

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: P1212970

Luminaire Tested: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1212970
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33524)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U
Description: 2FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

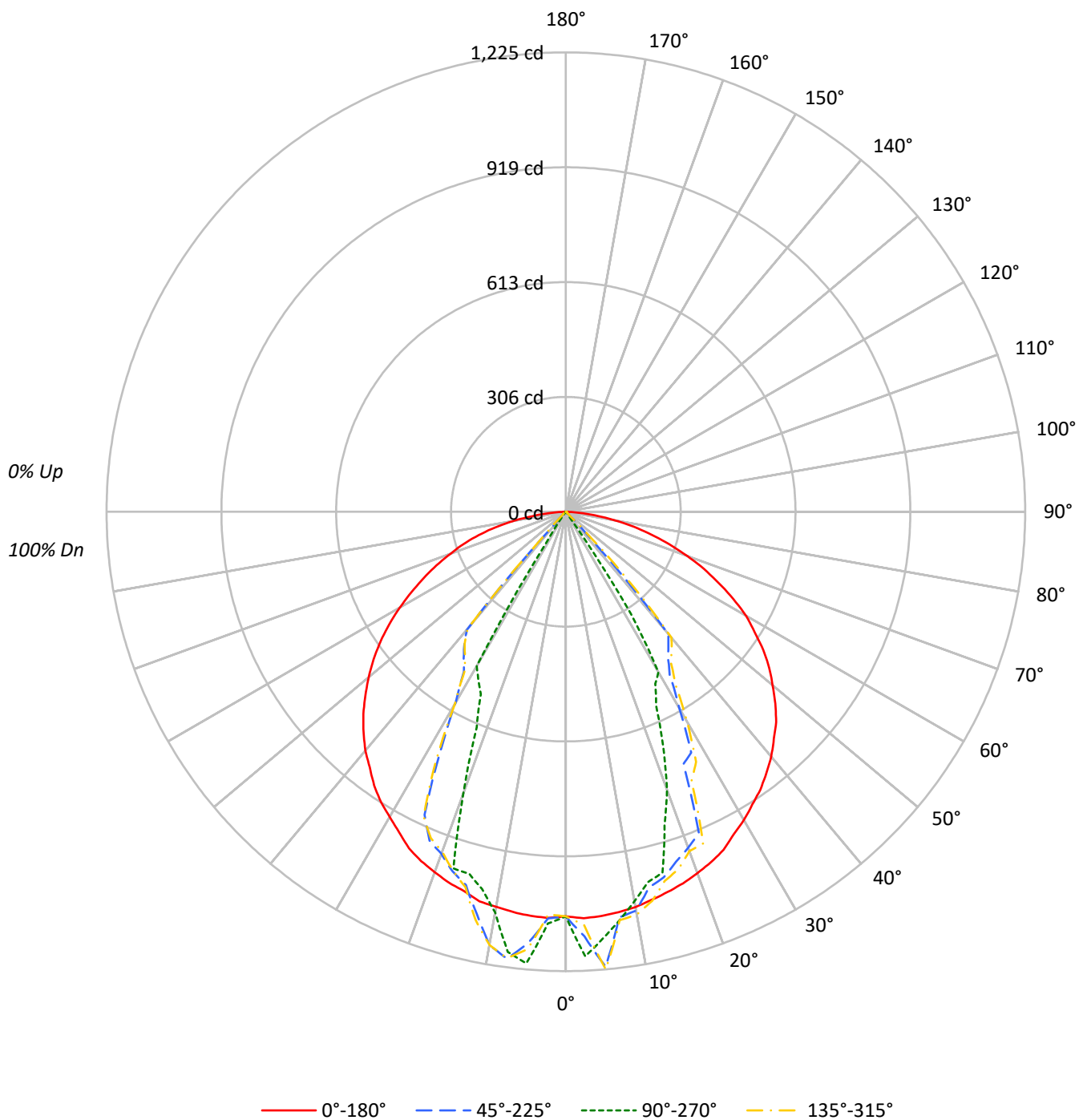
Lumens per Lamp: N/A
Luminaire Lumens: 1534.0 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.12')
CIE Type: Direct

Input Watts (W): 14
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P1212970

CATALOG NUMBER: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U

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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90		
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81		
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72		
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65		
5	85	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59		
6	80	69	62	57	79	69	62	57	67	61	56	65	60	56	64	59	55	54		
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49		
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45		
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42		
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	17436	17436	17436	17436
5°	17460	17932	17454	18991
10°	17370	16227	17359	16696
15°	17274	15147	17232	15186
20°	17244	11930	17195	12077
25°	17241	8634	17156	8147
30°	17105	7574	16924	7281
35°	17094	167	16843	203
40°	17084	37	16675	37
45°	17066	22	16424	17
50°	16844	17	16069	17
55°	16634	11	15612	11
60°	16188	12	14922	12
65°	15175	21	14096	13
70°	13869	23	13200	23
75°	11985	26	12183	26
80°	9345	30	9881	30
85°	5008	35	5116	35

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2°

Vertical Angle: 45°

Luminance: 18433 cd/sqm

TEST NUMBER: P1212970

CATALOG NUMBER: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.2	7.1
10°-20°	295.2	19.2
20°-30°	375.7	24.5
30°-40°	317.3	20.7
40°-50°	207.5	13.5
50°-60°	130.7	8.5
60°-70°	69.6	4.5
70°-80°	25.4	1.7
80°-90°	4.4	0.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	779.1	50.8
0°-40°	1096.5	71.5
0°-60°	1434.7	93.5
0°-90°	1534.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1534.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1079	1079	1079	1079	1079	
5°	1082	1142	1082	1209	1082	103
15°	1050	996	1047	999	1050	297
25°	995	569	990	537	995	458
35°	904	11	891	13	904	566
45°	793	1	764	1	793	610
55°	643	1	604	1	643	573
65°	450	1	418	1	450	446
75°	237	1	241	1	237	251
85°	46	1	47	1	46	59
90°	0	0	0	0	0	

TEST NUMBER: P1212970

CATALOG NUMBER: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8
2.5°	1085.0	1085.6	1085.9	1086.6	1087.6	1087.9	1088.5	1087.9	1087.9	1087.9	1087.9
5°	1082.1	1083.4	1084.3	1085.6	1087.9	1088.2	1090.8	1091.1	1092.4	1095.0	1097.0
7.5°	1077.2	1078.5	1080.4	1083.7	1086.9	1090.5	1095.0	1099.9	1106.7	1113.1	1121.2
10°	1070.1	1071.7	1074.0	1076.9	1092.7	1095.0	1105.0	1119.0	1122.9	1143.3	1158.5
12.5°	1059.7	1065.2	1071.1	1073.6	1088.9	1112.8	1146.5	1139.7	1132.2	1198.9	1198.0
15°	1049.7	1057.1	1054.2	1075.3	1089.2	1131.0	1116.7	1147.1	1202.8	1189.2	1189.9
17.5°	1039.0	1040.6	1056.8	1074.3	1099.2	1120.6	1138.1	1179.8	1190.9	1191.8	1179.8
20°	1025.4	1033.2	1056.8	1072.7	1114.8	1124.8	1162.7	1184.1	1179.5	1168.5	1148.1
22.5°	1011.5	1035.1	1059.1	1081.4	1110.9	1137.8	1156.5	1166.6	1142.9	1099.5	1076.2
25°	995.0	1008.9	1040.3	1073.0	1109.9	1125.4	1136.5	1120.3	1089.5	1050.7	1011.5
27.5°	969.4	991.7	1031.9	1068.8	1102.1	1120.9	1103.1	1064.3	1014.7	989.1	971.3
30°	949.6	978.8	1011.8	1047.4	1082.1	1093.1	1047.7	1003.4	969.4	943.8	939.9
32.5°	925.7	967.1	998.5	1032.5	1061.7	1047.1	1003.1	945.8	917.6	907.9	911.8
35°	904.3	935.7	976.8	1010.2	1031.2	998.5	928.9	893.3	879.7	885.2	878.1
37.5°	878.7	920.2	958.1	986.9	979.7	930.5	871.6	848.9	850.6	846.0	832.4
40°	852.2	891.7	931.2	958.4	933.4	858.3	819.2	814.3	815.3	800.7	781.3
42.5°	821.1	857.0	896.5	921.1	867.4	808.8	782.2	782.9	774.5	754.1	743.7
45°	793.3	826.3	867.4	869.7	803.6	754.7	747.0	738.5	719.8	713.0	705.2
47.5°	757.6	794.2	828.2	815.9	741.1	710.7	704.9	686.4	677.0	671.8	665.4
50°	719.8	756.7	787.7	752.8	682.2	675.1	656.0	641.4	634.9	629.4	623.6
52.5°	683.8	714.3	746.0	685.8	636.9	630.1	608.4	600.0	593.5	587.3	586.0
55°	643.0	669.9	691.6	622.0	593.5	577.6	562.1	556.2	550.1	547.2	552.0
57.5°	596.7	627.2	623.9	559.2	546.5	523.5	517.7	513.8	509.3	511.2	470.8
60°	555.0	578.3	562.4	513.2	491.8	476.3	471.1	468.5	471.1	431.6	379.5
62.5°	503.5	529.7	497.6	459.4	436.8	429.3	424.8	428.4	390.5	347.1	334.5
65°	450.0	478.5	431.3	401.8	387.6	381.1	380.8	350.7	313.4	296.6	296.6
67.5°	398.6	428.0	367.2	342.6	337.1	337.7	318.9	273.3	262.9	251.6	218.9
70°	343.9	369.8	303.4	288.5	285.2	283.0	237.3	225.0	212.7	182.6	180.0
72.5°	289.5	302.1	243.8	240.2	239.6	199.1	190.1	169.0	154.8	151.2	149.6
75°	236.7	232.8	192.6	195.9	165.1	150.9	136.3	124.0	122.1	120.8	30.1
77.5°	186.8	167.4	151.9	132.1	118.2	100.4	97.5	95.5	62.8	22.7	18.5
80°	136.0	108.5	101.0	85.8	73.2	70.3	71.9	22.0	17.5	14.6	12.6
82.5°	86.4	69.3	56.7	49.5	48.2	21.0	15.5	12.6	11.0	9.4	7.8
85°	46.3	30.8	28.5	24.0	14.2	9.7	8.1	6.2	5.2	4.2	3.9
87.5°	14.6	12.3	10.0	8.1	4.9	3.2	2.6	2.3	1.9	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1212970

CATALOG NUMBER: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8
2.5°	1087.2	1087.9	1087.6	1088.5	1088.5	1089.8	1090.8	1091.8	1093.7	1094.7	1102.1
5°	1101.2	1102.8	1107.6	1112.2	1117.7	1119.3	1128.7	1131.0	1142.0	1143.3	1179.5
7.5°	1132.2	1138.4	1150.1	1161.7	1173.4	1180.8	1193.8	1201.9	1210.6	1218.4	1247.2
10°	1169.8	1180.2	1191.5	1203.2	1210.0	1224.2	1232.0	1233.3	1231.0	1218.4	1171.7
12.5°	1206.7	1217.1	1212.2	1214.5	1222.6	1197.3	1200.9	1182.8	1195.4	1132.9	1086.6
15°	1201.5	1200.9	1188.9	1150.1	1156.5	1108.3	1088.9	1074.0	1085.9	1079.5	1072.3
17.5°	1186.0	1156.5	1135.8	1089.2	1069.4	1055.8	1056.2	1056.5	1050.7	1056.8	1038.7
20°	1120.3	1087.2	1056.5	1040.0	1034.1	1024.4	1029.3	1024.4	1024.8	1026.7	998.9
22.5°	1032.8	1022.8	1005.0	1010.2	1008.2	1017.0	1010.5	1000.5	1003.7	989.1	968.1
25°	997.6	985.9	985.3	987.2	984.3	980.4	974.6	959.3	958.4	953.8	944.1
27.5°	961.9	962.6	964.5	958.7	948.3	940.6	931.8	924.4	927.3	922.1	908.8
30°	937.3	937.0	925.4	920.2	901.1	901.4	899.1	894.6	891.7	892.0	883.6
32.5°	902.4	892.3	879.1	872.6	871.0	865.1	860.6	861.6	863.8	855.7	864.5
35°	866.4	845.7	843.8	838.3	833.1	829.2	830.8	824.3	824.0	823.0	751.8
37.5°	818.2	808.1	807.2	801.3	797.8	796.8	790.7	791.6	794.5	799.7	641.1
40°	778.4	769.3	767.0	766.7	758.9	758.3	759.9	766.1	770.3	737.9	611.0
42.5°	735.6	736.3	729.1	724.6	725.6	728.5	736.3	714.9	619.4	590.2	558.5
45°	699.0	695.8	691.9	690.6	699.0	693.2	607.7	560.8	549.4	548.2	459.1
47.5°	660.8	659.9	658.2	659.2	611.3	544.9	525.5	519.3	521.3	520.0	394.4
50°	622.3	623.6	623.6	544.6	499.9	488.9	490.5	496.0	461.7	430.9	367.5
52.5°	588.9	578.9	496.0	467.5	457.5	462.4	450.7	407.6	376.6	358.4	340.0
55°	527.1	453.3	434.8	430.3	433.9	390.8	364.2	336.4	328.3	326.4	315.7
57.5°	414.8	399.9	401.5	383.4	342.2	317.9	307.3	303.4	299.8	297.2	25.9
60°	366.8	371.0	339.6	300.8	284.3	281.0	278.4	274.9	274.2	269.7	16.5
62.5°	335.8	295.3	268.1	258.4	254.5	253.5	248.7	247.0	209.8	28.8	12.3
65°	253.2	236.7	231.5	229.2	225.0	225.0	186.8	29.5	24.0	20.7	11.0
67.5°	206.6	205.3	202.7	199.8	136.0	28.5	24.9	21.7	18.8	16.5	9.7
70°	174.8	174.2	158.7	29.1	24.3	21.4	18.8	16.8	15.5	13.9	8.7
72.5°	143.4	29.1	24.6	21.4	18.5	16.8	15.2	13.6	12.3	11.3	7.1
75°	22.3	19.8	17.5	15.9	14.6	13.0	11.7	10.7	10.4	9.1	4.9
77.5°	16.2	13.9	12.6	11.3	10.0	9.1	7.8	6.8	6.2	5.2	3.6
80°	11.3	10.0	9.1	7.4	6.5	5.5	4.9	4.2	3.9	3.2	1.6
82.5°	6.5	5.5	4.9	3.9	3.6	2.9	2.6	2.3	2.3	1.6	1.6
85°	2.9	2.9	2.3	1.9	1.6	1.6	1.6	1.3	1.3	1.0	1.0
87.5°	1.3	1.3	1.3	1.3	1.3	1.0	1.0	1.0	1.0	1.0	0.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1212970

CATALOG NUMBER: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
0°	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8
2.5°	1112.5	1116.7	1124.8	1133.2	1123.8	1157.5	1154.9	1166.2	1172.4	1175.3	1182.1
5°	1211.6	1230.4	1236.5	1218.0	1207.4	1196.4	1171.4	1152.6	1154.9	1148.8	1126.4
7.5°	1209.6	1169.5	1115.4	1090.8	1088.9	1085.9	1093.7	1098.3	1098.9	1098.6	1097.9
10°	1107.3	1086.6	1083.0	1079.8	1081.1	1069.1	1063.6	1048.1	1056.5	1052.0	1053.6
12.5°	1076.2	1071.4	1052.3	1025.7	1041.6	1029.6	1022.8	1027.3	1022.2	1017.3	1015.7
15°	1057.8	1026.4	1015.7	1009.2	1004.7	1002.1	1004.4	999.2	997.6	996.6	998.9
17.5°	1019.6	1006.9	995.3	978.1	978.5	977.5	984.0	993.7	994.3	944.5	899.5
20°	989.5	979.1	964.2	953.5	968.1	942.2	842.1	794.5	787.1	787.1	788.4
22.5°	965.5	942.5	943.5	926.6	790.3	762.5	763.1	766.1	752.8	707.5	702.6
25°	932.8	929.2	858.3	741.8	742.7	721.1	687.7	640.8	589.9	589.9	581.5
27.5°	908.2	832.8	729.1	724.3	651.4	605.5	577.0	533.9	528.1	522.6	523.2
30°	887.1	704.5	707.1	605.5	551.7	513.5	511.2	504.1	500.6	499.6	496.0
32.5°	701.3	686.1	591.9	515.5	494.4	488.3	485.3	477.2	476.9	470.8	428.0
35°	657.6	602.2	495.4	474.7	468.5	462.7	457.8	307.3	36.3	14.6	12.6
37.5°	607.7	503.1	458.1	448.8	442.9	327.3	32.7	11.3	8.1	5.8	5.2
40°	515.1	449.4	435.2	424.8	175.2	11.3	7.1	5.5	3.2	2.9	2.6
42.5°	434.5	423.5	408.3	124.3	13.0	5.5	3.6	2.6	2.3	2.3	1.9
45°	406.7	397.0	164.5	12.3	8.1	2.6	2.3	2.3	1.9	1.3	1.3
47.5°	380.8	335.1	14.9	7.8	5.2	2.3	1.9	1.3	1.3	1.3	1.0
50°	353.2	18.5	10.4	5.8	3.2	1.3	1.3	1.3	1.3	1.0	1.0
52.5°	66.1	13.0	8.4	5.2	1.6	1.3	1.3	1.3	1.0	1.0	1.0
55°	15.5	10.4	7.8	4.5	1.3	1.3	1.3	1.0	1.0	1.0	0.6
57.5°	11.7	7.8	6.2	4.2	1.3	1.0	1.0	1.0	1.0	1.0	0.6
60°	9.7	5.5	4.9	3.9	1.0	1.0	1.0	1.0	1.0	1.0	0.6
62.5°	6.8	4.5	3.6	2.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
65°	5.5	3.6	2.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
67.5°	4.9	2.9	1.9	0.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0
70°	3.9	1.0	1.0	0.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0
72.5°	3.2	1.0	0.6	0.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0
75°	3.2	1.6	0.6	0.6	1.0	1.0	1.3	1.3	1.0	1.0	1.0
77.5°	2.3	1.6	0.6	0.6	1.0	1.0	1.3	1.3	1.0	1.0	1.0
80°	1.3	1.6	0.6	1.0	1.0	1.9	2.3	1.3	1.0	1.0	1.0
82.5°	1.3	1.6	1.9	1.9	1.0	1.6	1.9	1.6	1.3	1.0	1.0
85°	1.3	1.0	1.3	1.6	1.0	1.6	1.6	1.3	1.3	1.0	1.0
87.5°	0.6	1.0	1.0	1.3	1.3	1.3	1.6	1.3	1.3	1.3	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1212970

CATALOG NUMBER: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8
2.5°	1185.3	1186.6	1166.2	1159.1	1165.3	1164.0	1158.5	1138.1	1135.8	1122.2	1102.5
5°	1132.9	1141.6	1131.0	1149.4	1140.7	1149.4	1176.0	1188.3	1208.3	1220.6	1225.2
7.5°	1096.3	1098.3	1098.3	1099.9	1101.5	1101.8	1099.9	1098.6	1093.1	1086.3	1098.6
10°	1052.0	1054.2	1058.1	1057.5	1057.1	1063.9	1065.5	1079.5	1078.8	1081.4	1090.8
12.5°	1029.0	1011.5	1027.3	1023.1	1029.0	1019.9	1036.7	1033.8	1034.8	1042.6	1062.6
15°	990.8	996.3	1000.1	1000.1	1002.4	1000.5	998.5	1011.8	1019.9	1020.2	1018.9
17.5°	917.3	875.5	918.2	907.2	995.0	997.2	989.8	983.6	983.6	988.5	998.9
20°	787.4	788.4	788.7	792.9	798.1	797.8	798.1	925.7	986.2	972.3	962.9
22.5°	690.3	678.3	700.7	699.0	726.9	757.6	787.1	784.2	786.1	876.1	957.1
25°	553.3	568.9	556.2	561.8	593.2	629.7	652.4	711.7	776.1	771.6	792.6
27.5°	521.0	516.7	522.6	522.6	526.8	531.6	544.3	577.6	634.9	695.1	752.1
30°	490.2	493.8	494.4	500.2	503.5	506.7	508.7	521.3	534.2	576.0	646.3
32.5°	368.1	322.8	424.8	452.3	475.6	481.1	485.0	490.2	499.6	505.7	541.0
35°	10.7	10.7	11.3	13.0	16.5	111.4	424.1	467.5	473.7	481.5	487.9
37.5°	5.2	3.9	4.5	4.9	5.8	8.1	11.7	36.3	403.7	456.5	463.6
40°	2.3	2.3	2.3	2.3	2.6	3.2	4.9	8.1	12.3	324.7	438.1
42.5°	1.9	1.9	1.9	1.9	1.9	1.9	2.3	2.9	5.8	13.9	229.9
45°	1.3	1.3	1.0	1.3	1.3	1.6	1.9	1.9	2.6	8.7	15.9
47.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.6	1.9	5.8	8.4
50°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	4.5	5.8
52.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.9	5.2
55°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.0	1.0	1.3	4.5
57.5°	0.6	0.6	0.6	0.6	0.6	1.0	0.6	0.6	1.0	1.0	4.2
60°	0.6	0.6	0.6	0.6	0.6	1.0	1.0	1.0	1.0	1.0	3.9
62.5°	1.0	1.0	0.6	1.0	0.6	0.6	1.0	1.0	1.0	1.0	2.6
65°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.6	1.0
67.5°	1.0	1.0	1.0	1.0	0.6	1.0	0.6	1.0	1.0	0.6	0.6
70°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.6	0.6	0.6	0.6
72.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.6	0.6	0.6	0.6
75°	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.3	0.6	0.6	0.6
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.6	1.9	1.6	1.6	0.6
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.6	1.6	1.6	1.6	2.3
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.3	1.3	1.3	1.6
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.3	1.3	1.0	1.3
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1212970

CATALOG NUMBER: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8
2.5°	1104.1	1093.1	1089.5	1082.1	1081.4	1082.1	1080.4	1078.2	1079.5	1077.2	1075.3
5°	1227.8	1198.3	1179.2	1153.6	1118.3	1110.6	1108.6	1097.6	1093.7	1092.4	1087.2
7.5°	1127.7	1181.5	1213.8	1224.8	1183.4	1173.7	1162.4	1153.3	1144.6	1128.0	1118.0
10°	1083.4	1085.9	1117.0	1153.3	1212.2	1220.3	1226.5	1206.7	1201.2	1159.1	1150.1
12.5°	1073.0	1073.3	1076.9	1098.9	1145.2	1150.4	1172.1	1183.7	1198.0	1206.1	1199.6
15°	1025.7	1052.0	1071.4	1073.3	1077.5	1086.6	1093.1	1133.5	1150.7	1196.7	1194.1
17.5°	1003.7	1012.1	1040.3	1063.3	1059.4	1056.2	1061.3	1066.8	1083.4	1129.3	1128.7
20°	967.1	994.0	1009.2	1033.2	1054.9	1055.8	1050.0	1046.8	1040.3	1047.7	1054.5
22.5°	951.6	955.8	984.3	1001.1	1025.7	1034.5	1035.8	1036.1	1032.5	1028.6	1026.7
25°	950.0	936.7	951.3	972.3	990.4	999.8	1010.5	1014.1	1012.8	1012.8	1010.8
27.5°	777.4	932.5	924.7	938.6	960.6	967.1	972.6	983.6	990.4	995.3	997.6
30°	740.5	768.3	904.0	905.9	928.3	927.6	933.8	942.8	951.6	962.9	965.8
32.5°	655.0	723.3	827.6	873.2	896.5	898.8	902.0	904.6	912.7	925.4	936.4
35°	524.8	658.9	709.1	857.7	861.9	866.4	868.4	874.5	877.1	882.3	892.0
37.5°	475.0	544.6	680.3	741.8	822.1	826.0	836.3	838.9	843.1	847.3	854.8
40°	446.2	465.3	566.3	662.4	790.0	792.6	796.2	802.6	803.0	807.8	814.6
42.5°	423.2	435.5	464.9	632.7	767.4	767.0	758.6	762.8	764.8	769.9	779.3
45°	338.0	408.6	427.4	516.7	611.0	655.0	739.5	725.6	725.3	727.2	737.2
47.5°	17.2	384.3	397.6	426.4	577.0	578.6	589.6	682.2	696.4	691.9	692.9
50°	11.7	26.5	370.4	383.7	497.3	537.5	545.6	549.8	603.2	662.8	653.1
52.5°	9.1	15.2	227.0	356.2	404.1	433.5	485.7	515.5	518.7	542.6	623.9
55°	8.1	11.7	24.6	328.6	343.5	350.0	380.4	432.6	474.7	487.3	488.3
57.5°	7.1	10.7	16.8	148.6	312.4	313.7	318.9	337.1	374.9	409.6	448.8
60°	6.5	9.4	13.3	25.6	284.0	287.2	288.2	293.0	297.6	321.2	366.2
62.5°	3.9	7.4	11.7	18.5	224.7	258.0	257.7	261.0	265.2	267.8	276.8
65°	3.2	5.8	10.0	15.5	27.5	34.3	208.5	231.8	234.4	238.0	239.6
67.5°	2.9	5.2	7.4	12.3	20.7	23.6	27.2	33.7	183.9	207.2	210.5
70°	2.6	3.6	6.2	10.4	16.8	18.1	20.4	23.3	27.5	34.0	166.4
72.5°	1.6	2.6	4.2	7.4	13.0	14.6	15.9	17.8	19.8	23.6	27.2
75°	0.6	1.9	3.6	5.5	10.0	11.0	12.0	13.3	14.9	17.5	19.4
77.5°	0.6	1.6	2.9	3.9	6.5	7.4	8.7	9.7	11.0	12.3	14.2
80°	2.3	1.3	1.9	2.9	4.5	4.9	5.5	6.2	7.1	8.1	9.4
82.5°	1.6	1.9	2.3	1.9	2.3	2.9	3.2	3.9	4.2	4.9	5.2
85°	1.3	1.3	1.6	1.6	1.6	1.6	1.6	1.6	1.9	2.3	2.9
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1212970

CATALOG NUMBER: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8
2.5°	1075.3	1074.6	1072.7	1072.7	1072.3	1073.6	1074.6	1075.6	1075.3	1077.2	1075.3
5°	1083.4	1081.7	1078.8	1076.2	1075.3	1075.9	1074.9	1075.9	1074.6	1076.2	1073.3
7.5°	1105.7	1100.2	1088.9	1084.3	1078.5	1078.2	1075.3	1074.6	1072.7	1072.7	1069.1
10°	1145.2	1118.6	1115.4	1101.8	1097.0	1073.3	1078.5	1069.8	1068.8	1064.6	1063.0
12.5°	1177.6	1156.9	1150.7	1138.7	1125.1	1077.2	1087.9	1069.1	1068.1	1059.7	1051.0
15°	1178.2	1190.2	1173.4	1140.3	1137.4	1104.4	1082.7	1076.2	1067.8	1042.6	1046.8
17.5°	1140.3	1167.9	1176.0	1168.8	1148.1	1125.8	1095.3	1082.4	1057.1	1045.8	1038.0
20°	1078.8	1106.7	1141.3	1143.6	1156.5	1140.7	1100.8	1079.8	1049.4	1029.6	1023.1
22.5°	1029.9	1050.3	1090.2	1108.6	1124.5	1130.0	1104.7	1073.6	1035.8	1016.7	1012.8
25°	1004.0	1008.6	1020.5	1042.2	1077.2	1102.5	1106.0	1073.0	1053.2	1011.5	989.5
27.5°	994.6	990.8	985.9	996.9	1023.1	1053.9	1074.3	1079.8	1030.6	990.8	968.7
30°	970.7	972.9	965.5	961.6	978.8	1010.5	1046.8	1055.8	1018.0	976.8	951.6
32.5°	941.2	945.1	946.4	939.6	936.0	958.1	997.2	1018.9	1017.0	957.1	928.9
35°	904.3	915.3	918.2	918.6	912.7	909.2	931.8	976.8	994.0	948.0	907.2
37.5°	865.5	868.7	884.6	888.8	888.8	878.1	894.9	930.9	954.8	927.6	880.7
40°	816.9	827.2	842.1	849.6	857.0	858.0	848.6	873.9	913.4	906.6	855.7
42.5°	781.6	788.4	797.5	807.5	822.7	826.6	816.9	821.4	862.5	880.3	823.4
45°	740.5	749.5	752.1	763.1	779.0	790.3	790.0	780.6	813.7	835.7	799.7
47.5°	698.4	707.1	711.7	717.2	728.8	743.4	751.5	747.3	753.8	796.8	768.3
50°	655.0	659.9	668.9	675.1	682.8	691.3	710.7	714.6	705.5	739.8	733.7
52.5°	613.9	615.5	621.7	627.8	638.2	644.3	659.9	671.5	670.9	680.9	695.1
55°	581.8	574.7	576.0	580.9	587.7	597.0	605.8	623.9	630.1	632.0	654.7
57.5°	454.6	527.8	534.2	533.9	542.0	546.2	554.3	566.3	588.3	583.4	608.7
60°	413.1	421.2	482.4	489.6	492.5	496.3	506.1	517.1	533.3	543.6	554.6
62.5°	315.0	364.2	382.7	436.8	445.2	447.5	453.9	459.1	476.0	499.6	495.1
65°	243.8	264.8	321.2	343.2	389.2	395.0	404.1	409.6	414.4	441.6	442.9
67.5°	210.8	214.0	229.2	271.6	300.8	345.8	351.3	356.2	363.6	383.0	395.0
70°	180.0	183.9	188.1	191.7	229.6	259.3	301.1	302.7	307.6	320.5	347.7
72.5°	34.0	153.8	156.4	158.7	162.9	182.6	222.4	254.8	256.8	262.9	287.8
75°	23.0	26.9	36.9	126.9	131.1	132.4	139.2	179.7	209.5	210.8	221.8
77.5°	16.5	18.5	22.3	26.5	67.7	101.7	103.3	110.7	141.5	163.8	165.8
80°	11.3	12.6	14.9	16.8	20.7	27.2	75.1	77.4	81.3	112.0	117.9
82.5°	6.5	7.4	8.7	10.7	12.3	15.5	20.1	25.9	52.8	56.3	74.8
85°	3.2	3.6	4.2	5.2	6.2	7.4	10.0	12.3	16.8	30.4	31.4
87.5°	1.6	1.6	1.6	1.6	2.6	2.9	3.6	4.5	5.8	8.7	11.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1212970

CATALOG NUMBER: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8
2.5°	1075.6	1080.1	1084.0	1085.0	1085.0	1085.6	1086.6	1087.2	1087.9	1088.5	1087.9
5°	1073.6	1078.5	1081.7	1082.7	1082.7	1084.7	1086.3	1088.2	1089.2	1089.2	1088.5
7.5°	1068.8	1072.3	1076.6	1079.1	1079.5	1082.7	1085.6	1085.3	1086.6	1087.2	1088.9
10°	1062.3	1062.3	1069.4	1071.4	1073.0	1076.6	1077.5	1079.5	1084.0	1084.7	1088.9
12.5°	1059.1	1055.8	1064.3	1065.2	1070.7	1066.2	1072.0	1074.0	1069.4	1075.6	1067.5
15°	1044.5	1048.4	1047.1	1050.0	1059.7	1054.5	1070.4	1065.2	1076.9	1063.0	1087.6
17.5°	1032.5	1031.9	1037.1	1039.6	1041.6	1052.6	1056.8	1062.6	1067.2	1063.3	1073.0
20°	1023.8	1018.6	1022.5	1025.4	1032.2	1040.6	1043.2	1034.5	1049.7	1075.6	1081.7
22.5°	1007.3	1003.7	1008.2	1008.2	1018.6	1017.3	1027.0	1021.5	1035.8	1065.9	1097.3
25°	984.9	985.3	990.1	995.9	997.9	1012.4	1017.6	1024.8	1042.6	1078.5	1097.6
27.5°	962.3	960.3	963.2	975.2	985.3	995.9	997.6	1021.8	1046.1	1070.7	1087.6
30°	939.6	937.7	939.6	948.3	960.3	967.4	985.3	1017.6	1040.3	1057.1	1073.0
32.5°	915.3	913.4	917.9	924.4	945.4	946.4	981.7	1012.1	1029.9	1042.2	1039.3
35°	889.4	886.8	891.0	901.1	920.5	927.6	964.5	987.2	1007.3	1013.1	999.5
37.5°	858.3	853.8	859.0	872.9	893.3	914.0	944.8	971.0	981.7	966.1	950.0
40°	826.0	822.7	831.8	838.9	862.9	891.7	927.0	945.4	938.6	920.8	903.0
42.5°	797.1	790.3	798.4	812.0	839.2	871.9	900.4	910.8	894.6	868.4	847.6
45°	761.8	753.8	763.5	781.6	810.7	848.0	870.3	866.7	839.2	816.6	788.1
47.5°	724.9	715.2	724.9	746.6	779.3	818.8	835.0	818.8	784.2	755.7	732.7
50°	688.7	677.3	686.7	719.4	751.5	781.9	781.6	750.2	729.5	698.4	678.3
52.5°	652.7	636.5	645.9	681.5	713.6	748.2	722.7	693.5	668.6	641.4	634.9
55°	608.4	590.9	603.5	655.3	679.9	700.3	659.5	634.0	609.3	595.7	587.7
57.5°	566.3	547.2	558.2	619.4	637.5	642.7	605.1	568.9	554.3	549.8	538.1
60°	522.9	501.2	511.6	582.2	594.8	573.7	536.8	508.7	505.7	496.7	487.6
62.5°	481.5	457.5	464.0	535.9	541.7	503.5	469.5	462.0	454.9	445.8	441.0
65°	433.9	408.9	418.0	486.6	481.1	431.9	412.8	411.2	401.8	394.4	401.5
67.5°	390.2	360.7	373.3	432.9	408.0	367.8	360.0	356.2	348.7	352.9	278.1
70°	342.2	310.2	327.3	374.9	338.0	311.5	308.6	302.7	303.1	240.9	203.0
72.5°	288.8	261.0	285.9	311.5	267.4	259.7	255.5	254.8	205.6	167.1	157.7
75°	241.9	213.7	240.6	250.3	213.0	207.9	207.5	171.6	135.0	128.9	125.9
77.5°	188.8	167.1	192.6	178.1	163.5	157.7	141.5	106.2	101.7	97.5	36.6
80°	127.2	128.9	143.8	122.7	116.6	99.4	78.4	75.1	64.8	25.9	20.4
82.5°	77.4	97.1	91.6	76.7	75.1	54.1	49.5	25.3	18.8	14.9	13.0
85°	40.1	49.2	47.3	41.8	31.1	27.8	15.5	12.0	9.7	7.4	6.2
87.5°	13.6	18.1	17.5	13.9	10.7	8.4	5.5	4.5	3.2	2.6	2.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1212970

CATALOG NUMBER: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8
2.5°	1087.2	1087.2	1086.6	1087.2	1087.6	1086.9	1086.9	1087.6	1087.9	1088.2	1089.8
5°	1088.9	1089.5	1090.5	1092.4	1092.7	1096.6	1098.3	1099.2	1100.2	1100.5	1098.3
7.5°	1092.4	1094.7	1096.6	1096.3	1094.0	1087.9	1085.9	1084.3	1087.2	1094.7	1103.4
10°	1095.7	1085.3	1065.9	1092.4	1084.3	1091.8	1113.8	1118.6	1133.5	1154.6	1160.7
12.5°	1073.3	1101.8	1108.0	1078.2	1133.2	1112.8	1137.1	1158.5	1164.6	1186.0	1173.0
15°	1097.3	1111.2	1120.6	1150.4	1147.1	1164.6	1171.4	1167.2	1168.2	1173.7	1188.3
17.5°	1097.0	1124.8	1131.0	1151.0	1164.6	1164.9	1163.0	1161.1	1166.2	1170.5	1161.7
20°	1115.7	1124.8	1136.8	1144.9	1147.5	1150.7	1156.9	1152.0	1142.3	1132.9	1129.0
22.5°	1106.3	1126.7	1137.1	1138.4	1136.8	1126.7	1117.7	1104.1	1099.5	1094.7	1096.3
25°	1108.3	1117.7	1116.4	1111.2	1104.4	1085.6	1081.1	1075.3	1066.5	1045.5	1026.4
27.5°	1094.4	1089.5	1083.7	1071.1	1058.7	1048.7	1037.4	1018.6	1003.1	980.4	972.0
30°	1071.1	1051.6	1037.4	1029.9	1018.0	1001.1	984.0	961.0	941.2	936.7	932.5
32.5°	1026.4	1007.3	995.6	977.5	957.1	937.0	917.3	908.2	904.0	904.6	900.7
35°	980.7	963.9	946.4	919.2	904.0	883.9	876.8	874.8	871.0	866.7	862.2
37.5°	932.2	912.4	886.2	870.0	854.8	846.7	843.1	840.2	833.4	826.0	820.8
40°	885.2	849.6	835.0	819.2	814.6	811.1	805.9	798.8	789.4	788.1	785.8
42.5°	822.4	796.8	784.2	780.9	775.4	769.3	764.8	757.0	753.1	755.7	757.6
45°	762.8	749.9	745.7	741.8	731.4	722.7	719.8	717.2	720.4	734.6	700.7
47.5°	714.6	709.4	704.2	697.7	688.0	681.5	684.5	687.1	690.0	585.4	534.2
50°	672.8	665.7	657.6	650.5	644.6	644.0	659.2	613.6	513.8	511.2	459.4
52.5°	627.2	616.5	611.6	607.4	610.0	619.7	512.9	476.0	456.5	396.6	370.1
55°	577.9	568.6	568.6	572.4	558.5	452.6	447.1	386.6	350.0	339.6	335.4
57.5°	528.7	527.8	533.3	487.6	410.9	394.0	331.2	317.9	312.1	310.8	304.0
60°	483.7	492.8	412.5	379.5	329.9	297.6	288.5	286.9	280.7	278.4	272.3
62.5°	447.8	371.4	345.8	282.3	265.8	261.6	256.8	254.5	249.0	219.8	64.4
65°	323.5	305.6	248.0	237.3	236.0	229.9	227.9	205.0	48.2	32.4	27.5
67.5°	244.1	216.6	209.2	207.2	201.1	188.8	56.0	32.1	27.5	24.0	21.0
70°	187.5	182.6	177.1	172.6	50.8	31.7	27.5	23.3	20.1	17.8	16.2
72.5°	153.5	150.2	87.4	33.3	27.2	23.0	20.4	17.8	15.5	14.2	13.0
75°	120.1	33.3	27.5	23.0	19.8	16.8	14.9	13.3	12.0	11.0	10.0
77.5°	27.2	22.0	18.8	15.9	14.2	12.6	11.3	9.7	8.7	7.8	6.5
80°	16.8	14.6	12.3	11.3	9.7	8.1	7.1	6.5	5.2	4.9	4.2
82.5°	11.0	8.7	7.8	6.5	5.2	4.9	4.2	3.2	2.9	2.6	2.3
85°	4.9	4.2	3.6	2.9	2.3	1.9	1.6	1.3	1.3	1.3	1.3
87.5°	1.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.6	0.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1212970

CATALOG NUMBER: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8
2.5°	1090.5	1096.3	1101.8	1100.2	1094.4	1085.3	1082.7	1079.1	1081.7	1087.2	1089.5
5°	1098.3	1095.0	1106.7	1123.8	1151.7	1154.3	1173.7	1178.2	1193.8	1203.5	1203.2
7.5°	1109.3	1155.2	1174.3	1195.1	1204.4	1202.2	1205.1	1202.8	1199.3	1197.6	1195.7
10°	1165.3	1200.2	1207.4	1207.4	1192.8	1173.0	1164.6	1150.1	1120.9	1121.6	1116.7
12.5°	1198.0	1210.3	1193.4	1179.2	1120.6	1097.9	1073.3	1061.7	1054.9	1044.5	1048.4
15°	1180.8	1163.3	1153.3	1107.3	1071.4	1030.6	1031.2	1024.1	1016.7	1017.3	1012.4
17.5°	1155.6	1141.6	1070.4	1038.7	1021.2	1005.3	1002.4	993.0	988.2	986.5	986.2
20°	1120.9	1070.7	1017.6	1009.9	988.8	970.7	967.8	970.7	985.6	959.0	869.0
22.5°	1080.4	1008.2	992.7	970.7	956.4	949.3	967.1	886.2	763.8	778.7	762.8
25°	1011.8	980.4	953.8	937.0	935.4	891.7	743.1	727.5	648.8	606.8	559.5
27.5°	961.6	948.0	920.2	917.3	896.2	729.1	651.8	566.3	534.9	530.0	519.7
30°	931.2	911.8	894.9	821.4	715.2	587.0	522.9	510.9	505.4	499.6	490.5
32.5°	894.6	876.1	884.2	690.6	570.2	505.4	492.5	483.7	473.7	469.8	437.1
35°	857.4	848.9	690.9	580.5	490.2	474.7	464.9	455.9	362.6	87.7	29.8
37.5°	817.5	815.6	621.0	481.8	459.1	444.5	417.0	86.1	20.4	13.9	10.4
40°	786.5	621.3	490.8	451.7	433.2	410.2	57.6	14.2	9.1	5.5	3.6
42.5°	765.7	558.8	439.4	423.8	383.7	42.4	14.6	6.2	3.6	2.9	2.3
45°	590.2	441.3	410.5	394.4	48.6	14.6	8.4	2.9	2.3	1.9	1.3
47.5°	544.6	400.8	382.7	86.1	16.2	7.8	5.8	1.9	1.3	1.3	1.3
50°	412.5	370.4	304.7	21.0	10.4	5.5	4.2	1.3	1.3	1.3	1.0
52.5°	361.7	341.9	32.7	13.9	8.1	4.2	2.6	1.0	1.0	1.0	1.0
55°	330.6	216.9	19.4	10.7	6.8	3.9	1.6	1.0	1.0	1.0	0.6
57.5°	302.4	29.1	14.2	9.1	6.2	3.6	1.0	1.0	1.0	1.0	0.6
60°	256.4	21.0	11.7	8.1	5.8	3.2	1.0	1.0	1.0	1.0	1.0
62.5°	33.3	16.5	10.0	7.1	4.2	2.6	0.6	1.0	1.0	1.0	1.0
65°	24.3	13.0	9.1	4.9	2.6	1.0	0.6	1.0	1.0	1.0	1.0
67.5°	18.8	10.7	6.8	4.2	2.3	0.6	0.6	1.0	1.0	1.0	1.0
70°	14.9	9.1	5.5	3.6	1.9	0.6	0.6	1.0	1.0	1.0	1.0
72.5°	11.7	6.5	3.9	1.9	1.3	0.6	0.6	1.0	1.0	1.0	1.0
75°	8.7	5.2	2.9	1.6	0.6	0.6	0.6	1.0	1.0	1.0	1.0
77.5°	5.8	3.2	2.3	1.3	1.3	1.3	1.6	1.6	1.0	1.0	1.0
80°	3.9	2.3	1.6	1.6	1.6	1.3	1.6	1.6	1.0	1.6	1.0
82.5°	1.9	1.6	1.6	1.3	1.3	1.0	1.3	1.3	1.3	1.3	1.0
85°	1.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.3	1.0
87.5°	0.6	0.6	0.6	0.6	1.0	1.0	1.0	1.0	1.3	1.3	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1212970

CATALOG NUMBER: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8
2.5°	1086.6	1087.6	1085.0	1098.9	1091.8	1092.4	1095.3	1087.9	1089.5	1084.3	1080.8
5°	1204.4	1206.4	1208.3	1209.0	1210.3	1211.9	1210.0	1209.0	1207.0	1200.6	1193.8
7.5°	1186.0	1183.7	1182.8	1184.1	1186.3	1187.3	1185.7	1187.9	1196.4	1199.9	1202.2
10°	1088.9	1078.5	1085.6	1084.7	1076.6	1103.8	1096.3	1100.5	1103.4	1133.2	1151.3
12.5°	1042.6	1049.0	1036.7	1030.6	1038.7	1044.2	1049.7	1038.0	1054.2	1046.8	1070.7
15°	1003.7	999.8	998.5	998.9	997.2	1005.0	1006.9	1009.5	1011.8	1021.8	1025.7
17.5°	986.2	992.7	995.3	997.2	994.0	990.4	986.9	981.7	983.3	980.7	988.2
20°	808.5	786.8	785.5	798.1	784.2	792.0	810.7	936.4	932.2	981.0	964.5
22.5°	674.8	654.4	636.9	621.7	643.3	652.4	687.4	726.9	791.0	780.9	850.6
25°	551.1	543.6	539.1	536.8	538.4	537.8	545.6	564.0	593.2	661.8	750.5
27.5°	515.5	511.9	510.3	505.1	509.0	507.7	513.8	517.7	526.5	533.3	562.1
30°	487.3	483.1	480.2	474.7	478.5	478.9	480.8	490.8	494.4	500.2	509.3
32.5°	178.1	104.9	98.4	93.6	102.3	133.4	234.1	409.3	466.9	471.4	481.8
35°	17.5	14.6	13.0	13.0	13.3	14.6	19.4	51.2	93.6	361.7	452.6
37.5°	6.8	5.8	4.9	4.5	4.9	5.5	7.4	9.7	13.3	27.5	122.7
40°	2.9	2.6	2.3	2.3	2.3	2.3	2.6	3.2	4.9	9.1	14.2
42.5°	1.9	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.3	2.9	5.8
45°	1.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.6	2.6
47.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.3
50°	1.0	1.0	1.0	1.0	0.6	1.0	0.6	1.0	1.0	1.0	1.0
52.5°	1.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.0	1.0
55°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.0
57.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
60°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
62.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.0	1.0	0.6
65°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.0	0.6
67.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
70°	1.0	1.0	0.6	1.0	0.6	0.6	1.0	1.0	1.0	0.6	0.6
72.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.9	1.9	1.3
75°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.6	1.9	1.6
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.6	1.6	1.6
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.3	1.3
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.3	1.3
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1212970

CATALOG NUMBER: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8
2.5°	1074.6	1074.3	1081.1	1086.3	1084.3	1086.3	1088.5	1088.9	1089.5	1086.9	1085.9
5°	1180.8	1170.8	1151.3	1137.4	1121.2	1091.8	1077.2	1078.8	1079.1	1078.2	1079.5
7.5°	1201.2	1200.2	1193.4	1190.5	1179.5	1158.5	1124.8	1119.0	1104.7	1095.7	1088.2
10°	1150.1	1173.4	1179.5	1189.9	1196.4	1192.5	1164.0	1159.8	1150.7	1140.3	1142.6
12.5°	1094.7	1113.8	1114.8	1171.1	1183.7	1185.0	1174.0	1179.8	1181.1	1157.8	1144.2
15°	1026.7	1035.8	1054.9	1107.3	1145.5	1169.5	1176.6	1179.8	1164.0	1163.0	1157.5
17.5°	996.9	1002.7	1011.5	1040.9	1098.9	1134.2	1164.3	1162.0	1168.2	1163.7	1149.7
20°	959.3	964.2	979.7	994.6	1023.1	1070.1	1126.4	1130.6	1138.7	1137.8	1141.6
22.5°	958.7	941.5	944.1	955.8	985.6	1027.7	1087.6	1101.5	1106.7	1110.2	1114.4
25°	760.6	896.9	921.8	929.2	948.7	973.3	1043.9	1049.0	1058.7	1074.6	1086.3
27.5°	658.9	751.5	851.2	903.0	915.3	935.7	977.8	985.6	1018.6	1022.5	1040.6
30°	520.0	591.5	740.5	865.1	885.5	899.8	929.6	945.1	959.3	974.9	994.0
32.5°	489.2	500.6	583.1	715.9	874.5	863.8	885.9	895.2	910.8	924.4	938.3
35°	461.1	468.8	486.3	586.4	712.3	834.4	849.3	855.4	864.2	874.5	884.6
37.5°	431.6	443.3	455.2	482.1	658.9	811.1	810.7	817.9	823.0	831.8	840.2
40°	78.4	407.0	426.4	443.9	510.9	646.9	774.5	777.7	781.3	786.8	795.5
42.5°	12.6	68.0	399.5	416.4	435.5	579.2	758.0	744.7	742.4	746.3	754.1
45°	6.5	16.5	80.3	388.9	406.0	462.0	619.7	721.7	719.4	712.0	713.6
47.5°	4.9	10.4	19.8	134.4	380.1	396.6	571.8	565.6	608.7	691.3	678.6
50°	4.2	7.1	11.7	27.5	335.8	365.2	440.3	514.5	537.1	540.1	639.1
52.5°	3.9	4.9	8.4	17.8	70.6	337.7	358.1	384.0	422.2	504.1	502.2
55°	3.6	4.5	7.1	12.0	24.6	304.3	325.4	330.3	338.3	377.5	429.3
57.5°	1.9	4.2	6.8	10.4	18.5	55.7	295.3	299.2	305.6	307.3	325.7
60°	1.0	3.9	6.2	9.1	13.6	25.9	265.5	270.0	273.9	274.6	280.4
62.5°	0.6	3.6	5.2	8.4	11.3	18.5	62.8	128.2	243.8	243.8	250.6
65°	0.6	2.6	3.2	5.5	10.4	15.2	26.5	30.8	59.9	147.3	219.8
67.5°	0.6	1.0	2.9	4.5	7.8	11.7	19.4	22.7	27.2	31.1	57.6
70°	0.6	0.6	2.6	2.9	4.9	8.7	13.9	15.9	18.5	21.0	24.3
72.5°	0.6	0.6	2.3	2.3	3.2	5.8	10.7	11.7	13.3	14.9	17.2
75°	1.6	1.3	1.9	1.9	2.3	4.5	8.1	9.1	9.7	11.0	12.6
77.5°	1.6	1.6	1.6	1.6	1.6	2.9	5.2	5.8	6.8	7.4	8.7
80°	1.3	1.3	1.3	1.6	1.6	1.9	3.2	3.6	3.9	4.9	5.2
82.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.9	2.3	2.9
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.3	1.3	1.3
87.5°	1.0	1.0	1.0	0.6	0.6	1.0	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1212970

CATALOG NUMBER: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8	1078.8
2.5°	1085.6	1083.7	1082.1	1083.0	1080.1	1078.8	1079.8	1080.1	1080.8	1082.4	1082.7
5°	1082.7	1082.1	1085.0	1086.6	1085.9	1086.6	1086.6	1085.3	1083.4	1084.7	1081.7
7.5°	1080.8	1076.6	1073.3	1074.0	1070.7	1074.6	1078.2	1083.4	1085.0	1085.0	1081.7
10°	1114.1	1109.6	1091.5	1079.1	1071.1	1063.9	1080.8	1063.6	1071.7	1040.9	1076.2
12.5°	1141.6	1147.8	1139.7	1106.0	1100.2	1078.8	1091.1	1070.1	1063.9	1028.6	1040.0
15°	1152.6	1141.0	1138.4	1129.0	1116.4	1110.2	1077.2	1073.6	1063.6	1067.5	1052.6
17.5°	1142.9	1148.8	1141.0	1134.8	1121.9	1107.3	1087.6	1070.1	1056.2	1025.1	1051.3
20°	1133.5	1141.3	1118.0	1121.9	1123.2	1106.3	1096.0	1081.4	1063.9	1034.8	1012.1
22.5°	1118.0	1112.5	1114.4	1108.6	1103.8	1106.0	1091.8	1081.7	1052.3	1039.0	1008.2
25°	1092.7	1090.8	1096.0	1095.3	1083.7	1079.8	1072.7	1062.0	1050.3	1029.0	1003.7
27.5°	1051.6	1061.7	1070.7	1074.9	1068.8	1058.4	1054.5	1048.4	1040.3	1018.6	999.8
30°	1008.2	1019.6	1029.9	1039.0	1044.5	1040.0	1036.4	1032.8	1020.5	1006.3	985.3
32.5°	958.7	973.6	987.8	998.9	1010.8	1014.4	1011.8	1008.9	998.5	985.6	968.7
35°	901.4	921.8	942.5	962.3	967.4	975.9	984.3	979.4	973.9	961.0	945.4
37.5°	852.8	867.4	882.3	907.2	925.4	936.0	950.9	952.9	943.5	937.3	916.9
40°	802.6	815.9	837.6	852.2	877.1	889.4	905.3	912.4	910.1	906.6	888.8
42.5°	763.1	769.6	783.9	796.8	821.4	846.7	860.6	868.4	876.5	873.5	864.5
45°	721.1	726.9	731.7	743.1	767.0	789.4	806.5	818.2	832.8	839.6	828.5
47.5°	679.3	680.9	686.7	696.1	710.4	727.5	756.3	773.8	787.4	800.7	793.6
50°	647.2	641.4	642.4	648.2	659.9	676.7	697.4	722.0	737.6	753.8	755.4
52.5°	565.6	612.9	601.6	604.8	611.0	619.1	640.8	665.0	684.1	698.1	712.0
55°	474.7	484.0	575.0	562.1	566.0	573.1	583.1	607.4	625.9	645.3	664.7
57.5°	368.1	438.1	441.6	525.8	523.9	524.5	532.9	546.9	565.3	589.6	606.1
60°	286.2	315.7	373.0	402.1	476.0	478.5	483.4	491.5	507.4	530.3	556.6
62.5°	252.5	256.4	276.8	320.5	368.5	426.4	436.8	438.1	445.2	468.2	498.6
65°	221.8	224.4	230.5	235.1	275.2	331.2	381.1	389.2	393.7	407.3	433.2
67.5°	152.8	193.3	198.8	202.0	205.9	231.8	293.7	334.8	340.0	351.9	374.6
70°	29.5	61.2	167.4	171.0	172.9	178.7	188.8	254.2	288.5	299.8	310.2
72.5°	20.1	23.6	28.5	67.3	142.5	145.7	148.0	156.4	214.3	247.4	252.9
75°	14.6	16.2	19.1	23.6	29.1	94.9	117.5	121.7	125.9	173.9	201.7
77.5°	10.4	11.7	13.0	15.2	17.8	23.0	33.0	91.0	95.2	97.5	137.6
80°	5.8	7.1	8.7	10.0	11.3	13.0	16.8	21.0	46.9	68.6	72.2
82.5°	3.2	3.9	4.5	5.5	6.2	7.8	9.4	11.3	14.9	22.0	46.6
85°	1.6	1.6	1.6	2.3	2.6	3.6	4.2	4.9	6.8	9.4	13.0
87.5°	1.0	1.0	1.3	1.3	1.3	1.6	1.6	1.6	1.9	2.9	4.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1212970

CATALOG NUMBER: 2SNLED-LD5-19SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	1078.8	1078.8	1078.8	1078.8	1078.8
2.5°	1083.0	1082.1	1082.1	1085.9	1085.0
5°	1081.1	1080.1	1079.8	1084.0	1082.1
7.5°	1079.5	1075.9	1074.9	1078.8	1077.2
10°	1073.0	1070.4	1072.0	1070.7	1070.1
12.5°	1062.0	1060.4	1053.6	1054.2	1059.7
15°	1042.2	1048.7	1037.1	1047.4	1049.7
17.5°	1006.0	1020.5	1031.9	1038.0	1039.0
20°	1022.2	1027.0	1021.2	1021.5	1025.4
22.5°	1001.1	1003.4	1005.0	1003.1	1011.5
25°	967.4	958.7	977.5	981.4	995.0
27.5°	957.1	950.0	958.7	958.1	969.4
30°	948.7	925.7	929.6	935.7	949.6
32.5°	936.7	900.4	896.5	910.1	925.7
35°	915.6	881.3	872.3	881.0	904.3
37.5°	897.8	854.8	836.6	848.3	878.7
40°	871.3	834.0	805.9	816.2	852.2
42.5°	839.6	816.2	772.9	780.0	821.1
45°	807.5	786.8	740.8	744.4	793.3
47.5°	774.8	755.7	707.5	708.1	757.6
50°	742.7	717.5	677.7	666.3	719.8
52.5°	701.0	677.7	647.6	629.1	683.8
55°	661.5	635.2	613.2	584.7	643.0
57.5°	622.9	593.8	578.9	542.3	596.7
60°	570.2	556.2	534.2	499.3	555.0
62.5°	516.1	511.6	489.2	453.0	503.5
65°	453.0	463.6	440.7	409.6	450.0
67.5°	393.4	412.5	387.2	368.1	398.6
70°	329.9	351.9	337.7	330.9	343.9
72.5°	267.4	288.8	290.1	285.2	289.5
75°	206.6	230.2	243.2	235.7	236.7
77.5°	156.7	168.0	182.3	188.1	186.8
80°	96.8	116.6	128.2	140.2	136.0
82.5°	48.9	65.4	79.6	92.6	86.4
85°	20.4	26.2	36.6	48.2	46.3
87.5°	6.2	10.4	11.0	15.5	14.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)