

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-LD5-47SL-RM-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 (P33524)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-47SL-RM-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

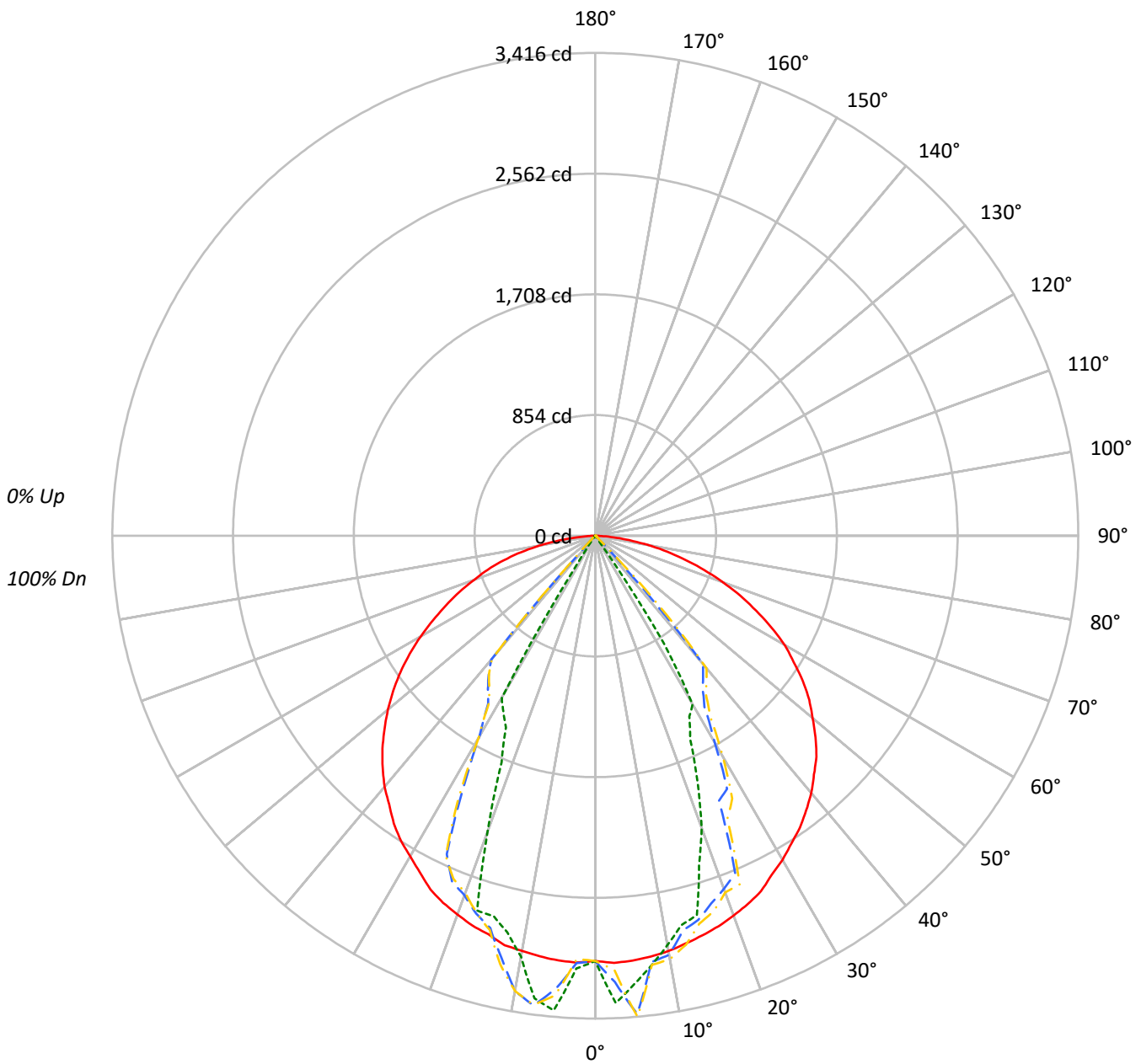
Lumens per Lamp: N/A
Luminaire Lumens: 4277.0 lumens
Efficiency: N/A
Efficacy: 122.2 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 35
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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CATALOG NUMBER: 4SNLED-LD5-47SL-RM-UNV-L950-CD1-U

Luminous Intensity Polar Plot



— 0°-180° - - - 45°-225° - - - 90°-270° - - - 135°-315°



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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°	24307	24307	24307	24307
5°	24406	24999	24399	26474
10°	24347	22622	24333	23275
15°	24282	21115	24221	21169
20°	24310	16631	24240	16836
25°	24380	12036	24261	11357
30°	24268	10558	24012	10149
35°	24340	233	23983	282
40°	24424	51	23839	51
45°	24510	30	23589	22
50°	24323	23	23207	23
55°	24179	17	22694	17
60°	23723	18	21868	18
65°	22486	29	20884	19
70°	20860	31	19860	31
75°	18452	35	18754	35
80°	14986	40	15844	40
85°	8820	47	9004	47



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.8	7.1
10°-20°	823.1	19.2
20°-30°	1047.4	24.5
30°-40°	884.8	20.7
40°-50°	578.5	13.5
50°-60°	364.5	8.5
60°-70°	194.0	4.5
70°-80°	70.7	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°	2172.3	50.8
0°-40°	3057.1	71.5
0°-60°	4000.1	93.5
0°-90°	4277.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4277.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3008	3008	3008	3008	3008	
5°	3017	3183	3016	3371	3017	287
15°	2927	2778	2919	2785	2927	827
25°	2774	1586	2761	1497	2774	1276
35°	2521	30	2484	36	2521	1577
45°	2212	4	2129	3	2212	1701
55°	1793	2	1683	2	1793	1597
65°	1255	3	1165	2	1255	1243
75°	660	3	671	3	660	700
85°	129	3	132	3	129	163
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°	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9
2.5°	3025.1	3026.9	3027.8	3029.6	3032.3	3033.2	3035.0	3033.2	3033.2	3033.2	3033.2
5°	3016.9	3020.5	3023.3	3026.9	3033.2	3034.1	3041.3	3042.2	3045.8	3053.0	3058.5
7.5°	3003.4	3007.0	3012.4	3021.4	3030.5	3040.4	3053.0	3066.6	3085.5	3103.6	3126.2
10°	2983.5	2988.0	2994.4	3002.5	3046.7	3053.0	3081.0	3119.8	3130.7	3187.6	3230.0
12.5°	2954.6	2970.0	2986.2	2993.5	3035.9	3102.7	3196.6	3177.6	3156.9	3342.8	3340.1
15°	2926.7	2947.4	2939.3	2998.0	3036.8	3153.2	3113.5	3198.4	3353.7	3315.7	3317.5
17.5°	2896.9	2901.4	2946.5	2995.3	3064.8	3124.4	3173.1	3289.6	3320.3	3323.0	3289.6
20°	2859.0	2880.6	2946.5	2990.8	3108.1	3136.1	3241.7	3301.3	3288.7	3258.0	3201.1
22.5°	2820.1	2886.0	2952.8	3015.1	3097.3	3172.2	3224.6	3252.5	3186.6	3065.7	3000.7
25°	2774.1	2812.9	2900.5	2991.7	3094.6	3137.9	3168.6	3123.5	3037.7	2929.4	2820.1
27.5°	2702.8	2765.1	2877.0	2979.9	3072.9	3125.3	3075.6	2967.3	2829.2	2757.8	2708.2
30°	2647.7	2729.0	2821.0	2920.3	3016.9	3047.6	2921.2	2797.6	2702.8	2631.5	2620.6
32.5°	2580.9	2696.5	2784.0	2878.8	2960.1	2919.4	2796.7	2636.9	2558.3	2531.3	2542.1
35°	2521.3	2608.9	2723.5	2816.5	2875.2	2784.0	2589.9	2490.6	2452.7	2468.1	2448.2
37.5°	2450.0	2565.6	2671.2	2751.5	2731.7	2594.5	2430.2	2367.0	2371.5	2358.8	2320.9
40°	2376.0	2486.1	2596.3	2672.1	2602.6	2393.1	2283.9	2270.4	2273.1	2232.5	2178.3
42.5°	2289.3	2389.5	2499.7	2568.3	2418.4	2255.0	2181.0	2182.8	2159.3	2102.5	2073.6
45°	2211.7	2303.8	2418.4	2424.7	2240.6	2104.3	2082.6	2059.1	2006.8	1987.8	1966.2
47.5°	2112.4	2214.4	2309.2	2274.9	2066.4	1981.5	1965.2	1913.8	1887.6	1873.2	1855.1
50°	2006.8	2109.7	2196.3	2098.9	1902.1	1882.2	1828.9	1788.3	1770.3	1754.9	1738.7
52.5°	1906.6	1991.4	2079.9	1912.0	1775.7	1756.7	1696.2	1672.8	1654.7	1637.6	1633.9
55°	1792.8	1867.8	1928.2	1734.2	1654.7	1610.5	1567.1	1550.9	1533.7	1525.6	1539.2
57.5°	1663.7	1748.6	1739.6	1559.0	1523.8	1459.7	1443.5	1432.6	1420.0	1425.4	1312.6
60°	1547.3	1612.3	1568.0	1430.8	1371.3	1327.9	1313.5	1306.3	1313.5	1203.3	1058.0
62.5°	1403.7	1476.9	1387.5	1281.0	1217.8	1197.0	1184.4	1194.3	1088.7	967.7	932.5
65°	1254.8	1334.2	1202.4	1120.3	1080.6	1062.5	1061.6	977.7	873.8	826.9	826.9
67.5°	1111.3	1193.4	1023.7	955.1	939.7	941.6	889.2	761.9	733.0	701.4	610.2
70°	958.7	1030.9	845.9	804.3	795.3	789.0	661.7	627.4	593.1	509.1	501.9
72.5°	807.0	842.2	679.8	669.8	668.0	555.2	529.9	471.2	431.5	421.6	417.1
75°	659.9	649.1	537.1	546.2	460.4	420.7	380.1	345.7	340.3	336.7	84.0
77.5°	520.9	466.7	423.4	368.3	329.5	279.8	271.7	266.3	175.1	63.2	51.5
80°	379.1	302.4	281.7	239.2	204.0	195.9	200.4	61.4	48.7	40.6	35.2
82.5°	241.0	193.2	158.0	138.1	134.5	58.7	43.3	35.2	30.7	26.2	21.7
85°	129.1	85.8	79.4	66.8	39.7	27.1	22.6	17.2	14.4	11.7	10.8
87.5°	40.6	34.3	28.0	22.6	13.5	9.0	7.2	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°	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9
2.5°	3031.4	3033.2	3032.3	3035.0	3035.0	3038.6	3041.3	3044.0	3049.4	3052.1	3072.9
5°	3070.2	3074.7	3088.2	3100.9	3116.2	3120.7	3146.9	3153.2	3183.9	3187.6	3288.7
7.5°	3156.9	3174.0	3206.5	3239.0	3271.5	3292.3	3328.4	3350.9	3375.3	3397.0	3477.3
10°	3261.6	3290.5	3322.1	3354.6	3373.5	3413.2	3434.9	3438.5	3432.2	3397.0	3267.0
12.5°	3364.5	3393.4	3379.8	3386.2	3408.7	3338.3	3348.2	3297.7	3332.9	3158.7	3029.6
15°	3350.0	3348.2	3314.8	3206.5	3224.6	3090.1	3035.9	2994.4	3027.8	3009.7	2989.9
17.5°	3306.7	3224.6	3166.8	3036.8	2981.7	2943.8	2944.7	2945.6	2929.4	2946.5	2896.0
20°	3123.5	3031.4	2945.6	2899.6	2883.3	2856.2	2869.8	2856.2	2857.1	2862.6	2784.9
22.5°	2879.7	2851.7	2802.1	2816.5	2811.1	2835.5	2817.4	2789.4	2798.5	2757.8	2699.2
25°	2781.3	2748.8	2747.0	2752.4	2744.3	2733.5	2717.2	2674.8	2672.1	2659.5	2632.4
27.5°	2682.0	2683.8	2689.2	2673.0	2644.1	2622.4	2598.1	2577.3	2585.4	2571.0	2534.0
30°	2613.4	2612.5	2580.0	2565.6	2512.3	2513.2	2506.9	2494.3	2486.1	2487.0	2463.6
32.5°	2515.9	2487.9	2450.9	2432.9	2428.4	2412.1	2399.5	2402.2	2408.5	2385.9	2410.3
35°	2415.7	2357.9	2352.5	2337.2	2322.7	2311.9	2316.4	2298.4	2297.5	2294.7	2096.1
37.5°	2281.2	2253.2	2250.5	2234.3	2224.3	2221.6	2204.5	2207.2	2215.3	2229.8	1787.4
40°	2170.2	2144.9	2138.6	2137.7	2116.0	2114.2	2118.7	2135.9	2147.6	2057.3	1703.5
42.5°	2051.0	2052.8	2033.0	2020.3	2023.0	2031.1	2052.8	1993.2	1726.9	1645.7	1557.2
45°	1949.0	1940.0	1929.1	1925.5	1949.0	1932.8	1694.4	1563.5	1531.9	1528.3	1280.1
47.5°	1842.5	1839.8	1835.3	1838.0	1704.4	1519.3	1465.1	1448.0	1453.4	1449.8	1099.5
50°	1735.1	1738.7	1738.7	1518.4	1393.8	1363.1	1367.6	1383.0	1287.3	1201.5	1024.6
52.5°	1642.1	1614.1	1383.0	1303.5	1275.6	1289.1	1256.6	1136.5	1049.9	999.3	947.9
55°	1469.6	1263.8	1212.4	1199.7	1209.7	1089.6	1015.6	937.9	915.4	910.0	880.2
57.5°	1156.4	1114.9	1119.4	1068.8	954.2	886.5	856.7	845.9	835.9	828.7	72.2
60°	1022.8	1034.5	947.0	838.6	792.6	783.6	776.4	766.4	764.6	752.0	46.0
62.5°	936.1	823.3	747.5	720.4	709.5	706.8	693.3	688.8	585.0	80.3	34.3
65°	705.9	659.9	645.5	639.1	627.4	627.4	520.9	82.1	66.8	57.8	30.7
67.5°	575.9	572.3	565.1	557.0	379.1	79.4	69.5	60.5	52.4	46.0	27.1
70°	487.5	485.7	442.3	81.2	67.7	59.6	52.4	46.9	43.3	38.8	24.4
72.5°	399.9	81.2	68.6	59.6	51.5	46.9	42.4	37.9	34.3	31.6	19.9
75°	62.3	55.1	48.7	44.2	40.6	36.1	32.5	29.8	28.9	25.3	13.5
77.5°	45.1	38.8	35.2	31.6	28.0	25.3	21.7	19.0	17.2	14.4	9.9
80°	31.6	28.0	25.3	20.8	18.1	15.3	13.5	11.7	10.8	9.0	4.5
82.5°	18.1	15.3	13.5	10.8	9.9	8.1	7.2	6.3	6.3	4.5	4.5
85°	8.1	8.1	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°	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9
2.5°	3101.8	3113.5	3136.1	3159.6	3133.4	3227.3	3220.0	3251.6	3268.8	3276.9	3295.9
5°	3378.0	3430.4	3447.5	3396.1	3366.3	3335.6	3266.1	3213.7	3220.0	3202.9	3140.6
7.5°	3372.6	3260.7	3109.9	3041.3	3035.9	3027.8	3049.4	3062.1	3063.9	3063.0	3061.2
10°	3087.3	3029.6	3019.6	3010.6	3014.2	2980.8	2965.5	2922.1	2945.6	2933.0	2937.5
12.5°	3000.7	2987.1	2933.9	2859.9	2904.1	2870.7	2851.7	2864.4	2849.9	2836.4	2831.9
15°	2949.2	2861.7	2831.9	2813.8	2801.2	2794.0	2800.3	2785.8	2781.3	2778.6	2784.9
17.5°	2842.7	2807.5	2775.0	2727.2	2728.1	2725.4	2743.4	2770.5	2772.3	2633.3	2507.8
20°	2758.8	2729.9	2688.3	2658.5	2699.2	2627.0	2348.0	2215.3	2194.5	2194.5	2198.2
22.5°	2691.9	2627.9	2630.6	2583.6	2203.6	2125.9	2127.7	2135.9	2098.9	1972.5	1958.9
25°	2600.8	2590.8	2393.1	2068.2	2070.9	2010.4	1917.4	1786.5	1644.8	1644.8	1621.3
27.5°	2532.2	2321.8	2033.0	2019.4	1816.3	1688.1	1608.7	1488.6	1472.4	1457.0	1458.8
30°	2473.5	1964.3	1971.6	1688.1	1538.3	1431.7	1425.4	1405.6	1395.6	1392.9	1383.0
32.5°	1955.3	1912.9	1650.2	1437.2	1378.5	1361.3	1353.2	1330.6	1329.7	1312.6	1193.4
35°	1833.5	1679.1	1381.2	1323.4	1306.3	1290.0	1276.5	856.7	101.1	40.6	35.2
37.5°	1694.4	1402.8	1277.4	1251.2	1234.9	912.7	91.2	31.6	22.6	16.2	14.4
40°	1436.2	1253.0	1213.3	1184.4	488.4	31.6	19.9	15.3	9.0	8.1	7.2
42.5°	1211.5	1180.8	1138.3	346.6	36.1	15.3	9.9	7.2	6.3	6.3	5.4
45°	1133.8	1106.8	458.6	34.3	22.6	7.2	6.3	6.3	5.4	3.6	3.6
47.5°	1061.6	934.3	41.5	21.7	14.4	6.3	5.4	3.6	3.6	3.6	2.7
50°	984.9	51.5	28.9	16.2	9.0	3.6	3.6	3.6	3.6	2.7	2.7
52.5°	184.2	36.1	23.5	14.4	4.5	3.6	3.6	3.6	2.7	2.7	2.7
55°	43.3	28.9	21.7	12.6	3.6	3.6	3.6	2.7	2.7	2.7	1.8
57.5°	32.5	21.7	17.2	11.7	3.6	2.7	2.7	2.7	2.7	2.7	1.8
60°	27.1	15.3	13.5	10.8	2.7	2.7	2.7	2.7	2.7	2.7	1.8
62.5°	19.0	12.6	9.9	8.1	2.7	2.7	2.7	2.7	2.7	2.7	2.7
65°	15.3	9.9	8.1	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
67.5°	13.5	8.1	5.4	1.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7
70°	10.8	2.7	2.7	1.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7
72.5°	9.0	2.7	1.8	1.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7
75°	9.0	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-LD5-47SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9
2.5°	3304.9	3308.5	3251.6	3231.8	3248.9	3245.3	3230.0	3173.1	3166.8	3128.9	3073.8
5°	3158.7	3183.0	3153.2	3204.7	3180.3	3204.7	3278.7	3313.0	3369.0	3403.3	3415.9
7.5°	3056.7	3062.1	3062.1	3066.6	3071.1	3072.0	3066.6	3063.0	3047.6	3028.7	3063.0
10°	2933.0	2939.3	2950.1	2948.3	2947.4	2966.4	2970.9	3009.7	3007.9	3015.1	3041.3
12.5°	2868.9	2820.1	2864.4	2852.6	2868.9	2843.6	2890.6	2882.4	2885.1	2906.8	2962.8
15°	2762.4	2777.7	2788.5	2788.5	2794.9	2789.4	2784.0	2821.0	2843.6	2844.5	2840.9
17.5°	2557.4	2441.0	2560.2	2529.5	2774.1	2780.4	2759.7	2742.5	2742.5	2756.0	2784.9
20°	2195.4	2198.2	2199.1	2210.8	2225.2	2224.3	2225.2	2580.9	2749.7	2710.9	2684.7
22.5°	1924.6	1891.2	1953.5	1949.0	2026.6	2112.4	2194.5	2186.4	2191.8	2442.8	2668.5
25°	1542.8	1586.1	1550.9	1566.2	1653.8	1755.8	1819.0	1984.2	2163.9	2151.2	2209.9
27.5°	1452.5	1440.8	1457.0	1457.0	1468.7	1482.3	1517.5	1610.5	1770.3	1938.2	2097.0
30°	1366.7	1376.7	1378.5	1394.7	1403.7	1412.8	1418.2	1453.4	1489.5	1606.0	1801.9
32.5°	1026.4	900.0	1184.4	1261.1	1326.1	1341.5	1352.3	1366.7	1392.9	1410.1	1508.5
35°	29.8	29.8	31.6	36.1	46.0	310.5	1182.6	1303.5	1320.7	1342.4	1360.4
37.5°	14.4	10.8	12.6	13.5	16.2	22.6	32.5	101.1	1125.7	1272.9	1292.7
40°	6.3	6.3	6.3	6.3	7.2	9.0	13.5	22.6	34.3	905.4	1221.4
42.5°	5.4	5.4	5.4	5.4	5.4	5.4	6.3	8.1	16.2	38.8	640.9
45°	3.6	3.6	2.7	3.6	3.6	4.5	5.4	5.4	7.2	24.4	44.2
47.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.5	5.4	16.2	23.5
50°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	12.6	16.2
52.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	5.4	14.4
55°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.7	2.7	3.6	12.6
57.5°	1.8	1.8	1.8	1.8	1.8	2.7	1.8	1.8	2.7	2.7	11.7
60°	1.8	1.8	1.8	1.8	1.8	2.7	2.7	2.7	2.7	2.7	10.8
62.5°	2.7	2.7	1.8	2.7	1.8	1.8	2.7	2.7	2.7	2.7	7.2
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-LD5-47SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9
2.5°	3078.3	3047.6	3037.7	3016.9	3015.1	3016.9	3012.4	3006.1	3009.7	3003.4	2998.0
5°	3423.2	3341.0	3287.8	3216.4	3118.0	3096.4	3091.0	3060.3	3049.4	3045.8	3031.4
7.5°	3144.2	3294.1	3384.3	3415.0	3299.5	3272.4	3240.8	3215.5	3191.2	3145.1	3117.1
10°	3020.5	3027.8	3114.4	3215.5	3379.8	3402.4	3419.6	3364.5	3349.1	3231.8	3206.5
12.5°	2991.7	2992.6	3002.5	3063.9	3193.0	3207.4	3267.9	3300.4	3340.1	3362.7	3344.6
15°	2859.9	2933.0	2987.1	2992.6	3004.3	3029.6	3047.6	3160.5	3208.3	3336.5	3329.3
17.5°	2798.5	2821.9	2900.5	2964.6	2953.7	2944.7	2959.2	2974.5	3020.5	3148.7	3146.9
20°	2696.5	2771.4	2813.8	2880.6	2941.1	2943.8	2927.6	2918.5	2900.5	2921.2	2940.2
22.5°	2653.1	2664.9	2744.3	2791.3	2859.9	2884.2	2887.8	2888.7	2878.8	2868.0	2862.6
25°	2648.6	2611.6	2652.2	2710.9	2761.5	2787.6	2817.4	2827.4	2823.7	2823.7	2818.3
27.5°	2167.5	2599.9	2578.2	2617.0	2678.4	2696.5	2711.8	2742.5	2761.5	2775.0	2781.3
30°	2064.6	2142.2	2520.4	2525.8	2588.1	2586.3	2603.5	2628.8	2653.1	2684.7	2692.9
32.5°	1826.2	2016.7	2307.4	2434.7	2499.7	2506.0	2515.0	2522.2	2544.8	2580.0	2610.7
35°	1463.3	1837.1	1977.0	2391.3	2403.1	2415.7	2421.1	2438.3	2445.5	2459.9	2487.0
37.5°	1324.3	1518.4	1896.6	2068.2	2292.0	2302.9	2331.8	2339.0	2350.7	2362.5	2383.2
40°	1244.0	1297.2	1578.9	1847.0	2202.7	2209.9	2219.8	2237.9	2238.8	2252.3	2271.3
42.5°	1179.9	1214.2	1296.3	1763.9	2139.5	2138.6	2115.1	2126.8	2132.3	2146.7	2172.9
45°	942.5	1139.2	1191.6	1440.8	1703.5	1826.2	2061.8	2023.0	2022.1	2027.5	2055.5
47.5°	47.8	1071.5	1108.6	1188.9	1608.7	1613.2	1643.9	1902.1	1941.8	1929.1	1931.8
50°	32.5	74.0	1032.7	1069.7	1386.6	1498.5	1521.1	1532.8	1681.8	1847.9	1820.8
52.5°	25.3	42.4	632.8	993.0	1126.6	1208.8	1354.1	1437.2	1446.2	1513.0	1739.6
55°	22.6	32.5	68.6	916.3	957.8	975.9	1060.7	1206.1	1323.4	1358.6	1361.3
57.5°	19.9	29.8	46.9	414.4	871.1	874.7	889.2	939.7	1045.4	1142.0	1251.2
60°	18.1	26.2	37.0	71.3	791.7	800.7	803.4	817.0	829.6	895.5	1021.0
62.5°	10.8	20.8	32.5	51.5	626.5	719.5	718.6	727.6	739.3	746.6	771.8
65°	9.0	16.2	28.0	43.3	76.7	95.7	581.4	646.4	653.6	663.5	668.0
67.5°	8.1	14.4	20.8	34.3	57.8	65.9	75.8	93.9	512.8	577.7	586.8
70°	7.2	9.9	17.2	28.9	46.9	50.6	56.9	65.0	76.7	94.8	464.0
72.5°	4.5	7.2	11.7	20.8	36.1	40.6	44.2	49.7	55.1	65.9	75.8
75°	1.8	5.4	9.9	15.3	28.0	30.7	33.4	37.0	41.5	48.7	54.2
77.5°	1.8	4.5	8.1	10.8	18.1	20.8	24.4	27.1	30.7	34.3	39.7
80°	6.3	3.6	5.4	8.1	12.6	13.5	15.3	17.2	19.9	22.6	26.2
82.5°	4.5	5.4	6.3	5.4	6.3	8.1	9.0	10.8	11.7	13.5	14.4
85°	3.6	3.6	4.5	4.5	4.5	4.5	4.5	4.5	5.4	6.3	8.1
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-LD5-47SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9
2.5°	2998.0	2996.2	2990.8	2990.8	2989.9	2993.5	2996.2	2998.9	2998.0	3003.4	2998.0
5°	3020.5	3016.0	3007.9	3000.7	2998.0	2999.8	2997.1	2999.8	2996.2	3000.7	2992.6
7.5°	3082.8	3067.5	3035.9	3023.3	3007.0	3006.1	2998.0	2996.2	2990.8	2990.8	2980.8
10°	3193.0	3118.9	3109.9	3072.0	3058.5	2992.6	3007.0	2982.6	2979.9	2968.2	2963.7
12.5°	3283.2	3225.5	3208.3	3174.9	3137.0	3003.4	3033.2	2980.8	2978.1	2954.6	2930.3
15°	3285.0	3318.4	3271.5	3179.4	3171.3	3079.2	3018.7	3000.7	2977.2	2906.8	2918.5
17.5°	3179.4	3256.2	3278.7	3258.9	3201.1	3138.8	3053.9	3017.8	2947.4	2915.8	2894.2
20°	3007.9	3085.5	3182.1	3188.5	3224.6	3180.3	3069.3	3010.6	2925.8	2870.7	2852.6
22.5°	2871.6	2928.5	3039.5	3091.0	3135.2	3150.5	3080.1	2993.5	2887.8	2834.6	2823.7
25°	2799.4	2812.0	2845.4	2905.9	3003.4	3073.8	3083.7	2991.7	2936.6	2820.1	2758.8
27.5°	2773.2	2762.4	2748.8	2779.5	2852.6	2938.4	2995.3	3010.6	2873.4	2762.4	2701.0
30°	2706.4	2712.7	2691.9	2681.1	2729.0	2817.4	2918.5	2943.8	2838.2	2723.5	2653.1
32.5°	2624.2	2635.1	2638.7	2619.7	2609.8	2671.2	2780.4	2840.9	2835.5	2668.5	2589.9
35°	2521.3	2552.0	2560.2	2561.1	2544.8	2534.9	2598.1	2723.5	2771.4	2643.2	2529.5
37.5°	2413.0	2422.0	2466.3	2478.0	2478.0	2448.2	2495.2	2595.4	2662.2	2586.3	2455.4
40°	2277.6	2306.5	2348.0	2368.8	2389.5	2392.2	2366.1	2436.5	2546.6	2527.7	2385.9
42.5°	2179.2	2198.2	2223.4	2251.4	2293.8	2304.7	2277.6	2290.2	2404.9	2454.5	2295.6
45°	2064.6	2089.8	2097.0	2127.7	2172.0	2203.6	2202.7	2176.5	2268.6	2330.0	2229.8
47.5°	1947.2	1971.6	1984.2	1999.6	2032.1	2072.7	2095.2	2083.5	2101.6	2221.6	2142.2
50°	1826.2	1839.8	1865.0	1882.2	1903.9	1927.3	1981.5	1992.3	1967.1	2062.7	2045.6
52.5°	1711.6	1716.1	1733.2	1750.4	1779.3	1796.4	1839.8	1872.3	1870.5	1898.4	1938.2
55°	1622.2	1602.4	1606.0	1619.5	1638.5	1664.6	1689.0	1739.6	1756.7	1762.1	1825.3
57.5°	1267.4	1471.5	1489.5	1488.6	1511.2	1522.9	1545.5	1578.9	1640.3	1626.7	1697.1
60°	1151.9	1174.5	1345.1	1364.9	1373.1	1383.9	1411.0	1441.7	1486.8	1515.7	1546.4
62.5°	878.4	1015.6	1067.0	1217.8	1241.3	1247.6	1265.6	1280.1	1327.0	1392.9	1380.3
65°	679.8	738.4	895.5	956.9	1085.1	1101.3	1126.6	1142.0	1155.5	1231.3	1234.9
67.5°	587.7	596.7	639.1	757.4	838.6	964.1	979.5	993.0	1013.8	1067.9	1101.3
70°	501.9	512.8	524.5	534.4	640.0	723.1	839.5	844.1	857.6	893.7	969.5
72.5°	94.8	428.8	436.0	442.3	454.1	509.1	620.2	710.5	715.9	733.0	802.5
75°	64.1	74.9	102.9	353.9	365.6	369.2	388.2	501.0	584.1	587.7	618.4
77.5°	46.0	51.5	62.3	74.0	188.7	283.5	288.0	308.7	394.5	456.8	462.2
80°	31.6	35.2	41.5	46.9	57.8	75.8	209.4	215.8	226.6	312.3	328.6
82.5°	18.1	20.8	24.4	29.8	34.3	43.3	56.0	72.2	147.1	157.1	208.5
85°	9.0	9.9	11.7	14.4	17.2	20.8	28.0	34.3	46.9	84.9	87.6
87.5°	4.5	4.5	4.5	4.5	7.2	8.1	9.9	12.6	16.2	24.4	31.6
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-LD5-47SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9
2.5°	2998.9	3011.5	3022.4	3025.1	3025.1	3026.9	3029.6	3031.4	3033.2	3035.0	3033.2
5°	2993.5	3007.0	3016.0	3018.7	3018.7	3024.2	3028.7	3034.1	3036.8	3036.8	3035.0
7.5°	2979.9	2989.9	3001.6	3008.8	3009.7	3018.7	3026.9	3026.0	3029.6	3031.4	3035.9
10°	2961.9	2961.9	2981.7	2987.1	2991.7	3001.6	3004.3	3009.7	3022.4	3024.2	3035.9
12.5°	2952.8	2943.8	2967.3	2970.0	2985.3	2972.7	2988.9	2994.4	2981.7	2998.9	2976.3
15°	2912.2	2923.0	2919.4	2927.6	2954.6	2940.2	2984.4	2970.0	3002.5	2963.7	3032.3
17.5°	2878.8	2877.0	2891.5	2898.7	2904.1	2934.8	2946.5	2962.8	2975.4	2964.6	2991.7
20°	2854.4	2840.0	2850.8	2859.0	2877.9	2901.4	2908.6	2884.2	2926.7	2998.9	3016.0
22.5°	2808.4	2798.5	2811.1	2811.1	2840.0	2836.4	2863.5	2848.1	2887.8	2971.8	3059.4
25°	2746.1	2747.0	2760.6	2776.8	2782.2	2822.8	2837.3	2857.1	2906.8	3007.0	3060.3
27.5°	2682.9	2677.5	2685.6	2719.0	2747.0	2776.8	2781.3	2849.0	2916.7	2985.3	3032.3
30°	2619.7	2614.3	2619.7	2644.1	2677.5	2697.4	2747.0	2837.3	2900.5	2947.4	2991.7
32.5°	2552.0	2546.6	2559.2	2577.3	2636.0	2638.7	2737.1	2821.9	2871.6	2905.9	2897.8
35°	2479.8	2472.6	2484.3	2512.3	2566.5	2586.3	2689.2	2752.4	2808.4	2824.7	2786.7
37.5°	2393.1	2380.5	2395.0	2433.8	2490.6	2548.4	2634.2	2707.3	2737.1	2693.8	2648.6
40°	2302.9	2293.8	2319.1	2339.0	2405.8	2486.1	2584.5	2636.0	2617.0	2567.4	2517.7
42.5°	2222.5	2203.6	2226.1	2264.1	2339.9	2431.1	2510.5	2539.4	2494.3	2421.1	2363.4
45°	2124.1	2101.6	2128.6	2179.2	2260.4	2364.3	2426.5	2416.6	2339.9	2276.7	2197.3
47.5°	2021.2	1994.1	2021.2	2081.7	2172.9	2283.0	2328.1	2283.0	2186.4	2107.0	2042.9
50°	1920.1	1888.5	1914.7	2005.9	2095.2	2180.1	2179.2	2091.6	2033.9	1947.2	1891.2
52.5°	1819.9	1774.8	1801.0	1900.3	1989.6	2086.2	2014.9	1933.7	1864.1	1788.3	1770.3
55°	1696.2	1647.5	1682.7	1827.1	1895.7	1952.6	1838.9	1767.6	1698.9	1661.0	1638.5
57.5°	1578.9	1525.6	1556.3	1726.9	1777.5	1791.9	1687.2	1586.1	1545.5	1532.8	1500.3
60°	1457.9	1397.4	1426.3	1623.1	1658.3	1599.6	1496.7	1418.2	1410.1	1384.8	1359.5
62.5°	1342.4	1275.6	1293.6	1494.0	1510.3	1403.7	1309.0	1288.2	1268.3	1243.1	1229.5
65°	1209.7	1140.2	1165.4	1356.8	1341.5	1204.2	1151.0	1146.5	1120.3	1099.5	1119.4
67.5°	1087.8	1005.6	1040.9	1207.0	1137.4	1025.5	1003.8	993.0	972.2	984.0	775.4
70°	954.2	864.8	912.7	1045.4	942.5	868.4	860.3	844.1	845.0	671.6	566.0
72.5°	805.2	727.6	797.1	868.4	745.7	724.0	712.3	710.5	573.2	465.8	439.6
75°	674.3	595.8	670.7	697.8	594.0	579.6	578.7	478.4	376.4	359.3	351.2
77.5°	526.3	465.8	537.1	496.5	455.9	439.6	394.5	296.1	283.5	271.7	102.0
80°	354.8	359.3	400.8	342.1	325.0	277.1	218.5	209.4	180.5	72.2	56.9
82.5°	215.8	270.8	255.5	213.9	209.4	150.8	138.1	70.4	52.4	41.5	36.1
85°	111.9	137.2	131.8	116.5	86.7	77.6	43.3	33.4	27.1	20.8	17.2
87.5°	37.9	50.6	48.7	38.8	29.8	23.5	15.3	12.6	9.0	7.2	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-LD5-47SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9
2.5°	3031.4	3031.4	3029.6	3031.4	3032.3	3030.5	3030.5	3032.3	3033.2	3034.1	3038.6
5°	3035.9	3037.7	3040.4	3045.8	3046.7	3057.6	3062.1	3064.8	3067.5	3068.4	3062.1
7.5°	3045.8	3052.1	3057.6	3056.7	3050.3	3033.2	3027.8	3023.3	3031.4	3052.1	3076.5
10°	3054.8	3026.0	2971.8	3045.8	3023.3	3044.0	3105.4	3118.9	3160.5	3219.1	3236.3
12.5°	2992.6	3072.0	3089.2	3006.1	3159.6	3102.7	3170.4	3230.0	3247.1	3306.7	3270.6
15°	3059.4	3098.2	3124.4	3207.4	3198.4	3247.1	3266.1	3254.4	3257.1	3272.4	3313.0
17.5°	3058.5	3136.1	3153.2	3209.2	3247.1	3248.0	3242.6	3237.2	3251.6	3263.4	3239.0
20°	3110.8	3136.1	3169.5	3192.1	3199.3	3208.3	3225.5	3211.9	3184.8	3158.7	3147.8
22.5°	3084.6	3141.5	3170.4	3174.0	3169.5	3141.5	3116.2	3078.3	3065.7	3052.1	3056.7
25°	3090.1	3116.2	3112.6	3098.2	3079.2	3026.9	3014.2	2998.0	2973.6	2914.9	2861.7
27.5°	3051.2	3037.7	3021.4	2986.2	2951.9	2924.0	2892.4	2840.0	2796.7	2733.5	2710.0
30°	2986.2	2932.1	2892.4	2871.6	2838.2	2791.3	2743.4	2679.3	2624.2	2611.6	2599.9
32.5°	2861.7	2808.4	2775.9	2725.4	2668.5	2612.5	2557.4	2532.2	2520.4	2522.2	2511.4
35°	2734.4	2687.4	2638.7	2562.9	2520.4	2464.5	2444.6	2439.2	2428.4	2416.6	2404.0
37.5°	2599.0	2543.9	2470.8	2425.6	2383.2	2360.6	2350.7	2342.6	2323.6	2302.9	2288.4
40°	2468.1	2368.8	2328.1	2283.9	2271.3	2261.3	2246.9	2227.0	2200.9	2197.3	2190.9
42.5°	2292.9	2221.6	2186.4	2177.4	2162.0	2144.9	2132.3	2110.6	2099.8	2107.0	2112.4
45°	2126.8	2090.7	2079.0	2068.2	2039.3	2014.9	2006.8	1999.6	2008.6	2048.3	1953.5
47.5°	1992.3	1977.9	1963.4	1945.4	1918.3	1900.3	1908.4	1915.6	1923.7	1632.1	1489.5
50°	1875.9	1856.0	1833.5	1813.6	1797.3	1795.5	1838.0	1710.7	1432.6	1425.4	1281.0
52.5°	1748.6	1718.8	1705.3	1693.5	1700.7	1727.8	1429.9	1327.0	1272.9	1105.8	1031.8
55°	1611.4	1585.2	1585.2	1596.0	1557.2	1262.0	1246.7	1077.9	975.9	947.0	935.2
57.5°	1474.2	1471.5	1486.8	1359.5	1145.6	1098.6	923.5	886.5	870.2	866.6	847.7
60°	1348.7	1374.0	1150.1	1058.0	919.9	829.6	804.3	799.8	782.7	776.4	759.2
62.5°	1248.5	1035.4	964.1	787.2	741.1	729.4	715.9	709.5	694.2	613.0	179.6
65°	901.8	852.2	691.5	661.7	658.1	640.9	635.5	571.4	134.5	90.3	76.7
67.5°	680.7	603.9	583.2	577.7	560.6	526.3	156.2	89.4	76.7	66.8	58.7
70°	522.7	509.1	493.8	481.2	141.7	88.5	76.7	65.0	56.0	49.7	45.1
72.5°	427.9	418.9	243.7	93.0	75.8	64.1	56.9	49.7	43.3	39.7	36.1
75°	334.9	93.0	76.7	64.1	55.1	46.9	41.5	37.0	33.4	30.7	28.0
77.5°	75.8	61.4	52.4	44.2	39.7	35.2	31.6	27.1	24.4	21.7	18.1
80°	46.9	40.6	34.3	31.6	27.1	22.6	19.9	18.1	14.4	13.5	11.7
82.5°	30.7	24.4	21.7	18.1	14.4	13.5	11.7	9.0	8.1	7.2	6.3
85°	13.5	11.7	9.9	8.1	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-LD5-47SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9
2.5°	3040.4	3056.7	3072.0	3067.5	3051.2	3026.0	3018.7	3008.8	3016.0	3031.4	3037.7
5°	3062.1	3053.0	3085.5	3133.4	3211.0	3218.2	3272.4	3285.0	3328.4	3355.5	3354.6
7.5°	3092.8	3221.0	3274.2	3332.0	3358.2	3351.8	3360.0	3353.7	3343.7	3339.2	3333.8
10°	3248.9	3346.4	3366.3	3366.3	3325.7	3270.6	3247.1	3206.5	3125.3	3127.1	3113.5
12.5°	3340.1	3374.4	3327.5	3287.8	3124.4	3061.2	2992.6	2960.1	2941.1	2912.2	2923.0
15°	3292.3	3243.5	3215.5	3087.3	2987.1	2873.4	2875.2	2855.3	2834.6	2836.4	2822.8
17.5°	3221.9	3183.0	2984.4	2896.0	2847.2	2803.0	2794.9	2768.7	2755.1	2750.6	2749.7
20°	3125.3	2985.3	2837.3	2815.6	2756.9	2706.4	2698.3	2706.4	2747.9	2673.9	2422.9
22.5°	3012.4	2811.1	2767.8	2706.4	2666.7	2646.8	2696.5	2470.8	2129.5	2171.1	2126.8
25°	2821.0	2733.5	2659.5	2612.5	2608.0	2486.1	2071.8	2028.4	1809.1	1691.7	1559.9
27.5°	2681.1	2643.2	2565.6	2557.4	2498.8	2033.0	1817.2	1578.9	1491.3	1477.8	1448.9
30°	2596.3	2542.1	2495.2	2290.2	1994.1	1636.7	1457.9	1424.5	1409.2	1392.9	1367.6
32.5°	2494.3	2442.8	2465.4	1925.5	1589.7	1409.2	1373.1	1348.7	1320.7	1309.9	1218.7
35°	2390.4	2367.0	1926.4	1618.6	1366.7	1323.4	1296.3	1271.0	1011.1	244.6	83.1
37.5°	2279.4	2274.0	1731.4	1343.3	1280.1	1239.5	1162.7	240.1	56.9	38.8	28.9
40°	2192.7	1732.3	1368.5	1259.3	1207.9	1143.8	160.7	39.7	25.3	15.3	9.9
42.5°	2135.0	1558.1	1225.0	1181.7	1069.7	118.3	40.6	17.2	9.9	8.1	6.3
45°	1645.7	1230.4	1144.7	1099.5	135.4	40.6	23.5	8.1	6.3	5.4	3.6
47.5°	1518.4	1117.6	1067.0	240.1	45.1	21.7	16.2	5.4	3.6	3.6	3.6
50°	1150.1	1032.7	849.5	58.7	28.9	15.3	11.7	3.6	3.6	3.6	2.7
52.5°	1008.4	953.3	91.2	38.8	22.6	11.7	7.2	2.7	2.7	2.7	2.7
55°	921.7	604.8	54.2	29.8	19.0	10.8	4.5	2.7	2.7	2.7	1.8
57.5°	843.2	81.2	39.7	25.3	17.2	9.9	2.7	2.7	2.7	2.7	1.8
60°	715.0	58.7	32.5	22.6	16.2	9.0	2.7	2.7	2.7	2.7	2.7
62.5°	93.0	46.0	28.0	19.9	11.7	7.2	1.8	2.7	2.7	2.7	2.7
65°	67.7	36.1	25.3	13.5	7.2	2.7	1.8	2.7	2.7	2.7	2.7
67.5°	52.4	29.8	19.0	11.7	6.3	1.8	1.8	2.7	2.7	2.7	2.7
70°	41.5	25.3	15.3	9.9	5.4	1.8	1.8	2.7	2.7	2.7	2.7
72.5°	32.5	18.1	10.8	5.4	3.6	1.8	1.8	2.7	2.7	2.7	2.7
75°	24.4	14.4	8.1	4.5	1.8	1.8	1.8	2.7	2.7	2.7	2.7
77.5°	16.2	9.0	6.3	3.6	3.6	3.6	4.5	4.5	2.7	2.7	2.7
80°	10.8	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-LD5-47SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9
2.5°	3029.6	3032.3	3025.1	3063.9	3044.0	3045.8	3053.9	3033.2	3037.7	3023.3	3013.3
5°	3358.2	3363.6	3369.0	3370.8	3374.4	3378.9	3373.5	3370.8	3365.4	3347.3	3328.4
7.5°	3306.7	3300.4	3297.7	3301.3	3307.6	3310.3	3305.8	3312.1	3335.6	3345.5	3351.8
10°	3035.9	3007.0	3026.9	3024.2	3001.6	3077.4	3056.7	3068.4	3076.5	3159.6	3210.1
12.5°	2906.8	2924.9	2890.6	2873.4	2896.0	2911.3	2926.7	2894.2	2939.3	2918.5	2985.3
15°	2798.5	2787.6	2784.0	2784.9	2780.4	2802.1	2807.5	2814.7	2821.0	2849.0	2859.9
17.5°	2749.7	2767.8	2775.0	2780.4	2771.4	2761.5	2751.5	2737.1	2741.6	2734.4	2755.1
20°	2254.1	2193.6	2190.0	2225.2	2186.4	2208.1	2260.4	2610.7	2599.0	2735.3	2689.2
22.5°	1881.3	1824.4	1775.7	1733.2	1793.7	1819.0	1916.5	2026.6	2205.4	2177.4	2371.5
25°	1536.5	1515.7	1503.1	1496.7	1501.2	1499.4	1521.1	1572.6	1653.8	1845.2	2092.5
27.5°	1437.2	1427.2	1422.7	1408.3	1419.1	1415.5	1432.6	1443.5	1467.8	1486.8	1567.1
30°	1358.6	1346.9	1338.8	1323.4	1334.2	1335.1	1340.6	1368.5	1378.5	1394.7	1420.0
32.5°	496.5	292.5	274.4	260.9	285.3	371.9	652.7	1141.1	1301.7	1314.4	1343.3
35°	48.7	40.6	36.1	36.1	37.0	40.6	54.2	142.6	260.9	1008.4	1262.0
37.5°	19.0	16.2	13.5	12.6	13.5	15.3	20.8	27.1	37.0	76.7	342.1
40°	8.1	7.2	6.3	6.3	6.3	6.3	7.2	9.0	13.5	25.3	39.7
42.5°	5.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	6.3	8.1	16.2
45°	3.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.6	4.5	7.2
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-LD5-47SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9
2.5°	2996.2	2995.3	3014.2	3028.7	3023.3	3028.7	3035.0	3035.9	3037.7	3030.5	3027.8
5°	3292.3	3264.3	3210.1	3171.3	3126.2	3044.0	3003.4	3007.9	3008.8	3006.1	3009.7
7.5°	3349.1	3346.4	3327.5	3319.3	3288.7	3230.0	3136.1	3119.8	3080.1	3054.8	3034.1
10°	3206.5	3271.5	3288.7	3317.5	3335.6	3324.8	3245.3	3233.6	3208.3	3179.4	3185.7
12.5°	3052.1	3105.4	3108.1	3265.2	3300.4	3304.0	3273.3	3289.6	3293.2	3228.2	3190.3
15°	2862.6	2887.8	2941.1	3087.3	3193.9	3260.7	3280.5	3289.6	3245.3	3242.6	3227.3
17.5°	2779.5	2795.8	2820.1	2902.3	3063.9	3162.3	3246.2	3239.9	3257.1	3244.4	3205.6
20°	2674.8	2688.3	2731.7	2773.2	2852.6	2983.5	3140.6	3152.3	3174.9	3172.2	3183.0
22.5°	2673.0	2625.1	2632.4	2664.9	2747.9	2865.3	3032.3	3071.1	3085.5	3095.5	3107.2
25°	2120.5	2500.6	2570.1	2590.8	2645.0	2713.6	2910.4	2924.9	2951.9	2996.2	3028.7
27.5°	1837.1	2095.2	2373.3	2517.7	2552.0	2608.9	2726.3	2747.9	2840.0	2850.8	2901.4
30°	1449.8	1649.3	2064.6	2412.1	2469.0	2508.7	2591.7	2635.1	2674.8	2718.1	2771.4
32.5°	1364.0	1395.6	1625.8	1995.9	2438.3	2408.5	2469.9	2496.1	2539.4	2577.3	2616.1
35°	1285.5	1307.2	1355.9	1634.8	1986.0	2326.3	2367.9	2385.0	2409.4	2438.3	2466.3
37.5°	1203.3	1235.8	1269.2	1344.2	1837.1	2261.3	2260.4	2280.3	2294.7	2319.1	2342.6
40°	218.5	1134.7	1188.9	1237.6	1424.5	1803.7	2159.3	2168.4	2178.3	2193.6	2218.0
42.5°	35.2	189.6	1114.0	1160.9	1214.2	1615.0	2113.3	2076.3	2070.0	2080.8	2102.5
45°	18.1	46.0	223.9	1084.2	1132.0	1288.2	1727.8	2012.2	2005.9	1985.1	1989.6
47.5°	13.5	28.9	55.1	374.6	1059.8	1105.8	1594.2	1577.1	1697.1	1927.3	1892.1
50°	11.7	19.9	32.5	76.7	936.1	1018.3	1227.7	1434.4	1497.6	1505.8	1782.0
52.5°	10.8	13.5	23.5	49.7	196.8	941.6	998.4	1070.6	1177.2	1405.6	1400.1
55°	9.9	12.6	19.9	33.4	68.6	848.6	907.2	920.8	943.4	1052.6	1197.0
57.5°	5.4	11.7	19.0	28.9	51.5	155.3	823.3	834.1	852.2	856.7	908.1
60°	2.7	10.8	17.2	25.3	37.9	72.2	740.2	752.9	763.7	765.5	781.8
62.5°	1.8	9.9	14.4	23.5	31.6	51.5	175.1	357.5	679.8	679.8	698.7
65°	1.8	7.2	9.0	15.3	28.9	42.4	74.0	85.8	167.0	410.7	613.0
67.5°	1.8	2.7	8.1	12.6	21.7	32.5	54.2	63.2	75.8	86.7	160.7
70°	1.8	1.8	7.2	8.1	13.5	24.4	38.8	44.2	51.5	58.7	67.7
72.5°	1.8	1.8	6.3	6.3	9.0	16.2	29.8	32.5	37.0	41.5	47.8
75°	4.5	3.6	5.4	5.4	6.3	12.6	22.6	25.3	27.1	30.7	35.2
77.5°	4.5	4.5	4.5	4.5	4.5	8.1	14.4	16.2	19.0	20.8	24.4
80°	3.6	3.6	3.6	4.5	4.5	5.4	9.0	9.9	10.8	13.5	14.4
82.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	5.4	6.3	8.1
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-LD5-47SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9	3007.9
2.5°	3026.9	3021.4	3016.9	3019.6	3011.5	3007.9	3010.6	3011.5	3013.3	3017.8	3018.7
5°	3018.7	3016.9	3025.1	3029.6	3027.8	3029.6	3029.6	3026.0	3020.5	3024.2	3016.0
7.5°	3013.3	3001.6	2992.6	2994.4	2985.3	2996.2	3006.1	3020.5	3025.1	3025.1	3016.0
10°	3106.3	3093.7	3043.1	3008.8	2986.2	2966.4	3013.3	2965.5	2988.0	2902.3	3000.7
12.5°	3183.0	3200.2	3177.6	3083.7	3067.5	3007.9	3042.2	2983.5	2966.4	2868.0	2899.6
15°	3213.7	3181.2	3174.0	3147.8	3112.6	3095.5	3003.4	2993.5	2965.5	2976.3	2934.8
17.5°	3186.6	3202.9	3181.2	3164.1	3128.0	3087.3	3032.3	2983.5	2944.7	2858.1	2931.2
20°	3160.5	3182.1	3117.1	3128.0	3131.6	3084.6	3055.8	3015.1	2966.4	2885.1	2821.9
22.5°	3117.1	3101.8	3107.2	3091.0	3077.4	3083.7	3044.0	3016.0	2933.9	2896.9	2811.1
25°	3046.7	3041.3	3055.8	3053.9	3021.4	3010.6	2990.8	2961.0	2928.5	2868.9	2798.5
27.5°	2932.1	2960.1	2985.3	2997.1	2979.9	2951.0	2940.2	2923.0	2900.5	2840.0	2787.6
30°	2811.1	2842.7	2871.6	2896.9	2912.2	2899.6	2889.6	2879.7	2845.4	2805.7	2747.0
32.5°	2673.0	2714.5	2754.2	2784.9	2818.3	2828.3	2821.0	2812.9	2784.0	2747.9	2701.0
35°	2513.2	2570.1	2627.9	2682.9	2697.4	2720.8	2744.3	2730.8	2715.4	2679.3	2636.0
37.5°	2377.8	2418.4	2459.9	2529.5	2580.0	2609.8	2651.3	2656.7	2630.6	2613.4	2556.5
40°	2237.9	2274.9	2335.4	2376.0	2445.5	2479.8	2524.0	2543.9	2537.6	2527.7	2478.0
42.5°	2127.7	2145.8	2185.5	2221.6	2290.2	2360.6	2399.5	2421.1	2443.7	2435.6	2410.3
45°	2010.4	2026.6	2040.2	2071.8	2138.6	2200.9	2248.7	2281.2	2321.8	2340.8	2310.1
47.5°	1893.9	1898.4	1914.7	1940.9	1980.6	2028.4	2108.8	2157.5	2195.4	2232.5	2212.6
50°	1804.6	1788.3	1791.0	1807.3	1839.8	1886.7	1944.5	2013.1	2056.4	2101.6	2106.1
52.5°	1577.1	1708.9	1677.3	1686.3	1703.5	1726.0	1786.5	1854.2	1907.5	1946.3	1985.1
55°	1323.4	1349.6	1603.3	1567.1	1578.0	1597.8	1625.8	1693.5	1745.0	1799.1	1853.3
57.5°	1026.4	1221.4	1231.3	1466.0	1460.6	1462.4	1485.9	1524.7	1576.2	1643.9	1689.9
60°	798.0	880.2	1039.9	1121.2	1327.0	1334.2	1347.8	1370.3	1414.6	1478.7	1551.8
62.5°	704.1	715.0	771.8	893.7	1027.3	1188.9	1217.8	1221.4	1241.3	1305.4	1390.2
65°	618.4	625.6	642.7	655.4	767.3	923.5	1062.5	1085.1	1097.7	1135.6	1207.9
67.5°	426.1	538.9	554.3	563.3	574.1	646.4	818.8	933.4	947.9	981.3	1044.5
70°	82.1	170.6	466.7	476.6	482.1	498.3	526.3	708.6	804.3	835.9	864.8
72.5°	56.0	65.9	79.4	187.8	397.2	406.2	412.5	436.0	597.6	689.7	705.0
75°	40.6	45.1	53.3	65.9	81.2	264.5	327.7	339.4	351.2	484.8	562.4
77.5°	28.9	32.5	36.1	42.4	49.7	64.1	92.1	253.7	265.4	271.7	383.7
80°	16.2	19.9	24.4	28.0	31.6	36.1	46.9	58.7	130.9	191.4	201.3
82.5°	9.0	10.8	12.6	15.3	17.2	21.7	26.2	31.6	41.5	61.4	130.0
85°	4.5	4.5	4.5	6.3	7.2	9.9	11.7	13.5	19.0	26.2	36.1
87.5°	2.7	2.7	3.6	3.6	3.6	4.5	4.5	4.5	5.4	8.1	11.7
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-LD5-47SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	3007.9	3007.9	3007.9	3007.9	3007.9
2.5°	3019.6	3016.9	3016.9	3027.8	3025.1
5°	3014.2	3011.5	3010.6	3022.4	3016.9
7.5°	3009.7	2999.8	2997.1	3007.9	3003.4
10°	2991.7	2984.4	2988.9	2985.3	2983.5
12.5°	2961.0	2956.5	2937.5	2939.3	2954.6
15°	2905.9	2924.0	2891.5	2920.3	2926.7
17.5°	2804.8	2845.4	2877.0	2894.2	2896.9
20°	2849.9	2863.5	2847.2	2848.1	2859.0
22.5°	2791.3	2797.6	2802.1	2796.7	2820.1
25°	2697.4	2673.0	2725.4	2736.2	2774.1
27.5°	2668.5	2648.6	2673.0	2671.2	2702.8
30°	2645.0	2580.9	2591.7	2608.9	2647.7
32.5°	2611.6	2510.5	2499.7	2537.6	2580.9
35°	2552.9	2457.2	2432.0	2456.3	2521.3
37.5°	2503.3	2383.2	2332.7	2365.2	2450.0
40°	2429.3	2325.4	2246.9	2275.8	2376.0
42.5°	2340.8	2275.8	2154.8	2174.7	2289.3
45°	2251.4	2193.6	2065.5	2075.4	2211.7
47.5°	2160.2	2107.0	1972.5	1974.3	2112.4
50°	2070.9	2000.5	1889.4	1857.8	2006.8
52.5°	1954.4	1889.4	1805.5	1754.0	1906.6
55°	1844.3	1771.2	1709.8	1630.3	1792.8
57.5°	1736.9	1655.6	1614.1	1512.1	1663.7
60°	1589.7	1550.9	1489.5	1392.0	1547.3
62.5°	1439.0	1426.3	1364.0	1262.9	1403.7
65°	1262.9	1292.7	1228.6	1142.0	1254.8
67.5°	1096.8	1150.1	1079.7	1026.4	1111.3
70°	919.9	981.3	941.6	922.6	958.7
72.5°	745.7	805.2	808.8	795.3	807.0
75°	575.9	641.8	678.0	657.2	659.9
77.5°	436.9	468.5	508.2	524.5	520.9
80°	269.9	325.0	357.5	390.9	379.1
82.5°	136.3	182.4	222.1	258.2	241.0
85°	56.9	73.1	102.0	134.5	129.1
87.5°	17.2	28.9	30.7	43.3	40.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)