

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: P1213759

Luminaire Tested: 4SNLED-LD5-37SL-LC-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213759
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-LD5-37SL-LC-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

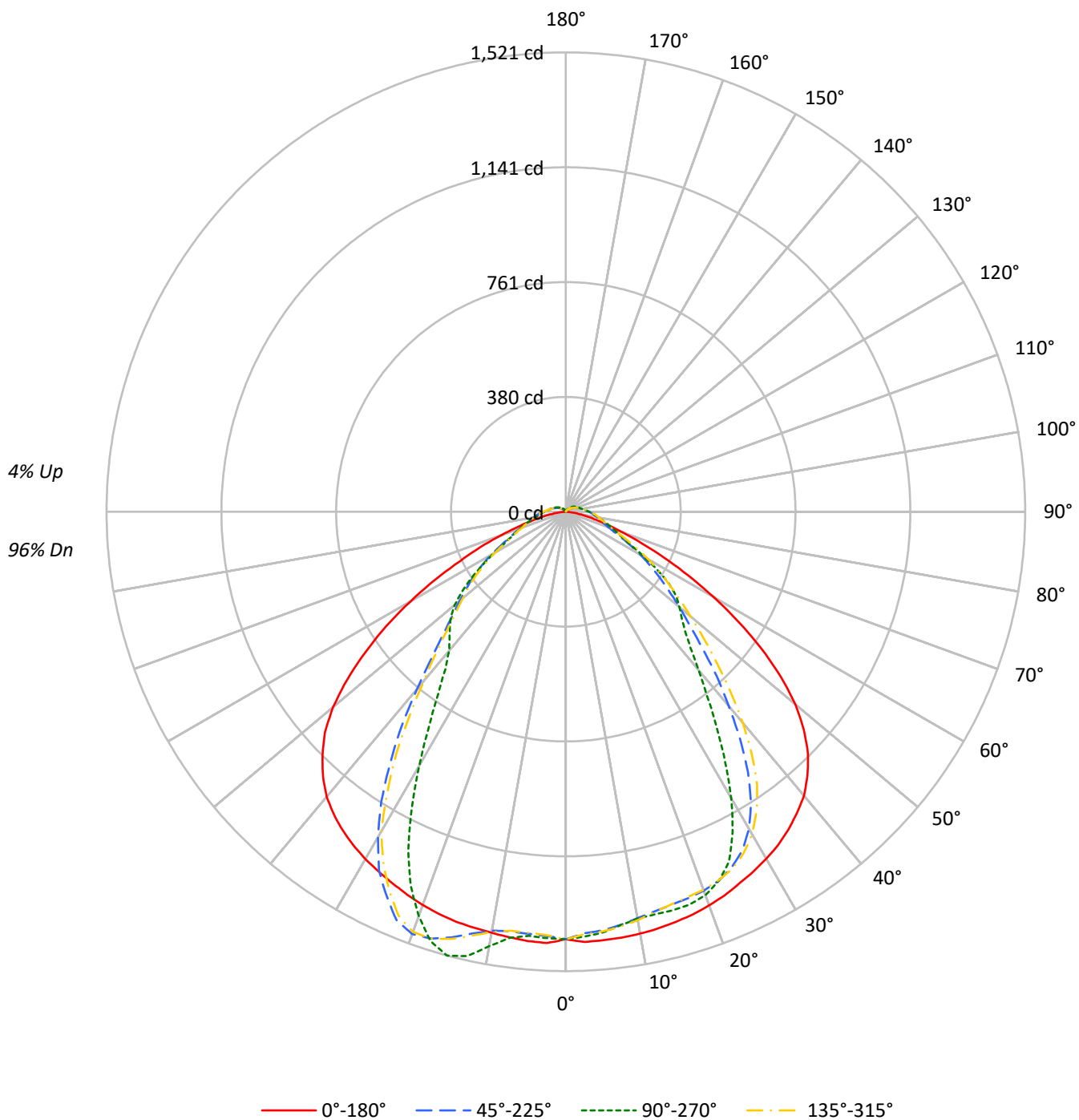
Lumens per Lamp: N/A
Luminaire Lumens: 3374.0 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	84
2	100	93	86	81	97	90	85	80	86	82	77	82	79	75	79	76	73
3	92	83	75	69	89	81	74	68	77	71	67	74	69	65	71	67	63
4	85	74	66	60	83	73	65	59	70	63	58	67	61	57	64	60	56
5	79	67	59	52	76	66	58	52	63	56	51	61	55	50	59	53	49
6	73	61	52	46	71	60	52	46	57	51	45	55	49	45	54	48	44
7	68	55	47	42	66	54	47	41	53	46	41	51	45	40	49	44	40
8	64	51	43	37	62	50	42	37	48	42	37	47	41	36	45	40	36
9	60	47	39	34	58	46	39	34	45	38	33	43	37	33	42	37	33
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11437	11437	11437	11437
5°	11521	10984	11544	11070
10°	11574	10527	11550	11241
15°	11663	10386	11658	11564
20°	11792	10222	11779	10775
25°	11937	9697	11931	9369
30°	12162	8404	12168	7445
35°	12399	6796	12435	5751
40°	12610	5472	12662	4821
45°	12566	4635	12630	4514
50°	12023	4267	12192	4172
55°	10668	3836	10934	3486
60°	8653	2935	9112	2692
65°	6432	2246	6930	2129
70°	4374	1939	4931	1854
75°	2860	1749	3333	1654
80°	1850	1632	2166	1501
85°	950	1626	1250	1486

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 12630 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.4	4.0
10°-20°	400.0	11.9
20°-30°	608.1	18.0
30°-40°	652.4	19.3
40°-50°	566.2	16.8
50°-60°	419.6	12.4
60°-70°	240.4	7.1
70°-80°	133.1	3.9
80°-90°	81.1	2.4
90°-100°	52.7	1.6
100°-110°	35.3	1.0
110°-120°	23.8	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°	1142.5	33.9
0°-40°	1794.9	53.2
0°-60°	2780.7	82.4
0°-90°	3235.3	95.9
90°-120°	111.9	3.3
90°-150°	137.7	4.1
90°-180°	139.0	4.1
0°-180°	3374.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1415	1415	1415	1415	1415	
5°	1424	1398	1427	1410	1424	136
15°	1406	1366	1405	1521	1406	398
25°	1358	1278	1358	1235	1358	628
35°	1284	870	1288	736	1284	804
45°	1134	558	1140	543	1134	868
55°	791	418	811	380	791	701
65°	359	212	387	201	359	362
75°	102	134	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	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3
2.5°	1425.5	1421.9	1420.4	1417.5	1419.7	1428.5	1422.6	1413.1	1413.8	1397.0	1405.8
5°	1424.1	1419.7	1417.5	1414.6	1416.0	1424.1	1418.2	1408.7	1408.0	1391.2	1399.2
7.5°	1421.9	1417.5	1413.8	1411.7	1412.4	1419.0	1411.7	1400.7	1398.5	1380.2	1387.5
10°	1418.2	1415.3	1410.2	1406.5	1405.8	1413.1	1401.4	1390.5	1385.3	1366.3	1373.6
12.5°	1413.1	1408.7	1403.6	1397.0	1396.3	1400.7	1391.2	1375.8	1370.7	1355.4	1363.4
15°	1405.8	1400.7	1394.8	1387.5	1383.9	1386.8	1375.1	1361.2	1360.5	1347.3	1358.3
17.5°	1397.8	1390.5	1383.9	1373.6	1368.5	1370.7	1361.2	1348.8	1350.2	1342.2	1354.6
20°	1386.8	1378.8	1368.5	1358.3	1351.0	1354.6	1348.1	1338.5	1340.7	1334.9	1345.9
22.5°	1374.4	1363.4	1351.0	1339.3	1333.4	1338.5	1333.4	1325.4	1326.1	1322.5	1329.0
25°	1358.3	1345.9	1331.2	1316.6	1313.7	1317.3	1314.4	1307.8	1304.9	1299.1	1302.0
27.5°	1343.7	1329.8	1311.5	1296.1	1291.0	1298.3	1291.8	1280.8	1272.8	1264.7	1258.9
30°	1326.9	1310.0	1289.6	1272.0	1267.6	1270.6	1261.1	1244.2	1223.0	1212.8	1196.7
32.5°	1308.6	1286.6	1261.1	1241.3	1238.4	1236.2	1218.7	1194.5	1161.6	1141.2	1116.3
35°	1284.4	1260.3	1229.6	1205.5	1201.1	1188.7	1160.2	1128.0	1085.6	1050.5	1008.1
37.5°	1257.4	1228.9	1196.7	1164.6	1152.1	1127.3	1087.1	1053.4	989.1	946.7	895.5
40°	1226.7	1192.3	1152.9	1114.1	1093.6	1053.4	1007.4	957.7	895.5	838.5	795.4
42.5°	1184.3	1147.7	1101.0	1057.8	1022.7	969.4	915.3	845.1	788.1	739.8	696.0
45°	1133.9	1090.0	1035.9	984.0	939.4	875.8	812.2	742.0	694.5	638.2	608.2
47.5°	1068.8	1021.3	963.5	905.8	847.3	777.1	710.6	643.3	595.8	555.6	533.7
50°	992.0	948.2	884.6	815.8	751.5	678.4	611.9	561.4	515.4	490.5	473.7
52.5°	897.0	856.1	791.0	716.4	654.3	582.6	522.0	481.0	448.1	429.9	424.0
55°	791.0	755.2	690.8	621.4	557.8	492.0	445.9	410.1	388.9	378.0	378.7
57.5°	677.7	649.9	589.2	527.1	467.1	417.4	375.8	347.2	331.2	330.4	332.6
60°	564.4	543.9	491.3	437.9	385.3	345.1	314.4	294.6	284.4	285.1	284.4
62.5°	456.2	437.2	399.2	355.3	313.6	286.6	258.8	250.7	242.0	241.2	241.2
65°	358.9	344.3	313.6	282.2	250.7	233.2	219.3	209.8	203.2	201.8	202.5
67.5°	269.8	263.9	242.7	221.5	201.8	190.8	179.1	176.9	171.8	171.8	173.3
70°	201.0	196.7	185.0	172.5	164.5	157.2	151.3	151.3	150.6	149.9	153.5
72.5°	145.5	146.2	142.6	133.1	132.3	130.9	129.4	131.6	132.3	134.5	138.9
75°	102.3	104.5	104.5	103.1	106.0	109.7	111.9	115.5	119.9	122.8	127.9
77.5°	72.4	72.4	76.0	80.4	86.3	92.8	98.7	103.8	109.7	113.3	117.7
80°	46.8	49.0	54.8	62.9	70.9	79.7	87.7	94.3	100.2	106.0	108.9
82.5°	27.8	31.4	38.7	49.0	59.2	70.2	78.2	86.3	92.8	98.7	100.9
85°	13.9	19.0	27.8	38.7	49.7	61.4	71.6	79.0	86.3	91.4	94.3
87.5°	4.4	10.2	19.7	30.0	41.7	53.4	64.3	72.4	79.0	83.3	86.3
90°	0.0	5.1	13.9	24.9	35.8	47.5	57.8	66.5	73.1	76.8	79.0
92.5°	0.0	2.9	11.0	20.5	30.7	42.4	52.6	60.7	66.5	70.2	71.6
95°	0.7	2.2	8.0	16.8	27.0	38.0	47.5	54.8	60.7	64.3	65.1
97.5°	0.7	1.5	6.6	13.9	23.4	33.6	43.1	50.4	54.8	58.5	59.2
100°	0.7	1.5	5.1	12.4	20.5	30.0	38.7	45.3	50.4	53.4	54.1
102.5°	0.7	0.7	4.4	10.2	18.3	26.3	34.4	40.9	45.3	48.2	49.7
105°	0.7	0.7	3.7	8.8	16.1	23.4	30.7	37.3	40.9	43.9	45.3
107.5°	0.7	0.7	2.9	7.3	13.9	20.5	27.8	32.9	37.3	40.2	41.7
110°	0.7	0.7	2.2	6.6	11.7	18.3	24.1	29.2	33.6	36.6	38.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.7	0.7	2.2	5.8	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	27.0	30.0	32.2
117.5°	0.7	0.7	2.2	4.4	8.0	12.4	16.8	21.2	24.1	27.0	29.2
120°	0.7	0.7	1.5	3.7	7.3	11.0	14.6	18.3	21.9	24.9	27.0
122.5°	0.7	0.7	1.5	3.7	5.8	9.5	13.2	16.1	19.7	21.9	24.1
125°	0.7	0.7	1.5	2.9	5.1	8.8	11.7	14.6	16.8	19.7	21.9
127.5°	0.7	0.7	1.5	2.9	4.4	7.3	10.2	13.2	15.4	17.5	19.0
130°	0.7	0.7	1.5	2.2	3.7	5.8	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	5.8	8.0	9.5	11.7
140°	0.7	0.7	0.7	1.5	2.2	2.9	3.7	5.1	6.6	8.0	9.5
142.5°	0.7	0.7	0.7	1.5	1.5	2.2	2.9	4.4	5.1	6.6	8.0
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

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3
2.5°	1402.9	1404.3	1413.1	1412.4	1410.9	1409.5	1409.5	1408.0	1409.5	1413.1	1411.7
5°	1395.6	1397.8	1404.3	1403.6	1402.1	1401.4	1400.7	1398.5	1400.0	1405.1	1403.6
7.5°	1382.4	1384.6	1390.5	1387.5	1385.3	1386.8	1383.1	1380.9	1383.9	1389.0	1388.3
10°	1368.5	1370.0	1377.3	1375.8	1372.2	1372.9	1369.3	1367.8	1371.4	1374.4	1375.1
12.5°	1359.0	1364.1	1370.7	1370.0	1369.3	1370.0	1366.3	1364.9	1367.1	1370.0	1369.3
15°	1356.8	1363.4	1370.7	1370.7	1371.4	1372.2	1368.5	1366.3	1368.5	1370.7	1370.0
17.5°	1354.6	1362.7	1369.3	1368.5	1369.3	1370.7	1364.9	1363.4	1366.3	1369.3	1367.8
20°	1347.3	1354.6	1359.0	1357.6	1357.6	1358.3	1351.0	1351.0	1355.4	1357.6	1358.3
22.5°	1326.9	1335.6	1335.6	1332.0	1332.0	1329.0	1326.9	1322.5	1327.6	1331.2	1334.2
25°	1296.1	1299.8	1295.4	1287.4	1283.0	1279.3	1269.1	1277.9	1277.9	1288.8	1292.5
27.5°	1253.0	1245.0	1232.5	1215.7	1212.1	1200.4	1193.8	1196.0	1199.6	1215.0	1226.7
30°	1182.1	1158.0	1136.8	1129.5	1113.4	1101.7	1090.0	1095.8	1102.4	1111.2	1135.3
32.5°	1088.5	1065.1	1030.8	1018.3	1001.5	986.9	973.0	981.8	993.5	999.3	1025.7
35°	981.1	953.3	921.9	900.7	883.1	875.1	857.5	869.9	882.4	886.8	909.4
37.5°	867.0	838.5	810.7	792.5	775.6	770.5	758.8	767.6	777.1	783.7	802.7
40°	758.8	732.5	711.3	698.9	687.2	682.8	678.4	682.1	689.4	694.5	709.1
42.5°	666.0	644.8	630.2	622.9	614.8	609.0	609.7	611.2	614.8	625.8	632.4
45°	584.8	572.4	562.9	561.4	556.3	555.6	554.9	557.8	560.0	566.6	571.7
47.5°	519.8	514.7	512.5	515.4	517.6	514.7	516.1	519.8	524.2	524.2	523.4
50°	468.6	470.1	473.0	479.6	484.0	485.4	486.9	491.3	492.0	493.5	491.3
52.5°	426.9	428.4	436.4	446.7	451.8	454.0	456.9	461.3	461.3	462.8	459.8
55°	384.5	386.7	394.8	405.0	409.4	412.3	415.2	418.2	420.4	423.3	421.1
57.5°	337.7	344.3	349.4	352.4	355.3	357.5	359.7	360.4	364.8	365.5	369.2
60°	288.0	289.5	294.6	293.9	291.7	297.5	294.6	299.7	304.8	311.4	312.2
62.5°	240.5	241.2	244.9	243.4	246.4	245.6	247.8	247.8	251.5	254.4	258.1
65°	203.2	204.0	206.9	206.9	206.2	208.3	210.5	212.0	212.0	214.2	217.1
67.5°	175.5	177.6	180.6	182.0	183.5	183.5	185.7	186.4	187.9	188.6	190.1
70°	156.4	159.4	162.3	163.8	164.5	165.9	166.7	166.7	168.1	168.9	170.3
72.5°	142.6	145.5	147.7	147.7	149.1	149.9	149.9	150.6	151.3	152.8	154.3
75°	130.9	133.1	134.5	133.8	133.8	133.8	134.5	134.5	136.0	137.4	138.9
77.5°	119.9	122.1	122.1	120.6	120.6	120.6	120.6	121.4	122.1	123.5	125.0
80°	111.9	111.9	111.1	111.1	109.7	108.9	108.9	109.7	109.7	111.1	113.3
82.5°	103.1	103.1	102.3	101.6	100.9	100.2	100.2	100.9	101.6	102.3	103.8
85°	95.0	95.0	93.6	93.6	92.8	92.8	92.8	92.8	93.6	94.3	95.8
87.5°	87.0	86.3	85.5	84.8	84.8	84.8	84.8	84.8	85.5	87.0	87.7
90°	79.0	78.2	77.5	77.5	76.8	76.8	77.5	77.5	78.2	79.0	79.7
92.5°	71.6	70.9	70.2	70.2	69.4	69.4	70.2	69.4	70.9	70.9	71.6
95°	65.1	64.3	63.6	63.6	63.6	63.6	63.6	63.6	64.3	64.3	65.1
97.5°	59.2	58.5	57.8	57.8	58.5	57.8	58.5	58.5	58.5	59.2	59.9
100°	54.1	53.4	53.4	54.1	53.4	53.4	54.1	54.1	54.1	54.1	54.8
102.5°	49.7	49.7	49.7	49.7	49.7	49.7	50.4	50.4	50.4	50.4	51.2
105°	45.3	46.1	46.1	46.1	46.8	46.8	46.8	47.5	47.5	47.5	47.5
107.5°	42.4	43.1	43.1	43.9	43.9	44.6	44.6	44.6	44.6	45.3	45.3
110°	39.5	40.2	40.9	41.7	41.7	42.4	42.4	42.4	42.4	42.4	42.4

TEST NUMBER: P1213759

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	36.6	37.3	38.0	39.5	40.2	40.2	40.2	40.2	40.9	40.9	40.2
115°	33.6	35.1	35.8	37.3	38.0	38.0	38.7	38.7	38.7	38.7	38.0
117.5°	30.7	32.9	33.6	35.1	35.8	35.8	36.6	36.6	36.6	36.6	35.8
120°	28.5	30.0	31.4	32.2	32.9	33.6	33.6	34.4	34.4	34.4	33.6
122.5°	26.3	27.8	29.2	30.0	30.7	31.4	31.4	31.4	31.4	31.4	31.4
125°	23.4	24.9	26.3	27.0	27.8	28.5	28.5	29.2	29.2	29.2	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	19.7	21.2	21.9	22.7	22.7	23.4	23.4	23.4	23.4	23.4
132.5°	16.1	17.5	18.3	19.7	19.7	20.5	20.5	21.2	21.2	21.2	20.5
135°	14.6	15.4	16.1	17.5	17.5	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°	5.8	6.6	8.0	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	8.0	8.0	8.0	8.0	8.0	8.0	8.0
152.5°	3.7	4.4	5.1	5.8	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	5.8	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: P1213759

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3
2.5°	1409.5	1408.7	1411.7	1408.7	1394.1	1400.0	1397.8	1405.8	1406.5	1408.7	1416.0
5°	1402.1	1402.1	1405.8	1402.9	1389.0	1394.8	1394.1	1402.1	1403.6	1405.1	1413.1
7.5°	1387.5	1388.3	1393.4	1391.2	1376.6	1385.3	1384.6	1394.1	1397.0	1400.0	1407.3
10°	1373.6	1372.9	1378.8	1376.6	1362.7	1372.9	1372.2	1381.7	1386.1	1391.2	1400.0
12.5°	1366.3	1364.1	1366.3	1364.1	1348.8	1356.8	1357.6	1368.5	1373.6	1380.2	1390.5
15°	1366.3	1362.7	1362.7	1358.3	1340.7	1345.9	1346.6	1353.9	1360.5	1367.1	1379.5
17.5°	1364.9	1361.2	1360.5	1356.8	1337.8	1337.8	1337.1	1342.2	1345.9	1352.4	1365.6
20°	1356.8	1355.4	1354.6	1352.4	1334.9	1332.0	1330.5	1330.5	1332.7	1334.9	1348.1
22.5°	1335.6	1337.1	1338.5	1340.0	1326.1	1321.0	1321.7	1320.3	1318.1	1318.1	1329.0
25°	1296.1	1303.5	1309.3	1315.9	1307.8	1304.2	1308.6	1306.4	1302.7	1299.8	1309.3
27.5°	1233.3	1248.6	1261.1	1277.1	1277.9	1274.9	1286.6	1285.2	1284.4	1280.1	1287.4
30°	1146.3	1170.4	1187.2	1210.6	1230.4	1233.3	1253.0	1255.9	1258.9	1256.7	1264.0
32.5°	1041.0	1073.9	1102.4	1139.0	1158.0	1174.8	1202.6	1214.3	1226.0	1229.6	1237.7
35°	926.2	963.5	997.1	1037.4	1067.3	1103.9	1137.5	1155.1	1181.4	1191.6	1203.3
37.5°	817.3	852.4	885.3	925.5	973.8	1011.8	1053.4	1092.9	1128.7	1143.4	1160.9
40°	720.8	749.3	780.8	815.8	859.7	909.4	954.7	1009.6	1052.0	1081.2	1106.8
42.5°	647.7	661.6	688.6	720.1	755.2	805.6	851.7	913.1	964.3	1005.9	1048.3
45°	582.6	589.2	609.0	625.8	661.6	706.2	755.2	815.1	868.5	921.9	973.0
47.5°	527.1	535.1	544.6	554.9	580.5	617.7	660.1	714.2	767.6	829.7	888.2
50°	489.8	492.0	493.5	497.8	513.2	538.8	573.1	619.2	670.4	736.9	799.0
52.5°	456.9	456.9	452.5	450.3	456.2	472.3	492.0	524.9	577.5	638.9	704.7
55°	421.8	415.2	413.8	406.5	407.9	415.2	424.7	450.3	493.5	546.1	609.7
57.5°	372.8	369.9	369.9	367.0	361.1	364.8	367.0	385.3	416.0	461.3	516.9
60°	316.5	315.1	318.7	319.5	314.4	316.5	315.8	326.8	348.7	385.3	431.3
62.5°	260.3	266.8	267.6	270.5	267.6	266.8	270.5	280.0	291.0	318.7	354.6
65°	218.6	222.2	223.0	226.6	225.2	225.2	228.1	235.4	242.0	261.0	288.8
67.5°	191.5	190.1	190.8	193.0	190.8	190.1	192.3	196.7	201.8	213.5	233.2
70°	170.3	168.9	168.9	168.9	165.9	163.8	164.5	165.9	168.1	174.7	187.1
72.5°	154.3	154.3	152.1	149.9	147.7	146.2	144.7	143.3	142.6	144.7	151.3
75°	139.6	140.4	139.6	137.4	134.5	131.6	128.7	125.7	122.1	120.6	121.4
77.5°	126.5	127.2	127.9	127.2	124.3	120.6	116.2	111.9	106.7	101.6	98.7
80°	114.8	116.2	117.0	116.2	114.0	111.1	106.0	100.9	93.6	87.0	79.7
82.5°	104.5	106.7	107.5	107.5	106.0	103.1	97.2	91.4	83.3	74.6	65.1
85°	96.5	98.0	99.4	99.4	98.7	95.8	89.9	83.3	75.3	65.1	54.8
87.5°	88.5	89.2	90.6	92.1	90.6	87.7	82.6	75.3	67.3	57.0	45.3
90°	80.4	81.1	82.6	84.1	83.3	80.4	76.0	69.4	60.7	49.7	38.0
92.5°	72.4	73.8	74.6	75.3	76.0	73.8	70.2	63.6	54.8	43.9	32.9
95°	66.5	66.5	68.0	68.7	69.4	67.3	64.3	57.8	49.7	39.5	28.5
97.5°	60.7	60.7	62.1	62.1	62.9	61.4	58.5	52.6	44.6	35.1	24.1
100°	54.8	55.6	56.3	57.0	57.0	56.3	53.4	47.5	40.2	31.4	21.2
102.5°	51.2	51.2	51.9	51.9	52.6	51.2	48.2	43.1	35.8	27.8	18.3
105°	47.5	47.5	48.2	48.2	47.5	46.1	43.1	38.7	32.2	24.1	16.1
107.5°	44.6	44.6	44.6	44.6	43.9	42.4	39.5	34.4	28.5	21.9	14.6
110°	42.4	41.7	41.7	40.9	40.2	38.0	35.1	30.7	25.6	19.0	12.4

TEST NUMBER: P1213759

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	40.2	39.5	38.7	38.0	36.6	34.4	31.4	27.8	22.7	16.8	11.0
115°	38.0	37.3	36.6	35.1	33.6	31.4	28.5	24.9	19.7	14.6	9.5
117.5°	35.8	35.1	33.6	32.2	30.7	28.5	25.6	21.9	17.5	13.2	8.8
120°	32.9	32.2	31.4	30.0	28.5	25.6	22.7	19.7	15.4	11.7	7.3
122.5°	30.7	30.0	28.5	27.8	25.6	23.4	20.5	17.5	13.9	10.2	6.6
125°	27.8	27.0	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	21.9	20.5	18.3	16.1	13.9	11.0	7.3	5.1
130°	22.7	21.9	21.2	19.7	18.3	16.1	14.6	11.7	9.5	6.6	4.4
132.5°	19.7	19.7	19.0	17.5	16.1	14.6	12.4	10.2	8.0	5.8	3.7
135°	18.3	17.5	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	5.8	4.4	2.9
140°	13.9	13.2	13.2	11.7	11.0	9.5	8.0	6.6	5.1	3.7	2.2
142.5°	12.4	11.7	11.0	10.2	9.5	8.0	6.6	5.1	4.4	2.9	2.2
145°	11.0	10.2	9.5	8.8	8.0	6.6	5.8	4.4	3.7	2.9	2.2
147.5°	8.8	8.8	8.0	7.3	6.6	5.8	5.1	4.4	2.9	2.2	1.5
150°	7.3	7.3	6.6	5.8	5.8	5.1	4.4	3.7	2.9	2.2	1.5
152.5°	6.6	5.8	5.8	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: P1213759

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3
2.5°	1417.5	1408.7	1416.0	1429.2	1427.7	1426.3	1424.8	1427.7	1437.2	1432.1	1424.1
5°	1415.3	1406.5	1414.6	1427.0	1426.3	1424.1	1422.6	1425.5	1435.0	1429.9	1421.2
7.5°	1410.9	1402.9	1408.7	1421.2	1421.2	1419.7	1418.2	1421.2	1429.9	1425.5	1416.8
10°	1403.6	1397.8	1403.6	1415.3	1416.0	1413.1	1411.7	1415.3	1424.1	1421.9	1414.6
12.5°	1397.8	1391.9	1398.5	1410.2	1410.9	1408.0	1405.8	1410.2	1421.9	1423.3	1421.2
15°	1389.7	1384.6	1392.6	1405.1	1405.1	1402.9	1402.9	1408.7	1424.8	1431.4	1435.0
17.5°	1378.0	1374.4	1383.9	1396.3	1397.0	1395.6	1396.3	1408.0	1429.2	1445.3	1455.5
20°	1363.4	1361.9	1372.2	1385.3	1387.5	1388.3	1391.9	1409.5	1438.7	1460.6	1470.9
22.5°	1345.9	1346.6	1358.3	1372.2	1375.1	1377.3	1384.6	1409.5	1446.0	1469.4	1473.8
25°	1326.1	1328.3	1340.7	1357.6	1361.2	1365.6	1378.0	1410.2	1448.2	1463.6	1456.2
27.5°	1304.9	1309.3	1325.4	1342.9	1347.3	1354.6	1370.7	1405.8	1438.0	1438.7	1411.7
30°	1283.0	1288.1	1307.1	1327.6	1334.9	1342.2	1361.9	1395.6	1413.1	1389.7	1342.2
32.5°	1258.1	1265.4	1284.4	1309.3	1318.1	1327.6	1347.3	1375.8	1369.3	1318.8	1250.8
35°	1226.7	1236.9	1258.9	1288.1	1296.1	1308.6	1322.5	1329.0	1299.8	1228.2	1151.4
37.5°	1188.0	1203.3	1228.9	1262.5	1271.3	1279.3	1283.0	1264.7	1206.2	1128.7	1049.1
40°	1143.4	1166.8	1194.5	1231.8	1240.6	1240.6	1227.4	1188.7	1114.8	1013.2	924.8
42.5°	1089.3	1117.8	1152.9	1190.1	1198.9	1188.7	1157.2	1089.3	1005.2	891.9	798.3
45°	1023.5	1061.5	1101.0	1139.7	1144.1	1121.4	1065.1	978.9	875.1	769.8	680.6
47.5°	945.2	995.0	1038.1	1081.9	1076.1	1038.1	962.8	864.8	755.2	655.7	584.1
50°	857.5	916.0	964.3	1005.9	993.5	940.9	852.4	750.1	641.1	556.3	497.1
52.5°	763.9	831.2	879.4	913.1	896.3	833.4	736.2	638.2	549.0	471.5	432.0
55°	666.7	734.7	784.4	810.7	788.8	720.8	625.0	535.9	451.8	401.3	378.0
57.5°	572.4	636.0	682.8	704.0	676.2	608.2	519.8	444.5	383.8	341.4	329.7
60°	481.8	533.7	578.3	594.3	564.4	501.5	425.5	365.5	320.9	291.7	285.8
62.5°	397.7	440.1	475.2	487.6	458.4	409.4	343.6	299.0	267.6	252.9	245.6
65°	328.2	353.1	388.9	386.7	369.2	323.9	275.6	244.2	223.7	214.2	209.8
67.5°	258.1	280.7	303.4	306.3	284.4	252.9	221.5	198.8	187.9	182.8	180.6
70°	199.6	216.4	230.3	226.6	214.9	195.2	175.5	163.0	158.6	156.4	156.4
72.5°	155.0	163.8	170.3	165.9	158.6	148.4	138.9	133.8	134.5	136.0	137.4
75°	119.9	122.1	123.5	119.2	117.7	111.1	110.4	111.1	115.5	119.9	122.1
77.5°	92.1	89.2	87.0	82.6	83.3	82.6	86.3	92.1	98.7	105.3	111.1
80°	70.9	64.3	59.2	54.8	57.0	60.7	68.0	76.8	85.5	92.8	100.2
82.5°	54.8	45.3	38.0	33.6	38.0	43.9	53.4	64.3	74.6	82.6	90.6
85°	42.4	31.4	22.7	18.3	22.7	31.4	41.7	54.1	65.1	73.8	81.9
87.5°	32.9	22.7	12.4	7.3	12.4	21.9	33.6	45.3	56.3	66.5	74.6
90°	26.3	15.4	5.8	1.5	6.6	15.4	26.3	38.0	49.0	59.9	68.0
92.5°	21.2	11.0	2.9	0.0	3.7	11.7	21.9	32.9	43.9	54.1	62.1
95°	17.5	8.8	2.2	0.0	2.9	8.8	17.5	28.5	38.7	49.0	55.6
97.5°	14.6	6.6	1.5	0.0	1.5	7.3	14.6	24.1	34.4	43.9	50.4
100°	12.4	5.8	1.5	0.0	1.5	5.8	12.4	21.2	30.0	38.7	45.3
102.5°	10.2	4.4	0.7	0.7	0.7	4.4	11.0	18.3	26.3	34.4	40.9
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°	8.0	2.9	0.7	0.7	0.7	2.9	8.0	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	24.1	29.2

TEST NUMBER: P1213759

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	5.8	2.2	0.7	0.7	0.7	2.2	5.8	11.0	16.1	21.9	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	8.0	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	5.8	9.5	12.4	16.1
125°	2.9	1.5	0.7	0.7	0.7	0.7	2.9	5.1	8.0	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	5.8	8.0	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	5.8
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: P1213759

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3
2.5°	1422.6	1405.8	1414.6	1411.7	1414.6	1421.9	1421.2	1419.0	1420.4	1416.8	1413.1
5°	1419.7	1402.9	1411.7	1408.0	1411.7	1419.0	1417.5	1415.3	1417.5	1413.1	1409.5
7.5°	1416.0	1400.7	1410.9	1410.2	1416.8	1426.3	1427.0	1427.0	1432.1	1425.5	1422.6
10°	1416.0	1408.0	1421.9	1427.0	1443.8	1456.2	1457.7	1460.6	1469.4	1467.9	1460.6
12.5°	1431.4	1429.9	1450.4	1462.8	1478.2	1495.7	1505.2	1508.2	1514.0	1509.6	1506.7
15°	1451.1	1458.4	1481.1	1495.0	1511.8	1525.0	1527.2	1528.6	1533.0	1526.4	1521.3
17.5°	1477.4	1481.8	1500.1	1506.0	1516.9	1519.1	1516.2	1508.9	1508.9	1494.3	1489.9
20°	1489.9	1487.7	1495.0	1485.5	1481.1	1467.9	1455.5	1441.6	1440.9	1425.5	1424.1
22.5°	1478.9	1464.3	1448.9	1425.5	1415.3	1396.3	1379.5	1371.4	1366.3	1346.6	1341.5
25°	1440.2	1404.3	1381.7	1353.9	1329.0	1307.1	1291.0	1274.2	1258.1	1242.0	1234.7
27.5°	1372.9	1339.3	1302.7	1264.0	1229.6	1196.0	1168.9	1152.1	1136.8	1115.6	1104.6
30°	1290.3	1243.5	1203.3	1166.0	1109.7	1068.8	1046.1	1012.5	1000.8	991.3	970.8
32.5°	1193.1	1136.8	1081.9	1031.5	973.8	935.7	905.8	880.9	873.6	848.7	842.9
35°	1085.6	1011.8	949.6	899.9	858.2	812.2	787.3	770.5	755.9	739.1	736.2
37.5°	959.1	892.6	822.4	778.6	745.7	706.2	687.2	675.5	668.9	656.5	654.3
40°	831.9	765.4	717.2	673.3	652.8	631.6	617.7	612.6	609.7	605.3	600.9
42.5°	716.4	657.9	623.6	594.3	585.6	575.3	571.7	574.6	571.7	570.2	569.5
45°	618.5	573.9	549.7	541.0	538.8	535.9	538.8	543.9	544.6	543.2	543.2
47.5°	529.3	508.1	497.8	499.3	503.0	505.2	510.3	516.9	518.3	514.7	516.1
50°	470.8	458.4	456.2	462.0	470.1	473.0	478.8	484.0	483.2	481.8	480.3
52.5°	416.0	412.3	418.2	424.0	432.8	434.2	436.4	438.6	437.9	435.0	433.5
55°	369.9	372.8	378.0	380.1	386.7	386.0	386.7	386.7	383.8	382.3	380.1
57.5°	328.2	329.0	331.9	332.6	336.3	334.8	334.1	332.6	328.2	327.5	325.3
60°	285.8	284.4	291.0	285.8	288.8	285.8	285.1	281.5	277.1	276.3	274.9
62.5°	245.6	242.7	247.1	244.9	246.4	243.4	242.0	237.6	233.9	233.2	232.5
65°	209.8	208.3	212.7	212.0	213.5	209.8	208.3	205.4	202.5	201.8	201.0
67.5°	179.8	183.5	185.7	185.7	187.1	186.4	182.8	182.0	181.3	178.4	178.4
70°	157.9	160.1	164.5	165.2	164.5	165.9	163.0	162.3	161.6	160.1	159.4
72.5°	140.4	143.3	147.7	148.4	147.7	147.7	146.2	145.5	145.5	143.3	143.3
75°	126.5	130.1	133.8	133.8	133.8	132.3	130.9	130.9	129.4	128.7	127.2
77.5°	114.8	119.2	122.1	121.4	120.6	119.2	119.2	117.0	114.8	114.8	113.3
80°	106.0	108.9	111.1	110.4	109.7	107.5	106.7	104.5	103.1	100.9	100.9
82.5°	96.5	100.2	101.6	100.9	99.4	97.2	96.5	95.0	93.6	92.8	91.4
85°	88.5	92.1	92.8	91.4	89.9	88.5	87.7	87.0	86.3	84.8	84.8
87.5°	80.4	84.1	84.1	83.3	81.9	81.1	80.4	79.7	79.0	78.2	77.5
90°	73.8	76.8	76.8	76.0	75.3	74.6	73.8	73.1	72.4	71.6	71.6
92.5°	67.3	70.2	70.2	69.4	68.7	68.0	68.0	67.3	66.5	65.8	65.1
95°	61.4	64.3	64.3	64.3	63.6	62.9	62.9	62.1	61.4	61.4	60.7
97.5°	55.6	58.5	58.5	58.5	57.8	57.0	57.0	56.3	56.3	56.3	55.6
100°	50.4	52.6	53.4	53.4	52.6	52.6	52.6	51.9	51.9	51.9	51.2
102.5°	45.3	47.5	49.0	49.0	49.0	48.2	48.2	48.2	48.2	48.2	47.5
105°	40.9	43.1	44.6	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
107.5°	37.3	39.5	40.9	41.7	42.4	42.4	43.1	43.1	43.1	43.1	43.1
110°	33.6	35.8	38.0	38.7	39.5	40.2	40.2	40.9	40.2	40.2	40.2

TEST NUMBER: P1213759

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	30.0	32.9	34.4	35.8	36.6	37.3	38.0	38.0	38.0	38.0	38.0
115°	27.0	30.0	31.4	32.9	34.4	35.1	35.1	35.8	35.8	35.8	35.1
117.5°	24.1	27.0	28.5	30.0	30.7	32.2	32.9	32.9	32.9	32.9	32.2
120°	21.9	24.1	25.6	27.0	28.5	29.2	30.0	30.0	30.0	30.0	30.0
122.5°	19.0	21.2	23.4	24.9	25.6	26.3	27.0	27.0	27.0	27.0	27.0
125°	16.8	19.0	20.5	21.9	22.7	24.1	24.1	24.1	24.1	24.1	24.1
127.5°	14.6	16.8	18.3	19.7	20.5	21.2	21.9	21.9	21.9	21.9	21.9
130°	12.4	14.6	16.1	17.5	18.3	19.0	19.0	19.7	19.7	19.7	19.7
132.5°	11.0	12.4	13.9	15.4	16.1	16.8	16.8	17.5	17.5	17.5	17.5
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°	5.8	6.6	8.8	9.5	10.2	11.0	11.7	11.7	11.7	11.7	11.7
142.5°	4.4	5.8	6.6	8.0	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	8.0	8.8	8.8	8.8	8.8	8.8
147.5°	2.9	3.7	4.4	5.1	5.8	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	5.8	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: P1213759

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3
2.5°	1415.3	1418.2	1416.8	1414.6	1413.8	1417.5	1413.8	1397.0	1403.6	1404.3	1409.5
5°	1413.1	1415.3	1413.8	1412.4	1410.2	1414.6	1410.2	1392.6	1399.2	1400.0	1405.1
7.5°	1427.7	1428.5	1428.5	1424.8	1419.0	1421.2	1415.3	1395.6	1399.2	1399.2	1402.9
10°	1464.3	1465.7	1467.9	1458.4	1451.1	1445.3	1437.2	1413.1	1412.4	1406.5	1406.5
12.5°	1511.8	1508.2	1504.5	1500.1	1494.3	1487.0	1475.3	1446.7	1437.2	1427.7	1418.2
15°	1525.7	1524.2	1523.5	1521.3	1517.7	1515.5	1506.7	1478.2	1464.3	1452.6	1435.8
17.5°	1489.1	1492.1	1501.6	1502.3	1506.7	1515.5	1514.0	1494.3	1481.8	1476.7	1456.2
20°	1423.3	1424.1	1435.8	1440.9	1459.9	1474.5	1485.5	1483.3	1480.4	1486.2	1470.9
22.5°	1344.4	1349.5	1361.9	1370.0	1388.3	1405.1	1422.6	1432.1	1447.5	1471.6	1468.7
25°	1236.9	1243.5	1261.1	1274.2	1299.8	1325.4	1348.8	1365.6	1383.9	1429.9	1445.3
27.5°	1108.3	1118.5	1141.2	1154.3	1190.1	1216.5	1250.1	1283.0	1308.6	1361.2	1392.6
30°	973.0	981.8	1005.9	1024.2	1054.9	1090.7	1133.1	1179.9	1222.3	1275.7	1315.2
32.5°	846.6	856.1	875.8	891.9	926.2	956.2	1003.0	1060.7	1100.2	1174.1	1226.7
35°	736.2	744.9	758.8	772.7	801.2	831.9	872.1	928.4	978.9	1055.6	1122.2
37.5°	658.7	660.1	668.2	676.2	697.4	720.8	752.2	802.0	848.7	931.4	1004.5
40°	603.1	603.1	607.5	609.7	619.2	633.1	652.8	691.6	730.3	793.2	882.4
42.5°	568.8	567.3	567.3	568.0	567.3	573.9	585.6	603.8	638.2	690.1	759.6
45°	543.2	540.2	538.1	532.9	530.0	530.0	530.7	537.3	557.1	590.7	647.0
47.5°	514.7	513.9	510.3	504.4	499.3	495.7	489.8	487.6	493.5	512.5	550.5
50°	481.8	478.1	474.4	470.1	464.2	460.6	449.6	450.3	445.2	454.0	473.7
52.5°	433.5	430.6	429.1	425.5	423.3	421.8	413.0	404.3	402.1	403.5	410.8
55°	380.1	381.6	375.8	378.7	378.0	371.4	367.7	361.1	358.9	358.2	361.9
57.5°	324.6	326.0	322.4	325.3	325.3	321.7	319.5	319.5	314.4	310.0	315.1
60°	274.1	271.2	273.4	277.1	277.1	274.9	273.4	273.4	269.8	268.3	271.9
62.5°	233.2	230.3	232.5	236.1	236.9	235.4	233.9	233.9	229.5	229.5	232.5
65°	201.8	202.5	201.8	204.7	204.7	205.4	204.0	202.5	197.4	199.6	198.8
67.5°	179.1	178.4	178.4	181.3	180.6	182.0	180.6	178.4	174.7	171.8	171.1
70°	160.1	159.4	159.4	160.8	161.6	161.6	160.8	159.4	154.3	151.3	149.1
72.5°	143.3	142.6	143.3	144.0	144.7	145.5	144.7	143.3	138.9	135.2	131.6
75°	127.9	127.2	129.4	129.4	130.1	130.1	130.9	130.1	126.5	122.1	117.7
77.5°	112.6	113.3	115.5	116.2	117.7	118.4	119.2	119.2	115.5	111.9	106.0
80°	100.2	101.6	103.1	103.8	105.3	107.5	108.2	108.9	106.0	102.3	95.8
82.5°	91.4	92.1	93.6	94.3	96.5	97.2	98.0	99.4	98.0	94.3	87.0
85°	84.1	84.8	86.3	86.3	87.7	89.2	89.9	90.6	89.9	86.3	79.0
87.5°	77.5	78.2	79.0	79.7	80.4	81.1	81.9	82.6	81.9	78.2	71.6
90°	71.6	71.6	72.4	72.4	73.1	73.8	75.3	75.3	74.6	71.6	65.1
92.5°	65.1	65.8	65.8	66.5	67.3	68.0	68.7	68.7	68.0	65.1	59.2
95°	60.7	60.7	61.4	61.4	62.1	62.1	62.9	62.9	62.1	59.2	53.4
97.5°	55.6	55.6	55.6	55.6	56.3	56.3	57.0	57.0	56.3	53.4	48.2
100°	51.2	51.2	51.2	51.2	51.2	51.9	51.9	51.9	51.2	48.2	43.1
102.5°	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	46.1	43.9	38.7
105°	45.3	45.3	45.3	44.6	44.6	44.6	43.9	43.9	41.7	39.5	35.1
107.5°	42.4	42.4	42.4	41.7	41.7	40.9	40.2	40.2	38.0	35.8	31.4
110°	40.2	40.2	40.2	39.5	38.7	38.0	37.3	36.6	34.4	31.4	27.8



TEST NUMBER: P1213759

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	38.0	38.0	37.3	37.3	36.6	35.8	34.4	33.6	31.4	28.5	24.9
115°	35.1	35.1	35.1	34.4	33.6	32.9	32.2	30.7	28.5	25.6	21.9
117.5°	32.2	32.2	32.2	31.4	30.7	30.0	29.2	27.8	25.6	22.7	19.7
120°	29.2	29.2	29.2	28.5	27.8	27.0	26.3	24.9	22.7	20.5	16.8
122.5°	27.0	27.0	26.3	25.6	24.9	24.1	23.4	21.9	20.5	17.5	14.6
125°	24.1	24.1	23.4	23.4	22.7	21.9	21.2	19.7	17.5	15.4	13.2
127.5°	21.9	21.2	21.2	21.2	20.5	19.7	18.3	17.5	15.4	13.2	11.0
130°	19.0	19.0	19.0	18.3	18.3	17.5	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	8.0
135°	15.4	15.4	14.6	14.6	13.9	13.2	12.4	11.0	9.5	8.0	6.6
137.5°	13.2	13.2	13.2	12.4	12.4	11.7	10.2	9.5	8.8	7.3	5.8
140°	11.7	11.7	11.0	11.0	10.2	10.2	9.5	8.0	7.3	5.8	5.1
142.5°	10.2	10.2	9.5	9.5	8.8	8.8	8.0	7.3	5.8	5.1	3.7
145°	8.8	8.8	8.0	8.0	8.0	7.3	6.6	5.8	5.1	4.4	3.7
147.5°	7.3	7.3	7.3	6.6	6.6	5.8	5.8	5.1	4.4	3.7	2.9
150°	6.6	6.6	5.8	5.8	5.8	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

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CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3	1415.3
2.5°	1407.3	1406.5	1413.1	1412.4	1403.6	1416.8	1425.5
5°	1403.6	1402.9	1408.7	1410.2	1400.7	1414.6	1424.1
7.5°	1400.7	1400.0	1406.5	1408.7	1399.2	1411.7	1421.9
10°	1401.4	1397.8	1403.6	1405.1	1396.3	1409.5	1418.2
12.5°	1406.5	1397.8	1400.0	1400.0	1391.9	1403.6	1413.1
15°	1419.0	1400.7	1397.8	1395.6	1385.3	1396.3	1405.8
17.5°	1432.9	1408.0	1397.8	1390.5	1378.0	1387.5	1397.8
20°	1446.7	1416.0	1399.2	1387.5	1370.7	1379.5	1386.8
22.5°	1453.3	1423.3	1400.7	1383.1	1361.9	1366.3	1374.4
25°	1444.5	1420.4	1397.8	1376.6	1351.0	1351.7	1358.3
27.5°	1412.4	1405.8	1391.2	1370.0	1342.2	1338.5	1343.7
30°	1357.6	1375.8	1376.6	1361.2	1332.0	1324.7	1326.9
32.5°	1280.8	1321.7	1345.9	1342.9	1317.3	1307.1	1308.6
35°	1192.3	1243.5	1296.1	1313.7	1295.4	1287.4	1284.4
37.5°	1086.3	1155.1	1225.2	1268.4	1265.4	1260.3	1257.4
40°	969.4	1052.0	1135.3	1204.0	1225.2	1225.2	1226.7
42.5°	844.4	940.9	1032.2	1119.2	1168.9	1179.9	1184.3
45°	723.7	821.0	920.4	1020.5	1087.1	1121.4	1133.9
47.5°	614.1	712.0	806.3	916.0	1004.5	1049.1	1068.8
50°	520.5	593.6	693.0	802.0	898.5	953.3	992.0
52.5°	443.0	500.0	587.0	688.6	785.9	861.2	897.0
55°	378.0	416.7	490.5	578.3	671.1	749.3	791.0
57.5°	323.1	353.8	404.3	477.4	555.6	633.1	677.7
60°	274.9	296.1	330.4	388.2	454.7	521.2	564.4
62.5°	233.2	247.1	269.8	312.2	364.1	416.0	456.2
65°	201.0	206.9	219.3	245.6	285.1	324.6	358.9
67.5°	169.6	173.3	182.8	198.8	218.6	247.1	269.8
70°	146.2	146.2	146.9	156.4	166.7	185.0	201.0
72.5°	127.2	125.0	120.6	122.8	125.0	135.2	145.5
75°	111.9	106.7	99.4	96.5	95.0	96.5	102.3
77.5°	98.7	91.4	82.6	75.3	69.4	67.3	72.4
80°	87.7	79.0	68.7	59.2	49.7	44.6	46.8
82.5°	79.0	68.0	57.0	46.1	35.1	27.8	27.8
85°	69.4	59.2	47.5	35.8	24.9	15.4	13.9
87.5°	62.9	51.9	39.5	28.5	17.5	8.0	4.4
90°	56.3	45.3	33.6	22.7	12.4	3.7	0.0
92.5°	50.4	40.2	29.2	18.3	8.8	2.2	0.0
95°	45.3	35.8	24.9	15.4	7.3	1.5	0.7
97.5°	40.2	31.4	21.9	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	21.9	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	5.8	2.2	0.7	0.7



TEST NUMBER: P1213759

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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°	17.5	13.2	8.0	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	5.8	2.9	0.7	0.7	0.7
122.5°	11.7	8.0	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	5.8	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°	5.8	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)