

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: P1213719

Luminaire Tested: 4SNLED-LD5-20SL-LW-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213719
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-LD5-20SL-LW-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

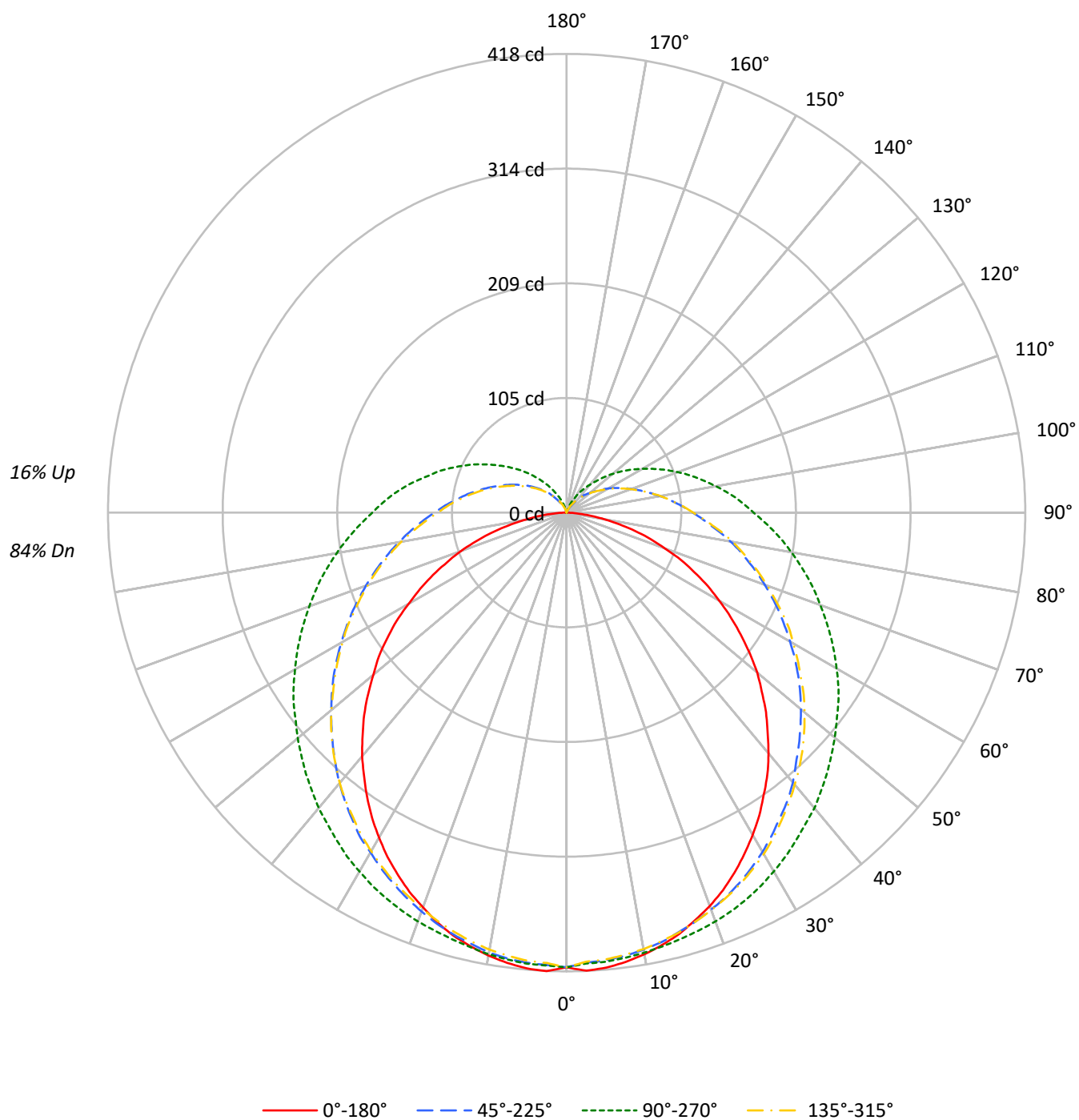
Lumens per Lamp: N/A
Luminaire Lumens: 1800.0 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 16
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°	3348	3348	3348	3348
5°	3366	3226	3373	3241
10°	3334	3135	3345	3145
15°	3296	3057	3310	3060
20°	3244	2999	3255	2999
25°	3181	2948	3199	2945
30°	3108	2896	3133	2896
35°	3026	2847	3058	2851
40°	2943	2819	2979	2819
45°	2848	2789	2891	2793
50°	2749	2771	2786	2779
55°	2611	2774	2693	2785
60°	2465	2783	2547	2799
65°	2303	2810	2405	2838
70°	2074	2861	2235	2902
75°	1809	2956	1980	3012
80°	1399	3094	1589	3165
85°	833	3316	1045	3409

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 270°

Vertical Angle: 90°

Luminance: 3810 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	2.2
10°-20°	112.8	6.3
20°-30°	172.9	9.6
30°-40°	213.4	11.9
40°-50°	231.5	12.9
50°-60°	228.2	12.7
60°-70°	206.3	11.5
70°-80°	171.8	9.5
80°-90°	133.1	7.4
90°-100°	100.9	5.6
100°-110°	74.7	4.2
110°-120°	52.0	2.9
120°-130°	33.2	1.8
130°-140°	18.6	1.0
140°-150°	8.5	0.5
150°-160°	2.6	0.1
160°-170°	0.3	0.0
170°-180°	0.0	0.0
0°-30°	325.0	18.1
0°-40°	538.3	29.9
0°-60°	998.0	55.4
0°-90°	1509.2	83.8
90°-120°	227.6	12.6
90°-150°	287.8	16.0
90°-180°	291.0	16.2
0°-180°	1800.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	414	414	414	414	414	
5°	416	411	417	413	416	39
15°	397	402	399	402	397	112
25°	362	388	364	388	362	167
35°	313	364	317	365	313	196
45°	257	336	261	336	257	198
55°	194	302	200	304	194	173
65°	128	265	134	268	128	127
75°	65	227	71	232	65	68
85°	12	189	15	194	12	15
90°	0	170	1	177	0	1
95°	0	155	0	162	0	0
105°	0	123	0	130	0	0
115°	0	94	0	102	0	0
125°	0	67	0	75	0	0
135°	0	44	0	52	0	0
145°	0	25	0	31	0	0
155°	0	10	0	14	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°	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3
2.5°	417.8	417.8	417.4	416.5	416.9	418.2	417.4	415.2	413.9	410.4	411.2
5°	416.1	416.1	415.6	414.7	415.2	416.9	416.1	414.3	412.6	409.5	410.8
7.5°	413.0	413.0	412.6	411.7	412.6	414.3	413.4	411.7	410.4	407.3	408.6
10°	408.6	409.1	408.6	407.3	409.1	410.8	410.4	408.2	406.9	404.3	405.6
12.5°	403.4	403.8	403.4	402.9	403.8	406.4	405.6	403.8	402.9	400.8	402.1
15°	397.3	397.7	396.8	396.8	397.7	400.3	400.3	398.6	397.7	395.5	398.1
17.5°	389.4	389.8	389.4	389.4	390.3	392.9	393.3	392.5	391.6	390.7	393.3
20°	381.5	381.1	381.1	380.7	382.4	386.3	385.9	385.9	385.0	385.0	388.1
22.5°	372.4	372.4	371.9	371.9	374.1	377.6	377.6	378.5	377.6	379.3	382.0
25°	361.9	362.3	361.9	362.7	364.5	368.4	368.9	370.2	370.6	372.4	375.4
27.5°	350.9	351.4	350.9	351.8	354.9	357.9	360.1	361.9	362.3	364.9	368.9
30°	339.1	339.1	339.6	340.4	343.9	348.8	350.5	352.7	352.7	357.1	361.0
32.5°	326.9	326.9	326.9	328.6	332.6	338.3	340.4	343.1	343.9	348.3	352.7
35°	313.4	313.8	313.8	315.1	320.3	326.0	329.1	332.1	333.9	339.1	343.5
37.5°	300.7	301.6	300.2	302.0	309.4	314.2	317.7	320.8	323.8	330.8	334.3
40°	286.3	287.1	286.7	290.2	296.3	302.4	306.4	309.4	313.8	320.8	324.7
42.5°	271.0	271.8	272.7	276.6	283.2	289.3	294.1	298.1	303.3	309.4	316.0
45°	257.0	257.0	258.3	263.1	270.1	276.6	282.3	286.7	292.8	299.4	305.9
47.5°	241.2	241.7	243.4	249.1	256.5	264.4	269.6	275.3	281.9	288.9	296.3
50°	226.8	226.8	229.4	235.6	242.6	251.3	257.0	263.5	270.5	278.8	286.3
52.5°	210.2	211.1	215.0	220.7	229.9	237.7	244.3	251.3	259.6	268.3	276.6
55°	193.6	195.4	198.4	206.3	215.9	223.3	231.2	239.9	247.8	257.4	267.0
57.5°	177.4	178.7	183.6	191.4	201.5	210.6	219.0	227.3	236.9	246.5	256.5
60°	160.8	162.6	168.3	176.1	187.1	196.7	206.3	215.0	225.1	235.1	245.6
62.5°	145.1	146.4	153.0	162.1	173.1	183.6	193.2	203.7	214.6	224.2	234.7
65°	128.5	130.7	138.1	146.4	159.1	169.6	180.5	191.9	203.2	213.7	223.8
67.5°	113.2	114.5	122.4	132.0	144.7	156.5	167.8	180.1	191.9	202.8	212.8
70°	95.3	99.6	107.5	117.6	131.1	143.3	155.6	168.3	180.9	192.3	201.9
72.5°	80.4	83.9	92.7	103.6	116.7	131.1	143.8	157.3	170.0	181.8	191.9
75°	64.7	68.2	78.2	90.5	104.0	119.3	132.4	146.4	159.5	171.3	181.8
77.5°	49.4	53.8	64.7	77.4	92.2	107.9	121.5	135.5	149.0	161.7	172.2
80°	35.4	40.2	52.0	66.4	80.9	96.6	111.4	125.4	139.0	151.7	162.6
82.5°	22.7	28.0	40.6	55.1	70.4	86.1	101.4	115.4	128.9	141.6	153.0
85°	12.2	17.9	31.0	45.5	60.7	76.5	91.8	106.6	119.7	131.5	143.8
87.5°	3.5	10.5	23.2	37.6	53.3	67.7	82.6	97.5	110.6	123.2	134.2
90°	0.4	6.1	17.5	31.0	46.3	60.3	75.2	89.2	102.3	114.9	125.9
92.5°	0.4	3.9	13.5	25.8	39.8	54.2	69.1	82.6	94.8	107.5	118.4
95°	0.4	3.1	10.9	21.9	35.0	48.5	62.5	75.6	88.3	100.1	111.0
97.5°	0.4	2.2	8.7	18.8	30.6	43.3	56.8	69.9	82.2	93.5	103.6
100°	0.4	1.7	7.0	16.2	26.7	38.9	51.1	63.8	75.6	86.5	97.0
102.5°	0.4	1.3	6.1	13.5	23.6	34.5	46.3	58.1	69.5	80.0	90.5
105°	0.4	1.3	5.2	11.8	21.0	31.0	42.0	53.3	63.8	73.9	83.5
107.5°	0.4	0.9	4.4	10.1	18.4	28.0	38.0	48.9	58.6	68.2	77.4
110°	0.4	0.9	3.5	9.2	16.2	24.9	34.5	44.6	53.8	62.9	71.7

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.4	0.9	3.1	7.9	14.0	22.3	31.0	40.2	48.9	58.1	66.0
115°	0.4	0.9	2.6	7.0	13.1	19.2	28.0	36.3	45.0	53.3	60.7
117.5°	0.4	0.9	2.2	5.7	11.4	17.5	24.5	32.8	40.6	48.5	55.5
120°	0.4	0.9	1.7	5.2	10.1	15.7	21.9	29.3	36.7	44.1	51.6
122.5°	0.4	0.4	1.7	4.4	8.7	14.0	20.1	25.8	32.8	39.8	46.3
125°	0.4	0.4	1.7	3.9	7.4	12.7	17.9	23.2	29.3	35.4	41.1
127.5°	0.4	0.4	1.3	3.1	6.6	10.9	15.7	21.4	25.8	31.5	37.1
130°	0.4	0.4	1.3	2.6	5.7	9.2	14.0	18.8	24.0	28.0	32.8
132.5°	0.4	0.4	1.3	2.2	4.4	7.4	11.8	16.2	21.0	25.3	29.3
135°	0.4	0.4	0.9	1.7	3.5	6.1	9.6	13.5	18.4	22.7	26.7
137.5°	0.4	0.4	0.9	1.7	2.6	5.2	7.4	10.9	15.3	19.2	23.2
140°	0.4	0.4	0.9	1.3	2.2	3.9	6.1	8.7	12.2	15.7	20.1
142.5°	0.4	0.4	0.4	1.3	1.7	3.1	4.8	7.0	9.6	12.7	16.2
145°	0.4	0.4	0.4	1.3	1.7	2.2	3.9	5.7	7.4	9.6	12.7
147.5°	0.4	0.4	0.4	0.9	1.3	1.7	3.1	4.4	5.7	7.4	9.2
150°	0.4	0.4	0.4	0.9	1.3	1.7	2.2	3.1	4.4	6.1	7.4
152.5°	0.4	0.4	0.4	0.9	0.9	1.3	1.7	2.2	3.1	4.4	5.2
155°	0.4	0.4	0.4	0.4	0.9	1.3	1.7	1.7	2.2	3.1	3.9
157.5°	0.4	0.4	0.4	0.4	0.9	0.9	1.3	1.3	1.7	1.7	2.6
160°	0.4	0.4	0.4	0.4	0.4	0.9	0.9	1.3	1.3	1.3	1.3
162.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.9	0.9	1.3	1.3
165°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.9	0.9
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3
2.5°	411.2	411.7	413.0	413.0	412.1	412.1	411.7	411.2	411.7	412.6	412.6
5°	410.4	410.8	412.1	412.6	411.7	411.2	411.2	410.8	411.2	412.1	412.1
7.5°	408.6	409.1	410.4	410.8	409.9	409.9	409.5	409.1	409.9	410.4	410.4
10°	406.0	406.4	408.2	408.6	408.2	407.8	407.8	407.3	407.8	408.6	408.6
12.5°	402.5	403.4	405.6	405.6	405.6	405.1	405.1	404.7	405.1	406.0	405.6
15°	398.6	400.3	402.1	402.9	402.9	402.9	402.5	402.1	402.9	403.4	402.9
17.5°	394.2	396.4	399.0	399.9	399.9	400.3	399.9	399.4	400.3	400.3	399.9
20°	389.8	392.0	394.6	395.5	396.4	396.8	396.8	396.4	396.8	397.3	396.8
22.5°	384.2	386.8	389.8	391.1	392.0	392.9	392.9	392.9	393.3	393.8	392.9
25°	378.0	381.1	384.6	385.9	387.6	388.1	388.5	388.5	389.0	389.4	388.1
27.5°	371.5	375.0	378.5	380.7	382.0	382.8	382.8	383.3	383.7	384.2	382.8
30°	363.6	368.9	371.9	373.7	375.4	376.7	377.2	377.6	378.0	378.5	377.2
32.5°	356.6	361.0	364.9	367.1	369.3	371.0	371.5	371.5	372.4	372.4	371.0
35°	348.3	353.6	357.5	359.7	362.3	363.6	364.5	364.5	365.4	365.4	364.0
37.5°	340.0	345.3	349.6	352.2	355.3	357.1	357.5	357.5	358.4	358.4	356.6
40°	331.3	337.0	341.8	344.8	347.4	349.6	350.1	351.4	351.4	350.9	349.2
42.5°	322.5	327.8	333.0	336.5	340.0	342.2	343.1	343.5	343.5	343.1	341.8
45°	312.9	319.0	323.8	328.2	331.7	333.9	335.2	335.6	335.6	334.8	333.5
47.5°	303.7	309.9	314.7	319.5	323.0	325.6	326.9	327.3	326.9	326.5	325.2
50°	294.1	301.1	305.9	310.7	314.2	316.4	318.6	319.0	318.6	318.2	315.5
52.5°	284.1	291.5	296.7	301.6	305.5	308.1	309.9	310.3	310.3	309.4	307.7
55°	274.0	280.6	287.1	292.4	296.7	299.4	301.6	302.4	301.6	300.7	298.5
57.5°	264.8	271.0	277.5	283.2	287.6	291.1	292.8	293.7	292.8	291.5	289.3
60°	253.9	260.5	267.9	273.1	278.0	281.4	282.3	284.1	283.2	281.9	279.7
62.5°	243.4	251.3	257.8	264.4	268.3	272.3	274.0	274.9	274.0	272.7	270.5
65°	232.5	241.2	247.8	254.4	258.7	262.7	264.8	265.3	264.4	263.1	260.9
67.5°	222.4	230.8	237.7	244.7	248.7	252.6	254.8	255.7	254.8	253.0	250.9
70°	212.4	220.7	229.0	234.2	239.1	243.4	244.7	246.0	245.2	243.4	240.8
72.5°	202.3	211.1	219.4	224.6	229.9	233.8	235.6	236.9	236.0	234.2	231.2
75°	191.9	201.0	209.3	215.0	220.3	224.2	225.9	227.3	226.4	224.6	221.1
77.5°	182.2	191.4	199.3	205.4	210.6	214.1	217.2	217.6	216.8	215.0	211.5
80°	172.2	181.4	189.7	195.8	201.0	204.5	206.7	208.0	207.2	205.4	201.9
82.5°	163.5	171.8	180.1	186.2	191.4	195.8	197.5	198.8	198.4	195.8	193.2
85°	153.8	163.5	170.0	176.6	181.8	186.2	187.5	189.2	188.8	186.6	183.1
87.5°	144.2	153.8	161.7	168.3	173.1	176.6	178.7	179.6	179.2	177.0	173.1
90°	136.4	145.1	153.0	160.0	163.9	167.8	170.0	170.4	170.4	167.8	164.8
92.5°	128.9	137.2	145.1	151.7	156.5	160.0	161.7	162.6	162.1	160.0	156.5
95°	120.6	129.8	137.2	143.8	148.6	152.1	153.8	154.7	154.3	152.1	148.6
97.5°	113.6	121.9	129.4	135.5	140.3	143.8	145.5	146.4	146.4	144.2	140.7
100°	106.6	114.9	121.9	128.1	132.4	135.9	137.7	138.1	137.7	135.9	132.4
102.5°	99.6	107.5	114.5	120.2	125.0	128.1	129.8	130.2	130.2	128.1	124.6
105°	92.7	100.5	107.1	113.2	117.1	120.2	121.5	122.8	122.4	120.6	117.1
107.5°	86.1	94.0	100.1	105.8	109.7	112.8	114.1	115.4	114.9	113.2	109.7
110°	80.0	87.4	93.1	98.8	102.3	105.3	107.5	107.9	107.1	105.3	102.3

TEST NUMBER: P1213719

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	74.3	80.9	86.5	91.8	95.7	97.9	99.6	100.5	99.6	97.9	95.7
115°	68.2	74.7	80.4	85.2	88.7	91.3	92.7	93.5	92.7	90.9	88.7
117.5°	62.5	68.6	74.3	79.1	82.2	84.3	85.7	86.5	85.7	84.3	82.2
120°	57.7	62.9	68.2	72.5	76.0	77.8	79.1	80.0	79.5	77.8	75.6
122.5°	52.0	57.7	62.5	66.9	69.9	71.7	72.5	73.4	73.0	71.7	69.5
125°	47.2	52.0	56.8	60.7	63.8	65.6	66.4	67.3	66.9	65.6	62.9
127.5°	42.0	47.2	51.1	55.1	57.3	59.9	60.3	61.2	60.7	59.4	57.3
130°	38.0	42.0	45.9	49.4	52.0	53.8	54.6	55.1	54.2	53.3	51.1
132.5°	33.2	37.6	41.1	44.1	45.9	47.6	48.5	48.9	48.9	47.6	45.9
135°	29.7	32.8	35.8	38.9	40.6	42.4	43.3	43.7	43.3	42.4	40.6
137.5°	26.7	29.3	31.5	34.1	36.3	37.1	38.0	38.0	37.6	37.1	35.8
140°	23.2	26.2	28.4	30.2	31.9	32.3	33.2	33.2	32.8	32.3	31.5
142.5°	19.7	22.3	24.5	26.7	28.0	28.8	29.3	29.7	29.3	28.8	27.5
145°	15.7	18.8	21.0	22.3	24.0	24.5	24.9	25.3	24.9	24.5	23.2
147.5°	12.2	14.9	17.0	18.8	20.1	20.5	21.0	21.4	21.0	20.1	19.7
150°	8.7	10.9	13.5	15.3	16.2	17.0	17.0	17.0	17.5	16.6	15.7
152.5°	7.0	7.9	9.6	11.4	12.7	13.1	13.5	13.5	13.1	13.1	12.2
155°	4.8	5.7	7.0	8.3	9.6	10.1	10.5	10.5	10.1	10.1	9.6
157.5°	3.1	3.9	4.8	5.7	7.0	7.4	7.9	7.9	7.9	7.4	7.0
160°	1.7	2.2	2.6	3.5	4.4	4.8	5.2	5.2	5.2	5.2	4.8
162.5°	1.3	1.3	1.3	1.7	2.2	2.6	3.1	3.1	3.1	3.1	2.6
165°	0.9	0.9	0.9	0.9	0.9	1.3	1.7	1.7	1.7	1.7	1.7
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

TEST NUMBER: P1213719

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3
2.5°	412.1	412.1	412.6	411.7	409.1	409.5	409.5	411.2	412.1	412.6	414.7
5°	411.2	411.2	412.1	410.8	408.6	408.6	408.6	410.4	410.8	411.7	413.4
7.5°	409.9	409.9	410.4	409.1	406.4	406.4	406.0	407.8	408.6	409.1	410.8
10°	407.8	407.8	408.2	406.9	403.8	403.8	403.4	404.7	405.1	406.0	407.3
12.5°	404.7	404.7	404.7	403.4	400.3	399.9	399.4	400.8	400.8	401.2	402.5
15°	402.1	401.2	401.2	399.9	396.8	396.0	395.1	395.5	396.4	396.0	396.8
17.5°	399.0	398.1	397.3	396.0	392.0	390.7	389.8	390.3	389.8	389.4	390.3
20°	395.5	394.2	393.8	391.6	387.6	385.5	383.7	382.8	383.3	382.0	382.4
22.5°	391.6	389.8	389.0	386.3	382.4	379.8	377.6	375.8	375.4	373.7	374.1
25°	386.8	384.6	383.3	381.1	376.7	373.7	371.0	368.4	367.1	364.9	364.5
27.5°	381.1	378.9	377.2	375.0	370.6	366.7	363.6	360.1	358.4	355.7	354.4
30°	375.4	372.8	370.2	368.4	363.6	359.2	354.4	351.4	348.8	345.7	343.5
32.5°	368.4	365.8	363.2	360.6	356.2	350.9	347.0	342.2	339.1	335.6	333.0
35°	361.4	357.9	355.3	351.8	347.9	341.8	337.0	332.1	328.2	324.3	321.2
37.5°	353.6	350.9	347.0	343.9	339.1	333.0	327.8	321.7	318.2	312.9	309.0
40°	346.1	343.1	339.1	335.2	330.4	323.4	317.7	310.7	306.8	300.7	296.7
42.5°	338.7	334.3	330.4	326.0	320.8	314.2	307.2	300.2	295.0	289.3	283.6
45°	330.4	325.6	320.8	316.0	310.7	304.2	296.7	289.3	282.8	277.5	270.5
47.5°	321.7	316.8	311.2	305.9	300.2	293.7	285.8	278.0	271.0	264.8	257.4
50°	312.9	308.1	302.0	296.3	289.8	283.2	274.9	265.7	258.3	250.4	243.9
52.5°	303.7	298.9	293.2	285.8	278.8	272.3	263.5	253.9	245.6	239.1	230.8
55°	294.6	289.8	283.2	275.8	268.8	260.5	252.2	242.6	233.4	225.5	217.2
57.5°	284.9	280.6	273.1	267.0	258.3	249.5	240.8	231.6	221.6	212.4	202.8
60°	275.3	270.5	263.5	256.1	247.4	238.6	229.4	219.4	208.9	198.8	190.1
62.5°	266.6	260.5	253.9	246.0	236.9	228.6	218.1	207.2	196.7	186.2	175.7
65°	256.5	250.0	243.9	236.0	226.4	216.8	206.3	195.4	184.0	172.6	162.1
67.5°	246.5	239.9	233.4	225.5	215.5	205.4	194.5	183.6	170.9	160.0	147.7
70°	236.4	231.2	222.9	214.6	205.4	194.5	183.6	171.8	158.6	146.8	134.2
72.5°	226.4	221.1	212.8	204.1	195.4	184.0	172.2	160.4	148.2	134.6	121.1
75°	216.8	210.2	202.8	194.5	185.3	173.5	161.7	149.5	135.0	122.4	108.4
77.5°	207.6	201.5	194.0	184.9	174.8	163.5	151.2	138.5	124.1	110.6	95.3
80°	197.5	191.4	184.0	174.8	164.8	153.8	140.7	127.6	113.6	98.8	83.0
82.5°	187.9	182.2	173.9	165.6	154.7	143.8	130.7	117.6	102.7	88.3	73.0
85°	177.9	172.2	164.3	155.6	145.1	133.3	121.1	107.9	93.1	78.2	62.9
87.5°	169.1	162.6	154.7	146.0	135.5	124.1	112.3	98.3	83.9	69.5	53.8
90°	160.0	153.8	146.0	137.2	126.7	115.4	103.1	90.0	76.0	61.2	46.3
92.5°	152.1	145.5	138.1	129.4	118.9	107.9	95.7	82.6	69.1	54.6	40.2
95°	144.2	137.7	130.7	121.9	111.4	100.5	88.3	75.6	62.5	48.5	35.0
97.5°	135.5	129.8	122.8	114.5	104.0	93.5	81.7	69.5	56.8	43.3	30.6
100°	128.5	121.9	115.4	106.6	97.0	87.0	75.2	63.4	51.1	38.5	26.7
102.5°	120.6	114.5	107.9	99.6	90.0	80.0	69.1	57.7	46.3	34.5	23.2
105°	113.2	107.5	100.5	92.7	83.5	73.9	63.4	52.9	42.0	30.6	20.5
107.5°	105.8	100.1	93.5	86.1	77.4	67.7	58.1	47.6	37.6	27.5	18.4
110°	98.3	93.1	87.0	79.5	71.2	62.5	53.3	43.7	33.7	24.5	16.2

TEST NUMBER: P1213719

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	91.8	86.5	80.4	73.4	65.6	57.3	48.5	39.3	30.2	21.9	14.0
115°	85.2	80.4	74.3	68.2	60.3	52.4	44.1	35.4	27.1	19.7	12.2
117.5°	78.7	73.9	68.2	62.1	55.1	47.6	39.8	31.5	24.5	17.5	10.9
120°	72.1	67.7	62.5	56.8	50.7	43.3	35.4	28.4	21.9	15.3	9.6
122.5°	66.0	62.1	57.3	52.0	45.5	38.5	31.9	25.8	19.7	13.5	7.9
125°	60.3	56.4	52.0	46.8	40.6	34.5	28.8	23.2	17.0	11.8	6.6
127.5°	54.6	50.7	46.3	41.5	36.7	31.0	25.8	20.5	15.3	10.5	5.7
130°	48.9	45.5	41.5	37.6	32.8	27.5	23.2	17.9	13.1	8.3	4.8
132.5°	43.3	40.6	37.1	33.2	28.8	24.9	20.1	15.7	11.4	7.4	4.4
135°	38.5	35.8	32.8	29.3	25.8	21.9	17.5	13.5	9.6	6.1	3.5
137.5°	34.1	31.9	28.8	25.8	22.7	18.8	15.3	11.4	7.9	5.2	2.6
140°	30.2	28.0	25.3	22.3	19.7	16.2	12.7	9.2	7.0	4.4	2.2
142.5°	26.2	24.0	21.9	19.2	16.6	13.5	10.5	7.9	5.7	3.5	2.2
145°	22.3	20.5	18.4	16.2	13.5	10.9	8.7	6.6	4.4	2.6	1.7
147.5°	18.4	17.0	14.9	13.1	10.9	8.7	7.0	5.2	3.5	2.2	1.3
150°	14.9	13.5	11.8	10.1	8.7	7.0	5.7	3.9	2.6	2.2	1.3
152.5°	11.4	10.5	9.2	8.3	7.0	5.2	3.9	3.1	2.2	1.7	0.9
155°	9.2	8.3	7.4	6.1	5.2	3.9	3.1	2.2	1.7	1.3	0.9
157.5°	6.6	6.1	5.2	4.4	3.5	2.6	2.2	2.2	1.3	0.9	0.4
160°	4.4	3.9	3.5	2.6	2.2	2.2	1.7	1.3	0.9	0.9	0.4
162.5°	2.6	2.2	2.2	2.2	1.7	1.7	1.3	0.9	0.9	0.4	0.4
165°	1.7	1.7	1.7	1.3	1.3	1.3	0.9	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: P1213719

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3
2.5°	414.7	413.4	415.2	418.2	418.7	418.2	417.4	418.7	420.4	420.0	416.9
5°	413.9	412.1	413.9	416.9	416.9	416.5	416.1	417.4	419.1	418.7	416.1
7.5°	411.2	409.5	411.2	413.9	414.3	413.4	413.4	414.7	416.5	416.1	413.9
10°	407.8	406.0	406.9	409.9	410.8	409.9	409.9	411.2	413.4	413.0	410.4
12.5°	402.5	401.2	402.1	404.7	405.6	405.1	404.7	406.4	408.6	408.6	406.0
15°	396.8	395.1	396.0	399.0	399.4	398.6	399.0	400.3	402.9	402.9	400.8
17.5°	390.3	388.1	389.4	391.6	392.0	392.0	392.0	393.8	396.8	396.4	394.6
20°	382.8	379.8	380.7	382.8	383.7	383.7	383.7	386.8	389.0	389.0	387.2
22.5°	374.1	371.9	371.9	374.1	375.4	375.0	375.0	377.6	380.7	380.2	380.2
25°	364.0	362.3	361.4	364.0	364.5	364.9	365.8	368.4	371.9	371.9	372.4
27.5°	353.6	351.8	351.4	353.6	354.0	354.4	355.3	358.4	361.9	362.3	363.2
30°	343.5	340.9	340.0	341.8	342.6	343.1	343.1	347.9	350.9	352.2	354.0
32.5°	331.7	329.1	326.9	330.0	330.4	331.3	331.7	336.5	340.0	342.2	344.8
35°	319.9	315.5	314.7	316.8	317.7	318.2	319.0	324.3	329.1	330.8	334.3
37.5°	306.8	303.7	301.1	303.3	304.2	304.6	307.2	312.0	316.8	319.5	323.0
40°	294.6	290.6	288.4	289.8	290.6	291.1	294.1	299.4	305.0	308.1	312.5
42.5°	281.0	275.8	274.0	275.3	275.8	277.1	279.7	286.7	292.4	296.7	300.2
45°	267.5	263.5	259.6	260.9	261.3	262.2	266.2	273.6	279.7	284.9	288.9
47.5°	253.5	248.7	244.7	245.6	247.4	247.8	252.2	260.9	266.6	272.3	277.5
50°	239.5	232.9	229.9	229.9	230.8	232.9	238.6	247.4	253.5	260.0	265.7
52.5°	225.1	219.0	215.5	215.9	216.8	219.4	224.6	233.4	240.4	247.4	254.4
55°	210.6	204.1	200.6	199.7	200.6	204.1	210.2	219.4	226.4	234.7	242.1
57.5°	196.2	188.4	185.3	184.0	184.9	189.2	195.4	205.0	213.7	221.6	230.3
60°	180.5	174.4	169.1	166.1	168.3	173.9	180.5	190.5	199.7	208.5	218.1
62.5°	166.9	159.1	153.4	150.3	152.5	157.3	166.5	176.1	186.2	196.2	205.8
65°	151.7	143.8	137.2	134.2	136.4	142.0	151.2	161.7	172.6	182.7	194.0
67.5°	136.8	128.5	120.6	117.6	120.2	126.3	136.4	148.2	160.0	170.4	182.7
70°	122.4	113.2	104.9	102.7	104.5	112.8	122.4	134.2	146.4	158.6	171.3
72.5°	109.3	97.9	89.2	86.5	88.7	97.9	108.8	121.1	134.2	147.3	160.8
75°	94.0	83.5	73.9	70.8	73.4	81.7	95.3	108.4	122.4	136.4	149.0
77.5°	81.7	69.5	59.4	54.6	59.0	69.5	82.6	96.6	111.0	125.4	139.9
80°	69.1	56.4	45.5	40.2	45.0	56.4	69.5	84.8	101.0	115.4	128.5
82.5°	57.7	44.1	32.8	27.1	32.3	45.0	59.4	74.7	90.5	104.9	120.2
85°	47.2	33.2	21.4	15.3	22.7	34.1	49.4	65.1	81.3	96.1	111.0
87.5°	38.5	24.9	13.1	6.6	14.0	26.7	41.1	56.8	73.0	87.8	101.8
90°	31.5	17.9	7.0	0.9	8.3	20.1	34.1	49.4	64.7	80.0	94.0
92.5°	25.8	13.5	3.9	0.4	5.2	16.2	29.3	43.7	58.6	73.4	87.0
95°	21.4	10.5	2.6	0.4	3.9	12.7	24.9	38.9	52.9	67.3	80.9
97.5°	18.4	8.7	2.2	0.4	3.1	10.9	21.4	34.5	48.1	61.6	74.7
100°	15.7	7.0	1.7	0.4	2.6	9.2	18.8	30.6	43.3	56.4	69.1
102.5°	13.5	5.7	1.3	0.4	2.2	7.9	16.6	27.5	38.9	51.6	63.8
105°	11.8	4.8	1.3	0.4	1.7	7.0	14.9	24.5	35.8	47.2	59.0
107.5°	10.1	3.9	0.9	0.4	1.3	5.7	13.1	22.3	32.3	43.3	54.2
110°	8.7	3.5	0.9	0.4	1.3	5.2	11.4	20.1	29.3	39.3	49.8

TEST NUMBER: P1213719

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	7.4	2.6	0.9	0.4	0.9	4.4	10.1	17.9	26.7	35.8	45.9
115°	6.6	2.2	0.4	0.4	0.9	3.9	9.2	16.2	24.0	32.8	42.0
117.5°	5.2	1.7	0.4	0.4	0.4	3.1	7.9	14.4	21.9	30.2	38.5
120°	4.4	1.7	0.4	0.4	0.4	2.6	7.0	12.7	19.7	27.1	35.0
122.5°	3.9	1.3	0.4	0.4	0.4	2.2	6.1	11.4	17.5	24.5	31.9
125°	3.5	1.3	0.4	0.4	0.4	1.7	5.2	10.1	15.7	21.9	28.8
127.5°	2.6	1.3	0.4	0.4	0.4	1.3	4.8	8.7	14.0	19.7	25.8
130°	2.2	0.9	0.4	0.4	0.4	1.3	3.9	7.9	12.2	17.5	23.2
132.5°	1.7	0.9	0.4	0.4	0.4	0.9	3.1	6.1	10.5	15.3	20.5
135°	1.7	0.9	0.4	0.4	0.4	0.9	2.2	5.2	8.7	13.1	17.5
137.5°	1.7	0.4	0.4	0.4	0.4	0.9	1.7	3.9	7.0	10.5	14.4
140°	1.3	0.4	0.4	0.4	0.4	0.4	1.3	3.1	5.7	8.7	12.2
142.5°	1.3	0.4	0.4	0.4	0.4	0.4	1.3	2.2	4.4	7.0	9.6
145°	0.9	0.4	0.4	0.4	0.4	0.4	0.9	1.7	3.5	5.2	7.9
147.5°	0.9	0.4	0.4	0.4	0.4	0.4	0.9	1.3	2.6	4.4	6.1
150°	0.9	0.4	0.4	0.4	0.4	0.4	0.9	1.3	1.7	3.1	4.8
152.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.9	1.3	2.2	3.1
155°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9	1.3	1.7	2.2
157.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.9	1.3	1.7
160°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.9	1.3
162.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.9
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: P1213719

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3
2.5°	415.6	412.6	413.4	413.0	413.9	415.2	415.2	414.7	414.7	413.9	413.0
5°	414.7	411.7	413.0	412.6	413.4	414.7	414.7	414.3	414.3	413.0	412.6
7.5°	412.1	409.9	410.8	410.8	411.7	413.0	413.0	412.6	412.6	411.2	410.8
10°	409.5	406.9	408.2	408.2	409.1	410.8	410.8	410.4	410.4	409.1	408.6
12.5°	405.1	402.5	404.7	405.1	406.0	407.8	407.3	407.3	407.3	406.0	405.6
15°	399.9	398.1	400.3	400.8	402.1	404.3	404.3	404.3	404.3	402.9	402.5
17.5°	394.2	392.9	395.1	396.0	397.7	399.9	399.9	400.3	400.8	399.9	399.4
20°	387.6	386.8	389.0	390.7	393.3	395.5	396.4	396.8	397.7	396.8	396.4
22.5°	380.2	380.2	383.3	385.0	388.1	390.3	391.6	392.9	393.8	392.9	392.5
25°	371.9	373.2	376.3	379.3	382.8	385.0	386.3	388.1	389.0	388.5	388.1
27.5°	364.0	365.8	369.7	372.8	375.8	379.3	380.7	382.8	383.7	383.7	383.3
30°	354.9	357.5	361.9	365.4	369.3	372.8	374.5	376.7	378.0	377.2	377.6
32.5°	346.1	350.5	354.0	357.9	362.3	365.8	368.0	370.6	371.9	371.5	371.9
35°	336.5	340.9	345.7	349.6	354.9	358.4	361.4	363.6	365.4	364.9	364.9
37.5°	326.0	331.7	336.5	341.8	346.6	350.5	353.6	356.2	357.9	357.9	357.9
40°	316.0	322.1	326.9	333.0	339.1	342.6	346.1	348.8	350.5	350.9	351.4
42.5°	305.0	311.6	317.3	323.8	330.0	334.3	338.3	341.3	343.1	343.9	343.5
45°	295.0	301.1	307.7	315.1	320.8	325.2	330.0	333.5	335.2	335.6	336.1
47.5°	283.6	290.6	298.1	305.5	311.2	316.8	321.2	324.7	326.5	327.8	327.8
50°	272.7	280.1	288.4	296.3	302.4	308.1	312.5	316.4	318.6	319.5	319.9
52.5°	262.7	269.6	278.4	286.3	292.4	298.1	303.7	308.1	310.3	311.2	311.2
55°	250.4	259.2	268.8	276.2	282.8	289.3	295.0	299.4	301.6	302.9	303.7
57.5°	239.1	248.2	258.3	266.2	274.0	280.1	285.4	291.1	292.8	294.6	295.0
60°	228.1	237.3	246.9	255.7	263.5	270.1	276.2	281.0	284.1	284.9	285.8
62.5°	216.8	226.4	236.4	245.2	253.5	261.3	267.0	271.4	274.9	276.2	277.1
65°	205.8	215.9	225.9	235.1	243.9	251.7	257.4	261.8	265.3	267.5	267.9
67.5°	194.0	205.0	215.5	225.1	233.8	242.1	247.8	252.2	255.7	258.3	258.7
70°	183.1	194.5	205.0	215.5	224.2	232.5	238.6	243.0	246.9	248.7	249.5
72.5°	172.6	184.4	195.4	205.8	214.6	222.9	229.4	233.8	237.7	239.9	240.4
75°	162.6	174.4	186.2	196.2	205.4	213.7	220.3	225.1	228.6	230.8	231.6
77.5°	152.5	164.8	176.6	186.6	196.2	204.5	210.2	215.9	219.4	222.0	222.0
80°	142.5	155.1	167.4	177.4	187.1	194.5	201.0	206.7	210.2	212.8	212.8
82.5°	133.7	146.0	157.8	167.8	177.4	185.7	192.3	197.5	201.5	203.2	203.7
85°	123.7	137.2	148.2	159.1	168.3	176.1	182.7	188.4	191.9	193.6	194.5
87.5°	115.4	128.5	140.3	149.9	159.1	166.9	174.4	179.2	182.7	184.9	185.7
90°	107.5	120.2	132.0	141.6	151.2	158.6	165.6	170.4	174.4	176.1	177.0
92.5°	100.5	113.2	124.6	134.2	143.3	151.7	158.2	163.0	166.5	168.3	169.6
95°	94.0	106.2	117.1	127.6	136.4	143.8	150.8	155.6	159.5	160.8	162.1
97.5°	87.4	99.2	110.1	120.2	129.4	136.4	142.9	147.7	150.8	153.0	154.3
100°	81.7	93.1	103.6	113.2	121.9	128.5	135.5	139.9	142.9	144.7	146.4
102.5°	75.6	87.0	97.0	106.2	115.4	121.5	128.1	132.4	135.0	138.1	138.1
105°	70.4	80.9	90.9	99.6	107.5	114.9	120.6	125.0	128.1	130.2	130.2
107.5°	64.7	75.2	84.8	94.0	101.4	108.4	113.6	117.6	121.1	122.4	123.7
110°	60.3	69.5	79.1	87.8	94.8	101.4	106.6	111.0	114.1	115.4	116.3



TEST NUMBER: P1213719

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	55.1	64.7	73.4	81.7	88.7	94.8	100.1	103.6	106.6	108.4	108.8
115°	50.7	59.9	67.7	75.6	83.0	88.3	93.1	96.6	99.6	101.0	101.8
117.5°	46.8	55.1	62.9	69.5	76.5	82.2	87.0	90.0	92.7	94.4	95.3
120°	42.8	50.7	57.7	64.2	70.8	76.0	80.4	83.5	86.5	87.8	87.8
122.5°	38.9	46.3	52.9	59.0	65.1	69.9	74.7	77.4	80.0	81.3	81.3
125°	35.4	42.4	48.5	54.2	59.9	64.2	68.2	71.2	73.9	74.7	74.7
127.5°	31.9	38.5	44.1	49.4	54.2	58.6	62.5	65.6	67.7	68.6	68.6
130°	28.8	34.5	39.8	45.0	49.8	53.3	57.3	59.9	61.2	62.5	62.9
132.5°	25.8	31.0	35.8	40.2	45.0	48.5	51.6	54.2	55.5	56.8	57.3
135°	22.7	27.5	31.9	36.3	40.2	43.7	46.3	48.5	50.3	51.1	51.6
137.5°	19.2	24.5	28.4	31.9	36.3	38.9	42.0	43.3	45.0	45.9	45.9
140°	16.2	20.1	24.5	28.0	31.5	34.1	36.7	38.9	40.2	40.6	40.6
142.5°	13.1	16.6	20.1	24.5	27.5	29.7	32.3	34.1	35.0	35.4	35.8
145°	10.5	13.1	16.2	20.1	23.6	26.2	27.5	29.3	30.2	30.6	31.0
147.5°	7.9	10.5	13.1	15.7	19.2	21.9	23.2	24.9	25.8	26.2	26.2
150°	6.1	7.9	9.6	12.2	14.9	17.9	19.7	21.0	21.4	21.9	21.9
152.5°	4.4	6.1	7.4	9.2	10.9	13.5	16.2	17.0	17.5	17.9	17.9
155°	3.1	4.4	5.2	6.6	7.9	10.1	12.2	13.5	14.0	14.4	14.4
157.5°	2.2	3.1	3.5	4.8	5.7	6.6	8.3	10.5	10.9	10.9	10.9
160°	1.3	1.7	2.2	3.1	3.5	4.4	5.2	6.6	7.9	7.9	7.9
162.5°	0.9	1.3	1.3	1.7	1.7	2.6	3.1	3.5	4.8	5.2	5.2
165°	0.4	0.9	0.9	0.9	0.9	0.9	1.3	1.3	2.2	2.6	2.6
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: P1213719

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3	414.3
2.5°	413.4	414.3	413.9	413.9	413.9	414.7	413.9	409.9	410.8	411.7	412.6
5°	413.0	413.4	413.4	413.0	413.0	413.9	413.0	409.1	409.9	410.8	411.2
7.5°	411.2	411.7	411.7	411.7	411.2	412.1	410.8	407.3	407.3	408.2	408.6
10°	409.1	409.9	409.5	409.1	409.1	409.1	408.2	404.3	404.3	404.7	405.1
12.5°	406.4	406.4	406.4	406.0	405.6	405.6	404.7	400.8	400.3	401.2	400.8
15°	402.9	403.8	402.9	402.5	401.6	401.6	400.3	396.4	395.5	396.0	395.5
17.5°	399.9	400.3	399.4	398.6	397.7	397.3	396.0	391.6	390.3	390.7	389.8
20°	396.8	396.8	396.0	395.1	393.8	392.5	390.7	386.3	384.2	384.2	382.4
22.5°	392.9	392.9	392.0	390.7	389.4	387.6	385.9	381.5	378.0	377.2	375.8
25°	388.5	388.1	387.6	386.3	383.7	382.0	380.2	375.4	371.5	369.7	367.5
27.5°	383.3	383.3	382.0	380.7	378.0	375.8	373.7	369.3	364.0	361.9	358.8
30°	377.6	377.6	376.3	374.5	371.9	369.3	366.7	361.4	356.2	353.1	349.6
32.5°	371.9	371.5	370.2	368.4	365.8	361.9	359.7	354.4	348.3	344.8	340.0
35°	364.9	364.5	363.2	361.0	357.5	354.4	350.9	346.1	339.1	334.8	329.5
37.5°	357.9	357.5	356.6	353.6	350.1	346.6	342.2	337.4	330.8	325.2	319.9
40°	350.9	350.5	348.8	346.6	342.2	337.8	333.5	328.6	321.7	315.1	309.4
42.5°	343.5	343.1	340.9	338.3	333.5	329.1	323.8	318.6	311.6	303.7	298.1
45°	336.1	335.2	333.0	330.0	324.7	319.9	314.7	308.5	301.6	294.1	286.7
47.5°	328.2	326.9	324.7	320.3	316.0	310.7	304.6	298.1	291.1	282.8	274.9
50°	319.5	318.6	316.0	312.0	306.8	301.6	294.6	288.0	279.7	271.8	262.2
52.5°	311.2	309.4	307.2	302.9	297.6	291.9	284.5	276.6	268.3	260.9	250.9
55°	302.4	301.6	298.5	295.0	288.4	281.9	274.9	266.6	257.4	248.7	239.1
57.5°	294.1	292.4	289.8	284.9	279.3	272.7	265.3	256.5	246.5	237.3	226.8
60°	285.8	283.2	280.1	275.8	269.6	262.7	254.8	245.6	235.6	225.5	214.6
62.5°	276.6	274.5	271.0	266.6	260.5	253.0	244.7	235.1	225.5	215.0	203.2
65°	267.5	265.3	261.8	257.4	251.3	243.0	234.2	224.6	213.7	203.7	191.0
67.5°	258.3	256.1	252.2	247.4	241.2	233.4	224.2	214.1	203.2	192.3	179.2
70°	249.1	246.5	243.0	237.7	231.6	223.3	214.1	203.7	192.7	180.9	167.8
72.5°	239.9	237.7	233.4	228.6	222.0	213.7	204.5	194.0	182.7	170.4	157.3
75°	230.8	228.1	225.1	219.4	212.4	204.5	194.9	184.4	172.2	160.4	146.8
77.5°	221.6	219.4	215.5	209.8	203.2	194.9	185.3	174.8	162.6	150.3	135.9
80°	212.4	209.8	206.7	201.5	194.0	185.7	175.7	165.2	153.0	140.3	125.9
82.5°	203.2	200.6	197.1	191.9	184.9	176.6	166.9	155.6	143.3	130.2	116.7
85°	194.0	191.9	187.9	182.7	175.3	166.9	157.3	147.3	134.2	121.1	107.5
87.5°	184.9	182.7	178.7	173.5	166.5	158.2	148.6	138.1	125.4	113.2	98.3
90°	176.1	174.4	170.4	165.2	158.2	149.9	141.2	129.8	117.6	105.3	91.3
92.5°	168.3	166.5	163.0	157.8	151.7	142.5	133.7	122.8	110.6	97.9	84.3
95°	161.3	159.1	155.6	150.8	143.3	135.5	126.7	115.8	104.0	91.3	78.2
97.5°	153.4	151.2	147.7	142.5	136.4	128.1	119.3	108.8	97.0	85.2	72.1
100°	145.5	143.3	139.4	135.0	128.9	120.6	112.3	101.8	90.9	79.5	66.9
102.5°	137.7	135.5	132.0	127.6	121.5	114.1	105.8	95.7	84.8	73.4	61.6
105°	130.2	128.1	124.6	120.2	114.5	107.1	98.3	89.6	79.1	68.2	56.8
107.5°	122.8	120.6	117.6	113.2	107.5	100.5	92.2	83.0	73.4	62.9	52.0
110°	115.4	113.6	110.1	106.2	100.5	93.5	86.1	77.4	67.7	58.1	47.6

TEST NUMBER: P1213719

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	108.4	106.6	103.1	98.8	94.0	87.4	80.0	71.7	62.5	53.3	43.3
115°	101.4	99.2	96.1	92.2	87.4	81.3	74.3	66.9	57.7	48.9	39.8
117.5°	94.4	92.7	89.6	85.7	81.3	75.2	68.6	61.6	52.9	44.6	36.3
120°	87.4	86.1	83.0	79.5	75.2	69.5	63.4	56.4	48.5	40.6	32.8
122.5°	80.9	79.5	76.5	73.4	69.1	63.8	58.1	51.6	44.6	37.1	30.2
125°	74.7	73.0	70.4	67.3	63.4	58.6	52.9	46.8	40.2	33.7	27.1
127.5°	68.2	66.9	65.1	61.6	57.7	53.3	48.1	42.8	36.7	30.6	24.5
130°	62.9	61.2	59.0	56.4	52.9	48.5	43.7	38.5	33.2	27.5	21.4
132.5°	56.8	55.1	53.3	50.7	47.6	43.7	39.3	34.5	29.7	24.5	19.2
135°	51.1	49.8	48.1	45.5	42.4	39.3	35.0	30.6	26.2	21.4	17.0
137.5°	45.9	44.6	42.8	41.1	38.0	35.0	31.0	27.1	23.2	18.8	14.9
140°	40.6	39.8	38.0	36.3	33.7	30.6	27.1	23.6	20.1	16.2	12.7
142.5°	35.4	34.5	33.2	31.5	29.3	26.7	23.6	20.5	17.0	14.0	10.9
145°	30.6	30.2	28.8	27.1	25.3	22.7	20.1	17.5	14.4	11.8	8.7
147.5°	25.8	25.3	24.5	23.2	21.4	19.2	17.0	14.4	12.2	9.6	7.0
150°	21.4	21.0	20.5	18.8	17.9	15.7	14.0	11.8	10.1	7.4	5.7
152.5°	17.5	17.5	16.6	15.3	14.4	12.7	11.4	9.6	7.9	6.1	4.4
155°	14.0	13.5	13.1	12.2	11.4	10.1	8.7	7.4	6.1	4.4	3.1
157.5°	10.9	10.5	10.1	9.2	8.3	7.9	6.6	5.2	3.9	3.1	2.2
160°	7.9	7.4	7.0	6.6	6.1	5.2	4.4	3.5	2.6	1.7	1.3
162.5°	5.2	4.8	4.8	4.4	3.9	3.1	2.6	2.2	1.7	1.3	0.9
165°	2.6	2.6	2.2	2.2	1.7	1.3	1.3	1.3	0.9	0.9	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: P1213719

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	414.3	414.3	414.3	414.3	414.3	414.3	414.3
2.5°	412.1	412.1	413.9	413.4	412.1	414.7	417.8
5°	410.8	410.8	412.1	412.1	410.8	413.4	416.1
7.5°	408.6	408.2	409.5	409.5	407.8	409.9	413.0
10°	404.7	404.3	405.6	405.6	403.8	406.0	408.6
12.5°	400.3	399.4	400.8	400.3	398.6	400.8	403.4
15°	394.6	394.2	395.1	394.2	392.5	394.6	397.3
17.5°	389.0	387.6	388.1	388.1	385.0	387.2	389.4
20°	381.5	379.8	380.2	379.8	377.6	378.9	381.5
22.5°	374.1	371.5	371.5	371.0	368.4	370.2	372.4
25°	364.9	361.9	361.9	361.4	358.4	359.7	361.9
27.5°	355.7	352.7	351.4	350.9	347.9	347.9	350.9
30°	346.1	341.8	340.9	339.6	336.5	336.5	339.1
32.5°	337.0	330.8	329.1	327.3	324.3	323.8	326.9
35°	324.7	319.9	316.8	315.1	311.6	310.7	313.4
37.5°	314.7	308.5	304.2	302.0	298.5	297.2	300.7
40°	303.7	297.2	291.5	290.2	284.9	283.2	286.3
42.5°	291.5	284.5	278.8	276.2	272.3	270.5	271.0
45°	279.3	271.8	265.7	262.2	258.3	255.2	257.0
47.5°	266.6	260.0	252.6	247.4	242.6	240.4	241.2
50°	253.9	246.0	239.1	233.4	227.7	225.1	226.8
52.5°	241.2	232.9	225.1	219.0	212.4	209.8	210.2
55°	229.0	220.3	211.1	204.5	198.4	194.5	193.6
57.5°	216.8	207.2	197.5	190.1	182.2	178.7	177.4
60°	203.7	193.6	183.6	174.8	166.5	162.6	160.8
62.5°	191.4	180.5	169.1	160.0	151.7	146.4	145.1
65°	179.6	166.9	155.6	145.1	135.9	130.2	128.5
67.5°	166.9	153.8	141.6	130.2	121.5	114.1	113.2
70°	155.1	141.2	127.6	115.8	106.2	98.8	95.3
72.5°	143.3	128.9	114.9	102.3	90.0	83.0	80.4
75°	132.0	117.1	102.3	89.2	75.6	67.3	64.7
77.5°	121.5	106.2	90.5	76.0	63.4	52.9	49.4
80°	111.4	95.7	79.1	64.2	50.7	39.3	35.4
82.5°	101.0	86.1	69.1	53.3	39.3	27.5	22.7
85°	91.8	76.9	59.9	44.1	30.2	17.5	12.2
87.5°	84.3	68.2	52.9	37.1	22.7	10.1	3.5
90°	76.9	61.2	45.9	30.6	17.0	5.7	0.4
92.5°	70.4	55.5	40.2	26.2	13.1	3.9	0.4
95°	64.2	49.8	35.4	21.9	10.5	2.6	0.4
97.5°	58.6	45.0	31.5	18.8	8.7	2.2	0.4
100°	53.8	40.6	28.0	16.6	7.4	1.7	0.4
102.5°	48.9	36.7	24.9	14.4	6.6	1.3	0.4
105°	45.0	33.2	22.3	13.1	5.7	1.3	0.4
107.5°	41.1	30.2	20.1	11.4	4.8	0.9	0.4
110°	37.1	27.5	17.9	10.1	4.4	0.9	0.4

TEST NUMBER: P1213719

CATALOG NUMBER: 4SNLED-LD5-20SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	34.1	24.9	16.2	9.2	3.5	0.9	0.4
115°	31.0	22.3	14.4	7.9	3.1	0.4	0.4
117.5°	28.0	20.1	12.7	7.0	2.6	0.4	0.4
120°	25.3	17.9	11.4	6.1	2.2	0.4	0.4
122.5°	22.7	16.2	10.1	5.2	1.7	0.4	0.4
125°	20.5	14.4	8.7	4.4	1.3	0.4	0.4
127.5°	18.4	12.7	7.9	3.9	1.3	0.4	0.4
130°	16.2	11.4	6.6	3.1	0.9	0.4	0.4
132.5°	14.4	9.6	5.7	2.6	0.9	0.4	0.4
135°	12.7	8.3	4.8	1.7	0.9	0.4	0.4
137.5°	10.9	7.0	3.9	1.3	0.4	0.4	0.4
140°	9.2	6.1	3.1	1.3	0.4	0.4	0.4
142.5°	7.9	4.8	2.2	0.9	0.4	0.4	0.4
145°	6.1	3.9	1.7	0.9	0.4	0.4	0.4
147.5°	4.8	3.1	1.3	0.9	0.4	0.4	0.4
150°	3.5	2.2	1.3	0.4	0.4	0.4	0.4
152.5°	2.6	1.7	0.9	0.4	0.4	0.4	0.4
155°	1.7	1.3	0.9	0.4	0.4	0.4	0.4
157.5°	1.3	0.9	0.4	0.4	0.4	0.4	0.4
160°	0.9	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)