

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1213466

Luminaire Tested: 4SNLED-LD5-54SL-RM-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213466
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33524)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-54SL-RM-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

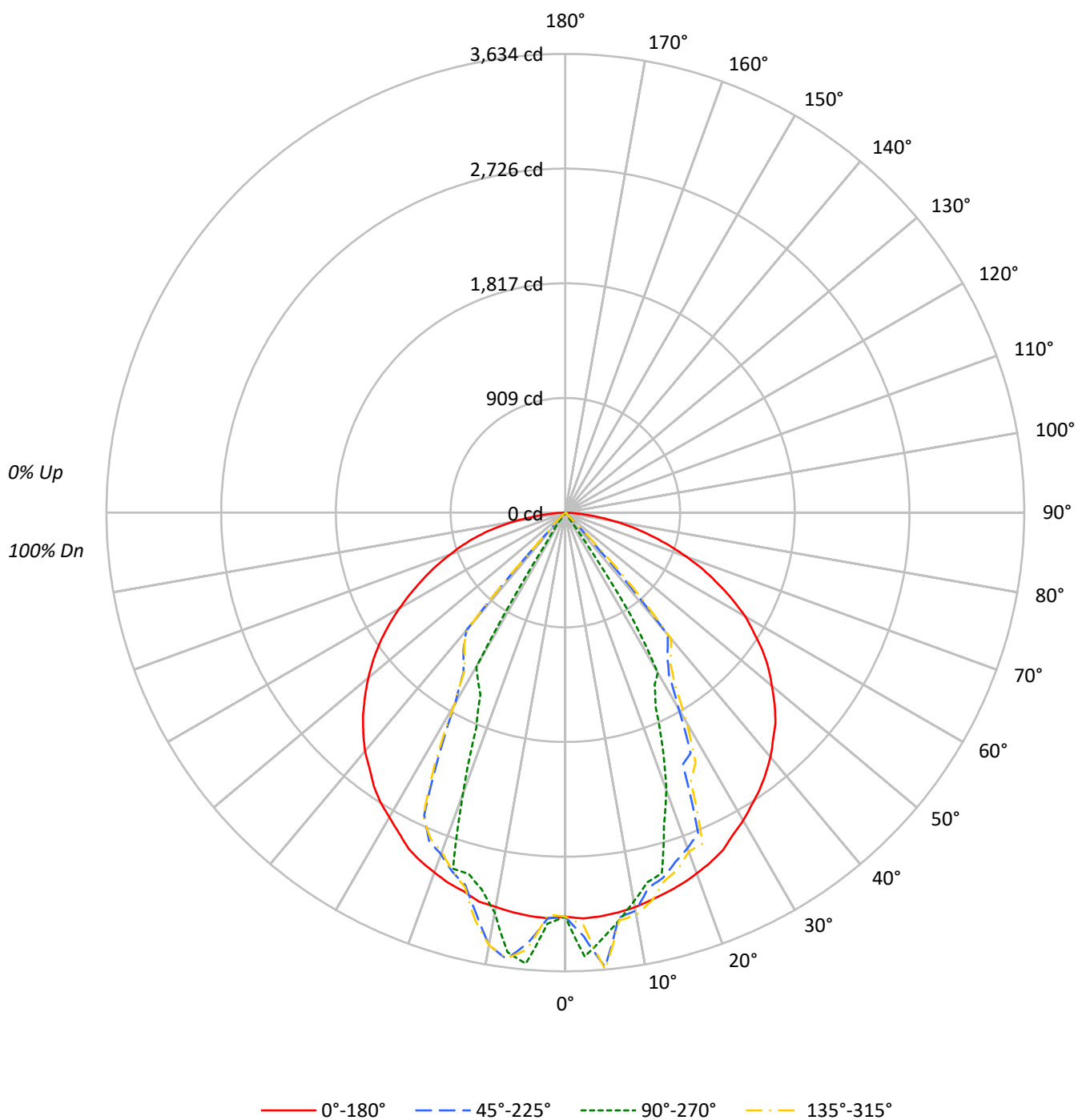
Lumens per Lamp: N/A
Luminaire Lumens: 4550.0 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 41
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: 24 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	25858	25858	25858	25858
5°	25964	26595	25956	28164
10°	25902	24065	25887	24760
15°	25832	22462	25768	22521
20°	25861	17693	25788	17911
25°	25936	12804	25810	12083
30°	25817	11231	25544	10797
35°	25895	248	25514	300
40°	25983	54	25362	54
45°	26075	32	25095	24
50°	25876	25	24688	25
55°	25724	17	24143	17
60°	25237	19	23265	19
65°	23922	31	22218	20
70°	22192	34	21126	34
75°	19629	38	19951	38
80°	15943	43	16856	43
85°	9380	51	9578	51

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2°

Vertical Angle: 45°

Luminance: 28155 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	321.0	7.1
10°-20°	875.7	19.2
20°-30°	1114.3	24.5
30°-40°	941.3	20.7
40°-50°	615.4	13.5
50°-60°	387.7	8.5
60°-70°	206.4	4.5
70°-80°	75.3	1.7
80°-90°	12.9	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°	2311.0	50.8
0°-40°	3252.3	71.5
0°-60°	4255.4	93.5
0°-90°	4550.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4550.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3200	3200	3200	3200	3200	
5°	3210	3386	3208	3586	3210	305
15°	3114	2955	3106	2963	3114	880
25°	2951	1687	2937	1592	2951	1357
35°	2682	32	2643	38	2682	1678
45°	2353	4	2264	3	2353	1809
55°	1907	2	1790	2	1907	1699
65°	1335	3	1240	2	1335	1322
75°	702	3	714	3	702	745
85°	137	3	140	3	137	174
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°	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9
2.5°	3218.1	3220.1	3221.0	3222.9	3225.8	3226.8	3228.7	3226.8	3226.8	3226.8	3226.8
5°	3209.5	3213.3	3216.2	3220.1	3226.8	3227.8	3235.4	3236.4	3240.2	3247.9	3253.7
7.5°	3195.1	3198.9	3204.7	3214.3	3223.9	3234.5	3247.9	3262.3	3282.5	3301.7	3325.7
10°	3174.0	3178.8	3185.5	3194.1	3241.2	3247.9	3277.7	3319.0	3330.5	3391.0	3436.1
12.5°	3143.2	3159.6	3176.9	3184.5	3229.7	3300.7	3400.6	3380.4	3358.4	3556.2	3553.3
15°	3113.5	3135.6	3126.9	3189.3	3230.6	3354.5	3312.3	3402.5	3567.7	3527.4	3529.3
17.5°	3081.8	3086.6	3134.6	3186.5	3260.4	3323.8	3375.6	3499.5	3532.2	3535.1	3499.5
20°	3041.4	3064.5	3134.6	3181.7	3306.5	3336.3	3448.6	3512.0	3498.6	3465.9	3405.4
22.5°	3000.1	3070.3	3141.3	3207.6	3295.0	3374.7	3430.4	3460.2	3390.1	3261.4	3192.2
25°	2951.2	2992.5	3085.6	3182.6	3292.1	3338.2	3370.8	3322.8	3231.6	3116.3	3000.1
27.5°	2875.3	2941.6	3060.6	3170.1	3269.0	3324.7	3271.9	3156.7	3009.8	2933.9	2881.1
30°	2816.7	2903.2	3001.1	3106.7	3209.5	3242.2	3107.7	2976.1	2875.3	2799.4	2787.9
32.5°	2745.7	2868.6	2961.7	3062.6	3149.0	3105.8	2975.2	2805.2	2721.6	2692.8	2704.4
35°	2682.3	2775.4	2897.4	2996.3	3058.7	2961.7	2755.3	2649.6	2609.3	2625.6	2604.5
37.5°	2606.4	2729.3	2841.7	2927.2	2906.0	2760.1	2585.3	2518.0	2522.9	2509.4	2469.1
40°	2527.7	2644.8	2762.0	2842.6	2768.7	2545.9	2429.7	2415.3	2418.2	2375.0	2317.3
42.5°	2435.5	2542.1	2659.2	2732.2	2572.8	2399.0	2320.2	2322.1	2297.2	2236.7	2205.9
45°	2352.9	2450.8	2572.8	2579.5	2383.6	2238.6	2215.5	2190.6	2134.9	2114.7	2091.7
47.5°	2247.2	2355.7	2456.6	2420.1	2198.3	2108.0	2090.7	2036.0	2008.1	1992.7	1973.5
50°	2134.9	2244.3	2336.5	2232.8	2023.5	2002.3	1945.7	1902.5	1883.3	1866.9	1849.6
52.5°	2028.3	2118.5	2212.7	2034.0	1889.0	1868.8	1804.5	1779.5	1760.3	1742.1	1738.2
55°	1907.3	1987.0	2051.3	1844.8	1760.3	1713.3	1667.2	1649.9	1631.6	1623.0	1637.4
57.5°	1769.9	1860.2	1850.6	1658.5	1621.1	1552.9	1535.6	1524.1	1510.6	1516.4	1396.4
60°	1646.0	1715.2	1668.1	1522.2	1458.8	1412.7	1397.3	1389.6	1397.3	1280.2	1125.5
62.5°	1493.4	1571.1	1476.1	1362.7	1295.5	1273.4	1260.0	1270.5	1158.2	1029.5	992.0
65°	1334.9	1419.4	1279.2	1191.8	1149.5	1130.3	1129.4	1040.1	929.6	879.7	879.7
67.5°	1182.2	1269.6	1089.0	1016.1	999.7	1001.6	945.9	810.5	779.8	746.2	649.2
70°	1019.9	1096.7	899.9	855.7	846.1	839.3	703.9	667.4	631.0	541.6	534.0
72.5°	858.6	896.0	723.1	712.6	710.7	590.6	563.7	501.3	459.0	448.5	443.7
75°	702.0	690.5	571.4	581.0	489.8	447.5	404.3	367.8	362.1	358.2	89.3
77.5°	554.1	496.5	450.4	391.8	350.5	297.7	289.1	283.3	186.3	67.2	54.7
80°	403.3	321.7	299.6	254.5	217.0	208.4	213.2	65.3	51.9	43.2	37.5
82.5°	256.4	205.5	168.1	146.9	143.1	62.4	46.1	37.5	32.7	27.9	23.0
85°	137.3	91.2	84.5	71.1	42.3	28.8	24.0	18.2	15.4	12.5	11.5
87.5°	43.2	36.5	29.8	24.0	14.4	9.6	7.7	6.7	5.8	4.8	4.8
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):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9
2.5°	3224.9	3226.8	3225.8	3228.7	3228.7	3232.6	3235.4	3238.3	3244.1	3247.0	3269.0
5°	3266.2	3271.0	3285.4	3298.8	3315.1	3319.9	3347.8	3354.5	3387.2	3391.0	3498.6
7.5°	3358.4	3376.6	3411.2	3445.8	3480.3	3502.4	3540.8	3564.8	3590.8	3613.8	3699.3
10°	3469.8	3500.5	3534.1	3568.7	3588.8	3631.1	3654.1	3658.0	3651.3	3613.8	3475.5
12.5°	3579.2	3610.0	3595.6	3602.3	3626.3	3551.4	3562.0	3508.2	3545.6	3360.3	3222.9
15°	3563.9	3562.0	3526.4	3411.2	3430.4	3287.3	3229.7	3185.5	3221.0	3201.8	3180.7
17.5°	3517.8	3430.4	3368.9	3230.6	3172.1	3131.7	3132.7	3133.6	3116.3	3134.6	3080.8
20°	3322.8	3224.9	3133.6	3084.7	3067.4	3038.6	3053.0	3038.6	3039.5	3045.3	2962.7
22.5°	3063.5	3033.8	2980.9	2996.3	2990.5	3016.5	2997.3	2967.5	2977.1	2933.9	2871.5
25°	2958.9	2924.3	2922.4	2928.1	2919.5	2908.0	2890.7	2845.5	2842.6	2829.2	2800.4
27.5°	2853.2	2855.1	2860.9	2843.6	2812.9	2789.8	2763.9	2741.8	2750.5	2735.1	2695.7
30°	2780.2	2779.3	2744.7	2729.3	2672.7	2673.6	2666.9	2653.5	2644.8	2645.8	2620.8
32.5°	2676.5	2646.7	2607.4	2588.2	2583.4	2566.1	2552.6	2555.5	2562.2	2538.2	2564.1
35°	2569.9	2508.4	2502.7	2486.4	2471.0	2459.5	2464.3	2445.1	2444.1	2441.2	2229.9
37.5°	2426.8	2397.0	2394.2	2376.9	2366.3	2363.4	2345.2	2348.1	2356.7	2372.1	1901.5
40°	2308.7	2281.8	2275.1	2274.1	2251.1	2249.1	2254.0	2272.2	2284.7	2188.6	1812.2
42.5°	2181.9	2183.8	2162.7	2149.3	2152.2	2160.8	2183.8	2120.5	1837.2	1750.7	1656.6
45°	2073.4	2063.8	2052.3	2048.4	2073.4	2056.1	1802.6	1663.3	1629.7	1625.9	1361.8
47.5°	1960.1	1957.2	1952.4	1955.3	1813.1	1616.3	1558.7	1540.4	1546.2	1542.3	1169.7
50°	1845.8	1849.6	1849.6	1615.3	1482.8	1450.1	1454.9	1471.3	1369.5	1278.2	1090.0
52.5°	1746.9	1717.1	1471.3	1386.8	1357.0	1371.4	1336.8	1209.1	1116.9	1063.1	1008.4
55°	1563.5	1344.5	1289.8	1276.3	1286.9	1159.1	1080.4	997.8	973.8	968.0	936.3
57.5°	1230.2	1186.0	1190.8	1137.1	1015.1	943.1	911.4	899.9	889.3	881.6	76.8
60°	1088.1	1100.6	1007.4	892.2	843.2	833.6	825.9	815.3	813.4	800.0	49.0
62.5°	995.9	875.8	795.2	766.4	754.8	752.0	737.6	732.8	622.3	85.5	36.5
65°	751.0	702.0	686.7	679.9	667.4	667.4	554.1	87.4	71.1	61.5	32.7
67.5°	612.7	608.9	601.2	592.5	403.3	84.5	73.9	64.3	55.7	49.0	28.8
70°	518.6	516.7	470.6	86.4	72.0	63.4	55.7	49.9	46.1	41.3	25.9
72.5°	425.4	86.4	73.0	63.4	54.7	49.9	45.1	40.3	36.5	33.6	21.1
75°	66.3	58.6	51.9	47.1	43.2	38.4	34.6	31.7	30.7	26.9	14.4
77.5°	48.0	41.3	37.5	33.6	29.8	26.9	23.0	20.2	18.2	15.4	10.6
80°	33.6	29.8	26.9	22.1	19.2	16.3	14.4	12.5	11.5	9.6	4.8
82.5°	19.2	16.3	14.4	11.5	10.6	8.6	7.7	6.7	6.7	4.8	4.8
85°	8.6	8.6	6.7	5.8	4.8	4.8	4.8	3.8	3.8	2.9	2.9
87.5°	3.8	3.8	3.8	3.8	3.8	2.9	2.9	2.9	2.9	2.9	1.9
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°	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9
2.5°	3299.8	3312.3	3336.3	3361.2	3333.4	3433.3	3425.6	3459.2	3477.4	3486.1	3506.3
5°	3593.6	3649.3	3667.6	3612.9	3581.2	3548.5	3474.6	3418.9	3425.6	3407.3	3341.1
7.5°	3587.9	3468.8	3308.4	3235.4	3229.7	3221.0	3244.1	3257.5	3259.4	3258.5	3256.6
10°	3284.4	3222.9	3212.4	3202.8	3206.6	3171.1	3154.8	3108.7	3133.6	3120.2	3125.0
12.5°	3192.2	3177.8	3121.2	3042.4	3089.5	3053.9	3033.8	3047.2	3031.8	3017.4	3012.6
15°	3137.5	3044.3	3012.6	2993.4	2980.0	2972.3	2979.0	2963.7	2958.9	2956.0	2962.7
17.5°	3024.2	2986.7	2952.1	2901.2	2902.2	2899.3	2918.5	2947.3	2949.2	2801.4	2667.9
20°	2934.8	2904.1	2859.9	2828.2	2871.5	2794.6	2497.9	2356.7	2334.6	2334.6	2338.5
22.5°	2863.8	2795.6	2798.5	2748.5	2344.2	2261.6	2263.6	2272.2	2232.8	2098.4	2084.0
25°	2766.8	2756.2	2545.9	2200.2	2203.1	2138.7	2039.8	1900.5	1749.8	1749.8	1724.8
27.5°	2693.8	2470.0	2162.7	2148.3	1932.2	1795.9	1711.4	1583.6	1566.3	1550.0	1551.9
30°	2631.4	2089.7	2097.4	1795.9	1636.4	1523.1	1516.4	1495.3	1484.7	1481.8	1471.3
32.5°	2080.1	2035.0	1755.5	1528.9	1466.5	1448.2	1439.6	1415.6	1414.6	1396.4	1269.6
35°	1950.5	1786.3	1469.3	1407.9	1389.6	1372.3	1357.9	911.4	107.6	43.2	37.5
37.5°	1802.6	1492.4	1358.9	1331.1	1313.8	970.9	97.0	33.6	24.0	17.3	15.4
40°	1527.9	1333.0	1290.7	1260.0	519.6	33.6	21.1	16.3	9.6	8.6	7.7
42.5°	1288.8	1256.1	1211.0	368.8	38.4	16.3	10.6	7.7	6.7	6.7	5.8
45°	1206.2	1177.4	487.9	36.5	24.0	7.7	6.7	6.7	5.8	3.8	3.8
47.5°	1129.4	994.0	44.2	23.0	15.4	6.7	5.8	3.8	3.8	3.8	2.9
50°	1047.7	54.7	30.7	17.3	9.6	3.8	3.8	3.8	3.8	2.9	2.9
52.5°	195.9	38.4	25.0	15.4	4.8	3.8	3.8	3.8	2.9	2.9	2.9
55°	46.1	30.7	23.0	13.4	3.8	3.8	3.8	2.9	2.9	2.9	1.9
57.5°	34.6	23.0	18.2	12.5	3.8	2.9	2.9	2.9	2.9	2.9	1.9
60°	28.8	16.3	14.4	11.5	2.9	2.9	2.9	2.9	2.9	2.9	1.9
62.5°	20.2	13.4	10.6	8.6	2.9	2.9	2.9	2.9	2.9	2.9	2.9
65°	16.3	10.6	8.6	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
67.5°	14.4	8.6	5.8	1.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
70°	11.5	2.9	2.9	1.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
72.5°	9.6	2.9	1.9	1.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
75°	9.6	4.8	1.9	1.9	2.9	2.9	3.8	3.8	2.9	2.9	2.9
77.5°	6.7	4.8	1.9	1.9	2.9	2.9	3.8	3.8	2.9	2.9	2.9
80°	3.8	4.8	1.9	2.9	2.9	5.8	6.7	3.8	2.9	2.9	2.9
82.5°	3.8	4.8	5.8	5.8	2.9	4.8	5.8	4.8	3.8	2.9	2.9
85°	3.8	2.9	3.8	4.8	2.9	4.8	4.8	3.8	3.8	2.9	2.9
87.5°	1.9	2.9	2.9	3.8	3.8	3.8	4.8	3.8	3.8	3.8	2.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213466

CATALOG NUMBER: 4SNLED-LD5-54SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9
2.5°	3515.9	3519.7	3459.2	3438.1	3456.3	3452.5	3436.1	3375.6	3368.9	3328.6	3270.0
5°	3360.3	3386.2	3354.5	3409.3	3383.3	3409.3	3488.0	3524.5	3584.0	3620.5	3634.0
7.5°	3251.8	3257.5	3257.5	3262.3	3267.1	3268.1	3262.3	3258.5	3242.2	3222.0	3258.5
10°	3120.2	3126.9	3138.4	3136.5	3135.6	3155.7	3160.5	3201.8	3199.9	3207.6	3235.4
12.5°	3052.0	3000.1	3047.2	3034.7	3052.0	3025.1	3075.1	3066.4	3069.3	3092.3	3151.9
15°	2938.7	2955.0	2966.5	2966.5	2973.3	2967.5	2961.7	3001.1	3025.1	3026.1	3022.2
17.5°	2720.7	2596.8	2723.6	2690.9	2951.2	2957.9	2935.8	2917.6	2917.6	2932.0	2962.7
20°	2335.6	2338.5	2339.4	2351.9	2367.3	2366.3	2367.3	2745.7	2925.2	2883.9	2856.1
22.5°	2047.5	2011.9	2078.2	2073.4	2156.0	2247.2	2334.6	2326.0	2331.7	2598.7	2838.8
25°	1641.2	1687.3	1649.9	1666.2	1759.4	1867.9	1935.1	2110.9	2302.0	2288.5	2350.9
27.5°	1545.2	1532.7	1550.0	1550.0	1562.5	1576.9	1614.4	1713.3	1883.3	2061.9	2230.9
30°	1454.0	1464.5	1466.5	1483.7	1493.4	1503.0	1508.7	1546.2	1584.6	1708.5	1916.9
32.5°	1091.9	957.5	1260.0	1341.6	1410.8	1427.1	1438.6	1454.0	1481.8	1500.1	1604.8
35°	31.7	31.7	33.6	38.4	49.0	330.4	1258.1	1386.8	1405.0	1428.0	1447.3
37.5°	15.4	11.5	13.4	14.4	17.3	24.0	34.6	107.6	1197.6	1354.1	1375.2
40°	6.7	6.7	6.7	6.7	7.7	9.6	14.4	24.0	36.5	963.2	1299.4
42.5°	5.8	5.8	5.8	5.8	5.8	5.8	6.7	8.6	17.3	41.3	681.9
45°	3.8	3.8	2.9	3.8	3.8	4.8	5.8	5.8	7.7	25.9	47.1
47.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	4.8	5.8	17.3	25.0
50°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	13.4	17.3
52.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	5.8	15.4
55°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.9	2.9	3.8	13.4
57.5°	1.9	1.9	1.9	1.9	1.9	2.9	1.9	1.9	2.9	2.9	12.5
60°	1.9	1.9	1.9	1.9	1.9	2.9	2.9	2.9	2.9	2.9	11.5
62.5°	2.9	2.9	1.9	2.9	1.9	1.9	2.9	2.9	2.9	2.9	7.7
65°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	1.9	2.9
67.5°	2.9	2.9	2.9	2.9	1.9	2.9	1.9	2.9	2.9	1.9	1.9
70°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	1.9	1.9	1.9	1.9
72.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	1.9	1.9	1.9	1.9
75°	2.9	2.9	2.9	2.9	2.9	2.9	3.8	3.8	1.9	1.9	1.9
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	4.8	5.8	4.8	4.8	1.9
80°	2.9	2.9	2.9	2.9	2.9	2.9	4.8	4.8	4.8	4.8	6.7
82.5°	2.9	2.9	2.9	2.9	2.9	2.9	3.8	3.8	3.8	3.8	4.8
85°	2.9	2.9	2.9	2.9	2.9	2.9	3.8	3.8	3.8	2.9	3.8
87.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.8	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213466

CATALOG NUMBER: 4SNLED-LD5-54SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9
2.5°	3274.8	3242.2	3231.6	3209.5	3207.6	3209.5	3204.7	3198.0	3201.8	3195.1	3189.3
5°	3641.7	3554.3	3497.6	3421.7	3317.1	3294.0	3288.3	3255.6	3244.1	3240.2	3224.9
7.5°	3344.9	3504.3	3600.4	3633.0	3510.1	3481.3	3447.7	3420.8	3394.9	3345.9	3316.1
10°	3213.3	3221.0	3313.2	3420.8	3595.6	3619.6	3637.8	3579.2	3562.9	3438.1	3411.2
12.5°	3182.6	3183.6	3194.1	3259.4	3396.8	3412.1	3476.5	3511.1	3553.3	3577.3	3558.1
15°	3042.4	3120.2	3177.8	3183.6	3196.1	3222.9	3242.2	3362.2	3413.1	3549.5	3541.8
17.5°	2977.1	3002.1	3085.6	3153.8	3142.3	3132.7	3148.0	3164.4	3213.3	3349.7	3347.8
20°	2868.6	2948.3	2993.4	3064.5	3128.8	3131.7	3114.4	3104.8	3085.6	3107.7	3127.9
22.5°	2822.5	2835.0	2919.5	2969.4	3042.4	3068.3	3072.2	3073.1	3062.6	3051.0	3045.3
25°	2817.7	2778.3	2821.5	2883.9	2937.7	2965.6	2997.3	3007.8	3004.0	3004.0	2998.2
27.5°	2305.8	2765.8	2742.8	2784.1	2849.4	2868.6	2884.9	2917.6	2937.7	2952.1	2958.9
30°	2196.3	2278.9	2681.3	2687.1	2753.3	2751.4	2769.7	2796.6	2822.5	2856.1	2864.7
32.5°	1942.8	2145.4	2454.7	2590.1	2659.2	2665.9	2675.5	2683.2	2707.2	2744.7	2777.3
35°	1556.7	1954.3	2103.2	2544.0	2556.5	2569.9	2575.7	2593.9	2601.6	2617.0	2645.8
37.5°	1408.8	1615.3	2017.7	2200.2	2438.3	2449.9	2480.6	2488.3	2500.8	2513.2	2535.3
40°	1323.4	1380.0	1679.7	1964.9	2343.3	2350.9	2361.5	2380.7	2381.7	2396.1	2416.3
42.5°	1255.2	1291.7	1379.1	1876.5	2276.0	2275.1	2250.1	2262.6	2268.4	2283.7	2311.6
45°	1002.6	1212.0	1267.7	1532.7	1812.2	1942.8	2193.4	2152.2	2151.2	2157.0	2186.7
47.5°	50.9	1139.9	1179.3	1264.8	1711.4	1716.2	1748.8	2023.5	2065.7	2052.3	2055.2
50°	34.6	78.7	1098.6	1138.0	1475.1	1594.2	1618.2	1630.7	1789.1	1965.8	1937.0
52.5°	26.9	45.1	673.2	1056.4	1198.5	1285.9	1440.5	1528.9	1538.5	1609.6	1850.6
55°	24.0	34.6	73.0	974.8	1018.9	1038.1	1128.4	1283.0	1407.9	1445.3	1448.2
57.5°	21.1	31.7	49.9	440.8	926.7	930.6	945.9	999.7	1112.1	1214.8	1331.1
60°	19.2	27.9	39.4	75.9	842.2	851.8	854.7	869.1	882.6	952.7	1086.2
62.5°	11.5	22.1	34.6	54.7	666.5	765.4	764.4	774.0	786.5	794.2	821.1
65°	9.6	17.3	29.8	46.1	81.6	101.8	618.5	687.6	695.3	705.9	710.7
67.5°	8.6	15.4	22.1	36.5	61.5	70.1	80.7	99.9	545.5	614.6	624.2
70°	7.7	10.6	18.2	30.7	49.9	53.8	60.5	69.1	81.6	100.8	493.6
72.5°	4.8	7.7	12.5	22.1	38.4	43.2	47.1	52.8	58.6	70.1	80.7
75°	1.9	5.8	10.6	16.3	29.8	32.7	35.5	39.4	44.2	51.9	57.6
77.5°	1.9	4.8	8.6	11.5	19.2	22.1	25.9	28.8	32.7	36.5	42.3
80°	6.7	3.8	5.8	8.6	13.4	14.4	16.3	18.2	21.1	24.0	27.9
82.5°	4.8	5.8	6.7	5.8	6.7	8.6	9.6	11.5	12.5	14.4	15.4
85°	3.8	3.8	4.8	4.8	4.8	4.8	4.8	4.8	5.8	6.7	8.6
87.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.8	3.8
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: P1213466

CATALOG NUMBER: 4SNLED-LD5-54SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9
2.5°	3189.3	3187.4	3181.7	3181.7	3180.7	3184.5	3187.4	3190.3	3189.3	3195.1	3189.3
5°	3213.3	3208.5	3199.9	3192.2	3189.3	3191.3	3188.4	3191.3	3187.4	3192.2	3183.6
7.5°	3279.6	3263.3	3229.7	3216.2	3198.9	3198.0	3189.3	3187.4	3181.7	3181.7	3171.1
10°	3396.8	3318.0	3308.4	3268.1	3253.7	3183.6	3198.9	3173.0	3170.1	3157.6	3152.8
12.5°	3492.8	3431.3	3413.1	3377.6	3337.2	3195.1	3226.8	3171.1	3168.2	3143.2	3117.3
15°	3494.7	3530.3	3480.3	3382.4	3373.7	3275.8	3211.4	3192.2	3167.2	3092.3	3104.8
17.5°	3382.4	3464.0	3488.0	3466.9	3405.4	3339.2	3248.9	3210.5	3135.6	3101.9	3078.9
20°	3199.9	3282.5	3385.2	3392.0	3430.4	3383.3	3265.2	3202.8	3112.5	3053.9	3034.7
22.5°	3054.9	3115.4	3233.5	3288.3	3335.3	3351.6	3276.7	3184.5	3072.2	3015.5	3004.0
25°	2978.1	2991.5	3027.0	3091.4	3195.1	3270.0	3280.6	3182.6	3124.0	3000.1	2934.8
27.5°	2950.2	2938.7	2924.3	2956.9	3034.7	3126.0	3186.5	3202.8	3056.8	2938.7	2873.4
30°	2879.1	2885.9	2863.8	2852.3	2903.2	2997.3	3104.8	3131.7	3019.4	2897.4	2822.5
32.5°	2791.7	2803.3	2807.1	2786.9	2776.4	2841.7	2957.9	3022.2	3016.5	2838.8	2755.3
35°	2682.3	2714.9	2723.6	2724.5	2707.2	2696.7	2763.9	2897.4	2948.3	2811.9	2690.9
37.5°	2567.0	2576.6	2623.7	2636.2	2636.2	2604.5	2654.4	2761.0	2832.1	2751.4	2612.2
40°	2423.0	2453.7	2497.9	2520.0	2542.1	2544.9	2517.1	2592.0	2709.2	2689.0	2538.2
42.5°	2318.3	2338.5	2365.4	2395.1	2440.3	2451.8	2423.0	2436.4	2558.4	2611.2	2442.2
45°	2196.3	2223.2	2230.9	2263.6	2310.6	2344.2	2343.3	2315.4	2413.4	2478.7	2372.1
47.5°	2071.5	2097.4	2110.9	2127.2	2161.8	2205.0	2229.0	2216.5	2235.7	2363.4	2278.9
50°	1942.8	1957.2	1984.1	2002.3	2025.4	2050.4	2108.0	2119.5	2092.6	2194.4	2176.2
52.5°	1820.8	1825.6	1843.9	1862.1	1892.9	1911.1	1957.2	1991.8	1989.9	2019.6	2061.9
55°	1725.8	1704.6	1708.5	1722.9	1743.0	1770.9	1796.8	1850.6	1868.8	1874.6	1941.8
57.5°	1348.3	1565.4	1584.6	1583.6	1607.6	1620.1	1644.1	1679.7	1745.0	1730.6	1805.5
60°	1225.4	1249.4	1430.9	1452.1	1460.7	1472.2	1501.0	1533.7	1581.7	1612.4	1645.1
62.5°	934.4	1080.4	1135.1	1295.5	1320.5	1327.2	1346.4	1361.8	1411.7	1481.8	1468.4
65°	723.1	785.6	952.7	1018.0	1154.3	1171.6	1198.5	1214.8	1229.3	1309.9	1313.8
67.5°	625.2	634.8	679.9	805.7	892.2	1025.7	1042.0	1056.4	1078.5	1136.1	1171.6
70°	534.0	545.5	558.0	568.5	680.9	769.2	893.1	897.9	912.3	950.8	1031.4
72.5°	100.8	456.2	463.9	470.6	483.1	541.6	659.8	755.8	761.6	779.8	853.8
75°	68.2	79.7	109.5	376.5	388.9	392.8	413.0	533.0	621.3	625.2	657.8
77.5°	49.0	54.7	66.3	78.7	200.7	301.6	306.4	328.4	419.7	485.9	491.7
80°	33.6	37.5	44.2	49.9	61.5	80.7	222.8	229.5	241.0	332.3	349.6
82.5°	19.2	22.1	25.9	31.7	36.5	46.1	59.5	76.8	156.5	167.1	221.8
85°	9.6	10.6	12.5	15.4	18.2	22.1	29.8	36.5	49.9	90.3	93.2
87.5°	4.8	4.8	4.8	4.8	7.7	8.6	10.6	13.4	17.3	25.9	33.6
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: P1213466

CATALOG NUMBER: 4SNLED-LD5-54SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9
2.5°	3190.3	3203.7	3215.3	3218.1	3218.1	3220.1	3222.9	3224.9	3226.8	3228.7	3226.8
5°	3184.5	3198.9	3208.5	3211.4	3211.4	3217.2	3222.0	3227.8	3230.6	3230.6	3228.7
7.5°	3170.1	3180.7	3193.2	3200.9	3201.8	3211.4	3220.1	3219.1	3222.9	3224.9	3229.7
10°	3150.9	3150.9	3172.1	3177.8	3182.6	3193.2	3196.1	3201.8	3215.3	3217.2	3229.7
12.5°	3141.3	3131.7	3156.7	3159.6	3175.9	3162.4	3179.7	3185.5	3172.1	3190.3	3166.3
15°	3098.1	3109.6	3105.8	3114.4	3143.2	3127.9	3174.9	3159.6	3194.1	3152.8	3225.8
17.5°	3062.6	3060.6	3076.0	3083.7	3089.5	3122.1	3134.6	3151.9	3165.3	3153.8	3182.6
20°	3036.6	3021.3	3032.8	3041.4	3061.6	3086.6	3094.3	3068.3	3113.5	3190.3	3208.5
22.5°	2987.7	2977.1	2990.5	2990.5	3021.3	3017.4	3046.2	3029.9	3072.2	3161.5	3254.6
25°	2921.4	2922.4	2936.8	2954.0	2959.8	3003.0	3018.4	3039.5	3092.3	3198.9	3255.6
27.5°	2854.2	2848.4	2857.1	2892.6	2922.4	2954.0	2958.9	3030.9	3102.9	3175.9	3225.8
30°	2786.9	2781.2	2786.9	2812.9	2848.4	2869.5	2922.4	3018.4	3085.6	3135.6	3182.6
32.5°	2714.9	2709.2	2722.6	2741.8	2804.2	2807.1	2911.8	3002.1	3054.9	3091.4	3082.7
35°	2638.1	2630.4	2642.9	2672.7	2730.3	2751.4	2860.9	2928.1	2987.7	3004.9	2964.6
37.5°	2545.9	2532.5	2547.8	2589.1	2649.6	2711.1	2802.3	2880.1	2911.8	2865.7	2817.7
40°	2449.9	2440.3	2467.2	2488.3	2559.3	2644.8	2749.5	2804.2	2784.1	2731.2	2678.4
42.5°	2364.4	2344.2	2368.2	2408.6	2489.2	2586.2	2670.7	2701.5	2653.5	2575.7	2514.2
45°	2259.7	2235.7	2264.5	2318.3	2404.7	2515.2	2581.4	2570.9	2489.2	2422.0	2337.5
47.5°	2150.2	2121.4	2150.2	2214.6	2311.6	2428.7	2476.8	2428.7	2326.0	2241.5	2173.3
50°	2042.7	2009.1	2036.9	2133.9	2229.0	2319.3	2318.3	2225.1	2163.7	2071.5	2011.9
52.5°	1936.1	1888.1	1915.9	2021.5	2116.6	2219.4	2143.5	2057.1	1983.1	1902.5	1883.3
55°	1804.5	1752.6	1790.1	1943.8	2016.7	2077.2	1956.2	1880.4	1807.4	1767.1	1743.0
57.5°	1679.7	1623.0	1655.7	1837.2	1890.9	1906.3	1794.9	1687.3	1644.1	1630.7	1596.1
60°	1551.0	1486.6	1517.4	1726.7	1764.2	1701.7	1592.3	1508.7	1500.1	1473.2	1446.3
62.5°	1428.0	1357.0	1376.2	1589.4	1606.7	1493.4	1392.5	1370.4	1349.3	1322.4	1308.0
65°	1286.9	1212.9	1239.8	1443.4	1427.1	1281.1	1224.5	1219.6	1191.8	1169.7	1190.8
67.5°	1157.2	1069.8	1107.3	1284.0	1210.0	1091.0	1067.9	1056.4	1034.3	1046.8	824.9
70°	1015.1	920.0	970.9	1112.1	1002.6	923.9	915.2	897.9	898.9	714.5	602.1
72.5°	856.6	774.0	848.0	923.9	793.3	770.2	757.7	755.8	609.8	495.5	467.7
75°	717.4	633.8	713.5	742.4	631.9	616.5	615.6	509.0	400.5	382.2	373.6
77.5°	559.9	495.5	571.4	528.2	485.0	467.7	419.7	315.0	301.6	289.1	108.5
80°	377.4	382.2	426.4	364.0	345.7	294.8	232.4	222.8	192.1	76.8	60.5
82.5°	229.5	288.1	271.8	227.6	222.8	160.4	146.9	74.9	55.7	44.2	38.4
85°	119.1	146.0	140.2	123.9	92.2	82.6	46.1	35.5	28.8	22.1	18.2
87.5°	40.3	53.8	51.9	41.3	31.7	25.0	16.3	13.4	9.6	7.7	6.7
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: P1213466

CATALOG NUMBER: 4SNLED-LD5-54SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9
2.5°	3224.9	3224.9	3222.9	3224.9	3225.8	3223.9	3223.9	3225.8	3226.8	3227.8	3232.6
5°	3229.7	3231.6	3234.5	3240.2	3241.2	3252.7	3257.5	3260.4	3263.3	3264.2	3257.5
7.5°	3240.2	3247.0	3252.7	3251.8	3245.0	3226.8	3221.0	3216.2	3224.9	3247.0	3272.9
10°	3249.8	3219.1	3161.5	3240.2	3216.2	3238.3	3303.6	3318.0	3362.2	3424.6	3442.9
12.5°	3183.6	3268.1	3286.3	3198.0	3361.2	3300.7	3372.8	3436.1	3454.4	3517.8	3479.4
15°	3254.6	3295.9	3323.8	3412.1	3402.5	3454.4	3474.6	3462.1	3465.0	3481.3	3524.5
17.5°	3253.7	3336.3	3354.5	3414.1	3454.4	3455.4	3449.6	3443.8	3459.2	3471.7	3445.8
20°	3309.4	3336.3	3371.8	3395.8	3403.5	3413.1	3431.3	3416.9	3388.1	3360.3	3348.8
22.5°	3281.5	3342.0	3372.8	3376.6	3371.8	3342.0	3315.1	3274.8	3261.4	3247.0	3251.8
25°	3287.3	3315.1	3311.3	3295.9	3275.8	3220.1	3206.6	3189.3	3163.4	3101.0	3044.3
27.5°	3246.0	3231.6	3214.3	3176.9	3140.4	3110.6	3077.0	3021.3	2975.2	2908.0	2883.0
30°	3176.9	3119.2	3077.0	3054.9	3019.4	2969.4	2918.5	2850.3	2791.7	2778.3	2765.8
32.5°	3044.3	2987.7	2953.1	2899.3	2838.8	2779.3	2720.7	2693.8	2681.3	2683.2	2671.7
35°	2908.9	2859.0	2807.1	2726.4	2681.3	2621.8	2600.6	2594.9	2583.4	2570.9	2557.4
37.5°	2764.9	2706.3	2628.5	2580.5	2535.3	2511.3	2500.8	2492.1	2472.0	2449.9	2434.5
40°	2625.6	2520.0	2476.8	2429.7	2416.3	2405.7	2390.3	2369.2	2341.3	2337.5	2330.8
42.5°	2439.3	2363.4	2326.0	2316.4	2300.0	2281.8	2268.4	2245.3	2233.8	2241.5	2247.2
45°	2262.6	2224.2	2211.7	2200.2	2169.4	2143.5	2134.9	2127.2	2136.8	2179.0	2078.2
47.5°	2119.5	2104.1	2088.8	2069.6	2040.8	2021.5	2030.2	2037.9	2046.5	1736.3	1584.6
50°	1995.6	1974.5	1950.5	1929.4	1912.1	1910.1	1955.3	1819.9	1524.1	1516.4	1362.7
52.5°	1860.2	1828.5	1814.1	1801.6	1809.3	1838.1	1521.2	1411.7	1354.1	1176.4	1097.7
55°	1714.2	1686.4	1686.4	1697.9	1656.6	1342.6	1326.2	1146.7	1038.1	1007.4	994.9
57.5°	1568.3	1565.4	1581.7	1446.3	1218.7	1168.8	982.4	943.1	925.8	921.9	901.8
60°	1434.8	1461.7	1223.5	1125.5	978.6	882.6	855.7	850.9	832.6	825.9	807.7
62.5°	1328.2	1101.5	1025.7	837.4	788.5	776.0	761.6	754.8	738.5	652.1	191.1
65°	959.4	906.6	735.6	703.9	700.1	681.9	676.1	607.9	143.1	96.0	81.6
67.5°	724.1	642.5	620.4	614.6	596.4	559.9	166.1	95.1	81.6	71.1	62.4
70°	556.0	541.6	525.3	511.9	150.8	94.1	81.6	69.1	59.5	52.8	48.0
72.5°	455.2	445.6	259.3	98.9	80.7	68.2	60.5	52.8	46.1	42.3	38.4
75°	356.3	98.9	81.6	68.2	58.6	49.9	44.2	39.4	35.5	32.7	29.8
77.5°	80.7	65.3	55.7	47.1	42.3	37.5	33.6	28.8	25.9	23.0	19.2
80°	49.9	43.2	36.5	33.6	28.8	24.0	21.1	19.2	15.4	14.4	12.5
82.5°	32.7	25.9	23.0	19.2	15.4	14.4	12.5	9.6	8.6	7.7	6.7
85°	14.4	12.5	10.6	8.6	6.7	5.8	4.8	3.8	3.8	3.8	3.8
87.5°	4.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213466

CATALOG NUMBER: 4SNLED-LD5-54SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9
2.5°	3234.5	3251.8	3268.1	3263.3	3246.0	3219.1	3211.4	3200.9	3208.5	3224.9	3231.6
5°	3257.5	3247.9	3282.5	3333.4	3416.0	3423.7	3481.3	3494.7	3540.8	3569.6	3568.7
7.5°	3290.2	3426.5	3483.2	3544.7	3572.5	3565.8	3574.4	3567.7	3557.2	3552.4	3546.6
10°	3456.3	3560.0	3581.2	3581.2	3537.9	3479.4	3454.4	3411.2	3324.7	3326.7	3312.3
12.5°	3553.3	3589.8	3539.9	3497.6	3323.8	3256.6	3183.6	3149.0	3128.8	3098.1	3109.6
15°	3502.4	3450.6	3420.8	3284.4	3177.8	3056.8	3058.7	3037.6	3015.5	3017.4	3003.0
17.5°	3427.5	3386.2	3174.9	3080.8	3029.0	2981.9	2973.3	2945.4	2931.0	2926.2	2925.2
20°	3324.7	3175.9	3018.4	2995.3	2932.9	2879.1	2870.5	2879.1	2923.3	2844.6	2577.6
22.5°	3204.7	2990.5	2944.4	2879.1	2836.9	2815.8	2868.6	2628.5	2265.5	2309.7	2262.6
25°	3001.1	2908.0	2829.2	2779.3	2774.5	2644.8	2204.0	2157.9	1924.5	1799.7	1659.5
27.5°	2852.3	2811.9	2729.3	2720.7	2658.3	2162.7	1933.2	1679.7	1586.5	1572.1	1541.4
30°	2762.0	2704.4	2654.4	2436.4	2121.4	1741.1	1551.0	1515.4	1499.1	1481.8	1454.9
32.5°	2653.5	2598.7	2622.7	2048.4	1691.2	1499.1	1460.7	1434.8	1405.0	1393.5	1296.5
35°	2543.0	2518.0	2049.4	1721.9	1454.0	1407.9	1379.1	1352.2	1075.6	260.3	88.4
37.5°	2424.9	2419.1	1842.0	1429.0	1361.8	1318.6	1236.9	255.5	60.5	41.3	30.7
40°	2332.7	1842.9	1455.9	1339.7	1285.0	1216.8	170.9	42.3	26.9	16.3	10.6
42.5°	2271.2	1657.6	1303.2	1257.1	1138.0	125.8	43.2	18.2	10.6	8.6	6.7
45°	1750.7	1309.0	1217.7	1169.7	144.1	43.2	25.0	8.6	6.7	5.8	3.8
47.5°	1615.3	1188.9	1135.1	255.5	48.0	23.0	17.3	5.8	3.8	3.8	3.8
50°	1223.5	1098.6	903.7	62.4	30.7	16.3	12.5	3.8	3.8	3.8	2.9
52.5°	1072.7	1014.1	97.0	41.3	24.0	12.5	7.7	2.9	2.9	2.9	2.9
55°	980.5	643.4	57.6	31.7	20.2	11.5	4.8	2.9	2.9	2.9	1.9
57.5°	897.0	86.4	42.3	26.9	18.2	10.6	2.9	2.9	2.9	2.9	1.9
60°	760.6	62.4	34.6	24.0	17.3	9.6	2.9	2.9	2.9	2.9	2.9
62.5°	98.9	49.0	29.8	21.1	12.5	7.7	1.9	2.9	2.9	2.9	2.9
65°	72.0	38.4	26.9	14.4	7.7	2.9	1.9	2.9	2.9	2.9	2.9
67.5°	55.7	31.7	20.2	12.5	6.7	1.9	1.9	2.9	2.9	2.9	2.9
70°	44.2	26.9	16.3	10.6	5.8	1.9	1.9	2.9	2.9	2.9	2.9
72.5°	34.6	19.2	11.5	5.8	3.8	1.9	1.9	2.9	2.9	2.9	2.9
75°	25.9	15.4	8.6	4.8	1.9	1.9	1.9	2.9	2.9	2.9	2.9
77.5°	17.3	9.6	6.7	3.8	3.8	3.8	4.8	4.8	2.9	2.9	2.9
80°	11.5	6.7	4.8	4.8	4.8	3.8	4.8	4.8	2.9	4.8	2.9
82.5°	5.8	4.8	4.8	3.8	3.8	2.9	3.8	3.8	3.8	3.8	2.9
85°	3.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.8	3.8	2.9
87.5°	1.9	1.9	1.9	1.9	2.9	2.9	2.9	2.9	3.8	3.8	2.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213466

CATALOG NUMBER: 4SNLED-LD5-54SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9
2.5°	3222.9	3225.8	3218.1	3259.4	3238.3	3240.2	3248.9	3226.8	3231.6	3216.2	3205.7
5°	3572.5	3578.3	3584.0	3586.0	3589.8	3594.6	3588.8	3586.0	3580.2	3561.0	3540.8
7.5°	3517.8	3511.1	3508.2	3512.0	3518.7	3521.6	3516.8	3523.5	3548.5	3559.1	3565.8
10°	3229.7	3198.9	3220.1	3217.2	3193.2	3273.8	3251.8	3264.2	3272.9	3361.2	3415.0
12.5°	3092.3	3111.5	3075.1	3056.8	3080.8	3097.1	3113.5	3078.9	3126.9	3104.8	3175.9
15°	2977.1	2965.6	2961.7	2962.7	2957.9	2980.9	2986.7	2994.4	3001.1	3030.9	3042.4
17.5°	2925.2	2944.4	2952.1	2957.9	2948.3	2937.7	2927.2	2911.8	2916.6	2908.9	2931.0
20°	2398.0	2333.7	2329.8	2367.3	2326.0	2349.0	2404.7	2777.3	2764.9	2909.9	2860.9
22.5°	2001.4	1940.9	1889.0	1843.9	1908.2	1935.1	2038.8	2156.0	2346.1	2316.4	2522.9
25°	1634.5	1612.4	1599.0	1592.3	1597.1	1595.1	1618.2	1672.9	1759.4	1963.0	2226.1
27.5°	1528.9	1518.3	1513.5	1498.2	1509.7	1505.8	1524.1	1535.6	1561.5	1581.7	1667.2
30°	1445.3	1432.8	1424.2	1407.9	1419.4	1420.4	1426.1	1455.9	1466.5	1483.7	1510.6
32.5°	528.2	311.2	291.9	277.5	303.5	395.7	694.3	1213.9	1384.8	1398.3	1429.0
35°	51.9	43.2	38.4	38.4	39.4	43.2	57.6	151.7	277.5	1072.7	1342.6
37.5°	20.2	17.3	14.4	13.4	14.4	16.3	22.1	28.8	39.4	81.6	364.0
40°	8.6	7.7	6.7	6.7	6.7	6.7	7.7	9.6	14.4	26.9	42.3
42.5°	5.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	6.7	8.6	17.3
45°	3.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.8	4.8	7.7
47.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.8
50°	2.9	2.9	2.9	2.9	1.9	2.9	1.9	2.9	2.9	2.9	2.9
52.5°	2.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.9	2.9
55°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.9
57.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
60°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
62.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.9	2.9	1.9
65°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.9	1.9
67.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
70°	2.9	2.9	1.9	2.9	1.9	1.9	2.9	2.9	2.9	1.9	1.9
72.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	5.8	5.8	3.8
75°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	4.8	5.8	4.8
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	4.8	4.8	4.8
80°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.8	3.8	3.8
82.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.8	3.8	3.8
85°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
87.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213466

CATALOG NUMBER: 4SNLED-LD5-54SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9
2.5°	3187.4	3186.5	3206.6	3222.0	3216.2	3222.0	3228.7	3229.7	3231.6	3223.9	3221.0
5°	3502.4	3472.6	3415.0	3373.7	3325.7	3238.3	3195.1	3199.9	3200.9	3198.0	3201.8
7.5°	3562.9	3560.0	3539.9	3531.2	3498.6	3436.1	3336.3	3319.0	3276.7	3249.8	3227.8
10°	3411.2	3480.3	3498.6	3529.3	3548.5	3537.0	3452.5	3440.0	3413.1	3382.4	3389.1
12.5°	3247.0	3303.6	3306.5	3473.6	3511.1	3514.9	3482.2	3499.5	3503.4	3434.2	3393.9
15°	3045.3	3072.2	3128.8	3284.4	3397.7	3468.8	3489.9	3499.5	3452.5	3449.6	3433.3
17.5°	2956.9	2974.2	3000.1	3087.5	3259.4	3364.1	3453.4	3446.7	3465.0	3451.5	3410.2
20°	2845.5	2859.9	2906.0	2950.2	3034.7	3174.0	3341.1	3353.6	3377.6	3374.7	3386.2
22.5°	2843.6	2792.7	2800.4	2835.0	2923.3	3048.2	3225.8	3267.1	3282.5	3293.1	3305.5
25°	2255.9	2660.2	2734.1	2756.2	2813.8	2886.8	3096.2	3111.5	3140.4	3187.4	3222.0
27.5°	1954.3	2229.0	2524.8	2678.4	2714.9	2775.4	2900.3	2923.3	3021.3	3032.8	3086.6
30°	1542.3	1754.6	2196.3	2566.1	2626.6	2668.8	2757.2	2803.3	2845.5	2891.6	2948.3
32.5°	1451.1	1484.7	1729.6	2123.3	2593.9	2562.2	2627.5	2655.4	2701.5	2741.8	2783.1
35°	1367.5	1390.6	1442.5	1739.2	2112.8	2474.8	2519.0	2537.3	2563.2	2593.9	2623.7
37.5°	1280.2	1314.7	1350.3	1430.0	1954.3	2405.7	2404.7	2425.9	2441.2	2467.2	2492.1
40°	232.4	1207.2	1264.8	1316.6	1515.4	1918.8	2297.2	2306.8	2317.3	2333.7	2359.6
42.5°	37.5	201.7	1185.1	1235.0	1291.7	1718.1	2248.2	2208.8	2202.1	2213.6	2236.7
45°	19.2	49.0	238.2	1153.4	1204.3	1370.4	1838.1	2140.6	2133.9	2111.8	2116.6
47.5°	14.4	30.7	58.6	398.5	1127.5	1176.4	1696.0	1677.7	1805.5	2050.4	2012.9
50°	12.5	21.1	34.6	81.6	995.9	1083.3	1306.1	1526.0	1593.2	1601.9	1895.7
52.5°	11.5	14.4	25.0	52.8	209.4	1001.6	1062.2	1139.0	1252.3	1495.3	1489.5
55°	10.6	13.4	21.1	35.5	73.0	902.7	965.2	979.6	1003.6	1119.8	1273.4
57.5°	5.8	12.5	20.2	30.7	54.7	165.2	875.8	887.4	906.6	911.4	966.1
60°	2.9	11.5	18.2	26.9	40.3	76.8	787.5	800.9	812.5	814.4	831.7
62.5°	1.9	10.6	15.4	25.0	33.6	54.7	186.3	380.3	723.1	723.1	743.3
65°	1.9	7.7	9.6	16.3	30.7	45.1	78.7	91.2	177.7	437.0	652.1
67.5°	1.9	2.9	8.6	13.4	23.0	34.6	57.6	67.2	80.7	92.2	170.9
70°	1.9	1.9	7.7	8.6	14.4	25.9	41.3	47.1	54.7	62.4	72.0
72.5°	1.9	1.9	6.7	6.7	9.6	17.3	31.7	34.6	39.4	44.2	50.9
75°	4.8	3.8	5.8	5.8	6.7	13.4	24.0	26.9	28.8	32.7	37.5
77.5°	4.8	4.8	4.8	4.8	4.8	8.6	15.4	17.3	20.2	22.1	25.9
80°	3.8	3.8	3.8	4.8	4.8	5.8	9.6	10.6	11.5	14.4	15.4
82.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	5.8	6.7	8.6
85°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.8	3.8	3.8	3.8
87.5°	2.9	2.9	2.9	1.9	1.9	2.9	2.9	2.9	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213466

CATALOG NUMBER: 4SNLED-LD5-54SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9	3199.9
2.5°	3220.1	3214.3	3209.5	3212.4	3203.7	3199.9	3202.8	3203.7	3205.7	3210.5	3211.4
5°	3211.4	3209.5	3218.1	3222.9	3221.0	3222.9	3222.9	3219.1	3213.3	3217.2	3208.5
7.5°	3205.7	3193.2	3183.6	3185.5	3175.9	3187.4	3198.0	3213.3	3218.1	3218.1	3208.5
10°	3304.6	3291.1	3237.4	3200.9	3176.9	3155.7	3205.7	3154.8	3178.8	3087.5	3192.2
12.5°	3386.2	3404.5	3380.4	3280.6	3263.3	3199.9	3236.4	3174.0	3155.7	3051.0	3084.7
15°	3418.9	3384.3	3376.6	3348.8	3311.3	3293.1	3195.1	3184.5	3154.8	3166.3	3122.1
17.5°	3390.1	3407.3	3384.3	3366.0	3327.6	3284.4	3225.8	3174.0	3132.7	3040.5	3118.3
20°	3362.2	3385.2	3316.1	3327.6	3331.5	3281.5	3250.8	3207.6	3155.7	3069.3	3002.1
22.5°	3316.1	3299.8	3305.5	3288.3	3273.8	3280.6	3238.3	3208.5	3121.2	3081.8	2990.5
25°	3241.2	3235.4	3250.8	3248.9	3214.3	3202.8	3181.7	3150.0	3115.4	3052.0	2977.1
27.5°	3119.2	3149.0	3175.9	3188.4	3170.1	3139.4	3127.9	3109.6	3085.6	3021.3	2965.6
30°	2990.5	3024.2	3054.9	3081.8	3098.1	3084.7	3074.1	3063.5	3027.0	2984.8	2922.4
32.5°	2843.6	2887.8	2930.0	2962.7	2998.2	3008.8	3001.1	2992.5	2961.7	2923.3	2873.4
35°	2673.6	2734.1	2795.6	2854.2	2869.5	2894.5	2919.5	2905.1	2888.7	2850.3	2804.2
37.5°	2529.6	2572.8	2617.0	2690.9	2744.7	2776.4	2820.6	2826.3	2798.5	2780.2	2719.7
40°	2380.7	2420.1	2484.4	2527.7	2601.6	2638.1	2685.2	2706.3	2699.6	2689.0	2636.2
42.5°	2263.6	2282.8	2325.0	2363.4	2436.4	2511.3	2552.6	2575.7	2599.7	2591.0	2564.1
45°	2138.7	2156.0	2170.4	2204.0	2275.1	2341.3	2392.2	2426.8	2470.0	2490.2	2457.5
47.5°	2014.8	2019.6	2036.9	2064.8	2107.0	2157.9	2243.4	2295.2	2335.6	2375.0	2353.8
50°	1919.7	1902.5	1905.3	1922.6	1957.2	2007.1	2068.6	2141.6	2187.7	2235.7	2240.5
52.5°	1677.7	1818.0	1784.3	1793.9	1812.2	1836.2	1900.5	1972.6	2029.2	2070.5	2111.8
55°	1407.9	1435.7	1705.6	1667.2	1678.7	1699.8	1729.6	1801.6	1856.4	1914.0	1971.6
57.5°	1091.9	1299.4	1309.9	1559.6	1553.9	1555.8	1580.7	1622.0	1676.8	1748.8	1797.8
60°	849.0	936.3	1106.3	1192.8	1411.7	1419.4	1433.8	1457.8	1504.9	1573.1	1650.8
62.5°	749.1	760.6	821.1	950.8	1092.9	1264.8	1295.5	1299.4	1320.5	1388.7	1478.9
65°	657.8	665.5	683.8	697.2	816.3	982.4	1130.3	1154.3	1167.8	1208.1	1285.0
67.5°	453.3	573.3	589.7	599.3	610.8	687.6	871.0	993.0	1008.4	1043.9	1111.1
70°	87.4	181.5	496.5	507.1	512.8	530.1	559.9	753.9	855.7	889.3	920.0
72.5°	59.5	70.1	84.5	199.8	422.6	432.2	438.9	463.9	635.8	733.7	750.0
75°	43.2	48.0	56.7	70.1	86.4	281.4	348.6	361.1	373.6	515.7	598.3
77.5°	30.7	34.6	38.4	45.1	52.8	68.2	98.0	269.9	282.3	289.1	408.2
80°	17.3	21.1	25.9	29.8	33.6	38.4	49.9	62.4	139.3	203.6	214.2
82.5°	9.6	11.5	13.4	16.3	18.2	23.0	27.9	33.6	44.2	65.3	138.3
85°	4.8	4.8	4.8	6.7	7.7	10.6	12.5	14.4	20.2	27.9	38.4
87.5°	2.9	2.9	3.8	3.8	3.8	4.8	4.8	4.8	5.8	8.6	12.5
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: P1213466

CATALOG NUMBER: 4SNLED-LD5-54SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	3199.9	3199.9	3199.9	3199.9	3199.9
2.5°	3212.4	3209.5	3209.5	3221.0	3218.1
5°	3206.6	3203.7	3202.8	3215.3	3209.5
7.5°	3201.8	3191.3	3188.4	3199.9	3195.1
10°	3182.6	3174.9	3179.7	3175.9	3174.0
12.5°	3150.0	3145.2	3125.0	3126.9	3143.2
15°	3091.4	3110.6	3076.0	3106.7	3113.5
17.5°	2983.8	3027.0	3060.6	3078.9	3081.8
20°	3031.8	3046.2	3029.0	3029.9	3041.4
22.5°	2969.4	2976.1	2980.9	2975.2	3000.1
25°	2869.5	2843.6	2899.3	2910.8	2951.2
27.5°	2838.8	2817.7	2843.6	2841.7	2875.3
30°	2813.8	2745.7	2757.2	2775.4	2816.7
32.5°	2778.3	2670.7	2659.2	2699.6	2745.7
35°	2715.9	2614.1	2587.2	2613.1	2682.3
37.5°	2663.1	2535.3	2481.6	2516.1	2606.4
40°	2584.3	2473.9	2390.3	2421.1	2527.7
42.5°	2490.2	2421.1	2292.4	2313.5	2435.5
45°	2395.1	2333.7	2197.3	2207.9	2352.9
47.5°	2298.1	2241.5	2098.4	2100.3	2247.2
50°	2203.1	2128.1	2010.0	1976.4	2134.9
52.5°	2079.2	2010.0	1920.7	1866.0	2028.3
55°	1962.0	1884.2	1818.9	1734.4	1907.3
57.5°	1847.7	1761.3	1717.1	1608.6	1769.9
60°	1691.2	1649.9	1584.6	1480.9	1646.0
62.5°	1530.8	1517.4	1451.1	1343.5	1493.4
65°	1343.5	1375.2	1307.0	1214.8	1334.9
67.5°	1166.8	1223.5	1148.6	1091.9	1182.2
70°	978.6	1043.9	1001.6	981.5	1019.9
72.5°	793.3	856.6	860.5	846.1	858.6
75°	612.7	682.8	721.2	699.1	702.0
77.5°	464.8	498.4	540.7	558.0	554.1
80°	287.1	345.7	380.3	415.8	403.3
82.5°	145.0	194.0	236.2	274.7	256.4
85°	60.5	77.8	108.5	143.1	137.3
87.5°	18.2	30.7	32.7	46.1	43.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)