

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: P1213770

Luminaire Tested: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213770
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-LD5-41SL-LW-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

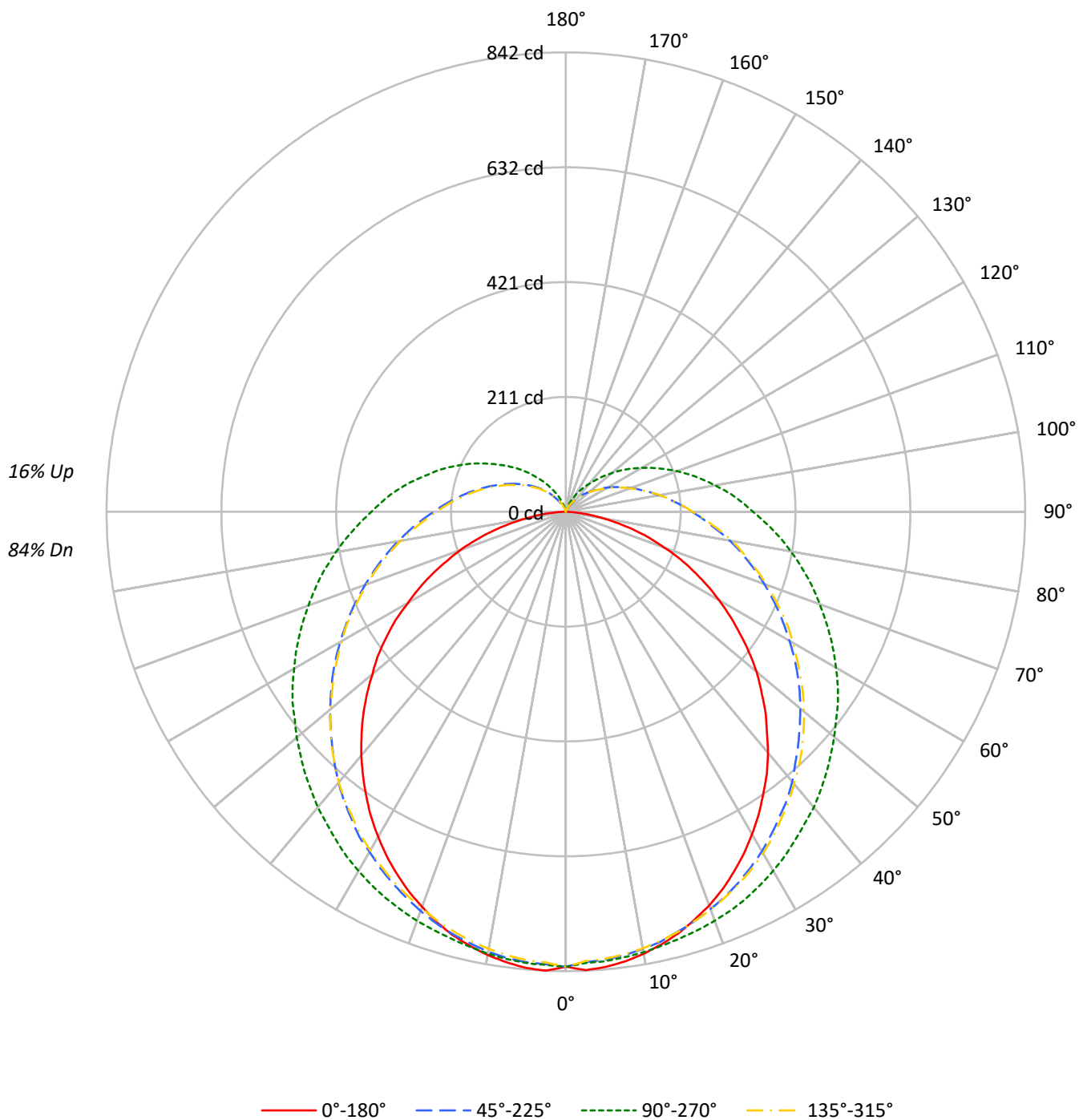
Lumens per Lamp: N/A
Luminaire Lumens: 3623.0 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 35
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

TEST NUMBER: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

Luminous Intensity Polar Plot



TEST NUMBER: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

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°	6739	6739	6739	6739
5°	6774	6494	6789	6522
10°	6712	6309	6733	6330
15°	6634	6152	6663	6159
20°	6529	6036	6552	6036
25°	6401	5934	6439	5927
30°	6257	5829	6305	5829
35°	6089	5731	6156	5738
40°	5923	5673	5995	5673
45°	5732	5614	5820	5621
50°	5533	5577	5608	5593
55°	5256	5583	5422	5608
60°	4963	5600	5126	5635
65°	4634	5656	4840	5712
70°	4173	5760	4498	5842
75°	3641	5948	3985	6063
80°	2819	6227	3198	6372
85°	1681	6675	2104	6859

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 270°

Vertical Angle: 90°

Luminance: 7670 cd/sqm

TEST NUMBER: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.0	2.2
10°-20°	227.0	6.3
20°-30°	348.1	9.6
30°-40°	429.4	11.9
40°-50°	465.9	12.9
50°-60°	459.2	12.7
60°-70°	415.2	11.5
70°-80°	345.9	9.5
80°-90°	267.9	7.4
90°-100°	203.2	5.6
100°-110°	150.4	4.1
110°-120°	104.6	2.9
120°-130°	66.7	1.8
130°-140°	37.4	1.0
140°-150°	17.1	0.5
150°-160°	5.3	0.1
160°-170°	0.7	0.0
170°-180°	0.0	0.0
0°-30°	654.1	18.1
0°-40°	1083.6	29.9
0°-60°	2008.7	55.4
0°-90°	3037.7	83.8
90°-120°	458.1	12.6
90°-150°	579.4	16.0
90°-180°	585.0	16.1
0°-180°	3623.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	834	834	834	834	834	
5°	837	827	839	830	837	79
15°	800	809	803	810	800	225
25°	728	782	733	781	728	336
35°	631	734	638	734	631	395
45°	517	676	525	676	517	398
55°	390	609	402	611	390	349
65°	259	534	270	539	259	256
75°	130	457	142	466	130	138
85°	25	381	31	391	25	30
90°	1	343	2	356	1	1
95°	1	311	1	326	1	1
105°	1	247	1	262	1	1
115°	1	188	1	205	1	1
125°	1	136	1	150	1	1
135°	1	88	1	104	1	1
145°	1	51	1	62	1	1
155°	1	21	1	29	1	0
165°	1	4	1	5	1	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

TEST NUMBER: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9
2.5°	840.9	840.9	840.1	838.3	839.2	841.8	840.1	835.7	833.0	826.0	827.8
5°	837.4	837.4	836.5	834.8	835.7	839.2	837.4	833.9	830.4	824.2	826.9
7.5°	831.3	831.3	830.4	828.6	830.4	833.9	832.1	828.6	826.0	819.8	822.5
10°	822.5	823.4	822.5	819.8	823.4	826.9	826.0	821.6	819.0	813.7	816.3
12.5°	811.9	812.8	811.9	811.0	812.8	818.1	816.3	812.8	811.0	806.6	809.3
15°	799.6	800.5	798.7	798.7	800.5	805.8	805.8	802.2	800.5	796.1	801.4
17.5°	783.8	784.6	783.8	783.8	785.5	790.8	791.7	789.9	788.2	786.4	791.7
20°	767.9	767.1	767.1	766.2	769.7	777.6	776.7	776.7	775.0	775.0	781.1
22.5°	749.5	749.5	748.6	748.6	753.0	760.0	760.0	761.8	760.0	763.5	768.8
25°	728.4	729.2	728.4	730.1	733.6	741.5	742.4	745.1	745.9	749.5	755.6
27.5°	706.4	707.2	706.4	708.1	714.3	720.4	724.8	728.4	729.2	734.5	742.4
30°	682.6	682.6	683.5	685.2	692.3	702.0	705.5	709.9	709.9	718.7	726.6
32.5°	658.0	658.0	658.0	661.5	669.4	680.8	685.2	690.5	692.3	701.1	709.9
35°	630.7	631.6	631.6	634.2	644.8	656.2	662.4	668.5	672.1	682.6	691.4
37.5°	605.2	607.0	604.3	607.8	622.8	632.5	639.5	645.7	651.8	665.9	672.9
40°	576.2	577.9	577.1	584.1	596.4	608.7	616.6	622.8	631.6	645.7	653.6
42.5°	545.4	547.1	548.9	556.8	570.0	582.3	592.0	599.9	610.5	622.8	636.0
45°	517.2	517.2	519.9	529.5	543.6	556.8	568.3	577.1	589.4	602.6	615.8
47.5°	485.6	486.4	490.0	501.4	516.4	532.2	542.7	554.2	567.4	581.4	596.4
50°	456.5	456.5	461.8	474.1	488.2	505.8	517.2	530.4	544.5	561.2	576.2
52.5°	423.1	424.9	432.8	444.2	462.7	478.5	491.7	505.8	522.5	540.1	556.8
55°	389.7	393.2	399.4	415.2	434.5	449.5	465.3	482.9	498.8	518.1	537.5
57.5°	357.1	359.8	369.5	385.3	405.5	424.0	440.7	457.4	476.8	496.1	516.4
60°	323.7	327.2	338.7	354.5	376.5	395.8	415.2	432.8	453.0	473.3	494.4
62.5°	292.0	294.7	307.9	326.4	348.3	369.5	388.8	409.9	431.9	451.3	472.4
65°	258.6	263.0	278.0	294.7	320.2	341.3	363.3	386.2	409.0	430.1	450.4
67.5°	227.8	230.5	246.3	265.7	291.2	314.9	337.8	362.4	386.2	408.2	428.4
70°	191.8	200.6	216.4	236.6	263.9	288.5	313.2	338.7	364.2	387.0	406.4
72.5°	161.9	168.9	186.5	208.5	234.9	263.9	289.4	316.7	342.2	365.9	386.2
75°	130.2	137.2	157.5	182.1	209.4	240.1	266.5	294.7	321.1	344.8	365.9
77.5°	99.4	108.2	130.2	155.7	185.6	217.3	244.5	272.7	300.0	325.5	346.6
80°	71.3	80.9	104.7	133.7	162.7	194.4	224.3	252.5	279.7	305.2	327.2
82.5°	45.7	56.3	81.8	110.8	141.6	173.3	204.1	232.2	259.5	285.0	307.9
85°	24.6	36.1	62.5	91.5	122.3	153.9	184.7	214.6	241.0	264.8	289.4
87.5°	7.0	21.1	46.6	75.6	107.3	136.3	166.3	196.2	222.6	248.1	270.1
90°	0.9	12.3	35.2	62.5	93.2	121.4	151.3	179.4	205.8	231.3	253.3
92.5°	0.9	7.9	27.3	51.9	80.0	109.1	139.0	166.3	190.9	216.4	238.4
95°	0.9	6.2	22.0	44.0	70.4	97.6	125.8	152.2	177.7	201.4	223.4
97.5°	0.9	4.4	17.6	37.8	61.6	87.1	114.4	140.7	165.4	188.2	208.5
100°	0.9	3.5	14.1	32.5	53.7	78.3	102.9	128.4	152.2	174.2	195.3
102.5°	0.9	2.6	12.3	27.3	47.5	69.5	93.2	117.0	139.9	161.0	182.1
105°	0.9	2.6	10.6	23.8	42.2	62.5	84.4	107.3	128.4	148.7	168.0
107.5°	0.9	1.8	8.8	20.2	36.9	56.3	76.5	98.5	117.9	137.2	155.7
110°	0.9	1.8	7.0	18.5	32.5	50.1	69.5	89.7	108.2	126.7	144.3



TEST NUMBER: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.9	1.8	6.2	15.8	28.1	44.9	62.5	80.9	98.5	117.0	132.8
115°	0.9	1.8	5.3	14.1	26.4	38.7	56.3	73.0	90.6	107.3	122.3
117.5°	0.9	1.8	4.4	11.4	22.9	35.2	49.3	66.0	81.8	97.6	111.7
120°	0.9	1.8	3.5	10.6	20.2	31.7	44.0	58.9	73.9	88.8	103.8
122.5°	0.9	0.9	3.5	8.8	17.6	28.1	40.5	51.9	66.0	80.0	93.2
125°	0.9	0.9	3.5	7.9	15.0	25.5	36.1	46.6	58.9	71.3	82.7
127.5°	0.9	0.9	2.6	6.2	13.2	22.0	31.7	43.1	51.9	63.3	74.8
130°	0.9	0.9	2.6	5.3	11.4	18.5	28.1	37.8	48.4	56.3	66.0
132.5°	0.9	0.9	2.6	4.4	8.8	15.0	23.8	32.5	42.2	51.0	58.9
135°	0.9	0.9	1.8	3.5	7.0	12.3	19.4	27.3	36.9	45.7	53.7
137.5°	0.9	0.9	1.8	3.5	5.3	10.6	15.0	22.0	30.8	38.7	46.6
140°	0.9	0.9	1.8	2.6	4.4	7.9	12.3	17.6	24.6	31.7	40.5
142.5°	0.9	0.9	0.9	2.6	3.5	6.2	9.7	14.1	19.4	25.5	32.5
145°	0.9	0.9	0.9	2.6	3.5	4.4	7.9	11.4	15.0	19.4	25.5
147.5°	0.9	0.9	0.9	1.8	2.6	3.5	6.2	8.8	11.4	15.0	18.5
150°	0.9	0.9	0.9	1.8	2.6	3.5	4.4	6.2	8.8	12.3	15.0
152.5°	0.9	0.9	0.9	1.8	1.8	2.6	3.5	4.4	6.2	8.8	10.6
155°	0.9	0.9	0.9	0.9	1.8	2.6	3.5	3.5	4.4	6.2	7.9
157.5°	0.9	0.9	0.9	0.9	1.8	1.8	2.6	2.6	3.5	3.5	5.3
160°	0.9	0.9	0.9	0.9	0.9	1.8	1.8	2.6	2.6	2.6	2.6
162.5°	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8	1.8	2.6	2.6
165°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8	1.8
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

TEST NUMBER: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9
2.5°	827.8	828.6	831.3	831.3	829.5	829.5	828.6	827.8	828.6	830.4	830.4
5°	826.0	826.9	829.5	830.4	828.6	827.8	827.8	826.9	827.8	829.5	829.5
7.5°	822.5	823.4	826.0	826.9	825.1	825.1	824.2	823.4	825.1	826.0	826.0
10°	817.2	818.1	821.6	822.5	821.6	820.7	820.7	819.8	820.7	822.5	822.5
12.5°	810.2	811.9	816.3	816.3	816.3	815.4	815.4	814.6	815.4	817.2	816.3
15°	802.2	805.8	809.3	811.0	811.0	811.0	810.2	809.3	811.0	811.9	811.0
17.5°	793.4	797.8	803.1	804.9	804.9	805.8	804.9	804.0	805.8	805.8	804.9
20°	784.6	789.0	794.3	796.1	797.8	798.7	798.7	797.8	798.7	799.6	798.7
22.5°	773.2	778.5	784.6	787.3	789.0	790.8	790.8	790.8	791.7	792.6	790.8
25°	760.9	767.1	774.1	776.7	780.2	781.1	782.0	782.0	782.9	783.8	781.1
27.5°	747.7	754.7	761.8	766.2	768.8	770.6	770.6	771.5	772.3	773.2	770.6
30°	731.9	742.4	748.6	752.1	755.6	758.3	759.1	760.0	760.9	761.8	759.1
32.5°	717.8	726.6	734.5	738.9	743.3	746.8	747.7	747.7	749.5	749.5	746.8
35°	701.1	711.6	719.6	724.0	729.2	731.9	733.6	733.6	735.4	735.4	732.7
37.5°	684.4	694.9	703.7	709.0	715.2	718.7	719.6	719.6	721.3	721.3	717.8
40°	666.8	678.2	687.9	694.0	699.3	703.7	704.6	707.2	707.2	706.4	702.8
42.5°	649.2	659.7	670.3	677.3	684.4	688.8	690.5	691.4	691.4	690.5	687.9
45°	629.8	642.1	651.8	660.6	667.7	672.1	674.7	675.6	675.6	673.8	671.2
47.5°	611.4	623.7	633.3	643.0	650.1	655.3	658.0	658.9	658.0	657.1	654.5
50°	592.0	606.1	615.8	625.4	632.5	636.9	641.3	642.1	641.3	640.4	635.1
52.5°	571.8	586.7	597.3	607.0	614.9	620.2	623.7	624.6	624.6	622.8	619.3
55°	551.5	564.7	577.9	588.5	597.3	602.6	607.0	608.7	607.0	605.2	600.8
57.5°	533.1	545.4	558.6	570.0	578.8	585.8	589.4	591.1	589.4	586.7	582.3
60°	511.1	524.3	539.2	549.8	559.5	566.5	568.3	571.8	570.0	567.4	563.0
62.5°	490.0	505.8	519.0	532.2	540.1	548.0	551.5	553.3	551.5	548.9	544.5
65°	468.0	485.6	498.8	512.0	520.8	528.7	533.1	533.9	532.2	529.5	525.2
67.5°	447.7	464.5	478.5	492.6	500.5	508.4	512.8	514.6	512.8	509.3	504.9
70°	427.5	444.2	460.9	471.5	481.2	490.0	492.6	495.2	493.5	490.0	484.7
72.5°	407.3	424.9	441.6	452.1	462.7	470.6	474.1	476.8	475.0	471.5	465.3
75°	386.2	404.6	421.4	432.8	443.3	451.3	454.8	457.4	455.7	452.1	445.1
77.5°	366.8	385.3	401.1	413.4	424.0	431.0	437.2	438.1	436.3	432.8	425.8
80°	346.6	365.1	381.8	394.1	404.6	411.7	416.1	418.7	417.0	413.4	406.4
82.5°	329.0	345.7	362.4	374.7	385.3	394.1	397.6	400.2	399.4	394.1	388.8
85°	309.6	329.0	342.2	355.4	365.9	374.7	377.4	380.9	380.0	375.6	368.6
87.5°	290.3	309.6	325.5	338.7	348.3	355.4	359.8	361.5	360.7	356.3	348.3
90°	274.5	292.0	307.9	322.0	329.9	337.8	342.2	343.1	343.1	337.8	331.6
92.5°	259.5	276.2	292.0	305.2	314.9	322.0	325.5	327.2	326.4	322.0	314.9
95°	242.8	261.3	276.2	289.4	299.1	306.1	309.6	311.4	310.5	306.1	299.1
97.5°	228.7	245.4	260.4	272.7	282.4	289.4	292.9	294.7	294.7	290.3	283.2
100°	214.6	231.3	245.4	257.7	266.5	273.6	277.1	278.0	277.1	273.6	266.5
102.5°	200.6	216.4	230.5	241.9	251.6	257.7	261.3	262.1	262.1	257.7	250.7
105°	186.5	202.3	215.5	227.8	235.7	241.9	244.5	247.2	246.3	242.8	235.7
107.5°	173.3	189.1	201.4	212.9	220.8	226.9	229.6	232.2	231.3	227.8	220.8
110°	161.0	175.9	187.4	198.8	205.8	212.0	216.4	217.3	215.5	212.0	205.8

TEST NUMBER: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	149.5	162.7	174.2	184.7	192.6	197.0	200.6	202.3	200.6	197.0	192.6
115°	137.2	150.4	161.9	171.5	178.6	183.8	186.5	188.2	186.5	183.0	178.6
117.5°	125.8	138.1	149.5	159.2	165.4	169.8	172.4	174.2	172.4	169.8	165.4
120°	116.1	126.7	137.2	146.0	153.1	156.6	159.2	161.0	160.1	156.6	152.2
122.5°	104.7	116.1	125.8	134.6	140.7	144.3	146.0	147.8	146.9	144.3	139.9
125°	95.0	104.7	114.4	122.3	128.4	131.9	133.7	135.5	134.6	131.9	126.7
127.5°	84.4	95.0	102.9	110.8	115.2	120.5	121.4	123.2	122.3	119.6	115.2
130°	76.5	84.4	92.4	99.4	104.7	108.2	110.0	110.8	109.1	107.3	102.9
132.5°	66.9	75.6	82.7	88.8	92.4	95.9	97.6	98.5	98.5	95.9	92.4
135°	59.8	66.0	72.1	78.3	81.8	85.3	87.1	88.0	87.1	85.3	81.8
137.5°	53.7	58.9	63.3	68.6	73.0	74.8	76.5	76.5	75.6	74.8	72.1
140°	46.6	52.8	57.2	60.7	64.2	65.1	66.9	66.9	66.0	65.1	63.3
142.5°	39.6	44.9	49.3	53.7	56.3	58.1	58.9	59.8	58.9	58.1	55.4
145°	31.7	37.8	42.2	44.9	48.4	49.3	50.1	51.0	50.1	49.3	46.6
147.5°	24.6	29.9	34.3	37.8	40.5	41.3	42.2	43.1	42.2	40.5	39.6
150°	17.6	22.0	27.3	30.8	32.5	34.3	34.3	34.3	35.2	33.4	31.7
152.5°	14.1	15.8	19.4	22.9	25.5	26.4	27.3	27.3	26.4	26.4	24.6
155°	9.7	11.4	14.1	16.7	19.4	20.2	21.1	21.1	20.2	20.2	19.4
157.5°	6.2	7.9	9.7	11.4	14.1	15.0	15.8	15.8	15.8	15.0	14.1
160°	3.5	4.4	5.3	7.0	8.8	9.7	10.6	10.6	10.6	10.6	9.7
162.5°	2.6	2.6	2.6	3.5	4.4	5.3	6.2	6.2	6.2	6.2	5.3
165°	1.8	1.8	1.8	1.8	1.8	2.6	3.5	3.5	3.5	3.5	3.5
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: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9
2.5°	829.5	829.5	830.4	828.6	823.4	824.2	824.2	827.8	829.5	830.4	834.8
5°	827.8	827.8	829.5	826.9	822.5	822.5	822.5	826.0	826.9	828.6	832.1
7.5°	825.1	825.1	826.0	823.4	818.1	818.1	817.2	820.7	822.5	823.4	826.9
10°	820.7	820.7	821.6	819.0	812.8	812.8	811.9	814.6	815.4	817.2	819.8
12.5°	814.6	814.6	814.6	811.9	805.8	804.9	804.0	806.6	806.6	807.5	810.2
15°	809.3	807.5	807.5	804.9	798.7	797.0	795.2	796.1	797.8	797.0	798.7
17.5°	803.1	801.4	799.6	797.0	789.0	786.4	784.6	785.5	784.6	783.8	785.5
20°	796.1	793.4	792.6	788.2	780.2	775.9	772.3	770.6	771.5	768.8	769.7
22.5°	788.2	784.6	782.9	777.6	769.7	764.4	760.0	756.5	755.6	752.1	753.0
25°	778.5	774.1	771.5	767.1	758.3	752.1	746.8	741.5	738.9	734.5	733.6
27.5°	767.1	762.7	759.1	754.7	745.9	738.0	731.9	724.8	721.3	716.0	713.4
30°	755.6	750.3	745.1	741.5	731.9	723.1	713.4	707.2	702.0	695.8	691.4
32.5°	741.5	736.3	731.0	725.7	716.9	706.4	698.4	688.8	682.6	675.6	670.3
35°	727.5	720.4	715.2	708.1	700.2	687.9	678.2	668.5	660.6	652.7	646.5
37.5°	711.6	706.4	698.4	692.3	682.6	670.3	659.7	647.4	640.4	629.8	621.9
40°	696.7	690.5	682.6	674.7	665.0	650.9	639.5	625.4	617.5	605.2	597.3
42.5°	681.7	672.9	665.0	656.2	645.7	632.5	618.4	604.3	593.8	582.3	570.9
45°	665.0	655.3	645.7	636.0	625.4	612.2	597.3	582.3	569.1	558.6	544.5
47.5°	647.4	637.7	626.3	615.8	604.3	591.1	575.3	559.5	545.4	533.1	518.1
50°	629.8	620.2	607.8	596.4	583.2	570.0	553.3	534.8	519.9	504.0	490.8
52.5°	611.4	601.7	590.2	575.3	561.2	548.0	530.4	511.1	494.4	481.2	464.5
55°	592.9	583.2	570.0	555.1	541.0	524.3	507.6	488.2	469.7	453.9	437.2
57.5°	573.5	564.7	549.8	537.5	519.9	502.3	484.7	466.2	446.0	427.5	408.2
60°	554.2	544.5	530.4	515.5	497.9	480.3	461.8	441.6	420.5	400.2	382.6
62.5°	536.6	524.3	511.1	495.2	476.8	460.1	438.9	417.0	395.8	374.7	353.6
65°	516.4	503.2	490.8	475.0	455.7	436.3	415.2	393.2	370.3	347.5	326.4
67.5°	496.1	482.9	469.7	453.9	433.7	413.4	391.4	369.5	343.9	322.0	297.3
70°	475.9	465.3	448.6	431.9	413.4	391.4	369.5	345.7	319.3	295.6	270.1
72.5°	455.7	445.1	428.4	410.8	393.2	370.3	346.6	322.8	298.2	270.9	243.7
75°	436.3	423.1	408.2	391.4	373.0	349.2	325.5	300.8	271.8	246.3	218.2
77.5°	417.8	405.5	390.6	372.1	351.9	329.0	304.4	278.8	249.8	222.6	191.8
80°	397.6	385.3	370.3	351.9	331.6	309.6	283.2	256.9	228.7	198.8	167.1
82.5°	378.2	366.8	350.1	333.4	311.4	289.4	263.0	236.6	206.7	177.7	146.9
85°	358.0	346.6	330.7	313.2	292.0	268.3	243.7	217.3	187.4	157.5	126.7
87.5°	340.4	327.2	311.4	293.8	272.7	249.8	226.1	197.9	168.9	139.9	108.2
90°	322.0	309.6	293.8	276.2	255.1	232.2	207.6	181.2	153.1	123.2	93.2
92.5°	306.1	292.9	278.0	260.4	239.3	217.3	192.6	166.3	139.0	110.0	80.9
95°	290.3	277.1	263.0	245.4	224.3	202.3	177.7	152.2	125.8	97.6	70.4
97.5°	272.7	261.3	247.2	230.5	209.4	188.2	164.5	139.9	114.4	87.1	61.6
100°	258.6	245.4	232.2	214.6	195.3	175.1	151.3	127.5	102.9	77.4	53.7
102.5°	242.8	230.5	217.3	200.6	181.2	161.0	139.0	116.1	93.2	69.5	46.6
105°	227.8	216.4	202.3	186.5	168.0	148.7	127.5	106.4	84.4	61.6	41.3
107.5°	212.9	201.4	188.2	173.3	155.7	136.3	117.0	95.9	75.6	55.4	36.9
110°	197.9	187.4	175.1	160.1	143.4	125.8	107.3	88.0	67.7	49.3	32.5

TEST NUMBER: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	184.7	174.2	161.9	147.8	131.9	115.2	97.6	79.2	60.7	44.0	28.1
115°	171.5	161.9	149.5	137.2	121.4	105.6	88.8	71.3	54.5	39.6	24.6
117.5°	158.3	148.7	137.2	124.9	110.8	95.9	80.0	63.3	49.3	35.2	22.0
120°	145.1	136.3	125.8	114.4	102.0	87.1	71.3	57.2	44.0	30.8	19.4
122.5°	132.8	124.9	115.2	104.7	91.5	77.4	64.2	51.9	39.6	27.3	15.8
125°	121.4	113.5	104.7	94.1	81.8	69.5	58.1	46.6	34.3	23.8	13.2
127.5°	110.0	102.0	93.2	83.6	73.9	62.5	51.9	41.3	30.8	21.1	11.4
130°	98.5	91.5	83.6	75.6	66.0	55.4	46.6	36.1	26.4	16.7	9.7
132.5°	87.1	81.8	74.8	66.9	58.1	50.1	40.5	31.7	22.9	15.0	8.8
135°	77.4	72.1	66.0	58.9	51.9	44.0	35.2	27.3	19.4	12.3	7.0
137.5°	68.6	64.2	58.1	51.9	45.7	37.8	30.8	22.9	15.8	10.6	5.3
140°	60.7	56.3	51.0	44.9	39.6	32.5	25.5	18.5	14.1	8.8	4.4
142.5°	52.8	48.4	44.0	38.7	33.4	27.3	21.1	15.8	11.4	7.0	4.4
145°	44.9	41.3	36.9	32.5	27.3	22.0	17.6	13.2	8.8	5.3	3.5
147.5°	36.9	34.3	29.9	26.4	22.0	17.6	14.1	10.6	7.0	4.4	2.6
150°	29.9	27.3	23.8	20.2	17.6	14.1	11.4	7.9	5.3	4.4	2.6
152.5°	22.9	21.1	18.5	16.7	14.1	10.6	7.9	6.2	4.4	3.5	1.8
155°	18.5	16.7	15.0	12.3	10.6	7.9	6.2	4.4	3.5	2.6	1.8
157.5°	13.2	12.3	10.6	8.8	7.0	5.3	4.4	4.4	2.6	1.8	0.9
160°	8.8	7.9	7.0	5.3	4.4	4.4	3.5	2.6	1.8	1.8	0.9
162.5°	5.3	4.4	4.4	4.4	3.5	3.5	2.6	1.8	1.8	0.9	0.9
165°	3.5	3.5	3.5	2.6	2.6	2.6	1.8	0.9	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

TEST NUMBER: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9
2.5°	834.8	832.1	835.7	841.8	842.7	841.8	840.1	842.7	846.2	845.3	839.2
5°	833.0	829.5	833.0	839.2	839.2	838.3	837.4	840.1	843.6	842.7	837.4
7.5°	827.8	824.2	827.8	833.0	833.9	832.1	832.1	834.8	838.3	837.4	833.0
10°	820.7	817.2	819.0	825.1	826.9	825.1	825.1	827.8	832.1	831.3	826.0
12.5°	810.2	807.5	809.3	814.6	816.3	815.4	814.6	818.1	822.5	822.5	817.2
15°	798.7	795.2	797.0	803.1	804.0	802.2	803.1	805.8	811.0	811.0	806.6
17.5°	785.5	781.1	783.8	788.2	789.0	789.0	789.0	792.6	798.7	797.8	794.3
20°	770.6	764.4	766.2	770.6	772.3	772.3	772.3	778.5	782.9	782.9	779.4
22.5°	753.0	748.6	748.6	753.0	755.6	754.7	754.7	760.0	766.2	765.3	765.3
25°	732.7	729.2	727.5	732.7	733.6	734.5	736.3	741.5	748.6	748.6	749.5
27.5°	711.6	708.1	707.2	711.6	712.5	713.4	715.2	721.3	728.4	729.2	731.0
30°	691.4	686.1	684.4	687.9	689.6	690.5	690.5	700.2	706.4	709.0	712.5
32.5°	667.7	662.4	658.0	664.1	665.0	666.8	667.7	677.3	684.4	688.8	694.0
35°	643.9	635.1	633.3	637.7	639.5	640.4	642.1	652.7	662.4	665.9	672.9
37.5°	617.5	611.4	606.1	610.5	612.2	613.1	618.4	628.1	637.7	643.0	650.1
40°	592.9	585.0	580.6	583.2	585.0	585.8	592.0	602.6	614.0	620.2	628.9
42.5°	565.6	555.1	551.5	554.2	555.1	557.7	563.0	577.1	588.5	597.3	604.3
45°	538.3	530.4	522.5	525.2	526.0	527.8	535.7	550.7	563.0	573.5	581.4
47.5°	510.2	500.5	492.6	494.4	497.9	498.8	507.6	525.2	536.6	548.0	558.6
50°	482.0	468.9	462.7	462.7	464.5	468.9	480.3	497.9	510.2	523.4	534.8
52.5°	453.0	440.7	433.7	434.5	436.3	441.6	452.1	469.7	483.8	497.9	512.0
55°	424.0	410.8	403.8	402.0	403.8	410.8	423.1	441.6	455.7	472.4	487.3
57.5°	395.0	379.1	373.0	370.3	372.1	380.9	393.2	412.6	430.1	446.0	463.6
60°	363.3	351.0	340.4	334.3	338.7	350.1	363.3	383.5	402.0	419.6	438.9
62.5°	336.0	320.2	308.8	302.6	307.0	316.7	335.1	354.5	374.7	395.0	414.3
65°	305.2	289.4	276.2	270.1	274.5	285.9	304.4	325.5	347.5	367.7	390.6
67.5°	275.3	258.6	242.8	236.6	241.9	254.2	274.5	298.2	322.0	343.1	367.7
70°	246.3	227.8	211.1	206.7	210.2	226.9	246.3	270.1	294.7	319.3	344.8
72.5°	219.9	197.0	179.4	174.2	178.6	197.0	219.0	243.7	270.1	296.4	323.7
75°	189.1	168.0	148.7	142.5	147.8	164.5	191.8	218.2	246.3	274.5	300.0
77.5°	164.5	139.9	119.6	110.0	118.8	139.9	166.3	194.4	223.4	252.5	281.5
80°	139.0	113.5	91.5	80.9	90.6	113.5	139.9	170.7	203.2	232.2	258.6
82.5°	116.1	88.8	66.0	54.5	65.1	90.6	119.6	150.4	182.1	211.1	241.9
85°	95.0	66.9	43.1	30.8	45.7	68.6	99.4	131.1	163.6	193.5	223.4
87.5°	77.4	50.1	26.4	13.2	28.1	53.7	82.7	114.4	146.9	176.8	205.0
90°	63.3	36.1	14.1	1.8	16.7	40.5	68.6	99.4	130.2	161.0	189.1
92.5°	51.9	27.3	7.9	0.9	10.6	32.5	58.9	88.0	117.9	147.8	175.1
95°	43.1	21.1	5.3	0.9	7.9	25.5	50.1	78.3	106.4	135.5	162.7
97.5°	36.9	17.6	4.4	0.9	6.2	22.0	43.1	69.5	96.8	124.0	150.4
100°	31.7	14.1	3.5	0.9	5.3	18.5	37.8	61.6	87.1	113.5	139.0
102.5°	27.3	11.4	2.6	0.9	4.4	15.8	33.4	55.4	78.3	103.8	128.4
105°	23.8	9.7	2.6	0.9	3.5	14.1	29.9	49.3	72.1	95.0	118.8
107.5°	20.2	7.9	1.8	0.9	2.6	11.4	26.4	44.9	65.1	87.1	109.1
110°	17.6	7.0	1.8	0.9	2.6	10.6	22.9	40.5	58.9	79.2	100.3

TEST NUMBER: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	15.0	5.3	1.8	0.9	1.8	8.8	20.2	36.1	53.7	72.1	92.4
115°	13.2	4.4	0.9	0.9	1.8	7.9	18.5	32.5	48.4	66.0	84.4
117.5°	10.6	3.5	0.9	0.9	0.9	6.2	15.8	29.0	44.0	60.7	77.4
120°	8.8	3.5	0.9	0.9	0.9	5.3	14.1	25.5	39.6	54.5	70.4
122.5°	7.9	2.6	0.9	0.9	0.9	4.4	12.3	22.9	35.2	49.3	64.2
125°	7.0	2.6	0.9	0.9	0.9	3.5	10.6	20.2	31.7	44.0	58.1
127.5°	5.3	2.6	0.9	0.9	0.9	2.6	9.7	17.6	28.1	39.6	51.9
130°	4.4	1.8	0.9	0.9	0.9	2.6	7.9	15.8	24.6	35.2	46.6
132.5°	3.5	1.8	0.9	0.9	0.9	1.8	6.2	12.3	21.1	30.8	41.3
135°	3.5	1.8	0.9	0.9	0.9	1.8	4.4	10.6	17.6	26.4	35.2
137.5°	3.5	0.9	0.9	0.9	0.9	1.8	3.5	7.9	14.1	21.1	29.0
140°	2.6	0.9	0.9	0.9	0.9	0.9	2.6	6.2	11.4	17.6	24.6
142.5°	2.6	0.9	0.9	0.9	0.9	0.9	2.6	4.4	8.8	14.1	19.4
145°	1.8	0.9	0.9	0.9	0.9	0.9	1.8	3.5	7.0	10.6	15.8
147.5°	1.8	0.9	0.9	0.9	0.9	0.9	1.8	2.6	5.3	8.8	12.3
150°	1.8	0.9	0.9	0.9	0.9	0.9	1.8	2.6	3.5	6.2	9.7
152.5°	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8	2.6	4.4	6.2
155°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8	2.6	3.5	4.4
157.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8	2.6	3.5
160°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8	2.6
162.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8
165°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	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

TEST NUMBER: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9
2.5°	836.5	830.4	832.1	831.3	833.0	835.7	835.7	834.8	834.8	833.0	831.3
5°	834.8	828.6	831.3	830.4	832.1	834.8	834.8	833.9	833.9	831.3	830.4
7.5°	829.5	825.1	826.9	826.9	828.6	831.3	831.3	830.4	830.4	827.8	826.9
10°	824.2	819.0	821.6	821.6	823.4	826.9	826.9	826.0	826.0	823.4	822.5
12.5°	815.4	810.2	814.6	815.4	817.2	820.7	819.8	819.8	819.8	817.2	816.3
15°	804.9	801.4	805.8	806.6	809.3	813.7	813.7	813.7	813.7	811.0	810.2
17.5°	793.4	790.8	795.2	797.0	800.5	804.9	804.9	805.8	806.6	804.9	804.0
20°	780.2	778.5	782.9	786.4	791.7	796.1	797.8	798.7	800.5	798.7	797.8
22.5°	765.3	765.3	771.5	775.0	781.1	785.5	788.2	790.8	792.6	790.8	789.9
25°	748.6	751.2	757.4	763.5	770.6	775.0	777.6	781.1	782.9	782.0	781.1
27.5°	732.7	736.3	744.2	750.3	756.5	763.5	766.2	770.6	772.3	772.3	771.5
30°	714.3	719.6	728.4	735.4	743.3	750.3	753.9	758.3	760.9	759.1	760.0
32.5°	696.7	705.5	712.5	720.4	729.2	736.3	740.7	745.9	748.6	747.7	748.6
35°	677.3	686.1	695.8	703.7	714.3	721.3	727.5	731.9	735.4	734.5	734.5
37.5°	656.2	667.7	677.3	687.9	697.6	705.5	711.6	716.9	720.4	720.4	720.4
40°	636.0	648.3	658.0	670.3	682.6	689.6	696.7	702.0	705.5	706.4	707.2
42.5°	614.0	627.2	638.6	651.8	664.1	672.9	680.8	687.0	690.5	692.3	691.4
45°	593.8	606.1	619.3	634.2	645.7	654.5	664.1	671.2	674.7	675.6	676.5
47.5°	570.9	585.0	599.9	614.9	626.3	637.7	646.5	653.6	657.1	659.7	659.7
50°	548.9	563.9	580.6	596.4	608.7	620.2	628.9	636.9	641.3	643.0	643.9
52.5°	528.7	542.7	560.3	576.2	588.5	599.9	611.4	620.2	624.6	626.3	626.3
55°	504.0	521.6	541.0	555.9	569.1	582.3	593.8	602.6	607.0	609.6	611.4
57.5°	481.2	499.6	519.9	535.7	551.5	563.9	574.4	585.8	589.4	592.9	593.8
60°	459.2	477.7	497.0	514.6	530.4	543.6	555.9	565.6	571.8	573.5	575.3
62.5°	436.3	455.7	475.9	493.5	510.2	526.0	537.5	546.3	553.3	555.9	557.7
65°	414.3	434.5	454.8	473.3	490.8	506.7	518.1	526.9	533.9	538.3	539.2
67.5°	390.6	412.6	433.7	453.0	470.6	487.3	498.8	507.6	514.6	519.9	520.8
70°	368.6	391.4	412.6	433.7	451.3	468.0	480.3	489.1	497.0	500.5	502.3
72.5°	347.5	371.2	393.2	414.3	431.9	448.6	461.8	470.6	478.5	482.9	483.8
75°	327.2	351.0	374.7	395.0	413.4	430.1	443.3	453.0	460.1	464.5	466.2
77.5°	307.0	331.6	355.4	375.6	395.0	411.7	423.1	434.5	441.6	446.9	446.9
80°	286.8	312.3	336.9	357.1	376.5	391.4	404.6	416.1	423.1	428.4	428.4
82.5°	269.2	293.8	317.6	337.8	357.1	373.9	387.0	397.6	405.5	409.0	409.9
85°	248.9	276.2	298.2	320.2	338.7	354.5	367.7	379.1	386.2	389.7	391.4
87.5°	232.2	258.6	282.4	301.7	320.2	336.0	351.0	360.7	367.7	372.1	373.9
90°	216.4	241.9	265.7	285.0	304.4	319.3	333.4	343.1	351.0	354.5	356.3
92.5°	202.3	227.8	250.7	270.1	288.5	305.2	318.4	328.1	335.1	338.7	341.3
95°	189.1	213.8	235.7	256.9	274.5	289.4	303.5	313.2	321.1	323.7	326.4
97.5°	175.9	199.7	221.7	241.9	260.4	274.5	287.6	297.3	303.5	307.9	310.5
100°	164.5	187.4	208.5	227.8	245.4	258.6	272.7	281.5	287.6	291.2	294.7
102.5°	152.2	175.1	195.3	213.8	232.2	244.5	257.7	266.5	271.8	278.0	278.0
105°	141.6	162.7	183.0	200.6	216.4	231.3	242.8	251.6	257.7	262.1	262.1
107.5°	130.2	151.3	170.7	189.1	204.1	218.2	228.7	236.6	243.7	246.3	248.9
110°	121.4	139.9	159.2	176.8	190.9	204.1	214.6	223.4	229.6	232.2	234.0

TEST NUMBER: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	110.8	130.2	147.8	164.5	178.6	190.9	201.4	208.5	214.6	218.2	219.0
115°	102.0	120.5	136.3	152.2	167.1	177.7	187.4	194.4	200.6	203.2	205.0
117.5°	94.1	110.8	126.7	139.9	153.9	165.4	175.1	181.2	186.5	190.0	191.8
120°	86.2	102.0	116.1	129.3	142.5	153.1	161.9	168.0	174.2	176.8	176.8
122.5°	78.3	93.2	106.4	118.8	131.1	140.7	150.4	155.7	161.0	163.6	163.6
125°	71.3	85.3	97.6	109.1	120.5	129.3	137.2	143.4	148.7	150.4	150.4
127.5°	64.2	77.4	88.8	99.4	109.1	117.9	125.8	131.9	136.3	138.1	138.1
130°	58.1	69.5	80.0	90.6	100.3	107.3	115.2	120.5	123.2	125.8	126.7
132.5°	51.9	62.5	72.1	80.9	90.6	97.6	103.8	109.1	111.7	114.4	115.2
135°	45.7	55.4	64.2	73.0	80.9	88.0	93.2	97.6	101.2	102.9	103.8
137.5°	38.7	49.3	57.2	64.2	73.0	78.3	84.4	87.1	90.6	92.4	92.4
140°	32.5	40.5	49.3	56.3	63.3	68.6	73.9	78.3	80.9	81.8	81.8
142.5°	26.4	33.4	40.5	49.3	55.4	59.8	65.1	68.6	70.4	71.3	72.1
145°	21.1	26.4	32.5	40.5	47.5	52.8	55.4	58.9	60.7	61.6	62.5
147.5°	15.8	21.1	26.4	31.7	38.7	44.0	46.6	50.1	51.9	52.8	52.8
150°	12.3	15.8	19.4	24.6	29.9	36.1	39.6	42.2	43.1	44.0	44.0
152.5°	8.8	12.3	15.0	18.5	22.0	27.3	32.5	34.3	35.2	36.1	36.1
155°	6.2	8.8	10.6	13.2	15.8	20.2	24.6	27.3	28.1	29.0	29.0
157.5°	4.4	6.2	7.0	9.7	11.4	13.2	16.7	21.1	22.0	22.0	22.0
160°	2.6	3.5	4.4	6.2	7.0	8.8	10.6	13.2	15.8	15.8	15.8
162.5°	1.8	2.6	2.6	3.5	3.5	5.3	6.2	7.0	9.7	10.6	10.6
165°	0.9	1.8	1.8	1.8	1.8	1.8	2.6	2.6	4.4	5.3	5.3
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: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9	833.9
2.5°	832.1	833.9	833.0	833.0	833.0	834.8	833.0	825.1	826.9	828.6	830.4
5°	831.3	832.1	832.1	831.3	831.3	833.0	831.3	823.4	825.1	826.9	827.8
7.5°	827.8	828.6	828.6	828.6	827.8	829.5	826.9	819.8	819.8	821.6	822.5
10°	823.4	825.1	824.2	823.4	823.4	823.4	821.6	813.7	813.7	814.6	815.4
12.5°	818.1	818.1	818.1	817.2	816.3	816.3	814.6	806.6	805.8	807.5	806.6
15°	811.0	812.8	811.0	810.2	808.4	808.4	805.8	797.8	796.1	797.0	796.1
17.5°	804.9	805.8	804.0	802.2	800.5	799.6	797.0	788.2	785.5	786.4	784.6
20°	798.7	798.7	797.0	795.2	792.6	789.9	786.4	777.6	773.2	773.2	769.7
22.5°	790.8	790.8	789.0	786.4	783.8	780.2	776.7	767.9	760.9	759.1	756.5
25°	782.0	781.1	780.2	777.6	772.3	768.8	765.3	755.6	747.7	744.2	739.8
27.5°	771.5	771.5	768.8	766.2	760.9	756.5	752.1	743.3	732.7	728.4	722.2
30°	760.0	760.0	757.4	753.9	748.6	743.3	738.0	727.5	716.9	710.8	703.7
32.5°	748.6	747.7	745.1	741.5	736.3	728.4	724.0	713.4	701.1	694.0	684.4
35°	734.5	733.6	731.0	726.6	719.6	713.4	706.4	696.7	682.6	673.8	663.3
37.5°	720.4	719.6	717.8	711.6	704.6	697.6	688.8	679.1	665.9	654.5	643.9
40°	706.4	705.5	702.0	697.6	688.8	680.0	671.2	661.5	647.4	634.2	622.8
42.5°	691.4	690.5	686.1	680.8	671.2	662.4	651.8	641.3	627.2	611.4	599.9
45°	676.5	674.7	670.3	664.1	653.6	643.9	633.3	621.0	607.0	592.0	577.1
47.5°	660.6	658.0	653.6	644.8	636.0	625.4	613.1	599.9	585.8	569.1	553.3
50°	643.0	641.3	636.0	628.1	617.5	607.0	592.9	579.7	563.0	547.1	527.8
52.5°	626.3	622.8	618.4	609.6	599.0	587.6	572.7	556.8	540.1	525.2	504.9
55°	608.7	607.0	600.8	593.8	580.6	567.4	553.3	536.6	518.1	500.5	481.2
57.5°	592.0	588.5	583.2	573.5	562.1	548.9	533.9	516.4	496.1	477.7	456.5
60°	575.3	570.0	563.9	555.1	542.7	528.7	512.8	494.4	474.1	453.9	431.9
62.5°	556.8	552.4	545.4	536.6	524.3	509.3	492.6	473.3	453.9	432.8	409.0
65°	538.3	533.9	526.9	518.1	505.8	489.1	471.5	452.1	430.1	409.9	384.4
67.5°	519.9	515.5	507.6	497.9	485.6	469.7	451.3	431.0	409.0	387.0	360.7
70°	501.4	496.1	489.1	478.5	466.2	449.5	431.0	409.9	387.9	364.2	337.8
72.5°	482.9	478.5	469.7	460.1	446.9	430.1	411.7	390.6	367.7	343.1	316.7
75°	464.5	459.2	453.0	441.6	427.5	411.7	392.3	371.2	346.6	322.8	295.6
77.5°	446.0	441.6	433.7	422.2	409.0	392.3	373.0	351.9	327.2	302.6	273.6
80°	427.5	422.2	416.1	405.5	390.6	373.9	353.6	332.5	307.9	282.4	253.3
82.5°	409.0	403.8	396.7	386.2	372.1	355.4	336.0	313.2	288.5	262.1	234.9
85°	390.6	386.2	378.2	367.7	352.7	336.0	316.7	296.4	270.1	243.7	216.4
87.5°	372.1	367.7	359.8	349.2	335.1	318.4	299.1	278.0	252.5	227.8	197.9
90°	354.5	351.0	343.1	332.5	318.4	301.7	284.1	261.3	236.6	212.0	183.8
92.5°	338.7	335.1	328.1	317.6	305.2	286.8	269.2	247.2	222.6	197.0	169.8
95°	324.6	320.2	313.2	303.5	288.5	272.7	255.1	233.1	209.4	183.8	157.5
97.5°	308.8	304.4	297.3	286.8	274.5	257.7	240.1	219.0	195.3	171.5	145.1
100°	292.9	288.5	280.6	271.8	259.5	242.8	226.1	205.0	183.0	160.1	134.6
102.5°	277.1	272.7	265.7	256.9	244.5	229.6	212.9	192.6	170.7	147.8	124.0
105°	262.1	257.7	250.7	241.9	230.5	215.5	197.9	180.3	159.2	137.2	114.4
107.5°	247.2	242.8	236.6	227.8	216.4	202.3	185.6	167.1	147.8	126.7	104.7
110°	232.2	228.7	221.7	213.8	202.3	188.2	173.3	155.7	136.3	117.0	95.9

TEST NUMBER: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	218.2	214.6	207.6	198.8	189.1	175.9	161.0	144.3	125.8	107.3	87.1
115°	204.1	199.7	193.5	185.6	175.9	163.6	149.5	134.6	116.1	98.5	80.0
117.5°	190.0	186.5	180.3	172.4	163.6	151.3	138.1	124.0	106.4	89.7	73.0
120°	175.9	173.3	167.1	160.1	151.3	139.9	127.5	113.5	97.6	81.8	66.0
122.5°	162.7	160.1	153.9	147.8	139.0	128.4	117.0	103.8	89.7	74.8	60.7
125°	150.4	146.9	141.6	135.5	127.5	117.9	106.4	94.1	80.9	67.7	54.5
127.5°	137.2	134.6	131.1	124.0	116.1	107.3	96.8	86.2	73.9	61.6	49.3
130°	126.7	123.2	118.8	113.5	106.4	97.6	88.0	77.4	66.9	55.4	43.1
132.5°	114.4	110.8	107.3	102.0	95.9	88.0	79.2	69.5	59.8	49.3	38.7
135°	102.9	100.3	96.8	91.5	85.3	79.2	70.4	61.6	52.8	43.1	34.3
137.5°	92.4	89.7	86.2	82.7	76.5	70.4	62.5	54.5	46.6	37.8	29.9
140°	81.8	80.0	76.5	73.0	67.7	61.6	54.5	47.5	40.5	32.5	25.5
142.5°	71.3	69.5	66.9	63.3	58.9	53.7	47.5	41.3	34.3	28.1	22.0
145°	61.6	60.7	58.1	54.5	51.0	45.7	40.5	35.2	29.0	23.8	17.6
147.5°	51.9	51.0	49.3	46.6	43.1	38.7	34.3	29.0	24.6	19.4	14.1
150°	43.1	42.2	41.3	37.8	36.1	31.7	28.1	23.8	20.2	15.0	11.4
152.5°	35.2	35.2	33.4	30.8	29.0	25.5	22.9	19.4	15.8	12.3	8.8
155°	28.1	27.3	26.4	24.6	22.9	20.2	17.6	15.0	12.3	8.8	6.2
157.5°	22.0	21.1	20.2	18.5	16.7	15.8	13.2	10.6	7.9	6.2	4.4
160°	15.8	15.0	14.1	13.2	12.3	10.6	8.8	7.0	5.3	3.5	2.6
162.5°	10.6	9.7	9.7	8.8	7.9	6.2	5.3	4.4	3.5	2.6	1.8
165°	5.3	5.3	4.4	4.4	3.5	2.6	2.6	2.6	1.8	1.8	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

TEST NUMBER: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	833.9	833.9	833.9	833.9	833.9	833.9	833.9
2.5°	829.5	829.5	833.0	832.1	829.5	834.8	840.9
5°	826.9	826.9	829.5	829.5	826.9	832.1	837.4
7.5°	822.5	821.6	824.2	824.2	820.7	825.1	831.3
10°	814.6	813.7	816.3	816.3	812.8	817.2	822.5
12.5°	805.8	804.0	806.6	805.8	802.2	806.6	811.9
15°	794.3	793.4	795.2	793.4	789.9	794.3	799.6
17.5°	782.9	780.2	781.1	781.1	775.0	779.4	783.8
20°	767.9	764.4	765.3	764.4	760.0	762.7	767.9
22.5°	753.0	747.7	747.7	746.8	741.5	745.1	749.5
25°	734.5	728.4	728.4	727.5	721.3	724.0	728.4
27.5°	716.0	709.9	707.2	706.4	700.2	700.2	706.4
30°	696.7	687.9	686.1	683.5	677.3	677.3	682.6
32.5°	678.2	665.9	662.4	658.9	652.7	651.8	658.0
35°	653.6	643.9	637.7	634.2	627.2	625.4	630.7
37.5°	633.3	621.0	612.2	607.8	600.8	598.2	605.2
40°	611.4	598.2	586.7	584.1	573.5	570.0	576.2
42.5°	586.7	572.7	561.2	555.9	548.0	544.5	545.4
45°	562.1	547.1	534.8	527.8	519.9	513.7	517.2
47.5°	536.6	523.4	508.4	497.9	488.2	483.8	485.6
50°	511.1	495.2	481.2	469.7	458.3	453.0	456.5
52.5°	485.6	468.9	453.0	440.7	427.5	422.2	423.1
55°	460.9	443.3	424.9	411.7	399.4	391.4	389.7
57.5°	436.3	417.0	397.6	382.6	366.8	359.8	357.1
60°	409.9	389.7	369.5	351.9	335.1	327.2	323.7
62.5°	385.3	363.3	340.4	322.0	305.2	294.7	292.0
65°	361.5	336.0	313.2	292.0	273.6	262.1	258.6
67.5°	336.0	309.6	285.0	262.1	244.5	229.6	227.8
70°	312.3	284.1	256.9	233.1	213.8	198.8	191.8
72.5°	288.5	259.5	231.3	205.8	181.2	167.1	161.9
75°	265.7	235.7	205.8	179.4	152.2	135.5	130.2
77.5°	244.5	213.8	182.1	153.1	127.5	106.4	99.4
80°	224.3	192.6	159.2	129.3	102.0	79.2	71.3
82.5°	203.2	173.3	139.0	107.3	79.2	55.4	45.7
85°	184.7	154.8	120.5	88.8	60.7	35.2	24.6
87.5°	169.8	137.2	106.4	74.8	45.7	20.2	7.0
90°	154.8	123.2	92.4	61.6	34.3	11.4	0.9
92.5°	141.6	111.7	80.9	52.8	26.4	7.9	0.9
95°	129.3	100.3	71.3	44.0	21.1	5.3	0.9
97.5°	117.9	90.6	63.3	37.8	17.6	4.4	0.9
100°	108.2	81.8	56.3	33.4	15.0	3.5	0.9
102.5°	98.5	73.9	50.1	29.0	13.2	2.6	0.9
105°	90.6	66.9	44.9	26.4	11.4	2.6	0.9
107.5°	82.7	60.7	40.5	22.9	9.7	1.8	0.9
110°	74.8	55.4	36.1	20.2	8.8	1.8	0.9

TEST NUMBER: P1213770

CATALOG NUMBER: 4SNLED-LD5-41SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	68.6	50.1	32.5	18.5	7.0	1.8	0.9
115°	62.5	44.9	29.0	15.8	6.2	0.9	0.9
117.5°	56.3	40.5	25.5	14.1	5.3	0.9	0.9
120°	51.0	36.1	22.9	12.3	4.4	0.9	0.9
122.5°	45.7	32.5	20.2	10.6	3.5	0.9	0.9
125°	41.3	29.0	17.6	8.8	2.6	0.9	0.9
127.5°	36.9	25.5	15.8	7.9	2.6	0.9	0.9
130°	32.5	22.9	13.2	6.2	1.8	0.9	0.9
132.5°	29.0	19.4	11.4	5.3	1.8	0.9	0.9
135°	25.5	16.7	9.7	3.5	1.8	0.9	0.9
137.5°	22.0	14.1	7.9	2.6	0.9	0.9	0.9
140°	18.5	12.3	6.2	2.6	0.9	0.9	0.9
142.5°	15.8	9.7	4.4	1.8	0.9	0.9	0.9
145°	12.3	7.9	3.5	1.8	0.9	0.9	0.9
147.5°	9.7	6.2	2.6	1.8	0.9	0.9	0.9
150°	7.0	4.4	2.6	0.9	0.9	0.9	0.9
152.5°	5.3	3.5	1.8	0.9	0.9	0.9	0.9
155°	3.5	2.6	1.8	0.9	0.9	0.9	0.9
157.5°	2.6	1.8	0.9	0.9	0.9	0.9	0.9
160°	1.8	0.9	0.9	0.9	0.9	0.9	0.9
162.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9
165°	0.9	0.9	0.9	0.9	0.9	0.9	0.9
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)