

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-LD5-57HL-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-LD5-57HL-RW-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

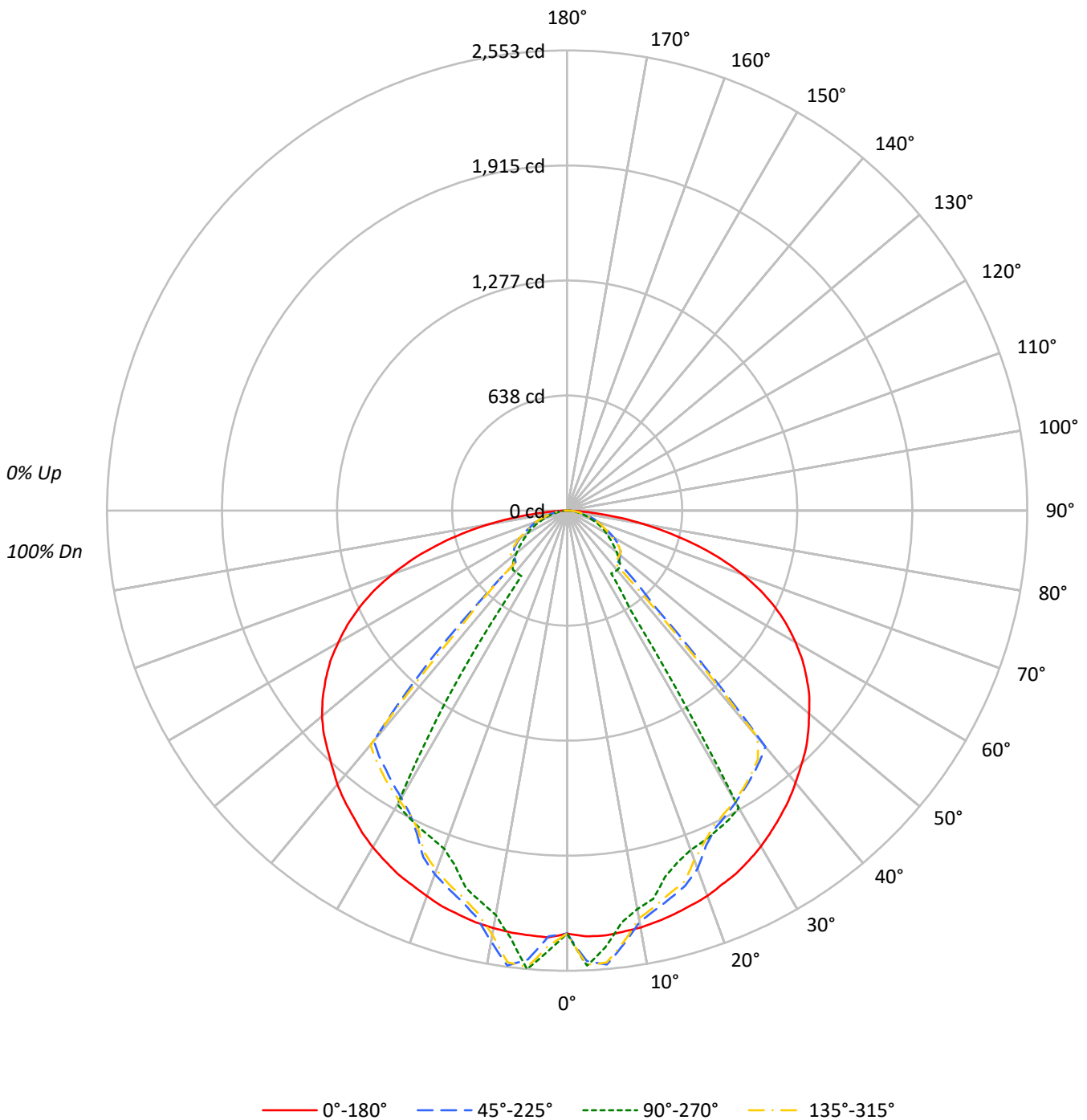
Lumens per Lamp: N/A
Luminaire Lumens: 4699.0 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 43
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	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				87
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	75				75
3	94	84	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67	65				65
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59	57				57
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51				51
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47	46				46
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41				41
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37				37
9	62	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34				34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31				31

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	18963	18963	18963	18963
5°	19148	19106	19140	20051
10°	19167	17274	19193	17538
15°	19210	15981	19254	16488
20°	19349	15158	19349	15102
25°	19516	14868	19545	14729
30°	19714	14607	19763	14433
35°	19944	3327	19985	3469
40°	20263	3459	20385	3571
45°	20749	3440	20821	3565
50°	21234	3110	21520	3195
55°	21887	2762	22061	2801
60°	22440	2454	22491	2486
65°	22838	2142	22779	2108
70°	22512	1726	22440	1663
75°	20898	1329	21049	1273
80°	16963	943	17643	864
85°	9182	566	9701	433



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.9	4.9
10°-20°	634.8	13.5
20°-30°	940.3	20.0
30°-40°	947.4	20.2
40°-50°	740.0	15.7
50°-60°	571.6	12.2
60°-70°	383.8	8.2
70°-80°	195.8	4.2
80°-90°	54.5	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°	1805.9	38.4
0°-40°	2753.3	58.6
0°-60°	4065.0	86.5
0°-90°	4699.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4699.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2347	2347	2347	2347	2347	
5°	2367	2433	2366	2553	2367	225
15°	2315	2102	2321	2169	2315	655
25°	2221	1959	2224	1941	2221	1024
35°	2066	426	2070	444	2066	1295
45°	1872	414	1879	429	1872	1444
55°	1623	301	1636	305	1623	1449
65°	1274	202	1271	199	1274	1253
75°	747	102	753	98	747	782
85°	134	32	142	25	134	185
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°	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6
2.5°	2364.8	2373.4	2379.9	2384.2	2386.4	2386.4	2387.4	2388.5	2402.5	2408.9	2413.2
5°	2367.0	2375.6	2388.5	2405.7	2420.8	2433.7	2444.4	2459.5	2474.5	2490.7	2496.0
7.5°	2357.3	2368.1	2393.9	2425.1	2454.1	2474.5	2488.5	2498.2	2505.7	2506.8	2512.2
10°	2348.7	2368.1	2403.6	2444.4	2481.0	2505.7	2505.7	2500.3	2507.9	2478.8	2449.8
12.5°	2333.7	2355.2	2403.6	2457.3	2491.7	2501.4	2497.1	2475.6	2431.5	2396.0	2379.9
15°	2315.4	2344.4	2404.6	2464.9	2493.9	2497.1	2456.3	2401.4	2368.1	2346.6	2319.7
17.5°	2294.9	2333.7	2405.7	2465.9	2476.7	2461.6	2384.2	2349.8	2315.4	2264.8	2228.3
20°	2275.6	2313.2	2397.1	2450.9	2457.3	2389.6	2329.4	2292.8	2234.7	2190.6	2174.5
22.5°	2245.5	2289.6	2389.6	2430.4	2405.7	2327.2	2269.1	2211.1	2158.4	2145.5	2126.1
25°	2220.7	2267.0	2372.4	2405.7	2340.1	2270.2	2202.5	2134.7	2110.0	2091.7	2074.5
27.5°	2187.4	2244.4	2349.8	2360.5	2270.2	2208.9	2110.0	2079.9	2057.3	2036.8	2029.3
30°	2150.8	2220.7	2318.6	2298.2	2212.1	2121.8	2048.7	2020.7	2004.6	1983.1	1974.5
32.5°	2108.9	2185.2	2284.2	2226.1	2149.8	2036.8	1989.5	1968.0	1946.5	1930.4	1876.6
35°	2065.9	2154.1	2243.3	2157.3	2074.5	1972.3	1930.4	1911.0	1890.6	1831.4	1775.5
37.5°	2021.8	2119.6	2193.9	2083.1	1974.5	1905.6	1870.2	1848.6	1802.4	1727.1	1699.2
40°	1971.2	2077.7	2130.4	2006.7	1887.4	1837.9	1804.5	1783.0	1678.7	1645.4	1636.8
42.5°	1920.7	2036.8	2053.0	1932.5	1815.3	1765.8	1737.9	1666.9	1595.9	1578.7	1581.9
45°	1872.3	1992.7	1968.0	1827.1	1740.0	1699.2	1651.8	1554.0	1516.3	1524.9	1527.1
47.5°	1814.2	1940.1	1878.8	1721.7	1662.6	1621.7	1516.3	1457.2	1451.8	1463.6	1470.1
50°	1751.9	1880.9	1784.1	1626.0	1578.7	1530.3	1410.9	1380.8	1387.3	1399.1	1406.6
52.5°	1693.8	1814.2	1686.3	1536.8	1495.9	1385.1	1304.5	1309.9	1320.6	1334.6	1338.9
55°	1622.8	1733.6	1581.9	1446.4	1407.7	1262.5	1226.0	1238.9	1249.6	1261.5	1270.1
57.5°	1548.6	1641.1	1458.3	1345.3	1283.0	1153.9	1157.1	1165.8	1173.3	1187.3	490.4
60°	1463.6	1535.7	1322.8	1251.8	1128.1	1067.9	1071.1	1086.2	1093.7	610.8	337.7
62.5°	1375.5	1413.1	1200.2	1145.3	986.2	981.9	996.9	1003.4	682.9	322.6	316.2
65°	1274.4	1266.8	1079.7	992.6	889.4	893.7	909.8	877.5	302.2	302.2	300.0
67.5°	1162.5	1117.4	962.5	821.6	795.8	805.5	822.7	287.1	279.6	281.8	274.2
70°	1034.6	971.1	841.0	695.8	704.4	714.1	277.5	260.3	257.0	251.6	236.6
72.5°	899.0	811.9	688.3	604.4	609.8	382.8	243.0	234.4	223.7	212.9	196.8
75°	747.4	634.5	505.4	505.4	513.0	218.3	211.9	197.9	186.0	172.1	162.4
77.5°	586.1	488.2	392.5	407.6	199.0	182.8	171.0	155.9	146.3	137.7	132.3
80°	429.1	340.9	295.7	264.6	154.9	138.7	126.9	118.3	114.0	108.6	102.2
82.5°	281.8	205.4	205.4	124.7	108.6	95.7	92.5	86.0	81.7	78.5	75.3
85°	134.4	119.4	90.3	76.4	67.8	61.3	59.1	55.9	55.9	54.8	53.8
87.5°	49.5	53.8	39.8	38.7	36.6	35.5	36.6	36.6	37.6	36.6	35.5
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°	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6
2.5°	2424.0	2432.6	2439.0	2449.8	2463.8	2475.6	2486.4	2501.4	2525.1	2531.5	2536.9
5°	2496.0	2499.3	2506.8	2515.4	2517.6	2522.9	2521.9	2528.3	2531.5	2539.1	2522.9
7.5°	2500.3	2483.1	2462.7	2444.4	2431.5	2419.7	2412.2	2424.0	2430.4	2435.8	2419.7
10°	2410.0	2389.6	2377.7	2367.0	2354.1	2335.8	2311.1	2316.4	2314.3	2314.3	2308.9
12.5°	2353.0	2324.0	2293.9	2267.0	2255.1	2254.1	2255.1	2267.0	2267.0	2265.9	2259.5
15°	2263.8	2235.8	2220.7	2214.3	2214.3	2211.1	2211.1	2224.0	2220.7	2220.7	2217.5
17.5°	2204.6	2185.2	2174.5	2167.0	2163.7	2169.1	2175.6	2180.9	2182.0	2177.7	2160.5
20°	2156.2	2137.9	2125.0	2127.2	2126.1	2129.3	2132.6	2114.3	2091.7	2061.6	2047.6
22.5°	2105.7	2091.7	2082.0	2082.0	2069.1	2048.7	2018.6	2012.1	2008.9	1994.9	1983.1
25°	2057.3	2041.1	2027.2	1984.1	1957.3	1960.5	1955.1	1944.4	1943.3	1942.2	1946.5
27.5°	2008.9	1966.9	1913.2	1906.7	1896.0	1894.9	1901.3	1906.7	1906.7	1911.0	1916.4
30°	1908.9	1860.5	1850.8	1839.0	1843.3	1858.3	1861.5	1869.1	1871.2	1878.8	1883.1
32.5°	1817.5	1795.9	1787.3	1792.7	1806.7	1819.6	1827.1	1830.4	1835.7	1842.2	1847.6
35°	1743.3	1736.8	1744.3	1756.2	1770.1	1780.9	1787.3	1793.8	1799.2	1804.5	1808.9
37.5°	1688.4	1692.7	1703.5	1718.5	1732.5	1741.1	1746.5	1754.0	1761.5	1768.0	1742.2
40°	1636.8	1647.5	1659.4	1675.5	1687.3	1695.9	1701.3	1711.0	1646.5	745.3	408.7
42.5°	1591.6	1603.4	1612.0	1625.0	1637.9	1644.3	1597.0	713.0	403.3	401.1	406.5
45°	1536.8	1546.4	1560.4	1570.1	1581.9	1038.9	396.8	401.1	394.7	399.0	401.1
47.5°	1480.8	1495.9	1503.4	1434.6	426.9	394.7	390.4	394.7	390.4	395.8	392.5
50°	1417.4	1435.7	1021.6	386.1	382.8	380.7	385.0	382.8	386.1	390.4	381.8
52.5°	1352.9	837.7	374.2	372.1	374.2	372.1	379.6	374.2	375.3	371.0	360.3
55°	458.1	362.4	359.2	358.1	364.6	364.6	364.6	356.0	350.6	339.8	332.3
57.5°	350.6	350.6	349.5	350.6	348.4	346.3	336.6	329.1	321.5	306.5	302.2
60°	332.3	332.3	332.3	332.3	322.6	318.3	303.3	296.8	283.9	276.4	272.1
62.5°	317.2	315.1	305.4	302.2	291.4	279.6	271.0	264.6	251.6	247.3	244.1
65°	295.7	288.2	276.4	263.5	258.1	245.2	240.9	231.2	224.8	221.5	219.4
67.5°	260.3	249.5	239.8	231.2	221.5	217.2	211.9	204.3	200.0	197.9	195.7
70°	222.6	215.1	205.4	200.0	193.6	190.3	182.8	180.7	177.4	174.2	171.0
72.5°	186.0	181.7	177.4	169.9	167.8	165.6	158.1	153.8	149.5	145.2	143.0
75°	155.9	152.7	150.6	144.1	140.9	134.4	129.1	125.8	122.6	119.4	117.2
77.5°	128.0	125.8	119.4	115.1	112.9	107.5	105.4	106.5	104.3	100.0	97.9
80°	100.0	97.9	92.5	92.5	90.3	88.2	86.0	83.9	81.7	78.5	76.4
82.5°	76.4	74.2	72.1	69.9	67.8	66.7	65.6	63.4	61.3	59.1	58.1
85°	53.8	52.7	51.6	50.5	49.5	48.4	47.3	45.2	43.0	41.9	40.9
87.5°	36.6	35.5	34.4	33.3	32.3	31.2	30.1	29.0	26.9	25.8	24.7
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°	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6
2.5°	2536.9	2542.3	2536.9	2525.1	2517.6	2514.3	2520.8	2520.8	2525.1	2530.5	2531.5
5°	2497.1	2484.2	2469.2	2454.1	2446.6	2442.3	2430.4	2432.6	2435.8	2438.0	2440.1
7.5°	2398.2	2381.0	2360.5	2341.2	2333.7	2327.2	2313.2	2313.2	2313.2	2314.3	2320.7
10°	2297.1	2289.6	2281.0	2268.1	2258.4	2255.1	2243.3	2246.5	2244.4	2247.6	2255.1
12.5°	2249.8	2241.2	2233.6	2220.7	2210.0	2205.7	2200.3	2203.5	2202.5	2207.8	2214.3
15°	2206.8	2202.5	2193.9	2184.2	2174.5	2165.9	2146.5	2140.1	2135.8	2130.4	2137.9
17.5°	2135.8	2105.7	2085.2	2070.2	2059.4	2051.9	2046.5	2046.5	2049.7	2053.0	2059.4
20°	2039.0	2030.4	2020.7	2004.6	1993.8	1989.5	1986.3	1986.3	1991.7	1996.0	2007.8
22.5°	1972.3	1971.2	1968.0	1960.5	1955.1	1955.1	1956.2	1958.3	1965.9	1972.3	1984.1
25°	1941.1	1945.4	1943.3	1939.0	1935.8	1936.8	1934.7	1936.8	1944.4	1950.8	1960.5
27.5°	1916.4	1922.8	1920.7	1914.2	1908.9	1911.0	1914.2	1912.1	1918.5	1926.1	1933.6
30°	1883.1	1884.1	1888.4	1880.9	1878.8	1882.0	1883.1	1885.2	1891.7	1897.0	1903.5
32.5°	1845.4	1854.0	1852.9	1845.4	1845.4	1848.6	1849.7	1777.7	1643.2	1415.2	1352.9
35°	1808.9	1818.5	1802.4	1519.6	1051.8	561.4	433.4	418.3	421.6	423.7	425.9
37.5°	1337.8	634.5	404.4	407.6	410.8	414.0	417.3	420.5	423.7	426.9	428.0
40°	402.2	401.1	404.4	408.7	411.9	414.0	418.3	421.6	424.8	428.0	429.1
42.5°	397.9	400.1	403.3	407.6	411.9	416.2	419.4	423.7	425.9	428.0	429.1
45°	395.8	400.1	404.4	407.6	410.8	413.0	415.1	416.2	415.1	415.1	417.3
47.5°	392.5	396.8	397.9	396.8	397.9	396.8	396.8	396.8	393.6	392.5	392.5
50°	380.7	380.7	378.5	374.2	373.2	372.1	369.9	368.9	364.6	363.5	363.5
52.5°	356.0	354.9	351.7	346.3	344.1	342.0	340.9	339.8	335.5	333.4	334.5
55°	326.9	324.8	321.5	315.1	314.0	311.9	310.8	309.7	305.4	307.6	304.3
57.5°	300.0	295.7	291.4	290.4	286.1	285.0	283.9	282.8	279.6	280.7	278.5
60°	267.8	266.7	264.6	260.3	260.3	259.2	259.2	257.0	254.9	253.8	253.8
62.5°	244.1	240.9	238.7	238.7	235.5	235.5	235.5	233.4	231.2	232.3	231.2
65°	218.3	217.2	216.2	214.0	214.0	212.9	212.9	210.8	207.6	208.6	206.5
67.5°	196.8	194.7	192.5	191.4	187.1	185.0	183.9	182.8	178.5	179.6	177.4
70°	169.9	166.7	164.5	162.4	159.2	157.0	157.0	154.9	151.6	152.7	150.6
72.5°	142.0	139.8	137.7	136.6	133.4	132.3	131.2	130.1	126.9	128.0	126.9
75°	118.3	118.3	117.2	116.1	112.9	109.7	107.5	106.5	104.3	105.4	103.2
77.5°	97.9	95.7	93.6	93.6	90.3	88.2	86.0	86.0	86.0	85.0	83.9
80°	76.4	74.2	74.2	73.1	71.0	68.8	67.8	67.8	66.7	66.7	65.6
82.5°	58.1	55.9	54.8	54.8	52.7	51.6	50.5	49.5	49.5	49.5	48.4
85°	40.9	38.7	37.6	37.6	35.5	34.4	34.4	33.3	33.3	32.3	32.3
87.5°	24.7	23.7	22.6	22.6	20.4	19.4	19.4	19.4	18.3	18.3	17.2
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-LD5-57HL-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°	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6
2.5°	2531.5	2531.5	2524.0	2526.2	2522.9	2527.2	2521.9	2521.9	2528.3	2528.3	2532.6
5°	2441.2	2435.8	2434.7	2432.6	2421.8	2426.1	2420.8	2415.4	2422.9	2422.9	2432.6
7.5°	2317.5	2307.8	2312.1	2305.7	2299.2	2289.6	2292.8	2288.5	2293.9	2301.4	2311.1
10°	2254.1	2245.5	2250.8	2244.4	2247.6	2233.6	2234.7	2235.8	2241.2	2243.3	2251.9
12.5°	2213.2	2211.1	2208.9	2206.8	2208.9	2201.4	2197.1	2198.2	2200.3	2201.4	2207.8
15°	2127.2	2113.2	2117.5	2102.4	2103.5	2104.6	2096.0	2104.6	2103.5	2117.5	2130.4
17.5°	2057.3	2057.3	2049.7	2043.3	2039.0	2037.9	2031.5	2035.8	2031.5	2040.1	2043.3
20°	2008.9	2007.8	2006.7	2003.5	1992.7	1993.8	1997.0	1987.4	1986.3	1985.2	1991.7
22.5°	1986.3	1987.4	1983.1	1983.1	1973.4	1975.5	1976.6	1965.9	1966.9	1963.7	1966.9
25°	1962.6	1964.8	1959.4	1959.4	1957.3	1956.2	1950.8	1953.0	1946.5	1941.1	1946.5
27.5°	1934.7	1939.0	1934.7	1936.8	1932.5	1930.4	1927.1	1925.0	1918.5	1917.5	1920.7
30°	1908.9	1911.0	1909.9	1904.6	1903.5	1897.0	1900.3	1893.8	1887.4	1888.4	1890.6
32.5°	978.6	934.5	720.5	650.6	644.2	667.8	791.5	963.6	1248.6	1524.9	1723.9
35°	426.9	426.9	426.9	425.9	425.9	424.8	423.7	422.6	421.6	420.5	419.4
37.5°	429.1	429.1	429.1	429.1	428.0	426.9	426.9	424.8	423.7	422.6	421.6
40°	430.2	431.2	431.2	431.2	430.2	430.2	429.1	426.9	425.9	423.7	421.6
42.5°	429.1	430.2	430.2	429.1	429.1	428.0	428.0	426.9	425.9	424.8	423.7
45°	415.1	416.2	414.0	414.0	413.0	413.0	413.0	413.0	413.0	414.0	414.0
47.5°	390.4	390.4	389.3	388.2	388.2	387.2	388.2	387.2	389.3	390.4	392.5
50°	361.3	361.3	359.2	358.1	358.1	358.1	358.1	359.2	360.3	362.4	364.6
52.5°	331.2	331.2	330.2	329.1	328.0	328.0	331.2	330.2	331.2	332.3	335.5
55°	302.2	303.3	301.1	301.1	300.0	300.0	300.0	301.1	302.2	303.3	306.5
57.5°	277.5	277.5	275.3	275.3	275.3	274.2	277.5	275.3	276.4	277.5	279.6
60°	252.7	251.6	251.6	250.6	250.6	250.6	252.7	251.6	251.6	252.7	254.9
62.5°	230.1	230.1	229.1	229.1	228.0	228.0	230.1	229.1	229.1	230.1	231.2
65°	204.3	204.3	203.3	202.2	205.4	202.2	205.4	203.3	205.4	206.5	208.6
67.5°	175.3	175.3	175.3	174.2	174.2	176.4	177.4	175.3	176.4	178.5	179.6
70°	149.5	149.5	148.4	148.4	148.4	150.6	151.6	149.5	150.6	151.6	153.8
72.5°	126.9	124.7	124.7	123.7	125.8	125.8	126.9	125.8	126.9	126.9	129.1
75°	104.3	102.2	102.2	102.2	104.3	103.2	104.3	103.2	104.3	104.3	105.4
77.5°	83.9	82.8	81.7	81.7	83.9	83.9	83.9	82.8	83.9	85.0	86.0
80°	65.6	64.5	63.4	63.4	65.6	65.6	65.6	66.7	65.6	66.7	67.8
82.5°	48.4	47.3	46.2	48.4	48.4	48.4	48.4	49.5	48.4	49.5	50.5
85°	32.3	31.2	30.1	32.3	32.3	32.3	32.3	33.3	32.3	33.3	34.4
87.5°	17.2	16.1	16.1	17.2	17.2	17.2	18.3	18.3	18.3	19.4	19.4
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-LD5-57HL-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°	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6
2.5°	2539.1	2542.3	2541.2	2534.8	2528.3	2520.8	2515.4	2516.5	2527.2	2530.5	2520.8
5°	2432.6	2453.0	2453.0	2467.0	2459.5	2453.0	2457.3	2481.0	2492.8	2511.1	2517.6
7.5°	2322.9	2332.6	2331.5	2345.5	2343.3	2343.3	2346.6	2377.7	2392.8	2407.9	2412.2
10°	2261.6	2271.3	2270.2	2271.3	2268.1	2260.5	2260.5	2274.5	2287.4	2294.9	2297.1
12.5°	2217.5	2222.9	2221.8	2221.8	2219.7	2213.2	2212.1	2224.0	2237.9	2247.6	2248.7
15°	2151.9	2167.0	2170.2	2184.2	2180.9	2172.3	2174.5	2184.2	2192.8	2201.4	2198.2
17.5°	2054.0	2061.6	2062.6	2068.0	2065.9	2065.9	2078.8	2114.3	2137.9	2158.4	2160.5
20°	1998.1	2003.5	2001.4	2013.2	2007.8	2006.7	2010.0	2025.0	2035.8	2045.4	2062.6
22.5°	1971.2	1975.5	1972.3	1973.4	1963.7	1955.1	1953.0	1964.8	1976.6	1989.5	1989.5
25°	1948.7	1951.9	1950.8	1948.7	1941.1	1929.3	1927.1	1929.3	1933.6	1934.7	1927.1
27.5°	1921.8	1923.9	1923.9	1925.0	1915.3	1904.6	1902.4	1900.3	1904.6	1903.5	1891.7
30°	1893.8	1890.6	1891.7	1892.7	1884.1	1874.5	1870.2	1869.1	1873.4	1872.3	1860.5
32.5°	1827.1	1851.9	1854.0	1856.2	1848.6	1840.0	1835.7	1832.5	1834.7	1833.6	1822.8
35°	418.3	425.9	521.6	1180.8	1603.4	1775.5	1793.8	1789.5	1790.6	1790.6	1782.0
37.5°	419.4	418.3	417.3	414.0	410.8	408.7	706.5	1506.7	1745.4	1746.5	1738.9
40°	419.4	418.3	417.3	415.1	410.8	407.6	402.2	397.9	407.6	896.9	1641.1
42.5°	421.6	419.4	417.3	415.1	410.8	406.5	402.2	396.8	400.1	397.9	392.5
45°	415.1	414.0	414.0	413.0	410.8	406.5	401.1	394.7	391.5	394.7	389.3
47.5°	394.7	395.8	399.0	400.1	400.1	401.1	397.9	393.6	388.2	391.5	385.0
50°	366.7	368.9	369.9	375.3	377.5	381.8	382.8	382.8	381.8	386.1	381.8
52.5°	336.6	338.8	344.1	346.3	348.4	354.9	357.0	360.3	362.4	368.9	373.2
55°	307.6	308.6	310.8	315.1	318.3	323.7	326.9	330.2	335.5	338.8	351.7
57.5°	280.7	281.8	286.1	287.1	289.3	293.6	296.8	301.1	305.4	307.6	322.6
60°	254.9	255.9	259.2	260.3	261.3	265.6	268.9	272.1	275.3	277.5	288.2
62.5°	232.3	232.3	235.5	235.5	236.6	239.8	242.0	244.1	247.3	248.4	253.8
65°	209.7	210.8	212.9	212.9	214.0	216.2	217.2	218.3	221.5	221.5	225.8
67.5°	181.7	182.8	186.0	188.2	189.3	193.6	194.7	195.7	197.9	199.0	201.1
70°	154.9	155.9	159.2	160.2	161.3	164.5	166.7	169.9	173.1	176.4	178.5
72.5°	130.1	131.2	134.4	134.4	137.7	138.7	140.9	142.0	145.2	147.3	150.6
75°	106.5	107.5	110.8	110.8	114.0	115.1	116.1	117.2	119.4	121.5	123.7
77.5°	87.1	87.1	91.4	93.6	95.7	95.7	96.8	96.8	96.8	97.9	100.0
80°	68.8	68.8	72.1	74.2	76.4	76.4	77.4	78.5	79.6	79.6	80.7
82.5°	51.6	51.6	54.8	55.9	58.1	58.1	58.1	59.1	60.2	59.1	61.3
85°	35.5	35.5	37.6	38.7	40.9	40.9	40.9	41.9	43.0	41.9	43.0
87.5°	20.4	21.5	22.6	23.7	24.7	25.8	25.8	25.8	26.9	26.9	28.0
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-LD5-57HL-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°	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6
2.5°	2510.0	2497.1	2496.0	2481.0	2476.7	2477.8	2465.9	2461.6	2442.3	2438.0	2417.5
5°	2519.7	2526.2	2522.9	2521.9	2525.1	2522.9	2514.3	2510.0	2506.8	2498.2	2481.0
7.5°	2413.2	2417.5	2420.8	2434.7	2446.6	2467.0	2488.5	2502.5	2513.2	2515.4	2501.4
10°	2304.6	2325.1	2339.0	2360.5	2377.7	2389.6	2402.5	2414.3	2445.5	2476.7	2495.0
12.5°	2248.7	2254.1	2253.0	2264.8	2276.7	2307.8	2338.0	2355.2	2378.8	2392.8	2426.1
15°	2201.4	2202.5	2205.7	2214.3	2220.7	2231.5	2245.5	2271.3	2318.6	2340.1	2358.4
17.5°	2158.4	2158.4	2160.5	2168.0	2176.6	2186.3	2194.9	2205.7	2229.3	2264.8	2310.0
20°	2089.5	2119.6	2122.9	2121.8	2126.1	2144.4	2146.5	2165.9	2177.7	2191.7	2235.8
22.5°	1987.4	2005.7	2031.5	2071.3	2086.3	2094.9	2101.4	2110.0	2128.3	2144.4	2162.7
25°	1931.4	1943.3	1950.8	1962.6	1993.8	2044.4	2054.0	2063.7	2075.6	2087.4	2110.0
27.5°	1882.0	1880.9	1886.3	1897.0	1905.6	1932.5	1979.8	2017.5	2019.6	2036.8	2056.2
30°	1846.5	1840.0	1832.5	1830.4	1842.2	1856.2	1870.2	1929.3	1970.2	1978.8	1999.2
32.5°	1813.2	1802.4	1791.6	1783.0	1775.5	1787.3	1795.9	1821.8	1874.5	1923.9	1934.7
35°	1772.3	1761.5	1748.6	1738.9	1727.1	1726.0	1725.0	1749.7	1766.9	1826.1	1877.7
37.5°	1730.3	1718.5	1707.8	1697.0	1685.2	1676.6	1671.2	1677.7	1693.8	1719.6	1805.6
40°	1686.3	1672.3	1661.5	1652.9	1636.8	1630.3	1619.6	1615.3	1616.4	1638.9	1684.1
42.5°	1007.7	1606.7	1612.0	1602.4	1588.4	1579.8	1568.0	1562.6	1551.8	1562.6	1588.4
45°	388.2	392.5	1175.4	1552.9	1535.7	1524.9	1514.2	1508.8	1497.0	1488.4	1512.0
47.5°	380.7	385.0	376.4	533.4	1465.8	1469.0	1456.1	1450.7	1438.9	1432.5	1426.0
50°	375.3	378.5	372.1	374.2	366.7	1343.2	1397.0	1390.5	1377.6	1370.1	1357.2
52.5°	369.9	369.9	365.6	360.3	358.1	359.2	1130.3	1329.2	1314.2	1306.6	1289.4
55°	352.7	354.9	359.2	350.6	348.4	347.4	344.1	1076.5	1244.3	1235.7	1220.6
57.5°	326.9	331.2	343.1	340.9	340.9	332.3	330.2	330.2	999.1	1163.6	1148.5
60°	296.8	301.1	314.0	318.3	321.5	319.4	317.2	316.2	311.9	1052.8	1072.2
62.5°	265.6	269.9	274.2	288.2	292.5	297.9	304.3	301.1	296.8	296.8	991.5
65°	232.3	238.7	240.9	253.8	259.2	268.9	274.2	281.8	279.6	278.5	283.9
67.5°	203.3	210.8	211.9	217.2	226.9	231.2	237.7	251.6	258.1	260.3	262.4
70°	178.5	182.8	186.0	188.2	194.7	195.7	207.6	217.2	226.9	237.7	240.9
72.5°	153.8	157.0	163.5	161.3	163.5	167.8	174.2	180.7	190.3	205.4	215.1
75°	125.8	128.0	132.3	134.4	138.7	142.0	146.3	151.6	160.2	167.8	180.7
77.5°	101.1	102.2	105.4	106.5	110.8	114.0	121.5	124.7	130.1	135.5	143.0
80°	81.7	81.7	82.8	82.8	86.0	89.3	94.6	97.9	104.3	108.6	108.6
82.5°	62.4	62.4	65.6	65.6	67.8	67.8	71.0	71.0	74.2	76.4	78.5
85°	44.1	45.2	47.3	46.2	48.4	47.3	49.5	51.6	52.7	51.6	50.5
87.5°	29.0	29.0	31.2	30.1	31.2	31.2	33.3	33.3	34.4	34.4	33.3
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-LD5-57HL-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°	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6
2.5°	2410.0	2393.9	2384.2	2372.4	2369.1	2365.9	2370.2	2370.2	2363.8	2358.4	2348.7
5°	2465.9	2448.7	2430.4	2411.1	2392.8	2373.4	2365.9	2364.8	2353.0	2346.6	2343.3
7.5°	2495.0	2486.4	2465.9	2439.0	2411.1	2376.7	2361.6	2353.0	2341.2	2339.0	2339.0
10°	2498.2	2488.5	2477.8	2458.4	2426.1	2381.0	2351.9	2334.7	2324.0	2331.5	2345.5
12.5°	2467.0	2485.3	2475.6	2462.7	2436.9	2382.0	2340.1	2314.3	2311.1	2330.4	2367.0
15°	2387.4	2441.2	2468.1	2455.2	2434.7	2379.9	2320.7	2290.6	2290.6	2330.4	2377.7
17.5°	2327.2	2369.1	2434.7	2445.5	2421.8	2375.6	2302.5	2267.0	2276.7	2334.7	2385.3
20°	2277.7	2303.5	2367.0	2427.2	2404.6	2365.9	2275.6	2239.0	2258.4	2328.3	2396.0
22.5°	2200.3	2251.9	2290.6	2379.9	2387.4	2347.6	2248.7	2204.6	2243.3	2328.3	2390.7
25°	2125.0	2187.4	2228.3	2315.4	2361.6	2325.1	2224.0	2168.0	2227.2	2325.1	2386.4
27.5°	2072.3	2101.4	2175.6	2237.9	2322.9	2294.9	2190.6	2128.3	2206.8	2307.8	2361.6
30°	2016.4	2035.8	2108.9	2168.0	2271.3	2260.5	2156.2	2084.2	2180.9	2291.7	2297.1
32.5°	1955.1	1976.6	2014.3	2100.3	2199.2	2228.3	2117.5	2040.1	2153.0	2267.0	2221.8
35°	1892.7	1908.9	1939.0	2031.5	2115.3	2179.9	2070.2	1989.5	2133.6	2229.3	2149.8
37.5°	1830.4	1847.6	1873.4	1950.8	2027.2	2134.7	2029.3	1939.0	2098.1	2162.7	2074.5
40°	1771.2	1780.9	1807.8	1856.2	1954.0	2088.5	1983.1	1886.3	2061.6	2077.7	1972.3
42.5°	1662.6	1711.0	1735.7	1774.4	1871.2	2025.0	1929.3	1830.4	2020.7	1992.7	1870.2
45°	1545.4	1650.8	1661.5	1700.2	1798.1	1957.3	1878.8	1775.5	1982.0	1919.6	1773.4
47.5°	1449.7	1526.0	1588.4	1620.7	1711.0	1877.7	1831.4	1729.3	1923.9	1827.1	1678.7
50°	1364.7	1405.6	1518.5	1542.1	1606.7	1782.0	1775.5	1675.5	1843.3	1711.0	1586.2
52.5°	1281.9	1310.9	1413.1	1463.6	1516.3	1678.7	1708.8	1622.8	1755.1	1594.8	1492.7
55°	1209.8	1219.5	1275.4	1381.9	1429.2	1574.4	1635.7	1561.5	1643.2	1484.1	1402.3
57.5°	1135.6	1127.0	1167.9	1304.5	1338.9	1467.9	1558.3	1499.1	1552.9	1371.2	1308.8
60°	1058.2	1046.4	1063.6	1153.9	1243.2	1362.6	1466.9	1430.3	1443.2	1259.3	1204.5
62.5°	977.6	965.7	960.3	1017.3	1149.6	1253.9	1374.4	1353.9	1308.8	1157.1	1075.4
65°	893.7	881.8	873.2	895.8	1046.4	1113.1	1271.1	1265.8	1161.5	1049.6	905.5
67.5°	272.1	802.3	784.0	782.9	881.8	985.1	1159.3	1150.7	1013.0	934.5	779.7
70°	245.2	650.6	691.5	681.8	724.8	855.0	1031.3	1024.9	868.9	749.6	689.3
72.5°	224.8	230.1	610.8	600.1	609.8	727.0	898.0	880.8	736.7	591.5	595.8
75°	192.5	202.2	210.8	506.5	493.6	602.2	752.8	725.9	607.6	488.2	497.9
77.5°	157.0	168.8	175.3	368.9	399.0	429.1	601.2	565.7	418.3	390.4	186.0
80°	117.2	126.9	137.7	147.3	303.3	300.0	446.3	410.8	291.4	243.0	145.2
82.5°	86.0	89.3	95.7	106.5	120.4	201.1	287.1	252.7	202.2	110.8	100.0
85°	53.8	58.1	61.3	64.5	73.1	120.4	142.0	112.9	85.0	67.8	63.4
87.5°	34.4	34.4	33.3	34.4	35.5	43.0	48.4	46.2	36.6	34.4	34.4
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-LD5-57HL-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°	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6
2.5°	2338.0	2322.9	2322.9	2318.6	2321.8	2321.8	2320.7	2321.8	2329.4	2333.7	2341.2
5°	2336.9	2332.6	2342.3	2354.1	2368.1	2385.3	2389.6	2404.6	2418.6	2436.9	2456.3
7.5°	2350.9	2365.9	2384.2	2403.6	2431.5	2452.0	2470.2	2488.5	2501.4	2518.6	2529.4
10°	2371.3	2401.4	2432.6	2457.3	2487.4	2504.6	2516.5	2518.6	2500.3	2471.3	2447.6
12.5°	2400.3	2435.8	2464.9	2488.5	2502.5	2496.0	2461.6	2426.1	2405.7	2375.6	2333.7
15°	2425.1	2457.3	2487.4	2477.8	2440.1	2404.6	2377.7	2335.8	2294.9	2267.0	2248.7
17.5°	2435.8	2467.0	2456.3	2405.7	2370.2	2329.4	2274.5	2242.2	2215.4	2193.9	2183.1
20°	2442.3	2436.9	2378.8	2342.3	2273.4	2235.8	2200.3	2170.2	2149.8	2139.0	2136.9
22.5°	2425.1	2359.5	2310.0	2244.4	2193.9	2162.7	2134.7	2110.0	2096.0	2087.4	2082.0
25°	2368.1	2291.7	2218.6	2167.0	2123.9	2097.1	2075.6	2055.1	2037.9	2033.6	2022.9
27.5°	2288.5	2226.1	2129.3	2089.5	2051.9	2039.0	2015.3	1994.9	1979.8	1966.9	1932.5
30°	2222.9	2123.9	2054.0	2017.5	1994.9	1979.8	1953.0	1931.4	1905.6	1858.3	1839.0
32.5°	2142.2	2044.4	1977.7	1957.3	1929.3	1916.4	1886.3	1839.0	1799.2	1779.8	1778.7
35°	2037.9	1957.3	1908.9	1890.6	1868.0	1846.5	1784.1	1741.1	1721.7	1723.9	1740.0
37.5°	1950.8	1878.8	1847.6	1821.8	1795.9	1741.1	1688.4	1668.0	1673.3	1684.1	1691.6
40°	1862.6	1807.8	1772.3	1751.9	1693.8	1640.0	1612.0	1619.6	1629.3	1636.8	1646.5
42.5°	1776.6	1737.9	1702.4	1662.6	1583.0	1554.0	1560.4	1570.1	1578.7	1589.5	1599.1
45°	1694.9	1660.4	1619.6	1529.2	1489.5	1497.0	1506.7	1514.2	1527.1	1534.6	1544.3
47.5°	1617.4	1580.9	1508.8	1429.2	1424.9	1440.0	1448.6	1458.3	1467.9	1448.6	799.0
50°	1530.3	1492.7	1383.0	1352.9	1362.6	1376.5	1387.3	1397.0	1244.3	494.7	380.7
52.5°	1444.3	1348.6	1278.7	1287.3	1297.0	1313.1	1320.6	980.8	390.4	372.1	373.2
55°	1348.6	1226.0	1205.5	1216.3	1224.9	1241.0	822.7	360.3	358.1	357.0	365.6
57.5°	1198.0	1123.8	1132.4	1143.2	1151.8	813.0	350.6	348.4	349.5	350.6	351.7
60°	1063.6	1047.5	1057.1	1066.8	754.9	338.8	332.3	333.4	337.7	334.5	325.9
62.5°	957.1	970.0	979.7	858.2	321.5	318.3	321.5	318.3	310.8	305.4	294.7
65°	875.4	888.3	895.8	302.2	301.1	305.4	302.2	291.4	279.6	264.6	261.3
67.5°	789.4	802.3	287.1	279.6	283.9	278.5	265.6	252.7	244.1	231.2	225.8
70°	700.1	300.0	260.3	259.2	251.6	243.0	229.1	216.2	205.4	200.0	194.7
72.5°	505.4	237.7	234.4	225.8	212.9	201.1	189.3	181.7	176.4	173.1	169.9
75°	210.8	206.5	196.8	181.7	168.8	163.5	154.9	149.5	147.3	140.9	138.7
77.5°	176.4	167.8	153.8	143.0	135.5	132.3	125.8	119.4	116.1	115.1	110.8
80°	135.5	123.7	117.2	111.8	109.7	102.2	94.6	91.4	89.3	88.2	85.0
82.5°	92.5	88.2	83.9	76.4	76.4	73.1	69.9	67.8	65.6	65.6	63.4
85°	60.2	57.0	55.9	52.7	52.7	50.5	49.5	48.4	47.3	46.2	45.2
87.5°	34.4	34.4	35.5	34.4	34.4	33.3	32.3	31.2	30.1	30.1	28.0
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-LD5-57HL-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°	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6
2.5°	2350.9	2361.6	2363.8	2400.3	2420.8	2419.7	2413.2	2432.6	2420.8	2414.3	2420.8
5°	2475.6	2488.5	2499.3	2539.1	2553.0	2559.5	2558.4	2569.2	2560.6	2553.0	2553.0
7.5°	2536.9	2541.2	2545.5	2535.8	2529.4	2518.6	2502.5	2478.8	2467.0	2454.1	2438.0
10°	2435.8	2421.8	2427.2	2407.9	2391.7	2379.9	2364.8	2345.5	2329.4	2317.5	2299.2
12.5°	2312.1	2311.1	2313.2	2316.4	2300.3	2290.6	2278.8	2264.8	2253.0	2240.1	2225.0
15°	2236.9	2237.9	2246.5	2243.3	2237.9	2232.6	2219.7	2215.4	2204.6	2190.6	2182.0
17.5°	2183.1	2188.5	2197.1	2192.8	2184.2	2178.8	2169.1	2159.4	2149.8	2139.0	2126.1
20°	2135.8	2141.2	2146.5	2141.2	2125.0	2117.5	2104.6	2074.5	2053.0	2031.5	2012.1
22.5°	2084.2	2087.4	2083.1	2065.9	2025.0	2005.7	1990.6	1982.0	1963.7	1951.9	1940.1
25°	2019.6	2001.4	1973.4	1954.0	1937.9	1929.3	1922.8	1921.8	1919.6	1917.5	1912.1
27.5°	1914.2	1907.8	1892.7	1885.2	1886.3	1889.5	1890.6	1893.8	1890.6	1886.3	1882.0
30°	1835.7	1839.0	1840.0	1842.2	1847.6	1850.8	1851.9	1856.2	1854.0	1850.8	1848.6
32.5°	1786.3	1793.8	1798.1	1804.5	1807.8	1813.2	1813.2	1819.6	1813.2	1812.1	1809.9
35°	1745.4	1751.9	1754.0	1763.7	1766.9	1772.3	1772.3	1777.7	1772.3	1717.4	1356.1
37.5°	1704.5	1711.0	1715.3	1723.9	1725.0	1728.2	1594.8	1166.8	752.8	582.9	445.2
40°	1656.1	1663.7	1668.0	1671.2	1174.4	745.3	513.0	417.3	417.3	420.5	423.7
42.5°	1604.5	1609.9	1121.7	652.8	406.5	405.4	408.7	411.9	415.1	419.4	423.7
45°	1261.5	636.6	404.4	394.7	397.9	402.2	406.5	410.8	416.2	420.5	422.6
47.5°	414.0	388.2	393.6	389.3	394.7	400.1	404.4	408.7	409.7	410.8	409.7
50°	382.8	382.8	386.1	386.1	390.4	392.5	392.5	392.5	388.2	387.2	383.9
52.5°	369.9	378.5	374.2	376.4	374.2	371.0	367.8	364.6	358.1	356.0	351.7
55°	363.5	366.7	356.0	352.7	348.4	339.8	335.5	331.2	325.9	323.7	318.3
57.5°	348.4	340.9	329.1	323.7	316.2	307.6	303.3	300.0	294.7	292.5	289.3
60°	320.5	305.4	297.9	291.4	282.8	275.3	272.1	269.9	265.6	264.6	261.3
62.5°	286.1	273.2	266.7	258.1	251.6	247.3	244.1	243.0	238.7	238.7	236.6
65°	248.4	242.0	236.6	228.0	224.8	220.5	219.4	218.3	216.2	215.1	212.9
67.5°	218.3	214.0	206.5	202.2	200.0	196.8	194.7	192.5	188.2	186.0	182.8
70°	191.4	188.2	180.7	177.4	173.1	167.8	164.5	162.4	159.2	157.0	153.8
72.5°	165.6	155.9	150.6	147.3	144.1	138.7	137.7	135.5	132.3	131.2	128.0
75°	133.4	125.8	122.6	120.4	117.2	114.0	114.0	114.0	110.8	109.7	108.6
77.5°	106.5	102.2	100.0	97.9	96.8	94.6	91.4	90.3	87.1	87.1	86.0
80°	81.7	79.6	77.4	76.4	75.3	73.1	71.0	69.9	66.7	66.7	65.6
82.5°	60.2	59.1	58.1	57.0	55.9	54.8	51.6	50.5	48.4	48.4	47.3
85°	43.0	41.9	39.8	38.7	38.7	37.6	34.4	33.3	31.2	31.2	31.2
87.5°	26.9	25.8	24.7	23.7	22.6	21.5	19.4	18.3	18.3	16.1	15.1
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-LD5-57HL-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°	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6
2.5°	2407.9	2426.1	2424.0	2436.9	2440.1	2446.6	2448.7	2449.8	2433.7	2446.6	2447.6
5°	2549.8	2553.0	2555.2	2560.6	2565.9	2567.0	2561.6	2555.2	2557.3	2553.0	2542.3
7.5°	2435.8	2419.7	2416.5	2412.2	2410.0	2407.9	2398.2	2406.8	2397.1	2392.8	2377.7
10°	2296.0	2281.0	2279.9	2279.9	2283.1	2282.0	2279.9	2275.6	2284.2	2278.8	2275.6
12.5°	2222.9	2217.5	2220.7	2218.6	2227.2	2229.3	2227.2	2227.2	2225.0	2220.7	2222.9
15°	2178.8	2174.5	2177.7	2174.5	2180.9	2182.0	2176.6	2179.9	2174.5	2169.1	2167.0
17.5°	2120.7	2111.0	2103.5	2092.8	2093.8	2091.7	2085.2	2085.2	2079.9	2065.9	2067.0
20°	2008.9	1999.2	1994.9	1994.9	2000.3	2002.4	2001.4	2003.5	1998.1	1996.0	1987.4
22.5°	1939.0	1937.9	1940.1	1945.4	1954.0	1965.9	1966.9	1966.9	1966.9	1965.9	1955.1
25°	1914.2	1914.2	1916.4	1923.9	1930.4	1939.0	1941.1	1943.3	1941.1	1941.1	1931.4
27.5°	1886.3	1884.1	1888.4	1896.0	1903.5	1909.9	1915.3	1916.4	1913.2	1913.2	1916.4
30°	1851.9	1850.8	1856.2	1863.7	1870.2	1876.6	1882.0	1886.3	1882.0	1882.0	1878.8
32.5°	1816.4	1816.4	1818.5	1773.4	1644.3	1480.8	1484.1	1389.4	1323.8	1241.0	1350.7
35°	1133.5	824.8	708.7	600.1	523.7	474.3	473.2	457.1	449.5	444.1	443.1
37.5°	428.0	430.2	434.5	436.6	439.8	442.0	443.1	443.1	443.1	443.1	442.0
40°	426.9	431.2	434.5	437.7	440.9	443.1	443.1	444.1	445.2	445.2	445.2
42.5°	428.0	432.3	436.6	439.8	442.0	443.1	444.1	445.2	445.2	445.2	445.2
45°	426.9	429.1	429.1	430.2	430.2	430.2	431.2	431.2	430.2	429.1	431.2
47.5°	410.8	410.8	407.6	406.5	405.4	403.3	404.4	403.3	402.2	401.1	403.3
50°	382.8	378.5	376.4	374.2	373.2	371.0	372.1	371.0	369.9	367.8	371.0
52.5°	349.5	348.4	344.1	342.0	340.9	342.0	339.8	338.8	337.7	336.6	337.7
55°	317.2	312.9	311.9	309.7	308.6	309.7	308.6	307.6	306.5	305.4	306.5
57.5°	288.2	285.0	283.9	281.8	281.8	281.8	281.8	280.7	279.6	278.5	279.6
60°	260.3	258.1	257.0	257.0	255.9	255.9	255.9	254.9	253.8	253.8	254.9
62.5°	236.6	236.6	233.4	232.3	232.3	233.4	232.3	231.2	230.1	229.1	231.2
65°	211.9	207.6	206.5	204.3	202.2	203.3	202.2	201.1	200.0	199.0	201.1
67.5°	181.7	180.7	176.4	174.2	173.1	174.2	173.1	172.1	171.0	169.9	172.1
70°	152.7	152.7	148.4	147.3	146.3	146.3	145.2	145.2	144.1	143.0	145.2
72.5°	126.9	126.9	125.8	123.7	122.6	121.5	120.4	119.4	119.4	120.4	120.4
75°	105.4	103.2	98.9	100.0	98.9	97.9	97.9	96.8	95.7	97.9	96.8
77.5°	82.8	81.7	78.5	79.6	78.5	77.4	77.4	76.4	75.3	76.4	76.4
80°	62.4	62.4	61.3	60.2	60.2	59.1	58.1	58.1	57.0	58.1	58.1
82.5°	45.2	45.2	44.1	43.0	41.9	41.9	40.9	40.9	40.9	40.9	40.9
85°	29.0	28.0	28.0	25.8	25.8	25.8	24.7	24.7	24.7	24.7	24.7
87.5°	14.0	14.0	12.9	12.9	11.8	10.8	10.8	9.7	9.7	10.8	10.8
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-LD5-57HL-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°	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6
2.5°	2428.3	2442.3	2430.4	2435.8	2436.9	2455.2	2454.1	2458.4	2450.9	2442.3	2430.4
5°	2552.0	2545.5	2536.9	2557.3	2546.6	2559.5	2563.8	2572.4	2572.4	2571.3	2561.6
7.5°	2393.9	2379.9	2390.7	2398.2	2401.4	2392.8	2410.0	2429.4	2445.5	2455.2	2456.3
10°	2270.2	2274.5	2273.4	2276.7	2284.2	2283.1	2293.9	2304.6	2308.9	2315.4	2317.5
12.5°	2212.1	2211.1	2213.2	2220.7	2225.0	2224.0	2234.7	2241.2	2243.3	2244.4	2243.3
15°	2165.9	2158.4	2163.7	2164.8	2168.0	2168.0	2180.9	2190.6	2194.9	2197.1	2194.9
17.5°	2078.8	2060.5	2077.7	2077.7	2089.5	2087.4	2107.8	2123.9	2132.6	2139.0	2139.0
20°	1992.7	1984.1	1990.6	1988.4	1997.0	1996.0	2008.9	2019.6	2027.2	2032.5	2039.0
22.5°	1958.3	1960.5	1950.8	1951.9	1951.9	1950.8	1957.3	1962.6	1964.8	1968.0	1965.9
25°	1935.8	1937.9	1934.7	1929.3	1927.1	1929.3	1932.5	1939.0	1940.1	1937.9	1930.4
27.5°	1913.2	1906.7	1912.1	1902.4	1900.3	1904.6	1908.9	1909.9	1911.0	1911.0	1904.6
30°	1878.8	1873.4	1878.8	1874.5	1870.2	1874.5	1877.7	1877.7	1879.8	1880.9	1873.4
32.5°	1313.1	1323.8	1498.1	1603.4	1751.9	1827.1	1841.1	1841.1	1843.3	1843.3	1836.8
35°	447.4	448.4	485.0	525.9	613.0	720.5	861.4	934.5	1181.9	1477.6	1763.7
37.5°	442.0	440.9	439.8	438.8	437.7	436.6	434.5	433.4	439.8	521.6	707.6
40°	444.1	443.1	440.9	439.8	438.8	436.6	435.5	433.4	431.2	429.1	426.9
42.5°	444.1	443.1	442.0	440.9	439.8	438.8	436.6	434.5	432.3	429.1	425.9
45°	429.1	429.1	430.2	430.2	431.2	431.2	431.2	430.2	430.2	429.1	424.8
47.5°	401.1	401.1	404.4	404.4	406.5	408.7	408.7	410.8	414.0	416.2	417.3
50°	368.9	368.9	372.1	373.2	375.3	378.5	381.8	382.8	386.1	390.4	394.7
52.5°	336.6	336.6	339.8	339.8	342.0	345.2	348.4	349.5	353.8	358.1	363.5
55°	306.5	306.5	308.6	309.7	310.8	312.9	316.2	316.2	320.5	323.7	329.1
57.5°	279.6	281.8	281.8	281.8	282.8	285.0	287.1	287.1	290.4	293.6	297.9
60°	253.8	255.9	255.9	255.9	257.0	258.1	260.3	260.3	262.4	264.6	268.9
62.5°	230.1	232.3	232.3	233.4	233.4	234.4	236.6	235.5	237.7	238.7	242.0
65°	200.0	202.2	203.3	204.3	205.4	207.6	210.8	209.7	212.9	215.1	218.3
67.5°	171.0	173.1	173.1	174.2	175.3	177.4	179.6	179.6	182.8	185.0	189.3
70°	144.1	146.3	146.3	147.3	148.4	150.6	152.7	151.6	154.9	157.0	160.2
72.5°	119.4	121.5	121.5	122.6	122.6	124.7	126.9	129.1	129.1	131.2	133.4
75°	96.8	97.9	98.9	98.9	100.0	101.1	103.2	105.4	106.5	107.5	109.7
77.5°	76.4	77.4	78.5	78.5	79.6	80.7	81.7	86.0	88.2	89.3	89.3
80°	58.1	59.1	59.1	59.1	60.2	61.3	63.4	63.4	67.8	67.8	68.8
82.5°	40.9	41.9	41.9	41.9	43.0	45.2	46.2	47.3	49.5	50.5	50.5
85°	24.7	25.8	25.8	25.8	26.9	28.0	30.1	31.2	32.3	32.3	33.3
87.5°	9.7	10.8	11.8	11.8	12.9	14.0	15.1	16.1	17.2	17.2	18.3
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-LD5-57HL-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°	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6
2.5°	2417.5	2425.1	2417.5	2421.8	2427.2	2417.5	2395.0	2386.4	2383.1	2370.2	2361.6
5°	2552.0	2552.0	2548.7	2557.3	2556.3	2541.2	2517.6	2506.8	2496.0	2482.1	2471.3
7.5°	2456.3	2464.9	2470.2	2503.6	2525.1	2527.2	2542.3	2545.5	2549.8	2545.5	2539.1
10°	2318.6	2315.4	2330.4	2361.6	2379.9	2389.6	2418.6	2432.6	2444.4	2468.1	2492.8
12.5°	2241.2	2245.5	2251.9	2274.5	2291.7	2287.4	2299.2	2308.9	2322.9	2346.6	2382.0
15°	2189.5	2193.9	2200.3	2217.5	2228.3	2222.9	2229.3	2235.8	2245.5	2257.3	2278.8
17.5°	2133.6	2141.2	2148.7	2167.0	2176.6	2175.6	2180.9	2183.1	2186.3	2193.9	2208.9
20°	2046.5	2070.2	2085.2	2110.0	2123.9	2121.8	2131.5	2134.7	2139.0	2146.5	2153.0
22.5°	1966.9	1973.4	1980.9	2007.8	2031.5	2060.5	2067.0	2075.6	2086.3	2093.8	2100.3
25°	1921.8	1917.5	1920.7	1939.0	1951.9	1954.0	1963.7	1991.7	2020.7	2033.6	2048.7
27.5°	1894.9	1890.6	1889.5	1898.1	1900.3	1894.9	1892.7	1901.3	1922.8	1944.4	1989.5
30°	1865.8	1860.5	1856.2	1863.7	1866.9	1859.4	1845.4	1837.9	1850.8	1856.2	1874.5
32.5°	1831.4	1826.1	1823.9	1828.2	1830.4	1823.9	1808.9	1800.2	1798.1	1793.8	1798.1
35°	1792.7	1787.3	1784.1	1785.2	1789.5	1784.1	1771.2	1760.5	1755.1	1743.3	1734.6
37.5°	923.8	1308.8	1699.2	1740.0	1744.3	1743.3	1730.3	1718.5	1713.1	1699.2	1694.9
40°	422.6	472.1	708.7	925.9	1335.7	1697.0	1685.2	1673.3	1663.7	1659.4	1643.2
42.5°	421.6	422.6	423.7	418.3	518.4	882.9	1303.4	1627.1	1620.7	1609.9	1598.1
45°	421.6	416.2	420.5	414.0	416.2	415.1	517.3	834.5	1485.2	1551.8	1546.4
47.5°	417.3	414.0	418.3	413.0	406.5	409.7	405.4	410.8	640.9	1087.2	1489.5
50°	397.9	400.1	407.6	406.5	401.1	405.4	397.9	404.4	399.0	437.7	843.1
52.5°	368.9	373.2	380.7	387.2	389.3	394.7	392.5	394.7	390.4	391.5	392.5
55°	334.5	339.8	346.3	356.0	360.3	368.9	375.3	378.5	383.9	382.8	374.2
57.5°	302.2	307.6	312.9	322.6	332.3	336.6	348.4	354.9	368.9	365.6	363.5
60°	272.1	276.4	281.8	283.9	295.7	303.3	314.0	320.5	338.8	343.1	349.5
62.5°	245.2	247.3	251.6	254.9	262.4	269.9	275.3	286.1	295.7	309.7	319.4
65°	220.5	222.6	225.8	228.0	229.1	239.8	243.0	254.9	258.1	273.2	281.8
67.5°	192.5	196.8	201.1	203.3	205.4	211.9	214.0	219.4	226.9	233.4	244.1
70°	163.5	166.7	171.0	174.2	178.5	182.8	189.3	192.5	197.9	202.2	210.8
72.5°	136.6	139.8	142.0	145.2	148.4	151.6	157.0	164.5	168.8	176.4	178.5
75°	110.8	114.0	116.1	118.3	121.5	123.7	125.8	133.4	137.7	144.1	150.6
77.5°	91.4	91.4	93.6	100.0	98.9	98.9	101.1	105.4	108.6	112.9	119.4
80°	71.0	72.1	73.1	78.5	79.6	80.7	79.6	82.8	86.0	87.1	91.4
82.5°	52.7	53.8	53.8	57.0	60.2	60.2	60.2	61.3	64.5	65.6	67.8
85°	35.5	36.6	37.6	38.7	40.9	41.9	43.0	43.0	45.2	46.2	47.3
87.5°	19.4	21.5	22.6	23.7	24.7	25.8	26.9	28.0	29.0	30.1	31.2
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-LD5-57HL-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°	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6	2346.6
2.5°	2358.4	2353.0	2349.8	2341.2	2339.0	2325.1	2327.2	2325.1	2325.1	2328.3	2339.0
5°	2459.5	2433.7	2427.2	2408.9	2393.9	2368.1	2351.9	2343.3	2330.4	2325.1	2332.6
7.5°	2528.3	2508.9	2492.8	2476.7	2455.2	2425.1	2402.5	2376.7	2355.2	2334.7	2329.4
10°	2516.5	2538.0	2538.0	2528.3	2507.9	2477.8	2450.9	2418.6	2381.0	2348.7	2329.4
12.5°	2416.5	2454.1	2484.2	2506.8	2527.2	2506.8	2479.9	2454.1	2412.2	2364.8	2329.4
15°	2306.8	2345.5	2383.1	2430.4	2479.9	2500.3	2499.3	2469.2	2431.5	2382.0	2332.6
17.5°	2229.3	2256.2	2276.7	2328.3	2388.5	2441.2	2476.7	2478.8	2442.3	2398.2	2333.7
20°	2171.3	2190.6	2207.8	2236.9	2289.6	2354.1	2419.7	2456.3	2449.8	2401.4	2336.9
22.5°	2118.6	2132.6	2146.5	2168.0	2210.0	2251.9	2328.3	2403.6	2435.8	2396.0	2333.7
25°	2065.9	2080.9	2091.7	2106.7	2140.1	2174.5	2228.3	2321.8	2393.9	2391.7	2327.2
27.5°	2003.5	2023.9	2036.8	2057.3	2079.9	2105.7	2142.2	2230.4	2333.7	2370.2	2310.0
30°	1928.2	1958.3	1977.7	2000.3	2019.6	2042.2	2071.3	2125.0	2253.0	2328.3	2291.7
32.5°	1819.6	1873.4	1916.4	1937.9	1959.4	1978.8	2004.6	2049.7	2154.1	2271.3	2271.3
35°	1742.2	1766.9	1805.6	1868.0	1894.9	1914.2	1937.9	1973.4	2040.1	2203.5	2237.9
37.5°	1682.0	1691.6	1711.0	1772.3	1822.8	1854.0	1877.7	1900.3	1965.9	2111.0	2194.9
40°	1636.8	1633.6	1631.4	1660.4	1732.5	1782.0	1808.9	1831.4	1882.0	2000.3	2137.9
42.5°	1584.1	1580.9	1570.1	1577.6	1613.1	1695.9	1736.8	1761.5	1803.5	1884.1	2075.6
45°	1529.2	1523.9	1519.6	1512.0	1524.9	1571.2	1655.1	1691.6	1715.3	1787.3	1997.0
47.5°	1473.3	1465.8	1460.4	1454.0	1446.4	1467.9	1547.5	1613.1	1654.0	1699.2	1902.4
50°	1393.7	1403.4	1397.0	1389.4	1383.0	1378.7	1412.0	1519.6	1570.1	1606.7	1787.3
52.5°	657.1	1277.6	1331.4	1323.8	1315.2	1307.7	1315.2	1397.0	1488.4	1517.4	1648.6
55°	374.2	568.9	1184.0	1251.8	1244.3	1233.5	1227.1	1255.0	1391.6	1430.3	1521.7
57.5°	360.3	361.3	522.7	1128.1	1170.1	1160.4	1152.8	1159.3	1275.4	1341.0	1410.9
60°	348.4	348.4	348.4	499.0	1078.6	1081.9	1072.2	1061.4	1112.0	1241.0	1299.1
62.5°	322.6	329.1	332.3	332.3	492.5	999.1	989.4	986.2	988.3	1120.6	1187.3
65°	289.3	304.3	310.8	315.1	315.1	517.3	904.4	899.0	891.5	942.1	1074.3
67.5°	252.7	267.8	281.8	290.4	291.4	301.1	539.9	809.8	799.0	800.1	953.9
70°	215.1	228.0	243.0	255.9	267.8	273.2	281.8	672.1	707.6	692.6	817.3
72.5°	186.0	191.4	202.2	215.1	229.1	242.0	249.5	267.8	614.1	597.9	621.6
75°	154.9	159.2	166.7	175.3	186.0	201.1	214.0	226.9	325.9	501.1	497.9
77.5°	120.4	128.0	136.6	142.0	147.3	158.1	175.3	188.2	201.1	338.8	399.0
80°	92.5	97.9	102.2	107.5	114.0	121.5	128.0	143.0	158.1	169.9	305.4
82.5°	68.8	72.1	75.3	77.4	79.6	83.9	95.7	101.1	110.8	121.5	144.1
85°	48.4	50.5	52.7	53.8	54.8	55.9	60.2	61.3	71.0	73.1	87.1
87.5°	31.2	32.3	34.4	35.5	35.5	36.6	37.6	37.6	37.6	35.5	43.0
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-LD5-57HL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	2346.6	2346.6
2.5°	2347.6	2364.8
5°	2344.4	2367.0
7.5°	2335.8	2357.3
10°	2322.9	2348.7
12.5°	2308.9	2333.7
15°	2297.1	2315.4
17.5°	2284.2	2294.9
20°	2267.0	2275.6
22.5°	2249.8	2245.5
25°	2230.4	2220.7
27.5°	2205.7	2187.4
30°	2183.1	2150.8
32.5°	2161.6	2108.9
35°	2132.6	2065.9
37.5°	2102.4	2021.8
40°	2067.0	1971.2
42.5°	2029.3	1920.7
45°	1982.0	1872.3
47.5°	1940.1	1814.2
50°	1882.0	1751.9
52.5°	1811.0	1693.8
55°	1727.1	1622.8
57.5°	1636.8	1548.6
60°	1540.0	1463.6
62.5°	1422.8	1375.5
65°	1285.1	1274.4
67.5°	1105.5	1162.5
70°	906.6	1034.6
72.5°	758.2	899.0
75°	621.6	747.4
77.5°	492.5	586.1
80°	307.6	429.1
82.5°	206.5	281.8
85°	124.7	134.4
87.5°	48.4	49.5
90°	0.0	0.0

(END OF REPORT)