

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: P1213431

Luminaire Tested: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213431
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-LD5-46SL-LC-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

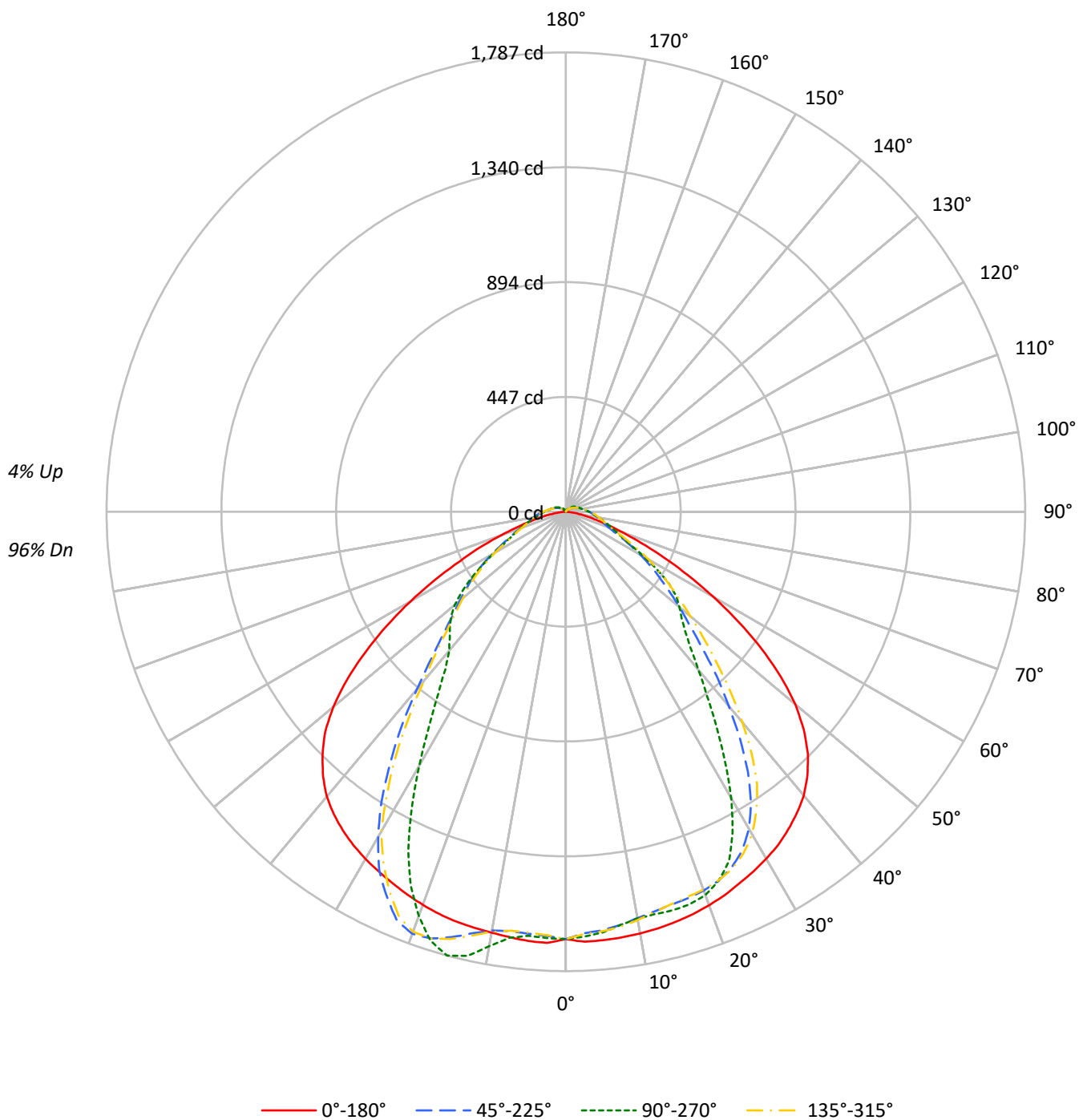
Lumens per Lamp: N/A
Luminaire Lumens: 3963.0 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

Luminous Intensity Polar Plot



TEST NUMBER: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

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°	13434	13434	13434	13434
5°	13532	12901	13559	13002
10°	13594	12365	13566	13204
15°	13699	12199	13693	13583
20°	13850	12006	13836	12656
25°	14021	11389	14013	11005
30°	14285	9871	14292	8745
35°	14565	7982	14606	6755
40°	14811	6427	14873	5662
45°	14759	5444	14835	5301
50°	14123	5012	14320	4900
55°	12531	4505	12844	4095
60°	10164	3449	10703	3163
65°	7555	2638	8139	2501
70°	5137	2277	5792	2177
75°	3361	2055	3915	1943
80°	2174	1916	2546	1762
85°	1114	1912	1469	1746

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 14835 cd/sqm

TEST NUMBER: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.9	4.0
10°-20°	469.8	11.9
20°-30°	714.3	18.0
30°-40°	766.2	19.3
40°-50°	665.0	16.8
50°-60°	492.8	12.4
60°-70°	282.4	7.1
70°-80°	156.4	3.9
80°-90°	95.2	2.4
90°-100°	61.9	1.6
100°-110°	41.5	1.0
110°-120°	28.0	0.7
120°-130°	17.2	0.4
130°-140°	9.0	0.2
140°-150°	4.1	0.1
150°-160°	1.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1342.0	33.9
0°-40°	2108.2	53.2
0°-60°	3266.1	82.4
0°-90°	3800.1	95.9
90°-120°	131.4	3.3
90°-150°	161.7	4.1
90°-180°	163.0	4.1
0°-180°	3963.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1662	1662	1662	1662	1662	
5°	1673	1643	1676	1656	1673	159
15°	1651	1605	1650	1787	1651	467
25°	1595	1501	1594	1450	1595	737
35°	1509	1022	1513	865	1509	944
45°	1332	655	1339	638	1332	1020
55°	929	491	952	446	929	824
65°	422	249	454	236	422	425
75°	120	158	140	149	120	137
85°	16	109	22	100	16	21
90°	0	91	2	84	0	1
95°	1	75	0	71	1	1
105°	1	56	1	53	1	1
115°	1	46	1	41	1	1
125°	1	34	1	28	1	1
135°	1	22	1	18	1	1
145°	1	13	2	10	1	1
155°	2	6	2	5	2	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	

TEST NUMBER: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4
2.5°	1674.4	1670.1	1668.4	1665.0	1667.5	1677.8	1671.0	1659.8	1660.7	1640.9	1651.2
5°	1672.7	1667.5	1665.0	1661.5	1663.2	1672.7	1665.8	1654.6	1653.8	1634.0	1643.5
7.5°	1670.1	1665.0	1660.7	1658.1	1658.9	1666.7	1658.1	1645.2	1642.6	1621.2	1629.7
10°	1665.8	1662.4	1656.4	1652.1	1651.2	1659.8	1646.1	1633.2	1627.2	1604.8	1613.4
12.5°	1659.8	1654.6	1648.6	1640.9	1640.1	1645.2	1634.0	1616.0	1610.0	1592.0	1601.4
15°	1651.2	1645.2	1638.3	1629.7	1625.5	1628.9	1615.2	1598.8	1598.0	1582.5	1595.4
17.5°	1641.8	1633.2	1625.5	1613.4	1607.4	1610.0	1598.8	1584.2	1586.0	1576.5	1591.1
20°	1628.9	1619.4	1607.4	1595.4	1586.8	1591.1	1583.4	1572.2	1574.8	1567.9	1580.8
22.5°	1614.3	1601.4	1586.8	1573.1	1566.2	1572.2	1566.2	1556.8	1557.6	1553.3	1561.1
25°	1595.4	1580.8	1563.6	1546.5	1543.0	1547.3	1543.9	1536.2	1532.7	1525.9	1529.3
27.5°	1578.2	1561.9	1540.4	1522.4	1516.4	1525.0	1517.3	1504.4	1494.9	1485.5	1478.6
30°	1558.5	1538.7	1514.7	1494.1	1488.9	1492.4	1481.2	1461.5	1436.5	1424.5	1405.6
32.5°	1537.0	1511.3	1481.2	1458.0	1454.6	1452.0	1431.4	1403.1	1364.4	1340.4	1311.2
35°	1508.7	1480.3	1444.3	1415.9	1410.8	1396.2	1362.7	1324.9	1275.1	1233.9	1184.1
37.5°	1476.9	1443.4	1405.6	1367.9	1353.3	1324.1	1276.8	1237.3	1161.8	1112.0	1051.9
40°	1440.8	1400.5	1354.1	1308.6	1284.6	1237.3	1183.2	1124.9	1051.9	984.9	934.2
42.5°	1391.0	1348.1	1293.2	1242.5	1201.3	1138.6	1075.1	992.6	925.6	869.0	817.5
45°	1331.8	1280.3	1216.7	1155.8	1103.4	1028.7	954.0	871.5	815.7	749.6	714.4
47.5°	1255.4	1199.6	1131.7	1063.9	995.2	912.8	834.6	755.6	699.8	652.6	626.8
50°	1165.2	1113.7	1039.0	958.3	882.7	796.8	718.7	659.5	605.4	576.2	556.4
52.5°	1053.6	1005.5	929.1	841.5	768.5	684.4	613.1	565.0	526.4	504.9	498.0
55°	929.1	887.0	811.4	729.9	655.2	577.9	523.8	481.7	456.8	443.9	444.8
57.5°	796.0	763.4	692.1	619.1	548.7	490.3	441.4	407.9	389.0	388.1	390.7
60°	662.9	638.8	577.0	514.3	452.5	405.3	369.2	346.0	334.0	334.9	334.0
62.5°	535.8	513.5	468.8	417.3	368.4	336.6	304.0	294.5	284.2	283.4	283.4
65°	421.6	404.4	368.4	331.4	294.5	273.9	257.6	246.4	238.7	237.0	237.9
67.5°	316.8	310.0	285.1	260.2	237.0	224.1	210.4	207.8	201.8	201.8	203.5
70°	236.1	231.0	217.2	202.6	193.2	184.6	177.7	177.7	176.9	176.0	180.3
72.5°	170.9	171.7	167.4	156.3	155.4	153.7	152.0	154.6	155.4	158.0	163.1
75°	120.2	122.8	122.8	121.1	124.5	128.8	131.4	135.7	140.8	144.3	150.3
77.5°	85.0	85.0	89.3	94.5	101.3	109.1	115.9	121.9	128.8	133.1	138.2
80°	55.0	57.5	64.4	73.8	83.3	93.6	103.0	110.8	117.6	124.5	127.9
82.5°	32.6	36.9	45.5	57.5	69.6	82.4	91.9	101.3	109.1	115.9	118.5
85°	16.3	22.3	32.6	45.5	58.4	72.1	84.1	92.7	101.3	107.3	110.8
87.5°	5.2	12.0	23.2	35.2	48.9	62.7	75.6	85.0	92.7	97.9	101.3
90°	0.0	6.0	16.3	29.2	42.1	55.8	67.8	78.1	85.9	90.2	92.7
92.5°	0.0	3.4	12.9	24.0	36.1	49.8	61.8	71.3	78.1	82.4	84.1
95°	0.9	2.6	9.4	19.7	31.8	44.7	55.8	64.4	71.3	75.6	76.4
97.5°	0.9	1.7	7.7	16.3	27.5	39.5	50.7	59.2	64.4	68.7	69.6
100°	0.9	1.7	6.0	14.6	24.0	35.2	45.5	53.2	59.2	62.7	63.5
102.5°	0.9	0.9	5.2	12.0	21.5	30.9	40.4	48.1	53.2	56.7	58.4
105°	0.9	0.9	4.3	10.3	18.9	27.5	36.1	43.8	48.1	51.5	53.2
107.5°	0.9	0.9	3.4	8.6	16.3	24.0	32.6	38.6	43.8	47.2	48.9
110°	0.9	0.9	2.6	7.7	13.7	21.5	28.3	34.3	39.5	42.9	44.7



TEST NUMBER: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.9	0.9	2.6	6.9	12.0	18.9	24.9	30.9	35.2	38.6	41.2
115°	0.9	0.9	2.6	6.0	11.2	16.3	22.3	27.5	31.8	35.2	37.8
117.5°	0.9	0.9	2.6	5.2	9.4	14.6	19.7	24.9	28.3	31.8	34.3
120°	0.9	0.9	1.7	4.3	8.6	12.9	17.2	21.5	25.8	29.2	31.8
122.5°	0.9	0.9	1.7	4.3	6.9	11.2	15.5	18.9	23.2	25.8	28.3
125°	0.9	0.9	1.7	3.4	6.0	10.3	13.7	17.2	19.7	23.2	25.8
127.5°	0.9	0.9	1.7	3.4	5.2	8.6	12.0	15.5	18.0	20.6	22.3
130°	0.9	0.9	1.7	2.6	4.3	6.9	10.3	12.9	16.3	18.0	19.7
132.5°	0.9	0.9	0.9	2.6	3.4	5.2	7.7	11.2	13.7	16.3	17.2
135°	0.9	0.9	0.9	1.7	3.4	4.3	6.0	8.6	11.2	13.7	15.5
137.5°	0.9	0.9	0.9	1.7	2.6	4.3	5.2	6.9	9.4	11.2	13.7
140°	0.9	0.9	0.9	1.7	2.6	3.4	4.3	6.0	7.7	9.4	11.2
142.5°	0.9	0.9	0.9	1.7	1.7	2.6	3.4	5.2	6.0	7.7	9.4
145°	0.9	0.9	0.9	1.7	1.7	2.6	3.4	4.3	5.2	6.0	7.7
147.5°	0.9	0.9	0.9	1.7	1.7	1.7	2.6	3.4	4.3	5.2	6.0
150°	1.7	1.7	1.7	1.7	1.7	1.7	2.6	2.6	3.4	4.3	5.2
152.5°	1.7	1.7	1.7	1.7	1.7	1.7	2.6	2.6	2.6	3.4	4.3
155°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.6	2.6	3.4	3.4
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: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4
2.5°	1647.8	1649.5	1659.8	1658.9	1657.2	1655.5	1655.5	1653.8	1655.5	1659.8	1658.1
5°	1639.2	1641.8	1649.5	1648.6	1646.9	1646.1	1645.2	1642.6	1644.3	1650.4	1648.6
7.5°	1623.7	1626.3	1633.2	1629.7	1627.2	1628.9	1624.6	1622.0	1625.5	1631.5	1630.6
10°	1607.4	1609.1	1617.7	1616.0	1611.7	1612.6	1608.3	1606.6	1610.9	1614.3	1615.2
12.5°	1596.3	1602.3	1610.0	1609.1	1608.3	1609.1	1604.8	1603.1	1605.7	1609.1	1608.3
15°	1593.7	1601.4	1610.0	1610.0	1610.9	1611.7	1607.4	1604.8	1607.4	1610.0	1609.1
17.5°	1591.1	1600.6	1608.3	1607.4	1608.3	1610.0	1603.1	1601.4	1604.8	1608.3	1606.6
20°	1582.5	1591.1	1596.3	1594.5	1594.5	1595.4	1586.8	1586.8	1592.0	1594.5	1595.4
22.5°	1558.5	1568.8	1568.8	1564.5	1564.5	1561.1	1558.5	1553.3	1559.3	1563.6	1567.1
25°	1522.4	1526.7	1521.6	1512.1	1507.0	1502.7	1490.6	1500.9	1500.9	1513.8	1518.1
27.5°	1471.8	1462.3	1447.7	1428.0	1423.7	1409.9	1402.2	1404.8	1409.1	1427.1	1440.8
30°	1388.5	1360.1	1335.2	1326.6	1307.7	1294.0	1280.3	1287.1	1294.9	1305.2	1333.5
32.5°	1278.6	1251.1	1210.7	1196.1	1176.4	1159.2	1142.9	1153.2	1166.9	1173.8	1204.7
35°	1152.3	1119.7	1082.8	1057.9	1037.3	1027.8	1007.2	1021.8	1036.4	1041.6	1068.2
37.5°	1018.4	984.9	952.3	930.8	911.0	905.0	891.3	901.6	912.8	920.5	942.8
40°	891.3	860.4	835.5	820.9	807.1	802.0	796.8	801.1	809.7	815.7	832.9
42.5°	782.2	757.3	740.2	731.6	722.1	715.3	716.1	717.8	722.1	735.0	742.7
45°	686.9	672.3	661.2	659.5	653.4	652.6	651.7	655.2	657.7	665.5	671.5
47.5°	610.5	604.5	601.9	605.4	607.9	604.5	606.2	610.5	615.7	615.7	614.8
50°	550.4	552.1	555.6	563.3	568.4	570.2	571.9	577.0	577.9	579.6	577.0
52.5°	501.5	503.2	512.6	524.6	530.7	533.2	536.7	541.8	541.8	543.5	540.1
55°	451.7	454.2	463.7	475.7	480.9	484.3	487.7	491.2	493.7	497.2	494.6
57.5°	396.7	404.4	410.4	413.9	417.3	419.9	422.5	423.3	428.5	429.3	433.6
60°	338.3	340.0	346.0	345.2	342.6	349.5	346.0	352.1	358.1	365.8	366.7
62.5°	282.5	283.4	287.7	285.9	289.4	288.5	291.1	291.1	295.4	298.8	303.1
65°	238.7	239.6	243.0	243.0	242.1	244.7	247.3	249.0	249.0	251.6	255.0
67.5°	206.1	208.7	212.1	213.8	215.5	215.5	218.1	219.0	220.7	221.5	223.3
70°	183.8	187.2	190.6	192.3	193.2	194.9	195.8	195.8	197.5	198.4	200.1
72.5°	167.4	170.9	173.5	173.5	175.2	176.0	176.0	176.9	177.7	179.5	181.2
75°	153.7	156.3	158.0	157.1	157.1	157.1	158.0	158.0	159.7	161.4	163.1
77.5°	140.8	143.4	143.4	141.7	141.7	141.7	141.7	142.5	143.4	145.1	146.8
80°	131.4	131.4	130.5	130.5	128.8	127.9	127.9	128.8	128.8	130.5	133.1
82.5°	121.1	121.1	120.2	119.4	118.5	117.6	117.6	118.5	119.4	120.2	121.9
85°	111.6	111.6	109.9	109.9	109.1	109.1	109.1	109.1	109.9	110.8	112.5
87.5°	102.2	101.3	100.5	99.6	99.6	99.6	99.6	99.6	100.5	102.2	103.0
90°	92.7	91.9	91.0	91.0	90.2	90.2	91.0	91.0	91.9	92.7	93.6
92.5°	84.1	83.3	82.4	82.4	81.6	81.6	82.4	81.6	83.3	83.3	84.1
95°	76.4	75.6	74.7	74.7	74.7	74.7	74.7	74.7	75.6	75.6	76.4
97.5°	69.6	68.7	67.8	67.8	68.7	67.8	68.7	68.7	68.7	69.6	70.4
100°	63.5	62.7	62.7	63.5	62.7	62.7	63.5	63.5	63.5	63.5	64.4
102.5°	58.4	58.4	58.4	58.4	58.4	58.4	59.2	59.2	59.2	59.2	60.1
105°	53.2	54.1	54.1	54.1	55.0	55.0	55.0	55.8	55.8	55.8	55.8
107.5°	49.8	50.7	50.7	51.5	51.5	52.4	52.4	52.4	52.4	53.2	53.2
110°	46.4	47.2	48.1	48.9	48.9	49.8	49.8	49.8	49.8	49.8	49.8

TEST NUMBER: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	42.9	43.8	44.7	46.4	47.2	47.2	47.2	47.2	48.1	48.1	47.2
115°	39.5	41.2	42.1	43.8	44.7	44.7	45.5	45.5	45.5	45.5	44.7
117.5°	36.1	38.6	39.5	41.2	42.1	42.1	42.9	42.9	42.9	42.9	42.1
120°	33.5	35.2	36.9	37.8	38.6	39.5	39.5	40.4	40.4	40.4	39.5
122.5°	30.9	32.6	34.3	35.2	36.1	36.9	36.9	36.9	36.9	36.9	36.9
125°	27.5	29.2	30.9	31.8	32.6	33.5	33.5	34.3	34.3	34.3	33.5
127.5°	24.9	26.6	27.5	29.2	30.1	30.1	30.9	30.9	30.9	30.9	30.1
130°	21.5	23.2	24.9	25.8	26.6	26.6	27.5	27.5	27.5	27.5	27.5
132.5°	18.9	20.6	21.5	23.2	23.2	24.0	24.0	24.9	24.9	24.9	24.0
135°	17.2	18.0	18.9	20.6	20.6	21.5	21.5	21.5	21.5	21.5	21.5
137.5°	15.5	16.3	17.2	18.0	18.0	18.9	18.9	18.9	18.9	19.7	18.9
140°	12.9	14.6	15.5	15.5	16.3	16.3	16.3	17.2	17.2	17.2	16.3
142.5°	11.2	12.0	12.9	13.7	14.6	14.6	14.6	14.6	15.5	14.6	14.6
145°	8.6	10.3	11.2	12.0	12.9	12.9	12.9	12.9	12.9	12.9	12.9
147.5°	6.9	7.7	9.4	10.3	10.3	11.2	11.2	11.2	11.2	11.2	11.2
150°	6.0	6.0	7.7	8.6	9.4	9.4	9.4	9.4	9.4	9.4	9.4
152.5°	4.3	5.2	6.0	6.9	7.7	7.7	7.7	7.7	7.7	7.7	7.7
155°	4.3	4.3	5.2	5.2	6.0	6.0	6.0	6.0	6.9	6.0	6.0
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: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4
2.5°	1655.5	1654.6	1658.1	1654.6	1637.5	1644.3	1641.8	1651.2	1652.1	1654.6	1663.2
5°	1646.9	1646.9	1651.2	1647.8	1631.5	1638.3	1637.5	1646.9	1648.6	1650.4	1659.8
7.5°	1629.7	1630.6	1636.6	1634.0	1616.9	1627.2	1626.3	1637.5	1640.9	1644.3	1652.9
10°	1613.4	1612.6	1619.4	1616.9	1600.6	1612.6	1611.7	1622.9	1628.0	1634.0	1644.3
12.5°	1604.8	1602.3	1604.8	1602.3	1584.2	1593.7	1594.5	1607.4	1613.4	1621.2	1633.2
15°	1604.8	1600.6	1600.6	1595.4	1574.8	1580.8	1581.7	1590.3	1598.0	1605.7	1620.3
17.5°	1603.1	1598.8	1598.0	1593.7	1571.4	1571.4	1570.5	1576.5	1580.8	1588.5	1604.0
20°	1593.7	1592.0	1591.1	1588.5	1567.9	1564.5	1562.8	1562.8	1565.3	1567.9	1583.4
22.5°	1568.8	1570.5	1572.2	1573.9	1557.6	1551.6	1552.5	1550.8	1548.2	1548.2	1561.1
25°	1522.4	1531.0	1537.9	1545.6	1536.2	1531.9	1537.0	1534.4	1530.1	1526.7	1537.9
27.5°	1448.6	1466.6	1481.2	1500.1	1500.9	1497.5	1511.3	1509.5	1508.7	1503.5	1512.1
30°	1346.4	1374.7	1394.5	1422.0	1445.1	1448.6	1471.8	1475.2	1478.6	1476.0	1484.6
32.5°	1222.7	1261.4	1294.9	1337.8	1360.1	1379.9	1412.5	1426.2	1440.0	1444.3	1453.7
35°	1087.9	1131.7	1171.2	1218.4	1253.7	1296.6	1336.1	1356.7	1387.6	1399.6	1413.4
37.5°	960.0	1001.2	1039.8	1087.1	1143.7	1188.4	1237.3	1283.7	1325.8	1343.0	1363.6
40°	846.6	880.1	917.1	958.3	1009.8	1068.2	1121.4	1185.8	1235.6	1270.0	1300.0
42.5°	760.8	777.1	808.9	845.8	887.0	946.3	1000.3	1072.5	1132.6	1181.5	1231.3
45°	684.4	692.1	715.3	735.0	777.1	829.5	887.0	957.4	1020.1	1082.8	1142.9
47.5°	619.1	628.5	639.7	651.7	681.8	725.6	775.4	838.9	901.6	974.6	1043.3
50°	575.3	577.9	579.6	584.8	602.8	632.8	673.2	727.3	787.4	865.5	938.5
52.5°	536.7	536.7	531.5	528.9	535.8	554.7	577.9	616.5	678.3	750.5	827.8
55°	495.5	487.7	486.0	477.4	479.1	487.7	498.9	528.9	579.6	641.4	716.1
57.5°	437.9	434.5	434.5	431.1	424.2	428.5	431.1	452.5	488.6	541.8	607.1
60°	371.8	370.1	374.4	375.2	369.2	371.8	370.9	383.8	409.6	452.5	506.6
62.5°	305.7	313.4	314.3	317.7	314.3	313.4	317.7	328.9	341.7	374.4	416.5
65°	256.7	261.0	261.9	266.2	264.5	264.5	267.9	276.5	284.2	306.5	339.2
67.5°	225.0	223.3	224.1	226.7	224.1	223.3	225.8	231.0	237.0	250.7	273.9
70°	200.1	198.4	198.4	198.4	194.9	192.3	193.2	194.9	197.5	205.2	219.8
72.5°	181.2	181.2	178.6	176.0	173.5	171.7	170.0	168.3	167.4	170.0	177.7
75°	164.0	164.9	164.0	161.4	158.0	154.6	151.1	147.7	143.4	141.7	142.5
77.5°	148.5	149.4	150.3	149.4	146.0	141.7	136.5	131.4	125.4	119.4	115.9
80°	134.8	136.5	137.4	136.5	134.0	130.5	124.5	118.5	109.9	102.2	93.6
82.5°	122.8	125.4	126.2	126.2	124.5	121.1	114.2	107.3	97.9	87.6	76.4
85°	113.3	115.1	116.8	116.8	115.9	112.5	105.6	97.9	88.4	76.4	64.4
87.5°	103.9	104.8	106.5	108.2	106.5	103.0	97.0	88.4	79.0	67.0	53.2
90°	94.5	95.3	97.0	98.7	97.9	94.5	89.3	81.6	71.3	58.4	44.7
92.5°	85.0	86.7	87.6	88.4	89.3	86.7	82.4	74.7	64.4	51.5	38.6
95°	78.1	78.1	79.9	80.7	81.6	79.0	75.6	67.8	58.4	46.4	33.5
97.5°	71.3	71.3	73.0	73.0	73.8	72.1	68.7	61.8	52.4	41.2	28.3
100°	64.4	65.3	66.1	67.0	67.0	66.1	62.7	55.8	47.2	36.9	24.9
102.5°	60.1	60.1	61.0	61.0	61.8	60.1	56.7	50.7	42.1	32.6	21.5
105°	55.8	55.8	56.7	56.7	55.8	54.1	50.7	45.5	37.8	28.3	18.9
107.5°	52.4	52.4	52.4	52.4	51.5	49.8	46.4	40.4	33.5	25.8	17.2
110°	49.8	48.9	48.9	48.1	47.2	44.7	41.2	36.1	30.1	22.3	14.6

TEST NUMBER: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	47.2	46.4	45.5	44.7	42.9	40.4	36.9	32.6	26.6	19.7	12.9
115°	44.7	43.8	42.9	41.2	39.5	36.9	33.5	29.2	23.2	17.2	11.2
117.5°	42.1	41.2	39.5	37.8	36.1	33.5	30.1	25.8	20.6	15.5	10.3
120°	38.6	37.8	36.9	35.2	33.5	30.1	26.6	23.2	18.0	13.7	8.6
122.5°	36.1	35.2	33.5	32.6	30.1	27.5	24.0	20.6	16.3	12.0	7.7
125°	32.6	31.8	30.9	29.2	27.5	24.0	21.5	18.0	14.6	10.3	6.0
127.5°	30.1	29.2	27.5	25.8	24.0	21.5	18.9	16.3	12.9	8.6	6.0
130°	26.6	25.8	24.9	23.2	21.5	18.9	17.2	13.7	11.2	7.7	5.2
132.5°	23.2	23.2	22.3	20.6	18.9	17.2	14.6	12.0	9.4	6.9	4.3
135°	21.5	20.6	19.7	18.0	17.2	14.6	12.9	10.3	7.7	6.0	3.4
137.5°	18.9	18.0	17.2	16.3	14.6	12.9	11.2	8.6	6.9	5.2	3.4
140°	16.3	15.5	15.5	13.7	12.9	11.2	9.4	7.7	6.0	4.3	2.6
142.5°	14.6	13.7	12.9	12.0	11.2	9.4	7.7	6.0	5.2	3.4	2.6
145°	12.9	12.0	11.2	10.3	9.4	7.7	6.9	5.2	4.3	3.4	2.6
147.5°	10.3	10.3	9.4	8.6	7.7	6.9	6.0	5.2	3.4	2.6	1.7
150°	8.6	8.6	7.7	6.9	6.9	6.0	5.2	4.3	3.4	2.6	1.7
152.5°	7.7	6.9	6.9	6.0	6.0	5.2	4.3	3.4	2.6	2.6	1.7
155°	6.0	6.0	6.0	5.2	5.2	4.3	3.4	3.4	2.6	1.7	1.7
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: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4
2.5°	1665.0	1654.6	1663.2	1678.7	1677.0	1675.3	1673.5	1677.0	1688.1	1682.1	1672.7
5°	1662.4	1652.1	1661.5	1676.1	1675.3	1672.7	1671.0	1674.4	1685.6	1679.6	1669.2
7.5°	1657.2	1647.8	1654.6	1669.2	1669.2	1667.5	1665.8	1669.2	1679.6	1674.4	1664.1
10°	1648.6	1641.8	1648.6	1662.4	1663.2	1659.8	1658.1	1662.4	1672.7	1670.1	1661.5
12.5°	1641.8	1634.9	1642.6	1656.4	1657.2	1653.8	1651.2	1656.4	1670.1	1671.8	1669.2
15°	1632.3	1626.3	1635.8	1650.4	1650.4	1647.8	1647.8	1654.6	1673.5	1681.3	1685.6
17.5°	1618.6	1614.3	1625.5	1640.1	1640.9	1639.2	1640.1	1653.8	1678.7	1697.6	1709.6
20°	1601.4	1599.7	1611.7	1627.2	1629.7	1630.6	1634.9	1655.5	1689.9	1715.6	1727.6
22.5°	1580.8	1581.7	1595.4	1611.7	1615.2	1617.7	1626.3	1655.5	1698.4	1725.9	1731.1
25°	1557.6	1560.2	1574.8	1594.5	1598.8	1604.0	1618.6	1656.4	1701.0	1719.0	1710.5
27.5°	1532.7	1537.9	1556.8	1577.4	1582.5	1591.1	1610.0	1651.2	1689.0	1689.9	1658.1
30°	1507.0	1513.0	1535.3	1559.3	1567.9	1576.5	1599.7	1639.2	1659.8	1632.3	1576.5
32.5°	1477.8	1486.4	1508.7	1537.9	1548.2	1559.3	1582.5	1616.0	1608.3	1549.0	1469.2
35°	1440.8	1452.9	1478.6	1513.0	1522.4	1537.0	1553.3	1561.1	1526.7	1442.6	1352.4
37.5°	1395.3	1413.4	1443.4	1482.9	1493.2	1502.7	1507.0	1485.5	1416.8	1325.8	1232.2
40°	1343.0	1370.4	1403.1	1446.9	1457.2	1457.2	1441.7	1396.2	1309.5	1190.1	1086.2
42.5°	1279.4	1312.9	1354.1	1397.9	1408.2	1396.2	1359.3	1279.4	1180.7	1047.6	937.7
45°	1202.1	1246.8	1293.2	1338.7	1343.8	1317.2	1251.1	1149.8	1027.8	904.2	799.4
47.5°	1110.3	1168.6	1219.3	1270.8	1264.0	1219.3	1130.9	1015.8	887.0	770.2	686.1
50°	1007.2	1075.9	1132.6	1181.5	1166.9	1105.1	1001.2	881.0	753.1	653.4	583.9
52.5°	897.3	976.3	1033.0	1072.5	1052.7	978.9	864.7	749.6	644.9	553.8	507.5
55°	783.1	863.0	921.3	952.3	926.5	846.6	734.2	629.4	530.7	471.4	443.9
57.5°	672.3	747.0	802.0	826.9	794.3	714.4	610.5	522.1	450.8	401.0	387.3
60°	565.9	626.8	679.2	698.1	662.9	589.0	499.7	429.3	377.0	342.6	335.7
62.5°	467.1	516.9	558.1	572.7	538.4	480.9	403.6	351.2	314.3	297.1	288.5
65°	385.5	414.7	456.8	454.2	433.6	380.4	323.7	286.8	262.8	251.6	246.4
67.5°	303.1	329.7	356.3	359.8	334.0	297.1	260.2	233.6	220.7	214.7	212.1
70°	234.4	254.2	270.5	266.2	252.4	229.3	206.1	191.5	186.3	183.8	183.8
72.5°	182.0	192.3	200.1	194.9	186.3	174.3	163.1	157.1	158.0	159.7	161.4
75°	140.8	143.4	145.1	140.0	138.2	130.5	129.7	130.5	135.7	140.8	143.4
77.5°	108.2	104.8	102.2	97.0	97.9	97.0	101.3	108.2	115.9	123.6	130.5
80°	83.3	75.6	69.6	64.4	67.0	71.3	79.9	90.2	100.5	109.1	117.6
82.5°	64.4	53.2	44.7	39.5	44.7	51.5	62.7	75.6	87.6	97.0	106.5
85°	49.8	36.9	26.6	21.5	26.6	36.9	48.9	63.5	76.4	86.7	96.2
87.5°	38.6	26.6	14.6	8.6	14.6	25.8	39.5	53.2	66.1	78.1	87.6
90°	30.9	18.0	6.9	1.7	7.7	18.0	30.9	44.7	57.5	70.4	79.9
92.5°	24.9	12.9	3.4	0.0	4.3	13.7	25.8	38.6	51.5	63.5	73.0
95°	20.6	10.3	2.6	0.0	3.4	10.3	20.6	33.5	45.5	57.5	65.3
97.5°	17.2	7.7	1.7	0.0	1.7	8.6	17.2	28.3	40.4	51.5	59.2
100°	14.6	6.9	1.7	0.0	1.7	6.9	14.6	24.9	35.2	45.5	53.2
102.5°	12.0	5.2	0.9	0.9	0.9	5.2	12.9	21.5	30.9	40.4	48.1
105°	11.2	4.3	0.9	0.9	0.9	4.3	11.2	18.9	27.5	36.1	42.9
107.5°	9.4	3.4	0.9	0.9	0.9	3.4	9.4	16.3	24.9	32.6	38.6
110°	7.7	3.4	0.9	0.9	0.9	3.4	7.7	14.6	21.5	28.3	34.3

TEST NUMBER: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	6.9	2.6	0.9	0.9	0.9	2.6	6.9	12.9	18.9	25.8	30.9
115°	6.0	2.6	0.9	0.9	0.9	2.6	6.0	11.2	16.3	22.3	27.5
117.5°	5.2	2.6	0.9	0.9	0.9	1.7	5.2	9.4	14.6	19.7	24.9
120°	4.3	1.7	0.9	0.9	0.9	1.7	4.3	8.6	12.9	17.2	21.5
122.5°	4.3	1.7	0.9	0.9	0.9	1.7	3.4	6.9	11.2	14.6	18.9
125°	3.4	1.7	0.9	0.9	0.9	0.9	3.4	6.0	9.4	12.9	16.3
127.5°	3.4	1.7	0.9	0.9	0.9	0.9	2.6	5.2	7.7	11.2	14.6
130°	2.6	1.7	0.9	0.9	0.9	0.9	1.7	4.3	6.9	9.4	12.0
132.5°	2.6	1.7	0.9	0.9	0.9	0.9	1.7	3.4	5.2	7.7	10.3
135°	2.6	0.9	0.9	0.9	0.9	0.9	0.9	2.6	4.3	6.0	7.7
137.5°	1.7	0.9	0.9	0.9	0.9	0.9	0.9	1.7	3.4	4.3	6.9
140°	1.7	0.9	0.9	0.9	0.9	0.9	0.9	1.7	2.6	3.4	5.2
142.5°	1.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.7	2.6	4.3
145°	1.7	0.9	0.9	1.7	1.7	0.9	0.9	1.7	1.7	2.6	3.4
147.5°	1.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.7	1.7	2.6
150°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.6
152.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
155°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
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: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4
2.5°	1671.0	1651.2	1661.5	1658.1	1661.5	1670.1	1669.2	1666.7	1668.4	1664.1	1659.8
5°	1667.5	1647.8	1658.1	1653.8	1658.1	1666.7	1665.0	1662.4	1665.0	1659.8	1655.5
7.5°	1663.2	1645.2	1657.2	1656.4	1664.1	1675.3	1676.1	1676.1	1682.1	1674.4	1671.0
10°	1663.2	1653.8	1670.1	1676.1	1695.9	1710.5	1712.2	1715.6	1725.9	1724.2	1715.6
12.5°	1681.3	1679.6	1703.6	1718.2	1736.2	1756.8	1768.0	1771.4	1778.3	1773.1	1769.7
15°	1704.5	1713.0	1739.7	1756.0	1775.7	1791.2	1793.8	1795.5	1800.6	1792.9	1786.9
17.5°	1735.4	1740.5	1762.0	1768.9	1781.7	1784.3	1780.9	1772.3	1772.3	1755.1	1750.0
20°	1750.0	1747.4	1756.0	1744.8	1739.7	1724.2	1709.6	1693.3	1692.4	1674.4	1672.7
22.5°	1737.1	1719.9	1701.9	1674.4	1662.4	1640.1	1620.3	1610.9	1604.8	1581.7	1575.7
25°	1691.6	1649.5	1622.9	1590.3	1561.1	1535.3	1516.4	1496.7	1477.8	1458.9	1450.3
27.5°	1612.6	1573.1	1530.1	1484.6	1444.3	1404.8	1373.0	1353.3	1335.2	1310.3	1297.4
30°	1515.5	1460.6	1413.4	1369.6	1303.5	1255.4	1228.8	1189.3	1175.5	1164.4	1140.3
32.5°	1401.3	1335.2	1270.8	1211.6	1143.7	1099.1	1063.9	1034.7	1026.1	996.9	990.0
35°	1275.1	1188.4	1115.4	1057.0	1008.1	954.0	924.8	905.0	887.9	868.1	864.7
37.5°	1126.6	1048.4	966.0	914.5	875.8	829.5	807.1	793.4	785.7	771.1	768.5
40°	977.2	899.0	842.4	790.8	766.8	741.9	725.6	719.6	716.1	711.0	705.8
42.5°	841.5	772.8	732.4	698.1	687.8	675.8	671.5	674.9	671.5	669.8	668.9
45°	726.4	674.1	645.7	635.4	632.8	629.4	632.8	638.8	639.7	638.0	638.0
47.5°	621.7	596.8	584.8	586.5	590.8	593.3	599.3	607.1	608.8	604.5	606.2
50°	553.0	538.4	535.8	542.7	552.1	555.6	562.4	568.4	567.6	565.9	564.1
52.5°	488.6	484.3	491.2	498.0	508.3	510.0	512.6	515.2	514.3	510.9	509.2
55°	434.5	437.9	443.9	446.5	454.2	453.4	454.2	454.2	450.8	449.1	446.5
57.5°	385.5	386.4	389.8	390.7	395.0	393.3	392.4	390.7	385.5	384.7	382.1
60°	335.7	334.0	341.7	335.7	339.2	335.7	334.9	330.6	325.4	324.6	322.9
62.5°	288.5	285.1	290.2	287.7	289.4	285.9	284.2	279.1	274.8	273.9	273.1
65°	246.4	244.7	249.9	249.0	250.7	246.4	244.7	241.3	237.9	237.0	236.1
67.5°	211.2	215.5	218.1	218.1	219.8	219.0	214.7	213.8	212.9	209.5	209.5
70°	185.5	188.0	193.2	194.1	193.2	194.9	191.5	190.6	189.8	188.0	187.2
72.5°	164.9	168.3	173.5	174.3	173.5	173.5	171.7	170.9	170.9	168.3	168.3
75°	148.5	152.8	157.1	157.1	157.1	155.4	153.7	153.7	152.0	151.1	149.4
77.5°	134.8	140.0	143.4	142.5	141.7	140.0	140.0	137.4	134.8	134.8	133.1
80°	124.5	127.9	130.5	129.7	128.8	126.2	125.4	122.8	121.1	118.5	118.5
82.5°	113.3	117.6	119.4	118.5	116.8	114.2	113.3	111.6	109.9	109.1	107.3
85°	103.9	108.2	109.1	107.3	105.6	103.9	103.0	102.2	101.3	99.6	99.6
87.5°	94.5	98.7	98.7	97.9	96.2	95.3	94.5	93.6	92.7	91.9	91.0
90°	86.7	90.2	90.2	89.3	88.4	87.6	86.7	85.9	85.0	84.1	84.1
92.5°	79.0	82.4	82.4	81.6	80.7	79.9	79.9	79.0	78.1	77.3	76.4
95°	72.1	75.6	75.6	75.6	74.7	73.8	73.8	73.0	72.1	72.1	71.3
97.5°	65.3	68.7	68.7	68.7	67.8	67.0	67.0	66.1	66.1	66.1	65.3
100°	59.2	61.8	62.7	62.7	61.8	61.8	61.8	61.0	61.0	61.0	60.1
102.5°	53.2	55.8	57.5	57.5	57.5	56.7	56.7	56.7	56.7	56.7	55.8
105°	48.1	50.7	52.4	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2
107.5°	43.8	46.4	48.1	48.9	49.8	49.8	50.7	50.7	50.7	50.7	50.7
110°	39.5	42.1	44.7	45.5	46.4	47.2	47.2	48.1	47.2	47.2	47.2

TEST NUMBER: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	35.2	38.6	40.4	42.1	42.9	43.8	44.7	44.7	44.7	44.7	44.7
115°	31.8	35.2	36.9	38.6	40.4	41.2	41.2	42.1	42.1	42.1	41.2
117.5°	28.3	31.8	33.5	35.2	36.1	37.8	38.6	38.6	38.6	38.6	37.8
120°	25.8	28.3	30.1	31.8	33.5	34.3	35.2	35.2	35.2	35.2	35.2
122.5°	22.3	24.9	27.5	29.2	30.1	30.9	31.8	31.8	31.8	31.8	31.8
125°	19.7	22.3	24.0	25.8	26.6	28.3	28.3	28.3	28.3	28.3	28.3
127.5°	17.2	19.7	21.5	23.2	24.0	24.9	25.8	25.8	25.8	25.8	25.8
130°	14.6	17.2	18.9	20.6	21.5	22.3	22.3	23.2	23.2	23.2	23.2
132.5°	12.9	14.6	16.3	18.0	18.9	19.7	19.7	20.6	20.6	20.6	20.6
135°	10.3	12.9	13.7	15.5	16.3	17.2	17.2	18.0	18.0	18.0	18.0
137.5°	8.6	10.3	12.0	13.7	14.6	14.6	15.5	15.5	16.3	16.3	16.3
140°	6.9	7.7	10.3	11.2	12.0	12.9	13.7	13.7	13.7	13.7	13.7
142.5°	5.2	6.9	7.7	9.4	10.3	11.2	12.0	12.0	12.0	12.0	12.0
145°	4.3	5.2	6.0	7.7	8.6	9.4	10.3	10.3	10.3	10.3	10.3
147.5°	3.4	4.3	5.2	6.0	6.9	7.7	8.6	8.6	8.6	8.6	8.6
150°	2.6	3.4	4.3	4.3	5.2	6.0	6.9	7.7	7.7	7.7	7.7
152.5°	2.6	2.6	3.4	3.4	4.3	5.2	6.0	6.0	6.0	6.0	6.0
155°	1.7	2.6	2.6	2.6	3.4	3.4	4.3	5.2	5.2	5.2	5.2
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: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4
2.5°	1662.4	1665.8	1664.1	1661.5	1660.7	1665.0	1660.7	1640.9	1648.6	1649.5	1655.5
5°	1659.8	1662.4	1660.7	1658.9	1656.4	1661.5	1656.4	1635.8	1643.5	1644.3	1650.4
7.5°	1677.0	1677.8	1677.8	1673.5	1666.7	1669.2	1662.4	1639.2	1643.5	1643.5	1647.8
10°	1719.9	1721.6	1724.2	1713.0	1704.5	1697.6	1688.1	1659.8	1658.9	1652.1	1652.1
12.5°	1775.7	1771.4	1767.1	1762.0	1755.1	1746.5	1732.8	1699.3	1688.1	1677.0	1665.8
15°	1792.0	1790.3	1789.5	1786.9	1782.6	1780.0	1769.7	1736.2	1719.9	1706.2	1686.4
17.5°	1749.1	1752.5	1763.7	1764.6	1769.7	1780.0	1778.3	1755.1	1740.5	1734.5	1710.5
20°	1671.8	1672.7	1686.4	1692.4	1714.8	1731.9	1744.8	1742.2	1738.8	1745.7	1727.6
22.5°	1579.1	1585.1	1599.7	1609.1	1630.6	1650.4	1671.0	1682.1	1700.2	1728.5	1725.1
25°	1452.9	1460.6	1481.2	1496.7	1526.7	1556.8	1584.2	1604.0	1625.5	1679.6	1697.6
27.5°	1301.7	1313.8	1340.4	1355.8	1397.9	1428.8	1468.3	1507.0	1537.0	1598.8	1635.8
30°	1142.9	1153.2	1181.5	1203.0	1239.1	1281.1	1330.9	1385.9	1435.7	1498.4	1544.7
32.5°	994.3	1005.5	1028.7	1047.6	1087.9	1123.1	1178.1	1245.9	1292.3	1379.0	1440.8
35°	864.7	875.0	891.3	907.6	941.1	977.2	1024.4	1090.5	1149.8	1239.9	1318.1
37.5°	773.7	775.4	784.8	794.3	819.2	846.6	883.6	942.0	996.9	1093.9	1179.8
40°	708.4	708.4	713.6	716.1	727.3	743.6	766.8	812.3	857.8	931.7	1036.4
42.5°	668.0	666.3	666.3	667.2	666.3	674.1	687.8	709.3	749.6	810.6	892.2
45°	638.0	634.6	632.0	626.0	622.5	622.5	623.4	631.1	654.3	693.8	759.9
47.5°	604.5	603.6	599.3	592.5	586.5	582.2	575.3	572.7	579.6	601.9	646.6
50°	565.9	561.6	557.3	552.1	545.3	541.0	528.1	528.9	522.9	533.2	556.4
52.5°	509.2	505.8	504.0	499.7	497.2	495.5	485.1	474.8	472.3	474.0	482.6
55°	446.5	448.2	441.4	444.8	443.9	436.2	431.9	424.2	421.6	420.7	425.0
57.5°	381.2	383.0	378.7	382.1	382.1	377.8	375.2	375.2	369.2	364.1	370.1
60°	322.0	318.6	321.1	325.4	325.4	322.9	321.1	321.1	316.8	315.1	319.4
62.5°	273.9	270.5	273.1	277.3	278.2	276.5	274.8	274.8	269.6	269.6	273.1
65°	237.0	237.9	237.0	240.4	240.4	241.3	239.6	237.9	231.8	234.4	233.6
67.5°	210.4	209.5	209.5	212.9	212.1	213.8	212.1	209.5	205.2	201.8	200.9
70°	188.0	187.2	187.2	188.9	189.8	189.8	188.9	187.2	181.2	177.7	175.2
72.5°	168.3	167.4	168.3	169.2	170.0	170.9	170.0	168.3	163.1	158.9	154.6
75°	150.3	149.4	152.0	152.0	152.8	152.8	153.7	152.8	148.5	143.4	138.2
77.5°	132.2	133.1	135.7	136.5	138.2	139.1	140.0	140.0	135.7	131.4	124.5
80°	117.6	119.4	121.1	121.9	123.6	126.2	127.1	127.9	124.5	120.2	112.5
82.5°	107.3	108.2	109.9	110.8	113.3	114.2	115.1	116.8	115.1	110.8	102.2
85°	98.7	99.6	101.3	101.3	103.0	104.8	105.6	106.5	105.6	101.3	92.7
87.5°	91.0	91.9	92.7	93.6	94.5	95.3	96.2	97.0	96.2	91.9	84.1
90°	84.1	84.1	85.0	85.0	85.9	86.7	88.4	88.4	87.6	84.1	76.4
92.5°	76.4	77.3	77.3	78.1	79.0	79.9	80.7	80.7	79.9	76.4	69.6
95°	71.3	71.3	72.1	72.1	73.0	73.0	73.8	73.8	73.0	69.6	62.7
97.5°	65.3	65.3	65.3	65.3	66.1	66.1	67.0	67.0	66.1	62.7	56.7
100°	60.1	60.1	60.1	60.1	60.1	61.0	61.0	61.0	60.1	56.7	50.7
102.5°	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	54.1	51.5	45.5
105°	53.2	53.2	53.2	52.4	52.4	52.4	51.5	51.5	48.9	46.4	41.2
107.5°	49.8	49.8	49.8	48.9	48.9	48.1	47.2	47.2	44.7	42.1	36.9
110°	47.2	47.2	47.2	46.4	45.5	44.7	43.8	42.9	40.4	36.9	32.6

TEST NUMBER: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	44.7	44.7	43.8	43.8	42.9	42.1	40.4	39.5	36.9	33.5	29.2
115°	41.2	41.2	41.2	40.4	39.5	38.6	37.8	36.1	33.5	30.1	25.8
117.5°	37.8	37.8	37.8	36.9	36.1	35.2	34.3	32.6	30.1	26.6	23.2
120°	34.3	34.3	34.3	33.5	32.6	31.8	30.9	29.2	26.6	24.0	19.7
122.5°	31.8	31.8	30.9	30.1	29.2	28.3	27.5	25.8	24.0	20.6	17.2
125°	28.3	28.3	27.5	27.5	26.6	25.8	24.9	23.2	20.6	18.0	15.5
127.5°	25.8	24.9	24.9	24.9	24.0	23.2	21.5	20.6	18.0	15.5	12.9
130°	22.3	22.3	22.3	21.5	21.5	20.6	18.9	17.2	15.5	13.7	11.2
132.5°	19.7	19.7	19.7	19.7	18.9	18.0	16.3	15.5	13.7	11.2	9.4
135°	18.0	18.0	17.2	17.2	16.3	15.5	14.6	12.9	11.2	9.4	7.7
137.5°	15.5	15.5	15.5	14.6	14.6	13.7	12.0	11.2	10.3	8.6	6.9
140°	13.7	13.7	12.9	12.9	12.0	12.0	11.2	9.4	8.6	6.9	6.0
142.5°	12.0	12.0	11.2	11.2	10.3	10.3	9.4	8.6	6.9	6.0	4.3
145°	10.3	10.3	9.4	9.4	9.4	8.6	7.7	6.9	6.0	5.2	4.3
147.5°	8.6	8.6	8.6	7.7	7.7	6.9	6.9	6.0	5.2	4.3	3.4
150°	7.7	7.7	6.9	6.9	6.9	6.0	5.2	5.2	4.3	3.4	2.6
152.5°	6.0	6.0	6.0	6.0	5.2	5.2	4.3	4.3	3.4	2.6	2.6
155°	5.2	5.2	5.2	4.3	4.3	4.3	3.4	3.4	2.6	2.6	1.7
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: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4	1662.4
2.5°	1652.9	1652.1	1659.8	1658.9	1648.6	1664.1	1674.4
5°	1648.6	1647.8	1654.6	1656.4	1645.2	1661.5	1672.7
7.5°	1645.2	1644.3	1652.1	1654.6	1643.5	1658.1	1670.1
10°	1646.1	1641.8	1648.6	1650.4	1640.1	1655.5	1665.8
12.5°	1652.1	1641.8	1644.3	1644.3	1634.9	1648.6	1659.8
15°	1666.7	1645.2	1641.8	1639.2	1627.2	1640.1	1651.2
17.5°	1683.0	1653.8	1641.8	1633.2	1618.6	1629.7	1641.8
20°	1699.3	1663.2	1643.5	1629.7	1610.0	1620.3	1628.9
22.5°	1707.0	1671.8	1645.2	1624.6	1599.7	1604.8	1614.3
25°	1696.7	1668.4	1641.8	1616.9	1586.8	1587.7	1595.4
27.5°	1658.9	1651.2	1634.0	1609.1	1576.5	1572.2	1578.2
30°	1594.5	1616.0	1616.9	1598.8	1564.5	1555.9	1558.5
32.5°	1504.4	1552.5	1580.8	1577.4	1547.3	1535.3	1537.0
35°	1400.5	1460.6	1522.4	1543.0	1521.6	1512.1	1508.7
37.5°	1276.0	1356.7	1439.1	1489.8	1486.4	1480.3	1476.9
40°	1138.6	1235.6	1333.5	1414.2	1439.1	1439.1	1440.8
42.5°	991.8	1105.1	1212.4	1314.6	1373.0	1385.9	1391.0
45°	850.1	964.3	1081.1	1198.7	1276.8	1317.2	1331.8
47.5°	721.3	836.3	947.1	1075.9	1179.8	1232.2	1255.4
50°	611.4	697.2	814.0	942.0	1055.3	1119.7	1165.2
52.5°	520.4	587.3	689.5	808.9	923.1	1011.5	1053.6
55°	443.9	489.4	576.2	679.2	788.3	880.1	929.1
57.5°	379.5	415.6	474.8	560.7	652.6	743.6	796.0
60°	322.9	347.8	388.1	456.0	534.1	612.2	662.9
62.5°	273.9	290.2	316.8	366.7	427.6	488.6	535.8
65°	236.1	243.0	257.6	288.5	334.9	381.2	421.6
67.5°	199.2	203.5	214.7	233.6	256.7	290.2	316.8
70°	171.7	171.7	172.6	183.8	195.8	217.2	236.1
72.5°	149.4	146.8	141.7	144.3	146.8	158.9	170.9
75°	131.4	125.4	116.8	113.3	111.6	113.3	120.2
77.5°	115.9	107.3	97.0	88.4	81.6	79.0	85.0
80°	103.0	92.7	80.7	69.6	58.4	52.4	55.0
82.5°	92.7	79.9	67.0	54.1	41.2	32.6	32.6
85°	81.6	69.6	55.8	42.1	29.2	18.0	16.3
87.5°	73.8	61.0	46.4	33.5	20.6	9.4	5.2
90°	66.1	53.2	39.5	26.6	14.6	4.3	0.0
92.5°	59.2	47.2	34.3	21.5	10.3	2.6	0.0
95°	53.2	42.1	29.2	18.0	8.6	1.7	0.9
97.5°	47.2	36.9	25.8	14.6	6.0	1.7	0.9
100°	42.9	32.6	22.3	12.0	5.2	0.9	0.9
102.5°	37.8	29.2	18.9	10.3	4.3	0.9	0.9
105°	33.5	25.8	16.3	8.6	3.4	0.9	0.9
107.5°	30.1	22.3	14.6	7.7	3.4	0.9	0.9
110°	26.6	19.7	12.9	6.9	2.6	0.9	0.9

TEST NUMBER: P1213431

CATALOG NUMBER: 4SNLED-LD5-46SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	24.0	17.2	11.2	6.0	1.7	0.9	0.9
115°	20.6	15.5	9.4	5.2	1.7	0.9	0.9
117.5°	18.0	12.9	8.6	4.3	1.7	0.9	0.9
120°	15.5	11.2	6.9	3.4	0.9	0.9	0.9
122.5°	13.7	9.4	6.0	3.4	0.9	0.9	0.9
125°	12.0	8.6	5.2	2.6	0.9	0.9	0.9
127.5°	10.3	6.9	4.3	1.7	0.9	0.9	0.9
130°	8.6	6.0	3.4	1.7	0.9	0.9	0.9
132.5°	6.9	5.2	3.4	1.7	0.9	0.9	0.9
135°	6.0	4.3	2.6	1.7	0.9	0.9	0.9
137.5°	5.2	3.4	1.7	1.7	1.7	0.9	0.9
140°	4.3	2.6	1.7	1.7	1.7	1.7	0.9
142.5°	3.4	2.6	1.7	1.7	1.7	1.7	0.9
145°	2.6	1.7	1.7	1.7	1.7	1.7	0.9
147.5°	2.6	1.7	1.7	1.7	1.7	1.7	0.9
150°	1.7	1.7	1.7	1.7	1.7	1.7	1.7
152.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7
155°	1.7	1.7	1.7	1.7	1.7	1.7	1.7
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)