

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: P1213021

Luminaire Tested: 4SNLED-LD5-22SL-LC-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213021
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-LD5-22SL-LC-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

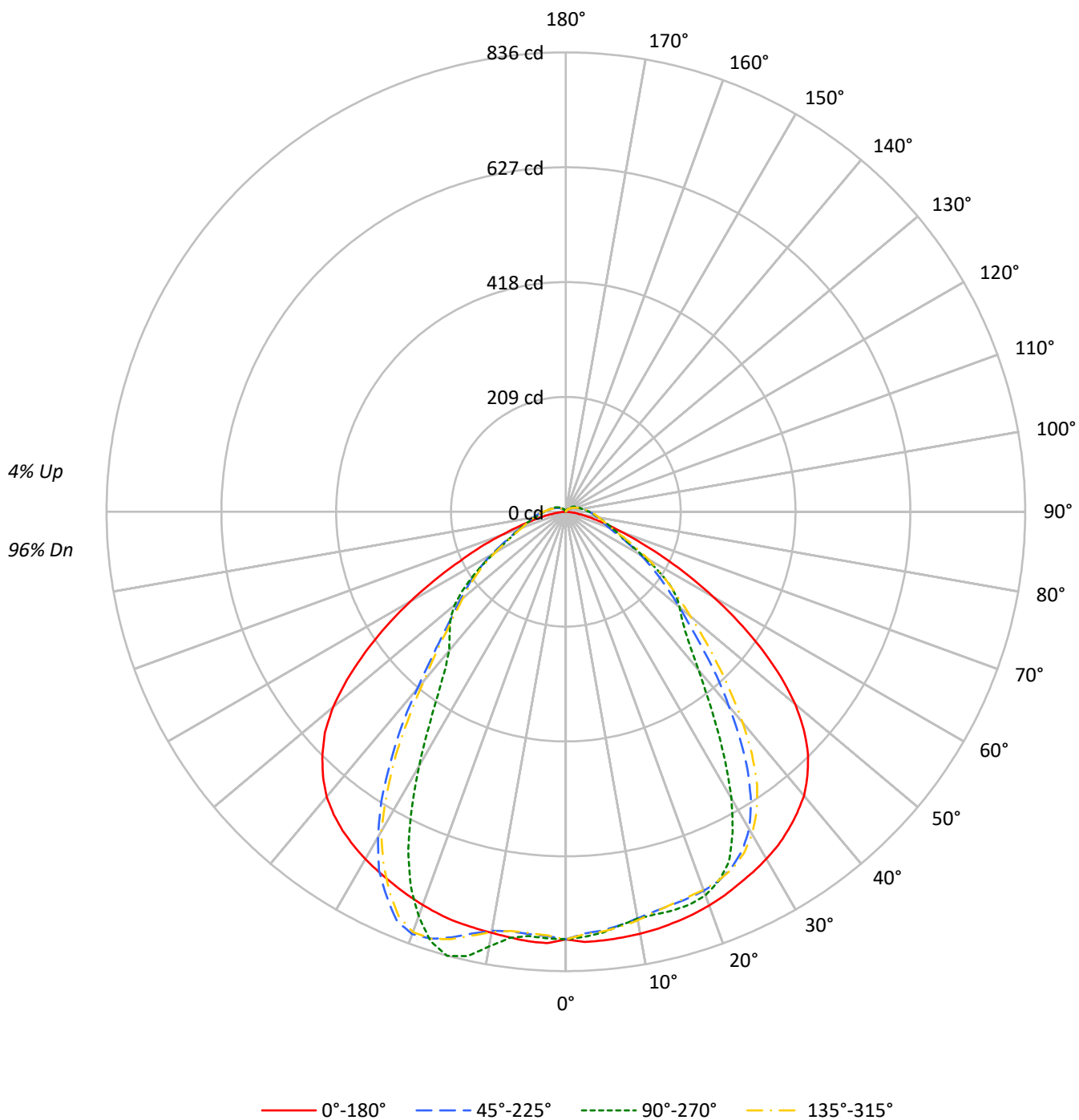
Lumens per Lamp: N/A
Luminaire Lumens: 1855.0 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 16
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	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°	6288	6288	6288	6288
5°	6333	6039	6347	6086
10°	6363	5788	6350	6180
15°	6412	5710	6409	6358
20°	6483	5620	6476	5923
25°	6563	5331	6560	5152
30°	6686	4621	6690	4094
35°	6818	3736	6837	3161
40°	6932	3008	6961	2651
45°	6909	2548	6944	2481
50°	6610	2346	6703	2294
55°	5865	2109	6011	1917
60°	4758	1614	5011	1480
65°	3536	1235	3810	1171
70°	2404	1065	2711	1019
75°	1574	962	1831	909
80°	1016	897	1190	825
85°	519	894	683	817

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 6944 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	4.0
10°-20°	219.9	11.9
20°-30°	334.3	18.0
30°-40°	358.7	19.3
40°-50°	311.3	16.8
50°-60°	230.7	12.4
60°-70°	132.2	7.1
70°-80°	73.2	3.9
80°-90°	44.6	2.4
90°-100°	29.0	1.6
100°-110°	19.4	1.0
110°-120°	13.1	0.7
120°-130°	8.0	0.4
130°-140°	4.2	0.2
140°-150°	1.9	0.1
150°-160°	0.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	628.2	33.9
0°-40°	986.8	53.2
0°-60°	1528.8	82.4
0°-90°	1778.7	95.9
90°-120°	61.5	3.3
90°-150°	75.7	4.1
90°-180°	76.0	4.1
0°-180°	1855.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	778	778	778	778	778	
5°	783	769	785	775	783	75
15°	773	751	772	836	773	219
25°	747	703	746	679	747	345
35°	706	478	708	405	706	442
45°	623	307	627	299	623	477
55°	435	230	446	209	435	386
65°	197	117	213	110	197	199
75°	56	74	66	70	56	64
85°	8	51	10	47	8	10
90°	0	43	1	39	0	0
95°	0	35	0	33	0	0
105°	0	26	0	25	0	0
115°	0	21	0	19	0	0
125°	0	16	0	13	0	0
135°	0	10	0	8	0	0
145°	0	6	1	5	0	0
155°	1	3	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

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1
2.5°	783.8	781.7	780.9	779.3	780.5	785.4	782.1	776.9	777.3	768.1	772.9
5°	782.9	780.5	779.3	777.7	778.5	782.9	779.7	774.5	774.1	764.9	769.3
7.5°	781.7	779.3	777.3	776.1	776.5	780.1	776.1	770.1	768.9	758.8	762.9
10°	779.7	778.1	775.3	773.3	772.9	776.9	770.5	764.5	761.6	751.2	755.2
12.5°	776.9	774.5	771.7	768.1	767.7	770.1	764.9	756.4	753.6	745.2	749.6
15°	772.9	770.1	766.9	762.9	760.8	762.5	756.0	748.4	748.0	740.7	746.8
17.5°	768.5	764.5	760.8	755.2	752.4	753.6	748.4	741.6	742.4	737.9	744.8
20°	762.5	758.0	752.4	746.8	742.8	744.8	741.1	735.9	737.1	733.9	739.9
22.5°	755.6	749.6	742.8	736.3	733.1	735.9	733.1	728.7	729.1	727.1	730.7
25°	746.8	739.9	731.9	723.9	722.3	724.3	722.7	719.0	717.4	714.2	715.8
27.5°	738.7	731.1	721.1	712.6	709.8	713.8	710.2	704.2	699.8	695.3	692.1
30°	729.5	720.2	709.0	699.3	696.9	698.5	693.3	684.1	672.4	666.8	658.0
32.5°	719.4	707.4	693.3	682.5	680.9	679.7	670.0	656.7	638.7	627.4	613.7
35°	706.2	692.9	676.0	662.8	660.4	653.5	637.9	620.2	596.9	577.6	554.3
37.5°	691.3	675.6	658.0	640.3	633.4	619.8	597.7	579.2	543.8	520.5	492.4
40°	674.4	655.5	633.8	612.5	601.3	579.2	553.9	526.5	492.4	461.0	437.3
42.5°	651.1	631.0	605.3	581.6	562.3	533.0	503.2	464.6	433.3	406.7	382.6
45°	623.4	599.3	569.5	541.0	516.5	481.5	446.5	408.0	381.8	350.9	334.4
47.5°	587.6	561.5	529.7	498.0	465.8	427.2	390.7	353.7	327.6	305.5	293.4
50°	545.4	521.3	486.3	448.5	413.2	373.0	336.4	308.7	283.4	269.7	260.4
52.5°	493.2	470.7	434.9	393.9	359.7	320.3	287.0	264.5	246.4	236.3	233.1
55°	434.9	415.2	379.8	341.6	306.7	270.5	245.2	225.5	213.8	207.8	208.2
57.5°	372.6	357.3	324.0	289.8	256.8	229.5	206.6	190.9	182.1	181.7	182.9
60°	310.3	299.0	270.1	240.8	211.8	189.7	172.8	162.0	156.3	156.8	156.3
62.5°	250.8	240.4	219.5	195.3	172.4	157.6	142.3	137.9	133.0	132.6	132.6
65°	197.3	189.3	172.4	155.1	137.9	128.2	120.6	115.4	111.7	110.9	111.3
67.5°	148.3	145.1	133.4	121.8	110.9	104.9	98.5	97.3	94.5	94.5	95.3
70°	110.5	108.1	101.7	94.9	90.4	86.4	83.2	83.2	82.8	82.4	84.4
72.5°	80.0	80.4	78.4	73.2	72.7	71.9	71.1	72.3	72.7	74.0	76.4
75°	56.3	57.5	57.5	56.7	58.3	60.3	61.5	63.5	65.9	67.5	70.3
77.5°	39.8	39.8	41.8	44.2	47.4	51.0	54.3	57.1	60.3	62.3	64.7
80°	25.7	26.9	30.1	34.6	39.0	43.8	48.2	51.8	55.1	58.3	59.9
82.5°	15.3	17.3	21.3	26.9	32.6	38.6	43.0	47.4	51.0	54.3	55.5
85°	7.6	10.5	15.3	21.3	27.3	33.8	39.4	43.4	47.4	50.2	51.8
87.5°	2.4	5.6	10.9	16.5	22.9	29.3	35.4	39.8	43.4	45.8	47.4
90°	0.0	2.8	7.6	13.7	19.7	26.1	31.8	36.6	40.2	42.2	43.4
92.5°	0.0	1.6	6.0	11.3	16.9	23.3	28.9	33.4	36.6	38.6	39.4
95°	0.4	1.2	4.4	9.2	14.9	20.9	26.1	30.1	33.4	35.4	35.8
97.5°	0.4	0.8	3.6	7.6	12.9	18.5	23.7	27.7	30.1	32.2	32.6
100°	0.4	0.8	2.8	6.8	11.3	16.5	21.3	24.9	27.7	29.3	29.7
102.5°	0.4	0.4	2.4	5.6	10.0	14.5	18.9	22.5	24.9	26.5	27.3
105°	0.4	0.4	2.0	4.8	8.8	12.9	16.9	20.5	22.5	24.1	24.9
107.5°	0.4	0.4	1.6	4.0	7.6	11.3	15.3	18.1	20.5	22.1	22.9
110°	0.4	0.4	1.2	3.6	6.4	10.0	13.3	16.1	18.5	20.1	20.9

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.4	0.4	1.2	3.2	5.6	8.8	11.7	14.5	16.5	18.1	19.3
115°	0.4	0.4	1.2	2.8	5.2	7.6	10.5	12.9	14.9	16.5	17.7
117.5°	0.4	0.4	1.2	2.4	4.4	6.8	9.2	11.7	13.3	14.9	16.1
120°	0.4	0.4	0.8	2.0	4.0	6.0	8.0	10.0	12.1	13.7	14.9
122.5°	0.4	0.4	0.8	2.0	3.2	5.2	7.2	8.8	10.9	12.1	13.3
125°	0.4	0.4	0.8	1.6	2.8	4.8	6.4	8.0	9.2	10.9	12.1
127.5°	0.4	0.4	0.8	1.6	2.4	4.0	5.6	7.2	8.4	9.6	10.5
130°	0.4	0.4	0.8	1.2	2.0	3.2	4.8	6.0	7.6	8.4	9.2
132.5°	0.4	0.4	0.4	1.2	1.6	2.4	3.6	5.2	6.4	7.6	8.0
135°	0.4	0.4	0.4	0.8	1.6	2.0	2.8	4.0	5.2	6.4	7.2
137.5°	0.4	0.4	0.4	0.8	1.2	2.0	2.4	3.2	4.4	5.2	6.4
140°	0.4	0.4	0.4	0.8	1.2	1.6	2.0	2.8	3.6	4.4	5.2
142.5°	0.4	0.4	0.4	0.8	0.8	1.2	1.6	2.4	2.8	3.6	4.4
145°	0.4	0.4	0.4	0.8	0.8	1.2	1.6	2.0	2.4	2.8	3.6
147.5°	0.4	0.4	0.4	0.8	0.8	0.8	1.2	1.6	2.0	2.4	2.8
150°	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.6	2.0	2.4
152.5°	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.6	2.0
155°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2	1.6	1.6
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

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1
2.5°	771.3	772.1	776.9	776.5	775.7	774.9	774.9	774.1	774.9	776.9	776.1
5°	767.3	768.5	772.1	771.7	770.9	770.5	770.1	768.9	769.7	772.5	771.7
7.5°	760.0	761.2	764.5	762.9	761.6	762.5	760.4	759.2	760.8	763.7	763.3
10°	752.4	753.2	757.2	756.4	754.4	754.8	752.8	752.0	754.0	755.6	756.0
12.5°	747.2	750.0	753.6	753.2	752.8	753.2	751.2	750.4	751.6	753.2	752.8
15°	746.0	749.6	753.6	753.6	754.0	754.4	752.4	751.2	752.4	753.6	753.2
17.5°	744.8	749.2	752.8	752.4	752.8	753.6	750.4	749.6	751.2	752.8	752.0
20°	740.7	744.8	747.2	746.4	746.4	746.8	742.8	742.8	745.2	746.4	746.8
22.5°	729.5	734.3	734.3	732.3	732.3	730.7	729.5	727.1	729.9	731.9	733.5
25°	712.6	714.6	712.2	707.8	705.4	703.4	697.7	702.6	702.6	708.6	710.6
27.5°	688.9	684.5	677.6	668.4	666.4	660.0	656.3	657.5	659.6	668.0	674.4
30°	649.9	636.6	625.0	621.0	612.1	605.7	599.3	602.5	606.1	610.9	624.2
32.5°	598.5	585.6	566.7	559.9	550.6	542.6	535.0	539.8	546.2	549.4	563.9
35°	539.4	524.1	506.8	495.2	485.5	481.1	471.5	478.3	485.1	487.5	500.0
37.5°	476.7	461.0	445.7	435.7	426.4	423.6	417.2	422.0	427.2	430.9	441.3
40°	417.2	402.7	391.1	384.2	377.8	375.4	373.0	375.0	379.0	381.8	389.9
42.5°	366.2	354.5	346.5	342.4	338.0	334.8	335.2	336.0	338.0	344.0	347.7
45°	321.5	314.7	309.5	308.7	305.9	305.5	305.1	306.7	307.9	311.5	314.3
47.5°	285.8	283.0	281.7	283.4	284.6	283.0	283.8	285.8	288.2	288.2	287.8
50°	257.6	258.4	260.0	263.7	266.1	266.9	267.7	270.1	270.5	271.3	270.1
52.5°	234.7	235.5	239.9	245.6	248.4	249.6	251.2	253.6	253.6	254.4	252.8
55°	211.4	212.6	217.0	222.7	225.1	226.7	228.3	229.9	231.1	232.7	231.5
57.5°	185.7	189.3	192.1	193.7	195.3	196.5	197.7	198.1	200.6	201.0	203.0
60°	158.4	159.2	162.0	161.6	160.4	163.6	162.0	164.8	167.6	171.2	171.6
62.5°	132.2	132.6	134.6	133.8	135.4	135.0	136.3	136.3	138.3	139.9	141.9
65°	111.7	112.1	113.7	113.7	113.3	114.5	115.8	116.6	116.6	117.8	119.4
67.5°	96.5	97.7	99.3	100.1	100.9	100.9	102.1	102.5	103.3	103.7	104.5
70°	86.0	87.6	89.2	90.0	90.4	91.2	91.6	91.6	92.4	92.8	93.6
72.5°	78.4	80.0	81.2	81.2	82.0	82.4	82.4	82.8	83.2	84.0	84.8
75°	71.9	73.2	74.0	73.6	73.6	73.6	74.0	74.0	74.8	75.6	76.4
77.5°	65.9	67.1	67.1	66.3	66.3	66.3	66.3	66.7	67.1	67.9	68.7
80°	61.5	61.5	61.1	61.1	60.3	59.9	59.9	60.3	60.3	61.1	62.3
82.5°	56.7	56.7	56.3	55.9	55.5	55.1	55.1	55.5	55.9	56.3	57.1
85°	52.3	52.3	51.4	51.4	51.0	51.0	51.0	51.0	51.4	51.8	52.7
87.5°	47.8	47.4	47.0	46.6	46.6	46.6	46.6	46.6	47.0	47.8	48.2
90°	43.4	43.0	42.6	42.6	42.2	42.2	42.6	42.6	43.0	43.4	43.8
92.5°	39.4	39.0	38.6	38.6	38.2	38.2	38.6	38.2	39.0	39.0	39.4
95°	35.8	35.4	35.0	35.0	35.0	35.0	35.0	35.0	35.4	35.4	35.8
97.5°	32.6	32.2	31.8	31.8	32.2	31.8	32.2	32.2	32.2	32.6	33.0
100°	29.7	29.3	29.3	29.7	29.3	29.3	29.7	29.7	29.7	29.7	30.1
102.5°	27.3	27.3	27.3	27.3	27.3	27.3	27.7	27.7	27.7	27.7	28.1
105°	24.9	25.3	25.3	25.3	25.7	25.7	25.7	26.1	26.1	26.1	26.1
107.5°	23.3	23.7	23.7	24.1	24.1	24.5	24.5	24.5	24.5	24.9	24.9
110°	21.7	22.1	22.5	22.9	22.9	23.3	23.3	23.3	23.3	23.3	23.3

TEST NUMBER: P1213021

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	20.1	20.5	20.9	21.7	22.1	22.1	22.1	22.1	22.5	22.5	22.1
115°	18.5	19.3	19.7	20.5	20.9	20.9	21.3	21.3	21.3	21.3	20.9
117.5°	16.9	18.1	18.5	19.3	19.7	19.7	20.1	20.1	20.1	20.1	19.7
120°	15.7	16.5	17.3	17.7	18.1	18.5	18.5	18.9	18.9	18.9	18.5
122.5°	14.5	15.3	16.1	16.5	16.9	17.3	17.3	17.3	17.3	17.3	17.3
125°	12.9	13.7	14.5	14.9	15.3	15.7	15.7	16.1	16.1	16.1	15.7
127.5°	11.7	12.5	12.9	13.7	14.1	14.1	14.5	14.5	14.5	14.5	14.1
130°	10.0	10.9	11.7	12.1	12.5	12.5	12.9	12.9	12.9	12.9	12.9
132.5°	8.8	9.6	10.0	10.9	10.9	11.3	11.3	11.7	11.7	11.7	11.3
135°	8.0	8.4	8.8	9.6	9.6	10.0	10.0	10.0	10.0	10.0	10.0
137.5°	7.2	7.6	8.0	8.4	8.4	8.8	8.8	8.8	8.8	9.2	8.8
140°	6.0	6.8	7.2	7.2	7.6	7.6	7.6	8.0	8.0	8.0	7.6
142.5°	5.2	5.6	6.0	6.4	6.8	6.8	6.8	6.8	7.2	6.8	6.8
145°	4.0	4.8	5.2	5.6	6.0	6.0	6.0	6.0	6.0	6.0	6.0
147.5°	3.2	3.6	4.4	4.8	4.8	5.2	5.2	5.2	5.2	5.2	5.2
150°	2.8	2.8	3.6	4.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4
152.5°	2.0	2.4	2.8	3.2	3.6	3.6	3.6	3.6	3.6	3.6	3.6
155°	2.0	2.0	2.4	2.4	2.8	2.8	2.8	2.8	3.2	2.8	2.8
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: P1213021

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1
2.5°	774.9	774.5	776.1	774.5	766.5	769.7	768.5	772.9	773.3	774.5	778.5
5°	770.9	770.9	772.9	771.3	763.7	766.9	766.5	770.9	771.7	772.5	776.9
7.5°	762.9	763.3	766.1	764.9	756.8	761.6	761.2	766.5	768.1	769.7	773.7
10°	755.2	754.8	758.0	756.8	749.2	754.8	754.4	759.6	762.0	764.9	769.7
12.5°	751.2	750.0	751.2	750.0	741.6	746.0	746.4	752.4	755.2	758.8	764.5
15°	751.2	749.2	749.2	746.8	737.1	739.9	740.3	744.4	748.0	751.6	758.4
17.5°	750.4	748.4	748.0	746.0	735.5	735.5	735.1	737.9	739.9	743.6	750.8
20°	746.0	745.2	744.8	743.6	733.9	732.3	731.5	731.5	732.7	733.9	741.1
22.5°	734.3	735.1	735.9	736.7	729.1	726.3	726.7	725.9	724.7	724.7	730.7
25°	712.6	716.6	719.8	723.5	719.0	717.0	719.4	718.2	716.2	714.6	719.8
27.5°	678.0	686.5	693.3	702.2	702.6	701.0	707.4	706.6	706.2	703.8	707.8
30°	630.2	643.5	652.7	665.6	676.4	678.0	688.9	690.5	692.1	690.9	694.9
32.5°	572.3	590.4	606.1	626.2	636.6	645.9	661.2	667.6	674.0	676.0	680.5
35°	509.2	529.7	548.2	570.3	586.8	606.9	625.4	635.0	649.5	655.1	661.6
37.5°	449.4	468.6	486.7	508.8	535.4	556.3	579.2	600.9	620.6	628.6	638.3
40°	396.3	412.0	429.3	448.5	472.7	500.0	524.9	555.1	578.4	594.4	608.5
42.5°	356.1	363.7	378.6	395.9	415.2	442.9	468.2	502.0	530.1	553.0	576.4
45°	320.3	324.0	334.8	344.0	363.7	388.3	415.2	448.1	477.5	506.8	535.0
47.5°	289.8	294.2	299.4	305.1	319.1	339.6	362.9	392.7	422.0	456.2	488.3
50°	269.3	270.5	271.3	273.7	282.2	296.2	315.1	340.4	368.6	405.1	439.3
52.5°	251.2	251.2	248.8	247.6	250.8	259.6	270.5	288.6	317.5	351.3	387.5
55°	231.9	228.3	227.5	223.5	224.3	228.3	233.5	247.6	271.3	300.2	335.2
57.5°	205.0	203.4	203.4	201.8	198.6	200.6	201.8	211.8	228.7	253.6	284.2
60°	174.0	173.2	175.2	175.6	172.8	174.0	173.6	179.7	191.7	211.8	237.1
62.5°	143.1	146.7	147.1	148.7	147.1	146.7	148.7	153.9	160.0	175.2	194.9
65°	120.2	122.2	122.6	124.6	123.8	123.8	125.4	129.4	133.0	143.5	158.8
67.5°	105.3	104.5	104.9	106.1	104.9	104.5	105.7	108.1	110.9	117.4	128.2
70°	93.6	92.8	92.8	92.8	91.2	90.0	90.4	91.2	92.4	96.1	102.9
72.5°	84.8	84.8	83.6	82.4	81.2	80.4	79.6	78.8	78.4	79.6	83.2
75°	76.8	77.2	76.8	75.6	74.0	72.3	70.7	69.1	67.1	66.3	66.7
77.5°	69.5	69.9	70.3	69.9	68.3	66.3	63.9	61.5	58.7	55.9	54.3
80°	63.1	63.9	64.3	63.9	62.7	61.1	58.3	55.5	51.4	47.8	43.8
82.5°	57.5	58.7	59.1	59.1	58.3	56.7	53.5	50.2	45.8	41.0	35.8
85°	53.1	53.9	54.7	54.7	54.3	52.7	49.4	45.8	41.4	35.8	30.1
87.5°	48.6	49.0	49.8	50.6	49.8	48.2	45.4	41.4	37.0	31.4	24.9
90°	44.2	44.6	45.4	46.2	45.8	44.2	41.8	38.2	33.4	27.3	20.9
92.5°	39.8	40.6	41.0	41.4	41.8	40.6	38.6	35.0	30.1	24.1	18.1
95°	36.6	36.6	37.4	37.8	38.2	37.0	35.4	31.8	27.3	21.7	15.7
97.5°	33.4	33.4	34.2	34.2	34.6	33.8	32.2	28.9	24.5	19.3	13.3
100°	30.1	30.5	30.9	31.4	31.4	30.9	29.3	26.1	22.1	17.3	11.7
102.5°	28.1	28.1	28.5	28.5	28.9	28.1	26.5	23.7	19.7	15.3	10.0
105°	26.1	26.1	26.5	26.5	26.1	25.3	23.7	21.3	17.7	13.3	8.8
107.5°	24.5	24.5	24.5	24.5	24.1	23.3	21.7	18.9	15.7	12.1	8.0
110°	23.3	22.9	22.9	22.5	22.1	20.9	19.3	16.9	14.1	10.5	6.8

TEST NUMBER: P1213021

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	22.1	21.7	21.3	20.9	20.1	18.9	17.3	15.3	12.5	9.2	6.0
115°	20.9	20.5	20.1	19.3	18.5	17.3	15.7	13.7	10.9	8.0	5.2
117.5°	19.7	19.3	18.5	17.7	16.9	15.7	14.1	12.1	9.6	7.2	4.8
120°	18.1	17.7	17.3	16.5	15.7	14.1	12.5	10.9	8.4	6.4	4.0
122.5°	16.9	16.5	15.7	15.3	14.1	12.9	11.3	9.6	7.6	5.6	3.6
125°	15.3	14.9	14.5	13.7	12.9	11.3	10.0	8.4	6.8	4.8	2.8
127.5°	14.1	13.7	12.9	12.1	11.3	10.0	8.8	7.6	6.0	4.0	2.8
130°	12.5	12.1	11.7	10.9	10.0	8.8	8.0	6.4	5.2	3.6	2.4
132.5°	10.9	10.9	10.5	9.6	8.8	8.0	6.8	5.6	4.4	3.2	2.0
135°	10.0	9.6	9.2	8.4	8.0	6.8	6.0	4.8	3.6	2.8	1.6
137.5°	8.8	8.4	8.0	7.6	6.8	6.0	5.2	4.0	3.2	2.4	1.6
140°	7.6	7.2	7.2	6.4	6.0	5.2	4.4	3.6	2.8	2.0	1.2
142.5°	6.8	6.4	6.0	5.6	5.2	4.4	3.6	2.8	2.4	1.6	1.2
145°	6.0	5.6	5.2	4.8	4.4	3.6	3.2	2.4	2.0	1.6	1.2
147.5°	4.8	4.8	4.4	4.0	3.6	3.2	2.8	2.4	1.6	1.2	0.8
150°	4.0	4.0	3.6	3.2	3.2	2.8	2.4	2.0	1.6	1.2	0.8
152.5°	3.6	3.2	3.2	2.8	2.8	2.4	2.0	1.6	1.2	1.2	0.8
155°	2.8	2.8	2.8	2.4	2.4	2.0	1.6	1.6	1.2	0.8	0.8
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: P1213021

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1
2.5°	779.3	774.5	778.5	785.8	785.0	784.2	783.4	785.0	790.2	787.4	782.9
5°	778.1	773.3	777.7	784.6	784.2	782.9	782.1	783.8	789.0	786.2	781.3
7.5°	775.7	771.3	774.5	781.3	781.3	780.5	779.7	781.3	786.2	783.8	778.9
10°	771.7	768.5	771.7	778.1	778.5	776.9	776.1	778.1	782.9	781.7	777.7
12.5°	768.5	765.3	768.9	775.3	775.7	774.1	772.9	775.3	781.7	782.5	781.3
15°	764.1	761.2	765.7	772.5	772.5	771.3	771.3	774.5	783.4	787.0	789.0
17.5°	757.6	755.6	760.8	767.7	768.1	767.3	767.7	774.1	785.8	794.6	800.2
20°	749.6	748.8	754.4	761.6	762.9	763.3	765.3	774.9	791.0	803.0	808.7
22.5°	739.9	740.3	746.8	754.4	756.0	757.2	761.2	774.9	795.0	807.9	810.3
25°	729.1	730.3	737.1	746.4	748.4	750.8	757.6	775.3	796.2	804.7	800.6
27.5°	717.4	719.8	728.7	738.3	740.7	744.8	753.6	772.9	790.6	791.0	776.1
30°	705.4	708.2	718.6	729.9	733.9	737.9	748.8	767.3	776.9	764.1	737.9
32.5°	691.7	695.7	706.2	719.8	724.7	729.9	740.7	756.4	752.8	725.1	687.7
35°	674.4	680.1	692.1	708.2	712.6	719.4	727.1	730.7	714.6	675.2	633.0
37.5°	653.1	661.6	675.6	694.1	698.9	703.4	705.4	695.3	663.2	620.6	576.8
40°	628.6	641.5	656.7	677.2	682.1	682.1	674.8	653.5	612.9	557.1	508.4
42.5°	598.9	614.5	633.8	654.3	659.2	653.5	636.2	598.9	552.6	490.3	438.9
45°	562.7	583.6	605.3	626.6	629.0	616.6	585.6	538.2	481.1	423.2	374.2
47.5°	519.7	547.0	570.7	594.8	591.6	570.7	529.3	475.5	415.2	360.5	321.1
50°	471.5	503.6	530.1	553.0	546.2	517.3	468.6	412.4	352.5	305.9	273.3
52.5°	420.0	457.0	483.5	502.0	492.8	458.2	404.7	350.9	301.8	259.2	237.5
55°	366.6	403.9	431.3	445.7	433.7	396.3	343.6	294.6	248.4	220.7	207.8
57.5°	314.7	349.7	375.4	387.1	371.8	334.4	285.8	244.4	211.0	187.7	181.3
60°	264.9	293.4	317.9	326.8	310.3	275.7	233.9	201.0	176.4	160.4	157.2
62.5°	218.6	242.0	261.3	268.1	252.0	225.1	188.9	164.4	147.1	139.1	135.0
65°	180.5	194.1	213.8	212.6	203.0	178.1	151.5	134.2	123.0	117.8	115.4
67.5°	141.9	154.3	166.8	168.4	156.3	139.1	121.8	109.3	103.3	100.5	99.3
70°	109.7	119.0	126.6	124.6	118.2	107.3	96.5	89.6	87.2	86.0	86.0
72.5°	85.2	90.0	93.6	91.2	87.2	81.6	76.4	73.6	74.0	74.8	75.6
75°	65.9	67.1	67.9	65.5	64.7	61.1	60.7	61.1	63.5	65.9	67.1
77.5°	50.6	49.0	47.8	45.4	45.8	45.4	47.4	50.6	54.3	57.9	61.1
80°	39.0	35.4	32.6	30.1	31.4	33.4	37.4	42.2	47.0	51.0	55.1
82.5°	30.1	24.9	20.9	18.5	20.9	24.1	29.3	35.4	41.0	45.4	49.8
85°	23.3	17.3	12.5	10.0	12.5	17.3	22.9	29.7	35.8	40.6	45.0
87.5°	18.1	12.5	6.8	4.0	6.8	12.1	18.5	24.9	30.9	36.6	41.0
90°	14.5	8.4	3.2	0.8	3.6	8.4	14.5	20.9	26.9	33.0	37.4
92.5°	11.7	6.0	1.6	0.0	2.0	6.4	12.1	18.1	24.1	29.7	34.2
95°	9.6	4.8	1.2	0.0	1.6	4.8	9.6	15.7	21.3	26.9	30.5
97.5°	8.0	3.6	0.8	0.0	0.8	4.0	8.0	13.3	18.9	24.1	27.7
100°	6.8	3.2	0.8	0.0	0.8	3.2	6.8	11.7	16.5	21.3	24.9
102.5°	5.6	2.4	0.4	0.4	0.4	2.4	6.0	10.0	14.5	18.9	22.5
105°	5.2	2.0	0.4	0.4	0.4	2.0	5.2	8.8	12.9	16.9	20.1
107.5°	4.4	1.6	0.4	0.4	0.4	1.6	4.4	7.6	11.7	15.3	18.1
110°	3.6	1.6	0.4	0.4	0.4	1.6	3.6	6.8	10.0	13.3	16.1



TEST NUMBER: P1213021

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	3.2	1.2	0.4	0.4	0.4	1.2	3.2	6.0	8.8	12.1	14.5
115°	2.8	1.2	0.4	0.4	0.4	1.2	2.8	5.2	7.6	10.5	12.9
117.5°	2.4	1.2	0.4	0.4	0.4	0.8	2.4	4.4	6.8	9.2	11.7
120°	2.0	0.8	0.4	0.4	0.4	0.8	2.0	4.0	6.0	8.0	10.0
122.5°	2.0	0.8	0.4	0.4	0.4	0.8	1.6	3.2	5.2	6.8	8.8
125°	1.6	0.8	0.4	0.4	0.4	0.4	1.6	2.8	4.4	6.0	7.6
127.5°	1.6	0.8	0.4	0.4	0.4	0.4	1.2	2.4	3.6	5.2	6.8
130°	1.2	0.8	0.4	0.4	0.4	0.4	0.8	2.0	3.2	4.4	5.6
132.5°	1.2	0.8	0.4	0.4	0.4	0.4	0.8	1.6	2.4	3.6	4.8
135°	1.2	0.4	0.4	0.4	0.4	0.4	0.4	1.2	2.0	2.8	3.6
137.5°	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.8	1.6	2.0	3.2
140°	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.8	1.2	1.6	2.4
142.5°	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	1.2	2.0
145°	0.8	0.4	0.4	0.8	0.8	0.4	0.4	0.8	0.8	1.2	1.6
147.5°	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8	1.2
150°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2
152.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
155°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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: P1213021

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1
2.5°	782.1	772.9	777.7	776.1	777.7	781.7	781.3	780.1	780.9	778.9	776.9
5°	780.5	771.3	776.1	774.1	776.1	780.1	779.3	778.1	779.3	776.9	774.9
7.5°	778.5	770.1	775.7	775.3	778.9	784.2	784.6	784.6	787.4	783.8	782.1
10°	778.5	774.1	781.7	784.6	793.8	800.6	801.4	803.0	807.9	807.1	803.0
12.5°	787.0	786.2	797.4	804.3	812.7	822.3	827.6	829.2	832.4	830.0	828.4
15°	797.8	801.8	814.3	821.9	831.2	838.4	839.6	840.4	842.8	839.2	836.4
17.5°	812.3	814.7	824.7	828.0	834.0	835.2	833.6	829.6	829.6	821.5	819.1
20°	819.1	817.9	821.9	816.7	814.3	807.1	800.2	792.6	792.2	783.8	782.9
22.5°	813.1	805.1	796.6	783.8	778.1	767.7	758.4	754.0	751.2	740.3	737.5
25°	791.8	772.1	759.6	744.4	730.7	718.6	709.8	700.6	691.7	682.9	678.9
27.5°	754.8	736.3	716.2	694.9	676.0	657.5	642.7	633.4	625.0	613.3	607.3
30°	709.4	683.7	661.6	641.1	610.1	587.6	575.2	556.7	550.2	545.0	533.8
32.5°	655.9	625.0	594.8	567.1	535.4	514.5	498.0	484.3	480.3	466.6	463.4
35°	596.9	556.3	522.1	494.8	471.9	446.5	432.9	423.6	415.6	406.3	404.7
37.5°	527.3	490.7	452.2	428.0	410.0	388.3	377.8	371.4	367.8	360.9	359.7
40°	457.4	420.8	394.3	370.2	358.9	347.3	339.6	336.8	335.2	332.8	330.4
42.5°	393.9	361.7	342.8	326.8	321.9	316.3	314.3	315.9	314.3	313.5	313.1
45°	340.0	315.5	302.2	297.4	296.2	294.6	296.2	299.0	299.4	298.6	298.6
47.5°	291.0	279.3	273.7	274.5	276.5	277.7	280.5	284.2	285.0	283.0	283.8
50°	258.8	252.0	250.8	254.0	258.4	260.0	263.3	266.1	265.7	264.9	264.1
52.5°	228.7	226.7	229.9	233.1	237.9	238.7	239.9	241.2	240.8	239.1	238.3
55°	203.4	205.0	207.8	209.0	212.6	212.2	212.6	212.6	211.0	210.2	209.0
57.5°	180.5	180.9	182.5	182.9	184.9	184.1	183.7	182.9	180.5	180.1	178.9
60°	157.2	156.3	160.0	157.2	158.8	157.2	156.8	154.7	152.3	151.9	151.1
62.5°	135.0	133.4	135.9	134.6	135.4	133.8	133.0	130.6	128.6	128.2	127.8
65°	115.4	114.5	117.0	116.6	117.4	115.4	114.5	112.9	111.3	110.9	110.5
67.5°	98.9	100.9	102.1	102.1	102.9	102.5	100.5	100.1	99.7	98.1	98.1
70°	86.8	88.0	90.4	90.8	90.4	91.2	89.6	89.2	88.8	88.0	87.6
72.5°	77.2	78.8	81.2	81.6	81.2	81.2	80.4	80.0	80.0	78.8	78.8
75°	69.5	71.5	73.6	73.6	73.6	72.7	71.9	71.9	71.1	70.7	69.9
77.5°	63.1	65.5	67.1	66.7	66.3	65.5	65.5	64.3	63.1	63.1	62.3
80°	58.3	59.9	61.1	60.7	60.3	59.1	58.7	57.5	56.7	55.5	55.5
82.5°	53.1	55.1	55.9	55.5	54.7	53.5	53.1	52.3	51.4	51.0	50.2
85°	48.6	50.6	51.0	50.2	49.4	48.6	48.2	47.8	47.4	46.6	46.6
87.5°	44.2	46.2	46.2	45.8	45.0	44.6	44.2	43.8	43.4	43.0	42.6
90°	40.6	42.2	42.2	41.8	41.4	41.0	40.6	40.2	39.8	39.4	39.4
92.5°	37.0	38.6	38.6	38.2	37.8	37.4	37.4	37.0	36.6	36.2	35.8
95°	33.8	35.4	35.4	35.4	35.0	34.6	34.6	34.2	33.8	33.8	33.4
97.5°	30.5	32.2	32.2	32.2	31.8	31.4	31.4	30.9	30.9	30.9	30.5
100°	27.7	28.9	29.3	29.3	28.9	28.9	28.9	28.5	28.5	28.5	28.1
102.5°	24.9	26.1	26.9	26.9	26.9	26.5	26.5	26.5	26.5	26.5	26.1
105°	22.5	23.7	24.5	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9
107.5°	20.5	21.7	22.5	22.9	23.3	23.3	23.7	23.7	23.7	23.7	23.7
110°	18.5	19.7	20.9	21.3	21.7	22.1	22.1	22.5	22.1	22.1	22.1

TEST NUMBER: P1213021

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	16.5	18.1	18.9	19.7	20.1	20.5	20.9	20.9	20.9	20.9	20.9
115°	14.9	16.5	17.3	18.1	18.9	19.3	19.3	19.7	19.7	19.7	19.3
117.5°	13.3	14.9	15.7	16.5	16.9	17.7	18.1	18.1	18.1	18.1	17.7
120°	12.1	13.3	14.1	14.9	15.7	16.1	16.5	16.5	16.5	16.5	16.5
122.5°	10.5	11.7	12.9	13.7	14.1	14.5	14.9	14.9	14.9	14.9	14.9
125°	9.2	10.5	11.3	12.1	12.5	13.3	13.3	13.3	13.3	13.3	13.3
127.5°	8.0	9.2	10.0	10.9	11.3	11.7	12.1	12.1	12.1	12.1	12.1
130°	6.8	8.0	8.8	9.6	10.0	10.5	10.5	10.9	10.9	10.9	10.9
132.5°	6.0	6.8	7.6	8.4	8.8	9.2	9.2	9.6	9.6	9.6	9.6
135°	4.8	6.0	6.4	7.2	7.6	8.0	8.0	8.4	8.4	8.4	8.4
137.5°	4.0	4.8	5.6	6.4	6.8	6.8	7.2	7.2	7.6	7.6	7.6
140°	3.2	3.6	4.8	5.2	5.6	6.0	6.4	6.4	6.4	6.4	6.4
142.5°	2.4	3.2	3.6	4.4	4.8	5.2	5.6	5.6	5.6	5.6	5.6
145°	2.0	2.4	2.8	3.6	4.0	4.4	4.8	4.8	4.8	4.8	4.8
147.5°	1.6	2.0	2.4	2.8	3.2	3.6	4.0	4.0	4.0	4.0	4.0
150°	1.2	1.6	2.0	2.0	2.4	2.8	3.2	3.6	3.6	3.6	3.6
152.5°	1.2	1.2	1.6	1.6	2.0	2.4	2.8	2.8	2.8	2.8	2.8
155°	0.8	1.2	1.2	1.2	1.6	1.6	2.0	2.4	2.4	2.4	2.4
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: P1213021

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1	778.1
2.5°	778.1	779.7	778.9	777.7	777.3	779.3	777.3	768.1	771.7	772.1	774.9
5°	776.9	778.1	777.3	776.5	775.3	777.7	775.3	765.7	769.3	769.7	772.5
7.5°	785.0	785.4	785.4	783.4	780.1	781.3	778.1	767.3	769.3	769.3	771.3
10°	805.1	805.9	807.1	801.8	797.8	794.6	790.2	776.9	776.5	773.3	773.3
12.5°	831.2	829.2	827.2	824.7	821.5	817.5	811.1	795.4	790.2	785.0	779.7
15°	838.8	838.0	837.6	836.4	834.4	833.2	828.4	812.7	805.1	798.6	789.4
17.5°	818.7	820.3	825.6	826.0	828.4	833.2	832.4	821.5	814.7	811.9	800.6
20°	782.5	782.9	789.4	792.2	802.6	810.7	816.7	815.5	813.9	817.1	808.7
22.5°	739.1	742.0	748.8	753.2	763.3	772.5	782.1	787.4	795.8	809.1	807.5
25°	680.1	683.7	693.3	700.6	714.6	728.7	741.6	750.8	760.8	786.2	794.6
27.5°	609.3	614.9	627.4	634.6	654.3	668.8	687.3	705.4	719.4	748.4	765.7
30°	535.0	539.8	553.0	563.1	580.0	599.7	623.0	648.7	672.0	701.4	723.1
32.5°	465.4	470.7	481.5	490.3	509.2	525.7	551.4	583.2	604.9	645.5	674.4
35°	404.7	409.6	417.2	424.8	440.5	457.4	479.5	510.4	538.2	580.4	617.0
37.5°	362.1	362.9	367.4	371.8	383.4	396.3	413.6	440.9	466.6	512.1	552.2
40°	331.6	331.6	334.0	335.2	340.4	348.1	358.9	380.2	401.5	436.1	485.1
42.5°	312.7	311.9	311.9	312.3	311.9	315.5	321.9	332.0	350.9	379.4	417.6
45°	298.6	297.0	295.8	293.0	291.4	291.4	291.8	295.4	306.3	324.8	355.7
47.5°	283.0	282.6	280.5	277.3	274.5	272.5	269.3	268.1	271.3	281.7	302.6
50°	264.9	262.9	260.8	258.4	255.2	253.2	247.2	247.6	244.8	249.6	260.4
52.5°	238.3	236.7	235.9	233.9	232.7	231.9	227.1	222.3	221.1	221.9	225.9
55°	209.0	209.8	206.6	208.2	207.8	204.2	202.2	198.6	197.3	196.9	199.0
57.5°	178.5	179.3	177.2	178.9	178.9	176.8	175.6	175.6	172.8	170.4	173.2
60°	150.7	149.1	150.3	152.3	152.3	151.1	150.3	150.3	148.3	147.5	149.5
62.5°	128.2	126.6	127.8	129.8	130.2	129.4	128.6	128.6	126.2	126.2	127.8
65°	110.9	111.3	110.9	112.5	112.5	112.9	112.1	111.3	108.5	109.7	109.3
67.5°	98.5	98.1	98.1	99.7	99.3	100.1	99.3	98.1	96.1	94.5	94.1
70°	88.0	87.6	87.6	88.4	88.8	88.8	88.4	87.6	84.8	83.2	82.0
72.5°	78.8	78.4	78.8	79.2	79.6	80.0	79.6	78.8	76.4	74.4	72.3
75°	70.3	69.9	71.1	71.1	71.5	71.5	71.9	71.5	69.5	67.1	64.7
77.5°	61.9	62.3	63.5	63.9	64.7	65.1	65.5	65.5	63.5	61.5	58.3
80°	55.1	55.9	56.7	57.1	57.9	59.1	59.5	59.9	58.3	56.3	52.7
82.5°	50.2	50.6	51.4	51.8	53.1	53.5	53.9	54.7	53.9	51.8	47.8
85°	46.2	46.6	47.4	47.4	48.2	49.0	49.4	49.8	49.4	47.4	43.4
87.5°	42.6	43.0	43.4	43.8	44.2	44.6	45.0	45.4	45.0	43.0	39.4
90°	39.4	39.4	39.8	39.8	40.2	40.6	41.4	41.4	41.0	39.4	35.8
92.5°	35.8	36.2	36.2	36.6	37.0	37.4	37.8	37.8	37.4	35.8	32.6
95°	33.4	33.4	33.8	33.8	34.2	34.2	34.6	34.6	34.2	32.6	29.3
97.5°	30.5	30.5	30.5	30.5	30.9	30.9	31.4	31.4	30.9	29.3	26.5
100°	28.1	28.1	28.1	28.1	28.1	28.5	28.5	28.5	28.1	26.5	23.7
102.5°	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	25.3	24.1	21.3
105°	24.9	24.9	24.9	24.5	24.5	24.5	24.1	24.1	22.9	21.7	19.3
107.5°	23.3	23.3	23.3	22.9	22.9	22.5	22.1	22.1	20.9	19.7	17.3
110°	22.1	22.1	22.1	21.7	21.3	20.9	20.5	20.1	18.9	17.3	15.3

TEST NUMBER: P1213021

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	20.9	20.9	20.5	20.5	20.1	19.7	18.9	18.5	17.3	15.7	13.7
115°	19.3	19.3	19.3	18.9	18.5	18.1	17.7	16.9	15.7	14.1	12.1
117.5°	17.7	17.7	17.7	17.3	16.9	16.5	16.1	15.3	14.1	12.5	10.9
120°	16.1	16.1	16.1	15.7	15.3	14.9	14.5	13.7	12.5	11.3	9.2
122.5°	14.9	14.9	14.5	14.1	13.7	13.3	12.9	12.1	11.3	9.6	8.0
125°	13.3	13.3	12.9	12.9	12.5	12.1	11.7	10.9	9.6	8.4	7.2
127.5°	12.1	11.7	11.7	11.7	11.3	10.9	10.0	9.6	8.4	7.2	6.0
130°	10.5	10.5	10.5	10.0	10.0	9.6	8.8	8.0	7.2	6.4	5.2
132.5°	9.2	9.2	9.2	9.2	8.8	8.4	7.6	7.2	6.4	5.2	4.4
135°	8.4	8.4	8.0	8.0	7.6	7.2	6.8	6.0	5.2	4.4	3.6
137.5°	7.2	7.2	7.2	6.8	6.8	6.4	5.6	5.2	4.8	4.0	3.2
140°	6.4	6.4	6.0	6.0	5.6	5.6	5.2	4.4	4.0	3.2	2.8
142.5°	5.6	5.6	5.2	5.2	4.8	4.8	4.4	4.0	3.2	2.8	2.0
145°	4.8	4.8	4.4	4.4	4.4	4.0	3.6	3.2	2.8	2.4	2.0
147.5°	4.0	4.0	4.0	3.6	3.6	3.2	3.2	2.8	2.4	2.0	1.6
150°	3.6	3.6	3.2	3.2	3.2	2.8	2.4	2.4	2.0	1.6	1.2
152.5°	2.8	2.8	2.8	2.8	2.4	2.4	2.0	2.0	1.6	1.2	1.2
155°	2.4	2.4	2.4	2.0	2.0	2.0	1.6	1.6	1.2	1.2	0.8
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: P1213021

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	778.1	778.1	778.1	778.1	778.1	778.1	778.1
2.5°	773.7	773.3	776.9	776.5	771.7	778.9	783.8
5°	771.7	771.3	774.5	775.3	770.1	777.7	782.9
7.5°	770.1	769.7	773.3	774.5	769.3	776.1	781.7
10°	770.5	768.5	771.7	772.5	767.7	774.9	779.7
12.5°	773.3	768.5	769.7	769.7	765.3	771.7	776.9
15°	780.1	770.1	768.5	767.3	761.6	767.7	772.9
17.5°	787.8	774.1	768.5	764.5	757.6	762.9	768.5
20°	795.4	778.5	769.3	762.9	753.6	758.4	762.5
22.5°	799.0	782.5	770.1	760.4	748.8	751.2	755.6
25°	794.2	780.9	768.5	756.8	742.8	743.2	746.8
27.5°	776.5	772.9	764.9	753.2	737.9	735.9	738.7
30°	746.4	756.4	756.8	748.4	732.3	728.3	729.5
32.5°	704.2	726.7	739.9	738.3	724.3	718.6	719.4
35°	655.5	683.7	712.6	722.3	712.2	707.8	706.2
37.5°	597.3	635.0	673.6	697.3	695.7	692.9	691.3
40°	533.0	578.4	624.2	662.0	673.6	673.6	674.4
42.5°	464.2	517.3	567.5	615.3	642.7	648.7	651.1
45°	397.9	451.4	506.0	561.1	597.7	616.6	623.4
47.5°	337.6	391.5	443.3	503.6	552.2	576.8	587.6
50°	286.2	326.4	381.0	440.9	494.0	524.1	545.4
52.5°	243.6	274.9	322.7	378.6	432.1	473.5	493.2
55°	207.8	229.1	269.7	317.9	369.0	412.0	434.9
57.5°	177.7	194.5	222.3	262.5	305.5	348.1	372.6
60°	151.1	162.8	181.7	213.4	250.0	286.6	310.3
62.5°	128.2	135.9	148.3	171.6	200.2	228.7	250.8
65°	110.5	113.7	120.6	135.0	156.8	178.5	197.3
67.5°	93.2	95.3	100.5	109.3	120.2	135.9	148.3
70°	80.4	80.4	80.8	86.0	91.6	101.7	110.5
72.5°	69.9	68.7	66.3	67.5	68.7	74.4	80.0
75°	61.5	58.7	54.7	53.1	52.3	53.1	56.3
77.5°	54.3	50.2	45.4	41.4	38.2	37.0	39.8
80°	48.2	43.4	37.8	32.6	27.3	24.5	25.7
82.5°	43.4	37.4	31.4	25.3	19.3	15.3	15.3
85°	38.2	32.6	26.1	19.7	13.7	8.4	7.6
87.5°	34.6	28.5	21.7	15.7	9.6	4.4	2.4
90°	30.9	24.9	18.5	12.5	6.8	2.0	0.0
92.5°	27.7	22.1	16.1	10.0	4.8	1.2	0.0
95°	24.9	19.7	13.7	8.4	4.0	0.8	0.4
97.5°	22.1	17.3	12.1	6.8	2.8	0.8	0.4
100°	20.1	15.3	10.5	5.6	2.4	0.4	0.4
102.5°	17.7	13.7	8.8	4.8	2.0	0.4	0.4
105°	15.7	12.1	7.6	4.0	1.6	0.4	0.4
107.5°	14.1	10.5	6.8	3.6	1.6	0.4	0.4
110°	12.5	9.2	6.0	3.2	1.2	0.4	0.4



TEST NUMBER: P1213021

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	11.3	8.0	5.2	2.8	0.8	0.4	0.4
115°	9.6	7.2	4.4	2.4	0.8	0.4	0.4
117.5°	8.4	6.0	4.0	2.0	0.8	0.4	0.4
120°	7.2	5.2	3.2	1.6	0.4	0.4	0.4
122.5°	6.4	4.4	2.8	1.6	0.4	0.4	0.4
125°	5.6	4.0	2.4	1.2	0.4	0.4	0.4
127.5°	4.8	3.2	2.0	0.8	0.4	0.4	0.4
130°	4.0	2.8	1.6	0.8	0.4	0.4	0.4
132.5°	3.2	2.4	1.6	0.8	0.4	0.4	0.4
135°	2.8	2.0	1.2	0.8	0.4	0.4	0.4
137.5°	2.4	1.6	0.8	0.8	0.8	0.4	0.4
140°	2.0	1.2	0.8	0.8	0.8	0.8	0.4
142.5°	1.6	1.2	0.8	0.8	0.8	0.8	0.4
145°	1.2	0.8	0.8	0.8	0.8	0.8	0.4
147.5°	1.2	0.8	0.8	0.8	0.8	0.8	0.4
150°	0.8	0.8	0.8	0.8	0.8	0.8	0.8
152.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8
155°	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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)