

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-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-LD5-46SL-RW-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

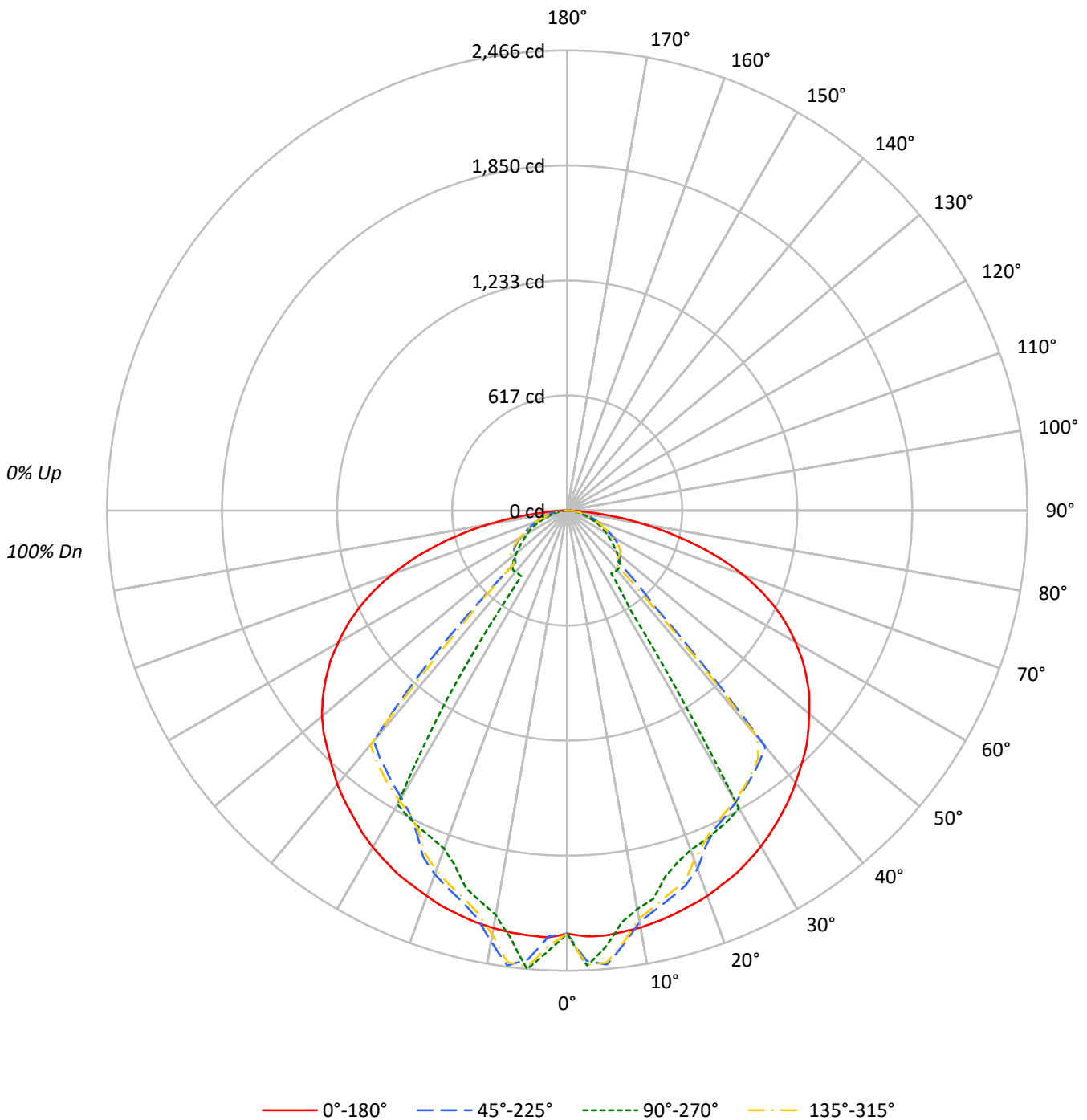
Lumens per Lamp: N/A
Luminaire Lumens: 4539.0 lumens
Efficiency: N/A
Efficacy: 119.4 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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	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°	18317	18317	18317	18317
5°	18496	18455	18488	19369
10°	18514	16686	18540	16941
15°	18555	15438	18599	15927
20°	18690	14642	18690	14587
25°	18852	14362	18879	14228
30°	19043	14109	19090	13942
35°	19264	3214	19305	3351
40°	19573	3342	19690	3450
45°	20042	3323	20112	3444
50°	20510	3005	20788	3086
55°	21141	2668	21309	2706
60°	21677	2370	21724	2402
65°	22060	2069	22004	2036
70°	21744	1668	21676	1607
75°	20188	1284	20334	1229
80°	16386	912	17042	834
85°	8868	547	9366	419



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.0	4.9
10°-20°	613.2	13.5
20°-30°	908.2	20.0
30°-40°	915.1	20.2
40°-50°	714.8	15.7
50°-60°	552.2	12.2
60°-70°	370.7	8.2
70°-80°	189.1	4.2
80°-90°	52.6	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°	1744.4	38.4
0°-40°	2659.5	58.6
0°-60°	3926.6	86.5
0°-90°	4539.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4539.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2267	2267	2267	2267	2267	
5°	2286	2350	2285	2466	2286	217
15°	2236	2031	2242	2095	2236	633
25°	2145	1893	2148	1875	2145	990
35°	1996	411	2000	429	1996	1251
45°	1808	400	1815	414	1808	1395
55°	1568	291	1580	295	1568	1400
65°	1231	195	1228	192	1231	1211
75°	722	99	727	94	722	755
85°	130	31	137	24	130	179
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°	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7
2.5°	2284.3	2292.6	2298.9	2303.0	2305.1	2305.1	2306.1	2307.2	2320.7	2326.9	2331.1
5°	2286.4	2294.7	2307.2	2323.8	2338.3	2350.8	2361.2	2375.7	2390.3	2405.9	2411.1
7.5°	2277.0	2287.4	2312.4	2342.5	2370.5	2390.3	2403.8	2413.1	2420.4	2421.4	2426.6
10°	2268.7	2287.4	2321.7	2361.2	2396.5	2420.4	2420.4	2415.2	2422.5	2394.4	2366.4
12.5°	2254.2	2275.0	2321.7	2373.7	2406.9	2416.2	2412.1	2391.3	2348.7	2314.4	2298.9
15°	2236.5	2264.6	2322.8	2380.9	2409.0	2412.1	2372.6	2319.6	2287.4	2266.7	2240.7
17.5°	2216.8	2254.2	2323.8	2382.0	2392.4	2377.8	2303.0	2269.8	2236.5	2187.7	2152.4
20°	2198.1	2234.5	2315.5	2367.4	2373.7	2308.2	2250.0	2214.7	2158.6	2116.0	2100.5
22.5°	2169.0	2211.6	2308.2	2347.7	2323.8	2248.0	2191.9	2135.8	2084.9	2072.4	2053.7
25°	2145.1	2189.8	2291.6	2323.8	2260.4	2192.9	2127.5	2062.0	2038.1	2020.5	2003.8
27.5°	2112.9	2168.0	2269.8	2280.2	2192.9	2133.7	2038.1	2009.0	1987.2	1967.5	1960.2
30°	2077.6	2145.1	2239.7	2219.9	2136.8	2049.6	1978.9	1951.9	1936.3	1915.5	1907.2
32.5°	2037.1	2110.8	2206.4	2150.3	2076.6	1967.5	1921.8	1901.0	1880.2	1864.6	1812.7
35°	1995.5	2080.7	2166.9	2083.8	2003.8	1905.2	1864.6	1845.9	1826.2	1769.1	1715.1
37.5°	1952.9	2047.5	2119.2	2012.2	1907.2	1840.8	1806.5	1785.7	1741.0	1668.3	1641.3
40°	1904.1	2007.0	2057.9	1938.4	1823.1	1775.3	1743.1	1722.3	1621.6	1589.4	1581.1
42.5°	1855.3	1967.5	1983.1	1866.7	1753.5	1705.7	1678.7	1610.1	1541.6	1525.0	1528.1
45°	1808.5	1924.9	1901.0	1764.9	1680.8	1641.3	1595.6	1501.1	1464.7	1473.0	1475.1
47.5°	1752.5	1874.0	1814.8	1663.1	1606.0	1566.5	1464.7	1407.6	1402.4	1413.8	1420.0
50°	1692.2	1816.9	1723.4	1570.7	1525.0	1478.2	1362.9	1333.8	1340.1	1351.5	1358.7
52.5°	1636.1	1752.5	1628.8	1484.4	1445.0	1338.0	1260.1	1265.3	1275.6	1289.1	1293.3
55°	1567.5	1674.5	1528.1	1397.2	1359.8	1219.6	1184.2	1196.7	1207.1	1218.5	1226.8
57.5°	1495.9	1585.2	1408.6	1299.5	1239.3	1114.6	1117.7	1126.1	1133.3	1146.8	473.7
60°	1413.8	1483.4	1277.7	1209.2	1089.7	1031.5	1034.6	1049.2	1056.5	590.0	326.2
62.5°	1328.6	1365.0	1159.3	1106.3	952.6	948.4	963.0	969.2	659.6	311.6	305.4
65°	1231.0	1223.7	1043.0	958.8	859.1	863.2	878.8	847.7	291.9	291.9	289.8
67.5°	1122.9	1079.3	929.7	793.6	768.7	778.1	794.7	277.4	270.1	272.2	264.9
70°	999.3	938.0	812.3	672.1	680.4	689.8	268.0	251.4	248.3	243.1	228.5
72.5°	868.4	784.3	664.8	583.8	589.0	369.8	234.8	226.5	216.1	205.7	190.1
75°	722.0	612.9	488.2	488.2	495.5	210.9	204.6	191.1	179.7	166.2	156.9
77.5°	566.1	471.6	379.2	393.7	192.2	176.6	165.2	150.6	141.3	133.0	127.8
80°	414.5	329.3	285.7	255.5	149.6	134.0	122.6	114.3	110.1	104.9	98.7
82.5°	272.2	198.4	198.4	120.5	104.9	92.5	89.3	83.1	78.9	75.8	72.7
85°	129.8	115.3	87.3	73.8	65.4	59.2	57.1	54.0	54.0	53.0	51.9
87.5°	47.8	51.9	38.4	37.4	35.3	34.3	35.3	35.3	36.4	35.3	34.3
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):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7
2.5°	2341.5	2349.8	2356.0	2366.4	2379.9	2391.3	2401.7	2416.2	2439.1	2445.3	2450.5
5°	2411.1	2414.2	2421.4	2429.8	2431.8	2437.0	2436.0	2442.2	2445.3	2452.6	2437.0
7.5°	2415.2	2398.6	2378.9	2361.2	2348.7	2337.3	2330.0	2341.5	2347.7	2352.9	2337.3
10°	2327.9	2308.2	2296.8	2286.4	2273.9	2256.3	2232.4	2237.6	2235.5	2235.5	2230.3
12.5°	2272.9	2244.8	2215.8	2189.8	2178.4	2177.3	2178.4	2189.8	2189.8	2188.7	2182.5
15°	2186.7	2159.7	2145.1	2138.9	2138.9	2135.8	2135.8	2148.2	2145.1	2145.1	2142.0
17.5°	2129.5	2110.8	2100.5	2093.2	2090.1	2095.3	2101.5	2106.7	2107.7	2103.6	2086.9
20°	2082.8	2065.1	2052.7	2054.7	2053.7	2056.8	2059.9	2042.3	2020.5	1991.4	1977.9
22.5°	2034.0	2020.5	2011.1	2011.1	1998.6	1978.9	1949.8	1943.6	1940.5	1927.0	1915.5
25°	1987.2	1971.6	1958.1	1916.6	1890.6	1893.7	1888.5	1878.1	1877.1	1876.1	1880.2
27.5°	1940.5	1900.0	1848.0	1841.8	1831.4	1830.4	1836.6	1841.8	1841.8	1845.9	1851.1
30°	1843.9	1797.1	1787.8	1776.3	1780.5	1795.0	1798.2	1805.4	1807.5	1814.8	1818.9
32.5°	1755.6	1734.8	1726.5	1731.7	1745.2	1757.6	1764.9	1768.0	1773.2	1779.5	1784.7
35°	1683.9	1677.7	1684.9	1696.4	1709.9	1720.3	1726.5	1732.7	1737.9	1743.1	1747.3
37.5°	1630.9	1635.1	1645.5	1660.0	1673.5	1681.8	1687.0	1694.3	1701.6	1707.8	1682.9
40°	1581.1	1591.4	1602.9	1618.4	1629.9	1638.2	1643.4	1652.7	1590.4	719.9	394.7
42.5°	1537.4	1548.8	1557.2	1569.6	1582.1	1588.3	1542.6	688.7	389.5	387.5	392.7
45°	1484.4	1493.8	1507.3	1516.6	1528.1	1003.5	383.3	387.5	381.2	385.4	387.5
47.5°	1430.4	1445.0	1452.2	1385.8	412.4	381.2	377.1	381.2	377.1	382.3	379.2
50°	1369.1	1386.8	986.9	372.9	369.8	367.7	371.9	369.8	372.9	377.1	368.8
52.5°	1306.8	809.2	361.5	359.4	361.5	359.4	366.7	361.5	362.5	358.4	348.0
55°	442.5	350.1	347.0	345.9	352.2	352.2	352.2	343.8	338.6	328.3	321.0
57.5°	338.6	338.6	337.6	338.6	336.6	334.5	325.1	317.9	310.6	296.1	291.9
60°	321.0	321.0	321.0	321.0	311.6	307.5	292.9	286.7	274.2	267.0	262.8
62.5°	306.4	304.4	295.0	291.9	281.5	270.1	261.8	255.5	243.1	238.9	235.8
65°	285.7	278.4	267.0	254.5	249.3	236.8	232.7	223.3	217.1	214.0	211.9
67.5°	251.4	241.0	231.7	223.3	214.0	209.8	204.6	197.4	193.2	191.1	189.1
70°	215.0	207.8	198.4	193.2	187.0	183.9	176.6	174.5	171.4	168.3	165.2
72.5°	179.7	175.6	171.4	164.1	162.1	160.0	152.7	148.5	144.4	140.2	138.2
75°	150.6	147.5	145.4	139.2	136.1	129.8	124.7	121.5	118.4	115.3	113.2
77.5°	123.6	121.5	115.3	111.2	109.1	103.9	101.8	102.8	100.8	96.6	94.5
80°	96.6	94.5	89.3	89.3	87.3	85.2	83.1	81.0	78.9	75.8	73.8
82.5°	73.8	71.7	69.6	67.5	65.4	64.4	63.4	61.3	59.2	57.1	56.1
85°	51.9	50.9	49.9	48.8	47.8	46.7	45.7	43.6	41.6	40.5	39.5
87.5°	35.3	34.3	33.2	32.2	31.2	30.1	29.1	28.0	26.0	24.9	23.9
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°	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7
2.5°	2450.5	2455.7	2450.5	2439.1	2431.8	2428.7	2434.9	2434.9	2439.1	2444.3	2445.3
5°	2412.1	2399.6	2385.1	2370.5	2363.3	2359.1	2347.7	2349.8	2352.9	2355.0	2357.0
7.5°	2316.5	2299.9	2280.2	2261.5	2254.2	2248.0	2234.5	2234.5	2234.5	2235.5	2241.7
10°	2218.9	2211.6	2203.3	2190.8	2181.5	2178.4	2166.9	2170.1	2168.0	2171.1	2178.4
12.5°	2173.2	2164.9	2157.6	2145.1	2134.7	2130.6	2125.4	2128.5	2127.5	2132.7	2138.9
15°	2131.6	2127.5	2119.2	2109.8	2100.5	2092.1	2073.4	2067.2	2063.1	2057.9	2065.1
17.5°	2063.1	2034.0	2014.2	1999.7	1989.3	1982.0	1976.8	1976.8	1980.0	1983.1	1989.3
20°	1969.6	1961.3	1951.9	1936.3	1925.9	1921.8	1918.7	1918.7	1923.9	1928.0	1939.4
22.5°	1905.2	1904.1	1901.0	1893.7	1888.5	1888.5	1889.6	1891.7	1898.9	1905.2	1916.6
25°	1875.0	1879.2	1877.1	1873.0	1869.8	1870.9	1868.8	1870.9	1878.1	1884.4	1893.7
27.5°	1851.1	1857.4	1855.3	1849.1	1843.9	1845.9	1849.1	1847.0	1853.2	1860.5	1867.8
30°	1818.9	1820.0	1824.1	1816.9	1814.8	1817.9	1818.9	1821.0	1827.2	1832.4	1838.7
32.5°	1782.6	1790.9	1789.9	1782.6	1782.6	1785.7	1786.7	1717.1	1587.3	1367.1	1306.8
35°	1747.3	1756.6	1741.0	1467.8	1015.9	542.3	418.6	404.1	407.2	409.3	411.4
37.5°	1292.3	612.9	390.6	393.7	396.8	399.9	403.1	406.2	409.3	412.4	413.4
40°	388.5	387.5	390.6	394.7	397.9	399.9	404.1	407.2	410.3	413.4	414.5
42.5°	384.4	386.4	389.5	393.7	397.9	402.0	405.1	409.3	411.4	413.4	414.5
45°	382.3	386.4	390.6	393.7	396.8	398.9	401.0	402.0	401.0	401.0	403.1
47.5°	379.2	383.3	384.4	383.3	384.4	383.3	383.3	383.3	380.2	379.2	379.2
50°	367.7	367.7	365.7	361.5	360.5	359.4	357.3	356.3	352.2	351.1	351.1
52.5°	343.8	342.8	339.7	334.5	332.4	330.3	329.3	328.3	324.1	322.0	323.1
55°	315.8	313.7	310.6	304.4	303.3	301.3	300.2	299.2	295.0	297.1	294.0
57.5°	289.8	285.7	281.5	280.5	276.3	275.3	274.2	273.2	270.1	271.1	269.0
60°	258.7	257.6	255.5	251.4	251.4	250.4	250.4	248.3	246.2	245.2	245.2
62.5°	235.8	232.7	230.6	230.6	227.5	227.5	227.5	225.4	223.3	224.4	223.3
65°	210.9	209.8	208.8	206.7	206.7	205.7	205.7	203.6	200.5	201.5	199.4
67.5°	190.1	188.0	185.9	184.9	180.8	178.7	177.6	176.6	172.4	173.5	171.4
70°	164.1	161.0	158.9	156.9	153.7	151.7	151.7	149.6	146.5	147.5	145.4
72.5°	137.1	135.0	133.0	131.9	128.8	127.8	126.7	125.7	122.6	123.6	122.6
75°	114.3	114.3	113.2	112.2	109.1	106.0	103.9	102.8	100.8	101.8	99.7
77.5°	94.5	92.5	90.4	90.4	87.3	85.2	83.1	83.1	83.1	82.1	81.0
80°	73.8	71.7	71.7	70.6	68.6	66.5	65.4	65.4	64.4	64.4	63.4
82.5°	56.1	54.0	53.0	53.0	50.9	49.9	48.8	47.8	47.8	47.8	46.7
85°	39.5	37.4	36.4	36.4	34.3	33.2	33.2	32.2	32.2	31.2	31.2
87.5°	23.9	22.9	21.8	21.8	19.7	18.7	18.7	18.7	17.7	17.7	16.6
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-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7
2.5°	2445.3	2445.3	2438.1	2440.1	2437.0	2441.2	2436.0	2436.0	2442.2	2442.2	2446.4
5°	2358.1	2352.9	2351.8	2349.8	2339.4	2343.5	2338.3	2333.1	2340.4	2340.4	2349.8
7.5°	2238.6	2229.3	2233.4	2227.2	2221.0	2211.6	2214.7	2210.6	2215.8	2223.0	2232.4
10°	2177.3	2169.0	2174.2	2168.0	2171.1	2157.6	2158.6	2159.7	2164.9	2166.9	2175.2
12.5°	2137.8	2135.8	2133.7	2131.6	2133.7	2126.4	2122.3	2123.3	2125.4	2126.4	2132.7
15°	2054.7	2041.2	2045.4	2030.9	2031.9	2032.9	2024.6	2032.9	2031.9	2045.4	2057.9
17.5°	1987.2	1987.2	1980.0	1973.7	1969.6	1968.5	1962.3	1966.4	1962.3	1970.6	1973.7
20°	1940.5	1939.4	1938.4	1935.3	1924.9	1925.9	1929.1	1919.7	1918.7	1917.6	1923.9
22.5°	1918.7	1919.7	1915.5	1915.5	1906.2	1908.3	1909.3	1898.9	1900.0	1896.8	1900.0
25°	1895.8	1897.9	1892.7	1892.7	1890.6	1889.6	1884.4	1886.5	1880.2	1875.0	1880.2
27.5°	1868.8	1873.0	1868.8	1870.9	1866.7	1864.6	1861.5	1859.5	1853.2	1852.2	1855.3
30°	1843.9	1845.9	1844.9	1839.7	1838.7	1832.4	1835.6	1829.3	1823.1	1824.1	1826.2
32.5°	945.3	902.7	696.0	628.5	622.2	645.1	764.6	930.8	1206.0	1473.0	1665.2
35°	412.4	412.4	412.4	411.4	411.4	410.3	409.3	408.2	407.2	406.2	405.1
37.5°	414.5	414.5	414.5	414.5	413.4	412.4	412.4	410.3	409.3	408.2	407.2
40°	415.5	416.6	416.6	416.6	415.5	415.5	414.5	412.4	411.4	409.3	407.2
42.5°	414.5	415.5	415.5	414.5	414.5	413.4	413.4	412.4	411.4	410.3	409.3
45°	401.0	402.0	399.9	399.9	398.9	398.9	398.9	398.9	398.9	399.9	399.9
47.5°	377.1	377.1	376.0	375.0	375.0	374.0	375.0	374.0	376.0	377.1	379.2
50°	349.0	349.0	347.0	345.9	345.9	345.9	345.9	347.0	348.0	350.1	352.2
52.5°	320.0	320.0	318.9	317.9	316.8	316.8	320.0	318.9	320.0	321.0	324.1
55°	291.9	292.9	290.9	290.9	289.8	289.8	289.8	290.9	291.9	292.9	296.1
57.5°	268.0	268.0	265.9	265.9	265.9	264.9	268.0	265.9	267.0	268.0	270.1
60°	244.1	243.1	243.1	242.0	242.0	242.0	244.1	243.1	243.1	244.1	246.2
62.5°	222.3	222.3	221.3	221.3	220.2	220.2	222.3	221.3	221.3	222.3	223.3
65°	197.4	197.4	196.3	195.3	198.4	195.3	198.4	196.3	198.4	199.4	201.5
67.5°	169.3	169.3	169.3	168.3	168.3	170.4	171.4	169.3	170.4	172.4	173.5
70°	144.4	144.4	143.4	143.4	143.4	145.4	146.5	144.4	145.4	146.5	148.5
72.5°	122.6	120.5	120.5	119.5	121.5	121.5	122.6	121.5	122.6	122.6	124.7
75°	100.8	98.7	98.7	98.7	100.8	99.7	100.8	99.7	100.8	100.8	101.8
77.5°	81.0	80.0	78.9	78.9	81.0	81.0	81.0	80.0	81.0	82.1	83.1
80°	63.4	62.3	61.3	61.3	63.4	63.4	63.4	64.4	63.4	64.4	65.4
82.5°	46.7	45.7	44.7	46.7	46.7	46.7	46.7	47.8	46.7	47.8	48.8
85°	31.2	30.1	29.1	31.2	31.2	31.2	31.2	32.2	31.2	32.2	33.2
87.5°	16.6	15.6	15.6	16.6	16.6	16.6	17.7	17.7	17.7	18.7	18.7
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-LD5-46SL-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°	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7
2.5°	2452.6	2455.7	2454.7	2448.4	2442.2	2434.9	2429.8	2430.8	2441.2	2444.3	2434.9
5°	2349.8	2369.5	2369.5	2383.0	2375.7	2369.5	2373.7	2396.5	2407.9	2425.6	2431.8
7.5°	2243.8	2253.2	2252.1	2265.6	2263.5	2263.5	2266.7	2296.8	2311.3	2325.9	2330.0
10°	2184.6	2193.9	2192.9	2193.9	2190.8	2183.6	2183.6	2197.1	2209.5	2216.8	2218.9
12.5°	2142.0	2147.2	2146.2	2146.2	2144.1	2137.8	2136.8	2148.2	2161.7	2171.1	2172.1
15°	2078.6	2093.2	2096.3	2109.8	2106.7	2098.4	2100.5	2109.8	2118.1	2126.4	2123.3
17.5°	1984.1	1991.4	1992.4	1997.6	1995.5	1995.5	2008.0	2042.3	2065.1	2084.9	2086.9
20°	1930.1	1935.3	1933.2	1944.6	1939.4	1938.4	1941.5	1956.1	1966.4	1975.8	1992.4
22.5°	1904.1	1908.3	1905.2	1906.2	1896.8	1888.5	1886.5	1897.9	1909.3	1921.8	1921.8
25°	1882.3	1885.4	1884.4	1882.3	1875.0	1863.6	1861.5	1863.6	1867.8	1868.8	1861.5
27.5°	1856.3	1858.4	1858.4	1859.5	1850.1	1839.7	1837.6	1835.6	1839.7	1838.7	1827.2
30°	1829.3	1826.2	1827.2	1828.3	1820.0	1810.6	1806.5	1805.4	1809.6	1808.5	1797.1
32.5°	1764.9	1788.8	1790.9	1793.0	1785.7	1777.4	1773.2	1770.1	1772.2	1771.2	1760.8
35°	404.1	411.4	503.8	1140.6	1548.8	1715.1	1732.7	1728.6	1729.6	1729.6	1721.3
37.5°	405.1	404.1	403.1	399.9	396.8	394.7	682.5	1455.4	1686.0	1687.0	1679.7
40°	405.1	404.1	403.1	401.0	396.8	393.7	388.5	384.4	393.7	866.4	1585.2
42.5°	407.2	405.1	403.1	401.0	396.8	392.7	388.5	383.3	386.4	384.4	379.2
45°	401.0	399.9	399.9	398.9	396.8	392.7	387.5	381.2	378.1	381.2	376.0
47.5°	381.2	382.3	385.4	386.4	386.4	387.5	384.4	380.2	375.0	378.1	371.9
50°	354.2	356.3	357.3	362.5	364.6	368.8	369.8	369.8	368.8	372.9	368.8
52.5°	325.1	327.2	332.4	334.5	336.6	342.8	344.9	348.0	350.1	356.3	360.5
55°	297.1	298.1	300.2	304.4	307.5	312.7	315.8	318.9	324.1	327.2	339.7
57.5°	271.1	272.2	276.3	277.4	279.4	283.6	286.7	290.9	295.0	297.1	311.6
60°	246.2	247.2	250.4	251.4	252.4	256.6	259.7	262.8	265.9	268.0	278.4
62.5°	224.4	224.4	227.5	227.5	228.5	231.7	233.7	235.8	238.9	240.0	245.2
65°	202.6	203.6	205.7	205.7	206.7	208.8	209.8	210.9	214.0	214.0	218.1
67.5°	175.6	176.6	179.7	181.8	182.8	187.0	188.0	189.1	191.1	192.2	194.3
70°	149.6	150.6	153.7	154.8	155.8	158.9	161.0	164.1	167.2	170.4	172.4
72.5°	125.7	126.7	129.8	129.8	133.0	134.0	136.1	137.1	140.2	142.3	145.4
75°	102.8	103.9	107.0	107.0	110.1	111.2	112.2	113.2	115.3	117.4	119.5
77.5°	84.1	84.1	88.3	90.4	92.5	92.5	93.5	93.5	93.5	94.5	96.6
80°	66.5	66.5	69.6	71.7	73.8	73.8	74.8	75.8	76.9	76.9	77.9
82.5°	49.9	49.9	53.0	54.0	56.1	56.1	56.1	57.1	58.2	57.1	59.2
85°	34.3	34.3	36.4	37.4	39.5	39.5	39.5	40.5	41.6	40.5	41.6
87.5°	19.7	20.8	21.8	22.9	23.9	24.9	24.9	24.9	26.0	26.0	27.0
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-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7
2.5°	2424.6	2412.1	2411.1	2396.5	2392.4	2393.4	2382.0	2377.8	2359.1	2355.0	2335.2
5°	2433.9	2440.1	2437.0	2436.0	2439.1	2437.0	2428.7	2424.6	2421.4	2413.1	2396.5
7.5°	2331.1	2335.2	2338.3	2351.8	2363.3	2383.0	2403.8	2417.3	2427.7	2429.8	2416.2
10°	2226.1	2245.9	2259.4	2280.2	2296.8	2308.2	2320.7	2332.1	2362.2	2392.4	2410.0
12.5°	2172.1	2177.3	2176.3	2187.7	2199.1	2229.3	2258.3	2275.0	2297.8	2311.3	2343.5
15°	2126.4	2127.5	2130.6	2138.9	2145.1	2155.5	2169.0	2193.9	2239.7	2260.4	2278.1
17.5°	2084.9	2084.9	2086.9	2094.2	2102.5	2111.9	2120.2	2130.6	2153.4	2187.7	2231.3
20°	2018.4	2047.5	2050.6	2049.6	2053.7	2071.4	2073.4	2092.1	2103.6	2117.1	2159.7
22.5°	1919.7	1937.4	1962.3	2000.7	2015.3	2023.6	2029.8	2038.1	2055.8	2071.4	2089.0
25°	1865.7	1877.1	1884.4	1895.8	1925.9	1974.8	1984.1	1993.5	2004.9	2016.3	2038.1
27.5°	1817.9	1816.9	1822.1	1832.4	1840.8	1866.7	1912.4	1948.8	1950.9	1967.5	1986.2
30°	1783.6	1777.4	1770.1	1768.0	1779.5	1793.0	1806.5	1863.6	1903.1	1911.4	1931.1
32.5°	1751.4	1741.0	1730.6	1722.3	1715.1	1726.5	1734.8	1759.7	1810.6	1858.4	1868.8
35°	1711.9	1701.6	1689.1	1679.7	1668.3	1667.3	1666.2	1690.1	1706.7	1763.9	1813.7
37.5°	1671.4	1660.0	1649.6	1639.2	1627.8	1619.5	1614.3	1620.5	1636.1	1661.0	1744.1
40°	1628.8	1615.3	1604.9	1596.6	1581.1	1574.8	1564.4	1560.3	1561.3	1583.1	1626.8
42.5°	973.4	1552.0	1557.2	1547.8	1534.3	1526.0	1514.6	1509.4	1499.0	1509.4	1534.3
45°	375.0	379.2	1135.4	1500.0	1483.4	1473.0	1462.6	1457.4	1446.0	1437.7	1460.6
47.5°	367.7	371.9	363.6	515.2	1415.9	1419.0	1406.5	1401.3	1389.9	1383.7	1377.4
50°	362.5	365.7	359.4	361.5	354.2	1297.5	1349.4	1343.2	1330.7	1323.4	1311.0
52.5°	357.3	357.3	353.2	348.0	345.9	347.0	1091.8	1284.0	1269.4	1262.1	1245.5
55°	340.7	342.8	347.0	338.6	336.6	335.5	332.4	1039.8	1201.9	1193.6	1179.0
57.5°	315.8	320.0	331.4	329.3	329.3	321.0	318.9	318.9	965.0	1124.0	1109.4
60°	286.7	290.9	303.3	307.5	310.6	308.5	306.4	305.4	301.3	1017.0	1035.7
62.5°	256.6	260.7	264.9	278.4	282.6	287.7	294.0	290.9	286.7	286.7	957.8
65°	224.4	230.6	232.7	245.2	250.4	259.7	264.9	272.2	270.1	269.0	274.2
67.5°	196.3	203.6	204.6	209.8	219.2	223.3	229.6	243.1	249.3	251.4	253.5
70°	172.4	176.6	179.7	181.8	188.0	189.1	200.5	209.8	219.2	229.6	232.7
72.5°	148.5	151.7	157.9	155.8	157.9	162.1	168.3	174.5	183.9	198.4	207.8
75°	121.5	123.6	127.8	129.8	134.0	137.1	141.3	146.5	154.8	162.1	174.5
77.5°	97.6	98.7	101.8	102.8	107.0	110.1	117.4	120.5	125.7	130.9	138.2
80°	78.9	78.9	80.0	80.0	83.1	86.2	91.4	94.5	100.8	104.9	104.9
82.5°	60.3	60.3	63.4	63.4	65.4	65.4	68.6	68.6	71.7	73.8	75.8
85°	42.6	43.6	45.7	44.7	46.7	45.7	47.8	49.9	50.9	49.9	48.8
87.5°	28.0	28.0	30.1	29.1	30.1	30.1	32.2	32.2	33.2	33.2	32.2
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-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7
2.5°	2327.9	2312.4	2303.0	2291.6	2288.5	2285.4	2289.5	2289.5	2283.3	2278.1	2268.7
5°	2382.0	2365.3	2347.7	2329.0	2311.3	2292.6	2285.4	2284.3	2272.9	2266.7	2263.5
7.5°	2410.0	2401.7	2382.0	2356.0	2329.0	2295.7	2281.2	2272.9	2261.5	2259.4	2259.4
10°	2413.1	2403.8	2393.4	2374.7	2343.5	2299.9	2271.9	2255.2	2244.8	2252.1	2265.6
12.5°	2383.0	2400.7	2391.3	2378.9	2353.9	2300.9	2260.4	2235.5	2232.4	2251.1	2286.4
15°	2306.1	2358.1	2384.0	2371.6	2351.8	2298.9	2241.7	2212.6	2212.6	2251.1	2296.8
17.5°	2248.0	2288.5	2351.8	2362.2	2339.4	2294.7	2224.1	2189.8	2199.1	2255.2	2304.1
20°	2200.2	2225.1	2286.4	2344.6	2322.8	2285.4	2198.1	2162.8	2181.5	2249.0	2314.4
22.5°	2125.4	2175.2	2212.6	2298.9	2306.1	2267.7	2172.1	2129.5	2166.9	2249.0	2309.3
25°	2052.7	2112.9	2152.4	2236.5	2281.2	2245.9	2148.2	2094.2	2151.4	2245.9	2305.1
27.5°	2001.8	2029.8	2101.5	2161.7	2243.8	2216.8	2116.0	2055.8	2131.6	2229.3	2281.2
30°	1947.7	1966.4	2037.1	2094.2	2193.9	2183.6	2082.8	2013.2	2106.7	2213.7	2218.9
32.5°	1888.5	1909.3	1945.7	2028.8	2124.3	2152.4	2045.4	1970.6	2079.7	2189.8	2146.2
35°	1828.3	1843.9	1873.0	1962.3	2043.3	2105.6	1999.7	1921.8	2061.0	2153.4	2076.6
37.5°	1768.0	1784.7	1809.6	1884.4	1958.1	2062.0	1960.2	1873.0	2026.7	2089.0	2003.8
40°	1710.9	1720.3	1746.2	1793.0	1887.5	2017.3	1915.5	1822.1	1991.4	2007.0	1905.2
42.5°	1606.0	1652.7	1676.6	1714.0	1807.5	1956.1	1863.6	1768.0	1951.9	1924.9	1806.5
45°	1492.8	1594.6	1604.9	1642.3	1736.9	1890.6	1814.8	1715.1	1914.5	1854.3	1713.0
47.5°	1400.3	1474.1	1534.3	1565.5	1652.7	1813.7	1769.1	1670.4	1858.4	1764.9	1621.6
50°	1318.2	1357.7	1466.8	1489.6	1552.0	1721.3	1715.1	1618.4	1780.5	1652.7	1532.2
52.5°	1238.2	1266.3	1365.0	1413.8	1464.7	1621.6	1650.7	1567.5	1695.3	1540.5	1441.9
55°	1168.6	1178.0	1232.0	1334.9	1380.6	1520.8	1580.0	1508.3	1587.3	1433.5	1354.6
57.5°	1097.0	1088.7	1128.1	1260.1	1293.3	1418.0	1505.2	1448.1	1500.0	1324.5	1264.2
60°	1022.2	1010.8	1027.4	1114.6	1200.9	1316.2	1416.9	1381.6	1394.1	1216.4	1163.5
62.5°	944.3	932.8	927.6	982.7	1110.5	1211.2	1327.6	1307.8	1264.2	1117.7	1038.8
65°	863.2	851.8	843.5	865.3	1010.8	1075.2	1227.9	1222.7	1121.9	1013.9	874.7
67.5°	262.8	774.9	757.3	756.2	851.8	951.5	1119.8	1111.5	978.5	902.7	753.1
70°	236.8	628.5	667.9	658.6	700.2	825.8	996.2	990.0	839.3	724.0	665.9
72.5°	217.1	222.3	590.0	579.6	589.0	702.2	867.4	850.8	711.6	571.3	575.5
75°	185.9	195.3	203.6	489.3	476.8	581.7	727.2	701.2	586.9	471.6	481.0
77.5°	151.7	163.1	169.3	356.3	385.4	414.5	580.7	546.4	404.1	377.1	179.7
80°	113.2	122.6	133.0	142.3	292.9	289.8	431.1	396.8	281.5	234.8	140.2
82.5°	83.1	86.2	92.5	102.8	116.3	194.3	277.4	244.1	195.3	107.0	96.6
85°	51.9	56.1	59.2	62.3	70.6	116.3	137.1	109.1	82.1	65.4	61.3
87.5°	33.2	33.2	32.2	33.2	34.3	41.6	46.7	44.7	35.3	33.2	33.2
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-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7
2.5°	2258.3	2243.8	2243.8	2239.7	2242.8	2242.8	2241.7	2242.8	2250.0	2254.2	2261.5
5°	2257.3	2253.2	2262.5	2273.9	2287.4	2304.1	2308.2	2322.8	2336.3	2353.9	2372.6
7.5°	2270.8	2285.4	2303.0	2321.7	2348.7	2368.5	2386.1	2403.8	2416.2	2432.9	2443.3
10°	2290.6	2319.6	2349.8	2373.7	2402.7	2419.4	2430.8	2432.9	2415.2	2387.2	2364.3
12.5°	2318.6	2352.9	2380.9	2403.8	2417.3	2411.1	2377.8	2343.5	2323.8	2294.7	2254.2
15°	2342.5	2373.7	2402.7	2393.4	2357.0	2322.8	2296.8	2256.3	2216.8	2189.8	2172.1
17.5°	2352.9	2383.0	2372.6	2323.8	2289.5	2250.0	2197.1	2165.9	2139.9	2119.2	2108.8
20°	2359.1	2353.9	2297.8	2262.5	2196.0	2159.7	2125.4	2096.3	2076.6	2066.2	2064.1
22.5°	2342.5	2279.1	2231.3	2168.0	2119.2	2089.0	2062.0	2038.1	2024.6	2016.3	2011.1
25°	2287.4	2213.7	2143.0	2093.2	2051.6	2025.7	2004.9	1985.1	1968.5	1964.4	1954.0
27.5°	2210.6	2150.3	2056.8	2018.4	1982.0	1969.6	1946.7	1927.0	1912.4	1900.0	1866.7
30°	2147.2	2051.6	1984.1	1948.8	1927.0	1912.4	1886.5	1865.7	1840.8	1795.0	1776.3
32.5°	2069.3	1974.8	1910.4	1890.6	1863.6	1851.1	1822.1	1776.3	1737.9	1719.2	1718.2
35°	1968.5	1890.6	1843.9	1826.2	1804.4	1783.6	1723.4	1681.8	1663.1	1665.2	1680.8
37.5°	1884.4	1814.8	1784.7	1759.7	1734.8	1681.8	1630.9	1611.2	1616.4	1626.8	1634.0
40°	1799.2	1746.2	1711.9	1692.2	1636.1	1584.2	1557.2	1564.4	1573.8	1581.1	1590.4
42.5°	1716.1	1678.7	1644.4	1606.0	1529.1	1501.1	1507.3	1516.6	1525.0	1535.3	1544.7
45°	1637.1	1603.9	1564.4	1477.2	1438.7	1446.0	1455.4	1462.6	1475.1	1482.4	1491.7
47.5°	1562.4	1527.0	1457.4	1380.6	1376.4	1391.0	1399.3	1408.6	1418.0	1399.3	771.8
50°	1478.2	1441.9	1335.9	1306.8	1316.2	1329.7	1340.1	1349.4	1201.9	477.8	367.7
52.5°	1395.1	1302.7	1235.1	1243.4	1252.8	1268.4	1275.6	947.4	377.1	359.4	360.5
55°	1302.7	1184.2	1164.5	1174.9	1183.2	1198.8	794.7	348.0	345.9	344.9	353.2
57.5°	1157.2	1085.5	1093.9	1104.2	1112.6	785.3	338.6	336.6	337.6	338.6	339.7
60°	1027.4	1011.8	1021.1	1030.5	729.2	327.2	321.0	322.0	326.2	323.1	314.8
62.5°	924.5	937.0	946.3	829.0	310.6	307.5	310.6	307.5	300.2	295.0	284.6
65°	845.6	858.0	865.3	291.9	290.9	295.0	291.9	281.5	270.1	255.5	252.4
67.5°	762.5	774.9	277.4	270.1	274.2	269.0	256.6	244.1	235.8	223.3	218.1
70°	676.3	289.8	251.4	250.4	243.1	234.8	221.3	208.8	198.4	193.2	188.0
72.5°	488.2	229.6	226.5	218.1	205.7	194.3	182.8	175.6	170.4	167.2	164.1
75°	203.6	199.4	190.1	175.6	163.1	157.9	149.6	144.4	142.3	136.1	134.0
77.5°	170.4	162.1	148.5	138.2	130.9	127.8	121.5	115.3	112.2	111.2	107.0
80°	130.9	119.5	113.2	108.0	106.0	98.7	91.4	88.3	86.2	85.2	82.1
82.5°	89.3	85.2	81.0	73.8	73.8	70.6	67.5	65.4	63.4	63.4	61.3
85°	58.2	55.1	54.0	50.9	50.9	48.8	47.8	46.7	45.7	44.7	43.6
87.5°	33.2	33.2	34.3	33.2	33.2	32.2	31.2	30.1	29.1	29.1	27.0
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-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7
2.5°	2270.8	2281.2	2283.3	2318.6	2338.3	2337.3	2331.1	2349.8	2338.3	2332.1	2338.3
5°	2391.3	2403.8	2414.2	2452.6	2466.1	2472.3	2471.3	2481.7	2473.4	2466.1	2466.1
7.5°	2450.5	2454.7	2458.8	2449.5	2443.3	2432.9	2417.3	2394.4	2383.0	2370.5	2355.0
10°	2352.9	2339.4	2344.6	2325.9	2310.3	2298.9	2284.3	2265.6	2250.0	2238.6	2221.0
12.5°	2233.4	2232.4	2234.5	2237.6	2222.0	2212.6	2201.2	2187.7	2176.3	2163.8	2149.3
15°	2160.7	2161.7	2170.1	2166.9	2161.7	2156.5	2144.1	2139.9	2129.5	2116.0	2107.7
17.5°	2108.8	2114.0	2122.3	2118.1	2109.8	2104.6	2095.3	2085.9	2076.6	2066.2	2053.7
20°	2063.1	2068.2	2073.4	2068.2	2052.7	2045.4	2032.9	2003.8	1983.1	1962.3	1943.6
22.5°	2013.2	2016.3	2012.2	1995.5	1956.1	1937.4	1922.8	1914.5	1896.8	1885.4	1874.0
25°	1950.9	1933.2	1906.2	1887.5	1871.9	1863.6	1857.4	1856.3	1854.3	1852.2	1847.0
27.5°	1849.1	1842.8	1828.3	1821.0	1822.1	1825.2	1826.2	1829.3	1826.2	1822.1	1817.9
30°	1773.2	1776.3	1777.4	1779.5	1784.7	1787.8	1788.8	1793.0	1790.9	1787.8	1785.7
32.5°	1725.4	1732.7	1736.9	1743.1	1746.2	1751.4	1751.4	1757.6	1751.4	1750.4	1748.3
35°	1686.0	1692.2	1694.3	1703.6	1706.7	1711.9	1711.9	1717.1	1711.9	1659.0	1309.9
37.5°	1646.5	1652.7	1656.9	1665.2	1666.2	1669.4	1540.5	1127.1	727.2	563.0	430.1
40°	1599.8	1607.0	1611.2	1614.3	1134.4	719.9	495.5	403.1	403.1	406.2	409.3
42.5°	1549.9	1555.1	1083.5	630.6	392.7	391.6	394.7	397.9	401.0	405.1	409.3
45°	1218.5	615.0	390.6	381.2	384.4	388.5	392.7	396.8	402.0	406.2	408.2
47.5°	399.9	375.0	380.2	376.0	381.2	386.4	390.6	394.7	395.8	396.8	395.8
50°	369.8	369.8	372.9	372.9	377.1	379.2	379.2	379.2	375.0	374.0	370.9
52.5°	357.3	365.7	361.5	363.6	361.5	358.4	355.3	352.2	345.9	343.8	339.7
55°	351.1	354.2	343.8	340.7	336.6	328.3	324.1	320.0	314.8	312.7	307.5
57.5°	336.6	329.3	317.9	312.7	305.4	297.1	292.9	289.8	284.6	282.6	279.4
60°	309.6	295.0	287.7	281.5	273.2	265.9	262.8	260.7	256.6	255.5	252.4
62.5°	276.3	263.9	257.6	249.3	243.1	238.9	235.8	234.8	230.6	230.6	228.5
65°	240.0	233.7	228.5	220.2	217.1	213.0	211.9	210.9	208.8	207.8	205.7
67.5°	210.9	206.7	199.4	195.3	193.2	190.1	188.0	185.9	181.8	179.7	176.6
70°	184.9	181.8	174.5	171.4	167.2	162.1	158.9	156.9	153.7	151.7	148.5
72.5°	160.0	150.6	145.4	142.3	139.2	134.0	133.0	130.9	127.8	126.7	123.6
75°	128.8	121.5	118.4	116.3	113.2	110.1	110.1	110.1	107.0	106.0	104.9
77.5°	102.8	98.7	96.6	94.5	93.5	91.4	88.3	87.3	84.1	84.1	83.1
80°	78.9	76.9	74.8	73.8	72.7	70.6	68.6	67.5	64.4	64.4	63.4
82.5°	58.2	57.1	56.1	55.1	54.0	53.0	49.9	48.8	46.7	46.7	45.7
85°	41.6	40.5	38.4	37.4	37.4	36.4	33.2	32.2	30.1	30.1	30.1
87.5°	26.0	24.9	23.9	22.9	21.8	20.8	18.7	17.7	17.7	15.6	14.5
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-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7
2.5°	2325.9	2343.5	2341.5	2353.9	2357.0	2363.3	2365.3	2366.4	2350.8	2363.3	2364.3
5°	2463.0	2466.1	2468.2	2473.4	2478.6	2479.6	2474.4	2468.2	2470.3	2466.1	2455.7
7.5°	2352.9	2337.3	2334.2	2330.0	2327.9	2325.9	2316.5	2324.8	2315.5	2311.3	2296.8
10°	2217.8	2203.3	2202.3	2202.3	2205.4	2204.3	2202.3	2198.1	2206.4	2201.2	2198.1
12.5°	2147.2	2142.0	2145.1	2143.0	2151.4	2153.4	2151.4	2151.4	2149.3	2145.1	2147.2
15°	2104.6	2100.5	2103.6	2100.5	2106.7	2107.7	2102.5	2105.6	2100.5	2095.3	2093.2
17.5°	2048.5	2039.2	2031.9	2021.5	2022.5	2020.5	2014.2	2014.2	2009.0	1995.5	1996.6
20°	1940.5	1931.1	1927.0	1927.0	1932.2	1934.2	1933.2	1935.3	1930.1	1928.0	1919.7
22.5°	1873.0	1871.9	1874.0	1879.2	1887.5	1898.9	1900.0	1900.0	1900.0	1898.9	1888.5
25°	1849.1	1849.1	1851.1	1858.4	1864.6	1873.0	1875.0	1877.1	1875.0	1875.0	1865.7
27.5°	1822.1	1820.0	1824.1	1831.4	1838.7	1844.9	1850.1	1851.1	1848.0	1848.0	1851.1
30°	1788.8	1787.8	1793.0	1800.2	1806.5	1812.7	1817.9	1822.1	1817.9	1817.9	1814.8
32.5°	1754.5	1754.5	1756.6	1713.0	1588.3	1430.4	1433.5	1342.1	1278.8	1198.8	1304.7
35°	1094.9	796.8	684.6	579.6	505.9	458.1	457.1	441.5	434.2	429.0	428.0
37.5°	413.4	415.5	419.7	421.8	424.9	426.9	428.0	428.0	428.0	428.0	426.9
40°	412.4	416.6	419.7	422.8	425.9	428.0	428.0	429.0	430.1	430.1	430.1
42.5°	413.4	417.6	421.8	424.9	426.9	428.0	429.0	430.1	430.1	430.1	430.1
45°	412.4	414.5	414.5	415.5	415.5	415.5	416.6	416.6	415.5	414.5	416.6
47.5°	396.8	396.8	393.7	392.7	391.6	389.5	390.6	389.5	388.5	387.5	389.5
50°	369.8	365.7	363.6	361.5	360.5	358.4	359.4	358.4	357.3	355.3	358.4
52.5°	337.6	336.6	332.4	330.3	329.3	330.3	328.3	327.2	326.2	325.1	326.2
55°	306.4	302.3	301.3	299.2	298.1	299.2	298.1	297.1	296.1	295.0	296.1
57.5°	278.4	275.3	274.2	272.2	272.2	272.2	272.2	271.1	270.1	269.0	270.1
60°	251.4	249.3	248.3	248.3	247.2	247.2	247.2	246.2	245.2	245.2	246.2
62.5°	228.5	228.5	225.4	224.4	224.4	225.4	224.4	223.3	222.3	221.3	223.3
65°	204.6	200.5	199.4	197.4	195.3	196.3	195.3	194.3	193.2	192.2	194.3
67.5°	175.6	174.5	170.4	168.3	167.2	168.3	167.2	166.2	165.2	164.1	166.2
70°	147.5	147.5	143.4	142.3	141.3	141.3	140.2	140.2	139.2	138.2	140.2
72.5°	122.6	122.6	121.5	119.5	118.4	117.4	116.3	115.3	115.3	116.3	116.3
75°	101.8	99.7	95.6	96.6	95.6	94.5	94.5	93.5	92.5	94.5	93.5
77.5°	80.0	78.9	75.8	76.9	75.8	74.8	74.8	73.8	72.7	73.8	73.8
80°	60.3	60.3	59.2	58.2	58.2	57.1	56.1	56.1	55.1	56.1	56.1
82.5°	43.6	43.6	42.6	41.6	40.5	40.5	39.5	39.5	39.5	39.5	39.5
85°	28.0	27.0	27.0	24.9	24.9	24.9	23.9	23.9	23.9	23.9	23.9
87.5°	13.5	13.5	12.5	12.5	11.4	10.4	10.4	9.3	9.3	10.4	10.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-46SL-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°	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7
2.5°	2345.6	2359.1	2347.7	2352.9	2353.9	2371.6	2370.5	2374.7	2367.4	2359.1	2347.7
5°	2465.1	2458.8	2450.5	2470.3	2459.9	2472.3	2476.5	2484.8	2484.8	2483.8	2474.4
7.5°	2312.4	2298.9	2309.3	2316.5	2319.6	2311.3	2327.9	2346.6	2362.2	2371.6	2372.6
10°	2192.9	2197.1	2196.0	2199.1	2206.4	2205.4	2215.8	2226.1	2230.3	2236.5	2238.6
12.5°	2136.8	2135.8	2137.8	2145.1	2149.3	2148.2	2158.6	2164.9	2166.9	2168.0	2166.9
15°	2092.1	2084.9	2090.1	2091.1	2094.2	2094.2	2106.7	2116.0	2120.2	2122.3	2120.2
17.5°	2008.0	1990.3	2007.0	2007.0	2018.4	2016.3	2036.0	2051.6	2059.9	2066.2	2066.2
20°	1924.9	1916.6	1922.8	1920.7	1929.1	1928.0	1940.5	1950.9	1958.1	1963.3	1969.6
22.5°	1891.7	1893.7	1884.4	1885.4	1885.4	1884.4	1890.6	1895.8	1897.9	1901.0	1898.9
25°	1869.8	1871.9	1868.8	1863.6	1861.5	1863.6	1866.7	1873.0	1874.0	1871.9	1864.6
27.5°	1848.0	1841.8	1847.0	1837.6	1835.6	1839.7	1843.9	1844.9	1845.9	1845.9	1839.7
30°	1814.8	1809.6	1814.8	1810.6	1806.5	1810.6	1813.7	1813.7	1815.8	1816.9	1809.6
32.5°	1268.4	1278.8	1447.0	1548.8	1692.2	1764.9	1778.4	1778.4	1780.5	1780.5	1774.3
35°	432.1	433.2	468.5	508.0	592.1	696.0	832.1	902.7	1141.6	1427.3	1703.6
37.5°	426.9	425.9	424.9	423.8	422.8	421.8	419.7	418.6	424.9	503.8	683.5
40°	429.0	428.0	425.9	424.9	423.8	421.8	420.7	418.6	416.6	414.5	412.4
42.5°	429.0	428.0	426.9	425.9	424.9	423.8	421.8	419.7	417.6	414.5	411.4
45°	414.5	414.5	415.5	415.5	416.6	416.6	416.6	415.5	415.5	414.5	410.3
47.5°	387.5	387.5	390.6	390.6	392.7	394.7	394.7	396.8	399.9	402.0	403.1
50°	356.3	356.3	359.4	360.5	362.5	365.7	368.8	369.8	372.9	377.1	381.2
52.5°	325.1	325.1	328.3	328.3	330.3	333.5	336.6	337.6	341.8	345.9	351.1
55°	296.1	296.1	298.1	299.2	300.2	302.3	305.4	305.4	309.6	312.7	317.9
57.5°	270.1	272.2	272.2	272.2	273.2	275.3	277.4	277.4	280.5	283.6	287.7
60°	245.2	247.2	247.2	247.2	248.3	249.3	251.4	251.4	253.5	255.5	259.7
62.5°	222.3	224.4	224.4	225.4	225.4	226.5	228.5	227.5	229.6	230.6	233.7
65°	193.2	195.3	196.3	197.4	198.4	200.5	203.6	202.6	205.7	207.8	210.9
67.5°	165.2	167.2	167.2	168.3	169.3	171.4	173.5	173.5	176.6	178.7	182.8
70°	139.2	141.3	141.3	142.3	143.4	145.4	147.5	146.5	149.6	151.7	154.8
72.5°	115.3	117.4	117.4	118.4	118.4	120.5	122.6	124.7	124.7	126.7	128.8
75°	93.5	94.5	95.6	95.6	96.6	97.6	99.7	101.8	102.8	103.9	106.0
77.5°	73.8	74.8	75.8	75.8	76.9	77.9	78.9	83.1	85.2	86.2	86.2
80°	56.1	57.1	57.1	57.1	58.2	59.2	61.3	61.3	65.4	65.4	66.5
82.5°	39.5	40.5	40.5	40.5	41.6	43.6	44.7	45.7	47.8	48.8	48.8
85°	23.9	24.9	24.9	24.9	26.0	27.0	29.1	30.1	31.2	31.2	32.2
87.5°	9.3	10.4	11.4	11.4	12.5	13.5	14.5	15.6	16.6	16.6	17.7
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-LD5-46SL-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°	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7
2.5°	2335.2	2342.5	2335.2	2339.4	2344.6	2335.2	2313.4	2305.1	2302.0	2289.5	2281.2
5°	2465.1	2465.1	2462.0	2470.3	2469.2	2454.7	2431.8	2421.4	2411.1	2397.5	2387.2
7.5°	2372.6	2380.9	2386.1	2418.3	2439.1	2441.2	2455.7	2458.8	2463.0	2458.8	2452.6
10°	2239.7	2236.5	2251.1	2281.2	2298.9	2308.2	2336.3	2349.8	2361.2	2384.0	2407.9
12.5°	2164.9	2169.0	2175.2	2197.1	2213.7	2209.5	2221.0	2230.3	2243.8	2266.7	2300.9
15°	2115.0	2119.2	2125.4	2142.0	2152.4	2147.2	2153.4	2159.7	2169.0	2180.4	2201.2
17.5°	2061.0	2068.2	2075.5	2093.2	2102.5	2101.5	2106.7	2108.8	2111.9	2119.2	2133.7
20°	1976.8	1999.7	2014.2	2038.1	2051.6	2049.6	2058.9	2062.0	2066.2	2073.4	2079.7
22.5°	1900.0	1906.2	1913.5	1939.4	1962.3	1990.3	1996.6	2004.9	2015.3	2022.5	2028.8
25°	1856.3	1852.2	1855.3	1873.0	1885.4	1887.5	1896.8	1923.9	1951.9	1964.4	1978.9
27.5°	1830.4	1826.2	1825.2	1833.5	1835.6	1830.4	1828.3	1836.6	1857.4	1878.1	1921.8
30°	1802.3	1797.1	1793.0	1800.2	1803.4	1796.1	1782.6	1775.3	1787.8	1793.0	1810.6
32.5°	1769.1	1763.9	1761.8	1766.0	1768.0	1761.8	1747.3	1738.9	1736.9	1732.7	1736.9
35°	1731.7	1726.5	1723.4	1724.4	1728.6	1723.4	1710.9	1700.5	1695.3	1683.9	1675.6
37.5°	892.3	1264.2	1641.3	1680.8	1684.9	1683.9	1671.4	1660.0	1654.8	1641.3	1637.1
40°	408.2	456.0	684.6	894.4	1290.2	1639.2	1627.8	1616.4	1607.0	1602.9	1587.3
42.5°	407.2	408.2	409.3	404.1	500.7	852.9	1259.0	1571.7	1565.5	1555.1	1543.7
45°	407.2	402.0	406.2	399.9	402.0	401.0	499.7	806.1	1434.6	1499.0	1493.8
47.5°	403.1	399.9	404.1	398.9	392.7	395.8	391.6	396.8	619.1	1050.2	1438.7
50°	384.4	386.4	393.7	392.7	387.5	391.6	384.4	390.6	385.4	422.8	814.4
52.5°	356.3	360.5	367.7	374.0	376.0	381.2	379.2	381.2	377.1	378.1	379.2
55°	323.1	328.3	334.5	343.8	348.0	356.3	362.5	365.7	370.9	369.8	361.5
57.5°	291.9	297.1	302.3	311.6	321.0	325.1	336.6	342.8	356.3	353.2	351.1
60°	262.8	267.0	272.2	274.2	285.7	292.9	303.3	309.6	327.2	331.4	337.6
62.5°	236.8	238.9	243.1	246.2	253.5	260.7	265.9	276.3	285.7	299.2	308.5
65°	213.0	215.0	218.1	220.2	221.3	231.7	234.8	246.2	249.3	263.9	272.2
67.5°	185.9	190.1	194.3	196.3	198.4	204.6	206.7	211.9	219.2	225.4	235.8
70°	157.9	161.0	165.2	168.3	172.4	176.6	182.8	185.9	191.1	195.3	203.6
72.5°	131.9	135.0	137.1	140.2	143.4	146.5	151.7	158.9	163.1	170.4	172.4
75°	107.0	110.1	112.2	114.3	117.4	119.5	121.5	128.8	133.0	139.2	145.4
77.5°	88.3	88.3	90.4	96.6	95.6	95.6	97.6	101.8	104.9	109.1	115.3
80°	68.6	69.6	70.6	75.8	76.9	77.9	76.9	80.0	83.1	84.1	88.3
82.5°	50.9	51.9	51.9	55.1	58.2	58.2	58.2	59.2	62.3	63.4	65.4
85°	34.3	35.3	36.4	37.4	39.5	40.5	41.6	41.6	43.6	44.7	45.7
87.5°	18.7	20.8	21.8	22.9	23.9	24.9	26.0	27.0	28.0	29.1	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-LD5-46SL-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°	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7	2266.7
2.5°	2278.1	2272.9	2269.8	2261.5	2259.4	2245.9	2248.0	2245.9	2245.9	2249.0	2259.4
5°	2375.7	2350.8	2344.6	2326.9	2312.4	2287.4	2271.9	2263.5	2251.1	2245.9	2253.2
7.5°	2442.2	2423.5	2407.9	2392.4	2371.6	2342.5	2320.7	2295.7	2275.0	2255.2	2250.0
10°	2430.8	2451.6	2451.6	2442.2	2422.5	2393.4	2367.4	2336.3	2299.9	2268.7	2250.0
12.5°	2334.2	2370.5	2399.6	2421.4	2441.2	2421.4	2395.5	2370.5	2330.0	2284.3	2250.0
15°	2228.2	2265.6	2302.0	2347.7	2395.5	2415.2	2414.2	2385.1	2348.7	2300.9	2253.2
17.5°	2153.4	2179.4	2199.1	2249.0	2307.2	2358.1	2392.4	2394.4	2359.1	2316.5	2254.2
20°	2097.3	2116.0	2132.7	2160.7	2211.6	2273.9	2337.3	2372.6	2366.4	2319.6	2257.3
22.5°	2046.4	2059.9	2073.4	2094.2	2134.7	2175.2	2249.0	2321.7	2352.9	2314.4	2254.2
25°	1995.5	2010.1	2020.5	2035.0	2067.2	2100.5	2152.4	2242.8	2312.4	2310.3	2248.0
27.5°	1935.3	1955.0	1967.5	1987.2	2009.0	2034.0	2069.3	2154.5	2254.2	2289.5	2231.3
30°	1862.6	1891.7	1910.4	1932.2	1950.9	1972.7	2000.7	2052.7	2176.3	2249.0	2213.7
32.5°	1757.6	1809.6	1851.1	1871.9	1892.7	1911.4	1936.3	1980.0	2080.7	2193.9	2193.9
35°	1682.9	1706.7	1744.1	1804.4	1830.4	1849.1	1871.9	1906.2	1970.6	2128.5	2161.7
37.5°	1624.7	1634.0	1652.7	1711.9	1760.8	1790.9	1813.7	1835.6	1898.9	2039.2	2120.2
40°	1581.1	1577.9	1575.9	1603.9	1673.5	1721.3	1747.3	1769.1	1817.9	1932.2	2065.1
42.5°	1530.2	1527.0	1516.6	1523.9	1558.2	1638.2	1677.7	1701.6	1742.1	1820.0	2004.9
45°	1477.2	1472.0	1467.8	1460.6	1473.0	1517.7	1598.7	1634.0	1656.9	1726.5	1929.1
47.5°	1423.2	1415.9	1410.7	1404.5	1397.2	1418.0	1494.8	1558.2	1597.7	1641.3	1837.6
50°	1346.3	1355.6	1349.4	1342.1	1335.9	1331.7	1363.9	1467.8	1516.6	1552.0	1726.5
52.5°	634.7	1234.1	1286.0	1278.8	1270.5	1263.2	1270.5	1349.4	1437.7	1465.7	1592.5
55°	361.5	549.5	1143.7	1209.2	1201.9	1191.5	1185.3	1212.3	1344.2	1381.6	1469.9
57.5°	348.0	349.0	504.9	1089.7	1130.2	1120.9	1113.6	1119.8	1232.0	1295.4	1362.9
60°	336.6	336.6	336.6	482.0	1041.9	1045.0	1035.7	1025.3	1074.1	1198.8	1254.9
62.5°	311.6	317.9	321.0	321.0	475.8	965.0	955.7	952.6	954.7	1082.4	1146.8
65°	279.4	294.0	300.2	304.4	304.4	499.7	873.6	868.4	861.2	910.0	1037.8
67.5°	244.1	258.7	272.2	280.5	281.5	290.9	521.5	782.2	771.8	772.9	921.4
70°	207.8	220.2	234.8	247.2	258.7	263.9	272.2	649.2	683.5	669.0	789.5
72.5°	179.7	184.9	195.3	207.8	221.3	233.7	241.0	258.7	593.2	577.6	600.4
75°	149.6	153.7	161.0	169.3	179.7	194.3	206.7	219.2	314.8	484.1	481.0
77.5°	116.3	123.6	131.9	137.1	142.3	152.7	169.3	181.8	194.3	327.2	385.4
80°	89.3	94.5	98.7	103.9	110.1	117.4	123.6	138.2	152.7	164.1	295.0
82.5°	66.5	69.6	72.7	74.8	76.9	81.0	92.5	97.6	107.0	117.4	139.2
85°	46.7	48.8	50.9	51.9	53.0	54.0	58.2	59.2	68.6	70.6	84.1
87.5°	30.1	31.2	33.2	34.3	34.3	35.3	36.4	36.4	36.4	34.3	41.6
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-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	2266.7	2266.7
2.5°	2267.7	2284.3
5°	2264.6	2286.4
7.5°	2256.3	2277.0
10°	2243.8	2268.7
12.5°	2230.3	2254.2
15°	2218.9	2236.5
17.5°	2206.4	2216.8
20°	2189.8	2198.1
22.5°	2173.2	2169.0
25°	2154.5	2145.1
27.5°	2130.6	2112.9
30°	2108.8	2077.6
32.5°	2088.0	2037.1
35°	2059.9	1995.5
37.5°	2030.9	1952.9
40°	1996.6	1904.1
42.5°	1960.2	1855.3
45°	1914.5	1808.5
47.5°	1874.0	1752.5
50°	1817.9	1692.2
52.5°	1749.3	1636.1
55°	1668.3	1567.5
57.5°	1581.1	1495.9
60°	1487.6	1413.8
62.5°	1374.3	1328.6
65°	1241.4	1231.0
67.5°	1067.9	1122.9
70°	875.7	999.3
72.5°	732.4	868.4
75°	600.4	722.0
77.5°	475.8	566.1
80°	297.1	414.5
82.5°	199.4	272.2
85°	120.5	129.8
87.5°	46.7	47.8
90°	0.0	0.0

(END OF REPORT)