

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: P1214098

Luminaire Tested: 4SNLED-LD5-31SL-RM-UNV-L950-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1214098
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33524)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-31SL-RM-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

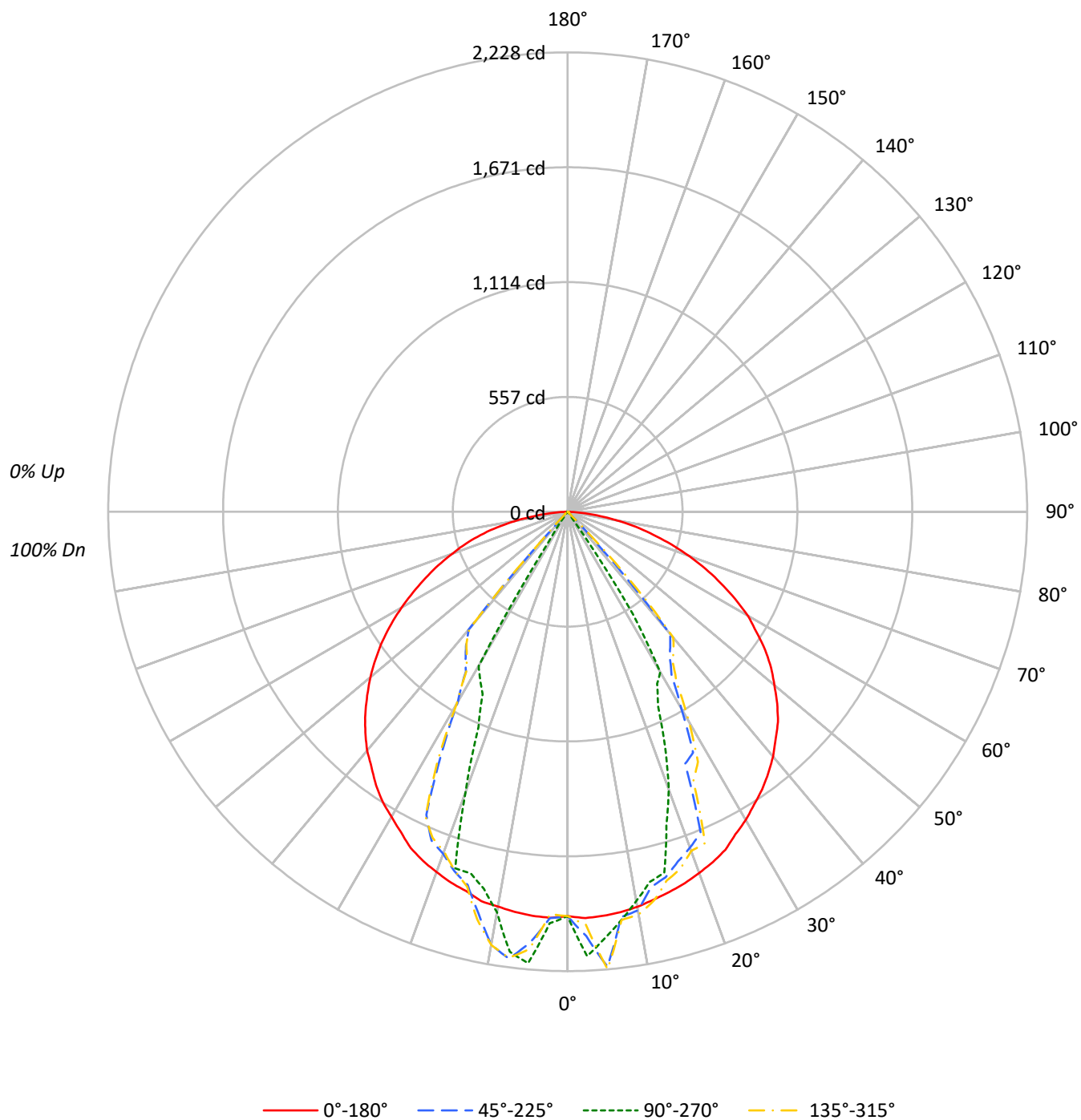
Lumens per Lamp: N/A
Luminaire Lumens: 2789.1 lumens
Efficiency: N/A
Efficacy: 132.8 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 21
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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	112	108	105	103	109	106	103	101	102	100	98		98	96	95		95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86		90	87	84		87	85	82	81
3	98	90	83	78	95	88	82	78	85	80	76		83	79	75		80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	69		76	72	68		74	70	67	65
5	85	75	68	63	84	74	68	63	72	66	62		71	65	61		69	64	61	59
6	80	69	62	57	79	69	62	57	67	61	56		65	60	56		64	59	55	54
7	75	64	57	52	74	64	57	52	62	56	52		61	55	51		60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	47		57	51	47		56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44		53	48	44		52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41		50	44	41		49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	15850	15850	15850	15850
5°	15915	16302	15910	17264
10°	15877	14751	15868	15177
15°	15834	13769	15794	13804
20°	15852	10845	15807	10979
25°	15898	7848	15820	7406
30°	15826	6885	15658	6618
35°	15872	152	15639	184
40°	15927	33	15546	33
45°	15982	20	15383	15
50°	15861	16	15134	16
55°	15768	11	14799	11
60°	15470	12	14260	12
65°	14662	19	13619	13
70°	13604	21	12949	21
75°	12032	23	12230	23
80°	9772	27	10333	27
85°	5752	32	5868	32

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2°

Vertical Angle: 45°

Luminance: 17257 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.8	7.1
10°-20°	536.8	19.2
20°-30°	683.0	24.5
30°-40°	577.0	20.7
40°-50°	377.2	13.5
50°-60°	237.7	8.5
60°-70°	126.5	4.5
70°-80°	46.1	1.7
80°-90°	8.0	0.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1416.6	50.8
0°-40°	1993.5	71.5
0°-60°	2608.4	93.5
0°-90°	2789.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2789.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1961	1961	1961	1961	1961	
5°	1967	2076	1967	2198	1967	187
15°	1908	1811	1904	1816	1908	540
25°	1809	1034	1800	976	1809	832
35°	1644	19	1620	24	1644	1029
45°	1442	2	1388	2	1442	1109
55°	1169	1	1097	1	1169	1042
65°	818	2	760	1	818	810
75°	430	2	437	2	430	457
85°	84	2	86	2	84	106
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4
2.5°	1972.6	1973.8	1974.4	1975.6	1977.3	1977.9	1979.1	1977.9	1977.9	1977.9	1977.9
5°	1967.3	1969.7	1971.4	1973.8	1977.9	1978.5	1983.2	1983.8	1986.2	1990.9	1994.4
7.5°	1958.5	1960.8	1964.4	1970.3	1976.2	1982.6	1990.9	1999.7	2012.1	2023.8	2038.5
10°	1945.5	1948.5	1952.6	1957.9	1986.7	1990.9	2009.1	2034.4	2041.5	2078.6	2106.2
12.5°	1926.7	1936.7	1947.3	1952.0	1979.7	2023.2	2084.5	2072.1	2058.6	2179.8	2178.1
15°	1908.5	1922.0	1916.7	1955.0	1980.3	2056.2	2030.3	2085.6	2186.9	2162.2	2163.3
17.5°	1889.0	1892.0	1921.4	1953.2	1998.5	2037.4	2069.2	2145.1	2165.1	2166.9	2145.1
20°	1864.3	1878.4	1921.4	1950.2	2026.8	2045.0	2113.9	2152.7	2144.5	2124.5	2087.4
22.5°	1839.0	1882.0	1925.5	1966.1	2019.7	2068.6	2102.7	2121.0	2078.0	1999.1	1956.7
25°	1809.0	1834.3	1891.4	1950.8	2017.9	2046.2	2066.2	2036.8	1980.9	1910.2	1839.0
27.5°	1762.5	1803.1	1876.1	1943.2	2003.8	2038.0	2005.6	1934.9	1844.9	1798.4	1766.0
30°	1726.6	1779.5	1839.6	1904.3	1967.3	1987.3	1904.9	1824.3	1762.5	1716.0	1708.9
32.5°	1683.0	1758.3	1815.4	1877.3	1930.2	1903.7	1823.7	1719.5	1668.3	1650.6	1657.7
35°	1644.1	1701.2	1776.0	1836.6	1874.9	1815.4	1688.9	1624.1	1599.4	1609.4	1596.5
37.5°	1597.6	1673.0	1741.9	1794.3	1781.3	1691.8	1584.7	1543.5	1546.4	1538.2	1513.5
40°	1549.4	1621.2	1693.0	1742.4	1697.1	1560.6	1489.3	1480.5	1482.3	1455.8	1420.4
42.5°	1492.9	1558.2	1630.0	1674.8	1577.0	1470.5	1422.2	1423.4	1408.1	1371.0	1352.2
45°	1442.2	1502.3	1577.0	1581.2	1461.1	1372.2	1358.1	1342.7	1308.6	1296.2	1282.1
47.5°	1377.5	1444.0	1505.8	1483.4	1347.5	1292.1	1281.5	1248.0	1230.9	1221.5	1209.7
50°	1308.6	1375.7	1432.2	1368.6	1240.3	1227.4	1192.6	1166.1	1154.4	1144.4	1133.8
52.5°	1243.3	1298.6	1356.3	1246.8	1157.9	1145.5	1106.1	1090.8	1079.0	1067.8	1065.5
55°	1169.1	1217.9	1257.4	1130.8	1079.0	1050.2	1021.9	1011.3	1000.1	994.8	1003.7
57.5°	1084.9	1140.2	1134.4	1016.6	993.7	951.9	941.3	934.2	926.0	929.5	855.9
60°	1009.0	1051.4	1022.5	933.0	894.2	865.9	856.5	851.8	856.5	784.7	689.9
62.5°	915.4	963.1	904.8	835.3	794.1	780.6	772.3	778.8	709.9	631.0	608.1
65°	818.2	870.0	784.1	730.5	704.6	692.9	692.3	637.5	569.8	539.2	539.2
67.5°	724.6	778.2	667.5	622.8	612.8	614.0	579.8	496.8	478.0	457.4	397.9
70°	625.2	672.3	551.6	524.5	518.6	514.5	431.5	409.1	386.8	332.0	327.3
72.5°	526.3	549.2	443.3	436.8	435.6	362.0	345.5	307.3	281.4	274.9	272.0
75°	430.3	423.3	350.3	356.1	300.2	274.3	247.8	225.5	221.9	219.6	54.7
77.5°	339.7	304.3	276.1	240.2	214.9	182.5	177.2	173.7	114.2	41.2	33.6
80°	247.2	197.2	183.7	156.0	133.0	127.7	130.7	40.0	31.8	26.5	23.0
82.5°	157.2	126.0	103.0	90.1	87.7	38.3	28.3	23.0	20.0	17.1	14.1
85°	84.2	55.9	51.8	43.6	25.9	17.7	14.7	11.2	9.4	7.7	7.1
87.5°	26.5	22.4	18.2	14.7	8.8	5.9	4.7	4.1	3.5	2.9	2.9
90°	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):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4
2.5°	1976.7	1977.9	1977.3	1979.1	1979.1	1981.4	1983.2	1985.0	1988.5	1990.3	2003.8
5°	2002.1	2005.0	2013.8	2022.1	2032.1	2035.0	2052.1	2056.2	2076.2	2078.6	2144.5
7.5°	2058.6	2069.7	2090.9	2112.1	2133.3	2146.9	2170.4	2185.1	2201.0	2215.1	2267.5
10°	2126.8	2145.7	2166.3	2187.5	2199.8	2225.7	2239.9	2242.2	2238.1	2215.1	2130.4
12.5°	2194.0	2212.8	2204.0	2208.1	2222.8	2176.9	2183.4	2150.4	2173.4	2059.7	1975.6
15°	2184.5	2183.4	2161.6	2090.9	2102.7	2015.0	1979.7	1952.6	1974.4	1962.6	1949.7
17.5°	2156.3	2102.7	2065.0	1980.3	1944.4	1919.6	1920.2	1920.8	1910.2	1921.4	1888.4
20°	2036.8	1976.7	1920.8	1890.8	1880.2	1862.5	1871.4	1862.5	1863.1	1866.7	1816.0
22.5°	1877.8	1859.6	1827.2	1836.6	1833.1	1849.0	1837.2	1819.0	1824.9	1798.4	1760.1
25°	1813.7	1792.5	1791.3	1794.8	1789.5	1782.5	1771.9	1744.2	1742.4	1734.2	1716.5
27.5°	1748.9	1750.1	1753.6	1743.0	1724.2	1710.1	1694.2	1680.6	1685.9	1676.5	1652.4
30°	1704.2	1703.6	1682.4	1673.0	1638.3	1638.8	1634.7	1626.5	1621.2	1621.8	1606.5
32.5°	1640.6	1622.4	1598.2	1586.5	1583.5	1572.9	1564.7	1566.4	1570.6	1555.8	1571.7
35°	1575.3	1537.6	1534.1	1524.1	1514.6	1507.6	1510.5	1498.7	1498.2	1496.4	1366.9
37.5°	1487.6	1469.3	1467.5	1456.9	1450.5	1448.7	1437.5	1439.3	1444.6	1454.0	1165.6
40°	1415.2	1398.7	1394.5	1394.0	1379.8	1378.7	1381.6	1392.8	1400.4	1341.6	1110.8
42.5°	1337.4	1338.6	1325.7	1317.4	1319.2	1324.5	1338.6	1299.8	1126.1	1073.1	1015.4
45°	1270.9	1265.0	1258.0	1255.6	1270.9	1260.3	1104.9	1019.6	999.0	996.6	834.7
47.5°	1201.5	1199.7	1196.8	1198.5	1111.4	990.7	955.4	944.2	947.8	945.4	717.0
50°	1131.4	1133.8	1133.8	990.1	908.9	888.9	891.8	901.8	839.4	783.5	668.1
52.5°	1070.8	1052.5	901.8	850.0	831.8	840.6	819.4	741.1	684.6	651.7	618.1
55°	958.3	824.1	790.6	782.3	788.8	710.5	662.2	611.6	596.9	593.4	573.9
57.5°	754.1	727.0	729.9	697.0	622.2	578.1	558.6	551.6	545.1	540.4	47.1
60°	667.0	674.6	617.5	546.9	516.8	511.0	506.3	499.8	498.6	490.4	30.0
62.5°	610.4	536.9	487.4	469.8	462.7	460.9	452.1	449.2	381.5	52.4	22.4
65°	460.3	430.3	420.9	416.8	409.1	409.1	339.7	53.6	43.6	37.7	20.0
67.5°	375.6	373.2	368.5	363.2	247.2	51.8	45.3	39.4	34.1	30.0	17.7
70°	317.9	316.7	288.4	53.0	44.1	38.9	34.1	30.6	28.3	25.3	15.9
72.5°	260.8	53.0	44.7	38.9	33.6	30.6	27.7	24.7	22.4	20.6	13.0
75°	40.6	35.9	31.8	28.8	26.5	23.5	21.2	19.4	18.8	16.5	8.8
77.5°	29.4	25.3	23.0	20.6	18.2	16.5	14.1	12.4	11.2	9.4	6.5
80°	20.6	18.2	16.5	13.5	11.8	10.0	8.8	7.7	7.1	5.9	2.9
82.5°	11.8	10.0	8.8	7.1	6.5	5.3	4.7	4.1	4.1	2.9	2.9
85°	5.3	5.3	4.1	3.5	2.9	2.9	2.9	2.4	2.4	1.8	1.8
87.5°	2.4	2.4	2.4	2.4	2.4	1.8	1.8	1.8	1.8	1.8	1.2
90°	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):

	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
0°	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4
2.5°	2022.7	2030.3	2045.0	2060.3	2043.3	2104.5	2099.8	2120.4	2131.6	2136.9	2149.2
5°	2202.8	2236.9	2248.1	2214.6	2195.1	2175.1	2129.8	2095.6	2099.8	2088.6	2048.0
7.5°	2199.3	2126.3	2028.0	1983.2	1979.7	1974.4	1988.5	1996.8	1997.9	1997.3	1996.2
10°	2013.2	1975.6	1969.1	1963.2	1965.6	1943.8	1933.8	1905.5	1920.8	1912.6	1915.5
12.5°	1956.7	1947.9	1913.2	1864.9	1893.7	1872.0	1859.6	1867.8	1858.4	1849.6	1846.6
15°	1923.2	1866.1	1846.6	1834.9	1826.6	1821.9	1826.0	1816.6	1813.7	1811.9	1816.0
17.5°	1853.7	1830.7	1809.6	1778.4	1778.9	1777.2	1789.0	1806.6	1807.8	1717.1	1635.3
20°	1799.0	1780.1	1753.0	1733.6	1760.1	1713.0	1531.1	1444.6	1431.0	1431.0	1433.4
22.5°	1755.4	1713.6	1715.4	1684.8	1436.9	1386.3	1387.5	1392.8	1368.6	1286.2	1277.4
25°	1695.9	1689.5	1560.6	1348.6	1350.4	1311.0	1250.3	1165.0	1072.5	1072.5	1057.2
27.5°	1651.2	1514.0	1325.7	1316.8	1184.4	1100.8	1049.0	970.7	960.1	950.1	951.3
30°	1612.9	1280.9	1285.6	1100.8	1003.1	933.6	929.5	916.6	910.1	908.3	901.8
32.5°	1275.0	1247.4	1076.1	937.2	898.9	887.7	882.4	867.7	867.1	855.9	778.2
35°	1195.6	1094.9	900.7	863.0	851.8	841.2	832.4	558.6	65.9	26.5	23.0
37.5°	1104.9	914.8	833.0	815.9	805.3	595.1	59.5	20.6	14.7	10.6	9.4
40°	936.6	817.1	791.2	772.3	318.5	20.6	13.0	10.0	5.9	5.3	4.7
42.5°	790.0	770.0	742.3	226.0	23.5	10.0	6.5	4.7	4.1	4.1	3.5
45°	739.4	721.7	299.0	22.4	14.7	4.7	4.1	4.1	3.5	2.4	2.4
47.5°	692.3	609.3	27.1	14.1	9.4	4.1	3.5	2.4	2.4	2.4	1.8
50°	642.2	33.6	18.8	10.6	5.9	2.4	2.4	2.4	2.4	1.8	1.8
52.5°	120.1	23.5	15.3	9.4	2.9	2.4	2.4	2.4	1.8	1.8	1.8
55°	28.3	18.8	14.1	8.2	2.4	2.4	2.4	1.8	1.8	1.8	1.2
57.5°	21.2	14.1	11.2	7.7	2.4	1.8	1.8	1.8	1.8	1.8	1.2
60°	17.7	10.0	8.8	7.1	1.8	1.8	1.8	1.8	1.8	1.8	1.2
62.5°	12.4	8.2	6.5	5.3	1.8	1.8	1.8	1.8	1.8	1.8	1.8
65°	10.0	6.5	5.3	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
67.5°	8.8	5.3	3.5	1.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8
70°	7.1	1.8	1.8	1.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8
72.5°	5.9	1.8	1.2	1.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8
75°	5.9	2.9	1.2	1.2	1.8	1.8	2.4	2.4	1.8	1.8	1.8
77.5°	4.1	2.9	1.2	1.2	1.8	1.8	2.4	2.4	1.8	1.8	1.8
80°	2.4	2.9	1.2	1.8	1.8	3.5	4.1	2.4	1.8	1.8	1.8
82.5°	2.4	2.9	3.5	3.5	1.8	2.9	3.5	2.9	2.4	1.8	1.8
85°	2.4	1.8	2.4	2.9	1.8	2.9	2.9	2.4	2.4	1.8	1.8
87.5°	1.2	1.8	1.8	2.4	2.4	2.4	2.9	2.4	2.4	2.4	1.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214098

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4
2.5°	2155.1	2157.5	2120.4	2107.4	2118.6	2116.3	2106.2	2069.2	2065.0	2040.3	2004.4
5°	2059.7	2075.6	2056.2	2089.8	2073.9	2089.8	2138.0	2160.4	2196.9	2219.3	2227.5
7.5°	1993.2	1996.8	1996.8	1999.7	2002.6	2003.2	1999.7	1997.3	1987.3	1975.0	1997.3
10°	1912.6	1916.7	1923.8	1922.6	1922.0	1934.4	1937.3	1962.6	1961.4	1966.1	1983.2
12.5°	1870.8	1839.0	1867.8	1860.2	1870.8	1854.3	1884.9	1879.6	1881.4	1895.5	1932.0
15°	1801.3	1811.3	1818.4	1818.4	1822.5	1819.0	1815.4	1839.6	1854.3	1854.9	1852.5
17.5°	1667.7	1591.8	1669.5	1649.4	1809.0	1813.1	1799.6	1788.4	1788.4	1797.2	1816.0
20°	1431.6	1433.4	1434.0	1441.6	1451.1	1450.5	1451.1	1683.0	1793.1	1767.8	1750.7
22.5°	1255.0	1233.3	1273.9	1270.9	1321.6	1377.5	1431.0	1425.7	1429.3	1592.9	1740.1
25°	1006.0	1034.3	1011.3	1021.3	1078.4	1145.0	1186.2	1293.9	1411.0	1402.8	1441.1
27.5°	947.2	939.5	950.1	950.1	957.8	966.6	989.5	1050.2	1154.4	1263.9	1367.5
30°	891.2	897.7	898.9	909.5	915.4	921.3	924.8	947.8	971.3	1047.2	1175.0
32.5°	669.3	586.9	772.3	822.4	864.7	874.8	881.8	891.2	908.3	919.5	983.7
35°	19.4	19.4	20.6	23.5	30.0	202.5	771.2	850.0	861.2	875.3	887.1
37.5°	9.4	7.1	8.2	8.8	10.6	14.7	21.2	65.9	734.1	830.0	843.0
40°	4.1	4.1	4.1	4.1	4.7	5.9	8.8	14.7	22.4	590.4	796.5
42.5°	3.5	3.5	3.5	3.5	3.5	3.5	4.1	5.3	10.6	25.3	418.0
45°	2.4	2.4	1.8	2.4	2.4	2.9	3.5	3.5	4.7	15.9	28.8
47.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.9	3.5	10.6	15.3
50°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	8.2	10.6
52.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.5	9.4
55°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.8	2.4	8.2
57.5°	1.2	1.2	1.2	1.2	1.2	1.8	1.2	1.2	1.8	1.8	7.7
60°	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.8	1.8	1.8	7.1
62.5°	1.8	1.8	1.2	1.8	1.2	1.2	1.8	1.8	1.8	1.8	4.7
65°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.8
67.5°	1.8	1.8	1.8	1.8	1.2	1.8	1.2	1.8	1.8	1.2	1.2
70°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.2	1.2	1.2
72.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.2	1.2	1.2
75°	1.8	1.8	1.8	1.8	1.8	1.8	2.4	2.4	1.2	1.2	1.2
77.5°	1.8	1.8	1.8	1.8	1.8	1.8	2.9	3.5	2.9	2.9	1.2
80°	1.8	1.8	1.8	1.8	1.8	1.8	2.9	2.9	2.9	2.9	4.1
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	2.4	2.4	2.4	2.4	2.9
85°	1.8	1.8	1.8	1.8	1.8	1.8	2.4	2.4	2.4	1.8	2.4
87.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.4	1.8	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214098

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4
2.5°	2007.3	1987.3	1980.9	1967.3	1966.1	1967.3	1964.4	1960.3	1962.6	1958.5	1955.0
5°	2232.2	2178.7	2143.9	2097.4	2033.3	2019.1	2015.6	1995.6	1988.5	1986.2	1976.7
7.5°	2050.3	2148.0	2206.9	2226.9	2151.6	2133.9	2113.3	2096.8	2080.9	2050.9	2032.7
10°	1969.7	1974.4	2030.9	2096.8	2204.0	2218.7	2229.9	2194.0	2183.9	2107.4	2090.9
12.5°	1950.8	1951.4	1957.9	1997.9	2082.1	2091.5	2131.0	2152.2	2178.1	2192.8	2181.0
15°	1864.9	1912.6	1947.9	1951.4	1959.1	1975.6	1987.3	2060.9	2092.1	2175.7	2171.0
17.5°	1824.9	1840.2	1891.4	1933.2	1926.1	1920.2	1929.6	1939.7	1969.7	2053.3	2052.1
20°	1758.3	1807.2	1834.9	1878.4	1917.9	1919.6	1909.0	1903.2	1891.4	1904.9	1917.3
22.5°	1730.1	1737.7	1789.5	1820.2	1864.9	1880.8	1883.1	1883.7	1877.3	1870.2	1866.7
25°	1727.1	1703.0	1729.5	1767.8	1800.7	1817.8	1837.2	1843.7	1841.3	1841.3	1837.8
27.5°	1413.4	1695.4	1681.2	1706.5	1746.6	1758.3	1768.4	1788.4	1800.7	1809.6	1813.7
30°	1346.3	1396.9	1643.6	1647.1	1687.7	1686.5	1697.7	1714.2	1730.1	1750.7	1756.0
32.5°	1190.9	1315.1	1504.6	1587.6	1630.0	1634.1	1640.0	1644.7	1659.4	1682.4	1702.4
35°	954.2	1197.9	1289.2	1559.4	1567.0	1575.3	1578.8	1590.0	1594.7	1604.1	1621.8
37.5°	863.6	990.1	1236.8	1348.6	1494.6	1501.7	1520.5	1525.2	1532.9	1540.5	1554.1
40°	811.2	845.9	1029.6	1204.4	1436.3	1441.1	1447.5	1459.3	1459.9	1468.7	1481.1
42.5°	769.4	791.8	845.3	1150.3	1395.1	1394.5	1379.2	1386.9	1390.4	1399.8	1416.9
45°	614.6	742.9	777.0	939.5	1110.8	1190.9	1344.5	1319.2	1318.6	1322.1	1340.4
47.5°	31.2	698.7	722.9	775.3	1049.0	1051.9	1072.0	1240.3	1266.2	1258.0	1259.7
50°	21.2	48.3	673.4	697.6	904.2	977.2	991.9	999.6	1096.7	1205.0	1187.3
52.5°	16.5	27.7	412.7	647.5	734.7	788.2	883.0	937.2	943.0	986.6	1134.4
55°	14.7	21.2	44.7	597.5	624.6	636.3	691.7	786.5	863.0	885.9	887.7
57.5°	13.0	19.4	30.6	270.2	568.1	570.4	579.8	612.8	681.7	744.7	815.9
60°	11.8	17.1	24.1	46.5	516.3	522.1	523.9	532.7	541.0	584.0	665.8
62.5°	7.1	13.5	21.2	33.6	408.5	469.2	468.6	474.5	482.1	486.8	503.3
65°	5.9	10.6	18.2	28.3	50.0	62.4	379.1	421.5	426.2	432.7	435.6
67.5°	5.3	9.4	13.5	22.4	37.7	43.0	49.4	61.2	334.4	376.7	382.6
70°	4.7	6.5	11.2	18.8	30.6	33.0	37.1	42.4	50.0	61.8	302.6
72.5°	2.9	4.7	7.7	13.5	23.5	26.5	28.8	32.4	35.9	43.0	49.4
75°	1.2	3.5	6.5	10.0	18.2	20.0	21.8	24.1	27.1	31.8	35.3
77.5°	1.2	2.9	5.3	7.1	11.8	13.5	15.9	17.7	20.0	22.4	25.9
80°	4.1	2.4	3.5	5.3	8.2	8.8	10.0	11.2	13.0	14.7	17.1
82.5°	2.9	3.5	4.1	3.5	4.1	5.3	5.9	7.1	7.7	8.8	9.4
85°	2.4	2.4	2.9	2.9	2.9	2.9	2.9	2.9	3.5	4.1	5.3
87.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214098

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4
2.5°	1955.0	1953.8	1950.2	1950.2	1949.7	1952.0	1953.8	1955.5	1955.0	1958.5	1955.0
5°	1969.7	1966.7	1961.4	1956.7	1955.0	1956.1	1954.4	1956.1	1953.8	1956.7	1951.4
7.5°	2010.3	2000.3	1979.7	1971.4	1960.8	1960.3	1955.0	1953.8	1950.2	1950.2	1943.8
10°	2082.1	2033.8	2028.0	2003.2	1994.4	1951.4	1960.8	1945.0	1943.2	1935.5	1932.6
12.5°	2141.0	2103.3	2092.1	2070.3	2045.6	1958.5	1977.9	1943.8	1942.0	1926.7	1910.8
15°	2142.2	2163.9	2133.3	2073.3	2068.0	2007.9	1968.5	1956.7	1941.4	1895.5	1903.2
17.5°	2073.3	2123.3	2138.0	2125.1	2087.4	2046.8	1991.5	1967.9	1922.0	1901.4	1887.3
20°	1961.4	2012.1	2075.0	2079.2	2102.7	2073.9	2001.5	1963.2	1907.9	1872.0	1860.2
22.5°	1872.5	1909.6	1982.0	2015.6	2044.4	2054.4	2008.5	1952.0	1883.1	1848.4	1841.3
25°	1825.5	1833.7	1855.5	1894.9	1958.5	2004.4	2010.9	1950.8	1914.9	1839.0	1799.0
27.5°	1808.4	1801.3	1792.5	1812.5	1860.2	1916.1	1953.2	1963.2	1873.7	1801.3	1761.3
30°	1764.8	1768.9	1755.4	1748.3	1779.5	1837.2	1903.2	1919.6	1850.8	1776.0	1730.1
32.5°	1711.3	1718.3	1720.7	1708.3	1701.8	1741.9	1813.1	1852.5	1849.0	1740.1	1688.9
35°	1644.1	1664.2	1669.5	1670.0	1659.4	1653.0	1694.2	1776.0	1807.2	1723.6	1649.4
37.5°	1573.5	1579.4	1608.2	1615.9	1615.9	1596.5	1627.1	1692.4	1736.0	1686.5	1601.2
40°	1485.2	1504.0	1531.1	1544.7	1558.2	1560.0	1542.9	1588.8	1660.6	1648.3	1555.8
42.5°	1421.0	1433.4	1449.9	1468.1	1495.8	1502.9	1485.2	1493.4	1568.2	1600.6	1497.0
45°	1346.3	1362.8	1367.5	1387.5	1416.3	1436.9	1436.3	1419.3	1479.3	1519.3	1454.0
47.5°	1269.8	1285.6	1293.9	1303.9	1325.1	1351.6	1366.3	1358.6	1370.4	1448.7	1396.9
50°	1190.9	1199.7	1216.2	1227.4	1241.5	1256.8	1292.1	1299.2	1282.7	1345.1	1333.9
52.5°	1116.1	1119.1	1130.2	1141.4	1160.3	1171.4	1199.7	1220.9	1219.7	1238.0	1263.9
55°	1057.8	1044.9	1047.2	1056.1	1068.4	1085.5	1101.4	1134.4	1145.5	1149.1	1190.3
57.5°	826.5	959.5	971.3	970.7	985.4	993.1	1007.8	1029.6	1069.6	1060.8	1106.7
60°	751.1	765.9	877.1	890.1	895.4	902.4	920.1	940.1	969.5	988.4	1008.4
62.5°	572.8	662.2	695.8	794.1	809.4	813.5	825.3	834.7	865.3	908.3	900.1
65°	443.3	481.5	584.0	624.0	707.6	718.2	734.7	744.7	753.5	802.9	805.3
67.5°	383.2	389.1	416.8	493.9	546.9	628.7	638.7	647.5	661.1	696.4	718.2
70°	327.3	334.4	342.0	348.5	417.4	471.5	547.5	550.4	559.2	582.8	632.2
72.5°	61.8	279.6	284.3	288.4	296.1	332.0	404.4	463.3	466.8	478.0	523.3
75°	41.8	48.9	67.1	230.8	238.4	240.8	253.1	326.7	380.9	383.2	403.2
77.5°	30.0	33.6	40.6	48.3	123.0	184.8	187.8	201.3	257.2	297.9	301.4
80°	20.6	23.0	27.1	30.6	37.7	49.4	136.6	140.7	147.8	203.7	214.3
82.5°	11.8	13.5	15.9	19.4	22.4	28.3	36.5	47.1	96.0	102.4	136.0
85°	5.9	6.5	7.7	9.4	11.2	13.5	18.2	22.4	30.6	55.3	57.1
87.5°	2.9	2.9	2.9	2.9	4.7	5.3	6.5	8.2	10.6	15.9	20.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214098

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4
2.5°	1955.5	1963.8	1970.9	1972.6	1972.6	1973.8	1975.6	1976.7	1977.9	1979.1	1977.9
5°	1952.0	1960.8	1966.7	1968.5	1968.5	1972.0	1975.0	1978.5	1980.3	1980.3	1979.1
7.5°	1943.2	1949.7	1957.3	1962.0	1962.6	1968.5	1973.8	1973.2	1975.6	1976.7	1979.7
10°	1931.4	1931.4	1944.4	1947.9	1950.8	1957.3	1959.1	1962.6	1970.9	1972.0	1979.7
12.5°	1925.5	1919.6	1934.9	1936.7	1946.7	1938.5	1949.1	1952.6	1944.4	1955.5	1940.8
15°	1899.0	1906.1	1903.7	1909.0	1926.7	1917.3	1946.1	1936.7	1957.9	1932.6	1977.3
17.5°	1877.3	1876.1	1885.5	1890.2	1893.7	1913.8	1921.4	1932.0	1940.2	1933.2	1950.8
20°	1861.4	1851.9	1859.0	1864.3	1876.7	1892.0	1896.7	1880.8	1908.5	1955.5	1966.7
22.5°	1831.3	1824.9	1833.1	1833.1	1851.9	1849.6	1867.2	1857.2	1883.1	1937.9	1995.0
25°	1790.7	1791.3	1800.1	1810.7	1814.3	1840.8	1850.2	1863.1	1895.5	1960.8	1995.6
27.5°	1749.5	1746.0	1751.3	1773.1	1791.3	1810.7	1813.7	1857.8	1902.0	1946.7	1977.3
30°	1708.3	1704.8	1708.3	1724.2	1746.0	1758.9	1791.3	1850.2	1891.4	1922.0	1950.8
32.5°	1664.2	1660.6	1668.9	1680.6	1718.9	1720.7	1784.8	1840.2	1872.5	1894.9	1889.6
35°	1617.1	1612.4	1620.0	1638.3	1673.6	1686.5	1753.6	1794.8	1831.3	1841.9	1817.2
37.5°	1560.6	1552.3	1561.7	1587.0	1624.1	1661.8	1717.7	1765.4	1784.8	1756.6	1727.1
40°	1501.7	1495.8	1512.3	1525.2	1568.8	1621.2	1685.3	1718.9	1706.5	1674.2	1641.8
42.5°	1449.3	1436.9	1451.6	1476.4	1525.8	1585.3	1637.1	1655.9	1626.5	1578.8	1541.1
45°	1385.1	1370.4	1388.1	1421.0	1474.0	1541.7	1582.3	1575.9	1525.8	1484.6	1432.8
47.5°	1318.0	1300.4	1318.0	1357.5	1416.9	1488.7	1518.2	1488.7	1425.7	1373.9	1332.2
50°	1252.1	1231.5	1248.6	1308.0	1366.3	1421.6	1421.0	1363.9	1326.3	1269.8	1233.3
52.5°	1186.7	1157.3	1174.4	1239.1	1297.4	1360.4	1313.9	1260.9	1215.6	1166.1	1154.4
55°	1106.1	1074.3	1097.3	1191.5	1236.2	1273.3	1199.1	1152.6	1107.9	1083.1	1068.4
57.5°	1029.6	994.8	1014.9	1126.1	1159.1	1168.5	1100.2	1034.3	1007.8	999.6	978.4
60°	950.7	911.3	930.1	1058.4	1081.4	1043.1	976.0	924.8	919.5	903.0	886.5
62.5°	875.3	831.8	843.6	974.2	984.8	915.4	853.6	840.0	827.1	810.6	801.8
65°	788.8	743.5	760.0	884.8	874.8	785.3	750.5	747.6	730.5	717.0	729.9
67.5°	709.3	655.8	678.7	787.0	741.7	668.7	654.6	647.5	634.0	641.6	505.7
70°	622.2	563.9	595.1	681.7	614.6	566.3	561.0	550.4	551.0	438.0	369.1
72.5°	525.1	474.5	519.8	566.3	486.2	472.1	464.5	463.3	373.8	303.8	286.7
75°	439.7	388.5	437.4	455.0	387.3	377.9	377.3	312.0	245.5	234.3	229.0
77.5°	343.2	303.8	350.3	323.8	297.3	286.7	257.2	193.1	184.8	177.2	66.5
80°	231.3	234.3	261.4	223.1	211.9	180.7	142.5	136.6	117.7	47.1	37.1
82.5°	140.7	176.6	166.6	139.5	136.6	98.3	90.1	45.9	34.1	27.1	23.5
85°	73.0	89.5	85.9	75.9	56.5	50.6	28.3	21.8	17.7	13.5	11.2
87.5°	24.7	33.0	31.8	25.3	19.4	15.3	10.0	8.2	5.9	4.7	4.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214098

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4
2.5°	1976.7	1976.7	1975.6	1976.7	1977.3	1976.2	1976.2	1977.3	1977.9	1978.5	1981.4
5°	1979.7	1980.9	1982.6	1986.2	1986.7	1993.8	1996.8	1998.5	2000.3	2000.9	1996.8
7.5°	1986.2	1990.3	1993.8	1993.2	1989.1	1977.9	1974.4	1971.4	1976.7	1990.3	2006.2
10°	1992.0	1973.2	1937.9	1986.2	1971.4	1985.0	2025.0	2033.8	2060.9	2099.2	2110.4
12.5°	1951.4	2003.2	2014.4	1960.3	2060.3	2023.2	2067.4	2106.2	2117.4	2156.3	2132.7
15°	1995.0	2020.3	2037.4	2091.5	2085.6	2117.4	2129.8	2122.1	2123.9	2133.9	2160.4
17.5°	1994.4	2045.0	2056.2	2092.7	2117.4	2118.0	2114.5	2111.0	2120.4	2128.0	2112.1
20°	2028.5	2045.0	2066.8	2081.5	2086.2	2092.1	2103.3	2094.5	2076.8	2059.7	2052.7
22.5°	2011.5	2048.6	2067.4	2069.7	2066.8	2048.6	2032.1	2007.3	1999.1	1990.3	1993.2
25°	2015.0	2032.1	2029.7	2020.3	2007.9	1973.8	1965.6	1955.0	1939.1	1900.8	1866.1
27.5°	1989.7	1980.9	1970.3	1947.3	1924.9	1906.7	1886.1	1851.9	1823.7	1782.5	1767.2
30°	1947.3	1912.0	1886.1	1872.5	1850.8	1820.2	1789.0	1747.2	1711.3	1703.0	1695.4
32.5°	1866.1	1831.3	1810.1	1777.2	1740.1	1703.6	1667.7	1651.2	1643.6	1644.7	1637.7
35°	1783.1	1752.5	1720.7	1671.2	1643.6	1607.1	1594.1	1590.6	1583.5	1575.9	1567.6
37.5°	1694.8	1658.9	1611.2	1581.7	1554.1	1539.4	1532.9	1527.6	1515.2	1501.7	1492.3
40°	1609.4	1544.7	1518.2	1489.3	1481.1	1474.6	1465.2	1452.2	1435.2	1432.8	1428.7
42.5°	1495.2	1448.7	1425.7	1419.9	1409.9	1398.7	1390.4	1376.3	1369.2	1373.9	1377.5
45°	1386.9	1363.3	1355.7	1348.6	1329.8	1313.9	1308.6	1303.9	1309.8	1335.7	1273.9
47.5°	1299.2	1289.8	1280.3	1268.6	1250.9	1239.1	1244.4	1249.1	1254.4	1064.3	971.3
50°	1223.2	1210.3	1195.6	1182.6	1172.0	1170.9	1198.5	1115.5	934.2	929.5	835.3
52.5°	1140.2	1120.8	1112.0	1104.3	1109.0	1126.7	932.4	865.3	830.0	721.1	672.8
55°	1050.8	1033.7	1033.7	1040.8	1015.4	823.0	812.9	702.9	636.3	617.5	609.9
57.5°	961.3	959.5	969.5	886.5	747.0	716.4	602.2	578.1	567.5	565.1	552.8
60°	879.5	895.9	750.0	689.9	599.9	541.0	524.5	521.6	510.4	506.3	495.1
62.5°	814.1	675.2	628.7	513.3	483.3	475.6	466.8	462.7	452.7	399.7	117.1
65°	588.1	555.7	450.9	431.5	429.1	418.0	414.4	372.6	87.7	58.9	50.0
67.5°	443.9	393.8	380.3	376.7	365.6	343.2	101.8	58.3	50.0	43.6	38.3
70°	340.8	332.0	322.0	313.8	92.4	57.7	50.0	42.4	36.5	32.4	29.4
72.5°	279.0	273.1	158.9	60.6	49.4	41.8	37.1	32.4	28.3	25.9	23.5
75°	218.4	60.6	50.0	41.8	35.9	30.6	27.1	24.1	21.8	20.0	18.2
77.5°	49.4	40.0	34.1	28.8	25.9	23.0	20.6	17.7	15.9	14.1	11.8
80°	30.6	26.5	22.4	20.6	17.7	14.7	13.0	11.8	9.4	8.8	7.7
82.5°	20.0	15.9	14.1	11.8	9.4	8.8	7.7	5.9	5.3	4.7	4.1
85°	8.8	7.7	6.5	5.3	4.1	3.5	2.9	2.4	2.4	2.4	2.4
87.5°	2.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.2
90°	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-LD5-31SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4
2.5°	1982.6	1993.2	2003.2	2000.3	1989.7	1973.2	1968.5	1962.0	1966.7	1976.7	1980.9
5°	1996.8	1990.9	2012.1	2043.3	2093.9	2098.6	2133.9	2142.2	2170.4	2188.1	2187.5
7.5°	2016.8	2100.4	2135.1	2172.8	2189.8	2185.7	2191.0	2186.9	2180.4	2177.5	2173.9
10°	2118.6	2182.2	2195.1	2195.1	2168.6	2132.7	2117.4	2090.9	2038.0	2039.1	2030.3
12.5°	2178.1	2200.4	2169.8	2143.9	2037.4	1996.2	1951.4	1930.2	1917.9	1899.0	1906.1
15°	2146.9	2115.1	2096.8	2013.2	1947.9	1873.7	1874.9	1861.9	1848.4	1849.6	1840.8
17.5°	2100.9	2075.6	1946.1	1888.4	1856.7	1827.8	1822.5	1805.4	1796.6	1793.7	1793.1
20°	2038.0	1946.7	1850.2	1836.0	1797.8	1764.8	1759.5	1764.8	1791.9	1743.6	1580.0
22.5°	1964.4	1833.1	1804.8	1764.8	1738.9	1726.0	1758.3	1611.2	1388.7	1415.7	1386.9
25°	1839.6	1782.5	1734.2	1703.6	1700.7	1621.2	1351.0	1322.7	1179.7	1103.2	1017.2
27.5°	1748.3	1723.6	1673.0	1667.7	1629.4	1325.7	1185.0	1029.6	972.5	963.6	944.8
30°	1693.0	1657.7	1627.1	1493.4	1300.4	1067.3	950.7	928.9	918.9	908.3	891.8
32.5°	1626.5	1592.9	1607.6	1255.6	1036.6	918.9	895.4	879.5	861.2	854.2	794.7
35°	1558.8	1543.5	1256.2	1055.5	891.2	863.0	845.3	828.8	659.3	159.5	54.2
37.5°	1486.4	1482.8	1129.1	875.9	834.7	808.2	758.2	156.6	37.1	25.3	18.8
40°	1429.9	1129.6	892.4	821.2	787.6	745.8	104.8	25.9	16.5	10.0	6.5
42.5°	1392.2	1016.0	798.8	770.6	697.6	77.1	26.5	11.2	6.5	5.3	4.1
45°	1073.1	802.4	746.4	717.0	88.3	26.5	15.3	5.3	4.1	3.5	2.4
47.5°	990.1	728.8	695.8	156.6	29.4	14.1	10.6	3.5	2.4	2.4	2.4
50°	750.0	673.4	553.9	38.3	18.8	10.0	7.7	2.4	2.4	2.4	1.8
52.5°	657.5	621.6	59.5	25.3	14.7	7.7	4.7	1.8	1.8	1.8	1.8
55°	601.0	394.4	35.3	19.4	12.4	7.1	2.9	1.8	1.8	1.8	1.2
57.5°	549.8	53.0	25.9	16.5	11.2	6.5	1.8	1.8	1.8	1.8	1.2
60°	466.2	38.3	21.2	14.7	10.6	5.9	1.8	1.8	1.8	1.8	1.8
62.5°	60.6	30.0	18.2	13.0	7.7	4.7	1.2	1.8	1.8	1.8	1.8
65°	44.1	23.5	16.5	8.8	4.7	1.8	1.2	1.8	1.8	1.8	1.8
67.5°	34.1	19.4	12.4	7.7	4.1	1.2	1.2	1.8	1.8	1.8	1.8
70°	27.1	16.5	10.0	6.5	3.5	1.2	1.2	1.8	1.8	1.8	1.8
72.5°	21.2	11.8	7.1	3.5	2.4	1.2	1.2	1.8	1.8	1.8	1.8
75°	15.9	9.4	5.3	2.9	1.2	1.2	1.2	1.8	1.8	1.8	1.8
77.5°	10.6	5.9	4.1	2.4	2.4	2.4	2.9	2.9	1.8	1.8	1.8
80°	7.1	4.1	2.9	2.9	2.9	2.4	2.9	2.9	1.8	2.9	1.8
82.5°	3.5	2.9	2.9	2.4	2.4	1.8	2.4	2.4	2.4	2.4	1.8
85°	2.4	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.4	2.4	1.8
87.5°	1.2	1.2	1.2	1.2	1.8	1.8	1.8	1.8	2.4	2.4	1.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214098

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4
2.5°	1975.6	1977.3	1972.6	1997.9	1985.0	1986.2	1991.5	1977.9	1980.9	1971.4	1965.0
5°	2189.8	2193.4	2196.9	2198.1	2200.4	2203.4	2199.8	2198.1	2194.5	2182.8	2170.4
7.5°	2156.3	2152.2	2150.4	2152.7	2156.9	2158.6	2155.7	2159.8	2175.1	2181.6	2185.7
10°	1979.7	1960.8	1973.8	1972.0	1957.3	2006.8	1993.2	2000.9	2006.2	2060.3	2093.3
12.5°	1895.5	1907.3	1884.9	1873.7	1888.4	1898.4	1908.5	1887.3	1916.7	1903.2	1946.7
15°	1824.9	1817.8	1815.4	1816.0	1813.1	1827.2	1830.7	1835.5	1839.6	1857.8	1864.9
17.5°	1793.1	1804.8	1809.6	1813.1	1807.2	1800.7	1794.3	1784.8	1787.8	1783.1	1796.6
20°	1469.9	1430.5	1428.1	1451.1	1425.7	1439.9	1474.0	1702.4	1694.8	1783.7	1753.6
22.5°	1226.8	1189.7	1157.9	1130.2	1169.7	1186.2	1249.7	1321.6	1438.1	1419.9	1546.4
25°	1001.9	988.4	980.1	976.0	979.0	977.8	991.9	1025.5	1078.4	1203.2	1364.5
27.5°	937.2	930.7	927.7	918.3	925.4	923.0	934.2	941.3	957.2	969.5	1021.9
30°	885.9	878.3	873.0	863.0	870.0	870.6	874.2	892.4	898.9	909.5	926.0
32.5°	323.8	190.7	179.0	170.1	186.0	242.5	425.6	744.1	848.9	857.1	875.9
35°	31.8	26.5	23.5	23.5	24.1	26.5	35.3	93.0	170.1	657.5	823.0
37.5°	12.4	10.6	8.8	8.2	8.8	10.0	13.5	17.7	24.1	50.0	223.1
40°	5.3	4.7	4.1	4.1	4.1	4.1	4.7	5.9	8.8	16.5	25.9
42.5°	3.5	2.9	2.9	2.9	2.9	2.9	2.9	2.9	4.1	5.3	10.6
45°	2.4	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.4	2.9	4.7
47.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.4
50°	1.8	1.8	1.8	1.8	1.2	1.8	1.2	1.8	1.8	1.8	1.8
52.5°	1.8	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.8
55°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.8
57.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
60°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
62.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.8	1.2
65°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.2
67.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
70°	1.8	1.8	1.2	1.8	1.2	1.2	1.8	1.8	1.8	1.2	1.2
72.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.5	3.5	2.4
75°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.9	3.5	2.9
77.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.9	2.9	2.9
80°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.4	2.4	2.4
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.4	2.4	2.4
85°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
87.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214098

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4
2.5°	1953.8	1953.2	1965.6	1975.0	1971.4	1975.0	1979.1	1979.7	1980.9	1976.2	1974.4
5°	2146.9	2128.6	2093.3	2068.0	2038.5	1985.0	1958.5	1961.4	1962.0	1960.3	1962.6
7.5°	2183.9	2182.2	2169.8	2164.5	2144.5	2106.2	2045.0	2034.4	2008.5	1992.0	1978.5
10°	2090.9	2133.3	2144.5	2163.3	2175.1	2168.1	2116.3	2108.6	2092.1	2073.3	2077.4
12.5°	1990.3	2025.0	2026.8	2129.2	2152.2	2154.5	2134.5	2145.1	2147.5	2105.1	2080.3
15°	1866.7	1883.1	1917.9	2013.2	2082.7	2126.3	2139.2	2145.1	2116.3	2114.5	2104.5
17.5°	1812.5	1823.1	1839.0	1892.6	1997.9	2062.1	2116.8	2112.7	2123.9	2115.7	2090.4
20°	1744.2	1753.0	1781.3	1808.4	1860.2	1945.5	2048.0	2055.6	2070.3	2068.6	2075.6
22.5°	1743.0	1711.8	1716.5	1737.7	1791.9	1868.4	1977.3	2002.6	2012.1	2018.5	2026.2
25°	1382.8	1630.6	1675.9	1689.5	1724.8	1769.5	1897.9	1907.3	1924.9	1953.8	1975.0
27.5°	1197.9	1366.3	1547.6	1641.8	1664.2	1701.2	1777.8	1791.9	1851.9	1859.0	1892.0
30°	945.4	1075.5	1346.3	1572.9	1610.0	1635.9	1690.1	1718.3	1744.2	1772.5	1807.2
32.5°	889.5	910.1	1060.2	1301.5	1590.0	1570.6	1610.6	1627.7	1655.9	1680.6	1706.0
35°	838.3	852.4	884.2	1066.1	1295.1	1517.0	1544.1	1555.3	1571.1	1590.0	1608.2
37.5°	784.7	805.9	827.7	876.5	1197.9	1474.6	1474.0	1487.0	1496.4	1512.3	1527.6
40°	142.5	740.0	775.3	807.1	928.9	1176.2	1408.1	1414.0	1420.4	1430.5	1446.4
42.5°	23.0	123.6	726.4	757.0	791.8	1053.1	1378.1	1353.9	1349.8	1356.9	1371.0
45°	11.8	30.0	146.0	707.0	738.2	840.0	1126.7	1312.1	1308.0	1294.5	1297.4
47.5°	8.8	18.8	35.9	244.3	691.1	721.1	1039.6	1028.4	1106.7	1256.8	1233.8
50°	7.7	13.0	21.2	50.0	610.4	664.0	800.6	935.4	976.6	981.9	1162.0
52.5°	7.1	8.8	15.3	32.4	128.3	614.0	651.1	698.2	767.6	916.6	913.0
55°	6.5	8.2	13.0	21.8	44.7	553.3	591.6	600.4	615.2	686.4	780.6
57.5°	3.5	7.7	12.4	18.8	33.6	101.3	536.9	543.9	555.7	558.6	592.2
60°	1.8	7.1	11.2	16.5	24.7	47.1	482.7	490.9	498.0	499.2	509.8
62.5°	1.2	6.5	9.4	15.3	20.6	33.6	114.2	233.1	443.3	443.3	455.6
65°	1.2	4.7	5.9	10.0	18.8	27.7	48.3	55.9	108.9	267.8	399.7
67.5°	1.2	1.8	5.3	8.2	14.1	21.2	35.3	41.2	49.4	56.5	104.8
70°	1.2	1.2	4.7	5.3	8.8	15.9	25.3	28.8	33.6	38.3	44.1
72.5°	1.2	1.2	4.1	4.1	5.9	10.6	19.4	21.2	24.1	27.1	31.2
75°	2.9	2.4	3.5	3.5	4.1	8.2	14.7	16.5	17.7	20.0	23.0
77.5°	2.9	2.9	2.9	2.9	2.9	5.3	9.4	10.6	12.4	13.5	15.9
80°	2.4	2.4	2.4	2.9	2.9	3.5	5.9	6.5	7.1	8.8	9.4
82.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.5	4.1	5.3
85°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.4	2.4	2.4	2.4
87.5°	1.8	1.8	1.8	1.2	1.2	1.8	1.8	1.8	1.8	1.8	1.8
90°	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):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4	1961.4
2.5°	1973.8	1970.3	1967.3	1969.1	1963.8	1961.4	1963.2	1963.8	1965.0	1967.9	1968.5
5°	1968.5	1967.3	1972.6	1975.6	1974.4	1975.6	1975.6	1973.2	1969.7	1972.0	1966.7
7.5°	1965.0	1957.3	1951.4	1952.6	1946.7	1953.8	1960.3	1969.7	1972.6	1972.6	1966.7
10°	2025.6	2017.4	1984.4	1962.0	1947.3	1934.4	1965.0	1933.8	1948.5	1892.6	1956.7
12.5°	2075.6	2086.8	2072.1	2010.9	2000.3	1961.4	1983.8	1945.5	1934.4	1870.2	1890.8
15°	2095.6	2074.5	2069.7	2052.7	2029.7	2018.5	1958.5	1952.0	1933.8	1940.8	1913.8
17.5°	2078.0	2088.6	2074.5	2063.3	2039.7	2013.2	1977.3	1945.5	1920.2	1863.7	1911.4
20°	2060.9	2075.0	2032.7	2039.7	2042.1	2011.5	1992.6	1966.1	1934.4	1881.4	1840.2
22.5°	2032.7	2022.7	2026.2	2015.6	2006.8	2010.9	1985.0	1966.7	1913.2	1889.0	1833.1
25°	1986.7	1983.2	1992.6	1991.5	1970.3	1963.2	1950.2	1930.8	1909.6	1870.8	1824.9
27.5°	1912.0	1930.2	1946.7	1954.4	1943.2	1924.3	1917.3	1906.1	1891.4	1851.9	1817.8
30°	1833.1	1853.7	1872.5	1889.0	1899.0	1890.8	1884.3	1877.8	1855.5	1829.6	1791.3
32.5°	1743.0	1770.1	1796.0	1816.0	1837.8	1844.3	1839.6	1834.3	1815.4	1791.9	1761.3
35°	1638.8	1675.9	1713.6	1749.5	1758.9	1774.2	1789.5	1780.7	1770.7	1747.2	1718.9
37.5°	1550.5	1577.0	1604.1	1649.4	1682.4	1701.8	1728.9	1732.4	1715.4	1704.2	1667.1
40°	1459.3	1483.4	1522.9	1549.4	1594.7	1617.1	1645.9	1658.9	1654.7	1648.3	1615.9
42.5°	1387.5	1399.3	1425.2	1448.7	1493.4	1539.4	1564.7	1578.8	1593.5	1588.2	1571.7
45°	1311.0	1321.6	1330.4	1351.0	1394.5	1435.2	1466.4	1487.6	1514.0	1526.4	1506.4
47.5°	1235.0	1238.0	1248.6	1265.6	1291.5	1322.7	1375.1	1406.9	1431.6	1455.8	1442.8
50°	1176.7	1166.1	1167.9	1178.5	1199.7	1230.3	1268.0	1312.7	1341.0	1370.4	1373.4
52.5°	1028.4	1114.3	1093.7	1099.6	1110.8	1125.5	1165.0	1209.1	1243.9	1269.2	1294.5
55°	863.0	880.1	1045.5	1021.9	1029.0	1041.9	1060.2	1104.3	1137.9	1173.2	1208.5
57.5°	669.3	796.5	802.9	956.0	952.5	953.6	968.9	994.3	1027.8	1072.0	1102.0
60°	520.4	573.9	678.1	731.1	865.3	870.0	878.9	893.6	922.4	964.2	1011.9
62.5°	459.2	466.2	503.3	582.8	669.9	775.3	794.1	796.5	809.4	851.2	906.5
65°	403.2	407.9	419.1	427.4	500.4	602.2	692.9	707.6	715.8	740.5	787.6
67.5°	277.9	351.4	361.4	367.3	374.4	421.5	533.9	608.7	618.1	639.9	681.1
70°	53.6	111.3	304.3	310.8	314.3	324.9	343.2	462.1	524.5	545.1	563.9
72.5°	36.5	43.0	51.8	122.4	259.0	264.9	269.0	284.3	389.7	449.7	459.7
75°	26.5	29.4	34.7	43.0	53.0	172.5	213.7	221.3	229.0	316.1	366.7
77.5°	18.8	21.2	23.5	27.7	32.4	41.8	60.0	165.4	173.1	177.2	250.2
80°	10.6	13.0	15.9	18.2	20.6	23.5	30.6	38.3	85.4	124.8	131.3
82.5°	5.9	7.1	8.2	10.0	11.2	14.1	17.1	20.6	27.1	40.0	84.8
85°	2.9	2.9	2.9	4.1	4.7	6.5	7.7	8.8	12.4	17.1	23.5
87.5°	1.8	1.8	2.4	2.4	2.4	2.9	2.9	2.9	3.5	5.3	7.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214098

CATALOG NUMBER: 4SNLED-LD5-31SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	1961.4	1961.4	1961.4	1961.4	1961.4
2.5°	1969.1	1967.3	1967.3	1974.4	1972.6
5°	1965.6	1963.8	1963.2	1970.9	1967.3
7.5°	1962.6	1956.1	1954.4	1961.4	1958.5
10°	1950.8	1946.1	1949.1	1946.7	1945.5
12.5°	1930.8	1927.9	1915.5	1916.7	1926.7
15°	1894.9	1906.7	1885.5	1904.3	1908.5
17.5°	1829.0	1855.5	1876.1	1887.3	1889.0
20°	1858.4	1867.2	1856.7	1857.2	1864.3
22.5°	1820.2	1824.3	1827.2	1823.7	1839.0
25°	1758.9	1743.0	1777.2	1784.2	1809.0
27.5°	1740.1	1727.1	1743.0	1741.9	1762.5
30°	1724.8	1683.0	1690.1	1701.2	1726.6
32.5°	1703.0	1637.1	1630.0	1654.7	1683.0
35°	1664.7	1602.3	1585.9	1601.8	1644.1
37.5°	1632.4	1554.1	1521.1	1542.3	1597.6
40°	1584.1	1516.4	1465.2	1484.0	1549.4
42.5°	1526.4	1484.0	1405.1	1418.1	1492.9
45°	1468.1	1430.5	1346.9	1353.3	1442.2
47.5°	1408.7	1373.9	1286.2	1287.4	1377.5
50°	1350.4	1304.5	1232.1	1211.5	1308.6
52.5°	1274.5	1232.1	1177.3	1143.8	1243.3
55°	1202.6	1155.0	1114.9	1063.1	1169.1
57.5°	1132.6	1079.6	1052.5	986.0	1084.9
60°	1036.6	1011.3	971.3	907.7	1009.0
62.5°	938.3	930.1	889.5	823.5	915.4
65°	823.5	843.0	801.2	744.7	818.2
67.5°	715.2	750.0	704.0	669.3	724.6
70°	599.9	639.9	614.0	601.6	625.2
72.5°	486.2	525.1	527.4	518.6	526.3
75°	375.6	418.5	442.1	428.5	430.3
77.5°	284.9	305.5	331.4	342.0	339.7
80°	176.0	211.9	233.1	254.9	247.2
82.5°	88.9	118.9	144.8	168.4	157.2
85°	37.1	47.7	66.5	87.7	84.2
87.5°	11.2	18.8	20.0	28.3	26.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)