

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: P1213856

Luminaire Tested: 4SNLED-LD5-64SL-RW-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213856
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-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

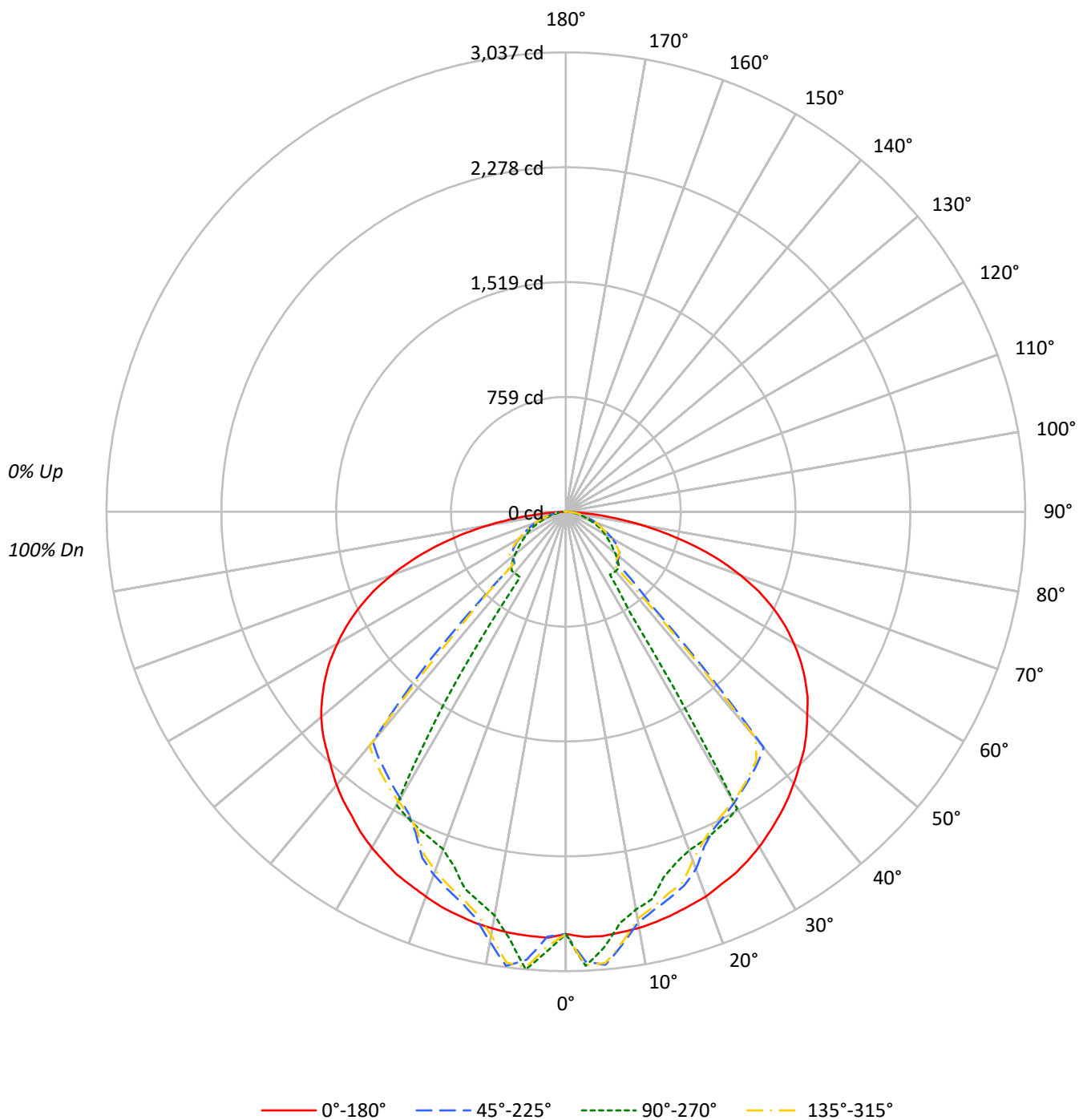
Lumens per Lamp: N/A
Luminaire Lumens: 5589.0 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	22554	22554	22554	22554
5°	22775	22724	22765	23849
10°	22798	20545	22829	20860
15°	22848	19008	22901	19612
20°	23014	18030	23014	17962
25°	23213	17684	23247	17520
30°	23448	17373	23507	17166
35°	23721	3957	23771	4127
40°	24101	4115	24246	4248
45°	24678	4092	24764	4241
50°	25255	3699	25596	3800
55°	26032	3284	26239	3332
60°	26692	2919	26750	2957
65°	27162	2548	27094	2506
70°	26775	2053	26692	1979
75°	24858	1580	25037	1514
80°	20177	1123	20983	1028
85°	10924	673	11532	515

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 357.5°

Vertical Angle: 60°

Luminance: 27349 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.6	4.9
10°-20°	755.0	13.5
20°-30°	1118.3	20.0
30°-40°	1126.8	20.2
40°-50°	880.2	15.7
50°-60°	679.9	12.2
60°-70°	456.5	8.2
70°-80°	232.9	4.2
80°-90°	64.8	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°	2148.0	38.4
0°-40°	3274.8	58.6
0°-60°	4834.9	86.5
0°-90°	5589.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5589.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2791	2791	2791	2791	2791	
5°	2815	2893	2814	3037	2815	268
15°	2754	2501	2760	2580	2754	779
25°	2641	2330	2645	2309	2641	1218
35°	2457	506	2462	528	2457	1540
45°	2227	492	2235	510	2227	1717
55°	1930	358	1946	363	1930	1724
65°	1516	240	1512	237	1516	1491
75°	889	122	895	116	889	930
85°	160	38	169	29	160	220
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°	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0
2.5°	2812.7	2823.0	2830.7	2835.8	2838.3	2838.3	2839.6	2840.9	2857.5	2865.2	2870.3
5°	2815.3	2825.5	2840.9	2861.4	2879.3	2894.6	2907.4	2925.3	2943.2	2962.4	2968.8
7.5°	2803.8	2816.6	2847.3	2884.4	2918.9	2943.2	2959.8	2971.4	2980.3	2981.6	2988.0
10°	2793.6	2816.6	2858.8	2907.4	2950.9	2980.3	2980.3	2973.9	2982.9	2948.3	2913.8
12.5°	2775.7	2801.2	2858.8	2922.8	2963.7	2975.2	2970.1	2944.5	2892.1	2849.8	2830.7
15°	2753.9	2788.4	2860.1	2931.7	2966.2	2970.1	2921.5	2856.2	2816.6	2791.0	2759.0
17.5°	2729.6	2775.7	2861.4	2933.0	2945.8	2927.9	2835.8	2794.8	2753.9	2693.8	2650.3
20°	2706.6	2751.4	2851.1	2915.1	2922.8	2842.2	2770.5	2727.0	2658.0	2605.5	2586.3
22.5°	2670.8	2723.2	2842.2	2890.8	2861.4	2768.0	2698.9	2629.8	2567.2	2551.8	2528.8
25°	2641.3	2696.3	2821.7	2861.4	2783.3	2700.2	2619.6	2539.0	2509.6	2487.9	2467.4
27.5°	2601.7	2669.5	2794.8	2807.6	2700.2	2627.3	2509.6	2473.8	2446.9	2422.6	2413.7
30°	2558.2	2641.3	2757.7	2733.4	2631.1	2523.7	2436.7	2403.4	2384.2	2358.7	2348.4
32.5°	2508.3	2599.1	2716.8	2647.7	2556.9	2422.6	2366.3	2340.8	2315.2	2296.0	2232.0
35°	2457.2	2562.0	2668.2	2565.9	2467.4	2345.9	2296.0	2273.0	2248.7	2178.3	2111.8
37.5°	2404.7	2521.1	2609.4	2477.6	2348.4	2266.6	2224.4	2198.8	2143.8	2054.2	2021.0
40°	2344.6	2471.2	2533.9	2386.8	2244.8	2186.0	2146.3	2120.8	1996.7	1957.0	1946.8
42.5°	2284.5	2422.6	2441.8	2298.5	2159.1	2100.3	2067.0	1982.6	1898.2	1877.7	1881.6
45°	2226.9	2370.2	2340.8	2173.2	2069.6	2021.0	1964.7	1848.3	1803.5	1813.8	1816.3
47.5°	2157.8	2307.5	2234.6	2047.8	1977.5	1928.9	1803.5	1733.2	1726.8	1740.9	1748.5
50°	2083.7	2237.2	2122.0	1934.0	1877.7	1820.2	1678.2	1642.4	1650.0	1664.1	1673.1
52.5°	2014.6	2157.8	2005.6	1827.8	1779.2	1647.5	1551.6	1557.9	1570.7	1587.4	1592.5
55°	1930.2	2061.9	1881.6	1720.4	1674.3	1501.7	1458.2	1473.5	1486.3	1500.4	1510.6
57.5°	1841.9	1951.9	1734.5	1600.2	1526.0	1372.5	1376.3	1386.5	1395.5	1412.1	583.3
60°	1740.9	1826.6	1573.3	1488.9	1341.8	1270.1	1274.0	1291.9	1300.8	726.5	401.6
62.5°	1636.0	1680.7	1427.5	1362.2	1172.9	1167.8	1185.7	1193.4	812.2	383.7	376.1
65°	1515.7	1506.8	1284.2	1180.6	1057.8	1062.9	1082.1	1043.7	359.4	359.4	356.9
67.5°	1382.7	1329.0	1144.8	977.2	946.5	958.0	978.5	341.5	332.6	335.1	326.2
70°	1230.5	1155.0	1000.3	827.6	837.8	849.3	330.0	309.5	305.7	299.3	281.4
72.5°	1069.3	965.7	818.6	718.9	725.3	455.4	289.1	278.8	266.1	253.3	234.1
75°	889.0	754.7	601.2	601.2	610.1	259.7	252.0	235.4	221.3	204.7	193.1
77.5°	697.1	580.7	466.9	484.8	236.6	217.4	203.4	185.5	174.0	163.7	157.3
80°	510.4	405.5	351.8	314.7	184.2	165.0	150.9	140.7	135.6	129.2	121.5
82.5°	335.1	244.3	244.3	148.4	129.2	113.8	110.0	102.3	97.2	93.4	89.5
85°	159.9	142.0	107.4	90.8	80.6	72.9	70.4	66.5	66.5	65.2	64.0
87.5°	58.8	64.0	47.3	46.0	43.5	42.2	43.5	43.5	44.8	43.5	42.2
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°	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0
2.5°	2883.1	2893.3	2901.0	2913.8	2930.4	2944.5	2957.3	2975.2	3003.3	3011.0	3017.4
5°	2968.8	2972.6	2981.6	2991.8	2994.4	3000.8	2999.5	3007.2	3011.0	3020.0	3000.8
7.5°	2973.9	2953.4	2929.1	2907.4	2892.1	2878.0	2869.0	2883.1	2890.8	2897.2	2878.0
10°	2866.5	2842.2	2828.1	2815.3	2800.0	2778.2	2748.8	2755.2	2752.6	2752.6	2746.2
12.5°	2798.7	2764.1	2728.3	2696.3	2682.3	2681.0	2682.3	2696.3	2696.3	2695.1	2687.4
15°	2692.5	2659.3	2641.3	2633.7	2633.7	2629.8	2629.8	2645.2	2641.3	2641.3	2637.5
17.5°	2622.2	2599.1	2586.3	2577.4	2573.6	2580.0	2587.6	2594.0	2595.3	2590.2	2569.7
20°	2564.6	2542.9	2527.5	2530.1	2528.8	2532.6	2536.5	2514.7	2487.9	2452.0	2435.4
22.5°	2504.5	2487.9	2476.3	2476.3	2461.0	2436.7	2400.9	2393.2	2389.4	2372.7	2358.7
25°	2446.9	2427.7	2411.1	2359.9	2328.0	2331.8	2325.4	2312.6	2311.3	2310.1	2315.2
27.5°	2389.4	2339.5	2275.5	2267.8	2255.1	2253.8	2261.5	2267.8	2267.8	2273.0	2279.4
30°	2270.4	2212.8	2201.3	2187.3	2192.4	2210.3	2214.1	2223.1	2225.6	2234.6	2239.7
32.5°	2161.7	2136.1	2125.9	2132.3	2148.9	2164.2	2173.2	2177.0	2183.4	2191.1	2197.5
35°	2073.4	2065.8	2074.7	2088.8	2105.4	2118.2	2125.9	2133.5	2139.9	2146.3	2151.5
37.5°	2008.2	2013.3	2026.1	2044.0	2060.6	2070.9	2077.3	2086.2	2095.2	2102.8	2072.1
40°	1946.8	1959.6	1973.7	1992.8	2006.9	2017.1	2023.5	2035.1	1958.3	886.4	486.1
42.5°	1893.1	1907.1	1917.4	1932.7	1948.1	1955.7	1899.5	848.0	479.7	477.1	483.5
45°	1827.8	1839.4	1856.0	1867.5	1881.6	1235.6	472.0	477.1	469.4	474.5	477.1
47.5°	1761.3	1779.2	1788.2	1706.3	507.8	469.4	464.3	469.4	464.3	470.7	466.9
50°	1685.9	1707.6	1215.1	459.2	455.4	452.8	457.9	455.4	459.2	464.3	454.1
52.5°	1609.1	996.4	445.1	442.6	445.1	442.6	451.5	445.1	446.4	441.3	428.5
55°	544.9	431.1	427.2	425.9	433.6	433.6	433.6	423.4	417.0	404.2	395.2
57.5°	417.0	417.0	415.7	417.0	414.4	411.9	400.4	391.4	382.5	364.5	359.4
60°	395.2	395.2	395.2	395.2	383.7	378.6	360.7	353.0	337.7	328.7	323.6
62.5°	377.3	374.8	363.3	359.4	346.6	332.6	322.3	314.7	299.3	294.2	290.4
65°	351.8	342.8	328.7	313.4	307.0	291.6	286.5	275.0	267.3	263.5	260.9
67.5°	309.5	296.8	285.2	275.0	263.5	258.4	252.0	243.0	237.9	235.4	232.8
70°	264.8	255.8	244.3	237.9	230.2	226.4	217.4	214.9	211.1	207.2	203.4
72.5°	221.3	216.2	211.1	202.1	199.5	197.0	188.0	182.9	177.8	172.7	170.1
75°	185.5	181.6	179.1	171.4	167.6	159.9	153.5	149.7	145.8	142.0	139.4
77.5°	152.2	149.7	142.0	136.9	134.3	127.9	125.4	126.6	124.1	119.0	116.4
80°	119.0	116.4	110.0	110.0	107.4	104.9	102.3	99.8	97.2	93.4	90.8
82.5°	90.8	88.3	85.7	83.1	80.6	79.3	78.0	75.5	72.9	70.4	69.1
85°	64.0	62.7	61.4	60.1	58.8	57.6	56.3	53.7	51.2	49.9	48.6
87.5°	43.5	42.2	40.9	39.7	38.4	37.1	35.8	34.5	32.0	30.7	29.4
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):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0
2.5°	3017.4	3023.8	3017.4	3003.3	2994.4	2990.5	2998.2	2998.2	3003.3	3009.7	3011.0
5°	2970.1	2954.7	2936.8	2918.9	2910.0	2904.8	2890.8	2893.3	2897.2	2899.7	2902.3
7.5°	2852.4	2831.9	2807.6	2784.6	2775.7	2768.0	2751.4	2751.4	2751.4	2752.6	2760.3
10°	2732.2	2723.2	2713.0	2697.6	2686.1	2682.3	2668.2	2672.0	2669.5	2673.3	2682.3
12.5°	2675.9	2665.7	2656.7	2641.3	2628.6	2623.4	2617.0	2620.9	2619.6	2626.0	2633.7
15°	2624.7	2619.6	2609.4	2597.9	2586.3	2576.1	2553.1	2545.4	2540.3	2533.9	2542.9
17.5°	2540.3	2504.5	2480.2	2462.3	2449.5	2440.5	2434.1	2434.1	2438.0	2441.8	2449.5
20°	2425.2	2414.9	2403.4	2384.2	2371.5	2366.3	2362.5	2362.5	2368.9	2374.0	2388.1
22.5°	2345.9	2344.6	2340.8	2331.8	2325.4	2325.4	2326.7	2329.2	2338.2	2345.9	2359.9
25°	2308.8	2313.9	2311.3	2306.2	2302.4	2303.7	2301.1	2303.7	2312.6	2320.3	2331.8
27.5°	2279.4	2287.0	2284.5	2276.8	2270.4	2273.0	2276.8	2274.2	2281.9	2290.9	2299.8
30°	2239.7	2241.0	2246.1	2237.2	2234.6	2238.4	2239.7	2242.3	2249.9	2256.3	2264.0
32.5°	2194.9	2205.2	2203.9	2194.9	2194.9	2198.8	2200.1	2114.4	1954.5	1683.3	1609.1
35°	2151.5	2163.0	2143.8	1807.4	1251.0	667.7	515.5	497.6	501.4	504.0	506.5
37.5°	1591.2	754.7	480.9	484.8	488.6	492.5	496.3	500.1	504.0	507.8	509.1
40°	478.4	477.1	480.9	486.1	489.9	492.5	497.6	501.4	505.2	509.1	510.4
42.5°	473.3	475.8	479.7	484.8	489.9	495.0	498.9	504.0	506.5	509.1	510.4
45°	470.7	475.8	480.9	484.8	488.6	491.2	493.7	495.0	493.7	493.7	496.3
47.5°	466.9	472.0	473.3	472.0	473.3	472.0	472.0	472.0	468.2	466.9	466.9
50°	452.8	452.8	450.2	445.1	443.8	442.6	440.0	438.7	433.6	432.3	432.3
52.5°	423.4	422.1	418.3	411.9	409.3	406.8	405.5	404.2	399.1	396.5	397.8
55°	388.8	386.3	382.5	374.8	373.5	370.9	369.7	368.4	363.3	365.8	362.0
57.5°	356.9	351.8	346.6	345.4	340.2	339.0	337.7	336.4	332.6	333.8	331.3
60°	318.5	317.2	314.7	309.5	309.5	308.3	308.3	305.7	303.1	301.9	301.9
62.5°	290.4	286.5	284.0	284.0	280.1	280.1	280.1	277.6	275.0	276.3	275.0
65°	259.7	258.4	257.1	254.5	254.5	253.3	253.3	250.7	246.9	248.1	245.6
67.5°	234.1	231.5	229.0	227.7	222.6	220.0	218.7	217.4	212.3	213.6	211.1
70°	202.1	198.3	195.7	193.1	189.3	186.7	186.7	184.2	180.4	181.6	179.1
72.5°	168.8	166.3	163.7	162.4	158.6	157.3	156.1	154.8	150.9	152.2	150.9
75°	140.7	140.7	139.4	138.1	134.3	130.5	127.9	126.6	124.1	125.4	122.8
77.5°	116.4	113.8	111.3	111.3	107.4	104.9	102.3	102.3	102.3	101.0	99.8
80°	90.8	88.3	88.3	87.0	84.4	81.9	80.6	80.6	79.3	79.3	78.0
82.5°	69.1	66.5	65.2	65.2	62.7	61.4	60.1	58.8	58.8	58.8	57.6
85°	48.6	46.0	44.8	44.8	42.2	40.9	40.9	39.7	39.7	38.4	38.4
87.5°	29.4	28.1	26.9	26.9	24.3	23.0	23.0	23.0	21.7	21.7	20.5
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: P1213856

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0
2.5°	3011.0	3011.0	3002.1	3004.6	3000.8	3005.9	2999.5	2999.5	3007.2	3007.2	3012.3
5°	2903.6	2897.2	2895.9	2893.3	2880.5	2885.7	2879.3	2872.9	2881.8	2881.8	2893.3
7.5°	2756.5	2745.0	2750.1	2742.4	2734.7	2723.2	2727.0	2721.9	2728.3	2737.3	2748.8
10°	2681.0	2670.8	2677.2	2669.5	2673.3	2656.7	2658.0	2659.3	2665.7	2668.2	2678.4
12.5°	2632.4	2629.8	2627.3	2624.7	2627.3	2618.3	2613.2	2614.5	2617.0	2618.3	2626.0
15°	2530.1	2513.4	2518.6	2500.6	2501.9	2503.2	2493.0	2503.2	2501.9	2518.6	2533.9
17.5°	2446.9	2446.9	2438.0	2430.3	2425.2	2423.9	2416.2	2421.3	2416.2	2426.5	2430.3
20°	2389.4	2388.1	2386.8	2383.0	2370.2	2371.5	2375.3	2363.8	2362.5	2361.2	2368.9
22.5°	2362.5	2363.8	2358.7	2358.7	2347.2	2349.7	2351.0	2338.2	2339.5	2335.6	2339.5
25°	2334.4	2336.9	2330.5	2330.5	2328.0	2326.7	2320.3	2322.9	2315.2	2308.8	2315.2
27.5°	2301.1	2306.2	2301.1	2303.7	2298.5	2296.0	2292.2	2289.6	2281.9	2280.6	2284.5
30°	2270.4	2273.0	2271.7	2265.3	2264.0	2256.3	2260.2	2252.5	2244.8	2246.1	2248.7
32.5°	1164.0	1111.5	857.0	773.9	766.2	794.3	941.4	1146.1	1485.0	1813.8	2050.4
35°	507.8	507.8	507.8	506.5	506.5	505.2	504.0	502.7	501.4	500.1	498.9
37.5°	510.4	510.4	510.4	510.4	509.1	507.8	507.8	505.2	504.0	502.7	501.4
40°	511.6	512.9	512.9	512.9	511.6	511.6	510.4	507.8	506.5	504.0	501.4
42.5°	510.4	511.6	511.6	510.4	510.4	509.1	509.1	507.8	506.5	505.2	504.0
45°	493.7	495.0	492.5	492.5	491.2	491.2	491.2	491.2	491.2	492.5	492.5
47.5°	464.3	464.3	463.0	461.8	461.8	460.5	461.8	460.5	463.0	464.3	466.9
50°	429.8	429.8	427.2	425.9	425.9	425.9	425.9	427.2	428.5	431.1	433.6
52.5°	394.0	394.0	392.7	391.4	390.1	390.1	394.0	392.7	394.0	395.2	399.1
55°	359.4	360.7	358.1	358.1	356.9	356.9	356.9	358.1	359.4	360.7	364.5
57.5°	330.0	330.0	327.5	327.5	327.5	326.2	330.0	327.5	328.7	330.0	332.6
60°	300.6	299.3	299.3	298.0	298.0	298.0	300.6	299.3	299.3	300.6	303.1
62.5°	273.7	273.7	272.4	272.4	271.2	271.2	273.7	272.4	272.4	273.7	275.0
65°	243.0	243.0	241.8	240.5	244.3	240.5	244.3	241.8	244.3	245.6	248.1
67.5°	208.5	208.5	208.5	207.2	207.2	209.8	211.1	208.5	209.8	212.3	213.6
70°	177.8	177.8	176.5	176.5	176.5	179.1	180.4	177.8	179.1	180.4	182.9
72.5°	150.9	148.4	148.4	147.1	149.7	149.7	150.9	149.7	150.9	150.9	153.5
75°	124.1	121.5	121.5	121.5	124.1	122.8	124.1	122.8	124.1	124.1	125.4
77.5°	99.8	98.5	97.2	97.2	99.8	99.8	99.8	98.5	99.8	101.0	102.3
80°	78.0	76.7	75.5	75.5	78.0	78.0	78.0	79.3	78.0	79.3	80.6
82.5°	57.6	56.3	55.0	57.6	57.6	57.6	57.6	58.8	57.6	58.8	60.1
85°	38.4	37.1	35.8	38.4	38.4	38.4	38.4	39.7	38.4	39.7	40.9
87.5°	20.5	19.2	19.2	20.5	20.5	20.5	21.7	21.7	21.7	23.0	23.0
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: P1213856

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0
2.5°	3020.0	3023.8	3022.5	3014.8	3007.2	2998.2	2991.8	2993.1	3005.9	3009.7	2998.2
5°	2893.3	2917.6	2917.6	2934.3	2925.3	2917.6	2922.8	2950.9	2965.0	2986.7	2994.4
7.5°	2762.9	2774.4	2773.1	2789.7	2787.2	2787.2	2791.0	2828.1	2846.0	2863.9	2869.0
10°	2690.0	2701.5	2700.2	2701.5	2697.6	2688.7	2688.7	2705.3	2720.7	2729.6	2732.2
12.5°	2637.5	2643.9	2642.6	2642.6	2640.1	2632.4	2631.1	2645.2	2661.8	2673.3	2674.6
15°	2559.5	2577.4	2581.2	2597.9	2594.0	2583.8	2586.3	2597.9	2608.1	2618.3	2614.5
17.5°	2443.1	2452.0	2453.3	2459.7	2457.2	2457.2	2472.5	2514.7	2542.9	2567.2	2569.7
20°	2376.6	2383.0	2380.4	2394.5	2388.1	2386.8	2390.6	2408.6	2421.3	2432.9	2453.3
22.5°	2344.6	2349.7	2345.9	2347.2	2335.6	2325.4	2322.9	2336.9	2351.0	2366.3	2366.3
25°	2317.7	2321.6	2320.3	2317.7	2308.8	2294.7	2292.2	2294.7	2299.8	2301.1	2292.2
27.5°	2285.8	2288.3	2288.3	2289.6	2278.1	2265.3	2262.7	2260.2	2265.3	2264.0	2249.9
30°	2252.5	2248.7	2249.9	2251.2	2241.0	2229.5	2224.4	2223.1	2228.2	2226.9	2212.8
32.5°	2173.2	2202.6	2205.2	2207.7	2198.8	2188.5	2183.4	2179.6	2182.1	2180.9	2168.1
35°	497.6	506.5	620.4	1404.5	1907.1	2111.8	2133.5	2128.4	2129.7	2129.7	2119.5
37.5°	498.9	497.6	496.3	492.5	488.6	486.1	840.4	1792.0	2076.0	2077.3	2068.3
40°	498.9	497.6	496.3	493.7	488.6	484.8	478.4	473.3	484.8	1066.8	1951.9
42.5°	501.4	498.9	496.3	493.7	488.6	483.5	478.4	472.0	475.8	473.3	466.9
45°	493.7	492.5	492.5	491.2	488.6	483.5	477.1	469.4	465.6	469.4	463.0
47.5°	469.4	470.7	474.5	475.8	475.8	477.1	473.3	468.2	461.8	465.6	457.9
50°	436.2	438.7	440.0	446.4	449.0	454.1	455.4	455.4	454.1	459.2	454.1
52.5°	400.4	402.9	409.3	411.9	414.4	422.1	424.7	428.5	431.1	438.7	443.8
55°	365.8	367.1	369.7	374.8	378.6	385.0	388.8	392.7	399.1	402.9	418.3
57.5°	333.8	335.1	340.2	341.5	344.1	349.2	353.0	358.1	363.3	365.8	383.7
60°	303.1	304.4	308.3	309.5	310.8	315.9	319.8	323.6	327.5	330.0	342.8
62.5°	276.3	276.3	280.1	280.1	281.4	285.2	287.8	290.4	294.2	295.5	301.9
65°	249.4	250.7	253.3	253.3	254.5	257.1	258.4	259.7	263.5	263.5	268.6
67.5°	216.2	217.4	221.3	223.8	225.1	230.2	231.5	232.8	235.4	236.6	239.2
70°	184.2	185.5	189.3	190.6	191.9	195.7	198.3	202.1	205.9	209.8	212.3
72.5°	154.8	156.1	159.9	159.9	163.7	165.0	167.6	168.8	172.7	175.2	179.1
75°	126.6	127.9	131.7	131.7	135.6	136.9	138.1	139.4	142.0	144.5	147.1
77.5°	103.6	103.6	108.7	111.3	113.8	113.8	115.1	115.1	115.1	116.4	119.0
80°	81.9	81.9	85.7	88.3	90.8	90.8	92.1	93.4	94.7	94.7	95.9
82.5°	61.4	61.4	65.2	66.5	69.1	69.1	69.1	70.4	71.6	70.4	72.9
85°	42.2	42.2	44.8	46.0	48.6	48.6	48.6	49.9	51.2	49.9	51.2
87.5°	24.3	25.6	26.9	28.1	29.4	30.7	30.7	30.7	32.0	32.0	33.3
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: P1213856

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0
2.5°	2985.4	2970.1	2968.8	2950.9	2945.8	2947.1	2933.0	2927.9	2904.8	2899.7	2875.4
5°	2996.9	3004.6	3000.8	2999.5	3003.3	3000.8	2990.5	2985.4	2981.6	2971.4	2950.9
7.5°	2870.3	2875.4	2879.3	2895.9	2910.0	2934.3	2959.8	2976.5	2989.3	2991.8	2975.2
10°	2741.1	2765.4	2782.0	2807.6	2828.1	2842.2	2857.5	2871.6	2908.7	2945.8	2967.5
12.5°	2674.6	2681.0	2679.7	2693.8	2707.9	2745.0	2780.8	2801.2	2829.4	2846.0	2885.7
15°	2618.3	2619.6	2623.4	2633.7	2641.3	2654.1	2670.8	2701.5	2757.7	2783.3	2805.1
17.5°	2567.2	2567.2	2569.7	2578.7	2588.9	2600.4	2610.6	2623.4	2651.6	2693.8	2747.5
20°	2485.3	2521.1	2524.9	2523.7	2528.8	2550.5	2553.1	2576.1	2590.2	2606.8	2659.3
22.5°	2363.8	2385.5	2416.2	2463.6	2481.5	2491.7	2499.4	2509.6	2531.3	2550.5	2572.3
25°	2297.3	2311.3	2320.3	2334.4	2371.5	2431.6	2443.1	2454.6	2468.7	2482.7	2509.6
27.5°	2238.4	2237.2	2243.5	2256.3	2266.6	2298.5	2354.8	2399.6	2402.2	2422.6	2445.6
30°	2196.2	2188.5	2179.6	2177.0	2191.1	2207.7	2224.4	2294.7	2343.3	2353.5	2377.9
32.5°	2156.6	2143.8	2131.0	2120.8	2111.8	2125.9	2136.1	2166.8	2229.5	2288.3	2301.1
35°	2108.0	2095.2	2079.8	2068.3	2054.2	2053.0	2051.7	2081.1	2101.6	2171.9	2233.3
37.5°	2058.1	2044.0	2031.2	2018.4	2004.4	1994.1	1987.7	1995.4	2014.6	2045.3	2147.6
40°	2005.6	1989.0	1976.2	1966.0	1946.8	1939.1	1926.3	1921.2	1922.5	1949.4	2003.1
42.5°	1198.5	1911.0	1917.4	1905.9	1889.2	1879.0	1864.9	1858.5	1845.7	1858.5	1889.2
45°	461.8	466.9	1398.1	1847.0	1826.6	1813.8	1801.0	1794.6	1780.5	1770.3	1798.4
47.5°	452.8	457.9	447.7	634.4	1743.4	1747.3	1731.9	1725.5	1711.4	1703.8	1696.1
50°	446.4	450.2	442.6	445.1	436.2	1597.6	1661.6	1653.9	1638.5	1629.6	1614.2
52.5°	440.0	440.0	434.9	428.5	425.9	427.2	1344.3	1581.0	1563.1	1554.1	1533.6
55°	419.5	422.1	427.2	417.0	414.4	413.2	409.3	1280.4	1479.9	1469.7	1451.8
57.5°	388.8	394.0	408.0	405.5	405.5	395.2	392.7	392.7	1188.3	1384.0	1366.1
60°	353.0	358.1	373.5	378.6	382.5	379.9	377.3	376.1	370.9	1252.2	1275.3
62.5°	315.9	321.1	326.2	342.8	347.9	354.3	362.0	358.1	353.0	353.0	1179.3
65°	276.3	284.0	286.5	301.9	308.3	319.8	326.2	335.1	332.6	331.3	337.7
67.5°	241.8	250.7	252.0	258.4	269.9	275.0	282.7	299.3	307.0	309.5	312.1
70°	212.3	217.4	221.3	223.8	231.5	232.8	246.9	258.4	269.9	282.7	286.5
72.5°	182.9	186.7	194.4	191.9	194.4	199.5	207.2	214.9	226.4	244.3	255.8
75°	149.7	152.2	157.3	159.9	165.0	168.8	174.0	180.4	190.6	199.5	214.9
77.5°	120.2	121.5	125.4	126.6	131.7	135.6	144.5	148.4	154.8	161.2	170.1
80°	97.2	97.2	98.5	98.5	102.3	106.2	112.6	116.4	124.1	129.2	129.2
82.5°	74.2	74.2	78.0	78.0	80.6	80.6	84.4	84.4	88.3	90.8	93.4
85°	52.4	53.7	56.3	55.0	57.6	56.3	58.8	61.4	62.7	61.4	60.1
87.5°	34.5	34.5	37.1	35.8	37.1	37.1	39.7	39.7	40.9	40.9	39.7
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: P1213856

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0
2.5°	2866.5	2847.3	2835.8	2821.7	2817.9	2814.0	2819.1	2819.1	2811.5	2805.1	2793.6
5°	2933.0	2912.5	2890.8	2867.7	2846.0	2823.0	2814.0	2812.7	2798.7	2791.0	2787.2
7.5°	2967.5	2957.3	2933.0	2901.0	2867.7	2826.8	2808.9	2798.7	2784.6	2782.0	2782.0
10°	2971.4	2959.8	2947.1	2924.0	2885.7	2831.9	2797.4	2776.9	2764.1	2773.1	2789.7
12.5°	2934.3	2956.0	2944.5	2929.1	2898.4	2833.2	2783.3	2752.6	2748.8	2771.8	2815.3
15°	2839.6	2903.6	2935.5	2920.2	2895.9	2830.7	2760.3	2724.5	2724.5	2771.8	2828.1
17.5°	2768.0	2817.9	2895.9	2908.7	2880.5	2825.5	2738.6	2696.3	2707.9	2776.9	2837.1
20°	2709.1	2739.8	2815.3	2886.9	2860.1	2814.0	2706.6	2663.1	2686.1	2769.3	2849.8
22.5°	2617.0	2678.4	2724.5	2830.7	2839.6	2792.3	2674.6	2622.2	2668.2	2769.3	2843.4
25°	2527.5	2601.7	2650.3	2753.9	2808.9	2765.4	2645.2	2578.7	2649.0	2765.4	2838.3
27.5°	2464.8	2499.4	2587.6	2661.8	2762.9	2729.6	2605.5	2531.3	2624.7	2745.0	2808.9
30°	2398.3	2421.3	2508.3	2578.7	2701.5	2688.7	2564.6	2478.9	2594.0	2725.8	2732.2
32.5°	2325.4	2351.0	2395.8	2498.1	2615.8	2650.3	2518.6	2426.5	2560.8	2696.3	2642.6
35°	2251.2	2270.4	2306.2	2416.2	2516.0	2592.7	2462.3	2366.3	2537.7	2651.6	2556.9
37.5°	2177.0	2197.5	2228.2	2320.3	2411.1	2539.0	2413.7	2306.2	2495.5	2572.3	2467.4
40°	2106.7	2118.2	2150.2	2207.7	2324.1	2484.0	2358.7	2243.5	2452.0	2471.2	2345.9
42.5°	1977.5	2035.1	2064.5	2110.5	2225.6	2408.6	2294.7	2177.0	2403.4	2370.2	2224.4
45°	1838.1	1963.4	1976.2	2022.3	2138.7	2328.0	2234.6	2111.8	2357.4	2283.2	2109.2
47.5°	1724.2	1815.0	1889.2	1927.6	2035.1	2233.3	2178.3	2056.8	2288.3	2173.2	1996.7
50°	1623.2	1671.8	1806.1	1834.2	1911.0	2119.5	2111.8	1992.8	2192.4	2035.1	1886.7
52.5°	1524.7	1559.2	1680.7	1740.9	1803.5	1996.7	2032.5	1930.2	2087.5	1896.9	1775.4
55°	1439.0	1450.5	1517.0	1643.6	1699.9	1872.6	1945.5	1857.3	1954.5	1765.2	1668.0
57.5°	1350.7	1340.5	1389.1	1551.6	1592.5	1746.0	1853.4	1783.1	1847.0	1630.9	1556.7
60°	1258.6	1244.6	1265.0	1372.5	1478.6	1620.6	1744.7	1701.2	1716.6	1497.8	1432.6
62.5°	1162.7	1148.6	1142.2	1210.0	1367.4	1491.4	1634.7	1610.4	1556.7	1376.3	1279.1
65°	1062.9	1048.9	1038.6	1065.5	1244.6	1323.9	1511.9	1505.5	1381.4	1248.4	1077.0
67.5°	323.6	954.2	932.5	931.2	1048.9	1171.7	1378.9	1368.6	1204.9	1111.5	927.3
70°	291.6	773.9	822.5	811.0	862.1	1016.9	1226.7	1219.0	1033.5	891.5	819.9
72.5°	267.3	273.7	726.5	713.7	725.3	864.7	1068.1	1047.6	876.2	703.5	708.6
75°	229.0	240.5	250.7	602.5	587.1	716.3	895.4	863.4	722.7	580.7	592.2
77.5°	186.7	200.8	208.5	438.7	474.5	510.4	715.0	672.8	497.6	464.3	221.3
80°	139.4	150.9	163.7	175.2	360.7	356.9	530.8	488.6	346.6	289.1	172.7
82.5°	102.3	106.2	113.8	126.6	143.3	239.2	341.5	300.6	240.5	131.7	119.0
85°	64.0	69.1	72.9	76.7	87.0	143.3	168.8	134.3	101.0	80.6	75.5
87.5°	40.9	40.9	39.7	40.9	42.2	51.2	57.6	55.0	43.5	40.9	40.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213856

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0
2.5°	2780.8	2762.9	2762.9	2757.7	2761.6	2761.6	2760.3	2761.6	2770.5	2775.7	2784.6
5°	2779.5	2774.4	2785.9	2800.0	2816.6	2837.1	2842.2	2860.1	2876.7	2898.4	2921.5
7.5°	2796.1	2814.0	2835.8	2858.8	2892.1	2916.4	2938.1	2959.8	2975.2	2995.7	3008.5
10°	2820.4	2856.2	2893.3	2922.8	2958.6	2979.0	2993.1	2995.7	2973.9	2939.4	2911.2
12.5°	2855.0	2897.2	2931.7	2959.8	2976.5	2968.8	2927.9	2885.7	2861.4	2825.5	2775.7
15°	2884.4	2922.8	2958.6	2947.1	2902.3	2860.1	2828.1	2778.2	2729.6	2696.3	2674.6
17.5°	2897.2	2934.3	2921.5	2861.4	2819.1	2770.5	2705.3	2666.9	2635.0	2609.4	2596.6
20°	2904.8	2898.4	2829.4	2785.9	2704.0	2659.3	2617.0	2581.2	2556.9	2544.1	2541.6
22.5°	2884.4	2806.4	2747.5	2669.5	2609.4	2572.3	2539.0	2509.6	2493.0	2482.7	2476.3
25°	2816.6	2725.8	2638.8	2577.4	2526.2	2494.3	2468.7	2444.4	2423.9	2418.8	2406.0
27.5°	2721.9	2647.7	2532.6	2485.3	2440.5	2425.2	2397.0	2372.7	2354.8	2339.5	2298.5
30°	2643.9	2526.2	2443.1	2399.6	2372.7	2354.8	2322.9	2297.3	2266.6	2210.3	2187.3
32.5°	2548.0	2431.6	2352.3	2328.0	2294.7	2279.4	2243.5	2187.3	2139.9	2116.9	2115.6
35°	2423.9	2328.0	2270.4	2248.7	2221.8	2196.2	2122.0	2070.9	2047.8	2050.4	2069.6
37.5°	2320.3	2234.6	2197.5	2166.8	2136.1	2070.9	2008.2	1983.9	1990.3	2003.1	2012.0
40°	2215.4	2150.2	2108.0	2083.7	2014.6	1950.6	1917.4	1926.3	1937.8	1946.8	1958.3
42.5°	2113.1	2067.0	2024.8	1977.5	1882.8	1848.3	1856.0	1867.5	1877.7	1890.5	1902.0
45°	2015.9	1974.9	1926.3	1818.9	1771.6	1780.5	1792.0	1801.0	1816.3	1825.3	1836.8
47.5°	1923.8	1880.3	1794.6	1699.9	1694.8	1712.7	1723.0	1734.5	1746.0	1723.0	950.4
50°	1820.2	1775.4	1644.9	1609.1	1620.6	1637.3	1650.0	1661.6	1479.9	588.4	452.8
52.5°	1717.8	1604.0	1520.9	1531.1	1542.6	1561.8	1570.7	1166.5	464.3	442.6	443.8
55°	1604.0	1458.2	1433.9	1446.7	1456.9	1476.1	978.5	428.5	425.9	424.7	434.9
57.5°	1424.9	1336.7	1346.9	1359.7	1369.9	967.0	417.0	414.4	415.7	417.0	418.3
60°	1265.0	1245.8	1257.4	1268.9	897.9	402.9	395.2	396.5	401.6	397.8	387.6
62.5°	1138.4	1153.8	1165.3	1020.7	382.5	378.6	382.5	378.6	369.7	363.3	350.5
65°	1041.2	1056.5	1065.5	359.4	358.1	363.3	359.4	346.6	332.6	314.7	310.8
67.5°	938.9	954.2	341.5	332.6	337.7	331.3	315.9	300.6	290.4	275.0	268.6
70°	832.7	356.9	309.5	308.3	299.3	289.1	272.4	257.1	244.3	237.9	231.5
72.5°	601.2	282.7	278.8	268.6	253.3	239.2	225.1	216.2	209.8	205.9	202.1
75°	250.7	245.6	234.1	216.2	200.8	194.4	184.2	177.8	175.2	167.6	165.0
77.5°	209.8	199.5	182.9	170.1	161.2	157.3	149.7	142.0	138.1	136.9	131.7
80°	161.2	147.1	139.4	133.0	130.5	121.5	112.6	108.7	106.2	104.9	101.0
82.5°	110.0	104.9	99.8	90.8	90.8	87.0	83.1	80.6	78.0	78.0	75.5
85°	71.6	67.8	66.5	62.7	62.7	60.1	58.8	57.6	56.3	55.0	53.7
87.5°	40.9	40.9	42.2	40.9	40.9	39.7	38.4	37.1	35.8	35.8	33.3
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: P1213856

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0
2.5°	2796.1	2808.9	2811.5	2855.0	2879.3	2878.0	2870.3	2893.3	2879.3	2871.6	2879.3
5°	2944.5	2959.8	2972.6	3020.0	3036.6	3044.3	3043.0	3055.8	3045.5	3036.6	3036.6
7.5°	3017.4	3022.5	3027.6	3016.1	3008.5	2995.7	2976.5	2948.3	2934.3	2918.9	2899.7
10°	2897.2	2880.5	2886.9	2863.9	2844.7	2830.7	2812.7	2789.7	2770.5	2756.5	2734.7
12.5°	2750.1	2748.8	2751.4	2755.2	2736.0	2724.5	2710.4	2693.8	2679.7	2664.4	2646.5
15°	2660.5	2661.8	2672.0	2668.2	2661.8	2655.4	2640.1	2635.0	2622.2	2605.5	2595.3
17.5°	2596.6	2603.0	2613.2	2608.1	2597.9	2591.5	2580.0	2568.4	2556.9	2544.1	2528.8
20°	2540.3	2546.7	2553.1	2546.7	2527.5	2518.6	2503.2	2467.4	2441.8	2416.2	2393.2
22.5°	2478.9	2482.7	2477.6	2457.2	2408.6	2385.5	2367.6	2357.4	2335.6	2321.6	2307.5
25°	2402.2	2380.4	2347.2	2324.1	2304.9	2294.7	2287.0	2285.8	2283.2	2280.6	2274.2
27.5°	2276.8	2269.1	2251.2	2242.3	2243.5	2247.4	2248.7	2252.5	2248.7	2243.5	2238.4
30°	2183.4	2187.3	2188.5	2191.1	2197.5	2201.3	2202.6	2207.7	2205.2	2201.3	2198.8
32.5°	2124.6	2133.5	2138.7	2146.3	2150.2	2156.6	2156.6	2164.2	2156.6	2155.3	2152.7
35°	2076.0	2083.7	2086.2	2097.7	2101.6	2108.0	2108.0	2114.4	2108.0	2042.7	1612.9
37.5°	2027.4	2035.1	2040.2	2050.4	2051.7	2055.5	1896.9	1387.8	895.4	693.3	529.5
40°	1969.8	1978.8	1983.9	1987.7	1396.8	886.4	610.1	496.3	496.3	500.1	504.0
42.5°	1908.4	1914.8	1334.1	776.4	483.5	482.2	486.1	489.9	493.7	498.9	504.0
45°	1500.4	757.2	480.9	469.4	473.3	478.4	483.5	488.6	495.0	500.1	502.7
47.5°	492.5	461.8	468.2	463.0	469.4	475.8	480.9	486.1	487.3	488.6	487.3
50°	455.4	455.4	459.2	459.2	464.3	466.9	466.9	466.9	461.8	460.5	456.6
52.5°	440.0	450.2	445.1	447.7	445.1	441.3	437.5	433.6	425.9	423.4	418.3
55°	432.3	436.2	423.4	419.5	414.4	404.2	399.1	394.0	387.6	385.0	378.6
57.5°	414.4	405.5	391.4	385.0	376.1	365.8	360.7	356.9	350.5	347.9	344.1
60°	381.2	363.3	354.3	346.6	336.4	327.5	323.6	321.1	315.9	314.7	310.8
62.5°	340.2	324.9	317.2	307.0	299.3	294.2	290.4	289.1	284.0	284.0	281.4
65°	295.5	287.8	281.4	271.2	267.3	262.2	260.9	259.7	257.1	255.8	253.3
67.5°	259.7	254.5	245.6	240.5	237.9	234.1	231.5	229.0	223.8	221.3	217.4
70°	227.7	223.8	214.9	211.1	205.9	199.5	195.7	193.1	189.3	186.7	182.9
72.5°	197.0	185.5	179.1	175.2	171.4	165.0	163.7	161.2	157.3	156.1	152.2
75°	158.6	149.7	145.8	143.3	139.4	135.6	135.6	135.6	131.7	130.5	129.2
77.5°	126.6	121.5	119.0	116.4	115.1	112.6	108.7	107.4	103.6	103.6	102.3
80°	97.2	94.7	92.1	90.8	89.5	87.0	84.4	83.1	79.3	79.3	78.0
82.5°	71.6	70.4	69.1	67.8	66.5	65.2	61.4	60.1	57.6	57.6	56.3
85°	51.2	49.9	47.3	46.0	46.0	44.8	40.9	39.7	37.1	37.1	37.1
87.5°	32.0	30.7	29.4	28.1	26.9	25.6	23.0	21.7	21.7	19.2	17.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213856

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0
2.5°	2863.9	2885.7	2883.1	2898.4	2902.3	2910.0	2912.5	2913.8	2894.6	2910.0	2911.2
5°	3032.8	3036.6	3039.1	3045.5	3051.9	3053.2	3046.8	3039.1	3041.7	3036.6	3023.8
7.5°	2897.2	2878.0	2874.1	2869.0	2866.5	2863.9	2852.4	2862.6	2851.1	2846.0	2828.1
10°	2730.9	2713.0	2711.7	2711.7	2715.5	2714.3	2711.7	2706.6	2716.8	2710.4	2706.6
12.5°	2643.9	2637.5	2641.3	2638.8	2649.0	2651.6	2649.0	2649.0	2646.5	2641.3	2643.9
15°	2591.5	2586.3	2590.2	2586.3	2594.0	2595.3	2588.9	2592.7	2586.3	2580.0	2577.4
17.5°	2522.4	2510.9	2501.9	2489.1	2490.4	2487.9	2480.2	2480.2	2473.8	2457.2	2458.4
20°	2389.4	2377.9	2372.7	2372.7	2379.1	2381.7	2380.4	2383.0	2376.6	2374.0	2363.8
22.5°	2306.2	2304.9	2307.5	2313.9	2324.1	2338.2	2339.5	2339.5	2339.5	2338.2	2325.4
25°	2276.8	2276.8	2279.4	2288.3	2296.0	2306.2	2308.8	2311.3	2308.8	2308.8	2297.3
27.5°	2243.5	2241.0	2246.1	2255.1	2264.0	2271.7	2278.1	2279.4	2275.5	2275.5	2279.4
30°	2202.6	2201.3	2207.7	2216.7	2224.4	2232.0	2238.4	2243.5	2238.4	2238.4	2234.6
32.5°	2160.4	2160.4	2163.0	2109.2	1955.7	1761.3	1765.2	1652.6	1574.6	1476.1	1606.6
35°	1348.2	981.1	842.9	713.7	622.9	564.1	562.8	543.6	534.7	528.3	527.0
37.5°	509.1	511.6	516.8	519.3	523.2	525.7	527.0	527.0	527.0	527.0	525.7
40°	507.8	512.9	516.8	520.6	524.4	527.0	527.0	528.3	529.5	529.5	529.5
42.5°	509.1	514.2	519.3	523.2	525.7	527.0	528.3	529.5	529.5	529.5	529.5
45°	507.8	510.4	510.4	511.6	511.6	511.6	512.9	512.9	511.6	510.4	512.9
47.5°	488.6	488.6	484.8	483.5	482.2	479.7	480.9	479.7	478.4	477.1	479.7
50°	455.4	450.2	447.7	445.1	443.8	441.3	442.6	441.3	440.0	437.5	441.3
52.5°	415.7	414.4	409.3	406.8	405.5	406.8	404.2	402.9	401.6	400.4	401.6
55°	377.3	372.2	370.9	368.4	367.1	368.4	367.1	365.8	364.5	363.3	364.5
57.5°	342.8	339.0	337.7	335.1	335.1	335.1	335.1	333.8	332.6	331.3	332.6
60°	309.5	307.0	305.7	305.7	304.4	304.4	304.4	303.1	301.9	301.9	303.1
62.5°	281.4	281.4	277.6	276.3	276.3	277.6	276.3	275.0	273.7	272.4	275.0
65°	252.0	246.9	245.6	243.0	240.5	241.8	240.5	239.2	237.9	236.6	239.2
67.5°	216.2	214.9	209.8	207.2	205.9	207.2	205.9	204.7	203.4	202.1	204.7
70°	181.6	181.6	176.5	175.2	174.0	174.0	172.7	172.7	171.4	170.1	172.7
72.5°	150.9	150.9	149.7	147.1	145.8	144.5	143.3	142.0	142.0	143.3	143.3
75°	125.4	122.8	117.7	119.0	117.7	116.4	116.4	115.1	113.8	116.4	115.1
77.5°	98.5	97.2	93.4	94.7	93.4	92.1	92.1	90.8	89.5	90.8	90.8
80°	74.2	74.2	72.9	71.6	71.6	70.4	69.1	69.1	67.8	69.1	69.1
82.5°	53.7	53.7	52.4	51.2	49.9	49.9	48.6	48.6	48.6	48.6	48.6
85°	34.5	33.3	33.3	30.7	30.7	30.7	29.4	29.4	29.4	29.4	29.4
87.5°	16.6	16.6	15.3	15.3	14.1	12.8	12.8	11.5	11.5	12.8	12.8
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: P1213856

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0
2.5°	2888.2	2904.8	2890.8	2897.2	2898.4	2920.2	2918.9	2924.0	2915.1	2904.8	2890.8
5°	3035.3	3027.6	3017.4	3041.7	3028.9	3044.3	3049.4	3059.6	3059.6	3058.3	3046.8
7.5°	2847.3	2830.7	2843.4	2852.4	2856.2	2846.0	2866.5	2889.5	2908.7	2920.2	2921.5
10°	2700.2	2705.3	2704.0	2707.9	2716.8	2715.5	2728.3	2741.1	2746.2	2753.9	2756.5
12.5°	2631.1	2629.8	2632.4	2641.3	2646.5	2645.2	2658.0	2665.7	2668.2	2669.5	2668.2
15°	2576.1	2567.2	2573.6	2574.8	2578.7	2578.7	2594.0	2605.5	2610.6	2613.2	2610.6
17.5°	2472.5	2450.8	2471.2	2471.2	2485.3	2482.7	2507.0	2526.2	2536.5	2544.1	2544.1
20°	2370.2	2359.9	2367.6	2365.1	2375.3	2374.0	2389.4	2402.2	2411.1	2417.5	2425.2
22.5°	2329.2	2331.8	2320.3	2321.6	2321.6	2320.3	2328.0	2334.4	2336.9	2340.8	2338.2
25°	2302.4	2304.9	2301.1	2294.7	2292.2	2294.7	2298.5	2306.2	2307.5	2304.9	2296.0
27.5°	2275.5	2267.8	2274.2	2262.7	2260.2	2265.3	2270.4	2271.7	2273.0	2273.0	2265.3
30°	2234.6	2228.2	2234.6	2229.5	2224.4	2229.5	2233.3	2233.3	2235.9	2237.2	2228.2
32.5°	1561.8	1574.6	1781.8	1907.1	2083.7	2173.2	2189.8	2189.8	2192.4	2192.4	2184.7
35°	532.1	533.4	576.9	625.5	729.1	857.0	1024.6	1111.5	1405.7	1757.5	2097.7
37.5°	525.7	524.4	523.2	521.9	520.6	519.3	516.8	515.5	523.2	620.4	841.6
40°	528.3	527.0	524.4	523.2	521.9	519.3	518.0	515.5	512.9	510.4	507.8
42.5°	528.3	527.0	525.7	524.4	523.2	521.9	519.3	516.8	514.2	510.4	506.5
45°	510.4	510.4	511.6	511.6	512.9	512.9	512.9	511.6	511.6	510.4	505.2
47.5°	477.1	477.1	480.9	480.9	483.5	486.1	486.1	488.6	492.5	495.0	496.3
50°	438.7	438.7	442.6	443.8	446.4	450.2	454.1	455.4	459.2	464.3	469.4
52.5°	400.4	400.4	404.2	404.2	406.8	410.6	414.4	415.7	420.8	425.9	432.3
55°	364.5	364.5	367.1	368.4	369.7	372.2	376.1	376.1	381.2	385.0	391.4
57.5°	332.6	335.1	335.1	335.1	336.4	339.0	341.5	341.5	345.4	349.2	354.3
60°	301.9	304.4	304.4	304.4	305.7	307.0	309.5	309.5	312.1	314.7	319.8
62.5°	273.7	276.3	276.3	277.6	277.6	278.8	281.4	280.1	282.7	284.0	287.8
65°	237.9	240.5	241.8	243.0	244.3	246.9	250.7	249.4	253.3	255.8	259.7
67.5°	203.4	205.9	205.9	207.2	208.5	211.1	213.6	213.6	217.4	220.0	225.1
70°	171.4	174.0	174.0	175.2	176.5	179.1	181.6	180.4	184.2	186.7	190.6
72.5°	142.0	144.5	144.5	145.8	145.8	148.4	150.9	153.5	153.5	156.1	158.6
75°	115.1	116.4	117.7	117.7	119.0	120.2	122.8	125.4	126.6	127.9	130.5
77.5°	90.8	92.1	93.4	93.4	94.7	95.9	97.2	102.3	104.9	106.2	106.2
80°	69.1	70.4	70.4	70.4	71.6	72.9	75.5	75.5	80.6	80.6	81.9
82.5°	48.6	49.9	49.9	49.9	51.2	53.7	55.0	56.3	58.8	60.1	60.1
85°	29.4	30.7	30.7	30.7	32.0	33.3	35.8	37.1	38.4	38.4	39.7
87.5°	11.5	12.8	14.1	14.1	15.3	16.6	17.9	19.2	20.5	20.5	21.7
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: P1213856

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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°	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0
2.5°	2875.4	2884.4	2875.4	2880.5	2886.9	2875.4	2848.6	2838.3	2834.5	2819.1	2808.9
5°	3035.3	3035.3	3031.5	3041.7	3040.4	3022.5	2994.4	2981.6	2968.8	2952.2	2939.4
7.5°	2921.5	2931.7	2938.1	2977.8	3003.3	3005.9	3023.8	3027.6	3032.8	3027.6	3020.0
10°	2757.7	2753.9	2771.8	2808.9	2830.7	2842.2	2876.7	2893.3	2907.4	2935.5	2965.0
12.5°	2665.7	2670.8	2678.4	2705.3	2725.8	2720.7	2734.7	2746.2	2762.9	2791.0	2833.2
15°	2604.3	2609.4	2617.0	2637.5	2650.3	2643.9	2651.6	2659.3	2670.8	2684.8	2710.4
17.5°	2537.7	2546.7	2555.6	2577.4	2588.9	2587.6	2594.0	2596.6	2600.4	2609.4	2627.3
20°	2434.1	2462.3	2480.2	2509.6	2526.2	2523.7	2535.2	2539.0	2544.1	2553.1	2560.8
22.5°	2339.5	2347.2	2356.1	2388.1	2416.2	2450.8	2458.4	2468.7	2481.5	2490.4	2498.1
25°	2285.8	2280.6	2284.5	2306.2	2321.6	2324.1	2335.6	2368.9	2403.4	2418.8	2436.7
27.5°	2253.8	2248.7	2247.4	2257.6	2260.2	2253.8	2251.2	2261.5	2287.0	2312.6	2366.3
30°	2219.2	2212.8	2207.7	2216.7	2220.5	2211.6	2194.9	2186.0	2201.3	2207.7	2229.5
32.5°	2178.3	2171.9	2169.4	2174.5	2177.0	2169.4	2151.5	2141.2	2138.7	2133.5	2138.7
35°	2132.3	2125.9	2122.0	2123.3	2128.4	2122.0	2106.7	2093.9	2087.5	2073.4	2063.2
37.5°	1098.7	1556.7	2021.0	2069.6	2074.7	2073.4	2058.1	2044.0	2037.6	2021.0	2015.9
40°	502.7	561.5	842.9	1101.3	1588.6	2018.4	2004.4	1990.3	1978.8	1973.7	1954.5
42.5°	501.4	502.7	504.0	497.6	616.5	1050.1	1550.3	1935.3	1927.6	1914.8	1900.7
45°	501.4	495.0	500.1	492.5	495.0	493.7	615.2	992.6	1766.4	1845.7	1839.4
47.5°	496.3	492.5	497.6	491.2	483.5	487.3	482.2	488.6	762.3	1293.2	1771.6
50°	473.3	475.8	484.8	483.5	477.1	482.2	473.3	480.9	474.5	520.6	1002.8
52.5°	438.7	443.8	452.8	460.5	463.0	469.4	466.9	469.4	464.3	465.6	466.9
55°	397.8	404.2	411.9	423.4	428.5	438.7	446.4	450.2	456.6	455.4	445.1
57.5°	359.4	365.8	372.2	383.7	395.2	400.4	414.4	422.1	438.7	434.9	432.3
60°	323.6	328.7	335.1	337.7	351.8	360.7	373.5	381.2	402.9	408.0	415.7
62.5°	291.6	294.2	299.3	303.1	312.1	321.1	327.5	340.2	351.8	368.4	379.9
65°	262.2	264.8	268.6	271.2	272.4	285.2	289.1	303.1	307.0	324.9	335.1
67.5°	229.0	234.1	239.2	241.8	244.3	252.0	254.5	260.9	269.9	277.6	290.4
70°	194.4	198.3	203.4	207.2	212.3	217.4	225.1	229.0	235.4	240.5	250.7
72.5°	162.4	166.3	168.8	172.7	176.5	180.4	186.7	195.7	200.8	209.8	212.3
75°	131.7	135.6	138.1	140.7	144.5	147.1	149.7	158.6	163.7	171.4	179.1
77.5°	108.7	108.7	111.3	119.0	117.7	117.7	120.2	125.4	129.2	134.3	142.0
80°	84.4	85.7	87.0	93.4	94.7	95.9	94.7	98.5	102.3	103.6	108.7
82.5°	62.7	64.0	64.0	67.8	71.6	71.6	71.6	72.9	76.7	78.0	80.6
85°	42.2	43.5	44.8	46.0	48.6	49.9	51.2	51.2	53.7	55.0	56.3
87.5°	23.0	25.6	26.9	28.1	29.4	30.7	32.0	33.3	34.5	35.8	37.1
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°	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0	2791.0
2.5°	2805.1	2798.7	2794.8	2784.6	2782.0	2765.4	2768.0	2765.4	2765.4	2769.3	2782.0
5°	2925.3	2894.6	2886.9	2865.2	2847.3	2816.6	2797.4	2787.2	2771.8	2765.4	2774.4
7.5°	3007.2	2984.1	2965.0	2945.8	2920.2	2884.4	2857.5	2826.8	2801.2	2776.9	2770.5
10°	2993.1	3018.7	3018.7	3007.2	2982.9	2947.1	2915.1	2876.7	2831.9	2793.6	2770.5
12.5°	2874.1	2918.9	2954.7	2981.6	3005.9	2981.6	2949.6	2918.9	2869.0	2812.7	2770.5
15°	2743.7	2789.7	2834.5	2890.8	2949.6	2973.9	2972.6	2936.8	2892.1	2833.2	2774.4
17.5°	2651.6	2683.6	2707.9	2769.3	2840.9	2903.6	2945.8	2948.3	2904.8	2852.4	2775.7
20°	2582.5	2605.5	2626.0	2660.5	2723.2	2800.0	2878.0	2921.5	2913.8	2856.2	2779.5
22.5°	2519.8	2536.5	2553.1	2578.7	2628.6	2678.4	2769.3	2858.8	2897.2	2849.8	2775.7
25°	2457.2	2475.1	2487.9	2505.8	2545.4	2586.3	2650.3	2761.6	2847.3	2844.7	2768.0
27.5°	2383.0	2407.3	2422.6	2446.9	2473.8	2504.5	2548.0	2652.9	2775.7	2819.1	2747.5
30°	2293.4	2329.2	2352.3	2379.1	2402.2	2429.0	2463.6	2527.5	2679.7	2769.3	2725.8
32.5°	2164.2	2228.2	2279.4	2304.9	2330.5	2353.5	2384.2	2438.0	2562.0	2701.5	2701.5
35°	2072.1	2101.6	2147.6	2221.8	2253.8	2276.8	2304.9	2347.2	2426.5	2620.9	2661.8
37.5°	2000.5	2012.0	2035.1	2108.0	2168.1	2205.2	2233.3	2260.2	2338.2	2510.9	2610.6
40°	1946.8	1943.0	1940.4	1974.9	2060.6	2119.5	2151.5	2178.3	2238.4	2379.1	2542.9
42.5°	1884.1	1880.3	1867.5	1876.4	1918.7	2017.1	2065.8	2095.2	2145.1	2241.0	2468.7
45°	1818.9	1812.5	1807.4	1798.4	1813.8	1868.8	1968.5	2012.0	2040.2	2125.9	2375.3
47.5°	1752.4	1743.4	1737.0	1729.3	1720.4	1746.0	1840.6	1918.7	1967.3	2021.0	2262.7
50°	1657.7	1669.2	1661.6	1652.6	1644.9	1639.8	1679.5	1807.4	1867.5	1911.0	2125.9
52.5°	781.5	1519.6	1583.5	1574.6	1564.3	1555.4	1564.3	1661.6	1770.3	1804.8	1960.9
55°	445.1	676.6	1408.3	1488.9	1479.9	1467.1	1459.5	1492.7	1655.2	1701.2	1809.9
57.5°	428.5	429.8	621.6	1341.8	1391.7	1380.2	1371.2	1378.9	1517.0	1595.0	1678.2
60°	414.4	414.4	414.4	593.5	1282.9	1286.8	1275.3	1262.5	1322.6	1476.1	1545.2
62.5°	383.7	391.4	395.2	395.2	585.8	1188.3	1176.8	1172.9	1175.5	1332.8	1412.1
65°	344.1	362.0	369.7	374.8	374.8	615.2	1075.7	1069.3	1060.4	1120.5	1277.8
67.5°	300.6	318.5	335.1	345.4	346.6	358.1	642.1	963.2	950.4	951.7	1134.6
70°	255.8	271.2	289.1	304.4	318.5	324.9	335.1	799.4	841.6	823.7	972.1
72.5°	221.3	227.7	240.5	255.8	272.4	287.8	296.8	318.5	730.4	711.2	739.3
75°	184.2	189.3	198.3	208.5	221.3	239.2	254.5	269.9	387.6	596.1	592.2
77.5°	143.3	152.2	162.4	168.8	175.2	188.0	208.5	223.8	239.2	402.9	474.5
80°	110.0	116.4	121.5	127.9	135.6	144.5	152.2	170.1	188.0	202.1	363.3
82.5°	81.9	85.7	89.5	92.1	94.7	99.8	113.8	120.2	131.7	144.5	171.4
85°	57.6	60.1	62.7	64.0	65.2	66.5	71.6	72.9	84.4	87.0	103.6
87.5°	37.1	38.4	40.9	42.2	42.2	43.5	44.8	44.8	44.8	42.2	51.2
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: P1213856

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CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	2791.0	2791.0
2.5°	2792.3	2812.7
5°	2788.4	2815.3
7.5°	2778.2	2803.8
10°	2762.9	2793.6
12.5°	2746.2	2775.7
15°	2732.2	2753.9
17.5°	2716.8	2729.6
20°	2696.3	2706.6
22.5°	2675.9	2670.8
25°	2652.9	2641.3
27.5°	2623.4	2601.7
30°	2596.6	2558.2
32.5°	2571.0	2508.3
35°	2536.5	2457.2
37.5°	2500.6	2404.7
40°	2458.4	2344.6
42.5°	2413.7	2284.5
45°	2357.4	2226.9
47.5°	2307.5	2157.8
50°	2238.4	2083.7
52.5°	2154.0	2014.6
55°	2054.2	1930.2
57.5°	1946.8	1841.9
60°	1831.7	1740.9
62.5°	1692.3	1636.0
65°	1528.5	1515.7
67.5°	1314.9	1382.7
70°	1078.3	1230.5
72.5°	901.8	1069.3
75°	739.3	889.0
77.5°	585.8	697.1
80°	365.8	510.4
82.5°	245.6	335.1
85°	148.4	159.9
87.5°	57.6	58.8
90°	0.0	0.0

(END OF REPORT)