

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: P1213724

Luminaire Tested: 4SNLED-LD5-22SL-LN-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213724
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-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

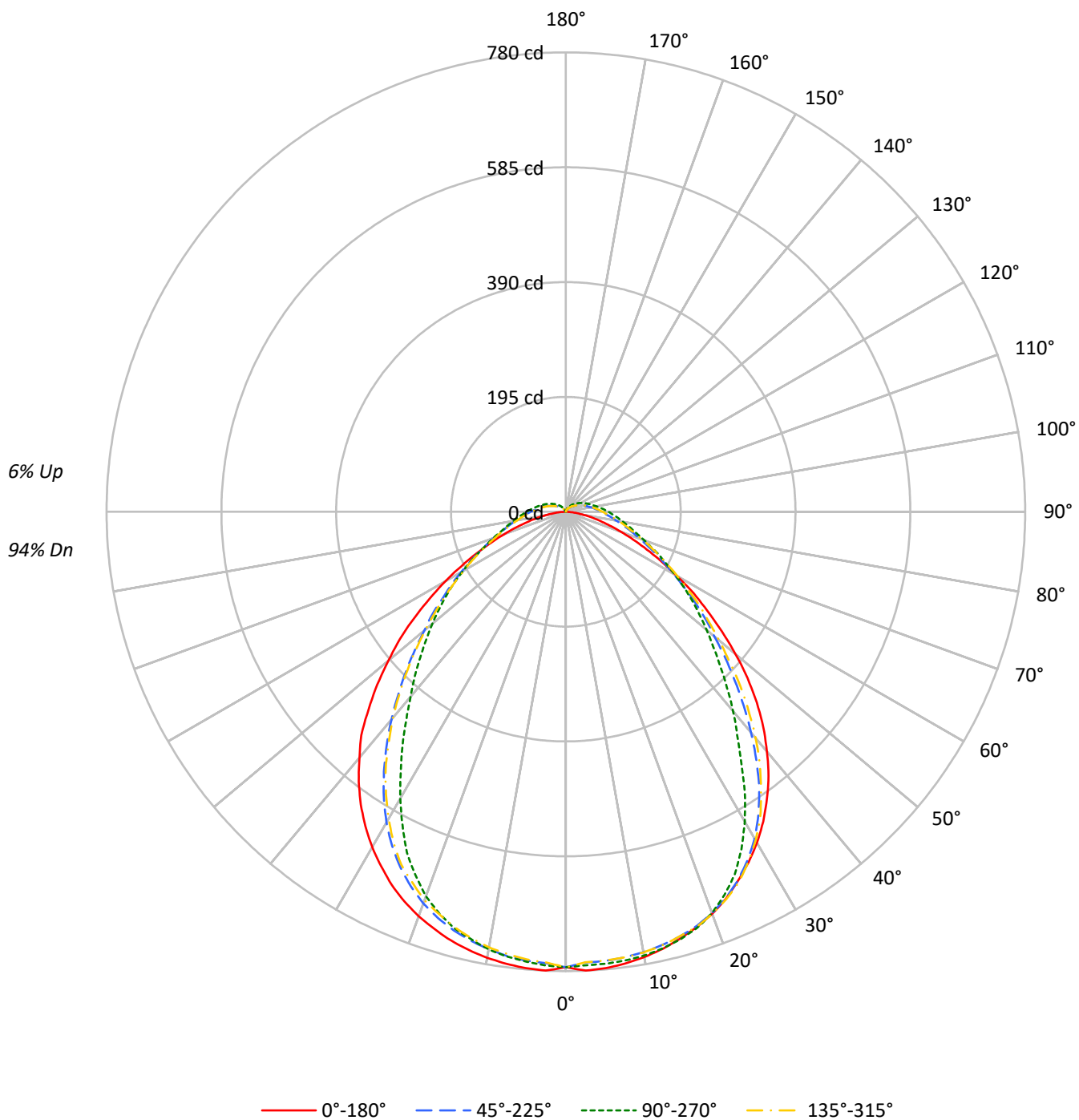
Lumens per Lamp: N/A
Luminaire Lumens: 1957.0 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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°	6249	6249	6249	6249
5°	6294	6050	6294	6023
10°	6266	5889	6276	5808
15°	6225	5713	6253	5564
20°	6177	5487	6214	5255
25°	6078	5152	6146	4848
30°	5950	4658	6027	4312
35°	5749	4054	5860	3775
40°	5461	3545	5605	3289
45°	5081	3082	5246	2905
50°	4562	2708	4763	2571
55°	3946	2391	4234	2271
60°	3319	2100	3620	1978
65°	2722	1856	2996	1721
70°	2165	1647	2424	1524
75°	1700	1522	1915	1399
80°	1229	1468	1447	1342
85°	758	1476	1018	1356

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 5246 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	3.7
10°-20°	210.2	10.7
20°-30°	311.6	15.9
30°-40°	346.1	17.7
40°-50°	313.8	16.0
50°-60°	243.1	12.4
60°-70°	165.1	8.4
70°-80°	105.0	5.4
80°-90°	67.2	3.4
90°-100°	45.3	2.3
100°-110°	31.0	1.6
110°-120°	20.7	1.1
120°-130°	12.9	0.7
130°-140°	7.1	0.4
140°-150°	3.3	0.2
150°-160°	1.2	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	595.1	30.4
0°-40°	941.2	48.1
0°-60°	1498.1	76.6
0°-90°	1835.4	93.8
90°-120°	97.0	5.0
90°-150°	120.3	6.1
90°-180°	122.0	6.2
0°-180°	1957.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	773	773	773	773	773	
5°	778	770	778	767	778	74
15°	750	752	754	732	750	212
25°	692	679	699	639	692	319
35°	596	519	607	483	596	371
45°	458	371	473	350	458	352
55°	293	261	314	248	293	263
65°	152	175	167	162	152	152
75°	61	117	68	108	61	65
85°	11	84	15	77	11	13
90°	0	73	1	66	0	1
95°	0	62	0	58	0	0
105°	0	46	0	43	0	0
115°	0	34	0	32	0	0
125°	0	26	0	22	0	0
135°	0	18	0	14	0	0
145°	0	12	0	8	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°	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3
2.5°	779.7	778.8	778.0	776.7	778.0	781.4	779.2	774.6	773.7	766.1	769.5
5°	778.0	776.7	775.8	774.6	776.3	780.5	778.4	774.1	772.9	765.6	769.5
7.5°	773.7	772.9	771.6	771.6	773.3	777.5	775.8	771.2	770.3	763.1	767.3
10°	767.8	767.3	766.5	766.5	768.2	773.3	771.2	766.9	766.1	759.3	763.9
12.5°	760.1	760.5	759.3	759.3	761.8	766.9	765.2	760.5	759.7	753.7	758.4
15°	750.3	750.7	749.9	750.3	752.9	758.8	756.7	752.5	751.6	746.9	750.7
17.5°	739.3	739.7	739.7	739.3	742.2	748.2	746.5	742.7	741.4	737.6	742.2
20°	726.5	726.5	726.5	726.5	729.9	735.9	733.7	730.8	728.2	725.2	729.1
22.5°	710.8	710.3	710.8	712.0	715.4	720.1	718.8	715.4	711.6	709.9	712.9
25°	691.6	692.9	693.3	694.6	698.9	702.7	701.4	698.0	692.1	690.8	691.6
27.5°	671.6	672.5	673.8	673.3	679.3	683.1	680.6	677.6	669.1	667.8	667.0
30°	649.1	650.4	651.2	650.8	655.5	659.7	657.2	653.3	641.9	641.0	634.2
32.5°	623.6	624.8	625.7	625.7	632.5	634.2	629.5	624.0	611.7	608.7	602.7
35°	595.5	596.8	597.2	597.2	604.0	603.6	597.6	590.0	576.4	572.5	562.3
37.5°	565.3	566.1	566.6	569.1	572.1	569.5	561.9	552.1	541.9	531.3	520.2
40°	531.3	532.5	533.4	535.1	538.1	535.1	524.0	512.1	501.1	489.2	478.1
42.5°	496.4	500.2	499.4	498.9	500.6	492.6	484.1	470.4	459.4	447.0	436.0
45°	458.5	458.1	460.2	461.1	460.7	453.9	441.9	429.6	418.5	405.8	396.4
47.5°	418.5	418.1	419.8	420.7	418.1	410.9	401.5	387.5	378.1	367.1	359.8
50°	376.4	376.4	379.0	376.4	375.2	367.9	360.3	346.2	339.0	329.2	325.0
52.5°	334.3	338.2	335.6	334.8	333.5	326.2	320.3	308.8	302.9	298.6	293.5
55°	292.6	296.9	295.2	293.9	293.5	287.5	282.0	273.5	269.7	266.7	263.7
57.5°	257.3	256.9	256.1	254.8	255.2	250.5	245.0	240.3	238.6	237.3	238.2
60°	216.5	219.9	218.6	219.1	219.5	218.6	214.0	211.0	211.4	211.8	213.1
62.5°	182.9	185.9	188.0	186.3	187.2	188.4	185.9	185.0	186.7	188.4	190.1
65°	151.9	154.8	157.0	156.5	159.1	161.6	161.2	162.1	165.9	168.0	170.1
67.5°	123.8	126.8	129.7	130.2	134.0	137.8	139.5	142.5	146.7	149.7	152.3
70°	99.5	102.1	105.5	107.6	112.7	117.8	120.8	126.8	129.3	133.6	135.3
72.5°	77.8	80.0	84.6	89.7	94.0	100.4	106.3	111.4	115.3	119.9	122.1
75°	60.8	61.7	66.8	72.7	78.7	85.9	92.3	97.8	102.9	107.6	111.0
77.5°	44.7	45.9	50.6	58.7	65.5	73.2	80.4	86.3	91.9	96.6	101.2
80°	31.1	33.6	38.7	46.8	54.4	63.0	69.8	76.6	82.5	87.2	91.9
82.5°	20.0	22.1	29.3	37.4	45.5	54.0	61.3	68.1	74.4	79.5	83.8
85°	11.1	14.0	21.3	29.8	37.9	46.4	54.0	60.8	67.2	71.9	76.1
87.5°	4.3	8.5	15.3	23.4	31.5	39.6	47.6	54.0	60.4	65.5	69.3
90°	0.0	5.1	11.5	19.6	27.6	35.7	43.4	50.2	56.1	60.8	65.1
92.5°	0.4	3.4	8.9	15.7	23.4	31.1	38.3	45.1	51.0	55.7	59.5
95°	0.4	2.6	7.2	13.6	20.4	27.6	34.5	40.8	46.4	51.0	54.9
97.5°	0.4	1.7	6.0	11.9	17.9	25.1	31.5	37.4	42.5	47.2	50.2
100°	0.4	1.7	5.1	10.2	16.2	22.5	28.5	34.5	39.1	43.0	46.4
102.5°	0.4	1.3	4.3	8.9	14.5	20.0	25.9	31.5	35.7	39.6	43.0
105°	0.4	1.3	3.8	7.7	12.8	18.3	23.4	28.5	33.2	36.6	39.6
107.5°	0.4	0.9	3.4	6.4	11.1	16.6	21.7	25.9	30.2	33.6	36.6
110°	0.4	0.9	3.0	6.0	9.8	14.9	19.6	23.8	27.6	31.1	33.6

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.4	0.9	2.6	5.5	8.9	13.2	17.9	21.7	25.5	28.5	31.1
115°	0.4	0.9	2.6	5.1	8.1	11.5	15.7	20.0	23.0	26.4	28.5
117.5°	0.4	0.9	2.1	4.3	7.7	10.6	14.5	17.9	21.3	24.2	26.4
120°	0.4	0.9	2.1	3.8	6.8	9.8	12.8	16.2	19.6	21.7	23.8
122.5°	0.4	0.9	1.7	3.8	6.0	8.9	11.5	14.5	17.4	20.0	22.1
125°	0.4	0.9	1.7	3.4	5.5	8.1	10.6	12.8	15.7	17.9	20.0
127.5°	0.4	0.9	1.7	3.0	5.1	7.2	9.8	11.9	14.0	16.2	17.9
130°	0.4	0.9	1.3	2.6	4.7	6.4	8.5	11.1	12.8	14.5	16.2
132.5°	0.4	0.9	1.3	2.6	3.8	5.5	7.7	9.8	11.5	13.2	14.5
135°	0.4	0.9	1.3	2.1	3.4	5.1	6.4	8.5	10.2	11.9	13.2
137.5°	0.4	0.9	1.3	2.1	3.0	4.3	5.5	7.2	8.9	10.2	11.9
140°	0.4	0.9	1.3	1.7	2.6	3.8	5.1	6.0	7.7	8.9	10.2
142.5°	0.4	0.9	1.3	1.7	2.6	3.4	4.3	5.1	6.4	7.7	8.9
145°	0.4	0.9	1.3	1.7	2.1	3.0	3.8	4.7	5.1	6.4	7.2
147.5°	0.4	0.9	1.3	1.7	1.7	2.6	3.4	3.8	4.7	5.1	6.0
150°	0.4	0.9	1.3	1.3	1.7	2.1	3.0	3.4	3.8	4.7	5.1
152.5°	0.4	0.9	1.3	1.3	1.7	2.1	2.6	3.0	3.4	3.8	4.3
155°	0.4	0.9	1.3	1.3	1.3	1.7	2.1	2.6	3.0	3.4	3.8
157.5°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.1	2.6	2.6	3.0
160°	0.9	0.9	0.9	1.3	1.3	1.3	1.7	1.7	2.1	2.1	2.6
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°	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3
2.5°	768.6	769.9	773.7	773.7	772.9	772.0	772.0	770.7	771.6	773.3	772.4
5°	768.6	769.9	773.7	773.7	772.9	772.0	771.6	770.3	771.6	773.3	772.4
7.5°	766.1	767.8	771.6	771.6	770.7	770.3	769.5	768.6	769.9	771.6	770.7
10°	762.7	764.4	768.2	768.2	767.3	767.3	766.1	765.2	766.9	768.2	767.8
12.5°	757.6	759.7	763.1	762.7	761.8	762.2	761.0	759.3	761.0	762.2	762.7
15°	750.3	752.9	756.3	755.4	754.2	755.0	752.9	751.6	752.9	755.4	755.0
17.5°	741.0	742.7	745.2	745.2	743.9	743.1	742.2	741.0	741.8	743.5	743.9
20°	727.8	729.9	731.2	729.9	729.5	728.2	726.5	725.2	726.9	729.5	729.9
22.5°	710.3	710.8	713.7	710.8	708.6	708.2	706.5	704.0	706.5	708.6	709.1
25°	688.6	690.8	689.5	684.4	684.4	681.0	680.1	678.9	679.3	683.1	684.8
27.5°	661.0	661.8	658.4	654.2	650.4	648.2	645.3	645.7	645.7	650.8	652.5
30°	630.8	626.1	623.1	616.3	613.4	608.3	607.4	607.4	606.6	609.1	616.8
32.5°	594.6	588.3	583.6	577.2	572.1	567.0	564.4	565.7	565.3	571.7	574.2
35°	555.1	551.3	541.5	533.4	530.4	522.8	522.8	518.9	521.5	528.7	531.7
37.5°	513.4	507.4	499.4	490.4	488.3	482.4	480.2	478.1	483.6	484.9	487.9
40°	470.9	465.3	457.7	449.2	449.2	441.9	441.9	441.9	442.4	444.9	450.4
42.5°	430.5	424.5	417.7	411.7	410.9	405.4	405.4	404.9	405.8	407.9	413.0
45°	391.3	386.6	379.4	376.4	376.9	370.9	372.2	370.9	372.6	374.7	376.4
47.5°	355.2	352.2	349.2	345.0	343.7	343.3	341.1	339.4	342.4	342.4	345.0
50°	321.6	319.9	318.2	315.6	316.0	314.3	311.8	311.8	313.9	314.3	316.0
52.5°	292.2	290.1	288.0	288.4	288.8	288.0	286.7	285.4	286.7	287.5	289.7
55°	262.9	261.2	263.3	262.4	263.3	262.4	261.6	260.7	262.9	261.6	263.7
57.5°	236.5	238.2	239.0	237.3	238.6	237.8	238.2	236.9	238.6	239.5	239.0
60°	212.3	214.8	213.5	214.0	215.7	214.8	213.1	214.4	216.1	216.5	216.1
62.5°	190.1	193.1	194.4	193.5	194.0	193.1	194.4	192.7	194.8	195.7	194.4
65°	170.1	173.5	174.4	174.4	174.4	173.5	174.8	175.2	176.1	176.1	175.2
67.5°	153.1	156.1	157.0	157.8	157.0	156.1	156.1	156.5	158.2	159.1	158.2
70°	137.8	140.8	141.2	141.2	141.6	142.5	140.8	141.6	142.9	143.3	142.9
72.5°	124.6	127.6	128.5	128.0	128.5	128.9	128.9	128.0	129.3	130.2	130.2
75°	114.0	115.7	116.5	116.5	117.0	117.4	117.4	117.0	117.8	118.2	118.7
77.5°	104.2	105.5	106.8	106.8	107.2	106.8	107.6	107.6	108.0	108.5	108.9
80°	94.4	96.1	97.0	97.4	98.3	98.7	98.7	98.7	99.1	99.5	99.5
82.5°	86.8	88.0	89.3	90.6	90.6	91.0	91.0	91.0	91.5	91.5	91.9
85°	79.1	80.8	82.1	82.9	83.4	83.8	83.8	84.2	84.2	84.2	84.6
87.5°	72.3	74.4	75.3	76.1	76.6	77.4	77.4	77.4	77.8	77.8	77.8
90°	67.6	69.8	70.6	71.5	71.9	72.3	72.3	72.7	72.7	73.2	73.2
92.5°	62.1	64.2	65.9	65.9	66.4	67.2	66.8	66.8	67.2	67.6	67.6
95°	57.8	59.5	60.8	61.3	61.7	61.7	61.7	62.1	61.7	62.1	62.1
97.5°	52.7	54.4	55.7	56.6	57.0	57.0	57.0	57.4	57.0	57.4	57.4
100°	48.5	50.2	51.5	51.9	52.7	52.7	52.7	52.7	52.7	52.7	53.2
102.5°	45.1	46.8	47.6	48.1	48.5	48.9	48.9	48.9	48.9	49.3	49.3
105°	41.7	43.4	44.2	44.7	45.1	45.5	45.5	45.5	45.9	45.9	45.5
107.5°	38.7	40.0	40.8	41.7	42.1	42.1	42.5	42.5	42.5	42.5	42.5
110°	35.7	37.0	38.3	39.1	39.1	39.6	39.6	40.0	40.0	39.6	40.0

TEST NUMBER: P1213724

CATALOG NUMBER: 4SNLED-LD5-22SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	32.8	34.5	35.3	36.2	36.6	37.0	37.0	37.0	37.0	37.0	37.0
115°	30.2	31.9	32.8	33.6	34.0	34.5	34.5	34.5	34.5	34.5	34.5
117.5°	28.1	29.8	30.6	31.1	31.5	31.9	32.3	32.3	32.3	32.3	31.9
120°	25.9	27.2	28.1	28.9	29.3	29.8	29.8	29.8	29.8	29.8	29.8
122.5°	23.8	25.1	25.9	26.8	27.2	27.6	27.6	27.6	27.6	27.6	27.6
125°	21.7	23.0	23.8	24.7	25.1	25.5	25.5	25.5	25.5	25.5	25.5
127.5°	19.6	20.8	22.1	22.5	23.0	23.4	23.4	23.4	23.8	23.4	23.4
130°	17.4	18.7	20.0	20.4	20.8	21.3	21.7	21.7	21.7	21.7	21.3
132.5°	15.7	17.0	17.9	18.3	19.1	19.1	19.6	19.6	19.6	19.6	19.1
135°	14.5	15.3	16.2	16.6	17.4	17.4	17.4	17.9	17.9	17.4	17.0
137.5°	12.8	13.6	14.5	14.9	15.3	15.7	15.7	16.2	15.7	15.7	15.7
140°	11.9	12.3	13.2	13.6	14.0	14.0	14.0	14.5	14.5	14.0	14.0
142.5°	10.2	11.1	11.9	12.3	12.8	12.8	12.8	12.8	12.8	12.8	12.8
145°	8.5	9.8	10.2	11.1	11.1	11.5	11.5	11.5	11.5	11.5	11.1
147.5°	7.2	8.1	9.4	9.8	9.8	10.2	10.2	10.2	10.2	10.2	9.8
150°	5.5	6.4	7.7	8.5	8.5	8.9	8.9	8.9	8.9	8.5	8.5
152.5°	4.7	5.5	6.0	6.8	7.2	7.2	7.2	7.7	7.2	7.2	7.2
155°	4.3	4.7	5.1	5.5	6.0	6.4	6.4	6.4	6.4	6.0	6.0
157.5°	3.4	3.8	4.3	4.7	5.1	5.5	5.5	5.5	5.5	5.5	5.1
160°	2.6	3.0	3.4	3.4	3.8	4.3	4.7	4.3	4.3	4.3	4.3
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

TEST NUMBER: P1213724

CATALOG NUMBER: 4SNLED-LD5-22SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3
2.5°	771.6	771.2	772.4	770.3	763.9	765.6	764.8	768.6	769.5	770.3	774.1
5°	771.6	771.2	772.0	770.3	763.5	764.8	763.9	767.8	768.6	769.0	772.9
7.5°	769.9	769.5	770.7	768.6	761.4	763.1	761.8	765.6	766.1	766.5	769.9
10°	766.5	766.1	766.9	765.2	758.0	759.7	758.0	761.8	761.8	762.7	765.2
12.5°	761.4	760.5	762.2	760.1	752.0	754.2	753.3	755.9	756.3	756.7	759.3
15°	754.2	753.3	754.6	753.3	746.1	746.5	745.2	749.0	749.5	748.6	751.2
17.5°	743.5	742.7	745.2	744.4	737.1	738.8	738.4	739.3	740.5	738.4	741.8
20°	730.3	731.2	732.0	732.5	726.9	726.9	726.5	728.2	729.5	727.8	730.3
22.5°	710.8	712.9	715.4	716.3	712.5	712.0	714.6	713.7	715.0	714.2	715.9
25°	686.1	690.3	692.9	695.5	693.3	694.2	698.0	698.9	698.9	698.4	700.1
27.5°	655.5	661.0	665.7	671.2	669.1	670.8	677.2	678.0	679.7	678.0	681.4
30°	618.9	624.0	632.9	641.0	641.9	644.4	653.3	654.2	658.9	657.2	658.4
32.5°	582.3	584.9	595.1	603.2	608.3	614.6	624.4	626.1	632.5	633.8	633.8
35°	536.4	543.6	553.0	564.4	570.8	577.6	590.8	593.4	602.7	605.7	609.1
37.5°	497.7	504.5	510.4	522.3	533.8	541.5	552.1	558.5	568.3	573.8	578.1
40°	456.4	461.9	468.3	480.2	490.0	501.5	512.1	519.8	532.1	538.5	544.0
42.5°	417.3	421.5	428.3	436.8	447.0	459.8	470.0	478.9	492.1	501.1	507.4
45°	382.4	384.9	390.9	397.3	406.2	419.4	429.2	440.7	451.3	460.7	468.3
47.5°	349.6	353.0	356.0	360.3	368.4	376.4	387.9	399.0	409.6	419.8	427.5
50°	319.4	319.4	324.1	327.1	332.6	339.9	348.8	356.4	369.6	376.9	386.6
52.5°	290.1	291.8	294.3	296.0	300.3	305.0	312.2	318.6	329.6	336.5	345.8
55°	264.1	265.8	267.1	268.0	270.5	276.1	278.6	283.7	291.4	296.9	305.0
57.5°	239.5	240.3	241.6	242.0	242.5	245.9	248.0	249.3	256.9	262.4	269.2
60°	216.9	216.9	218.2	217.8	217.4	219.1	218.6	219.9	224.6	228.0	231.0
62.5°	195.7	195.7	196.1	195.2	194.8	194.8	193.1	194.4	195.7	196.1	198.2
65°	176.1	178.2	176.5	176.9	174.4	173.5	172.7	170.1	169.7	168.0	168.9
67.5°	158.7	160.4	158.7	158.7	156.5	154.8	152.7	148.4	147.2	143.8	142.9
70°	144.6	143.3	144.2	142.9	140.4	138.2	135.3	131.9	127.6	123.4	120.4
72.5°	131.0	131.0	130.2	128.9	127.6	123.4	119.9	116.1	111.0	105.5	101.2
75°	117.8	118.2	118.2	117.0	114.8	111.0	107.2	101.7	96.1	89.7	84.2
77.5°	108.5	108.5	108.5	106.3	104.2	100.8	96.1	90.2	84.2	76.6	70.2
80°	99.5	99.1	99.1	96.6	94.4	90.6	85.9	80.0	73.6	65.5	58.3
82.5°	92.3	91.9	91.0	88.9	85.9	82.1	77.4	71.0	64.2	57.0	48.1
85°	84.6	84.2	83.4	81.2	78.3	74.9	69.8	63.4	56.6	48.5	40.0
87.5°	77.8	77.4	76.1	74.9	71.5	67.6	62.5	56.6	49.3	41.7	33.2
90°	73.2	72.3	71.5	69.8	66.8	62.5	57.4	51.0	43.8	36.2	27.6
92.5°	67.6	67.2	65.9	64.2	61.7	57.4	52.3	46.4	39.1	31.9	23.8
95°	62.1	61.7	60.8	59.1	56.6	52.7	48.1	42.1	35.3	28.1	20.8
97.5°	57.0	57.0	55.7	54.4	51.5	48.5	43.8	38.3	31.9	25.5	18.7
100°	52.7	52.7	51.5	49.8	47.6	44.7	40.0	34.9	28.9	23.0	16.2
102.5°	48.9	48.5	47.6	45.9	43.8	40.8	36.6	31.9	26.4	20.4	14.5
105°	45.5	45.1	44.2	42.5	40.8	37.4	34.0	29.3	23.8	18.3	12.8
107.5°	42.1	41.7	41.3	39.6	37.4	34.5	31.1	26.4	21.7	16.6	11.5
110°	39.1	38.7	37.9	36.2	34.0	31.5	28.1	24.2	19.6	14.9	10.2

TEST NUMBER: P1213724

CATALOG NUMBER: 4SNLED-LD5-22SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	36.6	36.2	35.3	33.6	31.9	28.9	25.9	21.7	17.9	13.6	8.9
115°	34.0	33.6	32.8	31.1	28.9	26.4	23.4	20.0	15.7	11.9	8.1
117.5°	31.5	31.1	30.2	28.9	26.8	24.2	21.3	17.9	14.0	11.1	7.2
120°	29.3	28.5	27.6	26.4	24.2	22.1	19.1	16.2	12.8	9.8	6.4
122.5°	27.2	26.4	25.5	24.2	22.1	20.0	17.0	14.5	11.9	8.9	6.0
125°	24.7	24.2	23.4	22.1	20.0	17.9	15.7	13.2	10.6	8.1	5.1
127.5°	22.5	22.1	21.3	19.6	17.9	16.2	14.0	11.9	9.4	6.8	4.7
130°	20.8	20.0	19.1	17.9	16.6	14.9	12.8	10.6	8.5	6.0	4.3
132.5°	18.7	17.9	17.0	16.2	14.9	13.2	11.5	9.4	7.7	5.5	3.8
135°	17.0	16.2	15.3	14.5	13.2	11.9	10.2	8.5	6.8	5.1	3.4
137.5°	14.9	14.5	14.0	13.2	11.9	10.6	9.4	7.2	6.0	4.7	3.0
140°	13.6	13.2	12.8	11.5	10.6	9.4	8.1	6.4	5.1	3.8	2.6
142.5°	12.3	11.9	11.1	10.2	9.4	8.5	6.8	6.0	4.7	3.4	2.6
145°	10.6	10.2	9.8	8.9	8.1	6.8	6.0	5.1	4.3	3.0	2.1
147.5°	9.8	9.4	8.5	7.7	6.8	6.0	5.5	4.7	3.4	2.6	1.7
150°	8.1	7.7	7.2	6.4	6.0	5.5	4.7	3.8	3.0	2.1	1.7
152.5°	6.8	6.4	6.0	6.0	5.1	4.7	3.8	3.4	2.6	2.1	1.3
155°	6.0	6.0	5.5	5.1	4.3	3.8	3.4	2.6	2.1	1.7	1.3
157.5°	5.1	4.7	4.3	4.3	3.8	3.4	2.6	2.1	1.7	1.7	1.3
160°	4.3	3.8	3.8	3.4	3.0	2.6	2.1	2.1	1.7	1.3	1.3
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

TEST NUMBER: P1213724

CATALOG NUMBER: 4SNLED-LD5-22SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3
2.5°	774.6	769.9	774.1	779.7	779.7	778.8	778.0	779.7	783.9	782.2	777.1
5°	773.3	768.6	772.4	778.0	778.0	776.7	775.8	777.1	781.8	779.7	775.0
7.5°	770.7	766.5	769.0	774.1	774.1	772.9	772.0	773.7	777.5	775.4	770.3
10°	766.1	761.4	764.4	769.0	768.6	767.8	766.5	768.6	772.0	769.0	763.1
12.5°	760.1	755.4	758.0	762.2	761.8	760.1	759.3	760.5	763.5	761.8	755.4
15°	752.0	747.3	749.5	753.7	752.5	751.2	749.5	749.9	753.7	750.7	743.9
17.5°	742.2	737.1	738.8	742.7	741.4	740.1	738.0	738.4	742.7	738.4	731.2
20°	730.3	724.8	726.1	730.8	728.6	726.5	724.4	724.4	728.6	724.0	715.9
22.5°	717.6	712.0	712.9	716.3	714.6	710.8	708.6	709.9	712.0	706.1	697.6
25°	701.8	694.6	695.9	699.3	698.0	692.9	690.8	691.6	690.8	686.1	677.2
27.5°	683.5	675.9	676.7	678.9	677.2	672.5	669.9	670.4	668.7	662.7	652.5
30°	660.6	656.7	656.3	657.6	655.0	650.4	647.4	646.5	646.1	637.6	625.3
32.5°	637.2	633.8	631.6	633.4	630.4	625.7	620.6	620.6	616.3	608.3	597.6
35°	613.4	607.8	605.7	607.0	603.6	597.6	593.4	591.2	584.9	574.7	563.2
37.5°	582.7	578.9	576.4	577.6	573.8	569.5	561.5	559.3	552.5	538.5	524.0
40°	549.6	546.6	544.0	545.3	541.0	534.7	527.4	524.0	516.4	500.6	489.2
42.5°	513.8	512.6	509.6	514.3	505.7	499.4	492.1	486.6	478.9	461.9	448.7
45°	476.0	478.9	472.1	473.4	467.9	462.4	454.7	446.6	439.0	422.8	407.9
47.5°	436.0	438.1	433.4	434.3	428.3	423.2	416.4	406.2	397.7	383.7	370.5
50°	394.7	393.9	393.9	393.0	388.3	382.0	375.2	365.8	357.3	344.5	333.5
52.5°	350.9	352.6	353.5	355.6	349.6	345.8	335.2	327.1	320.7	307.5	298.2
55°	308.8	314.8	313.1	313.9	307.1	304.1	295.6	289.2	279.9	272.2	266.3
57.5°	270.5	271.8	272.7	273.9	271.0	265.0	258.2	253.1	245.9	239.5	235.2
60°	233.5	233.5	233.9	236.1	233.1	228.0	222.9	219.1	214.0	210.1	207.6
62.5°	198.6	201.6	202.0	200.3	196.5	194.0	190.6	188.4	185.0	183.8	182.9
65°	166.3	166.3	166.3	167.2	165.0	163.3	161.2	160.8	162.1	160.4	161.2
67.5°	139.1	137.8	137.0	137.4	136.5	135.7	135.3	136.5	139.1	139.1	141.2
70°	115.7	113.1	111.4	111.4	111.4	111.9	113.1	115.7	119.9	121.7	124.6
72.5°	96.6	91.0	88.5	88.5	88.9	90.6	94.4	99.1	102.9	106.3	110.2
75°	78.3	72.7	68.9	68.5	69.3	71.9	77.4	81.7	88.0	92.7	97.4
77.5°	63.4	56.6	51.9	51.5	52.7	56.6	63.4	68.9	76.1	81.2	86.3
80°	50.6	43.0	39.1	36.6	38.7	43.4	51.0	57.8	64.7	71.5	77.8
82.5°	40.4	33.2	27.2	24.7	27.2	33.6	40.8	48.9	55.7	63.0	69.3
85°	31.9	24.2	17.4	14.9	17.9	24.7	32.8	40.8	48.5	55.7	62.1
87.5°	25.1	17.4	10.6	7.2	11.1	18.3	25.9	34.0	42.1	49.3	55.7
90°	19.6	12.3	6.0	0.9	6.4	13.2	20.8	28.5	36.6	43.8	50.2
92.5°	16.6	9.4	3.4	0.0	3.8	9.8	17.0	24.7	31.9	39.1	45.5
95°	14.0	7.7	2.6	0.0	2.6	7.7	14.0	20.8	28.1	35.3	41.7
97.5°	11.9	6.0	1.7	0.0	1.7	6.0	11.5	18.3	24.7	31.5	37.4
100°	10.2	5.1	1.3	0.0	1.3	4.7	9.8	15.7	22.1	28.5	34.0
102.5°	8.9	4.3	0.9	0.0	0.9	3.8	8.1	13.6	19.1	25.1	30.6
105°	7.7	3.4	0.9	0.0	0.4	3.0	6.8	11.9	17.0	22.5	27.6
107.5°	6.8	3.0	0.9	0.0	0.4	2.6	6.0	10.2	15.3	20.0	24.7
110°	6.0	2.6	0.9	0.0	0.4	1.7	5.1	8.9	13.2	17.9	22.5

TEST NUMBER: P1213724

CATALOG NUMBER: 4SNLED-LD5-22SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	5.1	2.1	0.4	0.0	0.0	1.3	4.3	7.7	11.5	16.2	20.0
115°	4.7	2.1	0.4	0.0	0.0	0.9	3.4	6.8	10.2	14.5	17.9
117.5°	4.3	1.7	0.4	0.0	0.4	0.9	3.0	6.0	8.9	12.3	16.2
120°	3.8	1.7	0.4	0.0	0.4	0.4	2.1	5.1	7.7	11.1	14.0
122.5°	3.4	1.7	0.4	0.0	0.4	0.4	1.7	4.3	6.8	9.8	12.3
125°	3.0	1.3	0.9	0.4	0.4	0.4	1.3	3.4	6.0	8.1	11.1
127.5°	3.0	1.3	0.9	0.4	0.4	0.4	0.9	3.0	4.7	7.2	9.8
130°	2.6	1.3	0.9	0.4	0.4	0.4	0.4	2.1	4.3	6.0	8.1
132.5°	2.1	1.3	0.9	0.4	0.4	0.4	0.4	1.3	3.0	5.1	6.8
135°	2.1	1.3	0.9	0.4	0.4	0.4	0.4	0.9	2.1	3.8	5.5
137.5°	1.7	0.9	0.9	0.4	0.4	0.4	0.4	0.4	1.7	3.0	4.3
140°	1.7	0.9	0.9	0.4	0.4	0.4	0.4	0.4	1.3	2.1	3.4
142.5°	1.3	0.9	0.9	0.4	0.4	0.4	0.4	0.4	0.9	1.7	2.6
145°	1.3	0.9	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.9	1.7
147.5°	1.3	1.3	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.9	1.3
150°	1.3	0.9	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9
152.5°	1.3	0.9	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9
155°	1.3	0.9	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.9
157.5°	1.3	0.9	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9
160°	1.3	0.9	0.9	0.4	0.9	0.4	0.9	0.9	0.9	0.9	0.9
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: P1213724

CATALOG NUMBER: 4SNLED-LD5-22SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3
2.5°	775.4	767.3	771.6	770.3	772.0	775.4	775.0	774.1	774.1	772.9	771.2
5°	772.9	765.2	769.0	766.9	769.0	772.0	771.6	770.3	771.2	769.0	766.9
7.5°	767.8	761.0	764.4	762.7	764.4	767.3	766.1	765.6	766.5	763.1	761.8
10°	761.8	754.2	758.0	755.9	758.0	760.1	759.3	757.6	759.3	755.9	754.6
12.5°	752.5	746.1	748.6	747.8	749.0	751.2	749.5	748.2	749.0	746.1	743.5
15°	742.2	735.9	738.0	736.7	737.6	740.1	737.1	736.7	735.9	732.9	732.0
17.5°	729.1	723.1	725.2	723.1	724.4	723.5	723.1	721.0	721.0	717.6	715.0
20°	712.9	707.8	706.5	704.8	706.5	704.8	702.3	700.6	700.1	696.7	694.6
22.5°	694.2	688.2	689.1	684.4	684.8	682.3	678.0	676.3	674.6	670.8	667.8
25°	671.6	665.7	661.4	658.4	654.6	654.2	648.7	644.4	644.0	639.3	638.9
27.5°	646.1	639.3	635.9	628.7	624.0	620.2	615.5	611.2	609.1	604.0	600.6
30°	616.8	609.1	600.6	595.5	588.3	585.3	577.2	572.1	570.4	564.9	562.3
32.5°	583.6	575.5	568.7	558.9	550.8	546.6	538.5	533.4	531.3	525.3	521.9
35°	547.4	538.5	530.4	521.1	514.7	507.4	497.7	492.6	487.9	485.8	483.2
37.5°	509.6	499.8	490.4	481.1	475.5	467.0	458.5	455.1	449.6	447.5	444.9
40°	470.4	460.7	451.7	442.8	436.4	428.8	421.1	419.8	413.9	411.7	410.0
42.5°	431.7	421.5	411.3	404.9	400.3	392.6	387.5	386.2	381.1	379.8	379.8
45°	396.9	384.1	375.6	370.1	366.2	359.8	355.6	354.7	350.5	349.6	349.6
47.5°	359.4	347.5	341.1	337.7	334.3	329.6	327.1	327.1	322.8	322.0	321.6
50°	324.5	313.5	308.8	305.4	305.0	301.6	299.4	298.6	298.6	295.6	296.0
52.5°	291.4	285.8	282.0	279.9	277.3	275.2	273.5	273.5	272.2	270.1	271.0
55°	260.7	254.4	254.8	253.1	251.8	250.5	251.0	248.4	248.0	246.3	247.6
57.5°	230.1	230.1	229.3	228.0	225.9	226.7	226.7	226.7	224.6	223.3	224.6
60°	204.2	205.4	203.3	204.6	203.7	204.2	203.3	203.3	202.0	201.6	202.0
62.5°	181.2	183.3	182.5	184.2	183.3	183.8	184.6	182.9	182.1	181.2	182.1
65°	160.8	163.3	162.9	164.2	164.6	165.0	165.5	164.6	163.8	162.9	162.5
67.5°	142.9	145.5	147.2	147.6	148.0	149.3	148.9	148.0	147.2	145.9	145.5
70°	126.8	130.2	132.3	133.1	134.8	134.0	134.0	133.6	132.7	131.4	131.0
72.5°	113.1	117.0	119.1	119.9	121.7	121.7	121.2	120.8	119.9	118.7	118.2
75°	101.2	104.6	107.6	109.3	110.6	110.6	110.2	109.7	108.9	108.0	107.6
77.5°	91.9	94.9	97.4	99.5	100.4	100.8	100.4	99.5	99.5	99.1	98.7
80°	82.5	85.9	88.5	90.6	91.9	91.9	91.5	91.9	91.0	90.6	90.2
82.5°	74.4	78.3	81.2	83.4	84.2	84.6	84.2	84.6	83.8	83.8	83.8
85°	67.2	71.0	74.4	76.1	77.4	77.8	77.8	77.8	77.4	77.4	77.4
87.5°	61.3	65.1	68.5	70.2	71.5	71.9	71.9	72.3	71.5	71.5	71.5
90°	55.7	59.5	63.0	64.7	65.9	66.8	66.8	67.2	66.8	66.4	66.4
92.5°	50.6	54.9	58.3	60.0	61.3	62.5	62.5	63.0	62.1	62.1	62.1
95°	46.4	50.6	53.6	55.7	57.0	57.8	58.3	58.3	57.8	57.8	57.8
97.5°	42.5	46.4	49.3	51.5	52.7	53.2	53.6	54.0	53.6	53.6	53.6
100°	38.7	42.5	45.5	47.2	48.9	49.3	49.8	50.2	50.2	49.8	49.8
102.5°	35.3	39.1	41.7	43.8	45.1	45.9	46.4	46.4	46.4	46.4	46.4
105°	31.9	35.7	38.3	40.4	41.7	42.5	43.0	43.4	43.4	43.0	43.0
107.5°	28.9	32.3	35.3	37.0	38.7	39.6	40.0	40.0	40.4	40.0	40.0
110°	25.9	29.8	32.3	34.0	35.7	36.6	37.0	37.4	37.4	37.4	37.4

TEST NUMBER: P1213724

CATALOG NUMBER: 4SNLED-LD5-22SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	23.8	26.8	29.3	31.1	32.8	33.6	34.0	34.5	34.9	34.5	34.5
115°	21.3	24.2	26.8	28.5	29.8	30.6	31.5	31.9	31.9	32.3	31.9
117.5°	19.1	21.7	24.2	25.9	27.2	28.5	28.9	29.3	29.8	29.3	29.3
120°	17.0	19.6	21.7	23.4	24.7	25.9	26.4	26.8	27.2	26.8	26.8
122.5°	15.3	17.4	19.6	21.3	22.5	23.4	24.2	24.2	24.7	24.7	24.7
125°	13.6	15.7	17.4	19.1	20.4	21.3	21.7	22.1	22.1	22.5	22.5
127.5°	11.9	13.6	15.7	17.0	18.3	19.1	19.6	20.0	20.0	20.4	20.4
130°	10.2	11.9	13.6	14.9	16.2	17.0	17.4	17.9	18.3	18.3	18.3
132.5°	8.9	10.6	11.9	13.2	14.0	14.9	15.7	16.2	16.2	16.2	16.2
135°	7.2	8.9	10.2	11.5	12.3	13.2	13.6	14.5	14.5	14.5	14.5
137.5°	6.0	7.7	8.9	9.8	10.6	11.5	11.9	12.3	12.8	12.8	12.8
140°	4.7	6.0	7.2	8.5	9.4	9.8	10.6	10.6	11.1	11.1	11.1
142.5°	3.4	4.7	5.5	6.8	7.7	8.5	8.9	9.4	9.4	9.4	9.4
145°	2.6	3.4	4.3	5.1	6.4	6.8	7.2	7.7	8.1	8.1	8.1
147.5°	1.7	2.6	3.0	3.8	4.7	5.5	6.0	6.4	6.8	6.8	6.8
150°	1.3	1.7	2.6	3.0	3.4	4.3	5.1	5.1	5.5	5.5	5.1
152.5°	0.9	1.3	1.7	2.1	2.6	3.0	3.8	3.8	4.3	4.3	4.3
155°	0.9	0.9	0.9	1.3	1.7	2.1	2.6	3.0	3.0	3.0	3.0
157.5°	0.9	0.9	0.9	0.9	0.9	1.3	1.7	2.1	2.1	2.1	2.1
160°	0.9	0.9	0.4	0.4	0.9	0.9	0.9	0.9	1.3	1.3	1.3
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

TEST NUMBER: P1213724

CATALOG NUMBER: 4SNLED-LD5-22SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3	773.3
2.5°	772.4	773.3	773.3	772.4	772.0	773.7	771.6	763.5	766.1	766.9	769.5
5°	768.6	769.5	769.5	769.5	768.6	770.3	768.2	760.1	763.1	764.4	766.1
7.5°	763.1	763.5	764.4	763.9	763.1	765.6	763.5	755.4	757.6	759.7	761.8
10°	755.9	755.9	756.3	757.1	756.3	758.4	756.3	749.0	751.2	752.5	755.0
12.5°	746.1	746.9	747.3	746.9	746.5	748.2	747.3	740.5	741.4	743.9	746.5
15°	732.9	732.9	735.0	734.2	734.2	735.9	736.7	729.1	730.3	734.2	736.7
17.5°	716.7	717.1	718.8	719.7	719.3	722.3	722.7	716.7	716.3	721.0	723.5
20°	695.9	696.7	698.9	700.6	700.6	704.0	705.2	701.4	701.8	706.9	707.8
22.5°	670.4	670.4	674.2	676.7	678.9	681.0	684.8	681.4	681.4	688.2	692.1
25°	638.9	641.9	643.1	648.2	651.2	657.2	660.6	661.0	661.4	667.8	670.4
27.5°	604.0	604.9	608.7	614.6	618.0	623.6	629.9	631.2	633.4	641.9	645.7
30°	564.4	567.0	568.7	577.2	581.9	589.1	597.2	600.2	601.9	613.4	618.0
32.5°	524.0	524.9	532.1	536.8	542.3	550.0	559.3	564.9	568.3	580.2	587.0
35°	483.6	485.3	491.3	497.2	502.8	510.4	520.2	527.9	533.8	544.5	553.4
37.5°	446.6	450.9	452.2	458.1	462.4	470.0	476.8	487.9	493.8	504.9	516.4
40°	413.4	414.7	415.6	421.5	424.5	431.7	441.5	448.7	456.8	464.9	478.5
42.5°	380.7	381.5	382.8	386.2	389.6	394.7	402.0	409.2	417.7	429.6	438.5
45°	350.5	351.3	352.2	354.3	357.3	362.0	366.7	371.8	380.3	390.5	399.8
47.5°	322.4	324.1	324.1	324.5	326.7	330.5	333.9	340.3	345.0	350.5	361.1
50°	295.6	296.9	297.3	297.3	298.6	301.2	302.0	306.3	310.5	315.6	323.3
52.5°	270.5	270.5	270.1	271.8	271.8	273.5	273.9	276.5	279.5	285.0	288.4
55°	246.7	246.7	248.0	247.1	247.1	248.0	247.6	248.0	250.5	253.9	256.9
57.5°	223.7	223.3	224.6	223.7	223.3	224.2	225.0	223.3	223.7	227.1	227.1
60°	200.8	201.2	202.5	201.6	201.6	201.6	200.8	199.9	199.1	201.2	202.0
62.5°	182.5	181.2	182.5	181.2	182.1	181.6	180.8	179.1	179.5	178.6	177.8
65°	163.3	163.3	163.8	162.5	163.3	163.3	162.1	161.6	159.1	158.2	156.1
67.5°	146.7	146.7	147.2	146.3	146.3	146.7	145.5	144.2	141.6	140.4	137.4
70°	132.3	132.3	132.3	131.9	131.9	131.9	131.0	129.3	126.8	124.6	120.8
72.5°	119.1	119.5	119.1	119.1	120.4	119.1	117.8	116.1	114.0	109.7	106.3
75°	108.5	108.9	108.5	108.5	108.5	108.0	107.6	105.1	102.5	99.1	94.0
77.5°	99.1	99.1	99.5	99.1	99.1	98.7	97.4	95.3	92.3	89.3	83.4
80°	90.2	90.6	91.0	91.5	90.6	90.2	88.9	87.2	83.4	80.0	74.0
82.5°	83.8	83.4	83.8	84.2	83.4	82.9	81.7	79.5	76.6	71.9	65.9
85°	77.4	77.0	77.0	77.4	77.0	76.1	74.9	72.7	69.8	65.1	59.1
87.5°	71.0	71.5	71.9	71.5	71.0	70.2	68.9	66.8	63.4	59.5	53.2
90°	66.4	66.4	66.4	66.4	65.9	65.1	63.8	61.3	58.3	53.6	48.1
92.5°	62.1	62.1	62.1	62.1	61.7	60.4	59.1	57.0	53.6	48.9	43.8
95°	57.8	58.3	57.8	57.8	57.0	56.6	54.4	52.3	49.3	44.7	39.1
97.5°	53.2	53.6	53.2	53.2	52.7	51.9	50.6	48.1	45.1	40.8	35.7
100°	49.8	49.8	49.3	49.3	48.9	48.1	46.4	44.2	41.3	37.0	31.9
102.5°	45.9	46.4	45.9	45.9	45.1	44.2	43.0	40.8	37.9	33.6	28.9
105°	43.0	43.0	42.5	42.5	41.7	40.8	39.6	37.0	34.5	30.6	25.9
107.5°	40.0	40.0	39.6	39.6	38.7	37.9	36.2	34.0	31.5	27.6	23.4
110°	37.0	37.0	37.0	36.6	35.7	34.5	33.2	31.1	28.5	25.1	20.8

TEST NUMBER: P1213724

CATALOG NUMBER: 4SNLED-LD5-22SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	34.9	34.5	34.0	33.6	32.8	31.9	30.2	28.1	25.5	22.5	18.7
115°	31.9	31.9	31.5	31.1	30.2	28.9	27.6	25.9	23.4	20.0	16.6
117.5°	29.3	29.3	28.9	28.5	27.6	26.4	25.1	23.4	20.8	17.9	14.9
120°	26.8	26.8	26.4	25.9	25.1	23.8	23.0	20.8	18.7	15.7	13.2
122.5°	24.7	24.2	24.2	23.4	23.0	21.7	20.4	18.7	16.6	14.0	11.5
125°	22.1	22.1	21.7	21.3	20.8	19.6	18.3	16.6	14.5	12.3	10.2
127.5°	20.0	20.0	19.6	19.1	18.7	17.4	16.2	14.9	12.8	10.6	8.5
130°	17.9	17.9	17.4	17.0	16.6	15.3	14.5	12.8	11.1	9.4	7.2
132.5°	16.2	16.2	15.7	15.3	14.5	13.6	12.8	11.1	9.8	8.1	6.4
135°	14.5	14.0	14.0	13.6	12.8	11.9	11.1	9.8	8.1	6.8	5.1
137.5°	12.8	12.3	11.9	11.5	11.1	10.2	9.4	8.5	7.2	5.5	4.3
140°	11.1	10.6	10.6	10.2	9.4	8.9	8.1	6.8	6.0	4.7	3.4
142.5°	9.4	9.4	8.9	8.5	8.1	7.7	6.8	6.0	4.7	3.8	2.6
145°	8.1	7.7	7.7	7.2	6.8	6.0	5.5	4.7	3.8	3.0	2.1
147.5°	6.4	6.4	6.4	6.0	5.5	5.1	4.7	3.8	3.0	2.1	1.3
150°	5.1	5.1	5.1	4.7	4.3	3.8	3.4	3.0	2.1	1.3	0.9
152.5°	4.3	4.3	3.8	3.8	3.4	3.0	2.6	2.1	1.3	0.9	0.9
155°	3.0	3.0	3.0	2.6	2.6	2.1	1.7	1.3	0.9	0.9	0.9
157.5°	2.1	2.1	2.1	1.7	1.7	1.3	1.3	0.9	0.9	0.9	0.9
160°	1.3	1.3	1.3	1.3	0.9	0.9	0.9	0.9	0.9	0.9	0.9
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: P1213724

CATALOG NUMBER: 4SNLED-LD5-22SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	773.3	773.3	773.3	773.3	773.3	773.3	773.3
2.5°	768.2	767.8	771.2	771.2	767.3	773.3	779.7
5°	765.6	765.2	768.6	768.6	765.2	771.2	778.0
7.5°	760.5	761.0	764.4	765.2	761.0	766.5	773.7
10°	755.0	754.6	758.4	759.3	755.9	761.0	767.8
12.5°	746.1	746.1	749.9	751.2	747.8	753.7	760.1
15°	736.7	736.7	739.3	741.4	738.4	743.9	750.3
17.5°	724.8	724.4	726.9	729.5	726.5	732.5	739.3
20°	709.5	709.5	712.5	715.4	713.3	718.8	726.5
22.5°	693.3	691.6	696.7	698.9	697.6	703.1	710.8
25°	672.9	672.5	677.6	680.6	678.9	684.8	691.6
27.5°	650.8	650.4	655.5	659.3	658.4	664.0	671.6
30°	624.0	626.1	630.8	637.2	635.1	641.0	649.1
32.5°	595.9	598.0	603.6	610.4	610.8	615.5	623.6
35°	562.3	567.8	571.7	580.6	582.3	587.0	595.5
37.5°	527.0	533.4	541.5	548.3	551.7	555.5	565.3
40°	487.5	496.8	505.7	513.8	518.1	521.9	531.3
42.5°	451.7	459.0	467.5	475.5	483.2	486.6	496.4
45°	411.3	419.8	427.5	437.3	444.9	448.7	458.5
47.5°	371.8	380.3	390.5	397.3	405.4	409.2	418.5
50°	333.9	341.6	350.1	358.1	365.0	368.4	376.4
52.5°	296.5	304.6	312.6	317.7	325.0	327.5	334.3
55°	263.3	268.8	276.1	279.0	286.3	288.0	292.6
57.5°	231.4	235.2	237.8	242.9	248.0	251.8	257.3
60°	202.5	204.2	205.9	208.8	213.1	214.4	216.5
62.5°	176.5	176.1	179.5	180.3	180.8	185.0	182.9
65°	153.6	154.0	151.0	149.7	151.4	152.7	151.9
67.5°	134.4	131.9	129.3	126.3	123.8	125.1	123.8
70°	115.7	113.6	109.3	105.1	103.4	100.8	99.5
72.5°	100.8	95.7	91.5	85.9	82.9	80.0	77.8
75°	89.3	82.1	76.1	70.2	65.9	61.7	60.8
77.5°	77.4	70.6	63.8	57.4	51.0	46.4	44.7
80°	68.1	61.7	53.6	45.9	39.1	33.2	31.1
82.5°	59.5	52.7	44.7	36.6	28.9	22.5	20.0
85°	52.3	45.1	37.0	28.9	21.3	14.5	11.1
87.5°	46.8	38.7	30.6	23.0	14.9	8.1	4.3
90°	41.7	34.0	26.4	18.3	10.6	4.3	0.0
92.5°	37.0	29.8	22.1	14.9	8.1	2.6	0.4
95°	32.8	26.4	18.7	11.9	6.0	1.7	0.4
97.5°	29.3	23.0	16.2	9.8	4.7	1.3	0.4
100°	26.4	20.0	14.0	8.1	3.8	0.9	0.4
102.5°	23.4	17.9	11.9	6.8	3.0	0.4	0.4
105°	20.8	15.7	10.2	6.0	2.6	0.4	0.4
107.5°	18.7	14.0	8.9	5.1	1.7	0.4	0.4
110°	16.6	11.9	7.7	4.3	1.3	0.4	0.4



TEST NUMBER: P1213724

CATALOG NUMBER: 4SNLED-LD5-22SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	14.9	10.6	6.8	3.4	0.9	0.4	0.4
115°	13.2	9.4	6.0	3.0	0.9	0.4	0.4
117.5°	11.5	8.1	5.1	2.1	0.4	0.4	0.4
120°	10.2	7.2	4.3	1.7	0.4	0.4	0.4
122.5°	8.9	6.0	3.4	1.3	0.4	0.4	0.4
125°	7.7	5.1	3.0	0.9	0.4	0.4	0.4
127.5°	6.4	4.3	2.1	0.9	0.4	0.4	0.4
130°	5.5	3.4	1.7	0.4	0.4	0.4	0.4
132.5°	4.7	2.6	1.3	0.4	0.4	0.4	0.4
135°	3.8	2.1	0.9	0.4	0.4	0.4	0.4
137.5°	3.0	1.7	0.9	0.4	0.4	0.4	0.4
140°	2.1	1.3	0.4	0.4	0.4	0.4	0.4
142.5°	1.7	0.9	0.4	0.4	0.4	0.4	0.4
145°	1.3	0.9	0.4	0.4	0.4	0.4	0.4
147.5°	0.9	0.9	0.9	0.9	0.4	0.4	0.4
150°	0.9	0.9	0.4	0.4	0.9	0.4	0.4
152.5°	0.9	0.4	0.4	0.4	0.9	0.4	0.4
155°	0.9	0.9	0.9	0.9	0.9	0.9	0.4
157.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9
160°	0.9	0.9	0.9	0.9	0.9	0.9	0.9
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)