

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: P1214062

Luminaire Tested: 4SNLED-LD5-16SL-LW-UNV-L950-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1214062
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-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

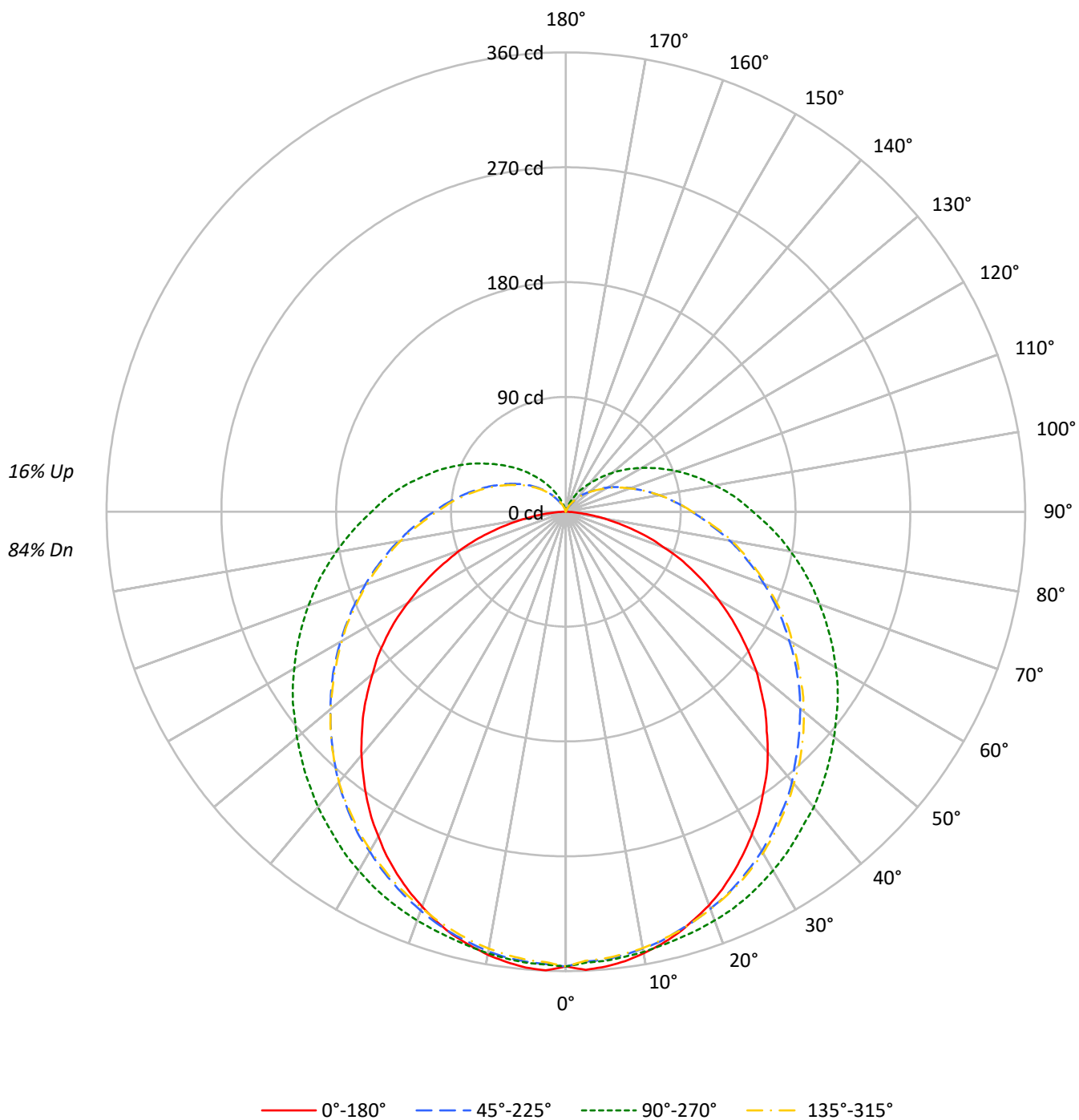
Lumens per Lamp: N/A
Luminaire Lumens: 1548.0 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	2879	2879	2879	2879
5°	2895	2775	2901	2787
10°	2868	2696	2877	2704
15°	2834	2629	2847	2632
20°	2790	2579	2799	2579
25°	2735	2535	2752	2533
30°	2674	2490	2694	2490
35°	2602	2449	2631	2451
40°	2531	2424	2562	2424
45°	2449	2399	2487	2401
50°	2365	2383	2396	2390
55°	2246	2386	2317	2396
60°	2120	2393	2189	2407
65°	1980	2416	2068	2441
70°	1782	2461	1921	2496
75°	1555	2541	1703	2590
80°	1202	2661	1368	2722
85°	717	2851	902	2932

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 270°

Vertical Angle: 90°

Luminance: 3277 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.8	2.2
10°-20°	97.0	6.3
20°-30°	148.7	9.6
30°-40°	183.5	11.9
40°-50°	199.1	12.9
50°-60°	196.2	12.7
60°-70°	177.4	11.5
70°-80°	147.8	9.5
80°-90°	114.5	7.4
90°-100°	86.8	5.6
100°-110°	64.2	4.1
110°-120°	44.7	2.9
120°-130°	28.5	1.8
130°-140°	16.0	1.0
140°-150°	7.3	0.5
150°-160°	2.3	0.1
160°-170°	0.3	0.0
170°-180°	0.0	0.0
0°-30°	279.5	18.1
0°-40°	463.0	29.9
0°-60°	858.2	55.4
0°-90°	1297.9	83.8
90°-120°	195.7	12.6
90°-150°	247.6	16.0
90°-180°	250.0	16.1
0°-180°	1548.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	356	356	356	356	356	
5°	358	353	359	355	358	34
15°	342	346	343	346	342	96
25°	311	334	313	334	311	143
35°	270	314	272	314	270	169
45°	221	289	224	289	221	170
55°	166	260	172	261	166	149
65°	110	228	115	230	110	110
75°	56	195	61	199	56	59
85°	10	163	13	167	10	13
90°	0	147	1	152	0	1
95°	0	133	0	139	0	0
105°	0	106	0	112	0	0
115°	0	80	0	88	0	0
125°	0	58	0	64	0	0
135°	0	38	0	44	0	0
145°	0	22	0	27	0	0
155°	0	9	0	12	0	0
165°	0	2	0	2	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°	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3
2.5°	359.3	359.3	358.9	358.2	358.6	359.7	358.9	357.1	355.9	352.9	353.7
5°	357.8	357.8	357.4	356.7	357.1	358.6	357.8	356.3	354.8	352.2	353.3
7.5°	355.2	355.2	354.8	354.0	354.8	356.3	355.6	354.0	352.9	350.3	351.4
10°	351.4	351.8	351.4	350.3	351.8	353.3	352.9	351.0	349.9	347.7	348.8
12.5°	346.9	347.3	346.9	346.5	347.3	349.5	348.8	347.3	346.5	344.7	345.8
15°	341.6	342.0	341.3	341.3	342.0	344.3	344.3	342.8	342.0	340.1	342.4
17.5°	334.9	335.3	334.9	334.9	335.6	337.9	338.3	337.5	336.8	336.0	338.3
20°	328.1	327.7	327.7	327.4	328.9	332.2	331.9	331.9	331.1	331.1	333.8
22.5°	320.2	320.2	319.8	319.8	321.7	324.7	324.7	325.5	324.7	326.2	328.5
25°	311.2	311.6	311.2	312.0	313.5	316.8	317.2	318.3	318.7	320.2	322.9
27.5°	301.8	302.2	301.8	302.6	305.2	307.8	309.7	311.2	311.6	313.8	317.2
30°	291.7	291.7	292.0	292.8	295.8	299.9	301.4	303.3	303.3	307.1	310.5
32.5°	281.1	281.1	281.1	282.6	286.0	290.9	292.8	295.0	295.8	299.6	303.3
35°	269.5	269.9	269.9	271.0	275.5	280.4	283.0	285.6	287.1	291.7	295.4
37.5°	258.6	259.3	258.2	259.7	266.1	270.2	273.2	275.9	278.5	284.5	287.5
40°	246.2	246.9	246.6	249.6	254.8	260.1	263.5	266.1	269.9	275.9	279.3
42.5°	233.0	233.8	234.5	237.9	243.5	248.8	252.9	256.3	260.8	266.1	271.7
45°	221.0	221.0	222.1	226.3	232.3	237.9	242.8	246.6	251.8	257.5	263.1
47.5°	207.5	207.8	209.3	214.2	220.6	227.4	231.9	236.8	242.4	248.4	254.8
50°	195.1	195.1	197.3	202.6	208.6	216.1	221.0	226.6	232.7	239.8	246.2
52.5°	180.8	181.5	184.9	189.8	197.7	204.5	210.1	216.1	223.3	230.8	237.9
55°	166.5	168.0	170.6	177.4	185.7	192.1	198.8	206.3	213.1	221.4	229.6
57.5°	152.6	153.7	157.9	164.6	173.3	181.2	188.3	195.4	203.7	212.0	220.6
60°	138.3	139.8	144.7	151.5	160.9	169.1	177.4	184.9	193.6	202.2	211.2
62.5°	124.8	125.9	131.5	139.4	148.8	157.9	166.1	175.1	184.5	192.8	201.8
65°	110.5	112.4	118.8	125.9	136.8	145.8	155.2	165.0	174.8	183.8	192.4
67.5°	97.3	98.5	105.2	113.5	124.4	134.6	144.3	154.8	165.0	174.4	183.0
70°	81.9	85.7	92.5	101.1	112.8	123.3	133.8	144.7	155.6	165.4	173.6
72.5°	69.2	72.2	79.7	89.1	100.4	112.8	123.7	135.3	146.2	156.4	165.0
75°	55.6	58.6	67.3	77.8	89.5	102.6	113.9	125.9	137.2	147.3	156.4
77.5°	42.5	46.2	55.6	66.5	79.3	92.8	104.5	116.5	128.2	139.1	148.1
80°	30.4	34.6	44.7	57.1	69.5	83.1	95.8	107.9	119.5	130.4	139.8
82.5°	19.5	24.1	35.0	47.4	60.5	74.0	87.2	99.2	110.9	121.8	131.5
85°	10.5	15.4	26.7	39.1	52.2	65.8	78.9	91.7	103.0	113.1	123.7
87.5°	3.0	9.0	19.9	32.3	45.9	58.3	71.0	83.8	95.1	106.0	115.4
90°	0.4	5.3	15.0	26.7	39.8	51.9	64.6	76.7	87.9	98.8	108.2
92.5°	0.4	3.4	11.7	22.2	34.2	46.6	59.4	71.0	81.6	92.5	101.9
95°	0.4	2.6	9.4	18.8	30.1	41.7	53.7	65.0	75.9	86.1	95.5
97.5°	0.4	1.9	7.5	16.2	26.3	37.2	48.9	60.1	70.7	80.4	89.1
100°	0.4	1.5	6.0	13.9	22.9	33.5	44.0	54.9	65.0	74.4	83.4
102.5°	0.4	1.1	5.3	11.7	20.3	29.7	39.8	50.0	59.8	68.8	77.8
105°	0.4	1.1	4.5	10.1	18.0	26.7	36.1	45.9	54.9	63.5	71.8
107.5°	0.4	0.8	3.8	8.6	15.8	24.1	32.7	42.1	50.4	58.6	66.5
110°	0.4	0.8	3.0	7.9	13.9	21.4	29.7	38.3	46.2	54.1	61.6

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.4	0.8	2.6	6.8	12.0	19.2	26.7	34.6	42.1	50.0	56.8
115°	0.4	0.8	2.3	6.0	11.3	16.5	24.1	31.2	38.7	45.9	52.2
117.5°	0.4	0.8	1.9	4.9	9.8	15.0	21.0	28.2	35.0	41.7	47.7
120°	0.4	0.8	1.5	4.5	8.6	13.5	18.8	25.2	31.6	38.0	44.4
122.5°	0.4	0.4	1.5	3.8	7.5	12.0	17.3	22.2	28.2	34.2	39.8
125°	0.4	0.4	1.5	3.4	6.4	10.9	15.4	19.9	25.2	30.4	35.3
127.5°	0.4	0.4	1.1	2.6	5.6	9.4	13.5	18.4	22.2	27.1	31.9
130°	0.4	0.4	1.1	2.3	4.9	7.9	12.0	16.2	20.7	24.1	28.2
132.5°	0.4	0.4	1.1	1.9	3.8	6.4	10.1	13.9	18.0	21.8	25.2
135°	0.4	0.4	0.8	1.5	3.0	5.3	8.3	11.7	15.8	19.5	22.9
137.5°	0.4	0.4	0.8	1.5	2.3	4.5	6.4	9.4	13.2	16.5	19.9
140°	0.4	0.4	0.8	1.1	1.9	3.4	5.3	7.5	10.5	13.5	17.3
142.5°	0.4	0.4	0.4	1.1	1.5	2.6	4.1	6.0	8.3	10.9	13.9
145°	0.4	0.4	0.4	1.1	1.5	1.9	3.4	4.9	6.4	8.3	10.9
147.5°	0.4	0.4	0.4	0.8	1.1	1.5	2.6	3.8	4.9	6.4	7.9
150°	0.4	0.4	0.4	0.8	1.1	1.5	1.9	2.6	3.8	5.3	6.4
152.5°	0.4	0.4	0.4	0.8	0.8	1.1	1.5	1.9	2.6	3.8	4.5
155°	0.4	0.4	0.4	0.4	0.8	1.1	1.5	1.5	1.9	2.6	3.4
157.5°	0.4	0.4	0.4	0.4	0.8	0.8	1.1	1.1	1.5	1.5	2.3
160°	0.4	0.4	0.4	0.4	0.4	0.8	0.8	1.1	1.1	1.1	1.1
162.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8	0.8	1.1	1.1
165°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8	0.8
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°	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3
2.5°	353.7	354.0	355.2	355.2	354.4	354.4	354.0	353.7	354.0	354.8	354.8
5°	352.9	353.3	354.4	354.8	354.0	353.7	353.7	353.3	353.7	354.4	354.4
7.5°	351.4	351.8	352.9	353.3	352.5	352.5	352.2	351.8	352.5	352.9	352.9
10°	349.2	349.5	351.0	351.4	351.0	350.7	350.7	350.3	350.7	351.4	351.4
12.5°	346.2	346.9	348.8	348.8	348.8	348.4	348.4	348.0	348.4	349.2	348.8
15°	342.8	344.3	345.8	346.5	346.5	346.5	346.2	345.8	346.5	346.9	346.5
17.5°	339.0	340.9	343.1	343.9	343.9	344.3	343.9	343.5	344.3	344.3	343.9
20°	335.3	337.1	339.4	340.1	340.9	341.3	341.3	340.9	341.3	341.6	341.3
22.5°	330.4	332.6	335.3	336.4	337.1	337.9	337.9	337.9	338.3	338.6	337.9
25°	325.1	327.7	330.7	331.9	333.4	333.8	334.1	334.1	334.5	334.9	333.8
27.5°	319.5	322.5	325.5	327.4	328.5	329.2	329.2	329.6	330.0	330.4	329.2
30°	312.7	317.2	319.8	321.4	322.9	324.0	324.4	324.7	325.1	325.5	324.4
32.5°	306.7	310.5	313.8	315.7	317.6	319.1	319.5	319.5	320.2	320.2	319.1
35°	299.6	304.1	307.4	309.3	311.6	312.7	313.5	313.5	314.2	314.2	313.1
37.5°	292.4	296.9	300.7	302.9	305.6	307.1	307.4	307.4	308.2	308.2	306.7
40°	284.9	289.8	293.9	296.5	298.8	300.7	301.1	302.2	302.2	301.8	300.3
42.5°	277.4	281.9	286.4	289.4	292.4	294.3	295.0	295.4	295.4	295.0	293.9
45°	269.1	274.4	278.5	282.3	285.3	287.1	288.3	288.7	288.7	287.9	286.8
47.5°	261.2	266.5	270.6	274.7	277.8	280.0	281.1	281.5	281.1	280.8	279.6
50°	252.9	259.0	263.1	267.2	270.2	272.1	274.0	274.4	274.0	273.6	271.4
52.5°	244.3	250.7	255.2	259.3	262.7	265.0	266.5	266.9	266.9	266.1	264.6
55°	235.7	241.3	246.9	251.4	255.2	257.5	259.3	260.1	259.3	258.6	256.7
57.5°	227.8	233.0	238.7	243.5	247.3	250.3	251.8	252.6	251.8	250.7	248.8
60°	218.4	224.0	230.4	234.9	239.0	242.0	242.8	244.3	243.5	242.4	240.5
62.5°	209.3	216.1	221.8	227.4	230.8	234.2	235.7	236.4	235.7	234.5	232.7
65°	200.0	207.5	213.1	218.7	222.5	225.9	227.8	228.1	227.4	226.3	224.4
67.5°	191.3	198.4	204.5	210.5	213.9	217.2	219.1	219.9	219.1	217.6	215.7
70°	182.7	189.8	196.9	201.5	205.6	209.3	210.5	211.6	210.9	209.3	207.1
72.5°	174.0	181.5	188.7	193.2	197.7	201.1	202.6	203.7	203.0	201.5	198.8
75°	165.0	172.9	180.0	184.9	189.4	192.8	194.3	195.4	194.7	193.2	190.2
77.5°	156.7	164.6	171.4	176.6	181.2	184.2	186.8	187.2	186.4	184.9	181.9
80°	148.1	156.0	163.1	168.4	172.9	175.9	177.8	178.9	178.2	176.6	173.6
82.5°	140.6	147.7	154.8	160.1	164.6	168.4	169.9	171.0	170.6	168.4	166.1
85°	132.3	140.6	146.2	151.8	156.4	160.1	161.2	162.7	162.4	160.5	157.5
87.5°	124.0	132.3	139.1	144.7	148.8	151.8	153.7	154.5	154.1	152.2	148.8
90°	117.3	124.8	131.5	137.6	140.9	144.3	146.2	146.6	146.6	144.3	141.7
92.5°	110.9	118.0	124.8	130.4	134.6	137.6	139.1	139.8	139.4	137.6	134.6
95°	103.7	111.6	118.0	123.7	127.8	130.8	132.3	133.1	132.7	130.8	127.8
97.5°	97.7	104.9	111.3	116.5	120.6	123.7	125.2	125.9	125.9	124.0	121.0
100°	91.7	98.8	104.9	110.1	113.9	116.9	118.4	118.8	118.4	116.9	113.9
102.5°	85.7	92.5	98.5	103.4	107.5	110.1	111.6	112.0	112.0	110.1	107.1
105°	79.7	86.4	92.1	97.3	100.7	103.4	104.5	105.6	105.2	103.7	100.7
107.5°	74.0	80.8	86.1	91.0	94.3	97.0	98.1	99.2	98.8	97.3	94.3
110°	68.8	75.2	80.1	84.9	87.9	90.6	92.5	92.8	92.1	90.6	87.9

TEST NUMBER: P1214062

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	63.9	69.5	74.4	78.9	82.3	84.2	85.7	86.4	85.7	84.2	82.3
115°	58.6	64.3	69.2	73.3	76.3	78.6	79.7	80.4	79.7	78.2	76.3
117.5°	53.7	59.0	63.9	68.0	70.7	72.5	73.7	74.4	73.7	72.5	70.7
120°	49.6	54.1	58.6	62.4	65.4	66.9	68.0	68.8	68.4	66.9	65.0
122.5°	44.7	49.6	53.7	57.5	60.1	61.6	62.4	63.1	62.8	61.6	59.8
125°	40.6	44.7	48.9	52.2	54.9	56.4	57.1	57.9	57.5	56.4	54.1
127.5°	36.1	40.6	44.0	47.4	49.2	51.5	51.9	52.6	52.2	51.1	49.2
130°	32.7	36.1	39.5	42.5	44.7	46.2	47.0	47.4	46.6	45.9	44.0
132.5°	28.6	32.3	35.3	38.0	39.5	41.0	41.7	42.1	42.1	41.0	39.5
135°	25.6	28.2	30.8	33.5	35.0	36.5	37.2	37.6	37.2	36.5	35.0
137.5°	22.9	25.2	27.1	29.3	31.2	31.9	32.7	32.7	32.3	31.9	30.8
140°	19.9	22.6	24.4	25.9	27.4	27.8	28.6	28.6	28.2	27.8	27.1
142.5°	16.9	19.2	21.0	22.9	24.1	24.8	25.2	25.6	25.2	24.8	23.7
145°	13.5	16.2	18.0	19.2	20.7	21.0	21.4	21.8	21.4	21.0	19.9
147.5°	10.5	12.8	14.7	16.2	17.3	17.7	18.0	18.4	18.0	17.3	16.9
150°	7.5	9.4	11.7	13.2	13.9	14.7	14.7	14.7	15.0	14.3	13.5
152.5°	6.0	6.8	8.3	9.8	10.9	11.3	11.7	11.7	11.3	11.3	10.5
155°	4.1	4.9	6.0	7.1	8.3	8.6	9.0	9.0	8.6	8.6	8.3
157.5°	2.6	3.4	4.1	4.9	6.0	6.4	6.8	6.8	6.8	6.4	6.0
160°	1.5	1.9	2.3	3.0	3.8	4.1	4.5	4.5	4.5	4.5	4.1
162.5°	1.1	1.1	1.1	1.5	1.9	2.3	2.6	2.6	2.6	2.6	2.3
165°	0.8	0.8	0.8	0.8	0.8	1.1	1.5	1.5	1.5	1.5	1.5
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: P1214062

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3
2.5°	354.4	354.4	354.8	354.0	351.8	352.2	352.2	353.7	354.4	354.8	356.7
5°	353.7	353.7	354.4	353.3	351.4	351.4	351.4	352.9	353.3	354.0	355.6
7.5°	352.5	352.5	352.9	351.8	349.5	349.5	349.2	350.7	351.4	351.8	353.3
10°	350.7	350.7	351.0	349.9	347.3	347.3	346.9	348.0	348.4	349.2	350.3
12.5°	348.0	348.0	348.0	346.9	344.3	343.9	343.5	344.7	344.7	345.0	346.2
15°	345.8	345.0	345.0	343.9	341.3	340.5	339.8	340.1	340.9	340.5	341.3
17.5°	343.1	342.4	341.6	340.5	337.1	336.0	335.3	335.6	335.3	334.9	335.6
20°	340.1	339.0	338.6	336.8	333.4	331.5	330.0	329.2	329.6	328.5	328.9
22.5°	336.8	335.3	334.5	332.2	328.9	326.6	324.7	323.2	322.9	321.4	321.7
25°	332.6	330.7	329.6	327.7	324.0	321.4	319.1	316.8	315.7	313.8	313.5
27.5°	327.7	325.9	324.4	322.5	318.7	315.3	312.7	309.7	308.2	305.9	304.8
30°	322.9	320.6	318.3	316.8	312.7	308.9	304.8	302.2	299.9	297.3	295.4
32.5°	316.8	314.6	312.3	310.1	306.3	301.8	298.4	294.3	291.7	288.7	286.4
35°	310.8	307.8	305.6	302.6	299.2	293.9	289.8	285.6	282.3	278.9	276.2
37.5°	304.1	301.8	298.4	295.8	291.7	286.4	281.9	276.6	273.6	269.1	265.7
40°	297.7	295.0	291.7	288.3	284.1	278.1	273.2	267.2	263.8	258.6	255.2
42.5°	291.3	287.5	284.1	280.4	275.9	270.2	264.2	258.2	253.7	248.8	243.9
45°	284.1	280.0	275.9	271.7	267.2	261.6	255.2	248.8	243.2	238.7	232.7
47.5°	276.6	272.5	267.6	263.1	258.2	252.6	245.8	239.0	233.0	227.8	221.4
50°	269.1	265.0	259.7	254.8	249.2	243.5	236.4	228.5	222.1	215.4	209.7
52.5°	261.2	257.1	252.2	245.8	239.8	234.2	226.6	218.4	211.2	205.6	198.4
55°	253.3	249.2	243.5	237.2	231.1	224.0	216.9	208.6	200.7	193.9	186.8
57.5°	245.1	241.3	234.9	229.6	222.1	214.6	207.1	199.2	190.6	182.7	174.4
60°	236.8	232.7	226.6	220.2	212.7	205.2	197.3	188.7	179.7	171.0	163.5
62.5°	229.3	224.0	218.4	211.6	203.7	196.6	187.5	178.2	169.1	160.1	151.1
65°	220.6	215.0	209.7	203.0	194.7	186.4	177.4	168.0	158.2	148.5	139.4
67.5°	212.0	206.3	200.7	193.9	185.3	176.6	167.3	157.9	147.0	137.6	127.0
70°	203.3	198.8	191.7	184.5	176.6	167.3	157.9	147.7	136.4	126.3	115.4
72.5°	194.7	190.2	183.0	175.5	168.0	158.2	148.1	137.9	127.4	115.8	104.1
75°	186.4	180.8	174.4	167.3	159.4	149.2	139.1	128.5	116.1	105.2	93.2
77.5°	178.5	173.3	166.9	159.0	150.3	140.6	130.0	119.1	106.7	95.1	81.9
80°	169.9	164.6	158.2	150.3	141.7	132.3	121.0	109.7	97.7	84.9	71.4
82.5°	161.6	156.7	149.6	142.4	133.1	123.7	112.4	101.1	88.3	75.9	62.8
85°	153.0	148.1	141.3	133.8	124.8	114.6	104.1	92.8	80.1	67.3	54.1
87.5°	145.5	139.8	133.1	125.5	116.5	106.7	96.6	84.6	72.2	59.8	46.2
90°	137.6	132.3	125.5	118.0	109.0	99.2	88.7	77.4	65.4	52.6	39.8
92.5°	130.8	125.2	118.8	111.3	102.2	92.8	82.3	71.0	59.4	47.0	34.6
95°	124.0	118.4	112.4	104.9	95.8	86.4	75.9	65.0	53.7	41.7	30.1
97.5°	116.5	111.6	105.6	98.5	89.5	80.4	70.3	59.8	48.9	37.2	26.3
100°	110.5	104.9	99.2	91.7	83.4	74.8	64.6	54.5	44.0	33.1	22.9
102.5°	103.7	98.5	92.8	85.7	77.4	68.8	59.4	49.6	39.8	29.7	19.9
105°	97.3	92.5	86.4	79.7	71.8	63.5	54.5	45.5	36.1	26.3	17.7
107.5°	91.0	86.1	80.4	74.0	66.5	58.3	50.0	41.0	32.3	23.7	15.8
110°	84.6	80.1	74.8	68.4	61.3	53.7	45.9	37.6	28.9	21.0	13.9



TEST NUMBER: P1214062

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	78.9	74.4	69.2	63.1	56.4	49.2	41.7	33.8	25.9	18.8	12.0
115°	73.3	69.2	63.9	58.6	51.9	45.1	38.0	30.4	23.3	16.9	10.5
117.5°	67.7	63.5	58.6	53.4	47.4	41.0	34.2	27.1	21.0	15.0	9.4
120°	62.0	58.3	53.7	48.9	43.6	37.2	30.4	24.4	18.8	13.2	8.3
122.5°	56.8	53.4	49.2	44.7	39.1	33.1	27.4	22.2	16.9	11.7	6.8
125°	51.9	48.5	44.7	40.2	35.0	29.7	24.8	19.9	14.7	10.1	5.6
127.5°	47.0	43.6	39.8	35.7	31.6	26.7	22.2	17.7	13.2	9.0	4.9
130°	42.1	39.1	35.7	32.3	28.2	23.7	19.9	15.4	11.3	7.1	4.1
132.5°	37.2	35.0	31.9	28.6	24.8	21.4	17.3	13.5	9.8	6.4	3.8
135°	33.1	30.8	28.2	25.2	22.2	18.8	15.0	11.7	8.3	5.3	3.0
137.5°	29.3	27.4	24.8	22.2	19.5	16.2	13.2	9.8	6.8	4.5	2.3
140°	25.9	24.1	21.8	19.2	16.9	13.9	10.9	7.9	6.0	3.8	1.9
142.5°	22.6	20.7	18.8	16.5	14.3	11.7	9.0	6.8	4.9	3.0	1.9
145°	19.2	17.7	15.8	13.9	11.7	9.4	7.5	5.6	3.8	2.3	1.5
147.5°	15.8	14.7	12.8	11.3	9.4	7.5	6.0	4.5	3.0	1.9	1.1
150°	12.8	11.7	10.1	8.6	7.5	6.0	4.9	3.4	2.3	1.9	1.1
152.5°	9.8	9.0	7.9	7.1	6.0	4.5	3.4	2.6	1.9	1.5	0.8
155°	7.9	7.1	6.4	5.3	4.5	3.4	2.6	1.9	1.5	1.1	0.8
157.5°	5.6	5.3	4.5	3.8	3.0	2.3	1.9	1.9	1.1	0.8	0.4
160°	3.8	3.4	3.0	2.3	1.9	1.9	1.5	1.1	0.8	0.8	0.4
162.5°	2.3	1.9	1.9	1.9	1.5	1.5	1.1	0.8	0.8	0.4	0.4
165°	1.5	1.5	1.5	1.1	1.1	1.1	0.8	0.4	0.4	0.4	0.4
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: P1214062

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3
2.5°	356.7	355.6	357.1	359.7	360.1	359.7	358.9	360.1	361.6	361.2	358.6
5°	355.9	354.4	355.9	358.6	358.6	358.2	357.8	358.9	360.4	360.1	357.8
7.5°	353.7	352.2	353.7	355.9	356.3	355.6	355.6	356.7	358.2	357.8	355.9
10°	350.7	349.2	349.9	352.5	353.3	352.5	352.5	353.7	355.6	355.2	352.9
12.5°	346.2	345.0	345.8	348.0	348.8	348.4	348.0	349.5	351.4	351.4	349.2
15°	341.3	339.8	340.5	343.1	343.5	342.8	343.1	344.3	346.5	346.5	344.7
17.5°	335.6	333.8	334.9	336.8	337.1	337.1	337.1	338.6	341.3	340.9	339.4
20°	329.2	326.6	327.4	329.2	330.0	330.0	330.0	332.6	334.5	334.5	333.0
22.5°	321.7	319.8	319.8	321.7	322.9	322.5	322.5	324.7	327.4	327.0	327.0
25°	313.1	311.6	310.8	313.1	313.5	313.8	314.6	316.8	319.8	319.8	320.2
27.5°	304.1	302.6	302.2	304.1	304.4	304.8	305.6	308.2	311.2	311.6	312.3
30°	295.4	293.2	292.4	293.9	294.7	295.0	295.0	299.2	301.8	302.9	304.4
32.5°	285.3	283.0	281.1	283.8	284.1	284.9	285.3	289.4	292.4	294.3	296.5
35°	275.1	271.4	270.6	272.5	273.2	273.6	274.4	278.9	283.0	284.5	287.5
37.5°	263.8	261.2	259.0	260.8	261.6	262.0	264.2	268.4	272.5	274.7	277.8
40°	253.3	249.9	248.1	249.2	249.9	250.3	252.9	257.5	262.3	265.0	268.7
42.5°	241.7	237.2	235.7	236.8	237.2	238.3	240.5	246.6	251.4	255.2	258.2
45°	230.0	226.6	223.3	224.4	224.8	225.5	228.9	235.3	240.5	245.1	248.4
47.5°	218.0	213.9	210.5	211.2	212.7	213.1	216.9	224.4	229.3	234.2	238.7
50°	206.0	200.3	197.7	197.7	198.4	200.3	205.2	212.7	218.0	223.6	228.5
52.5°	193.6	188.3	185.3	185.7	186.4	188.7	193.2	200.7	206.7	212.7	218.7
55°	181.2	175.5	172.5	171.8	172.5	175.5	180.8	188.7	194.7	201.8	208.2
57.5°	168.8	162.0	159.4	158.2	159.0	162.7	168.0	176.3	183.8	190.6	198.1
60°	155.2	150.0	145.5	142.8	144.7	149.6	155.2	163.9	171.8	179.3	187.5
62.5°	143.6	136.8	131.9	129.3	131.2	135.3	143.2	151.5	160.1	168.8	177.0
65°	130.4	123.7	118.0	115.4	117.3	122.2	130.0	139.1	148.5	157.1	166.9
67.5°	117.6	110.5	103.7	101.1	103.4	108.6	117.3	127.4	137.6	146.6	157.1
70°	105.2	97.3	90.2	88.3	89.8	97.0	105.2	115.4	125.9	136.4	147.3
72.5°	94.0	84.2	76.7	74.4	76.3	84.2	93.6	104.1	115.4	126.7	138.3
75°	80.8	71.8	63.5	60.9	63.1	70.3	81.9	93.2	105.2	117.3	128.2
77.5°	70.3	59.8	51.1	47.0	50.7	59.8	71.0	83.1	95.5	107.9	120.3
80°	59.4	48.5	39.1	34.6	38.7	48.5	59.8	72.9	86.8	99.2	110.5
82.5°	49.6	38.0	28.2	23.3	27.8	38.7	51.1	64.3	77.8	90.2	103.4
85°	40.6	28.6	18.4	13.2	19.5	29.3	42.5	56.0	69.9	82.7	95.5
87.5°	33.1	21.4	11.3	5.6	12.0	22.9	35.3	48.9	62.8	75.5	87.6
90°	27.1	15.4	6.0	0.8	7.1	17.3	29.3	42.5	55.6	68.8	80.8
92.5°	22.2	11.7	3.4	0.4	4.5	13.9	25.2	37.6	50.4	63.1	74.8
95°	18.4	9.0	2.3	0.4	3.4	10.9	21.4	33.5	45.5	57.9	69.5
97.5°	15.8	7.5	1.9	0.4	2.6	9.4	18.4	29.7	41.3	53.0	64.3
100°	13.5	6.0	1.5	0.4	2.3	7.9	16.2	26.3	37.2	48.5	59.4
102.5°	11.7	4.9	1.1	0.4	1.9	6.8	14.3	23.7	33.5	44.4	54.9
105°	10.1	4.1	1.1	0.4	1.5	6.0	12.8	21.0	30.8	40.6	50.7
107.5°	8.6	3.4	0.8	0.4	1.1	4.9	11.3	19.2	27.8	37.2	46.6
110°	7.5	3.0	0.8	0.4	1.1	4.5	9.8	17.3	25.2	33.8	42.8

TEST NUMBER: P1214062

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	6.4	2.3	0.8	0.4	0.8	3.8	8.6	15.4	22.9	30.8	39.5
115°	5.6	1.9	0.4	0.4	0.8	3.4	7.9	13.9	20.7	28.2	36.1
117.5°	4.5	1.5	0.4	0.4	0.4	2.6	6.8	12.4	18.8	25.9	33.1
120°	3.8	1.5	0.4	0.4	0.4	2.3	6.0	10.9	16.9	23.3	30.1
122.5°	3.4	1.1	0.4	0.4	0.4	1.9	5.3	9.8	15.0	21.0	27.4
125°	3.0	1.1	0.4	0.4	0.4	1.5	4.5	8.6	13.5	18.8	24.8
127.5°	2.3	1.1	0.4	0.4	0.4	1.1	4.1	7.5	12.0	16.9	22.2
130°	1.9	0.8	0.4	0.4	0.4	1.1	3.4	6.8	10.5	15.0	19.9
132.5°	1.5	0.8	0.4	0.4	0.4	0.8	2.6	5.3	9.0	13.2	17.7
135°	1.5	0.8	0.4	0.4	0.4	0.8	1.9	4.5	7.5	11.3	15.0
137.5°	1.5	0.4	0.4	0.4	0.4	0.8	1.5	3.4	6.0	9.0	12.4
140°	1.1	0.4	0.4	0.4	0.4	0.4	1.1	2.6	4.9	7.5	10.5
142.5°	1.1	0.4	0.4	0.4	0.4	0.4	1.1	1.9	3.8	6.0	8.3
145°	0.8	0.4	0.4	0.4	0.4	0.4	0.8	1.5	3.0	4.5	6.8
147.5°	0.8	0.4	0.4	0.4	0.4	0.4	0.8	1.1	2.3	3.8	5.3
150°	0.8	0.4	0.4	0.4	0.4	0.4	0.8	1.1	1.5	2.6	4.1
152.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8	1.1	1.9	2.6
155°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	1.1	1.5	1.9
157.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8	1.1	1.5
160°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8	1.1
162.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8
165°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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: P1214062

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3
2.5°	357.4	354.8	355.6	355.2	355.9	357.1	357.1	356.7	356.7	355.9	355.2
5°	356.7	354.0	355.2	354.8	355.6	356.7	356.7	356.3	356.3	355.2	354.8
7.5°	354.4	352.5	353.3	353.3	354.0	355.2	355.2	354.8	354.8	353.7	353.3
10°	352.2	349.9	351.0	351.0	351.8	353.3	353.3	352.9	352.9	351.8	351.4
12.5°	348.4	346.2	348.0	348.4	349.2	350.7	350.3	350.3	350.3	349.2	348.8
15°	343.9	342.4	344.3	344.7	345.8	347.7	347.7	347.7	347.7	346.5	346.2
17.5°	339.0	337.9	339.8	340.5	342.0	343.9	343.9	344.3	344.7	343.9	343.5
20°	333.4	332.6	334.5	336.0	338.3	340.1	340.9	341.3	342.0	341.3	340.9
22.5°	327.0	327.0	329.6	331.1	333.8	335.6	336.8	337.9	338.6	337.9	337.5
25°	319.8	321.0	323.6	326.2	329.2	331.1	332.2	333.8	334.5	334.1	333.8
27.5°	313.1	314.6	318.0	320.6	323.2	326.2	327.4	329.2	330.0	330.0	329.6
30°	305.2	307.4	311.2	314.2	317.6	320.6	322.1	324.0	325.1	324.4	324.7
32.5°	297.7	301.4	304.4	307.8	311.6	314.6	316.5	318.7	319.8	319.5	319.8
35°	289.4	293.2	297.3	300.7	305.2	308.2	310.8	312.7	314.2	313.8	313.8
37.5°	280.4	285.3	289.4	293.9	298.0	301.4	304.1	306.3	307.8	307.8	307.8
40°	271.7	277.0	281.1	286.4	291.7	294.7	297.7	299.9	301.4	301.8	302.2
42.5°	262.3	268.0	272.9	278.5	283.8	287.5	290.9	293.5	295.0	295.8	295.4
45°	253.7	259.0	264.6	271.0	275.9	279.6	283.8	286.8	288.3	288.7	289.0
47.5°	243.9	249.9	256.3	262.7	267.6	272.5	276.2	279.3	280.8	281.9	281.9
50°	234.5	240.9	248.1	254.8	260.1	265.0	268.7	272.1	274.0	274.7	275.1
52.5°	225.9	231.9	239.4	246.2	251.4	256.3	261.2	265.0	266.9	267.6	267.6
55°	215.4	222.9	231.1	237.5	243.2	248.8	253.7	257.5	259.3	260.5	261.2
57.5°	205.6	213.5	222.1	228.9	235.7	240.9	245.4	250.3	251.8	253.3	253.7
60°	196.2	204.1	212.4	219.9	226.6	232.3	237.5	241.7	244.3	245.1	245.8
62.5°	186.4	194.7	203.3	210.9	218.0	224.8	229.6	233.4	236.4	237.5	238.3
65°	177.0	185.7	194.3	202.2	209.7	216.5	221.4	225.1	228.1	230.0	230.4
67.5°	166.9	176.3	185.3	193.6	201.1	208.2	213.1	216.9	219.9	222.1	222.5
70°	157.5	167.3	176.3	185.3	192.8	200.0	205.2	209.0	212.4	213.9	214.6
72.5°	148.5	158.6	168.0	177.0	184.5	191.7	197.3	201.1	204.5	206.3	206.7
75°	139.8	150.0	160.1	168.8	176.6	183.8	189.4	193.6	196.6	198.4	199.2
77.5°	131.2	141.7	151.8	160.5	168.8	175.9	180.8	185.7	188.7	190.9	190.9
80°	122.5	133.4	143.9	152.6	160.9	167.3	172.9	177.8	180.8	183.0	183.0
82.5°	115.0	125.5	135.7	144.3	152.6	159.7	165.4	169.9	173.3	174.8	175.1
85°	106.4	118.0	127.4	136.8	144.7	151.5	157.1	162.0	165.0	166.5	167.3
87.5°	99.2	110.5	120.6	128.9	136.8	143.6	150.0	154.1	157.1	159.0	159.7
90°	92.5	103.4	113.5	121.8	130.0	136.4	142.4	146.6	150.0	151.5	152.2
92.5°	86.4	97.3	107.1	115.4	123.3	130.4	136.1	140.2	143.2	144.7	145.8
95°	80.8	91.3	100.7	109.7	117.3	123.7	129.7	133.8	137.2	138.3	139.4
97.5°	75.2	85.3	94.7	103.4	111.3	117.3	122.9	127.0	129.7	131.5	132.7
100°	70.3	80.1	89.1	97.3	104.9	110.5	116.5	120.3	122.9	124.4	125.9
102.5°	65.0	74.8	83.4	91.3	99.2	104.5	110.1	113.9	116.1	118.8	118.8
105°	60.5	69.5	78.2	85.7	92.5	98.8	103.7	107.5	110.1	112.0	112.0
107.5°	55.6	64.6	72.9	80.8	87.2	93.2	97.7	101.1	104.1	105.2	106.4
110°	51.9	59.8	68.0	75.5	81.6	87.2	91.7	95.5	98.1	99.2	100.0

TEST NUMBER: P1214062

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	47.4	55.6	63.1	70.3	76.3	81.6	86.1	89.1	91.7	93.2	93.6
115°	43.6	51.5	58.3	65.0	71.4	75.9	80.1	83.1	85.7	86.8	87.6
117.5°	40.2	47.4	54.1	59.8	65.8	70.7	74.8	77.4	79.7	81.2	81.9
120°	36.8	43.6	49.6	55.2	60.9	65.4	69.2	71.8	74.4	75.5	75.5
122.5°	33.5	39.8	45.5	50.7	56.0	60.1	64.3	66.5	68.8	69.9	69.9
125°	30.4	36.5	41.7	46.6	51.5	55.2	58.6	61.3	63.5	64.3	64.3
127.5°	27.4	33.1	38.0	42.5	46.6	50.4	53.7	56.4	58.3	59.0	59.0
130°	24.8	29.7	34.2	38.7	42.8	45.9	49.2	51.5	52.6	53.7	54.1
132.5°	22.2	26.7	30.8	34.6	38.7	41.7	44.4	46.6	47.7	48.9	49.2
135°	19.5	23.7	27.4	31.2	34.6	37.6	39.8	41.7	43.2	44.0	44.4
137.5°	16.5	21.0	24.4	27.4	31.2	33.5	36.1	37.2	38.7	39.5	39.5
140°	13.9	17.3	21.0	24.1	27.1	29.3	31.6	33.5	34.6	35.0	35.0
142.5°	11.3	14.3	17.3	21.0	23.7	25.6	27.8	29.3	30.1	30.4	30.8
145°	9.0	11.3	13.9	17.3	20.3	22.6	23.7	25.2	25.9	26.3	26.7
147.5°	6.8	9.0	11.3	13.5	16.5	18.8	19.9	21.4	22.2	22.6	22.6
150°	5.3	6.8	8.3	10.5	12.8	15.4	16.9	18.0	18.4	18.8	18.8
152.5°	3.8	5.3	6.4	7.9	9.4	11.7	13.9	14.7	15.0	15.4	15.4
155°	2.6	3.8	4.5	5.6	6.8	8.6	10.5	11.7	12.0	12.4	12.4
157.5°	1.9	2.6	3.0	4.1	4.9	5.6	7.1	9.0	9.4	9.4	9.4
160°	1.1	1.5	1.9	2.6	3.0	3.8	4.5	5.6	6.8	6.8	6.8
162.5°	0.8	1.1	1.1	1.5	1.5	2.3	2.6	3.0	4.1	4.5	4.5
165°	0.4	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.9	2.3	2.3
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: P1214062

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3
2.5°	355.6	356.3	355.9	355.9	355.9	356.7	355.9	352.5	353.3	354.0	354.8
5°	355.2	355.6	355.6	355.2	355.2	355.9	355.2	351.8	352.5	353.3	353.7
7.5°	353.7	354.0	354.0	354.0	353.7	354.4	353.3	350.3	350.3	351.0	351.4
10°	351.8	352.5	352.2	351.8	351.8	351.8	351.0	347.7	347.7	348.0	348.4
12.5°	349.5	349.5	349.5	349.2	348.8	348.8	348.0	344.7	344.3	345.0	344.7
15°	346.5	347.3	346.5	346.2	345.4	345.4	344.3	340.9	340.1	340.5	340.1
17.5°	343.9	344.3	343.5	342.8	342.0	341.6	340.5	336.8	335.6	336.0	335.3
20°	341.3	341.3	340.5	339.8	338.6	337.5	336.0	332.2	330.4	330.4	328.9
22.5°	337.9	337.9	337.1	336.0	334.9	333.4	331.9	328.1	325.1	324.4	323.2
25°	334.1	333.8	333.4	332.2	330.0	328.5	327.0	322.9	319.5	318.0	316.1
27.5°	329.6	329.6	328.5	327.4	325.1	323.2	321.4	317.6	313.1	311.2	308.6
30°	324.7	324.7	323.6	322.1	319.8	317.6	315.3	310.8	306.3	303.7	300.7
32.5°	319.8	319.5	318.3	316.8	314.6	311.2	309.3	304.8	299.6	296.5	292.4
35°	313.8	313.5	312.3	310.5	307.4	304.8	301.8	297.7	291.7	287.9	283.4
37.5°	307.8	307.4	306.7	304.1	301.1	298.0	294.3	290.2	284.5	279.6	275.1
40°	301.8	301.4	299.9	298.0	294.3	290.5	286.8	282.6	276.6	271.0	266.1
42.5°	295.4	295.0	293.2	290.9	286.8	283.0	278.5	274.0	268.0	261.2	256.3
45°	289.0	288.3	286.4	283.8	279.3	275.1	270.6	265.3	259.3	252.9	246.6
47.5°	282.3	281.1	279.3	275.5	271.7	267.2	262.0	256.3	250.3	243.2	236.4
50°	274.7	274.0	271.7	268.4	263.8	259.3	253.3	247.7	240.5	233.8	225.5
52.5°	267.6	266.1	264.2	260.5	256.0	251.1	244.7	237.9	230.8	224.4	215.7
55°	260.1	259.3	256.7	253.7	248.1	242.4	236.4	229.3	221.4	213.9	205.6
57.5°	252.9	251.4	249.2	245.1	240.2	234.5	228.1	220.6	212.0	204.1	195.1
60°	245.8	243.5	240.9	237.2	231.9	225.9	219.1	211.2	202.6	193.9	184.5
62.5°	237.9	236.0	233.0	229.3	224.0	217.6	210.5	202.2	193.9	184.9	174.8
65°	230.0	228.1	225.1	221.4	216.1	209.0	201.5	193.2	183.8	175.1	164.2
67.5°	222.1	220.2	216.9	212.7	207.5	200.7	192.8	184.2	174.8	165.4	154.1
70°	214.2	212.0	209.0	204.5	199.2	192.1	184.2	175.1	165.7	155.6	144.3
72.5°	206.3	204.5	200.7	196.6	190.9	183.8	175.9	166.9	157.1	146.6	135.3
75°	198.4	196.2	193.6	188.7	182.7	175.9	167.6	158.6	148.1	137.9	126.3
77.5°	190.6	188.7	185.3	180.4	174.8	167.6	159.4	150.3	139.8	129.3	116.9
80°	182.7	180.4	177.8	173.3	166.9	159.7	151.1	142.1	131.5	120.6	108.2
82.5°	174.8	172.5	169.5	165.0	159.0	151.8	143.6	133.8	123.3	112.0	100.4
85°	166.9	165.0	161.6	157.1	150.7	143.6	135.3	126.7	115.4	104.1	92.5
87.5°	159.0	157.1	153.7	149.2	143.2	136.1	127.8	118.8	107.9	97.3	84.6
90°	151.5	150.0	146.6	142.1	136.1	128.9	121.4	111.6	101.1	90.6	78.6
92.5°	144.7	143.2	140.2	135.7	130.4	122.5	115.0	105.6	95.1	84.2	72.5
95°	138.7	136.8	133.8	129.7	123.3	116.5	109.0	99.6	89.5	78.6	67.3
97.5°	131.9	130.0	127.0	122.5	117.3	110.1	102.6	93.6	83.4	73.3	62.0
100°	125.2	123.3	119.9	116.1	110.9	103.7	96.6	87.6	78.2	68.4	57.5
102.5°	118.4	116.5	113.5	109.7	104.5	98.1	91.0	82.3	72.9	63.1	53.0
105°	112.0	110.1	107.1	103.4	98.5	92.1	84.6	77.0	68.0	58.6	48.9
107.5°	105.6	103.7	101.1	97.3	92.5	86.4	79.3	71.4	63.1	54.1	44.7
110°	99.2	97.7	94.7	91.3	86.4	80.4	74.0	66.5	58.3	50.0	41.0

TEST NUMBER: P1214062

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	93.2	91.7	88.7	84.9	80.8	75.2	68.8	61.6	53.7	45.9	37.2
115°	87.2	85.3	82.7	79.3	75.2	69.9	63.9	57.5	49.6	42.1	34.2
117.5°	81.2	79.7	77.0	73.7	69.9	64.6	59.0	53.0	45.5	38.3	31.2
120°	75.2	74.0	71.4	68.4	64.6	59.8	54.5	48.5	41.7	35.0	28.2
122.5°	69.5	68.4	65.8	63.1	59.4	54.9	50.0	44.4	38.3	31.9	25.9
125°	64.3	62.8	60.5	57.9	54.5	50.4	45.5	40.2	34.6	28.9	23.3
127.5°	58.6	57.5	56.0	53.0	49.6	45.9	41.3	36.8	31.6	26.3	21.0
130°	54.1	52.6	50.7	48.5	45.5	41.7	37.6	33.1	28.6	23.7	18.4
132.5°	48.9	47.4	45.9	43.6	41.0	37.6	33.8	29.7	25.6	21.0	16.5
135°	44.0	42.8	41.3	39.1	36.5	33.8	30.1	26.3	22.6	18.4	14.7
137.5°	39.5	38.3	36.8	35.3	32.7	30.1	26.7	23.3	19.9	16.2	12.8
140°	35.0	34.2	32.7	31.2	28.9	26.3	23.3	20.3	17.3	13.9	10.9
142.5°	30.4	29.7	28.6	27.1	25.2	22.9	20.3	17.7	14.7	12.0	9.4
145°	26.3	25.9	24.8	23.3	21.8	19.5	17.3	15.0	12.4	10.1	7.5
147.5°	22.2	21.8	21.0	19.9	18.4	16.5	14.7	12.4	10.5	8.3	6.0
150°	18.4	18.0	17.7	16.2	15.4	13.5	12.0	10.1	8.6	6.4	4.9
152.5°	15.0	15.0	14.3	13.2	12.4	10.9	9.8	8.3	6.8	5.3	3.8
155°	12.0	11.7	11.3	10.5	9.8	8.6	7.5	6.4	5.3	3.8	2.6
157.5°	9.4	9.0	8.6	7.9	7.1	6.8	5.6	4.5	3.4	2.6	1.9
160°	6.8	6.4	6.0	5.6	5.3	4.5	3.8	3.0	2.3	1.5	1.1
162.5°	4.5	4.1	4.1	3.8	3.4	2.6	2.3	1.9	1.5	1.1	0.8
165°	2.3	2.3	1.9	1.9	1.5	1.1	1.1	1.1	0.8	0.8	0.4
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: P1214062

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	356.3	356.3	356.3	356.3	356.3	356.3	356.3
2.5°	354.4	354.4	355.9	355.6	354.4	356.7	359.3
5°	353.3	353.3	354.4	354.4	353.3	355.6	357.8
7.5°	351.4	351.0	352.2	352.2	350.7	352.5	355.2
10°	348.0	347.7	348.8	348.8	347.3	349.2	351.4
12.5°	344.3	343.5	344.7	344.3	342.8	344.7	346.9
15°	339.4	339.0	339.8	339.0	337.5	339.4	341.6
17.5°	334.5	333.4	333.8	333.8	331.1	333.0	334.9
20°	328.1	326.6	327.0	326.6	324.7	325.9	328.1
22.5°	321.7	319.5	319.5	319.1	316.8	318.3	320.2
25°	313.8	311.2	311.2	310.8	308.2	309.3	311.2
27.5°	305.9	303.3	302.2	301.8	299.2	299.2	301.8
30°	297.7	293.9	293.2	292.0	289.4	289.4	291.7
32.5°	289.8	284.5	283.0	281.5	278.9	278.5	281.1
35°	279.3	275.1	272.5	271.0	268.0	267.2	269.5
37.5°	270.6	265.3	261.6	259.7	256.7	255.6	258.6
40°	261.2	255.6	250.7	249.6	245.1	243.5	246.2
42.5°	250.7	244.7	239.8	237.5	234.2	232.7	233.0
45°	240.2	233.8	228.5	225.5	222.1	219.5	221.0
47.5°	229.3	223.6	217.2	212.7	208.6	206.7	207.5
50°	218.4	211.6	205.6	200.7	195.8	193.6	195.1
52.5°	207.5	200.3	193.6	188.3	182.7	180.4	180.8
55°	196.9	189.4	181.5	175.9	170.6	167.3	166.5
57.5°	186.4	178.2	169.9	163.5	156.7	153.7	152.6
60°	175.1	166.5	157.9	150.3	143.2	139.8	138.3
62.5°	164.6	155.2	145.5	137.6	130.4	125.9	124.8
65°	154.5	143.6	133.8	124.8	116.9	112.0	110.5
67.5°	143.6	132.3	121.8	112.0	104.5	98.1	97.3
70°	133.4	121.4	109.7	99.6	91.3	84.9	81.9
72.5°	123.3	110.9	98.8	87.9	77.4	71.4	69.2
75°	113.5	100.7	87.9	76.7	65.0	57.9	55.6
77.5°	104.5	91.3	77.8	65.4	54.5	45.5	42.5
80°	95.8	82.3	68.0	55.2	43.6	33.8	30.4
82.5°	86.8	74.0	59.4	45.9	33.8	23.7	19.5
85°	78.9	66.1	51.5	38.0	25.9	15.0	10.5
87.5°	72.5	58.6	45.5	31.9	19.5	8.6	3.0
90°	66.1	52.6	39.5	26.3	14.7	4.9	0.4
92.5°	60.5	47.7	34.6	22.6	11.3	3.4	0.4
95°	55.2	42.8	30.4	18.8	9.0	2.3	0.4
97.5°	50.4	38.7	27.1	16.2	7.5	1.9	0.4
100°	46.2	35.0	24.1	14.3	6.4	1.5	0.4
102.5°	42.1	31.6	21.4	12.4	5.6	1.1	0.4
105°	38.7	28.6	19.2	11.3	4.9	1.1	0.4
107.5°	35.3	25.9	17.3	9.8	4.1	0.8	0.4
110°	31.9	23.7	15.4	8.6	3.8	0.8	0.4



TEST NUMBER: P1214062

CATALOG NUMBER: 4SNLED-LD5-16SL-LW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	29.3	21.4	13.9	7.9	3.0	0.8	0.4
115°	26.7	19.2	12.4	6.8	2.6	0.4	0.4
117.5°	24.1	17.3	10.9	6.0	2.3	0.4	0.4
120°	21.8	15.4	9.8	5.3	1.9	0.4	0.4
122.5°	19.5	13.9	8.6	4.5	1.5	0.4	0.4
125°	17.7	12.4	7.5	3.8	1.1	0.4	0.4
127.5°	15.8	10.9	6.8	3.4	1.1	0.4	0.4
130°	13.9	9.8	5.6	2.6	0.8	0.4	0.4
132.5°	12.4	8.3	4.9	2.3	0.8	0.4	0.4
135°	10.9	7.1	4.1	1.5	0.8	0.4	0.4
137.5°	9.4	6.0	3.4	1.1	0.4	0.4	0.4
140°	7.9	5.3	2.6	1.1	0.4	0.4	0.4
142.5°	6.8	4.1	1.9	0.8	0.4	0.4	0.4
145°	5.3	3.4	1.5	0.8	0.4	0.4	0.4
147.5°	4.1	2.6	1.1	0.8	0.4	0.4	0.4
150°	3.0	1.9	1.1	0.4	0.4	0.4	0.4
152.5°	2.3	1.5	0.8	0.4	0.4	0.4	0.4
155°	1.5	1.1	0.8	0.4	0.4	0.4	0.4
157.5°	1.1	0.8	0.4	0.4	0.4	0.4	0.4
160°	0.8	0.4	0.4	0.4	0.4	0.4	0.4
162.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4
165°	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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)