

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-L950-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-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

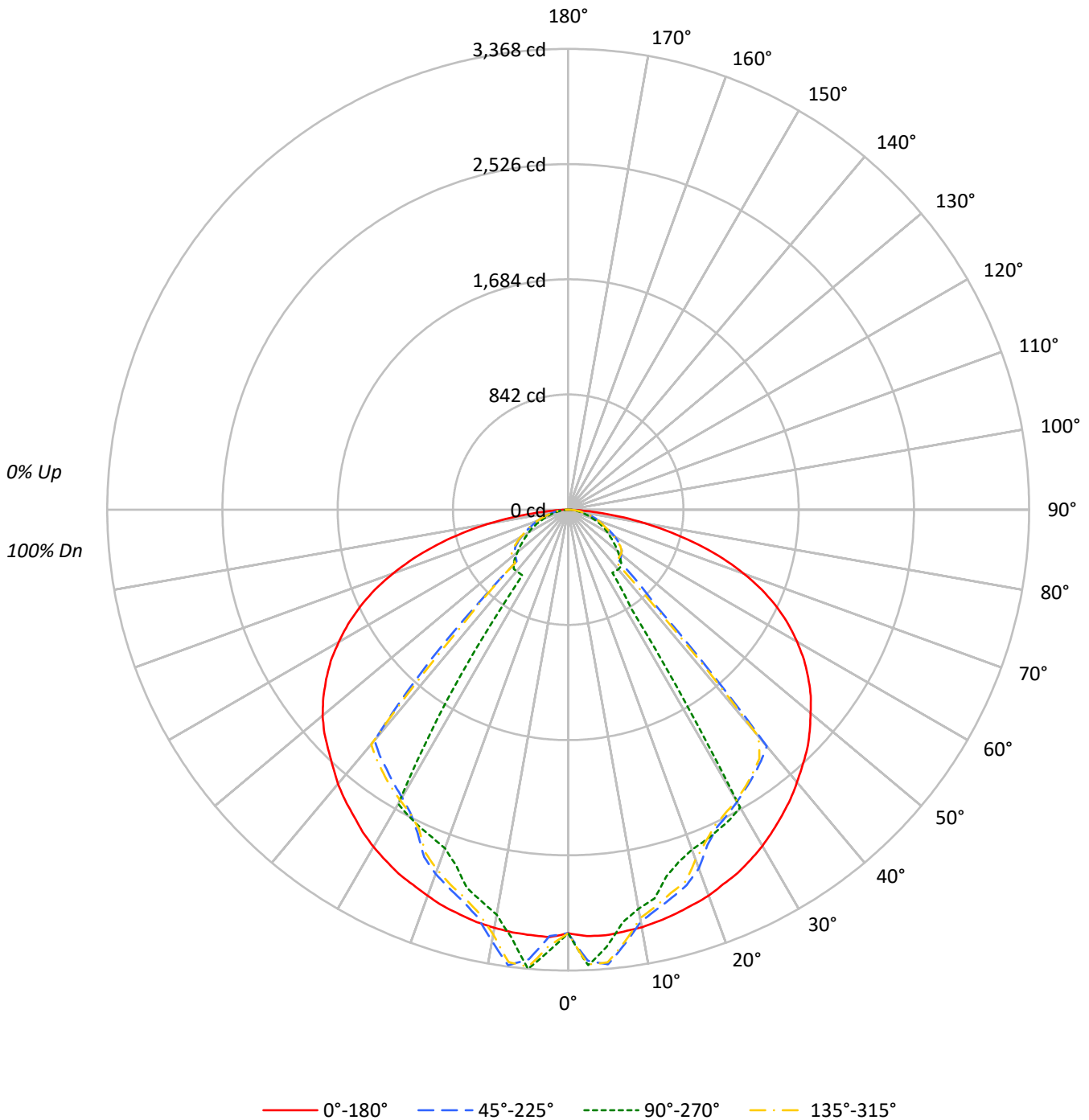
Lumens per Lamp: N/A
Luminaire Lumens: 6199.0 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	25016	25016	25016	25016
5°	25261	25204	25250	26452
10°	25286	22787	25320	23137
15°	25342	21084	25401	21752
20°	25526	19998	25526	19922
25°	25746	19615	25784	19432
30°	26007	19269	26072	19040
35°	26310	4389	26365	4577
40°	26732	4564	26892	4711
45°	27372	4538	27467	4704
50°	28012	4103	28390	4214
55°	28873	3643	29103	3695
60°	29605	3238	29669	3279
65°	30128	2825	30051	2781
70°	29697	2277	29603	2195
75°	27570	1753	27769	1679
80°	22378	1245	23276	1139
85°	12113	747	12796	571



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	304.6	4.9
10°-20°	837.4	13.5
20°-30°	1240.4	20.0
30°-40°	1249.8	20.2
40°-50°	976.3	15.7
50°-60°	754.1	12.2
60°-70°	506.3	8.2
70°-80°	258.3	4.2
80°-90°	71.9	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°	2382.4	38.4
0°-40°	3632.2	58.6
0°-60°	5362.6	86.5
0°-90°	6199.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6199.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3096	3096	3096	3096	3096	
5°	3123	3209	3121	3368	3123	297
15°	3054	2774	3062	2862	3054	864
25°	2930	2585	2934	2561	2930	1351
35°	2725	562	2731	586	2725	1708
45°	2470	546	2478	566	2470	1905
55°	2141	397	2158	403	2141	1912
65°	1681	267	1677	262	1681	1653
75°	986	135	993	129	986	1031
85°	177	43	187	33	177	244
90°	0	0	0	0	0	



TEST NUMBER: P#

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6
2.5°	3119.7	3131.1	3139.6	3145.3	3148.1	3148.1	3149.5	3151.0	3169.4	3177.9	3183.6
5°	3122.6	3133.9	3151.0	3173.7	3193.5	3210.5	3224.7	3244.6	3264.4	3285.7	3292.8
7.5°	3109.8	3124.0	3158.0	3199.2	3237.5	3264.4	3282.9	3295.7	3305.6	3307.0	3314.1
10°	3098.5	3124.0	3170.8	3224.7	3273.0	3305.6	3305.6	3298.5	3308.4	3270.1	3231.8
12.5°	3078.6	3107.0	3170.8	3241.7	3287.1	3299.9	3294.2	3265.9	3207.7	3160.9	3139.6
15°	3054.5	3092.8	3172.2	3251.7	3290.0	3294.2	3240.3	3168.0	3124.0	3095.6	3060.2
17.5°	3027.5	3078.6	3173.7	3253.1	3267.3	3247.4	3145.3	3099.9	3054.5	2987.8	2939.6
20°	3002.0	3051.6	3162.3	3233.2	3241.7	3152.4	3072.9	3024.7	2948.1	2889.9	2868.6
22.5°	2962.3	3020.4	3152.4	3206.3	3173.7	3070.1	2993.5	2916.9	2847.3	2830.3	2804.8
25°	2929.6	2990.6	3129.7	3173.7	3087.1	2994.9	2905.5	2816.1	2783.5	2759.4	2736.7
27.5°	2885.7	2960.8	3099.9	3114.1	2994.9	2914.0	2783.5	2743.8	2714.0	2687.0	2677.1
30°	2837.4	2929.6	3058.7	3031.8	2918.3	2799.1	2702.6	2665.8	2644.5	2616.1	2604.7
32.5°	2782.1	2882.8	3013.3	2936.7	2836.0	2687.0	2624.6	2596.2	2567.9	2546.6	2475.6
35°	2725.3	2841.7	2959.4	2845.9	2736.7	2601.9	2546.6	2521.0	2494.1	2416.1	2342.3
37.5°	2667.2	2796.3	2894.2	2748.0	2604.7	2514.0	2467.1	2438.8	2377.8	2278.4	2241.6
40°	2600.5	2740.9	2810.5	2647.3	2489.8	2424.6	2380.6	2352.2	2214.6	2170.6	2159.3
42.5°	2533.8	2687.0	2708.3	2549.4	2394.8	2329.5	2292.6	2199.0	2105.4	2082.7	2086.9
45°	2470.0	2628.9	2596.2	2410.4	2295.5	2241.6	2179.1	2050.0	2000.4	2011.7	2014.6
47.5°	2393.4	2559.3	2478.5	2271.4	2193.3	2139.4	2000.4	1922.3	1915.3	1930.9	1939.4
50°	2311.1	2481.3	2353.6	2145.1	2082.7	2018.8	1861.3	1821.6	1830.1	1845.7	1855.7
52.5°	2234.5	2393.4	2224.5	2027.3	1973.4	1827.3	1720.9	1728.0	1742.2	1760.6	1766.3
55°	2140.8	2287.0	2086.9	1908.2	1857.1	1665.6	1617.3	1634.4	1648.5	1664.1	1675.5
57.5°	2042.9	2164.9	1923.8	1774.8	1692.5	1522.3	1526.5	1537.9	1547.8	1566.3	646.9
60°	1930.9	2025.9	1745.0	1651.4	1488.2	1408.8	1413.0	1432.9	1442.8	805.8	445.5
62.5°	1814.5	1864.2	1583.3	1510.9	1301.0	1295.3	1315.1	1323.7	900.9	425.6	417.1
65°	1681.2	1671.2	1424.4	1309.5	1173.3	1178.9	1200.2	1157.7	398.7	398.7	395.8
67.5°	1533.6	1474.0	1269.7	1083.9	1049.8	1062.6	1085.3	378.8	368.9	371.7	361.8
70°	1364.8	1281.1	1109.4	917.9	929.3	942.0	366.0	343.3	339.1	332.0	312.1
72.5°	1186.0	1071.1	908.0	797.3	804.4	505.1	320.6	309.3	295.1	280.9	259.6
75°	986.0	837.0	666.8	666.8	676.7	288.0	279.5	261.0	245.4	227.0	214.2
77.5°	773.2	644.1	517.8	537.7	262.5	241.2	225.6	205.7	192.9	181.6	174.5
80°	566.1	449.7	390.1	349.0	204.3	183.0	167.4	156.1	150.4	143.3	134.8
82.5°	371.7	271.0	271.0	164.6	143.3	126.3	122.0	113.5	107.8	103.6	99.3
85°	177.3	157.5	119.2	100.7	89.4	80.9	78.0	73.8	73.8	72.4	70.9
87.5°	65.3	70.9	52.5	51.1	48.2	46.8	48.2	48.2	49.7	48.2	46.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6
2.5°	3197.8	3209.1	3217.6	3231.8	3250.3	3265.9	3280.1	3299.9	3331.1	3339.6	3346.7
5°	3292.8	3297.1	3307.0	3318.4	3321.2	3328.3	3326.9	3335.4	3339.6	3349.6	3328.3
7.5°	3298.5	3275.8	3248.8	3224.7	3207.7	3192.1	3182.2	3197.8	3206.3	3213.4	3192.1
10°	3179.3	3152.4	3136.8	3122.6	3105.6	3081.4	3048.8	3055.9	3053.1	3053.1	3046.0
12.5°	3104.1	3065.8	3026.1	2990.6	2975.0	2973.6	2975.0	2990.6	2990.6	2989.2	2980.7
15°	2986.4	2949.5	2929.6	2921.1	2921.1	2916.9	2916.9	2933.9	2929.6	2929.6	2925.4
17.5°	2908.4	2882.8	2868.6	2858.7	2854.4	2861.5	2870.0	2877.1	2878.6	2872.9	2850.2
20°	2844.5	2820.4	2803.4	2806.2	2804.8	2809.0	2813.3	2789.2	2759.4	2719.7	2701.2
22.5°	2777.8	2759.4	2746.6	2746.6	2729.6	2702.6	2662.9	2654.4	2650.1	2631.7	2616.1
25°	2714.0	2692.7	2674.3	2617.5	2582.0	2586.3	2579.2	2565.0	2563.6	2562.2	2567.9
27.5°	2650.1	2594.8	2523.9	2515.4	2501.2	2499.8	2508.3	2515.4	2515.4	2521.0	2528.1
30°	2518.2	2454.4	2441.6	2426.0	2431.7	2451.5	2455.8	2465.7	2468.6	2478.5	2484.2
32.5°	2397.6	2369.2	2357.9	2365.0	2383.4	2400.5	2410.4	2414.6	2421.7	2430.2	2437.3
35°	2299.7	2291.2	2301.1	2316.8	2335.2	2349.4	2357.9	2366.4	2373.5	2380.6	2386.3
37.5°	2227.4	2233.0	2247.2	2267.1	2285.5	2296.9	2304.0	2313.9	2323.8	2332.4	2298.3
40°	2159.3	2173.5	2189.1	2210.3	2226.0	2237.3	2244.4	2257.2	2172.0	983.2	539.1
42.5°	2099.7	2115.3	2126.6	2143.7	2160.7	2169.2	2106.8	940.6	532.0	529.2	536.3
45°	2027.3	2040.1	2058.5	2071.3	2086.9	1370.5	523.5	529.2	520.7	526.3	529.2
47.5°	1953.6	1973.4	1983.4	1892.6	563.2	520.7	515.0	520.7	515.0	522.1	517.8
50°	1869.9	1894.0	1347.8	509.3	505.1	502.2	507.9	505.1	509.3	515.0	503.6
52.5°	1784.7	1105.2	493.7	490.9	493.7	490.9	500.8	493.7	495.1	489.5	475.3
55°	604.4	478.1	473.8	472.4	480.9	480.9	480.9	469.6	462.5	448.3	438.4
57.5°	462.5	462.5	461.1	462.5	459.7	456.8	444.1	434.1	424.2	404.3	398.7
60°	438.4	438.4	438.4	438.4	425.6	419.9	400.1	391.6	374.5	364.6	358.9
62.5°	418.5	415.7	402.9	398.7	384.5	368.9	357.5	349.0	332.0	326.3	322.0
65°	390.1	380.2	364.6	347.6	340.5	323.5	317.8	305.0	296.5	292.3	289.4
67.5°	343.3	329.1	316.4	305.0	292.3	286.6	279.5	269.6	263.9	261.0	258.2
70°	293.7	283.7	271.0	263.9	255.4	251.1	241.2	238.3	234.1	229.8	225.6
72.5°	245.4	239.8	234.1	224.2	221.3	218.5	208.6	202.9	197.2	191.5	188.7
75°	205.7	201.5	198.6	190.1	185.9	177.3	170.2	166.0	161.7	157.5	154.6
77.5°	168.8	166.0	157.5	151.8	149.0	141.9	139.0	140.5	137.6	131.9	129.1
80°	131.9	129.1	122.0	122.0	119.2	116.3	113.5	110.7	107.8	103.6	100.7
82.5°	100.7	97.9	95.1	92.2	89.4	88.0	86.5	83.7	80.9	78.0	76.6
85°	70.9	69.5	68.1	66.7	65.3	63.8	62.4	59.6	56.7	55.3	53.9
87.5°	48.2	46.8	45.4	44.0	42.6	41.1	39.7	38.3	35.5	34.0	32.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6
2.5°	3346.7	3353.8	3346.7	3331.1	3321.2	3316.9	3325.5	3325.5	3331.1	3338.2	3339.6
5°	3294.2	3277.2	3257.4	3237.5	3227.6	3221.9	3206.3	3209.1	3213.4	3216.2	3219.0
7.5°	3163.7	3141.0	3114.1	3088.5	3078.6	3070.1	3051.6	3051.6	3051.6	3053.1	3061.6
10°	3030.4	3020.4	3009.1	2992.1	2979.3	2975.0	2959.4	2963.7	2960.8	2965.1	2975.0
12.5°	2967.9	2956.6	2946.7	2929.6	2915.4	2909.8	2902.7	2906.9	2905.5	2912.6	2921.1
15°	2911.2	2905.5	2894.2	2881.4	2868.6	2857.3	2831.7	2823.2	2817.6	2810.5	2820.4
17.5°	2817.6	2777.8	2750.9	2731.0	2716.8	2706.9	2699.8	2699.8	2704.1	2708.3	2716.8
20°	2689.9	2678.5	2665.8	2644.5	2630.3	2624.6	2620.4	2620.4	2627.4	2633.1	2648.7
22.5°	2601.9	2600.5	2596.2	2586.3	2579.2	2579.2	2580.6	2583.5	2593.4	2601.9	2617.5
25°	2560.8	2566.4	2563.6	2557.9	2553.7	2555.1	2552.3	2555.1	2565.0	2573.5	2586.3
27.5°	2528.1	2536.7	2533.8	2525.3	2518.2	2521.0	2525.3	2522.5	2531.0	2540.9	2550.8
30°	2484.2	2485.6	2491.3	2481.3	2478.5	2482.7	2484.2	2487.0	2495.5	2502.6	2511.1
32.5°	2434.5	2445.9	2444.4	2434.5	2434.5	2438.8	2440.2	2345.1	2167.8	1867.0	1784.7
35°	2386.3	2399.0	2377.8	2004.6	1387.5	740.6	571.7	551.9	556.1	559.0	561.8
37.5°	1764.9	837.0	533.4	537.7	541.9	546.2	550.5	554.7	559.0	563.2	564.6
40°	530.6	529.2	533.4	539.1	543.4	546.2	551.9	556.1	560.4	564.6	566.1
42.5°	524.9	527.8	532.0	537.7	543.4	549.0	553.3	559.0	561.8	564.6	566.1
45°	522.1	527.8	533.4	537.7	541.9	544.8	547.6	549.0	547.6	547.6	550.5
47.5°	517.8	523.5	524.9	523.5	524.9	523.5	523.5	523.5	519.2	517.8	517.8
50°	502.2	502.2	499.4	493.7	492.3	490.9	488.0	486.6	480.9	479.5	479.5
52.5°	469.6	468.2	463.9	456.8	454.0	451.1	449.7	448.3	442.6	439.8	441.2
55°	431.3	428.4	424.2	415.7	414.3	411.4	410.0	408.6	402.9	405.8	401.5
57.5°	395.8	390.1	384.5	383.1	377.4	376.0	374.5	373.1	368.9	370.3	367.4
60°	353.3	351.8	349.0	343.3	343.3	341.9	341.9	339.1	336.2	334.8	334.8
62.5°	322.0	317.8	315.0	315.0	310.7	310.7	310.7	307.9	305.0	306.4	305.0
65°	288.0	286.6	285.2	282.3	282.3	280.9	280.9	278.1	273.8	275.2	272.4
67.5°	259.6	256.8	253.9	252.5	246.9	244.0	242.6	241.2	235.5	236.9	234.1
70°	224.2	219.9	217.1	214.2	210.0	207.1	207.1	204.3	200.0	201.5	198.6
72.5°	187.3	184.4	181.6	180.2	175.9	174.5	173.1	171.7	167.4	168.8	167.4
75°	156.1	156.1	154.6	153.2	149.0	144.7	141.9	140.5	137.6	139.0	136.2
77.5°	129.1	126.3	123.4	123.4	119.2	116.3	113.5	113.5	113.5	112.1	110.7
80°	100.7	97.9	97.9	96.5	93.6	90.8	89.4	89.4	88.0	88.0	86.5
82.5°	76.6	73.8	72.4	72.4	69.5	68.1	66.7	65.3	65.3	65.3	63.8
85°	53.9	51.1	49.7	49.7	46.8	45.4	45.4	44.0	44.0	42.6	42.6
87.5°	32.6	31.2	29.8	29.8	27.0	25.5	25.5	25.5	24.1	24.1	22.7
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-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°	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6
2.5°	3339.6	3339.6	3329.7	3332.5	3328.3	3334.0	3326.9	3326.9	3335.4	3335.4	3341.1
5°	3220.5	3213.4	3212.0	3209.1	3194.9	3200.6	3193.5	3186.4	3196.3	3196.3	3209.1
7.5°	3057.3	3044.5	3050.2	3041.7	3033.2	3020.4	3024.7	3019.0	3026.1	3036.0	3048.8
10°	2973.6	2962.3	2969.4	2960.8	2965.1	2946.7	2948.1	2949.5	2956.6	2959.4	2970.8
12.5°	2919.7	2916.9	2914.0	2911.2	2914.0	2904.1	2898.4	2899.8	2902.7	2904.1	2912.6
15°	2806.2	2787.8	2793.4	2773.6	2775.0	2776.4	2765.1	2776.4	2775.0	2793.4	2810.5
17.5°	2714.0	2714.0	2704.1	2695.5	2689.9	2688.5	2679.9	2685.6	2679.9	2691.3	2695.5
20°	2650.1	2648.7	2647.3	2643.1	2628.9	2630.3	2634.5	2621.8	2620.4	2618.9	2627.4
22.5°	2620.4	2621.8	2616.1	2616.1	2603.3	2606.2	2607.6	2593.4	2594.8	2590.6	2594.8
25°	2589.1	2592.0	2584.9	2584.9	2582.0	2580.6	2573.5	2576.4	2567.9	2560.8	2567.9
27.5°	2552.3	2557.9	2552.3	2555.1	2549.4	2546.6	2542.3	2539.5	2531.0	2529.6	2533.8
30°	2518.2	2521.0	2519.6	2512.5	2511.1	2502.6	2506.9	2498.3	2489.8	2491.3	2494.1
32.5°	1291.0	1232.9	950.5	858.3	849.8	881.0	1044.2	1271.2	1647.1	2011.7	2274.2
35°	563.2	563.2	563.2	561.8	561.8	560.4	559.0	557.6	556.1	554.7	553.3
37.5°	566.1	566.1	566.1	566.1	564.6	563.2	563.2	560.4	559.0	557.6	556.1
40°	567.5	568.9	568.9	568.9	567.5	567.5	566.1	563.2	561.8	559.0	556.1
42.5°	566.1	567.5	567.5	566.1	566.1	564.6	564.6	563.2	561.8	560.4	559.0
45°	547.6	549.0	546.2	546.2	544.8	544.8	544.8	544.8	544.8	546.2	546.2
47.5°	515.0	515.0	513.6	512.2	512.2	510.7	512.2	510.7	513.6	515.0	517.8
50°	476.7	476.7	473.8	472.4	472.4	472.4	472.4	473.8	475.3	478.1	480.9
52.5°	437.0	437.0	435.5	434.1	432.7	432.7	437.0	435.5	437.0	438.4	442.6
55°	398.7	400.1	397.2	397.2	395.8	395.8	395.8	397.2	398.7	400.1	404.3
57.5°	366.0	366.0	363.2	363.2	363.2	361.8	366.0	363.2	364.6	366.0	368.9
60°	333.4	332.0	332.0	330.6	330.6	330.6	333.4	332.0	332.0	333.4	336.2
62.5°	303.6	303.6	302.2	302.2	300.8	300.8	303.6	302.2	302.2	303.6	305.0
65°	269.6	269.6	268.1	266.7	271.0	266.7	271.0	268.1	271.0	272.4	275.2
67.5°	231.2	231.2	231.2	229.8	229.8	232.7	234.1	231.2	232.7	235.5	236.9
70°	197.2	197.2	195.8	195.8	195.8	198.6	200.0	197.2	198.6	200.0	202.9
72.5°	167.4	164.6	164.6	163.2	166.0	166.0	167.4	166.0	167.4	167.4	170.2
75°	137.6	134.8	134.8	134.8	137.6	136.2	137.6	136.2	137.6	137.6	139.0
77.5°	110.7	109.2	107.8	107.8	110.7	110.7	110.7	109.2	110.7	112.1	113.5
80°	86.5	85.1	83.7	83.7	86.5	86.5	86.5	88.0	86.5	88.0	89.4
82.5°	63.8	62.4	61.0	63.8	63.8	63.8	63.8	65.3	63.8	65.3	66.7
85°	42.6	41.1	39.7	42.6	42.6	42.6	42.6	44.0	42.6	44.0	45.4
87.5°	22.7	21.3	21.3	22.7	22.7	22.7	24.1	24.1	24.1	25.5	25.5
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-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°	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6
2.5°	3349.6	3353.8	3352.4	3343.9	3335.4	3325.5	3318.4	3319.8	3334.0	3338.2	3325.5
5°	3209.1	3236.1	3236.1	3254.5	3244.6	3236.1	3241.7	3273.0	3288.6	3312.7	3321.2
7.5°	3064.4	3077.2	3075.8	3094.2	3091.4	3091.4	3095.6	3136.8	3156.6	3176.5	3182.2
10°	2983.5	2996.3	2994.9	2996.3	2992.1	2982.1	2982.1	3000.6	3017.6	3027.5	3030.4
12.5°	2925.4	2932.5	2931.1	2931.1	2928.2	2919.7	2918.3	2933.9	2952.3	2965.1	2966.5
15°	2838.8	2858.7	2863.0	2881.4	2877.1	2865.8	2868.6	2881.4	2892.7	2904.1	2899.8
17.5°	2709.7	2719.7	2721.1	2728.2	2725.3	2725.3	2742.4	2789.2	2820.4	2847.3	2850.2
20°	2636.0	2643.1	2640.2	2655.8	2648.7	2647.3	2651.6	2671.4	2685.6	2698.4	2721.1
22.5°	2600.5	2606.2	2601.9	2603.3	2590.6	2579.2	2576.4	2592.0	2607.6	2624.6	2624.6
25°	2570.7	2575.0	2573.5	2570.7	2560.8	2545.2	2542.3	2545.2	2550.8	2552.3	2542.3
27.5°	2535.2	2538.1	2538.1	2539.5	2526.7	2512.5	2509.7	2506.9	2512.5	2511.1	2495.5
30°	2498.3	2494.1	2495.5	2496.9	2485.6	2472.8	2467.1	2465.7	2471.4	2470.0	2454.4
32.5°	2410.4	2443.0	2445.9	2448.7	2438.8	2427.4	2421.7	2417.5	2420.3	2418.9	2404.7
35°	551.9	561.8	688.1	1557.7	2115.3	2342.3	2366.4	2360.7	2362.1	2362.1	2350.8
37.5°	553.3	551.9	550.5	546.2	541.9	539.1	932.1	1987.6	2302.6	2304.0	2294.1
40°	553.3	551.9	550.5	547.6	541.9	537.7	530.6	524.9	537.7	1183.2	2164.9
42.5°	556.1	553.3	550.5	547.6	541.9	536.3	530.6	523.5	527.8	524.9	517.8
45°	547.6	546.2	546.2	544.8	541.9	536.3	529.2	520.7	516.4	520.7	513.6
47.5°	520.7	522.1	526.3	527.8	527.8	529.2	524.9	519.2	512.2	516.4	507.9
50°	483.8	486.6	488.0	495.1	498.0	503.6	505.1	505.1	503.6	509.3	503.6
52.5°	444.1	446.9	454.0	456.8	459.7	468.2	471.0	475.3	478.1	486.6	492.3
55°	405.8	407.2	410.0	415.7	419.9	427.0	431.3	435.5	442.6	446.9	463.9
57.5°	370.3	371.7	377.4	378.8	381.6	387.3	391.6	397.2	402.9	405.8	425.6
60°	336.2	337.7	341.9	343.3	344.7	350.4	354.7	358.9	363.2	366.0	380.2
62.5°	306.4	306.4	310.7	310.7	312.1	316.4	319.2	322.0	326.3	327.7	334.8
65°	276.6	278.1	280.9	280.9	282.3	285.2	286.6	288.0	292.3	292.3	297.9
67.5°	239.8	241.2	245.4	248.3	249.7	255.4	256.8	258.2	261.0	262.5	265.3
70°	204.3	205.7	210.0	211.4	212.8	217.1	219.9	224.2	228.4	232.7	235.5
72.5°	171.7	173.1	177.3	177.3	181.6	183.0	185.9	187.3	191.5	194.4	198.6
75°	140.5	141.9	146.1	146.1	150.4	151.8	153.2	154.6	157.5	160.3	163.2
77.5°	114.9	114.9	120.6	123.4	126.3	126.3	127.7	127.7	127.7	129.1	131.9
80°	90.8	90.8	95.1	97.9	100.7	100.7	102.1	103.6	105.0	105.0	106.4
82.5°	68.1	68.1	72.4	73.8	76.6	76.6	76.6	78.0	79.4	78.0	80.9
85°	46.8	46.8	49.7	51.1	53.9	53.9	53.9	55.3	56.7	55.3	56.7
87.5°	27.0	28.4	29.8	31.2	32.6	34.0	34.0	34.0	35.5	35.5	36.9
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-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6
2.5°	3311.3	3294.2	3292.8	3273.0	3267.3	3268.7	3253.1	3247.4	3221.9	3216.2	3189.3
5°	3324.0	3332.5	3328.3	3326.9	3331.1	3328.3	3316.9	3311.3	3307.0	3295.7	3273.0
7.5°	3183.6	3189.3	3193.5	3212.0	3227.6	3254.5	3282.9	3301.3	3315.5	3318.4	3299.9
10°	3040.3	3067.2	3085.7	3114.1	3136.8	3152.4	3169.4	3185.0	3226.1	3267.3	3291.4
12.5°	2966.5	2973.6	2972.2	2987.8	3003.4	3044.5	3084.3	3107.0	3138.2	3156.6	3200.6
15°	2904.1	2905.5	2909.8	2921.1	2929.6	2943.8	2962.3	2996.3	3058.7	3087.1	3111.2
17.5°	2847.3	2847.3	2850.2	2860.1	2871.5	2884.2	2895.6	2909.8	2941.0	2987.8	3047.4
20°	2756.5	2796.3	2800.5	2799.1	2804.8	2828.9	2831.7	2857.3	2872.9	2891.3	2949.5
22.5°	2621.8	2645.9	2679.9	2732.4	2752.3	2763.6	2772.2	2783.5	2807.6	2828.9	2853.0
25°	2548.0	2563.6	2573.5	2589.1	2630.3	2697.0	2709.7	2722.5	2738.1	2753.7	2783.5
27.5°	2482.7	2481.3	2488.4	2502.6	2514.0	2549.4	2611.8	2661.5	2664.3	2687.0	2712.6
30°	2435.9	2427.4	2417.5	2414.6	2430.2	2448.7	2467.1	2545.2	2599.1	2610.4	2637.4
32.5°	2391.9	2377.8	2363.6	2352.2	2342.3	2357.9	2369.2	2403.3	2472.8	2538.1	2552.3
35°	2338.0	2323.8	2306.8	2294.1	2278.4	2277.0	2275.6	2308.2	2330.9	2409.0	2477.1
37.5°	2282.7	2267.1	2252.9	2238.7	2223.1	2211.8	2204.7	2213.2	2234.5	2268.5	2382.0
40°	2224.5	2206.1	2191.9	2180.6	2159.3	2150.8	2136.6	2130.9	2132.3	2162.1	2221.7
42.5°	1329.3	2119.5	2126.6	2113.9	2095.4	2084.1	2068.5	2061.4	2047.2	2061.4	2095.4
45°	512.2	517.8	1550.6	2048.6	2025.9	2011.7	1997.5	1990.4	1974.8	1963.5	1994.7
47.5°	502.2	507.9	496.5	703.7	1933.7	1938.0	1920.9	1913.8	1898.2	1889.7	1881.2
50°	495.1	499.4	490.9	493.7	483.8	1772.0	1842.9	1834.4	1817.4	1807.4	1790.4
52.5°	488.0	488.0	482.4	475.3	472.4	473.8	1491.1	1753.5	1733.7	1723.7	1701.0
55°	465.3	468.2	473.8	462.5	459.7	458.2	454.0	1420.1	1641.4	1630.1	1610.2
57.5°	431.3	437.0	452.6	449.7	449.7	438.4	435.5	435.5	1318.0	1535.0	1515.2
60°	391.6	397.2	414.3	419.9	424.2	421.4	418.5	417.1	411.4	1388.9	1414.5
62.5°	350.4	356.1	361.8	380.2	385.9	393.0	401.5	397.2	391.6	391.6	1308.0
65°	306.4	315.0	317.8	334.8	341.9	354.7	361.8	371.7	368.9	367.4	374.5
67.5°	268.1	278.1	279.5	286.6	299.3	305.0	313.5	332.0	340.5	343.3	346.2
70°	235.5	241.2	245.4	248.3	256.8	258.2	273.8	286.6	299.3	313.5	317.8
72.5°	202.9	207.1	215.6	212.8	215.6	221.3	229.8	238.3	251.1	271.0	283.7
75°	166.0	168.8	174.5	177.3	183.0	187.3	192.9	200.0	211.4	221.3	238.3
77.5°	133.4	134.8	139.0	140.5	146.1	150.4	160.3	164.6	171.7	178.8	188.7
80°	107.8	107.8	109.2	109.2	113.5	117.8	124.8	129.1	137.6	143.3	143.3
82.5°	82.3	82.3	86.5	86.5	89.4	89.4	93.6	93.6	97.9	100.7	103.6
85°	58.2	59.6	62.4	61.0	63.8	62.4	65.3	68.1	69.5	68.1	66.7
87.5°	38.3	38.3	41.1	39.7	41.1	41.1	44.0	44.0	45.4	45.4	44.0
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-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6
2.5°	3179.3	3158.0	3145.3	3129.7	3125.4	3121.2	3126.8	3126.8	3118.3	3111.2	3098.5
5°	3253.1	3230.4	3206.3	3180.7	3156.6	3131.1	3121.2	3119.7	3104.1	3095.6	3091.4
7.5°	3291.4	3280.1	3253.1	3217.6	3180.7	3135.3	3115.5	3104.1	3088.5	3085.7	3085.7
10°	3295.7	3282.9	3268.7	3243.2	3200.6	3141.0	3102.7	3080.0	3065.8	3075.8	3094.2
12.5°	3254.5	3278.6	3265.9	3248.8	3214.8	3142.4	3087.1	3053.1	3048.8	3074.3	3122.6
15°	3149.5	3220.5	3255.9	3238.9	3212.0	3139.6	3061.6	3021.8	3021.8	3074.3	3136.8
17.5°	3070.1	3125.4	3212.0	3226.1	3194.9	3133.9	3037.5	2990.6	3003.4	3080.0	3146.7
20°	3004.8	3038.9	3122.6	3202.0	3172.2	3121.2	3002.0	2953.8	2979.3	3071.5	3160.9
22.5°	2902.7	2970.8	3021.8	3139.6	3149.5	3097.0	2966.5	2908.4	2959.4	3071.5	3153.8
25°	2803.4	2885.7	2939.6	3054.5	3115.5	3067.2	2933.9	2860.1	2938.1	3067.2	3148.1
27.5°	2733.9	2772.2	2870.0	2952.3	3064.4	3027.5	2889.9	2807.6	2911.2	3044.5	3115.5
30°	2660.1	2685.6	2782.1	2860.1	2996.3	2982.1	2844.5	2749.5	2877.1	3023.3	3030.4
32.5°	2579.2	2607.6	2657.2	2770.7	2901.3	2939.6	2793.4	2691.3	2840.3	2990.6	2931.1
35°	2496.9	2518.2	2557.9	2679.9	2790.6	2875.7	2731.0	2624.6	2814.7	2941.0	2836.0
37.5°	2414.6	2437.3	2471.4	2573.5	2674.3	2816.1	2677.1	2557.9	2767.9	2853.0	2736.7
40°	2336.6	2349.4	2384.8	2448.7	2577.8	2755.1	2616.1	2488.4	2719.7	2740.9	2601.9
42.5°	2193.3	2257.2	2289.8	2340.9	2468.6	2671.4	2545.2	2414.6	2665.8	2628.9	2467.1
45°	2038.7	2177.7	2191.9	2243.0	2372.1	2582.0	2478.5	2342.3	2614.7	2532.4	2339.4
47.5°	1912.4	2013.1	2095.4	2138.0	2257.2	2477.1	2416.1	2281.3	2538.1	2410.4	2214.6
50°	1800.3	1854.3	2003.2	2034.4	2119.5	2350.8	2342.3	2210.3	2431.7	2257.2	2092.6
52.5°	1691.1	1729.4	1864.2	1930.9	2000.4	2214.6	2254.3	2140.8	2315.3	2103.9	1969.2
55°	1596.0	1608.8	1682.6	1823.0	1885.5	2077.0	2157.9	2060.0	2167.8	1957.8	1850.0
57.5°	1498.2	1486.8	1540.7	1720.9	1766.3	1936.5	2055.7	1977.7	2048.6	1808.9	1726.6
60°	1396.0	1380.4	1403.1	1522.3	1640.0	1797.5	1935.1	1886.9	1903.9	1661.3	1589.0
62.5°	1289.6	1274.0	1266.9	1342.1	1516.6	1654.2	1813.1	1786.2	1726.6	1526.5	1418.7
65°	1178.9	1163.3	1152.0	1181.8	1380.4	1468.4	1676.9	1669.8	1532.2	1384.7	1194.6
67.5°	358.9	1058.4	1034.2	1032.8	1163.3	1299.5	1529.4	1518.0	1336.4	1232.9	1028.6
70°	323.5	858.3	912.2	899.5	956.2	1127.9	1360.5	1352.0	1146.3	988.8	909.4
72.5°	296.5	303.6	805.8	791.6	804.4	959.0	1184.6	1161.9	971.8	780.3	786.0
75°	253.9	266.7	278.1	668.2	651.2	794.5	993.1	957.6	801.6	644.1	656.9
77.5°	207.1	222.7	231.2	486.6	526.3	566.1	793.1	746.2	551.9	515.0	245.4
80°	154.6	167.4	181.6	194.4	400.1	395.8	588.8	541.9	384.5	320.6	191.5
82.5°	113.5	117.8	126.3	140.5	158.9	265.3	378.8	333.4	266.7	146.1	131.9
85°	70.9	76.6	80.9	85.1	96.5	158.9	187.3	149.0	112.1	89.4	83.7
87.5°	45.4	45.4	44.0	45.4	46.8	56.7	63.8	61.0	48.2	45.4	45.4
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-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°	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6
2.5°	3084.3	3064.4	3064.4	3058.7	3063.0	3063.0	3061.6	3063.0	3072.9	3078.6	3088.5
5°	3082.9	3077.2	3089.9	3105.6	3124.0	3146.7	3152.4	3172.2	3190.7	3214.8	3240.3
7.5°	3101.3	3121.2	3145.3	3170.8	3207.7	3234.7	3258.8	3282.9	3299.9	3322.6	3336.8
10°	3128.3	3168.0	3209.1	3241.7	3281.5	3304.2	3319.8	3322.6	3298.5	3260.2	3229.0
12.5°	3166.6	3213.4	3251.7	3282.9	3301.3	3292.8	3247.4	3200.6	3173.7	3133.9	3078.6
15°	3199.2	3241.7	3281.5	3268.7	3219.0	3172.2	3136.8	3081.4	3027.5	2990.6	2966.5
17.5°	3213.4	3254.5	3240.3	3173.7	3126.8	3072.9	3000.6	2958.0	2922.5	2894.2	2880.0
20°	3221.9	3214.8	3138.2	3089.9	2999.1	2949.5	2902.7	2863.0	2836.0	2821.8	2819.0
22.5°	3199.2	3112.6	3047.4	2960.8	2894.2	2853.0	2816.1	2783.5	2765.1	2753.7	2746.6
25°	3124.0	3023.3	2926.8	2858.7	2801.9	2766.5	2738.1	2711.2	2688.5	2682.8	2668.6
27.5°	3019.0	2936.7	2809.0	2756.5	2706.9	2689.9	2658.7	2631.7	2611.8	2594.8	2549.4
30°	2932.5	2801.9	2709.7	2661.5	2631.7	2611.8	2576.4	2548.0	2514.0	2451.5	2426.0
32.5°	2826.1	2697.0	2609.0	2582.0	2545.2	2528.1	2488.4	2426.0	2373.5	2348.0	2346.5
35°	2688.5	2582.0	2518.2	2494.1	2464.3	2435.9	2353.6	2296.9	2271.4	2274.2	2295.5
37.5°	2573.5	2478.5	2437.3	2403.3	2369.2	2296.9	2227.4	2200.4	2207.5	2221.7	2231.6
40°	2457.2	2384.8	2338.0	2311.1	2234.5	2163.5	2126.6	2136.6	2149.3	2159.3	2172.0
42.5°	2343.7	2292.6	2245.8	2193.3	2088.3	2050.0	2058.5	2071.3	2082.7	2096.9	2109.6
45°	2235.9	2190.5	2136.6	2017.4	1964.9	1974.8	1987.6	1997.5	2014.6	2024.5	2037.3
47.5°	2133.7	2085.5	1990.4	1885.5	1879.8	1899.7	1911.0	1923.8	1936.5	1911.0	1054.1
50°	2018.8	1969.2	1824.5	1784.7	1797.5	1815.9	1830.1	1842.9	1641.4	652.6	502.2
52.5°	1905.3	1779.1	1686.8	1698.2	1711.0	1732.2	1742.2	1293.9	515.0	490.9	492.3
55°	1779.1	1617.3	1590.4	1604.6	1615.9	1637.2	1085.3	475.3	472.4	471.0	482.4
57.5°	1580.4	1482.5	1493.9	1508.1	1519.4	1072.5	462.5	459.7	461.1	462.5	463.9
60°	1403.1	1381.8	1394.6	1407.4	995.9	446.9	438.4	439.8	445.5	441.2	429.9
62.5°	1262.7	1279.7	1292.4	1132.1	424.2	419.9	424.2	419.9	410.0	402.9	388.7
65°	1154.8	1171.9	1181.8	398.7	397.2	402.9	398.7	384.5	368.9	349.0	344.7
67.5°	1041.3	1058.4	378.8	368.9	374.5	367.4	350.4	333.4	322.0	305.0	297.9
70°	923.6	395.8	343.3	341.9	332.0	320.6	302.2	285.2	271.0	263.9	256.8
72.5°	666.8	313.5	309.3	297.9	280.9	265.3	249.7	239.8	232.7	228.4	224.2
75°	278.1	272.4	259.6	239.8	222.7	215.6	204.3	197.2	194.4	185.9	183.0
77.5°	232.7	221.3	202.9	188.7	178.8	174.5	166.0	157.5	153.2	151.8	146.1
80°	178.8	163.2	154.6	147.5	144.7	134.8	124.8	120.6	117.8	116.3	112.1
82.5°	122.0	116.3	110.7	100.7	100.7	96.5	92.2	89.4	86.5	86.5	83.7
85°	79.4	75.2	73.8	69.5	69.5	66.7	65.3	63.8	62.4	61.0	59.6
87.5°	45.4	45.4	46.8	45.4	45.4	44.0	42.6	41.1	39.7	39.7	36.9
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-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6
2.5°	3101.3	3115.5	3118.3	3166.6	3193.5	3192.1	3183.6	3209.1	3193.5	3185.0	3193.5
5°	3265.9	3282.9	3297.1	3349.6	3368.0	3376.5	3375.1	3389.3	3377.9	3368.0	3368.0
7.5°	3346.7	3352.4	3358.1	3345.3	3336.8	3322.6	3301.3	3270.1	3254.5	3237.5	3216.2
10°	3213.4	3194.9	3202.0	3176.5	3155.2	3139.6	3119.7	3094.2	3072.9	3057.3	3033.2
12.5°	3050.2	3048.8	3051.6	3055.9	3034.6	3021.8	3006.2	2987.8	2972.2	2955.2	2935.3
15°	2950.9	2952.3	2963.7	2959.4	2952.3	2945.2	2928.2	2922.5	2908.4	2889.9	2878.6
17.5°	2880.0	2887.1	2898.4	2892.7	2881.4	2874.3	2861.5	2848.8	2836.0	2821.8	2804.8
20°	2817.6	2824.6	2831.7	2824.6	2803.4	2793.4	2776.4	2736.7	2708.3	2679.9	2654.4
22.5°	2749.5	2753.7	2748.0	2725.3	2671.4	2645.9	2626.0	2614.7	2590.6	2575.0	2559.3
25°	2664.3	2640.2	2603.3	2577.8	2556.5	2545.2	2536.7	2535.2	2532.4	2529.6	2522.5
27.5°	2525.3	2516.8	2496.9	2487.0	2488.4	2492.7	2494.1	2498.3	2494.1	2488.4	2482.7
30°	2421.7	2426.0	2427.4	2430.2	2437.3	2441.6	2443.0	2448.7	2445.9	2441.6	2438.8
32.5°	2356.5	2366.4	2372.1	2380.6	2384.8	2391.9	2391.9	2400.5	2391.9	2390.5	2387.7
35°	2302.6	2311.1	2313.9	2326.7	2330.9	2338.0	2338.0	2345.1	2338.0	2265.7	1789.0
37.5°	2248.7	2257.2	2262.8	2274.2	2275.6	2279.9	2103.9	1539.3	993.1	768.9	587.3
40°	2184.8	2194.7	2200.4	2204.7	1549.2	983.2	676.7	550.5	550.5	554.7	559.0
42.5°	2116.7	2123.8	1479.7	861.2	536.3	534.9	539.1	543.4	547.6	553.3	559.0
45°	1664.1	839.9	533.4	520.7	524.9	530.6	536.3	541.9	549.0	554.7	557.6
47.5°	546.2	512.2	519.2	513.6	520.7	527.8	533.4	539.1	540.5	541.9	540.5
50°	505.1	505.1	509.3	509.3	515.0	517.8	517.8	517.8	512.2	510.7	506.5
52.5°	488.0	499.4	493.7	496.5	493.7	489.5	485.2	480.9	472.4	469.6	463.9
55°	479.5	483.8	469.6	465.3	459.7	448.3	442.6	437.0	429.9	427.0	419.9
57.5°	459.7	449.7	434.1	427.0	417.1	405.8	400.1	395.8	388.7	385.9	381.6
60°	422.8	402.9	393.0	384.5	373.1	363.2	358.9	356.1	350.4	349.0	344.7
62.5°	377.4	360.4	351.8	340.5	332.0	326.3	322.0	320.6	315.0	315.0	312.1
65°	327.7	319.2	312.1	300.8	296.5	290.8	289.4	288.0	285.2	283.7	280.9
67.5°	288.0	282.3	272.4	266.7	263.9	259.6	256.8	253.9	248.3	245.4	241.2
70°	252.5	248.3	238.3	234.1	228.4	221.3	217.1	214.2	210.0	207.1	202.9
72.5°	218.5	205.7	198.6	194.4	190.1	183.0	181.6	178.8	174.5	173.1	168.8
75°	175.9	166.0	161.7	158.9	154.6	150.4	150.4	150.4	146.1	144.7	143.3
77.5°	140.5	134.8	131.9	129.1	127.7	124.8	120.6	119.2	114.9	114.9	113.5
80°	107.8	105.0	102.1	100.7	99.3	96.5	93.6	92.2	88.0	88.0	86.5
82.5°	79.4	78.0	76.6	75.2	73.8	72.4	68.1	66.7	63.8	63.8	62.4
85°	56.7	55.3	52.5	51.1	51.1	49.7	45.4	44.0	41.1	41.1	41.1
87.5°	35.5	34.0	32.6	31.2	29.8	28.4	25.5	24.1	24.1	21.3	19.9
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-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6
2.5°	3176.5	3200.6	3197.8	3214.8	3219.0	3227.6	3230.4	3231.8	3210.5	3227.6	3229.0
5°	3363.8	3368.0	3370.9	3377.9	3385.0	3386.5	3379.4	3370.9	3373.7	3368.0	3353.8
7.5°	3213.4	3192.1	3187.8	3182.2	3179.3	3176.5	3163.7	3175.1	3162.3	3156.6	3136.8
10°	3028.9	3009.1	3007.7	3007.7	3011.9	3010.5	3007.7	3002.0	3013.3	3006.2	3002.0
12.5°	2932.5	2925.4	2929.6	2926.8	2938.1	2941.0	2938.1	2938.1	2935.3	2929.6	2932.5
15°	2874.3	2868.6	2872.9	2868.6	2877.1	2878.6	2871.5	2875.7	2868.6	2861.5	2858.7
17.5°	2797.7	2784.9	2775.0	2760.8	2762.2	2759.4	2750.9	2750.9	2743.8	2725.3	2726.8
20°	2650.1	2637.4	2631.7	2631.7	2638.8	2641.6	2640.2	2643.1	2636.0	2633.1	2621.8
22.5°	2557.9	2556.5	2559.3	2566.4	2577.8	2593.4	2594.8	2594.8	2594.8	2593.4	2579.2
25°	2525.3	2525.3	2528.1	2538.1	2546.6	2557.9	2560.8	2563.6	2560.8	2560.8	2548.0
27.5°	2488.4	2485.6	2491.3	2501.2	2511.1	2519.6	2526.7	2528.1	2523.9	2523.9	2528.1
30°	2443.0	2441.6	2448.7	2458.6	2467.1	2475.6	2482.7	2488.4	2482.7	2482.7	2478.5
32.5°	2396.2	2396.2	2399.0	2339.4	2169.2	1953.6	1957.8	1833.0	1746.4	1637.2	1781.9
35°	1495.3	1088.1	934.9	791.6	690.9	625.7	624.2	603.0	593.0	585.9	584.5
37.5°	564.6	567.5	573.2	576.0	580.3	583.1	584.5	584.5	584.5	584.5	583.1
40°	563.2	568.9	573.2	577.4	581.7	584.5	584.5	585.9	587.3	587.3	587.3
42.5°	564.6	570.3	576.0	580.3	583.1	584.5	585.9	587.3	587.3	587.3	587.3
45°	563.2	566.1	566.1	567.5	567.5	567.5	568.9	568.9	567.5	566.1	568.9
47.5°	541.9	541.9	537.7	536.3	534.9	532.0	533.4	532.0	530.6	529.2	532.0
50°	505.1	499.4	496.5	493.7	492.3	489.5	490.9	489.5	488.0	485.2	489.5
52.5°	461.1	459.7	454.0	451.1	449.7	451.1	448.3	446.9	445.5	444.1	445.5
55°	418.5	412.8	411.4	408.6	407.2	408.6	407.2	405.8	404.3	402.9	404.3
57.5°	380.2	376.0	374.5	371.7	371.7	371.7	371.7	370.3	368.9	367.4	368.9
60°	343.3	340.5	339.1	339.1	337.7	337.7	337.7	336.2	334.8	334.8	336.2
62.5°	312.1	312.1	307.9	306.4	306.4	307.9	306.4	305.0	303.6	302.2	305.0
65°	279.5	273.8	272.4	269.6	266.7	268.1	266.7	265.3	263.9	262.5	265.3
67.5°	239.8	238.3	232.7	229.8	228.4	229.8	228.4	227.0	225.6	224.2	227.0
70°	201.5	201.5	195.8	194.4	192.9	192.9	191.5	191.5	190.1	188.7	191.5
72.5°	167.4	167.4	166.0	163.2	161.7	160.3	158.9	157.5	157.5	158.9	158.9
75°	139.0	136.2	130.5	131.9	130.5	129.1	129.1	127.7	126.3	129.1	127.7
77.5°	109.2	107.8	103.6	105.0	103.6	102.1	102.1	100.7	99.3	100.7	100.7
80°	82.3	82.3	80.9	79.4	79.4	78.0	76.6	76.6	75.2	76.6	76.6
82.5°	59.6	59.6	58.2	56.7	55.3	55.3	53.9	53.9	53.9	53.9	53.9
85°	38.3	36.9	36.9	34.0	34.0	34.0	32.6	32.6	32.6	32.6	32.6
87.5°	18.4	18.4	17.0	17.0	15.6	14.2	14.2	12.8	12.8	14.2	14.2
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-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6
2.5°	3203.4	3221.9	3206.3	3213.4	3214.8	3238.9	3237.5	3243.2	3233.2	3221.9	3206.3
5°	3366.6	3358.1	3346.7	3373.7	3359.5	3376.5	3382.2	3393.5	3393.5	3392.1	3379.4
7.5°	3158.0	3139.6	3153.8	3163.7	3168.0	3156.6	3179.3	3204.9	3226.1	3238.9	3240.3
10°	2994.9	3000.6	2999.1	3003.4	3013.3	3011.9	3026.1	3040.3	3046.0	3054.5	3057.3
12.5°	2918.3	2916.9	2919.7	2929.6	2935.3	2933.9	2948.1	2956.6	2959.4	2960.8	2959.4
15°	2857.3	2847.3	2854.4	2855.9	2860.1	2860.1	2877.1	2889.9	2895.6	2898.4	2895.6
17.5°	2742.4	2718.2	2740.9	2740.9	2756.5	2753.7	2780.7	2801.9	2813.3	2821.8	2821.8
20°	2628.9	2617.5	2626.0	2623.2	2634.5	2633.1	2650.1	2664.3	2674.3	2681.4	2689.9
22.5°	2583.5	2586.3	2573.5	2575.0	2575.0	2573.5	2582.0	2589.1	2592.0	2596.2	2593.4
25°	2553.7	2556.5	2552.3	2545.2	2542.3	2545.2	2549.4	2557.9	2559.3	2556.5	2546.6
27.5°	2523.9	2515.4	2522.5	2509.7	2506.9	2512.5	2518.2	2519.6	2521.0	2521.0	2512.5
30°	2478.5	2471.4	2478.5	2472.8	2467.1	2472.8	2477.1	2477.1	2479.9	2481.3	2471.4
32.5°	1732.2	1746.4	1976.3	2115.3	2311.1	2410.4	2428.8	2428.8	2431.7	2431.7	2423.2
35°	590.2	591.6	639.8	693.7	808.7	950.5	1136.4	1232.9	1559.2	1949.3	2326.7
37.5°	583.1	581.7	580.3	578.8	577.4	576.0	573.2	571.7	580.3	688.1	933.5
40°	585.9	584.5	581.7	580.3	578.8	576.0	574.6	571.7	568.9	566.1	563.2
42.5°	585.9	584.5	583.1	581.7	580.3	578.8	576.0	573.2	570.3	566.1	561.8
45°	566.1	566.1	567.5	567.5	568.9	568.9	568.9	567.5	567.5	566.1	560.4
47.5°	529.2	529.2	533.4	533.4	536.3	539.1	539.1	541.9	546.2	549.0	550.5
50°	486.6	486.6	490.9	492.3	495.1	499.4	503.6	505.1	509.3	515.0	520.7
52.5°	444.1	444.1	448.3	448.3	451.1	455.4	459.7	461.1	466.8	472.4	479.5
55°	404.3	404.3	407.2	408.6	410.0	412.8	417.1	417.1	422.8	427.0	434.1
57.5°	368.9	371.7	371.7	371.7	373.1	376.0	378.8	378.8	383.1	387.3	393.0
60°	334.8	337.7	337.7	337.7	339.1	340.5	343.3	343.3	346.2	349.0	354.7
62.5°	303.6	306.4	306.4	307.9	307.9	309.3	312.1	310.7	313.5	315.0	319.2
65°	263.9	266.7	268.1	269.6	271.0	273.8	278.1	276.6	280.9	283.7	288.0
67.5°	225.6	228.4	228.4	229.8	231.2	234.1	236.9	236.9	241.2	244.0	249.7
70°	190.1	192.9	192.9	194.4	195.8	198.6	201.5	200.0	204.3	207.1	211.4
72.5°	157.5	160.3	160.3	161.7	161.7	164.6	167.4	170.2	170.2	173.1	175.9
75°	127.7	129.1	130.5	130.5	131.9	133.4	136.2	139.0	140.5	141.9	144.7
77.5°	100.7	102.1	103.6	103.6	105.0	106.4	107.8	113.5	116.3	117.8	117.8
80°	76.6	78.0	78.0	78.0	79.4	80.9	83.7	83.7	89.4	89.4	90.8
82.5°	53.9	55.3	55.3	55.3	56.7	59.6	61.0	62.4	65.3	66.7	66.7
85°	32.6	34.0	34.0	34.0	35.5	36.9	39.7	41.1	42.6	42.6	44.0
87.5°	12.8	14.2	15.6	15.6	17.0	18.4	19.9	21.3	22.7	22.7	24.1
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-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°	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6
2.5°	3189.3	3199.2	3189.3	3194.9	3202.0	3189.3	3159.5	3148.1	3143.9	3126.8	3115.5
5°	3366.6	3366.6	3362.3	3373.7	3372.3	3352.4	3321.2	3307.0	3292.8	3274.4	3260.2
7.5°	3240.3	3251.7	3258.8	3302.8	3331.1	3334.0	3353.8	3358.1	3363.8	3358.1	3349.6
10°	3058.7	3054.5	3074.3	3115.5	3139.6	3152.4	3190.7	3209.1	3224.7	3255.9	3288.6
12.5°	2956.6	2962.3	2970.8	3000.6	3023.3	3017.6	3033.2	3046.0	3064.4	3095.6	3142.4
15°	2888.5	2894.2	2902.7	2925.4	2939.6	2932.5	2941.0	2949.5	2962.3	2977.9	3006.2
17.5°	2814.7	2824.6	2834.6	2858.7	2871.5	2870.0	2877.1	2880.0	2884.2	2894.2	2914.0
20°	2699.8	2731.0	2750.9	2783.5	2801.9	2799.1	2811.9	2816.1	2821.8	2831.7	2840.3
22.5°	2594.8	2603.3	2613.3	2648.7	2679.9	2718.2	2726.8	2738.1	2752.3	2762.2	2770.7
25°	2535.2	2529.6	2533.8	2557.9	2575.0	2577.8	2590.6	2627.4	2665.8	2682.8	2702.6
27.5°	2499.8	2494.1	2492.7	2504.0	2506.9	2499.8	2496.9	2508.3	2536.7	2565.0	2624.6
30°	2461.5	2454.4	2448.7	2458.6	2462.9	2452.9	2434.5	2424.6	2441.6	2448.7	2472.8
32.5°	2416.1	2409.0	2406.1	2411.8	2414.6	2406.1	2386.3	2374.9	2372.1	2366.4	2372.1
35°	2365.0	2357.9	2353.6	2355.1	2360.7	2353.6	2336.6	2322.4	2315.3	2299.7	2288.4
37.5°	1218.7	1726.6	2241.6	2295.5	2301.1	2299.7	2282.7	2267.1	2260.0	2241.6	2235.9
40°	557.6	622.8	934.9	1221.5	1762.0	2238.7	2223.1	2207.5	2194.7	2189.1	2167.8
42.5°	556.1	557.6	559.0	551.9	683.8	1164.8	1719.5	2146.5	2138.0	2123.8	2108.2
45°	556.1	549.0	554.7	546.2	549.0	547.6	682.4	1100.9	1959.2	2047.2	2040.1
47.5°	550.5	546.2	551.9	544.8	536.3	540.5	534.9	541.9	845.6	1434.3	1964.9
50°	524.9	527.8	537.7	536.3	529.2	534.9	524.9	533.4	526.3	577.4	1112.3
52.5°	486.6	492.3	502.2	510.7	513.6	520.7	517.8	520.7	515.0	516.4	517.8
55°	441.2	448.3	456.8	469.6	475.3	486.6	495.1	499.4	506.5	505.1	493.7
57.5°	398.7	405.8	412.8	425.6	438.4	444.1	459.7	468.2	486.6	482.4	479.5
60°	358.9	364.6	371.7	374.5	390.1	400.1	414.3	422.8	446.9	452.6	461.1
62.5°	323.5	326.3	332.0	336.2	346.2	356.1	363.2	377.4	390.1	408.6	421.4
65°	290.8	293.7	297.9	300.8	302.2	316.4	320.6	336.2	340.5	360.4	371.7
67.5°	253.9	259.6	265.3	268.1	271.0	279.5	282.3	289.4	299.3	307.9	322.0
70°	215.6	219.9	225.6	229.8	235.5	241.2	249.7	253.9	261.0	266.7	278.1
72.5°	180.2	184.4	187.3	191.5	195.8	200.0	207.1	217.1	222.7	232.7	235.5
75°	146.1	150.4	153.2	156.1	160.3	163.2	166.0	175.9	181.6	190.1	198.6
77.5°	120.6	120.6	123.4	131.9	130.5	130.5	133.4	139.0	143.3	149.0	157.5
80°	93.6	95.1	96.5	103.6	105.0	106.4	105.0	109.2	113.5	114.9	120.6
82.5°	69.5	70.9	70.9	75.2	79.4	79.4	79.4	80.9	85.1	86.5	89.4
85°	46.8	48.2	49.7	51.1	53.9	55.3	56.7	56.7	59.6	61.0	62.4
87.5°	25.5	28.4	29.8	31.2	32.6	34.0	35.5	36.9	38.3	39.7	41.1
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-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°	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6	3095.6
2.5°	3111.2	3104.1	3099.9	3088.5	3085.7	3067.2	3070.1	3067.2	3067.2	3071.5	3085.7
5°	3244.6	3210.5	3202.0	3177.9	3158.0	3124.0	3102.7	3091.4	3074.3	3067.2	3077.2
7.5°	3335.4	3309.8	3288.6	3267.3	3238.9	3199.2	3169.4	3135.3	3107.0	3080.0	3072.9
10°	3319.8	3348.2	3348.2	3335.4	3308.4	3268.7	3233.2	3190.7	3141.0	3098.5	3072.9
12.5°	3187.8	3237.5	3277.2	3307.0	3334.0	3307.0	3271.5	3237.5	3182.2	3119.7	3072.9
15°	3043.1	3094.2	3143.9	3206.3	3271.5	3298.5	3297.1	3257.4	3207.7	3142.4	3077.2
17.5°	2941.0	2976.4	3003.4	3071.5	3151.0	3220.5	3267.3	3270.1	3221.9	3163.7	3078.6
20°	2864.4	2889.9	2912.6	2950.9	3020.4	3105.6	3192.1	3240.3	3231.8	3168.0	3082.9
22.5°	2794.9	2813.3	2831.7	2860.1	2915.4	2970.8	3071.5	3170.8	3213.4	3160.9	3078.6
25°	2725.3	2745.2	2759.4	2779.2	2823.2	2868.6	2939.6	3063.0	3158.0	3155.2	3070.1
27.5°	2643.1	2670.0	2687.0	2714.0	2743.8	2777.8	2826.1	2942.4	3078.6	3126.8	3047.4
30°	2543.7	2583.5	2609.0	2638.8	2664.3	2694.1	2732.4	2803.4	2972.2	3071.5	3023.3
32.5°	2400.5	2471.4	2528.1	2556.5	2584.9	2610.4	2644.5	2704.1	2841.7	2996.3	2996.3
35°	2298.3	2330.9	2382.0	2464.3	2499.8	2525.3	2556.5	2603.3	2691.3	2906.9	2952.3
37.5°	2218.9	2231.6	2257.2	2338.0	2404.7	2445.9	2477.1	2506.9	2593.4	2784.9	2895.6
40°	2159.3	2155.0	2152.2	2190.5	2285.5	2350.8	2386.3	2416.1	2482.7	2638.8	2820.4
42.5°	2089.8	2085.5	2071.3	2081.2	2128.1	2237.3	2291.2	2323.8	2379.2	2485.6	2738.1
45°	2017.4	2010.3	2004.6	1994.7	2011.7	2072.7	2183.4	2231.6	2262.8	2357.9	2634.5
47.5°	1943.6	1933.7	1926.6	1918.1	1908.2	1936.5	2041.5	2128.1	2182.0	2241.6	2509.7
50°	1838.6	1851.4	1842.9	1833.0	1824.5	1818.8	1862.8	2004.6	2071.3	2119.5	2357.9
52.5°	866.8	1685.4	1756.4	1746.4	1735.1	1725.1	1735.1	1842.9	1963.5	2001.8	2174.9
55°	493.7	750.5	1562.0	1651.4	1641.4	1627.3	1618.7	1655.6	1835.8	1886.9	2007.5
57.5°	475.3	476.7	689.5	1488.2	1543.6	1530.8	1520.9	1529.4	1682.6	1769.1	1861.3
60°	459.7	459.7	459.7	658.3	1423.0	1427.2	1414.5	1400.3	1466.9	1637.2	1713.8
62.5°	425.6	434.1	438.4	438.4	649.8	1318.0	1305.2	1301.0	1303.8	1478.3	1566.3
65°	381.6	401.5	410.0	415.7	415.7	682.4	1193.1	1186.0	1176.1	1242.8	1417.3
67.5°	333.4	353.3	371.7	383.1	384.5	397.2	712.2	1068.3	1054.1	1055.5	1258.4
70°	283.7	300.8	320.6	337.7	353.3	360.4	371.7	886.7	933.5	913.6	1078.2
72.5°	245.4	252.5	266.7	283.7	302.2	319.2	329.1	353.3	810.1	788.8	820.0
75°	204.3	210.0	219.9	231.2	245.4	265.3	282.3	299.3	429.9	661.1	656.9
77.5°	158.9	168.8	180.2	187.3	194.4	208.6	231.2	248.3	265.3	446.9	526.3
80°	122.0	129.1	134.8	141.9	150.4	160.3	168.8	188.7	208.6	224.2	402.9
82.5°	90.8	95.1	99.3	102.1	105.0	110.7	126.3	133.4	146.1	160.3	190.1
85°	63.8	66.7	69.5	70.9	72.4	73.8	79.4	80.9	93.6	96.5	114.9
87.5°	41.1	42.6	45.4	46.8	46.8	48.2	49.7	49.7	49.7	46.8	56.7
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: P#

CATALOG NUMBER: 4SNLED-LD5-67HL-RW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	3095.6	3095.6
2.5°	3097.0	3119.7
5°	3092.8	3122.6
7.5°	3081.4	3109.8
10°	3064.4	3098.5
12.5°	3046.0	3078.6
15°	3030.4	3054.5
17.5°	3013.3	3027.5
20°	2990.6	3002.0
22.5°	2967.9	2962.3
25°	2942.4	2929.6
27.5°	2909.8	2885.7
30°	2880.0	2837.4
32.5°	2851.6	2782.1
35°	2813.3	2725.3
37.5°	2773.6	2667.2
40°	2726.8	2600.5
42.5°	2677.1	2533.8
45°	2614.7	2470.0
47.5°	2559.3	2393.4
50°	2482.7	2311.1
52.5°	2389.1	2234.5
55°	2278.4	2140.8
57.5°	2159.3	2042.9
60°	2031.6	1930.9
62.5°	1877.0	1814.5
65°	1695.4	1681.2
67.5°	1458.4	1533.6
70°	1196.0	1364.8
72.5°	1000.2	1186.0
75°	820.0	986.0
77.5°	649.8	773.2
80°	405.8	566.1
82.5°	272.4	371.7
85°	164.6	177.3
87.5°	63.8	65.3
90°	0.0	0.0

(END OF REPORT)