

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: P1213066

Luminaire Tested: 4SNLED-LD5-41SL-LC-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213066
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-LD5-41SL-LC-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

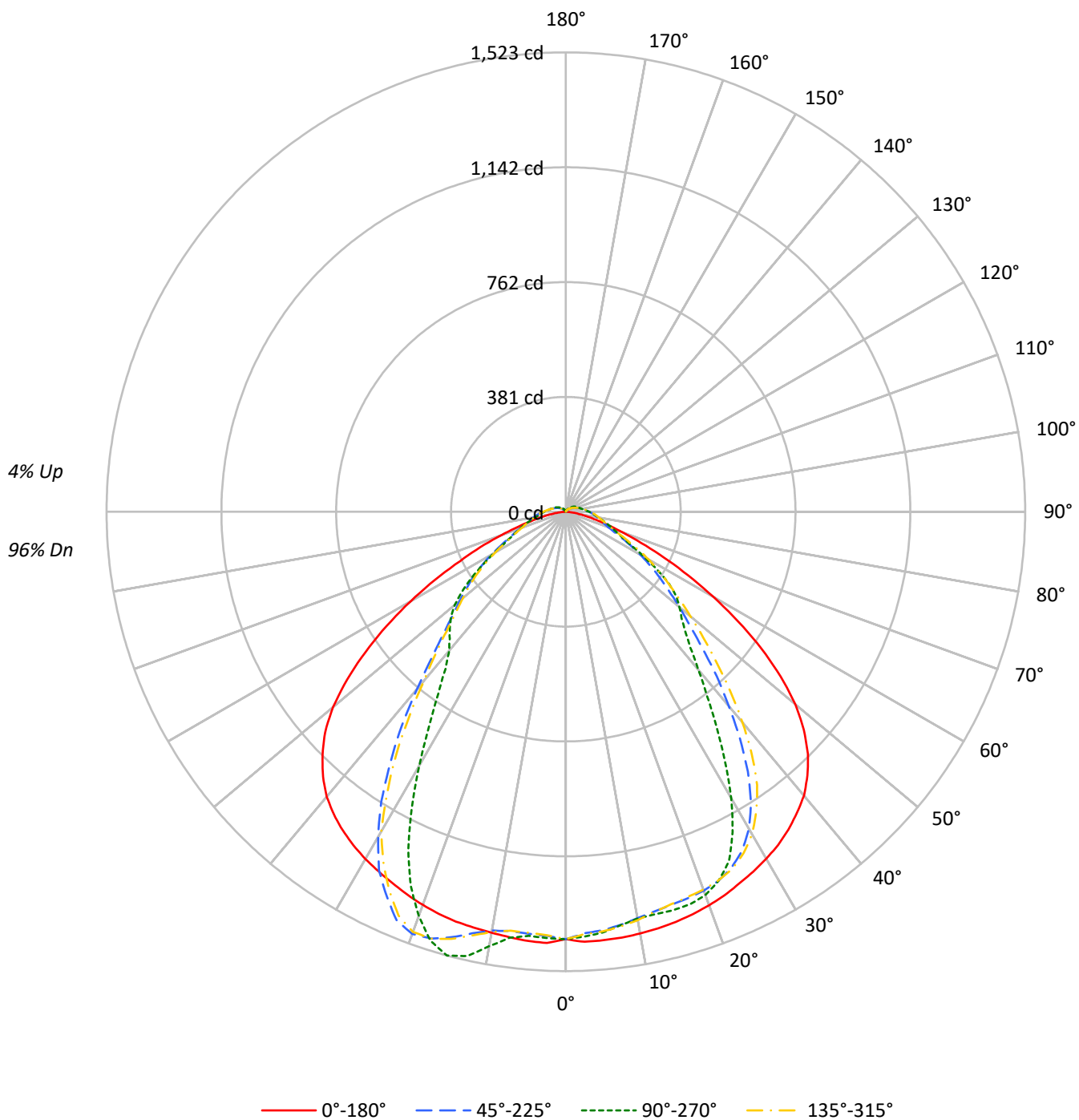
Lumens per Lamp: N/A
Luminaire Lumens: 3378.0 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 31
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: P1213066

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-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			0
RW	70	50	30	10	70	50	30	10	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	98	98	96
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	84	84	84	82
2	100	93	86	81	97	90	85	80	86	82	77	82	79	75	79	76	73	73	73	71
3	92	83	75	69	89	81	74	68	77	71	67	74	69	65	71	67	63	63	63	61
4	85	74	66	60	83	73	65	59	70	63	58	67	61	57	64	60	56	56	56	54
5	79	67	59	52	76	66	58	52	63	56	51	61	55	50	59	53	49	49	49	47
6	73	61	52	46	71	60	52	46	57	51	45	55	49	45	54	48	44	44	44	42
7	68	55	47	42	66	54	47	41	53	46	41	51	45	40	49	44	40	40	40	38
8	64	51	43	37	62	50	42	37	48	42	37	47	41	36	45	40	36	36	36	34
9	60	47	39	34	58	46	39	34	45	38	33	43	37	33	42	37	33	33	33	31
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30	30	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11451	11451	11451	11451
5°	11534	10997	11558	11083
10°	11587	10539	11564	11255
15°	11677	10398	11671	11578
20°	11805	10234	11794	10788
25°	11951	9708	11945	9381
30°	12176	8414	12183	7454
35°	12415	6804	12450	5757
40°	12625	5478	12678	4826
45°	12580	4641	12646	4519
50°	12038	4272	12206	4177
55°	10680	3840	10947	3491
60°	8663	2939	9123	2695
65°	6441	2249	6939	2132
70°	4380	1941	4937	1856
75°	2866	1752	3336	1657
80°	1850	1633	2170	1502
85°	950	1630	1250	1488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 12646 cd/sqm

TEST NUMBER: P1213066

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.6	4.0
10°-20°	400.5	11.9
20°-30°	608.8	18.0
30°-40°	653.1	19.3
40°-50°	566.9	16.8
50°-60°	420.1	12.4
60°-70°	240.7	7.1
70°-80°	133.3	3.9
80°-90°	81.2	2.4
90°-100°	52.8	1.6
100°-110°	35.3	1.0
110°-120°	23.9	0.7
120°-130°	14.6	0.4
130°-140°	7.7	0.2
140°-150°	3.5	0.1
150°-160°	1.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1143.9	33.9
0°-40°	1797.0	53.2
0°-60°	2784.0	82.4
0°-90°	3239.1	95.9
90°-120°	112.0	3.3
90°-150°	137.9	4.1
90°-180°	139.0	4.1
0°-180°	3378.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1417	1417	1417	1417	1417	
5°	1426	1400	1429	1411	1426	136
15°	1408	1368	1407	1523	1408	398
25°	1360	1279	1359	1236	1360	629
35°	1286	871	1290	737	1286	805
45°	1135	558	1141	544	1135	869
55°	792	419	812	381	792	702
65°	359	212	387	201	359	362
75°	102	135	119	127	102	117
85°	14	93	18	85	14	18
90°	0	78	2	72	0	1
95°	1	64	0	61	1	0
105°	1	48	1	45	1	1
115°	1	39	1	35	1	1
125°	1	29	1	24	1	1
135°	1	18	1	15	1	1
145°	1	11	2	9	1	0
155°	2	5	2	4	2	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

TEST NUMBER: P1213066

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0
2.5°	1427.2	1423.6	1422.1	1419.2	1421.4	1430.2	1424.3	1414.8	1415.5	1398.7	1407.5
5°	1425.8	1421.4	1419.2	1416.3	1417.7	1425.8	1419.9	1410.4	1409.7	1392.8	1400.9
7.5°	1423.6	1419.2	1415.5	1413.3	1414.1	1420.6	1413.3	1402.3	1400.2	1381.9	1389.2
10°	1419.9	1417.0	1411.9	1408.2	1407.5	1414.8	1403.1	1392.1	1387.0	1367.9	1375.3
12.5°	1414.8	1410.4	1405.3	1398.7	1398.0	1402.3	1392.8	1377.5	1372.3	1357.0	1365.0
15°	1407.5	1402.3	1396.5	1389.2	1385.5	1388.4	1376.7	1362.8	1362.1	1348.9	1359.9
17.5°	1399.4	1392.1	1385.5	1375.3	1370.1	1372.3	1362.8	1350.4	1351.8	1343.8	1356.2
20°	1388.4	1380.4	1370.1	1359.9	1352.6	1356.2	1349.6	1340.1	1342.3	1336.5	1347.5
22.5°	1376.0	1365.0	1352.6	1340.9	1335.0	1340.1	1335.0	1327.0	1327.7	1324.0	1330.6
25°	1359.9	1347.5	1332.8	1318.2	1315.2	1318.9	1316.0	1309.4	1306.5	1300.6	1303.5
27.5°	1345.3	1331.4	1313.1	1297.7	1292.6	1299.9	1293.3	1282.3	1274.3	1266.2	1260.4
30°	1328.4	1311.6	1291.1	1273.5	1269.1	1272.1	1262.6	1245.7	1224.5	1214.2	1198.1
32.5°	1310.1	1288.2	1262.6	1242.8	1239.9	1237.7	1220.1	1195.9	1163.0	1142.5	1117.6
35°	1286.0	1261.8	1231.1	1206.9	1202.5	1190.1	1161.5	1129.3	1086.9	1051.8	1009.3
37.5°	1258.9	1230.3	1198.1	1165.9	1153.5	1128.6	1088.4	1054.7	990.3	947.8	896.6
40°	1228.2	1193.8	1154.2	1115.4	1094.9	1054.7	1008.6	958.8	896.6	839.5	796.3
42.5°	1185.7	1149.1	1102.3	1059.1	1023.9	970.5	916.4	846.1	789.0	740.7	696.8
45°	1135.2	1091.3	1037.1	985.2	940.5	876.8	813.2	742.9	695.3	639.0	609.0
47.5°	1070.1	1022.5	964.7	906.8	848.3	778.0	711.4	644.1	596.5	556.3	534.3
50°	993.2	949.3	885.6	816.8	752.4	679.2	612.6	562.1	516.0	491.1	474.3
52.5°	898.1	857.1	791.9	717.3	655.1	583.3	522.6	481.6	448.7	430.4	424.5
55°	791.9	756.1	691.7	622.1	558.5	492.6	446.5	410.6	389.4	378.4	379.1
57.5°	678.5	650.7	589.9	527.7	467.7	417.9	376.2	347.7	331.6	330.8	333.0
60°	565.0	544.5	491.8	438.4	385.7	345.5	314.7	295.0	284.7	285.4	284.7
62.5°	456.7	437.7	399.6	355.7	314.0	286.9	259.1	251.0	242.3	241.5	241.5
65°	359.4	344.7	314.0	282.5	251.0	233.5	219.6	210.1	203.5	202.0	202.7
67.5°	270.1	264.2	243.0	221.8	202.0	191.0	179.3	177.1	172.0	172.0	173.5
70°	201.3	196.9	185.2	172.7	164.7	157.4	151.5	151.5	150.8	150.0	153.7
72.5°	145.7	146.4	142.7	133.2	132.5	131.0	129.5	131.7	132.5	134.7	139.1
75°	102.5	104.7	104.7	103.2	106.1	109.8	112.0	115.6	120.0	123.0	128.1
77.5°	72.5	72.5	76.1	80.5	86.4	93.0	98.8	103.9	109.8	113.4	117.8
80°	46.8	49.0	54.9	62.9	71.0	79.8	87.8	94.4	100.3	106.1	109.1
82.5°	27.8	31.5	38.8	49.0	59.3	70.3	78.3	86.4	93.0	98.8	101.0
85°	13.9	19.0	27.8	38.8	49.8	61.5	71.7	79.0	86.4	91.5	94.4
87.5°	4.4	10.2	19.8	30.0	41.7	53.4	64.4	72.5	79.0	83.4	86.4
90°	0.0	5.1	13.9	24.9	35.9	47.6	57.8	66.6	73.2	76.9	79.0
92.5°	0.0	2.9	11.0	20.5	30.7	42.5	52.7	60.7	66.6	70.3	71.7
95°	0.7	2.2	8.1	16.8	27.1	38.1	47.6	54.9	60.7	64.4	65.1
97.5°	0.7	1.5	6.6	13.9	23.4	33.7	43.2	50.5	54.9	58.6	59.3
100°	0.7	1.5	5.1	12.4	20.5	30.0	38.8	45.4	50.5	53.4	54.2
102.5°	0.7	0.7	4.4	10.2	18.3	26.3	34.4	41.0	45.4	48.3	49.8
105°	0.7	0.7	3.7	8.8	16.1	23.4	30.7	37.3	41.0	43.9	45.4
107.5°	0.7	0.7	2.9	7.3	13.9	20.5	27.8	32.9	37.3	40.3	41.7
110°	0.7	0.7	2.2	6.6	11.7	18.3	24.2	29.3	33.7	36.6	38.1

TEST NUMBER: P1213066

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.7	0.7	2.2	5.9	10.2	16.1	21.2	26.3	30.0	32.9	35.1
115°	0.7	0.7	2.2	5.1	9.5	13.9	19.0	23.4	27.1	30.0	32.2
117.5°	0.7	0.7	2.2	4.4	8.1	12.4	16.8	21.2	24.2	27.1	29.3
120°	0.7	0.7	1.5	3.7	7.3	11.0	14.6	18.3	22.0	24.9	27.1
122.5°	0.7	0.7	1.5	3.7	5.9	9.5	13.2	16.1	19.8	22.0	24.2
125°	0.7	0.7	1.5	2.9	5.1	8.8	11.7	14.6	16.8	19.8	22.0
127.5°	0.7	0.7	1.5	2.9	4.4	7.3	10.2	13.2	15.4	17.6	19.0
130°	0.7	0.7	1.5	2.2	3.7	5.9	8.8	11.0	13.9	15.4	16.8
132.5°	0.7	0.7	0.7	2.2	2.9	4.4	6.6	9.5	11.7	13.9	14.6
135°	0.7	0.7	0.7	1.5	2.9	3.7	5.1	7.3	9.5	11.7	13.2
137.5°	0.7	0.7	0.7	1.5	2.2	3.7	4.4	5.9	8.1	9.5	11.7
140°	0.7	0.7	0.7	1.5	2.2	2.9	3.7	5.1	6.6	8.1	9.5
142.5°	0.7	0.7	0.7	1.5	1.5	2.2	2.9	4.4	5.1	6.6	8.1
145°	0.7	0.7	0.7	1.5	1.5	2.2	2.9	3.7	4.4	5.1	6.6
147.5°	0.7	0.7	0.7	1.5	1.5	1.5	2.2	2.9	3.7	4.4	5.1
150°	1.5	1.5	1.5	1.5	1.5	1.5	2.2	2.2	2.9	3.7	4.4
152.5°	1.5	1.5	1.5	1.5	1.5	1.5	2.2	2.2	2.2	2.9	3.7
155°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.2	2.2	2.9	2.9
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: P1213066

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0
2.5°	1404.5	1406.0	1414.8	1414.1	1412.6	1411.1	1411.1	1409.7	1411.1	1414.8	1413.3
5°	1397.2	1399.4	1406.0	1405.3	1403.8	1403.1	1402.3	1400.2	1401.6	1406.7	1405.3
7.5°	1384.0	1386.2	1392.1	1389.2	1387.0	1388.4	1384.8	1382.6	1385.5	1390.6	1389.9
10°	1370.1	1371.6	1378.9	1377.5	1373.8	1374.5	1370.9	1369.4	1373.1	1376.0	1376.7
12.5°	1360.6	1365.8	1372.3	1371.6	1370.9	1371.6	1367.9	1366.5	1368.7	1371.6	1370.9
15°	1358.4	1365.0	1372.3	1372.3	1373.1	1373.8	1370.1	1367.9	1370.1	1372.3	1371.6
17.5°	1356.2	1364.3	1370.9	1370.1	1370.9	1372.3	1366.5	1365.0	1367.9	1370.9	1369.4
20°	1348.9	1356.2	1360.6	1359.2	1359.2	1359.9	1352.6	1352.6	1357.0	1359.2	1359.9
22.5°	1328.4	1337.2	1337.2	1333.5	1333.5	1330.6	1328.4	1324.0	1329.2	1332.8	1335.7
25°	1297.7	1301.3	1297.0	1288.9	1284.5	1280.8	1270.6	1279.4	1279.4	1290.4	1294.0
27.5°	1254.5	1246.4	1234.0	1217.2	1213.5	1201.8	1195.2	1197.4	1201.1	1216.4	1228.2
30°	1183.5	1159.4	1138.1	1130.8	1114.7	1103.0	1091.3	1097.1	1103.7	1112.5	1136.7
32.5°	1089.8	1066.4	1032.0	1019.6	1002.7	988.1	974.2	983.0	994.7	1000.5	1026.9
35°	982.2	954.4	922.9	901.7	884.2	876.1	858.5	871.0	883.4	887.8	910.5
37.5°	868.0	839.5	811.7	793.4	776.6	771.4	759.7	768.5	778.0	784.6	803.6
40°	759.7	733.4	712.2	699.7	688.0	683.6	679.2	682.9	690.2	695.3	710.0
42.5°	666.8	645.5	630.9	623.6	615.5	609.7	610.4	611.9	615.5	626.5	633.1
45°	585.5	573.1	563.6	562.1	557.0	556.3	555.5	558.5	560.6	567.2	572.4
47.5°	520.4	515.3	513.1	516.0	518.2	515.3	516.7	520.4	524.8	524.8	524.1
50°	469.2	470.6	473.5	480.1	484.5	486.0	487.5	491.8	492.6	494.0	491.8
52.5°	427.4	428.9	437.0	447.2	452.3	454.5	457.4	461.8	461.8	463.3	460.4
55°	385.0	387.2	395.2	405.5	409.9	412.8	415.7	418.7	420.9	423.8	421.6
57.5°	338.1	344.7	349.9	352.8	355.7	357.9	360.1	360.8	365.2	366.0	369.6
60°	288.4	289.8	295.0	294.2	292.0	297.9	295.0	300.1	305.2	311.8	312.5
62.5°	240.8	241.5	245.2	243.7	246.7	245.9	248.1	248.1	251.8	254.7	258.4
65°	203.5	204.2	207.1	207.1	206.4	208.6	210.8	212.3	212.3	214.5	217.4
67.5°	175.7	177.9	180.8	182.2	183.7	183.7	185.9	186.6	188.1	188.8	190.3
70°	156.6	159.6	162.5	163.9	164.7	166.1	166.9	166.9	168.3	169.1	170.5
72.5°	142.7	145.7	147.8	147.8	149.3	150.0	150.0	150.8	151.5	153.0	154.4
75°	131.0	133.2	134.7	133.9	133.9	133.9	134.7	134.7	136.1	137.6	139.1
77.5°	120.0	122.2	122.2	120.8	120.8	120.8	120.8	121.5	122.2	123.7	125.2
80°	112.0	112.0	111.3	111.3	109.8	109.1	109.1	109.8	109.8	111.3	113.4
82.5°	103.2	103.2	102.5	101.7	101.0	100.3	100.3	101.0	101.7	102.5	103.9
85°	95.1	95.1	93.7	93.7	93.0	93.0	93.0	93.0	93.7	94.4	95.9
87.5°	87.1	86.4	85.6	84.9	84.9	84.9	84.9	84.9	85.6	87.1	87.8
90°	79.0	78.3	77.6	77.6	76.9	76.9	77.6	77.6	78.3	79.0	79.8
92.5°	71.7	71.0	70.3	70.3	69.5	69.5	70.3	69.5	71.0	71.0	71.7
95°	65.1	64.4	63.7	63.7	63.7	63.7	63.7	63.7	64.4	64.4	65.1
97.5°	59.3	58.6	57.8	57.8	58.6	57.8	58.6	58.6	58.6	59.3	60.0
100°	54.2	53.4	53.4	54.2	53.4	53.4	54.2	54.2	54.2	54.2	54.9
102.5°	49.8	49.8	49.8	49.8	49.8	49.8	50.5	50.5	50.5	50.5	51.2
105°	45.4	46.1	46.1	46.1	46.8	46.8	46.8	47.6	47.6	47.6	47.6
107.5°	42.5	43.2	43.2	43.9	43.9	44.6	44.6	44.6	44.6	45.4	45.4
110°	39.5	40.3	41.0	41.7	41.7	42.5	42.5	42.5	42.5	42.5	42.5

TEST NUMBER: P1213066

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	36.6	37.3	38.1	39.5	40.3	40.3	40.3	40.3	41.0	41.0	40.3
115°	33.7	35.1	35.9	37.3	38.1	38.1	38.8	38.8	38.8	38.8	38.1
117.5°	30.7	32.9	33.7	35.1	35.9	35.9	36.6	36.6	36.6	36.6	35.9
120°	28.5	30.0	31.5	32.2	32.9	33.7	33.7	34.4	34.4	34.4	33.7
122.5°	26.3	27.8	29.3	30.0	30.7	31.5	31.5	31.5	31.5	31.5	31.5
125°	23.4	24.9	26.3	27.1	27.8	28.5	28.5	29.3	29.3	29.3	28.5
127.5°	21.2	22.7	23.4	24.9	25.6	25.6	26.3	26.3	26.3	26.3	25.6
130°	18.3	19.8	21.2	22.0	22.7	22.7	23.4	23.4	23.4	23.4	23.4
132.5°	16.1	17.6	18.3	19.8	19.8	20.5	20.5	21.2	21.2	21.2	20.5
135°	14.6	15.4	16.1	17.6	17.6	18.3	18.3	18.3	18.3	18.3	18.3
137.5°	13.2	13.9	14.6	15.4	15.4	16.1	16.1	16.1	16.1	16.8	16.1
140°	11.0	12.4	13.2	13.2	13.9	13.9	13.9	14.6	14.6	14.6	13.9
142.5°	9.5	10.2	11.0	11.7	12.4	12.4	12.4	12.4	13.2	12.4	12.4
145°	7.3	8.8	9.5	10.2	11.0	11.0	11.0	11.0	11.0	11.0	11.0
147.5°	5.9	6.6	8.1	8.8	8.8	9.5	9.5	9.5	9.5	9.5	9.5
150°	5.1	5.1	6.6	7.3	8.1	8.1	8.1	8.1	8.1	8.1	8.1
152.5°	3.7	4.4	5.1	5.9	6.6	6.6	6.6	6.6	6.6	6.6	6.6
155°	3.7	3.7	4.4	4.4	5.1	5.1	5.1	5.1	5.9	5.1	5.1
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: P1213066

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0
2.5°	1411.1	1410.4	1413.3	1410.4	1395.8	1401.6	1399.4	1407.5	1408.2	1410.4	1417.7
5°	1403.8	1403.8	1407.5	1404.5	1390.6	1396.5	1395.8	1403.8	1405.3	1406.7	1414.8
7.5°	1389.2	1389.9	1395.0	1392.8	1378.2	1387.0	1386.2	1395.8	1398.7	1401.6	1408.9
10°	1375.3	1374.5	1380.4	1378.2	1364.3	1374.5	1373.8	1383.3	1387.7	1392.8	1401.6
12.5°	1367.9	1365.8	1367.9	1365.8	1350.4	1358.4	1359.2	1370.1	1375.3	1381.9	1392.1
15°	1367.9	1364.3	1364.3	1359.9	1342.3	1347.5	1348.2	1355.5	1362.1	1368.7	1381.1
17.5°	1366.5	1362.8	1362.1	1358.4	1339.4	1339.4	1338.7	1343.8	1347.5	1354.0	1367.2
20°	1358.4	1357.0	1356.2	1354.0	1336.5	1333.5	1332.1	1332.1	1334.3	1336.5	1349.6
22.5°	1337.2	1338.7	1340.1	1341.6	1327.7	1322.6	1323.3	1321.8	1319.6	1319.6	1330.6
25°	1297.7	1305.0	1310.9	1317.4	1309.4	1305.7	1310.1	1307.9	1304.3	1301.3	1310.9
27.5°	1234.7	1250.1	1262.6	1278.7	1279.4	1276.5	1288.2	1286.7	1286.0	1281.6	1288.9
30°	1147.6	1171.8	1188.6	1212.0	1231.8	1234.7	1254.5	1257.4	1260.4	1258.2	1265.5
32.5°	1042.2	1075.2	1103.7	1140.3	1159.4	1176.2	1204.0	1215.7	1227.4	1231.1	1239.1
35°	927.3	964.7	998.3	1038.6	1068.6	1105.2	1138.9	1156.4	1182.8	1193.0	1204.7
37.5°	818.3	853.4	886.3	926.6	974.9	1013.0	1054.7	1094.2	1130.1	1144.7	1162.3
40°	721.7	750.2	781.7	816.8	860.7	910.5	955.9	1010.8	1053.2	1082.5	1108.1
42.5°	648.5	662.4	689.5	720.9	756.1	806.6	852.7	914.2	965.4	1007.1	1049.6
45°	583.3	589.9	609.7	626.5	662.4	707.0	756.1	816.1	869.5	922.9	974.2
47.5°	527.7	535.8	545.3	555.5	581.1	618.5	660.9	715.1	768.5	830.7	889.3
50°	490.4	492.6	494.0	498.4	513.8	539.4	573.8	619.9	671.2	737.8	800.0
52.5°	457.4	457.4	453.1	450.9	456.7	472.8	492.6	525.5	578.2	639.7	705.6
55°	422.3	415.7	414.3	406.9	408.4	415.7	425.2	450.9	494.0	546.7	610.4
57.5°	373.3	370.3	370.3	367.4	361.6	365.2	367.4	385.7	416.5	461.8	517.5
60°	316.9	315.5	319.1	319.8	314.7	316.9	316.2	327.2	349.1	385.7	431.8
62.5°	260.6	267.1	267.9	270.8	267.9	267.1	270.8	280.3	291.3	319.1	355.0
65°	218.8	222.5	223.2	226.9	225.4	225.4	228.4	235.7	242.3	261.3	289.1
67.5°	191.8	190.3	191.0	193.2	191.0	190.3	192.5	196.9	202.0	213.7	233.5
70°	170.5	169.1	169.1	169.1	166.1	163.9	164.7	166.1	168.3	174.9	187.4
72.5°	154.4	154.4	152.2	150.0	147.8	146.4	144.9	143.5	142.7	144.9	151.5
75°	139.8	140.5	139.8	137.6	134.7	131.7	128.8	125.9	122.2	120.8	121.5
77.5°	126.6	127.4	128.1	127.4	124.4	120.8	116.4	112.0	106.9	101.7	98.8
80°	114.9	116.4	117.1	116.4	114.2	111.3	106.1	101.0	93.7	87.1	79.8
82.5°	104.7	106.9	107.6	107.6	106.1	103.2	97.3	91.5	83.4	74.7	65.1
85°	96.6	98.1	99.5	99.5	98.8	95.9	90.0	83.4	75.4	65.1	54.9
87.5°	88.6	89.3	90.8	92.2	90.8	87.8	82.7	75.4	67.3	57.1	45.4
90°	80.5	81.2	82.7	84.2	83.4	80.5	76.1	69.5	60.7	49.8	38.1
92.5°	72.5	73.9	74.7	75.4	76.1	73.9	70.3	63.7	54.9	43.9	32.9
95°	66.6	66.6	68.1	68.8	69.5	67.3	64.4	57.8	49.8	39.5	28.5
97.5°	60.7	60.7	62.2	62.2	62.9	61.5	58.6	52.7	44.6	35.1	24.2
100°	54.9	55.6	56.4	57.1	57.1	56.4	53.4	47.6	40.3	31.5	21.2
102.5°	51.2	51.2	52.0	52.0	52.7	51.2	48.3	43.2	35.9	27.8	18.3
105°	47.6	47.6	48.3	48.3	47.6	46.1	43.2	38.8	32.2	24.2	16.1
107.5°	44.6	44.6	44.6	44.6	43.9	42.5	39.5	34.4	28.5	22.0	14.6
110°	42.5	41.7	41.7	41.0	40.3	38.1	35.1	30.7	25.6	19.0	12.4

TEST NUMBER: P1213066

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	40.3	39.5	38.8	38.1	36.6	34.4	31.5	27.8	22.7	16.8	11.0
115°	38.1	37.3	36.6	35.1	33.7	31.5	28.5	24.9	19.8	14.6	9.5
117.5°	35.9	35.1	33.7	32.2	30.7	28.5	25.6	22.0	17.6	13.2	8.8
120°	32.9	32.2	31.5	30.0	28.5	25.6	22.7	19.8	15.4	11.7	7.3
122.5°	30.7	30.0	28.5	27.8	25.6	23.4	20.5	17.6	13.9	10.2	6.6
125°	27.8	27.1	26.3	24.9	23.4	20.5	18.3	15.4	12.4	8.8	5.1
127.5°	25.6	24.9	23.4	22.0	20.5	18.3	16.1	13.9	11.0	7.3	5.1
130°	22.7	22.0	21.2	19.8	18.3	16.1	14.6	11.7	9.5	6.6	4.4
132.5°	19.8	19.8	19.0	17.6	16.1	14.6	12.4	10.2	8.1	5.9	3.7
135°	18.3	17.6	16.8	15.4	14.6	12.4	11.0	8.8	6.6	5.1	2.9
137.5°	16.1	15.4	14.6	13.9	12.4	11.0	9.5	7.3	5.9	4.4	2.9
140°	13.9	13.2	13.2	11.7	11.0	9.5	8.1	6.6	5.1	3.7	2.2
142.5°	12.4	11.7	11.0	10.2	9.5	8.1	6.6	5.1	4.4	2.9	2.2
145°	11.0	10.2	9.5	8.8	8.1	6.6	5.9	4.4	3.7	2.9	2.2
147.5°	8.8	8.8	8.1	7.3	6.6	5.9	5.1	4.4	2.9	2.2	1.5
150°	7.3	7.3	6.6	5.9	5.9	5.1	4.4	3.7	2.9	2.2	1.5
152.5°	6.6	5.9	5.9	5.1	5.1	4.4	3.7	2.9	2.2	2.2	1.5
155°	5.1	5.1	5.1	4.4	4.4	3.7	2.9	2.9	2.2	1.5	1.5
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: P1213066

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0
2.5°	1419.2	1410.4	1417.7	1430.9	1429.4	1428.0	1426.5	1429.4	1438.9	1433.8	1425.8
5°	1417.0	1408.2	1416.3	1428.7	1428.0	1425.8	1424.3	1427.2	1436.7	1431.6	1422.8
7.5°	1412.6	1404.5	1410.4	1422.8	1422.8	1421.4	1419.9	1422.8	1431.6	1427.2	1418.4
10°	1405.3	1399.4	1405.3	1417.0	1417.7	1414.8	1413.3	1417.0	1425.8	1423.6	1416.3
12.5°	1399.4	1393.6	1400.2	1411.9	1412.6	1409.7	1407.5	1411.9	1423.6	1425.0	1422.8
15°	1391.4	1386.2	1394.3	1406.7	1406.7	1404.5	1404.5	1410.4	1426.5	1433.1	1436.7
17.5°	1379.7	1376.0	1385.5	1398.0	1398.7	1397.2	1398.0	1409.7	1430.9	1447.0	1457.2
20°	1365.0	1363.6	1373.8	1387.0	1389.2	1389.9	1393.6	1411.1	1440.4	1462.4	1472.6
22.5°	1347.5	1348.2	1359.9	1373.8	1376.7	1378.9	1386.2	1411.1	1447.7	1471.1	1475.5
25°	1327.7	1329.9	1342.3	1359.2	1362.8	1367.2	1379.7	1411.9	1449.9	1465.3	1458.0
27.5°	1306.5	1310.9	1327.0	1344.5	1348.9	1356.2	1372.3	1407.5	1439.7	1440.4	1413.3
30°	1284.5	1289.6	1308.7	1329.2	1336.5	1343.8	1363.6	1397.2	1414.8	1391.4	1343.8
32.5°	1259.6	1266.9	1286.0	1310.9	1319.6	1329.2	1348.9	1377.5	1370.9	1320.4	1252.3
35°	1228.2	1238.4	1260.4	1289.6	1297.7	1310.1	1324.0	1330.6	1301.3	1229.6	1152.8
37.5°	1189.4	1204.7	1230.3	1264.0	1272.8	1280.8	1284.5	1266.2	1207.7	1130.1	1050.3
40°	1144.7	1168.1	1195.9	1233.3	1242.1	1242.1	1228.9	1190.1	1116.2	1014.4	925.9
42.5°	1090.6	1119.1	1154.2	1191.6	1200.3	1190.1	1158.6	1090.6	1006.4	892.9	799.2
45°	1024.7	1062.7	1102.3	1141.1	1145.4	1122.8	1066.4	980.0	876.1	770.7	681.4
47.5°	946.4	996.1	1039.3	1083.2	1077.4	1039.3	963.9	865.9	756.1	656.5	584.8
50°	858.5	917.1	965.4	1007.1	994.7	942.0	853.4	750.9	641.9	557.0	497.7
52.5°	764.9	832.2	880.5	914.2	897.3	834.4	737.0	639.0	549.7	472.1	432.6
55°	667.5	735.6	785.3	811.7	789.7	721.7	625.8	536.5	452.3	401.8	378.4
57.5°	573.1	636.8	683.6	704.8	677.0	609.0	520.4	445.0	384.3	341.8	330.1
60°	482.3	534.3	578.9	595.0	565.0	502.1	426.0	366.0	321.3	292.0	286.2
62.5°	398.2	440.6	475.7	488.2	458.9	409.9	344.0	299.4	267.9	253.2	245.9
65°	328.6	353.5	389.4	387.2	369.6	324.2	275.9	244.5	224.0	214.5	210.1
67.5°	258.4	281.1	303.7	306.7	284.7	253.2	221.8	199.1	188.1	183.0	180.8
70°	199.8	216.6	230.6	226.9	215.2	195.4	175.7	163.2	158.8	156.6	156.6
72.5°	155.2	163.9	170.5	166.1	158.8	148.6	139.1	133.9	134.7	136.1	137.6
75°	120.0	122.2	123.7	119.3	117.8	111.3	110.5	111.3	115.6	120.0	122.2
77.5°	92.2	89.3	87.1	82.7	83.4	82.7	86.4	92.2	98.8	105.4	111.3
80°	71.0	64.4	59.3	54.9	57.1	60.7	68.1	76.9	85.6	93.0	100.3
82.5°	54.9	45.4	38.1	33.7	38.1	43.9	53.4	64.4	74.7	82.7	90.8
85°	42.5	31.5	22.7	18.3	22.7	31.5	41.7	54.2	65.1	73.9	82.0
87.5°	32.9	22.7	12.4	7.3	12.4	22.0	33.7	45.4	56.4	66.6	74.7
90°	26.3	15.4	5.9	1.5	6.6	15.4	26.3	38.1	49.0	60.0	68.1
92.5°	21.2	11.0	2.9	0.0	3.7	11.7	22.0	32.9	43.9	54.2	62.2
95°	17.6	8.8	2.2	0.0	2.9	8.8	17.6	28.5	38.8	49.0	55.6
97.5°	14.6	6.6	1.5	0.0	1.5	7.3	14.6	24.2	34.4	43.9	50.5
100°	12.4	5.9	1.5	0.0	1.5	5.9	12.4	21.2	30.0	38.8	45.4
102.5°	10.2	4.4	0.7	0.7	0.7	4.4	11.0	18.3	26.3	34.4	41.0
105°	9.5	3.7	0.7	0.7	0.7	3.7	9.5	16.1	23.4	30.7	36.6
107.5°	8.1	2.9	0.7	0.7	0.7	2.9	8.1	13.9	21.2	27.8	32.9
110°	6.6	2.9	0.7	0.7	0.7	2.9	6.6	12.4	18.3	24.2	29.3

TEST NUMBER: P1213066

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	5.9	2.2	0.7	0.7	0.7	2.2	5.9	11.0	16.1	22.0	26.3
115°	5.1	2.2	0.7	0.7	0.7	2.2	5.1	9.5	13.9	19.0	23.4
117.5°	4.4	2.2	0.7	0.7	0.7	1.5	4.4	8.1	12.4	16.8	21.2
120°	3.7	1.5	0.7	0.7	0.7	1.5	3.7	7.3	11.0	14.6	18.3
122.5°	3.7	1.5	0.7	0.7	0.7	1.5	2.9	5.9	9.5	12.4	16.1
125°	2.9	1.5	0.7	0.7	0.7	0.7	2.9	5.1	8.1	11.0	13.9
127.5°	2.9	1.5	0.7	0.7	0.7	0.7	2.2	4.4	6.6	9.5	12.4
130°	2.2	1.5	0.7	0.7	0.7	0.7	1.5	3.7	5.9	8.1	10.2
132.5°	2.2	1.5	0.7	0.7	0.7	0.7	1.5	2.9	4.4	6.6	8.8
135°	2.2	0.7	0.7	0.7	0.7	0.7	0.7	2.2	3.7	5.1	6.6
137.5°	1.5	0.7	0.7	0.7	0.7	0.7	0.7	1.5	2.9	3.7	5.9
140°	1.5	0.7	0.7	0.7	0.7	0.7	0.7	1.5	2.2	2.9	4.4
142.5°	1.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5	2.2	3.7
145°	1.5	0.7	0.7	1.5	1.5	0.7	0.7	1.5	1.5	2.2	2.9
147.5°	1.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5	1.5	2.2
150°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.2
152.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
155°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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: P1213066

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0
2.5°	1424.3	1407.5	1416.3	1413.3	1416.3	1423.6	1422.8	1420.6	1422.1	1418.4	1414.8
5°	1421.4	1404.5	1413.3	1409.7	1413.3	1420.6	1419.2	1417.0	1419.2	1414.8	1411.1
7.5°	1417.7	1402.3	1412.6	1411.9	1418.4	1428.0	1428.7	1428.7	1433.8	1427.2	1424.3
10°	1417.7	1409.7	1423.6	1428.7	1445.5	1458.0	1459.4	1462.4	1471.1	1469.7	1462.4
12.5°	1433.1	1431.6	1452.1	1464.6	1479.9	1497.5	1507.0	1509.9	1515.8	1511.4	1508.5
15°	1452.8	1460.2	1482.9	1496.8	1513.6	1526.8	1529.0	1530.4	1534.8	1528.2	1523.1
17.5°	1479.2	1483.6	1501.9	1507.7	1518.7	1520.9	1518.0	1510.7	1510.7	1496.0	1491.6
20°	1491.6	1489.4	1496.8	1487.2	1482.9	1469.7	1457.2	1443.3	1442.6	1427.2	1425.8
22.5°	1480.7	1466.0	1450.7	1427.2	1417.0	1398.0	1381.1	1373.1	1367.9	1348.2	1343.1
25°	1441.9	1406.0	1383.3	1355.5	1330.6	1308.7	1292.6	1275.7	1259.6	1243.5	1236.2
27.5°	1374.5	1340.9	1304.3	1265.5	1231.1	1197.4	1170.3	1153.5	1138.1	1116.9	1105.9
30°	1291.8	1245.0	1204.7	1167.4	1111.0	1070.1	1047.4	1013.7	1002.0	992.5	972.0
32.5°	1194.5	1138.1	1083.2	1032.7	974.9	936.8	906.8	882.0	874.6	849.8	843.9
35°	1086.9	1013.0	950.8	901.0	859.3	813.2	788.3	771.4	756.8	740.0	737.0
37.5°	960.3	893.7	823.4	779.5	746.6	707.0	688.0	676.3	669.7	657.3	655.1
40°	832.9	766.3	718.0	674.1	653.6	632.4	618.5	613.3	610.4	606.0	601.6
42.5°	717.3	658.7	624.3	595.0	586.3	576.0	572.4	575.3	572.4	570.9	570.2
45°	619.2	574.6	550.4	541.6	539.4	536.5	539.4	544.5	545.3	543.8	543.8
47.5°	529.9	508.7	498.4	499.9	503.6	505.8	510.9	517.5	518.9	515.3	516.7
50°	471.4	458.9	456.7	462.6	470.6	473.5	479.4	484.5	483.8	482.3	480.9
52.5°	416.5	412.8	418.7	424.5	433.3	434.8	437.0	439.1	438.4	435.5	434.0
55°	370.3	373.3	378.4	380.6	387.2	386.5	387.2	387.2	384.3	382.8	380.6
57.5°	328.6	329.4	332.3	333.0	336.7	335.2	334.5	333.0	328.6	327.9	325.7
60°	286.2	284.7	291.3	286.2	289.1	286.2	285.4	281.8	277.4	276.7	275.2
62.5°	245.9	243.0	247.4	245.2	246.7	243.7	242.3	237.9	234.2	233.5	232.7
65°	210.1	208.6	213.0	212.3	213.7	210.1	208.6	205.7	202.7	202.0	201.3
67.5°	180.1	183.7	185.9	185.9	187.4	186.6	183.0	182.2	181.5	178.6	178.6
70°	158.1	160.3	164.7	165.4	164.7	166.1	163.2	162.5	161.8	160.3	159.6
72.5°	140.5	143.5	147.8	148.6	147.8	147.8	146.4	145.7	145.7	143.5	143.5
75°	126.6	130.3	133.9	133.9	133.9	132.5	131.0	131.0	129.5	128.8	127.4
77.5°	114.9	119.3	122.2	121.5	120.8	119.3	119.3	117.1	114.9	114.9	113.4
80°	106.1	109.1	111.3	110.5	109.8	107.6	106.9	104.7	103.2	101.0	101.0
82.5°	96.6	100.3	101.7	101.0	99.5	97.3	96.6	95.1	93.7	93.0	91.5
85°	88.6	92.2	93.0	91.5	90.0	88.6	87.8	87.1	86.4	84.9	84.9
87.5°	80.5	84.2	84.2	83.4	82.0	81.2	80.5	79.8	79.0	78.3	77.6
90°	73.9	76.9	76.9	76.1	75.4	74.7	73.9	73.2	72.5	71.7	71.7
92.5°	67.3	70.3	70.3	69.5	68.8	68.1	68.1	67.3	66.6	65.9	65.1
95°	61.5	64.4	64.4	64.4	63.7	62.9	62.9	62.2	61.5	61.5	60.7
97.5°	55.6	58.6	58.6	58.6	57.8	57.1	57.1	56.4	56.4	56.4	55.6
100°	50.5	52.7	53.4	53.4	52.7	52.7	52.7	52.0	52.0	52.0	51.2
102.5°	45.4	47.6	49.0	49.0	49.0	48.3	48.3	48.3	48.3	48.3	47.6
105°	41.0	43.2	44.6	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4
107.5°	37.3	39.5	41.0	41.7	42.5	42.5	43.2	43.2	43.2	43.2	43.2
110°	33.7	35.9	38.1	38.8	39.5	40.3	40.3	41.0	40.3	40.3	40.3

TEST NUMBER: P1213066

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	30.0	32.9	34.4	35.9	36.6	37.3	38.1	38.1	38.1	38.1	38.1
115°	27.1	30.0	31.5	32.9	34.4	35.1	35.1	35.9	35.9	35.9	35.1
117.5°	24.2	27.1	28.5	30.0	30.7	32.2	32.9	32.9	32.9	32.9	32.2
120°	22.0	24.2	25.6	27.1	28.5	29.3	30.0	30.0	30.0	30.0	30.0
122.5°	19.0	21.2	23.4	24.9	25.6	26.3	27.1	27.1	27.1	27.1	27.1
125°	16.8	19.0	20.5	22.0	22.7	24.2	24.2	24.2	24.2	24.2	24.2
127.5°	14.6	16.8	18.3	19.8	20.5	21.2	22.0	22.0	22.0	22.0	22.0
130°	12.4	14.6	16.1	17.6	18.3	19.0	19.0	19.8	19.8	19.8	19.8
132.5°	11.0	12.4	13.9	15.4	16.1	16.8	16.8	17.6	17.6	17.6	17.6
135°	8.8	11.0	11.7	13.2	13.9	14.6	14.6	15.4	15.4	15.4	15.4
137.5°	7.3	8.8	10.2	11.7	12.4	12.4	13.2	13.2	13.9	13.9	13.9
140°	5.9	6.6	8.8	9.5	10.2	11.0	11.7	11.7	11.7	11.7	11.7
142.5°	4.4	5.9	6.6	8.1	8.8	9.5	10.2	10.2	10.2	10.2	10.2
145°	3.7	4.4	5.1	6.6	7.3	8.1	8.8	8.8	8.8	8.8	8.8
147.5°	2.9	3.7	4.4	5.1	5.9	6.6	7.3	7.3	7.3	7.3	7.3
150°	2.2	2.9	3.7	3.7	4.4	5.1	5.9	6.6	6.6	6.6	6.6
152.5°	2.2	2.2	2.9	2.9	3.7	4.4	5.1	5.1	5.1	5.1	5.1
155°	1.5	2.2	2.2	2.2	2.9	2.9	3.7	4.4	4.4	4.4	4.4
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

TEST NUMBER: P1213066

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0
2.5°	1417.0	1419.9	1418.4	1416.3	1415.5	1419.2	1415.5	1398.7	1405.3	1406.0	1411.1
5°	1414.8	1417.0	1415.5	1414.1	1411.9	1416.3	1411.9	1394.3	1400.9	1401.6	1406.7
7.5°	1429.4	1430.2	1430.2	1426.5	1420.6	1422.8	1417.0	1397.2	1400.9	1400.9	1404.5
10°	1466.0	1467.5	1469.7	1460.2	1452.8	1447.0	1438.9	1414.8	1414.1	1408.2	1408.2
12.5°	1513.6	1509.9	1506.3	1501.9	1496.0	1488.7	1477.0	1448.5	1438.9	1429.4	1419.9
15°	1527.5	1526.0	1525.3	1523.1	1519.5	1517.3	1508.5	1479.9	1466.0	1454.3	1437.5
17.5°	1490.9	1493.8	1503.4	1504.1	1508.5	1517.3	1515.8	1496.0	1483.6	1478.5	1458.0
20°	1425.0	1425.8	1437.5	1442.6	1461.6	1476.3	1487.2	1485.1	1482.1	1488.0	1472.6
22.5°	1346.0	1351.1	1363.6	1371.6	1389.9	1406.7	1424.3	1433.8	1449.2	1473.3	1470.4
25°	1238.4	1245.0	1262.6	1275.7	1301.3	1327.0	1350.4	1367.2	1385.5	1431.6	1447.0
27.5°	1109.6	1119.8	1142.5	1155.7	1191.6	1217.9	1251.6	1284.5	1310.1	1362.8	1394.3
30°	974.2	983.0	1007.1	1025.4	1056.2	1092.0	1134.5	1181.3	1223.8	1277.2	1316.7
32.5°	847.6	857.1	876.8	892.9	927.3	957.3	1004.2	1062.0	1101.5	1175.5	1228.2
35°	737.0	745.8	759.7	773.6	802.2	832.9	873.2	929.5	980.0	1056.9	1123.5
37.5°	659.5	660.9	669.0	677.0	698.2	721.7	753.1	802.9	849.8	932.5	1005.6
40°	603.8	603.8	608.2	610.4	619.9	633.8	653.6	692.4	731.2	794.1	883.4
42.5°	569.4	568.0	568.0	568.7	568.0	574.6	586.3	604.6	639.0	690.9	760.5
45°	543.8	540.9	538.7	533.6	530.6	530.6	531.4	538.0	557.7	591.4	647.7
47.5°	515.3	514.5	510.9	505.0	499.9	496.2	490.4	488.2	494.0	513.1	551.1
50°	482.3	478.7	475.0	470.6	464.8	461.1	450.1	450.9	445.7	454.5	474.3
52.5°	434.0	431.1	429.6	426.0	423.8	422.3	413.5	404.7	402.6	404.0	411.3
55°	380.6	382.1	376.2	379.1	378.4	371.8	368.2	361.6	359.4	358.6	362.3
57.5°	325.0	326.4	322.8	325.7	325.7	322.0	319.8	319.8	314.7	310.3	315.5
60°	274.5	271.5	273.7	277.4	277.4	275.2	273.7	273.7	270.1	268.6	272.3
62.5°	233.5	230.6	232.7	236.4	237.1	235.7	234.2	234.2	229.8	229.8	232.7
65°	202.0	202.7	202.0	204.9	204.9	205.7	204.2	202.7	197.6	199.8	199.1
67.5°	179.3	178.6	178.6	181.5	180.8	182.2	180.8	178.6	174.9	172.0	171.3
70°	160.3	159.6	159.6	161.0	161.8	161.8	161.0	159.6	154.4	151.5	149.3
72.5°	143.5	142.7	143.5	144.2	144.9	145.7	144.9	143.5	139.1	135.4	131.7
75°	128.1	127.4	129.5	129.5	130.3	130.3	131.0	130.3	126.6	122.2	117.8
77.5°	112.7	113.4	115.6	116.4	117.8	118.6	119.3	119.3	115.6	112.0	106.1
80°	100.3	101.7	103.2	103.9	105.4	107.6	108.3	109.1	106.1	102.5	95.9
82.5°	91.5	92.2	93.7	94.4	96.6	97.3	98.1	99.5	98.1	94.4	87.1
85°	84.2	84.9	86.4	86.4	87.8	89.3	90.0	90.8	90.0	86.4	79.0
87.5°	77.6	78.3	79.0	79.8	80.5	81.2	82.0	82.7	82.0	78.3	71.7
90°	71.7	71.7	72.5	72.5	73.2	73.9	75.4	75.4	74.7	71.7	65.1
92.5°	65.1	65.9	65.9	66.6	67.3	68.1	68.8	68.8	68.1	65.1	59.3
95°	60.7	60.7	61.5	61.5	62.2	62.2	62.9	62.9	62.2	59.3	53.4
97.5°	55.6	55.6	55.6	55.6	56.4	56.4	57.1	57.1	56.4	53.4	48.3
100°	51.2	51.2	51.2	51.2	51.2	52.0	52.0	52.0	51.2	48.3	43.2
102.5°	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6	46.1	43.9	38.8
105°	45.4	45.4	45.4	44.6	44.6	44.6	43.9	43.9	41.7	39.5	35.1
107.5°	42.5	42.5	42.5	41.7	41.7	41.0	40.3	40.3	38.1	35.9	31.5
110°	40.3	40.3	40.3	39.5	38.8	38.1	37.3	36.6	34.4	31.5	27.8

TEST NUMBER: P1213066

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	38.1	38.1	37.3	37.3	36.6	35.9	34.4	33.7	31.5	28.5	24.9
115°	35.1	35.1	35.1	34.4	33.7	32.9	32.2	30.7	28.5	25.6	22.0
117.5°	32.2	32.2	32.2	31.5	30.7	30.0	29.3	27.8	25.6	22.7	19.8
120°	29.3	29.3	29.3	28.5	27.8	27.1	26.3	24.9	22.7	20.5	16.8
122.5°	27.1	27.1	26.3	25.6	24.9	24.2	23.4	22.0	20.5	17.6	14.6
125°	24.2	24.2	23.4	23.4	22.7	22.0	21.2	19.8	17.6	15.4	13.2
127.5°	22.0	21.2	21.2	21.2	20.5	19.8	18.3	17.6	15.4	13.2	11.0
130°	19.0	19.0	19.0	18.3	18.3	17.6	16.1	14.6	13.2	11.7	9.5
132.5°	16.8	16.8	16.8	16.8	16.1	15.4	13.9	13.2	11.7	9.5	8.1
135°	15.4	15.4	14.6	14.6	13.9	13.2	12.4	11.0	9.5	8.1	6.6
137.5°	13.2	13.2	13.2	12.4	12.4	11.7	10.2	9.5	8.8	7.3	5.9
140°	11.7	11.7	11.0	11.0	10.2	10.2	9.5	8.1	7.3	5.9	5.1
142.5°	10.2	10.2	9.5	9.5	8.8	8.8	8.1	7.3	5.9	5.1	3.7
145°	8.8	8.8	8.1	8.1	8.1	7.3	6.6	5.9	5.1	4.4	3.7
147.5°	7.3	7.3	7.3	6.6	6.6	5.9	5.9	5.1	4.4	3.7	2.9
150°	6.6	6.6	5.9	5.9	5.9	5.1	4.4	4.4	3.7	2.9	2.2
152.5°	5.1	5.1	5.1	5.1	4.4	4.4	3.7	3.7	2.9	2.2	2.2
155°	4.4	4.4	4.4	3.7	3.7	3.7	2.9	2.9	2.2	2.2	1.5
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: P1213066

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0	1417.0
2.5°	1408.9	1408.2	1414.8	1414.1	1405.3	1418.4	1427.2
5°	1405.3	1404.5	1410.4	1411.9	1402.3	1416.3	1425.8
7.5°	1402.3	1401.6	1408.2	1410.4	1400.9	1413.3	1423.6
10°	1403.1	1399.4	1405.3	1406.7	1398.0	1411.1	1419.9
12.5°	1408.2	1399.4	1401.6	1401.6	1393.6	1405.3	1414.8
15°	1420.6	1402.3	1399.4	1397.2	1387.0	1398.0	1407.5
17.5°	1434.6	1409.7	1399.4	1392.1	1379.7	1389.2	1399.4
20°	1448.5	1417.7	1400.9	1389.2	1372.3	1381.1	1388.4
22.5°	1455.0	1425.0	1402.3	1384.8	1363.6	1367.9	1376.0
25°	1446.3	1422.1	1399.4	1378.2	1352.6	1353.3	1359.9
27.5°	1414.1	1407.5	1392.8	1371.6	1343.8	1340.1	1345.3
30°	1359.2	1377.5	1378.2	1362.8	1333.5	1326.2	1328.4
32.5°	1282.3	1323.3	1347.5	1344.5	1318.9	1308.7	1310.1
35°	1193.8	1245.0	1297.7	1315.2	1297.0	1288.9	1286.0
37.5°	1087.6	1156.4	1226.7	1269.9	1266.9	1261.8	1258.9
40°	970.5	1053.2	1136.7	1205.5	1226.7	1226.7	1228.2
42.5°	845.4	942.0	1033.5	1120.6	1170.3	1181.3	1185.7
45°	724.6	821.9	921.5	1021.8	1088.4	1122.8	1135.2
47.5°	614.8	712.9	807.3	917.1	1005.6	1050.3	1070.1
50°	521.1	594.3	693.9	802.9	899.5	954.4	993.2
52.5°	443.5	500.6	587.7	689.5	786.8	862.2	898.1
55°	378.4	417.2	491.1	578.9	671.9	750.2	791.9
57.5°	323.5	354.2	404.7	477.9	556.3	633.8	678.5
60°	275.2	296.4	330.8	388.6	455.3	521.9	565.0
62.5°	233.5	247.4	270.1	312.5	364.5	416.5	456.7
65°	201.3	207.1	219.6	245.9	285.4	325.0	359.4
67.5°	169.8	173.5	183.0	199.1	218.8	247.4	270.1
70°	146.4	146.4	147.1	156.6	166.9	185.2	201.3
72.5°	127.4	125.2	120.8	123.0	125.2	135.4	145.7
75°	112.0	106.9	99.5	96.6	95.1	96.6	102.5
77.5°	98.8	91.5	82.7	75.4	69.5	67.3	72.5
80°	87.8	79.0	68.8	59.3	49.8	44.6	46.8
82.5°	79.0	68.1	57.1	46.1	35.1	27.8	27.8
85°	69.5	59.3	47.6	35.9	24.9	15.4	13.9
87.5°	62.9	52.0	39.5	28.5	17.6	8.1	4.4
90°	56.4	45.4	33.7	22.7	12.4	3.7	0.0
92.5°	50.5	40.3	29.3	18.3	8.8	2.2	0.0
95°	45.4	35.9	24.9	15.4	7.3	1.5	0.7
97.5°	40.3	31.5	22.0	12.4	5.1	1.5	0.7
100°	36.6	27.8	19.0	10.2	4.4	0.7	0.7
102.5°	32.2	24.9	16.1	8.8	3.7	0.7	0.7
105°	28.5	22.0	13.9	7.3	2.9	0.7	0.7
107.5°	25.6	19.0	12.4	6.6	2.9	0.7	0.7
110°	22.7	16.8	11.0	5.9	2.2	0.7	0.7

TEST NUMBER: P1213066

CATALOG NUMBER: 4SNLED-LD5-41SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	20.5	14.6	9.5	5.1	1.5	0.7	0.7
115°	17.6	13.2	8.1	4.4	1.5	0.7	0.7
117.5°	15.4	11.0	7.3	3.7	1.5	0.7	0.7
120°	13.2	9.5	5.9	2.9	0.7	0.7	0.7
122.5°	11.7	8.1	5.1	2.9	0.7	0.7	0.7
125°	10.2	7.3	4.4	2.2	0.7	0.7	0.7
127.5°	8.8	5.9	3.7	1.5	0.7	0.7	0.7
130°	7.3	5.1	2.9	1.5	0.7	0.7	0.7
132.5°	5.9	4.4	2.9	1.5	0.7	0.7	0.7
135°	5.1	3.7	2.2	1.5	0.7	0.7	0.7
137.5°	4.4	2.9	1.5	1.5	1.5	0.7	0.7
140°	3.7	2.2	1.5	1.5	1.5	1.5	0.7
142.5°	2.9	2.2	1.5	1.5	1.5	1.5	0.7
145°	2.2	1.5	1.5	1.5	1.5	1.5	0.7
147.5°	2.2	1.5	1.5	1.5	1.5	1.5	0.7
150°	1.5	1.5	1.5	1.5	1.5	1.5	1.5
152.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5
155°	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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)