

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: P1213360

Luminaire Tested: 4SNLED-LD5-16SL-LW-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213360
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-LD5-16SL-LW-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

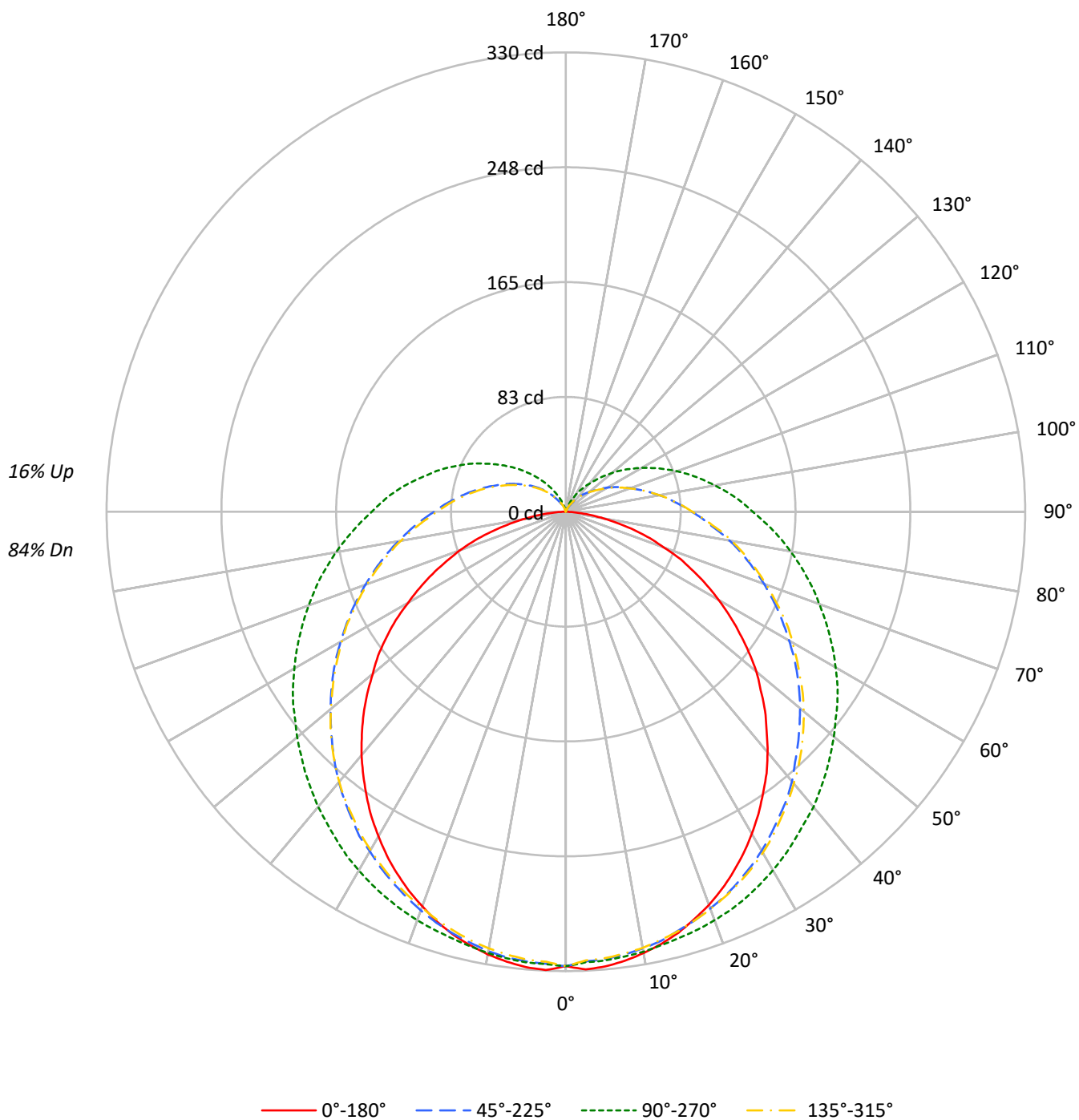
Lumens per Lamp: N/A
Luminaire Lumens: 1418.0 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 13
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°	2638	2638	2638	2638
5°	2652	2542	2657	2553
10°	2627	2470	2635	2477
15°	2597	2407	2608	2410
20°	2556	2363	2564	2363
25°	2506	2323	2520	2320
30°	2449	2282	2467	2282
35°	2384	2243	2410	2246
40°	2318	2221	2347	2221
45°	2243	2197	2277	2200
50°	2166	2183	2195	2189
55°	2057	2185	2121	2195
60°	1943	2192	2005	2206
65°	1814	2214	1894	2235
70°	1634	2254	1760	2287
75°	1426	2328	1560	2373
80°	1103	2438	1253	2494
85°	656	2613	820	2685

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 270°

Vertical Angle: 90°

Luminance: 3001 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.9	2.2
10°-20°	88.9	6.3
20°-30°	136.2	9.6
30°-40°	168.1	11.9
40°-50°	182.4	12.9
50°-60°	179.7	12.7
60°-70°	162.5	11.5
70°-80°	135.4	9.5
80°-90°	104.8	7.4
90°-100°	79.5	5.6
100°-110°	58.8	4.2
110°-120°	40.9	2.9
120°-130°	26.1	1.8
130°-140°	14.7	1.0
140°-150°	6.7	0.5
150°-160°	2.1	0.1
160°-170°	0.3	0.0
170°-180°	0.0	0.0
0°-30°	256.0	18.1
0°-40°	424.1	29.9
0°-60°	786.2	55.4
0°-90°	1188.9	83.8
90°-120°	179.3	12.6
90°-150°	226.7	16.0
90°-180°	229.0	16.1
0°-180°	1418.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	326	326	326	326	326	
5°	328	324	328	325	328	31
15°	313	317	314	317	313	88
25°	285	306	287	306	285	131
35°	247	287	250	288	247	155
45°	202	264	206	265	202	156
55°	152	238	157	239	152	137
65°	101	209	106	211	101	100
75°	51	179	56	182	51	54
85°	10	149	12	153	10	12
90°	0	134	1	139	0	1
95°	0	122	0	128	0	0
105°	0	97	0	103	0	0
115°	0	74	0	80	0	0
125°	0	53	0	59	0	0
135°	0	34	0	41	0	0
145°	0	20	0	24	0	0
155°	0	8	0	11	0	0
165°	0	1	0	2	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4
2.5°	329.1	329.1	328.8	328.1	328.4	329.5	328.8	327.1	326.0	323.3	324.0
5°	327.8	327.8	327.4	326.7	327.1	328.4	327.8	326.4	325.0	322.6	323.6
7.5°	325.3	325.3	325.0	324.3	325.0	326.4	325.7	324.3	323.3	320.9	321.9
10°	321.9	322.3	321.9	320.9	322.3	323.6	323.3	321.6	320.5	318.5	319.5
12.5°	317.8	318.1	317.8	317.4	318.1	320.2	319.5	318.1	317.4	315.7	316.7
15°	313.0	313.3	312.6	312.6	313.3	315.4	315.4	314.0	313.3	311.6	313.6
17.5°	306.8	307.1	306.8	306.8	307.4	309.5	309.9	309.2	308.5	307.8	309.9
20°	300.6	300.2	300.2	299.9	301.2	304.3	304.0	304.0	303.3	303.3	305.7
22.5°	293.3	293.3	293.0	293.0	294.7	297.5	297.5	298.2	297.5	298.8	300.9
25°	285.1	285.4	285.1	285.8	287.1	290.2	290.6	291.6	292.0	293.3	295.7
27.5°	276.5	276.8	276.5	277.1	279.6	282.0	283.7	285.1	285.4	287.5	290.6
30°	267.2	267.2	267.5	268.2	271.0	274.7	276.1	277.8	277.8	281.3	284.4
32.5°	257.5	257.5	257.5	258.9	262.0	266.5	268.2	270.3	271.0	274.4	277.8
35°	246.9	247.2	247.2	248.2	252.4	256.8	259.2	261.7	263.0	267.2	270.6
37.5°	236.9	237.6	236.5	237.9	243.8	247.5	250.3	252.7	255.1	260.6	263.4
40°	225.5	226.2	225.9	228.6	233.4	238.2	241.3	243.8	247.2	252.7	255.8
42.5°	213.5	214.1	214.8	217.9	223.1	227.9	231.7	234.8	238.9	243.8	248.9
45°	202.4	202.4	203.5	207.3	212.8	217.9	222.4	225.9	230.7	235.8	241.0
47.5°	190.0	190.4	191.8	196.2	202.1	208.3	212.4	216.9	222.1	227.6	233.4
50°	178.7	178.7	180.7	185.6	191.1	198.0	202.4	207.6	213.1	219.7	225.5
52.5°	165.6	166.3	169.4	173.9	181.1	187.3	192.5	198.0	204.5	211.4	217.9
55°	152.5	153.9	156.3	162.5	170.1	175.9	182.1	189.0	195.2	202.8	210.4
57.5°	139.8	140.8	144.6	150.8	158.7	165.9	172.5	179.0	186.6	194.2	202.1
60°	126.7	128.1	132.5	138.7	147.4	154.9	162.5	169.4	177.3	185.2	193.5
62.5°	114.3	115.3	120.5	127.7	136.3	144.6	152.2	160.4	169.0	176.6	184.9
65°	101.2	102.9	108.8	115.3	125.3	133.6	142.2	151.1	160.1	168.4	176.3
67.5°	89.2	90.2	96.4	104.0	114.0	123.3	132.2	141.8	151.1	159.7	167.7
70°	75.1	78.5	84.7	92.6	103.3	112.9	122.6	132.5	142.5	151.5	159.1
72.5°	63.3	66.1	73.0	81.6	91.9	103.3	113.3	123.9	133.9	143.2	151.1
75°	51.0	53.7	61.6	71.3	81.9	94.0	104.3	115.3	125.7	135.0	143.2
77.5°	38.9	42.3	51.0	60.9	72.6	85.0	95.7	106.7	117.4	127.4	135.6
80°	27.9	31.7	41.0	52.3	63.7	76.1	87.8	98.8	109.5	119.5	128.1
82.5°	17.9	22.0	32.0	43.4	55.4	67.8	79.9	90.9	101.6	111.5	120.5
85°	9.6	14.1	24.4	35.8	47.9	60.2	72.3	84.0	94.3	103.6	113.3
87.5°	2.8	8.3	18.2	29.6	42.0	53.4	65.1	76.8	87.1	97.1	105.7
90°	0.3	4.8	13.8	24.4	36.5	47.5	59.2	70.2	80.6	90.5	99.2
92.5°	0.3	3.1	10.7	20.3	31.3	42.7	54.4	65.1	74.7	84.7	93.3
95°	0.3	2.4	8.6	17.2	27.5	38.2	49.2	59.6	69.5	78.8	87.4
97.5°	0.3	1.7	6.9	14.8	24.1	34.1	44.8	55.1	64.7	73.7	81.6
100°	0.3	1.4	5.5	12.7	21.0	30.6	40.3	50.3	59.6	68.2	76.4
102.5°	0.3	1.0	4.8	10.7	18.6	27.2	36.5	45.8	54.7	63.0	71.3
105°	0.3	1.0	4.1	9.3	16.5	24.4	33.1	42.0	50.3	58.2	65.8
107.5°	0.3	0.7	3.4	7.9	14.5	22.0	30.0	38.6	46.1	53.7	60.9
110°	0.3	0.7	2.8	7.2	12.7	19.6	27.2	35.1	42.3	49.6	56.5

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.3	0.7	2.4	6.2	11.0	17.6	24.4	31.7	38.6	45.8	52.0
115°	0.3	0.7	2.1	5.5	10.3	15.1	22.0	28.6	35.5	42.0	47.9
117.5°	0.3	0.7	1.7	4.5	9.0	13.8	19.3	25.8	32.0	38.2	43.7
120°	0.3	0.7	1.4	4.1	7.9	12.4	17.2	23.1	28.9	34.8	40.6
122.5°	0.3	0.3	1.4	3.4	6.9	11.0	15.8	20.3	25.8	31.3	36.5
125°	0.3	0.3	1.4	3.1	5.9	10.0	14.1	18.2	23.1	27.9	32.4
127.5°	0.3	0.3	1.0	2.4	5.2	8.6	12.4	16.9	20.3	24.8	29.3
130°	0.3	0.3	1.0	2.1	4.5	7.2	11.0	14.8	18.9	22.0	25.8
132.5°	0.3	0.3	1.0	1.7	3.4	5.9	9.3	12.7	16.5	20.0	23.1
135°	0.3	0.3	0.7	1.4	2.8	4.8	7.6	10.7	14.5	17.9	21.0
137.5°	0.3	0.3	0.7	1.4	2.1	4.1	5.9	8.6	12.0	15.1	18.2
140°	0.3	0.3	0.7	1.0	1.7	3.1	4.8	6.9	9.6	12.4	15.8
142.5°	0.3	0.3	0.3	1.0	1.4	2.4	3.8	5.5	7.6	10.0	12.7
145°	0.3	0.3	0.3	1.0	1.4	1.7	3.1	4.5	5.9	7.6	10.0
147.5°	0.3	0.3	0.3	0.7	1.0	1.4	2.4	3.4	4.5	5.9	7.2
150°	0.3	0.3	0.3	0.7	1.0	1.4	1.7	2.4	3.4	4.8	5.9
152.5°	0.3	0.3	0.3	0.7	0.7	1.0	1.4	1.7	2.4	3.4	4.1
155°	0.3	0.3	0.3	0.3	0.7	1.0	1.4	1.4	1.7	2.4	3.1
157.5°	0.3	0.3	0.3	0.3	0.7	0.7	1.0	1.0	1.4	1.4	2.1
160°	0.3	0.3	0.3	0.3	0.3	0.7	0.7	1.0	1.0	1.0	1.0
162.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.7	0.7	1.0	1.0
165°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.7	0.7
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°	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4
2.5°	324.0	324.3	325.3	325.3	324.7	324.7	324.3	324.0	324.3	325.0	325.0
5°	323.3	323.6	324.7	325.0	324.3	324.0	324.0	323.6	324.0	324.7	324.7
7.5°	321.9	322.3	323.3	323.6	322.9	322.9	322.6	322.3	322.9	323.3	323.3
10°	319.8	320.2	321.6	321.9	321.6	321.2	321.2	320.9	321.2	321.9	321.9
12.5°	317.1	317.8	319.5	319.5	319.5	319.2	319.2	318.8	319.2	319.8	319.5
15°	314.0	315.4	316.7	317.4	317.4	317.4	317.1	316.7	317.4	317.8	317.4
17.5°	310.5	312.3	314.3	315.0	315.0	315.4	315.0	314.7	315.4	315.4	315.0
20°	307.1	308.8	310.9	311.6	312.3	312.6	312.6	312.3	312.6	313.0	312.6
22.5°	302.6	304.7	307.1	308.1	308.8	309.5	309.5	309.5	309.9	310.2	309.5
25°	297.8	300.2	303.0	304.0	305.4	305.7	306.1	306.1	306.4	306.8	305.7
27.5°	292.6	295.4	298.2	299.9	300.9	301.6	301.6	301.9	302.3	302.6	301.6
30°	286.4	290.6	293.0	294.4	295.7	296.8	297.1	297.5	297.8	298.2	297.1
32.5°	280.9	284.4	287.5	289.2	290.9	292.3	292.6	292.6	293.3	293.3	292.3
35°	274.4	278.5	281.6	283.3	285.4	286.4	287.1	287.1	287.8	287.8	286.8
37.5°	267.9	272.0	275.4	277.5	279.9	281.3	281.6	281.6	282.3	282.3	280.9
40°	261.0	265.4	269.2	271.6	273.7	275.4	275.8	276.8	276.8	276.5	275.1
42.5°	254.1	258.2	262.3	265.1	267.9	269.6	270.3	270.6	270.6	270.3	269.2
45°	246.5	251.3	255.1	258.6	261.3	263.0	264.1	264.4	264.4	263.7	262.7
47.5°	239.3	244.1	247.9	251.7	254.4	256.5	257.5	257.9	257.5	257.2	256.1
50°	231.7	237.2	241.0	244.8	247.5	249.3	251.0	251.3	251.0	250.6	248.6
52.5°	223.8	229.6	233.8	237.6	240.7	242.7	244.1	244.4	244.4	243.8	242.4
55°	215.9	221.0	226.2	230.3	233.8	235.8	237.6	238.2	237.6	236.9	235.1
57.5°	208.6	213.5	218.6	223.1	226.5	229.3	230.7	231.4	230.7	229.6	227.9
60°	200.0	205.2	211.0	215.2	219.0	221.7	222.4	223.8	223.1	222.1	220.3
62.5°	191.8	198.0	203.1	208.3	211.4	214.5	215.9	216.6	215.9	214.8	213.1
65°	183.2	190.0	195.2	200.4	203.8	206.9	208.6	209.0	208.3	207.3	205.5
67.5°	175.2	181.8	187.3	192.8	195.9	199.0	200.7	201.4	200.7	199.3	197.6
70°	167.3	173.9	180.4	184.5	188.3	191.8	192.8	193.8	193.1	191.8	189.7
72.5°	159.4	166.3	172.8	177.0	181.1	184.2	185.6	186.6	185.9	184.5	182.1
75°	151.1	158.4	164.9	169.4	173.5	176.6	178.0	179.0	178.3	177.0	174.2
77.5°	143.6	150.8	157.0	161.8	165.9	168.7	171.1	171.5	170.8	169.4	166.6
80°	135.6	142.9	149.4	154.2	158.4	161.1	162.8	163.9	163.2	161.8	159.1
82.5°	128.8	135.3	141.8	146.7	150.8	154.2	155.6	156.6	156.3	154.2	152.2
85°	121.2	128.8	133.9	139.1	143.2	146.7	147.7	149.1	148.7	147.0	144.3
87.5°	113.6	121.2	127.4	132.5	136.3	139.1	140.8	141.5	141.2	139.4	136.3
90°	107.4	114.3	120.5	126.0	129.1	132.2	133.9	134.3	134.3	132.2	129.8
92.5°	101.6	108.1	114.3	119.5	123.3	126.0	127.4	128.1	127.7	126.0	123.3
95°	95.0	102.3	108.1	113.3	117.1	119.8	121.2	121.9	121.5	119.8	117.1
97.5°	89.5	96.1	101.9	106.7	110.5	113.3	114.6	115.3	115.3	113.6	110.9
100°	84.0	90.5	96.1	100.9	104.3	107.1	108.4	108.8	108.4	107.1	104.3
102.5°	78.5	84.7	90.2	94.7	98.5	100.9	102.3	102.6	102.6	100.9	98.1
105°	73.0	79.2	84.3	89.2	92.3	94.7	95.7	96.7	96.4	95.0	92.3
107.5°	67.8	74.0	78.8	83.3	86.4	88.8	89.9	90.9	90.5	89.2	86.4
110°	63.0	68.9	73.3	77.8	80.6	83.0	84.7	85.0	84.3	83.0	80.6



TEST NUMBER: P1213360

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	58.5	63.7	68.2	72.3	75.4	77.1	78.5	79.2	78.5	77.1	75.4
115°	53.7	58.9	63.3	67.1	69.9	72.0	73.0	73.7	73.0	71.6	69.9
117.5°	49.2	54.1	58.5	62.3	64.7	66.4	67.5	68.2	67.5	66.4	64.7
120°	45.4	49.6	53.7	57.2	59.9	61.3	62.3	63.0	62.7	61.3	59.6
122.5°	41.0	45.4	49.2	52.7	55.1	56.5	57.2	57.8	57.5	56.5	54.7
125°	37.2	41.0	44.8	47.9	50.3	51.6	52.3	53.0	52.7	51.6	49.6
127.5°	33.1	37.2	40.3	43.4	45.1	47.2	47.5	48.2	47.9	46.8	45.1
130°	30.0	33.1	36.1	38.9	41.0	42.3	43.0	43.4	42.7	42.0	40.3
132.5°	26.2	29.6	32.4	34.8	36.1	37.5	38.2	38.6	38.6	37.5	36.1
135°	23.4	25.8	28.2	30.6	32.0	33.4	34.1	34.4	34.1	33.4	32.0
137.5°	21.0	23.1	24.8	26.9	28.6	29.3	30.0	30.0	29.6	29.3	28.2
140°	18.2	20.7	22.4	23.8	25.1	25.5	26.2	26.2	25.8	25.5	24.8
142.5°	15.5	17.6	19.3	21.0	22.0	22.7	23.1	23.4	23.1	22.7	21.7
145°	12.4	14.8	16.5	17.6	18.9	19.3	19.6	20.0	19.6	19.3	18.2
147.5°	9.6	11.7	13.4	14.8	15.8	16.2	16.5	16.9	16.5	15.8	15.5
150°	6.9	8.6	10.7	12.0	12.7	13.4	13.4	13.4	13.8	13.1	12.4
152.5°	5.5	6.2	7.6	9.0	10.0	10.3	10.7	10.7	10.3	10.3	9.6
155°	3.8	4.5	5.5	6.5	7.6	7.9	8.3	8.3	7.9	7.9	7.6
157.5°	2.4	3.1	3.8	4.5	5.5	5.9	6.2	6.2	6.2	5.9	5.5
160°	1.4	1.7	2.1	2.8	3.4	3.8	4.1	4.1	4.1	4.1	3.8
162.5°	1.0	1.0	1.0	1.4	1.7	2.1	2.4	2.4	2.4	2.4	2.1
165°	0.7	0.7	0.7	0.7	0.7	1.0	1.4	1.4	1.4	1.4	1.4
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: P1213360

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4
2.5°	324.7	324.7	325.0	324.3	322.3	322.6	322.6	324.0	324.7	325.0	326.7
5°	324.0	324.0	324.7	323.6	321.9	321.9	321.9	323.3	323.6	324.3	325.7
7.5°	322.9	322.9	323.3	322.3	320.2	320.2	319.8	321.2	321.9	322.3	323.6
10°	321.2	321.2	321.6	320.5	318.1	318.1	317.8	318.8	319.2	319.8	320.9
12.5°	318.8	318.8	318.8	317.8	315.4	315.0	314.7	315.7	315.7	316.1	317.1
15°	316.7	316.1	316.1	315.0	312.6	311.9	311.2	311.6	312.3	311.9	312.6
17.5°	314.3	313.6	313.0	311.9	308.8	307.8	307.1	307.4	307.1	306.8	307.4
20°	311.6	310.5	310.2	308.5	305.4	303.7	302.3	301.6	301.9	300.9	301.2
22.5°	308.5	307.1	306.4	304.3	301.2	299.2	297.5	296.1	295.7	294.4	294.7
25°	304.7	303.0	301.9	300.2	296.8	294.4	292.3	290.2	289.2	287.5	287.1
27.5°	300.2	298.5	297.1	295.4	292.0	288.9	286.4	283.7	282.3	280.2	279.2
30°	295.7	293.7	291.6	290.2	286.4	283.0	279.2	276.8	274.7	272.3	270.6
32.5°	290.2	288.2	286.1	284.0	280.6	276.5	273.4	269.6	267.2	264.4	262.3
35°	284.7	282.0	279.9	277.1	274.1	269.2	265.4	261.7	258.6	255.5	253.0
37.5°	278.5	276.5	273.4	271.0	267.2	262.3	258.2	253.4	250.6	246.5	243.4
40°	272.7	270.3	267.2	264.1	260.3	254.8	250.3	244.8	241.7	236.9	233.8
42.5°	266.8	263.4	260.3	256.8	252.7	247.5	242.0	236.5	232.4	227.9	223.4
45°	260.3	256.5	252.7	248.9	244.8	239.6	233.8	227.9	222.8	218.6	213.1
47.5°	253.4	249.6	245.1	241.0	236.5	231.4	225.2	219.0	213.5	208.6	202.8
50°	246.5	242.7	237.9	233.4	228.3	223.1	216.6	209.3	203.5	197.3	192.1
52.5°	239.3	235.5	231.0	225.2	219.7	214.5	207.6	200.0	193.5	188.3	181.8
55°	232.0	228.3	223.1	217.2	211.7	205.2	198.7	191.1	183.8	177.7	171.1
57.5°	224.5	221.0	215.2	210.4	203.5	196.6	189.7	182.5	174.6	167.3	159.7
60°	216.9	213.1	207.6	201.8	194.9	188.0	180.7	172.8	164.6	156.6	149.8
62.5°	210.0	205.2	200.0	193.8	186.6	180.1	171.8	163.2	154.9	146.7	138.4
65°	202.1	196.9	192.1	185.9	178.3	170.8	162.5	153.9	144.9	136.0	127.7
67.5°	194.2	189.0	183.8	177.7	169.7	161.8	153.2	144.6	134.6	126.0	116.4
70°	186.3	182.1	175.6	169.0	161.8	153.2	144.6	135.3	125.0	115.7	105.7
72.5°	178.3	174.2	167.7	160.8	153.9	144.9	135.6	126.4	116.7	106.0	95.4
75°	170.8	165.6	159.7	153.2	146.0	136.7	127.4	117.7	106.4	96.4	85.4
77.5°	163.5	158.7	152.9	145.6	137.7	128.8	119.1	109.1	97.8	87.1	75.1
80°	155.6	150.8	144.9	137.7	129.8	121.2	110.9	100.5	89.5	77.8	65.4
82.5°	148.0	143.6	137.0	130.5	121.9	113.3	102.9	92.6	80.9	69.5	57.5
85°	140.1	135.6	129.5	122.6	114.3	105.0	95.4	85.0	73.3	61.6	49.6
87.5°	133.2	128.1	121.9	115.0	106.7	97.8	88.5	77.5	66.1	54.7	42.3
90°	126.0	121.2	115.0	108.1	99.8	90.9	81.3	70.9	59.9	48.2	36.5
92.5°	119.8	114.6	108.8	101.9	93.6	85.0	75.4	65.1	54.4	43.0	31.7
95°	113.6	108.4	102.9	96.1	87.8	79.2	69.5	59.6	49.2	38.2	27.5
97.5°	106.7	102.3	96.7	90.2	81.9	73.7	64.4	54.7	44.8	34.1	24.1
100°	101.2	96.1	90.9	84.0	76.4	68.5	59.2	49.9	40.3	30.3	21.0
102.5°	95.0	90.2	85.0	78.5	70.9	63.0	54.4	45.4	36.5	27.2	18.2
105°	89.2	84.7	79.2	73.0	65.8	58.2	49.9	41.7	33.1	24.1	16.2
107.5°	83.3	78.8	73.7	67.8	60.9	53.4	45.8	37.5	29.6	21.7	14.5
110°	77.5	73.3	68.5	62.7	56.1	49.2	42.0	34.4	26.5	19.3	12.7



TEST NUMBER: P1213360

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	72.3	68.2	63.3	57.8	51.6	45.1	38.2	31.0	23.8	17.2	11.0
115°	67.1	63.3	58.5	53.7	47.5	41.3	34.8	27.9	21.3	15.5	9.6
117.5°	62.0	58.2	53.7	48.9	43.4	37.5	31.3	24.8	19.3	13.8	8.6
120°	56.8	53.4	49.2	44.8	39.9	34.1	27.9	22.4	17.2	12.0	7.6
122.5°	52.0	48.9	45.1	41.0	35.8	30.3	25.1	20.3	15.5	10.7	6.2
125°	47.5	44.4	41.0	36.8	32.0	27.2	22.7	18.2	13.4	9.3	5.2
127.5°	43.0	39.9	36.5	32.7	28.9	24.4	20.3	16.2	12.0	8.3	4.5
130°	38.6	35.8	32.7	29.6	25.8	21.7	18.2	14.1	10.3	6.5	3.8
132.5°	34.1	32.0	29.3	26.2	22.7	19.6	15.8	12.4	9.0	5.9	3.4
135°	30.3	28.2	25.8	23.1	20.3	17.2	13.8	10.7	7.6	4.8	2.8
137.5°	26.9	25.1	22.7	20.3	17.9	14.8	12.0	9.0	6.2	4.1	2.1
140°	23.8	22.0	20.0	17.6	15.5	12.7	10.0	7.2	5.5	3.4	1.7
142.5°	20.7	18.9	17.2	15.1	13.1	10.7	8.3	6.2	4.5	2.8	1.7
145°	17.6	16.2	14.5	12.7	10.7	8.6	6.9	5.2	3.4	2.1	1.4
147.5°	14.5	13.4	11.7	10.3	8.6	6.9	5.5	4.1	2.8	1.7	1.0
150°	11.7	10.7	9.3	7.9	6.9	5.5	4.5	3.1	2.1	1.7	1.0
152.5°	9.0	8.3	7.2	6.5	5.5	4.1	3.1	2.4	1.7	1.4	0.7
155°	7.2	6.5	5.9	4.8	4.1	3.1	2.4	1.7	1.4	1.0	0.7
157.5°	5.2	4.8	4.1	3.4	2.8	2.1	1.7	1.7	1.0	0.7	0.3
160°	3.4	3.1	2.8	2.1	1.7	1.7	1.4	1.0	0.7	0.7	0.3
162.5°	2.1	1.7	1.7	1.7	1.4	1.4	1.0	0.7	0.7	0.3	0.3
165°	1.4	1.4	1.4	1.0	1.0	1.0	0.7	0.3	0.3	0.3	0.3
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: P1213360

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4
2.5°	326.7	325.7	327.1	329.5	329.8	329.5	328.8	329.8	331.2	330.9	328.4
5°	326.0	324.7	326.0	328.4	328.4	328.1	327.8	328.8	330.2	329.8	327.8
7.5°	324.0	322.6	324.0	326.0	326.4	325.7	325.7	326.7	328.1	327.8	326.0
10°	321.2	319.8	320.5	322.9	323.6	322.9	322.9	324.0	325.7	325.3	323.3
12.5°	317.1	316.1	316.7	318.8	319.5	319.2	318.8	320.2	321.9	321.9	319.8
15°	312.6	311.2	311.9	314.3	314.7	314.0	314.3	315.4	317.4	317.4	315.7
17.5°	307.4	305.7	306.8	308.5	308.8	308.8	308.8	310.2	312.6	312.3	310.9
20°	301.6	299.2	299.9	301.6	302.3	302.3	302.3	304.7	306.4	306.4	305.0
22.5°	294.7	293.0	293.0	294.7	295.7	295.4	295.4	297.5	299.9	299.5	299.5
25°	286.8	285.4	284.7	286.8	287.1	287.5	288.2	290.2	293.0	293.0	293.3
27.5°	278.5	277.1	276.8	278.5	278.9	279.2	279.9	282.3	285.1	285.4	286.1
30°	270.6	268.5	267.9	269.2	269.9	270.3	270.3	274.1	276.5	277.5	278.9
32.5°	261.3	259.2	257.5	259.9	260.3	261.0	261.3	265.1	267.9	269.6	271.6
35°	252.0	248.6	247.9	249.6	250.3	250.6	251.3	255.5	259.2	260.6	263.4
37.5°	241.7	239.3	237.2	238.9	239.6	240.0	242.0	245.8	249.6	251.7	254.4
40°	232.0	228.9	227.2	228.3	228.9	229.3	231.7	235.8	240.3	242.7	246.2
42.5°	221.4	217.2	215.9	216.9	217.2	218.3	220.3	225.9	230.3	233.8	236.5
45°	210.7	207.6	204.5	205.5	205.9	206.6	209.7	215.5	220.3	224.5	227.6
47.5°	199.7	195.9	192.8	193.5	194.9	195.2	198.7	205.5	210.0	214.5	218.6
50°	188.7	183.5	181.1	181.1	181.8	183.5	188.0	194.9	199.7	204.8	209.3
52.5°	177.3	172.5	169.7	170.1	170.8	172.8	177.0	183.8	189.4	194.9	200.4
55°	165.9	160.8	158.0	157.3	158.0	160.8	165.6	172.8	178.3	184.9	190.7
57.5°	154.6	148.4	146.0	144.9	145.6	149.1	153.9	161.5	168.4	174.6	181.4
60°	142.2	137.4	133.2	130.8	132.5	137.0	142.2	150.1	157.3	164.2	171.8
62.5°	131.5	125.3	120.8	118.4	120.2	123.9	131.2	138.7	146.7	154.6	162.2
65°	119.5	113.3	108.1	105.7	107.4	111.9	119.1	127.4	136.0	143.9	152.9
67.5°	107.8	101.2	95.0	92.6	94.7	99.5	107.4	116.7	126.0	134.3	143.9
70°	96.4	89.2	82.6	80.9	82.3	88.8	96.4	105.7	115.3	125.0	135.0
72.5°	86.1	77.1	70.2	68.2	69.9	77.1	85.7	95.4	105.7	116.0	126.7
75°	74.0	65.8	58.2	55.8	57.8	64.4	75.1	85.4	96.4	107.4	117.4
77.5°	64.4	54.7	46.8	43.0	46.5	54.7	65.1	76.1	87.4	98.8	110.2
80°	54.4	44.4	35.8	31.7	35.5	44.4	54.7	66.8	79.5	90.9	101.2
82.5°	45.4	34.8	25.8	21.3	25.5	35.5	46.8	58.9	71.3	82.6	94.7
85°	37.2	26.2	16.9	12.0	17.9	26.9	38.9	51.3	64.0	75.7	87.4
87.5°	30.3	19.6	10.3	5.2	11.0	21.0	32.4	44.8	57.5	69.2	80.2
90°	24.8	14.1	5.5	0.7	6.5	15.8	26.9	38.9	51.0	63.0	74.0
92.5°	20.3	10.7	3.1	0.3	4.1	12.7	23.1	34.4	46.1	57.8	68.5
95°	16.9	8.3	2.1	0.3	3.1	10.0	19.6	30.6	41.7	53.0	63.7
97.5°	14.5	6.9	1.7	0.3	2.4	8.6	16.9	27.2	37.9	48.5	58.9
100°	12.4	5.5	1.4	0.3	2.1	7.2	14.8	24.1	34.1	44.4	54.4
102.5°	10.7	4.5	1.0	0.3	1.7	6.2	13.1	21.7	30.6	40.6	50.3
105°	9.3	3.8	1.0	0.3	1.4	5.5	11.7	19.3	28.2	37.2	46.5
107.5°	7.9	3.1	0.7	0.3	1.0	4.5	10.3	17.6	25.5	34.1	42.7
110°	6.9	2.8	0.7	0.3	1.0	4.1	9.0	15.8	23.1	31.0	39.2

TEST NUMBER: P1213360

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	5.9	2.1	0.7	0.3	0.7	3.4	7.9	14.1	21.0	28.2	36.1
115°	5.2	1.7	0.3	0.3	0.7	3.1	7.2	12.7	18.9	25.8	33.1
117.5°	4.1	1.4	0.3	0.3	0.3	2.4	6.2	11.4	17.2	23.8	30.3
120°	3.4	1.4	0.3	0.3	0.3	2.1	5.5	10.0	15.5	21.3	27.5
122.5°	3.1	1.0	0.3	0.3	0.3	1.7	4.8	9.0	13.8	19.3	25.1
125°	2.8	1.0	0.3	0.3	0.3	1.4	4.1	7.9	12.4	17.2	22.7
127.5°	2.1	1.0	0.3	0.3	0.3	1.0	3.8	6.9	11.0	15.5	20.3
130°	1.7	0.7	0.3	0.3	0.3	1.0	3.1	6.2	9.6	13.8	18.2
132.5°	1.4	0.7	0.3	0.3	0.3	0.7	2.4	4.8	8.3	12.0	16.2
135°	1.4	0.7	0.3	0.3	0.3	0.7	1.7	4.1	6.9	10.3	13.8
137.5°	1.4	0.3	0.3	0.3	0.3	0.7	1.4	3.1	5.5	8.3	11.4
140°	1.0	0.3	0.3	0.3	0.3	0.3	1.0	2.4	4.5	6.9	9.6
142.5°	1.0	0.3	0.3	0.3	0.3	0.3	1.0	1.7	3.4	5.5	7.6
145°	0.7	0.3	0.3	0.3	0.3	0.3	0.7	1.4	2.8	4.1	6.2
147.5°	0.7	0.3	0.3	0.3	0.3	0.3	0.7	1.0	2.1	3.4	4.8
150°	0.7	0.3	0.3	0.3	0.3	0.3	0.7	1.0	1.4	2.4	3.8
152.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.7	1.0	1.7	2.4
155°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	1.0	1.4	1.7
157.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.7	1.0	1.4
160°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.7	1.0
162.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.7
165°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
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: P1213360

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4
2.5°	327.4	325.0	325.7	325.3	326.0	327.1	327.1	326.7	326.7	326.0	325.3
5°	326.7	324.3	325.3	325.0	325.7	326.7	326.7	326.4	326.4	325.3	325.0
7.5°	324.7	322.9	323.6	323.6	324.3	325.3	325.3	325.0	325.0	324.0	323.6
10°	322.6	320.5	321.6	321.6	322.3	323.6	323.6	323.3	323.3	322.3	321.9
12.5°	319.2	317.1	318.8	319.2	319.8	321.2	320.9	320.9	320.9	319.8	319.5
15°	315.0	313.6	315.4	315.7	316.7	318.5	318.5	318.5	318.5	317.4	317.1
17.5°	310.5	309.5	311.2	311.9	313.3	315.0	315.0	315.4	315.7	315.0	314.7
20°	305.4	304.7	306.4	307.8	309.9	311.6	312.3	312.6	313.3	312.6	312.3
22.5°	299.5	299.5	301.9	303.3	305.7	307.4	308.5	309.5	310.2	309.5	309.2
25°	293.0	294.0	296.4	298.8	301.6	303.3	304.3	305.7	306.4	306.1	305.7
27.5°	286.8	288.2	291.3	293.7	296.1	298.8	299.9	301.6	302.3	302.3	301.9
30°	279.6	281.6	285.1	287.8	290.9	293.7	295.1	296.8	297.8	297.1	297.5
32.5°	272.7	276.1	278.9	282.0	285.4	288.2	289.9	292.0	293.0	292.6	293.0
35°	265.1	268.5	272.3	275.4	279.6	282.3	284.7	286.4	287.8	287.5	287.5
37.5°	256.8	261.3	265.1	269.2	273.0	276.1	278.5	280.6	282.0	282.0	282.0
40°	248.9	253.7	257.5	262.3	267.2	269.9	272.7	274.7	276.1	276.5	276.8
42.5°	240.3	245.5	250.0	255.1	259.9	263.4	266.5	268.9	270.3	271.0	270.6
45°	232.4	237.2	242.4	248.2	252.7	256.1	259.9	262.7	264.1	264.4	264.8
47.5°	223.4	228.9	234.8	240.7	245.1	249.6	253.0	255.8	257.2	258.2	258.2
50°	214.8	220.7	227.2	233.4	238.2	242.7	246.2	249.3	251.0	251.7	252.0
52.5°	206.9	212.4	219.3	225.5	230.3	234.8	239.3	242.7	244.4	245.1	245.1
55°	197.3	204.2	211.7	217.6	222.8	227.9	232.4	235.8	237.6	238.6	239.3
57.5°	188.3	195.6	203.5	209.7	215.9	220.7	224.8	229.3	230.7	232.0	232.4
60°	179.7	186.9	194.5	201.4	207.6	212.8	217.6	221.4	223.8	224.5	225.2
62.5°	170.8	178.3	186.3	193.1	199.7	205.9	210.4	213.8	216.6	217.6	218.3
65°	162.2	170.1	178.0	185.2	192.1	198.3	202.8	206.2	209.0	210.7	211.0
67.5°	152.9	161.5	169.7	177.3	184.2	190.7	195.2	198.7	201.4	203.5	203.8
70°	144.3	153.2	161.5	169.7	176.6	183.2	188.0	191.4	194.5	195.9	196.6
72.5°	136.0	145.3	153.9	162.2	169.0	175.6	180.7	184.2	187.3	189.0	189.4
75°	128.1	137.4	146.7	154.6	161.8	168.4	173.5	177.3	180.1	181.8	182.5
77.5°	120.2	129.8	139.1	147.0	154.6	161.1	165.6	170.1	172.8	174.9	174.9
80°	112.2	122.2	131.9	139.8	147.4	153.2	158.4	162.8	165.6	167.7	167.7
82.5°	105.4	115.0	124.3	132.2	139.8	146.3	151.5	155.6	158.7	160.1	160.4
85°	97.4	108.1	116.7	125.3	132.5	138.7	143.9	148.4	151.1	152.5	153.2
87.5°	90.9	101.2	110.5	118.1	125.3	131.5	137.4	141.2	143.9	145.6	146.3
90°	84.7	94.7	104.0	111.5	119.1	125.0	130.5	134.3	137.4	138.7	139.4
92.5°	79.2	89.2	98.1	105.7	112.9	119.5	124.6	128.4	131.2	132.5	133.6
95°	74.0	83.7	92.3	100.5	107.4	113.3	118.8	122.6	125.7	126.7	127.7
97.5°	68.9	78.2	86.8	94.7	101.9	107.4	112.6	116.4	118.8	120.5	121.5
100°	64.4	73.3	81.6	89.2	96.1	101.2	106.7	110.2	112.6	114.0	115.3
102.5°	59.6	68.5	76.4	83.7	90.9	95.7	100.9	104.3	106.4	108.8	108.8
105°	55.4	63.7	71.6	78.5	84.7	90.5	95.0	98.5	100.9	102.6	102.6
107.5°	51.0	59.2	66.8	74.0	79.9	85.4	89.5	92.6	95.4	96.4	97.4
110°	47.5	54.7	62.3	69.2	74.7	79.9	84.0	87.4	89.9	90.9	91.6

TEST NUMBER: P1213360

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	43.4	51.0	57.8	64.4	69.9	74.7	78.8	81.6	84.0	85.4	85.7
115°	39.9	47.2	53.4	59.6	65.4	69.5	73.3	76.1	78.5	79.5	80.2
117.5°	36.8	43.4	49.6	54.7	60.2	64.7	68.5	70.9	73.0	74.4	75.1
120°	33.7	39.9	45.4	50.6	55.8	59.9	63.3	65.8	68.2	69.2	69.2
122.5°	30.6	36.5	41.7	46.5	51.3	55.1	58.9	60.9	63.0	64.0	64.0
125°	27.9	33.4	38.2	42.7	47.2	50.6	53.7	56.1	58.2	58.9	58.9
127.5°	25.1	30.3	34.8	38.9	42.7	46.1	49.2	51.6	53.4	54.1	54.1
130°	22.7	27.2	31.3	35.5	39.2	42.0	45.1	47.2	48.2	49.2	49.6
132.5°	20.3	24.4	28.2	31.7	35.5	38.2	40.6	42.7	43.7	44.8	45.1
135°	17.9	21.7	25.1	28.6	31.7	34.4	36.5	38.2	39.6	40.3	40.6
137.5°	15.1	19.3	22.4	25.1	28.6	30.6	33.1	34.1	35.5	36.1	36.1
140°	12.7	15.8	19.3	22.0	24.8	26.9	28.9	30.6	31.7	32.0	32.0
142.5°	10.3	13.1	15.8	19.3	21.7	23.4	25.5	26.9	27.5	27.9	28.2
145°	8.3	10.3	12.7	15.8	18.6	20.7	21.7	23.1	23.8	24.1	24.4
147.5°	6.2	8.3	10.3	12.4	15.1	17.2	18.2	19.6	20.3	20.7	20.7
150°	4.8	6.2	7.6	9.6	11.7	14.1	15.5	16.5	16.9	17.2	17.2
152.5°	3.4	4.8	5.9	7.2	8.6	10.7	12.7	13.4	13.8	14.1	14.1
155°	2.4	3.4	4.1	5.2	6.2	7.9	9.6	10.7	11.0	11.4	11.4
157.5°	1.7	2.4	2.8	3.8	4.5	5.2	6.5	8.3	8.6	8.6	8.6
160°	1.0	1.4	1.7	2.4	2.8	3.4	4.1	5.2	6.2	6.2	6.2
162.5°	0.7	1.0	1.0	1.4	1.4	2.1	2.4	2.8	3.8	4.1	4.1
165°	0.3	0.7	0.7	0.7	0.7	0.7	1.0	1.0	1.7	2.1	2.1
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: P1213360

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4	326.4
2.5°	325.7	326.4	326.0	326.0	326.0	326.7	326.0	322.9	323.6	324.3	325.0
5°	325.3	325.7	325.7	325.3	325.3	326.0	325.3	322.3	322.9	323.6	324.0
7.5°	324.0	324.3	324.3	324.3	324.0	324.7	323.6	320.9	320.9	321.6	321.9
10°	322.3	322.9	322.6	322.3	322.3	322.3	321.6	318.5	318.5	318.8	319.2
12.5°	320.2	320.2	320.2	319.8	319.5	319.5	318.8	315.7	315.4	316.1	315.7
15°	317.4	318.1	317.4	317.1	316.4	316.4	315.4	312.3	311.6	311.9	311.6
17.5°	315.0	315.4	314.7	314.0	313.3	313.0	311.9	308.5	307.4	307.8	307.1
20°	312.6	312.6	311.9	311.2	310.2	309.2	307.8	304.3	302.6	302.6	301.2
22.5°	309.5	309.5	308.8	307.8	306.8	305.4	304.0	300.6	297.8	297.1	296.1
25°	306.1	305.7	305.4	304.3	302.3	300.9	299.5	295.7	292.6	291.3	289.5
27.5°	301.9	301.9	300.9	299.9	297.8	296.1	294.4	290.9	286.8	285.1	282.7
30°	297.5	297.5	296.4	295.1	293.0	290.9	288.9	284.7	280.6	278.2	275.4
32.5°	293.0	292.6	291.6	290.2	288.2	285.1	283.3	279.2	274.4	271.6	267.9
35°	287.5	287.1	286.1	284.4	281.6	279.2	276.5	272.7	267.2	263.7	259.6
37.5°	282.0	281.6	280.9	278.5	275.8	273.0	269.6	265.8	260.6	256.1	252.0
40°	276.5	276.1	274.7	273.0	269.6	266.1	262.7	258.9	253.4	248.2	243.8
42.5°	270.6	270.3	268.5	266.5	262.7	259.2	255.1	251.0	245.5	239.3	234.8
45°	264.8	264.1	262.3	259.9	255.8	252.0	247.9	243.1	237.6	231.7	225.9
47.5°	258.6	257.5	255.8	252.4	248.9	244.8	240.0	234.8	229.3	222.8	216.6
50°	251.7	251.0	248.9	245.8	241.7	237.6	232.0	226.9	220.3	214.1	206.6
52.5°	245.1	243.8	242.0	238.6	234.5	230.0	224.1	217.9	211.4	205.5	197.6
55°	238.2	237.6	235.1	232.4	227.2	222.1	216.6	210.0	202.8	195.9	188.3
57.5°	231.7	230.3	228.3	224.5	220.0	214.8	209.0	202.1	194.2	186.9	178.7
60°	225.2	223.1	220.7	217.2	212.4	206.9	200.7	193.5	185.6	177.7	169.0
62.5°	217.9	216.2	213.5	210.0	205.2	199.3	192.8	185.2	177.7	169.4	160.1
65°	210.7	209.0	206.2	202.8	198.0	191.4	184.5	177.0	168.4	160.4	150.5
67.5°	203.5	201.8	198.7	194.9	190.0	183.8	176.6	168.7	160.1	151.5	141.2
70°	196.2	194.2	191.4	187.3	182.5	175.9	168.7	160.4	151.8	142.5	132.2
72.5°	189.0	187.3	183.8	180.1	174.9	168.4	161.1	152.9	143.9	134.3	123.9
75°	181.8	179.7	177.3	172.8	167.3	161.1	153.6	145.3	135.6	126.4	115.7
77.5°	174.6	172.8	169.7	165.3	160.1	153.6	146.0	137.7	128.1	118.4	107.1
80°	167.3	165.3	162.8	158.7	152.9	146.3	138.4	130.1	120.5	110.5	99.2
82.5°	160.1	158.0	155.3	151.1	145.6	139.1	131.5	122.6	112.9	102.6	91.9
85°	152.9	151.1	148.0	143.9	138.1	131.5	123.9	116.0	105.7	95.4	84.7
87.5°	145.6	143.9	140.8	136.7	131.2	124.6	117.1	108.8	98.8	89.2	77.5
90°	138.7	137.4	134.3	130.1	124.6	118.1	111.2	102.3	92.6	83.0	72.0
92.5°	132.5	131.2	128.4	124.3	119.5	112.2	105.4	96.7	87.1	77.1	66.4
95°	127.0	125.3	122.6	118.8	112.9	106.7	99.8	91.2	81.9	72.0	61.6
97.5°	120.8	119.1	116.4	112.2	107.4	100.9	94.0	85.7	76.4	67.1	56.8
100°	114.6	112.9	109.8	106.4	101.6	95.0	88.5	80.2	71.6	62.7	52.7
102.5°	108.4	106.7	104.0	100.5	95.7	89.9	83.3	75.4	66.8	57.8	48.5
105°	102.6	100.9	98.1	94.7	90.2	84.3	77.5	70.6	62.3	53.7	44.8
107.5°	96.7	95.0	92.6	89.2	84.7	79.2	72.6	65.4	57.8	49.6	41.0
110°	90.9	89.5	86.8	83.7	79.2	73.7	67.8	60.9	53.4	45.8	37.5

TEST NUMBER: P1213360

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	85.4	84.0	81.3	77.8	74.0	68.9	63.0	56.5	49.2	42.0	34.1
115°	79.9	78.2	75.7	72.6	68.9	64.0	58.5	52.7	45.4	38.6	31.3
117.5°	74.4	73.0	70.6	67.5	64.0	59.2	54.1	48.5	41.7	35.1	28.6
120°	68.9	67.8	65.4	62.7	59.2	54.7	49.9	44.4	38.2	32.0	25.8
122.5°	63.7	62.7	60.2	57.8	54.4	50.3	45.8	40.6	35.1	29.3	23.8
125°	58.9	57.5	55.4	53.0	49.9	46.1	41.7	36.8	31.7	26.5	21.3
127.5°	53.7	52.7	51.3	48.5	45.4	42.0	37.9	33.7	28.9	24.1	19.3
130°	49.6	48.2	46.5	44.4	41.7	38.2	34.4	30.3	26.2	21.7	16.9
132.5°	44.8	43.4	42.0	39.9	37.5	34.4	31.0	27.2	23.4	19.3	15.1
135°	40.3	39.2	37.9	35.8	33.4	31.0	27.5	24.1	20.7	16.9	13.4
137.5°	36.1	35.1	33.7	32.4	30.0	27.5	24.4	21.3	18.2	14.8	11.7
140°	32.0	31.3	30.0	28.6	26.5	24.1	21.3	18.6	15.8	12.7	10.0
142.5°	27.9	27.2	26.2	24.8	23.1	21.0	18.6	16.2	13.4	11.0	8.6
145°	24.1	23.8	22.7	21.3	20.0	17.9	15.8	13.8	11.4	9.3	6.9
147.5°	20.3	20.0	19.3	18.2	16.9	15.1	13.4	11.4	9.6	7.6	5.5
150°	16.9	16.5	16.2	14.8	14.1	12.4	11.0	9.3	7.9	5.9	4.5
152.5°	13.8	13.8	13.1	12.0	11.4	10.0	9.0	7.6	6.2	4.8	3.4
155°	11.0	10.7	10.3	9.6	9.0	7.9	6.9	5.9	4.8	3.4	2.4
157.5°	8.6	8.3	7.9	7.2	6.5	6.2	5.2	4.1	3.1	2.4	1.7
160°	6.2	5.9	5.5	5.2	4.8	4.1	3.4	2.8	2.1	1.4	1.0
162.5°	4.1	3.8	3.8	3.4	3.1	2.4	2.1	1.7	1.4	1.0	0.7
165°	2.1	2.1	1.7	1.7	1.4	1.0	1.0	1.0	0.7	0.7	0.3
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: P1213360

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	326.4	326.4	326.4	326.4	326.4	326.4	326.4
2.5°	324.7	324.7	326.0	325.7	324.7	326.7	329.1
5°	323.6	323.6	324.7	324.7	323.6	325.7	327.8
7.5°	321.9	321.6	322.6	322.6	321.2	322.9	325.3
10°	318.8	318.5	319.5	319.5	318.1	319.8	321.9
12.5°	315.4	314.7	315.7	315.4	314.0	315.7	317.8
15°	310.9	310.5	311.2	310.5	309.2	310.9	313.0
17.5°	306.4	305.4	305.7	305.7	303.3	305.0	306.8
20°	300.6	299.2	299.5	299.2	297.5	298.5	300.6
22.5°	294.7	292.6	292.6	292.3	290.2	291.6	293.3
25°	287.5	285.1	285.1	284.7	282.3	283.3	285.1
27.5°	280.2	277.8	276.8	276.5	274.1	274.1	276.5
30°	272.7	269.2	268.5	267.5	265.1	265.1	267.2
32.5°	265.4	260.6	259.2	257.9	255.5	255.1	257.5
35°	255.8	252.0	249.6	248.2	245.5	244.8	246.9
37.5°	247.9	243.1	239.6	237.9	235.1	234.1	236.9
40°	239.3	234.1	229.6	228.6	224.5	223.1	225.5
42.5°	229.6	224.1	219.7	217.6	214.5	213.1	213.5
45°	220.0	214.1	209.3	206.6	203.5	201.1	202.4
47.5°	210.0	204.8	199.0	194.9	191.1	189.4	190.0
50°	200.0	193.8	188.3	183.8	179.4	177.3	178.7
52.5°	190.0	183.5	177.3	172.5	167.3	165.3	165.6
55°	180.4	173.5	166.3	161.1	156.3	153.2	152.5
57.5°	170.8	163.2	155.6	149.8	143.6	140.8	139.8
60°	160.4	152.5	144.6	137.7	131.2	128.1	126.7
62.5°	150.8	142.2	133.2	126.0	119.5	115.3	114.3
65°	141.5	131.5	122.6	114.3	107.1	102.6	101.2
67.5°	131.5	121.2	111.5	102.6	95.7	89.9	89.2
70°	122.2	111.2	100.5	91.2	83.7	77.8	75.1
72.5°	112.9	101.6	90.5	80.6	70.9	65.4	63.3
75°	104.0	92.3	80.6	70.2	59.6	53.0	51.0
77.5°	95.7	83.7	71.3	59.9	49.9	41.7	38.9
80°	87.8	75.4	62.3	50.6	39.9	31.0	27.9
82.5°	79.5	67.8	54.4	42.0	31.0	21.7	17.9
85°	72.3	60.6	47.2	34.8	23.8	13.8	9.6
87.5°	66.4	53.7	41.7	29.3	17.9	7.9	2.8
90°	60.6	48.2	36.1	24.1	13.4	4.5	0.3
92.5°	55.4	43.7	31.7	20.7	10.3	3.1	0.3
95°	50.6	39.2	27.9	17.2	8.3	2.1	0.3
97.5°	46.1	35.5	24.8	14.8	6.9	1.7	0.3
100°	42.3	32.0	22.0	13.1	5.9	1.4	0.3
102.5°	38.6	28.9	19.6	11.4	5.2	1.0	0.3
105°	35.5	26.2	17.6	10.3	4.5	1.0	0.3
107.5°	32.4	23.8	15.8	9.0	3.8	0.7	0.3
110°	29.3	21.7	14.1	7.9	3.4	0.7	0.3



TEST NUMBER: P1213360

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	26.9	19.6	12.7	7.2	2.8	0.7	0.3
115°	24.4	17.6	11.4	6.2	2.4	0.3	0.3
117.5°	22.0	15.8	10.0	5.5	2.1	0.3	0.3
120°	20.0	14.1	9.0	4.8	1.7	0.3	0.3
122.5°	17.9	12.7	7.9	4.1	1.4	0.3	0.3
125°	16.2	11.4	6.9	3.4	1.0	0.3	0.3
127.5°	14.5	10.0	6.2	3.1	1.0	0.3	0.3
130°	12.7	9.0	5.2	2.4	0.7	0.3	0.3
132.5°	11.4	7.6	4.5	2.1	0.7	0.3	0.3
135°	10.0	6.5	3.8	1.4	0.7	0.3	0.3
137.5°	8.6	5.5	3.1	1.0	0.3	0.3	0.3
140°	7.2	4.8	2.4	1.0	0.3	0.3	0.3
142.5°	6.2	3.8	1.7	0.7	0.3	0.3	0.3
145°	4.8	3.1	1.4	0.7	0.3	0.3	0.3
147.5°	3.8	2.4	1.0	0.7	0.3	0.3	0.3
150°	2.8	1.7	1.0	0.3	0.3	0.3	0.3
152.5°	2.1	1.4	0.7	0.3	0.3	0.3	0.3
155°	1.4	1.0	0.7	0.3	0.3	0.3	0.3
157.5°	1.0	0.7	0.3	0.3	0.3	0.3	0.3
160°	0.7	0.3	0.3	0.3	0.3	0.3	0.3
162.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3
165°	0.3	0.3	0.3	0.3	0.3	0.3	0.3
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)