

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: P1213713

Luminaire Tested: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213713
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-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

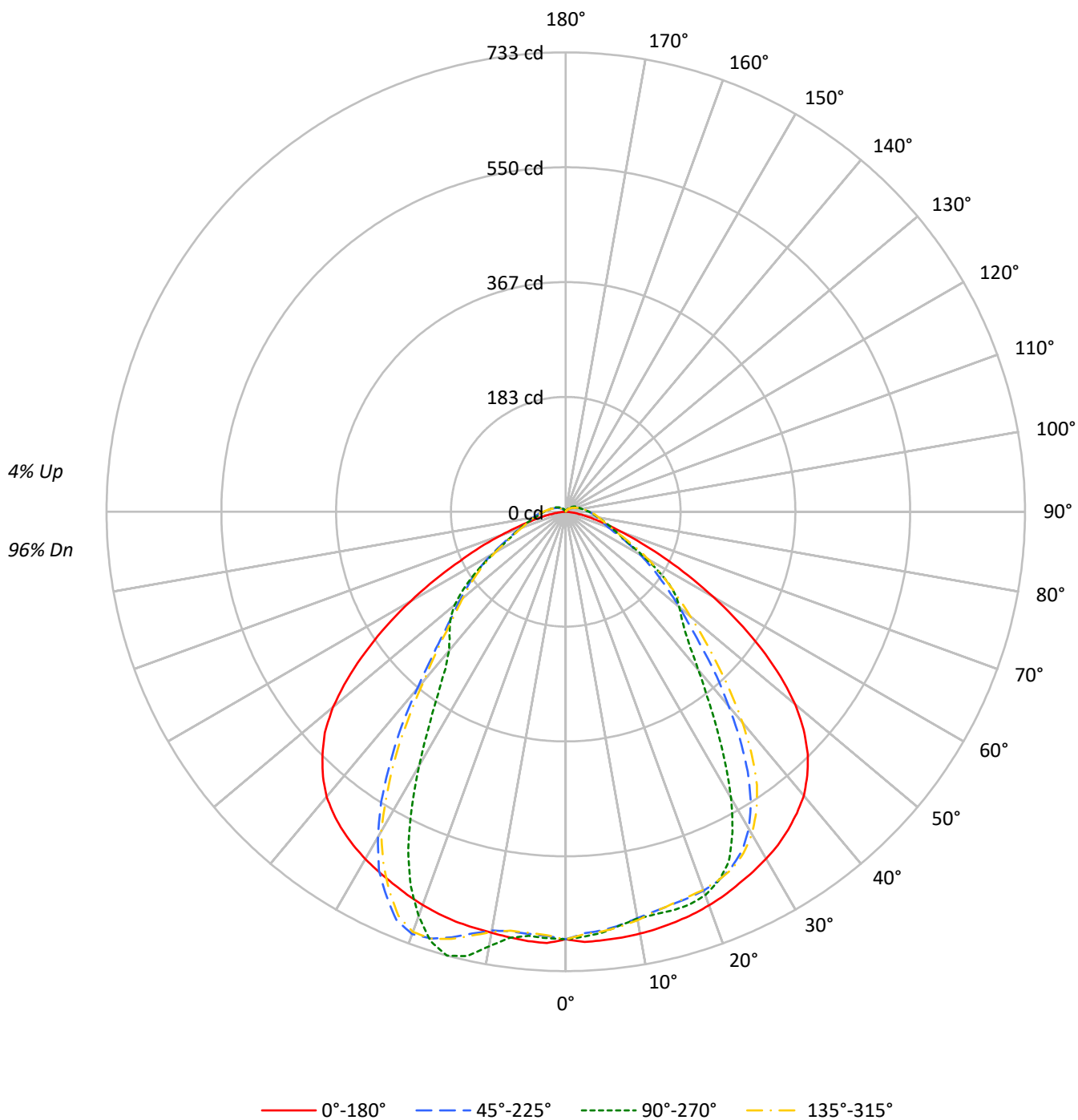
Lumens per Lamp: N/A
Luminaire Lumens: 1626.0 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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: P1213713

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

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	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°	5512	5512	5512	5512
5°	5552	5294	5563	5334
10°	5578	5073	5566	5417
15°	5621	5006	5618	5573
20°	5683	4926	5677	5193
25°	5753	4673	5749	4515
30°	5861	4050	5864	3588
35°	5976	3275	5993	2772
40°	6077	2637	6102	2323
45°	6055	2234	6086	2175
50°	5795	2057	5876	2011
55°	5141	1848	5269	1680
60°	4170	1414	4391	1298
65°	3100	1083	3340	1027
70°	2108	934	2376	893
75°	1379	843	1605	797
80°	889	785	1044	723
85°	458	783	601	717

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 6086 cd/sqm

TEST NUMBER: P1213713

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.8	4.0
10°-20°	192.8	11.9
20°-30°	293.1	18.0
30°-40°	314.4	19.3
40°-50°	272.9	16.8
50°-60°	202.2	12.4
60°-70°	115.9	7.1
70°-80°	64.2	3.9
80°-90°	39.1	2.4
90°-100°	25.4	1.6
100°-110°	17.0	1.0
110°-120°	11.5	0.7
120°-130°	7.1	0.4
130°-140°	3.7	0.2
140°-150°	1.7	0.1
150°-160°	0.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	550.6	33.9
0°-40°	865.0	53.2
0°-60°	1340.1	82.4
0°-90°	1559.1	95.9
90°-120°	53.9	3.3
90°-150°	66.4	4.1
90°-180°	67.0	4.1
0°-180°	1626.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	682	682	682	682	682	
5°	686	674	688	679	686	65
15°	678	658	677	733	678	192
25°	655	616	654	595	655	303
35°	619	419	621	355	619	387
45°	546	269	549	262	546	418
55°	381	202	391	183	381	338
65°	173	102	186	97	173	174
75°	49	65	57	61	49	56
85°	7	45	9	41	7	9
90°	0	37	1	34	0	0
95°	0	31	0	29	0	0
105°	0	23	0	22	0	0
115°	0	19	0	17	0	0
125°	0	14	0	12	0	0
135°	0	9	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: P1213713

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1
2.5°	687.0	685.2	684.5	683.1	684.2	688.4	685.6	681.0	681.4	673.3	677.5
5°	686.3	684.2	683.1	681.7	682.4	686.3	683.5	678.9	678.5	670.4	674.3
7.5°	685.2	683.1	681.4	680.3	680.7	683.8	680.3	675.0	674.0	665.2	668.7
10°	683.5	682.1	679.6	677.8	677.5	681.0	675.4	670.1	667.6	658.5	662.0
12.5°	681.0	678.9	676.4	673.3	672.9	675.0	670.4	663.0	660.6	653.2	657.1
15°	677.5	675.0	672.2	668.7	666.9	668.3	662.7	656.0	655.6	649.3	654.6
17.5°	673.6	670.1	666.9	662.0	659.5	660.6	656.0	650.0	650.7	646.8	652.8
20°	668.3	664.5	659.5	654.6	651.1	652.8	649.7	645.1	646.1	643.3	648.6
22.5°	662.3	657.1	651.1	645.4	642.6	645.1	642.6	638.7	639.1	637.3	640.5
25°	654.6	648.6	641.6	634.5	633.1	634.9	633.4	630.3	628.9	626.0	627.5
27.5°	647.5	640.8	632.0	624.6	622.2	625.7	622.5	617.2	613.4	609.5	606.7
30°	639.4	631.3	621.5	613.0	610.9	612.3	607.7	599.6	589.4	584.5	576.7
32.5°	630.6	620.1	607.7	598.2	596.8	595.8	587.3	575.7	559.8	550.0	538.0
35°	619.0	607.4	592.6	581.0	578.8	572.9	559.1	543.6	523.2	506.3	485.8
37.5°	606.0	592.2	576.7	561.2	555.2	543.3	523.9	507.7	476.7	456.2	431.6
40°	591.2	574.6	555.6	536.9	527.1	507.7	485.5	461.5	431.6	404.1	383.3
42.5°	570.7	553.1	530.6	509.8	492.9	467.2	441.1	407.3	379.8	356.5	335.4
45°	546.4	525.3	499.2	474.2	452.7	422.1	391.4	357.6	334.7	307.6	293.1
47.5°	515.1	492.2	464.3	436.5	408.3	374.5	342.4	310.0	287.1	267.8	257.2
50°	478.1	456.9	426.3	393.2	362.2	326.9	294.9	270.6	248.4	236.4	228.3
52.5°	432.3	412.6	381.2	345.3	315.3	280.8	251.5	231.8	216.0	207.2	204.3
55°	381.2	363.9	332.9	299.5	268.8	237.1	214.9	197.6	187.4	182.1	182.5
57.5°	326.6	313.2	284.0	254.0	225.1	201.2	181.1	167.3	159.6	159.2	160.3
60°	272.0	262.1	236.8	211.0	185.7	166.3	151.5	142.0	137.0	137.4	137.0
62.5°	219.8	210.7	192.4	171.2	151.1	138.1	124.7	120.8	116.6	116.3	116.3
65°	173.0	165.9	151.1	136.0	120.8	112.4	105.7	101.1	97.9	97.2	97.6
67.5°	130.0	127.2	117.0	106.7	97.2	92.0	86.3	85.3	82.8	82.8	83.5
70°	96.9	94.8	89.1	83.1	79.3	75.7	72.9	72.9	72.6	72.2	74.0
72.5°	70.1	70.5	68.7	64.1	63.8	63.1	62.4	63.4	63.8	64.8	66.9
75°	49.3	50.4	50.4	49.7	51.1	52.8	53.9	55.7	57.8	59.2	61.7
77.5°	34.9	34.9	36.6	38.8	41.6	44.7	47.6	50.0	52.8	54.6	56.7
80°	22.5	23.6	26.4	30.3	34.2	38.4	42.3	45.4	48.3	51.1	52.5
82.5°	13.4	15.1	18.7	23.6	28.5	33.8	37.7	41.6	44.7	47.6	48.6
85°	6.7	9.2	13.4	18.7	24.0	29.6	34.5	38.0	41.6	44.0	45.4
87.5°	2.1	4.9	9.5	14.4	20.1	25.7	31.0	34.9	38.0	40.2	41.6
90°	0.0	2.5	6.7	12.0	17.3	22.9	27.8	32.1	35.2	37.0	38.0
92.5°	0.0	1.4	5.3	9.9	14.8	20.4	25.4	29.2	32.1	33.8	34.5
95°	0.4	1.1	3.9	8.1	13.0	18.3	22.9	26.4	29.2	31.0	31.4
97.5°	0.4	0.7	3.2	6.7	11.3	16.2	20.8	24.3	26.4	28.2	28.5
100°	0.4	0.7	2.5	6.0	9.9	14.4	18.7	21.8	24.3	25.7	26.1
102.5°	0.4	0.4	2.1	4.9	8.8	12.7	16.6	19.7	21.8	23.3	24.0
105°	0.4	0.4	1.8	4.2	7.8	11.3	14.8	18.0	19.7	21.1	21.8
107.5°	0.4	0.4	1.4	3.5	6.7	9.9	13.4	15.9	18.0	19.4	20.1
110°	0.4	0.4	1.1	3.2	5.6	8.8	11.6	14.1	16.2	17.6	18.3

TEST NUMBER: P1213713

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.4	0.4	1.1	2.8	4.9	7.8	10.2	12.7	14.4	15.9	16.9
115°	0.4	0.4	1.1	2.5	4.6	6.7	9.2	11.3	13.0	14.4	15.5
117.5°	0.4	0.4	1.1	2.1	3.9	6.0	8.1	10.2	11.6	13.0	14.1
120°	0.4	0.4	0.7	1.8	3.5	5.3	7.0	8.8	10.6	12.0	13.0
122.5°	0.4	0.4	0.7	1.8	2.8	4.6	6.3	7.8	9.5	10.6	11.6
125°	0.4	0.4	0.7	1.4	2.5	4.2	5.6	7.0	8.1	9.5	10.6
127.5°	0.4	0.4	0.7	1.4	2.1	3.5	4.9	6.3	7.4	8.5	9.2
130°	0.4	0.4	0.7	1.1	1.8	2.8	4.2	5.3	6.7	7.4	8.1
132.5°	0.4	0.4	0.4	1.1	1.4	2.1	3.2	4.6	5.6	6.7	7.0
135°	0.4	0.4	0.4	0.7	1.4	1.8	2.5	3.5	4.6	5.6	6.3
137.5°	0.4	0.4	0.4	0.7	1.1	1.8	2.1	2.8	3.9	4.6	5.6
140°	0.4	0.4	0.4	0.7	1.1	1.4	1.8	2.5	3.2	3.9	4.6
142.5°	0.4	0.4	0.4	0.7	0.7	1.1	1.4	2.1	2.5	3.2	3.9
145°	0.4	0.4	0.4	0.7	0.7	1.1	1.4	1.8	2.1	2.5	3.2
147.5°	0.4	0.4	0.4	0.7	0.7	0.7	1.1	1.4	1.8	2.1	2.5
150°	0.7	0.7	0.7	0.7	0.7	0.7	1.1	1.1	1.4	1.8	2.1
152.5°	0.7	0.7	0.7	0.7	0.7	0.7	1.1	1.1	1.1	1.4	1.8
155°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.1	1.1	1.4	1.4
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: P1213713

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1
2.5°	676.1	676.8	681.0	680.7	680.0	679.2	679.2	678.5	679.2	681.0	680.3
5°	672.6	673.6	676.8	676.4	675.7	675.4	675.0	674.0	674.7	677.1	676.4
7.5°	666.2	667.3	670.1	668.7	667.6	668.3	666.6	665.5	666.9	669.4	669.0
10°	659.5	660.2	663.7	663.0	661.3	661.6	659.9	659.2	660.9	662.3	662.7
12.5°	654.9	657.4	660.6	660.2	659.9	660.2	658.5	657.8	658.8	660.2	659.9
15°	653.9	657.1	660.6	660.6	660.9	661.3	659.5	658.5	659.5	660.6	660.2
17.5°	652.8	656.7	659.9	659.5	659.9	660.6	657.8	657.1	658.5	659.9	659.2
20°	649.3	652.8	654.9	654.2	654.2	654.6	651.1	651.1	653.2	654.2	654.6
22.5°	639.4	643.7	643.7	641.9	641.9	640.5	639.4	637.3	639.8	641.6	643.0
25°	624.6	626.4	624.3	620.4	618.3	616.5	611.6	615.8	615.8	621.1	622.9
27.5°	603.9	600.0	594.0	585.9	584.1	578.5	575.3	576.4	578.1	585.5	591.2
30°	569.7	558.1	547.8	544.3	536.6	530.9	525.3	528.1	531.3	535.5	547.1
32.5°	524.6	513.3	496.8	490.8	482.7	475.6	468.9	473.1	478.8	481.6	494.3
35°	472.8	459.4	444.3	434.0	425.6	421.7	413.3	419.2	425.2	427.3	438.3
37.5°	417.8	404.1	390.7	381.9	373.8	371.3	365.7	369.9	374.5	377.7	386.8
40°	365.7	353.0	342.8	336.8	331.2	329.1	326.9	328.7	332.2	334.7	341.7
42.5°	321.0	310.7	303.7	300.2	296.3	293.5	293.8	294.5	296.3	301.6	304.7
45°	281.8	275.9	271.3	270.6	268.1	267.8	267.4	268.8	269.9	273.0	275.5
47.5°	250.5	248.0	247.0	248.4	249.4	248.0	248.7	250.5	252.6	252.6	252.3
50°	225.8	226.5	227.9	231.1	233.2	233.9	234.6	236.8	237.1	237.8	236.8
52.5°	205.7	206.5	210.3	215.3	217.7	218.8	220.2	222.3	222.3	223.0	221.6
55°	185.3	186.4	190.2	195.2	197.3	198.7	200.1	201.5	202.6	204.0	202.9
57.5°	162.8	165.9	168.4	169.8	171.2	172.3	173.3	173.7	175.8	176.2	177.9
60°	138.8	139.5	142.0	141.6	140.6	143.4	142.0	144.4	146.9	150.1	150.4
62.5°	115.9	116.3	118.0	117.3	118.7	118.4	119.4	119.4	121.2	122.6	124.4
65°	97.9	98.3	99.7	99.7	99.4	100.4	101.5	102.2	102.2	103.2	104.6
67.5°	84.6	85.6	87.0	87.7	88.4	88.4	89.5	89.8	90.5	90.9	91.6
70°	75.4	76.8	78.2	78.9	79.3	80.0	80.3	80.3	81.0	81.4	82.1
72.5°	68.7	70.1	71.2	71.2	71.9	72.2	72.2	72.6	72.9	73.6	74.3
75°	63.1	64.1	64.8	64.5	64.5	64.5	64.8	64.8	65.5	66.2	66.9
77.5°	57.8	58.8	58.8	58.1	58.1	58.1	58.1	58.5	58.8	59.5	60.2
80°	53.9	53.9	53.6	53.6	52.8	52.5	52.5	52.8	52.8	53.6	54.6
82.5°	49.7	49.7	49.3	49.0	48.6	48.3	48.3	48.6	49.0	49.3	50.0
85°	45.8	45.8	45.1	45.1	44.7	44.7	44.7	44.7	45.1	45.4	46.2
87.5°	41.9	41.6	41.2	40.9	40.9	40.9	40.9	40.9	41.2	41.9	42.3
90°	38.0	37.7	37.3	37.3	37.0	37.0	37.3	37.3	37.7	38.0	38.4
92.5°	34.5	34.2	33.8	33.8	33.5	33.5	33.8	33.5	34.2	34.2	34.5
95°	31.4	31.0	30.7	30.7	30.7	30.7	30.7	30.7	31.0	31.0	31.4
97.5°	28.5	28.2	27.8	27.8	28.2	27.8	28.2	28.2	28.2	28.5	28.9
100°	26.1	25.7	25.7	26.1	25.7	25.7	26.1	26.1	26.1	26.1	26.4
102.5°	24.0	24.0	24.0	24.0	24.0	24.0	24.3	24.3	24.3	24.3	24.7
105°	21.8	22.2	22.2	22.2	22.5	22.5	22.5	22.9	22.9	22.9	22.9
107.5°	20.4	20.8	20.8	21.1	21.1	21.5	21.5	21.5	21.5	21.8	21.8
110°	19.0	19.4	19.7	20.1	20.1	20.4	20.4	20.4	20.4	20.4	20.4

TEST NUMBER: P1213713

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	17.6	18.0	18.3	19.0	19.4	19.4	19.4	19.4	19.7	19.7	19.4
115°	16.2	16.9	17.3	18.0	18.3	18.3	18.7	18.7	18.7	18.7	18.3
117.5°	14.8	15.9	16.2	16.9	17.3	17.3	17.6	17.6	17.6	17.6	17.3
120°	13.7	14.4	15.1	15.5	15.9	16.2	16.2	16.6	16.6	16.6	16.2
122.5°	12.7	13.4	14.1	14.4	14.8	15.1	15.1	15.1	15.1	15.1	15.1
125°	11.3	12.0	12.7	13.0	13.4	13.7	13.7	14.1	14.1	14.1	13.7
127.5°	10.2	10.9	11.3	12.0	12.3	12.3	12.7	12.7	12.7	12.7	12.3
130°	8.8	9.5	10.2	10.6	10.9	10.9	11.3	11.3	11.3	11.3	11.3
132.5°	7.8	8.5	8.8	9.5	9.5	9.9	9.9	10.2	10.2	10.2	9.9
135°	7.0	7.4	7.8	8.5	8.5	8.8	8.8	8.8	8.8	8.8	8.8
137.5°	6.3	6.7	7.0	7.4	7.4	7.8	7.8	7.8	7.8	8.1	7.8
140°	5.3	6.0	6.3	6.3	6.7	6.7	6.7	7.0	7.0	7.0	6.7
142.5°	4.6	4.9	5.3	5.6	6.0	6.0	6.0	6.0	6.3	6.0	6.0
145°	3.5	4.2	4.6	4.9	5.3	5.3	5.3	5.3	5.3	5.3	5.3
147.5°	2.8	3.2	3.9	4.2	4.2	4.6	4.6	4.6	4.6	4.6	4.6
150°	2.5	2.5	3.2	3.5	3.9	3.9	3.9	3.9	3.9	3.9	3.9
152.5°	1.8	2.1	2.5	2.8	3.2	3.2	3.2	3.2	3.2	3.2	3.2
155°	1.8	1.8	2.1	2.1	2.5	2.5	2.5	2.5	2.8	2.5	2.5
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: P1213713

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1
2.5°	679.2	678.9	680.3	678.9	671.8	674.7	673.6	677.5	677.8	678.9	682.4
5°	675.7	675.7	677.5	676.1	669.4	672.2	671.8	675.7	676.4	677.1	681.0
7.5°	668.7	669.0	671.5	670.4	663.4	667.6	667.3	671.8	673.3	674.7	678.2
10°	662.0	661.6	664.5	663.4	656.7	661.6	661.3	665.9	668.0	670.4	674.7
12.5°	658.5	657.4	658.5	657.4	650.0	653.9	654.2	659.5	662.0	665.2	670.1
15°	658.5	656.7	656.7	654.6	646.1	648.6	648.9	652.5	655.6	658.8	664.8
17.5°	657.8	656.0	655.6	653.9	644.7	644.7	644.4	646.8	648.6	651.8	658.1
20°	653.9	653.2	652.8	651.8	643.3	641.9	641.2	641.2	642.3	643.3	649.7
22.5°	643.7	644.4	645.1	645.8	639.1	636.6	637.0	636.3	635.2	635.2	640.5
25°	624.6	628.2	631.0	634.2	630.3	628.5	630.6	629.6	627.8	626.4	631.0
27.5°	594.3	601.7	607.7	615.5	615.8	614.4	620.1	619.4	619.0	616.9	620.4
30°	552.4	564.0	572.1	583.4	592.9	594.3	603.9	605.3	606.7	605.6	609.1
32.5°	501.7	517.5	531.3	548.9	558.1	566.2	579.5	585.2	590.8	592.6	596.5
35°	446.4	464.3	480.5	499.9	514.4	532.0	548.2	556.6	569.3	574.3	579.9
37.5°	393.9	410.8	426.6	446.0	469.3	487.6	507.7	526.7	544.0	551.0	559.5
40°	347.4	361.1	376.3	393.2	414.3	438.3	460.1	486.5	507.0	521.1	533.4
42.5°	312.1	318.8	331.9	347.0	363.9	388.2	410.4	440.0	464.7	484.8	505.2
45°	280.8	284.0	293.5	301.6	318.8	340.3	363.9	392.8	418.5	444.3	468.9
47.5°	254.0	257.9	262.5	267.4	279.7	297.7	318.1	344.2	369.9	399.9	428.1
50°	236.0	237.1	237.8	239.9	247.3	259.7	276.2	298.4	323.1	355.1	385.1
52.5°	220.2	220.2	218.1	217.0	219.8	227.6	237.1	253.0	278.3	307.9	339.6
55°	203.3	200.1	199.4	195.9	196.6	200.1	204.7	217.0	237.8	263.2	293.8
57.5°	179.7	178.3	178.3	176.9	174.0	175.8	176.9	185.7	200.5	222.3	249.1
60°	152.5	151.8	153.6	154.0	151.5	152.5	152.2	157.5	168.1	185.7	207.9
62.5°	125.4	128.6	128.9	130.4	128.9	128.6	130.4	134.9	140.2	153.6	170.9
65°	105.3	107.1	107.5	109.2	108.5	108.5	109.9	113.4	116.6	125.8	139.2
67.5°	92.3	91.6	92.0	93.0	92.0	91.6	92.7	94.8	97.2	102.9	112.4
70°	82.1	81.4	81.4	81.4	80.0	78.9	79.3	80.0	81.0	84.2	90.2
72.5°	74.3	74.3	73.3	72.2	71.2	70.5	69.8	69.1	68.7	69.8	72.9
75°	67.3	67.6	67.3	66.2	64.8	63.4	62.0	60.6	58.8	58.1	58.5
77.5°	60.9	61.3	61.7	61.3	59.9	58.1	56.0	53.9	51.4	49.0	47.6
80°	55.3	56.0	56.4	56.0	55.0	53.6	51.1	48.6	45.1	41.9	38.4
82.5°	50.4	51.4	51.8	51.8	51.1	49.7	46.9	44.0	40.2	35.9	31.4
85°	46.5	47.2	47.9	47.9	47.6	46.2	43.3	40.2	36.3	31.4	26.4
87.5°	42.6	43.0	43.7	44.4	43.7	42.3	39.8	36.3	32.4	27.5	21.8
90°	38.8	39.1	39.8	40.5	40.2	38.8	36.6	33.5	29.2	24.0	18.3
92.5°	34.9	35.6	35.9	36.3	36.6	35.6	33.8	30.7	26.4	21.1	15.9
95°	32.1	32.1	32.8	33.1	33.5	32.4	31.0	27.8	24.0	19.0	13.7
97.5°	29.2	29.2	29.9	29.9	30.3	29.6	28.2	25.4	21.5	16.9	11.6
100°	26.4	26.8	27.1	27.5	27.5	27.1	25.7	22.9	19.4	15.1	10.2
102.5°	24.7	24.7	25.0	25.0	25.4	24.7	23.3	20.8	17.3	13.4	8.8
105°	22.9	22.9	23.3	23.3	22.9	22.2	20.8	18.7	15.5	11.6	7.8
107.5°	21.5	21.5	21.5	21.5	21.1	20.4	19.0	16.6	13.7	10.6	7.0
110°	20.4	20.1	20.1	19.7	19.4	18.3	16.9	14.8	12.3	9.2	6.0

TEST NUMBER: P1213713

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	19.4	19.0	18.7	18.3	17.6	16.6	15.1	13.4	10.9	8.1	5.3
115°	18.3	18.0	17.6	16.9	16.2	15.1	13.7	12.0	9.5	7.0	4.6
117.5°	17.3	16.9	16.2	15.5	14.8	13.7	12.3	10.6	8.5	6.3	4.2
120°	15.9	15.5	15.1	14.4	13.7	12.3	10.9	9.5	7.4	5.6	3.5
122.5°	14.8	14.4	13.7	13.4	12.3	11.3	9.9	8.5	6.7	4.9	3.2
125°	13.4	13.0	12.7	12.0	11.3	9.9	8.8	7.4	6.0	4.2	2.5
127.5°	12.3	12.0	11.3	10.6	9.9	8.8	7.8	6.7	5.3	3.5	2.5
130°	10.9	10.6	10.2	9.5	8.8	7.8	7.0	5.6	4.6	3.2	2.1
132.5°	9.5	9.5	9.2	8.5	7.8	7.0	6.0	4.9	3.9	2.8	1.8
135°	8.8	8.5	8.1	7.4	7.0	6.0	5.3	4.2	3.2	2.5	1.4
137.5°	7.8	7.4	7.0	6.7	6.0	5.3	4.6	3.5	2.8	2.1	1.4
140°	6.7	6.3	6.3	5.6	5.3	4.6	3.9	3.2	2.5	1.8	1.1
142.5°	6.0	5.6	5.3	4.9	4.6	3.9	3.2	2.5	2.1	1.4	1.1
145°	5.3	4.9	4.6	4.2	3.9	3.2	2.8	2.1	1.8	1.4	1.1
147.5°	4.2	4.2	3.9	3.5	3.2	2.8	2.5	2.1	1.4	1.1	0.7
150°	3.5	3.5	3.2	2.8	2.8	2.5	2.1	1.8	1.4	1.1	0.7
152.5°	3.2	2.8	2.8	2.5	2.5	2.1	1.8	1.4	1.1	1.1	0.7
155°	2.5	2.5	2.5	2.1	2.1	1.8	1.4	1.4	1.1	0.7	0.7
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: P1213713

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1
2.5°	683.1	678.9	682.4	688.8	688.1	687.4	686.6	688.1	692.6	690.2	686.3
5°	682.1	677.8	681.7	687.7	687.4	686.3	685.6	687.0	691.6	689.1	684.9
7.5°	680.0	676.1	678.9	684.9	684.9	684.2	683.5	684.9	689.1	687.0	682.8
10°	676.4	673.6	676.4	682.1	682.4	681.0	680.3	682.1	686.3	685.2	681.7
12.5°	673.6	670.8	674.0	679.6	680.0	678.5	677.5	679.6	685.2	685.9	684.9
15°	669.7	667.3	671.1	677.1	677.1	676.1	676.1	678.9	686.6	689.8	691.6
17.5°	664.1	662.3	666.9	672.9	673.3	672.6	672.9	678.5	688.8	696.5	701.4
20°	657.1	656.3	661.3	667.6	668.7	669.0	670.8	679.2	693.3	703.9	708.8
22.5°	648.6	648.9	654.6	661.3	662.7	663.7	667.3	679.2	696.9	708.1	710.3
25°	639.1	640.1	646.1	654.2	656.0	658.1	664.1	679.6	697.9	705.3	701.8
27.5°	628.9	631.0	638.7	647.2	649.3	652.8	660.6	677.5	693.0	693.3	680.3
30°	618.3	620.8	629.9	639.8	643.3	646.8	656.3	672.6	681.0	669.7	646.8
32.5°	606.3	609.8	619.0	631.0	635.2	639.8	649.3	663.0	659.9	635.6	602.8
35°	591.2	596.1	606.7	620.8	624.6	630.6	637.3	640.5	626.4	591.9	554.9
37.5°	572.5	579.9	592.2	608.4	612.7	616.5	618.3	609.5	581.3	544.0	505.6
40°	551.0	562.3	575.7	593.6	597.9	597.9	591.5	572.9	537.3	488.3	445.7
42.5°	524.9	538.7	555.6	573.6	577.8	572.9	557.7	524.9	484.4	429.8	384.7
45°	493.2	511.5	530.6	549.2	551.4	540.4	513.3	471.7	421.7	371.0	328.0
47.5°	455.5	479.5	500.3	521.4	518.6	500.3	464.0	416.8	363.9	316.0	281.5
50°	413.3	441.4	464.7	484.8	478.8	453.4	410.8	361.5	309.0	268.1	239.6
52.5°	368.2	400.6	423.8	440.0	431.9	401.6	354.8	307.6	264.6	227.2	208.2
55°	321.3	354.1	378.0	390.7	380.1	347.4	301.2	258.2	217.7	193.4	182.1
57.5°	275.9	306.5	329.1	339.3	325.9	293.1	250.5	214.2	185.0	164.5	158.9
60°	232.2	257.2	278.7	286.4	272.0	241.7	205.0	176.2	154.7	140.6	137.8
62.5°	191.7	212.1	229.0	235.0	220.9	197.3	165.6	144.1	128.9	121.9	118.4
65°	158.2	170.2	187.4	186.4	177.9	156.1	132.8	117.7	107.8	103.2	101.1
67.5°	124.4	135.3	146.2	147.6	137.0	121.9	106.7	95.8	90.5	88.1	87.0
70°	96.2	104.3	111.0	109.2	103.6	94.1	84.6	78.6	76.5	75.4	75.4
72.5°	74.7	78.9	82.1	80.0	76.5	71.5	66.9	64.5	64.8	65.5	66.2
75°	57.8	58.8	59.5	57.4	56.7	53.6	53.2	53.6	55.7	57.8	58.8
77.5°	44.4	43.0	41.9	39.8	40.2	39.8	41.6	44.4	47.6	50.7	53.6
80°	34.2	31.0	28.5	26.4	27.5	29.2	32.8	37.0	41.2	44.7	48.3
82.5°	26.4	21.8	18.3	16.2	18.3	21.1	25.7	31.0	35.9	39.8	43.7
85°	20.4	15.1	10.9	8.8	10.9	15.1	20.1	26.1	31.4	35.6	39.5
87.5°	15.9	10.9	6.0	3.5	6.0	10.6	16.2	21.8	27.1	32.1	35.9
90°	12.7	7.4	2.8	0.7	3.2	7.4	12.7	18.3	23.6	28.9	32.8
92.5°	10.2	5.3	1.4	0.0	1.8	5.6	10.6	15.9	21.1	26.1	29.9
95°	8.5	4.2	1.1	0.0	1.4	4.2	8.5	13.7	18.7	23.6	26.8
97.5°	7.0	3.2	0.7	0.0	0.7	3.5	7.0	11.6	16.6	21.1	24.3
100°	6.0	2.8	0.7	0.0	0.7	2.8	6.0	10.2	14.4	18.7	21.8
102.5°	4.9	2.1	0.4	0.4	0.4	2.1	5.3	8.8	12.7	16.6	19.7
105°	4.6	1.8	0.4	0.4	0.4	1.8	4.6	7.8	11.3	14.8	17.6
107.5°	3.9	1.4	0.4	0.4	0.4	1.4	3.9	6.7	10.2	13.4	15.9
110°	3.2	1.4	0.4	0.4	0.4	1.4	3.2	6.0	8.8	11.6	14.1

TEST NUMBER: P1213713

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	2.8	1.1	0.4	0.4	0.4	1.1	2.8	5.3	7.8	10.6	12.7
115°	2.5	1.1	0.4	0.4	0.4	1.1	2.5	4.6	6.7	9.2	11.3
117.5°	2.1	1.1	0.4	0.4	0.4	0.7	2.1	3.9	6.0	8.1	10.2
120°	1.8	0.7	0.4	0.4	0.4	0.7	1.8	3.5	5.3	7.0	8.8
122.5°	1.8	0.7	0.4	0.4	0.4	0.7	1.4	2.8	4.6	6.0	7.8
125°	1.4	0.7	0.4	0.4	0.4	0.4	1.4	2.5	3.9	5.3	6.7
127.5°	1.4	0.7	0.4	0.4	0.4	0.4	1.1	2.1	3.2	4.6	6.0
130°	1.1	0.7	0.4	0.4	0.4	0.4	0.7	1.8	2.8	3.9	4.9
132.5°	1.1	0.7	0.4	0.4	0.4	0.4	0.7	1.4	2.1	3.2	4.2
135°	1.1	0.4	0.4	0.4	0.4	0.4	0.4	1.1	1.8	2.5	3.2
137.5°	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.7	1.4	1.8	2.8
140°	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.7	1.1	1.4	2.1
142.5°	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7	1.1	1.8
145°	0.7	0.4	0.4	0.7	0.7	0.4	0.4	0.7	0.7	1.1	1.4
147.5°	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7	0.7	1.1
150°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.1
152.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
155°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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: P1213713

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1
2.5°	685.6	677.5	681.7	680.3	681.7	685.2	684.9	683.8	684.5	682.8	681.0
5°	684.2	676.1	680.3	678.5	680.3	683.8	683.1	682.1	683.1	681.0	679.2
7.5°	682.4	675.0	680.0	679.6	682.8	687.4	687.7	687.7	690.2	687.0	685.6
10°	682.4	678.5	685.2	687.7	695.8	701.8	702.5	703.9	708.1	707.4	703.9
12.5°	689.8	689.1	699.0	705.0	712.4	720.8	725.4	726.8	729.6	727.5	726.1
15°	699.3	702.9	713.8	720.5	728.6	734.9	736.0	736.7	738.8	735.6	733.2
17.5°	712.0	714.1	722.9	725.8	731.0	732.1	730.7	727.2	727.2	720.1	718.0
20°	718.0	716.9	720.5	715.9	713.8	707.4	701.4	694.7	694.4	687.0	686.3
22.5°	712.7	705.7	698.3	687.0	682.1	672.9	664.8	660.9	658.5	648.9	646.5
25°	694.0	676.8	665.9	652.5	640.5	629.9	622.2	614.1	606.3	598.6	595.0
27.5°	661.6	645.4	627.8	609.1	592.6	576.4	563.3	555.2	547.8	537.6	532.3
30°	621.8	599.3	579.9	561.9	534.8	515.1	504.2	487.9	482.3	477.7	467.9
32.5°	575.0	547.8	521.4	497.1	469.3	451.0	436.5	424.5	421.0	409.0	406.2
35°	523.2	487.6	457.6	433.7	413.6	391.4	379.4	371.3	364.3	356.2	354.8
37.5°	462.2	430.2	396.3	375.2	359.4	340.3	331.2	325.5	322.4	316.4	315.3
40°	400.9	368.9	345.6	324.5	314.6	304.4	297.7	295.2	293.8	291.7	289.6
42.5°	345.3	317.1	300.5	286.4	282.2	277.3	275.5	276.9	275.5	274.8	274.4
45°	298.1	276.6	264.9	260.7	259.7	258.2	259.7	262.1	262.5	261.8	261.8
47.5°	255.1	244.9	239.9	240.6	242.4	243.4	245.9	249.1	249.8	248.0	248.7
50°	226.9	220.9	219.8	222.7	226.5	227.9	230.8	233.2	232.9	232.2	231.5
52.5°	200.5	198.7	201.5	204.3	208.6	209.3	210.3	211.4	211.0	209.6	208.9
55°	178.3	179.7	182.1	183.2	186.4	186.0	186.4	186.4	185.0	184.3	183.2
57.5°	158.2	158.5	159.9	160.3	162.1	161.4	161.0	160.3	158.2	157.8	156.8
60°	137.8	137.0	140.2	137.8	139.2	137.8	137.4	135.6	133.5	133.2	132.5
62.5°	118.4	117.0	119.1	118.0	118.7	117.3	116.6	114.5	112.7	112.4	112.0
65°	101.1	100.4	102.5	102.2	102.9	101.1	100.4	99.0	97.6	97.2	96.9
67.5°	86.7	88.4	89.5	89.5	90.2	89.8	88.1	87.7	87.4	86.0	86.0
70°	76.1	77.2	79.3	79.6	79.3	80.0	78.6	78.2	77.9	77.2	76.8
72.5°	67.6	69.1	71.2	71.5	71.2	71.2	70.5	70.1	70.1	69.1	69.1
75°	60.9	62.7	64.5	64.5	64.5	63.8	63.1	63.1	62.4	62.0	61.3
77.5°	55.3	57.4	58.8	58.5	58.1	57.4	57.4	56.4	55.3	55.3	54.6
80°	51.1	52.5	53.6	53.2	52.8	51.8	51.4	50.4	49.7	48.6	48.6
82.5°	46.5	48.3	49.0	48.6	47.9	46.9	46.5	45.8	45.1	44.7	44.0
85°	42.6	44.4	44.7	44.0	43.3	42.6	42.3	41.9	41.6	40.9	40.9
87.5°	38.8	40.5	40.5	40.2	39.5	39.1	38.8	38.4	38.0	37.7	37.3
90°	35.6	37.0	37.0	36.6	36.3	35.9	35.6	35.2	34.9	34.5	34.5
92.5°	32.4	33.8	33.8	33.5	33.1	32.8	32.8	32.4	32.1	31.7	31.4
95°	29.6	31.0	31.0	31.0	30.7	30.3	30.3	29.9	29.6	29.6	29.2
97.5°	26.8	28.2	28.2	28.2	27.8	27.5	27.5	27.1	27.1	27.1	26.8
100°	24.3	25.4	25.7	25.7	25.4	25.4	25.4	25.0	25.0	25.0	24.7
102.5°	21.8	22.9	23.6	23.6	23.6	23.3	23.3	23.3	23.3	23.3	22.9
105°	19.7	20.8	21.5	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8
107.5°	18.0	19.0	19.7	20.1	20.4	20.4	20.8	20.8	20.8	20.8	20.8
110°	16.2	17.3	18.3	18.7	19.0	19.4	19.4	19.7	19.4	19.4	19.4

TEST NUMBER: P1213713

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	14.4	15.9	16.6	17.3	17.6	18.0	18.3	18.3	18.3	18.3	18.3
115°	13.0	14.4	15.1	15.9	16.6	16.9	16.9	17.3	17.3	17.3	16.9
117.5°	11.6	13.0	13.7	14.4	14.8	15.5	15.9	15.9	15.9	15.9	15.5
120°	10.6	11.6	12.3	13.0	13.7	14.1	14.4	14.4	14.4	14.4	14.4
122.5°	9.2	10.2	11.3	12.0	12.3	12.7	13.0	13.0	13.0	13.0	13.0
125°	8.1	9.2	9.9	10.6	10.9	11.6	11.6	11.6	11.6	11.6	11.6
127.5°	7.0	8.1	8.8	9.5	9.9	10.2	10.6	10.6	10.6	10.6	10.6
130°	6.0	7.0	7.8	8.5	8.8	9.2	9.2	9.5	9.5	9.5	9.5
132.5°	5.3	6.0	6.7	7.4	7.8	8.1	8.1	8.5	8.5	8.5	8.5
135°	4.2	5.3	5.6	6.3	6.7	7.0	7.0	7.4	7.4	7.4	7.4
137.5°	3.5	4.2	4.9	5.6	6.0	6.0	6.3	6.3	6.7	6.7	6.7
140°	2.8	3.2	4.2	4.6	4.9	5.3	5.6	5.6	5.6	5.6	5.6
142.5°	2.1	2.8	3.2	3.9	4.2	4.6	4.9	4.9	4.9	4.9	4.9
145°	1.8	2.1	2.5	3.2	3.5	3.9	4.2	4.2	4.2	4.2	4.2
147.5°	1.4	1.8	2.1	2.5	2.8	3.2	3.5	3.5	3.5	3.5	3.5
150°	1.1	1.4	1.8	1.8	2.1	2.5	2.8	3.2	3.2	3.2	3.2
152.5°	1.1	1.1	1.4	1.4	1.8	2.1	2.5	2.5	2.5	2.5	2.5
155°	0.7	1.1	1.1	1.1	1.4	1.4	1.8	2.1	2.1	2.1	2.1
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: P1213713

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1	682.1
2.5°	682.1	683.5	682.8	681.7	681.4	683.1	681.4	673.3	676.4	676.8	679.2
5°	681.0	682.1	681.4	680.7	679.6	681.7	679.6	671.1	674.3	674.7	677.1
7.5°	688.1	688.4	688.4	686.6	683.8	684.9	682.1	672.6	674.3	674.3	676.1
10°	705.7	706.4	707.4	702.9	699.3	696.5	692.6	681.0	680.7	677.8	677.8
12.5°	728.6	726.8	725.0	722.9	720.1	716.6	711.0	697.2	692.6	688.1	683.5
15°	735.3	734.6	734.2	733.2	731.4	730.3	726.1	712.4	705.7	700.0	691.9
17.5°	717.6	719.1	723.6	724.0	726.1	730.3	729.6	720.1	714.1	711.7	701.8
20°	685.9	686.3	691.9	694.4	703.6	710.6	715.9	714.8	713.4	716.2	708.8
22.5°	647.9	650.4	656.3	660.2	669.0	677.1	685.6	690.2	697.6	709.2	707.8
25°	596.1	599.3	607.7	614.1	626.4	638.7	650.0	658.1	666.9	689.1	696.5
27.5°	534.1	539.0	550.0	556.3	573.6	586.2	602.4	618.3	630.6	656.0	671.1
30°	468.9	473.1	484.8	493.6	508.4	525.6	546.1	568.6	589.1	614.8	633.8
32.5°	408.0	412.6	422.1	429.8	446.4	460.8	483.4	511.2	530.2	565.8	591.2
35°	354.8	359.0	365.7	372.4	386.1	400.9	420.3	447.4	471.7	508.7	540.8
37.5°	317.4	318.1	322.0	325.9	336.1	347.4	362.5	386.5	409.0	448.8	484.1
40°	290.7	290.7	292.8	293.8	298.4	305.1	314.6	333.3	352.0	382.3	425.2
42.5°	274.1	273.4	273.4	273.7	273.4	276.6	282.2	291.0	307.6	332.6	366.0
45°	261.8	260.4	259.3	256.8	255.4	255.4	255.8	258.9	268.5	284.7	311.8
47.5°	248.0	247.7	245.9	243.1	240.6	238.9	236.0	235.0	237.8	247.0	265.3
50°	232.2	230.4	228.6	226.5	223.7	222.0	216.7	217.0	214.6	218.8	228.3
52.5°	208.9	207.5	206.8	205.0	204.0	203.3	199.1	194.8	193.8	194.5	198.0
55°	183.2	183.9	181.1	182.5	182.1	179.0	177.2	174.0	173.0	172.6	174.4
57.5°	156.4	157.1	155.4	156.8	156.8	155.0	154.0	154.0	151.5	149.4	151.8
60°	132.1	130.7	131.8	133.5	133.5	132.5	131.8	131.8	130.0	129.3	131.1
62.5°	112.4	111.0	112.0	113.8	114.1	113.4	112.7	112.7	110.6	110.6	112.0
65°	97.2	97.6	97.2	98.6	98.6	99.0	98.3	97.6	95.1	96.2	95.8
67.5°	86.3	86.0	86.0	87.4	87.0	87.7	87.0	86.0	84.2	82.8	82.4
70°	77.2	76.8	76.8	77.5	77.9	77.9	77.5	76.8	74.3	72.9	71.9
72.5°	69.1	68.7	69.1	69.4	69.8	70.1	69.8	69.1	66.9	65.2	63.4
75°	61.7	61.3	62.4	62.4	62.7	62.7	63.1	62.7	60.9	58.8	56.7
77.5°	54.3	54.6	55.7	56.0	56.7	57.1	57.4	57.4	55.7	53.9	51.1
80°	48.3	49.0	49.7	50.0	50.7	51.8	52.1	52.5	51.1	49.3	46.2
82.5°	44.0	44.4	45.1	45.4	46.5	46.9	47.2	47.9	47.2	45.4	41.9
85°	40.5	40.9	41.6	41.6	42.3	43.0	43.3	43.7	43.3	41.6	38.0
87.5°	37.3	37.7	38.0	38.4	38.8	39.1	39.5	39.8	39.5	37.7	34.5
90°	34.5	34.5	34.9	34.9	35.2	35.6	36.3	36.3	35.9	34.5	31.4
92.5°	31.4	31.7	31.7	32.1	32.4	32.8	33.1	33.1	32.8	31.4	28.5
95°	29.2	29.2	29.6	29.6	29.9	29.9	30.3	30.3	29.9	28.5	25.7
97.5°	26.8	26.8	26.8	26.8	27.1	27.1	27.5	27.5	27.1	25.7	23.3
100°	24.7	24.7	24.7	24.7	24.7	25.0	25.0	25.0	24.7	23.3	20.8
102.5°	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.2	21.1	18.7
105°	21.8	21.8	21.8	21.5	21.5	21.5	21.1	21.1	20.1	19.0	16.9
107.5°	20.4	20.4	20.4	20.1	20.1	19.7	19.4	19.4	18.3	17.3	15.1
110°	19.4	19.4	19.4	19.0	18.7	18.3	18.0	17.6	16.6	15.1	13.4

TEST NUMBER: P1213713

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	18.3	18.3	18.0	18.0	17.6	17.3	16.6	16.2	15.1	13.7	12.0
115°	16.9	16.9	16.9	16.6	16.2	15.9	15.5	14.8	13.7	12.3	10.6
117.5°	15.5	15.5	15.5	15.1	14.8	14.4	14.1	13.4	12.3	10.9	9.5
120°	14.1	14.1	14.1	13.7	13.4	13.0	12.7	12.0	10.9	9.9	8.1
122.5°	13.0	13.0	12.7	12.3	12.0	11.6	11.3	10.6	9.9	8.5	7.0
125°	11.6	11.6	11.3	11.3	10.9	10.6	10.2	9.5	8.5	7.4	6.3
127.5°	10.6	10.2	10.2	10.2	9.9	9.5	8.8	8.5	7.4	6.3	5.3
130°	9.2	9.2	9.2	8.8	8.8	8.5	7.8	7.0	6.3	5.6	4.6
132.5°	8.1	8.1	8.1	8.1	7.8	7.4	6.7	6.3	5.6	4.6	3.9
135°	7.4	7.4	7.0	7.0	6.7	6.3	6.0	5.3	4.6	3.9	3.2
137.5°	6.3	6.3	6.3	6.0	6.0	5.6	4.9	4.6	4.2	3.5	2.8
140°	5.6	5.6	5.3	5.3	4.9	4.9	4.6	3.9	3.5	2.8	2.5
142.5°	4.9	4.9	4.6	4.6	4.2	4.2	3.9	3.5	2.8	2.5	1.8
145°	4.2	4.2	3.9	3.9	3.9	3.5	3.2	2.8	2.5	2.1	1.8
147.5°	3.5	3.5	3.5	3.2	3.2	2.8	2.8	2.5	2.1	1.8	1.4
150°	3.2	3.2	2.8	2.8	2.8	2.5	2.1	2.1	1.8	1.4	1.1
152.5°	2.5	2.5	2.5	2.5	2.1	2.1	1.8	1.8	1.4	1.1	1.1
155°	2.1	2.1	2.1	1.8	1.8	1.8	1.4	1.4	1.1	1.1	0.7
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: P1213713

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	682.1	682.1	682.1	682.1	682.1	682.1	682.1
2.5°	678.2	677.8	681.0	680.7	676.4	682.8	687.0
5°	676.4	676.1	678.9	679.6	675.0	681.7	686.3
7.5°	675.0	674.7	677.8	678.9	674.3	680.3	685.2
10°	675.4	673.6	676.4	677.1	672.9	679.2	683.5
12.5°	677.8	673.6	674.7	674.7	670.8	676.4	681.0
15°	683.8	675.0	673.6	672.6	667.6	672.9	677.5
17.5°	690.5	678.5	673.6	670.1	664.1	668.7	673.6
20°	697.2	682.4	674.3	668.7	660.6	664.8	668.3
22.5°	700.4	685.9	675.0	666.6	656.3	658.5	662.3
25°	696.2	684.5	673.6	663.4	651.1	651.4	654.6
27.5°	680.7	677.5	670.4	660.2	646.8	645.1	647.5
30°	654.2	663.0	663.4	656.0	641.9	638.4	639.4
32.5°	617.2	637.0	648.6	647.2	634.9	629.9	630.6
35°	574.6	599.3	624.6	633.1	624.3	620.4	619.0
37.5°	523.5	556.6	590.5	611.3	609.8	607.4	606.0
40°	467.2	507.0	547.1	580.2	590.5	590.5	591.2
42.5°	406.9	453.4	497.5	539.4	563.3	568.6	570.7
45°	348.8	395.6	443.6	491.8	523.9	540.4	546.4
47.5°	295.9	343.1	388.6	441.4	484.1	505.6	515.1
50°	250.8	286.1	334.0	386.5	433.0	459.4	478.1
52.5°	213.5	241.0	282.9	331.9	378.7	415.0	432.3
55°	182.1	200.8	236.4	278.7	323.4	361.1	381.2
57.5°	155.7	170.5	194.8	230.1	267.8	305.1	326.6
60°	132.5	142.7	159.2	187.1	219.1	251.2	272.0
62.5°	112.4	119.1	130.0	150.4	175.4	200.5	219.8
65°	96.9	99.7	105.7	118.4	137.4	156.4	173.0
67.5°	81.7	83.5	88.1	95.8	105.3	119.1	130.0
70°	70.5	70.5	70.8	75.4	80.3	89.1	96.9
72.5°	61.3	60.2	58.1	59.2	60.2	65.2	70.1
75°	53.9	51.4	47.9	46.5	45.8	46.5	49.3
77.5°	47.6	44.0	39.8	36.3	33.5	32.4	34.9
80°	42.3	38.0	33.1	28.5	24.0	21.5	22.5
82.5°	38.0	32.8	27.5	22.2	16.9	13.4	13.4
85°	33.5	28.5	22.9	17.3	12.0	7.4	6.7
87.5°	30.3	25.0	19.0	13.7	8.5	3.9	2.1
90°	27.1	21.8	16.2	10.9	6.0	1.8	0.0
92.5°	24.3	19.4	14.1	8.8	4.2	1.1	0.0
95°	21.8	17.3	12.0	7.4	3.5	0.7	0.4
97.5°	19.4	15.1	10.6	6.0	2.5	0.7	0.4
100°	17.6	13.4	9.2	4.9	2.1	0.4	0.4
102.5°	15.5	12.0	7.8	4.2	1.8	0.4	0.4
105°	13.7	10.6	6.7	3.5	1.4	0.4	0.4
107.5°	12.3	9.2	6.0	3.2	1.4	0.4	0.4
110°	10.9	8.1	5.3	2.8	1.1	0.4	0.4

TEST NUMBER: P1213713

CATALOG NUMBER: 4SNLED-LD5-18SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	9.9	7.0	4.6	2.5	0.7	0.4	0.4
115°	8.5	6.3	3.9	2.1	0.7	0.4	0.4
117.5°	7.4	5.3	3.5	1.8	0.7	0.4	0.4
120°	6.3	4.6	2.8	1.4	0.4	0.4	0.4
122.5°	5.6	3.9	2.5	1.4	0.4	0.4	0.4
125°	4.9	3.5	2.1	1.1	0.4	0.4	0.4
127.5°	4.2	2.8	1.8	0.7	0.4	0.4	0.4
130°	3.5	2.5	1.4	0.7	0.4	0.4	0.4
132.5°	2.8	2.1	1.4	0.7	0.4	0.4	0.4
135°	2.5	1.8	1.1	0.7	0.4	0.4	0.4
137.5°	2.1	1.4	0.7	0.7	0.7	0.4	0.4
140°	1.8	1.1	0.7	0.7	0.7	0.7	0.4
142.5°	1.4	1.1	0.7	0.7	0.7	0.7	0.4
145°	1.1	0.7	0.7	0.7	0.7	0.7	0.4
147.5°	1.1	0.7	0.7	0.7	0.7	0.7	0.4
150°	0.7	0.7	0.7	0.7	0.7	0.7	0.7
152.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7
155°	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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)