

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: P1213050

Luminaire Tested: 4SNLED-LD5-34SL-LC-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213050
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33518)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-34SL-LC-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

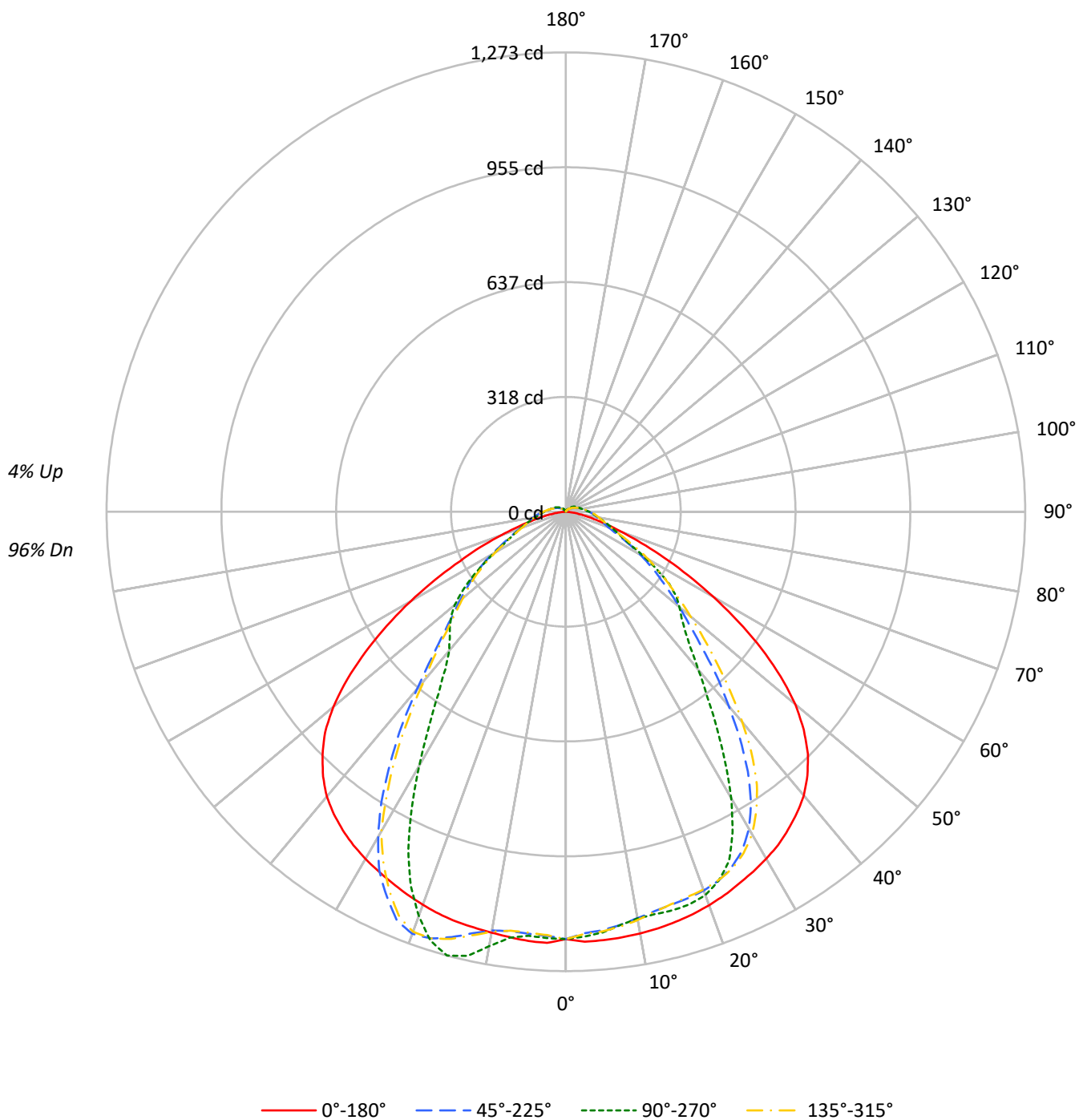
Lumens per Lamp: N/A
Luminaire Lumens: 2823.0 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 25
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	115	115	115	115	109	109	109	103	103	103	98	98	98
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	84
2	100	93	86	81	97	90	85	80	86	82	77	82	79	75	79	76	73
3	92	83	75	69	89	81	74	68	77	71	67	74	69	65	71	67	63
4	85	74	66	60	83	73	65	59	70	63	58	67	61	57	64	60	56
5	79	67	59	52	76	66	58	52	63	56	51	61	55	50	59	53	49
6	73	61	52	46	71	60	52	46	57	51	45	55	49	45	54	48	44
7	68	55	47	42	66	54	47	41	53	46	41	51	45	40	49	44	40
8	64	51	43	37	62	50	42	37	48	42	37	47	41	36	45	40	36
9	60	47	39	34	58	46	39	34	45	38	33	43	37	33	42	37	33
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9570	9570	9570	9570
5°	9639	9190	9659	9262
10°	9684	8808	9664	9406
15°	9758	8690	9753	9676
20°	9866	8553	9856	9015
25°	9988	8113	9983	7839
30°	10176	7032	10181	6230
35°	10375	5686	10404	4811
40°	10551	4578	10594	4034
45°	10513	3878	10568	3777
50°	10060	3570	10201	3491
55°	8926	3209	9148	2918
60°	7240	2456	7625	2253
65°	5381	1879	5799	1782
70°	3660	1623	4126	1550
75°	2394	1463	2788	1384
80°	1546	1364	1814	1255
85°	792	1362	1045	1244

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 10568 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.5	4.0
10°-20°	334.7	11.9
20°-30°	508.8	18.0
30°-40°	545.8	19.3
40°-50°	473.7	16.8
50°-60°	351.1	12.4
60°-70°	201.1	7.1
70°-80°	111.4	3.9
80°-90°	67.8	2.4
90°-100°	44.1	1.6
100°-110°	29.5	1.0
110°-120°	19.9	0.7
120°-130°	12.2	0.4
130°-140°	6.4	0.2
140°-150°	2.9	0.1
150°-160°	0.9	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	956.0	33.9
0°-40°	1501.8	53.2
0°-60°	2326.6	82.4
0°-90°	2706.9	95.9
90°-120°	93.6	3.3
90°-150°	115.2	4.1
90°-180°	116.0	4.1
0°-180°	2823.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1184	1184	1184	1184	1184	
5°	1192	1170	1194	1179	1192	114
15°	1176	1143	1176	1273	1176	333
25°	1136	1069	1136	1033	1136	525
35°	1075	728	1078	616	1075	673
45°	949	467	954	454	949	726
55°	662	350	678	318	662	587
65°	300	177	324	168	300	303
75°	86	112	100	106	86	98
85°	12	78	15	71	12	15
90°	0	65	1	60	0	1
95°	1	53	0	51	1	0
105°	1	40	1	38	1	1
115°	1	32	1	29	1	1
125°	1	24	1	20	1	1
135°	1	15	1	13	1	0
145°	1	9	1	7	1	0
155°	1	4	1	4	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°	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2
2.5°	1192.7	1189.7	1188.5	1186.0	1187.8	1195.2	1190.3	1182.3	1183.0	1168.9	1176.2
5°	1191.5	1187.8	1186.0	1183.6	1184.8	1191.5	1186.6	1178.7	1178.1	1164.0	1170.7
7.5°	1189.7	1186.0	1183.0	1181.1	1181.7	1187.2	1181.1	1171.9	1170.1	1154.8	1160.9
10°	1186.6	1184.2	1179.9	1176.8	1176.2	1182.3	1172.6	1163.4	1159.1	1143.2	1149.3
12.5°	1182.3	1178.7	1174.4	1168.9	1168.3	1171.9	1164.0	1151.1	1146.9	1134.0	1140.7
15°	1176.2	1171.9	1167.1	1160.9	1157.9	1160.3	1150.5	1138.9	1138.3	1127.3	1136.5
17.5°	1169.5	1163.4	1157.9	1149.3	1145.0	1146.9	1138.9	1128.5	1129.7	1123.0	1133.4
20°	1160.3	1153.6	1145.0	1136.5	1130.4	1133.4	1127.9	1120.0	1121.8	1116.9	1126.1
22.5°	1149.9	1140.7	1130.4	1120.6	1115.7	1120.0	1115.7	1108.9	1109.6	1106.5	1112.0
25°	1136.5	1126.1	1113.8	1101.6	1099.2	1102.2	1099.8	1094.3	1091.8	1086.9	1089.4
27.5°	1124.2	1112.6	1097.3	1084.5	1080.2	1086.3	1080.8	1071.6	1064.9	1058.2	1053.3
30°	1110.2	1096.1	1079.0	1064.3	1060.6	1063.1	1055.1	1041.0	1023.3	1014.7	1001.3
32.5°	1094.9	1076.5	1055.1	1038.6	1036.2	1034.3	1019.6	999.5	971.9	954.8	934.0
35°	1074.7	1054.5	1028.8	1008.6	1005.0	994.6	970.7	943.8	908.3	879.0	843.5
37.5°	1052.1	1028.2	1001.3	974.4	964.0	943.2	909.5	881.4	827.6	792.1	749.3
40°	1026.4	997.6	964.6	932.2	915.0	881.4	842.9	801.3	749.3	701.6	665.5
42.5°	990.9	960.3	921.2	885.1	855.7	811.1	765.8	707.1	659.4	619.0	582.3
45°	948.7	912.0	866.7	823.3	786.0	732.8	679.6	620.8	581.1	534.0	508.9
47.5°	894.2	854.5	806.2	757.8	708.9	650.2	594.5	538.3	498.5	464.9	446.5
50°	830.0	793.3	740.1	682.6	628.8	567.6	512.0	469.8	431.2	410.4	396.4
52.5°	750.5	716.3	661.8	599.4	547.4	487.5	436.7	402.5	374.9	359.7	354.8
55°	661.8	631.8	578.0	519.9	466.7	411.6	373.1	343.1	325.4	316.2	316.8
57.5°	567.0	543.8	493.0	441.0	390.9	349.3	314.4	290.5	277.1	276.5	278.3
60°	472.2	455.1	411.0	366.4	322.3	288.7	263.0	246.5	237.9	238.5	237.9
62.5°	381.7	365.8	334.0	297.3	262.4	239.8	216.5	209.8	202.5	201.8	201.8
65°	300.3	288.1	262.4	236.1	209.8	195.1	183.5	175.5	170.0	168.8	169.4
67.5°	225.7	220.8	203.1	185.3	168.8	159.6	149.9	148.0	143.7	143.7	145.0
70°	168.2	164.5	154.8	144.4	137.6	131.5	126.6	126.6	126.0	125.4	128.4
72.5°	121.7	122.3	119.3	111.3	110.7	109.5	108.3	110.1	110.7	112.5	116.2
75°	85.6	87.5	87.5	86.2	88.7	91.7	93.6	96.6	100.3	102.8	107.0
77.5°	60.6	60.6	63.6	67.3	72.2	77.7	82.6	86.9	91.7	94.8	98.5
80°	39.1	41.0	45.9	52.6	59.3	66.7	73.4	78.9	83.8	88.7	91.1
82.5°	23.2	26.3	32.4	41.0	49.5	58.7	65.4	72.2	77.7	82.6	84.4
85°	11.6	15.9	23.2	32.4	41.6	51.4	59.9	66.1	72.2	76.5	78.9
87.5°	3.7	8.6	16.5	25.1	34.9	44.7	53.8	60.6	66.1	69.7	72.2
90°	0.0	4.3	11.6	20.8	30.0	39.8	48.3	55.7	61.2	64.2	66.1
92.5°	0.0	2.4	9.2	17.1	25.7	35.5	44.0	50.8	55.7	58.7	59.9
95°	0.6	1.8	6.7	14.1	22.6	31.8	39.8	45.9	50.8	53.8	54.4
97.5°	0.6	1.2	5.5	11.6	19.6	28.1	36.1	42.2	45.9	48.9	49.5
100°	0.6	1.2	4.3	10.4	17.1	25.1	32.4	37.9	42.2	44.7	45.3
102.5°	0.6	0.6	3.7	8.6	15.3	22.0	28.7	34.3	37.9	40.4	41.6
105°	0.6	0.6	3.1	7.3	13.5	19.6	25.7	31.2	34.3	36.7	37.9
107.5°	0.6	0.6	2.4	6.1	11.6	17.1	23.2	27.5	31.2	33.6	34.9
110°	0.6	0.6	1.8	5.5	9.8	15.3	20.2	24.5	28.1	30.6	31.8

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.6	0.6	1.8	4.9	8.6	13.5	17.7	22.0	25.1	27.5	29.4
115°	0.6	0.6	1.8	4.3	8.0	11.6	15.9	19.6	22.6	25.1	26.9
117.5°	0.6	0.6	1.8	3.7	6.7	10.4	14.1	17.7	20.2	22.6	24.5
120°	0.6	0.6	1.2	3.1	6.1	9.2	12.2	15.3	18.3	20.8	22.6
122.5°	0.6	0.6	1.2	3.1	4.9	8.0	11.0	13.5	16.5	18.3	20.2
125°	0.6	0.6	1.2	2.4	4.3	7.3	9.8	12.2	14.1	16.5	18.3
127.5°	0.6	0.6	1.2	2.4	3.7	6.1	8.6	11.0	12.8	14.7	15.9
130°	0.6	0.6	1.2	1.8	3.1	4.9	7.3	9.2	11.6	12.8	14.1
132.5°	0.6	0.6	0.6	1.8	2.4	3.7	5.5	8.0	9.8	11.6	12.2
135°	0.6	0.6	0.6	1.2	2.4	3.1	4.3	6.1	8.0	9.8	11.0
137.5°	0.6	0.6	0.6	1.2	1.8	3.1	3.7	4.9	6.7	8.0	9.8
140°	0.6	0.6	0.6	1.2	1.8	2.4	3.1	4.3	5.5	6.7	8.0
142.5°	0.6	0.6	0.6	1.2	1.2	1.8	2.4	3.7	4.3	5.5	6.7
145°	0.6	0.6	0.6	1.2	1.2	1.8	2.4	3.1	3.7	4.3	5.5
147.5°	0.6	0.6	0.6	1.2	1.2	1.2	1.8	2.4	3.1	3.7	4.3
150°	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.8	2.4	3.1	3.7
152.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.8	2.4	3.1
155°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.8	2.4	2.4
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2
2.5°	1173.8	1175.0	1182.3	1181.7	1180.5	1179.3	1179.3	1178.1	1179.3	1182.3	1181.1
5°	1167.7	1169.5	1175.0	1174.4	1173.2	1172.6	1171.9	1170.1	1171.3	1175.6	1174.4
7.5°	1156.7	1158.5	1163.4	1160.9	1159.1	1160.3	1157.3	1155.4	1157.9	1162.2	1161.5
10°	1145.0	1146.3	1152.4	1151.1	1148.1	1148.7	1145.6	1144.4	1147.5	1149.9	1150.5
12.5°	1137.1	1141.4	1146.9	1146.3	1145.6	1146.3	1143.2	1142.0	1143.8	1146.3	1145.6
15°	1135.2	1140.7	1146.9	1146.9	1147.5	1148.1	1145.0	1143.2	1145.0	1146.9	1146.3
17.5°	1133.4	1140.1	1145.6	1145.0	1145.6	1146.9	1142.0	1140.7	1143.2	1145.6	1144.4
20°	1127.3	1133.4	1137.1	1135.9	1135.9	1136.5	1130.4	1130.4	1134.0	1135.9	1136.5
22.5°	1110.2	1117.5	1117.5	1114.4	1114.4	1112.0	1110.2	1106.5	1110.8	1113.8	1116.3
25°	1084.5	1087.5	1083.9	1077.1	1073.5	1070.4	1061.8	1069.2	1069.2	1078.4	1081.4
27.5°	1048.4	1041.7	1031.3	1017.2	1014.1	1004.3	998.8	1000.7	1003.7	1016.6	1026.4
30°	989.1	968.9	951.1	945.0	931.6	921.8	912.0	916.9	922.4	929.7	949.9
32.5°	910.8	891.2	862.4	852.0	838.0	825.7	814.1	821.5	831.2	836.1	858.2
35°	820.8	797.6	771.3	753.6	738.9	732.2	717.5	727.9	738.3	741.9	760.9
37.5°	725.4	701.6	678.3	663.0	649.0	644.7	634.9	642.2	650.2	655.7	671.6
40°	634.9	612.9	595.1	584.7	575.0	571.3	567.6	570.7	576.8	581.1	593.3
42.5°	557.2	539.5	527.3	521.1	514.4	509.5	510.1	511.3	514.4	523.6	529.1
45°	489.3	478.9	471.0	469.8	465.5	464.9	464.3	466.7	468.5	474.0	478.3
47.5°	434.9	430.6	428.8	431.2	433.1	430.6	431.8	434.9	438.6	438.6	437.9
50°	392.1	393.3	395.7	401.3	404.9	406.1	407.4	411.0	411.6	412.9	411.0
52.5°	357.2	358.4	365.2	373.7	378.0	379.8	382.3	386.0	386.0	387.2	384.7
55°	321.7	323.6	330.3	338.9	342.5	345.0	347.4	349.9	351.7	354.2	352.3
57.5°	282.6	288.1	292.4	294.8	297.3	299.1	300.9	301.5	305.2	305.8	308.9
60°	241.0	242.2	246.5	245.9	244.1	248.9	246.5	250.8	255.1	260.6	261.2
62.5°	201.2	201.8	204.9	203.7	206.1	205.5	207.4	207.4	210.4	212.9	215.9
65°	170.0	170.7	173.1	173.1	172.5	174.3	176.2	177.4	177.4	179.2	181.7
67.5°	146.8	148.6	151.1	152.3	153.5	153.5	155.4	156.0	157.2	157.8	159.0
70°	130.9	133.3	135.8	137.0	137.6	138.8	139.5	139.5	140.7	141.3	142.5
72.5°	119.3	121.7	123.6	123.6	124.8	125.4	125.4	126.0	126.6	127.8	129.1
75°	109.5	111.3	112.5	111.9	111.9	111.9	112.5	112.5	113.8	115.0	116.2
77.5°	100.3	102.1	102.1	100.9	100.9	100.9	100.9	101.5	102.1	103.4	104.6
80°	93.6	93.6	93.0	93.0	91.7	91.1	91.1	91.7	91.7	93.0	94.8
82.5°	86.2	86.2	85.6	85.0	84.4	83.8	83.8	84.4	85.0	85.6	86.9
85°	79.5	79.5	78.3	78.3	77.7	77.7	77.7	77.7	78.3	78.9	80.1
87.5°	72.8	72.2	71.6	71.0	71.0	71.0	71.0	71.0	71.6	72.8	73.4
90°	66.1	65.4	64.8	64.8	64.2	64.2	64.8	64.8	65.4	66.1	66.7
92.5°	59.9	59.3	58.7	58.7	58.1	58.1	58.7	58.1	59.3	59.3	59.9
95°	54.4	53.8	53.2	53.2	53.2	53.2	53.2	53.2	53.8	53.8	54.4
97.5°	49.5	48.9	48.3	48.3	48.9	48.3	48.9	48.9	48.9	49.5	50.2
100°	45.3	44.7	44.7	45.3	44.7	44.7	45.3	45.3	45.3	45.3	45.9
102.5°	41.6	41.6	41.6	41.6	41.6	41.6	42.2	42.2	42.2	42.2	42.8
105°	37.9	38.5	38.5	38.5	39.1	39.1	39.1	39.8	39.8	39.8	39.8
107.5°	35.5	36.1	36.1	36.7	36.7	37.3	37.3	37.3	37.3	37.9	37.9
110°	33.0	33.6	34.3	34.9	34.9	35.5	35.5	35.5	35.5	35.5	35.5

TEST NUMBER: P1213050

CATALOG NUMBER: 4SNLED-LD5-34SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	30.6	31.2	31.8	33.0	33.6	33.6	33.6	33.6	34.3	34.3	33.6
115°	28.1	29.4	30.0	31.2	31.8	31.8	32.4	32.4	32.4	32.4	31.8
117.5°	25.7	27.5	28.1	29.4	30.0	30.0	30.6	30.6	30.6	30.6	30.0
120°	23.9	25.1	26.3	26.9	27.5	28.1	28.1	28.7	28.7	28.7	28.1
122.5°	22.0	23.2	24.5	25.1	25.7	26.3	26.3	26.3	26.3	26.3	26.3
125°	19.6	20.8	22.0	22.6	23.2	23.9	23.9	24.5	24.5	24.5	23.9
127.5°	17.7	19.0	19.6	20.8	21.4	21.4	22.0	22.0	22.0	22.0	21.4
130°	15.3	16.5	17.7	18.3	19.0	19.0	19.6	19.6	19.6	19.6	19.6
132.5°	13.5	14.7	15.3	16.5	16.5	17.1	17.1	17.7	17.7	17.7	17.1
135°	12.2	12.8	13.5	14.7	14.7	15.3	15.3	15.3	15.3	15.3	15.3
137.5°	11.0	11.6	12.2	12.8	12.8	13.5	13.5	13.5	13.5	14.1	13.5
140°	9.2	10.4	11.0	11.0	11.6	11.6	11.6	12.2	12.2	12.2	11.6
142.5°	8.0	8.6	9.2	9.8	10.4	10.4	10.4	10.4	11.0	10.4	10.4
145°	6.1	7.3	8.0	8.6	9.2	9.2	9.2	9.2	9.2	9.2	9.2
147.5°	4.9	5.5	6.7	7.3	7.3	8.0	8.0	8.0	8.0	8.0	8.0
150°	4.3	4.3	5.5	6.1	6.7	6.7	6.7	6.7	6.7	6.7	6.7
152.5°	3.1	3.7	4.3	4.9	5.5	5.5	5.5	5.5	5.5	5.5	5.5
155°	3.1	3.1	3.7	3.7	4.3	4.3	4.3	4.3	4.9	4.3	4.3
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213050

CATALOG NUMBER: 4SNLED-LD5-34SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2
2.5°	1179.3	1178.7	1181.1	1178.7	1166.4	1171.3	1169.5	1176.2	1176.8	1178.7	1184.8
5°	1173.2	1173.2	1176.2	1173.8	1162.2	1167.1	1166.4	1173.2	1174.4	1175.6	1182.3
7.5°	1160.9	1161.5	1165.8	1164.0	1151.8	1159.1	1158.5	1166.4	1168.9	1171.3	1177.4
10°	1149.3	1148.7	1153.6	1151.8	1140.1	1148.7	1148.1	1156.0	1159.7	1164.0	1171.3
12.5°	1143.2	1141.4	1143.2	1141.4	1128.5	1135.2	1135.9	1145.0	1149.3	1154.8	1163.4
15°	1143.2	1140.1	1140.1	1136.5	1121.8	1126.1	1126.7	1132.8	1138.3	1143.8	1154.2
17.5°	1142.0	1138.9	1138.3	1135.2	1119.3	1119.3	1118.7	1123.0	1126.1	1131.6	1142.6
20°	1135.2	1134.0	1133.4	1131.6	1116.9	1114.4	1113.2	1113.2	1115.1	1116.9	1127.9
22.5°	1117.5	1118.7	1120.0	1121.2	1109.6	1105.3	1105.9	1104.7	1102.8	1102.8	1112.0
25°	1084.5	1090.6	1095.5	1101.0	1094.3	1091.2	1094.9	1093.0	1090.0	1087.5	1095.5
27.5°	1031.9	1044.7	1055.1	1068.6	1069.2	1066.7	1076.5	1075.3	1074.7	1071.0	1077.1
30°	959.1	979.3	993.3	1012.9	1029.4	1031.9	1048.4	1050.8	1053.3	1051.4	1057.6
32.5°	871.0	898.5	922.4	953.0	968.9	982.9	1006.2	1016.0	1025.8	1028.8	1035.5
35°	775.0	806.2	834.3	867.9	893.0	923.6	951.7	966.4	988.4	997.0	1006.8
37.5°	683.8	713.2	740.7	774.4	814.7	846.5	881.4	914.4	944.4	956.6	971.3
40°	603.1	627.0	653.3	682.6	719.3	760.9	798.8	844.7	880.2	904.6	926.1
42.5°	541.9	553.6	576.2	602.5	631.8	674.1	712.6	764.0	806.8	841.6	877.1
45°	487.5	493.0	509.5	523.6	553.6	590.9	631.8	682.0	726.7	771.3	814.1
47.5°	441.0	447.7	455.7	464.3	485.7	516.9	552.3	597.6	642.2	694.2	743.2
50°	409.8	411.6	412.9	416.5	429.4	450.8	479.5	518.1	560.9	616.6	668.5
52.5°	382.3	382.3	378.6	376.8	381.7	395.1	411.6	439.2	483.2	534.6	589.6
55°	352.9	347.4	346.2	340.1	341.3	347.4	355.4	376.8	412.9	456.9	510.1
57.5°	311.9	309.5	309.5	307.1	302.2	305.2	307.1	322.3	348.0	386.0	432.4
60°	264.8	263.6	266.7	267.3	263.0	264.8	264.2	273.4	291.8	322.3	360.9
62.5°	217.8	223.3	223.9	226.3	223.9	223.3	226.3	234.3	243.4	266.7	296.7
65°	182.9	185.9	186.6	189.6	188.4	188.4	190.8	197.0	202.5	218.4	241.6
67.5°	160.3	159.0	159.6	161.5	159.6	159.0	160.9	164.5	168.8	178.6	195.1
70°	142.5	141.3	141.3	141.3	138.8	137.0	137.6	138.8	140.7	146.2	156.6
72.5°	129.1	129.1	127.2	125.4	123.6	122.3	121.1	119.9	119.3	121.1	126.6
75°	116.8	117.4	116.8	115.0	112.5	110.1	107.7	105.2	102.1	100.9	101.5
77.5°	105.8	106.4	107.0	106.4	104.0	100.9	97.3	93.6	89.3	85.0	82.6
80°	96.0	97.3	97.9	97.3	95.4	93.0	88.7	84.4	78.3	72.8	66.7
82.5°	87.5	89.3	89.9	89.9	88.7	86.2	81.4	76.5	69.7	62.4	54.4
85°	80.7	82.0	83.2	83.2	82.6	80.1	75.2	69.7	63.0	54.4	45.9
87.5°	74.0	74.6	75.8	77.1	75.8	73.4	69.1	63.0	56.3	47.7	37.9
90°	67.3	67.9	69.1	70.3	69.7	67.3	63.6	58.1	50.8	41.6	31.8
92.5°	60.6	61.8	62.4	63.0	63.6	61.8	58.7	53.2	45.9	36.7	27.5
95°	55.7	55.7	56.9	57.5	58.1	56.3	53.8	48.3	41.6	33.0	23.9
97.5°	50.8	50.8	52.0	52.0	52.6	51.4	48.9	44.0	37.3	29.4	20.2
100°	45.9	46.5	47.1	47.7	47.7	47.1	44.7	39.8	33.6	26.3	17.7
102.5°	42.8	42.8	43.4	43.4	44.0	42.8	40.4	36.1	30.0	23.2	15.3
105°	39.8	39.8	40.4	40.4	39.8	38.5	36.1	32.4	26.9	20.2	13.5
107.5°	37.3	37.3	37.3	37.3	36.7	35.5	33.0	28.7	23.9	18.3	12.2
110°	35.5	34.9	34.9	34.3	33.6	31.8	29.4	25.7	21.4	15.9	10.4

TEST NUMBER: P1213050

CATALOG NUMBER: 4SNLED-LD5-34SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	33.6	33.0	32.4	31.8	30.6	28.7	26.3	23.2	19.0	14.1	9.2
115°	31.8	31.2	30.6	29.4	28.1	26.3	23.9	20.8	16.5	12.2	8.0
117.5°	30.0	29.4	28.1	26.9	25.7	23.9	21.4	18.3	14.7	11.0	7.3
120°	27.5	26.9	26.3	25.1	23.9	21.4	19.0	16.5	12.8	9.8	6.1
122.5°	25.7	25.1	23.9	23.2	21.4	19.6	17.1	14.7	11.6	8.6	5.5
125°	23.2	22.6	22.0	20.8	19.6	17.1	15.3	12.8	10.4	7.3	4.3
127.5°	21.4	20.8	19.6	18.3	17.1	15.3	13.5	11.6	9.2	6.1	4.3
130°	19.0	18.3	17.7	16.5	15.3	13.5	12.2	9.8	8.0	5.5	3.7
132.5°	16.5	16.5	15.9	14.7	13.5	12.2	10.4	8.6	6.7	4.9	3.1
135°	15.3	14.7	14.1	12.8	12.2	10.4	9.2	7.3	5.5	4.3	2.4
137.5°	13.5	12.8	12.2	11.6	10.4	9.2	8.0	6.1	4.9	3.7	2.4
140°	11.6	11.0	11.0	9.8	9.2	8.0	6.7	5.5	4.3	3.1	1.8
142.5°	10.4	9.8	9.2	8.6	8.0	6.7	5.5	4.3	3.7	2.4	1.8
145°	9.2	8.6	8.0	7.3	6.7	5.5	4.9	3.7	3.1	2.4	1.8
147.5°	7.3	7.3	6.7	6.1	5.5	4.9	4.3	3.7	2.4	1.8	1.2
150°	6.1	6.1	5.5	4.9	4.9	4.3	3.7	3.1	2.4	1.8	1.2
152.5°	5.5	4.9	4.9	4.3	4.3	3.7	3.1	2.4	1.8	1.8	1.2
155°	4.3	4.3	4.3	3.7	3.7	3.1	2.4	2.4	1.8	1.2	1.2
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213050

CATALOG NUMBER: 4SNLED-LD5-34SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2
2.5°	1186.0	1178.7	1184.8	1195.8	1194.6	1193.4	1192.1	1194.6	1202.5	1198.2	1191.5
5°	1184.2	1176.8	1183.6	1194.0	1193.4	1191.5	1190.3	1192.7	1200.7	1196.4	1189.1
7.5°	1180.5	1173.8	1178.7	1189.1	1189.1	1187.8	1186.6	1189.1	1196.4	1192.7	1185.4
10°	1174.4	1169.5	1174.4	1184.2	1184.8	1182.3	1181.1	1184.2	1191.5	1189.7	1183.6
12.5°	1169.5	1164.6	1170.1	1179.9	1180.5	1178.1	1176.2	1179.9	1189.7	1190.9	1189.1
15°	1162.8	1158.5	1165.2	1175.6	1175.6	1173.8	1173.8	1178.7	1192.1	1197.6	1200.7
17.5°	1153.0	1149.9	1157.9	1168.3	1168.9	1167.7	1168.3	1178.1	1195.8	1209.3	1217.8
20°	1140.7	1139.5	1148.1	1159.1	1160.9	1161.5	1164.6	1179.3	1203.8	1222.1	1230.7
22.5°	1126.1	1126.7	1136.5	1148.1	1150.5	1152.4	1158.5	1179.3	1209.9	1229.4	1233.1
25°	1109.6	1111.4	1121.8	1135.9	1138.9	1142.6	1153.0	1179.9	1211.7	1224.5	1218.4
27.5°	1091.8	1095.5	1108.9	1123.6	1127.3	1133.4	1146.9	1176.2	1203.1	1203.8	1181.1
30°	1073.5	1077.7	1093.7	1110.8	1116.9	1123.0	1139.5	1167.7	1182.3	1162.8	1123.0
32.5°	1052.7	1058.8	1074.7	1095.5	1102.8	1110.8	1127.3	1151.1	1145.6	1103.4	1046.6
35°	1026.4	1034.9	1053.3	1077.7	1084.5	1094.9	1106.5	1112.0	1087.5	1027.6	963.4
37.5°	994.0	1006.8	1028.2	1056.3	1063.7	1070.4	1073.5	1058.2	1009.2	944.4	877.7
40°	956.6	976.2	999.5	1030.6	1038.0	1038.0	1027.0	994.6	932.8	847.8	773.8
42.5°	911.4	935.2	964.6	995.8	1003.1	994.6	968.3	911.4	841.0	746.2	667.9
45°	856.3	888.1	921.2	953.6	957.3	938.3	891.2	819.0	732.2	644.1	569.5
47.5°	790.9	832.5	868.6	905.3	900.4	868.6	805.6	723.6	631.8	548.7	488.7
50°	717.5	766.4	806.8	841.6	831.2	787.2	713.2	627.6	536.4	465.5	415.9
52.5°	639.2	695.5	735.8	764.0	749.9	697.3	615.9	534.0	459.4	394.5	361.5
55°	557.8	614.7	656.3	678.3	660.0	603.1	523.0	448.3	378.0	335.8	316.2
57.5°	478.9	532.1	571.3	589.0	565.8	508.9	434.9	371.9	321.1	285.6	275.9
60°	403.1	446.5	483.8	497.3	472.2	419.6	356.0	305.8	268.5	244.1	239.2
62.5°	332.7	368.2	397.6	408.0	383.5	342.5	287.5	250.2	223.9	211.6	205.5
65°	274.6	295.4	325.4	323.6	308.9	271.0	230.6	204.3	187.2	179.2	175.5
67.5°	215.9	234.9	253.8	256.3	237.9	211.6	185.3	166.4	157.2	152.9	151.1
70°	167.0	181.1	192.7	189.6	179.8	163.3	146.8	136.4	132.7	130.9	130.9
72.5°	129.7	137.0	142.5	138.8	132.7	124.2	116.2	111.9	112.5	113.8	115.0
75°	100.3	102.1	103.4	99.7	98.5	93.0	92.4	93.0	96.6	100.3	102.1
77.5°	77.1	74.6	72.8	69.1	69.7	69.1	72.2	77.1	82.6	88.1	93.0
80°	59.3	53.8	49.5	45.9	47.7	50.8	56.9	64.2	71.6	77.7	83.8
82.5°	45.9	37.9	31.8	28.1	31.8	36.7	44.7	53.8	62.4	69.1	75.8
85°	35.5	26.3	19.0	15.3	19.0	26.3	34.9	45.3	54.4	61.8	68.5
87.5°	27.5	19.0	10.4	6.1	10.4	18.3	28.1	37.9	47.1	55.7	62.4
90°	22.0	12.8	4.9	1.2	5.5	12.8	22.0	31.8	41.0	50.2	56.9
92.5°	17.7	9.2	2.4	0.0	3.1	9.8	18.3	27.5	36.7	45.3	52.0
95°	14.7	7.3	1.8	0.0	2.4	7.3	14.7	23.9	32.4	41.0	46.5
97.5°	12.2	5.5	1.2	0.0	1.2	6.1	12.2	20.2	28.7	36.7	42.2
100°	10.4	4.9	1.2	0.0	1.2	4.9	10.4	17.7	25.1	32.4	37.9
102.5°	8.6	3.7	0.6	0.6	0.6	3.7	9.2	15.3	22.0	28.7	34.3
105°	8.0	3.1	0.6	0.6	0.6	3.1	8.0	13.5	19.6	25.7	30.6
107.5°	6.7	2.4	0.6	0.6	0.6	2.4	6.7	11.6	17.7	23.2	27.5
110°	5.5	2.4	0.6	0.6	0.6	2.4	5.5	10.4	15.3	20.2	24.5



TEST NUMBER: P1213050

CATALOG NUMBER: 4SNLED-LD5-34SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	4.9	1.8	0.6	0.6	0.6	1.8	4.9	9.2	13.5	18.3	22.0
115°	4.3	1.8	0.6	0.6	0.6	1.8	4.3	8.0	11.6	15.9	19.6
117.5°	3.7	1.8	0.6	0.6	0.6	1.2	3.7	6.7	10.4	14.1	17.7
120°	3.1	1.2	0.6	0.6	0.6	1.2	3.1	6.1	9.2	12.2	15.3
122.5°	3.1	1.2	0.6	0.6	0.6	1.2	2.4	4.9	8.0	10.4	13.5
125°	2.4	1.2	0.6	0.6	0.6	0.6	2.4	4.3	6.7	9.2	11.6
127.5°	2.4	1.2	0.6	0.6	0.6	0.6	1.8	3.7	5.5	8.0	10.4
130°	1.8	1.2	0.6	0.6	0.6	0.6	1.2	3.1	4.9	6.7	8.6
132.5°	1.8	1.2	0.6	0.6	0.6	0.6	1.2	2.4	3.7	5.5	7.3
135°	1.8	0.6	0.6	0.6	0.6	0.6	0.6	1.8	3.1	4.3	5.5
137.5°	1.2	0.6	0.6	0.6	0.6	0.6	0.6	1.2	2.4	3.1	4.9
140°	1.2	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.8	2.4	3.7
142.5°	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.8	3.1
145°	1.2	0.6	0.6	1.2	1.2	0.6	0.6	1.2	1.2	1.8	2.4
147.5°	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.8
150°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.8
152.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
155°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213050

CATALOG NUMBER: 4SNLED-LD5-34SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2
2.5°	1190.3	1176.2	1183.6	1181.1	1183.6	1189.7	1189.1	1187.2	1188.5	1185.4	1182.3
5°	1187.8	1173.8	1181.1	1178.1	1181.1	1187.2	1186.0	1184.2	1186.0	1182.3	1179.3
7.5°	1184.8	1171.9	1180.5	1179.9	1185.4	1193.4	1194.0	1194.0	1198.2	1192.7	1190.3
10°	1184.8	1178.1	1189.7	1194.0	1208.0	1218.4	1219.7	1222.1	1229.4	1228.2	1222.1
12.5°	1197.6	1196.4	1213.5	1223.9	1236.8	1251.5	1259.4	1261.9	1266.8	1263.1	1260.6
15°	1214.1	1220.3	1239.2	1250.8	1264.9	1275.9	1277.8	1279.0	1282.7	1277.1	1272.9
17.5°	1236.2	1239.8	1255.1	1260.0	1269.2	1271.0	1268.6	1262.5	1262.5	1250.2	1246.6
20°	1246.6	1244.7	1250.8	1242.9	1239.2	1228.2	1217.8	1206.2	1205.6	1192.7	1191.5
22.5°	1237.4	1225.2	1212.3	1192.7	1184.2	1168.3	1154.2	1147.5	1143.2	1126.7	1122.4
25°	1205.0	1175.0	1156.0	1132.8	1112.0	1093.7	1080.2	1066.1	1052.7	1039.2	1033.1
27.5°	1148.7	1120.6	1090.0	1057.6	1028.8	1000.7	978.0	964.0	951.1	933.4	924.2
30°	1079.6	1040.4	1006.8	975.6	928.5	894.2	875.3	847.2	837.4	829.4	812.3
32.5°	998.2	951.1	905.3	863.1	814.7	782.9	757.8	737.1	730.9	710.1	705.2
35°	908.3	846.5	794.5	753.0	718.1	679.6	658.8	644.7	632.5	618.4	615.9
37.5°	802.5	746.8	688.1	651.4	623.9	590.9	575.0	565.2	559.7	549.3	547.4
40°	696.1	640.4	600.0	563.3	546.2	528.5	516.9	512.6	510.1	506.5	502.8
42.5°	599.4	550.5	521.7	497.3	489.9	481.4	478.3	480.8	478.3	477.1	476.5
45°	517.5	480.2	460.0	452.6	450.8	448.3	450.8	455.1	455.7	454.5	454.5
47.5°	442.8	425.1	416.5	417.8	420.8	422.7	426.9	432.4	433.7	430.6	431.8
50°	393.9	383.5	381.7	386.6	393.3	395.7	400.6	404.9	404.3	403.1	401.9
52.5°	348.0	345.0	349.9	354.8	362.1	363.3	365.2	367.0	366.4	363.9	362.7
55°	309.5	311.9	316.2	318.1	323.6	323.0	323.6	323.6	321.1	319.9	318.1
57.5°	274.6	275.2	277.7	278.3	281.4	280.1	279.5	278.3	274.6	274.0	272.2
60°	239.2	237.9	243.4	239.2	241.6	239.2	238.5	235.5	231.8	231.2	230.0
62.5°	205.5	203.1	206.7	204.9	206.1	203.7	202.5	198.8	195.7	195.1	194.5
65°	175.5	174.3	178.0	177.4	178.6	175.5	174.3	171.9	169.4	168.8	168.2
67.5°	150.5	153.5	155.4	155.4	156.6	156.0	152.9	152.3	151.7	149.2	149.2
70°	132.1	134.0	137.6	138.2	137.6	138.8	136.4	135.8	135.2	134.0	133.3
72.5°	117.4	119.9	123.6	124.2	123.6	123.6	122.3	121.7	121.7	119.9	119.9
75°	105.8	108.9	111.9	111.9	111.9	110.7	109.5	109.5	108.3	107.7	106.4
77.5°	96.0	99.7	102.1	101.5	100.9	99.7	99.7	97.9	96.0	96.0	94.8
80°	88.7	91.1	93.0	92.4	91.7	89.9	89.3	87.5	86.2	84.4	84.4
82.5°	80.7	83.8	85.0	84.4	83.2	81.4	80.7	79.5	78.3	77.7	76.5
85°	74.0	77.1	77.7	76.5	75.2	74.0	73.4	72.8	72.2	71.0	71.0
87.5°	67.3	70.3	70.3	69.7	68.5	67.9	67.3	66.7	66.1	65.4	64.8
90°	61.8	64.2	64.2	63.6	63.0	62.4	61.8	61.2	60.6	59.9	59.9
92.5°	56.3	58.7	58.7	58.1	57.5	56.9	56.9	56.3	55.7	55.0	54.4
95°	51.4	53.8	53.8	53.8	53.2	52.6	52.6	52.0	51.4	51.4	50.8
97.5°	46.5	48.9	48.9	48.9	48.3	47.7	47.7	47.1	47.1	47.1	46.5
100°	42.2	44.0	44.7	44.7	44.0	44.0	44.0	43.4	43.4	43.4	42.8
102.5°	37.9	39.8	41.0	41.0	41.0	40.4	40.4	40.4	40.4	40.4	39.8
105°	34.3	36.1	37.3	37.9	37.9	37.9	37.9	37.9	37.9	37.9	37.9
107.5°	31.2	33.0	34.3	34.9	35.5	35.5	36.1	36.1	36.1	36.1	36.1
110°	28.1	30.0	31.8	32.4	33.0	33.6	33.6	34.3	33.6	33.6	33.6

TEST NUMBER: P1213050

CATALOG NUMBER: 4SNLED-LD5-34SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	25.1	27.5	28.7	30.0	30.6	31.2	31.8	31.8	31.8	31.8	31.8
115°	22.6	25.1	26.3	27.5	28.7	29.4	29.4	30.0	30.0	30.0	29.4
117.5°	20.2	22.6	23.9	25.1	25.7	26.9	27.5	27.5	27.5	27.5	26.9
120°	18.3	20.2	21.4	22.6	23.9	24.5	25.1	25.1	25.1	25.1	25.1
122.5°	15.9	17.7	19.6	20.8	21.4	22.0	22.6	22.6	22.6	22.6	22.6
125°	14.1	15.9	17.1	18.3	19.0	20.2	20.2	20.2	20.2	20.2	20.2
127.5°	12.2	14.1	15.3	16.5	17.1	17.7	18.3	18.3	18.3	18.3	18.3
130°	10.4	12.2	13.5	14.7	15.3	15.9	15.9	16.5	16.5	16.5	16.5
132.5°	9.2	10.4	11.6	12.8	13.5	14.1	14.1	14.7	14.7	14.7	14.7
135°	7.3	9.2	9.8	11.0	11.6	12.2	12.2	12.8	12.8	12.8	12.8
137.5°	6.1	7.3	8.6	9.8	10.4	10.4	11.0	11.0	11.6	11.6	11.6
140°	4.9	5.5	7.3	8.0	8.6	9.2	9.8	9.8	9.8	9.8	9.8
142.5°	3.7	4.9	5.5	6.7	7.3	8.0	8.6	8.6	8.6	8.6	8.6
145°	3.1	3.7	4.3	5.5	6.1	6.7	7.3	7.3	7.3	7.3	7.3
147.5°	2.4	3.1	3.7	4.3	4.9	5.5	6.1	6.1	6.1	6.1	6.1
150°	1.8	2.4	3.1	3.1	3.7	4.3	4.9	5.5	5.5	5.5	5.5
152.5°	1.8	1.8	2.4	2.4	3.1	3.7	4.3	4.3	4.3	4.3	4.3
155°	1.2	1.8	1.8	1.8	2.4	2.4	3.1	3.7	3.7	3.7	3.7
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213050

CATALOG NUMBER: 4SNLED-LD5-34SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2
2.5°	1184.2	1186.6	1185.4	1183.6	1183.0	1186.0	1183.0	1168.9	1174.4	1175.0	1179.3
5°	1182.3	1184.2	1183.0	1181.7	1179.9	1183.6	1179.9	1165.2	1170.7	1171.3	1175.6
7.5°	1194.6	1195.2	1195.2	1192.1	1187.2	1189.1	1184.2	1167.7	1170.7	1170.7	1173.8
10°	1225.2	1226.4	1228.2	1220.3	1214.1	1209.3	1202.5	1182.3	1181.7	1176.8	1176.8
12.5°	1264.9	1261.9	1258.8	1255.1	1250.2	1244.1	1234.3	1210.5	1202.5	1194.6	1186.6
15°	1276.5	1275.3	1274.7	1272.9	1269.8	1268.0	1260.6	1236.8	1225.2	1215.4	1201.3
17.5°	1246.0	1248.4	1256.4	1257.0	1260.6	1268.0	1266.8	1250.2	1239.8	1235.6	1218.4
20°	1190.9	1191.5	1201.3	1205.6	1221.5	1233.7	1242.9	1241.1	1238.6	1243.5	1230.7
22.5°	1124.8	1129.1	1139.5	1146.3	1161.5	1175.6	1190.3	1198.2	1211.1	1231.3	1228.8
25°	1034.9	1040.4	1055.1	1066.1	1087.5	1108.9	1128.5	1142.6	1157.9	1196.4	1209.3
27.5°	927.3	935.8	954.8	965.8	995.8	1017.8	1045.9	1073.5	1094.9	1138.9	1165.2
30°	814.1	821.5	841.6	856.9	882.6	912.6	948.1	987.2	1022.7	1067.3	1100.4
32.5°	708.3	716.3	732.8	746.2	775.0	800.1	839.2	887.5	920.6	982.3	1026.4
35°	615.9	623.3	634.9	646.5	670.4	696.1	729.7	776.8	819.0	883.2	938.9
37.5°	551.1	552.3	559.1	565.8	583.5	603.1	629.4	671.0	710.1	779.3	840.4
40°	504.6	504.6	508.3	510.1	518.1	529.7	546.2	578.6	611.0	663.7	738.3
42.5°	475.9	474.6	474.6	475.3	474.6	480.2	489.9	505.2	534.0	577.4	635.5
45°	454.5	452.0	450.2	445.9	443.5	443.5	444.1	449.6	466.1	494.2	541.3
47.5°	430.6	430.0	426.9	422.0	417.8	414.7	409.8	408.0	412.9	428.8	460.6
50°	403.1	400.0	397.0	393.3	388.4	385.3	376.2	376.8	372.5	379.8	396.4
52.5°	362.7	360.3	359.0	356.0	354.2	352.9	345.6	338.2	336.4	337.6	343.8
55°	318.1	319.3	314.4	316.8	316.2	310.7	307.7	302.2	300.3	299.7	302.8
57.5°	271.6	272.8	269.7	272.2	272.2	269.1	267.3	267.3	263.0	259.3	263.6
60°	229.4	226.9	228.8	231.8	231.8	230.0	228.8	228.8	225.7	224.5	227.5
62.5°	195.1	192.7	194.5	197.6	198.2	197.0	195.7	195.7	192.1	192.1	194.5
65°	168.8	169.4	168.8	171.3	171.3	171.9	170.7	169.4	165.1	167.0	166.4
67.5°	149.9	149.2	149.2	151.7	151.1	152.3	151.1	149.2	146.2	143.7	143.1
70°	134.0	133.3	133.3	134.6	135.2	135.2	134.6	133.3	129.1	126.6	124.8
72.5°	119.9	119.3	119.9	120.5	121.1	121.7	121.1	119.9	116.2	113.2	110.1
75°	107.0	106.4	108.3	108.3	108.9	108.9	109.5	108.9	105.8	102.1	98.5
77.5°	94.2	94.8	96.6	97.3	98.5	99.1	99.7	99.7	96.6	93.6	88.7
80°	83.8	85.0	86.2	86.9	88.1	89.9	90.5	91.1	88.7	85.6	80.1
82.5°	76.5	77.1	78.3	78.9	80.7	81.4	82.0	83.2	82.0	78.9	72.8
85°	70.3	71.0	72.2	72.2	73.4	74.6	75.2	75.8	75.2	72.2	66.1
87.5°	64.8	65.4	66.1	66.7	67.3	67.9	68.5	69.1	68.5	65.4	59.9
90°	59.9	59.9	60.6	60.6	61.2	61.8	63.0	63.0	62.4	59.9	54.4
92.5°	54.4	55.0	55.0	55.7	56.3	56.9	57.5	57.5	56.9	54.4	49.5
95°	50.8	50.8	51.4	51.4	52.0	52.0	52.6	52.6	52.0	49.5	44.7
97.5°	46.5	46.5	46.5	46.5	47.1	47.1	47.7	47.7	47.1	44.7	40.4
100°	42.8	42.8	42.8	42.8	42.8	43.4	43.4	43.4	42.8	40.4	36.1
102.5°	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	38.5	36.7	32.4
105°	37.9	37.9	37.9	37.3	37.3	37.3	36.7	36.7	34.9	33.0	29.4
107.5°	35.5	35.5	35.5	34.9	34.9	34.3	33.6	33.6	31.8	30.0	26.3
110°	33.6	33.6	33.6	33.0	32.4	31.8	31.2	30.6	28.7	26.3	23.2

TEST NUMBER: P1213050

CATALOG NUMBER: 4SNLED-LD5-34SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	31.8	31.8	31.2	31.2	30.6	30.0	28.7	28.1	26.3	23.9	20.8
115°	29.4	29.4	29.4	28.7	28.1	27.5	26.9	25.7	23.9	21.4	18.3
117.5°	26.9	26.9	26.9	26.3	25.7	25.1	24.5	23.2	21.4	19.0	16.5
120°	24.5	24.5	24.5	23.9	23.2	22.6	22.0	20.8	19.0	17.1	14.1
122.5°	22.6	22.6	22.0	21.4	20.8	20.2	19.6	18.3	17.1	14.7	12.2
125°	20.2	20.2	19.6	19.6	19.0	18.3	17.7	16.5	14.7	12.8	11.0
127.5°	18.3	17.7	17.7	17.7	17.1	16.5	15.3	14.7	12.8	11.0	9.2
130°	15.9	15.9	15.9	15.3	15.3	14.7	13.5	12.2	11.0	9.8	8.0
132.5°	14.1	14.1	14.1	14.1	13.5	12.8	11.6	11.0	9.8	8.0	6.7
135°	12.8	12.8	12.2	12.2	11.6	11.0	10.4	9.2	8.0	6.7	5.5
137.5°	11.0	11.0	11.0	10.4	10.4	9.8	8.6	8.0	7.3	6.1	4.9
140°	9.8	9.8	9.2	9.2	8.6	8.6	8.0	6.7	6.1	4.9	4.3
142.5°	8.6	8.6	8.0	8.0	7.3	7.3	6.7	6.1	4.9	4.3	3.1
145°	7.3	7.3	6.7	6.7	6.7	6.1	5.5	4.9	4.3	3.7	3.1
147.5°	6.1	6.1	6.1	5.5	5.5	4.9	4.9	4.3	3.7	3.1	2.4
150°	5.5	5.5	4.9	4.9	4.9	4.3	3.7	3.7	3.1	2.4	1.8
152.5°	4.3	4.3	4.3	4.3	3.7	3.7	3.1	3.1	2.4	1.8	1.8
155°	3.7	3.7	3.7	3.1	3.1	3.1	2.4	2.4	1.8	1.8	1.2
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CATALOG NUMBER: 4SNLED-LD5-34SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2	1184.2
2.5°	1177.4	1176.8	1182.3	1181.7	1174.4	1185.4	1192.7
5°	1174.4	1173.8	1178.7	1179.9	1171.9	1183.6	1191.5
7.5°	1171.9	1171.3	1176.8	1178.7	1170.7	1181.1	1189.7
10°	1172.6	1169.5	1174.4	1175.6	1168.3	1179.3	1186.6
12.5°	1176.8	1169.5	1171.3	1171.3	1164.6	1174.4	1182.3
15°	1187.2	1171.9	1169.5	1167.7	1159.1	1168.3	1176.2
17.5°	1198.9	1178.1	1169.5	1163.4	1153.0	1160.9	1169.5
20°	1210.5	1184.8	1170.7	1160.9	1146.9	1154.2	1160.3
22.5°	1216.0	1190.9	1171.9	1157.3	1139.5	1143.2	1149.9
25°	1208.6	1188.5	1169.5	1151.8	1130.4	1131.0	1136.5
27.5°	1181.7	1176.2	1164.0	1146.3	1123.0	1120.0	1124.2
30°	1135.9	1151.1	1151.8	1138.9	1114.4	1108.3	1110.2
32.5°	1071.6	1105.9	1126.1	1123.6	1102.2	1093.7	1094.9
35°	997.6	1040.4	1084.5	1099.2	1083.9	1077.1	1074.7
37.5°	908.9	966.4	1025.1	1061.2	1058.8	1054.5	1052.1
40°	811.1	880.2	949.9	1007.4	1025.1	1025.1	1026.4
42.5°	706.5	787.2	863.7	936.5	978.0	987.2	990.9
45°	605.5	686.9	770.1	853.9	909.5	938.3	948.7
47.5°	513.8	595.8	674.7	766.4	840.4	877.7	894.2
50°	435.5	496.7	579.9	671.0	751.7	797.6	830.0
52.5°	370.7	418.4	491.2	576.2	657.5	720.5	750.5
55°	316.2	348.6	410.4	483.8	561.5	627.0	661.8
57.5°	270.4	296.0	338.2	399.4	464.9	529.7	567.0
60°	230.0	247.7	276.5	324.8	380.5	436.1	472.2
62.5°	195.1	206.7	225.7	261.2	304.6	348.0	381.7
65°	168.2	173.1	183.5	205.5	238.5	271.6	300.3
67.5°	141.9	145.0	152.9	166.4	182.9	206.7	225.7
70°	122.3	122.3	122.9	130.9	139.5	154.8	168.2
72.5°	106.4	104.6	100.9	102.8	104.6	113.2	121.7
75°	93.6	89.3	83.2	80.7	79.5	80.7	85.6
77.5°	82.6	76.5	69.1	63.0	58.1	56.3	60.6
80°	73.4	66.1	57.5	49.5	41.6	37.3	39.1
82.5°	66.1	56.9	47.7	38.5	29.4	23.2	23.2
85°	58.1	49.5	39.8	30.0	20.8	12.8	11.6
87.5°	52.6	43.4	33.0	23.9	14.7	6.7	3.7
90°	47.1	37.9	28.1	19.0	10.4	3.1	0.0
92.5°	42.2	33.6	24.5	15.3	7.3	1.8	0.0
95°	37.9	30.0	20.8	12.8	6.1	1.2	0.6
97.5°	33.6	26.3	18.3	10.4	4.3	1.2	0.6
100°	30.6	23.2	15.9	8.6	3.7	0.6	0.6
102.5°	26.9	20.8	13.5	7.3	3.1	0.6	0.6
105°	23.9	18.3	11.6	6.1	2.4	0.6	0.6
107.5°	21.4	15.9	10.4	5.5	2.4	0.6	0.6
110°	19.0	14.1	9.2	4.9	1.8	0.6	0.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	17.1	12.2	8.0	4.3	1.2	0.6	0.6
115°	14.7	11.0	6.7	3.7	1.2	0.6	0.6
117.5°	12.8	9.2	6.1	3.1	1.2	0.6	0.6
120°	11.0	8.0	4.9	2.4	0.6	0.6	0.6
122.5°	9.8	6.7	4.3	2.4	0.6	0.6	0.6
125°	8.6	6.1	3.7	1.8	0.6	0.6	0.6
127.5°	7.3	4.9	3.1	1.2	0.6	0.6	0.6
130°	6.1	4.3	2.4	1.2	0.6	0.6	0.6
132.5°	4.9	3.7	2.4	1.2	0.6	0.6	0.6
135°	4.3	3.1	1.8	1.2	0.6	0.6	0.6
137.5°	3.7	2.4	1.2	1.2	1.2	0.6	0.6
140°	3.1	1.8	1.2	1.2	1.2	1.2	0.6
142.5°	2.4	1.8	1.2	1.2	1.2	1.2	0.6
145°	1.8	1.2	1.2	1.2	1.2	1.2	0.6
147.5°	1.8	1.2	1.2	1.2	1.2	1.2	0.6
150°	1.2	1.2	1.2	1.2	1.2	1.2	1.2
152.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2
155°	1.2	1.2	1.2	1.2	1.2	1.2	1.2
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)