

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: P1213707

Luminaire Tested: 2SNLED-LD5-46HL-LC-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213707
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: 2SNLED-LD5-46HL-LC-UNV-L940-CD1-U
Description: 2FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

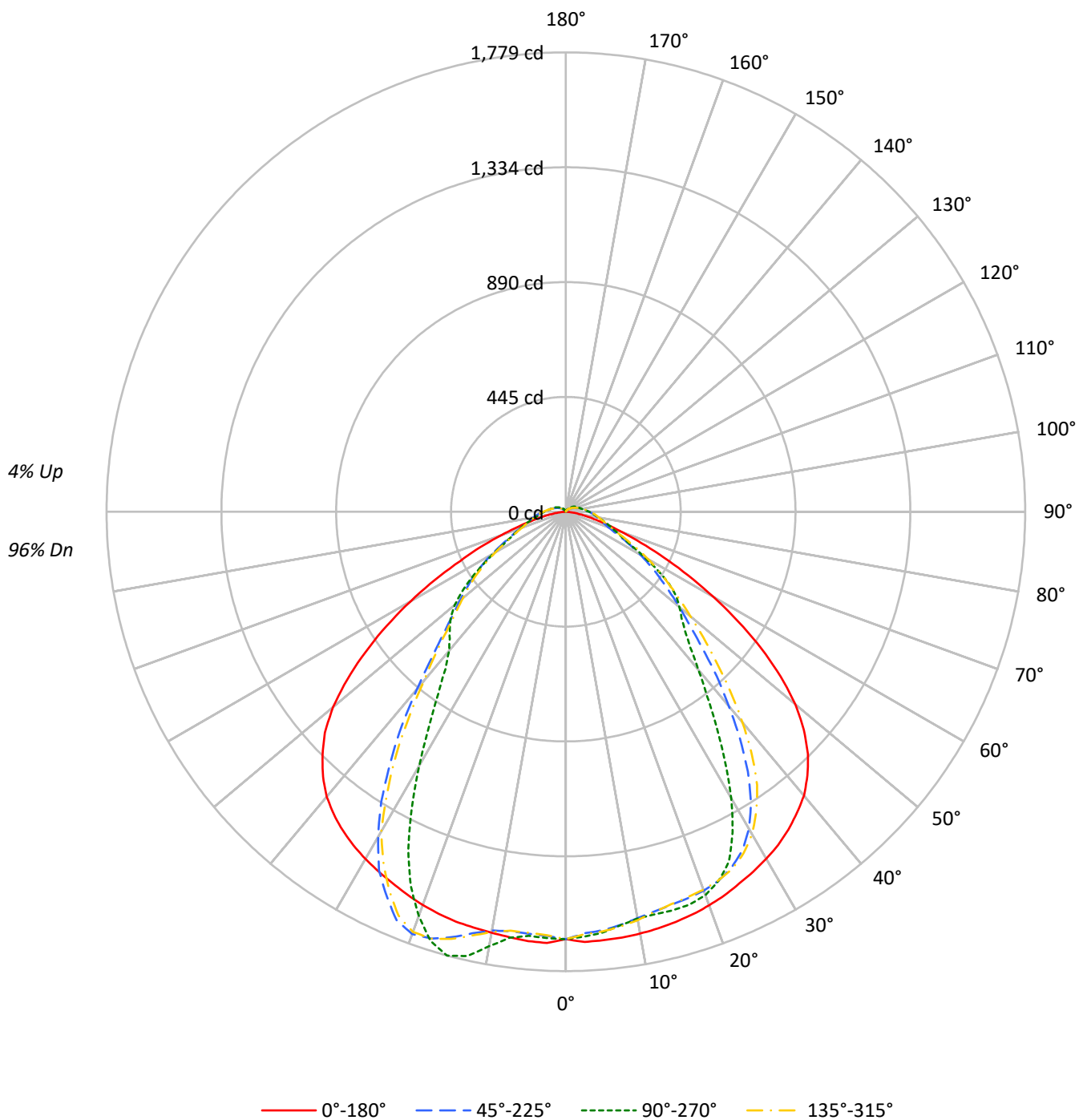
Lumens per Lamp: N/A
Luminaire Lumens: 3946.0 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.12')
CIE Type: Direct

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	115	115	115	115	109	109	109	103	103	103	98	98	98	98	98	96
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	84	84	84	82
2	100	93	86	81	97	90	85	80	86	82	77	82	79	75	79	76	73	73	73	71
3	92	83	75	69	89	81	74	68	77	71	67	74	69	65	71	67	63	63	63	61
4	85	74	66	60	83	73	65	59	70	63	58	67	61	57	64	60	56	56	56	54
5	79	67	59	52	76	66	58	52	63	56	51	61	55	50	59	53	49	49	49	47
6	73	61	52	46	71	60	52	46	57	51	45	55	49	45	54	48	44	44	44	42
7	68	55	47	42	66	54	47	41	53	46	41	51	45	40	49	44	40	40	40	38
8	64	51	43	37	62	50	42	37	48	42	37	47	41	36	45	40	36	36	36	34
9	60	47	39	34	58	46	39	34	45	38	33	43	37	33	42	37	33	33	33	31
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30	30	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	26751	26751	26751	26751
5°	26874	25692	26929	25893
10°	26925	24623	26868	26295
15°	27056	24294	27043	27049
20°	27275	23908	27246	25202
25°	27527	22681	27511	21916
30°	27952	19657	27966	17415
35°	28396	15896	28477	13452
40°	28761	12799	28879	11276
45°	28527	10842	28673	10558
50°	27149	9980	27531	9758
55°	23931	8972	24529	8156
60°	19250	6866	20274	6298
65°	14157	5252	15253	4981
70°	9481	4534	10687	4336
75°	6061	4091	7058	3870
80°	3759	3814	4405	3510
85°	1752	3807	2315	3477

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 28673 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.2	4.0
10°-20°	467.8	11.9
20°-30°	711.2	18.0
30°-40°	763.0	19.3
40°-50°	662.2	16.8
50°-60°	490.7	12.4
60°-70°	281.2	7.1
70°-80°	155.7	3.9
80°-90°	94.8	2.4
90°-100°	61.7	1.6
100°-110°	41.3	1.0
110°-120°	27.9	0.7
120°-130°	17.1	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°	1336.2	33.9
0°-40°	2099.2	53.2
0°-60°	3252.1	82.4
0°-90°	3783.8	95.9
90°-120°	130.8	3.3
90°-150°	161.0	4.1
90°-180°	162.0	4.1
0°-180°	3946.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1655	1655	1655	1655	1655	
5°	1666	1636	1669	1648	1666	159
15°	1644	1598	1643	1779	1644	465
25°	1589	1494	1588	1444	1589	734
35°	1502	1017	1506	861	1502	940
45°	1326	652	1333	635	1326	1015
55°	925	489	948	445	925	820
65°	420	248	452	235	420	423
75°	120	157	139	149	120	137
85°	16	109	21	99	16	21
90°	0	91	2	84	0	1
95°	1	74	0	71	1	1
105°	1	56	1	53	1	1
115°	1	45	1	41	1	1
125°	1	34	1	28	1	1
135°	1	21	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	0

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2
2.5°	1667.2	1662.9	1661.2	1657.8	1660.4	1670.6	1663.8	1652.7	1653.5	1633.9	1644.1
5°	1665.5	1660.4	1657.8	1654.4	1656.1	1665.5	1658.7	1647.6	1646.7	1627.0	1636.4
7.5°	1662.9	1657.8	1653.5	1651.0	1651.8	1659.5	1651.0	1638.1	1635.6	1614.2	1622.8
10°	1658.7	1655.2	1649.3	1645.0	1644.1	1652.7	1639.0	1626.2	1620.2	1598.0	1606.5
12.5°	1652.7	1647.6	1641.6	1633.9	1633.0	1638.1	1627.0	1609.1	1603.1	1585.1	1594.5
15°	1644.1	1638.1	1631.3	1622.8	1618.5	1621.9	1608.2	1592.0	1591.1	1575.7	1588.6
17.5°	1634.7	1626.2	1618.5	1606.5	1600.5	1603.1	1592.0	1577.4	1579.2	1569.7	1584.3
20°	1621.9	1612.5	1600.5	1588.6	1580.0	1584.3	1576.6	1565.5	1568.0	1561.2	1574.0
22.5°	1607.4	1594.5	1580.0	1566.3	1559.5	1565.5	1559.5	1550.1	1550.9	1546.7	1554.4
25°	1588.6	1574.0	1556.9	1539.8	1536.4	1540.7	1537.3	1529.6	1526.1	1519.3	1522.7
27.5°	1571.5	1555.2	1533.8	1515.9	1509.9	1518.4	1510.8	1497.9	1488.5	1479.1	1472.3
30°	1551.8	1532.1	1508.2	1487.7	1482.5	1486.0	1474.8	1455.2	1430.4	1418.4	1399.6
32.5°	1530.4	1504.8	1474.8	1451.8	1448.3	1445.8	1425.3	1397.0	1358.6	1334.6	1305.6
35°	1502.2	1474.0	1438.1	1409.9	1404.7	1390.2	1356.9	1319.2	1269.6	1228.6	1179.0
37.5°	1470.6	1437.2	1399.6	1362.0	1347.5	1318.4	1271.4	1232.0	1156.8	1107.2	1047.4
40°	1434.7	1394.5	1348.3	1303.0	1279.1	1232.0	1178.2	1120.0	1047.4	980.7	930.2
42.5°	1385.1	1342.3	1287.6	1237.2	1196.1	1133.7	1070.4	988.4	921.7	865.2	813.9
45°	1326.1	1274.8	1211.5	1150.8	1098.7	1024.3	949.9	867.8	812.2	746.4	711.3
47.5°	1250.0	1194.4	1126.9	1059.3	990.9	908.8	831.0	752.4	696.8	649.8	624.1
50°	1160.2	1108.9	1034.5	954.2	878.9	793.4	715.6	656.6	602.8	573.7	554.0
52.5°	1049.1	1001.2	925.1	837.9	765.2	681.4	610.5	562.6	524.1	502.7	495.9
55°	925.1	883.2	808.0	726.7	652.4	575.4	521.5	479.6	454.9	442.0	442.9
57.5°	792.6	760.1	689.1	616.4	546.3	488.2	439.5	406.1	387.3	386.5	389.0
60°	660.0	636.1	574.5	512.1	450.6	403.6	367.6	344.6	332.6	333.4	332.6
62.5°	533.5	511.3	466.8	415.5	366.8	335.2	302.7	293.3	283.0	282.1	282.1
65°	419.8	402.7	366.8	330.0	293.3	272.7	256.5	245.4	237.7	236.0	236.8
67.5°	315.5	308.6	283.9	259.1	236.0	223.2	209.5	206.9	200.9	200.9	202.6
70°	235.1	230.0	216.3	201.8	192.4	183.8	177.0	177.0	176.1	175.3	179.5
72.5°	170.1	171.0	166.7	155.6	154.8	153.0	151.3	153.9	154.8	157.3	162.4
75°	119.7	122.3	122.3	120.6	124.0	128.2	130.8	135.1	140.2	143.6	149.6
77.5°	84.6	84.6	88.9	94.0	100.9	108.6	115.4	121.4	128.2	132.5	137.7
80°	54.7	57.3	64.1	73.5	82.9	93.2	102.6	110.3	117.1	124.0	127.4
82.5°	32.5	36.8	45.3	57.3	69.3	82.1	91.5	100.9	108.6	115.4	118.0
85°	16.2	22.2	32.5	45.3	58.1	71.8	83.8	92.3	100.9	106.9	110.3
87.5°	5.1	12.0	23.1	35.1	48.7	62.4	75.2	84.6	92.3	97.5	100.9
90°	0.0	6.0	16.2	29.1	41.9	55.6	67.5	77.8	85.5	89.8	92.3
92.5°	0.0	3.4	12.8	23.9	35.9	49.6	61.6	71.0	77.8	82.1	83.8
95°	0.9	2.6	9.4	19.7	31.6	44.5	55.6	64.1	71.0	75.2	76.1
97.5°	0.9	1.7	7.7	16.2	27.4	39.3	50.4	59.0	64.1	68.4	69.3
100°	0.9	1.7	6.0	14.5	23.9	35.1	45.3	53.0	59.0	62.4	63.3
102.5°	0.9	0.9	5.1	12.0	21.4	30.8	40.2	47.9	53.0	56.4	58.1
105°	0.9	0.9	4.3	10.3	18.8	27.4	35.9	43.6	47.9	51.3	53.0
107.5°	0.9	0.9	3.4	8.5	16.2	23.9	32.5	38.5	43.6	47.0	48.7
110°	0.9	0.9	2.6	7.7	13.7	21.4	28.2	34.2	39.3	42.7	44.5

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.9	0.9	2.6	6.8	12.0	18.8	24.8	30.8	35.1	38.5	41.0
115°	0.9	0.9	2.6	6.0	11.1	16.2	22.2	27.4	31.6	35.1	37.6
117.5°	0.9	0.9	2.6	5.1	9.4	14.5	19.7	24.8	28.2	31.6	34.2
120°	0.9	0.9	1.7	4.3	8.5	12.8	17.1	21.4	25.6	29.1	31.6
122.5°	0.9	0.9	1.7	4.3	6.8	11.1	15.4	18.8	23.1	25.6	28.2
125°	0.9	0.9	1.7	3.4	6.0	10.3	13.7	17.1	19.7	23.1	25.6
127.5°	0.9	0.9	1.7	3.4	5.1	8.5	12.0	15.4	18.0	20.5	22.2
130°	0.9	0.9	1.7	2.6	4.3	6.8	10.3	12.8	16.2	18.0	19.7
132.5°	0.9	0.9	0.9	2.6	3.4	5.1	7.7	11.1	13.7	16.2	17.1
135°	0.9	0.9	0.9	1.7	3.4	4.3	6.0	8.5	11.1	13.7	15.4
137.5°	0.9	0.9	0.9	1.7	2.6	4.3	5.1	6.8	9.4	11.1	13.7
140°	0.9	0.9	0.9	1.7	2.6	3.4	4.3	6.0	7.7	9.4	11.1
142.5°	0.9	0.9	0.9	1.7	1.7	2.6	3.4	5.1	6.0	7.7	9.4
145°	0.9	0.9	0.9	1.7	1.7	2.6	3.4	4.3	5.1	6.0	7.7
147.5°	0.9	0.9	0.9	1.7	1.7	1.7	2.6	3.4	4.3	5.1	6.0
150°	1.7	1.7	1.7	1.7	1.7	1.7	2.6	2.6	3.4	4.3	5.1
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

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2
2.5°	1640.7	1642.4	1652.7	1651.8	1650.1	1648.4	1648.4	1646.7	1648.4	1652.7	1651.0
5°	1632.2	1634.7	1642.4	1641.6	1639.9	1639.0	1638.1	1635.6	1637.3	1643.3	1641.6
7.5°	1616.8	1619.3	1626.2	1622.8	1620.2	1621.9	1617.6	1615.1	1618.5	1624.5	1623.6
10°	1600.5	1602.2	1610.8	1609.1	1604.8	1605.7	1601.4	1599.7	1603.9	1607.4	1608.2
12.5°	1589.4	1595.4	1603.1	1602.2	1601.4	1602.2	1598.0	1596.3	1598.8	1602.2	1601.4
15°	1586.8	1594.5	1603.1	1603.1	1603.9	1604.8	1600.5	1598.0	1600.5	1603.1	1602.2
17.5°	1584.3	1593.7	1601.4	1600.5	1601.4	1603.1	1596.3	1594.5	1598.0	1601.4	1599.7
20°	1575.7	1584.3	1589.4	1587.7	1587.7	1588.6	1580.0	1580.0	1585.1	1587.7	1588.6
22.5°	1551.8	1562.1	1562.1	1557.8	1557.8	1554.4	1551.8	1546.7	1552.6	1556.9	1560.3
25°	1515.9	1520.2	1515.0	1505.6	1500.5	1496.2	1484.3	1494.5	1494.5	1507.3	1511.6
27.5°	1465.4	1456.0	1441.5	1421.8	1417.6	1403.9	1396.2	1398.8	1403.0	1421.0	1434.7
30°	1382.5	1354.3	1329.5	1320.9	1302.1	1288.5	1274.8	1281.6	1289.3	1299.6	1327.8
32.5°	1273.1	1245.7	1205.5	1191.0	1171.3	1154.2	1138.0	1148.2	1161.9	1168.8	1199.5
35°	1147.4	1114.9	1078.1	1053.3	1032.8	1023.4	1002.9	1017.4	1032.0	1037.1	1063.6
37.5°	1014.0	980.7	948.2	926.8	907.1	901.2	887.5	897.7	908.8	916.5	938.8
40°	887.5	856.7	831.9	817.4	803.7	798.6	793.4	797.7	806.2	812.2	829.3
42.5°	778.9	754.1	737.0	728.4	719.0	712.2	713.1	714.8	719.0	731.9	739.6
45°	684.0	669.5	658.3	656.6	650.6	649.8	648.9	652.4	654.9	662.6	668.6
47.5°	607.9	601.9	599.3	602.8	605.3	601.9	603.6	607.9	613.0	613.0	612.2
50°	548.0	549.8	553.2	560.9	566.0	567.7	569.4	574.5	575.4	577.1	574.5
52.5°	499.3	501.0	510.4	522.4	528.4	530.9	534.4	539.5	539.5	541.2	537.8
55°	449.7	452.3	461.7	473.7	478.8	482.2	485.6	489.1	491.6	495.0	492.5
57.5°	395.0	402.7	408.7	412.1	415.5	418.1	420.7	421.5	426.6	427.5	431.8
60°	336.9	338.6	344.6	343.7	341.1	348.0	344.6	350.5	356.5	364.2	365.1
62.5°	281.3	282.1	286.4	284.7	288.1	287.3	289.8	289.8	294.1	297.5	301.8
65°	237.7	238.5	242.0	242.0	241.1	243.7	246.2	247.9	247.9	250.5	253.9
67.5°	205.2	207.8	211.2	212.9	214.6	214.6	217.2	218.0	219.7	220.6	222.3
70°	183.0	186.4	189.8	191.5	192.4	194.1	194.9	194.9	196.6	197.5	199.2
72.5°	166.7	170.1	172.7	172.7	174.4	175.3	175.3	176.1	177.0	178.7	180.4
75°	153.0	155.6	157.3	156.5	156.5	156.5	157.3	157.3	159.0	160.7	162.4
77.5°	140.2	142.8	142.8	141.1	141.1	141.1	141.1	141.9	142.8	144.5	146.2
80°	130.8	130.8	130.0	130.0	128.2	127.4	127.4	128.2	128.2	130.0	132.5
82.5°	120.6	120.6	119.7	118.8	118.0	117.1	117.1	118.0	118.8	119.7	121.4
85°	111.1	111.1	109.4	109.4	108.6	108.6	108.6	108.6	109.4	110.3	112.0
87.5°	101.7	100.9	100.0	99.2	99.2	99.2	99.2	99.2	100.0	101.7	102.6
90°	92.3	91.5	90.6	90.6	89.8	89.8	90.6	90.6	91.5	92.3	93.2
92.5°	83.8	82.9	82.1	82.1	81.2	81.2	82.1	81.2	82.9	82.9	83.8
95°	76.1	75.2	74.4	74.4	74.4	74.4	74.4	74.4	75.2	75.2	76.1
97.5°	69.3	68.4	67.5	67.5	68.4	67.5	68.4	68.4	68.4	69.3	70.1
100°	63.3	62.4	62.4	63.3	62.4	62.4	63.3	63.3	63.3	63.3	64.1
102.5°	58.1	58.1	58.1	58.1	58.1	58.1	59.0	59.0	59.0	59.0	59.8
105°	53.0	53.9	53.9	53.9	54.7	54.7	54.7	55.6	55.6	55.6	55.6
107.5°	49.6	50.4	50.4	51.3	51.3	52.2	52.2	52.2	52.2	53.0	53.0
110°	46.2	47.0	47.9	48.7	48.7	49.6	49.6	49.6	49.6	49.6	49.6

TEST NUMBER: P1213707

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	42.7	43.6	44.5	46.2	47.0	47.0	47.0	47.0	47.9	47.9	47.0
115°	39.3	41.0	41.9	43.6	44.5	44.5	45.3	45.3	45.3	45.3	44.5
117.5°	35.9	38.5	39.3	41.0	41.9	41.9	42.7	42.7	42.7	42.7	41.9
120°	33.3	35.1	36.8	37.6	38.5	39.3	39.3	40.2	40.2	40.2	39.3
122.5°	30.8	32.5	34.2	35.1	35.9	36.8	36.8	36.8	36.8	36.8	36.8
125°	27.4	29.1	30.8	31.6	32.5	33.3	33.3	34.2	34.2	34.2	33.3
127.5°	24.8	26.5	27.4	29.1	29.9	29.9	30.8	30.8	30.8	30.8	29.9
130°	21.4	23.1	24.8	25.6	26.5	26.5	27.4	27.4	27.4	27.4	27.4
132.5°	18.8	20.5	21.4	23.1	23.1	23.9	23.9	24.8	24.8	24.8	23.9
135°	17.1	18.0	18.8	20.5	20.5	21.4	21.4	21.4	21.4	21.4	21.4
137.5°	15.4	16.2	17.1	18.0	18.0	18.8	18.8	18.8	18.8	19.7	18.8
140°	12.8	14.5	15.4	15.4	16.2	16.2	16.2	17.1	17.1	17.1	16.2
142.5°	11.1	12.0	12.8	13.7	14.5	14.5	14.5	14.5	15.4	14.5	14.5
145°	8.5	10.3	11.1	12.0	12.8	12.8	12.8	12.8	12.8	12.8	12.8
147.5°	6.8	7.7	9.4	10.3	10.3	11.1	11.1	11.1	11.1	11.1	11.1
150°	6.0	6.0	7.7	8.5	9.4	9.4	9.4	9.4	9.4	9.4	9.4
152.5°	4.3	5.1	6.0	6.8	7.7	7.7	7.7	7.7	7.7	7.7	7.7
155°	4.3	4.3	5.1	5.1	6.0	6.0	6.0	6.0	6.8	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: P1213707

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2
2.5°	1648.4	1647.6	1651.0	1647.6	1630.5	1637.3	1634.7	1644.1	1645.0	1647.6	1656.1
5°	1639.9	1639.9	1644.1	1640.7	1624.5	1631.3	1630.5	1639.9	1641.6	1643.3	1652.7
7.5°	1622.8	1623.6	1629.6	1627.0	1609.9	1620.2	1619.3	1630.5	1633.9	1637.3	1645.8
10°	1606.5	1605.7	1612.5	1609.9	1593.7	1605.7	1604.8	1615.9	1621.0	1627.0	1637.3
12.5°	1598.0	1595.4	1598.0	1595.4	1577.4	1586.8	1587.7	1600.5	1606.5	1614.2	1626.2
15°	1598.0	1593.7	1593.7	1588.6	1568.0	1574.0	1574.9	1583.4	1591.1	1598.8	1613.4
17.5°	1596.3	1592.0	1591.1	1586.8	1564.6	1564.6	1563.8	1569.7	1574.0	1581.7	1597.1
20°	1586.8	1585.1	1584.3	1581.7	1561.2	1557.8	1556.1	1556.1	1558.6	1561.2	1576.6
22.5°	1562.1	1563.8	1565.5	1567.2	1550.9	1545.0	1545.8	1544.1	1541.5	1541.5	1554.4
25°	1515.9	1524.4	1531.3	1539.0	1529.6	1525.3	1530.4	1527.9	1523.6	1520.2	1531.3
27.5°	1442.4	1460.3	1474.8	1493.7	1494.5	1491.1	1504.8	1503.1	1502.2	1497.1	1505.6
30°	1340.6	1368.8	1388.5	1415.9	1438.9	1442.4	1465.4	1468.9	1472.3	1469.7	1478.3
32.5°	1217.5	1256.0	1289.3	1332.1	1354.3	1374.0	1406.4	1420.1	1433.8	1438.1	1447.5
35°	1083.3	1126.9	1166.2	1213.2	1248.3	1291.0	1330.4	1350.9	1381.7	1393.6	1407.3
37.5°	955.9	996.9	1035.4	1082.4	1138.8	1183.3	1232.0	1278.2	1320.1	1337.2	1357.7
40°	843.0	876.4	913.1	954.2	1005.5	1063.6	1116.6	1180.7	1230.3	1264.5	1294.4
42.5°	757.5	773.8	805.4	842.2	883.2	942.2	996.1	1067.9	1127.7	1176.5	1226.0
45°	681.4	689.1	712.2	731.9	773.8	825.9	883.2	953.3	1015.7	1078.1	1138.0
47.5°	616.4	625.8	637.0	648.9	678.9	722.5	772.0	835.3	897.7	970.4	1038.8
50°	572.8	575.4	577.1	582.2	600.2	630.1	670.3	724.2	784.0	861.8	934.5
52.5°	534.4	534.4	529.2	526.7	533.5	552.3	575.4	613.9	675.4	747.3	824.2
55°	493.3	485.6	483.9	475.4	477.1	485.6	496.7	526.7	577.1	638.7	713.1
57.5°	436.0	432.6	432.6	429.2	422.4	426.6	429.2	450.6	486.5	539.5	604.5
60°	370.2	368.5	372.8	373.6	367.6	370.2	369.4	382.2	407.8	450.6	504.4
62.5°	304.4	312.1	312.9	316.3	312.9	312.1	316.3	327.5	340.3	372.8	414.7
65°	255.6	259.9	260.8	265.0	263.3	263.3	266.8	275.3	283.0	305.2	337.7
67.5°	224.0	222.3	223.2	225.7	223.2	222.3	224.9	230.0	236.0	249.7	272.7
70°	199.2	197.5	197.5	197.5	194.1	191.5	192.4	194.1	196.6	204.3	218.9
72.5°	180.4	180.4	177.8	175.3	172.7	171.0	169.3	167.6	166.7	169.3	177.0
75°	163.3	164.2	163.3	160.7	157.3	153.9	150.5	147.1	142.8	141.1	141.9
77.5°	147.9	148.8	149.6	148.8	145.3	141.1	135.9	130.8	124.8	118.8	115.4
80°	134.2	135.9	136.8	135.9	133.4	130.0	124.0	118.0	109.4	101.7	93.2
82.5°	122.3	124.8	125.7	125.7	124.0	120.6	113.7	106.9	97.5	87.2	76.1
85°	112.9	114.6	116.3	116.3	115.4	112.0	105.2	97.5	88.1	76.1	64.1
87.5°	103.5	104.3	106.0	107.7	106.0	102.6	96.6	88.1	78.7	66.7	53.0
90°	94.0	94.9	96.6	98.3	97.5	94.0	88.9	81.2	71.0	58.1	44.5
92.5°	84.6	86.4	87.2	88.1	88.9	86.4	82.1	74.4	64.1	51.3	38.5
95°	77.8	77.8	79.5	80.4	81.2	78.7	75.2	67.5	58.1	46.2	33.3
97.5°	71.0	71.0	72.7	72.7	73.5	71.8	68.4	61.6	52.2	41.0	28.2
100°	64.1	65.0	65.8	66.7	66.7	65.8	62.4	55.6	47.0	36.8	24.8
102.5°	59.8	59.8	60.7	60.7	61.6	59.8	56.4	50.4	41.9	32.5	21.4
105°	55.6	55.6	56.4	56.4	55.6	53.9	50.4	45.3	37.6	28.2	18.8
107.5°	52.2	52.2	52.2	52.2	51.3	49.6	46.2	40.2	33.3	25.6	17.1
110°	49.6	48.7	48.7	47.9	47.0	44.5	41.0	35.9	29.9	22.2	14.5

TEST NUMBER: P1213707

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	47.0	46.2	45.3	44.5	42.7	40.2	36.8	32.5	26.5	19.7	12.8
115°	44.5	43.6	42.7	41.0	39.3	36.8	33.3	29.1	23.1	17.1	11.1
117.5°	41.9	41.0	39.3	37.6	35.9	33.3	29.9	25.6	20.5	15.4	10.3
120°	38.5	37.6	36.8	35.1	33.3	29.9	26.5	23.1	18.0	13.7	8.5
122.5°	35.9	35.1	33.3	32.5	29.9	27.4	23.9	20.5	16.2	12.0	7.7
125°	32.5	31.6	30.8	29.1	27.4	23.9	21.4	18.0	14.5	10.3	6.0
127.5°	29.9	29.1	27.4	25.6	23.9	21.4	18.8	16.2	12.8	8.5	6.0
130°	26.5	25.6	24.8	23.1	21.4	18.8	17.1	13.7	11.1	7.7	5.1
132.5°	23.1	23.1	22.2	20.5	18.8	17.1	14.5	12.0	9.4	6.8	4.3
135°	21.4	20.5	19.7	18.0	17.1	14.5	12.8	10.3	7.7	6.0	3.4
137.5°	18.8	18.0	17.1	16.2	14.5	12.8	11.1	8.5	6.8	5.1	3.4
140°	16.2	15.4	15.4	13.7	12.8	11.1	9.4	7.7	6.0	4.3	2.6
142.5°	14.5	13.7	12.8	12.0	11.1	9.4	7.7	6.0	5.1	3.4	2.6
145°	12.8	12.0	11.1	10.3	9.4	7.7	6.8	5.1	4.3	3.4	2.6
147.5°	10.3	10.3	9.4	8.5	7.7	6.8	6.0	5.1	3.4	2.6	1.7
150°	8.5	8.5	7.7	6.8	6.8	6.0	5.1	4.3	3.4	2.6	1.7
152.5°	7.7	6.8	6.8	6.0	6.0	5.1	4.3	3.4	2.6	2.6	1.7
155°	6.0	6.0	6.0	5.1	5.1	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: P1213707

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2
2.5°	1657.8	1647.6	1656.1	1671.5	1669.8	1668.1	1666.4	1669.8	1680.9	1674.9	1665.5
5°	1655.2	1645.0	1654.4	1668.9	1668.1	1665.5	1663.8	1667.2	1678.3	1672.3	1662.1
7.5°	1650.1	1640.7	1647.6	1662.1	1662.1	1660.4	1658.7	1662.1	1672.3	1667.2	1657.0
10°	1641.6	1634.7	1641.6	1655.2	1656.1	1652.7	1651.0	1655.2	1665.5	1662.9	1654.4
12.5°	1634.7	1627.9	1635.6	1649.3	1650.1	1646.7	1644.1	1649.3	1662.9	1664.7	1662.1
15°	1625.3	1619.3	1628.7	1643.3	1643.3	1640.7	1640.7	1647.6	1666.4	1674.1	1678.3
17.5°	1611.6	1607.4	1618.5	1633.0	1633.9	1632.2	1633.0	1646.7	1671.5	1690.3	1702.3
20°	1594.5	1592.8	1604.8	1620.2	1622.8	1623.6	1627.9	1648.4	1682.6	1708.3	1720.2
22.5°	1574.0	1574.9	1588.6	1604.8	1608.2	1610.8	1619.3	1648.4	1691.2	1718.5	1723.6
25°	1550.9	1553.5	1568.0	1587.7	1592.0	1597.1	1611.6	1649.3	1693.7	1711.7	1703.1
27.5°	1526.1	1531.3	1550.1	1570.6	1575.7	1584.3	1603.1	1644.1	1681.8	1682.6	1651.0
30°	1500.5	1506.5	1528.7	1552.6	1561.2	1569.7	1592.8	1632.2	1652.7	1625.3	1569.7
32.5°	1471.4	1480.0	1502.2	1531.3	1541.5	1552.6	1575.7	1609.1	1601.4	1542.4	1462.9
35°	1434.7	1446.6	1472.3	1506.5	1515.9	1530.4	1546.7	1554.4	1520.2	1436.4	1346.6
37.5°	1389.3	1407.3	1437.2	1476.6	1486.8	1496.2	1500.5	1479.1	1410.7	1320.1	1226.9
40°	1337.2	1364.6	1397.0	1440.6	1450.9	1450.9	1435.5	1390.2	1303.8	1185.0	1081.6
42.5°	1273.9	1307.3	1348.3	1391.9	1402.2	1390.2	1353.4	1273.9	1175.6	1043.1	933.6
45°	1197.0	1241.4	1287.6	1332.9	1338.0	1311.5	1245.7	1144.8	1023.4	900.3	796.0
47.5°	1105.5	1163.6	1214.1	1265.4	1258.5	1214.1	1126.0	1011.4	883.2	766.9	683.1
50°	1002.9	1071.3	1127.7	1176.5	1161.9	1100.4	996.9	877.2	749.8	650.6	581.4
52.5°	893.5	972.1	1028.5	1067.9	1048.2	974.7	861.0	746.4	642.1	551.5	505.3
55°	779.7	859.3	917.4	948.2	922.5	843.0	731.0	626.7	528.4	469.4	442.0
57.5°	669.5	743.8	798.6	823.3	790.9	711.3	607.9	519.8	448.9	399.3	385.6
60°	563.4	624.1	676.3	695.1	660.0	586.5	497.6	427.5	375.3	341.1	334.3
62.5°	465.1	514.7	555.7	570.3	536.1	478.8	401.8	349.7	312.9	295.8	287.3
65°	383.9	413.0	454.9	452.3	431.8	378.8	322.3	285.6	261.6	250.5	245.4
67.5°	301.8	328.3	354.8	358.2	332.6	295.8	259.1	232.6	219.7	213.7	211.2
70°	233.4	253.1	269.3	265.0	251.4	228.3	205.2	190.7	185.5	183.0	183.0
72.5°	181.3	191.5	199.2	194.1	185.5	173.6	162.4	156.5	157.3	159.0	160.7
75°	140.2	142.8	144.5	139.4	137.7	130.0	129.1	130.0	135.1	140.2	142.8
77.5°	107.7	104.3	101.7	96.6	97.5	96.6	100.9	107.7	115.4	123.1	130.0
80°	82.9	75.2	69.3	64.1	66.7	71.0	79.5	89.8	100.0	108.6	117.1
82.5°	64.1	53.0	44.5	39.3	44.5	51.3	62.4	75.2	87.2	96.6	106.0
85°	49.6	36.8	26.5	21.4	26.5	36.8	48.7	63.3	76.1	86.4	95.8
87.5°	38.5	26.5	14.5	8.5	14.5	25.6	39.3	53.0	65.8	77.8	87.2
90°	30.8	18.0	6.8	1.7	7.7	18.0	30.8	44.5	57.3	70.1	79.5
92.5°	24.8	12.8	3.4	0.0	4.3	13.7	25.6	38.5	51.3	63.3	72.7
95°	20.5	10.3	2.6	0.0	3.4	10.3	20.5	33.3	45.3	57.3	65.0
97.5°	17.1	7.7	1.7	0.0	1.7	8.5	17.1	28.2	40.2	51.3	59.0
100°	14.5	6.8	1.7	0.0	1.7	6.8	14.5	24.8	35.1	45.3	53.0
102.5°	12.0	5.1	0.9	0.9	0.9	5.1	12.8	21.4	30.8	40.2	47.9
105°	11.1	4.3	0.9	0.9	0.9	4.3	11.1	18.8	27.4	35.9	42.7
107.5°	9.4	3.4	0.9	0.9	0.9	3.4	9.4	16.2	24.8	32.5	38.5
110°	7.7	3.4	0.9	0.9	0.9	3.4	7.7	14.5	21.4	28.2	34.2

TEST NUMBER: P1213707

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	6.8	2.6	0.9	0.9	0.9	2.6	6.8	12.8	18.8	25.6	30.8
115°	6.0	2.6	0.9	0.9	0.9	2.6	6.0	11.1	16.2	22.2	27.4
117.5°	5.1	2.6	0.9	0.9	0.9	1.7	5.1	9.4	14.5	19.7	24.8
120°	4.3	1.7	0.9	0.9	0.9	1.7	4.3	8.5	12.8	17.1	21.4
122.5°	4.3	1.7	0.9	0.9	0.9	1.7	3.4	6.8	11.1	14.5	18.8
125°	3.4	1.7	0.9	0.9	0.9	0.9	3.4	6.0	9.4	12.8	16.2
127.5°	3.4	1.7	0.9	0.9	0.9	0.9	2.6	5.1	7.7	11.1	14.5
130°	2.6	1.7	0.9	0.9	0.9	0.9	1.7	4.3	6.8	9.4	12.0
132.5°	2.6	1.7	0.9	0.9	0.9	0.9	1.7	3.4	5.1	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	6.8
140°	1.7	0.9	0.9	0.9	0.9	0.9	0.9	1.7	2.6	3.4	5.1
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

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CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2
2.5°	1663.8	1644.1	1654.4	1651.0	1654.4	1662.9	1662.1	1659.5	1661.2	1657.0	1652.7
5°	1660.4	1640.7	1651.0	1646.7	1651.0	1659.5	1657.8	1655.2	1657.8	1652.7	1648.4
7.5°	1656.1	1638.1	1650.1	1649.3	1657.0	1668.1	1668.9	1668.9	1674.9	1667.2	1663.8
10°	1656.1	1646.7	1662.9	1668.9	1688.6	1703.1	1704.8	1708.3	1718.5	1716.8	1708.3
12.5°	1674.1	1672.3	1696.3	1710.8	1728.8	1749.3	1760.4	1763.8	1770.7	1765.5	1762.1
15°	1697.1	1705.7	1732.2	1748.4	1768.1	1783.5	1786.1	1787.8	1792.9	1785.2	1779.2
17.5°	1727.9	1733.1	1754.4	1761.3	1774.1	1776.7	1773.2	1764.7	1764.7	1747.6	1742.5
20°	1742.5	1739.9	1748.4	1737.3	1732.2	1716.8	1702.3	1686.0	1685.2	1667.2	1665.5
22.5°	1729.6	1712.5	1694.6	1667.2	1655.2	1633.0	1613.4	1603.9	1598.0	1574.9	1568.9
25°	1684.3	1642.4	1615.9	1583.4	1554.4	1528.7	1509.9	1490.2	1471.4	1452.6	1444.1
27.5°	1605.7	1566.3	1523.6	1478.3	1438.1	1398.8	1367.1	1347.5	1329.5	1304.7	1291.9
30°	1509.0	1454.3	1407.3	1363.7	1297.9	1250.0	1223.5	1184.2	1170.5	1159.4	1135.4
32.5°	1395.3	1329.5	1265.4	1206.4	1138.8	1094.4	1059.3	1030.3	1021.7	992.6	985.8
35°	1269.6	1183.3	1110.6	1052.5	1003.7	949.9	920.8	901.2	884.1	864.4	861.0
37.5°	1121.7	1043.9	961.9	910.6	872.1	825.9	803.7	790.0	782.3	767.8	765.2
40°	973.0	895.2	838.7	787.4	763.5	738.7	722.5	716.5	713.1	707.9	702.8
42.5°	837.9	769.5	729.3	695.1	684.8	672.9	668.6	672.0	668.6	666.9	666.0
45°	723.3	671.2	642.9	632.7	630.1	626.7	630.1	636.1	637.0	635.3	635.3
47.5°	619.0	594.2	582.2	584.0	588.2	590.8	596.8	604.5	606.2	601.9	603.6
50°	550.6	536.1	533.5	540.3	549.8	553.2	560.0	566.0	565.1	563.4	561.7
52.5°	486.5	482.2	489.1	495.9	506.1	507.9	510.4	513.0	512.1	508.7	507.0
55°	432.6	436.0	442.0	444.6	452.3	451.4	452.3	452.3	448.9	447.2	444.6
57.5°	383.9	384.7	388.2	389.0	393.3	391.6	390.7	389.0	383.9	383.0	380.5
60°	334.3	332.6	340.3	334.3	337.7	334.3	333.4	329.2	324.0	323.2	321.5
62.5°	287.3	283.9	289.0	286.4	288.1	284.7	283.0	277.9	273.6	272.7	271.9
65°	245.4	243.7	248.8	247.9	249.7	245.4	243.7	240.3	236.8	236.0	235.1
67.5°	210.3	214.6	217.2	217.2	218.9	218.0	213.7	212.9	212.0	208.6	208.6
70°	184.7	187.2	192.4	193.2	192.4	194.1	190.7	189.8	189.0	187.2	186.4
72.5°	164.2	167.6	172.7	173.6	172.7	172.7	171.0	170.1	170.1	167.6	167.6
75°	147.9	152.2	156.5	156.5	156.5	154.8	153.0	153.0	151.3	150.5	148.8
77.5°	134.2	139.4	142.8	141.9	141.1	139.4	139.4	136.8	134.2	134.2	132.5
80°	124.0	127.4	130.0	129.1	128.2	125.7	124.8	122.3	120.6	118.0	118.0
82.5°	112.9	117.1	118.8	118.0	116.3	113.7	112.9	111.1	109.4	108.6	106.9
85°	103.5	107.7	108.6	106.9	105.2	103.5	102.6	101.7	100.9	99.2	99.2
87.5°	94.0	98.3	98.3	97.5	95.8	94.9	94.0	93.2	92.3	91.5	90.6
90°	86.4	89.8	89.8	88.9	88.1	87.2	86.4	85.5	84.6	83.8	83.8
92.5°	78.7	82.1	82.1	81.2	80.4	79.5	79.5	78.7	77.8	76.9	76.1
95°	71.8	75.2	75.2	75.2	74.4	73.5	73.5	72.7	71.8	71.8	71.0
97.5°	65.0	68.4	68.4	68.4	67.5	66.7	66.7	65.8	65.8	65.8	65.0
100°	59.0	61.6	62.4	62.4	61.6	61.6	61.6	60.7	60.7	60.7	59.8
102.5°	53.0	55.6	57.3	57.3	57.3	56.4	56.4	56.4	56.4	56.4	55.6
105°	47.9	50.4	52.2	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
107.5°	43.6	46.2	47.9	48.7	49.6	49.6	50.4	50.4	50.4	50.4	50.4
110°	39.3	41.9	44.5	45.3	46.2	47.0	47.0	47.9	47.0	47.0	47.0

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CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	35.1	38.5	40.2	41.9	42.7	43.6	44.5	44.5	44.5	44.5	44.5
115°	31.6	35.1	36.8	38.5	40.2	41.0	41.0	41.9	41.9	41.9	41.0
117.5°	28.2	31.6	33.3	35.1	35.9	37.6	38.5	38.5	38.5	38.5	37.6
120°	25.6	28.2	29.9	31.6	33.3	34.2	35.1	35.1	35.1	35.1	35.1
122.5°	22.2	24.8	27.4	29.1	29.9	30.8	31.6	31.6	31.6	31.6	31.6
125°	19.7	22.2	23.9	25.6	26.5	28.2	28.2	28.2	28.2	28.2	28.2
127.5°	17.1	19.7	21.4	23.1	23.9	24.8	25.6	25.6	25.6	25.6	25.6
130°	14.5	17.1	18.8	20.5	21.4	22.2	22.2	23.1	23.1	23.1	23.1
132.5°	12.8	14.5	16.2	18.0	18.8	19.7	19.7	20.5	20.5	20.5	20.5
135°	10.3	12.8	13.7	15.4	16.2	17.1	17.1	18.0	18.0	18.0	18.0
137.5°	8.5	10.3	12.0	13.7	14.5	14.5	15.4	15.4	16.2	16.2	16.2
140°	6.8	7.7	10.3	11.1	12.0	12.8	13.7	13.7	13.7	13.7	13.7
142.5°	5.1	6.8	7.7	9.4	10.3	11.1	12.0	12.0	12.0	12.0	12.0
145°	4.3	5.1	6.0	7.7	8.5	9.4	10.3	10.3	10.3	10.3	10.3
147.5°	3.4	4.3	5.1	6.0	6.8	7.7	8.5	8.5	8.5	8.5	8.5
150°	2.6	3.4	4.3	4.3	5.1	6.0	6.8	7.7	7.7	7.7	7.7
152.5°	2.6	2.6	3.4	3.4	4.3	5.1	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	5.1	5.1	5.1	5.1
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2
2.5°	1655.2	1658.7	1657.0	1654.4	1653.5	1657.8	1653.5	1633.9	1641.6	1642.4	1648.4
5°	1652.7	1655.2	1653.5	1651.8	1649.3	1654.4	1649.3	1628.7	1636.4	1637.3	1643.3
7.5°	1669.8	1670.6	1670.6	1666.4	1659.5	1662.1	1655.2	1632.2	1636.4	1636.4	1640.7
10°	1712.5	1714.2	1716.8	1705.7	1697.1	1690.3	1680.9	1652.7	1651.8	1645.0	1645.0
12.5°	1768.1	1763.8	1759.6	1754.4	1747.6	1739.0	1725.4	1692.0	1680.9	1669.8	1658.7
15°	1784.3	1782.6	1781.8	1779.2	1774.9	1772.4	1762.1	1728.8	1712.5	1698.9	1679.2
17.5°	1741.6	1745.0	1756.1	1757.0	1762.1	1772.4	1770.7	1747.6	1733.1	1727.1	1703.1
20°	1664.7	1665.5	1679.2	1685.2	1707.4	1724.5	1737.3	1734.8	1731.3	1738.2	1720.2
22.5°	1572.3	1578.3	1592.8	1602.2	1623.6	1643.3	1663.8	1674.9	1692.9	1721.1	1717.7
25°	1446.6	1454.3	1474.8	1490.2	1520.2	1550.1	1577.4	1597.1	1618.5	1672.3	1690.3
27.5°	1296.2	1308.1	1334.6	1350.0	1391.9	1422.7	1462.0	1500.5	1530.4	1592.0	1628.7
30°	1138.0	1148.2	1176.5	1197.8	1233.7	1275.6	1325.2	1379.9	1429.5	1491.9	1538.1
32.5°	990.1	1001.2	1024.3	1043.1	1083.3	1118.3	1173.0	1240.6	1286.7	1373.1	1434.7
35°	861.0	871.2	887.5	903.7	937.1	973.0	1020.0	1085.8	1144.8	1234.6	1312.4
37.5°	770.3	772.0	781.5	790.9	815.7	843.0	879.8	937.9	992.6	1089.2	1174.7
40°	705.4	705.4	710.5	713.1	724.2	740.4	763.5	808.8	854.1	927.7	1032.0
42.5°	665.2	663.5	663.5	664.3	663.5	671.2	684.8	706.2	746.4	807.1	888.3
45°	635.3	631.8	629.3	623.3	619.9	619.9	620.7	628.4	651.5	690.8	756.7
47.5°	601.9	601.1	596.8	589.9	584.0	579.7	572.8	570.3	577.1	599.3	643.8
50°	563.4	559.2	554.9	549.8	542.9	538.6	525.8	526.7	520.7	530.9	554.0
52.5°	507.0	503.6	501.9	497.6	495.0	493.3	483.1	472.8	470.2	472.0	480.5
55°	444.6	446.3	439.5	442.9	442.0	434.3	430.1	422.4	419.8	418.9	423.2
57.5°	379.6	381.3	377.0	380.5	380.5	376.2	373.6	373.6	367.6	362.5	368.5
60°	320.6	317.2	319.8	324.0	324.0	321.5	319.8	319.8	315.5	313.8	318.1
62.5°	272.7	269.3	271.9	276.2	277.0	275.3	273.6	273.6	268.5	268.5	271.9
65°	236.0	236.8	236.0	239.4	239.4	240.3	238.5	236.8	230.8	233.4	232.6
67.5°	209.5	208.6	208.6	212.0	211.2	212.9	211.2	208.6	204.3	200.9	200.1
70°	187.2	186.4	186.4	188.1	189.0	189.0	188.1	186.4	180.4	177.0	174.4
72.5°	167.6	166.7	167.6	168.4	169.3	170.1	169.3	167.6	162.4	158.2	153.9
75°	149.6	148.8	151.3	151.3	152.2	152.2	153.0	152.2	147.9	142.8	137.7
77.5°	131.7	132.5	135.1	135.9	137.7	138.5	139.4	139.4	135.1	130.8	124.0
80°	117.1	118.8	120.6	121.4	123.1	125.7	126.5	127.4	124.0	119.7	112.0
82.5°	106.9	107.7	109.4	110.3	112.9	113.7	114.6	116.3	114.6	110.3	101.7
85°	98.3	99.2	100.9	100.9	102.6	104.3	105.2	106.0	105.2	100.9	92.3
87.5°	90.6	91.5	92.3	93.2	94.0	94.9	95.8	96.6	95.8	91.5	83.8
90°	83.8	83.8	84.6	84.6	85.5	86.4	88.1	88.1	87.2	83.8	76.1
92.5°	76.1	76.9	76.9	77.8	78.7	79.5	80.4	80.4	79.5	76.1	69.3
95°	71.0	71.0	71.8	71.8	72.7	72.7	73.5	73.5	72.7	69.3	62.4
97.5°	65.0	65.0	65.0	65.0	65.8	65.8	66.7	66.7	65.8	62.4	56.4
100°	59.8	59.8	59.8	59.8	59.8	60.7	60.7	60.7	59.8	56.4	50.4
102.5°	55.6	55.6	55.6	55.6	55.6	55.6	55.6	55.6	53.9	51.3	45.3
105°	53.0	53.0	53.0	52.2	52.2	52.2	51.3	51.3	48.7	46.2	41.0
107.5°	49.6	49.6	49.6	48.7	48.7	47.9	47.0	47.0	44.5	41.9	36.8
110°	47.0	47.0	47.0	46.2	45.3	44.5	43.6	42.7	40.2	36.8	32.5

TEST NUMBER: P1213707

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	44.5	44.5	43.6	43.6	42.7	41.9	40.2	39.3	36.8	33.3	29.1
115°	41.0	41.0	41.0	40.2	39.3	38.5	37.6	35.9	33.3	29.9	25.6
117.5°	37.6	37.6	37.6	36.8	35.9	35.1	34.2	32.5	29.9	26.5	23.1
120°	34.2	34.2	34.2	33.3	32.5	31.6	30.8	29.1	26.5	23.9	19.7
122.5°	31.6	31.6	30.8	29.9	29.1	28.2	27.4	25.6	23.9	20.5	17.1
125°	28.2	28.2	27.4	27.4	26.5	25.6	24.8	23.1	20.5	18.0	15.4
127.5°	25.6	24.8	24.8	24.8	23.9	23.1	21.4	20.5	18.0	15.4	12.8
130°	22.2	22.2	22.2	21.4	21.4	20.5	18.8	17.1	15.4	13.7	11.1
132.5°	19.7	19.7	19.7	19.7	18.8	18.0	16.2	15.4	13.7	11.1	9.4
135°	18.0	18.0	17.1	17.1	16.2	15.4	14.5	12.8	11.1	9.4	7.7
137.5°	15.4	15.4	15.4	14.5	14.5	13.7	12.0	11.1	10.3	8.5	6.8
140°	13.7	13.7	12.8	12.8	12.0	12.0	11.1	9.4	8.5	6.8	6.0
142.5°	12.0	12.0	11.1	11.1	10.3	10.3	9.4	8.5	6.8	6.0	4.3
145°	10.3	10.3	9.4	9.4	9.4	8.5	7.7	6.8	6.0	5.1	4.3
147.5°	8.5	8.5	8.5	7.7	7.7	6.8	6.8	6.0	5.1	4.3	3.4
150°	7.7	7.7	6.8	6.8	6.8	6.0	5.1	5.1	4.3	3.4	2.6
152.5°	6.0	6.0	6.0	6.0	5.1	5.1	4.3	4.3	3.4	2.6	2.6
155°	5.1	5.1	5.1	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: P1213707

CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2	1655.2
2.5°	1645.8	1645.0	1652.7	1651.8	1641.6	1657.0	1667.2
5°	1641.6	1640.7	1647.6	1649.3	1638.1	1654.4	1665.5
7.5°	1638.1	1637.3	1645.0	1647.6	1636.4	1651.0	1662.9
10°	1639.0	1634.7	1641.6	1643.3	1633.0	1648.4	1658.7
12.5°	1645.0	1634.7	1637.3	1637.3	1627.9	1641.6	1652.7
15°	1659.5	1638.1	1634.7	1632.2	1620.2	1633.0	1644.1
17.5°	1675.8	1646.7	1634.7	1626.2	1611.6	1622.8	1634.7
20°	1692.0	1656.1	1636.4	1622.8	1603.1	1613.4	1621.9
22.5°	1699.7	1664.7	1638.1	1617.6	1592.8	1598.0	1607.4
25°	1689.4	1661.2	1634.7	1609.9	1580.0	1580.9	1588.6
27.5°	1651.8	1644.1	1627.0	1602.2	1569.7	1565.5	1571.5
30°	1587.7	1609.1	1609.9	1592.0	1557.8	1549.2	1551.8
32.5°	1497.9	1545.8	1574.0	1570.6	1540.7	1528.7	1530.4
35°	1394.5	1454.3	1515.9	1536.4	1515.0	1505.6	1502.2
37.5°	1270.5	1350.9	1433.0	1483.4	1480.0	1474.0	1470.6
40°	1133.7	1230.3	1327.8	1408.2	1433.0	1433.0	1434.7
42.5°	987.5	1100.4	1207.2	1309.0	1367.1	1379.9	1385.1
45°	846.4	960.1	1076.4	1193.6	1271.4	1311.5	1326.1
47.5°	718.2	832.8	943.0	1071.3	1174.7	1226.9	1250.0
50°	608.7	694.2	810.5	937.9	1050.8	1114.9	1160.2
52.5°	518.1	584.8	686.6	805.4	919.1	1007.2	1049.1
55°	442.0	487.3	573.7	676.3	784.9	876.4	925.1
57.5°	377.9	413.8	472.8	558.3	649.8	740.4	792.6
60°	321.5	346.3	386.5	454.0	531.8	609.6	660.0
62.5°	272.7	289.0	315.5	365.1	425.8	486.5	533.5
65°	235.1	242.0	256.5	287.3	333.4	379.6	419.8
67.5°	198.4	202.6	213.7	232.6	255.6	289.0	315.5
70°	171.0	171.0	171.9	183.0	194.9	216.3	235.1
72.5°	148.8	146.2	141.1	143.6	146.2	158.2	170.1
75°	130.8	124.8	116.3	112.9	111.1	112.9	119.7
77.5°	115.4	106.9	96.6	88.1	81.2	78.7	84.6
80°	102.6	92.3	80.4	69.3	58.1	52.2	54.7
82.5°	92.3	79.5	66.7	53.9	41.0	32.5	32.5
85°	81.2	69.3	55.6	41.9	29.1	18.0	16.2
87.5°	73.5	60.7	46.2	33.3	20.5	9.4	5.1
90°	65.8	53.0	39.3	26.5	14.5	4.3	0.0
92.5°	59.0	47.0	34.2	21.4	10.3	2.6	0.0
95°	53.0	41.9	29.1	18.0	8.5	1.7	0.9
97.5°	47.0	36.8	25.6	14.5	6.0	1.7	0.9
100°	42.7	32.5	22.2	12.0	5.1	0.9	0.9
102.5°	37.6	29.1	18.8	10.3	4.3	0.9	0.9
105°	33.3	25.6	16.2	8.5	3.4	0.9	0.9
107.5°	29.9	22.2	14.5	7.7	3.4	0.9	0.9
110°	26.5	19.7	12.8	6.8	2.6	0.9	0.9



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CATALOG NUMBER: 2SNLED-LD5-46HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	23.9	17.1	11.1	6.0	1.7	0.9	0.9
115°	20.5	15.4	9.4	5.1	1.7	0.9	0.9
117.5°	18.0	12.8	8.5	4.3	1.7	0.9	0.9
120°	15.4	11.1	6.8	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	8.5	5.1	2.6	0.9	0.9	0.9
127.5°	10.3	6.8	4.3	1.7	0.9	0.9	0.9
130°	8.5	6.0	3.4	1.7	0.9	0.9	0.9
132.5°	6.8	5.1	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°	5.1	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)