

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: P1213727

Luminaire Tested: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213727
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33520)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

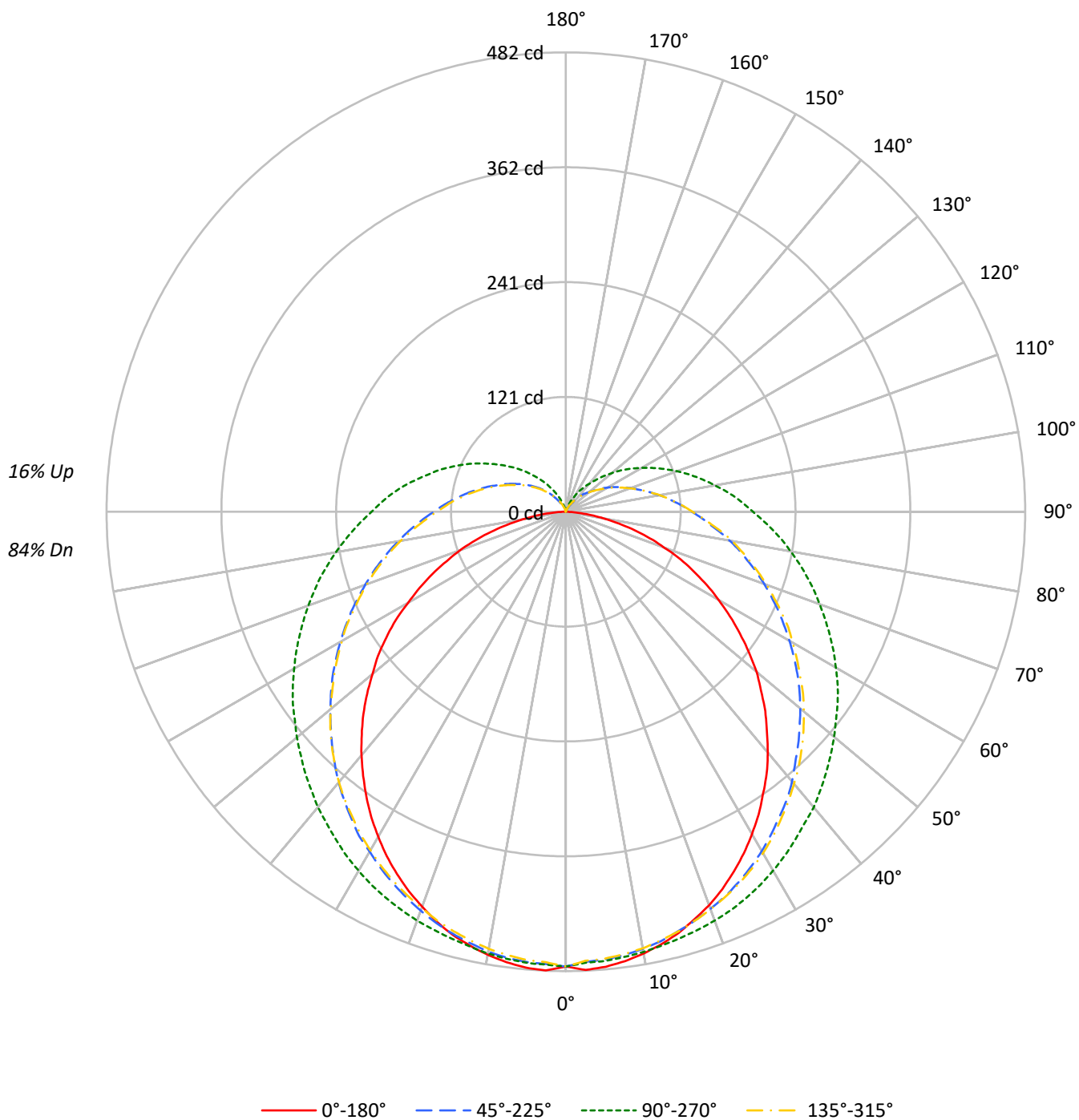
Lumens per Lamp: N/A
Luminaire Lumens: 2073.0 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 18
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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	115	115	115	115	111	111	111	111	102	102	102	94	94	94	87	87	87	84		
1	102	96	91	86	98	92	87	83	85	81	77	78	75	72	72	70	67	64		
2	92	82	74	68	87	79	72	66	73	67	62	67	62	58	62	58	54	51		
3	83	71	62	55	79	69	60	54	63	56	51	58	52	48	54	49	45	42		
4	76	63	53	46	72	60	52	45	56	48	42	51	45	40	47	42	38	35		
5	69	56	46	39	66	54	45	38	50	42	36	46	39	34	42	37	33	30		
6	64	50	41	34	61	48	39	33	45	37	31	41	35	30	38	33	28	26		
7	59	45	36	30	56	43	35	29	40	33	28	38	31	26	35	29	25	23		
8	55	41	32	26	52	40	31	26	37	30	24	34	28	23	32	26	22	20		
9	51	37	29	23	49	36	28	23	34	27	22	32	25	21	30	24	20	18		
10	48	34	26	21	46	33	26	21	31	24	20	29	23	19	27	22	18	16		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	3855	3855	3855	3855
5°	3877	3716	3885	3731
10°	3840	3610	3853	3622
15°	3796	3520	3812	3524
20°	3736	3454	3749	3454
25°	3662	3395	3685	3391
30°	3580	3335	3608	3335
35°	3484	3279	3523	3283
40°	3389	3247	3430	3247
45°	3279	3212	3330	3216
50°	3166	3191	3208	3200
55°	3008	3195	3102	3208
60°	2840	3205	2933	3224
65°	2652	3236	2769	3268
70°	2387	3296	2574	3343
75°	2083	3403	2279	3470
80°	1613	3564	1830	3645
85°	963	3819	1202	3926

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 270°

Vertical Angle: 90°

Luminance: 4387 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.2	2.2
10°-20°	129.9	6.3
20°-30°	199.2	9.6
30°-40°	245.7	11.9
40°-50°	266.6	12.9
50°-60°	262.7	12.7
60°-70°	237.6	11.5
70°-80°	197.9	9.5
80°-90°	153.3	7.4
90°-100°	116.3	5.6
100°-110°	86.0	4.2
110°-120°	59.8	2.9
120°-130°	38.2	1.8
130°-140°	21.4	1.0
140°-150°	9.8	0.5
150°-160°	3.0	0.1
160°-170°	0.4	0.0
170°-180°	0.0	0.0
0°-30°	374.3	18.1
0°-40°	620.0	29.9
0°-60°	1149.3	55.4
0°-90°	1738.1	83.8
90°-120°	262.1	12.6
90°-150°	331.5	16.0
90°-180°	335.0	16.2
0°-180°	2073.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	477	477	477	477	477	
5°	479	473	480	475	479	45
15°	458	463	460	464	458	129
25°	417	447	419	447	417	192
35°	361	420	365	420	361	226
45°	296	386	300	387	296	228
55°	223	348	230	350	223	200
65°	148	306	154	308	148	147
75°	74	262	82	267	74	79
85°	14	218	18	224	14	17
90°	0	196	1	204	0	1
95°	0	178	0	187	0	0
105°	0	141	0	150	0	1
115°	0	108	0	117	0	0
125°	0	78	0	86	0	0
135°	0	50	0	59	0	0
145°	0	29	0	36	0	0
155°	0	12	0	17	0	0
165°	0	2	0	3	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°	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1
2.5°	481.2	481.2	480.7	479.7	480.2	481.7	480.7	478.2	476.6	472.6	473.6
5°	479.2	479.2	478.7	477.6	478.2	480.2	479.2	477.1	475.1	471.6	473.1
7.5°	475.6	475.6	475.1	474.1	475.1	477.1	476.1	474.1	472.6	469.1	470.6
10°	470.6	471.1	470.6	469.1	471.1	473.1	472.6	470.1	468.6	465.6	467.1
12.5°	464.6	465.1	464.6	464.1	465.1	468.1	467.1	465.1	464.1	461.5	463.1
15°	457.5	458.0	457.0	457.0	458.0	461.0	461.0	459.0	458.0	455.5	458.5
17.5°	448.5	449.0	448.5	448.5	449.5	452.5	453.0	452.0	451.0	450.0	453.0
20°	439.4	438.9	438.9	438.4	440.4	444.9	444.4	444.4	443.4	443.4	446.9
22.5°	428.8	428.8	428.3	428.3	430.8	434.9	434.9	435.9	434.9	436.9	439.9
25°	416.7	417.2	416.7	417.8	419.8	424.3	424.8	426.3	426.8	428.8	432.3
27.5°	404.2	404.7	404.2	405.2	408.7	412.2	414.7	416.7	417.2	420.3	424.8
30°	390.6	390.6	391.1	392.1	396.1	401.6	403.7	406.2	406.2	411.2	415.7
32.5°	376.5	376.5	376.5	378.5	383.0	389.6	392.1	395.1	396.1	401.1	406.2
35°	360.9	361.4	361.4	362.9	368.9	375.5	379.0	382.5	384.5	390.6	395.6
37.5°	346.3	347.3	345.8	347.8	356.3	361.9	365.9	369.4	373.0	381.0	385.0
40°	329.7	330.7	330.2	334.2	341.2	348.3	352.8	356.3	361.4	369.4	374.0
42.5°	312.1	313.1	314.1	318.6	326.1	333.2	338.7	343.3	349.3	356.3	363.9
45°	295.9	295.9	297.5	303.0	311.0	318.6	325.1	330.2	337.2	344.8	352.3
47.5°	277.8	278.3	280.3	286.9	295.4	304.5	310.5	317.1	324.6	332.7	341.2
50°	261.2	261.2	264.2	271.3	279.3	289.4	295.9	303.5	311.6	321.1	329.7
52.5°	242.1	243.1	247.6	254.2	264.7	273.8	281.4	289.4	299.0	309.0	318.6
55°	223.0	225.0	228.5	237.6	248.6	257.2	266.3	276.3	285.4	296.5	307.5
57.5°	204.3	205.9	211.4	220.5	232.0	242.6	252.2	261.7	272.8	283.9	295.4
60°	185.2	187.2	193.8	202.8	215.4	226.5	237.6	247.6	259.2	270.8	282.9
62.5°	167.1	168.6	176.2	186.7	199.3	211.4	222.5	234.5	247.1	258.2	270.3
65°	148.0	150.5	159.0	168.6	183.2	195.3	207.9	221.0	234.0	246.1	257.7
67.5°	130.4	131.9	140.9	152.0	166.6	180.2	193.3	207.4	221.0	233.5	245.1
70°	109.7	114.8	123.8	135.4	151.0	165.1	179.2	193.8	208.4	221.5	232.5
72.5°	92.6	96.6	106.7	119.3	134.4	151.0	165.6	181.2	195.8	209.4	221.0
75°	74.5	78.5	90.1	104.2	119.8	137.4	152.5	168.6	183.7	197.3	209.4
77.5°	56.9	61.9	74.5	89.1	106.2	124.3	139.9	156.0	171.6	186.2	198.3
80°	40.8	46.3	59.9	76.5	93.1	111.2	128.3	144.5	160.1	174.7	187.2
82.5°	26.2	32.2	46.8	63.4	81.0	99.2	116.8	132.9	148.5	163.1	176.2
85°	14.1	20.6	35.7	52.3	70.0	88.1	105.7	122.8	137.9	151.5	165.6
87.5°	4.0	12.1	26.7	43.3	61.4	78.0	95.1	112.2	127.3	141.9	154.5
90°	0.5	7.0	20.1	35.7	53.4	69.5	86.6	102.7	117.8	132.4	145.0
92.5°	0.5	4.5	15.6	29.7	45.8	62.4	79.5	95.1	109.2	123.8	136.4
95°	0.5	3.5	12.6	25.2	40.3	55.9	72.0	87.1	101.7	115.3	127.8
97.5°	0.5	2.5	10.1	21.6	35.2	49.8	65.4	80.5	94.6	107.7	119.3
100°	0.5	2.0	8.1	18.6	30.7	44.8	58.9	73.5	87.1	99.7	111.7
102.5°	0.5	1.5	7.0	15.6	27.2	39.8	53.4	66.9	80.0	92.1	104.2
105°	0.5	1.5	6.0	13.6	24.2	35.7	48.3	61.4	73.5	85.1	96.1
107.5°	0.5	1.0	5.0	11.6	21.1	32.2	43.8	56.4	67.4	78.5	89.1
110°	0.5	1.0	4.0	10.6	18.6	28.7	39.8	51.3	61.9	72.5	82.5

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.5	1.0	3.5	9.1	16.1	25.7	35.7	46.3	56.4	66.9	76.0
115°	0.5	1.0	3.0	8.1	15.1	22.1	32.2	41.8	51.8	61.4	70.0
117.5°	0.5	1.0	2.5	6.5	13.1	20.1	28.2	37.7	46.8	55.9	63.9
120°	0.5	1.0	2.0	6.0	11.6	18.1	25.2	33.7	42.3	50.8	59.4
122.5°	0.5	0.5	2.0	5.0	10.1	16.1	23.2	29.7	37.7	45.8	53.4
125°	0.5	0.5	2.0	4.5	8.6	14.6	20.6	26.7	33.7	40.8	47.3
127.5°	0.5	0.5	1.5	3.5	7.5	12.6	18.1	24.7	29.7	36.2	42.8
130°	0.5	0.5	1.5	3.0	6.5	10.6	16.1	21.6	27.7	32.2	37.7
132.5°	0.5	0.5	1.5	2.5	5.0	8.6	13.6	18.6	24.2	29.2	33.7
135°	0.5	0.5	1.0	2.0	4.0	7.0	11.1	15.6	21.1	26.2	30.7
137.5°	0.5	0.5	1.0	2.0	3.0	6.0	8.6	12.6	17.6	22.1	26.7
140°	0.5	0.5	1.0	1.5	2.5	4.5	7.0	10.1	14.1	18.1	23.2
142.5°	0.5	0.5	0.5	1.5	2.0	3.5	5.5	8.1	11.1	14.6	18.6
145°	0.5	0.5	0.5	1.5	2.0	2.5	4.5	6.5	8.6	11.1	14.6
147.5°	0.5	0.5	0.5	1.0	1.5	2.0	3.5	5.0	6.5	8.6	10.6
150°	0.5	0.5	0.5	1.0	1.5	2.0	2.5	3.5	5.0	7.0	8.6
152.5°	0.5	0.5	0.5	1.0	1.0	1.5	2.0	2.5	3.5	5.0	6.0
155°	0.5	0.5	0.5	0.5	1.0	1.5	2.0	2.0	2.5	3.5	4.5
157.5°	0.5	0.5	0.5	0.5	1.0	1.0	1.5	1.5	2.0	2.0	3.0
160°	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.5	1.5	1.5	1.5
162.5°	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.5	1.5
165°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0
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°	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1
2.5°	473.6	474.1	475.6	475.6	474.6	474.6	474.1	473.6	474.1	475.1	475.1
5°	472.6	473.1	474.6	475.1	474.1	473.6	473.6	473.1	473.6	474.6	474.6
7.5°	470.6	471.1	472.6	473.1	472.1	472.1	471.6	471.1	472.1	472.6	472.6
10°	467.6	468.1	470.1	470.6	470.1	469.6	469.6	469.1	469.6	470.6	470.6
12.5°	463.6	464.6	467.1	467.1	467.1	466.6	466.6	466.1	466.6	467.6	467.1
15°	459.0	461.0	463.1	464.1	464.1	464.1	463.6	463.1	464.1	464.6	464.1
17.5°	454.0	456.5	459.5	460.5	460.5	461.0	460.5	460.0	461.0	461.0	460.5
20°	449.0	451.5	454.5	455.5	456.5	457.0	457.0	456.5	457.0	457.5	457.0
22.5°	442.4	445.4	449.0	450.5	451.5	452.5	452.5	452.5	453.0	453.5	452.5
25°	435.4	438.9	442.9	444.4	446.4	446.9	447.4	447.4	448.0	448.5	446.9
27.5°	427.8	431.8	435.9	438.4	439.9	440.9	440.9	441.4	441.9	442.4	440.9
30°	418.8	424.8	428.3	430.3	432.3	433.9	434.4	434.9	435.4	435.9	434.4
32.5°	410.7	415.7	420.3	422.8	425.3	427.3	427.8	427.8	428.8	428.8	427.3
35°	401.1	407.2	411.7	414.2	417.2	418.8	419.8	419.8	420.8	420.8	419.3
37.5°	391.6	397.6	402.7	405.7	409.2	411.2	411.7	411.7	412.7	412.7	410.7
40°	381.5	388.1	393.6	397.1	400.1	402.7	403.2	404.7	404.7	404.2	402.1
42.5°	371.4	377.5	383.5	387.6	391.6	394.1	395.1	395.6	395.6	395.1	393.6
45°	360.4	367.4	373.0	378.0	382.0	384.5	386.0	386.5	386.5	385.5	384.0
47.5°	349.8	356.9	362.4	367.9	372.0	375.0	376.5	377.0	376.5	376.0	374.5
50°	338.7	346.8	352.3	357.9	361.9	364.4	366.9	367.4	366.9	366.4	363.4
52.5°	327.2	335.7	341.8	347.3	351.8	354.8	356.9	357.4	357.4	356.3	354.3
55°	315.6	323.1	330.7	336.7	341.8	344.8	347.3	348.3	347.3	346.3	343.8
57.5°	305.0	312.1	319.6	326.1	331.2	335.2	337.2	338.2	337.2	335.7	333.2
60°	292.4	300.0	308.5	314.6	320.1	324.1	325.1	327.2	326.1	324.6	322.1
62.5°	280.3	289.4	297.0	304.5	309.0	313.6	315.6	316.6	315.6	314.1	311.6
65°	267.8	277.8	285.4	292.9	298.0	302.5	305.0	305.5	304.5	303.0	300.5
67.5°	256.2	265.8	273.8	281.9	286.4	290.9	293.4	294.4	293.4	291.4	288.9
70°	244.6	254.2	263.7	269.8	275.3	280.3	281.9	283.4	282.4	280.3	277.3
72.5°	233.0	243.1	252.7	258.7	264.7	269.3	271.3	272.8	271.8	269.8	266.3
75°	221.0	231.5	241.1	247.6	253.7	258.2	260.2	261.7	260.7	258.7	254.7
77.5°	209.9	220.5	229.5	236.6	242.6	246.6	250.1	250.7	249.6	247.6	243.6
80°	198.3	208.9	218.4	225.5	231.5	235.6	238.1	239.6	238.6	236.6	232.5
82.5°	188.2	197.8	207.4	214.4	220.5	225.5	227.5	229.0	228.5	225.5	222.5
85°	177.2	188.2	195.8	203.3	209.4	214.4	215.9	217.9	217.4	214.9	210.9
87.5°	166.1	177.2	186.2	193.8	199.3	203.3	205.9	206.9	206.4	203.8	199.3
90°	157.0	167.1	176.2	184.2	188.7	193.3	195.8	196.3	196.3	193.3	189.8
92.5°	148.5	158.0	167.1	174.7	180.2	184.2	186.2	187.2	186.7	184.2	180.2
95°	138.9	149.5	158.0	165.6	171.1	175.2	177.2	178.2	177.7	175.2	171.1
97.5°	130.9	140.4	149.0	156.0	161.6	165.6	167.6	168.6	168.6	166.1	162.1
100°	122.8	132.4	140.4	147.5	152.5	156.5	158.5	159.0	158.5	156.5	152.5
102.5°	114.8	123.8	131.9	138.4	143.9	147.5	149.5	150.0	150.0	147.5	143.4
105°	106.7	115.8	123.3	130.4	134.9	138.4	139.9	141.4	140.9	138.9	134.9
107.5°	99.2	108.2	115.3	121.8	126.3	129.9	131.4	132.9	132.4	130.4	126.3
110°	92.1	100.7	107.2	113.7	117.8	121.3	123.8	124.3	123.3	121.3	117.8

TEST NUMBER: P1213727

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	85.6	93.1	99.7	105.7	110.2	112.7	114.8	115.8	114.8	112.7	110.2
115°	78.5	86.1	92.6	98.1	102.2	105.2	106.7	107.7	106.7	104.7	102.2
117.5°	72.0	79.0	85.6	91.1	94.6	97.1	98.6	99.7	98.6	97.1	94.6
120°	66.4	72.5	78.5	83.6	87.6	89.6	91.1	92.1	91.6	89.6	87.1
122.5°	59.9	66.4	72.0	77.0	80.5	82.5	83.6	84.6	84.1	82.5	80.0
125°	54.4	59.9	65.4	70.0	73.5	75.5	76.5	77.5	77.0	75.5	72.5
127.5°	48.3	54.4	58.9	63.4	65.9	69.0	69.5	70.5	70.0	68.5	65.9
130°	43.8	48.3	52.8	56.9	59.9	61.9	62.9	63.4	62.4	61.4	58.9
132.5°	38.3	43.3	47.3	50.8	52.8	54.9	55.9	56.4	56.4	54.9	52.8
135°	34.2	37.7	41.3	44.8	46.8	48.8	49.8	50.3	49.8	48.8	46.8
137.5°	30.7	33.7	36.2	39.3	41.8	42.8	43.8	43.8	43.3	42.8	41.3
140°	26.7	30.2	32.7	34.7	36.7	37.2	38.3	38.3	37.7	37.2	36.2
142.5°	22.6	25.7	28.2	30.7	32.2	33.2	33.7	34.2	33.7	33.2	31.7
145°	18.1	21.6	24.2	25.7	27.7	28.2	28.7	29.2	28.7	28.2	26.7
147.5°	14.1	17.1	19.6	21.6	23.2	23.7	24.2	24.7	24.2	23.2	22.6
150°	10.1	12.6	15.6	17.6	18.6	19.6	19.6	19.6	20.1	19.1	18.1
152.5°	8.1	9.1	11.1	13.1	14.6	15.1	15.6	15.6	15.1	15.1	14.1
155°	5.5	6.5	8.1	9.6	11.1	11.6	12.1	12.1	11.6	11.6	11.1
157.5°	3.5	4.5	5.5	6.5	8.1	8.6	9.1	9.1	9.1	8.6	8.1
160°	2.0	2.5	3.0	4.0	5.0	5.5	6.0	6.0	6.0	6.0	5.5
162.5°	1.5	1.5	1.5	2.0	2.5	3.0	3.5	3.5	3.5	3.5	3.0
165°	1.0	1.0	1.0	1.0	1.0	1.5	2.0	2.0	2.0	2.0	2.0
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: P1213727

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1
2.5°	474.6	474.6	475.1	474.1	471.1	471.6	471.6	473.6	474.6	475.1	477.6
5°	473.6	473.6	474.6	473.1	470.6	470.6	470.6	472.6	473.1	474.1	476.1
7.5°	472.1	472.1	472.6	471.1	468.1	468.1	467.6	469.6	470.6	471.1	473.1
10°	469.6	469.6	470.1	468.6	465.1	465.1	464.6	466.1	466.6	467.6	469.1
12.5°	466.1	466.1	466.1	464.6	461.0	460.5	460.0	461.5	461.5	462.0	463.6
15°	463.1	462.0	462.0	460.5	457.0	456.0	455.0	455.5	456.5	456.0	457.0
17.5°	459.5	458.5	457.5	456.0	451.5	450.0	449.0	449.5	449.0	448.5	449.5
20°	455.5	454.0	453.5	451.0	446.4	443.9	441.9	440.9	441.4	439.9	440.4
22.5°	451.0	449.0	448.0	444.9	440.4	437.4	434.9	432.9	432.3	430.3	430.8
25°	445.4	442.9	441.4	438.9	433.9	430.3	427.3	424.3	422.8	420.3	419.8
27.5°	438.9	436.4	434.4	431.8	426.8	422.3	418.8	414.7	412.7	409.7	408.2
30°	432.3	429.3	426.3	424.3	418.8	413.7	408.2	404.7	401.6	398.1	395.6
32.5°	424.3	421.3	418.3	415.2	410.2	404.2	399.6	394.1	390.6	386.5	383.5
35°	416.2	412.2	409.2	405.2	400.6	393.6	388.1	382.5	378.0	373.5	369.9
37.5°	407.2	404.2	399.6	396.1	390.6	383.5	377.5	370.4	366.4	360.4	355.8
40°	398.6	395.1	390.6	386.0	380.5	372.5	365.9	357.9	353.3	346.3	341.8
42.5°	390.1	385.0	380.5	375.5	369.4	361.9	353.8	345.8	339.7	333.2	326.7
45°	380.5	375.0	369.4	363.9	357.9	350.3	341.8	333.2	325.6	319.6	311.6
47.5°	370.4	364.9	358.4	352.3	345.8	338.2	329.2	320.1	312.1	305.0	296.5
50°	360.4	354.8	347.8	341.2	333.7	326.1	316.6	306.0	297.5	288.4	280.9
52.5°	349.8	344.3	337.7	329.2	321.1	313.6	303.5	292.4	282.9	275.3	265.8
55°	339.2	333.7	326.1	317.6	309.5	300.0	290.4	279.3	268.8	259.7	250.1
57.5°	328.2	323.1	314.6	307.5	297.5	287.4	277.3	266.8	255.2	244.6	233.5
60°	317.1	311.6	303.5	294.9	284.9	274.8	264.2	252.7	240.6	229.0	218.9
62.5°	307.0	300.0	292.4	283.4	272.8	263.2	251.2	238.6	226.5	214.4	202.3
65°	295.4	287.9	280.9	271.8	260.7	249.6	237.6	225.0	211.9	198.8	186.7
67.5°	283.9	276.3	268.8	259.7	248.1	236.6	224.0	211.4	196.8	184.2	170.1
70°	272.3	266.3	256.7	247.1	236.6	224.0	211.4	197.8	182.7	169.1	154.5
72.5°	260.7	254.7	245.1	235.0	225.0	211.9	198.3	184.7	170.6	155.0	139.4
75°	249.6	242.1	233.5	224.0	213.4	199.8	186.2	172.1	155.5	140.9	124.8
77.5°	239.1	232.0	223.5	212.9	201.3	188.2	174.1	159.6	142.9	127.3	109.7
80°	227.5	220.5	211.9	201.3	189.8	177.2	162.1	147.0	130.9	113.7	95.6
82.5°	216.4	209.9	200.3	190.8	178.2	165.6	150.5	135.4	118.3	101.7	84.1
85°	204.8	198.3	189.2	179.2	167.1	153.5	139.4	124.3	107.2	90.1	72.5
87.5°	194.8	187.2	178.2	168.1	156.0	142.9	129.4	113.2	96.6	80.0	61.9
90°	184.2	177.2	168.1	158.0	146.0	132.9	118.8	103.7	87.6	70.5	53.4
92.5°	175.2	167.6	159.0	149.0	136.9	124.3	110.2	95.1	79.5	62.9	46.3
95°	166.1	158.5	150.5	140.4	128.3	115.8	101.7	87.1	72.0	55.9	40.3
97.5°	156.0	149.5	141.4	131.9	119.8	107.7	94.1	80.0	65.4	49.8	35.2
100°	148.0	140.4	132.9	122.8	111.7	100.2	86.6	73.0	58.9	44.3	30.7
102.5°	138.9	131.9	124.3	114.8	103.7	92.1	79.5	66.4	53.4	39.8	26.7
105°	130.4	123.8	115.8	106.7	96.1	85.1	73.0	60.9	48.3	35.2	23.7
107.5°	121.8	115.3	107.7	99.2	89.1	78.0	66.9	54.9	43.3	31.7	21.1
110°	113.2	107.2	100.2	91.6	82.0	72.0	61.4	50.3	38.8	28.2	18.6

TEST NUMBER: P1213727

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	105.7	99.7	92.6	84.6	75.5	65.9	55.9	45.3	34.7	25.2	16.1
115°	98.1	92.6	85.6	78.5	69.5	60.4	50.8	40.8	31.2	22.6	14.1
117.5°	90.6	85.1	78.5	71.5	63.4	54.9	45.8	36.2	28.2	20.1	12.6
120°	83.0	78.0	72.0	65.4	58.4	49.8	40.8	32.7	25.2	17.6	11.1
122.5°	76.0	71.5	65.9	59.9	52.3	44.3	36.7	29.7	22.6	15.6	9.1
125°	69.5	64.9	59.9	53.9	46.8	39.8	33.2	26.7	19.6	13.6	7.5
127.5°	62.9	58.4	53.4	47.8	42.3	35.7	29.7	23.7	17.6	12.1	6.5
130°	56.4	52.3	47.8	43.3	37.7	31.7	26.7	20.6	15.1	9.6	5.5
132.5°	49.8	46.8	42.8	38.3	33.2	28.7	23.2	18.1	13.1	8.6	5.0
135°	44.3	41.3	37.7	33.7	29.7	25.2	20.1	15.6	11.1	7.0	4.0
137.5°	39.3	36.7	33.2	29.7	26.2	21.6	17.6	13.1	9.1	6.0	3.0
140°	34.7	32.2	29.2	25.7	22.6	18.6	14.6	10.6	8.1	5.0	2.5
142.5°	30.2	27.7	25.2	22.1	19.1	15.6	12.1	9.1	6.5	4.0	2.5
145°	25.7	23.7	21.1	18.6	15.6	12.6	10.1	7.5	5.0	3.0	2.0
147.5°	21.1	19.6	17.1	15.1	12.6	10.1	8.1	6.0	4.0	2.5	1.5
150°	17.1	15.6	13.6	11.6	10.1	8.1	6.5	4.5	3.0	2.5	1.5
152.5°	13.1	12.1	10.6	9.6	8.1	6.0	4.5	3.5	2.5	2.0	1.0
155°	10.6	9.6	8.6	7.0	6.0	4.5	3.5	2.5	2.0	1.5	1.0
157.5°	7.5	7.0	6.0	5.0	4.0	3.0	2.5	2.5	1.5	1.0	0.5
160°	5.0	4.5	4.0	3.0	2.5	2.5	2.0	1.5	1.0	1.0	0.5
162.5°	3.0	2.5	2.5	2.5	2.0	2.0	1.5	1.0	1.0	0.5	0.5
165°	2.0	2.0	2.0	1.5	1.5	1.5	1.0	0.5	0.5	0.5	0.5
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: P1213727

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1
2.5°	477.6	476.1	478.2	481.7	482.2	481.7	480.7	482.2	484.2	483.7	480.2
5°	476.6	474.6	476.6	480.2	480.2	479.7	479.2	480.7	482.7	482.2	479.2
7.5°	473.6	471.6	473.6	476.6	477.1	476.1	476.1	477.6	479.7	479.2	476.6
10°	469.6	467.6	468.6	472.1	473.1	472.1	472.1	473.6	476.1	475.6	472.6
12.5°	463.6	462.0	463.1	466.1	467.1	466.6	466.1	468.1	470.6	470.6	467.6
15°	457.0	455.0	456.0	459.5	460.0	459.0	459.5	461.0	464.1	464.1	461.5
17.5°	449.5	446.9	448.5	451.0	451.5	451.5	451.5	453.5	457.0	456.5	454.5
20°	440.9	437.4	438.4	440.9	441.9	441.9	441.9	445.4	448.0	448.0	445.9
22.5°	430.8	428.3	428.3	430.8	432.3	431.8	431.8	434.9	438.4	437.9	437.9
25°	419.3	417.2	416.2	419.3	419.8	420.3	421.3	424.3	428.3	428.3	428.8
27.5°	407.2	405.2	404.7	407.2	407.7	408.2	409.2	412.7	416.7	417.2	418.3
30°	395.6	392.6	391.6	393.6	394.6	395.1	395.1	400.6	404.2	405.7	407.7
32.5°	382.0	379.0	376.5	380.0	380.5	381.5	382.0	387.6	391.6	394.1	397.1
35°	368.4	363.4	362.4	364.9	365.9	366.4	367.4	373.5	379.0	381.0	385.0
37.5°	353.3	349.8	346.8	349.3	350.3	350.8	353.8	359.4	364.9	367.9	372.0
40°	339.2	334.7	332.2	333.7	334.7	335.2	338.7	344.8	351.3	354.8	359.9
42.5°	323.6	317.6	315.6	317.1	317.6	319.1	322.1	330.2	336.7	341.8	345.8
45°	308.0	303.5	299.0	300.5	301.0	302.0	306.5	315.1	322.1	328.2	332.7
47.5°	291.9	286.4	281.9	282.9	284.9	285.4	290.4	300.5	307.0	313.6	319.6
50°	275.8	268.3	264.7	264.7	265.8	268.3	274.8	284.9	291.9	299.5	306.0
52.5°	259.2	252.2	248.1	248.6	249.6	252.7	258.7	268.8	276.8	284.9	292.9
55°	242.6	235.0	231.0	230.0	231.0	235.0	242.1	252.7	260.7	270.3	278.8
57.5°	226.0	216.9	213.4	211.9	212.9	217.9	225.0	236.1	246.1	255.2	265.2
60°	207.9	200.8	194.8	191.3	193.8	200.3	207.9	219.4	230.0	240.1	251.2
62.5°	192.3	183.2	176.7	173.1	175.7	181.2	191.8	202.8	214.4	226.0	237.1
65°	174.7	165.6	158.0	154.5	157.0	163.6	174.1	186.2	198.8	210.4	223.5
67.5°	157.5	148.0	138.9	135.4	138.4	145.5	157.0	170.6	184.2	196.3	210.4
70°	140.9	130.4	120.8	118.3	120.3	129.9	140.9	154.5	168.6	182.7	197.3
72.5°	125.8	112.7	102.7	99.7	102.2	112.7	125.3	139.4	154.5	169.6	185.2
75°	108.2	96.1	85.1	81.5	84.6	94.1	109.7	124.8	140.9	157.0	171.6
77.5°	94.1	80.0	68.5	62.9	67.9	80.0	95.1	111.2	127.8	144.5	161.1
80°	79.5	64.9	52.3	46.3	51.8	64.9	80.0	97.6	116.3	132.9	148.0
82.5°	66.4	50.8	37.7	31.2	37.2	51.8	68.5	86.1	104.2	120.8	138.4
85°	54.4	38.3	24.7	17.6	26.2	39.3	56.9	75.0	93.6	110.7	127.8
87.5°	44.3	28.7	15.1	7.5	16.1	30.7	47.3	65.4	84.1	101.2	117.3
90°	36.2	20.6	8.1	1.0	9.6	23.2	39.3	56.9	74.5	92.1	108.2
92.5°	29.7	15.6	4.5	0.5	6.0	18.6	33.7	50.3	67.4	84.6	100.2
95°	24.7	12.1	3.0	0.5	4.5	14.6	28.7	44.8	60.9	77.5	93.1
97.5°	21.1	10.1	2.5	0.5	3.5	12.6	24.7	39.8	55.4	71.0	86.1
100°	18.1	8.1	2.0	0.5	3.0	10.6	21.6	35.2	49.8	64.9	79.5
102.5°	15.6	6.5	1.5	0.5	2.5	9.1	19.1	31.7	44.8	59.4	73.5
105°	13.6	5.5	1.5	0.5	2.0	8.1	17.1	28.2	41.3	54.4	67.9
107.5°	11.6	4.5	1.0	0.5	1.5	6.5	15.1	25.7	37.2	49.8	62.4
110°	10.1	4.0	1.0	0.5	1.5	6.0	13.1	23.2	33.7	45.3	57.4

TEST NUMBER: P1213727

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	8.6	3.0	1.0	0.5	1.0	5.0	11.6	20.6	30.7	41.3	52.8
115°	7.5	2.5	0.5	0.5	1.0	4.5	10.6	18.6	27.7	37.7	48.3
117.5°	6.0	2.0	0.5	0.5	0.5	3.5	9.1	16.6	25.2	34.7	44.3
120°	5.0	2.0	0.5	0.5	0.5	3.0	8.1	14.6	22.6	31.2	40.3
122.5°	4.5	1.5	0.5	0.5	0.5	2.5	7.0	13.1	20.1	28.2	36.7
125°	4.0	1.5	0.5	0.5	0.5	2.0	6.0	11.6	18.1	25.2	33.2
127.5°	3.0	1.5	0.5	0.5	0.5	1.5	5.5	10.1	16.1	22.6	29.7
130°	2.5	1.0	0.5	0.5	0.5	1.5	4.5	9.1	14.1	20.1	26.7
132.5°	2.0	1.0	0.5	0.5	0.5	1.0	3.5	7.0	12.1	17.6	23.7
135°	2.0	1.0	0.5	0.5	0.5	1.0	2.5	6.0	10.1	15.1	20.1
137.5°	2.0	0.5	0.5	0.5	0.5	1.0	2.0	4.5	8.1	12.1	16.6
140°	1.5	0.5	0.5	0.5	0.5	0.5	1.5	3.5	6.5	10.1	14.1
142.5°	1.5	0.5	0.5	0.5	0.5	0.5	1.5	2.5	5.0	8.1	11.1
145°	1.0	0.5	0.5	0.5	0.5	0.5	1.0	2.0	4.0	6.0	9.1
147.5°	1.0	0.5	0.5	0.5	0.5	0.5	1.0	1.5	3.0	5.0	7.0
150°	1.0	0.5	0.5	0.5	0.5	0.5	1.0	1.5	2.0	3.5	5.5
152.5°	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.5	2.5	3.5
155°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.5	2.0	2.5
157.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.5	2.0
160°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.5
162.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0
165°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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: P1213727

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1
2.5°	478.7	475.1	476.1	475.6	476.6	478.2	478.2	477.6	477.6	476.6	475.6
5°	477.6	474.1	475.6	475.1	476.1	477.6	477.6	477.1	477.1	475.6	475.1
7.5°	474.6	472.1	473.1	473.1	474.1	475.6	475.6	475.1	475.1	473.6	473.1
10°	471.6	468.6	470.1	470.1	471.1	473.1	473.1	472.6	472.6	471.1	470.6
12.5°	466.6	463.6	466.1	466.6	467.6	469.6	469.1	469.1	469.1	467.6	467.1
15°	460.5	458.5	461.0	461.5	463.1	465.6	465.6	465.6	465.6	464.1	463.6
17.5°	454.0	452.5	455.0	456.0	458.0	460.5	460.5	461.0	461.5	460.5	460.0
20°	446.4	445.4	448.0	450.0	453.0	455.5	456.5	457.0	458.0	457.0	456.5
22.5°	437.9	437.9	441.4	443.4	446.9	449.5	451.0	452.5	453.5	452.5	452.0
25°	428.3	429.8	433.4	436.9	440.9	443.4	444.9	446.9	448.0	447.4	446.9
27.5°	419.3	421.3	425.8	429.3	432.9	436.9	438.4	440.9	441.9	441.9	441.4
30°	408.7	411.7	416.7	420.8	425.3	429.3	431.3	433.9	435.4	434.4	434.9
32.5°	398.6	403.7	407.7	412.2	417.2	421.3	423.8	426.8	428.3	427.8	428.3
35°	387.6	392.6	398.1	402.7	408.7	412.7	416.2	418.8	420.8	420.3	420.3
37.5°	375.5	382.0	387.6	393.6	399.1	403.7	407.2	410.2	412.2	412.2	412.2
40°	363.9	370.9	376.5	383.5	390.6	394.6	398.6	401.6	403.7	404.2	404.7
42.5°	351.3	358.9	365.4	373.0	380.0	385.0	389.6	393.1	395.1	396.1	395.6
45°	339.7	346.8	354.3	362.9	369.4	374.5	380.0	384.0	386.0	386.5	387.1
47.5°	326.7	334.7	343.3	351.8	358.4	364.9	369.9	374.0	376.0	377.5	377.5
50°	314.1	322.6	332.2	341.2	348.3	354.8	359.9	364.4	366.9	367.9	368.4
52.5°	302.5	310.5	320.6	329.7	336.7	343.3	349.8	354.8	357.4	358.4	358.4
55°	288.4	298.5	309.5	318.1	325.6	333.2	339.7	344.8	347.3	348.8	349.8
57.5°	275.3	285.9	297.5	306.5	315.6	322.6	328.7	335.2	337.2	339.2	339.7
60°	262.7	273.3	284.4	294.4	303.5	311.0	318.1	323.6	327.2	328.2	329.2
62.5°	249.6	260.7	272.3	282.4	291.9	301.0	307.5	312.6	316.6	318.1	319.1
65°	237.1	248.6	260.2	270.8	280.9	289.9	296.5	301.5	305.5	308.0	308.5
67.5°	223.5	236.1	248.1	259.2	269.3	278.8	285.4	290.4	294.4	297.5	298.0
70°	210.9	224.0	236.1	248.1	258.2	267.8	274.8	279.8	284.4	286.4	287.4
72.5°	198.8	212.4	225.0	237.1	247.1	256.7	264.2	269.3	273.8	276.3	276.8
75°	187.2	200.8	214.4	226.0	236.6	246.1	253.7	259.2	263.2	265.8	266.8
77.5°	175.7	189.8	203.3	214.9	226.0	235.6	242.1	248.6	252.7	255.7	255.7
80°	164.1	178.7	192.8	204.3	215.4	224.0	231.5	238.1	242.1	245.1	245.1
82.5°	154.0	168.1	181.7	193.3	204.3	213.9	221.5	227.5	232.0	234.0	234.5
85°	142.4	158.0	170.6	183.2	193.8	202.8	210.4	216.9	221.0	223.0	224.0
87.5°	132.9	148.0	161.6	172.6	183.2	192.3	200.8	206.4	210.4	212.9	213.9
90°	123.8	138.4	152.0	163.1	174.1	182.7	190.8	196.3	200.8	202.8	203.8
92.5°	115.8	130.4	143.4	154.5	165.1	174.7	182.2	187.7	191.8	193.8	195.3
95°	108.2	122.3	134.9	147.0	157.0	165.6	173.6	179.2	183.7	185.2	186.7
97.5°	100.7	114.3	126.8	138.4	149.0	157.0	164.6	170.1	173.6	176.2	177.7
100°	94.1	107.2	119.3	130.4	140.4	148.0	156.0	161.1	164.6	166.6	168.6
102.5°	87.1	100.2	111.7	122.3	132.9	139.9	147.5	152.5	155.5	159.0	159.0
105°	81.0	93.1	104.7	114.8	123.8	132.4	138.9	143.9	147.5	150.0	150.0
107.5°	74.5	86.6	97.6	108.2	116.8	124.8	130.9	135.4	139.4	140.9	142.4
110°	69.5	80.0	91.1	101.2	109.2	116.8	122.8	127.8	131.4	132.9	133.9

TEST NUMBER: P1213727

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	63.4	74.5	84.6	94.1	102.2	109.2	115.3	119.3	122.8	124.8	125.3
115°	58.4	69.0	78.0	87.1	95.6	101.7	107.2	111.2	114.8	116.3	117.3
117.5°	53.9	63.4	72.5	80.0	88.1	94.6	100.2	103.7	106.7	108.7	109.7
120°	49.3	58.4	66.4	74.0	81.5	87.6	92.6	96.1	99.7	101.2	101.2
122.5°	44.8	53.4	60.9	67.9	75.0	80.5	86.1	89.1	92.1	93.6	93.6
125°	40.8	48.8	55.9	62.4	69.0	74.0	78.5	82.0	85.1	86.1	86.1
127.5°	36.7	44.3	50.8	56.9	62.4	67.4	72.0	75.5	78.0	79.0	79.0
130°	33.2	39.8	45.8	51.8	57.4	61.4	65.9	69.0	70.5	72.0	72.5
132.5°	29.7	35.7	41.3	46.3	51.8	55.9	59.4	62.4	63.9	65.4	65.9
135°	26.2	31.7	36.7	41.8	46.3	50.3	53.4	55.9	57.9	58.9	59.4
137.5°	22.1	28.2	32.7	36.7	41.8	44.8	48.3	49.8	51.8	52.8	52.8
140°	18.6	23.2	28.2	32.2	36.2	39.3	42.3	44.8	46.3	46.8	46.8
142.5°	15.1	19.1	23.2	28.2	31.7	34.2	37.2	39.3	40.3	40.8	41.3
145°	12.1	15.1	18.6	23.2	27.2	30.2	31.7	33.7	34.7	35.2	35.7
147.5°	9.1	12.1	15.1	18.1	22.1	25.2	26.7	28.7	29.7	30.2	30.2
150°	7.0	9.1	11.1	14.1	17.1	20.6	22.6	24.2	24.7	25.2	25.2
152.5°	5.0	7.0	8.6	10.6	12.6	15.6	18.6	19.6	20.1	20.6	20.6
155°	3.5	5.0	6.0	7.5	9.1	11.6	14.1	15.6	16.1	16.6	16.6
157.5°	2.5	3.5	4.0	5.5	6.5	7.5	9.6	12.1	12.6	12.6	12.6
160°	1.5	2.0	2.5	3.5	4.0	5.0	6.0	7.5	9.1	9.1	9.1
162.5°	1.0	1.5	1.5	2.0	2.0	3.0	3.5	4.0	5.5	6.0	6.0
165°	0.5	1.0	1.0	1.0	1.0	1.0	1.5	1.5	2.5	3.0	3.0
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: P1213727

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1
2.5°	476.1	477.1	476.6	476.6	476.6	477.6	476.6	472.1	473.1	474.1	475.1
5°	475.6	476.1	476.1	475.6	475.6	476.6	475.6	471.1	472.1	473.1	473.6
7.5°	473.6	474.1	474.1	474.1	473.6	474.6	473.1	469.1	469.1	470.1	470.6
10°	471.1	472.1	471.6	471.1	471.1	471.1	470.1	465.6	465.6	466.1	466.6
12.5°	468.1	468.1	468.1	467.6	467.1	467.1	466.1	461.5	461.0	462.0	461.5
15°	464.1	465.1	464.1	463.6	462.5	462.5	461.0	456.5	455.5	456.0	455.5
17.5°	460.5	461.0	460.0	459.0	458.0	457.5	456.0	451.0	449.5	450.0	449.0
20°	457.0	457.0	456.0	455.0	453.5	452.0	450.0	444.9	442.4	442.4	440.4
22.5°	452.5	452.5	451.5	450.0	448.5	446.4	444.4	439.4	435.4	434.4	432.9
25°	447.4	446.9	446.4	444.9	441.9	439.9	437.9	432.3	427.8	425.8	423.3
27.5°	441.4	441.4	439.9	438.4	435.4	432.9	430.3	425.3	419.3	416.7	413.2
30°	434.9	434.9	433.4	431.3	428.3	425.3	422.3	416.2	410.2	406.7	402.7
32.5°	428.3	427.8	426.3	424.3	421.3	416.7	414.2	408.2	401.1	397.1	391.6
35°	420.3	419.8	418.3	415.7	411.7	408.2	404.2	398.6	390.6	385.5	379.5
37.5°	412.2	411.7	410.7	407.2	403.2	399.1	394.1	388.6	381.0	374.5	368.4
40°	404.2	403.7	401.6	399.1	394.1	389.1	384.0	378.5	370.4	362.9	356.3
42.5°	395.6	395.1	392.6	389.6	384.0	379.0	373.0	366.9	358.9	349.8	343.3
45°	387.1	386.0	383.5	380.0	374.0	368.4	362.4	355.3	347.3	338.7	330.2
47.5°	378.0	376.5	374.0	368.9	363.9	357.9	350.8	343.3	335.2	325.6	316.6
50°	367.9	366.9	363.9	359.4	353.3	347.3	339.2	331.7	322.1	313.1	302.0
52.5°	358.4	356.3	353.8	348.8	342.8	336.2	327.7	318.6	309.0	300.5	288.9
55°	348.3	347.3	343.8	339.7	332.2	324.6	316.6	307.0	296.5	286.4	275.3
57.5°	338.7	336.7	333.7	328.2	321.6	314.1	305.5	295.4	283.9	273.3	261.2
60°	329.2	326.1	322.6	317.6	310.5	302.5	293.4	282.9	271.3	259.7	247.1
62.5°	318.6	316.1	312.1	307.0	300.0	291.4	281.9	270.8	259.7	247.6	234.0
65°	308.0	305.5	301.5	296.5	289.4	279.8	269.8	258.7	246.1	234.5	219.9
67.5°	297.5	294.9	290.4	284.9	277.8	268.8	258.2	246.6	234.0	221.5	206.4
70°	286.9	283.9	279.8	273.8	266.8	257.2	246.6	234.5	222.0	208.4	193.3
72.5°	276.3	273.8	268.8	263.2	255.7	246.1	235.6	223.5	210.4	196.3	181.2
75°	265.8	262.7	259.2	252.7	244.6	235.6	224.5	212.4	198.3	184.7	169.1
77.5°	255.2	252.7	248.1	241.6	234.0	224.5	213.4	201.3	187.2	173.1	156.5
80°	244.6	241.6	238.1	232.0	223.5	213.9	202.3	190.3	176.2	161.6	145.0
82.5°	234.0	231.0	227.0	221.0	212.9	203.3	192.3	179.2	165.1	150.0	134.4
85°	223.5	221.0	216.4	210.4	201.8	192.3	181.2	169.6	154.5	139.4	123.8
87.5°	212.9	210.4	205.9	199.8	191.8	182.2	171.1	159.0	144.5	130.4	113.2
90°	202.8	200.8	196.3	190.3	182.2	172.6	162.6	149.5	135.4	121.3	105.2
92.5°	193.8	191.8	187.7	181.7	174.7	164.1	154.0	141.4	127.3	112.7	97.1
95°	185.7	183.2	179.2	173.6	165.1	156.0	146.0	133.4	119.8	105.2	90.1
97.5°	176.7	174.1	170.1	164.1	157.0	147.5	137.4	125.3	111.7	98.1	83.0
100°	167.6	165.1	160.6	155.5	148.5	138.9	129.4	117.3	104.7	91.6	77.0
102.5°	158.5	156.0	152.0	147.0	139.9	131.4	121.8	110.2	97.6	84.6	71.0
105°	150.0	147.5	143.4	138.4	131.9	123.3	113.2	103.2	91.1	78.5	65.4
107.5°	141.4	138.9	135.4	130.4	123.8	115.8	106.2	95.6	84.6	72.5	59.9
110°	132.9	130.9	126.8	122.3	115.8	107.7	99.2	89.1	78.0	66.9	54.9

TEST NUMBER: P1213727

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	124.8	122.8	118.8	113.7	108.2	100.7	92.1	82.5	72.0	61.4	49.8
115°	116.8	114.3	110.7	106.2	100.7	93.6	85.6	77.0	66.4	56.4	45.8
117.5°	108.7	106.7	103.2	98.6	93.6	86.6	79.0	71.0	60.9	51.3	41.8
120°	100.7	99.2	95.6	91.6	86.6	80.0	73.0	64.9	55.9	46.8	37.7
122.5°	93.1	91.6	88.1	84.6	79.5	73.5	66.9	59.4	51.3	42.8	34.7
125°	86.1	84.1	81.0	77.5	73.0	67.4	60.9	53.9	46.3	38.8	31.2
127.5°	78.5	77.0	75.0	71.0	66.4	61.4	55.4	49.3	42.3	35.2	28.2
130°	72.5	70.5	67.9	64.9	60.9	55.9	50.3	44.3	38.3	31.7	24.7
132.5°	65.4	63.4	61.4	58.4	54.9	50.3	45.3	39.8	34.2	28.2	22.1
135°	58.9	57.4	55.4	52.3	48.8	45.3	40.3	35.2	30.2	24.7	19.6
137.5°	52.8	51.3	49.3	47.3	43.8	40.3	35.7	31.2	26.7	21.6	17.1
140°	46.8	45.8	43.8	41.8	38.8	35.2	31.2	27.2	23.2	18.6	14.6
142.5°	40.8	39.8	38.3	36.2	33.7	30.7	27.2	23.7	19.6	16.1	12.6
145°	35.2	34.7	33.2	31.2	29.2	26.2	23.2	20.1	16.6	13.6	10.1
147.5°	29.7	29.2	28.2	26.7	24.7	22.1	19.6	16.6	14.1	11.1	8.1
150°	24.7	24.2	23.7	21.6	20.6	18.1	16.1	13.6	11.6	8.6	6.5
152.5°	20.1	20.1	19.1	17.6	16.6	14.6	13.1	11.1	9.1	7.0	5.0
155°	16.1	15.6	15.1	14.1	13.1	11.6	10.1	8.6	7.0	5.0	3.5
157.5°	12.6	12.1	11.6	10.6	9.6	9.1	7.5	6.0	4.5	3.5	2.5
160°	9.1	8.6	8.1	7.5	7.0	6.0	5.0	4.0	3.0	2.0	1.5
162.5°	6.0	5.5	5.5	5.0	4.5	3.5	3.0	2.5	2.0	1.5	1.0
165°	3.0	3.0	2.5	2.5	2.0	1.5	1.5	1.5	1.0	1.0	0.5
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: P1213727

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	477.1	477.1	477.1	477.1	477.1	477.1	477.1
2.5°	474.6	474.6	476.6	476.1	474.6	477.6	481.2
5°	473.1	473.1	474.6	474.6	473.1	476.1	479.2
7.5°	470.6	470.1	471.6	471.6	469.6	472.1	475.6
10°	466.1	465.6	467.1	467.1	465.1	467.6	470.6
12.5°	461.0	460.0	461.5	461.0	459.0	461.5	464.6
15°	454.5	454.0	455.0	454.0	452.0	454.5	457.5
17.5°	448.0	446.4	446.9	446.9	443.4	445.9	448.5
20°	439.4	437.4	437.9	437.4	434.9	436.4	439.4
22.5°	430.8	427.8	427.8	427.3	424.3	426.3	428.8
25°	420.3	416.7	416.7	416.2	412.7	414.2	416.7
27.5°	409.7	406.2	404.7	404.2	400.6	400.6	404.2
30°	398.6	393.6	392.6	391.1	387.6	387.6	390.6
32.5°	388.1	381.0	379.0	377.0	373.5	373.0	376.5
35°	374.0	368.4	364.9	362.9	358.9	357.9	360.9
37.5°	362.4	355.3	350.3	347.8	343.8	342.3	346.3
40°	349.8	342.3	335.7	334.2	328.2	326.1	329.7
42.5°	335.7	327.7	321.1	318.1	313.6	311.6	312.1
45°	321.6	313.1	306.0	302.0	297.5	293.9	295.9
47.5°	307.0	299.5	290.9	284.9	279.3	276.8	277.8
50°	292.4	283.4	275.3	268.8	262.2	259.2	261.2
52.5°	277.8	268.3	259.2	252.2	244.6	241.6	242.1
55°	263.7	253.7	243.1	235.6	228.5	224.0	223.0
57.5°	249.6	238.6	227.5	218.9	209.9	205.9	204.3
60°	234.5	223.0	211.4	201.3	191.8	187.2	185.2
62.5°	220.5	207.9	194.8	184.2	174.7	168.6	167.1
65°	206.9	192.3	179.2	167.1	156.5	150.0	148.0
67.5°	192.3	177.2	163.1	150.0	139.9	131.4	130.4
70°	178.7	162.6	147.0	133.4	122.3	113.7	109.7
72.5°	165.1	148.5	132.4	117.8	103.7	95.6	92.6
75°	152.0	134.9	117.8	102.7	87.1	77.5	74.5
77.5°	139.9	122.3	104.2	87.6	73.0	60.9	56.9
80°	128.3	110.2	91.1	74.0	58.4	45.3	40.8
82.5°	116.3	99.2	79.5	61.4	45.3	31.7	26.2
85°	105.7	88.6	69.0	50.8	34.7	20.1	14.1
87.5°	97.1	78.5	60.9	42.8	26.2	11.6	4.0
90°	88.6	70.5	52.8	35.2	19.6	6.5	0.5
92.5°	81.0	63.9	46.3	30.2	15.1	4.5	0.5
95°	74.0	57.4	40.8	25.2	12.1	3.0	0.5
97.5°	67.4	51.8	36.2	21.6	10.1	2.5	0.5
100°	61.9	46.8	32.2	19.1	8.6	2.0	0.5
102.5°	56.4	42.3	28.7	16.6	7.5	1.5	0.5
105°	51.8	38.3	25.7	15.1	6.5	1.5	0.5
107.5°	47.3	34.7	23.2	13.1	5.5	1.0	0.5
110°	42.8	31.7	20.6	11.6	5.0	1.0	0.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	39.3	28.7	18.6	10.6	4.0	1.0	0.5
115°	35.7	25.7	16.6	9.1	3.5	0.5	0.5
117.5°	32.2	23.2	14.6	8.1	3.0	0.5	0.5
120°	29.2	20.6	13.1	7.0	2.5	0.5	0.5
122.5°	26.2	18.6	11.6	6.0	2.0	0.5	0.5
125°	23.7	16.6	10.1	5.0	1.5	0.5	0.5
127.5°	21.1	14.6	9.1	4.5	1.5	0.5	0.5
130°	18.6	13.1	7.5	3.5	1.0	0.5	0.5
132.5°	16.6	11.1	6.5	3.0	1.0	0.5	0.5
135°	14.6	9.6	5.5	2.0	1.0	0.5	0.5
137.5°	12.6	8.1	4.5	1.5	0.5	0.5	0.5
140°	10.6	7.0	3.5	1.5	0.5	0.5	0.5
142.5°	9.1	5.5	2.5	1.0	0.5	0.5	0.5
145°	7.0	4.5	2.0	1.0	0.5	0.5	0.5
147.5°	5.5	3.5	1.5	1.0	0.5	0.5	0.5
150°	4.0	2.5	1.5	0.5	0.5	0.5	0.5
152.5°	3.0	2.0	1.0	0.5	0.5	0.5	0.5
155°	2.0	1.5	1.0	0.5	0.5	0.5	0.5
157.5°	1.5	1.0	0.5	0.5	0.5	0.5	0.5
160°	1.0	0.5	0.5	0.5	0.5	0.5	0.5
162.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5
165°	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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)