

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: P1213185

Luminaire Tested: 4SNLED-LD5-80HL-RW-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213185
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-LD5-80HL-RW-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

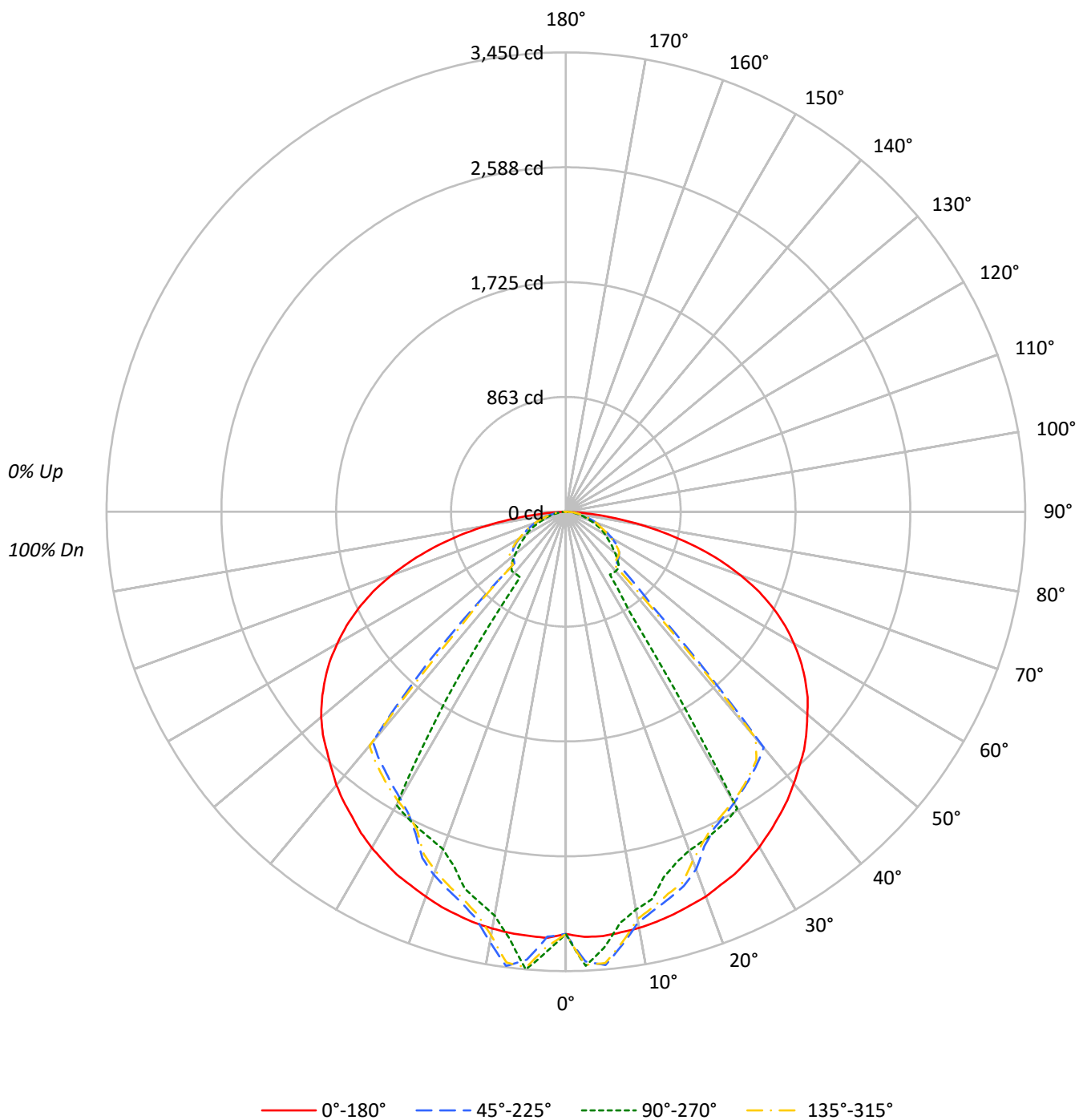
Lumens per Lamp: N/A
Luminaire Lumens: 6350.0 lumens
Efficiency: N/A
Efficacy: 80.4 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 79
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: P1213185

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L930-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	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°	25625	25625	25625	25625
5°	25876	25818	25865	27097
10°	25901	23343	25937	23701
15°	25959	21597	26019	22282
20°	26147	20484	26147	20408
25°	26374	20093	26413	19905
30°	26640	19738	26707	19504
35°	26951	4496	27007	4689
40°	27382	4675	27547	4827
45°	28038	4649	28136	4819
50°	28694	4203	29081	4317
55°	29577	3732	29811	3785
60°	30325	3316	30393	3359
65°	30861	2894	30784	2849
70°	30419	2333	30326	2248
75°	28241	1796	28445	1719
80°	22924	1275	23841	1168
85°	12413	764	13103	585

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 357.5°

Vertical Angle: 60°

Luminance: 31073 cd/sqm

TEST NUMBER: P1213185

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.0	4.9
10°-20°	857.8	13.5
20°-30°	1270.6	20.0
30°-40°	1280.2	20.2
40°-50°	1000.1	15.7
50°-60°	772.5	12.2
60°-70°	518.6	8.2
70°-80°	264.6	4.2
80°-90°	73.6	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°	2440.4	38.4
0°-40°	3720.7	58.6
0°-60°	5493.2	86.5
0°-90°	6350.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6350.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3171	3171	3171	3171	3171	
5°	3199	3287	3197	3450	3199	304
15°	3129	2841	3136	2931	3129	885
25°	3001	2648	3005	2623	3001	1384
35°	2792	576	2798	600	2792	1750
45°	2530	560	2539	580	2530	1951
55°	2193	407	2210	413	2193	1959
65°	1722	273	1718	269	1722	1694
75°	1010	138	1017	132	1010	1056
85°	182	44	192	33	182	250
90°	0	0	0	0	0	

TEST NUMBER: P1213185

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0
2.5°	3195.7	3207.4	3216.1	3221.9	3224.8	3224.8	3226.3	3227.7	3246.6	3255.3	3261.1
5°	3198.6	3210.3	3227.7	3251.0	3271.3	3288.7	3303.3	3323.6	3344.0	3365.8	3373.0
7.5°	3185.6	3200.1	3235.0	3277.1	3316.4	3344.0	3362.9	3375.9	3386.1	3387.6	3394.8
10°	3173.9	3200.1	3248.0	3303.3	3352.7	3386.1	3386.1	3378.8	3389.0	3349.8	3310.5
12.5°	3153.6	3182.7	3248.0	3320.7	3367.2	3380.3	3374.5	3345.4	3285.8	3237.9	3216.1
15°	3128.9	3168.1	3249.5	3330.9	3370.1	3374.5	3319.3	3245.1	3200.1	3171.0	3134.7
17.5°	3101.3	3153.6	3251.0	3332.3	3346.9	3326.5	3221.9	3175.4	3128.9	3060.6	3011.2
20°	3075.1	3126.0	3239.3	3312.0	3320.7	3229.2	3147.8	3098.4	3019.9	2960.3	2938.5
22.5°	3034.4	3094.0	3229.2	3284.4	3251.0	3144.9	3066.4	2987.9	2916.7	2899.3	2873.1
25°	3001.0	3063.5	3205.9	3251.0	3162.3	3067.8	2976.3	2884.7	2851.3	2826.6	2803.4
27.5°	2955.9	3033.0	3175.4	3189.9	3067.8	2985.0	2851.3	2810.6	2780.1	2752.5	2742.3
30°	2906.5	3001.0	3133.2	3105.6	2989.4	2867.3	2768.5	2730.7	2708.9	2679.8	2668.2
32.5°	2849.9	2953.0	3086.7	3008.3	2905.1	2752.5	2688.5	2659.5	2630.4	2608.6	2535.9
35°	2791.7	2910.9	3031.5	2915.3	2803.4	2665.3	2608.6	2582.5	2554.8	2474.9	2399.3
37.5°	2732.1	2864.4	2964.7	2815.0	2668.2	2575.2	2527.2	2498.2	2435.7	2333.9	2296.2
40°	2663.8	2807.7	2878.9	2711.8	2550.5	2483.6	2438.6	2409.5	2268.5	2223.5	2211.9
42.5°	2595.5	2752.5	2774.3	2611.5	2453.1	2386.3	2348.5	2252.6	2156.6	2133.4	2137.8
45°	2530.1	2692.9	2659.5	2469.1	2351.4	2296.2	2232.2	2100.0	2049.1	2060.7	2063.6
47.5°	2451.7	2621.7	2538.9	2326.7	2246.7	2191.5	2049.1	1969.2	1961.9	1977.9	1986.6
50°	2367.4	2541.8	2411.0	2197.3	2133.4	2068.0	1906.7	1866.0	1874.7	1890.7	1900.9
52.5°	2288.9	2451.7	2278.7	2076.7	2021.5	1871.8	1762.8	1770.1	1784.6	1803.5	1809.3
55°	2193.0	2342.7	2137.8	1954.6	1902.3	1706.1	1656.7	1674.2	1688.7	1704.7	1716.3
57.5°	2092.7	2217.7	1970.6	1818.0	1733.7	1559.4	1563.7	1575.3	1585.5	1604.4	662.7
60°	1977.9	2075.3	1787.5	1691.6	1524.5	1443.1	1447.5	1467.8	1478.0	825.5	456.3
62.5°	1858.7	1909.6	1621.8	1547.7	1332.6	1326.8	1347.2	1355.9	922.8	436.0	427.3
65°	1722.1	1711.9	1459.1	1341.4	1201.9	1207.7	1229.5	1185.9	408.4	408.4	405.5
67.5°	1571.0	1509.9	1300.7	1110.3	1075.4	1088.5	1111.7	388.0	377.8	380.8	370.6
70°	1398.0	1312.3	1136.5	940.3	951.9	965.0	374.9	351.7	347.3	340.1	319.7
72.5°	1214.9	1097.2	930.1	816.7	824.0	517.4	328.4	316.8	302.3	287.7	265.9
75°	1010.0	857.4	683.0	683.0	693.2	295.0	286.3	267.4	251.4	232.5	219.4
77.5°	792.0	659.8	530.4	550.8	268.9	247.1	231.1	210.7	197.6	186.0	178.8
80°	579.9	460.7	399.6	357.5	209.3	187.5	171.5	159.9	154.0	146.8	138.1
82.5°	380.8	277.6	277.6	168.6	146.8	129.3	125.0	116.3	110.4	106.1	101.7
85°	181.7	161.3	122.1	103.2	91.6	82.8	79.9	75.6	75.6	74.1	72.7
87.5°	66.9	72.7	53.8	52.3	49.4	48.0	49.4	49.4	50.9	49.4	48.0
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: P1213185

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0
2.5°	3275.7	3287.3	3296.0	3310.5	3329.4	3345.4	3360.0	3380.3	3412.3	3421.0	3428.3
5°	3373.0	3377.4	3387.6	3399.2	3402.1	3409.4	3407.9	3416.6	3421.0	3431.2	3409.4
7.5°	3378.8	3355.6	3328.0	3303.3	3285.8	3269.8	3259.7	3275.7	3284.4	3291.6	3269.8
10°	3256.8	3229.2	3213.2	3198.6	3181.2	3156.5	3123.1	3130.3	3127.4	3127.4	3120.2
12.5°	3179.7	3140.5	3099.8	3063.5	3047.5	3046.0	3047.5	3063.5	3063.5	3062.0	3053.3
15°	3059.1	3021.3	3001.0	2992.3	2992.3	2987.9	2987.9	3005.4	3001.0	3001.0	2996.6
17.5°	2979.2	2953.0	2938.5	2928.3	2924.0	2931.2	2940.0	2947.2	2948.7	2942.9	2919.6
20°	2913.8	2889.1	2871.7	2874.6	2873.1	2877.5	2881.8	2857.1	2826.6	2785.9	2767.0
22.5°	2845.5	2826.6	2813.5	2813.5	2796.1	2768.5	2727.8	2719.1	2714.7	2695.8	2679.8
25°	2780.1	2758.3	2739.4	2681.3	2644.9	2649.3	2642.0	2627.5	2626.1	2624.6	2630.4
27.5°	2714.7	2658.0	2585.4	2576.6	2562.1	2560.7	2569.4	2576.6	2576.6	2582.5	2589.7
30°	2579.5	2514.2	2501.1	2485.1	2490.9	2511.2	2515.6	2525.8	2528.7	2538.9	2544.7
32.5°	2456.0	2427.0	2415.3	2422.6	2441.5	2458.9	2469.1	2473.5	2480.7	2489.4	2496.7
35°	2355.7	2347.0	2357.2	2373.2	2392.1	2406.6	2415.3	2424.0	2431.3	2438.6	2444.4
37.5°	2281.6	2287.4	2302.0	2322.3	2341.2	2352.8	2360.1	2370.3	2380.4	2389.2	2354.3
40°	2211.9	2226.4	2242.4	2264.2	2280.2	2291.8	2299.1	2312.1	2225.0	1007.1	552.2
42.5°	2150.8	2166.8	2178.4	2195.9	2213.3	2222.0	2158.1	963.5	545.0	542.1	549.3
45°	2076.7	2089.8	2108.7	2121.8	2137.8	1403.9	536.3	542.1	533.3	539.2	542.1
47.5°	2001.1	2021.5	2031.7	1938.7	576.9	533.3	527.5	533.3	527.5	534.8	530.4
50°	1915.4	1940.1	1380.6	521.7	517.4	514.5	520.3	517.4	521.7	527.5	515.9
52.5°	1828.2	1132.1	505.7	502.8	505.7	502.8	513.0	505.7	507.2	501.4	486.8
55°	619.1	489.8	485.4	483.9	492.7	492.7	492.7	481.0	473.8	459.2	449.1
57.5°	473.8	473.8	472.3	473.8	470.9	468.0	454.9	444.7	434.5	414.2	408.4
60°	449.1	449.1	449.1	449.1	436.0	430.2	409.8	401.1	383.7	373.5	367.7
62.5°	428.7	425.8	412.7	408.4	393.8	377.8	366.2	357.5	340.1	334.3	329.9
65°	399.6	389.5	373.5	356.1	348.8	331.3	325.5	312.5	303.7	299.4	296.5
67.5°	351.7	337.2	324.1	312.5	299.4	293.6	286.3	276.1	270.3	267.4	264.5
70°	300.8	290.7	277.6	270.3	261.6	257.2	247.1	244.1	239.8	235.4	231.1
72.5°	251.4	245.6	239.8	229.6	226.7	223.8	213.6	207.8	202.0	196.2	193.3
75°	210.7	206.4	203.5	194.7	190.4	181.7	174.4	170.0	165.7	161.3	158.4
77.5°	172.9	170.0	161.3	155.5	152.6	145.3	142.4	143.9	141.0	135.2	132.2
80°	135.2	132.2	125.0	125.0	122.1	119.2	116.3	113.4	110.4	106.1	103.2
82.5°	103.2	100.3	97.4	94.5	91.6	90.1	88.6	85.7	82.8	79.9	78.5
85°	72.7	71.2	69.8	68.3	66.9	65.4	63.9	61.0	58.1	56.7	55.2
87.5°	49.4	48.0	46.5	45.1	43.6	42.1	40.7	39.2	36.3	34.9	33.4
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: P1213185

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0
2.5°	3428.3	3435.5	3428.3	3412.3	3402.1	3397.7	3406.5	3406.5	3412.3	3419.5	3421.0
5°	3374.5	3357.0	3336.7	3316.4	3306.2	3300.4	3284.4	3287.3	3291.6	3294.6	3297.5
7.5°	3240.8	3217.5	3189.9	3163.8	3153.6	3144.9	3126.0	3126.0	3126.0	3127.4	3136.1
10°	3104.2	3094.0	3082.4	3064.9	3051.9	3047.5	3031.5	3035.9	3033.0	3037.3	3047.5
12.5°	3040.2	3028.6	3018.4	3001.0	2986.5	2980.6	2973.4	2977.7	2976.3	2983.6	2992.3
15°	2982.1	2976.3	2964.7	2951.6	2938.5	2926.9	2900.7	2892.0	2886.2	2878.9	2889.1
17.5°	2886.2	2845.5	2817.9	2797.5	2783.0	2772.8	2765.6	2765.6	2769.9	2774.3	2783.0
20°	2755.4	2743.8	2730.7	2708.9	2694.4	2688.5	2684.2	2684.2	2691.4	2697.3	2713.2
22.5°	2665.3	2663.8	2659.5	2649.3	2642.0	2642.0	2643.5	2646.4	2656.6	2665.3	2681.3
25°	2623.1	2629.0	2626.1	2620.2	2615.9	2617.3	2614.4	2617.3	2627.5	2636.2	2649.3
27.5°	2589.7	2598.4	2595.5	2586.8	2579.5	2582.5	2586.8	2583.9	2592.6	2602.8	2613.0
30°	2544.7	2546.1	2551.9	2541.8	2538.9	2543.2	2544.7	2547.6	2556.3	2563.6	2572.3
32.5°	2493.8	2505.4	2504.0	2493.8	2493.8	2498.2	2499.6	2402.2	2220.6	1912.5	1828.2
35°	2444.4	2457.5	2435.7	2053.5	1421.3	758.6	585.7	565.3	569.7	572.6	575.5
37.5°	1807.9	857.4	546.4	550.8	555.1	559.5	563.9	568.2	572.6	576.9	578.4
40°	543.5	542.1	546.4	552.2	556.6	559.5	565.3	569.7	574.0	578.4	579.9
42.5°	537.7	540.6	545.0	550.8	556.6	562.4	566.8	572.6	575.5	578.4	579.9
45°	534.8	540.6	546.4	550.8	555.1	558.1	561.0	562.4	561.0	561.0	563.9
47.5°	530.4	536.3	537.7	536.3	537.7	536.3	536.3	536.3	531.9	530.4	530.4
50°	514.5	514.5	511.5	505.7	504.3	502.8	499.9	498.5	492.7	491.2	491.2
52.5°	481.0	479.6	475.2	468.0	465.0	462.1	460.7	459.2	453.4	450.5	452.0
55°	441.8	438.9	434.5	425.8	424.4	421.4	420.0	418.5	412.7	415.6	411.3
57.5°	405.5	399.6	393.8	392.4	386.6	385.1	383.7	382.2	377.8	379.3	376.4
60°	361.9	360.4	357.5	351.7	351.7	350.2	350.2	347.3	344.4	343.0	343.0
62.5°	329.9	325.5	322.6	322.6	318.3	318.3	318.3	315.4	312.5	313.9	312.5
65°	295.0	293.6	292.1	289.2	289.2	287.7	287.7	284.8	280.5	281.9	279.0
67.5°	265.9	263.0	260.1	258.7	252.9	250.0	248.5	247.1	241.2	242.7	239.8
70°	229.6	225.3	222.3	219.4	215.1	212.2	212.2	209.3	204.9	206.4	203.5
72.5°	191.8	188.9	186.0	184.6	180.2	178.8	177.3	175.8	171.5	172.9	171.5
75°	159.9	159.9	158.4	157.0	152.6	148.2	145.3	143.9	141.0	142.4	139.5
77.5°	132.2	129.3	126.4	126.4	122.1	119.2	116.3	116.3	116.3	114.8	113.4
80°	103.2	100.3	100.3	98.8	95.9	93.0	91.6	91.6	90.1	90.1	88.6
82.5°	78.5	75.6	74.1	74.1	71.2	69.8	68.3	66.9	66.9	66.9	65.4
85°	55.2	52.3	50.9	50.9	48.0	46.5	46.5	45.1	45.1	43.6	43.6
87.5°	33.4	32.0	30.5	30.5	27.6	26.2	26.2	26.2	24.7	24.7	23.3
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: P1213185

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0
2.5°	3421.0	3421.0	3410.8	3413.7	3409.4	3415.2	3407.9	3407.9	3416.6	3416.6	3422.4
5°	3298.9	3291.6	3290.2	3287.3	3272.8	3278.6	3271.3	3264.0	3274.2	3274.2	3287.3
7.5°	3131.8	3118.7	3124.5	3115.8	3107.1	3094.0	3098.4	3092.6	3099.8	3110.0	3123.1
10°	3046.0	3034.4	3041.7	3033.0	3037.3	3018.4	3019.9	3021.3	3028.6	3031.5	3043.1
12.5°	2990.8	2987.9	2985.0	2982.1	2985.0	2974.8	2969.0	2970.5	2973.4	2974.8	2983.6
15°	2874.6	2855.7	2861.5	2841.1	2842.6	2844.0	2832.4	2844.0	2842.6	2861.5	2878.9
17.5°	2780.1	2780.1	2769.9	2761.2	2755.4	2753.9	2745.2	2751.0	2745.2	2756.8	2761.2
20°	2714.7	2713.2	2711.8	2707.4	2692.9	2694.4	2698.7	2685.6	2684.2	2682.7	2691.4
22.5°	2684.2	2685.6	2679.8	2679.8	2666.7	2669.6	2671.1	2656.6	2658.0	2653.7	2658.0
25°	2652.2	2655.1	2647.9	2647.9	2644.9	2643.5	2636.2	2639.1	2630.4	2623.1	2630.4
27.5°	2614.4	2620.2	2614.4	2617.3	2611.5	2608.6	2604.3	2601.3	2592.6	2591.2	2595.5
30°	2579.5	2582.5	2581.0	2573.7	2572.3	2563.6	2567.9	2559.2	2550.5	2551.9	2554.8
32.5°	1322.5	1262.9	973.7	879.2	870.5	902.5	1069.6	1302.1	1687.2	2060.7	2329.6
35°	576.9	576.9	576.9	575.5	575.5	574.0	572.6	571.1	569.7	568.2	566.8
37.5°	579.9	579.9	579.9	579.9	578.4	576.9	576.9	574.0	572.6	571.1	569.7
40°	581.3	582.8	582.8	582.8	581.3	581.3	579.9	576.9	575.5	572.6	569.7
42.5°	579.9	581.3	581.3	579.9	579.9	578.4	578.4	576.9	575.5	574.0	572.6
45°	561.0	562.4	559.5	559.5	558.1	558.1	558.1	558.1	558.1	559.5	559.5
47.5°	527.5	527.5	526.1	524.6	524.6	523.2	524.6	523.2	526.1	527.5	530.4
50°	488.3	488.3	485.4	483.9	483.9	483.9	483.9	485.4	486.8	489.8	492.7
52.5°	447.6	447.6	446.2	444.7	443.2	443.2	447.6	446.2	447.6	449.1	453.4
55°	408.4	409.8	406.9	406.9	405.5	405.5	405.5	406.9	408.4	409.8	414.2
57.5°	374.9	374.9	372.0	372.0	372.0	370.6	374.9	372.0	373.5	374.9	377.8
60°	341.5	340.1	340.1	338.6	338.6	338.6	341.5	340.1	340.1	341.5	344.4
62.5°	311.0	311.0	309.5	309.5	308.1	308.1	311.0	309.5	309.5	311.0	312.5
65°	276.1	276.1	274.7	273.2	277.6	273.2	277.6	274.7	277.6	279.0	281.9
67.5°	236.9	236.9	236.9	235.4	235.4	238.3	239.8	236.9	238.3	241.2	242.7
70°	202.0	202.0	200.6	200.6	200.6	203.5	204.9	202.0	203.5	204.9	207.8
72.5°	171.5	168.6	168.6	167.1	170.0	170.0	171.5	170.0	171.5	171.5	174.4
75°	141.0	138.1	138.1	138.1	141.0	139.5	141.0	139.5	141.0	141.0	142.4
77.5°	113.4	111.9	110.4	110.4	113.4	113.4	113.4	111.9	113.4	114.8	116.3
80°	88.6	87.2	85.7	85.7	88.6	88.6	88.6	90.1	88.6	90.1	91.6
82.5°	65.4	63.9	62.5	65.4	65.4	65.4	65.4	66.9	65.4	66.9	68.3
85°	43.6	42.1	40.7	43.6	43.6	43.6	43.6	45.1	43.6	45.1	46.5
87.5°	23.3	21.8	21.8	23.3	23.3	23.3	24.7	24.7	24.7	26.2	26.2
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: P1213185

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0
2.5°	3431.2	3435.5	3434.1	3425.3	3416.6	3406.5	3399.2	3400.6	3415.2	3419.5	3406.5
5°	3287.3	3314.9	3314.9	3333.8	3323.6	3314.9	3320.7	3352.7	3368.7	3393.4	3402.1
7.5°	3139.1	3152.1	3150.7	3169.6	3166.7	3166.7	3171.0	3213.2	3233.5	3253.9	3259.7
10°	3056.2	3069.3	3067.8	3069.3	3064.9	3054.8	3054.8	3073.7	3091.1	3101.3	3104.2
12.5°	2996.6	3003.9	3002.4	3002.4	2999.5	2990.8	2989.4	3005.4	3024.2	3037.3	3038.8
15°	2908.0	2928.3	2932.7	2951.6	2947.2	2935.6	2938.5	2951.6	2963.2	2974.8	2970.5
17.5°	2775.7	2785.9	2787.4	2794.6	2791.7	2791.7	2809.2	2857.1	2889.1	2916.7	2919.6
20°	2700.2	2707.4	2704.5	2720.5	2713.2	2711.8	2716.2	2736.5	2751.0	2764.1	2787.4
22.5°	2663.8	2669.6	2665.3	2666.7	2653.7	2642.0	2639.1	2655.1	2671.1	2688.5	2688.5
25°	2633.3	2637.7	2636.2	2633.3	2623.1	2607.2	2604.3	2607.2	2613.0	2614.4	2604.3
27.5°	2597.0	2599.9	2599.9	2601.3	2588.3	2573.7	2570.8	2567.9	2573.7	2572.3	2556.3
30°	2559.2	2554.8	2556.3	2557.7	2546.1	2533.0	2527.2	2525.8	2531.6	2530.1	2514.2
32.5°	2469.1	2502.5	2505.4	2508.3	2498.2	2486.5	2480.7	2476.4	2479.3	2477.8	2463.3
35°	565.3	575.5	704.8	1595.7	2166.8	2399.3	2424.0	2418.2	2419.7	2419.7	2408.1
37.5°	566.8	565.3	563.9	559.5	555.1	552.2	954.8	2036.0	2358.7	2360.1	2349.9
40°	566.8	565.3	563.9	561.0	555.1	550.8	543.5	537.7	550.8	1212.0	2217.7
42.5°	569.7	566.8	563.9	561.0	555.1	549.3	543.5	536.3	540.6	537.7	530.4
45°	561.0	559.5	559.5	558.1	555.1	549.3	542.1	533.3	529.0	533.3	526.1
47.5°	533.3	534.8	539.2	540.6	540.6	542.1	537.7	531.9	524.6	529.0	520.3
50°	495.6	498.5	499.9	507.2	510.1	515.9	517.4	517.4	515.9	521.7	515.9
52.5°	454.9	457.8	465.0	468.0	470.9	479.6	482.5	486.8	489.8	498.5	504.3
55°	415.6	417.1	420.0	425.8	430.2	437.4	441.8	446.2	453.4	457.8	475.2
57.5°	379.3	380.8	386.6	388.0	390.9	396.7	401.1	406.9	412.7	415.6	436.0
60°	344.4	345.9	350.2	351.7	353.1	359.0	363.3	367.7	372.0	374.9	389.5
62.5°	313.9	313.9	318.3	318.3	319.7	324.1	327.0	329.9	334.3	335.7	343.0
65°	283.4	284.8	287.7	287.7	289.2	292.1	293.6	295.0	299.4	299.4	305.2
67.5°	245.6	247.1	251.4	254.3	255.8	261.6	263.0	264.5	267.4	268.9	271.8
70°	209.3	210.7	215.1	216.5	218.0	222.3	225.3	229.6	234.0	238.3	241.2
72.5°	175.8	177.3	181.7	181.7	186.0	187.5	190.4	191.8	196.2	199.1	203.5
75°	143.9	145.3	149.7	149.7	154.0	155.5	157.0	158.4	161.3	164.2	167.1
77.5°	117.7	117.7	123.5	126.4	129.3	129.3	130.8	130.8	130.8	132.2	135.2
80°	93.0	93.0	97.4	100.3	103.2	103.2	104.6	106.1	107.5	107.5	109.0
82.5°	69.8	69.8	74.1	75.6	78.5	78.5	78.5	79.9	81.4	79.9	82.8
85°	48.0	48.0	50.9	52.3	55.2	55.2	55.2	56.7	58.1	56.7	58.1
87.5°	27.6	29.1	30.5	32.0	33.4	34.9	34.9	34.9	36.3	36.3	37.8
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: P1213185

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0
2.5°	3391.9	3374.5	3373.0	3352.7	3346.9	3348.3	3332.3	3326.5	3300.4	3294.6	3266.9
5°	3405.0	3413.7	3409.4	3407.9	3412.3	3409.4	3397.7	3391.9	3387.6	3375.9	3352.7
7.5°	3261.1	3266.9	3271.3	3290.2	3306.2	3333.8	3362.9	3381.8	3396.3	3399.2	3380.3
10°	3114.3	3142.0	3160.9	3189.9	3213.2	3229.2	3246.6	3262.6	3304.7	3346.9	3371.6
12.5°	3038.8	3046.0	3044.6	3060.6	3076.6	3118.7	3159.4	3182.7	3214.6	3233.5	3278.6
15°	2974.8	2976.3	2980.6	2992.3	3001.0	3015.5	3034.4	3069.3	3133.2	3162.3	3187.0
17.5°	2916.7	2916.7	2919.6	2929.8	2941.4	2954.5	2966.1	2980.6	3012.6	3060.6	3121.6
20°	2823.7	2864.4	2868.7	2867.3	2873.1	2897.8	2900.7	2926.9	2942.9	2961.8	3021.3
22.5°	2685.6	2710.3	2745.2	2799.0	2819.3	2831.0	2839.7	2851.3	2876.0	2897.8	2922.5
25°	2610.1	2626.1	2636.2	2652.2	2694.4	2762.7	2775.7	2788.8	2804.8	2820.8	2851.3
27.5°	2543.2	2541.8	2549.0	2563.6	2575.2	2611.5	2675.5	2726.3	2729.2	2752.5	2778.6
30°	2495.3	2486.5	2476.4	2473.5	2489.4	2508.3	2527.2	2607.2	2662.4	2674.0	2701.6
32.5°	2450.2	2435.7	2421.1	2409.5	2399.3	2415.3	2427.0	2461.8	2533.0	2599.9	2614.4
35°	2395.0	2380.4	2363.0	2349.9	2333.9	2332.5	2331.0	2364.5	2387.7	2467.6	2537.4
37.5°	2338.3	2322.3	2307.8	2293.3	2277.3	2265.6	2258.4	2267.1	2288.9	2323.8	2440.0
40°	2278.7	2259.8	2245.3	2233.7	2211.9	2203.2	2188.6	2182.8	2184.3	2214.8	2275.8
42.5°	1361.7	2171.2	2178.4	2165.4	2146.5	2134.8	2118.9	2111.6	2097.1	2111.6	2146.5
45°	524.6	530.4	1588.4	2098.5	2075.3	2060.7	2046.2	2038.9	2022.9	2011.3	2043.3
47.5°	514.5	520.3	508.6	720.8	1980.8	1985.2	1967.7	1960.5	1944.5	1935.8	1927.0
50°	507.2	511.5	502.8	505.7	495.6	1815.1	1887.8	1879.1	1861.6	1851.5	1834.0
52.5°	499.9	499.9	494.1	486.8	483.9	485.4	1527.4	1796.2	1775.9	1765.7	1742.5
55°	476.7	479.6	485.4	473.8	470.9	469.4	465.0	1454.7	1681.4	1669.8	1649.5
57.5°	441.8	447.6	463.6	460.7	460.7	449.1	446.2	446.2	1350.1	1572.4	1552.1
60°	401.1	406.9	424.4	430.2	434.5	431.6	428.7	427.3	421.4	1422.7	1448.9
62.5°	359.0	364.8	370.6	389.5	395.3	402.6	411.3	406.9	401.1	401.1	1339.9
65°	313.9	322.6	325.5	343.0	350.2	363.3	370.6	380.8	377.8	376.4	383.7
67.5°	274.7	284.8	286.3	293.6	306.6	312.5	321.2	340.1	348.8	351.7	354.6
70°	241.2	247.1	251.4	254.3	263.0	264.5	280.5	293.6	306.6	321.2	325.5
72.5°	207.8	212.2	220.9	218.0	220.9	226.7	235.4	244.1	257.2	277.6	290.7
75°	170.0	172.9	178.8	181.7	187.5	191.8	197.6	204.9	216.5	226.7	244.1
77.5°	136.6	138.1	142.4	143.9	149.7	154.0	164.2	168.6	175.8	183.1	193.3
80°	110.4	110.4	111.9	111.9	116.3	120.6	127.9	132.2	141.0	146.8	146.8
82.5°	84.3	84.3	88.6	88.6	91.6	91.6	95.9	95.9	100.3	103.2	106.1
85°	59.6	61.0	63.9	62.5	65.4	63.9	66.9	69.8	71.2	69.8	68.3
87.5°	39.2	39.2	42.1	40.7	42.1	42.1	45.1	45.1	46.5	46.5	45.1
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: P1213185

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0
2.5°	3256.8	3235.0	3221.9	3205.9	3201.5	3197.2	3203.0	3203.0	3194.3	3187.0	3173.9
5°	3332.3	3309.1	3284.4	3258.2	3233.5	3207.4	3197.2	3195.7	3179.7	3171.0	3166.7
7.5°	3371.6	3360.0	3332.3	3296.0	3258.2	3211.7	3191.4	3179.7	3163.8	3160.9	3160.9
10°	3375.9	3362.9	3348.3	3322.2	3278.6	3217.5	3178.3	3155.0	3140.5	3150.7	3169.6
12.5°	3333.8	3358.5	3345.4	3328.0	3293.1	3219.0	3162.3	3127.4	3123.1	3149.2	3198.6
15°	3226.3	3298.9	3335.2	3317.8	3290.2	3216.1	3136.1	3095.5	3095.5	3149.2	3213.2
17.5°	3144.9	3201.5	3290.2	3304.7	3272.8	3210.3	3111.4	3063.5	3076.6	3155.0	3223.3
20°	3078.0	3112.9	3198.6	3280.0	3249.5	3197.2	3075.1	3025.7	3051.9	3146.3	3237.9
22.5°	2973.4	3043.1	3095.5	3216.1	3226.3	3172.5	3038.8	2979.2	3031.5	3146.3	3230.6
25°	2871.7	2955.9	3011.2	3128.9	3191.4	3142.0	3005.4	2929.8	3009.7	3142.0	3224.8
27.5°	2800.4	2839.7	2940.0	3024.2	3139.1	3101.3	2960.3	2876.0	2982.1	3118.7	3191.4
30°	2724.9	2751.0	2849.9	2929.8	3069.3	3054.8	2913.8	2816.4	2947.2	3096.9	3104.2
32.5°	2642.0	2671.1	2722.0	2838.2	2971.9	3011.2	2861.5	2756.8	2909.4	3063.5	3002.4
35°	2557.7	2579.5	2620.2	2745.2	2858.6	2945.8	2797.5	2688.5	2883.3	3012.6	2905.1
37.5°	2473.5	2496.7	2531.6	2636.2	2739.4	2884.7	2742.3	2620.2	2835.3	2922.5	2803.4
40°	2393.5	2406.6	2442.9	2508.3	2640.6	2822.2	2679.8	2549.0	2785.9	2807.7	2665.3
42.5°	2246.7	2312.1	2345.6	2397.9	2528.7	2736.5	2607.2	2473.5	2730.7	2692.9	2527.2
45°	2088.3	2230.8	2245.3	2297.6	2429.9	2644.9	2538.9	2399.3	2678.4	2594.1	2396.4
47.5°	1959.0	2062.2	2146.5	2190.1	2312.1	2537.4	2474.9	2336.9	2599.9	2469.1	2268.5
50°	1844.2	1899.4	2052.0	2084.0	2171.2	2408.1	2399.3	2264.2	2490.9	2312.1	2143.6
52.5°	1732.3	1771.5	1909.6	1977.9	2049.1	2268.5	2309.2	2193.0	2371.7	2155.2	2017.1
55°	1634.9	1648.0	1723.6	1867.4	1931.4	2127.6	2210.4	2110.1	2220.6	2005.5	1895.1
57.5°	1534.6	1523.0	1578.2	1762.8	1809.3	1983.7	2105.8	2025.9	2098.5	1852.9	1768.6
60°	1430.0	1414.0	1437.3	1559.4	1680.0	1841.3	1982.3	1932.8	1950.3	1701.8	1627.7
62.5°	1321.0	1305.0	1297.8	1374.8	1553.5	1694.5	1857.3	1829.7	1768.6	1563.7	1453.3
65°	1207.7	1191.7	1180.1	1210.6	1414.0	1504.1	1717.8	1710.5	1569.5	1418.4	1223.7
67.5°	367.7	1084.1	1059.4	1058.0	1191.7	1331.2	1566.6	1555.0	1369.0	1262.9	1053.6
70°	331.3	879.2	934.5	921.4	979.5	1155.3	1393.7	1385.0	1174.2	1012.9	931.5
72.5°	303.7	311.0	825.5	810.9	824.0	982.4	1213.5	1190.2	995.5	799.3	805.1
75°	260.1	273.2	284.8	684.5	667.0	813.8	1017.3	981.0	821.1	659.8	672.9
77.5°	212.2	228.2	236.9	498.5	539.2	579.9	812.4	764.4	565.3	527.5	251.4
80°	158.4	171.5	186.0	199.1	409.8	405.5	603.1	555.1	393.8	328.4	196.2
82.5°	116.3	120.6	129.3	143.9	162.8	271.8	388.0	341.5	273.2	149.7	135.2
85°	72.7	78.5	82.8	87.2	98.8	162.8	191.8	152.6	114.8	91.6	85.7
87.5°	46.5	46.5	45.1	46.5	48.0	58.1	65.4	62.5	49.4	46.5	46.5
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: P1213185

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0
2.5°	3159.4	3139.1	3139.1	3133.2	3137.6	3137.6	3136.1	3137.6	3147.8	3153.6	3163.8
5°	3157.9	3152.1	3165.2	3181.2	3200.1	3223.3	3229.2	3249.5	3268.4	3293.1	3319.3
7.5°	3176.8	3197.2	3221.9	3248.0	3285.8	3313.4	3338.2	3362.9	3380.3	3403.5	3418.1
10°	3204.5	3245.1	3287.3	3320.7	3361.4	3384.7	3400.6	3403.5	3378.8	3339.6	3307.6
12.5°	3243.7	3291.6	3330.9	3362.9	3381.8	3373.0	3326.5	3278.6	3251.0	3210.3	3153.6
15°	3277.1	3320.7	3361.4	3348.3	3297.5	3249.5	3213.2	3156.5	3101.3	3063.5	3038.8
17.5°	3291.6	3333.8	3319.3	3251.0	3203.0	3147.8	3073.7	3030.1	2993.7	2964.7	2950.1
20°	3300.4	3293.1	3214.6	3165.2	3072.2	3021.3	2973.4	2932.7	2905.1	2890.5	2887.6
22.5°	3277.1	3188.5	3121.6	3033.0	2964.7	2922.5	2884.7	2851.3	2832.4	2820.8	2813.5
25°	3200.1	3096.9	2998.1	2928.3	2870.2	2833.9	2804.8	2777.2	2753.9	2748.1	2733.6
27.5°	3092.6	3008.3	2877.5	2823.7	2772.8	2755.4	2723.4	2695.8	2675.5	2658.0	2611.5
30°	3003.9	2870.2	2775.7	2726.3	2695.8	2675.5	2639.1	2610.1	2575.2	2511.2	2485.1
32.5°	2894.9	2762.7	2672.6	2644.9	2607.2	2589.7	2549.0	2485.1	2431.3	2405.2	2403.7
35°	2753.9	2644.9	2579.5	2554.8	2524.3	2495.3	2411.0	2352.8	2326.7	2329.6	2351.4
37.5°	2636.2	2538.9	2496.7	2461.8	2427.0	2352.8	2281.6	2254.0	2261.3	2275.8	2286.0
40°	2517.1	2442.9	2395.0	2367.4	2288.9	2216.2	2178.4	2188.6	2201.7	2211.9	2225.0
42.5°	2400.8	2348.5	2300.5	2246.7	2139.2	2100.0	2108.7	2121.8	2133.4	2147.9	2161.0
45°	2290.3	2243.8	2188.6	2066.5	2012.8	2022.9	2036.0	2046.2	2063.6	2073.8	2086.9
47.5°	2185.7	2136.3	2038.9	1931.4	1925.6	1945.9	1957.5	1970.6	1983.7	1957.5	1079.8
50°	2068.0	2017.1	1868.9	1828.2	1841.3	1860.2	1874.7	1887.8	1681.4	668.5	514.5
52.5°	1951.7	1822.4	1727.9	1739.6	1752.6	1774.4	1784.6	1325.4	527.5	502.8	504.3
55°	1822.4	1656.7	1629.1	1643.6	1655.3	1677.1	1111.7	486.8	483.9	482.5	494.1
57.5°	1618.9	1518.7	1530.3	1544.8	1556.4	1098.7	473.8	470.9	472.3	473.8	475.2
60°	1437.3	1415.5	1428.6	1441.6	1020.2	457.8	449.1	450.5	456.3	452.0	440.3
62.5°	1293.4	1310.8	1323.9	1159.7	434.5	430.2	434.5	430.2	420.0	412.7	398.2
65°	1183.0	1200.4	1210.6	408.4	406.9	412.7	408.4	393.8	377.8	357.5	353.1
67.5°	1066.7	1084.1	388.0	377.8	383.7	376.4	359.0	341.5	329.9	312.5	305.2
70°	946.1	405.5	351.7	350.2	340.1	328.4	309.5	292.1	277.6	270.3	263.0
72.5°	683.0	321.2	316.8	305.2	287.7	271.8	255.8	245.6	238.3	234.0	229.6
75°	284.8	279.0	265.9	245.6	228.2	220.9	209.3	202.0	199.1	190.4	187.5
77.5°	238.3	226.7	207.8	193.3	183.1	178.8	170.0	161.3	157.0	155.5	149.7
80°	183.1	167.1	158.4	151.1	148.2	138.1	127.9	123.5	120.6	119.2	114.8
82.5°	125.0	119.2	113.4	103.2	103.2	98.8	94.5	91.6	88.6	88.6	85.7
85°	81.4	77.0	75.6	71.2	71.2	68.3	66.9	65.4	63.9	62.5	61.0
87.5°	46.5	46.5	48.0	46.5	46.5	45.1	43.6	42.1	40.7	40.7	37.8
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: P1213185

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0
2.5°	3176.8	3191.4	3194.3	3243.7	3271.3	3269.8	3261.1	3287.3	3271.3	3262.6	3271.3
5°	3345.4	3362.9	3377.4	3431.2	3450.1	3458.8	3457.3	3471.9	3460.2	3450.1	3450.1
7.5°	3428.3	3434.1	3439.9	3426.8	3418.1	3403.5	3381.8	3349.8	3333.8	3316.4	3294.6
10°	3291.6	3272.8	3280.0	3253.9	3232.1	3216.1	3195.7	3169.6	3147.8	3131.8	3107.1
12.5°	3124.5	3123.1	3126.0	3130.3	3108.5	3095.5	3079.5	3060.6	3044.6	3027.2	3006.8
15°	3022.8	3024.2	3035.9	3031.5	3024.2	3017.0	2999.5	2993.7	2979.2	2960.3	2948.7
17.5°	2950.1	2957.4	2969.0	2963.2	2951.6	2944.3	2931.2	2918.2	2905.1	2890.5	2873.1
20°	2886.2	2893.5	2900.7	2893.5	2871.7	2861.5	2844.0	2803.4	2774.3	2745.2	2719.1
22.5°	2816.4	2820.8	2815.0	2791.7	2736.5	2710.3	2690.0	2678.4	2653.7	2637.7	2621.7
25°	2729.2	2704.5	2666.7	2640.6	2618.8	2607.2	2598.4	2597.0	2594.1	2591.2	2583.9
27.5°	2586.8	2578.1	2557.7	2547.6	2549.0	2553.4	2554.8	2559.2	2554.8	2549.0	2543.2
30°	2480.7	2485.1	2486.5	2489.4	2496.7	2501.1	2502.5	2508.3	2505.4	2501.1	2498.2
32.5°	2413.9	2424.0	2429.9	2438.6	2442.9	2450.2	2450.2	2458.9	2450.2	2448.8	2445.8
35°	2358.7	2367.4	2370.3	2383.4	2387.7	2395.0	2395.0	2402.2	2395.0	2320.9	1832.6
37.5°	2303.4	2312.1	2318.0	2329.6	2331.0	2335.4	2155.2	1576.8	1017.3	787.7	601.7
40°	2238.0	2248.2	2254.0	2258.4	1587.0	1007.1	693.2	563.9	563.9	568.2	572.6
42.5°	2168.3	2175.5	1515.8	882.1	549.3	547.9	552.2	556.6	561.0	566.8	572.6
45°	1704.7	860.3	546.4	533.3	537.7	543.5	549.3	555.1	562.4	568.2	571.1
47.5°	559.5	524.6	531.9	526.1	533.3	540.6	546.4	552.2	553.7	555.1	553.7
50°	517.4	517.4	521.7	521.7	527.5	530.4	530.4	530.4	524.6	523.2	518.8
52.5°	499.9	511.5	505.7	508.6	505.7	501.4	497.0	492.7	483.9	481.0	475.2
55°	491.2	495.6	481.0	476.7	470.9	459.2	453.4	447.6	440.3	437.4	430.2
57.5°	470.9	460.7	444.7	437.4	427.3	415.6	409.8	405.5	398.2	395.3	390.9
60°	433.1	412.7	402.6	393.8	382.2	372.0	367.7	364.8	359.0	357.5	353.1
62.5°	386.6	369.1	360.4	348.8	340.1	334.3	329.9	328.4	322.6	322.6	319.7
65°	335.7	327.0	319.7	308.1	303.7	297.9	296.5	295.0	292.1	290.7	287.7
67.5°	295.0	289.2	279.0	273.2	270.3	265.9	263.0	260.1	254.3	251.4	247.1
70°	258.7	254.3	244.1	239.8	234.0	226.7	222.3	219.4	215.1	212.2	207.8
72.5°	223.8	210.7	203.5	199.1	194.7	187.5	186.0	183.1	178.8	177.3	172.9
75°	180.2	170.0	165.7	162.8	158.4	154.0	154.0	154.0	149.7	148.2	146.8
77.5°	143.9	138.1	135.2	132.2	130.8	127.9	123.5	122.1	117.7	117.7	116.3
80°	110.4	107.5	104.6	103.2	101.7	98.8	95.9	94.5	90.1	90.1	88.6
82.5°	81.4	79.9	78.5	77.0	75.6	74.1	69.8	68.3	65.4	65.4	63.9
85°	58.1	56.7	53.8	52.3	52.3	50.9	46.5	45.1	42.1	42.1	42.1
87.5°	36.3	34.9	33.4	32.0	30.5	29.1	26.2	24.7	24.7	21.8	20.3
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: P1213185

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0
2.5°	3253.9	3278.6	3275.7	3293.1	3297.5	3306.2	3309.1	3310.5	3288.7	3306.2	3307.6
5°	3445.7	3450.1	3453.0	3460.2	3467.5	3468.9	3461.7	3453.0	3455.9	3450.1	3435.5
7.5°	3291.6	3269.8	3265.5	3259.7	3256.8	3253.9	3240.8	3252.4	3239.3	3233.5	3213.2
10°	3102.7	3082.4	3080.9	3080.9	3085.3	3083.8	3080.9	3075.1	3086.7	3079.5	3075.1
12.5°	3003.9	2996.6	3001.0	2998.1	3009.7	3012.6	3009.7	3009.7	3006.8	3001.0	3003.9
15°	2944.3	2938.5	2942.9	2938.5	2947.2	2948.7	2941.4	2945.8	2938.5	2931.2	2928.3
17.5°	2865.8	2852.8	2842.6	2828.1	2829.5	2826.6	2817.9	2817.9	2810.6	2791.7	2793.2
20°	2714.7	2701.6	2695.8	2695.8	2703.1	2706.0	2704.5	2707.4	2700.2	2697.3	2685.6
22.5°	2620.2	2618.8	2621.7	2629.0	2640.6	2656.6	2658.0	2658.0	2658.0	2656.6	2642.0
25°	2586.8	2586.8	2589.7	2599.9	2608.6	2620.2	2623.1	2626.1	2623.1	2623.1	2610.1
27.5°	2549.0	2546.1	2551.9	2562.1	2572.3	2581.0	2588.3	2589.7	2585.4	2585.4	2589.7
30°	2502.5	2501.1	2508.3	2518.5	2527.2	2535.9	2543.2	2549.0	2543.2	2543.2	2538.9
32.5°	2454.6	2454.6	2457.5	2396.4	2222.0	2001.1	2005.5	1877.6	1789.0	1677.1	1825.3
35°	1531.7	1114.7	957.7	810.9	707.7	640.9	639.4	617.6	607.5	600.2	598.7
37.5°	578.4	581.3	587.1	590.0	594.4	597.3	598.7	598.7	598.7	598.7	597.3
40°	576.9	582.8	587.1	591.5	595.8	598.7	598.7	600.2	601.7	601.7	601.7
42.5°	578.4	584.2	590.0	594.4	597.3	598.7	600.2	601.7	601.7	601.7	601.7
45°	576.9	579.9	579.9	581.3	581.3	581.3	582.8	582.8	581.3	579.9	582.8
47.5°	555.1	555.1	550.8	549.3	547.9	545.0	546.4	545.0	543.5	542.1	545.0
50°	517.4	511.5	508.6	505.7	504.3	501.4	502.8	501.4	499.9	497.0	501.4
52.5°	472.3	470.9	465.0	462.1	460.7	462.1	459.2	457.8	456.3	454.9	456.3
55°	428.7	422.9	421.4	418.5	417.1	418.5	417.1	415.6	414.2	412.7	414.2
57.5°	389.5	385.1	383.7	380.8	380.8	380.8	380.8	379.3	377.8	376.4	377.8
60°	351.7	348.8	347.3	347.3	345.9	345.9	345.9	344.4	343.0	343.0	344.4
62.5°	319.7	319.7	315.4	313.9	313.9	315.4	313.9	312.5	311.0	309.5	312.5
65°	286.3	280.5	279.0	276.1	273.2	274.7	273.2	271.8	270.3	268.9	271.8
67.5°	245.6	244.1	238.3	235.4	234.0	235.4	234.0	232.5	231.1	229.6	232.5
70°	206.4	206.4	200.6	199.1	197.6	197.6	196.2	196.2	194.7	193.3	196.2
72.5°	171.5	171.5	170.0	167.1	165.7	164.2	162.8	161.3	161.3	162.8	162.8
75°	142.4	139.5	133.7	135.2	133.7	132.2	132.2	130.8	129.3	132.2	130.8
77.5°	111.9	110.4	106.1	107.5	106.1	104.6	104.6	103.2	101.7	103.2	103.2
80°	84.3	84.3	82.8	81.4	81.4	79.9	78.5	78.5	77.0	78.5	78.5
82.5°	61.0	61.0	59.6	58.1	56.7	56.7	55.2	55.2	55.2	55.2	55.2
85°	39.2	37.8	37.8	34.9	34.9	34.9	33.4	33.4	33.4	33.4	33.4
87.5°	18.9	18.9	17.4	17.4	16.0	14.5	14.5	13.1	13.1	14.5	14.5
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: P1213185

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0
2.5°	3281.5	3300.4	3284.4	3291.6	3293.1	3317.8	3316.4	3322.2	3312.0	3300.4	3284.4
5°	3448.6	3439.9	3428.3	3455.9	3441.3	3458.8	3464.6	3476.2	3476.2	3474.8	3461.7
7.5°	3235.0	3216.1	3230.6	3240.8	3245.1	3233.5	3256.8	3282.9	3304.7	3317.8	3319.3
10°	3067.8	3073.7	3072.2	3076.6	3086.7	3085.3	3099.8	3114.3	3120.2	3128.9	3131.8
12.5°	2989.4	2987.9	2990.8	3001.0	3006.8	3005.4	3019.9	3028.6	3031.5	3033.0	3031.5
15°	2926.9	2916.7	2924.0	2925.4	2929.8	2929.8	2947.2	2960.3	2966.1	2969.0	2966.1
17.5°	2809.2	2784.5	2807.7	2807.7	2823.7	2820.8	2848.4	2870.2	2881.8	2890.5	2890.5
20°	2692.9	2681.3	2690.0	2687.1	2698.7	2697.3	2714.7	2729.2	2739.4	2746.7	2755.4
22.5°	2646.4	2649.3	2636.2	2637.7	2637.7	2636.2	2644.9	2652.2	2655.1	2659.5	2656.6
25°	2615.9	2618.8	2614.4	2607.2	2604.3	2607.2	2611.5	2620.2	2621.7	2618.8	2608.6
27.5°	2585.4	2576.6	2583.9	2570.8	2567.9	2573.7	2579.5	2581.0	2582.5	2582.5	2573.7
30°	2538.9	2531.6	2538.9	2533.0	2527.2	2533.0	2537.4	2537.4	2540.3	2541.8	2531.6
32.5°	1774.4	1789.0	2024.4	2166.8	2367.4	2469.1	2488.0	2488.0	2490.9	2490.9	2482.2
35°	604.6	606.0	655.4	710.6	828.4	973.7	1164.1	1262.9	1597.1	1996.8	2383.4
37.5°	597.3	595.8	594.4	592.9	591.5	590.0	587.1	585.7	594.4	704.8	956.2
40°	600.2	598.7	595.8	594.4	592.9	590.0	588.6	585.7	582.8	579.9	576.9
42.5°	600.2	598.7	597.3	595.8	594.4	592.9	590.0	587.1	584.2	579.9	575.5
45°	579.9	579.9	581.3	581.3	582.8	582.8	582.8	581.3	581.3	579.9	574.0
47.5°	542.1	542.1	546.4	546.4	549.3	552.2	552.2	555.1	559.5	562.4	563.9
50°	498.5	498.5	502.8	504.3	507.2	511.5	515.9	517.4	521.7	527.5	533.3
52.5°	454.9	454.9	459.2	459.2	462.1	466.5	470.9	472.3	478.1	483.9	491.2
55°	414.2	414.2	417.1	418.5	420.0	422.9	427.3	427.3	433.1	437.4	444.7
57.5°	377.8	380.8	380.8	380.8	382.2	385.1	388.0	388.0	392.4	396.7	402.6
60°	343.0	345.9	345.9	345.9	347.3	348.8	351.7	351.7	354.6	357.5	363.3
62.5°	311.0	313.9	313.9	315.4	315.4	316.8	319.7	318.3	321.2	322.6	327.0
65°	270.3	273.2	274.7	276.1	277.6	280.5	284.8	283.4	287.7	290.7	295.0
67.5°	231.1	234.0	234.0	235.4	236.9	239.8	242.7	242.7	247.1	250.0	255.8
70°	194.7	197.6	197.6	199.1	200.6	203.5	206.4	204.9	209.3	212.2	216.5
72.5°	161.3	164.2	164.2	165.7	165.7	168.6	171.5	174.4	174.4	177.3	180.2
75°	130.8	132.2	133.7	133.7	135.2	136.6	139.5	142.4	143.9	145.3	148.2
77.5°	103.2	104.6	106.1	106.1	107.5	109.0	110.4	116.3	119.2	120.6	120.6
80°	78.5	79.9	79.9	79.9	81.4	82.8	85.7	85.7	91.6	91.6	93.0
82.5°	55.2	56.7	56.7	56.7	58.1	61.0	62.5	63.9	66.9	68.3	68.3
85°	33.4	34.9	34.9	34.9	36.3	37.8	40.7	42.1	43.6	43.6	45.1
87.5°	13.1	14.5	16.0	16.0	17.4	18.9	20.3	21.8	23.3	23.3	24.7
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: P1213185

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0
2.5°	3266.9	3277.1	3266.9	3272.8	3280.0	3266.9	3236.4	3224.8	3220.4	3203.0	3191.4
5°	3448.6	3448.6	3444.2	3455.9	3454.4	3434.1	3402.1	3387.6	3373.0	3354.1	3339.6
7.5°	3319.3	3330.9	3338.2	3383.2	3412.3	3415.2	3435.5	3439.9	3445.7	3439.9	3431.2
10°	3133.2	3128.9	3149.2	3191.4	3216.1	3229.2	3268.4	3287.3	3303.3	3335.2	3368.7
12.5°	3028.6	3034.4	3043.1	3073.7	3096.9	3091.1	3107.1	3120.2	3139.1	3171.0	3219.0
15°	2958.8	2964.7	2973.4	2996.6	3011.2	3003.9	3012.6	3021.3	3034.4	3050.4	3079.5
17.5°	2883.3	2893.5	2903.6	2928.3	2941.4	2940.0	2947.2	2950.1	2954.5	2964.7	2985.0
20°	2765.6	2797.5	2817.9	2851.3	2870.2	2867.3	2880.4	2884.7	2890.5	2900.7	2909.4
22.5°	2658.0	2666.7	2676.9	2713.2	2745.2	2784.5	2793.2	2804.8	2819.3	2829.5	2838.2
25°	2597.0	2591.2	2595.5	2620.2	2637.7	2640.6	2653.7	2691.4	2730.7	2748.1	2768.5
27.5°	2560.7	2554.8	2553.4	2565.0	2567.9	2560.7	2557.7	2569.4	2598.4	2627.5	2688.5
30°	2521.4	2514.2	2508.3	2518.5	2522.9	2512.7	2493.8	2483.6	2501.1	2508.3	2533.0
32.5°	2474.9	2467.6	2464.7	2470.6	2473.5	2464.7	2444.4	2432.8	2429.9	2424.0	2429.9
35°	2422.6	2415.3	2411.0	2412.4	2418.2	2411.0	2393.5	2379.0	2371.7	2355.7	2344.1
37.5°	1248.4	1768.6	2296.2	2351.4	2357.2	2355.7	2338.3	2322.3	2315.1	2296.2	2290.3
40°	571.1	638.0	957.7	1251.3	1805.0	2293.3	2277.3	2261.3	2248.2	2242.4	2220.6
42.5°	569.7	571.1	572.6	565.3	700.5	1193.1	1761.4	2198.8	2190.1	2175.5	2159.6
45°	569.7	562.4	568.2	559.5	562.4	561.0	699.0	1127.7	2007.0	2097.1	2089.8
47.5°	563.9	559.5	565.3	558.1	549.3	553.7	547.9	555.1	866.1	1469.3	2012.8
50°	537.7	540.6	550.8	549.3	542.1	547.9	537.7	546.4	539.2	591.5	1139.4
52.5°	498.5	504.3	514.5	523.2	526.1	533.3	530.4	533.3	527.5	529.0	530.4
55°	452.0	459.2	468.0	481.0	486.8	498.5	507.2	511.5	518.8	517.4	505.7
57.5°	408.4	415.6	422.9	436.0	449.1	454.9	470.9	479.6	498.5	494.1	491.2
60°	367.7	373.5	380.8	383.7	399.6	409.8	424.4	433.1	457.8	463.6	472.3
62.5°	331.3	334.3	340.1	344.4	354.6	364.8	372.0	386.6	399.6	418.5	431.6
65°	297.9	300.8	305.2	308.1	309.5	324.1	328.4	344.4	348.8	369.1	380.8
67.5°	260.1	265.9	271.8	274.7	277.6	286.3	289.2	296.5	306.6	315.4	329.9
70°	220.9	225.3	231.1	235.4	241.2	247.1	255.8	260.1	267.4	273.2	284.8
72.5°	184.6	188.9	191.8	196.2	200.6	204.9	212.2	222.3	228.2	238.3	241.2
75°	149.7	154.0	157.0	159.9	164.2	167.1	170.0	180.2	186.0	194.7	203.5
77.5°	123.5	123.5	126.4	135.2	133.7	133.7	136.6	142.4	146.8	152.6	161.3
80°	95.9	97.4	98.8	106.1	107.5	109.0	107.5	111.9	116.3	117.7	123.5
82.5°	71.2	72.7	72.7	77.0	81.4	81.4	81.4	82.8	87.2	88.6	91.6
85°	48.0	49.4	50.9	52.3	55.2	56.7	58.1	58.1	61.0	62.5	63.9
87.5°	26.2	29.1	30.5	32.0	33.4	34.9	36.3	37.8	39.2	40.7	42.1
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: P1213185

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0	3171.0
2.5°	3187.0	3179.7	3175.4	3163.8	3160.9	3142.0	3144.9	3142.0	3142.0	3146.3	3160.9
5°	3323.6	3288.7	3280.0	3255.3	3235.0	3200.1	3178.3	3166.7	3149.2	3142.0	3152.1
7.5°	3416.6	3390.5	3368.7	3346.9	3317.8	3277.1	3246.6	3211.7	3182.7	3155.0	3147.8
10°	3400.6	3429.7	3429.7	3416.6	3389.0	3348.3	3312.0	3268.4	3217.5	3173.9	3147.8
12.5°	3265.5	3316.4	3357.0	3387.6	3415.2	3387.6	3351.2	3316.4	3259.7	3195.7	3147.8
15°	3117.3	3169.6	3220.4	3284.4	3351.2	3378.8	3377.4	3336.7	3285.8	3219.0	3152.1
17.5°	3012.6	3049.0	3076.6	3146.3	3227.7	3298.9	3346.9	3349.8	3300.4	3240.8	3153.6
20°	2934.1	2960.3	2983.6	3022.8	3094.0	3181.2	3269.8	3319.3	3310.5	3245.1	3157.9
22.5°	2862.9	2881.8	2900.7	2929.8	2986.5	3043.1	3146.3	3248.0	3291.6	3237.9	3153.6
25°	2791.7	2812.1	2826.6	2846.9	2892.0	2938.5	3011.2	3137.6	3235.0	3232.1	3144.9
27.5°	2707.4	2735.0	2752.5	2780.1	2810.6	2845.5	2894.9	3014.1	3153.6	3203.0	3121.6
30°	2605.7	2646.4	2672.6	2703.1	2729.2	2759.8	2799.0	2871.7	3044.6	3146.3	3096.9
32.5°	2458.9	2531.6	2589.7	2618.8	2647.9	2674.0	2708.9	2769.9	2910.9	3069.3	3069.3
35°	2354.3	2387.7	2440.0	2524.3	2560.7	2586.8	2618.8	2666.7	2756.8	2977.7	3024.2
37.5°	2272.9	2286.0	2312.1	2395.0	2463.3	2505.4	2537.4	2567.9	2656.6	2852.8	2966.1
40°	2211.9	2207.5	2204.6	2243.8	2341.2	2408.1	2444.4	2474.9	2543.2	2703.1	2889.1
42.5°	2140.7	2136.3	2121.8	2131.9	2179.9	2291.8	2347.0	2380.4	2437.1	2546.1	2804.8
45°	2066.5	2059.3	2053.5	2043.3	2060.7	2123.2	2236.6	2286.0	2318.0	2415.3	2698.7
47.5°	1991.0	1980.8	1973.5	1964.8	1954.6	1983.7	2091.2	2179.9	2235.1	2296.2	2570.8
50°	1883.4	1896.5	1887.8	1877.6	1868.9	1863.1	1908.1	2053.5	2121.8	2171.2	2415.3
52.5°	887.9	1726.5	1799.1	1789.0	1777.3	1767.2	1777.3	1887.8	2011.3	2050.6	2227.9
55°	505.7	768.8	1600.0	1691.6	1681.4	1666.9	1658.2	1696.0	1880.5	1932.8	2056.4
57.5°	486.8	488.3	706.3	1524.5	1581.2	1568.1	1557.9	1566.6	1723.6	1812.2	1906.7
60°	470.9	470.9	470.9	674.3	1457.6	1462.0	1448.9	1434.4	1502.7	1677.1	1755.5
62.5°	436.0	444.7	449.1	449.1	665.6	1350.1	1337.0	1332.6	1335.6	1514.3	1604.4
65°	390.9	411.3	420.0	425.8	425.8	699.0	1222.2	1214.9	1204.8	1273.1	1451.8
67.5°	341.5	361.9	380.8	392.4	393.8	406.9	729.5	1094.3	1079.8	1081.2	1289.0
70°	290.7	308.1	328.4	345.9	361.9	369.1	380.8	908.3	956.2	935.9	1104.5
72.5°	251.4	258.7	273.2	290.7	309.5	327.0	337.2	361.9	829.8	808.0	840.0
75°	209.3	215.1	225.3	236.9	251.4	271.8	289.2	306.6	440.3	677.2	672.9
77.5°	162.8	172.9	184.6	191.8	199.1	213.6	236.9	254.3	271.8	457.8	539.2
80°	125.0	132.2	138.1	145.3	154.0	164.2	172.9	193.3	213.6	229.6	412.7
82.5°	93.0	97.4	101.7	104.6	107.5	113.4	129.3	136.6	149.7	164.2	194.7
85°	65.4	68.3	71.2	72.7	74.1	75.6	81.4	82.8	95.9	98.8	117.7
87.5°	42.1	43.6	46.5	48.0	48.0	49.4	50.9	50.9	50.9	48.0	58.1
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: P1213185

CATALOG NUMBER: 4SNLED-LD5-80HL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	3171.0	3171.0
2.5°	3172.5	3195.7
5°	3168.1	3198.6
7.5°	3156.5	3185.6
10°	3139.1	3173.9
12.5°	3120.2	3153.6
15°	3104.2	3128.9
17.5°	3086.7	3101.3
20°	3063.5	3075.1
22.5°	3040.2	3034.4
25°	3014.1	3001.0
27.5°	2980.6	2955.9
30°	2950.1	2906.5
32.5°	2921.1	2849.9
35°	2881.8	2791.7
37.5°	2841.1	2732.1
40°	2793.2	2663.8
42.5°	2742.3	2595.5
45°	2678.4	2530.1
47.5°	2621.7	2451.7
50°	2543.2	2367.4
52.5°	2447.3	2288.9
55°	2333.9	2193.0
57.5°	2211.9	2092.7
60°	2081.1	1977.9
62.5°	1922.7	1858.7
65°	1736.7	1722.1
67.5°	1494.0	1571.0
70°	1225.1	1398.0
72.5°	1024.6	1214.9
75°	840.0	1010.0
77.5°	665.6	792.0
80°	415.6	579.9
82.5°	279.0	380.8
85°	168.6	181.7
87.5°	65.4	66.9
90°	0.0	0.0

(END OF REPORT)