

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: P1213704

Luminaire Tested: 2SNLED-LD5-43HL-RM-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213704
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: 2SNLED-LD5-43HL-RM-UNV-L940-CD1-U
Description: 2FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

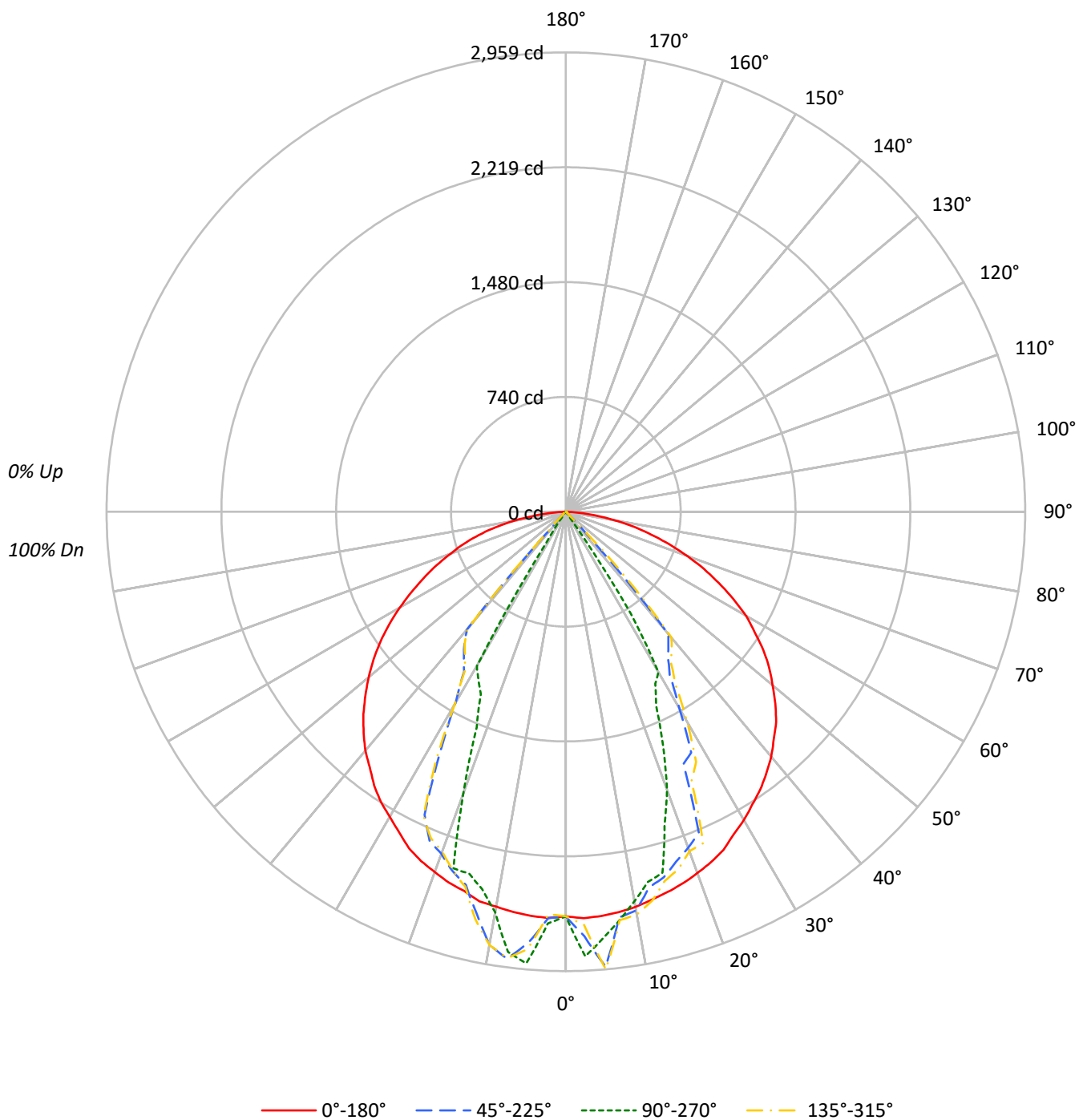
Lumens per Lamp: N/A
Luminaire Lumens: 3704.9 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.12')
CIE Type: Direct

Input Watts (W): 36
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			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°	42112	42112	42112	42112
5°	42170	43311	42157	45867
10°	41953	39193	41928	40324
15°	41722	36582	41619	36677
20°	41648	28814	41531	29168
25°	41640	20852	41438	19678
30°	41313	18292	40877	17584
35°	41286	403	40681	489
40°	41260	88	40274	88
45°	41215	52	39668	38
50°	40680	40	38812	40
55°	40177	29	37709	29
60°	39095	31	36038	31
65°	36657	49	34046	34
70°	33494	54	31884	54
75°	28943	60	29419	60
80°	22567	68	23858	68
85°	12093	81	12353	81

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2°

Vertical Angle: 45°

Luminance: 44520 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.4	7.1
10°-20°	713.1	19.2
20°-30°	907.3	24.5
30°-40°	766.5	20.7
40°-50°	501.1	13.5
50°-60°	315.7	8.5
60°-70°	168.1	4.5
70°-80°	61.3	1.7
80°-90°	10.5	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°	1881.8	50.8
0°-40°	2648.3	71.5
0°-60°	3465.1	93.5
0°-90°	3704.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3704.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2606	2606	2606	2606	2606	
5°	2614	2757	2613	2920	2614	249
15°	2535	2406	2529	2412	2535	717
25°	2403	1374	2391	1297	2403	1105
35°	2184	26	2152	31	2184	1366
45°	1916	3	1844	2	1916	1473
55°	1553	2	1458	2	1553	1384
65°	1087	2	1010	2	1087	1077
75°	572	2	581	2	572	607
85°	112	2	114	2	112	141
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6
2.5°	2620.5	2622.1	2622.8	2624.4	2626.7	2627.5	2629.1	2627.5	2627.5	2627.5	2627.5
5°	2613.5	2616.6	2618.9	2622.1	2627.5	2628.3	2634.6	2635.3	2638.5	2644.7	2649.4
7.5°	2601.7	2604.9	2609.5	2617.4	2625.2	2633.8	2644.7	2656.5	2672.9	2688.5	2708.1
10°	2584.5	2588.4	2593.9	2600.9	2639.3	2644.7	2669.0	2702.6	2712.0	2761.3	2798.0
12.5°	2559.5	2572.8	2586.9	2593.1	2629.9	2687.7	2769.1	2752.6	2734.7	2895.8	2893.4
15°	2535.3	2553.2	2546.2	2597.0	2630.7	2731.5	2697.1	2770.6	2905.1	2872.3	2873.9
17.5°	2509.4	2513.4	2552.5	2594.7	2654.9	2706.5	2748.7	2849.6	2876.2	2878.6	2849.6
20°	2476.6	2495.4	2552.5	2590.8	2692.4	2716.7	2808.2	2859.8	2848.8	2822.2	2773.0
22.5°	2443.0	2500.1	2557.9	2611.9	2683.1	2748.0	2793.3	2817.6	2760.5	2655.7	2599.4
25°	2403.1	2436.7	2512.6	2591.6	2680.7	2718.2	2744.8	2705.7	2631.4	2537.6	2443.0
27.5°	2341.3	2395.3	2492.2	2581.4	2661.9	2707.3	2664.3	2570.4	2450.8	2389.0	2346.0
30°	2293.6	2364.0	2443.8	2529.8	2613.5	2640.0	2530.6	2423.4	2341.3	2279.5	2270.2
32.5°	2235.7	2335.8	2411.7	2493.8	2564.2	2529.0	2422.6	2284.2	2216.2	2192.7	2202.1
35°	2184.1	2260.0	2359.3	2439.8	2490.7	2411.7	2243.6	2157.5	2124.7	2138.0	2120.8
37.5°	2122.4	2222.5	2313.9	2383.5	2366.3	2247.5	2105.2	2050.4	2054.3	2043.4	2010.5
40°	2058.2	2153.6	2249.0	2314.7	2254.5	2073.1	1978.5	1966.7	1969.1	1933.9	1887.0
42.5°	1983.2	2070.0	2165.4	2224.8	2095.0	1953.4	1889.3	1890.9	1870.6	1821.3	1796.3
45°	1915.9	1995.7	2095.0	2100.5	1940.9	1822.8	1804.1	1783.7	1738.4	1722.0	1703.2
47.5°	1829.9	1918.3	2000.4	1970.6	1790.0	1716.5	1702.4	1657.8	1635.2	1622.7	1607.0
50°	1738.4	1827.5	1902.6	1818.2	1647.7	1630.5	1584.3	1549.1	1533.5	1520.2	1506.1
52.5°	1651.6	1725.1	1801.7	1656.3	1538.2	1521.8	1469.4	1449.1	1433.4	1418.6	1415.4
55°	1553.1	1618.0	1670.4	1502.2	1433.4	1395.1	1357.6	1343.5	1328.6	1321.6	1333.3
57.5°	1441.2	1514.7	1506.9	1350.5	1320.0	1264.5	1250.4	1241.0	1230.1	1234.8	1137.0
60°	1340.4	1396.7	1358.3	1239.5	1187.9	1150.3	1137.8	1131.6	1137.8	1042.4	916.5
62.5°	1216.0	1279.4	1201.9	1109.7	1054.9	1036.9	1026.0	1034.6	943.1	838.3	807.8
65°	1087.0	1155.8	1041.6	970.5	936.1	920.4	919.6	846.9	757.0	716.3	716.3
67.5°	962.6	1033.8	886.8	827.4	814.1	815.6	770.3	660.0	635.0	607.6	528.6
70°	830.5	893.0	732.7	696.8	688.9	683.5	573.2	543.5	513.8	441.0	434.8
72.5°	699.1	729.6	588.8	580.2	578.7	480.9	459.0	408.2	373.8	365.2	361.3
75°	571.6	562.3	465.3	473.1	398.8	364.4	329.2	299.5	294.8	291.7	72.7
77.5°	451.2	404.3	366.8	319.1	285.4	242.4	235.4	230.7	151.7	54.7	44.6
80°	328.4	262.0	244.0	207.2	176.7	169.7	173.6	53.2	42.2	35.2	30.5
82.5°	208.8	167.3	136.9	119.6	116.5	50.8	37.5	30.5	26.6	22.7	18.8
85°	111.8	74.3	68.8	57.9	34.4	23.5	19.6	14.9	12.5	10.2	9.4
87.5°	35.2	29.7	24.2	19.6	11.7	7.8	6.3	5.5	4.7	3.9	3.9
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):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6
2.5°	2626.0	2627.5	2626.7	2629.1	2629.1	2632.2	2634.6	2636.9	2641.6	2644.0	2661.9
5°	2659.6	2663.5	2675.2	2686.2	2699.5	2703.4	2726.1	2731.5	2758.1	2761.3	2848.8
7.5°	2734.7	2749.5	2777.7	2805.8	2834.0	2852.0	2883.2	2902.8	2923.9	2942.7	3012.3
10°	2825.4	2850.4	2877.8	2905.9	2922.3	2956.8	2975.5	2978.6	2973.2	2942.7	2830.1
12.5°	2914.5	2939.5	2927.8	2933.3	2952.8	2891.8	2900.4	2856.7	2887.2	2736.2	2624.4
15°	2902.0	2900.4	2871.5	2777.7	2793.3	2676.8	2629.9	2593.9	2622.8	2607.2	2590.0
17.5°	2864.5	2793.3	2743.3	2630.7	2583.0	2550.1	2550.9	2551.7	2537.6	2552.5	2508.7
20°	2705.7	2626.0	2551.7	2511.8	2497.7	2474.3	2486.0	2474.3	2475.0	2479.7	2412.5
22.5°	2494.6	2470.3	2427.3	2439.8	2435.2	2456.3	2440.6	2416.4	2424.2	2389.0	2338.2
25°	2409.4	2381.2	2379.6	2384.3	2377.3	2367.9	2353.8	2317.1	2314.7	2303.8	2280.3
27.5°	2323.3	2324.9	2329.6	2315.5	2290.5	2271.7	2250.6	2232.6	2239.7	2227.1	2195.1
30°	2263.9	2263.1	2235.0	2222.5	2176.3	2177.1	2171.6	2160.7	2153.6	2154.4	2134.1
32.5°	2179.4	2155.2	2123.1	2107.5	2103.6	2089.5	2078.6	2080.9	2086.4	2066.8	2087.9
35°	2092.6	2042.6	2037.9	2024.6	2012.1	2002.7	2006.6	1991.0	1990.2	1987.9	1815.8
37.5°	1976.1	1951.9	1949.5	1935.5	1926.9	1924.5	1909.7	1912.0	1919.0	1931.5	1548.4
40°	1879.9	1858.0	1852.6	1851.8	1833.0	1831.5	1835.4	1850.2	1860.4	1782.2	1475.6
42.5°	1776.7	1778.3	1761.1	1750.1	1752.5	1759.5	1778.3	1726.7	1496.0	1425.6	1349.0
45°	1688.3	1680.5	1671.1	1668.0	1688.3	1674.3	1467.8	1354.4	1327.1	1323.9	1108.9
47.5°	1596.1	1593.7	1589.8	1592.2	1476.4	1316.1	1269.2	1254.3	1259.0	1255.9	952.5
50°	1503.0	1506.1	1506.1	1315.3	1207.4	1180.8	1184.7	1198.0	1115.1	1040.8	887.6
52.5°	1422.5	1398.2	1198.0	1129.2	1105.0	1116.7	1088.5	984.5	909.5	865.7	821.1
55°	1273.1	1094.8	1050.2	1039.3	1047.9	943.9	879.8	812.5	793.0	788.3	762.5
57.5°	1001.7	965.8	969.7	925.9	826.6	767.9	742.1	732.7	724.1	717.9	62.6
60°	886.0	896.2	820.3	726.5	686.6	678.8	672.5	663.9	662.4	651.4	39.9
62.5°	810.9	713.2	647.5	624.0	614.7	612.3	600.6	596.7	506.7	69.6	29.7
65°	611.5	571.6	559.1	553.7	543.5	543.5	451.2	71.2	57.9	50.0	26.6
67.5°	498.9	495.8	489.5	482.5	328.4	68.8	60.2	52.4	45.4	39.9	23.5
70°	422.3	420.7	383.2	70.4	58.7	51.6	45.4	40.7	37.5	33.6	21.1
72.5°	346.4	70.4	59.4	51.6	44.6	40.7	36.8	32.8	29.7	27.4	17.2
75°	54.0	47.7	42.2	38.3	35.2	31.3	28.2	25.8	25.0	21.9	11.7
77.5°	39.1	33.6	30.5	27.4	24.2	21.9	18.8	16.4	14.9	12.5	8.6
80°	27.4	24.2	21.9	18.0	15.6	13.3	11.7	10.2	9.4	7.8	3.9
82.5°	15.6	13.3	11.7	9.4	8.6	7.0	6.3	5.5	5.5	3.9	3.9
85°	7.0	7.0	5.5	4.7	3.9	3.9	3.9	3.1	3.1	2.3	2.3
87.5°	3.1	3.1	3.1	3.1	3.1	2.3	2.3	2.3	2.3	2.3	1.6
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):

	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
0°	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6
2.5°	2687.0	2697.1	2716.7	2737.0	2714.3	2795.7	2789.4	2816.8	2831.6	2838.7	2855.1
5°	2926.3	2971.6	2986.5	2941.9	2916.1	2889.5	2829.3	2783.9	2789.4	2774.5	2720.6
7.5°	2921.6	2824.6	2694.0	2634.6	2629.9	2622.8	2641.6	2652.6	2654.1	2653.3	2651.8
10°	2674.4	2624.4	2615.8	2608.0	2611.1	2582.2	2568.9	2531.3	2551.7	2540.7	2544.6
12.5°	2599.4	2587.6	2541.5	2477.4	2515.7	2486.8	2470.3	2481.3	2468.8	2457.1	2453.1
15°	2554.8	2478.9	2453.1	2437.5	2426.6	2420.3	2425.8	2413.3	2409.4	2407.0	2412.5
17.5°	2462.5	2432.0	2403.9	2362.4	2363.2	2360.9	2376.5	2400.0	2401.5	2281.1	2172.4
20°	2389.8	2364.8	2328.8	2303.0	2338.2	2275.6	2034.0	1919.0	1901.0	1901.0	1904.2
22.5°	2331.9	2276.4	2278.8	2238.1	1908.9	1841.6	1843.2	1850.2	1818.2	1708.7	1696.9
25°	2252.9	2244.3	2073.1	1791.6	1793.9	1741.5	1661.0	1547.6	1424.8	1424.8	1404.5
27.5°	2193.5	2011.3	1761.1	1749.3	1573.4	1462.3	1393.5	1289.5	1275.4	1262.2	1263.7
30°	2142.7	1701.6	1707.9	1462.3	1332.5	1240.3	1234.8	1217.6	1209.0	1206.6	1198.0
32.5°	1693.8	1657.1	1429.5	1244.9	1194.1	1179.3	1172.2	1152.7	1151.9	1137.0	1033.8
35°	1588.2	1454.5	1196.5	1146.4	1131.6	1117.5	1105.8	742.1	87.6	35.2	30.5
37.5°	1467.8	1215.2	1106.5	1083.9	1069.8	790.6	79.0	27.4	19.6	14.1	12.5
40°	1244.2	1085.4	1051.0	1026.0	423.1	27.4	17.2	13.3	7.8	7.0	6.3
42.5°	1049.4	1022.9	986.1	300.3	31.3	13.3	8.6	6.3	5.5	5.5	4.7
45°	982.2	958.7	397.3	29.7	19.6	6.3	5.5	5.5	4.7	3.1	3.1
47.5°	919.6	809.4	36.0	18.8	12.5	5.5	4.7	3.1	3.1	3.1	2.3
50°	853.2	44.6	25.0	14.1	7.8	3.1	3.1	3.1	3.1	2.3	2.3
52.5°	159.5	31.3	20.3	12.5	3.9	3.1	3.1	3.1	2.3	2.3	2.3
55°	37.5	25.0	18.8	10.9	3.1	3.1	3.1	2.3	2.3	2.3	1.6
57.5°	28.2	18.8	14.9	10.2	3.1	2.3	2.3	2.3	2.3	2.3	1.6
60°	23.5	13.3	11.7	9.4	2.3	2.3	2.3	2.3	2.3	2.3	1.6
62.5°	16.4	10.9	8.6	7.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3
65°	13.3	8.6	7.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
67.5°	11.7	7.0	4.7	1.6	2.3	2.3	2.3	2.3	2.3	2.3	2.3
70°	9.4	2.3	2.3	1.6	2.3	2.3	2.3	2.3	2.3	2.3	2.3
72.5°	7.8	2.3	1.6	1.6	2.3	2.3	2.3	2.3	2.3	2.3	2.3
75°	7.8	3.9	1.6	1.6	2.3	2.3	3.1	3.1	2.3	2.3	2.3
77.5°	5.5	3.9	1.6	1.6	2.3	2.3	3.1	3.1	2.3	2.3	2.3
80°	3.1	3.9	1.6	2.3	2.3	4.7	5.5	3.1	2.3	2.3	2.3
82.5°	3.1	3.9	4.7	4.7	2.3	3.9	4.7	3.9	3.1	2.3	2.3
85°	3.1	2.3	3.1	3.9	2.3	3.9	3.9	3.1	3.1	2.3	2.3
87.5°	1.6	2.3	2.3	3.1	3.1	3.1	3.9	3.1	3.1	3.1	2.3
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: P1213704

CATALOG NUMBER: 2SNLED-LD5-43HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6
2.5°	2862.9	2866.0	2816.8	2799.6	2814.4	2811.3	2798.0	2748.7	2743.3	2710.4	2662.7
5°	2736.2	2757.3	2731.5	2776.1	2755.0	2776.1	2840.2	2870.0	2918.4	2948.2	2959.1
7.5°	2647.9	2652.6	2652.6	2656.5	2660.4	2661.2	2656.5	2653.3	2640.0	2623.6	2653.3
10°	2540.7	2546.2	2555.6	2554.0	2553.2	2569.7	2573.6	2607.2	2605.6	2611.9	2634.6
12.5°	2485.2	2443.0	2481.3	2471.1	2485.2	2463.3	2504.0	2496.9	2499.3	2518.0	2566.5
15°	2392.9	2406.2	2415.6	2415.6	2421.1	2416.4	2411.7	2443.8	2463.3	2464.1	2461.0
17.5°	2215.4	2114.5	2217.8	2191.2	2403.1	2408.6	2390.6	2375.7	2375.7	2387.5	2412.5
20°	1901.8	1904.2	1905.0	1915.1	1927.6	1926.9	1927.6	2235.7	2382.0	2348.4	2325.7
22.5°	1667.2	1638.3	1692.3	1688.3	1755.6	1829.9	1901.0	1894.0	1898.7	2116.1	2311.6
25°	1336.4	1374.0	1343.5	1356.8	1432.6	1521.0	1575.7	1718.8	1874.5	1863.5	1914.3
27.5°	1258.2	1248.1	1262.2	1262.2	1272.3	1284.0	1314.5	1395.1	1533.5	1679.0	1816.6
30°	1184.0	1192.6	1194.1	1208.2	1216.0	1223.8	1228.5	1259.0	1290.3	1391.2	1560.9
32.5°	889.1	779.7	1026.0	1092.5	1148.8	1162.1	1171.4	1184.0	1206.6	1221.5	1306.7
35°	25.8	25.8	27.4	31.3	39.9	269.0	1024.4	1129.2	1144.1	1162.8	1178.5
37.5°	12.5	9.4	10.9	11.7	14.1	19.6	28.2	87.6	975.2	1102.6	1119.8
40°	5.5	5.5	5.5	5.5	6.3	7.8	11.7	19.6	29.7	784.3	1058.0
42.5°	4.7	4.7	4.7	4.7	4.7	4.7	5.5	7.0	14.1	33.6	555.2
45°	3.1	3.1	2.3	3.1	3.1	3.9	4.7	4.7	6.3	21.1	38.3
47.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.9	4.7	14.1	20.3
50°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	10.9	14.1
52.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	4.7	12.5
55°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.3	2.3	3.1	10.9
57.5°	1.6	1.6	1.6	1.6	1.6	2.3	1.6	1.6	2.3	2.3	10.2
60°	1.6	1.6	1.6	1.6	1.6	2.3	2.3	2.3	2.3	2.3	9.4
62.5°	2.3	2.3	1.6	2.3	1.6	1.6	2.3	2.3	2.3	2.3	6.3
65°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	1.6	2.3
67.5°	2.3	2.3	2.3	2.3	1.6	2.3	1.6	2.3	2.3	1.6	1.6
70°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	1.6	1.6	1.6	1.6
72.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	1.6	1.6	1.6	1.6
75°	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.1	1.6	1.6	1.6
77.5°	2.3	2.3	2.3	2.3	2.3	2.3	3.9	4.7	3.9	3.9	1.6
80°	2.3	2.3	2.3	2.3	2.3	2.3	3.9	3.9	3.9	3.9	5.5
82.5°	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.1	3.1	3.1	3.9
85°	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.1	3.1	2.3	3.1
87.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.1	2.3	2.3	2.3
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: P1213704

CATALOG NUMBER: 2SNLED-LD5-43HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6
2.5°	2666.6	2640.0	2631.4	2613.5	2611.9	2613.5	2609.5	2604.1	2607.2	2601.7	2597.0
5°	2965.4	2894.2	2848.1	2786.3	2701.0	2682.3	2677.6	2651.0	2641.6	2638.5	2626.0
7.5°	2723.7	2853.5	2931.7	2958.3	2858.2	2834.8	2807.4	2785.5	2764.4	2724.5	2700.3
10°	2616.6	2622.8	2697.9	2785.5	2927.8	2947.4	2962.2	2914.5	2901.2	2799.6	2777.7
12.5°	2591.6	2592.3	2600.9	2654.1	2765.9	2778.5	2830.8	2859.0	2893.4	2913.0	2897.3
15°	2477.4	2540.7	2587.6	2592.3	2602.5	2624.4	2640.0	2737.8	2779.2	2890.3	2884.0
17.5°	2424.2	2444.5	2512.6	2568.1	2558.7	2550.9	2563.4	2576.7	2616.6	2727.6	2726.1
20°	2335.8	2400.7	2437.5	2495.4	2547.8	2550.1	2536.0	2528.2	2512.6	2530.6	2547.0
22.5°	2298.3	2308.5	2377.3	2418.0	2477.4	2498.5	2501.6	2502.4	2493.8	2484.4	2479.7
25°	2294.4	2262.3	2297.5	2348.4	2392.1	2414.8	2440.6	2449.2	2446.1	2446.1	2441.4
27.5°	1877.6	2252.2	2233.4	2267.0	2320.2	2335.8	2349.1	2375.7	2392.1	2403.9	2409.4
30°	1788.4	1855.7	2183.4	2188.0	2242.0	2240.4	2255.3	2277.2	2298.3	2325.7	2332.7
32.5°	1582.0	1747.0	1998.8	2109.1	2165.4	2170.8	2178.7	2184.9	2204.5	2235.0	2261.6
35°	1267.6	1591.4	1712.6	2071.5	2081.7	2092.6	2097.3	2112.2	2118.4	2131.0	2154.4
37.5°	1147.2	1315.3	1643.0	1791.6	1985.5	1994.9	2019.9	2026.2	2036.3	2046.5	2064.5
40°	1077.6	1123.7	1367.7	1600.0	1908.1	1914.3	1922.9	1938.6	1939.4	1951.1	1967.5
42.5°	1022.1	1051.8	1123.0	1528.0	1853.3	1852.6	1832.2	1842.4	1847.1	1859.6	1882.3
45°	816.4	986.9	1032.2	1248.1	1475.6	1582.0	1786.1	1752.5	1751.7	1756.4	1780.6
47.5°	41.4	928.2	960.3	1029.9	1393.5	1397.4	1424.0	1647.7	1682.1	1671.1	1673.5
50°	28.2	64.1	894.6	926.7	1201.2	1298.1	1317.7	1327.8	1456.9	1600.8	1577.3
52.5°	21.9	36.8	548.2	860.2	975.9	1047.1	1173.0	1244.9	1252.8	1310.6	1506.9
55°	19.6	28.2	59.4	793.7	829.7	845.3	918.9	1044.8	1146.4	1176.9	1179.3
57.5°	17.2	25.8	40.7	358.9	754.6	757.8	770.3	814.1	905.6	989.2	1083.9
60°	15.6	22.7	32.1	61.8	685.8	693.6	696.0	707.7	718.7	775.7	884.4
62.5°	9.4	18.0	28.2	44.6	542.7	623.3	622.5	630.3	640.5	646.7	668.6
65°	7.8	14.1	24.2	37.5	66.5	82.9	503.6	559.9	566.2	574.8	578.7
67.5°	7.0	12.5	18.0	29.7	50.0	57.1	65.7	81.3	444.2	500.5	508.3
70°	6.3	8.6	14.9	25.0	40.7	43.8	49.3	56.3	66.5	82.1	401.9
72.5°	3.9	6.3	10.2	18.0	31.3	35.2	38.3	43.0	47.7	57.1	65.7
75°	1.6	4.7	8.6	13.3	24.2	26.6	28.9	32.1	36.0	42.2	46.9
77.5°	1.6	3.9	7.0	9.4	15.6	18.0	21.1	23.5	26.6	29.7	34.4
80°	5.5	3.1	4.7	7.0	10.9	11.7	13.3	14.9	17.2	19.6	22.7
82.5°	3.9	4.7	5.5	4.7	5.5	7.0	7.8	9.4	10.2	11.7	12.5
85°	3.1	3.1	3.9	3.9	3.9	3.9	3.9	3.9	4.7	5.5	7.0
87.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.1
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: P1213704

CATALOG NUMBER: 2SNLED-LD5-43HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6
2.5°	2597.0	2595.5	2590.8	2590.8	2590.0	2593.1	2595.5	2597.8	2597.0	2601.7	2597.0
5°	2616.6	2612.7	2605.6	2599.4	2597.0	2598.6	2596.2	2598.6	2595.5	2599.4	2592.3
7.5°	2670.5	2657.2	2629.9	2618.9	2604.9	2604.1	2597.0	2595.5	2590.8	2590.8	2582.2
10°	2765.9	2701.8	2694.0	2661.2	2649.4	2592.3	2604.9	2583.7	2581.4	2571.2	2567.3
12.5°	2844.1	2794.1	2779.2	2750.3	2717.5	2601.7	2627.5	2582.2	2579.8	2559.5	2538.4
15°	2845.7	2874.6	2834.0	2754.2	2747.2	2667.4	2615.0	2599.4	2579.0	2518.0	2528.2
17.5°	2754.2	2820.7	2840.2	2823.0	2773.0	2719.0	2645.5	2614.2	2553.2	2525.9	2507.1
20°	2605.6	2672.9	2756.6	2762.0	2793.3	2755.0	2658.8	2608.0	2534.5	2486.8	2471.1
22.5°	2487.6	2536.8	2633.0	2677.6	2715.9	2729.2	2668.2	2593.1	2501.6	2455.5	2446.1
25°	2425.0	2435.9	2464.9	2517.3	2601.7	2662.7	2671.3	2591.6	2543.9	2443.0	2389.8
27.5°	2402.3	2392.9	2381.2	2407.8	2471.1	2545.4	2594.7	2608.0	2489.1	2392.9	2339.8
30°	2344.4	2349.9	2331.9	2322.5	2364.0	2440.6	2528.2	2550.1	2458.6	2359.3	2298.3
32.5°	2273.3	2282.7	2285.8	2269.4	2260.8	2313.9	2408.6	2461.0	2456.3	2311.6	2243.6
35°	2184.1	2210.7	2217.8	2218.5	2204.5	2195.9	2250.6	2359.3	2400.7	2289.7	2191.2
37.5°	2090.3	2098.1	2136.4	2146.6	2146.6	2120.8	2161.5	2248.3	2306.1	2240.4	2127.0
40°	1973.0	1998.0	2034.0	2052.0	2070.0	2072.3	2049.6	2110.6	2206.0	2189.6	2066.8
42.5°	1887.8	1904.2	1926.1	1950.3	1987.1	1996.5	1973.0	1983.9	2083.3	2126.3	1988.6
45°	1788.4	1810.3	1816.6	1843.2	1881.5	1908.9	1908.1	1885.4	1965.2	2018.3	1931.5
47.5°	1686.8	1707.9	1718.8	1732.1	1760.3	1795.5	1815.0	1804.9	1820.5	1924.5	1855.7
50°	1582.0	1593.7	1615.6	1630.5	1649.2	1669.6	1716.5	1725.9	1704.0	1786.9	1772.0
52.5°	1482.7	1486.6	1501.4	1516.3	1541.3	1556.2	1593.7	1621.9	1620.3	1644.6	1679.0
55°	1405.3	1388.1	1391.2	1402.9	1419.3	1442.0	1463.1	1506.9	1521.8	1526.5	1581.2
57.5°	1097.9	1274.7	1290.3	1289.5	1309.1	1319.2	1338.8	1367.7	1420.9	1409.2	1470.2
60°	997.8	1017.4	1165.2	1182.4	1189.4	1198.8	1222.3	1248.9	1288.0	1313.0	1339.6
62.5°	760.9	879.8	924.3	1054.9	1075.3	1080.7	1096.4	1108.9	1149.5	1206.6	1195.7
65°	588.8	639.7	775.7	828.9	940.0	954.0	975.9	989.2	1001.0	1066.7	1069.8
67.5°	509.1	516.9	553.7	656.1	726.5	835.2	848.5	860.2	878.2	925.1	954.0
70°	434.8	444.2	454.3	462.9	554.4	626.4	727.3	731.2	742.9	774.2	839.9
72.5°	82.1	371.5	377.7	383.2	393.3	441.0	537.2	615.4	620.1	635.0	695.2
75°	55.5	64.9	89.1	306.5	316.7	319.8	336.3	434.0	506.0	509.1	535.7
77.5°	39.9	44.6	54.0	64.1	163.4	245.5	249.5	267.4	341.7	395.7	400.4
80°	27.4	30.5	36.0	40.7	50.0	65.7	181.4	186.9	196.3	270.6	284.6
82.5°	15.6	18.0	21.1	25.8	29.7	37.5	48.5	62.6	127.5	136.1	180.6
85°	7.8	8.6	10.2	12.5	14.9	18.0	24.2	29.7	40.7	73.5	75.9
87.5°	3.9	3.9	3.9	3.9	6.3	7.0	8.6	10.9	14.1	21.1	27.4
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: P1213704

CATALOG NUMBER: 2SNLED-LD5-43HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6
2.5°	2597.8	2608.8	2618.1	2620.5	2620.5	2622.1	2624.4	2626.0	2627.5	2629.1	2627.5
5°	2593.1	2604.9	2612.7	2615.0	2615.0	2619.7	2623.6	2628.3	2630.7	2630.7	2629.1
7.5°	2581.4	2590.0	2600.2	2606.4	2607.2	2615.0	2622.1	2621.3	2624.4	2626.0	2629.9
10°	2565.8	2565.8	2583.0	2587.6	2591.6	2600.2	2602.5	2607.2	2618.1	2619.7	2629.9
12.5°	2557.9	2550.1	2570.4	2572.8	2586.1	2575.1	2589.2	2593.9	2583.0	2597.8	2578.3
15°	2522.7	2532.1	2529.0	2536.0	2559.5	2547.0	2585.3	2572.8	2600.9	2567.3	2626.7
17.5°	2493.8	2492.2	2504.8	2511.0	2515.7	2542.3	2552.5	2566.5	2577.5	2568.1	2591.6
20°	2472.7	2460.2	2469.6	2476.6	2493.0	2513.4	2519.6	2498.5	2535.3	2597.8	2612.7
22.5°	2432.8	2424.2	2435.2	2435.2	2460.2	2457.1	2480.5	2467.2	2501.6	2574.4	2650.2
25°	2378.9	2379.6	2391.4	2405.4	2410.1	2445.3	2457.8	2475.0	2518.0	2604.9	2651.0
27.5°	2324.1	2319.4	2326.5	2355.4	2379.6	2405.4	2409.4	2468.0	2526.7	2586.1	2626.7
30°	2269.4	2264.7	2269.4	2290.5	2319.4	2336.6	2379.6	2457.8	2512.6	2553.2	2591.6
32.5°	2210.7	2206.0	2217.0	2232.6	2283.4	2285.8	2371.0	2444.5	2487.6	2517.3	2510.2
35°	2148.2	2141.9	2152.1	2176.3	2223.2	2240.4	2329.6	2384.3	2432.8	2446.9	2414.0
37.5°	2073.1	2062.1	2074.7	2108.3	2157.5	2207.6	2281.9	2345.2	2371.0	2333.5	2294.4
40°	1994.9	1987.1	2009.0	2026.2	2084.0	2153.6	2238.9	2283.4	2267.0	2224.0	2181.0
42.5°	1925.3	1908.9	1928.4	1961.3	2027.0	2105.9	2174.7	2199.8	2160.7	2097.3	2047.3
45°	1840.1	1820.5	1844.0	1887.8	1958.1	2048.1	2102.0	2093.4	2027.0	1972.2	1903.4
47.5°	1750.9	1727.4	1750.9	1803.3	1882.3	1977.7	2016.8	1977.7	1894.0	1825.2	1769.7
50°	1663.3	1635.9	1658.6	1737.6	1815.0	1888.5	1887.8	1811.9	1761.9	1686.8	1638.3
52.5°	1576.5	1537.4	1560.1	1646.1	1723.5	1807.2	1745.4	1675.0	1614.8	1549.1	1533.5
55°	1469.4	1427.2	1457.7	1582.8	1642.2	1691.5	1592.9	1531.2	1471.7	1438.9	1419.3
57.5°	1367.7	1321.6	1348.2	1496.0	1539.8	1552.3	1461.6	1374.0	1338.8	1327.8	1299.7
60°	1262.9	1210.5	1235.6	1406.0	1436.5	1385.7	1296.6	1228.5	1221.5	1199.6	1177.7
62.5°	1162.8	1105.0	1120.6	1294.2	1308.3	1216.0	1133.9	1115.9	1098.7	1076.8	1065.1
65°	1047.9	987.7	1009.6	1175.4	1162.1	1043.2	997.1	993.1	970.5	952.5	969.7
67.5°	942.3	871.2	901.6	1045.5	985.3	888.4	869.6	860.2	842.2	852.4	671.7
70°	826.6	749.2	790.6	905.6	816.4	752.3	745.2	731.2	732.0	581.8	490.3
72.5°	697.5	630.3	690.5	752.3	645.9	627.2	617.0	615.4	496.6	403.5	380.8
75°	584.2	516.1	581.0	604.5	514.6	502.0	501.3	414.5	326.1	311.2	304.2
77.5°	455.9	403.5	465.3	430.1	394.9	380.8	341.7	256.5	245.5	235.4	88.4
80°	307.3	311.2	347.2	296.4	281.5	240.1	189.2	181.4	156.4	62.6	49.3
82.5°	186.9	234.6	221.3	185.3	181.4	130.6	119.6	61.0	45.4	36.0	31.3
85°	97.0	118.9	114.2	100.9	75.1	67.3	37.5	28.9	23.5	18.0	14.9
87.5°	32.8	43.8	42.2	33.6	25.8	20.3	13.3	10.9	7.8	6.3	5.5
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: P1213704

CATALOG NUMBER: 2SNLED-LD5-43HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6
2.5°	2626.0	2626.0	2624.4	2626.0	2626.7	2625.2	2625.2	2626.7	2627.5	2628.3	2632.2
5°	2629.9	2631.4	2633.8	2638.5	2639.3	2648.6	2652.6	2654.9	2657.2	2658.0	2652.6
7.5°	2638.5	2644.0	2648.6	2647.9	2642.4	2627.5	2622.8	2618.9	2626.0	2644.0	2665.1
10°	2646.3	2621.3	2574.4	2638.5	2618.9	2636.9	2690.1	2701.8	2737.8	2788.6	2803.5
12.5°	2592.3	2661.2	2676.0	2604.1	2737.0	2687.7	2746.4	2798.0	2812.9	2864.5	2833.2
15°	2650.2	2683.8	2706.5	2778.5	2770.6	2812.9	2829.3	2819.1	2821.5	2834.8	2870.0
17.5°	2649.4	2716.7	2731.5	2780.0	2812.9	2813.6	2809.0	2804.3	2816.8	2826.9	2805.8
20°	2694.8	2716.7	2745.6	2765.2	2771.4	2779.2	2794.1	2782.4	2758.9	2736.2	2726.8
22.5°	2672.1	2721.4	2746.4	2749.5	2745.6	2721.4	2699.5	2666.6	2655.7	2644.0	2647.9
25°	2676.8	2699.5	2696.3	2683.8	2667.4	2622.1	2611.1	2597.0	2575.9	2525.1	2478.9
27.5°	2643.2	2631.4	2617.4	2586.9	2557.1	2532.9	2505.5	2460.2	2422.6	2367.9	2347.6
30°	2586.9	2539.9	2505.5	2487.6	2458.6	2418.0	2376.5	2321.0	2273.3	2262.3	2252.2
32.5°	2478.9	2432.8	2404.7	2360.9	2311.6	2263.1	2215.4	2193.5	2183.4	2184.9	2175.5
35°	2368.7	2328.0	2285.8	2220.1	2183.4	2134.9	2117.7	2113.0	2103.6	2093.4	2082.5
37.5°	2251.4	2203.7	2140.3	2101.2	2064.5	2044.9	2036.3	2029.3	2012.9	1994.9	1982.4
40°	2138.0	2052.0	2016.8	1978.5	1967.5	1958.9	1946.4	1929.2	1906.5	1903.4	1897.9
42.5°	1986.3	1924.5	1894.0	1886.2	1872.9	1858.0	1847.1	1828.3	1818.9	1825.2	1829.9
45°	1842.4	1811.1	1801.0	1791.6	1766.5	1745.4	1738.4	1732.1	1740.0	1774.4	1692.3
47.5°	1725.9	1713.4	1700.9	1685.2	1661.8	1646.1	1653.2	1659.4	1666.4	1413.9	1290.3
50°	1625.0	1607.8	1588.2	1571.0	1557.0	1555.4	1592.2	1481.9	1241.0	1234.8	1109.7
52.5°	1514.7	1488.9	1477.2	1467.0	1473.3	1496.8	1238.7	1149.5	1102.6	958.0	893.8
55°	1395.9	1373.2	1373.2	1382.6	1349.0	1093.2	1079.9	933.7	845.3	820.3	810.2
57.5°	1277.0	1274.7	1288.0	1177.7	992.4	951.7	800.0	767.9	753.9	750.7	734.3
60°	1168.3	1190.2	996.3	916.5	796.9	718.7	696.8	692.9	678.0	672.5	657.7
62.5°	1081.5	897.0	835.2	681.9	642.0	631.9	620.1	614.7	601.4	531.0	155.6
65°	781.2	738.2	599.0	573.2	570.1	555.2	550.5	495.0	116.5	78.2	66.5
67.5°	589.6	523.2	505.2	500.5	485.6	455.9	135.3	77.4	66.5	57.9	50.8
70°	452.8	441.0	427.8	416.8	122.8	76.6	66.5	56.3	48.5	43.0	39.1
72.5°	370.7	362.8	211.1	80.5	65.7	55.5	49.3	43.0	37.5	34.4	31.3
75°	290.1	80.5	66.5	55.5	47.7	40.7	36.0	32.1	28.9	26.6	24.2
77.5°	65.7	53.2	45.4	38.3	34.4	30.5	27.4	23.5	21.1	18.8	15.6
80°	40.7	35.2	29.7	27.4	23.5	19.6	17.2	15.6	12.5	11.7	10.2
82.5°	26.6	21.1	18.8	15.6	12.5	11.7	10.2	7.8	7.0	6.3	5.5
85°	11.7	10.2	8.6	7.0	5.5	4.7	3.9	3.1	3.1	3.1	3.1
87.5°	3.9	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	1.6	1.6
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: P1213704

CATALOG NUMBER: 2SNLED-LD5-43HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6
2.5°	2633.8	2647.9	2661.2	2657.2	2643.2	2621.3	2615.0	2606.4	2612.7	2626.0	2631.4
5°	2652.6	2644.7	2672.9	2714.3	2781.6	2787.8	2834.8	2845.7	2883.2	2906.7	2905.9
7.5°	2679.1	2790.2	2836.3	2886.4	2909.1	2903.6	2910.6	2905.1	2896.5	2892.6	2887.9
10°	2814.4	2898.9	2916.1	2916.1	2880.9	2833.2	2812.9	2777.7	2707.3	2708.9	2697.1
12.5°	2893.4	2923.1	2882.5	2848.1	2706.5	2651.8	2592.3	2564.2	2547.8	2522.7	2532.1
15°	2852.0	2809.7	2785.5	2674.4	2587.6	2489.1	2490.7	2473.5	2455.5	2457.1	2445.3
17.5°	2791.0	2757.3	2585.3	2508.7	2466.4	2428.1	2421.1	2398.4	2386.7	2382.8	2382.0
20°	2707.3	2586.1	2457.8	2439.1	2388.2	2344.4	2337.4	2344.4	2380.4	2316.3	2098.9
22.5°	2609.5	2435.2	2397.6	2344.4	2310.0	2292.8	2335.8	2140.3	1844.7	1880.7	1842.4
25°	2443.8	2367.9	2303.8	2263.1	2259.2	2153.6	1794.7	1757.2	1567.1	1465.5	1351.3
27.5°	2322.5	2289.7	2222.5	2215.4	2164.6	1761.1	1574.2	1367.7	1291.9	1280.1	1255.1
30°	2249.0	2202.1	2161.5	1983.9	1727.4	1417.8	1262.9	1234.0	1220.7	1206.6	1184.7
32.5°	2160.7	2116.1	2135.6	1668.0	1377.1	1220.7	1189.4	1168.3	1144.1	1134.7	1055.7
35°	2070.7	2050.4	1668.8	1402.1	1184.0	1146.4	1123.0	1101.1	875.8	211.9	71.9
37.5°	1974.6	1969.9	1499.9	1163.6	1108.9	1073.7	1007.2	208.0	49.3	33.6	25.0
40°	1899.5	1500.7	1185.5	1090.9	1046.3	990.8	139.2	34.4	21.9	13.3	8.6
42.5°	1849.4	1349.7	1061.2	1023.6	926.7	102.4	35.2	14.9	8.6	7.0	5.5
45°	1425.6	1065.9	991.6	952.5	117.3	35.2	20.3	7.0	5.5	4.7	3.1
47.5°	1315.3	968.1	924.3	208.0	39.1	18.8	14.1	4.7	3.1	3.1	3.1
50°	996.3	894.6	735.9	50.8	25.0	13.3	10.2	3.1	3.1	3.1	2.3
52.5°	873.5	825.8	79.0	33.6	19.6	10.2	6.3	2.3	2.3	2.3	2.3
55°	798.4	523.9	46.9	25.8	16.4	9.4	3.9	2.3	2.3	2.3	1.6
57.5°	730.4	70.4	34.4	21.9	14.9	8.6	2.3	2.3	2.3	2.3	1.6
60°	619.3	50.8	28.2	19.6	14.1	7.8	2.3	2.3	2.3	2.3	2.3
62.5°	80.5	39.9	24.2	17.2	10.2	6.3	1.6	2.3	2.3	2.3	2.3
65°	58.7	31.3	21.9	11.7	6.3	2.3	1.6	2.3	2.3	2.3	2.3
67.5°	45.4	25.8	16.4	10.2	5.5	1.6	1.6	2.3	2.3	2.3	2.3
70°	36.0	21.9	13.3	8.6	4.7	1.6	1.6	2.3	2.3	2.3	2.3
72.5°	28.2	15.6	9.4	4.7	3.1	1.6	1.6	2.3	2.3	2.3	2.3
75°	21.1	12.5	7.0	3.9	1.6	1.6	1.6	2.3	2.3	2.3	2.3
77.5°	14.1	7.8	5.5	3.1	3.1	3.1	3.9	3.9	2.3	2.3	2.3
80°	9.4	5.5	3.9	3.9	3.9	3.1	3.9	3.9	2.3	3.9	2.3
82.5°	4.7	3.9	3.9	3.1	3.1	2.3	3.1	3.1	3.1	3.1	2.3
85°	3.1	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.1	2.3
87.5°	1.6	1.6	1.6	1.6	2.3	2.3	2.3	2.3	3.1	3.1	2.3
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: P1213704

CATALOG NUMBER: 2SNLED-LD5-43HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6
2.5°	2624.4	2626.7	2620.5	2654.1	2636.9	2638.5	2645.5	2627.5	2631.4	2618.9	2610.3
5°	2909.1	2913.7	2918.4	2920.0	2923.1	2927.0	2922.3	2920.0	2915.3	2899.7	2883.2
7.5°	2864.5	2859.0	2856.7	2859.8	2865.3	2867.6	2863.7	2869.2	2889.5	2898.1	2903.6
10°	2629.9	2604.9	2622.1	2619.7	2600.2	2665.8	2647.9	2658.0	2665.1	2737.0	2780.8
12.5°	2518.0	2533.7	2504.0	2489.1	2508.7	2522.0	2535.3	2507.1	2546.2	2528.2	2586.1
15°	2424.2	2414.8	2411.7	2412.5	2408.6	2427.3	2432.0	2438.3	2443.8	2468.0	2477.4
17.5°	2382.0	2397.6	2403.9	2408.6	2400.7	2392.1	2383.5	2371.0	2374.9	2368.7	2386.7
20°	1952.7	1900.3	1897.1	1927.6	1894.0	1912.8	1958.1	2261.6	2251.4	2369.5	2329.6
22.5°	1629.7	1580.4	1538.2	1501.4	1553.8	1575.7	1660.2	1755.6	1910.4	1886.2	2054.3
25°	1331.0	1313.0	1302.0	1296.6	1300.5	1298.9	1317.7	1362.2	1432.6	1598.4	1812.7
27.5°	1244.9	1236.3	1232.4	1219.9	1229.3	1226.2	1241.0	1250.4	1271.5	1288.0	1357.6
30°	1176.9	1166.7	1159.7	1146.4	1155.8	1156.6	1161.3	1185.5	1194.1	1208.2	1230.1
32.5°	430.1	253.4	237.7	226.0	247.1	322.2	565.4	988.5	1127.6	1138.6	1163.6
35°	42.2	35.2	31.3	31.3	32.1	35.2	46.9	123.6	226.0	873.5	1093.2
37.5°	16.4	14.1	11.7	10.9	11.7	13.3	18.0	23.5	32.1	66.5	296.4
40°	7.0	6.3	5.5	5.5	5.5	5.5	6.3	7.8	11.7	21.9	34.4
42.5°	4.7	3.9	3.9	3.9	3.9	3.9	3.9	3.9	5.5	7.0	14.1
45°	3.1	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.9	6.3
47.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.1
50°	2.3	2.3	2.3	2.3	1.6	2.3	1.6	2.3	2.3	2.3	2.3
52.5°	2.3	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.3	2.3
55°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.3
57.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
60°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
62.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.3	2.3	1.6
65°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.3	1.6
67.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
70°	2.3	2.3	1.6	2.3	1.6	1.6	2.3	2.3	2.3	1.6	1.6
72.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	4.7	4.7	3.1
75°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.9	4.7	3.9
77.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.9	3.9	3.9
80°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.1	3.1
82.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.1	3.1
85°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
87.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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: P1213704

CATALOG NUMBER: 2SNLED-LD5-43HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6
2.5°	2595.5	2594.7	2611.1	2623.6	2618.9	2623.6	2629.1	2629.9	2631.4	2625.2	2622.8
5°	2852.0	2827.7	2780.8	2747.2	2708.1	2636.9	2601.7	2605.6	2606.4	2604.1	2607.2
7.5°	2901.2	2898.9	2882.5	2875.4	2848.8	2798.0	2716.7	2702.6	2668.2	2646.3	2628.3
10°	2777.7	2834.0	2848.8	2873.9	2889.5	2880.1	2811.3	2801.1	2779.2	2754.2	2759.7
12.5°	2644.0	2690.1	2692.4	2828.5	2859.0	2862.1	2835.5	2849.6	2852.7	2796.4	2763.6
15°	2479.7	2501.6	2547.8	2674.4	2766.7	2824.6	2841.8	2849.6	2811.3	2809.0	2795.7
17.5°	2407.8	2421.9	2443.0	2514.1	2654.1	2739.4	2812.1	2806.6	2821.5	2810.5	2776.9
20°	2317.1	2328.8	2366.3	2402.3	2471.1	2584.5	2720.6	2730.8	2750.3	2748.0	2757.3
22.5°	2315.5	2274.1	2280.3	2308.5	2380.4	2482.1	2626.7	2660.4	2672.9	2681.5	2691.7
25°	1836.9	2166.1	2226.4	2244.3	2291.3	2350.7	2521.2	2533.7	2557.1	2595.5	2623.6
27.5°	1591.4	1815.0	2055.9	2181.0	2210.7	2260.0	2361.6	2380.4	2460.2	2469.6	2513.4
30°	1255.9	1428.7	1788.4	2089.5	2138.8	2173.2	2245.1	2282.7	2317.1	2354.6	2400.7
32.5°	1181.6	1209.0	1408.4	1729.0	2112.2	2086.4	2139.6	2162.2	2199.8	2232.6	2266.2
35°	1113.6	1132.3	1174.6	1416.2	1720.4	2015.2	2051.2	2066.1	2087.2	2112.2	2136.4
37.5°	1042.4	1070.6	1099.5	1164.4	1591.4	1958.9	1958.1	1975.3	1987.9	2009.0	2029.3
40°	189.2	983.0	1029.9	1072.1	1234.0	1562.4	1870.6	1878.4	1887.0	1900.3	1921.4
42.5°	30.5	164.2	965.0	1005.7	1051.8	1399.0	1830.7	1798.6	1793.1	1802.5	1821.3
45°	15.6	39.9	193.9	939.2	980.6	1115.9	1496.8	1743.1	1737.6	1719.6	1723.5
47.5°	11.7	25.0	47.7	324.5	918.1	958.0	1381.0	1366.2	1470.2	1669.6	1639.1
50°	10.2	17.2	28.2	66.5	810.9	882.1	1063.5	1242.6	1297.3	1304.4	1543.7
52.5°	9.4	11.7	20.3	43.0	170.5	815.6	864.9	927.5	1019.7	1217.6	1212.9
55°	8.6	10.9	17.2	28.9	59.4	735.1	785.9	797.6	817.2	911.8	1036.9
57.5°	4.7	10.2	16.4	25.0	44.6	134.5	713.2	722.6	738.2	742.1	786.7
60°	2.3	9.4	14.9	21.9	32.8	62.6	641.2	652.2	661.6	663.1	677.2
62.5°	1.6	8.6	12.5	20.3	27.4	44.6	151.7	309.7	588.8	588.8	605.3
65°	1.6	6.3	7.8	13.3	25.0	36.8	64.1	74.3	144.7	355.8	531.0
67.5°	1.6	2.3	7.0	10.9	18.8	28.2	46.9	54.7	65.7	75.1	139.2
70°	1.6	1.6	6.3	7.0	11.7	21.1	33.6	38.3	44.6	50.8	58.7
72.5°	1.6	1.6	5.5	5.5	7.8	14.1	25.8	28.2	32.1	36.0	41.4
75°	3.9	3.1	4.7	4.7	5.5	10.9	19.6	21.9	23.5	26.6	30.5
77.5°	3.9	3.9	3.9	3.9	3.9	7.0	12.5	14.1	16.4	18.0	21.1
80°	3.1	3.1	3.1	3.9	3.9	4.7	7.8	8.6	9.4	11.7	12.5
82.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.7	5.5	7.0
85°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	3.1	3.1	3.1	3.1
87.5°	2.3	2.3	2.3	1.6	1.6	2.3	2.3	2.3	2.3	2.3	2.3
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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CATALOG NUMBER: 2SNLED-LD5-43HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6	2605.6
2.5°	2622.1	2617.4	2613.5	2615.8	2608.8	2605.6	2608.0	2608.8	2610.3	2614.2	2615.0
5°	2615.0	2613.5	2620.5	2624.4	2622.8	2624.4	2624.4	2621.3	2616.6	2619.7	2612.7
7.5°	2610.3	2600.2	2592.3	2593.9	2586.1	2595.5	2604.1	2616.6	2620.5	2620.5	2612.7
10°	2690.9	2679.9	2636.1	2606.4	2586.9	2569.7	2610.3	2568.9	2588.4	2514.1	2599.4
12.5°	2757.3	2772.2	2752.6	2671.3	2657.2	2605.6	2635.3	2584.5	2569.7	2484.4	2511.8
15°	2783.9	2755.8	2749.5	2726.8	2696.3	2681.5	2601.7	2593.1	2568.9	2578.3	2542.3
17.5°	2760.5	2774.5	2755.8	2740.9	2709.6	2674.4	2626.7	2584.5	2550.9	2475.8	2539.2
20°	2737.8	2756.6	2700.3	2709.6	2712.8	2672.1	2647.1	2611.9	2569.7	2499.3	2444.5
22.5°	2700.3	2687.0	2691.7	2677.6	2665.8	2671.3	2636.9	2612.7	2541.5	2509.4	2435.2
25°	2639.3	2634.6	2647.1	2645.5	2617.4	2608.0	2590.8	2565.0	2536.8	2485.2	2424.2
27.5°	2539.9	2564.2	2586.1	2596.2	2581.4	2556.4	2547.0	2532.1	2512.6	2460.2	2414.8
30°	2435.2	2462.5	2487.6	2509.4	2522.7	2511.8	2503.2	2494.6	2464.9	2430.5	2379.6
32.5°	2315.5	2351.5	2385.9	2412.5	2441.4	2450.0	2443.8	2436.7	2411.7	2380.4	2339.8
35°	2177.1	2226.4	2276.4	2324.1	2336.6	2357.0	2377.3	2365.6	2352.3	2321.0	2283.4
37.5°	2059.8	2095.0	2131.0	2191.2	2235.0	2260.8	2296.7	2301.4	2278.8	2263.9	2214.6
40°	1938.6	1970.6	2023.0	2058.2	2118.4	2148.2	2186.5	2203.7	2198.2	2189.6	2146.6
42.5°	1843.2	1858.8	1893.2	1924.5	1983.9	2044.9	2078.6	2097.3	2116.9	2109.8	2087.9
45°	1741.5	1755.6	1767.3	1794.7	1852.6	1906.5	1948.0	1976.1	2011.3	2027.7	2001.1
47.5°	1640.6	1644.6	1658.6	1681.3	1715.7	1757.2	1826.8	1869.0	1901.8	1933.9	1916.7
50°	1563.2	1549.1	1551.5	1565.6	1593.7	1634.4	1684.4	1743.9	1781.4	1820.5	1824.4
52.5°	1366.2	1480.3	1453.0	1460.8	1475.6	1495.2	1547.6	1606.2	1652.4	1686.0	1719.6
55°	1146.4	1169.1	1388.8	1357.6	1366.9	1384.1	1408.4	1467.0	1511.6	1558.5	1605.5
57.5°	889.1	1058.0	1066.7	1270.0	1265.3	1266.8	1287.2	1320.8	1365.4	1424.0	1463.9
60°	691.3	762.5	900.9	971.2	1149.5	1155.8	1167.5	1187.1	1225.4	1280.9	1344.3
62.5°	610.0	619.3	668.6	774.2	889.9	1029.9	1054.9	1058.0	1075.3	1130.8	1204.3
65°	535.7	541.9	556.8	567.7	664.7	800.0	920.4	940.0	950.9	983.8	1046.3
67.5°	369.1	466.9	480.1	488.0	497.4	559.9	709.3	808.6	821.1	850.0	904.8
70°	71.2	147.8	404.3	412.9	417.6	431.7	455.9	613.9	696.8	724.1	749.2
72.5°	48.5	57.1	68.8	162.7	344.1	351.9	357.4	377.7	517.7	597.5	610.7
75°	35.2	39.1	46.1	57.1	70.4	229.1	283.9	294.0	304.2	419.9	487.2
77.5°	25.0	28.2	31.3	36.8	43.0	55.5	79.8	219.7	229.9	235.4	332.4
80°	14.1	17.2	21.1	24.2	27.4	31.3	40.7	50.8	113.4	165.8	174.4
82.5°	7.8	9.4	10.9	13.3	14.9	18.8	22.7	27.4	36.0	53.2	112.6
85°	3.9	3.9	3.9	5.5	6.3	8.6	10.2	11.7	16.4	22.7	31.3
87.5°	2.3	2.3	3.1	3.1	3.1	3.9	3.9	3.9	4.7	7.0	10.2
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: P1213704

CATALOG NUMBER: 2SNLED-LD5-43HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	2605.6	2605.6	2605.6	2605.6	2605.6
2.5°	2615.8	2613.5	2613.5	2622.8	2620.5
5°	2611.1	2608.8	2608.0	2618.1	2613.5
7.5°	2607.2	2598.6	2596.2	2605.6	2601.7
10°	2591.6	2585.3	2589.2	2586.1	2584.5
12.5°	2565.0	2561.1	2544.6	2546.2	2559.5
15°	2517.3	2532.9	2504.8	2529.8	2535.3
17.5°	2429.7	2464.9	2492.2	2507.1	2509.4
20°	2468.8	2480.5	2466.4	2467.2	2476.6
22.5°	2418.0	2423.4	2427.3	2422.6	2443.0
25°	2336.6	2315.5	2360.9	2370.3	2403.1
27.5°	2311.6	2294.4	2315.5	2313.9	2341.3
30°	2291.3	2235.7	2245.1	2260.0	2293.6
32.5°	2262.3	2174.7	2165.4	2198.2	2235.7
35°	2211.5	2128.6	2106.7	2127.8	2184.1
37.5°	2168.5	2064.5	2020.7	2048.8	2122.4
40°	2104.4	2014.4	1946.4	1971.4	2058.2
42.5°	2027.7	1971.4	1866.6	1883.8	1983.2
45°	1950.3	1900.3	1789.2	1797.8	1915.9
47.5°	1871.3	1825.2	1708.7	1710.2	1829.9
50°	1793.9	1732.9	1636.7	1609.4	1738.4
52.5°	1693.0	1636.7	1564.0	1519.4	1651.6
55°	1597.6	1534.3	1481.1	1412.3	1553.1
57.5°	1504.6	1434.2	1398.2	1309.9	1441.2
60°	1377.1	1343.5	1290.3	1205.8	1340.4
62.5°	1246.5	1235.6	1181.6	1094.0	1216.0
65°	1094.0	1119.8	1064.3	989.2	1087.0
67.5°	950.1	996.3	935.3	889.1	962.6
70°	796.9	850.0	815.6	799.2	830.5
72.5°	645.9	697.5	700.7	688.9	699.1
75°	498.9	556.0	587.3	569.3	571.6
77.5°	378.5	405.9	440.3	454.3	451.2
80°	233.8	281.5	309.7	338.6	328.4
82.5°	118.1	158.0	192.4	223.7	208.8
85°	49.3	63.3	88.4	116.5	111.8
87.5°	14.9	25.0	26.6	37.5	35.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)