

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P#

Luminaire Tested: **4SNLED-LD5-46SL-RW-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33525)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-46SL-RW-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

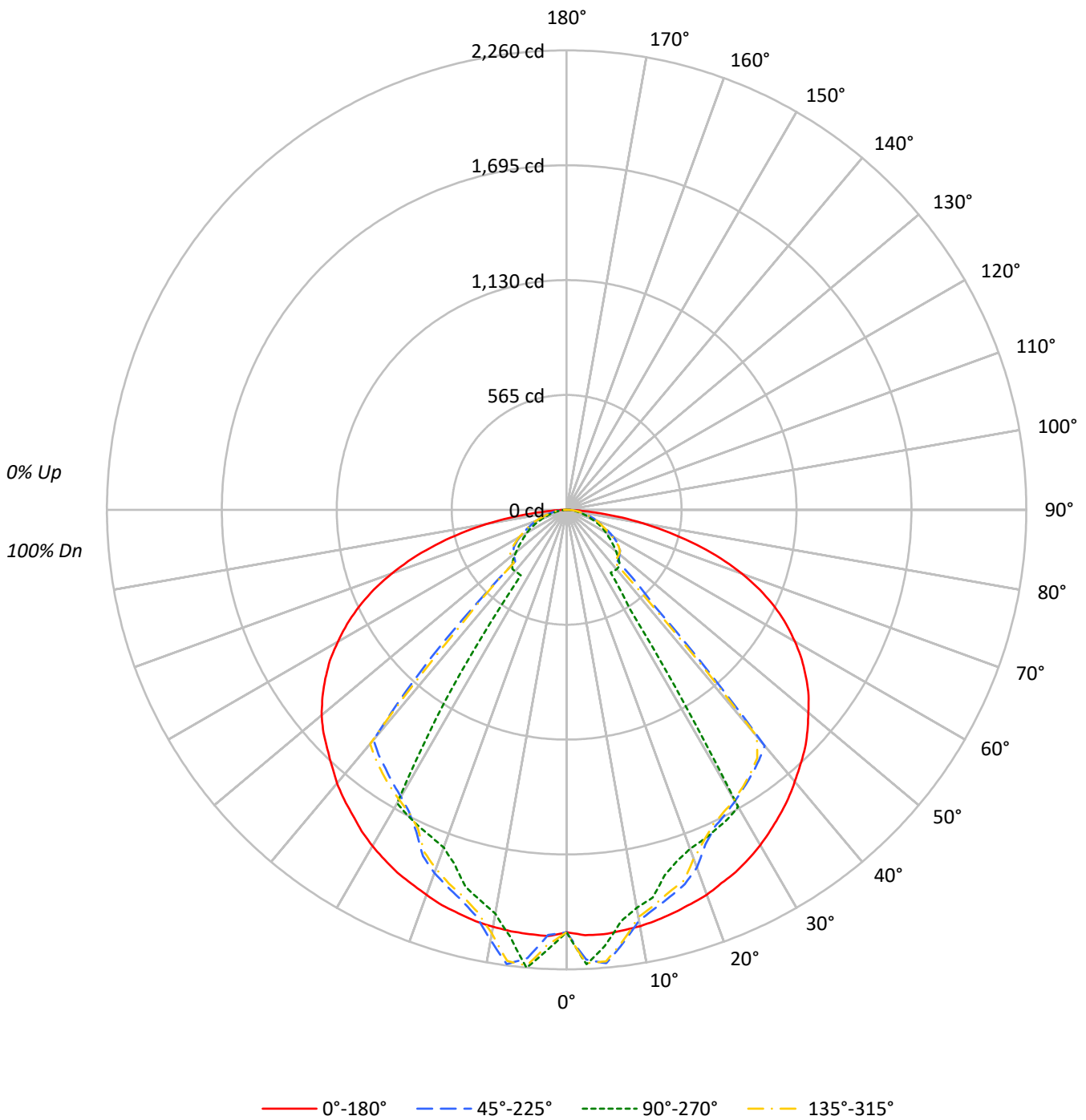
Lumens per Lamp: N/A
Luminaire Lumens: 4160.0 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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: 25 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	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°	16788	16788	16788	16788
5°	16952	16914	16944	17752
10°	16969	15292	16992	15526
15°	17006	14149	17045	14597
20°	17130	13420	17130	13369
25°	17278	13163	17303	13040
30°	17453	12931	17497	12777
35°	17656	2945	17693	3072
40°	17939	3063	18047	3162
45°	18368	3045	18433	3157
50°	18798	2753	19052	2828
55°	19377	2445	19530	2480
60°	19867	2172	19910	2201
65°	20218	1896	20166	1866
70°	19929	1528	19866	1473
75°	18502	1176	18634	1126
80°	15018	836	15619	764
85°	8130	501	8587	384



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.4	4.9
10°-20°	562.0	13.5
20°-30°	832.4	20.0
30°-40°	838.7	20.2
40°-50°	655.2	15.7
50°-60°	506.1	12.2
60°-70°	339.8	8.2
70°-80°	173.3	4.2
80°-90°	48.2	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°	1598.8	38.4
0°-40°	2437.5	58.6
0°-60°	3598.7	86.5
0°-90°	4160.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4160.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2077	2077	2077	2077	2077	
5°	2096	2154	2094	2260	2096	199
15°	2050	1861	2054	1920	2050	580
25°	1966	1735	1969	1718	1966	907
35°	1829	377	1833	393	1829	1146
45°	1658	366	1663	380	1658	1278
55°	1437	267	1448	270	1437	1283
65°	1128	179	1125	176	1128	1110
75°	662	90	666	87	662	692
85°	119	29	126	22	119	164
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°	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4
2.5°	2093.6	2101.2	2106.9	2110.7	2112.6	2112.6	2113.6	2114.5	2126.9	2132.6	2136.4
5°	2095.5	2103.1	2114.5	2129.8	2143.1	2154.5	2164.0	2177.4	2190.7	2205.0	2209.7
7.5°	2086.9	2096.4	2119.3	2146.9	2172.6	2190.7	2203.1	2211.6	2218.3	2219.3	2224.0
10°	2079.3	2096.4	2127.9	2164.0	2196.4	2218.3	2218.3	2213.5	2220.2	2194.5	2168.8
12.5°	2066.0	2085.0	2127.9	2175.5	2205.9	2214.5	2210.7	2191.6	2152.6	2121.2	2106.9
15°	2049.8	2075.5	2128.8	2182.1	2207.8	2210.7	2174.5	2126.0	2096.4	2077.4	2053.6
17.5°	2031.7	2066.0	2129.8	2183.1	2192.6	2179.3	2110.7	2080.3	2049.8	2005.0	1972.7
20°	2014.6	2047.9	2122.1	2169.7	2175.5	2115.5	2062.2	2029.8	1978.4	1939.3	1925.1
22.5°	1987.9	2026.9	2115.5	2151.7	2129.8	2060.3	2008.8	1957.4	1910.8	1899.4	1882.2
25°	1966.0	2006.9	2100.2	2129.8	2071.7	2009.8	1949.8	1889.8	1867.9	1851.8	1836.5
27.5°	1936.5	1987.0	2080.3	2089.8	2009.8	1955.5	1867.9	1841.3	1821.3	1803.2	1796.5
30°	1904.1	1966.0	2052.6	2034.6	1958.4	1878.4	1813.7	1788.9	1774.6	1755.6	1748.0
32.5°	1867.0	1934.6	2022.2	1970.8	1903.2	1803.2	1761.3	1742.3	1723.2	1708.9	1661.3
35°	1828.9	1907.0	1986.0	1909.8	1836.5	1746.1	1708.9	1691.8	1673.7	1621.4	1571.9
37.5°	1789.9	1876.5	1942.2	1844.1	1748.0	1687.1	1655.6	1636.6	1595.7	1529.0	1504.3
40°	1745.1	1839.4	1886.0	1776.5	1670.9	1627.1	1597.6	1578.5	1486.2	1456.7	1449.0
42.5°	1700.4	1803.2	1817.5	1710.9	1607.1	1563.3	1538.5	1475.7	1412.9	1397.6	1400.5
45°	1657.5	1764.2	1742.3	1617.6	1540.4	1504.3	1462.4	1375.7	1342.4	1350.0	1351.9
47.5°	1606.1	1717.5	1663.3	1524.2	1471.9	1435.7	1342.4	1290.0	1285.3	1295.8	1301.5
50°	1550.9	1665.2	1579.5	1439.5	1397.6	1354.8	1249.1	1222.4	1228.2	1238.6	1245.3
52.5°	1499.5	1606.1	1492.8	1360.5	1324.3	1226.3	1154.8	1159.6	1169.1	1181.5	1185.3
55°	1436.7	1534.7	1400.5	1280.5	1246.2	1117.7	1085.3	1096.8	1106.3	1116.8	1124.4
57.5°	1371.0	1452.8	1291.0	1191.0	1135.8	1021.6	1024.4	1032.0	1038.7	1051.1	434.1
60°	1295.8	1359.5	1171.0	1108.2	998.7	945.4	948.3	961.6	968.2	540.8	298.9
62.5°	1217.7	1251.0	1062.5	1013.9	873.0	869.2	882.6	888.3	604.6	285.6	279.9
65°	1128.2	1121.5	955.9	878.8	787.4	791.2	805.4	776.9	267.5	267.5	265.6
67.5°	1029.2	989.2	852.1	727.4	704.5	713.1	728.3	254.2	247.5	249.4	242.8
70°	915.9	859.7	744.5	616.0	623.6	632.2	245.6	230.4	227.5	222.8	209.5
72.5°	795.9	718.8	609.3	535.1	539.8	338.9	215.2	207.5	198.0	188.5	174.2
75°	661.7	561.7	447.5	447.5	454.1	193.3	187.6	175.2	164.7	152.3	143.8
77.5°	518.9	432.2	347.5	360.8	176.1	161.9	151.4	138.0	129.5	121.9	117.1
80°	379.9	301.8	261.8	234.2	137.1	122.8	112.3	104.7	100.9	96.2	90.4
82.5°	249.4	181.8	181.8	110.4	96.2	84.7	81.9	76.2	72.4	69.5	66.6
85°	119.0	105.7	80.0	67.6	60.0	54.3	52.4	49.5	49.5	48.6	47.6
87.5°	43.8	47.6	35.2	34.3	32.4	31.4	32.4	32.4	33.3	32.4	31.4
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):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4
2.5°	2145.9	2153.6	2159.3	2168.8	2181.2	2191.6	2201.2	2214.5	2235.4	2241.2	2245.9
5°	2209.7	2212.6	2219.3	2226.9	2228.8	2233.5	2232.6	2238.3	2241.2	2247.8	2233.5
7.5°	2213.5	2198.3	2180.2	2164.0	2152.6	2142.1	2135.5	2145.9	2151.7	2156.4	2142.1
10°	2133.6	2115.5	2105.0	2095.5	2084.1	2067.9	2046.0	2050.7	2048.8	2048.8	2044.1
12.5°	2083.1	2057.4	2030.7	2006.9	1996.5	1995.5	1996.5	2006.9	2006.9	2006.0	2000.3
15°	2004.1	1979.3	1966.0	1960.3	1960.3	1957.4	1957.4	1968.9	1966.0	1966.0	1963.1
17.5°	1951.7	1934.6	1925.1	1918.4	1915.5	1920.3	1926.0	1930.8	1931.7	1927.9	1912.7
20°	1908.9	1892.7	1881.3	1883.2	1882.2	1885.1	1887.9	1871.8	1851.8	1825.1	1812.7
22.5°	1864.1	1851.8	1843.2	1843.2	1831.8	1813.7	1787.0	1781.3	1778.4	1766.1	1755.6
25°	1821.3	1807.0	1794.6	1756.6	1732.8	1735.6	1730.8	1721.3	1720.4	1719.4	1723.2
27.5°	1778.4	1741.3	1693.7	1688.0	1678.5	1677.5	1683.2	1688.0	1688.0	1691.8	1696.6
30°	1689.9	1647.1	1638.5	1628.0	1631.8	1645.2	1648.0	1654.7	1656.6	1663.3	1667.1
32.5°	1609.0	1589.9	1582.3	1587.1	1599.5	1610.9	1617.6	1620.4	1625.2	1630.9	1635.6
35°	1543.3	1537.6	1544.2	1554.7	1567.1	1576.6	1582.3	1588.0	1592.8	1597.6	1601.4
37.5°	1494.7	1498.5	1508.1	1521.4	1533.8	1541.4	1546.1	1552.8	1559.5	1565.2	1542.3
40°	1449.0	1458.6	1469.0	1483.3	1493.8	1501.4	1506.2	1514.7	1457.6	659.8	361.8
42.5°	1409.1	1419.5	1427.1	1438.6	1450.0	1455.7	1413.8	631.2	357.0	355.1	359.9
45°	1360.5	1369.1	1381.4	1390.0	1400.5	919.7	351.3	355.1	349.4	353.2	355.1
47.5°	1311.0	1324.3	1331.0	1270.0	378.0	349.4	345.6	349.4	345.6	350.4	347.5
50°	1254.8	1271.0	904.5	341.8	338.9	337.0	340.8	338.9	341.8	345.6	338.0
52.5°	1197.7	741.7	331.3	329.4	331.3	329.4	336.1	331.3	332.3	328.5	318.9
55°	405.6	320.8	318.0	317.0	322.7	322.7	322.7	315.1	310.4	300.9	294.2
57.5°	310.4	310.4	309.4	310.4	308.5	306.6	298.0	291.3	284.7	271.3	267.5
60°	294.2	294.2	294.2	294.2	285.6	281.8	268.5	262.8	251.3	244.7	240.9
62.5°	280.9	279.0	270.4	267.5	258.0	247.5	239.9	234.2	222.8	219.0	216.1
65°	261.8	255.2	244.7	233.3	228.5	217.1	213.3	204.7	199.0	196.1	194.2
67.5°	230.4	220.9	212.3	204.7	196.1	192.3	187.6	180.9	177.1	175.2	173.3
70°	197.1	190.4	181.8	177.1	171.4	168.5	161.9	159.9	157.1	154.2	151.4
72.5°	164.7	160.9	157.1	150.4	148.5	146.6	140.0	136.1	132.3	128.5	126.6
75°	138.0	135.2	133.3	127.6	124.7	119.0	114.2	111.4	108.5	105.7	103.8
77.5°	113.3	111.4	105.7	101.9	100.0	95.2	93.3	94.3	92.3	88.5	86.6
80°	88.5	86.6	81.9	81.9	80.0	78.1	76.2	74.3	72.4	69.5	67.6
82.5°	67.6	65.7	63.8	61.9	60.0	59.0	58.1	56.2	54.3	52.4	51.4
85°	47.6	46.7	45.7	44.7	43.8	42.8	41.9	40.0	38.1	37.1	36.2
87.5°	32.4	31.4	30.5	29.5	28.6	27.6	26.7	25.7	23.8	22.8	21.9
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°	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4
2.5°	2245.9	2250.7	2245.9	2235.4	2228.8	2225.9	2231.6	2231.6	2235.4	2240.2	2241.2
5°	2210.7	2199.3	2185.9	2172.6	2165.9	2162.1	2151.7	2153.6	2156.4	2158.3	2160.2
7.5°	2123.1	2107.9	2089.8	2072.6	2066.0	2060.3	2047.9	2047.9	2047.9	2048.8	2054.5
10°	2033.6	2026.9	2019.3	2007.9	1999.3	1996.5	1986.0	1988.9	1987.0	1989.8	1996.5
12.5°	1991.7	1984.1	1977.4	1966.0	1956.5	1952.7	1947.9	1950.8	1949.8	1954.6	1960.3
15°	1953.6	1949.8	1942.2	1933.6	1925.1	1917.5	1900.3	1894.6	1890.8	1886.0	1892.7
17.5°	1890.8	1864.1	1846.0	1832.7	1823.2	1816.5	1811.8	1811.8	1814.6	1817.5	1823.2
20°	1805.1	1797.5	1788.9	1774.6	1765.1	1761.3	1758.5	1758.5	1763.2	1767.0	1777.5
22.5°	1746.1	1745.1	1742.3	1735.6	1730.8	1730.8	1731.8	1733.7	1740.4	1746.1	1756.6
25°	1718.5	1722.3	1720.4	1716.6	1713.7	1714.7	1712.8	1714.7	1721.3	1727.0	1735.6
27.5°	1696.6	1702.3	1700.4	1694.7	1689.9	1691.8	1694.7	1692.8	1698.5	1705.1	1711.8
30°	1667.1	1668.0	1671.8	1665.2	1663.3	1666.1	1667.1	1669.0	1674.7	1679.4	1685.1
32.5°	1633.7	1641.4	1640.4	1633.7	1633.7	1636.6	1637.5	1573.8	1454.7	1252.9	1197.7
35°	1601.4	1609.9	1595.7	1345.3	931.1	497.0	383.7	370.4	373.2	375.1	377.0
37.5°	1184.4	561.7	358.0	360.8	363.7	366.5	369.4	372.3	375.1	378.0	378.9
40°	356.1	355.1	358.0	361.8	364.6	366.5	370.4	373.2	376.1	378.9	379.9
42.5°	352.3	354.2	357.0	360.8	364.6	368.4	371.3	375.1	377.0	378.9	379.9
45°	350.4	354.2	358.0	360.8	363.7	365.6	367.5	368.4	367.5	367.5	369.4
47.5°	347.5	351.3	352.3	351.3	352.3	351.3	351.3	351.3	348.5	347.5	347.5
50°	337.0	337.0	335.1	331.3	330.4	329.4	327.5	326.6	322.7	321.8	321.8
52.5°	315.1	314.2	311.3	306.6	304.7	302.8	301.8	300.9	297.0	295.1	296.1
55°	289.4	287.5	284.7	279.0	278.0	276.1	275.1	274.2	270.4	272.3	269.4
57.5°	265.6	261.8	258.0	257.1	253.2	252.3	251.3	250.4	247.5	248.5	246.6
60°	237.1	236.1	234.2	230.4	230.4	229.4	229.4	227.5	225.6	224.7	224.7
62.5°	216.1	213.3	211.4	211.4	208.5	208.5	208.5	206.6	204.7	205.6	204.7
65°	193.3	192.3	191.4	189.5	189.5	188.5	188.5	186.6	183.7	184.7	182.8
67.5°	174.2	172.3	170.4	169.5	165.7	163.8	162.8	161.9	158.0	159.0	157.1
70°	150.4	147.6	145.7	143.8	140.9	139.0	139.0	137.1	134.2	135.2	133.3
72.5°	125.7	123.8	121.9	120.9	118.1	117.1	116.2	115.2	112.3	113.3	112.3
75°	104.7	104.7	103.8	102.8	100.0	97.1	95.2	94.3	92.3	93.3	91.4
77.5°	86.6	84.7	82.8	82.8	80.0	78.1	76.2	76.2	76.2	75.2	74.3
80°	67.6	65.7	65.7	64.7	62.8	60.9	60.0	60.0	59.0	59.0	58.1
82.5°	51.4	49.5	48.6	48.6	46.7	45.7	44.7	43.8	43.8	43.8	42.8
85°	36.2	34.3	33.3	33.3	31.4	30.5	30.5	29.5	29.5	28.6	28.6
87.5°	21.9	20.9	20.0	20.0	18.1	17.1	17.1	17.1	16.2	16.2	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



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4
2.5°	2241.2	2241.2	2234.5	2236.4	2233.5	2237.3	2232.6	2232.6	2238.3	2238.3	2242.1
5°	2161.2	2156.4	2155.5	2153.6	2144.0	2147.8	2143.1	2138.3	2145.0	2145.0	2153.6
7.5°	2051.7	2043.1	2046.9	2041.2	2035.5	2026.9	2029.8	2026.0	2030.7	2037.4	2046.0
10°	1995.5	1987.9	1992.7	1987.0	1989.8	1977.4	1978.4	1979.3	1984.1	1986.0	1993.6
12.5°	1959.3	1957.4	1955.5	1953.6	1955.5	1948.9	1945.1	1946.0	1947.9	1948.9	1954.6
15°	1883.2	1870.8	1874.6	1861.3	1862.2	1863.2	1855.6	1863.2	1862.2	1874.6	1886.0
17.5°	1821.3	1821.3	1814.6	1808.9	1805.1	1804.2	1798.4	1802.3	1798.4	1806.1	1808.9
20°	1778.4	1777.5	1776.5	1773.7	1764.2	1765.1	1768.0	1759.4	1758.5	1757.5	1763.2
22.5°	1758.5	1759.4	1755.6	1755.6	1747.0	1748.9	1749.9	1740.4	1741.3	1738.5	1741.3
25°	1737.5	1739.4	1734.7	1734.7	1732.8	1731.8	1727.0	1728.9	1723.2	1718.5	1723.2
27.5°	1712.8	1716.6	1712.8	1714.7	1710.9	1708.9	1706.1	1704.2	1698.5	1697.5	1700.4
30°	1689.9	1691.8	1690.9	1686.1	1685.1	1679.4	1682.3	1676.6	1670.9	1671.8	1673.7
32.5°	866.4	827.3	637.9	576.0	570.3	591.2	700.7	853.0	1105.3	1350.0	1526.2
35°	378.0	378.0	378.0	377.0	377.0	376.1	375.1	374.2	373.2	372.3	371.3
37.5°	379.9	379.9	379.9	379.9	378.9	378.0	378.0	376.1	375.1	374.2	373.2
40°	380.8	381.8	381.8	381.8	380.8	380.8	379.9	378.0	377.0	375.1	373.2
42.5°	379.9	380.8	380.8	379.9	379.9	378.9	378.9	378.0	377.0	376.1	375.1
45°	367.5	368.4	366.5	366.5	365.6	365.6	365.6	365.6	365.6	366.5	366.5
47.5°	345.6	345.6	344.6	343.7	343.7	342.7	343.7	342.7	344.6	345.6	347.5
50°	319.9	319.9	318.0	317.0	317.0	317.0	317.0	318.0	318.9	320.8	322.7
52.5°	293.2	293.2	292.3	291.3	290.4	290.4	293.2	292.3	293.2	294.2	297.0
55°	267.5	268.5	266.6	266.6	265.6	265.6	265.6	266.6	267.5	268.5	271.3
57.5°	245.6	245.6	243.7	243.7	243.7	242.8	245.6	243.7	244.7	245.6	247.5
60°	223.7	222.8	222.8	221.8	221.8	221.8	223.7	222.8	222.8	223.7	225.6
62.5°	203.7	203.7	202.8	202.8	201.8	201.8	203.7	202.8	202.8	203.7	204.7
65°	180.9	180.9	179.9	179.0	181.8	179.0	181.8	179.9	181.8	182.8	184.7
67.5°	155.2	155.2	155.2	154.2	154.2	156.1	157.1	155.2	156.1	158.0	159.0
70°	132.3	132.3	131.4	131.4	131.4	133.3	134.2	132.3	133.3	134.2	136.1
72.5°	112.3	110.4	110.4	109.5	111.4	111.4	112.3	111.4	112.3	112.3	114.2
75°	92.3	90.4	90.4	90.4	92.3	91.4	92.3	91.4	92.3	92.3	93.3
77.5°	74.3	73.3	72.4	72.4	74.3	74.3	74.3	73.3	74.3	75.2	76.2
80°	58.1	57.1	56.2	56.2	58.1	58.1	58.1	59.0	58.1	59.0	60.0
82.5°	42.8	41.9	40.9	42.8	42.8	42.8	42.8	43.8	42.8	43.8	44.7
85°	28.6	27.6	26.7	28.6	28.6	28.6	28.6	29.5	28.6	29.5	30.5
87.5°	15.2	14.3	14.3	15.2	15.2	15.2	16.2	16.2	16.2	17.1	17.1
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: P#

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4
2.5°	2247.8	2250.7	2249.7	2244.0	2238.3	2231.6	2226.9	2227.8	2237.3	2240.2	2231.6
5°	2153.6	2171.7	2171.7	2184.0	2177.4	2171.7	2175.5	2196.4	2206.9	2223.1	2228.8
7.5°	2056.5	2065.0	2064.1	2076.4	2074.5	2074.5	2077.4	2105.0	2118.3	2131.7	2135.5
10°	2002.2	2010.8	2009.8	2010.8	2007.9	2001.2	2001.2	2013.6	2025.0	2031.7	2033.6
12.5°	1963.1	1967.9	1967.0	1967.0	1965.1	1959.3	1958.4	1968.9	1981.2	1989.8	1990.8
15°	1905.1	1918.4	1921.3	1933.6	1930.8	1923.2	1925.1	1933.6	1941.3	1948.9	1946.0
17.5°	1818.4	1825.1	1826.1	1830.8	1828.9	1828.9	1840.3	1871.8	1892.7	1910.8	1912.7
20°	1768.9	1773.7	1771.8	1782.3	1777.5	1776.5	1779.4	1792.7	1802.3	1810.8	1826.1
22.5°	1745.1	1748.9	1746.1	1747.0	1738.5	1730.8	1728.9	1739.4	1749.9	1761.3	1761.3
25°	1725.1	1728.0	1727.0	1725.1	1718.5	1708.0	1706.1	1708.0	1711.8	1712.8	1706.1
27.5°	1701.3	1703.2	1703.2	1704.2	1695.6	1686.1	1684.2	1682.3	1686.1	1685.1	1674.7
30°	1676.6	1673.7	1674.7	1675.6	1668.0	1659.4	1655.6	1654.7	1658.5	1657.5	1647.1
32.5°	1617.6	1639.4	1641.4	1643.3	1636.6	1629.0	1625.2	1622.3	1624.2	1623.3	1613.7
35°	370.4	377.0	461.7	1045.4	1419.5	1571.9	1588.0	1584.2	1585.2	1585.2	1577.6
37.5°	371.3	370.4	369.4	366.5	363.7	361.8	625.5	1333.8	1545.2	1546.1	1539.5
40°	371.3	370.4	369.4	367.5	363.7	360.8	356.1	352.3	360.8	794.0	1452.8
42.5°	373.2	371.3	369.4	367.5	363.7	359.9	356.1	351.3	354.2	352.3	347.5
45°	367.5	366.5	366.5	365.6	363.7	359.9	355.1	349.4	346.6	349.4	344.6
47.5°	349.4	350.4	353.2	354.2	354.2	355.1	352.3	348.5	343.7	346.6	340.8
50°	324.7	326.6	327.5	332.3	334.2	338.0	338.9	338.9	338.0	341.8	338.0
52.5°	298.0	299.9	304.7	306.6	308.5	314.2	316.1	318.9	320.8	326.6	330.4
55°	272.3	273.2	275.1	279.0	281.8	286.6	289.4	292.3	297.0	299.9	311.3
57.5°	248.5	249.4	253.2	254.2	256.1	259.9	262.8	266.6	270.4	272.3	285.6
60°	225.6	226.6	229.4	230.4	231.4	235.2	238.0	240.9	243.7	245.6	255.2
62.5°	205.6	205.6	208.5	208.5	209.5	212.3	214.2	216.1	219.0	219.9	224.7
65°	185.7	186.6	188.5	188.5	189.5	191.4	192.3	193.3	196.1	196.1	199.9
67.5°	160.9	161.9	164.7	166.6	167.6	171.4	172.3	173.3	175.2	176.1	178.0
70°	137.1	138.0	140.9	141.9	142.8	145.7	147.6	150.4	153.3	156.1	158.0
72.5°	115.2	116.2	119.0	119.0	121.9	122.8	124.7	125.7	128.5	130.4	133.3
75°	94.3	95.2	98.1	98.1	100.9	101.9	102.8	103.8	105.7	107.6	109.5
77.5°	77.1	77.1	80.9	82.8	84.7	84.7	85.7	85.7	85.7	86.6	88.5
80°	60.9	60.9	63.8	65.7	67.6	67.6	68.5	69.5	70.5	70.5	71.4
82.5°	45.7	45.7	48.6	49.5	51.4	51.4	51.4	52.4	53.3	52.4	54.3
85°	31.4	31.4	33.3	34.3	36.2	36.2	36.2	37.1	38.1	37.1	38.1
87.5°	18.1	19.0	20.0	20.9	21.9	22.8	22.8	22.8	23.8	23.8	24.8
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: P#

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4
2.5°	2222.1	2210.7	2209.7	2196.4	2192.6	2193.5	2183.1	2179.3	2162.1	2158.3	2140.2
5°	2230.7	2236.4	2233.5	2232.6	2235.4	2233.5	2225.9	2222.1	2219.3	2211.6	2196.4
7.5°	2136.4	2140.2	2143.1	2155.5	2165.9	2184.0	2203.1	2215.4	2225.0	2226.9	2214.5
10°	2040.3	2058.4	2070.7	2089.8	2105.0	2115.5	2126.9	2137.4	2165.0	2192.6	2208.8
12.5°	1990.8	1995.5	1994.6	2005.0	2015.5	2043.1	2069.8	2085.0	2106.0	2118.3	2147.8
15°	1948.9	1949.8	1952.7	1960.3	1966.0	1975.5	1987.9	2010.8	2052.6	2071.7	2087.9
17.5°	1910.8	1910.8	1912.7	1919.4	1927.0	1935.5	1943.2	1952.7	1973.6	2005.0	2045.0
20°	1849.9	1876.5	1879.4	1878.4	1882.2	1898.4	1900.3	1917.5	1927.9	1940.3	1979.3
22.5°	1759.4	1775.6	1798.4	1833.7	1847.0	1854.6	1860.3	1867.9	1884.1	1898.4	1914.6
25°	1709.9	1720.4	1727.0	1737.5	1765.1	1809.9	1818.4	1827.0	1837.5	1848.0	1867.9
27.5°	1666.1	1665.2	1669.9	1679.4	1687.1	1710.9	1752.7	1786.1	1788.0	1803.2	1820.3
30°	1634.7	1629.0	1622.3	1620.4	1630.9	1643.3	1655.6	1708.0	1744.2	1751.8	1769.9
32.5°	1605.2	1595.7	1586.1	1578.5	1571.9	1582.3	1589.9	1612.8	1659.4	1703.2	1712.8
35°	1569.0	1559.5	1548.1	1539.5	1529.0	1528.1	1527.1	1549.0	1564.2	1616.6	1662.3
37.5°	1531.9	1521.4	1511.9	1502.4	1491.9	1484.3	1479.5	1485.2	1499.5	1522.3	1598.5
40°	1492.8	1480.5	1470.9	1463.3	1449.0	1443.3	1433.8	1430.0	1430.9	1450.9	1490.9
42.5°	892.1	1422.4	1427.1	1418.6	1406.2	1398.6	1388.1	1383.3	1373.8	1383.3	1406.2
45°	343.7	347.5	1040.6	1374.8	1359.5	1350.0	1340.5	1335.7	1325.3	1317.7	1338.6
47.5°	337.0	340.8	333.2	472.2	1297.7	1300.5	1289.1	1284.3	1273.9	1268.1	1262.4
50°	332.3	335.1	329.4	331.3	324.7	1189.1	1236.7	1231.0	1219.6	1212.9	1201.5
52.5°	327.5	327.5	323.7	318.9	317.0	318.0	1000.6	1176.7	1163.4	1156.8	1141.5
55°	312.3	314.2	318.0	310.4	308.5	307.5	304.7	953.0	1101.5	1093.9	1080.6
57.5°	289.4	293.2	303.7	301.8	301.8	294.2	292.3	292.3	884.5	1030.1	1016.8
60°	262.8	266.6	278.0	281.8	284.7	282.8	280.9	279.9	276.1	932.1	949.2
62.5°	235.2	239.0	242.8	255.2	259.0	263.7	269.4	266.6	262.8	262.8	877.8
65°	205.6	211.4	213.3	224.7	229.4	238.0	242.8	249.4	247.5	246.6	251.3
67.5°	179.9	186.6	187.6	192.3	200.9	204.7	210.4	222.8	228.5	230.4	232.3
70°	158.0	161.9	164.7	166.6	172.3	173.3	183.7	192.3	200.9	210.4	213.3
72.5°	136.1	139.0	144.7	142.8	144.7	148.5	154.2	159.9	168.5	181.8	190.4
75°	111.4	113.3	117.1	119.0	122.8	125.7	129.5	134.2	141.9	148.5	159.9
77.5°	89.5	90.4	93.3	94.3	98.1	100.9	107.6	110.4	115.2	120.0	126.6
80°	72.4	72.4	73.3	73.3	76.2	79.0	83.8	86.6	92.3	96.2	96.2
82.5°	55.2	55.2	58.1	58.1	60.0	60.0	62.8	62.8	65.7	67.6	69.5
85°	39.0	40.0	41.9	40.9	42.8	41.9	43.8	45.7	46.7	45.7	44.7
87.5°	25.7	25.7	27.6	26.7	27.6	27.6	29.5	29.5	30.5	30.5	29.5
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: P#

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4
2.5°	2133.6	2119.3	2110.7	2100.2	2097.4	2094.5	2098.3	2098.3	2092.6	2087.9	2079.3
5°	2183.1	2167.8	2151.7	2134.5	2118.3	2101.2	2094.5	2093.6	2083.1	2077.4	2074.5
7.5°	2208.8	2201.2	2183.1	2159.3	2134.5	2104.1	2090.7	2083.1	2072.6	2070.7	2070.7
10°	2211.6	2203.1	2193.5	2176.4	2147.8	2107.9	2082.2	2066.9	2057.4	2064.1	2076.4
12.5°	2184.0	2200.2	2191.6	2180.2	2157.4	2108.8	2071.7	2048.8	2046.0	2063.1	2095.5
15°	2113.6	2161.2	2185.0	2173.6	2155.5	2106.9	2054.5	2027.9	2027.9	2063.1	2105.0
17.5°	2060.3	2097.4	2155.5	2165.0	2144.0	2103.1	2038.4	2006.9	2015.5	2066.9	2111.7
20°	2016.5	2039.3	2095.5	2148.8	2128.8	2094.5	2014.6	1982.2	1999.3	2061.2	2121.2
22.5°	1947.9	1993.6	2027.9	2106.9	2113.6	2078.3	1990.8	1951.7	1986.0	2061.2	2116.4
25°	1881.3	1936.5	1972.7	2049.8	2090.7	2058.4	1968.9	1919.4	1971.7	2058.4	2112.6
27.5°	1834.6	1860.3	1926.0	1981.2	2056.5	2031.7	1939.3	1884.1	1953.6	2043.1	2090.7
30°	1785.1	1802.3	1867.0	1919.4	2010.8	2001.2	1908.9	1845.1	1930.8	2028.8	2033.6
32.5°	1730.8	1749.9	1783.2	1859.4	1947.0	1972.7	1874.6	1806.1	1906.0	2006.9	1967.0
35°	1675.6	1689.9	1716.6	1798.4	1872.7	1929.8	1832.7	1761.3	1888.9	1973.6	1903.2
37.5°	1620.4	1635.6	1658.5	1727.0	1794.6	1889.8	1796.5	1716.6	1857.5	1914.6	1836.5
40°	1568.0	1576.6	1600.4	1643.3	1729.9	1848.9	1755.6	1669.9	1825.1	1839.4	1746.1
42.5°	1471.9	1514.7	1536.6	1570.9	1656.6	1792.7	1708.0	1620.4	1788.9	1764.2	1655.6
45°	1368.1	1461.4	1470.9	1505.2	1591.8	1732.8	1663.3	1571.9	1754.6	1699.4	1569.9
47.5°	1283.4	1351.0	1406.2	1434.8	1514.7	1662.3	1621.4	1530.9	1703.2	1617.6	1486.2
50°	1208.2	1244.3	1344.3	1365.3	1422.4	1577.6	1571.9	1483.3	1631.8	1514.7	1404.3
52.5°	1134.9	1160.6	1251.0	1295.8	1342.4	1486.2	1512.8	1436.7	1553.8	1411.9	1321.5
55°	1071.1	1079.6	1129.1	1223.4	1265.3	1393.8	1448.1	1382.4	1454.7	1313.8	1241.5
57.5°	1005.4	997.8	1033.9	1154.8	1185.3	1299.6	1379.5	1327.2	1374.8	1213.9	1158.7
60°	936.8	926.4	941.6	1021.6	1100.6	1206.3	1298.6	1266.2	1277.7	1114.9	1066.3
62.5°	865.4	855.0	850.2	900.6	1017.8	1110.1	1216.7	1198.6	1158.7	1024.4	952.1
65°	791.2	780.7	773.1	793.1	926.4	985.4	1125.3	1120.6	1028.2	929.2	801.6
67.5°	240.9	710.2	694.1	693.1	780.7	872.1	1026.3	1018.7	896.8	827.3	690.2
70°	217.1	576.0	612.2	603.6	641.7	756.9	913.0	907.3	769.3	663.6	610.3
72.5°	199.0	203.7	540.8	531.3	539.8	643.6	795.0	779.7	652.2	523.6	527.4
75°	170.4	179.0	186.6	448.4	437.0	533.2	666.4	642.6	537.9	432.2	440.8
77.5°	139.0	149.5	155.2	326.6	353.2	379.9	532.2	500.8	370.4	345.6	164.7
80°	103.8	112.3	121.9	130.4	268.5	265.6	395.1	363.7	258.0	215.2	128.5
82.5°	76.2	79.0	84.7	94.3	106.6	178.0	254.2	223.7	179.0	98.1	88.5
85°	47.6	51.4	54.3	57.1	64.7	106.6	125.7	100.0	75.2	60.0	56.2
87.5°	30.5	30.5	29.5	30.5	31.4	38.1	42.8	40.9	32.4	30.5	30.5
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: P#

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4
2.5°	2069.8	2056.5	2056.5	2052.6	2055.5	2055.5	2054.5	2055.5	2062.2	2066.0	2072.6
5°	2068.8	2065.0	2073.6	2084.1	2096.4	2111.7	2115.5	2128.8	2141.2	2157.4	2174.5
7.5°	2081.2	2094.5	2110.7	2127.9	2152.6	2170.7	2186.9	2203.1	2214.5	2229.7	2239.2
10°	2099.3	2126.0	2153.6	2175.5	2202.1	2217.3	2227.8	2229.7	2213.5	2187.8	2166.9
12.5°	2125.0	2156.4	2182.1	2203.1	2215.4	2209.7	2179.3	2147.8	2129.8	2103.1	2066.0
15°	2146.9	2175.5	2202.1	2193.5	2160.2	2128.8	2105.0	2067.9	2031.7	2006.9	1990.8
17.5°	2156.4	2184.0	2174.5	2129.8	2098.3	2062.2	2013.6	1985.0	1961.2	1942.2	1932.7
20°	2162.1	2157.4	2106.0	2073.6	2012.7	1979.3	1947.9	1921.3	1903.2	1893.6	1891.7
22.5°	2146.9	2088.8	2045.0	1987.0	1942.2	1914.6	1889.8	1867.9	1855.6	1848.0	1843.2
25°	2096.4	2028.8	1964.1	1918.4	1880.3	1856.5	1837.5	1819.4	1804.2	1800.3	1790.8
27.5°	2026.0	1970.8	1885.1	1849.9	1816.5	1805.1	1784.2	1766.1	1752.7	1741.3	1710.9
30°	1967.9	1880.3	1818.4	1786.1	1766.1	1752.7	1728.9	1709.9	1687.1	1645.2	1628.0
32.5°	1896.5	1809.9	1750.8	1732.8	1708.0	1696.6	1669.9	1628.0	1592.8	1575.7	1574.7
35°	1804.2	1732.8	1689.9	1673.7	1653.7	1634.7	1579.5	1541.4	1524.2	1526.2	1540.4
37.5°	1727.0	1663.3	1635.6	1612.8	1589.9	1541.4	1494.7	1476.6	1481.4	1490.9	1497.6
40°	1649.0	1600.4	1569.0	1550.9	1499.5	1451.9	1427.1	1433.8	1442.4	1449.0	1457.6
42.5°	1572.8	1538.5	1507.1	1471.9	1401.4	1375.7	1381.4	1390.0	1397.6	1407.1	1415.7
45°	1500.4	1470.0	1433.8	1353.8	1318.6	1325.3	1333.8	1340.5	1351.9	1358.6	1367.2
47.5°	1431.9	1399.5	1335.7	1265.3	1261.5	1274.8	1282.4	1291.0	1299.6	1282.4	707.4
50°	1354.8	1321.5	1224.4	1197.7	1206.3	1218.6	1228.2	1236.7	1101.5	437.9	337.0
52.5°	1278.6	1193.9	1132.0	1139.6	1148.2	1162.5	1169.1	868.3	345.6	329.4	330.4
55°	1193.9	1085.3	1067.3	1076.8	1084.4	1098.7	728.3	318.9	317.0	316.1	323.7
57.5°	1060.6	994.9	1002.5	1012.0	1019.7	719.8	310.4	308.5	309.4	310.4	311.3
60°	941.6	927.3	935.9	944.4	668.3	299.9	294.2	295.1	298.9	296.1	288.5
62.5°	847.3	858.8	867.3	759.7	284.7	281.8	284.7	281.8	275.1	270.4	260.9
65°	775.0	786.4	793.1	267.5	266.6	270.4	267.5	258.0	247.5	234.2	231.4
67.5°	698.8	710.2	254.2	247.5	251.3	246.6	235.2	223.7	216.1	204.7	199.9
70°	619.8	265.6	230.4	229.4	222.8	215.2	202.8	191.4	181.8	177.1	172.3
72.5°	447.5	210.4	207.5	199.9	188.5	178.0	167.6	160.9	156.1	153.3	150.4
75°	186.6	182.8	174.2	160.9	149.5	144.7	137.1	132.3	130.4	124.7	122.8
77.5°	156.1	148.5	136.1	126.6	120.0	117.1	111.4	105.7	102.8	101.9	98.1
80°	120.0	109.5	103.8	99.0	97.1	90.4	83.8	80.9	79.0	78.1	75.2
82.5°	81.9	78.1	74.3	67.6	67.6	64.7	61.9	60.0	58.1	58.1	56.2
85°	53.3	50.5	49.5	46.7	46.7	44.7	43.8	42.8	41.9	40.9	40.0
87.5°	30.5	30.5	31.4	30.5	30.5	29.5	28.6	27.6	26.7	26.7	24.8
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: P#

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4
2.5°	2081.2	2090.7	2092.6	2125.0	2143.1	2142.1	2136.4	2153.6	2143.1	2137.4	2143.1
5°	2191.6	2203.1	2212.6	2247.8	2260.2	2265.9	2265.0	2274.5	2266.9	2260.2	2260.2
7.5°	2245.9	2249.7	2253.5	2245.0	2239.2	2229.7	2215.4	2194.5	2184.0	2172.6	2158.3
10°	2156.4	2144.0	2148.8	2131.7	2117.4	2106.9	2093.6	2076.4	2062.2	2051.7	2035.5
12.5°	2046.9	2046.0	2047.9	2050.7	2036.5	2027.9	2017.4	2005.0	1994.6	1983.1	1969.8
15°	1980.3	1981.2	1988.9	1986.0	1981.2	1976.5	1965.1	1961.2	1951.7	1939.3	1931.7
17.5°	1932.7	1937.4	1945.1	1941.3	1933.6	1928.9	1920.3	1911.7	1903.2	1893.6	1882.2
20°	1890.8	1895.6	1900.3	1895.6	1881.3	1874.6	1863.2	1836.5	1817.5	1798.4	1781.3
22.5°	1845.1	1848.0	1844.1	1828.9	1792.7	1775.6	1762.3	1754.6	1738.5	1728.0	1717.5
25°	1788.0	1771.8	1747.0	1729.9	1715.6	1708.0	1702.3	1701.3	1699.4	1697.5	1692.8
27.5°	1694.7	1689.0	1675.6	1669.0	1669.9	1672.8	1673.7	1676.6	1673.7	1669.9	1666.1
30°	1625.2	1628.0	1629.0	1630.9	1635.6	1638.5	1639.4	1643.3	1641.4	1638.5	1636.6
32.5°	1581.4	1588.0	1591.8	1597.6	1600.4	1605.2	1605.2	1610.9	1605.2	1604.2	1602.3
35°	1545.2	1550.9	1552.8	1561.4	1564.2	1569.0	1569.0	1573.8	1569.0	1520.4	1200.5
37.5°	1509.0	1514.7	1518.5	1526.2	1527.1	1530.0	1411.9	1033.0	666.4	516.0	394.2
40°	1466.2	1472.8	1476.6	1479.5	1039.7	659.8	454.1	369.4	369.4	372.3	375.1
42.5°	1420.5	1425.2	993.0	577.9	359.9	358.9	361.8	364.6	367.5	371.3	375.1
45°	1116.8	563.6	358.0	349.4	352.3	356.1	359.9	363.7	368.4	372.3	374.2
47.5°	366.5	343.7	348.5	344.6	349.4	354.2	358.0	361.8	362.7	363.7	362.7
50°	338.9	338.9	341.8	341.8	345.6	347.5	347.5	347.5	343.7	342.7	339.9
52.5°	327.5	335.1	331.3	333.2	331.3	328.5	325.6	322.7	317.0	315.1	311.3
55°	321.8	324.7	315.1	312.3	308.5	300.9	297.0	293.2	288.5	286.6	281.8
57.5°	308.5	301.8	291.3	286.6	279.9	272.3	268.5	265.6	260.9	259.0	256.1
60°	283.7	270.4	263.7	258.0	250.4	243.7	240.9	239.0	235.2	234.2	231.4
62.5°	253.2	241.8	236.1	228.5	222.8	219.0	216.1	215.2	211.4	211.4	209.5
65°	219.9	214.2	209.5	201.8	199.0	195.2	194.2	193.3	191.4	190.4	188.5
67.5°	193.3	189.5	182.8	179.0	177.1	174.2	172.3	170.4	166.6	164.7	161.9
70°	169.5	166.6	159.9	157.1	153.3	148.5	145.7	143.8	140.9	139.0	136.1
72.5°	146.6	138.0	133.3	130.4	127.6	122.8	121.9	120.0	117.1	116.2	113.3
75°	118.1	111.4	108.5	106.6	103.8	100.9	100.9	100.9	98.1	97.1	96.2
77.5°	94.3	90.4	88.5	86.6	85.7	83.8	80.9	80.0	77.1	77.1	76.2
80°	72.4	70.5	68.5	67.6	66.6	64.7	62.8	61.9	59.0	59.0	58.1
82.5°	53.3	52.4	51.4	50.5	49.5	48.6	45.7	44.7	42.8	42.8	41.9
85°	38.1	37.1	35.2	34.3	34.3	33.3	30.5	29.5	27.6	27.6	27.6
87.5°	23.8	22.8	21.9	20.9	20.0	19.0	17.1	16.2	16.2	14.3	13.3
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: P#

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4
2.5°	2131.7	2147.8	2145.9	2157.4	2160.2	2165.9	2167.8	2168.8	2154.5	2165.9	2166.9
5°	2257.3	2260.2	2262.1	2266.9	2271.6	2272.6	2267.8	2262.1	2264.0	2260.2	2250.7
7.5°	2156.4	2142.1	2139.3	2135.5	2133.6	2131.7	2123.1	2130.7	2122.1	2118.3	2105.0
10°	2032.7	2019.3	2018.4	2018.4	2021.2	2020.3	2018.4	2014.6	2022.2	2017.4	2014.6
12.5°	1967.9	1963.1	1966.0	1964.1	1971.7	1973.6	1971.7	1971.7	1969.8	1966.0	1967.9
15°	1928.9	1925.1	1927.9	1925.1	1930.8	1931.7	1927.0	1929.8	1925.1	1920.3	1918.4
17.5°	1877.5	1868.9	1862.2	1852.7	1853.7	1851.8	1846.0	1846.0	1841.3	1828.9	1829.9
20°	1778.4	1769.9	1766.1	1766.1	1770.8	1772.7	1771.8	1773.7	1768.9	1767.0	1759.4
22.5°	1716.6	1715.6	1717.5	1722.3	1729.9	1740.4	1741.3	1741.3	1741.3	1740.4	1730.8
25°	1694.7	1694.7	1696.6	1703.2	1708.9	1716.6	1718.5	1720.4	1718.5	1718.5	1709.9
27.5°	1669.9	1668.0	1671.8	1678.5	1685.1	1690.9	1695.6	1696.6	1693.7	1693.7	1696.6
30°	1639.4	1638.5	1643.3	1649.9	1655.6	1661.3	1666.1	1669.9	1666.1	1666.1	1663.3
32.5°	1608.0	1608.0	1609.9	1569.9	1455.7	1311.0	1313.8	1230.1	1172.0	1098.7	1195.8
35°	1003.5	730.2	627.4	531.3	463.7	419.9	418.9	404.6	398.0	393.2	392.2
37.5°	378.9	380.8	384.6	386.5	389.4	391.3	392.2	392.2	392.2	392.2	391.3
40°	378.0	381.8	384.6	387.5	390.3	392.2	392.2	392.2	394.2	394.2	394.2
42.5°	378.9	382.7	386.5	389.4	391.3	392.2	392.2	394.2	394.2	394.2	394.2
45°	378.0	379.9	379.9	380.8	380.8	380.8	381.8	381.8	380.8	379.9	381.8
47.5°	363.7	363.7	360.8	359.9	358.9	357.0	358.0	357.0	356.1	355.1	357.0
50°	338.9	335.1	333.2	331.3	330.4	328.5	329.4	328.5	327.5	325.6	328.5
52.5°	309.4	308.5	304.7	302.8	301.8	302.8	300.9	299.9	298.9	298.0	298.9
55°	280.9	277.0	276.1	274.2	273.2	274.2	273.2	272.3	271.3	270.4	271.3
57.5°	255.2	252.3	251.3	249.4	249.4	249.4	249.4	248.5	247.5	246.6	247.5
60°	230.4	228.5	227.5	227.5	226.6	226.6	226.6	225.6	224.7	224.7	225.6
62.5°	209.5	209.5	206.6	205.6	205.6	206.6	205.6	204.7	203.7	202.8	204.7
65°	187.6	183.7	182.8	180.9	179.0	179.9	179.0	178.0	177.1	176.1	178.0
67.5°	160.9	159.9	156.1	154.2	153.3	154.2	153.3	152.3	151.4	150.4	152.3
70°	135.2	135.2	131.4	130.4	129.5	129.5	128.5	128.5	127.6	126.6	128.5
72.5°	112.3	112.3	111.4	109.5	108.5	107.6	106.6	105.7	105.7	106.6	106.6
75°	93.3	91.4	87.6	88.5	87.6	86.6	86.6	85.7	84.7	86.6	85.7
77.5°	73.3	72.4	69.5	70.5	69.5	68.5	68.5	67.6	66.6	67.6	67.6
80°	55.2	55.2	54.3	53.3	53.3	52.4	51.4	51.4	50.5	51.4	51.4
82.5°	40.0	40.0	39.0	38.1	37.1	37.1	36.2	36.2	36.2	36.2	36.2
85°	25.7	24.8	24.8	22.8	22.8	22.8	21.9	21.9	21.9	21.9	21.9
87.5°	12.4	12.4	11.4	11.4	10.5	9.5	9.5	8.6	8.6	9.5	9.5
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: P#

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4
2.5°	2149.8	2162.1	2151.7	2156.4	2157.4	2173.6	2172.6	2176.4	2169.7	2162.1	2151.7
5°	2259.2	2253.5	2245.9	2264.0	2254.5	2265.9	2269.7	2277.3	2277.3	2276.4	2267.8
7.5°	2119.3	2106.9	2116.4	2123.1	2126.0	2118.3	2133.6	2150.7	2165.0	2173.6	2174.5
10°	2009.8	2013.6	2012.7	2015.5	2022.2	2021.2	2030.7	2040.3	2044.1	2049.8	2051.7
12.5°	1958.4	1957.4	1959.3	1966.0	1969.8	1968.9	1978.4	1984.1	1986.0	1987.0	1986.0
15°	1917.5	1910.8	1915.5	1916.5	1919.4	1919.4	1930.8	1939.3	1943.2	1945.1	1943.2
17.5°	1840.3	1824.1	1839.4	1839.4	1849.9	1848.0	1866.0	1880.3	1887.9	1893.6	1893.6
20°	1764.2	1756.6	1762.3	1760.4	1768.0	1767.0	1778.4	1788.0	1794.6	1799.4	1805.1
22.5°	1733.7	1735.6	1727.0	1728.0	1728.0	1727.0	1732.8	1737.5	1739.4	1742.3	1740.4
25°	1713.7	1715.6	1712.8	1708.0	1706.1	1708.0	1710.9	1716.6	1717.5	1715.6	1708.9
27.5°	1693.7	1688.0	1692.8	1684.2	1682.3	1686.1	1689.9	1690.9	1691.8	1691.8	1686.1
30°	1663.3	1658.5	1663.3	1659.4	1655.6	1659.4	1662.3	1662.3	1664.2	1665.2	1658.5
32.5°	1162.5	1172.0	1326.2	1419.5	1550.9	1617.6	1629.9	1629.9	1631.8	1631.8	1626.1
35°	396.1	397.0	429.4	465.6	542.7	637.9	762.6	827.3	1046.3	1308.1	1561.4
37.5°	391.3	390.3	389.4	388.4	387.5	386.5	384.6	383.7	389.4	461.7	626.5
40°	393.2	392.2	390.3	389.4	388.4	386.5	385.6	383.7	381.8	379.9	378.0
42.5°	393.2	392.2	391.3	390.3	389.4	388.4	386.5	384.6	382.7	379.9	377.0
45°	379.9	379.9	380.8	380.8	381.8	381.8	381.8	380.8	380.8	379.9	376.1
47.5°	355.1	355.1	358.0	358.0	359.9	361.8	361.8	363.7	366.5	368.4	369.4
50°	326.6	326.6	329.4	330.4	332.3	335.1	338.0	338.9	341.8	345.6	349.4
52.5°	298.0	298.0	300.9	300.9	302.8	305.6	308.5	309.4	313.2	317.0	321.8
55°	271.3	271.3	273.2	274.2	275.1	277.0	279.9	279.9	283.7	286.6	291.3
57.5°	247.5	249.4	249.4	249.4	250.4	252.3	254.2	254.2	257.1	259.9	263.7
60°	224.7	226.6	226.6	226.6	227.5	228.5	230.4	230.4	232.3	234.2	238.0
62.5°	203.7	205.6	205.6	206.6	206.6	207.5	209.5	208.5	210.4	211.4	214.2
65°	177.1	179.0	179.9	180.9	181.8	183.7	186.6	185.7	188.5	190.4	193.3
67.5°	151.4	153.3	153.3	154.2	155.2	157.1	159.0	159.0	161.9	163.8	167.6
70°	127.6	129.5	129.5	130.4	131.4	133.3	135.2	134.2	137.1	139.0	141.9
72.5°	105.7	107.6	107.6	108.5	108.5	110.4	112.3	114.2	114.2	116.2	118.1
75°	85.7	86.6	87.6	87.6	88.5	89.5	91.4	93.3	94.3	95.2	97.1
77.5°	67.6	68.5	69.5	69.5	70.5	71.4	72.4	76.2	78.1	79.0	79.0
80°	51.4	52.4	52.4	52.4	53.3	54.3	56.2	56.2	60.0	60.0	60.9
82.5°	36.2	37.1	37.1	37.1	38.1	40.0	40.9	41.9	43.8	44.7	44.7
85°	21.9	22.8	22.8	22.8	23.8	24.8	26.7	27.6	28.6	28.6	29.5
87.5°	8.6	9.5	10.5	10.5	11.4	12.4	13.3	14.3	15.2	15.2	16.2
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: P#

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4
2.5°	2140.2	2146.9	2140.2	2144.0	2148.8	2140.2	2120.2	2112.6	2109.8	2098.3	2090.7
5°	2259.2	2259.2	2256.4	2264.0	2263.0	2249.7	2228.8	2219.3	2209.7	2197.4	2187.8
7.5°	2174.5	2182.1	2186.9	2216.4	2235.4	2237.3	2250.7	2253.5	2257.3	2253.5	2247.8
10°	2052.6	2049.8	2063.1	2090.7	2106.9	2115.5	2141.2	2153.6	2164.0	2185.0	2206.9
12.5°	1984.1	1987.9	1993.6	2013.6	2028.8	2025.0	2035.5	2044.1	2056.5	2077.4	2108.8
15°	1938.4	1942.2	1947.9	1963.1	1972.7	1967.9	1973.6	1979.3	1987.9	1998.4	2017.4
17.5°	1888.9	1895.6	1902.2	1918.4	1927.0	1926.0	1930.8	1932.7	1935.5	1942.2	1955.5
20°	1811.8	1832.7	1846.0	1867.9	1880.3	1878.4	1887.0	1889.8	1893.6	1900.3	1906.0
22.5°	1741.3	1747.0	1753.7	1777.5	1798.4	1824.1	1829.9	1837.5	1847.0	1853.7	1859.4
25°	1701.3	1697.5	1700.4	1716.6	1728.0	1729.9	1738.5	1763.2	1788.9	1800.3	1813.7
27.5°	1677.5	1673.7	1672.8	1680.4	1682.3	1677.5	1675.6	1683.2	1702.3	1721.3	1761.3
30°	1651.8	1647.1	1643.3	1649.9	1652.8	1646.1	1633.7	1627.1	1638.5	1643.3	1659.4
32.5°	1621.4	1616.6	1614.7	1618.5	1620.4	1614.7	1601.4	1593.8	1591.8	1588.0	1591.8
35°	1587.1	1582.3	1579.5	1580.4	1584.2	1579.5	1568.0	1558.5	1553.8	1543.3	1535.7
37.5°	817.8	1158.7	1504.3	1540.4	1544.2	1543.3	1531.9	1521.4	1516.6	1504.3	1500.4
40°	374.2	418.0	627.4	819.7	1182.5	1502.4	1491.9	1481.4	1472.8	1469.0	1454.7
42.5°	373.2	374.2	375.1	370.4	458.9	781.6	1153.9	1440.5	1434.8	1425.2	1414.8
45°	373.2	368.4	372.3	366.5	368.4	367.5	457.9	738.8	1314.8	1373.8	1369.1
47.5°	369.4	366.5	370.4	365.6	359.9	362.7	358.9	363.7	567.4	962.5	1318.6
50°	352.3	354.2	360.8	359.9	355.1	358.9	352.3	358.0	353.2	387.5	746.4
52.5°	326.6	330.4	337.0	342.7	344.6	349.4	347.5	349.4	345.6	346.6	347.5
55°	296.1	300.9	306.6	315.1	318.9	326.6	332.3	335.1	339.9	338.9	331.3
57.5°	267.5	272.3	277.0	285.6	294.2	298.0	308.5	314.2	326.6	323.7	321.8
60°	240.9	244.7	249.4	251.3	261.8	268.5	278.0	283.7	299.9	303.7	309.4
62.5°	217.1	219.0	222.8	225.6	232.3	239.0	243.7	253.2	261.8	274.2	282.8
65°	195.2	197.1	199.9	201.8	202.8	212.3	215.2	225.6	228.5	241.8	249.4
67.5°	170.4	174.2	178.0	179.9	181.8	187.6	189.5	194.2	200.9	206.6	216.1
70°	144.7	147.6	151.4	154.2	158.0	161.9	167.6	170.4	175.2	179.0	186.6
72.5°	120.9	123.8	125.7	128.5	131.4	134.2	139.0	145.7	149.5	156.1	158.0
75°	98.1	100.9	102.8	104.7	107.6	109.5	111.4	118.1	121.9	127.6	133.3
77.5°	80.9	80.9	82.8	88.5	87.6	87.6	89.5	93.3	96.2	100.0	105.7
80°	62.8	63.8	64.7	69.5	70.5	71.4	70.5	73.3	76.2	77.1	80.9
82.5°	46.7	47.6	47.6	50.5	53.3	53.3	53.3	54.3	57.1	58.1	60.0
85°	31.4	32.4	33.3	34.3	36.2	37.1	38.1	38.1	40.0	40.9	41.9
87.5°	17.1	19.0	20.0	20.9	21.9	22.8	23.8	24.8	25.7	26.7	27.6
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: P#

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4	2077.4
2.5°	2087.9	2083.1	2080.3	2072.6	2070.7	2058.4	2060.3	2058.4	2058.4	2061.2	2070.7
5°	2177.4	2154.5	2148.8	2132.6	2119.3	2096.4	2082.2	2074.5	2063.1	2058.4	2065.0
7.5°	2238.3	2221.2	2206.9	2192.6	2173.6	2146.9	2126.9	2104.1	2085.0	2066.9	2062.2
10°	2227.8	2246.9	2246.9	2238.3	2220.2	2193.5	2169.7	2141.2	2107.9	2079.3	2062.2
12.5°	2139.3	2172.6	2199.3	2219.3	2237.3	2219.3	2195.5	2172.6	2135.5	2093.6	2062.2
15°	2042.2	2076.4	2109.8	2151.7	2195.5	2213.5	2212.6	2185.9	2152.6	2108.8	2065.0
17.5°	1973.6	1997.4	2015.5	2061.2	2114.5	2161.2	2192.6	2194.5	2162.1	2123.1	2066.0
20°	1922.2	1939.3	1954.6	1980.3	2026.9	2084.1	2142.1	2174.5	2168.8	2126.0	2068.8
22.5°	1875.6	1887.9	1900.3	1919.4	1956.5	1993.6	2061.2	2127.9	2156.4	2121.2	2066.0
25°	1828.9	1842.2	1851.8	1865.1	1894.6	1925.1	1972.7	2055.5	2119.3	2117.4	2060.3
27.5°	1773.7	1791.8	1803.2	1821.3	1841.3	1864.1	1896.5	1974.6	2066.0	2098.3	2045.0
30°	1707.0	1733.7	1750.8	1770.8	1788.0	1808.0	1833.7	1881.3	1994.6	2061.2	2028.8
32.5°	1610.9	1658.5	1696.6	1715.6	1734.7	1751.8	1774.6	1814.6	1907.0	2010.8	2010.8
35°	1542.3	1564.2	1598.5	1653.7	1677.5	1694.7	1715.6	1747.0	1806.1	1950.8	1981.2
37.5°	1489.0	1497.6	1514.7	1569.0	1613.7	1641.4	1662.3	1682.3	1740.4	1868.9	1943.2
40°	1449.0	1446.2	1444.3	1470.0	1533.8	1577.6	1601.4	1621.4	1666.1	1770.8	1892.7
42.5°	1402.4	1399.5	1390.0	1396.7	1428.1	1501.4	1537.6	1559.5	1596.6	1668.0	1837.5
45°	1353.8	1349.1	1345.3	1338.6	1350.0	1391.0	1465.2	1497.6	1518.5	1582.3	1768.0
47.5°	1304.3	1297.7	1292.9	1287.2	1280.5	1299.6	1370.0	1428.1	1464.3	1504.3	1684.2
50°	1233.9	1242.4	1236.7	1230.1	1224.4	1220.5	1250.1	1345.3	1390.0	1422.4	1582.3
52.5°	581.7	1131.0	1178.7	1172.0	1164.4	1157.7	1164.4	1236.7	1317.7	1343.4	1459.5
55°	331.3	503.6	1048.2	1108.2	1101.5	1092.0	1086.3	1111.1	1232.0	1266.2	1347.2
57.5°	318.9	319.9	462.7	998.7	1035.8	1027.3	1020.6	1026.3	1129.1	1187.2	1249.1
60°	308.5	308.5	308.5	441.8	954.9	957.8	949.2	939.7	984.4	1098.7	1150.1
62.5°	285.6	291.3	294.2	294.2	436.0	884.5	875.9	873.0	874.9	992.0	1051.1
65°	256.1	269.4	275.1	279.0	279.0	457.9	800.7	795.9	789.3	834.0	951.1
67.5°	223.7	237.1	249.4	257.1	258.0	266.6	477.9	716.9	707.4	708.3	844.5
70°	190.4	201.8	215.2	226.6	237.1	241.8	249.4	595.0	626.5	613.1	723.6
72.5°	164.7	169.5	179.0	190.4	202.8	214.2	220.9	237.1	543.6	529.3	550.3
75°	137.1	140.9	147.6	155.2	164.7	178.0	189.5	200.9	288.5	443.7	440.8
77.5°	106.6	113.3	120.9	125.7	130.4	140.0	155.2	166.6	178.0	299.9	353.2
80°	81.9	86.6	90.4	95.2	100.9	107.6	113.3	126.6	140.0	150.4	270.4
82.5°	60.9	63.8	66.6	68.5	70.5	74.3	84.7	89.5	98.1	107.6	127.6
85°	42.8	44.7	46.7	47.6	48.6	49.5	53.3	54.3	62.8	64.7	77.1
87.5°	27.6	28.6	30.5	31.4	31.4	32.4	33.3	33.3	33.3	31.4	38.1
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: P#

CATALOG NUMBER: 4SNLED-LD5-46SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	2077.4	2077.4
2.5°	2078.3	2093.6
5°	2075.5	2095.5
7.5°	2067.9	2086.9
10°	2056.5	2079.3
12.5°	2044.1	2066.0
15°	2033.6	2049.8
17.5°	2022.2	2031.7
20°	2006.9	2014.6
22.5°	1991.7	1987.9
25°	1974.6	1966.0
27.5°	1952.7	1936.5
30°	1932.7	1904.1
32.5°	1913.6	1867.0
35°	1887.9	1828.9
37.5°	1861.3	1789.9
40°	1829.9	1745.1
42.5°	1796.5	1700.4
45°	1754.6	1657.5
47.5°	1717.5	1606.1
50°	1666.1	1550.9
52.5°	1603.3	1499.5
55°	1529.0	1436.7
57.5°	1449.0	1371.0
60°	1363.4	1295.8
62.5°	1259.6	1217.7
65°	1137.7	1128.2
67.5°	978.7	1029.2
70°	802.6	915.9
72.5°	671.2	795.9
75°	550.3	661.7
77.5°	436.0	518.9
80°	272.3	379.9
82.5°	182.8	249.4
85°	110.4	119.0
87.5°	42.8	43.8
90°	0.0	0.0

(END OF REPORT)