

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-LD5-50SL-RW-UNV-L930-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-LD5-50SL-RW-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

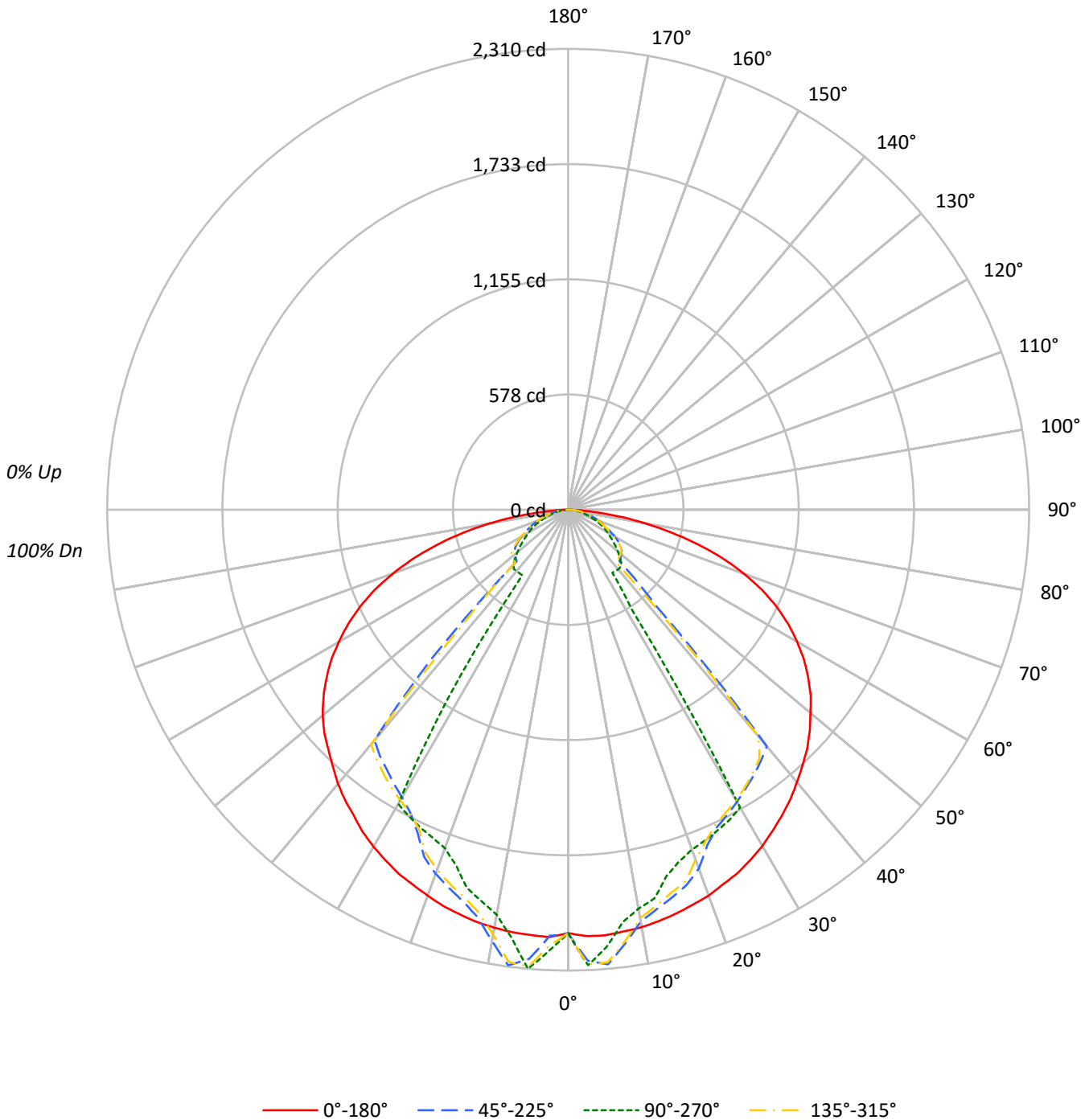
Lumens per Lamp: N/A
Luminaire Lumens: 4251.0 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-RW-UNV-L930-CD1-U

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°	17154	17154	17154	17154
5°	17323	17284	17315	18139
10°	17340	15627	17364	15866
15°	17378	14458	17419	14916
20°	17504	13713	17504	13662
25°	17656	13451	17681	13326
30°	17835	13214	17879	13057
35°	18042	3010	18080	3139
40°	18331	3129	18441	3231
45°	18771	3113	18835	3226
50°	19208	2814	19468	2890
55°	19800	2498	19958	2534
60°	20301	2220	20346	2249
65°	20660	1938	20608	1907
70°	20364	1562	20301	1505
75°	18908	1202	19042	1151
80°	15346	854	15959	781
85°	8307	512	8772	393



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.9	4.9
10°-20°	574.3	13.5
20°-30°	850.6	20.0
30°-40°	857.1	20.2
40°-50°	669.5	15.7
50°-60°	517.1	12.2
60°-70°	347.2	8.2
70°-80°	177.1	4.2
80°-90°	49.3	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°	1633.7	38.4
0°-40°	2490.8	58.6
0°-60°	3677.4	86.5
0°-90°	4251.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4251.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2123	2123	2123	2123	2123	
5°	2141	2201	2140	2310	2141	204
15°	2095	1902	2100	1962	2095	592
25°	2009	1773	2012	1756	2009	927
35°	1869	385	1873	402	1869	1171
45°	1694	375	1700	388	1694	1306
55°	1468	272	1480	276	1468	1311
65°	1153	183	1150	180	1153	1134
75°	676	92	681	88	676	707
85°	122	29	128	22	122	167
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°	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8
2.5°	2139.4	2147.2	2153.0	2156.9	2158.8	2158.8	2159.8	2160.8	2173.4	2179.3	2183.2
5°	2141.3	2149.1	2160.8	2176.3	2190.0	2201.6	2211.4	2225.0	2238.6	2253.2	2258.1
7.5°	2132.6	2142.3	2165.6	2193.9	2220.1	2238.6	2251.3	2260.0	2266.8	2267.8	2272.7
10°	2124.8	2142.3	2174.4	2211.4	2244.5	2266.8	2266.8	2262.0	2268.8	2242.5	2216.2
12.5°	2111.2	2130.6	2174.4	2223.0	2254.2	2262.9	2259.0	2239.6	2199.7	2167.6	2153.0
15°	2094.6	2120.9	2175.4	2229.9	2256.1	2259.0	2222.1	2172.5	2142.3	2122.8	2098.5
17.5°	2076.1	2111.2	2176.3	2230.8	2240.6	2226.9	2156.9	2125.8	2094.6	2048.9	2015.8
20°	2058.6	2092.7	2168.6	2217.2	2223.0	2161.8	2107.3	2074.2	2021.7	1981.8	1967.2
22.5°	2031.4	2071.3	2161.8	2198.7	2176.3	2105.3	2052.8	2000.3	1952.6	1940.9	1923.4
25°	2009.0	2050.8	2146.2	2176.3	2117.0	2053.8	1992.5	1931.2	1908.8	1892.3	1876.7
27.5°	1978.9	2030.4	2125.8	2135.5	2053.8	1998.3	1908.8	1881.6	1861.1	1842.6	1835.8
30°	1945.8	2009.0	2097.5	2079.1	2001.2	1919.5	1853.4	1828.1	1813.5	1794.0	1786.2
32.5°	1907.8	1976.9	2066.4	2013.9	1944.8	1842.6	1799.8	1780.4	1760.9	1746.3	1697.7
35°	1868.9	1948.7	2029.4	1951.6	1876.7	1784.3	1746.3	1728.8	1710.3	1656.8	1606.2
37.5°	1829.0	1917.6	1984.7	1884.5	1786.2	1724.0	1691.9	1672.4	1630.6	1562.5	1537.2
40°	1783.3	1879.6	1927.3	1815.4	1707.4	1662.7	1632.5	1613.0	1518.7	1488.5	1480.7
42.5°	1737.6	1842.6	1857.2	1748.3	1642.2	1597.5	1572.2	1508.0	1443.8	1428.2	1431.1
45°	1693.8	1802.8	1780.4	1652.9	1574.1	1537.2	1494.4	1405.8	1371.8	1379.6	1381.5
47.5°	1641.3	1755.1	1699.6	1557.6	1504.1	1467.1	1371.8	1318.3	1313.4	1324.1	1329.9
50°	1584.8	1701.6	1614.0	1471.0	1428.2	1384.4	1276.4	1249.2	1255.0	1265.7	1272.5
52.5°	1532.3	1641.3	1525.5	1390.3	1353.3	1253.1	1180.1	1185.0	1194.7	1207.4	1211.2
55°	1468.1	1568.3	1431.1	1308.5	1273.5	1142.2	1109.1	1120.8	1130.5	1141.2	1149.0
57.5°	1401.0	1484.6	1319.2	1217.1	1160.7	1043.9	1046.8	1054.6	1061.4	1074.1	443.6
60°	1324.1	1389.3	1196.7	1132.4	1020.6	966.1	969.0	982.6	989.4	552.6	305.5
62.5°	1244.3	1278.4	1085.7	1036.1	892.1	888.2	901.9	907.7	617.8	291.9	286.0
65°	1152.9	1146.1	976.8	898.0	804.6	808.5	823.1	793.9	273.4	273.4	271.4
67.5°	1051.7	1010.8	870.7	743.3	719.9	728.7	744.3	259.8	253.0	254.9	248.1
70°	935.9	878.5	760.8	629.5	637.2	646.0	251.0	235.4	232.5	227.7	214.0
72.5°	813.3	734.5	622.6	546.8	551.6	346.3	219.9	212.1	202.4	192.6	178.0
75°	676.2	574.0	457.3	457.3	464.1	197.5	191.7	179.0	168.3	155.7	146.9
77.5°	530.2	441.7	355.1	368.7	180.0	165.4	154.7	141.1	132.3	124.5	119.7
80°	388.2	308.4	267.5	239.3	140.1	125.5	114.8	107.0	103.1	98.3	92.4
82.5°	254.9	185.8	185.8	112.9	98.3	86.6	83.7	77.8	73.9	71.0	68.1
85°	121.6	108.0	81.7	69.1	61.3	55.5	53.5	50.6	50.6	49.6	48.6
87.5°	44.8	48.6	36.0	35.0	33.1	32.1	33.1	33.1	34.1	33.1	32.1
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°	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8
2.5°	2192.9	2200.7	2206.5	2216.2	2228.9	2239.6	2249.3	2262.9	2284.3	2290.2	2295.0
5°	2258.1	2261.0	2267.8	2275.6	2277.5	2282.4	2281.4	2287.3	2290.2	2297.0	2282.4
7.5°	2262.0	2246.4	2227.9	2211.4	2199.7	2189.0	2182.2	2192.9	2198.7	2203.6	2189.0
10°	2180.2	2161.8	2151.1	2141.3	2129.7	2113.1	2090.7	2095.6	2093.7	2093.7	2088.8
12.5°	2128.7	2102.4	2075.2	2050.8	2040.1	2039.2	2040.1	2050.8	2050.8	2049.9	2044.0
15°	2047.9	2022.6	2009.0	2003.2	2003.2	2000.3	2000.3	2011.9	2009.0	2009.0	2006.1
17.5°	1994.4	1976.9	1967.2	1960.4	1957.4	1962.3	1968.2	1973.0	1974.0	1970.1	1954.5
20°	1950.6	1934.1	1922.4	1924.4	1923.4	1926.3	1929.2	1912.7	1892.3	1865.0	1852.4
22.5°	1904.9	1892.3	1883.5	1883.5	1871.8	1853.4	1826.1	1820.3	1817.4	1804.7	1794.0
25°	1861.1	1846.5	1833.9	1795.0	1770.7	1773.6	1768.7	1759.0	1758.0	1757.0	1760.9
27.5°	1817.4	1779.4	1730.8	1724.9	1715.2	1714.2	1720.1	1724.9	1724.9	1728.8	1733.7
30°	1726.9	1683.1	1674.3	1663.6	1667.5	1681.1	1684.1	1690.9	1692.8	1699.6	1703.5
32.5°	1644.2	1624.7	1616.9	1621.8	1634.5	1646.1	1652.9	1655.9	1660.7	1666.6	1671.4
35°	1577.1	1571.2	1578.0	1588.7	1601.4	1611.1	1616.9	1622.8	1627.6	1632.5	1636.4
37.5°	1527.4	1531.3	1541.1	1554.7	1567.3	1575.1	1580.0	1586.8	1593.6	1599.4	1576.1
40°	1480.7	1490.5	1501.2	1515.8	1526.5	1534.2	1539.1	1547.9	1489.5	674.2	369.7
42.5°	1439.9	1450.6	1458.4	1470.0	1481.7	1487.5	1444.7	645.0	364.8	362.9	367.8
45°	1390.3	1399.0	1411.7	1420.4	1431.1	939.8	359.0	362.9	357.0	360.9	362.9
47.5°	1339.7	1353.3	1360.1	1297.8	386.2	357.0	353.2	357.0	353.2	358.0	355.1
50°	1282.3	1298.8	924.2	349.3	346.3	344.4	348.3	346.3	349.3	353.2	345.4
52.5°	1223.9	757.9	338.6	336.6	338.6	336.6	343.4	338.6	339.5	335.6	325.9
55°	414.4	327.9	324.9	324.0	329.8	329.8	329.8	322.0	317.2	307.4	300.6
57.5°	317.2	317.2	316.2	317.2	315.2	313.3	304.5	297.7	290.9	277.3	273.4
60°	300.6	300.6	300.6	300.6	291.9	288.0	274.4	268.5	256.8	250.0	246.1
62.5°	287.0	285.1	276.3	273.4	263.7	253.0	245.2	239.3	227.7	223.8	220.8
65°	267.5	260.7	250.0	238.4	233.5	221.8	217.9	209.2	203.3	200.4	198.5
67.5°	235.4	225.7	217.0	209.2	200.4	196.5	191.7	184.8	181.0	179.0	177.1
70°	201.4	194.6	185.8	181.0	175.1	172.2	165.4	163.4	160.5	157.6	154.7
72.5°	168.3	164.4	160.5	153.7	151.8	149.8	143.0	139.1	135.2	131.3	129.4
75°	141.1	138.1	136.2	130.4	127.4	121.6	116.7	113.8	110.9	108.0	106.0
77.5°	115.8	113.8	108.0	104.1	102.2	97.3	95.3	96.3	94.4	90.5	88.5
80°	90.5	88.5	83.7	83.7	81.7	79.8	77.8	75.9	73.9	71.0	69.1
82.5°	69.1	67.1	65.2	63.2	61.3	60.3	59.3	57.4	55.5	53.5	52.5
85°	48.6	47.7	46.7	45.7	44.8	43.8	42.8	40.9	38.9	37.9	37.0
87.5°	33.1	32.1	31.1	30.2	29.2	28.2	27.2	26.3	24.3	23.3	22.4
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):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8
2.5°	2295.0	2299.9	2295.0	2284.3	2277.5	2274.6	2280.4	2280.4	2284.3	2289.2	2290.2
5°	2259.0	2247.4	2233.7	2220.1	2213.3	2209.4	2198.7	2200.7	2203.6	2205.5	2207.5
7.5°	2169.5	2154.0	2135.5	2118.0	2111.2	2105.3	2092.7	2092.7	2092.7	2093.7	2099.5
10°	2078.1	2071.3	2063.5	2051.8	2043.1	2040.1	2029.4	2032.4	2030.4	2033.3	2040.1
12.5°	2035.3	2027.5	2020.7	2009.0	1999.3	1995.4	1990.5	1993.4	1992.5	1997.3	2003.2
15°	1996.4	1992.5	1984.7	1975.9	1967.2	1959.4	1941.9	1936.0	1932.2	1927.3	1934.1
17.5°	1932.2	1904.9	1886.4	1872.8	1863.1	1856.3	1851.4	1851.4	1854.3	1857.2	1863.1
20°	1844.6	1836.8	1828.1	1813.5	1803.7	1799.8	1796.9	1796.9	1801.8	1805.7	1816.4
22.5°	1784.3	1783.3	1780.4	1773.6	1768.7	1768.7	1769.7	1771.6	1778.4	1784.3	1795.0
25°	1756.1	1760.0	1758.0	1754.1	1751.2	1752.2	1750.2	1752.2	1759.0	1764.8	1773.6
27.5°	1733.7	1739.5	1737.6	1731.7	1726.9	1728.8	1731.7	1729.8	1735.6	1742.4	1749.3
30°	1703.5	1704.5	1708.4	1701.6	1699.6	1702.6	1703.5	1705.5	1711.3	1716.2	1722.0
32.5°	1669.5	1677.3	1676.3	1669.5	1669.5	1672.4	1673.4	1608.2	1486.6	1280.3	1223.9
35°	1636.4	1645.2	1630.6	1374.7	951.5	507.8	392.1	378.5	381.4	383.3	385.3
37.5°	1210.3	574.0	365.8	368.7	371.6	374.6	377.5	380.4	383.3	386.2	387.2
40°	363.9	362.9	365.8	369.7	372.6	374.6	378.5	381.4	384.3	387.2	388.2
42.5°	360.0	361.9	364.8	368.7	372.6	376.5	379.4	383.3	385.3	387.2	388.2
45°	358.0	361.9	365.8	368.7	371.6	373.6	375.5	376.5	375.5	375.5	377.5
47.5°	355.1	359.0	360.0	359.0	360.0	359.0	359.0	359.0	356.1	355.1	355.1
50°	344.4	344.4	342.5	338.6	337.6	336.6	334.7	333.7	329.8	328.8	328.8
52.5°	322.0	321.1	318.1	313.3	311.3	309.4	308.4	307.4	303.5	301.6	302.6
55°	295.8	293.8	290.9	285.1	284.1	282.1	281.2	280.2	276.3	278.2	275.3
57.5°	271.4	267.5	263.7	262.7	258.8	257.8	256.8	255.9	253.0	253.9	252.0
60°	242.2	241.3	239.3	235.4	235.4	234.5	234.5	232.5	230.6	229.6	229.6
62.5°	220.8	217.9	216.0	216.0	213.1	213.1	213.1	211.1	209.2	210.1	209.2
65°	197.5	196.5	195.6	193.6	193.6	192.6	192.6	190.7	187.8	188.7	186.8
67.5°	178.0	176.1	174.1	173.2	169.3	167.3	166.4	165.4	161.5	162.5	160.5
70°	153.7	150.8	148.9	146.9	144.0	142.0	142.0	140.1	137.2	138.1	136.2
72.5°	128.4	126.5	124.5	123.6	120.6	119.7	118.7	117.7	114.8	115.8	114.8
75°	107.0	107.0	106.0	105.1	102.2	99.2	97.3	96.3	94.4	95.3	93.4
77.5°	88.5	86.6	84.6	84.6	81.7	79.8	77.8	77.8	77.8	76.9	75.9
80°	69.1	67.1	67.1	66.2	64.2	62.3	61.3	61.3	60.3	60.3	59.3
82.5°	52.5	50.6	49.6	49.6	47.7	46.7	45.7	44.8	44.8	44.8	43.8
85°	37.0	35.0	34.1	34.1	32.1	31.1	31.1	30.2	30.2	29.2	29.2
87.5°	22.4	21.4	20.4	20.4	18.5	17.5	17.5	17.5	16.5	16.5	15.6
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-LD5-50SL-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°	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8
2.5°	2290.2	2290.2	2283.4	2285.3	2282.4	2286.3	2281.4	2281.4	2287.3	2287.3	2291.1
5°	2208.5	2203.6	2202.6	2200.7	2190.9	2194.8	2190.0	2185.1	2191.9	2191.9	2200.7
7.5°	2096.6	2087.8	2091.7	2085.9	2080.0	2071.3	2074.2	2070.3	2075.2	2082.0	2090.7
10°	2039.2	2031.4	2036.3	2030.4	2033.3	2020.7	2021.7	2022.6	2027.5	2029.4	2037.2
12.5°	2002.2	2000.3	1998.3	1996.4	1998.3	1991.5	1987.6	1988.6	1990.5	1991.5	1997.3
15°	1924.4	1911.7	1915.6	1902.0	1903.0	1903.9	1896.2	1903.9	1903.0	1915.6	1927.3
17.5°	1861.1	1861.1	1854.3	1848.5	1844.6	1843.6	1837.8	1841.7	1837.8	1845.6	1848.5
20°	1817.4	1816.4	1815.4	1812.5	1802.8	1803.7	1806.7	1797.9	1796.9	1795.9	1801.8
22.5°	1796.9	1797.9	1794.0	1794.0	1785.2	1787.2	1788.2	1778.4	1779.4	1776.5	1779.4
25°	1775.5	1777.5	1772.6	1772.6	1770.7	1769.7	1764.8	1766.8	1760.9	1756.1	1760.9
27.5°	1750.2	1754.1	1750.2	1752.2	1748.3	1746.3	1743.4	1741.5	1735.6	1734.7	1737.6
30°	1726.9	1728.8	1727.8	1723.0	1722.0	1716.2	1719.1	1713.3	1707.4	1708.4	1710.3
32.5°	885.3	845.4	651.8	588.6	582.8	604.2	716.0	871.7	1129.5	1379.6	1559.5
35°	386.2	386.2	386.2	385.3	385.3	384.3	383.3	382.3	381.4	380.4	379.4
37.5°	388.2	388.2	388.2	388.2	387.2	386.2	386.2	384.3	383.3	382.3	381.4
40°	389.2	390.1	390.1	390.1	389.2	389.2	388.2	386.2	385.3	383.3	381.4
42.5°	388.2	389.2	389.2	388.2	388.2	387.2	387.2	386.2	385.3	384.3	383.3
45°	375.5	376.5	374.6	374.6	373.6	373.6	373.6	373.6	373.6	374.6	374.6
47.5°	353.2	353.2	352.2	351.2	351.2	350.2	351.2	350.2	352.2	353.2	355.1
50°	326.9	326.9	324.9	324.0	324.0	324.0	324.0	324.9	325.9	327.9	329.8
52.5°	299.6	299.6	298.7	297.7	296.7	296.7	299.6	298.7	299.6	300.6	303.5
55°	273.4	274.4	272.4	272.4	271.4	271.4	271.4	272.4	273.4	274.4	277.3
57.5°	251.0	251.0	249.1	249.1	249.1	248.1	251.0	249.1	250.0	251.0	253.0
60°	228.6	227.7	227.7	226.7	226.7	226.7	228.6	227.7	227.7	228.6	230.6
62.5°	208.2	208.2	207.2	207.2	206.3	206.3	208.2	207.2	207.2	208.2	209.2
65°	184.8	184.8	183.9	182.9	185.8	182.9	185.8	183.9	185.8	186.8	188.7
67.5°	158.6	158.6	158.6	157.6	157.6	159.6	160.5	158.6	159.6	161.5	162.5
70°	135.2	135.2	134.3	134.3	134.3	136.2	137.2	135.2	136.2	137.2	139.1
72.5°	114.8	112.9	112.9	111.9	113.8	113.8	114.8	113.8	114.8	114.8	116.7
75°	94.4	92.4	92.4	92.4	94.4	93.4	94.4	93.4	94.4	94.4	95.3
77.5°	75.9	74.9	73.9	73.9	75.9	75.9	75.9	74.9	75.9	76.9	77.8
80°	59.3	58.4	57.4	57.4	59.3	59.3	59.3	60.3	59.3	60.3	61.3
82.5°	43.8	42.8	41.8	43.8	43.8	43.8	43.8	44.8	43.8	44.8	45.7
85°	29.2	28.2	27.2	29.2	29.2	29.2	29.2	30.2	29.2	30.2	31.1
87.5°	15.6	14.6	14.6	15.6	15.6	15.6	16.5	16.5	16.5	17.5	17.5
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-LD5-50SL-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°	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8
2.5°	2297.0	2299.9	2298.9	2293.1	2287.3	2280.4	2275.6	2276.6	2286.3	2289.2	2280.4
5°	2200.7	2219.2	2219.2	2231.8	2225.0	2219.2	2223.0	2244.5	2255.2	2271.7	2277.5
7.5°	2101.4	2110.2	2109.2	2121.9	2119.9	2119.9	2122.8	2151.1	2164.7	2178.3	2182.2
10°	2046.0	2054.7	2053.8	2054.7	2051.8	2045.0	2045.0	2057.7	2069.3	2076.1	2078.1
12.5°	2006.1	2011.0	2010.0	2010.0	2008.0	2002.2	2001.2	2011.9	2024.6	2033.3	2034.3
15°	1946.7	1960.4	1963.3	1975.9	1973.0	1965.2	1967.2	1975.9	1983.7	1991.5	1988.6
17.5°	1858.2	1865.0	1866.0	1870.9	1868.9	1868.9	1880.6	1912.7	1934.1	1952.6	1954.5
20°	1807.6	1812.5	1810.5	1821.2	1816.4	1815.4	1818.3	1831.9	1841.7	1850.4	1866.0
22.5°	1783.3	1787.2	1784.3	1785.2	1776.5	1768.7	1766.8	1777.5	1788.2	1799.8	1799.8
25°	1762.9	1765.8	1764.8	1762.9	1756.1	1745.4	1743.4	1745.4	1749.3	1750.2	1743.4
27.5°	1738.5	1740.5	1740.5	1741.5	1732.7	1723.0	1721.0	1719.1	1723.0	1722.0	1711.3
30°	1713.3	1710.3	1711.3	1712.3	1704.5	1695.7	1691.9	1690.9	1694.8	1693.8	1683.1
32.5°	1652.9	1675.3	1677.3	1679.2	1672.4	1664.6	1660.7	1657.8	1659.7	1658.8	1649.0
35°	378.5	385.3	471.9	1068.2	1450.6	1606.2	1622.8	1618.9	1619.9	1619.9	1612.1
37.5°	379.4	378.5	377.5	374.6	371.6	369.7	639.2	1363.0	1579.0	1580.0	1573.2
40°	379.4	378.5	377.5	375.5	371.6	368.7	363.9	360.0	368.7	811.4	1484.6
42.5°	381.4	379.4	377.5	375.5	371.6	367.8	363.9	359.0	361.9	360.0	355.1
45°	375.5	374.6	374.6	373.6	371.6	367.8	362.9	357.0	354.1	357.0	352.2
47.5°	357.0	358.0	360.9	361.9	361.9	362.9	360.0	356.1	351.2	354.1	348.3
50°	331.8	333.7	334.7	339.5	341.5	345.4	346.3	346.3	345.4	349.3	345.4
52.5°	304.5	306.5	311.3	313.3	315.2	321.1	323.0	325.9	327.9	333.7	337.6
55°	278.2	279.2	281.2	285.1	288.0	292.8	295.8	298.7	303.5	306.5	318.1
57.5°	253.9	254.9	258.8	259.8	261.7	265.6	268.5	272.4	276.3	278.2	291.9
60°	230.6	231.5	234.5	235.4	236.4	240.3	243.2	246.1	249.1	251.0	260.7
62.5°	210.1	210.1	213.1	213.1	214.0	217.0	218.9	220.8	223.8	224.7	229.6
65°	189.7	190.7	192.6	192.6	193.6	195.6	196.5	197.5	200.4	200.4	204.3
67.5°	164.4	165.4	168.3	170.3	171.2	175.1	176.1	177.1	179.0	180.0	181.9
70°	140.1	141.1	144.0	145.0	145.9	148.9	150.8	153.7	156.6	159.6	161.5
72.5°	117.7	118.7	121.6	121.6	124.5	125.5	127.4	128.4	131.3	133.3	136.2
75°	96.3	97.3	100.2	100.2	103.1	104.1	105.1	106.0	108.0	109.9	111.9
77.5°	78.8	78.8	82.7	84.6	86.6	86.6	87.6	87.6	87.6	88.5	90.5
80°	62.3	62.3	65.2	67.1	69.1	69.1	70.0	71.0	72.0	72.0	73.0
82.5°	46.7	46.7	49.6	50.6	52.5	52.5	52.5	53.5	54.5	53.5	55.5
85°	32.1	32.1	34.1	35.0	37.0	37.0	37.0	37.9	38.9	37.9	38.9
87.5°	18.5	19.5	20.4	21.4	22.4	23.3	23.3	23.3	24.3	24.3	25.3
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-LD5-50SL-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°	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8
2.5°	2270.7	2259.0	2258.1	2244.5	2240.6	2241.5	2230.8	2226.9	2209.4	2205.5	2187.1
5°	2279.5	2285.3	2282.4	2281.4	2284.3	2282.4	2274.6	2270.7	2267.8	2260.0	2244.5
7.5°	2183.2	2187.1	2190.0	2202.6	2213.3	2231.8	2251.3	2263.9	2273.6	2275.6	2262.9
10°	2084.9	2103.4	2116.0	2135.5	2151.1	2161.8	2173.4	2184.1	2212.3	2240.6	2257.1
12.5°	2034.3	2039.2	2038.2	2048.9	2059.6	2087.8	2115.1	2130.6	2152.0	2164.7	2194.8
15°	1991.5	1992.5	1995.4	2003.2	2009.0	2018.7	2031.4	2054.7	2097.5	2117.0	2133.5
17.5°	1952.6	1952.6	1954.5	1961.3	1969.1	1977.9	1985.7	1995.4	2016.8	2048.9	2089.8
20°	1890.3	1917.6	1920.5	1919.5	1923.4	1939.9	1941.9	1959.4	1970.1	1982.7	2022.6
22.5°	1797.9	1814.4	1837.8	1873.8	1887.4	1895.2	1901.0	1908.8	1925.3	1939.9	1956.5
25°	1747.3	1758.0	1764.8	1775.5	1803.7	1849.5	1858.2	1867.0	1877.7	1888.4	1908.8
27.5°	1702.6	1701.6	1706.4	1716.2	1724.0	1748.3	1791.1	1825.1	1827.1	1842.6	1860.2
30°	1670.4	1664.6	1657.8	1655.9	1666.6	1679.2	1691.9	1745.4	1782.3	1790.1	1808.6
32.5°	1640.3	1630.6	1620.8	1613.0	1606.2	1616.9	1624.7	1648.1	1695.7	1740.5	1750.2
35°	1603.3	1593.6	1581.9	1573.2	1562.5	1561.5	1560.5	1582.9	1598.5	1652.0	1698.7
37.5°	1565.4	1554.7	1544.9	1535.2	1524.5	1516.7	1511.9	1517.7	1532.3	1555.6	1633.5
40°	1525.5	1512.8	1503.1	1495.3	1480.7	1474.9	1465.2	1461.3	1462.2	1482.7	1523.5
42.5°	911.6	1453.5	1458.4	1449.6	1437.0	1429.2	1418.5	1413.6	1403.9	1413.6	1437.0
45°	351.2	355.1	1063.4	1404.8	1389.3	1379.6	1369.8	1365.0	1354.3	1346.5	1367.9
47.5°	344.4	348.3	340.5	482.6	1326.0	1329.0	1317.3	1312.4	1301.7	1295.9	1290.0
50°	339.5	342.5	336.6	338.6	331.8	1215.1	1263.8	1257.9	1246.3	1239.5	1227.8
52.5°	334.7	334.7	330.8	325.9	324.0	324.9	1022.5	1202.5	1188.9	1182.1	1166.5
55°	319.1	321.1	324.9	317.2	315.2	314.2	311.3	973.9	1125.6	1117.8	1104.2
57.5°	295.8	299.6	310.4	308.4	308.4	300.6	298.7	298.7	903.8	1052.7	1039.0
60°	268.5	272.4	284.1	288.0	290.9	288.9	287.0	286.0	282.1	952.5	970.0
62.5°	240.3	244.2	248.1	260.7	264.6	269.5	275.3	272.4	268.5	268.5	897.0
65°	210.1	216.0	217.9	229.6	234.5	243.2	248.1	254.9	253.0	252.0	256.8
67.5°	183.9	190.7	191.7	196.5	205.3	209.2	215.0	227.7	233.5	235.4	237.4
70°	161.5	165.4	168.3	170.3	176.1	177.1	187.8	196.5	205.3	215.0	217.9
72.5°	139.1	142.0	147.9	145.9	147.9	151.8	157.6	163.4	172.2	185.8	194.6
75°	113.8	115.8	119.7	121.6	125.5	128.4	132.3	137.2	145.0	151.8	163.4
77.5°	91.5	92.4	95.3	96.3	100.2	103.1	109.9	112.9	117.7	122.6	129.4
80°	73.9	73.9	74.9	74.9	77.8	80.7	85.6	88.5	94.4	98.3	98.3
82.5°	56.4	56.4	59.3	59.3	61.3	61.3	64.2	64.2	67.1	69.1	71.0
85°	39.9	40.9	42.8	41.8	43.8	42.8	44.8	46.7	47.7	46.7	45.7
87.5°	26.3	26.3	28.2	27.2	28.2	28.2	30.2	30.2	31.1	31.1	30.2
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-LD5-50SL-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°	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8
2.5°	2180.2	2165.6	2156.9	2146.2	2143.3	2140.4	2144.2	2144.2	2138.4	2133.5	2124.8
5°	2230.8	2215.3	2198.7	2181.2	2164.7	2147.2	2140.4	2139.4	2128.7	2122.8	2119.9
7.5°	2257.1	2249.3	2230.8	2206.5	2181.2	2150.1	2136.5	2128.7	2118.0	2116.0	2116.0
10°	2260.0	2251.3	2241.5	2224.0	2194.8	2154.0	2127.7	2112.1	2102.4	2109.2	2121.9
12.5°	2231.8	2248.3	2239.6	2227.9	2204.6	2154.9	2117.0	2093.7	2090.7	2108.2	2141.3
15°	2159.8	2208.5	2232.8	2221.1	2202.6	2153.0	2099.5	2072.2	2072.2	2108.2	2151.1
17.5°	2105.3	2143.3	2202.6	2212.3	2190.9	2149.1	2083.0	2050.8	2059.6	2112.1	2157.9
20°	2060.6	2083.9	2141.3	2195.8	2175.4	2140.4	2058.6	2025.6	2043.1	2106.3	2167.6
22.5°	1990.5	2037.2	2072.2	2153.0	2159.8	2123.8	2034.3	1994.4	2029.4	2106.3	2162.7
25°	1922.4	1978.9	2015.8	2094.6	2136.5	2103.4	2011.9	1961.3	2014.8	2103.4	2158.8
27.5°	1874.8	1901.0	1968.2	2024.6	2101.4	2076.1	1981.8	1925.3	1996.4	2087.8	2136.5
30°	1824.2	1841.7	1907.8	1961.3	2054.7	2045.0	1950.6	1885.5	1973.0	2073.2	2078.1
32.5°	1768.7	1788.2	1822.2	1900.0	1989.6	2015.8	1915.6	1845.6	1947.7	2050.8	2010.0
35°	1712.3	1726.9	1754.1	1837.8	1913.7	1972.0	1872.8	1799.8	1930.2	2016.8	1944.8
37.5°	1655.9	1671.4	1694.8	1764.8	1833.9	1931.2	1835.8	1754.1	1898.1	1956.5	1876.7
40°	1602.3	1611.1	1635.4	1679.2	1767.7	1889.3	1794.0	1706.4	1865.0	1879.6	1784.3
42.5°	1504.1	1547.9	1570.2	1605.3	1692.8	1831.9	1745.4	1655.9	1828.1	1802.8	1691.9
45°	1398.0	1493.4	1503.1	1538.1	1626.7	1770.7	1699.6	1606.2	1793.0	1736.6	1604.3
47.5°	1311.5	1380.5	1437.0	1466.1	1547.9	1698.7	1656.8	1564.4	1740.5	1652.9	1518.7
50°	1234.6	1271.6	1373.7	1395.1	1453.5	1612.1	1606.2	1515.8	1667.5	1547.9	1435.0
52.5°	1159.7	1185.9	1278.4	1324.1	1371.8	1518.7	1545.9	1468.1	1587.8	1442.8	1350.4
55°	1094.5	1103.3	1153.8	1250.2	1293.0	1424.3	1479.8	1412.6	1486.6	1342.6	1268.6
57.5°	1027.4	1019.6	1056.6	1180.1	1211.2	1328.0	1409.7	1356.2	1404.8	1240.4	1184.0
60°	957.3	946.6	962.2	1043.9	1124.7	1232.6	1327.0	1293.9	1305.6	1139.3	1089.6
62.5°	884.4	873.7	868.8	920.4	1040.0	1134.4	1243.3	1224.9	1184.0	1046.8	972.9
65°	808.5	797.8	790.0	810.4	946.6	1006.9	1150.0	1145.1	1050.7	949.5	819.2
67.5°	246.1	725.8	709.2	708.3	797.8	891.2	1048.8	1041.0	916.5	845.4	705.3
70°	221.8	588.6	625.6	616.8	655.7	773.4	933.0	927.2	786.1	678.1	623.6
72.5°	203.3	208.2	552.6	542.9	551.6	657.7	812.4	796.8	666.4	535.1	539.0
75°	174.1	182.9	190.7	458.2	446.6	544.8	681.0	656.7	549.7	441.7	450.4
77.5°	142.0	152.7	158.6	333.7	360.9	388.2	543.8	511.7	378.5	353.2	168.3
80°	106.0	114.8	124.5	133.3	274.4	271.4	403.7	371.6	263.7	219.9	131.3
82.5°	77.8	80.7	86.6	96.3	109.0	181.9	259.8	228.6	182.9	100.2	90.5
85°	48.6	52.5	55.5	58.4	66.2	109.0	128.4	102.2	76.9	61.3	57.4
87.5°	31.1	31.1	30.2	31.1	32.1	38.9	43.8	41.8	33.1	31.1	31.1
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-LD5-50SL-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°	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8
2.5°	2115.1	2101.4	2101.4	2097.5	2100.5	2100.5	2099.5	2100.5	2107.3	2111.2	2118.0
5°	2114.1	2110.2	2118.9	2129.7	2142.3	2157.9	2161.8	2175.4	2188.0	2204.6	2222.1
7.5°	2126.7	2140.4	2156.9	2174.4	2199.7	2218.2	2234.7	2251.3	2262.9	2278.5	2288.2
10°	2145.2	2172.5	2200.7	2223.0	2250.3	2265.9	2276.6	2278.5	2262.0	2235.7	2214.3
12.5°	2171.5	2203.6	2229.9	2251.3	2263.9	2258.1	2226.9	2194.8	2176.3	2149.1	2111.2
15°	2193.9	2223.0	2250.3	2241.5	2207.5	2175.4	2151.1	2113.1	2076.1	2050.8	2034.3
17.5°	2203.6	2231.8	2222.1	2176.3	2144.2	2107.3	2057.7	2028.5	2004.1	1984.7	1975.0
20°	2209.4	2204.6	2152.0	2118.9	2056.7	2022.6	1990.5	1963.3	1944.8	1935.1	1933.1
22.5°	2193.9	2134.5	2089.8	2030.4	1984.7	1956.5	1931.2	1908.8	1896.2	1888.4	1883.5
25°	2142.3	2073.2	2007.1	1960.4	1921.5	1897.1	1877.7	1859.2	1843.6	1839.7	1830.0
27.5°	2070.3	2013.9	1926.3	1890.3	1856.3	1844.6	1823.2	1804.7	1791.1	1779.4	1748.3
30°	2011.0	1921.5	1858.2	1825.1	1804.7	1791.1	1766.8	1747.3	1724.0	1681.1	1663.6
32.5°	1938.0	1849.5	1789.1	1770.7	1745.4	1733.7	1706.4	1663.6	1627.6	1610.1	1609.2
35°	1843.6	1770.7	1726.9	1710.3	1689.9	1670.4	1614.0	1575.1	1557.6	1559.5	1574.1
37.5°	1764.8	1699.6	1671.4	1648.1	1624.7	1575.1	1527.4	1508.9	1513.8	1523.5	1530.4
40°	1685.0	1635.4	1603.3	1584.8	1532.3	1483.7	1458.4	1465.2	1473.9	1480.7	1489.5
42.5°	1607.2	1572.2	1540.1	1504.1	1432.1	1405.8	1411.7	1420.4	1428.2	1437.9	1446.7
45°	1533.3	1502.1	1465.2	1383.4	1347.4	1354.3	1363.0	1369.8	1381.5	1388.3	1397.1
47.5°	1463.2	1430.1	1365.0	1293.0	1289.1	1302.7	1310.5	1319.2	1328.0	1310.5	722.9
50°	1384.4	1350.4	1251.1	1223.9	1232.6	1245.3	1255.0	1263.8	1125.6	447.5	344.4
52.5°	1306.6	1220.0	1156.8	1164.5	1173.3	1187.9	1194.7	887.3	353.2	336.6	337.6
55°	1220.0	1109.1	1090.6	1100.3	1108.1	1122.7	744.3	325.9	324.0	323.0	330.8
57.5°	1083.8	1016.7	1024.5	1034.2	1042.0	735.5	317.2	315.2	316.2	317.2	318.1
60°	962.2	947.6	956.3	965.1	683.0	306.5	300.6	301.6	305.5	302.6	294.8
62.5°	865.9	877.5	886.3	776.4	290.9	288.0	290.9	288.0	281.2	276.3	266.6
65°	791.9	803.6	810.4	273.4	272.4	276.3	273.4	263.7	253.0	239.3	236.4
67.5°	714.1	725.8	259.8	253.0	256.8	252.0	240.3	228.6	220.8	209.2	204.3
70°	633.3	271.4	235.4	234.5	227.7	219.9	207.2	195.6	185.8	181.0	176.1
72.5°	457.3	215.0	212.1	204.3	192.6	181.9	171.2	164.4	159.6	156.6	153.7
75°	190.7	186.8	178.0	164.4	152.7	147.9	140.1	135.2	133.3	127.4	125.5
77.5°	159.6	151.8	139.1	129.4	122.6	119.7	113.8	108.0	105.1	104.1	100.2
80°	122.6	111.9	106.0	101.2	99.2	92.4	85.6	82.7	80.7	79.8	76.9
82.5°	83.7	79.8	75.9	69.1	69.1	66.2	63.2	61.3	59.3	59.3	57.4
85°	54.5	51.6	50.6	47.7	47.7	45.7	44.8	43.8	42.8	41.8	40.9
87.5°	31.1	31.1	32.1	31.1	31.1	30.2	29.2	28.2	27.2	27.2	25.3
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-LD5-50SL-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°	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8
2.5°	2126.7	2136.5	2138.4	2171.5	2190.0	2189.0	2183.2	2200.7	2190.0	2184.1	2190.0
5°	2239.6	2251.3	2261.0	2297.0	2309.6	2315.5	2314.5	2324.2	2316.4	2309.6	2309.6
7.5°	2295.0	2298.9	2302.8	2294.1	2288.2	2278.5	2263.9	2242.5	2231.8	2220.1	2205.5
10°	2203.6	2190.9	2195.8	2178.3	2163.7	2153.0	2139.4	2121.9	2107.3	2096.6	2080.0
12.5°	2091.7	2090.7	2092.7	2095.6	2081.0	2072.2	2061.5	2048.9	2038.2	2026.5	2012.9
15°	2023.6	2024.6	2032.4	2029.4	2024.6	2019.7	2008.0	2004.1	1994.4	1981.8	1974.0
17.5°	1975.0	1979.8	1987.6	1983.7	1975.9	1971.1	1962.3	1953.6	1944.8	1935.1	1923.4
20°	1932.2	1937.0	1941.9	1937.0	1922.4	1915.6	1903.9	1876.7	1857.2	1837.8	1820.3
22.5°	1885.5	1888.4	1884.5	1868.9	1831.9	1814.4	1800.8	1793.0	1776.5	1765.8	1755.1
25°	1827.1	1810.5	1785.2	1767.7	1753.1	1745.4	1739.5	1738.5	1736.6	1734.7	1729.8
27.5°	1731.7	1725.9	1712.3	1705.5	1706.4	1709.4	1710.3	1713.3	1710.3	1706.4	1702.6
30°	1660.7	1663.6	1664.6	1666.6	1671.4	1674.3	1675.3	1679.2	1677.3	1674.3	1672.4
32.5°	1616.0	1622.8	1626.7	1632.5	1635.4	1640.3	1640.3	1646.1	1640.3	1639.3	1637.4
35°	1579.0	1584.8	1586.8	1595.5	1598.5	1603.3	1603.3	1608.2	1603.3	1553.7	1226.8
37.5°	1542.0	1547.9	1551.8	1559.5	1560.5	1563.4	1442.8	1055.6	681.0	527.3	402.8
40°	1498.2	1505.1	1508.9	1511.9	1062.4	674.2	464.1	377.5	377.5	380.4	383.3
42.5°	1451.5	1456.4	1014.7	590.5	367.8	366.8	369.7	372.6	375.5	379.4	383.3
45°	1141.2	575.9	365.8	357.0	360.0	363.9	367.8	371.6	376.5	380.4	382.3
47.5°	374.6	351.2	356.1	352.2	357.0	361.9	365.8	369.7	370.7	371.6	370.7
50°	346.3	346.3	349.3	349.3	353.2	355.1	355.1	355.1	351.2	350.2	347.3
52.5°	334.7	342.5	338.6	340.5	338.6	335.6	332.7	329.8	324.0	322.0	318.1
55°	328.8	331.8	322.0	319.1	315.2	307.4	303.5	299.6	294.8	292.8	288.0
57.5°	315.2	308.4	297.7	292.8	286.0	278.2	274.4	271.4	266.6	264.6	261.7
60°	289.9	276.3	269.5	263.7	255.9	249.1	246.1	244.2	240.3	239.3	236.4
62.5°	258.8	247.1	241.3	233.5	227.7	223.8	220.8	219.9	216.0	216.0	214.0
65°	224.7	218.9	214.0	206.3	203.3	199.4	198.5	197.5	195.6	194.6	192.6
67.5°	197.5	193.6	186.8	182.9	181.0	178.0	176.1	174.1	170.3	168.3	165.4
70°	173.2	170.3	163.4	160.5	156.6	151.8	148.9	146.9	144.0	142.0	139.1
72.5°	149.8	141.1	136.2	133.3	130.4	125.5	124.5	122.6	119.7	118.7	115.8
75°	120.6	113.8	110.9	109.0	106.0	103.1	103.1	103.1	100.2	99.2	98.3
77.5°	96.3	92.4	90.5	88.5	87.6	85.6	82.7	81.7	78.8	78.8	77.8
80°	73.9	72.0	70.0	69.1	68.1	66.2	64.2	63.2	60.3	60.3	59.3
82.5°	54.5	53.5	52.5	51.6	50.6	49.6	46.7	45.7	43.8	43.8	42.8
85°	38.9	37.9	36.0	35.0	35.0	34.1	31.1	30.2	28.2	28.2	28.2
87.5°	24.3	23.3	22.4	21.4	20.4	19.5	17.5	16.5	16.5	14.6	13.6
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-LD5-50SL-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°	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8
2.5°	2178.3	2194.8	2192.9	2204.6	2207.5	2213.3	2215.3	2216.2	2201.6	2213.3	2214.3
5°	2306.7	2309.6	2311.6	2316.4	2321.3	2322.3	2317.4	2311.6	2313.5	2309.6	2299.9
7.5°	2203.6	2189.0	2186.1	2182.2	2180.2	2178.3	2169.5	2177.3	2168.6	2164.7	2151.1
10°	2077.1	2063.5	2062.5	2062.5	2065.4	2064.5	2062.5	2058.6	2066.4	2061.5	2058.6
12.5°	2011.0	2006.1	2009.0	2007.1	2014.8	2016.8	2014.8	2014.8	2012.9	2009.0	2011.0
15°	1971.1	1967.2	1970.1	1967.2	1973.0	1974.0	1969.1	1972.0	1967.2	1962.3	1960.4
17.5°	1918.5	1909.8	1903.0	1893.2	1894.2	1892.3	1886.4	1886.4	1881.6	1868.9	1869.9
20°	1817.4	1808.6	1804.7	1804.7	1809.6	1811.5	1810.5	1812.5	1807.6	1805.7	1797.9
22.5°	1754.1	1753.1	1755.1	1760.0	1767.7	1778.4	1779.4	1779.4	1779.4	1778.4	1768.7
25°	1731.7	1731.7	1733.7	1740.5	1746.3	1754.1	1756.1	1758.0	1756.1	1756.1	1747.3
27.5°	1706.4	1704.5	1708.4	1715.2	1722.0	1727.8	1732.7	1733.7	1730.8	1730.8	1733.7
30°	1675.3	1674.3	1679.2	1686.0	1691.9	1697.7	1702.6	1706.4	1702.6	1702.6	1699.6
32.5°	1643.2	1643.2	1645.2	1604.3	1487.5	1339.7	1342.6	1257.0	1197.6	1122.7	1221.9
35°	1025.4	746.2	641.1	542.9	473.8	429.0	428.1	413.5	406.7	401.8	400.8
37.5°	387.2	389.2	393.0	395.0	397.9	399.9	400.8	400.8	400.8	400.8	399.9
40°	386.2	390.1	393.0	396.0	398.9	400.8	400.8	401.8	402.8	402.8	402.8
42.5°	387.2	391.1	395.0	397.9	399.9	400.8	401.8	402.8	402.8	402.8	402.8
45°	386.2	388.2	388.2	389.2	389.2	389.2	390.1	390.1	389.2	388.2	390.1
47.5°	371.6	371.6	368.7	367.8	366.8	364.8	365.8	364.8	363.9	362.9	364.8
50°	346.3	342.5	340.5	338.6	337.6	335.6	336.6	335.6	334.7	332.7	335.6
52.5°	316.2	315.2	311.3	309.4	308.4	309.4	307.4	306.5	305.5	304.5	305.5
55°	287.0	283.1	282.1	280.2	279.2	280.2	279.2	278.2	277.3	276.3	277.3
57.5°	260.7	257.8	256.8	254.9	254.9	254.9	254.9	253.9	253.0	252.0	253.0
60°	235.4	233.5	232.5	232.5	231.5	231.5	231.5	230.6	229.6	229.6	230.6
62.5°	214.0	214.0	211.1	210.1	210.1	211.1	210.1	209.2	208.2	207.2	209.2
65°	191.7	187.8	186.8	184.8	182.9	183.9	182.9	181.9	181.0	180.0	181.9
67.5°	164.4	163.4	159.6	157.6	156.6	157.6	156.6	155.7	154.7	153.7	155.7
70°	138.1	138.1	134.3	133.3	132.3	132.3	131.3	131.3	130.4	129.4	131.3
72.5°	114.8	114.8	113.8	111.9	110.9	109.9	109.0	108.0	108.0	109.0	109.0
75°	95.3	93.4	89.5	90.5	89.5	88.5	88.5	87.6	86.6	88.5	87.6
77.5°	74.9	73.9	71.0	72.0	71.0	70.0	70.0	69.1	68.1	69.1	69.1
80°	56.4	56.4	55.5	54.5	54.5	53.5	52.5	52.5	51.6	52.5	52.5
82.5°	40.9	40.9	39.9	38.9	37.9	37.9	37.0	37.0	37.0	37.0	37.0
85°	26.3	25.3	25.3	23.3	23.3	23.3	22.4	22.4	22.4	22.4	22.4
87.5°	12.6	12.6	11.7	11.7	10.7	9.7	9.7	8.8	8.8	9.7	9.7
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: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8
2.5°	2196.8	2209.4	2198.7	2203.6	2204.6	2221.1	2220.1	2224.0	2217.2	2209.4	2198.7
5°	2308.7	2302.8	2295.0	2313.5	2303.8	2315.5	2319.4	2327.1	2327.1	2326.2	2317.4
7.5°	2165.6	2153.0	2162.7	2169.5	2172.5	2164.7	2180.2	2197.8	2212.3	2221.1	2222.1
10°	2053.8	2057.7	2056.7	2059.6	2066.4	2065.4	2075.2	2084.9	2088.8	2094.6	2096.6
12.5°	2001.2	2000.3	2002.2	2009.0	2012.9	2011.9	2021.7	2027.5	2029.4	2030.4	2029.4
15°	1959.4	1952.6	1957.4	1958.4	1961.3	1961.3	1973.0	1981.8	1985.7	1987.6	1985.7
17.5°	1880.6	1864.1	1879.6	1879.6	1890.3	1888.4	1906.9	1921.5	1929.2	1935.1	1935.1
20°	1802.8	1795.0	1800.8	1798.9	1806.7	1805.7	1817.4	1827.1	1833.9	1838.8	1844.6
22.5°	1771.6	1773.6	1764.8	1765.8	1765.8	1764.8	1770.7	1775.5	1777.5	1780.4	1778.4
25°	1751.2	1753.1	1750.2	1745.4	1743.4	1745.4	1748.3	1754.1	1755.1	1753.1	1746.3
27.5°	1730.8	1724.9	1729.8	1721.0	1719.1	1723.0	1726.9	1727.8	1728.8	1728.8	1723.0
30°	1699.6	1694.8	1699.6	1695.7	1691.9	1695.7	1698.7	1698.7	1700.6	1701.6	1694.8
32.5°	1187.9	1197.6	1355.2	1450.6	1584.8	1652.9	1665.6	1665.6	1667.5	1667.5	1661.7
35°	404.7	405.7	438.8	475.7	554.5	651.8	779.3	845.4	1069.2	1336.7	1595.5
37.5°	399.9	398.9	397.9	396.9	396.0	395.0	393.0	392.1	397.9	471.9	640.2
40°	401.8	400.8	398.9	397.9	396.9	395.0	394.0	392.1	390.1	388.2	386.2
42.5°	401.8	400.8	399.9	398.9	397.9	396.9	395.0	393.0	391.1	388.2	385.3
45°	388.2	388.2	389.2	389.2	390.1	390.1	390.1	389.2	389.2	388.2	384.3
47.5°	362.9	362.9	365.8	365.8	367.8	369.7	369.7	371.6	374.6	376.5	377.5
50°	333.7	333.7	336.6	337.6	339.5	342.5	345.4	346.3	349.3	353.2	357.0
52.5°	304.5	304.5	307.4	307.4	309.4	312.3	315.2	316.2	320.1	324.0	328.8
55°	277.3	277.3	279.2	280.2	281.2	283.1	286.0	286.0	289.9	292.8	297.7
57.5°	253.0	254.9	254.9	254.9	255.9	257.8	259.8	259.8	262.7	265.6	269.5
60°	229.6	231.5	231.5	231.5	232.5	233.5	235.4	235.4	237.4	239.3	243.2
62.5°	208.2	210.1	210.1	211.1	211.1	212.1	214.0	213.1	215.0	216.0	218.9
65°	181.0	182.9	183.9	184.8	185.8	187.8	190.7	189.7	192.6	194.6	197.5
67.5°	154.7	156.6	156.6	157.6	158.6	160.5	162.5	162.5	165.4	167.3	171.2
70°	130.4	132.3	132.3	133.3	134.3	136.2	138.1	137.2	140.1	142.0	145.0
72.5°	108.0	109.9	109.9	110.9	110.9	112.9	114.8	116.7	116.7	118.7	120.6
75°	87.6	88.5	89.5	89.5	90.5	91.5	93.4	95.3	96.3	97.3	99.2
77.5°	69.1	70.0	71.0	71.0	72.0	73.0	73.9	77.8	79.8	80.7	80.7
80°	52.5	53.5	53.5	53.5	54.5	55.5	57.4	57.4	61.3	61.3	62.3
82.5°	37.0	37.9	37.9	37.9	38.9	40.9	41.8	42.8	44.8	45.7	45.7
85°	22.4	23.3	23.3	23.3	24.3	25.3	27.2	28.2	29.2	29.2	30.2
87.5°	8.8	9.7	10.7	10.7	11.7	12.6	13.6	14.6	15.6	15.6	16.5
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-LD5-50SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8
2.5°	2187.1	2193.9	2187.1	2190.9	2195.8	2187.1	2166.6	2158.8	2155.9	2144.2	2136.5
5°	2308.7	2308.7	2305.7	2313.5	2312.6	2298.9	2277.5	2267.8	2258.1	2245.4	2235.7
7.5°	2222.1	2229.9	2234.7	2264.9	2284.3	2286.3	2299.9	2302.8	2306.7	2302.8	2297.0
10°	2097.5	2094.6	2108.2	2136.5	2153.0	2161.8	2188.0	2200.7	2211.4	2232.8	2255.2
12.5°	2027.5	2031.4	2037.2	2057.7	2073.2	2069.3	2080.0	2088.8	2101.4	2122.8	2154.9
15°	1980.8	1984.7	1990.5	2006.1	2015.8	2011.0	2016.8	2022.6	2031.4	2042.1	2061.5
17.5°	1930.2	1937.0	1943.8	1960.4	1969.1	1968.2	1973.0	1975.0	1977.9	1984.7	1998.3
20°	1851.4	1872.8	1886.4	1908.8	1921.5	1919.5	1928.3	1931.2	1935.1	1941.9	1947.7
22.5°	1779.4	1785.2	1792.1	1816.4	1837.8	1864.1	1869.9	1877.7	1887.4	1894.2	1900.0
25°	1738.5	1734.7	1737.6	1754.1	1765.8	1767.7	1776.5	1801.8	1828.1	1839.7	1853.4
27.5°	1714.2	1710.3	1709.4	1717.1	1719.1	1714.2	1712.3	1720.1	1739.5	1759.0	1799.8
30°	1688.0	1683.1	1679.2	1686.0	1688.9	1682.1	1669.5	1662.7	1674.3	1679.2	1695.7
32.5°	1656.8	1652.0	1650.0	1653.9	1655.9	1650.0	1636.4	1628.6	1626.7	1622.8	1626.7
35°	1621.8	1616.9	1614.0	1615.0	1618.9	1614.0	1602.3	1592.6	1587.8	1577.1	1569.3
37.5°	835.7	1184.0	1537.2	1574.1	1578.0	1577.1	1565.4	1554.7	1549.8	1537.2	1533.3
40°	382.3	427.1	641.1	837.7	1208.3	1535.2	1524.5	1513.8	1505.1	1501.2	1486.6
42.5°	381.4	382.3	383.3	378.5	468.9	798.7	1179.1	1472.0	1466.1	1456.4	1445.7
45°	381.4	376.5	380.4	374.6	376.5	375.5	468.0	755.0	1343.6	1403.9	1399.0
47.5°	377.5	374.6	378.5	373.6	367.8	370.7	366.8	371.6	579.8	983.6	1347.4
50°	360.0	361.9	368.7	367.8	362.9	366.8	360.0	365.8	360.9	396.0	762.7
52.5°	333.7	337.6	344.4	350.2	352.2	357.0	355.1	357.0	353.2	354.1	355.1
55°	302.6	307.4	313.3	322.0	325.9	333.7	339.5	342.5	347.3	346.3	338.6
57.5°	273.4	278.2	283.1	291.9	300.6	304.5	315.2	321.1	333.7	330.8	328.8
60°	246.1	250.0	254.9	256.8	267.5	274.4	284.1	289.9	306.5	310.4	316.2
62.5°	221.8	223.8	227.7	230.6	237.4	244.2	249.1	258.8	267.5	280.2	288.9
65°	199.4	201.4	204.3	206.3	207.2	217.0	219.9	230.6	233.5	247.1	254.9
67.5°	174.1	178.0	181.9	183.9	185.8	191.7	193.6	198.5	205.3	211.1	220.8
70°	147.9	150.8	154.7	157.6	161.5	165.4	171.2	174.1	179.0	182.9	190.7
72.5°	123.6	126.5	128.4	131.3	134.3	137.2	142.0	148.9	152.7	159.6	161.5
75°	100.2	103.1	105.1	107.0	109.9	111.9	113.8	120.6	124.5	130.4	136.2
77.5°	82.7	82.7	84.6	90.5	89.5	89.5	91.5	95.3	98.3	102.2	108.0
80°	64.2	65.2	66.2	71.0	72.0	73.0	72.0	74.9	77.8	78.8	82.7
82.5°	47.7	48.6	48.6	51.6	54.5	54.5	54.5	55.5	58.4	59.3	61.3
85°	32.1	33.1	34.1	35.0	37.0	37.9	38.9	38.9	40.9	41.8	42.8
87.5°	17.5	19.5	20.4	21.4	22.4	23.3	24.3	25.3	26.3	27.2	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: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8	2122.8
2.5°	2133.5	2128.7	2125.8	2118.0	2116.0	2103.4	2105.3	2103.4	2103.4	2106.3	2116.0
5°	2225.0	2201.6	2195.8	2179.3	2165.6	2142.3	2127.7	2119.9	2108.2	2103.4	2110.2
7.5°	2287.3	2269.7	2255.2	2240.6	2221.1	2193.9	2173.4	2150.1	2130.6	2112.1	2107.3
10°	2276.6	2296.0	2296.0	2287.3	2268.8	2241.5	2217.2	2188.0	2154.0	2124.8	2107.3
12.5°	2186.1	2220.1	2247.4	2267.8	2286.3	2267.8	2243.5	2220.1	2182.2	2139.4	2107.3
15°	2086.8	2121.9	2155.9	2198.7	2243.5	2262.0	2261.0	2233.7	2199.7	2154.9	2110.2
17.5°	2016.8	2041.1	2059.6	2106.3	2160.8	2208.5	2240.6	2242.5	2209.4	2169.5	2111.2
20°	1964.3	1981.8	1997.3	2023.6	2071.3	2129.7	2189.0	2222.1	2216.2	2172.5	2114.1
22.5°	1916.6	1929.2	1941.9	1961.3	1999.3	2037.2	2106.3	2174.4	2203.6	2167.6	2111.2
25°	1868.9	1882.5	1892.3	1905.9	1936.0	1967.2	2015.8	2100.5	2165.6	2163.7	2105.3
27.5°	1812.5	1831.0	1842.6	1861.1	1881.6	1904.9	1938.0	2017.8	2111.2	2144.2	2089.8
30°	1744.4	1771.6	1789.1	1809.6	1827.1	1847.5	1873.8	1922.4	2038.2	2106.3	2073.2
32.5°	1646.1	1694.8	1733.7	1753.1	1772.6	1790.1	1813.5	1854.3	1948.7	2054.7	2054.7
35°	1576.1	1598.5	1633.5	1689.9	1714.2	1731.7	1753.1	1785.2	1845.6	1993.4	2024.6
37.5°	1521.6	1530.4	1547.9	1603.3	1649.0	1677.3	1698.7	1719.1	1778.4	1909.8	1985.7
40°	1480.7	1477.8	1475.9	1502.1	1567.3	1612.1	1636.4	1656.8	1702.6	1809.6	1934.1
42.5°	1433.1	1430.1	1420.4	1427.2	1459.3	1534.2	1571.2	1593.6	1631.5	1704.5	1877.7
45°	1383.4	1378.6	1374.7	1367.9	1379.6	1421.4	1497.3	1530.4	1551.8	1616.9	1806.7
47.5°	1332.9	1326.0	1321.2	1315.3	1308.5	1328.0	1400.0	1459.3	1496.3	1537.2	1721.0
50°	1260.9	1269.6	1263.8	1257.0	1251.1	1247.2	1277.4	1374.7	1420.4	1453.5	1616.9
52.5°	594.4	1155.8	1204.4	1197.6	1189.8	1183.0	1189.8	1263.8	1346.5	1372.7	1491.4
55°	338.6	514.7	1071.1	1132.4	1125.6	1115.9	1110.1	1135.4	1258.9	1293.9	1376.6
57.5°	325.9	326.9	472.8	1020.6	1058.5	1049.7	1042.9	1048.8	1153.8	1213.2	1276.4
60°	315.2	315.2	315.2	451.4	975.8	978.7	970.0	960.2	1006.0	1122.7	1175.2
62.5°	291.9	297.7	300.6	300.6	445.6	903.8	895.1	892.1	894.1	1013.7	1074.1
65°	261.7	275.3	281.2	285.1	285.1	468.0	818.2	813.3	806.5	852.2	971.9
67.5°	228.6	242.2	254.9	262.7	263.7	272.4	488.4	732.6	722.9	723.8	863.0
70°	194.6	206.3	219.9	231.5	242.2	247.1	254.9	608.1	640.2	626.5	739.4
72.5°	168.3	173.2	182.9	194.6	207.2	218.9	225.7	242.2	555.5	540.9	562.3
75°	140.1	144.0	150.8	158.6	168.3	181.9	193.6	205.3	294.8	453.4	450.4
77.5°	109.0	115.8	123.6	128.4	133.3	143.0	158.6	170.3	181.9	306.5	360.9
80°	83.7	88.5	92.4	97.3	103.1	109.9	115.8	129.4	143.0	153.7	276.3
82.5°	62.3	65.2	68.1	70.0	72.0	75.9	86.6	91.5	100.2	109.9	130.4
85°	43.8	45.7	47.7	48.6	49.6	50.6	54.5	55.5	64.2	66.2	78.8
87.5°	28.2	29.2	31.1	32.1	32.1	33.1	34.1	34.1	34.1	32.1	38.9
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-LD5-50SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	2122.8	2122.8
2.5°	2123.8	2139.4
5°	2120.9	2141.3
7.5°	2113.1	2132.6
10°	2101.4	2124.8
12.5°	2088.8	2111.2
15°	2078.1	2094.6
17.5°	2066.4	2076.1
20°	2050.8	2058.6
22.5°	2035.3	2031.4
25°	2017.8	2009.0
27.5°	1995.4	1978.9
30°	1975.0	1945.8
32.5°	1955.5	1907.8
35°	1929.2	1868.9
37.5°	1902.0	1829.0
40°	1869.9	1783.3
42.5°	1835.8	1737.6
45°	1793.0	1693.8
47.5°	1755.1	1641.3
50°	1702.6	1584.8
52.5°	1638.3	1532.3
55°	1562.5	1468.1
57.5°	1480.7	1401.0
60°	1393.2	1324.1
62.5°	1287.1	1244.3
65°	1162.6	1152.9
67.5°	1000.1	1051.7
70°	820.1	935.9
72.5°	685.9	813.3
75°	562.3	676.2
77.5°	445.6	530.2
80°	278.2	388.2
82.5°	186.8	254.9
85°	112.9	121.6
87.5°	43.8	44.8
90°	0.0	0.0

(END OF REPORT)