

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: P1213450

Luminaire Tested: 4SNLED-LD5-50SL-LW-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213450
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-LD5-50SL-LW-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

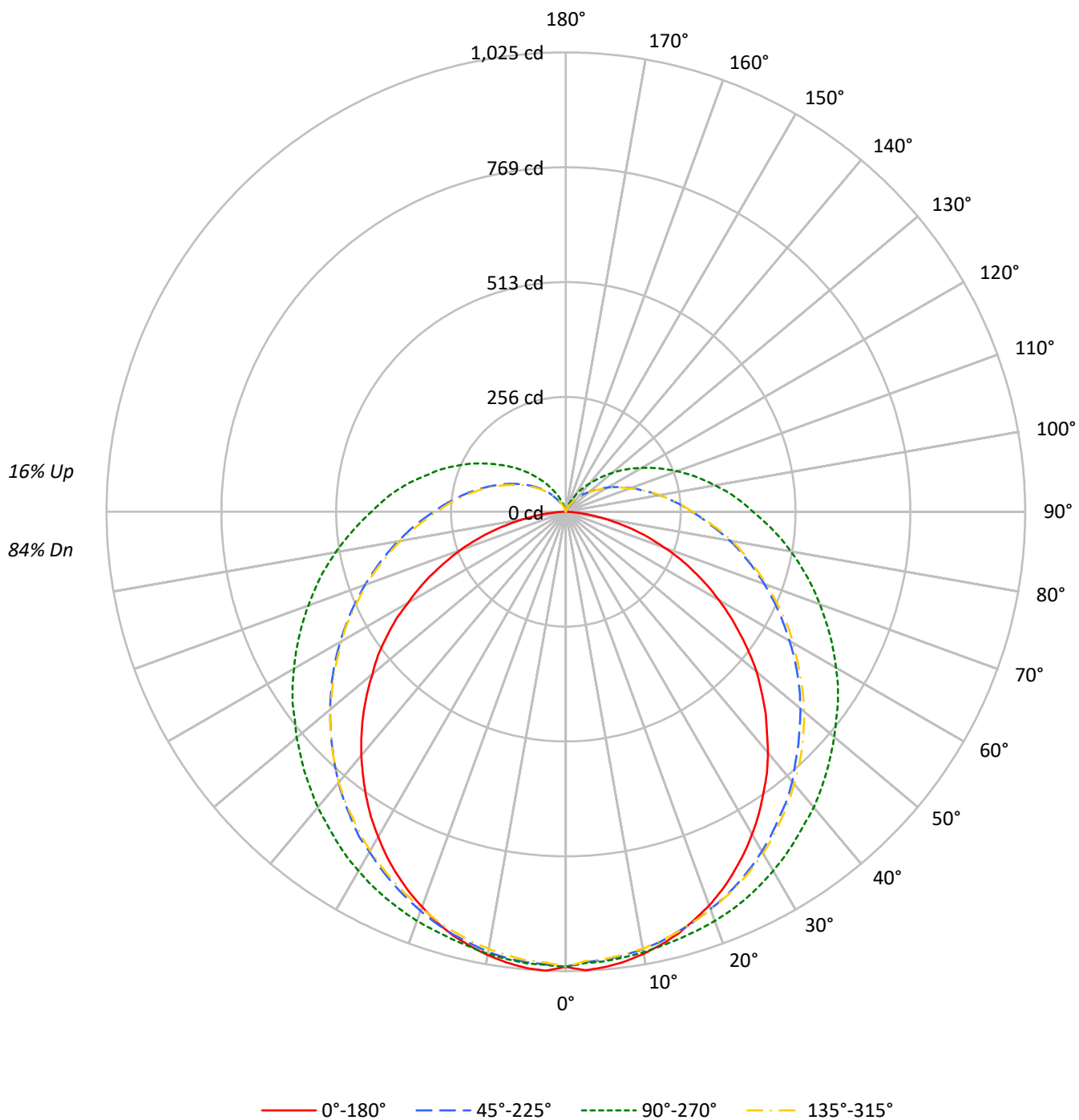
Lumens per Lamp: N/A
Luminaire Lumens: 4411.0 lumens
Efficiency: N/A
Efficacy: 95.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 46
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°	8205	8205	8205	8205
5°	8248	7907	8265	7940
10°	8172	7682	8198	7707
15°	8077	7490	8112	7498
20°	7950	7350	7977	7350
25°	7794	7225	7840	7216
30°	7618	7096	7676	7096
35°	7413	6978	7496	6986
40°	7211	6908	7299	6908
45°	6978	6834	7086	6843
50°	6737	6791	6827	6810
55°	6398	6797	6600	6827
60°	6042	6818	6240	6860
65°	5643	6887	5892	6955
70°	5081	7014	5477	7113
75°	4432	7242	4851	7381
80°	3427	7582	3894	7758
85°	2050	8127	2562	8353

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 270°

Vertical Angle: 90°

Luminance: 9337 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.2	2.2
10°-20°	276.4	6.3
20°-30°	423.8	9.6
30°-40°	522.8	11.9
40°-50°	567.2	12.9
50°-60°	559.1	12.7
60°-70°	505.5	11.5
70°-80°	421.1	9.5
80°-90°	326.2	7.4
90°-100°	247.4	5.6
100°-110°	183.1	4.2
110°-120°	127.3	2.9
120°-130°	81.2	1.8
130°-140°	45.6	1.0
140°-150°	20.8	0.5
150°-160°	6.5	0.1
160°-170°	0.8	0.0
170°-180°	0.0	0.0
0°-30°	796.4	18.1
0°-40°	1319.2	29.9
0°-60°	2445.6	55.4
0°-90°	3698.3	83.8
90°-120°	557.8	12.6
90°-150°	705.4	16.0
90°-180°	713.0	16.2
0°-180°	4411.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1015	1015	1015	1015	1015	
5°	1020	1007	1022	1011	1020	97
15°	974	985	978	986	974	274
25°	887	952	892	951	887	408
35°	768	893	776	894	768	481
45°	630	822	639	824	630	485
55°	474	741	489	744	474	425
65°	315	650	329	656	315	312
75°	158	557	174	568	158	168
85°	30	464	38	477	30	36
90°	1	418	2	434	1	2
95°	1	379	1	397	1	1
105°	1	301	1	319	1	1
115°	1	229	1	250	1	1
125°	1	165	1	183	1	1
135°	1	107	1	126	1	1
145°	1	62	1	76	1	1
155°	1	26	1	35	1	1
165°	1	4	1	6	1	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3
2.5°	1023.9	1023.9	1022.8	1020.6	1021.7	1024.9	1022.8	1017.4	1014.2	1005.6	1007.8
5°	1019.6	1019.6	1018.5	1016.4	1017.4	1021.7	1019.6	1015.3	1011.0	1003.5	1006.7
7.5°	1012.1	1012.1	1011.0	1008.9	1011.0	1015.3	1013.1	1008.9	1005.6	998.1	1001.4
10°	1001.4	1002.4	1001.4	998.1	1002.4	1006.7	1005.6	1000.3	997.1	990.7	993.9
12.5°	988.5	989.6	988.5	987.4	989.6	996.0	993.9	989.6	987.4	982.1	985.3
15°	973.5	974.6	972.4	972.4	974.6	981.0	981.0	976.7	974.6	969.2	975.7
17.5°	954.2	955.3	954.2	954.2	956.4	962.8	963.9	961.7	959.6	957.5	963.9
20°	935.0	933.9	933.9	932.8	937.1	946.7	945.7	945.7	943.5	943.5	951.0
22.5°	912.5	912.5	911.4	911.4	916.8	925.3	925.3	927.5	925.3	929.6	936.0
25°	886.8	887.8	886.8	888.9	893.2	902.8	903.9	907.1	908.2	912.5	920.0
27.5°	860.0	861.1	860.0	862.1	869.6	877.1	882.5	886.8	887.8	894.3	903.9
30°	831.1	831.1	832.1	834.3	842.9	854.6	858.9	864.3	864.3	875.0	884.6
32.5°	801.1	801.1	801.1	805.4	815.0	828.9	834.3	840.7	842.9	853.6	864.3
35°	767.9	769.0	769.0	772.2	785.0	798.9	806.4	813.9	818.2	831.1	841.8
37.5°	736.8	739.0	735.8	740.0	758.2	770.0	778.6	786.1	793.6	810.7	819.3
40°	701.5	703.6	702.6	711.1	726.1	741.1	750.8	758.2	769.0	786.1	795.7
42.5°	664.0	666.1	668.3	677.9	694.0	709.0	720.8	730.4	743.3	758.2	774.3
45°	629.7	629.7	632.9	644.7	661.9	677.9	691.8	702.6	717.6	733.6	749.7
47.5°	591.2	592.2	596.5	610.5	628.7	647.9	660.8	674.7	690.8	707.9	726.1
50°	555.8	555.8	562.3	577.3	594.4	615.8	629.7	645.8	662.9	683.3	701.5
52.5°	515.1	517.3	526.9	540.8	563.3	582.6	598.7	615.8	636.2	657.6	677.9
55°	474.4	478.7	486.2	505.5	529.1	547.3	566.5	588.0	607.2	630.8	654.4
57.5°	434.8	438.0	449.8	469.1	493.7	516.2	536.6	556.9	580.5	604.0	628.7
60°	394.1	398.4	412.3	431.6	458.4	481.9	505.5	526.9	551.6	576.2	601.9
62.5°	355.6	358.8	374.8	397.3	424.1	449.8	473.4	499.1	525.8	549.4	575.1
65°	314.9	320.2	338.4	358.8	389.8	415.5	442.3	470.2	498.0	523.7	548.3
67.5°	277.4	280.6	299.9	323.4	354.5	383.4	411.3	441.2	470.2	496.9	521.6
70°	233.5	244.2	263.5	288.1	321.3	351.3	381.3	412.3	443.4	471.2	494.8
72.5°	197.1	205.6	227.0	253.8	285.9	321.3	352.4	385.6	416.6	445.5	470.2
75°	158.5	167.1	191.7	221.7	254.9	292.4	324.5	358.8	390.9	419.8	445.5
77.5°	121.0	131.7	158.5	189.6	226.0	264.5	297.7	332.0	365.2	396.3	422.0
80°	86.7	98.5	127.4	162.8	198.1	236.7	273.1	307.4	340.6	371.6	398.4
82.5°	55.7	68.5	99.6	134.9	172.4	211.0	248.5	282.7	315.9	347.0	374.8
85°	30.0	43.9	76.0	111.4	148.9	187.4	224.9	261.3	293.4	322.4	352.4
87.5°	8.6	25.7	56.8	92.1	130.7	166.0	202.4	238.8	271.0	302.0	328.8
90°	1.1	15.0	42.8	76.0	113.5	147.8	184.2	218.5	250.6	281.7	308.4
92.5°	1.1	9.6	33.2	63.2	97.5	132.8	169.2	202.4	232.4	263.5	290.2
95°	1.1	7.5	26.8	53.5	85.7	118.9	153.1	185.3	216.3	245.3	272.0
97.5°	1.1	5.4	21.4	46.1	75.0	106.0	139.2	171.4	201.3	229.2	253.8
100°	1.1	4.3	17.1	39.6	65.3	95.3	125.3	156.4	185.3	212.1	237.8
102.5°	1.1	3.2	15.0	33.2	57.8	84.6	113.5	142.4	170.3	196.0	221.7
105°	1.1	3.2	12.9	28.9	51.4	76.0	102.8	130.7	156.4	181.0	204.6
107.5°	1.1	2.1	10.7	24.6	45.0	68.5	93.2	119.9	143.5	167.1	189.6
110°	1.1	2.1	8.6	22.5	39.6	61.0	84.6	109.2	131.7	154.2	175.6

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.1	2.1	7.5	19.3	34.3	54.6	76.0	98.5	119.9	142.4	161.7
115°	1.1	2.1	6.4	17.1	32.1	47.1	68.5	88.9	110.3	130.7	148.9
117.5°	1.1	2.1	5.4	13.9	27.8	42.8	60.0	80.3	99.6	118.9	136.0
120°	1.1	2.1	4.3	12.9	24.6	38.6	53.5	71.8	90.0	108.2	126.4
122.5°	1.1	1.1	4.3	10.7	21.4	34.3	49.3	63.2	80.3	97.5	113.5
125°	1.1	1.1	4.3	9.6	18.2	31.1	43.9	56.8	71.8	86.7	100.7
127.5°	1.1	1.1	3.2	7.5	16.1	26.8	38.6	52.5	63.2	77.1	91.0
130°	1.1	1.1	3.2	6.4	13.9	22.5	34.3	46.1	58.9	68.5	80.3
132.5°	1.1	1.1	3.2	5.4	10.7	18.2	28.9	39.6	51.4	62.1	71.8
135°	1.1	1.1	2.1	4.3	8.6	15.0	23.6	33.2	45.0	55.7	65.3
137.5°	1.1	1.1	2.1	4.3	6.4	12.9	18.2	26.8	37.5	47.1	56.8
140°	1.1	1.1	2.1	3.2	5.4	9.6	15.0	21.4	30.0	38.6	49.3
142.5°	1.1	1.1	1.1	3.2	4.3	7.5	11.8	17.1	23.6	31.1	39.6
145°	1.1	1.1	1.1	3.2	4.3	5.4	9.6	13.9	18.2	23.6	31.1
147.5°	1.1	1.1	1.1	2.1	3.2	4.3	7.5	10.7	13.9	18.2	22.5
150°	1.1	1.1	1.1	2.1	3.2	4.3	5.4	7.5	10.7	15.0	18.2
152.5°	1.1	1.1	1.1	2.1	2.1	3.2	4.3	5.4	7.5	10.7	12.9
155°	1.1	1.1	1.1	1.1	2.1	3.2	4.3	4.3	5.4	7.5	9.6
157.5°	1.1	1.1	1.1	1.1	2.1	2.1	3.2	3.2	4.3	4.3	6.4
160°	1.1	1.1	1.1	1.1	1.1	2.1	2.1	3.2	3.2	3.2	3.2
162.5°	1.1	1.1	1.1	1.1	1.1	1.1	2.1	2.1	2.1	3.2	3.2
165°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1	2.1	2.1
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°	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3
2.5°	1007.8	1008.9	1012.1	1012.1	1009.9	1009.9	1008.9	1007.8	1008.9	1011.0	1011.0
5°	1005.6	1006.7	1009.9	1011.0	1008.9	1007.8	1007.8	1006.7	1007.8	1009.9	1009.9
7.5°	1001.4	1002.4	1005.6	1006.7	1004.6	1004.6	1003.5	1002.4	1004.6	1005.6	1005.6
10°	994.9	996.0	1000.3	1001.4	1000.3	999.2	999.2	998.1	999.2	1001.4	1001.4
12.5°	986.4	988.5	993.9	993.9	993.9	992.8	992.8	991.7	992.8	994.9	993.9
15°	976.7	981.0	985.3	987.4	987.4	987.4	986.4	985.3	987.4	988.5	987.4
17.5°	966.0	971.4	977.8	979.9	979.9	981.0	979.9	978.9	981.0	981.0	979.9
20°	955.3	960.7	967.1	969.2	971.4	972.4	972.4	971.4	972.4	973.5	972.4
22.5°	941.4	947.8	955.3	958.5	960.7	962.8	962.8	962.8	963.9	964.9	962.8
25°	926.4	933.9	942.5	945.7	950.0	951.0	952.1	952.1	953.2	954.2	951.0
27.5°	910.3	918.9	927.5	932.8	936.0	938.2	938.2	939.2	940.3	941.4	938.2
30°	891.0	903.9	911.4	915.7	920.0	923.2	924.3	925.3	926.4	927.5	924.3
32.5°	873.9	884.6	894.3	899.6	905.0	909.3	910.3	910.3	912.5	912.5	909.3
35°	853.6	866.4	876.1	881.4	887.8	891.0	893.2	893.2	895.3	895.3	892.1
37.5°	833.2	846.1	856.8	863.2	870.7	875.0	876.1	876.1	878.2	878.2	873.9
40°	811.8	825.7	837.5	845.0	851.4	856.8	857.8	861.1	861.1	860.0	855.7
42.5°	790.4	803.2	816.1	824.6	833.2	838.6	840.7	841.8	841.8	840.7	837.5
45°	766.8	781.8	793.6	804.3	812.9	818.2	821.4	822.5	822.5	820.4	817.2
47.5°	744.3	759.3	771.1	782.9	791.4	797.9	801.1	802.2	801.1	800.0	796.8
50°	720.8	737.9	749.7	761.5	770.0	775.4	780.7	781.8	780.7	779.7	773.2
52.5°	696.1	714.3	727.2	739.0	748.6	755.0	759.3	760.4	760.4	758.2	754.0
55°	671.5	687.6	703.6	716.5	727.2	733.6	739.0	741.1	739.0	736.8	731.5
57.5°	649.0	664.0	680.1	694.0	704.7	713.3	717.6	719.7	717.6	714.3	709.0
60°	622.2	638.3	656.5	669.4	681.1	689.7	691.8	696.1	694.0	690.8	685.4
62.5°	596.5	615.8	631.9	647.9	657.6	667.2	671.5	673.6	671.5	668.3	662.9
65°	569.8	591.2	607.2	623.3	634.0	643.7	649.0	650.1	647.9	644.7	639.4
67.5°	545.1	565.5	582.6	599.7	609.4	619.0	624.4	626.5	624.4	620.1	614.7
70°	520.5	540.8	561.2	574.0	585.8	596.5	599.7	603.0	600.8	596.5	590.1
72.5°	495.9	517.3	537.6	550.5	563.3	573.0	577.3	580.5	578.3	574.0	566.5
75°	470.2	492.6	513.0	526.9	539.8	549.4	553.7	556.9	554.8	550.5	541.9
77.5°	446.6	469.1	488.4	503.4	516.2	524.8	532.3	533.3	531.2	526.9	518.4
80°	422.0	444.5	464.8	479.8	492.6	501.2	506.6	509.8	507.6	503.4	494.8
82.5°	400.5	420.9	441.2	456.2	469.1	479.8	484.1	487.3	486.2	479.8	473.4
85°	377.0	400.5	416.6	432.7	445.5	456.2	459.4	463.7	462.7	457.3	448.7
87.5°	353.4	377.0	396.3	412.3	424.1	432.7	438.0	440.2	439.1	433.7	424.1
90°	334.1	355.6	374.8	392.0	401.6	411.3	416.6	417.7	417.7	411.3	403.8
92.5°	315.9	336.3	355.6	371.6	383.4	392.0	396.3	398.4	397.3	392.0	383.4
95°	295.6	318.1	336.3	352.4	364.1	372.7	377.0	379.1	378.1	372.7	364.1
97.5°	278.5	298.8	317.0	332.0	343.8	352.4	356.6	358.8	358.8	353.4	344.9
100°	261.3	281.7	298.8	313.8	324.5	333.1	337.4	338.4	337.4	333.1	324.5
102.5°	244.2	263.5	280.6	294.5	306.3	313.8	318.1	319.2	319.2	313.8	305.2
105°	227.0	246.3	262.4	277.4	287.0	294.5	297.7	300.9	299.9	295.6	287.0
107.5°	211.0	230.3	245.3	259.2	268.8	276.3	279.5	282.7	281.7	277.4	268.8
110°	196.0	214.2	228.1	242.0	250.6	258.1	263.5	264.5	262.4	258.1	250.6

TEST NUMBER: P1213450

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	182.1	198.1	212.1	224.9	234.5	239.9	244.2	246.3	244.2	239.9	234.5
115°	167.1	183.1	197.1	208.8	217.4	223.8	227.0	229.2	227.0	222.8	217.4
117.5°	153.1	168.1	182.1	193.8	201.3	206.7	209.9	212.1	209.9	206.7	201.3
120°	141.4	154.2	167.1	177.8	186.3	190.6	193.8	196.0	194.9	190.6	185.3
122.5°	127.4	141.4	153.1	163.9	171.4	175.6	177.8	179.9	178.9	175.6	170.3
125°	115.7	127.4	139.2	148.9	156.4	160.6	162.8	164.9	163.9	160.6	154.2
127.5°	102.8	115.7	125.3	134.9	140.3	146.7	147.8	149.9	148.9	145.7	140.3
130°	93.2	102.8	112.5	121.0	127.4	131.7	133.9	134.9	132.8	130.7	125.3
132.5°	81.4	92.1	100.7	108.2	112.5	116.7	118.9	119.9	119.9	116.7	112.5
135°	72.8	80.3	87.8	95.3	99.6	103.9	106.0	107.1	106.0	103.9	99.6
137.5°	65.3	71.8	77.1	83.5	88.9	91.0	93.2	93.2	92.1	91.0	87.8
140°	56.8	64.3	69.6	73.9	78.2	79.3	81.4	81.4	80.3	79.3	77.1
142.5°	48.2	54.6	60.0	65.3	68.5	70.7	71.8	72.8	71.8	70.7	67.5
145°	38.6	46.1	51.4	54.6	58.9	60.0	61.0	62.1	61.0	60.0	56.8
147.5°	30.0	36.4	41.8	46.1	49.3	50.3	51.4	52.5	51.4	49.3	48.2
150°	21.4	26.8	33.2	37.5	39.6	41.8	41.8	41.8	42.8	40.7	38.6
152.5°	17.1	19.3	23.6	27.8	31.1	32.1	33.2	33.2	32.1	32.1	30.0
155°	11.8	13.9	17.1	20.3	23.6	24.6	25.7	25.7	24.6	24.6	23.6
157.5°	7.5	9.6	11.8	13.9	17.1	18.2	19.3	19.3	19.3	18.2	17.1
160°	4.3	5.4	6.4	8.6	10.7	11.8	12.9	12.9	12.9	12.9	11.8
162.5°	3.2	3.2	3.2	4.3	5.4	6.4	7.5	7.5	7.5	7.5	6.4
165°	2.1	2.1	2.1	2.1	2.1	3.2	4.3	4.3	4.3	4.3	4.3
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: P1213450

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3
2.5°	1009.9	1009.9	1011.0	1008.9	1002.4	1003.5	1003.5	1007.8	1009.9	1011.0	1016.4
5°	1007.8	1007.8	1009.9	1006.7	1001.4	1001.4	1001.4	1005.6	1006.7	1008.9	1013.1
7.5°	1004.6	1004.6	1005.6	1002.4	996.0	996.0	994.9	999.2	1001.4	1002.4	1006.7
10°	999.2	999.2	1000.3	997.1	989.6	989.6	988.5	991.7	992.8	994.9	998.1
12.5°	991.7	991.7	991.7	988.5	981.0	979.9	978.9	982.1	982.1	983.2	986.4
15°	985.3	983.2	983.2	979.9	972.4	970.3	968.2	969.2	971.4	970.3	972.4
17.5°	977.8	975.7	973.5	970.3	960.7	957.5	955.3	956.4	955.3	954.2	956.4
20°	969.2	966.0	964.9	959.6	950.0	944.6	940.3	938.2	939.2	936.0	937.1
22.5°	959.6	955.3	953.2	946.7	937.1	930.7	925.3	921.0	920.0	915.7	916.8
25°	947.8	942.5	939.2	933.9	923.2	915.7	909.3	902.8	899.6	894.3	893.2
27.5°	933.9	928.5	924.3	918.9	908.2	898.5	891.0	882.5	878.2	871.8	868.6
30°	920.0	913.5	907.1	902.8	891.0	880.3	868.6	861.1	854.6	847.1	841.8
32.5°	902.8	896.4	890.0	883.6	872.8	860.0	850.4	838.6	831.1	822.5	816.1
35°	885.7	877.1	870.7	862.1	852.5	837.5	825.7	813.9	804.3	794.7	787.2
37.5°	866.4	860.0	850.4	842.9	831.1	816.1	803.2	788.2	779.7	766.8	757.2
40°	848.2	840.7	831.1	821.4	809.7	792.5	778.6	761.5	751.8	736.8	727.2
42.5°	830.0	819.3	809.7	798.9	786.1	770.0	752.9	735.8	722.9	709.0	695.1
45°	809.7	797.9	786.1	774.3	761.5	745.4	727.2	709.0	692.9	680.1	662.9
47.5°	788.2	776.5	762.5	749.7	735.8	719.7	700.4	681.1	664.0	649.0	630.8
50°	766.8	755.0	740.0	726.1	710.1	694.0	673.6	651.2	632.9	613.7	597.6
52.5°	744.3	732.5	718.6	700.4	683.3	667.2	645.8	622.2	601.9	585.8	565.5
55°	721.8	710.1	694.0	675.8	658.6	638.3	618.0	594.4	571.9	552.6	532.3
57.5°	698.3	687.6	669.4	654.4	632.9	611.5	590.1	567.6	543.0	520.5	496.9
60°	674.7	662.9	645.8	627.6	606.2	584.8	562.3	537.6	511.9	487.3	465.9
62.5°	653.3	638.3	622.2	603.0	580.5	560.1	534.4	507.6	481.9	456.2	430.5
65°	628.7	612.6	597.6	578.3	554.8	531.2	505.5	478.7	450.9	423.0	397.3
67.5°	604.0	588.0	571.9	552.6	528.0	503.4	476.6	449.8	418.8	392.0	362.0
70°	579.4	566.5	546.2	525.8	503.4	476.6	449.8	420.9	388.8	359.8	328.8
72.5°	554.8	541.9	521.6	500.1	478.7	450.9	422.0	393.0	363.1	329.9	296.7
75°	531.2	515.1	496.9	476.6	454.1	425.2	396.3	366.3	330.9	299.9	265.6
77.5°	508.7	493.7	475.5	453.0	428.4	400.5	370.6	339.5	304.2	271.0	233.5
80°	484.1	469.1	450.9	428.4	403.8	377.0	344.9	312.7	278.5	242.0	203.5
82.5°	460.5	446.6	426.2	405.9	379.1	352.4	320.2	288.1	251.7	216.3	178.9
85°	435.9	422.0	402.7	381.3	355.6	326.6	296.7	264.5	228.1	191.7	154.2
87.5°	414.5	398.4	379.1	357.7	332.0	304.2	275.2	241.0	205.6	170.3	131.7
90°	392.0	377.0	357.7	336.3	310.6	282.7	252.7	220.6	186.3	149.9	113.5
92.5°	372.7	356.6	338.4	317.0	291.3	264.5	234.5	202.4	169.2	133.9	98.5
95°	353.4	337.4	320.2	298.8	273.1	246.3	216.3	185.3	153.1	118.9	85.7
97.5°	332.0	318.1	300.9	280.6	254.9	229.2	200.3	170.3	139.2	106.0	75.0
100°	314.9	298.8	282.7	261.3	237.8	213.1	184.2	155.3	125.3	94.2	65.3
102.5°	295.6	280.6	264.5	244.2	220.6	196.0	169.2	141.4	113.5	84.6	56.8
105°	277.4	263.5	246.3	227.0	204.6	181.0	155.3	129.6	102.8	75.0	50.3
107.5°	259.2	245.3	229.2	211.0	189.6	166.0	142.4	116.7	92.1	67.5	45.0
110°	241.0	228.1	213.1	194.9	174.6	153.1	130.7	107.1	82.5	60.0	39.6

TEST NUMBER: P1213450

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	224.9	212.1	197.1	179.9	160.6	140.3	118.9	96.4	73.9	53.5	34.3
115°	208.8	197.1	182.1	167.1	147.8	128.5	108.2	86.7	66.4	48.2	30.0
117.5°	192.8	181.0	167.1	152.1	134.9	116.7	97.5	77.1	60.0	42.8	26.8
120°	176.7	166.0	153.1	139.2	124.2	106.0	86.7	69.6	53.5	37.5	23.6
122.5°	161.7	152.1	140.3	127.4	111.4	94.2	78.2	63.2	48.2	33.2	19.3
125°	147.8	138.2	127.4	114.6	99.6	84.6	70.7	56.8	41.8	28.9	16.1
127.5°	133.9	124.2	113.5	101.7	90.0	76.0	63.2	50.3	37.5	25.7	13.9
130°	119.9	111.4	101.7	92.1	80.3	67.5	56.8	43.9	32.1	20.3	11.8
132.5°	106.0	99.6	91.0	81.4	70.7	61.0	49.3	38.6	27.8	18.2	10.7
135°	94.2	87.8	80.3	71.8	63.2	53.5	42.8	33.2	23.6	15.0	8.6
137.5°	83.5	78.2	70.7	63.2	55.7	46.1	37.5	27.8	19.3	12.9	6.4
140°	73.9	68.5	62.1	54.6	48.2	39.6	31.1	22.5	17.1	10.7	5.4
142.5°	64.3	58.9	53.5	47.1	40.7	33.2	25.7	19.3	13.9	8.6	5.4
145°	54.6	50.3	45.0	39.6	33.2	26.8	21.4	16.1	10.7	6.4	4.3
147.5°	45.0	41.8	36.4	32.1	26.8	21.4	17.1	12.9	8.6	5.4	3.2
150°	36.4	33.2	28.9	24.6	21.4	17.1	13.9	9.6	6.4	5.4	3.2
152.5°	27.8	25.7	22.5	20.3	17.1	12.9	9.6	7.5	5.4	4.3	2.1
155°	22.5	20.3	18.2	15.0	12.9	9.6	7.5	5.4	4.3	3.2	2.1
157.5°	16.1	15.0	12.9	10.7	8.6	6.4	5.4	5.4	3.2	2.1	1.1
160°	10.7	9.6	8.6	6.4	5.4	5.4	4.3	3.2	2.1	2.1	1.1
162.5°	6.4	5.4	5.4	5.4	4.3	4.3	3.2	2.1	2.1	1.1	1.1
165°	4.3	4.3	4.3	3.2	3.2	3.2	2.1	1.1	1.1	1.1	1.1
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: P1213450

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3
2.5°	1016.4	1013.1	1017.4	1024.9	1026.0	1024.9	1022.8	1026.0	1030.3	1029.2	1021.7
5°	1014.2	1009.9	1014.2	1021.7	1021.7	1020.6	1019.6	1022.8	1027.1	1026.0	1019.6
7.5°	1007.8	1003.5	1007.8	1014.2	1015.3	1013.1	1013.1	1016.4	1020.6	1019.6	1014.2
10°	999.2	994.9	997.1	1004.6	1006.7	1004.6	1004.6	1007.8	1013.1	1012.1	1005.6
12.5°	986.4	983.2	985.3	991.7	993.9	992.8	991.7	996.0	1001.4	1001.4	994.9
15°	972.4	968.2	970.3	977.8	978.9	976.7	977.8	981.0	987.4	987.4	982.1
17.5°	956.4	951.0	954.2	959.6	960.7	960.7	960.7	964.9	972.4	971.4	967.1
20°	938.2	930.7	932.8	938.2	940.3	940.3	940.3	947.8	953.2	953.2	948.9
22.5°	916.8	911.4	911.4	916.8	920.0	918.9	918.9	925.3	932.8	931.7	931.7
25°	892.1	887.8	885.7	892.1	893.2	894.3	896.4	902.8	911.4	911.4	912.5
27.5°	866.4	862.1	861.1	866.4	867.5	868.6	870.7	878.2	886.8	887.8	890.0
30°	841.8	835.4	833.2	837.5	839.6	840.7	840.7	852.5	860.0	863.2	867.5
32.5°	812.9	806.4	801.1	808.6	809.7	811.8	812.9	824.6	833.2	838.6	845.0
35°	784.0	773.2	771.1	776.5	778.6	779.7	781.8	794.7	806.4	810.7	819.3
37.5°	751.8	744.3	737.9	743.3	745.4	746.5	752.9	764.7	776.5	782.9	791.4
40°	721.8	712.2	706.8	710.1	712.2	713.3	720.8	733.6	747.5	755.0	765.7
42.5°	688.6	675.8	671.5	674.7	675.8	679.0	685.4	702.6	716.5	727.2	735.8
45°	655.4	645.8	636.2	639.4	640.4	642.6	652.2	670.4	685.4	698.3	707.9
47.5°	621.2	609.4	599.7	601.9	606.2	607.2	618.0	639.4	653.3	667.2	680.1
50°	586.9	570.8	563.3	563.3	565.5	570.8	584.8	606.2	621.2	637.2	651.2
52.5°	551.6	536.6	528.0	529.1	531.2	537.6	550.5	571.9	589.0	606.2	623.3
55°	516.2	500.1	491.6	489.4	491.6	500.1	515.1	537.6	554.8	575.1	593.3
57.5°	480.9	461.6	454.1	450.9	453.0	463.7	478.7	502.3	523.7	543.0	564.4
60°	442.3	427.3	414.5	407.0	412.3	426.2	442.3	466.9	489.4	510.9	534.4
62.5°	409.1	389.8	375.9	368.4	373.8	385.6	408.0	431.6	456.2	480.9	504.4
65°	371.6	352.4	336.3	328.8	334.1	348.1	370.6	396.3	423.0	447.7	475.5
67.5°	335.2	314.9	295.6	288.1	294.5	309.5	334.1	363.1	392.0	417.7	447.7
70°	299.9	277.4	257.0	251.7	256.0	276.3	299.9	328.8	358.8	388.8	419.8
72.5°	267.7	239.9	218.5	212.1	217.4	239.9	266.7	296.7	328.8	360.9	394.1
75°	230.3	204.6	181.0	173.5	179.9	200.3	233.5	265.6	299.9	334.1	365.2
77.5°	200.3	170.3	145.7	133.9	144.6	170.3	202.4	236.7	272.0	307.4	342.7
80°	169.2	138.2	111.4	98.5	110.3	138.2	170.3	207.8	247.4	282.7	314.9
82.5°	141.4	108.2	80.3	66.4	79.3	110.3	145.7	183.1	221.7	257.0	294.5
85°	115.7	81.4	52.5	37.5	55.7	83.5	121.0	159.6	199.2	235.6	272.0
87.5°	94.2	61.0	32.1	16.1	34.3	65.3	100.7	139.2	178.9	215.3	249.5
90°	77.1	43.9	17.1	2.1	20.3	49.3	83.5	121.0	158.5	196.0	230.3
92.5°	63.2	33.2	9.6	1.1	12.9	39.6	71.8	107.1	143.5	179.9	213.1
95°	52.5	25.7	6.4	1.1	9.6	31.1	61.0	95.3	129.6	164.9	198.1
97.5°	45.0	21.4	5.4	1.1	7.5	26.8	52.5	84.6	117.8	151.0	183.1
100°	38.6	17.1	4.3	1.1	6.4	22.5	46.1	75.0	106.0	138.2	169.2
102.5°	33.2	13.9	3.2	1.1	5.4	19.3	40.7	67.5	95.3	126.4	156.4
105°	28.9	11.8	3.2	1.1	4.3	17.1	36.4	60.0	87.8	115.7	144.6
107.5°	24.6	9.6	2.1	1.1	3.2	13.9	32.1	54.6	79.3	106.0	132.8
110°	21.4	8.6	2.1	1.1	3.2	12.9	27.8	49.3	71.8	96.4	122.1

TEST NUMBER: P1213450

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	18.2	6.4	2.1	1.1	2.1	10.7	24.6	43.9	65.3	87.8	112.5
115°	16.1	5.4	1.1	1.1	2.1	9.6	22.5	39.6	58.9	80.3	102.8
117.5°	12.9	4.3	1.1	1.1	1.1	7.5	19.3	35.3	53.5	73.9	94.2
120°	10.7	4.3	1.1	1.1	1.1	6.4	17.1	31.1	48.2	66.4	85.7
122.5°	9.6	3.2	1.1	1.1	1.1	5.4	15.0	27.8	42.8	60.0	78.2
125°	8.6	3.2	1.1	1.1	1.1	4.3	12.9	24.6	38.6	53.5	70.7
127.5°	6.4	3.2	1.1	1.1	1.1	3.2	11.8	21.4	34.3	48.2	63.2
130°	5.4	2.1	1.1	1.1	1.1	3.2	9.6	19.3	30.0	42.8	56.8
132.5°	4.3	2.1	1.1	1.1	1.1	2.1	7.5	15.0	25.7	37.5	50.3
135°	4.3	2.1	1.1	1.1	1.1	2.1	5.4	12.9	21.4	32.1	42.8
137.5°	4.3	1.1	1.1	1.1	1.1	2.1	4.3	9.6	17.1	25.7	35.3
140°	3.2	1.1	1.1	1.1	1.1	1.1	3.2	7.5	13.9	21.4	30.0
142.5°	3.2	1.1	1.1	1.1	1.1	1.1	3.2	5.4	10.7	17.1	23.6
145°	2.1	1.1	1.1	1.1	1.1	1.1	2.1	4.3	8.6	12.9	19.3
147.5°	2.1	1.1	1.1	1.1	1.1	1.1	2.1	3.2	6.4	10.7	15.0
150°	2.1	1.1	1.1	1.1	1.1	1.1	2.1	3.2	4.3	7.5	11.8
152.5°	1.1	1.1	1.1	1.1	1.1	1.1	2.1	2.1	3.2	5.4	7.5
155°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1	3.2	4.3	5.4
157.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1	2.1	3.2	4.3
160°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1	2.1	3.2
162.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1	2.1
165°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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: P1213450

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3
2.5°	1018.5	1011.0	1013.1	1012.1	1014.2	1017.4	1017.4	1016.4	1016.4	1014.2	1012.1
5°	1016.4	1008.9	1012.1	1011.0	1013.1	1016.4	1016.4	1015.3	1015.3	1012.1	1011.0
7.5°	1009.9	1004.6	1006.7	1006.7	1008.9	1012.1	1012.1	1011.0	1011.0	1007.8	1006.7
10°	1003.5	997.1	1000.3	1000.3	1002.4	1006.7	1006.7	1005.6	1005.6	1002.4	1001.4
12.5°	992.8	986.4	991.7	992.8	994.9	999.2	998.1	998.1	998.1	994.9	993.9
15°	979.9	975.7	981.0	982.1	985.3	990.7	990.7	990.7	990.7	987.4	986.4
17.5°	966.0	962.8	968.2	970.3	974.6	979.9	979.9	981.0	982.1	979.9	978.9
20°	950.0	947.8	953.2	957.5	963.9	969.2	971.4	972.4	974.6	972.4	971.4
22.5°	931.7	931.7	939.2	943.5	951.0	956.4	959.6	962.8	964.9	962.8	961.7
25°	911.4	914.6	922.1	929.6	938.2	943.5	946.7	951.0	953.2	952.1	951.0
27.5°	892.1	896.4	906.0	913.5	921.0	929.6	932.8	938.2	940.3	940.3	939.2
30°	869.6	876.1	886.8	895.3	905.0	913.5	917.8	923.2	926.4	924.3	925.3
32.5°	848.2	858.9	867.5	877.1	887.8	896.4	901.8	908.2	911.4	910.3	911.4
35°	824.6	835.4	847.1	856.8	869.6	878.2	885.7	891.0	895.3	894.3	894.3
37.5°	798.9	812.9	824.6	837.5	849.3	858.9	866.4	872.8	877.1	877.1	877.1
40°	774.3	789.3	801.1	816.1	831.1	839.6	848.2	854.6	858.9	860.0	861.1
42.5°	747.5	763.6	777.5	793.6	808.6	819.3	828.9	836.4	840.7	842.9	841.8
45°	722.9	737.9	754.0	772.2	786.1	796.8	808.6	817.2	821.4	822.5	823.6
47.5°	695.1	712.2	730.4	748.6	762.5	776.5	787.2	795.7	800.0	803.2	803.2
50°	668.3	686.5	706.8	726.1	741.1	755.0	765.7	775.4	780.7	782.9	784.0
52.5°	643.7	660.8	682.2	701.5	716.5	730.4	744.3	755.0	760.4	762.5	762.5
55°	613.7	635.1	658.6	676.9	692.9	709.0	722.9	733.6	739.0	742.2	744.3
57.5°	585.8	608.3	632.9	652.2	671.5	686.5	699.3	713.3	717.6	721.8	722.9
60°	559.0	581.5	605.1	626.5	645.8	661.9	676.9	688.6	696.1	698.3	700.4
62.5°	531.2	554.8	579.4	600.8	621.2	640.4	654.4	665.1	673.6	676.9	679.0
65°	504.4	529.1	553.7	576.2	597.6	616.9	630.8	641.5	650.1	655.4	656.5
67.5°	475.5	502.3	528.0	551.6	573.0	593.3	607.2	618.0	626.5	632.9	634.0
70°	448.7	476.6	502.3	528.0	549.4	569.8	584.8	595.5	605.1	609.4	611.5
72.5°	423.0	452.0	478.7	504.4	525.8	546.2	562.3	573.0	582.6	588.0	589.0
75°	398.4	427.3	456.2	480.9	503.4	523.7	539.8	551.6	560.1	565.5	567.6
77.5°	373.8	403.8	432.7	457.3	480.9	501.2	515.1	529.1	537.6	544.1	544.1
80°	349.1	380.2	410.2	434.8	458.4	476.6	492.6	506.6	515.1	521.6	521.6
82.5°	327.7	357.7	386.6	411.3	434.8	455.2	471.2	484.1	493.7	498.0	499.1
85°	303.1	336.3	363.1	389.8	412.3	431.6	447.7	461.6	470.2	474.4	476.6
87.5°	282.7	314.9	343.8	367.3	389.8	409.1	427.3	439.1	447.7	453.0	455.2
90°	263.5	294.5	323.4	347.0	370.6	388.8	405.9	417.7	427.3	431.6	433.7
92.5°	246.3	277.4	305.2	328.8	351.3	371.6	387.7	399.5	408.0	412.3	415.5
95°	230.3	260.2	287.0	312.7	334.1	352.4	369.5	381.3	390.9	394.1	397.3
97.5°	214.2	243.1	269.9	294.5	317.0	334.1	350.2	362.0	369.5	374.8	378.1
100°	200.3	228.1	253.8	277.4	298.8	314.9	332.0	342.7	350.2	354.5	358.8
102.5°	185.3	213.1	237.8	260.2	282.7	297.7	313.8	324.5	330.9	338.4	338.4
105°	172.4	198.1	222.8	244.2	263.5	281.7	295.6	306.3	313.8	319.2	319.2
107.5°	158.5	184.2	207.8	230.3	248.5	265.6	278.5	288.1	296.7	299.9	303.1
110°	147.8	170.3	193.8	215.3	232.4	248.5	261.3	272.0	279.5	282.7	284.9

TEST NUMBER: P1213450

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	134.9	158.5	179.9	200.3	217.4	232.4	245.3	253.8	261.3	265.6	266.7
115°	124.2	146.7	166.0	185.3	203.5	216.3	228.1	236.7	244.2	247.4	249.5
117.5°	114.6	134.9	154.2	170.3	187.4	201.3	213.1	220.6	227.0	231.3	233.5
120°	105.0	124.2	141.4	157.4	173.5	186.3	197.1	204.6	212.1	215.3	215.3
122.5°	95.3	113.5	129.6	144.6	159.6	171.4	183.1	189.6	196.0	199.2	199.2
125°	86.7	103.9	118.9	132.8	146.7	157.4	167.1	174.6	181.0	183.1	183.1
127.5°	78.2	94.2	108.2	121.0	132.8	143.5	153.1	160.6	166.0	168.1	168.1
130°	70.7	84.6	97.5	110.3	122.1	130.7	140.3	146.7	149.9	153.1	154.2
132.5°	63.2	76.0	87.8	98.5	110.3	118.9	126.4	132.8	136.0	139.2	140.3
135°	55.7	67.5	78.2	88.9	98.5	107.1	113.5	118.9	123.2	125.3	126.4
137.5°	47.1	60.0	69.6	78.2	88.9	95.3	102.8	106.0	110.3	112.5	112.5
140°	39.6	49.3	60.0	68.5	77.1	83.5	90.0	95.3	98.5	99.6	99.6
142.5°	32.1	40.7	49.3	60.0	67.5	72.8	79.3	83.5	85.7	86.7	87.8
145°	25.7	32.1	39.6	49.3	57.8	64.3	67.5	71.8	73.9	75.0	76.0
147.5°	19.3	25.7	32.1	38.6	47.1	53.5	56.8	61.0	63.2	64.3	64.3
150°	15.0	19.3	23.6	30.0	36.4	43.9	48.2	51.4	52.5	53.5	53.5
152.5°	10.7	15.0	18.2	22.5	26.8	33.2	39.6	41.8	42.8	43.9	43.9
155°	7.5	10.7	12.9	16.1	19.3	24.6	30.0	33.2	34.3	35.3	35.3
157.5°	5.4	7.5	8.6	11.8	13.9	16.1	20.3	25.7	26.8	26.8	26.8
160°	3.2	4.3	5.4	7.5	8.6	10.7	12.9	16.1	19.3	19.3	19.3
162.5°	2.1	3.2	3.2	4.3	4.3	6.4	7.5	8.6	11.8	12.9	12.9
165°	1.1	2.1	2.1	2.1	2.1	2.1	3.2	3.2	5.4	6.4	6.4
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213450

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3
2.5°	1013.1	1015.3	1014.2	1014.2	1014.2	1016.4	1014.2	1004.6	1006.7	1008.9	1011.0
5°	1012.1	1013.1	1013.1	1012.1	1012.1	1014.2	1012.1	1002.4	1004.6	1006.7	1007.8
7.5°	1007.8	1008.9	1008.9	1008.9	1007.8	1009.9	1006.7	998.1	998.1	1000.3	1001.4
10°	1002.4	1004.6	1003.5	1002.4	1002.4	1002.4	1000.3	990.7	990.7	991.7	992.8
12.5°	996.0	996.0	996.0	994.9	993.9	993.9	991.7	982.1	981.0	983.2	982.1
15°	987.4	989.6	987.4	986.4	984.2	984.2	981.0	971.4	969.2	970.3	969.2
17.5°	979.9	981.0	978.9	976.7	974.6	973.5	970.3	959.6	956.4	957.5	955.3
20°	972.4	972.4	970.3	968.2	964.9	961.7	957.5	946.7	941.4	941.4	937.1
22.5°	962.8	962.8	960.7	957.5	954.2	950.0	945.7	935.0	926.4	924.3	921.0
25°	952.1	951.0	950.0	946.7	940.3	936.0	931.7	920.0	910.3	906.0	900.7
27.5°	939.2	939.2	936.0	932.8	926.4	921.0	915.7	905.0	892.1	886.8	879.3
30°	925.3	925.3	922.1	917.8	911.4	905.0	898.5	885.7	872.8	865.3	856.8
32.5°	911.4	910.3	907.1	902.8	896.4	886.8	881.4	868.6	853.6	845.0	833.2
35°	894.3	893.2	890.0	884.6	876.1	868.6	860.0	848.2	831.1	820.4	807.5
37.5°	877.1	876.1	873.9	866.4	857.8	849.3	838.6	826.8	810.7	796.8	784.0
40°	860.0	858.9	854.6	849.3	838.6	827.9	817.2	805.4	788.2	772.2	758.2
42.5°	841.8	840.7	835.4	828.9	817.2	806.4	793.6	780.7	763.6	744.3	730.4
45°	823.6	821.4	816.1	808.6	795.7	784.0	771.1	756.1	739.0	720.8	702.6
47.5°	804.3	801.1	795.7	785.0	774.3	761.5	746.5	730.4	713.3	692.9	673.6
50°	782.9	780.7	774.3	764.7	751.8	739.0	721.8	705.8	685.4	666.1	642.6
52.5°	762.5	758.2	752.9	742.2	729.3	715.4	697.2	677.9	657.6	639.4	614.7
55°	741.1	739.0	731.5	722.9	706.8	690.8	673.6	653.3	630.8	609.4	585.8
57.5°	720.8	716.5	710.1	698.3	684.4	668.3	650.1	628.7	604.0	581.5	555.8
60°	700.4	694.0	686.5	675.8	660.8	643.7	624.4	601.9	577.3	552.6	525.8
62.5°	677.9	672.6	664.0	653.3	638.3	620.1	599.7	576.2	552.6	526.9	498.0
65°	655.4	650.1	641.5	630.8	615.8	595.5	574.0	550.5	523.7	499.1	468.0
67.5°	632.9	627.6	618.0	606.2	591.2	571.9	549.4	524.8	498.0	471.2	439.1
70°	610.5	604.0	595.5	582.6	567.6	547.3	524.8	499.1	472.3	443.4	411.3
72.5°	588.0	582.6	571.9	560.1	544.1	523.7	501.2	475.5	447.7	417.7	385.6
75°	565.5	559.0	551.6	537.6	520.5	501.2	477.7	452.0	422.0	393.0	359.8
77.5°	543.0	537.6	528.0	514.1	498.0	477.7	454.1	428.4	398.4	368.4	333.1
80°	520.5	514.1	506.6	493.7	475.5	455.2	430.5	404.8	374.8	343.8	308.4
82.5°	498.0	491.6	483.0	470.2	453.0	432.7	409.1	381.3	351.3	319.2	285.9
85°	475.5	470.2	460.5	447.7	429.5	409.1	385.6	360.9	328.8	296.7	263.5
87.5°	453.0	447.7	438.0	425.2	408.0	387.7	364.1	338.4	307.4	277.4	241.0
90°	431.6	427.3	417.7	404.8	387.7	367.3	345.9	318.1	288.1	258.1	223.8
92.5°	412.3	408.0	399.5	386.6	371.6	349.1	327.7	300.9	271.0	239.9	206.7
95°	395.2	389.8	381.3	369.5	351.3	332.0	310.6	283.8	254.9	223.8	191.7
97.5°	375.9	370.6	362.0	349.1	334.1	313.8	292.4	266.7	237.8	208.8	176.7
100°	356.6	351.3	341.6	330.9	315.9	295.6	275.2	249.5	222.8	194.9	163.9
102.5°	337.4	332.0	323.4	312.7	297.7	279.5	259.2	234.5	207.8	179.9	151.0
105°	319.2	313.8	305.2	294.5	280.6	262.4	241.0	219.5	193.8	167.1	139.2
107.5°	300.9	295.6	288.1	277.4	263.5	246.3	226.0	203.5	179.9	154.2	127.4
110°	282.7	278.5	269.9	260.2	246.3	229.2	211.0	189.6	166.0	142.4	116.7

TEST NUMBER: P1213450

CATALOG NUMBER: 4SNLED-LD5-50SL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	265.6	261.3	252.7	242.0	230.3	214.2	196.0	175.6	153.1	130.7	106.0
115°	248.5	243.1	235.6	226.0	214.2	199.2	182.1	163.9	141.4	119.9	97.5
117.5°	231.3	227.0	219.5	209.9	199.2	184.2	168.1	151.0	129.6	109.2	88.9
120°	214.2	211.0	203.5	194.9	184.2	170.3	155.3	138.2	118.9	99.6	80.3
122.5°	198.1	194.9	187.4	179.9	169.2	156.4	142.4	126.4	109.2	91.0	73.9
125°	183.1	178.9	172.4	164.9	155.3	143.5	129.6	114.6	98.5	82.5	66.4
127.5°	167.1	163.9	159.6	151.0	141.4	130.7	117.8	105.0	90.0	75.0	60.0
130°	154.2	149.9	144.6	138.2	129.6	118.9	107.1	94.2	81.4	67.5	52.5
132.5°	139.2	134.9	130.7	124.2	116.7	107.1	96.4	84.6	72.8	60.0	47.1
135°	125.3	122.1	117.8	111.4	103.9	96.4	85.7	75.0	64.3	52.5	41.8
137.5°	112.5	109.2	105.0	100.7	93.2	85.7	76.0	66.4	56.8	46.1	36.4
140°	99.6	97.5	93.2	88.9	82.5	75.0	66.4	57.8	49.3	39.6	31.1
142.5°	86.7	84.6	81.4	77.1	71.8	65.3	57.8	50.3	41.8	34.3	26.8
145°	75.0	73.9	70.7	66.4	62.1	55.7	49.3	42.8	35.3	28.9	21.4
147.5°	63.2	62.1	60.0	56.8	52.5	47.1	41.8	35.3	30.0	23.6	17.1
150°	52.5	51.4	50.3	46.1	43.9	38.6	34.3	28.9	24.6	18.2	13.9
152.5°	42.8	42.8	40.7	37.5	35.3	31.1	27.8	23.6	19.3	15.0	10.7
155°	34.3	33.2	32.1	30.0	27.8	24.6	21.4	18.2	15.0	10.7	7.5
157.5°	26.8	25.7	24.6	22.5	20.3	19.3	16.1	12.9	9.6	7.5	5.4
160°	19.3	18.2	17.1	16.1	15.0	12.9	10.7	8.6	6.4	4.3	3.2
162.5°	12.9	11.8	11.8	10.7	9.6	7.5	6.4	5.4	4.3	3.2	2.1
165°	6.4	6.4	5.4	5.4	4.3	3.2	3.2	3.2	2.1	2.1	1.1
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):

	330°	335°	340°	345°	350°	355°	360°
0°	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3	1015.3
2.5°	1009.9	1009.9	1014.2	1013.1	1009.9	1016.4	1023.9
5°	1006.7	1006.7	1009.9	1009.9	1006.7	1013.1	1019.6
7.5°	1001.4	1000.3	1003.5	1003.5	999.2	1004.6	1012.1
10°	991.7	990.7	993.9	993.9	989.6	994.9	1001.4
12.5°	981.0	978.9	982.1	981.0	976.7	982.1	988.5
15°	967.1	966.0	968.2	966.0	961.7	967.1	973.5
17.5°	953.2	950.0	951.0	951.0	943.5	948.9	954.2
20°	935.0	930.7	931.7	930.7	925.3	928.5	935.0
22.5°	916.8	910.3	910.3	909.3	902.8	907.1	912.5
25°	894.3	886.8	886.8	885.7	878.2	881.4	886.8
27.5°	871.8	864.3	861.1	860.0	852.5	852.5	860.0
30°	848.2	837.5	835.4	832.1	824.6	824.6	831.1
32.5°	825.7	810.7	806.4	802.2	794.7	793.6	801.1
35°	795.7	784.0	776.5	772.2	763.6	761.5	767.9
37.5°	771.1	756.1	745.4	740.0	731.5	728.3	736.8
40°	744.3	728.3	714.3	711.1	698.3	694.0	701.5
42.5°	714.3	697.2	683.3	676.9	667.2	662.9	664.0
45°	684.4	666.1	651.2	642.6	632.9	625.4	629.7
47.5°	653.3	637.2	619.0	606.2	594.4	589.0	591.2
50°	622.2	603.0	585.8	571.9	558.0	551.6	555.8
52.5°	591.2	570.8	551.6	536.6	520.5	514.1	515.1
55°	561.2	539.8	517.3	501.2	486.2	476.6	474.4
57.5°	531.2	507.6	484.1	465.9	446.6	438.0	434.8
60°	499.1	474.4	449.8	428.4	408.0	398.4	394.1
62.5°	469.1	442.3	414.5	392.0	371.6	358.8	355.6
65°	440.2	409.1	381.3	355.6	333.1	319.2	314.9
67.5°	409.1	377.0	347.0	319.2	297.7	279.5	277.4
70°	380.2	345.9	312.7	283.8	260.2	242.0	233.5
72.5°	351.3	315.9	281.7	250.6	220.6	203.5	197.1
75°	323.4	287.0	250.6	218.5	185.3	164.9	158.5
77.5°	297.7	260.2	221.7	186.3	155.3	129.6	121.0
80°	273.1	234.5	193.8	157.4	124.2	96.4	86.7
82.5°	247.4	211.0	169.2	130.7	96.4	67.5	55.7
85°	224.9	188.5	146.7	108.2	73.9	42.8	30.0
87.5°	206.7	167.1	129.6	91.0	55.7	24.6	8.6
90°	188.5	149.9	112.5	75.0	41.8	13.9	1.1
92.5°	172.4	136.0	98.5	64.3	32.1	9.6	1.1
95°	157.4	122.1	86.7	53.5	25.7	6.4	1.1
97.5°	143.5	110.3	77.1	46.1	21.4	5.4	1.1
100°	131.7	99.6	68.5	40.7	18.2	4.3	1.1
102.5°	119.9	90.0	61.0	35.3	16.1	3.2	1.1
105°	110.3	81.4	54.6	32.1	13.9	3.2	1.1
107.5°	100.7	73.9	49.3	27.8	11.8	2.1	1.1
110°	91.0	67.5	43.9	24.6	10.7	2.1	1.1



TEST NUMBER: P1213450

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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	83.5	61.0	39.6	22.5	8.6	2.1	1.1
115°	76.0	54.6	35.3	19.3	7.5	1.1	1.1
117.5°	68.5	49.3	31.1	17.1	6.4	1.1	1.1
120°	62.1	43.9	27.8	15.0	5.4	1.1	1.1
122.5°	55.7	39.6	24.6	12.9	4.3	1.1	1.1
125°	50.3	35.3	21.4	10.7	3.2	1.1	1.1
127.5°	45.0	31.1	19.3	9.6	3.2	1.1	1.1
130°	39.6	27.8	16.1	7.5	2.1	1.1	1.1
132.5°	35.3	23.6	13.9	6.4	2.1	1.1	1.1
135°	31.1	20.3	11.8	4.3	2.1	1.1	1.1
137.5°	26.8	17.1	9.6	3.2	1.1	1.1	1.1
140°	22.5	15.0	7.5	3.2	1.1	1.1	1.1
142.5°	19.3	11.8	5.4	2.1	1.1	1.1	1.1
145°	15.0	9.6	4.3	2.1	1.1	1.1	1.1
147.5°	11.8	7.5	3.2	2.1	1.1	1.1	1.1
150°	8.6	5.4	3.2	1.1	1.1	1.1	1.1
152.5°	6.4	4.3	2.1	1.1	1.1	1.1	1.1
155°	4.3	3.2	2.1	1.1	1.1	1.1	1.1
157.5°	3.2	2.1	1.1	1.1	1.1	1.1	1.1
160°	2.1	1.1	1.1	1.1	1.1	1.1	1.1
162.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1
165°	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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)