2.6	1.6	0.6	0.3	0.3	0.3
130°	3.2	2.3	1.3	0.6	0.3	0.3	0.3
132.5°	2.6	1.9	1.3	0.6	0.3	0.3	0.3
135°	2.3	1.6	1.0	0.6	0.3	0.3	0.3
137.5°	1.9	1.3	0.6	0.6	0.6	0.3	0.3
140°	1.6	1.0	0.6	0.6	0.6	0.6	0.3
142.5°	1.3	1.0	0.6	0.6	0.6	0.6	0.3
145°	1.0	0.6	0.6	0.6	0.6	0.6	0.3
147.5°	1.0	0.6	0.6	0.6	0.6	0.6	0.3
150°	0.6	0.6	0.6	0.6	0.6	0.6	0.6
152.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6
155°	0.6	0.6	0.6	0.6	0.6	0.6	0.6
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)