

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: P1213022

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

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213022
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33519)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-22SL-LN-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

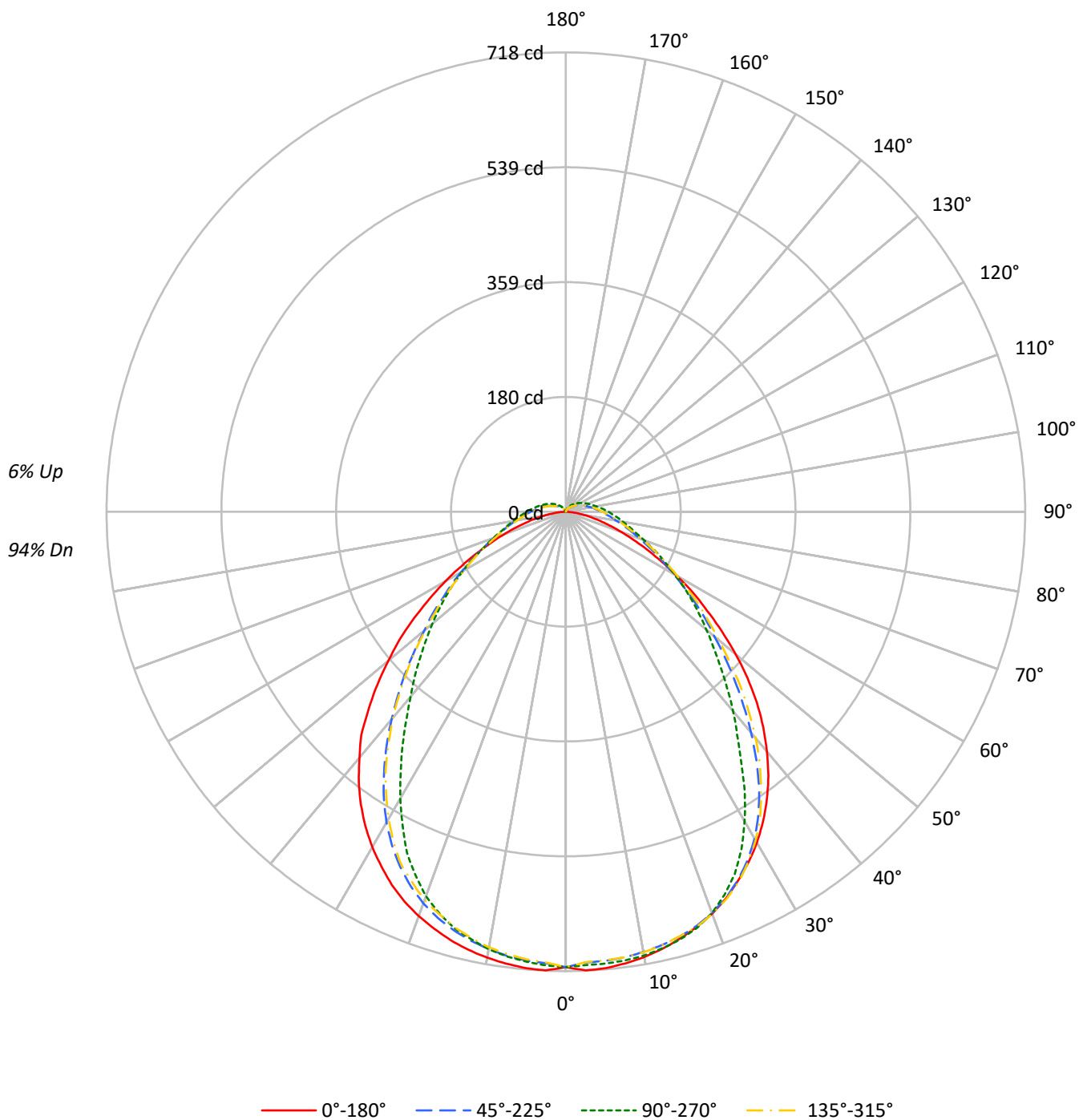
Lumens per Lamp: N/A
Luminaire Lumens: 1801.0 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5751	5751	5751	5751
5°	5792	5568	5792	5543
10°	5766	5420	5775	5344
15°	5729	5258	5755	5121
20°	5685	5050	5718	4836
25°	5594	4740	5655	4462
30°	5475	4287	5547	3969
35°	5290	3731	5393	3474
40°	5026	3263	5158	3028
45°	4677	2836	4828	2674
50°	4199	2492	4384	2366
55°	3632	2201	3896	2089
60°	3054	1932	3332	1821
65°	2503	1709	2756	1584
70°	1993	1517	2232	1403
75°	1566	1399	1762	1287
80°	1131	1351	1332	1234
85°	697	1358	936	1248

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 4828 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.5	3.7
10°-20°	193.5	10.7
20°-30°	286.7	15.9
30°-40°	318.5	17.7
40°-50°	288.7	16.0
50°-60°	223.7	12.4
60°-70°	151.9	8.4
70°-80°	96.7	5.4
80°-90°	61.8	3.4
90°-100°	41.7	2.3
100°-110°	28.5	1.6
110°-120°	19.0	1.1
120°-130°	11.8	0.7
130°-140°	6.6	0.4
140°-150°	3.1	0.2
150°-160°	1.1	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	547.6	30.4
0°-40°	866.2	48.1
0°-60°	1378.7	76.6
0°-90°	1689.1	93.8
90°-120°	89.2	5.0
90°-150°	110.7	6.1
90°-180°	112.0	6.2
0°-180°	1801.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	712	712	712	712	712	
5°	716	709	716	706	716	68
15°	690	692	694	674	690	195
25°	636	625	644	588	636	293
35°	548	478	559	445	548	342
45°	422	341	436	322	422	324
55°	269	240	289	228	269	242
65°	140	161	154	150	140	140
75°	56	108	63	99	56	60
85°	10	78	14	71	10	12
90°	0	67	1	61	0	1
95°	0	57	0	53	0	0
105°	0	42	0	40	0	0
115°	0	32	0	29	0	0
125°	0	24	0	21	0	0
135°	0	16	0	13	0	0
145°	0	11	0	7	0	0
155°	0	6	0	3	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7
2.5°	717.5	716.7	716.0	714.8	716.0	719.1	717.1	712.8	712.0	705.0	708.1
5°	716.0	714.8	714.0	712.8	714.4	718.3	716.3	712.4	711.3	704.6	708.1
7.5°	712.0	711.3	710.1	710.1	711.7	715.6	714.0	709.7	708.9	702.3	706.2
10°	706.6	706.2	705.4	705.4	707.0	711.7	709.7	705.8	705.0	698.7	703.0
12.5°	699.5	699.9	698.7	698.7	701.1	705.8	704.2	699.9	699.1	693.6	697.9
15°	690.5	690.9	690.1	690.5	692.9	698.3	696.4	692.5	691.7	687.4	690.9
17.5°	680.3	680.7	680.7	680.3	683.1	688.6	687.0	683.5	682.3	678.8	683.1
20°	668.6	668.6	668.6	668.6	671.7	677.2	675.2	672.5	670.2	667.4	670.9
22.5°	654.1	653.7	654.1	655.3	658.4	662.7	661.5	658.4	654.9	653.3	656.1
25°	636.5	637.7	638.1	639.2	643.1	646.7	645.5	642.4	636.9	635.7	636.5
27.5°	618.1	618.9	620.1	619.7	625.1	628.7	626.3	623.6	615.7	614.6	613.8
30°	597.3	598.5	599.3	598.9	603.2	607.1	604.8	601.3	590.7	589.9	583.6
32.5°	573.9	575.0	575.8	575.8	582.1	583.6	579.3	574.3	562.9	560.2	554.7
35°	548.0	549.2	549.6	549.6	555.9	555.5	550.0	542.9	530.4	526.9	517.5
37.5°	520.2	521.0	521.4	523.8	526.5	524.1	517.1	508.1	498.7	488.9	478.7
40°	488.9	490.1	490.9	492.4	495.2	492.4	482.3	471.3	461.1	450.2	440.0
42.5°	456.8	460.3	459.6	459.2	460.7	453.3	445.5	432.9	422.8	411.4	401.2
45°	422.0	421.6	423.5	424.3	423.9	417.7	406.7	395.4	385.2	373.4	364.8
47.5°	385.2	384.8	386.4	387.1	384.8	378.1	369.5	356.6	348.0	337.8	331.2
50°	346.4	346.4	348.8	346.4	345.3	338.6	331.6	318.6	312.0	303.0	299.1
52.5°	307.7	311.2	308.9	308.1	306.9	300.2	294.8	284.2	278.7	274.8	270.1
55°	269.3	273.2	271.7	270.5	270.1	264.6	259.5	251.7	248.2	245.4	242.7
57.5°	236.8	236.4	235.7	234.5	234.9	230.6	225.5	221.2	219.6	218.4	219.2
60°	199.2	202.4	201.2	201.6	202.0	201.2	196.9	194.2	194.5	194.9	196.1
62.5°	168.3	171.1	173.0	171.5	172.2	173.4	171.1	170.3	171.8	173.4	175.0
65°	139.7	142.5	144.4	144.1	146.4	148.7	148.4	149.1	152.7	154.6	156.6
67.5°	113.9	116.7	119.4	119.8	123.3	126.8	128.4	131.1	135.0	137.8	140.1
70°	91.6	93.9	97.1	99.0	103.7	108.4	111.2	116.7	119.0	122.9	124.5
72.5°	71.6	73.6	77.9	82.6	86.5	92.4	97.9	102.6	106.1	110.4	112.3
75°	56.0	56.8	61.5	66.9	72.4	79.1	84.9	90.0	94.7	99.0	102.2
77.5°	41.1	42.3	46.6	54.0	60.3	67.3	74.0	79.5	84.6	88.9	93.2
80°	28.6	30.9	35.6	43.1	50.1	57.9	64.2	70.5	75.9	80.2	84.6
82.5°	18.4	20.4	27.0	34.4	41.9	49.7	56.4	62.6	68.5	73.2	77.1
85°	10.2	12.9	19.6	27.4	34.8	42.7	49.7	56.0	61.8	66.2	70.1
87.5°	3.9	7.8	14.1	21.5	29.0	36.4	43.8	49.7	55.6	60.3	63.8
90°	0.0	4.7	10.6	18.0	25.4	32.9	39.9	46.2	51.7	56.0	59.9
92.5°	0.4	3.1	8.2	14.5	21.5	28.6	35.2	41.5	47.0	51.3	54.8
95°	0.4	2.3	6.7	12.5	18.8	25.4	31.7	37.6	42.7	47.0	50.5
97.5°	0.4	1.6	5.5	11.0	16.4	23.1	29.0	34.4	39.1	43.5	46.2
100°	0.4	1.6	4.7	9.4	14.9	20.7	26.2	31.7	36.0	39.5	42.7
102.5°	0.4	1.2	3.9	8.2	13.3	18.4	23.9	29.0	32.9	36.4	39.5
105°	0.4	1.2	3.5	7.0	11.7	16.8	21.5	26.2	30.5	33.7	36.4
107.5°	0.4	0.8	3.1	5.9	10.2	15.3	20.0	23.9	27.8	30.9	33.7
110°	0.4	0.8	2.7	5.5	9.0	13.7	18.0	21.9	25.4	28.6	30.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.4	0.8	2.3	5.1	8.2	12.1	16.4	20.0	23.5	26.2	28.6
115°	0.4	0.8	2.3	4.7	7.4	10.6	14.5	18.4	21.1	24.3	26.2
117.5°	0.4	0.8	2.0	3.9	7.0	9.8	13.3	16.4	19.6	22.3	24.3
120°	0.4	0.8	2.0	3.5	6.3	9.0	11.7	14.9	18.0	20.0	21.9
122.5°	0.4	0.8	1.6	3.5	5.5	8.2	10.6	13.3	16.0	18.4	20.4
125°	0.4	0.8	1.6	3.1	5.1	7.4	9.8	11.7	14.5	16.4	18.4
127.5°	0.4	0.8	1.6	2.7	4.7	6.7	9.0	11.0	12.9	14.9	16.4
130°	0.4	0.8	1.2	2.3	4.3	5.9	7.8	10.2	11.7	13.3	14.9
132.5°	0.4	0.8	1.2	2.3	3.5	5.1	7.0	9.0	10.6	12.1	13.3
135°	0.4	0.8	1.2	2.0	3.1	4.7	5.9	7.8	9.4	11.0	12.1
137.5°	0.4	0.8	1.2	2.0	2.7	3.9	5.1	6.7	8.2	9.4	11.0
140°	0.4	0.8	1.2	1.6	2.3	3.5	4.7	5.5	7.0	8.2	9.4
142.5°	0.4	0.8	1.2	1.6	2.3	3.1	3.9	4.7	5.9	7.0	8.2
145°	0.4	0.8	1.2	1.6	2.0	2.7	3.5	4.3	4.7	5.9	6.7
147.5°	0.4	0.8	1.2	1.6	1.6	2.3	3.1	3.5	4.3	4.7	5.5
150°	0.4	0.8	1.2	1.2	1.6	2.0	2.7	3.1	3.5	4.3	4.7
152.5°	0.4	0.8	1.2	1.2	1.6	2.0	2.3	2.7	3.1	3.5	3.9
155°	0.4	0.8	1.2	1.2	1.2	1.6	2.0	2.3	2.7	3.1	3.5
157.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.3	2.3	2.7
160°	0.8	0.8	0.8	1.2	1.2	1.2	1.6	1.6	2.0	2.0	2.3
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°	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7
2.5°	707.3	708.5	712.0	712.0	711.3	710.5	710.5	709.3	710.1	711.7	710.9
5°	707.3	708.5	712.0	712.0	711.3	710.5	710.1	708.9	710.1	711.7	710.9
7.5°	705.0	706.6	710.1	710.1	709.3	708.9	708.1	707.3	708.5	710.1	709.3
10°	701.9	703.4	707.0	707.0	706.2	706.2	705.0	704.2	705.8	707.0	706.6
12.5°	697.2	699.1	702.3	701.9	701.1	701.5	700.3	698.7	700.3	701.5	701.9
15°	690.5	692.9	696.0	695.2	694.0	694.8	692.9	691.7	692.9	695.2	694.8
17.5°	681.9	683.5	685.8	685.8	684.6	683.9	683.1	681.9	682.7	684.2	684.6
20°	669.8	671.7	672.9	671.7	671.3	670.2	668.6	667.4	669.0	671.3	671.7
22.5°	653.7	654.1	656.8	654.1	652.2	651.8	650.2	647.8	650.2	652.2	652.5
25°	633.8	635.7	634.5	629.8	629.8	626.7	625.9	624.7	625.1	628.7	630.2
27.5°	608.3	609.1	606.0	602.0	598.5	596.6	593.8	594.2	594.2	598.9	600.5
30°	580.5	576.2	573.5	567.2	564.5	559.8	559.0	559.0	558.2	560.6	567.6
32.5°	547.2	541.4	537.1	531.2	526.5	521.8	519.4	520.6	520.2	526.1	528.5
35°	510.8	507.3	498.3	490.9	488.1	481.1	481.1	477.6	479.9	486.6	489.3
37.5°	472.5	467.0	459.6	451.3	449.4	443.9	441.9	440.0	445.1	446.2	449.0
40°	433.3	428.2	421.2	413.4	413.4	406.7	406.7	406.7	407.1	409.5	414.5
42.5°	396.1	390.7	384.4	378.9	378.1	373.0	373.0	372.7	373.4	375.4	380.1
45°	360.1	355.8	349.2	346.4	346.8	341.3	342.5	341.3	342.9	344.9	346.4
47.5°	326.9	324.1	321.4	317.5	316.3	315.9	313.9	312.4	315.1	315.1	317.5
50°	295.9	294.4	292.8	290.5	290.8	289.3	286.9	286.9	288.9	289.3	290.8
52.5°	268.9	267.0	265.0	265.4	265.8	265.0	263.8	262.7	263.8	264.6	266.6
55°	241.9	240.3	242.3	241.5	242.3	241.5	240.7	240.0	241.9	240.7	242.7
57.5°	217.6	219.2	220.0	218.4	219.6	218.8	219.2	218.0	219.6	220.4	220.0
60°	195.3	197.7	196.5	196.9	198.5	197.7	196.1	197.3	198.9	199.2	198.9
62.5°	175.0	177.7	178.9	178.1	178.5	177.7	178.9	177.3	179.3	180.1	178.9
65°	156.6	159.7	160.5	160.5	160.5	159.7	160.9	161.3	162.1	162.1	161.3
67.5°	140.9	143.7	144.4	145.2	144.4	143.7	143.7	144.1	145.6	146.4	145.6
70°	126.8	129.6	130.0	130.0	130.4	131.1	129.6	130.4	131.5	131.9	131.5
72.5°	114.7	117.4	118.2	117.8	118.2	118.6	118.6	117.8	119.0	119.8	119.8
75°	104.9	106.5	107.3	107.3	107.6	108.0	108.0	107.6	108.4	108.8	109.2
77.5°	95.9	97.1	98.3	98.3	98.6	98.3	99.0	99.0	99.4	99.8	100.2
80°	86.9	88.5	89.2	89.6	90.4	90.8	90.8	90.8	91.2	91.6	91.6
82.5°	79.9	81.0	82.2	83.4	83.4	83.8	83.8	83.8	84.2	84.2	84.6
85°	72.8	74.4	75.5	76.3	76.7	77.1	77.1	77.5	77.5	77.5	77.9
87.5°	66.5	68.5	69.3	70.1	70.5	71.2	71.2	71.2	71.6	71.6	71.6
90°	62.2	64.2	65.0	65.8	66.2	66.5	66.5	66.9	66.9	67.3	67.3
92.5°	57.2	59.1	60.7	60.7	61.1	61.8	61.5	61.5	61.8	62.2	62.2
95°	53.2	54.8	56.0	56.4	56.8	56.8	56.8	57.2	56.8	57.2	57.2
97.5°	48.5	50.1	51.3	52.1	52.5	52.5	52.5	52.8	52.5	52.8	52.8
100°	44.6	46.2	47.4	47.8	48.5	48.5	48.5	48.5	48.5	48.5	48.9
102.5°	41.5	43.1	43.8	44.2	44.6	45.0	45.0	45.0	45.0	45.4	45.4
105°	38.4	39.9	40.7	41.1	41.5	41.9	41.9	41.9	42.3	42.3	41.9
107.5°	35.6	36.8	37.6	38.4	38.8	38.8	39.1	39.1	39.1	39.1	39.1
110°	32.9	34.1	35.2	36.0	36.0	36.4	36.4	36.8	36.8	36.4	36.8

TEST NUMBER: P1213022

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	30.1	31.7	32.5	33.3	33.7	34.1	34.1	34.1	34.1	34.1	34.1
115°	27.8	29.4	30.1	30.9	31.3	31.7	31.7	31.7	31.7	31.7	31.7
117.5°	25.8	27.4	28.2	28.6	29.0	29.4	29.7	29.7	29.7	29.7	29.4
120°	23.9	25.1	25.8	26.6	27.0	27.4	27.4	27.4	27.4	27.4	27.4
122.5°	21.9	23.1	23.9	24.7	25.1	25.4	25.4	25.4	25.4	25.4	25.4
125°	20.0	21.1	21.9	22.7	23.1	23.5	23.5	23.5	23.5	23.5	23.5
127.5°	18.0	19.2	20.4	20.7	21.1	21.5	21.5	21.5	21.9	21.5	21.5
130°	16.0	17.2	18.4	18.8	19.2	19.6	20.0	20.0	20.0	20.0	19.6
132.5°	14.5	15.7	16.4	16.8	17.6	17.6	18.0	18.0	18.0	18.0	17.6
135°	13.3	14.1	14.9	15.3	16.0	16.0	16.0	16.4	16.4	16.0	15.7
137.5°	11.7	12.5	13.3	13.7	14.1	14.5	14.5	14.9	14.5	14.5	14.5
140°	11.0	11.4	12.1	12.5	12.9	12.9	12.9	13.3	13.3	12.9	12.9
142.5°	9.4	10.2	11.0	11.4	11.7	11.7	11.7	11.7	11.7	11.7	11.7
145°	7.8	9.0	9.4	10.2	10.2	10.6	10.6	10.6	10.6	10.6	10.2
147.5°	6.7	7.4	8.6	9.0	9.0	9.4	9.4	9.4	9.4	9.4	9.0
150°	5.1	5.9	7.0	7.8	7.8	8.2	8.2	8.2	8.2	7.8	7.8
152.5°	4.3	5.1	5.5	6.3	6.7	6.7	6.7	7.0	6.7	6.7	6.7
155°	3.9	4.3	4.7	5.1	5.5	5.9	5.9	5.9	5.9	5.5	5.5
157.5°	3.1	3.5	3.9	4.3	4.7	5.1	5.1	5.1	5.1	5.1	4.7
160°	2.3	2.7	3.1	3.1	3.5	3.9	4.3	3.9	3.9	3.9	3.9
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: P1213022

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

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7
2.5°	710.1	709.7	710.9	708.9	703.0	704.6	703.8	707.3	708.1	708.9	712.4
5°	710.1	709.7	710.5	708.9	702.6	703.8	703.0	706.6	707.3	707.7	711.3
7.5°	708.5	708.1	709.3	707.3	700.7	702.3	701.1	704.6	705.0	705.4	708.5
10°	705.4	705.0	705.8	704.2	697.6	699.1	697.6	701.1	701.1	701.9	704.2
12.5°	700.7	699.9	701.5	699.5	692.1	694.0	693.3	695.6	696.0	696.4	698.7
15°	694.0	693.3	694.4	693.3	686.6	687.0	685.8	689.3	689.7	688.9	691.3
17.5°	684.2	683.5	685.8	685.0	678.4	679.9	679.6	680.3	681.5	679.6	682.7
20°	672.1	672.9	673.7	674.1	669.0	669.0	668.6	670.2	671.3	669.8	672.1
22.5°	654.1	656.1	658.4	659.2	655.7	655.3	657.6	656.8	658.0	657.2	658.8
25°	631.4	635.3	637.7	640.0	638.1	638.8	642.4	643.1	643.1	642.8	644.3
27.5°	603.2	608.3	612.6	617.7	615.7	617.3	623.2	624.0	625.5	624.0	627.1
30°	569.6	574.3	582.5	589.9	590.7	593.0	601.3	602.0	606.4	604.8	606.0
32.5°	535.9	538.2	547.6	555.1	559.8	565.6	574.6	576.2	582.1	583.3	583.3
35°	493.6	500.3	508.9	519.4	525.3	531.6	543.7	546.1	554.7	557.4	560.6
37.5°	458.0	464.3	469.7	480.7	491.3	498.3	508.1	514.0	523.0	528.1	532.0
40°	420.0	425.1	431.0	441.9	450.9	461.5	471.3	478.3	489.7	495.6	500.7
42.5°	384.0	387.9	394.2	402.0	411.4	423.2	432.5	440.8	452.9	461.1	467.0
45°	351.9	354.3	359.7	365.6	373.8	386.0	395.0	405.5	415.3	423.9	431.0
47.5°	321.8	324.9	327.6	331.6	339.0	346.4	357.0	367.2	377.0	386.4	393.4
50°	294.0	294.0	298.3	301.0	306.1	312.8	321.0	328.0	340.2	346.8	355.8
52.5°	267.0	268.5	270.9	272.4	276.4	280.7	287.3	293.2	303.4	309.6	318.2
55°	243.1	244.7	245.8	246.6	249.0	254.0	256.4	261.1	268.1	273.2	280.7
57.5°	220.4	221.2	222.3	222.7	223.1	226.3	228.2	229.4	236.4	241.5	247.8
60°	199.6	199.6	200.8	200.4	200.0	201.6	201.2	202.4	206.7	209.8	212.6
62.5°	180.1	180.1	180.5	179.7	179.3	179.3	177.7	178.9	180.1	180.5	182.4
65°	162.1	164.0	162.5	162.8	160.5	159.7	158.9	156.6	156.2	154.6	155.4
67.5°	146.0	147.6	146.0	146.0	144.1	142.5	140.5	136.6	135.4	132.3	131.5
70°	133.1	131.9	132.7	131.5	129.2	127.2	124.5	121.3	117.4	113.5	110.8
72.5°	120.6	120.6	119.8	118.6	117.4	113.5	110.4	106.9	102.2	97.1	93.2
75°	108.4	108.8	108.8	107.6	105.7	102.2	98.6	93.6	88.5	82.6	77.5
77.5°	99.8	99.8	99.8	97.9	95.9	92.8	88.5	83.0	77.5	70.5	64.6
80°	91.6	91.2	91.2	88.9	86.9	83.4	79.1	73.6	67.7	60.3	53.6
82.5°	84.9	84.6	83.8	81.8	79.1	75.5	71.2	65.4	59.1	52.5	44.2
85°	77.9	77.5	76.7	74.8	72.0	68.9	64.2	58.3	52.1	44.6	36.8
87.5°	71.6	71.2	70.1	68.9	65.8	62.2	57.5	52.1	45.4	38.4	30.5
90°	67.3	66.5	65.8	64.2	61.5	57.5	52.8	47.0	40.3	33.3	25.4
92.5°	62.2	61.8	60.7	59.1	56.8	52.8	48.1	42.7	36.0	29.4	21.9
95°	57.2	56.8	56.0	54.4	52.1	48.5	44.2	38.8	32.5	25.8	19.2
97.5°	52.5	52.5	51.3	50.1	47.4	44.6	40.3	35.2	29.4	23.5	17.2
100°	48.5	48.5	47.4	45.8	43.8	41.1	36.8	32.1	26.6	21.1	14.9
102.5°	45.0	44.6	43.8	42.3	40.3	37.6	33.7	29.4	24.3	18.8	13.3
105°	41.9	41.5	40.7	39.1	37.6	34.4	31.3	27.0	21.9	16.8	11.7
107.5°	38.8	38.4	38.0	36.4	34.4	31.7	28.6	24.3	20.0	15.3	10.6
110°	36.0	35.6	34.8	33.3	31.3	29.0	25.8	22.3	18.0	13.7	9.4

TEST NUMBER: P1213022

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

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	33.7	33.3	32.5	30.9	29.4	26.6	23.9	20.0	16.4	12.5	8.2
115°	31.3	30.9	30.1	28.6	26.6	24.3	21.5	18.4	14.5	11.0	7.4
117.5°	29.0	28.6	27.8	26.6	24.7	22.3	19.6	16.4	12.9	10.2	6.7
120°	27.0	26.2	25.4	24.3	22.3	20.4	17.6	14.9	11.7	9.0	5.9
122.5°	25.1	24.3	23.5	22.3	20.4	18.4	15.7	13.3	11.0	8.2	5.5
125°	22.7	22.3	21.5	20.4	18.4	16.4	14.5	12.1	9.8	7.4	4.7
127.5°	20.7	20.4	19.6	18.0	16.4	14.9	12.9	11.0	8.6	6.3	4.3
130°	19.2	18.4	17.6	16.4	15.3	13.7	11.7	9.8	7.8	5.5	3.9
132.5°	17.2	16.4	15.7	14.9	13.7	12.1	10.6	8.6	7.0	5.1	3.5
135°	15.7	14.9	14.1	13.3	12.1	11.0	9.4	7.8	6.3	4.7	3.1
137.5°	13.7	13.3	12.9	12.1	11.0	9.8	8.6	6.7	5.5	4.3	2.7
140°	12.5	12.1	11.7	10.6	9.8	8.6	7.4	5.9	4.7	3.5	2.3
142.5°	11.4	11.0	10.2	9.4	8.6	7.8	6.3	5.5	4.3	3.1	2.3
145°	9.8	9.4	9.0	8.2	7.4	6.3	5.5	4.7	3.9	2.7	2.0
147.5°	9.0	8.6	7.8	7.0	6.3	5.5	5.1	4.3	3.1	2.3	1.6
150°	7.4	7.0	6.7	5.9	5.5	5.1	4.3	3.5	2.7	2.0	1.6
152.5°	6.3	5.9	5.5	5.5	4.7	4.3	3.5	3.1	2.3	2.0	1.2
155°	5.5	5.5	5.1	4.7	3.9	3.5	3.1	2.3	2.0	1.6	1.2
157.5°	4.7	4.3	3.9	3.9	3.5	3.1	2.3	2.0	1.6	1.6	1.2
160°	3.9	3.5	3.5	3.1	2.7	2.3	2.0	2.0	1.6	1.2	1.2
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: P1213022

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

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7
2.5°	712.8	708.5	712.4	717.5	717.5	716.7	716.0	717.5	721.4	719.9	715.2
5°	711.7	707.3	710.9	716.0	716.0	714.8	714.0	715.2	719.5	717.5	713.2
7.5°	709.3	705.4	707.7	712.4	712.4	711.3	710.5	712.0	715.6	713.6	708.9
10°	705.0	700.7	703.4	707.7	707.3	706.6	705.4	707.3	710.5	707.7	702.3
12.5°	699.5	695.2	697.6	701.5	701.1	699.5	698.7	699.9	702.6	701.1	695.2
15°	692.1	687.8	689.7	693.6	692.5	691.3	689.7	690.1	693.6	690.9	684.6
17.5°	683.1	678.4	679.9	683.5	682.3	681.1	679.2	679.6	683.5	679.6	672.9
20°	672.1	667.0	668.2	672.5	670.5	668.6	666.6	666.6	670.5	666.2	658.8
22.5°	660.4	655.3	656.1	659.2	657.6	654.1	652.2	653.3	655.3	649.8	642.0
25°	645.9	639.2	640.4	643.5	642.4	637.7	635.7	636.5	635.7	631.4	623.2
27.5°	629.1	622.0	622.8	624.7	623.2	618.9	616.5	616.9	615.4	609.9	600.5
30°	607.9	604.4	604.0	605.2	602.8	598.5	595.8	595.0	594.6	586.8	575.4
32.5°	586.4	583.3	581.3	582.9	580.1	575.8	571.1	571.1	567.2	559.8	550.0
35°	564.5	559.4	557.4	558.6	555.5	550.0	546.1	544.1	538.2	528.8	518.3
37.5°	536.3	532.8	530.4	531.6	528.1	524.1	516.7	514.8	508.5	495.6	482.3
40°	505.7	503.0	500.7	501.8	497.9	492.0	485.4	482.3	475.2	460.7	450.2
42.5°	472.9	471.7	469.0	473.3	465.4	459.6	452.9	447.8	440.8	425.1	413.0
45°	438.0	440.8	434.5	435.7	430.6	425.5	418.5	411.0	404.0	389.1	375.4
47.5°	401.2	403.2	398.9	399.7	394.2	389.5	383.2	373.8	366.0	353.1	341.0
50°	363.3	362.5	362.5	361.7	357.4	351.5	345.3	336.6	328.8	317.1	306.9
52.5°	322.9	324.5	325.3	327.2	321.8	318.2	308.5	301.0	295.2	283.0	274.4
55°	284.2	289.7	288.1	288.9	282.6	279.9	272.1	266.2	257.6	250.5	245.0
57.5°	249.0	250.1	250.9	252.1	249.4	243.9	237.6	232.9	226.3	220.4	216.5
60°	214.9	214.9	215.3	217.3	214.5	209.8	205.1	201.6	196.9	193.4	191.0
62.5°	182.8	185.5	185.9	184.4	180.8	178.5	175.4	173.4	170.3	169.1	168.3
65°	153.1	153.1	153.1	153.8	151.9	150.3	148.4	148.0	149.1	147.6	148.4
67.5°	128.0	126.8	126.0	126.4	125.7	124.9	124.5	125.7	128.0	128.0	130.0
70°	106.5	104.1	102.6	102.6	102.6	103.0	104.1	106.5	110.4	112.0	114.7
72.5°	88.9	83.8	81.4	81.4	81.8	83.4	86.9	91.2	94.7	97.9	101.4
75°	72.0	66.9	63.4	63.0	63.8	66.2	71.2	75.2	81.0	85.3	89.6
77.5°	58.3	52.1	47.8	47.4	48.5	52.1	58.3	63.4	70.1	74.8	79.5
80°	46.6	39.5	36.0	33.7	35.6	39.9	47.0	53.2	59.5	65.8	71.6
82.5°	37.2	30.5	25.1	22.7	25.1	30.9	37.6	45.0	51.3	57.9	63.8
85°	29.4	22.3	16.0	13.7	16.4	22.7	30.1	37.6	44.6	51.3	57.2
87.5°	23.1	16.0	9.8	6.7	10.2	16.8	23.9	31.3	38.8	45.4	51.3
90°	18.0	11.4	5.5	0.8	5.9	12.1	19.2	26.2	33.7	40.3	46.2
92.5°	15.3	8.6	3.1	0.0	3.5	9.0	15.7	22.7	29.4	36.0	41.9
95°	12.9	7.0	2.3	0.0	2.3	7.0	12.9	19.2	25.8	32.5	38.4
97.5°	11.0	5.5	1.6	0.0	1.6	5.5	10.6	16.8	22.7	29.0	34.4
100°	9.4	4.7	1.2	0.0	1.2	4.3	9.0	14.5	20.4	26.2	31.3
102.5°	8.2	3.9	0.8	0.0	0.8	3.5	7.4	12.5	17.6	23.1	28.2
105°	7.0	3.1	0.8	0.0	0.4	2.7	6.3	11.0	15.7	20.7	25.4
107.5°	6.3	2.7	0.8	0.0	0.4	2.3	5.5	9.4	14.1	18.4	22.7
110°	5.5	2.3	0.8	0.0	0.4	1.6	4.7	8.2	12.1	16.4	20.7

TEST NUMBER: P1213022

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

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	4.7	2.0	0.4	0.0	0.0	1.2	3.9	7.0	10.6	14.9	18.4
115°	4.3	2.0	0.4	0.0	0.0	0.8	3.1	6.3	9.4	13.3	16.4
117.5°	3.9	1.6	0.4	0.0	0.4	0.8	2.7	5.5	8.2	11.4	14.9
120°	3.5	1.6	0.4	0.0	0.4	0.4	2.0	4.7	7.0	10.2	12.9
122.5°	3.1	1.6	0.4	0.0	0.4	0.4	1.6	3.9	6.3	9.0	11.4
125°	2.7	1.2	0.8	0.4	0.4	0.4	1.2	3.1	5.5	7.4	10.2
127.5°	2.7	1.2	0.8	0.4	0.4	0.4	0.8	2.7	4.3	6.7	9.0
130°	2.3	1.2	0.8	0.4	0.4	0.4	0.4	2.0	3.9	5.5	7.4
132.5°	2.0	1.2	0.8	0.4	0.4	0.4	0.4	1.2	2.7	4.7	6.3
135°	2.0	1.2	0.8	0.4	0.4	0.4	0.4	0.8	2.0	3.5	5.1
137.5°	1.6	0.8	0.8	0.4	0.4	0.4	0.4	0.4	1.6	2.7	3.9
140°	1.6	0.8	0.8	0.4	0.4	0.4	0.4	0.4	1.2	2.0	3.1
142.5°	1.2	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.8	1.6	2.3
145°	1.2	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.8	1.6
147.5°	1.2	1.2	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.8	1.2
150°	1.2	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8
152.5°	1.2	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8
155°	1.2	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8
157.5°	1.2	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8
160°	1.2	0.8	0.8	0.4	0.8	0.4	0.8	0.8	0.8	0.8	0.8
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: P1213022

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

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7
2.5°	713.6	706.2	710.1	708.9	710.5	713.6	713.2	712.4	712.4	711.3	709.7
5°	711.3	704.2	707.7	705.8	707.7	710.5	710.1	708.9	709.7	707.7	705.8
7.5°	706.6	700.3	703.4	701.9	703.4	706.2	705.0	704.6	705.4	702.3	701.1
10°	701.1	694.0	697.6	695.6	697.6	699.5	698.7	697.2	698.7	695.6	694.4
12.5°	692.5	686.6	688.9	688.2	689.3	691.3	689.7	688.6	689.3	686.6	684.2
15°	683.1	677.2	679.2	678.0	678.8	681.1	678.4	678.0	677.2	674.5	673.7
17.5°	670.9	665.5	667.4	665.5	666.6	665.9	665.5	663.5	663.5	660.4	658.0
20°	656.1	651.4	650.2	648.6	650.2	648.6	646.3	644.7	644.3	641.2	639.2
22.5°	638.8	633.4	634.1	629.8	630.2	627.9	624.0	622.4	620.8	617.3	614.6
25°	618.1	612.6	608.7	606.0	602.4	602.0	597.0	593.0	592.7	588.3	588.0
27.5°	594.6	588.3	585.2	578.6	574.3	570.7	566.4	562.5	560.6	555.9	552.7
30°	567.6	560.6	552.7	548.0	541.4	538.6	531.2	526.5	524.9	519.8	517.5
32.5°	537.1	529.6	523.4	514.4	506.9	503.0	495.6	490.9	488.9	483.4	480.3
35°	503.8	495.6	488.1	479.5	473.7	467.0	458.0	453.3	449.0	447.0	444.7
37.5°	469.0	460.0	451.3	442.7	437.6	429.8	422.0	418.8	413.8	411.8	409.5
40°	432.9	423.9	415.7	407.5	401.6	394.6	387.5	386.4	380.9	378.9	377.4
42.5°	397.3	387.9	378.5	372.7	368.4	361.3	356.6	355.4	350.7	349.6	349.6
45°	365.2	353.5	345.6	340.6	337.0	331.2	327.2	326.5	322.6	321.8	321.8
47.5°	330.8	319.8	313.9	310.8	307.7	303.4	301.0	301.0	297.1	296.3	295.9
50°	298.7	288.5	284.2	281.1	280.7	277.5	275.6	274.8	274.8	272.1	272.4
52.5°	268.1	263.1	259.5	257.6	255.2	253.3	251.7	251.7	250.5	248.6	249.4
55°	240.0	234.1	234.5	232.9	231.7	230.6	231.0	228.6	228.2	226.6	227.8
57.5°	211.8	211.8	211.0	209.8	207.9	208.6	208.6	208.6	206.7	205.5	206.7
60°	187.9	189.1	187.1	188.3	187.5	187.9	187.1	187.1	185.9	185.5	185.9
62.5°	166.8	168.7	167.9	169.5	168.7	169.1	169.9	168.3	167.5	166.8	167.5
65°	148.0	150.3	149.9	151.1	151.5	151.9	152.3	151.5	150.7	149.9	149.5
67.5°	131.5	133.9	135.4	135.8	136.2	137.4	137.0	136.2	135.4	134.3	133.9
70°	116.7	119.8	121.7	122.5	124.1	123.3	123.3	122.9	122.1	121.0	120.6
72.5°	104.1	107.6	109.6	110.4	112.0	112.0	111.6	111.2	110.4	109.2	108.8
75°	93.2	96.3	99.0	100.6	101.8	101.8	101.4	101.0	100.2	99.4	99.0
77.5°	84.6	87.3	89.6	91.6	92.4	92.8	92.4	91.6	91.6	91.2	90.8
80°	75.9	79.1	81.4	83.4	84.6	84.6	84.2	84.6	83.8	83.4	83.0
82.5°	68.5	72.0	74.8	76.7	77.5	77.9	77.5	77.9	77.1	77.1	77.1
85°	61.8	65.4	68.5	70.1	71.2	71.6	71.6	71.6	71.2	71.2	71.2
87.5°	56.4	59.9	63.0	64.6	65.8	66.2	66.2	66.5	65.8	65.8	65.8
90°	51.3	54.8	57.9	59.5	60.7	61.5	61.5	61.8	61.5	61.1	61.1
92.5°	46.6	50.5	53.6	55.2	56.4	57.5	57.5	57.9	57.2	57.2	57.2
95°	42.7	46.6	49.3	51.3	52.5	53.2	53.6	53.6	53.2	53.2	53.2
97.5°	39.1	42.7	45.4	47.4	48.5	48.9	49.3	49.7	49.3	49.3	49.3
100°	35.6	39.1	41.9	43.5	45.0	45.4	45.8	46.2	46.2	45.8	45.8
102.5°	32.5	36.0	38.4	40.3	41.5	42.3	42.7	42.7	42.7	42.7	42.7
105°	29.4	32.9	35.2	37.2	38.4	39.1	39.5	39.9	39.9	39.5	39.5
107.5°	26.6	29.7	32.5	34.1	35.6	36.4	36.8	36.8	37.2	36.8	36.8
110°	23.9	27.4	29.7	31.3	32.9	33.7	34.1	34.4	34.4	34.4	34.4

TEST NUMBER: P1213022

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

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	21.9	24.7	27.0	28.6	30.1	30.9	31.3	31.7	32.1	31.7	31.7
115°	19.6	22.3	24.7	26.2	27.4	28.2	29.0	29.4	29.4	29.7	29.4
117.5°	17.6	20.0	22.3	23.9	25.1	26.2	26.6	27.0	27.4	27.0	27.0
120°	15.7	18.0	20.0	21.5	22.7	23.9	24.3	24.7	25.1	24.7	24.7
122.5°	14.1	16.0	18.0	19.6	20.7	21.5	22.3	22.3	22.7	22.7	22.7
125°	12.5	14.5	16.0	17.6	18.8	19.6	20.0	20.4	20.4	20.7	20.7
127.5°	11.0	12.5	14.5	15.7	16.8	17.6	18.0	18.4	18.4	18.8	18.8
130°	9.4	11.0	12.5	13.7	14.9	15.7	16.0	16.4	16.8	16.8	16.8
132.5°	8.2	9.8	11.0	12.1	12.9	13.7	14.5	14.9	14.9	14.9	14.9
135°	6.7	8.2	9.4	10.6	11.4	12.1	12.5	13.3	13.3	13.3	13.3
137.5°	5.5	7.0	8.2	9.0	9.8	10.6	11.0	11.4	11.7	11.7	11.7
140°	4.3	5.5	6.7	7.8	8.6	9.0	9.8	9.8	10.2	10.2	10.2
142.5°	3.1	4.3	5.1	6.3	7.0	7.8	8.2	8.6	8.6	8.6	8.6
145°	2.3	3.1	3.9	4.7	5.9	6.3	6.7	7.0	7.4	7.4	7.4
147.5°	1.6	2.3	2.7	3.5	4.3	5.1	5.5	5.9	6.3	6.3	6.3
150°	1.2	1.6	2.3	2.7	3.1	3.9	4.7	4.7	5.1	5.1	4.7
152.5°	0.8	1.2	1.6	2.0	2.3	2.7	3.5	3.5	3.9	3.9	3.9
155°	0.8	0.8	0.8	1.2	1.6	2.0	2.3	2.7	2.7	2.7	2.7
157.5°	0.8	0.8	0.8	0.8	0.8	1.2	1.6	2.0	2.0	2.0	2.0
160°	0.8	0.8	0.4	0.4	0.8	0.8	0.8	0.8	1.2	1.2	1.2
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: P1213022

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

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7	711.7
2.5°	710.9	711.7	711.7	710.9	710.5	712.0	710.1	702.6	705.0	705.8	708.1
5°	707.3	708.1	708.1	708.1	707.3	708.9	707.0	699.5	702.3	703.4	705.0
7.5°	702.3	702.6	703.4	703.0	702.3	704.6	702.6	695.2	697.2	699.1	701.1
10°	695.6	695.6	696.0	696.8	696.0	697.9	696.0	689.3	691.3	692.5	694.8
12.5°	686.6	687.4	687.8	687.4	687.0	688.6	687.8	681.5	682.3	684.6	687.0
15°	674.5	674.5	676.4	675.6	675.6	677.2	678.0	670.9	672.1	675.6	678.0
17.5°	659.6	660.0	661.5	662.3	661.9	664.7	665.1	659.6	659.2	663.5	665.9
20°	640.4	641.2	643.1	644.7	644.7	647.8	649.0	645.5	645.9	650.6	651.4
22.5°	616.9	616.9	620.4	622.8	624.7	626.7	630.2	627.1	627.1	633.4	636.9
25°	588.0	590.7	591.9	596.6	599.3	604.8	607.9	608.3	608.7	614.6	616.9
27.5°	555.9	556.6	560.2	565.6	568.8	573.9	579.7	580.9	582.9	590.7	594.2
30°	519.4	521.8	523.4	531.2	535.5	542.2	549.6	552.3	553.9	564.5	568.8
32.5°	482.3	483.0	489.7	494.0	499.1	506.1	514.8	519.8	523.0	533.9	540.2
35°	445.1	446.6	452.1	457.6	462.7	469.7	478.7	485.8	491.3	501.1	509.3
37.5°	411.0	414.9	416.1	421.6	425.5	432.5	438.8	449.0	454.5	464.6	475.2
40°	380.5	381.7	382.4	387.9	390.7	397.3	406.3	413.0	420.4	427.9	440.4
42.5°	350.3	351.1	352.3	355.4	358.6	363.3	369.9	376.6	384.4	395.4	403.6
45°	322.6	323.3	324.1	326.1	328.8	333.1	337.4	342.1	350.0	359.3	368.0
47.5°	296.7	298.3	298.3	298.7	300.6	304.2	307.3	313.2	317.5	322.6	332.3
50°	272.1	273.2	273.6	273.6	274.8	277.1	277.9	281.8	285.8	290.5	297.5
52.5°	249.0	249.0	248.6	250.1	250.1	251.7	252.1	254.4	257.2	262.3	265.4
55°	227.0	227.0	228.2	227.4	227.4	228.2	227.8	228.2	230.6	233.7	236.4
57.5°	205.9	205.5	206.7	205.9	205.5	206.3	207.1	205.5	205.9	209.0	209.0
60°	184.8	185.2	186.3	185.5	185.5	185.5	184.8	184.0	183.2	185.2	185.9
62.5°	167.9	166.8	167.9	166.8	167.5	167.1	166.4	164.8	165.2	164.4	163.6
65°	150.3	150.3	150.7	149.5	150.3	150.3	149.1	148.7	146.4	145.6	143.7
67.5°	135.0	135.0	135.4	134.7	134.7	135.0	133.9	132.7	130.4	129.2	126.4
70°	121.7	121.7	121.7	121.3	121.3	121.3	120.6	119.0	116.7	114.7	111.2
72.5°	109.6	110.0	109.6	109.6	110.8	109.6	108.4	106.9	104.9	101.0	97.9
75°	99.8	100.2	99.8	99.8	99.8	99.4	99.0	96.7	94.3	91.2	86.5
77.5°	91.2	91.2	91.6	91.2	91.2	90.8	89.6	87.7	84.9	82.2	76.7
80°	83.0	83.4	83.8	84.2	83.4	83.0	81.8	80.2	76.7	73.6	68.1
82.5°	77.1	76.7	77.1	77.5	76.7	76.3	75.2	73.2	70.5	66.2	60.7
85°	71.2	70.9	70.9	71.2	70.9	70.1	68.9	66.9	64.2	59.9	54.4
87.5°	65.4	65.8	66.2	65.8	65.4	64.6	63.4	61.5	58.3	54.8	48.9
90°	61.1	61.1	61.1	61.1	60.7	59.9	58.7	56.4	53.6	49.3	44.2
92.5°	57.2	57.2	57.2	57.2	56.8	55.6	54.4	52.5	49.3	45.0	40.3
95°	53.2	53.6	53.2	53.2	52.5	52.1	50.1	48.1	45.4	41.1	36.0
97.5°	48.9	49.3	48.9	48.9	48.5	47.8	46.6	44.2	41.5	37.6	32.9
100°	45.8	45.8	45.4	45.4	45.0	44.2	42.7	40.7	38.0	34.1	29.4
102.5°	42.3	42.7	42.3	42.3	41.5	40.7	39.5	37.6	34.8	30.9	26.6
105°	39.5	39.5	39.1	39.1	38.4	37.6	36.4	34.1	31.7	28.2	23.9
107.5°	36.8	36.8	36.4	36.4	35.6	34.8	33.3	31.3	29.0	25.4	21.5
110°	34.1	34.1	34.1	33.7	32.9	31.7	30.5	28.6	26.2	23.1	19.2

TEST NUMBER: P1213022

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

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	32.1	31.7	31.3	30.9	30.1	29.4	27.8	25.8	23.5	20.7	17.2
115°	29.4	29.4	29.0	28.6	27.8	26.6	25.4	23.9	21.5	18.4	15.3
117.5°	27.0	27.0	26.6	26.2	25.4	24.3	23.1	21.5	19.2	16.4	13.7
120°	24.7	24.7	24.3	23.9	23.1	21.9	21.1	19.2	17.2	14.5	12.1
122.5°	22.7	22.3	22.3	21.5	21.1	20.0	18.8	17.2	15.3	12.9	10.6
125°	20.4	20.4	20.0	19.6	19.2	18.0	16.8	15.3	13.3	11.4	9.4
127.5°	18.4	18.4	18.0	17.6	17.2	16.0	14.9	13.7	11.7	9.8	7.8
130°	16.4	16.4	16.0	15.7	15.3	14.1	13.3	11.7	10.2	8.6	6.7
132.5°	14.9	14.9	14.5	14.1	13.3	12.5	11.7	10.2	9.0	7.4	5.9
135°	13.3	12.9	12.9	12.5	11.7	11.0	10.2	9.0	7.4	6.3	4.7
137.5°	11.7	11.4	11.0	10.6	10.2	9.4	8.6	7.8	6.7	5.1	3.9
140°	10.2	9.8	9.8	9.4	8.6	8.2	7.4	6.3	5.5	4.3	3.1
142.5°	8.6	8.6	8.2	7.8	7.4	7.0	6.3	5.5	4.3	3.5	2.3
145°	7.4	7.0	7.0	6.7	6.3	5.5	5.1	4.3	3.5	2.7	2.0
147.5°	5.9	5.9	5.9	5.5	5.1	4.7	4.3	3.5	2.7	2.0	1.2
150°	4.7	4.7	4.7	4.3	3.9	3.5	3.1	2.7	2.0	1.2	0.8
152.5°	3.9	3.9	3.5	3.5	3.1	2.7	2.3	2.0	1.2	0.8	0.8
155°	2.7	2.7	2.7	2.3	2.3	2.0	1.6	1.2	0.8	0.8	0.8
157.5°	2.0	2.0	2.0	1.6	1.6	1.2	1.2	0.8	0.8	0.8	0.8
160°	1.2	1.2	1.2	1.2	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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: P1213022

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

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	711.7	711.7	711.7	711.7	711.7	711.7	711.7
2.5°	707.0	706.6	709.7	709.7	706.2	711.7	717.5
5°	704.6	704.2	707.3	707.3	704.2	709.7	716.0
7.5°	699.9	700.3	703.4	704.2	700.3	705.4	712.0
10°	694.8	694.4	697.9	698.7	695.6	700.3	706.6
12.5°	686.6	686.6	690.1	691.3	688.2	693.6	699.5
15°	678.0	678.0	680.3	682.3	679.6	684.6	690.5
17.5°	667.0	666.6	669.0	671.3	668.6	674.1	680.3
20°	652.9	652.9	655.7	658.4	656.5	661.5	668.6
22.5°	638.1	636.5	641.2	643.1	642.0	647.1	654.1
25°	619.3	618.9	623.6	626.3	624.7	630.2	636.5
27.5°	598.9	598.5	603.2	606.7	606.0	611.0	618.1
30°	574.3	576.2	580.5	586.4	584.4	589.9	597.3
32.5°	548.4	550.4	555.5	561.7	562.1	566.4	573.9
35°	517.5	522.6	526.1	534.3	535.9	540.2	548.0
37.5°	485.0	490.9	498.3	504.6	507.7	511.2	520.2
40°	448.6	457.2	465.4	472.9	476.8	480.3	488.9
42.5°	415.7	422.4	430.2	437.6	444.7	447.8	456.8
45°	378.5	386.4	393.4	402.4	409.5	413.0	422.0
47.5°	342.1	350.0	359.3	365.6	373.0	376.6	385.2
50°	307.3	314.3	322.2	329.6	335.9	339.0	346.4
52.5°	272.8	280.3	287.7	292.4	299.1	301.4	307.7
55°	242.3	247.4	254.0	256.8	263.4	265.0	269.3
57.5°	212.9	216.5	218.8	223.5	228.2	231.7	236.8
60°	186.3	187.9	189.5	192.2	196.1	197.3	199.2
62.5°	162.5	162.1	165.2	166.0	166.4	170.3	168.3
65°	141.3	141.7	139.0	137.8	139.4	140.5	139.7
67.5°	123.7	121.3	119.0	116.3	113.9	115.1	113.9
70°	106.5	104.5	100.6	96.7	95.1	92.8	91.6
72.5°	92.8	88.1	84.2	79.1	76.3	73.6	71.6
75°	82.2	75.5	70.1	64.6	60.7	56.8	56.0
77.5°	71.2	65.0	58.7	52.8	47.0	42.7	41.1
80°	62.6	56.8	49.3	42.3	36.0	30.5	28.6
82.5°	54.8	48.5	41.1	33.7	26.6	20.7	18.4
85°	48.1	41.5	34.1	26.6	19.6	13.3	10.2
87.5°	43.1	35.6	28.2	21.1	13.7	7.4	3.9
90°	38.4	31.3	24.3	16.8	9.8	3.9	0.0
92.5°	34.1	27.4	20.4	13.7	7.4	2.3	0.4
95°	30.1	24.3	17.2	11.0	5.5	1.6	0.4
97.5°	27.0	21.1	14.9	9.0	4.3	1.2	0.4
100°	24.3	18.4	12.9	7.4	3.5	0.8	0.4
102.5°	21.5	16.4	11.0	6.3	2.7	0.4	0.4
105°	19.2	14.5	9.4	5.5	2.3	0.4	0.4
107.5°	17.2	12.9	8.2	4.7	1.6	0.4	0.4
110°	15.3	11.0	7.0	3.9	1.2	0.4	0.4

TEST NUMBER: P1213022

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

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	13.7	9.8	6.3	3.1	0.8	0.4	0.4
115°	12.1	8.6	5.5	2.7	0.8	0.4	0.4
117.5°	10.6	7.4	4.7	2.0	0.4	0.4	0.4
120°	9.4	6.7	3.9	1.6	0.4	0.4	0.4
122.5°	8.2	5.5	3.1	1.2	0.4	0.4	0.4
125°	7.0	4.7	2.7	0.8	0.4	0.4	0.4
127.5°	5.9	3.9	2.0	0.8	0.4	0.4	0.4
130°	5.1	3.1	1.6	0.4	0.4	0.4	0.4
132.5°	4.3	2.3	1.2	0.4	0.4	0.4	0.4
135°	3.5	2.0	0.8	0.4	0.4	0.4	0.4
137.5°	2.7	1.6	0.8	0.4	0.4	0.4	0.4
140°	2.0	1.2	0.4	0.4	0.4	0.4	0.4
142.5°	1.6	0.8	0.4	0.4	0.4	0.4	0.4
145°	1.2	0.8	0.4	0.4	0.4	0.4	0.4
147.5°	0.8	0.8	0.8	0.8	0.4	0.4	0.4
150°	0.8	0.8	0.4	0.4	0.8	0.4	0.4
152.5°	0.8	0.4	0.4	0.4	0.8	0.4	0.4
155°	0.8	0.8	0.8	0.8	0.8	0.8	0.4
157.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8
160°	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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)