

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: P1213811

Luminaire Tested: 4SNLED-LD5-53SL-LN-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213811
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: 4SNLED-LD5-53SL-LN-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

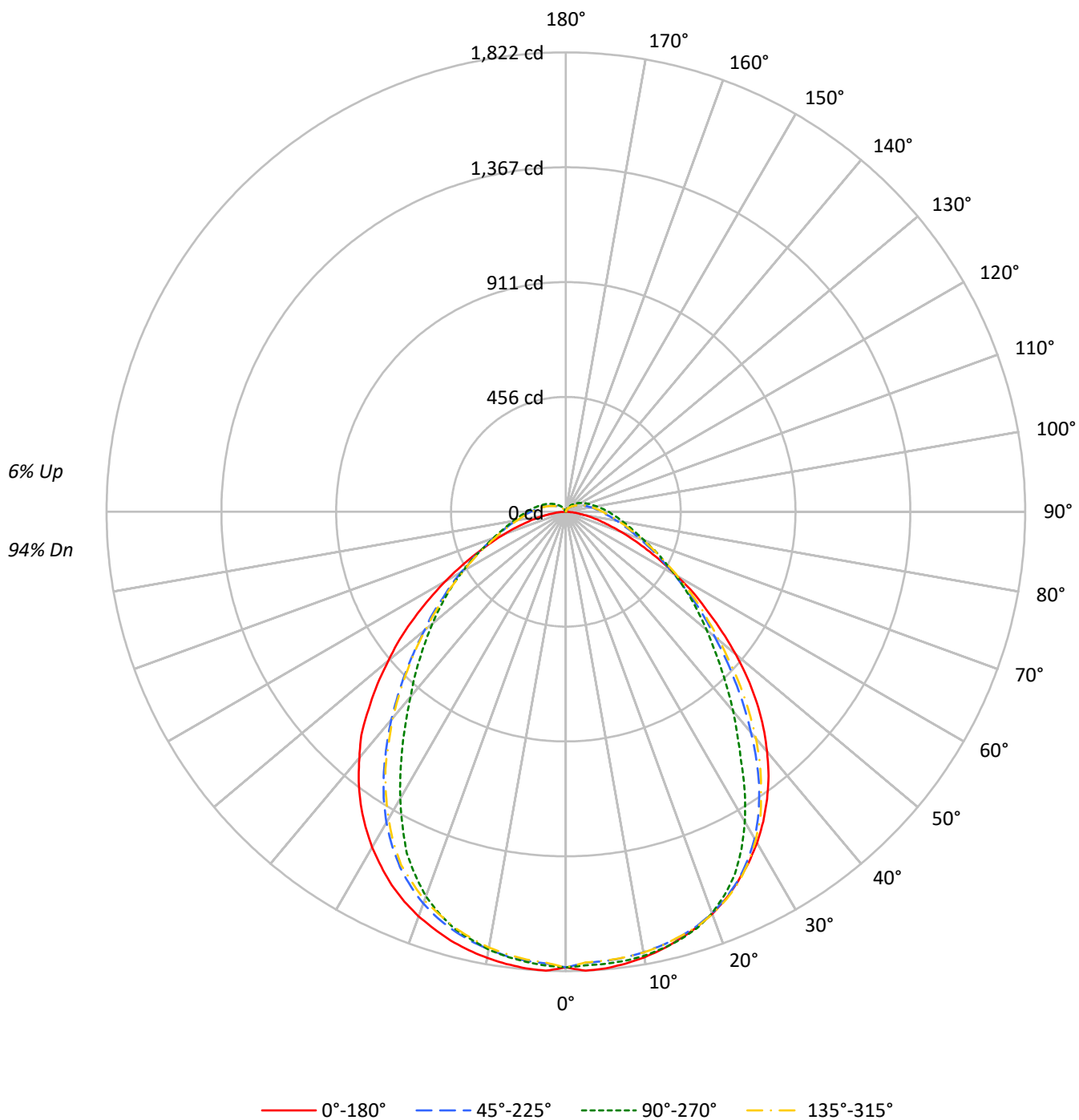
Lumens per Lamp: N/A
Luminaire Lumens: 4573.0 lumens
Efficiency: N/A
Efficacy: 111.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 41
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°	14602	14602	14602	14602
5°	14706	14137	14706	14075
10°	14641	13762	14665	13571
15°	14546	13351	14613	13003
20°	14435	12822	14520	12280
25°	14203	12037	14360	11328
30°	13903	10885	14084	10077
35°	13433	9473	13693	8820
40°	12761	8285	13098	7687
45°	11874	7202	12260	6789
50°	10661	6329	11131	6009
55°	9222	5588	9893	5306
60°	7757	4906	8457	4624
65°	6358	4338	7000	4022
70°	5061	3850	5666	3560
75°	3973	3554	4474	3271
80°	2870	3430	3380	3134
85°	1763	3449	2377	3170

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 12260 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.3	3.7
10°-20°	491.2	10.7
20°-30°	728.0	15.9
30°-40°	808.8	17.7
40°-50°	733.2	16.0
50°-60°	568.1	12.4
60°-70°	385.8	8.4
70°-80°	245.5	5.4
80°-90°	156.9	3.4
90°-100°	105.8	2.3
100°-110°	72.5	1.6
110°-120°	48.3	1.1
120°-130°	30.1	0.7
130°-140°	16.6	0.4
140°-150°	7.8	0.2
150°-160°	2.9	0.1
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-30°	1390.6	30.4
0°-40°	2199.4	48.1
0°-60°	3500.7	76.6
0°-90°	4288.8	93.8
90°-120°	226.6	5.0
90°-150°	281.1	6.1
90°-180°	284.0	6.2
0°-180°	4573.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1807	1807	1807	1807	1807	
5°	1818	1800	1818	1792	1818	173
15°	1753	1756	1761	1711	1753	495
25°	1616	1586	1634	1493	1616	744
35°	1392	1213	1418	1129	1392	868
45°	1072	867	1106	817	1072	823
55°	684	609	734	578	684	616
65°	355	410	391	380	355	356
75°	142	273	160	252	142	153
85°	26	197	35	181	26	31
90°	0	170	2	155	0	1
95°	1	145	0	135	1	1
105°	1	106	0	100	1	1
115°	1	80	0	74	1	1
125°	1	60	1	53	1	1
135°	1	42	1	34	1	1
145°	1	27	1	19	1	1
155°	1	15	1	7	1	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°	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0
2.5°	1821.9	1819.9	1817.9	1814.9	1817.9	1825.9	1820.9	1810.0	1808.0	1790.1	1798.0
5°	1817.9	1814.9	1812.9	1810.0	1813.9	1823.9	1818.9	1809.0	1806.0	1789.1	1798.0
7.5°	1808.0	1806.0	1803.0	1803.0	1807.0	1816.9	1812.9	1802.0	1800.0	1783.1	1793.1
10°	1794.1	1793.1	1791.1	1791.1	1795.1	1807.0	1802.0	1792.1	1790.1	1774.2	1785.1
12.5°	1776.2	1777.2	1774.2	1774.2	1780.1	1792.1	1788.1	1777.2	1775.2	1761.3	1772.2
15°	1753.3	1754.3	1752.3	1753.3	1759.3	1773.2	1768.2	1758.3	1756.3	1745.4	1754.3
17.5°	1727.5	1728.5	1728.5	1727.5	1734.4	1748.3	1744.4	1735.4	1732.4	1723.5	1734.4
20°	1697.7	1697.7	1697.7	1697.7	1705.6	1719.5	1714.5	1707.6	1701.6	1694.7	1703.6
22.5°	1660.9	1659.9	1660.9	1663.9	1671.8	1682.7	1679.8	1671.8	1662.9	1658.9	1665.8
25°	1616.1	1619.1	1620.1	1623.1	1633.0	1642.0	1639.0	1631.1	1617.1	1614.2	1616.1
27.5°	1569.4	1571.4	1574.4	1573.4	1587.3	1596.3	1590.3	1583.3	1563.5	1560.5	1558.5
30°	1516.8	1519.7	1521.7	1520.7	1531.7	1541.6	1535.6	1526.7	1499.9	1497.9	1482.0
32.5°	1457.1	1460.1	1462.1	1462.1	1478.0	1482.0	1471.0	1458.1	1429.3	1422.3	1408.4
35°	1391.5	1394.5	1395.5	1395.5	1411.4	1410.4	1396.5	1378.6	1346.8	1337.8	1314.0
37.5°	1320.9	1322.9	1323.9	1329.9	1336.8	1330.9	1313.0	1290.1	1266.3	1241.4	1215.6
40°	1241.4	1244.4	1246.4	1250.4	1257.3	1250.4	1224.5	1196.7	1170.9	1143.0	1117.2
42.5°	1159.9	1168.9	1166.9	1165.9	1169.9	1151.0	1131.1	1099.3	1073.5	1044.6	1018.8
45°	1071.5	1070.5	1075.4	1077.4	1076.4	1060.5	1032.7	1003.9	978.0	948.2	926.4
47.5°	978.0	977.0	981.0	983.0	977.0	960.1	938.3	905.5	883.6	857.8	840.9
50°	879.6	879.6	885.6	879.6	876.7	859.8	841.9	809.1	792.2	769.3	759.4
52.5°	781.2	790.2	784.2	782.2	779.2	762.4	748.4	721.6	707.7	697.7	685.8
55°	683.8	693.8	689.8	686.8	685.8	671.9	659.0	639.1	630.2	623.2	616.2
57.5°	601.3	600.3	598.4	595.4	596.4	585.4	572.5	561.6	557.6	554.6	556.6
60°	505.9	513.9	510.9	511.9	512.9	510.9	500.0	493.0	494.0	495.0	498.0
62.5°	427.4	434.4	439.3	435.3	437.3	440.3	434.4	432.4	436.3	440.3	444.3
65°	354.8	361.8	366.8	365.8	371.7	377.7	376.7	378.7	387.6	392.6	397.6
67.5°	289.2	296.2	303.2	304.1	313.1	322.0	326.0	333.0	342.9	349.9	355.8
70°	232.6	238.5	246.5	251.5	263.4	275.3	282.3	296.2	302.2	312.1	316.1
72.5°	181.9	186.9	197.8	209.7	219.7	234.6	248.5	260.4	269.4	280.3	285.3
75°	142.1	144.1	156.0	170.0	183.9	200.8	215.7	228.6	240.5	251.5	259.4
77.5°	104.4	107.3	118.3	137.2	153.1	171.0	187.9	201.8	214.7	225.6	236.6
80°	72.6	78.5	90.4	109.3	127.2	147.1	163.0	178.9	192.8	203.8	214.7
82.5°	46.7	51.7	68.6	87.5	106.4	126.2	143.1	159.0	173.9	185.9	195.8
85°	25.8	32.8	49.7	69.6	88.5	108.3	126.2	142.1	157.0	168.0	177.9
87.5°	9.9	19.9	35.8	54.7	73.6	92.4	111.3	126.2	141.1	153.1	162.0
90°	0.0	11.9	26.8	45.7	64.6	83.5	101.4	117.3	131.2	142.1	152.1
92.5°	1.0	8.0	20.9	36.8	54.7	72.6	89.5	105.4	119.3	130.2	139.2
95°	1.0	6.0	16.9	31.8	47.7	64.6	80.5	95.4	108.3	119.3	128.2
97.5°	1.0	4.0	13.9	27.8	41.7	58.6	73.6	87.5	99.4	110.3	117.3
100°	1.0	4.0	11.9	23.9	37.8	52.7	66.6	80.5	91.4	100.4	108.3
102.5°	1.0	3.0	9.9	20.9	33.8	46.7	60.6	73.6	83.5	92.4	100.4
105°	1.0	3.0	8.9	17.9	29.8	42.7	54.7	66.6	77.5	85.5	92.4
107.5°	1.0	2.0	8.0	14.9	25.8	38.8	50.7	60.6	70.6	78.5	85.5
110°	1.0	2.0	7.0	13.9	22.9	34.8	45.7	55.7	64.6	72.6	78.5

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.0	2.0	6.0	12.9	20.9	30.8	41.7	50.7	59.6	66.6	72.6
115°	1.0	2.0	6.0	11.9	18.9	26.8	36.8	46.7	53.7	61.6	66.6
117.5°	1.0	2.0	5.0	9.9	17.9	24.8	33.8	41.7	49.7	56.7	61.6
120°	1.0	2.0	5.0	8.9	15.9	22.9	29.8	37.8	45.7	50.7	55.7
122.5°	1.0	2.0	4.0	8.9	13.9	20.9	26.8	33.8	40.8	46.7	51.7
125°	1.0	2.0	4.0	8.0	12.9	18.9	24.8	29.8	36.8	41.7	46.7
127.5°	1.0	2.0	4.0	7.0	11.9	16.9	22.9	27.8	32.8	37.8	41.7
130°	1.0	2.0	3.0	6.0	10.9	14.9	19.9	25.8	29.8	33.8	37.8
132.5°	1.0	2.0	3.0	6.0	8.9	12.9	17.9	22.9	26.8	30.8	33.8
135°	1.0	2.0	3.0	5.0	8.0	11.9	14.9	19.9	23.9	27.8	30.8
137.5°	1.0	2.0	3.0	5.0	7.0	9.9	12.9	16.9	20.9	23.9	27.8
140°	1.0	2.0	3.0	4.0	6.0	8.9	11.9	13.9	17.9	20.9	23.9
142.5°	1.0	2.0	3.0	4.0	6.0	8.0	9.9	11.9	14.9	17.9	20.9
145°	1.0	2.0	3.0	4.0	5.0	7.0	8.9	10.9	11.9	14.9	16.9
147.5°	1.0	2.0	3.0	4.0	4.0	6.0	8.0	8.9	10.9	11.9	13.9
150°	1.0	2.0	3.0	3.0	4.0	5.0	7.0	8.0	8.9	10.9	11.9
152.5°	1.0	2.0	3.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9	9.9
155°	1.0	2.0	3.0	3.0	3.0	4.0	5.0	6.0	7.0	8.0	8.9
157.5°	2.0	2.0	2.0	3.0	3.0	4.0	4.0	5.0	6.0	6.0	7.0
160°	2.0	2.0	2.0	3.0	3.0	3.0	4.0	4.0	5.0	5.0	6.0
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°	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0
2.5°	1796.1	1799.0	1808.0	1808.0	1806.0	1804.0	1804.0	1801.0	1803.0	1807.0	1805.0
5°	1796.1	1799.0	1808.0	1808.0	1806.0	1804.0	1803.0	1800.0	1803.0	1807.0	1805.0
7.5°	1790.1	1794.1	1803.0	1803.0	1801.0	1800.0	1798.0	1796.1	1799.0	1803.0	1801.0
10°	1782.1	1786.1	1795.1	1795.1	1793.1	1793.1	1790.1	1788.1	1792.1	1795.1	1794.1
12.5°	1770.2	1775.2	1783.1	1782.1	1780.1	1781.1	1778.2	1774.2	1778.2	1781.1	1782.1
15°	1753.3	1759.3	1767.2	1765.2	1762.3	1764.2	1759.3	1756.3	1759.3	1765.2	1764.2
17.5°	1731.4	1735.4	1741.4	1741.4	1738.4	1736.4	1734.4	1731.4	1733.4	1737.4	1738.4
20°	1700.6	1705.6	1708.6	1705.6	1704.6	1701.6	1697.7	1694.7	1698.6	1704.6	1705.6
22.5°	1659.9	1660.9	1667.8	1660.9	1655.9	1654.9	1650.9	1645.0	1650.9	1655.9	1656.9
25°	1609.2	1614.2	1611.2	1599.2	1599.2	1591.3	1589.3	1586.3	1587.3	1596.3	1600.2
27.5°	1544.6	1546.6	1538.6	1528.7	1519.7	1514.8	1507.8	1508.8	1508.8	1520.7	1524.7
30°	1474.0	1463.1	1456.1	1440.2	1433.3	1421.3	1419.3	1419.3	1417.4	1423.3	1441.2
32.5°	1389.5	1374.6	1363.7	1348.8	1336.8	1324.9	1319.0	1321.9	1320.9	1335.9	1341.8
35°	1297.1	1288.1	1265.3	1246.4	1239.4	1221.6	1221.6	1212.6	1218.6	1235.5	1242.4
37.5°	1199.7	1185.8	1166.9	1146.0	1141.0	1127.1	1122.2	1117.2	1130.1	1133.1	1140.0
40°	1100.3	1087.4	1069.5	1049.6	1049.6	1032.7	1032.7	1032.7	1033.7	1039.7	1052.6
42.5°	1005.9	992.0	976.0	962.1	960.1	947.2	947.2	946.2	948.2	953.2	965.1
45°	914.4	903.5	886.6	879.6	880.6	866.7	869.7	866.7	870.7	875.7	879.6
47.5°	829.9	823.0	816.0	806.1	803.1	802.1	797.1	793.2	800.1	800.1	806.1
50°	751.4	747.4	743.5	737.5	738.5	734.5	728.6	728.6	733.5	734.5	738.5
52.5°	682.8	677.9	672.9	673.9	674.9	672.9	669.9	666.9	669.9	671.9	676.9
55°	614.3	610.3	615.2	613.3	615.2	613.3	611.3	609.3	614.3	611.3	616.2
57.5°	552.6	556.6	558.6	554.6	557.6	555.6	556.6	553.6	557.6	559.6	558.6
60°	496.0	501.9	499.0	500.0	503.9	501.9	498.0	500.9	504.9	505.9	504.9
62.5°	444.3	451.2	454.2	452.2	453.2	451.2	454.2	450.3	455.2	457.2	454.2
65°	397.6	405.5	407.5	407.5	407.5	405.5	408.5	409.5	411.5	411.5	409.5
67.5°	357.8	364.8	366.8	368.8	366.8	364.8	364.8	365.8	369.7	371.7	369.7
70°	322.0	329.0	330.0	330.0	331.0	333.0	329.0	331.0	334.0	335.0	334.0
72.5°	291.2	298.2	300.2	299.2	300.2	301.2	301.2	299.2	302.2	304.1	304.1
75°	266.4	270.4	272.3	272.3	273.3	274.3	274.3	273.3	275.3	276.3	277.3
77.5°	243.5	246.5	249.5	249.5	250.5	249.5	251.5	251.5	252.5	253.5	254.4
80°	220.7	224.6	226.6	227.6	229.6	230.6	230.6	230.6	231.6	232.6	232.6
82.5°	202.8	205.7	208.7	211.7	211.7	212.7	212.7	212.7	213.7	213.7	214.7
85°	184.9	188.8	191.8	193.8	194.8	195.8	195.8	196.8	196.8	196.8	197.8
87.5°	169.0	173.9	175.9	177.9	178.9	180.9	180.9	180.9	181.9	181.9	181.9
90°	158.0	163.0	165.0	167.0	168.0	169.0	169.0	170.0	170.0	171.0	171.0
92.5°	145.1	150.1	154.1	154.1	155.1	157.0	156.0	156.0	157.0	158.0	158.0
95°	135.2	139.2	142.1	143.1	144.1	144.1	144.1	145.1	144.1	145.1	145.1
97.5°	123.2	127.2	130.2	132.2	133.2	133.2	133.2	134.2	133.2	134.2	134.2
100°	113.3	117.3	120.3	121.3	123.2	123.2	123.2	123.2	123.2	123.2	124.2
102.5°	105.4	109.3	111.3	112.3	113.3	114.3	114.3	114.3	114.3	115.3	115.3
105°	97.4	101.4	103.4	104.4	105.4	106.4	106.4	106.4	107.3	107.3	106.4
107.5°	90.4	93.4	95.4	97.4	98.4	98.4	99.4	99.4	99.4	99.4	99.4
110°	83.5	86.5	89.5	91.4	91.4	92.4	92.4	93.4	93.4	92.4	93.4



TEST NUMBER: P1213811

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	76.5	80.5	82.5	84.5	85.5	86.5	86.5	86.5	86.5	86.5	86.5
115°	70.6	74.5	76.5	78.5	79.5	80.5	80.5	80.5	80.5	80.5	80.5
117.5°	65.6	69.6	71.6	72.6	73.6	74.5	75.5	75.5	75.5	75.5	74.5
120°	60.6	63.6	65.6	67.6	68.6	69.6	69.6	69.6	69.6	69.6	69.6
122.5°	55.7	58.6	60.6	62.6	63.6	64.6	64.6	64.6	64.6	64.6	64.6
125°	50.7	53.7	55.7	57.6	58.6	59.6	59.6	59.6	59.6	59.6	59.6
127.5°	45.7	48.7	51.7	52.7	53.7	54.7	54.7	54.7	55.7	54.7	54.7
130°	40.8	43.7	46.7	47.7	48.7	49.7	50.7	50.7	50.7	50.7	49.7
132.5°	36.8	39.8	41.7	42.7	44.7	44.7	45.7	45.7	45.7	45.7	44.7
135°	33.8	35.8	37.8	38.8	40.8	40.8	40.8	41.7	41.7	40.8	39.8
137.5°	29.8	31.8	33.8	34.8	35.8	36.8	36.8	37.8	36.8	36.8	36.8
140°	27.8	28.8	30.8	31.8	32.8	32.8	32.8	33.8	33.8	32.8	32.8
142.5°	23.9	25.8	27.8	28.8	29.8	29.8	29.8	29.8	29.8	29.8	29.8
145°	19.9	22.9	23.9	25.8	25.8	26.8	26.8	26.8	26.8	26.8	25.8
147.5°	16.9	18.9	21.9	22.9	22.9	23.9	23.9	23.9	23.9	23.9	22.9
150°	12.9	14.9	17.9	19.9	19.9	20.9	20.9	20.9	20.9	19.9	19.9
152.5°	10.9	12.9	13.9	15.9	16.9	16.9	16.9	17.9	16.9	16.9	16.9
155°	9.9	10.9	11.9	12.9	13.9	14.9	14.9	14.9	14.9	13.9	13.9
157.5°	8.0	8.9	9.9	10.9	11.9	12.9	12.9	12.9	12.9	12.9	11.9
160°	6.0	7.0	8.0	8.0	8.9	9.9	10.9	9.9	9.9	9.9	9.9
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

TEST NUMBER: P1213811

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0
2.5°	1803.0	1802.0	1805.0	1800.0	1785.1	1789.1	1787.1	1796.1	1798.0	1800.0	1809.0
5°	1803.0	1802.0	1804.0	1800.0	1784.1	1787.1	1785.1	1794.1	1796.1	1797.0	1806.0
7.5°	1799.0	1798.0	1801.0	1796.1	1779.2	1783.1	1780.1	1789.1	1790.1	1791.1	1799.0
10°	1791.1	1790.1	1792.1	1788.1	1771.2	1775.2	1771.2	1780.1	1780.1	1782.1	1788.1
12.5°	1779.2	1777.2	1781.1	1776.2	1757.3	1762.3	1760.3	1766.2	1767.2	1768.2	1774.2
15°	1762.3	1760.3	1763.3	1760.3	1743.4	1744.4	1741.4	1750.3	1751.3	1749.3	1755.3
17.5°	1737.4	1735.4	1741.4	1739.4	1722.5	1726.5	1725.5	1727.5	1730.5	1725.5	1733.4
20°	1706.6	1708.6	1710.6	1711.6	1698.6	1698.6	1697.7	1701.6	1704.6	1700.6	1706.6
22.5°	1660.9	1665.8	1671.8	1673.8	1664.9	1663.9	1669.8	1667.8	1670.8	1668.8	1672.8
25°	1603.2	1613.2	1619.1	1625.1	1620.1	1622.1	1631.1	1633.0	1633.0	1632.1	1636.0
27.5°	1531.7	1544.6	1555.5	1568.4	1563.5	1567.4	1582.4	1584.3	1588.3	1584.3	1592.3
30°	1446.2	1458.1	1479.0	1497.9	1499.9	1505.8	1526.7	1528.7	1539.6	1535.6	1538.6
32.5°	1360.7	1366.7	1390.5	1409.4	1421.3	1436.2	1459.1	1463.1	1478.0	1481.0	1481.0
35°	1253.4	1270.3	1292.1	1319.0	1333.9	1349.8	1380.6	1386.5	1408.4	1415.4	1423.3
37.5°	1162.9	1178.8	1192.7	1220.6	1247.4	1265.3	1290.1	1305.0	1327.9	1340.8	1350.8
40°	1066.5	1079.4	1094.3	1122.2	1145.0	1171.9	1196.7	1214.6	1243.4	1258.3	1271.2
42.5°	975.1	985.0	1000.9	1020.8	1044.6	1074.4	1098.3	1119.2	1150.0	1170.9	1185.8
45°	893.6	899.5	913.4	928.3	949.2	980.0	1002.9	1029.7	1054.6	1076.4	1094.3
47.5°	817.0	825.0	831.9	841.9	860.8	879.6	906.5	932.3	957.2	981.0	998.9
50°	746.4	746.4	757.4	764.3	777.3	794.2	815.0	832.9	863.7	880.6	903.5
52.5°	677.9	681.8	687.8	691.8	701.7	712.7	729.6	744.5	770.3	786.2	808.1
55°	617.2	621.2	624.2	626.2	632.1	645.1	651.0	663.0	680.8	693.8	712.7
57.5°	559.6	561.6	564.6	565.6	566.5	574.5	579.5	582.4	600.3	613.3	629.2
60°	506.9	506.9	509.9	508.9	507.9	511.9	510.9	513.9	524.8	532.8	539.7
62.5°	457.2	457.2	458.2	456.2	455.2	455.2	451.2	454.2	457.2	458.2	463.2
65°	411.5	416.5	412.5	413.5	407.5	405.5	403.5	397.6	396.6	392.6	394.6
67.5°	370.7	374.7	370.7	370.7	365.8	361.8	356.8	346.9	343.9	336.0	334.0
70°	337.9	335.0	336.9	334.0	328.0	323.0	316.1	308.1	298.2	288.2	281.3
72.5°	306.1	306.1	304.1	301.2	298.2	288.2	280.3	271.3	259.4	246.5	236.6
75°	275.3	276.3	276.3	273.3	268.4	259.4	250.5	237.6	224.6	209.7	196.8
77.5°	253.5	253.5	253.5	248.5	243.5	235.6	224.6	210.7	196.8	178.9	164.0
80°	232.6	231.6	231.6	225.6	220.7	211.7	200.8	186.9	172.0	153.1	136.2
82.5°	215.7	214.7	212.7	207.7	200.8	191.8	180.9	166.0	150.1	133.2	112.3
85°	197.8	196.8	194.8	189.8	182.9	174.9	163.0	148.1	132.2	113.3	93.4
87.5°	181.9	180.9	177.9	174.9	167.0	158.0	146.1	132.2	115.3	97.4	77.5
90°	171.0	169.0	167.0	163.0	156.0	146.1	134.2	119.3	102.4	84.5	64.6
92.5°	158.0	157.0	154.1	150.1	144.1	134.2	122.3	108.3	91.4	74.5	55.7
95°	145.1	144.1	142.1	138.2	132.2	123.2	112.3	98.4	82.5	65.6	48.7
97.5°	133.2	133.2	130.2	127.2	120.3	113.3	102.4	89.5	74.5	59.6	43.7
100°	123.2	123.2	120.3	116.3	111.3	104.4	93.4	81.5	67.6	53.7	37.8
102.5°	114.3	113.3	111.3	107.3	102.4	95.4	85.5	74.5	61.6	47.7	33.8
105°	106.4	105.4	103.4	99.4	95.4	87.5	79.5	68.6	55.7	42.7	29.8
107.5°	98.4	97.4	96.4	92.4	87.5	80.5	72.6	61.6	50.7	38.8	26.8
110°	91.4	90.4	88.5	84.5	79.5	73.6	65.6	56.7	45.7	34.8	23.9

TEST NUMBER: P1213811

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	85.5	84.5	82.5	78.5	74.5	67.6	60.6	50.7	41.7	31.8	20.9
115°	79.5	78.5	76.5	72.6	67.6	61.6	54.7	46.7	36.8	27.8	18.9
117.5°	73.6	72.6	70.6	67.6	62.6	56.7	49.7	41.7	32.8	25.8	16.9
120°	68.6	66.6	64.6	61.6	56.7	51.7	44.7	37.8	29.8	22.9	14.9
122.5°	63.6	61.6	59.6	56.7	51.7	46.7	39.8	33.8	27.8	20.9	13.9
125°	57.6	56.7	54.7	51.7	46.7	41.7	36.8	30.8	24.8	18.9	11.9
127.5°	52.7	51.7	49.7	45.7	41.7	37.8	32.8	27.8	21.9	15.9	10.9
130°	48.7	46.7	44.7	41.7	38.8	34.8	29.8	24.8	19.9	13.9	9.9
132.5°	43.7	41.7	39.8	37.8	34.8	30.8	26.8	21.9	17.9	12.9	8.9
135°	39.8	37.8	35.8	33.8	30.8	27.8	23.9	19.9	15.9	11.9	8.0
137.5°	34.8	33.8	32.8	30.8	27.8	24.8	21.9	16.9	13.9	10.9	7.0
140°	31.8	30.8	29.8	26.8	24.8	21.9	18.9	14.9	11.9	8.9	6.0
142.5°	28.8	27.8	25.8	23.9	21.9	19.9	15.9	13.9	10.9	8.0	6.0
145°	24.8	23.9	22.9	20.9	18.9	15.9	13.9	11.9	9.9	7.0	5.0
147.5°	22.9	21.9	19.9	17.9	15.9	13.9	12.9	10.9	8.0	6.0	4.0
150°	18.9	17.9	16.9	14.9	13.9	12.9	10.9	8.9	7.0	5.0	4.0
152.5°	15.9	14.9	13.9	13.9	11.9	10.9	8.9	8.0	6.0	5.0	3.0
155°	13.9	13.9	12.9	11.9	9.9	8.9	8.0	6.0	5.0	4.0	3.0
157.5°	11.9	10.9	9.9	9.9	8.9	8.0	6.0	5.0	4.0	4.0	3.0
160°	9.9	8.9	8.9	8.0	7.0	6.0	5.0	5.0	4.0	3.0	3.0
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: P1213811

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0
2.5°	1810.0	1799.0	1809.0	1821.9	1821.9	1819.9	1817.9	1821.9	1831.8	1827.9	1815.9
5°	1807.0	1796.1	1805.0	1817.9	1817.9	1814.9	1812.9	1815.9	1826.9	1821.9	1811.0
7.5°	1801.0	1791.1	1797.0	1809.0	1809.0	1806.0	1804.0	1808.0	1816.9	1812.0	1800.0
10°	1790.1	1779.2	1786.1	1797.0	1796.1	1794.1	1791.1	1796.1	1804.0	1797.0	1783.1
12.5°	1776.2	1765.2	1771.2	1781.1	1780.1	1776.2	1774.2	1777.2	1784.1	1780.1	1765.2
15°	1757.3	1746.4	1751.3	1761.3	1758.3	1755.3	1751.3	1752.3	1761.3	1754.3	1738.4
17.5°	1734.4	1722.5	1726.5	1735.4	1732.4	1729.5	1724.5	1725.5	1735.4	1725.5	1708.6
20°	1706.6	1693.7	1696.7	1707.6	1702.6	1697.7	1692.7	1692.7	1702.6	1691.7	1672.8
22.5°	1676.8	1663.9	1665.8	1673.8	1669.8	1660.9	1655.9	1658.9	1663.9	1649.9	1630.1
25°	1640.0	1623.1	1626.1	1634.0	1631.1	1619.1	1614.2	1616.1	1614.2	1603.2	1582.4
27.5°	1597.3	1579.4	1581.4	1586.3	1582.4	1571.4	1565.5	1566.4	1562.5	1548.6	1524.7
30°	1543.6	1534.6	1533.6	1536.6	1530.7	1519.7	1512.8	1510.8	1509.8	1489.9	1461.1
32.5°	1488.9	1481.0	1476.0	1480.0	1473.0	1462.1	1450.2	1450.2	1440.2	1421.3	1396.5
35°	1433.3	1420.3	1415.4	1418.4	1410.4	1396.5	1386.5	1381.6	1366.7	1342.8	1316.0
37.5°	1361.7	1352.8	1346.8	1349.8	1340.8	1330.9	1312.0	1307.0	1291.1	1258.3	1224.5
40°	1284.2	1277.2	1271.2	1274.2	1264.3	1249.4	1232.5	1224.5	1206.6	1169.9	1143.0
42.5°	1200.7	1197.7	1190.7	1201.7	1181.8	1166.9	1150.0	1137.1	1119.2	1079.4	1048.6
45°	1112.2	1119.2	1103.3	1106.3	1093.3	1080.4	1062.5	1043.6	1025.7	988.0	953.2
47.5°	1018.8	1023.8	1012.8	1014.8	1000.9	989.0	973.1	949.2	929.3	896.5	865.7
50°	922.4	920.4	920.4	918.4	907.5	892.6	876.7	854.8	834.9	805.1	779.2
52.5°	820.0	824.0	826.0	830.9	817.0	808.1	783.2	764.3	749.4	718.6	696.8
55°	721.6	735.5	731.5	733.5	717.6	710.7	690.8	675.9	654.0	636.1	622.2
57.5°	632.1	635.1	637.1	640.1	633.1	619.2	603.3	591.4	574.5	559.6	549.6
60°	545.7	545.7	546.7	551.6	544.7	532.8	520.8	511.9	500.0	491.0	485.0
62.5°	464.2	471.1	472.1	468.1	459.2	453.2	445.3	440.3	432.4	429.4	427.4
65°	388.6	388.6	388.6	390.6	385.6	381.7	376.7	375.7	378.7	374.7	376.7
67.5°	325.0	322.0	320.0	321.0	319.1	317.1	316.1	319.1	325.0	325.0	330.0
70°	270.4	264.4	260.4	260.4	260.4	261.4	264.4	270.4	280.3	284.3	291.2
72.5°	225.6	212.7	206.7	206.7	207.7	211.7	220.7	231.6	240.5	248.5	257.4
75°	182.9	170.0	161.0	160.0	162.0	168.0	180.9	190.8	205.7	216.7	227.6
77.5°	148.1	132.2	121.3	120.3	123.2	132.2	148.1	161.0	177.9	189.8	201.8
80°	118.3	100.4	91.4	85.5	90.4	101.4	119.3	135.2	151.1	167.0	181.9
82.5°	94.4	77.5	63.6	57.6	63.6	78.5	95.4	114.3	130.2	147.1	162.0
85°	74.5	56.7	40.8	34.8	41.7	57.6	76.5	95.4	113.3	130.2	145.1
87.5°	58.6	40.8	24.8	16.9	25.8	42.7	60.6	79.5	98.4	115.3	130.2
90°	45.7	28.8	13.9	2.0	14.9	30.8	48.7	66.6	85.5	102.4	117.3
92.5°	38.8	21.9	8.0	0.0	8.9	22.9	39.8	57.6	74.5	91.4	106.4
95°	32.8	17.9	6.0	0.0	6.0	17.9	32.8	48.7	65.6	82.5	97.4
97.5°	27.8	13.9	4.0	0.0	4.0	13.9	26.8	42.7	57.6	73.6	87.5
100°	23.9	11.9	3.0	0.0	3.0	10.9	22.9	36.8	51.7	66.6	79.5
102.5°	20.9	9.9	2.0	0.0	2.0	8.9	18.9	31.8	44.7	58.6	71.6
105°	17.9	8.0	2.0	0.0	1.0	7.0	15.9	27.8	39.8	52.7	64.6
107.5°	15.9	7.0	2.0	0.0	1.0	6.0	13.9	23.9	35.8	46.7	57.6
110°	13.9	6.0	2.0	0.0	1.0	4.0	11.9	20.9	30.8	41.7	52.7

TEST NUMBER: P1213811

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	11.9	5.0	1.0	0.0	0.0	3.0	9.9	17.9	26.8	37.8	46.7
115°	10.9	5.0	1.0	0.0	0.0	2.0	8.0	15.9	23.9	33.8	41.7
117.5°	9.9	4.0	1.0	0.0	1.0	2.0	7.0	13.9	20.9	28.8	37.8
120°	8.9	4.0	1.0	0.0	1.0	1.0	5.0	11.9	17.9	25.8	32.8
122.5°	8.0	4.0	1.0	0.0	1.0	1.0	4.0	9.9	15.9	22.9	28.8
125°	7.0	3.0	2.0	1.0	1.0	1.0	3.0	8.0	13.9	18.9	25.8
127.5°	7.0	3.0	2.0	1.0	1.0	1.0	2.0	7.0	10.9	16.9	22.9
130°	6.0	3.0	2.0	1.0	1.0	1.0	1.0	5.0	9.9	13.9	18.9
132.5°	5.0	3.0	2.0	1.0	1.0	1.0	1.0	3.0	7.0	11.9	15.9
135°	5.0	3.0	2.0	1.0	1.0	1.0	1.0	2.0	5.0	8.9	12.9
137.5°	4.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	4.0	7.0	9.9
140°	4.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	3.0	5.0	8.0
142.5°	3.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	2.0	4.0	6.0
145°	3.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	4.0
147.5°	3.0	3.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0
150°	3.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
152.5°	3.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
155°	3.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0
157.5°	3.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
160°	3.0	2.0	2.0	1.0	2.0	1.0	2.0	2.0	2.0	2.0	2.0
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: P1213811

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0
2.5°	1812.0	1793.1	1803.0	1800.0	1804.0	1812.0	1811.0	1809.0	1809.0	1806.0	1802.0
5°	1806.0	1788.1	1797.0	1792.1	1797.0	1804.0	1803.0	1800.0	1802.0	1797.0	1792.1
7.5°	1794.1	1778.2	1786.1	1782.1	1786.1	1793.1	1790.1	1789.1	1791.1	1783.1	1780.1
10°	1780.1	1762.3	1771.2	1766.2	1771.2	1776.2	1774.2	1770.2	1774.2	1766.2	1763.3
12.5°	1758.3	1743.4	1749.3	1747.3	1750.3	1755.3	1751.3	1748.3	1750.3	1743.4	1737.4
15°	1734.4	1719.5	1724.5	1721.5	1723.5	1729.5	1722.5	1721.5	1719.5	1712.6	1710.6
17.5°	1703.6	1689.7	1694.7	1689.7	1692.7	1690.7	1689.7	1684.7	1684.7	1676.8	1670.8
20°	1665.8	1653.9	1650.9	1647.0	1650.9	1647.0	1641.0	1637.0	1636.0	1628.1	1623.1
22.5°	1622.1	1608.2	1610.2	1599.2	1600.2	1594.3	1584.3	1580.4	1576.4	1567.4	1560.5
25°	1569.4	1555.5	1545.6	1538.6	1529.7	1528.7	1515.8	1505.8	1504.8	1493.9	1492.9
27.5°	1509.8	1493.9	1485.9	1469.0	1458.1	1449.2	1438.2	1428.3	1423.3	1411.4	1403.4
30°	1441.2	1423.3	1403.4	1391.5	1374.6	1367.7	1348.8	1336.8	1332.9	1320.0	1314.0
32.5°	1363.7	1344.8	1328.9	1306.0	1287.2	1277.2	1258.3	1246.4	1241.4	1227.5	1219.6
35°	1279.2	1258.3	1239.4	1217.6	1202.7	1185.8	1162.9	1151.0	1140.0	1135.1	1129.1
37.5°	1190.7	1167.9	1146.0	1124.1	1111.2	1091.3	1071.5	1063.5	1050.6	1045.6	1039.7
40°	1099.3	1076.4	1055.6	1034.7	1019.8	1001.9	984.0	981.0	967.1	962.1	958.2
42.5°	1008.8	985.0	961.1	946.2	935.3	917.4	905.5	902.5	890.6	887.6	887.6
45°	927.3	897.5	877.6	864.7	855.8	840.9	830.9	828.9	819.0	817.0	817.0
47.5°	839.9	812.0	797.1	789.2	781.2	770.3	764.3	764.3	754.4	752.4	751.4
50°	758.4	732.5	721.6	713.6	712.7	704.7	699.7	697.7	697.7	690.8	691.8
52.5°	680.8	667.9	659.0	654.0	648.0	643.1	639.1	639.1	636.1	631.2	633.1
55°	609.3	594.4	595.4	591.4	588.4	585.4	586.4	580.5	579.5	575.5	578.5
57.5°	537.7	537.7	535.7	532.8	527.8	529.8	529.8	529.8	524.8	521.8	524.8
60°	477.1	480.1	475.1	478.1	476.1	477.1	475.1	475.1	472.1	471.1	472.1
62.5°	423.4	428.4	426.4	430.4	428.4	429.4	431.4	427.4	425.4	423.4	425.4
65°	375.7	381.7	380.7	383.7	384.7	385.6	386.6	384.7	382.7	380.7	379.7
67.5°	334.0	339.9	343.9	344.9	345.9	348.9	347.9	345.9	343.9	340.9	339.9
70°	296.2	304.1	309.1	311.1	315.1	313.1	313.1	312.1	310.1	307.1	306.1
72.5°	264.4	273.3	278.3	280.3	284.3	284.3	283.3	282.3	280.3	277.3	276.3
75°	236.6	244.5	251.5	255.4	258.4	258.4	257.4	256.4	254.4	252.5	251.5
77.5°	214.7	221.6	227.6	232.6	234.6	235.6	234.6	232.6	232.6	231.6	230.6
80°	192.8	200.8	206.7	211.7	214.7	214.7	213.7	214.7	212.7	211.7	210.7
82.5°	173.9	182.9	189.8	194.8	196.8	197.8	196.8	197.8	195.8	195.8	195.8
85°	157.0	166.0	173.9	177.9	180.9	181.9	181.9	181.9	180.9	180.9	180.9
87.5°	143.1	152.1	160.0	164.0	167.0	168.0	168.0	169.0	167.0	167.0	167.0
90°	130.2	139.2	147.1	151.1	154.1	156.0	156.0	157.0	156.0	155.1	155.1
92.5°	118.3	128.2	136.2	140.1	143.1	146.1	146.1	147.1	145.1	145.1	145.1
95°	108.3	118.3	125.2	130.2	133.2	135.2	136.2	136.2	135.2	135.2	135.2
97.5°	99.4	108.3	115.3	120.3	123.2	124.2	125.2	126.2	125.2	125.2	125.2
100°	90.4	99.4	106.4	110.3	114.3	115.3	116.3	117.3	117.3	116.3	116.3
102.5°	82.5	91.4	97.4	102.4	105.4	107.3	108.3	108.3	108.3	108.3	108.3
105°	74.5	83.5	89.5	94.4	97.4	99.4	100.4	101.4	101.4	100.4	100.4
107.5°	67.6	75.5	82.5	86.5	90.4	92.4	93.4	93.4	94.4	93.4	93.4
110°	60.6	69.6	75.5	79.5	83.5	85.5	86.5	87.5	87.5	87.5	87.5

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CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	55.7	62.6	68.6	72.6	76.5	78.5	79.5	80.5	81.5	80.5	80.5
115°	49.7	56.7	62.6	66.6	69.6	71.6	73.6	74.5	74.5	75.5	74.5
117.5°	44.7	50.7	56.7	60.6	63.6	66.6	67.6	68.6	69.6	68.6	68.6
120°	39.8	45.7	50.7	54.7	57.6	60.6	61.6	62.6	63.6	62.6	62.6
122.5°	35.8	40.8	45.7	49.7	52.7	54.7	56.7	56.7	57.6	57.6	57.6
125°	31.8	36.8	40.8	44.7	47.7	49.7	50.7	51.7	51.7	52.7	52.7
127.5°	27.8	31.8	36.8	39.8	42.7	44.7	45.7	46.7	46.7	47.7	47.7
130°	23.9	27.8	31.8	34.8	37.8	39.8	40.8	41.7	42.7	42.7	42.7
132.5°	20.9	24.8	27.8	30.8	32.8	34.8	36.8	37.8	37.8	37.8	37.8
135°	16.9	20.9	23.9	26.8	28.8	30.8	31.8	33.8	33.8	33.8	33.8
137.5°	13.9	17.9	20.9	22.9	24.8	26.8	27.8	28.8	29.8	29.8	29.8
140°	10.9	13.9	16.9	19.9	21.9	22.9	24.8	24.8	25.8	25.8	25.8
142.5°	8.0	10.9	12.9	15.9	17.9	19.9	20.9	21.9	21.9	21.9	21.9
145°	6.0	8.0	9.9	11.9	14.9	15.9	16.9	17.9	18.9	18.9	18.9
147.5°	4.0	6.0	7.0	8.9	10.9	12.9	13.9	14.9	15.9	15.9	15.9
150°	3.0	4.0	6.0	7.0	8.0	9.9	11.9	11.9	12.9	12.9	11.9
152.5°	2.0	3.0	4.0	5.0	6.0	7.0	8.9	8.9	9.9	9.9	9.9
155°	2.0	2.0	2.0	3.0	4.0	5.0	6.0	7.0	7.0	7.0	7.0
157.5°	2.0	2.0	2.0	2.0	2.0	3.0	4.0	5.0	5.0	5.0	5.0
160°	2.0	2.0	1.0	1.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0
2.5°	1805.0	1807.0	1807.0	1805.0	1804.0	1808.0	1803.0	1784.1	1790.1	1792.1	1798.0
5°	1796.1	1798.0	1798.0	1798.0	1796.1	1800.0	1795.1	1776.2	1783.1	1786.1	1790.1
7.5°	1783.1	1784.1	1786.1	1785.1	1783.1	1789.1	1784.1	1765.2	1770.2	1775.2	1780.1
10°	1766.2	1766.2	1767.2	1769.2	1767.2	1772.2	1767.2	1750.3	1755.3	1758.3	1764.2
12.5°	1743.4	1745.4	1746.4	1745.4	1744.4	1748.3	1746.4	1730.5	1732.4	1738.4	1744.4
15°	1712.6	1712.6	1717.5	1715.5	1715.5	1719.5	1721.5	1703.6	1706.6	1715.5	1721.5
17.5°	1674.8	1675.8	1679.8	1681.7	1680.8	1687.7	1688.7	1674.8	1673.8	1684.7	1690.7
20°	1626.1	1628.1	1633.0	1637.0	1637.0	1645.0	1648.0	1639.0	1640.0	1651.9	1653.9
22.5°	1566.4	1566.4	1575.4	1581.4	1586.3	1591.3	1600.2	1592.3	1592.3	1608.2	1617.1
25°	1492.9	1499.9	1502.8	1514.8	1521.7	1535.6	1543.6	1544.6	1545.6	1560.5	1566.4
27.5°	1411.4	1413.4	1422.3	1436.2	1444.2	1457.1	1472.0	1475.0	1480.0	1499.9	1508.8
30°	1319.0	1324.9	1328.9	1348.8	1359.7	1376.6	1395.5	1402.4	1406.4	1433.3	1444.2
32.5°	1224.5	1226.5	1243.4	1254.4	1267.3	1285.2	1307.0	1320.0	1327.9	1355.7	1371.6
35°	1130.1	1134.1	1148.0	1161.9	1174.8	1192.7	1215.6	1233.5	1247.4	1272.2	1293.1
37.5°	1043.6	1053.6	1056.6	1070.5	1080.4	1098.3	1114.2	1140.0	1154.0	1179.8	1206.6
40°	966.1	969.1	971.1	985.0	992.0	1008.8	1031.7	1048.6	1067.5	1086.4	1118.2
42.5°	889.6	891.6	894.5	902.5	910.4	922.4	939.3	956.2	976.0	1003.9	1024.8
45°	819.0	821.0	823.0	828.0	834.9	845.8	856.8	868.7	888.6	912.4	934.3
47.5°	753.4	757.4	757.4	758.4	763.3	772.3	780.2	795.2	806.1	819.0	843.9
50°	690.8	693.8	694.8	694.8	697.7	703.7	705.7	715.6	725.6	737.5	755.4
52.5°	632.1	632.1	631.2	635.1	635.1	639.1	640.1	646.1	653.0	665.9	673.9
55°	576.5	576.5	579.5	577.5	577.5	579.5	578.5	579.5	585.4	593.4	600.3
57.5°	522.8	521.8	524.8	522.8	521.8	523.8	525.8	521.8	522.8	530.8	530.8
60°	469.1	470.1	473.1	471.1	471.1	471.1	469.1	467.2	465.2	470.1	472.1
62.5°	426.4	423.4	426.4	423.4	425.4	424.4	422.4	418.4	419.4	417.5	415.5
65°	381.7	381.7	382.7	379.7	381.7	381.7	378.7	377.7	371.7	369.7	364.8
67.5°	342.9	342.9	343.9	341.9	341.9	342.9	339.9	336.9	331.0	328.0	321.0
70°	309.1	309.1	309.1	308.1	308.1	308.1	306.1	302.2	296.2	291.2	282.3
72.5°	278.3	279.3	278.3	278.3	281.3	278.3	275.3	271.3	266.4	256.4	248.5
75°	253.5	254.4	253.5	253.5	253.5	252.5	251.5	245.5	239.5	231.6	219.7
77.5°	231.6	231.6	232.6	231.6	231.6	230.6	227.6	222.6	215.7	208.7	194.8
80°	210.7	211.7	212.7	213.7	211.7	210.7	207.7	203.8	194.8	186.9	172.9
82.5°	195.8	194.8	195.8	196.8	194.8	193.8	190.8	185.9	178.9	168.0	154.1
85°	180.9	179.9	179.9	180.9	179.9	177.9	174.9	170.0	163.0	152.1	138.2
87.5°	166.0	167.0	168.0	167.0	166.0	164.0	161.0	156.0	148.1	139.2	124.2
90°	155.1	155.1	155.1	155.1	154.1	152.1	149.1	143.1	136.2	125.2	112.3
92.5°	145.1	145.1	145.1	145.1	144.1	141.1	138.2	133.2	125.2	114.3	102.4
95°	135.2	136.2	135.2	135.2	133.2	132.2	127.2	122.3	115.3	104.4	91.4
97.5°	124.2	125.2	124.2	124.2	123.2	121.3	118.3	112.3	105.4	95.4	83.5
100°	116.3	116.3	115.3	115.3	114.3	112.3	108.3	103.4	96.4	86.5	74.5
102.5°	107.3	108.3	107.3	107.3	105.4	103.4	100.4	95.4	88.5	78.5	67.6
105°	100.4	100.4	99.4	99.4	97.4	95.4	92.4	86.5	80.5	71.6	60.6
107.5°	93.4	93.4	92.4	92.4	90.4	88.5	84.5	79.5	73.6	64.6	54.7
110°	86.5	86.5	86.5	85.5	83.5	80.5	77.5	72.6	66.6	58.6	48.7

TEST NUMBER: P1213811

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	81.5	80.5	79.5	78.5	76.5	74.5	70.6	65.6	59.6	52.7	43.7
115°	74.5	74.5	73.6	72.6	70.6	67.6	64.6	60.6	54.7	46.7	38.8
117.5°	68.6	68.6	67.6	66.6	64.6	61.6	58.6	54.7	48.7	41.7	34.8
120°	62.6	62.6	61.6	60.6	58.6	55.7	53.7	48.7	43.7	36.8	30.8
122.5°	57.6	56.7	56.7	54.7	53.7	50.7	47.7	43.7	38.8	32.8	26.8
125°	51.7	51.7	50.7	49.7	48.7	45.7	42.7	38.8	33.8	28.8	23.9
127.5°	46.7	46.7	45.7	44.7	43.7	40.8	37.8	34.8	29.8	24.8	19.9
130°	41.7	41.7	40.8	39.8	38.8	35.8	33.8	29.8	25.8	21.9	16.9
132.5°	37.8	37.8	36.8	35.8	33.8	31.8	29.8	25.8	22.9	18.9	14.9
135°	33.8	32.8	32.8	31.8	29.8	27.8	25.8	22.9	18.9	15.9	11.9
137.5°	29.8	28.8	27.8	26.8	25.8	23.9	21.9	19.9	16.9	12.9	9.9
140°	25.8	24.8	24.8	23.9	21.9	20.9	18.9	15.9	13.9	10.9	8.0
142.5°	21.9	21.9	20.9	19.9	18.9	17.9	15.9	13.9	10.9	8.9	6.0
145°	18.9	17.9	17.9	16.9	15.9	13.9	12.9	10.9	8.9	7.0	5.0
147.5°	14.9	14.9	14.9	13.9	12.9	11.9	10.9	8.9	7.0	5.0	3.0
150°	11.9	11.9	11.9	10.9	9.9	8.9	8.0	7.0	5.0	3.0	2.0
152.5°	9.9	9.9	8.9	8.9	8.0	7.0	6.0	5.0	3.0	2.0	2.0
155°	7.0	7.0	7.0	6.0	6.0	5.0	4.0	3.0	2.0	2.0	2.0
157.5°	5.0	5.0	5.0	4.0	4.0	3.0	3.0	2.0	2.0	2.0	2.0
160°	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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: P1213811

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0
2.5°	1795.1	1794.1	1802.0	1802.0	1793.1	1807.0	1821.9
5°	1789.1	1788.1	1796.1	1796.1	1788.1	1802.0	1817.9
7.5°	1777.2	1778.2	1786.1	1788.1	1778.2	1791.1	1808.0
10°	1764.2	1763.3	1772.2	1774.2	1766.2	1778.2	1794.1
12.5°	1743.4	1743.4	1752.3	1755.3	1747.3	1761.3	1776.2
15°	1721.5	1721.5	1727.5	1732.4	1725.5	1738.4	1753.3
17.5°	1693.7	1692.7	1698.6	1704.6	1697.7	1711.6	1727.5
20°	1657.9	1657.9	1664.9	1671.8	1666.8	1679.8	1697.7
22.5°	1620.1	1616.1	1628.1	1633.0	1630.1	1643.0	1660.9
25°	1572.4	1571.4	1583.3	1590.3	1586.3	1600.2	1616.1
27.5°	1520.7	1519.7	1531.7	1540.6	1538.6	1551.5	1569.4
30°	1458.1	1463.1	1474.0	1488.9	1484.0	1497.9	1516.8
32.5°	1392.5	1397.5	1410.4	1426.3	1427.3	1438.2	1457.1
35°	1314.0	1326.9	1335.9	1356.7	1360.7	1371.6	1391.5
37.5°	1231.5	1246.4	1265.3	1281.2	1289.1	1298.1	1320.9
40°	1139.1	1160.9	1181.8	1200.7	1210.6	1219.6	1241.4
42.5°	1055.6	1072.5	1092.3	1111.2	1129.1	1137.1	1159.9
45°	961.1	981.0	998.9	1021.8	1039.7	1048.6	1071.5
47.5°	868.7	888.6	912.4	928.3	947.2	956.2	978.0
50°	780.2	798.1	818.0	836.9	852.8	860.8	879.6
52.5°	692.8	711.7	730.5	742.5	759.4	765.3	781.2
55°	615.2	628.2	645.1	652.0	668.9	672.9	683.8
57.5°	540.7	549.6	555.6	567.5	579.5	588.4	601.3
60°	473.1	477.1	481.1	488.0	498.0	500.9	505.9
62.5°	412.5	411.5	419.4	421.4	422.4	432.4	427.4
65°	358.8	359.8	352.8	349.9	353.8	356.8	354.8
67.5°	314.1	308.1	302.2	295.2	289.2	292.2	289.2
70°	270.4	265.4	255.4	245.5	241.5	235.6	232.6
72.5°	235.6	223.6	213.7	200.8	193.8	186.9	181.9
75°	208.7	191.8	177.9	164.0	154.1	144.1	142.1
77.5°	180.9	165.0	149.1	134.2	119.3	108.3	104.4
80°	159.0	144.1	125.2	107.3	91.4	77.5	72.6
82.5°	139.2	123.2	104.4	85.5	67.6	52.7	46.7
85°	122.3	105.4	86.5	67.6	49.7	33.8	25.8
87.5°	109.3	90.4	71.6	53.7	34.8	18.9	9.9
90°	97.4	79.5	61.6	42.7	24.8	9.9	0.0
92.5°	86.5	69.6	51.7	34.8	18.9	6.0	1.0
95°	76.5	61.6	43.7	27.8	13.9	4.0	1.0
97.5°	68.6	53.7	37.8	22.9	10.9	3.0	1.0
100°	61.6	46.7	32.8	18.9	8.9	2.0	1.0
102.5°	54.7	41.7	27.8	15.9	7.0	1.0	1.0
105°	48.7	36.8	23.9	13.9	6.0	1.0	1.0
107.5°	43.7	32.8	20.9	11.9	4.0	1.0	1.0
110°	38.8	27.8	17.9	9.9	3.0	1.0	1.0



TEST NUMBER: P1213811

CATALOG NUMBER: 4SNLED-LD5-53SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	34.8	24.8	15.9	8.0	2.0	1.0	1.0
115°	30.8	21.9	13.9	7.0	2.0	1.0	1.0
117.5°	26.8	18.9	11.9	5.0	1.0	1.0	1.0
120°	23.9	16.9	9.9	4.0	1.0	1.0	1.0
122.5°	20.9	13.9	8.0	3.0	1.0	1.0	1.0
125°	17.9	11.9	7.0	2.0	1.0	1.0	1.0
127.5°	14.9	9.9	5.0	2.0	1.0	1.0	1.0
130°	12.9	8.0	4.0	1.0	1.0	1.0	1.0
132.5°	10.9	6.0	3.0	1.0	1.0	1.0	1.0
135°	8.9	5.0	2.0	1.0	1.0	1.0	1.0
137.5°	7.0	4.0	2.0	1.0	1.0	1.0	1.0
140°	5.0	3.0	1.0	1.0	1.0	1.0	1.0
142.5°	4.0	2.0	1.0	1.0	1.0	1.0	1.0
145°	3.0	2.0	1.0	1.0	1.0	1.0	1.0
147.5°	2.0	2.0	2.0	2.0	1.0	1.0	1.0
150°	2.0	2.0	1.0	1.0	2.0	1.0	1.0
152.5°	2.0	1.0	1.0	1.0	2.0	1.0	1.0
155°	2.0	2.0	2.0	2.0	2.0	2.0	1.0
157.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0
160°	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)