

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P#

Luminaire Tested: **4SNLED-LD5-67HL-RW-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33525)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-67HL-RW-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

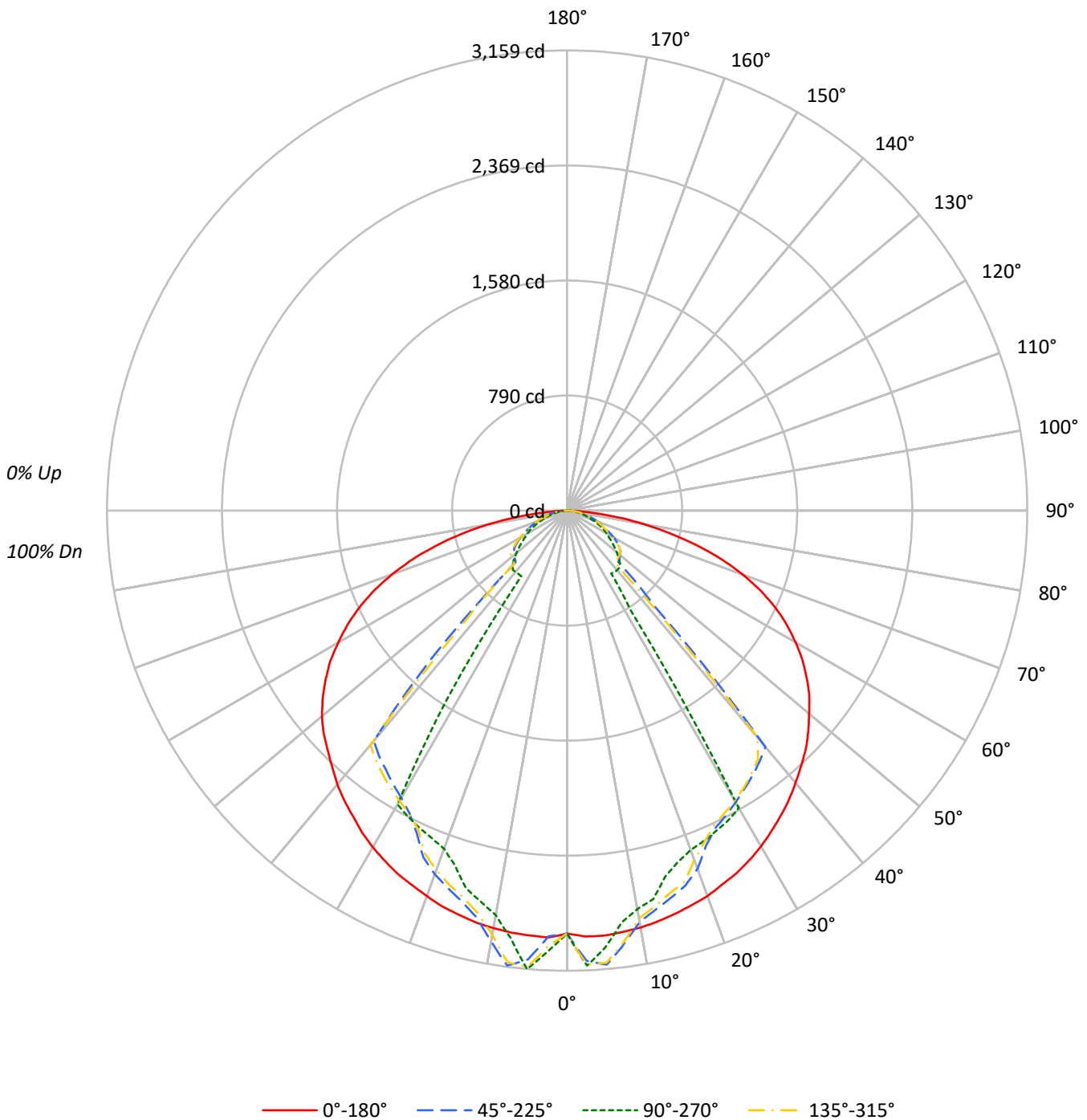
Lumens per Lamp: N/A
Luminaire Lumens: 5815.0 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 62
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: 25 FT



TEST NUMBER: P#
CATALOG NUMBER: 4SNLED-LD5-67HL-RW-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-RW-UNV-L940-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					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°	23466	23466	23466	23466
5°	23696	23643	23685	24814
10°	23719	21376	23752	21703
15°	23772	19778	23827	20405
20°	23944	18758	23944	18688
25°	24152	18400	24186	18228
30°	24397	18075	24457	17861
35°	24680	4117	24731	4293
40°	25076	4281	25226	4420
45°	25677	4258	25766	4412
50°	26276	3850	26631	3953
55°	27084	3417	27300	3467
60°	27771	3037	27831	3076
65°	28260	2651	28189	2608
70°	27858	2137	27771	2059
75°	25862	1644	26049	1575
80°	20991	1168	21833	1069
85°	11368	699	12003	536



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-RW-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.7	4.9
10°-20°	785.5	13.5
20°-30°	1163.6	20.0
30°-40°	1172.4	20.2
40°-50°	915.8	15.7
50°-60°	707.4	12.2
60°-70°	474.9	8.2
70°-80°	242.3	4.2
80°-90°	67.4	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°	2234.8	38.4
0°-40°	3407.2	58.6
0°-60°	5030.4	86.5
0°-90°	5815.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5815.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2904	2904	2904	2904	2904	
5°	2929	3010	2928	3159	2929	279
15°	2865	2602	2872	2684	2865	810
25°	2748	2425	2752	2402	2748	1268
35°	2556	527	2562	550	2556	1602
45°	2317	512	2325	531	2317	1787
55°	2008	373	2024	378	2008	1794
65°	1577	250	1573	246	1577	1551
75°	925	126	932	121	925	967
85°	166	40	176	31	166	229
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9
2.5°	2926.5	2937.1	2945.1	2950.4	2953.1	2953.1	2954.4	2955.8	2973.1	2981.0	2986.4
5°	2929.1	2939.8	2955.8	2977.1	2995.7	3011.7	3025.0	3043.6	3062.2	3082.2	3088.8
7.5°	2917.2	2930.5	2962.4	3001.0	3036.9	3062.2	3079.5	3091.5	3100.8	3102.2	3108.8
10°	2906.5	2930.5	2974.4	3025.0	3070.2	3100.8	3100.8	3094.2	3103.5	3067.6	3031.6
12.5°	2887.9	2914.5	2974.4	3040.9	3083.5	3095.5	3090.2	3063.6	3009.0	2965.1	2945.1
15°	2865.3	2901.2	2975.7	3050.3	3086.2	3090.2	3039.6	2971.7	2930.5	2903.9	2870.6
17.5°	2840.0	2887.9	2977.1	3051.6	3064.9	3046.3	2950.4	2907.9	2865.3	2802.7	2757.5
20°	2816.0	2862.6	2966.4	3033.0	3040.9	2957.1	2882.6	2837.3	2765.5	2710.9	2690.9
22.5°	2778.8	2833.3	2957.1	3007.7	2977.1	2879.9	2808.0	2736.2	2671.0	2655.0	2631.0
25°	2748.2	2805.4	2935.8	2977.1	2895.9	2809.4	2725.5	2641.7	2611.1	2588.5	2567.2
27.5°	2706.9	2777.4	2907.9	2921.2	2809.4	2733.5	2611.1	2573.8	2545.9	2520.6	2511.3
30°	2661.7	2748.2	2869.3	2844.0	2737.5	2625.7	2535.2	2500.6	2480.7	2454.0	2443.4
32.5°	2609.7	2704.2	2826.7	2754.8	2660.3	2520.6	2462.0	2435.4	2408.8	2388.8	2322.3
35°	2556.5	2665.6	2776.1	2669.6	2567.2	2440.7	2388.8	2364.9	2339.6	2266.4	2197.2
37.5°	2502.0	2623.1	2714.9	2577.8	2443.4	2358.2	2314.3	2287.7	2230.5	2137.3	2102.7
40°	2439.4	2571.2	2636.4	2483.3	2335.6	2274.4	2233.1	2206.5	2077.4	2036.2	2025.5
42.5°	2376.9	2520.6	2540.5	2391.5	2246.4	2185.2	2150.6	2062.8	1974.9	1953.7	1957.6
45°	2317.0	2466.0	2435.4	2261.1	2153.3	2102.7	2044.1	1923.0	1876.5	1887.1	1889.8
47.5°	2245.1	2400.8	2325.0	2130.7	2057.5	2006.9	1876.5	1803.3	1796.6	1811.3	1819.2
50°	2167.9	2327.6	2207.8	2012.2	1953.7	1893.8	1746.0	1708.8	1716.8	1731.4	1740.7
52.5°	2096.1	2245.1	2086.7	1901.7	1851.2	1714.1	1614.3	1620.9	1634.3	1651.6	1656.9
55°	2008.2	2145.3	1957.6	1790.0	1742.1	1562.4	1517.1	1533.1	1546.4	1561.1	1571.7
57.5°	1916.4	2030.8	1804.6	1664.9	1587.7	1428.0	1432.0	1442.6	1451.9	1469.2	606.9
60°	1811.3	1900.4	1636.9	1549.1	1396.0	1321.5	1325.5	1344.1	1353.4	755.9	417.9
62.5°	1702.1	1748.7	1485.2	1417.3	1220.4	1215.0	1233.7	1241.7	845.1	399.2	391.3
65°	1577.0	1567.7	1336.1	1228.4	1100.6	1105.9	1125.9	1086.0	374.0	374.0	371.3
67.5°	1438.6	1382.7	1191.1	1016.8	984.8	996.8	1018.1	355.3	346.0	348.7	339.4
70°	1280.3	1201.7	1040.7	861.0	871.7	883.7	343.4	322.1	318.1	311.4	292.8
72.5°	1112.6	1004.8	851.7	747.9	754.6	473.8	300.8	290.1	276.8	263.5	243.5
75°	924.9	785.2	625.5	625.5	634.8	270.2	262.2	244.9	230.2	212.9	201.0
77.5°	725.3	604.2	485.8	504.4	246.2	226.2	211.6	193.0	181.0	170.3	163.7
80°	531.0	421.9	366.0	327.4	191.6	171.7	157.0	146.4	141.1	134.4	126.4
82.5°	348.7	254.2	254.2	154.4	134.4	118.4	114.5	106.5	101.1	97.2	93.2
85°	166.4	147.7	111.8	94.5	83.8	75.9	73.2	69.2	69.2	67.9	66.5
87.5°	61.2	66.5	49.2	47.9	45.2	43.9	45.2	45.2	46.6	45.2	43.9
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9
2.5°	2999.7	3010.3	3018.3	3031.6	3048.9	3063.6	3076.9	3095.5	3124.8	3132.8	3139.4
5°	3088.8	3092.8	3102.2	3112.8	3115.5	3122.1	3120.8	3128.8	3132.8	3142.1	3122.1
7.5°	3094.2	3072.9	3047.6	3025.0	3009.0	2994.4	2985.0	2999.7	3007.7	3014.3	2994.4
10°	2982.4	2957.1	2942.5	2929.1	2913.2	2890.6	2859.9	2866.6	2863.9	2863.9	2857.3
12.5°	2911.8	2875.9	2838.7	2805.4	2790.7	2789.4	2790.7	2805.4	2805.4	2804.0	2796.1
15°	2801.4	2766.8	2748.2	2740.2	2740.2	2736.2	2736.2	2752.1	2748.2	2748.2	2744.2
17.5°	2728.2	2704.2	2690.9	2681.6	2677.6	2684.3	2692.3	2698.9	2700.2	2694.9	2673.6
20°	2668.3	2645.7	2629.7	2632.4	2631.0	2635.0	2639.0	2616.4	2588.5	2551.2	2533.9
22.5°	2605.8	2588.5	2576.5	2576.5	2560.5	2535.2	2498.0	2490.0	2486.0	2468.7	2454.0
25°	2545.9	2525.9	2508.6	2455.4	2422.1	2426.1	2419.4	2406.1	2404.8	2403.5	2408.8
27.5°	2486.0	2434.1	2367.5	2359.6	2346.2	2344.9	2352.9	2359.6	2359.6	2364.9	2371.5
30°	2362.2	2302.3	2290.4	2275.7	2281.0	2299.7	2303.7	2313.0	2315.6	2325.0	2330.3
32.5°	2249.1	2222.5	2211.8	2218.5	2235.8	2251.8	2261.1	2265.1	2271.7	2279.7	2286.4
35°	2157.3	2149.3	2158.6	2173.2	2190.5	2203.8	2211.8	2219.8	2226.5	2233.1	2238.4
37.5°	2089.4	2094.7	2108.0	2126.7	2144.0	2154.6	2161.3	2170.6	2179.9	2187.9	2155.9
40°	2025.5	2038.8	2053.5	2073.4	2088.1	2098.7	2105.4	2117.3	2037.5	922.3	505.7
42.5°	1969.6	1984.3	1994.9	2010.9	2026.8	2034.8	1976.3	882.3	499.1	496.4	503.1
45°	1901.7	1913.7	1931.0	1943.0	1957.6	1285.6	491.1	496.4	488.4	493.7	496.4
47.5°	1832.5	1851.2	1860.5	1775.3	528.3	488.4	483.1	488.4	483.1	489.7	485.8
50°	1754.0	1776.7	1264.3	477.8	473.8	471.1	476.4	473.8	477.8	483.1	472.4
52.5°	1674.2	1036.7	463.1	460.5	463.1	460.5	469.8	463.1	464.5	459.1	445.8
55°	566.9	448.5	444.5	443.2	451.1	451.1	451.1	440.5	433.8	420.5	411.2
57.5°	433.8	433.8	432.5	433.8	431.2	428.5	416.5	407.2	397.9	379.3	374.0
60°	411.2	411.2	411.2	411.2	399.2	393.9	375.3	367.3	351.3	342.0	336.7
62.5°	392.6	389.9	378.0	374.0	360.7	346.0	335.4	327.4	311.4	306.1	302.1
65°	366.0	356.7	342.0	326.1	319.4	303.4	298.1	286.1	278.1	274.2	271.5
67.5°	322.1	308.8	296.8	286.1	274.2	268.8	262.2	252.9	247.5	244.9	242.2
70°	275.5	266.2	254.2	247.5	239.5	235.6	226.2	223.6	219.6	215.6	211.6
72.5°	230.2	224.9	219.6	210.3	207.6	204.9	195.6	190.3	185.0	179.7	177.0
75°	193.0	189.0	186.3	178.3	174.3	166.4	159.7	155.7	151.7	147.7	145.1
77.5°	158.4	155.7	147.7	142.4	139.7	133.1	130.4	131.8	129.1	123.8	121.1
80°	123.8	121.1	114.5	114.5	111.8	109.1	106.5	103.8	101.1	97.2	94.5
82.5°	94.5	91.8	89.2	86.5	83.8	82.5	81.2	78.5	75.9	73.2	71.9
85°	66.5	65.2	63.9	62.5	61.2	59.9	58.6	55.9	53.2	51.9	50.6
87.5°	45.2	43.9	42.6	41.3	39.9	38.6	37.3	35.9	33.3	31.9	30.6
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9
2.5°	3139.4	3146.1	3139.4	3124.8	3115.5	3111.5	3119.5	3119.5	3124.8	3131.4	3132.8
5°	3090.2	3074.2	3055.6	3036.9	3027.6	3022.3	3007.7	3010.3	3014.3	3017.0	3019.6
7.5°	2967.7	2946.4	2921.2	2897.2	2887.9	2879.9	2862.6	2862.6	2862.6	2863.9	2871.9
10°	2842.6	2833.3	2822.7	2806.7	2794.7	2790.7	2776.1	2780.1	2777.4	2781.4	2790.7
12.5°	2784.1	2773.4	2764.1	2748.2	2734.8	2729.5	2722.9	2726.9	2725.5	2732.2	2740.2
15°	2730.9	2725.5	2714.9	2702.9	2690.9	2680.3	2656.3	2648.3	2643.0	2636.4	2645.7
17.5°	2643.0	2605.8	2580.5	2561.8	2548.5	2539.2	2532.6	2532.6	2536.6	2540.5	2548.5
20°	2523.2	2512.6	2500.6	2480.7	2467.4	2462.0	2458.0	2458.0	2464.7	2470.0	2484.7
22.5°	2440.7	2439.4	2435.4	2426.1	2419.4	2419.4	2420.8	2423.4	2432.7	2440.7	2455.4
25°	2402.1	2407.5	2404.8	2399.5	2395.5	2396.8	2394.2	2396.8	2406.1	2414.1	2426.1
27.5°	2371.5	2379.5	2376.9	2368.9	2362.2	2364.9	2368.9	2366.2	2374.2	2383.5	2392.8
30°	2330.3	2331.6	2336.9	2327.6	2325.0	2328.9	2330.3	2332.9	2340.9	2347.6	2355.6
32.5°	2283.7	2294.3	2293.0	2283.7	2283.7	2287.7	2289.0	2199.9	2033.5	1751.4	1674.2
35°	2238.4	2250.4	2230.5	1880.5	1301.5	694.7	536.3	517.7	521.7	524.3	527.0
37.5°	1655.5	785.2	500.4	504.4	508.4	512.4	516.4	520.4	524.3	528.3	529.7
40°	497.7	496.4	500.4	505.7	509.7	512.4	517.7	521.7	525.7	529.7	531.0
42.5°	492.4	495.1	499.1	504.4	509.7	515.0	519.0	524.3	527.0	529.7	531.0
45°	489.7	495.1	500.4	504.4	508.4	511.0	513.7	515.0	513.7	513.7	516.4
47.5°	485.8	491.1	492.4	491.1	492.4	491.1	491.1	491.1	487.1	485.8	485.8
50°	471.1	471.1	468.5	463.1	461.8	460.5	457.8	456.5	451.1	449.8	449.8
52.5°	440.5	439.2	435.2	428.5	425.9	423.2	421.9	420.5	415.2	412.6	413.9
55°	404.6	401.9	397.9	389.9	388.6	385.9	384.6	383.3	378.0	380.6	376.6
57.5°	371.3	366.0	360.7	359.3	354.0	352.7	351.3	350.0	346.0	347.3	344.7
60°	331.4	330.0	327.4	322.1	322.1	320.7	320.7	318.1	315.4	314.1	314.1
62.5°	302.1	298.1	295.4	295.4	291.5	291.5	291.5	288.8	286.1	287.5	286.1
65°	270.2	268.8	267.5	264.8	264.8	263.5	263.5	260.8	256.8	258.2	255.5
67.5°	243.5	240.9	238.2	236.9	231.6	228.9	227.6	226.2	220.9	222.2	219.6
70°	210.3	206.3	203.6	201.0	197.0	194.3	194.3	191.6	187.6	189.0	186.3
72.5°	175.7	173.0	170.3	169.0	165.0	163.7	162.4	161.0	157.0	158.4	157.0
75°	146.4	146.4	145.1	143.7	139.7	135.7	133.1	131.8	129.1	130.4	127.8
77.5°	121.1	118.4	115.8	115.8	111.8	109.1	106.5	106.5	106.5	105.1	103.8
80°	94.5	91.8	91.8	90.5	87.8	85.2	83.8	83.8	82.5	82.5	81.2
82.5°	71.9	69.2	67.9	67.9	65.2	63.9	62.5	61.2	61.2	61.2	59.9
85°	50.6	47.9	46.6	46.6	43.9	42.6	42.6	41.3	41.3	39.9	39.9
87.5°	30.6	29.3	27.9	27.9	25.3	24.0	24.0	24.0	22.6	22.6	21.3
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-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°	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9
2.5°	3132.8	3132.8	3123.4	3126.1	3122.1	3127.4	3120.8	3120.8	3128.8	3128.8	3134.1
5°	3021.0	3014.3	3013.0	3010.3	2997.0	3002.3	2995.7	2989.0	2998.3	2998.3	3010.3
7.5°	2867.9	2856.0	2861.3	2853.3	2845.3	2833.3	2837.3	2832.0	2838.7	2848.0	2859.9
10°	2789.4	2778.8	2785.4	2777.4	2781.4	2764.1	2765.5	2766.8	2773.4	2776.1	2786.7
12.5°	2738.8	2736.2	2733.5	2730.9	2733.5	2724.2	2718.9	2720.2	2722.9	2724.2	2732.2
15°	2632.4	2615.1	2620.4	2601.8	2603.1	2604.4	2593.8	2604.4	2603.1	2620.4	2636.4
17.5°	2545.9	2545.9	2536.6	2528.6	2523.2	2521.9	2513.9	2519.3	2513.9	2524.6	2528.6
20°	2486.0	2484.7	2483.3	2479.3	2466.0	2467.4	2471.3	2459.4	2458.0	2456.7	2464.7
22.5°	2458.0	2459.4	2454.0	2454.0	2442.1	2444.7	2446.1	2432.7	2434.1	2430.1	2434.1
25°	2428.8	2431.4	2424.8	2424.8	2422.1	2420.8	2414.1	2416.8	2408.8	2402.1	2408.8
27.5°	2394.2	2399.5	2394.2	2396.8	2391.5	2388.8	2384.8	2382.2	2374.2	2372.9	2376.9
30°	2362.2	2364.9	2363.5	2356.9	2355.6	2347.6	2351.6	2343.6	2335.6	2336.9	2339.6
32.5°	1211.1	1156.5	891.7	805.1	797.2	826.4	979.5	1192.4	1545.1	1887.1	2133.3
35°	528.3	528.3	528.3	527.0	527.0	525.7	524.3	523.0	521.7	520.4	519.0
37.5°	531.0	531.0	531.0	531.0	529.7	528.3	528.3	525.7	524.3	523.0	521.7
40°	532.3	533.7	533.7	533.7	532.3	532.3	531.0	528.3	527.0	524.3	521.7
42.5°	531.0	532.3	532.3	531.0	531.0	529.7	529.7	528.3	527.0	525.7	524.3
45°	513.7	515.0	512.4	512.4	511.0	511.0	511.0	511.0	511.0	512.4	512.4
47.5°	483.1	483.1	481.8	480.4	480.4	479.1	480.4	479.1	481.8	483.1	485.8
50°	447.2	447.2	444.5	443.2	443.2	443.2	443.2	444.5	445.8	448.5	451.1
52.5°	409.9	409.9	408.6	407.2	405.9	405.9	409.9	408.6	409.9	411.2	415.2
55°	374.0	375.3	372.6	372.6	371.3	371.3	371.3	372.6	374.0	375.3	379.3
57.5°	343.4	343.4	340.7	340.7	340.7	339.4	343.4	340.7	342.0	343.4	346.0
60°	312.7	311.4	311.4	310.1	310.1	310.1	312.7	311.4	311.4	312.7	315.4
62.5°	284.8	284.8	283.5	283.5	282.1	282.1	284.8	283.5	283.5	284.8	286.1
65°	252.9	252.9	251.5	250.2	254.2	250.2	254.2	251.5	254.2	255.5	258.2
67.5°	216.9	216.9	216.9	215.6	215.6	218.3	219.6	216.9	218.3	220.9	222.2
70°	185.0	185.0	183.7	183.7	183.7	186.3	187.6	185.0	186.3	187.6	190.3
72.5°	157.0	154.4	154.4	153.0	155.7	155.7	157.0	155.7	157.0	157.0	159.7
75°	129.1	126.4	126.4	126.4	129.1	127.8	129.1	127.8	129.1	129.1	130.4
77.5°	103.8	102.5	101.1	101.1	103.8	103.8	103.8	102.5	103.8	105.1	106.5
80°	81.2	79.8	78.5	78.5	81.2	81.2	81.2	82.5	81.2	82.5	83.8
82.5°	59.9	58.6	57.2	59.9	59.9	59.9	59.9	61.2	59.9	61.2	62.5
85°	39.9	38.6	37.3	39.9	39.9	39.9	39.9	41.3	39.9	41.3	42.6
87.5°	21.3	20.0	20.0	21.3	21.3	21.3	22.6	22.6	22.6	24.0	24.0
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-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°	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9
2.5°	3142.1	3146.1	3144.7	3136.8	3128.8	3119.5	3112.8	3114.1	3127.4	3131.4	3119.5
5°	3010.3	3035.6	3035.6	3052.9	3043.6	3035.6	3040.9	3070.2	3084.9	3107.5	3115.5
7.5°	2874.6	2886.6	2885.2	2902.5	2899.9	2899.9	2903.9	2942.5	2961.1	2979.7	2985.0
10°	2798.7	2810.7	2809.4	2810.7	2806.7	2797.4	2797.4	2814.7	2830.7	2840.0	2842.6
12.5°	2744.2	2750.8	2749.5	2749.5	2746.8	2738.8	2737.5	2752.1	2769.4	2781.4	2782.8
15°	2663.0	2681.6	2685.6	2702.9	2698.9	2688.3	2690.9	2702.9	2713.6	2724.2	2720.2
17.5°	2541.9	2551.2	2552.5	2559.2	2556.5	2556.5	2572.5	2616.4	2645.7	2671.0	2673.6
20°	2472.7	2479.3	2476.7	2491.3	2484.7	2483.3	2487.3	2505.9	2519.3	2531.2	2552.5
22.5°	2439.4	2444.7	2440.7	2442.1	2430.1	2419.4	2416.8	2431.4	2446.1	2462.0	2462.0
25°	2411.5	2415.4	2414.1	2411.5	2402.1	2387.5	2384.8	2387.5	2392.8	2394.2	2384.8
27.5°	2378.2	2380.8	2380.8	2382.2	2370.2	2356.9	2354.2	2351.6	2356.9	2355.6	2340.9
30°	2343.6	2339.6	2340.9	2342.3	2331.6	2319.6	2314.3	2313.0	2318.3	2317.0	2302.3
32.5°	2261.1	2291.7	2294.3	2297.0	2287.7	2277.0	2271.7	2267.7	2270.4	2269.1	2255.7
35°	517.7	527.0	645.5	1461.2	1984.3	2197.2	2219.8	2214.5	2215.8	2215.8	2205.2
37.5°	519.0	517.7	516.4	512.4	508.4	505.7	874.4	1864.5	2159.9	2161.3	2151.9
40°	519.0	517.7	516.4	513.7	508.4	504.4	497.7	492.4	504.4	1109.9	2030.8
42.5°	521.7	519.0	516.4	513.7	508.4	503.1	497.7	491.1	495.1	492.4	485.8
45°	513.7	512.4	512.4	511.0	508.4	503.1	496.4	488.4	484.4	488.4	481.8
47.5°	488.4	489.7	493.7	495.1	495.1	496.4	492.4	487.1	480.4	484.4	476.4
50°	453.8	456.5	457.8	464.5	467.1	472.4	473.8	473.8	472.4	477.8	472.4
52.5°	416.5	419.2	425.9	428.5	431.2	439.2	441.8	445.8	448.5	456.5	461.8
55°	380.6	381.9	384.6	389.9	393.9	400.6	404.6	408.6	415.2	419.2	435.2
57.5°	347.3	348.7	354.0	355.3	358.0	363.3	367.3	372.6	378.0	380.6	399.2
60°	315.4	316.7	320.7	322.1	323.4	328.7	332.7	336.7	340.7	343.4	356.7
62.5°	287.5	287.5	291.5	291.5	292.8	296.8	299.4	302.1	306.1	307.4	314.1
65°	259.5	260.8	263.5	263.5	264.8	267.5	268.8	270.2	274.2	274.2	279.5
67.5°	224.9	226.2	230.2	232.9	234.2	239.5	240.9	242.2	244.9	246.2	248.9
70°	191.6	193.0	197.0	198.3	199.6	203.6	206.3	210.3	214.3	218.3	220.9
72.5°	161.0	162.4	166.4	166.4	170.3	171.7	174.3	175.7	179.7	182.3	186.3
75°	131.8	133.1	137.1	137.1	141.1	142.4	143.7	145.1	147.7	150.4	153.0
77.5°	107.8	107.8	113.1	115.8	118.4	118.4	119.8	119.8	119.8	121.1	123.8
80°	85.2	85.2	89.2	91.8	94.5	94.5	95.8	97.2	98.5	98.5	99.8
82.5°	63.9	63.9	67.9	69.2	71.9	71.9	71.9	73.2	74.5	73.2	75.9
85°	43.9	43.9	46.6	47.9	50.6	50.6	50.6	51.9	53.2	51.9	53.2
87.5°	25.3	26.6	27.9	29.3	30.6	31.9	31.9	31.9	33.3	33.3	34.6
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-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°	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9
2.5°	3106.1	3090.2	3088.8	3070.2	3064.9	3066.2	3051.6	3046.3	3022.3	3017.0	2991.7
5°	3118.1	3126.1	3122.1	3120.8	3124.8	3122.1	3111.5	3106.1	3102.2	3091.5	3070.2
7.5°	2986.4	2991.7	2995.7	3013.0	3027.6	3052.9	3079.5	3096.8	3110.1	3112.8	3095.5
10°	2852.0	2877.2	2894.5	2921.2	2942.5	2957.1	2973.1	2987.7	3026.3	3064.9	3087.5
12.5°	2782.8	2789.4	2788.1	2802.7	2817.4	2856.0	2893.2	2914.5	2943.8	2961.1	3002.3
15°	2724.2	2725.5	2729.5	2740.2	2748.2	2761.5	2778.8	2810.7	2869.3	2895.9	2918.5
17.5°	2671.0	2671.0	2673.6	2682.9	2693.6	2705.6	2716.2	2729.5	2758.8	2802.7	2858.6
20°	2585.8	2623.1	2627.0	2625.7	2631.0	2653.7	2656.3	2680.3	2694.9	2712.2	2766.8
22.5°	2459.4	2482.0	2513.9	2563.2	2581.8	2592.4	2600.4	2611.1	2633.7	2653.7	2676.3
25°	2390.2	2404.8	2414.1	2428.8	2467.4	2529.9	2541.9	2553.9	2568.5	2583.1	2611.1
27.5°	2328.9	2327.6	2334.3	2347.6	2358.2	2391.5	2450.0	2496.6	2499.3	2520.6	2544.5
30°	2285.0	2277.0	2267.7	2265.1	2279.7	2297.0	2314.3	2387.5	2438.1	2448.7	2474.0
32.5°	2243.8	2230.5	2217.2	2206.5	2197.2	2211.8	2222.5	2254.4	2319.6	2380.8	2394.2
35°	2193.2	2179.9	2163.9	2151.9	2137.3	2136.0	2134.6	2165.3	2186.5	2259.7	2323.6
37.5°	2141.3	2126.7	2113.4	2100.0	2085.4	2074.8	2068.1	2076.1	2096.1	2128.0	2234.5
40°	2086.7	2069.4	2056.1	2045.5	2025.5	2017.5	2004.2	1998.9	2000.2	2028.2	2084.1
42.5°	1247.0	1988.3	1994.9	1982.9	1965.6	1955.0	1940.3	1933.7	1920.4	1933.7	1965.6
45°	480.4	485.8	1454.6	1921.7	1900.4	1887.1	1873.8	1867.1	1852.5	1841.9	1871.1
47.5°	471.1	476.4	465.8	660.1	1813.9	1817.9	1801.9	1795.3	1780.6	1772.7	1764.7
50°	464.5	468.5	460.5	463.1	453.8	1662.2	1728.7	1720.8	1704.8	1695.5	1679.5
52.5°	457.8	457.8	452.5	445.8	443.2	444.5	1398.7	1644.9	1626.3	1617.0	1595.7
55°	436.5	439.2	444.5	433.8	431.2	429.9	425.9	1332.2	1539.8	1529.1	1510.5
57.5°	404.6	409.9	424.5	421.9	421.9	411.2	408.6	408.6	1236.3	1440.0	1421.3
60°	367.3	372.6	388.6	393.9	397.9	395.3	392.6	391.3	385.9	1302.9	1326.8
62.5°	328.7	334.0	339.4	356.7	362.0	368.6	376.6	372.6	367.3	367.3	1227.0
65°	287.5	295.4	298.1	314.1	320.7	332.7	339.4	348.7	346.0	344.7	351.3
67.5°	251.5	260.8	262.2	268.8	280.8	286.1	294.1	311.4	319.4	322.1	324.7
70°	220.9	226.2	230.2	232.9	240.9	242.2	256.8	268.8	280.8	294.1	298.1
72.5°	190.3	194.3	202.3	199.6	202.3	207.6	215.6	223.6	235.6	254.2	266.2
75°	155.7	158.4	163.7	166.4	171.7	175.7	181.0	187.6	198.3	207.6	223.6
77.5°	125.1	126.4	130.4	131.8	137.1	141.1	150.4	154.4	161.0	167.7	177.0
80°	101.1	101.1	102.5	102.5	106.5	110.5	117.1	121.1	129.1	134.4	134.4
82.5°	77.2	77.2	81.2	81.2	83.8	83.8	87.8	87.8	91.8	94.5	97.2
85°	54.6	55.9	58.6	57.2	59.9	58.6	61.2	63.9	65.2	63.9	62.5
87.5°	35.9	35.9	38.6	37.3	38.6	38.6	41.3	41.3	42.6	42.6	41.3
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-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°	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9
2.5°	2982.4	2962.4	2950.4	2935.8	2931.8	2927.8	2933.1	2933.1	2925.2	2918.5	2906.5
5°	3051.6	3030.3	3007.7	2983.7	2961.1	2937.1	2927.8	2926.5	2911.8	2903.9	2899.9
7.5°	3087.5	3076.9	3051.6	3018.3	2983.7	2941.1	2922.5	2911.8	2897.2	2894.5	2894.5
10°	3091.5	3079.5	3066.2	3042.3	3002.3	2946.4	2910.5	2889.2	2875.9	2885.2	2902.5
12.5°	3052.9	3075.5	3063.6	3047.6	3015.7	2947.8	2895.9	2863.9	2859.9	2883.9	2929.1
15°	2954.4	3021.0	3054.2	3038.3	3013.0	2945.1	2871.9	2834.7	2834.7	2883.9	2942.5
17.5°	2879.9	2931.8	3013.0	3026.3	2997.0	2939.8	2849.3	2805.4	2817.4	2889.2	2951.8
20°	2818.7	2850.6	2929.1	3003.7	2975.7	2927.8	2816.0	2770.8	2794.7	2881.2	2965.1
22.5°	2722.9	2786.7	2834.7	2945.1	2954.4	2905.2	2782.8	2728.2	2776.1	2881.2	2958.4
25°	2629.7	2706.9	2757.5	2865.3	2922.5	2877.2	2752.1	2682.9	2756.1	2877.2	2953.1
27.5°	2564.5	2600.4	2692.3	2769.4	2874.6	2840.0	2710.9	2633.7	2730.9	2856.0	2922.5
30°	2495.3	2519.3	2609.7	2682.9	2810.7	2797.4	2668.3	2579.1	2698.9	2836.0	2842.6
32.5°	2419.4	2446.1	2492.6	2599.1	2721.5	2757.5	2620.4	2524.6	2664.3	2805.4	2749.5
35°	2342.3	2362.2	2399.5	2513.9	2617.7	2697.6	2561.8	2462.0	2640.4	2758.8	2660.3
37.5°	2265.1	2286.4	2318.3	2414.1	2508.6	2641.7	2511.3	2399.5	2596.4	2676.3	2567.2
40°	2191.9	2203.8	2237.1	2297.0	2418.1	2584.5	2454.0	2334.3	2551.2	2571.2	2440.7
42.5°	2057.5	2117.3	2148.0	2195.9	2315.6	2505.9	2387.5	2265.1	2500.6	2466.0	2314.3
45°	1912.4	2042.8	2056.1	2104.0	2225.1	2422.1	2325.0	2197.2	2452.7	2375.5	2194.5
47.5°	1794.0	1888.4	1965.6	2005.6	2117.3	2323.6	2266.4	2140.0	2380.8	2261.1	2077.4
50°	1688.8	1739.4	1879.1	1908.4	1988.3	2205.2	2197.2	2073.4	2281.0	2117.3	1963.0
52.5°	1586.3	1622.3	1748.7	1811.3	1876.5	2077.4	2114.7	2008.2	2171.9	1973.6	1847.2
55°	1497.2	1509.2	1578.4	1710.1	1768.7	1948.3	2024.2	1932.4	2033.5	1836.5	1735.4
57.5°	1405.4	1394.7	1445.3	1614.3	1656.9	1816.6	1928.4	1855.2	1921.7	1696.8	1619.6
60°	1309.5	1294.9	1316.2	1428.0	1538.4	1686.2	1815.2	1770.0	1786.0	1558.4	1490.5
62.5°	1209.7	1195.1	1188.4	1259.0	1422.7	1551.7	1700.8	1675.5	1619.6	1432.0	1330.8
65°	1105.9	1091.3	1080.6	1108.6	1294.9	1377.4	1573.0	1566.4	1437.3	1298.9	1120.6
67.5°	336.7	992.8	970.2	968.8	1091.3	1219.0	1434.6	1424.0	1253.6	1156.5	964.8
70°	303.4	805.1	855.7	843.7	897.0	1058.0	1276.3	1268.3	1075.3	927.6	853.1
72.5°	278.1	284.8	755.9	742.6	754.6	899.6	1111.2	1089.9	911.6	732.0	737.3
75°	238.2	250.2	260.8	626.8	610.8	745.3	931.6	898.3	751.9	604.2	616.2
77.5°	194.3	208.9	216.9	456.5	493.7	531.0	743.9	700.0	517.7	483.1	230.2
80°	145.1	157.0	170.3	182.3	375.3	371.3	552.3	508.4	360.7	300.8	179.7
82.5°	106.5	110.5	118.4	131.8	149.1	248.9	355.3	312.7	250.2	137.1	123.8
85°	66.5	71.9	75.9	79.8	90.5	149.1	175.7	139.7	105.1	83.8	78.5
87.5°	42.6	42.6	41.3	42.6	43.9	53.2	59.9	57.2	45.2	42.6	42.6
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-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°	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9
2.5°	2893.2	2874.6	2874.6	2869.3	2873.3	2873.3	2871.9	2873.3	2882.6	2887.9	2897.2
5°	2891.9	2886.6	2898.5	2913.2	2930.5	2951.8	2957.1	2975.7	2993.0	3015.7	3039.6
7.5°	2909.2	2927.8	2950.4	2974.4	3009.0	3034.3	3056.9	3079.5	3095.5	3116.8	3130.1
10°	2934.5	2971.7	3010.3	3040.9	3078.2	3099.5	3114.1	3116.8	3094.2	3058.2	3029.0
12.5°	2970.4	3014.3	3050.3	3079.5	3096.8	3088.8	3046.3	3002.3	2977.1	2939.8	2887.9
15°	3001.0	3040.9	3078.2	3066.2	3019.6	2975.7	2942.5	2890.6	2840.0	2805.4	2782.8
17.5°	3014.3	3052.9	3039.6	2977.1	2933.1	2882.6	2814.7	2774.8	2741.5	2714.9	2701.6
20°	3022.3	3015.7	2943.8	2898.5	2813.4	2766.8	2722.9	2685.6	2660.3	2647.0	2644.4
22.5°	3001.0	2919.8	2858.6	2777.4	2714.9	2676.3	2641.7	2611.1	2593.8	2583.1	2576.5
25°	2930.5	2836.0	2745.5	2681.6	2628.4	2595.1	2568.5	2543.2	2521.9	2516.6	2503.3
27.5°	2832.0	2754.8	2635.0	2585.8	2539.2	2523.2	2494.0	2468.7	2450.0	2434.1	2391.5
30°	2750.8	2628.4	2541.9	2496.6	2468.7	2450.0	2416.8	2390.2	2358.2	2299.7	2275.7
32.5°	2651.0	2529.9	2447.4	2422.1	2387.5	2371.5	2334.3	2275.7	2226.5	2202.5	2201.2
35°	2521.9	2422.1	2362.2	2339.6	2311.6	2285.0	2207.8	2154.6	2130.7	2133.3	2153.3
37.5°	2414.1	2325.0	2286.4	2254.4	2222.5	2154.6	2089.4	2064.1	2070.8	2084.1	2093.4
40°	2305.0	2237.1	2193.2	2167.9	2096.1	2029.5	1994.9	2004.2	2016.2	2025.5	2037.5
42.5°	2198.5	2150.6	2106.7	2057.5	1959.0	1923.0	1931.0	1943.0	1953.7	1967.0	1978.9
45°	2097.4	2054.8	2004.2	1892.4	1843.2	1852.5	1864.5	1873.8	1889.8	1899.1	1911.1
47.5°	2001.6	1956.3	1867.1	1768.7	1763.3	1782.0	1792.6	1804.6	1816.6	1792.6	988.8
50°	1893.8	1847.2	1711.4	1674.2	1686.2	1703.5	1716.8	1728.7	1539.8	612.2	471.1
52.5°	1787.3	1668.9	1582.4	1593.0	1605.0	1624.9	1634.3	1213.7	483.1	460.5	461.8
55°	1668.9	1517.1	1491.9	1505.2	1515.8	1535.8	1018.1	445.8	443.2	441.8	452.5
57.5°	1482.5	1390.7	1401.4	1414.7	1425.3	1006.1	433.8	431.2	432.5	433.8	435.2
60°	1316.2	1296.2	1308.2	1320.2	934.2	419.2	411.2	412.6	417.9	413.9	403.2
62.5°	1184.4	1200.4	1212.4	1062.0	397.9	393.9	397.9	393.9	384.6	378.0	364.6
65°	1083.3	1099.3	1108.6	374.0	372.6	378.0	374.0	360.7	346.0	327.4	323.4
67.5°	976.8	992.8	355.3	346.0	351.3	344.7	328.7	312.7	302.1	286.1	279.5
70°	866.4	371.3	322.1	320.7	311.4	300.8	283.5	267.5	254.2	247.5	240.9
72.5°	625.5	294.1	290.1	279.5	263.5	248.9	234.2	224.9	218.3	214.3	210.3
75°	260.8	255.5	243.5	224.9	208.9	202.3	191.6	185.0	182.3	174.3	171.7
77.5°	218.3	207.6	190.3	177.0	167.7	163.7	155.7	147.7	143.7	142.4	137.1
80°	167.7	153.0	145.1	138.4	135.7	126.4	117.1	113.1	110.5	109.1	105.1
82.5°	114.5	109.1	103.8	94.5	94.5	90.5	86.5	83.8	81.2	81.2	78.5
85°	74.5	70.5	69.2	65.2	65.2	62.5	61.2	59.9	58.6	57.2	55.9
87.5°	42.6	42.6	43.9	42.6	42.6	41.3	39.9	38.6	37.3	37.3	34.6
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-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°	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9
2.5°	2909.2	2922.5	2925.2	2970.4	2995.7	2994.4	2986.4	3010.3	2995.7	2987.7	2995.7
5°	3063.6	3079.5	3092.8	3142.1	3159.4	3167.4	3166.0	3179.3	3168.7	3159.4	3159.4
7.5°	3139.4	3144.7	3150.1	3138.1	3130.1	3116.8	3096.8	3067.6	3052.9	3036.9	3017.0
10°	3014.3	2997.0	3003.7	2979.7	2959.8	2945.1	2926.5	2902.5	2882.6	2867.9	2845.3
12.5°	2861.3	2859.9	2862.6	2866.6	2846.6	2834.7	2820.0	2802.7	2788.1	2772.1	2753.5
15°	2768.1	2769.4	2780.1	2776.1	2769.4	2762.8	2746.8	2741.5	2728.2	2710.9	2700.2
17.5°	2701.6	2708.2	2718.9	2713.6	2702.9	2696.3	2684.3	2672.3	2660.3	2647.0	2631.0
20°	2643.0	2649.7	2656.3	2649.7	2629.7	2620.4	2604.4	2567.2	2540.5	2513.9	2490.0
22.5°	2579.1	2583.1	2577.8	2556.5	2505.9	2482.0	2463.4	2452.7	2430.1	2415.4	2400.8
25°	2499.3	2476.7	2442.1	2418.1	2398.1	2387.5	2379.5	2378.2	2375.5	2372.9	2366.2
27.5°	2368.9	2360.9	2342.3	2332.9	2334.3	2338.3	2339.6	2343.6	2339.6	2334.3	2328.9
30°	2271.7	2275.7	2277.0	2279.7	2286.4	2290.4	2291.7	2297.0	2294.3	2290.4	2287.7
32.5°	2210.5	2219.8	2225.1	2233.1	2237.1	2243.8	2243.8	2251.8	2243.8	2242.4	2239.8
35°	2159.9	2167.9	2170.6	2182.6	2186.5	2193.2	2193.2	2199.9	2193.2	2125.3	1678.2
37.5°	2109.4	2117.3	2122.7	2133.3	2134.6	2138.6	1973.6	1443.9	931.6	721.3	551.0
40°	2049.5	2058.8	2064.1	2068.1	1453.3	922.3	634.8	516.4	516.4	520.4	524.3
42.5°	1985.6	1992.2	1388.1	807.8	503.1	501.7	505.7	509.7	513.7	519.0	524.3
45°	1561.1	787.8	500.4	488.4	492.4	497.7	503.1	508.4	515.0	520.4	523.0
47.5°	512.4	480.4	487.1	481.8	488.4	495.1	500.4	505.7	507.0	508.4	507.0
50°	473.8	473.8	477.8	477.8	483.1	485.8	485.8	485.8	480.4	479.1	475.1
52.5°	457.8	468.5	463.1	465.8	463.1	459.1	455.1	451.1	443.2	440.5	435.2
55°	449.8	453.8	440.5	436.5	431.2	420.5	415.2	409.9	403.2	400.6	393.9
57.5°	431.2	421.9	407.2	400.6	391.3	380.6	375.3	371.3	364.6	362.0	358.0
60°	396.6	378.0	368.6	360.7	350.0	340.7	336.7	334.0	328.7	327.4	323.4
62.5°	354.0	338.0	330.0	319.4	311.4	306.1	302.1	300.8	295.4	295.4	292.8
65°	307.4	299.4	292.8	282.1	278.1	272.8	271.5	270.2	267.5	266.2	263.5
67.5°	270.2	264.8	255.5	250.2	247.5	243.5	240.9	238.2	232.9	230.2	226.2
70°	236.9	232.9	223.6	219.6	214.3	207.6	203.6	201.0	197.0	194.3	190.3
72.5°	204.9	193.0	186.3	182.3	178.3	171.7	170.3	167.7	163.7	162.4	158.4
75°	165.0	155.7	151.7	149.1	145.1	141.1	141.1	141.1	137.1	135.7	134.4
77.5°	131.8	126.4	123.8	121.1	119.8	117.1	113.1	111.8	107.8	107.8	106.5
80°	101.1	98.5	95.8	94.5	93.2	90.5	87.8	86.5	82.5	82.5	81.2
82.5°	74.5	73.2	71.9	70.5	69.2	67.9	63.9	62.5	59.9	59.9	58.6
85°	53.2	51.9	49.2	47.9	47.9	46.6	42.6	41.3	38.6	38.6	38.6
87.5°	33.3	31.9	30.6	29.3	27.9	26.6	24.0	22.6	22.6	20.0	18.6
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-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°	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9
2.5°	2979.7	3002.3	2999.7	3015.7	3019.6	3027.6	3030.3	3031.6	3011.7	3027.6	3029.0
5°	3155.4	3159.4	3162.0	3168.7	3175.3	3176.7	3170.0	3162.0	3164.7	3159.4	3146.1
7.5°	3014.3	2994.4	2990.4	2985.0	2982.4	2979.7	2967.7	2978.4	2966.4	2961.1	2942.5
10°	2841.3	2822.7	2821.4	2821.4	2825.3	2824.0	2821.4	2816.0	2826.7	2820.0	2816.0
12.5°	2750.8	2744.2	2748.2	2745.5	2756.1	2758.8	2756.1	2756.1	2753.5	2748.2	2750.8
15°	2696.3	2690.9	2694.9	2690.9	2698.9	2700.2	2693.6	2697.6	2690.9	2684.3	2681.6
17.5°	2624.4	2612.4	2603.1	2589.8	2591.1	2588.5	2580.5	2580.5	2573.8	2556.5	2557.8
20°	2486.0	2474.0	2468.7	2468.7	2475.3	2478.0	2476.7	2479.3	2472.7	2470.0	2459.4
22.5°	2399.5	2398.1	2400.8	2407.5	2418.1	2432.7	2434.1	2434.1	2434.1	2432.7	2419.4
25°	2368.9	2368.9	2371.5	2380.8	2388.8	2399.5	2402.1	2404.8	2402.1	2402.1	2390.2
27.5°	2334.3	2331.6	2336.9	2346.2	2355.6	2363.5	2370.2	2371.5	2367.5	2367.5	2371.5
30°	2291.7	2290.4	2297.0	2306.3	2314.3	2322.3	2328.9	2334.3	2328.9	2328.9	2325.0
32.5°	2247.8	2247.8	2250.4	2194.5	2034.8	1832.5	1836.5	1719.4	1638.2	1535.8	1671.5
35°	1402.7	1020.7	877.0	742.6	648.1	586.9	585.6	565.6	556.3	549.6	548.3
37.5°	529.7	532.3	537.7	540.3	544.3	547.0	548.3	548.3	548.3	548.3	547.0
40°	528.3	533.7	537.7	541.6	545.6	548.3	548.3	549.6	551.0	551.0	551.0
42.5°	529.7	535.0	540.3	544.3	547.0	548.3	549.6	551.0	551.0	551.0	551.0
45°	528.3	531.0	531.0	532.3	532.3	532.3	533.7	533.7	532.3	531.0	533.7
47.5°	508.4	508.4	504.4	503.1	501.7	499.1	500.4	499.1	497.7	496.4	499.1
50°	473.8	468.5	465.8	463.1	461.8	459.1	460.5	459.1	457.8	455.1	459.1
52.5°	432.5	431.2	425.9	423.2	421.9	423.2	420.5	419.2	417.9	416.5	417.9
55°	392.6	387.3	385.9	383.3	381.9	383.3	381.9	380.6	379.3	378.0	379.3
57.5°	356.7	352.7	351.3	348.7	348.7	348.7	348.7	347.3	346.0	344.7	346.0
60°	322.1	319.4	318.1	318.1	316.7	316.7	316.7	315.4	314.1	314.1	315.4
62.5°	292.8	292.8	288.8	287.5	287.5	288.8	287.5	286.1	284.8	283.5	286.1
65°	262.2	256.8	255.5	252.9	250.2	251.5	250.2	248.9	247.5	246.2	248.9
67.5°	224.9	223.6	218.3	215.6	214.3	215.6	214.3	212.9	211.6	210.3	212.9
70°	189.0	189.0	183.7	182.3	181.0	181.0	179.7	179.7	178.3	177.0	179.7
72.5°	157.0	157.0	155.7	153.0	151.7	150.4	149.1	147.7	147.7	149.1	149.1
75°	130.4	127.8	122.4	123.8	122.4	121.1	121.1	119.8	118.4	121.1	119.8
77.5°	102.5	101.1	97.2	98.5	97.2	95.8	95.8	94.5	93.2	94.5	94.5
80°	77.2	77.2	75.9	74.5	74.5	73.2	71.9	71.9	70.5	71.9	71.9
82.5°	55.9	55.9	54.6	53.2	51.9	51.9	50.6	50.6	50.6	50.6	50.6
85°	35.9	34.6	34.6	31.9	31.9	31.9	30.6	30.6	30.6	30.6	30.6
87.5°	17.3	17.3	16.0	16.0	14.6	13.3	13.3	12.0	12.0	13.3	13.3
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-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°	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9
2.5°	3005.0	3022.3	3007.7	3014.3	3015.7	3038.3	3036.9	3042.3	3033.0	3022.3	3007.7
5°	3158.0	3150.1	3139.4	3164.7	3151.4	3167.4	3172.7	3183.3	3183.3	3182.0	3170.0
7.5°	2962.4	2945.1	2958.4	2967.7	2971.7	2961.1	2982.4	3006.3	3026.3	3038.3	3039.6
10°	2809.4	2814.7	2813.4	2817.4	2826.7	2825.3	2838.7	2852.0	2857.3	2865.3	2867.9
12.5°	2737.5	2736.2	2738.8	2748.2	2753.5	2752.1	2765.5	2773.4	2776.1	2777.4	2776.1
15°	2680.3	2671.0	2677.6	2679.0	2682.9	2682.9	2698.9	2710.9	2716.2	2718.9	2716.2
17.5°	2572.5	2549.9	2571.2	2571.2	2585.8	2583.1	2608.4	2628.4	2639.0	2647.0	2647.0
20°	2466.0	2455.4	2463.4	2460.7	2471.3	2470.0	2486.0	2499.3	2508.6	2515.3	2523.2
22.5°	2423.4	2426.1	2414.1	2415.4	2415.4	2414.1	2422.1	2428.8	2431.4	2435.4	2432.7
25°	2395.5	2398.1	2394.2	2387.5	2384.8	2387.5	2391.5	2399.5	2400.8	2398.1	2388.8
27.5°	2367.5	2359.6	2366.2	2354.2	2351.6	2356.9	2362.2	2363.5	2364.9	2364.9	2356.9
30°	2325.0	2318.3	2325.0	2319.6	2314.3	2319.6	2323.6	2323.6	2326.3	2327.6	2318.3
32.5°	1624.9	1638.2	1853.8	1984.3	2167.9	2261.1	2278.4	2278.4	2281.0	2281.0	2273.1
35°	553.6	555.0	600.2	650.8	758.6	891.7	1066.0	1156.5	1462.6	1828.6	2182.6
37.5°	547.0	545.6	544.3	543.0	541.6	540.3	537.7	536.3	544.3	645.5	875.7
40°	549.6	548.3	545.6	544.3	543.0	540.3	539.0	536.3	533.7	531.0	528.3
42.5°	549.6	548.3	547.0	545.6	544.3	543.0	540.3	537.7	535.0	531.0	527.0
45°	531.0	531.0	532.3	532.3	533.7	533.7	533.7	532.3	532.3	531.0	525.7
47.5°	496.4	496.4	500.4	500.4	503.1	505.7	505.7	508.4	512.4	515.0	516.4
50°	456.5	456.5	460.5	461.8	464.5	468.5	472.4	473.8	477.8	483.1	488.4
52.5°	416.5	416.5	420.5	420.5	423.2	427.2	431.2	432.5	437.8	443.2	449.8
55°	379.3	379.3	381.9	383.3	384.6	387.3	391.3	391.3	396.6	400.6	407.2
57.5°	346.0	348.7	348.7	348.7	350.0	352.7	355.3	355.3	359.3	363.3	368.6
60°	314.1	316.7	316.7	316.7	318.1	319.4	322.1	322.1	324.7	327.4	332.7
62.5°	284.8	287.5	287.5	288.8	288.8	290.1	292.8	291.5	294.1	295.4	299.4
65°	247.5	250.2	251.5	252.9	254.2	256.8	260.8	259.5	263.5	266.2	270.2
67.5°	211.6	214.3	214.3	215.6	216.9	219.6	222.2	222.2	226.2	228.9	234.2
70°	178.3	181.0	181.0	182.3	183.7	186.3	189.0	187.6	191.6	194.3	198.3
72.5°	147.7	150.4	150.4	151.7	151.7	154.4	157.0	159.7	159.7	162.4	165.0
75°	119.8	121.1	122.4	122.4	123.8	125.1	127.8	130.4	131.8	133.1	135.7
77.5°	94.5	95.8	97.2	97.2	98.5	99.8	101.1	106.5	109.1	110.5	110.5
80°	71.9	73.2	73.2	73.2	74.5	75.9	78.5	78.5	83.8	83.8	85.2
82.5°	50.6	51.9	51.9	51.9	53.2	55.9	57.2	58.6	61.2	62.5	62.5
85°	30.6	31.9	31.9	31.9	33.3	34.6	37.3	38.6	39.9	39.9	41.3
87.5°	12.0	13.3	14.6	14.6	16.0	17.3	18.6	20.0	21.3	21.3	22.6
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9
2.5°	2991.7	3001.0	2991.7	2997.0	3003.7	2991.7	2963.7	2953.1	2949.1	2933.1	2922.5
5°	3158.0	3158.0	3154.1	3164.7	3163.4	3144.7	3115.5	3102.2	3088.8	3071.5	3058.2
7.5°	3039.6	3050.3	3056.9	3098.2	3124.8	3127.4	3146.1	3150.1	3155.4	3150.1	3142.1
10°	2869.3	2865.3	2883.9	2922.5	2945.1	2957.1	2993.0	3010.3	3025.0	3054.2	3084.9
12.5°	2773.4	2778.8	2786.7	2814.7	2836.0	2830.7	2845.3	2857.3	2874.6	2903.9	2947.8
15°	2709.6	2714.9	2722.9	2744.2	2757.5	2750.8	2758.8	2766.8	2778.8	2793.4	2820.0
17.5°	2640.4	2649.7	2659.0	2681.6	2693.6	2692.3	2698.9	2701.6	2705.6	2714.9	2733.5
20°	2532.6	2561.8	2580.5	2611.1	2628.4	2625.7	2637.7	2641.7	2647.0	2656.3	2664.3
22.5°	2434.1	2442.1	2451.4	2484.7	2513.9	2549.9	2557.8	2568.5	2581.8	2591.1	2599.1
25°	2378.2	2372.9	2376.9	2399.5	2415.4	2418.1	2430.1	2464.7	2500.6	2516.6	2535.2
27.5°	2344.9	2339.6	2338.3	2348.9	2351.6	2344.9	2342.3	2352.9	2379.5	2406.1	2462.0
30°	2309.0	2302.3	2297.0	2306.3	2310.3	2301.0	2283.7	2274.4	2290.4	2297.0	2319.6
32.5°	2266.4	2259.7	2257.1	2262.4	2265.1	2257.1	2238.4	2227.8	2225.1	2219.8	2225.1
35°	2218.5	2211.8	2207.8	2209.2	2214.5	2207.8	2191.9	2178.6	2171.9	2157.3	2146.6
37.5°	1143.2	1619.6	2102.7	2153.3	2158.6	2157.3	2141.3	2126.7	2120.0	2102.7	2097.4
40°	523.0	584.2	877.0	1145.8	1652.9	2100.0	2085.4	2070.8	2058.8	2053.5	2033.5
42.5°	521.7	523.0	524.3	517.7	641.5	1092.6	1613.0	2013.5	2005.6	1992.2	1977.6
45°	521.7	515.0	520.4	512.4	515.0	513.7	640.1	1032.7	1837.9	1920.4	1913.7
47.5°	516.4	512.4	517.7	511.0	503.1	507.0	501.7	508.4	793.2	1345.5	1843.2
50°	492.4	495.1	504.4	503.1	496.4	501.7	492.4	500.4	493.7	541.6	1043.4
52.5°	456.5	461.8	471.1	479.1	481.8	488.4	485.8	488.4	483.1	484.4	485.8
55°	413.9	420.5	428.5	440.5	445.8	456.5	464.5	468.5	475.1	473.8	463.1
57.5°	374.0	380.6	387.3	399.2	411.2	416.5	431.2	439.2	456.5	452.5	449.8
60°	336.7	342.0	348.7	351.3	366.0	375.3	388.6	396.6	419.2	424.5	432.5
62.5°	303.4	306.1	311.4	315.4	324.7	334.0	340.7	354.0	366.0	383.3	395.3
65°	272.8	275.5	279.5	282.1	283.5	296.8	300.8	315.4	319.4	338.0	348.7
67.5°	238.2	243.5	248.9	251.5	254.2	262.2	264.8	271.5	280.8	288.8	302.1
70°	202.3	206.3	211.6	215.6	220.9	226.2	234.2	238.2	244.9	250.2	260.8
72.5°	169.0	173.0	175.7	179.7	183.7	187.6	194.3	203.6	208.9	218.3	220.9
75°	137.1	141.1	143.7	146.4	150.4	153.0	155.7	165.0	170.3	178.3	186.3
77.5°	113.1	113.1	115.8	123.8	122.4	122.4	125.1	130.4	134.4	139.7	147.7
80°	87.8	89.2	90.5	97.2	98.5	99.8	98.5	102.5	106.5	107.8	113.1
82.5°	65.2	66.5	66.5	70.5	74.5	74.5	74.5	75.9	79.8	81.2	83.8
85°	43.9	45.2	46.6	47.9	50.6	51.9	53.2	53.2	55.9	57.2	58.6
87.5°	24.0	26.6	27.9	29.3	30.6	31.9	33.3	34.6	35.9	37.3	38.6
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9	2903.9
2.5°	2918.5	2911.8	2907.9	2897.2	2894.5	2877.2	2879.9	2877.2	2877.2	2881.2	2894.5
5°	3043.6	3011.7	3003.7	2981.0	2962.4	2930.5	2910.5	2899.9	2883.9	2877.2	2886.6
7.5°	3128.8	3104.8	3084.9	3064.9	3038.3	3001.0	2973.1	2941.1	2914.5	2889.2	2882.6
10°	3114.1	3140.7	3140.7	3128.8	3103.5	3066.2	3033.0	2993.0	2946.4	2906.5	2882.6
12.5°	2990.4	3036.9	3074.2	3102.2	3127.4	3102.2	3068.9	3036.9	2985.0	2926.5	2882.6
15°	2854.6	2902.5	2949.1	3007.7	3068.9	3094.2	3092.8	3055.6	3009.0	2947.8	2886.6
17.5°	2758.8	2792.1	2817.4	2881.2	2955.8	3021.0	3064.9	3067.6	3022.3	2967.7	2887.9
20°	2686.9	2710.9	2732.2	2768.1	2833.3	2913.2	2994.4	3039.6	3031.6	2971.7	2891.9
22.5°	2621.7	2639.0	2656.3	2682.9	2734.8	2786.7	2881.2	2974.4	3014.3	2965.1	2887.9
25°	2556.5	2575.1	2588.5	2607.1	2648.3	2690.9	2757.5	2873.3	2962.4	2959.8	2879.9
27.5°	2479.3	2504.6	2520.6	2545.9	2573.8	2605.8	2651.0	2760.1	2887.9	2933.1	2858.6
30°	2386.2	2423.4	2447.4	2475.3	2499.3	2527.2	2563.2	2629.7	2788.1	2881.2	2836.0
32.5°	2251.8	2318.3	2371.5	2398.1	2424.8	2448.7	2480.7	2536.6	2665.6	2810.7	2810.7
35°	2155.9	2186.5	2234.5	2311.6	2344.9	2368.9	2398.1	2442.1	2524.6	2726.9	2769.4
37.5°	2081.4	2093.4	2117.3	2193.2	2255.7	2294.3	2323.6	2351.6	2432.7	2612.4	2716.2
40°	2025.5	2021.5	2018.9	2054.8	2144.0	2205.2	2238.4	2266.4	2328.9	2475.3	2645.7
42.5°	1960.3	1956.3	1943.0	1952.3	1996.2	2098.7	2149.3	2179.9	2231.8	2331.6	2568.5
45°	1892.4	1885.8	1880.5	1871.1	1887.1	1944.3	2048.1	2093.4	2122.7	2211.8	2471.3
47.5°	1823.2	1813.9	1807.3	1799.3	1790.0	1816.6	1915.1	1996.2	2046.8	2102.7	2354.2
50°	1724.7	1736.7	1728.7	1719.4	1711.4	1706.1	1747.4	1880.5	1943.0	1988.3	2211.8
52.5°	813.1	1581.0	1647.6	1638.2	1627.6	1618.3	1627.6	1728.7	1841.9	1877.8	2040.2
55°	463.1	704.0	1465.2	1549.1	1539.8	1526.5	1518.5	1553.1	1722.1	1770.0	1883.1
57.5°	445.8	447.2	646.8	1396.0	1447.9	1436.0	1426.6	1434.6	1578.4	1659.5	1746.0
60°	431.2	431.2	431.2	617.5	1334.8	1338.8	1326.8	1313.5	1376.1	1535.8	1607.6
62.5°	399.2	407.2	411.2	411.2	609.5	1236.3	1224.4	1220.4	1223.0	1386.7	1469.2
65°	358.0	376.6	384.6	389.9	389.9	640.1	1119.2	1112.6	1103.3	1165.8	1329.5
67.5°	312.7	331.4	348.7	359.3	360.7	372.6	668.1	1002.1	988.8	990.1	1180.4
70°	266.2	282.1	300.8	316.7	331.4	338.0	348.7	831.8	875.7	857.1	1011.4
72.5°	230.2	236.9	250.2	266.2	283.5	299.4	308.8	331.4	759.9	739.9	769.2
75°	191.6	197.0	206.3	216.9	230.2	248.9	264.8	280.8	403.2	620.2	616.2
77.5°	149.1	158.4	169.0	175.7	182.3	195.6	216.9	232.9	248.9	419.2	493.7
80°	114.5	121.1	126.4	133.1	141.1	150.4	158.4	177.0	195.6	210.3	378.0
82.5°	85.2	89.2	93.2	95.8	98.5	103.8	118.4	125.1	137.1	150.4	178.3
85°	59.9	62.5	65.2	66.5	67.9	69.2	74.5	75.9	87.8	90.5	107.8
87.5°	38.6	39.9	42.6	43.9	43.9	45.2	46.6	46.6	46.6	43.9	53.2
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	2903.9	2903.9
2.5°	2905.2	2926.5
5°	2901.2	2929.1
7.5°	2890.6	2917.2
10°	2874.6	2906.5
12.5°	2857.3	2887.9
15°	2842.6	2865.3
17.5°	2826.7	2840.0
20°	2805.4	2816.0
22.5°	2784.1	2778.8
25°	2760.1	2748.2
27.5°	2729.5	2706.9
30°	2701.6	2661.7
32.5°	2675.0	2609.7
35°	2639.0	2556.5
37.5°	2601.8	2502.0
40°	2557.8	2439.4
42.5°	2511.3	2376.9
45°	2452.7	2317.0
47.5°	2400.8	2245.1
50°	2328.9	2167.9
52.5°	2241.1	2096.1
55°	2137.3	2008.2
57.5°	2025.5	1916.4
60°	1905.7	1811.3
62.5°	1760.7	1702.1
65°	1590.3	1577.0
67.5°	1368.1	1438.6
70°	1121.9	1280.3
72.5°	938.2	1112.6
75°	769.2	924.9
77.5°	609.5	725.3
80°	380.6	531.0
82.5°	255.5	348.7
85°	154.4	166.4
87.5°	59.9	61.2
90°	0.0	0.0

(END OF REPORT)