

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: P1213739

Luminaire Tested: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213739
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33525)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

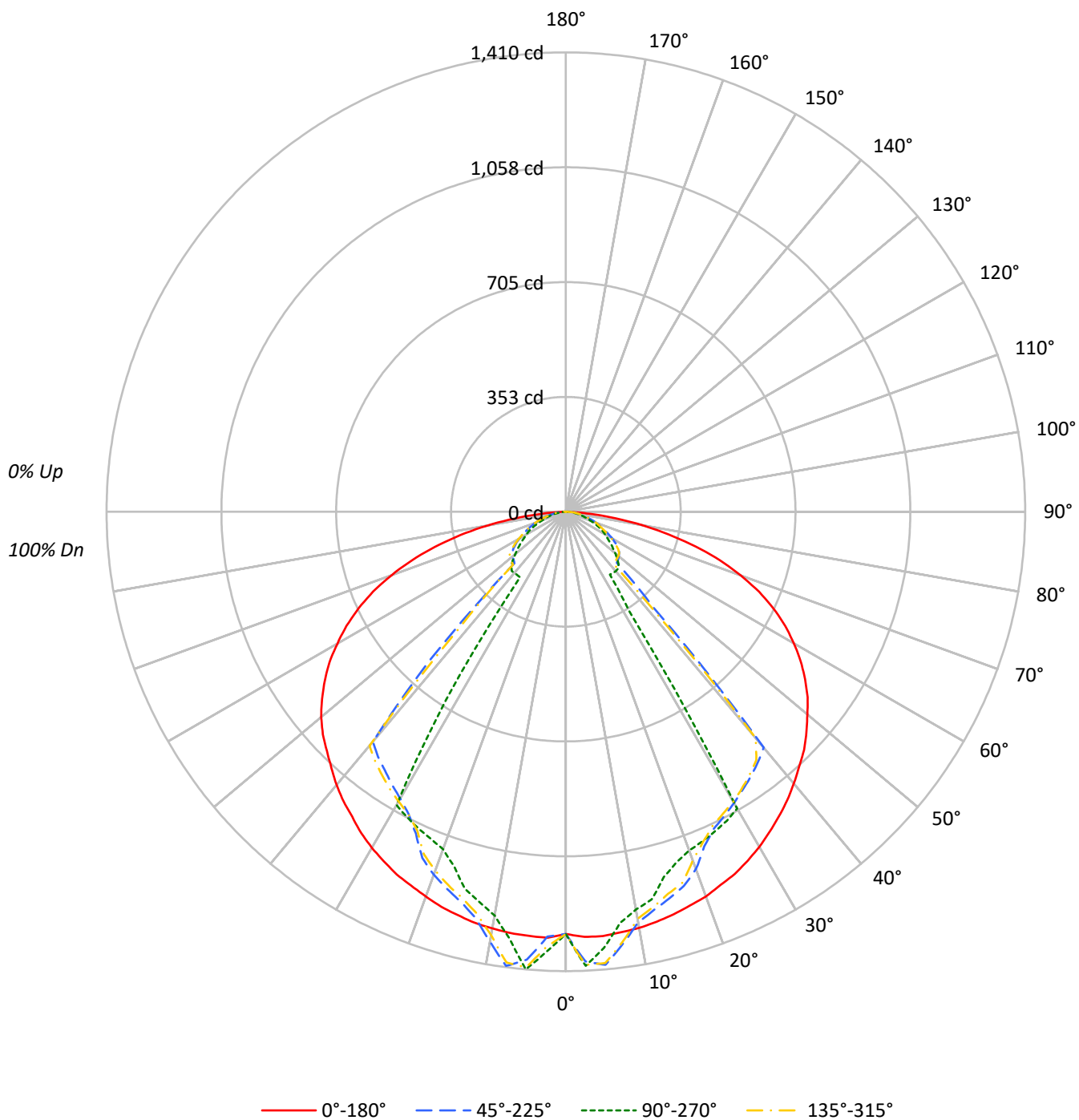
Lumens per Lamp: N/A
Luminaire Lumens: 2595.0 lumens
Efficiency: N/A
Efficacy: 123.6 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 21
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: P1213739

CATALOG NUMBER: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

Luminous Intensity Polar Plot



TEST NUMBER: P1213739

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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	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89	87		
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	75		
3	94	84	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67	65		
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59	57		
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51		
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47	46		
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41		
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37		
9	62	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34		
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	10472	10472	10472	10472
5°	10575	10551	10570	11073
10°	10585	9540	10599	9686
15°	10609	8826	10633	9106
20°	10686	8371	10686	8340
25°	10778	8211	10794	8135
30°	10887	8066	10915	7970
35°	11014	1837	11036	1916
40°	11190	1911	11257	1973
45°	11459	1899	11498	1969
50°	11727	1718	11884	1764
55°	12087	1525	12183	1547
60°	12393	1356	12421	1373
65°	12612	1183	12580	1164
70°	12431	954	12392	919
75°	11543	733	11624	702
80°	9369	521	9744	477
85°	5069	312	5356	240

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 357.5°

Vertical Angle: 60°

Luminance: 12699 cd/sqm

TEST NUMBER: P1213739

CATALOG NUMBER: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.5	4.9
10°-20°	350.6	13.5
20°-30°	519.2	20.0
30°-40°	523.2	20.2
40°-50°	408.7	15.7
50°-60°	315.7	12.2
60°-70°	211.9	8.2
70°-80°	108.1	4.2
80°-90°	30.1	1.2
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°	997.3	38.4
0°-40°	1520.5	58.6
0°-60°	2244.9	86.5
0°-90°	2595.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2595.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1296	1296	1296	1296	1296	
5°	1307	1343	1307	1410	1307	124
15°	1279	1161	1282	1198	1279	362
25°	1226	1082	1228	1072	1226	566
35°	1141	235	1143	245	1141	715
45°	1034	229	1038	237	1034	797
55°	896	166	903	169	896	800
65°	704	112	702	110	704	692
75°	413	56	416	54	413	432
85°	74	18	78	14	74	102
90°	0	0	0	0	0	

TEST NUMBER: P1213739

CATALOG NUMBER: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9
2.5°	1306.0	1310.7	1314.3	1316.7	1317.9	1317.9	1318.4	1319.0	1326.8	1330.3	1332.7
5°	1307.2	1311.9	1319.0	1328.5	1336.9	1344.0	1349.9	1358.2	1366.5	1375.5	1378.4
7.5°	1301.8	1307.8	1322.0	1339.2	1355.3	1366.5	1374.3	1379.6	1383.8	1384.4	1387.3
10°	1297.1	1307.8	1327.4	1349.9	1370.1	1383.8	1383.8	1380.8	1385.0	1368.9	1352.9
12.5°	1288.7	1300.6	1327.4	1357.0	1376.1	1381.4	1379.0	1367.1	1342.8	1323.2	1314.3
15°	1278.7	1294.7	1327.9	1361.2	1377.2	1379.0	1356.5	1326.2	1307.8	1295.9	1281.0
17.5°	1267.4	1288.7	1328.5	1361.8	1367.7	1359.4	1316.7	1297.7	1278.7	1250.7	1230.5
20°	1256.7	1277.5	1323.8	1353.5	1357.0	1319.6	1286.4	1266.2	1234.1	1209.8	1200.9
22.5°	1240.1	1264.4	1319.6	1342.2	1328.5	1285.2	1253.1	1221.0	1191.9	1184.8	1174.1
25°	1226.4	1251.9	1310.1	1328.5	1292.3	1253.7	1216.3	1178.9	1165.2	1155.1	1145.6
27.5°	1208.0	1239.5	1297.7	1303.6	1253.7	1219.9	1165.2	1148.6	1136.1	1124.8	1120.7
30°	1187.8	1226.4	1280.4	1269.2	1221.6	1171.8	1131.4	1115.9	1107.0	1095.1	1090.4
32.5°	1164.6	1206.8	1261.4	1229.4	1187.2	1124.8	1098.7	1086.8	1074.9	1066.0	1036.3
35°	1140.9	1189.6	1238.9	1191.4	1145.6	1089.2	1066.0	1055.3	1044.1	1011.4	980.5
37.5°	1116.5	1170.6	1211.5	1150.4	1090.4	1052.4	1032.8	1020.9	995.4	953.8	938.4
40°	1088.6	1147.4	1176.5	1108.2	1042.3	1015.0	996.6	984.7	927.1	908.7	903.9
42.5°	1060.7	1124.8	1133.7	1067.2	1002.5	975.2	959.7	920.5	881.3	871.8	873.6
45°	1034.0	1100.5	1086.8	1009.0	960.9	938.4	912.2	858.2	837.4	842.1	843.3
47.5°	1001.9	1071.4	1037.5	950.8	918.2	895.6	837.4	804.7	801.8	808.3	811.9
50°	967.5	1038.7	985.3	898.0	871.8	845.1	779.2	762.6	766.1	772.7	776.8
52.5°	935.4	1001.9	931.2	848.7	826.1	764.9	720.4	723.4	729.3	737.0	739.4
55°	896.2	957.4	873.6	798.8	777.4	697.2	677.0	684.2	690.1	696.6	701.4
57.5°	855.2	906.3	805.3	743.0	708.5	637.2	639.0	643.8	647.9	655.7	270.8
60°	808.3	848.1	730.5	691.3	623.0	589.7	591.5	599.8	604.0	337.3	186.5
62.5°	759.6	780.4	662.8	632.5	544.6	542.2	550.5	554.1	377.1	178.2	174.6
65°	703.8	699.6	596.3	548.2	491.2	493.5	502.4	484.6	166.9	166.9	165.7
67.5°	642.0	617.1	531.5	453.7	439.5	444.8	454.3	158.6	154.4	155.6	151.4
70°	571.3	536.3	464.4	384.2	389.0	394.3	153.2	143.7	141.9	139.0	130.7
72.5°	496.5	448.4	380.1	333.8	336.7	211.4	134.2	129.5	123.5	117.6	108.7
75°	412.8	350.4	279.1	279.1	283.3	120.6	117.0	109.3	102.7	95.0	89.7
77.5°	323.7	269.6	216.8	225.1	109.9	101.0	94.4	86.1	80.8	76.0	73.0
80°	237.0	188.3	163.3	146.1	85.5	76.6	70.1	65.3	63.0	60.0	56.4
82.5°	155.6	113.4	113.4	68.9	60.0	52.9	51.1	47.5	45.1	43.4	41.6
85°	74.2	65.9	49.9	42.2	37.4	33.9	32.7	30.9	30.9	30.3	29.7
87.5°	27.3	29.7	22.0	21.4	20.2	19.6	20.2	20.2	20.8	20.2	19.6
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: P1213739

CATALOG NUMBER: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9
2.5°	1338.6	1343.4	1347.0	1352.9	1360.6	1367.1	1373.1	1381.4	1394.5	1398.0	1401.0
5°	1378.4	1380.2	1384.4	1389.1	1390.3	1393.3	1392.7	1396.2	1398.0	1402.2	1393.3
7.5°	1380.8	1371.3	1360.0	1349.9	1342.8	1336.3	1332.1	1338.6	1342.2	1345.2	1336.3
10°	1330.9	1319.6	1313.1	1307.2	1300.0	1289.9	1276.3	1279.2	1278.1	1278.1	1275.1
12.5°	1299.4	1283.4	1266.8	1251.9	1245.4	1244.8	1245.4	1251.9	1251.9	1251.3	1247.8
15°	1250.1	1234.7	1226.4	1222.8	1222.8	1221.0	1221.0	1228.2	1226.4	1226.4	1224.6
17.5°	1217.5	1206.8	1200.9	1196.7	1194.9	1197.9	1201.4	1204.4	1205.0	1202.6	1193.1
20°	1190.8	1180.7	1173.5	1174.7	1174.1	1175.9	1177.7	1167.6	1155.1	1138.5	1130.8
22.5°	1162.8	1155.1	1149.8	1149.8	1142.7	1131.4	1114.7	1111.2	1109.4	1101.7	1095.1
25°	1136.1	1127.2	1119.5	1095.7	1080.9	1082.7	1079.7	1073.8	1073.2	1072.6	1074.9
27.5°	1109.4	1086.2	1056.5	1053.0	1047.0	1046.4	1050.0	1053.0	1053.0	1055.3	1058.3
30°	1054.2	1027.4	1022.1	1015.6	1017.9	1026.2	1028.0	1032.2	1033.4	1037.5	1039.9
32.5°	1003.7	991.8	987.1	990.0	997.7	1004.9	1009.0	1010.8	1013.8	1017.3	1020.3
35°	962.7	959.1	963.3	969.8	977.5	983.5	987.1	990.6	993.6	996.6	998.9
37.5°	932.4	934.8	940.7	949.0	956.8	961.5	964.5	968.6	972.8	976.4	962.1
40°	903.9	909.8	916.4	925.3	931.8	936.6	939.5	944.9	909.3	411.6	225.7
42.5°	879.0	885.5	890.2	897.4	904.5	908.1	881.9	393.8	222.7	221.5	224.5
45°	848.7	854.0	861.7	867.1	873.6	573.7	219.1	221.5	218.0	220.3	221.5
47.5°	817.8	826.1	830.3	792.3	235.8	218.0	215.6	218.0	215.6	218.6	216.8
50°	782.8	792.8	564.2	213.2	211.4	210.2	212.6	211.4	213.2	215.6	210.8
52.5°	747.1	462.6	206.7	205.5	206.7	205.5	209.6	206.7	207.3	204.9	199.0
55°	253.0	200.1	198.4	197.8	201.3	201.3	201.3	196.6	193.6	187.7	183.5
57.5°	193.6	193.6	193.0	193.6	192.4	191.2	185.9	181.7	177.6	169.3	166.9
60°	183.5	183.5	183.5	183.5	178.2	175.8	167.5	163.9	156.8	152.6	150.3
62.5°	175.2	174.0	168.7	166.9	160.9	154.4	149.7	146.1	139.0	136.6	134.8
65°	163.3	159.2	152.6	145.5	142.5	135.4	133.0	127.7	124.1	122.3	121.2
67.5°	143.7	137.8	132.4	127.7	122.3	120.0	117.0	112.8	110.5	109.3	108.1
70°	122.9	118.8	113.4	110.5	106.9	105.1	101.0	99.8	98.0	96.2	94.4
72.5°	102.7	100.4	98.0	93.8	92.6	91.5	87.3	84.9	82.6	80.2	79.0
75°	86.1	84.3	83.1	79.6	77.8	74.2	71.3	69.5	67.7	65.9	64.7
77.5°	70.7	69.5	65.9	63.5	62.4	59.4	58.2	58.8	57.6	55.2	54.0
80°	55.2	54.0	51.1	51.1	49.9	48.7	47.5	46.3	45.1	43.4	42.2
82.5°	42.2	41.0	39.8	38.6	37.4	36.8	36.2	35.0	33.9	32.7	32.1
85°	29.7	29.1	28.5	27.9	27.3	26.7	26.1	24.9	23.8	23.2	22.6
87.5°	20.2	19.6	19.0	18.4	17.8	17.2	16.6	16.0	14.8	14.3	13.7
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: P1213739

CATALOG NUMBER: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9
2.5°	1401.0	1404.0	1401.0	1394.5	1390.3	1388.5	1392.1	1392.1	1394.5	1397.4	1398.0
5°	1379.0	1371.9	1363.6	1355.3	1351.1	1348.7	1342.2	1343.4	1345.2	1346.4	1347.5
7.5°	1324.4	1314.9	1303.6	1292.9	1288.7	1285.2	1277.5	1277.5	1277.5	1278.1	1281.6
10°	1268.6	1264.4	1259.6	1252.5	1247.2	1245.4	1238.9	1240.6	1239.5	1241.2	1245.4
12.5°	1242.4	1237.7	1233.5	1226.4	1220.5	1218.1	1215.1	1216.9	1216.3	1219.3	1222.8
15°	1218.7	1216.3	1211.5	1206.2	1200.9	1196.1	1185.4	1181.8	1179.5	1176.5	1180.7
17.5°	1179.5	1162.8	1151.6	1143.2	1137.3	1133.1	1130.2	1130.2	1132.0	1133.7	1137.3
20°	1126.0	1121.3	1115.9	1107.0	1101.1	1098.7	1096.9	1096.9	1099.9	1102.3	1108.8
22.5°	1089.2	1088.6	1086.8	1082.7	1079.7	1079.7	1080.3	1081.5	1085.6	1089.2	1095.7
25°	1072.0	1074.4	1073.2	1070.8	1069.0	1069.6	1068.4	1069.6	1073.8	1077.3	1082.7
27.5°	1058.3	1061.9	1060.7	1057.1	1054.2	1055.3	1057.1	1055.9	1059.5	1063.7	1067.8
30°	1039.9	1040.5	1042.9	1038.7	1037.5	1039.3	1039.9	1041.1	1044.7	1047.6	1051.2
32.5°	1019.1	1023.9	1023.3	1019.1	1019.1	1020.9	1021.5	981.7	907.5	781.6	747.1
35°	998.9	1004.3	995.4	839.2	580.8	310.0	239.3	231.0	232.8	234.0	235.2
37.5°	738.8	350.4	223.3	225.1	226.9	228.6	230.4	232.2	234.0	235.8	236.4
40°	222.1	221.5	223.3	225.7	227.5	228.6	231.0	232.8	234.6	236.4	237.0
42.5°	219.7	220.9	222.7	225.1	227.5	229.8	231.6	234.0	235.2	236.4	237.0
45°	218.6	220.9	223.3	225.1	226.9	228.1	229.2	229.8	229.2	229.2	230.4
47.5°	216.8	219.1	219.7	219.1	219.7	219.1	219.1	219.1	217.4	216.8	216.8
50°	210.2	210.2	209.1	206.7	206.1	205.5	204.3	203.7	201.3	200.7	200.7
52.5°	196.6	196.0	194.2	191.2	190.0	188.9	188.3	187.7	185.3	184.1	184.7
55°	180.5	179.4	177.6	174.0	173.4	172.2	171.6	171.0	168.7	169.9	168.1
57.5°	165.7	163.3	160.9	160.4	158.0	157.4	156.8	156.2	154.4	155.0	153.8
60°	147.9	147.3	146.1	143.7	143.7	143.1	143.1	141.9	140.8	140.2	140.2
62.5°	134.8	133.0	131.8	131.8	130.1	130.1	130.1	128.9	127.7	128.3	127.7
65°	120.6	120.0	119.4	118.2	118.2	117.6	117.6	116.4	114.6	115.2	114.0
67.5°	108.7	107.5	106.3	105.7	103.3	102.1	101.6	101.0	98.6	99.2	98.0
70°	93.8	92.1	90.9	89.7	87.9	86.7	86.7	85.5	83.7	84.3	83.1
72.5°	78.4	77.2	76.0	75.4	73.6	73.0	72.5	71.9	70.1	70.7	70.1
75°	65.3	65.3	64.7	64.1	62.4	60.6	59.4	58.8	57.6	58.2	57.0
77.5°	54.0	52.9	51.7	51.7	49.9	48.7	47.5	47.5	47.5	46.9	46.3
80°	42.2	41.0	41.0	40.4	39.2	38.0	37.4	37.4	36.8	36.8	36.2
82.5°	32.1	30.9	30.3	30.3	29.1	28.5	27.9	27.3	27.3	27.3	26.7
85°	22.6	21.4	20.8	20.8	19.6	19.0	19.0	18.4	18.4	17.8	17.8
87.5°	13.7	13.1	12.5	12.5	11.3	10.7	10.7	10.7	10.1	10.1	9.5
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: P1213739

CATALOG NUMBER: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9
2.5°	1398.0	1398.0	1393.9	1395.1	1393.3	1395.7	1392.7	1392.7	1396.2	1396.2	1398.6
5°	1348.1	1345.2	1344.6	1343.4	1337.4	1339.8	1336.9	1333.9	1338.0	1338.0	1343.4
7.5°	1279.8	1274.5	1276.9	1273.3	1269.7	1264.4	1266.2	1263.8	1266.8	1270.9	1276.3
10°	1244.8	1240.1	1243.0	1239.5	1241.2	1233.5	1234.1	1234.7	1237.7	1238.9	1243.6
12.5°	1222.2	1221.0	1219.9	1218.7	1219.9	1215.7	1213.3	1213.9	1215.1	1215.7	1219.3
15°	1174.7	1167.0	1169.4	1161.1	1161.7	1162.3	1157.5	1162.3	1161.7	1169.4	1176.5
17.5°	1136.1	1136.1	1132.0	1128.4	1126.0	1125.4	1121.9	1124.2	1121.9	1126.6	1128.4
20°	1109.4	1108.8	1108.2	1106.4	1100.5	1101.1	1102.9	1097.5	1096.9	1096.3	1099.9
22.5°	1096.9	1097.5	1095.1	1095.1	1089.8	1091.0	1091.6	1085.6	1086.2	1084.5	1086.2
25°	1083.9	1085.0	1082.1	1082.1	1080.9	1080.3	1077.3	1078.5	1074.9	1072.0	1074.9
27.5°	1068.4	1070.8	1068.4	1069.6	1067.2	1066.0	1064.3	1063.1	1059.5	1058.9	1060.7
30°	1054.2	1055.3	1054.8	1051.8	1051.2	1047.6	1049.4	1045.8	1042.3	1042.9	1044.1
32.5°	540.4	516.1	397.9	359.3	355.7	368.8	437.1	532.1	689.5	842.1	952.0
35°	235.8	235.8	235.8	235.2	235.2	234.6	234.0	233.4	232.8	232.2	231.6
37.5°	237.0	237.0	237.0	237.0	236.4	235.8	235.8	234.6	234.0	233.4	232.8
40°	237.6	238.2	238.2	238.2	237.6	237.6	237.0	235.8	235.2	234.0	232.8
42.5°	237.0	237.6	237.6	237.0	237.0	236.4	236.4	235.8	235.2	234.6	234.0
45°	229.2	229.8	228.6	228.6	228.1	228.1	228.1	228.1	228.1	228.6	228.6
47.5°	215.6	215.6	215.0	214.4	214.4	213.8	214.4	213.8	215.0	215.6	216.8
50°	199.5	199.5	198.4	197.8	197.8	197.8	197.8	198.4	199.0	200.1	201.3
52.5°	182.9	182.9	182.3	181.7	181.1	181.1	182.9	182.3	182.9	183.5	185.3
55°	166.9	167.5	166.3	166.3	165.7	165.7	165.7	166.3	166.9	167.5	169.3
57.5°	153.2	153.2	152.0	152.0	152.0	151.4	153.2	152.0	152.6	153.2	154.4
60°	139.6	139.0	139.0	138.4	138.4	138.4	139.6	139.0	139.0	139.6	140.8
62.5°	127.1	127.1	126.5	126.5	125.9	125.9	127.1	126.5	126.5	127.1	127.7
65°	112.8	112.8	112.2	111.7	113.4	111.7	113.4	112.2	113.4	114.0	115.2
67.5°	96.8	96.8	96.8	96.2	96.2	97.4	98.0	96.8	97.4	98.6	99.2
70°	82.6	82.6	82.0	82.0	82.0	83.1	83.7	82.6	83.1	83.7	84.9
72.5°	70.1	68.9	68.9	68.3	69.5	69.5	70.1	69.5	70.1	70.1	71.3
75°	57.6	56.4	56.4	56.4	57.6	57.0	57.6	57.0	57.6	57.6	58.2
77.5°	46.3	45.7	45.1	45.1	46.3	46.3	46.3	45.7	46.3	46.9	47.5
80°	36.2	35.6	35.0	35.0	36.2	36.2	36.2	36.8	36.2	36.8	37.4
82.5°	26.7	26.1	25.5	26.7	26.7	26.7	26.7	27.3	26.7	27.3	27.9
85°	17.8	17.2	16.6	17.8	17.8	17.8	17.8	18.4	17.8	18.4	19.0
87.5°	9.5	8.9	8.9	9.5	9.5	9.5	10.1	10.1	10.1	10.7	10.7
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: P1213739

CATALOG NUMBER: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9
2.5°	1402.2	1404.0	1403.4	1399.8	1396.2	1392.1	1389.1	1389.7	1395.7	1397.4	1392.1
5°	1343.4	1354.7	1354.7	1362.4	1358.2	1354.7	1357.0	1370.1	1376.6	1386.7	1390.3
7.5°	1282.8	1288.2	1287.6	1295.3	1294.1	1294.1	1295.9	1313.1	1321.4	1329.7	1332.1
10°	1249.0	1254.3	1253.7	1254.3	1252.5	1248.4	1248.4	1256.1	1263.2	1267.4	1268.6
12.5°	1224.6	1227.6	1227.0	1227.0	1225.8	1222.2	1221.6	1228.2	1235.9	1241.2	1241.8
15°	1188.4	1196.7	1198.5	1206.2	1204.4	1199.7	1200.9	1206.2	1210.9	1215.7	1213.9
17.5°	1134.3	1138.5	1139.1	1142.1	1140.9	1140.9	1148.0	1167.6	1180.7	1191.9	1193.1
20°	1103.5	1106.4	1105.2	1111.8	1108.8	1108.2	1110.0	1118.3	1124.2	1129.6	1139.1
22.5°	1088.6	1091.0	1089.2	1089.8	1084.5	1079.7	1078.5	1085.0	1091.6	1098.7	1098.7
25°	1076.1	1077.9	1077.3	1076.1	1072.0	1065.4	1064.3	1065.4	1067.8	1068.4	1064.3
27.5°	1061.3	1062.5	1062.5	1063.1	1057.7	1051.8	1050.6	1049.4	1051.8	1051.2	1044.7
30°	1045.8	1044.1	1044.7	1045.3	1040.5	1035.2	1032.8	1032.2	1034.6	1034.0	1027.4
32.5°	1009.0	1022.7	1023.9	1025.1	1020.9	1016.2	1013.8	1012.0	1013.2	1012.6	1006.6
35°	231.0	235.2	288.0	652.1	885.5	980.5	990.6	988.2	988.8	988.8	984.1
37.5°	231.6	231.0	230.4	228.6	226.9	225.7	390.2	832.0	963.9	964.5	960.3
40°	231.6	231.0	230.4	229.2	226.9	225.1	222.1	219.7	225.1	495.3	906.3
42.5°	232.8	231.6	230.4	229.2	226.9	224.5	222.1	219.1	220.9	219.7	216.8
45°	229.2	228.6	228.6	228.1	226.9	224.5	221.5	218.0	216.2	218.0	215.0
47.5°	218.0	218.6	220.3	220.9	220.9	221.5	219.7	217.4	214.4	216.2	212.6
50°	202.5	203.7	204.3	207.3	208.5	210.8	211.4	211.4	210.8	213.2	210.8
52.5°	185.9	187.1	190.0	191.2	192.4	196.0	197.2	199.0	200.1	203.7	206.1
55°	169.9	170.4	171.6	174.0	175.8	178.8	180.5	182.3	185.3	187.1	194.2
57.5°	155.0	155.6	158.0	158.6	159.8	162.1	163.9	166.3	168.7	169.9	178.2
60°	140.8	141.3	143.1	143.7	144.3	146.7	148.5	150.3	152.0	153.2	159.2
62.5°	128.3	128.3	130.1	130.1	130.7	132.4	133.6	134.8	136.6	137.2	140.2
65°	115.8	116.4	117.6	117.6	118.2	119.4	120.0	120.6	122.3	122.3	124.7
67.5°	100.4	101.0	102.7	103.9	104.5	106.9	107.5	108.1	109.3	109.9	111.1
70°	85.5	86.1	87.9	88.5	89.1	90.9	92.1	93.8	95.6	97.4	98.6
72.5°	71.9	72.5	74.2	74.2	76.0	76.6	77.8	78.4	80.2	81.4	83.1
75°	58.8	59.4	61.2	61.2	63.0	63.5	64.1	64.7	65.9	67.1	68.3
77.5°	48.1	48.1	50.5	51.7	52.9	52.9	53.5	53.5	53.5	54.0	55.2
80°	38.0	38.0	39.8	41.0	42.2	42.2	42.8	43.4	43.9	43.9	44.5
82.5°	28.5	28.5	30.3	30.9	32.1	32.1	32.1	32.7	33.3	32.7	33.9
85°	19.6	19.6	20.8	21.4	22.6	22.6	22.6	23.2	23.8	23.2	23.8
87.5°	11.3	11.9	12.5	13.1	13.7	14.3	14.3	14.3	14.8	14.8	15.4
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: P1213739

CATALOG NUMBER: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9
2.5°	1386.1	1379.0	1378.4	1370.1	1367.7	1368.3	1361.8	1359.4	1348.7	1346.4	1335.1
5°	1391.5	1395.1	1393.3	1392.7	1394.5	1393.3	1388.5	1386.1	1384.4	1379.6	1370.1
7.5°	1332.7	1335.1	1336.9	1344.6	1351.1	1362.4	1374.3	1382.0	1387.9	1389.1	1381.4
10°	1272.7	1284.0	1291.7	1303.6	1313.1	1319.6	1326.8	1333.3	1350.5	1367.7	1377.8
12.5°	1241.8	1244.8	1244.2	1250.7	1257.3	1274.5	1291.1	1300.6	1313.7	1321.4	1339.8
15°	1215.7	1216.3	1218.1	1222.8	1226.4	1232.3	1240.1	1254.3	1280.4	1292.3	1302.4
17.5°	1191.9	1191.9	1193.1	1197.3	1202.0	1207.4	1212.1	1218.1	1231.1	1250.7	1275.7
20°	1153.9	1170.6	1172.3	1171.8	1174.1	1184.2	1185.4	1196.1	1202.6	1210.4	1234.7
22.5°	1097.5	1107.6	1121.9	1143.8	1152.2	1156.9	1160.5	1165.2	1175.3	1184.2	1194.3
25°	1066.6	1073.2	1077.3	1083.9	1101.1	1129.0	1134.3	1139.7	1146.2	1152.7	1165.2
27.5°	1039.3	1038.7	1041.7	1047.6	1052.4	1067.2	1093.4	1114.1	1115.3	1124.8	1135.5
30°	1019.7	1016.2	1012.0	1010.8	1017.3	1025.1	1032.8	1065.4	1088.0	1092.8	1104.0
32.5°	1001.3	995.4	989.4	984.7	980.5	987.1	991.8	1006.1	1035.2	1062.5	1068.4
35°	978.7	972.8	965.7	960.3	953.8	953.2	952.6	966.3	975.8	1008.4	1036.9
37.5°	955.6	949.0	943.1	937.2	930.6	925.9	922.9	926.5	935.4	949.6	997.1
40°	931.2	923.5	917.6	912.8	903.9	900.3	894.4	892.0	892.6	905.1	930.0
42.5°	556.5	887.3	890.2	884.9	877.2	872.4	865.9	862.9	857.0	862.9	877.2
45°	214.4	216.8	649.1	857.6	848.1	842.1	836.2	833.2	826.7	821.9	835.0
47.5°	210.2	212.6	207.9	294.6	809.5	811.3	804.1	801.2	794.6	791.1	787.5
50°	207.3	209.1	205.5	206.7	202.5	741.8	771.5	767.9	760.8	756.6	749.5
52.5°	204.3	204.3	201.9	199.0	197.8	198.4	624.2	734.1	725.7	721.6	712.1
55°	194.8	196.0	198.4	193.6	192.4	191.8	190.0	594.5	687.1	682.4	674.1
57.5°	180.5	182.9	189.5	188.3	188.3	183.5	182.3	182.3	551.7	642.6	634.3
60°	163.9	166.3	173.4	175.8	177.6	176.4	175.2	174.6	172.2	581.4	592.1
62.5°	146.7	149.1	151.4	159.2	161.5	164.5	168.1	166.3	163.9	163.9	547.6
65°	128.3	131.8	133.0	140.2	143.1	148.5	151.4	155.6	154.4	153.8	156.8
67.5°	112.2	116.4	117.0	120.0	125.3	127.7	131.3	139.0	142.5	143.7	144.9
70°	98.6	101.0	102.7	103.9	107.5	108.1	114.6	120.0	125.3	131.3	133.0
72.5°	84.9	86.7	90.3	89.1	90.3	92.6	96.2	99.8	105.1	113.4	118.8
75°	69.5	70.7	73.0	74.2	76.6	78.4	80.8	83.7	88.5	92.6	99.8
77.5°	55.8	56.4	58.2	58.8	61.2	63.0	67.1	68.9	71.9	74.8	79.0
80°	45.1	45.1	45.7	45.7	47.5	49.3	52.3	54.0	57.6	60.0	60.0
82.5°	34.4	34.4	36.2	36.2	37.4	37.4	39.2	39.2	41.0	42.2	43.4
85°	24.3	24.9	26.1	25.5	26.7	26.1	27.3	28.5	29.1	28.5	27.9
87.5°	16.0	16.0	17.2	16.6	17.2	17.2	18.4	18.4	19.0	19.0	18.4
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: P1213739

CATALOG NUMBER: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9
2.5°	1330.9	1322.0	1316.7	1310.1	1308.3	1306.6	1308.9	1308.9	1305.4	1302.4	1297.1
5°	1361.8	1352.3	1342.2	1331.5	1321.4	1310.7	1306.6	1306.0	1299.4	1295.9	1294.1
7.5°	1377.8	1373.1	1361.8	1347.0	1331.5	1312.5	1304.2	1299.4	1292.9	1291.7	1291.7
10°	1379.6	1374.3	1368.3	1357.6	1339.8	1314.9	1298.8	1289.3	1283.4	1287.6	1295.3
12.5°	1362.4	1372.5	1367.1	1360.0	1345.8	1315.5	1292.3	1278.1	1276.3	1287.0	1307.2
15°	1318.4	1348.1	1363.0	1355.9	1344.6	1314.3	1281.6	1265.0	1265.0	1287.0	1313.1
17.5°	1285.2	1308.3	1344.6	1350.5	1337.4	1311.9	1271.5	1251.9	1257.3	1289.3	1317.3
20°	1257.9	1272.1	1307.2	1340.4	1327.9	1306.6	1256.7	1236.5	1247.2	1285.8	1323.2
22.5°	1215.1	1243.6	1265.0	1314.3	1318.4	1296.5	1241.8	1217.5	1238.9	1285.8	1320.2
25°	1173.5	1208.0	1230.5	1278.7	1304.2	1284.0	1228.2	1197.3	1230.0	1284.0	1317.9
27.5°	1144.4	1160.5	1201.4	1235.9	1282.8	1267.4	1209.8	1175.3	1218.7	1274.5	1304.2
30°	1113.6	1124.2	1164.6	1197.3	1254.3	1248.4	1190.8	1151.0	1204.4	1265.6	1268.6
32.5°	1079.7	1091.6	1112.4	1159.9	1214.5	1230.5	1169.4	1126.6	1189.0	1251.9	1227.0
35°	1045.3	1054.2	1070.8	1121.9	1168.2	1203.8	1143.2	1098.7	1178.3	1231.1	1187.2
37.5°	1010.8	1020.3	1034.6	1077.3	1119.5	1178.9	1120.7	1070.8	1158.7	1194.3	1145.6
40°	978.1	983.5	998.3	1025.1	1079.1	1153.3	1095.1	1041.7	1138.5	1147.4	1089.2
42.5°	918.2	944.9	958.5	979.9	1033.4	1118.3	1065.4	1010.8	1115.9	1100.5	1032.8
45°	853.4	911.6	917.6	938.9	993.0	1080.9	1037.5	980.5	1094.5	1060.1	979.3
47.5°	800.6	842.7	877.2	895.0	944.9	1036.9	1011.4	955.0	1062.5	1009.0	927.1
50°	753.7	776.2	838.6	851.6	887.3	984.1	980.5	925.3	1017.9	944.9	876.0
52.5°	707.9	724.0	780.4	808.3	837.4	927.1	943.7	896.2	969.2	880.7	824.3
55°	668.1	673.5	704.4	763.2	789.3	869.5	903.3	862.3	907.5	819.6	774.4
57.5°	627.2	622.4	645.0	720.4	739.4	810.7	860.6	827.9	857.6	757.2	722.8
60°	584.4	577.9	587.4	637.2	686.5	752.5	810.1	789.9	797.0	695.4	665.2
62.5°	539.8	533.3	530.3	561.8	634.9	692.5	759.0	747.7	722.8	639.0	593.9
65°	493.5	487.0	482.2	494.7	577.9	614.7	702.0	699.0	641.4	579.6	500.1
67.5°	150.3	443.0	432.9	432.4	487.0	544.0	640.2	635.5	559.4	516.1	430.6
70°	135.4	359.3	381.9	376.5	400.3	472.1	569.5	566.0	479.9	413.9	380.7
72.5°	124.1	127.1	337.3	331.4	336.7	401.5	495.9	486.4	406.8	326.6	329.0
75°	106.3	111.7	116.4	279.7	272.6	332.6	415.7	400.9	335.5	269.6	275.0
77.5°	86.7	93.2	96.8	203.7	220.3	237.0	332.0	312.4	231.0	215.6	102.7
80°	64.7	70.1	76.0	81.4	167.5	165.7	246.5	226.9	160.9	134.2	80.2
82.5°	47.5	49.3	52.9	58.8	66.5	111.1	158.6	139.6	111.7	61.2	55.2
85°	29.7	32.1	33.9	35.6	40.4	66.5	78.4	62.4	46.9	37.4	35.0
87.5°	19.0	19.0	18.4	19.0	19.6	23.8	26.7	25.5	20.2	19.0	19.0
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: P1213739

CATALOG NUMBER: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9
2.5°	1291.1	1282.8	1282.8	1280.4	1282.2	1282.2	1281.6	1282.2	1286.4	1288.7	1292.9
5°	1290.5	1288.2	1293.5	1300.0	1307.8	1317.3	1319.6	1327.9	1335.7	1345.8	1356.5
7.5°	1298.3	1306.6	1316.7	1327.4	1342.8	1354.1	1364.2	1374.3	1381.4	1390.9	1396.8
10°	1309.5	1326.2	1343.4	1357.0	1373.7	1383.2	1389.7	1390.9	1380.8	1364.8	1351.7
12.5°	1325.6	1345.2	1361.2	1374.3	1382.0	1378.4	1359.4	1339.8	1328.5	1311.9	1288.7
15°	1339.2	1357.0	1373.7	1368.3	1347.5	1327.9	1313.1	1289.9	1267.4	1251.9	1241.8
17.5°	1345.2	1362.4	1356.5	1328.5	1308.9	1286.4	1256.1	1238.3	1223.4	1211.5	1205.6
20°	1348.7	1345.8	1313.7	1293.5	1255.5	1234.7	1215.1	1198.5	1187.2	1181.3	1180.1
22.5°	1339.2	1303.0	1275.7	1239.5	1211.5	1194.3	1178.9	1165.2	1157.5	1152.7	1149.8
25°	1307.8	1265.6	1225.2	1196.7	1172.9	1158.1	1146.2	1134.9	1125.4	1123.1	1117.1
27.5°	1263.8	1229.4	1175.9	1153.9	1133.1	1126.0	1113.0	1101.7	1093.4	1086.2	1067.2
30°	1227.6	1172.9	1134.3	1114.1	1101.7	1093.4	1078.5	1066.6	1052.4	1026.2	1015.6
32.5°	1183.0	1129.0	1092.2	1080.9	1065.4	1058.3	1041.7	1015.6	993.6	982.9	982.3
35°	1125.4	1080.9	1054.2	1044.1	1031.6	1019.7	985.3	961.5	950.8	952.0	960.9
37.5°	1077.3	1037.5	1020.3	1006.1	991.8	961.5	932.4	921.1	924.1	930.0	934.2
40°	1028.6	998.3	978.7	967.5	935.4	905.7	890.2	894.4	899.7	903.9	909.3
42.5°	981.1	959.7	940.1	918.2	874.2	858.2	861.7	867.1	871.8	877.8	883.1
45°	936.0	917.0	894.4	844.5	822.5	826.7	832.0	836.2	843.3	847.5	852.8
47.5°	893.2	873.0	833.2	789.3	786.9	795.2	800.0	805.3	810.7	800.0	441.3
50°	845.1	824.3	763.7	747.1	752.5	760.2	766.1	771.5	687.1	273.2	210.2
52.5°	797.6	744.7	706.1	710.9	716.2	725.1	729.3	541.6	215.6	205.5	206.1
55°	744.7	677.0	665.8	671.7	676.4	685.4	454.3	199.0	197.8	197.2	201.9
57.5°	661.6	620.6	625.4	631.3	636.1	449.0	193.6	192.4	193.0	193.6	194.2
60°	587.4	578.5	583.8	589.1	416.9	187.1	183.5	184.1	186.5	184.7	179.9
62.5°	528.6	535.7	541.0	473.9	177.6	175.8	177.6	175.8	171.6	168.7	162.7
65°	483.4	490.6	494.7	166.9	166.3	168.7	166.9	160.9	154.4	146.1	144.3
67.5°	435.9	443.0	158.6	154.4	156.8	153.8	146.7	139.6	134.8	127.7	124.7
70°	386.6	165.7	143.7	143.1	139.0	134.2	126.5	119.4	113.4	110.5	107.5
72.5°	279.1	131.3	129.5	124.7	117.6	111.1	104.5	100.4	97.4	95.6	93.8
75°	116.4	114.0	108.7	100.4	93.2	90.3	85.5	82.6	81.4	77.8	76.6
77.5°	97.4	92.6	84.9	79.0	74.8	73.0	69.5	65.9	64.1	63.5	61.2
80°	74.8	68.3	64.7	61.8	60.6	56.4	52.3	50.5	49.3	48.7	46.9
82.5°	51.1	48.7	46.3	42.2	42.2	40.4	38.6	37.4	36.2	36.2	35.0
85°	33.3	31.5	30.9	29.1	29.1	27.9	27.3	26.7	26.1	25.5	24.9
87.5°	19.0	19.0	19.6	19.0	19.0	18.4	17.8	17.2	16.6	16.6	15.4
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: P1213739

CATALOG NUMBER: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9
2.5°	1298.3	1304.2	1305.4	1325.6	1336.9	1336.3	1332.7	1343.4	1336.9	1333.3	1336.9
5°	1367.1	1374.3	1380.2	1402.2	1409.9	1413.5	1412.9	1418.8	1414.1	1409.9	1409.9
7.5°	1401.0	1403.4	1405.7	1400.4	1396.8	1390.9	1382.0	1368.9	1362.4	1355.3	1346.4
10°	1345.2	1337.4	1340.4	1329.7	1320.8	1314.3	1306.0	1295.3	1286.4	1279.8	1269.7
12.5°	1276.9	1276.3	1277.5	1279.2	1270.3	1265.0	1258.5	1250.7	1244.2	1237.1	1228.8
15°	1235.3	1235.9	1240.6	1238.9	1235.9	1232.9	1225.8	1223.4	1217.5	1209.8	1205.0
17.5°	1205.6	1208.6	1213.3	1210.9	1206.2	1203.2	1197.9	1192.5	1187.2	1181.3	1174.1
20°	1179.5	1182.4	1185.4	1182.4	1173.5	1169.4	1162.3	1145.6	1133.7	1121.9	1111.2
22.5°	1151.0	1152.7	1150.4	1140.9	1118.3	1107.6	1099.3	1094.5	1084.5	1077.9	1071.4
25°	1115.3	1105.2	1089.8	1079.1	1070.2	1065.4	1061.9	1061.3	1060.1	1058.9	1055.9
27.5°	1057.1	1053.6	1045.3	1041.1	1041.7	1043.5	1044.1	1045.8	1044.1	1041.7	1039.3
30°	1013.8	1015.6	1016.2	1017.3	1020.3	1022.1	1022.7	1025.1	1023.9	1022.1	1020.9
32.5°	986.5	990.6	993.0	996.6	998.3	1001.3	1001.3	1004.9	1001.3	1000.7	999.5
35°	963.9	967.5	968.6	974.0	975.8	978.7	978.7	981.7	978.7	948.4	748.9
37.5°	941.3	944.9	947.3	952.0	952.6	954.4	880.7	644.4	415.7	321.9	245.9
40°	914.6	918.8	921.1	922.9	648.5	411.6	283.3	230.4	230.4	232.2	234.0
42.5°	886.1	889.1	619.4	360.5	224.5	223.9	225.7	227.5	229.2	231.6	234.0
45°	696.6	351.6	223.3	218.0	219.7	222.1	224.5	226.9	229.8	232.2	233.4
47.5°	228.6	214.4	217.4	215.0	218.0	220.9	223.3	225.7	226.3	226.9	226.3
50°	211.4	211.4	213.2	213.2	215.6	216.8	216.8	216.8	214.4	213.8	212.0
52.5°	204.3	209.1	206.7	207.9	206.7	204.9	203.1	201.3	197.8	196.6	194.2
55°	200.7	202.5	196.6	194.8	192.4	187.7	185.3	182.9	179.9	178.8	175.8
57.5°	192.4	188.3	181.7	178.8	174.6	169.9	167.5	165.7	162.7	161.5	159.8
60°	177.0	168.7	164.5	160.9	156.2	152.0	150.3	149.1	146.7	146.1	144.3
62.5°	158.0	150.8	147.3	142.5	139.0	136.6	134.8	134.2	131.8	131.8	130.7
65°	137.2	133.6	130.7	125.9	124.1	121.7	121.2	120.6	119.4	118.8	117.6
67.5°	120.6	118.2	114.0	111.7	110.5	108.7	107.5	106.3	103.9	102.7	101.0
70°	105.7	103.9	99.8	98.0	95.6	92.6	90.9	89.7	87.9	86.7	84.9
72.5°	91.5	86.1	83.1	81.4	79.6	76.6	76.0	74.8	73.0	72.5	70.7
75°	73.6	69.5	67.7	66.5	64.7	63.0	63.0	63.0	61.2	60.6	60.0
77.5°	58.8	56.4	55.2	54.0	53.5	52.3	50.5	49.9	48.1	48.1	47.5
80°	45.1	43.9	42.8	42.2	41.6	40.4	39.2	38.6	36.8	36.8	36.2
82.5°	33.3	32.7	32.1	31.5	30.9	30.3	28.5	27.9	26.7	26.7	26.1
85°	23.8	23.2	22.0	21.4	21.4	20.8	19.0	18.4	17.2	17.2	17.2
87.5°	14.8	14.3	13.7	13.1	12.5	11.9	10.7	10.1	10.1	8.9	8.3
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: P1213739

CATALOG NUMBER: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9
2.5°	1329.7	1339.8	1338.6	1345.8	1347.5	1351.1	1352.3	1352.9	1344.0	1351.1	1351.7
5°	1408.1	1409.9	1411.1	1414.1	1417.0	1417.6	1414.7	1411.1	1412.3	1409.9	1404.0
7.5°	1345.2	1336.3	1334.5	1332.1	1330.9	1329.7	1324.4	1329.1	1323.8	1321.4	1313.1
10°	1268.0	1259.6	1259.1	1259.1	1260.8	1260.2	1259.1	1256.7	1261.4	1258.5	1256.7
12.5°	1227.6	1224.6	1226.4	1225.2	1230.0	1231.1	1230.0	1230.0	1228.8	1226.4	1227.6
15°	1203.2	1200.9	1202.6	1200.9	1204.4	1205.0	1202.0	1203.8	1200.9	1197.9	1196.7
17.5°	1171.2	1165.8	1161.7	1155.7	1156.3	1155.1	1151.6	1151.6	1148.6	1140.9	1141.5
20°	1109.4	1104.0	1101.7	1101.7	1104.6	1105.8	1105.2	1106.4	1103.5	1102.3	1097.5
22.5°	1070.8	1070.2	1071.4	1074.4	1079.1	1085.6	1086.2	1086.2	1086.2	1085.6	1079.7
25°	1057.1	1057.1	1058.3	1062.5	1066.0	1070.8	1072.0	1073.2	1072.0	1072.0	1066.6
27.5°	1041.7	1040.5	1042.9	1047.0	1051.2	1054.8	1057.7	1058.3	1056.5	1056.5	1058.3
30°	1022.7	1022.1	1025.1	1029.2	1032.8	1036.3	1039.3	1041.7	1039.3	1039.3	1037.5
32.5°	1003.1	1003.1	1004.3	979.3	908.1	817.8	819.6	767.3	731.1	685.4	745.9
35°	626.0	455.5	391.4	331.4	289.2	261.9	261.3	252.4	248.2	245.3	244.7
37.5°	236.4	237.6	239.9	241.1	242.9	244.1	244.7	244.7	244.7	244.7	244.1
40°	235.8	238.2	239.9	241.7	243.5	244.7	244.7	245.3	245.9	245.9	245.9
42.5°	236.4	238.7	241.1	242.9	244.1	244.7	245.3	245.9	245.9	245.9	245.9
45°	235.8	237.0	237.0	237.6	237.6	237.6	238.2	238.2	237.6	237.0	238.2
47.5°	226.9	226.9	225.1	224.5	223.9	222.7	223.3	222.7	222.1	221.5	222.7
50°	211.4	209.1	207.9	206.7	206.1	204.9	205.5	204.9	204.3	203.1	204.9
52.5°	193.0	192.4	190.0	188.9	188.3	188.9	187.7	187.1	186.5	185.9	186.5
55°	175.2	172.8	172.2	171.0	170.4	171.0	170.4	169.9	169.3	168.7	169.3
57.5°	159.2	157.4	156.8	155.6	155.6	155.6	155.6	155.0	154.4	153.8	154.4
60°	143.7	142.5	141.9	141.9	141.3	141.3	141.3	140.8	140.2	140.2	140.8
62.5°	130.7	130.7	128.9	128.3	128.3	128.9	128.3	127.7	127.1	126.5	127.7
65°	117.0	114.6	114.0	112.8	111.7	112.2	111.7	111.1	110.5	109.9	111.1
67.5°	100.4	99.8	97.4	96.2	95.6	96.2	95.6	95.0	94.4	93.8	95.0
70°	84.3	84.3	82.0	81.4	80.8	80.8	80.2	80.2	79.6	79.0	80.2
72.5°	70.1	70.1	69.5	68.3	67.7	67.1	66.5	65.9	65.9	66.5	66.5
75°	58.2	57.0	54.6	55.2	54.6	54.0	54.0	53.5	52.9	54.0	53.5
77.5°	45.7	45.1	43.4	43.9	43.4	42.8	42.8	42.2	41.6	42.2	42.2
80°	34.4	34.4	33.9	33.3	33.3	32.7	32.1	32.1	31.5	32.1	32.1
82.5°	24.9	24.9	24.3	23.8	23.2	23.2	22.6	22.6	22.6	22.6	22.6
85°	16.0	15.4	15.4	14.3	14.3	14.3	13.7	13.7	13.7	13.7	13.7
87.5°	7.7	7.7	7.1	7.1	6.5	5.9	5.9	5.3	5.3	5.9	5.9
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: P1213739

CATALOG NUMBER: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9
2.5°	1341.0	1348.7	1342.2	1345.2	1345.8	1355.9	1355.3	1357.6	1353.5	1348.7	1342.2
5°	1409.3	1405.7	1401.0	1412.3	1406.3	1413.5	1415.8	1420.6	1420.6	1420.0	1414.7
7.5°	1322.0	1314.3	1320.2	1324.4	1326.2	1321.4	1330.9	1341.6	1350.5	1355.9	1356.5
10°	1253.7	1256.1	1255.5	1257.3	1261.4	1260.8	1266.8	1272.7	1275.1	1278.7	1279.8
12.5°	1221.6	1221.0	1222.2	1226.4	1228.8	1228.2	1234.1	1237.7	1238.9	1239.5	1238.9
15°	1196.1	1191.9	1194.9	1195.5	1197.3	1197.3	1204.4	1209.8	1212.1	1213.3	1212.1
17.5°	1148.0	1137.9	1147.4	1147.4	1153.9	1152.7	1164.0	1172.9	1177.7	1181.3	1181.3
20°	1100.5	1095.7	1099.3	1098.1	1102.9	1102.3	1109.4	1115.3	1119.5	1122.5	1126.0
22.5°	1081.5	1082.7	1077.3	1077.9	1077.9	1077.3	1080.9	1083.9	1085.0	1086.8	1085.6
25°	1069.0	1070.2	1068.4	1065.4	1064.3	1065.4	1067.2	1070.8	1071.4	1070.2	1066.0
27.5°	1056.5	1053.0	1055.9	1050.6	1049.4	1051.8	1054.2	1054.8	1055.3	1055.3	1051.8
30°	1037.5	1034.6	1037.5	1035.2	1032.8	1035.2	1036.9	1036.9	1038.1	1038.7	1034.6
32.5°	725.1	731.1	827.3	885.5	967.5	1009.0	1016.7	1016.7	1017.9	1017.9	1014.4
35°	247.1	247.7	267.8	290.4	338.5	397.9	475.7	516.1	652.7	816.0	974.0
37.5°	244.1	243.5	242.9	242.3	241.7	241.1	239.9	239.3	242.9	288.0	390.8
40°	245.3	244.7	243.5	242.9	242.3	241.1	240.5	239.3	238.2	237.0	235.8
42.5°	245.3	244.7	244.1	243.5	242.9	242.3	241.1	239.9	238.7	237.0	235.2
45°	237.0	237.0	237.6	237.6	238.2	238.2	238.2	237.6	237.6	237.0	234.6
47.5°	221.5	221.5	223.3	223.3	224.5	225.7	225.7	226.9	228.6	229.8	230.4
50°	203.7	203.7	205.5	206.1	207.3	209.1	210.8	211.4	213.2	215.6	218.0
52.5°	185.9	185.9	187.7	187.7	188.9	190.6	192.4	193.0	195.4	197.8	200.7
55°	169.3	169.3	170.4	171.0	171.6	172.8	174.6	174.6	177.0	178.8	181.7
57.5°	154.4	155.6	155.6	155.6	156.2	157.4	158.6	158.6	160.4	162.1	164.5
60°	140.2	141.3	141.3	141.3	141.9	142.5	143.7	143.7	144.9	146.1	148.5
62.5°	127.1	128.3	128.3	128.9	128.9	129.5	130.7	130.1	131.3	131.8	133.6
65°	110.5	111.7	112.2	112.8	113.4	114.6	116.4	115.8	117.6	118.8	120.6
67.5°	94.4	95.6	95.6	96.2	96.8	98.0	99.2	99.2	101.0	102.1	104.5
70°	79.6	80.8	80.8	81.4	82.0	83.1	84.3	83.7	85.5	86.7	88.5
72.5°	65.9	67.1	67.1	67.7	67.7	68.9	70.1	71.3	71.3	72.5	73.6
75°	53.5	54.0	54.6	54.6	55.2	55.8	57.0	58.2	58.8	59.4	60.6
77.5°	42.2	42.8	43.4	43.4	43.9	44.5	45.1	47.5	48.7	49.3	49.3
80°	32.1	32.7	32.7	32.7	33.3	33.9	35.0	35.0	37.4	37.4	38.0
82.5°	22.6	23.2	23.2	23.2	23.8	24.9	25.5	26.1	27.3	27.9	27.9
85°	13.7	14.3	14.3	14.3	14.8	15.4	16.6	17.2	17.8	17.8	18.4
87.5°	5.3	5.9	6.5	6.5	7.1	7.7	8.3	8.9	9.5	9.5	10.1
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: P1213739

CATALOG NUMBER: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9
2.5°	1335.1	1339.2	1335.1	1337.4	1340.4	1335.1	1322.6	1317.9	1316.1	1308.9	1304.2
5°	1409.3	1409.3	1407.5	1412.3	1411.7	1403.4	1390.3	1384.4	1378.4	1370.7	1364.8
7.5°	1356.5	1361.2	1364.2	1382.6	1394.5	1395.7	1404.0	1405.7	1408.1	1405.7	1402.2
10°	1280.4	1278.7	1287.0	1304.2	1314.3	1319.6	1335.7	1343.4	1349.9	1363.0	1376.6
12.5°	1237.7	1240.1	1243.6	1256.1	1265.6	1263.2	1269.7	1275.1	1282.8	1295.9	1315.5
15°	1209.2	1211.5	1215.1	1224.6	1230.5	1227.6	1231.1	1234.7	1240.1	1246.6	1258.5
17.5°	1178.3	1182.4	1186.6	1196.7	1202.0	1201.4	1204.4	1205.6	1207.4	1211.5	1219.9
20°	1130.2	1143.2	1151.6	1165.2	1172.9	1171.8	1177.1	1178.9	1181.3	1185.4	1189.0
22.5°	1086.2	1089.8	1094.0	1108.8	1121.9	1137.9	1141.5	1146.2	1152.2	1156.3	1159.9
25°	1061.3	1058.9	1060.7	1070.8	1077.9	1079.1	1084.5	1099.9	1115.9	1123.1	1131.4
27.5°	1046.4	1044.1	1043.5	1048.2	1049.4	1046.4	1045.3	1050.0	1061.9	1073.8	1098.7
30°	1030.4	1027.4	1025.1	1029.2	1031.0	1026.8	1019.1	1015.0	1022.1	1025.1	1035.2
32.5°	1011.4	1008.4	1007.2	1009.6	1010.8	1007.2	998.9	994.2	993.0	990.6	993.0
35°	990.0	987.1	985.3	985.9	988.2	985.3	978.1	972.2	969.2	962.7	958.0
37.5°	510.2	722.8	938.4	960.9	963.3	962.7	955.6	949.0	946.1	938.4	936.0
40°	233.4	260.7	391.4	511.3	737.6	937.2	930.6	924.1	918.8	916.4	907.5
42.5°	232.8	233.4	234.0	231.0	286.3	487.6	719.8	898.6	895.0	889.1	882.5
45°	232.8	229.8	232.2	228.6	229.8	229.2	285.7	460.9	820.2	857.0	854.0
47.5°	230.4	228.6	231.0	228.1	224.5	226.3	223.9	226.9	354.0	600.4	822.5
50°	219.7	220.9	225.1	224.5	221.5	223.9	219.7	223.3	220.3	241.7	465.6
52.5°	203.7	206.1	210.2	213.8	215.0	218.0	216.8	218.0	215.6	216.2	216.8
55°	184.7	187.7	191.2	196.6	199.0	203.7	207.3	209.1	212.0	211.4	206.7
57.5°	166.9	169.9	172.8	178.2	183.5	185.9	192.4	196.0	203.7	201.9	200.7
60°	150.3	152.6	155.6	156.8	163.3	167.5	173.4	177.0	187.1	189.5	193.0
62.5°	135.4	136.6	139.0	140.8	144.9	149.1	152.0	158.0	163.3	171.0	176.4
65°	121.7	122.9	124.7	125.9	126.5	132.4	134.2	140.8	142.5	150.8	155.6
67.5°	106.3	108.7	111.1	112.2	113.4	117.0	118.2	121.2	125.3	128.9	134.8
70°	90.3	92.1	94.4	96.2	98.6	101.0	104.5	106.3	109.3	111.7	116.4
72.5°	75.4	77.2	78.4	80.2	82.0	83.7	86.7	90.9	93.2	97.4	98.6
75°	61.2	63.0	64.1	65.3	67.1	68.3	69.5	73.6	76.0	79.6	83.1
77.5°	50.5	50.5	51.7	55.2	54.6	54.6	55.8	58.2	60.0	62.4	65.9
80°	39.2	39.8	40.4	43.4	43.9	44.5	43.9	45.7	47.5	48.1	50.5
82.5°	29.1	29.7	29.7	31.5	33.3	33.3	33.3	33.9	35.6	36.2	37.4
85°	19.6	20.2	20.8	21.4	22.6	23.2	23.8	23.8	24.9	25.5	26.1
87.5°	10.7	11.9	12.5	13.1	13.7	14.3	14.8	15.4	16.0	16.6	17.2
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: P1213739

CATALOG NUMBER: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9	1295.9
2.5°	1302.4	1299.4	1297.7	1292.9	1291.7	1284.0	1285.2	1284.0	1284.0	1285.8	1291.7
5°	1358.2	1344.0	1340.4	1330.3	1322.0	1307.8	1298.8	1294.1	1287.0	1284.0	1288.2
7.5°	1396.2	1385.6	1376.6	1367.7	1355.9	1339.2	1326.8	1312.5	1300.6	1289.3	1286.4
10°	1389.7	1401.6	1401.6	1396.2	1385.0	1368.3	1353.5	1335.7	1314.9	1297.1	1286.4
12.5°	1334.5	1355.3	1371.9	1384.4	1395.7	1384.4	1369.5	1355.3	1332.1	1306.0	1286.4
15°	1273.9	1295.3	1316.1	1342.2	1369.5	1380.8	1380.2	1363.6	1342.8	1315.5	1288.2
17.5°	1231.1	1246.0	1257.3	1285.8	1319.0	1348.1	1367.7	1368.9	1348.7	1324.4	1288.7
20°	1199.1	1209.8	1219.3	1235.3	1264.4	1300.0	1336.3	1356.5	1352.9	1326.2	1290.5
22.5°	1170.0	1177.7	1185.4	1197.3	1220.5	1243.6	1285.8	1327.4	1345.2	1323.2	1288.7
25°	1140.9	1149.2	1155.1	1163.4	1181.8	1200.9	1230.5	1282.2	1322.0	1320.8	1285.2
27.5°	1106.4	1117.7	1124.8	1136.1	1148.6	1162.8	1183.0	1231.7	1288.7	1308.9	1275.7
30°	1064.9	1081.5	1092.2	1104.6	1115.3	1127.8	1143.8	1173.5	1244.2	1285.8	1265.6
32.5°	1004.9	1034.6	1058.3	1070.2	1082.1	1092.8	1107.0	1132.0	1189.6	1254.3	1254.3
35°	962.1	975.8	997.1	1031.6	1046.4	1057.1	1070.2	1089.8	1126.6	1216.9	1235.9
37.5°	928.8	934.2	944.9	978.7	1006.6	1023.9	1036.9	1049.4	1085.6	1165.8	1212.1
40°	903.9	902.1	900.9	917.0	956.8	984.1	998.9	1011.4	1039.3	1104.6	1180.7
42.5°	874.8	873.0	867.1	871.2	890.8	936.6	959.1	972.8	996.0	1040.5	1146.2
45°	844.5	841.5	839.2	835.0	842.1	867.7	914.0	934.2	947.3	987.1	1102.9
47.5°	813.6	809.5	806.5	802.9	798.8	810.7	854.6	890.8	913.4	938.4	1050.6
50°	769.7	775.0	771.5	767.3	763.7	761.4	779.8	839.2	867.1	887.3	987.1
52.5°	362.9	705.5	735.2	731.1	726.3	722.2	726.3	771.5	821.9	838.0	910.4
55°	206.7	314.2	653.9	691.3	687.1	681.2	677.6	693.1	768.5	789.9	840.4
57.5°	199.0	199.5	288.6	623.0	646.2	640.8	636.7	640.2	704.4	740.6	779.2
60°	192.4	192.4	192.4	275.6	595.7	597.5	592.1	586.2	614.1	685.4	717.4
62.5°	178.2	181.7	183.5	183.5	272.0	551.7	546.4	544.6	545.8	618.8	655.7
65°	159.8	168.1	171.6	174.0	174.0	285.7	499.5	496.5	492.3	520.3	593.3
67.5°	139.6	147.9	155.6	160.4	160.9	166.3	298.1	447.2	441.3	441.9	526.8
70°	118.8	125.9	134.2	141.3	147.9	150.8	155.6	371.2	390.8	382.5	451.4
72.5°	102.7	105.7	111.7	118.8	126.5	133.6	137.8	147.9	339.1	330.2	343.3
75°	85.5	87.9	92.1	96.8	102.7	111.1	118.2	125.3	179.9	276.8	275.0
77.5°	66.5	70.7	75.4	78.4	81.4	87.3	96.8	103.9	111.1	187.1	220.3
80°	51.1	54.0	56.4	59.4	63.0	67.1	70.7	79.0	87.3	93.8	168.7
82.5°	38.0	39.8	41.6	42.8	43.9	46.3	52.9	55.8	61.2	67.1	79.6
85°	26.7	27.9	29.1	29.7	30.3	30.9	33.3	33.9	39.2	40.4	48.1
87.5°	17.2	17.8	19.0	19.6	19.6	20.2	20.8	20.8	20.8	19.6	23.8
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: P1213739

CATALOG NUMBER: 4SNLED-LD5-28SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	1295.9	1295.9
2.5°	1296.5	1306.0
5°	1294.7	1307.2
7.5°	1289.9	1301.8
10°	1282.8	1297.1
12.5°	1275.1	1288.7
15°	1268.6	1278.7
17.5°	1261.4	1267.4
20°	1251.9	1256.7
22.5°	1242.4	1240.1
25°	1231.7	1226.4
27.5°	1218.1	1208.0
30°	1205.6	1187.8
32.5°	1193.7	1164.6
35°	1177.7	1140.9
37.5°	1161.1	1116.5
40°	1141.5	1088.6
42.5°	1120.7	1060.7
45°	1094.5	1034.0
47.5°	1071.4	1001.9
50°	1039.3	967.5
52.5°	1000.1	935.4
55°	953.8	896.2
57.5°	903.9	855.2
60°	850.5	808.3
62.5°	785.7	759.6
65°	709.7	703.8
67.5°	610.5	642.0
70°	500.7	571.3
72.5°	418.7	496.5
75°	343.3	412.8
77.5°	272.0	323.7
80°	169.9	237.0
82.5°	114.0	155.6
85°	68.9	74.2
87.5°	26.7	27.3
90°	0.0	0.0

(END OF REPORT)