

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: P1213451

Luminaire Tested: 4SNLED-LD5-50SL-RM-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213451
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-LD5-50SL-RM-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

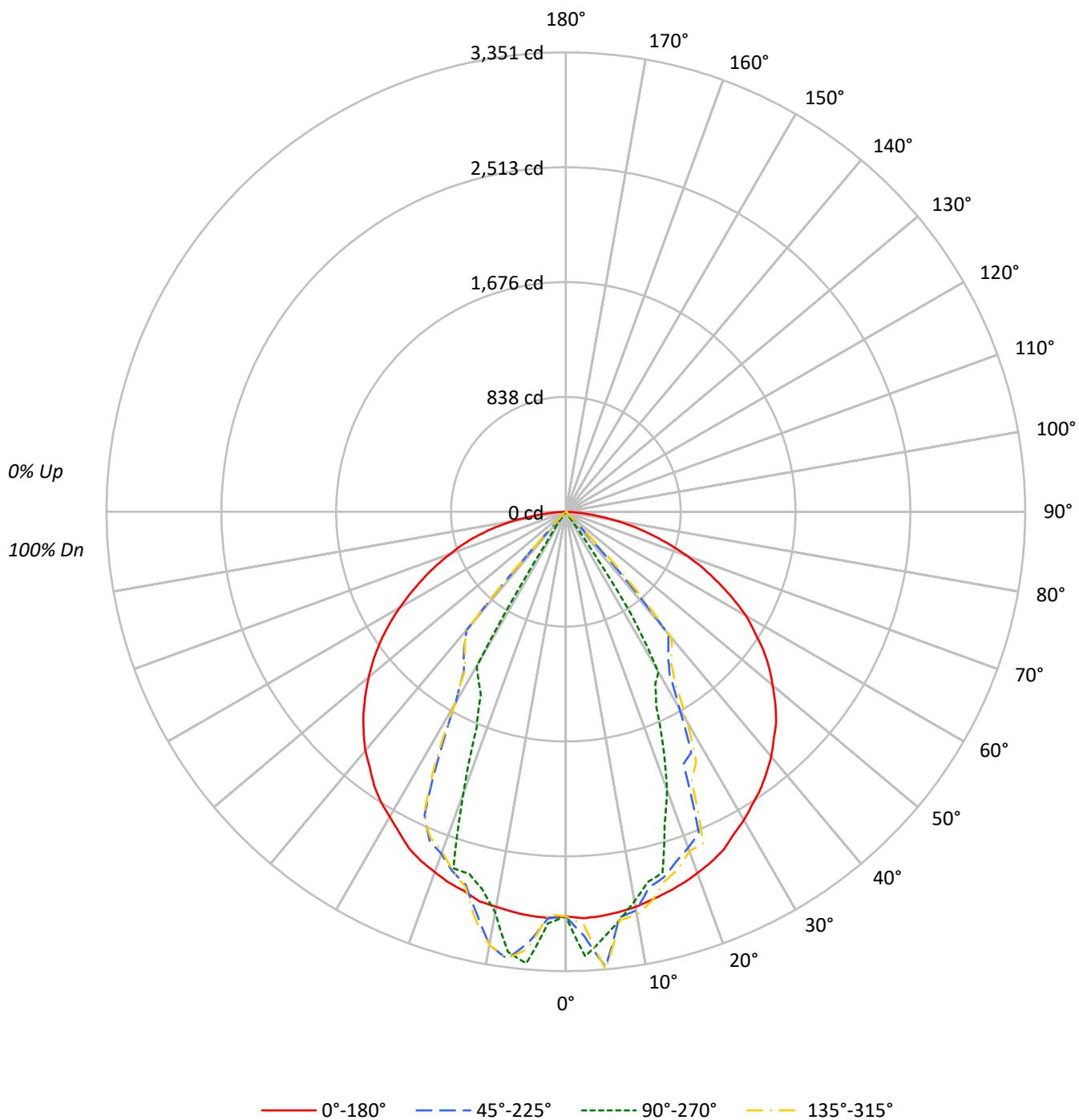
Lumens per Lamp: N/A
Luminaire Lumens: 4196.1 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 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°	23846	23846	23846	23846
5°	23944	24526	23937	25973
10°	23886	22193	23873	22834
15°	23821	20715	23762	20769
20°	23849	16316	23781	16517
25°	23918	11808	23801	11142
30°	23809	10358	23557	9957
35°	23880	228	23529	277
40°	23961	50	23388	50
45°	24046	29	23142	22
50°	23863	23	22767	23
55°	23722	17	22264	17
60°	23274	18	21454	18
65°	22060	29	20490	19
70°	20464	31	19483	31
75°	18102	35	18399	35
80°	14705	40	15544	40
85°	8649	47	8833	47

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2°

Vertical Angle: 45°

Luminance: 25964 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.1	7.1
10°-20°	807.5	19.2
20°-30°	1027.6	24.5
30°-40°	868.0	20.7
40°-50°	567.5	13.5
50°-60°	357.6	8.5
60°-70°	190.4	4.5
70°-80°	69.4	1.7
80°-90°	11.9	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°	2131.2	50.8
0°-40°	2999.2	71.5
0°-60°	3924.3	93.5
0°-90°	4196.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4196.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2951	2951	2951	2951	2951	
5°	2960	3123	2959	3307	2960	281
15°	2871	2725	2864	2732	2871	812
25°	2722	1556	2708	1468	2722	1252
35°	2474	29	2437	35	2474	1547
45°	2170	4	2088	3	2170	1669
55°	1759	2	1651	2	1759	1567
65°	1231	3	1143	2	1231	1219
75°	647	3	658	3	647	687
85°	127	3	129	3	127	160
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°	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9
2.5°	2967.8	2969.5	2970.4	2972.2	2974.9	2975.7	2977.5	2975.7	2975.7	2975.7	2975.7
5°	2959.8	2963.3	2966.0	2969.5	2975.7	2976.6	2983.7	2984.6	2988.1	2995.2	3000.5
7.5°	2946.5	2950.1	2955.4	2964.2	2973.1	2982.8	2995.2	3008.5	3027.1	3044.8	3067.0
10°	2927.0	2931.5	2937.7	2945.6	2989.0	2995.2	3022.7	3060.8	3071.4	3127.2	3168.8
12.5°	2898.7	2913.7	2929.7	2936.8	2978.4	3043.9	3136.0	3117.4	3097.1	3279.5	3276.9
15°	2871.2	2891.6	2883.6	2941.2	2979.3	3093.5	3054.6	3137.8	3290.1	3252.9	3254.7
17.5°	2842.0	2846.4	2890.7	2938.5	3006.7	3065.2	3113.0	3227.3	3257.4	3260.0	3227.3
20°	2804.8	2826.1	2890.7	2934.1	3049.2	3076.7	3180.3	3238.8	3226.4	3196.3	3140.5
22.5°	2766.7	2831.4	2896.9	2958.0	3038.6	3112.1	3163.5	3190.9	3126.3	3007.6	2943.9
25°	2721.6	2759.6	2845.6	2935.0	3036.0	3078.5	3108.6	3064.3	2980.2	2873.9	2766.7
27.5°	2651.6	2712.7	2822.5	2923.5	3014.7	3066.1	3017.4	2911.1	2775.6	2705.6	2656.9
30°	2597.6	2677.3	2767.6	2865.0	2959.8	2989.9	2865.9	2744.6	2651.6	2581.6	2571.0
32.5°	2532.0	2645.4	2731.3	2824.3	2904.0	2864.1	2743.7	2586.9	2509.9	2483.3	2494.0
35°	2473.6	2559.5	2672.0	2763.2	2820.8	2731.3	2540.9	2443.5	2406.3	2421.3	2401.8
37.5°	2403.6	2517.0	2620.6	2699.4	2679.9	2545.3	2384.1	2322.1	2326.6	2314.2	2277.0
40°	2331.0	2439.0	2547.1	2621.5	2553.3	2347.8	2240.7	2227.4	2230.0	2190.2	2137.0
42.5°	2246.0	2344.3	2452.3	2519.6	2372.6	2212.3	2139.7	2141.5	2118.4	2062.6	2034.3
45°	2169.8	2260.1	2372.6	2378.8	2198.1	2064.4	2043.2	2020.1	1968.8	1950.2	1928.9
47.5°	2072.4	2172.5	2265.5	2231.8	2027.2	1944.0	1928.0	1877.5	1851.9	1837.7	1820.0
50°	1968.8	2069.7	2154.8	2059.1	1866.0	1846.6	1794.3	1754.4	1736.7	1721.7	1705.7
52.5°	1870.5	1953.7	2040.5	1875.8	1742.0	1723.4	1664.1	1641.1	1623.4	1606.5	1603.0
55°	1758.9	1832.4	1891.7	1701.3	1623.4	1580.0	1537.5	1521.5	1504.7	1496.7	1510.0
57.5°	1632.2	1715.5	1706.6	1529.5	1495.0	1432.1	1416.1	1405.5	1393.1	1398.4	1287.7
60°	1518.0	1581.7	1538.4	1403.7	1345.3	1302.8	1288.6	1281.5	1288.6	1180.6	1038.0
62.5°	1377.2	1448.9	1361.2	1256.7	1194.7	1174.4	1162.0	1171.7	1068.1	949.4	914.9
65°	1231.0	1309.0	1179.7	1099.1	1060.1	1042.4	1041.5	959.1	857.3	811.2	811.2
67.5°	1090.2	1170.8	1004.3	937.0	921.9	923.7	872.4	747.5	719.1	688.1	598.7
70°	940.5	1011.4	829.8	789.1	780.2	774.0	649.2	615.5	581.9	499.5	492.4
72.5°	791.8	826.3	666.9	657.1	655.4	544.7	519.9	462.3	423.3	413.6	409.2
75°	647.4	636.8	527.0	535.8	451.7	412.7	372.9	339.2	333.9	330.3	82.4
77.5°	511.0	457.9	415.4	361.3	323.3	274.5	266.6	261.3	171.8	62.0	50.5
80°	372.0	296.7	276.3	234.7	200.2	192.2	196.6	60.2	47.8	39.9	34.5
82.5°	236.5	189.5	155.0	135.5	132.0	57.6	42.5	34.5	30.1	25.7	21.3
85°	126.6	84.1	77.9	65.5	39.0	26.6	22.1	16.8	14.2	11.5	10.6
87.5°	39.9	33.7	27.5	22.1	13.3	8.9	7.1	6.2	5.3	4.4	4.4
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°	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9
2.5°	2974.0	2975.7	2974.9	2977.5	2977.5	2981.1	2983.7	2986.4	2991.7	2994.3	3014.7
5°	3012.0	3016.5	3029.8	3042.2	3057.2	3061.6	3087.3	3093.5	3123.6	3127.2	3226.4
7.5°	3097.1	3113.9	3145.8	3177.7	3209.5	3229.9	3265.3	3287.5	3311.4	3332.7	3411.5
10°	3199.8	3228.1	3259.1	3291.0	3309.6	3348.6	3369.8	3373.4	3367.2	3332.7	3205.1
12.5°	3300.8	3329.1	3315.8	3322.0	3344.2	3275.1	3284.8	3235.2	3269.8	3098.8	2972.2
15°	3286.6	3284.8	3252.1	3145.8	3163.5	3031.5	2978.4	2937.7	2970.4	2952.7	2933.2
17.5°	3244.1	3163.5	3106.8	2979.3	2925.3	2888.1	2888.9	2889.8	2873.9	2890.7	2841.1
20°	3064.3	2974.0	2889.8	2844.7	2828.7	2802.2	2815.4	2802.2	2803.0	2808.4	2732.2
22.5°	2825.2	2797.7	2749.0	2763.2	2757.9	2781.8	2764.1	2736.6	2745.5	2705.6	2648.1
25°	2728.6	2696.8	2695.0	2700.3	2692.3	2681.7	2665.8	2624.1	2621.5	2609.1	2582.5
27.5°	2631.2	2633.0	2638.3	2622.4	2594.0	2572.8	2548.9	2528.5	2536.5	2522.3	2486.0
30°	2563.9	2563.0	2531.1	2517.0	2464.7	2465.6	2459.4	2447.0	2439.0	2439.9	2416.9
32.5°	2468.3	2440.8	2404.5	2386.8	2382.4	2366.4	2354.0	2356.7	2362.9	2340.7	2364.6
35°	2370.0	2313.3	2308.0	2292.9	2278.7	2268.1	2272.5	2254.8	2253.9	2251.3	2056.4
37.5°	2238.0	2210.5	2207.9	2192.0	2182.2	2179.6	2162.7	2165.4	2173.4	2187.5	1753.6
40°	2129.1	2104.3	2098.1	2097.2	2075.9	2074.2	2078.6	2095.4	2106.9	2018.4	1671.2
42.5°	2012.2	2013.9	1994.5	1982.1	1984.7	1992.7	2013.9	1955.5	1694.2	1614.5	1527.7
45°	1912.1	1903.2	1892.6	1889.1	1912.1	1896.1	1662.3	1533.9	1502.9	1499.4	1255.8
47.5°	1807.6	1804.9	1800.5	1803.2	1672.1	1490.5	1437.4	1420.6	1425.9	1422.3	1078.7
50°	1702.2	1705.7	1705.7	1489.6	1367.4	1337.3	1341.7	1356.8	1262.9	1178.8	1005.2
52.5°	1611.0	1583.5	1356.8	1278.9	1251.4	1264.7	1232.8	1115.0	1030.0	980.4	929.9
55°	1441.8	1239.9	1189.4	1177.0	1186.8	1069.0	996.3	920.2	898.0	892.7	863.5
57.5°	1134.5	1093.8	1098.2	1048.6	936.1	869.7	840.5	829.8	820.1	813.0	70.9
60°	1003.4	1014.9	929.0	822.8	777.6	768.7	761.6	751.9	750.1	737.7	45.2
62.5°	918.4	807.7	733.3	706.7	696.1	693.5	680.2	675.7	573.9	78.8	33.7
65°	692.6	647.4	633.2	627.0	615.5	615.5	511.0	80.6	65.5	56.7	30.1
67.5°	565.0	561.5	554.4	546.4	372.0	77.9	68.2	59.3	51.4	45.2	26.6
70°	478.2	476.5	434.0	79.7	66.4	58.5	51.4	46.1	42.5	38.1	23.9
72.5°	392.3	79.7	67.3	58.5	50.5	46.1	41.6	37.2	33.7	31.0	19.5
75°	61.1	54.0	47.8	43.4	39.9	35.4	31.9	29.2	28.3	24.8	13.3
77.5°	44.3	38.1	34.5	31.0	27.5	24.8	21.3	18.6	16.8	14.2	9.7
80°	31.0	27.5	24.8	20.4	17.7	15.1	13.3	11.5	10.6	8.9	4.4
82.5°	17.7	15.1	13.3	10.6	9.7	8.0	7.1	6.2	6.2	4.4	4.4
85°	8.0	8.0	6.2	5.3	4.4	4.4	4.4	3.5	3.5	2.7	2.7
87.5°	3.5	3.5	3.5	3.5	3.5	2.7	2.7	2.7	2.7	2.7	1.8
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°	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9
2.5°	3043.0	3054.6	3076.7	3099.7	3074.0	3166.2	3159.1	3190.1	3206.9	3214.9	3233.5
5°	3314.1	3365.4	3382.2	3331.8	3302.5	3272.4	3204.2	3152.9	3159.1	3142.2	3081.1
7.5°	3308.7	3198.9	3051.0	2983.7	2978.4	2970.4	2991.7	3004.1	3005.9	3005.0	3003.2
10°	3028.9	2972.2	2962.5	2953.6	2957.1	2924.4	2909.3	2866.8	2889.8	2877.4	2881.9
12.5°	2943.9	2930.6	2878.3	2805.7	2849.1	2816.3	2797.7	2810.1	2796.0	2782.7	2778.2
15°	2893.4	2807.5	2778.2	2760.5	2748.1	2741.0	2747.2	2733.1	2728.6	2726.0	2732.2
17.5°	2788.9	2754.3	2722.4	2675.5	2676.4	2673.7	2691.4	2718.0	2719.8	2583.4	2460.3
20°	2706.5	2678.2	2637.4	2608.2	2648.1	2577.2	2303.5	2173.4	2153.0	2153.0	2156.5
22.5°	2641.0	2578.1	2580.7	2534.7	2161.8	2085.7	2087.4	2095.4	2059.1	1935.1	1921.8
25°	2551.5	2541.8	2347.8	2029.0	2031.7	1972.3	1881.1	1752.7	1613.6	1613.6	1590.6
27.5°	2484.2	2277.9	1994.5	1981.2	1781.9	1656.1	1578.2	1460.4	1444.5	1429.4	1431.2
30°	2426.6	1927.1	1934.2	1656.1	1509.1	1404.6	1398.4	1378.9	1369.2	1366.5	1356.8
32.5°	1918.3	1876.7	1618.9	1409.9	1352.4	1335.5	1327.6	1305.4	1304.5	1287.7	1170.8
35°	1798.7	1647.3	1355.0	1298.3	1281.5	1265.6	1252.3	840.5	99.2	39.9	34.5
37.5°	1662.3	1376.3	1253.2	1227.5	1211.6	895.4	89.4	31.0	22.1	15.9	14.2
40°	1409.0	1229.3	1190.3	1162.0	479.1	31.0	19.5	15.1	8.9	8.0	7.1
42.5°	1188.5	1158.4	1116.8	340.1	35.4	15.1	9.7	7.1	6.2	6.2	5.3
45°	1112.4	1085.8	449.9	33.7	22.1	7.1	6.2	6.2	5.3	3.5	3.5
47.5°	1041.5	916.6	40.7	21.3	14.2	6.2	5.3	3.5	3.5	3.5	2.7
50°	966.2	50.5	28.3	15.9	8.9	3.5	3.5	3.5	3.5	2.7	2.7
52.5°	180.7	35.4	23.0	14.2	4.4	3.5	3.5	3.5	2.7	2.7	2.7
55°	42.5	28.3	21.3	12.4	3.5	3.5	3.5	2.7	2.7	2.7	1.8
57.5°	31.9	21.3	16.8	11.5	3.5	2.7	2.7	2.7	2.7	2.7	1.8
60°	26.6	15.1	13.3	10.6	2.7	2.7	2.7	2.7	2.7	2.7	1.8
62.5°	18.6	12.4	9.7	8.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7
65°	15.1	9.7	8.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
67.5°	13.3	8.0	5.3	1.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7
70°	10.6	2.7	2.7	1.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7
72.5°	8.9	2.7	1.8	1.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7
75°	8.9	4.4	1.8	1.8	2.7	2.7	3.5	3.5	2.7	2.7	2.7
77.5°	6.2	4.4	1.8	1.8	2.7	2.7	3.5	3.5	2.7	2.7	2.7
80°	3.5	4.4	1.8	2.7	2.7	5.3	6.2	3.5	2.7	2.7	2.7
82.5°	3.5	4.4	5.3	5.3	2.7	4.4	5.3	4.4	3.5	2.7	2.7
85°	3.5	2.7	3.5	4.4	2.7	4.4	4.4	3.5	3.5	2.7	2.7
87.5°	1.8	2.7	2.7	3.5	3.5	3.5	4.4	3.5	3.5	3.5	2.7
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: P1213451

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9
2.5°	3242.3	3245.9	3190.1	3170.6	3187.4	3183.9	3168.8	3113.0	3106.8	3069.6	3015.6
5°	3098.8	3122.8	3093.5	3144.0	3120.1	3144.0	3216.6	3250.3	3305.2	3338.8	3351.2
7.5°	2998.8	3004.1	3004.1	3008.5	3012.9	3013.8	3008.5	3005.0	2989.9	2971.3	3005.0
10°	2877.4	2883.6	2894.3	2892.5	2891.6	2910.2	2914.6	2952.7	2950.9	2958.0	2983.7
12.5°	2814.6	2766.7	2810.1	2798.6	2814.6	2789.8	2835.8	2827.8	2830.5	2851.7	2906.7
15°	2710.0	2725.1	2735.7	2735.7	2741.9	2736.6	2731.3	2767.6	2789.8	2790.6	2787.1
17.5°	2509.0	2394.8	2511.7	2481.6	2721.6	2727.8	2707.4	2690.6	2690.6	2703.8	2732.2
20°	2153.9	2156.5	2157.4	2168.9	2183.1	2182.2	2183.1	2532.0	2697.6	2659.6	2633.9
22.5°	1888.2	1855.4	1916.5	1912.1	1988.3	2072.4	2153.0	2145.0	2150.3	2396.5	2617.9
25°	1513.6	1556.1	1521.5	1536.6	1622.5	1722.6	1784.6	1946.6	2122.9	2110.5	2168.0
27.5°	1425.0	1413.5	1429.4	1429.4	1440.9	1454.2	1488.8	1580.0	1736.7	1901.5	2057.3
30°	1340.9	1350.6	1352.4	1368.3	1377.2	1386.0	1391.3	1425.9	1461.3	1575.5	1767.7
32.5°	1007.0	883.0	1162.0	1237.2	1301.0	1316.1	1326.7	1340.9	1366.5	1383.4	1479.9
35°	29.2	29.2	31.0	35.4	45.2	304.7	1160.2	1278.9	1295.7	1316.9	1334.7
37.5°	14.2	10.6	12.4	13.3	15.9	22.1	31.9	99.2	1104.4	1248.7	1268.2
40°	6.2	6.2	6.2	6.2	7.1	8.9	13.3	22.1	33.7	888.3	1198.3
42.5°	5.3	5.3	5.3	5.3	5.3	5.3	6.2	8.0	15.9	38.1	628.8
45°	3.5	3.5	2.7	3.5	3.5	4.4	5.3	5.3	7.1	23.9	43.4
47.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.4	5.3	15.9	23.0
50°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	12.4	15.9
52.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	5.3	14.2
55°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.7	2.7	3.5	12.4
57.5°	1.8	1.8	1.8	1.8	1.8	2.7	1.8	1.8	2.7	2.7	11.5
60°	1.8	1.8	1.8	1.8	1.8	2.7	2.7	2.7	2.7	2.7	10.6
62.5°	2.7	2.7	1.8	2.7	1.8	1.8	2.7	2.7	2.7	2.7	7.1
65°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	1.8	2.7
67.5°	2.7	2.7	2.7	2.7	1.8	2.7	1.8	2.7	2.7	1.8	1.8
70°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	1.8	1.8	1.8	1.8
72.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	1.8	1.8	1.8	1.8
75°	2.7	2.7	2.7	2.7	2.7	2.7	3.5	3.5	1.8	1.8	1.8
77.5°	2.7	2.7	2.7	2.7	2.7	2.7	4.4	5.3	4.4	4.4	1.8
80°	2.7	2.7	2.7	2.7	2.7	2.7	4.4	4.4	4.4	4.4	6.2
82.5°	2.7	2.7	2.7	2.7	2.7	2.7	3.5	3.5	3.5	3.5	4.4
85°	2.7	2.7	2.7	2.7	2.7	2.7	3.5	3.5	3.5	2.7	3.5
87.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.5	2.7	2.7	2.7
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: P1213451

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9
2.5°	3020.0	2989.9	2980.2	2959.8	2958.0	2959.8	2955.4	2949.2	2952.7	2946.5	2941.2
5°	3358.3	3277.7	3225.5	3155.5	3059.0	3037.7	3032.4	3002.3	2991.7	2988.1	2974.0
7.5°	3084.7	3231.7	3320.3	3350.4	3237.0	3210.4	3179.4	3154.6	3130.7	3085.6	3058.1
10°	2963.3	2970.4	3055.4	3154.6	3315.8	3338.0	3354.8	3300.8	3285.7	3170.6	3145.8
12.5°	2935.0	2935.9	2945.6	3005.9	3132.5	3146.7	3206.0	3237.9	3276.9	3299.0	3281.3
15°	2805.7	2877.4	2930.6	2935.9	2947.4	2972.2	2989.9	3100.6	3147.6	3273.3	3266.2
17.5°	2745.5	2768.5	2845.6	2908.4	2897.8	2888.9	2903.1	2918.2	2963.3	3089.1	3087.3
20°	2645.4	2718.9	2760.5	2826.1	2885.4	2888.1	2872.1	2863.3	2845.6	2865.9	2884.5
22.5°	2602.9	2614.4	2692.3	2738.4	2805.7	2829.6	2833.2	2834.0	2824.3	2813.7	2808.4
25°	2598.5	2562.1	2602.0	2659.6	2709.2	2734.8	2764.1	2773.8	2770.3	2770.3	2765.0
27.5°	2126.4	2550.6	2529.4	2567.5	2627.7	2645.4	2660.5	2690.6	2709.2	2722.4	2728.6
30°	2025.5	2101.6	2472.7	2478.0	2539.1	2537.3	2554.2	2579.0	2602.9	2633.9	2641.9
32.5°	1791.6	1978.5	2263.7	2388.6	2452.3	2458.5	2467.4	2474.5	2496.6	2531.1	2561.3
35°	1435.6	1802.3	1939.5	2346.1	2357.6	2370.0	2375.3	2392.1	2399.2	2413.4	2439.9
37.5°	1299.2	1489.6	1860.7	2029.0	2248.6	2259.3	2287.6	2294.7	2306.2	2317.7	2338.1
40°	1220.4	1272.7	1549.0	1812.0	2161.0	2168.0	2177.8	2195.5	2196.4	2209.7	2228.3
42.5°	1157.5	1191.2	1271.8	1730.5	2099.0	2098.1	2075.0	2086.6	2091.9	2106.0	2131.7
45°	924.6	1117.7	1169.0	1413.5	1671.2	1791.6	2022.8	1984.7	1983.8	1989.1	2016.6
47.5°	46.9	1051.3	1087.6	1166.4	1578.2	1582.6	1612.7	1866.0	1905.0	1892.6	1895.3
50°	31.9	72.6	1013.2	1049.5	1360.3	1470.2	1492.3	1503.8	1649.9	1812.9	1786.3
52.5°	24.8	41.6	620.8	974.2	1105.3	1185.9	1328.5	1409.9	1418.8	1484.3	1706.6
55°	22.1	31.9	67.3	898.9	939.7	957.4	1040.6	1183.2	1298.3	1332.9	1335.5
57.5°	19.5	29.2	46.1	406.5	854.6	858.2	872.4	921.9	1025.6	1120.3	1227.5
60°	17.7	25.7	36.3	70.0	776.7	785.6	788.2	801.5	813.9	878.6	1001.7
62.5°	10.6	20.4	31.9	50.5	614.6	705.9	705.0	713.8	725.3	732.4	757.2
65°	8.9	15.9	27.5	42.5	75.3	93.9	570.3	634.1	641.2	650.9	655.4
67.5°	8.0	14.2	20.4	33.7	56.7	64.7	74.4	92.1	503.0	566.8	575.7
70°	7.1	9.7	16.8	28.3	46.1	49.6	55.8	63.8	75.3	93.0	455.2
72.5°	4.4	7.1	11.5	20.4	35.4	39.9	43.4	48.7	54.0	64.7	74.4
75°	1.8	5.3	9.7	15.1	27.5	30.1	32.8	36.3	40.7	47.8	53.1
77.5°	1.8	4.4	8.0	10.6	17.7	20.4	23.9	26.6	30.1	33.7	39.0
80°	6.2	3.5	5.3	8.0	12.4	13.3	15.1	16.8	19.5	22.1	25.7
82.5°	4.4	5.3	6.2	5.3	6.2	8.0	8.9	10.6	11.5	13.3	14.2
85°	3.5	3.5	4.4	4.4	4.4	4.4	4.4	4.4	5.3	6.2	8.0
87.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	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: P1213451

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9
2.5°	2941.2	2939.4	2934.1	2934.1	2933.2	2936.8	2939.4	2942.1	2941.2	2946.5	2941.2
5°	2963.3	2958.9	2950.9	2943.9	2941.2	2943.0	2940.3	2943.0	2939.4	2943.9	2935.9
7.5°	3024.4	3009.4	2978.4	2966.0	2950.1	2949.2	2941.2	2939.4	2934.1	2934.1	2924.4
10°	3132.5	3059.9	3051.0	3013.8	3000.5	2935.9	2950.1	2926.1	2923.5	2912.0	2907.5
12.5°	3221.1	3164.4	3147.6	3114.8	3077.6	2946.5	2975.7	2924.4	2921.7	2898.7	2874.8
15°	3222.8	3255.6	3209.5	3119.2	3111.2	3020.9	2961.6	2943.9	2920.8	2851.7	2863.3
17.5°	3119.2	3194.5	3216.6	3197.1	3140.5	3079.4	2996.1	2960.7	2891.6	2860.6	2839.4
20°	2950.9	3027.1	3121.9	3128.1	3163.5	3120.1	3011.2	2953.6	2870.3	2816.3	2798.6
22.5°	2817.2	2873.0	2981.9	3032.4	3075.8	3090.9	3021.8	2936.8	2833.2	2780.9	2770.3
25°	2746.4	2758.8	2791.5	2850.9	2946.5	3015.6	3025.3	2935.0	2881.0	2766.7	2706.5
27.5°	2720.7	2710.0	2696.8	2726.9	2798.6	2882.7	2938.5	2953.6	2819.0	2710.0	2649.8
30°	2655.1	2661.3	2641.0	2630.3	2677.3	2764.1	2863.3	2888.1	2784.4	2672.0	2602.9
32.5°	2574.5	2585.2	2588.7	2570.1	2560.4	2620.6	2727.8	2787.1	2781.8	2617.9	2540.9
35°	2473.6	2503.7	2511.7	2512.6	2496.6	2486.9	2548.9	2672.0	2718.9	2593.1	2481.6
37.5°	2367.3	2376.2	2419.6	2431.1	2431.1	2401.8	2447.9	2546.2	2611.7	2537.3	2408.9
40°	2234.5	2262.8	2303.5	2323.9	2344.3	2346.9	2321.3	2390.3	2498.4	2479.8	2340.7
42.5°	2137.9	2156.5	2181.3	2208.8	2250.4	2261.0	2234.5	2246.9	2359.3	2408.0	2252.2
45°	2025.5	2050.2	2057.3	2087.4	2130.8	2161.8	2161.0	2135.3	2225.6	2285.8	2187.5
47.5°	1910.3	1934.2	1946.6	1961.7	1993.6	2033.4	2055.6	2044.0	2061.8	2179.6	2101.6
50°	1791.6	1804.9	1829.7	1846.6	1867.8	1890.8	1944.0	1954.6	1929.8	2023.7	2006.9
52.5°	1679.2	1683.6	1700.4	1717.2	1745.6	1762.4	1804.9	1836.8	1835.0	1862.5	1901.5
55°	1591.5	1572.0	1575.5	1588.8	1607.4	1633.1	1657.0	1706.6	1723.4	1728.8	1790.8
57.5°	1243.4	1443.6	1461.3	1460.4	1482.6	1494.1	1516.2	1549.0	1609.2	1595.9	1665.0
60°	1130.1	1152.2	1319.6	1339.1	1347.1	1357.7	1384.2	1414.4	1458.6	1487.0	1517.1
62.5°	861.7	996.3	1046.8	1194.7	1217.8	1223.9	1241.7	1255.8	1301.9	1366.5	1354.1
65°	666.9	724.5	878.6	938.8	1064.5	1080.5	1105.3	1120.3	1133.6	1208.0	1211.6
67.5°	576.5	585.4	627.0	743.0	822.8	945.9	960.9	974.2	994.6	1047.7	1080.5
70°	492.4	503.0	514.6	524.3	627.9	709.4	823.6	828.1	841.4	876.8	951.2
72.5°	93.0	420.7	427.8	434.0	445.5	499.5	608.4	697.0	702.3	719.1	787.3
75°	62.9	73.5	101.0	347.2	358.7	362.2	380.8	491.5	573.0	576.5	606.7
77.5°	45.2	50.5	61.1	72.6	185.1	278.1	282.5	302.9	387.0	448.1	453.4
80°	31.0	34.5	40.7	46.1	56.7	74.4	205.5	211.7	222.3	306.4	322.4
82.5°	17.7	20.4	23.9	29.2	33.7	42.5	54.9	70.9	144.4	154.1	204.6
85°	8.9	9.7	11.5	14.2	16.8	20.4	27.5	33.7	46.1	83.2	85.9
87.5°	4.4	4.4	4.4	4.4	7.1	8.0	9.7	12.4	15.9	23.9	31.0
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: P1213451

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9
2.5°	2942.1	2954.5	2965.1	2967.8	2967.8	2969.5	2972.2	2974.0	2975.7	2977.5	2975.7
5°	2936.8	2950.1	2958.9	2961.6	2961.6	2966.9	2971.3	2976.6	2979.3	2979.3	2977.5
7.5°	2923.5	2933.2	2944.7	2951.8	2952.7	2961.6	2969.5	2968.7	2972.2	2974.0	2978.4
10°	2905.8	2905.8	2925.3	2930.6	2935.0	2944.7	2947.4	2952.7	2965.1	2966.9	2978.4
12.5°	2896.9	2888.1	2911.1	2913.7	2928.8	2916.4	2932.3	2937.7	2925.3	2942.1	2919.9
15°	2857.1	2867.7	2864.1	2872.1	2898.7	2884.5	2927.9	2913.7	2945.6	2907.5	2974.9
17.5°	2824.3	2822.5	2836.7	2843.8	2849.1	2879.2	2890.7	2906.7	2919.1	2908.4	2935.0
20°	2800.4	2786.2	2796.8	2804.8	2823.4	2846.4	2853.5	2829.6	2871.2	2942.1	2958.9
22.5°	2755.2	2745.5	2757.9	2757.9	2786.2	2782.7	2809.2	2794.2	2833.2	2915.5	3001.4
25°	2694.1	2695.0	2708.3	2724.2	2729.5	2769.4	2783.6	2803.0	2851.7	2950.1	3002.3
27.5°	2632.1	2626.8	2634.8	2667.5	2695.0	2724.2	2728.6	2795.1	2861.5	2928.8	2974.9
30°	2570.1	2564.8	2570.1	2594.0	2626.8	2646.3	2695.0	2783.6	2845.6	2891.6	2935.0
32.5°	2503.7	2498.4	2510.8	2528.5	2586.1	2588.7	2685.3	2768.5	2817.2	2850.9	2842.9
35°	2432.8	2425.8	2437.3	2464.7	2517.9	2537.3	2638.3	2700.3	2755.2	2771.2	2734.0
37.5°	2347.8	2335.4	2349.6	2387.7	2443.5	2500.2	2584.3	2656.0	2685.3	2642.7	2598.5
40°	2259.3	2250.4	2275.2	2294.7	2360.2	2439.0	2535.6	2586.1	2567.5	2518.8	2470.0
42.5°	2180.4	2161.8	2184.0	2221.2	2295.6	2385.0	2463.0	2491.3	2447.0	2375.3	2318.6
45°	2083.9	2061.8	2088.3	2137.9	2217.6	2319.5	2380.6	2370.8	2295.6	2233.6	2155.6
47.5°	1982.9	1956.4	1982.9	2042.3	2131.7	2239.8	2284.1	2239.8	2145.0	2067.1	2004.2
50°	1883.7	1852.8	1878.4	1967.9	2055.6	2138.8	2137.9	2052.0	1995.3	1910.3	1855.4
52.5°	1785.4	1741.2	1766.8	1864.3	1951.9	2046.7	1976.7	1897.0	1828.8	1754.4	1736.7
55°	1664.1	1616.3	1650.8	1792.5	1859.8	1915.6	1804.0	1734.1	1666.8	1629.6	1607.4
57.5°	1549.0	1496.7	1526.8	1694.2	1743.8	1758.0	1655.3	1556.1	1516.2	1503.8	1471.9
60°	1430.3	1371.0	1399.3	1592.4	1626.9	1569.3	1468.4	1391.3	1383.4	1358.6	1333.8
62.5°	1316.9	1251.4	1269.1	1465.7	1481.7	1377.2	1284.2	1263.8	1244.3	1219.5	1206.2
65°	1186.8	1118.6	1143.4	1331.1	1316.1	1181.4	1129.2	1124.8	1099.1	1078.7	1098.2
67.5°	1067.2	986.6	1021.1	1184.1	1115.9	1006.1	984.8	974.2	953.8	965.3	760.8
70°	936.1	848.4	895.4	1025.6	924.6	852.0	844.0	828.1	829.0	658.9	555.3
72.5°	790.0	713.8	782.0	852.0	731.5	710.3	698.8	697.0	562.4	457.0	431.3
75°	661.6	584.5	658.0	684.6	582.7	568.6	567.7	469.4	369.3	352.5	344.5
77.5°	516.3	457.0	527.0	487.1	447.2	431.3	387.0	290.5	278.1	266.6	100.1
80°	348.1	352.5	393.2	335.7	318.8	271.9	214.3	205.5	177.1	70.9	55.8
82.5°	211.7	265.7	250.6	209.9	205.5	147.9	135.5	69.1	51.4	40.7	35.4
85°	109.8	134.6	129.3	114.2	85.0	76.2	42.5	32.8	26.6	20.4	16.8
87.5°	37.2	49.6	47.8	38.1	29.2	23.0	15.1	12.4	8.9	7.1	6.2
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: P1213451

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9
2.5°	2974.0	2974.0	2972.2	2974.0	2974.9	2973.1	2973.1	2974.9	2975.7	2976.6	2981.1
5°	2978.4	2980.2	2982.8	2988.1	2989.0	2999.7	3004.1	3006.7	3009.4	3010.3	3004.1
7.5°	2988.1	2994.3	2999.7	2998.8	2992.6	2975.7	2970.4	2966.0	2974.0	2994.3	3018.2
10°	2997.0	2968.7	2915.5	2988.1	2966.0	2986.4	3046.6	3059.9	3100.6	3158.2	3175.0
12.5°	2935.9	3013.8	3030.6	2949.2	3099.7	3043.9	3110.4	3168.8	3185.6	3244.1	3208.7
15°	3001.4	3039.5	3065.2	3146.7	3137.8	3185.6	3204.2	3192.7	3195.4	3210.4	3250.3
17.5°	3000.5	3076.7	3093.5	3148.4	3185.6	3186.5	3181.2	3175.9	3190.1	3201.6	3177.7
20°	3051.9	3076.7	3109.5	3131.6	3138.7	3147.6	3164.4	3151.1	3124.5	3098.8	3088.2
22.5°	3026.2	3082.0	3110.4	3113.9	3109.5	3082.0	3057.2	3020.0	3007.6	2994.3	2998.8
25°	3031.5	3057.2	3053.7	3039.5	3020.9	2969.5	2957.1	2941.2	2917.3	2859.7	2807.5
27.5°	2993.5	2980.2	2964.2	2929.7	2896.0	2868.6	2837.6	2786.2	2743.7	2681.7	2658.7
30°	2929.7	2876.5	2837.6	2817.2	2784.4	2738.4	2691.4	2628.6	2574.5	2562.1	2550.6
32.5°	2807.5	2755.2	2723.3	2673.7	2617.9	2563.0	2509.0	2484.2	2472.7	2474.5	2463.8
35°	2682.6	2636.5	2588.7	2514.3	2472.7	2417.8	2398.3	2393.0	2382.4	2370.8	2358.5
37.5°	2549.7	2495.7	2424.0	2379.7	2338.1	2315.9	2306.2	2298.2	2279.6	2259.3	2245.1
40°	2421.3	2323.9	2284.1	2240.7	2228.3	2218.5	2204.3	2184.9	2159.2	2155.6	2149.4
42.5°	2249.5	2179.6	2145.0	2136.2	2121.1	2104.3	2091.9	2070.6	2060.0	2067.1	2072.4
45°	2086.6	2051.1	2039.6	2029.0	2000.7	1976.7	1968.8	1961.7	1970.5	2009.5	1916.5
47.5°	1954.6	1940.4	1926.3	1908.5	1882.0	1864.3	1872.2	1879.3	1887.3	1601.2	1461.3
50°	1840.4	1820.9	1798.7	1779.2	1763.3	1761.5	1803.2	1678.3	1405.5	1398.4	1256.7
52.5°	1715.5	1686.3	1673.0	1661.5	1668.5	1695.1	1402.8	1301.9	1248.7	1084.9	1012.3
55°	1580.9	1555.2	1555.2	1565.8	1527.7	1238.1	1223.1	1057.5	957.4	929.0	917.5
57.5°	1446.2	1443.6	1458.6	1333.8	1123.9	1077.8	906.0	869.7	853.8	850.2	831.6
60°	1323.1	1347.9	1128.3	1038.0	902.5	813.9	789.1	784.7	767.8	761.6	744.8
62.5°	1224.8	1015.8	945.9	772.3	727.1	715.6	702.3	696.1	681.1	601.3	176.2
65°	884.8	836.0	678.4	649.2	645.6	628.8	623.5	560.6	132.0	88.6	75.3
67.5°	667.8	592.5	572.1	566.8	550.0	516.3	153.2	87.7	75.3	65.5	57.6
70°	512.8	499.5	484.4	472.0	139.0	86.8	75.3	63.8	54.9	48.7	44.3
72.5°	419.8	410.9	239.1	91.2	74.4	62.9	55.8	48.7	42.5	39.0	35.4
75°	328.6	91.2	75.3	62.9	54.0	46.1	40.7	36.3	32.8	30.1	27.5
77.5°	74.4	60.2	51.4	43.4	39.0	34.5	31.0	26.6	23.9	21.3	17.7
80°	46.1	39.9	33.7	31.0	26.6	22.1	19.5	17.7	14.2	13.3	11.5
82.5°	30.1	23.9	21.3	17.7	14.2	13.3	11.5	8.9	8.0	7.1	6.2
85°	13.3	11.5	9.7	8.0	6.2	5.3	4.4	3.5	3.5	3.5	3.5
87.5°	4.4	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	1.8	1.8
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: P1213451

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9
2.5°	2982.8	2998.8	3013.8	3009.4	2993.5	2968.7	2961.6	2951.8	2958.9	2974.0	2980.2
5°	3004.1	2995.2	3027.1	3074.0	3150.2	3157.3	3210.4	3222.8	3265.3	3291.9	3291.0
7.5°	3034.2	3160.0	3212.2	3268.9	3294.6	3288.4	3296.3	3290.1	3280.4	3276.0	3270.7
10°	3187.4	3283.1	3302.5	3302.5	3262.7	3208.7	3185.6	3145.8	3066.1	3067.8	3054.6
12.5°	3276.9	3310.5	3264.5	3225.5	3065.2	3003.2	2935.9	2904.0	2885.4	2857.1	2867.7
15°	3229.9	3182.1	3154.6	3028.9	2930.6	2819.0	2820.8	2801.3	2780.9	2782.7	2769.4
17.5°	3160.8	3122.8	2927.9	2841.1	2793.3	2749.9	2741.9	2716.2	2703.0	2698.5	2697.6
20°	3066.1	2928.8	2783.6	2762.3	2704.7	2655.1	2647.2	2655.1	2695.9	2623.3	2377.0
22.5°	2955.4	2757.9	2715.4	2655.1	2616.2	2596.7	2645.4	2424.0	2089.2	2130.0	2086.6
25°	2767.6	2681.7	2609.1	2563.0	2558.6	2439.0	2032.5	1990.0	1774.8	1659.7	1530.4
27.5°	2630.3	2593.1	2517.0	2509.0	2451.4	1994.5	1782.8	1549.0	1463.1	1449.8	1421.4
30°	2547.1	2494.0	2447.9	2246.9	1956.4	1605.7	1430.3	1397.5	1382.5	1366.5	1341.7
32.5°	2447.0	2396.5	2418.7	1889.1	1559.6	1382.5	1347.1	1323.1	1295.7	1285.1	1195.6
35°	2345.2	2322.1	1889.9	1587.9	1340.9	1298.3	1271.8	1247.0	991.9	240.0	81.5
37.5°	2236.2	2230.9	1698.7	1317.8	1255.8	1216.0	1140.7	235.6	55.8	38.1	28.3
40°	2151.2	1699.5	1342.6	1235.5	1185.0	1122.1	157.6	39.0	24.8	15.1	9.7
42.5°	2094.5	1528.6	1201.8	1159.3	1049.5	116.0	39.9	16.8	9.7	8.0	6.2
45°	1614.5	1207.1	1123.0	1078.7	132.8	39.9	23.0	8.0	6.2	5.3	3.5
47.5°	1489.6	1096.4	1046.8	235.6	44.3	21.3	15.9	5.3	3.5	3.5	3.5
50°	1128.3	1013.2	833.4	57.6	28.3	15.1	11.5	3.5	3.5	3.5	2.7
52.5°	989.3	935.2	89.4	38.1	22.1	11.5	7.1	2.7	2.7	2.7	2.7
55°	904.2	593.4	53.1	29.2	18.6	10.6	4.4	2.7	2.7	2.7	1.8
57.5°	827.2	79.7	39.0	24.8	16.8	9.7	2.7	2.7	2.7	2.7	1.8
60°	701.4	57.6	31.9	22.1	15.9	8.9	2.7	2.7	2.7	2.7	2.7
62.5°	91.2	45.2	27.5	19.5	11.5	7.1	1.8	2.7	2.7	2.7	2.7
65°	66.4	35.4	24.8	13.3	7.1	2.7	1.8	2.7	2.7	2.7	2.7
67.5°	51.4	29.2	18.6	11.5	6.2	1.8	1.8	2.7	2.7	2.7	2.7
70°	40.7	24.8	15.1	9.7	5.3	1.8	1.8	2.7	2.7	2.7	2.7
72.5°	31.9	17.7	10.6	5.3	3.5	1.8	1.8	2.7	2.7	2.7	2.7
75°	23.9	14.2	8.0	4.4	1.8	1.8	1.8	2.7	2.7	2.7	2.7
77.5°	15.9	8.9	6.2	3.5	3.5	3.5	4.4	4.4	2.7	2.7	2.7
80°	10.6	6.2	4.4	4.4	4.4	3.5	4.4	4.4	2.7	4.4	2.7
82.5°	5.3	4.4	4.4	3.5	3.5	2.7	3.5	3.5	3.5	3.5	2.7
85°	3.5	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.5	3.5	2.7
87.5°	1.8	1.8	1.8	1.8	2.7	2.7	2.7	2.7	3.5	3.5	2.7
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: P1213451

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9
2.5°	2972.2	2974.9	2967.8	3005.9	2986.4	2988.1	2996.1	2975.7	2980.2	2966.0	2956.3
5°	3294.6	3299.9	3305.2	3307.0	3310.5	3314.9	3309.6	3307.0	3301.7	3283.9	3265.3
7.5°	3244.1	3237.9	3235.2	3238.8	3245.0	3247.6	3243.2	3249.4	3272.4	3282.2	3288.4
10°	2978.4	2950.1	2969.5	2966.9	2944.7	3019.1	2998.8	3010.3	3018.2	3099.7	3149.3
12.5°	2851.7	2869.5	2835.8	2819.0	2841.1	2856.2	2871.2	2839.4	2883.6	2863.3	2928.8
15°	2745.5	2734.8	2731.3	2732.2	2727.8	2749.0	2754.3	2761.4	2767.6	2795.1	2805.7
17.5°	2697.6	2715.4	2722.4	2727.8	2718.9	2709.2	2699.4	2685.3	2689.7	2682.6	2703.0
20°	2211.4	2152.1	2148.6	2183.1	2145.0	2166.3	2217.6	2561.3	2549.7	2683.5	2638.3
22.5°	1845.7	1789.9	1742.0	1700.4	1759.8	1784.6	1880.2	1988.3	2163.6	2136.2	2326.6
25°	1507.4	1487.0	1474.6	1468.4	1472.8	1471.0	1492.3	1542.8	1622.5	1810.2	2052.9
27.5°	1409.9	1400.2	1395.8	1381.6	1392.2	1388.7	1405.5	1416.1	1440.0	1458.6	1537.5
30°	1332.9	1321.4	1313.4	1298.3	1309.0	1309.9	1315.2	1342.6	1352.4	1368.3	1393.1
32.5°	487.1	286.9	269.2	255.9	279.9	364.9	640.3	1119.4	1277.1	1289.5	1317.8
35°	47.8	39.9	35.4	35.4	36.3	39.9	53.1	139.9	255.9	989.3	1238.1
37.5°	18.6	15.9	13.3	12.4	13.3	15.1	20.4	26.6	36.3	75.3	335.7
40°	8.0	7.1	6.2	6.2	6.2	6.2	7.1	8.9	13.3	24.8	39.0
42.5°	5.3	4.4	4.4	4.4	4.4	4.4	4.4	4.4	6.2	8.0	15.9
45°	3.5	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.5	4.4	7.1
47.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.5
50°	2.7	2.7	2.7	2.7	1.8	2.7	1.8	2.7	2.7	2.7	2.7
52.5°	2.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.7	2.7
55°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.7
57.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
60°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
62.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.7	2.7	1.8
65°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.7	1.8
67.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
70°	2.7	2.7	1.8	2.7	1.8	1.8	2.7	2.7	2.7	1.8	1.8
72.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	5.3	5.3	3.5
75°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.4	5.3	4.4
77.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.4	4.4	4.4
80°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.5	3.5	3.5
82.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.5	3.5	3.5
85°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
87.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
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: P1213451

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9
2.5°	2939.4	2938.5	2957.1	2971.3	2966.0	2971.3	2977.5	2978.4	2980.2	2973.1	2970.4
5°	3229.9	3202.5	3149.3	3111.2	3067.0	2986.4	2946.5	2950.9	2951.8	2949.2	2952.7
7.5°	3285.7	3283.1	3264.5	3256.5	3226.4	3168.8	3076.7	3060.8	3021.8	2997.0	2976.6
10°	3145.8	3209.5	3226.4	3254.7	3272.4	3261.8	3183.9	3172.4	3147.6	3119.2	3125.4
12.5°	2994.3	3046.6	3049.2	3203.3	3237.9	3241.4	3211.3	3227.3	3230.8	3167.0	3129.8
15°	2808.4	2833.2	2885.4	3028.9	3133.4	3198.9	3218.4	3227.3	3183.9	3181.2	3166.2
17.5°	2726.9	2742.8	2766.7	2847.3	3005.9	3102.4	3184.7	3178.5	3195.4	3183.0	3144.9
20°	2624.1	2637.4	2679.9	2720.7	2798.6	2927.0	3081.1	3092.6	3114.8	3112.1	3122.8
22.5°	2622.4	2575.4	2582.5	2614.4	2695.9	2811.0	2974.9	3012.9	3027.1	3036.8	3048.4
25°	2080.4	2453.2	2521.4	2541.8	2594.9	2662.2	2855.3	2869.5	2896.0	2939.4	2971.3
27.5°	1802.3	2055.6	2328.3	2470.0	2503.7	2559.5	2674.6	2695.9	2786.2	2796.8	2846.4
30°	1422.3	1618.1	2025.5	2366.4	2422.2	2461.2	2542.7	2585.2	2624.1	2666.7	2718.9
32.5°	1338.2	1369.2	1595.0	1958.1	2392.1	2362.9	2423.1	2448.8	2491.3	2528.5	2566.6
35°	1261.1	1282.4	1330.2	1603.9	1948.4	2282.3	2323.0	2339.9	2363.8	2392.1	2419.6
37.5°	1180.6	1212.4	1245.2	1318.7	1802.3	2218.5	2217.6	2237.1	2251.3	2275.2	2298.2
40°	214.3	1113.2	1166.4	1214.2	1397.5	1769.5	2118.4	2127.3	2137.0	2152.1	2176.0
42.5°	34.5	186.0	1092.9	1138.9	1191.2	1584.4	2073.3	2037.0	2030.8	2041.4	2062.6
45°	17.7	45.2	219.6	1063.6	1110.6	1263.8	1695.1	1974.1	1967.9	1947.5	1951.9
47.5°	13.3	28.3	54.0	367.5	1039.7	1084.9	1564.0	1547.2	1665.0	1890.8	1856.3
50°	11.5	19.5	31.9	75.3	918.4	999.0	1204.5	1407.3	1469.3	1477.2	1748.2
52.5°	10.6	13.3	23.0	48.7	193.1	923.7	979.5	1050.4	1154.9	1378.9	1373.6
55°	9.7	12.4	19.5	32.8	67.3	832.5	890.1	903.3	925.5	1032.7	1174.4
57.5°	5.3	11.5	18.6	28.3	50.5	152.3	807.7	818.3	836.0	840.5	891.0
60°	2.7	10.6	16.8	24.8	37.2	70.9	726.2	738.6	749.2	751.0	767.0
62.5°	1.8	9.7	14.2	23.0	31.0	50.5	171.8	350.7	666.9	666.9	685.5
65°	1.8	7.1	8.9	15.1	28.3	41.6	72.6	84.1	163.8	403.0	601.3
67.5°	1.8	2.7	8.0	12.4	21.3	31.9	53.1	62.0	74.4	85.0	157.6
70°	1.8	1.8	7.1	8.0	13.3	23.9	38.1	43.4	50.5	57.6	66.4
72.5°	1.8	1.8	6.2	6.2	8.9	15.9	29.2	31.9	36.3	40.7	46.9
75°	4.4	3.5	5.3	5.3	6.2	12.4	22.1	24.8	26.6	30.1	34.5
77.5°	4.4	4.4	4.4	4.4	4.4	8.0	14.2	15.9	18.6	20.4	23.9
80°	3.5	3.5	3.5	4.4	4.4	5.3	8.9	9.7	10.6	13.3	14.2
82.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	5.3	6.2	8.0
85°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.5	3.5	3.5	3.5
87.5°	2.7	2.7	2.7	1.8	1.8	2.7	2.7	2.7	2.7	2.7	2.7
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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CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9	2950.9
2.5°	2969.5	2964.2	2959.8	2962.5	2954.5	2950.9	2953.6	2954.5	2956.3	2960.7	2961.6
5°	2961.6	2959.8	2967.8	2972.2	2970.4	2972.2	2972.2	2968.7	2963.3	2966.9	2958.9
7.5°	2956.3	2944.7	2935.9	2937.7	2928.8	2939.4	2949.2	2963.3	2967.8	2967.8	2958.9
10°	3047.5	3035.1	2985.5	2951.8	2929.7	2910.2	2956.3	2909.3	2931.5	2847.3	2943.9
12.5°	3122.8	3139.6	3117.4	3025.3	3009.4	2950.9	2984.6	2927.0	2910.2	2813.7	2844.7
15°	3152.9	3121.0	3113.9	3088.2	3053.7	3036.8	2946.5	2936.8	2909.3	2919.9	2879.2
17.5°	3126.3	3142.2	3121.0	3104.2	3068.7	3028.9	2974.9	2927.0	2888.9	2803.9	2875.7
20°	3100.6	3121.9	3058.1	3068.7	3072.3	3026.2	2997.9	2958.0	2910.2	2830.5	2768.5
22.5°	3058.1	3043.0	3048.4	3032.4	3019.1	3025.3	2986.4	2958.9	2878.3	2842.0	2757.9
25°	2989.0	2983.7	2997.9	2996.1	2964.2	2953.6	2934.1	2904.9	2873.0	2814.6	2745.5
27.5°	2876.5	2904.0	2928.8	2940.3	2923.5	2895.1	2884.5	2867.7	2845.6	2786.2	2734.8
30°	2757.9	2788.9	2817.2	2842.0	2857.1	2844.7	2834.9	2825.2	2791.5	2752.6	2695.0
32.5°	2622.4	2663.1	2702.1	2732.2	2765.0	2774.7	2767.6	2759.6	2731.3	2695.9	2649.8
35°	2465.6	2521.4	2578.1	2632.1	2646.3	2669.3	2692.3	2679.1	2664.0	2628.6	2586.1
37.5°	2332.8	2372.6	2413.4	2481.6	2531.1	2560.4	2601.1	2606.4	2580.7	2563.9	2508.1
40°	2195.5	2231.8	2291.1	2331.0	2399.2	2432.8	2476.2	2495.7	2489.5	2479.8	2431.1
42.5°	2087.4	2105.2	2144.1	2179.6	2246.9	2315.9	2354.0	2375.3	2397.4	2389.4	2364.6
45°	1972.3	1988.3	2001.5	2032.5	2098.1	2159.2	2206.1	2238.0	2277.9	2296.5	2266.3
47.5°	1858.1	1862.5	1878.4	1904.1	1943.1	1990.0	2068.8	2116.7	2153.9	2190.2	2170.7
50°	1770.4	1754.4	1757.1	1773.0	1804.9	1851.0	1907.7	1975.0	2017.5	2061.8	2066.2
52.5°	1547.2	1676.5	1645.5	1654.4	1671.2	1693.3	1752.7	1819.1	1871.4	1909.4	1947.5
55°	1298.3	1324.0	1572.9	1537.5	1548.1	1567.6	1595.0	1661.5	1711.9	1765.1	1818.2
57.5°	1007.0	1198.3	1208.0	1438.3	1433.0	1434.7	1457.8	1495.8	1546.3	1612.7	1657.9
60°	782.9	863.5	1020.3	1100.0	1301.9	1309.0	1322.3	1344.4	1387.8	1450.7	1522.4
62.5°	690.8	701.4	757.2	876.8	1007.9	1166.4	1194.7	1198.3	1217.8	1280.6	1363.9
65°	606.7	613.7	630.6	643.0	752.8	906.0	1042.4	1064.5	1076.9	1114.1	1185.0
67.5°	418.0	528.7	543.8	552.6	563.3	634.1	803.3	915.7	929.9	962.7	1024.7
70°	80.6	167.4	457.9	467.6	472.9	488.9	516.3	695.2	789.1	820.1	848.4
72.5°	54.9	64.7	77.9	184.2	389.7	398.5	404.7	427.8	586.3	676.6	691.7
75°	39.9	44.3	52.3	64.7	79.7	259.5	321.5	333.0	344.5	475.6	551.8
77.5°	28.3	31.9	35.4	41.6	48.7	62.9	90.3	248.9	260.4	266.6	376.4
80°	15.9	19.5	23.9	27.5	31.0	35.4	46.1	57.6	128.4	187.8	197.5
82.5°	8.9	10.6	12.4	15.1	16.8	21.3	25.7	31.0	40.7	60.2	127.5
85°	4.4	4.4	4.4	6.2	7.1	9.7	11.5	13.3	18.6	25.7	35.4
87.5°	2.7	2.7	3.5	3.5	3.5	4.4	4.4	4.4	5.3	8.0	11.5
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: P1213451

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	2950.9	2950.9	2950.9	2950.9	2950.9
2.5°	2962.5	2959.8	2959.8	2970.4	2967.8
5°	2957.1	2954.5	2953.6	2965.1	2959.8
7.5°	2952.7	2943.0	2940.3	2950.9	2946.5
10°	2935.0	2927.9	2932.3	2928.8	2927.0
12.5°	2904.9	2900.5	2881.9	2883.6	2898.7
15°	2850.9	2868.6	2836.7	2865.0	2871.2
17.5°	2751.7	2791.5	2822.5	2839.4	2842.0
20°	2796.0	2809.2	2793.3	2794.2	2804.8
22.5°	2738.4	2744.6	2749.0	2743.7	2766.7
25°	2646.3	2622.4	2673.7	2684.4	2721.6
27.5°	2617.9	2598.5	2622.4	2620.6	2651.6
30°	2594.9	2532.0	2542.7	2559.5	2597.6
32.5°	2562.1	2463.0	2452.3	2489.5	2532.0
35°	2504.6	2410.7	2385.9	2409.8	2473.6
37.5°	2455.9	2338.1	2288.5	2320.4	2403.6
40°	2383.2	2281.4	2204.3	2232.7	2331.0
42.5°	2296.5	2232.7	2114.0	2133.5	2246.0
45°	2208.8	2152.1	2026.3	2036.1	2169.8
47.5°	2119.3	2067.1	1935.1	1936.9	2072.4
50°	2031.7	1962.6	1853.6	1822.6	1968.8
52.5°	1917.4	1853.6	1771.3	1720.8	1870.5
55°	1809.4	1737.6	1677.4	1599.5	1758.9
57.5°	1704.0	1624.3	1583.5	1483.4	1632.2
60°	1559.6	1521.5	1461.3	1365.7	1518.0
62.5°	1411.7	1399.3	1338.2	1239.0	1377.2
65°	1239.0	1268.2	1205.4	1120.3	1231.0
67.5°	1076.0	1128.3	1059.2	1007.0	1090.2
70°	902.5	962.7	923.7	905.1	940.5
72.5°	731.5	790.0	793.5	780.2	791.8
75°	565.0	629.7	665.1	644.7	647.4
77.5°	428.6	459.6	498.6	514.6	511.0
80°	264.8	318.8	350.7	383.5	372.0
82.5°	133.7	178.9	217.9	253.3	236.5
85°	55.8	71.7	100.1	132.0	126.6
87.5°	16.8	28.3	30.1	42.5	39.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)