

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: P1213778

Luminaire Tested: 4SNLED-LD5-44SL-LW-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213778
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-LD5-44SL-LW-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

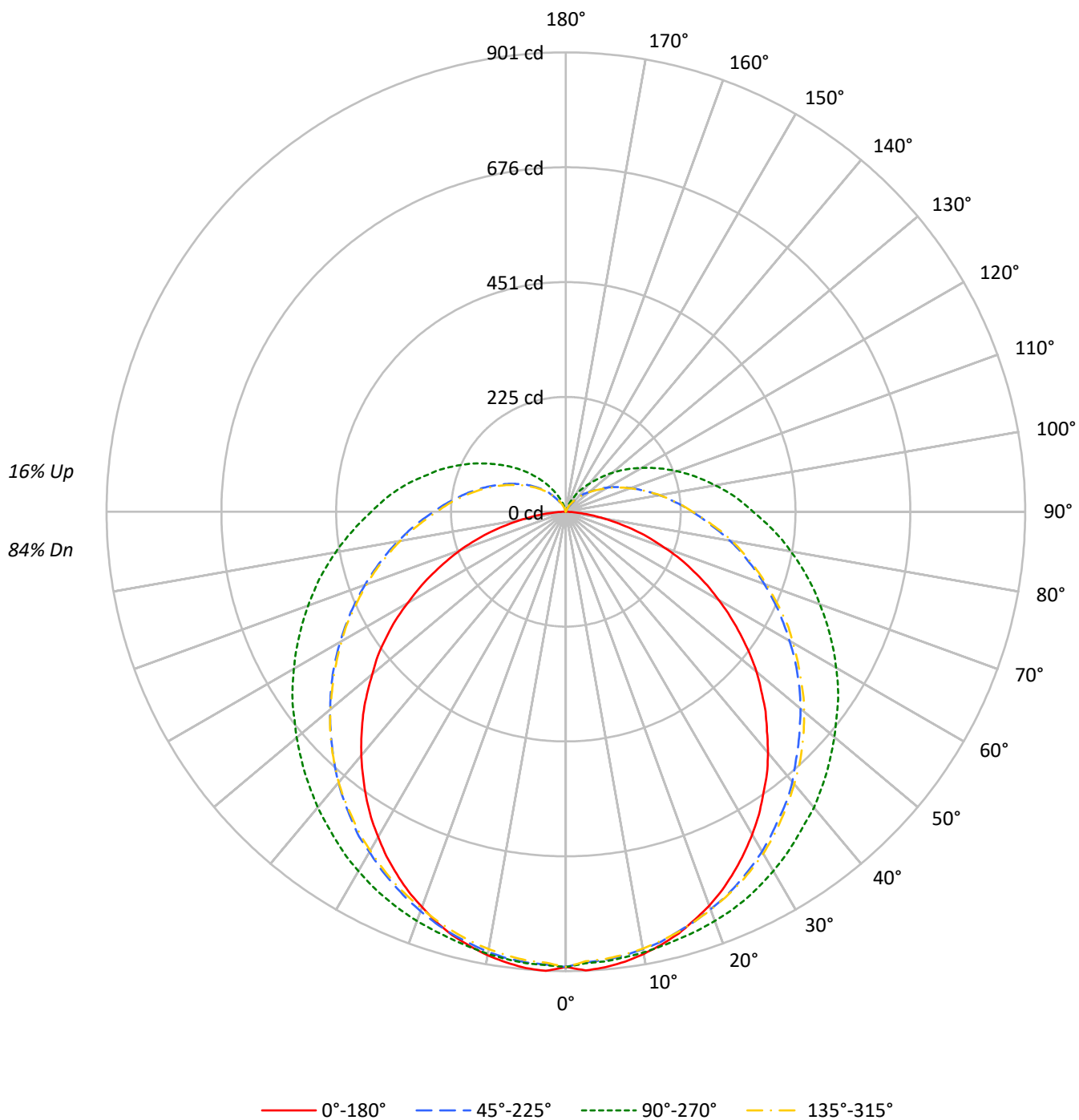
Lumens per Lamp: N/A
Luminaire Lumens: 3879.0 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 38
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°	7215	7215	7215	7215
5°	7253	6953	7269	6983
10°	7186	6756	7209	6777
15°	7103	6587	7134	6594
20°	6991	6463	7015	6463
25°	6853	6354	6894	6346
30°	6698	6240	6751	6240
35°	6519	6136	6592	6143
40°	6341	6074	6419	6074
45°	6137	6010	6231	6018
50°	5924	5972	6004	5988
55°	5627	5977	5805	6004
60°	5314	5996	5487	6032
65°	4962	6056	5181	6116
70°	4467	6167	4815	6255
75°	3898	6368	4267	6492
80°	3016	6668	3423	6822
85°	1804	7147	2254	7345

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 270°

Vertical Angle: 90°

Luminance: 8211 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.6	2.2
10°-20°	243.1	6.3
20°-30°	372.7	9.6
30°-40°	459.8	11.9
40°-50°	498.8	12.9
50°-60°	491.7	12.7
60°-70°	444.5	11.5
70°-80°	370.3	9.5
80°-90°	286.8	7.4
90°-100°	217.5	5.6
100°-110°	161.0	4.1
110°-120°	112.0	2.9
120°-130°	71.4	1.8
130°-140°	40.1	1.0
140°-150°	18.3	0.5
150°-160°	5.7	0.1
160°-170°	0.7	0.0
170°-180°	0.0	0.0
0°-30°	700.3	18.1
0°-40°	1160.1	29.9
0°-60°	2150.6	55.4
0°-90°	3252.3	83.8
90°-120°	490.5	12.6
90°-150°	620.3	16.0
90°-180°	627.0	16.2
0°-180°	3879.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	893	893	893	893	893	
5°	897	885	898	889	897	85
15°	856	866	860	867	856	241
25°	780	837	784	836	780	359
35°	675	786	683	786	675	423
45°	554	723	562	724	554	427
55°	417	652	430	655	417	373
65°	277	572	289	577	277	274
75°	139	490	153	499	139	148
85°	26	408	33	419	26	32
90°	1	367	2	381	1	1
95°	1	333	1	349	1	1
105°	1	265	1	281	1	1
115°	1	202	1	219	1	1
125°	1	145	1	161	1	1
135°	1	94	1	111	1	1
145°	1	55	1	67	1	1
155°	1	23	1	31	1	0
165°	1	4	1	6	1	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°	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8
2.5°	900.4	900.4	899.4	897.5	898.5	901.3	899.4	894.7	891.9	884.4	886.2
5°	896.6	896.6	895.7	893.8	894.7	898.5	896.6	892.8	889.1	882.5	885.3
7.5°	890.0	890.0	889.1	887.2	889.1	892.8	890.9	887.2	884.4	877.8	880.6
10°	880.6	881.5	880.6	877.8	881.5	885.3	884.4	879.6	876.8	871.2	874.0
12.5°	869.3	870.2	869.3	868.3	870.2	875.9	874.0	870.2	868.3	863.6	866.5
15°	856.1	857.0	855.2	855.2	857.0	862.7	862.7	858.9	857.0	852.3	858.0
17.5°	839.1	840.1	839.1	839.1	841.0	846.7	847.6	845.7	843.9	842.0	847.6
20°	822.2	821.3	821.3	820.3	824.1	832.6	831.6	831.6	829.7	829.7	836.3
22.5°	802.4	802.4	801.5	801.5	806.2	813.7	813.7	815.6	813.7	817.5	823.1
25°	779.8	780.8	779.8	781.7	785.5	793.9	794.9	797.7	798.7	802.4	809.0
27.5°	756.3	757.2	756.3	758.2	764.7	771.3	776.0	779.8	780.8	786.4	794.9
30°	730.8	730.8	731.8	733.7	741.2	751.6	755.3	760.0	760.0	769.5	777.9
32.5°	704.5	704.5	704.5	708.2	716.7	729.0	733.7	739.3	741.2	750.6	760.0
35°	675.3	676.2	676.2	679.0	690.3	702.6	709.2	715.8	719.5	730.8	740.3
37.5°	648.0	649.8	647.0	650.8	666.8	677.2	684.7	691.3	697.9	712.9	720.5
40°	616.9	618.8	617.8	625.4	638.5	651.7	660.2	666.8	676.2	691.3	699.8
42.5°	583.9	585.8	587.7	596.2	610.3	623.5	633.8	642.3	653.6	666.8	680.9
45°	553.8	553.8	556.6	567.0	582.0	596.2	608.4	617.8	631.0	645.1	659.3
47.5°	519.9	520.8	524.6	536.8	552.8	569.8	581.1	593.3	607.5	622.5	638.5
50°	488.8	488.8	494.4	507.6	522.7	541.5	553.8	567.9	583.0	600.9	616.9
52.5°	453.0	454.9	463.4	475.6	495.4	512.3	526.5	541.5	559.4	578.3	596.2
55°	417.2	421.0	427.6	444.5	465.3	481.3	498.2	517.1	534.0	554.7	575.4
57.5°	382.4	385.2	395.6	412.5	434.2	454.0	471.8	489.7	510.5	531.2	552.8
60°	346.6	350.4	362.6	379.5	403.1	423.8	444.5	463.4	485.0	506.7	529.3
62.5°	312.7	315.5	329.6	349.4	373.0	395.6	416.3	438.9	462.4	483.1	505.7
65°	276.9	281.6	297.6	315.5	342.8	365.4	389.0	413.5	437.9	460.5	482.2
67.5°	243.9	246.8	263.7	284.4	311.7	337.2	361.7	388.0	413.5	437.0	458.7
70°	205.3	214.7	231.7	253.3	282.5	308.9	335.3	362.6	389.9	414.4	435.1
72.5°	173.3	180.8	199.7	223.2	251.5	282.5	309.9	339.1	366.4	391.8	413.5
75°	139.4	146.9	168.6	195.0	224.1	257.1	285.4	315.5	343.8	369.2	391.8
77.5°	106.4	115.8	139.4	166.7	198.7	232.6	261.8	292.0	321.2	348.5	371.1
80°	76.3	86.6	112.1	143.2	174.2	208.1	240.2	270.3	299.5	326.8	350.4
82.5°	49.0	60.3	87.6	118.7	151.6	185.5	218.5	248.6	277.8	305.1	329.6
85°	26.4	38.6	66.9	97.9	130.9	164.8	197.8	229.8	258.1	283.5	309.9
87.5°	7.5	22.6	49.9	81.0	114.9	146.0	178.0	210.0	238.3	265.6	289.1
90°	0.9	13.2	37.7	66.9	99.8	130.0	162.0	192.1	220.4	247.7	271.2
92.5°	0.9	8.5	29.2	55.6	85.7	116.8	148.8	178.0	204.4	231.7	255.2
95°	0.9	6.6	23.5	47.1	75.3	104.5	134.7	162.9	190.2	215.7	239.2
97.5°	0.9	4.7	18.8	40.5	65.9	93.2	122.4	150.7	177.1	201.5	223.2
100°	0.9	3.8	15.1	34.8	57.5	83.8	110.2	137.5	162.9	186.5	209.1
102.5°	0.9	2.8	13.2	29.2	50.9	74.4	99.8	125.3	149.7	172.4	195.0
105°	0.9	2.8	11.3	25.4	45.2	66.9	90.4	114.9	137.5	159.2	179.9
107.5°	0.9	1.9	9.4	21.7	39.6	60.3	81.9	105.5	126.2	146.9	166.7
110°	0.9	1.9	7.5	19.8	34.8	53.7	74.4	96.1	115.8	135.6	154.5

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.9	1.9	6.6	17.0	30.1	48.0	66.9	86.6	105.5	125.3	142.2
115°	0.9	1.9	5.7	15.1	28.3	41.4	60.3	78.2	97.0	114.9	130.9
117.5°	0.9	1.9	4.7	12.2	24.5	37.7	52.7	70.6	87.6	104.5	119.6
120°	0.9	1.9	3.8	11.3	21.7	33.9	47.1	63.1	79.1	95.1	111.1
122.5°	0.9	0.9	3.8	9.4	18.8	30.1	43.3	55.6	70.6	85.7	99.8
125°	0.9	0.9	3.8	8.5	16.0	27.3	38.6	49.9	63.1	76.3	88.5
127.5°	0.9	0.9	2.8	6.6	14.1	23.5	33.9	46.1	55.6	67.8	80.1
130°	0.9	0.9	2.8	5.7	12.2	19.8	30.1	40.5	51.8	60.3	70.6
132.5°	0.9	0.9	2.8	4.7	9.4	16.0	25.4	34.8	45.2	54.6	63.1
135°	0.9	0.9	1.9	3.8	7.5	13.2	20.7	29.2	39.6	49.0	57.5
137.5°	0.9	0.9	1.9	3.8	5.7	11.3	16.0	23.5	33.0	41.4	49.9
140°	0.9	0.9	1.9	2.8	4.7	8.5	13.2	18.8	26.4	33.9	43.3
142.5°	0.9	0.9	0.9	2.8	3.8	6.6	10.4	15.1	20.7	27.3	34.8
145°	0.9	0.9	0.9	2.8	3.8	4.7	8.5	12.2	16.0	20.7	27.3
147.5°	0.9	0.9	0.9	1.9	2.8	3.8	6.6	9.4	12.2	16.0	19.8
150°	0.9	0.9	0.9	1.9	2.8	3.8	4.7	6.6	9.4	13.2	16.0
152.5°	0.9	0.9	0.9	1.9	1.9	2.8	3.8	4.7	6.6	9.4	11.3
155°	0.9	0.9	0.9	0.9	1.9	2.8	3.8	3.8	4.7	6.6	8.5
157.5°	0.9	0.9	0.9	0.9	1.9	1.9	2.8	2.8	3.8	3.8	5.7
160°	0.9	0.9	0.9	0.9	0.9	1.9	1.9	2.8	2.8	2.8	2.8
162.5°	0.9	0.9	0.9	0.9	0.9	0.9	1.9	1.9	1.9	2.8	2.8
165°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.9	1.9	1.9
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°	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8
2.5°	886.2	887.2	890.0	890.0	888.1	888.1	887.2	886.2	887.2	889.1	889.1
5°	884.4	885.3	888.1	889.1	887.2	886.2	886.2	885.3	886.2	888.1	888.1
7.5°	880.6	881.5	884.4	885.3	883.4	883.4	882.5	881.5	883.4	884.4	884.4
10°	874.9	875.9	879.6	880.6	879.6	878.7	878.7	877.8	878.7	880.6	880.6
12.5°	867.4	869.3	874.0	874.0	874.0	873.1	873.1	872.1	873.1	874.9	874.0
15°	858.9	862.7	866.5	868.3	868.3	868.3	867.4	866.5	868.3	869.3	868.3
17.5°	849.5	854.2	859.9	861.8	861.8	862.7	861.8	860.8	862.7	862.7	861.8
20°	840.1	844.8	850.5	852.3	854.2	855.2	855.2	854.2	855.2	856.1	855.2
22.5°	827.8	833.5	840.1	842.9	844.8	846.7	846.7	846.7	847.6	848.6	846.7
25°	814.7	821.3	828.8	831.6	835.4	836.3	837.3	837.3	838.2	839.1	836.3
27.5°	800.5	808.1	815.6	820.3	823.1	825.0	825.0	826.0	826.9	827.8	825.0
30°	783.6	794.9	801.5	805.2	809.0	811.8	812.8	813.7	814.7	815.6	812.8
32.5°	768.5	777.9	786.4	791.1	795.8	799.6	800.5	800.5	802.4	802.4	799.6
35°	750.6	761.9	770.4	775.1	780.8	783.6	785.5	785.5	787.3	787.3	784.5
37.5°	732.7	744.0	753.4	759.1	765.7	769.5	770.4	770.4	772.3	772.3	768.5
40°	713.9	726.1	736.5	743.1	748.7	753.4	754.4	757.2	757.2	756.3	752.5
42.5°	695.1	706.4	717.7	725.2	732.7	737.4	739.3	740.3	740.3	739.3	736.5
45°	674.3	687.5	697.9	707.3	714.8	719.5	722.4	723.3	723.3	721.4	718.6
47.5°	654.6	667.7	678.1	688.5	696.0	701.6	704.5	705.4	704.5	703.5	700.7
50°	633.8	648.9	659.3	669.6	677.2	681.9	686.6	687.5	686.6	685.6	680.0
52.5°	612.2	628.2	639.5	649.8	658.3	664.0	667.7	668.7	668.7	666.8	663.0
55°	590.5	604.6	618.8	630.1	639.5	645.1	649.8	651.7	649.8	648.0	643.3
57.5°	570.7	583.9	598.0	610.3	619.7	627.2	631.0	632.9	631.0	628.2	623.5
60°	547.2	561.3	577.3	588.6	599.0	606.5	608.4	612.2	610.3	607.5	602.8
62.5°	524.6	541.5	555.7	569.8	578.3	586.7	590.5	592.4	590.5	587.7	583.0
65°	501.0	519.9	534.0	548.1	557.5	566.0	570.7	571.7	569.8	567.0	562.3
67.5°	479.4	497.3	512.3	527.4	535.9	544.4	549.1	551.0	549.1	545.3	540.6
70°	457.7	475.6	493.5	504.8	515.2	524.6	527.4	530.2	528.4	524.6	518.9
72.5°	436.1	454.9	472.8	484.1	495.4	503.9	507.6	510.5	508.6	504.8	498.2
75°	413.5	433.2	451.1	463.4	474.7	483.1	486.9	489.7	487.9	484.1	476.6
77.5°	392.7	412.5	429.5	442.6	454.0	461.5	468.1	469.0	467.1	463.4	455.8
80°	371.1	390.8	408.7	421.9	433.2	440.8	445.5	448.3	446.4	442.6	435.1
82.5°	352.2	370.1	388.0	401.2	412.5	421.9	425.7	428.5	427.6	421.9	416.3
85°	331.5	352.2	366.4	380.5	391.8	401.2	404.0	407.8	406.9	402.2	394.6
87.5°	310.8	331.5	348.5	362.6	373.0	380.5	385.2	387.1	386.1	381.4	373.0
90°	293.8	312.7	329.6	344.7	353.2	361.7	366.4	367.3	367.3	361.7	355.1
92.5°	277.8	295.7	312.7	326.8	337.2	344.7	348.5	350.4	349.4	344.7	337.2
95°	259.9	279.7	295.7	309.9	320.2	327.7	331.5	333.4	332.5	327.7	320.2
97.5°	244.9	262.8	278.8	292.0	302.3	309.9	313.6	315.5	315.5	310.8	303.3
100°	229.8	247.7	262.8	275.9	285.4	292.9	296.7	297.6	296.7	292.9	285.4
102.5°	214.7	231.7	246.8	259.0	269.4	275.9	279.7	280.7	280.7	275.9	268.4
105°	199.7	216.6	230.7	243.9	252.4	259.0	261.8	264.6	263.7	259.9	252.4
107.5°	185.5	202.5	215.7	227.9	236.4	243.0	245.8	248.6	247.7	243.9	236.4
110°	172.4	188.4	200.6	212.8	220.4	227.0	231.7	232.6	230.7	227.0	220.4

TEST NUMBER: P1213778

CATALOG NUMBER: 4SNLED-LD5-44SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	160.1	174.2	186.5	197.8	206.3	211.0	214.7	216.6	214.7	211.0	206.3
115°	146.9	161.0	173.3	183.7	191.2	196.8	199.7	201.5	199.7	195.9	191.2
117.5°	134.7	147.9	160.1	170.5	177.1	181.8	184.6	186.5	184.6	181.8	177.1
120°	124.3	135.6	146.9	156.3	163.9	167.6	170.5	172.4	171.4	167.6	162.9
122.5°	112.1	124.3	134.7	144.1	150.7	154.5	156.3	158.2	157.3	154.5	149.7
125°	101.7	112.1	122.4	130.9	137.5	141.3	143.2	145.0	144.1	141.3	135.6
127.5°	90.4	101.7	110.2	118.7	123.4	129.0	130.0	131.9	130.9	128.1	123.4
130°	81.9	90.4	98.9	106.4	112.1	115.8	117.7	118.7	116.8	114.9	110.2
132.5°	71.6	81.0	88.5	95.1	98.9	102.7	104.5	105.5	105.5	102.7	98.9
135°	64.0	70.6	77.2	83.8	87.6	91.4	93.2	94.2	93.2	91.4	87.6
137.5°	57.5	63.1	67.8	73.5	78.2	80.1	81.9	81.9	81.0	80.1	77.2
140°	49.9	56.5	61.2	65.0	68.8	69.7	71.6	71.6	70.6	69.7	67.8
142.5°	42.4	48.0	52.7	57.5	60.3	62.2	63.1	64.0	63.1	62.2	59.3
145°	33.9	40.5	45.2	48.0	51.8	52.7	53.7	54.6	53.7	52.7	49.9
147.5°	26.4	32.0	36.7	40.5	43.3	44.3	45.2	46.1	45.2	43.3	42.4
150°	18.8	23.5	29.2	33.0	34.8	36.7	36.7	36.7	37.7	35.8	33.9
152.5°	15.1	17.0	20.7	24.5	27.3	28.3	29.2	29.2	28.3	28.3	26.4
155°	10.4	12.2	15.1	17.9	20.7	21.7	22.6	22.6	21.7	21.7	20.7
157.5°	6.6	8.5	10.4	12.2	15.1	16.0	17.0	17.0	17.0	16.0	15.1
160°	3.8	4.7	5.7	7.5	9.4	10.4	11.3	11.3	11.3	11.3	10.4
162.5°	2.8	2.8	2.8	3.8	4.7	5.7	6.6	6.6	6.6	6.6	5.7
165°	1.9	1.9	1.9	1.9	1.9	2.8	3.8	3.8	3.8	3.8	3.8
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: P1213778

CATALOG NUMBER: 4SNLED-LD5-44SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8
2.5°	888.1	888.1	889.1	887.2	881.5	882.5	882.5	886.2	888.1	889.1	893.8
5°	886.2	886.2	888.1	885.3	880.6	880.6	880.6	884.4	885.3	887.2	890.9
7.5°	883.4	883.4	884.4	881.5	875.9	875.9	874.9	878.7	880.6	881.5	885.3
10°	878.7	878.7	879.6	876.8	870.2	870.2	869.3	872.1	873.1	874.9	877.8
12.5°	872.1	872.1	872.1	869.3	862.7	861.8	860.8	863.6	863.6	864.6	867.4
15°	866.5	864.6	864.6	861.8	855.2	853.3	851.4	852.3	854.2	853.3	855.2
17.5°	859.9	858.0	856.1	853.3	844.8	842.0	840.1	841.0	840.1	839.1	841.0
20°	852.3	849.5	848.6	843.9	835.4	830.7	826.9	825.0	826.0	823.1	824.1
22.5°	843.9	840.1	838.2	832.6	824.1	818.4	813.7	810.0	809.0	805.2	806.2
25°	833.5	828.8	826.0	821.3	811.8	805.2	799.6	793.9	791.1	786.4	785.5
27.5°	821.3	816.5	812.8	808.1	798.7	790.2	783.6	776.0	772.3	766.6	763.8
30°	809.0	803.4	797.7	793.9	783.6	774.2	763.8	757.2	751.6	745.0	740.3
32.5°	793.9	788.3	782.6	777.0	767.6	756.3	747.8	737.4	730.8	723.3	717.7
35°	778.9	771.3	765.7	758.2	749.7	736.5	726.1	715.8	707.3	698.8	692.2
37.5°	761.9	756.3	747.8	741.2	730.8	717.7	706.4	693.2	685.6	674.3	665.9
40°	745.9	739.3	730.8	722.4	712.0	696.9	684.7	669.6	661.1	648.0	639.5
42.5°	729.9	720.5	712.0	702.6	691.3	677.2	662.1	647.0	635.7	623.5	611.2
45°	712.0	701.6	691.3	680.9	669.6	655.5	639.5	623.5	609.3	598.0	583.0
47.5°	693.2	682.8	670.6	659.3	647.0	632.9	615.9	599.0	583.9	570.7	554.7
50°	674.3	664.0	650.8	638.5	624.4	610.3	592.4	572.6	556.6	539.7	525.5
52.5°	654.6	644.2	632.0	615.9	600.9	586.7	567.9	547.2	529.3	515.2	497.3
55°	634.8	624.4	610.3	594.3	579.2	561.3	543.4	522.7	502.9	486.0	468.1
57.5°	614.1	604.6	588.6	575.4	556.6	537.8	518.9	499.2	477.5	457.7	437.0
60°	593.3	583.0	567.9	551.9	533.1	514.2	494.4	472.8	450.2	428.5	409.7
62.5°	574.5	561.3	547.2	530.2	510.5	492.6	470.0	446.4	423.8	401.2	378.6
65°	552.8	538.7	525.5	508.6	487.9	467.1	444.5	421.0	396.5	372.0	349.4
67.5°	531.2	517.1	502.9	486.0	464.3	442.6	419.1	395.6	368.2	344.7	318.3
70°	509.5	498.2	480.3	462.4	442.6	419.1	395.6	370.1	341.9	316.4	289.1
72.5°	487.9	476.6	458.7	439.8	421.0	396.5	371.1	345.6	319.3	290.1	260.9
75°	467.1	453.0	437.0	419.1	399.3	373.9	348.5	322.1	291.0	263.7	233.6
77.5°	447.4	434.2	418.2	398.4	376.7	352.2	325.9	298.6	267.5	238.3	205.3
80°	425.7	412.5	396.5	376.7	355.1	331.5	303.3	275.0	244.9	212.8	178.9
82.5°	405.0	392.7	374.8	356.9	333.4	309.9	281.6	253.3	221.3	190.2	157.3
85°	383.3	371.1	354.1	335.3	312.7	287.3	260.9	232.6	200.6	168.6	135.6
87.5°	364.5	350.4	333.4	314.6	292.0	267.5	242.0	211.9	180.8	149.7	115.8
90°	344.7	331.5	314.6	295.7	273.1	248.6	222.3	194.0	163.9	131.9	99.8
92.5°	327.7	313.6	297.6	278.8	256.2	232.6	206.3	178.0	148.8	117.7	86.6
95°	310.8	296.7	281.6	262.8	240.2	216.6	190.2	162.9	134.7	104.5	75.3
97.5°	292.0	279.7	264.6	246.8	224.1	201.5	176.1	149.7	122.4	93.2	65.9
100°	276.9	262.8	248.6	229.8	209.1	187.4	162.0	136.6	110.2	82.9	57.5
102.5°	259.9	246.8	232.6	214.7	194.0	172.4	148.8	124.3	99.8	74.4	49.9
105°	243.9	231.7	216.6	199.7	179.9	159.2	136.6	114.0	90.4	65.9	44.3
107.5°	227.9	215.7	201.5	185.5	166.7	146.0	125.3	102.7	81.0	59.3	39.6
110°	211.9	200.6	187.4	171.4	153.5	134.7	114.9	94.2	72.5	52.7	34.8

TEST NUMBER: P1213778

CATALOG NUMBER: 4SNLED-LD5-44SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	197.8	186.5	173.3	158.2	141.3	123.4	104.5	84.8	65.0	47.1	30.1
115°	183.7	173.3	160.1	146.9	130.0	113.0	95.1	76.3	58.4	42.4	26.4
117.5°	169.5	159.2	146.9	133.7	118.7	102.7	85.7	67.8	52.7	37.7	23.5
120°	155.4	146.0	134.7	122.4	109.2	93.2	76.3	61.2	47.1	33.0	20.7
122.5°	142.2	133.7	123.4	112.1	97.9	82.9	68.8	55.6	42.4	29.2	17.0
125°	130.0	121.5	112.1	100.8	87.6	74.4	62.2	49.9	36.7	25.4	14.1
127.5°	117.7	109.2	99.8	89.5	79.1	66.9	55.6	44.3	33.0	22.6	12.2
130°	105.5	97.9	89.5	81.0	70.6	59.3	49.9	38.6	28.3	17.9	10.4
132.5°	93.2	87.6	80.1	71.6	62.2	53.7	43.3	33.9	24.5	16.0	9.4
135°	82.9	77.2	70.6	63.1	55.6	47.1	37.7	29.2	20.7	13.2	7.5
137.5°	73.5	68.8	62.2	55.6	49.0	40.5	33.0	24.5	17.0	11.3	5.7
140°	65.0	60.3	54.6	48.0	42.4	34.8	27.3	19.8	15.1	9.4	4.7
142.5°	56.5	51.8	47.1	41.4	35.8	29.2	22.6	17.0	12.2	7.5	4.7
145°	48.0	44.3	39.6	34.8	29.2	23.5	18.8	14.1	9.4	5.7	3.8
147.5°	39.6	36.7	32.0	28.3	23.5	18.8	15.1	11.3	7.5	4.7	2.8
150°	32.0	29.2	25.4	21.7	18.8	15.1	12.2	8.5	5.7	4.7	2.8
152.5°	24.5	22.6	19.8	17.9	15.1	11.3	8.5	6.6	4.7	3.8	1.9
155°	19.8	17.9	16.0	13.2	11.3	8.5	6.6	4.7	3.8	2.8	1.9
157.5°	14.1	13.2	11.3	9.4	7.5	5.7	4.7	4.7	2.8	1.9	0.9
160°	9.4	8.5	7.5	5.7	4.7	4.7	3.8	2.8	1.9	1.9	0.9
162.5°	5.7	4.7	4.7	4.7	3.8	3.8	2.8	1.9	1.9	0.9	0.9
165°	3.8	3.8	3.8	2.8	2.8	2.8	1.9	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: P1213778

CATALOG NUMBER: 4SNLED-LD5-44SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8
2.5°	893.8	890.9	894.7	901.3	902.3	901.3	899.4	902.3	906.0	905.1	898.5
5°	891.9	888.1	891.9	898.5	898.5	897.5	896.6	899.4	903.2	902.3	896.6
7.5°	886.2	882.5	886.2	891.9	892.8	890.9	890.9	893.8	897.5	896.6	891.9
10°	878.7	874.9	876.8	883.4	885.3	883.4	883.4	886.2	890.9	890.0	884.4
12.5°	867.4	864.6	866.5	872.1	874.0	873.1	872.1	875.9	880.6	880.6	874.9
15°	855.2	851.4	853.3	859.9	860.8	858.9	859.9	862.7	868.3	868.3	863.6
17.5°	841.0	836.3	839.1	843.9	844.8	844.8	844.8	848.6	855.2	854.2	850.5
20°	825.0	818.4	820.3	825.0	826.9	826.9	826.9	833.5	838.2	838.2	834.4
22.5°	806.2	801.5	801.5	806.2	809.0	808.1	808.1	813.7	820.3	819.4	819.4
25°	784.5	780.8	778.9	784.5	785.5	786.4	788.3	793.9	801.5	801.5	802.4
27.5°	761.9	758.2	757.2	761.9	762.9	763.8	765.7	772.3	779.8	780.8	782.6
30°	740.3	734.6	732.7	736.5	738.4	739.3	739.3	749.7	756.3	759.1	762.9
32.5°	714.8	709.2	704.5	711.1	712.0	713.9	714.8	725.2	732.7	737.4	743.1
35°	689.4	680.0	678.1	682.8	684.7	685.6	687.5	698.8	709.2	712.9	720.5
37.5°	661.1	654.6	648.9	653.6	655.5	656.4	662.1	672.4	682.8	688.5	696.0
40°	634.8	626.3	621.6	624.4	626.3	627.2	633.8	645.1	657.4	664.0	673.4
42.5°	605.6	594.3	590.5	593.3	594.3	597.1	602.8	617.8	630.1	639.5	647.0
45°	576.4	567.9	559.4	562.3	563.2	565.1	573.6	589.6	602.8	614.1	622.5
47.5°	546.2	535.9	527.4	529.3	533.1	534.0	543.4	562.3	574.5	586.7	598.0
50°	516.1	502.0	495.4	495.4	497.3	502.0	514.2	533.1	546.2	560.4	572.6
52.5°	485.0	471.8	464.3	465.3	467.1	472.8	484.1	502.9	518.0	533.1	548.1
55°	454.0	439.8	432.3	430.4	432.3	439.8	453.0	472.8	487.9	505.7	521.8
57.5°	422.9	405.9	399.3	396.5	398.4	407.8	421.0	441.7	460.5	477.5	496.3
60°	389.0	375.8	364.5	357.9	362.6	374.8	389.0	410.6	430.4	449.2	470.0
62.5°	359.8	342.8	330.6	324.0	328.7	339.1	358.8	379.5	401.2	422.9	443.6
65°	326.8	309.9	295.7	289.1	293.8	306.1	325.9	348.5	372.0	393.7	418.2
67.5°	294.8	276.9	259.9	253.3	259.0	272.2	293.8	319.3	344.7	367.3	393.7
70°	263.7	243.9	226.0	221.3	225.1	243.0	263.7	289.1	315.5	341.9	369.2
72.5°	235.5	211.0	192.1	186.5	191.2	211.0	234.5	260.9	289.1	317.4	346.6
75°	202.5	179.9	159.2	152.6	158.2	176.1	205.3	233.6	263.7	293.8	321.2
77.5°	176.1	149.7	128.1	117.7	127.1	149.7	178.0	208.1	239.2	270.3	301.4
80°	148.8	121.5	97.9	86.6	97.0	121.5	149.7	182.7	217.6	248.6	276.9
82.5°	124.3	95.1	70.6	58.4	69.7	97.0	128.1	161.0	195.0	226.0	259.0
85°	101.7	71.6	46.1	33.0	49.0	73.5	106.4	140.3	175.2	207.2	239.2
87.5°	82.9	53.7	28.3	14.1	30.1	57.5	88.5	122.4	157.3	189.3	219.4
90°	67.8	38.6	15.1	1.9	17.9	43.3	73.5	106.4	139.4	172.4	202.5
92.5°	55.6	29.2	8.5	0.9	11.3	34.8	63.1	94.2	126.2	158.2	187.4
95°	46.1	22.6	5.7	0.9	8.5	27.3	53.7	83.8	114.0	145.0	174.2
97.5°	39.6	18.8	4.7	0.9	6.6	23.5	46.1	74.4	103.6	132.8	161.0
100°	33.9	15.1	3.8	0.9	5.7	19.8	40.5	65.9	93.2	121.5	148.8
102.5°	29.2	12.2	2.8	0.9	4.7	17.0	35.8	59.3	83.8	111.1	137.5
105°	25.4	10.4	2.8	0.9	3.8	15.1	32.0	52.7	77.2	101.7	127.1
107.5°	21.7	8.5	1.9	0.9	2.8	12.2	28.3	48.0	69.7	93.2	116.8
110°	18.8	7.5	1.9	0.9	2.8	11.3	24.5	43.3	63.1	84.8	107.4

TEST NUMBER: P1213778

CATALOG NUMBER: 4SNLED-LD5-44SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	16.0	5.7	1.9	0.9	1.9	9.4	21.7	38.6	57.5	77.2	98.9
115°	14.1	4.7	0.9	0.9	1.9	8.5	19.8	34.8	51.8	70.6	90.4
117.5°	11.3	3.8	0.9	0.9	0.9	6.6	17.0	31.1	47.1	65.0	82.9
120°	9.4	3.8	0.9	0.9	0.9	5.7	15.1	27.3	42.4	58.4	75.3
122.5°	8.5	2.8	0.9	0.9	0.9	4.7	13.2	24.5	37.7	52.7	68.8
125°	7.5	2.8	0.9	0.9	0.9	3.8	11.3	21.7	33.9	47.1	62.2
127.5°	5.7	2.8	0.9	0.9	0.9	2.8	10.4	18.8	30.1	42.4	55.6
130°	4.7	1.9	0.9	0.9	0.9	2.8	8.5	17.0	26.4	37.7	49.9
132.5°	3.8	1.9	0.9	0.9	0.9	1.9	6.6	13.2	22.6	33.0	44.3
135°	3.8	1.9	0.9	0.9	0.9	1.9	4.7	11.3	18.8	28.3	37.7
137.5°	3.8	0.9	0.9	0.9	0.9	1.9	3.8	8.5	15.1	22.6	31.1
140°	2.8	0.9	0.9	0.9	0.9	0.9	2.8	6.6	12.2	18.8	26.4
142.5°	2.8	0.9	0.9	0.9	0.9	0.9	2.8	4.7	9.4	15.1	20.7
145°	1.9	0.9	0.9	0.9	0.9	0.9	1.9	3.8	7.5	11.3	17.0
147.5°	1.9	0.9	0.9	0.9	0.9	0.9	1.9	2.8	5.7	9.4	13.2
150°	1.9	0.9	0.9	0.9	0.9	0.9	1.9	2.8	3.8	6.6	10.4
152.5°	0.9	0.9	0.9	0.9	0.9	0.9	1.9	1.9	2.8	4.7	6.6
155°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.9	2.8	3.8	4.7
157.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.9	1.9	2.8	3.8
160°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.9	1.9	2.8
162.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.9	1.9
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: P1213778

CATALOG NUMBER: 4SNLED-LD5-44SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8
2.5°	895.7	889.1	890.9	890.0	891.9	894.7	894.7	893.8	893.8	891.9	890.0
5°	893.8	887.2	890.0	889.1	890.9	893.8	893.8	892.8	892.8	890.0	889.1
7.5°	888.1	883.4	885.3	885.3	887.2	890.0	890.0	889.1	889.1	886.2	885.3
10°	882.5	876.8	879.6	879.6	881.5	885.3	885.3	884.4	884.4	881.5	880.6
12.5°	873.1	867.4	872.1	873.1	874.9	878.7	877.8	877.8	877.8	874.9	874.0
15°	861.8	858.0	862.7	863.6	866.5	871.2	871.2	871.2	871.2	868.3	867.4
17.5°	849.5	846.7	851.4	853.3	857.0	861.8	861.8	862.7	863.6	861.8	860.8
20°	835.4	833.5	838.2	842.0	847.6	852.3	854.2	855.2	857.0	855.2	854.2
22.5°	819.4	819.4	826.0	829.7	836.3	841.0	843.9	846.7	848.6	846.7	845.7
25°	801.5	804.3	810.9	817.5	825.0	829.7	832.6	836.3	838.2	837.3	836.3
27.5°	784.5	788.3	796.8	803.4	810.0	817.5	820.3	825.0	826.9	826.9	826.0
30°	764.7	770.4	779.8	787.3	795.8	803.4	807.1	811.8	814.7	812.8	813.7
32.5°	745.9	755.3	762.9	771.3	780.8	788.3	793.0	798.7	801.5	800.5	801.5
35°	725.2	734.6	745.0	753.4	764.7	772.3	778.9	783.6	787.3	786.4	786.4
37.5°	702.6	714.8	725.2	736.5	746.9	755.3	761.9	767.6	771.3	771.3	771.3
40°	680.9	694.1	704.5	717.7	730.8	738.4	745.9	751.6	755.3	756.3	757.2
42.5°	657.4	671.5	683.8	697.9	711.1	720.5	729.0	735.6	739.3	741.2	740.3
45°	635.7	648.9	663.0	679.0	691.3	700.7	711.1	718.6	722.4	723.3	724.2
47.5°	611.2	626.3	642.3	658.3	670.6	682.8	692.2	699.8	703.5	706.4	706.4
50°	587.7	603.7	621.6	638.5	651.7	664.0	673.4	681.9	686.6	688.5	689.4
52.5°	566.0	581.1	599.9	616.9	630.1	642.3	654.6	664.0	668.7	670.6	670.6
55°	539.7	558.5	579.2	595.2	609.3	623.5	635.7	645.1	649.8	652.7	654.6
57.5°	515.2	534.9	556.6	573.6	590.5	603.7	615.0	627.2	631.0	634.8	635.7
60°	491.6	511.4	532.1	551.0	567.9	582.0	595.2	605.6	612.2	614.1	615.9
62.5°	467.1	487.9	509.5	528.4	546.2	563.2	575.4	584.9	592.4	595.2	597.1
65°	443.6	465.3	486.9	506.7	525.5	542.5	554.7	564.1	571.7	576.4	577.3
67.5°	418.2	441.7	464.3	485.0	503.9	521.8	534.0	543.4	551.0	556.6	557.5
70°	394.6	419.1	441.7	464.3	483.1	501.0	514.2	523.6	532.1	535.9	537.8
72.5°	372.0	397.4	421.0	443.6	462.4	480.3	494.4	503.9	512.3	517.1	518.0
75°	350.4	375.8	401.2	422.9	442.6	460.5	474.7	485.0	492.6	497.3	499.2
77.5°	328.7	355.1	380.5	402.2	422.9	440.8	453.0	465.3	472.8	478.4	478.4
80°	307.0	334.3	360.7	382.4	403.1	419.1	433.2	445.5	453.0	458.7	458.7
82.5°	288.2	314.6	340.0	361.7	382.4	400.3	414.4	425.7	434.2	437.9	438.9
85°	266.5	295.7	319.3	342.8	362.6	379.5	393.7	405.9	413.5	417.2	419.1
87.5°	248.6	276.9	302.3	323.0	342.8	359.8	375.8	386.1	393.7	398.4	400.3
90°	231.7	259.0	284.4	305.1	325.9	341.9	356.9	367.3	375.8	379.5	381.4
92.5°	216.6	243.9	268.4	289.1	308.9	326.8	340.9	351.3	358.8	362.6	365.4
95°	202.5	228.9	252.4	275.0	293.8	309.9	324.9	335.3	343.8	346.6	349.4
97.5°	188.4	213.8	237.3	259.0	278.8	293.8	308.0	318.3	324.9	329.6	332.5
100°	176.1	200.6	223.2	243.9	262.8	276.9	292.0	301.4	308.0	311.7	315.5
102.5°	162.9	187.4	209.1	228.9	248.6	261.8	275.9	285.4	291.0	297.6	297.6
105°	151.6	174.2	195.9	214.7	231.7	247.7	259.9	269.4	275.9	280.7	280.7
107.5°	139.4	162.0	182.7	202.5	218.5	233.6	244.9	253.3	260.9	263.7	266.5
110°	130.0	149.7	170.5	189.3	204.4	218.5	229.8	239.2	245.8	248.6	250.5

TEST NUMBER: P1213778

CATALOG NUMBER: 4SNLED-LD5-44SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	118.7	139.4	158.2	176.1	191.2	204.4	215.7	223.2	229.8	233.6	234.5
115°	109.2	129.0	146.0	162.9	178.9	190.2	200.6	208.1	214.7	217.6	219.4
117.5°	100.8	118.7	135.6	149.7	164.8	177.1	187.4	194.0	199.7	203.4	205.3
120°	92.3	109.2	124.3	138.4	152.6	163.9	173.3	179.9	186.5	189.3	189.3
122.5°	83.8	99.8	114.0	127.1	140.3	150.7	161.0	166.7	172.4	175.2	175.2
125°	76.3	91.4	104.5	116.8	129.0	138.4	146.9	153.5	159.2	161.0	161.0
127.5°	68.8	82.9	95.1	106.4	116.8	126.2	134.7	141.3	146.0	147.9	147.9
130°	62.2	74.4	85.7	97.0	107.4	114.9	123.4	129.0	131.9	134.7	135.6
132.5°	55.6	66.9	77.2	86.6	97.0	104.5	111.1	116.8	119.6	122.4	123.4
135°	49.0	59.3	68.8	78.2	86.6	94.2	99.8	104.5	108.3	110.2	111.1
137.5°	41.4	52.7	61.2	68.8	78.2	83.8	90.4	93.2	97.0	98.9	98.9
140°	34.8	43.3	52.7	60.3	67.8	73.5	79.1	83.8	86.6	87.6	87.6
142.5°	28.3	35.8	43.3	52.7	59.3	64.0	69.7	73.5	75.3	76.3	77.2
145°	22.6	28.3	34.8	43.3	50.9	56.5	59.3	63.1	65.0	65.9	66.9
147.5°	17.0	22.6	28.3	33.9	41.4	47.1	49.9	53.7	55.6	56.5	56.5
150°	13.2	17.0	20.7	26.4	32.0	38.6	42.4	45.2	46.1	47.1	47.1
152.5°	9.4	13.2	16.0	19.8	23.5	29.2	34.8	36.7	37.7	38.6	38.6
155°	6.6	9.4	11.3	14.1	17.0	21.7	26.4	29.2	30.1	31.1	31.1
157.5°	4.7	6.6	7.5	10.4	12.2	14.1	17.9	22.6	23.5	23.5	23.5
160°	2.8	3.8	4.7	6.6	7.5	9.4	11.3	14.1	17.0	17.0	17.0
162.5°	1.9	2.8	2.8	3.8	3.8	5.7	6.6	7.5	10.4	11.3	11.3
165°	0.9	1.9	1.9	1.9	1.9	1.9	2.8	2.8	4.7	5.7	5.7
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: P1213778

CATALOG NUMBER: 4SNLED-LD5-44SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8	892.8
2.5°	890.9	892.8	891.9	891.9	891.9	893.8	891.9	883.4	885.3	887.2	889.1
5°	890.0	890.9	890.9	890.0	890.0	891.9	890.0	881.5	883.4	885.3	886.2
7.5°	886.2	887.2	887.2	887.2	886.2	888.1	885.3	877.8	877.8	879.6	880.6
10°	881.5	883.4	882.5	881.5	881.5	881.5	879.6	871.2	871.2	872.1	873.1
12.5°	875.9	875.9	875.9	874.9	874.0	874.0	872.1	863.6	862.7	864.6	863.6
15°	868.3	870.2	868.3	867.4	865.5	865.5	862.7	854.2	852.3	853.3	852.3
17.5°	861.8	862.7	860.8	858.9	857.0	856.1	853.3	843.9	841.0	842.0	840.1
20°	855.2	855.2	853.3	851.4	848.6	845.7	842.0	832.6	827.8	827.8	824.1
22.5°	846.7	846.7	844.8	842.0	839.1	835.4	831.6	822.2	814.7	812.8	810.0
25°	837.3	836.3	835.4	832.6	826.9	823.1	819.4	809.0	800.5	796.8	792.1
27.5°	826.0	826.0	823.1	820.3	814.7	810.0	805.2	795.8	784.5	779.8	773.2
30°	813.7	813.7	810.9	807.1	801.5	795.8	790.2	778.9	767.6	761.0	753.4
32.5°	801.5	800.5	797.7	793.9	788.3	779.8	775.1	763.8	750.6	743.1	732.7
35°	786.4	785.5	782.6	777.9	770.4	763.8	756.3	745.9	730.8	721.4	710.1
37.5°	771.3	770.4	768.5	761.9	754.4	746.9	737.4	727.1	712.9	700.7	689.4
40°	756.3	755.3	751.6	746.9	737.4	728.0	718.6	708.2	693.2	679.0	666.8
42.5°	740.3	739.3	734.6	729.0	718.6	709.2	697.9	686.6	671.5	654.6	642.3
45°	724.2	722.4	717.7	711.1	699.8	689.4	678.1	664.9	649.8	633.8	617.8
47.5°	707.3	704.5	699.8	690.3	680.9	669.6	656.4	642.3	627.2	609.3	592.4
50°	688.5	686.6	680.9	672.4	661.1	649.8	634.8	620.7	602.8	585.8	565.1
52.5°	670.6	666.8	662.1	652.7	641.4	629.1	613.1	596.2	578.3	562.3	540.6
55°	651.7	649.8	643.3	635.7	621.6	607.5	592.4	574.5	554.7	535.9	515.2
57.5°	633.8	630.1	624.4	614.1	601.8	587.7	571.7	552.8	531.2	511.4	488.8
60°	615.9	610.3	603.7	594.3	581.1	566.0	549.1	529.3	507.6	486.0	462.4
62.5°	596.2	591.5	583.9	574.5	561.3	545.3	527.4	506.7	486.0	463.4	437.9
65°	576.4	571.7	564.1	554.7	541.5	523.6	504.8	484.1	460.5	438.9	411.6
67.5°	556.6	551.9	543.4	533.1	519.9	502.9	483.1	461.5	437.9	414.4	386.1
70°	536.8	531.2	523.6	512.3	499.2	481.3	461.5	438.9	415.3	389.9	361.7
72.5°	517.1	512.3	502.9	492.6	478.4	460.5	440.8	418.2	393.7	367.3	339.1
75°	497.3	491.6	485.0	472.8	457.7	440.8	420.0	397.4	371.1	345.6	316.4
77.5°	477.5	472.8	464.3	452.1	437.9	420.0	399.3	376.7	350.4	324.0	292.9
80°	457.7	452.1	445.5	434.2	418.2	400.3	378.6	356.0	329.6	302.3	271.2
82.5°	437.9	432.3	424.8	413.5	398.4	380.5	359.8	335.3	308.9	280.7	251.5
85°	418.2	413.5	405.0	393.7	377.7	359.8	339.1	317.4	289.1	260.9	231.7
87.5°	398.4	393.7	385.2	373.9	358.8	340.9	320.2	297.6	270.3	243.9	211.9
90°	379.5	375.8	367.3	356.0	340.9	323.0	304.2	279.7	253.3	227.0	196.8
92.5°	362.6	358.8	351.3	340.0	326.8	307.0	288.2	264.6	238.3	211.0	181.8
95°	347.5	342.8	335.3	324.9	308.9	292.0	273.1	249.6	224.1	196.8	168.6
97.5°	330.6	325.9	318.3	307.0	293.8	275.9	257.1	234.5	209.1	183.7	155.4
100°	313.6	308.9	300.4	291.0	277.8	259.9	242.0	219.4	195.9	171.4	144.1
102.5°	296.7	292.0	284.4	275.0	261.8	245.8	227.9	206.3	182.7	158.2	132.8
105°	280.7	275.9	268.4	259.0	246.8	230.7	211.9	193.1	170.5	146.9	122.4
107.5°	264.6	259.9	253.3	243.9	231.7	216.6	198.7	178.9	158.2	135.6	112.1
110°	248.6	244.9	237.3	228.9	216.6	201.5	185.5	166.7	146.0	125.3	102.7



TEST NUMBER: P1213778

CATALOG NUMBER: 4SNLED-LD5-44SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	233.6	229.8	222.3	212.8	202.5	188.4	172.4	154.5	134.7	114.9	93.2
115°	218.5	213.8	207.2	198.7	188.4	175.2	160.1	144.1	124.3	105.5	85.7
117.5°	203.4	199.7	193.1	184.6	175.2	162.0	147.9	132.8	114.0	96.1	78.2
120°	188.4	185.5	178.9	171.4	162.0	149.7	136.6	121.5	104.5	87.6	70.6
122.5°	174.2	171.4	164.8	158.2	148.8	137.5	125.3	111.1	96.1	80.1	65.0
125°	161.0	157.3	151.6	145.0	136.6	126.2	114.0	100.8	86.6	72.5	58.4
127.5°	146.9	144.1	140.3	132.8	124.3	114.9	103.6	92.3	79.1	65.9	52.7
130°	135.6	131.9	127.1	121.5	114.0	104.5	94.2	82.9	71.6	59.3	46.1
132.5°	122.4	118.7	114.9	109.2	102.7	94.2	84.8	74.4	64.0	52.7	41.4
135°	110.2	107.4	103.6	97.9	91.4	84.8	75.3	65.9	56.5	46.1	36.7
137.5°	98.9	96.1	92.3	88.5	81.9	75.3	66.9	58.4	49.9	40.5	32.0
140°	87.6	85.7	81.9	78.2	72.5	65.9	58.4	50.9	43.3	34.8	27.3
142.5°	76.3	74.4	71.6	67.8	63.1	57.5	50.9	44.3	36.7	30.1	23.5
145°	65.9	65.0	62.2	58.4	54.6	49.0	43.3	37.7	31.1	25.4	18.8
147.5°	55.6	54.6	52.7	49.9	46.1	41.4	36.7	31.1	26.4	20.7	15.1
150°	46.1	45.2	44.3	40.5	38.6	33.9	30.1	25.4	21.7	16.0	12.2
152.5°	37.7	37.7	35.8	33.0	31.1	27.3	24.5	20.7	17.0	13.2	9.4
155°	30.1	29.2	28.3	26.4	24.5	21.7	18.8	16.0	13.2	9.4	6.6
157.5°	23.5	22.6	21.7	19.8	17.9	17.0	14.1	11.3	8.5	6.6	4.7
160°	17.0	16.0	15.1	14.1	13.2	11.3	9.4	7.5	5.7	3.8	2.8
162.5°	11.3	10.4	10.4	9.4	8.5	6.6	5.7	4.7	3.8	2.8	1.9
165°	5.7	5.7	4.7	4.7	3.8	2.8	2.8	2.8	1.9	1.9	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: P1213778

CATALOG NUMBER: 4SNLED-LD5-44SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	892.8	892.8	892.8	892.8	892.8	892.8	892.8
2.5°	888.1	888.1	891.9	890.9	888.1	893.8	900.4
5°	885.3	885.3	888.1	888.1	885.3	890.9	896.6
7.5°	880.6	879.6	882.5	882.5	878.7	883.4	890.0
10°	872.1	871.2	874.0	874.0	870.2	874.9	880.6
12.5°	862.7	860.8	863.6	862.7	858.9	863.6	869.3
15°	850.5	849.5	851.4	849.5	845.7	850.5	856.1
17.5°	838.2	835.4	836.3	836.3	829.7	834.4	839.1
20°	822.2	818.4	819.4	818.4	813.7	816.5	822.2
22.5°	806.2	800.5	800.5	799.6	793.9	797.7	802.4
25°	786.4	779.8	779.8	778.9	772.3	775.1	779.8
27.5°	766.6	760.0	757.2	756.3	749.7	749.7	756.3
30°	745.9	736.5	734.6	731.8	725.2	725.2	730.8
32.5°	726.1	712.9	709.2	705.4	698.8	697.9	704.5
35°	699.8	689.4	682.8	679.0	671.5	669.6	675.3
37.5°	678.1	664.9	655.5	650.8	643.3	640.4	648.0
40°	654.6	640.4	628.2	625.4	614.1	610.3	616.9
42.5°	628.2	613.1	600.9	595.2	586.7	583.0	583.9
45°	601.8	585.8	572.6	565.1	556.6	550.0	553.8
47.5°	574.5	560.4	544.4	533.1	522.7	518.0	519.9
50°	547.2	530.2	515.2	502.9	490.7	485.0	488.8
52.5°	519.9	502.0	485.0	471.8	457.7	452.1	453.0
55°	493.5	474.7	454.9	440.8	427.6	419.1	417.2
57.5°	467.1	446.4	425.7	409.7	392.7	385.2	382.4
60°	438.9	417.2	395.6	376.7	358.8	350.4	346.6
62.5°	412.5	389.0	364.5	344.7	326.8	315.5	312.7
65°	387.1	359.8	335.3	312.7	292.9	280.7	276.9
67.5°	359.8	331.5	305.1	280.7	261.8	245.8	243.9
70°	334.3	304.2	275.0	249.6	228.9	212.8	205.3
72.5°	308.9	277.8	247.7	220.4	194.0	178.9	173.3
75°	284.4	252.4	220.4	192.1	162.9	145.0	139.4
77.5°	261.8	228.9	195.0	163.9	136.6	114.0	106.4
80°	240.2	206.3	170.5	138.4	109.2	84.8	76.3
82.5°	217.6	185.5	148.8	114.9	84.8	59.3	49.0
85°	197.8	165.8	129.0	95.1	65.0	37.7	26.4
87.5°	181.8	146.9	114.0	80.1	49.0	21.7	7.5
90°	165.8	131.9	98.9	65.9	36.7	12.2	0.9
92.5°	151.6	119.6	86.6	56.5	28.3	8.5	0.9
95°	138.4	107.4	76.3	47.1	22.6	5.7	0.9
97.5°	126.2	97.0	67.8	40.5	18.8	4.7	0.9
100°	115.8	87.6	60.3	35.8	16.0	3.8	0.9
102.5°	105.5	79.1	53.7	31.1	14.1	2.8	0.9
105°	97.0	71.6	48.0	28.3	12.2	2.8	0.9
107.5°	88.5	65.0	43.3	24.5	10.4	1.9	0.9
110°	80.1	59.3	38.6	21.7	9.4	1.9	0.9

TEST NUMBER: P1213778

CATALOG NUMBER: 4SNLED-LD5-44SL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	73.5	53.7	34.8	19.8	7.5	1.9	0.9
115°	66.9	48.0	31.1	17.0	6.6	0.9	0.9
117.5°	60.3	43.3	27.3	15.1	5.7	0.9	0.9
120°	54.6	38.6	24.5	13.2	4.7	0.9	0.9
122.5°	49.0	34.8	21.7	11.3	3.8	0.9	0.9
125°	44.3	31.1	18.8	9.4	2.8	0.9	0.9
127.5°	39.6	27.3	17.0	8.5	2.8	0.9	0.9
130°	34.8	24.5	14.1	6.6	1.9	0.9	0.9
132.5°	31.1	20.7	12.2	5.7	1.9	0.9	0.9
135°	27.3	17.9	10.4	3.8	1.9	0.9	0.9
137.5°	23.5	15.1	8.5	2.8	0.9	0.9	0.9
140°	19.8	13.2	6.6	2.8	0.9	0.9	0.9
142.5°	17.0	10.4	4.7	1.9	0.9	0.9	0.9
145°	13.2	8.5	3.8	1.9	0.9	0.9	0.9
147.5°	10.4	6.6	2.8	1.9	0.9	0.9	0.9
150°	7.5	4.7	2.8	0.9	0.9	0.9	0.9
152.5°	5.7	3.8	1.9	0.9	0.9	0.9	0.9
155°	3.8	2.8	1.9	0.9	0.9	0.9	0.9
157.5°	2.8	1.9	0.9	0.9	0.9	0.9	0.9
160°	1.9	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)