

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: P1213681

Luminaire Tested: 2SNLED-LD5-23SL-LW-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213681
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: 2SNLED-LD5-23SL-LW-UNV-L940-CD1-U
Description: 2FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

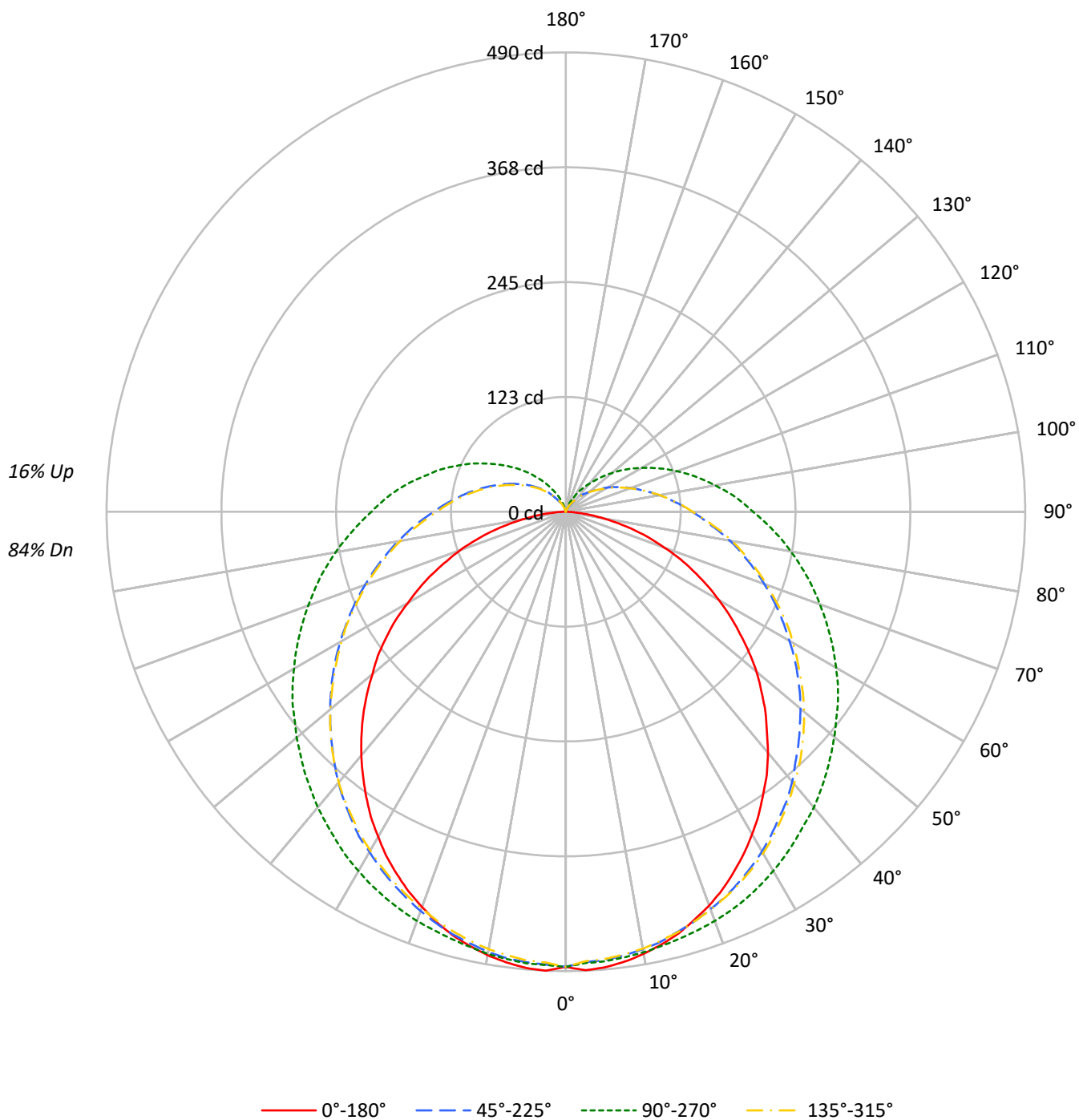
Lumens per Lamp: N/A
Luminaire Lumens: 2109.0 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 21
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°	7845	7845	7845	7845
5°	7866	7560	7882	7593
10°	7772	7345	7796	7370
15°	7661	7162	7693	7170
20°	7517	7027	7544	7027
25°	7347	6908	7390	6901
30°	7158	6786	7212	6786
35°	6939	6673	7017	6681
40°	6724	6605	6806	6605
45°	6477	6536	6576	6544
50°	6220	6494	6302	6511
55°	5867	6499	6053	6529
60°	5495	6519	5676	6560
65°	5075	6585	5301	6651
70°	4501	6707	4852	6802
75°	3838	6926	4203	7059
80°	2852	7249	3237	7419
85°	1547	7771	1936	7988

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 270°

Vertical Angle: 90°

Luminance: 8930 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.0	2.2
10°-20°	132.2	6.3
20°-30°	202.6	9.6
30°-40°	250.0	11.9
40°-50°	271.2	12.9
50°-60°	267.3	12.7
60°-70°	241.7	11.5
70°-80°	201.3	9.5
80°-90°	155.9	7.4
90°-100°	118.3	5.6
100°-110°	87.5	4.1
110°-120°	60.9	2.9
120°-130°	38.8	1.8
130°-140°	21.8	1.0
140°-150°	10.0	0.5
150°-160°	3.1	0.1
160°-170°	0.4	0.0
170°-180°	0.0	0.0
0°-30°	380.8	18.1
0°-40°	630.8	29.9
0°-60°	1169.3	55.4
0°-90°	1768.3	83.8
90°-120°	266.7	12.6
90°-150°	337.3	16.0
90°-180°	341.0	16.2
0°-180°	2109.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	485	485	485	485	485	
5°	488	481	488	483	488	46
15°	466	471	468	472	466	131
25°	424	455	426	455	424	195
35°	367	427	371	428	367	230
45°	301	393	306	394	301	232
55°	227	354	234	356	227	203
65°	150	311	157	314	150	149
75°	76	266	83	271	76	80
85°	14	222	18	228	14	17
90°	0	200	1	207	0	1
95°	0	181	0	190	0	0
105°	0	144	0	153	0	1
115°	0	110	0	119	0	0
125°	0	79	0	88	0	0
135°	0	51	0	60	0	0
145°	0	30	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°	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4
2.5°	489.5	489.5	489.0	488.0	488.5	490.0	489.0	486.5	484.9	480.8	481.8
5°	487.5	487.5	487.0	485.9	486.5	488.5	487.5	485.4	483.4	479.8	481.3
7.5°	483.9	483.9	483.4	482.4	483.4	485.4	484.4	482.4	480.8	477.2	478.8
10°	478.8	479.3	478.8	477.2	479.3	481.3	480.8	478.3	476.7	473.7	475.2
12.5°	472.6	473.1	472.6	472.1	473.1	476.2	475.2	473.1	472.1	469.6	471.1
15°	465.5	466.0	464.9	464.9	466.0	469.0	469.0	467.0	466.0	463.4	466.5
17.5°	456.2	456.8	456.2	456.2	457.3	460.3	460.9	459.8	458.8	457.8	460.9
20°	447.0	446.5	446.5	446.0	448.0	452.7	452.1	452.1	451.1	451.1	454.7
22.5°	436.3	436.3	435.8	435.8	438.3	442.4	442.4	443.4	442.4	444.5	447.5
25°	424.0	424.5	424.0	425.0	427.1	431.7	432.2	433.7	434.2	436.3	439.9
27.5°	411.2	411.7	411.2	412.2	415.8	419.4	421.9	424.0	424.5	427.6	432.2
30°	397.4	397.4	397.9	398.9	403.0	408.6	410.7	413.2	413.2	418.4	423.0
32.5°	383.0	383.0	383.0	385.1	389.7	396.3	398.9	402.0	403.0	408.1	413.2
35°	367.1	367.7	367.7	369.2	375.3	382.0	385.6	389.2	391.2	397.4	402.5
37.5°	352.3	353.3	351.8	353.8	362.5	368.2	372.3	375.8	379.4	387.6	391.7
40°	335.4	336.4	335.9	340.0	347.2	354.3	359.0	362.5	367.7	375.8	380.5
42.5°	317.5	318.5	319.5	324.1	331.8	339.0	344.6	349.2	355.4	362.5	370.2
45°	301.1	301.1	302.6	308.3	316.5	324.1	330.8	335.9	343.1	350.8	358.4
47.5°	282.7	283.2	285.2	291.9	300.6	309.8	315.9	322.6	330.3	338.5	347.2
50°	265.8	265.8	268.8	276.0	284.2	294.4	301.1	308.8	317.0	326.7	335.4
52.5°	246.3	247.3	251.9	258.6	269.3	278.6	286.2	294.4	304.2	314.4	324.1
55°	226.8	228.9	232.5	241.7	253.0	261.7	270.9	281.1	290.3	301.6	312.9
57.5°	207.9	209.4	215.1	224.3	236.1	246.8	256.5	266.3	277.5	288.8	300.6
60°	188.4	190.5	197.1	206.4	219.2	230.4	241.7	251.9	263.7	275.5	287.8
62.5°	170.0	171.5	179.2	190.0	202.8	215.1	226.3	238.6	251.4	262.7	275.0
65°	150.5	153.1	161.8	171.5	186.4	198.7	211.5	224.8	238.1	250.4	262.2
67.5°	132.6	134.2	143.4	154.6	169.5	183.3	196.6	211.0	224.8	237.6	249.4
70°	111.6	116.7	126.0	137.7	153.6	168.0	182.3	197.1	212.0	225.3	236.6
72.5°	94.2	98.3	108.6	121.4	136.7	153.6	168.5	184.3	199.2	213.0	224.8
75°	75.8	79.9	91.7	106.0	121.9	139.8	155.2	171.5	186.9	200.7	213.0
77.5°	57.9	63.0	75.8	90.6	108.0	126.5	142.4	158.7	174.6	189.5	201.8
80°	41.5	47.1	60.9	77.8	94.7	113.2	130.6	147.0	162.8	177.7	190.5
82.5°	26.6	32.8	47.6	64.5	82.4	100.9	118.8	135.2	151.1	165.9	179.2
85°	14.3	21.0	36.4	53.3	71.2	89.6	107.5	124.9	140.3	154.1	168.5
87.5°	4.1	12.3	27.1	44.0	62.5	79.4	96.8	114.2	129.6	144.4	157.2
90°	0.5	7.2	20.5	36.4	54.3	70.7	88.1	104.5	119.8	134.7	147.5
92.5°	0.5	4.6	15.9	30.2	46.6	63.5	80.9	96.8	111.1	126.0	138.8
95°	0.5	3.6	12.8	25.6	41.0	56.8	73.2	88.6	103.4	117.3	130.1
97.5°	0.5	2.6	10.2	22.0	35.8	50.7	66.6	81.9	96.3	109.6	121.4
100°	0.5	2.0	8.2	18.9	31.2	45.6	59.9	74.8	88.6	101.4	113.7
102.5°	0.5	1.5	7.2	15.9	27.7	40.5	54.3	68.1	81.4	93.7	106.0
105°	0.5	1.5	6.1	13.8	24.6	36.4	49.2	62.5	74.8	86.5	97.8
107.5°	0.5	1.0	5.1	11.8	21.5	32.8	44.5	57.4	68.6	79.9	90.6
110°	0.5	1.0	4.1	10.8	18.9	29.2	40.5	52.2	63.0	73.7	84.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.5	1.0	3.6	9.2	16.4	26.1	36.4	47.1	57.4	68.1	77.3
115°	0.5	1.0	3.1	8.2	15.4	22.5	32.8	42.5	52.7	62.5	71.2
117.5°	0.5	1.0	2.6	6.7	13.3	20.5	28.7	38.4	47.6	56.8	65.0
120°	0.5	1.0	2.0	6.1	11.8	18.4	25.6	34.3	43.0	51.7	60.4
122.5°	0.5	0.5	2.0	5.1	10.2	16.4	23.6	30.2	38.4	46.6	54.3
125°	0.5	0.5	2.0	4.6	8.7	14.8	21.0	27.1	34.3	41.5	48.1
127.5°	0.5	0.5	1.5	3.6	7.7	12.8	18.4	25.1	30.2	36.9	43.5
130°	0.5	0.5	1.5	3.1	6.7	10.8	16.4	22.0	28.2	32.8	38.4
132.5°	0.5	0.5	1.5	2.6	5.1	8.7	13.8	18.9	24.6	29.7	34.3
135°	0.5	0.5	1.0	2.0	4.1	7.2	11.3	15.9	21.5	26.6	31.2
137.5°	0.5	0.5	1.0	2.0	3.1	6.1	8.7	12.8	17.9	22.5	27.1
140°	0.5	0.5	1.0	1.5	2.6	4.6	7.2	10.2	14.3	18.4	23.6
142.5°	0.5	0.5	0.5	1.5	2.0	3.6	5.6	8.2	11.3	14.8	18.9
145°	0.5	0.5	0.5	1.5	2.0	2.6	4.6	6.7	8.7	11.3	14.8
147.5°	0.5	0.5	0.5	1.0	1.5	2.0	3.6	5.1	6.7	8.7	10.8
150°	0.5	0.5	0.5	1.0	1.5	2.0	2.6	3.6	5.1	7.2	8.7
152.5°	0.5	0.5	0.5	1.0	1.0	1.5	2.0	2.6	3.6	5.1	6.1
155°	0.5	0.5	0.5	0.5	1.0	1.5	2.0	2.0	2.6	3.6	4.6
157.5°	0.5	0.5	0.5	0.5	1.0	1.0	1.5	1.5	2.0	2.0	3.1
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°	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4
2.5°	481.8	482.4	483.9	483.9	482.9	482.9	482.4	481.8	482.4	483.4	483.4
5°	480.8	481.3	482.9	483.4	482.4	481.8	481.8	481.3	481.8	482.9	482.9
7.5°	478.8	479.3	480.8	481.3	480.3	480.3	479.8	479.3	480.3	480.8	480.8
10°	475.7	476.2	478.3	478.8	478.3	477.7	477.7	477.2	477.7	478.8	478.8
12.5°	471.6	472.6	475.2	475.2	475.2	474.7	474.7	474.2	474.7	475.7	475.2
15°	467.0	469.0	471.1	472.1	472.1	472.1	471.6	471.1	472.1	472.6	472.1
17.5°	461.9	464.4	467.5	468.5	468.5	469.0	468.5	468.0	469.0	469.0	468.5
20°	456.8	459.3	462.4	463.4	464.4	464.9	464.9	464.4	464.9	465.5	464.9
22.5°	450.1	453.2	456.8	458.3	459.3	460.3	460.3	460.3	460.9	461.4	460.3
25°	442.9	446.5	450.6	452.1	454.2	454.7	455.2	455.2	455.7	456.2	454.7
27.5°	435.2	439.3	443.4	446.0	447.5	448.6	448.6	449.1	449.6	450.1	448.6
30°	426.0	432.2	435.8	437.8	439.9	441.4	441.9	442.4	442.9	443.4	441.9
32.5°	417.8	423.0	427.6	430.1	432.7	434.7	435.2	435.2	436.3	436.3	434.7
35°	408.1	414.3	418.9	421.4	424.5	426.0	427.1	427.1	428.1	428.1	426.5
37.5°	398.4	404.5	409.6	412.7	416.3	418.4	418.9	418.9	419.9	419.9	417.8
40°	388.1	394.8	400.4	404.0	407.1	409.6	410.2	411.7	411.7	411.2	409.1
42.5°	377.9	384.0	390.2	394.3	398.4	400.9	402.0	402.5	402.5	402.0	400.4
45°	366.6	373.8	379.4	384.6	388.7	391.2	392.7	393.3	393.3	392.2	390.7
47.5°	355.9	363.0	368.7	374.3	378.4	381.5	383.0	383.5	383.0	382.5	381.0
50°	344.6	352.8	358.4	364.1	368.2	370.7	373.3	373.8	373.3	372.8	369.7
52.5°	332.8	341.5	347.7	353.3	357.9	361.0	363.0	363.6	363.6	362.5	360.5
55°	321.1	328.7	336.4	342.6	347.7	350.8	353.3	354.3	353.3	352.3	349.7
57.5°	310.3	317.5	325.2	331.8	336.9	341.0	343.1	344.1	343.1	341.5	339.0
60°	297.5	305.2	313.9	320.0	325.7	329.8	330.8	332.8	331.8	330.3	327.7
62.5°	285.2	294.4	302.1	309.8	314.4	319.0	321.1	322.1	321.1	319.5	317.0
65°	272.4	282.7	290.3	298.0	303.1	307.7	310.3	310.8	309.8	308.3	305.7
67.5°	260.6	270.4	278.6	286.8	291.4	296.0	298.5	299.6	298.5	296.5	293.9
70°	248.9	258.6	268.3	274.5	280.1	285.2	286.8	288.3	287.3	285.2	282.1
72.5°	237.1	247.3	257.1	263.2	269.3	274.0	276.0	277.5	276.5	274.5	270.9
75°	224.8	235.5	245.3	251.9	258.1	262.7	264.7	266.3	265.2	263.2	259.1
77.5°	213.5	224.3	233.5	240.7	246.8	250.9	254.5	255.0	254.0	251.9	247.8
80°	201.8	212.5	222.2	229.4	235.5	239.6	242.2	243.7	242.7	240.7	236.6
82.5°	191.5	201.2	211.0	218.1	224.3	229.4	231.4	233.0	232.5	229.4	226.3
85°	180.2	191.5	199.2	206.9	213.0	218.1	219.7	221.7	221.2	218.6	214.6
87.5°	169.0	180.2	189.5	197.1	202.8	206.9	209.4	210.5	209.9	207.4	202.8
90°	159.8	170.0	179.2	187.4	192.0	196.6	199.2	199.7	199.7	196.6	193.0
92.5°	151.1	160.8	170.0	177.7	183.3	187.4	189.5	190.5	190.0	187.4	183.3
95°	141.3	152.1	160.8	168.5	174.1	178.2	180.2	181.3	180.8	178.2	174.1
97.5°	133.1	142.9	151.6	158.7	164.4	168.5	170.5	171.5	171.5	169.0	164.9
100°	124.9	134.7	142.9	150.0	155.2	159.2	161.3	161.8	161.3	159.2	155.2
102.5°	116.7	126.0	134.2	140.8	146.4	150.0	152.1	152.6	152.6	150.0	145.9
105°	108.6	117.8	125.5	132.6	137.2	140.8	142.4	143.9	143.4	141.3	137.2
107.5°	100.9	110.1	117.3	123.9	128.5	132.1	133.6	135.2	134.7	132.6	128.5
110°	93.7	102.4	109.1	115.7	119.8	123.4	126.0	126.5	125.5	123.4	119.8

TEST NUMBER: P1213681

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	87.0	94.7	101.4	107.5	112.1	114.7	116.7	117.8	116.7	114.7	112.1
115°	79.9	87.6	94.2	99.9	103.9	107.0	108.6	109.6	108.6	106.5	103.9
117.5°	73.2	80.4	87.0	92.7	96.3	98.8	100.4	101.4	100.4	98.8	96.3
120°	67.6	73.7	79.9	85.0	89.1	91.1	92.7	93.7	93.2	91.1	88.6
122.5°	60.9	67.6	73.2	78.3	81.9	84.0	85.0	86.0	85.5	84.0	81.4
125°	55.3	60.9	66.6	71.2	74.8	76.8	77.8	78.9	78.3	76.8	73.7
127.5°	49.2	55.3	59.9	64.5	67.1	70.2	70.7	71.7	71.2	69.6	67.1
130°	44.5	49.2	53.8	57.9	60.9	63.0	64.0	64.5	63.5	62.5	59.9
132.5°	38.9	44.0	48.1	51.7	53.8	55.8	56.8	57.4	57.4	55.8	53.8
135°	34.8	38.4	42.0	45.6	47.6	49.7	50.7	51.2	50.7	49.7	47.6
137.5°	31.2	34.3	36.9	39.9	42.5	43.5	44.5	44.5	44.0	43.5	42.0
140°	27.1	30.7	33.3	35.3	37.4	37.9	38.9	38.9	38.4	37.9	36.9
142.5°	23.0	26.1	28.7	31.2	32.8	33.8	34.3	34.8	34.3	33.8	32.3
145°	18.4	22.0	24.6	26.1	28.2	28.7	29.2	29.7	29.2	28.7	27.1
147.5°	14.3	17.4	20.0	22.0	23.6	24.1	24.6	25.1	24.6	23.6	23.0
150°	10.2	12.8	15.9	17.9	18.9	20.0	20.0	20.0	20.5	19.5	18.4
152.5°	8.2	9.2	11.3	13.3	14.8	15.4	15.9	15.9	15.4	15.4	14.3
155°	5.6	6.7	8.2	9.7	11.3	11.8	12.3	12.3	11.8	11.8	11.3
157.5°	3.6	4.6	5.6	6.7	8.2	8.7	9.2	9.2	9.2	8.7	8.2
160°	2.0	2.6	3.1	4.1	5.1	5.6	6.1	6.1	6.1	6.1	5.6
162.5°	1.5	1.5	1.5	2.0	2.6	3.1	3.6	3.6	3.6	3.6	3.1
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: P1213681

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4
2.5°	482.9	482.9	483.4	482.4	479.3	479.8	479.8	481.8	482.9	483.4	485.9
5°	481.8	481.8	482.9	481.3	478.8	478.8	478.8	480.8	481.3	482.4	484.4
7.5°	480.3	480.3	480.8	479.3	476.2	476.2	475.7	477.7	478.8	479.3	481.3
10°	477.7	477.7	478.3	476.7	473.1	473.1	472.6	474.2	474.7	475.7	477.2
12.5°	474.2	474.2	474.2	472.6	469.0	468.5	468.0	469.6	469.6	470.1	471.6
15°	471.1	470.1	470.1	468.5	464.9	463.9	462.9	463.4	464.4	463.9	464.9
17.5°	467.5	466.5	465.5	463.9	459.3	457.8	456.8	457.3	456.8	456.2	457.3
20°	463.4	461.9	461.4	458.8	454.2	451.6	449.6	448.6	449.1	447.5	448.0
22.5°	458.8	456.8	455.7	452.7	448.0	445.0	442.4	440.4	439.9	437.8	438.3
25°	453.2	450.6	449.1	446.5	441.4	437.8	434.7	431.7	430.1	427.6	427.1
27.5°	446.5	444.0	441.9	439.3	434.2	429.6	426.0	421.9	419.9	416.8	415.3
30°	439.9	436.8	433.7	431.7	426.0	420.9	415.3	411.7	408.6	405.0	402.5
32.5°	431.7	428.6	425.5	422.4	417.3	411.2	406.6	400.9	397.4	393.3	390.2
35°	423.5	419.4	416.3	412.2	407.6	400.4	394.8	389.2	384.6	379.9	376.4
37.5°	414.3	411.2	406.6	403.0	397.4	390.2	384.0	376.9	372.8	366.6	362.0
40°	405.5	402.0	397.4	392.7	387.1	378.9	372.3	364.1	359.5	352.3	347.7
42.5°	396.8	391.7	387.1	382.0	375.8	368.2	360.0	351.8	345.6	339.0	332.3
45°	387.1	381.5	375.8	370.2	364.1	356.4	347.7	339.0	331.3	325.2	317.0
47.5°	376.9	371.2	364.6	358.4	351.8	344.1	334.9	325.7	317.5	310.3	301.6
50°	366.6	361.0	353.8	347.2	339.5	331.8	322.1	311.3	302.6	293.4	285.7
52.5°	355.9	350.2	343.6	334.9	326.7	319.0	308.8	297.5	287.8	280.1	270.4
55°	345.1	339.5	331.8	323.1	314.9	305.2	295.5	284.2	273.4	264.2	254.5
57.5°	333.9	328.7	320.0	312.9	302.6	292.4	282.1	271.4	259.6	248.9	237.6
60°	322.6	317.0	308.8	300.1	289.8	279.6	268.8	257.1	244.8	233.0	222.7
62.5°	312.4	305.2	297.5	288.3	277.5	267.8	255.5	242.7	230.4	218.1	205.8
65°	300.6	292.9	285.7	276.5	265.2	254.0	241.7	228.9	215.6	202.3	190.0
67.5°	288.8	281.1	273.4	264.2	252.4	240.7	227.9	215.1	200.2	187.4	173.1
70°	277.0	270.9	261.1	251.4	240.7	227.9	215.1	201.2	185.9	172.1	157.2
72.5°	265.2	259.1	249.4	239.1	228.9	215.6	201.8	187.9	173.6	157.7	141.8
75°	254.0	246.3	237.6	227.9	217.1	203.3	189.5	175.1	158.2	143.4	127.0
77.5°	243.2	236.1	227.4	216.6	204.8	191.5	177.2	162.3	145.4	129.6	111.6
80°	231.4	224.3	215.6	204.8	193.0	180.2	164.9	149.5	133.1	115.7	97.3
82.5°	220.2	213.5	203.8	194.1	181.3	168.5	153.1	137.7	120.3	103.4	85.5
85°	208.4	201.8	192.5	182.3	170.0	156.2	141.8	126.5	109.1	91.7	73.7
87.5°	198.2	190.5	181.3	171.0	158.7	145.4	131.6	115.2	98.3	81.4	63.0
90°	187.4	180.2	171.0	160.8	148.5	135.2	120.8	105.5	89.1	71.7	54.3
92.5°	178.2	170.5	161.8	151.6	139.3	126.5	112.1	96.8	80.9	64.0	47.1
95°	169.0	161.3	153.1	142.9	130.6	117.8	103.4	88.6	73.2	56.8	41.0
97.5°	158.7	152.1	143.9	134.2	121.9	109.6	95.8	81.4	66.6	50.7	35.8
100°	150.5	142.9	135.2	124.9	113.7	101.9	88.1	74.2	59.9	45.1	31.2
102.5°	141.3	134.2	126.5	116.7	105.5	93.7	80.9	67.6	54.3	40.5	27.1
105°	132.6	126.0	117.8	108.6	97.8	86.5	74.2	62.0	49.2	35.8	24.1
107.5°	123.9	117.3	109.6	100.9	90.6	79.4	68.1	55.8	44.0	32.3	21.5
110°	115.2	109.1	101.9	93.2	83.5	73.2	62.5	51.2	39.4	28.7	18.9

TEST NUMBER: P1213681

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	107.5	101.4	94.2	86.0	76.8	67.1	56.8	46.1	35.3	25.6	16.4
115°	99.9	94.2	87.0	79.9	70.7	61.4	51.7	41.5	31.7	23.0	14.3
117.5°	92.2	86.5	79.9	72.7	64.5	55.8	46.6	36.9	28.7	20.5	12.8
120°	84.5	79.4	73.2	66.6	59.4	50.7	41.5	33.3	25.6	17.9	11.3
122.5°	77.3	72.7	67.1	60.9	53.3	45.1	37.4	30.2	23.0	15.9	9.2
125°	70.7	66.1	60.9	54.8	47.6	40.5	33.8	27.1	20.0	13.8	7.7
127.5°	64.0	59.4	54.3	48.6	43.0	36.4	30.2	24.1	17.9	12.3	6.7
130°	57.4	53.3	48.6	44.0	38.4	32.3	27.1	21.0	15.4	9.7	5.6
132.5°	50.7	47.6	43.5	38.9	33.8	29.2	23.6	18.4	13.3	8.7	5.1
135°	45.1	42.0	38.4	34.3	30.2	25.6	20.5	15.9	11.3	7.2	4.1
137.5°	39.9	37.4	33.8	30.2	26.6	22.0	17.9	13.3	9.2	6.1	3.1
140°	35.3	32.8	29.7	26.1	23.0	18.9	14.8	10.8	8.2	5.1	2.6
142.5°	30.7	28.2	25.6	22.5	19.5	15.9	12.3	9.2	6.7	4.1	2.6
145°	26.1	24.1	21.5	18.9	15.9	12.8	10.2	7.7	5.1	3.1	2.0
147.5°	21.5	20.0	17.4	15.4	12.8	10.2	8.2	6.1	4.1	2.6	1.5
150°	17.4	15.9	13.8	11.8	10.2	8.2	6.7	4.6	3.1	2.6	1.5
152.5°	13.3	12.3	10.8	9.7	8.2	6.1	4.6	3.6	2.6	2.0	1.0
155°	10.8	9.7	8.7	7.2	6.1	4.6	3.6	2.6	2.0	1.5	1.0
157.5°	7.7	7.2	6.1	5.1	4.1	3.1	2.6	2.6	1.5	1.0	0.5
160°	5.1	4.6	4.1	3.1	2.6	2.6	2.0	1.5	1.0	1.0	0.5
162.5°	3.1	2.6	2.6	2.6	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: P1213681

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4
2.5°	485.9	484.4	486.5	490.0	490.6	490.0	489.0	490.6	492.6	492.1	488.5
5°	484.9	482.9	484.9	488.5	488.5	488.0	487.5	489.0	491.1	490.6	487.5
7.5°	481.8	479.8	481.8	484.9	485.4	484.4	484.4	485.9	488.0	487.5	484.9
10°	477.7	475.7	476.7	480.3	481.3	480.3	480.3	481.8	484.4	483.9	480.8
12.5°	471.6	470.1	471.1	474.2	475.2	474.7	474.2	476.2	478.8	478.8	475.7
15°	464.9	462.9	463.9	467.5	468.0	467.0	467.5	469.0	472.1	472.1	469.6
17.5°	457.3	454.7	456.2	458.8	459.3	459.3	459.3	461.4	464.9	464.4	462.4
20°	448.6	445.0	446.0	448.6	449.6	449.6	449.6	453.2	455.7	455.7	453.7
22.5°	438.3	435.8	435.8	438.3	439.9	439.3	439.3	442.4	446.0	445.5	445.5
25°	426.5	424.5	423.5	426.5	427.1	427.6	428.6	431.7	435.8	435.8	436.3
27.5°	414.3	412.2	411.7	414.3	414.8	415.3	416.3	419.9	424.0	424.5	425.5
30°	402.5	399.4	398.4	400.4	401.5	402.0	402.0	407.6	411.2	412.7	414.8
32.5°	388.7	385.6	383.0	386.6	387.1	388.1	388.7	394.3	398.4	400.9	404.0
35°	374.8	369.7	368.7	371.2	372.3	372.8	373.8	379.9	385.6	387.6	391.7
37.5°	359.5	355.9	352.8	355.4	356.4	356.9	360.0	365.6	371.2	374.3	378.4
40°	345.1	340.5	338.0	339.5	340.5	341.0	344.6	350.8	357.4	361.0	366.1
42.5°	329.3	323.1	321.1	322.6	323.1	324.6	327.7	335.9	342.6	347.7	351.8
45°	313.4	308.8	304.2	305.7	306.2	307.2	311.8	320.5	327.7	333.9	338.5
47.5°	297.0	291.4	286.8	287.8	289.8	290.3	295.5	305.7	312.4	319.0	325.2
50°	280.6	272.9	269.3	269.3	270.4	272.9	279.6	289.8	297.0	304.7	311.3
52.5°	263.7	256.5	252.4	253.0	254.0	257.1	263.2	273.4	281.6	289.8	298.0
55°	246.8	239.1	235.0	234.0	235.0	239.1	246.3	257.1	265.2	275.0	283.7
57.5°	229.9	220.7	217.1	215.6	216.6	221.7	228.9	240.2	250.4	259.6	269.9
60°	211.5	204.3	198.2	194.6	197.1	203.8	211.5	223.3	234.0	244.3	255.5
62.5°	195.6	186.4	179.7	176.1	178.7	184.3	195.1	206.4	218.1	229.9	241.2
65°	177.7	168.5	160.8	157.2	159.8	166.4	177.2	189.5	202.3	214.0	227.4
67.5°	160.3	150.5	141.3	137.7	140.8	148.0	159.8	173.6	187.4	199.7	214.0
70°	143.4	132.6	122.9	120.3	122.4	132.1	143.4	157.2	171.5	185.9	200.7
72.5°	128.0	114.7	104.5	101.4	103.9	114.7	127.5	141.8	157.2	172.6	188.4
75°	110.1	97.8	86.5	83.0	86.0	95.8	111.6	127.0	143.4	159.8	174.6
77.5°	95.8	81.4	69.6	64.0	69.1	81.4	96.8	113.2	130.1	147.0	163.9
80°	80.9	66.1	53.3	47.1	52.7	66.1	81.4	99.3	118.3	135.2	150.5
82.5°	67.6	51.7	38.4	31.7	37.9	52.7	69.6	87.6	106.0	122.9	140.8
85°	55.3	38.9	25.1	17.9	26.6	39.9	57.9	76.3	95.2	112.7	130.1
87.5°	45.1	29.2	15.4	7.7	16.4	31.2	48.1	66.6	85.5	102.9	119.3
90°	36.9	21.0	8.2	1.0	9.7	23.6	39.9	57.9	75.8	93.7	110.1
92.5°	30.2	15.9	4.6	0.5	6.1	18.9	34.3	51.2	68.6	86.0	101.9
95°	25.1	12.3	3.1	0.5	4.6	14.8	29.2	45.6	62.0	78.9	94.7
97.5°	21.5	10.2	2.6	0.5	3.6	12.8	25.1	40.5	56.3	72.2	87.6
100°	18.4	8.2	2.0	0.5	3.1	10.8	22.0	35.8	50.7	66.1	80.9
102.5°	15.9	6.7	1.5	0.5	2.6	9.2	19.5	32.3	45.6	60.4	74.8
105°	13.8	5.6	1.5	0.5	2.0	8.2	17.4	28.7	42.0	55.3	69.1
107.5°	11.8	4.6	1.0	0.5	1.5	6.7	15.4	26.1	37.9	50.7	63.5
110°	10.2	4.1	1.0	0.5	1.5	6.1	13.3	23.6	34.3	46.1	58.4

TEST NUMBER: P1213681

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	8.7	3.1	1.0	0.5	1.0	5.1	11.8	21.0	31.2	42.0	53.8
115°	7.7	2.6	0.5	0.5	1.0	4.6	10.8	18.9	28.2	38.4	49.2
117.5°	6.1	2.0	0.5	0.5	0.5	3.6	9.2	16.9	25.6	35.3	45.1
120°	5.1	2.0	0.5	0.5	0.5	3.1	8.2	14.8	23.0	31.7	41.0
122.5°	4.6	1.5	0.5	0.5	0.5	2.6	7.2	13.3	20.5	28.7	37.4
125°	4.1	1.5	0.5	0.5	0.5	2.0	6.1	11.8	18.4	25.6	33.8
127.5°	3.1	1.5	0.5	0.5	0.5	1.5	5.6	10.2	16.4	23.0	30.2
130°	2.6	1.0	0.5	0.5	0.5	1.5	4.6	9.2	14.3	20.5	27.1
132.5°	2.0	1.0	0.5	0.5	0.5	1.0	3.6	7.2	12.3	17.9	24.1
135°	2.0	1.0	0.5	0.5	0.5	1.0	2.6	6.1	10.2	15.4	20.5
137.5°	2.0	0.5	0.5	0.5	0.5	1.0	2.0	4.6	8.2	12.3	16.9
140°	1.5	0.5	0.5	0.5	0.5	0.5	1.5	3.6	6.7	10.2	14.3
142.5°	1.5	0.5	0.5	0.5	0.5	0.5	1.5	2.6	5.1	8.2	11.3
145°	1.0	0.5	0.5	0.5	0.5	0.5	1.0	2.0	4.1	6.1	9.2
147.5°	1.0	0.5	0.5	0.5	0.5	0.5	1.0	1.5	3.1	5.1	7.2
150°	1.0	0.5	0.5	0.5	0.5	0.5	1.0	1.5	2.0	3.6	5.6
152.5°	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.5	2.6	3.6
155°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.5	2.0	2.6
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: P1213681

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4
2.5°	487.0	483.4	484.4	483.9	484.9	486.5	486.5	485.9	485.9	484.9	483.9
5°	485.9	482.4	483.9	483.4	484.4	485.9	485.9	485.4	485.4	483.9	483.4
7.5°	482.9	480.3	481.3	481.3	482.4	483.9	483.9	483.4	483.4	481.8	481.3
10°	479.8	476.7	478.3	478.3	479.3	481.3	481.3	480.8	480.8	479.3	478.8
12.5°	474.7	471.6	474.2	474.7	475.7	477.7	477.2	477.2	477.2	475.7	475.2
15°	468.5	466.5	469.0	469.6	471.1	473.7	473.7	473.7	473.7	472.1	471.6
17.5°	461.9	460.3	462.9	463.9	466.0	468.5	468.5	469.0	469.6	468.5	468.0
20°	454.2	453.2	455.7	457.8	460.9	463.4	464.4	464.9	466.0	464.9	464.4
22.5°	445.5	445.5	449.1	451.1	454.7	457.3	458.8	460.3	461.4	460.3	459.8
25°	435.8	437.3	440.9	444.5	448.6	451.1	452.7	454.7	455.7	455.2	454.7
27.5°	426.5	428.6	433.2	436.8	440.4	444.5	446.0	448.6	449.6	449.6	449.1
30°	415.8	418.9	424.0	428.1	432.7	436.8	438.8	441.4	442.9	441.9	442.4
32.5°	405.5	410.7	414.8	419.4	424.5	428.6	431.2	434.2	435.8	435.2	435.8
35°	394.3	399.4	405.0	409.6	415.8	419.9	423.5	426.0	428.1	427.6	427.6
37.5°	382.0	388.7	394.3	400.4	406.1	410.7	414.3	417.3	419.4	419.4	419.4
40°	370.2	377.4	383.0	390.2	397.4	401.5	405.5	408.6	410.7	411.2	411.7
42.5°	357.4	365.1	371.8	379.4	386.6	391.7	396.3	399.9	402.0	403.0	402.5
45°	345.6	352.8	360.5	369.2	375.8	381.0	386.6	390.7	392.7	393.3	393.8
47.5°	332.3	340.5	349.2	357.9	364.6	371.2	376.4	380.5	382.5	384.0	384.0
50°	319.5	328.2	338.0	347.2	354.3	361.0	366.1	370.7	373.3	374.3	374.8
52.5°	307.7	315.9	326.2	335.4	342.6	349.2	355.9	361.0	363.6	364.6	364.6
55°	293.4	303.6	314.9	323.6	331.3	339.0	345.6	350.8	353.3	354.9	355.9
57.5°	280.1	290.8	302.6	311.8	321.1	328.2	334.4	341.0	343.1	345.1	345.6
60°	267.3	278.0	289.3	299.6	308.8	316.5	323.6	329.3	332.8	333.9	334.9
62.5°	254.0	265.2	277.0	287.3	297.0	306.2	312.9	318.0	322.1	323.6	324.6
65°	241.2	253.0	264.7	275.5	285.7	294.9	301.6	306.7	310.8	313.4	313.9
67.5°	227.4	240.2	252.4	263.7	274.0	283.7	290.3	295.5	299.6	302.6	303.1
70°	214.6	227.9	240.2	252.4	262.7	272.4	279.6	284.7	289.3	291.4	292.4
72.5°	202.3	216.1	228.9	241.2	251.4	261.1	268.8	274.0	278.6	281.1	281.6
75°	190.5	204.3	218.1	229.9	240.7	250.4	258.1	263.7	267.8	270.4	271.4
77.5°	178.7	193.0	206.9	218.6	229.9	239.6	246.3	253.0	257.1	260.1	260.1
80°	166.9	181.8	196.1	207.9	219.2	227.9	235.5	242.2	246.3	249.4	249.4
82.5°	156.7	171.0	184.9	196.6	207.9	217.6	225.3	231.4	236.1	238.1	238.6
85°	144.9	160.8	173.6	186.4	197.1	206.4	214.0	220.7	224.8	226.8	227.9
87.5°	135.2	150.5	164.4	175.6	186.4	195.6	204.3	209.9	214.0	216.6	217.6
90°	126.0	140.8	154.6	165.9	177.2	185.9	194.1	199.7	204.3	206.4	207.4
92.5°	117.8	132.6	145.9	157.2	168.0	177.7	185.4	191.0	195.1	197.1	198.7
95°	110.1	124.4	137.2	149.5	159.8	168.5	176.7	182.3	186.9	188.4	190.0
97.5°	102.4	116.2	129.0	140.8	151.6	159.8	167.4	173.1	176.7	179.2	180.8
100°	95.8	109.1	121.4	132.6	142.9	150.5	158.7	163.9	167.4	169.5	171.5
102.5°	88.6	101.9	113.7	124.4	135.2	142.4	150.0	155.2	158.2	161.8	161.8
105°	82.4	94.7	106.5	116.7	126.0	134.7	141.3	146.4	150.0	152.6	152.6
107.5°	75.8	88.1	99.3	110.1	118.8	127.0	133.1	137.7	141.8	143.4	144.9
110°	70.7	81.4	92.7	102.9	111.1	118.8	124.9	130.1	133.6	135.2	136.2

TEST NUMBER: P1213681

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	64.5	75.8	86.0	95.8	103.9	111.1	117.3	121.4	124.9	127.0	127.5
115°	59.4	70.2	79.4	88.6	97.3	103.4	109.1	113.2	116.7	118.3	119.3
117.5°	54.8	64.5	73.7	81.4	89.6	96.3	101.9	105.5	108.6	110.6	111.6
120°	50.2	59.4	67.6	75.3	83.0	89.1	94.2	97.8	101.4	102.9	102.9
122.5°	45.6	54.3	62.0	69.1	76.3	81.9	87.6	90.6	93.7	95.2	95.2
125°	41.5	49.7	56.8	63.5	70.2	75.3	79.9	83.5	86.5	87.6	87.6
127.5°	37.4	45.1	51.7	57.9	63.5	68.6	73.2	76.8	79.4	80.4	80.4
130°	33.8	40.5	46.6	52.7	58.4	62.5	67.1	70.2	71.7	73.2	73.7
132.5°	30.2	36.4	42.0	47.1	52.7	56.8	60.4	63.5	65.0	66.6	67.1
135°	26.6	32.3	37.4	42.5	47.1	51.2	54.3	56.8	58.9	59.9	60.4
137.5°	22.5	28.7	33.3	37.4	42.5	45.6	49.2	50.7	52.7	53.8	53.8
140°	18.9	23.6	28.7	32.8	36.9	39.9	43.0	45.6	47.1	47.6	47.6
142.5°	15.4	19.5	23.6	28.7	32.3	34.8	37.9	39.9	41.0	41.5	42.0
145°	12.3	15.4	18.9	23.6	27.7	30.7	32.3	34.3	35.3	35.8	36.4
147.5°	9.2	12.3	15.4	18.4	22.5	25.6	27.1	29.2	30.2	30.7	30.7
150°	7.2	9.2	11.3	14.3	17.4	21.0	23.0	24.6	25.1	25.6	25.6
152.5°	5.1	7.2	8.7	10.8	12.8	15.9	18.9	20.0	20.5	21.0	21.0
155°	3.6	5.1	6.1	7.7	9.2	11.8	14.3	15.9	16.4	16.9	16.9
157.5°	2.6	3.6	4.1	5.6	6.7	7.7	9.7	12.3	12.8	12.8	12.8
160°	1.5	2.0	2.6	3.6	4.1	5.1	6.1	7.7	9.2	9.2	9.2
162.5°	1.0	1.5	1.5	2.0	2.0	3.1	3.6	4.1	5.6	6.1	6.1
165°	0.5	1.0	1.0	1.0	1.0	1.0	1.5	1.5	2.6	3.1	3.1
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: P1213681

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4	485.4
2.5°	484.4	485.4	484.9	484.9	484.9	485.9	484.9	480.3	481.3	482.4	483.4
5°	483.9	484.4	484.4	483.9	483.9	484.9	483.9	479.3	480.3	481.3	481.8
7.5°	481.8	482.4	482.4	482.4	481.8	482.9	481.3	477.2	477.2	478.3	478.8
10°	479.3	480.3	479.8	479.3	479.3	479.3	478.3	473.7	473.7	474.2	474.7
12.5°	476.2	476.2	476.2	475.7	475.2	475.2	474.2	469.6	469.0	470.1	469.6
15°	472.1	473.1	472.1	471.6	470.6	470.6	469.0	464.4	463.4	463.9	463.4
17.5°	468.5	469.0	468.0	467.0	466.0	465.5	463.9	458.8	457.3	457.8	456.8
20°	464.9	464.9	463.9	462.9	461.4	459.8	457.8	452.7	450.1	450.1	448.0
22.5°	460.3	460.3	459.3	457.8	456.2	454.2	452.1	447.0	442.9	441.9	440.4
25°	455.2	454.7	454.2	452.7	449.6	447.5	445.5	439.9	435.2	433.2	430.6
27.5°	449.1	449.1	447.5	446.0	442.9	440.4	437.8	432.7	426.5	424.0	420.4
30°	442.4	442.4	440.9	438.8	435.8	432.7	429.6	423.5	417.3	413.7	409.6
32.5°	435.8	435.2	433.7	431.7	428.6	424.0	421.4	415.3	408.1	404.0	398.4
35°	427.6	427.1	425.5	423.0	418.9	415.3	411.2	405.5	397.4	392.2	386.1
37.5°	419.4	418.9	417.8	414.3	410.2	406.1	400.9	395.3	387.6	381.0	374.8
40°	411.2	410.7	408.6	406.1	400.9	395.8	390.7	385.1	376.9	369.2	362.5
42.5°	402.5	402.0	399.4	396.3	390.7	385.6	379.4	373.3	365.1	355.9	349.2
45°	393.8	392.7	390.2	386.6	380.5	374.8	368.7	361.5	353.3	344.6	335.9
47.5°	384.6	383.0	380.5	375.3	370.2	364.1	356.9	349.2	341.0	331.3	322.1
50°	374.3	373.3	370.2	365.6	359.5	353.3	345.1	337.4	327.7	318.5	307.2
52.5°	364.6	362.5	360.0	354.9	348.7	342.1	333.3	324.1	314.4	305.7	293.9
55°	354.3	353.3	349.7	345.6	338.0	330.3	322.1	312.4	301.6	291.4	280.1
57.5°	344.6	342.6	339.5	333.9	327.2	319.5	310.8	300.6	288.8	278.0	265.8
60°	334.9	331.8	328.2	323.1	315.9	307.7	298.5	287.8	276.0	264.2	251.4
62.5°	324.1	321.6	317.5	312.4	305.2	296.5	286.8	275.5	264.2	251.9	238.1
65°	313.4	310.8	306.7	301.6	294.4	284.7	274.5	263.2	250.4	238.6	223.8
67.5°	302.6	300.1	295.5	289.8	282.7	273.4	262.7	250.9	238.1	225.3	209.9
70°	291.9	288.8	284.7	278.6	271.4	261.7	250.9	238.6	225.8	212.0	196.6
72.5°	281.1	278.6	273.4	267.8	260.1	250.4	239.6	227.4	214.0	199.7	184.3
75°	270.4	267.3	263.7	257.1	248.9	239.6	228.4	216.1	201.8	187.9	172.1
77.5°	259.6	257.1	252.4	245.8	238.1	228.4	217.1	204.8	190.5	176.1	159.2
80°	248.9	245.8	242.2	236.1	227.4	217.6	205.8	193.6	179.2	164.4	147.5
82.5°	238.1	235.0	230.9	224.8	216.6	206.9	195.6	182.3	168.0	152.6	136.7
85°	227.4	224.8	220.2	214.0	205.3	195.6	184.3	172.6	157.2	141.8	126.0
87.5°	216.6	214.0	209.4	203.3	195.1	185.4	174.1	161.8	147.0	132.6	115.2
90°	206.4	204.3	199.7	193.6	185.4	175.6	165.4	152.1	137.7	123.4	107.0
92.5°	197.1	195.1	191.0	184.9	177.7	166.9	156.7	143.9	129.6	114.7	98.8
95°	188.9	186.4	182.3	176.7	168.0	158.7	148.5	135.7	121.9	107.0	91.7
97.5°	179.7	177.2	173.1	166.9	159.8	150.0	139.8	127.5	113.7	99.9	84.5
100°	170.5	168.0	163.3	158.2	151.1	141.3	131.6	119.3	106.5	93.2	78.3
102.5°	161.3	158.7	154.6	149.5	142.4	133.6	123.9	112.1	99.3	86.0	72.2
105°	152.6	150.0	145.9	140.8	134.2	125.5	115.2	105.0	92.7	79.9	66.6
107.5°	143.9	141.3	137.7	132.6	126.0	117.8	108.0	97.3	86.0	73.7	60.9
110°	135.2	133.1	129.0	124.4	117.8	109.6	100.9	90.6	79.4	68.1	55.8

TEST NUMBER: P1213681

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	127.0	124.9	120.8	115.7	110.1	102.4	93.7	84.0	73.2	62.5	50.7
115°	118.8	116.2	112.7	108.0	102.4	95.2	87.0	78.3	67.6	57.4	46.6
117.5°	110.6	108.6	105.0	100.4	95.2	88.1	80.4	72.2	62.0	52.2	42.5
120°	102.4	100.9	97.3	93.2	88.1	81.4	74.2	66.1	56.8	47.6	38.4
122.5°	94.7	93.2	89.6	86.0	80.9	74.8	68.1	60.4	52.2	43.5	35.3
125°	87.6	85.5	82.4	78.9	74.2	68.6	62.0	54.8	47.1	39.4	31.7
127.5°	79.9	78.3	76.3	72.2	67.6	62.5	56.3	50.2	43.0	35.8	28.7
130°	73.7	71.7	69.1	66.1	62.0	56.8	51.2	45.1	38.9	32.3	25.1
132.5°	66.6	64.5	62.5	59.4	55.8	51.2	46.1	40.5	34.8	28.7	22.5
135°	59.9	58.4	56.3	53.3	49.7	46.1	41.0	35.8	30.7	25.1	20.0
137.5°	53.8	52.2	50.2	48.1	44.5	41.0	36.4	31.7	27.1	22.0	17.4
140°	47.6	46.6	44.5	42.5	39.4	35.8	31.7	27.7	23.6	18.9	14.8
142.5°	41.5	40.5	38.9	36.9	34.3	31.2	27.7	24.1	20.0	16.4	12.8
145°	35.8	35.3	33.8	31.7	29.7	26.6	23.6	20.5	16.9	13.8	10.2
147.5°	30.2	29.7	28.7	27.1	25.1	22.5	20.0	16.9	14.3	11.3	8.2
150°	25.1	24.6	24.1	22.0	21.0	18.4	16.4	13.8	11.8	8.7	6.7
152.5°	20.5	20.5	19.5	17.9	16.9	14.8	13.3	11.3	9.2	7.2	5.1
155°	16.4	15.9	15.4	14.3	13.3	11.8	10.2	8.7	7.2	5.1	3.6
157.5°	12.8	12.3	11.8	10.8	9.7	9.2	7.7	6.1	4.6	3.6	2.6
160°	9.2	8.7	8.2	7.7	7.2	6.1	5.1	4.1	3.1	2.0	1.5
162.5°	6.1	5.6	5.6	5.1	4.6	3.6	3.1	2.6	2.0	1.5	1.0
165°	3.1	3.1	2.6	2.6	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: P1213681

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	485.4	485.4	485.4	485.4	485.4	485.4	485.4
2.5°	482.9	482.9	484.9	484.4	482.9	485.9	489.5
5°	481.3	481.3	482.9	482.9	481.3	484.4	487.5
7.5°	478.8	478.3	479.8	479.8	477.7	480.3	483.9
10°	474.2	473.7	475.2	475.2	473.1	475.7	478.8
12.5°	469.0	468.0	469.6	469.0	467.0	469.6	472.6
15°	462.4	461.9	462.9	461.9	459.8	462.4	465.5
17.5°	455.7	454.2	454.7	454.7	451.1	453.7	456.2
20°	447.0	445.0	445.5	445.0	442.4	444.0	447.0
22.5°	438.3	435.2	435.2	434.7	431.7	433.7	436.3
25°	427.6	424.0	424.0	423.5	419.9	421.4	424.0
27.5°	416.8	413.2	411.7	411.2	407.6	407.6	411.2
30°	405.5	400.4	399.4	397.9	394.3	394.3	397.4
32.5°	394.8	387.6	385.6	383.5	379.9	379.4	383.0
35°	380.5	374.8	371.2	369.2	365.1	364.1	367.1
37.5°	368.7	361.5	356.4	353.8	349.7	348.2	352.3
40°	355.9	348.2	341.5	340.0	333.9	331.8	335.4
42.5°	341.5	333.3	326.7	323.6	319.0	317.0	317.5
45°	327.2	318.5	311.3	307.2	302.6	299.0	301.1
47.5°	312.4	304.7	296.0	289.8	284.2	281.6	282.7
50°	297.5	288.3	280.1	273.4	266.8	263.7	265.8
52.5°	282.7	272.9	263.7	256.5	248.9	245.8	246.3
55°	268.3	258.1	247.3	239.6	232.5	227.9	226.8
57.5°	254.0	242.7	231.4	222.7	213.5	209.4	207.9
60°	238.6	226.8	215.1	204.8	195.1	190.5	188.4
62.5°	224.3	211.5	198.2	187.4	177.7	171.5	170.0
65°	210.5	195.6	182.3	170.0	159.2	152.6	150.5
67.5°	195.6	180.2	165.9	152.6	142.4	133.6	132.6
70°	181.8	165.4	149.5	135.7	124.4	115.7	111.6
72.5°	168.0	151.1	134.7	119.8	105.5	97.3	94.2
75°	154.6	137.2	119.8	104.5	88.6	78.9	75.8
77.5°	142.4	124.4	106.0	89.1	74.2	62.0	57.9
80°	130.6	112.1	92.7	75.3	59.4	46.1	41.5
82.5°	118.3	100.9	80.9	62.5	46.1	32.3	26.6
85°	107.5	90.1	70.2	51.7	35.3	20.5	14.3
87.5°	98.8	79.9	62.0	43.5	26.6	11.8	4.1
90°	90.1	71.7	53.8	35.8	20.0	6.7	0.5
92.5°	82.4	65.0	47.1	30.7	15.4	4.6	0.5
95°	75.3	58.4	41.5	25.6	12.3	3.1	0.5
97.5°	68.6	52.7	36.9	22.0	10.2	2.6	0.5
100°	63.0	47.6	32.8	19.5	8.7	2.0	0.5
102.5°	57.4	43.0	29.2	16.9	7.7	1.5	0.5
105°	52.7	38.9	26.1	15.4	6.7	1.5	0.5
107.5°	48.1	35.3	23.6	13.3	5.6	1.0	0.5
110°	43.5	32.3	21.0	11.8	5.1	1.0	0.5

TEST NUMBER: P1213681

CATALOG NUMBER: 2SNLED-LD5-23SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	39.9	29.2	18.9	10.8	4.1	1.0	0.5
115°	36.4	26.1	16.9	9.2	3.6	0.5	0.5
117.5°	32.8	23.6	14.8	8.2	3.1	0.5	0.5
120°	29.7	21.0	13.3	7.2	2.6	0.5	0.5
122.5°	26.6	18.9	11.8	6.1	2.0	0.5	0.5
125°	24.1	16.9	10.2	5.1	1.5	0.5	0.5
127.5°	21.5	14.8	9.2	4.6	1.5	0.5	0.5
130°	18.9	13.3	7.7	3.6	1.0	0.5	0.5
132.5°	16.9	11.3	6.7	3.1	1.0	0.5	0.5
135°	14.8	9.7	5.6	2.0	1.0	0.5	0.5
137.5°	12.8	8.2	4.6	1.5	0.5	0.5	0.5
140°	10.8	7.2	3.6	1.5	0.5	0.5	0.5
142.5°	9.2	5.6	2.6	1.0	0.5	0.5	0.5
145°	7.2	4.6	2.0	1.0	0.5	0.5	0.5
147.5°	5.6	3.6	1.5	1.0	0.5	0.5	0.5
150°	4.1	2.6	1.5	0.5	0.5	0.5	0.5
152.5°	3.1	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)