

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: P1213124

Luminaire Tested: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213124
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-LD5-56SL-LN-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

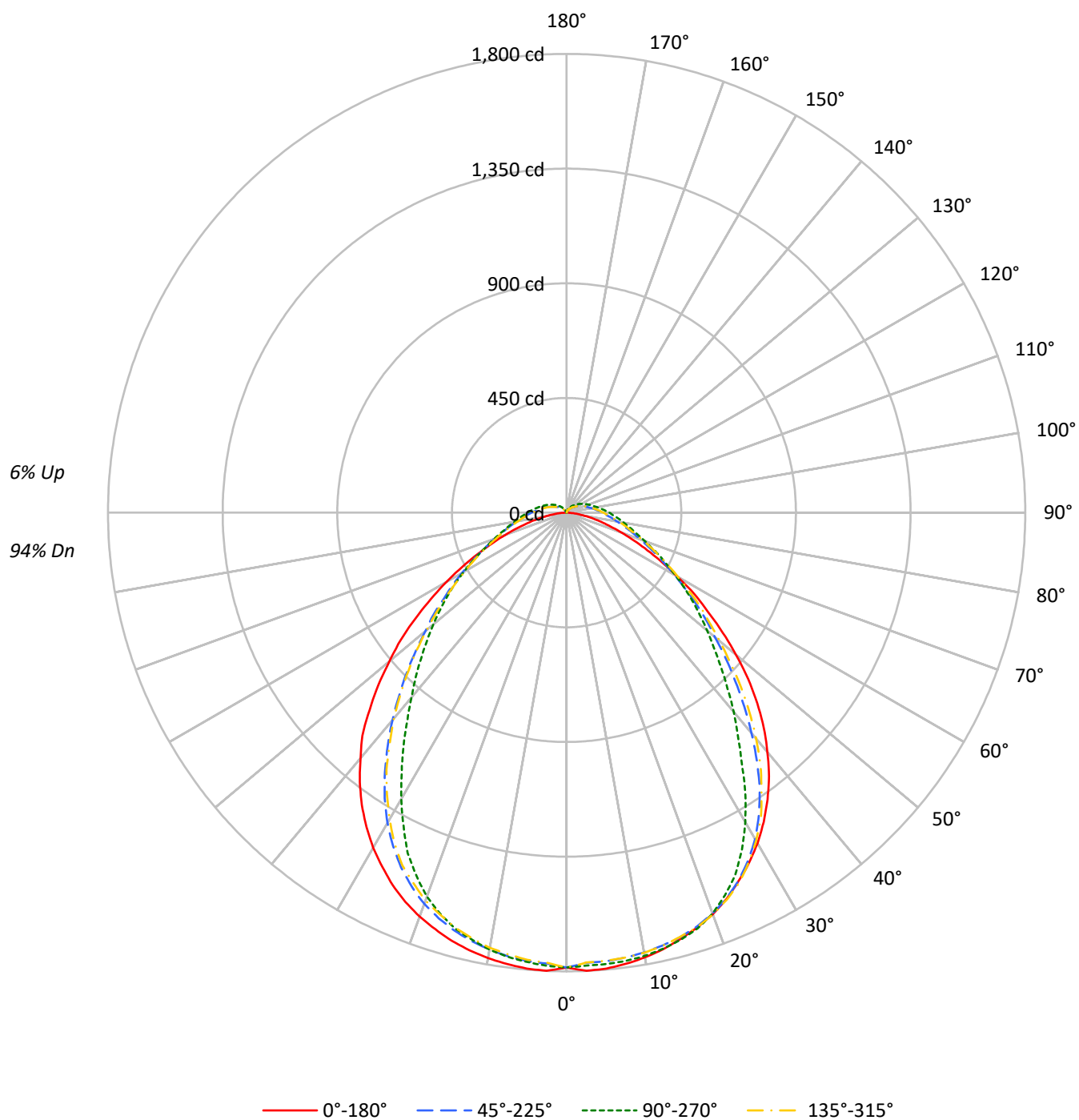
Lumens per Lamp: N/A
Luminaire Lumens: 4517.0 lumens
Efficiency: N/A
Efficacy: 98.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 46
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: P1213124

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96
1	107	103	98	95	104	100	96	92	94	91	88	89	87	85	85	83	81
2	98	90	84	78	95	88	82	77	83	78	74	79	75	72	75	72	69
3	90	80	72	66	87	78	71	65	74	68	63	71	66	61	67	63	60
4	83	72	63	57	80	70	62	56	67	60	55	64	58	53	61	56	52
5	77	64	56	50	74	63	55	49	60	53	48	58	52	47	55	50	46
6	71	58	50	44	69	57	49	43	55	48	42	52	46	42	50	45	41
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37
8	62	49	41	35	60	48	40	35	46	39	34	44	38	34	43	37	33
9	58	45	37	32	56	44	37	31	42	36	31	41	35	30	40	34	30
10	54	42	34	29	53	41	34	29	39	33	28	38	32	28	37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	14424	14424	14424	14424
5°	14527	13964	14527	13902
10°	14462	13593	14485	13405
15°	14368	13187	14434	12844
20°	14259	12665	14342	12130
25°	14030	11890	14184	11190
30°	13732	10752	13912	9954
35°	13269	9357	13525	8713
40°	12605	8183	12938	7592
45°	11728	7114	12109	6706
50°	10531	6250	10996	5935
55°	9110	5520	9771	5241
60°	7661	4846	8354	4567
65°	6281	4285	6914	3973
70°	4998	3802	5596	3517
75°	3926	3511	4421	3230
80°	2834	3388	3336	3095
85°	1742	3407	2350	3132

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 12109 cd/sqm

TEST NUMBER: P1213124

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.2	3.7
10°-20°	485.2	10.7
20°-30°	719.1	15.9
30°-40°	798.9	17.7
40°-50°	724.2	16.0
50°-60°	561.2	12.4
60°-70°	381.1	8.4
70°-80°	242.4	5.4
80°-90°	155.0	3.4
90°-100°	104.5	2.3
100°-110°	71.6	1.6
110°-120°	47.8	1.1
120°-130°	29.7	0.7
130°-140°	16.4	0.4
140°-150°	7.7	0.2
150°-160°	2.8	0.1
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-30°	1373.5	30.4
0°-40°	2172.4	48.1
0°-60°	3457.8	76.6
0°-90°	4236.3	93.8
90°-120°	223.8	5.0
90°-150°	277.7	6.1
90°-180°	281.0	6.2
0°-180°	4517.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1785	1785	1785	1785	1785	
5°	1796	1778	1796	1770	1796	171
15°	1732	1735	1740	1690	1732	489
25°	1596	1567	1614	1475	1596	735
35°	1374	1198	1401	1115	1374	857
45°	1058	856	1093	807	1058	813
55°	676	602	724	571	676	608
65°	350	404	386	375	350	351
75°	140	270	158	248	140	151
85°	26	194	34	179	26	31
90°	0	168	2	153	0	1
95°	1	143	0	134	1	1
105°	1	105	0	99	1	1
115°	1	80	0	74	1	1
125°	1	59	1	52	1	1
135°	1	41	1	33	1	1
145°	1	26	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

TEST NUMBER: P1213124

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9
2.5°	1799.6	1797.6	1795.7	1792.7	1795.7	1803.5	1798.6	1787.8	1785.8	1768.2	1776.0
5°	1795.7	1792.7	1790.7	1787.8	1791.7	1801.5	1796.6	1786.8	1783.9	1767.2	1776.0
7.5°	1785.8	1783.9	1780.9	1780.9	1784.9	1794.7	1790.7	1779.9	1778.0	1761.3	1771.1
10°	1772.1	1771.1	1769.1	1769.1	1773.1	1784.9	1779.9	1770.1	1768.2	1752.5	1763.3
12.5°	1754.4	1755.4	1752.5	1752.5	1758.3	1770.1	1766.2	1755.4	1753.4	1739.7	1750.5
15°	1731.8	1732.8	1730.9	1731.8	1737.7	1751.5	1746.6	1736.7	1734.8	1724.0	1732.8
17.5°	1706.3	1707.3	1707.3	1706.3	1713.2	1726.9	1723.0	1714.2	1711.2	1702.4	1713.2
20°	1676.9	1676.9	1676.9	1676.9	1684.7	1698.5	1693.6	1686.7	1680.8	1673.9	1682.8
22.5°	1640.5	1639.6	1640.5	1643.5	1651.3	1662.1	1659.2	1651.3	1642.5	1638.6	1645.4
25°	1596.4	1599.3	1600.3	1603.2	1613.0	1621.9	1618.9	1611.1	1597.3	1594.4	1596.4
27.5°	1550.2	1552.2	1555.1	1554.1	1567.9	1576.7	1570.8	1564.0	1544.3	1541.4	1539.4
30°	1498.2	1501.1	1503.1	1502.1	1512.9	1522.7	1516.8	1508.0	1481.5	1479.5	1463.8
32.5°	1439.3	1442.2	1444.2	1444.2	1459.9	1463.8	1453.0	1440.3	1411.8	1404.9	1391.2
35°	1374.5	1377.4	1378.4	1378.4	1394.1	1393.1	1379.4	1361.7	1330.3	1321.5	1297.9
37.5°	1304.8	1306.7	1307.7	1313.6	1320.5	1314.6	1296.9	1274.3	1250.8	1226.2	1200.7
40°	1226.2	1229.2	1231.1	1235.1	1241.9	1235.1	1209.5	1182.0	1156.5	1129.0	1103.5
42.5°	1145.7	1154.6	1152.6	1151.6	1155.5	1136.9	1117.3	1085.8	1060.3	1031.8	1006.3
45°	1058.3	1057.4	1062.3	1064.2	1063.3	1047.5	1020.1	991.6	966.1	936.6	915.0
47.5°	966.1	965.1	969.0	971.0	965.1	948.4	926.8	894.4	872.8	847.3	830.6
50°	868.9	868.9	874.8	868.9	865.9	849.2	831.6	799.2	782.5	759.9	750.1
52.5°	771.7	780.5	774.6	772.7	769.7	753.0	739.3	712.8	699.0	689.2	677.4
55°	675.5	685.3	681.3	678.4	677.4	663.7	650.9	631.3	622.4	615.6	608.7
57.5°	594.0	593.0	591.0	588.1	589.1	578.3	565.5	554.7	550.8	547.8	549.8
60°	499.7	507.6	504.6	505.6	506.6	504.6	493.8	487.0	487.9	488.9	491.9
62.5°	422.2	429.0	433.9	430.0	432.0	434.9	429.0	427.1	431.0	434.9	438.9
65°	350.5	357.4	362.3	361.3	367.2	373.1	372.1	374.1	382.9	387.8	392.7
67.5°	285.7	292.6	299.4	300.4	309.3	318.1	322.0	328.9	338.7	345.6	351.5
70°	229.7	235.6	243.5	248.4	260.2	271.9	278.8	292.6	298.5	308.3	312.2
72.5°	179.7	184.6	195.4	207.2	217.0	231.7	245.4	257.2	266.1	276.9	281.8
75°	140.4	142.4	154.1	167.9	181.6	198.3	213.0	225.8	237.6	248.4	256.2
77.5°	103.1	106.0	116.8	135.5	151.2	168.9	185.6	199.3	212.1	222.9	233.7
80°	71.7	77.6	89.3	108.0	125.7	145.3	161.0	176.7	190.5	201.3	212.1
82.5°	46.1	51.1	67.7	86.4	105.0	124.7	141.4	157.1	171.8	183.6	193.4
85°	25.5	32.4	49.1	68.7	87.4	107.0	124.7	140.4	155.1	165.9	175.7
87.5°	9.8	19.6	35.3	54.0	72.7	91.3	110.0	124.7	139.4	151.2	160.0
90°	0.0	11.8	26.5	45.2	63.8	82.5	100.1	115.8	129.6	140.4	150.2
92.5°	1.0	7.9	20.6	36.3	54.0	71.7	88.4	104.1	117.8	128.6	137.4
95°	1.0	5.9	16.7	31.4	47.1	63.8	79.5	94.2	107.0	117.8	126.6
97.5°	1.0	3.9	13.7	27.5	41.2	57.9	72.7	86.4	98.2	109.0	115.8
100°	1.0	3.9	11.8	23.6	37.3	52.0	65.8	79.5	90.3	99.2	107.0
102.5°	1.0	2.9	9.8	20.6	33.4	46.1	59.9	72.7	82.5	91.3	99.2
105°	1.0	2.9	8.8	17.7	29.5	42.2	54.0	65.8	76.6	84.4	91.3
107.5°	1.0	2.0	7.9	14.7	25.5	38.3	50.1	59.9	69.7	77.6	84.4
110°	1.0	2.0	6.9	13.7	22.6	34.4	45.2	55.0	63.8	71.7	77.6

TEST NUMBER: P1213124

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.0	2.0	5.9	12.8	20.6	30.4	41.2	50.1	58.9	65.8	71.7
115°	1.0	2.0	5.9	11.8	18.7	26.5	36.3	46.1	53.0	60.9	65.8
117.5°	1.0	2.0	4.9	9.8	17.7	24.5	33.4	41.2	49.1	56.0	60.9
120°	1.0	2.0	4.9	8.8	15.7	22.6	29.5	37.3	45.2	50.1	55.0
122.5°	1.0	2.0	3.9	8.8	13.7	20.6	26.5	33.4	40.3	46.1	51.1
125°	1.0	2.0	3.9	7.9	12.8	18.7	24.5	29.5	36.3	41.2	46.1
127.5°	1.0	2.0	3.9	6.9	11.8	16.7	22.6	27.5	32.4	37.3	41.2
130°	1.0	2.0	2.9	5.9	10.8	14.7	19.6	25.5	29.5	33.4	37.3
132.5°	1.0	2.0	2.9	5.9	8.8	12.8	17.7	22.6	26.5	30.4	33.4
135°	1.0	2.0	2.9	4.9	7.9	11.8	14.7	19.6	23.6	27.5	30.4
137.5°	1.0	2.0	2.9	4.9	6.9	9.8	12.8	16.7	20.6	23.6	27.5
140°	1.0	2.0	2.9	3.9	5.9	8.8	11.8	13.7	17.7	20.6	23.6
142.5°	1.0	2.0	2.9	3.9	5.9	7.9	9.8	11.8	14.7	17.7	20.6
145°	1.0	2.0	2.9	3.9	4.9	6.9	8.8	10.8	11.8	14.7	16.7
147.5°	1.0	2.0	2.9	3.9	3.9	5.9	7.9	8.8	10.8	11.8	13.7
150°	1.0	2.0	2.9	2.9	3.9	4.9	6.9	7.9	8.8	10.8	11.8
152.5°	1.0	2.0	2.9	2.9	3.9	4.9	5.9	6.9	7.9	8.8	9.8
155°	1.0	2.0	2.9	2.9	2.9	3.9	4.9	5.9	6.9	7.9	8.8
157.5°	2.0	2.0	2.0	2.9	2.9	3.9	3.9	4.9	5.9	5.9	6.9
160°	2.0	2.0	2.0	2.9	2.9	2.9	3.9	3.9	4.9	4.9	5.9
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: P1213124

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9
2.5°	1774.1	1777.0	1785.8	1785.8	1783.9	1781.9	1781.9	1779.0	1780.9	1784.9	1782.9
5°	1774.1	1777.0	1785.8	1785.8	1783.9	1781.9	1780.9	1778.0	1780.9	1784.9	1782.9
7.5°	1768.2	1772.1	1780.9	1780.9	1779.0	1778.0	1776.0	1774.1	1777.0	1780.9	1779.0
10°	1760.3	1764.2	1773.1	1773.1	1771.1	1771.1	1768.2	1766.2	1770.1	1773.1	1772.1
12.5°	1748.5	1753.4	1761.3	1760.3	1758.3	1759.3	1756.4	1752.5	1756.4	1759.3	1760.3
15°	1731.8	1737.7	1745.6	1743.6	1740.7	1742.6	1737.7	1734.8	1737.7	1743.6	1742.6
17.5°	1710.2	1714.2	1720.1	1720.1	1717.1	1715.1	1713.2	1710.2	1712.2	1716.1	1717.1
20°	1679.8	1684.7	1687.7	1684.7	1683.7	1680.8	1676.9	1673.9	1677.8	1683.7	1684.7
22.5°	1639.6	1640.5	1647.4	1640.5	1635.6	1634.6	1630.7	1624.8	1630.7	1635.6	1636.6
25°	1589.5	1594.4	1591.4	1579.7	1579.7	1571.8	1569.8	1566.9	1567.9	1576.7	1580.6
27.5°	1525.7	1527.6	1519.8	1510.0	1501.1	1496.2	1489.3	1490.3	1490.3	1502.1	1506.0
30°	1456.0	1445.2	1438.3	1422.6	1415.7	1403.9	1402.0	1402.0	1400.0	1405.9	1423.6
32.5°	1372.5	1357.8	1347.0	1332.3	1320.5	1308.7	1302.8	1305.8	1304.8	1319.5	1325.4
35°	1281.2	1272.4	1249.8	1231.1	1224.3	1206.6	1206.6	1197.8	1203.6	1220.3	1227.2
37.5°	1185.0	1171.3	1152.6	1132.0	1127.1	1113.3	1108.4	1103.5	1116.3	1119.2	1126.1
40°	1086.8	1074.1	1056.4	1036.7	1036.7	1020.1	1020.1	1020.1	1021.0	1026.9	1039.7
42.5°	993.5	979.8	964.1	950.4	948.4	935.6	935.6	934.6	936.6	941.5	953.3
45°	903.2	892.4	875.7	868.9	869.8	856.1	859.0	856.1	860.0	864.9	868.9
47.5°	819.8	812.9	806.0	796.2	793.3	792.3	787.4	783.5	790.3	790.3	796.2
50°	742.2	738.3	734.4	728.5	729.5	725.5	719.6	719.6	724.5	725.5	729.5
52.5°	674.5	669.6	664.7	665.6	666.6	664.7	661.7	658.8	661.7	663.7	668.6
55°	606.7	602.8	607.7	605.8	607.7	605.8	603.8	601.8	606.7	603.8	608.7
57.5°	545.9	549.8	551.8	547.8	550.8	548.8	549.8	546.8	550.8	552.7	551.8
60°	489.9	495.8	492.8	493.8	497.8	495.8	491.9	494.8	498.7	499.7	498.7
62.5°	438.9	445.7	448.7	446.7	447.7	445.7	448.7	444.7	449.7	451.6	448.7
65°	392.7	400.6	402.5	402.5	402.5	400.6	403.5	404.5	406.5	406.5	404.5
67.5°	353.4	360.3	362.3	364.2	362.3	360.3	360.3	361.3	365.2	367.2	365.2
70°	318.1	325.0	325.9	325.9	326.9	328.9	325.0	326.9	329.9	330.9	329.9
72.5°	287.7	294.5	296.5	295.5	296.5	297.5	297.5	295.5	298.5	300.4	300.4
75°	263.1	267.0	269.0	269.0	270.0	271.0	271.0	270.0	271.9	272.9	273.9
77.5°	240.5	243.5	246.4	246.4	247.4	246.4	248.4	248.4	249.4	250.4	251.3
80°	218.0	221.9	223.8	224.8	226.8	227.8	227.8	227.8	228.8	229.7	229.7
82.5°	200.3	203.2	206.2	209.1	209.1	210.1	210.1	210.1	211.1	211.1	212.1
85°	182.6	186.5	189.5	191.4	192.4	193.4	193.4	194.4	194.4	194.4	195.4
87.5°	166.9	171.8	173.8	175.7	176.7	178.7	178.7	178.7	179.7	179.7	179.7
90°	156.1	161.0	163.0	164.9	165.9	166.9	166.9	167.9	167.9	168.9	168.9
92.5°	143.3	148.2	152.2	152.2	153.2	155.1	154.1	154.1	155.1	156.1	156.1
95°	133.5	137.4	140.4	141.4	142.4	142.4	142.4	143.3	142.4	143.3	143.3
97.5°	121.7	125.7	128.6	130.6	131.6	131.6	131.6	132.5	131.6	132.5	132.5
100°	111.9	115.8	118.8	119.8	121.7	121.7	121.7	121.7	121.7	121.7	122.7
102.5°	104.1	108.0	110.0	110.9	111.9	112.9	112.9	112.9	112.9	113.9	113.9
105°	96.2	100.1	102.1	103.1	104.1	105.0	105.0	105.0	106.0	106.0	105.0
107.5°	89.3	92.3	94.2	96.2	97.2	97.2	98.2	98.2	98.2	98.2	98.2
110°	82.5	85.4	88.4	90.3	90.3	91.3	91.3	92.3	92.3	91.3	92.3

TEST NUMBER: P1213124

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	75.6	79.5	81.5	83.5	84.4	85.4	85.4	85.4	85.4	85.4	85.4
115°	69.7	73.6	75.6	77.6	78.5	79.5	79.5	79.5	79.5	79.5	79.5
117.5°	64.8	68.7	70.7	71.7	72.7	73.6	74.6	74.6	74.6	74.6	73.6
120°	59.9	62.8	64.8	66.8	67.7	68.7	68.7	68.7	68.7	68.7	68.7
122.5°	55.0	57.9	59.9	61.9	62.8	63.8	63.8	63.8	63.8	63.8	63.8
125°	50.1	53.0	55.0	56.9	57.9	58.9	58.9	58.9	58.9	58.9	58.9
127.5°	45.2	48.1	51.1	52.0	53.0	54.0	54.0	54.0	55.0	54.0	54.0
130°	40.3	43.2	46.1	47.1	48.1	49.1	50.1	50.1	50.1	50.1	49.1
132.5°	36.3	39.3	41.2	42.2	44.2	44.2	45.2	45.2	45.2	45.2	44.2
135°	33.4	35.3	37.3	38.3	40.3	40.3	40.3	41.2	41.2	40.3	39.3
137.5°	29.5	31.4	33.4	34.4	35.3	36.3	36.3	37.3	36.3	36.3	36.3
140°	27.5	28.5	30.4	31.4	32.4	32.4	32.4	33.4	33.4	32.4	32.4
142.5°	23.6	25.5	27.5	28.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
145°	19.6	22.6	23.6	25.5	25.5	26.5	26.5	26.5	26.5	26.5	25.5
147.5°	16.7	18.7	21.6	22.6	22.6	23.6	23.6	23.6	23.6	23.6	22.6
150°	12.8	14.7	17.7	19.6	19.6	20.6	20.6	20.6	20.6	19.6	19.6
152.5°	10.8	12.8	13.7	15.7	16.7	16.7	16.7	17.7	16.7	16.7	16.7
155°	9.8	10.8	11.8	12.8	13.7	14.7	14.7	14.7	14.7	13.7	13.7
157.5°	7.9	8.8	9.8	10.8	11.8	12.8	12.8	12.8	12.8	12.8	11.8
160°	5.9	6.9	7.9	7.9	8.8	9.8	10.8	9.8	9.8	9.8	9.8
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: P1213124

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9
2.5°	1780.9	1779.9	1782.9	1778.0	1763.3	1767.2	1765.2	1774.1	1776.0	1778.0	1786.8
5°	1780.9	1779.9	1781.9	1778.0	1762.3	1765.2	1763.3	1772.1	1774.1	1775.0	1783.9
7.5°	1777.0	1776.0	1779.0	1774.1	1757.4	1761.3	1758.3	1767.2	1768.2	1769.1	1777.0
10°	1769.1	1768.2	1770.1	1766.2	1749.5	1753.4	1749.5	1758.3	1758.3	1760.3	1766.2
12.5°	1757.4	1755.4	1759.3	1754.4	1735.8	1740.7	1738.7	1744.6	1745.6	1746.6	1752.5
15°	1740.7	1738.7	1741.7	1738.7	1722.0	1723.0	1720.1	1728.9	1729.9	1727.9	1733.8
17.5°	1716.1	1714.2	1720.1	1718.1	1701.4	1705.3	1704.4	1706.3	1709.3	1704.4	1712.2
20°	1685.7	1687.7	1689.6	1690.6	1677.8	1677.8	1676.9	1680.8	1683.7	1679.8	1685.7
22.5°	1640.5	1645.4	1651.3	1653.3	1644.5	1643.5	1649.4	1647.4	1650.4	1648.4	1652.3
25°	1583.6	1593.4	1599.3	1605.2	1600.3	1602.2	1611.1	1613.0	1613.0	1612.1	1616.0
27.5°	1512.9	1525.7	1536.5	1549.2	1544.3	1548.2	1563.0	1564.9	1568.9	1564.9	1572.8
30°	1428.5	1440.3	1460.9	1479.5	1481.5	1487.4	1508.0	1510.0	1520.8	1516.8	1519.8
32.5°	1344.0	1349.9	1373.5	1392.1	1403.9	1418.7	1441.2	1445.2	1459.9	1462.8	1462.8
35°	1238.0	1254.7	1276.3	1302.8	1317.5	1333.2	1363.7	1369.6	1391.2	1398.0	1405.9
37.5°	1148.7	1164.4	1178.1	1205.6	1232.1	1249.8	1274.3	1289.1	1311.6	1324.4	1334.2
40°	1053.4	1066.2	1080.9	1108.4	1131.0	1157.5	1182.0	1199.7	1228.2	1242.9	1255.7
42.5°	963.1	972.9	988.6	1008.3	1031.8	1061.3	1084.9	1105.5	1135.9	1156.5	1171.3
45°	882.6	888.5	902.2	917.0	937.6	968.0	990.6	1017.1	1041.7	1063.3	1080.9
47.5°	807.0	814.9	821.7	831.6	850.2	868.9	895.4	920.9	945.4	969.0	986.7
50°	737.3	737.3	748.1	755.0	767.7	784.4	805.1	822.7	853.2	869.8	892.4
52.5°	669.6	673.5	679.4	683.3	693.1	703.9	720.6	735.3	760.9	776.6	798.2
55°	609.7	613.6	616.6	618.5	624.4	637.2	643.1	654.8	672.5	685.3	703.9
57.5°	552.7	554.7	557.6	558.6	559.6	567.5	572.4	575.3	593.0	605.8	621.5
60°	500.7	500.7	503.6	502.7	501.7	505.6	504.6	507.6	518.4	526.2	533.1
62.5°	451.6	451.6	452.6	450.6	449.7	449.7	445.7	448.7	451.6	452.6	457.5
65°	406.5	411.4	407.4	408.4	402.5	400.6	398.6	392.7	391.7	387.8	389.8
67.5°	366.2	370.1	366.2	366.2	361.3	357.4	352.5	342.6	339.7	331.8	329.9
70°	333.8	330.9	332.8	329.9	324.0	319.1	312.2	304.3	294.5	284.7	277.8
72.5°	302.4	302.4	300.4	297.5	294.5	284.7	276.9	268.0	256.2	243.5	233.7
75°	271.9	272.9	272.9	270.0	265.1	256.2	247.4	234.6	221.9	207.2	194.4
77.5°	250.4	250.4	250.4	245.4	240.5	232.7	221.9	208.1	194.4	176.7	162.0
80°	229.7	228.8	228.8	222.9	218.0	209.1	198.3	184.6	169.8	151.2	134.5
82.5°	213.0	212.1	210.1	205.2	198.3	189.5	178.7	164.0	148.2	131.6	110.9
85°	195.4	194.4	192.4	187.5	180.6	172.8	161.0	146.3	130.6	111.9	92.3
87.5°	179.7	178.7	175.7	172.8	164.9	156.1	144.3	130.6	113.9	96.2	76.6
90°	168.9	166.9	164.9	161.0	154.1	144.3	132.5	117.8	101.1	83.5	63.8
92.5°	156.1	155.1	152.2	148.2	142.4	132.5	120.8	107.0	90.3	73.6	55.0
95°	143.3	142.4	140.4	136.5	130.6	121.7	110.9	97.2	81.5	64.8	48.1
97.5°	131.6	131.6	128.6	125.7	118.8	111.9	101.1	88.4	73.6	58.9	43.2
100°	121.7	121.7	118.8	114.9	110.0	103.1	92.3	80.5	66.8	53.0	37.3
102.5°	112.9	111.9	110.0	106.0	101.1	94.2	84.4	73.6	60.9	47.1	33.4
105°	105.0	104.1	102.1	98.2	94.2	86.4	78.5	67.7	55.0	42.2	29.5
107.5°	97.2	96.2	95.2	91.3	86.4	79.5	71.7	60.9	50.1	38.3	26.5
110°	90.3	89.3	87.4	83.5	78.5	72.7	64.8	56.0	45.2	34.4	23.6

TEST NUMBER: P1213124

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	84.4	83.5	81.5	77.6	73.6	66.8	59.9	50.1	41.2	31.4	20.6
115°	78.5	77.6	75.6	71.7	66.8	60.9	54.0	46.1	36.3	27.5	18.7
117.5°	72.7	71.7	69.7	66.8	61.9	56.0	49.1	41.2	32.4	25.5	16.7
120°	67.7	65.8	63.8	60.9	56.0	51.1	44.2	37.3	29.5	22.6	14.7
122.5°	62.8	60.9	58.9	56.0	51.1	46.1	39.3	33.4	27.5	20.6	13.7
125°	56.9	56.0	54.0	51.1	46.1	41.2	36.3	30.4	24.5	18.7	11.8
127.5°	52.0	51.1	49.1	45.2	41.2	37.3	32.4	27.5	21.6	15.7	10.8
130°	48.1	46.1	44.2	41.2	38.3	34.4	29.5	24.5	19.6	13.7	9.8
132.5°	43.2	41.2	39.3	37.3	34.4	30.4	26.5	21.6	17.7	12.8	8.8
135°	39.3	37.3	35.3	33.4	30.4	27.5	23.6	19.6	15.7	11.8	7.9
137.5°	34.4	33.4	32.4	30.4	27.5	24.5	21.6	16.7	13.7	10.8	6.9
140°	31.4	30.4	29.5	26.5	24.5	21.6	18.7	14.7	11.8	8.8	5.9
142.5°	28.5	27.5	25.5	23.6	21.6	19.6	15.7	13.7	10.8	7.9	5.9
145°	24.5	23.6	22.6	20.6	18.7	15.7	13.7	11.8	9.8	6.9	4.9
147.5°	22.6	21.6	19.6	17.7	15.7	13.7	12.8	10.8	7.9	5.9	3.9
150°	18.7	17.7	16.7	14.7	13.7	12.8	10.8	8.8	6.9	4.9	3.9
152.5°	15.7	14.7	13.7	13.7	11.8	10.8	8.8	7.9	5.9	4.9	2.9
155°	13.7	13.7	12.8	11.8	9.8	8.8	7.9	5.9	4.9	3.9	2.9
157.5°	11.8	10.8	9.8	9.8	8.8	7.9	5.9	4.9	3.9	3.9	2.9
160°	9.8	8.8	8.8	7.9	6.9	5.9	4.9	4.9	3.9	2.9	2.9
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: P1213124

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9
2.5°	1787.8	1777.0	1786.8	1799.6	1799.6	1797.6	1795.7	1799.6	1809.4	1805.5	1793.7
5°	1784.9	1774.1	1782.9	1795.7	1795.7	1792.7	1790.7	1793.7	1804.5	1799.6	1788.8
7.5°	1779.0	1769.1	1775.0	1786.8	1786.8	1783.9	1781.9	1785.8	1794.7	1789.8	1778.0
10°	1768.2	1757.4	1764.2	1775.0	1774.1	1772.1	1769.1	1774.1	1781.9	1775.0	1761.3
12.5°	1754.4	1743.6	1749.5	1759.3	1758.3	1754.4	1752.5	1755.4	1762.3	1758.3	1743.6
15°	1735.8	1725.0	1729.9	1739.7	1736.7	1733.8	1729.9	1730.9	1739.7	1732.8	1717.1
17.5°	1713.2	1701.4	1705.3	1714.2	1711.2	1708.3	1703.4	1704.4	1714.2	1704.4	1687.7
20°	1685.7	1672.9	1675.9	1686.7	1681.8	1676.9	1672.0	1672.0	1681.8	1671.0	1652.3
22.5°	1656.2	1643.5	1645.4	1653.3	1649.4	1640.5	1635.6	1638.6	1643.5	1629.7	1610.1
25°	1619.9	1603.2	1606.2	1614.0	1611.1	1599.3	1594.4	1596.4	1594.4	1583.6	1563.0
27.5°	1577.7	1560.0	1562.0	1566.9	1563.0	1552.2	1546.3	1547.3	1543.3	1529.6	1506.0
30°	1524.7	1515.9	1514.9	1517.8	1511.9	1501.1	1494.3	1492.3	1491.3	1471.7	1443.2
32.5°	1470.7	1462.8	1457.9	1461.9	1455.0	1444.2	1432.4	1432.4	1422.6	1403.9	1379.4
35°	1415.7	1402.9	1398.0	1401.0	1393.1	1379.4	1369.6	1364.7	1349.9	1326.4	1299.9
37.5°	1345.0	1336.2	1330.3	1333.2	1324.4	1314.6	1295.9	1291.0	1275.3	1242.9	1209.5
40°	1268.4	1261.6	1255.7	1258.6	1248.8	1234.1	1217.4	1209.5	1191.9	1155.5	1129.0
42.5°	1186.0	1183.0	1176.2	1187.0	1167.3	1152.6	1135.9	1123.1	1105.5	1066.2	1035.8
45°	1098.6	1105.5	1089.8	1092.7	1079.9	1067.2	1049.5	1030.9	1013.2	975.9	941.5
47.5°	1006.3	1011.2	1000.4	1002.4	988.6	976.9	961.2	937.6	918.0	885.6	855.1
50°	911.1	909.1	909.1	907.2	896.4	881.6	865.9	844.3	824.7	795.2	769.7
52.5°	810.0	813.9	815.8	820.8	807.0	798.2	773.6	755.0	740.3	709.8	688.2
55°	712.8	726.5	722.6	724.5	708.8	702.0	682.3	667.6	646.0	628.3	614.6
57.5°	624.4	627.4	629.3	632.3	625.4	611.6	595.9	584.2	567.5	552.7	542.9
60°	539.0	539.0	540.0	544.9	538.0	526.2	514.4	505.6	493.8	485.0	479.1
62.5°	458.5	465.4	466.3	462.4	453.6	447.7	439.8	434.9	427.1	424.1	422.2
65°	383.9	383.9	383.9	385.8	380.9	377.0	372.1	371.1	374.1	370.1	372.1
67.5°	321.0	318.1	316.1	317.1	315.1	313.2	312.2	315.1	321.0	321.0	325.9
70°	267.0	261.2	257.2	257.2	257.2	258.2	261.2	267.0	276.9	280.8	287.7
72.5°	222.9	210.1	204.2	204.2	205.2	209.1	218.0	228.8	237.6	245.4	254.3
75°	180.6	167.9	159.0	158.1	160.0	165.9	178.7	188.5	203.2	214.0	224.8
77.5°	146.3	130.6	119.8	118.8	121.7	130.6	146.3	159.0	175.7	187.5	199.3
80°	116.8	99.2	90.3	84.4	89.3	100.1	117.8	133.5	149.2	164.9	179.7
82.5°	93.3	76.6	62.8	56.9	62.8	77.6	94.2	112.9	128.6	145.3	160.0
85°	73.6	56.0	40.3	34.4	41.2	56.9	75.6	94.2	111.9	128.6	143.3
87.5°	57.9	40.3	24.5	16.7	25.5	42.2	59.9	78.5	97.2	113.9	128.6
90°	45.2	28.5	13.7	2.0	14.7	30.4	48.1	65.8	84.4	101.1	115.8
92.5°	38.3	21.6	7.9	0.0	8.8	22.6	39.3	56.9	73.6	90.3	105.0
95°	32.4	17.7	5.9	0.0	5.9	17.7	32.4	48.1	64.8	81.5	96.2
97.5°	27.5	13.7	3.9	0.0	3.9	13.7	26.5	42.2	56.9	72.7	86.4
100°	23.6	11.8	2.9	0.0	2.9	10.8	22.6	36.3	51.1	65.8	78.5
102.5°	20.6	9.8	2.0	0.0	2.0	8.8	18.7	31.4	44.2	57.9	70.7
105°	17.7	7.9	2.0	0.0	1.0	6.9	15.7	27.5	39.3	52.0	63.8
107.5°	15.7	6.9	2.0	0.0	1.0	5.9	13.7	23.6	35.3	46.1	56.9
110°	13.7	5.9	2.0	0.0	1.0	3.9	11.8	20.6	30.4	41.2	52.0

TEST NUMBER: P1213124

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	11.8	4.9	1.0	0.0	0.0	2.9	9.8	17.7	26.5	37.3	46.1
115°	10.8	4.9	1.0	0.0	0.0	2.0	7.9	15.7	23.6	33.4	41.2
117.5°	9.8	3.9	1.0	0.0	1.0	2.0	6.9	13.7	20.6	28.5	37.3
120°	8.8	3.9	1.0	0.0	1.0	1.0	4.9	11.8	17.7	25.5	32.4
122.5°	7.9	3.9	1.0	0.0	1.0	1.0	3.9	9.8	15.7	22.6	28.5
125°	6.9	2.9	2.0	1.0	1.0	1.0	2.9	7.9	13.7	18.7	25.5
127.5°	6.9	2.9	2.0	1.0	1.0	1.0	2.0	6.9	10.8	16.7	22.6
130°	5.9	2.9	2.0	1.0	1.0	1.0	1.0	4.9	9.8	13.7	18.7
132.5°	4.9	2.9	2.0	1.0	1.0	1.0	1.0	2.9	6.9	11.8	15.7
135°	4.9	2.9	2.0	1.0	1.0	1.0	1.0	2.0	4.9	8.8	12.8
137.5°	3.9	2.0	2.0	1.0	1.0	1.0	1.0	1.0	3.9	6.9	9.8
140°	3.9	2.0	2.0	1.0	1.0	1.0	1.0	1.0	2.9	4.9	7.9
142.5°	2.9	2.0	2.0	1.0	1.0	1.0	1.0	1.0	2.0	3.9	5.9
145°	2.9	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.9
147.5°	2.9	2.9	2.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.9
150°	2.9	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
152.5°	2.9	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
155°	2.9	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0
157.5°	2.9	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
160°	2.9	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: P1213124

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9
2.5°	1789.8	1771.1	1780.9	1778.0	1781.9	1789.8	1788.8	1786.8	1786.8	1783.9	1779.9
5°	1783.9	1766.2	1775.0	1770.1	1775.0	1781.9	1780.9	1778.0	1779.9	1775.0	1770.1
7.5°	1772.1	1756.4	1764.2	1760.3	1764.2	1771.1	1768.2	1767.2	1769.1	1761.3	1758.3
10°	1758.3	1740.7	1749.5	1744.6	1749.5	1754.4	1752.5	1748.5	1752.5	1744.6	1741.7
12.5°	1736.7	1722.0	1727.9	1725.9	1728.9	1733.8	1729.9	1726.9	1728.9	1722.0	1716.1
15°	1713.2	1698.5	1703.4	1700.4	1702.4	1708.3	1701.4	1700.4	1698.5	1691.6	1689.6
17.5°	1682.8	1669.0	1673.9	1669.0	1672.0	1670.0	1669.0	1664.1	1664.1	1656.2	1650.4
20°	1645.4	1633.7	1630.7	1626.8	1630.7	1626.8	1620.9	1617.0	1616.0	1608.1	1603.2
22.5°	1602.2	1588.5	1590.5	1579.7	1580.6	1574.8	1564.9	1561.0	1557.1	1548.2	1541.4
25°	1550.2	1536.5	1526.7	1519.8	1510.9	1510.0	1497.2	1487.4	1486.4	1475.6	1474.6
27.5°	1491.3	1475.6	1467.7	1451.1	1440.3	1431.4	1420.6	1410.8	1405.9	1394.1	1386.3
30°	1423.6	1405.9	1386.3	1374.5	1357.8	1350.9	1332.3	1320.5	1316.6	1303.8	1297.9
32.5°	1347.0	1328.3	1312.6	1290.0	1271.4	1261.6	1242.9	1231.1	1226.2	1212.5	1204.6
35°	1263.5	1242.9	1224.3	1202.7	1187.9	1171.3	1148.7	1136.9	1126.1	1121.2	1115.3
37.5°	1176.2	1153.6	1132.0	1110.4	1097.6	1078.0	1058.3	1050.5	1037.7	1032.8	1026.9
40°	1085.8	1063.3	1042.6	1022.0	1007.3	989.6	972.0	969.0	955.3	950.4	946.4
42.5°	996.5	972.9	949.4	934.6	923.8	906.2	894.4	891.4	879.7	876.7	876.7
45°	916.0	886.5	866.9	854.1	845.3	830.6	820.8	818.8	809.0	807.0	807.0
47.5°	829.6	802.1	787.4	779.5	771.7	760.9	755.0	755.0	745.2	743.2	742.2
50°	749.1	723.6	712.8	704.9	703.9	696.1	691.2	689.2	689.2	682.3	683.3
52.5°	672.5	659.7	650.9	646.0	640.1	635.2	631.3	631.3	628.3	623.4	625.4
55°	601.8	587.1	588.1	584.2	581.2	578.3	579.2	573.4	572.4	568.4	571.4
57.5°	531.1	531.1	529.2	526.2	521.3	523.3	523.3	523.3	518.4	515.4	518.4
60°	471.2	474.2	469.3	472.2	470.3	471.2	469.3	469.3	466.3	465.4	466.3
62.5°	418.2	423.1	421.2	425.1	423.1	424.1	426.1	422.2	420.2	418.2	420.2
65°	371.1	377.0	376.0	379.0	379.9	380.9	381.9	379.9	378.0	376.0	375.0
67.5°	329.9	335.8	339.7	340.7	341.7	344.6	343.6	341.7	339.7	336.7	335.8
70°	292.6	300.4	305.3	307.3	311.2	309.3	309.3	308.3	306.3	303.4	302.4
72.5°	261.2	270.0	274.9	276.9	280.8	280.8	279.8	278.8	276.9	273.9	272.9
75°	233.7	241.5	248.4	252.3	255.3	255.3	254.3	253.3	251.3	249.4	248.4
77.5°	212.1	218.9	224.8	229.7	231.7	232.7	231.7	229.7	229.7	228.8	227.8
80°	190.5	198.3	204.2	209.1	212.1	212.1	211.1	212.1	210.1	209.1	208.1
82.5°	171.8	180.6	187.5	192.4	194.4	195.4	194.4	195.4	193.4	193.4	193.4
85°	155.1	164.0	171.8	175.7	178.7	179.7	179.7	179.7	178.7	178.7	178.7
87.5°	141.4	150.2	158.1	162.0	164.9	165.9	165.9	166.9	164.9	164.9	164.9
90°	128.6	137.4	145.3	149.2	152.2	154.1	154.1	155.1	154.1	153.2	153.2
92.5°	116.8	126.6	134.5	138.4	141.4	144.3	144.3	145.3	143.3	143.3	143.3
95°	107.0	116.8	123.7	128.6	131.6	133.5	134.5	134.5	133.5	133.5	133.5
97.5°	98.2	107.0	113.9	118.8	121.7	122.7	123.7	124.7	123.7	123.7	123.7
100°	89.3	98.2	105.0	109.0	112.9	113.9	114.9	115.8	115.8	114.9	114.9
102.5°	81.5	90.3	96.2	101.1	104.1	106.0	107.0	107.0	107.0	107.0	107.0
105°	73.6	82.5	88.4	93.3	96.2	98.2	99.2	100.1	100.1	99.2	99.2
107.5°	66.8	74.6	81.5	85.4	89.3	91.3	92.3	92.3	93.3	92.3	92.3
110°	59.9	68.7	74.6	78.5	82.5	84.4	85.4	86.4	86.4	86.4	86.4

TEST NUMBER: P1213124

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	55.0	61.9	67.7	71.7	75.6	77.6	78.5	79.5	80.5	79.5	79.5
115°	49.1	56.0	61.9	65.8	68.7	70.7	72.7	73.6	73.6	74.6	73.6
117.5°	44.2	50.1	56.0	59.9	62.8	65.8	66.8	67.7	68.7	67.7	67.7
120°	39.3	45.2	50.1	54.0	56.9	59.9	60.9	61.9	62.8	61.9	61.9
122.5°	35.3	40.3	45.2	49.1	52.0	54.0	56.0	56.0	56.9	56.9	56.9
125°	31.4	36.3	40.3	44.2	47.1	49.1	50.1	51.1	51.1	52.0	52.0
127.5°	27.5	31.4	36.3	39.3	42.2	44.2	45.2	46.1	46.1	47.1	47.1
130°	23.6	27.5	31.4	34.4	37.3	39.3	40.3	41.2	42.2	42.2	42.2
132.5°	20.6	24.5	27.5	30.4	32.4	34.4	36.3	37.3	37.3	37.3	37.3
135°	16.7	20.6	23.6	26.5	28.5	30.4	31.4	33.4	33.4	33.4	33.4
137.5°	13.7	17.7	20.6	22.6	24.5	26.5	27.5	28.5	29.5	29.5	29.5
140°	10.8	13.7	16.7	19.6	21.6	22.6	24.5	24.5	25.5	25.5	25.5
142.5°	7.9	10.8	12.8	15.7	17.7	19.6	20.6	21.6	21.6	21.6	21.6
145°	5.9	7.9	9.8	11.8	14.7	15.7	16.7	17.7	18.7	18.7	18.7
147.5°	3.9	5.9	6.9	8.8	10.8	12.8	13.7	14.7	15.7	15.7	15.7
150°	2.9	3.9	5.9	6.9	7.9	9.8	11.8	11.8	12.8	12.8	11.8
152.5°	2.0	2.9	3.9	4.9	5.9	6.9	8.8	8.8	9.8	9.8	9.8
155°	2.0	2.0	2.0	2.9	3.9	4.9	5.9	6.9	6.9	6.9	6.9
157.5°	2.0	2.0	2.0	2.0	2.0	2.9	3.9	4.9	4.9	4.9	4.9
160°	2.0	2.0	1.0	1.0	2.0	2.0	2.0	2.0	2.9	2.9	2.9
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: P1213124

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9
2.5°	1782.9	1784.9	1784.9	1782.9	1781.9	1785.8	1780.9	1762.3	1768.2	1770.1	1776.0
5°	1774.1	1776.0	1776.0	1776.0	1774.1	1778.0	1773.1	1754.4	1761.3	1764.2	1768.2
7.5°	1761.3	1762.3	1764.2	1763.3	1761.3	1767.2	1762.3	1743.6	1748.5	1753.4	1758.3
10°	1744.6	1744.6	1745.6	1747.5	1745.6	1750.5	1745.6	1728.9	1733.8	1736.7	1742.6
12.5°	1722.0	1724.0	1725.0	1724.0	1723.0	1726.9	1725.0	1709.3	1711.2	1717.1	1723.0
15°	1691.6	1691.6	1696.5	1694.5	1694.5	1698.5	1700.4	1682.8	1685.7	1694.5	1700.4
17.5°	1654.3	1655.3	1659.2	1661.2	1660.2	1667.0	1668.0	1654.3	1653.3	1664.1	1670.0
20°	1606.2	1608.1	1613.0	1617.0	1617.0	1624.8	1627.8	1618.9	1619.9	1631.7	1633.7
22.5°	1547.3	1547.3	1556.1	1562.0	1566.9	1571.8	1580.6	1572.8	1572.8	1588.5	1597.3
25°	1474.6	1481.5	1484.4	1496.2	1503.1	1516.8	1524.7	1525.7	1526.7	1541.4	1547.3
27.5°	1394.1	1396.1	1404.9	1418.7	1426.5	1439.3	1454.0	1456.9	1461.9	1481.5	1490.3
30°	1302.8	1308.7	1312.6	1332.3	1343.1	1359.7	1378.4	1385.3	1389.2	1415.7	1426.5
32.5°	1209.5	1211.5	1228.2	1239.0	1251.8	1269.4	1291.0	1303.8	1311.6	1339.1	1354.8
35°	1116.3	1120.2	1133.9	1147.7	1160.5	1178.1	1200.7	1218.4	1232.1	1256.7	1277.3
37.5°	1030.9	1040.7	1043.6	1057.4	1067.2	1084.9	1100.6	1126.1	1139.8	1165.4	1191.9
40°	954.3	957.2	959.2	972.9	979.8	996.5	1019.1	1035.8	1054.4	1073.1	1104.5
42.5°	878.7	880.6	883.6	891.4	899.3	911.1	927.8	944.5	964.1	991.6	1012.2
45°	809.0	810.9	812.9	817.8	824.7	835.5	846.3	858.1	877.7	901.3	922.9
47.5°	744.2	748.1	748.1	749.1	754.0	762.8	770.7	785.4	796.2	809.0	833.5
50°	682.3	685.3	686.3	686.3	689.2	695.1	697.1	706.9	716.7	728.5	746.1
52.5°	624.4	624.4	623.4	627.4	627.4	631.3	632.3	638.1	645.0	657.8	665.6
55°	569.4	569.4	572.4	570.4	570.4	572.4	571.4	572.4	578.3	586.1	593.0
57.5°	516.4	515.4	518.4	516.4	515.4	517.4	519.4	515.4	516.4	524.3	524.3
60°	463.4	464.4	467.3	465.4	465.4	465.4	463.4	461.4	459.5	464.4	466.3
62.5°	421.2	418.2	421.2	418.2	420.2	419.2	417.3	413.3	414.3	412.3	410.4
65°	377.0	377.0	378.0	375.0	377.0	377.0	374.1	373.1	367.2	365.2	360.3
67.5°	338.7	338.7	339.7	337.7	337.7	338.7	335.8	332.8	326.9	324.0	317.1
70°	305.3	305.3	305.3	304.3	304.3	304.3	302.4	298.5	292.6	287.7	278.8
72.5°	274.9	275.9	274.9	274.9	277.8	274.9	271.9	268.0	263.1	253.3	245.4
75°	250.4	251.3	250.4	250.4	250.4	249.4	248.4	242.5	236.6	228.8	217.0
77.5°	228.8	228.8	229.7	228.8	228.8	227.8	224.8	219.9	213.0	206.2	192.4
80°	208.1	209.1	210.1	211.1	209.1	208.1	205.2	201.3	192.4	184.6	170.8
82.5°	193.4	192.4	193.4	194.4	192.4	191.4	188.5	183.6	176.7	165.9	152.2
85°	178.7	177.7	177.7	178.7	177.7	175.7	172.8	167.9	161.0	150.2	136.5
87.5°	164.0	164.9	165.9	164.9	164.0	162.0	159.0	154.1	146.3	137.4	122.7
90°	153.2	153.2	153.2	153.2	152.2	150.2	147.3	141.4	134.5	123.7	110.9
92.5°	143.3	143.3	143.3	143.3	142.4	139.4	136.5	131.6	123.7	112.9	101.1
95°	133.5	134.5	133.5	133.5	131.6	130.6	125.7	120.8	113.9	103.1	90.3
97.5°	122.7	123.7	122.7	122.7	121.7	119.8	116.8	110.9	104.1	94.2	82.5
100°	114.9	114.9	113.9	113.9	112.9	110.9	107.0	102.1	95.2	85.4	73.6
102.5°	106.0	107.0	106.0	106.0	104.1	102.1	99.2	94.2	87.4	77.6	66.8
105°	99.2	99.2	98.2	98.2	96.2	94.2	91.3	85.4	79.5	70.7	59.9
107.5°	92.3	92.3	91.3	91.3	89.3	87.4	83.5	78.5	72.7	63.8	54.0
110°	85.4	85.4	85.4	84.4	82.5	79.5	76.6	71.7	65.8	57.9	48.1

TEST NUMBER: P1213124

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	80.5	79.5	78.5	77.6	75.6	73.6	69.7	64.8	58.9	52.0	43.2
115°	73.6	73.6	72.7	71.7	69.7	66.8	63.8	59.9	54.0	46.1	38.3
117.5°	67.7	67.7	66.8	65.8	63.8	60.9	57.9	54.0	48.1	41.2	34.4
120°	61.9	61.9	60.9	59.9	57.9	55.0	53.0	48.1	43.2	36.3	30.4
122.5°	56.9	56.0	56.0	54.0	53.0	50.1	47.1	43.2	38.3	32.4	26.5
125°	51.1	51.1	50.1	49.1	48.1	45.2	42.2	38.3	33.4	28.5	23.6
127.5°	46.1	46.1	45.2	44.2	43.2	40.3	37.3	34.4	29.5	24.5	19.6
130°	41.2	41.2	40.3	39.3	38.3	35.3	33.4	29.5	25.5	21.6	16.7
132.5°	37.3	37.3	36.3	35.3	33.4	31.4	29.5	25.5	22.6	18.7	14.7
135°	33.4	32.4	32.4	31.4	29.5	27.5	25.5	22.6	18.7	15.7	11.8
137.5°	29.5	28.5	27.5	26.5	25.5	23.6	21.6	19.6	16.7	12.8	9.8
140°	25.5	24.5	24.5	23.6	21.6	20.6	18.7	15.7	13.7	10.8	7.9
142.5°	21.6	21.6	20.6	19.6	18.7	17.7	15.7	13.7	10.8	8.8	5.9
145°	18.7	17.7	17.7	16.7	15.7	13.7	12.8	10.8	8.8	6.9	4.9
147.5°	14.7	14.7	14.7	13.7	12.8	11.8	10.8	8.8	6.9	4.9	2.9
150°	11.8	11.8	11.8	10.8	9.8	8.8	7.9	6.9	4.9	2.9	2.0
152.5°	9.8	9.8	8.8	8.8	7.9	6.9	5.9	4.9	2.9	2.0	2.0
155°	6.9	6.9	6.9	5.9	5.9	4.9	3.9	2.9	2.0	2.0	2.0
157.5°	4.9	4.9	4.9	3.9	3.9	2.9	2.9	2.0	2.0	2.0	2.0
160°	2.9	2.9	2.9	2.9	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: P1213124

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9	1784.9
2.5°	1773.1	1772.1	1779.9	1779.9	1771.1	1784.9	1799.6
5°	1767.2	1766.2	1774.1	1774.1	1766.2	1779.9	1795.7
7.5°	1755.4	1756.4	1764.2	1766.2	1756.4	1769.1	1785.8
10°	1742.6	1741.7	1750.5	1752.5	1744.6	1756.4	1772.1
12.5°	1722.0	1722.0	1730.9	1733.8	1725.9	1739.7	1754.4
15°	1700.4	1700.4	1706.3	1711.2	1704.4	1717.1	1731.8
17.5°	1672.9	1672.0	1677.8	1683.7	1676.9	1690.6	1706.3
20°	1637.6	1637.6	1644.5	1651.3	1646.4	1659.2	1676.9
22.5°	1600.3	1596.4	1608.1	1613.0	1610.1	1622.9	1640.5
25°	1553.2	1552.2	1564.0	1570.8	1566.9	1580.6	1596.4
27.5°	1502.1	1501.1	1512.9	1521.7	1519.8	1532.5	1550.2
30°	1440.3	1445.2	1456.0	1470.7	1465.8	1479.5	1498.2
32.5°	1375.5	1380.4	1393.1	1408.8	1409.8	1420.6	1439.3
35°	1297.9	1310.7	1319.5	1340.1	1344.0	1354.8	1374.5
37.5°	1216.4	1231.1	1249.8	1265.5	1273.4	1282.2	1304.8
40°	1125.1	1146.7	1167.3	1186.0	1195.8	1204.6	1226.2
42.5°	1042.6	1059.3	1079.0	1097.6	1115.3	1123.1	1145.7
45°	949.4	969.0	986.7	1009.3	1026.9	1035.8	1058.3
47.5°	858.1	877.7	901.3	917.0	935.6	944.5	966.1
50°	770.7	788.4	808.0	826.6	842.4	850.2	868.9
52.5°	684.3	702.9	721.6	733.4	750.1	756.0	771.7
55°	607.7	620.5	637.2	644.0	660.7	664.7	675.5
57.5°	534.1	542.9	548.8	560.6	572.4	581.2	594.0
60°	467.3	471.2	475.2	482.0	491.9	494.8	499.7
62.5°	407.4	406.5	414.3	416.3	417.3	427.1	422.2
65°	354.4	355.4	348.5	345.6	349.5	352.5	350.5
67.5°	310.2	304.3	298.5	291.6	285.7	288.6	285.7
70°	267.0	262.1	252.3	242.5	238.6	232.7	229.7
72.5°	232.7	220.9	211.1	198.3	191.4	184.6	179.7
75°	206.2	189.5	175.7	162.0	152.2	142.4	140.4
77.5°	178.7	163.0	147.3	132.5	117.8	107.0	103.1
80°	157.1	142.4	123.7	106.0	90.3	76.6	71.7
82.5°	137.4	121.7	103.1	84.4	66.8	52.0	46.1
85°	120.8	104.1	85.4	66.8	49.1	33.4	25.5
87.5°	108.0	89.3	70.7	53.0	34.4	18.7	9.8
90°	96.2	78.5	60.9	42.2	24.5	9.8	0.0
92.5°	85.4	68.7	51.1	34.4	18.7	5.9	1.0
95°	75.6	60.9	43.2	27.5	13.7	3.9	1.0
97.5°	67.7	53.0	37.3	22.6	10.8	2.9	1.0
100°	60.9	46.1	32.4	18.7	8.8	2.0	1.0
102.5°	54.0	41.2	27.5	15.7	6.9	1.0	1.0
105°	48.1	36.3	23.6	13.7	5.9	1.0	1.0
107.5°	43.2	32.4	20.6	11.8	3.9	1.0	1.0
110°	38.3	27.5	17.7	9.8	2.9	1.0	1.0



TEST NUMBER: P1213124

CATALOG NUMBER: 4SNLED-LD5-56SL-LN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	34.4	24.5	15.7	7.9	2.0	1.0	1.0
115°	30.4	21.6	13.7	6.9	2.0	1.0	1.0
117.5°	26.5	18.7	11.8	4.9	1.0	1.0	1.0
120°	23.6	16.7	9.8	3.9	1.0	1.0	1.0
122.5°	20.6	13.7	7.9	2.9	1.0	1.0	1.0
125°	17.7	11.8	6.9	2.0	1.0	1.0	1.0
127.5°	14.7	9.8	4.9	2.0	1.0	1.0	1.0
130°	12.8	7.9	3.9	1.0	1.0	1.0	1.0
132.5°	10.8	5.9	2.9	1.0	1.0	1.0	1.0
135°	8.8	4.9	2.0	1.0	1.0	1.0	1.0
137.5°	6.9	3.9	2.0	1.0	1.0	1.0	1.0
140°	4.9	2.9	1.0	1.0	1.0	1.0	1.0
142.5°	3.9	2.0	1.0	1.0	1.0	1.0	1.0
145°	2.9	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)