

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: P1213354

Luminaire Tested: 2SNLED-LD5-45HL-LN-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213354
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33519)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2SNLED-LD5-45HL-LN-UNV-L935-CD1-U
Description: 2FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

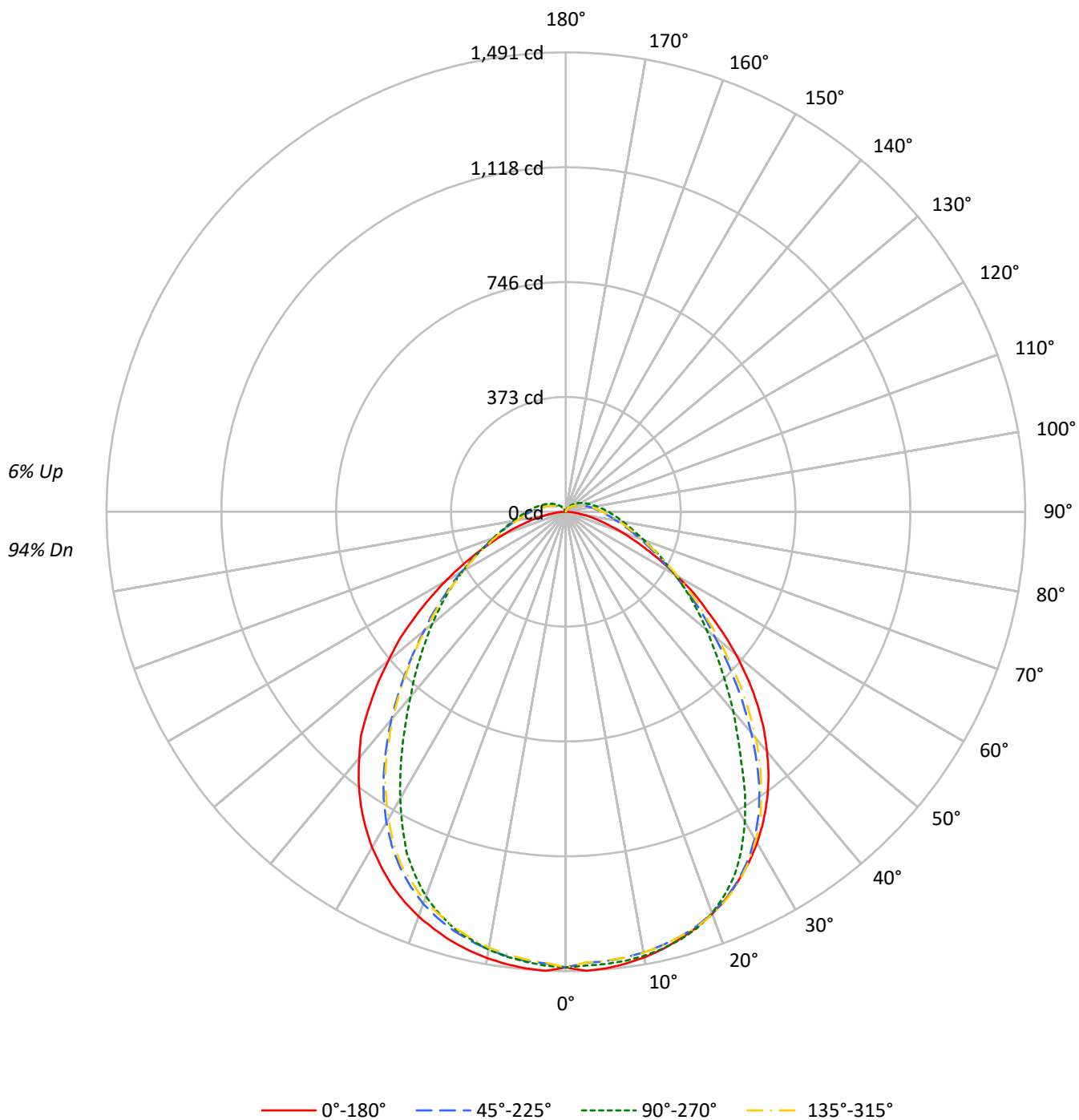
Lumens per Lamp: N/A
Luminaire Lumens: 3743.0 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.12')
CIE Type: Direct

Input Watts (W): 36
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			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	114	114	114	114	108	108	108	102	102	102	96	96	96	94		
1	107	103	98	95	104	100	96	92	94	91	88	89	87	85	85	83	81	79		
2	98	90	84	78	95	88	82	77	83	78	74	79	75	72	75	72	69	67		
3	90	80	72	66	87	78	71	65	74	68	63	71	66	61	67	63	60	57		
4	83	72	63	57	80	70	62	56	67	60	55	64	58	53	61	56	52	50		
5	77	64	56	50	74	63	55	49	60	53	48	58	52	47	55	50	46	44		
6	71	58	50	44	69	57	49	43	55	48	42	52	46	42	50	45	41	39		
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37	35		
8	62	49	41	35	60	48	40	35	46	39	34	44	38	34	43	37	33	31		
9	58	45	37	32	56	44	37	31	42	36	31	41	35	30	40	34	30	28		
10	54	42	34	29	53	41	34	29	39	33	28	38	32	28	37	31	27	26		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	23904	23904	23904	23904
5°	24010	23142	24010	23040
10°	23836	22529	23876	22215
15°	23617	21854	23724	21286
20°	23367	20989	23505	20103
25°	22921	19705	23176	18544
30°	22362	17818	22654	16496
35°	21530	15506	21944	14439
40°	20369	13562	20909	12584
45°	18866	11789	19479	11113
50°	16848	10359	17590	9836
55°	14479	9148	15532	8686
60°	12078	8031	13169	7569
65°	9793	7102	10781	6585
70°	7679	6302	8594	5830
75°	5889	5818	6633	5353
80°	4082	5613	4810	5131
85°	2293	5647	3083	5191

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 19479 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.2	3.7
10°-20°	402.1	10.7
20°-30°	595.9	15.9
30°-40°	662.0	17.7
40°-50°	600.1	16.0
50°-60°	465.0	12.4
60°-70°	315.8	8.4
70°-80°	200.9	5.4
80°-90°	128.4	3.4
90°-100°	86.6	2.3
100°-110°	59.3	1.6
110°-120°	39.6	1.1
120°-130°	24.6	0.7
130°-140°	13.6	0.4
140°-150°	6.4	0.2
150°-160°	2.3	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1138.2	30.4
0°-40°	1800.2	48.1
0°-60°	2865.3	76.6
0°-90°	3510.4	93.8
90°-120°	185.5	5.0
90°-150°	230.1	6.1
90°-180°	233.0	6.2
0°-180°	3743.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1479	1479	1479	1479	1479	
5°	1488	1473	1488	1467	1488	141
15°	1435	1438	1442	1400	1435	405
25°	1323	1298	1338	1222	1323	609
35°	1139	992	1161	924	1139	711
45°	877	709	906	669	877	674
55°	560	499	600	474	560	504
65°	290	335	320	311	290	291
75°	116	224	131	206	116	125
85°	21	161	28	148	21	25
90°	0	139	2	127	0	1
95°	1	119	0	111	1	1
105°	1	87	0	82	1	1
115°	1	66	0	61	1	1
125°	1	49	1	43	1	1
135°	1	34	1	28	1	1
145°	1	22	1	16	1	1
155°	1	12	1	6	1	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0
2.5°	1491.2	1489.6	1488.0	1485.5	1488.0	1494.5	1490.4	1481.5	1479.8	1465.2	1471.7
5°	1488.0	1485.5	1483.9	1481.5	1484.7	1492.8	1488.8	1480.6	1478.2	1464.4	1471.7
7.5°	1479.8	1478.2	1475.8	1475.8	1479.0	1487.2	1483.9	1474.9	1473.3	1459.5	1467.6
10°	1468.4	1467.6	1466.0	1466.0	1469.3	1479.0	1474.9	1466.8	1465.2	1452.2	1461.1
12.5°	1453.8	1454.6	1452.2	1452.2	1457.1	1466.8	1463.6	1454.6	1453.0	1441.6	1450.5
15°	1435.1	1435.9	1434.3	1435.1	1440.0	1451.4	1447.3	1439.2	1437.5	1428.6	1435.9
17.5°	1413.9	1414.7	1414.7	1413.9	1419.6	1431.0	1427.8	1420.4	1418.0	1410.7	1419.6
20°	1389.5	1389.5	1389.5	1389.5	1396.0	1407.4	1403.4	1397.7	1392.8	1387.1	1394.4
22.5°	1359.4	1358.6	1359.4	1361.9	1368.4	1377.3	1374.9	1368.4	1361.1	1357.8	1363.5
25°	1322.8	1325.3	1326.1	1328.5	1336.6	1344.0	1341.5	1335.0	1323.6	1321.2	1322.8
27.5°	1284.6	1286.2	1288.6	1287.8	1299.2	1306.5	1301.7	1296.0	1279.7	1277.3	1275.6
30°	1241.5	1243.9	1245.5	1244.7	1253.7	1261.8	1256.9	1249.6	1227.6	1226.0	1213.0
32.5°	1192.6	1195.1	1196.7	1196.7	1209.7	1213.0	1204.0	1193.5	1169.9	1164.2	1152.8
35°	1139.0	1141.4	1142.2	1142.2	1155.2	1154.4	1143.0	1128.4	1102.3	1095.0	1075.5
37.5°	1081.2	1082.8	1083.6	1088.5	1094.2	1089.3	1074.7	1056.0	1036.5	1016.1	995.0
40°	1016.1	1018.6	1020.2	1023.4	1029.1	1023.4	1002.3	979.5	958.4	935.6	914.4
42.5°	949.4	956.7	955.1	954.3	957.5	942.1	925.8	899.8	878.6	855.0	833.9
45°	877.0	876.2	880.3	881.9	881.1	868.0	845.3	821.7	800.5	776.1	758.2
47.5°	800.5	799.7	803.0	804.6	799.7	785.9	768.0	741.1	723.2	702.1	688.3
50°	720.0	720.0	724.9	720.0	717.5	703.7	689.1	662.2	648.4	629.7	621.5
52.5°	639.4	646.8	641.9	640.3	637.8	624.0	612.6	590.6	579.2	571.1	561.3
55°	559.7	567.9	564.6	562.2	561.3	550.0	539.4	523.1	515.8	510.1	504.4
57.5°	492.2	491.4	489.8	487.3	488.1	479.2	468.6	459.7	456.4	454.0	455.6
60°	414.1	420.6	418.2	419.0	419.8	418.2	409.2	403.5	404.3	405.1	407.6
62.5°	349.8	355.5	359.6	356.3	358.0	360.4	355.5	353.9	357.1	360.4	363.7
65°	290.4	296.1	300.2	299.4	304.3	309.1	308.3	310.0	317.3	321.3	325.4
67.5°	236.7	242.4	248.1	248.9	256.3	263.6	266.8	272.5	280.7	286.4	291.2
70°	190.4	195.2	201.8	205.8	215.6	225.4	231.0	242.4	247.3	255.5	258.7
72.5°	148.9	152.9	161.9	171.7	179.8	192.0	203.4	213.1	220.5	229.4	233.5
75°	116.3	118.0	127.7	139.1	150.5	164.3	176.5	187.1	196.9	205.8	212.3
77.5°	85.4	87.9	96.8	112.3	125.3	139.9	153.8	165.1	175.7	184.7	193.6
80°	59.4	64.3	74.0	89.5	104.1	120.4	133.4	146.4	157.8	166.8	175.7
82.5°	38.2	42.3	56.1	71.6	87.0	103.3	117.1	130.2	142.4	152.1	160.3
85°	21.2	26.8	40.7	56.9	72.4	88.7	103.3	116.3	128.5	137.5	145.6
87.5°	8.1	16.3	29.3	44.7	60.2	75.7	91.1	103.3	115.5	125.3	132.6
90°	0.0	9.8	22.0	37.4	52.9	68.3	83.0	96.0	107.4	116.3	124.5
92.5°	0.8	6.5	17.1	30.1	44.7	59.4	73.2	86.2	97.6	106.6	113.9
95°	0.8	4.9	13.8	26.0	39.0	52.9	65.9	78.1	88.7	97.6	104.9
97.5°	0.8	3.3	11.4	22.8	34.2	48.0	60.2	71.6	81.4	90.3	96.0
100°	0.8	3.3	9.8	19.5	30.9	43.1	54.5	65.9	74.8	82.2	88.7
102.5°	0.8	2.4	8.1	17.1	27.7	38.2	49.6	60.2	68.3	75.7	82.2
105°	0.8	2.4	7.3	14.6	24.4	35.0	44.7	54.5	63.5	70.0	75.7
107.5°	0.8	1.6	6.5	12.2	21.2	31.7	41.5	49.6	57.8	64.3	70.0
110°	0.8	1.6	5.7	11.4	18.7	28.5	37.4	45.6	52.9	59.4	64.3

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.8	1.6	4.9	10.6	17.1	25.2	34.2	41.5	48.8	54.5	59.4
115°	0.8	1.6	4.9	9.8	15.5	22.0	30.1	38.2	43.9	50.4	54.5
117.5°	0.8	1.6	4.1	8.1	14.6	20.3	27.7	34.2	40.7	46.4	50.4
120°	0.8	1.6	4.1	7.3	13.0	18.7	24.4	30.9	37.4	41.5	45.6
122.5°	0.8	1.6	3.3	7.3	11.4	17.1	22.0	27.7	33.4	38.2	42.3
125°	0.8	1.6	3.3	6.5	10.6	15.5	20.3	24.4	30.1	34.2	38.2
127.5°	0.8	1.6	3.3	5.7	9.8	13.8	18.7	22.8	26.8	30.9	34.2
130°	0.8	1.6	2.4	4.9	8.9	12.2	16.3	21.2	24.4	27.7	30.9
132.5°	0.8	1.6	2.4	4.9	7.3	10.6	14.6	18.7	22.0	25.2	27.7
135°	0.8	1.6	2.4	4.1	6.5	9.8	12.2	16.3	19.5	22.8	25.2
137.5°	0.8	1.6	2.4	4.1	5.7	8.1	10.6	13.8	17.1	19.5	22.8
140°	0.8	1.6	2.4	3.3	4.9	7.3	9.8	11.4	14.6	17.1	19.5
142.5°	0.8	1.6	2.4	3.3	4.9	6.5	8.1	9.8	12.2	14.6	17.1
145°	0.8	1.6	2.4	3.3	4.1	5.7	7.3	8.9	9.8	12.2	13.8
147.5°	0.8	1.6	2.4	3.3	3.3	4.9	6.5	7.3	8.9	9.8	11.4
150°	0.8	1.6	2.4	2.4	3.3	4.1	5.7	6.5	7.3	8.9	9.8
152.5°	0.8	1.6	2.4	2.4	3.3	4.1	4.9	5.7	6.5	7.3	8.1
155°	0.8	1.6	2.4	2.4	2.4	3.3	4.1	4.9	5.7	6.5	7.3
157.5°	1.6	1.6	1.6	2.4	2.4	3.3	3.3	4.1	4.9	4.9	5.7
160°	1.6	1.6	1.6	2.4	2.4	2.4	3.3	3.3	4.1	4.1	4.9
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°	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0
2.5°	1470.1	1472.5	1479.8	1479.8	1478.2	1476.6	1476.6	1474.1	1475.8	1479.0	1477.4
5°	1470.1	1472.5	1479.8	1479.8	1478.2	1476.6	1475.8	1473.3	1475.8	1479.0	1477.4
7.5°	1465.2	1468.4	1475.8	1475.8	1474.1	1473.3	1471.7	1470.1	1472.5	1475.8	1474.1
10°	1458.7	1461.9	1469.3	1469.3	1467.6	1467.6	1465.2	1463.6	1466.8	1469.3	1468.4
12.5°	1448.9	1453.0	1459.5	1458.7	1457.1	1457.9	1455.4	1452.2	1455.4	1457.9	1458.7
15°	1435.1	1440.0	1446.5	1444.8	1442.4	1444.0	1440.0	1437.5	1440.0	1444.8	1444.0
17.5°	1417.2	1420.4	1425.3	1425.3	1422.9	1421.3	1419.6	1417.2	1418.8	1422.1	1422.9
20°	1392.0	1396.0	1398.5	1396.0	1395.2	1392.8	1389.5	1387.1	1390.3	1395.2	1396.0
22.5°	1358.6	1359.4	1365.1	1359.4	1355.4	1354.5	1351.3	1346.4	1351.3	1355.4	1356.2
25°	1317.1	1321.2	1318.7	1309.0	1309.0	1302.5	1300.9	1298.4	1299.2	1306.5	1309.8
27.5°	1264.2	1265.9	1259.4	1251.2	1243.9	1239.8	1234.1	1235.0	1235.0	1244.7	1248.0
30°	1206.5	1197.5	1191.8	1178.8	1173.1	1163.4	1161.7	1161.7	1160.1	1165.0	1179.6
32.5°	1137.3	1125.1	1116.2	1104.0	1094.2	1084.4	1079.6	1082.0	1081.2	1093.4	1098.3
35°	1061.7	1054.3	1035.6	1020.2	1014.5	999.8	999.8	992.5	997.4	1011.2	1016.9
37.5°	981.9	970.6	955.1	938.0	933.9	922.6	918.5	914.4	925.0	927.4	933.1
40°	900.6	890.0	875.4	859.1	859.1	845.3	845.3	845.3	846.1	851.0	861.5
42.5°	823.3	811.9	798.9	787.5	785.9	775.3	775.3	774.5	776.1	780.2	789.9
45°	748.5	739.5	725.7	720.0	720.8	709.4	711.8	709.4	712.7	716.7	720.0
47.5°	679.3	673.6	667.9	659.8	657.3	656.5	652.5	649.2	654.9	654.9	659.8
50°	615.0	611.8	608.5	603.6	604.5	601.2	596.3	596.3	600.4	601.2	604.5
52.5°	558.9	554.8	550.8	551.6	552.4	550.8	548.3	545.9	548.3	550.0	554.0
55°	502.8	499.5	503.6	502.0	503.6	502.0	500.3	498.7	502.8	500.3	504.4
57.5°	452.3	455.6	457.2	454.0	456.4	454.8	455.6	453.1	456.4	458.0	457.2
60°	406.0	410.8	408.4	409.2	412.5	410.8	407.6	410.0	413.3	414.1	413.3
62.5°	363.7	369.3	371.8	370.2	371.0	369.3	371.8	368.5	372.6	374.2	371.8
65°	325.4	331.9	333.6	333.6	333.6	331.9	334.4	335.2	336.8	336.8	335.2
67.5°	292.9	298.6	300.2	301.8	300.2	298.6	298.6	299.4	302.6	304.3	302.6
70°	263.6	269.3	270.1	270.1	270.9	272.5	269.3	270.9	273.3	274.2	273.3
72.5°	238.4	244.1	245.7	244.9	245.7	246.5	246.5	244.9	247.3	248.9	248.9
75°	218.0	221.3	222.9	222.9	223.7	224.5	224.5	223.7	225.4	226.2	227.0
77.5°	199.3	201.8	204.2	204.2	205.0	204.2	205.8	205.8	206.6	207.5	208.3
80°	180.6	183.9	185.5	186.3	187.9	188.7	188.7	188.7	189.6	190.4	190.4
82.5°	166.0	168.4	170.8	173.3	173.3	174.1	174.1	174.1	174.9	174.9	175.7
85°	151.3	154.6	157.0	158.6	159.5	160.3	160.3	161.1	161.1	161.1	161.9
87.5°	138.3	142.4	144.0	145.6	146.4	148.1	148.1	148.1	148.9	148.9	148.9
90°	129.4	133.4	135.0	136.7	137.5	138.3	138.3	139.1	139.1	139.9	139.9
92.5°	118.8	122.8	126.1	126.1	126.9	128.5	127.7	127.7	128.5	129.4	129.4
95°	110.6	113.9	116.3	117.1	118.0	118.0	118.0	118.8	118.0	118.8	118.8
97.5°	100.9	104.1	106.6	108.2	109.0	109.0	109.0	109.8	109.0	109.8	109.8
100°	92.7	96.0	98.4	99.3	100.9	100.9	100.9	100.9	100.9	100.9	101.7
102.5°	86.2	89.5	91.1	91.9	92.7	93.6	93.6	93.6	93.6	94.4	94.4
105°	79.7	83.0	84.6	85.4	86.2	87.0	87.0	87.0	87.9	87.9	87.0
107.5°	74.0	76.5	78.1	79.7	80.5	80.5	81.4	81.4	81.4	81.4	81.4
110°	68.3	70.8	73.2	74.8	74.8	75.7	75.7	76.5	76.5	75.7	76.5

TEST NUMBER: P1213354

CATALOG NUMBER: 2SNLED-LD5-45HL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	62.6	65.9	67.5	69.2	70.0	70.8	70.8	70.8	70.8	70.8	70.8
115°	57.8	61.0	62.6	64.3	65.1	65.9	65.9	65.9	65.9	65.9	65.9
117.5°	53.7	56.9	58.6	59.4	60.2	61.0	61.8	61.8	61.8	61.8	61.0
120°	49.6	52.1	53.7	55.3	56.1	56.9	56.9	56.9	56.9	56.9	56.9
122.5°	45.6	48.0	49.6	51.3	52.1	52.9	52.9	52.9	52.9	52.9	52.9
125°	41.5	43.9	45.6	47.2	48.0	48.8	48.8	48.8	48.8	48.8	48.8
127.5°	37.4	39.9	42.3	43.1	43.9	44.7	44.7	44.7	45.6	44.7	44.7
130°	33.4	35.8	38.2	39.0	39.9	40.7	41.5	41.5	41.5	41.5	40.7
132.5°	30.1	32.5	34.2	35.0	36.6	36.6	37.4	37.4	37.4	37.4	36.6
135°	27.7	29.3	30.9	31.7	33.4	33.4	33.4	34.2	34.2	33.4	32.5
137.5°	24.4	26.0	27.7	28.5	29.3	30.1	30.1	30.9	30.1	30.1	30.1
140°	22.8	23.6	25.2	26.0	26.8	26.8	26.8	27.7	27.7	26.8	26.8
142.5°	19.5	21.2	22.8	23.6	24.4	24.4	24.4	24.4	24.4	24.4	24.4
145°	16.3	18.7	19.5	21.2	21.2	22.0	22.0	22.0	22.0	22.0	21.2
147.5°	13.8	15.5	17.9	18.7	18.7	19.5	19.5	19.5	19.5	19.5	18.7
150°	10.6	12.2	14.6	16.3	16.3	17.1	17.1	17.1	17.1	16.3	16.3
152.5°	8.9	10.6	11.4	13.0	13.8	13.8	13.8	14.6	13.8	13.8	13.8
155°	8.1	8.9	9.8	10.6	11.4	12.2	12.2	12.2	12.2	11.4	11.4
157.5°	6.5	7.3	8.1	8.9	9.8	10.6	10.6	10.6	10.6	10.6	9.8
160°	4.9	5.7	6.5	6.5	7.3	8.1	8.9	8.1	8.1	8.1	8.1
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: P1213354

CATALOG NUMBER: 2SNLED-LD5-45HL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0
2.5°	1475.8	1474.9	1477.4	1473.3	1461.1	1464.4	1462.7	1470.1	1471.7	1473.3	1480.6
5°	1475.8	1474.9	1476.6	1473.3	1460.3	1462.7	1461.1	1468.4	1470.1	1470.9	1478.2
7.5°	1472.5	1471.7	1474.1	1470.1	1456.2	1459.5	1457.1	1464.4	1465.2	1466.0	1472.5
10°	1466.0	1465.2	1466.8	1463.6	1449.7	1453.0	1449.7	1457.1	1457.1	1458.7	1463.6
12.5°	1456.2	1454.6	1457.9	1453.8	1438.3	1442.4	1440.8	1445.7	1446.5	1447.3	1452.2
15°	1442.4	1440.8	1443.2	1440.8	1426.9	1427.8	1425.3	1432.6	1433.5	1431.8	1436.7
17.5°	1422.1	1420.4	1425.3	1423.7	1409.9	1413.1	1412.3	1413.9	1416.4	1412.3	1418.8
20°	1396.8	1398.5	1400.1	1400.9	1390.3	1390.3	1389.5	1392.8	1395.2	1392.0	1396.8
22.5°	1359.4	1363.5	1368.4	1370.0	1362.7	1361.9	1366.7	1365.1	1367.6	1365.9	1369.2
25°	1312.2	1320.4	1325.3	1330.1	1326.1	1327.7	1335.0	1336.6	1336.6	1335.8	1339.1
27.5°	1253.7	1264.2	1273.2	1283.8	1279.7	1283.0	1295.2	1296.8	1300.0	1296.8	1303.3
30°	1183.7	1193.5	1210.5	1226.0	1227.6	1232.5	1249.6	1251.2	1260.2	1256.9	1259.4
32.5°	1113.7	1118.6	1138.1	1153.6	1163.4	1175.6	1194.3	1197.5	1209.7	1212.2	1212.2
35°	1025.9	1039.7	1057.6	1079.6	1091.8	1104.8	1130.0	1134.9	1152.8	1158.5	1165.0
37.5°	951.8	964.9	976.2	999.0	1021.0	1035.6	1056.0	1068.2	1086.9	1097.5	1105.6
40°	872.9	883.5	895.7	918.5	937.2	959.2	979.5	994.1	1017.7	1029.9	1040.5
42.5°	798.1	806.2	819.2	835.5	855.0	879.4	899.0	916.0	941.3	958.4	970.6
45°	731.4	736.3	747.6	759.8	776.9	802.2	820.9	842.8	863.2	881.1	895.7
47.5°	668.7	675.2	680.9	689.1	704.5	720.0	741.9	763.1	783.4	803.0	817.6
50°	611.0	611.0	619.9	625.6	636.2	650.0	667.1	681.7	707.0	720.8	739.5
52.5°	554.8	558.1	563.0	566.2	574.4	583.3	597.1	609.3	630.5	643.5	661.4
55°	505.2	508.5	510.9	512.5	517.4	528.0	532.9	542.6	557.3	567.9	583.3
57.5°	458.0	459.7	462.1	462.9	463.7	470.2	474.3	476.7	491.4	502.0	515.0
60°	414.9	414.9	417.3	416.5	415.7	419.0	418.2	420.6	429.5	436.1	441.8
62.5°	374.2	374.2	375.0	373.4	372.6	372.6	369.3	371.8	374.2	375.0	379.1
65°	336.8	340.9	337.6	338.4	333.6	331.9	330.3	325.4	324.6	321.3	323.0
67.5°	303.5	306.7	303.5	303.5	299.4	296.1	292.1	283.9	281.5	275.0	273.3
70°	276.6	274.2	275.8	273.3	268.5	264.4	258.7	252.2	244.1	235.9	230.2
72.5°	250.6	250.6	248.9	246.5	244.1	235.9	229.4	222.1	212.3	201.8	193.6
75°	225.4	226.2	226.2	223.7	219.7	212.3	205.0	194.4	183.9	171.7	161.1
77.5°	207.5	207.5	207.5	203.4	199.3	192.8	183.9	172.5	161.1	146.4	134.2
80°	190.4	189.6	189.6	184.7	180.6	173.3	164.3	152.9	140.7	125.3	111.5
82.5°	176.5	175.7	174.1	170.0	164.3	157.0	148.1	135.9	122.8	109.0	91.9
85°	161.9	161.1	159.5	155.4	149.7	143.2	133.4	121.2	108.2	92.7	76.5
87.5°	148.9	148.1	145.6	143.2	136.7	129.4	119.6	108.2	94.4	79.7	63.5
90°	139.9	138.3	136.7	133.4	127.7	119.6	109.8	97.6	83.8	69.2	52.9
92.5°	129.4	128.5	126.1	122.8	118.0	109.8	100.1	88.7	74.8	61.0	45.6
95°	118.8	118.0	116.3	113.1	108.2	100.9	91.9	80.5	67.5	53.7	39.9
97.5°	109.0	109.0	106.6	104.1	98.4	92.7	83.8	73.2	61.0	48.8	35.8
100°	100.9	100.9	98.4	95.2	91.1	85.4	76.5	66.7	55.3	43.9	30.9
102.5°	93.6	92.7	91.1	87.9	83.8	78.1	70.0	61.0	50.4	39.0	27.7
105°	87.0	86.2	84.6	81.4	78.1	71.6	65.1	56.1	45.6	35.0	24.4
107.5°	80.5	79.7	78.9	75.7	71.6	65.9	59.4	50.4	41.5	31.7	22.0
110°	74.8	74.0	72.4	69.2	65.1	60.2	53.7	46.4	37.4	28.5	19.5

TEST NUMBER: P1213354

CATALOG NUMBER: 2SNLED-LD5-45HL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	70.0	69.2	67.5	64.3	61.0	55.3	49.6	41.5	34.2	26.0	17.1
115°	65.1	64.3	62.6	59.4	55.3	50.4	44.7	38.2	30.1	22.8	15.5
117.5°	60.2	59.4	57.8	55.3	51.3	46.4	40.7	34.2	26.8	21.2	13.8
120°	56.1	54.5	52.9	50.4	46.4	42.3	36.6	30.9	24.4	18.7	12.2
122.5°	52.1	50.4	48.8	46.4	42.3	38.2	32.5	27.7	22.8	17.1	11.4
125°	47.2	46.4	44.7	42.3	38.2	34.2	30.1	25.2	20.3	15.5	9.8
127.5°	43.1	42.3	40.7	37.4	34.2	30.9	26.8	22.8	17.9	13.0	8.9
130°	39.9	38.2	36.6	34.2	31.7	28.5	24.4	20.3	16.3	11.4	8.1
132.5°	35.8	34.2	32.5	30.9	28.5	25.2	22.0	17.9	14.6	10.6	7.3
135°	32.5	30.9	29.3	27.7	25.2	22.8	19.5	16.3	13.0	9.8	6.5
137.5°	28.5	27.7	26.8	25.2	22.8	20.3	17.9	13.8	11.4	8.9	5.7
140°	26.0	25.2	24.4	22.0	20.3	17.9	15.5	12.2	9.8	7.3	4.9
142.5°	23.6	22.8	21.2	19.5	17.9	16.3	13.0	11.4	8.9	6.5	4.9
145°	20.3	19.5	18.7	17.1	15.5	13.0	11.4	9.8	8.1	5.7	4.1
147.5°	18.7	17.9	16.3	14.6	13.0	11.4	10.6	8.9	6.5	4.9	3.3
150°	15.5	14.6	13.8	12.2	11.4	10.6	8.9	7.3	5.7	4.1	3.3
152.5°	13.0	12.2	11.4	11.4	9.8	8.9	7.3	6.5	4.9	4.1	2.4
155°	11.4	11.4	10.6	9.8	8.1	7.3	6.5	4.9	4.1	3.3	2.4
157.5°	9.8	8.9	8.1	8.1	7.3	6.5	4.9	4.1	3.3	3.3	2.4
160°	8.1	7.3	7.3	6.5	5.7	4.9	4.1	4.1	3.3	2.4	2.4
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: P1213354

CATALOG NUMBER: 2SNLED-LD5-45HL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0
2.5°	1481.5	1472.5	1480.6	1491.2	1491.2	1489.6	1488.0	1491.2	1499.4	1496.1	1486.3
5°	1479.0	1470.1	1477.4	1488.0	1488.0	1485.5	1483.9	1486.3	1495.3	1491.2	1482.3
7.5°	1474.1	1466.0	1470.9	1480.6	1480.6	1478.2	1476.6	1479.8	1487.2	1483.1	1473.3
10°	1465.2	1456.2	1461.9	1470.9	1470.1	1468.4	1466.0	1470.1	1476.6	1470.9	1459.5
12.5°	1453.8	1444.8	1449.7	1457.9	1457.1	1453.8	1452.2	1454.6	1460.3	1457.1	1444.8
15°	1438.3	1429.4	1433.5	1441.6	1439.2	1436.7	1433.5	1434.3	1441.6	1435.9	1422.9
17.5°	1419.6	1409.9	1413.1	1420.4	1418.0	1415.6	1411.5	1412.3	1420.4	1412.3	1398.5
20°	1396.8	1386.3	1388.7	1397.7	1393.6	1389.5	1385.5	1385.5	1393.6	1384.6	1369.2
22.5°	1372.4	1361.9	1363.5	1370.0	1366.7	1359.4	1355.4	1357.8	1361.9	1350.5	1334.2
25°	1342.3	1328.5	1331.0	1337.5	1335.0	1325.3	1321.2	1322.8	1321.2	1312.2	1295.2
27.5°	1307.4	1292.7	1294.3	1298.4	1295.2	1286.2	1281.3	1282.1	1278.9	1267.5	1248.0
30°	1263.4	1256.1	1255.3	1257.7	1252.9	1243.9	1238.2	1236.6	1235.8	1219.5	1195.9
32.5°	1218.7	1212.2	1208.1	1211.4	1205.7	1196.7	1187.0	1187.0	1178.8	1163.4	1143.0
35°	1173.1	1162.5	1158.5	1160.9	1154.4	1143.0	1134.9	1130.8	1118.6	1099.1	1077.1
37.5°	1114.5	1107.2	1102.3	1104.8	1097.5	1089.3	1073.9	1069.8	1056.8	1029.9	1002.3
40°	1051.1	1045.4	1040.5	1043.0	1034.8	1022.6	1008.8	1002.3	987.6	957.5	935.6
42.5°	982.8	980.3	974.6	983.6	967.3	955.1	941.3	930.7	916.0	883.5	858.3
45°	910.4	916.0	903.0	905.5	894.9	884.3	869.7	854.2	839.6	808.7	780.2
47.5°	833.9	837.9	829.0	830.6	819.2	809.5	796.5	776.9	760.7	733.8	708.6
50°	755.0	753.3	753.3	751.7	742.8	730.6	717.5	699.6	683.4	659.0	637.8
52.5°	671.2	674.4	676.1	680.1	668.7	661.4	641.1	625.6	613.4	588.2	570.3
55°	590.6	602.0	598.8	600.4	587.4	581.7	565.4	553.2	535.3	520.7	509.3
57.5°	517.4	519.9	521.5	523.9	518.2	506.8	493.8	484.1	470.2	458.0	449.9
60°	446.6	446.6	447.4	451.5	445.8	436.1	426.3	419.0	409.2	401.9	397.0
62.5°	379.9	385.6	386.4	383.2	375.9	371.0	364.5	360.4	353.9	351.4	349.8
65°	318.1	318.1	318.1	319.7	315.7	312.4	308.3	307.5	310.0	306.7	308.3
67.5°	266.0	263.6	262.0	262.8	261.1	259.5	258.7	261.1	266.0	266.0	270.1
70°	221.3	216.4	213.1	213.1	213.1	214.0	216.4	221.3	229.4	232.7	238.4
72.5°	184.7	174.1	169.2	169.2	170.0	173.3	180.6	189.6	196.9	203.4	210.7
75°	149.7	139.1	131.8	131.0	132.6	137.5	148.1	156.2	168.4	177.4	186.3
77.5°	121.2	108.2	99.3	98.4	100.9	108.2	121.2	131.8	145.6	155.4	165.1
80°	96.8	82.2	74.8	70.0	74.0	83.0	97.6	110.6	123.7	136.7	148.9
82.5°	77.3	63.5	52.1	47.2	52.1	64.3	78.1	93.6	106.6	120.4	132.6
85°	61.0	46.4	33.4	28.5	34.2	47.2	62.6	78.1	92.7	106.6	118.8
87.5°	48.0	33.4	20.3	13.8	21.2	35.0	49.6	65.1	80.5	94.4	106.6
90°	37.4	23.6	11.4	1.6	12.2	25.2	39.9	54.5	70.0	83.8	96.0
92.5°	31.7	17.9	6.5	0.0	7.3	18.7	32.5	47.2	61.0	74.8	87.0
95°	26.8	14.6	4.9	0.0	4.9	14.6	26.8	39.9	53.7	67.5	79.7
97.5°	22.8	11.4	3.3	0.0	3.3	11.4	22.0	35.0	47.2	60.2	71.6
100°	19.5	9.8	2.4	0.0	2.4	8.9	18.7	30.1	42.3	54.5	65.1
102.5°	17.1	8.1	1.6	0.0	1.6	7.3	15.5	26.0	36.6	48.0	58.6
105°	14.6	6.5	1.6	0.0	0.8	5.7	13.0	22.8	32.5	43.1	52.9
107.5°	13.0	5.7	1.6	0.0	0.8	4.9	11.4	19.5	29.3	38.2	47.2
110°	11.4	4.9	1.6	0.0	0.8	3.3	9.8	17.1	25.2	34.2	43.1

TEST NUMBER: P1213354

CATALOG NUMBER: 2SNLED-LD5-45HL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	9.8	4.1	0.8	0.0	0.0	2.4	8.1	14.6	22.0	30.9	38.2
115°	8.9	4.1	0.8	0.0	0.0	1.6	6.5	13.0	19.5	27.7	34.2
117.5°	8.1	3.3	0.8	0.0	0.8	1.6	5.7	11.4	17.1	23.6	30.9
120°	7.3	3.3	0.8	0.0	0.8	0.8	4.1	9.8	14.6	21.2	26.8
122.5°	6.5	3.3	0.8	0.0	0.8	0.8	3.3	8.1	13.0	18.7	23.6
125°	5.7	2.4	1.6	0.8	0.8	0.8	2.4	6.5	11.4	15.5	21.2
127.5°	5.7	2.4	1.6	0.8	0.8	0.8	1.6	5.7	8.9	13.8	18.7
130°	4.9	2.4	1.6	0.8	0.8	0.8	0.8	4.1	8.1	11.4	15.5
132.5°	4.1	2.4	1.6	0.8	0.8	0.8	0.8	2.4	5.7	9.8	13.0
135°	4.1	2.4	1.6	0.8	0.8	0.8	0.8	1.6	4.1	7.3	10.6
137.5°	3.3	1.6	1.6	0.8	0.8	0.8	0.8	0.8	3.3	5.7	8.1
140°	3.3	1.6	1.6	0.8	0.8	0.8	0.8	0.8	2.4	4.1	6.5
142.5°	2.4	1.6	1.6	0.8	0.8	0.8	0.8	0.8	1.6	3.3	4.9
145°	2.4	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	1.6	3.3
147.5°	2.4	2.4	1.6	0.8	0.8	0.8	0.8	0.8	0.8	1.6	2.4
150°	2.4	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6
152.5°	2.4	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6
155°	2.4	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6
157.5°	2.4	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6
160°	2.4	1.6	1.6	0.8	1.6	0.8	1.6	1.6	1.6	1.6	1.6
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: P1213354

CATALOG NUMBER: 2SNLED-LD5-45HL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0
2.5°	1483.1	1467.6	1475.8	1473.3	1476.6	1483.1	1482.3	1480.6	1480.6	1478.2	1474.9
5°	1478.2	1463.6	1470.9	1466.8	1470.9	1476.6	1475.8	1473.3	1474.9	1470.9	1466.8
7.5°	1468.4	1455.4	1461.9	1458.7	1461.9	1467.6	1465.2	1464.4	1466.0	1459.5	1457.1
10°	1457.1	1442.4	1449.7	1445.7	1449.7	1453.8	1452.2	1448.9	1452.2	1445.7	1443.2
12.5°	1439.2	1426.9	1431.8	1430.2	1432.6	1436.7	1433.5	1431.0	1432.6	1426.9	1422.1
15°	1419.6	1407.4	1411.5	1409.1	1410.7	1415.6	1409.9	1409.1	1407.4	1401.7	1400.1
17.5°	1394.4	1383.0	1387.1	1383.0	1385.5	1383.8	1383.0	1379.0	1379.0	1372.4	1367.6
20°	1363.5	1353.7	1351.3	1348.0	1351.3	1348.0	1343.2	1339.9	1339.1	1332.6	1328.5
22.5°	1327.7	1316.3	1317.9	1309.0	1309.8	1304.9	1296.8	1293.5	1290.3	1283.0	1277.3
25°	1284.6	1273.2	1265.1	1259.4	1252.0	1251.2	1240.6	1232.5	1231.7	1222.8	1221.9
27.5°	1235.8	1222.8	1216.2	1202.4	1193.5	1186.1	1177.2	1169.1	1165.0	1155.2	1148.7
30°	1179.6	1165.0	1148.7	1139.0	1125.1	1119.4	1104.0	1094.2	1091.0	1080.4	1075.5
32.5°	1116.2	1100.7	1087.7	1069.0	1053.5	1045.4	1029.9	1020.2	1016.1	1004.7	998.2
35°	1047.0	1029.9	1014.5	996.6	984.4	970.6	951.8	942.1	933.1	929.1	924.2
37.5°	974.6	955.9	938.0	920.1	909.5	893.3	877.0	870.5	859.9	855.8	851.0
40°	899.8	881.1	864.0	846.9	834.7	820.0	805.4	803.0	791.6	787.5	784.3
42.5°	825.7	806.2	786.7	774.5	765.5	750.9	741.1	738.7	728.9	726.5	726.5
45°	759.0	734.6	718.4	707.8	700.5	688.3	680.1	678.5	670.4	668.7	668.7
47.5°	687.4	664.7	652.5	646.0	639.4	630.5	625.6	625.6	617.5	615.8	615.0
50°	620.7	599.6	590.6	584.1	583.3	576.8	572.7	571.1	571.1	565.4	566.2
52.5°	557.3	546.7	539.4	535.3	530.4	526.4	523.1	523.1	520.7	516.6	518.2
55°	498.7	486.5	487.3	484.1	481.6	479.2	480.0	475.1	474.3	471.0	473.5
57.5°	440.1	440.1	438.5	436.1	432.0	433.6	433.6	433.6	429.5	427.1	429.5
60°	390.5	392.9	388.9	391.3	389.7	390.5	388.9	388.9	386.4	385.6	386.4
62.5°	346.6	350.6	349.0	352.3	350.6	351.4	353.1	349.8	348.2	346.6	348.2
65°	307.5	312.4	311.6	314.0	314.8	315.7	316.5	314.8	313.2	311.6	310.8
67.5°	273.3	278.2	281.5	282.3	283.1	285.6	284.7	283.1	281.5	279.0	278.2
70°	242.4	248.9	253.0	254.6	257.9	256.3	256.3	255.5	253.8	251.4	250.6
72.5°	216.4	223.7	227.8	229.4	232.7	232.7	231.9	231.0	229.4	227.0	226.2
75°	193.6	200.1	205.8	209.1	211.5	211.5	210.7	209.9	208.3	206.6	205.8
77.5°	175.7	181.4	186.3	190.4	192.0	192.8	192.0	190.4	190.4	189.6	188.7
80°	157.8	164.3	169.2	173.3	175.7	175.7	174.9	175.7	174.1	173.3	172.5
82.5°	142.4	149.7	155.4	159.5	161.1	161.9	161.1	161.9	160.3	160.3	160.3
85°	128.5	135.9	142.4	145.6	148.1	148.9	148.9	148.9	148.1	148.1	148.1
87.5°	117.1	124.5	131.0	134.2	136.7	137.5	137.5	138.3	136.7	136.7	136.7
90°	106.6	113.9	120.4	123.7	126.1	127.7	127.7	128.5	127.7	126.9	126.9
92.5°	96.8	104.9	111.5	114.7	117.1	119.6	119.6	120.4	118.8	118.8	118.8
95°	88.7	96.8	102.5	106.6	109.0	110.6	111.5	111.5	110.6	110.6	110.6
97.5°	81.4	88.7	94.4	98.4	100.9	101.7	102.5	103.3	102.5	102.5	102.5
100°	74.0	81.4	87.0	90.3	93.6	94.4	95.2	96.0	96.0	95.2	95.2
102.5°	67.5	74.8	79.7	83.8	86.2	87.9	88.7	88.7	88.7	88.7	88.7
105°	61.0	68.3	73.2	77.3	79.7	81.4	82.2	83.0	83.0	82.2	82.2
107.5°	55.3	61.8	67.5	70.8	74.0	75.7	76.5	76.5	77.3	76.5	76.5
110°	49.6	56.9	61.8	65.1	68.3	70.0	70.8	71.6	71.6	71.6	71.6

TEST NUMBER: P1213354

CATALOG NUMBER: 2SNLED-LD5-45HL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	45.6	51.3	56.1	59.4	62.6	64.3	65.1	65.9	66.7	65.9	65.9
115°	40.7	46.4	51.3	54.5	56.9	58.6	60.2	61.0	61.0	61.8	61.0
117.5°	36.6	41.5	46.4	49.6	52.1	54.5	55.3	56.1	56.9	56.1	56.1
120°	32.5	37.4	41.5	44.7	47.2	49.6	50.4	51.3	52.1	51.3	51.3
122.5°	29.3	33.4	37.4	40.7	43.1	44.7	46.4	46.4	47.2	47.2	47.2
125°	26.0	30.1	33.4	36.6	39.0	40.7	41.5	42.3	42.3	43.1	43.1
127.5°	22.8	26.0	30.1	32.5	35.0	36.6	37.4	38.2	38.2	39.0	39.0
130°	19.5	22.8	26.0	28.5	30.9	32.5	33.4	34.2	35.0	35.0	35.0
132.5°	17.1	20.3	22.8	25.2	26.8	28.5	30.1	30.9	30.9	30.9	30.9
135°	13.8	17.1	19.5	22.0	23.6	25.2	26.0	27.7	27.7	27.7	27.7
137.5°	11.4	14.6	17.1	18.7	20.3	22.0	22.8	23.6	24.4	24.4	24.4
140°	8.9	11.4	13.8	16.3	17.9	18.7	20.3	20.3	21.2	21.2	21.2
142.5°	6.5	8.9	10.6	13.0	14.6	16.3	17.1	17.9	17.9	17.9	17.9
145°	4.9	6.5	8.1	9.8	12.2	13.0	13.8	14.6	15.5	15.5	15.5
147.5°	3.3	4.9	5.7	7.3	8.9	10.6	11.4	12.2	13.0	13.0	13.0
150°	2.4	3.3	4.9	5.7	6.5	8.1	9.8	9.8	10.6	10.6	9.8
152.5°	1.6	2.4	3.3	4.1	4.9	5.7	7.3	7.3	8.1	8.1	8.1
155°	1.6	1.6	1.6	2.4	3.3	4.1	4.9	5.7	5.7	5.7	5.7
157.5°	1.6	1.6	1.6	1.6	1.6	2.4	3.3	4.1	4.1	4.1	4.1
160°	1.6	1.6	0.8	0.8	1.6	1.6	1.6	1.6	2.4	2.4	2.4
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: P1213354

CATALOG NUMBER: 2SNLED-LD5-45HL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0
2.5°	1477.4	1479.0	1479.0	1477.4	1476.6	1479.8	1475.8	1460.3	1465.2	1466.8	1471.7
5°	1470.1	1471.7	1471.7	1471.7	1470.1	1473.3	1469.3	1453.8	1459.5	1461.9	1465.2
7.5°	1459.5	1460.3	1461.9	1461.1	1459.5	1464.4	1460.3	1444.8	1448.9	1453.0	1457.1
10°	1445.7	1445.7	1446.5	1448.1	1446.5	1450.5	1446.5	1432.6	1436.7	1439.2	1444.0
12.5°	1426.9	1428.6	1429.4	1428.6	1427.8	1431.0	1429.4	1416.4	1418.0	1422.9	1427.8
15°	1401.7	1401.7	1405.8	1404.2	1404.2	1407.4	1409.1	1394.4	1396.8	1404.2	1409.1
17.5°	1370.8	1371.6	1374.9	1376.5	1375.7	1381.4	1382.2	1370.8	1370.0	1379.0	1383.8
20°	1331.0	1332.6	1336.6	1339.9	1339.9	1346.4	1348.8	1341.5	1342.3	1352.1	1353.7
22.5°	1282.1	1282.1	1289.5	1294.3	1298.4	1302.5	1309.8	1303.3	1303.3	1316.3	1323.6
25°	1221.9	1227.6	1230.1	1239.8	1245.5	1256.9	1263.4	1264.2	1265.1	1277.3	1282.1
27.5°	1155.2	1156.9	1164.2	1175.6	1182.1	1192.6	1204.9	1207.3	1211.4	1227.6	1235.0
30°	1079.6	1084.4	1087.7	1104.0	1112.9	1126.8	1142.2	1147.9	1151.2	1173.1	1182.1
32.5°	1002.3	1003.9	1017.7	1026.7	1037.3	1051.9	1069.8	1080.4	1086.9	1109.7	1122.7
35°	925.0	928.2	939.6	951.0	961.6	976.2	995.0	1009.6	1021.0	1041.3	1058.4
37.5°	854.2	862.4	864.8	876.2	884.3	899.0	912.0	933.1	944.5	965.7	987.6
40°	790.8	793.2	794.8	806.2	811.9	825.7	844.5	858.3	873.7	889.2	915.2
42.5°	728.1	729.7	732.2	738.7	745.2	755.0	768.8	782.6	798.9	821.7	838.8
45°	670.4	672.0	673.6	677.7	683.4	692.3	701.3	711.0	727.3	746.8	764.7
47.5°	616.7	619.9	619.9	620.7	624.8	632.1	638.6	650.8	659.8	670.4	690.7
50°	565.4	567.9	568.7	568.7	571.1	576.0	577.6	585.7	593.9	603.6	618.3
52.5°	517.4	517.4	516.6	519.9	519.9	523.1	523.9	528.8	534.5	545.1	551.6
55°	471.9	471.9	474.3	472.7	472.7	474.3	473.5	474.3	479.2	485.7	491.4
57.5°	427.9	427.1	429.5	427.9	427.1	428.7	430.4	427.1	427.9	434.4	434.4
60°	384.0	384.8	387.2	385.6	385.6	385.6	384.0	382.4	380.7	384.8	386.4
62.5°	349.0	346.6	349.0	346.6	348.2	347.4	345.8	342.5	343.3	341.7	340.1
65°	312.4	312.4	313.2	310.8	312.4	312.4	310.0	309.1	304.3	302.6	298.6
67.5°	280.7	280.7	281.5	279.9	279.9	280.7	278.2	275.8	270.9	268.5	262.8
70°	253.0	253.0	253.0	252.2	252.2	252.2	250.6	247.3	242.4	238.4	231.0
72.5°	227.8	228.6	227.8	227.8	230.2	227.8	225.4	222.1	218.0	209.9	203.4
75°	207.5	208.3	207.5	207.5	207.5	206.6	205.8	200.9	196.1	189.6	179.8
77.5°	189.6	189.6	190.4	189.6	189.6	188.7	186.3	182.2	176.5	170.8	159.5
80°	172.5	173.3	174.1	174.9	173.3	172.5	170.0	166.8	159.5	152.9	141.6
82.5°	160.3	159.5	160.3	161.1	159.5	158.6	156.2	152.1	146.4	137.5	126.1
85°	148.1	147.3	147.3	148.1	147.3	145.6	143.2	139.1	133.4	124.5	113.1
87.5°	135.9	136.7	137.5	136.7	135.9	134.2	131.8	127.7	121.2	113.9	101.7
90°	126.9	126.9	126.9	126.9	126.1	124.5	122.0	117.1	111.5	102.5	91.9
92.5°	118.8	118.8	118.8	118.8	118.0	115.5	113.1	109.0	102.5	93.6	83.8
95°	110.6	111.5	110.6	110.6	109.0	108.2	104.1	100.1	94.4	85.4	74.8
97.5°	101.7	102.5	101.7	101.7	100.9	99.3	96.8	91.9	86.2	78.1	68.3
100°	95.2	95.2	94.4	94.4	93.6	91.9	88.7	84.6	78.9	70.8	61.0
102.5°	87.9	88.7	87.9	87.9	86.2	84.6	82.2	78.1	72.4	64.3	55.3
105°	82.2	82.2	81.4	81.4	79.7	78.1	75.7	70.8	65.9	58.6	49.6
107.5°	76.5	76.5	75.7	75.7	74.0	72.4	69.2	65.1	60.2	52.9	44.7
110°	70.8	70.8	70.8	70.0	68.3	65.9	63.5	59.4	54.5	48.0	39.9

TEST NUMBER: P1213354

CATALOG NUMBER: 2SNLED-LD5-45HL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	66.7	65.9	65.1	64.3	62.6	61.0	57.8	53.7	48.8	43.1	35.8
115°	61.0	61.0	60.2	59.4	57.8	55.3	52.9	49.6	44.7	38.2	31.7
117.5°	56.1	56.1	55.3	54.5	52.9	50.4	48.0	44.7	39.9	34.2	28.5
120°	51.3	51.3	50.4	49.6	48.0	45.6	43.9	39.9	35.8	30.1	25.2
122.5°	47.2	46.4	46.4	44.7	43.9	41.5	39.0	35.8	31.7	26.8	22.0
125°	42.3	42.3	41.5	40.7	39.9	37.4	35.0	31.7	27.7	23.6	19.5
127.5°	38.2	38.2	37.4	36.6	35.8	33.4	30.9	28.5	24.4	20.3	16.3
130°	34.2	34.2	33.4	32.5	31.7	29.3	27.7	24.4	21.2	17.9	13.8
132.5°	30.9	30.9	30.1	29.3	27.7	26.0	24.4	21.2	18.7	15.5	12.2
135°	27.7	26.8	26.8	26.0	24.4	22.8	21.2	18.7	15.5	13.0	9.8
137.5°	24.4	23.6	22.8	22.0	21.2	19.5	17.9	16.3	13.8	10.6	8.1
140°	21.2	20.3	20.3	19.5	17.9	17.1	15.5	13.0	11.4	8.9	6.5
142.5°	17.9	17.9	17.1	16.3	15.5	14.6	13.0	11.4	8.9	7.3	4.9
145°	15.5	14.6	14.6	13.8	13.0	11.4	10.6	8.9	7.3	5.7	4.1
147.5°	12.2	12.2	12.2	11.4	10.6	9.8	8.9	7.3	5.7	4.1	2.4
150°	9.8	9.8	9.8	8.9	8.1	7.3	6.5	5.7	4.1	2.4	1.6
152.5°	8.1	8.1	7.3	7.3	6.5	5.7	4.9	4.1	2.4	1.6	1.6
155°	5.7	5.7	5.7	4.9	4.9	4.1	3.3	2.4	1.6	1.6	1.6
157.5°	4.1	4.1	4.1	3.3	3.3	2.4	2.4	1.6	1.6	1.6	1.6
160°	2.4	2.4	2.4	2.4	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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: 2SNLED-LD5-45HL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0	1479.0
2.5°	1469.3	1468.4	1474.9	1474.9	1467.6	1479.0	1491.2
5°	1464.4	1463.6	1470.1	1470.1	1463.6	1474.9	1488.0
7.5°	1454.6	1455.4	1461.9	1463.6	1455.4	1466.0	1479.8
10°	1444.0	1443.2	1450.5	1452.2	1445.7	1455.4	1468.4
12.5°	1426.9	1426.9	1434.3	1436.7	1430.2	1441.6	1453.8
15°	1409.1	1409.1	1413.9	1418.0	1412.3	1422.9	1435.1
17.5°	1386.3	1385.5	1390.3	1395.2	1389.5	1400.9	1413.9
20°	1357.0	1357.0	1362.7	1368.4	1364.3	1374.9	1389.5
22.5°	1326.1	1322.8	1332.6	1336.6	1334.2	1344.8	1359.4
25°	1287.0	1286.2	1296.0	1301.7	1298.4	1309.8	1322.8
27.5°	1244.7	1243.9	1253.7	1261.0	1259.4	1269.9	1284.6
30°	1193.5	1197.5	1206.5	1218.7	1214.6	1226.0	1241.5
32.5°	1139.8	1143.8	1154.4	1167.4	1168.2	1177.2	1192.6
35°	1075.5	1086.1	1093.4	1110.5	1113.7	1122.7	1139.0
37.5°	1008.0	1020.2	1035.6	1048.7	1055.2	1062.5	1081.2
40°	932.3	950.2	967.3	982.8	990.9	998.2	1016.1
42.5°	864.0	877.8	894.1	909.5	924.2	930.7	949.4
45°	786.7	803.0	817.6	836.3	851.0	858.3	877.0
47.5°	711.0	727.3	746.8	759.8	775.3	782.6	800.5
50°	638.6	653.3	669.5	685.0	698.0	704.5	720.0
52.5°	567.0	582.5	598.0	607.7	621.5	626.4	639.4
55°	503.6	514.2	528.0	533.7	547.5	550.8	559.7
57.5°	442.6	449.9	454.8	464.5	474.3	481.6	492.2
60°	387.2	390.5	393.8	399.4	407.6	410.0	414.1
62.5°	337.6	336.8	343.3	344.9	345.8	353.9	349.8
65°	293.7	294.5	288.8	286.4	289.6	292.1	290.4
67.5°	257.1	252.2	247.3	241.6	236.7	239.2	236.7
70°	221.3	217.2	209.1	200.9	197.7	192.8	190.4
72.5°	192.8	183.0	174.9	164.3	158.6	152.9	148.9
75°	170.8	157.0	145.6	134.2	126.1	118.0	116.3
77.5°	148.1	135.0	122.0	109.8	97.6	88.7	85.4
80°	130.2	118.0	102.5	87.9	74.8	63.5	59.4
82.5°	113.9	100.9	85.4	70.0	55.3	43.1	38.2
85°	100.1	86.2	70.8	55.3	40.7	27.7	21.2
87.5°	89.5	74.0	58.6	43.9	28.5	15.5	8.1
90°	79.7	65.1	50.4	35.0	20.3	8.1	0.0
92.5°	70.8	56.9	42.3	28.5	15.5	4.9	0.8
95°	62.6	50.4	35.8	22.8	11.4	3.3	0.8
97.5°	56.1	43.9	30.9	18.7	8.9	2.4	0.8
100°	50.4	38.2	26.8	15.5	7.3	1.6	0.8
102.5°	44.7	34.2	22.8	13.0	5.7	0.8	0.8
105°	39.9	30.1	19.5	11.4	4.9	0.8	0.8
107.5°	35.8	26.8	17.1	9.8	3.3	0.8	0.8
110°	31.7	22.8	14.6	8.1	2.4	0.8	0.8



TEST NUMBER: P1213354

CATALOG NUMBER: 2SNLED-LD5-45HL-LN-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	28.5	20.3	13.0	6.5	1.6	0.8	0.8
115°	25.2	17.9	11.4	5.7	1.6	0.8	0.8
117.5°	22.0	15.5	9.8	4.1	0.8	0.8	0.8
120°	19.5	13.8	8.1	3.3	0.8	0.8	0.8
122.5°	17.1	11.4	6.5	2.4	0.8	0.8	0.8
125°	14.6	9.8	5.7	1.6	0.8	0.8	0.8
127.5°	12.2	8.1	4.1	1.6	0.8	0.8	0.8
130°	10.6	6.5	3.3	0.8	0.8	0.8	0.8
132.5°	8.9	4.9	2.4	0.8	0.8	0.8	0.8
135°	7.3	4.1	1.6	0.8	0.8	0.8	0.8
137.5°	5.7	3.3	1.6	0.8	0.8	0.8	0.8
140°	4.1	2.4	0.8	0.8	0.8	0.8	0.8
142.5°	3.3	1.6	0.8	0.8	0.8	0.8	0.8
145°	2.4	1.6	0.8	0.8	0.8	0.8	0.8
147.5°	1.6	1.6	1.6	1.6	0.8	0.8	0.8
150°	1.6	1.6	0.8	0.8	1.6	0.8	0.8
152.5°	1.6	0.8	0.8	0.8	1.6	0.8	0.8
155°	1.6	1.6	1.6	1.6	1.6	1.6	0.8
157.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6
160°	1.6	1.6	1.6	1.6	1.6	1.6	1.6
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)