

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: P1213409

Luminaire Tested: 4SNLED-LD5-37SL-LN-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213409
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33519)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-37SL-LN-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

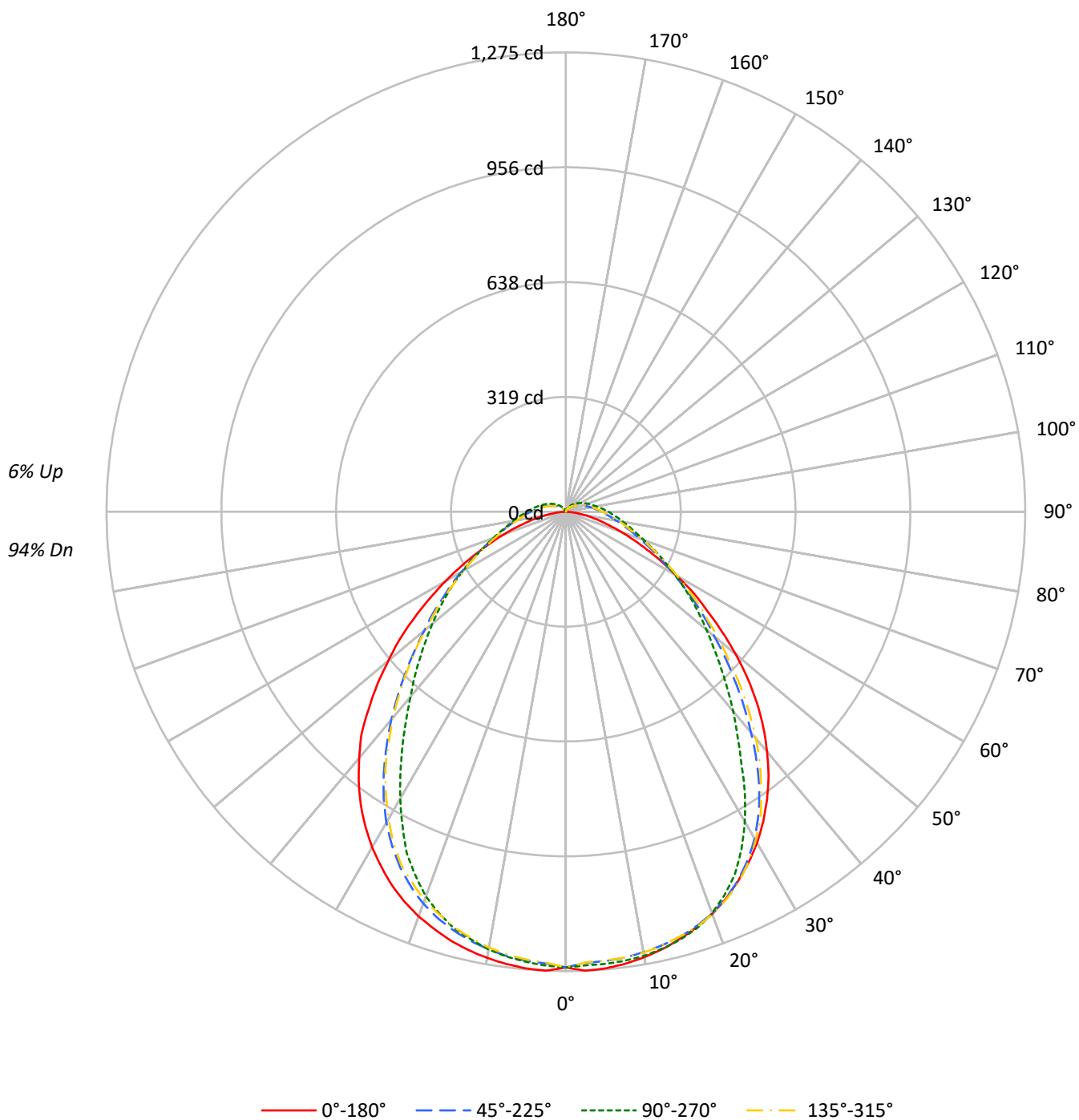
Lumens per Lamp: N/A
Luminaire Lumens: 3200.0 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 28
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96
1	107	103	98	95	104	100	96	92	94	91	88	89	87	85	85	83	81
2	98	90	84	78	95	88	82	77	83	78	74	79	75	72	75	72	69
3	90	80	72	66	87	78	71	65	74	68	63	71	66	61	67	63	60
4	83	72	63	57	80	70	62	56	67	60	55	64	58	53	61	56	52
5	77	64	56	50	74	63	55	49	60	53	48	58	52	47	55	50	46
6	71	58	50	44	69	57	49	43	55	48	42	52	46	42	50	45	41
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37
8	62	49	41	35	60	48	40	35	46	39	34	44	38	34	43	37	33
9	58	45	37	32	56	44	37	31	42	36	31	41	35	30	40	34	30
10	54	42	34	29	53	41	34	29	39	33	28	38	32	28	37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	10218	10218	10218	10218
5°	10291	9893	10291	9849
10°	10245	9630	10262	9496
15°	10179	9342	10226	9099
20°	10101	8972	10160	8593
25°	9939	8423	10049	7927
30°	9729	7617	9856	7052
35°	9400	6628	9581	6172
40°	8930	5797	9166	5379
45°	8309	5040	8579	4750
50°	7460	4428	7790	4205
55°	6453	3911	6923	3713
60°	5428	3433	5918	3236
65°	4450	3036	4898	2815
70°	3542	2694	3965	2491
75°	2782	2488	3132	2289
80°	2008	2401	2364	2194
85°	1237	2413	1660	2219

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 8579 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.9	3.7
10°-20°	343.7	10.7
20°-30°	509.4	15.9
30°-40°	566.0	17.7
40°-50°	513.0	16.0
50°-60°	397.6	12.4
60°-70°	270.0	8.4
70°-80°	171.8	5.4
80°-90°	109.8	3.4
90°-100°	74.0	2.3
100°-110°	50.7	1.6
110°-120°	33.8	1.1
120°-130°	21.0	0.7
130°-140°	11.6	0.4
140°-150°	5.5	0.2
150°-160°	2.0	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	973.1	30.4
0°-40°	1539.0	48.1
0°-60°	2449.6	76.6
0°-90°	3001.2	93.8
90°-120°	158.6	5.0
90°-150°	196.7	6.1
90°-180°	199.0	6.2
0°-180°	3200.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1264	1264	1264	1264	1264	
5°	1272	1260	1272	1254	1272	121
15°	1227	1229	1232	1197	1227	346
25°	1131	1110	1143	1045	1131	521
35°	974	848	992	790	974	607
45°	750	606	774	572	750	576
55°	478	426	513	405	478	431
65°	248	287	273	266	248	249
75°	100	191	112	176	100	107
85°	18	138	24	127	18	22
90°	0	119	1	108	0	1
95°	1	102	0	95	1	1
105°	1	74	0	70	1	1
115°	1	56	0	52	1	1
125°	1	42	1	37	1	1
135°	1	29	1	24	1	1
145°	1	19	1	13	1	0
155°	1	10	1	5	1	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5
2.5°	1274.9	1273.5	1272.1	1270.0	1272.1	1277.7	1274.2	1266.5	1265.1	1252.6	1258.2
5°	1272.1	1270.0	1268.6	1266.5	1269.3	1276.3	1272.8	1265.8	1263.8	1251.9	1258.2
7.5°	1265.1	1263.8	1261.7	1261.7	1264.5	1271.4	1268.6	1261.0	1259.6	1247.8	1254.7
10°	1255.4	1254.7	1253.3	1253.3	1256.1	1264.5	1261.0	1254.0	1252.6	1241.5	1249.2
12.5°	1242.9	1243.6	1241.5	1241.5	1245.7	1254.0	1251.2	1243.6	1242.2	1232.5	1240.1
15°	1226.9	1227.6	1226.2	1226.9	1231.1	1240.8	1237.3	1230.4	1229.0	1221.3	1227.6
17.5°	1208.8	1209.5	1209.5	1208.8	1213.7	1223.4	1220.6	1214.4	1212.3	1206.0	1213.7
20°	1187.9	1187.9	1187.9	1187.9	1193.5	1203.2	1199.8	1194.9	1190.7	1185.9	1192.1
22.5°	1162.2	1161.5	1162.2	1164.3	1169.9	1177.5	1175.4	1169.9	1163.6	1160.8	1165.7
25°	1130.9	1133.0	1133.7	1135.8	1142.7	1149.0	1146.9	1141.3	1131.6	1129.5	1130.9
27.5°	1098.2	1099.6	1101.7	1101.0	1110.7	1117.0	1112.8	1108.0	1094.1	1092.0	1090.6
30°	1061.4	1063.4	1064.8	1064.1	1071.8	1078.8	1074.6	1068.3	1049.5	1048.1	1037.0
32.5°	1019.6	1021.7	1023.1	1023.1	1034.2	1037.0	1029.4	1020.3	1000.2	995.3	985.6
35°	973.7	975.8	976.5	976.5	987.6	986.9	977.2	964.7	942.4	936.2	919.5
37.5°	924.3	925.7	926.4	930.6	935.5	931.3	918.8	902.8	886.1	868.7	850.6
40°	868.7	870.8	872.2	875.0	879.8	875.0	856.9	837.4	819.3	799.8	781.8
42.5°	811.7	817.9	816.5	815.8	818.6	805.4	791.5	769.2	751.2	731.0	712.9
45°	749.8	749.1	752.6	753.9	753.2	742.1	722.6	702.5	684.4	663.5	648.2
47.5°	684.4	683.7	686.5	687.9	683.7	671.9	656.6	633.6	618.3	600.2	588.4
50°	615.5	615.5	619.7	615.5	613.4	601.6	589.1	566.2	554.3	538.3	531.4
52.5°	546.7	552.9	548.8	547.4	545.3	533.5	523.7	504.9	495.2	488.3	479.9
55°	478.5	485.5	482.7	480.6	479.9	470.2	461.1	447.2	441.0	436.1	431.2
57.5°	420.8	420.1	418.7	416.6	417.3	409.7	400.6	393.0	390.2	388.1	389.5
60°	354.0	359.6	357.5	358.2	358.9	357.5	349.8	345.0	345.7	346.4	348.5
62.5°	299.1	303.9	307.4	304.6	306.0	308.1	303.9	302.6	305.3	308.1	310.9
65°	248.3	253.2	256.6	256.0	260.1	264.3	263.6	265.0	271.3	274.7	278.2
67.5°	202.4	207.3	212.1	212.8	219.1	225.3	228.1	233.0	240.0	244.8	249.0
70°	162.8	166.9	172.5	176.0	184.3	192.7	197.5	207.3	211.4	218.4	221.2
72.5°	127.3	130.8	138.4	146.8	153.7	164.1	173.9	182.2	188.5	196.1	199.6
75°	99.5	100.9	109.2	118.9	128.7	140.5	150.9	160.0	168.3	176.0	181.5
77.5°	73.0	75.1	82.8	96.0	107.1	119.6	131.5	141.2	150.2	157.9	165.5
80°	50.8	54.9	63.3	76.5	89.0	102.9	114.1	125.2	134.9	142.6	150.2
82.5°	32.7	36.2	48.0	61.2	74.4	88.3	100.2	111.3	121.7	130.1	137.0
85°	18.1	23.0	34.8	48.7	61.9	75.8	88.3	99.5	109.9	117.5	124.5
87.5°	7.0	13.9	25.0	38.3	51.5	64.7	77.9	88.3	98.8	107.1	113.4
90°	0.0	8.3	18.8	32.0	45.2	58.4	70.9	82.1	91.8	99.5	106.4
92.5°	0.7	5.6	14.6	25.7	38.3	50.8	62.6	73.7	83.5	91.1	97.4
95°	0.7	4.2	11.8	22.3	33.4	45.2	56.3	66.8	75.8	83.5	89.7
97.5°	0.7	2.8	9.7	19.5	29.2	41.0	51.5	61.2	69.6	77.2	82.1
100°	0.7	2.8	8.3	16.7	26.4	36.9	46.6	56.3	64.0	70.2	75.8
102.5°	0.7	2.1	7.0	14.6	23.6	32.7	42.4	51.5	58.4	64.7	70.2
105°	0.7	2.1	6.3	12.5	20.9	29.9	38.3	46.6	54.3	59.8	64.7
107.5°	0.7	1.4	5.6	10.4	18.1	27.1	35.5	42.4	49.4	54.9	59.8
110°	0.7	1.4	4.9	9.7	16.0	24.3	32.0	38.9	45.2	50.8	54.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.7	1.4	4.2	9.0	14.6	21.6	29.2	35.5	41.7	46.6	50.8
115°	0.7	1.4	4.2	8.3	13.2	18.8	25.7	32.7	37.6	43.1	46.6
117.5°	0.7	1.4	3.5	7.0	12.5	17.4	23.6	29.2	34.8	39.6	43.1
120°	0.7	1.4	3.5	6.3	11.1	16.0	20.9	26.4	32.0	35.5	38.9
122.5°	0.7	1.4	2.8	6.3	9.7	14.6	18.8	23.6	28.5	32.7	36.2
125°	0.7	1.4	2.8	5.6	9.0	13.2	17.4	20.9	25.7	29.2	32.7
127.5°	0.7	1.4	2.8	4.9	8.3	11.8	16.0	19.5	23.0	26.4	29.2
130°	0.7	1.4	2.1	4.2	7.7	10.4	13.9	18.1	20.9	23.6	26.4
132.5°	0.7	1.4	2.1	4.2	6.3	9.0	12.5	16.0	18.8	21.6	23.6
135°	0.7	1.4	2.1	3.5	5.6	8.3	10.4	13.9	16.7	19.5	21.6
137.5°	0.7	1.4	2.1	3.5	4.9	7.0	9.0	11.8	14.6	16.7	19.5
140°	0.7	1.4	2.1	2.8	4.2	6.3	8.3	9.7	12.5	14.6	16.7
142.5°	0.7	1.4	2.1	2.8	4.2	5.6	7.0	8.3	10.4	12.5	14.6
145°	0.7	1.4	2.1	2.8	3.5	4.9	6.3	7.7	8.3	10.4	11.8
147.5°	0.7	1.4	2.1	2.8	2.8	4.2	5.6	6.3	7.7	8.3	9.7
150°	0.7	1.4	2.1	2.1	2.8	3.5	4.9	5.6	6.3	7.7	8.3
152.5°	0.7	1.4	2.1	2.1	2.8	3.5	4.2	4.9	5.6	6.3	7.0
155°	0.7	1.4	2.1	2.1	2.1	2.8	3.5	4.2	4.9	5.6	6.3
157.5°	1.4	1.4	1.4	2.1	2.1	2.8	2.8	3.5	4.2	4.2	4.9
160°	1.4	1.4	1.4	2.1	2.1	2.1	2.8	2.8	3.5	3.5	4.2
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5
2.5°	1256.8	1258.9	1265.1	1265.1	1263.8	1262.4	1262.4	1260.3	1261.7	1264.5	1263.1
5°	1256.8	1258.9	1265.1	1265.1	1263.8	1262.4	1261.7	1259.6	1261.7	1264.5	1263.1
7.5°	1252.6	1255.4	1261.7	1261.7	1260.3	1259.6	1258.2	1256.8	1258.9	1261.7	1260.3
10°	1247.1	1249.8	1256.1	1256.1	1254.7	1254.7	1252.6	1251.2	1254.0	1256.1	1255.4
12.5°	1238.7	1242.2	1247.8	1247.1	1245.7	1246.4	1244.3	1241.5	1244.3	1246.4	1247.1
15°	1226.9	1231.1	1236.6	1235.2	1233.2	1234.5	1231.1	1229.0	1231.1	1235.2	1234.5
17.5°	1211.6	1214.4	1218.5	1218.5	1216.5	1215.1	1213.7	1211.6	1213.0	1215.8	1216.5
20°	1190.0	1193.5	1195.6	1193.5	1192.8	1190.7	1187.9	1185.9	1188.6	1192.8	1193.5
22.5°	1161.5	1162.2	1167.1	1162.2	1158.7	1158.0	1155.3	1151.1	1155.3	1158.7	1159.4
25°	1126.0	1129.5	1127.4	1119.1	1119.1	1113.5	1112.1	1110.0	1110.7	1117.0	1119.8
27.5°	1080.8	1082.2	1076.7	1069.7	1063.4	1060.0	1055.1	1055.8	1055.8	1064.1	1066.9
30°	1031.5	1023.8	1018.9	1007.8	1002.9	994.6	993.2	993.2	991.8	996.0	1008.5
32.5°	972.3	961.9	954.3	943.8	935.5	927.1	923.0	925.0	924.3	934.8	939.0
35°	907.7	901.4	885.4	872.2	867.3	854.8	854.8	848.5	852.7	864.5	869.4
37.5°	839.5	829.8	816.5	801.9	798.5	788.7	785.2	781.8	790.8	792.9	797.8
40°	769.9	760.9	748.4	734.5	734.5	722.6	722.6	722.6	723.3	727.5	736.6
42.5°	703.9	694.1	683.0	673.3	671.9	662.8	662.8	662.1	663.5	667.0	675.3
45°	639.9	632.2	620.4	615.5	616.2	606.5	608.6	606.5	609.3	612.8	615.5
47.5°	580.8	575.9	571.0	564.1	562.0	561.3	557.8	555.0	559.9	559.9	564.1
50°	525.8	523.0	520.2	516.1	516.8	514.0	509.8	509.8	513.3	514.0	516.8
52.5°	477.8	474.3	470.9	471.6	472.3	470.9	468.8	466.7	468.8	470.2	473.6
55°	429.8	427.0	430.5	429.1	430.5	429.1	427.7	426.4	429.8	427.7	431.2
57.5°	386.7	389.5	390.9	388.1	390.2	388.8	389.5	387.4	390.2	391.6	390.9
60°	347.1	351.2	349.2	349.8	352.6	351.2	348.5	350.5	353.3	354.0	353.3
62.5°	310.9	315.8	317.9	316.5	317.2	315.8	317.9	315.1	318.5	319.9	317.9
65°	278.2	283.8	285.2	285.2	285.2	283.8	285.9	286.6	287.9	287.9	286.6
67.5°	250.4	255.3	256.6	258.0	256.6	255.3	255.3	256.0	258.7	260.1	258.7
70°	225.3	230.2	230.9	230.9	231.6	233.0	230.2	231.6	233.7	234.4	233.7
72.5°	203.8	208.7	210.0	209.4	210.0	210.7	210.7	209.4	211.4	212.8	212.8
75°	186.4	189.2	190.6	190.6	191.3	192.0	192.0	191.3	192.7	193.4	194.0
77.5°	170.4	172.5	174.6	174.6	175.3	174.6	176.0	176.0	176.7	177.4	178.1
80°	154.4	157.2	158.6	159.3	160.7	161.4	161.4	161.4	162.1	162.8	162.8
82.5°	141.9	144.0	146.1	148.1	148.1	148.8	148.8	148.8	149.5	149.5	150.2
85°	129.4	132.1	134.2	135.6	136.3	137.0	137.0	137.7	137.7	137.7	138.4
87.5°	118.2	121.7	123.1	124.5	125.2	126.6	126.6	126.6	127.3	127.3	127.3
90°	110.6	114.1	115.5	116.8	117.5	118.2	118.2	118.9	118.9	119.6	119.6
92.5°	101.5	105.0	107.8	107.8	108.5	109.9	109.2	109.2	109.9	110.6	110.6
95°	94.6	97.4	99.5	100.2	100.9	100.9	100.9	101.5	100.9	101.5	101.5
97.5°	86.2	89.0	91.1	92.5	93.2	93.2	93.2	93.9	93.2	93.9	93.9
100°	79.3	82.1	84.2	84.9	86.2	86.2	86.2	86.2	86.2	86.2	86.9
102.5°	73.7	76.5	77.9	78.6	79.3	80.0	80.0	80.0	80.0	80.7	80.7
105°	68.2	70.9	72.3	73.0	73.7	74.4	74.4	74.4	75.1	75.1	74.4
107.5°	63.3	65.4	66.8	68.2	68.9	68.9	69.6	69.6	69.6	69.6	69.6
110°	58.4	60.5	62.6	64.0	64.0	64.7	64.7	65.4	65.4	64.7	65.4



TEST NUMBER: P1213409

CATALOG NUMBER: 4SNLED-LD5-37SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	53.6	56.3	57.7	59.1	59.8	60.5	60.5	60.5	60.5	60.5	60.5
115°	49.4	52.2	53.6	54.9	55.6	56.3	56.3	56.3	56.3	56.3	56.3
117.5°	45.9	48.7	50.1	50.8	51.5	52.2	52.9	52.9	52.9	52.9	52.2
120°	42.4	44.5	45.9	47.3	48.0	48.7	48.7	48.7	48.7	48.7	48.7
122.5°	38.9	41.0	42.4	43.8	44.5	45.2	45.2	45.2	45.2	45.2	45.2
125°	35.5	37.6	38.9	40.3	41.0	41.7	41.7	41.7	41.7	41.7	41.7
127.5°	32.0	34.1	36.2	36.9	37.6	38.3	38.3	38.3	38.9	38.3	38.3
130°	28.5	30.6	32.7	33.4	34.1	34.8	35.5	35.5	35.5	35.5	34.8
132.5°	25.7	27.8	29.2	29.9	31.3	31.3	32.0	32.0	32.0	32.0	31.3
135°	23.6	25.0	26.4	27.1	28.5	28.5	28.5	29.2	29.2	28.5	27.8
137.5°	20.9	22.3	23.6	24.3	25.0	25.7	25.7	26.4	25.7	25.7	25.7
140°	19.5	20.2	21.6	22.3	23.0	23.0	23.0	23.6	23.6	23.0	23.0
142.5°	16.7	18.1	19.5	20.2	20.9	20.9	20.9	20.9	20.9	20.9	20.9
145°	13.9	16.0	16.7	18.1	18.1	18.8	18.8	18.8	18.8	18.8	18.1
147.5°	11.8	13.2	15.3	16.0	16.0	16.7	16.7	16.7	16.7	16.7	16.0
150°	9.0	10.4	12.5	13.9	13.9	14.6	14.6	14.6	14.6	13.9	13.9
152.5°	7.7	9.0	9.7	11.1	11.8	11.8	11.8	12.5	11.8	11.8	11.8
155°	7.0	7.7	8.3	9.0	9.7	10.4	10.4	10.4	10.4	9.7	9.7
157.5°	5.6	6.3	7.0	7.7	8.3	9.0	9.0	9.0	9.0	9.0	8.3
160°	4.2	4.9	5.6	5.6	6.3	7.0	7.7	7.0	7.0	7.0	7.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213409

CATALOG NUMBER: 4SNLED-LD5-37SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5
2.5°	1261.7	1261.0	1263.1	1259.6	1249.2	1251.9	1250.5	1256.8	1258.2	1259.6	1265.8
5°	1261.7	1261.0	1262.4	1259.6	1248.5	1250.5	1249.2	1255.4	1256.8	1257.5	1263.8
7.5°	1258.9	1258.2	1260.3	1256.8	1245.0	1247.8	1245.7	1251.9	1252.6	1253.3	1258.9
10°	1253.3	1252.6	1254.0	1251.2	1239.4	1242.2	1239.4	1245.7	1245.7	1247.1	1251.2
12.5°	1245.0	1243.6	1246.4	1242.9	1229.7	1233.2	1231.8	1235.9	1236.6	1237.3	1241.5
15°	1233.2	1231.8	1233.9	1231.8	1219.9	1220.6	1218.5	1224.8	1225.5	1224.1	1228.3
17.5°	1215.8	1214.4	1218.5	1217.2	1205.3	1208.1	1207.4	1208.8	1210.9	1207.4	1213.0
20°	1194.2	1195.6	1197.0	1197.7	1188.6	1188.6	1187.9	1190.7	1192.8	1190.0	1194.2
22.5°	1162.2	1165.7	1169.9	1171.3	1165.0	1164.3	1168.5	1167.1	1169.2	1167.8	1170.6
25°	1121.9	1128.8	1133.0	1137.2	1133.7	1135.1	1141.3	1142.7	1142.7	1142.0	1144.8
27.5°	1071.8	1080.8	1088.5	1097.5	1094.1	1096.8	1107.3	1108.7	1111.4	1108.7	1114.2
30°	1012.0	1020.3	1034.9	1048.1	1049.5	1053.7	1068.3	1069.7	1077.4	1074.6	1076.7
32.5°	952.2	956.3	973.0	986.2	994.6	1005.0	1021.0	1023.8	1034.2	1036.3	1036.3
35°	877.0	888.9	904.2	923.0	933.4	944.5	966.1	970.2	985.6	990.4	996.0
37.5°	813.8	824.9	834.6	854.1	872.9	885.4	902.8	913.2	929.2	938.3	945.2
40°	746.3	755.3	765.8	785.2	801.2	820.0	837.4	849.9	870.1	880.5	889.6
42.5°	682.3	689.3	700.4	714.3	731.0	751.9	768.5	783.2	804.7	819.3	829.8
45°	625.3	629.4	639.2	649.6	664.2	685.8	701.8	720.6	737.9	753.2	765.8
47.5°	571.7	577.3	582.1	589.1	602.3	615.5	634.3	652.4	669.8	686.5	699.0
50°	522.3	522.3	530.0	534.9	543.9	555.7	570.3	582.8	604.4	616.2	632.2
52.5°	474.3	477.1	481.3	484.1	491.0	498.7	510.5	520.9	539.0	550.2	565.5
55°	431.9	434.7	436.8	438.2	442.4	451.4	455.6	463.9	476.4	485.5	498.7
57.5°	391.6	393.0	395.1	395.8	396.4	402.0	405.5	407.6	420.1	429.1	440.3
60°	354.7	354.7	356.8	356.1	355.4	358.2	357.5	359.6	367.2	372.8	377.7
62.5°	319.9	319.9	320.6	319.2	318.5	318.5	315.8	317.9	319.9	320.6	324.1
65°	287.9	291.4	288.6	289.3	285.2	283.8	282.4	278.2	277.5	274.7	276.1
67.5°	259.4	262.2	259.4	259.4	256.0	253.2	249.7	242.7	240.6	235.1	233.7
70°	236.5	234.4	235.8	233.7	229.5	226.0	221.2	215.6	208.7	201.7	196.8
72.5°	214.2	214.2	212.8	210.7	208.7	201.7	196.1	189.9	181.5	172.5	165.5
75°	192.7	193.4	193.4	191.3	187.8	181.5	175.3	166.2	157.2	146.8	137.7
77.5°	177.4	177.4	177.4	173.9	170.4	164.8	157.2	147.5	137.7	125.2	114.8
80°	162.8	162.1	162.1	157.9	154.4	148.1	140.5	130.8	120.3	107.1	95.3
82.5°	150.9	150.2	148.8	145.4	140.5	134.2	126.6	116.2	105.0	93.2	78.6
85°	138.4	137.7	136.3	132.8	128.0	122.4	114.1	103.6	92.5	79.3	65.4
87.5°	127.3	126.6	124.5	122.4	116.8	110.6	102.2	92.5	80.7	68.2	54.3
90°	119.6	118.2	116.8	114.1	109.2	102.2	93.9	83.5	71.6	59.1	45.2
92.5°	110.6	109.9	107.8	105.0	100.9	93.9	85.5	75.8	64.0	52.2	38.9
95°	101.5	100.9	99.5	96.7	92.5	86.2	78.6	68.9	57.7	45.9	34.1
97.5°	93.2	93.2	91.1	89.0	84.2	79.3	71.6	62.6	52.2	41.7	30.6
100°	86.2	86.2	84.2	81.4	77.9	73.0	65.4	57.0	47.3	37.6	26.4
102.5°	80.0	79.3	77.9	75.1	71.6	66.8	59.8	52.2	43.1	33.4	23.6
105°	74.4	73.7	72.3	69.6	66.8	61.2	55.6	48.0	38.9	29.9	20.9
107.5°	68.9	68.2	67.5	64.7	61.2	56.3	50.8	43.1	35.5	27.1	18.8
110°	64.0	63.3	61.9	59.1	55.6	51.5	45.9	39.6	32.0	24.3	16.7

TEST NUMBER: P1213409

CATALOG NUMBER: 4SNLED-LD5-37SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	59.8	59.1	57.7	54.9	52.2	47.3	42.4	35.5	29.2	22.3	14.6
115°	55.6	54.9	53.6	50.8	47.3	43.1	38.3	32.7	25.7	19.5	13.2
117.5°	51.5	50.8	49.4	47.3	43.8	39.6	34.8	29.2	23.0	18.1	11.8
120°	48.0	46.6	45.2	43.1	39.6	36.2	31.3	26.4	20.9	16.0	10.4
122.5°	44.5	43.1	41.7	39.6	36.2	32.7	27.8	23.6	19.5	14.6	9.7
125°	40.3	39.6	38.3	36.2	32.7	29.2	25.7	21.6	17.4	13.2	8.3
127.5°	36.9	36.2	34.8	32.0	29.2	26.4	23.0	19.5	15.3	11.1	7.7
130°	34.1	32.7	31.3	29.2	27.1	24.3	20.9	17.4	13.9	9.7	7.0
132.5°	30.6	29.2	27.8	26.4	24.3	21.6	18.8	15.3	12.5	9.0	6.3
135°	27.8	26.4	25.0	23.6	21.6	19.5	16.7	13.9	11.1	8.3	5.6
137.5°	24.3	23.6	23.0	21.6	19.5	17.4	15.3	11.8	9.7	7.7	4.9
140°	22.3	21.6	20.9	18.8	17.4	15.3	13.2	10.4	8.3	6.3	4.2
142.5°	20.2	19.5	18.1	16.7	15.3	13.9	11.1	9.7	7.7	5.6	4.2
145°	17.4	16.7	16.0	14.6	13.2	11.1	9.7	8.3	7.0	4.9	3.5
147.5°	16.0	15.3	13.9	12.5	11.1	9.7	9.0	7.7	5.6	4.2	2.8
150°	13.2	12.5	11.8	10.4	9.7	9.0	7.7	6.3	4.9	3.5	2.8
152.5°	11.1	10.4	9.7	9.7	8.3	7.7	6.3	5.6	4.2	3.5	2.1
155°	9.7	9.7	9.0	8.3	7.0	6.3	5.6	4.2	3.5	2.8	2.1
157.5°	8.3	7.7	7.0	7.0	6.3	5.6	4.2	3.5	2.8	2.8	2.1
160°	7.0	6.3	6.3	5.6	4.9	4.2	3.5	3.5	2.8	2.1	2.1
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213409

CATALOG NUMBER: 4SNLED-LD5-37SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5
2.5°	1266.5	1258.9	1265.8	1274.9	1274.9	1273.5	1272.1	1274.9	1281.8	1279.1	1270.7
5°	1264.5	1256.8	1263.1	1272.1	1272.1	1270.0	1268.6	1270.7	1278.4	1274.9	1267.2
7.5°	1260.3	1253.3	1257.5	1265.8	1265.8	1263.8	1262.4	1265.1	1271.4	1267.9	1259.6
10°	1252.6	1245.0	1249.8	1257.5	1256.8	1255.4	1253.3	1256.8	1262.4	1257.5	1247.8
12.5°	1242.9	1235.2	1239.4	1246.4	1245.7	1242.9	1241.5	1243.6	1248.5	1245.7	1235.2
15°	1229.7	1222.0	1225.5	1232.5	1230.4	1228.3	1225.5	1226.2	1232.5	1227.6	1216.5
17.5°	1213.7	1205.3	1208.1	1214.4	1212.3	1210.2	1206.7	1207.4	1214.4	1207.4	1195.6
20°	1194.2	1185.2	1187.3	1194.9	1191.4	1187.9	1184.5	1184.5	1191.4	1183.8	1170.6
22.5°	1173.3	1164.3	1165.7	1171.3	1168.5	1162.2	1158.7	1160.8	1164.3	1154.6	1140.7
25°	1147.6	1135.8	1137.9	1143.4	1141.3	1133.0	1129.5	1130.9	1129.5	1121.9	1107.3
27.5°	1117.7	1105.2	1106.6	1110.0	1107.3	1099.6	1095.4	1096.1	1093.4	1083.6	1066.9
30°	1080.1	1073.9	1073.2	1075.3	1071.1	1063.4	1058.6	1057.2	1056.5	1042.6	1022.4
32.5°	1041.9	1036.3	1032.8	1035.6	1030.8	1023.1	1014.8	1014.8	1007.8	994.6	977.2
35°	1002.9	993.9	990.4	992.5	986.9	977.2	970.2	966.8	956.3	939.6	920.9
37.5°	952.9	946.6	942.4	944.5	938.3	931.3	918.1	914.6	903.5	880.5	856.9
40°	898.6	893.7	889.6	891.7	884.7	874.3	862.4	856.9	844.4	818.6	799.8
42.5°	840.2	838.1	833.2	840.9	827.0	816.5	804.7	795.7	783.2	755.3	733.8
45°	778.3	783.2	772.0	774.1	765.1	756.0	743.5	730.3	717.8	691.3	667.0
47.5°	712.9	716.4	708.7	710.1	700.4	692.0	680.9	664.2	650.3	627.4	605.8
50°	645.4	644.1	644.1	642.7	635.0	624.6	613.4	598.1	584.2	563.4	545.3
52.5°	573.8	576.6	578.0	581.5	571.7	565.5	548.1	534.9	524.4	502.9	487.6
55°	504.9	514.7	511.9	513.3	502.2	497.3	483.4	473.0	457.7	445.1	435.4
57.5°	442.4	444.4	445.8	447.9	443.0	433.3	422.2	413.8	402.0	391.6	384.6
60°	381.8	381.8	382.5	386.0	381.1	372.8	364.5	358.2	349.8	343.6	339.4
62.5°	324.8	329.7	330.4	327.6	321.3	317.2	311.6	308.1	302.6	300.5	299.1
65°	271.9	271.9	271.9	273.3	269.9	267.1	263.6	262.9	265.0	262.2	263.6
67.5°	227.4	225.3	224.0	224.7	223.3	221.9	221.2	223.3	227.4	227.4	230.9
70°	189.2	185.0	182.2	182.2	182.2	182.9	185.0	189.2	196.1	198.9	203.8
72.5°	157.9	148.8	144.7	144.7	145.4	148.1	154.4	162.1	168.3	173.9	180.1
75°	128.0	118.9	112.7	112.0	113.4	117.5	126.6	133.5	144.0	151.6	159.3
77.5°	103.6	92.5	84.9	84.2	86.2	92.5	103.6	112.7	124.5	132.8	141.2
80°	82.8	70.2	64.0	59.8	63.3	70.9	83.5	94.6	105.7	116.8	127.3
82.5°	66.1	54.3	44.5	40.3	44.5	54.9	66.8	80.0	91.1	102.9	113.4
85°	52.2	39.6	28.5	24.3	29.2	40.3	53.6	66.8	79.3	91.1	101.5
87.5°	41.0	28.5	17.4	11.8	18.1	29.9	42.4	55.6	68.9	80.7	91.1
90°	32.0	20.2	9.7	1.4	10.4	21.6	34.1	46.6	59.8	71.6	82.1
92.5°	27.1	15.3	5.6	0.0	6.3	16.0	27.8	40.3	52.2	64.0	74.4
95°	23.0	12.5	4.2	0.0	4.2	12.5	23.0	34.1	45.9	57.7	68.2
97.5°	19.5	9.7	2.8	0.0	2.8	9.7	18.8	29.9	40.3	51.5	61.2
100°	16.7	8.3	2.1	0.0	2.1	7.7	16.0	25.7	36.2	46.6	55.6
102.5°	14.6	7.0	1.4	0.0	1.4	6.3	13.2	22.3	31.3	41.0	50.1
105°	12.5	5.6	1.4	0.0	0.7	4.9	11.1	19.5	27.8	36.9	45.2
107.5°	11.1	4.9	1.4	0.0	0.7	4.2	9.7	16.7	25.0	32.7	40.3
110°	9.7	4.2	1.4	0.0	0.7	2.8	8.3	14.6	21.6	29.2	36.9

TEST NUMBER: P1213409

CATALOG NUMBER: 4SNLED-LD5-37SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	8.3	3.5	0.7	0.0	0.0	2.1	7.0	12.5	18.8	26.4	32.7
115°	7.7	3.5	0.7	0.0	0.0	1.4	5.6	11.1	16.7	23.6	29.2
117.5°	7.0	2.8	0.7	0.0	0.7	1.4	4.9	9.7	14.6	20.2	26.4
120°	6.3	2.8	0.7	0.0	0.7	0.7	3.5	8.3	12.5	18.1	23.0
122.5°	5.6	2.8	0.7	0.0	0.7	0.7	2.8	7.0	11.1	16.0	20.2
125°	4.9	2.1	1.4	0.7	0.7	0.7	2.1	5.6	9.7	13.2	18.1
127.5°	4.9	2.1	1.4	0.7	0.7	0.7	1.4	4.9	7.7	11.8	16.0
130°	4.2	2.1	1.4	0.7	0.7	0.7	0.7	3.5	7.0	9.7	13.2
132.5°	3.5	2.1	1.4	0.7	0.7	0.7	0.7	2.1	4.9	8.3	11.1
135°	3.5	2.1	1.4	0.7	0.7	0.7	0.7	1.4	3.5	6.3	9.0
137.5°	2.8	1.4	1.4	0.7	0.7	0.7	0.7	0.7	2.8	4.9	7.0
140°	2.8	1.4	1.4	0.7	0.7	0.7	0.7	0.7	2.1	3.5	5.6
142.5°	2.1	1.4	1.4	0.7	0.7	0.7	0.7	0.7	1.4	2.8	4.2
145°	2.1	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	1.4	2.8
147.5°	2.1	2.1	1.4	0.7	0.7	0.7	0.7	0.7	0.7	1.4	2.1
150°	2.1	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4
152.5°	2.1	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4
155°	2.1	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	1.4	1.4
157.5°	2.1	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4
160°	2.1	1.4	1.4	0.7	1.4	0.7	1.4	1.4	1.4	1.4	1.4
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213409

CATALOG NUMBER: 4SNLED-LD5-37SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5
2.5°	1267.9	1254.7	1261.7	1259.6	1262.4	1267.9	1267.2	1265.8	1265.8	1263.8	1261.0
5°	1263.8	1251.2	1257.5	1254.0	1257.5	1262.4	1261.7	1259.6	1261.0	1257.5	1254.0
7.5°	1255.4	1244.3	1249.8	1247.1	1249.8	1254.7	1252.6	1251.9	1253.3	1247.8	1245.7
10°	1245.7	1233.2	1239.4	1235.9	1239.4	1242.9	1241.5	1238.7	1241.5	1235.9	1233.9
12.5°	1230.4	1219.9	1224.1	1222.7	1224.8	1228.3	1225.5	1223.4	1224.8	1219.9	1215.8
15°	1213.7	1203.2	1206.7	1204.6	1206.0	1210.2	1205.3	1204.6	1203.2	1198.4	1197.0
17.5°	1192.1	1182.4	1185.9	1182.4	1184.5	1183.1	1182.4	1178.9	1178.9	1173.3	1169.2
20°	1165.7	1157.3	1155.3	1152.5	1155.3	1152.5	1148.3	1145.5	1144.8	1139.3	1135.8
22.5°	1135.1	1125.3	1126.7	1119.1	1119.8	1115.6	1108.7	1105.9	1103.1	1096.8	1092.0
25°	1098.2	1088.5	1081.5	1076.7	1070.4	1069.7	1060.7	1053.7	1053.0	1045.4	1044.7
27.5°	1056.5	1045.4	1039.8	1028.0	1020.3	1014.1	1006.4	999.5	996.0	987.6	982.1
30°	1008.5	996.0	982.1	973.7	961.9	957.0	943.8	935.5	932.7	923.6	919.5
32.5°	954.3	941.0	929.9	913.9	900.7	893.7	880.5	872.2	868.7	859.0	853.4
35°	895.1	880.5	867.3	852.0	841.6	829.8	813.8	805.4	797.8	794.3	790.1
37.5°	833.2	817.2	801.9	786.6	777.6	763.7	749.8	744.2	735.2	731.7	727.5
40°	769.2	753.2	738.6	724.0	713.6	701.1	688.6	686.5	676.7	673.3	670.5
42.5°	706.0	689.3	672.6	662.1	654.5	642.0	633.6	631.5	623.2	621.1	621.1
45°	648.9	628.1	614.1	605.1	598.8	588.4	581.5	580.1	573.1	571.7	571.7
47.5°	587.7	568.2	557.8	552.2	546.7	539.0	534.9	534.9	527.9	526.5	525.8
50°	530.7	512.6	504.9	499.4	498.7	493.1	489.6	488.3	488.3	483.4	484.1
52.5°	476.4	467.4	461.1	457.7	453.5	450.0	447.2	447.2	445.1	441.7	443.0
55°	426.4	415.9	416.6	413.8	411.7	409.7	410.4	406.2	405.5	402.7	404.8
57.5°	376.3	376.3	374.9	372.8	369.3	370.7	370.7	370.7	367.2	365.1	367.2
60°	333.8	335.9	332.5	334.5	333.2	333.8	332.5	332.5	330.4	329.7	330.4
62.5°	296.3	299.8	298.4	301.2	299.8	300.5	301.9	299.1	297.7	296.3	297.7
65°	262.9	267.1	266.4	268.5	269.2	269.9	270.6	269.2	267.8	266.4	265.7
67.5°	233.7	237.9	240.6	241.3	242.0	244.1	243.4	242.0	240.6	238.6	237.9
70°	207.3	212.8	216.3	217.7	220.5	219.1	219.1	218.4	217.0	214.9	214.2
72.5°	185.0	191.3	194.7	196.1	198.9	198.9	198.2	197.5	196.1	194.0	193.4
75°	165.5	171.1	176.0	178.7	180.8	180.8	180.1	179.4	178.1	176.7	176.0
77.5°	150.2	155.1	159.3	162.8	164.1	164.8	164.1	162.8	162.8	162.1	161.4
80°	134.9	140.5	144.7	148.1	150.2	150.2	149.5	150.2	148.8	148.1	147.5
82.5°	121.7	128.0	132.8	136.3	137.7	138.4	137.7	138.4	137.0	137.0	137.0
85°	109.9	116.2	121.7	124.5	126.6	127.3	127.3	127.3	126.6	126.6	126.6
87.5°	100.2	106.4	112.0	114.8	116.8	117.5	117.5	118.2	116.8	116.8	116.8
90°	91.1	97.4	102.9	105.7	107.8	109.2	109.2	109.9	109.2	108.5	108.5
92.5°	82.8	89.7	95.3	98.1	100.2	102.2	102.2	102.9	101.5	101.5	101.5
95°	75.8	82.8	87.6	91.1	93.2	94.6	95.3	95.3	94.6	94.6	94.6
97.5°	69.6	75.8	80.7	84.2	86.2	86.9	87.6	88.3	87.6	87.6	87.6
100°	63.3	69.6	74.4	77.2	80.0	80.7	81.4	82.1	82.1	81.4	81.4
102.5°	57.7	64.0	68.2	71.6	73.7	75.1	75.8	75.8	75.8	75.8	75.8
105°	52.2	58.4	62.6	66.1	68.2	69.6	70.2	70.9	70.9	70.2	70.2
107.5°	47.3	52.9	57.7	60.5	63.3	64.7	65.4	65.4	66.1	65.4	65.4
110°	42.4	48.7	52.9	55.6	58.4	59.8	60.5	61.2	61.2	61.2	61.2

TEST NUMBER: P1213409

CATALOG NUMBER: 4SNLED-LD5-37SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	38.9	43.8	48.0	50.8	53.6	54.9	55.6	56.3	57.0	56.3	56.3
115°	34.8	39.6	43.8	46.6	48.7	50.1	51.5	52.2	52.2	52.9	52.2
117.5°	31.3	35.5	39.6	42.4	44.5	46.6	47.3	48.0	48.7	48.0	48.0
120°	27.8	32.0	35.5	38.3	40.3	42.4	43.1	43.8	44.5	43.8	43.8
122.5°	25.0	28.5	32.0	34.8	36.9	38.3	39.6	39.6	40.3	40.3	40.3
125°	22.3	25.7	28.5	31.3	33.4	34.8	35.5	36.2	36.2	36.9	36.9
127.5°	19.5	22.3	25.7	27.8	29.9	31.3	32.0	32.7	32.7	33.4	33.4
130°	16.7	19.5	22.3	24.3	26.4	27.8	28.5	29.2	29.9	29.9	29.9
132.5°	14.6	17.4	19.5	21.6	23.0	24.3	25.7	26.4	26.4	26.4	26.4
135°	11.8	14.6	16.7	18.8	20.2	21.6	22.3	23.6	23.6	23.6	23.6
137.5°	9.7	12.5	14.6	16.0	17.4	18.8	19.5	20.2	20.9	20.9	20.9
140°	7.7	9.7	11.8	13.9	15.3	16.0	17.4	17.4	18.1	18.1	18.1
142.5°	5.6	7.7	9.0	11.1	12.5	13.9	14.6	15.3	15.3	15.3	15.3
145°	4.2	5.6	7.0	8.3	10.4	11.1	11.8	12.5	13.2	13.2	13.2
147.5°	2.8	4.2	4.9	6.3	7.7	9.0	9.7	10.4	11.1	11.1	11.1
150°	2.1	2.8	4.2	4.9	5.6	7.0	8.3	8.3	9.0	9.0	8.3
152.5°	1.4	2.1	2.8	3.5	4.2	4.9	6.3	6.3	7.0	7.0	7.0
155°	1.4	1.4	1.4	2.1	2.8	3.5	4.2	4.9	4.9	4.9	4.9
157.5°	1.4	1.4	1.4	1.4	1.4	2.1	2.8	3.5	3.5	3.5	3.5
160°	1.4	1.4	0.7	0.7	1.4	1.4	1.4	1.4	2.1	2.1	2.1
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213409

CATALOG NUMBER: 4SNLED-LD5-37SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5
2.5°	1263.1	1264.5	1264.5	1263.1	1262.4	1265.1	1261.7	1248.5	1252.6	1254.0	1258.2
5°	1256.8	1258.2	1258.2	1258.2	1256.8	1259.6	1256.1	1242.9	1247.8	1249.8	1252.6
7.5°	1247.8	1248.5	1249.8	1249.2	1247.8	1251.9	1248.5	1235.2	1238.7	1242.2	1245.7
10°	1235.9	1235.9	1236.6	1238.0	1236.6	1240.1	1236.6	1224.8	1228.3	1230.4	1234.5
12.5°	1219.9	1221.3	1222.0	1221.3	1220.6	1223.4	1222.0	1210.9	1212.3	1216.5	1220.6
15°	1198.4	1198.4	1201.9	1200.5	1200.5	1203.2	1204.6	1192.1	1194.2	1200.5	1204.6
17.5°	1171.9	1172.6	1175.4	1176.8	1176.1	1181.0	1181.7	1171.9	1171.3	1178.9	1183.1
20°	1137.9	1139.3	1142.7	1145.5	1145.5	1151.1	1153.2	1146.9	1147.6	1156.0	1157.3
22.5°	1096.1	1096.1	1102.4	1106.6	1110.0	1113.5	1119.8	1114.2	1114.2	1125.3	1131.6
25°	1044.7	1049.5	1051.6	1060.0	1064.8	1074.6	1080.1	1080.8	1081.5	1092.0	1096.1
27.5°	987.6	989.0	995.3	1005.0	1010.6	1019.6	1030.1	1032.2	1035.6	1049.5	1055.8
30°	923.0	927.1	929.9	943.8	951.5	963.3	976.5	981.4	984.2	1002.9	1010.6
32.5°	856.9	858.3	870.1	877.7	886.8	899.3	914.6	923.6	929.2	948.7	959.8
35°	790.8	793.6	803.3	813.1	822.1	834.6	850.6	863.1	872.9	890.3	904.9
37.5°	730.3	737.3	739.3	749.1	756.0	768.5	779.7	797.8	807.5	825.6	844.4
40°	676.0	678.1	679.5	689.3	694.1	706.0	721.9	733.8	747.0	760.2	782.5
42.5°	622.5	623.9	626.0	631.5	637.1	645.4	657.3	669.1	683.0	702.5	717.1
45°	573.1	574.5	575.9	579.4	584.2	591.9	599.5	607.9	621.8	638.5	653.8
47.5°	527.2	530.0	530.0	530.7	534.2	540.4	546.0	556.4	564.1	573.1	590.5
50°	483.4	485.5	486.2	486.2	488.3	492.4	493.8	500.8	507.7	516.1	528.6
52.5°	442.4	442.4	441.7	444.4	444.4	447.2	447.9	452.1	457.0	466.0	471.6
55°	403.4	403.4	405.5	404.1	404.1	405.5	404.8	405.5	409.7	415.2	420.1
57.5°	365.8	365.1	367.2	365.8	365.1	366.5	367.9	365.1	365.8	371.4	371.4
60°	328.3	329.0	331.1	329.7	329.7	329.7	328.3	326.9	325.5	329.0	330.4
62.5°	298.4	296.3	298.4	296.3	297.7	297.0	295.6	292.8	293.5	292.1	290.7
65°	267.1	267.1	267.8	265.7	267.1	267.1	265.0	264.3	260.1	258.7	255.3
67.5°	240.0	240.0	240.6	239.3	239.3	240.0	237.9	235.8	231.6	229.5	224.7
70°	216.3	216.3	216.3	215.6	215.6	215.6	214.2	211.4	207.3	203.8	197.5
72.5°	194.7	195.4	194.7	194.7	196.8	194.7	192.7	189.9	186.4	179.4	173.9
75°	177.4	178.1	177.4	177.4	177.4	176.7	176.0	171.8	167.6	162.1	153.7
77.5°	162.1	162.1	162.8	162.1	162.1	161.4	159.3	155.8	150.9	146.1	136.3
80°	147.5	148.1	148.8	149.5	148.1	147.5	145.4	142.6	136.3	130.8	121.0
82.5°	137.0	136.3	137.0	137.7	136.3	135.6	133.5	130.1	125.2	117.5	107.8
85°	126.6	125.9	125.9	126.6	125.9	124.5	122.4	118.9	114.1	106.4	96.7
87.5°	116.2	116.8	117.5	116.8	116.2	114.8	112.7	109.2	103.6	97.4	86.9
90°	108.5	108.5	108.5	108.5	107.8	106.4	104.3	100.2	95.3	87.6	78.6
92.5°	101.5	101.5	101.5	101.5	100.9	98.8	96.7	93.2	87.6	80.0	71.6
95°	94.6	95.3	94.6	94.6	93.2	92.5	89.0	85.5	80.7	73.0	64.0
97.5°	86.9	87.6	86.9	86.9	86.2	84.9	82.8	78.6	73.7	66.8	58.4
100°	81.4	81.4	80.7	80.7	80.0	78.6	75.8	72.3	67.5	60.5	52.2
102.5°	75.1	75.8	75.1	75.1	73.7	72.3	70.2	66.8	61.9	54.9	47.3
105°	70.2	70.2	69.6	69.6	68.2	66.8	64.7	60.5	56.3	50.1	42.4
107.5°	65.4	65.4	64.7	64.7	63.3	61.9	59.1	55.6	51.5	45.2	38.3
110°	60.5	60.5	60.5	59.8	58.4	56.3	54.3	50.8	46.6	41.0	34.1



TEST NUMBER: P1213409

CATALOG NUMBER: 4SNLED-LD5-37SL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	57.0	56.3	55.6	54.9	53.6	52.2	49.4	45.9	41.7	36.9	30.6
115°	52.2	52.2	51.5	50.8	49.4	47.3	45.2	42.4	38.3	32.7	27.1
117.5°	48.0	48.0	47.3	46.6	45.2	43.1	41.0	38.3	34.1	29.2	24.3
120°	43.8	43.8	43.1	42.4	41.0	38.9	37.6	34.1	30.6	25.7	21.6
122.5°	40.3	39.6	39.6	38.3	37.6	35.5	33.4	30.6	27.1	23.0	18.8
125°	36.2	36.2	35.5	34.8	34.1	32.0	29.9	27.1	23.6	20.2	16.7
127.5°	32.7	32.7	32.0	31.3	30.6	28.5	26.4	24.3	20.9	17.4	13.9
130°	29.2	29.2	28.5	27.8	27.1	25.0	23.6	20.9	18.1	15.3	11.8
132.5°	26.4	26.4	25.7	25.0	23.6	22.3	20.9	18.1	16.0	13.2	10.4
135°	23.6	23.0	23.0	22.3	20.9	19.5	18.1	16.0	13.2	11.1	8.3
137.5°	20.9	20.2	19.5	18.8	18.1	16.7	15.3	13.9	11.8	9.0	7.0
140°	18.1	17.4	17.4	16.7	15.3	14.6	13.2	11.1	9.7	7.7	5.6
142.5°	15.3	15.3	14.6	13.9	13.2	12.5	11.1	9.7	7.7	6.3	4.2
145°	13.2	12.5	12.5	11.8	11.1	9.7	9.0	7.7	6.3	4.9	3.5
147.5°	10.4	10.4	10.4	9.7	9.0	8.3	7.7	6.3	4.9	3.5	2.1
150°	8.3	8.3	8.3	7.7	7.0	6.3	5.6	4.9	3.5	2.1	1.4
152.5°	7.0	7.0	6.3	6.3	5.6	4.9	4.2	3.5	2.1	1.4	1.4
155°	4.9	4.9	4.9	4.2	4.2	3.5	2.8	2.1	1.4	1.4	1.4
157.5°	3.5	3.5	3.5	2.8	2.8	2.1	2.1	1.4	1.4	1.4	1.4
160°	2.1	2.1	2.1	2.1	1.4	1.4	1.4	1.4	1.4	1.4	1.4
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5	1264.5
2.5°	1256.1	1255.4	1261.0	1261.0	1254.7	1264.5	1274.9
5°	1251.9	1251.2	1256.8	1256.8	1251.2	1261.0	1272.1
7.5°	1243.6	1244.3	1249.8	1251.2	1244.3	1253.3	1265.1
10°	1234.5	1233.9	1240.1	1241.5	1235.9	1244.3	1255.4
12.5°	1219.9	1219.9	1226.2	1228.3	1222.7	1232.5	1242.9
15°	1204.6	1204.6	1208.8	1212.3	1207.4	1216.5	1226.9
17.5°	1185.2	1184.5	1188.6	1192.8	1187.9	1197.7	1208.8
20°	1160.1	1160.1	1165.0	1169.9	1166.4	1175.4	1187.9
22.5°	1133.7	1130.9	1139.3	1142.7	1140.7	1149.7	1162.2
25°	1100.3	1099.6	1108.0	1112.8	1110.0	1119.8	1130.9
27.5°	1064.1	1063.4	1071.8	1078.1	1076.7	1085.7	1098.2
30°	1020.3	1023.8	1031.5	1041.9	1038.4	1048.1	1061.4
32.5°	974.4	977.9	986.9	998.1	998.8	1006.4	1019.6
35°	919.5	928.5	934.8	949.4	952.2	959.8	973.7
37.5°	861.7	872.2	885.4	896.5	902.1	908.3	924.3
40°	797.1	812.4	827.0	840.2	847.1	853.4	868.7
42.5°	738.6	750.5	764.4	777.6	790.1	795.7	811.7
45°	672.6	686.5	699.0	715.0	727.5	733.8	749.8
47.5°	607.9	621.8	638.5	649.6	662.8	669.1	684.4
50°	546.0	558.5	572.4	585.6	596.8	602.3	615.5
52.5°	484.8	498.0	511.2	519.6	531.4	535.5	546.7
55°	430.5	439.6	451.4	456.3	468.1	470.9	478.5
57.5°	378.4	384.6	388.8	397.1	405.5	411.7	420.8
60°	331.1	333.8	336.6	341.5	348.5	350.5	354.0
62.5°	288.6	287.9	293.5	294.9	295.6	302.6	299.1
65°	251.1	251.8	246.9	244.8	247.6	249.7	248.3
67.5°	219.8	215.6	211.4	206.6	202.4	204.5	202.4
70°	189.2	185.7	178.7	171.8	169.0	164.8	162.8
72.5°	164.8	156.5	149.5	140.5	135.6	130.8	127.3
75°	146.1	134.2	124.5	114.8	107.8	100.9	99.5
77.5°	126.6	115.5	104.3	93.9	83.5	75.8	73.0
80°	111.3	100.9	87.6	75.1	64.0	54.3	50.8
82.5°	97.4	86.2	73.0	59.8	47.3	36.9	32.7
85°	85.5	73.7	60.5	47.3	34.8	23.6	18.1
87.5°	76.5	63.3	50.1	37.6	24.3	13.2	7.0
90°	68.2	55.6	43.1	29.9	17.4	7.0	0.0
92.5°	60.5	48.7	36.2	24.3	13.2	4.2	0.7
95°	53.6	43.1	30.6	19.5	9.7	2.8	0.7
97.5°	48.0	37.6	26.4	16.0	7.7	2.1	0.7
100°	43.1	32.7	23.0	13.2	6.3	1.4	0.7
102.5°	38.3	29.2	19.5	11.1	4.9	0.7	0.7
105°	34.1	25.7	16.7	9.7	4.2	0.7	0.7
107.5°	30.6	23.0	14.6	8.3	2.8	0.7	0.7
110°	27.1	19.5	12.5	7.0	2.1	0.7	0.7



TEST NUMBER: P1213409

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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	24.3	17.4	11.1	5.6	1.4	0.7	0.7
115°	21.6	15.3	9.7	4.9	1.4	0.7	0.7
117.5°	18.8	13.2	8.3	3.5	0.7	0.7	0.7
120°	16.7	11.8	7.0	2.8	0.7	0.7	0.7
122.5°	14.6	9.7	5.6	2.1	0.7	0.7	0.7
125°	12.5	8.3	4.9	1.4	0.7	0.7	0.7
127.5°	10.4	7.0	3.5	1.4	0.7	0.7	0.7
130°	9.0	5.6	2.8	0.7	0.7	0.7	0.7
132.5°	7.7	4.2	2.1	0.7	0.7	0.7	0.7
135°	6.3	3.5	1.4	0.7	0.7	0.7	0.7
137.5°	4.9	2.8	1.4	0.7	0.7	0.7	0.7
140°	3.5	2.1	0.7	0.7	0.7	0.7	0.7
142.5°	2.8	1.4	0.7	0.7	0.7	0.7	0.7
145°	2.1	1.4	0.7	0.7	0.7	0.7	0.7
147.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7
150°	1.4	1.4	0.7	0.7	1.4	0.7	0.7
152.5°	1.4	0.7	0.7	0.7	1.4	0.7	0.7
155°	1.4	1.4	1.4	1.4	1.4	1.4	0.7
157.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4
160°	1.4	1.4	1.4	1.4	1.4	1.4	1.4
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)