

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: P1213723

Luminaire Tested: 4SNLED-LD5-22SL-LC-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213723
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33518)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-22SL-LC-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

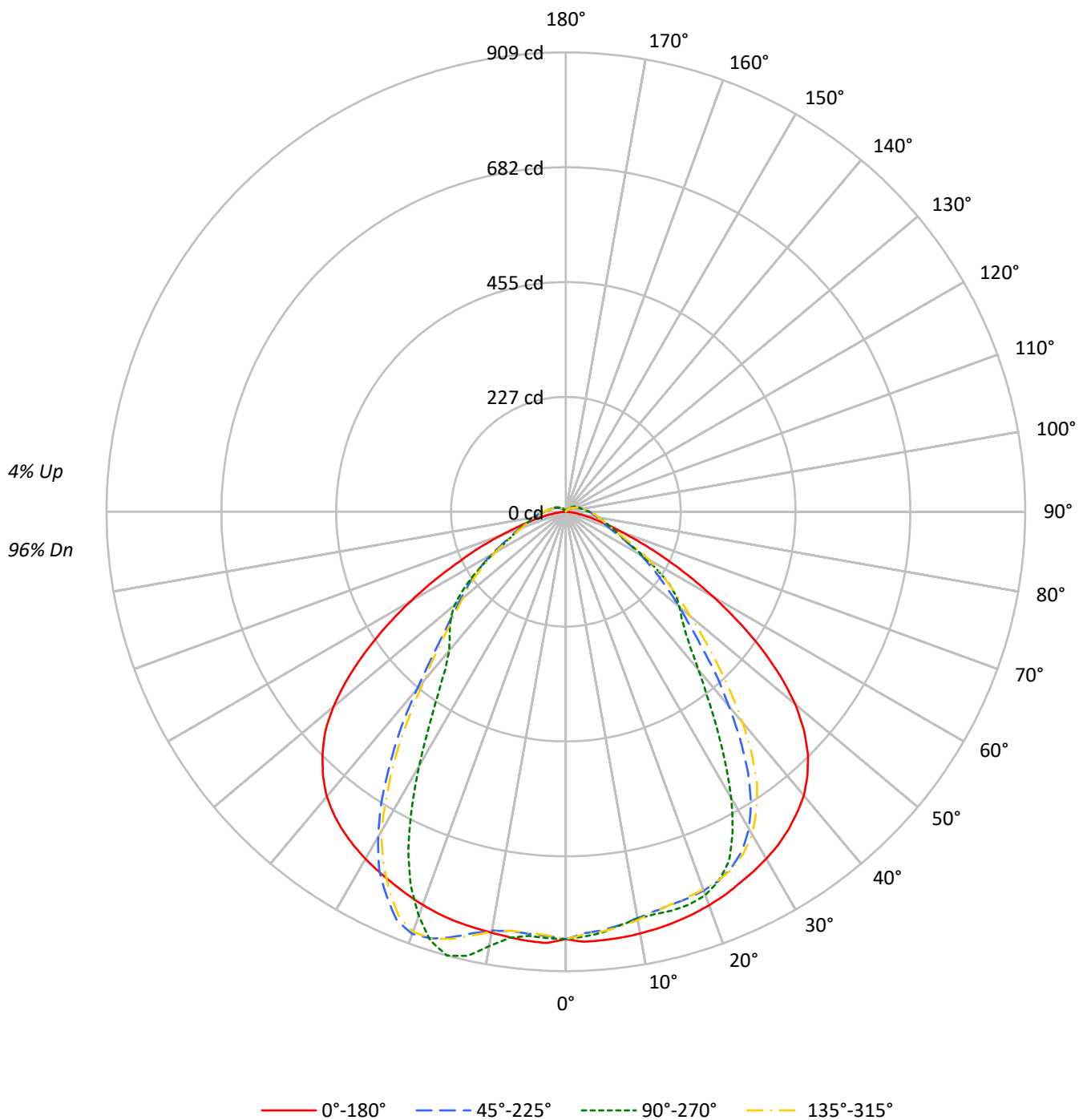
Lumens per Lamp: N/A
Luminaire Lumens: 2016.0 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	98	98	96
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	84	84	84	82
2	100	93	86	81	97	90	85	80	86	82	77	82	79	75	79	76	73	73	73	71
3	92	83	75	69	89	81	74	68	77	71	67	74	69	65	71	67	63	63	63	61
4	85	74	66	60	83	73	65	59	70	63	58	67	61	57	64	60	56	56	56	54
5	79	67	59	52	76	66	58	52	63	56	51	61	55	50	59	53	49	49	49	47
6	73	61	52	46	71	60	52	46	57	51	45	55	49	45	54	48	44	44	44	42
7	68	55	47	42	66	54	47	41	53	46	41	51	45	40	49	44	40	40	40	38
8	64	51	43	37	62	50	42	37	48	42	37	47	41	36	45	40	36	36	36	34
9	60	47	39	34	58	46	39	34	45	38	33	43	37	33	42	37	33	33	33	31
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30	30	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	6834	6834	6834	6834
5°	6884	6563	6897	6615
10°	6915	6290	6902	6717
15°	6969	6206	6965	6910
20°	7046	6107	7039	6438
25°	7133	5794	7129	5599
30°	7267	5022	7270	4449
35°	7409	4061	7431	3436
40°	7535	3269	7566	2881
45°	7508	2769	7547	2696
50°	7184	2549	7284	2493
55°	6374	2292	6533	2083
60°	5170	1754	5444	1608
65°	3844	1342	4141	1272
70°	2613	1158	2946	1107
75°	1711	1046	1991	988
80°	1107	974	1297	897
85°	567	973	745	889

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 7547 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.3	4.0
10°-20°	239.0	11.9
20°-30°	363.4	18.0
30°-40°	389.8	19.3
40°-50°	338.3	16.8
50°-60°	250.7	12.4
60°-70°	143.6	7.1
70°-80°	79.5	3.9
80°-90°	48.4	2.4
90°-100°	31.5	1.6
100°-110°	21.1	1.0
110°-120°	14.2	0.7
120°-130°	8.7	0.4
130°-140°	4.6	0.2
140°-150°	2.1	0.1
150°-160°	0.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	682.7	33.9
0°-40°	1072.5	53.2
0°-60°	1661.5	82.4
0°-90°	1933.1	95.9
90°-120°	66.8	3.3
90°-150°	82.3	4.1
90°-180°	83.0	4.1
0°-180°	2016.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	846	846	846	846	846	
5°	851	836	853	842	851	81
15°	840	816	840	909	840	238
25°	812	764	811	738	812	375
35°	768	520	770	440	768	480
45°	678	333	681	324	678	519
55°	473	250	484	227	473	419
65°	214	127	231	120	214	216
75°	61	80	71	76	61	70
85°	8	56	11	51	8	11
90°	0	46	1	43	0	0
95°	0	38	0	36	0	0
105°	0	28	0	27	0	0
115°	0	23	0	21	0	0
125°	0	18	0	14	0	0
135°	0	11	0	9	0	0
145°	0	7	1	5	0	0
155°	1	3	1	3	1	0
165°	0	0	0	0	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°	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7
2.5°	851.8	849.6	848.7	847.0	848.3	853.5	850.0	844.4	844.8	834.7	840.0
5°	850.9	848.3	847.0	845.2	846.1	850.9	847.4	841.7	841.3	831.2	836.1
7.5°	849.6	847.0	844.8	843.5	843.9	847.8	843.5	836.9	835.6	824.7	829.1
10°	847.4	845.7	842.6	840.4	840.0	844.4	837.4	830.8	827.8	816.4	820.8
12.5°	844.4	841.7	838.7	834.7	834.3	836.9	831.2	822.1	819.0	809.8	814.6
15°	840.0	836.9	833.4	829.1	826.9	828.6	821.6	813.3	812.9	805.0	811.6
17.5°	835.2	830.8	826.9	820.8	817.7	819.0	813.3	805.9	806.8	802.0	809.4
20°	828.6	823.8	817.7	811.6	807.2	809.4	805.5	799.8	801.1	797.6	804.2
22.5°	821.2	814.6	807.2	800.2	796.7	799.8	796.7	791.9	792.4	790.2	794.1
25°	811.6	804.2	795.4	786.7	784.9	787.1	785.4	781.5	779.7	776.2	778.0
27.5°	802.9	794.6	783.6	774.5	771.4	775.8	771.8	765.3	760.5	755.7	752.2
30°	792.8	782.8	770.5	760.0	757.4	759.2	753.5	743.4	730.8	724.7	715.1
32.5°	781.9	768.8	753.5	741.7	740.0	738.6	728.2	713.7	694.1	681.9	667.0
35°	767.5	753.1	734.7	720.3	717.7	710.3	693.2	674.0	648.7	627.7	602.4
37.5°	751.3	734.3	715.1	695.8	688.4	673.6	649.5	629.4	591.0	565.7	535.1
40°	733.0	712.4	688.8	665.7	653.5	629.4	601.9	572.2	535.1	501.0	475.2
42.5°	707.6	685.8	657.8	632.1	611.1	579.2	546.9	505.0	470.9	442.0	415.8
45°	677.5	651.3	619.0	587.9	561.3	523.3	485.3	443.4	415.0	381.3	363.4
47.5°	638.6	610.2	575.7	541.2	506.3	464.3	424.6	384.4	356.0	332.0	318.9
50°	592.7	566.5	528.5	487.5	449.0	405.4	365.6	335.5	307.9	293.1	283.1
52.5°	536.0	511.5	472.6	428.1	390.9	348.1	311.9	287.4	267.8	256.8	253.3
55°	472.6	451.2	412.8	371.3	333.3	294.0	266.5	245.0	232.4	225.8	226.3
57.5°	404.9	388.3	352.1	314.9	279.1	249.4	224.5	207.5	197.9	197.4	198.7
60°	337.2	325.0	293.5	261.6	230.2	206.2	187.8	176.0	169.9	170.4	169.9
62.5°	272.6	261.2	238.5	212.3	187.4	171.2	154.6	149.8	144.6	144.1	144.1
65°	214.5	205.7	187.4	168.6	149.8	139.3	131.0	125.4	121.4	120.6	121.0
67.5°	161.2	157.7	145.0	132.4	120.6	114.0	107.0	105.7	102.6	102.6	103.5
70°	120.1	117.5	110.5	103.1	98.3	93.9	90.4	90.4	90.0	89.5	91.7
72.5°	86.9	87.4	85.2	79.5	79.1	78.2	77.3	78.6	79.1	80.4	83.0
75°	61.2	62.5	62.5	61.6	63.3	65.5	66.8	69.0	71.6	73.4	76.4
77.5°	43.2	43.2	45.4	48.0	51.5	55.5	59.0	62.0	65.5	67.7	70.3
80°	28.0	29.3	32.8	37.6	42.4	47.6	52.4	56.3	59.8	63.3	65.1
82.5°	16.6	18.8	23.2	29.3	35.4	41.9	46.7	51.5	55.5	59.0	60.3
85°	8.3	11.4	16.6	23.2	29.7	36.7	42.8	47.2	51.5	54.6	56.3
87.5°	2.6	6.1	11.8	17.9	24.9	31.9	38.4	43.2	47.2	49.8	51.5
90°	0.0	3.1	8.3	14.9	21.4	28.4	34.5	39.7	43.7	45.9	47.2
92.5°	0.0	1.7	6.6	12.2	18.3	25.3	31.5	36.3	39.7	41.9	42.8
95°	0.4	1.3	4.8	10.0	16.2	22.7	28.4	32.8	36.3	38.4	38.9
97.5°	0.4	0.9	3.9	8.3	14.0	20.1	25.8	30.1	32.8	34.9	35.4
100°	0.4	0.9	3.1	7.4	12.2	17.9	23.2	27.1	30.1	31.9	32.3
102.5°	0.4	0.4	2.6	6.1	10.9	15.7	20.5	24.5	27.1	28.8	29.7
105°	0.4	0.4	2.2	5.2	9.6	14.0	18.3	22.3	24.5	26.2	27.1
107.5°	0.4	0.4	1.7	4.4	8.3	12.2	16.6	19.7	22.3	24.0	24.9
110°	0.4	0.4	1.3	3.9	7.0	10.9	14.4	17.5	20.1	21.8	22.7

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.4	0.4	1.3	3.5	6.1	9.6	12.7	15.7	17.9	19.7	21.0
115°	0.4	0.4	1.3	3.1	5.7	8.3	11.4	14.0	16.2	17.9	19.2
117.5°	0.4	0.4	1.3	2.6	4.8	7.4	10.0	12.7	14.4	16.2	17.5
120°	0.4	0.4	0.9	2.2	4.4	6.6	8.7	10.9	13.1	14.9	16.2
122.5°	0.4	0.4	0.9	2.2	3.5	5.7	7.9	9.6	11.8	13.1	14.4
125°	0.4	0.4	0.9	1.7	3.1	5.2	7.0	8.7	10.0	11.8	13.1
127.5°	0.4	0.4	0.9	1.7	2.6	4.4	6.1	7.9	9.2	10.5	11.4
130°	0.4	0.4	0.9	1.3	2.2	3.5	5.2	6.6	8.3	9.2	10.0
132.5°	0.4	0.4	0.4	1.3	1.7	2.6	3.9	5.7	7.0	8.3	8.7
135°	0.4	0.4	0.4	0.9	1.7	2.2	3.1	4.4	5.7	7.0	7.9
137.5°	0.4	0.4	0.4	0.9	1.3	2.2	2.6	3.5	4.8	5.7	7.0
140°	0.4	0.4	0.4	0.9	1.3	1.7	2.2	3.1	3.9	4.8	5.7
142.5°	0.4	0.4	0.4	0.9	0.9	1.3	1.7	2.6	3.1	3.9	4.8
145°	0.4	0.4	0.4	0.9	0.9	1.3	1.7	2.2	2.6	3.1	3.9
147.5°	0.4	0.4	0.4	0.9	0.9	0.9	1.3	1.7	2.2	2.6	3.1
150°	0.9	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.7	2.2	2.6
152.5°	0.9	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.7	2.2
155°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.7	1.7
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7
2.5°	838.2	839.1	844.4	843.9	843.0	842.2	842.2	841.3	842.2	844.4	843.5
5°	833.9	835.2	839.1	838.7	837.8	837.4	836.9	835.6	836.5	839.5	838.7
7.5°	826.0	827.3	830.8	829.1	827.8	828.6	826.4	825.1	826.9	829.9	829.5
10°	817.7	818.6	822.9	822.1	819.9	820.3	818.1	817.3	819.5	821.2	821.6
12.5°	812.0	815.1	819.0	818.6	818.1	818.6	816.4	815.5	816.8	818.6	818.1
15°	810.7	814.6	819.0	819.0	819.5	819.9	817.7	816.4	817.7	819.0	818.6
17.5°	809.4	814.2	818.1	817.7	818.1	819.0	815.5	814.6	816.4	818.1	817.3
20°	805.0	809.4	812.0	811.2	811.2	811.6	807.2	807.2	809.8	811.2	811.6
22.5°	792.8	798.0	798.0	795.9	795.9	794.1	792.8	790.2	793.2	795.4	797.2
25°	774.5	776.6	774.0	769.2	766.6	764.4	758.3	763.5	763.5	770.1	772.3
27.5°	748.7	743.9	736.5	726.4	724.2	717.2	713.3	714.6	716.8	726.0	733.0
30°	706.3	691.9	679.2	674.9	665.3	658.3	651.3	654.8	658.7	663.9	678.4
32.5°	650.4	636.4	615.9	608.5	598.4	589.7	581.4	586.6	593.6	597.1	612.8
35°	586.2	569.6	550.8	538.1	527.7	522.9	512.4	519.8	527.2	529.8	543.4
37.5°	518.1	501.0	484.4	473.5	463.5	460.4	453.4	458.6	464.3	468.3	479.6
40°	453.4	437.7	425.0	417.6	410.6	408.0	405.4	407.5	411.9	415.0	423.7
42.5°	397.9	385.3	376.5	372.2	367.4	363.9	364.3	365.2	367.4	373.9	377.8
45°	349.4	342.0	336.3	335.5	332.4	332.0	331.5	333.3	334.6	338.5	341.6
47.5°	310.6	307.5	306.2	307.9	309.3	307.5	308.4	310.6	313.2	313.2	312.8
50°	280.0	280.9	282.6	286.5	289.2	290.0	290.9	293.5	294.0	294.8	293.5
52.5°	255.1	256.0	260.8	266.9	269.9	271.3	273.0	275.6	275.6	276.5	274.8
55°	229.8	231.1	235.9	242.0	244.6	246.4	248.1	249.9	251.2	252.9	251.6
57.5°	201.8	205.7	208.8	210.5	212.3	213.6	214.9	215.3	218.0	218.4	220.6
60°	172.1	173.0	176.0	175.6	174.3	177.8	176.0	179.1	182.1	186.1	186.5
62.5°	143.7	144.1	146.3	145.5	147.2	146.8	148.1	148.1	150.3	152.0	154.2
65°	121.4	121.9	123.6	123.6	123.2	124.5	125.8	126.7	126.7	128.0	129.7
67.5°	104.8	106.1	107.9	108.8	109.6	109.6	110.9	111.4	112.3	112.7	113.6
70°	93.5	95.2	97.0	97.8	98.3	99.2	99.6	99.6	100.5	100.9	101.8
72.5°	85.2	86.9	88.2	88.2	89.1	89.5	89.5	90.0	90.4	91.3	92.2
75°	78.2	79.5	80.4	79.9	79.9	79.9	80.4	80.4	81.2	82.1	83.0
77.5°	71.6	72.9	72.9	72.1	72.1	72.1	72.1	72.5	72.9	73.8	74.7
80°	66.8	66.8	66.4	66.4	65.5	65.1	65.1	65.5	65.5	66.4	67.7
82.5°	61.6	61.6	61.2	60.7	60.3	59.8	59.8	60.3	60.7	61.2	62.0
85°	56.8	56.8	55.9	55.9	55.5	55.5	55.5	55.5	55.9	56.3	57.2
87.5°	52.0	51.5	51.1	50.7	50.7	50.7	50.7	50.7	51.1	52.0	52.4
90°	47.2	46.7	46.3	46.3	45.9	45.9	46.3	46.3	46.7	47.2	47.6
92.5°	42.8	42.4	41.9	41.9	41.5	41.5	41.9	41.5	42.4	42.4	42.8
95°	38.9	38.4	38.0	38.0	38.0	38.0	38.0	38.0	38.4	38.4	38.9
97.5°	35.4	34.9	34.5	34.5	34.9	34.5	34.9	34.9	34.9	35.4	35.8
100°	32.3	31.9	31.9	32.3	31.9	31.9	32.3	32.3	32.3	32.3	32.8
102.5°	29.7	29.7	29.7	29.7	29.7	29.7	30.1	30.1	30.1	30.1	30.6
105°	27.1	27.5	27.5	27.5	28.0	28.0	28.0	28.4	28.4	28.4	28.4
107.5°	25.3	25.8	25.8	26.2	26.2	26.6	26.6	26.6	26.6	27.1	27.1
110°	23.6	24.0	24.5	24.9	24.9	25.3	25.3	25.3	25.3	25.3	25.3



TEST NUMBER: P1213723

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	21.8	22.3	22.7	23.6	24.0	24.0	24.0	24.0	24.5	24.5	24.0
115°	20.1	21.0	21.4	22.3	22.7	22.7	23.2	23.2	23.2	23.2	22.7
117.5°	18.3	19.7	20.1	21.0	21.4	21.4	21.8	21.8	21.8	21.8	21.4
120°	17.0	17.9	18.8	19.2	19.7	20.1	20.1	20.5	20.5	20.5	20.1
122.5°	15.7	16.6	17.5	17.9	18.3	18.8	18.8	18.8	18.8	18.8	18.8
125°	14.0	14.9	15.7	16.2	16.6	17.0	17.0	17.5	17.5	17.5	17.0
127.5°	12.7	13.5	14.0	14.9	15.3	15.3	15.7	15.7	15.7	15.7	15.3
130°	10.9	11.8	12.7	13.1	13.5	13.5	14.0	14.0	14.0	14.0	14.0
132.5°	9.6	10.5	10.9	11.8	11.8	12.2	12.2	12.7	12.7	12.7	12.2
135°	8.7	9.2	9.6	10.5	10.5	10.9	10.9	10.9	10.9	10.9	10.9
137.5°	7.9	8.3	8.7	9.2	9.2	9.6	9.6	9.6	9.6	10.0	9.6
140°	6.6	7.4	7.9	7.9	8.3	8.3	8.3	8.7	8.7	8.7	8.3
142.5°	5.7	6.1	6.6	7.0	7.4	7.4	7.4	7.4	7.9	7.4	7.4
145°	4.4	5.2	5.7	6.1	6.6	6.6	6.6	6.6	6.6	6.6	6.6
147.5°	3.5	3.9	4.8	5.2	5.2	5.7	5.7	5.7	5.7	5.7	5.7
150°	3.1	3.1	3.9	4.4	4.8	4.8	4.8	4.8	4.8	4.8	4.8
152.5°	2.2	2.6	3.1	3.5	3.9	3.9	3.9	3.9	3.9	3.9	3.9
155°	2.2	2.2	2.6	2.6	3.1	3.1	3.1	3.1	3.5	3.1	3.1
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213723

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7
2.5°	842.2	841.7	843.5	841.7	833.0	836.5	835.2	840.0	840.4	841.7	846.1
5°	837.8	837.8	840.0	838.2	829.9	833.4	833.0	837.8	838.7	839.5	844.4
7.5°	829.1	829.5	832.6	831.2	822.5	827.8	827.3	833.0	834.7	836.5	840.9
10°	820.8	820.3	823.8	822.5	814.2	820.3	819.9	825.6	828.2	831.2	836.5
12.5°	816.4	815.1	816.4	815.1	805.9	810.7	811.2	817.7	820.8	824.7	830.8
15°	816.4	814.2	814.2	811.6	801.1	804.2	804.6	809.0	812.9	816.8	824.3
17.5°	815.5	813.3	812.9	810.7	799.4	799.4	798.9	802.0	804.2	808.1	816.0
20°	810.7	809.8	809.4	808.1	797.6	795.9	795.0	795.0	796.3	797.6	805.5
22.5°	798.0	798.9	799.8	800.7	792.4	789.3	789.7	788.9	787.6	787.6	794.1
25°	774.5	778.8	782.3	786.3	781.5	779.3	781.9	780.6	778.4	776.6	782.3
27.5°	736.9	746.1	753.5	763.1	763.5	761.8	768.8	767.9	767.5	764.9	769.2
30°	684.9	699.3	709.4	723.4	735.1	736.9	748.7	750.4	752.2	750.9	755.2
32.5°	622.0	641.7	658.7	680.5	691.9	702.0	718.5	725.5	732.5	734.7	739.5
35°	553.4	575.7	595.8	619.8	637.7	659.6	679.7	690.2	705.9	712.0	719.0
37.5°	488.4	509.3	529.0	553.0	581.8	604.5	629.4	653.0	674.4	683.2	693.7
40°	430.7	447.7	466.5	487.5	513.7	543.4	570.5	603.2	628.6	646.0	661.3
42.5°	387.0	395.3	411.5	430.3	451.2	481.4	508.9	545.6	576.2	601.0	626.4
45°	348.1	352.1	363.9	373.9	395.3	422.0	451.2	487.0	518.9	550.8	581.4
47.5°	314.9	319.7	325.4	331.5	346.8	369.1	394.4	426.8	458.6	495.8	530.7
50°	292.7	294.0	294.8	297.5	306.6	321.9	342.5	370.0	400.6	440.3	477.4
52.5°	273.0	273.0	270.4	269.1	272.6	282.2	294.0	313.6	345.1	381.8	421.1
55°	252.0	248.1	247.2	242.9	243.7	248.1	253.8	269.1	294.8	326.3	364.3
57.5°	222.8	221.0	221.0	219.3	215.8	218.0	219.3	230.2	248.5	275.6	308.8
60°	189.1	188.3	190.4	190.9	187.8	189.1	188.7	195.3	208.4	230.2	257.7
62.5°	155.5	159.4	159.9	161.6	159.9	159.4	161.6	167.3	173.8	190.4	211.9
65°	130.6	132.8	133.2	135.4	134.5	134.5	136.3	140.7	144.6	155.9	172.5
67.5°	114.4	113.6	114.0	115.3	114.0	113.6	114.9	117.5	120.6	127.5	139.3
70°	101.8	100.9	100.9	100.9	99.2	97.8	98.3	99.2	100.5	104.4	111.8
72.5°	92.2	92.2	90.9	89.5	88.2	87.4	86.5	85.6	85.2	86.5	90.4
75°	83.4	83.9	83.4	82.1	80.4	78.6	76.9	75.1	72.9	72.1	72.5
77.5°	75.6	76.0	76.4	76.0	74.3	72.1	69.5	66.8	63.8	60.7	59.0
80°	68.6	69.5	69.9	69.5	68.1	66.4	63.3	60.3	55.9	52.0	47.6
82.5°	62.5	63.8	64.2	64.2	63.3	61.6	58.1	54.6	49.8	44.6	38.9
85°	57.7	58.5	59.4	59.4	59.0	57.2	53.7	49.8	45.0	38.9	32.8
87.5°	52.9	53.3	54.2	55.0	54.2	52.4	49.4	45.0	40.2	34.1	27.1
90°	48.0	48.5	49.4	50.2	49.8	48.0	45.4	41.5	36.3	29.7	22.7
92.5°	43.2	44.1	44.6	45.0	45.4	44.1	41.9	38.0	32.8	26.2	19.7
95°	39.7	39.7	40.6	41.1	41.5	40.2	38.4	34.5	29.7	23.6	17.0
97.5°	36.3	36.3	37.1	37.1	37.6	36.7	34.9	31.5	26.6	21.0	14.4
100°	32.8	33.2	33.6	34.1	34.1	33.6	31.9	28.4	24.0	18.8	12.7
102.5°	30.6	30.6	31.0	31.0	31.5	30.6	28.8	25.8	21.4	16.6	10.9
105°	28.4	28.4	28.8	28.8	28.4	27.5	25.8	23.2	19.2	14.4	9.6
107.5°	26.6	26.6	26.6	26.6	26.2	25.3	23.6	20.5	17.0	13.1	8.7
110°	25.3	24.9	24.9	24.5	24.0	22.7	21.0	18.3	15.3	11.4	7.4

TEST NUMBER: P1213723

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	24.0	23.6	23.2	22.7	21.8	20.5	18.8	16.6	13.5	10.0	6.6
115°	22.7	22.3	21.8	21.0	20.1	18.8	17.0	14.9	11.8	8.7	5.7
117.5°	21.4	21.0	20.1	19.2	18.3	17.0	15.3	13.1	10.5	7.9	5.2
120°	19.7	19.2	18.8	17.9	17.0	15.3	13.5	11.8	9.2	7.0	4.4
122.5°	18.3	17.9	17.0	16.6	15.3	14.0	12.2	10.5	8.3	6.1	3.9
125°	16.6	16.2	15.7	14.9	14.0	12.2	10.9	9.2	7.4	5.2	3.1
127.5°	15.3	14.9	14.0	13.1	12.2	10.9	9.6	8.3	6.6	4.4	3.1
130°	13.5	13.1	12.7	11.8	10.9	9.6	8.7	7.0	5.7	3.9	2.6
132.5°	11.8	11.8	11.4	10.5	9.6	8.7	7.4	6.1	4.8	3.5	2.2
135°	10.9	10.5	10.0	9.2	8.7	7.4	6.6	5.2	3.9	3.1	1.7
137.5°	9.6	9.2	8.7	8.3	7.4	6.6	5.7	4.4	3.5	2.6	1.7
140°	8.3	7.9	7.9	7.0	6.6	5.7	4.8	3.9	3.1	2.2	1.3
142.5°	7.4	7.0	6.6	6.1	5.7	4.8	3.9	3.1	2.6	1.7	1.3
145°	6.6	6.1	5.7	5.2	4.8	3.9	3.5	2.6	2.2	1.7	1.3
147.5°	5.2	5.2	4.8	4.4	3.9	3.5	3.1	2.6	1.7	1.3	0.9
150°	4.4	4.4	3.9	3.5	3.5	3.1	2.6	2.2	1.7	1.3	0.9
152.5°	3.9	3.5	3.5	3.1	3.1	2.6	2.2	1.7	1.3	1.3	0.9
155°	3.1	3.1	3.1	2.6	2.6	2.2	1.7	1.7	1.3	0.9	0.9
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213723

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7
2.5°	847.0	841.7	846.1	854.0	853.1	852.2	851.3	853.1	858.8	855.7	850.9
5°	845.7	840.4	845.2	852.6	852.2	850.9	850.0	851.8	857.5	854.4	849.2
7.5°	843.0	838.2	841.7	849.2	849.2	848.3	847.4	849.2	854.4	851.8	846.5
10°	838.7	835.2	838.7	845.7	846.1	844.4	843.5	845.7	850.9	849.6	845.2
12.5°	835.2	831.7	835.6	842.6	843.0	841.3	840.0	842.6	849.6	850.5	849.2
15°	830.4	827.3	832.1	839.5	839.5	838.2	838.2	841.7	851.3	855.3	857.5
17.5°	823.4	821.2	826.9	834.3	834.7	833.9	834.3	841.3	854.0	863.6	869.7
20°	814.6	813.8	819.9	827.8	829.1	829.5	831.7	842.2	859.6	872.7	878.9
22.5°	804.2	804.6	811.6	819.9	821.6	822.9	827.3	842.2	864.0	878.0	880.6
25°	792.4	793.7	801.1	811.2	813.3	816.0	823.4	842.6	865.3	874.5	870.1
27.5°	779.7	782.3	791.9	802.4	805.0	809.4	819.0	840.0	859.2	859.6	843.5
30°	766.6	769.7	781.0	793.2	797.6	802.0	813.8	833.9	844.4	830.4	802.0
32.5°	751.7	756.1	767.5	782.3	787.6	793.2	805.0	822.1	818.1	788.0	747.4
35°	733.0	739.1	752.2	769.7	774.5	781.9	790.2	794.1	776.6	733.8	688.0
37.5°	709.8	719.0	734.3	754.4	759.6	764.4	766.6	755.7	720.7	674.4	626.8
40°	683.2	697.1	713.7	736.0	741.3	741.3	733.4	710.3	666.1	605.4	552.6
42.5°	650.8	667.9	688.8	711.1	716.4	710.3	691.5	650.8	600.6	532.9	477.0
45°	611.5	634.2	657.8	681.0	683.6	670.1	636.4	584.9	522.9	460.0	406.7
47.5°	564.8	594.5	620.3	646.5	643.0	620.3	575.3	516.7	451.2	391.8	349.0
50°	512.4	547.3	576.2	601.0	593.6	562.2	509.3	448.2	383.1	332.4	297.0
52.5°	456.5	496.7	525.5	545.6	535.5	498.0	439.9	381.3	328.0	281.7	258.2
55°	398.4	439.0	468.7	484.4	471.3	430.7	373.5	320.2	269.9	239.8	225.8
57.5°	342.0	380.0	408.0	420.6	404.0	363.4	310.6	265.6	229.3	204.0	197.0
60°	287.9	318.9	345.5	355.1	337.2	299.7	254.2	218.4	191.8	174.3	170.8
62.5°	237.6	263.0	283.9	291.4	273.9	244.6	205.3	178.7	159.9	151.1	146.8
65°	196.1	211.0	232.4	231.1	220.6	193.5	164.7	145.9	133.7	128.0	125.4
67.5°	154.2	167.7	181.3	183.0	169.9	151.1	132.4	118.8	112.3	109.2	107.9
70°	119.2	129.3	137.6	135.4	128.4	116.6	104.8	97.4	94.8	93.5	93.5
72.5°	92.6	97.8	101.8	99.2	94.8	88.7	83.0	79.9	80.4	81.2	82.1
75°	71.6	72.9	73.8	71.2	70.3	66.4	66.0	66.4	69.0	71.6	72.9
77.5°	55.0	53.3	52.0	49.4	49.8	49.4	51.5	55.0	59.0	62.9	66.4
80°	42.4	38.4	35.4	32.8	34.1	36.3	40.6	45.9	51.1	55.5	59.8
82.5°	32.8	27.1	22.7	20.1	22.7	26.2	31.9	38.4	44.6	49.4	54.2
85°	25.3	18.8	13.5	10.9	13.5	18.8	24.9	32.3	38.9	44.1	48.9
87.5°	19.7	13.5	7.4	4.4	7.4	13.1	20.1	27.1	33.6	39.7	44.6
90°	15.7	9.2	3.5	0.9	3.9	9.2	15.7	22.7	29.3	35.8	40.6
92.5°	12.7	6.6	1.7	0.0	2.2	7.0	13.1	19.7	26.2	32.3	37.1
95°	10.5	5.2	1.3	0.0	1.7	5.2	10.5	17.0	23.2	29.3	33.2
97.5°	8.7	3.9	0.9	0.0	0.9	4.4	8.7	14.4	20.5	26.2	30.1
100°	7.4	3.5	0.9	0.0	0.9	3.5	7.4	12.7	17.9	23.2	27.1
102.5°	6.1	2.6	0.4	0.4	0.4	2.6	6.6	10.9	15.7	20.5	24.5
105°	5.7	2.2	0.4	0.4	0.4	2.2	5.7	9.6	14.0	18.3	21.8
107.5°	4.8	1.7	0.4	0.4	0.4	1.7	4.8	8.3	12.7	16.6	19.7
110°	3.9	1.7	0.4	0.4	0.4	1.7	3.9	7.4	10.9	14.4	17.5

TEST NUMBER: P1213723

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	3.5	1.3	0.4	0.4	0.4	1.3	3.5	6.6	9.6	13.1	15.7
115°	3.1	1.3	0.4	0.4	0.4	1.3	3.1	5.7	8.3	11.4	14.0
117.5°	2.6	1.3	0.4	0.4	0.4	0.9	2.6	4.8	7.4	10.0	12.7
120°	2.2	0.9	0.4	0.4	0.4	0.9	2.2	4.4	6.6	8.7	10.9
122.5°	2.2	0.9	0.4	0.4	0.4	0.9	1.7	3.5	5.7	7.4	9.6
125°	1.7	0.9	0.4	0.4	0.4	0.4	1.7	3.1	4.8	6.6	8.3
127.5°	1.7	0.9	0.4	0.4	0.4	0.4	1.3	2.6	3.9	5.7	7.4
130°	1.3	0.9	0.4	0.4	0.4	0.4	0.9	2.2	3.5	4.8	6.1
132.5°	1.3	0.9	0.4	0.4	0.4	0.4	0.9	1.7	2.6	3.9	5.2
135°	1.3	0.4	0.4	0.4	0.4	0.4	0.4	1.3	2.2	3.1	3.9
137.5°	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.9	1.7	2.2	3.5
140°	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.9	1.3	1.7	2.6
142.5°	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9	1.3	2.2
145°	0.9	0.4	0.4	0.9	0.9	0.4	0.4	0.9	0.9	1.3	1.7
147.5°	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.9	0.9	1.3
150°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3
152.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
155°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213723

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7
2.5°	850.0	840.0	845.2	843.5	845.2	849.6	849.2	847.8	848.7	846.5	844.4
5°	848.3	838.2	843.5	841.3	843.5	847.8	847.0	845.7	847.0	844.4	842.2
7.5°	846.1	836.9	843.0	842.6	846.5	852.2	852.6	852.6	855.7	851.8	850.0
10°	846.1	841.3	849.6	852.6	862.7	870.1	871.0	872.7	878.0	877.1	872.7
12.5°	855.3	854.4	866.6	874.1	883.2	893.7	899.4	901.1	904.6	902.0	900.3
15°	867.1	871.4	885.0	893.3	903.3	911.2	912.5	913.4	916.0	912.1	909.0
17.5°	882.8	885.4	896.3	899.8	906.4	907.7	905.9	901.6	901.6	892.8	890.2
20°	890.2	888.9	893.3	887.6	885.0	877.1	869.7	861.4	860.9	851.8	850.9
22.5°	883.7	874.9	865.8	851.8	845.7	834.3	824.3	819.5	816.4	804.6	801.5
25°	860.5	839.1	825.6	809.0	794.1	781.0	771.4	761.4	751.7	742.1	737.8
27.5°	820.3	800.2	778.4	755.2	734.7	714.6	698.5	688.4	679.2	666.6	660.0
30°	771.0	743.0	719.0	696.7	663.1	638.6	625.1	605.0	598.0	592.3	580.1
32.5°	712.9	679.2	646.5	616.3	581.8	559.1	541.2	526.4	522.0	507.1	503.6
35°	648.7	604.5	567.4	537.7	512.8	485.3	470.4	460.4	451.7	441.6	439.9
37.5°	573.1	533.3	491.4	465.2	445.5	422.0	410.6	403.6	399.7	392.3	390.9
40°	497.1	457.3	428.5	402.3	390.1	377.4	369.1	366.0	364.3	361.7	359.1
42.5°	428.1	393.1	372.6	355.1	349.9	343.8	341.6	343.3	341.6	340.7	340.3
45°	369.5	342.9	328.5	323.2	321.9	320.2	321.9	325.0	325.4	324.5	324.5
47.5°	316.2	303.6	297.5	298.3	300.5	301.8	304.9	308.8	309.7	307.5	308.4
50°	281.3	273.9	272.6	276.1	280.9	282.6	286.1	289.2	288.7	287.9	287.0
52.5°	248.5	246.4	249.9	253.3	258.6	259.5	260.8	262.1	261.6	259.9	259.0
55°	221.0	222.8	225.8	227.1	231.1	230.6	231.1	231.1	229.3	228.5	227.1
57.5°	196.1	196.6	198.3	198.7	200.9	200.1	199.6	198.7	196.1	195.7	194.4
60°	170.8	169.9	173.8	170.8	172.5	170.8	170.4	168.2	165.6	165.1	164.2
62.5°	146.8	145.0	147.6	146.3	147.2	145.5	144.6	142.0	139.8	139.3	138.9
65°	125.4	124.5	127.1	126.7	127.5	125.4	124.5	122.7	121.0	120.6	120.1
67.5°	107.5	109.6	110.9	110.9	111.8	111.4	109.2	108.8	108.3	106.6	106.6
70°	94.4	95.7	98.3	98.7	98.3	99.2	97.4	97.0	96.5	95.7	95.2
72.5°	83.9	85.6	88.2	88.7	88.2	88.2	87.4	86.9	86.9	85.6	85.6
75°	75.6	77.8	79.9	79.9	79.9	79.1	78.2	78.2	77.3	76.9	76.0
77.5°	68.6	71.2	72.9	72.5	72.1	71.2	71.2	69.9	68.6	68.6	67.7
80°	63.3	65.1	66.4	66.0	65.5	64.2	63.8	62.5	61.6	60.3	60.3
82.5°	57.7	59.8	60.7	60.3	59.4	58.1	57.7	56.8	55.9	55.5	54.6
85°	52.9	55.0	55.5	54.6	53.7	52.9	52.4	52.0	51.5	50.7	50.7
87.5°	48.0	50.2	50.2	49.8	48.9	48.5	48.0	47.6	47.2	46.7	46.3
90°	44.1	45.9	45.9	45.4	45.0	44.6	44.1	43.7	43.2	42.8	42.8
92.5°	40.2	41.9	41.9	41.5	41.1	40.6	40.6	40.2	39.7	39.3	38.9
95°	36.7	38.4	38.4	38.4	38.0	37.6	37.6	37.1	36.7	36.7	36.3
97.5°	33.2	34.9	34.9	34.9	34.5	34.1	34.1	33.6	33.6	33.6	33.2
100°	30.1	31.5	31.9	31.9	31.5	31.5	31.5	31.0	31.0	31.0	30.6
102.5°	27.1	28.4	29.3	29.3	29.3	28.8	28.8	28.8	28.8	28.8	28.4
105°	24.5	25.8	26.6	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
107.5°	22.3	23.6	24.5	24.9	25.3	25.3	25.8	25.8	25.8	25.8	25.8
110°	20.1	21.4	22.7	23.2	23.6	24.0	24.0	24.5	24.0	24.0	24.0

TEST NUMBER: P1213723

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	17.9	19.7	20.5	21.4	21.8	22.3	22.7	22.7	22.7	22.7	22.7
115°	16.2	17.9	18.8	19.7	20.5	21.0	21.0	21.4	21.4	21.4	21.0
117.5°	14.4	16.2	17.0	17.9	18.3	19.2	19.7	19.7	19.7	19.7	19.2
120°	13.1	14.4	15.3	16.2	17.0	17.5	17.9	17.9	17.9	17.9	17.9
122.5°	11.4	12.7	14.0	14.9	15.3	15.7	16.2	16.2	16.2	16.2	16.2
125°	10.0	11.4	12.2	13.1	13.5	14.4	14.4	14.4	14.4	14.4	14.4
127.5°	8.7	10.0	10.9	11.8	12.2	12.7	13.1	13.1	13.1	13.1	13.1
130°	7.4	8.7	9.6	10.5	10.9	11.4	11.4	11.8	11.8	11.8	11.8
132.5°	6.6	7.4	8.3	9.2	9.6	10.0	10.0	10.5	10.5	10.5	10.5
135°	5.2	6.6	7.0	7.9	8.3	8.7	8.7	9.2	9.2	9.2	9.2
137.5°	4.4	5.2	6.1	7.0	7.4	7.4	7.9	7.9	8.3	8.3	8.3
140°	3.5	3.9	5.2	5.7	6.1	6.6	7.0	7.0	7.0	7.0	7.0
142.5°	2.6	3.5	3.9	4.8	5.2	5.7	6.1	6.1	6.1	6.1	6.1
145°	2.2	2.6	3.1	3.9	4.4	4.8	5.2	5.2	5.2	5.2	5.2
147.5°	1.7	2.2	2.6	3.1	3.5	3.9	4.4	4.4	4.4	4.4	4.4
150°	1.3	1.7	2.2	2.2	2.6	3.1	3.5	3.9	3.9	3.9	3.9
152.5°	1.3	1.3	1.7	1.7	2.2	2.6	3.1	3.1	3.1	3.1	3.1
155°	0.9	1.3	1.3	1.3	1.7	1.7	2.2	2.6	2.6	2.6	2.6
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213723

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7	845.7
2.5°	845.7	847.4	846.5	845.2	844.8	847.0	844.8	834.7	838.7	839.1	842.2
5°	844.4	845.7	844.8	843.9	842.6	845.2	842.6	832.1	836.1	836.5	839.5
7.5°	853.1	853.5	853.5	851.3	847.8	849.2	845.7	833.9	836.1	836.1	838.2
10°	874.9	875.8	877.1	871.4	867.1	863.6	858.8	844.4	843.9	840.4	840.4
12.5°	903.3	901.1	899.0	896.3	892.8	888.5	881.5	864.4	858.8	853.1	847.4
15°	911.6	910.7	910.3	909.0	906.8	905.5	900.3	883.2	874.9	867.9	857.9
17.5°	889.8	891.5	897.2	897.6	900.3	905.5	904.6	892.8	885.4	882.4	870.1
20°	850.5	850.9	857.9	860.9	872.3	881.0	887.6	886.3	884.5	888.0	878.9
22.5°	803.3	806.3	813.8	818.6	829.5	839.5	850.0	855.7	864.9	879.3	877.5
25°	739.1	743.0	753.5	761.4	776.6	791.9	805.9	816.0	826.9	854.4	863.6
27.5°	662.2	668.3	681.9	689.7	711.1	726.8	746.9	766.6	781.9	813.3	832.1
30°	581.4	586.6	601.0	612.0	630.3	651.7	677.1	705.0	730.3	762.2	785.8
32.5°	505.8	511.5	523.3	532.9	553.4	571.3	599.3	633.8	657.4	701.5	733.0
35°	439.9	445.1	453.4	461.7	478.7	497.1	521.1	554.7	584.9	630.8	670.5
37.5°	393.6	394.4	399.2	404.0	416.7	430.7	449.5	479.2	507.1	556.5	600.2
40°	360.4	360.4	363.0	364.3	370.0	378.3	390.1	413.2	436.4	473.9	527.2
42.5°	339.8	339.0	339.0	339.4	339.0	342.9	349.9	360.8	381.3	412.3	453.8
45°	324.5	322.8	321.5	318.4	316.7	316.7	317.1	321.1	332.8	352.9	386.6
47.5°	307.5	307.1	304.9	301.4	298.3	296.2	292.7	291.4	294.8	306.2	328.9
50°	287.9	285.7	283.5	280.9	277.4	275.2	268.6	269.1	266.0	271.3	283.1
52.5°	259.0	257.3	256.4	254.2	252.9	252.0	246.8	241.6	240.2	241.1	245.5
55°	227.1	228.0	224.5	226.3	225.8	221.9	219.7	215.8	214.5	214.0	216.2
57.5°	193.9	194.8	192.6	194.4	194.4	192.2	190.9	190.9	187.8	185.2	188.3
60°	163.8	162.1	163.4	165.6	165.6	164.2	163.4	163.4	161.2	160.3	162.5
62.5°	139.3	137.6	138.9	141.1	141.5	140.7	139.8	139.8	137.2	137.2	138.9
65°	120.6	121.0	120.6	122.3	122.3	122.7	121.9	121.0	117.9	119.2	118.8
67.5°	107.0	106.6	106.6	108.3	107.9	108.8	107.9	106.6	104.4	102.6	102.2
70°	95.7	95.2	95.2	96.1	96.5	96.5	96.1	95.2	92.2	90.4	89.1
72.5°	85.6	85.2	85.6	86.1	86.5	86.9	86.5	85.6	83.0	80.8	78.6
75°	76.4	76.0	77.3	77.3	77.8	77.8	78.2	77.8	75.6	72.9	70.3
77.5°	67.3	67.7	69.0	69.5	70.3	70.8	71.2	71.2	69.0	66.8	63.3
80°	59.8	60.7	61.6	62.0	62.9	64.2	64.6	65.1	63.3	61.2	57.2
82.5°	54.6	55.0	55.9	56.3	57.7	58.1	58.5	59.4	58.5	56.3	52.0
85°	50.2	50.7	51.5	51.5	52.4	53.3	53.7	54.2	53.7	51.5	47.2
87.5°	46.3	46.7	47.2	47.6	48.0	48.5	48.9	49.4	48.9	46.7	42.8
90°	42.8	42.8	43.2	43.2	43.7	44.1	45.0	45.0	44.6	42.8	38.9
92.5°	38.9	39.3	39.3	39.7	40.2	40.6	41.1	41.1	40.6	38.9	35.4
95°	36.3	36.3	36.7	36.7	37.1	37.1	37.6	37.6	37.1	35.4	31.9
97.5°	33.2	33.2	33.2	33.2	33.6	33.6	34.1	34.1	33.6	31.9	28.8
100°	30.6	30.6	30.6	30.6	30.6	31.0	31.0	31.0	30.6	28.8	25.8
102.5°	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4	27.5	26.2	23.2
105°	27.1	27.1	27.1	26.6	26.6	26.6	26.2	26.2	24.9	23.6	21.0
107.5°	25.3	25.3	25.3	24.9	24.9	24.5	24.0	24.0	22.7	21.4	18.8
110°	24.0	24.0	24.0	23.6	23.2	22.7	22.3	21.8	20.5	18.8	16.6



TEST NUMBER: P1213723

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	22.7	22.7	22.3	22.3	21.8	21.4	20.5	20.1	18.8	17.0	14.9
115°	21.0	21.0	21.0	20.5	20.1	19.7	19.2	18.3	17.0	15.3	13.1
117.5°	19.2	19.2	19.2	18.8	18.3	17.9	17.5	16.6	15.3	13.5	11.8
120°	17.5	17.5	17.5	17.0	16.6	16.2	15.7	14.9	13.5	12.2	10.0
122.5°	16.2	16.2	15.7	15.3	14.9	14.4	14.0	13.1	12.2	10.5	8.7
125°	14.4	14.4	14.0	14.0	13.5	13.1	12.7	11.8	10.5	9.2	7.9
127.5°	13.1	12.7	12.7	12.7	12.2	11.8	10.9	10.5	9.2	7.9	6.6
130°	11.4	11.4	11.4	10.9	10.9	10.5	9.6	8.7	7.9	7.0	5.7
132.5°	10.0	10.0	10.0	10.0	9.6	9.2	8.3	7.9	7.0	5.7	4.8
135°	9.2	9.2	8.7	8.7	8.3	7.9	7.4	6.6	5.7	4.8	3.9
137.5°	7.9	7.9	7.9	7.4	7.4	7.0	6.1	5.7	5.2	4.4	3.5
140°	7.0	7.0	6.6	6.6	6.1	6.1	5.7	4.8	4.4	3.5	3.1
142.5°	6.1	6.1	5.7	5.7	5.2	5.2	4.8	4.4	3.5	3.1	2.2
145°	5.2	5.2	4.8	4.8	4.8	4.4	3.9	3.5	3.1	2.6	2.2
147.5°	4.4	4.4	4.4	3.9	3.9	3.5	3.5	3.1	2.6	2.2	1.7
150°	3.9	3.9	3.5	3.5	3.5	3.1	2.6	2.6	2.2	1.7	1.3
152.5°	3.1	3.1	3.1	3.1	2.6	2.6	2.2	2.2	1.7	1.3	1.3
155°	2.6	2.6	2.6	2.2	2.2	2.2	1.7	1.7	1.3	1.3	0.9
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213723

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	845.7	845.7	845.7	845.7	845.7	845.7	845.7
2.5°	840.9	840.4	844.4	843.9	838.7	846.5	851.8
5°	838.7	838.2	841.7	842.6	836.9	845.2	850.9
7.5°	836.9	836.5	840.4	841.7	836.1	843.5	849.6
10°	837.4	835.2	838.7	839.5	834.3	842.2	847.4
12.5°	840.4	835.2	836.5	836.5	831.7	838.7	844.4
15°	847.8	836.9	835.2	833.9	827.8	834.3	840.0
17.5°	856.1	841.3	835.2	830.8	823.4	829.1	835.2
20°	864.4	846.1	836.1	829.1	819.0	824.3	828.6
22.5°	868.4	850.5	836.9	826.4	813.8	816.4	821.2
25°	863.1	848.7	835.2	822.5	807.2	807.7	811.6
27.5°	843.9	840.0	831.2	818.6	802.0	799.8	802.9
30°	811.2	822.1	822.5	813.3	795.9	791.5	792.8
32.5°	765.3	789.7	804.2	802.4	787.1	781.0	781.9
35°	712.4	743.0	774.5	784.9	774.0	769.2	767.5
37.5°	649.1	690.2	732.1	757.9	756.1	753.1	751.3
40°	579.2	628.6	678.4	719.4	732.1	732.1	733.0
42.5°	504.5	562.2	616.8	668.8	698.5	705.0	707.6
45°	432.4	490.5	549.9	609.8	649.5	670.1	677.5
47.5°	366.9	425.5	481.8	547.3	600.2	626.8	638.6
50°	311.0	354.7	414.1	479.2	536.8	569.6	592.7
52.5°	264.7	298.8	350.8	411.5	469.6	514.6	536.0
55°	225.8	249.0	293.1	345.5	401.0	447.7	472.6
57.5°	193.1	211.4	241.6	285.2	332.0	378.3	404.9
60°	164.2	176.9	197.4	231.9	271.7	311.4	337.2
62.5°	139.3	147.6	161.2	186.5	217.5	248.5	272.6
65°	120.1	123.6	131.0	146.8	170.4	193.9	214.5
67.5°	101.3	103.5	109.2	118.8	130.6	147.6	161.2
70°	87.4	87.4	87.8	93.5	99.6	110.5	120.1
72.5°	76.0	74.7	72.1	73.4	74.7	80.8	86.9
75°	66.8	63.8	59.4	57.7	56.8	57.7	61.2
77.5°	59.0	54.6	49.4	45.0	41.5	40.2	43.2
80°	52.4	47.2	41.1	35.4	29.7	26.6	28.0
82.5°	47.2	40.6	34.1	27.5	21.0	16.6	16.6
85°	41.5	35.4	28.4	21.4	14.9	9.2	8.3
87.5°	37.6	31.0	23.6	17.0	10.5	4.8	2.6
90°	33.6	27.1	20.1	13.5	7.4	2.2	0.0
92.5°	30.1	24.0	17.5	10.9	5.2	1.3	0.0
95°	27.1	21.4	14.9	9.2	4.4	0.9	0.4
97.5°	24.0	18.8	13.1	7.4	3.1	0.9	0.4
100°	21.8	16.6	11.4	6.1	2.6	0.4	0.4
102.5°	19.2	14.9	9.6	5.2	2.2	0.4	0.4
105°	17.0	13.1	8.3	4.4	1.7	0.4	0.4
107.5°	15.3	11.4	7.4	3.9	1.7	0.4	0.4
110°	13.5	10.0	6.6	3.5	1.3	0.4	0.4



TEST NUMBER: P1213723

CATALOG NUMBER: 4SNLED-LD5-22SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	12.2	8.7	5.7	3.1	0.9	0.4	0.4
115°	10.5	7.9	4.8	2.6	0.9	0.4	0.4
117.5°	9.2	6.6	4.4	2.2	0.9	0.4	0.4
120°	7.9	5.7	3.5	1.7	0.4	0.4	0.4
122.5°	7.0	4.8	3.1	1.7	0.4	0.4	0.4
125°	6.1	4.4	2.6	1.3	0.4	0.4	0.4
127.5°	5.2	3.5	2.2	0.9	0.4	0.4	0.4
130°	4.4	3.1	1.7	0.9	0.4	0.4	0.4
132.5°	3.5	2.6	1.7	0.9	0.4	0.4	0.4
135°	3.1	2.2	1.3	0.9	0.4	0.4	0.4
137.5°	2.6	1.7	0.9	0.9	0.9	0.4	0.4
140°	2.2	1.3	0.9	0.9	0.9	0.9	0.4
142.5°	1.7	1.3	0.9	0.9	0.9	0.9	0.4
145°	1.3	0.9	0.9	0.9	0.9	0.9	0.4
147.5°	1.3	0.9	0.9	0.9	0.9	0.9	0.4
150°	0.9	0.9	0.9	0.9	0.9	0.9	0.9
152.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9
155°	0.9	0.9	0.9	0.9	0.9	0.9	0.9
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)