

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: P1214110

Luminaire Tested: 4SNLED-LD5-37SL-LC-UNV-L950-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1214110
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-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

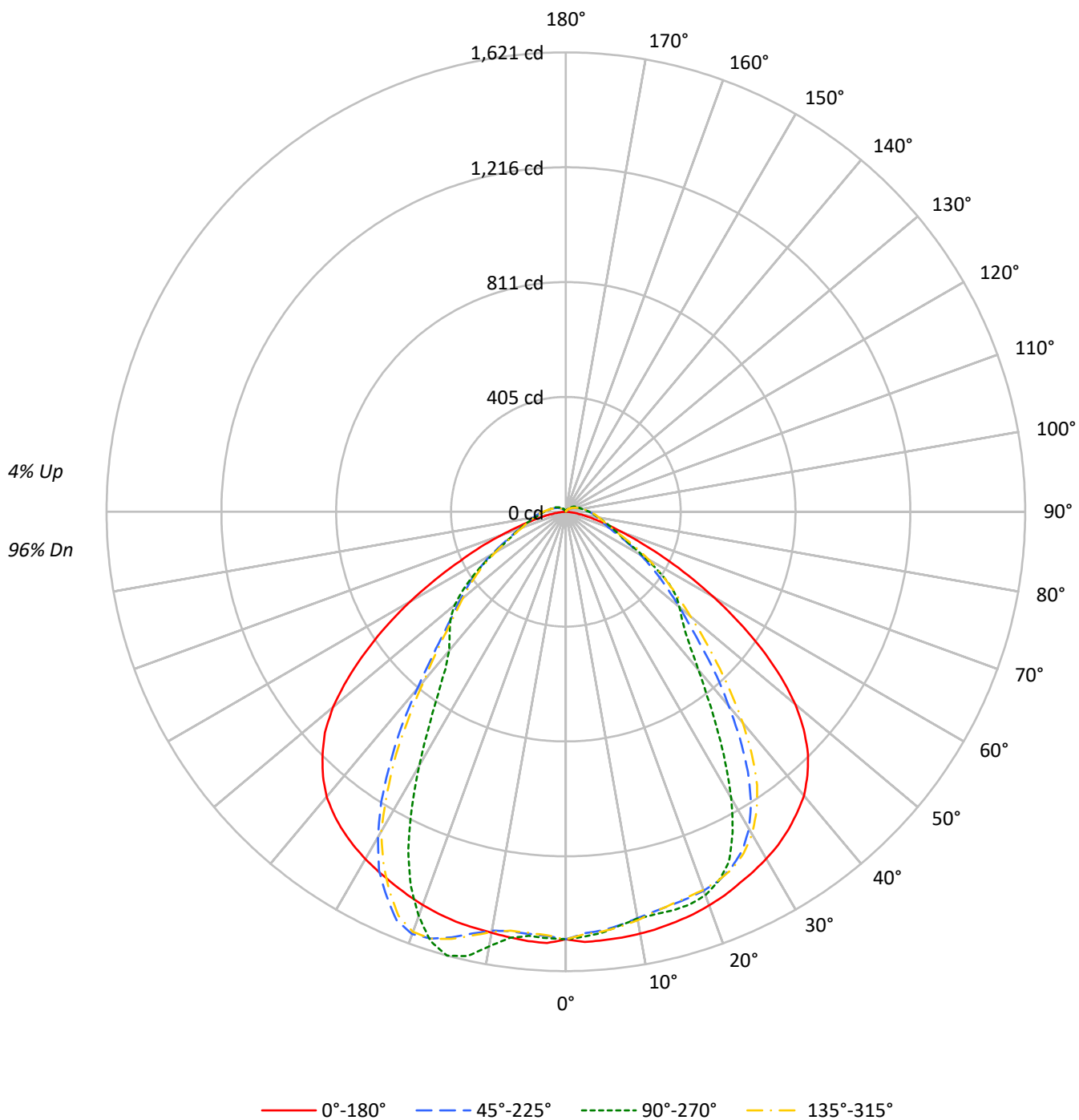
Lumens per Lamp: N/A
Luminaire Lumens: 3596.0 lumens
Efficiency: N/A
Efficacy: 128.4 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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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CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L950-CD1-U

Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
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°	12189	12189	12189	12189
5°	12279	11706	12304	11798
10°	12335	11220	12310	11981
15°	12431	11069	12424	12325
20°	12567	10894	12555	11484
25°	12723	10335	12716	9986
30°	12962	8957	12969	7935
35°	13216	7243	13254	6129
40°	13439	5831	13496	5138
45°	13393	4940	13461	4810
50°	12815	4548	12994	4446
55°	11369	4088	11654	3716
60°	9222	3129	9711	2870
65°	6856	2394	7387	2270
70°	4663	2066	5255	1976
75°	3051	1865	3551	1763
80°	1973	1739	2309	1599
85°	1011	1735	1332	1584

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 13461 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.3	4.0
10°-20°	426.3	11.9
20°-30°	648.1	18.0
30°-40°	695.3	19.3
40°-50°	603.4	16.8
50°-60°	447.2	12.4
60°-70°	256.2	7.1
70°-80°	141.9	3.9
80°-90°	86.4	2.4
90°-100°	56.2	1.6
100°-110°	37.6	1.0
110°-120°	25.4	0.7
120°-130°	15.6	0.4
130°-140°	8.2	0.2
140°-150°	3.7	0.1
150°-160°	1.1	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1217.7	33.9
0°-40°	1913.0	53.2
0°-60°	2963.6	82.4
0°-90°	3448.2	95.9
90°-120°	119.2	3.3
90°-150°	146.8	4.1
90°-180°	148.0	4.1
0°-180°	3596.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1508	1508	1508	1508	1508	
5°	1518	1490	1521	1502	1518	145
15°	1498	1456	1498	1621	1498	424
25°	1448	1362	1447	1316	1448	669
35°	1369	927	1373	785	1369	857
45°	1208	594	1215	579	1208	925
55°	843	446	864	405	843	748
65°	383	226	412	214	383	386
75°	109	143	127	136	109	125
85°	15	99	20	90	15	19
90°	0	83	2	76	0	1
95°	1	68	0	65	1	1
105°	1	51	1	48	1	1
115°	1	41	1	37	1	1
125°	1	31	1	26	1	1
135°	1	20	1	16	1	1
145°	1	12	2	9	1	1
155°	2	6	2	5	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°	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4
2.5°	1519.3	1515.4	1513.9	1510.8	1513.1	1522.5	1516.2	1506.1	1506.9	1489.0	1498.3
5°	1517.8	1513.1	1510.8	1507.7	1509.2	1517.8	1511.5	1501.4	1500.6	1482.7	1491.3
7.5°	1515.4	1510.8	1506.9	1504.5	1505.3	1512.3	1504.5	1492.8	1490.5	1471.0	1478.8
10°	1511.5	1508.4	1503.0	1499.1	1498.3	1506.1	1493.6	1481.9	1476.5	1456.2	1464.0
12.5°	1506.1	1501.4	1496.0	1489.0	1488.2	1492.8	1482.7	1466.4	1460.9	1444.5	1453.1
15°	1498.3	1492.8	1486.6	1478.8	1474.9	1478.0	1465.6	1450.8	1450.0	1436.0	1447.7
17.5°	1489.7	1481.9	1474.9	1464.0	1458.6	1460.9	1450.8	1437.5	1439.1	1430.5	1443.8
20°	1478.0	1469.5	1458.6	1447.7	1439.9	1443.8	1436.7	1426.6	1429.0	1422.7	1434.4
22.5°	1464.8	1453.1	1439.9	1427.4	1421.2	1426.6	1421.2	1412.6	1413.4	1409.5	1416.5
25°	1447.7	1434.4	1418.8	1403.2	1400.1	1404.0	1400.9	1393.9	1390.8	1384.5	1387.7
27.5°	1432.1	1417.3	1397.8	1381.4	1376.0	1383.8	1376.8	1365.1	1356.5	1347.9	1341.7
30°	1414.2	1396.2	1374.4	1355.7	1351.0	1354.2	1344.0	1326.1	1303.5	1292.6	1275.5
32.5°	1394.7	1371.3	1344.0	1323.0	1319.9	1317.5	1298.8	1273.1	1238.1	1216.3	1189.8
35°	1369.0	1343.3	1310.5	1284.8	1280.1	1266.9	1236.5	1202.2	1157.0	1119.6	1074.4
37.5°	1340.1	1309.7	1275.5	1241.2	1227.9	1201.4	1158.6	1122.8	1054.2	1009.0	954.5
40°	1307.4	1270.8	1228.7	1187.4	1165.6	1122.8	1073.7	1020.7	954.5	893.7	847.7
42.5°	1262.2	1223.3	1173.4	1127.4	1090.0	1033.2	975.5	900.7	839.9	788.5	741.7
45°	1208.5	1161.7	1104.1	1048.7	1001.2	933.4	865.6	790.8	740.2	680.2	648.3
47.5°	1139.1	1088.5	1026.9	965.4	903.0	828.2	757.3	685.7	635.0	592.2	568.8
50°	1057.3	1010.6	942.8	869.5	801.0	723.0	652.1	598.4	549.3	522.8	504.9
52.5°	956.0	912.4	843.0	763.6	697.3	621.0	556.3	512.7	477.6	458.1	451.9
55°	843.0	804.9	736.3	662.3	594.5	524.4	475.3	437.1	414.5	402.8	403.6
57.5°	722.3	692.7	628.0	561.8	497.9	444.9	400.5	370.1	353.0	352.2	354.5
60°	601.5	579.7	523.6	466.7	410.6	367.8	335.0	314.0	303.1	303.9	303.1
62.5°	486.2	465.9	425.4	378.7	334.3	305.4	275.8	267.2	257.9	257.1	257.1
65°	382.6	367.0	334.3	300.8	267.2	248.5	233.7	223.6	216.6	215.0	215.8
67.5°	287.5	281.3	258.7	236.1	215.0	203.4	190.9	188.6	183.1	183.1	184.7
70°	214.3	209.6	197.1	183.9	175.3	167.5	161.3	161.3	160.5	159.7	163.6
72.5°	155.1	155.8	151.9	141.8	141.0	139.5	137.9	140.2	141.0	143.4	148.0
75°	109.1	111.4	111.4	109.9	113.0	116.9	119.2	123.1	127.8	130.9	136.4
77.5°	77.1	77.1	81.0	85.7	91.9	99.0	105.2	110.6	116.9	120.8	125.4
80°	49.9	52.2	58.4	67.0	75.6	84.9	93.5	100.5	106.7	113.0	116.1
82.5°	29.6	33.5	41.3	52.2	63.1	74.8	83.4	91.9	99.0	105.2	107.5
85°	14.8	20.3	29.6	41.3	53.0	65.4	76.4	84.1	91.9	97.4	100.5
87.5°	4.7	10.9	21.0	31.9	44.4	56.9	68.6	77.1	84.1	88.8	91.9
90°	0.0	5.5	14.8	26.5	38.2	50.6	61.6	70.9	77.9	81.8	84.1
92.5°	0.0	3.1	11.7	21.8	32.7	45.2	56.1	64.7	70.9	74.8	76.4
95°	0.8	2.3	8.6	17.9	28.8	40.5	50.6	58.4	64.7	68.6	69.3
97.5°	0.8	1.6	7.0	14.8	24.9	35.8	46.0	53.8	58.4	62.3	63.1
100°	0.8	1.6	5.5	13.2	21.8	31.9	41.3	48.3	53.8	56.9	57.7
102.5°	0.8	0.8	4.7	10.9	19.5	28.0	36.6	43.6	48.3	51.4	53.0
105°	0.8	0.8	3.9	9.3	17.1	24.9	32.7	39.7	43.6	46.7	48.3
107.5°	0.8	0.8	3.1	7.8	14.8	21.8	29.6	35.1	39.7	42.9	44.4
110°	0.8	0.8	2.3	7.0	12.5	19.5	25.7	31.2	35.8	39.0	40.5

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.8	0.8	2.3	6.2	10.9	17.1	22.6	28.0	31.9	35.1	37.4
115°	0.8	0.8	2.3	5.5	10.1	14.8	20.3	24.9	28.8	31.9	34.3
117.5°	0.8	0.8	2.3	4.7	8.6	13.2	17.9	22.6	25.7	28.8	31.2
120°	0.8	0.8	1.6	3.9	7.8	11.7	15.6	19.5	23.4	26.5	28.8
122.5°	0.8	0.8	1.6	3.9	6.2	10.1	14.0	17.1	21.0	23.4	25.7
125°	0.8	0.8	1.6	3.1	5.5	9.3	12.5	15.6	17.9	21.0	23.4
127.5°	0.8	0.8	1.6	3.1	4.7	7.8	10.9	14.0	16.4	18.7	20.3
130°	0.8	0.8	1.6	2.3	3.9	6.2	9.3	11.7	14.8	16.4	17.9
132.5°	0.8	0.8	0.8	2.3	3.1	4.7	7.0	10.1	12.5	14.8	15.6
135°	0.8	0.8	0.8	1.6	3.1	3.9	5.5	7.8	10.1	12.5	14.0
137.5°	0.8	0.8	0.8	1.6	2.3	3.9	4.7	6.2	8.6	10.1	12.5
140°	0.8	0.8	0.8	1.6	2.3	3.1	3.9	5.5	7.0	8.6	10.1
142.5°	0.8	0.8	0.8	1.6	1.6	2.3	3.1	4.7	5.5	7.0	8.6
145°	0.8	0.8	0.8	1.6	1.6	2.3	3.1	3.9	4.7	5.5	7.0
147.5°	0.8	0.8	0.8	1.6	1.6	1.6	2.3	3.1	3.9	4.7	5.5
150°	1.6	1.6	1.6	1.6	1.6	1.6	2.3	2.3	3.1	3.9	4.7
152.5°	1.6	1.6	1.6	1.6	1.6	1.6	2.3	2.3	2.3	3.1	3.9
155°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.3	2.3	3.1	3.1
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

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4
2.5°	1495.2	1496.7	1506.1	1505.3	1503.8	1502.2	1502.2	1500.6	1502.2	1506.1	1504.5
5°	1487.4	1489.7	1496.7	1496.0	1494.4	1493.6	1492.8	1490.5	1492.1	1497.5	1496.0
7.5°	1473.4	1475.7	1481.9	1478.8	1476.5	1478.0	1474.1	1471.8	1474.9	1480.4	1479.6
10°	1458.6	1460.1	1467.9	1466.4	1462.5	1463.2	1459.3	1457.8	1461.7	1464.8	1465.6
12.5°	1448.4	1453.9	1460.9	1460.1	1459.3	1460.1	1456.2	1454.7	1457.0	1460.1	1459.3
15°	1446.1	1453.1	1460.9	1460.9	1461.7	1462.5	1458.6	1456.2	1458.6	1460.9	1460.1
17.5°	1443.8	1452.3	1459.3	1458.6	1459.3	1460.9	1454.7	1453.1	1456.2	1459.3	1457.8
20°	1436.0	1443.8	1448.4	1446.9	1446.9	1447.7	1439.9	1439.9	1444.5	1446.9	1447.7
22.5°	1414.2	1423.5	1423.5	1419.6	1419.6	1416.5	1414.2	1409.5	1414.9	1418.8	1421.9
25°	1381.4	1385.3	1380.7	1372.1	1367.4	1363.5	1352.6	1362.0	1362.0	1373.6	1377.5
27.5°	1335.5	1326.9	1313.6	1295.7	1291.8	1279.4	1272.3	1274.7	1278.6	1294.9	1307.4
30°	1259.9	1234.2	1211.6	1203.8	1186.6	1174.2	1161.7	1167.9	1175.0	1184.3	1210.0
32.5°	1160.2	1135.2	1098.6	1085.4	1067.4	1051.8	1037.0	1046.4	1058.9	1065.1	1093.1
35°	1045.6	1016.0	982.5	959.9	941.2	932.6	913.9	927.2	940.4	945.1	969.3
37.5°	924.1	893.7	864.1	844.6	826.7	821.2	808.8	818.1	828.2	835.2	855.5
40°	808.8	780.7	758.1	744.9	732.4	727.7	723.0	726.9	734.7	740.2	755.8
42.5°	709.8	687.2	671.6	663.8	655.3	649.0	649.8	651.4	655.3	667.0	674.0
45°	623.3	610.1	599.9	598.4	592.9	592.2	591.4	594.5	596.8	603.8	609.3
47.5°	554.0	548.5	546.2	549.3	551.6	548.5	550.1	554.0	558.6	558.6	557.9
50°	499.4	501.0	504.1	511.1	515.8	517.4	518.9	523.6	524.4	525.9	523.6
52.5°	455.0	456.6	465.2	476.1	481.5	483.9	487.0	491.6	491.6	493.2	490.1
55°	409.8	412.2	420.7	431.6	436.3	439.4	442.6	445.7	448.0	451.1	448.8
57.5°	360.0	367.0	372.4	375.5	378.7	381.0	383.3	384.1	388.8	389.6	393.5
60°	307.0	308.5	314.0	313.2	310.9	317.1	314.0	319.5	324.9	331.9	332.7
62.5°	256.3	257.1	261.0	259.5	262.6	261.8	264.1	264.1	268.0	271.1	275.0
65°	216.6	217.4	220.5	220.5	219.7	222.1	224.4	226.0	226.0	228.3	231.4
67.5°	187.0	189.3	192.4	194.0	195.6	195.6	197.9	198.7	200.2	201.0	202.6
70°	166.7	169.9	173.0	174.5	175.3	176.9	177.6	177.6	179.2	180.0	181.5
72.5°	151.9	155.1	157.4	157.4	158.9	159.7	159.7	160.5	161.3	162.8	164.4
75°	139.5	141.8	143.4	142.6	142.6	142.6	143.4	143.4	144.9	146.5	148.0
77.5°	127.8	130.1	130.1	128.6	128.6	128.6	128.6	129.3	130.1	131.7	133.2
80°	119.2	119.2	118.4	118.4	116.9	116.1	116.1	116.9	116.9	118.4	120.8
82.5°	109.9	109.9	109.1	108.3	107.5	106.7	106.7	107.5	108.3	109.1	110.6
85°	101.3	101.3	99.7	99.7	99.0	99.0	99.0	99.0	99.7	100.5	102.1
87.5°	92.7	91.9	91.2	90.4	90.4	90.4	90.4	90.4	91.2	92.7	93.5
90°	84.1	83.4	82.6	82.6	81.8	81.8	82.6	82.6	83.4	84.1	84.9
92.5°	76.4	75.6	74.8	74.8	74.0	74.0	74.8	74.0	75.6	75.6	76.4
95°	69.3	68.6	67.8	67.8	67.8	67.8	67.8	67.8	68.6	68.6	69.3
97.5°	63.1	62.3	61.6	61.6	62.3	61.6	62.3	62.3	62.3	63.1	63.9
100°	57.7	56.9	56.9	57.7	56.9	56.9	57.7	57.7	57.7	57.7	58.4
102.5°	53.0	53.0	53.0	53.0	53.0	53.0	53.8	53.8	53.8	53.8	54.5
105°	48.3	49.1	49.1	49.1	49.9	49.9	49.9	50.6	50.6	50.6	50.6
107.5°	45.2	46.0	46.0	46.7	46.7	47.5	47.5	47.5	47.5	48.3	48.3
110°	42.1	42.9	43.6	44.4	44.4	45.2	45.2	45.2	45.2	45.2	45.2

TEST NUMBER: P1214110

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	39.0	39.7	40.5	42.1	42.9	42.9	42.9	42.9	43.6	43.6	42.9
115°	35.8	37.4	38.2	39.7	40.5	40.5	41.3	41.3	41.3	41.3	40.5
117.5°	32.7	35.1	35.8	37.4	38.2	38.2	39.0	39.0	39.0	39.0	38.2
120°	30.4	31.9	33.5	34.3	35.1	35.8	35.8	36.6	36.6	36.6	35.8
122.5°	28.0	29.6	31.2	31.9	32.7	33.5	33.5	33.5	33.5	33.5	33.5
125°	24.9	26.5	28.0	28.8	29.6	30.4	30.4	31.2	31.2	31.2	30.4
127.5°	22.6	24.2	24.9	26.5	27.3	27.3	28.0	28.0	28.0	28.0	27.3
130°	19.5	21.0	22.6	23.4	24.2	24.2	24.9	24.9	24.9	24.9	24.9
132.5°	17.1	18.7	19.5	21.0	21.0	21.8	21.8	22.6	22.6	22.6	21.8
135°	15.6	16.4	17.1	18.7	18.7	19.5	19.5	19.5	19.5	19.5	19.5
137.5°	14.0	14.8	15.6	16.4	16.4	17.1	17.1	17.1	17.1	17.9	17.1
140°	11.7	13.2	14.0	14.0	14.8	14.8	14.8	15.6	15.6	15.6	14.8
142.5°	10.1	10.9	11.7	12.5	13.2	13.2	13.2	13.2	14.0	13.2	13.2
145°	7.8	9.3	10.1	10.9	11.7	11.7	11.7	11.7	11.7	11.7	11.7
147.5°	6.2	7.0	8.6	9.3	9.3	10.1	10.1	10.1	10.1	10.1	10.1
150°	5.5	5.5	7.0	7.8	8.6	8.6	8.6	8.6	8.6	8.6	8.6
152.5°	3.9	4.7	5.5	6.2	7.0	7.0	7.0	7.0	7.0	7.0	7.0
155°	3.9	3.9	4.7	4.7	5.5	5.5	5.5	5.5	6.2	5.5	5.5
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: P1214110

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4
2.5°	1502.2	1501.4	1504.5	1501.4	1485.8	1492.1	1489.7	1498.3	1499.1	1501.4	1509.2
5°	1494.4	1494.4	1498.3	1495.2	1480.4	1486.6	1485.8	1494.4	1496.0	1497.5	1506.1
7.5°	1478.8	1479.6	1485.1	1482.7	1467.1	1476.5	1475.7	1485.8	1489.0	1492.1	1499.9
10°	1464.0	1463.2	1469.5	1467.1	1452.3	1463.2	1462.5	1472.6	1477.3	1482.7	1492.1
12.5°	1456.2	1453.9	1456.2	1453.9	1437.5	1446.1	1446.9	1458.6	1464.0	1471.0	1481.9
15°	1456.2	1452.3	1452.3	1447.7	1429.0	1434.4	1435.2	1443.0	1450.0	1457.0	1470.3
17.5°	1454.7	1450.8	1450.0	1446.1	1425.8	1425.8	1425.1	1430.5	1434.4	1441.4	1455.4
20°	1446.1	1444.5	1443.8	1441.4	1422.7	1419.6	1418.0	1418.0	1420.4	1422.7	1436.7
22.5°	1423.5	1425.1	1426.6	1428.2	1413.4	1407.9	1408.7	1407.1	1404.8	1404.8	1416.5
25°	1381.4	1389.2	1395.5	1402.5	1393.9	1390.0	1394.7	1392.3	1388.4	1385.3	1395.5
27.5°	1314.4	1330.8	1344.0	1361.2	1362.0	1358.8	1371.3	1369.7	1369.0	1364.3	1372.1
30°	1221.7	1247.4	1265.3	1290.3	1311.3	1314.4	1335.5	1338.6	1341.7	1339.4	1347.1
32.5°	1109.5	1144.6	1175.0	1213.9	1234.2	1252.1	1281.7	1294.2	1306.6	1310.5	1319.1
35°	987.2	1026.9	1062.8	1105.6	1137.6	1176.5	1212.4	1231.1	1259.1	1270.0	1282.5
37.5°	871.1	908.5	943.5	986.4	1037.8	1078.3	1122.8	1164.8	1203.0	1218.6	1237.3
40°	768.2	798.6	832.1	869.5	916.3	969.3	1017.6	1076.0	1121.2	1152.4	1179.6
42.5°	690.3	705.1	734.0	767.5	804.9	858.6	907.7	973.2	1027.7	1072.1	1117.3
45°	621.0	628.0	649.0	667.0	705.1	752.7	804.9	868.8	925.6	982.5	1037.0
47.5°	561.8	570.3	580.5	591.4	618.6	658.4	703.6	761.2	818.1	884.3	946.7
50°	522.0	524.4	525.9	530.6	547.0	574.2	610.9	659.9	714.5	785.4	851.6
52.5°	487.0	487.0	482.3	480.0	486.2	503.3	524.4	559.4	615.5	681.0	751.1
55°	449.6	442.6	441.0	433.2	434.8	442.6	452.7	480.0	525.9	582.0	649.8
57.5°	397.4	394.2	394.2	391.1	384.9	388.8	391.1	410.6	443.3	491.6	550.9
60°	337.4	335.8	339.7	340.5	335.0	337.4	336.6	348.3	371.7	410.6	459.7
62.5°	277.4	284.4	285.2	288.3	285.2	284.4	288.3	298.4	310.1	339.7	377.9
65°	233.0	236.9	237.6	241.5	240.0	240.0	243.1	250.9	257.9	278.2	307.8
67.5°	204.1	202.6	203.4	205.7	203.4	202.6	204.9	209.6	215.0	227.5	248.5
70°	181.5	180.0	180.0	180.0	176.9	174.5	175.3	176.9	179.2	186.2	199.5
72.5°	164.4	164.4	162.1	159.7	157.4	155.8	154.3	152.7	151.9	154.3	161.3
75°	148.8	149.6	148.8	146.5	143.4	140.2	137.1	134.0	130.1	128.6	129.3
77.5°	134.8	135.6	136.4	135.6	132.5	128.6	123.9	119.2	113.8	108.3	105.2
80°	122.3	123.9	124.7	123.9	121.5	118.4	113.0	107.5	99.7	92.7	84.9
82.5°	111.4	113.8	114.5	114.5	113.0	109.9	103.6	97.4	88.8	79.5	69.3
85°	102.8	104.4	106.0	106.0	105.2	102.1	95.8	88.8	80.3	69.3	58.4
87.5°	94.3	95.1	96.6	98.2	96.6	93.5	88.0	80.3	71.7	60.8	48.3
90°	85.7	86.5	88.0	89.6	88.8	85.7	81.0	74.0	64.7	53.0	40.5
92.5°	77.1	78.7	79.5	80.3	81.0	78.7	74.8	67.8	58.4	46.7	35.1
95°	70.9	70.9	72.5	73.2	74.0	71.7	68.6	61.6	53.0	42.1	30.4
97.5°	64.7	64.7	66.2	66.2	67.0	65.4	62.3	56.1	47.5	37.4	25.7
100°	58.4	59.2	60.0	60.8	60.8	60.0	56.9	50.6	42.9	33.5	22.6
102.5°	54.5	54.5	55.3	55.3	56.1	54.5	51.4	46.0	38.2	29.6	19.5
105°	50.6	50.6	51.4	51.4	50.6	49.1	46.0	41.3	34.3	25.7	17.1
107.5°	47.5	47.5	47.5	47.5	46.7	45.2	42.1	36.6	30.4	23.4	15.6
110°	45.2	44.4	44.4	43.6	42.9	40.5	37.4	32.7	27.3	20.3	13.2

TEST NUMBER: P1214110

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	42.9	42.1	41.3	40.5	39.0	36.6	33.5	29.6	24.2	17.9	11.7
115°	40.5	39.7	39.0	37.4	35.8	33.5	30.4	26.5	21.0	15.6	10.1
117.5°	38.2	37.4	35.8	34.3	32.7	30.4	27.3	23.4	18.7	14.0	9.3
120°	35.1	34.3	33.5	31.9	30.4	27.3	24.2	21.0	16.4	12.5	7.8
122.5°	32.7	31.9	30.4	29.6	27.3	24.9	21.8	18.7	14.8	10.9	7.0
125°	29.6	28.8	28.0	26.5	24.9	21.8	19.5	16.4	13.2	9.3	5.5
127.5°	27.3	26.5	24.9	23.4	21.8	19.5	17.1	14.8	11.7	7.8	5.5
130°	24.2	23.4	22.6	21.0	19.5	17.1	15.6	12.5	10.1	7.0	4.7
132.5°	21.0	21.0	20.3	18.7	17.1	15.6	13.2	10.9	8.6	6.2	3.9
135°	19.5	18.7	17.9	16.4	15.6	13.2	11.7	9.3	7.0	5.5	3.1
137.5°	17.1	16.4	15.6	14.8	13.2	11.7	10.1	7.8	6.2	4.7	3.1
140°	14.8	14.0	14.0	12.5	11.7	10.1	8.6	7.0	5.5	3.9	2.3
142.5°	13.2	12.5	11.7	10.9	10.1	8.6	7.0	5.5	4.7	3.1	2.3
145°	11.7	10.9	10.1	9.3	8.6	7.0	6.2	4.7	3.9	3.1	2.3
147.5°	9.3	9.3	8.6	7.8	7.0	6.2	5.5	4.7	3.1	2.3	1.6
150°	7.8	7.8	7.0	6.2	6.2	5.5	4.7	3.9	3.1	2.3	1.6
152.5°	7.0	6.2	6.2	5.5	5.5	4.7	3.9	3.1	2.3	2.3	1.6
155°	5.5	5.5	5.5	4.7	4.7	3.9	3.1	3.1	2.3	1.6	1.6
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: P1214110

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4
2.5°	1510.8	1501.4	1509.2	1523.2	1521.7	1520.1	1518.6	1521.7	1531.8	1526.4	1517.8
5°	1508.4	1499.1	1507.7	1520.9	1520.1	1517.8	1516.2	1519.3	1529.5	1524.0	1514.7
7.5°	1503.8	1495.2	1501.4	1514.7	1514.7	1513.1	1511.5	1514.7	1524.0	1519.3	1510.0
10°	1496.0	1489.7	1496.0	1508.4	1509.2	1506.1	1504.5	1508.4	1517.8	1515.4	1507.7
12.5°	1489.7	1483.5	1490.5	1503.0	1503.8	1500.6	1498.3	1503.0	1515.4	1517.0	1514.7
15°	1481.2	1475.7	1484.3	1497.5	1497.5	1495.2	1495.2	1501.4	1518.6	1525.6	1529.5
17.5°	1468.7	1464.8	1474.9	1488.2	1489.0	1487.4	1488.2	1500.6	1523.2	1540.4	1551.3
20°	1453.1	1451.6	1462.5	1476.5	1478.8	1479.6	1483.5	1502.2	1533.4	1556.7	1567.6
22.5°	1434.4	1435.2	1447.7	1462.5	1465.6	1467.9	1475.7	1502.2	1541.2	1566.1	1570.8
25°	1413.4	1415.7	1429.0	1446.9	1450.8	1455.4	1468.7	1503.0	1543.5	1559.9	1552.1
27.5°	1390.8	1395.5	1412.6	1431.3	1436.0	1443.8	1460.9	1498.3	1532.6	1533.4	1504.5
30°	1367.4	1372.9	1393.1	1414.9	1422.7	1430.5	1451.6	1487.4	1506.1	1481.2	1430.5
32.5°	1340.9	1348.7	1369.0	1395.5	1404.8	1414.9	1436.0	1466.4	1459.3	1405.6	1333.1
35°	1307.4	1318.3	1341.7	1372.9	1381.4	1394.7	1409.5	1416.5	1385.3	1309.0	1227.2
37.5°	1266.1	1282.5	1309.7	1345.6	1354.9	1363.5	1367.4	1347.9	1285.6	1203.0	1118.1
40°	1218.6	1243.5	1273.1	1312.9	1322.2	1322.2	1308.2	1266.9	1188.2	1079.9	985.6
42.5°	1160.9	1191.3	1228.7	1268.5	1277.8	1266.9	1233.4	1160.9	1071.3	950.6	850.8
45°	1090.8	1131.3	1173.4	1214.7	1219.4	1195.2	1135.2	1043.3	932.6	820.4	725.4
47.5°	1007.4	1060.4	1106.4	1153.1	1146.9	1106.4	1026.1	921.7	804.9	698.9	622.5
50°	913.9	976.3	1027.7	1072.1	1058.9	1002.8	908.5	799.4	683.3	592.9	529.8
52.5°	814.2	885.9	937.3	973.2	955.2	888.2	784.6	680.2	585.1	502.6	460.5
55°	710.6	783.0	836.0	864.1	840.7	768.2	666.2	571.1	481.5	427.8	402.8
57.5°	610.1	677.9	727.7	750.3	720.7	648.3	554.0	473.7	409.1	363.9	351.4
60°	513.5	568.8	616.3	633.4	601.5	534.5	453.5	389.6	342.0	310.9	304.6
62.5°	423.9	469.0	506.4	519.7	488.5	436.3	366.2	318.7	285.2	269.6	261.8
65°	349.8	376.3	414.5	412.2	393.5	345.2	293.7	260.2	238.4	228.3	223.6
67.5°	275.0	299.2	323.3	326.5	303.1	269.6	236.1	211.9	200.2	194.8	192.4
70°	212.7	230.6	245.4	241.5	229.1	208.0	187.0	173.8	169.1	166.7	166.7
72.5°	165.2	174.5	181.5	176.9	169.1	158.2	148.0	142.6	143.4	144.9	146.5
75°	127.8	130.1	131.7	127.0	125.4	118.4	117.7	118.4	123.1	127.8	130.1
77.5°	98.2	95.1	92.7	88.0	88.8	88.0	91.9	98.2	105.2	112.2	118.4
80°	75.6	68.6	63.1	58.4	60.8	64.7	72.5	81.8	91.2	99.0	106.7
82.5°	58.4	48.3	40.5	35.8	40.5	46.7	56.9	68.6	79.5	88.0	96.6
85°	45.2	33.5	24.2	19.5	24.2	33.5	44.4	57.7	69.3	78.7	87.3
87.5°	35.1	24.2	13.2	7.8	13.2	23.4	35.8	48.3	60.0	70.9	79.5
90°	28.0	16.4	6.2	1.6	7.0	16.4	28.0	40.5	52.2	63.9	72.5
92.5°	22.6	11.7	3.1	0.0	3.9	12.5	23.4	35.1	46.7	57.7	66.2
95°	18.7	9.3	2.3	0.0	3.1	9.3	18.7	30.4	41.3	52.2	59.2
97.5°	15.6	7.0	1.6	0.0	1.6	7.8	15.6	25.7	36.6	46.7	53.8
100°	13.2	6.2	1.6	0.0	1.6	6.2	13.2	22.6	31.9	41.3	48.3
102.5°	10.9	4.7	0.8	0.8	0.8	4.7	11.7	19.5	28.0	36.6	43.6
105°	10.1	3.9	0.8	0.8	0.8	3.9	10.1	17.1	24.9	32.7	39.0
107.5°	8.6	3.1	0.8	0.8	0.8	3.1	8.6	14.8	22.6	29.6	35.1
110°	7.0	3.1	0.8	0.8	0.8	3.1	7.0	13.2	19.5	25.7	31.2

TEST NUMBER: P1214110

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	6.2	2.3	0.8	0.8	0.8	2.3	6.2	11.7	17.1	23.4	28.0
115°	5.5	2.3	0.8	0.8	0.8	2.3	5.5	10.1	14.8	20.3	24.9
117.5°	4.7	2.3	0.8	0.8	0.8	1.6	4.7	8.6	13.2	17.9	22.6
120°	3.9	1.6	0.8	0.8	0.8	1.6	3.9	7.8	11.7	15.6	19.5
122.5°	3.9	1.6	0.8	0.8	0.8	1.6	3.1	6.2	10.1	13.2	17.1
125°	3.1	1.6	0.8	0.8	0.8	0.8	3.1	5.5	8.6	11.7	14.8
127.5°	3.1	1.6	0.8	0.8	0.8	0.8	2.3	4.7	7.0	10.1	13.2
130°	2.3	1.6	0.8	0.8	0.8	0.8	1.6	3.9	6.2	8.6	10.9
132.5°	2.3	1.6	0.8	0.8	0.8	0.8	1.6	3.1	4.7	7.0	9.3
135°	2.3	0.8	0.8	0.8	0.8	0.8	0.8	2.3	3.9	5.5	7.0
137.5°	1.6	0.8	0.8	0.8	0.8	0.8	0.8	1.6	3.1	3.9	6.2
140°	1.6	0.8	0.8	0.8	0.8	0.8	0.8	1.6	2.3	3.1	4.7
142.5°	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	2.3	3.9
145°	1.6	0.8	0.8	1.6	1.6	0.8	0.8	1.6	1.6	2.3	3.1
147.5°	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	2.3
150°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.3
152.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
155°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4
2.5°	1516.2	1498.3	1507.7	1504.5	1507.7	1515.4	1514.7	1512.3	1513.9	1510.0	1506.1
5°	1513.1	1495.2	1504.5	1500.6	1504.5	1512.3	1510.8	1508.4	1510.8	1506.1	1502.2
7.5°	1509.2	1492.8	1503.8	1503.0	1510.0	1520.1	1520.9	1520.9	1526.4	1519.3	1516.2
10°	1509.2	1500.6	1515.4	1520.9	1538.8	1552.1	1553.6	1556.7	1566.1	1564.5	1556.7
12.5°	1525.6	1524.0	1545.8	1559.1	1575.4	1594.1	1604.3	1607.4	1613.6	1608.9	1605.8
15°	1546.6	1554.4	1578.6	1593.4	1611.3	1625.3	1627.6	1629.2	1633.9	1626.9	1621.4
17.5°	1574.7	1579.3	1598.8	1605.0	1616.7	1619.1	1616.0	1608.2	1608.2	1592.6	1587.9
20°	1587.9	1585.6	1593.4	1583.2	1578.6	1564.5	1551.3	1536.5	1535.7	1519.3	1517.8
22.5°	1576.2	1560.6	1544.3	1519.3	1508.4	1488.2	1470.3	1461.7	1456.2	1435.2	1429.7
25°	1534.9	1496.7	1472.6	1443.0	1416.5	1393.1	1376.0	1358.1	1340.9	1323.8	1316.0
27.5°	1463.2	1427.4	1388.4	1347.1	1310.5	1274.7	1245.9	1227.9	1211.6	1189.0	1177.3
30°	1375.2	1325.3	1282.5	1242.7	1182.7	1139.1	1115.0	1079.1	1066.7	1056.5	1034.7
32.5°	1271.6	1211.6	1153.1	1099.4	1037.8	997.3	965.4	938.9	931.1	904.6	898.4
35°	1157.0	1078.3	1012.1	959.1	914.7	865.6	839.1	821.2	805.6	787.7	784.6
37.5°	1022.2	951.3	876.5	829.8	794.7	752.7	732.4	719.9	712.9	699.7	697.3
40°	886.7	815.8	764.3	717.6	695.8	673.2	658.4	652.9	649.8	645.1	640.5
42.5°	763.6	701.2	664.6	633.4	624.1	613.2	609.3	612.4	609.3	607.7	607.0
45°	659.2	611.6	585.9	576.6	574.2	571.1	574.2	579.7	580.5	578.9	578.9
47.5°	564.1	541.5	530.6	532.2	536.1	538.4	543.8	550.9	552.4	548.5	550.1
50°	501.8	488.5	486.2	492.4	501.0	504.1	510.3	515.8	515.0	513.5	511.9
52.5°	443.3	439.4	445.7	451.9	461.3	462.8	465.2	467.5	466.7	463.6	462.0
55°	394.2	397.4	402.8	405.2	412.2	411.4	412.2	412.2	409.1	407.5	405.2
57.5°	349.8	350.6	353.7	354.5	358.4	356.8	356.1	354.5	349.8	349.1	346.7
60°	304.6	303.1	310.1	304.6	307.8	304.6	303.9	300.0	295.3	294.5	293.0
62.5°	261.8	258.7	263.4	261.0	262.6	259.5	257.9	253.2	249.3	248.5	247.8
65°	223.6	222.1	226.7	226.0	227.5	223.6	222.1	218.9	215.8	215.0	214.3
67.5°	191.7	195.6	197.9	197.9	199.5	198.7	194.8	194.0	193.2	190.1	190.1
70°	168.3	170.6	175.3	176.1	175.3	176.9	173.8	173.0	172.2	170.6	169.9
72.5°	149.6	152.7	157.4	158.2	157.4	157.4	155.8	155.1	155.1	152.7	152.7
75°	134.8	138.7	142.6	142.6	142.6	141.0	139.5	139.5	137.9	137.1	135.6
77.5°	122.3	127.0	130.1	129.3	128.6	127.0	127.0	124.7	122.3	122.3	120.8
80°	113.0	116.1	118.4	117.7	116.9	114.5	113.8	111.4	109.9	107.5	107.5
82.5°	102.8	106.7	108.3	107.5	106.0	103.6	102.8	101.3	99.7	99.0	97.4
85°	94.3	98.2	99.0	97.4	95.8	94.3	93.5	92.7	91.9	90.4	90.4
87.5°	85.7	89.6	89.6	88.8	87.3	86.5	85.7	84.9	84.1	83.4	82.6
90°	78.7	81.8	81.8	81.0	80.3	79.5	78.7	77.9	77.1	76.4	76.4
92.5°	71.7	74.8	74.8	74.0	73.2	72.5	72.5	71.7	70.9	70.1	69.3
95°	65.4	68.6	68.6	68.6	67.8	67.0	67.0	66.2	65.4	65.4	64.7
97.5°	59.2	62.3	62.3	62.3	61.6	60.8	60.8	60.0	60.0	60.0	59.2
100°	53.8	56.1	56.9	56.9	56.1	56.1	56.1	55.3	55.3	55.3	54.5
102.5°	48.3	50.6	52.2	52.2	52.2	51.4	51.4	51.4	51.4	51.4	50.6
105°	43.6	46.0	47.5	48.3	48.3	48.3	48.3	48.3	48.3	48.3	48.3
107.5°	39.7	42.1	43.6	44.4	45.2	45.2	46.0	46.0	46.0	46.0	46.0
110°	35.8	38.2	40.5	41.3	42.1	42.9	42.9	43.6	42.9	42.9	42.9

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CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	31.9	35.1	36.6	38.2	39.0	39.7	40.5	40.5	40.5	40.5	40.5
115°	28.8	31.9	33.5	35.1	36.6	37.4	37.4	38.2	38.2	38.2	37.4
117.5°	25.7	28.8	30.4	31.9	32.7	34.3	35.1	35.1	35.1	35.1	34.3
120°	23.4	25.7	27.3	28.8	30.4	31.2	31.9	31.9	31.9	31.9	31.9
122.5°	20.3	22.6	24.9	26.5	27.3	28.0	28.8	28.8	28.8	28.8	28.8
125°	17.9	20.3	21.8	23.4	24.2	25.7	25.7	25.7	25.7	25.7	25.7
127.5°	15.6	17.9	19.5	21.0	21.8	22.6	23.4	23.4	23.4	23.4	23.4
130°	13.2	15.6	17.1	18.7	19.5	20.3	20.3	21.0	21.0	21.0	21.0
132.5°	11.7	13.2	14.8	16.4	17.1	17.9	17.9	18.7	18.7	18.7	18.7
135°	9.3	11.7	12.5	14.0	14.8	15.6	15.6	16.4	16.4	16.4	16.4
137.5°	7.8	9.3	10.9	12.5	13.2	13.2	14.0	14.0	14.8	14.8	14.8
140°	6.2	7.0	9.3	10.1	10.9	11.7	12.5	12.5	12.5	12.5	12.5
142.5°	4.7	6.2	7.0	8.6	9.3	10.1	10.9	10.9	10.9	10.9	10.9
145°	3.9	4.7	5.5	7.0	7.8	8.6	9.3	9.3	9.3	9.3	9.3
147.5°	3.1	3.9	4.7	5.5	6.2	7.0	7.8	7.8	7.8	7.8	7.8
150°	2.3	3.1	3.9	3.9	4.7	5.5	6.2	7.0	7.0	7.0	7.0
152.5°	2.3	2.3	3.1	3.1	3.9	4.7	5.5	5.5	5.5	5.5	5.5
155°	1.6	2.3	2.3	2.3	3.1	3.1	3.9	4.7	4.7	4.7	4.7
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214110

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4
2.5°	1508.4	1511.5	1510.0	1507.7	1506.9	1510.8	1506.9	1489.0	1496.0	1496.7	1502.2
5°	1506.1	1508.4	1506.9	1505.3	1503.0	1507.7	1503.0	1484.3	1491.3	1492.1	1497.5
7.5°	1521.7	1522.5	1522.5	1518.6	1512.3	1514.7	1508.4	1487.4	1491.3	1491.3	1495.2
10°	1560.6	1562.2	1564.5	1554.4	1546.6	1540.4	1531.8	1506.1	1505.3	1499.1	1499.1
12.5°	1611.3	1607.4	1603.5	1598.8	1592.6	1584.8	1572.3	1541.9	1531.8	1521.7	1511.5
15°	1626.1	1624.5	1623.7	1621.4	1617.5	1615.2	1605.8	1575.4	1560.6	1548.2	1530.2
17.5°	1587.1	1590.2	1600.4	1601.1	1605.8	1615.2	1613.6	1592.6	1579.3	1573.9	1552.1
20°	1517.0	1517.8	1530.2	1535.7	1556.0	1571.5	1583.2	1580.9	1577.8	1584.0	1567.6
22.5°	1432.9	1438.3	1451.6	1460.1	1479.6	1497.5	1516.2	1526.4	1542.7	1568.4	1565.3
25°	1318.3	1325.3	1344.0	1358.1	1385.3	1412.6	1437.5	1455.4	1474.9	1524.0	1540.4
27.5°	1181.2	1192.1	1216.3	1230.3	1268.5	1296.5	1332.3	1367.4	1394.7	1450.8	1484.3
30°	1037.0	1046.4	1072.1	1091.6	1124.3	1162.5	1207.7	1257.5	1302.7	1359.6	1401.7
32.5°	902.3	912.4	933.4	950.6	987.2	1019.1	1069.0	1130.5	1172.6	1251.3	1307.4
35°	784.6	794.0	808.8	823.6	853.9	886.7	929.5	989.5	1043.3	1125.1	1196.0
37.5°	702.0	703.6	712.1	720.7	743.3	768.2	801.7	854.7	904.6	992.6	1070.5
40°	642.8	642.8	647.5	649.8	659.9	674.7	695.8	737.1	778.4	845.4	940.4
42.5°	606.2	604.6	604.6	605.4	604.6	611.6	624.1	643.6	680.2	735.5	809.5
45°	578.9	575.8	573.5	568.0	564.9	564.9	565.7	572.7	593.7	629.6	689.5
47.5°	548.5	547.7	543.8	537.6	532.2	528.3	522.0	519.7	525.9	546.2	586.7
50°	513.5	509.6	505.7	501.0	494.8	490.9	479.2	480.0	474.5	483.9	504.9
52.5°	462.0	458.9	457.4	453.5	451.1	449.6	440.2	430.9	428.5	430.1	437.9
55°	405.2	406.7	400.5	403.6	402.8	395.8	391.9	384.9	382.6	381.8	385.7
57.5°	345.9	347.5	343.6	346.7	346.7	342.8	340.5	340.5	335.0	330.4	335.8
60°	292.2	289.1	291.4	295.3	295.3	293.0	291.4	291.4	287.5	285.9	289.8
62.5°	248.5	245.4	247.8	251.7	252.4	250.9	249.3	249.3	244.7	244.7	247.8
65°	215.0	215.8	215.0	218.2	218.2	218.9	217.4	215.8	210.4	212.7	211.9
67.5°	190.9	190.1	190.1	193.2	192.4	194.0	192.4	190.1	186.2	183.1	182.3
70°	170.6	169.9	169.9	171.4	172.2	172.2	171.4	169.9	164.4	161.3	158.9
72.5°	152.7	151.9	152.7	153.5	154.3	155.1	154.3	152.7	148.0	144.1	140.2
75°	136.4	135.6	137.9	137.9	138.7	138.7	139.5	138.7	134.8	130.1	125.4
77.5°	120.0	120.8	123.1	123.9	125.4	126.2	127.0	127.0	123.1	119.2	113.0
80°	106.7	108.3	109.9	110.6	112.2	114.5	115.3	116.1	113.0	109.1	102.1
82.5°	97.4	98.2	99.7	100.5	102.8	103.6	104.4	106.0	104.4	100.5	92.7
85°	89.6	90.4	91.9	91.9	93.5	95.1	95.8	96.6	95.8	91.9	84.1
87.5°	82.6	83.4	84.1	84.9	85.7	86.5	87.3	88.0	87.3	83.4	76.4
90°	76.4	76.4	77.1	77.1	77.9	78.7	80.3	80.3	79.5	76.4	69.3
92.5°	69.3	70.1	70.1	70.9	71.7	72.5	73.2	73.2	72.5	69.3	63.1
95°	64.7	64.7	65.4	65.4	66.2	66.2	67.0	67.0	66.2	63.1	56.9
97.5°	59.2	59.2	59.2	59.2	60.0	60.0	60.8	60.8	60.0	56.9	51.4
100°	54.5	54.5	54.5	54.5	54.5	55.3	55.3	55.3	54.5	51.4	46.0
102.5°	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	49.1	46.7	41.3
105°	48.3	48.3	48.3	47.5	47.5	47.5	46.7	46.7	44.4	42.1	37.4
107.5°	45.2	45.2	45.2	44.4	44.4	43.6	42.9	42.9	40.5	38.2	33.5
110°	42.9	42.9	42.9	42.1	41.3	40.5	39.7	39.0	36.6	33.5	29.6

TEST NUMBER: P1214110

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	40.5	40.5	39.7	39.7	39.0	38.2	36.6	35.8	33.5	30.4	26.5
115°	37.4	37.4	37.4	36.6	35.8	35.1	34.3	32.7	30.4	27.3	23.4
117.5°	34.3	34.3	34.3	33.5	32.7	31.9	31.2	29.6	27.3	24.2	21.0
120°	31.2	31.2	31.2	30.4	29.6	28.8	28.0	26.5	24.2	21.8	17.9
122.5°	28.8	28.8	28.0	27.3	26.5	25.7	24.9	23.4	21.8	18.7	15.6
125°	25.7	25.7	24.9	24.9	24.2	23.4	22.6	21.0	18.7	16.4	14.0
127.5°	23.4	22.6	22.6	22.6	21.8	21.0	19.5	18.7	16.4	14.0	11.7
130°	20.3	20.3	20.3	19.5	19.5	18.7	17.1	15.6	14.0	12.5	10.1
132.5°	17.9	17.9	17.9	17.9	17.1	16.4	14.8	14.0	12.5	10.1	8.6
135°	16.4	16.4	15.6	15.6	14.8	14.0	13.2	11.7	10.1	8.6	7.0
137.5°	14.0	14.0	14.0	13.2	13.2	12.5	10.9	10.1	9.3	7.8	6.2
140°	12.5	12.5	11.7	11.7	10.9	10.9	10.1	8.6	7.8	6.2	5.5
142.5°	10.9	10.9	10.1	10.1	9.3	9.3	8.6	7.8	6.2	5.5	3.9
145°	9.3	9.3	8.6	8.6	8.6	7.8	7.0	6.2	5.5	4.7	3.9
147.5°	7.8	7.8	7.8	7.0	7.0	6.2	6.2	5.5	4.7	3.9	3.1
150°	7.0	7.0	6.2	6.2	6.2	5.5	4.7	4.7	3.9	3.1	2.3
152.5°	5.5	5.5	5.5	5.5	4.7	4.7	3.9	3.9	3.1	2.3	2.3
155°	4.7	4.7	4.7	3.9	3.9	3.9	3.1	3.1	2.3	2.3	1.6
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: P1214110

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4
2.5°	1499.9	1499.1	1506.1	1505.3	1496.0	1510.0	1519.3
5°	1496.0	1495.2	1501.4	1503.0	1492.8	1507.7	1517.8
7.5°	1492.8	1492.1	1499.1	1501.4	1491.3	1504.5	1515.4
10°	1493.6	1489.7	1496.0	1497.5	1488.2	1502.2	1511.5
12.5°	1499.1	1489.7	1492.1	1492.1	1483.5	1496.0	1506.1
15°	1512.3	1492.8	1489.7	1487.4	1476.5	1488.2	1498.3
17.5°	1527.1	1500.6	1489.7	1481.9	1468.7	1478.8	1489.7
20°	1541.9	1509.2	1491.3	1478.8	1460.9	1470.3	1478.0
22.5°	1548.9	1517.0	1492.8	1474.1	1451.6	1456.2	1464.8
25°	1539.6	1513.9	1489.7	1467.1	1439.9	1440.6	1447.7
27.5°	1505.3	1498.3	1482.7	1460.1	1430.5	1426.6	1432.1
30°	1446.9	1466.4	1467.1	1450.8	1419.6	1411.8	1414.2
32.5°	1365.1	1408.7	1434.4	1431.3	1404.0	1393.1	1394.7
35°	1270.8	1325.3	1381.4	1400.1	1380.7	1372.1	1369.0
37.5°	1157.8	1231.1	1305.9	1351.8	1348.7	1343.3	1340.1
40°	1033.2	1121.2	1210.0	1283.3	1305.9	1305.9	1307.4
42.5°	899.9	1002.8	1100.2	1192.9	1245.9	1257.5	1262.2
45°	771.4	875.0	980.9	1087.7	1158.6	1195.2	1208.5
47.5°	654.5	758.9	859.4	976.3	1070.5	1118.1	1139.1
50°	554.8	632.7	738.6	854.7	957.6	1016.0	1057.3
52.5°	472.2	532.9	625.7	734.0	837.6	917.8	956.0
55°	402.8	444.1	522.8	616.3	715.3	798.6	843.0
57.5°	344.4	377.1	430.9	508.8	592.2	674.7	722.3
60°	293.0	315.6	352.2	413.7	484.6	555.5	601.5
62.5°	248.5	263.4	287.5	332.7	388.0	443.3	486.2
65°	214.3	220.5	233.7	261.8	303.9	345.9	382.6
67.5°	180.8	184.7	194.8	211.9	233.0	263.4	287.5
70°	155.8	155.8	156.6	166.7	177.6	197.1	214.3
72.5°	135.6	133.2	128.6	130.9	133.2	144.1	155.1
75°	119.2	113.8	106.0	102.8	101.3	102.8	109.1
77.5°	105.2	97.4	88.0	80.3	74.0	71.7	77.1
80°	93.5	84.1	73.2	63.1	53.0	47.5	49.9
82.5°	84.1	72.5	60.8	49.1	37.4	29.6	29.6
85°	74.0	63.1	50.6	38.2	26.5	16.4	14.8
87.5°	67.0	55.3	42.1	30.4	18.7	8.6	4.7
90°	60.0	48.3	35.8	24.2	13.2	3.9	0.0
92.5°	53.8	42.9	31.2	19.5	9.3	2.3	0.0
95°	48.3	38.2	26.5	16.4	7.8	1.6	0.8
97.5°	42.9	33.5	23.4	13.2	5.5	1.6	0.8
100°	39.0	29.6	20.3	10.9	4.7	0.8	0.8
102.5°	34.3	26.5	17.1	9.3	3.9	0.8	0.8
105°	30.4	23.4	14.8	7.8	3.1	0.8	0.8
107.5°	27.3	20.3	13.2	7.0	3.1	0.8	0.8
110°	24.2	17.9	11.7	6.2	2.3	0.8	0.8



TEST NUMBER: P1214110

CATALOG NUMBER: 4SNLED-LD5-37SL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	21.8	15.6	10.1	5.5	1.6	0.8	0.8
115°	18.7	14.0	8.6	4.7	1.6	0.8	0.8
117.5°	16.4	11.7	7.8	3.9	1.6	0.8	0.8
120°	14.0	10.1	6.2	3.1	0.8	0.8	0.8
122.5°	12.5	8.6	5.5	3.1	0.8	0.8	0.8
125°	10.9	7.8	4.7	2.3	0.8	0.8	0.8
127.5°	9.3	6.2	3.9	1.6	0.8	0.8	0.8
130°	7.8	5.5	3.1	1.6	0.8	0.8	0.8
132.5°	6.2	4.7	3.1	1.6	0.8	0.8	0.8
135°	5.5	3.9	2.3	1.6	0.8	0.8	0.8
137.5°	4.7	3.1	1.6	1.6	1.6	0.8	0.8
140°	3.9	2.3	1.6	1.6	1.6	1.6	0.8
142.5°	3.1	2.3	1.6	1.6	1.6	1.6	0.8
145°	2.3	1.6	1.6	1.6	1.6	1.6	0.8
147.5°	2.3	1.6	1.6	1.6	1.6	1.6	0.8
150°	1.6	1.6	1.6	1.6	1.6	1.6	1.6
152.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6
155°	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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)