

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: P1213082

Luminaire Tested: 4SNLED-LD5-46SL-RW-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213082
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-LD5-46SL-RW-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

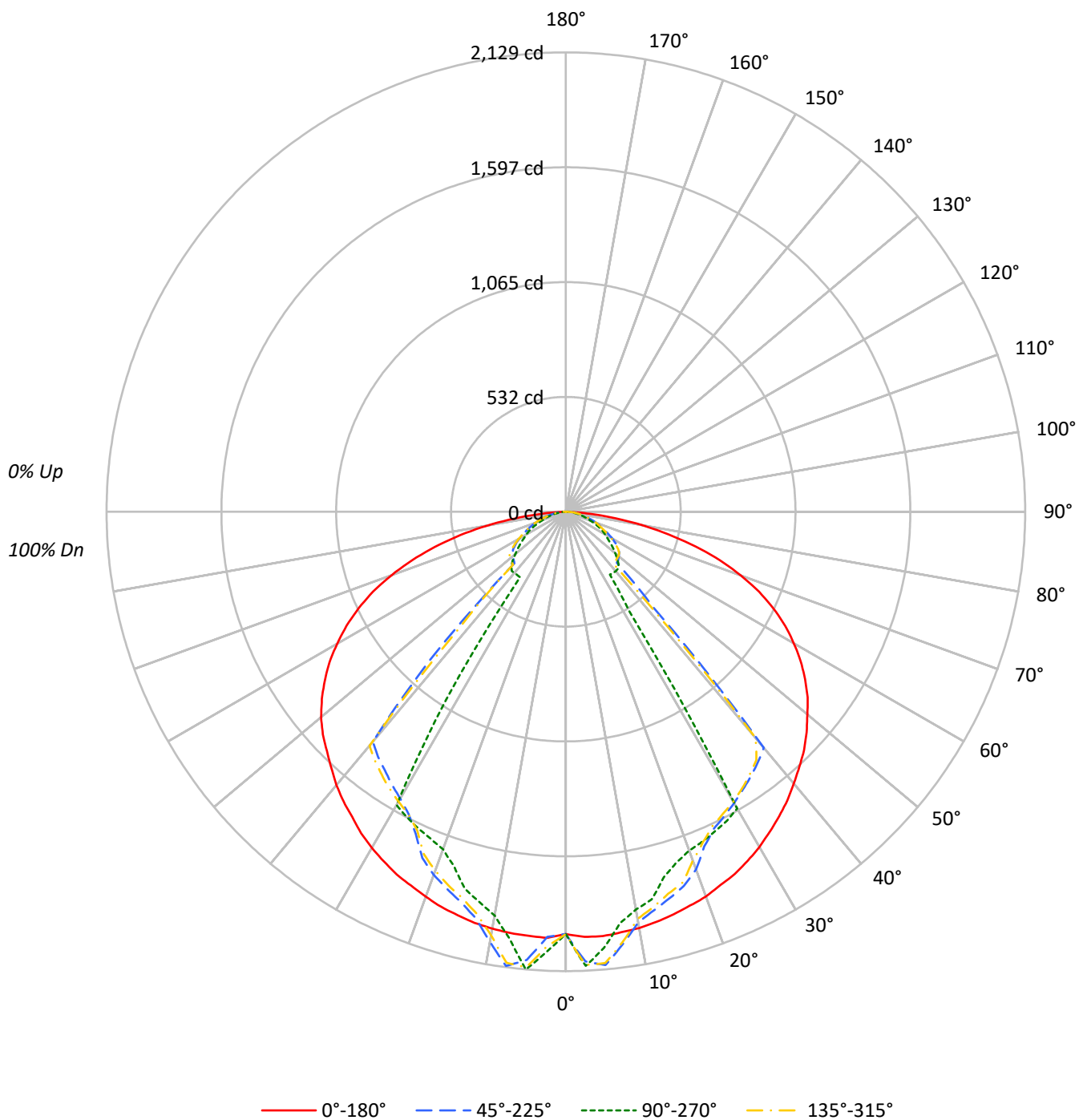
Lumens per Lamp: N/A
Luminaire Lumens: 3919.0 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89	87		
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	75		
3	94	84	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67	65		
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59	57		
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51		
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47	46		
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41		
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37		
9	62	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34		
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	15815	15815	15815	15815
5°	15970	15934	15963	16723
10°	15985	14406	16007	14627
15°	16021	13329	16058	13752
20°	16138	12642	16138	12595
25°	16277	12401	16301	12285
30°	16442	12182	16483	12037
35°	16634	2775	16667	2894
40°	16899	2886	17001	2979
45°	17305	2869	17364	2974
50°	17709	2595	17948	2664
55°	18253	2303	18399	2336
60°	18716	2047	18757	2073
65°	19046	1786	18997	1757
70°	18774	1440	18715	1388
75°	17428	1108	17554	1061
80°	14148	787	14713	720
85°	7658	471	8089	361

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 357.5°

Vertical Angle: 60°

Luminance: 19178 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.6	4.9
10°-20°	529.4	13.5
20°-30°	784.2	20.0
30°-40°	790.1	20.2
40°-50°	617.2	15.7
50°-60°	476.7	12.2
60°-70°	320.1	8.2
70°-80°	163.3	4.2
80°-90°	45.4	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°	1506.1	38.4
0°-40°	2296.3	58.6
0°-60°	3390.2	86.5
0°-90°	3919.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3919.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1957	1957	1957	1957	1957	
5°	1974	2029	1973	2129	1974	188
15°	1931	1754	1936	1809	1931	546
25°	1852	1634	1855	1619	1852	854
35°	1723	355	1726	370	1723	1080
45°	1562	345	1567	358	1562	1204
55°	1353	251	1364	255	1353	1209
65°	1063	169	1060	166	1063	1045
75°	623	85	628	82	623	652
85°	112	27	118	21	112	154
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°	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0
2.5°	1972.3	1979.5	1984.9	1988.4	1990.2	1990.2	1991.1	1992.0	2003.7	2009.1	2012.7
5°	1974.1	1981.3	1992.0	2006.4	2018.9	2029.7	2038.7	2051.2	2063.8	2077.2	2081.7
7.5°	1966.0	1975.0	1996.5	2022.5	2046.7	2063.8	2075.4	2083.5	2089.8	2090.7	2095.2
10°	1958.8	1975.0	2004.6	2038.7	2069.2	2089.8	2089.8	2085.3	2091.6	2067.4	2043.2
12.5°	1946.3	1964.2	2004.6	2049.4	2078.1	2086.2	2082.6	2064.7	2027.9	1998.3	1984.9
15°	1931.0	1955.3	2005.5	2055.7	2079.9	2082.6	2048.5	2002.8	1975.0	1957.0	1934.6
17.5°	1914.0	1946.3	2006.4	2056.6	2065.6	2053.0	1988.4	1959.7	1931.0	1888.9	1858.4
20°	1897.9	1929.2	1999.2	2044.0	2049.4	1992.9	1942.7	1912.2	1863.8	1827.0	1813.5
22.5°	1872.7	1909.5	1992.9	2027.0	2006.4	1940.9	1892.5	1844.0	1800.1	1789.3	1773.2
25°	1852.1	1890.7	1978.6	2006.4	1951.7	1893.4	1836.9	1780.4	1759.7	1744.5	1730.1
27.5°	1824.3	1871.8	1959.7	1968.7	1893.4	1842.2	1759.7	1734.6	1715.8	1698.7	1692.5
30°	1793.8	1852.1	1933.7	1916.7	1844.9	1769.6	1708.6	1685.3	1671.8	1653.9	1646.7
32.5°	1758.8	1822.5	1905.0	1856.6	1792.9	1698.7	1659.3	1641.3	1623.4	1609.9	1565.1
35°	1723.0	1796.5	1870.9	1799.2	1730.1	1644.9	1609.9	1593.8	1576.8	1527.4	1480.8
37.5°	1686.2	1767.8	1829.7	1737.3	1646.7	1589.3	1559.7	1541.8	1503.2	1440.4	1417.1
40°	1644.0	1732.8	1776.8	1673.6	1574.1	1532.8	1505.0	1487.1	1400.1	1372.3	1365.1
42.5°	1601.9	1698.7	1712.2	1611.7	1514.0	1472.7	1449.4	1390.2	1331.0	1316.7	1319.3
45°	1561.5	1662.0	1641.3	1523.8	1451.2	1417.1	1377.6	1296.0	1264.6	1271.8	1273.6
47.5°	1513.1	1618.0	1566.9	1435.9	1386.6	1352.5	1264.6	1215.3	1210.8	1220.7	1226.1
50°	1461.1	1568.7	1488.0	1356.1	1316.7	1276.3	1176.7	1151.6	1157.0	1166.9	1173.2
52.5°	1412.6	1513.1	1406.3	1281.7	1247.6	1155.2	1087.9	1092.4	1101.4	1113.1	1116.6
55°	1353.4	1445.8	1319.3	1206.3	1174.0	1053.0	1022.5	1033.2	1042.2	1052.1	1059.2
57.5°	1291.5	1368.7	1216.2	1122.0	1070.0	962.4	965.1	972.2	978.5	990.2	409.0
60°	1220.7	1280.8	1103.2	1044.0	940.9	890.6	893.3	905.9	912.2	509.4	281.6
62.5°	1147.1	1178.5	1000.9	955.2	822.5	818.9	831.4	836.8	569.5	269.1	263.7
65°	1062.8	1056.6	900.5	827.8	741.7	745.3	758.8	731.9	252.0	252.0	250.2
67.5°	969.6	931.9	802.7	685.2	663.7	671.8	686.1	239.5	233.2	235.0	228.7
70°	862.8	809.9	701.4	580.3	587.5	595.5	231.4	217.1	214.4	209.9	197.3
72.5°	749.8	677.2	574.0	504.1	508.5	319.3	202.7	195.5	186.6	177.6	164.1
75°	623.3	529.2	421.5	421.5	427.8	182.1	176.7	165.0	155.2	143.5	135.4
77.5°	488.8	407.2	327.4	339.9	165.9	152.5	142.6	130.1	122.0	114.8	110.3
80°	357.9	284.3	246.6	220.6	129.2	115.7	105.8	98.7	95.1	90.6	85.2
82.5°	235.0	171.3	171.3	104.0	90.6	79.8	77.1	71.8	68.2	65.5	62.8
85°	112.1	99.6	75.3	63.7	56.5	51.1	49.3	46.6	46.6	45.7	44.8
87.5°	41.3	44.8	33.2	32.3	30.5	29.6	30.5	30.5	31.4	30.5	29.6
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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CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0
2.5°	2021.6	2028.8	2034.2	2043.2	2054.8	2064.7	2073.6	2086.2	2105.9	2111.3	2115.8
5°	2081.7	2084.4	2090.7	2097.9	2099.7	2104.1	2103.2	2108.6	2111.3	2117.6	2104.1
7.5°	2085.3	2071.0	2053.9	2038.7	2027.9	2018.0	2011.8	2021.6	2027.0	2031.5	2018.0
10°	2010.0	1992.9	1983.1	1974.1	1963.3	1948.1	1927.4	1931.9	1930.1	1930.1	1925.7
12.5°	1962.4	1938.2	1913.1	1890.7	1880.8	1879.9	1880.8	1890.7	1890.7	1889.8	1884.4
15°	1888.0	1864.7	1852.1	1846.7	1846.7	1844.0	1844.0	1854.8	1852.1	1852.1	1849.4
17.5°	1838.7	1822.5	1813.5	1807.3	1804.6	1809.1	1814.4	1818.9	1819.8	1816.2	1801.9
20°	1798.3	1783.0	1772.3	1774.1	1773.2	1775.9	1778.6	1763.3	1744.5	1719.4	1707.7
22.5°	1756.1	1744.5	1736.4	1736.4	1725.6	1708.6	1683.5	1678.1	1675.4	1663.8	1653.9
25°	1715.8	1702.3	1690.7	1654.8	1632.4	1635.1	1630.6	1621.6	1620.7	1619.8	1623.4
27.5°	1675.4	1640.4	1595.6	1590.2	1581.2	1580.3	1585.7	1590.2	1590.2	1593.8	1598.3
30°	1592.0	1551.6	1543.6	1533.7	1537.3	1549.9	1552.5	1558.8	1560.6	1566.9	1570.5
32.5°	1515.8	1497.8	1490.7	1495.1	1506.8	1517.6	1523.8	1526.5	1531.0	1536.4	1540.9
35°	1453.9	1448.5	1454.8	1464.6	1476.3	1485.3	1490.7	1496.0	1500.5	1505.0	1508.6
37.5°	1408.1	1411.7	1420.7	1433.3	1444.9	1452.1	1456.6	1462.9	1469.1	1474.5	1453.0
40°	1365.1	1374.1	1383.9	1397.4	1407.2	1414.4	1418.9	1427.0	1373.2	621.6	340.8
42.5°	1327.4	1337.3	1344.5	1355.2	1366.0	1371.4	1331.9	594.6	336.3	334.5	339.0
45°	1281.7	1289.8	1301.4	1309.5	1319.3	866.4	331.0	334.5	329.2	332.8	334.5
47.5°	1235.0	1247.6	1253.9	1196.5	356.1	329.2	325.6	329.2	325.6	330.1	327.4
50°	1182.1	1197.4	852.1	322.0	319.3	317.5	321.1	319.3	322.0	325.6	318.4
52.5°	1128.3	698.7	312.1	310.3	312.1	310.3	316.6	312.1	313.0	309.4	300.5
55°	382.1	302.3	299.6	298.7	304.1	304.1	304.1	296.9	292.4	283.4	277.1
57.5°	292.4	292.4	291.5	292.4	290.6	288.8	280.7	274.5	268.2	255.6	252.0
60°	277.1	277.1	277.1	277.1	269.1	265.5	252.9	247.5	236.8	230.5	226.9
62.5°	264.6	262.8	254.7	252.0	243.1	233.2	226.0	220.6	209.9	206.3	203.6
65°	246.6	240.4	230.5	219.7	215.3	204.5	200.9	192.8	187.5	184.8	183.0
67.5°	217.1	208.1	200.0	192.8	184.8	181.2	176.7	170.4	166.8	165.0	163.2
70°	185.7	179.4	171.3	166.8	161.4	158.8	152.5	150.7	148.0	145.3	142.6
72.5°	155.2	151.6	148.0	141.7	139.9	138.1	131.8	128.3	124.7	121.1	119.3
75°	130.1	127.4	125.6	120.2	117.5	112.1	107.6	104.9	102.2	99.6	97.8
77.5°	106.7	104.9	99.6	96.0	94.2	89.7	87.9	88.8	87.0	83.4	81.6
80°	83.4	81.6	77.1	77.1	75.3	73.5	71.8	70.0	68.2	65.5	63.7
82.5°	63.7	61.9	60.1	58.3	56.5	55.6	54.7	52.9	51.1	49.3	48.4
85°	44.8	43.9	43.1	42.2	41.3	40.4	39.5	37.7	35.9	35.0	34.1
87.5°	30.5	29.6	28.7	27.8	26.9	26.0	25.1	24.2	22.4	21.5	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

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CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0
2.5°	2115.8	2120.3	2115.8	2105.9	2099.7	2097.0	2102.3	2102.3	2105.9	2110.4	2111.3
5°	2082.6	2071.9	2059.3	2046.7	2040.5	2036.9	2027.0	2028.8	2031.5	2033.3	2035.1
7.5°	2000.1	1985.7	1968.7	1952.6	1946.3	1940.9	1929.2	1929.2	1929.2	1930.1	1935.5
10°	1915.8	1909.5	1902.3	1891.6	1883.5	1880.8	1870.9	1873.6	1871.8	1874.5	1880.8
12.5°	1876.3	1869.2	1862.9	1852.1	1843.1	1839.6	1835.1	1837.8	1836.9	1841.3	1846.7
15°	1840.5	1836.9	1829.7	1821.6	1813.5	1806.4	1790.2	1784.8	1781.3	1776.8	1783.0
17.5°	1781.3	1756.1	1739.1	1726.5	1717.6	1711.3	1706.8	1706.8	1709.5	1712.2	1717.6
20°	1700.5	1693.4	1685.3	1671.8	1662.9	1659.3	1656.6	1656.6	1661.1	1664.7	1674.5
22.5°	1644.9	1644.0	1641.3	1635.1	1630.6	1630.6	1631.5	1633.3	1639.5	1644.9	1654.8
25°	1618.9	1622.5	1620.7	1617.1	1614.4	1615.3	1613.5	1615.3	1621.6	1627.0	1635.1
27.5°	1598.3	1603.7	1601.9	1596.5	1592.0	1593.8	1596.5	1594.7	1600.1	1606.4	1612.6
30°	1570.5	1571.4	1575.0	1568.7	1566.9	1569.6	1570.5	1572.3	1577.7	1582.1	1587.5
32.5°	1539.1	1546.3	1545.4	1539.1	1539.1	1541.8	1542.7	1482.6	1370.5	1180.3	1128.3
35°	1508.6	1516.7	1503.2	1267.3	877.2	468.2	361.5	348.9	351.6	353.4	355.2
37.5°	1115.8	529.2	337.2	339.9	342.6	345.3	348.0	350.7	353.4	356.1	357.0
40°	335.4	334.5	337.2	340.8	343.5	345.3	348.9	351.6	354.3	357.0	357.9
42.5°	331.9	333.6	336.3	339.9	343.5	347.1	349.8	353.4	355.2	357.0	357.9
45°	330.1	333.6	337.2	339.9	342.6	344.4	346.2	347.1	346.2	346.2	348.0
47.5°	327.4	331.0	331.9	331.0	331.9	331.0	331.0	331.0	328.3	327.4	327.4
50°	317.5	317.5	315.7	312.1	311.2	310.3	308.5	307.6	304.1	303.2	303.2
52.5°	296.9	296.0	293.3	288.8	287.0	285.2	284.3	283.4	279.8	278.0	278.9
55°	272.7	270.9	268.2	262.8	261.9	260.1	259.2	258.3	254.7	256.5	253.8
57.5°	250.2	246.6	243.1	242.2	238.6	237.7	236.8	235.9	233.2	234.1	232.3
60°	223.3	222.4	220.6	217.1	217.1	216.2	216.2	214.4	212.6	211.7	211.7
62.5°	203.6	200.9	199.1	199.1	196.4	196.4	196.4	194.6	192.8	193.7	192.8
65°	182.1	181.2	180.3	178.5	178.5	177.6	177.6	175.8	173.1	174.0	172.2
67.5°	164.1	162.3	160.5	159.6	156.1	154.3	153.4	152.5	148.9	149.8	148.0
70°	141.7	139.0	137.2	135.4	132.7	130.9	130.9	129.2	126.5	127.4	125.6
72.5°	118.4	116.6	114.8	113.9	111.2	110.3	109.4	108.5	105.8	106.7	105.8
75°	98.7	98.7	97.8	96.9	94.2	91.5	89.7	88.8	87.0	87.9	86.1
77.5°	81.6	79.8	78.0	78.0	75.3	73.5	71.8	71.8	71.8	70.9	70.0
80°	63.7	61.9	61.9	61.0	59.2	57.4	56.5	56.5	55.6	55.6	54.7
82.5°	48.4	46.6	45.7	45.7	43.9	43.1	42.2	41.3	41.3	41.3	40.4
85°	34.1	32.3	31.4	31.4	29.6	28.7	28.7	27.8	27.8	26.9	26.9
87.5°	20.6	19.7	18.8	18.8	17.0	16.1	16.1	16.1	15.2	15.2	14.4
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: P1213082

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0
2.5°	2111.3	2111.3	2105.0	2106.8	2104.1	2107.7	2103.2	2103.2	2108.6	2108.6	2112.2
5°	2036.0	2031.5	2030.6	2028.8	2019.8	2023.4	2018.9	2014.4	2020.7	2020.7	2028.8
7.5°	1932.8	1924.8	1928.3	1923.0	1917.6	1909.5	1912.2	1908.6	1913.1	1919.4	1927.4
10°	1879.9	1872.7	1877.2	1871.8	1874.5	1862.9	1863.8	1864.7	1869.2	1870.9	1878.1
12.5°	1845.8	1844.0	1842.2	1840.5	1842.2	1836.0	1832.4	1833.3	1835.1	1836.0	1841.3
15°	1774.1	1762.4	1766.0	1753.5	1754.3	1755.2	1748.1	1755.2	1754.3	1766.0	1776.8
17.5°	1715.8	1715.8	1709.5	1704.1	1700.5	1699.6	1694.3	1697.8	1694.3	1701.4	1704.1
20°	1675.4	1674.5	1673.6	1670.9	1662.0	1662.9	1665.6	1657.5	1656.6	1655.7	1661.1
22.5°	1656.6	1657.5	1653.9	1653.9	1645.8	1647.6	1648.5	1639.5	1640.4	1637.7	1640.4
25°	1636.9	1638.6	1634.2	1634.2	1632.4	1631.5	1627.0	1628.8	1623.4	1618.9	1623.4
27.5°	1613.5	1617.1	1613.5	1615.3	1611.7	1609.9	1607.3	1605.5	1600.1	1599.2	1601.9
30°	1592.0	1593.8	1592.9	1588.4	1587.5	1582.1	1584.8	1579.5	1574.1	1575.0	1576.8
32.5°	816.2	779.4	600.9	542.6	537.2	557.0	660.1	803.6	1041.3	1271.8	1437.7
35°	356.1	356.1	356.1	355.2	355.2	354.3	353.4	352.5	351.6	350.7	349.8
37.5°	357.9	357.9	357.9	357.9	357.0	356.1	356.1	354.3	353.4	352.5	351.6
40°	358.8	359.7	359.7	359.7	358.8	358.8	357.9	356.1	355.2	353.4	351.6
42.5°	357.9	358.8	358.8	357.9	357.9	357.0	357.0	356.1	355.2	354.3	353.4
45°	346.2	347.1	345.3	345.3	344.4	344.4	344.4	344.4	344.4	345.3	345.3
47.5°	325.6	325.6	324.7	323.8	323.8	322.9	323.8	322.9	324.7	325.6	327.4
50°	301.4	301.4	299.6	298.7	298.7	298.7	298.7	299.6	300.5	302.3	304.1
52.5°	276.2	276.2	275.3	274.5	273.6	273.6	276.2	275.3	276.2	277.1	279.8
55°	252.0	252.9	251.1	251.1	250.2	250.2	250.2	251.1	252.0	252.9	255.6
57.5°	231.4	231.4	229.6	229.6	229.6	228.7	231.4	229.6	230.5	231.4	233.2
60°	210.8	209.9	209.9	209.0	209.0	209.0	210.8	209.9	209.9	210.8	212.6
62.5°	191.9	191.9	191.0	191.0	190.1	190.1	191.9	191.0	191.0	191.9	192.8
65°	170.4	170.4	169.5	168.6	171.3	168.6	171.3	169.5	171.3	172.2	174.0
67.5°	146.2	146.2	146.2	145.3	145.3	147.1	148.0	146.2	147.1	148.9	149.8
70°	124.7	124.7	123.8	123.8	123.8	125.6	126.5	124.7	125.6	126.5	128.3
72.5°	105.8	104.0	104.0	103.1	104.9	104.9	105.8	104.9	105.8	105.8	107.6
75°	87.0	85.2	85.2	85.2	87.0	86.1	87.0	86.1	87.0	87.0	87.9
77.5°	70.0	69.1	68.2	68.2	70.0	70.0	70.0	69.1	70.0	70.9	71.8
80°	54.7	53.8	52.9	52.9	54.7	54.7	54.7	55.6	54.7	55.6	56.5
82.5°	40.4	39.5	38.6	40.4	40.4	40.4	40.4	41.3	40.4	41.3	42.2
85°	26.9	26.0	25.1	26.9	26.9	26.9	26.9	27.8	26.9	27.8	28.7
87.5°	14.4	13.5	13.5	14.4	14.4	14.4	15.2	15.2	15.2	16.1	16.1
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: P1213082

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0
2.5°	2117.6	2120.3	2119.4	2114.0	2108.6	2102.3	2097.9	2098.8	2107.7	2110.4	2102.3
5°	2028.8	2045.8	2045.8	2057.5	2051.2	2045.8	2049.4	2069.2	2079.0	2094.3	2099.7
7.5°	1937.3	1945.4	1944.5	1956.2	1954.4	1954.4	1957.0	1983.1	1995.6	2008.2	2011.8
10°	1886.2	1894.3	1893.4	1894.3	1891.6	1885.3	1885.3	1897.0	1907.7	1914.0	1915.8
12.5°	1849.4	1853.9	1853.0	1853.0	1851.2	1845.8	1844.9	1854.8	1866.5	1874.5	1875.4
15°	1794.7	1807.3	1810.0	1821.6	1818.9	1811.7	1813.5	1821.6	1828.8	1836.0	1833.3
17.5°	1713.1	1719.4	1720.3	1724.7	1723.0	1723.0	1733.7	1763.3	1783.0	1800.1	1801.9
20°	1666.5	1670.9	1669.1	1679.0	1674.5	1673.6	1676.3	1688.9	1697.8	1705.9	1720.3
22.5°	1644.0	1647.6	1644.9	1645.8	1637.7	1630.6	1628.8	1638.6	1648.5	1659.3	1659.3
25°	1625.2	1627.9	1627.0	1625.2	1618.9	1609.0	1607.3	1609.0	1612.6	1613.5	1607.3
27.5°	1602.8	1604.6	1604.6	1605.5	1597.4	1588.4	1586.6	1584.8	1588.4	1587.5	1577.7
30°	1579.5	1576.8	1577.7	1578.6	1571.4	1563.3	1559.7	1558.8	1562.4	1561.5	1551.6
32.5°	1523.8	1544.5	1546.3	1548.1	1541.8	1534.6	1531.0	1528.3	1530.1	1529.2	1520.3
35°	348.9	355.2	435.0	984.8	1337.3	1480.8	1496.0	1492.5	1493.3	1493.3	1486.2
37.5°	349.8	348.9	348.0	345.3	342.6	340.8	589.3	1256.6	1455.7	1456.6	1450.3
40°	349.8	348.9	348.0	346.2	342.6	339.9	335.4	331.9	339.9	748.0	1368.7
42.5°	351.6	349.8	348.0	346.2	342.6	339.0	335.4	331.0	333.6	331.9	327.4
45°	346.2	345.3	345.3	344.4	342.6	339.0	334.5	329.2	326.5	329.2	324.7
47.5°	329.2	330.1	332.8	333.6	333.6	334.5	331.9	328.3	323.8	326.5	321.1
50°	305.8	307.6	308.5	313.0	314.8	318.4	319.3	319.3	318.4	322.0	318.4
52.5°	280.7	282.5	287.0	288.8	290.6	296.0	297.8	300.5	302.3	307.6	311.2
55°	256.5	257.4	259.2	262.8	265.5	270.0	272.7	275.3	279.8	282.5	293.3
57.5°	234.1	235.0	238.6	239.5	241.3	244.9	247.5	251.1	254.7	256.5	269.1
60°	212.6	213.5	216.2	217.1	217.9	221.5	224.2	226.9	229.6	231.4	240.4
62.5°	193.7	193.7	196.4	196.4	197.3	200.0	201.8	203.6	206.3	207.2	211.7
65°	174.9	175.8	177.6	177.6	178.5	180.3	181.2	182.1	184.8	184.8	188.4
67.5°	151.6	152.5	155.2	157.0	157.9	161.4	162.3	163.2	165.0	165.9	167.7
70°	129.2	130.1	132.7	133.6	134.5	137.2	139.0	141.7	144.4	147.1	148.9
72.5°	108.5	109.4	112.1	112.1	114.8	115.7	117.5	118.4	121.1	122.9	125.6
75°	88.8	89.7	92.4	92.4	95.1	96.0	96.9	97.8	99.6	101.4	103.1
77.5°	72.6	72.6	76.2	78.0	79.8	79.8	80.7	80.7	80.7	81.6	83.4
80°	57.4	57.4	60.1	61.9	63.7	63.7	64.6	65.5	66.4	66.4	67.3
82.5°	43.1	43.1	45.7	46.6	48.4	48.4	48.4	49.3	50.2	49.3	51.1
85°	29.6	29.6	31.4	32.3	34.1	34.1	34.1	35.0	35.9	35.0	35.9
87.5°	17.0	17.9	18.8	19.7	20.6	21.5	21.5	21.5	22.4	22.4	23.3
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: P1213082

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0
2.5°	2093.4	2082.6	2081.7	2069.2	2065.6	2066.5	2056.6	2053.0	2036.9	2033.3	2016.2
5°	2101.4	2106.8	2104.1	2103.2	2105.9	2104.1	2097.0	2093.4	2090.7	2083.5	2069.2
7.5°	2012.7	2016.2	2018.9	2030.6	2040.5	2057.5	2075.4	2087.1	2096.1	2097.9	2086.2
10°	1922.1	1939.1	1950.8	1968.7	1983.1	1992.9	2003.7	2013.6	2039.6	2065.6	2080.8
12.5°	1875.4	1879.9	1879.0	1888.9	1898.7	1924.8	1949.9	1964.2	1984.0	1995.6	2023.4
15°	1836.0	1836.9	1839.6	1846.7	1852.1	1861.1	1872.7	1894.3	1933.7	1951.7	1966.9
17.5°	1800.1	1800.1	1801.9	1808.2	1815.3	1823.4	1830.6	1839.6	1859.3	1888.9	1926.6
20°	1742.7	1767.8	1770.5	1769.6	1773.2	1788.4	1790.2	1806.4	1816.2	1827.9	1864.7
22.5°	1657.5	1672.7	1694.3	1727.4	1740.0	1747.2	1752.6	1759.7	1775.0	1788.4	1803.7
25°	1610.8	1620.7	1627.0	1636.9	1662.9	1705.0	1713.1	1721.2	1731.0	1740.9	1759.7
27.5°	1569.6	1568.7	1573.2	1582.1	1589.3	1611.7	1651.2	1682.6	1684.4	1698.7	1714.9
30°	1540.0	1534.6	1528.3	1526.5	1536.4	1548.1	1559.7	1609.0	1643.1	1650.3	1667.3
32.5°	1512.2	1503.2	1494.2	1487.1	1480.8	1490.7	1497.8	1519.4	1563.3	1604.6	1613.5
35°	1478.1	1469.1	1458.4	1450.3	1440.4	1439.5	1438.6	1459.3	1473.6	1522.9	1566.0
37.5°	1443.1	1433.3	1424.3	1415.3	1405.5	1398.3	1393.8	1399.2	1412.6	1434.2	1505.9
40°	1406.3	1394.7	1385.7	1378.5	1365.1	1359.7	1350.7	1347.2	1348.0	1366.9	1404.6
42.5°	840.4	1340.0	1344.5	1336.4	1324.7	1317.6	1307.7	1303.2	1294.2	1303.2	1324.7
45°	323.8	327.4	980.3	1295.1	1280.8	1271.8	1262.8	1258.4	1248.5	1241.3	1261.0
47.5°	317.5	321.1	313.9	444.9	1222.5	1225.2	1214.4	1209.9	1200.1	1194.7	1189.3
50°	313.0	315.7	310.3	312.1	305.8	1120.2	1165.1	1159.7	1148.9	1142.7	1131.9
52.5°	308.5	308.5	304.9	300.5	298.7	299.6	942.6	1108.6	1096.0	1089.7	1075.4
55°	294.2	296.0	299.6	292.4	290.6	289.7	287.0	897.8	1037.7	1030.5	1018.0
57.5°	272.7	276.2	286.1	284.3	284.3	277.1	275.3	275.3	833.2	970.5	957.9
60°	247.5	251.1	261.9	265.5	268.2	266.4	264.6	263.7	260.1	878.1	894.2
62.5°	221.5	225.1	228.7	240.4	244.0	248.4	253.8	251.1	247.5	247.5	826.9
65°	193.7	199.1	200.9	211.7	216.2	224.2	228.7	235.0	233.2	232.3	236.8
67.5°	169.5	175.8	176.7	181.2	189.2	192.8	198.2	209.9	215.3	217.1	218.8
70°	148.9	152.5	155.2	157.0	162.3	163.2	173.1	181.2	189.2	198.2	200.9
72.5°	128.3	130.9	136.3	134.5	136.3	139.9	145.3	150.7	158.8	171.3	179.4
75°	104.9	106.7	110.3	112.1	115.7	118.4	122.0	126.5	133.6	139.9	150.7
77.5°	84.3	85.2	87.9	88.8	92.4	95.1	101.4	104.0	108.5	113.0	119.3
80°	68.2	68.2	69.1	69.1	71.8	74.4	78.9	81.6	87.0	90.6	90.6
82.5°	52.0	52.0	54.7	54.7	56.5	56.5	59.2	59.2	61.9	63.7	65.5
85°	36.8	37.7	39.5	38.6	40.4	39.5	41.3	43.1	43.9	43.1	42.2
87.5°	24.2	24.2	26.0	25.1	26.0	26.0	27.8	27.8	28.7	28.7	27.8
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: P1213082

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0
2.5°	2010.0	1996.5	1988.4	1978.6	1975.9	1973.2	1976.8	1976.8	1971.4	1966.9	1958.8
5°	2056.6	2042.3	2027.0	2010.9	1995.6	1979.5	1973.2	1972.3	1962.4	1957.0	1954.4
7.5°	2080.8	2073.6	2056.6	2034.2	2010.9	1982.2	1969.6	1962.4	1952.6	1950.8	1950.8
10°	2083.5	2075.4	2066.5	2050.3	2023.4	1985.7	1961.5	1947.2	1938.2	1944.5	1956.2
12.5°	2057.5	2072.7	2064.7	2053.9	2032.4	1986.6	1951.7	1930.1	1927.4	1943.6	1974.1
15°	1991.1	2036.0	2058.4	2047.6	2030.6	1984.9	1935.5	1910.4	1910.4	1943.6	1983.1
17.5°	1940.9	1975.9	2030.6	2039.6	2019.8	1981.3	1920.3	1890.7	1898.7	1947.2	1989.3
20°	1899.6	1921.2	1974.1	2024.3	2005.5	1973.2	1897.9	1867.4	1883.5	1941.8	1998.3
22.5°	1835.1	1878.1	1910.4	1984.9	1991.1	1957.9	1875.4	1838.7	1870.9	1941.8	1993.8
25°	1772.3	1824.3	1858.4	1931.0	1969.6	1939.1	1854.8	1808.2	1857.5	1939.1	1990.2
27.5°	1728.3	1752.6	1814.4	1866.5	1937.3	1914.0	1827.0	1775.0	1840.5	1924.8	1969.6
30°	1681.7	1697.8	1758.8	1808.2	1894.3	1885.3	1798.3	1738.2	1818.9	1911.3	1915.8
32.5°	1630.6	1648.5	1679.9	1751.7	1834.2	1858.4	1766.0	1701.4	1795.6	1890.7	1853.0
35°	1578.6	1592.0	1617.1	1694.3	1764.2	1818.0	1726.5	1659.3	1779.5	1859.3	1792.9
37.5°	1526.5	1540.9	1562.4	1627.0	1690.7	1780.4	1692.5	1617.1	1749.9	1803.7	1730.1
40°	1477.2	1485.3	1507.7	1548.1	1629.7	1741.8	1653.9	1573.2	1719.4	1732.8	1644.9
42.5°	1386.6	1427.0	1447.6	1479.9	1560.6	1688.9	1609.0	1526.5	1685.3	1662.0	1559.7
45°	1288.9	1376.7	1385.7	1418.0	1499.6	1632.4	1566.9	1480.8	1653.0	1601.0	1479.0
47.5°	1209.0	1272.7	1324.7	1351.6	1427.0	1566.0	1527.4	1442.2	1604.6	1523.8	1400.1
50°	1138.2	1172.3	1266.4	1286.2	1340.0	1486.2	1480.8	1397.4	1537.3	1427.0	1322.9
52.5°	1069.1	1093.3	1178.5	1220.7	1264.6	1400.1	1425.2	1353.4	1463.7	1330.1	1244.9
55°	1009.0	1017.1	1063.7	1152.5	1192.0	1313.1	1364.2	1302.3	1370.5	1237.7	1169.6
57.5°	947.1	940.0	974.0	1087.9	1116.6	1224.3	1299.6	1250.3	1295.1	1143.6	1091.5
60°	882.6	872.7	887.0	962.4	1036.8	1136.4	1223.4	1192.9	1203.6	1050.3	1004.5
62.5°	815.3	805.4	800.9	848.5	958.8	1045.8	1146.2	1129.2	1091.5	965.1	896.9
65°	745.3	735.5	728.3	747.1	872.7	928.3	1060.1	1055.7	968.7	875.4	755.2
67.5°	226.9	669.1	653.8	652.9	735.5	821.6	966.9	959.7	844.9	779.4	650.3
70°	204.5	542.6	576.7	568.6	604.5	713.0	860.1	854.8	724.7	625.1	574.9
72.5°	187.5	191.9	509.4	500.5	508.5	606.3	748.9	734.6	614.4	493.3	496.9
75°	160.5	168.6	175.8	422.4	411.7	502.3	627.8	605.4	506.8	407.2	415.3
77.5°	130.9	140.8	146.2	307.6	332.8	357.9	501.4	471.8	348.9	325.6	155.2
80°	97.8	105.8	114.8	122.9	252.9	250.2	372.2	342.6	243.1	202.7	121.1
82.5°	71.8	74.4	79.8	88.8	100.5	167.7	239.5	210.8	168.6	92.4	83.4
85°	44.8	48.4	51.1	53.8	61.0	100.5	118.4	94.2	70.9	56.5	52.9
87.5°	28.7	28.7	27.8	28.7	29.6	35.9	40.4	38.6	30.5	28.7	28.7
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: P1213082

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0
2.5°	1949.9	1937.3	1937.3	1933.7	1936.4	1936.4	1935.5	1936.4	1942.7	1946.3	1952.6
5°	1949.0	1945.4	1953.5	1963.3	1975.0	1989.3	1992.9	2005.5	2017.1	2032.4	2048.5
7.5°	1960.6	1973.2	1988.4	2004.6	2027.9	2044.9	2060.2	2075.4	2086.2	2100.6	2109.5
10°	1977.7	2002.8	2028.8	2049.4	2074.5	2088.9	2098.8	2100.6	2085.3	2061.1	2041.4
12.5°	2001.9	2031.5	2055.7	2075.4	2087.1	2081.7	2053.0	2023.4	2006.4	1981.3	1946.3
15°	2022.5	2049.4	2074.5	2066.5	2035.1	2005.5	1983.1	1948.1	1914.0	1890.7	1875.4
17.5°	2031.5	2057.5	2048.5	2006.4	1976.8	1942.7	1897.0	1870.0	1847.6	1829.7	1820.7
20°	2036.9	2032.4	1984.0	1953.5	1896.1	1864.7	1835.1	1810.0	1792.9	1783.9	1782.2
22.5°	2022.5	1967.8	1926.6	1871.8	1829.7	1803.7	1780.4	1759.7	1748.1	1740.9	1736.4
25°	1975.0	1911.3	1850.3	1807.3	1771.4	1749.0	1731.0	1714.0	1699.6	1696.0	1687.1
27.5°	1908.6	1856.6	1775.9	1742.7	1711.3	1700.5	1680.8	1663.8	1651.2	1640.4	1611.7
30°	1853.9	1771.4	1713.1	1682.6	1663.8	1651.2	1628.8	1610.8	1589.3	1549.9	1533.7
32.5°	1786.6	1705.0	1649.4	1632.4	1609.0	1598.3	1573.2	1533.7	1500.5	1484.4	1483.5
35°	1699.6	1632.4	1592.0	1576.8	1557.9	1540.0	1488.0	1452.1	1435.9	1437.7	1451.2
37.5°	1627.0	1566.9	1540.9	1519.4	1497.8	1452.1	1408.1	1391.1	1395.6	1404.6	1410.8
40°	1553.4	1507.7	1478.1	1461.1	1412.6	1367.8	1344.5	1350.7	1358.8	1365.1	1373.2
42.5°	1481.7	1449.4	1419.8	1386.6	1320.2	1296.0	1301.4	1309.5	1316.7	1325.6	1333.7
45°	1413.5	1384.8	1350.7	1275.4	1242.2	1248.5	1256.6	1262.8	1273.6	1279.9	1288.0
47.5°	1348.9	1318.5	1258.4	1192.0	1188.4	1201.0	1208.1	1216.2	1224.3	1208.1	666.4
50°	1276.3	1244.9	1153.4	1128.3	1136.4	1148.0	1157.0	1165.1	1037.7	412.6	317.5
52.5°	1204.5	1124.7	1066.4	1073.6	1081.7	1095.1	1101.4	818.0	325.6	310.3	311.2
55°	1124.7	1022.5	1005.4	1014.4	1021.6	1035.0	686.1	300.5	298.7	297.8	304.9
57.5°	999.2	937.3	944.4	953.4	960.6	678.1	292.4	290.6	291.5	292.4	293.3
60°	887.0	873.6	881.7	889.7	629.6	282.5	277.1	278.0	281.6	278.9	271.8
62.5°	798.2	809.0	817.1	715.7	268.2	265.5	268.2	265.5	259.2	254.7	245.8
65°	730.1	740.8	747.1	252.0	251.1	254.7	252.0	243.1	233.2	220.6	217.9
67.5°	658.3	669.1	239.5	233.2	236.8	232.3	221.5	210.8	203.6	192.8	188.4
70°	583.9	250.2	217.1	216.2	209.9	202.7	191.0	180.3	171.3	166.8	162.3
72.5°	421.5	198.2	195.5	188.4	177.6	167.7	157.9	151.6	147.1	144.4	141.7
75°	175.8	172.2	164.1	151.6	140.8	136.3	129.2	124.7	122.9	117.5	115.7
77.5°	147.1	139.9	128.3	119.3	113.0	110.3	104.9	99.6	96.9	96.0	92.4
80°	113.0	103.1	97.8	93.3	91.5	85.2	78.9	76.2	74.4	73.5	70.9
82.5°	77.1	73.5	70.0	63.7	63.7	61.0	58.3	56.5	54.7	54.7	52.9
85°	50.2	47.5	46.6	43.9	43.9	42.2	41.3	40.4	39.5	38.6	37.7
87.5°	28.7	28.7	29.6	28.7	28.7	27.8	26.9	26.0	25.1	25.1	23.3
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: P1213082

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0
2.5°	1960.6	1969.6	1971.4	2001.9	2018.9	2018.0	2012.7	2028.8	2018.9	2013.6	2018.9
5°	2064.7	2075.4	2084.4	2117.6	2129.3	2134.6	2133.7	2142.7	2135.5	2129.3	2129.3
7.5°	2115.8	2119.4	2123.0	2114.9	2109.5	2100.6	2087.1	2067.4	2057.5	2046.7	2033.3
10°	2031.5	2019.8	2024.3	2008.2	1994.7	1984.9	1972.3	1956.2	1942.7	1932.8	1917.6
12.5°	1928.3	1927.4	1929.2	1931.9	1918.5	1910.4	1900.5	1888.9	1879.0	1868.3	1855.7
15°	1865.6	1866.5	1873.6	1870.9	1866.5	1862.0	1851.2	1847.6	1838.7	1827.0	1819.8
17.5°	1820.7	1825.2	1832.4	1828.8	1821.6	1817.1	1809.1	1801.0	1792.9	1783.9	1773.2
20°	1781.3	1785.7	1790.2	1785.7	1772.3	1766.0	1755.2	1730.1	1712.2	1694.3	1678.1
22.5°	1738.2	1740.9	1737.3	1723.0	1688.9	1672.7	1660.2	1653.0	1637.7	1627.9	1618.0
25°	1684.4	1669.1	1645.8	1629.7	1616.2	1609.0	1603.7	1602.8	1601.0	1599.2	1594.7
27.5°	1596.5	1591.1	1578.6	1572.3	1573.2	1575.9	1576.8	1579.5	1576.8	1573.2	1569.6
30°	1531.0	1533.7	1534.6	1536.4	1540.9	1543.6	1544.5	1548.1	1546.3	1543.6	1541.8
32.5°	1489.8	1496.0	1499.6	1505.0	1507.7	1512.2	1512.2	1517.6	1512.2	1511.3	1509.5
35°	1455.7	1461.1	1462.9	1470.9	1473.6	1478.1	1478.1	1482.6	1478.1	1432.4	1131.0
37.5°	1421.6	1427.0	1430.6	1437.7	1438.6	1441.3	1330.1	973.1	627.8	486.1	371.3
40°	1381.2	1387.5	1391.1	1393.8	979.4	621.6	427.8	348.0	348.0	350.7	353.4
42.5°	1338.2	1342.7	935.5	544.4	339.0	338.1	340.8	343.5	346.2	349.8	353.4
45°	1052.1	531.0	337.2	329.2	331.9	335.4	339.0	342.6	347.1	350.7	352.5
47.5°	345.3	323.8	328.3	324.7	329.2	333.6	337.2	340.8	341.7	342.6	341.7
50°	319.3	319.3	322.0	322.0	325.6	327.4	327.4	327.4	323.8	322.9	320.2
52.5°	308.5	315.7	312.1	313.9	312.1	309.4	306.7	304.1	298.7	296.9	293.3
55°	303.2	305.8	296.9	294.2	290.6	283.4	279.8	276.2	271.8	270.0	265.5
57.5°	290.6	284.3	274.5	270.0	263.7	256.5	252.9	250.2	245.8	244.0	241.3
60°	267.3	254.7	248.4	243.1	235.9	229.6	226.9	225.1	221.5	220.6	217.9
62.5°	238.6	227.8	222.4	215.3	209.9	206.3	203.6	202.7	199.1	199.1	197.3
65°	207.2	201.8	197.3	190.1	187.5	183.9	183.0	182.1	180.3	179.4	177.6
67.5°	182.1	178.5	172.2	168.6	166.8	164.1	162.3	160.5	157.0	155.2	152.5
70°	159.6	157.0	150.7	148.0	144.4	139.9	137.2	135.4	132.7	130.9	128.3
72.5°	138.1	130.1	125.6	122.9	120.2	115.7	114.8	113.0	110.3	109.4	106.7
75°	111.2	104.9	102.2	100.5	97.8	95.1	95.1	95.1	92.4	91.5	90.6
77.5°	88.8	85.2	83.4	81.6	80.7	78.9	76.2	75.3	72.6	72.6	71.8
80°	68.2	66.4	64.6	63.7	62.8	61.0	59.2	58.3	55.6	55.6	54.7
82.5°	50.2	49.3	48.4	47.5	46.6	45.7	43.1	42.2	40.4	40.4	39.5
85°	35.9	35.0	33.2	32.3	32.3	31.4	28.7	27.8	26.0	26.0	26.0
87.5°	22.4	21.5	20.6	19.7	18.8	17.9	16.1	15.2	15.2	13.5	12.6
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: P1213082

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0
2.5°	2008.2	2023.4	2021.6	2032.4	2035.1	2040.5	2042.3	2043.2	2029.7	2040.5	2041.4
5°	2126.6	2129.3	2131.0	2135.5	2140.0	2140.9	2136.4	2131.0	2132.8	2129.3	2120.3
7.5°	2031.5	2018.0	2015.3	2011.8	2010.0	2008.2	2000.1	2007.3	1999.2	1995.6	1983.1
10°	1914.9	1902.3	1901.4	1901.4	1904.1	1903.2	1901.4	1897.9	1905.0	1900.5	1897.9
12.5°	1853.9	1849.4	1852.1	1850.3	1857.5	1859.3	1857.5	1857.5	1855.7	1852.1	1853.9
15°	1817.1	1813.5	1816.2	1813.5	1818.9	1819.8	1815.3	1818.0	1813.5	1809.1	1807.3
17.5°	1768.7	1760.6	1754.3	1745.4	1746.3	1744.5	1739.1	1739.1	1734.6	1723.0	1723.9
20°	1675.4	1667.3	1663.8	1663.8	1668.2	1670.0	1669.1	1670.9	1666.5	1664.7	1657.5
22.5°	1617.1	1616.2	1618.0	1622.5	1629.7	1639.5	1640.4	1640.4	1640.4	1639.5	1630.6
25°	1596.5	1596.5	1598.3	1604.6	1609.9	1617.1	1618.9	1620.7	1618.9	1618.9	1610.8
27.5°	1573.2	1571.4	1575.0	1581.2	1587.5	1592.9	1597.4	1598.3	1595.6	1595.6	1598.3
30°	1544.5	1543.6	1548.1	1554.3	1559.7	1565.1	1569.6	1573.2	1569.6	1569.6	1566.9
32.5°	1514.9	1514.9	1516.7	1479.0	1371.4	1235.0	1237.7	1158.8	1104.1	1035.0	1126.5
35°	945.3	687.9	591.1	500.5	436.8	395.5	394.6	381.2	374.9	370.4	369.5
37.5°	357.0	358.8	362.3	364.1	366.8	368.6	369.5	369.5	369.5	369.5	368.6
40°	356.1	359.7	362.3	365.0	367.7	369.5	369.5	370.4	371.3	371.3	371.3
42.5°	357.0	360.6	364.1	366.8	368.6	369.5	370.4	371.3	371.3	371.3	371.3
45°	356.1	357.9	357.9	358.8	358.8	358.8	359.7	359.7	358.8	357.9	359.7
47.5°	342.6	342.6	339.9	339.0	338.1	336.3	337.2	336.3	335.4	334.5	336.3
50°	319.3	315.7	313.9	312.1	311.2	309.4	310.3	309.4	308.5	306.7	309.4
52.5°	291.5	290.6	287.0	285.2	284.3	285.2	283.4	282.5	281.6	280.7	281.6
55°	264.6	261.0	260.1	258.3	257.4	258.3	257.4	256.5	255.6	254.7	255.6
57.5°	240.4	237.7	236.8	235.0	235.0	235.0	235.0	234.1	233.2	232.3	233.2
60°	217.1	215.3	214.4	214.4	213.5	213.5	213.5	212.6	211.7	211.7	212.6
62.5°	197.3	197.3	194.6	193.7	193.7	194.6	193.7	192.8	191.9	191.0	192.8
65°	176.7	173.1	172.2	170.4	168.6	169.5	168.6	167.7	166.8	165.9	167.7
67.5°	151.6	150.7	147.1	145.3	144.4	145.3	144.4	143.5	142.6	141.7	143.5
70°	127.4	127.4	123.8	122.9	122.0	122.0	121.1	121.1	120.2	119.3	121.1
72.5°	105.8	105.8	104.9	103.1	102.2	101.4	100.5	99.6	99.6	100.5	100.5
75°	87.9	86.1	82.5	83.4	82.5	81.6	81.6	80.7	79.8	81.6	80.7
77.5°	69.1	68.2	65.5	66.4	65.5	64.6	64.6	63.7	62.8	63.7	63.7
80°	52.0	52.0	51.1	50.2	50.2	49.3	48.4	48.4	47.5	48.4	48.4
82.5°	37.7	37.7	36.8	35.9	35.0	35.0	34.1	34.1	34.1	34.1	34.1
85°	24.2	23.3	23.3	21.5	21.5	21.5	20.6	20.6	20.6	20.6	20.6
87.5°	11.7	11.7	10.8	10.8	9.9	9.0	9.0	8.1	8.1	9.0	9.0
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):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0
2.5°	2025.2	2036.9	2027.0	2031.5	2032.4	2047.6	2046.7	2050.3	2044.0	2036.9	2027.0
5°	2128.4	2123.0	2115.8	2132.8	2123.9	2134.6	2138.2	2145.4	2145.4	2144.5	2136.4
7.5°	1996.5	1984.9	1993.8	2000.1	2002.8	1995.6	2010.0	2026.1	2039.6	2047.6	2048.5
10°	1893.4	1897.0	1896.1	1898.7	1905.0	1904.1	1913.1	1922.1	1925.7	1931.0	1932.8
12.5°	1844.9	1844.0	1845.8	1852.1	1855.7	1854.8	1863.8	1869.2	1870.9	1871.8	1870.9
15°	1806.4	1800.1	1804.6	1805.5	1808.2	1808.2	1818.9	1827.0	1830.6	1832.4	1830.6
17.5°	1733.7	1718.5	1732.8	1732.8	1742.7	1740.9	1757.9	1771.4	1778.6	1783.9	1783.9
20°	1662.0	1654.8	1660.2	1658.4	1665.6	1664.7	1675.4	1684.4	1690.7	1695.2	1700.5
22.5°	1633.3	1635.1	1627.0	1627.9	1627.9	1627.0	1632.4	1636.9	1638.6	1641.3	1639.5
25°	1614.4	1616.2	1613.5	1609.0	1607.3	1609.0	1611.7	1617.1	1618.0	1616.2	1609.9
27.5°	1595.6	1590.2	1594.7	1586.6	1584.8	1588.4	1592.0	1592.9	1593.8	1593.8	1588.4
30°	1566.9	1562.4	1566.9	1563.3	1559.7	1563.3	1566.0	1566.0	1567.8	1568.7	1562.4
32.5°	1095.1	1104.1	1249.4	1337.3	1461.1	1523.8	1535.5	1535.5	1537.3	1537.3	1531.9
35°	373.1	374.0	404.5	438.6	511.2	600.9	718.4	779.4	985.7	1232.3	1470.9
37.5°	368.6	367.7	366.8	365.9	365.0	364.1	362.3	361.5	366.8	435.0	590.2
40°	370.4	369.5	367.7	366.8	365.9	364.1	363.2	361.5	359.7	357.9	356.1
42.5°	370.4	369.5	368.6	367.7	366.8	365.9	364.1	362.3	360.6	357.9	355.2
45°	357.9	357.9	358.8	358.8	359.7	359.7	359.7	358.8	358.8	357.9	354.3
47.5°	334.5	334.5	337.2	337.2	339.0	340.8	340.8	342.6	345.3	347.1	348.0
50°	307.6	307.6	310.3	311.2	313.0	315.7	318.4	319.3	322.0	325.6	329.2
52.5°	280.7	280.7	283.4	283.4	285.2	287.9	290.6	291.5	295.1	298.7	303.2
55°	255.6	255.6	257.4	258.3	259.2	261.0	263.7	263.7	267.3	270.0	274.5
57.5°	233.2	235.0	235.0	235.0	235.9	237.7	239.5	239.5	242.2	244.9	248.4
60°	211.7	213.5	213.5	213.5	214.4	215.3	217.1	217.1	218.8	220.6	224.2
62.5°	191.9	193.7	193.7	194.6	194.6	195.5	197.3	196.4	198.2	199.1	201.8
65°	166.8	168.6	169.5	170.4	171.3	173.1	175.8	174.9	177.6	179.4	182.1
67.5°	142.6	144.4	144.4	145.3	146.2	148.0	149.8	149.8	152.5	154.3	157.9
70°	120.2	122.0	122.0	122.9	123.8	125.6	127.4	126.5	129.2	130.9	133.6
72.5°	99.6	101.4	101.4	102.2	102.2	104.0	105.8	107.6	107.6	109.4	111.2
75°	80.7	81.6	82.5	82.5	83.4	84.3	86.1	87.9	88.8	89.7	91.5
77.5°	63.7	64.6	65.5	65.5	66.4	67.3	68.2	71.8	73.5	74.4	74.4
80°	48.4	49.3	49.3	49.3	50.2	51.1	52.9	52.9	56.5	56.5	57.4
82.5°	34.1	35.0	35.0	35.0	35.9	37.7	38.6	39.5	41.3	42.2	42.2
85°	20.6	21.5	21.5	21.5	22.4	23.3	25.1	26.0	26.9	26.9	27.8
87.5°	8.1	9.0	9.9	9.9	10.8	11.7	12.6	13.5	14.4	14.4	15.2
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):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0
2.5°	2016.2	2022.5	2016.2	2019.8	2024.3	2016.2	1997.4	1990.2	1987.5	1976.8	1969.6
5°	2128.4	2128.4	2125.7	2132.8	2131.9	2119.4	2099.7	2090.7	2081.7	2070.1	2061.1
7.5°	2048.5	2055.7	2060.2	2088.0	2105.9	2107.7	2120.3	2123.0	2126.6	2123.0	2117.6
10°	1933.7	1931.0	1943.6	1969.6	1984.9	1992.9	2017.1	2028.8	2038.7	2058.4	2079.0
12.5°	1869.2	1872.7	1878.1	1897.0	1911.3	1907.7	1917.6	1925.7	1937.3	1957.0	1986.6
15°	1826.1	1829.7	1835.1	1849.4	1858.4	1853.9	1859.3	1864.7	1872.7	1882.6	1900.5
17.5°	1779.5	1785.7	1792.0	1807.3	1815.3	1814.4	1818.9	1820.7	1823.4	1829.7	1842.2
20°	1706.8	1726.5	1739.1	1759.7	1771.4	1769.6	1777.7	1780.4	1783.9	1790.2	1795.6
22.5°	1640.4	1645.8	1652.1	1674.5	1694.3	1718.5	1723.9	1731.0	1740.0	1746.3	1751.7
25°	1602.8	1599.2	1601.9	1617.1	1627.9	1629.7	1637.7	1661.1	1685.3	1696.0	1708.6
27.5°	1580.3	1576.8	1575.9	1583.0	1584.8	1580.3	1578.6	1585.7	1603.7	1621.6	1659.3
30°	1556.1	1551.6	1548.1	1554.3	1557.0	1550.7	1539.1	1532.8	1543.6	1548.1	1563.3
32.5°	1527.4	1522.9	1521.2	1524.7	1526.5	1521.2	1508.6	1501.4	1499.6	1496.0	1499.6
35°	1495.1	1490.7	1488.0	1488.9	1492.5	1488.0	1477.2	1468.2	1463.7	1453.9	1446.7
37.5°	770.4	1091.5	1417.1	1451.2	1454.8	1453.9	1443.1	1433.3	1428.8	1417.1	1413.5
40°	352.5	393.7	591.1	772.2	1114.0	1415.3	1405.5	1395.6	1387.5	1383.9	1370.5
42.5°	351.6	352.5	353.4	348.9	432.3	736.4	1087.0	1357.0	1351.6	1342.7	1332.8
45°	351.6	347.1	350.7	345.3	347.1	346.2	431.4	696.0	1238.6	1294.2	1289.8
47.5°	348.0	345.3	348.9	344.4	339.0	341.7	338.1	342.6	534.6	906.8	1242.2
50°	331.9	333.6	339.9	339.0	334.5	338.1	331.9	337.2	332.8	365.0	703.2
52.5°	307.6	311.2	317.5	322.9	324.7	329.2	327.4	329.2	325.6	326.5	327.4
55°	278.9	283.4	288.8	296.9	300.5	307.6	313.0	315.7	320.2	319.3	312.1
57.5°	252.0	256.5	261.0	269.1	277.1	280.7	290.6	296.0	307.6	304.9	303.2
60°	226.9	230.5	235.0	236.8	246.6	252.9	261.9	267.3	282.5	286.1	291.5
62.5°	204.5	206.3	209.9	212.6	218.8	225.1	229.6	238.6	246.6	258.3	266.4
65°	183.9	185.7	188.4	190.1	191.0	200.0	202.7	212.6	215.3	227.8	235.0
67.5°	160.5	164.1	167.7	169.5	171.3	176.7	178.5	183.0	189.2	194.6	203.6
70°	136.3	139.0	142.6	145.3	148.9	152.5	157.9	160.5	165.0	168.6	175.8
72.5°	113.9	116.6	118.4	121.1	123.8	126.5	130.9	137.2	140.8	147.1	148.9
75°	92.4	95.1	96.9	98.7	101.4	103.1	104.9	111.2	114.8	120.2	125.6
77.5°	76.2	76.2	78.0	83.4	82.5	82.5	84.3	87.9	90.6	94.2	99.6
80°	59.2	60.1	61.0	65.5	66.4	67.3	66.4	69.1	71.8	72.6	76.2
82.5°	43.9	44.8	44.8	47.5	50.2	50.2	50.2	51.1	53.8	54.7	56.5
85°	29.6	30.5	31.4	32.3	34.1	35.0	35.9	35.9	37.7	38.6	39.5
87.5°	16.1	17.9	18.8	19.7	20.6	21.5	22.4	23.3	24.2	25.1	26.0
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):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0	1957.0
2.5°	1966.9	1962.4	1959.7	1952.6	1950.8	1939.1	1940.9	1939.1	1939.1	1941.8	1950.8
5°	2051.2	2029.7	2024.3	2009.1	1996.5	1975.0	1961.5	1954.4	1943.6	1939.1	1945.4
7.5°	2108.6	2092.5	2079.0	2065.6	2047.6	2022.5	2003.7	1982.2	1964.2	1947.2	1942.7
10°	2098.8	2116.7	2116.7	2108.6	2091.6	2066.5	2044.0	2017.1	1985.7	1958.8	1942.7
12.5°	2015.3	2046.7	2071.9	2090.7	2107.7	2090.7	2068.3	2046.7	2011.8	1972.3	1942.7
15°	1923.9	1956.2	1987.5	2027.0	2068.3	2085.3	2084.4	2059.3	2027.9	1986.6	1945.4
17.5°	1859.3	1881.7	1898.7	1941.8	1992.0	2036.0	2065.6	2067.4	2036.9	2000.1	1946.3
20°	1810.9	1827.0	1841.3	1865.6	1909.5	1963.3	2018.0	2048.5	2043.2	2002.8	1949.0
22.5°	1766.9	1778.6	1790.2	1808.2	1843.1	1878.1	1941.8	2004.6	2031.5	1998.3	1946.3
25°	1723.0	1735.5	1744.5	1757.0	1784.8	1813.5	1858.4	1936.4	1996.5	1994.7	1940.9
27.5°	1670.9	1688.0	1698.7	1715.8	1734.6	1756.1	1786.6	1860.2	1946.3	1976.8	1926.6
30°	1608.2	1633.3	1649.4	1668.2	1684.4	1703.2	1727.4	1772.3	1879.0	1941.8	1911.3
32.5°	1517.6	1562.4	1598.3	1616.2	1634.2	1650.3	1671.8	1709.5	1796.5	1894.3	1894.3
35°	1453.0	1473.6	1505.9	1557.9	1580.3	1596.5	1616.2	1645.8	1701.4	1837.8	1866.5
37.5°	1402.8	1410.8	1427.0	1478.1	1520.3	1546.3	1566.0	1584.8	1639.5	1760.6	1830.6
40°	1365.1	1362.4	1360.6	1384.8	1444.9	1486.2	1508.6	1527.4	1569.6	1668.2	1783.0
42.5°	1321.1	1318.5	1309.5	1315.8	1345.4	1414.4	1448.5	1469.1	1504.1	1571.4	1731.0
45°	1275.4	1270.9	1267.3	1261.0	1271.8	1310.4	1380.3	1410.8	1430.6	1490.7	1665.6
47.5°	1228.8	1222.5	1218.0	1212.6	1206.3	1224.3	1290.6	1345.4	1379.4	1417.1	1586.6
50°	1162.4	1170.5	1165.1	1158.8	1153.4	1149.8	1177.6	1267.3	1309.5	1340.0	1490.7
52.5°	548.0	1065.5	1110.4	1104.1	1096.9	1090.6	1096.9	1165.1	1241.3	1265.5	1375.0
55°	312.1	474.5	987.5	1044.0	1037.7	1028.8	1023.4	1046.7	1160.6	1192.9	1269.1
57.5°	300.5	301.4	435.9	940.9	975.8	967.8	961.5	966.9	1063.7	1118.4	1176.7
60°	290.6	290.6	290.6	416.2	899.6	902.3	894.2	885.2	927.4	1035.0	1083.5
62.5°	269.1	274.5	277.1	277.1	410.8	833.2	825.2	822.5	824.3	934.6	990.2
65°	241.3	253.8	259.2	262.8	262.8	431.4	754.3	749.8	743.5	785.7	896.0
67.5°	210.8	223.3	235.0	242.2	243.1	251.1	450.2	675.4	666.4	667.3	795.6
70°	179.4	190.1	202.7	213.5	223.3	227.8	235.0	560.6	590.2	577.6	681.6
72.5°	155.2	159.6	168.6	179.4	191.0	201.8	208.1	223.3	512.1	498.7	518.4
75°	129.2	132.7	139.0	146.2	155.2	167.7	178.5	189.2	271.8	418.0	415.3
77.5°	100.5	106.7	113.9	118.4	122.9	131.8	146.2	157.0	167.7	282.5	332.8
80°	77.1	81.6	85.2	89.7	95.1	101.4	106.7	119.3	131.8	141.7	254.7
82.5°	57.4	60.1	62.8	64.6	66.4	70.0	79.8	84.3	92.4	101.4	120.2
85°	40.4	42.2	43.9	44.8	45.7	46.6	50.2	51.1	59.2	61.0	72.6
87.5°	26.0	26.9	28.7	29.6	29.6	30.5	31.4	31.4	31.4	29.6	35.9
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):

	357.5°	360°
0°	1957.0	1957.0
2.5°	1957.9	1972.3
5°	1955.3	1974.1
7.5°	1948.1	1966.0
10°	1937.3	1958.8
12.5°	1925.7	1946.3
15°	1915.8	1931.0
17.5°	1905.0	1914.0
20°	1890.7	1897.9
22.5°	1876.3	1872.7
25°	1860.2	1852.1
27.5°	1839.6	1824.3
30°	1820.7	1793.8
32.5°	1802.8	1758.8
35°	1778.6	1723.0
37.5°	1753.5	1686.2
40°	1723.9	1644.0
42.5°	1692.5	1601.9
45°	1653.0	1561.5
47.5°	1618.0	1513.1
50°	1569.6	1461.1
52.5°	1510.4	1412.6
55°	1440.4	1353.4
57.5°	1365.1	1291.5
60°	1284.4	1220.7
62.5°	1186.6	1147.1
65°	1071.8	1062.8
67.5°	922.0	969.6
70°	756.1	862.8
72.5°	632.3	749.8
75°	518.4	623.3
77.5°	410.8	488.8
80°	256.5	357.9
82.5°	172.2	235.0
85°	104.0	112.1
87.5°	40.4	41.3
90°	0.0	0.0

(END OF REPORT)