

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: P1213376

Luminaire Tested: 4SNLED-LD5-23SL-LW-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213376
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-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

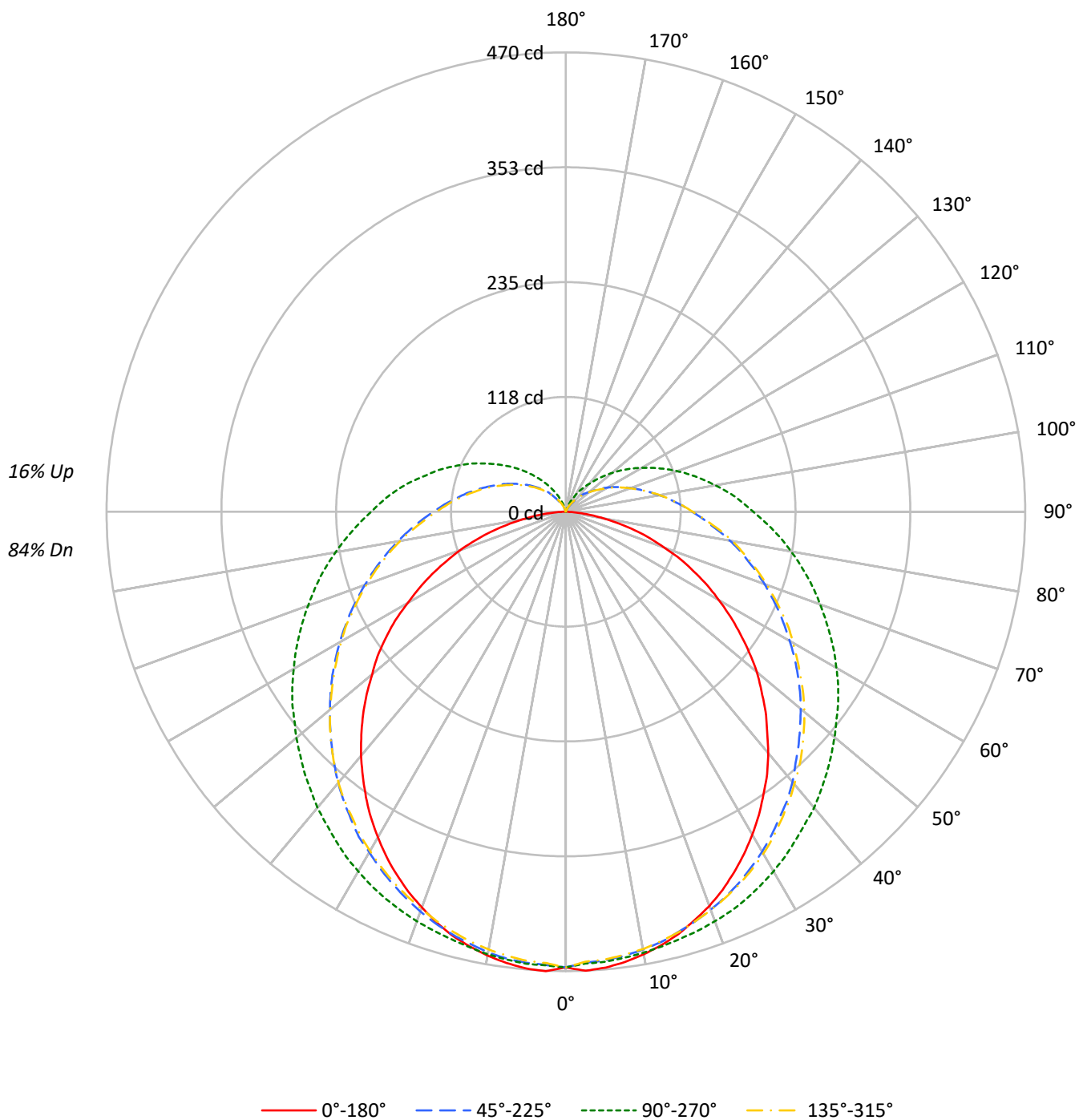
Lumens per Lamp: N/A
Luminaire Lumens: 2025.0 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

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°	3767	3767	3767	3767
5°	3787	3630	3794	3645
10°	3751	3526	3764	3538
15°	3708	3438	3724	3442
20°	3649	3374	3662	3374
25°	3578	3317	3600	3313
30°	3497	3258	3524	3258
35°	3403	3203	3442	3207
40°	3310	3171	3351	3171
45°	3204	3138	3253	3142
50°	3093	3117	3134	3126
55°	2937	3120	3031	3134
60°	2774	3130	2864	3149
65°	2589	3161	2704	3193
70°	2333	3220	2513	3265
75°	2036	3325	2226	3389
80°	1573	3480	1787	3561
85°	943	3731	1175	3835

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 270°

Vertical Angle: 90°

Luminance: 4286 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.2	2.2
10°-20°	126.9	6.3
20°-30°	194.6	9.6
30°-40°	240.0	11.9
40°-50°	260.4	12.9
50°-60°	256.7	12.7
60°-70°	232.1	11.5
70°-80°	193.3	9.5
80°-90°	149.7	7.4
90°-100°	113.6	5.6
100°-110°	84.0	4.2
110°-120°	58.5	2.9
120°-130°	37.3	1.8
130°-140°	20.9	1.0
140°-150°	9.6	0.5
150°-160°	3.0	0.1
160°-170°	0.4	0.0
170°-180°	0.0	0.0
0°-30°	365.6	18.1
0°-40°	605.6	29.9
0°-60°	1122.7	55.4
0°-90°	1697.8	83.8
90°-120°	256.0	12.6
90°-150°	323.8	16.0
90°-180°	327.0	16.1
0°-180°	2025.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	466	466	466	466	466	
5°	468	462	469	464	468	44
15°	447	452	449	453	447	126
25°	407	437	410	437	407	188
35°	352	410	356	410	352	221
45°	289	378	294	378	289	223
55°	218	340	225	342	218	195
65°	144	298	151	301	144	143
75°	73	256	80	261	73	77
85°	14	213	17	219	14	17
90°	0	192	1	199	0	1
95°	0	174	0	182	0	0
105°	0	138	0	146	0	1
115°	0	105	0	115	0	0
125°	0	76	0	84	0	0
135°	0	49	0	58	0	0
145°	0	28	0	35	0	0
155°	0	12	0	16	0	0
165°	0	2	0	3	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1
2.5°	470.0	470.0	469.5	468.6	469.0	470.5	469.5	467.1	465.6	461.7	462.7
5°	468.1	468.1	467.6	466.6	467.1	469.0	468.1	466.1	464.1	460.7	462.2
7.5°	464.6	464.6	464.1	463.1	464.1	466.1	465.1	463.1	461.7	458.2	459.7
10°	459.7	460.2	459.7	458.2	460.2	462.2	461.7	459.2	457.7	454.8	456.3
12.5°	453.8	454.3	453.8	453.3	454.3	457.2	456.3	454.3	453.3	450.9	452.3
15°	446.9	447.4	446.4	446.4	447.4	450.4	450.4	448.4	447.4	445.0	447.9
17.5°	438.1	438.6	438.1	438.1	439.1	442.0	442.5	441.5	440.5	439.5	442.5
20°	429.2	428.7	428.7	428.2	430.2	434.6	434.1	434.1	433.2	433.2	436.6
22.5°	418.9	418.9	418.4	418.4	420.9	424.8	424.8	425.8	424.8	426.8	429.7
25°	407.1	407.6	407.1	408.1	410.0	414.5	415.0	416.4	416.9	418.9	422.3
27.5°	394.8	395.3	394.8	395.8	399.2	402.7	405.1	407.1	407.6	410.5	415.0
30°	381.5	381.5	382.0	383.0	386.9	392.3	394.3	396.8	396.8	401.7	406.1
32.5°	367.8	367.8	367.8	369.7	374.2	380.5	383.0	386.0	386.9	391.9	396.8
35°	352.5	353.0	353.0	354.5	360.4	366.8	370.2	373.7	375.6	381.5	386.4
37.5°	338.3	339.2	337.8	339.7	348.1	353.5	357.4	360.9	364.3	372.2	376.1
40°	322.0	323.0	322.5	326.5	333.3	340.2	344.7	348.1	353.0	360.9	365.3
42.5°	304.8	305.8	306.8	311.2	318.6	325.5	330.9	335.3	341.2	348.1	355.5
45°	289.1	289.1	290.6	296.0	303.8	311.2	317.6	322.5	329.4	336.8	344.2
47.5°	271.4	271.9	273.9	280.2	288.6	297.5	303.4	309.7	317.1	325.0	333.3
50°	255.2	255.2	258.1	265.0	272.9	282.7	289.1	296.5	304.3	313.7	322.0
52.5°	236.5	237.5	241.9	248.3	258.6	267.5	274.8	282.7	292.0	301.9	311.2
55°	217.8	219.8	223.2	232.1	242.9	251.2	260.1	269.9	278.8	289.6	300.4
57.5°	199.6	201.1	206.5	215.3	226.7	237.0	246.3	255.7	266.5	277.3	288.6
60°	180.9	182.9	189.3	198.1	210.4	221.2	232.1	241.9	253.2	264.5	276.3
62.5°	163.2	164.7	172.1	182.4	194.7	206.5	217.3	229.1	241.4	252.2	264.0
65°	144.5	147.0	155.4	164.7	179.0	190.8	203.1	215.8	228.6	240.4	251.7
67.5°	127.3	128.8	137.7	148.5	162.7	176.0	188.8	202.6	215.8	228.1	239.4
70°	107.2	112.1	120.9	132.3	147.5	161.3	175.0	189.3	203.5	216.3	227.1
72.5°	90.5	94.4	104.2	116.5	131.3	147.5	161.8	177.0	191.3	204.5	215.8
75°	72.8	76.7	88.0	101.8	117.0	134.2	149.0	164.7	179.5	192.7	204.5
77.5°	55.6	60.5	72.8	87.0	103.7	121.4	136.7	152.4	167.7	181.9	193.7
80°	39.8	45.2	58.5	74.7	91.0	108.7	125.4	141.1	156.3	170.6	182.9
82.5°	25.6	31.5	45.7	61.9	79.2	96.9	114.1	129.8	145.0	159.3	172.1
85°	13.8	20.2	34.9	51.1	68.3	86.0	103.2	120.0	134.7	148.0	161.8
87.5°	3.9	11.8	26.1	42.3	60.0	76.2	92.9	109.6	124.4	138.6	150.9
90°	0.5	6.9	19.7	34.9	52.1	67.8	84.6	100.3	115.0	129.3	141.6
92.5°	0.5	4.4	15.2	29.0	44.7	61.0	77.7	92.9	106.7	120.9	133.2
95°	0.5	3.4	12.3	24.6	39.3	54.6	70.3	85.1	99.3	112.6	124.9
97.5°	0.5	2.5	9.8	21.1	34.4	48.7	63.9	78.7	92.4	105.2	116.5
100°	0.5	2.0	7.9	18.2	30.0	43.8	57.5	71.8	85.1	97.3	109.1
102.5°	0.5	1.5	6.9	15.2	26.5	38.8	52.1	65.4	78.2	90.0	101.8
105°	0.5	1.5	5.9	13.3	23.6	34.9	47.2	60.0	71.8	83.1	93.9
107.5°	0.5	1.0	4.9	11.3	20.6	31.5	42.8	55.1	65.9	76.7	87.0
110°	0.5	1.0	3.9	10.3	18.2	28.0	38.8	50.1	60.5	70.8	80.6

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.5	1.0	3.4	8.8	15.7	25.1	34.9	45.2	55.1	65.4	74.2
115°	0.5	1.0	2.9	7.9	14.7	21.6	31.5	40.8	50.6	60.0	68.3
117.5°	0.5	1.0	2.5	6.4	12.8	19.7	27.5	36.9	45.7	54.6	62.4
120°	0.5	1.0	2.0	5.9	11.3	17.7	24.6	32.9	41.3	49.7	58.0
122.5°	0.5	0.5	2.0	4.9	9.8	15.7	22.6	29.0	36.9	44.7	52.1
125°	0.5	0.5	2.0	4.4	8.4	14.3	20.2	26.1	32.9	39.8	46.2
127.5°	0.5	0.5	1.5	3.4	7.4	12.3	17.7	24.1	29.0	35.4	41.8
130°	0.5	0.5	1.5	2.9	6.4	10.3	15.7	21.1	27.0	31.5	36.9
132.5°	0.5	0.5	1.5	2.5	4.9	8.4	13.3	18.2	23.6	28.5	32.9
135°	0.5	0.5	1.0	2.0	3.9	6.9	10.8	15.2	20.6	25.6	30.0
137.5°	0.5	0.5	1.0	2.0	2.9	5.9	8.4	12.3	17.2	21.6	26.1
140°	0.5	0.5	1.0	1.5	2.5	4.4	6.9	9.8	13.8	17.7	22.6
142.5°	0.5	0.5	0.5	1.5	2.0	3.4	5.4	7.9	10.8	14.3	18.2
145°	0.5	0.5	0.5	1.5	2.0	2.5	4.4	6.4	8.4	10.8	14.3
147.5°	0.5	0.5	0.5	1.0	1.5	2.0	3.4	4.9	6.4	8.4	10.3
150°	0.5	0.5	0.5	1.0	1.5	2.0	2.5	3.4	4.9	6.9	8.4
152.5°	0.5	0.5	0.5	1.0	1.0	1.5	2.0	2.5	3.4	4.9	5.9
155°	0.5	0.5	0.5	0.5	1.0	1.5	2.0	2.0	2.5	3.4	4.4
157.5°	0.5	0.5	0.5	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.9
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°	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1
2.5°	462.7	463.1	464.6	464.6	463.6	463.6	463.1	462.7	463.1	464.1	464.1
5°	461.7	462.2	463.6	464.1	463.1	462.7	462.7	462.2	462.7	463.6	463.6
7.5°	459.7	460.2	461.7	462.2	461.2	461.2	460.7	460.2	461.2	461.7	461.7
10°	456.8	457.2	459.2	459.7	459.2	458.7	458.7	458.2	458.7	459.7	459.7
12.5°	452.8	453.8	456.3	456.3	456.3	455.8	455.8	455.3	455.8	456.8	456.3
15°	448.4	450.4	452.3	453.3	453.3	453.3	452.8	452.3	453.3	453.8	453.3
17.5°	443.5	445.9	448.9	449.9	449.9	450.4	449.9	449.4	450.4	450.4	449.9
20°	438.6	441.0	444.0	445.0	445.9	446.4	446.4	445.9	446.4	446.9	446.4
22.5°	432.2	435.1	438.6	440.0	441.0	442.0	442.0	442.0	442.5	443.0	442.0
25°	425.3	428.7	432.7	434.1	436.1	436.6	437.1	437.1	437.6	438.1	436.6
27.5°	417.9	421.8	425.8	428.2	429.7	430.7	430.7	431.2	431.7	432.2	430.7
30°	409.1	415.0	418.4	420.4	422.3	423.8	424.3	424.8	425.3	425.8	424.3
32.5°	401.2	406.1	410.5	413.0	415.5	417.4	417.9	417.9	418.9	418.9	417.4
35°	391.9	397.8	402.2	404.6	407.6	409.1	410.0	410.0	411.0	411.0	409.6
37.5°	382.5	388.4	393.3	396.3	399.7	401.7	402.2	402.2	403.2	403.2	401.2
40°	372.7	379.1	384.5	387.9	390.9	393.3	393.8	395.3	395.3	394.8	392.8
42.5°	362.8	368.7	374.6	378.6	382.5	385.0	386.0	386.4	386.4	386.0	384.5
45°	352.0	358.9	364.3	369.2	373.2	375.6	377.1	377.6	377.6	376.6	375.1
47.5°	341.7	348.6	354.0	359.4	363.3	366.3	367.8	368.3	367.8	367.3	365.8
50°	330.9	338.8	344.2	349.6	353.5	356.0	358.4	358.9	358.4	357.9	355.0
52.5°	319.6	327.9	333.8	339.2	343.7	346.6	348.6	349.1	349.1	348.1	346.1
55°	308.3	315.6	323.0	328.9	333.8	336.8	339.2	340.2	339.2	338.3	335.8
57.5°	297.9	304.8	312.2	318.6	323.5	327.4	329.4	330.4	329.4	327.9	325.5
60°	285.7	293.0	301.4	307.3	312.7	316.6	317.6	319.6	318.6	317.1	314.7
62.5°	273.9	282.7	290.1	297.5	301.9	306.3	308.3	309.3	308.3	306.8	304.3
65°	261.6	271.4	278.8	286.1	291.1	295.5	297.9	298.4	297.5	296.0	293.5
67.5°	250.3	259.6	267.5	275.3	279.8	284.2	286.6	287.6	286.6	284.7	282.2
70°	238.9	248.3	257.6	263.5	268.9	273.9	275.3	276.8	275.8	273.9	270.9
72.5°	227.6	237.5	246.8	252.7	258.6	263.0	265.0	266.5	265.5	263.5	260.1
75°	215.8	226.2	235.5	241.9	247.8	252.2	254.2	255.7	254.7	252.7	248.8
77.5°	205.0	215.3	224.2	231.1	237.0	240.9	244.4	244.8	243.9	241.9	238.0
80°	193.7	204.0	213.4	220.3	226.2	230.1	232.6	234.0	233.0	231.1	227.1
82.5°	183.9	193.2	202.6	209.4	215.3	220.3	222.2	223.7	223.2	220.3	217.3
85°	173.1	183.9	191.3	198.6	204.5	209.4	210.9	212.9	212.4	209.9	206.0
87.5°	162.2	173.1	181.9	189.3	194.7	198.6	201.1	202.1	201.6	199.1	194.7
90°	153.4	163.2	172.1	179.9	184.4	188.8	191.3	191.7	191.7	188.8	185.4
92.5°	145.0	154.4	163.2	170.6	176.0	179.9	181.9	182.9	182.4	179.9	176.0
95°	135.7	146.0	154.4	161.8	167.2	171.1	173.1	174.0	173.6	171.1	167.2
97.5°	127.8	137.2	145.5	152.4	157.8	161.8	163.7	164.7	164.7	162.2	158.3
100°	120.0	129.3	137.2	144.1	149.0	152.9	154.9	155.4	154.9	152.9	149.0
102.5°	112.1	120.9	128.8	135.2	140.6	144.1	146.0	146.5	146.5	144.1	140.1
105°	104.2	113.1	120.5	127.3	131.8	135.2	136.7	138.2	137.7	135.7	131.8
107.5°	96.9	105.7	112.6	119.0	123.4	126.8	128.3	129.8	129.3	127.3	123.4
110°	90.0	98.3	104.7	111.1	115.0	118.5	120.9	121.4	120.5	118.5	115.0

TEST NUMBER: P1213376

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	83.6	91.0	97.3	103.2	107.7	110.1	112.1	113.1	112.1	110.1	107.7
115°	76.7	84.1	90.5	95.9	99.8	102.8	104.2	105.2	104.2	102.3	99.8
117.5°	70.3	77.2	83.6	89.0	92.4	94.9	96.4	97.3	96.4	94.9	92.4
120°	64.9	70.8	76.7	81.6	85.5	87.5	89.0	90.0	89.5	87.5	85.1
122.5°	58.5	64.9	70.3	75.2	78.7	80.6	81.6	82.6	82.1	80.6	78.2
125°	53.1	58.5	63.9	68.3	71.8	73.7	74.7	75.7	75.2	73.7	70.8
127.5°	47.2	53.1	57.5	61.9	64.4	67.4	67.8	68.8	68.3	66.9	64.4
130°	42.8	47.2	51.6	55.6	58.5	60.5	61.5	61.9	61.0	60.0	57.5
132.5°	37.4	42.3	46.2	49.7	51.6	53.6	54.6	55.1	55.1	53.6	51.6
135°	33.4	36.9	40.3	43.8	45.7	47.7	48.7	49.2	48.7	47.7	45.7
137.5°	30.0	32.9	35.4	38.3	40.8	41.8	42.8	42.8	42.3	41.8	40.3
140°	26.1	29.5	32.0	33.9	35.9	36.4	37.4	37.4	36.9	36.4	35.4
142.5°	22.1	25.1	27.5	30.0	31.5	32.4	32.9	33.4	32.9	32.4	31.0
145°	17.7	21.1	23.6	25.1	27.0	27.5	28.0	28.5	28.0	27.5	26.1
147.5°	13.8	16.7	19.2	21.1	22.6	23.1	23.6	24.1	23.6	22.6	22.1
150°	9.8	12.3	15.2	17.2	18.2	19.2	19.2	19.2	19.7	18.7	17.7
152.5°	7.9	8.8	10.8	12.8	14.3	14.7	15.2	15.2	14.7	14.7	13.8
155°	5.4	6.4	7.9	9.3	10.8	11.3	11.8	11.8	11.3	11.3	10.8
157.5°	3.4	4.4	5.4	6.4	7.9	8.4	8.8	8.8	8.8	8.4	7.9
160°	2.0	2.5	2.9	3.9	4.9	5.4	5.9	5.9	5.9	5.9	5.4
162.5°	1.5	1.5	1.5	2.0	2.5	2.9	3.4	3.4	3.4	3.4	2.9
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: P1213376

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1
2.5°	463.6	463.6	464.1	463.1	460.2	460.7	460.7	462.7	463.6	464.1	466.6
5°	462.7	462.7	463.6	462.2	459.7	459.7	459.7	461.7	462.2	463.1	465.1
7.5°	461.2	461.2	461.7	460.2	457.2	457.2	456.8	458.7	459.7	460.2	462.2
10°	458.7	458.7	459.2	457.7	454.3	454.3	453.8	455.3	455.8	456.8	458.2
12.5°	455.3	455.3	455.3	453.8	450.4	449.9	449.4	450.9	450.9	451.3	452.8
15°	452.3	451.3	451.3	449.9	446.4	445.4	444.5	445.0	445.9	445.4	446.4
17.5°	448.9	447.9	446.9	445.4	441.0	439.5	438.6	439.1	438.6	438.1	439.1
20°	445.0	443.5	443.0	440.5	436.1	433.6	431.7	430.7	431.2	429.7	430.2
22.5°	440.5	438.6	437.6	434.6	430.2	427.3	424.8	422.8	422.3	420.4	420.9
25°	435.1	432.7	431.2	428.7	423.8	420.4	417.4	414.5	413.0	410.5	410.0
27.5°	428.7	426.3	424.3	421.8	416.9	412.5	409.1	405.1	403.2	400.2	398.7
30°	422.3	419.4	416.4	414.5	409.1	404.1	398.7	395.3	392.3	388.9	386.4
32.5°	414.5	411.5	408.6	405.6	400.7	394.8	390.4	385.0	381.5	377.6	374.6
35°	406.6	402.7	399.7	395.8	391.4	384.5	379.1	373.7	369.2	364.8	361.4
37.5°	397.8	394.8	390.4	386.9	381.5	374.6	368.7	361.9	357.9	352.0	347.6
40°	389.4	386.0	381.5	377.1	371.7	363.8	357.4	349.6	345.1	338.3	333.8
42.5°	381.0	376.1	371.7	366.8	360.9	353.5	345.6	337.8	331.9	325.5	319.1
45°	371.7	366.3	360.9	355.5	349.6	342.2	333.8	325.5	318.1	312.2	304.3
47.5°	361.9	356.5	350.1	344.2	337.8	330.4	321.5	312.7	304.8	297.9	289.6
50°	352.0	346.6	339.7	333.3	326.0	318.6	309.3	298.9	290.6	281.7	274.3
52.5°	341.7	336.3	329.9	321.5	313.7	306.3	296.5	285.7	276.3	268.9	259.6
55°	331.4	326.0	318.6	310.2	302.4	293.0	283.7	272.9	262.5	253.7	244.4
57.5°	320.6	315.6	307.3	300.4	290.6	280.7	270.9	260.6	249.3	238.9	228.1
60°	309.7	304.3	296.5	288.1	278.3	268.4	258.1	246.8	235.0	223.7	213.9
62.5°	299.9	293.0	285.7	276.8	266.5	257.1	245.3	233.0	221.2	209.4	197.6
65°	288.6	281.2	274.3	265.5	254.7	243.9	232.1	219.8	207.0	194.2	182.4
67.5°	277.3	269.9	262.5	253.7	242.4	231.1	218.8	206.5	192.2	179.9	166.2
70°	266.0	260.1	250.7	241.4	231.1	218.8	206.5	193.2	178.5	165.2	150.9
72.5°	254.7	248.8	239.4	229.6	219.8	207.0	193.7	180.4	166.7	151.4	136.2
75°	243.9	236.5	228.1	218.8	208.5	195.2	181.9	168.1	151.9	137.7	121.9
77.5°	233.5	226.7	218.3	208.0	196.7	183.9	170.1	155.9	139.6	124.4	107.2
80°	222.2	215.3	207.0	196.7	185.4	173.1	158.3	143.6	127.8	111.1	93.4
82.5°	211.4	205.0	195.7	186.3	174.0	161.8	147.0	132.3	115.5	99.3	82.1
85°	200.1	193.7	184.9	175.0	163.2	150.0	136.2	121.4	104.7	88.0	70.8
87.5°	190.3	182.9	174.0	164.2	152.4	139.6	126.4	110.6	94.4	78.2	60.5
90°	179.9	173.1	164.2	154.4	142.6	129.8	116.0	101.3	85.5	68.8	52.1
92.5°	171.1	163.7	155.4	145.5	133.7	121.4	107.7	92.9	77.7	61.5	45.2
95°	162.2	154.9	147.0	137.2	125.4	113.1	99.3	85.1	70.3	54.6	39.3
97.5°	152.4	146.0	138.2	128.8	117.0	105.2	91.9	78.2	63.9	48.7	34.4
100°	144.5	137.2	129.8	120.0	109.1	97.8	84.6	71.3	57.5	43.3	30.0
102.5°	135.7	128.8	121.4	112.1	101.3	90.0	77.7	64.9	52.1	38.8	26.1
105°	127.3	120.9	113.1	104.2	93.9	83.1	71.3	59.5	47.2	34.4	23.1
107.5°	119.0	112.6	105.2	96.9	87.0	76.2	65.4	53.6	42.3	31.0	20.6
110°	110.6	104.7	97.8	89.5	80.1	70.3	60.0	49.2	37.9	27.5	18.2

TEST NUMBER: P1213376

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	103.2	97.3	90.5	82.6	73.7	64.4	54.6	44.2	33.9	24.6	15.7
115°	95.9	90.5	83.6	76.7	67.8	59.0	49.7	39.8	30.5	22.1	13.8
117.5°	88.5	83.1	76.7	69.8	61.9	53.6	44.7	35.4	27.5	19.7	12.3
120°	81.1	76.2	70.3	63.9	57.0	48.7	39.8	32.0	24.6	17.2	10.8
122.5°	74.2	69.8	64.4	58.5	51.1	43.3	35.9	29.0	22.1	15.2	8.8
125°	67.8	63.4	58.5	52.6	45.7	38.8	32.4	26.1	19.2	13.3	7.4
127.5°	61.5	57.0	52.1	46.7	41.3	34.9	29.0	23.1	17.2	11.8	6.4
130°	55.1	51.1	46.7	42.3	36.9	31.0	26.1	20.2	14.7	9.3	5.4
132.5°	48.7	45.7	41.8	37.4	32.4	28.0	22.6	17.7	12.8	8.4	4.9
135°	43.3	40.3	36.9	32.9	29.0	24.6	19.7	15.2	10.8	6.9	3.9
137.5°	38.3	35.9	32.4	29.0	25.6	21.1	17.2	12.8	8.8	5.9	2.9
140°	33.9	31.5	28.5	25.1	22.1	18.2	14.3	10.3	7.9	4.9	2.5
142.5°	29.5	27.0	24.6	21.6	18.7	15.2	11.8	8.8	6.4	3.9	2.5
145°	25.1	23.1	20.6	18.2	15.2	12.3	9.8	7.4	4.9	2.9	2.0
147.5°	20.6	19.2	16.7	14.7	12.3	9.8	7.9	5.9	3.9	2.5	1.5
150°	16.7	15.2	13.3	11.3	9.8	7.9	6.4	4.4	2.9	2.5	1.5
152.5°	12.8	11.8	10.3	9.3	7.9	5.9	4.4	3.4	2.5	2.0	1.0
155°	10.3	9.3	8.4	6.9	5.9	4.4	3.4	2.5	2.0	1.5	1.0
157.5°	7.4	6.9	5.9	4.9	3.9	2.9	2.5	2.5	1.5	1.0	0.5
160°	4.9	4.4	3.9	2.9	2.5	2.5	2.0	1.5	1.0	1.0	0.5
162.5°	2.9	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: P1213376

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1
2.5°	466.6	465.1	467.1	470.5	471.0	470.5	469.5	471.0	473.0	472.5	469.0
5°	465.6	463.6	465.6	469.0	469.0	468.6	468.1	469.5	471.5	471.0	468.1
7.5°	462.7	460.7	462.7	465.6	466.1	465.1	465.1	466.6	468.6	468.1	465.6
10°	458.7	456.8	457.7	461.2	462.2	461.2	461.2	462.7	465.1	464.6	461.7
12.5°	452.8	451.3	452.3	455.3	456.3	455.8	455.3	457.2	459.7	459.7	456.8
15°	446.4	444.5	445.4	448.9	449.4	448.4	448.9	450.4	453.3	453.3	450.9
17.5°	439.1	436.6	438.1	440.5	441.0	441.0	441.0	443.0	446.4	445.9	444.0
20°	430.7	427.3	428.2	430.7	431.7	431.7	431.7	435.1	437.6	437.6	435.6
22.5°	420.9	418.4	418.4	420.9	422.3	421.8	421.8	424.8	428.2	427.7	427.7
25°	409.6	407.6	406.6	409.6	410.0	410.5	411.5	414.5	418.4	418.4	418.9
27.5°	397.8	395.8	395.3	397.8	398.2	398.7	399.7	403.2	407.1	407.6	408.6
30°	386.4	383.5	382.5	384.5	385.5	386.0	386.0	391.4	394.8	396.3	398.2
32.5°	373.2	370.2	367.8	371.2	371.7	372.7	373.2	378.6	382.5	385.0	387.9
35°	359.9	355.0	354.0	356.5	357.4	357.9	358.9	364.8	370.2	372.2	376.1
37.5°	345.1	341.7	338.8	341.2	342.2	342.7	345.6	351.0	356.5	359.4	363.3
40°	331.4	327.0	324.5	326.0	327.0	327.4	330.9	336.8	343.2	346.6	351.5
42.5°	316.1	310.2	308.3	309.7	310.2	311.7	314.7	322.5	328.9	333.8	337.8
45°	300.9	296.5	292.0	293.5	294.0	295.0	299.4	307.8	314.7	320.6	325.0
47.5°	285.2	279.8	275.3	276.3	278.3	278.8	283.7	293.5	299.9	306.3	312.2
50°	269.4	262.1	258.6	258.6	259.6	262.1	268.4	278.3	285.2	292.5	298.9
52.5°	253.2	246.3	242.4	242.9	243.9	246.8	252.7	262.5	270.4	278.3	286.1
55°	237.0	229.6	225.7	224.7	225.7	229.6	236.5	246.8	254.7	264.0	272.4
57.5°	220.8	211.9	208.5	207.0	208.0	212.9	219.8	230.6	240.4	249.3	259.1
60°	203.1	196.2	190.3	186.8	189.3	195.7	203.1	214.4	224.7	234.5	245.3
62.5°	187.8	179.0	172.6	169.1	171.6	177.0	187.3	198.1	209.4	220.8	231.6
65°	170.6	161.8	154.4	150.9	153.4	159.8	170.1	181.9	194.2	205.5	218.3
67.5°	153.9	144.5	135.7	132.3	135.2	142.1	153.4	166.7	179.9	191.7	205.5
70°	137.7	127.3	118.0	115.5	117.5	126.8	137.7	150.9	164.7	178.5	192.7
72.5°	122.9	110.1	100.3	97.3	99.8	110.1	122.4	136.2	150.9	165.7	180.9
75°	105.7	93.9	83.1	79.6	82.6	91.9	107.2	121.9	137.7	153.4	167.7
77.5°	91.9	78.2	66.9	61.5	66.4	78.2	92.9	108.7	124.9	141.1	157.3
80°	77.7	63.4	51.1	45.2	50.6	63.4	78.2	95.4	113.6	129.8	144.5
82.5°	64.9	49.7	36.9	30.5	36.4	50.6	66.9	84.1	101.8	118.0	135.2
85°	53.1	37.4	24.1	17.2	25.6	38.3	55.6	73.3	91.4	108.2	124.9
87.5°	43.3	28.0	14.7	7.4	15.7	30.0	46.2	63.9	82.1	98.8	114.6
90°	35.4	20.2	7.9	1.0	9.3	22.6	38.3	55.6	72.8	90.0	105.7
92.5°	29.0	15.2	4.4	0.5	5.9	18.2	32.9	49.2	65.9	82.6	97.8
95°	24.1	11.8	2.9	0.5	4.4	14.3	28.0	43.8	59.5	75.7	91.0
97.5°	20.6	9.8	2.5	0.5	3.4	12.3	24.1	38.8	54.1	69.3	84.1
100°	17.7	7.9	2.0	0.5	2.9	10.3	21.1	34.4	48.7	63.4	77.7
102.5°	15.2	6.4	1.5	0.5	2.5	8.8	18.7	31.0	43.8	58.0	71.8
105°	13.3	5.4	1.5	0.5	2.0	7.9	16.7	27.5	40.3	53.1	66.4
107.5°	11.3	4.4	1.0	0.5	1.5	6.4	14.7	25.1	36.4	48.7	61.0
110°	9.8	3.9	1.0	0.5	1.5	5.9	12.8	22.6	32.9	44.2	56.0

TEST NUMBER: P1213376

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	8.4	2.9	1.0	0.5	1.0	4.9	11.3	20.2	30.0	40.3	51.6
115°	7.4	2.5	0.5	0.5	1.0	4.4	10.3	18.2	27.0	36.9	47.2
117.5°	5.9	2.0	0.5	0.5	0.5	3.4	8.8	16.2	24.6	33.9	43.3
120°	4.9	2.0	0.5	0.5	0.5	2.9	7.9	14.3	22.1	30.5	39.3
122.5°	4.4	1.5	0.5	0.5	0.5	2.5	6.9	12.8	19.7	27.5	35.9
125°	3.9	1.5	0.5	0.5	0.5	2.0	5.9	11.3	17.7	24.6	32.4
127.5°	2.9	1.5	0.5	0.5	0.5	1.5	5.4	9.8	15.7	22.1	29.0
130°	2.5	1.0	0.5	0.5	0.5	1.5	4.4	8.8	13.8	19.7	26.1
132.5°	2.0	1.0	0.5	0.5	0.5	1.0	3.4	6.9	11.8	17.2	23.1
135°	2.0	1.0	0.5	0.5	0.5	1.0	2.5	5.9	9.8	14.7	19.7
137.5°	2.0	0.5	0.5	0.5	0.5	1.0	2.0	4.4	7.9	11.8	16.2
140°	1.5	0.5	0.5	0.5	0.5	0.5	1.5	3.4	6.4	9.8	13.8
142.5°	1.5	0.5	0.5	0.5	0.5	0.5	1.5	2.5	4.9	7.9	10.8
145°	1.0	0.5	0.5	0.5	0.5	0.5	1.0	2.0	3.9	5.9	8.8
147.5°	1.0	0.5	0.5	0.5	0.5	0.5	1.0	1.5	2.9	4.9	6.9
150°	1.0	0.5	0.5	0.5	0.5	0.5	1.0	1.5	2.0	3.4	5.4
152.5°	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.5	2.5	3.4
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: P1213376

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1
2.5°	467.6	464.1	465.1	464.6	465.6	467.1	467.1	466.6	466.6	465.6	464.6
5°	466.6	463.1	464.6	464.1	465.1	466.6	466.6	466.1	466.1	464.6	464.1
7.5°	463.6	461.2	462.2	462.2	463.1	464.6	464.6	464.1	464.1	462.7	462.2
10°	460.7	457.7	459.2	459.2	460.2	462.2	462.2	461.7	461.7	460.2	459.7
12.5°	455.8	452.8	455.3	455.8	456.8	458.7	458.2	458.2	458.2	456.8	456.3
15°	449.9	447.9	450.4	450.9	452.3	454.8	454.8	454.8	454.8	453.3	452.8
17.5°	443.5	442.0	444.5	445.4	447.4	449.9	449.9	450.4	450.9	449.9	449.4
20°	436.1	435.1	437.6	439.5	442.5	445.0	445.9	446.4	447.4	446.4	445.9
22.5°	427.7	427.7	431.2	433.2	436.6	439.1	440.5	442.0	443.0	442.0	441.5
25°	418.4	419.9	423.3	426.8	430.7	433.2	434.6	436.6	437.6	437.1	436.6
27.5°	409.6	411.5	415.9	419.4	422.8	426.8	428.2	430.7	431.7	431.7	431.2
30°	399.2	402.2	407.1	411.0	415.5	419.4	421.4	423.8	425.3	424.3	424.8
32.5°	389.4	394.3	398.2	402.7	407.6	411.5	414.0	416.9	418.4	417.9	418.4
35°	378.6	383.5	388.9	393.3	399.2	403.2	406.6	409.1	411.0	410.5	410.5
37.5°	366.8	373.2	378.6	384.5	389.9	394.3	397.8	400.7	402.7	402.7	402.7
40°	355.5	362.4	367.8	374.6	381.5	385.5	389.4	392.3	394.3	394.8	395.3
42.5°	343.2	350.6	356.9	364.3	371.2	376.1	380.5	384.0	386.0	386.9	386.4
45°	331.9	338.8	346.1	354.5	360.9	365.8	371.2	375.1	377.1	377.6	378.1
47.5°	319.1	327.0	335.3	343.7	350.1	356.5	361.4	365.3	367.3	368.7	368.7
50°	306.8	315.2	324.5	333.3	340.2	346.6	351.5	356.0	358.4	359.4	359.9
52.5°	295.5	303.4	313.2	322.0	328.9	335.3	341.7	346.6	349.1	350.1	350.1
55°	281.7	291.6	302.4	310.7	318.1	325.5	331.9	336.8	339.2	340.7	341.7
57.5°	268.9	279.3	290.6	299.4	308.3	315.2	321.1	327.4	329.4	331.4	331.9
60°	256.6	267.0	277.8	287.6	296.5	303.8	310.7	316.1	319.6	320.6	321.5
62.5°	243.9	254.7	266.0	275.8	285.2	294.0	300.4	305.3	309.3	310.7	311.7
65°	231.6	242.9	254.2	264.5	274.3	283.2	289.6	294.5	298.4	300.9	301.4
67.5°	218.3	230.6	242.4	253.2	263.0	272.4	278.8	283.7	287.6	290.6	291.1
70°	206.0	218.8	230.6	242.4	252.2	261.6	268.4	273.4	277.8	279.8	280.7
72.5°	194.2	207.5	219.8	231.6	241.4	250.7	258.1	263.0	267.5	269.9	270.4
75°	182.9	196.2	209.4	220.8	231.1	240.4	247.8	253.2	257.1	259.6	260.6
77.5°	171.6	185.4	198.6	209.9	220.8	230.1	236.5	242.9	246.8	249.8	249.8
80°	160.3	174.5	188.3	199.6	210.4	218.8	226.2	232.6	236.5	239.4	239.4
82.5°	150.4	164.2	177.5	188.8	199.6	209.0	216.3	222.2	226.7	228.6	229.1
85°	139.1	154.4	166.7	179.0	189.3	198.1	205.5	211.9	215.8	217.8	218.8
87.5°	129.8	144.5	157.8	168.6	179.0	187.8	196.2	201.6	205.5	208.0	209.0
90°	120.9	135.2	148.5	159.3	170.1	178.5	186.3	191.7	196.2	198.1	199.1
92.5°	113.1	127.3	140.1	150.9	161.3	170.6	178.0	183.4	187.3	189.3	190.8
95°	105.7	119.5	131.8	143.6	153.4	161.8	169.6	175.0	179.5	180.9	182.4
97.5°	98.3	111.6	123.9	135.2	145.5	153.4	160.8	166.2	169.6	172.1	173.6
100°	91.9	104.7	116.5	127.3	137.2	144.5	152.4	157.3	160.8	162.7	164.7
102.5°	85.1	97.8	109.1	119.5	129.8	136.7	144.1	149.0	151.9	155.4	155.4
105°	79.2	91.0	102.3	112.1	120.9	129.3	135.7	140.6	144.1	146.5	146.5
107.5°	72.8	84.6	95.4	105.7	114.1	121.9	127.8	132.3	136.2	137.7	139.1
110°	67.8	78.2	89.0	98.8	106.7	114.1	120.0	124.9	128.3	129.8	130.8

TEST NUMBER: P1213376

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	61.9	72.8	82.6	91.9	99.8	106.7	112.6	116.5	120.0	121.9	122.4
115°	57.0	67.4	76.2	85.1	93.4	99.3	104.7	108.7	112.1	113.6	114.6
117.5°	52.6	61.9	70.8	78.2	86.0	92.4	97.8	101.3	104.2	106.2	107.2
120°	48.2	57.0	64.9	72.3	79.6	85.5	90.5	93.9	97.3	98.8	98.8
122.5°	43.8	52.1	59.5	66.4	73.3	78.7	84.1	87.0	90.0	91.4	91.4
125°	39.8	47.7	54.6	61.0	67.4	72.3	76.7	80.1	83.1	84.1	84.1
127.5°	35.9	43.3	49.7	55.6	61.0	65.9	70.3	73.7	76.2	77.2	77.2
130°	32.4	38.8	44.7	50.6	56.0	60.0	64.4	67.4	68.8	70.3	70.8
132.5°	29.0	34.9	40.3	45.2	50.6	54.6	58.0	61.0	62.4	63.9	64.4
135°	25.6	31.0	35.9	40.8	45.2	49.2	52.1	54.6	56.5	57.5	58.0
137.5°	21.6	27.5	32.0	35.9	40.8	43.8	47.2	48.7	50.6	51.6	51.6
140°	18.2	22.6	27.5	31.5	35.4	38.3	41.3	43.8	45.2	45.7	45.7
142.5°	14.7	18.7	22.6	27.5	31.0	33.4	36.4	38.3	39.3	39.8	40.3
145°	11.8	14.7	18.2	22.6	26.5	29.5	31.0	32.9	33.9	34.4	34.9
147.5°	8.8	11.8	14.7	17.7	21.6	24.6	26.1	28.0	29.0	29.5	29.5
150°	6.9	8.8	10.8	13.8	16.7	20.2	22.1	23.6	24.1	24.6	24.6
152.5°	4.9	6.9	8.4	10.3	12.3	15.2	18.2	19.2	19.7	20.2	20.2
155°	3.4	4.9	5.9	7.4	8.8	11.3	13.8	15.2	15.7	16.2	16.2
157.5°	2.5	3.4	3.9	5.4	6.4	7.4	9.3	11.8	12.3	12.3	12.3
160°	1.5	2.0	2.5	3.4	3.9	4.9	5.9	7.4	8.8	8.8	8.8
162.5°	1.0	1.5	1.5	2.0	2.0	2.9	3.4	3.9	5.4	5.9	5.9
165°	0.5	1.0	1.0	1.0	1.0	1.0	1.5	1.5	2.5	2.9	2.9
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: P1213376

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1	466.1
2.5°	465.1	466.1	465.6	465.6	465.6	466.6	465.6	461.2	462.2	463.1	464.1
5°	464.6	465.1	465.1	464.6	464.6	465.6	464.6	460.2	461.2	462.2	462.7
7.5°	462.7	463.1	463.1	463.1	462.7	463.6	462.2	458.2	458.2	459.2	459.7
10°	460.2	461.2	460.7	460.2	460.2	460.2	459.2	454.8	454.8	455.3	455.8
12.5°	457.2	457.2	457.2	456.8	456.3	456.3	455.3	450.9	450.4	451.3	450.9
15°	453.3	454.3	453.3	452.8	451.8	451.8	450.4	445.9	445.0	445.4	445.0
17.5°	449.9	450.4	449.4	448.4	447.4	446.9	445.4	440.5	439.1	439.5	438.6
20°	446.4	446.4	445.4	444.5	443.0	441.5	439.5	434.6	432.2	432.2	430.2
22.5°	442.0	442.0	441.0	439.5	438.1	436.1	434.1	429.2	425.3	424.3	422.8
25°	437.1	436.6	436.1	434.6	431.7	429.7	427.7	422.3	417.9	415.9	413.5
27.5°	431.2	431.2	429.7	428.2	425.3	422.8	420.4	415.5	409.6	407.1	403.7
30°	424.8	424.8	423.3	421.4	418.4	415.5	412.5	406.6	400.7	397.3	393.3
32.5°	418.4	417.9	416.4	414.5	411.5	407.1	404.6	398.7	391.9	387.9	382.5
35°	410.5	410.0	408.6	406.1	402.2	398.7	394.8	389.4	381.5	376.6	370.7
37.5°	402.7	402.2	401.2	397.8	393.8	389.9	385.0	379.6	372.2	365.8	359.9
40°	394.8	394.3	392.3	389.9	385.0	380.1	375.1	369.7	361.9	354.5	348.1
42.5°	386.4	386.0	383.5	380.5	375.1	370.2	364.3	358.4	350.6	341.7	335.3
45°	378.1	377.1	374.6	371.2	365.3	359.9	354.0	347.1	339.2	330.9	322.5
47.5°	369.2	367.8	365.3	360.4	355.5	349.6	342.7	335.3	327.4	318.1	309.3
50°	359.4	358.4	355.5	351.0	345.1	339.2	331.4	324.0	314.7	305.8	295.0
52.5°	350.1	348.1	345.6	340.7	334.8	328.4	320.1	311.2	301.9	293.5	282.2
55°	340.2	339.2	335.8	331.9	324.5	317.1	309.3	299.9	289.6	279.8	268.9
57.5°	330.9	328.9	326.0	320.6	314.2	306.8	298.4	288.6	277.3	267.0	255.2
60°	321.5	318.6	315.2	310.2	303.4	295.5	286.6	276.3	265.0	253.7	241.4
62.5°	311.2	308.8	304.8	299.9	293.0	284.7	275.3	264.5	253.7	241.9	228.6
65°	300.9	298.4	294.5	289.6	282.7	273.4	263.5	252.7	240.4	229.1	214.9
67.5°	290.6	288.1	283.7	278.3	271.4	262.5	252.2	240.9	228.6	216.3	201.6
70°	280.2	277.3	273.4	267.5	260.6	251.2	240.9	229.1	216.8	203.5	188.8
72.5°	269.9	267.5	262.5	257.1	249.8	240.4	230.1	218.3	205.5	191.7	177.0
75°	259.6	256.6	253.2	246.8	238.9	230.1	219.3	207.5	193.7	180.4	165.2
77.5°	249.3	246.8	242.4	236.0	228.6	219.3	208.5	196.7	182.9	169.1	152.9
80°	238.9	236.0	232.6	226.7	218.3	209.0	197.6	185.8	172.1	157.8	141.6
82.5°	228.6	225.7	221.7	215.8	208.0	198.6	187.8	175.0	161.3	146.5	131.3
85°	218.3	215.8	211.4	205.5	197.2	187.8	177.0	165.7	150.9	136.2	120.9
87.5°	208.0	205.5	201.1	195.2	187.3	178.0	167.2	155.4	141.1	127.3	110.6
90°	198.1	196.2	191.7	185.8	178.0	168.6	158.8	146.0	132.3	118.5	102.8
92.5°	189.3	187.3	183.4	177.5	170.6	160.3	150.4	138.2	124.4	110.1	94.9
95°	181.4	179.0	175.0	169.6	161.3	152.4	142.6	130.3	117.0	102.8	88.0
97.5°	172.6	170.1	166.2	160.3	153.4	144.1	134.2	122.4	109.1	95.9	81.1
100°	163.7	161.3	156.8	151.9	145.0	135.7	126.4	114.6	102.3	89.5	75.2
102.5°	154.9	152.4	148.5	143.6	136.7	128.3	119.0	107.7	95.4	82.6	69.3
105°	146.5	144.1	140.1	135.2	128.8	120.5	110.6	100.8	89.0	76.7	63.9
107.5°	138.2	135.7	132.3	127.3	120.9	113.1	103.7	93.4	82.6	70.8	58.5
110°	129.8	127.8	123.9	119.5	113.1	105.2	96.9	87.0	76.2	65.4	53.6

TEST NUMBER: P1213376

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	121.9	120.0	116.0	111.1	105.7	98.3	90.0	80.6	70.3	60.0	48.7
115°	114.1	111.6	108.2	103.7	98.3	91.4	83.6	75.2	64.9	55.1	44.7
117.5°	106.2	104.2	100.8	96.4	91.4	84.6	77.2	69.3	59.5	50.1	40.8
120°	98.3	96.9	93.4	89.5	84.6	78.2	71.3	63.4	54.6	45.7	36.9
122.5°	91.0	89.5	86.0	82.6	77.7	71.8	65.4	58.0	50.1	41.8	33.9
125°	84.1	82.1	79.2	75.7	71.3	65.9	59.5	52.6	45.2	37.9	30.5
127.5°	76.7	75.2	73.3	69.3	64.9	60.0	54.1	48.2	41.3	34.4	27.5
130°	70.8	68.8	66.4	63.4	59.5	54.6	49.2	43.3	37.4	31.0	24.1
132.5°	63.9	61.9	60.0	57.0	53.6	49.2	44.2	38.8	33.4	27.5	21.6
135°	57.5	56.0	54.1	51.1	47.7	44.2	39.3	34.4	29.5	24.1	19.2
137.5°	51.6	50.1	48.2	46.2	42.8	39.3	34.9	30.5	26.1	21.1	16.7
140°	45.7	44.7	42.8	40.8	37.9	34.4	30.5	26.5	22.6	18.2	14.3
142.5°	39.8	38.8	37.4	35.4	32.9	30.0	26.5	23.1	19.2	15.7	12.3
145°	34.4	33.9	32.4	30.5	28.5	25.6	22.6	19.7	16.2	13.3	9.8
147.5°	29.0	28.5	27.5	26.1	24.1	21.6	19.2	16.2	13.8	10.8	7.9
150°	24.1	23.6	23.1	21.1	20.2	17.7	15.7	13.3	11.3	8.4	6.4
152.5°	19.7	19.7	18.7	17.2	16.2	14.3	12.8	10.8	8.8	6.9	4.9
155°	15.7	15.2	14.7	13.8	12.8	11.3	9.8	8.4	6.9	4.9	3.4
157.5°	12.3	11.8	11.3	10.3	9.3	8.8	7.4	5.9	4.4	3.4	2.5
160°	8.8	8.4	7.9	7.4	6.9	5.9	4.9	3.9	2.9	2.0	1.5
162.5°	5.9	5.4	5.4	4.9	4.4	3.4	2.9	2.5	2.0	1.5	1.0
165°	2.9	2.9	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: P1213376

CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	466.1	466.1	466.1	466.1	466.1	466.1	466.1
2.5°	463.6	463.6	465.6	465.1	463.6	466.6	470.0
5°	462.2	462.2	463.6	463.6	462.2	465.1	468.1
7.5°	459.7	459.2	460.7	460.7	458.7	461.2	464.6
10°	455.3	454.8	456.3	456.3	454.3	456.8	459.7
12.5°	450.4	449.4	450.9	450.4	448.4	450.9	453.8
15°	444.0	443.5	444.5	443.5	441.5	444.0	446.9
17.5°	437.6	436.1	436.6	436.6	433.2	435.6	438.1
20°	429.2	427.3	427.7	427.3	424.8	426.3	429.2
22.5°	420.9	417.9	417.9	417.4	414.5	416.4	418.9
25°	410.5	407.1	407.1	406.6	403.2	404.6	407.1
27.5°	400.2	396.8	395.3	394.8	391.4	391.4	394.8
30°	389.4	384.5	383.5	382.0	378.6	378.6	381.5
32.5°	379.1	372.2	370.2	368.3	364.8	364.3	367.8
35°	365.3	359.9	356.5	354.5	350.6	349.6	352.5
37.5°	354.0	347.1	342.2	339.7	335.8	334.3	338.3
40°	341.7	334.3	327.9	326.5	320.6	318.6	322.0
42.5°	327.9	320.1	313.7	310.7	306.3	304.3	304.8
45°	314.2	305.8	298.9	295.0	290.6	287.1	289.1
47.5°	299.9	292.5	284.2	278.3	272.9	270.4	271.4
50°	285.7	276.8	268.9	262.5	256.2	253.2	255.2
52.5°	271.4	262.1	253.2	246.3	238.9	236.0	236.5
55°	257.6	247.8	237.5	230.1	223.2	218.8	217.8
57.5°	243.9	233.0	222.2	213.9	205.0	201.1	199.6
60°	229.1	217.8	206.5	196.7	187.3	182.9	180.9
62.5°	215.3	203.1	190.3	179.9	170.6	164.7	163.2
65°	202.1	187.8	175.0	163.2	152.9	146.5	144.5
67.5°	187.8	173.1	159.3	146.5	136.7	128.3	127.3
70°	174.5	158.8	143.6	130.3	119.5	111.1	107.2
72.5°	161.3	145.0	129.3	115.0	101.3	93.4	90.5
75°	148.5	131.8	115.0	100.3	85.1	75.7	72.8
77.5°	136.7	119.5	101.8	85.5	71.3	59.5	55.6
80°	125.4	107.7	89.0	72.3	57.0	44.2	39.8
82.5°	113.6	96.9	77.7	60.0	44.2	31.0	25.6
85°	103.2	86.5	67.4	49.7	33.9	19.7	13.8
87.5°	94.9	76.7	59.5	41.8	25.6	11.3	3.9
90°	86.5	68.8	51.6	34.4	19.2	6.4	0.5
92.5°	79.2	62.4	45.2	29.5	14.7	4.4	0.5
95°	72.3	56.0	39.8	24.6	11.8	2.9	0.5
97.5°	65.9	50.6	35.4	21.1	9.8	2.5	0.5
100°	60.5	45.7	31.5	18.7	8.4	2.0	0.5
102.5°	55.1	41.3	28.0	16.2	7.4	1.5	0.5
105°	50.6	37.4	25.1	14.7	6.4	1.5	0.5
107.5°	46.2	33.9	22.6	12.8	5.4	1.0	0.5
110°	41.8	31.0	20.2	11.3	4.9	1.0	0.5



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CATALOG NUMBER: 4SNLED-LD5-23SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	38.3	28.0	18.2	10.3	3.9	1.0	0.5
115°	34.9	25.1	16.2	8.8	3.4	0.5	0.5
117.5°	31.5	22.6	14.3	7.9	2.9	0.5	0.5
120°	28.5	20.2	12.8	6.9	2.5	0.5	0.5
122.5°	25.6	18.2	11.3	5.9	2.0	0.5	0.5
125°	23.1	16.2	9.8	4.9	1.5	0.5	0.5
127.5°	20.6	14.3	8.8	4.4	1.5	0.5	0.5
130°	18.2	12.8	7.4	3.4	1.0	0.5	0.5
132.5°	16.2	10.8	6.4	2.9	1.0	0.5	0.5
135°	14.3	9.3	5.4	2.0	1.0	0.5	0.5
137.5°	12.3	7.9	4.4	1.5	0.5	0.5	0.5
140°	10.3	6.9	3.4	1.5	0.5	0.5	0.5
142.5°	8.8	5.4	2.5	1.0	0.5	0.5	0.5
145°	6.9	4.4	2.0	1.0	0.5	0.5	0.5
147.5°	5.4	3.4	1.5	1.0	0.5	0.5	0.5
150°	3.9	2.5	1.5	0.5	0.5	0.5	0.5
152.5°	2.9	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)