

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-LD5-50SL-RM-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 (P33524)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-50SL-RM-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

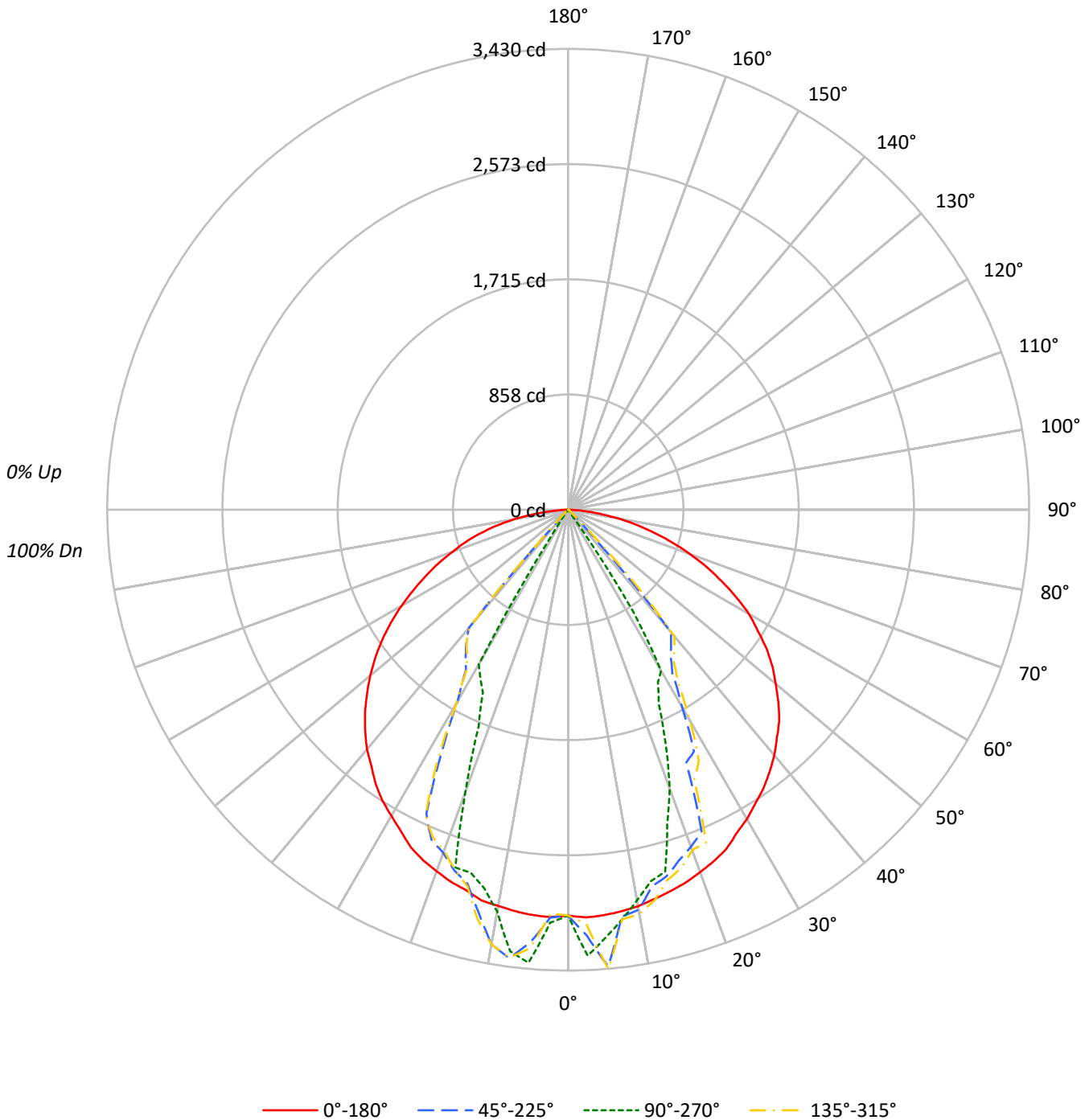
Lumens per Lamp: N/A
Luminaire Lumens: 4295.0 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 38
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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	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
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65
5	85	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59
6	80	69	62	57	79	69	62	57	67	61	56	65	60	56	64	59	55	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	24410	24410	24410	24410
5°	24509	25104	24501	26586
10°	24450	22717	24436	23373
15°	24384	21204	24323	21259
20°	24412	16701	24342	16907
25°	24483	12086	24363	11405
30°	24371	10603	24113	10192
35°	24443	234	24084	284
40°	24527	51	23940	51
45°	24613	30	23689	22
50°	24425	23	23305	23
55°	24282	17	22790	17
60°	23823	18	21960	18
65°	22581	29	20972	19
70°	20947	31	19942	31
75°	18530	35	18835	35
80°	15049	40	15911	40
85°	8854	47	9045	47



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	303.0	7.1
10°-20°	826.6	19.2
20°-30°	1051.8	24.5
30°-40°	888.5	20.7
40°-50°	580.9	13.5
50°-60°	366.0	8.5
60°-70°	194.8	4.5
70°-80°	71.0	1.7
80°-90°	12.2	0.3
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°	2181.5	50.8
0°-40°	3070.0	71.5
0°-60°	4016.9	93.5
0°-90°	4295.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4295.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3021	3021	3021	3021	3021	
5°	3030	3196	3029	3385	3030	288
15°	2939	2789	2932	2797	2939	831
25°	2786	1593	2772	1503	2786	1281
35°	2532	30	2495	36	2532	1584
45°	2221	4	2138	3	2221	1708
55°	1800	2	1690	2	1800	1604
65°	1260	3	1170	2	1260	1248
75°	663	3	674	3	663	703
85°	130	3	132	3	130	164
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6
2.5°	3037.8	3039.6	3040.5	3042.3	3045.0	3045.9	3047.8	3045.9	3045.9	3045.9	3045.9
5°	3029.6	3033.3	3036.0	3039.6	3045.9	3046.9	3054.1	3055.0	3058.6	3065.9	3071.3
7.5°	3016.0	3019.7	3025.1	3034.2	3043.2	3053.2	3065.9	3079.5	3098.5	3116.7	3139.3
10°	2996.1	3000.6	3007.0	3015.1	3059.5	3065.9	3094.0	3133.0	3143.9	3201.0	3243.6
12.5°	2967.1	2982.5	2998.8	3006.1	3048.7	3115.8	3210.0	3191.0	3170.1	3356.9	3354.2
15°	2939.0	2959.8	2951.7	3010.6	3049.6	3166.5	3126.6	3211.8	3367.8	3329.7	3331.5
17.5°	2909.1	2913.6	2958.9	3007.9	3077.7	3137.5	3186.5	3303.4	3334.2	3336.9	3303.4
20°	2871.0	2892.7	2958.9	3003.3	3121.2	3149.3	3255.4	3315.2	3302.5	3271.7	3214.6
22.5°	2832.0	2898.2	2965.3	3027.8	3110.3	3185.6	3238.1	3266.2	3200.1	3078.6	3013.3
25°	2785.8	2824.8	2912.7	3004.2	3107.6	3151.1	3181.9	3136.6	3050.5	2941.7	2832.0
27.5°	2714.2	2776.7	2889.1	2992.5	3085.8	3138.4	3088.6	2979.8	2841.1	2769.5	2719.6
30°	2658.9	2740.4	2832.9	2932.6	3029.6	3060.5	2933.5	2809.3	2714.2	2642.5	2631.7
32.5°	2591.8	2707.8	2795.7	2890.9	2972.5	2931.7	2808.4	2648.0	2569.1	2541.9	2552.8
35°	2531.9	2619.9	2735.0	2828.4	2887.3	2795.7	2600.8	2501.1	2463.0	2478.5	2458.5
37.5°	2460.3	2576.4	2682.4	2763.1	2743.2	2605.4	2440.4	2376.9	2381.5	2368.8	2330.7
40°	2386.0	2496.6	2607.2	2683.3	2613.5	2403.2	2293.5	2279.9	2282.6	2241.9	2187.5
42.5°	2299.0	2399.6	2510.2	2579.1	2428.6	2264.5	2190.2	2192.0	2168.4	2111.3	2082.3
45°	2221.0	2313.5	2428.6	2434.9	2250.0	2113.1	2091.4	2067.8	2015.2	1996.2	1974.4
47.5°	2121.3	2223.7	2318.9	2284.5	2075.1	1989.8	1973.5	1921.8	1895.6	1881.1	1862.9
50°	2015.2	2118.6	2205.6	2107.7	1910.1	1890.1	1836.6	1795.8	1777.7	1762.3	1746.0
52.5°	1914.6	1999.8	2088.7	1920.0	1783.1	1764.1	1703.4	1679.8	1661.7	1644.4	1640.8
55°	1800.4	1875.6	1936.4	1741.4	1661.7	1617.3	1573.7	1557.4	1540.2	1532.0	1545.6
57.5°	1670.7	1756.0	1746.9	1565.6	1530.2	1465.9	1449.5	1438.7	1426.0	1431.4	1318.1
60°	1553.8	1619.1	1574.6	1436.9	1377.0	1333.5	1319.0	1311.8	1319.0	1208.4	1062.5
62.5°	1409.7	1483.1	1393.3	1286.4	1222.9	1202.1	1189.4	1199.3	1093.3	971.8	936.4
65°	1260.1	1339.9	1207.5	1125.0	1085.1	1067.0	1066.1	981.8	877.5	830.4	830.4
67.5°	1115.9	1198.4	1028.0	959.1	943.7	945.5	892.9	765.1	736.1	704.4	612.8
70°	962.7	1035.3	849.4	807.7	798.7	792.3	664.5	630.0	595.6	511.3	504.0
72.5°	810.4	845.8	682.6	672.6	670.8	557.5	532.1	473.2	433.3	423.4	418.8
75°	662.7	651.8	539.4	548.5	462.3	422.4	381.7	347.2	341.8	338.1	84.3
77.5°	523.1	468.7	425.2	369.9	330.9	281.0	272.9	267.4	175.9	63.5	51.7
80°	380.7	303.7	282.8	240.2	204.9	196.7	201.3	61.6	49.0	40.8	35.4
82.5°	242.0	194.0	158.6	138.7	135.1	58.9	43.5	35.4	30.8	26.3	21.8
85°	129.6	86.1	79.8	67.1	39.9	27.2	22.7	17.2	14.5	11.8	10.9
87.5°	40.8	34.4	28.1	22.7	13.6	9.1	7.3	6.3	5.4	4.5	4.5
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):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6
2.5°	3044.1	3045.9	3045.0	3047.8	3047.8	3051.4	3054.1	3056.8	3062.3	3065.0	3085.8
5°	3083.1	3087.6	3101.2	3113.9	3129.3	3133.9	3160.2	3166.5	3197.3	3201.0	3302.5
7.5°	3170.1	3187.4	3220.0	3252.6	3285.3	3306.1	3342.4	3365.0	3389.5	3411.3	3492.0
10°	3275.3	3304.3	3336.0	3368.7	3387.7	3427.6	3449.4	3453.0	3446.6	3411.3	3280.7
12.5°	3378.6	3407.7	3394.1	3400.4	3423.1	3352.4	3362.3	3311.6	3346.9	3172.0	3042.3
15°	3364.1	3362.3	3328.8	3220.0	3238.1	3103.1	3048.7	3007.0	3040.5	3022.4	3002.4
17.5°	3320.6	3238.1	3180.1	3049.6	2994.3	2956.2	2957.1	2958.0	2941.7	2958.9	2908.2
20°	3136.6	3044.1	2958.0	2911.8	2895.5	2868.3	2881.9	2868.3	2869.2	2874.6	2796.7
22.5°	2891.8	2863.7	2813.9	2828.4	2822.9	2847.4	2829.3	2801.2	2810.2	2769.5	2710.5
25°	2793.0	2760.4	2758.6	2764.0	2755.9	2745.0	2728.7	2686.1	2683.3	2670.6	2643.4
27.5°	2693.3	2695.1	2700.6	2684.2	2655.2	2633.5	2609.0	2588.1	2596.3	2581.8	2544.6
30°	2624.4	2623.5	2590.9	2576.4	2522.9	2523.8	2517.4	2504.7	2496.6	2497.5	2473.9
32.5°	2526.5	2498.4	2461.2	2443.1	2438.6	2422.3	2409.6	2412.3	2418.6	2396.0	2420.4
35°	2425.9	2367.9	2362.4	2347.0	2332.5	2321.6	2326.2	2308.0	2307.1	2304.4	2105.0
37.5°	2290.8	2262.7	2260.0	2243.7	2233.7	2231.0	2213.8	2216.5	2224.6	2239.1	1794.9
40°	2179.3	2153.9	2147.6	2146.7	2124.9	2123.1	2127.6	2144.9	2156.6	2066.0	1710.6
42.5°	2059.6	2061.5	2041.5	2028.8	2031.5	2039.7	2061.5	2001.6	1734.2	1652.6	1563.8
45°	1957.2	1948.1	1937.3	1933.6	1957.2	1940.9	1701.6	1570.1	1538.4	1534.8	1285.5
47.5°	1850.2	1847.5	1843.0	1845.7	1711.5	1525.7	1471.3	1454.1	1459.5	1455.9	1104.2
50°	1742.4	1746.0	1746.0	1524.8	1399.7	1368.9	1373.4	1388.8	1292.7	1206.6	1028.9
52.5°	1649.0	1620.9	1388.8	1309.0	1280.9	1294.5	1261.9	1141.3	1054.3	1003.5	951.9
55°	1475.8	1269.1	1217.5	1204.8	1214.8	1094.2	1019.8	941.9	919.2	913.8	883.9
57.5°	1161.3	1119.6	1124.1	1073.3	958.2	890.2	860.3	849.4	839.4	832.2	72.5
60°	1027.1	1038.9	951.0	842.2	795.9	786.9	779.6	769.6	767.8	755.1	46.2
62.5°	940.1	826.8	750.6	723.4	712.5	709.8	696.2	691.7	587.4	80.7	34.4
65°	708.9	662.7	648.2	641.8	630.0	630.0	523.1	82.5	67.1	58.0	30.8
67.5°	578.4	574.7	567.5	559.3	380.7	79.8	69.8	60.7	52.6	46.2	27.2
70°	489.5	487.7	444.2	81.6	68.0	59.8	52.6	47.1	43.5	39.0	24.5
72.5°	401.6	81.6	68.9	59.8	51.7	47.1	42.6	38.1	34.4	31.7	19.9
75°	62.6	55.3	49.0	44.4	40.8	36.3	32.6	29.9	29.0	25.4	13.6
77.5°	45.3	39.0	35.4	31.7	28.1	25.4	21.8	19.0	17.2	14.5	10.0
80°	31.7	28.1	25.4	20.9	18.1	15.4	13.6	11.8	10.9	9.1	4.5
82.5°	18.1	15.4	13.6	10.9	10.0	8.2	7.3	6.3	6.3	4.5	4.5
85°	8.2	8.2	6.3	5.4	4.5	4.5	4.5	3.6	3.6	2.7	2.7
87.5°	3.6	3.6	3.6	3.6	3.6	2.7	2.7	2.7	2.7	2.7	1.8
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):

	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
0°	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6
2.5°	3114.8	3126.6	3149.3	3172.9	3146.6	3240.9	3233.6	3265.3	3282.6	3290.7	3309.7
5°	3392.2	3444.8	3462.0	3410.4	3380.5	3349.6	3279.8	3227.3	3233.6	3216.4	3153.8
7.5°	3386.8	3274.4	3123.0	3054.1	3048.7	3040.5	3062.3	3075.0	3076.8	3075.9	3074.1
10°	3100.3	3042.3	3032.4	3023.3	3026.9	2993.4	2978.0	2934.4	2958.0	2945.3	2949.9
12.5°	3013.3	2999.7	2946.2	2871.9	2916.3	2882.8	2863.7	2876.4	2861.9	2848.3	2843.8
15°	2961.6	2873.7	2843.8	2825.7	2813.0	2805.7	2812.1	2797.6	2793.0	2790.3	2796.7
17.5°	2854.7	2819.3	2786.7	2738.6	2739.5	2736.8	2755.0	2782.1	2784.0	2644.4	2518.3
20°	2770.4	2741.4	2699.7	2669.7	2710.5	2638.0	2357.9	2224.6	2203.8	2203.8	2207.4
22.5°	2703.3	2638.9	2641.6	2594.5	2212.8	2134.9	2136.7	2144.9	2107.7	1980.8	1967.2
25°	2611.7	2601.7	2403.2	2076.9	2079.6	2018.8	1925.5	1794.0	1651.7	1651.7	1628.1
27.5°	2542.8	2331.6	2041.5	2027.9	1823.9	1695.2	1615.4	1494.9	1478.6	1463.1	1465.0
30°	2483.9	1972.6	1979.9	1695.2	1544.7	1437.8	1431.4	1411.5	1401.5	1398.8	1388.8
32.5°	1963.5	1920.9	1657.1	1443.2	1384.3	1367.1	1358.9	1336.2	1335.3	1318.1	1198.4
35°	1841.2	1686.1	1387.0	1329.0	1311.8	1295.4	1281.8	860.3	101.5	40.8	35.4
37.5°	1701.6	1408.8	1282.7	1256.5	1240.1	916.5	91.6	31.7	22.7	16.3	14.5
40°	1442.3	1258.3	1218.4	1189.4	490.4	31.7	19.9	15.4	9.1	8.2	7.3
42.5°	1216.6	1185.7	1143.1	348.1	36.3	15.4	10.0	7.3	6.3	6.3	5.4
45°	1138.6	1111.4	460.5	34.4	22.7	7.3	6.3	6.3	5.4	3.6	3.6
47.5°	1066.1	938.3	41.7	21.8	14.5	6.3	5.4	3.6	3.6	3.6	2.7
50°	989.0	51.7	29.0	16.3	9.1	3.6	3.6	3.6	3.6	2.7	2.7
52.5°	184.9	36.3	23.6	14.5	4.5	3.6	3.6	3.6	2.7	2.7	2.7
55°	43.5	29.0	21.8	12.7	3.6	3.6	3.6	2.7	2.7	2.7	1.8
57.5°	32.6	21.8	17.2	11.8	3.6	2.7	2.7	2.7	2.7	2.7	1.8
60°	27.2	15.4	13.6	10.9	2.7	2.7	2.7	2.7	2.7	2.7	1.8
62.5°	19.0	12.7	10.0	8.2	2.7	2.7	2.7	2.7	2.7	2.7	2.7
65°	15.4	10.0	8.2	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
67.5°	13.6	8.2	5.4	1.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7
70°	10.9	2.7	2.7	1.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7
72.5°	9.1	2.7	1.8	1.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7
75°	9.1	4.5	1.8	1.8	2.7	2.7	3.6	3.6	2.7	2.7	2.7
77.5°	6.3	4.5	1.8	1.8	2.7	2.7	3.6	3.6	2.7	2.7	2.7
80°	3.6	4.5	1.8	2.7	2.7	5.4	6.3	3.6	2.7	2.7	2.7
82.5°	3.6	4.5	5.4	5.4	2.7	4.5	5.4	4.5	3.6	2.7	2.7
85°	3.6	2.7	3.6	4.5	2.7	4.5	4.5	3.6	3.6	2.7	2.7
87.5°	1.8	2.7	2.7	3.6	3.6	3.6	4.5	3.6	3.6	3.6	2.7
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-LD5-50SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6
2.5°	3318.8	3322.4	3265.3	3245.4	3262.6	3259.0	3243.6	3186.5	3180.1	3142.0	3086.7
5°	3172.0	3196.4	3166.5	3218.2	3193.7	3218.2	3292.5	3327.0	3383.2	3417.6	3430.3
7.5°	3069.5	3075.0	3075.0	3079.5	3084.0	3084.9	3079.5	3075.9	3060.5	3041.4	3075.9
10°	2945.3	2951.7	2962.5	2960.7	2959.8	2978.9	2983.4	3022.4	3020.6	3027.8	3054.1
12.5°	2881.0	2832.0	2876.4	2864.6	2881.0	2855.6	2902.7	2894.6	2897.3	2919.0	2975.2
15°	2774.0	2789.4	2800.3	2800.3	2806.6	2801.2	2795.7	2832.9	2855.6	2856.5	2852.9
17.5°	2568.2	2451.3	2570.9	2540.1	2785.8	2792.1	2771.3	2754.0	2754.0	2767.6	2796.7
20°	2204.7	2207.4	2208.3	2220.1	2234.6	2233.7	2234.6	2591.8	2761.3	2722.3	2696.0
22.5°	1932.7	1899.2	1961.7	1957.2	2035.2	2121.3	2203.8	2195.6	2201.1	2453.1	2679.7
25°	1549.3	1592.8	1557.4	1572.8	1660.8	1763.2	1826.7	1992.6	2173.0	2160.3	2219.2
27.5°	1458.6	1446.8	1463.1	1463.1	1474.9	1488.5	1523.9	1617.3	1777.7	1946.3	2105.9
30°	1372.5	1382.5	1384.3	1400.6	1409.7	1418.7	1424.2	1459.5	1495.8	1612.7	1809.4
32.5°	1030.7	903.8	1189.4	1266.4	1331.7	1347.1	1358.0	1372.5	1398.8	1416.0	1514.8
35°	29.9	29.9	31.7	36.3	46.2	311.8	1187.6	1309.0	1326.3	1348.0	1366.1
37.5°	14.5	10.9	12.7	13.6	16.3	22.7	32.6	101.5	1130.4	1278.2	1298.2
40°	6.3	6.3	6.3	6.3	7.3	9.1	13.6	22.7	34.4	909.3	1226.5
42.5°	5.4	5.4	5.4	5.4	5.4	5.4	6.3	8.2	16.3	39.0	643.6
45°	3.6	3.6	2.7	3.6	3.6	4.5	5.4	5.4	7.3	24.5	44.4
47.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.5	5.4	16.3	23.6
50°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	12.7	16.3
52.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	5.4	14.5
55°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.7	2.7	3.6	12.7
57.5°	1.8	1.8	1.8	1.8	1.8	2.7	1.8	1.8	2.7	2.7	11.8
60°	1.8	1.8	1.8	1.8	1.8	2.7	2.7	2.7	2.7	2.7	10.9
62.5°	2.7	2.7	1.8	2.7	1.8	1.8	2.7	2.7	2.7	2.7	7.3
65°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	1.8	2.7
67.5°	2.7	2.7	2.7	2.7	1.8	2.7	1.8	2.7	2.7	1.8	1.8
70°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	1.8	1.8	1.8	1.8
72.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	1.8	1.8	1.8	1.8
75°	2.7	2.7	2.7	2.7	2.7	2.7	3.6	3.6	1.8	1.8	1.8
77.5°	2.7	2.7	2.7	2.7	2.7	2.7	4.5	5.4	4.5	4.5	1.8
80°	2.7	2.7	2.7	2.7	2.7	2.7	4.5	4.5	4.5	4.5	6.3
82.5°	2.7	2.7	2.7	2.7	2.7	2.7	3.6	3.6	3.6	3.6	4.5
85°	2.7	2.7	2.7	2.7	2.7	2.7	3.6	3.6	3.6	2.7	3.6
87.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.6	2.7	2.7	2.7
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-LD5-50SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6
2.5°	3091.3	3060.5	3050.5	3029.6	3027.8	3029.6	3025.1	3018.8	3022.4	3016.0	3010.6
5°	3437.6	3355.1	3301.6	3230.0	3131.2	3109.4	3104.0	3073.1	3062.3	3058.6	3044.1
7.5°	3157.5	3307.9	3398.6	3429.4	3313.4	3286.2	3254.5	3229.1	3204.6	3158.4	3130.3
10°	3033.3	3040.5	3127.5	3229.1	3394.1	3416.7	3433.9	3378.6	3363.2	3245.4	3220.0
12.5°	3004.2	3005.2	3015.1	3076.8	3206.4	3220.9	3281.6	3314.3	3354.2	3376.8	3358.7
15°	2871.9	2945.3	2999.7	3005.2	3016.9	3042.3	3060.5	3173.8	3221.8	3350.5	3343.3
17.5°	2810.2	2833.8	2912.7	2977.1	2966.2	2957.1	2971.6	2987.0	3033.3	3162.0	3160.2
20°	2707.8	2783.1	2825.7	2892.7	2953.5	2956.2	2939.9	2930.8	2912.7	2933.5	2952.6
22.5°	2664.3	2676.1	2755.9	2803.0	2871.9	2896.4	2900.0	2900.9	2890.9	2880.1	2874.6
25°	2659.8	2622.6	2663.4	2722.3	2773.1	2799.4	2829.3	2839.3	2835.6	2835.6	2830.2
27.5°	2176.6	2610.8	2589.1	2628.0	2689.7	2707.8	2723.2	2754.0	2773.1	2786.7	2793.0
30°	2073.2	2151.2	2531.0	2536.5	2599.0	2597.2	2614.4	2639.8	2664.3	2696.0	2704.2
32.5°	1833.9	2025.2	2317.1	2444.9	2510.2	2516.5	2525.6	2532.9	2555.5	2590.9	2621.7
35°	1469.5	1844.8	1985.3	2401.4	2413.2	2425.9	2431.3	2448.5	2455.8	2470.3	2497.5
37.5°	1329.9	1524.8	1904.6	2076.9	2301.7	2312.6	2341.6	2348.8	2360.6	2372.4	2393.2
40°	1249.2	1302.7	1585.5	1854.8	2211.9	2219.2	2229.2	2247.3	2248.2	2261.8	2280.8
42.5°	1184.8	1219.3	1301.8	1771.4	2148.5	2147.6	2124.0	2135.8	2141.2	2155.7	2182.0
45°	946.4	1144.0	1196.6	1446.8	1710.6	1833.9	2070.5	2031.5	2030.6	2036.1	2064.2
47.5°	48.0	1076.1	1113.2	1193.9	1615.4	1620.0	1650.8	1910.1	1950.0	1937.3	1940.0
50°	32.6	74.3	1037.1	1074.2	1392.4	1504.8	1527.5	1539.3	1688.9	1855.7	1828.5
52.5°	25.4	42.6	635.5	997.2	1131.4	1213.8	1359.8	1443.2	1452.3	1519.3	1746.9
55°	22.7	32.6	68.9	920.1	961.8	980.0	1065.2	1211.1	1329.0	1364.3	1367.1
57.5°	19.9	29.9	47.1	416.1	874.8	878.4	892.9	943.7	1049.8	1146.8	1256.5
60°	18.1	26.3	37.2	71.6	795.0	804.1	806.8	820.4	833.1	899.3	1025.3
62.5°	10.9	20.9	32.6	51.7	629.1	722.5	721.6	730.7	742.4	749.7	775.1
65°	9.1	16.3	28.1	43.5	77.1	96.1	583.8	649.1	656.3	666.3	670.8
67.5°	8.2	14.5	20.9	34.4	58.0	66.2	76.1	94.3	514.9	580.2	589.2
70°	7.3	10.0	17.2	29.0	47.1	50.8	57.1	65.3	77.1	95.2	466.0
72.5°	4.5	7.3	11.8	20.9	36.3	40.8	44.4	49.9	55.3	66.2	76.1
75°	1.8	5.4	10.0	15.4	28.1	30.8	33.5	37.2	41.7	49.0	54.4
77.5°	1.8	4.5	8.2	10.9	18.1	20.9	24.5	27.2	30.8	34.4	39.9
80°	6.3	3.6	5.4	8.2	12.7	13.6	15.4	17.2	19.9	22.7	26.3
82.5°	4.5	5.4	6.3	5.4	6.3	8.2	9.1	10.9	11.8	13.6	14.5
85°	3.6	3.6	4.5	4.5	4.5	4.5	4.5	4.5	5.4	6.3	8.2
87.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.6	3.6
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-LD5-50SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6
2.5°	3010.6	3008.8	3003.3	3003.3	3002.4	3006.1	3008.8	3011.5	3010.6	3016.0	3010.6
5°	3033.3	3028.7	3020.6	3013.3	3010.6	3012.4	3009.7	3012.4	3008.8	3013.3	3005.2
7.5°	3095.8	3080.4	3048.7	3036.0	3019.7	3018.8	3010.6	3008.8	3003.3	3003.3	2993.4
10°	3206.4	3132.1	3123.0	3084.9	3071.3	3005.2	3019.7	2995.2	2992.5	2980.7	2976.1
12.5°	3297.1	3239.0	3221.8	3188.3	3150.2	3016.0	3045.9	2993.4	2990.6	2967.1	2942.6
15°	3298.9	3332.4	3285.3	3192.8	3184.6	3092.2	3031.4	3013.3	2989.7	2919.0	2930.8
17.5°	3192.8	3269.9	3292.5	3272.6	3214.6	3152.0	3066.8	3030.5	2959.8	2928.1	2906.3
20°	3020.6	3098.5	3195.5	3201.9	3238.1	3193.7	3082.2	3023.3	2938.1	2882.8	2864.6
22.5°	2883.7	2940.8	3052.3	3104.0	3148.4	3163.8	3093.1	3006.1	2900.0	2846.5	2835.6
25°	2811.2	2823.8	2857.4	2918.1	3016.0	3086.7	3096.7	3004.2	2948.9	2832.0	2770.4
27.5°	2784.9	2774.0	2760.4	2791.2	2864.6	2950.8	3007.9	3023.3	2885.5	2774.0	2712.3
30°	2717.8	2724.1	2703.3	2692.4	2740.4	2829.3	2930.8	2956.2	2850.1	2735.0	2664.3
32.5°	2635.3	2646.2	2649.8	2630.8	2620.8	2682.4	2792.1	2852.9	2847.4	2679.7	2600.8
35°	2531.9	2562.8	2570.9	2571.8	2555.5	2545.5	2609.0	2735.0	2783.1	2654.3	2540.1
37.5°	2423.2	2432.2	2476.6	2488.4	2488.4	2458.5	2505.7	2606.3	2673.4	2597.2	2465.8
40°	2287.2	2316.2	2357.9	2378.7	2399.6	2402.3	2376.0	2446.7	2557.3	2538.3	2396.0
42.5°	2188.4	2207.4	2232.8	2260.9	2303.5	2314.4	2287.2	2299.9	2415.0	2464.9	2305.3
45°	2073.2	2098.6	2105.9	2136.7	2181.1	2212.8	2211.9	2185.6	2278.1	2339.8	2239.1
47.5°	1955.4	1979.9	1992.6	2008.0	2040.6	2081.4	2104.1	2092.3	2110.4	2231.0	2151.2
50°	1833.9	1847.5	1872.9	1890.1	1911.9	1935.4	1989.8	2000.7	1975.3	2071.4	2054.2
52.5°	1718.8	1723.3	1740.5	1757.8	1786.8	1804.0	1847.5	1880.1	1878.3	1906.4	1946.3
55°	1629.0	1609.1	1612.7	1626.3	1645.4	1671.6	1696.1	1746.9	1764.1	1769.6	1833.0
57.5°	1272.8	1477.6	1495.8	1494.9	1517.5	1529.3	1552.0	1585.5	1647.2	1633.6	1704.3
60°	1156.7	1179.4	1350.7	1370.7	1378.8	1389.7	1416.9	1447.7	1493.1	1522.1	1552.9
62.5°	882.1	1019.8	1071.5	1222.9	1246.5	1252.8	1271.0	1285.5	1332.6	1398.8	1386.1
65°	682.6	741.5	899.3	960.9	1089.7	1106.0	1131.4	1146.8	1160.4	1236.5	1240.1
67.5°	590.2	599.2	641.8	760.6	842.2	968.2	983.6	997.2	1018.0	1072.4	1106.0
70°	504.0	514.9	526.7	536.7	642.7	726.1	843.1	847.6	861.2	897.5	973.6
72.5°	95.2	430.6	437.9	444.2	456.0	511.3	622.8	713.4	718.9	736.1	805.9
75°	64.4	75.2	103.3	355.4	367.1	370.8	389.8	503.1	586.5	590.2	621.0
77.5°	46.2	51.7	62.6	74.3	189.5	284.7	289.2	310.0	396.2	458.7	464.1
80°	31.7	35.4	41.7	47.1	58.0	76.1	210.3	216.7	227.5	313.7	330.0
82.5°	18.1	20.9	24.5	29.9	34.4	43.5	56.2	72.5	147.8	157.7	209.4
85°	9.1	10.0	11.8	14.5	17.2	20.9	28.1	34.4	47.1	85.2	87.9
87.5°	4.5	4.5	4.5	4.5	7.3	8.2	10.0	12.7	16.3	24.5	31.7
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-LD5-50SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6
2.5°	3011.5	3024.2	3035.1	3037.8	3037.8	3039.6	3042.3	3044.1	3045.9	3047.8	3045.9
5°	3006.1	3019.7	3028.7	3031.4	3031.4	3036.9	3041.4	3046.9	3049.6	3049.6	3047.8
7.5°	2992.5	3002.4	3014.2	3021.5	3022.4	3031.4	3039.6	3038.7	3042.3	3044.1	3048.7
10°	2974.3	2974.3	2994.3	2999.7	3004.2	3014.2	3016.9	3022.4	3035.1	3036.9	3048.7
12.5°	2965.3	2956.2	2979.8	2982.5	2997.9	2985.2	3001.5	3007.0	2994.3	3011.5	2988.8
15°	2924.5	2935.4	2931.7	2939.9	2967.1	2952.6	2997.0	2982.5	3015.1	2976.1	3045.0
17.5°	2890.9	2889.1	2903.6	2910.9	2916.3	2947.1	2958.9	2975.2	2987.9	2977.1	3004.2
20°	2866.5	2852.0	2862.8	2871.0	2890.0	2913.6	2920.8	2896.4	2939.0	3011.5	3028.7
22.5°	2820.2	2810.2	2822.9	2822.9	2852.0	2848.3	2875.5	2860.1	2900.0	2984.3	3072.2
25°	2757.7	2758.6	2772.2	2788.5	2793.9	2834.7	2849.2	2869.2	2919.0	3019.7	3073.1
27.5°	2694.2	2688.8	2696.9	2730.5	2758.6	2788.5	2793.0	2861.0	2929.0	2997.9	3045.0
30°	2630.8	2625.3	2630.8	2655.2	2688.8	2708.7	2758.6	2849.2	2912.7	2959.8	3004.2
32.5°	2562.8	2557.3	2570.0	2588.1	2647.1	2649.8	2748.6	2833.8	2883.7	2918.1	2910.0
35°	2490.2	2483.0	2494.8	2522.9	2577.3	2597.2	2700.6	2764.0	2820.2	2836.5	2798.5
37.5°	2403.2	2390.5	2405.0	2444.0	2501.1	2559.1	2645.3	2718.7	2748.6	2705.1	2659.8
40°	2312.6	2303.5	2328.9	2348.8	2415.9	2496.6	2595.4	2647.1	2628.0	2578.2	2528.3
42.5°	2231.9	2212.8	2235.5	2273.6	2349.7	2441.3	2521.1	2550.1	2504.7	2431.3	2373.3
45°	2133.1	2110.4	2137.6	2188.4	2270.0	2374.2	2436.8	2426.8	2349.7	2286.3	2206.5
47.5°	2029.7	2002.5	2029.7	2090.5	2182.0	2292.6	2337.9	2292.6	2195.6	2115.8	2051.5
50°	1928.2	1896.5	1922.8	2014.3	2104.1	2189.3	2188.4	2100.4	2042.4	1955.4	1899.2
52.5°	1827.6	1782.2	1808.5	1908.3	1998.0	2095.0	2023.4	1941.8	1872.0	1795.8	1777.7
55°	1703.4	1654.4	1689.8	1834.8	1903.7	1960.8	1846.6	1775.0	1706.1	1668.0	1645.4
57.5°	1585.5	1532.0	1562.9	1734.2	1785.0	1799.5	1694.3	1592.8	1552.0	1539.3	1506.7
60°	1464.0	1403.3	1432.3	1629.9	1665.3	1606.4	1503.0	1424.2	1416.0	1390.6	1365.2
62.5°	1348.0	1280.9	1299.1	1500.3	1516.6	1409.7	1314.5	1293.6	1273.7	1248.3	1234.7
65°	1214.8	1145.0	1170.3	1362.5	1347.1	1209.3	1155.8	1151.3	1125.0	1104.2	1124.1
67.5°	1092.4	1009.9	1045.2	1212.0	1142.2	1029.8	1008.1	997.2	976.3	988.1	778.7
70°	958.2	868.5	916.5	1049.8	946.4	872.1	863.9	847.6	848.5	674.5	568.4
72.5°	808.6	730.7	800.5	872.1	748.8	727.0	715.3	713.4	575.6	467.8	441.5
75°	677.2	598.3	673.6	700.7	596.5	582.0	581.1	480.5	378.0	360.8	352.6
77.5°	528.5	467.8	539.4	498.6	457.8	441.5	396.2	297.3	284.7	272.9	102.4
80°	356.3	360.8	402.5	343.6	326.4	278.3	219.4	210.3	181.3	72.5	57.1
82.5°	216.7	272.0	256.5	214.8	210.3	151.4	138.7	70.7	52.6	41.7	36.3
85°	112.4	137.8	132.4	116.9	87.0	78.0	43.5	33.5	27.2	20.9	17.2
87.5°	38.1	50.8	49.0	39.0	29.9	23.6	15.4	12.7	9.1	7.3	6.3
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-LD5-50SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6
2.5°	3044.1	3044.1	3042.3	3044.1	3045.0	3043.2	3043.2	3045.0	3045.9	3046.9	3051.4
5°	3048.7	3050.5	3053.2	3058.6	3059.5	3070.4	3075.0	3077.7	3080.4	3081.3	3075.0
7.5°	3058.6	3065.0	3070.4	3069.5	3063.2	3045.9	3040.5	3036.0	3044.1	3065.0	3089.5
10°	3067.7	3038.7	2984.3	3058.6	3036.0	3056.8	3118.5	3132.1	3173.8	3232.7	3249.9
12.5°	3005.2	3084.9	3102.2	3018.8	3172.9	3115.8	3183.7	3243.6	3260.8	3320.6	3284.4
15°	3072.2	3111.2	3137.5	3220.9	3211.8	3260.8	3279.8	3268.0	3270.8	3286.2	3327.0
17.5°	3071.3	3149.3	3166.5	3222.7	3260.8	3261.7	3256.3	3250.8	3265.3	3277.1	3252.6
20°	3123.9	3149.3	3182.8	3205.5	3212.8	3221.8	3239.0	3225.4	3198.2	3172.0	3161.1
22.5°	3097.6	3154.7	3183.7	3187.4	3182.8	3154.7	3129.3	3091.3	3078.6	3065.0	3069.5
25°	3103.1	3129.3	3125.7	3111.2	3092.2	3039.6	3026.9	3010.6	2986.1	2927.2	2873.7
27.5°	3064.1	3050.5	3034.2	2998.8	2964.4	2936.3	2904.5	2852.0	2808.4	2745.0	2721.4
30°	2998.8	2944.4	2904.5	2883.7	2850.1	2803.0	2755.0	2690.6	2635.3	2622.6	2610.8
32.5°	2873.7	2820.2	2787.6	2736.8	2679.7	2623.5	2568.2	2542.8	2531.0	2532.9	2522.0
35°	2745.9	2698.7	2649.8	2573.6	2531.0	2474.8	2454.9	2449.4	2438.6	2426.8	2414.1
37.5°	2609.9	2554.6	2481.2	2435.9	2393.2	2370.6	2360.6	2352.5	2333.4	2312.6	2298.1
40°	2478.5	2378.7	2337.9	2293.5	2280.8	2270.9	2256.4	2236.4	2210.1	2206.5	2200.2
42.5°	2302.6	2231.0	2195.6	2186.6	2171.1	2153.9	2141.2	2119.5	2108.6	2115.8	2121.3
45°	2135.8	2099.5	2087.7	2076.9	2047.9	2023.4	2015.2	2008.0	2017.0	2056.9	1961.7
47.5°	2000.7	1986.2	1971.7	1953.6	1926.4	1908.3	1916.4	1923.7	1931.8	1639.0	1495.8
50°	1883.8	1863.8	1841.2	1821.2	1804.9	1803.1	1845.7	1717.9	1438.7	1431.4	1286.4
52.5°	1756.0	1726.0	1712.4	1700.7	1707.9	1735.1	1435.9	1332.6	1278.2	1110.5	1036.2
55°	1618.2	1591.9	1591.9	1602.7	1563.8	1267.3	1251.9	1082.4	980.0	951.0	939.2
57.5°	1480.4	1477.6	1493.1	1365.2	1150.4	1103.2	927.4	890.2	873.9	870.3	851.2
60°	1354.4	1379.7	1154.9	1062.5	923.8	833.1	807.7	803.2	786.0	779.6	762.4
62.5°	1253.7	1039.8	968.2	790.5	744.3	732.5	718.9	712.5	697.1	615.5	180.4
65°	905.6	855.8	694.4	664.5	660.9	643.6	638.2	573.8	135.1	90.7	77.1
67.5°	683.5	606.5	585.6	580.2	563.0	528.5	156.8	89.7	77.1	67.1	58.9
70°	524.9	511.3	495.9	483.2	142.3	88.8	77.1	65.3	56.2	49.9	45.3
72.5°	429.7	420.6	244.8	93.4	76.1	64.4	57.1	49.9	43.5	39.9	36.3
75°	336.3	93.4	77.1	64.4	55.3	47.1	41.7	37.2	33.5	30.8	28.1
77.5°	76.1	61.6	52.6	44.4	39.9	35.4	31.7	27.2	24.5	21.8	18.1
80°	47.1	40.8	34.4	31.7	27.2	22.7	19.9	18.1	14.5	13.6	11.8
82.5°	30.8	24.5	21.8	18.1	14.5	13.6	11.8	9.1	8.2	7.3	6.3
85°	13.6	11.8	10.0	8.2	6.3	5.4	4.5	3.6	3.6	3.6	3.6
87.5°	4.5	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	1.8	1.8
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: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6
2.5°	3053.2	3069.5	3084.9	3080.4	3064.1	3038.7	3031.4	3021.5	3028.7	3044.1	3050.5
5°	3075.0	3065.9	3098.5	3146.6	3224.5	3231.8	3286.2	3298.9	3342.4	3369.6	3368.7
7.5°	3105.8	3234.5	3288.0	3346.0	3372.3	3366.0	3374.1	3367.8	3357.8	3353.3	3347.8
10°	3262.6	3360.5	3380.5	3380.5	3339.7	3284.4	3260.8	3220.0	3138.4	3140.2	3126.6
12.5°	3354.2	3388.6	3341.5	3301.6	3137.5	3074.1	3005.2	2972.5	2953.5	2924.5	2935.4
15°	3306.1	3257.2	3229.1	3100.3	2999.7	2885.5	2887.3	2867.4	2846.5	2848.3	2834.7
17.5°	3235.4	3196.4	2997.0	2908.2	2859.2	2814.8	2806.6	2780.3	2766.7	2762.2	2761.3
20°	3138.4	2997.9	2849.2	2827.5	2768.5	2717.8	2709.6	2717.8	2759.5	2685.1	2433.1
22.5°	3025.1	2822.9	2779.4	2717.8	2677.9	2658.0	2707.8	2481.2	2138.5	2180.2	2135.8
25°	2832.9	2745.0	2670.6	2623.5	2619.0	2496.6	2080.5	2037.0	1816.7	1698.8	1566.5
27.5°	2692.4	2654.3	2576.4	2568.2	2509.3	2041.5	1824.8	1585.5	1497.6	1484.0	1455.0
30°	2607.2	2552.8	2505.7	2299.9	2002.5	1643.5	1464.0	1430.5	1415.1	1398.8	1373.4
32.5°	2504.7	2453.1	2475.7	1933.6	1596.4	1415.1	1378.8	1354.4	1326.3	1315.4	1223.8
35°	2400.5	2376.9	1934.5	1625.4	1372.5	1329.0	1301.8	1276.4	1015.3	245.7	83.4
37.5°	2289.0	2283.6	1738.7	1348.9	1285.5	1244.7	1167.6	241.1	57.1	39.0	29.0
40°	2202.0	1739.6	1374.3	1264.6	1212.9	1148.6	161.4	39.9	25.4	15.4	10.0
42.5°	2143.9	1564.7	1230.2	1186.7	1074.2	118.8	40.8	17.2	10.0	8.2	6.3
45°	1652.6	1235.6	1149.5	1104.2	136.0	40.8	23.6	8.2	6.3	5.4	3.6
47.5°	1524.8	1122.3	1071.5	241.1	45.3	21.8	16.3	5.4	3.6	3.6	3.6
50°	1154.9	1037.1	853.0	58.9	29.0	15.4	11.8	3.6	3.6	3.6	2.7
52.5°	1012.6	957.3	91.6	39.0	22.7	11.8	7.3	2.7	2.7	2.7	2.7
55°	925.6	607.4	54.4	29.9	19.0	10.9	4.5	2.7	2.7	2.7	1.8
57.5°	846.7	81.6	39.9	25.4	17.2	10.0	2.7	2.7	2.7	2.7	1.8
60°	718.0	58.9	32.6	22.7	16.3	9.1	2.7	2.7	2.7	2.7	2.7
62.5°	93.4	46.2	28.1	19.9	11.8	7.3	1.8	2.7	2.7	2.7	2.7
65°	68.0	36.3	25.4	13.6	7.3	2.7	1.8	2.7	2.7	2.7	2.7
67.5°	52.6	29.9	19.0	11.8	6.3	1.8	1.8	2.7	2.7	2.7	2.7
70°	41.7	25.4	15.4	10.0	5.4	1.8	1.8	2.7	2.7	2.7	2.7
72.5°	32.6	18.1	10.9	5.4	3.6	1.8	1.8	2.7	2.7	2.7	2.7
75°	24.5	14.5	8.2	4.5	1.8	1.8	1.8	2.7	2.7	2.7	2.7
77.5°	16.3	9.1	6.3	3.6	3.6	3.6	4.5	4.5	2.7	2.7	2.7
80°	10.9	6.3	4.5	4.5	4.5	3.6	4.5	4.5	2.7	4.5	2.7
82.5°	5.4	4.5	4.5	3.6	3.6	2.7	3.6	3.6	3.6	3.6	2.7
85°	3.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.6	3.6	2.7
87.5°	1.8	1.8	1.8	1.8	2.7	2.7	2.7	2.7	3.6	3.6	2.7
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-LD5-50SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6
2.5°	3042.3	3045.0	3037.8	3076.8	3056.8	3058.6	3066.8	3045.9	3050.5	3036.0	3026.0
5°	3372.3	3377.7	3383.2	3385.0	3388.6	3393.1	3387.7	3385.0	3379.6	3361.4	3342.4
7.5°	3320.6	3314.3	3311.6	3315.2	3321.5	3324.3	3319.7	3326.1	3349.6	3359.6	3366.0
10°	3048.7	3019.7	3039.6	3036.9	3014.2	3090.4	3069.5	3081.3	3089.5	3172.9	3223.6
12.5°	2919.0	2937.2	2902.7	2885.5	2908.2	2923.6	2939.0	2906.3	2951.7	2930.8	2997.9
15°	2810.2	2799.4	2795.7	2796.7	2792.1	2813.9	2819.3	2826.6	2832.9	2861.0	2871.9
17.5°	2761.3	2779.4	2786.7	2792.1	2783.1	2773.1	2763.1	2748.6	2753.1	2745.9	2766.7
20°	2263.6	2202.9	2199.2	2234.6	2195.6	2217.4	2270.0	2621.7	2609.9	2746.8	2700.6
22.5°	1889.2	1832.1	1783.1	1740.5	1801.3	1826.7	1924.6	2035.2	2214.7	2186.6	2381.5
25°	1542.9	1522.1	1509.4	1503.0	1507.6	1505.7	1527.5	1579.2	1660.8	1853.0	2101.3
27.5°	1443.2	1433.2	1428.7	1414.2	1425.1	1421.4	1438.7	1449.5	1474.0	1493.1	1573.7
30°	1364.3	1352.5	1344.4	1329.0	1339.9	1340.8	1346.2	1374.3	1384.3	1400.6	1426.0
32.5°	498.6	293.7	275.6	262.0	286.5	373.5	655.4	1145.9	1307.2	1319.9	1348.9
35°	49.0	40.8	36.3	36.3	37.2	40.8	54.4	143.2	262.0	1012.6	1267.3
37.5°	19.0	16.3	13.6	12.7	13.6	15.4	20.9	27.2	37.2	77.1	343.6
40°	8.2	7.3	6.3	6.3	6.3	6.3	7.3	9.1	13.6	25.4	39.9
42.5°	5.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	6.3	8.2	16.3
45°	3.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.6	4.5	7.3
47.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.6
50°	2.7	2.7	2.7	2.7	1.8	2.7	1.8	2.7	2.7	2.7	2.7
52.5°	2.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.7	2.7
55°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.7
57.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
60°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
62.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.7	2.7	1.8
65°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.7	1.8
67.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
70°	2.7	2.7	1.8	2.7	1.8	1.8	2.7	2.7	2.7	1.8	1.8
72.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	5.4	5.4	3.6
75°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.5	5.4	4.5
77.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.5	4.5	4.5
80°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.6	3.6	3.6
82.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.6	3.6	3.6
85°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
87.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
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-LD5-50SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6
2.5°	3008.8	3007.9	3026.9	3041.4	3036.0	3041.4	3047.8	3048.7	3050.5	3043.2	3040.5
5°	3306.1	3278.0	3223.6	3184.6	3139.3	3056.8	3016.0	3020.6	3021.5	3018.8	3022.4
7.5°	3363.2	3360.5	3341.5	3333.3	3302.5	3243.6	3149.3	3133.0	3093.1	3067.7	3046.9
10°	3220.0	3285.3	3302.5	3331.5	3349.6	3338.8	3259.0	3247.2	3221.8	3192.8	3199.2
12.5°	3065.0	3118.5	3121.2	3278.9	3314.3	3317.9	3287.1	3303.4	3307.0	3241.8	3203.7
15°	2874.6	2900.0	2953.5	3100.3	3207.3	3274.4	3294.3	3303.4	3259.0	3256.3	3240.9
17.5°	2791.2	2807.5	2832.0	2914.5	3076.8	3175.6	3259.9	3253.5	3270.8	3258.1	3219.1
20°	2686.1	2699.7	2743.2	2784.9	2864.6	2996.1	3153.8	3165.6	3188.3	3185.6	3196.4
22.5°	2684.2	2636.2	2643.4	2676.1	2759.5	2877.3	3045.0	3084.0	3098.5	3108.5	3120.3
25°	2129.4	2511.1	2580.9	2601.7	2656.1	2725.0	2922.7	2937.2	2964.4	3008.8	3041.4
27.5°	1844.8	2104.1	2383.3	2528.3	2562.8	2619.9	2737.7	2759.5	2852.0	2862.8	2913.6
30°	1455.9	1656.2	2073.2	2422.3	2479.4	2519.3	2602.7	2646.2	2686.1	2729.6	2783.1
32.5°	1369.8	1401.5	1632.7	2004.3	2448.5	2418.6	2480.3	2506.6	2550.1	2588.1	2627.1
35°	1290.9	1312.7	1361.6	1641.7	1994.4	2336.1	2377.8	2395.1	2419.5	2448.5	2476.6
37.5°	1208.4	1241.0	1274.6	1349.8	1844.8	2270.9	2270.0	2289.9	2304.4	2328.9	2352.5
40°	219.4	1139.5	1193.9	1242.9	1430.5	1811.3	2168.4	2177.5	2187.5	2202.9	2227.3
42.5°	35.4	190.4	1118.7	1165.8	1219.3	1621.8	2122.2	2085.0	2078.7	2089.6	2111.3
45°	18.1	46.2	224.8	1088.7	1136.8	1293.6	1735.1	2020.7	2014.3	1993.5	1998.0
47.5°	13.6	29.0	55.3	376.2	1064.3	1110.5	1600.9	1583.7	1704.3	1935.4	1900.1
50°	11.8	19.9	32.6	77.1	940.1	1022.6	1232.9	1440.5	1503.9	1512.1	1789.5
52.5°	10.9	13.6	23.6	49.9	197.6	945.5	1002.6	1075.1	1182.1	1411.5	1406.0
55°	10.0	12.7	19.9	33.5	68.9	852.1	911.1	924.7	947.3	1057.0	1202.1
57.5°	5.4	11.8	19.0	29.0	51.7	155.9	826.8	837.6	855.8	860.3	912.0
60°	2.7	10.9	17.2	25.4	38.1	72.5	743.4	756.0	766.9	768.7	785.1
62.5°	1.8	10.0	14.5	23.6	31.7	51.7	175.9	359.0	682.6	682.6	701.7
65°	1.8	7.3	9.1	15.4	29.0	42.6	74.3	86.1	167.7	412.5	615.5
67.5°	1.8	2.7	8.2	12.7	21.8	32.6	54.4	63.5	76.1	87.0	161.4
70°	1.8	1.8	7.3	8.2	13.6	24.5	39.0	44.4	51.7	58.9	68.0
72.5°	1.8	1.8	6.3	6.3	9.1	16.3	29.9	32.6	37.2	41.7	48.0
75°	4.5	3.6	5.4	5.4	6.3	12.7	22.7	25.4	27.2	30.8	35.4
77.5°	4.5	4.5	4.5	4.5	4.5	8.2	14.5	16.3	19.0	20.9	24.5
80°	3.6	3.6	3.6	4.5	4.5	5.4	9.1	10.0	10.9	13.6	14.5
82.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	5.4	6.3	8.2
85°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.6	3.6	3.6	3.6
87.5°	2.7	2.7	2.7	1.8	1.8	2.7	2.7	2.7	2.7	2.7	2.7
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-LD5-50SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6	3020.6
2.5°	3039.6	3034.2	3029.6	3032.4	3024.2	3020.6	3023.3	3024.2	3026.0	3030.5	3031.4
5°	3031.4	3029.6	3037.8	3042.3	3040.5	3042.3	3042.3	3038.7	3033.3	3036.9	3028.7
7.5°	3026.0	3014.2	3005.2	3007.0	2997.9	3008.8	3018.8	3033.3	3037.8	3037.8	3028.7
10°	3119.4	3106.7	3055.9	3021.5	2998.8	2978.9	3026.0	2978.0	3000.6	2914.5	3013.3
12.5°	3196.4	3213.7	3191.0	3096.7	3080.4	3020.6	3055.0	2996.1	2978.9	2880.1	2911.8
15°	3227.3	3194.6	3187.4	3161.1	3125.7	3108.5	3016.0	3006.1	2978.0	2988.8	2947.1
17.5°	3200.1	3216.4	3194.6	3177.4	3141.1	3100.3	3045.0	2996.1	2957.1	2870.1	2943.5
20°	3173.8	3195.5	3130.3	3141.1	3144.8	3097.6	3068.6	3027.8	2978.9	2897.3	2833.8
22.5°	3130.3	3114.8	3120.3	3104.0	3090.4	3096.7	3056.8	3028.7	2946.2	2909.1	2822.9
25°	3059.5	3054.1	3068.6	3066.8	3034.2	3023.3	3003.3	2973.4	2940.8	2881.0	2810.2
27.5°	2944.4	2972.5	2997.9	3009.7	2992.5	2963.5	2952.6	2935.4	2912.7	2852.0	2799.4
30°	2822.9	2854.7	2883.7	2909.1	2924.5	2911.8	2901.8	2891.8	2857.4	2817.5	2758.6
32.5°	2684.2	2725.9	2765.8	2796.7	2830.2	2840.2	2832.9	2824.8	2795.7	2759.5	2712.3
35°	2523.8	2580.9	2638.9	2694.2	2708.7	2732.3	2755.9	2742.3	2726.8	2690.6	2647.1
37.5°	2387.8	2428.6	2470.3	2540.1	2590.9	2620.8	2662.5	2667.9	2641.6	2624.4	2567.3
40°	2247.3	2284.5	2345.2	2386.0	2455.8	2490.2	2534.7	2554.6	2548.3	2538.3	2488.4
42.5°	2136.7	2154.8	2194.7	2231.0	2299.9	2370.6	2409.6	2431.3	2454.0	2445.8	2420.4
45°	2018.8	2035.2	2048.8	2080.5	2147.6	2210.1	2258.2	2290.8	2331.6	2350.6	2319.8
47.5°	1901.9	1906.4	1922.8	1949.0	1988.9	2037.0	2117.7	2166.6	2204.7	2241.9	2221.9
50°	1812.2	1795.8	1798.6	1814.9	1847.5	1894.7	1952.7	2021.6	2065.1	2110.4	2114.9
52.5°	1583.7	1716.1	1684.3	1693.4	1710.6	1733.3	1794.0	1862.0	1915.5	1954.5	1993.5
55°	1329.0	1355.3	1610.0	1573.7	1584.6	1604.6	1632.7	1700.7	1752.3	1806.7	1861.1
57.5°	1030.7	1226.5	1236.5	1472.2	1466.8	1468.6	1492.2	1531.1	1582.8	1650.8	1697.0
60°	801.4	883.9	1044.3	1125.9	1332.6	1339.9	1353.5	1376.1	1420.5	1484.9	1558.3
62.5°	707.1	718.0	775.1	897.5	1031.6	1193.9	1222.9	1226.5	1246.5	1310.8	1396.1
65°	621.0	628.2	645.5	658.1	770.6	927.4	1067.0	1089.7	1102.3	1140.4	1212.9
67.5°	427.9	541.2	556.6	565.7	576.6	649.1	822.2	937.4	951.9	985.4	1048.9
70°	82.5	171.3	468.7	478.6	484.1	500.4	528.5	711.6	807.7	839.4	868.5
72.5°	56.2	66.2	79.8	188.6	398.9	407.9	414.3	437.9	600.1	692.6	708.0
75°	40.8	45.3	53.5	66.2	81.6	265.6	329.1	340.9	352.6	486.8	564.8
77.5°	29.0	32.6	36.3	42.6	49.9	64.4	92.5	254.7	266.5	272.9	385.3
80°	16.3	19.9	24.5	28.1	31.7	36.3	47.1	58.9	131.4	192.2	202.2
82.5°	9.1	10.9	12.7	15.4	17.2	21.8	26.3	31.7	41.7	61.6	130.5
85°	4.5	4.5	4.5	6.3	7.3	10.0	11.8	13.6	19.0	26.3	36.3
87.5°	2.7	2.7	3.6	3.6	3.6	4.5	4.5	4.5	5.4	8.2	11.8
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: P#

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	3020.6	3020.6	3020.6	3020.6	3020.6
2.5°	3032.4	3029.6	3029.6	3040.5	3037.8
5°	3026.9	3024.2	3023.3	3035.1	3029.6
7.5°	3022.4	3012.4	3009.7	3020.6	3016.0
10°	3004.2	2997.0	3001.5	2997.9	2996.1
12.5°	2973.4	2968.9	2949.9	2951.7	2967.1
15°	2918.1	2936.3	2903.6	2932.6	2939.0
17.5°	2816.6	2857.4	2889.1	2906.3	2909.1
20°	2861.9	2875.5	2859.2	2860.1	2871.0
22.5°	2803.0	2809.3	2813.9	2808.4	2832.0
25°	2708.7	2684.2	2736.8	2747.7	2785.8
27.5°	2679.7	2659.8	2684.2	2682.4	2714.2
30°	2656.1	2591.8	2602.7	2619.9	2658.9
32.5°	2622.6	2521.1	2510.2	2548.3	2591.8
35°	2563.7	2467.6	2442.2	2466.7	2531.9
37.5°	2513.8	2393.2	2342.5	2375.1	2460.3
40°	2439.5	2335.2	2256.4	2285.4	2386.0
42.5°	2350.6	2285.4	2163.9	2183.8	2299.0
45°	2260.9	2202.9	2074.1	2084.1	2221.0
47.5°	2169.3	2115.8	1980.8	1982.6	2121.3
50°	2079.6	2008.9	1897.4	1865.6	2015.2
52.5°	1962.6	1897.4	1813.1	1761.4	1914.6
55°	1852.0	1778.6	1717.0	1637.2	1800.4
57.5°	1744.2	1662.6	1620.9	1518.4	1670.7
60°	1596.4	1557.4	1495.8	1397.9	1553.8
62.5°	1445.0	1432.3	1369.8	1268.2	1409.7
65°	1268.2	1298.2	1233.8	1146.8	1260.1
67.5°	1101.4	1154.9	1084.2	1030.7	1115.9
70°	923.8	985.4	945.5	926.5	962.7
72.5°	748.8	808.6	812.3	798.7	810.4
75°	578.4	644.5	680.8	660.0	662.7
77.5°	438.8	470.5	510.4	526.7	523.1
80°	271.1	326.4	359.0	392.5	380.7
82.5°	136.9	183.1	223.0	259.3	242.0
85°	57.1	73.4	102.4	135.1	129.6
87.5°	17.2	29.0	30.8	43.5	40.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)