

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: P1213505

Luminaire Tested: 4SNLED-LD5-64SL-RW-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213505
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33525)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-64SL-RW-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

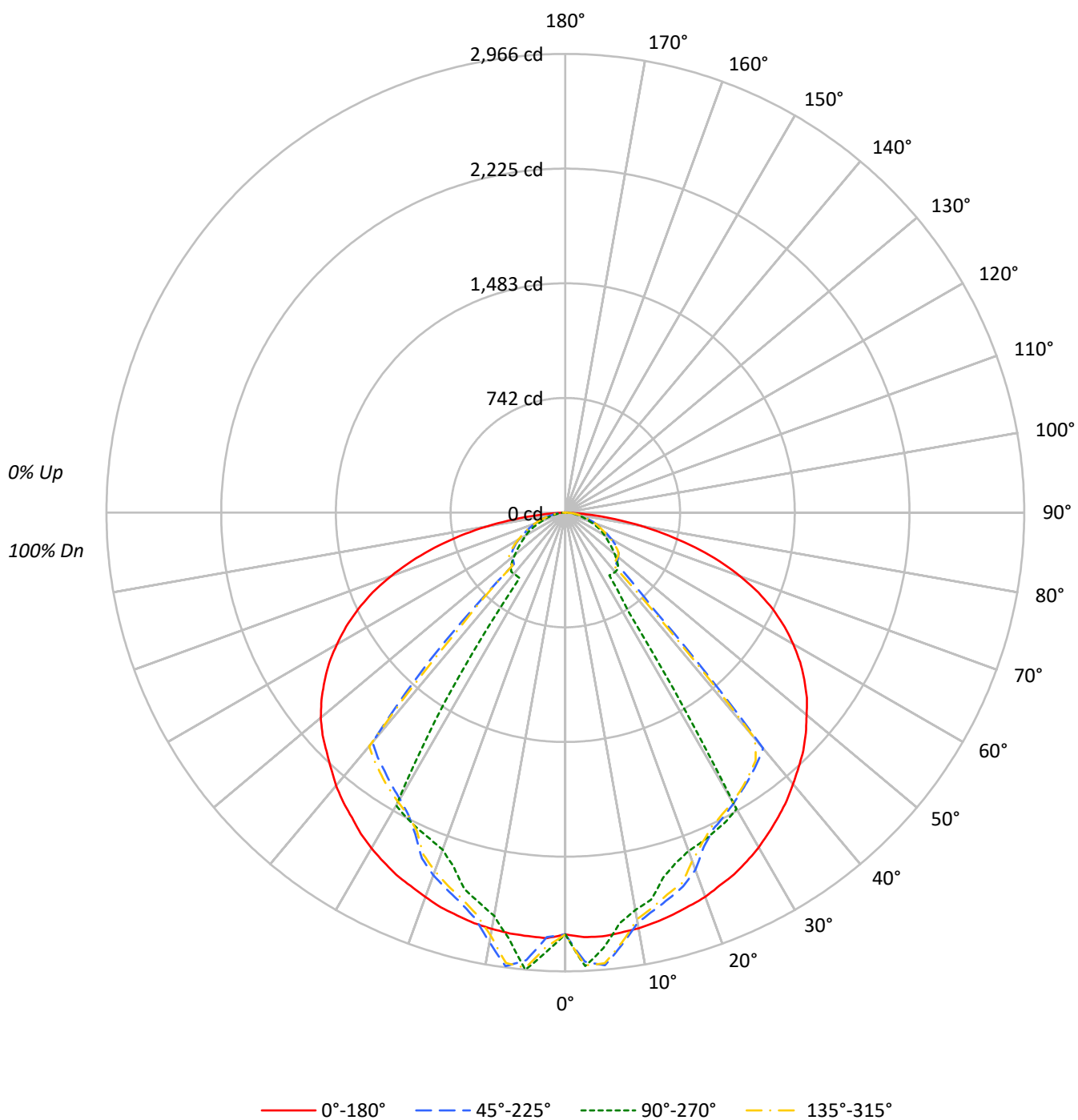
Lumens per Lamp: N/A
Luminaire Lumens: 5460.0 lumens
Efficiency: N/A
Efficacy: 99.3 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 55
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	110	106	102	99	108	104	101	98	100	97	94		96	94	92		92	91	89	87
2	102	94	88	83	99	93	87	82	89	85	81		86	82	79		83	80	77	75
3	94	84	77	72	91	83	76	71	80	74	70		77	73	69		75	71	67	65
4	87	76	68	62	85	75	67	62	72	66	61		70	65	60		68	63	59	57
5	81	69	61	55	79	68	60	55	66	59	54		64	58	53		62	57	53	51
6	75	63	55	49	73	62	54	49	60	53	48		59	53	48		57	52	47	46
7	70	58	50	44	68	57	49	44	55	48	43		54	48	43		53	47	43	41
8	66	53	45	40	64	52	45	40	51	44	39		50	44	39		49	43	39	37
9	62	49	41	36	60	48	41	36	47	41	36		46	40	36		45	40	36	34
10	58	46	38	33	57	45	38	33	44	38	33		43	37	33		42	37	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	22034	22034	22034	22034
5°	22249	22199	22240	23299
10°	22271	20071	22302	20379
15°	22320	18570	22373	19159
20°	22483	17614	22483	17547
25°	22677	17276	22710	17115
30°	22907	16972	22964	16771
35°	23173	3865	23221	4032
40°	23545	4020	23686	4150
45°	24109	3998	24192	4143
50°	24672	3614	25006	3712
55°	25431	3209	25633	3255
60°	26075	2852	26132	2888
65°	26536	2488	26468	2449
70°	26157	2005	26074	1933
75°	24285	1544	24458	1479
80°	19710	1096	20501	1004
85°	10671	657	11265	503

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 357.5°

Vertical Angle: 60°

Luminance: 26718 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.3	4.9
10°-20°	737.6	13.5
20°-30°	1092.5	20.0
30°-40°	1100.8	20.2
40°-50°	859.9	15.7
50°-60°	664.2	12.2
60°-70°	445.9	8.2
70°-80°	227.5	4.2
80°-90°	63.3	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2098.4	38.4
0°-40°	3199.2	58.6
0°-60°	4723.3	86.5
0°-90°	5460.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5460.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2727	2727	2727	2727	2727	
5°	2750	2826	2749	2966	2750	262
15°	2690	2443	2697	2520	2690	761
25°	2580	2277	2584	2256	2580	1190
35°	2400	495	2405	516	2400	1504
45°	2176	481	2183	499	2176	1678
55°	1886	350	1901	355	1886	1684
65°	1481	235	1477	231	1481	1456
75°	868	119	875	114	868	908
85°	156	38	165	29	156	215
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6
2.5°	2747.8	2757.8	2765.3	2770.3	2772.8	2772.8	2774.1	2775.3	2791.6	2799.1	2804.1
5°	2750.3	2760.3	2775.3	2795.3	2812.8	2827.8	2840.3	2857.8	2875.3	2894.0	2900.3
7.5°	2739.1	2751.6	2781.6	2817.8	2851.5	2875.3	2891.5	2902.8	2911.5	2912.8	2919.0
10°	2729.1	2751.6	2792.8	2840.3	2882.8	2911.5	2911.5	2905.3	2914.0	2880.3	2846.5
12.5°	2711.6	2736.6	2792.8	2855.3	2895.3	2906.5	2901.5	2876.5	2825.3	2784.1	2765.3
15°	2690.3	2724.1	2794.1	2864.0	2897.8	2901.5	2854.0	2790.3	2751.6	2726.6	2695.3
17.5°	2666.6	2711.6	2795.3	2865.3	2877.8	2860.3	2770.3	2730.3	2690.3	2631.6	2589.1
20°	2644.1	2687.8	2785.3	2847.8	2855.3	2776.6	2706.6	2664.1	2596.6	2545.4	2526.7
22.5°	2609.1	2660.4	2776.6	2824.1	2795.3	2704.1	2636.6	2569.1	2507.9	2492.9	2470.4
25°	2580.4	2634.1	2756.6	2795.3	2719.1	2637.9	2559.1	2480.4	2451.7	2430.4	2410.4
27.5°	2541.6	2607.9	2730.3	2742.8	2637.9	2566.6	2451.7	2416.7	2390.4	2366.7	2358.0
30°	2499.2	2580.4	2694.1	2670.4	2570.4	2465.4	2380.4	2348.0	2329.2	2304.2	2294.2
32.5°	2450.4	2539.1	2654.1	2586.6	2497.9	2366.7	2311.7	2286.7	2261.7	2243.0	2180.5
35°	2400.4	2502.9	2606.6	2506.7	2410.4	2291.7	2243.0	2220.5	2196.8	2128.0	2063.1
37.5°	2349.2	2462.9	2549.1	2420.4	2294.2	2214.3	2173.0	2148.0	2094.3	2006.8	1974.3
40°	2290.5	2414.2	2475.4	2331.7	2193.0	2135.5	2096.8	2071.8	1950.6	1911.9	1901.9
42.5°	2231.7	2366.7	2385.4	2245.5	2109.3	2051.8	2019.3	1936.8	1854.4	1834.4	1838.1
45°	2175.5	2315.5	2286.7	2123.0	2021.8	1974.3	1919.4	1805.6	1761.9	1771.9	1774.4
47.5°	2108.0	2254.2	2183.0	2000.6	1931.9	1884.4	1761.9	1693.2	1686.9	1700.7	1708.2
50°	2035.6	2185.5	2073.1	1889.4	1834.4	1778.2	1639.4	1604.5	1612.0	1625.7	1634.5
52.5°	1968.1	2108.0	1959.3	1785.6	1738.2	1609.5	1515.7	1522.0	1534.5	1550.7	1555.7
55°	1885.6	2014.3	1838.1	1680.7	1635.7	1467.0	1424.5	1439.5	1452.0	1465.8	1475.8
57.5°	1799.4	1906.9	1694.4	1563.2	1490.7	1340.8	1344.5	1354.5	1363.3	1379.5	569.8
60°	1700.7	1784.4	1537.0	1454.5	1310.8	1240.8	1244.6	1262.1	1270.8	709.8	392.4
62.5°	1598.2	1641.9	1394.5	1330.8	1145.9	1140.9	1158.4	1165.9	793.5	374.9	367.4
65°	1480.8	1472.0	1254.6	1153.4	1033.4	1038.4	1057.1	1019.7	351.1	351.1	348.6
67.5°	1350.8	1298.3	1118.4	954.7	924.7	935.9	955.9	333.6	324.9	327.4	318.6
70°	1202.1	1128.4	977.2	808.5	818.5	829.7	322.4	302.4	298.6	292.4	274.9
72.5°	1044.6	943.4	799.7	702.3	708.5	444.9	282.4	272.4	259.9	247.4	228.7
75°	868.5	737.3	587.3	587.3	596.0	253.7	246.2	229.9	216.2	199.9	188.7
77.5°	681.0	567.3	456.1	473.6	231.2	212.4	198.7	181.2	169.9	159.9	153.7
80°	498.6	396.1	343.6	307.4	179.9	161.2	147.5	137.5	132.5	126.2	118.7
82.5°	327.4	238.7	238.7	145.0	126.2	111.2	107.5	100.0	95.0	91.2	87.5
85°	156.2	138.7	105.0	88.7	78.7	71.2	68.7	65.0	65.0	63.7	62.5
87.5°	57.5	62.5	46.2	45.0	42.5	41.2	42.5	42.5	43.7	42.5	41.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6
2.5°	2816.6	2826.5	2834.0	2846.5	2862.8	2876.5	2889.0	2906.5	2934.0	2941.5	2947.8
5°	2900.3	2904.0	2912.8	2922.8	2925.3	2931.5	2930.3	2937.8	2941.5	2950.3	2931.5
7.5°	2905.3	2885.3	2861.5	2840.3	2825.3	2811.6	2802.8	2816.6	2824.1	2830.3	2811.6
10°	2800.3	2776.6	2762.8	2750.3	2735.3	2714.1	2685.3	2691.6	2689.1	2689.1	2682.8
12.5°	2734.1	2700.3	2665.4	2634.1	2620.4	2619.1	2620.4	2634.1	2634.1	2632.9	2625.4
15°	2630.4	2597.9	2580.4	2572.9	2572.9	2569.1	2569.1	2584.1	2580.4	2580.4	2576.6
17.5°	2561.6	2539.1	2526.7	2517.9	2514.2	2520.4	2527.9	2534.1	2535.4	2530.4	2510.4
20°	2505.4	2484.2	2469.2	2471.7	2470.4	2474.2	2477.9	2456.7	2430.4	2395.4	2379.2
22.5°	2446.7	2430.4	2419.2	2419.2	2404.2	2380.4	2345.5	2338.0	2334.2	2318.0	2304.2
25°	2390.4	2371.7	2355.5	2305.5	2274.2	2278.0	2271.7	2259.2	2258.0	2256.7	2261.7
27.5°	2334.2	2285.5	2223.0	2215.5	2203.0	2201.8	2209.3	2215.5	2215.5	2220.5	2226.8
30°	2218.0	2161.8	2150.5	2136.8	2141.8	2159.3	2163.0	2171.8	2174.3	2183.0	2188.0
32.5°	2111.8	2086.8	2076.8	2083.0	2099.3	2114.3	2123.0	2126.8	2133.0	2140.5	2146.8
35°	2025.6	2018.1	2026.8	2040.6	2056.8	2069.3	2076.8	2084.3	2090.5	2096.8	2101.8
37.5°	1961.8	1966.8	1979.3	1996.8	2013.1	2023.1	2029.3	2038.1	2046.8	2054.3	2024.3
40°	1901.9	1914.4	1928.1	1946.8	1960.6	1970.6	1976.8	1988.1	1913.1	866.0	474.8
42.5°	1849.4	1863.1	1873.1	1888.1	1903.1	1910.6	1855.6	828.5	468.6	466.1	472.3
45°	1785.6	1796.9	1813.1	1824.4	1838.1	1207.1	461.1	466.1	458.6	463.6	466.1
47.5°	1720.7	1738.2	1746.9	1666.9	496.1	458.6	453.6	458.6	453.6	459.8	456.1
50°	1646.9	1668.2	1187.1	448.6	444.9	442.4	447.3	444.9	448.6	453.6	443.6
52.5°	1572.0	973.4	434.9	432.4	434.9	432.4	441.1	434.9	436.1	431.1	418.6
55°	532.3	421.1	417.4	416.1	423.6	423.6	423.6	413.6	407.4	394.9	386.1
57.5°	407.4	407.4	406.1	407.4	404.9	402.4	391.1	382.4	373.6	356.1	351.1
60°	386.1	386.1	386.1	386.1	374.9	369.9	352.4	344.9	329.9	321.1	316.1
62.5°	368.6	366.1	354.9	351.1	338.6	324.9	314.9	307.4	292.4	287.4	283.7
65°	343.6	334.9	321.1	306.1	299.9	284.9	279.9	268.7	261.2	257.4	254.9
67.5°	302.4	289.9	278.7	268.7	257.4	252.4	246.2	237.4	232.4	229.9	227.4
70°	258.7	249.9	238.7	232.4	224.9	221.2	212.4	209.9	206.2	202.4	198.7
72.5°	216.2	211.2	206.2	197.4	194.9	192.4	183.7	178.7	173.7	168.7	166.2
75°	181.2	177.4	174.9	167.4	163.7	156.2	149.9	146.2	142.5	138.7	136.2
77.5°	148.7	146.2	138.7	133.7	131.2	125.0	122.5	123.7	121.2	116.2	113.7
80°	116.2	113.7	107.5	107.5	105.0	102.5	100.0	97.5	95.0	91.2	88.7
82.5°	88.7	86.2	83.7	81.2	78.7	77.5	76.2	73.7	71.2	68.7	67.5
85°	62.5	61.2	60.0	58.7	57.5	56.2	55.0	52.5	50.0	48.7	47.5
87.5°	42.5	41.2	40.0	38.7	37.5	36.2	35.0	33.7	31.2	30.0	28.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6
2.5°	2947.8	2954.0	2947.8	2934.0	2925.3	2921.5	2929.0	2929.0	2934.0	2940.3	2941.5
5°	2901.5	2886.5	2869.0	2851.5	2842.8	2837.8	2824.1	2826.5	2830.3	2832.8	2835.3
7.5°	2786.6	2766.6	2742.8	2720.3	2711.6	2704.1	2687.8	2687.8	2687.8	2689.1	2696.6
10°	2669.1	2660.4	2650.4	2635.4	2624.1	2620.4	2606.6	2610.4	2607.9	2611.6	2620.4
12.5°	2614.1	2604.1	2595.4	2580.4	2567.9	2562.9	2556.6	2560.4	2559.1	2565.4	2572.9
15°	2564.1	2559.1	2549.1	2537.9	2526.7	2516.7	2494.2	2486.7	2481.7	2475.4	2484.2
17.5°	2481.7	2446.7	2422.9	2405.4	2392.9	2384.2	2378.0	2378.0	2381.7	2385.4	2392.9
20°	2369.2	2359.2	2348.0	2329.2	2316.7	2311.7	2308.0	2308.0	2314.2	2319.2	2333.0
22.5°	2291.7	2290.5	2286.7	2278.0	2271.7	2271.7	2273.0	2275.5	2284.2	2291.7	2305.5
25°	2255.5	2260.5	2258.0	2253.0	2249.2	2250.5	2248.0	2250.5	2259.2	2266.7	2278.0
27.5°	2226.8	2234.2	2231.7	2224.3	2218.0	2220.5	2224.3	2221.8	2229.3	2238.0	2246.7
30°	2188.0	2189.3	2194.3	2185.5	2183.0	2186.8	2188.0	2190.5	2198.0	2204.3	2211.8
32.5°	2144.3	2154.3	2153.0	2144.3	2144.3	2148.0	2149.3	2065.6	1909.4	1644.4	1572.0
35°	2101.8	2113.0	2094.3	1765.7	1222.1	652.3	503.6	486.1	489.8	492.3	494.8
37.5°	1554.5	737.3	469.8	473.6	477.3	481.1	484.8	488.6	492.3	496.1	497.3
40°	467.3	466.1	469.8	474.8	478.6	481.1	486.1	489.8	493.6	497.3	498.6
42.5°	462.3	464.8	468.6	473.6	478.6	483.6	487.3	492.3	494.8	497.3	498.6
45°	459.8	464.8	469.8	473.6	477.3	479.8	482.3	483.6	482.3	482.3	484.8
47.5°	456.1	461.1	462.3	461.1	462.3	461.1	461.1	461.1	457.3	456.1	456.1
50°	442.4	442.4	439.9	434.9	433.6	432.4	429.9	428.6	423.6	422.4	422.4
52.5°	413.6	412.4	408.6	402.4	399.9	397.4	396.1	394.9	389.9	387.4	388.6
55°	379.9	377.4	373.6	366.1	364.9	362.4	361.1	359.9	354.9	357.4	353.6
57.5°	348.6	343.6	338.6	337.4	332.4	331.1	329.9	328.6	324.9	326.1	323.6
60°	311.1	309.9	307.4	302.4	302.4	301.1	301.1	298.6	296.2	294.9	294.9
62.5°	283.7	279.9	277.4	277.4	273.7	273.7	273.7	271.2	268.7	269.9	268.7
65°	253.7	252.4	251.2	248.7	248.7	247.4	247.4	244.9	241.2	242.4	239.9
67.5°	228.7	226.2	223.7	222.4	217.4	214.9	213.7	212.4	207.4	208.7	206.2
70°	197.4	193.7	191.2	188.7	184.9	182.4	182.4	179.9	176.2	177.4	174.9
72.5°	164.9	162.4	159.9	158.7	154.9	153.7	152.4	151.2	147.5	148.7	147.5
75°	137.5	137.5	136.2	135.0	131.2	127.5	125.0	123.7	121.2	122.5	120.0
77.5°	113.7	111.2	108.7	108.7	105.0	102.5	100.0	100.0	100.0	98.7	97.5
80°	88.7	86.2	86.2	85.0	82.5	80.0	78.7	78.7	77.5	77.5	76.2
82.5°	67.5	65.0	63.7	63.7	61.2	60.0	58.7	57.5	57.5	57.5	56.2
85°	47.5	45.0	43.7	43.7	41.2	40.0	40.0	38.7	38.7	37.5	37.5
87.5°	28.7	27.5	26.2	26.2	23.7	22.5	22.5	22.5	21.2	21.2	20.0
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: P1213505

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6
2.5°	2941.5	2941.5	2932.8	2935.3	2931.5	2936.5	2930.3	2930.3	2937.8	2937.8	2942.8
5°	2836.5	2830.3	2829.0	2826.5	2814.1	2819.1	2812.8	2806.6	2815.3	2815.3	2826.5
7.5°	2692.8	2681.6	2686.6	2679.1	2671.6	2660.4	2664.1	2659.1	2665.4	2674.1	2685.3
10°	2619.1	2609.1	2615.4	2607.9	2611.6	2595.4	2596.6	2597.9	2604.1	2606.6	2616.6
12.5°	2571.6	2569.1	2566.6	2564.1	2566.6	2557.9	2552.9	2554.1	2556.6	2557.9	2565.4
15°	2471.7	2455.4	2460.4	2442.9	2444.2	2445.4	2435.4	2445.4	2444.2	2460.4	2475.4
17.5°	2390.4	2390.4	2381.7	2374.2	2369.2	2368.0	2360.5	2365.5	2360.5	2370.5	2374.2
20°	2334.2	2333.0	2331.7	2328.0	2315.5	2316.7	2320.5	2309.2	2308.0	2306.7	2314.2
22.5°	2308.0	2309.2	2304.2	2304.2	2293.0	2295.5	2296.7	2284.2	2285.5	2281.7	2285.5
25°	2280.5	2283.0	2276.7	2276.7	2274.2	2273.0	2266.7	2269.2	2261.7	2255.5	2261.7
27.5°	2248.0	2253.0	2248.0	2250.5	2245.5	2243.0	2239.2	2236.7	2229.3	2228.0	2231.7
30°	2218.0	2220.5	2219.3	2213.0	2211.8	2204.3	2208.0	2200.5	2193.0	2194.3	2196.8
32.5°	1137.1	1085.9	837.2	756.0	748.5	776.0	919.7	1119.6	1450.8	1771.9	2003.1
35°	496.1	496.1	496.1	494.8	494.8	493.6	492.3	491.1	489.8	488.6	487.3
37.5°	498.6	498.6	498.6	498.6	497.3	496.1	496.1	493.6	492.3	491.1	489.8
40°	499.8	501.1	501.1	501.1	499.8	499.8	498.6	496.1	494.8	492.3	489.8
42.5°	498.6	499.8	499.8	498.6	498.6	497.3	497.3	496.1	494.8	493.6	492.3
45°	482.3	483.6	481.1	481.1	479.8	479.8	479.8	479.8	479.8	481.1	481.1
47.5°	453.6	453.6	452.3	451.1	451.1	449.8	451.1	449.8	452.3	453.6	456.1
50°	419.9	419.9	417.4	416.1	416.1	416.1	416.1	417.4	418.6	421.1	423.6
52.5°	384.9	384.9	383.6	382.4	381.1	381.1	384.9	383.6	384.9	386.1	389.9
55°	351.1	352.4	349.9	349.9	348.6	348.6	348.6	349.9	351.1	352.4	356.1
57.5°	322.4	322.4	319.9	319.9	319.9	318.6	322.4	319.9	321.1	322.4	324.9
60°	293.7	292.4	292.4	291.2	291.2	291.2	293.7	292.4	292.4	293.7	296.2
62.5°	267.4	267.4	266.2	266.2	264.9	264.9	267.4	266.2	266.2	267.4	268.7
65°	237.4	237.4	236.2	234.9	238.7	234.9	238.7	236.2	238.7	239.9	242.4
67.5°	203.7	203.7	203.7	202.4	202.4	204.9	206.2	203.7	204.9	207.4	208.7
70°	173.7	173.7	172.4	172.4	172.4	174.9	176.2	173.7	174.9	176.2	178.7
72.5°	147.5	145.0	145.0	143.7	146.2	146.2	147.5	146.2	147.5	147.5	149.9
75°	121.2	118.7	118.7	118.7	121.2	120.0	121.2	120.0	121.2	121.2	122.5
77.5°	97.5	96.2	95.0	95.0	97.5	97.5	97.5	96.2	97.5	98.7	100.0
80°	76.2	75.0	73.7	73.7	76.2	76.2	76.2	77.5	76.2	77.5	78.7
82.5°	56.2	55.0	53.7	56.2	56.2	56.2	56.2	57.5	56.2	57.5	58.7
85°	37.5	36.2	35.0	37.5	37.5	37.5	37.5	38.7	37.5	38.7	40.0
87.5°	20.0	18.7	18.7	20.0	20.0	20.0	21.2	21.2	21.2	22.5	22.5
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: P1213505

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6
2.5°	2950.3	2954.0	2952.8	2945.3	2937.8	2929.0	2922.8	2924.0	2936.5	2940.3	2929.0
5°	2826.5	2850.3	2850.3	2866.5	2857.8	2850.3	2855.3	2882.8	2896.5	2917.8	2925.3
7.5°	2699.1	2710.3	2709.1	2725.3	2722.8	2722.8	2726.6	2762.8	2780.3	2797.8	2802.8
10°	2627.9	2639.1	2637.9	2639.1	2635.4	2626.6	2626.6	2642.9	2657.9	2666.6	2669.1
12.5°	2576.6	2582.9	2581.6	2581.6	2579.1	2571.6	2570.4	2584.1	2600.4	2611.6	2612.9
15°	2500.4	2517.9	2521.7	2537.9	2534.1	2524.2	2526.7	2537.9	2547.9	2557.9	2554.1
17.5°	2386.7	2395.4	2396.7	2402.9	2400.4	2400.4	2415.4	2456.7	2484.2	2507.9	2510.4
20°	2321.7	2328.0	2325.5	2339.2	2333.0	2331.7	2335.5	2353.0	2365.5	2376.7	2396.7
22.5°	2290.5	2295.5	2291.7	2293.0	2281.7	2271.7	2269.2	2283.0	2296.7	2311.7	2311.7
25°	2264.2	2268.0	2266.7	2264.2	2255.5	2241.7	2239.2	2241.7	2246.7	2248.0	2239.2
27.5°	2233.0	2235.5	2235.5	2236.7	2225.5	2213.0	2210.5	2208.0	2213.0	2211.8	2198.0
30°	2200.5	2196.8	2198.0	2199.3	2189.3	2178.0	2173.0	2171.8	2176.8	2175.5	2161.8
32.5°	2123.0	2151.8	2154.3	2156.8	2148.0	2138.0	2133.0	2129.3	2131.8	2130.5	2118.0
35°	486.1	494.8	606.0	1372.0	1863.1	2063.1	2084.3	2079.3	2080.6	2080.6	2070.6
37.5°	487.3	486.1	484.8	481.1	477.3	474.8	821.0	1750.7	2028.1	2029.3	2020.6
40°	487.3	486.1	484.8	482.3	477.3	473.6	467.3	462.3	473.6	1042.1	1906.9
42.5°	489.8	487.3	484.8	482.3	477.3	472.3	467.3	461.1	464.8	462.3	456.1
45°	482.3	481.1	481.1	479.8	477.3	472.3	466.1	458.6	454.8	458.6	452.3
47.5°	458.6	459.8	463.6	464.8	464.8	466.1	462.3	457.3	451.1	454.8	447.3
50°	426.1	428.6	429.9	436.1	438.6	443.6	444.9	444.9	443.6	448.6	443.6
52.5°	391.1	393.6	399.9	402.4	404.9	412.4	414.9	418.6	421.1	428.6	433.6
55°	357.4	358.6	361.1	366.1	369.9	376.1	379.9	383.6	389.9	393.6	408.6
57.5°	326.1	327.4	332.4	333.6	336.1	341.1	344.9	349.9	354.9	357.4	374.9
60°	296.2	297.4	301.1	302.4	303.6	308.6	312.4	316.1	319.9	322.4	334.9
62.5°	269.9	269.9	273.7	273.7	274.9	278.7	281.2	283.7	287.4	288.7	294.9
65°	243.7	244.9	247.4	247.4	248.7	251.2	252.4	253.7	257.4	257.4	262.4
67.5°	211.2	212.4	216.2	218.7	219.9	224.9	226.2	227.4	229.9	231.2	233.7
70°	179.9	181.2	184.9	186.2	187.4	191.2	193.7	197.4	201.2	204.9	207.4
72.5°	151.2	152.4	156.2	156.2	159.9	161.2	163.7	164.9	168.7	171.2	174.9
75°	123.7	125.0	128.7	128.7	132.5	133.7	135.0	136.2	138.7	141.2	143.7
77.5°	101.2	101.2	106.2	108.7	111.2	111.2	112.5	112.5	112.5	113.7	116.2
80°	80.0	80.0	83.7	86.2	88.7	88.7	90.0	91.2	92.5	92.5	93.7
82.5°	60.0	60.0	63.7	65.0	67.5	67.5	67.5	68.7	70.0	68.7	71.2
85°	41.2	41.2	43.7	45.0	47.5	47.5	47.5	48.7	50.0	48.7	50.0
87.5°	23.7	25.0	26.2	27.5	28.7	30.0	30.0	30.0	31.2	31.2	32.5
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: P1213505

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6
2.5°	2916.5	2901.5	2900.3	2882.8	2877.8	2879.0	2865.3	2860.3	2837.8	2832.8	2809.1
5°	2927.8	2935.3	2931.5	2930.3	2934.0	2931.5	2921.5	2916.5	2912.8	2902.8	2882.8
7.5°	2804.1	2809.1	2812.8	2829.0	2842.8	2866.5	2891.5	2907.8	2920.3	2922.8	2906.5
10°	2677.8	2701.6	2717.8	2742.8	2762.8	2776.6	2791.6	2805.3	2841.5	2877.8	2899.0
12.5°	2612.9	2619.1	2617.9	2631.6	2645.4	2681.6	2716.6	2736.6	2764.1	2780.3	2819.1
15°	2557.9	2559.1	2562.9	2572.9	2580.4	2592.9	2609.1	2639.1	2694.1	2719.1	2740.3
17.5°	2507.9	2507.9	2510.4	2519.2	2529.1	2540.4	2550.4	2562.9	2590.4	2631.6	2684.1
20°	2427.9	2462.9	2466.7	2465.4	2470.4	2491.7	2494.2	2516.7	2530.4	2546.6	2597.9
22.5°	2309.2	2330.5	2360.5	2406.7	2424.2	2434.2	2441.7	2451.7	2472.9	2491.7	2512.9
25°	2244.2	2258.0	2266.7	2280.5	2316.7	2375.5	2386.7	2397.9	2411.7	2425.4	2451.7
27.5°	2186.8	2185.5	2191.8	2204.3	2214.3	2245.5	2300.5	2344.2	2346.7	2366.7	2389.2
30°	2145.5	2138.0	2129.3	2126.8	2140.5	2156.8	2173.0	2241.7	2289.2	2299.2	2323.0
32.5°	2106.8	2094.3	2081.8	2071.8	2063.1	2076.8	2086.8	2116.8	2178.0	2235.5	2248.0
35°	2059.3	2046.8	2031.8	2020.6	2006.8	2005.6	2004.3	2033.1	2053.1	2121.8	2181.8
37.5°	2010.6	1996.8	1984.3	1971.8	1958.1	1948.1	1941.8	1949.3	1968.1	1998.1	2098.0
40°	1959.3	1943.1	1930.6	1920.6	1901.9	1894.4	1881.9	1876.9	1878.1	1904.4	1956.8
42.5°	1170.9	1866.9	1873.1	1861.9	1845.6	1835.6	1821.9	1815.6	1803.1	1815.6	1845.6
45°	451.1	456.1	1365.8	1804.4	1784.4	1771.9	1759.4	1753.2	1739.4	1729.4	1756.9
47.5°	442.4	447.3	437.4	619.8	1703.2	1706.9	1691.9	1685.7	1671.9	1664.4	1656.9
50°	436.1	439.9	432.4	434.9	426.1	1560.7	1623.2	1615.7	1600.7	1592.0	1577.0
52.5°	429.9	429.9	424.9	418.6	416.1	417.4	1313.3	1544.5	1527.0	1518.2	1498.2
55°	409.9	412.4	417.4	407.4	404.9	403.6	399.9	1250.8	1445.8	1435.8	1418.3
57.5°	379.9	384.9	398.6	396.1	396.1	386.1	383.6	383.6	1160.9	1352.0	1334.6
60°	344.9	349.9	364.9	369.9	373.6	371.1	368.6	367.4	362.4	1223.3	1245.8
62.5°	308.6	313.6	318.6	334.9	339.9	346.1	353.6	349.9	344.9	344.9	1152.1
65°	269.9	277.4	279.9	294.9	301.1	312.4	318.6	327.4	324.9	323.6	329.9
67.5°	236.2	244.9	246.2	252.4	263.7	268.7	276.2	292.4	299.9	302.4	304.9
70°	207.4	212.4	216.2	218.7	226.2	227.4	241.2	252.4	263.7	276.2	279.9
72.5°	178.7	182.4	189.9	187.4	189.9	194.9	202.4	209.9	221.2	238.7	249.9
75°	146.2	148.7	153.7	156.2	161.2	164.9	169.9	176.2	186.2	194.9	209.9
77.5°	117.5	118.7	122.5	123.7	128.7	132.5	141.2	145.0	151.2	157.4	166.2
80°	95.0	95.0	96.2	96.2	100.0	103.7	110.0	113.7	121.2	126.2	126.2
82.5°	72.5	72.5	76.2	76.2	78.7	78.7	82.5	82.5	86.2	88.7	91.2
85°	51.2	52.5	55.0	53.7	56.2	55.0	57.5	60.0	61.2	60.0	58.7
87.5°	33.7	33.7	36.2	35.0	36.2	36.2	38.7	38.7	40.0	40.0	38.7
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: P1213505

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6
2.5°	2800.3	2781.6	2770.3	2756.6	2752.8	2749.1	2754.1	2754.1	2746.6	2740.3	2729.1
5°	2865.3	2845.3	2824.1	2801.6	2780.3	2757.8	2749.1	2747.8	2734.1	2726.6	2722.8
7.5°	2899.0	2889.0	2865.3	2834.0	2801.6	2761.6	2744.1	2734.1	2720.3	2717.8	2717.8
10°	2902.8	2891.5	2879.0	2856.5	2819.1	2766.6	2732.8	2712.8	2700.3	2709.1	2725.3
12.5°	2866.5	2887.8	2876.5	2861.5	2831.5	2767.8	2719.1	2689.1	2685.3	2707.8	2750.3
15°	2774.1	2836.5	2867.8	2852.8	2829.0	2765.3	2696.6	2661.6	2661.6	2707.8	2762.8
17.5°	2704.1	2752.8	2829.0	2841.5	2814.1	2760.3	2675.4	2634.1	2645.4	2712.8	2771.6
20°	2646.6	2676.6	2750.3	2820.3	2794.1	2749.1	2644.1	2601.6	2624.1	2705.3	2784.1
22.5°	2556.6	2616.6	2661.6	2765.3	2774.1	2727.8	2612.9	2561.6	2606.6	2705.3	2777.8
25°	2469.2	2541.6	2589.1	2690.3	2744.1	2701.6	2584.1	2519.2	2587.9	2701.6	2772.8
27.5°	2407.9	2441.7	2527.9	2600.4	2699.1	2666.6	2545.4	2472.9	2564.1	2681.6	2744.1
30°	2343.0	2365.5	2450.4	2519.2	2639.1	2626.6	2505.4	2421.7	2534.1	2662.9	2669.1
32.5°	2271.7	2296.7	2340.5	2440.4	2555.4	2589.1	2460.4	2370.5	2501.7	2634.1	2581.6
35°	2199.3	2218.0	2253.0	2360.5	2457.9	2532.9	2405.4	2311.7	2479.2	2590.4	2497.9
37.5°	2126.8	2146.8	2176.8	2266.7	2355.5	2480.4	2358.0	2253.0	2437.9	2512.9	2410.4
40°	2058.1	2069.3	2100.5	2156.8	2270.5	2426.7	2304.2	2191.8	2395.4	2414.2	2291.7
42.5°	1931.9	1988.1	2016.8	2061.8	2174.3	2353.0	2241.7	2126.8	2348.0	2315.5	2173.0
45°	1795.6	1918.1	1930.6	1975.6	2089.3	2274.2	2183.0	2063.1	2303.0	2230.5	2060.6
47.5°	1684.4	1773.2	1845.6	1883.1	1988.1	2181.8	2128.0	2009.3	2235.5	2123.0	1950.6
50°	1585.7	1633.2	1764.4	1791.9	1866.9	2070.6	2063.1	1946.8	2141.8	1988.1	1843.1
52.5°	1489.5	1523.2	1641.9	1700.7	1761.9	1950.6	1985.6	1885.6	2039.3	1853.1	1734.4
55°	1405.8	1417.0	1482.0	1605.7	1660.7	1829.4	1900.6	1814.4	1909.4	1724.4	1629.5
57.5°	1319.6	1309.6	1357.0	1515.7	1555.7	1705.7	1810.6	1741.9	1804.4	1593.2	1520.7
60°	1229.6	1215.8	1235.8	1340.8	1444.5	1583.2	1704.4	1661.9	1676.9	1463.3	1399.5
62.5°	1135.9	1122.1	1115.9	1182.1	1335.8	1457.0	1597.0	1573.2	1520.7	1344.5	1249.6
65°	1038.4	1024.7	1014.7	1040.9	1215.8	1293.3	1477.0	1470.8	1349.5	1219.6	1052.1
67.5°	316.1	932.2	910.9	909.7	1024.7	1144.6	1347.0	1337.1	1177.1	1085.9	905.9
70°	284.9	756.0	803.5	792.2	842.2	993.4	1198.3	1190.8	1009.7	871.0	801.0
72.5°	261.2	267.4	709.8	697.3	708.5	844.7	1043.4	1023.4	856.0	687.3	692.3
75°	223.7	234.9	244.9	588.6	573.6	699.8	874.7	843.5	706.0	567.3	578.6
77.5°	182.4	196.2	203.7	428.6	463.6	498.6	698.5	657.3	486.1	453.6	216.2
80°	136.2	147.5	159.9	171.2	352.4	348.6	518.6	477.3	338.6	282.4	168.7
82.5°	100.0	103.7	111.2	123.7	140.0	233.7	333.6	293.7	234.9	128.7	116.2
85°	62.5	67.5	71.2	75.0	85.0	140.0	164.9	131.2	98.7	78.7	73.7
87.5°	40.0	40.0	38.7	40.0	41.2	50.0	56.2	53.7	42.5	40.0	40.0
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: P1213505

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6
2.5°	2716.6	2699.1	2699.1	2694.1	2697.8	2697.8	2696.6	2697.8	2706.6	2711.6	2720.3
5°	2715.3	2710.3	2721.6	2735.3	2751.6	2771.6	2776.6	2794.1	2810.3	2831.5	2854.0
7.5°	2731.6	2749.1	2770.3	2792.8	2825.3	2849.0	2870.3	2891.5	2906.5	2926.5	2939.0
10°	2755.3	2790.3	2826.5	2855.3	2890.3	2910.3	2924.0	2926.5	2905.3	2871.5	2844.0
12.5°	2789.1	2830.3	2864.0	2891.5	2907.8	2900.3	2860.3	2819.1	2795.3	2760.3	2711.6
15°	2817.8	2855.3	2890.3	2879.0	2835.3	2794.1	2762.8	2714.1	2666.6	2634.1	2612.9
17.5°	2830.3	2866.5	2854.0	2795.3	2754.1	2706.6	2642.9	2605.4	2574.1	2549.1	2536.6
20°	2837.8	2831.5	2764.1	2721.6	2641.6	2597.9	2556.6	2521.7	2497.9	2485.4	2482.9
22.5°	2817.8	2741.6	2684.1	2607.9	2549.1	2512.9	2480.4	2451.7	2435.4	2425.4	2419.2
25°	2751.6	2662.9	2577.9	2517.9	2467.9	2436.7	2411.7	2387.9	2368.0	2363.0	2350.5
27.5°	2659.1	2586.6	2474.2	2427.9	2384.2	2369.2	2341.7	2318.0	2300.5	2285.5	2245.5
30°	2582.9	2467.9	2386.7	2344.2	2318.0	2300.5	2269.2	2244.2	2214.3	2159.3	2136.8
32.5°	2489.2	2375.5	2298.0	2274.2	2241.7	2226.8	2191.8	2136.8	2090.5	2068.1	2066.8
35°	2368.0	2274.2	2218.0	2196.8	2170.5	2145.5	2073.1	2023.1	2000.6	2003.1	2021.8
37.5°	2266.7	2183.0	2146.8	2116.8	2086.8	2023.1	1961.8	1938.1	1944.3	1956.8	1965.6
40°	2164.3	2100.5	2059.3	2035.6	1968.1	1905.6	1873.1	1881.9	1893.1	1901.9	1913.1
42.5°	2064.3	2019.3	1978.1	1931.9	1839.4	1805.6	1813.1	1824.4	1834.4	1846.9	1858.1
45°	1969.3	1929.4	1881.9	1776.9	1730.7	1739.4	1750.7	1759.4	1774.4	1783.2	1794.4
47.5°	1879.4	1836.9	1753.2	1660.7	1655.7	1673.2	1683.2	1694.4	1705.7	1683.2	928.4
50°	1778.2	1734.4	1607.0	1572.0	1583.2	1599.5	1612.0	1623.2	1445.8	574.8	442.4
52.5°	1678.2	1567.0	1485.8	1495.7	1507.0	1525.7	1534.5	1139.6	453.6	432.4	433.6
55°	1567.0	1424.5	1400.8	1413.3	1423.3	1442.0	955.9	418.6	416.1	414.9	424.9
57.5°	1392.0	1305.8	1315.8	1328.3	1338.3	944.7	407.4	404.9	406.1	407.4	408.6
60°	1235.8	1217.1	1228.3	1239.6	877.2	393.6	386.1	387.4	392.4	388.6	378.6
62.5°	1112.1	1127.1	1138.4	997.2	373.6	369.9	373.6	369.9	361.1	354.9	342.4
65°	1017.2	1032.2	1040.9	351.1	349.9	354.9	351.1	338.6	324.9	307.4	303.6
67.5°	917.2	932.2	333.6	324.9	329.9	323.6	308.6	293.7	283.7	268.7	262.4
70°	813.5	348.6	302.4	301.1	292.4	282.4	266.2	251.2	238.7	232.4	226.2
72.5°	587.3	276.2	272.4	262.4	247.4	233.7	219.9	211.2	204.9	201.2	197.4
75°	244.9	239.9	228.7	211.2	196.2	189.9	179.9	173.7	171.2	163.7	161.2
77.5°	204.9	194.9	178.7	166.2	157.4	153.7	146.2	138.7	135.0	133.7	128.7
80°	157.4	143.7	136.2	130.0	127.5	118.7	110.0	106.2	103.7	102.5	98.7
82.5°	107.5	102.5	97.5	88.7	88.7	85.0	81.2	78.7	76.2	76.2	73.7
85°	70.0	66.2	65.0	61.2	61.2	58.7	57.5	56.2	55.0	53.7	52.5
87.5°	40.0	40.0	41.2	40.0	40.0	38.7	37.5	36.2	35.0	35.0	32.5
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: P1213505

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6
2.5°	2731.6	2744.1	2746.6	2789.1	2812.8	2811.6	2804.1	2826.5	2812.8	2805.3	2812.8
5°	2876.5	2891.5	2904.0	2950.3	2966.5	2974.0	2972.8	2985.2	2975.2	2966.5	2966.5
7.5°	2947.8	2952.8	2957.8	2946.5	2939.0	2926.5	2907.8	2880.3	2866.5	2851.5	2832.8
10°	2830.3	2814.1	2820.3	2797.8	2779.1	2765.3	2747.8	2725.3	2706.6	2692.8	2671.6
12.5°	2686.6	2685.3	2687.8	2691.6	2672.9	2661.6	2647.9	2631.6	2617.9	2602.9	2585.4
15°	2599.1	2600.4	2610.4	2606.6	2600.4	2594.1	2579.1	2574.1	2561.6	2545.4	2535.4
17.5°	2536.6	2542.9	2552.9	2547.9	2537.9	2531.6	2520.4	2509.2	2497.9	2485.4	2470.4
20°	2481.7	2487.9	2494.2	2487.9	2469.2	2460.4	2445.4	2410.4	2385.4	2360.5	2338.0
22.5°	2421.7	2425.4	2420.4	2400.4	2353.0	2330.5	2313.0	2303.0	2281.7	2268.0	2254.2
25°	2346.7	2325.5	2293.0	2270.5	2251.7	2241.7	2234.2	2233.0	2230.5	2228.0	2221.8
27.5°	2224.3	2216.8	2199.3	2190.5	2191.8	2195.5	2196.8	2200.5	2196.8	2191.8	2186.8
30°	2133.0	2136.8	2138.0	2140.5	2146.8	2150.5	2151.8	2156.8	2154.3	2150.5	2148.0
32.5°	2075.6	2084.3	2089.3	2096.8	2100.5	2106.8	2106.8	2114.3	2106.8	2105.5	2103.0
35°	2028.1	2035.6	2038.1	2049.3	2053.1	2059.3	2059.3	2065.6	2059.3	1995.6	1575.7
37.5°	1980.6	1988.1	1993.1	2003.1	2004.3	2008.1	1853.1	1355.8	874.7	677.3	517.3
40°	1924.4	1933.1	1938.1	1941.8	1364.5	866.0	596.0	484.8	484.8	488.6	492.3
42.5°	1864.4	1870.6	1303.3	758.5	472.3	471.1	474.8	478.6	482.3	487.3	492.3
45°	1465.8	739.8	469.8	458.6	462.3	467.3	472.3	477.3	483.6	488.6	491.1
47.5°	481.1	451.1	457.3	452.3	458.6	464.8	469.8	474.8	476.1	477.3	476.1
50°	444.9	444.9	448.6	448.6	453.6	456.1	456.1	456.1	451.1	449.8	446.1
52.5°	429.9	439.9	434.9	437.4	434.9	431.1	427.4	423.6	416.1	413.6	408.6
55°	422.4	426.1	413.6	409.9	404.9	394.9	389.9	384.9	378.6	376.1	369.9
57.5°	404.9	396.1	382.4	376.1	367.4	357.4	352.4	348.6	342.4	339.9	336.1
60°	372.4	354.9	346.1	338.6	328.6	319.9	316.1	313.6	308.6	307.4	303.6
62.5°	332.4	317.4	309.9	299.9	292.4	287.4	283.7	282.4	277.4	277.4	274.9
65°	288.7	281.2	274.9	264.9	261.2	256.2	254.9	253.7	251.2	249.9	247.4
67.5°	253.7	248.7	239.9	234.9	232.4	228.7	226.2	223.7	218.7	216.2	212.4
70°	222.4	218.7	209.9	206.2	201.2	194.9	191.2	188.7	184.9	182.4	178.7
72.5°	192.4	181.2	174.9	171.2	167.4	161.2	159.9	157.4	153.7	152.4	148.7
75°	154.9	146.2	142.5	140.0	136.2	132.5	132.5	132.5	128.7	127.5	126.2
77.5°	123.7	118.7	116.2	113.7	112.5	110.0	106.2	105.0	101.2	101.2	100.0
80°	95.0	92.5	90.0	88.7	87.5	85.0	82.5	81.2	77.5	77.5	76.2
82.5°	70.0	68.7	67.5	66.2	65.0	63.7	60.0	58.7	56.2	56.2	55.0
85°	50.0	48.7	46.2	45.0	45.0	43.7	40.0	38.7	36.2	36.2	36.2
87.5°	31.2	30.0	28.7	27.5	26.2	25.0	22.5	21.2	21.2	18.7	17.5
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: P1213505

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6
2.5°	2797.8	2819.1	2816.6	2831.5	2835.3	2842.8	2845.3	2846.5	2827.8	2842.8	2844.0
5°	2962.8	2966.5	2969.0	2975.2	2981.5	2982.7	2976.5	2969.0	2971.5	2966.5	2954.0
7.5°	2830.3	2811.6	2807.8	2802.8	2800.3	2797.8	2786.6	2796.6	2785.3	2780.3	2762.8
10°	2667.9	2650.4	2649.1	2649.1	2652.9	2651.6	2649.1	2644.1	2654.1	2647.9	2644.1
12.5°	2582.9	2576.6	2580.4	2577.9	2587.9	2590.4	2587.9	2587.9	2585.4	2580.4	2582.9
15°	2531.6	2526.7	2530.4	2526.7	2534.1	2535.4	2529.1	2532.9	2526.7	2520.4	2517.9
17.5°	2464.2	2452.9	2444.2	2431.7	2432.9	2430.4	2422.9	2422.9	2416.7	2400.4	2401.7
20°	2334.2	2323.0	2318.0	2318.0	2324.2	2326.7	2325.5	2328.0	2321.7	2319.2	2309.2
22.5°	2253.0	2251.7	2254.2	2260.5	2270.5	2284.2	2285.5	2285.5	2285.5	2284.2	2271.7
25°	2224.3	2224.3	2226.8	2235.5	2243.0	2253.0	2255.5	2258.0	2255.5	2255.5	2244.2
27.5°	2191.8	2189.3	2194.3	2203.0	2211.8	2219.3	2225.5	2226.8	2223.0	2223.0	2226.8
30°	2151.8	2150.5	2156.8	2165.5	2173.0	2180.5	2186.8	2191.8	2186.8	2186.8	2183.0
32.5°	2110.5	2110.5	2113.0	2060.6	1910.6	1720.7	1724.4	1614.5	1538.2	1442.0	1569.5
35°	1317.1	958.4	823.5	697.3	608.5	551.1	549.8	531.1	522.3	516.1	514.8
37.5°	497.3	499.8	504.8	507.3	511.1	513.6	514.8	514.8	514.8	514.8	513.6
40°	496.1	501.1	504.8	508.6	512.3	514.8	514.8	516.1	517.3	517.3	517.3
42.5°	497.3	502.3	507.3	511.1	513.6	514.8	516.1	517.3	517.3	517.3	517.3
45°	496.1	498.6	498.6	499.8	499.8	499.8	501.1	501.1	499.8	498.6	501.1
47.5°	477.3	477.3	473.6	472.3	471.1	468.6	469.8	468.6	467.3	466.1	468.6
50°	444.9	439.9	437.4	434.9	433.6	431.1	432.4	431.1	429.9	427.4	431.1
52.5°	406.1	404.9	399.9	397.4	396.1	397.4	394.9	393.6	392.4	391.1	392.4
55°	368.6	363.6	362.4	359.9	358.6	359.9	358.6	357.4	356.1	354.9	356.1
57.5°	334.9	331.1	329.9	327.4	327.4	327.4	327.4	326.1	324.9	323.6	324.9
60°	302.4	299.9	298.6	298.6	297.4	297.4	297.4	296.2	294.9	294.9	296.2
62.5°	274.9	274.9	271.2	269.9	269.9	271.2	269.9	268.7	267.4	266.2	268.7
65°	246.2	241.2	239.9	237.4	234.9	236.2	234.9	233.7	232.4	231.2	233.7
67.5°	211.2	209.9	204.9	202.4	201.2	202.4	201.2	199.9	198.7	197.4	199.9
70°	177.4	177.4	172.4	171.2	169.9	169.9	168.7	168.7	167.4	166.2	168.7
72.5°	147.5	147.5	146.2	143.7	142.5	141.2	140.0	138.7	138.7	140.0	140.0
75°	122.5	120.0	115.0	116.2	115.0	113.7	113.7	112.5	111.2	113.7	112.5
77.5°	96.2	95.0	91.2	92.5	91.2	90.0	90.0	88.7	87.5	88.7	88.7
80°	72.5	72.5	71.2	70.0	70.0	68.7	67.5	67.5	66.2	67.5	67.5
82.5°	52.5	52.5	51.2	50.0	48.7	48.7	47.5	47.5	47.5	47.5	47.5
85°	33.7	32.5	32.5	30.0	30.0	30.0	28.7	28.7	28.7	28.7	28.7
87.5°	16.2	16.2	15.0	15.0	13.7	12.5	12.5	11.2	11.2	12.5	12.5
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: P1213505

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6
2.5°	2821.6	2837.8	2824.1	2830.3	2831.5	2852.8	2851.5	2856.5	2847.8	2837.8	2824.1
5°	2965.3	2957.8	2947.8	2971.5	2959.0	2974.0	2979.0	2989.0	2989.0	2987.7	2976.5
7.5°	2781.6	2765.3	2777.8	2786.6	2790.3	2780.3	2800.3	2822.8	2841.5	2852.8	2854.0
10°	2637.9	2642.9	2641.6	2645.4	2654.1	2652.9	2665.4	2677.8	2682.8	2690.3	2692.8
12.5°	2570.4	2569.1	2571.6	2580.4	2585.4	2584.1	2596.6	2604.1	2606.6	2607.9	2606.6
15°	2516.7	2507.9	2514.2	2515.4	2519.2	2519.2	2534.1	2545.4	2550.4	2552.9	2550.4
17.5°	2415.4	2394.2	2414.2	2414.2	2427.9	2425.4	2449.2	2467.9	2477.9	2485.4	2485.4
20°	2315.5	2305.5	2313.0	2310.5	2320.5	2319.2	2334.2	2346.7	2355.5	2361.7	2369.2
22.5°	2275.5	2278.0	2266.7	2268.0	2268.0	2266.7	2274.2	2280.5	2283.0	2286.7	2284.2
25°	2249.2	2251.7	2248.0	2241.7	2239.2	2241.7	2245.5	2253.0	2254.2	2251.7	2243.0
27.5°	2223.0	2215.5	2221.8	2210.5	2208.0	2213.0	2218.0	2219.3	2220.5	2220.5	2213.0
30°	2183.0	2176.8	2183.0	2178.0	2173.0	2178.0	2181.8	2181.8	2184.3	2185.5	2176.8
32.5°	1525.7	1538.2	1740.7	1863.1	2035.6	2123.0	2139.3	2139.3	2141.8	2141.8	2134.3
35°	519.8	521.1	563.6	611.0	712.3	837.2	1000.9	1085.9	1373.3	1716.9	2049.3
37.5°	513.6	512.3	511.1	509.8	508.6	507.3	504.8	503.6	511.1	606.0	822.2
40°	516.1	514.8	512.3	511.1	509.8	507.3	506.1	503.6	501.1	498.6	496.1
42.5°	516.1	514.8	513.6	512.3	511.1	509.8	507.3	504.8	502.3	498.6	494.8
45°	498.6	498.6	499.8	499.8	501.1	501.1	501.1	499.8	499.8	498.6	493.6
47.5°	466.1	466.1	469.8	469.8	472.3	474.8	474.8	477.3	481.1	483.6	484.8
50°	428.6	428.6	432.4	433.6	436.1	439.9	443.6	444.9	448.6	453.6	458.6
52.5°	391.1	391.1	394.9	394.9	397.4	401.1	404.9	406.1	411.1	416.1	422.4
55°	356.1	356.1	358.6	359.9	361.1	363.6	367.4	367.4	372.4	376.1	382.4
57.5°	324.9	327.4	327.4	327.4	328.6	331.1	333.6	333.6	337.4	341.1	346.1
60°	294.9	297.4	297.4	297.4	298.6	299.9	302.4	302.4	304.9	307.4	312.4
62.5°	267.4	269.9	269.9	271.2	271.2	272.4	274.9	273.7	276.2	277.4	281.2
65°	232.4	234.9	236.2	237.4	238.7	241.2	244.9	243.7	247.4	249.9	253.7
67.5°	198.7	201.2	201.2	202.4	203.7	206.2	208.7	208.7	212.4	214.9	219.9
70°	167.4	169.9	169.9	171.2	172.4	174.9	177.4	176.2	179.9	182.4	186.2
72.5°	138.7	141.2	141.2	142.5	142.5	145.0	147.5	149.9	149.9	152.4	154.9
75°	112.5	113.7	115.0	115.0	116.2	117.5	120.0	122.5	123.7	125.0	127.5
77.5°	88.7	90.0	91.2	91.2	92.5	93.7	95.0	100.0	102.5	103.7	103.7
80°	67.5	68.7	68.7	68.7	70.0	71.2	73.7	73.7	78.7	78.7	80.0
82.5°	47.5	48.7	48.7	48.7	50.0	52.5	53.7	55.0	57.5	58.7	58.7
85°	28.7	30.0	30.0	30.0	31.2	32.5	35.0	36.2	37.5	37.5	38.7
87.5°	11.2	12.5	13.7	13.7	15.0	16.2	17.5	18.7	20.0	20.0	21.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6
2.5°	2809.1	2817.8	2809.1	2814.1	2820.3	2809.1	2782.8	2772.8	2769.1	2754.1	2744.1
5°	2965.3	2965.3	2961.5	2971.5	2970.3	2952.8	2925.3	2912.8	2900.3	2884.0	2871.5
7.5°	2854.0	2864.0	2870.3	2909.0	2934.0	2936.5	2954.0	2957.8	2962.8	2957.8	2950.3
10°	2694.1	2690.3	2707.8	2744.1	2765.3	2776.6	2810.3	2826.5	2840.3	2867.8	2896.5
12.5°	2604.1	2609.1	2616.6	2642.9	2662.9	2657.9	2671.6	2682.8	2699.1	2726.6	2767.8
15°	2544.1	2549.1	2556.6	2576.6	2589.1	2582.9	2590.4	2597.9	2609.1	2622.9	2647.9
17.5°	2479.2	2487.9	2496.7	2517.9	2529.1	2527.9	2534.1	2536.6	2540.4	2549.1	2566.6
20°	2378.0	2405.4	2422.9	2451.7	2467.9	2465.4	2476.7	2480.4	2485.4	2494.2	2501.7
22.5°	2285.5	2293.0	2301.7	2333.0	2360.5	2394.2	2401.7	2411.7	2424.2	2432.9	2440.4
25°	2233.0	2228.0	2231.7	2253.0	2268.0	2270.5	2281.7	2314.2	2348.0	2363.0	2380.4
27.5°	2201.8	2196.8	2195.5	2205.5	2208.0	2201.8	2199.3	2209.3	2234.2	2259.2	2311.7
30°	2168.0	2161.8	2156.8	2165.5	2169.3	2160.5	2144.3	2135.5	2150.5	2156.8	2178.0
32.5°	2128.0	2121.8	2119.3	2124.3	2126.8	2119.3	2101.8	2091.8	2089.3	2084.3	2089.3
35°	2083.0	2076.8	2073.1	2074.3	2079.3	2073.1	2058.1	2045.6	2039.3	2025.6	2015.6
37.5°	1073.4	1520.7	1974.3	2021.8	2026.8	2025.6	2010.6	1996.8	1990.6	1974.3	1969.3
40°	491.1	548.6	823.5	1075.9	1552.0	1971.8	1958.1	1944.3	1933.1	1928.1	1909.4
42.5°	489.8	491.1	492.3	486.1	602.3	1025.9	1514.5	1890.6	1883.1	1870.6	1856.9
45°	489.8	483.6	488.6	481.1	483.6	482.3	601.0	969.7	1725.7	1803.1	1796.9
47.5°	484.8	481.1	486.1	479.8	472.3	476.1	471.1	477.3	744.7	1263.3	1730.7
50°	462.3	464.8	473.6	472.3	466.1	471.1	462.3	469.8	463.6	508.6	979.7
52.5°	428.6	433.6	442.4	449.8	452.3	458.6	456.1	458.6	453.6	454.8	456.1
55°	388.6	394.9	402.4	413.6	418.6	428.6	436.1	439.9	446.1	444.9	434.9
57.5°	351.1	357.4	363.6	374.9	386.1	391.1	404.9	412.4	428.6	424.9	422.4
60°	316.1	321.1	327.4	329.9	343.6	352.4	364.9	372.4	393.6	398.6	406.1
62.5°	284.9	287.4	292.4	296.2	304.9	313.6	319.9	332.4	343.6	359.9	371.1
65°	256.2	258.7	262.4	264.9	266.2	278.7	282.4	296.2	299.9	317.4	327.4
67.5°	223.7	228.7	233.7	236.2	238.7	246.2	248.7	254.9	263.7	271.2	283.7
70°	189.9	193.7	198.7	202.4	207.4	212.4	219.9	223.7	229.9	234.9	244.9
72.5°	158.7	162.4	164.9	168.7	172.4	176.2	182.4	191.2	196.2	204.9	207.4
75°	128.7	132.5	135.0	137.5	141.2	143.7	146.2	154.9	159.9	167.4	174.9
77.5°	106.2	106.2	108.7	116.2	115.0	115.0	117.5	122.5	126.2	131.2	138.7
80°	82.5	83.7	85.0	91.2	92.5	93.7	92.5	96.2	100.0	101.2	106.2
82.5°	61.2	62.5	62.5	66.2	70.0	70.0	70.0	71.2	75.0	76.2	78.7
85°	41.2	42.5	43.7	45.0	47.5	48.7	50.0	50.0	52.5	53.7	55.0
87.5°	22.5	25.0	26.2	27.5	28.7	30.0	31.2	32.5	33.7	35.0	36.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6	2726.6
2.5°	2740.3	2734.1	2730.3	2720.3	2717.8	2701.6	2704.1	2701.6	2701.6	2705.3	2717.8
5°	2857.8	2827.8	2820.3	2799.1	2781.6	2751.6	2732.8	2722.8	2707.8	2701.6	2710.3
7.5°	2937.8	2915.3	2896.5	2877.8	2852.8	2817.8	2791.6	2761.6	2736.6	2712.8	2706.6
10°	2924.0	2949.0	2949.0	2937.8	2914.0	2879.0	2847.8	2810.3	2766.6	2729.1	2706.6
12.5°	2807.8	2851.5	2886.5	2912.8	2936.5	2912.8	2881.5	2851.5	2802.8	2747.8	2706.6
15°	2680.3	2725.3	2769.1	2824.1	2881.5	2905.3	2904.0	2869.0	2825.3	2767.8	2710.3
17.5°	2590.4	2621.6	2645.4	2705.3	2775.3	2836.5	2877.8	2880.3	2837.8	2786.6	2711.6
20°	2522.9	2545.4	2565.4	2599.1	2660.4	2735.3	2811.6	2854.0	2846.5	2790.3	2715.3
22.5°	2461.7	2477.9	2494.2	2519.2	2567.9	2616.6	2705.3	2792.8	2830.3	2784.1	2711.6
25°	2400.4	2417.9	2430.4	2447.9	2486.7	2526.7	2589.1	2697.8	2781.6	2779.1	2704.1
27.5°	2328.0	2351.7	2366.7	2390.4	2416.7	2446.7	2489.2	2591.6	2711.6	2754.1	2684.1
30°	2240.5	2275.5	2298.0	2324.2	2346.7	2373.0	2406.7	2469.2	2617.9	2705.3	2662.9
32.5°	2114.3	2176.8	2226.8	2251.7	2276.7	2299.2	2329.2	2381.7	2502.9	2639.1	2639.1
35°	2024.3	2053.1	2098.0	2170.5	2201.8	2224.3	2251.7	2293.0	2370.5	2560.4	2600.4
37.5°	1954.3	1965.6	1988.1	2059.3	2118.0	2154.3	2181.8	2208.0	2284.2	2452.9	2550.4
40°	1901.9	1898.1	1895.6	1929.4	2013.1	2070.6	2101.8	2128.0	2186.8	2324.2	2484.2
42.5°	1840.6	1836.9	1824.4	1833.1	1874.4	1970.6	2018.1	2046.8	2095.5	2189.3	2411.7
45°	1776.9	1770.7	1765.7	1756.9	1771.9	1825.6	1923.1	1965.6	1993.1	2076.8	2320.5
47.5°	1711.9	1703.2	1696.9	1689.4	1680.7	1705.7	1798.1	1874.4	1921.9	1974.3	2210.5
50°	1619.5	1630.7	1623.2	1614.5	1607.0	1602.0	1640.7	1765.7	1824.4	1866.9	2076.8
52.5°	763.5	1484.5	1547.0	1538.2	1528.2	1519.5	1528.2	1623.2	1729.4	1763.2	1915.6
55°	434.9	661.0	1375.8	1454.5	1445.8	1433.3	1425.8	1458.3	1617.0	1661.9	1768.2
57.5°	418.6	419.9	607.3	1310.8	1359.5	1348.3	1339.5	1347.0	1482.0	1558.2	1639.4
60°	404.9	404.9	404.9	579.8	1253.3	1257.1	1245.8	1233.3	1292.1	1442.0	1509.5
62.5°	374.9	382.4	386.1	386.1	572.3	1160.9	1149.6	1145.9	1148.4	1302.1	1379.5
65°	336.1	353.6	361.1	366.1	366.1	601.0	1050.9	1044.6	1035.9	1094.6	1248.3
67.5°	293.7	311.1	327.4	337.4	338.6	349.9	627.3	940.9	928.4	929.7	1108.4
70°	249.9	264.9	282.4	297.4	311.1	317.4	327.4	781.0	822.2	804.7	949.7
72.5°	216.2	222.4	234.9	249.9	266.2	281.2	289.9	311.1	713.5	694.8	722.3
75°	179.9	184.9	193.7	203.7	216.2	233.7	248.7	263.7	378.6	582.3	578.6
77.5°	140.0	148.7	158.7	164.9	171.2	183.7	203.7	218.7	233.7	393.6	463.6
80°	107.5	113.7	118.7	125.0	132.5	141.2	148.7	166.2	183.7	197.4	354.9
82.5°	80.0	83.7	87.5	90.0	92.5	97.5	111.2	117.5	128.7	141.2	167.4
85°	56.2	58.7	61.2	62.5	63.7	65.0	70.0	71.2	82.5	85.0	101.2
87.5°	36.2	37.5	40.0	41.2	41.2	42.5	43.7	43.7	43.7	41.2	50.0
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: P1213505

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CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	2726.6	2726.6
2.5°	2727.8	2747.8
5°	2724.1	2750.3
7.5°	2714.1	2739.1
10°	2699.1	2729.1
12.5°	2682.8	2711.6
15°	2669.1	2690.3
17.5°	2654.1	2666.6
20°	2634.1	2644.1
22.5°	2614.1	2609.1
25°	2591.6	2580.4
27.5°	2562.9	2541.6
30°	2536.6	2499.2
32.5°	2511.7	2450.4
35°	2477.9	2400.4
37.5°	2442.9	2349.2
40°	2401.7	2290.5
42.5°	2358.0	2231.7
45°	2303.0	2175.5
47.5°	2254.2	2108.0
50°	2186.8	2035.6
52.5°	2104.3	1968.1
55°	2006.8	1885.6
57.5°	1901.9	1799.4
60°	1789.4	1700.7
62.5°	1653.2	1598.2
65°	1493.2	1480.8
67.5°	1284.6	1350.8
70°	1053.4	1202.1
72.5°	881.0	1044.6
75°	722.3	868.5
77.5°	572.3	681.0
80°	357.4	498.6
82.5°	239.9	327.4
85°	145.0	156.2
87.5°	56.2	57.5
90°	0.0	0.0

(END OF REPORT)