

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: P1213775

Luminaire Tested: 4SNLED-LD5-43SL-RW-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213775
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33525)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-43SL-RW-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

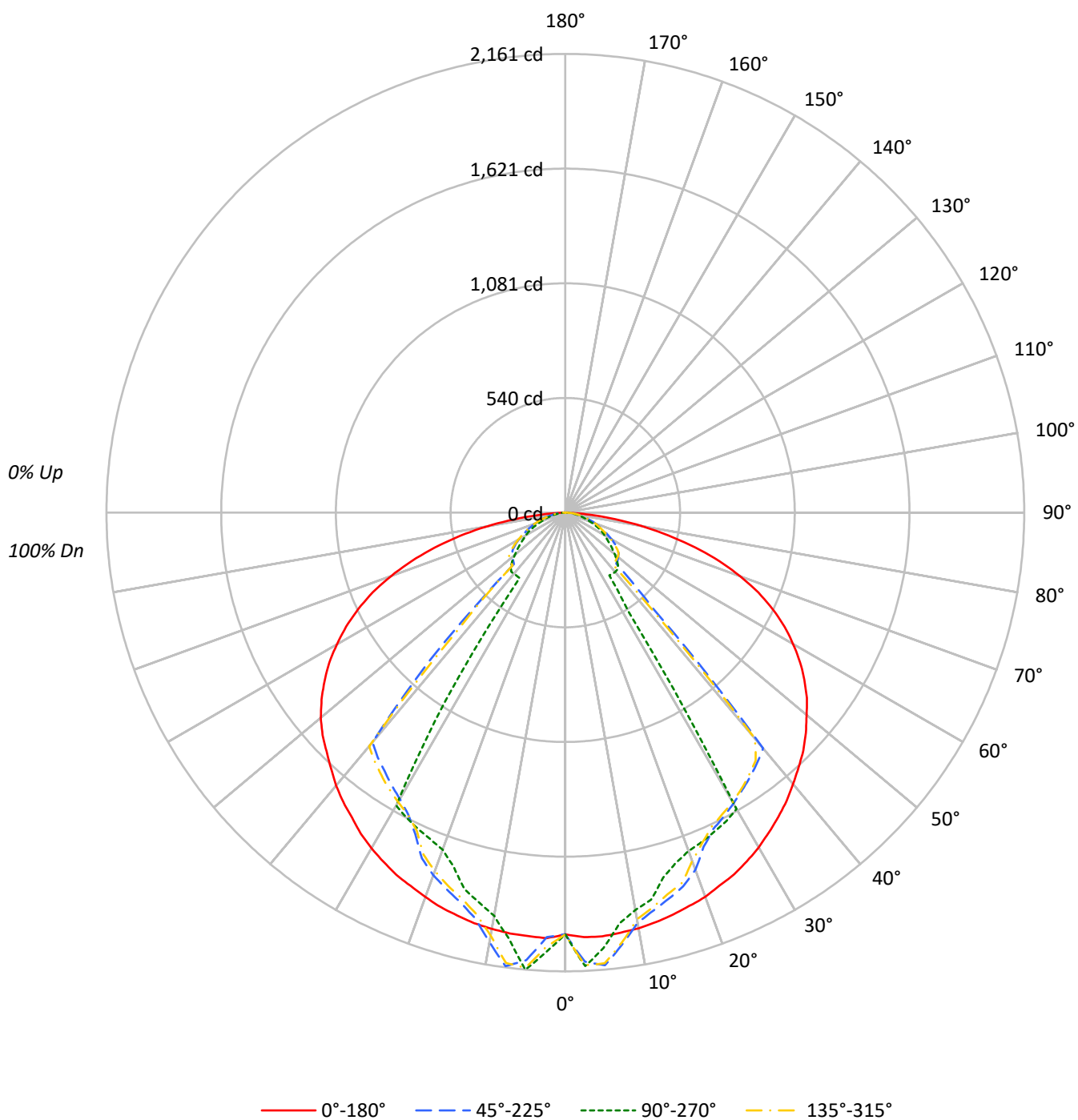
Lumens per Lamp: N/A
Luminaire Lumens: 3978.0 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 35
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77
3	94	84	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39
9	62	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	16053	16053	16053	16053
5°	16210	16174	16203	16975
10°	16226	14623	16249	14848
15°	16262	13529	16300	13959
20°	16380	12833	16380	12784
25°	16522	12587	16546	12470
30°	16689	12365	16731	12218
35°	16884	2816	16918	2937
40°	17154	2929	17257	3024
45°	17565	2912	17626	3019
50°	17976	2634	18218	2705
55°	18528	2338	18675	2372
60°	18998	2077	19039	2105
65°	19332	1814	19284	1784
70°	19057	1461	18998	1409
75°	17691	1125	17820	1077
80°	14362	799	14935	732
85°	7774	478	8212	366

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 357.5°

Vertical Angle: 60°

Luminance: 19466 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.5	4.9
10°-20°	537.4	13.5
20°-30°	796.0	20.0
30°-40°	802.0	20.2
40°-50°	626.5	15.7
50°-60°	483.9	12.2
60°-70°	324.9	8.2
70°-80°	165.7	4.2
80°-90°	46.1	1.2
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°	1528.8	38.4
0°-40°	2330.8	58.6
0°-60°	3441.2	86.5
0°-90°	3978.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3978.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1986	1986	1986	1986	1986	
5°	2004	2059	2003	2161	2004	191
15°	1960	1780	1965	1836	1960	554
25°	1880	1659	1883	1643	1880	867
35°	1749	360	1752	376	1749	1096
45°	1585	350	1590	363	1585	1222
55°	1374	255	1385	259	1374	1227
65°	1079	171	1076	168	1079	1061
75°	633	86	637	83	633	662
85°	114	27	120	21	114	157
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5
2.5°	2002.0	2009.3	2014.7	2018.4	2020.2	2020.2	2021.1	2022.0	2033.9	2039.3	2043.0
5°	2003.8	2011.1	2022.0	2036.6	2049.3	2060.3	2069.4	2082.1	2094.8	2108.5	2113.1
7.5°	1995.6	2004.7	2026.6	2053.0	2077.6	2094.8	2106.7	2114.9	2121.3	2122.2	2126.7
10°	1988.3	2004.7	2034.8	2069.4	2100.3	2121.3	2121.3	2116.7	2123.1	2098.5	2073.9
12.5°	1975.6	1993.8	2034.8	2080.3	2109.4	2117.6	2114.0	2095.8	2058.4	2028.4	2014.7
15°	1960.1	1984.7	2035.7	2086.7	2111.2	2114.0	2079.4	2032.9	2004.7	1986.5	1963.8
17.5°	1942.8	1975.6	2036.6	2087.6	2096.7	2083.9	2018.4	1989.2	1960.1	1917.3	1886.4
20°	1926.4	1958.3	2029.3	2074.8	2080.3	2022.9	1971.9	1941.0	1891.8	1854.5	1840.8
22.5°	1900.9	1938.3	2022.9	2057.5	2036.6	1970.1	1921.0	1871.8	1827.2	1816.3	1799.9
25°	1880.0	1919.1	2008.4	2036.6	1981.0	1921.9	1864.5	1807.2	1786.2	1770.7	1756.2
27.5°	1851.8	1900.0	1989.2	1998.3	1921.9	1870.0	1786.2	1760.7	1741.6	1724.3	1717.9
30°	1820.8	1880.0	1962.8	1945.5	1872.7	1796.2	1734.3	1710.7	1697.0	1678.8	1671.5
32.5°	1785.3	1849.9	1933.7	1884.5	1819.9	1724.3	1684.3	1666.0	1647.8	1634.2	1588.7
35°	1748.9	1823.5	1899.1	1826.3	1756.2	1669.7	1634.2	1617.8	1600.5	1550.4	1503.1
37.5°	1711.6	1794.4	1857.2	1763.5	1671.5	1613.2	1583.2	1565.0	1525.8	1462.1	1438.4
40°	1668.8	1758.9	1803.5	1698.8	1597.8	1555.9	1527.7	1509.5	1421.1	1392.9	1385.6
42.5°	1626.0	1724.3	1738.0	1636.0	1536.8	1494.9	1471.2	1411.1	1351.0	1336.5	1339.2
45°	1585.0	1687.0	1666.0	1546.8	1473.0	1438.4	1398.4	1315.5	1283.7	1291.0	1292.8
47.5°	1535.9	1642.4	1590.5	1457.6	1407.5	1372.9	1283.7	1233.6	1229.1	1239.1	1244.5
50°	1483.1	1592.3	1510.4	1376.5	1336.5	1295.5	1194.5	1169.0	1174.4	1184.4	1190.8
52.5°	1433.9	1535.9	1427.5	1301.0	1266.4	1172.6	1104.3	1108.9	1118.0	1129.8	1133.5
55°	1373.8	1467.6	1339.2	1224.5	1191.7	1068.8	1037.9	1048.8	1057.9	1067.9	1075.2
57.5°	1311.0	1389.3	1234.5	1138.9	1086.1	976.9	979.6	986.9	993.3	1005.1	415.1
60°	1239.1	1300.1	1119.8	1059.7	955.0	904.0	906.8	919.5	925.9	517.1	285.9
62.5°	1164.4	1196.3	1016.0	969.6	834.8	831.2	843.9	849.4	578.1	273.1	267.7
65°	1078.8	1072.5	914.0	840.3	752.9	756.5	770.2	742.9	255.8	255.8	254.0
67.5°	984.2	945.9	814.8	695.6	673.7	681.9	696.5	243.1	236.7	238.5	232.2
70°	875.8	822.1	711.9	589.0	596.3	604.5	234.9	220.3	217.6	213.0	200.3
72.5°	761.1	687.4	582.7	511.6	516.2	324.1	205.8	198.5	189.4	180.3	166.6
75°	632.7	537.1	427.9	427.9	434.3	184.8	179.4	167.5	157.5	145.7	137.5
77.5°	496.2	413.3	332.3	345.0	168.4	154.8	144.8	132.0	123.8	116.5	112.0
80°	363.3	288.6	250.4	224.0	131.1	117.4	107.4	100.1	96.5	92.0	86.5
82.5°	238.5	173.9	173.9	105.6	92.0	81.0	78.3	72.8	69.2	66.5	63.7
85°	113.8	101.1	76.5	64.6	57.4	51.9	50.1	47.3	47.3	46.4	45.5
87.5°	41.9	45.5	33.7	32.8	31.0	30.0	31.0	31.0	31.9	31.0	30.0
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):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5
2.5°	2052.1	2059.3	2064.8	2073.9	2085.7	2095.8	2104.9	2117.6	2137.6	2143.1	2147.7
5°	2113.1	2115.8	2122.2	2129.4	2131.3	2135.8	2134.9	2140.4	2143.1	2149.5	2135.8
7.5°	2116.7	2102.1	2084.8	2069.4	2058.4	2048.4	2042.0	2052.1	2057.5	2062.1	2048.4
10°	2040.2	2022.9	2012.9	2003.8	1992.9	1977.4	1956.5	1961.0	1959.2	1959.2	1954.6
12.5°	1992.0	1967.4	1941.9	1919.1	1909.1	1908.2	1909.1	1919.1	1919.1	1918.2	1912.8
15°	1916.4	1892.7	1880.0	1874.5	1874.5	1871.8	1871.8	1882.7	1880.0	1880.0	1877.3
17.5°	1866.3	1849.9	1840.8	1834.5	1831.7	1836.3	1841.8	1846.3	1847.2	1843.6	1829.0
20°	1825.4	1809.9	1799.0	1800.8	1799.9	1802.6	1805.3	1789.9	1770.7	1745.3	1733.4
22.5°	1782.6	1770.7	1762.6	1762.6	1751.6	1734.3	1708.8	1703.4	1700.6	1688.8	1678.8
25°	1741.6	1728.0	1716.1	1679.7	1656.9	1659.7	1655.1	1646.0	1645.1	1644.2	1647.8
27.5°	1700.6	1665.1	1619.6	1614.2	1605.0	1604.1	1609.6	1614.2	1614.2	1617.8	1622.3
30°	1616.0	1575.0	1566.8	1556.8	1560.4	1573.2	1575.9	1582.3	1584.1	1590.5	1594.1
32.5°	1538.6	1520.4	1513.1	1517.7	1529.5	1540.4	1546.8	1549.5	1554.1	1559.5	1564.1
35°	1475.8	1470.3	1476.7	1486.7	1498.5	1507.6	1513.1	1518.6	1523.1	1527.7	1531.3
37.5°	1429.3	1433.0	1442.1	1454.8	1466.7	1474.0	1478.5	1484.9	1491.2	1496.7	1474.9
40°	1385.6	1394.7	1404.8	1418.4	1428.4	1435.7	1440.3	1448.5	1393.8	630.9	346.0
42.5°	1347.4	1357.4	1364.7	1375.6	1386.6	1392.0	1352.0	603.6	341.4	339.6	344.1
45°	1301.0	1309.2	1321.0	1329.2	1339.2	879.5	335.9	339.6	334.1	337.8	339.6
47.5°	1253.6	1266.4	1272.8	1214.5	361.4	334.1	330.5	334.1	330.5	335.0	332.3
50°	1199.9	1215.4	864.9	326.8	324.1	322.3	325.9	324.1	326.8	330.5	323.2
52.5°	1145.3	709.2	316.8	315.0	316.8	315.0	321.4	316.8	317.7	314.1	305.0
55°	387.8	306.8	304.1	303.2	308.6	308.6	308.6	301.3	296.8	287.7	281.3
57.5°	296.8	296.8	295.9	296.8	295.0	293.2	285.0	278.6	272.2	259.5	255.8
60°	281.3	281.3	281.3	281.3	273.1	269.5	256.7	251.3	240.3	234.0	230.3
62.5°	268.6	266.7	258.6	255.8	246.7	236.7	229.4	224.0	213.0	209.4	206.7
65°	250.4	244.0	234.0	223.1	218.5	207.6	203.9	195.7	190.3	187.5	185.7
67.5°	220.3	211.2	203.0	195.7	187.5	183.9	179.4	173.0	169.3	167.5	165.7
70°	188.5	182.1	173.9	169.3	163.9	161.1	154.8	152.9	150.2	147.5	144.8
72.5°	157.5	153.9	150.2	143.8	142.0	140.2	133.8	130.2	126.5	122.9	121.1
75°	132.0	129.3	127.5	122.0	119.3	113.8	109.2	106.5	103.8	101.1	99.2
77.5°	108.3	106.5	101.1	97.4	95.6	91.0	89.2	90.1	88.3	84.7	82.8
80°	84.7	82.8	78.3	78.3	76.5	74.7	72.8	71.0	69.2	66.5	64.6
82.5°	64.6	62.8	61.0	59.2	57.4	56.4	55.5	53.7	51.9	50.1	49.2
85°	45.5	44.6	43.7	42.8	41.9	41.0	40.1	38.2	36.4	35.5	34.6
87.5°	31.0	30.0	29.1	28.2	27.3	26.4	25.5	24.6	22.8	21.8	20.9
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):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5
2.5°	2147.7	2152.2	2147.7	2137.6	2131.3	2128.5	2134.0	2134.0	2137.6	2142.2	2143.1
5°	2114.0	2103.0	2090.3	2077.6	2071.2	2067.5	2057.5	2059.3	2062.1	2063.9	2065.7
7.5°	2030.2	2015.6	1998.3	1982.0	1975.6	1970.1	1958.3	1958.3	1958.3	1959.2	1964.7
10°	1944.6	1938.3	1931.0	1920.1	1911.9	1909.1	1899.1	1901.8	1900.0	1902.8	1909.1
12.5°	1904.6	1897.3	1890.9	1880.0	1870.9	1867.2	1862.7	1865.4	1864.5	1869.1	1874.5
15°	1868.2	1864.5	1857.2	1849.0	1840.8	1833.6	1817.2	1811.7	1808.1	1803.5	1809.9
17.5°	1808.1	1782.6	1765.3	1752.5	1743.4	1737.1	1732.5	1732.5	1735.2	1738.0	1743.4
20°	1726.1	1718.9	1710.7	1697.0	1687.9	1684.3	1681.5	1681.5	1686.1	1689.7	1699.7
22.5°	1669.7	1668.8	1666.0	1659.7	1655.1	1655.1	1656.0	1657.9	1664.2	1669.7	1679.7
25°	1643.3	1646.9	1645.1	1641.5	1638.7	1639.6	1637.8	1639.6	1646.0	1651.5	1659.7
27.5°	1622.3	1627.8	1626.0	1620.5	1616.0	1617.8	1620.5	1618.7	1624.2	1630.5	1636.9
30°	1594.1	1595.0	1598.7	1592.3	1590.5	1593.2	1594.1	1595.9	1601.4	1606.0	1611.4
32.5°	1562.3	1569.5	1568.6	1562.3	1562.3	1565.0	1565.9	1504.9	1391.1	1198.1	1145.3
35°	1531.3	1539.5	1525.8	1286.4	890.4	475.2	366.9	354.1	356.9	358.7	360.5
37.5°	1132.5	537.1	342.3	345.0	347.8	350.5	353.2	356.0	358.7	361.4	362.3
40°	340.5	339.6	342.3	346.0	348.7	350.5	354.1	356.9	359.6	362.3	363.3
42.5°	336.9	338.7	341.4	345.0	348.7	352.3	355.1	358.7	360.5	362.3	363.3
45°	335.0	338.7	342.3	345.0	347.8	349.6	351.4	352.3	351.4	351.4	353.2
47.5°	332.3	335.9	336.9	335.9	336.9	335.9	335.9	335.9	333.2	332.3	332.3
50°	322.3	322.3	320.5	316.8	315.9	315.0	313.2	312.3	308.6	307.7	307.7
52.5°	301.3	300.4	297.7	293.2	291.3	289.5	288.6	287.7	284.0	282.2	283.1
55°	276.8	274.9	272.2	266.7	265.8	264.0	263.1	262.2	258.6	260.4	257.6
57.5°	254.0	250.4	246.7	245.8	242.2	241.3	240.3	239.4	236.7	237.6	235.8
60°	226.7	225.8	224.0	220.3	220.3	219.4	219.4	217.6	215.8	214.9	214.9
62.5°	206.7	203.9	202.1	202.1	199.4	199.4	199.4	197.6	195.7	196.6	195.7
65°	184.8	183.9	183.0	181.2	181.2	180.3	180.3	178.4	175.7	176.6	174.8
67.5°	166.6	164.8	163.0	162.1	158.4	156.6	155.7	154.8	151.1	152.0	150.2
70°	143.8	141.1	139.3	137.5	134.7	132.9	132.9	131.1	128.4	129.3	127.5
72.5°	120.2	118.4	116.5	115.6	112.9	112.0	111.1	110.2	107.4	108.3	107.4
75°	100.1	100.1	99.2	98.3	95.6	92.9	91.0	90.1	88.3	89.2	87.4
77.5°	82.8	81.0	79.2	79.2	76.5	74.7	72.8	72.8	72.8	71.9	71.0
80°	64.6	62.8	62.8	61.9	60.1	58.3	57.4	57.4	56.4	56.4	55.5
82.5°	49.2	47.3	46.4	46.4	44.6	43.7	42.8	41.9	41.9	41.9	41.0
85°	34.6	32.8	31.9	31.9	30.0	29.1	29.1	28.2	28.2	27.3	27.3
87.5°	20.9	20.0	19.1	19.1	17.3	16.4	16.4	16.4	15.5	15.5	14.6
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-LD5-43SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5
2.5°	2143.1	2143.1	2136.7	2138.5	2135.8	2139.5	2134.9	2134.9	2140.4	2140.4	2144.0
5°	2066.6	2062.1	2061.2	2059.3	2050.2	2053.9	2049.3	2044.8	2051.1	2051.1	2059.3
7.5°	1961.9	1953.7	1957.4	1951.9	1946.5	1938.3	1941.0	1937.3	1941.9	1948.3	1956.5
10°	1908.2	1900.9	1905.5	1900.0	1902.8	1890.9	1891.8	1892.7	1897.3	1899.1	1906.4
12.5°	1873.6	1871.8	1870.0	1868.2	1870.0	1863.6	1860.0	1860.9	1862.7	1863.6	1869.1
15°	1800.8	1789.0	1792.6	1779.8	1780.8	1781.7	1774.4	1781.7	1780.8	1792.6	1803.5
17.5°	1741.6	1741.6	1735.2	1729.8	1726.1	1725.2	1719.8	1723.4	1719.8	1727.0	1729.8
20°	1700.6	1699.7	1698.8	1696.1	1687.0	1687.9	1690.6	1682.4	1681.5	1680.6	1686.1
22.5°	1681.5	1682.4	1678.8	1678.8	1670.6	1672.4	1673.3	1664.2	1665.1	1662.4	1665.1
25°	1661.5	1663.3	1658.8	1658.8	1656.9	1656.0	1651.5	1653.3	1647.8	1643.3	1647.8
27.5°	1637.8	1641.5	1637.8	1639.6	1636.0	1634.2	1631.5	1629.6	1624.2	1623.3	1626.0
30°	1616.0	1617.8	1616.9	1612.3	1611.4	1606.0	1608.7	1603.2	1597.8	1598.7	1600.5
32.5°	828.5	791.1	610.0	550.8	545.3	565.4	670.1	815.7	1057.0	1291.0	1459.4
35°	361.4	361.4	361.4	360.5	360.5	359.6	358.7	357.8	356.9	356.0	355.1
37.5°	363.3	363.3	363.3	363.3	362.3	361.4	361.4	359.6	358.7	357.8	356.9
40°	364.2	365.1	365.1	365.1	364.2	364.2	363.3	361.4	360.5	358.7	356.9
42.5°	363.3	364.2	364.2	363.3	363.3	362.3	362.3	361.4	360.5	359.6	358.7
45°	351.4	352.3	350.5	350.5	349.6	349.6	349.6	349.6	349.6	350.5	350.5
47.5°	330.5	330.5	329.6	328.7	328.7	327.7	328.7	327.7	329.6	330.5	332.3
50°	305.9	305.9	304.1	303.2	303.2	303.2	303.2	304.1	305.0	306.8	308.6
52.5°	280.4	280.4	279.5	278.6	277.7	277.7	280.4	279.5	280.4	281.3	284.0
55°	255.8	256.7	254.9	254.9	254.0	254.0	254.0	254.9	255.8	256.7	259.5
57.5°	234.9	234.9	233.1	233.1	233.1	232.2	234.9	233.1	234.0	234.9	236.7
60°	213.9	213.0	213.0	212.1	212.1	212.1	213.9	213.0	213.0	213.9	215.8
62.5°	194.8	194.8	193.9	193.9	193.0	193.0	194.8	193.9	193.9	194.8	195.7
65°	173.0	173.0	172.1	171.2	173.9	171.2	173.9	172.1	173.9	174.8	176.6
67.5°	148.4	148.4	148.4	147.5	147.5	149.3	150.2	148.4	149.3	151.1	152.0
70°	126.5	126.5	125.6	125.6	125.6	127.5	128.4	126.5	127.5	128.4	130.2
72.5°	107.4	105.6	105.6	104.7	106.5	106.5	107.4	106.5	107.4	107.4	109.2
75°	88.3	86.5	86.5	86.5	88.3	87.4	88.3	87.4	88.3	88.3	89.2
77.5°	71.0	70.1	69.2	69.2	71.0	71.0	71.0	70.1	71.0	71.9	72.8
80°	55.5	54.6	53.7	53.7	55.5	55.5	55.5	56.4	55.5	56.4	57.4
82.5°	41.0	40.1	39.1	41.0	41.0	41.0	41.0	41.9	41.0	41.9	42.8
85°	27.3	26.4	25.5	27.3	27.3	27.3	27.3	28.2	27.3	28.2	29.1
87.5°	14.6	13.7	13.7	14.6	14.6	14.6	15.5	15.5	15.5	16.4	16.4
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: P1213775

CATALOG NUMBER: 4SNLED-LD5-43SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5
2.5°	2149.5	2152.2	2151.3	2145.8	2140.4	2134.0	2129.4	2130.4	2139.5	2142.2	2134.0
5°	2059.3	2076.6	2076.6	2088.5	2082.1	2076.6	2080.3	2100.3	2110.3	2125.8	2131.3
7.5°	1966.5	1974.7	1973.8	1985.6	1983.8	1983.8	1986.5	2012.9	2025.7	2038.4	2042.0
10°	1914.6	1922.8	1921.9	1922.8	1920.1	1913.7	1913.7	1925.5	1936.4	1942.8	1944.6
12.5°	1877.3	1881.8	1880.9	1880.9	1879.1	1873.6	1872.7	1882.7	1894.6	1902.8	1903.7
15°	1821.7	1834.5	1837.2	1849.0	1846.3	1839.0	1840.8	1849.0	1856.3	1863.6	1860.9
17.5°	1738.9	1745.3	1746.2	1750.7	1748.9	1748.9	1759.8	1789.9	1809.9	1827.2	1829.0
20°	1691.5	1696.1	1694.3	1704.3	1699.7	1698.8	1701.6	1714.3	1723.4	1731.6	1746.2
22.5°	1668.8	1672.4	1669.7	1670.6	1662.4	1655.1	1653.3	1663.3	1673.3	1684.3	1684.3
25°	1649.7	1652.4	1651.5	1649.7	1643.3	1633.3	1631.5	1633.3	1636.9	1637.8	1631.5
27.5°	1626.9	1628.7	1628.7	1629.6	1621.4	1612.3	1610.5	1608.7	1612.3	1611.4	1601.4
30°	1603.2	1600.5	1601.4	1602.3	1595.0	1586.8	1583.2	1582.3	1585.9	1585.0	1575.0
32.5°	1546.8	1567.7	1569.5	1571.4	1565.0	1557.7	1554.1	1551.3	1553.2	1552.2	1543.1
35°	354.1	360.5	441.5	999.6	1357.4	1503.1	1518.6	1514.9	1515.8	1515.8	1508.5
37.5°	355.1	354.1	353.2	350.5	347.8	346.0	598.1	1275.5	1477.6	1478.5	1472.1
40°	355.1	354.1	353.2	351.4	347.8	345.0	340.5	336.9	345.0	759.3	1389.3
42.5°	356.9	355.1	353.2	351.4	347.8	344.1	340.5	335.9	338.7	336.9	332.3
45°	351.4	350.5	350.5	349.6	347.8	344.1	339.6	334.1	331.4	334.1	329.6
47.5°	334.1	335.0	337.8	338.7	338.7	339.6	336.9	333.2	328.7	331.4	325.9
50°	310.4	312.3	313.2	317.7	319.6	323.2	324.1	324.1	323.2	326.8	323.2
52.5°	285.0	286.8	291.3	293.2	295.0	300.4	302.3	305.0	306.8	312.3	315.9
55°	260.4	261.3	263.1	266.7	269.5	274.0	276.8	279.5	284.0	286.8	297.7
57.5°	237.6	238.5	242.2	243.1	244.9	248.5	251.3	254.9	258.6	260.4	273.1
60°	215.8	216.7	219.4	220.3	221.2	224.9	227.6	230.3	233.1	234.9	244.0
62.5°	196.6	196.6	199.4	199.4	200.3	203.0	204.8	206.7	209.4	210.3	214.9
65°	177.5	178.4	180.3	180.3	181.2	183.0	183.9	184.8	187.5	187.5	191.2
67.5°	153.9	154.8	157.5	159.3	160.2	163.9	164.8	165.7	167.5	168.4	170.2
70°	131.1	132.0	134.7	135.7	136.6	139.3	141.1	143.8	146.6	149.3	151.1
72.5°	110.2	111.1	113.8	113.8	116.5	117.4	119.3	120.2	122.9	124.7	127.5
75°	90.1	91.0	93.8	93.8	96.5	97.4	98.3	99.2	101.1	102.9	104.7
77.5°	73.7	73.7	77.4	79.2	81.0	81.0	81.9	81.9	81.9	82.8	84.7
80°	58.3	58.3	61.0	62.8	64.6	64.6	65.5	66.5	67.4	67.4	68.3
82.5°	43.7	43.7	46.4	47.3	49.2	49.2	49.2	50.1	51.0	50.1	51.9
85°	30.0	30.0	31.9	32.8	34.6	34.6	34.6	35.5	36.4	35.5	36.4
87.5°	17.3	18.2	19.1	20.0	20.9	21.8	21.8	21.8	22.8	22.8	23.7
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-LD5-43SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5
2.5°	2124.9	2114.0	2113.1	2100.3	2096.7	2097.6	2087.6	2083.9	2067.5	2063.9	2046.6
5°	2133.1	2138.5	2135.8	2134.9	2137.6	2135.8	2128.5	2124.9	2122.2	2114.9	2100.3
7.5°	2043.0	2046.6	2049.3	2061.2	2071.2	2088.5	2106.7	2118.5	2127.6	2129.4	2117.6
10°	1951.0	1968.3	1980.1	1998.3	2012.9	2022.9	2033.9	2043.9	2070.3	2096.7	2112.1
12.5°	1903.7	1908.2	1907.3	1917.3	1927.3	1953.7	1979.2	1993.8	2013.8	2025.7	2053.9
15°	1863.6	1864.5	1867.2	1874.5	1880.0	1889.1	1900.9	1922.8	1962.8	1981.0	1996.5
17.5°	1827.2	1827.2	1829.0	1835.4	1842.7	1850.9	1858.1	1867.2	1887.3	1917.3	1955.6
20°	1768.9	1794.4	1797.1	1796.2	1799.9	1815.4	1817.2	1833.6	1843.6	1855.4	1892.7
22.5°	1682.4	1697.9	1719.8	1753.4	1766.2	1773.5	1778.9	1786.2	1801.7	1815.4	1830.8
25°	1635.1	1645.1	1651.5	1661.5	1687.9	1730.7	1738.9	1747.1	1757.1	1767.1	1786.2
27.5°	1593.2	1592.3	1596.9	1606.0	1613.2	1636.0	1676.1	1707.9	1709.7	1724.3	1740.7
30°	1563.2	1557.7	1551.3	1549.5	1559.5	1571.4	1583.2	1633.3	1667.9	1675.2	1692.4
32.5°	1534.9	1525.8	1516.7	1509.5	1503.1	1513.1	1520.4	1542.2	1586.8	1628.7	1637.8
35°	1500.4	1491.2	1480.3	1472.1	1462.1	1461.2	1460.3	1481.2	1495.8	1545.9	1589.6
37.5°	1464.8	1454.8	1445.7	1436.6	1426.6	1419.3	1414.8	1420.2	1433.9	1455.7	1528.6
40°	1427.5	1415.7	1406.6	1399.3	1385.6	1380.2	1371.1	1367.4	1368.3	1387.5	1425.7
42.5°	853.1	1360.1	1364.7	1356.5	1344.7	1337.4	1327.4	1322.8	1313.7	1322.8	1344.7
45°	328.7	332.3	995.1	1314.6	1300.1	1291.0	1281.9	1277.3	1267.3	1260.0	1280.0
47.5°	322.3	325.9	318.6	451.6	1240.9	1243.6	1232.7	1228.1	1218.1	1212.7	1207.2
50°	317.7	320.5	315.0	316.8	310.4	1137.1	1182.6	1177.2	1166.2	1159.9	1148.9
52.5°	313.2	313.2	309.5	305.0	303.2	304.1	956.8	1125.3	1112.5	1106.1	1091.6
55°	298.6	300.4	304.1	296.8	295.0	294.1	291.3	911.3	1053.3	1046.1	1033.3
57.5°	276.8	280.4	290.4	288.6	288.6	281.3	279.5	279.5	845.8	985.1	972.3
60°	251.3	254.9	265.8	269.5	272.2	270.4	268.6	267.7	264.0	891.3	907.7
62.5°	224.9	228.5	232.2	244.0	247.6	252.2	257.6	254.9	251.3	251.3	839.4
65°	196.6	202.1	203.9	214.9	219.4	227.6	232.2	238.5	236.7	235.8	240.3
67.5°	172.1	178.4	179.4	183.9	192.1	195.7	201.2	213.0	218.5	220.3	222.1
70°	151.1	154.8	157.5	159.3	164.8	165.7	175.7	183.9	192.1	201.2	203.9
72.5°	130.2	132.9	138.4	136.6	138.4	142.0	147.5	152.9	161.1	173.9	182.1
75°	106.5	108.3	112.0	113.8	117.4	120.2	123.8	128.4	135.7	142.0	152.9
77.5°	85.6	86.5	89.2	90.1	93.8	96.5	102.9	105.6	110.2	114.7	121.1
80°	69.2	69.2	70.1	70.1	72.8	75.6	80.1	82.8	88.3	92.0	92.0
82.5°	52.8	52.8	55.5	55.5	57.4	57.4	60.1	60.1	62.8	64.6	66.5
85°	37.3	38.2	40.1	39.1	41.0	40.1	41.9	43.7	44.6	43.7	42.8
87.5°	24.6	24.6	26.4	25.5	26.4	26.4	28.2	28.2	29.1	29.1	28.2
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: P1213775

CATALOG NUMBER: 4SNLED-LD5-43SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5
2.5°	2040.2	2026.6	2018.4	2008.4	2005.6	2002.9	2006.5	2006.5	2001.1	1996.5	1988.3
5°	2087.6	2073.0	2057.5	2041.1	2025.7	2009.3	2002.9	2002.0	1992.0	1986.5	1983.8
7.5°	2112.1	2104.9	2087.6	2064.8	2041.1	2012.0	1999.3	1992.0	1982.0	1980.1	1980.1
10°	2114.9	2106.7	2097.6	2081.2	2053.9	2015.6	1991.1	1976.5	1967.4	1973.8	1985.6
12.5°	2088.5	2104.0	2095.8	2084.8	2063.0	2016.6	1981.0	1959.2	1956.5	1972.9	2003.8
15°	2021.1	2066.6	2089.4	2078.5	2061.2	2014.7	1964.7	1939.2	1939.2	1972.9	2012.9
17.5°	1970.1	2005.6	2061.2	2070.3	2050.2	2011.1	1949.2	1919.1	1927.3	1976.5	2019.3
20°	1928.2	1950.1	2003.8	2054.8	2035.7	2002.9	1926.4	1895.5	1911.9	1971.0	2028.4
22.5°	1862.7	1906.4	1939.2	2014.7	2021.1	1987.4	1903.7	1866.3	1899.1	1971.0	2023.8
25°	1799.0	1851.8	1886.4	1960.1	1999.3	1968.3	1882.7	1835.4	1885.5	1968.3	2020.2
27.5°	1754.4	1778.9	1841.8	1894.6	1966.5	1942.8	1854.5	1801.7	1868.2	1953.7	1999.3
30°	1707.0	1723.4	1785.3	1835.4	1922.8	1913.7	1825.4	1764.4	1846.3	1940.1	1944.6
32.5°	1655.1	1673.3	1705.2	1778.0	1861.8	1886.4	1792.6	1727.0	1822.6	1919.1	1880.9
35°	1602.3	1616.0	1641.5	1719.8	1790.8	1845.4	1752.5	1684.3	1806.3	1887.3	1819.9
37.5°	1549.5	1564.1	1585.9	1651.5	1716.1	1807.2	1717.9	1641.5	1776.2	1830.8	1756.2
40°	1499.4	1507.6	1530.4	1571.4	1654.2	1768.0	1678.8	1596.9	1745.3	1758.9	1669.7
42.5°	1407.5	1448.5	1469.4	1502.2	1584.1	1714.3	1633.3	1549.5	1710.7	1687.0	1583.2
45°	1308.3	1397.5	1406.6	1439.4	1522.2	1656.9	1590.5	1503.1	1677.9	1625.1	1501.3
47.5°	1227.2	1291.9	1344.7	1372.0	1448.5	1589.6	1550.4	1463.9	1628.7	1546.8	1421.1
50°	1155.3	1189.9	1285.5	1305.5	1360.1	1508.5	1503.1	1418.4	1560.4	1448.5	1342.9
52.5°	1085.2	1109.8	1196.3	1239.1	1283.7	1421.1	1446.6	1373.8	1485.8	1350.1	1263.6
55°	1024.2	1032.4	1079.7	1169.9	1209.9	1332.8	1384.7	1321.9	1391.1	1256.4	1187.2
57.5°	961.4	954.1	988.7	1104.3	1133.5	1242.7	1319.2	1269.1	1314.6	1160.8	1108.0
60°	895.8	885.8	900.4	976.9	1052.4	1153.5	1241.8	1210.8	1221.8	1066.1	1019.7
62.5°	827.6	817.5	813.0	861.2	973.2	1061.5	1163.5	1146.2	1108.0	979.6	910.4
65°	756.5	746.5	739.3	758.4	885.8	942.3	1076.1	1071.6	983.2	888.6	766.6
67.5°	230.3	679.2	663.7	662.8	746.5	833.9	981.4	974.1	857.6	791.1	660.0
70°	207.6	550.8	585.4	577.2	613.6	723.8	873.1	867.6	735.6	634.6	583.6
72.5°	190.3	194.8	517.1	508.0	516.2	615.4	760.2	745.6	623.6	500.7	504.4
75°	163.0	171.2	178.4	428.8	417.9	509.8	637.3	614.5	514.4	413.3	421.5
77.5°	132.9	142.9	148.4	312.3	337.8	363.3	508.9	478.9	354.1	330.5	157.5
80°	99.2	107.4	116.5	124.7	256.7	254.0	377.8	347.8	246.7	205.8	122.9
82.5°	72.8	75.6	81.0	90.1	102.0	170.2	243.1	213.9	171.2	93.8	84.7
85°	45.5	49.2	51.9	54.6	61.9	102.0	120.2	95.6	71.9	57.4	53.7
87.5°	29.1	29.1	28.2	29.1	30.0	36.4	41.0	39.1	31.0	29.1	29.1
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: P1213775

CATALOG NUMBER: 4SNLED-LD5-43SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5
2.5°	1979.2	1966.5	1966.5	1962.8	1965.6	1965.6	1964.7	1965.6	1971.9	1975.6	1982.0
5°	1978.3	1974.7	1982.9	1992.9	2004.7	2019.3	2022.9	2035.7	2047.5	2063.0	2079.4
7.5°	1990.2	2002.9	2018.4	2034.8	2058.4	2075.7	2091.2	2106.7	2117.6	2132.2	2141.3
10°	2007.5	2032.9	2059.3	2080.3	2105.8	2120.3	2130.4	2132.2	2116.7	2092.1	2072.1
12.5°	2032.0	2062.1	2086.7	2106.7	2118.5	2113.1	2083.9	2053.9	2036.6	2011.1	1975.6
15°	2053.0	2080.3	2105.8	2097.6	2065.7	2035.7	2012.9	1977.4	1942.8	1919.1	1903.7
17.5°	2062.1	2088.5	2079.4	2036.6	2006.5	1971.9	1925.5	1898.2	1875.4	1857.2	1848.1
20°	2067.5	2063.0	2013.8	1982.9	1924.6	1892.7	1862.7	1837.2	1819.9	1810.8	1809.0
22.5°	2053.0	1997.4	1955.6	1900.0	1857.2	1830.8	1807.2	1786.2	1774.4	1767.1	1762.6
25°	2004.7	1940.1	1878.2	1834.5	1798.1	1775.3	1757.1	1739.8	1725.2	1721.6	1712.5
27.5°	1937.3	1884.5	1802.6	1768.9	1737.1	1726.1	1706.1	1688.8	1676.1	1665.1	1636.0
30°	1881.8	1798.1	1738.9	1707.9	1688.8	1676.1	1653.3	1635.1	1613.2	1573.2	1556.8
32.5°	1813.5	1730.7	1674.2	1656.9	1633.3	1622.3	1596.9	1556.8	1523.1	1506.7	1505.8
35°	1725.2	1656.9	1616.0	1600.5	1581.4	1563.2	1510.4	1474.0	1457.6	1459.4	1473.0
37.5°	1651.5	1590.5	1564.1	1542.2	1520.4	1474.0	1429.3	1412.0	1416.6	1425.7	1432.1
40°	1576.8	1530.4	1500.4	1483.1	1433.9	1388.4	1364.7	1371.1	1379.3	1385.6	1393.8
42.5°	1504.0	1471.2	1441.2	1407.5	1340.1	1315.5	1321.0	1329.2	1336.5	1345.6	1353.8
45°	1434.8	1405.7	1371.1	1294.6	1260.9	1267.3	1275.5	1281.9	1292.8	1299.2	1307.3
47.5°	1369.3	1338.3	1277.3	1209.9	1206.3	1219.0	1226.3	1234.5	1242.7	1226.3	676.4
50°	1295.5	1263.6	1170.8	1145.3	1153.5	1165.3	1174.4	1182.6	1053.3	418.8	322.3
52.5°	1222.7	1141.7	1082.5	1089.8	1098.0	1111.6	1118.0	830.3	330.5	315.0	315.9
55°	1141.7	1037.9	1020.6	1029.7	1037.0	1050.6	696.5	305.0	303.2	302.3	309.5
57.5°	1014.2	951.4	958.7	967.8	975.0	688.3	296.8	295.0	295.9	296.8	297.7
60°	900.4	886.7	894.9	903.1	639.1	286.8	281.3	282.2	285.9	283.1	275.9
62.5°	810.3	821.2	829.4	726.5	272.2	269.5	272.2	269.5	263.1	258.6	249.5
65°	741.1	752.0	758.4	255.8	254.9	258.6	255.8	246.7	236.7	224.0	221.2
67.5°	668.2	679.2	243.1	236.7	240.3	235.8	224.9	213.9	206.7	195.7	191.2
70°	592.7	254.0	220.3	219.4	213.0	205.8	193.9	183.0	173.9	169.3	164.8
72.5°	427.9	201.2	198.5	191.2	180.3	170.2	160.2	153.9	149.3	146.6	143.8
75°	178.4	174.8	166.6	153.9	142.9	138.4	131.1	126.5	124.7	119.3	117.4
77.5°	149.3	142.0	130.2	121.1	114.7	112.0	106.5	101.1	98.3	97.4	93.8
80°	114.7	104.7	99.2	94.7	92.9	86.5	80.1	77.4	75.6	74.7	71.9
82.5°	78.3	74.7	71.0	64.6	64.6	61.9	59.2	57.4	55.5	55.5	53.7
85°	51.0	48.3	47.3	44.6	44.6	42.8	41.9	41.0	40.1	39.1	38.2
87.5°	29.1	29.1	30.0	29.1	29.1	28.2	27.3	26.4	25.5	25.5	23.7
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: P1213775

CATALOG NUMBER: 4SNLED-LD5-43SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5
2.5°	1990.2	1999.3	2001.1	2032.0	2049.3	2048.4	2043.0	2059.3	2049.3	2043.9	2049.3
5°	2095.8	2106.7	2115.8	2149.5	2161.3	2166.8	2165.9	2175.0	2167.7	2161.3	2161.3
7.5°	2147.7	2151.3	2154.9	2146.7	2141.3	2132.2	2118.5	2098.5	2088.5	2077.6	2063.9
10°	2062.1	2050.2	2054.8	2038.4	2024.7	2014.7	2002.0	1985.6	1971.9	1961.9	1946.5
12.5°	1957.4	1956.5	1958.3	1961.0	1947.4	1939.2	1929.2	1917.3	1907.3	1896.4	1883.6
15°	1893.6	1894.6	1901.8	1899.1	1894.6	1890.0	1879.1	1875.4	1866.3	1854.5	1847.2
17.5°	1848.1	1852.7	1860.0	1856.3	1849.0	1844.5	1836.3	1828.1	1819.9	1810.8	1799.9
20°	1808.1	1812.6	1817.2	1812.6	1799.0	1792.6	1781.7	1756.2	1738.0	1719.8	1703.4
22.5°	1764.4	1767.1	1763.5	1748.9	1714.3	1697.9	1685.2	1677.9	1662.4	1652.4	1642.4
25°	1709.7	1694.3	1670.6	1654.2	1640.6	1633.3	1627.8	1626.9	1625.1	1623.3	1618.7
27.5°	1620.5	1615.1	1602.3	1595.9	1596.9	1599.6	1600.5	1603.2	1600.5	1596.9	1593.2
30°	1554.1	1556.8	1557.7	1559.5	1564.1	1566.8	1567.7	1571.4	1569.5	1566.8	1565.0
32.5°	1512.2	1518.6	1522.2	1527.7	1530.4	1534.9	1534.9	1540.4	1534.9	1534.0	1532.2
35°	1477.6	1483.1	1484.9	1493.1	1495.8	1500.4	1500.4	1504.9	1500.4	1453.9	1148.0
37.5°	1443.0	1448.5	1452.1	1459.4	1460.3	1463.0	1350.1	987.8	637.3	493.4	376.9
40°	1402.0	1408.4	1412.0	1414.8	994.2	630.9	434.3	353.2	353.2	356.0	358.7
42.5°	1358.3	1362.9	949.6	552.6	344.1	343.2	346.0	348.7	351.4	355.1	358.7
45°	1067.9	539.0	342.3	334.1	336.9	340.5	344.1	347.8	352.3	356.0	357.8
47.5°	350.5	328.7	333.2	329.6	334.1	338.7	342.3	346.0	346.9	347.8	346.9
50°	324.1	324.1	326.8	326.8	330.5	332.3	332.3	332.3	328.7	327.7	325.0
52.5°	313.2	320.5	316.8	318.6	316.8	314.1	311.4	308.6	303.2	301.3	297.7
55°	307.7	310.4	301.3	298.6	295.0	287.7	284.0	280.4	275.9	274.0	269.5
57.5°	295.0	288.6	278.6	274.0	267.7	260.4	256.7	254.0	249.5	247.6	244.9
60°	271.3	258.6	252.2	246.7	239.4	233.1	230.3	228.5	224.9	224.0	221.2
62.5°	242.2	231.2	225.8	218.5	213.0	209.4	206.7	205.8	202.1	202.1	200.3
65°	210.3	204.8	200.3	193.0	190.3	186.6	185.7	184.8	183.0	182.1	180.3
67.5°	184.8	181.2	174.8	171.2	169.3	166.6	164.8	163.0	159.3	157.5	154.8
70°	162.1	159.3	152.9	150.2	146.6	142.0	139.3	137.5	134.7	132.9	130.2
72.5°	140.2	132.0	127.5	124.7	122.0	117.4	116.5	114.7	112.0	111.1	108.3
75°	112.9	106.5	103.8	102.0	99.2	96.5	96.5	96.5	93.8	92.9	92.0
77.5°	90.1	86.5	84.7	82.8	81.9	80.1	77.4	76.5	73.7	73.7	72.8
80°	69.2	67.4	65.5	64.6	63.7	61.9	60.1	59.2	56.4	56.4	55.5
82.5°	51.0	50.1	49.2	48.3	47.3	46.4	43.7	42.8	41.0	41.0	40.1
85°	36.4	35.5	33.7	32.8	32.8	31.9	29.1	28.2	26.4	26.4	26.4
87.5°	22.8	21.8	20.9	20.0	19.1	18.2	16.4	15.5	15.5	13.7	12.7
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: P1213775

CATALOG NUMBER: 4SNLED-LD5-43SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5
2.5°	2038.4	2053.9	2052.1	2063.0	2065.7	2071.2	2073.0	2073.9	2060.3	2071.2	2072.1
5°	2158.6	2161.3	2163.1	2167.7	2172.2	2173.1	2168.6	2163.1	2165.0	2161.3	2152.2
7.5°	2062.1	2048.4	2045.7	2042.0	2040.2	2038.4	2030.2	2037.5	2029.3	2025.7	2012.9
10°	1943.7	1931.0	1930.1	1930.1	1932.8	1931.9	1930.1	1926.4	1933.7	1929.2	1926.4
12.5°	1881.8	1877.3	1880.0	1878.2	1885.5	1887.3	1885.5	1885.5	1883.6	1880.0	1881.8
15°	1844.5	1840.8	1843.6	1840.8	1846.3	1847.2	1842.7	1845.4	1840.8	1836.3	1834.5
17.5°	1795.3	1787.1	1780.8	1771.7	1772.6	1770.7	1765.3	1765.3	1760.7	1748.9	1749.8
20°	1700.6	1692.4	1688.8	1688.8	1693.4	1695.2	1694.3	1696.1	1691.5	1689.7	1682.4
22.5°	1641.5	1640.6	1642.4	1646.9	1654.2	1664.2	1665.1	1665.1	1665.1	1664.2	1655.1
25°	1620.5	1620.5	1622.3	1628.7	1634.2	1641.5	1643.3	1645.1	1643.3	1643.3	1635.1
27.5°	1596.9	1595.0	1598.7	1605.0	1611.4	1616.9	1621.4	1622.3	1619.6	1619.6	1622.3
30°	1567.7	1566.8	1571.4	1577.7	1583.2	1588.7	1593.2	1596.9	1593.2	1593.2	1590.5
32.5°	1537.7	1537.7	1539.5	1501.3	1392.0	1253.6	1256.4	1176.2	1120.7	1050.6	1143.5
35°	959.6	698.3	600.0	508.0	443.4	401.5	400.6	386.9	380.6	376.0	375.1
37.5°	362.3	364.2	367.8	369.6	372.4	374.2	375.1	375.1	375.1	375.1	374.2
40°	361.4	365.1	367.8	370.5	373.3	375.1	375.1	376.0	376.9	376.9	376.9
42.5°	362.3	366.0	369.6	372.4	374.2	375.1	376.0	376.9	376.9	376.9	376.9
45°	361.4	363.3	363.3	364.2	364.2	364.2	365.1	365.1	364.2	363.3	365.1
47.5°	347.8	347.8	345.0	344.1	343.2	341.4	342.3	341.4	340.5	339.6	341.4
50°	324.1	320.5	318.6	316.8	315.9	314.1	315.0	314.1	313.2	311.4	314.1
52.5°	295.9	295.0	291.3	289.5	288.6	289.5	287.7	286.8	285.9	285.0	285.9
55°	268.6	264.9	264.0	262.2	261.3	262.2	261.3	260.4	259.5	258.6	259.5
57.5°	244.0	241.3	240.3	238.5	238.5	238.5	238.5	237.6	236.7	235.8	236.7
60°	220.3	218.5	217.6	217.6	216.7	216.7	216.7	215.8	214.9	214.9	215.8
62.5°	200.3	200.3	197.6	196.6	196.6	197.6	196.6	195.7	194.8	193.9	195.7
65°	179.4	175.7	174.8	173.0	171.2	172.1	171.2	170.2	169.3	168.4	170.2
67.5°	153.9	152.9	149.3	147.5	146.6	147.5	146.6	145.7	144.8	143.8	145.7
70°	129.3	129.3	125.6	124.7	123.8	123.8	122.9	122.9	122.0	121.1	122.9
72.5°	107.4	107.4	106.5	104.7	103.8	102.9	102.0	101.1	101.1	102.0	102.0
75°	89.2	87.4	83.8	84.7	83.8	82.8	82.8	81.9	81.0	82.8	81.9
77.5°	70.1	69.2	66.5	67.4	66.5	65.5	65.5	64.6	63.7	64.6	64.6
80°	52.8	52.8	51.9	51.0	51.0	50.1	49.2	49.2	48.3	49.2	49.2
82.5°	38.2	38.2	37.3	36.4	35.5	35.5	34.6	34.6	34.6	34.6	34.6
85°	24.6	23.7	23.7	21.8	21.8	21.8	20.9	20.9	20.9	20.9	20.9
87.5°	11.8	11.8	10.9	10.9	10.0	9.1	9.1	8.2	8.2	9.1	9.1
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: P1213775

CATALOG NUMBER: 4SNLED-LD5-43SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5
2.5°	2055.7	2067.5	2057.5	2062.1	2063.0	2078.5	2077.6	2081.2	2074.8	2067.5	2057.5
5°	2160.4	2154.9	2147.7	2165.0	2155.8	2166.8	2170.4	2177.7	2177.7	2176.8	2168.6
7.5°	2026.6	2014.7	2023.8	2030.2	2032.9	2025.7	2040.2	2056.6	2070.3	2078.5	2079.4
10°	1921.9	1925.5	1924.6	1927.3	1933.7	1932.8	1941.9	1951.0	1954.6	1960.1	1961.9
12.5°	1872.7	1871.8	1873.6	1880.0	1883.6	1882.7	1891.8	1897.3	1899.1	1900.0	1899.1
15°	1833.6	1827.2	1831.7	1832.7	1835.4	1835.4	1846.3	1854.5	1858.1	1860.0	1858.1
17.5°	1759.8	1744.3	1758.9	1758.9	1768.9	1767.1	1784.4	1798.1	1805.3	1810.8	1810.8
20°	1687.0	1679.7	1685.2	1683.3	1690.6	1689.7	1700.6	1709.7	1716.1	1720.7	1726.1
22.5°	1657.9	1659.7	1651.5	1652.4	1652.4	1651.5	1656.9	1661.5	1663.3	1666.0	1664.2
25°	1638.7	1640.6	1637.8	1633.3	1631.5	1633.3	1636.0	1641.5	1642.4	1640.6	1634.2
27.5°	1619.6	1614.2	1618.7	1610.5	1608.7	1612.3	1616.0	1616.9	1617.8	1617.8	1612.3
30°	1590.5	1585.9	1590.5	1586.8	1583.2	1586.8	1589.6	1589.6	1591.4	1592.3	1585.9
32.5°	1111.6	1120.7	1268.2	1357.4	1483.1	1546.8	1558.6	1558.6	1560.4	1560.4	1555.0
35°	378.7	379.6	410.6	445.2	518.9	610.0	729.2	791.1	1000.5	1250.9	1493.1
37.5°	374.2	373.3	372.4	371.4	370.5	369.6	367.8	366.9	372.4	441.5	599.0
40°	376.0	375.1	373.3	372.4	371.4	369.6	368.7	366.9	365.1	363.3	361.4
42.5°	376.0	375.1	374.2	373.3	372.4	371.4	369.6	367.8	366.0	363.3	360.5
45°	363.3	363.3	364.2	364.2	365.1	365.1	365.1	364.2	364.2	363.3	359.6
47.5°	339.6	339.6	342.3	342.3	344.1	346.0	346.0	347.8	350.5	352.3	353.2
50°	312.3	312.3	315.0	315.9	317.7	320.5	323.2	324.1	326.8	330.5	334.1
52.5°	285.0	285.0	287.7	287.7	289.5	292.2	295.0	295.9	299.5	303.2	307.7
55°	259.5	259.5	261.3	262.2	263.1	264.9	267.7	267.7	271.3	274.0	278.6
57.5°	236.7	238.5	238.5	238.5	239.4	241.3	243.1	243.1	245.8	248.5	252.2
60°	214.9	216.7	216.7	216.7	217.6	218.5	220.3	220.3	222.1	224.0	227.6
62.5°	194.8	196.6	196.6	197.6	197.6	198.5	200.3	199.4	201.2	202.1	204.8
65°	169.3	171.2	172.1	173.0	173.9	175.7	178.4	177.5	180.3	182.1	184.8
67.5°	144.8	146.6	146.6	147.5	148.4	150.2	152.0	152.0	154.8	156.6	160.2
70°	122.0	123.8	123.8	124.7	125.6	127.5	129.3	128.4	131.1	132.9	135.7
72.5°	101.1	102.9	102.9	103.8	103.8	105.6	107.4	109.2	109.2	111.1	112.9
75°	81.9	82.8	83.8	83.8	84.7	85.6	87.4	89.2	90.1	91.0	92.9
77.5°	64.6	65.5	66.5	66.5	67.4	68.3	69.2	72.8	74.7	75.6	75.6
80°	49.2	50.1	50.1	50.1	51.0	51.9	53.7	53.7	57.4	57.4	58.3
82.5°	34.6	35.5	35.5	35.5	36.4	38.2	39.1	40.1	41.9	42.8	42.8
85°	20.9	21.8	21.8	21.8	22.8	23.7	25.5	26.4	27.3	27.3	28.2
87.5°	8.2	9.1	10.0	10.0	10.9	11.8	12.7	13.7	14.6	14.6	15.5
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):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5
2.5°	2046.6	2053.0	2046.6	2050.2	2054.8	2046.6	2027.5	2020.2	2017.5	2006.5	1999.3
5°	2160.4	2160.4	2157.7	2165.0	2164.0	2151.3	2131.3	2122.2	2113.1	2101.2	2092.1
7.5°	2079.4	2086.7	2091.2	2119.4	2137.6	2139.5	2152.2	2154.9	2158.6	2154.9	2149.5
10°	1962.8	1960.1	1972.9	1999.3	2014.7	2022.9	2047.5	2059.3	2069.4	2089.4	2110.3
12.5°	1897.3	1900.9	1906.4	1925.5	1940.1	1936.4	1946.5	1954.6	1966.5	1986.5	2016.6
15°	1853.6	1857.2	1862.7	1877.3	1886.4	1881.8	1887.3	1892.7	1900.9	1910.9	1929.2
17.5°	1806.3	1812.6	1819.0	1834.5	1842.7	1841.8	1846.3	1848.1	1850.9	1857.2	1870.0
20°	1732.5	1752.5	1765.3	1786.2	1798.1	1796.2	1804.4	1807.2	1810.8	1817.2	1822.6
22.5°	1665.1	1670.6	1677.0	1699.7	1719.8	1744.3	1749.8	1757.1	1766.2	1772.6	1778.0
25°	1626.9	1623.3	1626.0	1641.5	1652.4	1654.2	1662.4	1686.1	1710.7	1721.6	1734.3
27.5°	1604.1	1600.5	1599.6	1606.9	1608.7	1604.1	1602.3	1609.6	1627.8	1646.0	1684.3
30°	1579.6	1575.0	1571.4	1577.7	1580.5	1574.1	1562.3	1555.9	1566.8	1571.4	1586.8
32.5°	1550.4	1545.9	1544.1	1547.7	1549.5	1544.1	1531.3	1524.0	1522.2	1518.6	1522.2
35°	1517.7	1513.1	1510.4	1511.3	1514.9	1510.4	1499.4	1490.3	1485.8	1475.8	1468.5
37.5°	782.0	1108.0	1438.4	1473.0	1476.7	1475.8	1464.8	1454.8	1450.3	1438.4	1434.8
40°	357.8	399.7	600.0	783.9	1130.7	1436.6	1426.6	1416.6	1408.4	1404.8	1391.1
42.5°	356.9	357.8	358.7	354.1	438.8	747.4	1103.4	1377.4	1372.0	1362.9	1352.9
45°	356.9	352.3	356.0	350.5	352.3	351.4	437.9	706.5	1257.3	1313.7	1309.2
47.5°	353.2	350.5	354.1	349.6	344.1	346.9	343.2	347.8	542.6	920.4	1260.9
50°	336.9	338.7	345.0	344.1	339.6	343.2	336.9	342.3	337.8	370.5	713.8
52.5°	312.3	315.9	322.3	327.7	329.6	334.1	332.3	334.1	330.5	331.4	332.3
55°	283.1	287.7	293.2	301.3	305.0	312.3	317.7	320.5	325.0	324.1	316.8
57.5°	255.8	260.4	264.9	273.1	281.3	285.0	295.0	300.4	312.3	309.5	307.7
60°	230.3	234.0	238.5	240.3	250.4	256.7	265.8	271.3	286.8	290.4	295.9
62.5°	207.6	209.4	213.0	215.8	222.1	228.5	233.1	242.2	250.4	262.2	270.4
65°	186.6	188.5	191.2	193.0	193.9	203.0	205.8	215.8	218.5	231.2	238.5
67.5°	163.0	166.6	170.2	172.1	173.9	179.4	181.2	185.7	192.1	197.6	206.7
70°	138.4	141.1	144.8	147.5	151.1	154.8	160.2	163.0	167.5	171.2	178.4
72.5°	115.6	118.4	120.2	122.9	125.6	128.4	132.9	139.3	142.9	149.3	151.1
75°	93.8	96.5	98.3	100.1	102.9	104.7	106.5	112.9	116.5	122.0	127.5
77.5°	77.4	77.4	79.2	84.7	83.8	83.8	85.6	89.2	92.0	95.6	101.1
80°	60.1	61.0	61.9	66.5	67.4	68.3	67.4	70.1	72.8	73.7	77.4
82.5°	44.6	45.5	45.5	48.3	51.0	51.0	51.0	51.9	54.6	55.5	57.4
85°	30.0	31.0	31.9	32.8	34.6	35.5	36.4	36.4	38.2	39.1	40.1
87.5°	16.4	18.2	19.1	20.0	20.9	21.8	22.8	23.7	24.6	25.5	26.4
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):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5	1986.5
2.5°	1996.5	1992.0	1989.2	1982.0	1980.1	1968.3	1970.1	1968.3	1968.3	1971.0	1980.1
5°	2082.1	2060.3	2054.8	2039.3	2026.6	2004.7	1991.1	1983.8	1972.9	1968.3	1974.7
7.5°	2140.4	2124.0	2110.3	2096.7	2078.5	2053.0	2033.9	2012.0	1993.8	1976.5	1971.9
10°	2130.4	2148.6	2148.6	2140.4	2123.1	2097.6	2074.8	2047.5	2015.6	1988.3	1971.9
12.5°	2045.7	2077.6	2103.0	2122.2	2139.5	2122.2	2099.4	2077.6	2042.0	2002.0	1971.9
15°	1952.8	1985.6	2017.5	2057.5	2099.4	2116.7	2115.8	2090.3	2058.4	2016.6	1974.7
17.5°	1887.3	1910.0	1927.3	1971.0	2022.0	2066.6	2096.7	2098.5	2067.5	2030.2	1975.6
20°	1838.1	1854.5	1869.1	1893.6	1938.3	1992.9	2048.4	2079.4	2073.9	2032.9	1978.3
22.5°	1793.5	1805.3	1817.2	1835.4	1870.9	1906.4	1971.0	2034.8	2062.1	2028.4	1975.6
25°	1748.9	1761.6	1770.7	1783.5	1811.7	1840.8	1886.4	1965.6	2026.6	2024.7	1970.1
27.5°	1696.1	1713.4	1724.3	1741.6	1760.7	1782.6	1813.5	1888.2	1975.6	2006.5	1955.6
30°	1632.4	1657.9	1674.2	1693.4	1709.7	1728.9	1753.4	1799.0	1907.3	1971.0	1940.1
32.5°	1540.4	1585.9	1622.3	1640.6	1658.8	1675.2	1697.0	1735.2	1823.5	1922.8	1922.8
35°	1474.9	1495.8	1528.6	1581.4	1604.1	1620.5	1640.6	1670.6	1727.0	1865.4	1894.6
37.5°	1423.9	1432.1	1448.5	1500.4	1543.1	1569.5	1589.6	1608.7	1664.2	1787.1	1858.1
40°	1385.6	1382.9	1381.1	1405.7	1466.7	1508.5	1531.3	1550.4	1593.2	1693.4	1809.9
42.5°	1341.0	1338.3	1329.2	1335.6	1365.6	1435.7	1470.3	1491.2	1526.8	1595.0	1757.1
45°	1294.6	1290.0	1286.4	1280.0	1291.0	1330.1	1401.1	1432.1	1452.1	1513.1	1690.6
47.5°	1247.3	1240.9	1236.3	1230.9	1224.5	1242.7	1310.1	1365.6	1400.2	1438.4	1610.5
50°	1179.9	1188.1	1182.6	1176.2	1170.8	1167.1	1195.4	1286.4	1329.2	1360.1	1513.1
52.5°	556.3	1081.6	1127.1	1120.7	1113.4	1107.1	1113.4	1182.6	1260.0	1284.6	1395.7
55°	316.8	481.6	1002.4	1059.7	1053.3	1044.2	1038.8	1062.4	1178.1	1210.8	1288.2
57.5°	305.0	305.9	442.5	955.0	990.5	982.3	976.0	981.4	1079.7	1135.3	1194.5
60°	295.0	295.0	295.0	422.4	913.1	915.9	907.7	898.6	941.4	1050.6	1099.8
62.5°	273.1	278.6	281.3	281.3	417.0	845.8	837.6	834.8	836.7	948.6	1005.1
65°	244.9	257.6	263.1	266.7	266.7	437.9	765.7	761.1	754.7	797.5	909.5
67.5°	213.9	226.7	238.5	245.8	246.7	254.9	457.0	685.5	676.4	677.3	807.5
70°	182.1	193.0	205.8	216.7	226.7	231.2	238.5	569.0	599.0	586.3	691.9
72.5°	157.5	162.1	171.2	182.1	193.9	204.8	211.2	226.7	519.8	506.2	526.2
75°	131.1	134.7	141.1	148.4	157.5	170.2	181.2	192.1	275.9	424.3	421.5
77.5°	102.0	108.3	115.6	120.2	124.7	133.8	148.4	159.3	170.2	286.8	337.8
80°	78.3	82.8	86.5	91.0	96.5	102.9	108.3	121.1	133.8	143.8	258.6
82.5°	58.3	61.0	63.7	65.5	67.4	71.0	81.0	85.6	93.8	102.9	122.0
85°	41.0	42.8	44.6	45.5	46.4	47.3	51.0	51.9	60.1	61.9	73.7
87.5°	26.4	27.3	29.1	30.0	30.0	31.0	31.9	31.9	31.9	30.0	36.4
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):

	357.5°	360°
0°	1986.5	1986.5
2.5°	1987.4	2002.0
5°	1984.7	2003.8
7.5°	1977.4	1995.6
10°	1966.5	1988.3
12.5°	1954.6	1975.6
15°	1944.6	1960.1
17.5°	1933.7	1942.8
20°	1919.1	1926.4
22.5°	1904.6	1900.9
25°	1888.2	1880.0
27.5°	1867.2	1851.8
30°	1848.1	1820.8
32.5°	1829.9	1785.3
35°	1805.3	1748.9
37.5°	1779.8	1711.6
40°	1749.8	1668.8
42.5°	1717.9	1626.0
45°	1677.9	1585.0
47.5°	1642.4	1535.9
50°	1593.2	1483.1
52.5°	1533.1	1433.9
55°	1462.1	1373.8
57.5°	1385.6	1311.0
60°	1303.7	1239.1
62.5°	1204.5	1164.4
65°	1087.9	1078.8
67.5°	935.9	984.2
70°	767.5	875.8
72.5°	641.8	761.1
75°	526.2	632.7
77.5°	417.0	496.2
80°	260.4	363.3
82.5°	174.8	238.5
85°	105.6	113.8
87.5°	41.0	41.9
90°	0.0	0.0

(END OF REPORT)