

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: P1214207

Luminaire Tested: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1214207
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-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

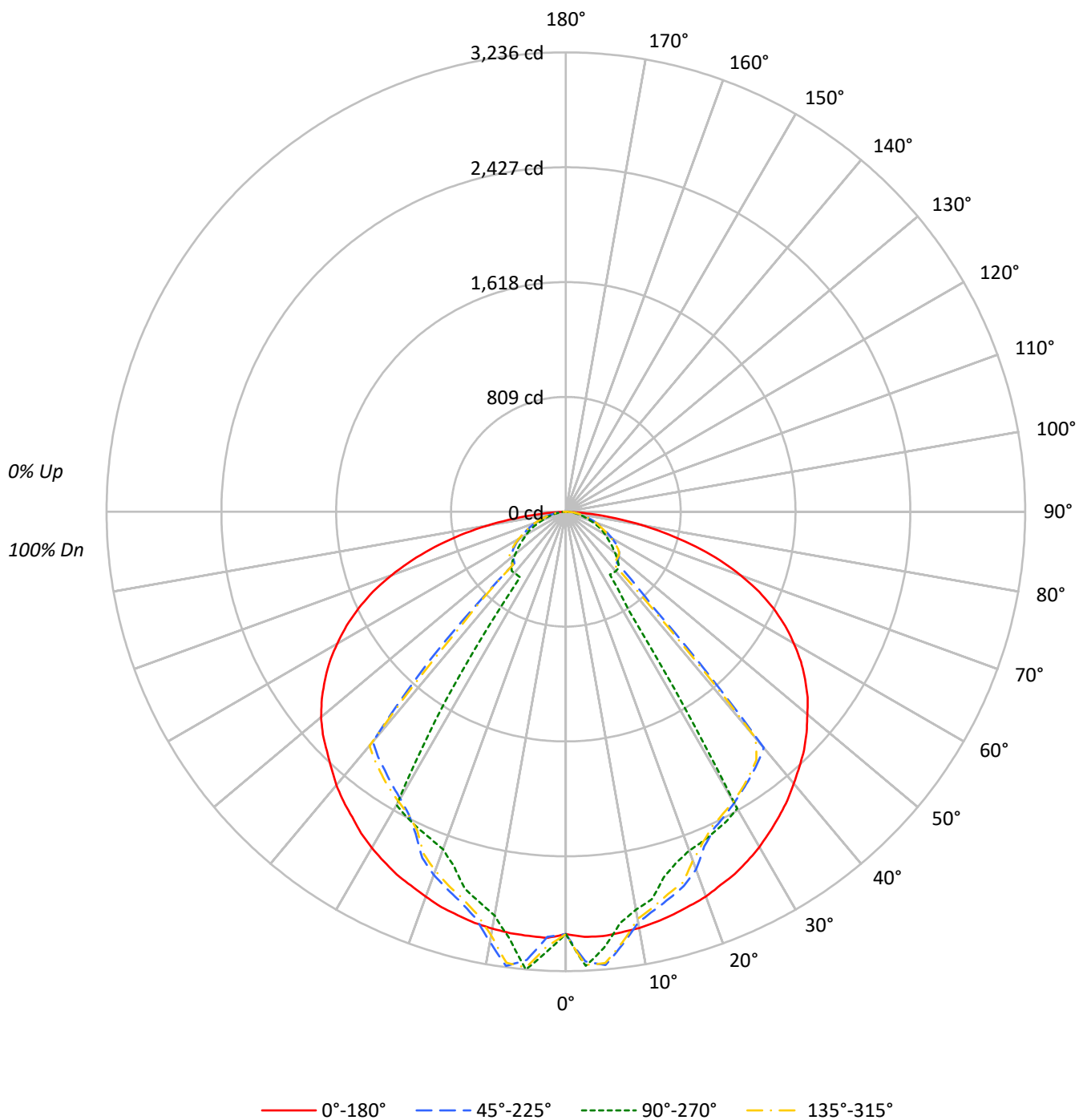
Lumens per Lamp: N/A
Luminaire Lumens: 5957.0 lumens
Efficiency: N/A
Efficacy: 108.3 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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

TEST NUMBER: P1214207

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77
3	94	84	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39
9	62	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	24039	24039	24039	24039
5°	24275	24220	24264	25419
10°	24299	21898	24332	22234
15°	24352	20260	24409	20903
20°	24529	19217	24529	19144
25°	24742	18849	24778	18673
30°	24991	18516	25055	18297
35°	25282	4218	25336	4399
40°	25688	4386	25843	4528
45°	26303	4362	26394	4520
50°	26918	3943	27281	4050
55°	27747	3501	27966	3551
60°	28449	3112	28512	3151
65°	28950	2715	28877	2672
70°	28537	2188	28448	2109
75°	26494	1684	26684	1614
80°	21505	1196	22367	1095
85°	11641	717	12297	550

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 357.5°

Vertical Angle: 60°

Luminance: 29150 cd/sqm

TEST NUMBER: P1214207

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.7	4.9
10°-20°	804.7	13.5
20°-30°	1192.0	20.0
30°-40°	1201.0	20.2
40°-50°	938.2	15.7
50°-60°	724.7	12.2
60°-70°	486.5	8.2
70°-80°	248.2	4.2
80°-90°	69.0	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°	2289.4	38.4
0°-40°	3490.4	58.6
0°-60°	5153.2	86.5
0°-90°	5957.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5957.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2975	2975	2975	2975	2975	
5°	3001	3084	2999	3236	3001	285
15°	2935	2665	2942	2750	2935	830
25°	2815	2484	2819	2461	2815	1299
35°	2619	540	2624	563	2619	1641
45°	2374	525	2382	544	2374	1830
55°	2057	382	2074	387	2057	1837
65°	1616	256	1611	252	1616	1589
75°	948	130	954	124	948	991
85°	170	41	180	31	170	234
90°	0	0	0	0	0	

TEST NUMBER: P1214207

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8
2.5°	2997.9	3008.9	3017.0	3022.5	3025.2	3025.2	3026.6	3027.9	3045.7	3053.8	3059.3
5°	3000.7	3011.6	3027.9	3049.8	3068.8	3085.2	3098.8	3117.9	3137.0	3157.5	3164.3
7.5°	2988.4	3002.0	3034.8	3074.3	3111.1	3137.0	3154.7	3167.0	3176.5	3177.9	3184.7
10°	2977.5	3002.0	3047.0	3098.8	3145.2	3176.5	3176.5	3169.7	3179.3	3142.5	3105.7
12.5°	2958.4	2985.7	3047.0	3115.2	3158.8	3171.1	3165.6	3138.4	3082.5	3037.5	3017.0
15°	2935.2	2972.0	3048.4	3124.7	3161.5	3165.6	3113.8	3044.3	3002.0	2974.8	2940.7
17.5°	2909.3	2958.4	3049.8	3126.1	3139.7	3120.6	3022.5	2978.9	2935.2	2871.2	2824.8
20°	2884.8	2932.5	3038.8	3107.0	3115.2	3029.3	2953.0	2906.6	2833.0	2777.1	2756.6
22.5°	2846.6	2902.5	3029.3	3081.1	3049.8	2950.2	2876.6	2803.0	2736.2	2719.8	2695.3
25°	2815.3	2873.9	3007.5	3049.8	2966.6	2878.0	2792.1	2706.2	2674.8	2651.7	2629.9
27.5°	2773.0	2845.3	2978.9	2992.5	2878.0	2800.3	2674.8	2636.7	2608.0	2582.1	2572.6
30°	2726.6	2815.3	2939.3	2913.4	2804.4	2689.8	2597.1	2561.7	2541.2	2514.0	2503.1
32.5°	2673.5	2770.3	2895.7	2822.1	2725.3	2582.1	2522.1	2494.9	2467.6	2447.2	2379.0
35°	2618.9	2730.7	2843.9	2734.8	2629.9	2500.3	2447.2	2422.6	2396.7	2321.7	2250.8
37.5°	2563.0	2687.1	2781.2	2640.8	2503.1	2415.8	2370.8	2343.6	2284.9	2189.5	2154.1
40°	2499.0	2633.9	2700.7	2544.0	2392.6	2329.9	2287.7	2260.4	2128.1	2085.9	2075.0
42.5°	2434.9	2582.1	2602.6	2449.9	2301.3	2238.6	2203.1	2113.2	2023.2	2001.4	2005.4
45°	2373.5	2526.2	2494.9	2316.3	2205.9	2154.1	2094.1	1970.0	1922.3	1933.2	1935.9
47.5°	2299.9	2459.4	2381.7	2182.7	2107.7	2055.9	1922.3	1847.3	1840.5	1855.5	1863.7
50°	2220.9	2384.5	2261.8	2061.3	2001.4	1940.0	1788.7	1750.5	1758.7	1773.7	1783.2
52.5°	2147.2	2299.9	2137.7	1948.2	1896.4	1756.0	1653.7	1660.5	1674.2	1691.9	1697.3
55°	2057.3	2197.7	2005.4	1833.7	1784.6	1600.5	1554.2	1570.5	1584.2	1599.2	1610.1
57.5°	1963.2	2080.4	1848.7	1705.5	1626.4	1462.8	1466.9	1477.8	1487.4	1505.1	621.7
60°	1855.5	1946.8	1676.9	1586.9	1430.1	1353.8	1357.9	1377.0	1386.5	774.4	428.1
62.5°	1743.7	1791.4	1521.5	1451.9	1250.2	1244.7	1263.8	1272.0	865.7	409.0	400.8
65°	1615.5	1606.0	1368.8	1258.3	1127.5	1132.9	1153.4	1112.5	383.1	383.1	380.4
67.5°	1473.8	1416.5	1220.2	1041.6	1008.9	1021.1	1042.9	364.0	354.5	357.2	347.6
70°	1311.5	1231.1	1066.1	882.1	893.0	905.2	351.7	329.9	325.8	319.0	299.9
72.5°	1139.7	1029.3	872.5	766.2	773.0	485.3	308.1	297.2	283.6	269.9	249.5
75°	947.5	804.4	640.8	640.8	650.3	276.8	268.6	250.9	235.9	218.1	205.9
77.5°	743.0	618.9	497.6	516.7	252.2	231.8	216.8	197.7	185.4	174.5	167.7
80°	544.0	432.2	374.9	335.4	196.3	175.9	160.9	150.0	144.5	137.7	129.5
82.5°	357.2	260.4	260.4	158.1	137.7	121.3	117.2	109.1	103.6	99.5	95.4
85°	170.4	151.3	114.5	96.8	85.9	77.7	75.0	70.9	70.9	69.5	68.2
87.5°	62.7	68.2	50.4	49.1	46.4	45.0	46.4	46.4	47.7	46.4	45.0
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: P1214207

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8
2.5°	3072.9	3083.8	3092.0	3105.7	3123.4	3138.4	3152.0	3171.1	3201.1	3209.3	3216.1
5°	3164.3	3168.4	3177.9	3188.8	3191.5	3198.4	3197.0	3205.2	3209.3	3218.8	3198.4
7.5°	3169.7	3147.9	3122.0	3098.8	3082.5	3067.5	3057.9	3072.9	3081.1	3087.9	3067.5
10°	3055.2	3029.3	3014.3	3000.7	2984.3	2961.1	2929.8	2936.6	2933.9	2933.9	2927.1
12.5°	2983.0	2946.1	2908.0	2873.9	2858.9	2857.5	2858.9	2873.9	2873.9	2872.5	2864.3
15°	2869.8	2834.4	2815.3	2807.1	2807.1	2803.0	2803.0	2819.4	2815.3	2815.3	2811.2
17.5°	2794.8	2770.3	2756.6	2747.1	2743.0	2749.8	2758.0	2764.8	2766.2	2760.7	2738.9
20°	2733.5	2710.3	2693.9	2696.7	2695.3	2699.4	2703.5	2680.3	2651.7	2613.5	2595.8
22.5°	2669.4	2651.7	2639.4	2639.4	2623.0	2597.1	2559.0	2550.8	2546.7	2529.0	2514.0
25°	2608.0	2587.6	2569.9	2515.3	2481.2	2485.3	2478.5	2464.9	2463.5	2462.2	2467.6
27.5°	2546.7	2493.5	2425.4	2417.2	2403.5	2402.2	2410.4	2417.2	2417.2	2422.6	2429.4
30°	2419.9	2358.6	2346.3	2331.3	2336.7	2355.8	2359.9	2369.5	2372.2	2381.7	2387.2
32.5°	2304.0	2276.8	2265.8	2272.7	2290.4	2306.7	2316.3	2320.4	2327.2	2335.4	2342.2
35°	2209.9	2201.8	2211.3	2226.3	2244.0	2257.7	2265.8	2274.0	2280.8	2287.7	2293.1
37.5°	2140.4	2145.9	2159.5	2178.6	2196.3	2207.2	2214.0	2223.6	2233.1	2241.3	2208.6
40°	2075.0	2088.6	2103.6	2124.1	2139.1	2150.0	2156.8	2169.0	2087.2	944.8	518.1
42.5°	2017.7	2032.7	2043.6	2060.0	2076.3	2084.5	2024.5	903.9	511.2	508.5	515.3
45°	1948.2	1960.5	1978.2	1990.5	2005.4	1317.0	503.1	508.5	500.3	505.8	508.5
47.5°	1877.3	1896.4	1905.9	1818.7	541.2	500.3	494.9	500.3	494.9	501.7	497.6
50°	1796.9	1820.0	1295.2	489.4	485.3	482.6	488.1	485.3	489.4	494.9	484.0
52.5°	1715.1	1062.0	474.4	471.7	474.4	471.7	481.3	474.4	475.8	470.3	456.7
55°	580.8	459.4	455.4	454.0	462.2	462.2	462.2	451.3	444.4	430.8	421.3
57.5°	444.4	444.4	443.1	444.4	441.7	439.0	426.7	417.2	407.6	388.5	383.1
60°	421.3	421.3	421.3	421.3	409.0	403.5	384.5	376.3	359.9	350.4	344.9
62.5°	402.2	399.5	387.2	383.1	369.5	354.5	343.6	335.4	319.0	313.6	309.5
65°	374.9	365.4	350.4	334.0	327.2	310.8	305.4	293.1	284.9	280.8	278.1
67.5°	329.9	316.3	304.0	293.1	280.8	275.4	268.6	259.0	253.6	250.9	248.1
70°	282.2	272.7	260.4	253.6	245.4	241.3	231.8	229.0	224.9	220.9	216.8
72.5°	235.9	230.4	224.9	215.4	212.7	210.0	200.4	195.0	189.5	184.0	181.3
75°	197.7	193.6	190.9	182.7	178.6	170.4	163.6	159.5	155.4	151.3	148.6
77.5°	162.2	159.5	151.3	145.9	143.1	136.3	133.6	135.0	132.2	126.8	124.1
80°	126.8	124.1	117.2	117.2	114.5	111.8	109.1	106.3	103.6	99.5	96.8
82.5°	96.8	94.1	91.3	88.6	85.9	84.5	83.2	80.4	77.7	75.0	73.6
85°	68.2	66.8	65.4	64.1	62.7	61.3	60.0	57.3	54.5	53.2	51.8
87.5°	46.4	45.0	43.6	42.3	40.9	39.5	38.2	36.8	34.1	32.7	31.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214207

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8
2.5°	3216.1	3222.9	3216.1	3201.1	3191.5	3187.5	3195.6	3195.6	3201.1	3207.9	3209.3
5°	3165.6	3149.3	3130.2	3111.1	3101.6	3096.1	3081.1	3083.8	3087.9	3090.7	3093.4
7.5°	3040.2	3018.4	2992.5	2968.0	2958.4	2950.2	2932.5	2932.5	2932.5	2933.9	2942.1
10°	2912.1	2902.5	2891.6	2875.2	2863.0	2858.9	2843.9	2848.0	2845.3	2849.3	2858.9
12.5°	2852.1	2841.2	2831.6	2815.3	2801.6	2796.2	2789.4	2793.5	2792.1	2798.9	2807.1
15°	2797.5	2792.1	2781.2	2768.9	2756.6	2745.7	2721.2	2713.0	2707.6	2700.7	2710.3
17.5°	2707.6	2669.4	2643.5	2624.4	2610.8	2601.2	2594.4	2594.4	2598.5	2602.6	2610.8
20°	2584.9	2574.0	2561.7	2541.2	2527.6	2522.1	2518.1	2518.1	2524.9	2530.3	2545.3
22.5°	2500.3	2499.0	2494.9	2485.3	2478.5	2478.5	2479.9	2482.6	2492.2	2500.3	2515.3
25°	2460.8	2466.3	2463.5	2458.1	2454.0	2455.3	2452.6	2455.3	2464.9	2473.1	2485.3
27.5°	2429.4	2437.6	2434.9	2426.7	2419.9	2422.6	2426.7	2424.0	2432.2	2441.7	2451.3
30°	2387.2	2388.5	2394.0	2384.5	2381.7	2385.8	2387.2	2389.9	2398.1	2404.9	2413.1
32.5°	2339.5	2350.4	2349.0	2339.5	2339.5	2343.6	2344.9	2253.6	2083.2	1794.1	1715.1
35°	2293.1	2305.4	2284.9	1926.4	1333.3	711.7	549.4	530.3	534.4	537.1	539.9
37.5°	1696.0	804.4	512.6	516.7	520.8	524.9	529.0	533.1	537.1	541.2	542.6
40°	509.9	508.5	512.6	518.1	522.2	524.9	530.3	534.4	538.5	542.6	544.0
42.5°	504.4	507.2	511.2	516.7	522.2	527.6	531.7	537.1	539.9	542.6	544.0
45°	501.7	507.2	512.6	516.7	520.8	523.5	526.2	527.6	526.2	526.2	529.0
47.5°	497.6	503.1	504.4	503.1	504.4	503.1	503.1	503.1	499.0	497.6	497.6
50°	482.6	482.6	479.9	474.4	473.1	471.7	469.0	467.6	462.2	460.8	460.8
52.5°	451.3	449.9	445.8	439.0	436.3	433.5	432.2	430.8	425.4	422.6	424.0
55°	414.5	411.7	407.6	399.5	398.1	395.4	394.0	392.6	387.2	389.9	385.8
57.5°	380.4	374.9	369.5	368.1	362.6	361.3	359.9	358.6	354.5	355.8	353.1
60°	339.5	338.1	335.4	329.9	329.9	328.6	328.6	325.8	323.1	321.7	321.7
62.5°	309.5	305.4	302.7	302.7	298.6	298.6	298.6	295.8	293.1	294.5	293.1
65°	276.8	275.4	274.0	271.3	271.3	269.9	269.9	267.2	263.1	264.5	261.8
67.5°	249.5	246.8	244.0	242.7	237.2	234.5	233.1	231.8	226.3	227.7	224.9
70°	215.4	211.3	208.6	205.9	201.8	199.0	199.0	196.3	192.2	193.6	190.9
72.5°	180.0	177.2	174.5	173.1	169.1	167.7	166.3	165.0	160.9	162.2	160.9
75°	150.0	150.0	148.6	147.2	143.1	139.1	136.3	135.0	132.2	133.6	130.9
77.5°	124.1	121.3	118.6	118.6	114.5	111.8	109.1	109.1	109.1	107.7	106.3
80°	96.8	94.1	94.1	92.7	90.0	87.3	85.9	85.9	84.5	84.5	83.2
82.5°	73.6	70.9	69.5	69.5	66.8	65.4	64.1	62.7	62.7	62.7	61.3
85°	51.8	49.1	47.7	47.7	45.0	43.6	43.6	42.3	42.3	40.9	40.9
87.5°	31.4	30.0	28.6	28.6	25.9	24.5	24.5	24.5	23.2	23.2	21.8
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: P1214207

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8
2.5°	3209.3	3209.3	3199.7	3202.4	3198.4	3203.8	3197.0	3197.0	3205.2	3205.2	3210.6
5°	3094.7	3087.9	3086.6	3083.8	3070.2	3075.7	3068.8	3062.0	3071.6	3071.6	3083.8
7.5°	2938.0	2925.7	2931.1	2923.0	2914.8	2902.5	2906.6	2901.2	2908.0	2917.5	2929.8
10°	2857.5	2846.6	2853.4	2845.3	2849.3	2831.6	2833.0	2834.4	2841.2	2843.9	2854.8
12.5°	2805.7	2803.0	2800.3	2797.5	2800.3	2790.7	2785.3	2786.6	2789.4	2790.7	2798.9
15°	2696.7	2678.9	2684.4	2665.3	2666.7	2668.0	2657.1	2668.0	2666.7	2684.4	2700.7
17.5°	2608.0	2608.0	2598.5	2590.3	2584.9	2583.5	2575.3	2580.8	2575.3	2586.2	2590.3
20°	2546.7	2545.3	2544.0	2539.9	2526.2	2527.6	2531.7	2519.4	2518.1	2516.7	2524.9
22.5°	2518.1	2519.4	2514.0	2514.0	2501.7	2504.4	2505.8	2492.2	2493.5	2489.4	2493.5
25°	2488.1	2490.8	2484.0	2484.0	2481.2	2479.9	2473.1	2475.8	2467.6	2460.8	2467.6
27.5°	2452.6	2458.1	2452.6	2455.3	2449.9	2447.2	2443.1	2440.3	2432.2	2430.8	2434.9
30°	2419.9	2422.6	2421.3	2414.4	2413.1	2404.9	2409.0	2400.8	2392.6	2394.0	2396.7
32.5°	1240.6	1184.7	913.4	824.8	816.6	846.6	1003.4	1221.5	1582.8	1933.2	2185.4
35°	541.2	541.2	541.2	539.9	539.9	538.5	537.1	535.8	534.4	533.1	531.7
37.5°	544.0	544.0	544.0	544.0	542.6	541.2	541.2	538.5	537.1	535.8	534.4
40°	545.3	546.7	546.7	546.7	545.3	545.3	544.0	541.2	539.9	537.1	534.4
42.5°	544.0	545.3	545.3	544.0	544.0	542.6	542.6	541.2	539.9	538.5	537.1
45°	526.2	527.6	524.9	524.9	523.5	523.5	523.5	523.5	523.5	524.9	524.9
47.5°	494.9	494.9	493.5	492.2	492.2	490.8	492.2	490.8	493.5	494.9	497.6
50°	458.1	458.1	455.4	454.0	454.0	454.0	454.0	455.4	456.7	459.4	462.2
52.5°	419.9	419.9	418.5	417.2	415.8	415.8	419.9	418.5	419.9	421.3	425.4
55°	383.1	384.5	381.7	381.7	380.4	380.4	380.4	381.7	383.1	384.5	388.5
57.5°	351.7	351.7	349.0	349.0	349.0	347.6	351.7	349.0	350.4	351.7	354.5
60°	320.4	319.0	319.0	317.7	317.7	317.7	320.4	319.0	319.0	320.4	323.1
62.5°	291.8	291.8	290.4	290.4	289.0	289.0	291.8	290.4	290.4	291.8	293.1
65°	259.0	259.0	257.7	256.3	260.4	256.3	260.4	257.7	260.4	261.8	264.5
67.5°	222.2	222.2	222.2	220.9	220.9	223.6	224.9	222.2	223.6	226.3	227.7
70°	189.5	189.5	188.1	188.1	188.1	190.9	192.2	189.5	190.9	192.2	195.0
72.5°	160.9	158.1	158.1	156.8	159.5	159.5	160.9	159.5	160.9	160.9	163.6
75°	132.2	129.5	129.5	129.5	132.2	130.9	132.2	130.9	132.2	132.2	133.6
77.5°	106.3	105.0	103.6	103.6	106.3	106.3	106.3	105.0	106.3	107.7	109.1
80°	83.2	81.8	80.4	80.4	83.2	83.2	83.2	84.5	83.2	84.5	85.9
82.5°	61.3	60.0	58.6	61.3	61.3	61.3	61.3	62.7	61.3	62.7	64.1
85°	40.9	39.5	38.2	40.9	40.9	40.9	40.9	42.3	40.9	42.3	43.6
87.5°	21.8	20.4	20.4	21.8	21.8	21.8	23.2	23.2	23.2	24.5	24.5
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: P1214207

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8
2.5°	3218.8	3222.9	3221.5	3213.4	3205.2	3195.6	3188.8	3190.2	3203.8	3207.9	3195.6
5°	3083.8	3109.7	3109.7	3127.5	3117.9	3109.7	3115.2	3145.2	3160.2	3183.4	3191.5
7.5°	2944.8	2957.0	2955.7	2973.4	2970.7	2970.7	2974.8	3014.3	3033.4	3052.5	3057.9
10°	2867.1	2879.3	2878.0	2879.3	2875.2	2865.7	2865.7	2883.4	2899.8	2909.3	2912.1
12.5°	2811.2	2818.0	2816.6	2816.6	2813.9	2805.7	2804.4	2819.4	2837.1	2849.3	2850.7
15°	2728.0	2747.1	2751.2	2768.9	2764.8	2753.9	2756.6	2768.9	2779.8	2790.7	2786.6
17.5°	2603.9	2613.5	2614.9	2621.7	2618.9	2618.9	2635.3	2680.3	2710.3	2736.2	2738.9
20°	2533.1	2539.9	2537.1	2552.1	2545.3	2544.0	2548.1	2567.1	2580.8	2593.0	2614.9
22.5°	2499.0	2504.4	2500.3	2501.7	2489.4	2478.5	2475.8	2490.8	2505.8	2522.1	2522.1
25°	2470.3	2474.4	2473.1	2470.3	2460.8	2445.8	2443.1	2445.8	2451.3	2452.6	2443.1
27.5°	2436.3	2439.0	2439.0	2440.3	2428.1	2414.4	2411.7	2409.0	2414.4	2413.1	2398.1
30°	2400.8	2396.7	2398.1	2399.4	2388.5	2376.3	2370.8	2369.5	2374.9	2373.5	2358.6
32.5°	2316.3	2347.6	2350.4	2353.1	2343.6	2332.6	2327.2	2323.1	2325.8	2324.5	2310.8
35°	530.3	539.9	661.2	1496.9	2032.7	2250.8	2274.0	2268.6	2269.9	2269.9	2259.0
37.5°	531.7	530.3	529.0	524.9	520.8	518.1	895.7	1910.0	2212.7	2214.0	2204.5
40°	531.7	530.3	529.0	526.2	520.8	516.7	509.9	504.4	516.7	1137.0	2080.4
42.5°	534.4	531.7	529.0	526.2	520.8	515.3	509.9	503.1	507.2	504.4	497.6
45°	526.2	524.9	524.9	523.5	520.8	515.3	508.5	500.3	496.2	500.3	493.5
47.5°	500.3	501.7	505.8	507.2	507.2	508.5	504.4	499.0	492.2	496.2	488.1
50°	464.9	467.6	469.0	475.8	478.5	484.0	485.3	485.3	484.0	489.4	484.0
52.5°	426.7	429.4	436.3	439.0	441.7	449.9	452.6	456.7	459.4	467.6	473.1
55°	389.9	391.3	394.0	399.5	403.5	410.4	414.5	418.5	425.4	429.4	445.8
57.5°	355.8	357.2	362.6	364.0	366.7	372.2	376.3	381.7	387.2	389.9	409.0
60°	323.1	324.5	328.6	329.9	331.3	336.7	340.8	344.9	349.0	351.7	365.4
62.5°	294.5	294.5	298.6	298.6	299.9	304.0	306.7	309.5	313.6	314.9	321.7
65°	265.8	267.2	269.9	269.9	271.3	274.0	275.4	276.8	280.8	280.8	286.3
67.5°	230.4	231.8	235.9	238.6	239.9	245.4	246.8	248.1	250.9	252.2	254.9
70°	196.3	197.7	201.8	203.1	204.5	208.6	211.3	215.4	219.5	223.6	226.3
72.5°	165.0	166.3	170.4	170.4	174.5	175.9	178.6	180.0	184.0	186.8	190.9
75°	135.0	136.3	140.4	140.4	144.5	145.9	147.2	148.6	151.3	154.1	156.8
77.5°	110.4	110.4	115.9	118.6	121.3	121.3	122.7	122.7	122.7	124.1	126.8
80°	87.3	87.3	91.3	94.1	96.8	96.8	98.2	99.5	100.9	100.9	102.2
82.5°	65.4	65.4	69.5	70.9	73.6	73.6	73.6	75.0	76.3	75.0	77.7
85°	45.0	45.0	47.7	49.1	51.8	51.8	51.8	53.2	54.5	53.2	54.5
87.5°	25.9	27.3	28.6	30.0	31.4	32.7	32.7	32.7	34.1	34.1	35.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214207

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8
2.5°	3182.0	3165.6	3164.3	3145.2	3139.7	3141.1	3126.1	3120.6	3096.1	3090.7	3064.8
5°	3194.3	3202.4	3198.4	3197.0	3201.1	3198.4	3187.5	3182.0	3177.9	3167.0	3145.2
7.5°	3059.3	3064.8	3068.8	3086.6	3101.6	3127.5	3154.7	3172.5	3186.1	3188.8	3171.1
10°	2921.6	2947.5	2965.2	2992.5	3014.3	3029.3	3045.7	3060.7	3100.2	3139.7	3162.9
12.5°	2850.7	2857.5	2856.2	2871.2	2886.2	2925.7	2963.9	2985.7	3015.7	3033.4	3075.7
15°	2790.7	2792.1	2796.2	2807.1	2815.3	2828.9	2846.6	2879.3	2939.3	2966.6	2989.8
17.5°	2736.2	2736.2	2738.9	2748.5	2759.4	2771.6	2782.5	2796.2	2826.2	2871.2	2928.4
20°	2648.9	2687.1	2691.2	2689.8	2695.3	2718.5	2721.2	2745.7	2760.7	2778.5	2834.4
22.5°	2519.4	2542.6	2575.3	2625.8	2644.8	2655.8	2663.9	2674.8	2698.0	2718.5	2741.6
25°	2448.5	2463.5	2473.1	2488.1	2527.6	2591.7	2603.9	2616.2	2631.2	2646.2	2674.8
27.5°	2385.8	2384.5	2391.3	2404.9	2415.8	2449.9	2509.9	2557.6	2560.3	2582.1	2606.7
30°	2340.8	2332.6	2323.1	2320.4	2335.4	2353.1	2370.8	2445.8	2497.6	2508.5	2534.4
32.5°	2298.6	2284.9	2271.3	2260.4	2250.8	2265.8	2276.8	2309.5	2376.3	2439.0	2452.6
35°	2246.8	2233.1	2216.8	2204.5	2189.5	2188.1	2186.8	2218.1	2239.9	2314.9	2380.4
37.5°	2193.6	2178.6	2165.0	2151.3	2136.3	2125.4	2118.6	2126.8	2147.2	2180.0	2289.0
40°	2137.7	2120.0	2106.3	2095.4	2075.0	2066.8	2053.2	2047.7	2049.1	2077.7	2135.0
42.5°	1277.4	2036.8	2043.6	2031.4	2013.6	2002.7	1987.7	1980.9	1967.3	1980.9	2013.6
45°	492.2	497.6	1490.1	1968.6	1946.8	1933.2	1919.6	1912.7	1897.7	1886.8	1916.8
47.5°	482.6	488.1	477.2	676.2	1858.2	1862.3	1845.9	1839.1	1824.1	1815.9	1807.8
50°	475.8	479.9	471.7	474.4	464.9	1702.8	1771.0	1762.8	1746.4	1736.9	1720.5
52.5°	469.0	469.0	463.5	456.7	454.0	455.4	1432.9	1685.1	1666.0	1656.4	1634.6
55°	447.2	449.9	455.4	444.4	441.7	440.4	436.3	1364.7	1577.4	1566.5	1547.4
57.5°	414.5	419.9	434.9	432.2	432.2	421.3	418.5	418.5	1266.5	1475.1	1456.0
60°	376.3	381.7	398.1	403.5	407.6	404.9	402.2	400.8	395.4	1334.7	1359.2
62.5°	336.7	342.2	347.6	365.4	370.8	377.6	385.8	381.7	376.3	376.3	1257.0
65°	294.5	302.7	305.4	321.7	328.6	340.8	347.6	357.2	354.5	353.1	359.9
67.5°	257.7	267.2	268.6	275.4	287.7	293.1	301.3	319.0	327.2	329.9	332.7
70°	226.3	231.8	235.9	238.6	246.8	248.1	263.1	275.4	287.7	301.3	305.4
72.5°	195.0	199.0	207.2	204.5	207.2	212.7	220.9	229.0	241.3	260.4	272.7
75°	159.5	162.2	167.7	170.4	175.9	180.0	185.4	192.2	203.1	212.7	229.0
77.5°	128.2	129.5	133.6	135.0	140.4	144.5	154.1	158.1	165.0	171.8	181.3
80°	103.6	103.6	105.0	105.0	109.1	113.2	120.0	124.1	132.2	137.7	137.7
82.5°	79.1	79.1	83.2	83.2	85.9	85.9	90.0	90.0	94.1	96.8	99.5
85°	55.9	57.3	60.0	58.6	61.3	60.0	62.7	65.4	66.8	65.4	64.1
87.5°	36.8	36.8	39.5	38.2	39.5	39.5	42.3	42.3	43.6	43.6	42.3
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: P1214207

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8
2.5°	3055.2	3034.8	3022.5	3007.5	3003.4	2999.3	3004.8	3004.8	2996.6	2989.8	2977.5
5°	3126.1	3104.3	3081.1	3056.6	3033.4	3008.9	2999.3	2997.9	2983.0	2974.8	2970.7
7.5°	3162.9	3152.0	3126.1	3092.0	3056.6	3012.9	2993.9	2983.0	2968.0	2965.2	2965.2
10°	3167.0	3154.7	3141.1	3116.6	3075.7	3018.4	2981.6	2959.8	2946.1	2955.7	2973.4
12.5°	3127.5	3150.6	3138.4	3122.0	3089.3	3019.8	2966.6	2933.9	2929.8	2954.3	3000.7
15°	3026.6	3094.7	3128.8	3112.5	3086.6	3017.0	2942.1	2903.9	2903.9	2954.3	3014.3
17.5°	2950.2	3003.4	3086.6	3100.2	3070.2	3011.6	2918.9	2873.9	2886.2	2959.8	3023.9
20°	2887.5	2920.2	3000.7	3077.0	3048.4	2999.3	2884.8	2838.4	2863.0	2951.6	3037.5
22.5°	2789.4	2854.8	2903.9	3017.0	3026.6	2976.1	2850.7	2794.8	2843.9	2951.6	3030.7
25°	2693.9	2773.0	2824.8	2935.2	2993.9	2947.5	2819.4	2748.5	2823.4	2947.5	3025.2
27.5°	2627.1	2663.9	2758.0	2837.1	2944.8	2909.3	2777.1	2698.0	2797.5	2925.7	2993.9
30°	2556.2	2580.8	2673.5	2748.5	2879.3	2865.7	2733.5	2642.1	2764.8	2905.2	2912.1
32.5°	2478.5	2505.8	2553.5	2662.6	2788.0	2824.8	2684.4	2586.2	2729.4	2873.9	2816.6
35°	2399.4	2419.9	2458.1	2575.3	2681.7	2763.5	2624.4	2522.1	2704.8	2826.2	2725.3
37.5°	2320.4	2342.2	2374.9	2473.1	2569.9	2706.2	2572.6	2458.1	2659.8	2741.6	2629.9
40°	2245.4	2257.7	2291.7	2353.1	2477.2	2647.6	2514.0	2391.3	2613.5	2633.9	2500.3
42.5°	2107.7	2169.0	2200.4	2249.5	2372.2	2567.1	2445.8	2320.4	2561.7	2526.2	2370.8
45°	1959.1	2092.7	2106.3	2155.4	2279.5	2481.2	2381.7	2250.8	2512.6	2433.5	2248.1
47.5°	1837.8	1934.6	2013.6	2054.5	2169.0	2380.4	2321.7	2192.2	2439.0	2316.3	2128.1
50°	1730.1	1781.9	1925.0	1955.0	2036.8	2259.0	2250.8	2124.1	2336.7	2169.0	2010.9
52.5°	1625.1	1661.9	1791.4	1855.5	1922.3	2128.1	2166.3	2057.3	2224.9	2021.8	1892.3
55°	1533.7	1546.0	1616.9	1751.9	1811.9	1995.9	2073.6	1979.5	2083.2	1881.4	1777.8
57.5°	1439.7	1428.8	1480.6	1653.7	1697.3	1860.9	1975.5	1900.5	1968.6	1738.2	1659.2
60°	1341.5	1326.5	1348.3	1462.8	1576.0	1727.3	1859.6	1813.2	1829.6	1596.5	1526.9
62.5°	1239.3	1224.3	1217.4	1289.7	1457.4	1589.6	1742.3	1716.4	1659.2	1466.9	1363.3
65°	1132.9	1117.9	1107.0	1135.6	1326.5	1411.0	1611.4	1604.6	1472.4	1330.6	1147.9
67.5°	344.9	1017.0	993.9	992.5	1117.9	1248.8	1469.7	1458.8	1284.3	1184.7	988.4
70°	310.8	824.8	876.6	864.3	918.9	1083.8	1307.4	1299.2	1101.6	950.2	873.9
72.5°	284.9	291.8	774.4	760.7	773.0	921.6	1138.4	1116.6	933.9	749.8	755.3
75°	244.0	256.3	267.2	642.1	625.8	763.5	954.3	920.2	770.3	618.9	631.2
77.5°	199.0	214.0	222.2	467.6	505.8	544.0	762.1	717.1	530.3	494.9	235.9
80°	148.6	160.9	174.5	186.8	384.5	380.4	565.8	520.8	369.5	308.1	184.0
82.5°	109.1	113.2	121.3	135.0	152.7	254.9	364.0	320.4	256.3	140.4	126.8
85°	68.2	73.6	77.7	81.8	92.7	152.7	180.0	143.1	107.7	85.9	80.4
87.5°	43.6	43.6	42.3	43.6	45.0	54.5	61.3	58.6	46.4	43.6	43.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214207

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8
2.5°	2963.9	2944.8	2944.8	2939.3	2943.4	2943.4	2942.1	2943.4	2953.0	2958.4	2968.0
5°	2962.5	2957.0	2969.3	2984.3	3002.0	3023.9	3029.3	3048.4	3066.1	3089.3	3113.8
7.5°	2980.2	2999.3	3022.5	3047.0	3082.5	3108.4	3131.6	3154.7	3171.1	3192.9	3206.5
10°	3006.1	3044.3	3083.8	3115.2	3153.4	3175.2	3190.2	3192.9	3169.7	3132.9	3102.9
12.5°	3042.9	3087.9	3124.7	3154.7	3172.5	3164.3	3120.6	3075.7	3049.8	3011.6	2958.4
15°	3074.3	3115.2	3153.4	3141.1	3093.4	3048.4	3014.3	2961.1	2909.3	2873.9	2850.7
17.5°	3087.9	3127.5	3113.8	3049.8	3004.8	2953.0	2883.4	2842.5	2808.4	2781.2	2767.5
20°	3096.1	3089.3	3015.7	2969.3	2882.1	2834.4	2789.4	2751.2	2725.3	2711.7	2708.9
22.5°	3074.3	2991.1	2928.4	2845.3	2781.2	2741.6	2706.2	2674.8	2657.1	2646.2	2639.4
25°	3002.0	2905.2	2812.5	2747.1	2692.6	2658.5	2631.2	2605.3	2583.5	2578.0	2564.4
27.5°	2901.2	2822.1	2699.4	2648.9	2601.2	2584.9	2554.9	2529.0	2509.9	2493.5	2449.9
30°	2818.0	2692.6	2603.9	2557.6	2529.0	2509.9	2475.8	2448.5	2415.8	2355.8	2331.3
32.5°	2715.7	2591.7	2507.2	2481.2	2445.8	2429.4	2391.3	2331.3	2280.8	2256.3	2254.9
35°	2583.5	2481.2	2419.9	2396.7	2368.1	2340.8	2261.8	2207.2	2182.7	2185.4	2205.9
37.5°	2473.1	2381.7	2342.2	2309.5	2276.8	2207.2	2140.4	2114.5	2121.3	2135.0	2144.5
40°	2361.3	2291.7	2246.8	2220.9	2147.2	2079.1	2043.6	2053.2	2065.4	2075.0	2087.2
42.5°	2252.2	2203.1	2158.1	2107.7	2006.8	1970.0	1978.2	1990.5	2001.4	2015.0	2027.3
45°	2148.6	2105.0	2053.2	1938.6	1888.2	1897.7	1910.0	1919.6	1935.9	1945.5	1957.7
47.5°	2050.4	2004.1	1912.7	1811.9	1806.4	1825.5	1836.4	1848.7	1860.9	1836.4	1012.9
50°	1940.0	1892.3	1753.2	1715.1	1727.3	1745.1	1758.7	1771.0	1577.4	627.1	482.6
52.5°	1830.9	1709.6	1621.0	1631.9	1644.2	1664.6	1674.2	1243.4	494.9	471.7	473.1
55°	1709.6	1554.2	1528.3	1541.9	1552.8	1573.3	1042.9	456.7	454.0	452.6	463.5
57.5°	1518.7	1424.7	1435.6	1449.2	1460.1	1030.7	444.4	441.7	443.1	444.4	445.8
60°	1348.3	1327.9	1340.1	1352.4	957.1	429.4	421.3	422.6	428.1	424.0	413.1
62.5°	1213.4	1229.7	1242.0	1087.9	407.6	403.5	407.6	403.5	394.0	387.2	373.6
65°	1109.7	1126.1	1135.6	383.1	381.7	387.2	383.1	369.5	354.5	335.4	331.3
67.5°	1000.7	1017.0	364.0	354.5	359.9	353.1	336.7	320.4	309.5	293.1	286.3
70°	887.5	380.4	329.9	328.6	319.0	308.1	290.4	274.0	260.4	253.6	246.8
72.5°	640.8	301.3	297.2	286.3	269.9	254.9	239.9	230.4	223.6	219.5	215.4
75°	267.2	261.8	249.5	230.4	214.0	207.2	196.3	189.5	186.8	178.6	175.9
77.5°	223.6	212.7	195.0	181.3	171.8	167.7	159.5	151.3	147.2	145.9	140.4
80°	171.8	156.8	148.6	141.8	139.1	129.5	120.0	115.9	113.2	111.8	107.7
82.5°	117.2	111.8	106.3	96.8	96.8	92.7	88.6	85.9	83.2	83.2	80.4
85°	76.3	72.3	70.9	66.8	66.8	64.1	62.7	61.3	60.0	58.6	57.3
87.5°	43.6	43.6	45.0	43.6	43.6	42.3	40.9	39.5	38.2	38.2	35.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214207

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8
2.5°	2980.2	2993.9	2996.6	3042.9	3068.8	3067.5	3059.3	3083.8	3068.8	3060.7	3068.8
5°	3138.4	3154.7	3168.4	3218.8	3236.5	3244.7	3243.3	3257.0	3246.1	3236.5	3236.5
7.5°	3216.1	3221.5	3227.0	3214.7	3206.5	3192.9	3172.5	3142.5	3127.5	3111.1	3090.7
10°	3087.9	3070.2	3077.0	3052.5	3032.0	3017.0	2997.9	2973.4	2953.0	2938.0	2914.8
12.5°	2931.1	2929.8	2932.5	2936.6	2916.1	2903.9	2888.9	2871.2	2856.2	2839.8	2820.7
15°	2835.7	2837.1	2848.0	2843.9	2837.1	2830.3	2813.9	2808.4	2794.8	2777.1	2766.2
17.5°	2767.5	2774.4	2785.3	2779.8	2768.9	2762.1	2749.8	2737.6	2725.3	2711.7	2695.3
20°	2707.6	2714.4	2721.2	2714.4	2693.9	2684.4	2668.0	2629.9	2602.6	2575.3	2550.8
22.5°	2642.1	2646.2	2640.8	2618.9	2567.1	2542.6	2523.5	2512.6	2489.4	2474.4	2459.4
25°	2560.3	2537.1	2501.7	2477.2	2456.7	2445.8	2437.6	2436.3	2433.5	2430.8	2424.0
27.5°	2426.7	2418.5	2399.4	2389.9	2391.3	2395.4	2396.7	2400.8	2396.7	2391.3	2385.8
30°	2327.2	2331.3	2332.6	2335.4	2342.2	2346.3	2347.6	2353.1	2350.4	2346.3	2343.6
32.5°	2264.5	2274.0	2279.5	2287.7	2291.7	2298.6	2298.6	2306.7	2298.6	2297.2	2294.5
35°	2212.7	2220.9	2223.6	2235.9	2239.9	2246.8	2246.8	2253.6	2246.8	2177.2	1719.2
37.5°	2160.9	2169.0	2174.5	2185.4	2186.8	2190.9	2021.8	1479.2	954.3	738.9	564.4
40°	2099.5	2109.1	2114.5	2118.6	1488.7	944.8	650.3	529.0	529.0	533.1	537.1
42.5°	2034.1	2040.9	1421.9	827.5	515.3	514.0	518.1	522.2	526.2	531.7	537.1
45°	1599.2	807.1	512.6	500.3	504.4	509.9	515.3	520.8	527.6	533.1	535.8
47.5°	524.9	492.2	499.0	493.5	500.3	507.2	512.6	518.1	519.4	520.8	519.4
50°	485.3	485.3	489.4	489.4	494.9	497.6	497.6	497.6	492.2	490.8	486.7
52.5°	469.0	479.9	474.4	477.2	474.4	470.3	466.3	462.2	454.0	451.3	445.8
55°	460.8	464.9	451.3	447.2	441.7	430.8	425.4	419.9	413.1	410.4	403.5
57.5°	441.7	432.2	417.2	410.4	400.8	389.9	384.5	380.4	373.6	370.8	366.7
60°	406.3	387.2	377.6	369.5	358.6	349.0	344.9	342.2	336.7	335.4	331.3
62.5°	362.6	346.3	338.1	327.2	319.0	313.6	309.5	308.1	302.7	302.7	299.9
65°	314.9	306.7	299.9	289.0	284.9	279.5	278.1	276.8	274.0	272.7	269.9
67.5°	276.8	271.3	261.8	256.3	253.6	249.5	246.8	244.0	238.6	235.9	231.8
70°	242.7	238.6	229.0	224.9	219.5	212.7	208.6	205.9	201.8	199.0	195.0
72.5°	210.0	197.7	190.9	186.8	182.7	175.9	174.5	171.8	167.7	166.3	162.2
75°	169.1	159.5	155.4	152.7	148.6	144.5	144.5	144.5	140.4	139.1	137.7
77.5°	135.0	129.5	126.8	124.1	122.7	120.0	115.9	114.5	110.4	110.4	109.1
80°	103.6	100.9	98.2	96.8	95.4	92.7	90.0	88.6	84.5	84.5	83.2
82.5°	76.3	75.0	73.6	72.3	70.9	69.5	65.4	64.1	61.3	61.3	60.0
85°	54.5	53.2	50.4	49.1	49.1	47.7	43.6	42.3	39.5	39.5	39.5
87.5°	34.1	32.7	31.4	30.0	28.6	27.3	24.5	23.2	23.2	20.4	19.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214207

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8
2.5°	3052.5	3075.7	3072.9	3089.3	3093.4	3101.6	3104.3	3105.7	3085.2	3101.6	3102.9
5°	3232.4	3236.5	3239.3	3246.1	3252.9	3254.3	3247.4	3239.3	3242.0	3236.5	3222.9
7.5°	3087.9	3067.5	3063.4	3057.9	3055.2	3052.5	3040.2	3051.1	3038.8	3033.4	3014.3
10°	2910.7	2891.6	2890.2	2890.2	2894.3	2893.0	2890.2	2884.8	2895.7	2888.9	2884.8
12.5°	2818.0	2811.2	2815.3	2812.5	2823.4	2826.2	2823.4	2823.4	2820.7	2815.3	2818.0
15°	2762.1	2756.6	2760.7	2756.6	2764.8	2766.2	2759.4	2763.5	2756.6	2749.8	2747.1
17.5°	2688.5	2676.2	2666.7	2653.0	2654.4	2651.7	2643.5	2643.5	2636.7	2618.9	2620.3
20°	2546.7	2534.4	2529.0	2529.0	2535.8	2538.5	2537.1	2539.9	2533.1	2530.3	2519.4
22.5°	2458.1	2456.7	2459.4	2466.3	2477.2	2492.2	2493.5	2493.5	2493.5	2492.2	2478.5
25°	2426.7	2426.7	2429.4	2439.0	2447.2	2458.1	2460.8	2463.5	2460.8	2460.8	2448.5
27.5°	2391.3	2388.5	2394.0	2403.5	2413.1	2421.3	2428.1	2429.4	2425.4	2425.4	2429.4
30°	2347.6	2346.3	2353.1	2362.6	2370.8	2379.0	2385.8	2391.3	2385.8	2385.8	2381.7
32.5°	2302.7	2302.7	2305.4	2248.1	2084.5	1877.3	1881.4	1761.4	1678.3	1573.3	1712.3
35°	1436.9	1045.7	898.4	760.7	663.9	601.2	599.9	579.4	569.9	563.1	561.7
37.5°	542.6	545.3	550.8	553.5	557.6	560.3	561.7	561.7	561.7	561.7	560.3
40°	541.2	546.7	550.8	554.9	559.0	561.7	561.7	563.1	564.4	564.4	564.4
42.5°	542.6	548.1	553.5	557.6	560.3	561.7	563.1	564.4	564.4	564.4	564.4
45°	541.2	544.0	544.0	545.3	545.3	545.3	546.7	546.7	545.3	544.0	546.7
47.5°	520.8	520.8	516.7	515.3	514.0	511.2	512.6	511.2	509.9	508.5	511.2
50°	485.3	479.9	477.2	474.4	473.1	470.3	471.7	470.3	469.0	466.3	470.3
52.5°	443.1	441.7	436.3	433.5	432.2	433.5	430.8	429.4	428.1	426.7	428.1
55°	402.2	396.7	395.4	392.6	391.3	392.6	391.3	389.9	388.5	387.2	388.5
57.5°	365.4	361.3	359.9	357.2	357.2	357.2	357.2	355.8	354.5	353.1	354.5
60°	329.9	327.2	325.8	325.8	324.5	324.5	324.5	323.1	321.7	321.7	323.1
62.5°	299.9	299.9	295.8	294.5	294.5	295.8	294.5	293.1	291.8	290.4	293.1
65°	268.6	263.1	261.8	259.0	256.3	257.7	256.3	254.9	253.6	252.2	254.9
67.5°	230.4	229.0	223.6	220.9	219.5	220.9	219.5	218.1	216.8	215.4	218.1
70°	193.6	193.6	188.1	186.8	185.4	185.4	184.0	184.0	182.7	181.3	184.0
72.5°	160.9	160.9	159.5	156.8	155.4	154.1	152.7	151.3	151.3	152.7	152.7
75°	133.6	130.9	125.4	126.8	125.4	124.1	124.1	122.7	121.3	124.1	122.7
77.5°	105.0	103.6	99.5	100.9	99.5	98.2	98.2	96.8	95.4	96.8	96.8
80°	79.1	79.1	77.7	76.3	76.3	75.0	73.6	73.6	72.3	73.6	73.6
82.5°	57.3	57.3	55.9	54.5	53.2	53.2	51.8	51.8	51.8	51.8	51.8
85°	36.8	35.4	35.4	32.7	32.7	32.7	31.4	31.4	31.4	31.4	31.4
87.5°	17.7	17.7	16.4	16.4	15.0	13.6	13.6	12.3	12.3	13.6	13.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214207

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8
2.5°	3078.4	3096.1	3081.1	3087.9	3089.3	3112.5	3111.1	3116.6	3107.0	3096.1	3081.1
5°	3235.2	3227.0	3216.1	3242.0	3228.4	3244.7	3250.2	3261.1	3261.1	3259.7	3247.4
7.5°	3034.8	3017.0	3030.7	3040.2	3044.3	3033.4	3055.2	3079.7	3100.2	3112.5	3113.8
10°	2878.0	2883.4	2882.1	2886.2	2895.7	2894.3	2908.0	2921.6	2927.1	2935.2	2938.0
12.5°	2804.4	2803.0	2805.7	2815.3	2820.7	2819.4	2833.0	2841.2	2843.9	2845.3	2843.9
15°	2745.7	2736.2	2743.0	2744.4	2748.5	2748.5	2764.8	2777.1	2782.5	2785.3	2782.5
17.5°	2635.3	2612.1	2633.9	2633.9	2648.9	2646.2	2672.1	2692.6	2703.5	2711.7	2711.7
20°	2526.2	2515.3	2523.5	2520.8	2531.7	2530.3	2546.7	2560.3	2569.9	2576.7	2584.9
22.5°	2482.6	2485.3	2473.1	2474.4	2474.4	2473.1	2481.2	2488.1	2490.8	2494.9	2492.2
25°	2454.0	2456.7	2452.6	2445.8	2443.1	2445.8	2449.9	2458.1	2459.4	2456.7	2447.2
27.5°	2425.4	2417.2	2424.0	2411.7	2409.0	2414.4	2419.9	2421.3	2422.6	2422.6	2414.4
30°	2381.7	2374.9	2381.7	2376.3	2370.8	2376.3	2380.4	2380.4	2383.1	2384.5	2374.9
32.5°	1664.6	1678.3	1899.1	2032.7	2220.9	2316.3	2334.0	2334.0	2336.7	2336.7	2328.6
35°	567.1	568.5	614.9	666.7	777.1	913.4	1092.0	1184.7	1498.3	1873.2	2235.9
37.5°	560.3	559.0	557.6	556.2	554.9	553.5	550.8	549.4	557.6	661.2	897.1
40°	563.1	561.7	559.0	557.6	556.2	553.5	552.1	549.4	546.7	544.0	541.2
42.5°	563.1	561.7	560.3	559.0	557.6	556.2	553.5	550.8	548.1	544.0	539.9
45°	544.0	544.0	545.3	545.3	546.7	546.7	546.7	545.3	545.3	544.0	538.5
47.5°	508.5	508.5	512.6	512.6	515.3	518.1	518.1	520.8	524.9	527.6	529.0
50°	467.6	467.6	471.7	473.1	475.8	479.9	484.0	485.3	489.4	494.9	500.3
52.5°	426.7	426.7	430.8	430.8	433.5	437.6	441.7	443.1	448.5	454.0	460.8
55°	388.5	388.5	391.3	392.6	394.0	396.7	400.8	400.8	406.3	410.4	417.2
57.5°	354.5	357.2	357.2	357.2	358.6	361.3	364.0	364.0	368.1	372.2	377.6
60°	321.7	324.5	324.5	324.5	325.8	327.2	329.9	329.9	332.7	335.4	340.8
62.5°	291.8	294.5	294.5	295.8	295.8	297.2	299.9	298.6	301.3	302.7	306.7
65°	253.6	256.3	257.7	259.0	260.4	263.1	267.2	265.8	269.9	272.7	276.8
67.5°	216.8	219.5	219.5	220.9	222.2	224.9	227.7	227.7	231.8	234.5	239.9
70°	182.7	185.4	185.4	186.8	188.1	190.9	193.6	192.2	196.3	199.0	203.1
72.5°	151.3	154.1	154.1	155.4	155.4	158.1	160.9	163.6	163.6	166.3	169.1
75°	122.7	124.1	125.4	125.4	126.8	128.2	130.9	133.6	135.0	136.3	139.1
77.5°	96.8	98.2	99.5	99.5	100.9	102.2	103.6	109.1	111.8	113.2	113.2
80°	73.6	75.0	75.0	75.0	76.3	77.7	80.4	80.4	85.9	85.9	87.3
82.5°	51.8	53.2	53.2	53.2	54.5	57.3	58.6	60.0	62.7	64.1	64.1
85°	31.4	32.7	32.7	32.7	34.1	35.4	38.2	39.5	40.9	40.9	42.3
87.5°	12.3	13.6	15.0	15.0	16.4	17.7	19.1	20.4	21.8	21.8	23.2
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: P1214207

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8
2.5°	3064.8	3074.3	3064.8	3070.2	3077.0	3064.8	3036.1	3025.2	3021.1	3004.8	2993.9
5°	3235.2	3235.2	3231.1	3242.0	3240.6	3221.5	3191.5	3177.9	3164.3	3146.6	3132.9
7.5°	3113.8	3124.7	3131.6	3173.8	3201.1	3203.8	3222.9	3227.0	3232.4	3227.0	3218.8
10°	2939.3	2935.2	2954.3	2993.9	3017.0	3029.3	3066.1	3083.8	3098.8	3128.8	3160.2
12.5°	2841.2	2846.6	2854.8	2883.4	2905.2	2899.8	2914.8	2927.1	2944.8	2974.8	3019.8
15°	2775.7	2781.2	2789.4	2811.2	2824.8	2818.0	2826.2	2834.4	2846.6	2861.6	2888.9
17.5°	2704.8	2714.4	2723.9	2747.1	2759.4	2758.0	2764.8	2767.5	2771.6	2781.2	2800.3
20°	2594.4	2624.4	2643.5	2674.8	2692.6	2689.8	2702.1	2706.2	2711.7	2721.2	2729.4
22.5°	2493.5	2501.7	2511.2	2545.3	2575.3	2612.1	2620.3	2631.2	2644.8	2654.4	2662.6
25°	2436.3	2430.8	2434.9	2458.1	2474.4	2477.2	2489.4	2524.9	2561.7	2578.0	2597.1
27.5°	2402.2	2396.7	2395.4	2406.3	2409.0	2402.2	2399.4	2410.4	2437.6	2464.9	2522.1
30°	2365.4	2358.6	2353.1	2362.6	2366.7	2357.2	2339.5	2329.9	2346.3	2353.1	2376.3
32.5°	2321.7	2314.9	2312.2	2317.7	2320.4	2312.2	2293.1	2282.2	2279.5	2274.0	2279.5
35°	2272.7	2265.8	2261.8	2263.1	2268.6	2261.8	2245.4	2231.8	2224.9	2209.9	2199.0
37.5°	1171.1	1659.2	2154.1	2205.9	2211.3	2209.9	2193.6	2178.6	2171.8	2154.1	2148.6
40°	535.8	598.5	898.4	1173.8	1693.2	2151.3	2136.3	2121.3	2109.1	2103.6	2083.2
42.5°	534.4	535.8	537.1	530.3	657.1	1119.3	1652.3	2062.7	2054.5	2040.9	2025.9
45°	534.4	527.6	533.1	524.9	527.6	526.2	655.8	1057.9	1882.8	1967.3	1960.5
47.5°	529.0	524.9	530.3	523.5	515.3	519.4	514.0	520.8	812.5	1378.3	1888.2
50°	504.4	507.2	516.7	515.3	508.5	514.0	504.4	512.6	505.8	554.9	1068.8
52.5°	467.6	473.1	482.6	490.8	493.5	500.3	497.6	500.3	494.9	496.2	497.6
55°	424.0	430.8	439.0	451.3	456.7	467.6	475.8	479.9	486.7	485.3	474.4
57.5°	383.1	389.9	396.7	409.0	421.3	426.7	441.7	449.9	467.6	463.5	460.8
60°	344.9	350.4	357.2	359.9	374.9	384.5	398.1	406.3	429.4	434.9	443.1
62.5°	310.8	313.6	319.0	323.1	332.7	342.2	349.0	362.6	374.9	392.6	404.9
65°	279.5	282.2	286.3	289.0	290.4	304.0	308.1	323.1	327.2	346.3	357.2
67.5°	244.0	249.5	254.9	257.7	260.4	268.6	271.3	278.1	287.7	295.8	309.5
70°	207.2	211.3	216.8	220.9	226.3	231.8	239.9	244.0	250.9	256.3	267.2
72.5°	173.1	177.2	180.0	184.0	188.1	192.2	199.0	208.6	214.0	223.6	226.3
75°	140.4	144.5	147.2	150.0	154.1	156.8	159.5	169.1	174.5	182.7	190.9
77.5°	115.9	115.9	118.6	126.8	125.4	125.4	128.2	133.6	137.7	143.1	151.3
80°	90.0	91.3	92.7	99.5	100.9	102.2	100.9	105.0	109.1	110.4	115.9
82.5°	66.8	68.2	68.2	72.3	76.3	76.3	76.3	77.7	81.8	83.2	85.9
85°	45.0	46.4	47.7	49.1	51.8	53.2	54.5	54.5	57.3	58.6	60.0
87.5°	24.5	27.3	28.6	30.0	31.4	32.7	34.1	35.4	36.8	38.2	39.5
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: P1214207

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8	2974.8
2.5°	2989.8	2983.0	2978.9	2968.0	2965.2	2947.5	2950.2	2947.5	2947.5	2951.6	2965.2
5°	3117.9	3085.2	3077.0	3053.8	3034.8	3002.0	2981.6	2970.7	2954.3	2947.5	2957.0
7.5°	3205.2	3180.6	3160.2	3139.7	3112.5	3074.3	3045.7	3012.9	2985.7	2959.8	2953.0
10°	3190.2	3217.4	3217.4	3205.2	3179.3	3141.1	3107.0	3066.1	3018.4	2977.5	2953.0
12.5°	3063.4	3111.1	3149.3	3177.9	3203.8	3177.9	3143.8	3111.1	3057.9	2997.9	2953.0
15°	2924.3	2973.4	3021.1	3081.1	3143.8	3169.7	3168.4	3130.2	3082.5	3019.8	2957.0
17.5°	2826.2	2860.3	2886.2	2951.6	3027.9	3094.7	3139.7	3142.5	3096.1	3040.2	2958.4
20°	2752.6	2777.1	2798.9	2835.7	2902.5	2984.3	3067.5	3113.8	3105.7	3044.3	2962.5
22.5°	2685.7	2703.5	2721.2	2748.5	2801.6	2854.8	2951.6	3047.0	3087.9	3037.5	2958.4
25°	2618.9	2638.0	2651.7	2670.8	2713.0	2756.6	2824.8	2943.4	3034.8	3032.0	2950.2
27.5°	2539.9	2565.8	2582.1	2608.0	2636.7	2669.4	2715.7	2827.5	2958.4	3004.8	2928.4
30°	2444.4	2482.6	2507.2	2535.8	2560.3	2589.0	2625.8	2693.9	2856.2	2951.6	2905.2
32.5°	2306.7	2374.9	2429.4	2456.7	2484.0	2508.5	2541.2	2598.5	2730.7	2879.3	2879.3
35°	2208.6	2239.9	2289.0	2368.1	2402.2	2426.7	2456.7	2501.7	2586.2	2793.5	2837.1
37.5°	2132.2	2144.5	2169.0	2246.8	2310.8	2350.4	2380.4	2409.0	2492.2	2676.2	2782.5
40°	2075.0	2070.9	2068.2	2105.0	2196.3	2259.0	2293.1	2321.7	2385.8	2535.8	2710.3
42.5°	2008.2	2004.1	1990.5	2000.0	2045.0	2150.0	2201.8	2233.1	2286.3	2388.5	2631.2
45°	1938.6	1931.8	1926.4	1916.8	1933.2	1991.8	2098.2	2144.5	2174.5	2265.8	2531.7
47.5°	1867.8	1858.2	1851.4	1843.2	1833.7	1860.9	1961.8	2045.0	2096.8	2154.1	2411.7
50°	1766.9	1779.1	1771.0	1761.4	1753.2	1747.8	1790.0	1926.4	1990.5	2036.8	2265.8
52.5°	833.0	1619.6	1687.8	1678.3	1667.3	1657.8	1667.3	1771.0	1886.8	1923.6	2090.0
55°	474.4	721.2	1501.0	1586.9	1577.4	1563.7	1555.6	1591.0	1764.1	1813.2	1929.1
57.5°	456.7	458.1	662.6	1430.1	1483.3	1471.0	1461.5	1469.7	1616.9	1700.1	1788.7
60°	441.7	441.7	441.7	632.6	1367.4	1371.5	1359.2	1345.6	1409.7	1573.3	1646.9
62.5°	409.0	417.2	421.3	421.3	624.4	1266.5	1254.3	1250.2	1252.9	1420.6	1505.1
65°	366.7	385.8	394.0	399.5	399.5	655.8	1146.6	1139.7	1130.2	1194.3	1362.0
67.5°	320.4	339.5	357.2	368.1	369.5	381.7	684.4	1026.6	1012.9	1014.3	1209.3
70°	272.7	289.0	308.1	324.5	339.5	346.3	357.2	852.1	897.1	878.0	1036.1
72.5°	235.9	242.7	256.3	272.7	290.4	306.7	316.3	339.5	778.5	758.0	788.0
75°	196.3	201.8	211.3	222.2	235.9	254.9	271.3	287.7	413.1	635.3	631.2
77.5°	152.7	162.2	173.1	180.0	186.8	200.4	222.2	238.6	254.9	429.4	505.8
80°	117.2	124.1	129.5	136.3	144.5	154.1	162.2	181.3	200.4	215.4	387.2
82.5°	87.3	91.3	95.4	98.2	100.9	106.3	121.3	128.2	140.4	154.1	182.7
85°	61.3	64.1	66.8	68.2	69.5	70.9	76.3	77.7	90.0	92.7	110.4
87.5°	39.5	40.9	43.6	45.0	45.0	46.4	47.7	47.7	47.7	45.0	54.5
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: P1214207

CATALOG NUMBER: 4SNLED-LD5-64SL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	2974.8	2974.8
2.5°	2976.1	2997.9
5°	2972.0	3000.7
7.5°	2961.1	2988.4
10°	2944.8	2977.5
12.5°	2927.1	2958.4
15°	2912.1	2935.2
17.5°	2895.7	2909.3
20°	2873.9	2884.8
22.5°	2852.1	2846.6
25°	2827.5	2815.3
27.5°	2796.2	2773.0
30°	2767.5	2726.6
32.5°	2740.3	2673.5
35°	2703.5	2618.9
37.5°	2665.3	2563.0
40°	2620.3	2499.0
42.5°	2572.6	2434.9
45°	2512.6	2373.5
47.5°	2459.4	2299.9
50°	2385.8	2220.9
52.5°	2295.8	2147.2
55°	2189.5	2057.3
57.5°	2075.0	1963.2
60°	1952.3	1855.5
62.5°	1803.7	1743.7
65°	1629.2	1615.5
67.5°	1401.5	1473.8
70°	1149.3	1311.5
72.5°	961.1	1139.7
75°	788.0	947.5
77.5°	624.4	743.0
80°	389.9	544.0
82.5°	261.8	357.2
85°	158.1	170.4
87.5°	61.3	62.7
90°	0.0	0.0

(END OF REPORT)