

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: P1213457

Luminaire Tested: 4SNLED-LD5-52SL-LC-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213457
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33518)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-52SL-LC-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

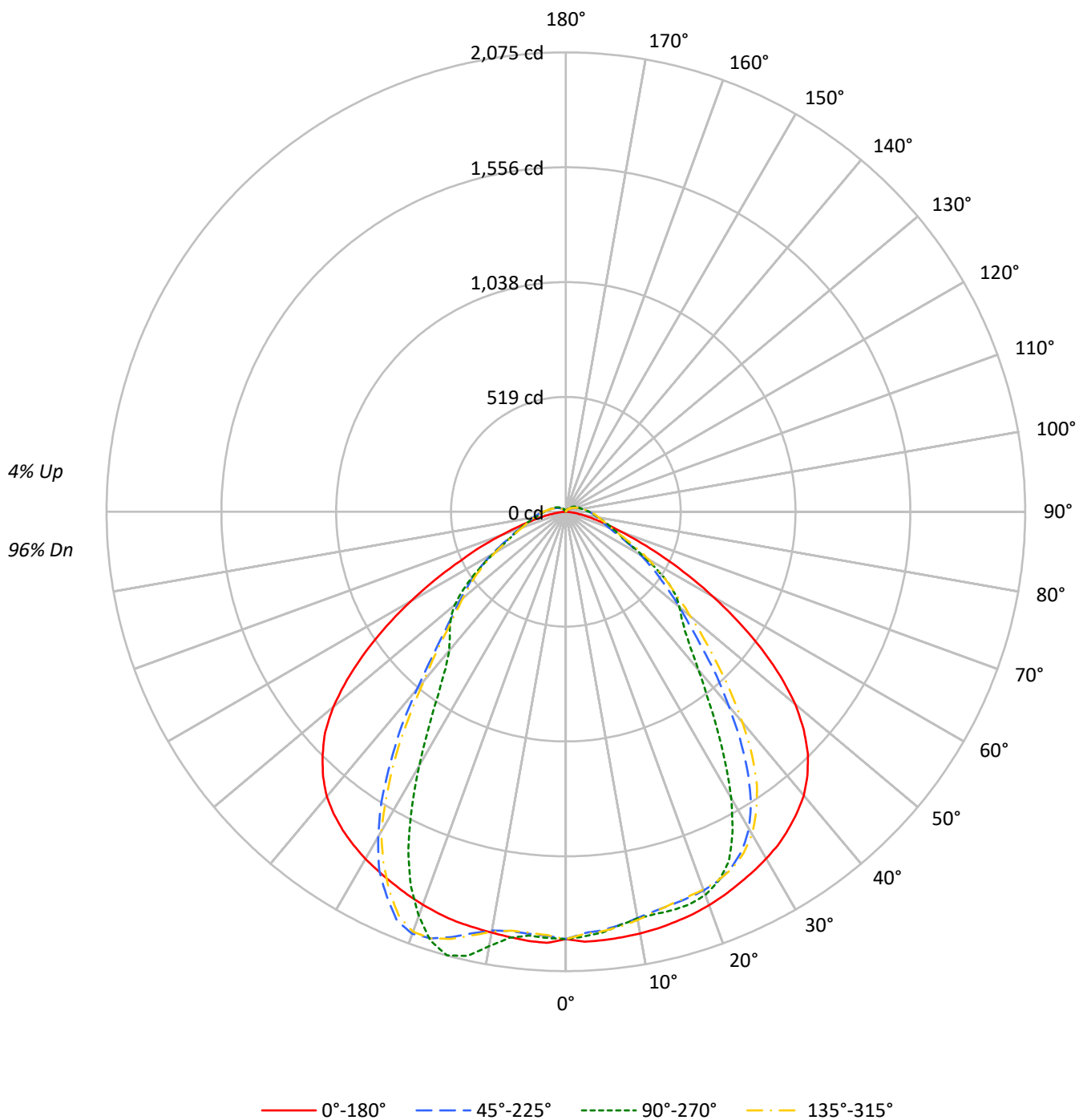
Lumens per Lamp: N/A
Luminaire Lumens: 4601.0 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	84
2	100	93	86	81	97	90	85	80	86	82	77	82	79	75	79	76	73
3	92	83	75	69	89	81	74	68	77	71	67	74	69	65	71	67	63
4	85	74	66	60	83	73	65	59	70	63	58	67	61	57	64	60	56
5	79	67	59	52	76	66	58	52	63	56	51	61	55	50	59	53	49
6	73	61	52	46	71	60	52	46	57	51	45	55	49	45	54	48	44
7	68	55	47	42	66	54	47	41	53	46	41	51	45	40	49	44	40
8	64	51	43	37	62	50	42	37	48	42	37	47	41	36	45	40	36
9	60	47	39	34	58	46	39	34	45	38	33	43	37	33	42	37	33
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	15596	15596	15596	15596
5°	15710	14978	15743	15095
10°	15783	14355	15750	15329
15°	15905	14163	15896	15770
20°	16080	13939	16063	14693
25°	16278	13223	16269	12777
30°	16585	11461	16594	10153
35°	16910	9267	16957	7842
40°	17196	7461	17267	6574
45°	17135	6320	17224	6155
50°	16397	5819	16626	5689
55°	14547	5230	14911	4755
60°	11800	4003	12427	3671
65°	8772	3063	9451	2904
70°	5964	2644	6724	2528
75°	3903	2385	4544	2256
80°	2522	2224	2957	2047
85°	1291	2219	1701	2026

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 17224 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.3	4.0
10°-20°	545.5	11.9
20°-30°	829.3	18.0
30°-40°	889.6	19.3
40°-50°	772.1	16.8
50°-60°	572.2	12.4
60°-70°	327.8	7.1
70°-80°	181.5	3.9
80°-90°	110.5	2.4
90°-100°	71.9	1.6
100°-110°	48.1	1.0
110°-120°	32.5	0.7
120°-130°	20.0	0.4
130°-140°	10.5	0.2
140°-150°	4.8	0.1
150°-160°	1.4	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1558.0	33.9
0°-40°	2447.6	53.2
0°-60°	3791.9	82.4
0°-90°	4411.8	95.9
90°-120°	152.6	3.3
90°-150°	187.8	4.1
90°-180°	189.0	4.1
0°-180°	4601.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1930	1930	1930	1930	1930	
5°	1942	1907	1946	1922	1942	185
15°	1917	1863	1916	2075	1917	542
25°	1852	1743	1851	1684	1852	856
35°	1752	1186	1756	1004	1752	1096
45°	1546	761	1554	741	1546	1184
55°	1079	570	1106	518	1079	957
65°	490	289	527	274	490	493
75°	140	183	162	174	140	159
85°	19	127	25	116	19	25
90°	0	106	2	98	0	1
95°	1	87	0	83	1	1
105°	1	65	1	62	1	1
115°	1	53	1	48	1	1
125°	1	40	1	33	1	1
135°	1	25	1	21	1	1
145°	1	15	2	12	1	1
155°	2	7	2	6	2	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0
2.5°	1944.0	1939.0	1937.0	1933.0	1936.0	1947.9	1940.0	1927.0	1928.0	1905.1	1917.0
5°	1942.0	1936.0	1933.0	1929.0	1931.0	1942.0	1934.0	1921.0	1920.0	1897.1	1908.1
7.5°	1939.0	1933.0	1928.0	1925.0	1926.0	1935.0	1925.0	1910.1	1907.1	1882.2	1892.1
10°	1934.0	1930.0	1923.0	1918.0	1917.0	1927.0	1911.1	1896.1	1889.1	1863.2	1873.2
12.5°	1927.0	1921.0	1914.1	1905.1	1904.1	1910.1	1897.1	1876.2	1869.2	1848.3	1859.2
15°	1917.0	1910.1	1902.1	1892.1	1887.1	1891.1	1875.2	1856.2	1855.2	1837.3	1852.2
17.5°	1906.1	1896.1	1887.1	1873.2	1866.2	1869.2	1856.2	1839.3	1841.3	1830.3	1847.3
20°	1891.1	1880.2	1866.2	1852.2	1842.3	1847.3	1838.3	1825.3	1828.3	1820.3	1835.3
22.5°	1874.2	1859.2	1842.3	1826.3	1818.3	1825.3	1818.3	1807.4	1808.4	1803.4	1812.4
25°	1852.2	1835.3	1815.4	1795.4	1791.4	1796.4	1792.4	1783.5	1779.5	1771.5	1775.5
27.5°	1832.3	1813.4	1788.4	1767.5	1760.5	1770.5	1761.5	1746.6	1735.6	1724.6	1716.7
30°	1809.4	1786.4	1758.5	1734.6	1728.6	1732.6	1719.7	1696.7	1667.8	1653.9	1631.9
32.5°	1784.5	1754.5	1719.7	1692.7	1688.8	1685.8	1661.8	1628.9	1584.1	1556.2	1522.3
35°	1751.6	1718.7	1676.8	1643.9	1637.9	1621.0	1582.1	1538.2	1480.4	1432.5	1374.7
37.5°	1714.7	1675.8	1631.9	1588.1	1571.1	1537.2	1482.4	1436.5	1348.8	1291.0	1221.2
40°	1672.8	1625.9	1572.1	1519.3	1491.4	1436.5	1373.7	1305.9	1221.2	1143.4	1084.6
42.5°	1615.0	1565.1	1501.3	1442.5	1394.7	1321.9	1248.1	1152.4	1074.7	1008.9	949.1
45°	1546.2	1486.4	1412.6	1341.8	1281.0	1194.3	1107.6	1011.9	947.1	870.3	829.4
47.5°	1457.5	1392.7	1313.9	1235.2	1155.4	1059.7	969.0	877.3	812.5	757.6	727.7
50°	1352.8	1293.0	1206.3	1112.5	1024.8	925.1	834.4	765.6	702.8	668.9	646.0
52.5°	1223.2	1167.4	1078.6	977.0	892.2	794.5	711.8	656.0	611.1	586.2	578.2
55°	1078.6	1029.8	942.1	847.4	760.6	670.9	608.1	559.3	530.4	515.4	516.4
57.5°	924.1	886.2	803.5	718.8	637.0	569.2	512.4	473.5	451.6	450.6	453.6
60°	769.6	741.7	669.9	597.1	525.4	470.5	428.7	401.8	387.8	388.8	387.8
62.5°	622.1	596.1	544.3	484.5	427.7	390.8	352.9	341.9	330.0	329.0	329.0
65°	489.5	469.5	427.7	384.8	341.9	318.0	299.1	286.1	277.1	275.1	276.1
67.5°	367.9	359.9	331.0	302.1	275.1	260.2	244.2	241.3	234.3	234.3	236.3
70°	274.1	268.2	252.2	235.3	224.3	214.3	206.4	206.4	205.4	204.4	209.3
72.5°	198.4	199.4	194.4	181.4	180.4	178.4	176.5	179.4	180.4	183.4	189.4
75°	139.6	142.6	142.6	140.6	144.6	149.5	152.5	157.5	163.5	167.5	174.5
77.5°	98.7	98.7	103.7	109.7	117.6	126.6	134.6	141.6	149.5	154.5	160.5
80°	63.8	66.8	74.8	85.7	96.7	108.7	119.6	128.6	136.6	144.6	148.5
82.5°	37.9	42.9	52.8	66.8	80.7	95.7	106.7	117.6	126.6	134.6	137.6
85°	18.9	25.9	37.9	52.8	67.8	83.7	97.7	107.7	117.6	124.6	128.6
87.5°	6.0	14.0	26.9	40.9	56.8	72.8	87.7	98.7	107.7	113.6	117.6
90°	0.0	7.0	18.9	33.9	48.8	64.8	78.8	90.7	99.7	104.7	107.7
92.5°	0.0	4.0	15.0	27.9	41.9	57.8	71.8	82.7	90.7	95.7	97.7
95°	1.0	3.0	11.0	22.9	36.9	51.8	64.8	74.8	82.7	87.7	88.7
97.5°	1.0	2.0	9.0	18.9	31.9	45.9	58.8	68.8	74.8	79.8	80.7
100°	1.0	2.0	7.0	16.9	27.9	40.9	52.8	61.8	68.8	72.8	73.8
102.5°	1.0	1.0	6.0	14.0	24.9	35.9	46.9	55.8	61.8	65.8	67.8
105°	1.0	1.0	5.0	12.0	21.9	31.9	41.9	50.8	55.8	59.8	61.8
107.5°	1.0	1.0	4.0	10.0	18.9	27.9	37.9	44.9	50.8	54.8	56.8
110°	1.0	1.0	3.0	9.0	16.0	24.9	32.9	39.9	45.9	49.8	51.8

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.0	1.0	3.0	8.0	14.0	21.9	28.9	35.9	40.9	44.9	47.9
115°	1.0	1.0	3.0	7.0	13.0	18.9	25.9	31.9	36.9	40.9	43.9
117.5°	1.0	1.0	3.0	6.0	11.0	16.9	22.9	28.9	32.9	36.9	39.9
120°	1.0	1.0	2.0	5.0	10.0	15.0	19.9	24.9	29.9	33.9	36.9
122.5°	1.0	1.0	2.0	5.0	8.0	13.0	17.9	21.9	26.9	29.9	32.9
125°	1.0	1.0	2.0	4.0	7.0	12.0	16.0	19.9	22.9	26.9	29.9
127.5°	1.0	1.0	2.0	4.0	6.0	10.0	14.0	17.9	20.9	23.9	25.9
130°	1.0	1.0	2.0	3.0	5.0	8.0	12.0	15.0	18.9	20.9	22.9
132.5°	1.0	1.0	1.0	3.0	4.0	6.0	9.0	13.0	16.0	18.9	19.9
135°	1.0	1.0	1.0	2.0	4.0	5.0	7.0	10.0	13.0	16.0	17.9
137.5°	1.0	1.0	1.0	2.0	3.0	5.0	6.0	8.0	11.0	13.0	16.0
140°	1.0	1.0	1.0	2.0	3.0	4.0	5.0	7.0	9.0	11.0	13.0
142.5°	1.0	1.0	1.0	2.0	2.0	3.0	4.0	6.0	7.0	9.0	11.0
145°	1.0	1.0	1.0	2.0	2.0	3.0	4.0	5.0	6.0	7.0	9.0
147.5°	1.0	1.0	1.0	2.0	2.0	2.0	3.0	4.0	5.0	6.0	7.0
150°	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	4.0	5.0	6.0
152.5°	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	4.0	5.0
155°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	4.0	4.0
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

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0
2.5°	1913.1	1915.0	1927.0	1926.0	1924.0	1922.0	1922.0	1920.0	1922.0	1927.0	1925.0
5°	1903.1	1906.1	1915.0	1914.1	1912.1	1911.1	1910.1	1907.1	1909.1	1916.0	1914.1
7.5°	1885.1	1888.1	1896.1	1892.1	1889.1	1891.1	1886.1	1883.1	1887.1	1894.1	1893.1
10°	1866.2	1868.2	1878.2	1876.2	1871.2	1872.2	1867.2	1865.2	1870.2	1874.2	1875.2
12.5°	1853.2	1860.2	1869.2	1868.2	1867.2	1868.2	1863.2	1861.2	1864.2	1868.2	1867.2
15°	1850.3	1859.2	1869.2	1869.2	1870.2	1871.2	1866.2	1863.2	1866.2	1869.2	1868.2
17.5°	1847.3	1858.2	1867.2	1866.2	1867.2	1869.2	1861.2	1859.2	1863.2	1867.2	1865.2
20°	1837.3	1847.3	1853.2	1851.2	1851.2	1852.2	1842.3	1842.3	1848.3	1851.2	1852.2
22.5°	1809.4	1821.3	1821.3	1816.4	1816.4	1812.4	1809.4	1803.4	1810.4	1815.4	1819.3
25°	1767.5	1772.5	1766.5	1755.5	1749.6	1744.6	1730.6	1742.6	1742.6	1757.5	1762.5
27.5°	1708.7	1697.7	1680.8	1657.8	1652.9	1636.9	1627.9	1630.9	1635.9	1656.9	1672.8
30°	1612.0	1579.1	1550.2	1540.2	1518.3	1502.3	1486.4	1494.4	1503.3	1515.3	1548.2
32.5°	1484.4	1452.5	1405.6	1388.7	1365.8	1345.8	1326.9	1338.8	1354.8	1362.8	1398.7
35°	1337.8	1300.0	1257.1	1228.2	1204.3	1193.3	1169.4	1186.3	1203.3	1209.2	1240.1
37.5°	1182.3	1143.4	1105.6	1080.6	1057.7	1050.7	1034.8	1046.7	1059.7	1068.7	1094.6
40°	1034.8	998.9	970.0	953.0	937.1	931.1	925.1	930.1	940.1	947.1	967.0
42.5°	908.2	879.3	859.3	849.4	838.4	830.4	831.4	833.4	838.4	853.3	862.3
45°	797.5	780.6	767.6	765.6	758.6	757.6	756.6	760.6	763.6	772.6	779.6
47.5°	708.8	701.8	698.8	702.8	705.8	701.8	703.8	708.8	714.8	714.8	713.8
50°	639.0	641.0	645.0	654.0	659.9	661.9	663.9	669.9	670.9	672.9	669.9
52.5°	582.2	584.2	595.2	609.1	616.1	619.1	623.1	629.0	629.0	631.0	627.1
55°	524.4	527.4	538.3	552.3	558.3	562.3	566.2	570.2	573.2	577.2	574.2
57.5°	460.6	469.5	476.5	480.5	484.5	487.5	490.5	491.5	497.5	498.5	503.4
60°	392.8	394.8	401.8	400.8	397.8	405.7	401.8	408.7	415.7	424.7	425.7
62.5°	328.0	329.0	334.0	332.0	336.0	335.0	337.9	337.9	342.9	346.9	351.9
65°	277.1	278.1	282.1	282.1	281.1	284.1	287.1	289.1	289.1	292.1	296.1
67.5°	239.3	242.2	246.2	248.2	250.2	250.2	253.2	254.2	256.2	257.2	259.2
70°	213.3	217.3	221.3	223.3	224.3	226.3	227.3	227.3	229.3	230.3	232.3
72.5°	194.4	198.4	201.4	201.4	203.4	204.4	204.4	205.4	206.4	208.4	210.3
75°	178.4	181.4	183.4	182.4	182.4	182.4	183.4	183.4	185.4	187.4	189.4
77.5°	163.5	166.5	166.5	164.5	164.5	164.5	164.5	165.5	166.5	168.5	170.5
80°	152.5	152.5	151.5	151.5	149.5	148.5	148.5	149.5	149.5	151.5	154.5
82.5°	140.6	140.6	139.6	138.6	137.6	136.6	136.6	137.6	138.6	139.6	141.6
85°	129.6	129.6	127.6	127.6	126.6	126.6	126.6	126.6	127.6	128.6	130.6
87.5°	118.6	117.6	116.6	115.6	115.6	115.6	115.6	115.6	116.6	118.6	119.6
90°	107.7	106.7	105.7	105.7	104.7	104.7	105.7	105.7	106.7	107.7	108.7
92.5°	97.7	96.7	95.7	95.7	94.7	94.7	95.7	94.7	96.7	96.7	97.7
95°	88.7	87.7	86.7	86.7	86.7	86.7	86.7	86.7	87.7	87.7	88.7
97.5°	80.7	79.8	78.8	78.8	79.8	78.8	79.8	79.8	79.8	80.7	81.7
100°	73.8	72.8	72.8	73.8	72.8	72.8	73.8	73.8	73.8	73.8	74.8
102.5°	67.8	67.8	67.8	67.8	67.8	67.8	68.8	68.8	68.8	68.8	69.8
105°	61.8	62.8	62.8	62.8	63.8	63.8	63.8	64.8	64.8	64.8	64.8
107.5°	57.8	58.8	58.8	59.8	59.8	60.8	60.8	60.8	60.8	61.8	61.8
110°	53.8	54.8	55.8	56.8	56.8	57.8	57.8	57.8	57.8	57.8	57.8



TEST NUMBER: P1213457

CATALOG NUMBER: 4SNLED-LD5-52SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	49.8	50.8	51.8	53.8	54.8	54.8	54.8	54.8	55.8	55.8	54.8
115°	45.9	47.9	48.8	50.8	51.8	51.8	52.8	52.8	52.8	52.8	51.8
117.5°	41.9	44.9	45.9	47.9	48.8	48.8	49.8	49.8	49.8	49.8	48.8
120°	38.9	40.9	42.9	43.9	44.9	45.9	45.9	46.9	46.9	46.9	45.9
122.5°	35.9	37.9	39.9	40.9	41.9	42.9	42.9	42.9	42.9	42.9	42.9
125°	31.9	33.9	35.9	36.9	37.9	38.9	38.9	39.9	39.9	39.9	38.9
127.5°	28.9	30.9	31.9	33.9	34.9	34.9	35.9	35.9	35.9	35.9	34.9
130°	24.9	26.9	28.9	29.9	30.9	30.9	31.9	31.9	31.9	31.9	31.9
132.5°	21.9	23.9	24.9	26.9	26.9	27.9	27.9	28.9	28.9	28.9	27.9
135°	19.9	20.9	21.9	23.9	23.9	24.9	24.9	24.9	24.9	24.9	24.9
137.5°	17.9	18.9	19.9	20.9	20.9	21.9	21.9	21.9	21.9	22.9	21.9
140°	15.0	16.9	17.9	17.9	18.9	18.9	18.9	19.9	19.9	19.9	18.9
142.5°	13.0	14.0	15.0	16.0	16.9	16.9	16.9	16.9	17.9	16.9	16.9
145°	10.0	12.0	13.0	14.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
147.5°	8.0	9.0	11.0	12.0	12.0	13.0	13.0	13.0	13.0	13.0	13.0
150°	7.0	7.0	9.0	10.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
152.5°	5.0	6.0	7.0	8.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
155°	5.0	5.0	6.0	6.0	7.0	7.0	7.0	7.0	8.0	7.0	7.0
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: P1213457

CATALOG NUMBER: 4SNLED-LD5-52SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0
2.5°	1922.0	1921.0	1925.0	1921.0	1901.1	1909.1	1906.1	1917.0	1918.0	1921.0	1931.0
5°	1912.1	1912.1	1917.0	1913.1	1894.1	1902.1	1901.1	1912.1	1914.1	1916.0	1927.0
7.5°	1892.1	1893.1	1900.1	1897.1	1877.2	1889.1	1888.1	1901.1	1905.1	1909.1	1919.0
10°	1873.2	1872.2	1880.2	1877.2	1858.2	1872.2	1871.2	1884.1	1890.1	1897.1	1909.1
12.5°	1863.2	1860.2	1863.2	1860.2	1839.3	1850.3	1851.2	1866.2	1873.2	1882.2	1896.1
15°	1863.2	1858.2	1858.2	1852.2	1828.3	1835.3	1836.3	1846.3	1855.2	1864.2	1881.2
17.5°	1861.2	1856.2	1855.2	1850.3	1824.3	1824.3	1823.3	1830.3	1835.3	1844.3	1862.2
20°	1850.3	1848.3	1847.3	1844.3	1820.3	1816.4	1814.4	1814.4	1817.4	1820.3	1838.3
22.5°	1821.3	1823.3	1825.3	1827.3	1808.4	1801.4	1802.4	1800.4	1797.4	1797.4	1812.4
25°	1767.5	1777.5	1785.5	1794.4	1783.5	1778.5	1784.5	1781.5	1776.5	1772.5	1785.5
27.5°	1681.8	1702.7	1719.7	1741.6	1742.6	1738.6	1754.5	1752.6	1751.6	1745.6	1755.5
30°	1563.1	1596.0	1619.0	1650.9	1677.8	1681.8	1708.7	1712.7	1716.7	1713.7	1723.6
32.5°	1419.6	1464.4	1503.3	1553.2	1579.1	1602.0	1639.9	1655.9	1671.8	1676.8	1687.8
35°	1263.1	1313.9	1359.8	1414.6	1455.5	1505.3	1551.2	1575.1	1611.0	1625.0	1640.9
37.5°	1114.5	1162.4	1207.2	1262.1	1327.9	1379.7	1436.5	1490.4	1539.2	1559.2	1583.1
40°	982.9	1021.8	1064.7	1112.5	1172.4	1240.1	1302.0	1376.7	1434.5	1474.4	1509.3
42.5°	883.3	902.2	939.1	981.9	1029.8	1098.6	1161.4	1245.1	1314.9	1371.7	1429.6
45°	794.5	803.5	830.4	853.3	902.2	963.0	1029.8	1111.5	1184.3	1257.1	1326.9
47.5°	718.8	729.7	742.7	756.6	791.5	842.4	900.2	974.0	1046.7	1131.5	1211.2
50°	667.9	670.9	672.9	678.9	699.8	734.7	781.6	844.4	914.2	1004.9	1089.6
52.5°	623.1	623.1	617.1	614.1	622.1	644.0	670.9	715.8	787.6	871.3	961.0
55°	575.2	566.2	564.2	554.3	556.3	566.2	579.2	614.1	672.9	744.7	831.4
57.5°	508.4	504.4	504.4	500.4	492.5	497.5	500.4	525.4	567.2	629.0	704.8
60°	431.7	429.7	434.6	435.6	428.7	431.7	430.7	445.6	475.5	525.4	588.2
62.5°	354.9	363.9	364.9	368.9	364.9	363.9	368.9	381.8	396.8	434.6	483.5
65°	298.1	303.1	304.1	309.0	307.0	307.0	311.0	321.0	330.0	355.9	393.8
67.5°	261.2	259.2	260.2	263.2	260.2	259.2	262.2	268.2	275.1	291.1	318.0
70°	232.3	230.3	230.3	230.3	226.3	223.3	224.3	226.3	229.3	238.3	255.2
72.5°	210.3	210.3	207.4	204.4	201.4	199.4	197.4	195.4	194.4	197.4	206.4
75°	190.4	191.4	190.4	187.4	183.4	179.4	175.5	171.5	166.5	164.5	165.5
77.5°	172.5	173.5	174.5	173.5	169.5	164.5	158.5	152.5	145.5	138.6	134.6
80°	156.5	158.5	159.5	158.5	155.5	151.5	144.6	137.6	127.6	118.6	108.7
82.5°	142.6	145.5	146.5	146.5	144.6	140.6	132.6	124.6	113.6	101.7	88.7
85°	131.6	133.6	135.6	135.6	134.6	130.6	122.6	113.6	102.7	88.7	74.8
87.5°	120.6	121.6	123.6	125.6	123.6	119.6	112.6	102.7	91.7	77.8	61.8
90°	109.7	110.7	112.6	114.6	113.6	109.7	103.7	94.7	82.7	67.8	51.8
92.5°	98.7	100.7	101.7	102.7	103.7	100.7	95.7	86.7	74.8	59.8	44.9
95°	90.7	90.7	92.7	93.7	94.7	91.7	87.7	78.8	67.8	53.8	38.9
97.5°	82.7	82.7	84.7	84.7	85.7	83.7	79.8	71.8	60.8	47.9	32.9
100°	74.8	75.8	76.8	77.8	77.8	76.8	72.8	64.8	54.8	42.9	28.9
102.5°	69.8	69.8	70.8	70.8	71.8	69.8	65.8	58.8	48.8	37.9	24.9
105°	64.8	64.8	65.8	65.8	64.8	62.8	58.8	52.8	43.9	32.9	21.9
107.5°	60.8	60.8	60.8	60.8	59.8	57.8	53.8	46.9	38.9	29.9	19.9
110°	57.8	56.8	56.8	55.8	54.8	51.8	47.9	41.9	34.9	25.9	16.9

TEST NUMBER: P1213457

CATALOG NUMBER: 4SNLED-LD5-52SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	54.8	53.8	52.8	51.8	49.8	46.9	42.9	37.9	30.9	22.9	15.0
115°	51.8	50.8	49.8	47.9	45.9	42.9	38.9	33.9	26.9	19.9	13.0
117.5°	48.8	47.9	45.9	43.9	41.9	38.9	34.9	29.9	23.9	17.9	12.0
120°	44.9	43.9	42.9	40.9	38.9	34.9	30.9	26.9	20.9	16.0	10.0
122.5°	41.9	40.9	38.9	37.9	34.9	31.9	27.9	23.9	18.9	14.0	9.0
125°	37.9	36.9	35.9	33.9	31.9	27.9	24.9	20.9	16.9	12.0	7.0
127.5°	34.9	33.9	31.9	29.9	27.9	24.9	21.9	18.9	15.0	10.0	7.0
130°	30.9	29.9	28.9	26.9	24.9	21.9	19.9	16.0	13.0	9.0	6.0
132.5°	26.9	26.9	25.9	23.9	21.9	19.9	16.9	14.0	11.0	8.0	5.0
135°	24.9	23.9	22.9	20.9	19.9	16.9	15.0	12.0	9.0	7.0	4.0
137.5°	21.9	20.9	19.9	18.9	16.9	15.0	13.0	10.0	8.0	6.0	4.0
140°	18.9	17.9	17.9	16.0	15.0	13.0	11.0	9.0	7.0	5.0	3.0
142.5°	16.9	16.0	15.0	14.0	13.0	11.0	9.0	7.0	6.0	4.0	3.0
145°	15.0	14.0	13.0	12.0	11.0	9.0	8.0	6.0	5.0	4.0	3.0
147.5°	12.0	12.0	11.0	10.0	9.0	8.0	7.0	6.0	4.0	3.0	2.0
150°	10.0	10.0	9.0	8.0	8.0	7.0	6.0	5.0	4.0	3.0	2.0
152.5°	9.0	8.0	8.0	7.0	7.0	6.0	5.0	4.0	3.0	3.0	2.0
155°	7.0	7.0	7.0	6.0	6.0	5.0	4.0	4.0	3.0	2.0	2.0
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: P1213457

CATALOG NUMBER: 4SNLED-LD5-52SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0
2.5°	1933.0	1921.0	1931.0	1948.9	1947.0	1945.0	1943.0	1947.0	1959.9	1952.9	1942.0
5°	1930.0	1918.0	1929.0	1946.0	1945.0	1942.0	1940.0	1944.0	1956.9	1949.9	1938.0
7.5°	1924.0	1913.1	1921.0	1938.0	1938.0	1936.0	1934.0	1938.0	1949.9	1944.0	1932.0
10°	1914.1	1906.1	1914.1	1930.0	1931.0	1927.0	1925.0	1930.0	1942.0	1939.0	1929.0
12.5°	1906.1	1898.1	1907.1	1923.0	1924.0	1920.0	1917.0	1923.0	1939.0	1941.0	1938.0
15°	1895.1	1888.1	1899.1	1916.0	1916.0	1913.1	1913.1	1921.0	1943.0	1951.9	1956.9
17.5°	1879.2	1874.2	1887.1	1904.1	1905.1	1903.1	1904.1	1920.0	1948.9	1970.9	1984.8
20°	1859.2	1857.2	1871.2	1889.1	1892.1	1893.1	1898.1	1922.0	1961.9	1991.8	2005.8
22.5°	1835.3	1836.3	1852.2	1871.2	1875.2	1878.2	1888.1	1922.0	1971.9	2003.8	2009.8
25°	1808.4	1811.4	1828.3	1851.2	1856.2	1862.2	1879.2	1923.0	1974.9	1995.8	1985.8
27.5°	1779.5	1785.5	1807.4	1831.3	1837.3	1847.3	1869.2	1917.0	1960.9	1961.9	1925.0
30°	1749.6	1756.5	1782.5	1810.4	1820.3	1830.3	1857.2	1903.1	1927.0	1895.1	1830.3
32.5°	1715.7	1725.6	1751.6	1785.5	1797.4	1810.4	1837.3	1876.2	1867.2	1798.4	1705.7
35°	1672.8	1686.8	1716.7	1756.5	1767.5	1784.5	1803.4	1812.4	1772.5	1674.8	1570.1
37.5°	1620.0	1640.9	1675.8	1721.7	1733.6	1744.6	1749.6	1724.6	1644.9	1539.2	1430.6
40°	1559.2	1591.1	1628.9	1679.8	1691.7	1691.7	1673.8	1621.0	1520.3	1381.7	1261.1
42.5°	1485.4	1524.3	1572.1	1623.0	1634.9	1621.0	1578.1	1485.4	1370.7	1216.2	1088.6
45°	1395.7	1447.5	1501.3	1554.2	1560.2	1529.2	1452.5	1334.9	1193.3	1049.7	928.1
47.5°	1289.0	1356.8	1415.6	1475.4	1467.4	1415.6	1312.9	1179.3	1029.8	894.2	796.5
50°	1169.4	1249.1	1314.9	1371.7	1354.8	1283.0	1162.4	1022.8	874.3	758.6	677.9
52.5°	1041.8	1133.5	1199.3	1245.1	1222.2	1136.5	1003.9	870.3	748.7	643.0	589.2
55°	909.2	1001.9	1069.7	1105.6	1075.7	982.9	852.4	730.7	616.1	547.3	515.4
57.5°	780.6	867.3	931.1	960.0	922.1	829.4	708.8	606.1	523.4	465.6	449.6
60°	657.0	727.7	788.5	810.5	769.6	683.9	580.2	498.5	437.6	397.8	389.8
62.5°	542.3	600.1	648.0	664.9	625.1	558.3	468.5	407.7	364.9	344.9	335.0
65°	447.6	481.5	530.4	527.4	503.4	441.6	375.8	333.0	305.1	292.1	286.1
67.5°	351.9	382.8	413.7	417.7	387.8	344.9	302.1	271.2	256.2	249.2	246.2
70°	272.2	295.1	314.0	309.0	293.1	266.2	239.3	222.3	216.3	213.3	213.3
72.5°	211.3	223.3	232.3	226.3	216.3	202.4	189.4	182.4	183.4	185.4	187.4
75°	163.5	166.5	168.5	162.5	160.5	151.5	150.5	151.5	157.5	163.5	166.5
77.5°	125.6	121.6	118.6	112.6	113.6	112.6	117.6	125.6	134.6	143.6	151.5
80°	96.7	87.7	80.7	74.8	77.8	82.7	92.7	104.7	116.6	126.6	136.6
82.5°	74.8	61.8	51.8	45.9	51.8	59.8	72.8	87.7	101.7	112.6	123.6
85°	57.8	42.9	30.9	24.9	30.9	42.9	56.8	73.8	88.7	100.7	111.7
87.5°	44.9	30.9	16.9	10.0	16.9	29.9	45.9	61.8	76.8	90.7	101.7
90°	35.9	20.9	8.0	2.0	9.0	20.9	35.9	51.8	66.8	81.7	92.7
92.5°	28.9	15.0	4.0	0.0	5.0	16.0	29.9	44.9	59.8	73.8	84.7
95°	23.9	12.0	3.0	0.0	4.0	12.0	23.9	38.9	52.8	66.8	75.8
97.5°	19.9	9.0	2.0	0.0	2.0	10.0	19.9	32.9	46.9	59.8	68.8
100°	16.9	8.0	2.0	0.0	2.0	8.0	16.9	28.9	40.9	52.8	61.8
102.5°	14.0	6.0	1.0	1.0	1.0	6.0	15.0	24.9	35.9	46.9	55.8
105°	13.0	5.0	1.0	1.0	1.0	5.0	13.0	21.9	31.9	41.9	49.8
107.5°	11.0	4.0	1.0	1.0	1.0	4.0	11.0	18.9	28.9	37.9	44.9
110°	9.0	4.0	1.0	1.0	1.0	4.0	9.0	16.9	24.9	32.9	39.9

TEST NUMBER: P1213457

CATALOG NUMBER: 4SNLED-LD5-52SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	8.0	3.0	1.0	1.0	1.0	3.0	8.0	15.0	21.9	29.9	35.9
115°	7.0	3.0	1.0	1.0	1.0	3.0	7.0	13.0	18.9	25.9	31.9
117.5°	6.0	3.0	1.0	1.0	1.0	2.0	6.0	11.0	16.9	22.9	28.9
120°	5.0	2.0	1.0	1.0	1.0	2.0	5.0	10.0	15.0	19.9	24.9
122.5°	5.0	2.0	1.0	1.0	1.0	2.0	4.0	8.0	13.0	16.9	21.9
125°	4.0	2.0	1.0	1.0	1.0	1.0	4.0	7.0	11.0	15.0	18.9
127.5°	4.0	2.0	1.0	1.0	1.0	1.0	3.0	6.0	9.0	13.0	16.9
130°	3.0	2.0	1.0	1.0	1.0	1.0	2.0	5.0	8.0	11.0	14.0
132.5°	3.0	2.0	1.0	1.0	1.0	1.0	2.0	4.0	6.0	9.0	12.0
135°	3.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0	5.0	7.0	9.0
137.5°	2.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	4.0	5.0	8.0
140°	2.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	6.0
142.5°	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	5.0
145°	2.0	1.0	1.0	2.0	2.0	1.0	1.0	2.0	2.0	3.0	4.0
147.5°	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0
150°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0
152.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
155°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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: P1213457

CATALOG NUMBER: 4SNLED-LD5-52SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0
2.5°	1940.0	1917.0	1929.0	1925.0	1929.0	1939.0	1938.0	1935.0	1937.0	1932.0	1927.0
5°	1936.0	1913.1	1925.0	1920.0	1925.0	1935.0	1933.0	1930.0	1933.0	1927.0	1922.0
7.5°	1931.0	1910.1	1924.0	1923.0	1932.0	1945.0	1946.0	1946.0	1952.9	1944.0	1940.0
10°	1931.0	1920.0	1939.0	1946.0	1968.9	1985.8	1987.8	1991.8	2003.8	2001.8	1991.8
12.5°	1951.9	1949.9	1977.9	1994.8	2015.7	2039.7	2052.6	2056.6	2064.6	2058.6	2054.6
15°	1978.9	1988.8	2019.7	2038.7	2061.6	2079.5	2082.5	2084.5	2090.5	2081.5	2074.6
17.5°	2014.7	2020.7	2045.6	2053.6	2068.6	2071.6	2067.6	2057.6	2057.6	2037.7	2031.7
20°	2031.7	2028.7	2038.7	2025.7	2019.7	2001.8	1984.8	1965.9	1964.9	1944.0	1942.0
22.5°	2016.7	1996.8	1975.9	1944.0	1930.0	1904.1	1881.2	1870.2	1863.2	1836.3	1829.3
25°	1963.9	1915.0	1884.1	1846.3	1812.4	1782.5	1760.5	1737.6	1715.7	1693.7	1683.8
27.5°	1872.2	1826.3	1776.5	1723.6	1676.8	1630.9	1594.0	1571.1	1550.2	1521.3	1506.3
30°	1759.5	1695.7	1640.9	1590.1	1513.3	1457.5	1426.6	1380.7	1364.8	1351.8	1323.9
32.5°	1626.9	1550.2	1475.4	1406.6	1327.9	1276.0	1235.2	1201.3	1191.3	1157.4	1149.4
35°	1480.4	1379.7	1295.0	1227.2	1170.4	1107.6	1073.7	1050.7	1030.8	1007.9	1003.9
37.5°	1307.9	1217.2	1121.5	1061.7	1016.8	963.0	937.1	921.1	912.2	895.2	892.2
40°	1134.5	1043.8	978.0	918.1	890.2	861.3	842.4	835.4	831.4	825.4	819.5
42.5°	977.0	897.2	850.4	810.5	798.5	784.6	779.6	783.6	779.6	777.6	776.6
45°	843.4	782.6	749.7	737.7	734.7	730.7	734.7	741.7	742.7	740.7	740.7
47.5°	721.8	692.8	678.9	680.9	685.9	688.9	695.8	704.8	706.8	701.8	703.8
50°	642.0	625.1	622.1	630.0	641.0	645.0	653.0	659.9	659.0	657.0	655.0
52.5°	567.2	562.3	570.2	578.2	590.2	592.2	595.2	598.1	597.1	593.2	591.2
55°	504.4	508.4	515.4	518.4	527.4	526.4	527.4	527.4	523.4	521.4	518.4
57.5°	447.6	448.6	452.6	453.6	458.6	456.6	455.6	453.6	447.6	446.6	443.6
60°	389.8	387.8	396.8	389.8	393.8	389.8	388.8	383.8	377.8	376.8	374.8
62.5°	335.0	331.0	337.0	334.0	336.0	332.0	330.0	324.0	319.0	318.0	317.0
65°	286.1	284.1	290.1	289.1	291.1	286.1	284.1	280.1	276.1	275.1	274.1
67.5°	245.2	250.2	253.2	253.2	255.2	254.2	249.2	248.2	247.2	243.2	243.2
70°	215.3	218.3	224.3	225.3	224.3	226.3	222.3	221.3	220.3	218.3	217.3
72.5°	191.4	195.4	201.4	202.4	201.4	201.4	199.4	198.4	198.4	195.4	195.4
75°	172.5	177.4	182.4	182.4	182.4	180.4	178.4	178.4	176.5	175.5	173.5
77.5°	156.5	162.5	166.5	165.5	164.5	162.5	162.5	159.5	156.5	156.5	154.5
80°	144.6	148.5	151.5	150.5	149.5	146.5	145.5	142.6	140.6	137.6	137.6
82.5°	131.6	136.6	138.6	137.6	135.6	132.6	131.6	129.6	127.6	126.6	124.6
85°	120.6	125.6	126.6	124.6	122.6	120.6	119.6	118.6	117.6	115.6	115.6
87.5°	109.7	114.6	114.6	113.6	111.7	110.7	109.7	108.7	107.7	106.7	105.7
90°	100.7	104.7	104.7	103.7	102.7	101.7	100.7	99.7	98.7	97.7	97.7
92.5°	91.7	95.7	95.7	94.7	93.7	92.7	92.7	91.7	90.7	89.7	88.7
95°	83.7	87.7	87.7	87.7	86.7	85.7	85.7	84.7	83.7	83.7	82.7
97.5°	75.8	79.8	79.8	79.8	78.8	77.8	77.8	76.8	76.8	76.8	75.8
100°	68.8	71.8	72.8	72.8	71.8	71.8	71.8	70.8	70.8	70.8	69.8
102.5°	61.8	64.8	66.8	66.8	66.8	65.8	65.8	65.8	65.8	65.8	64.8
105°	55.8	58.8	60.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8
107.5°	50.8	53.8	55.8	56.8	57.8	57.8	58.8	58.8	58.8	58.8	58.8
110°	45.9	48.8	51.8	52.8	53.8	54.8	54.8	55.8	54.8	54.8	54.8

TEST NUMBER: P1213457

CATALOG NUMBER: 4SNLED-LD5-52SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	40.9	44.9	46.9	48.8	49.8	50.8	51.8	51.8	51.8	51.8	51.8
115°	36.9	40.9	42.9	44.9	46.9	47.9	47.9	48.8	48.8	48.8	47.9
117.5°	32.9	36.9	38.9	40.9	41.9	43.9	44.9	44.9	44.9	44.9	43.9
120°	29.9	32.9	34.9	36.9	38.9	39.9	40.9	40.9	40.9	40.9	40.9
122.5°	25.9	28.9	31.9	33.9	34.9	35.9	36.9	36.9	36.9	36.9	36.9
125°	22.9	25.9	27.9	29.9	30.9	32.9	32.9	32.9	32.9	32.9	32.9
127.5°	19.9	22.9	24.9	26.9	27.9	28.9	29.9	29.9	29.9	29.9	29.9
130°	16.9	19.9	21.9	23.9	24.9	25.9	25.9	26.9	26.9	26.9	26.9
132.5°	15.0	16.9	18.9	20.9	21.9	22.9	22.9	23.9	23.9	23.9	23.9
135°	12.0	15.0	16.0	17.9	18.9	19.9	19.9	20.9	20.9	20.9	20.9
137.5°	10.0	12.0	14.0	16.0	16.9	16.9	17.9	17.9	18.9	18.9	18.9
140°	8.0	9.0	12.0	13.0	14.0	15.0	16.0	16.0	16.0	16.0	16.0
142.5°	6.0	8.0	9.0	11.0	12.0	13.0	14.0	14.0	14.0	14.0	14.0
145°	5.0	6.0	7.0	9.0	10.0	11.0	12.0	12.0	12.0	12.0	12.0
147.5°	4.0	5.0	6.0	7.0	8.0	9.0	10.0	10.0	10.0	10.0	10.0
150°	3.0	4.0	5.0	5.0	6.0	7.0	8.0	9.0	9.0	9.0	9.0
152.5°	3.0	3.0	4.0	4.0	5.0	6.0	7.0	7.0	7.0	7.0	7.0
155°	2.0	3.0	3.0	3.0	4.0	4.0	5.0	6.0	6.0	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: P1213457

CATALOG NUMBER: 4SNLED-LD5-52SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0
2.5°	1930.0	1934.0	1932.0	1929.0	1928.0	1933.0	1928.0	1905.1	1914.1	1915.0	1922.0
5°	1927.0	1930.0	1928.0	1926.0	1923.0	1929.0	1923.0	1899.1	1908.1	1909.1	1916.0
7.5°	1947.0	1947.9	1947.9	1943.0	1935.0	1938.0	1930.0	1903.1	1908.1	1908.1	1913.1
10°	1996.8	1998.8	2001.8	1988.8	1978.9	1970.9	1959.9	1927.0	1926.0	1918.0	1918.0
12.5°	2061.6	2056.6	2051.6	2045.6	2037.7	2027.7	2011.7	1972.9	1959.9	1947.0	1934.0
15°	2080.5	2078.5	2077.5	2074.6	2069.6	2066.6	2054.6	2015.7	1996.8	1980.8	1957.9
17.5°	2030.7	2034.7	2047.6	2048.6	2054.6	2066.6	2064.6	2037.7	2020.7	2013.7	1985.8
20°	1941.0	1942.0	1957.9	1964.9	1990.8	2010.8	2025.7	2022.7	2018.7	2026.7	2005.8
22.5°	1833.3	1840.3	1857.2	1868.2	1893.1	1916.0	1940.0	1952.9	1973.9	2006.8	2002.8
25°	1686.8	1695.7	1719.7	1737.6	1772.5	1807.4	1839.3	1862.2	1887.1	1949.9	1970.9
27.5°	1511.3	1525.3	1556.2	1574.1	1623.0	1658.8	1704.7	1749.6	1784.5	1856.2	1899.1
30°	1326.9	1338.8	1371.7	1396.7	1438.5	1487.4	1545.2	1609.0	1666.8	1739.6	1793.4
32.5°	1154.4	1167.4	1194.3	1216.2	1263.1	1303.9	1367.7	1446.5	1500.3	1601.0	1672.8
35°	1003.9	1015.8	1034.8	1053.7	1092.6	1134.5	1189.3	1266.1	1334.9	1439.5	1530.2
37.5°	898.2	900.2	911.2	922.1	951.0	982.9	1025.8	1093.6	1157.4	1270.1	1369.7
40°	822.4	822.4	828.4	831.4	844.4	863.3	890.2	943.1	995.9	1081.6	1203.3
42.5°	775.6	773.6	773.6	774.6	773.6	782.6	798.5	823.4	870.3	941.1	1035.8
45°	740.7	736.7	733.7	726.7	722.8	722.8	723.8	732.7	759.6	805.5	882.3
47.5°	701.8	700.8	695.8	687.9	680.9	675.9	667.9	664.9	672.9	698.8	750.7
50°	657.0	652.0	647.0	641.0	633.0	628.0	613.1	614.1	607.1	619.1	646.0
52.5°	591.2	587.2	585.2	580.2	577.2	575.2	563.2	551.3	548.3	550.3	560.3
55°	518.4	520.4	512.4	516.4	515.4	506.4	501.4	492.5	489.5	488.5	493.5
57.5°	442.6	444.6	439.6	443.6	443.6	438.6	435.6	435.6	428.7	422.7	429.7
60°	373.8	369.9	372.8	377.8	377.8	374.8	372.8	372.8	367.9	365.9	370.8
62.5°	318.0	314.0	317.0	322.0	323.0	321.0	319.0	319.0	313.0	313.0	317.0
65°	275.1	276.1	275.1	279.1	279.1	280.1	278.1	276.1	269.2	272.2	271.2
67.5°	244.2	243.2	243.2	247.2	246.2	248.2	246.2	243.2	238.3	234.3	233.3
70°	218.3	217.3	217.3	219.3	220.3	220.3	219.3	217.3	210.3	206.4	203.4
72.5°	195.4	194.4	195.4	196.4	197.4	198.4	197.4	195.4	189.4	184.4	179.4
75°	174.5	173.5	176.5	176.5	177.4	177.4	178.4	177.4	172.5	166.5	160.5
77.5°	153.5	154.5	157.5	158.5	160.5	161.5	162.5	162.5	157.5	152.5	144.6
80°	136.6	138.6	140.6	141.6	143.6	146.5	147.5	148.5	144.6	139.6	130.6
82.5°	124.6	125.6	127.6	128.6	131.6	132.6	133.6	135.6	133.6	128.6	118.6
85°	114.6	115.6	117.6	117.6	119.6	121.6	122.6	123.6	122.6	117.6	107.7
87.5°	105.7	106.7	107.7	108.7	109.7	110.7	111.7	112.6	111.7	106.7	97.7
90°	97.7	97.7	98.7	98.7	99.7	100.7	102.7	102.7	101.7	97.7	88.7
92.5°	88.7	89.7	89.7	90.7	91.7	92.7	93.7	93.7	92.7	88.7	80.7
95°	82.7	82.7	83.7	83.7	84.7	84.7	85.7	85.7	84.7	80.7	72.8
97.5°	75.8	75.8	75.8	75.8	76.8	76.8	77.8	77.8	76.8	72.8	65.8
100°	69.8	69.8	69.8	69.8	69.8	70.8	70.8	70.8	69.8	65.8	58.8
102.5°	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	62.8	59.8	52.8
105°	61.8	61.8	61.8	60.8	60.8	60.8	59.8	59.8	56.8	53.8	47.9
107.5°	57.8	57.8	57.8	56.8	56.8	55.8	54.8	54.8	51.8	48.8	42.9
110°	54.8	54.8	54.8	53.8	52.8	51.8	50.8	49.8	46.9	42.9	37.9



TEST NUMBER: P1213457

CATALOG NUMBER: 4SNLED-LD5-52SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	51.8	51.8	50.8	50.8	49.8	48.8	46.9	45.9	42.9	38.9	33.9
115°	47.9	47.9	47.9	46.9	45.9	44.9	43.9	41.9	38.9	34.9	29.9
117.5°	43.9	43.9	43.9	42.9	41.9	40.9	39.9	37.9	34.9	30.9	26.9
120°	39.9	39.9	39.9	38.9	37.9	36.9	35.9	33.9	30.9	27.9	22.9
122.5°	36.9	36.9	35.9	34.9	33.9	32.9	31.9	29.9	27.9	23.9	19.9
125°	32.9	32.9	31.9	31.9	30.9	29.9	28.9	26.9	23.9	20.9	17.9
127.5°	29.9	28.9	28.9	28.9	27.9	26.9	24.9	23.9	20.9	17.9	15.0
130°	25.9	25.9	25.9	24.9	24.9	23.9	21.9	19.9	17.9	16.0	13.0
132.5°	22.9	22.9	22.9	22.9	21.9	20.9	18.9	17.9	16.0	13.0	11.0
135°	20.9	20.9	19.9	19.9	18.9	17.9	16.9	15.0	13.0	11.0	9.0
137.5°	17.9	17.9	17.9	16.9	16.9	16.0	14.0	13.0	12.0	10.0	8.0
140°	16.0	16.0	15.0	15.0	14.0	14.0	13.0	11.0	10.0	8.0	7.0
142.5°	14.0	14.0	13.0	13.0	12.0	12.0	11.0	10.0	8.0	7.0	5.0
145°	12.0	12.0	11.0	11.0	11.0	10.0	9.0	8.0	7.0	6.0	5.0
147.5°	10.0	10.0	10.0	9.0	9.0	8.0	8.0	7.0	6.0	5.0	4.0
150°	9.0	9.0	8.0	8.0	8.0	7.0	6.0	6.0	5.0	4.0	3.0
152.5°	7.0	7.0	7.0	7.0	6.0	6.0	5.0	5.0	4.0	3.0	3.0
155°	6.0	6.0	6.0	5.0	5.0	5.0	4.0	4.0	3.0	3.0	2.0
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

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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0	1930.0
2.5°	1919.0	1918.0	1927.0	1926.0	1914.1	1932.0	1944.0
5°	1914.1	1913.1	1921.0	1923.0	1910.1	1929.0	1942.0
7.5°	1910.1	1909.1	1918.0	1921.0	1908.1	1925.0	1939.0
10°	1911.1	1906.1	1914.1	1916.0	1904.1	1922.0	1934.0
12.5°	1918.0	1906.1	1909.1	1909.1	1898.1	1914.1	1927.0
15°	1935.0	1910.1	1906.1	1903.1	1889.1	1904.1	1917.0
17.5°	1953.9	1920.0	1906.1	1896.1	1879.2	1892.1	1906.1
20°	1972.9	1931.0	1908.1	1892.1	1869.2	1881.2	1891.1
22.5°	1981.8	1941.0	1910.1	1886.1	1857.2	1863.2	1874.2
25°	1969.9	1937.0	1906.1	1877.2	1842.3	1843.3	1852.2
27.5°	1926.0	1917.0	1897.1	1868.2	1830.3	1825.3	1832.3
30°	1851.2	1876.2	1877.2	1856.2	1816.4	1806.4	1809.4
32.5°	1746.6	1802.4	1835.3	1831.3	1796.4	1782.5	1784.5
35°	1625.9	1695.7	1767.5	1791.4	1766.5	1755.5	1751.6
37.5°	1481.4	1575.1	1670.8	1729.6	1725.6	1718.7	1714.7
40°	1321.9	1434.5	1548.2	1641.9	1670.8	1670.8	1672.8
42.5°	1151.4	1283.0	1407.6	1526.3	1594.0	1609.0	1615.0
45°	986.9	1119.5	1255.1	1391.7	1482.4	1529.2	1546.2
47.5°	837.4	971.0	1099.6	1249.1	1369.7	1430.6	1457.5
50°	709.8	809.5	945.1	1093.6	1225.2	1300.0	1352.8
52.5°	604.1	681.9	800.5	939.1	1071.7	1174.4	1223.2
55°	515.4	568.2	668.9	788.5	915.2	1021.8	1078.6
57.5°	440.6	482.5	551.3	651.0	757.6	863.3	924.1
60°	374.8	403.7	450.6	529.4	620.1	710.8	769.6
62.5°	318.0	337.0	367.9	425.7	496.5	567.2	622.1
65°	274.1	282.1	299.1	335.0	388.8	442.6	489.5
67.5°	231.3	236.3	249.2	271.2	298.1	337.0	367.9
70°	199.4	199.4	200.4	213.3	227.3	252.2	274.1
72.5°	173.5	170.5	164.5	167.5	170.5	184.4	198.4
75°	152.5	145.5	135.6	131.6	129.6	131.6	139.6
77.5°	134.6	124.6	112.6	102.7	94.7	91.7	98.7
80°	119.6	107.7	93.7	80.7	67.8	60.8	63.8
82.5°	107.7	92.7	77.8	62.8	47.9	37.9	37.9
85°	94.7	80.7	64.8	48.8	33.9	20.9	18.9
87.5°	85.7	70.8	53.8	38.9	23.9	11.0	6.0
90°	76.8	61.8	45.9	30.9	16.9	5.0	0.0
92.5°	68.8	54.8	39.9	24.9	12.0	3.0	0.0
95°	61.8	48.8	33.9	20.9	10.0	2.0	1.0
97.5°	54.8	42.9	29.9	16.9	7.0	2.0	1.0
100°	49.8	37.9	25.9	14.0	6.0	1.0	1.0
102.5°	43.9	33.9	21.9	12.0	5.0	1.0	1.0
105°	38.9	29.9	18.9	10.0	4.0	1.0	1.0
107.5°	34.9	25.9	16.9	9.0	4.0	1.0	1.0
110°	30.9	22.9	15.0	8.0	3.0	1.0	1.0

TEST NUMBER: P1213457

CATALOG NUMBER: 4SNLED-LD5-52SL-LC-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	27.9	19.9	13.0	7.0	2.0	1.0	1.0
115°	23.9	17.9	11.0	6.0	2.0	1.0	1.0
117.5°	20.9	15.0	10.0	5.0	2.0	1.0	1.0
120°	17.9	13.0	8.0	4.0	1.0	1.0	1.0
122.5°	16.0	11.0	7.0	4.0	1.0	1.0	1.0
125°	14.0	10.0	6.0	3.0	1.0	1.0	1.0
127.5°	12.0	8.0	5.0	2.0	1.0	1.0	1.0
130°	10.0	7.0	4.0	2.0	1.0	1.0	1.0
132.5°	8.0	6.0	4.0	2.0	1.0	1.0	1.0
135°	7.0	5.0	3.0	2.0	1.0	1.0	1.0
137.5°	6.0	4.0	2.0	2.0	2.0	1.0	1.0
140°	5.0	3.0	2.0	2.0	2.0	2.0	1.0
142.5°	4.0	3.0	2.0	2.0	2.0	2.0	1.0
145°	3.0	2.0	2.0	2.0	2.0	2.0	1.0
147.5°	3.0	2.0	2.0	2.0	2.0	2.0	1.0
150°	2.0	2.0	2.0	2.0	2.0	2.0	2.0
152.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0
155°	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)