

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: P1213072

Luminaire Tested: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213072
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33524)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

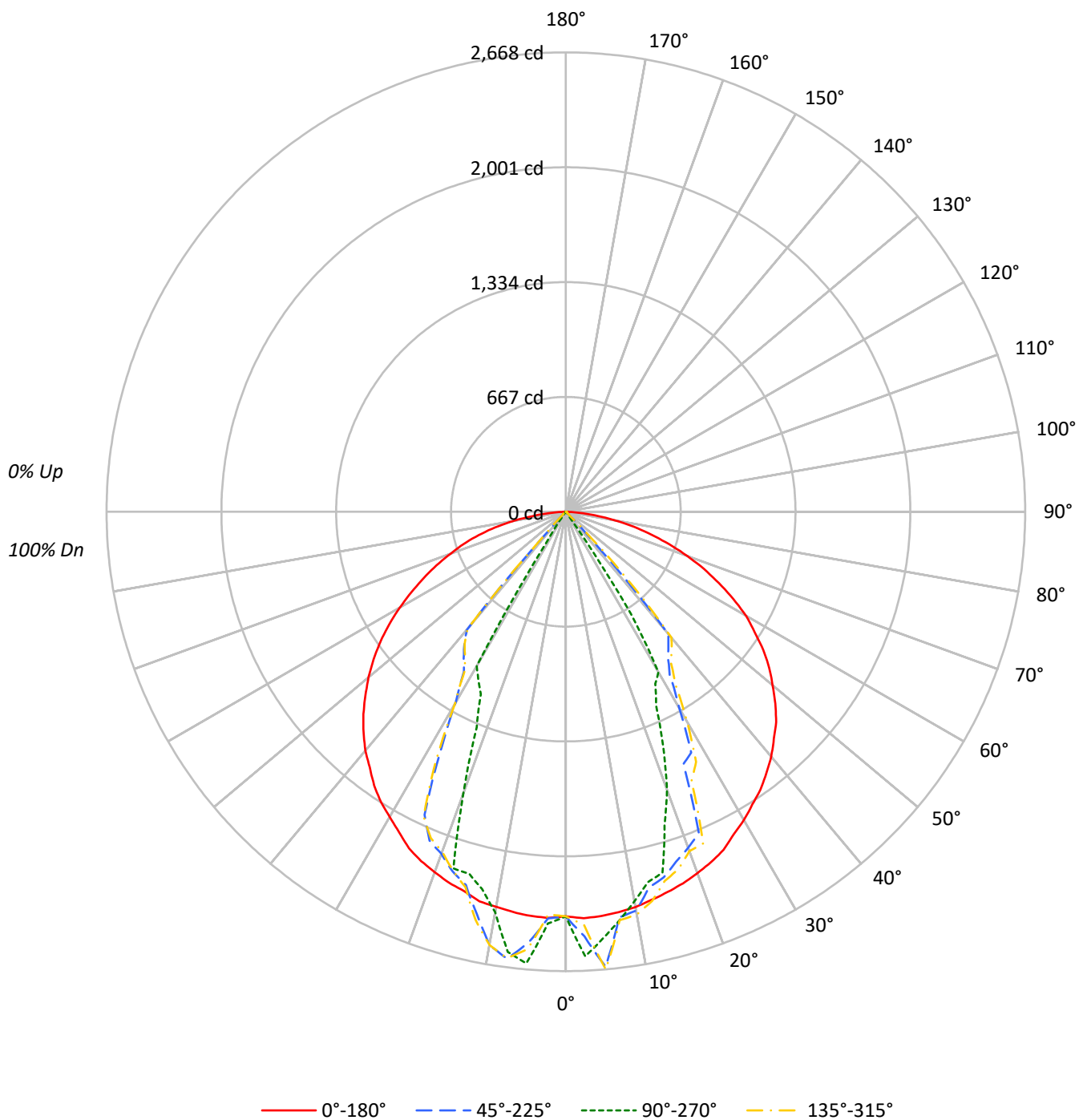
Lumens per Lamp: N/A
Luminaire Lumens: 3341.0 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 31
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

TEST NUMBER: P1213072

CATALOG NUMBER: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

Luminous Intensity Polar Plot



TEST NUMBER: P1213072

CATALOG NUMBER: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	112	108	105	103	109	106	103	101	102	100	98		98	96	95		95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86		90	87	84		87	85	82	81
3	98	90	83	78	95	88	82	78	85	80	76		83	79	75		80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	69		76	72	68		74	70	67	65
5	85	75	68	63	84	74	68	63	72	66	62		71	65	61		69	64	61	59
6	80	69	62	57	79	69	62	57	67	61	56		65	60	56		64	59	55	54
7	75	64	57	52	74	64	57	52	62	56	52		61	55	51		60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	47		57	51	47		56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44		53	48	44		52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41		50	44	41		49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	18987	18987	18987	18987
5°	19065	19528	19059	20680
10°	19019	17671	19008	18181
15°	18968	16494	18920	16537
20°	18990	12991	18935	13152
25°	19044	9402	18951	8872
30°	18958	8247	18757	7928
35°	19014	182	18734	220
40°	19079	39	18622	39
45°	19146	23	18427	17
50°	19000	18	18129	18
55°	18888	13	17727	13
60°	18532	14	17083	14
65°	17566	22	16315	15
70°	16295	24	15512	24
75°	14414	27	14649	27
80°	11709	31	12377	31
85°	6886	37	7037	37

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2°

Vertical Angle: 45°

Luminance: 20674 cd/sqm

TEST NUMBER: P1213072

CATALOG NUMBER: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.7	7.1
10°-20°	643.0	19.2
20°-30°	818.2	24.5
30°-40°	691.2	20.7
40°-50°	451.9	13.5
50°-60°	284.7	8.5
60°-70°	151.6	4.5
70°-80°	55.2	1.7
80°-90°	9.5	0.3
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°	1696.9	50.8
0°-40°	2388.1	71.5
0°-60°	3124.7	93.5
0°-90°	3341.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3341.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2350	2350	2350	2350	2350	
5°	2357	2486	2356	2633	2357	224
15°	2286	2170	2280	2176	2286	646
25°	2167	1239	2156	1169	2167	997
35°	1970	23	1941	28	1970	1232
45°	1728	3	1663	2	1728	1329
55°	1400	1	1314	1	1400	1248
65°	980	2	910	1	980	971
75°	516	2	524	2	516	547
85°	101	2	103	2	101	127
90°	0	0	0	0	0	

TEST NUMBER: P1213072

CATALOG NUMBER: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6
2.5°	2363.0	2364.4	2365.2	2366.6	2368.7	2369.4	2370.8	2369.4	2369.4	2369.4	2369.4
5°	2356.7	2359.5	2361.6	2364.4	2369.4	2370.1	2375.7	2376.4	2379.3	2384.9	2389.1
7.5°	2346.1	2348.9	2353.2	2360.2	2367.3	2375.0	2384.9	2395.5	2410.3	2424.4	2442.0
10°	2330.6	2334.1	2339.1	2345.4	2380.0	2384.9	2406.8	2437.1	2445.5	2490.0	2523.1
12.5°	2308.0	2320.0	2332.7	2338.4	2371.5	2423.7	2497.0	2482.2	2466.0	2611.3	2609.1
15°	2286.2	2302.4	2296.0	2341.9	2372.2	2463.2	2432.1	2498.4	2619.7	2590.1	2591.5
17.5°	2262.9	2266.4	2301.7	2339.8	2394.1	2440.6	2478.7	2569.7	2593.6	2595.7	2569.7
20°	2233.3	2250.2	2301.7	2336.2	2427.9	2449.8	2532.3	2578.8	2569.0	2545.0	2500.5
22.5°	2203.0	2254.4	2306.6	2355.3	2419.5	2478.0	2518.9	2540.7	2489.3	2394.8	2344.0
25°	2167.0	2197.3	2265.7	2336.9	2417.3	2451.2	2475.2	2439.9	2372.9	2288.3	2203.0
27.5°	2111.3	2159.9	2247.4	2327.8	2400.4	2441.3	2402.5	2317.9	2210.0	2154.3	2115.5
30°	2068.3	2131.7	2203.7	2281.2	2356.7	2380.7	2281.9	2185.3	2111.3	2055.6	2047.1
32.5°	2016.1	2106.4	2174.8	2248.8	2312.3	2280.5	2184.6	2059.8	1998.5	1977.3	1985.8
35°	1969.6	2038.0	2127.5	2200.1	2246.0	2174.8	2023.1	1945.6	1916.0	1927.9	1912.4
37.5°	1913.8	2004.1	2086.6	2149.4	2133.9	2026.7	1898.3	1849.0	1852.5	1842.6	1813.0
40°	1856.0	1942.1	2028.1	2087.3	2033.0	1869.4	1784.1	1773.5	1775.6	1743.9	1701.6
42.5°	1788.3	1866.6	1952.6	2006.2	1889.2	1761.5	1703.7	1705.1	1686.8	1642.4	1619.8
45°	1727.7	1799.6	1889.2	1894.1	1750.2	1643.8	1626.8	1608.5	1567.6	1552.8	1535.9
47.5°	1650.1	1729.8	1803.8	1777.0	1614.1	1547.9	1535.2	1495.0	1474.5	1463.2	1449.1
50°	1567.6	1648.0	1715.7	1639.5	1485.8	1470.3	1428.7	1397.0	1382.8	1370.9	1358.2
52.5°	1489.3	1555.6	1624.7	1493.6	1387.1	1372.3	1325.0	1306.7	1292.6	1279.2	1276.4
55°	1400.5	1459.0	1506.3	1354.6	1292.6	1258.0	1224.2	1211.5	1198.1	1191.7	1202.3
57.5°	1299.6	1365.9	1358.9	1217.8	1190.3	1140.3	1127.6	1119.1	1109.2	1113.5	1025.3
60°	1208.7	1259.4	1224.9	1117.7	1071.2	1037.3	1026.0	1020.4	1026.0	940.0	826.5
62.5°	1096.5	1153.7	1083.9	1000.6	951.3	935.1	925.2	932.9	850.4	755.9	728.4
65°	980.2	1042.2	939.3	875.1	844.1	830.0	829.3	763.7	682.6	645.9	645.9
67.5°	868.1	932.2	799.7	746.1	734.1	735.5	694.6	595.2	572.6	547.9	476.7
70°	748.9	805.3	660.7	628.3	621.3	616.3	516.9	490.1	463.3	397.7	392.1
72.5°	630.4	657.9	531.0	523.2	521.8	433.7	413.9	368.1	337.1	329.3	325.8
75°	515.5	507.0	419.6	426.6	359.6	328.6	296.9	270.1	265.9	263.0	65.6
77.5°	406.9	364.6	330.7	287.7	257.4	218.6	212.3	208.0	136.8	49.4	40.2
80°	296.2	236.2	220.0	186.9	159.4	153.0	156.5	48.0	38.1	31.7	27.5
82.5°	188.3	150.9	123.4	107.9	105.1	45.8	33.8	27.5	24.0	20.5	16.9
85°	100.8	67.0	62.1	52.2	31.0	21.2	17.6	13.4	11.3	9.2	8.5
87.5°	31.7	26.8	21.9	17.6	10.6	7.1	5.6	4.9	4.2	3.5	3.5
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: P1213072

CATALOG NUMBER: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6
2.5°	2368.0	2369.4	2368.7	2370.8	2370.8	2373.6	2375.7	2377.8	2382.1	2384.2	2400.4
5°	2398.3	2401.8	2412.4	2422.3	2434.3	2437.8	2458.2	2463.2	2487.2	2490.0	2569.0
7.5°	2466.0	2479.4	2504.8	2530.2	2555.6	2571.8	2600.0	2617.6	2636.6	2653.6	2716.3
10°	2547.8	2570.4	2595.0	2620.4	2635.2	2666.3	2683.2	2686.0	2681.1	2653.6	2552.0
12.5°	2628.2	2650.8	2640.2	2645.1	2662.7	2607.7	2615.5	2576.0	2603.5	2467.4	2366.6
15°	2616.9	2615.5	2589.4	2504.8	2518.9	2413.8	2371.5	2339.1	2365.2	2351.1	2335.5
17.5°	2583.1	2518.9	2473.8	2372.2	2329.2	2299.6	2300.3	2301.0	2288.3	2301.7	2262.2
20°	2439.9	2368.0	2301.0	2265.0	2252.3	2231.2	2241.7	2231.2	2231.9	2236.1	2175.5
22.5°	2249.5	2227.6	2188.9	2200.1	2195.9	2215.0	2200.8	2179.0	2186.0	2154.3	2108.5
25°	2172.6	2147.3	2145.8	2150.1	2143.7	2135.3	2122.6	2089.4	2087.3	2077.4	2056.3
27.5°	2095.1	2096.5	2100.7	2088.0	2065.5	2048.5	2029.5	2013.3	2019.6	2008.3	1979.4
30°	2041.5	2040.8	2015.4	2004.1	1962.5	1963.2	1958.3	1948.4	1942.1	1942.8	1924.4
32.5°	1965.3	1943.5	1914.5	1900.4	1896.9	1884.2	1874.4	1876.5	1881.4	1863.8	1882.8
35°	1887.0	1841.9	1837.7	1825.7	1814.4	1806.0	1809.5	1795.4	1794.7	1792.6	1637.4
37.5°	1782.0	1760.1	1758.0	1745.3	1737.5	1735.4	1722.0	1724.2	1730.5	1741.8	1396.2
40°	1695.2	1675.5	1670.6	1669.9	1652.9	1651.5	1655.0	1668.4	1677.6	1607.1	1330.7
42.5°	1602.2	1603.6	1588.1	1578.2	1580.3	1586.6	1603.6	1557.0	1349.0	1285.5	1216.4
45°	1522.5	1515.4	1507.0	1504.1	1522.5	1509.8	1323.6	1221.4	1196.7	1193.9	999.9
47.5°	1439.3	1437.1	1433.6	1435.7	1331.4	1186.8	1144.5	1131.1	1135.3	1132.5	858.9
50°	1355.3	1358.2	1358.2	1186.1	1088.8	1064.8	1068.3	1080.3	1005.6	938.6	800.4
52.5°	1282.7	1260.9	1080.3	1018.3	996.4	1007.0	981.6	887.8	820.1	780.6	740.4
55°	1148.0	987.2	947.0	937.2	944.9	851.1	793.3	732.7	715.0	710.8	687.5
57.5°	903.3	870.9	874.4	834.9	745.4	692.5	669.2	660.7	653.0	647.4	56.4
60°	799.0	808.1	739.7	655.1	619.1	612.1	606.4	598.7	597.3	587.4	36.0
62.5°	731.3	643.1	583.9	562.7	554.3	552.2	541.6	538.0	457.0	62.8	26.8
65°	551.4	515.5	504.2	499.3	490.1	490.1	406.9	64.2	52.2	45.1	24.0
67.5°	449.9	447.1	441.4	435.1	296.2	62.1	54.3	47.2	40.9	36.0	21.2
70°	380.8	379.4	345.5	63.5	52.9	46.5	40.9	36.7	33.8	30.3	19.0
72.5°	312.4	63.5	53.6	46.5	40.2	36.7	33.1	29.6	26.8	24.7	15.5
75°	48.7	43.0	38.1	34.6	31.7	28.2	25.4	23.3	22.6	19.7	10.6
77.5°	35.3	30.3	27.5	24.7	21.9	19.7	16.9	14.8	13.4	11.3	7.8
80°	24.7	21.9	19.7	16.2	14.1	12.0	10.6	9.2	8.5	7.1	3.5
82.5°	14.1	12.0	10.6	8.5	7.8	6.3	5.6	4.9	4.9	3.5	3.5
85°	6.3	6.3	4.9	4.2	3.5	3.5	3.5	2.8	2.8	2.1	2.1
87.5°	2.8	2.8	2.8	2.8	2.8	2.1	2.1	2.1	2.1	2.1	1.4
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: P1213072

CATALOG NUMBER: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
0°	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6
2.5°	2423.0	2432.1	2449.8	2468.1	2447.7	2521.0	2515.4	2540.0	2553.4	2559.8	2574.6
5°	2638.8	2679.7	2693.1	2652.9	2629.6	2605.6	2551.3	2510.4	2515.4	2502.0	2453.3
7.5°	2634.5	2547.1	2429.3	2375.7	2371.5	2365.2	2382.1	2392.0	2393.4	2392.7	2391.2
10°	2411.7	2366.6	2358.8	2351.8	2354.6	2328.5	2316.5	2282.6	2301.0	2291.1	2294.6
12.5°	2344.0	2333.4	2291.8	2234.0	2268.5	2242.5	2227.6	2237.5	2226.2	2215.7	2212.1
15°	2303.8	2235.4	2212.1	2198.0	2188.2	2182.5	2187.5	2176.2	2172.6	2170.5	2175.5
17.5°	2220.6	2193.1	2167.7	2130.3	2131.0	2128.9	2143.0	2164.2	2165.6	2057.0	1959.0
20°	2155.0	2132.4	2100.0	2076.7	2108.5	2052.1	1834.2	1730.5	1714.3	1714.3	1717.1
22.5°	2102.8	2052.8	2054.9	2018.2	1721.3	1660.7	1662.1	1668.4	1639.5	1540.8	1530.2
25°	2031.6	2023.9	1869.4	1615.6	1617.7	1570.4	1497.8	1395.5	1284.8	1284.8	1266.5
27.5°	1978.0	1813.7	1588.1	1577.5	1418.8	1318.7	1256.6	1162.8	1150.1	1138.2	1139.6
30°	1932.2	1534.5	1540.1	1318.7	1201.6	1118.4	1113.5	1098.0	1090.2	1088.1	1080.3
32.5°	1527.4	1494.3	1289.1	1122.6	1076.8	1063.4	1057.1	1039.4	1038.7	1025.3	932.2
35°	1432.2	1311.6	1078.9	1033.8	1020.4	1007.7	997.1	669.2	79.0	31.7	27.5
37.5°	1323.6	1095.8	997.8	977.4	964.7	712.9	71.2	24.7	17.6	12.7	11.3
40°	1121.9	978.8	947.8	925.2	381.5	24.7	15.5	12.0	7.1	6.3	5.6
42.5°	946.3	922.4	889.2	270.8	28.2	12.0	7.8	5.6	4.9	4.9	4.2
45°	885.7	864.5	358.2	26.8	17.6	5.6	4.9	4.9	4.2	2.8	2.8
47.5°	829.3	729.9	32.4	16.9	11.3	4.9	4.2	2.8	2.8	2.8	2.1
50°	769.3	40.2	22.6	12.7	7.1	2.8	2.8	2.8	2.8	2.1	2.1
52.5°	143.9	28.2	18.3	11.3	3.5	2.8	2.8	2.8	2.1	2.1	2.1
55°	33.8	22.6	16.9	9.9	2.8	2.8	2.8	2.1	2.1	2.1	1.4
57.5°	25.4	16.9	13.4	9.2	2.8	2.1	2.1	2.1	2.1	2.1	1.4
60°	21.2	12.0	10.6	8.5	2.1	2.1	2.1	2.1	2.1	2.1	1.4
62.5°	14.8	9.9	7.8	6.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1
65°	12.0	7.8	6.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
67.5°	10.6	6.3	4.2	1.4	2.1	2.1	2.1	2.1	2.1	2.1	2.1
70°	8.5	2.1	2.1	1.4	2.1	2.1	2.1	2.1	2.1	2.1	2.1
72.5°	7.1	2.1	1.4	1.4	2.1	2.1	2.1	2.1	2.1	2.1	2.1
75°	7.1	3.5	1.4	1.4	2.1	2.1	2.8	2.8	2.1	2.1	2.1
77.5°	4.9	3.5	1.4	1.4	2.1	2.1	2.8	2.8	2.1	2.1	2.1
80°	2.8	3.5	1.4	2.1	2.1	4.2	4.9	2.8	2.1	2.1	2.1
82.5°	2.8	3.5	4.2	4.2	2.1	3.5	4.2	3.5	2.8	2.1	2.1
85°	2.8	2.1	2.8	3.5	2.1	3.5	3.5	2.8	2.8	2.1	2.1
87.5°	1.4	2.1	2.1	2.8	2.8	2.8	3.5	2.8	2.8	2.8	2.1
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: P1213072

CATALOG NUMBER: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6
2.5°	2581.6	2584.5	2540.0	2524.5	2537.9	2535.1	2523.1	2478.7	2473.8	2444.1	2401.1
5°	2467.4	2486.4	2463.2	2503.4	2484.3	2503.4	2561.2	2588.0	2631.7	2658.5	2668.4
7.5°	2387.7	2392.0	2392.0	2395.5	2399.0	2399.7	2395.5	2392.7	2380.7	2365.9	2392.7
10°	2291.1	2296.0	2304.5	2303.1	2302.4	2317.2	2320.7	2351.1	2349.6	2355.3	2375.7
12.5°	2241.0	2203.0	2237.5	2228.4	2241.0	2221.3	2258.0	2251.6	2253.7	2270.7	2314.4
15°	2157.8	2169.8	2178.3	2178.3	2183.2	2179.0	2174.8	2203.7	2221.3	2222.0	2219.2
17.5°	1997.8	1906.8	1999.9	1975.9	2167.0	2171.9	2155.7	2142.3	2142.3	2152.9	2175.5
20°	1715.0	1717.1	1717.8	1727.0	1738.3	1737.5	1738.3	2016.1	2148.0	2117.6	2097.2
22.5°	1503.4	1477.3	1526.0	1522.5	1583.1	1650.1	1714.3	1707.9	1712.2	1908.2	2084.5
25°	1205.1	1239.0	1211.5	1223.5	1291.9	1371.6	1420.9	1550.0	1690.3	1680.4	1726.3
27.5°	1134.6	1125.5	1138.2	1138.2	1147.3	1157.9	1185.4	1258.0	1382.8	1514.0	1638.1
30°	1067.6	1075.4	1076.8	1089.5	1096.5	1103.6	1107.8	1135.3	1163.5	1254.5	1407.5
32.5°	801.8	703.1	925.2	985.1	1035.9	1047.9	1056.4	1067.6	1088.1	1101.5	1178.3
35°	23.3	23.3	24.7	28.2	36.0	242.6	923.8	1018.3	1031.7	1048.6	1062.7
37.5°	11.3	8.5	9.9	10.6	12.7	17.6	25.4	79.0	879.4	994.3	1009.8
40°	4.9	4.9	4.9	4.9	5.6	7.1	10.6	17.6	26.8	707.3	954.1
42.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.9	6.3	12.7	30.3	500.7
45°	2.8	2.8	2.1	2.8	2.8	3.5	4.2	4.2	5.6	19.0	34.6
47.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.5	4.2	12.7	18.3
50°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	9.9	12.7
52.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	4.2	11.3
55°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.1	2.1	2.8	9.9
57.5°	1.4	1.4	1.4	1.4	1.4	2.1	1.4	1.4	2.1	2.1	9.2
60°	1.4	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1	2.1	8.5
62.5°	2.1	2.1	1.4	2.1	1.4	1.4	2.1	2.1	2.1	2.1	5.6
65°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.4	2.1
67.5°	2.1	2.1	2.1	2.1	1.4	2.1	1.4	2.1	2.1	1.4	1.4
70°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.4	1.4	1.4	1.4
72.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.4	1.4	1.4	1.4
75°	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8	1.4	1.4	1.4
77.5°	2.1	2.1	2.1	2.1	2.1	2.1	3.5	4.2	3.5	3.5	1.4
80°	2.1	2.1	2.1	2.1	2.1	2.1	3.5	3.5	3.5	3.5	4.9
82.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8	2.8	2.8	3.5
85°	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8	2.8	2.1	2.8
87.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.1	2.1	2.1
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: P1213072

CATALOG NUMBER: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6
2.5°	2404.6	2380.7	2372.9	2356.7	2355.3	2356.7	2353.2	2348.2	2351.1	2346.1	2341.9
5°	2674.0	2609.9	2568.2	2512.5	2435.7	2418.7	2414.5	2390.5	2382.1	2379.3	2368.0
7.5°	2456.1	2573.2	2643.7	2667.7	2577.4	2556.3	2531.6	2511.8	2492.8	2456.8	2435.0
10°	2359.5	2365.2	2432.9	2511.8	2640.2	2657.8	2671.2	2628.2	2616.2	2524.5	2504.8
12.5°	2336.9	2337.7	2345.4	2393.4	2494.2	2505.5	2552.7	2578.1	2609.1	2626.8	2612.7
15°	2234.0	2291.1	2333.4	2337.7	2346.8	2366.6	2380.7	2468.8	2506.2	2606.3	2600.7
17.5°	2186.0	2204.4	2265.7	2315.8	2307.3	2300.3	2311.6	2323.5	2359.5	2459.6	2458.2
20°	2106.4	2164.9	2198.0	2250.2	2297.5	2299.6	2286.9	2279.8	2265.7	2281.9	2296.8
22.5°	2072.5	2081.7	2143.7	2180.4	2234.0	2253.0	2255.9	2256.6	2248.8	2240.3	2236.1
25°	2069.0	2040.1	2071.8	2117.6	2157.1	2177.6	2200.8	2208.6	2205.8	2205.8	2201.6
27.5°	1693.1	2030.9	2014.0	2044.3	2092.3	2106.4	2118.3	2142.3	2157.1	2167.7	2172.6
30°	1612.7	1673.4	1968.8	1973.1	2021.7	2020.3	2033.7	2053.5	2072.5	2097.2	2103.5
32.5°	1426.6	1575.4	1802.4	1901.9	1952.6	1957.6	1964.6	1970.3	1987.9	2015.4	2039.4
35°	1143.1	1435.0	1544.3	1868.0	1877.2	1887.0	1891.3	1904.7	1910.3	1921.6	1942.8
37.5°	1034.5	1186.1	1481.6	1615.6	1790.4	1798.9	1821.5	1827.1	1836.3	1845.4	1861.7
40°	971.7	1013.3	1233.4	1442.8	1720.6	1726.3	1734.0	1748.1	1748.8	1759.4	1774.2
42.5°	921.7	948.5	1012.6	1377.9	1671.3	1670.6	1652.2	1661.4	1665.6	1676.9	1697.4
45°	736.2	889.9	930.8	1125.5	1330.7	1426.6	1610.6	1580.3	1579.6	1583.8	1605.7
47.5°	37.4	837.0	866.0	928.7	1256.6	1260.1	1284.1	1485.8	1516.8	1507.0	1509.1
50°	25.4	57.8	806.7	835.6	1083.1	1170.6	1188.2	1197.4	1313.7	1443.5	1422.3
52.5°	19.7	33.1	494.3	775.7	880.1	944.2	1057.8	1122.6	1129.7	1181.9	1358.9
55°	17.6	25.4	53.6	715.8	748.2	762.3	828.6	942.1	1033.8	1061.3	1063.4
57.5°	15.5	23.3	36.7	323.7	680.5	683.3	694.6	734.1	816.6	892.0	977.4
60°	14.1	20.5	28.9	55.7	618.4	625.5	627.6	638.2	648.1	699.5	797.6
62.5°	8.5	16.2	25.4	40.2	489.4	562.0	561.3	568.4	577.5	583.2	602.9
65°	7.1	12.7	21.9	33.8	59.9	74.7	454.1	504.9	510.5	518.3	521.8
67.5°	6.3	11.3	16.2	26.8	45.1	51.5	59.2	73.3	400.5	451.3	458.4
70°	5.6	7.8	13.4	22.6	36.7	39.5	44.4	50.8	59.9	74.0	362.5
72.5°	3.5	5.6	9.2	16.2	28.2	31.7	34.6	38.8	43.0	51.5	59.2
75°	1.4	4.2	7.8	12.0	21.9	24.0	26.1	28.9	32.4	38.1	42.3
77.5°	1.4	3.5	6.3	8.5	14.1	16.2	19.0	21.2	24.0	26.8	31.0
80°	4.9	2.8	4.2	6.3	9.9	10.6	12.0	13.4	15.5	17.6	20.5
82.5°	3.5	4.2	4.9	4.2	4.9	6.3	7.1	8.5	9.2	10.6	11.3
85°	2.8	2.8	3.5	3.5	3.5	3.5	3.5	3.5	4.2	4.9	6.3
87.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8
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: P1213072

CATALOG NUMBER: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6
2.5°	2341.9	2340.5	2336.2	2336.2	2335.5	2338.4	2340.5	2342.6	2341.9	2346.1	2341.9
5°	2359.5	2356.0	2349.6	2344.0	2341.9	2343.3	2341.2	2343.3	2340.5	2344.0	2337.7
7.5°	2408.2	2396.2	2371.5	2361.6	2348.9	2348.2	2341.9	2340.5	2336.2	2336.2	2328.5
10°	2494.2	2436.4	2429.3	2399.7	2389.1	2337.7	2348.9	2329.9	2327.8	2318.6	2315.1
12.5°	2564.7	2519.6	2506.2	2480.1	2450.5	2346.1	2369.4	2328.5	2326.4	2308.0	2289.0
15°	2566.1	2592.2	2555.6	2483.6	2477.3	2405.3	2358.1	2344.0	2325.7	2270.7	2279.8
17.5°	2483.6	2543.6	2561.2	2545.7	2500.5	2451.9	2385.6	2357.4	2302.4	2277.7	2260.8
20°	2349.6	2410.3	2485.7	2490.7	2518.9	2484.3	2397.6	2351.8	2285.5	2242.5	2228.4
22.5°	2243.2	2287.6	2374.3	2414.5	2449.1	2461.1	2406.1	2338.4	2255.9	2214.2	2205.8
25°	2186.7	2196.6	2222.7	2270.0	2346.1	2401.1	2408.9	2336.9	2293.9	2203.0	2155.0
27.5°	2166.3	2157.8	2147.3	2171.2	2228.4	2295.3	2339.8	2351.8	2244.6	2157.8	2109.9
30°	2114.1	2119.0	2102.8	2094.4	2131.7	2200.8	2279.8	2299.6	2217.1	2127.5	2072.5
32.5°	2049.9	2058.4	2061.2	2046.4	2038.7	2086.6	2171.9	2219.2	2215.0	2084.5	2023.1
35°	1969.6	1993.5	1999.9	2000.6	1987.9	1980.1	2029.5	2127.5	2164.9	2064.8	1975.9
37.5°	1884.9	1892.0	1926.5	1935.7	1935.7	1912.4	1949.1	2027.4	2079.6	2020.3	1918.1
40°	1779.2	1801.7	1834.2	1850.4	1866.6	1868.7	1848.3	1903.3	1989.3	1974.5	1863.8
42.5°	1702.3	1717.1	1736.8	1758.7	1791.8	1800.3	1779.2	1789.0	1878.6	1917.4	1793.3
45°	1612.7	1632.5	1638.1	1662.1	1696.6	1721.3	1720.6	1700.2	1772.1	1820.1	1741.8
47.5°	1521.1	1540.1	1550.0	1562.0	1587.3	1619.1	1636.7	1627.5	1641.6	1735.4	1673.4
50°	1426.6	1437.1	1456.9	1470.3	1487.2	1505.5	1547.9	1556.3	1536.6	1611.3	1597.9
52.5°	1337.0	1340.5	1353.9	1367.3	1389.9	1403.3	1437.1	1462.5	1461.1	1483.0	1514.0
55°	1267.2	1251.7	1254.5	1265.1	1279.9	1300.3	1319.4	1358.9	1372.3	1376.5	1425.9
57.5°	990.1	1149.4	1163.5	1162.8	1180.5	1189.6	1207.3	1233.4	1281.3	1270.7	1325.7
60°	899.8	917.4	1050.7	1066.2	1072.6	1081.0	1102.2	1126.2	1161.4	1184.0	1208.0
62.5°	686.1	793.3	833.5	951.3	969.6	974.6	988.7	999.9	1036.6	1088.1	1078.2
65°	531.0	576.8	699.5	747.5	847.6	860.3	880.1	892.0	902.6	961.9	964.7
67.5°	459.1	466.1	499.3	591.6	655.1	753.1	765.1	775.7	791.9	834.2	860.3
70°	392.1	400.5	409.7	417.5	500.0	564.8	655.8	659.3	669.9	698.1	757.4
72.5°	74.0	335.0	340.6	345.5	354.7	397.7	484.5	555.0	559.2	572.6	626.9
75°	50.1	58.5	80.4	276.4	285.6	288.4	303.2	391.4	456.2	459.1	483.0
77.5°	36.0	40.2	48.7	57.8	147.4	221.4	225.0	241.2	308.2	356.8	361.0
80°	24.7	27.5	32.4	36.7	45.1	59.2	163.6	168.5	177.0	244.0	256.7
82.5°	14.1	16.2	19.0	23.3	26.8	33.8	43.7	56.4	114.9	122.7	162.9
85°	7.1	7.8	9.2	11.3	13.4	16.2	21.9	26.8	36.7	66.3	68.4
87.5°	3.5	3.5	3.5	3.5	5.6	6.3	7.8	9.9	12.7	19.0	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

TEST NUMBER: P1213072

CATALOG NUMBER: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6
2.5°	2342.6	2352.5	2360.9	2363.0	2363.0	2364.4	2366.6	2368.0	2369.4	2370.8	2369.4
5°	2338.4	2348.9	2356.0	2358.1	2358.1	2362.3	2365.9	2370.1	2372.2	2372.2	2370.8
7.5°	2327.8	2335.5	2344.7	2350.3	2351.1	2358.1	2364.4	2363.7	2366.6	2368.0	2371.5
10°	2313.7	2313.7	2329.2	2333.4	2336.9	2344.7	2346.8	2351.1	2360.9	2362.3	2371.5
12.5°	2306.6	2299.6	2317.9	2320.0	2332.0	2322.1	2334.8	2339.1	2329.2	2342.6	2325.0
15°	2274.9	2283.4	2280.5	2286.9	2308.0	2296.8	2331.3	2320.0	2345.4	2315.1	2368.7
17.5°	2248.8	2247.4	2258.7	2264.3	2268.5	2292.5	2301.7	2314.4	2324.3	2315.8	2336.9
20°	2229.8	2218.5	2226.9	2233.3	2248.1	2266.4	2272.1	2253.0	2286.2	2342.6	2356.0
22.5°	2193.8	2186.0	2195.9	2195.9	2218.5	2215.7	2236.8	2224.8	2255.9	2321.4	2389.8
25°	2145.1	2145.8	2156.4	2169.1	2173.3	2205.1	2216.4	2231.9	2270.7	2348.9	2390.5
27.5°	2095.8	2091.5	2097.9	2124.0	2145.8	2169.1	2172.6	2225.5	2278.4	2332.0	2368.7
30°	2046.4	2042.2	2046.4	2065.5	2091.5	2107.1	2145.8	2216.4	2265.7	2302.4	2336.9
32.5°	1993.5	1989.3	1999.2	2013.3	2059.1	2061.2	2138.1	2204.4	2243.2	2270.0	2263.6
35°	1937.1	1931.5	1940.6	1962.5	2004.8	2020.3	2100.7	2150.1	2193.8	2206.5	2176.9
37.5°	1869.4	1859.5	1870.8	1901.2	1945.6	1990.7	2057.7	2114.8	2138.1	2104.2	2069.0
40°	1798.9	1791.8	1811.6	1827.1	1879.3	1942.1	2018.9	2059.1	2044.3	2005.5	1966.7
42.5°	1736.1	1721.3	1739.0	1768.6	1827.8	1899.0	1961.1	1983.7	1948.4	1891.3	1846.1
45°	1659.3	1641.6	1662.8	1702.3	1765.8	1846.9	1895.5	1887.8	1827.8	1778.4	1716.4
47.5°	1578.9	1557.7	1578.9	1626.1	1697.4	1783.4	1818.6	1783.4	1707.9	1645.9	1595.8
50°	1499.9	1475.2	1495.7	1566.9	1636.7	1703.0	1702.3	1633.9	1588.8	1521.1	1477.3
52.5°	1421.6	1386.4	1406.8	1484.4	1554.2	1629.7	1573.9	1510.5	1456.2	1397.0	1382.8
55°	1325.0	1286.9	1314.4	1427.3	1480.9	1525.3	1436.4	1380.7	1327.1	1297.5	1279.9
57.5°	1233.4	1191.7	1215.7	1349.0	1388.5	1399.8	1318.0	1239.0	1207.3	1197.4	1172.0
60°	1138.9	1091.6	1114.2	1267.9	1295.4	1249.6	1169.2	1107.8	1101.5	1081.7	1062.0
62.5°	1048.6	996.4	1010.5	1167.1	1179.8	1096.5	1022.5	1006.3	990.8	971.0	960.4
65°	944.9	890.6	910.4	1059.9	1047.9	940.7	899.1	895.6	875.1	858.9	874.4
67.5°	849.7	785.6	813.1	942.8	888.5	801.1	784.2	775.7	759.5	768.6	605.7
70°	745.4	675.6	712.9	816.6	736.2	678.4	672.0	659.3	660.0	524.6	442.1
72.5°	629.0	568.4	622.7	678.4	582.5	565.5	556.4	555.0	447.8	363.9	343.4
75°	526.8	465.4	523.9	545.1	464.0	452.7	452.0	373.7	294.1	280.7	274.3
77.5°	411.1	363.9	419.6	387.8	356.1	343.4	308.2	231.3	221.4	212.3	79.7
80°	277.1	280.7	313.1	267.3	253.9	216.5	170.7	163.6	141.0	56.4	44.4
82.5°	168.5	211.6	199.6	167.1	163.6	117.8	107.9	55.0	40.9	32.4	28.2
85°	87.4	107.2	103.0	91.0	67.7	60.6	33.8	26.1	21.2	16.2	13.4
87.5°	29.6	39.5	38.1	30.3	23.3	18.3	12.0	9.9	7.1	5.6	4.9
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: P1213072

CATALOG NUMBER: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6
2.5°	2368.0	2368.0	2366.6	2368.0	2368.7	2367.3	2367.3	2368.7	2369.4	2370.1	2373.6
5°	2371.5	2372.9	2375.0	2379.3	2380.0	2388.4	2392.0	2394.1	2396.2	2396.9	2392.0
7.5°	2379.3	2384.2	2388.4	2387.7	2382.8	2369.4	2365.2	2361.6	2368.0	2384.2	2403.2
10°	2386.3	2363.7	2321.4	2379.3	2361.6	2377.8	2425.8	2436.4	2468.8	2514.7	2528.1
12.5°	2337.7	2399.7	2413.1	2348.2	2468.1	2423.7	2476.6	2523.1	2536.5	2583.1	2554.8
15°	2389.8	2420.2	2440.6	2505.5	2498.4	2536.5	2551.3	2542.2	2544.3	2556.3	2588.0
17.5°	2389.1	2449.8	2463.2	2506.9	2536.5	2537.2	2533.0	2528.8	2540.0	2549.2	2530.2
20°	2430.0	2449.8	2475.9	2493.5	2499.1	2506.2	2519.6	2509.0	2487.9	2467.4	2458.9
22.5°	2409.6	2454.0	2476.6	2479.4	2475.9	2454.0	2434.3	2404.6	2394.8	2384.2	2387.7
25°	2413.8	2434.3	2431.4	2420.2	2405.3	2364.4	2354.6	2341.9	2322.8	2277.0	2235.4
27.5°	2383.5	2372.9	2360.2	2332.7	2305.9	2284.1	2259.4	2218.5	2184.6	2135.3	2116.9
30°	2332.7	2290.4	2259.4	2243.2	2217.1	2180.4	2143.0	2093.0	2049.9	2040.1	2030.9
32.5°	2235.4	2193.8	2168.4	2128.9	2084.5	2040.8	1997.8	1978.0	1968.8	1970.3	1961.8
35°	2136.0	2099.3	2061.2	2002.0	1968.8	1925.1	1909.6	1905.4	1896.9	1887.8	1877.9
37.5°	2030.2	1987.2	1930.1	1894.8	1861.7	1844.0	1836.3	1829.9	1815.1	1798.9	1787.6
40°	1927.9	1850.4	1818.6	1784.1	1774.2	1766.5	1755.2	1739.7	1719.2	1716.4	1711.5
42.5°	1791.1	1735.4	1707.9	1700.9	1688.9	1675.5	1665.6	1648.7	1640.2	1645.9	1650.1
45°	1661.4	1633.2	1624.0	1615.6	1593.0	1573.9	1567.6	1562.0	1569.0	1600.0	1526.0
47.5°	1556.3	1545.0	1533.8	1519.7	1498.5	1484.4	1490.7	1496.4	1502.7	1275.0	1163.5
50°	1465.4	1449.8	1432.2	1416.7	1404.0	1402.6	1435.7	1336.3	1119.1	1113.5	1000.6
52.5°	1365.9	1342.7	1332.1	1322.9	1328.5	1349.7	1117.0	1036.6	994.3	863.8	806.0
55°	1258.7	1238.3	1238.3	1246.7	1216.4	985.8	973.8	842.0	762.3	739.7	730.6
57.5°	1151.5	1149.4	1161.4	1062.0	894.9	858.2	721.4	692.5	679.8	677.0	662.2
60°	1053.5	1073.3	898.4	826.5	718.6	648.1	628.3	624.8	611.4	606.4	593.1
62.5°	975.3	808.8	753.1	614.9	578.9	569.8	559.2	554.3	542.3	478.8	140.3
65°	704.5	665.7	540.2	516.9	514.1	500.7	496.4	446.4	105.1	70.5	59.9
67.5°	531.7	471.8	455.5	451.3	437.9	411.1	122.0	69.8	59.9	52.2	45.8
70°	408.3	397.7	385.7	375.9	110.7	69.1	59.9	50.8	43.7	38.8	35.3
72.5°	334.3	327.2	190.4	72.6	59.2	50.1	44.4	38.8	33.8	31.0	28.2
75°	261.6	72.6	59.9	50.1	43.0	36.7	32.4	28.9	26.1	24.0	21.9
77.5°	59.2	48.0	40.9	34.6	31.0	27.5	24.7	21.2	19.0	16.9	14.1
80°	36.7	31.7	26.8	24.7	21.2	17.6	15.5	14.1	11.3	10.6	9.2
82.5°	24.0	19.0	16.9	14.1	11.3	10.6	9.2	7.1	6.3	5.6	4.9
85°	10.6	9.2	7.8	6.3	4.9	4.2	3.5	2.8	2.8	2.8	2.8
87.5°	3.5	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.4	1.4
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: P1213072

CATALOG NUMBER: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6
2.5°	2375.0	2387.7	2399.7	2396.2	2383.5	2363.7	2358.1	2350.3	2356.0	2368.0	2372.9
5°	2392.0	2384.9	2410.3	2447.7	2508.3	2513.9	2556.3	2566.1	2600.0	2621.1	2620.4
7.5°	2415.9	2516.1	2557.7	2602.8	2623.2	2618.3	2624.7	2619.7	2612.0	2608.4	2604.2
10°	2537.9	2614.1	2629.6	2629.6	2597.9	2554.8	2536.5	2504.8	2441.3	2442.7	2432.1
12.5°	2609.1	2635.9	2599.3	2568.2	2440.6	2391.2	2337.7	2312.3	2297.5	2274.9	2283.4
15°	2571.8	2533.7	2511.8	2411.7	2333.4	2244.6	2246.0	2230.5	2214.2	2215.7	2205.1
17.5°	2516.8	2486.4	2331.3	2262.2	2224.1	2189.6	2183.2	2162.8	2152.2	2148.7	2148.0
20°	2441.3	2332.0	2216.4	2199.4	2153.6	2114.1	2107.8	2114.1	2146.6	2088.7	1892.7
22.5°	2353.2	2195.9	2162.1	2114.1	2083.1	2067.6	2106.4	1930.1	1663.5	1695.9	1661.4
25°	2203.7	2135.3	2077.4	2040.8	2037.2	1942.1	1618.4	1584.5	1413.2	1321.5	1218.5
27.5°	2094.4	2064.8	2004.1	1997.8	1951.9	1588.1	1419.5	1233.4	1164.9	1154.4	1131.8
30°	2028.1	1985.8	1949.1	1789.0	1557.7	1278.5	1138.9	1112.8	1100.8	1088.1	1068.3
32.5°	1948.4	1908.2	1925.8	1504.1	1241.8	1100.8	1072.6	1053.5	1031.7	1023.2	952.0
35°	1867.3	1849.0	1504.8	1264.4	1067.6	1033.8	1012.6	992.9	789.8	191.1	64.9
37.5°	1780.6	1776.3	1352.5	1049.3	999.9	968.2	908.3	187.6	44.4	30.3	22.6
40°	1712.9	1353.2	1069.0	983.7	943.5	893.5	125.5	31.0	19.7	12.0	7.8
42.5°	1667.7	1217.1	956.9	923.1	835.6	92.4	31.7	13.4	7.8	6.3	4.9
45°	1285.5	961.2	894.2	858.9	105.8	31.7	18.3	6.3	4.9	4.2	2.8
47.5°	1186.1	873.0	833.5	187.6	35.3	16.9	12.7	4.2	2.8	2.8	2.8
50°	898.4	806.7	663.6	45.8	22.6	12.0	9.2	2.8	2.8	2.8	2.1
52.5°	787.7	744.7	71.2	30.3	17.6	9.2	5.6	2.1	2.1	2.1	2.1
55°	720.0	472.5	42.3	23.3	14.8	8.5	3.5	2.1	2.1	2.1	1.4
57.5°	658.6	63.5	31.0	19.7	13.4	7.8	2.1	2.1	2.1	2.1	1.4
60°	558.5	45.8	25.4	17.6	12.7	7.1	2.1	2.1	2.1	2.1	2.1
62.5°	72.6	36.0	21.9	15.5	9.2	5.6	1.4	2.1	2.1	2.1	2.1
65°	52.9	28.2	19.7	10.6	5.6	2.1	1.4	2.1	2.1	2.1	2.1
67.5°	40.9	23.3	14.8	9.2	4.9	1.4	1.4	2.1	2.1	2.1	2.1
70°	32.4	19.7	12.0	7.8	4.2	1.4	1.4	2.1	2.1	2.1	2.1
72.5°	25.4	14.1	8.5	4.2	2.8	1.4	1.4	2.1	2.1	2.1	2.1
75°	19.0	11.3	6.3	3.5	1.4	1.4	1.4	2.1	2.1	2.1	2.1
77.5°	12.7	7.1	4.9	2.8	2.8	2.8	3.5	3.5	2.1	2.1	2.1
80°	8.5	4.9	3.5	3.5	3.5	2.8	3.5	3.5	2.1	3.5	2.1
82.5°	4.2	3.5	3.5	2.8	2.8	2.1	2.8	2.8	2.8	2.8	2.1
85°	2.8	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8	2.1
87.5°	1.4	1.4	1.4	1.4	2.1	2.1	2.1	2.1	2.8	2.8	2.1
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: P1213072

CATALOG NUMBER: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6
2.5°	2366.6	2368.7	2363.0	2393.4	2377.8	2379.3	2385.6	2369.4	2372.9	2361.6	2353.9
5°	2623.2	2627.5	2631.7	2633.1	2635.9	2639.5	2635.2	2633.1	2628.9	2614.8	2600.0
7.5°	2583.1	2578.1	2576.0	2578.8	2583.8	2585.9	2582.3	2587.3	2605.6	2613.4	2618.3
10°	2371.5	2348.9	2364.4	2362.3	2344.7	2403.9	2387.7	2396.9	2403.2	2468.1	2507.6
12.5°	2270.7	2284.8	2258.0	2244.6	2262.2	2274.2	2286.2	2260.8	2296.0	2279.8	2332.0
15°	2186.0	2177.6	2174.8	2175.5	2171.9	2188.9	2193.1	2198.7	2203.7	2225.5	2234.0
17.5°	2148.0	2162.1	2167.7	2171.9	2164.9	2157.1	2149.4	2138.1	2141.6	2136.0	2152.2
20°	1760.8	1713.6	1710.8	1738.3	1707.9	1724.9	1765.8	2039.4	2030.2	2136.7	2100.7
22.5°	1469.6	1425.2	1387.1	1353.9	1401.2	1420.9	1497.1	1583.1	1722.7	1700.9	1852.5
25°	1200.2	1184.0	1174.1	1169.2	1172.7	1171.3	1188.2	1228.4	1291.9	1441.4	1634.6
27.5°	1122.6	1114.9	1111.4	1100.1	1108.5	1105.7	1119.1	1127.6	1146.6	1161.4	1224.2
30°	1061.3	1052.1	1045.8	1033.8	1042.2	1043.0	1047.2	1069.0	1076.8	1089.5	1109.2
32.5°	387.8	228.5	214.4	203.8	222.8	290.5	509.8	891.3	1016.9	1026.7	1049.3
35°	38.1	31.7	28.2	28.2	28.9	31.7	42.3	111.4	203.8	787.7	985.8
37.5°	14.8	12.7	10.6	9.9	10.6	12.0	16.2	21.2	28.9	59.9	267.3
40°	6.3	5.6	4.9	4.9	4.9	4.9	5.6	7.1	10.6	19.7	31.0
42.5°	4.2	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.9	6.3	12.7
45°	2.8	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	3.5	5.6
47.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8
50°	2.1	2.1	2.1	2.1	1.4	2.1	1.4	2.1	2.1	2.1	2.1
52.5°	2.1	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.1	2.1
55°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.1
57.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
60°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
62.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.1	2.1	1.4
65°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.1	1.4
67.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
70°	2.1	2.1	1.4	2.1	1.4	1.4	2.1	2.1	2.1	1.4	1.4
72.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	4.2	4.2	2.8
75°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.5	4.2	3.5
77.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.5	3.5	3.5
80°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8	2.8
82.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8	2.8
85°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
87.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
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: P1213072

CATALOG NUMBER: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6
2.5°	2340.5	2339.8	2354.6	2365.9	2361.6	2365.9	2370.8	2371.5	2372.9	2367.3	2365.2
5°	2571.8	2549.9	2507.6	2477.3	2442.0	2377.8	2346.1	2349.6	2350.3	2348.2	2351.1
7.5°	2616.2	2614.1	2599.3	2592.9	2569.0	2523.1	2449.8	2437.1	2406.1	2386.3	2370.1
10°	2504.8	2555.6	2569.0	2591.5	2605.6	2597.2	2535.1	2525.9	2506.2	2483.6	2488.6
12.5°	2384.2	2425.8	2427.9	2550.6	2578.1	2580.9	2557.0	2569.7	2572.5	2521.7	2492.1
15°	2236.1	2255.9	2297.5	2411.7	2494.9	2547.1	2562.6	2569.7	2535.1	2533.0	2521.0
17.5°	2171.2	2183.9	2203.0	2267.1	2393.4	2470.2	2535.8	2530.9	2544.3	2534.4	2504.1
20°	2089.4	2100.0	2133.9	2166.3	2228.4	2330.6	2453.3	2462.5	2480.1	2478.0	2486.4
22.5°	2088.0	2050.6	2056.3	2081.7	2146.6	2238.2	2368.7	2399.0	2410.3	2418.0	2427.2
25°	1656.5	1953.3	2007.6	2023.9	2066.2	2119.8	2273.5	2284.8	2305.9	2340.5	2365.9
27.5°	1435.0	1636.7	1853.9	1966.7	1993.5	2038.0	2129.6	2146.6	2218.5	2226.9	2266.4
30°	1132.5	1288.4	1612.7	1884.2	1928.7	1959.7	2024.6	2058.4	2089.4	2123.3	2164.9
32.5°	1065.5	1090.2	1270.0	1559.1	1904.7	1881.4	1929.4	1949.8	1983.7	2013.3	2043.6
35°	1004.2	1021.1	1059.2	1277.1	1551.4	1817.2	1849.7	1863.1	1882.1	1904.7	1926.5
37.5°	940.0	965.4	991.5	1050.0	1435.0	1766.5	1765.8	1781.3	1792.6	1811.6	1829.9
40°	170.7	886.4	928.7	966.8	1112.8	1408.9	1686.8	1693.8	1701.6	1713.6	1732.6
42.5°	27.5	148.1	870.2	906.9	948.5	1261.6	1650.8	1621.9	1617.0	1625.4	1642.4
45°	14.1	36.0	174.9	846.9	884.3	1006.3	1349.7	1571.8	1566.9	1550.7	1554.2
47.5°	10.6	22.6	43.0	292.6	827.9	863.8	1245.3	1231.9	1325.7	1505.5	1478.0
50°	9.2	15.5	25.4	59.9	731.3	795.4	959.0	1120.5	1169.9	1176.2	1392.0
52.5°	8.5	10.6	18.3	38.8	153.7	735.5	779.9	836.3	919.5	1098.0	1093.7
55°	7.8	9.9	15.5	26.1	53.6	662.9	708.7	719.3	736.9	822.2	935.1
57.5°	4.2	9.2	14.8	22.6	40.2	121.3	643.1	651.6	665.7	669.2	709.4
60°	2.1	8.5	13.4	19.7	29.6	56.4	578.2	588.1	596.6	598.0	610.7
62.5°	1.4	7.8	11.3	18.3	24.7	40.2	136.8	279.2	531.0	531.0	545.8
65°	1.4	5.6	7.1	12.0	22.6	33.1	57.8	67.0	130.5	320.9	478.8
67.5°	1.4	2.1	6.3	9.9	16.9	25.4	42.3	49.4	59.2	67.7	125.5
70°	1.4	1.4	5.6	6.3	10.6	19.0	30.3	34.6	40.2	45.8	52.9
72.5°	1.4	1.4	4.9	4.9	7.1	12.7	23.3	25.4	28.9	32.4	37.4
75°	3.5	2.8	4.2	4.2	4.9	9.9	17.6	19.7	21.2	24.0	27.5
77.5°	3.5	3.5	3.5	3.5	3.5	6.3	11.3	12.7	14.8	16.2	19.0
80°	2.8	2.8	2.8	3.5	3.5	4.2	7.1	7.8	8.5	10.6	11.3
82.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	4.2	4.9	6.3
85°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.8	2.8	2.8
87.5°	2.1	2.1	2.1	1.4	1.4	2.1	2.1	2.1	2.1	2.1	2.1
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: P1213072

CATALOG NUMBER: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6	2349.6
2.5°	2364.4	2360.2	2356.7	2358.8	2352.5	2349.6	2351.8	2352.5	2353.9	2357.4	2358.1
5°	2358.1	2356.7	2363.0	2366.6	2365.2	2366.6	2366.6	2363.7	2359.5	2362.3	2356.0
7.5°	2353.9	2344.7	2337.7	2339.1	2332.0	2340.5	2348.2	2359.5	2363.0	2363.0	2356.0
10°	2426.5	2416.6	2377.1	2350.3	2332.7	2317.2	2353.9	2316.5	2334.1	2267.1	2344.0
12.5°	2486.4	2499.8	2482.2	2408.9	2396.2	2349.6	2376.4	2330.6	2317.2	2240.3	2265.0
15°	2510.4	2485.0	2479.4	2458.9	2431.4	2418.0	2346.1	2338.4	2316.5	2325.0	2292.5
17.5°	2489.3	2502.0	2485.0	2471.6	2443.4	2411.7	2368.7	2330.6	2300.3	2232.6	2289.7
20°	2468.8	2485.7	2435.0	2443.4	2446.2	2409.6	2387.0	2355.3	2317.2	2253.7	2204.4
22.5°	2435.0	2423.0	2427.2	2414.5	2403.9	2408.9	2377.8	2356.0	2291.8	2262.9	2195.9
25°	2380.0	2375.7	2387.0	2385.6	2360.2	2351.8	2336.2	2313.0	2287.6	2241.0	2186.0
27.5°	2290.4	2312.3	2332.0	2341.2	2327.8	2305.2	2296.8	2283.4	2265.7	2218.5	2177.6
30°	2195.9	2220.6	2243.2	2262.9	2274.9	2265.0	2257.3	2249.5	2222.7	2191.7	2145.8
32.5°	2088.0	2120.5	2151.5	2175.5	2201.6	2209.3	2203.7	2197.3	2174.8	2146.6	2109.9
35°	1963.2	2007.6	2052.8	2095.8	2107.1	2125.4	2143.7	2133.2	2121.2	2093.0	2059.1
37.5°	1857.4	1889.2	1921.6	1975.9	2015.4	2038.7	2071.1	2075.3	2054.9	2041.5	1997.1
40°	1748.1	1777.0	1824.3	1856.0	1910.3	1937.1	1971.7	1987.2	1982.2	1974.5	1935.7
42.5°	1662.1	1676.2	1707.2	1735.4	1789.0	1844.0	1874.4	1891.3	1908.9	1902.6	1882.8
45°	1570.4	1583.1	1593.7	1618.4	1670.6	1719.2	1756.6	1782.0	1813.7	1828.5	1804.5
47.5°	1479.5	1483.0	1495.7	1516.1	1547.2	1584.5	1647.3	1685.4	1715.0	1743.9	1728.4
50°	1409.6	1397.0	1399.1	1411.8	1437.1	1473.8	1518.9	1572.5	1606.4	1641.6	1645.2
52.5°	1231.9	1334.9	1310.2	1317.3	1330.7	1348.3	1395.5	1448.4	1490.0	1520.4	1550.7
55°	1033.8	1054.2	1252.4	1224.2	1232.6	1248.2	1270.0	1322.9	1363.1	1405.4	1447.7
57.5°	801.8	954.1	961.9	1145.2	1141.0	1142.4	1160.7	1191.0	1231.2	1284.1	1320.1
60°	623.4	687.5	812.4	875.8	1036.6	1042.2	1052.8	1070.5	1105.0	1155.1	1212.2
62.5°	550.0	558.5	602.9	698.1	802.5	928.7	951.3	954.1	969.6	1019.7	1086.0
65°	483.0	488.7	502.1	512.0	599.4	721.4	830.0	847.6	857.5	887.1	943.5
67.5°	332.8	421.0	433.0	440.0	448.5	504.9	639.6	729.2	740.4	766.5	815.9
70°	64.2	133.3	364.6	372.3	376.6	389.3	411.1	553.6	628.3	653.0	675.6
72.5°	43.7	51.5	62.1	146.7	310.3	317.3	322.3	340.6	466.8	538.8	550.7
75°	31.7	35.3	41.6	51.5	63.5	206.6	256.0	265.1	274.3	378.7	439.3
77.5°	22.6	25.4	28.2	33.1	38.8	50.1	71.9	198.2	207.3	212.3	299.7
80°	12.7	15.5	19.0	21.9	24.7	28.2	36.7	45.8	102.3	149.5	157.3
82.5°	7.1	8.5	9.9	12.0	13.4	16.9	20.5	24.7	32.4	48.0	101.5
85°	3.5	3.5	3.5	4.9	5.6	7.8	9.2	10.6	14.8	20.5	28.2
87.5°	2.1	2.1	2.8	2.8	2.8	3.5	3.5	3.5	4.2	6.3	9.2
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: P1213072

CATALOG NUMBER: 4SNLED-LD5-42SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	2349.6	2349.6	2349.6	2349.6	2349.6
2.5°	2358.8	2356.7	2356.7	2365.2	2363.0
5°	2354.6	2352.5	2351.8	2360.9	2356.7
7.5°	2351.1	2343.3	2341.2	2349.6	2346.1
10°	2336.9	2331.3	2334.8	2332.0	2330.6
12.5°	2313.0	2309.4	2294.6	2296.0	2308.0
15°	2270.0	2284.1	2258.7	2281.2	2286.2
17.5°	2191.0	2222.7	2247.4	2260.8	2262.9
20°	2226.2	2236.8	2224.1	2224.8	2233.3
22.5°	2180.4	2185.3	2188.9	2184.6	2203.0
25°	2107.1	2088.0	2128.9	2137.4	2167.0
27.5°	2084.5	2069.0	2088.0	2086.6	2111.3
30°	2066.2	2016.1	2024.6	2038.0	2068.3
32.5°	2040.1	1961.1	1952.6	1982.2	2016.1
35°	1994.2	1919.5	1899.7	1918.8	1969.6
37.5°	1955.4	1861.7	1822.2	1847.6	1913.8
40°	1897.6	1816.5	1755.2	1777.7	1856.0
42.5°	1828.5	1777.7	1683.3	1698.8	1788.3
45°	1758.7	1713.6	1613.4	1621.2	1727.7
47.5°	1687.5	1645.9	1540.8	1542.2	1650.1
50°	1617.7	1562.7	1475.9	1451.2	1567.6
52.5°	1526.7	1475.9	1410.3	1370.2	1489.3
55°	1440.7	1383.6	1335.6	1273.5	1400.5
57.5°	1356.8	1293.3	1260.9	1181.2	1299.6
60°	1241.8	1211.5	1163.5	1087.4	1208.7
62.5°	1124.0	1114.2	1065.5	986.5	1096.5
65°	986.5	1009.8	959.7	892.0	980.2
67.5°	856.8	898.4	843.4	801.8	868.1
70°	718.6	766.5	735.5	720.7	748.9
72.5°	582.5	629.0	631.8	621.3	630.4
75°	449.9	501.4	529.6	513.4	515.5
77.5°	341.3	366.0	397.0	409.7	406.9
80°	210.8	253.9	279.2	305.3	296.2
82.5°	106.5	142.4	173.5	201.7	188.3
85°	44.4	57.1	79.7	105.1	100.8
87.5°	13.4	22.6	24.0	33.8	31.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)