

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1213803

Luminaire Tested: 4SNLED-LD5-50SL-RW-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213803
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33525)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-50SL-RW-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

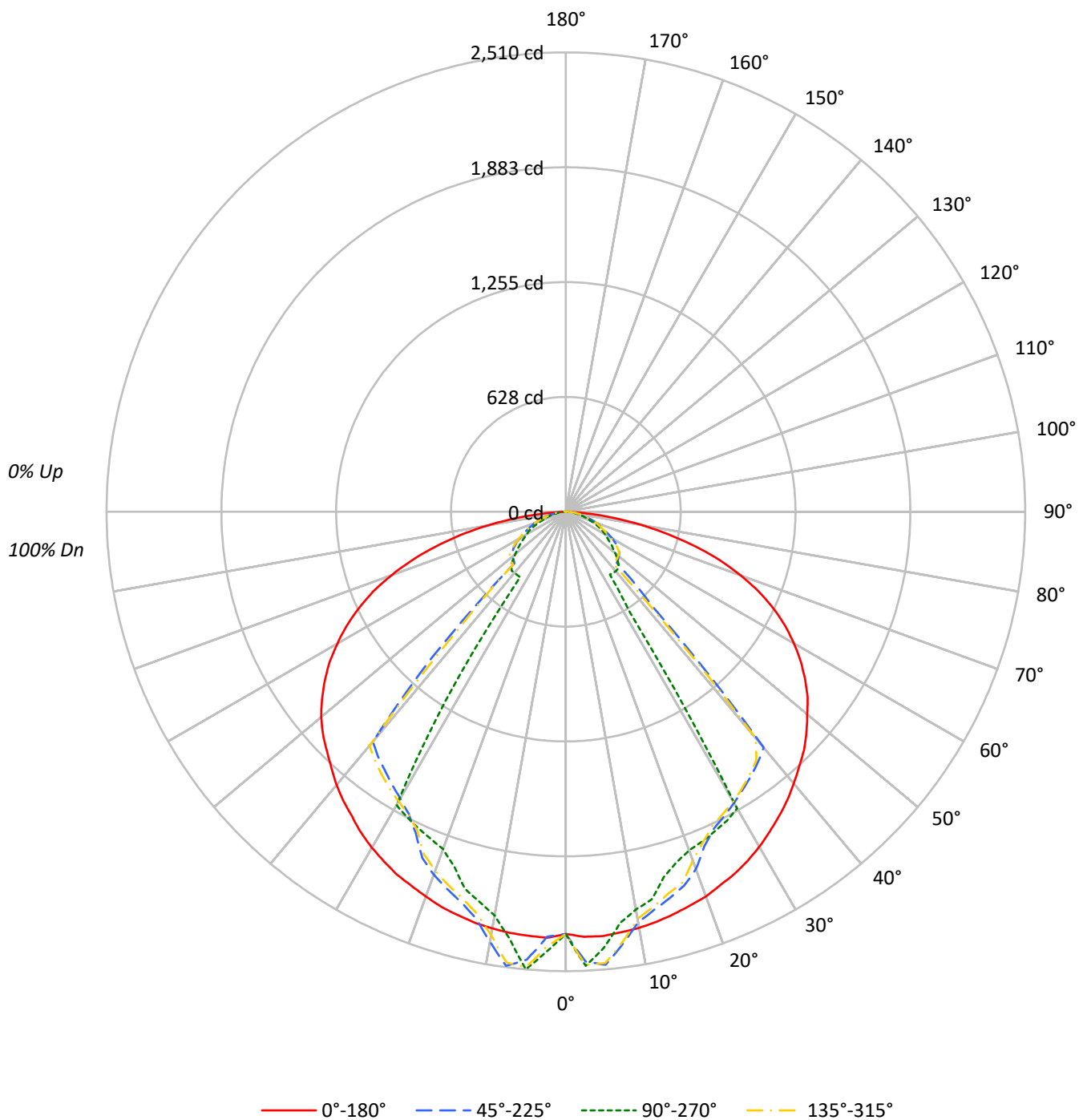
Lumens per Lamp: N/A
Luminaire Lumens: 4619.0 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77
3	94	84	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39
9	62	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	18640	18640	18640	18640
5°	18822	18780	18814	19710
10°	18841	16980	18867	17240
15°	18883	15709	18926	16208
20°	19019	14900	19019	14844
25°	19184	14616	19212	14479
30°	19378	14357	19427	14187
35°	19604	3270	19645	3411
40°	19919	3401	20038	3511
45°	20395	3382	20466	3505
50°	20871	3057	21154	3140
55°	21514	2715	21686	2753
60°	22058	2412	22107	2444
65°	22449	2105	22391	2072
70°	22127	1697	22059	1635
75°	20543	1306	20692	1251
80°	16674	928	17342	849
85°	9025	556	9530	426

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 357.5°

Vertical Angle: 60°

Luminance: 22603 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.9	4.9
10°-20°	624.0	13.5
20°-30°	924.2	20.0
30°-40°	931.2	20.2
40°-50°	727.4	15.7
50°-60°	561.9	12.2
60°-70°	377.3	8.2
70°-80°	192.4	4.2
80°-90°	53.5	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°	1775.2	38.4
0°-40°	2706.4	58.6
0°-60°	3995.8	86.5
0°-90°	4619.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4619.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2307	2307	2307	2307	2307	
5°	2327	2391	2326	2510	2327	221
15°	2276	2067	2281	2132	2276	644
25°	2183	1926	2186	1908	2183	1007
35°	2031	419	2035	437	2031	1273
45°	1840	407	1847	422	1840	1419
55°	1595	296	1608	300	1595	1425
65°	1253	199	1250	196	1253	1232
75°	735	100	740	96	735	768
85°	132	32	140	24	132	182
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°	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6
2.5°	2324.6	2333.0	2339.4	2343.6	2345.7	2345.7	2346.8	2347.8	2361.6	2367.9	2372.2
5°	2326.7	2335.2	2347.8	2364.8	2379.6	2392.2	2402.8	2417.6	2432.4	2448.3	2453.5
7.5°	2317.2	2327.8	2353.1	2383.8	2412.3	2432.4	2446.1	2455.7	2463.1	2464.1	2469.4
10°	2308.7	2327.8	2362.6	2402.8	2438.7	2463.1	2463.1	2457.8	2465.2	2436.6	2408.1
12.5°	2293.9	2315.1	2362.6	2415.5	2449.3	2458.8	2454.6	2433.5	2390.1	2355.2	2339.4
15°	2276.0	2304.5	2363.7	2422.9	2451.4	2454.6	2414.4	2360.5	2327.8	2306.6	2280.2
17.5°	2255.9	2293.9	2364.8	2423.9	2434.5	2419.7	2343.6	2309.8	2276.0	2226.3	2190.3
20°	2236.8	2273.8	2356.3	2409.1	2415.5	2348.9	2289.7	2253.8	2196.7	2153.3	2137.5
22.5°	2207.2	2250.6	2348.9	2389.1	2364.8	2287.6	2230.5	2173.4	2121.6	2108.9	2089.9
25°	2182.9	2228.4	2332.0	2364.8	2300.3	2231.6	2165.0	2098.4	2074.0	2056.1	2039.2
27.5°	2150.2	2206.2	2309.8	2320.4	2231.6	2171.3	2074.0	2044.4	2022.2	2002.2	1994.8
30°	2114.2	2182.9	2279.1	2259.0	2174.5	2085.7	2013.8	1986.3	1970.4	1949.3	1940.9
32.5°	2073.0	2148.0	2245.3	2188.2	2113.2	2002.2	1955.6	1934.5	1913.4	1897.5	1844.7
35°	2030.7	2117.4	2205.1	2120.6	2039.2	1938.7	1897.5	1878.5	1858.4	1800.3	1745.3
37.5°	1987.4	2083.6	2156.5	2047.6	1940.9	1873.2	1838.3	1817.2	1771.7	1697.7	1670.2
40°	1937.7	2042.3	2094.1	1972.6	1855.2	1806.6	1773.8	1752.7	1650.1	1617.4	1608.9
42.5°	1888.0	2002.2	2018.0	1899.6	1784.4	1735.8	1708.3	1638.5	1568.7	1551.8	1555.0
45°	1840.4	1958.8	1934.5	1796.0	1710.4	1670.2	1623.7	1527.5	1490.5	1499.0	1501.1
47.5°	1783.3	1907.0	1846.8	1692.4	1634.3	1594.1	1490.5	1432.4	1427.1	1438.7	1445.1
50°	1722.0	1848.9	1753.7	1598.3	1551.8	1504.3	1386.9	1357.3	1363.7	1375.3	1382.7
52.5°	1664.9	1783.3	1657.5	1510.6	1470.4	1361.6	1282.3	1287.6	1298.1	1311.9	1316.1
55°	1595.2	1704.1	1555.0	1421.8	1383.8	1241.0	1205.1	1217.8	1228.4	1240.0	1248.4
57.5°	1522.2	1613.1	1433.4	1322.4	1261.1	1134.3	1137.4	1145.9	1153.3	1167.0	482.0
60°	1438.7	1509.6	1300.2	1230.5	1108.9	1049.7	1052.9	1067.7	1075.1	600.4	331.9
62.5°	1352.0	1389.0	1179.7	1125.8	969.4	965.1	979.9	986.3	671.3	317.1	310.8
65°	1252.7	1245.3	1061.3	975.7	874.2	878.5	894.3	862.6	297.0	297.0	294.9
67.5°	1142.7	1098.3	946.1	807.6	782.3	791.8	808.7	282.2	274.8	277.0	269.6
70°	1016.9	954.6	826.7	683.9	692.4	701.9	272.7	255.8	252.6	247.4	232.6
72.5°	883.7	798.1	676.5	594.1	599.4	376.3	238.9	230.4	219.9	209.3	193.5
75°	734.7	623.7	496.8	496.8	504.2	214.6	208.3	194.5	182.9	169.1	159.6
77.5°	576.1	479.9	385.8	400.6	195.6	179.7	168.1	153.3	143.8	135.3	130.0
80°	421.8	335.1	290.7	260.0	152.2	136.4	124.7	116.3	112.1	106.8	100.4
82.5°	277.0	201.9	201.9	122.6	106.8	94.1	90.9	84.6	80.3	77.2	74.0
85°	132.1	117.3	88.8	75.1	66.6	60.3	58.1	55.0	55.0	53.9	52.9
87.5°	48.6	52.9	39.1	38.1	35.9	34.9	35.9	35.9	37.0	35.9	34.9
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):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6
2.5°	2382.7	2391.2	2397.5	2408.1	2421.8	2433.5	2444.0	2458.8	2482.1	2488.4	2493.7
5°	2453.5	2456.7	2464.1	2472.6	2474.7	2480.0	2478.9	2485.3	2488.4	2495.8	2480.0
7.5°	2457.8	2440.9	2420.8	2402.8	2390.1	2378.5	2371.1	2382.7	2389.1	2394.3	2378.5
10°	2369.0	2348.9	2337.3	2326.7	2314.0	2296.0	2271.7	2277.0	2274.9	2274.9	2269.6
12.5°	2313.0	2284.4	2254.8	2228.4	2216.8	2215.7	2216.8	2228.4	2228.4	2227.3	2221.0
15°	2225.2	2197.7	2182.9	2176.6	2176.6	2173.4	2173.4	2186.1	2182.9	2182.9	2179.8
17.5°	2167.1	2148.0	2137.5	2130.1	2126.9	2132.2	2138.5	2143.8	2144.9	2140.6	2123.7
20°	2119.5	2101.5	2088.8	2091.0	2089.9	2093.1	2096.2	2078.3	2056.1	2026.5	2012.7
22.5°	2069.8	2056.1	2046.6	2046.6	2033.9	2013.8	1984.2	1977.8	1974.7	1960.9	1949.3
25°	2022.2	2006.4	1992.6	1950.4	1923.9	1927.1	1921.8	1911.3	1910.2	1909.1	1913.4
27.5°	1974.7	1933.5	1880.6	1874.3	1863.7	1862.6	1869.0	1874.3	1874.3	1878.5	1883.8
30°	1876.4	1828.8	1819.3	1807.7	1811.9	1826.7	1829.9	1837.3	1839.4	1846.8	1851.0
32.5°	1786.5	1765.4	1756.9	1762.2	1775.9	1788.6	1796.0	1799.2	1804.5	1810.8	1816.1
35°	1713.6	1707.2	1714.6	1726.3	1740.0	1750.6	1756.9	1763.3	1768.5	1773.8	1778.1
37.5°	1659.7	1663.9	1674.5	1689.3	1703.0	1711.5	1716.7	1724.1	1731.5	1737.9	1712.5
40°	1608.9	1619.5	1631.1	1647.0	1658.6	1667.1	1672.3	1681.9	1618.4	732.6	401.7
42.5°	1564.5	1576.1	1584.6	1597.3	1610.0	1616.3	1569.8	700.9	396.4	394.3	399.6
45°	1510.6	1520.1	1533.9	1543.4	1555.0	1021.2	390.1	394.3	388.0	392.2	394.3
47.5°	1455.6	1470.4	1477.8	1410.2	419.7	388.0	383.7	388.0	383.7	389.0	385.8
50°	1393.3	1411.2	1004.3	379.5	376.3	374.2	378.4	376.3	379.5	383.7	375.3
52.5°	1329.8	823.5	367.9	365.8	367.9	365.8	373.2	367.9	368.9	364.7	354.1
55°	450.3	356.2	353.1	352.0	358.4	358.4	358.4	349.9	344.6	334.0	326.6
57.5°	344.6	344.6	343.6	344.6	342.5	340.4	330.9	323.5	316.1	301.3	297.0
60°	326.6	326.6	326.6	326.6	317.1	312.9	298.1	291.8	279.1	271.7	267.4
62.5°	311.8	309.7	300.2	297.0	286.5	274.8	266.4	260.0	247.4	243.1	240.0
65°	290.7	283.3	271.7	259.0	253.7	241.0	236.8	227.3	220.9	217.8	215.7
67.5°	255.8	245.2	235.7	227.3	217.8	213.5	208.3	200.9	196.6	194.5	192.4
70°	218.8	211.4	201.9	196.6	190.3	187.1	179.7	177.6	174.4	171.3	168.1
72.5°	182.9	178.7	174.4	167.0	164.9	162.8	155.4	151.2	146.9	142.7	140.6
75°	153.3	150.1	148.0	141.7	138.5	132.1	126.9	123.7	120.5	117.3	115.2
77.5°	125.8	123.7	117.3	113.1	111.0	105.7	103.6	104.7	102.5	98.3	96.2
80°	98.3	96.2	90.9	90.9	88.8	86.7	84.6	82.5	80.3	77.2	75.1
82.5°	75.1	72.9	70.8	68.7	66.6	65.5	64.5	62.4	60.3	58.1	57.1
85°	52.9	51.8	50.7	49.7	48.6	47.6	46.5	44.4	42.3	41.2	40.2
87.5°	35.9	34.9	33.8	32.8	31.7	30.7	29.6	28.5	26.4	25.4	24.3
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°	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6
2.5°	2493.7	2499.0	2493.7	2482.1	2474.7	2471.5	2477.9	2477.9	2482.1	2487.4	2488.4
5°	2454.6	2441.9	2427.1	2412.3	2404.9	2400.7	2389.1	2391.2	2394.3	2396.5	2398.6
7.5°	2357.4	2340.4	2320.4	2301.3	2293.9	2287.6	2273.8	2273.8	2273.8	2274.9	2281.2
10°	2258.0	2250.6	2242.1	2229.4	2219.9	2216.8	2205.1	2208.3	2206.2	2209.4	2216.8
12.5°	2211.5	2203.0	2195.6	2182.9	2172.4	2168.1	2162.8	2166.0	2165.0	2170.2	2176.6
15°	2169.2	2165.0	2156.5	2147.0	2137.5	2129.0	2110.0	2103.6	2099.4	2094.1	2101.5
17.5°	2099.4	2069.8	2049.7	2034.9	2024.4	2017.0	2011.7	2011.7	2014.8	2018.0	2024.4
20°	2004.3	1995.8	1986.3	1970.4	1959.9	1955.6	1952.5	1952.5	1957.8	1962.0	1973.6
22.5°	1938.7	1937.7	1934.5	1927.1	1921.8	1921.8	1922.9	1925.0	1932.4	1938.7	1950.4
25°	1908.1	1912.3	1910.2	1906.0	1902.8	1903.9	1901.7	1903.9	1911.3	1917.6	1927.1
27.5°	1883.8	1890.1	1888.0	1881.7	1876.4	1878.5	1881.7	1879.5	1885.9	1893.3	1900.7
30°	1851.0	1852.1	1856.3	1848.9	1846.8	1849.9	1851.0	1853.1	1859.5	1864.7	1871.1
32.5°	1814.0	1822.5	1821.4	1814.0	1814.0	1817.2	1818.2	1747.4	1615.3	1391.2	1329.8
35°	1778.1	1787.6	1771.7	1493.7	1033.9	551.8	426.0	411.2	414.4	416.5	418.6
37.5°	1315.0	623.7	397.5	400.6	403.8	407.0	410.2	413.3	416.5	419.7	420.7
40°	395.4	394.3	397.5	401.7	404.9	407.0	411.2	414.4	417.6	420.7	421.8
42.5°	391.1	393.2	396.4	400.6	404.9	409.1	412.3	416.5	418.6	420.7	421.8
45°	389.0	393.2	397.5	400.6	403.8	405.9	408.0	409.1	408.0	408.0	410.2
47.5°	385.8	390.1	391.1	390.1	391.1	390.1	390.1	390.1	386.9	385.8	385.8
50°	374.2	374.2	372.1	367.9	366.8	365.8	363.6	362.6	358.4	357.3	357.3
52.5°	349.9	348.8	345.7	340.4	338.3	336.2	335.1	334.0	329.8	327.7	328.8
55°	321.4	319.2	316.1	309.7	308.7	306.6	305.5	304.4	300.2	302.3	299.2
57.5°	294.9	290.7	286.5	285.4	281.2	280.1	279.1	278.0	274.8	275.9	273.8
60°	263.2	262.2	260.0	255.8	255.8	254.8	254.8	252.6	250.5	249.5	249.5
62.5°	240.0	236.8	234.7	234.7	231.5	231.5	231.5	229.4	227.3	228.3	227.3
65°	214.6	213.5	212.5	210.4	210.4	209.3	209.3	207.2	204.0	205.1	203.0
67.5°	193.5	191.3	189.2	188.2	183.9	181.8	180.8	179.7	175.5	176.5	174.4
70°	167.0	163.9	161.7	159.6	156.5	154.3	154.3	152.2	149.1	150.1	148.0
72.5°	139.5	137.4	135.3	134.3	131.1	130.0	129.0	127.9	124.7	125.8	124.7
75°	116.3	116.3	115.2	114.2	111.0	107.8	105.7	104.7	102.5	103.6	101.5
77.5°	96.2	94.1	92.0	92.0	88.8	86.7	84.6	84.6	84.6	83.5	82.5
80°	75.1	72.9	72.9	71.9	69.8	67.7	66.6	66.6	65.5	65.5	64.5
82.5°	57.1	55.0	53.9	53.9	51.8	50.7	49.7	48.6	48.6	48.6	47.6
85°	40.2	38.1	37.0	37.0	34.9	33.8	33.8	32.8	32.8	31.7	31.7
87.5°	24.3	23.3	22.2	22.2	20.1	19.0	19.0	19.0	18.0	18.0	16.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213803

CATALOG NUMBER: 4SNLED-LD5-50SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6
2.5°	2488.4	2488.4	2481.0	2483.1	2480.0	2484.2	2478.9	2478.9	2485.3	2485.3	2489.5
5°	2399.6	2394.3	2393.3	2391.2	2380.6	2384.8	2379.6	2374.3	2381.7	2381.7	2391.2
7.5°	2278.1	2268.6	2272.8	2266.4	2260.1	2250.6	2253.8	2249.5	2254.8	2262.2	2271.7
10°	2215.7	2207.2	2212.5	2206.2	2209.4	2195.6	2196.7	2197.7	2203.0	2205.1	2213.6
12.5°	2175.5	2173.4	2171.3	2169.2	2171.3	2163.9	2159.7	2160.7	2162.8	2163.9	2170.2
15°	2091.0	2077.2	2081.4	2066.6	2067.7	2068.8	2060.3	2068.8	2067.7	2081.4	2094.1
17.5°	2022.2	2022.2	2014.8	2008.5	2004.3	2003.2	1996.9	2001.1	1996.9	2005.3	2008.5
20°	1974.7	1973.6	1972.6	1969.4	1958.8	1959.9	1963.0	1953.5	1952.5	1951.4	1957.8
22.5°	1952.5	1953.5	1949.3	1949.3	1939.8	1941.9	1943.0	1932.4	1933.5	1930.3	1933.5
25°	1929.2	1931.3	1926.1	1926.1	1923.9	1922.9	1917.6	1919.7	1913.4	1908.1	1913.4
27.5°	1901.7	1906.0	1901.7	1903.9	1899.6	1897.5	1894.3	1892.2	1885.9	1884.8	1888.0
30°	1876.4	1878.5	1877.4	1872.1	1871.1	1864.7	1867.9	1861.6	1855.2	1856.3	1858.4
32.5°	962.0	918.6	708.3	639.6	633.2	656.5	778.0	947.2	1227.3	1499.0	1694.5
35°	419.7	419.7	419.7	418.6	418.6	417.6	416.5	415.4	414.4	413.3	412.3
37.5°	421.8	421.8	421.8	421.8	420.7	419.7	419.7	417.6	416.5	415.4	414.4
40°	422.8	423.9	423.9	423.9	422.8	422.8	421.8	419.7	418.6	416.5	414.4
42.5°	421.8	422.8	422.8	421.8	421.8	420.7	420.7	419.7	418.6	417.6	416.5
45°	408.0	409.1	407.0	407.0	405.9	405.9	405.9	405.9	405.9	407.0	407.0
47.5°	383.7	383.7	382.7	381.6	381.6	380.6	381.6	380.6	382.7	383.7	385.8
50°	355.2	355.2	353.1	352.0	352.0	352.0	352.0	353.1	354.1	356.2	358.4
52.5°	325.6	325.6	324.5	323.5	322.4	322.4	325.6	324.5	325.6	326.6	329.8
55°	297.0	298.1	296.0	296.0	294.9	294.9	294.9	296.0	297.0	298.1	301.3
57.5°	272.7	272.7	270.6	270.6	270.6	269.6	272.7	270.6	271.7	272.7	274.8
60°	248.4	247.4	247.4	246.3	246.3	246.3	248.4	247.4	247.4	248.4	250.5
62.5°	226.2	226.2	225.2	225.2	224.1	224.1	226.2	225.2	225.2	226.2	227.3
65°	200.9	200.9	199.8	198.7	201.9	198.7	201.9	199.8	201.9	203.0	205.1
67.5°	172.3	172.3	172.3	171.3	171.3	173.4	174.4	172.3	173.4	175.5	176.5
70°	146.9	146.9	145.9	145.9	145.9	148.0	149.1	146.9	148.0	149.1	151.2
72.5°	124.7	122.6	122.6	121.6	123.7	123.7	124.7	123.7	124.7	124.7	126.9
75°	102.5	100.4	100.4	100.4	102.5	101.5	102.5	101.5	102.5	102.5	103.6
77.5°	82.5	81.4	80.3	80.3	82.5	82.5	82.5	81.4	82.5	83.5	84.6
80°	64.5	63.4	62.4	62.4	64.5	64.5	64.5	65.5	64.5	65.5	66.6
82.5°	47.6	46.5	45.5	47.6	47.6	47.6	47.6	48.6	47.6	48.6	49.7
85°	31.7	30.7	29.6	31.7	31.7	31.7	31.7	32.8	31.7	32.8	33.8
87.5°	16.9	15.9	15.9	16.9	16.9	16.9	18.0	18.0	18.0	19.0	19.0
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: P1213803

CATALOG NUMBER: 4SNLED-LD5-50SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6
2.5°	2495.8	2499.0	2497.9	2491.6	2485.3	2477.9	2472.6	2473.6	2484.2	2487.4	2477.9
5°	2391.2	2411.3	2411.3	2425.0	2417.6	2411.3	2415.5	2438.7	2450.4	2468.3	2474.7
7.5°	2283.4	2292.9	2291.8	2305.6	2303.4	2303.4	2306.6	2337.3	2352.1	2366.9	2371.1
10°	2223.1	2232.6	2231.6	2232.6	2229.4	2222.0	2222.0	2235.8	2248.5	2255.9	2258.0
12.5°	2179.8	2185.0	2184.0	2184.0	2181.9	2175.5	2174.5	2186.1	2199.8	2209.4	2210.4
15°	2115.3	2130.1	2133.2	2147.0	2143.8	2135.4	2137.5	2147.0	2155.4	2163.9	2160.7
17.5°	2019.1	2026.5	2027.5	2032.8	2030.7	2030.7	2043.4	2078.3	2101.5	2121.6	2123.7
20°	1964.1	1969.4	1967.3	1978.9	1973.6	1972.6	1975.7	1990.5	2001.1	2010.6	2027.5
22.5°	1937.7	1941.9	1938.7	1939.8	1930.3	1921.8	1919.7	1931.3	1943.0	1955.6	1955.6
25°	1915.5	1918.7	1917.6	1915.5	1908.1	1896.5	1894.3	1896.5	1900.7	1901.7	1894.3
27.5°	1889.1	1891.2	1891.2	1892.2	1882.7	1872.1	1870.0	1867.9	1872.1	1871.1	1859.5
30°	1861.6	1858.4	1859.5	1860.5	1852.1	1842.5	1838.3	1837.3	1841.5	1840.4	1828.8
32.5°	1796.0	1820.3	1822.5	1824.6	1817.2	1808.7	1804.5	1801.3	1803.4	1802.4	1791.8
35°	411.2	418.6	512.7	1160.7	1576.1	1745.3	1763.3	1759.0	1760.1	1760.1	1751.6
37.5°	412.3	411.2	410.2	407.0	403.8	401.7	694.5	1481.0	1715.7	1716.7	1709.3
40°	412.3	411.2	410.2	408.0	403.8	400.6	395.4	391.1	400.6	881.6	1613.1
42.5°	414.4	412.3	410.2	408.0	403.8	399.6	395.4	390.1	393.2	391.1	385.8
45°	408.0	407.0	407.0	405.9	403.8	399.6	394.3	388.0	384.8	388.0	382.7
47.5°	388.0	389.0	392.2	393.2	393.2	394.3	391.1	386.9	381.6	384.8	378.4
50°	360.5	362.6	363.6	368.9	371.0	375.3	376.3	376.3	375.3	379.5	375.3
52.5°	330.9	333.0	338.3	340.4	342.5	348.8	351.0	354.1	356.2	362.6	366.8
55°	302.3	303.4	305.5	309.7	312.9	318.2	321.4	324.5	329.8	333.0	345.7
57.5°	275.9	277.0	281.2	282.2	284.4	288.6	291.8	296.0	300.2	302.3	317.1
60°	250.5	251.6	254.8	255.8	256.9	261.1	264.3	267.4	270.6	272.7	283.3
62.5°	228.3	228.3	231.5	231.5	232.6	235.7	237.8	240.0	243.1	244.2	249.5
65°	206.1	207.2	209.3	209.3	210.4	212.5	213.5	214.6	217.8	217.8	222.0
67.5°	178.7	179.7	182.9	185.0	186.1	190.3	191.3	192.4	194.5	195.6	197.7
70°	152.2	153.3	156.5	157.5	158.6	161.7	163.9	167.0	170.2	173.4	175.5
72.5°	127.9	129.0	132.1	132.1	135.3	136.4	138.5	139.5	142.7	144.8	148.0
75°	104.7	105.7	108.9	108.9	112.1	113.1	114.2	115.2	117.3	119.5	121.6
77.5°	85.6	85.6	89.9	92.0	94.1	94.1	95.1	95.1	95.1	96.2	98.3
80°	67.7	67.7	70.8	72.9	75.1	75.1	76.1	77.2	78.2	78.2	79.3
82.5°	50.7	50.7	53.9	55.0	57.1	57.1	57.1	58.1	59.2	58.1	60.3
85°	34.9	34.9	37.0	38.1	40.2	40.2	40.2	41.2	42.3	41.2	42.3
87.5°	20.1	21.1	22.2	23.3	24.3	25.4	25.4	25.4	26.4	26.4	27.5
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: P1213803

CATALOG NUMBER: 4SNLED-LD5-50SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6
2.5°	2467.3	2454.6	2453.5	2438.7	2434.5	2435.6	2423.9	2419.7	2400.7	2396.5	2376.4
5°	2476.8	2483.1	2480.0	2478.9	2482.1	2480.0	2471.5	2467.3	2464.1	2455.7	2438.7
7.5°	2372.2	2376.4	2379.6	2393.3	2404.9	2425.0	2446.1	2459.9	2470.5	2472.6	2458.8
10°	2265.4	2285.5	2299.2	2320.4	2337.3	2348.9	2361.6	2373.2	2403.9	2434.5	2452.5
12.5°	2210.4	2215.7	2214.6	2226.3	2237.9	2268.6	2298.2	2315.1	2338.3	2352.1	2384.8
15°	2163.9	2165.0	2168.1	2176.6	2182.9	2193.5	2207.2	2232.6	2279.1	2300.3	2318.2
17.5°	2121.6	2121.6	2123.7	2131.1	2139.6	2149.1	2157.6	2168.1	2191.4	2226.3	2270.7
20°	2054.0	2083.6	2086.7	2085.7	2089.9	2107.9	2110.0	2129.0	2140.6	2154.4	2197.7
22.5°	1953.5	1971.5	1996.9	2036.0	2050.8	2059.2	2065.6	2074.0	2092.0	2107.9	2125.8
25°	1898.6	1910.2	1917.6	1929.2	1959.9	2009.6	2019.1	2028.6	2040.2	2051.8	2074.0
27.5°	1849.9	1848.9	1854.2	1864.7	1873.2	1899.6	1946.1	1983.1	1985.2	2002.2	2021.2
30°	1815.1	1808.7	1801.3	1799.2	1810.8	1824.6	1838.3	1896.5	1936.6	1945.1	1965.2
32.5°	1782.3	1771.7	1761.1	1752.7	1745.3	1756.9	1765.4	1790.7	1842.5	1891.2	1901.7
35°	1742.1	1731.5	1718.9	1709.3	1697.7	1696.7	1695.6	1719.9	1736.8	1795.0	1845.7
37.5°	1700.9	1689.3	1678.7	1668.1	1656.5	1648.0	1642.7	1649.1	1664.9	1690.3	1774.9
40°	1657.5	1643.8	1633.2	1624.8	1608.9	1602.6	1592.0	1587.8	1588.8	1611.0	1655.4
42.5°	990.5	1579.3	1584.6	1575.1	1561.3	1552.9	1541.3	1536.0	1525.4	1536.0	1561.3
45°	381.6	385.8	1155.4	1526.5	1509.6	1499.0	1488.4	1483.1	1471.5	1463.0	1486.3
47.5°	374.2	378.4	370.0	524.3	1440.8	1444.0	1431.3	1426.0	1414.4	1408.1	1401.7
50°	368.9	372.1	365.8	367.9	360.5	1320.3	1373.2	1366.8	1354.2	1346.8	1334.1
52.5°	363.6	363.6	359.4	354.1	352.0	353.1	1111.0	1306.6	1291.8	1284.4	1267.5
55°	346.7	348.8	353.1	344.6	342.5	341.4	338.3	1058.2	1223.1	1214.6	1199.8
57.5°	321.4	325.6	337.2	335.1	335.1	326.6	324.5	324.5	982.1	1143.8	1129.0
60°	291.8	296.0	308.7	312.9	316.1	314.0	311.8	310.8	306.6	1034.9	1053.9
62.5°	261.1	265.3	269.6	283.3	287.5	292.8	299.2	296.0	291.8	291.8	974.7
65°	228.3	234.7	236.8	249.5	254.8	264.3	269.6	277.0	274.8	273.8	279.1
67.5°	199.8	207.2	208.3	213.5	223.0	227.3	233.6	247.4	253.7	255.8	257.9
70°	175.5	179.7	182.9	185.0	191.3	192.4	204.0	213.5	223.0	233.6	236.8
72.5°	151.2	154.3	160.7	158.6	160.7	164.9	171.3	177.6	187.1	201.9	211.4
75°	123.7	125.8	130.0	132.1	136.4	139.5	143.8	149.1	157.5	164.9	177.6
77.5°	99.4	100.4	103.6	104.7	108.9	112.1	119.5	122.6	127.9	133.2	140.6
80°	80.3	80.3	81.4	81.4	84.6	87.7	93.0	96.2	102.5	106.8	106.8
82.5°	61.3	61.3	64.5	64.5	66.6	66.6	69.8	69.8	72.9	75.1	77.2
85°	43.3	44.4	46.5	45.5	47.6	46.5	48.6	50.7	51.8	50.7	49.7
87.5°	28.5	28.5	30.7	29.6	30.7	30.7	32.8	32.8	33.8	33.8	32.8
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: P1213803

CATALOG NUMBER: 4SNLED-LD5-50SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6
2.5°	2369.0	2353.1	2343.6	2332.0	2328.8	2325.6	2329.9	2329.9	2323.5	2318.2	2308.7
5°	2423.9	2407.0	2389.1	2370.0	2352.1	2333.0	2325.6	2324.6	2313.0	2306.6	2303.4
7.5°	2452.5	2444.0	2423.9	2397.5	2370.0	2336.2	2321.4	2313.0	2301.3	2299.2	2299.2
10°	2455.7	2446.1	2435.6	2416.5	2384.8	2340.4	2311.9	2295.0	2284.4	2291.8	2305.6
12.5°	2425.0	2443.0	2433.5	2420.8	2395.4	2341.5	2300.3	2274.9	2271.7	2290.8	2326.7
15°	2346.8	2399.6	2426.1	2413.4	2393.3	2339.4	2281.2	2251.6	2251.6	2290.8	2337.3
17.5°	2287.6	2328.8	2393.3	2403.9	2380.6	2335.2	2263.3	2228.4	2237.9	2295.0	2344.7
20°	2239.0	2264.3	2326.7	2385.9	2363.7	2325.6	2236.8	2200.9	2219.9	2288.6	2355.2
22.5°	2162.8	2213.6	2251.6	2339.4	2346.8	2307.7	2210.4	2167.1	2205.1	2288.6	2350.0
25°	2088.8	2150.2	2190.3	2276.0	2321.4	2285.5	2186.1	2131.1	2189.3	2285.5	2345.7
27.5°	2037.0	2065.6	2138.5	2199.8	2283.4	2255.9	2153.3	2092.0	2169.2	2268.6	2321.4
30°	1982.1	2001.1	2073.0	2131.1	2232.6	2222.0	2119.5	2048.7	2143.8	2252.7	2258.0
32.5°	1921.8	1943.0	1980.0	2064.5	2161.8	2190.3	2081.4	2005.3	2116.3	2228.4	2184.0
35°	1860.5	1876.4	1906.0	1996.9	2079.3	2142.8	2034.9	1955.6	2097.3	2191.4	2113.2
37.5°	1799.2	1816.1	1841.5	1917.6	1992.6	2098.4	1994.8	1906.0	2062.4	2125.8	2039.2
40°	1741.1	1750.6	1777.0	1824.6	1920.8	2052.9	1949.3	1854.2	2026.5	2042.3	1938.7
42.5°	1634.3	1681.9	1706.2	1744.2	1839.4	1990.5	1896.5	1799.2	1986.3	1958.8	1838.3
45°	1519.1	1622.7	1633.2	1671.3	1767.5	1923.9	1846.8	1745.3	1948.3	1886.9	1743.2
47.5°	1425.0	1500.0	1561.3	1593.1	1681.9	1845.7	1800.3	1699.8	1891.2	1796.0	1650.1
50°	1341.5	1381.6	1492.6	1515.9	1579.3	1751.6	1745.3	1647.0	1811.9	1681.9	1559.2
52.5°	1260.1	1288.6	1389.0	1438.7	1490.5	1650.1	1679.7	1595.2	1725.2	1567.7	1467.3
55°	1189.2	1198.8	1253.7	1358.4	1404.9	1547.6	1607.9	1534.9	1615.3	1458.8	1378.5
57.5°	1116.3	1107.8	1148.0	1282.3	1316.1	1443.0	1531.7	1473.6	1526.5	1347.8	1286.5
60°	1040.2	1028.6	1045.5	1134.3	1222.0	1339.4	1441.9	1406.0	1418.6	1237.9	1184.0
62.5°	960.9	949.3	944.0	1000.0	1130.0	1232.6	1351.0	1330.9	1286.5	1137.4	1057.1
65°	878.5	866.8	858.4	880.6	1028.6	1094.1	1249.5	1244.2	1141.7	1031.7	890.1
67.5°	267.4	788.6	770.6	769.6	866.8	968.3	1139.6	1131.1	995.8	918.6	766.4
70°	241.0	639.6	679.7	670.2	712.5	840.4	1013.8	1007.4	854.1	736.8	677.6
72.5°	220.9	226.2	600.4	589.9	599.4	714.6	882.7	865.8	724.1	581.4	585.6
75°	189.2	198.7	207.2	497.9	485.2	592.0	740.0	713.5	597.3	479.9	489.4
77.5°	154.3	166.0	172.3	362.6	392.2	421.8	590.9	556.0	411.2	383.7	182.9
80°	115.2	124.7	135.3	144.8	298.1	294.9	438.7	403.8	286.5	238.9	142.7
82.5°	84.6	87.7	94.1	104.7	118.4	197.7	282.2	248.4	198.7	108.9	98.3
85°	52.9	57.1	60.3	63.4	71.9	118.4	139.5	111.0	83.5	66.6	62.4
87.5°	33.8	33.8	32.8	33.8	34.9	42.3	47.6	45.5	35.9	33.8	33.8
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: P1213803

CATALOG NUMBER: 4SNLED-LD5-50SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6
2.5°	2298.2	2283.4	2283.4	2279.1	2282.3	2282.3	2281.2	2282.3	2289.7	2293.9	2301.3
5°	2297.1	2292.9	2302.4	2314.0	2327.8	2344.7	2348.9	2363.7	2377.4	2395.4	2414.4
7.5°	2310.8	2325.6	2343.6	2362.6	2390.1	2410.2	2428.2	2446.1	2458.8	2475.7	2486.3
10°	2330.9	2360.5	2391.2	2415.5	2445.1	2462.0	2473.6	2475.7	2457.8	2429.2	2406.0
12.5°	2359.5	2394.3	2422.9	2446.1	2459.9	2453.5	2419.7	2384.8	2364.8	2335.2	2293.9
15°	2383.8	2415.5	2445.1	2435.6	2398.6	2363.7	2337.3	2296.0	2255.9	2228.4	2210.4
17.5°	2394.3	2425.0	2414.4	2364.8	2329.9	2289.7	2235.8	2204.1	2177.6	2156.5	2145.9
20°	2400.7	2395.4	2338.3	2302.4	2234.7	2197.7	2162.8	2133.2	2113.2	2102.6	2100.5
22.5°	2383.8	2319.3	2270.7	2206.2	2156.5	2125.8	2098.4	2074.0	2060.3	2051.8	2046.6
25°	2327.8	2252.7	2180.8	2130.1	2087.8	2061.4	2040.2	2020.1	2003.2	1999.0	1988.4
27.5°	2249.5	2188.2	2093.1	2054.0	2017.0	2004.3	1981.0	1960.9	1946.1	1933.5	1899.6
30°	2185.0	2087.8	2019.1	1983.1	1960.9	1946.1	1919.7	1898.6	1873.2	1826.7	1807.7
32.5°	2105.8	2009.6	1944.0	1923.9	1896.5	1883.8	1854.2	1807.7	1768.5	1749.5	1748.5
35°	2003.2	1923.9	1876.4	1858.4	1836.2	1815.1	1753.7	1711.5	1692.4	1694.5	1710.4
37.5°	1917.6	1846.8	1816.1	1790.7	1765.4	1711.5	1659.7	1639.6	1644.9	1655.4	1662.8
40°	1830.9	1777.0	1742.1	1722.0	1664.9	1612.1	1584.6	1592.0	1601.5	1608.9	1618.4
42.5°	1746.3	1708.3	1673.4	1634.3	1556.1	1527.5	1533.9	1543.4	1551.8	1562.4	1571.9
45°	1666.0	1632.2	1592.0	1503.2	1464.1	1471.5	1481.0	1488.4	1501.1	1508.5	1518.0
47.5°	1589.9	1553.9	1483.1	1404.9	1400.7	1415.5	1423.9	1433.4	1443.0	1423.9	785.4
50°	1504.3	1467.3	1359.4	1329.8	1339.4	1353.1	1363.7	1373.2	1223.1	486.3	374.2
52.5°	1419.7	1325.6	1256.9	1265.4	1274.9	1290.7	1298.1	964.1	383.7	365.8	366.8
55°	1325.6	1205.1	1185.0	1195.6	1204.0	1219.9	808.7	354.1	352.0	351.0	359.4
57.5°	1177.6	1104.7	1113.1	1123.7	1132.2	799.2	344.6	342.5	343.6	344.6	345.7
60°	1045.5	1029.6	1039.1	1048.7	742.1	333.0	326.6	327.7	331.9	328.8	320.3
62.5°	940.8	953.5	963.0	843.6	316.1	312.9	316.1	312.9	305.5	300.2	289.6
65°	860.5	873.2	880.6	297.0	296.0	300.2	297.0	286.5	274.8	260.0	256.9
67.5°	775.9	788.6	282.2	274.8	279.1	273.8	261.1	248.4	240.0	227.3	222.0
70°	688.2	294.9	255.8	254.8	247.4	238.9	225.2	212.5	201.9	196.6	191.3
72.5°	496.8	233.6	230.4	222.0	209.3	197.7	186.1	178.7	173.4	170.2	167.0
75°	207.2	203.0	193.5	178.7	166.0	160.7	152.2	146.9	144.8	138.5	136.4
77.5°	173.4	164.9	151.2	140.6	133.2	130.0	123.7	117.3	114.2	113.1	108.9
80°	133.2	121.6	115.2	109.9	107.8	100.4	93.0	89.9	87.7	86.7	83.5
82.5°	90.9	86.7	82.5	75.1	75.1	71.9	68.7	66.6	64.5	64.5	62.4
85°	59.2	56.0	55.0	51.8	51.8	49.7	48.6	47.6	46.5	45.5	44.4
87.5°	33.8	33.8	34.9	33.8	33.8	32.8	31.7	30.7	29.6	29.6	27.5
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: P1213803

CATALOG NUMBER: 4SNLED-LD5-50SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6
2.5°	2310.8	2321.4	2323.5	2359.5	2379.6	2378.5	2372.2	2391.2	2379.6	2373.2	2379.6
5°	2433.5	2446.1	2456.7	2495.8	2509.6	2515.9	2514.9	2525.4	2517.0	2509.6	2509.6
7.5°	2493.7	2497.9	2502.2	2492.7	2486.3	2475.7	2459.9	2436.6	2425.0	2412.3	2396.5
10°	2394.3	2380.6	2385.9	2366.9	2351.0	2339.4	2324.6	2305.6	2289.7	2278.1	2260.1
12.5°	2272.8	2271.7	2273.8	2277.0	2261.2	2251.6	2240.0	2226.3	2214.6	2202.0	2187.2
15°	2198.8	2199.8	2208.3	2205.1	2199.8	2194.6	2181.9	2177.6	2167.1	2153.3	2144.9
17.5°	2145.9	2151.2	2159.7	2155.4	2147.0	2141.7	2132.2	2122.7	2113.2	2102.6	2089.9
20°	2099.4	2104.7	2110.0	2104.7	2088.8	2081.4	2068.8	2039.2	2018.0	1996.9	1977.8
22.5°	2048.7	2051.8	2047.6	2030.7	1990.5	1971.5	1956.7	1948.3	1930.3	1918.7	1907.0
25°	1985.2	1967.3	1939.8	1920.8	1904.9	1896.5	1890.1	1889.1	1886.9	1884.8	1879.5
27.5°	1881.7	1875.3	1860.5	1853.1	1854.2	1857.3	1858.4	1861.6	1858.4	1854.2	1849.9
30°	1804.5	1807.7	1808.7	1810.8	1816.1	1819.3	1820.3	1824.6	1822.5	1819.3	1817.2
32.5°	1755.9	1763.3	1767.5	1773.8	1777.0	1782.3	1782.3	1788.6	1782.3	1781.2	1779.1
35°	1715.7	1722.0	1724.1	1733.7	1736.8	1742.1	1742.1	1747.4	1742.1	1688.2	1333.0
37.5°	1675.5	1681.9	1686.1	1694.5	1695.6	1698.8	1567.7	1147.0	740.0	573.0	437.6
40°	1627.9	1635.3	1639.6	1642.7	1154.4	732.6	504.2	410.2	410.2	413.3	416.5
42.5°	1577.2	1582.5	1102.6	641.7	399.6	398.5	401.7	404.9	408.0	412.3	416.5
45°	1240.0	625.8	397.5	388.0	391.1	395.4	399.6	403.8	409.1	413.3	415.4
47.5°	407.0	381.6	386.9	382.7	388.0	393.2	397.5	401.7	402.8	403.8	402.8
50°	376.3	376.3	379.5	379.5	383.7	385.8	385.8	385.8	381.6	380.6	377.4
52.5°	363.6	372.1	367.9	370.0	367.9	364.7	361.5	358.4	352.0	349.9	345.7
55°	357.3	360.5	349.9	346.7	342.5	334.0	329.8	325.6	320.3	318.2	312.9
57.5°	342.5	335.1	323.5	318.2	310.8	302.3	298.1	294.9	289.6	287.5	284.4
60°	315.0	300.2	292.8	286.5	278.0	270.6	267.4	265.3	261.1	260.0	256.9
62.5°	281.2	268.5	262.2	253.7	247.4	243.1	240.0	238.9	234.7	234.7	232.6
65°	244.2	237.8	232.6	224.1	220.9	216.7	215.7	214.6	212.5	211.4	209.3
67.5°	214.6	210.4	203.0	198.7	196.6	193.5	191.3	189.2	185.0	182.9	179.7
70°	188.2	185.0	177.6	174.4	170.2	164.9	161.7	159.6	156.5	154.3	151.2
72.5°	162.8	153.3	148.0	144.8	141.7	136.4	135.3	133.2	130.0	129.0	125.8
75°	131.1	123.7	120.5	118.4	115.2	112.1	112.1	112.1	108.9	107.8	106.8
77.5°	104.7	100.4	98.3	96.2	95.1	93.0	89.9	88.8	85.6	85.6	84.6
80°	80.3	78.2	76.1	75.1	74.0	71.9	69.8	68.7	65.5	65.5	64.5
82.5°	59.2	58.1	57.1	56.0	55.0	53.9	50.7	49.7	47.6	47.6	46.5
85°	42.3	41.2	39.1	38.1	38.1	37.0	33.8	32.8	30.7	30.7	30.7
87.5°	26.4	25.4	24.3	23.3	22.2	21.1	19.0	18.0	18.0	15.9	14.8
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: P1213803

CATALOG NUMBER: 4SNLED-LD5-50SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6
2.5°	2366.9	2384.8	2382.7	2395.4	2398.6	2404.9	2407.0	2408.1	2392.2	2404.9	2406.0
5°	2506.4	2509.6	2511.7	2517.0	2522.3	2523.3	2518.0	2511.7	2513.8	2509.6	2499.0
7.5°	2394.3	2378.5	2375.3	2371.1	2369.0	2366.9	2357.4	2365.8	2356.3	2352.1	2337.3
10°	2256.9	2242.1	2241.1	2241.1	2244.2	2243.2	2241.1	2236.8	2245.3	2240.0	2236.8
12.5°	2185.0	2179.8	2182.9	2180.8	2189.3	2191.4	2189.3	2189.3	2187.2	2182.9	2185.0
15°	2141.7	2137.5	2140.6	2137.5	2143.8	2144.9	2139.6	2142.8	2137.5	2132.2	2130.1
17.5°	2084.6	2075.1	2067.7	2057.1	2058.2	2056.1	2049.7	2049.7	2044.4	2030.7	2031.8
20°	1974.7	1965.2	1960.9	1960.9	1966.2	1968.3	1967.3	1969.4	1964.1	1962.0	1953.5
22.5°	1906.0	1904.9	1907.0	1912.3	1920.8	1932.4	1933.5	1933.5	1933.5	1932.4	1921.8
25°	1881.7	1881.7	1883.8	1891.2	1897.5	1906.0	1908.1	1910.2	1908.1	1908.1	1898.6
27.5°	1854.2	1852.1	1856.3	1863.7	1871.1	1877.4	1882.7	1883.8	1880.6	1880.6	1883.8
30°	1820.3	1819.3	1824.6	1832.0	1838.3	1844.7	1849.9	1854.2	1849.9	1849.9	1846.8
32.5°	1785.5	1785.5	1787.6	1743.2	1616.3	1455.6	1458.8	1365.8	1301.3	1219.9	1327.7
35°	1114.2	810.8	696.6	589.9	514.8	466.2	465.1	449.3	441.9	436.6	435.5
37.5°	420.7	422.8	427.1	429.2	432.4	434.5	435.5	435.5	435.5	435.5	434.5
40°	419.7	423.9	427.1	430.2	433.4	435.5	435.5	436.6	437.6	437.6	437.6
42.5°	420.7	425.0	429.2	432.4	434.5	435.5	436.6	437.6	437.6	437.6	437.6
45°	419.7	421.8	421.8	422.8	422.8	422.8	423.9	423.9	422.8	421.8	423.9
47.5°	403.8	403.8	400.6	399.6	398.5	396.4	397.5	396.4	395.4	394.3	396.4
50°	376.3	372.1	370.0	367.9	366.8	364.7	365.8	364.7	363.6	361.5	364.7
52.5°	343.6	342.5	338.3	336.2	335.1	336.2	334.0	333.0	331.9	330.9	331.9
55°	311.8	307.6	306.6	304.4	303.4	304.4	303.4	302.3	301.3	300.2	301.3
57.5°	283.3	280.1	279.1	277.0	277.0	277.0	277.0	275.9	274.8	273.8	274.8
60°	255.8	253.7	252.6	252.6	251.6	251.6	251.6	250.5	249.5	249.5	250.5
62.5°	232.6	232.6	229.4	228.3	228.3	229.4	228.3	227.3	226.2	225.2	227.3
65°	208.3	204.0	203.0	200.9	198.7	199.8	198.7	197.7	196.6	195.6	197.7
67.5°	178.7	177.6	173.4	171.3	170.2	171.3	170.2	169.1	168.1	167.0	169.1
70°	150.1	150.1	145.9	144.8	143.8	143.8	142.7	142.7	141.7	140.6	142.7
72.5°	124.7	124.7	123.7	121.6	120.5	119.5	118.4	117.3	117.3	118.4	118.4
75°	103.6	101.5	97.3	98.3	97.3	96.2	96.2	95.1	94.1	96.2	95.1
77.5°	81.4	80.3	77.2	78.2	77.2	76.1	76.1	75.1	74.0	75.1	75.1
80°	61.3	61.3	60.3	59.2	59.2	58.1	57.1	57.1	56.0	57.1	57.1
82.5°	44.4	44.4	43.3	42.3	41.2	41.2	40.2	40.2	40.2	40.2	40.2
85°	28.5	27.5	27.5	25.4	25.4	25.4	24.3	24.3	24.3	24.3	24.3
87.5°	13.7	13.7	12.7	12.7	11.6	10.6	10.6	9.5	9.5	10.6	10.6
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: P1213803

CATALOG NUMBER: 4SNLED-LD5-50SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6
2.5°	2386.9	2400.7	2389.1	2394.3	2395.4	2413.4	2412.3	2416.5	2409.1	2400.7	2389.1
5°	2508.5	2502.2	2493.7	2513.8	2503.2	2515.9	2520.1	2528.6	2528.6	2527.5	2518.0
7.5°	2353.1	2339.4	2350.0	2357.4	2360.5	2352.1	2369.0	2388.0	2403.9	2413.4	2414.4
10°	2231.6	2235.8	2234.7	2237.9	2245.3	2244.2	2254.8	2265.4	2269.6	2276.0	2278.1
12.5°	2174.5	2173.4	2175.5	2182.9	2187.2	2186.1	2196.7	2203.0	2205.1	2206.2	2205.1
15°	2129.0	2121.6	2126.9	2128.0	2131.1	2131.1	2143.8	2153.3	2157.6	2159.7	2157.6
17.5°	2043.4	2025.4	2042.3	2042.3	2054.0	2051.8	2071.9	2087.8	2096.2	2102.6	2102.6
20°	1958.8	1950.4	1956.7	1954.6	1963.0	1962.0	1974.7	1985.2	1992.6	1997.9	2004.3
22.5°	1925.0	1927.1	1917.6	1918.7	1918.7	1917.6	1923.9	1929.2	1931.3	1934.5	1932.4
25°	1902.8	1904.9	1901.7	1896.5	1894.3	1896.5	1899.6	1906.0	1907.0	1904.9	1897.5
27.5°	1880.6	1874.3	1879.5	1870.0	1867.9	1872.1	1876.4	1877.4	1878.5	1878.5	1872.1
30°	1846.8	1841.5	1846.8	1842.5	1838.3	1842.5	1845.7	1845.7	1847.8	1848.9	1841.5
32.5°	1290.7	1301.3	1472.6	1576.1	1722.0	1796.0	1809.8	1809.8	1811.9	1811.9	1805.5
35°	439.8	440.8	476.8	516.9	602.6	708.3	846.7	918.6	1161.8	1452.5	1733.7
37.5°	434.5	433.4	432.4	431.3	430.2	429.2	427.1	426.0	432.4	512.7	695.6
40°	436.6	435.5	433.4	432.4	431.3	429.2	428.1	426.0	423.9	421.8	419.7
42.5°	436.6	435.5	434.5	433.4	432.4	431.3	429.2	427.1	425.0	421.8	418.6
45°	421.8	421.8	422.8	422.8	423.9	423.9	423.9	422.8	422.8	421.8	417.6
47.5°	394.3	394.3	397.5	397.5	399.6	401.7	401.7	403.8	407.0	409.1	410.2
50°	362.6	362.6	365.8	366.8	368.9	372.1	375.3	376.3	379.5	383.7	388.0
52.5°	330.9	330.9	334.0	334.0	336.2	339.3	342.5	343.6	347.8	352.0	357.3
55°	301.3	301.3	303.4	304.4	305.5	307.6	310.8	310.8	315.0	318.2	323.5
57.5°	274.8	277.0	277.0	277.0	278.0	280.1	282.2	282.2	285.4	288.6	292.8
60°	249.5	251.6	251.6	251.6	252.6	253.7	255.8	255.8	257.9	260.0	264.3
62.5°	226.2	228.3	228.3	229.4	229.4	230.4	232.6	231.5	233.6	234.7	237.8
65°	196.6	198.7	199.8	200.9	201.9	204.0	207.2	206.1	209.3	211.4	214.6
67.5°	168.1	170.2	170.2	171.3	172.3	174.4	176.5	176.5	179.7	181.8	186.1
70°	141.7	143.8	143.8	144.8	145.9	148.0	150.1	149.1	152.2	154.3	157.5
72.5°	117.3	119.5	119.5	120.5	120.5	122.6	124.7	126.9	126.9	129.0	131.1
75°	95.1	96.2	97.3	97.3	98.3	99.4	101.5	103.6	104.7	105.7	107.8
77.5°	75.1	76.1	77.2	77.2	78.2	79.3	80.3	84.6	86.7	87.7	87.7
80°	57.1	58.1	58.1	58.1	59.2	60.3	62.4	62.4	66.6	66.6	67.7
82.5°	40.2	41.2	41.2	41.2	42.3	44.4	45.5	46.5	48.6	49.7	49.7
85°	24.3	25.4	25.4	25.4	26.4	27.5	29.6	30.7	31.7	31.7	32.8
87.5°	9.5	10.6	11.6	11.6	12.7	13.7	14.8	15.9	16.9	16.9	18.0
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):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6
2.5°	2376.4	2383.8	2376.4	2380.6	2385.9	2376.4	2354.2	2345.7	2342.6	2329.9	2321.4
5°	2508.5	2508.5	2505.3	2513.8	2512.7	2497.9	2474.7	2464.1	2453.5	2439.8	2429.2
7.5°	2414.4	2422.9	2428.2	2460.9	2482.1	2484.2	2499.0	2502.2	2506.4	2502.2	2495.8
10°	2279.1	2276.0	2290.8	2321.4	2339.4	2348.9	2377.4	2391.2	2402.8	2426.1	2450.4
12.5°	2203.0	2207.2	2213.6	2235.8	2252.7	2248.5	2260.1	2269.6	2283.4	2306.6	2341.5
15°	2152.3	2156.5	2162.8	2179.8	2190.3	2185.0	2191.4	2197.7	2207.2	2218.9	2240.0
17.5°	2097.3	2104.7	2112.1	2130.1	2139.6	2138.5	2143.8	2145.9	2149.1	2156.5	2171.3
20°	2011.7	2034.9	2049.7	2074.0	2087.8	2085.7	2095.2	2098.4	2102.6	2110.0	2116.3
22.5°	1933.5	1939.8	1947.2	1973.6	1996.9	2025.4	2031.8	2040.2	2050.8	2058.2	2064.5
25°	1889.1	1884.8	1888.0	1906.0	1918.7	1920.8	1930.3	1957.8	1986.3	1999.0	2013.8
27.5°	1862.6	1858.4	1857.3	1865.8	1867.9	1862.6	1860.5	1869.0	1890.1	1911.3	1955.6
30°	1834.1	1828.8	1824.6	1832.0	1835.1	1827.7	1814.0	1806.6	1819.3	1824.6	1842.5
32.5°	1800.3	1795.0	1792.9	1797.1	1799.2	1792.9	1778.1	1769.6	1767.5	1763.3	1767.5
35°	1762.2	1756.9	1753.7	1754.8	1759.0	1753.7	1741.1	1730.5	1725.2	1713.6	1705.1
37.5°	908.1	1286.5	1670.2	1710.4	1714.6	1713.6	1700.9	1689.3	1684.0	1670.2	1666.0
40°	415.4	464.1	696.6	910.2	1312.9	1668.1	1656.5	1644.9	1635.3	1631.1	1615.3
42.5°	414.4	415.4	416.5	411.2	509.5	867.9	1281.2	1599.4	1593.1	1582.5	1570.9
45°	414.4	409.1	413.3	407.0	409.1	408.0	508.5	820.3	1459.9	1525.4	1520.1
47.5°	410.2	407.0	411.2	405.9	399.6	402.8	398.5	403.8	630.0	1068.7	1464.1
50°	391.1	393.2	400.6	399.6	394.3	398.5	391.1	397.5	392.2	430.2	828.8
52.5°	362.6	366.8	374.2	380.6	382.7	388.0	385.8	388.0	383.7	384.8	385.8
55°	328.8	334.0	340.4	349.9	354.1	362.6	368.9	372.1	377.4	376.3	367.9
57.5°	297.0	302.3	307.6	317.1	326.6	330.9	342.5	348.8	362.6	359.4	357.3
60°	267.4	271.7	277.0	279.1	290.7	298.1	308.7	315.0	333.0	337.2	343.6
62.5°	241.0	243.1	247.4	250.5	257.9	265.3	270.6	281.2	290.7	304.4	314.0
65°	216.7	218.8	222.0	224.1	225.2	235.7	238.9	250.5	253.7	268.5	277.0
67.5°	189.2	193.5	197.7	199.8	201.9	208.3	210.4	215.7	223.0	229.4	240.0
70°	160.7	163.9	168.1	171.3	175.5	179.7	186.1	189.2	194.5	198.7	207.2
72.5°	134.3	137.4	139.5	142.7	145.9	149.1	154.3	161.7	166.0	173.4	175.5
75°	108.9	112.1	114.2	116.3	119.5	121.6	123.7	131.1	135.3	141.7	148.0
77.5°	89.9	89.9	92.0	98.3	97.3	97.3	99.4	103.6	106.8	111.0	117.3
80°	69.8	70.8	71.9	77.2	78.2	79.3	78.2	81.4	84.6	85.6	89.9
82.5°	51.8	52.9	52.9	56.0	59.2	59.2	59.2	60.3	63.4	64.5	66.6
85°	34.9	35.9	37.0	38.1	40.2	41.2	42.3	42.3	44.4	45.5	46.5
87.5°	19.0	21.1	22.2	23.3	24.3	25.4	26.4	27.5	28.5	29.6	30.7
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):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6	2306.6
2.5°	2318.2	2313.0	2309.8	2301.3	2299.2	2285.5	2287.6	2285.5	2285.5	2288.6	2299.2
5°	2417.6	2392.2	2385.9	2367.9	2353.1	2327.8	2311.9	2303.4	2290.8	2285.5	2292.9
7.5°	2485.3	2466.2	2450.4	2434.5	2413.4	2383.8	2361.6	2336.2	2315.1	2295.0	2289.7
10°	2473.6	2494.8	2494.8	2485.3	2465.2	2435.6	2409.1	2377.4	2340.4	2308.7	2289.7
12.5°	2375.3	2412.3	2441.9	2464.1	2484.2	2464.1	2437.7	2412.3	2371.1	2324.6	2289.7
15°	2267.5	2305.6	2342.6	2389.1	2437.7	2457.8	2456.7	2427.1	2390.1	2341.5	2292.9
17.5°	2191.4	2217.8	2237.9	2288.6	2347.8	2399.6	2434.5	2436.6	2400.7	2357.4	2293.9
20°	2134.3	2153.3	2170.2	2198.8	2250.6	2314.0	2378.5	2414.4	2408.1	2360.5	2297.1
22.5°	2082.5	2096.2	2110.0	2131.1	2172.4	2213.6	2288.6	2362.6	2394.3	2355.2	2293.9
25°	2030.7	2045.5	2056.1	2070.9	2103.6	2137.5	2190.3	2282.3	2353.1	2351.0	2287.6
27.5°	1969.4	1989.5	2002.2	2022.2	2044.4	2069.8	2105.8	2192.4	2293.9	2329.9	2270.7
30°	1895.4	1925.0	1944.0	1966.2	1985.2	2007.4	2036.0	2088.8	2214.6	2288.6	2252.7
32.5°	1788.6	1841.5	1883.8	1904.9	1926.1	1945.1	1970.4	2014.8	2117.4	2232.6	2232.6
35°	1712.5	1736.8	1774.9	1836.2	1862.6	1881.7	1904.9	1939.8	2005.3	2166.0	2199.8
37.5°	1653.3	1662.8	1681.9	1742.1	1791.8	1822.5	1845.7	1867.9	1932.4	2075.1	2157.6
40°	1608.9	1605.7	1603.6	1632.2	1703.0	1751.6	1778.1	1800.3	1849.9	1966.2	2101.5
42.5°	1557.1	1553.9	1543.4	1550.8	1585.7	1667.1	1707.2	1731.5	1772.8	1852.1	2040.2
45°	1503.2	1497.9	1493.7	1486.3	1499.0	1544.4	1626.9	1662.8	1686.1	1756.9	1963.0
47.5°	1448.2	1440.8	1435.6	1429.2	1421.8	1443.0	1521.2	1585.7	1625.8	1670.2	1870.0
50°	1370.0	1379.5	1373.2	1365.8	1359.4	1355.2	1388.0	1493.7	1543.4	1579.3	1756.9
52.5°	645.9	1255.8	1308.7	1301.3	1292.8	1285.4	1292.8	1373.2	1463.0	1491.6	1620.5
55°	367.9	559.2	1163.9	1230.5	1223.1	1212.5	1206.2	1233.6	1367.9	1406.0	1495.8
57.5°	354.1	355.2	513.8	1108.9	1150.1	1140.6	1133.2	1139.6	1253.7	1318.2	1386.9
60°	342.5	342.5	342.5	490.5	1060.3	1063.5	1053.9	1043.4	1093.0	1219.9	1277.0
62.5°	317.1	323.5	326.6	326.6	484.2	982.1	972.5	969.4	971.5	1101.5	1167.0
65°	284.4	299.2	305.5	309.7	309.7	508.5	889.0	883.7	876.3	926.0	1056.1
67.5°	248.4	263.2	277.0	285.4	286.5	296.0	530.7	796.0	785.4	786.5	937.7
70°	211.4	224.1	238.9	251.6	263.2	268.5	277.0	660.7	695.6	680.8	803.4
72.5°	182.9	188.2	198.7	211.4	225.2	237.8	245.2	263.2	603.6	587.8	611.0
75°	152.2	156.5	163.9	172.3	182.9	197.7	210.4	223.0	320.3	492.6	489.4
77.5°	118.4	125.8	134.3	139.5	144.8	155.4	172.3	185.0	197.7	333.0	392.2
80°	90.9	96.2	100.4	105.7	112.1	119.5	125.8	140.6	155.4	167.0	300.2
82.5°	67.7	70.8	74.0	76.1	78.2	82.5	94.1	99.4	108.9	119.5	141.7
85°	47.6	49.7	51.8	52.9	53.9	55.0	59.2	60.3	69.8	71.9	85.6
87.5°	30.7	31.7	33.8	34.9	34.9	35.9	37.0	37.0	37.0	34.9	42.3
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):

	357.5°	360°
0°	2306.6	2306.6
2.5°	2307.7	2324.6
5°	2304.5	2326.7
7.5°	2296.0	2317.2
10°	2283.4	2308.7
12.5°	2269.6	2293.9
15°	2258.0	2276.0
17.5°	2245.3	2255.9
20°	2228.4	2236.8
22.5°	2211.5	2207.2
25°	2192.4	2182.9
27.5°	2168.1	2150.2
30°	2145.9	2114.2
32.5°	2124.8	2073.0
35°	2096.2	2030.7
37.5°	2066.6	1987.4
40°	2031.8	1937.7
42.5°	1994.8	1888.0
45°	1948.3	1840.4
47.5°	1907.0	1783.3
50°	1849.9	1722.0
52.5°	1780.2	1664.9
55°	1697.7	1595.2
57.5°	1608.9	1522.2
60°	1513.8	1438.7
62.5°	1398.6	1352.0
65°	1263.2	1252.7
67.5°	1086.7	1142.7
70°	891.1	1016.9
72.5°	745.3	883.7
75°	611.0	734.7
77.5°	484.2	576.1
80°	302.3	421.8
82.5°	203.0	277.0
85°	122.6	132.1
87.5°	47.6	48.6
90°	0.0	0.0

(END OF REPORT)