

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: P1214153

Luminaire Tested: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1214153
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-LD5-50SL-RM-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

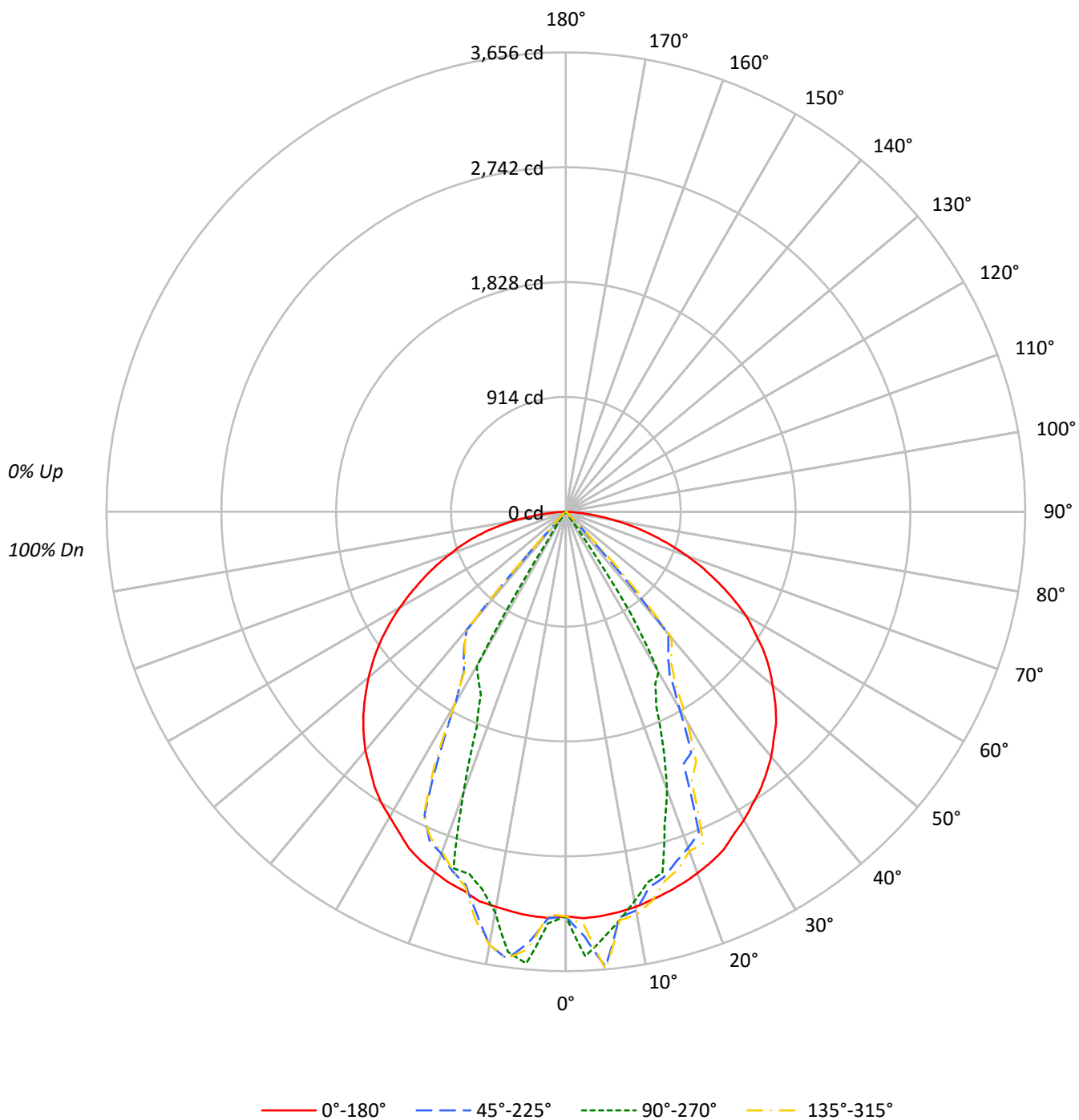
Lumens per Lamp: N/A
Luminaire Lumens: 4578.0 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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: 24 FT

TEST NUMBER: P1214153

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

Luminous Intensity Polar Plot



TEST NUMBER: P1214153

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

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°	26018	26018	26018	26018
5°	26124	26758	26116	28337
10°	26061	24214	26046	24913
15°	25990	22601	25926	22659
20°	26021	17802	25947	18021
25°	26095	12882	25968	12157
30°	25977	11301	25702	10863
35°	26054	249	25672	302
40°	26143	55	25517	55
45°	26234	32	25250	24
50°	26035	25	24840	25
55°	25881	17	24291	17
60°	25393	19	23408	19
65°	24069	31	22354	20
70°	22329	34	21256	34
75°	19749	38	20074	38
80°	16042	43	16959	43
85°	9441	51	9640	51

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2°

Vertical Angle: 45°

Luminance: 28327 cd/sqm

TEST NUMBER: P1214153

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	323.0	7.1
10°-20°	881.1	19.2
20°-30°	1121.1	24.5
30°-40°	947.1	20.7
40°-50°	619.2	13.5
50°-60°	390.1	8.5
60°-70°	207.7	4.5
70°-80°	75.7	1.7
80°-90°	13.0	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°	2325.2	50.8
0°-40°	3272.3	71.5
0°-60°	4281.6	93.5
0°-90°	4578.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4578.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3220	3220	3220	3220	3220	
5°	3229	3407	3228	3608	3229	307
15°	3133	2973	3125	2981	3133	886
25°	2969	1698	2955	1602	2969	1366
35°	2699	32	2659	39	2699	1688
45°	2367	4	2278	3	2367	1821
55°	1919	2	1801	2	1919	1710
65°	1343	3	1247	2	1343	1330
75°	706	3	718	3	706	750
85°	138	3	141	3	138	175
90°	0	0	0	0	0	

TEST NUMBER: P1214153

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6
2.5°	3238.0	3239.9	3240.8	3242.8	3245.7	3246.6	3248.6	3246.6	3246.6	3246.6	3246.6
5°	3229.3	3233.1	3236.0	3239.9	3246.6	3247.6	3255.3	3256.3	3260.2	3267.9	3273.7
7.5°	3214.8	3218.6	3224.4	3234.1	3243.7	3254.4	3267.9	3282.4	3302.7	3322.0	3346.2
10°	3193.5	3198.3	3205.1	3213.8	3261.1	3267.9	3297.9	3339.4	3351.0	3411.9	3457.3
12.5°	3162.6	3179.0	3196.4	3204.1	3249.5	3321.0	3421.5	3401.2	3379.0	3578.1	3575.2
15°	3132.6	3154.9	3146.2	3209.0	3250.5	3375.2	3332.6	3423.5	3589.7	3549.1	3551.0
17.5°	3100.7	3105.6	3153.9	3206.1	3280.5	3344.2	3396.4	3521.1	3553.9	3556.8	3521.1
20°	3060.2	3083.3	3153.9	3201.2	3326.8	3356.8	3469.9	3533.6	3520.1	3487.2	3426.4
22.5°	3018.6	3089.1	3160.6	3227.3	3315.3	3395.5	3451.5	3481.4	3410.9	3281.4	3211.9
25°	2969.3	3010.9	3104.6	3202.2	3312.4	3358.7	3391.6	3343.3	3251.5	3135.5	3018.6
27.5°	2893.0	2959.7	3079.5	3189.6	3289.2	3345.2	3292.1	3176.1	3028.3	2951.9	2898.8
30°	2834.1	2921.0	3019.6	3125.9	3229.3	3262.1	3126.8	2994.5	2893.0	2816.7	2805.1
32.5°	2762.5	2886.2	2980.0	3081.4	3168.4	3124.9	2993.5	2822.5	2738.4	2709.4	2721.0
35°	2698.8	2792.5	2915.2	3014.7	3077.6	2980.0	2772.2	2665.9	2625.3	2641.8	2620.5
37.5°	2622.4	2746.1	2859.2	2945.2	2923.9	2777.0	2601.2	2533.5	2538.4	2524.8	2484.3
40°	2543.2	2661.1	2779.0	2860.1	2785.7	2561.6	2444.6	2430.2	2433.1	2389.6	2331.6
42.5°	2450.4	2557.7	2675.6	2749.0	2588.6	2413.7	2334.5	2336.4	2311.3	2250.4	2219.5
45°	2367.3	2465.9	2588.6	2595.4	2398.3	2252.4	2229.2	2204.0	2148.0	2127.7	2104.5
47.5°	2261.1	2370.2	2471.7	2435.0	2211.8	2120.9	2103.6	2048.5	2020.5	2005.0	1985.7
50°	2148.0	2258.2	2350.9	2246.6	2035.9	2014.7	1957.7	1914.2	1894.8	1878.4	1861.0
52.5°	2040.7	2131.6	2226.3	2046.5	1900.6	1880.3	1815.6	1790.5	1771.2	1752.8	1748.9
55°	1919.0	1999.2	2063.9	1856.2	1771.2	1723.8	1677.4	1660.0	1641.7	1633.0	1647.5
57.5°	1780.8	1871.7	1862.0	1668.7	1631.1	1562.4	1545.1	1533.5	1519.9	1525.7	1404.9
60°	1656.2	1725.7	1678.4	1531.5	1467.8	1421.4	1405.9	1398.2	1405.9	1288.0	1132.5
62.5°	1502.5	1580.8	1485.1	1371.1	1303.5	1281.3	1267.7	1278.4	1165.3	1035.8	998.2
65°	1343.1	1428.1	1287.1	1199.1	1156.6	1137.3	1136.3	1046.5	935.3	885.1	885.1
67.5°	1189.5	1277.4	1095.7	1022.3	1005.9	1007.8	951.8	815.5	784.6	750.8	653.2
70°	1026.2	1103.5	905.4	860.9	851.3	844.5	708.3	671.6	634.8	545.0	537.2
72.5°	863.8	901.5	727.6	717.0	715.0	594.3	567.2	504.4	461.9	451.2	446.4
75°	706.3	694.7	574.9	584.6	492.8	450.3	406.8	370.1	364.3	360.4	89.9
77.5°	557.5	499.6	453.2	394.2	352.7	299.5	290.8	285.0	187.5	67.6	55.1
80°	405.8	323.7	301.5	256.1	218.4	209.7	214.5	65.7	52.2	43.5	37.7
82.5°	258.0	206.8	169.1	147.8	144.0	62.8	46.4	37.7	32.9	28.0	23.2
85°	138.2	91.8	85.0	71.5	42.5	29.0	24.2	18.4	15.5	12.6	11.6
87.5°	43.5	36.7	30.0	24.2	14.5	9.7	7.7	6.8	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

TEST NUMBER: P1214153

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6
2.5°	3244.7	3246.6	3245.7	3248.6	3248.6	3252.4	3255.3	3258.2	3264.0	3266.9	3289.2
5°	3286.3	3291.1	3305.6	3319.1	3335.5	3340.4	3368.4	3375.2	3408.0	3411.9	3520.1
7.5°	3379.0	3397.4	3432.2	3467.0	3501.7	3524.0	3562.6	3586.8	3612.9	3636.1	3722.0
10°	3491.1	3522.0	3555.9	3590.6	3610.9	3653.4	3676.6	3680.5	3673.7	3636.1	3496.9
12.5°	3601.3	3632.2	3617.7	3624.5	3648.6	3573.2	3583.9	3529.8	3567.4	3381.0	3242.8
15°	3585.8	3583.9	3548.1	3432.2	3451.5	3307.5	3249.5	3205.1	3240.8	3221.5	3200.3
17.5°	3539.4	3451.5	3389.7	3250.5	3191.6	3151.0	3152.0	3152.9	3135.5	3153.9	3099.8
20°	3343.3	3244.7	3152.9	3103.6	3086.2	3057.3	3071.8	3057.3	3058.2	3064.0	2980.9
22.5°	3082.4	3052.4	2999.3	3014.7	3008.9	3035.0	3015.7	2985.8	2995.4	2951.9	2889.1
25°	2977.1	2942.3	2940.3	2946.1	2937.4	2925.8	2908.5	2863.0	2860.1	2846.6	2817.6
27.5°	2870.8	2872.7	2878.5	2861.1	2830.2	2807.0	2780.9	2758.7	2767.4	2751.9	2712.3
30°	2797.3	2796.4	2761.6	2746.1	2689.1	2690.1	2683.3	2669.8	2661.1	2662.1	2636.9
32.5°	2693.0	2663.0	2623.4	2604.1	2599.3	2581.9	2568.3	2571.2	2578.0	2553.8	2579.9
35°	2585.7	2523.9	2518.1	2501.7	2486.2	2474.6	2479.4	2460.1	2459.1	2456.2	2243.7
37.5°	2441.7	2411.8	2408.9	2391.5	2380.9	2378.0	2359.6	2362.5	2371.2	2386.7	1913.2
40°	2322.9	2295.8	2289.1	2288.1	2264.9	2263.0	2267.8	2286.2	2298.7	2202.1	1823.3
42.5°	2195.4	2197.3	2176.0	2162.5	2165.4	2174.1	2197.3	2133.5	1848.5	1761.5	1666.8
45°	2086.2	2076.5	2064.9	2061.0	2086.2	2068.8	1813.7	1673.6	1639.8	1635.9	1370.2
47.5°	1972.1	1969.2	1964.4	1967.3	1824.3	1626.2	1568.2	1549.9	1555.7	1551.8	1176.9
50°	1857.2	1861.0	1861.0	1625.3	1491.9	1459.1	1463.9	1480.3	1377.9	1286.1	1096.7
52.5°	1757.6	1727.7	1480.3	1395.3	1365.3	1379.8	1345.0	1216.5	1123.8	1069.7	1014.6
55°	1573.1	1352.8	1297.7	1284.2	1294.8	1166.3	1087.0	1003.9	979.8	974.0	942.1
57.5°	1237.8	1193.3	1198.2	1144.1	1021.3	948.9	917.0	905.4	894.8	887.0	77.3
60°	1094.8	1107.3	1013.6	897.7	848.4	838.7	831.0	820.4	818.4	804.9	49.3
62.5°	1002.0	881.2	800.1	771.1	759.5	756.6	742.1	737.3	626.1	86.0	36.7
65°	755.6	706.3	690.9	684.1	671.6	671.6	557.5	87.9	71.5	61.8	32.9
67.5°	616.5	612.6	604.9	596.2	405.8	85.0	74.4	64.7	56.0	49.3	29.0
70°	521.8	519.9	473.5	87.0	72.5	63.8	56.0	50.2	46.4	41.5	26.1
72.5°	428.1	87.0	73.4	63.8	55.1	50.2	45.4	40.6	36.7	33.8	21.3
75°	66.7	58.9	52.2	47.3	43.5	38.7	34.8	31.9	30.9	27.1	14.5
77.5°	48.3	41.5	37.7	33.8	30.0	27.1	23.2	20.3	18.4	15.5	10.6
80°	33.8	30.0	27.1	22.2	19.3	16.4	14.5	12.6	11.6	9.7	4.8
82.5°	19.3	16.4	14.5	11.6	10.6	8.7	7.7	6.8	6.8	4.8	4.8
85°	8.7	8.7	6.8	5.8	4.8	4.8	4.8	3.9	3.9	2.9	2.9
87.5°	3.9	3.9	3.9	3.9	3.9	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

TEST NUMBER: P1214153

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
0°	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6
2.5°	3320.1	3332.6	3356.8	3381.9	3353.9	3454.4	3446.7	3480.5	3498.8	3507.5	3527.8
5°	3615.8	3671.8	3690.2	3635.1	3603.2	3570.3	3495.9	3439.9	3446.7	3428.3	3361.6
7.5°	3610.0	3490.1	3328.8	3255.3	3249.5	3240.8	3264.0	3277.6	3279.5	3278.5	3276.6
10°	3304.6	3242.8	3232.2	3222.5	3226.4	3190.6	3174.2	3127.8	3152.9	3139.4	3144.2
12.5°	3211.9	3197.4	3140.4	3061.1	3108.5	3072.7	3052.4	3066.0	3050.5	3036.0	3031.2
15°	3156.8	3063.1	3031.2	3011.8	2998.3	2990.6	2997.4	2981.9	2977.1	2974.2	2980.9
17.5°	3042.8	3005.1	2970.3	2919.1	2920.1	2917.2	2936.5	2965.5	2967.4	2818.6	2684.3
20°	2952.9	2922.0	2877.5	2845.6	2889.1	2811.8	2513.3	2371.2	2349.0	2349.0	2352.9
22.5°	2881.4	2812.8	2815.7	2765.4	2358.7	2275.6	2277.5	2286.2	2246.6	2111.3	2096.8
25°	2783.8	2773.2	2561.6	2213.7	2216.6	2151.9	2052.3	1912.2	1760.5	1760.5	1735.4
27.5°	2710.4	2485.2	2176.0	2161.5	1944.1	1806.9	1721.9	1593.4	1576.0	1559.6	1561.5
30°	2647.6	2102.6	2110.3	1806.9	1646.5	1532.5	1525.7	1504.5	1493.8	1490.9	1480.3
32.5°	2092.9	2047.5	1766.3	1538.3	1475.5	1457.1	1448.4	1424.3	1423.3	1404.9	1277.4
35°	1962.5	1797.3	1478.4	1416.5	1398.2	1380.8	1366.3	917.0	108.2	43.5	37.7
37.5°	1813.7	1501.6	1367.3	1339.2	1321.8	976.9	97.6	33.8	24.2	17.4	15.5
40°	1537.3	1341.2	1298.7	1267.7	522.7	33.8	21.3	16.4	9.7	8.7	7.7
42.5°	1296.7	1263.9	1218.5	371.0	38.7	16.4	10.6	7.7	6.8	6.8	5.8
45°	1213.6	1184.6	490.9	36.7	24.2	7.7	6.8	6.8	5.8	3.9	3.9
47.5°	1136.3	1000.1	44.4	23.2	15.5	6.8	5.8	3.9	3.9	3.9	2.9
50°	1054.2	55.1	30.9	17.4	9.7	3.9	3.9	3.9	3.9	2.9	2.9
52.5°	197.1	38.7	25.1	15.5	4.8	3.9	3.9	3.9	2.9	2.9	2.9
55°	46.4	30.9	23.2	13.5	3.9	3.9	3.9	2.9	2.9	2.9	1.9
57.5°	34.8	23.2	18.4	12.6	3.9	2.9	2.9	2.9	2.9	2.9	1.9
60°	29.0	16.4	14.5	11.6	2.9	2.9	2.9	2.9	2.9	2.9	1.9
62.5°	20.3	13.5	10.6	8.7	2.9	2.9	2.9	2.9	2.9	2.9	2.9
65°	16.4	10.6	8.7	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
67.5°	14.5	8.7	5.8	1.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
70°	11.6	2.9	2.9	1.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
72.5°	9.7	2.9	1.9	1.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
75°	9.7	4.8	1.9	1.9	2.9	2.9	3.9	3.9	2.9	2.9	2.9
77.5°	6.8	4.8	1.9	1.9	2.9	2.9	3.9	3.9	2.9	2.9	2.9
80°	3.9	4.8	1.9	2.9	2.9	5.8	6.8	3.9	2.9	2.9	2.9
82.5°	3.9	4.8	5.8	5.8	2.9	4.8	5.8	4.8	3.9	2.9	2.9
85°	3.9	2.9	3.9	4.8	2.9	4.8	4.8	3.9	3.9	2.9	2.9
87.5°	1.9	2.9	2.9	3.9	3.9	3.9	4.8	3.9	3.9	3.9	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: P1214153

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6
2.5°	3537.5	3541.4	3480.5	3459.2	3477.6	3473.7	3457.3	3396.4	3389.7	3349.1	3290.1
5°	3381.0	3407.0	3375.2	3430.2	3404.1	3430.2	3509.5	3546.2	3606.1	3642.8	3656.3
7.5°	3271.8	3277.6	3277.6	3282.4	3287.2	3288.2	3282.4	3278.5	3262.1	3241.8	3278.5
10°	3139.4	3146.2	3157.8	3155.8	3154.9	3175.1	3180.0	3221.5	3219.6	3227.3	3255.3
12.5°	3070.8	3018.6	3066.0	3053.4	3070.8	3043.7	3094.0	3085.3	3088.2	3111.4	3171.3
15°	2956.8	2973.2	2984.8	2984.8	2991.6	2985.8	2980.0	3019.6	3043.7	3044.7	3040.8
17.5°	2737.4	2612.8	2740.3	2707.5	2969.3	2976.1	2953.9	2935.5	2935.5	2950.0	2980.9
20°	2350.0	2352.9	2353.8	2366.4	2381.8	2380.9	2381.8	2762.5	2943.2	2901.7	2873.7
22.5°	2060.1	2024.3	2091.0	2086.2	2169.3	2261.1	2349.0	2340.3	2346.1	2614.7	2856.3
25°	1651.3	1697.7	1660.0	1676.5	1770.2	1879.4	1947.0	2123.8	2316.1	2302.6	2365.4
27.5°	1554.7	1542.2	1559.6	1559.6	1572.1	1586.6	1624.3	1723.8	1894.8	2074.6	2244.6
30°	1462.9	1473.6	1475.5	1492.9	1502.5	1512.2	1518.0	1555.7	1594.3	1719.0	1928.7
32.5°	1098.6	963.4	1267.7	1349.9	1419.4	1435.9	1447.5	1462.9	1490.9	1509.3	1614.6
35°	31.9	31.9	33.8	38.7	49.3	332.4	1265.8	1395.3	1413.6	1436.8	1456.2
37.5°	15.5	11.6	13.5	14.5	17.4	24.2	34.8	108.2	1204.9	1362.4	1383.7
40°	6.8	6.8	6.8	6.8	7.7	9.7	14.5	24.2	36.7	969.2	1307.4
42.5°	5.8	5.8	5.8	5.8	5.8	5.8	6.8	8.7	17.4	41.5	686.0
45°	3.9	3.9	2.9	3.9	3.9	4.8	5.8	5.8	7.7	26.1	47.3
47.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	4.8	5.8	17.4	25.1
50°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	13.5	17.4
52.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	5.8	15.5
55°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.9	2.9	3.9	13.5
57.5°	1.9	1.9	1.9	1.9	1.9	2.9	1.9	1.9	2.9	2.9	12.6
60°	1.9	1.9	1.9	1.9	1.9	2.9	2.9	2.9	2.9	2.9	11.6
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	3.9	3.9	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	6.8
82.5°	2.9	2.9	2.9	2.9	2.9	2.9	3.9	3.9	3.9	3.9	4.8
85°	2.9	2.9	2.9	2.9	2.9	2.9	3.9	3.9	3.9	2.9	3.9
87.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.9	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: P1214153

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6
2.5°	3295.0	3262.1	3251.5	3229.3	3227.3	3229.3	3224.4	3217.7	3221.5	3214.8	3209.0
5°	3664.1	3576.1	3519.1	3442.8	3337.5	3314.3	3308.5	3275.6	3264.0	3260.2	3244.7
7.5°	3365.5	3525.9	3622.5	3655.4	3531.7	3502.7	3468.9	3441.8	3415.7	3366.5	3336.5
10°	3233.1	3240.8	3333.6	3441.8	3617.7	3641.8	3660.2	3601.3	3584.8	3459.2	3432.2
12.5°	3202.2	3203.2	3213.8	3279.5	3417.7	3433.1	3497.9	3532.7	3575.2	3599.3	3580.0
15°	3061.1	3139.4	3197.4	3203.2	3215.7	3242.8	3262.1	3382.9	3434.1	3571.3	3563.6
17.5°	2995.4	3020.5	3104.6	3173.2	3161.6	3152.0	3167.4	3183.8	3233.1	3370.3	3368.4
20°	2886.2	2966.4	3011.8	3083.3	3148.1	3151.0	3133.6	3123.9	3104.6	3126.8	3147.1
22.5°	2839.9	2852.4	2937.4	2987.7	3061.1	3087.2	3091.1	3092.0	3081.4	3069.8	3064.0
25°	2835.0	2795.4	2838.9	2901.7	2955.8	2983.8	3015.7	3026.3	3022.5	3022.5	3016.7
27.5°	2320.0	2782.8	2759.7	2801.2	2866.9	2886.2	2902.7	2935.5	2955.8	2970.3	2977.1
30°	2209.8	2292.9	2697.8	2703.6	2770.3	2768.3	2786.7	2813.8	2839.9	2873.7	2882.4
32.5°	1954.8	2158.6	2469.8	2606.0	2675.6	2682.3	2692.0	2699.7	2723.9	2761.6	2794.4
35°	1566.3	1966.3	2116.1	2559.6	2572.2	2585.7	2591.5	2609.9	2617.6	2633.1	2662.1
37.5°	1417.5	1625.3	2030.1	2213.7	2453.3	2464.9	2495.9	2503.6	2516.2	2528.7	2550.9
40°	1331.5	1388.5	1690.0	1977.0	2357.7	2365.4	2376.0	2395.4	2396.3	2410.8	2431.1
42.5°	1262.9	1299.6	1387.6	1888.1	2290.0	2289.1	2264.0	2276.5	2282.3	2297.8	2325.8
45°	1008.8	1219.4	1275.5	1542.2	1823.3	1954.8	2206.9	2165.4	2164.4	2170.2	2200.2
47.5°	51.2	1147.0	1186.6	1272.6	1721.9	1726.7	1759.6	2035.9	2078.4	2064.9	2067.8
50°	34.8	79.2	1105.4	1145.0	1484.2	1604.0	1628.2	1640.7	1800.2	1977.9	1949.0
52.5°	27.1	45.4	677.4	1062.9	1205.9	1293.8	1449.4	1538.3	1548.0	1619.5	1862.0
55°	24.2	34.8	73.4	980.8	1025.2	1044.5	1135.4	1290.9	1416.5	1454.2	1457.1
57.5°	21.3	31.9	50.2	443.5	932.4	936.3	951.8	1005.9	1118.9	1222.3	1339.2
60°	19.3	28.0	39.6	76.3	847.4	857.1	860.0	874.5	888.0	958.5	1092.8
62.5°	11.6	22.2	34.8	55.1	670.6	770.1	769.1	778.8	791.4	799.1	826.2
65°	9.7	17.4	30.0	46.4	82.1	102.4	622.3	691.8	699.6	710.2	715.0
67.5°	8.7	15.5	22.2	36.7	61.8	70.5	81.2	100.5	548.8	618.4	628.1
70°	7.7	10.6	18.4	30.9	50.2	54.1	60.9	69.6	82.1	101.5	496.7
72.5°	4.8	7.7	12.6	22.2	38.7	43.5	47.3	53.1	58.9	70.5	81.2
75°	1.9	5.8	10.6	16.4	30.0	32.9	35.8	39.6	44.4	52.2	58.0
77.5°	1.9	4.8	8.7	11.6	19.3	22.2	26.1	29.0	32.9	36.7	42.5
80°	6.8	3.9	5.8	8.7	13.5	14.5	16.4	18.4	21.3	24.2	28.0
82.5°	4.8	5.8	6.8	5.8	6.8	8.7	9.7	11.6	12.6	14.5	15.5
85°	3.9	3.9	4.8	4.8	4.8	4.8	4.8	4.8	5.8	6.8	8.7
87.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.9	3.9
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: P1214153

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6
2.5°	3209.0	3207.0	3201.2	3201.2	3200.3	3204.1	3207.0	3209.9	3209.0	3214.8	3209.0
5°	3233.1	3228.3	3219.6	3211.9	3209.0	3210.9	3208.0	3210.9	3207.0	3211.9	3203.2
7.5°	3299.8	3283.4	3249.5	3236.0	3218.6	3217.7	3209.0	3207.0	3201.2	3201.2	3190.6
10°	3417.7	3338.4	3328.8	3288.2	3273.7	3203.2	3218.6	3192.5	3189.6	3177.1	3172.2
12.5°	3514.3	3452.5	3434.1	3398.4	3357.8	3214.8	3246.6	3190.6	3187.7	3162.6	3136.5
15°	3516.2	3552.0	3501.7	3403.2	3394.5	3295.9	3231.2	3211.9	3186.7	3111.4	3123.9
17.5°	3403.2	3485.3	3509.5	3488.2	3426.4	3359.7	3268.9	3230.2	3154.9	3121.0	3097.8
20°	3219.6	3302.7	3406.1	3412.8	3451.5	3404.1	3285.3	3222.5	3131.7	3072.7	3053.4
22.5°	3073.7	3134.6	3253.4	3308.5	3355.8	3372.3	3296.9	3204.1	3091.1	3034.1	3022.5
25°	2996.4	3009.9	3045.7	3110.4	3214.8	3290.1	3300.8	3202.2	3143.3	3018.6	2952.9
27.5°	2968.4	2956.8	2942.3	2975.1	3053.4	3145.2	3206.1	3222.5	3075.6	2956.8	2891.1
30°	2896.9	2903.6	2881.4	2869.8	2921.0	3015.7	3123.9	3151.0	3037.9	2915.2	2839.9
32.5°	2808.9	2820.5	2824.4	2804.1	2793.5	2859.2	2976.1	3040.8	3035.0	2856.3	2772.2
35°	2698.8	2731.6	2740.3	2741.3	2723.9	2713.3	2780.9	2915.2	2966.4	2829.2	2707.5
37.5°	2582.8	2592.5	2639.8	2652.4	2652.4	2620.5	2670.8	2778.0	2849.5	2768.3	2628.2
40°	2437.9	2468.8	2513.3	2535.5	2557.7	2560.6	2532.6	2607.9	2725.8	2705.5	2553.8
42.5°	2332.6	2352.9	2379.9	2409.9	2455.3	2466.9	2437.9	2451.4	2574.1	2627.3	2457.2
45°	2209.8	2236.9	2244.6	2277.5	2324.8	2358.7	2357.7	2329.7	2428.2	2493.9	2386.7
47.5°	2084.2	2110.3	2123.8	2140.3	2175.1	2218.5	2242.7	2230.1	2249.5	2378.0	2292.9
50°	1954.8	1969.2	1996.3	2014.7	2037.9	2063.0	2120.9	2132.5	2105.5	2207.9	2189.6
52.5°	1832.0	1836.9	1855.2	1873.6	1904.5	1922.9	1969.2	2004.0	2002.1	2032.1	2074.6
55°	1736.4	1715.1	1719.0	1733.5	1753.8	1781.8	1807.9	1862.0	1880.3	1886.1	1953.8
57.5°	1356.6	1575.0	1594.3	1593.4	1617.5	1630.1	1654.2	1690.0	1755.7	1741.2	1816.6
60°	1233.0	1257.1	1439.7	1461.0	1469.7	1481.3	1510.3	1543.1	1591.4	1622.4	1655.2
62.5°	940.2	1087.0	1142.1	1303.5	1328.6	1335.4	1354.7	1370.2	1420.4	1490.9	1477.4
65°	727.6	790.4	958.5	1024.2	1161.4	1178.8	1205.9	1222.3	1236.8	1318.0	1321.8
67.5°	629.0	638.7	684.1	810.7	897.7	1032.0	1048.4	1062.9	1085.1	1143.1	1178.8
70°	537.2	548.8	561.4	572.0	685.1	774.0	898.6	903.5	918.0	956.6	1037.8
72.5°	101.5	459.0	466.7	473.5	486.0	545.0	663.8	760.4	766.2	784.6	859.0
75°	68.6	80.2	110.2	378.8	391.3	395.2	415.5	536.3	625.2	629.0	661.9
77.5°	49.3	55.1	66.7	79.2	201.9	303.4	308.2	330.5	422.3	488.9	494.7
80°	33.8	37.7	44.4	50.2	61.8	81.2	224.2	230.9	242.5	334.3	351.7
82.5°	19.3	22.2	26.1	31.9	36.7	46.4	59.9	77.3	157.5	168.1	223.2
85°	9.7	10.6	12.6	15.5	18.4	22.2	30.0	36.7	50.2	90.8	93.7
87.5°	4.8	4.8	4.8	4.8	7.7	8.7	10.6	13.5	17.4	26.1	33.8
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: P1214153

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6
2.5°	3209.9	3223.5	3235.1	3238.0	3238.0	3239.9	3242.8	3244.7	3246.6	3248.6	3246.6
5°	3204.1	3218.6	3228.3	3231.2	3231.2	3237.0	3241.8	3247.6	3250.5	3250.5	3248.6
7.5°	3189.6	3200.3	3212.8	3220.6	3221.5	3231.2	3239.9	3238.9	3242.8	3244.7	3249.5
10°	3170.3	3170.3	3191.6	3197.4	3202.2	3212.8	3215.7	3221.5	3235.1	3237.0	3249.5
12.5°	3160.6	3151.0	3176.1	3179.0	3195.4	3181.9	3199.3	3205.1	3191.6	3209.9	3185.8
15°	3117.2	3128.8	3124.9	3133.6	3162.6	3147.1	3194.5	3179.0	3213.8	3172.2	3245.7
17.5°	3081.4	3079.5	3094.9	3102.7	3108.5	3141.3	3153.9	3171.3	3184.8	3173.2	3202.2
20°	3055.3	3039.9	3051.5	3060.2	3080.4	3105.6	3113.3	3087.2	3132.6	3209.9	3228.3
22.5°	3006.0	2995.4	3008.9	3008.9	3039.9	3036.0	3065.0	3048.6	3091.1	3180.9	3274.7
25°	2939.4	2940.3	2954.8	2972.2	2978.0	3021.5	3037.0	3058.2	3111.4	3218.6	3275.6
27.5°	2871.7	2865.9	2874.6	2910.4	2940.3	2972.2	2977.1	3049.5	3122.0	3195.4	3245.7
30°	2804.1	2798.3	2804.1	2830.2	2865.9	2887.2	2940.3	3037.0	3104.6	3154.9	3202.2
32.5°	2731.6	2725.8	2739.4	2758.7	2821.5	2824.4	2929.7	3020.5	3073.7	3110.4	3101.7
35°	2654.3	2646.6	2659.2	2689.1	2747.1	2768.3	2878.5	2946.1	3006.0	3023.4	2982.9
37.5°	2561.6	2548.0	2563.5	2605.0	2665.9	2727.8	2819.6	2897.8	2929.7	2883.3	2835.0
40°	2464.9	2455.3	2482.3	2503.6	2575.1	2661.1	2766.4	2821.5	2801.2	2748.1	2694.9
42.5°	2378.9	2358.7	2382.8	2423.4	2504.6	2602.1	2687.2	2718.1	2669.8	2591.5	2529.7
45°	2273.6	2249.5	2278.5	2332.6	2419.5	2530.6	2597.3	2586.7	2504.6	2436.9	2351.9
47.5°	2163.5	2134.5	2163.5	2228.2	2325.8	2443.7	2492.0	2443.7	2340.3	2255.3	2186.7
50°	2055.2	2021.4	2049.4	2147.0	2242.7	2333.5	2332.6	2238.8	2177.0	2084.2	2024.3
52.5°	1948.0	1899.7	1927.7	2034.0	2129.6	2233.0	2156.7	2069.7	1995.3	1914.2	1894.8
55°	1815.6	1763.4	1801.1	1955.7	2029.2	2090.0	1968.3	1891.9	1818.5	1777.9	1753.8
57.5°	1690.0	1633.0	1665.8	1848.5	1902.6	1918.0	1805.9	1697.7	1654.2	1640.7	1605.9
60°	1560.5	1495.8	1526.7	1737.3	1775.0	1712.2	1602.1	1518.0	1509.3	1482.2	1455.2
62.5°	1436.8	1365.3	1384.7	1599.2	1616.6	1502.5	1401.1	1378.9	1357.6	1330.5	1316.1
65°	1294.8	1220.4	1247.4	1452.3	1435.9	1289.0	1232.0	1227.2	1199.1	1176.9	1198.2
67.5°	1164.3	1076.4	1114.1	1291.9	1217.5	1097.7	1074.5	1062.9	1040.7	1053.2	830.0
70°	1021.3	925.7	976.9	1118.9	1008.8	929.5	920.8	903.5	904.4	718.9	605.8
72.5°	861.9	778.8	853.2	929.5	798.1	774.9	762.4	760.4	613.6	498.6	470.6
75°	721.8	637.7	717.9	746.9	635.8	620.3	619.4	512.1	402.9	384.6	375.9
77.5°	563.3	498.6	574.9	531.4	488.0	470.6	422.3	316.9	303.4	290.8	109.2
80°	379.7	384.6	429.0	366.2	347.9	296.6	233.8	224.2	193.3	77.3	60.9
82.5°	230.9	289.9	273.5	229.0	224.2	161.4	147.8	75.4	56.0	44.4	38.7
85°	119.8	146.9	141.1	124.6	92.8	83.1	46.4	35.8	29.0	22.2	18.4
87.5°	40.6	54.1	52.2	41.5	31.9	25.1	16.4	13.5	9.7	7.7	6.8
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: P1214153

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6
2.5°	3244.7	3244.7	3242.8	3244.7	3245.7	3243.7	3243.7	3245.7	3246.6	3247.6	3252.4
5°	3249.5	3251.5	3254.4	3260.2	3261.1	3272.7	3277.6	3280.5	3283.4	3284.3	3277.6
7.5°	3260.2	3266.9	3272.7	3271.8	3265.0	3246.6	3240.8	3236.0	3244.7	3266.9	3293.0
10°	3269.8	3238.9	3180.9	3260.2	3236.0	3258.2	3323.9	3338.4	3382.9	3445.7	3464.1
12.5°	3203.2	3288.2	3306.6	3217.7	3381.9	3321.0	3393.5	3457.3	3475.7	3539.4	3500.8
15°	3274.7	3316.2	3344.2	3433.1	3423.5	3475.7	3495.9	3483.4	3486.3	3502.7	3546.2
17.5°	3273.7	3356.8	3375.2	3435.1	3475.7	3476.6	3470.8	3465.0	3480.5	3493.0	3467.0
20°	3329.7	3356.8	3392.6	3416.7	3424.4	3434.1	3452.5	3438.0	3409.0	3381.0	3369.4
22.5°	3301.7	3362.6	3393.5	3397.4	3392.6	3362.6	3335.5	3295.0	3281.4	3266.9	3271.8
25°	3307.5	3335.5	3331.7	3316.2	3295.9	3239.9	3226.4	3209.0	3182.9	3120.1	3063.1
27.5°	3266.0	3251.5	3234.1	3196.4	3159.7	3129.7	3095.9	3039.9	2993.5	2925.8	2900.7
30°	3196.4	3138.4	3095.9	3073.7	3037.9	2987.7	2936.5	2867.9	2808.9	2795.4	2782.8
32.5°	3063.1	3006.0	2971.3	2917.2	2856.3	2796.4	2737.4	2710.4	2697.8	2699.7	2688.1
35°	2926.8	2876.6	2824.4	2743.2	2697.8	2637.9	2616.6	2610.8	2599.3	2586.7	2573.2
37.5°	2781.9	2722.9	2644.7	2596.4	2550.9	2526.8	2516.2	2507.5	2487.2	2464.9	2449.5
40°	2641.8	2535.5	2492.0	2444.6	2431.1	2420.5	2405.0	2383.8	2355.8	2351.9	2345.1
42.5°	2454.3	2378.0	2340.3	2330.6	2314.2	2295.8	2282.3	2259.1	2247.5	2255.3	2261.1
45°	2276.5	2237.9	2225.3	2213.7	2182.8	2156.7	2148.0	2140.3	2149.9	2192.5	2091.0
47.5°	2132.5	2117.1	2101.6	2082.3	2053.3	2034.0	2042.7	2050.4	2059.1	1747.0	1594.3
50°	2007.9	1986.6	1962.5	1941.2	1923.8	1921.9	1967.3	1831.1	1533.5	1525.7	1371.1
52.5°	1871.7	1839.8	1825.3	1812.7	1820.4	1849.4	1530.6	1420.4	1362.4	1183.7	1104.4
55°	1724.8	1696.8	1696.8	1708.4	1666.8	1350.8	1334.4	1153.7	1044.5	1013.6	1001.0
57.5°	1577.9	1575.0	1591.4	1455.2	1226.2	1175.9	988.5	948.9	931.5	927.6	907.3
60°	1443.6	1470.7	1231.0	1132.5	984.6	888.0	860.9	856.1	837.8	831.0	812.6
62.5°	1336.3	1108.3	1032.0	842.6	793.3	780.7	766.2	759.5	743.1	656.1	192.3
65°	965.3	912.2	740.2	708.3	704.4	686.0	680.2	611.6	144.0	96.6	82.1
67.5°	728.6	646.4	624.2	618.4	600.1	563.3	167.2	95.7	82.1	71.5	62.8
70°	559.5	545.0	528.5	515.0	151.7	94.7	82.1	69.6	59.9	53.1	48.3
72.5°	458.0	448.3	260.9	99.5	81.2	68.6	60.9	53.1	46.4	42.5	38.7
75°	358.5	99.5	82.1	68.6	58.9	50.2	44.4	39.6	35.8	32.9	30.0
77.5°	81.2	65.7	56.0	47.3	42.5	37.7	33.8	29.0	26.1	23.2	19.3
80°	50.2	43.5	36.7	33.8	29.0	24.2	21.3	19.3	15.5	14.5	12.6
82.5°	32.9	26.1	23.2	19.3	15.5	14.5	12.6	9.7	8.7	7.7	6.8
85°	14.5	12.6	10.6	8.7	6.8	5.8	4.8	3.9	3.9	3.9	3.9
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: P1214153

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6
2.5°	3254.4	3271.8	3288.2	3283.4	3266.0	3238.9	3231.2	3220.6	3228.3	3244.7	3251.5
5°	3277.6	3267.9	3302.7	3353.9	3437.0	3444.7	3502.7	3516.2	3562.6	3591.6	3590.6
7.5°	3310.4	3447.6	3504.6	3566.5	3594.5	3587.7	3596.4	3589.7	3579.0	3574.2	3568.4
10°	3477.6	3581.9	3603.2	3603.2	3559.7	3500.8	3475.7	3432.2	3345.2	3347.1	3332.6
12.5°	3575.2	3611.9	3561.6	3519.1	3344.2	3276.6	3203.2	3168.4	3148.1	3117.2	3128.8
15°	3524.0	3471.8	3441.8	3304.6	3197.4	3075.6	3077.6	3056.3	3034.1	3036.0	3021.5
17.5°	3448.6	3407.0	3194.5	3099.8	3047.6	3000.3	2991.6	2963.5	2949.0	2944.2	2943.2
20°	3345.2	3195.4	3037.0	3013.8	2951.0	2896.9	2888.2	2896.9	2941.3	2862.1	2593.5
22.5°	3224.4	3008.9	2962.6	2896.9	2854.3	2833.1	2886.2	2644.7	2279.4	2323.9	2276.5
25°	3019.6	2925.8	2846.6	2796.4	2791.5	2661.1	2217.6	2171.2	1936.4	1810.8	1669.7
27.5°	2869.8	2829.2	2746.1	2737.4	2674.6	2176.0	1945.1	1690.0	1596.3	1581.8	1550.9
30°	2779.0	2721.0	2670.8	2451.4	2134.5	1751.8	1560.5	1524.8	1508.3	1490.9	1463.9
32.5°	2669.8	2614.7	2638.9	2061.0	1701.6	1508.3	1469.7	1443.6	1413.6	1402.0	1304.5
35°	2558.7	2533.5	2062.0	1732.5	1462.9	1416.5	1387.6	1360.5	1082.2	261.9	88.9
37.5°	2439.8	2434.0	1853.3	1437.8	1370.2	1326.7	1244.5	257.0	60.9	41.5	30.9
40°	2347.1	1854.3	1464.9	1347.9	1292.9	1224.3	172.0	42.5	27.1	16.4	10.6
42.5°	2285.2	1667.8	1311.2	1264.8	1145.0	126.6	43.5	18.4	10.6	8.7	6.8
45°	1761.5	1317.0	1225.2	1176.9	144.9	43.5	25.1	8.7	6.8	5.8	3.9
47.5°	1625.3	1196.2	1142.1	257.0	48.3	23.2	17.4	5.8	3.9	3.9	3.9
50°	1231.0	1105.4	909.3	62.8	30.9	16.4	12.6	3.9	3.9	3.9	2.9
52.5°	1079.3	1020.4	97.6	41.5	24.2	12.6	7.7	2.9	2.9	2.9	2.9
55°	986.6	647.4	58.0	31.9	20.3	11.6	4.8	2.9	2.9	2.9	1.9
57.5°	902.5	87.0	42.5	27.1	18.4	10.6	2.9	2.9	2.9	2.9	1.9
60°	765.3	62.8	34.8	24.2	17.4	9.7	2.9	2.9	2.9	2.9	2.9
62.5°	99.5	49.3	30.0	21.3	12.6	7.7	1.9	2.9	2.9	2.9	2.9
65°	72.5	38.7	27.1	14.5	7.7	2.9	1.9	2.9	2.9	2.9	2.9
67.5°	56.0	31.9	20.3	12.6	6.8	1.9	1.9	2.9	2.9	2.9	2.9
70°	44.4	27.1	16.4	10.6	5.8	1.9	1.9	2.9	2.9	2.9	2.9
72.5°	34.8	19.3	11.6	5.8	3.9	1.9	1.9	2.9	2.9	2.9	2.9
75°	26.1	15.5	8.7	4.8	1.9	1.9	1.9	2.9	2.9	2.9	2.9
77.5°	17.4	9.7	6.8	3.9	3.9	3.9	4.8	4.8	2.9	2.9	2.9
80°	11.6	6.8	4.8	4.8	4.8	3.9	4.8	4.8	2.9	4.8	2.9
82.5°	5.8	4.8	4.8	3.9	3.9	2.9	3.9	3.9	3.9	3.9	2.9
85°	3.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.9	3.9	2.9
87.5°	1.9	1.9	1.9	1.9	2.9	2.9	2.9	2.9	3.9	3.9	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: P1214153

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6
2.5°	3242.8	3245.7	3238.0	3279.5	3258.2	3260.2	3268.9	3246.6	3251.5	3236.0	3225.4
5°	3594.5	3600.3	3606.1	3608.0	3611.9	3616.7	3610.9	3608.0	3602.2	3582.9	3562.6
7.5°	3539.4	3532.7	3529.8	3533.6	3540.4	3543.3	3538.5	3545.2	3570.3	3581.0	3587.7
10°	3249.5	3218.6	3239.9	3237.0	3212.8	3294.0	3271.8	3284.3	3293.0	3381.9	3436.0
12.5°	3111.4	3130.7	3094.0	3075.6	3099.8	3116.2	3132.6	3097.8	3146.2	3123.9	3195.4
15°	2995.4	2983.8	2980.0	2980.9	2976.1	2999.3	3005.1	3012.8	3019.6	3049.5	3061.1
17.5°	2943.2	2962.6	2970.3	2976.1	2966.4	2955.8	2945.2	2929.7	2934.5	2926.8	2949.0
20°	2412.8	2348.0	2344.2	2381.8	2340.3	2363.5	2419.5	2794.4	2781.9	2927.8	2878.5
22.5°	2013.7	1952.8	1900.6	1855.2	1920.0	1947.0	2051.4	2169.3	2360.6	2330.6	2538.4
25°	1644.6	1622.4	1608.8	1602.1	1606.9	1605.0	1628.2	1683.2	1770.2	1975.0	2239.8
27.5°	1538.3	1527.7	1522.8	1507.4	1519.0	1515.1	1533.5	1545.1	1571.1	1591.4	1677.4
30°	1454.2	1441.7	1433.0	1416.5	1428.1	1429.1	1434.9	1464.9	1475.5	1492.9	1519.9
32.5°	531.4	313.1	293.7	279.3	305.3	398.1	698.6	1221.4	1393.4	1406.9	1437.8
35°	52.2	43.5	38.7	38.7	39.6	43.5	58.0	152.7	279.3	1079.3	1350.8
37.5°	20.3	17.4	14.5	13.5	14.5	16.4	22.2	29.0	39.6	82.1	366.2
40°	8.7	7.7	6.8	6.8	6.8	6.8	7.7	9.7	14.5	27.1	42.5
42.5°	5.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	6.8	8.7	17.4
45°	3.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.9	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	3.9
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	3.9
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	3.9	3.9	3.9
82.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.9	3.9	3.9
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: P1214153

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6
2.5°	3207.0	3206.1	3226.4	3241.8	3236.0	3241.8	3248.6	3249.5	3251.5	3243.7	3240.8
5°	3524.0	3494.0	3436.0	3394.5	3346.2	3258.2	3214.8	3219.6	3220.6	3217.7	3221.5
7.5°	3584.8	3581.9	3561.6	3553.0	3520.1	3457.3	3356.8	3339.4	3296.9	3269.8	3247.6
10°	3432.2	3501.7	3520.1	3551.0	3570.3	3558.8	3473.7	3461.2	3434.1	3403.2	3409.9
12.5°	3266.9	3323.9	3326.8	3495.0	3532.7	3536.5	3503.7	3521.1	3524.9	3455.4	3414.8
15°	3064.0	3091.1	3148.1	3304.6	3418.6	3490.1	3511.4	3521.1	3473.7	3470.8	3454.4
17.5°	2975.1	2992.5	3018.6	3106.5	3279.5	3384.8	3474.7	3467.9	3486.3	3472.8	3431.2
20°	2863.0	2877.5	2923.9	2968.4	3053.4	3193.5	3361.6	3374.2	3398.4	3395.5	3407.0
22.5°	2861.1	2809.9	2817.6	2852.4	2941.3	3066.9	3245.7	3287.2	3302.7	3313.3	3325.9
25°	2269.8	2676.6	2751.0	2773.2	2831.2	2904.6	3115.2	3130.7	3159.7	3207.0	3241.8
27.5°	1966.3	2242.7	2540.3	2694.9	2731.6	2792.5	2918.1	2941.3	3039.9	3051.5	3105.6
30°	1551.8	1765.4	2209.8	2581.9	2642.7	2685.2	2774.1	2820.5	2863.0	2909.4	2966.4
32.5°	1460.0	1493.8	1740.2	2136.4	2609.9	2578.0	2643.7	2671.7	2718.1	2758.7	2800.2
35°	1376.0	1399.2	1451.3	1749.9	2125.8	2490.1	2534.5	2552.9	2579.0	2609.9	2639.8
37.5°	1288.0	1322.8	1358.6	1438.8	1966.3	2420.5	2419.5	2440.8	2456.2	2482.3	2507.5
40°	233.8	1214.6	1272.6	1324.7	1524.8	1930.6	2311.3	2321.0	2331.6	2348.0	2374.1
42.5°	37.7	202.9	1192.4	1242.6	1299.6	1728.6	2262.0	2222.4	2215.6	2227.2	2250.4
45°	19.3	49.3	239.6	1160.5	1211.7	1378.9	1849.4	2153.8	2147.0	2124.8	2129.6
47.5°	14.5	30.9	58.9	401.0	1134.4	1183.7	1706.4	1688.1	1816.6	2063.0	2025.3
50°	12.6	21.3	34.8	82.1	1002.0	1089.9	1314.1	1535.4	1603.0	1611.7	1907.4
52.5°	11.6	14.5	25.1	53.1	210.6	1007.8	1068.7	1146.0	1260.0	1504.5	1498.7
55°	10.6	13.5	21.3	35.8	73.4	908.3	971.1	985.6	1009.7	1126.7	1281.3
57.5°	5.8	12.6	20.3	30.9	55.1	166.2	881.2	892.8	912.2	917.0	972.1
60°	2.9	11.6	18.4	27.1	40.6	77.3	792.3	805.9	817.5	819.4	836.8
62.5°	1.9	10.6	15.5	25.1	33.8	55.1	187.5	382.6	727.6	727.6	747.9
65°	1.9	7.7	9.7	16.4	30.9	45.4	79.2	91.8	178.8	439.7	656.1
67.5°	1.9	2.9	8.7	13.5	23.2	34.8	58.0	67.6	81.2	92.8	172.0
70°	1.9	1.9	7.7	8.7	14.5	26.1	41.5	47.3	55.1	62.8	72.5
72.5°	1.9	1.9	6.8	6.8	9.7	17.4	31.9	34.8	39.6	44.4	51.2
75°	4.8	3.9	5.8	5.8	6.8	13.5	24.2	27.1	29.0	32.9	37.7
77.5°	4.8	4.8	4.8	4.8	4.8	8.7	15.5	17.4	20.3	22.2	26.1
80°	3.9	3.9	3.9	4.8	4.8	5.8	9.7	10.6	11.6	14.5	15.5
82.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	5.8	6.8	8.7
85°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.9	3.9	3.9	3.9
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: P1214153

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6	3219.6
2.5°	3239.9	3234.1	3229.3	3232.2	3223.5	3219.6	3222.5	3223.5	3225.4	3230.2	3231.2
5°	3231.2	3229.3	3238.0	3242.8	3240.8	3242.8	3242.8	3238.9	3233.1	3237.0	3228.3
7.5°	3225.4	3212.8	3203.2	3205.1	3195.4	3207.0	3217.7	3233.1	3238.0	3238.0	3228.3
10°	3324.9	3311.4	3257.3	3220.6	3196.4	3175.1	3225.4	3174.2	3198.3	3106.5	3211.9
12.5°	3407.0	3425.4	3401.2	3300.8	3283.4	3219.6	3256.3	3193.5	3175.1	3069.8	3103.6
15°	3439.9	3405.1	3397.4	3369.4	3331.7	3313.3	3214.8	3204.1	3174.2	3185.8	3141.3
17.5°	3410.9	3428.3	3405.1	3386.8	3348.1	3304.6	3245.7	3193.5	3152.0	3059.2	3137.5
20°	3382.9	3406.1	3336.5	3348.1	3352.0	3301.7	3270.8	3227.3	3175.1	3088.2	3020.5
22.5°	3336.5	3320.1	3325.9	3308.5	3294.0	3300.8	3258.2	3228.3	3140.4	3100.7	3008.9
25°	3261.1	3255.3	3270.8	3268.9	3234.1	3222.5	3201.2	3169.3	3134.6	3070.8	2995.4
27.5°	3138.4	3168.4	3195.4	3208.0	3189.6	3158.7	3147.1	3128.8	3104.6	3039.9	2983.8
30°	3008.9	3042.8	3073.7	3100.7	3117.2	3103.6	3093.0	3082.4	3045.7	3003.1	2940.3
32.5°	2861.1	2905.6	2948.1	2980.9	3016.7	3027.3	3019.6	3010.9	2980.0	2941.3	2891.1
35°	2690.1	2751.0	2812.8	2871.7	2887.2	2912.3	2937.4	2922.9	2906.5	2867.9	2821.5
37.5°	2545.1	2588.6	2633.1	2707.5	2761.6	2793.5	2837.9	2843.7	2815.7	2797.3	2736.5
40°	2395.4	2435.0	2499.7	2543.2	2617.6	2654.3	2701.7	2722.9	2716.2	2705.5	2652.4
42.5°	2277.5	2296.8	2339.3	2378.0	2451.4	2526.8	2568.3	2591.5	2615.7	2607.0	2579.9
45°	2151.9	2169.3	2183.8	2217.6	2289.1	2355.8	2407.0	2441.7	2485.2	2505.5	2472.7
47.5°	2027.2	2032.1	2049.4	2077.5	2120.0	2171.2	2257.2	2309.4	2350.0	2389.6	2368.3
50°	1931.6	1914.2	1917.1	1934.5	1969.2	2019.5	2081.3	2154.8	2201.1	2249.5	2254.3
52.5°	1688.1	1829.1	1795.3	1805.0	1823.3	1847.5	1912.2	1984.7	2041.7	2083.3	2124.8
55°	1416.5	1444.6	1716.1	1677.4	1689.0	1710.3	1740.2	1812.7	1867.8	1925.8	1983.7
57.5°	1098.6	1307.4	1318.0	1569.2	1563.4	1565.3	1590.5	1632.0	1687.1	1759.6	1808.8
60°	854.2	942.1	1113.1	1200.1	1420.4	1428.1	1442.6	1466.8	1514.1	1582.7	1661.0
62.5°	753.7	765.3	826.2	956.6	1099.6	1272.6	1303.5	1307.4	1328.6	1397.2	1488.0
65°	661.9	669.6	688.0	701.5	821.3	988.5	1137.3	1161.4	1175.0	1215.6	1292.9
67.5°	456.1	576.9	593.3	602.9	614.5	691.8	876.4	999.1	1014.6	1050.3	1118.0
70°	87.9	182.6	499.6	510.2	516.0	533.4	563.3	758.5	860.9	894.8	925.7
72.5°	59.9	70.5	85.0	201.0	425.2	434.8	441.6	466.7	639.7	738.2	754.7
75°	43.5	48.3	57.0	70.5	87.0	283.1	350.8	363.3	375.9	518.9	602.0
77.5°	30.9	34.8	38.7	45.4	53.1	68.6	98.6	271.5	284.1	290.8	410.7
80°	17.4	21.3	26.1	30.0	33.8	38.7	50.2	62.8	140.1	204.8	215.5
82.5°	9.7	11.6	13.5	16.4	18.4	23.2	28.0	33.8	44.4	65.7	139.1
85°	4.8	4.8	4.8	6.8	7.7	10.6	12.6	14.5	20.3	28.0	38.7
87.5°	2.9	2.9	3.9	3.9	3.9	4.8	4.8	4.8	5.8	8.7	12.6
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: P1214153

CATALOG NUMBER: 4SNLED-LD5-50SL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	3219.6	3219.6	3219.6	3219.6	3219.6
2.5°	3232.2	3229.3	3229.3	3240.8	3238.0
5°	3226.4	3223.5	3222.5	3235.1	3229.3
7.5°	3221.5	3210.9	3208.0	3219.6	3214.8
10°	3202.2	3194.5	3199.3	3195.4	3193.5
12.5°	3169.3	3164.5	3144.2	3146.2	3162.6
15°	3110.4	3129.7	3094.9	3125.9	3132.6
17.5°	3002.2	3045.7	3079.5	3097.8	3100.7
20°	3050.5	3065.0	3047.6	3048.6	3060.2
22.5°	2987.7	2994.5	2999.3	2993.5	3018.6
25°	2887.2	2861.1	2917.2	2928.7	2969.3
27.5°	2856.3	2835.0	2861.1	2859.2	2893.0
30°	2831.2	2762.5	2774.1	2792.5	2834.1
32.5°	2795.4	2687.2	2675.6	2716.2	2762.5
35°	2732.6	2630.2	2603.1	2629.2	2698.8
37.5°	2679.5	2550.9	2496.8	2531.6	2622.4
40°	2600.2	2489.1	2405.0	2436.0	2543.2
42.5°	2505.5	2436.0	2306.5	2327.7	2450.4
45°	2409.9	2348.0	2210.8	2221.4	2367.3
47.5°	2312.3	2255.3	2111.3	2113.2	2261.1
50°	2216.6	2141.2	2022.4	1988.6	2148.0
52.5°	2092.0	2022.4	1932.5	1877.5	2040.7
55°	1974.1	1895.8	1830.1	1745.1	1919.0
57.5°	1859.1	1772.1	1727.7	1618.5	1780.8
60°	1701.6	1660.0	1594.3	1490.0	1656.2
62.5°	1540.2	1526.7	1460.0	1351.8	1502.5
65°	1351.8	1383.7	1315.1	1222.3	1343.1
67.5°	1174.0	1231.0	1155.7	1098.6	1189.5
70°	984.6	1050.3	1007.8	987.5	1026.2
72.5°	798.1	861.9	865.8	851.3	863.8
75°	616.5	687.0	725.7	703.4	706.3
77.5°	467.7	501.5	544.0	561.4	557.5
80°	288.9	347.9	382.6	418.4	405.8
82.5°	145.9	195.2	237.7	276.4	258.0
85°	60.9	78.3	109.2	144.0	138.2
87.5°	18.4	30.9	32.9	46.4	43.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)