

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-L930-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-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

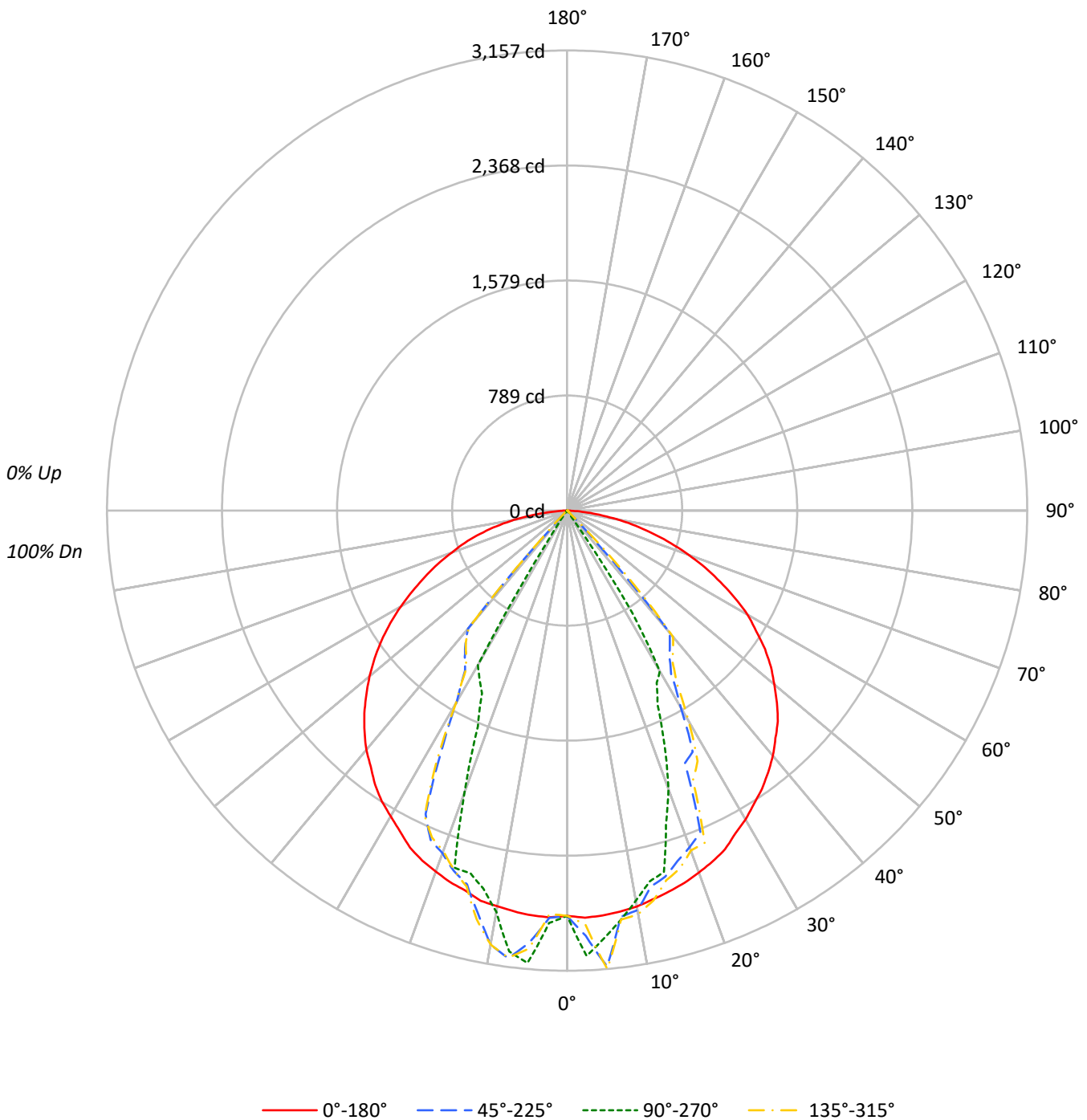
Lumens per Lamp: N/A
Luminaire Lumens: 3953.0 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	22465	22465	22465	22465
5°	22558	23106	22551	24469
10°	22503	20908	22489	21512
15°	22442	19515	22387	19566
20°	22468	15371	22404	15561
25°	22532	11124	22423	10497
30°	22430	9758	22193	9381
35°	22496	215	22166	261
40°	22574	47	22033	47
45°	22654	27	21803	21
50°	22481	22	21450	22
55°	22348	16	20975	16
60°	21927	17	20212	17
65°	20782	26	19302	18
70°	19281	29	18354	29
75°	17054	33	17333	33
80°	13852	37	14646	37
85°	8150	44	8321	44



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.9	7.1
10°-20°	760.8	19.2
20°-30°	968.1	24.5
30°-40°	817.8	20.7
40°-50°	534.6	13.5
50°-60°	336.9	8.5
60°-70°	179.3	4.5
70°-80°	65.4	1.7
80°-90°	11.2	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°	2007.8	50.8
0°-40°	2825.6	71.5
0°-60°	3697.1	93.5
0°-90°	3953.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3953.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2780	2780	2780	2780	2780	
5°	2788	2942	2788	3116	2788	265
15°	2705	2567	2698	2574	2705	765
25°	2564	1466	2551	1383	2564	1179
35°	2330	28	2296	33	2330	1458
45°	2044	3	1967	2	2044	1572
55°	1657	2	1555	2	1657	1476
65°	1160	2	1077	2	1160	1149
75°	610	2	620	2	610	647
85°	119	2	122	2	119	151
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°	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0
2.5°	2795.9	2797.6	2798.4	2800.1	2802.6	2803.4	2805.1	2803.4	2803.4	2803.4	2803.4
5°	2788.4	2791.7	2794.2	2797.6	2803.4	2804.2	2810.9	2811.8	2815.1	2821.8	2826.8
7.5°	2775.9	2779.2	2784.2	2792.6	2800.9	2810.1	2821.8	2834.3	2851.8	2868.5	2889.3
10°	2757.5	2761.7	2767.5	2775.0	2815.9	2821.8	2847.6	2883.5	2893.5	2946.1	2985.3
12.5°	2730.8	2745.0	2760.0	2766.7	2805.9	2867.7	2954.4	2936.9	2917.7	3089.6	3087.1
15°	2705.0	2724.1	2716.6	2770.9	2806.7	2914.4	2877.7	2956.1	3099.6	3064.6	3066.2
17.5°	2677.4	2681.6	2723.3	2768.4	2832.6	2887.7	2932.7	3040.4	3068.7	3071.2	3040.4
20°	2642.4	2662.4	2723.3	2764.2	2872.7	2898.5	2996.1	3051.2	3039.5	3011.2	2958.6
22.5°	2606.5	2667.4	2729.2	2786.7	2862.6	2931.9	2980.3	3006.2	2945.2	2833.4	2773.4
25°	2563.9	2599.8	2680.8	2765.0	2860.1	2900.2	2928.6	2886.8	2807.6	2707.5	2606.5
27.5°	2498.0	2555.6	2659.1	2754.2	2840.1	2888.5	2842.6	2742.5	2614.8	2548.9	2503.0
30°	2447.1	2522.2	2607.3	2699.1	2788.4	2816.8	2699.9	2585.6	2498.0	2432.1	2422.1
32.5°	2385.4	2492.2	2573.1	2660.7	2735.8	2698.3	2584.8	2437.1	2364.5	2339.5	2349.5
35°	2330.3	2411.3	2517.2	2603.2	2657.4	2573.1	2393.7	2302.0	2266.9	2281.1	2262.7
37.5°	2264.4	2371.2	2468.8	2543.1	2524.7	2397.9	2246.1	2187.7	2191.8	2180.1	2145.1
40°	2196.0	2297.8	2399.6	2469.7	2405.4	2211.9	2110.9	2098.4	2100.9	2063.3	2013.3
42.5°	2115.9	2208.5	2310.3	2373.7	2235.2	2084.2	2015.8	2017.5	1995.8	1943.2	1916.5
45°	2044.2	2129.3	2235.2	2241.1	2070.9	1944.9	1924.8	1903.1	1854.8	1837.2	1817.2
47.5°	1952.4	2046.7	2134.3	2102.6	1909.8	1831.4	1816.4	1768.8	1744.6	1731.3	1714.6
50°	1854.8	1949.9	2030.0	1939.9	1758.0	1739.6	1690.4	1652.8	1636.2	1622.0	1607.0
52.5°	1762.1	1840.6	1922.3	1767.1	1641.2	1623.6	1567.7	1546.0	1529.4	1513.5	1510.2
55°	1657.0	1726.3	1782.2	1602.8	1529.4	1488.5	1448.4	1433.4	1417.6	1410.0	1422.6
57.5°	1537.7	1616.1	1607.8	1440.9	1408.4	1349.1	1334.1	1324.1	1312.4	1317.4	1213.1
60°	1430.1	1490.1	1449.3	1322.4	1267.4	1227.3	1214.0	1207.3	1214.0	1112.2	977.9
62.5°	1297.4	1365.0	1282.4	1183.9	1125.5	1106.3	1094.7	1103.8	1006.2	894.4	861.9
65°	1159.7	1233.2	1111.4	1035.4	998.7	982.0	981.2	903.6	807.6	764.3	764.3
67.5°	1027.1	1103.0	946.1	882.7	868.6	870.2	821.8	704.2	677.5	648.3	564.0
70°	886.1	952.8	781.8	743.4	735.1	729.2	611.6	579.9	548.2	470.6	463.9
72.5°	745.9	778.4	628.3	619.1	617.4	513.1	489.8	435.5	398.8	389.6	385.5
75°	609.9	599.9	496.4	504.8	425.5	388.8	351.3	319.6	314.5	311.2	77.6
77.5°	481.4	431.4	391.3	340.4	304.5	258.6	251.1	246.1	161.9	58.4	47.6
80°	350.4	279.5	260.3	221.1	188.6	181.1	185.2	56.7	45.1	37.5	32.5
82.5°	222.8	178.6	146.0	127.7	124.3	54.2	40.0	32.5	28.4	24.2	20.0
85°	119.3	79.3	73.4	61.7	36.7	25.0	20.9	15.9	13.3	10.8	10.0
87.5°	37.5	31.7	25.9	20.9	12.5	8.3	6.7	5.8	5.0	4.2	4.2
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°	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0
2.5°	2801.7	2803.4	2802.6	2805.1	2805.1	2808.4	2810.9	2813.4	2818.4	2820.9	2840.1
5°	2837.6	2841.8	2854.3	2866.0	2880.2	2884.3	2908.5	2914.4	2942.7	2946.1	3039.5
7.5°	2917.7	2933.6	2963.6	2993.6	3023.7	3042.9	3076.2	3097.1	3119.6	3139.6	3213.9
10°	3014.5	3041.2	3070.4	3100.4	3118.0	3154.7	3174.7	3178.0	3172.2	3139.6	3019.5
12.5°	3109.6	3136.3	3123.8	3129.6	3150.5	3085.4	3094.6	3047.9	3080.4	2919.4	2800.1
15°	3096.3	3094.6	3063.7	2963.6	2980.3	2856.0	2805.9	2767.5	2798.4	2781.7	2763.4
17.5°	3056.2	2980.3	2926.9	2806.7	2755.8	2720.8	2721.6	2722.5	2707.5	2723.3	2676.6
20°	2886.8	2801.7	2722.5	2679.9	2664.9	2639.9	2652.4	2639.9	2640.7	2645.7	2574.0
22.5°	2661.6	2635.7	2589.8	2603.2	2598.2	2620.7	2604.0	2578.1	2586.5	2548.9	2494.7
25°	2570.6	2540.6	2538.9	2543.9	2536.4	2526.4	2511.4	2472.2	2469.7	2458.0	2433.0
27.5°	2478.8	2480.5	2485.5	2470.5	2443.8	2423.8	2401.3	2382.1	2389.6	2376.2	2342.0
30°	2415.4	2414.6	2384.6	2371.2	2322.0	2322.8	2317.0	2305.3	2297.8	2298.6	2276.9
32.5°	2325.3	2299.5	2265.3	2248.6	2244.4	2229.4	2217.7	2220.2	2226.0	2205.2	2227.7
35°	2232.7	2179.3	2174.3	2160.1	2146.8	2136.8	2140.9	2124.2	2123.4	2120.9	1937.4
37.5°	2108.4	2082.5	2080.0	2065.0	2055.8	2053.3	2037.5	2040.0	2047.5	2060.8	1652.0
40°	2005.8	1982.4	1976.6	1975.7	1955.7	1954.0	1958.2	1974.1	1984.9	1901.5	1574.4
42.5°	1895.6	1897.3	1879.0	1867.3	1869.8	1877.3	1897.3	1842.2	1596.1	1521.0	1439.2
45°	1801.4	1793.0	1783.0	1779.7	1801.4	1786.3	1566.1	1445.1	1415.9	1412.6	1183.1
47.5°	1702.9	1700.4	1696.2	1698.7	1575.2	1404.2	1354.1	1338.3	1343.3	1340.0	1016.2
50°	1603.6	1607.0	1607.0	1403.4	1288.2	1259.9	1264.0	1278.2	1189.8	1110.5	947.0
52.5°	1517.7	1491.8	1278.2	1204.8	1178.9	1191.4	1161.4	1050.4	970.3	923.6	876.1
55°	1358.3	1168.1	1120.5	1108.8	1118.0	1007.1	938.6	866.9	846.0	841.0	813.5
57.5°	1068.8	1030.4	1034.6	987.9	881.9	819.3	791.8	781.8	772.6	765.9	66.7
60°	945.3	956.2	875.2	775.1	732.6	724.2	717.5	708.4	706.7	695.0	42.6
62.5°	865.2	760.9	690.8	665.8	655.8	653.3	640.8	636.6	540.7	74.3	31.7
65°	652.5	609.9	596.6	590.7	579.9	579.9	481.4	75.9	61.7	53.4	28.4
67.5°	532.3	529.0	522.3	514.8	350.4	73.4	64.2	55.9	48.4	42.6	25.0
70°	450.5	448.9	408.8	75.1	62.6	55.1	48.4	43.4	40.0	35.9	22.5
72.5°	369.6	75.1	63.4	55.1	47.6	43.4	39.2	35.0	31.7	29.2	18.4
75°	57.6	50.9	45.1	40.9	37.5	33.4	30.0	27.5	26.7	23.4	12.5
77.5°	41.7	35.9	32.5	29.2	25.9	23.4	20.0	17.5	15.9	13.3	9.2
80°	29.2	25.9	23.4	19.2	16.7	14.2	12.5	10.8	10.0	8.3	4.2
82.5°	16.7	14.2	12.5	10.0	9.2	7.5	6.7	5.8	5.8	4.2	4.2
85°	7.5	7.5	5.8	5.0	4.2	4.2	4.2	3.3	3.3	2.5	2.5
87.5°	3.3	3.3	3.3	3.3	3.3	2.5	2.5	2.5	2.5	2.5	1.7
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°	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0
2.5°	2866.8	2877.7	2898.5	2920.2	2896.0	2982.8	2976.1	3005.3	3021.2	3028.7	3046.2
5°	3122.1	3170.5	3186.4	3138.8	3111.3	3082.9	3018.7	2970.3	2976.1	2960.3	2902.7
7.5°	3117.1	3013.7	2874.3	2810.9	2805.9	2798.4	2818.4	2830.1	2831.8	2830.9	2829.3
10°	2853.5	2800.1	2790.9	2782.5	2785.9	2755.0	2740.8	2700.8	2722.5	2710.8	2715.0
12.5°	2773.4	2760.9	2711.6	2643.2	2684.1	2653.2	2635.7	2647.4	2634.0	2621.5	2617.3
15°	2725.8	2644.9	2617.3	2600.7	2589.0	2582.3	2588.1	2574.8	2570.6	2568.1	2574.0
17.5°	2627.4	2594.8	2564.8	2520.6	2521.4	2518.9	2535.6	2560.6	2562.3	2433.8	2317.8
20°	2549.8	2523.1	2484.7	2457.2	2494.7	2428.0	2170.1	2047.5	2028.3	2028.3	2031.6
22.5°	2488.0	2428.8	2431.3	2387.9	2036.6	1964.9	1966.6	1974.1	1939.9	1823.0	1810.5
25°	2403.8	2394.6	2211.9	1911.5	1914.0	1858.1	1772.2	1651.2	1520.2	1520.2	1498.5
27.5°	2340.3	2145.9	1879.0	1866.4	1678.7	1560.2	1486.8	1375.8	1360.8	1346.6	1348.3
30°	2286.1	1815.5	1822.2	1560.2	1421.7	1323.3	1317.4	1299.1	1289.9	1287.4	1278.2
32.5°	1807.2	1768.0	1525.2	1328.3	1274.0	1258.2	1250.7	1229.8	1229.0	1213.1	1103.0
35°	1694.6	1551.9	1276.6	1223.2	1207.3	1192.3	1179.8	791.8	93.4	37.5	32.5
37.5°	1566.1	1296.6	1180.6	1156.4	1141.4	843.5	84.3	29.2	20.9	15.0	13.3
40°	1327.4	1158.1	1121.4	1094.7	451.4	29.2	18.4	14.2	8.3	7.5	6.7
42.5°	1119.7	1091.3	1052.1	320.4	33.4	14.2	9.2	6.7	5.8	5.8	5.0
45°	1047.9	1022.9	423.8	31.7	20.9	6.7	5.8	5.8	5.0	3.3	3.3
47.5°	981.2	863.5	38.4	20.0	13.3	5.8	5.0	3.3	3.3	3.3	2.5
50°	910.3	47.6	26.7	15.0	8.3	3.3	3.3	3.3	3.3	2.5	2.5
52.5°	170.2	33.4	21.7	13.3	4.2	3.3	3.3	3.3	2.5	2.5	2.5
55°	40.0	26.7	20.0	11.7	3.3	3.3	3.3	2.5	2.5	2.5	1.7
57.5°	30.0	20.0	15.9	10.8	3.3	2.5	2.5	2.5	2.5	2.5	1.7
60°	25.0	14.2	12.5	10.0	2.5	2.5	2.5	2.5	2.5	2.5	1.7
62.5°	17.5	11.7	9.2	7.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
65°	14.2	9.2	7.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
67.5°	12.5	7.5	5.0	1.7	2.5	2.5	2.5	2.5	2.5	2.5	2.5
70°	10.0	2.5	2.5	1.7	2.5	2.5	2.5	2.5	2.5	2.5	2.5
72.5°	8.3	2.5	1.7	1.7	2.5	2.5	2.5	2.5	2.5	2.5	2.5
75°	8.3	4.2	1.7	1.7	2.5	2.5	3.3	3.3	2.5	2.5	2.5
77.5°	5.8	4.2	1.7	1.7	2.5	2.5	3.3	3.3	2.5	2.5	2.5
80°	3.3	4.2	1.7	2.5	2.5	5.0	5.8	3.3	2.5	2.5	2.5
82.5°	3.3	4.2	5.0	5.0	2.5	4.2	5.0	4.2	3.3	2.5	2.5
85°	3.3	2.5	3.3	4.2	2.5	4.2	4.2	3.3	3.3	2.5	2.5
87.5°	1.7	2.5	2.5	3.3	3.3	3.3	4.2	3.3	3.3	3.3	2.5
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-LD5-50SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0
2.5°	3054.5	3057.9	3005.3	2987.0	3002.8	2999.5	2985.3	2932.7	2926.9	2891.8	2841.0
5°	2919.4	2941.9	2914.4	2961.9	2939.4	2961.9	3030.3	3062.1	3113.8	3145.5	3157.2
7.5°	2825.1	2830.1	2830.1	2834.3	2838.4	2839.3	2834.3	2830.9	2816.8	2799.2	2830.9
10°	2710.8	2716.6	2726.6	2725.0	2724.1	2741.7	2745.8	2781.7	2780.0	2786.7	2810.9
12.5°	2651.6	2606.5	2647.4	2636.5	2651.6	2628.2	2671.6	2664.1	2666.6	2686.6	2738.3
15°	2553.1	2567.3	2577.3	2577.3	2583.1	2578.1	2573.1	2607.3	2628.2	2629.0	2625.7
17.5°	2363.7	2256.1	2366.2	2337.8	2563.9	2569.8	2550.6	2534.7	2534.7	2547.3	2574.0
20°	2029.1	2031.6	2032.5	2043.3	2056.7	2055.8	2056.7	2385.4	2541.4	2505.5	2481.3
22.5°	1778.8	1748.0	1805.5	1801.4	1873.1	1952.4	2028.3	2020.8	2025.8	2257.7	2466.3
25°	1425.9	1465.9	1433.4	1447.6	1528.5	1622.8	1681.2	1833.9	1999.9	1988.2	2042.5
27.5°	1342.5	1331.6	1346.6	1346.6	1357.5	1370.0	1402.5	1488.5	1636.2	1791.3	1938.2
30°	1263.2	1272.4	1274.0	1289.1	1297.4	1305.8	1310.8	1343.3	1376.7	1484.3	1665.4
32.5°	948.7	831.8	1094.7	1165.6	1225.7	1239.8	1249.9	1263.2	1287.4	1303.3	1394.2
35°	27.5	27.5	29.2	33.4	42.6	287.0	1093.0	1204.8	1220.7	1240.7	1257.4
37.5°	13.3	10.0	11.7	12.5	15.0	20.9	30.0	93.4	1040.4	1176.4	1194.8
40°	5.8	5.8	5.8	5.8	6.7	8.3	12.5	20.9	31.7	836.9	1128.9
42.5°	5.0	5.0	5.0	5.0	5.0	5.0	5.8	7.5	15.0	35.9	592.4
45°	3.3	3.3	2.5	3.3	3.3	4.2	5.0	5.0	6.7	22.5	40.9
47.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	4.2	5.0	15.0	21.7
50°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	11.7	15.0
52.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	5.0	13.3
55°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.5	2.5	3.3	11.7
57.5°	1.7	1.7	1.7	1.7	1.7	2.5	1.7	1.7	2.5	2.5	10.8
60°	1.7	1.7	1.7	1.7	1.7	2.5	2.5	2.5	2.5	2.5	10.0
62.5°	2.5	2.5	1.7	2.5	1.7	1.7	2.5	2.5	2.5	2.5	6.7
65°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.7	2.5
67.5°	2.5	2.5	2.5	2.5	1.7	2.5	1.7	2.5	2.5	1.7	1.7
70°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.7	1.7	1.7	1.7
72.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.7	1.7	1.7	1.7
75°	2.5	2.5	2.5	2.5	2.5	2.5	3.3	3.3	1.7	1.7	1.7
77.5°	2.5	2.5	2.5	2.5	2.5	2.5	4.2	5.0	4.2	4.2	1.7
80°	2.5	2.5	2.5	2.5	2.5	2.5	4.2	4.2	4.2	4.2	5.8
82.5°	2.5	2.5	2.5	2.5	2.5	2.5	3.3	3.3	3.3	3.3	4.2
85°	2.5	2.5	2.5	2.5	2.5	2.5	3.3	3.3	3.3	2.5	3.3
87.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.3	2.5	2.5	2.5
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-LD5-50SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0
2.5°	2845.1	2816.8	2807.6	2788.4	2786.7	2788.4	2784.2	2778.4	2781.7	2775.9	2770.9
5°	3163.8	3087.9	3038.7	2972.8	2881.8	2861.8	2856.8	2828.4	2818.4	2815.1	2801.7
7.5°	2906.0	3044.5	3128.0	3156.3	3049.5	3024.5	2995.3	2971.9	2949.4	2906.9	2881.0
10°	2791.7	2798.4	2878.5	2971.9	3123.8	3144.7	3160.5	3109.6	3095.4	2987.0	2963.6
12.5°	2765.0	2765.9	2775.0	2831.8	2951.1	2964.4	3020.3	3050.4	3087.1	3107.9	3091.3
15°	2643.2	2710.8	2760.9	2765.9	2776.7	2800.1	2816.8	2921.0	2965.3	3083.7	3077.1
17.5°	2586.5	2608.2	2680.8	2740.0	2730.0	2721.6	2735.0	2749.2	2791.7	2910.2	2908.5
20°	2492.2	2561.4	2600.7	2662.4	2718.3	2720.8	2705.8	2697.4	2680.8	2699.9	2717.5
22.5°	2452.1	2463.0	2536.4	2579.8	2643.2	2665.7	2669.1	2669.9	2660.7	2650.7	2645.7
25°	2448.0	2413.8	2451.3	2505.5	2552.3	2576.5	2604.0	2613.2	2609.8	2609.8	2604.8
27.5°	2003.3	2402.9	2382.9	2418.8	2475.5	2492.2	2506.4	2534.7	2552.3	2564.8	2570.6
30°	1908.2	1979.9	2329.5	2334.5	2392.1	2390.4	2406.3	2429.6	2452.1	2481.3	2488.9
32.5°	1687.9	1863.9	2132.6	2250.2	2310.3	2316.1	2324.5	2331.2	2352.0	2384.6	2412.9
35°	1352.5	1697.9	1827.2	2210.2	2221.0	2232.7	2237.7	2253.6	2260.2	2273.6	2298.6
37.5°	1224.0	1403.4	1753.0	1911.5	2118.4	2128.4	2155.1	2161.8	2172.6	2183.5	2202.7
40°	1149.7	1199.0	1459.3	1707.1	2035.8	2042.5	2051.7	2068.3	2069.2	2081.7	2099.2
42.5°	1090.5	1122.2	1198.1	1630.3	1977.4	1976.6	1954.9	1965.7	1970.7	1984.1	2008.3
45°	871.1	1052.9	1101.3	1331.6	1574.4	1687.9	1905.6	1869.8	1868.9	1873.9	1899.8
47.5°	44.2	990.4	1024.6	1098.8	1486.8	1491.0	1519.3	1758.0	1794.7	1783.0	1785.5
50°	30.0	68.4	954.5	988.7	1281.6	1385.0	1405.9	1416.7	1554.4	1707.9	1682.9
52.5°	23.4	39.2	584.9	917.8	1041.3	1117.2	1251.5	1328.3	1336.6	1398.4	1607.8
55°	20.9	30.0	63.4	846.9	885.2	901.9	980.4	1114.7	1223.2	1255.7	1258.2
57.5°	18.4	27.5	43.4	383.0	805.1	808.5	821.8	868.6	966.2	1055.4	1156.4
60°	16.7	24.2	34.2	65.9	731.7	740.1	742.6	755.1	766.8	827.7	943.6
62.5°	10.0	19.2	30.0	47.6	579.0	665.0	664.1	672.5	683.3	690.0	713.4
65°	8.3	15.0	25.9	40.0	70.9	88.4	537.3	597.4	604.1	613.2	617.4
67.5°	7.5	13.3	19.2	31.7	53.4	60.9	70.1	86.8	473.9	534.0	542.3
70°	6.7	9.2	15.9	26.7	43.4	46.7	52.6	60.1	70.9	87.6	428.9
72.5°	4.2	6.7	10.8	19.2	33.4	37.5	40.9	45.9	50.9	60.9	70.1
75°	1.7	5.0	9.2	14.2	25.9	28.4	30.9	34.2	38.4	45.1	50.1
77.5°	1.7	4.2	7.5	10.0	16.7	19.2	22.5	25.0	28.4	31.7	36.7
80°	5.8	3.3	5.0	7.5	11.7	12.5	14.2	15.9	18.4	20.9	24.2
82.5°	4.2	5.0	5.8	5.0	5.8	7.5	8.3	10.0	10.8	12.5	13.3
85°	3.3	3.3	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.8	7.5
87.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.3	3.3
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-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0
2.5°	2770.9	2769.2	2764.2	2764.2	2763.4	2766.7	2769.2	2771.7	2770.9	2775.9	2770.9
5°	2791.7	2787.6	2780.0	2773.4	2770.9	2772.5	2770.0	2772.5	2769.2	2773.4	2765.9
7.5°	2849.3	2835.1	2805.9	2794.2	2779.2	2778.4	2770.9	2769.2	2764.2	2764.2	2755.0
10°	2951.1	2882.7	2874.3	2839.3	2826.8	2765.9	2779.2	2756.7	2754.2	2743.3	2739.2
12.5°	3034.5	2981.1	2965.3	2934.4	2899.4	2775.9	2803.4	2755.0	2752.5	2730.8	2708.3
15°	3036.2	3067.1	3023.7	2938.6	2931.1	2846.0	2790.1	2773.4	2751.7	2686.6	2697.4
17.5°	2938.6	3009.5	3030.3	3012.0	2958.6	2901.0	2822.6	2789.2	2724.1	2694.9	2674.9
20°	2780.0	2851.8	2941.1	2946.9	2980.3	2939.4	2836.8	2782.5	2704.1	2653.2	2636.5
22.5°	2654.1	2706.6	2809.2	2856.8	2897.7	2911.9	2846.8	2766.7	2669.1	2619.9	2609.8
25°	2587.3	2599.0	2629.9	2685.8	2775.9	2841.0	2850.1	2765.0	2714.1	2606.5	2549.8
27.5°	2563.1	2553.1	2540.6	2569.0	2636.5	2715.8	2768.4	2782.5	2655.7	2553.1	2496.4
30°	2501.4	2507.2	2488.0	2478.0	2522.2	2604.0	2697.4	2720.8	2623.2	2517.2	2452.1
32.5°	2425.4	2435.5	2438.8	2421.3	2412.1	2468.8	2569.8	2625.7	2620.7	2466.3	2393.7
35°	2330.3	2358.7	2366.2	2367.0	2352.0	2342.8	2401.3	2517.2	2561.4	2443.0	2337.8
37.5°	2230.2	2238.6	2279.4	2290.3	2290.3	2262.7	2306.1	2398.7	2460.5	2390.4	2269.4
40°	2105.1	2131.8	2170.1	2189.3	2208.5	2211.0	2186.8	2251.9	2353.7	2336.2	2205.2
42.5°	2014.1	2031.6	2055.0	2080.9	2120.1	2130.1	2105.1	2116.7	2222.7	2268.6	2121.7
45°	1908.2	1931.5	1938.2	1966.6	2007.4	2036.6	2035.8	2011.6	2096.7	2153.5	2060.8
47.5°	1799.7	1822.2	1833.9	1848.1	1878.1	1915.7	1936.5	1925.7	1942.4	2053.3	1979.9
50°	1687.9	1700.4	1723.8	1739.6	1759.6	1781.3	1831.4	1841.4	1818.0	1906.5	1890.6
52.5°	1581.9	1586.1	1601.9	1617.8	1644.5	1660.4	1700.4	1730.4	1728.8	1754.6	1791.3
55°	1499.3	1481.0	1484.3	1496.8	1514.3	1538.5	1561.1	1607.8	1623.6	1628.6	1687.1
57.5°	1171.4	1360.0	1376.7	1375.8	1396.7	1407.5	1428.4	1459.3	1516.0	1503.5	1568.6
60°	1064.6	1085.5	1243.2	1261.5	1269.0	1279.1	1304.1	1332.5	1374.2	1400.9	1429.2
62.5°	811.8	938.6	986.2	1125.5	1147.2	1153.1	1169.8	1183.1	1226.5	1287.4	1275.7
65°	628.3	682.5	827.7	884.4	1002.9	1017.9	1041.3	1055.4	1068.0	1138.0	1141.4
67.5°	543.2	551.5	590.7	700.0	775.1	891.1	905.3	917.8	937.0	987.0	1017.9
70°	463.9	473.9	484.8	493.9	591.6	668.3	775.9	780.1	792.6	826.0	896.1
72.5°	87.6	396.3	403.0	408.8	419.7	470.6	573.2	656.6	661.6	677.5	741.7
75°	59.2	69.3	95.1	327.1	337.9	341.2	358.8	463.1	539.8	543.2	571.5
77.5°	42.6	47.6	57.6	68.4	174.4	262.0	266.2	285.3	364.6	422.2	427.2
80°	29.2	32.5	38.4	43.4	53.4	70.1	193.6	199.4	209.4	288.7	303.7
82.5°	16.7	19.2	22.5	27.5	31.7	40.0	51.7	66.7	136.0	145.2	192.7
85°	8.3	9.2	10.8	13.3	15.9	19.2	25.9	31.7	43.4	78.4	80.9
87.5°	4.2	4.2	4.2	4.2	6.7	7.5	9.2	11.7	15.0	22.5	29.2
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-LD5-50SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0
2.5°	2771.7	2783.4	2793.4	2795.9	2795.9	2797.6	2800.1	2801.7	2803.4	2805.1	2803.4
5°	2766.7	2779.2	2787.6	2790.1	2790.1	2795.1	2799.2	2804.2	2806.7	2806.7	2805.1
7.5°	2754.2	2763.4	2774.2	2780.9	2781.7	2790.1	2797.6	2796.7	2800.1	2801.7	2805.9
10°	2737.5	2737.5	2755.8	2760.9	2765.0	2774.2	2776.7	2781.7	2793.4	2795.1	2805.9
12.5°	2729.2	2720.8	2742.5	2745.0	2759.2	2747.5	2762.5	2767.5	2755.8	2771.7	2750.8
15°	2691.6	2701.6	2698.3	2705.8	2730.8	2717.5	2758.4	2745.0	2775.0	2739.2	2802.6
17.5°	2660.7	2659.1	2672.4	2679.1	2684.1	2712.5	2723.3	2738.3	2750.0	2740.0	2765.0
20°	2638.2	2624.9	2634.9	2642.4	2659.9	2681.6	2688.3	2665.7	2705.0	2771.7	2787.6
22.5°	2595.7	2586.5	2598.2	2598.2	2624.9	2621.5	2646.5	2632.4	2669.1	2746.7	2827.6
25°	2538.1	2538.9	2551.4	2566.5	2571.5	2609.0	2622.4	2640.7	2686.6	2779.2	2828.4
27.5°	2479.7	2474.7	2482.2	2513.1	2538.9	2566.5	2570.6	2633.2	2695.8	2759.2	2802.6
30°	2421.3	2416.3	2421.3	2443.8	2474.7	2493.0	2538.9	2622.4	2680.8	2724.1	2765.0
32.5°	2358.7	2353.7	2365.4	2382.1	2436.3	2438.8	2529.7	2608.2	2654.1	2685.8	2678.3
35°	2292.0	2285.3	2296.1	2322.0	2372.0	2390.4	2485.5	2543.9	2595.7	2610.7	2575.6
37.5°	2211.9	2200.2	2213.5	2249.4	2302.0	2355.4	2434.6	2502.2	2529.7	2489.7	2448.0
40°	2128.4	2120.1	2143.4	2161.8	2223.5	2297.8	2388.7	2436.3	2418.8	2372.9	2327.0
42.5°	2054.2	2036.6	2057.5	2092.5	2162.6	2246.9	2320.3	2347.0	2305.3	2237.7	2184.3
45°	1963.2	1942.4	1967.4	2014.1	2089.2	2185.2	2242.7	2233.5	2162.6	2104.2	2030.8
47.5°	1868.1	1843.1	1868.1	1924.0	2008.3	2110.1	2151.8	2110.1	2020.8	1947.4	1888.1
50°	1774.7	1745.5	1769.7	1853.9	1936.5	2014.9	2014.1	1933.2	1879.8	1799.7	1748.0
52.5°	1682.0	1640.3	1664.5	1756.3	1838.9	1928.2	1862.3	1787.2	1722.9	1652.8	1636.2
55°	1567.7	1522.7	1555.2	1688.7	1752.1	1804.7	1699.6	1633.7	1570.2	1535.2	1514.3
57.5°	1459.3	1410.0	1438.4	1596.1	1642.8	1656.2	1559.4	1465.9	1428.4	1416.7	1386.7
60°	1347.5	1291.6	1318.3	1500.2	1532.7	1478.5	1383.3	1310.8	1303.3	1279.9	1256.5
62.5°	1240.7	1178.9	1195.6	1380.8	1395.9	1297.4	1209.8	1190.6	1172.3	1148.9	1136.4
65°	1118.0	1053.8	1077.1	1254.0	1239.8	1113.0	1063.8	1059.6	1035.4	1016.2	1034.6
67.5°	1005.4	929.5	962.0	1115.5	1051.3	947.8	927.8	917.8	898.6	909.4	716.7
70°	881.9	799.3	843.5	966.2	871.1	802.6	795.1	780.1	780.9	620.8	523.1
72.5°	744.2	672.5	736.7	802.6	689.2	669.1	658.3	656.6	529.8	430.5	406.3
75°	623.3	550.7	619.9	645.0	549.0	535.7	534.8	442.2	347.9	332.1	324.6
77.5°	486.4	430.5	496.4	458.9	421.3	406.3	364.6	273.7	262.0	251.1	94.3
80°	327.9	332.1	370.5	316.2	300.4	256.1	201.9	193.6	166.9	66.7	52.6
82.5°	199.4	250.3	236.1	197.7	193.6	139.3	127.7	65.1	48.4	38.4	33.4
85°	103.5	126.8	121.8	107.6	80.1	71.8	40.0	30.9	25.0	19.2	15.9
87.5°	35.0	46.7	45.1	35.9	27.5	21.7	14.2	11.7	8.3	6.7	5.8
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-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0
2.5°	2801.7	2801.7	2800.1	2801.7	2802.6	2800.9	2800.9	2802.6	2803.4	2804.2	2808.4
5°	2805.9	2807.6	2810.1	2815.1	2815.9	2825.9	2830.1	2832.6	2835.1	2835.9	2830.1
7.5°	2815.1	2820.9	2825.9	2825.1	2819.3	2803.4	2798.4	2794.2	2801.7	2820.9	2843.5
10°	2823.4	2796.7	2746.7	2815.1	2794.2	2813.4	2870.2	2882.7	2921.0	2975.3	2991.1
12.5°	2765.9	2839.3	2855.1	2778.4	2920.2	2867.7	2930.2	2985.3	3001.1	3056.2	3022.8
15°	2827.6	2863.5	2887.7	2964.4	2956.1	3001.1	3018.7	3007.8	3010.3	3024.5	3062.1
17.5°	2826.8	2898.5	2914.4	2966.1	3001.1	3002.0	2997.0	2992.0	3005.3	3016.2	2993.6
20°	2875.2	2898.5	2929.4	2950.3	2956.9	2965.3	2981.1	2968.6	2943.6	2919.4	2909.4
22.5°	2851.0	2903.5	2930.2	2933.6	2929.4	2903.5	2880.2	2845.1	2833.4	2820.9	2825.1
25°	2856.0	2880.2	2876.8	2863.5	2846.0	2797.6	2785.9	2770.9	2748.3	2694.1	2644.9
27.5°	2820.1	2807.6	2792.6	2760.0	2728.3	2702.5	2673.2	2624.9	2584.8	2526.4	2504.7
30°	2760.0	2710.0	2673.2	2654.1	2623.2	2579.8	2535.6	2476.3	2425.4	2413.8	2402.9
32.5°	2644.9	2595.7	2565.6	2518.9	2466.3	2414.6	2363.7	2340.3	2329.5	2331.2	2321.2
35°	2527.2	2483.9	2438.8	2368.7	2329.5	2277.8	2259.4	2254.4	2244.4	2233.5	2221.9
37.5°	2402.1	2351.2	2283.6	2241.9	2202.7	2181.8	2172.6	2165.1	2147.6	2128.4	2115.1
40°	2281.1	2189.3	2151.8	2110.9	2099.2	2090.0	2076.7	2058.3	2034.1	2030.8	2025.0
42.5°	2119.2	2053.3	2020.8	2012.4	1998.3	1982.4	1970.7	1950.7	1940.7	1947.4	1952.4
45°	1965.7	1932.3	1921.5	1911.5	1884.8	1862.3	1854.8	1848.1	1856.4	1893.1	1805.5
47.5°	1841.4	1828.1	1814.7	1798.0	1773.0	1756.3	1763.8	1770.5	1778.0	1508.5	1376.7
50°	1733.8	1715.4	1694.6	1676.2	1661.2	1659.5	1698.7	1581.1	1324.1	1317.4	1183.9
52.5°	1616.1	1588.6	1576.1	1565.2	1571.9	1596.9	1321.6	1226.5	1176.4	1022.1	953.7
55°	1489.3	1465.1	1465.1	1475.1	1439.2	1166.4	1152.2	996.2	901.9	875.2	864.4
57.5°	1362.5	1360.0	1374.2	1256.5	1058.8	1015.4	853.5	819.3	804.3	801.0	783.5
60°	1246.5	1269.9	1063.0	977.9	850.2	766.8	743.4	739.2	723.4	717.5	701.7
62.5°	1153.9	957.0	891.1	727.6	685.0	674.2	661.6	655.8	641.6	566.5	166.0
65°	833.5	787.6	639.1	611.6	608.2	592.4	587.4	528.1	124.3	83.4	70.9
67.5°	629.1	558.2	539.0	534.0	518.1	486.4	144.3	82.6	70.9	61.7	54.2
70°	483.1	470.6	456.4	444.7	131.0	81.8	70.9	60.1	51.7	45.9	41.7
72.5°	395.5	387.1	225.3	85.9	70.1	59.2	52.6	45.9	40.0	36.7	33.4
75°	309.5	85.9	70.9	59.2	50.9	43.4	38.4	34.2	30.9	28.4	25.9
77.5°	70.1	56.7	48.4	40.9	36.7	32.5	29.2	25.0	22.5	20.0	16.7
80°	43.4	37.5	31.7	29.2	25.0	20.9	18.4	16.7	13.3	12.5	10.8
82.5°	28.4	22.5	20.0	16.7	13.3	12.5	10.8	8.3	7.5	6.7	5.8
85°	12.5	10.8	9.2	7.5	5.8	5.0	4.2	3.3	3.3	3.3	3.3
87.5°	4.2	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.7	1.7
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-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0
2.5°	2810.1	2825.1	2839.3	2835.1	2820.1	2796.7	2790.1	2780.9	2787.6	2801.7	2807.6
5°	2830.1	2821.8	2851.8	2896.0	2967.8	2974.4	3024.5	3036.2	3076.2	3101.3	3100.4
7.5°	2858.5	2977.0	3026.2	3079.6	3103.8	3097.9	3105.4	3099.6	3090.4	3086.3	3081.2
10°	3002.8	3092.9	3111.3	3111.3	3073.7	3022.8	3001.1	2963.6	2888.5	2890.2	2877.7
12.5°	3087.1	3118.8	3075.4	3038.7	2887.7	2829.3	2765.9	2735.8	2718.3	2691.6	2701.6
15°	3042.9	2997.8	2971.9	2853.5	2760.9	2655.7	2657.4	2639.0	2619.9	2621.5	2609.0
17.5°	2977.8	2941.9	2758.4	2676.6	2631.5	2590.6	2583.1	2558.9	2546.4	2542.3	2541.4
20°	2888.5	2759.2	2622.4	2602.3	2548.1	2501.4	2493.9	2501.4	2539.8	2471.3	2239.4
22.5°	2784.2	2598.2	2558.1	2501.4	2464.7	2446.3	2492.2	2283.6	1968.2	2006.6	1965.7
25°	2607.3	2526.4	2458.0	2414.6	2410.4	2297.8	1914.8	1874.8	1672.0	1563.6	1441.8
27.5°	2478.0	2443.0	2371.2	2363.7	2309.5	1879.0	1679.5	1459.3	1378.3	1365.8	1339.1
30°	2399.6	2349.5	2306.1	2116.7	1843.1	1512.7	1347.5	1316.6	1302.4	1287.4	1264.0
32.5°	2305.3	2257.7	2278.6	1779.7	1469.3	1302.4	1269.0	1246.5	1220.7	1210.6	1126.4
35°	2209.4	2187.7	1780.5	1496.0	1263.2	1223.2	1198.1	1174.8	934.5	226.1	76.8
37.5°	2106.7	2101.7	1600.3	1241.5	1183.1	1145.6	1074.6	221.9	52.6	35.9	26.7
40°	2026.6	1601.1	1264.9	1163.9	1116.4	1057.1	148.5	36.7	23.4	14.2	9.2
42.5°	1973.2	1440.1	1132.2	1092.2	988.7	109.3	37.5	15.9	9.2	7.5	5.8
45°	1521.0	1137.2	1058.0	1016.2	125.2	37.5	21.7	7.5	5.8	5.0	3.3
47.5°	1403.4	1032.9	986.2	221.9	41.7	20.0	15.0	5.0	3.3	3.3	3.3
50°	1063.0	954.5	785.1	54.2	26.7	14.2	10.8	3.3	3.3	3.3	2.5
52.5°	932.0	881.1	84.3	35.9	20.9	10.8	6.7	2.5	2.5	2.5	2.5
55°	851.9	559.0	50.1	27.5	17.5	10.0	4.2	2.5	2.5	2.5	1.7
57.5°	779.3	75.1	36.7	23.4	15.9	9.2	2.5	2.5	2.5	2.5	1.7
60°	660.8	54.2	30.0	20.9	15.0	8.3	2.5	2.5	2.5	2.5	2.5
62.5°	85.9	42.6	25.9	18.4	10.8	6.7	1.7	2.5	2.5	2.5	2.5
65°	62.6	33.4	23.4	12.5	6.7	2.5	1.7	2.5	2.5	2.5	2.5
67.5°	48.4	27.5	17.5	10.8	5.8	1.7	1.7	2.5	2.5	2.5	2.5
70°	38.4	23.4	14.2	9.2	5.0	1.7	1.7	2.5	2.5	2.5	2.5
72.5°	30.0	16.7	10.0	5.0	3.3	1.7	1.7	2.5	2.5	2.5	2.5
75°	22.5	13.3	7.5	4.2	1.7	1.7	1.7	2.5	2.5	2.5	2.5
77.5°	15.0	8.3	5.8	3.3	3.3	3.3	4.2	4.2	2.5	2.5	2.5
80°	10.0	5.8	4.2	4.2	4.2	3.3	4.2	4.2	2.5	4.2	2.5
82.5°	5.0	4.2	4.2	3.3	3.3	2.5	3.3	3.3	3.3	3.3	2.5
85°	3.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.3	3.3	2.5
87.5°	1.7	1.7	1.7	1.7	2.5	2.5	2.5	2.5	3.3	3.3	2.5
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-LD5-50SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0
2.5°	2800.1	2802.6	2795.9	2831.8	2813.4	2815.1	2822.6	2803.4	2807.6	2794.2	2785.1
5°	3103.8	3108.8	3113.8	3115.5	3118.8	3123.0	3118.0	3115.5	3110.4	3093.8	3076.2
7.5°	3056.2	3050.4	3047.9	3051.2	3057.0	3059.6	3055.4	3061.2	3082.9	3092.1	3097.9
10°	2805.9	2779.2	2797.6	2795.1	2774.2	2844.3	2825.1	2835.9	2843.5	2920.2	2966.9
12.5°	2686.6	2703.3	2671.6	2655.7	2676.6	2690.8	2705.0	2674.9	2716.6	2697.4	2759.2
15°	2586.5	2576.5	2573.1	2574.0	2569.8	2589.8	2594.8	2601.5	2607.3	2633.2	2643.2
17.5°	2541.4	2558.1	2564.8	2569.8	2561.4	2552.3	2543.1	2529.7	2533.9	2527.2	2546.4
20°	2083.4	2027.5	2024.1	2056.7	2020.8	2040.8	2089.2	2412.9	2402.1	2528.1	2485.5
22.5°	1738.8	1686.2	1641.2	1601.9	1657.8	1681.2	1771.3	1873.1	2038.3	2012.4	2191.8
25°	1420.1	1400.9	1389.2	1383.3	1387.5	1385.9	1405.9	1453.4	1528.5	1705.4	1934.0
27.5°	1328.3	1319.1	1314.9	1301.6	1311.6	1308.3	1324.1	1334.1	1356.6	1374.2	1448.4
30°	1255.7	1244.8	1237.3	1223.2	1233.2	1234.0	1239.0	1264.9	1274.0	1289.1	1312.4
32.5°	458.9	270.3	253.6	241.1	263.7	343.8	603.2	1054.6	1203.1	1214.8	1241.5
35°	45.1	37.5	33.4	33.4	34.2	37.5	50.1	131.8	241.1	932.0	1166.4
37.5°	17.5	15.0	12.5	11.7	12.5	14.2	19.2	25.0	34.2	70.9	316.2
40°	7.5	6.7	5.8	5.8	5.8	5.8	6.7	8.3	12.5	23.4	36.7
42.5°	5.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.8	7.5	15.0
45°	3.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.3	4.2	6.7
47.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.3
50°	2.5	2.5	2.5	2.5	1.7	2.5	1.7	2.5	2.5	2.5	2.5
52.5°	2.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.5	2.5
55°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.5
57.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
60°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
62.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.5	2.5	1.7
65°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.5	1.7
67.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
70°	2.5	2.5	1.7	2.5	1.7	1.7	2.5	2.5	2.5	1.7	1.7
72.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	5.0	5.0	3.3
75°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	4.2	5.0	4.2
77.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	4.2	4.2	4.2
80°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.3	3.3	3.3
82.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.3	3.3	3.3
85°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
87.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
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-LD5-50SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0
2.5°	2769.2	2768.4	2785.9	2799.2	2794.2	2799.2	2805.1	2805.9	2807.6	2800.9	2798.4
5°	3042.9	3017.0	2966.9	2931.1	2889.3	2813.4	2775.9	2780.0	2780.9	2778.4	2781.7
7.5°	3095.4	3092.9	3075.4	3067.9	3039.5	2985.3	2898.5	2883.5	2846.8	2823.4	2804.2
10°	2963.6	3023.7	3039.5	3066.2	3082.9	3072.9	2999.5	2988.6	2965.3	2938.6	2944.4
12.5°	2820.9	2870.2	2872.7	3017.8	3050.4	3053.7	3025.3	3040.4	3043.7	2983.6	2948.6
15°	2645.7	2669.1	2718.3	2853.5	2951.9	3013.7	3032.0	3040.4	2999.5	2997.0	2982.8
17.5°	2569.0	2584.0	2606.5	2682.4	2831.8	2922.7	3000.3	2994.5	3010.3	2998.6	2962.8
20°	2472.2	2484.7	2524.7	2563.1	2636.5	2757.5	2902.7	2913.5	2934.4	2931.9	2941.9
22.5°	2470.5	2426.3	2433.0	2463.0	2539.8	2648.2	2802.6	2838.4	2851.8	2861.0	2871.8
25°	1959.9	2311.1	2375.4	2394.6	2444.6	2508.0	2689.9	2703.3	2728.3	2769.2	2799.2
27.5°	1697.9	1936.5	2193.5	2327.0	2358.7	2411.3	2519.7	2539.8	2624.9	2634.9	2681.6
30°	1340.0	1524.4	1908.2	2229.4	2281.9	2318.7	2395.4	2435.5	2472.2	2512.2	2561.4
32.5°	1260.7	1289.9	1502.7	1844.7	2253.6	2226.0	2282.8	2307.0	2347.0	2382.1	2417.9
35°	1188.1	1208.1	1253.2	1511.0	1835.6	2150.1	2188.5	2204.3	2226.9	2253.6	2279.4
37.5°	1112.2	1142.2	1173.1	1242.3	1697.9	2090.0	2089.2	2107.6	2120.9	2143.4	2165.1
40°	201.9	1048.8	1098.8	1143.9	1316.6	1667.0	1995.8	2004.1	2013.3	2027.5	2050.0
42.5°	32.5	175.2	1029.6	1073.0	1122.2	1492.6	1953.2	1919.0	1913.2	1923.2	1943.2
45°	16.7	42.6	206.9	1002.1	1046.3	1190.6	1596.9	1859.8	1853.9	1834.7	1838.9
47.5°	12.5	26.7	50.9	346.3	979.5	1022.1	1473.5	1457.6	1568.6	1781.3	1748.8
50°	10.8	18.4	30.0	70.9	865.2	941.1	1134.7	1325.8	1384.2	1391.7	1647.0
52.5°	10.0	12.5	21.7	45.9	181.9	870.2	922.8	989.5	1088.0	1299.1	1294.1
55°	9.2	11.7	18.4	30.9	63.4	784.3	838.5	851.0	871.9	972.8	1106.3
57.5°	5.0	10.8	17.5	26.7	47.6	143.5	760.9	770.9	787.6	791.8	839.4
60°	2.5	10.0	15.9	23.4	35.0	66.7	684.2	695.8	705.9	707.5	722.5
62.5°	1.7	9.2	13.3	21.7	29.2	47.6	161.9	330.4	628.3	628.3	645.8
65°	1.7	6.7	8.3	14.2	26.7	39.2	68.4	79.3	154.4	379.6	566.5
67.5°	1.7	2.5	7.5	11.7	20.0	30.0	50.1	58.4	70.1	80.1	148.5
70°	1.7	1.7	6.7	7.5	12.5	22.5	35.9	40.9	47.6	54.2	62.6
72.5°	1.7	1.7	5.8	5.8	8.3	15.0	27.5	30.0	34.2	38.4	44.2
75°	4.2	3.3	5.0	5.0	5.8	11.7	20.9	23.4	25.0	28.4	32.5
77.5°	4.2	4.2	4.2	4.2	4.2	7.5	13.3	15.0	17.5	19.2	22.5
80°	3.3	3.3	3.3	4.2	4.2	5.0	8.3	9.2	10.0	12.5	13.3
82.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	5.0	5.8	7.5
85°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.3	3.3	3.3	3.3
87.5°	2.5	2.5	2.5	1.7	1.7	2.5	2.5	2.5	2.5	2.5	2.5
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-LD5-50SL-RM-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0	2780.0
2.5°	2797.6	2792.6	2788.4	2790.9	2783.4	2780.0	2782.5	2783.4	2785.1	2789.2	2790.1
5°	2790.1	2788.4	2795.9	2800.1	2798.4	2800.1	2800.1	2796.7	2791.7	2795.1	2787.6
7.5°	2785.1	2774.2	2765.9	2767.5	2759.2	2769.2	2778.4	2791.7	2795.9	2795.9	2787.6
10°	2871.0	2859.3	2812.6	2780.9	2760.0	2741.7	2785.1	2740.8	2761.7	2682.4	2773.4
12.5°	2941.9	2957.8	2936.9	2850.1	2835.1	2780.0	2811.8	2757.5	2741.7	2650.7	2679.9
15°	2970.3	2940.2	2933.6	2909.4	2876.8	2861.0	2775.9	2766.7	2740.8	2750.8	2712.5
17.5°	2945.2	2960.3	2940.2	2924.4	2891.0	2853.5	2802.6	2757.5	2721.6	2641.5	2709.1
20°	2921.0	2941.1	2881.0	2891.0	2894.4	2851.0	2824.3	2786.7	2741.7	2666.6	2608.2
22.5°	2881.0	2866.8	2871.8	2856.8	2844.3	2850.1	2813.4	2787.6	2711.6	2677.4	2598.2
25°	2815.9	2810.9	2824.3	2822.6	2792.6	2782.5	2764.2	2736.7	2706.6	2651.6	2586.5
27.5°	2710.0	2735.8	2759.2	2770.0	2754.2	2727.5	2717.5	2701.6	2680.8	2624.9	2576.5
30°	2598.2	2627.4	2654.1	2677.4	2691.6	2679.9	2670.7	2661.6	2629.9	2593.2	2538.9
32.5°	2470.5	2508.9	2545.6	2574.0	2604.8	2614.0	2607.3	2599.8	2573.1	2539.8	2496.4
35°	2322.8	2375.4	2428.8	2479.7	2493.0	2514.7	2536.4	2523.9	2509.7	2476.3	2436.3
37.5°	2197.7	2235.2	2273.6	2337.8	2384.6	2412.1	2450.5	2455.5	2431.3	2415.4	2362.9
40°	2068.3	2102.6	2158.5	2196.0	2260.2	2292.0	2332.8	2351.2	2345.4	2336.2	2290.3
42.5°	1966.6	1983.2	2020.0	2053.3	2116.7	2181.8	2217.7	2237.7	2258.6	2251.1	2227.7
45°	1858.1	1873.1	1885.6	1914.8	1976.6	2034.1	2078.4	2108.4	2145.9	2163.5	2135.1
47.5°	1750.5	1754.6	1769.7	1793.8	1830.6	1874.8	1949.0	1994.1	2029.1	2063.3	2045.0
50°	1667.9	1652.8	1655.3	1670.4	1700.4	1743.8	1797.2	1860.6	1900.6	1942.4	1946.5
52.5°	1457.6	1579.4	1550.2	1558.6	1574.4	1595.3	1651.2	1713.7	1763.0	1798.9	1834.7
55°	1223.2	1247.3	1481.8	1448.4	1458.4	1476.8	1502.7	1565.2	1612.8	1662.9	1712.9
57.5°	948.7	1128.9	1138.0	1355.0	1350.0	1351.6	1373.3	1409.2	1456.8	1519.3	1561.9
60°	737.6	813.5	961.2	1036.3	1226.5	1233.2	1245.7	1266.5	1307.4	1366.7	1434.2
62.5°	650.8	660.8	713.4	826.0	949.5	1098.8	1125.5	1128.9	1147.2	1206.5	1284.9
65°	571.5	578.2	594.1	605.7	709.2	853.5	982.0	1002.9	1014.6	1049.6	1116.4
67.5°	393.8	498.1	512.3	520.6	530.6	597.4	756.8	862.7	876.1	906.9	965.3
70°	75.9	157.7	431.4	440.5	445.5	460.6	486.4	655.0	743.4	772.6	799.3
72.5°	51.7	60.9	73.4	173.5	367.1	375.5	381.3	403.0	552.3	637.4	651.6
75°	37.5	41.7	49.2	60.9	75.1	244.5	302.9	313.7	324.6	448.0	519.8
77.5°	26.7	30.0	33.4	39.2	45.9	59.2	85.1	234.5	245.3	251.1	354.6
80°	15.0	18.4	22.5	25.9	29.2	33.4	43.4	54.2	121.0	176.9	186.1
82.5°	8.3	10.0	11.7	14.2	15.9	20.0	24.2	29.2	38.4	56.7	120.1
85°	4.2	4.2	4.2	5.8	6.7	9.2	10.8	12.5	17.5	24.2	33.4
87.5°	2.5	2.5	3.3	3.3	3.3	4.2	4.2	4.2	5.0	7.5	10.8
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-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	2780.0	2780.0	2780.0	2780.0	2780.0
2.5°	2790.9	2788.4	2788.4	2798.4	2795.9
5°	2785.9	2783.4	2782.5	2793.4	2788.4
7.5°	2781.7	2772.5	2770.0	2780.0	2775.9
10°	2765.0	2758.4	2762.5	2759.2	2757.5
12.5°	2736.7	2732.5	2715.0	2716.6	2730.8
15°	2685.8	2702.5	2672.4	2699.1	2705.0
17.5°	2592.3	2629.9	2659.1	2674.9	2677.4
20°	2634.0	2646.5	2631.5	2632.4	2642.4
22.5°	2579.8	2585.6	2589.8	2584.8	2606.5
25°	2493.0	2470.5	2518.9	2528.9	2563.9
27.5°	2466.3	2448.0	2470.5	2468.8	2498.0
30°	2444.6	2385.4	2395.4	2411.3	2447.1
32.5°	2413.8	2320.3	2310.3	2345.4	2385.4
35°	2359.5	2271.1	2247.7	2270.3	2330.3
37.5°	2313.6	2202.7	2156.0	2186.0	2264.4
40°	2245.2	2149.3	2076.7	2103.4	2196.0
42.5°	2163.5	2103.4	1991.6	2009.9	2115.9
45°	2080.9	2027.5	1909.0	1918.2	2044.2
47.5°	1996.6	1947.4	1823.0	1824.7	1952.4
50°	1914.0	1848.9	1746.3	1717.1	1854.8
52.5°	1806.4	1746.3	1668.7	1621.1	1762.1
55°	1704.6	1637.0	1580.3	1506.8	1657.0
57.5°	1605.3	1530.2	1491.8	1397.5	1537.7
60°	1469.3	1433.4	1376.7	1286.6	1430.1
62.5°	1329.9	1318.3	1260.7	1167.3	1297.4
65°	1167.3	1194.8	1135.5	1055.4	1159.7
67.5°	1013.7	1063.0	997.9	948.7	1027.1
70°	850.2	906.9	870.2	852.7	886.1
72.5°	689.2	744.2	747.6	735.1	745.9
75°	532.3	593.2	626.6	607.4	609.9
77.5°	403.8	433.0	469.7	484.8	481.4
80°	249.5	300.4	330.4	361.3	350.4
82.5°	126.0	168.5	205.2	238.6	222.8
85°	52.6	67.6	94.3	124.3	119.3
87.5°	15.9	26.7	28.4	40.0	37.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)