

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-LD5-43SL-RW-UNV-L950-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-LD5-43SL-RW-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

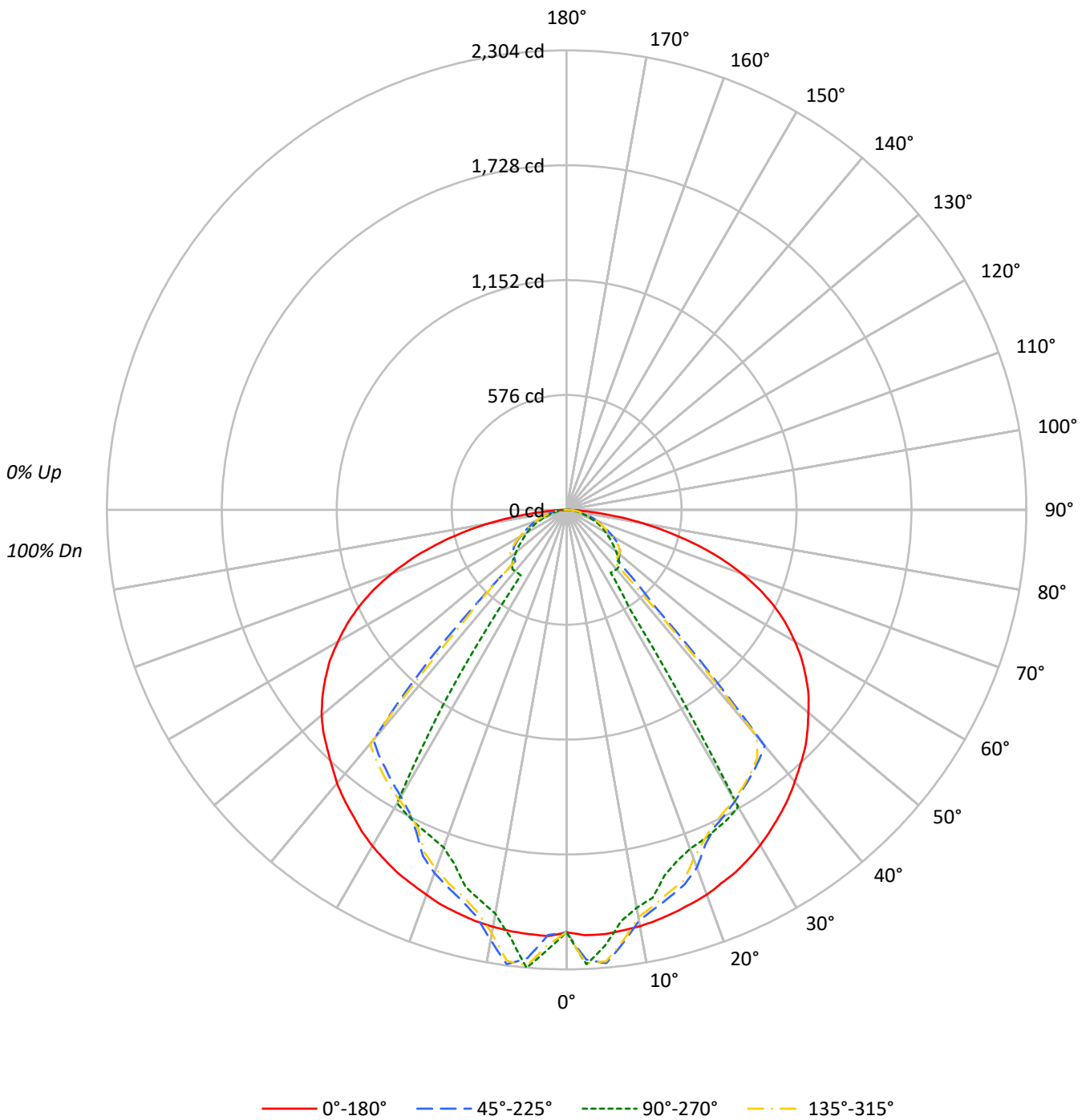
Lumens per Lamp: N/A
Luminaire Lumens: 4241.0 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 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	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					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°	17114	17114	17114	17114
5°	17282	17243	17274	18097
10°	17299	15590	17323	15829
15°	17337	14424	17378	14881
20°	17463	13681	17463	13629
25°	17614	13419	17640	13294
30°	17793	13182	17838	13026
35°	18000	3003	18037	3132
40°	18288	3122	18398	3223
45°	18726	3105	18791	3218
50°	19164	2807	19423	2883
55°	19753	2493	19911	2529
60°	20254	2214	20298	2244
65°	20612	1933	20558	1903
70°	20316	1557	20253	1502
75°	18863	1199	18997	1148
80°	15310	852	15923	779
85°	8287	510	8751	391



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.4	4.9
10°-20°	572.9	13.5
20°-30°	848.6	20.0
30°-40°	855.0	20.2
40°-50°	667.9	15.7
50°-60°	515.9	12.2
60°-70°	346.4	8.2
70°-80°	176.7	4.2
80°-90°	49.2	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°	1629.9	38.4
0°-40°	2484.9	58.6
0°-60°	3668.8	86.5
0°-90°	4241.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4241.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2118	2118	2118	2118	2118	
5°	2136	2196	2135	2304	2136	203
15°	2090	1898	2095	1958	2090	591
25°	2004	1768	2007	1752	2004	925
35°	1864	384	1868	401	1864	1168
45°	1690	374	1696	387	1690	1303
55°	1465	272	1476	276	1465	1308
65°	1150	182	1147	180	1150	1131
75°	675	92	679	88	675	705
85°	121	29	128	22	121	167
90°	0	0	0	0	0	



TEST NUMBER: P#

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8
2.5°	2134.3	2142.1	2147.9	2151.8	2153.8	2153.8	2154.7	2155.7	2168.3	2174.1	2178.0
5°	2136.3	2144.1	2155.7	2171.2	2184.8	2196.5	2206.2	2219.8	2233.3	2247.9	2252.8
7.5°	2127.6	2137.3	2160.6	2188.7	2214.9	2233.3	2246.0	2254.7	2261.5	2262.5	2267.3
10°	2119.8	2137.3	2169.3	2206.2	2239.2	2261.5	2261.5	2256.6	2263.4	2237.2	2211.0
12.5°	2106.2	2125.6	2169.3	2217.8	2248.9	2257.6	2253.7	2234.3	2194.5	2162.5	2147.9
15°	2089.7	2115.9	2170.3	2224.6	2250.8	2253.7	2216.8	2167.3	2137.3	2117.8	2093.6
17.5°	2071.3	2106.2	2171.2	2225.6	2235.3	2221.7	2151.8	2120.8	2089.7	2044.1	2011.1
20°	2053.8	2087.8	2163.5	2212.0	2217.8	2156.7	2102.3	2069.3	2016.9	1977.1	1962.6
22.5°	2026.6	2066.4	2156.7	2193.6	2171.2	2100.4	2048.0	1995.6	1948.0	1936.3	1918.9
25°	2004.3	2046.0	2141.1	2171.2	2112.0	2048.9	1987.8	1926.6	1904.3	1887.8	1872.3
27.5°	1974.2	2025.6	2120.8	2130.5	2048.9	1993.6	1904.3	1877.1	1856.8	1838.3	1831.5
30°	1941.2	2004.3	2092.6	2074.2	1996.5	1915.0	1849.0	1823.8	1809.2	1789.8	1782.0
32.5°	1903.3	1972.3	2061.6	2009.1	1940.2	1838.3	1795.6	1776.2	1756.8	1742.2	1693.7
35°	1864.5	1944.1	2024.7	1947.0	1872.3	1780.1	1742.2	1724.8	1706.3	1652.9	1602.5
37.5°	1824.7	1913.0	1980.0	1880.0	1782.0	1719.9	1687.9	1668.5	1626.7	1558.8	1533.5
40°	1779.1	1875.2	1922.8	1811.1	1703.4	1658.8	1628.7	1609.3	1515.1	1485.0	1477.3
42.5°	1733.5	1838.3	1852.9	1744.2	1638.4	1593.7	1568.5	1504.4	1440.4	1424.8	1427.8
45°	1689.8	1798.5	1776.2	1649.0	1570.4	1533.5	1490.8	1402.5	1368.5	1376.3	1378.3
47.5°	1637.4	1751.0	1695.6	1553.9	1500.5	1463.7	1368.5	1315.2	1310.3	1321.0	1326.8
50°	1581.1	1697.6	1610.2	1467.5	1424.8	1381.2	1273.4	1246.2	1252.1	1262.7	1269.5
52.5°	1528.7	1637.4	1521.9	1387.0	1350.1	1250.1	1177.3	1182.2	1191.9	1204.5	1208.4
55°	1464.6	1564.6	1427.8	1305.5	1270.5	1139.5	1106.5	1118.1	1127.8	1138.5	1146.3
57.5°	1397.7	1481.1	1316.1	1214.2	1157.9	1041.5	1044.4	1052.1	1058.9	1071.5	442.6
60°	1321.0	1386.0	1193.8	1129.8	1018.2	963.8	966.7	980.3	987.1	551.3	304.8
62.5°	1241.4	1275.4	1083.2	1033.7	890.0	886.2	899.7	905.6	616.3	291.2	285.4
65°	1150.2	1143.4	974.5	895.9	802.7	806.6	821.1	792.0	272.7	272.7	270.8
67.5°	1049.2	1008.5	868.7	741.5	718.2	727.0	742.5	259.1	252.4	254.3	247.5
70°	933.7	876.5	759.0	628.0	635.7	644.5	250.4	234.9	232.0	227.1	213.5
72.5°	811.4	732.8	621.2	545.5	550.3	345.5	219.4	211.6	201.9	192.2	177.6
75°	674.6	572.7	456.2	456.2	463.0	197.0	191.2	178.6	167.9	155.3	146.6
77.5°	529.0	440.7	354.3	367.9	179.6	165.0	154.3	140.7	132.0	124.2	119.4
80°	387.3	307.7	266.9	238.8	139.8	125.2	114.5	106.8	102.9	98.0	92.2
82.5°	254.3	185.4	185.4	112.6	98.0	86.4	83.5	77.6	73.8	70.9	67.9
85°	121.3	107.7	81.5	68.9	61.1	55.3	53.4	50.5	50.5	49.5	48.5
87.5°	44.6	48.5	35.9	34.9	33.0	32.0	33.0	33.0	34.0	33.0	32.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8
2.5°	2187.7	2195.5	2201.3	2211.0	2223.6	2234.3	2244.0	2257.6	2279.0	2284.8	2289.6
5°	2252.8	2255.7	2262.5	2270.2	2272.2	2277.0	2276.1	2281.9	2284.8	2291.6	2277.0
7.5°	2256.6	2241.1	2222.7	2206.2	2194.5	2183.8	2177.1	2187.7	2193.6	2198.4	2183.8
10°	2175.1	2156.7	2146.0	2136.3	2124.6	2108.1	2085.8	2090.7	2088.7	2088.7	2083.9
12.5°	2123.7	2097.5	2070.3	2046.0	2035.3	2034.4	2035.3	2046.0	2046.0	2045.1	2039.2
15°	2043.1	2017.9	2004.3	1998.5	1998.5	1995.6	1995.6	2007.2	2004.3	2004.3	2001.4
17.5°	1989.7	1972.3	1962.6	1955.8	1952.8	1957.7	1963.5	1968.4	1969.3	1965.5	1949.9
20°	1946.1	1929.6	1917.9	1919.8	1918.9	1921.8	1924.7	1908.2	1887.8	1860.6	1848.0
22.5°	1900.4	1887.8	1879.1	1879.1	1867.4	1849.0	1821.8	1816.0	1813.1	1800.5	1789.8
25°	1856.8	1842.2	1829.6	1790.8	1766.5	1769.4	1764.5	1754.8	1753.9	1752.9	1756.8
27.5°	1813.1	1775.2	1726.7	1720.9	1711.2	1710.2	1716.0	1720.9	1720.9	1724.8	1729.6
30°	1722.8	1679.1	1670.4	1659.7	1663.6	1677.2	1680.1	1686.9	1688.8	1695.6	1699.5
32.5°	1640.3	1620.9	1613.1	1618.0	1630.6	1642.3	1649.0	1652.0	1656.8	1662.6	1667.5
35°	1573.3	1567.5	1574.3	1585.0	1597.6	1607.3	1613.1	1619.0	1623.8	1628.7	1632.5
37.5°	1523.8	1527.7	1537.4	1551.0	1563.6	1571.4	1576.3	1583.0	1589.8	1595.7	1572.4
40°	1477.3	1487.0	1497.6	1512.2	1522.9	1530.6	1535.5	1544.2	1486.0	672.6	368.8
42.5°	1436.5	1447.2	1454.9	1466.6	1478.2	1484.0	1441.3	643.5	364.0	362.0	366.9
45°	1387.0	1395.7	1408.3	1417.1	1427.8	937.6	358.2	362.0	356.2	360.1	362.0
47.5°	1336.5	1350.1	1356.9	1294.8	385.3	356.2	352.3	356.2	352.3	357.2	354.3
50°	1279.2	1295.7	922.1	348.4	345.5	343.6	347.5	345.5	348.4	352.3	344.6
52.5°	1221.0	756.1	337.8	335.8	337.8	335.8	342.6	337.8	338.7	334.9	325.2
55°	413.5	327.1	324.2	323.2	329.0	329.0	329.0	321.3	316.4	306.7	299.9
57.5°	316.4	316.4	315.4	316.4	314.5	312.5	303.8	297.0	290.2	276.6	272.7
60°	299.9	299.9	299.9	299.9	291.2	287.3	273.7	267.9	256.2	249.4	245.6
62.5°	286.3	284.4	275.7	272.7	263.0	252.4	244.6	238.8	227.1	223.2	220.3
65°	266.9	260.1	249.4	237.8	232.9	221.3	217.4	208.7	202.9	199.9	198.0
67.5°	234.9	225.2	216.4	208.7	199.9	196.1	191.2	184.4	180.5	178.6	176.6
70°	200.9	194.1	185.4	180.5	174.7	171.8	165.0	163.1	160.1	157.2	154.3
72.5°	167.9	164.0	160.1	153.4	151.4	149.5	142.7	138.8	134.9	131.0	129.1
75°	140.7	137.8	135.9	130.1	127.1	121.3	116.5	113.6	110.6	107.7	105.8
77.5°	115.5	113.6	107.7	103.9	101.9	97.1	95.1	96.1	94.1	90.3	88.3
80°	90.3	88.3	83.5	83.5	81.5	79.6	77.6	75.7	73.8	70.9	68.9
82.5°	68.9	67.0	65.0	63.1	61.1	60.2	59.2	57.3	55.3	53.4	52.4
85°	48.5	47.6	46.6	45.6	44.6	43.7	42.7	40.8	38.8	37.9	36.9
87.5°	33.0	32.0	31.1	30.1	29.1	28.1	27.2	26.2	24.3	23.3	22.3
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°	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8
2.5°	2289.6	2294.5	2289.6	2279.0	2272.2	2269.3	2275.1	2275.1	2279.0	2283.8	2284.8
5°	2253.7	2242.1	2228.5	2214.9	2208.1	2204.2	2193.6	2195.5	2198.4	2200.3	2202.3
7.5°	2164.4	2148.9	2130.5	2113.0	2106.2	2100.4	2087.8	2087.8	2087.8	2088.7	2094.6
10°	2073.2	2066.4	2058.6	2047.0	2038.3	2035.3	2024.7	2027.6	2025.6	2028.6	2035.3
12.5°	2030.5	2022.7	2015.9	2004.3	1994.6	1990.7	1985.8	1988.8	1987.8	1992.6	1998.5
15°	1991.7	1987.8	1980.0	1971.3	1962.6	1954.8	1937.3	1931.5	1927.6	1922.8	1929.6
17.5°	1927.6	1900.4	1882.0	1868.4	1858.7	1851.9	1847.0	1847.0	1850.0	1852.9	1858.7
20°	1840.3	1832.5	1823.8	1809.2	1799.5	1795.6	1792.7	1792.7	1797.5	1801.4	1812.1
22.5°	1780.1	1779.1	1776.2	1769.4	1764.5	1764.5	1765.5	1767.5	1774.3	1780.1	1790.8
25°	1751.9	1755.8	1753.9	1750.0	1747.1	1748.0	1746.1	1748.0	1754.8	1760.7	1769.4
27.5°	1729.6	1735.4	1733.5	1727.7	1722.8	1724.8	1727.7	1725.7	1731.5	1738.3	1745.1
30°	1699.5	1700.5	1704.4	1697.6	1695.6	1698.5	1699.5	1701.5	1707.3	1712.1	1718.0
32.5°	1665.5	1673.3	1672.3	1665.5	1665.5	1668.5	1669.4	1604.4	1483.1	1277.3	1221.0
35°	1632.5	1641.3	1626.7	1371.5	949.2	506.7	391.2	377.6	380.5	382.4	384.4
37.5°	1207.4	572.7	364.9	367.9	370.8	373.7	376.6	379.5	382.4	385.3	386.3
40°	363.0	362.0	364.9	368.8	371.7	373.7	377.6	380.5	383.4	386.3	387.3
42.5°	359.1	361.1	364.0	367.9	371.7	375.6	378.5	382.4	384.4	386.3	387.3
45°	357.2	361.1	364.9	367.9	370.8	372.7	374.7	375.6	374.7	374.7	376.6
47.5°	354.3	358.2	359.1	358.2	359.1	358.2	358.2	358.2	355.2	354.3	354.3
50°	343.6	343.6	341.7	337.8	336.8	335.8	333.9	332.9	329.0	328.1	328.1
52.5°	321.3	320.3	317.4	312.5	310.6	308.7	307.7	306.7	302.8	300.9	301.9
55°	295.1	293.1	290.2	284.4	283.4	281.5	280.5	279.5	275.7	277.6	274.7
57.5°	270.8	266.9	263.0	262.1	258.2	257.2	256.2	255.3	252.4	253.3	251.4
60°	241.7	240.7	238.8	234.9	234.9	233.9	233.9	232.0	230.0	229.1	229.1
62.5°	220.3	217.4	215.5	215.5	212.6	212.6	212.6	210.6	208.7	209.6	208.7
65°	197.0	196.1	195.1	193.1	193.1	192.2	192.2	190.2	187.3	188.3	186.4
67.5°	177.6	175.7	173.7	172.8	168.9	166.9	166.0	165.0	161.1	162.1	160.1
70°	153.4	150.4	148.5	146.6	143.6	141.7	141.7	139.8	136.9	137.8	135.9
72.5°	128.1	126.2	124.2	123.3	120.4	119.4	118.4	117.4	114.5	115.5	114.5
75°	106.8	106.8	105.8	104.8	101.9	99.0	97.1	96.1	94.1	95.1	93.2
77.5°	88.3	86.4	84.4	84.4	81.5	79.6	77.6	77.6	77.6	76.7	75.7
80°	68.9	67.0	67.0	66.0	64.1	62.1	61.1	61.1	60.2	60.2	59.2
82.5°	52.4	50.5	49.5	49.5	47.6	46.6	45.6	44.6	44.6	44.6	43.7
85°	36.9	34.9	34.0	34.0	32.0	31.1	31.1	30.1	30.1	29.1	29.1
87.5°	22.3	21.4	20.4	20.4	18.4	17.5	17.5	17.5	16.5	16.5	15.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-43SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8
2.5°	2284.8	2284.8	2278.0	2279.9	2277.0	2280.9	2276.1	2276.1	2281.9	2281.9	2285.8
5°	2203.3	2198.4	2197.4	2195.5	2185.8	2189.7	2184.8	2180.0	2186.8	2186.8	2195.5
7.5°	2091.6	2082.9	2086.8	2081.0	2075.1	2066.4	2069.3	2065.4	2070.3	2077.1	2085.8
10°	2034.4	2026.6	2031.5	2025.6	2028.6	2015.9	2016.9	2017.9	2022.7	2024.7	2032.4
12.5°	1997.5	1995.6	1993.6	1991.7	1993.6	1986.8	1982.9	1983.9	1985.8	1986.8	1992.6
15°	1919.8	1907.2	1911.1	1897.5	1898.5	1899.5	1891.7	1899.5	1898.5	1911.1	1922.8
17.5°	1856.8	1856.8	1850.0	1844.1	1840.3	1839.3	1833.5	1837.3	1833.5	1841.2	1844.1
20°	1813.1	1812.1	1811.1	1808.2	1798.5	1799.5	1802.4	1793.7	1792.7	1791.7	1797.5
22.5°	1792.7	1793.7	1789.8	1789.8	1781.0	1783.0	1784.0	1774.3	1775.2	1772.3	1775.2
25°	1771.3	1773.3	1768.4	1768.4	1766.5	1765.5	1760.7	1762.6	1756.8	1751.9	1756.8
27.5°	1746.1	1750.0	1746.1	1748.0	1744.2	1742.2	1739.3	1737.4	1731.5	1730.6	1733.5
30°	1722.8	1724.8	1723.8	1718.9	1718.0	1712.1	1715.0	1709.2	1703.4	1704.4	1706.3
32.5°	883.2	843.5	650.3	587.2	581.4	602.7	714.4	869.7	1126.9	1376.3	1555.9
35°	385.3	385.3	385.3	384.4	384.4	383.4	382.4	381.4	380.5	379.5	378.5
37.5°	387.3	387.3	387.3	387.3	386.3	385.3	385.3	383.4	382.4	381.4	380.5
40°	388.2	389.2	389.2	389.2	388.2	388.2	387.3	385.3	384.4	382.4	380.5
42.5°	387.3	388.2	388.2	387.3	387.3	386.3	386.3	385.3	384.4	383.4	382.4
45°	374.7	375.6	373.7	373.7	372.7	372.7	372.7	372.7	372.7	373.7	373.7
47.5°	352.3	352.3	351.4	350.4	350.4	349.4	350.4	349.4	351.4	352.3	354.3
50°	326.1	326.1	324.2	323.2	323.2	323.2	323.2	324.2	325.2	327.1	329.0
52.5°	298.9	298.9	298.0	297.0	296.0	296.0	298.9	298.0	298.9	299.9	302.8
55°	272.7	273.7	271.8	271.8	270.8	270.8	270.8	271.8	272.7	273.7	276.6
57.5°	250.4	250.4	248.5	248.5	248.5	247.5	250.4	248.5	249.4	250.4	252.4
60°	228.1	227.1	227.1	226.1	226.1	226.1	228.1	227.1	227.1	228.1	230.0
62.5°	207.7	207.7	206.7	206.7	205.8	205.8	207.7	206.7	206.7	207.7	208.7
65°	184.4	184.4	183.4	182.5	185.4	182.5	185.4	183.4	185.4	186.4	188.3
67.5°	158.2	158.2	158.2	157.2	157.2	159.2	160.1	158.2	159.2	161.1	162.1
70°	134.9	134.9	133.9	133.9	133.9	135.9	136.9	134.9	135.9	136.9	138.8
72.5°	114.5	112.6	112.6	111.6	113.6	113.6	114.5	113.6	114.5	114.5	116.5
75°	94.1	92.2	92.2	92.2	94.1	93.2	94.1	93.2	94.1	94.1	95.1
77.5°	75.7	74.7	73.8	73.8	75.7	75.7	75.7	74.7	75.7	76.7	77.6
80°	59.2	58.2	57.3	57.3	59.2	59.2	59.2	60.2	59.2	60.2	61.1
82.5°	43.7	42.7	41.7	43.7	43.7	43.7	43.7	44.6	43.7	44.6	45.6
85°	29.1	28.1	27.2	29.1	29.1	29.1	29.1	30.1	29.1	30.1	31.1
87.5°	15.5	14.6	14.6	15.5	15.5	15.5	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-LD5-43SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8
2.5°	2291.6	2294.5	2293.5	2287.7	2281.9	2275.1	2270.2	2271.2	2280.9	2283.8	2275.1
5°	2195.5	2213.9	2213.9	2226.6	2219.8	2213.9	2217.8	2239.2	2249.8	2266.3	2272.2
7.5°	2096.5	2105.2	2104.3	2116.9	2114.9	2114.9	2117.8	2146.0	2159.6	2173.2	2177.1
10°	2041.2	2049.9	2048.9	2049.9	2047.0	2040.2	2040.2	2052.8	2064.5	2071.3	2073.2
12.5°	2001.4	2006.2	2005.3	2005.3	2003.3	1997.5	1996.5	2007.2	2019.8	2028.6	2029.5
15°	1942.2	1955.8	1958.7	1971.3	1968.4	1960.6	1962.6	1971.3	1979.1	1986.8	1983.9
17.5°	1853.8	1860.6	1861.6	1866.5	1864.5	1864.5	1876.2	1908.2	1929.6	1948.0	1949.9
20°	1803.4	1808.2	1806.3	1817.0	1812.1	1811.1	1814.0	1827.6	1837.3	1846.1	1861.6
22.5°	1779.1	1783.0	1780.1	1781.0	1772.3	1764.5	1762.6	1773.3	1784.0	1795.6	1795.6
25°	1758.7	1761.6	1760.7	1758.7	1751.9	1741.3	1739.3	1741.3	1745.1	1746.1	1739.3
27.5°	1734.5	1736.4	1736.4	1737.4	1728.6	1718.9	1717.0	1715.0	1718.9	1718.0	1707.3
30°	1709.2	1706.3	1707.3	1708.3	1700.5	1691.8	1687.9	1686.9	1690.8	1689.8	1679.1
32.5°	1649.0	1671.4	1673.3	1675.3	1668.5	1660.7	1656.8	1653.9	1655.8	1654.9	1645.2
35°	377.6	384.4	470.7	1065.7	1447.2	1602.5	1619.0	1615.1	1616.0	1616.0	1608.3
37.5°	378.5	377.6	376.6	373.7	370.8	368.8	637.7	1359.8	1575.3	1576.3	1569.5
40°	378.5	377.6	376.6	374.7	370.8	367.9	363.0	359.1	367.9	809.5	1481.1
42.5°	380.5	378.5	376.6	374.7	370.8	366.9	363.0	358.2	361.1	359.1	354.3
45°	374.7	373.7	373.7	372.7	370.8	366.9	362.0	356.2	353.3	356.2	351.4
47.5°	356.2	357.2	360.1	361.1	361.1	362.0	359.1	355.2	350.4	353.3	347.5
50°	331.0	332.9	333.9	338.7	340.7	344.6	345.5	345.5	344.6	348.4	344.6
52.5°	303.8	305.7	310.6	312.5	314.5	320.3	322.2	325.2	327.1	332.9	336.8
55°	277.6	278.6	280.5	284.4	287.3	292.2	295.1	298.0	302.8	305.7	317.4
57.5°	253.3	254.3	258.2	259.1	261.1	265.0	267.9	271.8	275.7	277.6	291.2
60°	230.0	231.0	233.9	234.9	235.9	239.7	242.6	245.6	248.5	250.4	260.1
62.5°	209.6	209.6	212.6	212.6	213.5	216.4	218.4	220.3	223.2	224.2	229.1
65°	189.3	190.2	192.2	192.2	193.1	195.1	196.1	197.0	199.9	199.9	203.8
67.5°	164.0	165.0	167.9	169.9	170.8	174.7	175.7	176.6	178.6	179.6	181.5
70°	139.8	140.7	143.6	144.6	145.6	148.5	150.4	153.4	156.3	159.2	161.1
72.5°	117.4	118.4	121.3	121.3	124.2	125.2	127.1	128.1	131.0	133.0	135.9
75°	96.1	97.1	100.0	100.0	102.9	103.9	104.8	105.8	107.7	109.7	111.6
77.5°	78.6	78.6	82.5	84.4	86.4	86.4	87.4	87.4	87.4	88.3	90.3
80°	62.1	62.1	65.0	67.0	68.9	68.9	69.9	70.9	71.8	71.8	72.8
82.5°	46.6	46.6	49.5	50.5	52.4	52.4	52.4	53.4	54.4	53.4	55.3
85°	32.0	32.0	34.0	34.9	36.9	36.9	36.9	37.9	38.8	37.9	38.8
87.5°	18.4	19.4	20.4	21.4	22.3	23.3	23.3	23.3	24.3	24.3	25.2
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-LD5-43SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8
2.5°	2265.4	2253.7	2252.8	2239.2	2235.3	2236.3	2225.6	2221.7	2204.2	2200.3	2181.9
5°	2274.1	2279.9	2277.0	2276.1	2279.0	2277.0	2269.3	2265.4	2262.5	2254.7	2239.2
7.5°	2178.0	2181.9	2184.8	2197.4	2208.1	2226.6	2246.0	2258.6	2268.3	2270.2	2257.6
10°	2080.0	2098.4	2111.1	2130.5	2146.0	2156.7	2168.3	2179.0	2207.1	2235.3	2251.8
12.5°	2029.5	2034.4	2033.4	2044.1	2054.8	2082.9	2110.1	2125.6	2147.0	2159.6	2189.7
15°	1986.8	1987.8	1990.7	1998.5	2004.3	2014.0	2026.6	2049.9	2092.6	2112.0	2128.5
17.5°	1948.0	1948.0	1949.9	1956.7	1964.5	1973.2	1981.0	1990.7	2012.1	2044.1	2084.8
20°	1885.9	1913.0	1916.0	1915.0	1918.9	1935.4	1937.3	1954.8	1965.5	1978.1	2017.9
22.5°	1793.7	1810.2	1833.5	1869.4	1883.0	1890.7	1896.5	1904.3	1920.8	1935.4	1951.9
25°	1743.2	1753.9	1760.7	1771.3	1799.5	1845.1	1853.8	1862.6	1873.3	1883.9	1904.3
27.5°	1698.5	1697.6	1702.4	1712.1	1719.9	1744.2	1786.9	1820.8	1822.8	1838.3	1855.8
30°	1666.5	1660.7	1653.9	1652.0	1662.6	1675.3	1687.9	1741.3	1778.1	1785.9	1804.3
32.5°	1636.4	1626.7	1617.0	1609.3	1602.5	1613.1	1620.9	1644.2	1691.8	1736.4	1746.1
35°	1599.5	1589.8	1578.2	1569.5	1558.8	1557.8	1556.8	1579.2	1594.7	1648.1	1694.7
37.5°	1561.7	1551.0	1541.3	1531.6	1520.9	1513.2	1508.3	1514.1	1528.7	1552.0	1629.6
40°	1521.9	1509.3	1499.6	1491.8	1477.3	1471.4	1461.7	1457.8	1458.8	1479.2	1520.0
42.5°	909.5	1450.1	1454.9	1446.2	1433.6	1425.8	1415.1	1410.3	1400.6	1410.3	1433.6
45°	350.4	354.3	1060.9	1401.5	1386.0	1376.3	1366.6	1361.7	1351.1	1343.3	1364.7
47.5°	343.6	347.5	339.7	481.4	1322.9	1325.8	1314.2	1309.3	1298.7	1292.8	1287.0
50°	338.7	341.7	335.8	337.8	331.0	1212.3	1260.8	1255.0	1243.3	1236.5	1224.9
52.5°	333.9	333.9	330.0	325.2	323.2	324.2	1020.1	1199.7	1186.1	1179.3	1163.7
55°	318.4	320.3	324.2	316.4	314.5	313.5	310.6	971.6	1123.0	1115.2	1101.6
57.5°	295.1	298.9	309.6	307.7	307.7	299.9	298.0	298.0	901.7	1050.2	1036.6
60°	267.9	271.8	283.4	287.3	290.2	288.3	286.3	285.4	281.5	950.2	967.7
62.5°	239.7	243.6	247.5	260.1	264.0	268.9	274.7	271.8	267.9	267.9	894.9
65°	209.6	215.5	217.4	229.1	233.9	242.6	247.5	254.3	252.4	251.4	256.2
67.5°	183.4	190.2	191.2	196.1	204.8	208.7	214.5	227.1	232.9	234.9	236.8
70°	161.1	165.0	167.9	169.9	175.7	176.6	187.3	196.1	204.8	214.5	217.4
72.5°	138.8	141.7	147.5	145.6	147.5	151.4	157.2	163.1	171.8	185.4	194.1
75°	113.6	115.5	119.4	121.3	125.2	128.1	132.0	136.9	144.6	151.4	163.1
77.5°	91.2	92.2	95.1	96.1	100.0	102.9	109.7	112.6	117.4	122.3	129.1
80°	73.8	73.8	74.7	74.7	77.6	80.6	85.4	88.3	94.1	98.0	98.0
82.5°	56.3	56.3	59.2	59.2	61.1	61.1	64.1	64.1	67.0	68.9	70.9
85°	39.8	40.8	42.7	41.7	43.7	42.7	44.6	46.6	47.6	46.6	45.6
87.5°	26.2	26.2	28.1	27.2	28.1	28.1	30.1	30.1	31.1	31.1	30.1
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-LD5-43SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8
2.5°	2175.1	2160.6	2151.8	2141.1	2138.2	2135.3	2139.2	2139.2	2133.4	2128.5	2119.8
5°	2225.6	2210.1	2193.6	2176.1	2159.6	2142.1	2135.3	2134.3	2123.7	2117.8	2114.9
7.5°	2251.8	2244.0	2225.6	2201.3	2176.1	2145.0	2131.4	2123.7	2113.0	2111.1	2111.1
10°	2254.7	2246.0	2236.3	2218.8	2189.7	2148.9	2122.7	2107.2	2097.5	2104.3	2116.9
12.5°	2226.6	2243.1	2234.3	2222.7	2199.4	2149.9	2112.0	2088.7	2085.8	2103.3	2136.3
15°	2154.7	2203.3	2227.5	2215.9	2197.4	2147.9	2094.6	2067.4	2067.4	2103.3	2146.0
17.5°	2100.4	2138.2	2197.4	2207.1	2185.8	2144.1	2078.1	2046.0	2054.8	2107.2	2152.8
20°	2055.7	2079.0	2136.3	2190.6	2170.3	2135.3	2053.8	2020.8	2038.3	2101.3	2162.5
22.5°	1985.8	2032.4	2067.4	2147.9	2154.7	2118.8	2029.5	1989.7	2024.7	2101.3	2157.6
25°	1917.9	1974.2	2011.1	2089.7	2131.4	2098.4	2007.2	1956.7	2010.1	2098.4	2153.8
27.5°	1870.3	1896.5	1963.5	2019.8	2096.5	2071.3	1977.1	1920.8	1991.7	2082.9	2131.4
30°	1819.9	1837.3	1903.3	1956.7	2049.9	2040.2	1946.1	1881.0	1968.4	2068.3	2073.2
32.5°	1764.5	1784.0	1817.9	1895.6	1984.9	2011.1	1911.1	1841.2	1943.1	2046.0	2005.3
35°	1708.3	1722.8	1750.0	1833.5	1909.2	1967.4	1868.4	1795.6	1925.7	2012.1	1940.2
37.5°	1652.0	1667.5	1690.8	1760.7	1829.6	1926.6	1831.5	1750.0	1893.6	1951.9	1872.3
40°	1598.6	1607.3	1631.6	1675.3	1763.6	1884.9	1789.8	1702.4	1860.6	1875.2	1780.1
42.5°	1500.5	1544.2	1566.5	1601.5	1688.8	1827.6	1741.3	1652.0	1823.8	1798.5	1687.9
45°	1394.8	1489.9	1499.6	1534.5	1622.8	1766.5	1695.6	1602.5	1788.8	1732.5	1600.5
47.5°	1308.4	1377.3	1433.6	1462.7	1544.2	1694.7	1652.9	1560.7	1736.4	1649.0	1515.1
50°	1231.7	1268.6	1370.5	1391.8	1450.1	1608.3	1602.5	1512.2	1663.6	1544.2	1431.6
52.5°	1157.0	1183.2	1275.4	1321.0	1368.5	1515.1	1542.3	1464.6	1584.0	1439.4	1347.2
55°	1091.9	1100.7	1151.1	1247.2	1289.9	1421.0	1476.3	1409.3	1483.1	1339.4	1265.7
57.5°	1025.0	1017.2	1054.1	1177.3	1208.4	1324.9	1406.4	1353.0	1401.5	1237.5	1181.2
60°	955.1	944.4	959.9	1041.5	1122.0	1229.7	1323.9	1290.9	1302.5	1136.6	1087.1
62.5°	882.3	871.6	866.7	918.2	1037.6	1131.7	1240.4	1222.0	1181.2	1044.4	970.6
65°	806.6	795.9	788.1	808.5	944.4	1004.6	1147.2	1142.4	1048.2	947.3	817.2
67.5°	245.6	724.1	707.6	706.6	795.9	889.1	1046.3	1038.5	914.3	843.5	703.7
70°	221.3	587.2	624.1	615.4	654.2	771.6	930.8	925.0	784.2	676.5	622.2
72.5°	202.9	207.7	551.3	541.6	550.3	656.1	810.4	794.9	664.9	533.8	537.7
75°	173.7	182.5	190.2	457.2	445.5	543.5	679.4	655.2	548.4	440.7	449.4
77.5°	141.7	152.4	158.2	332.9	360.1	387.3	542.6	510.5	377.6	352.3	167.9
80°	105.8	114.5	124.2	133.0	273.7	270.8	402.8	370.8	263.0	219.4	131.0
82.5°	77.6	80.6	86.4	96.1	108.7	181.5	259.1	228.1	182.5	100.0	90.3
85°	48.5	52.4	55.3	58.2	66.0	108.7	128.1	101.9	76.7	61.1	57.3
87.5°	31.1	31.1	30.1	31.1	32.0	38.8	43.7	41.7	33.0	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-LD5-43SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8
2.5°	2110.1	2096.5	2096.5	2092.6	2095.5	2095.5	2094.6	2095.5	2102.3	2106.2	2113.0
5°	2109.1	2105.2	2114.0	2124.6	2137.3	2152.8	2156.7	2170.3	2182.9	2199.4	2216.8
7.5°	2121.7	2135.3	2151.8	2169.3	2194.5	2213.0	2229.5	2246.0	2257.6	2273.1	2282.8
10°	2140.2	2167.3	2195.5	2217.8	2245.0	2260.5	2271.2	2273.1	2256.6	2230.4	2209.1
12.5°	2166.4	2198.4	2224.6	2246.0	2258.6	2252.8	2221.7	2189.7	2171.2	2144.1	2106.2
15°	2188.7	2217.8	2245.0	2236.3	2202.3	2170.3	2146.0	2108.1	2071.3	2046.0	2029.5
17.5°	2198.4	2226.6	2216.8	2171.2	2139.2	2102.3	2052.8	2023.7	1999.4	1980.0	1970.3
20°	2204.2	2199.4	2147.0	2114.0	2051.8	2017.9	1985.8	1958.7	1940.2	1930.5	1928.6
22.5°	2188.7	2129.5	2084.8	2025.6	1980.0	1951.9	1926.6	1904.3	1891.7	1883.9	1879.1
25°	2137.3	2068.3	2002.3	1955.8	1916.9	1892.7	1873.3	1854.8	1839.3	1835.4	1825.7
27.5°	2065.4	2009.1	1921.8	1885.9	1851.9	1840.3	1818.9	1800.5	1786.9	1775.2	1744.2
30°	2006.2	1916.9	1853.8	1820.8	1800.5	1786.9	1762.6	1743.2	1719.9	1677.2	1659.7
32.5°	1933.4	1845.1	1784.9	1766.5	1741.3	1729.6	1702.4	1659.7	1623.8	1606.3	1605.4
35°	1839.3	1766.5	1722.8	1706.3	1685.9	1666.5	1610.2	1571.4	1553.9	1555.9	1570.4
37.5°	1760.7	1695.6	1667.5	1644.2	1620.9	1571.4	1523.8	1505.4	1510.3	1520.0	1526.8
40°	1681.1	1631.6	1599.5	1581.1	1528.7	1480.2	1454.9	1461.7	1470.5	1477.3	1486.0
42.5°	1603.4	1568.5	1536.5	1500.5	1428.7	1402.5	1408.3	1417.1	1424.8	1434.5	1443.3
45°	1529.7	1498.6	1461.7	1380.2	1344.3	1351.1	1359.8	1366.6	1378.3	1385.0	1393.8
47.5°	1459.8	1426.8	1361.7	1289.9	1286.0	1299.6	1307.4	1316.1	1324.9	1307.4	721.2
50°	1381.2	1347.2	1248.2	1221.0	1229.7	1242.4	1252.1	1260.8	1123.0	446.5	343.6
52.5°	1303.5	1217.1	1154.0	1161.8	1170.5	1185.1	1191.9	885.2	352.3	335.8	336.8
55°	1217.1	1106.5	1088.0	1097.7	1105.5	1120.1	742.5	325.2	323.2	322.2	330.0
57.5°	1081.2	1014.3	1022.0	1031.7	1039.5	733.8	316.4	314.5	315.4	316.4	317.4
60°	959.9	945.4	954.1	962.8	681.4	305.7	299.9	300.9	304.8	301.9	294.1
62.5°	863.8	875.5	884.2	774.5	290.2	287.3	290.2	287.3	280.5	275.7	265.9
65°	790.1	801.7	808.5	272.7	271.8	275.7	272.7	263.0	252.4	238.8	235.9
67.5°	712.4	724.1	259.1	252.4	256.2	251.4	239.7	228.1	220.3	208.7	203.8
70°	631.9	270.8	234.9	233.9	227.1	219.4	206.7	195.1	185.4	180.5	175.7
72.5°	456.2	214.5	211.6	203.8	192.2	181.5	170.8	164.0	159.2	156.3	153.4
75°	190.2	186.4	177.6	164.0	152.4	147.5	139.8	134.9	133.0	127.1	125.2
77.5°	159.2	151.4	138.8	129.1	122.3	119.4	113.6	107.7	104.8	103.9	100.0
80°	122.3	111.6	105.8	100.9	99.0	92.2	85.4	82.5	80.6	79.6	76.7
82.5°	83.5	79.6	75.7	68.9	68.9	66.0	63.1	61.1	59.2	59.2	57.3
85°	54.4	51.4	50.5	47.6	47.6	45.6	44.6	43.7	42.7	41.7	40.8
87.5°	31.1	31.1	32.0	31.1	31.1	30.1	29.1	28.1	27.2	27.2	25.2
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-LD5-43SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8
2.5°	2121.7	2131.4	2133.4	2166.4	2184.8	2183.8	2178.0	2195.5	2184.8	2179.0	2184.8
5°	2234.3	2246.0	2255.7	2291.6	2304.2	2310.0	2309.1	2318.8	2311.0	2304.2	2304.2
7.5°	2289.6	2293.5	2297.4	2288.7	2282.8	2273.1	2258.6	2237.2	2226.6	2214.9	2200.3
10°	2198.4	2185.8	2190.6	2173.2	2158.6	2147.9	2134.3	2116.9	2102.3	2091.6	2075.1
12.5°	2086.8	2085.8	2087.8	2090.7	2076.1	2067.4	2056.7	2044.1	2033.4	2021.8	2008.2
15°	2018.8	2019.8	2027.6	2024.7	2019.8	2015.0	2003.3	1999.4	1989.7	1977.1	1969.3
17.5°	1970.3	1975.2	1982.9	1979.1	1971.3	1966.4	1957.7	1949.0	1940.2	1930.5	1918.9
20°	1927.6	1932.5	1937.3	1932.5	1917.9	1911.1	1899.5	1872.3	1852.9	1833.5	1816.0
22.5°	1881.0	1883.9	1880.0	1864.5	1827.6	1810.2	1796.6	1788.8	1772.3	1761.6	1751.0
25°	1822.8	1806.3	1781.0	1763.6	1749.0	1741.3	1735.4	1734.5	1732.5	1730.6	1725.7
27.5°	1727.7	1721.8	1708.3	1701.5	1702.4	1705.3	1706.3	1709.2	1706.3	1702.4	1698.5
30°	1656.8	1659.7	1660.7	1662.6	1667.5	1670.4	1671.4	1675.3	1673.3	1670.4	1668.5
32.5°	1612.2	1619.0	1622.8	1628.7	1631.6	1636.4	1636.4	1642.3	1636.4	1635.5	1633.5
35°	1575.3	1581.1	1583.0	1591.8	1594.7	1599.5	1599.5	1604.4	1599.5	1550.0	1223.9
37.5°	1538.4	1544.2	1548.1	1555.9	1556.8	1559.8	1439.4	1053.1	679.4	526.1	401.8
40°	1494.7	1501.5	1505.4	1508.3	1059.9	672.6	463.0	376.6	376.6	379.5	382.4
42.5°	1448.1	1453.0	1012.3	589.2	366.9	365.9	368.8	371.7	374.7	378.5	382.4
45°	1138.5	574.6	364.9	356.2	359.1	363.0	366.9	370.8	375.6	379.5	381.4
47.5°	373.7	350.4	355.2	351.4	356.2	361.1	364.9	368.8	369.8	370.8	369.8
50°	345.5	345.5	348.4	348.4	352.3	354.3	354.3	354.3	350.4	349.4	346.5
52.5°	333.9	341.7	337.8	339.7	337.8	334.9	331.9	329.0	323.2	321.3	317.4
55°	328.1	331.0	321.3	318.4	314.5	306.7	302.8	298.9	294.1	292.2	287.3
57.5°	314.5	307.7	297.0	292.2	285.4	277.6	273.7	270.8	265.9	264.0	261.1
60°	289.2	275.7	268.9	263.0	255.3	248.5	245.6	243.6	239.7	238.8	235.9
62.5°	258.2	246.5	240.7	232.9	227.1	223.2	220.3	219.4	215.5	215.5	213.5
65°	224.2	218.4	213.5	205.8	202.9	199.0	198.0	197.0	195.1	194.1	192.2
67.5°	197.0	193.1	186.4	182.5	180.5	177.6	175.7	173.7	169.9	167.9	165.0
70°	172.8	169.9	163.1	160.1	156.3	151.4	148.5	146.6	143.6	141.7	138.8
72.5°	149.5	140.7	135.9	133.0	130.1	125.2	124.2	122.3	119.4	118.4	115.5
75°	120.4	113.6	110.6	108.7	105.8	102.9	102.9	102.9	100.0	99.0	98.0
77.5°	96.1	92.2	90.3	88.3	87.4	85.4	82.5	81.5	78.6	78.6	77.6
80°	73.8	71.8	69.9	68.9	67.9	66.0	64.1	63.1	60.2	60.2	59.2
82.5°	54.4	53.4	52.4	51.4	50.5	49.5	46.6	45.6	43.7	43.7	42.7
85°	38.8	37.9	35.9	34.9	34.9	34.0	31.1	30.1	28.1	28.1	28.1
87.5°	24.3	23.3	22.3	21.4	20.4	19.4	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-LD5-43SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8
2.5°	2173.2	2189.7	2187.7	2199.4	2202.3	2208.1	2210.1	2211.0	2196.5	2208.1	2209.1
5°	2301.3	2304.2	2306.1	2311.0	2315.8	2316.8	2312.0	2306.1	2308.1	2304.2	2294.5
7.5°	2198.4	2183.8	2180.9	2177.1	2175.1	2173.2	2164.4	2172.2	2163.5	2159.6	2146.0
10°	2072.2	2058.6	2057.7	2057.7	2060.6	2059.6	2057.7	2053.8	2061.6	2056.7	2053.8
12.5°	2006.2	2001.4	2004.3	2002.3	2010.1	2012.1	2010.1	2010.1	2008.2	2004.3	2006.2
15°	1966.4	1962.6	1965.5	1962.6	1968.4	1969.3	1964.5	1967.4	1962.6	1957.7	1955.8
17.5°	1914.0	1905.3	1898.5	1888.8	1889.8	1887.8	1882.0	1882.0	1877.1	1864.5	1865.5
20°	1813.1	1804.3	1800.5	1800.5	1805.3	1807.3	1806.3	1808.2	1803.4	1801.4	1793.7
22.5°	1750.0	1749.0	1751.0	1755.8	1763.6	1774.3	1775.2	1775.2	1775.2	1774.3	1764.5
25°	1727.7	1727.7	1729.6	1736.4	1742.2	1750.0	1751.9	1753.9	1751.9	1751.9	1743.2
27.5°	1702.4	1700.5	1704.4	1711.2	1718.0	1723.8	1728.6	1729.6	1726.7	1726.7	1729.6
30°	1671.4	1670.4	1675.3	1682.0	1687.9	1693.7	1698.5	1702.4	1698.5	1698.5	1695.6
32.5°	1639.3	1639.3	1641.3	1600.5	1484.0	1336.5	1339.4	1254.0	1194.8	1120.1	1219.1
35°	1023.0	744.4	639.6	541.6	472.7	428.0	427.1	412.5	405.7	400.9	399.9
37.5°	386.3	388.2	392.1	394.1	397.0	398.9	399.9	399.9	399.9	399.9	398.9
40°	385.3	389.2	392.1	395.0	397.9	399.9	399.9	400.9	401.8	401.8	401.8
42.5°	386.3	390.2	394.1	397.0	398.9	399.9	400.9	401.8	401.8	401.8	401.8
45°	385.3	387.3	387.3	388.2	388.2	388.2	389.2	389.2	388.2	387.3	389.2
47.5°	370.8	370.8	367.9	366.9	365.9	364.0	364.9	364.0	363.0	362.0	364.0
50°	345.5	341.7	339.7	337.8	336.8	334.9	335.8	334.9	333.9	331.9	334.9
52.5°	315.4	314.5	310.6	308.7	307.7	308.7	306.7	305.7	304.8	303.8	304.8
55°	286.3	282.4	281.5	279.5	278.6	279.5	278.6	277.6	276.6	275.7	276.6
57.5°	260.1	257.2	256.2	254.3	254.3	254.3	254.3	253.3	252.4	251.4	252.4
60°	234.9	232.9	232.0	232.0	231.0	231.0	231.0	230.0	229.1	229.1	230.0
62.5°	213.5	213.5	210.6	209.6	209.6	210.6	209.6	208.7	207.7	206.7	208.7
65°	191.2	187.3	186.4	184.4	182.5	183.4	182.5	181.5	180.5	179.6	181.5
67.5°	164.0	163.1	159.2	157.2	156.3	157.2	156.3	155.3	154.3	153.4	155.3
70°	137.8	137.8	133.9	133.0	132.0	132.0	131.0	131.0	130.1	129.1	131.0
72.5°	114.5	114.5	113.6	111.6	110.6	109.7	108.7	107.7	107.7	108.7	108.7
75°	95.1	93.2	89.3	90.3	89.3	88.3	88.3	87.4	86.4	88.3	87.4
77.5°	74.7	73.8	70.9	71.8	70.9	69.9	69.9	68.9	67.9	68.9	68.9
80°	56.3	56.3	55.3	54.4	54.4	53.4	52.4	52.4	51.4	52.4	52.4
82.5°	40.8	40.8	39.8	38.8	37.9	37.9	36.9	36.9	36.9	36.9	36.9
85°	26.2	25.2	25.2	23.3	23.3	23.3	22.3	22.3	22.3	22.3	22.3
87.5°	12.6	12.6	11.6	11.6	10.7	9.7	9.7	8.7	8.7	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-LD5-43SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8
2.5°	2191.6	2204.2	2193.6	2198.4	2199.4	2215.9	2214.9	2218.8	2212.0	2204.2	2193.6
5°	2303.2	2297.4	2289.6	2308.1	2298.4	2310.0	2313.9	2321.7	2321.7	2320.7	2312.0
7.5°	2160.6	2147.9	2157.6	2164.4	2167.3	2159.6	2175.1	2192.6	2207.1	2215.9	2216.8
10°	2048.9	2052.8	2051.8	2054.8	2061.6	2060.6	2070.3	2080.0	2083.9	2089.7	2091.6
12.5°	1996.5	1995.6	1997.5	2004.3	2008.2	2007.2	2016.9	2022.7	2024.7	2025.6	2024.7
15°	1954.8	1948.0	1952.8	1953.8	1956.7	1956.7	1968.4	1977.1	1981.0	1982.9	1981.0
17.5°	1876.2	1859.7	1875.2	1875.2	1885.9	1883.9	1902.4	1916.9	1924.7	1930.5	1930.5
20°	1798.5	1790.8	1796.6	1794.6	1802.4	1801.4	1813.1	1822.8	1829.6	1834.4	1840.3
22.5°	1767.5	1769.4	1760.7	1761.6	1761.6	1760.7	1766.5	1771.3	1773.3	1776.2	1774.3
25°	1747.1	1749.0	1746.1	1741.3	1739.3	1741.3	1744.2	1750.0	1751.0	1749.0	1742.2
27.5°	1726.7	1720.9	1725.7	1717.0	1715.0	1718.9	1722.8	1723.8	1724.8	1724.8	1718.9
30°	1695.6	1690.8	1695.6	1691.8	1687.9	1691.8	1694.7	1694.7	1696.6	1697.6	1690.8
32.5°	1185.1	1194.8	1352.0	1447.2	1581.1	1649.0	1661.7	1661.7	1663.6	1663.6	1657.8
35°	403.8	404.7	437.7	474.6	553.2	650.3	777.4	843.5	1066.7	1333.6	1591.8
37.5°	398.9	397.9	397.0	396.0	395.0	394.1	392.1	391.2	397.0	470.7	638.7
40°	400.9	399.9	397.9	397.0	396.0	394.1	393.1	391.2	389.2	387.3	385.3
42.5°	400.9	399.9	398.9	397.9	397.0	396.0	394.1	392.1	390.2	387.3	384.4
45°	387.3	387.3	388.2	388.2	389.2	389.2	389.2	388.2	388.2	387.3	383.4
47.5°	362.0	362.0	364.9	364.9	366.9	368.8	368.8	370.8	373.7	375.6	376.6
50°	332.9	332.9	335.8	336.8	338.7	341.7	344.6	345.5	348.4	352.3	356.2
52.5°	303.8	303.8	306.7	306.7	308.7	311.6	314.5	315.4	319.3	323.2	328.1
55°	276.6	276.6	278.6	279.5	280.5	282.4	285.4	285.4	289.2	292.2	297.0
57.5°	252.4	254.3	254.3	254.3	255.3	257.2	259.1	259.1	262.1	265.0	268.9
60°	229.1	231.0	231.0	231.0	232.0	232.9	234.9	234.9	236.8	238.8	242.6
62.5°	207.7	209.6	209.6	210.6	210.6	211.6	213.5	212.6	214.5	215.5	218.4
65°	180.5	182.5	183.4	184.4	185.4	187.3	190.2	189.3	192.2	194.1	197.0
67.5°	154.3	156.3	156.3	157.2	158.2	160.1	162.1	162.1	165.0	166.9	170.8
70°	130.1	132.0	132.0	133.0	133.9	135.9	137.8	136.9	139.8	141.7	144.6
72.5°	107.7	109.7	109.7	110.6	110.6	112.6	114.5	116.5	116.5	118.4	120.4
75°	87.4	88.3	89.3	89.3	90.3	91.2	93.2	95.1	96.1	97.1	99.0
77.5°	68.9	69.9	70.9	70.9	71.8	72.8	73.8	77.6	79.6	80.6	80.6
80°	52.4	53.4	53.4	53.4	54.4	55.3	57.3	57.3	61.1	61.1	62.1
82.5°	36.9	37.9	37.9	37.9	38.8	40.8	41.7	42.7	44.6	45.6	45.6
85°	22.3	23.3	23.3	23.3	24.3	25.2	27.2	28.1	29.1	29.1	30.1
87.5°	8.7	9.7	10.7	10.7	11.6	12.6	13.6	14.6	15.5	15.5	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-LD5-43SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8
2.5°	2181.9	2188.7	2181.9	2185.8	2190.6	2181.9	2161.5	2153.8	2150.8	2139.2	2131.4
5°	2303.2	2303.2	2300.3	2308.1	2307.1	2293.5	2272.2	2262.5	2252.8	2240.1	2230.4
7.5°	2216.8	2224.6	2229.5	2259.6	2279.0	2280.9	2294.5	2297.4	2301.3	2297.4	2291.6
10°	2092.6	2089.7	2103.3	2131.4	2147.9	2156.7	2182.9	2195.5	2206.2	2227.5	2249.8
12.5°	2022.7	2026.6	2032.4	2052.8	2068.3	2064.5	2075.1	2083.9	2096.5	2117.8	2149.9
15°	1976.1	1980.0	1985.8	2001.4	2011.1	2006.2	2012.1	2017.9	2026.6	2037.3	2056.7
17.5°	1925.7	1932.5	1939.3	1955.8	1964.5	1963.5	1968.4	1970.3	1973.2	1980.0	1993.6
20°	1847.0	1868.4	1882.0	1904.3	1916.9	1915.0	1923.7	1926.6	1930.5	1937.3	1943.1
22.5°	1775.2	1781.0	1787.8	1812.1	1833.5	1859.7	1865.5	1873.3	1883.0	1889.8	1895.6
25°	1734.5	1730.6	1733.5	1750.0	1761.6	1763.6	1772.3	1797.5	1823.8	1835.4	1849.0
27.5°	1710.2	1706.3	1705.3	1713.1	1715.0	1710.2	1708.3	1716.0	1735.4	1754.8	1795.6
30°	1684.0	1679.1	1675.3	1682.0	1685.0	1678.2	1665.5	1658.8	1670.4	1675.3	1691.8
32.5°	1652.9	1648.1	1646.1	1650.0	1652.0	1646.1	1632.5	1624.8	1622.8	1619.0	1622.8
35°	1618.0	1613.1	1610.2	1611.2	1615.1	1610.2	1598.6	1588.9	1584.0	1573.3	1565.6
37.5°	833.7	1181.2	1533.5	1570.4	1574.3	1573.3	1561.7	1551.0	1546.2	1533.5	1529.7
40°	381.4	426.1	639.6	835.7	1205.5	1531.6	1520.9	1510.3	1501.5	1497.6	1483.1
42.5°	380.5	381.4	382.4	377.6	467.8	796.9	1176.4	1468.5	1462.7	1453.0	1442.3
45°	380.5	375.6	379.5	373.7	375.6	374.7	466.9	753.2	1340.4	1400.6	1395.7
47.5°	376.6	373.7	377.6	372.7	366.9	369.8	365.9	370.8	578.5	981.3	1344.3
50°	359.1	361.1	367.9	366.9	362.0	365.9	359.1	364.9	360.1	395.0	760.9
52.5°	332.9	336.8	343.6	349.4	351.4	356.2	354.3	356.2	352.3	353.3	354.3
55°	301.9	306.7	312.5	321.3	325.2	332.9	338.7	341.7	346.5	345.5	337.8
57.5°	272.7	277.6	282.4	291.2	299.9	303.8	314.5	320.3	332.9	330.0	328.1
60°	245.6	249.4	254.3	256.2	266.9	273.7	283.4	289.2	305.7	309.6	315.4
62.5°	221.3	223.2	227.1	230.0	236.8	243.6	248.5	258.2	266.9	279.5	288.3
65°	199.0	200.9	203.8	205.8	206.7	216.4	219.4	230.0	232.9	246.5	254.3
67.5°	173.7	177.6	181.5	183.4	185.4	191.2	193.1	198.0	204.8	210.6	220.3
70°	147.5	150.4	154.3	157.2	161.1	165.0	170.8	173.7	178.6	182.5	190.2
72.5°	123.3	126.2	128.1	131.0	133.9	136.9	141.7	148.5	152.4	159.2	161.1
75°	100.0	102.9	104.8	106.8	109.7	111.6	113.6	120.4	124.2	130.1	135.9
77.5°	82.5	82.5	84.4	90.3	89.3	89.3	91.2	95.1	98.0	101.9	107.7
80°	64.1	65.0	66.0	70.9	71.8	72.8	71.8	74.7	77.6	78.6	82.5
82.5°	47.6	48.5	48.5	51.4	54.4	54.4	54.4	55.3	58.2	59.2	61.1
85°	32.0	33.0	34.0	34.9	36.9	37.9	38.8	38.8	40.8	41.7	42.7
87.5°	17.5	19.4	20.4	21.4	22.3	23.3	24.3	25.2	26.2	27.2	28.1
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-LD5-43SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8	2117.8
2.5°	2128.5	2123.7	2120.8	2113.0	2111.1	2098.4	2100.4	2098.4	2098.4	2101.3	2111.1
5°	2219.8	2196.5	2190.6	2174.1	2160.6	2137.3	2122.7	2114.9	2103.3	2098.4	2105.2
7.5°	2281.9	2264.4	2249.8	2235.3	2215.9	2188.7	2168.3	2145.0	2125.6	2107.2	2102.3
10°	2271.2	2290.6	2290.6	2281.9	2263.4	2236.3	2212.0	2182.9	2148.9	2119.8	2102.3
12.5°	2180.9	2214.9	2242.1	2262.5	2280.9	2262.5	2238.2	2214.9	2177.1	2134.3	2102.3
15°	2081.9	2116.9	2150.8	2193.6	2238.2	2256.6	2255.7	2228.5	2194.5	2149.9	2105.2
17.5°	2012.1	2036.3	2054.8	2101.3	2155.7	2203.3	2235.3	2237.2	2204.2	2164.4	2106.2
20°	1959.6	1977.1	1992.6	2018.8	2066.4	2124.6	2183.8	2216.8	2211.0	2167.3	2109.1
22.5°	1912.1	1924.7	1937.3	1956.7	1994.6	2032.4	2101.3	2169.3	2198.4	2162.5	2106.2
25°	1864.5	1878.1	1887.8	1901.4	1931.5	1962.6	2011.1	2095.5	2160.6	2158.6	2100.4
27.5°	1808.2	1826.7	1838.3	1856.8	1877.1	1900.4	1933.4	2013.0	2106.2	2139.2	2084.8
30°	1740.3	1767.5	1784.9	1805.3	1822.8	1843.2	1869.4	1917.9	2033.4	2101.3	2068.3
32.5°	1642.3	1690.8	1729.6	1749.0	1768.4	1785.9	1809.2	1850.0	1944.1	2049.9	2049.9
35°	1572.4	1594.7	1629.6	1685.9	1710.2	1727.7	1749.0	1781.0	1841.2	1988.8	2019.8
37.5°	1518.0	1526.8	1544.2	1599.5	1645.2	1673.3	1694.7	1715.0	1774.3	1905.3	1981.0
40°	1477.3	1474.3	1472.4	1498.6	1563.6	1608.3	1632.5	1652.9	1698.5	1805.3	1929.6
42.5°	1429.7	1426.8	1417.1	1423.9	1455.9	1530.6	1567.5	1589.8	1627.7	1700.5	1873.3
45°	1380.2	1375.3	1371.5	1364.7	1376.3	1418.0	1493.8	1526.8	1548.1	1613.1	1802.4
47.5°	1329.7	1322.9	1318.1	1312.2	1305.5	1324.9	1396.7	1455.9	1492.8	1533.5	1717.0
50°	1257.9	1266.6	1260.8	1254.0	1248.2	1244.3	1274.4	1371.5	1417.1	1450.1	1613.1
52.5°	593.0	1153.1	1201.6	1194.8	1187.0	1180.2	1187.0	1260.8	1343.3	1369.5	1487.9
55°	337.8	513.4	1068.6	1129.8	1123.0	1113.3	1107.5	1132.7	1256.0	1290.9	1373.4
57.5°	325.2	326.1	471.7	1018.2	1056.0	1047.3	1040.5	1046.3	1151.1	1210.3	1273.4
60°	314.5	314.5	314.5	450.4	973.5	976.4	967.7	958.0	1003.6	1120.1	1172.5
62.5°	291.2	297.0	299.9	299.9	444.5	901.7	893.0	890.0	892.0	1011.4	1071.5
65°	261.1	274.7	280.5	284.4	284.4	466.9	816.3	811.4	804.6	850.2	969.6
67.5°	228.1	241.7	254.3	262.1	263.0	271.8	487.2	730.9	721.2	722.1	860.9
70°	194.1	205.8	219.4	231.0	241.7	246.5	254.3	606.6	638.7	625.1	737.7
72.5°	167.9	172.8	182.5	194.1	206.7	218.4	225.2	241.7	554.2	539.7	561.0
75°	139.8	143.6	150.4	158.2	167.9	181.5	193.1	204.8	294.1	452.3	449.4
77.5°	108.7	115.5	123.3	128.1	133.0	142.7	158.2	169.9	181.5	305.7	360.1
80°	83.5	88.3	92.2	97.1	102.9	109.7	115.5	129.1	142.7	153.4	275.7
82.5°	62.1	65.0	67.9	69.9	71.8	75.7	86.4	91.2	100.0	109.7	130.1
85°	43.7	45.6	47.6	48.5	49.5	50.5	54.4	55.3	64.1	66.0	78.6
87.5°	28.1	29.1	31.1	32.0	32.0	33.0	34.0	34.0	34.0	32.0	38.8
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-LD5-43SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	2117.8	2117.8
2.5°	2118.8	2134.3
5°	2115.9	2136.3
7.5°	2108.1	2127.6
10°	2096.5	2119.8
12.5°	2083.9	2106.2
15°	2073.2	2089.7
17.5°	2061.6	2071.3
20°	2046.0	2053.8
22.5°	2030.5	2026.6
25°	2013.0	2004.3
27.5°	1990.7	1974.2
30°	1970.3	1941.2
32.5°	1950.9	1903.3
35°	1924.7	1864.5
37.5°	1897.5	1824.7
40°	1865.5	1779.1
42.5°	1831.5	1733.5
45°	1788.8	1689.8
47.5°	1751.0	1637.4
50°	1698.5	1581.1
52.5°	1634.5	1528.7
55°	1558.8	1464.6
57.5°	1477.3	1397.7
60°	1389.9	1321.0
62.5°	1284.1	1241.4
65°	1159.9	1150.2
67.5°	997.8	1049.2
70°	818.2	933.7
72.5°	684.3	811.4
75°	561.0	674.6
77.5°	444.5	529.0
80°	277.6	387.3
82.5°	186.4	254.3
85°	112.6	121.3
87.5°	43.7	44.6
90°	0.0	0.0

(END OF REPORT)