

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: P1213845

Luminaire Tested: 4SNLED-LD5-62HL-RM-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213845
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-LD5-62HL-RM-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

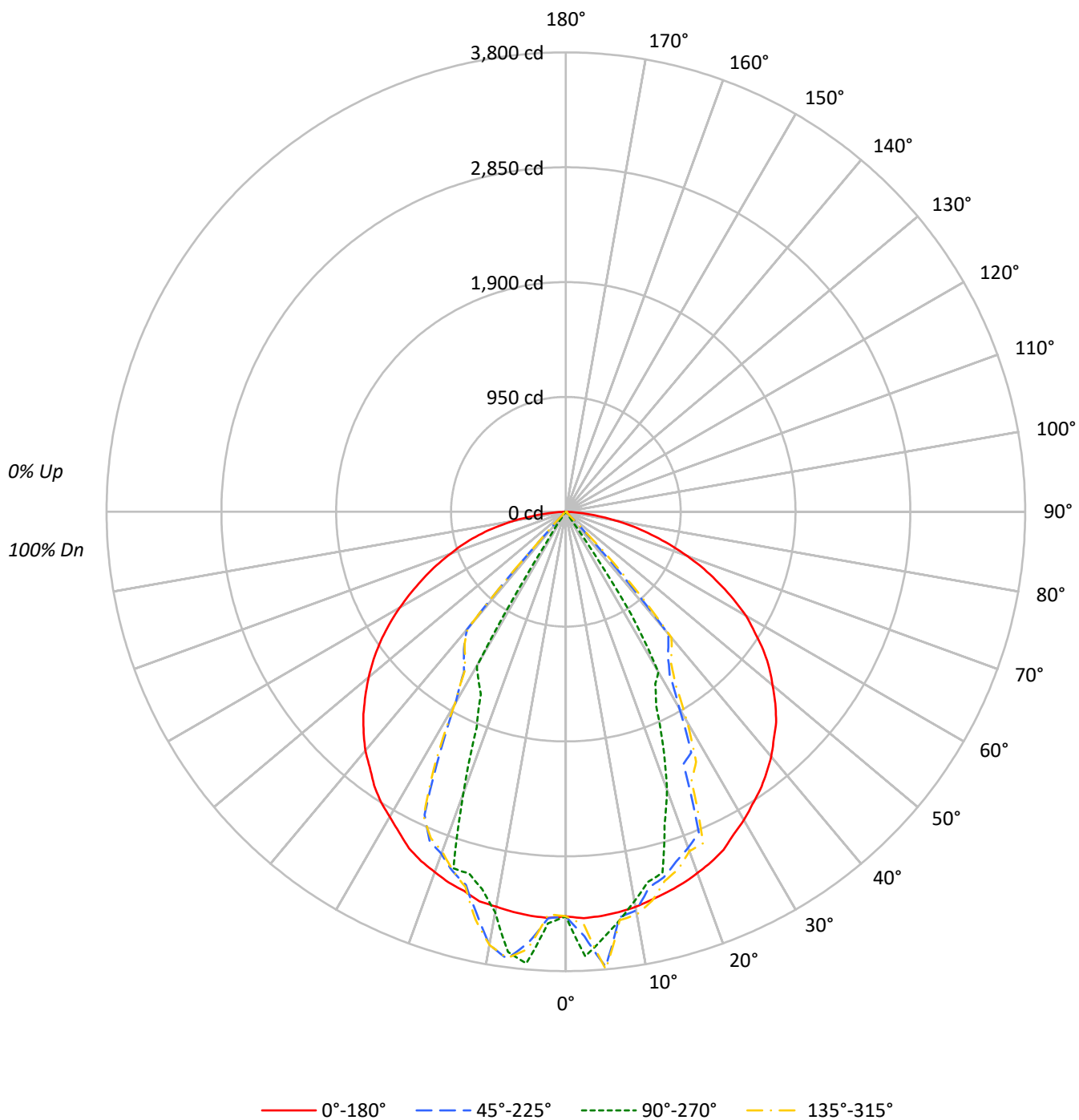
Lumens per Lamp: N/A
Luminaire Lumens: 4758.0 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 43
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			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°	27041	27041	27041	27041
5°	27151	27811	27143	29452
10°	27086	25166	27070	25893
15°	27012	23489	26946	23550
20°	27044	18502	26966	18729
25°	27122	13389	26989	12635
30°	26998	11745	26713	11290
35°	27078	259	26680	314
40°	27171	56	26520	56
45°	27266	33	26242	25
50°	27059	26	25817	26
55°	26900	18	25246	18
60°	26391	20	24328	20
65°	25015	32	23234	21
70°	23206	35	22092	35
75°	20527	39	20865	39
80°	16674	45	17627	45
85°	9810	53	10015	53

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2°

Vertical Angle: 45°

Luminance: 29441 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	335.7	7.1
10°-20°	915.7	19.2
20°-30°	1165.2	24.5
30°-40°	984.3	20.7
40°-50°	643.5	13.5
50°-60°	405.5	8.5
60°-70°	215.8	4.5
70°-80°	78.7	1.7
80°-90°	13.5	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°	2416.7	50.8
0°-40°	3401.0	71.5
0°-60°	4449.9	93.5
0°-90°	4758.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4758.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3346	3346	3346	3346	3346	
5°	3356	3541	3355	3750	3356	319
15°	3256	3090	3248	3098	3256	920
25°	3086	1764	3071	1665	3086	1419
35°	2805	33	2764	40	2805	1755
45°	2460	4	2368	3	2460	1892
55°	1994	2	1872	2	1994	1777
65°	1396	3	1296	2	1396	1382
75°	734	3	746	3	734	779
85°	144	3	147	3	144	182
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°	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2
2.5°	3365.3	3367.3	3368.3	3370.3	3373.3	3374.3	3376.3	3374.3	3374.3	3374.3	3374.3
5°	3356.2	3360.2	3363.3	3367.3	3374.3	3375.3	3383.3	3384.3	3388.4	3396.4	3402.4
7.5°	3341.2	3345.2	3351.2	3361.2	3371.3	3382.3	3396.4	3411.5	3432.5	3452.6	3477.7
10°	3319.1	3324.1	3331.1	3340.2	3389.4	3396.4	3427.5	3470.7	3482.8	3546.0	3593.2
12.5°	3286.9	3304.0	3322.1	3330.1	3377.3	3451.6	3556.1	3535.0	3511.9	3718.8	3715.7
15°	3255.8	3278.9	3269.9	3335.1	3378.3	3507.9	3463.7	3558.1	3730.8	3688.6	3690.6
17.5°	3222.7	3227.7	3277.9	3332.1	3409.4	3475.7	3530.0	3659.5	3693.7	3696.7	3659.5
20°	3180.5	3204.6	3277.9	3327.1	3457.7	3488.8	3606.3	3672.6	3658.5	3624.4	3561.1
22.5°	3137.3	3210.6	3284.9	3354.2	3445.6	3529.0	3587.2	3618.3	3545.0	3410.5	3338.1
25°	3086.1	3129.3	3226.7	3328.1	3442.6	3490.8	3524.9	3474.7	3379.3	3258.8	3137.3
27.5°	3006.7	3076.0	3200.6	3315.0	3418.5	3476.7	3421.5	3301.0	3147.3	3068.0	3012.8
30°	2945.5	3035.9	3138.3	3248.8	3356.2	3390.4	3249.8	3112.2	3006.7	2927.4	2915.4
32.5°	2871.2	2999.7	3097.1	3202.6	3293.0	3247.8	3111.2	2933.4	2846.1	2815.9	2828.0
35°	2804.9	2902.3	3029.8	3133.3	3198.6	3097.1	2881.2	2770.7	2728.6	2745.6	2723.5
37.5°	2725.6	2854.1	2971.6	3061.0	3038.9	2886.2	2703.5	2633.2	2638.2	2624.1	2581.9
40°	2643.2	2765.7	2888.2	2972.6	2895.3	2662.3	2540.8	2525.7	2528.7	2483.5	2423.3
42.5°	2546.8	2658.3	2780.8	2857.1	2690.4	2508.6	2426.3	2428.3	2402.2	2338.9	2306.8
45°	2460.4	2562.9	2690.4	2697.4	2492.6	2340.9	2316.8	2290.7	2232.5	2211.4	2187.3
47.5°	2350.0	2463.4	2568.9	2530.7	2298.7	2204.3	2186.3	2129.0	2099.9	2083.8	2063.7
50°	2232.5	2346.9	2443.4	2334.9	2116.0	2093.9	2034.6	1989.4	1969.3	1952.3	1934.2
52.5°	2121.0	2215.4	2313.8	2127.0	1975.4	1954.3	1887.0	1860.9	1840.8	1821.7	1817.7
55°	1994.5	2077.8	2145.1	1929.2	1840.8	1791.6	1743.4	1725.3	1706.2	1697.2	1712.3
57.5°	1850.8	1945.2	1935.2	1734.4	1695.2	1623.9	1605.8	1593.8	1579.7	1585.7	1460.2
60°	1721.3	1793.6	1744.4	1591.7	1525.5	1477.3	1461.2	1453.2	1461.2	1338.7	1177.0
62.5°	1561.6	1643.0	1543.5	1425.0	1354.7	1331.6	1317.6	1328.6	1211.1	1076.6	1037.4
65°	1395.9	1484.3	1337.7	1246.3	1202.1	1182.0	1181.0	1087.6	972.1	919.9	919.9
67.5°	1236.2	1327.6	1138.8	1062.5	1045.4	1047.4	989.2	847.6	815.5	780.3	678.9
70°	1066.5	1146.9	941.0	894.8	884.7	877.7	736.1	698.0	659.8	566.4	558.4
72.5°	897.8	937.0	756.2	745.2	743.1	617.6	589.5	524.2	480.0	469.0	464.0
75°	734.1	722.1	597.5	607.6	512.2	468.0	422.8	384.6	378.6	374.6	93.4
77.5°	579.5	519.2	471.0	409.7	366.6	311.3	302.3	296.3	194.8	70.3	57.2
80°	421.8	336.4	313.3	266.1	227.0	217.9	222.9	68.3	54.2	45.2	39.2
82.5°	268.1	214.9	175.7	153.7	149.6	65.3	48.2	39.2	34.1	29.1	24.1
85°	143.6	95.4	88.4	74.3	44.2	30.1	25.1	19.1	16.1	13.1	12.1
87.5°	45.2	38.2	31.1	25.1	15.1	10.0	8.0	7.0	6.0	5.0	5.0
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°	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2
2.5°	3372.3	3374.3	3373.3	3376.3	3376.3	3380.3	3383.3	3386.4	3392.4	3395.4	3418.5
5°	3415.5	3420.5	3435.6	3449.6	3466.7	3471.7	3500.8	3507.9	3542.0	3546.0	3658.5
7.5°	3511.9	3531.0	3567.1	3603.3	3639.4	3662.5	3702.7	3727.8	3754.9	3779.0	3868.4
10°	3628.4	3660.5	3695.7	3731.8	3752.9	3797.1	3821.2	3825.2	3818.2	3779.0	3634.4
12.5°	3742.9	3775.0	3759.9	3767.0	3792.1	3713.7	3724.8	3668.5	3707.7	3513.9	3370.3
15°	3726.8	3724.8	3687.6	3567.1	3587.2	3437.6	3377.3	3331.1	3368.3	3348.2	3326.1
17.5°	3678.6	3587.2	3522.9	3378.3	3317.1	3274.9	3275.9	3276.9	3258.8	3277.9	3221.7
20°	3474.7	3372.3	3276.9	3225.7	3207.6	3177.5	3192.5	3177.5	3178.5	3184.5	3098.1
22.5°	3203.6	3172.4	3117.2	3133.3	3127.3	3154.4	3134.3	3103.2	3113.2	3068.0	3002.7
25°	3094.1	3058.0	3056.0	3062.0	3052.9	3040.9	3022.8	2975.6	2972.6	2958.5	2928.4
27.5°	2983.6	2985.7	2991.7	2973.6	2941.5	2917.4	2890.2	2867.2	2876.2	2860.1	2818.9
30°	2907.3	2906.3	2870.2	2854.1	2794.8	2795.8	2788.8	2774.8	2765.7	2766.7	2740.6
32.5°	2798.9	2767.7	2726.6	2706.5	2701.4	2683.4	2669.3	2672.3	2679.4	2654.2	2681.4
35°	2687.4	2623.1	2617.1	2600.0	2584.0	2571.9	2576.9	2556.8	2555.8	2552.8	2331.9
37.5°	2537.8	2506.6	2503.6	2485.5	2474.5	2471.5	2452.4	2455.4	2464.4	2480.5	1988.4
40°	2414.2	2386.1	2379.1	2378.1	2354.0	2352.0	2357.0	2376.1	2389.1	2288.7	1895.0
42.5°	2281.7	2283.7	2261.6	2247.5	2250.5	2259.6	2283.7	2217.4	1921.1	1830.8	1732.3
45°	2168.2	2158.1	2146.1	2142.1	2168.2	2150.1	1885.0	1739.4	1704.2	1700.2	1424.0
47.5°	2049.7	2046.7	2041.7	2044.7	1896.0	1690.2	1629.9	1610.8	1616.9	1612.8	1223.2
50°	1930.2	1934.2	1934.2	1689.2	1550.6	1516.4	1521.4	1538.5	1432.1	1336.7	1139.8
52.5°	1826.7	1795.6	1538.5	1450.1	1419.0	1434.1	1397.9	1264.4	1167.9	1111.7	1054.5
55°	1634.9	1406.0	1348.7	1334.7	1345.7	1212.1	1129.8	1043.4	1018.3	1012.3	979.1
57.5°	1286.5	1240.3	1245.3	1189.0	1061.5	986.2	953.0	941.0	929.9	921.9	80.3
60°	1137.8	1150.9	1053.5	933.0	881.7	871.7	863.7	852.6	850.6	836.5	51.2
62.5°	1041.4	915.9	831.5	801.4	789.3	786.3	771.3	766.2	650.8	89.4	38.2
65°	785.3	734.1	718.0	711.0	698.0	698.0	579.5	91.4	74.3	64.3	34.1
67.5°	640.7	636.7	628.7	619.6	421.8	88.4	77.3	67.3	58.2	51.2	30.1
70°	542.3	540.3	492.1	90.4	75.3	66.3	58.2	52.2	48.2	43.2	27.1
72.5°	444.9	90.4	76.3	66.3	57.2	52.2	47.2	42.2	38.2	35.1	22.1
75°	69.3	61.3	54.2	49.2	45.2	40.2	36.2	33.1	32.1	28.1	15.1
77.5°	50.2	43.2	39.2	35.1	31.1	28.1	24.1	21.1	19.1	16.1	11.0
80°	35.1	31.1	28.1	23.1	20.1	17.1	15.1	13.1	12.1	10.0	5.0
82.5°	20.1	17.1	15.1	12.1	11.0	9.0	8.0	7.0	7.0	5.0	5.0
85°	9.0	9.0	7.0	6.0	5.0	5.0	5.0	4.0	4.0	3.0	3.0
87.5°	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	2.0
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°	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2
2.5°	3450.6	3463.7	3488.8	3514.9	3485.8	3590.2	3582.2	3617.3	3636.4	3645.4	3666.5
5°	3757.9	3816.2	3835.3	3778.0	3744.9	3710.7	3633.4	3575.2	3582.2	3563.1	3493.8
7.5°	3751.9	3627.4	3459.7	3383.3	3377.3	3368.3	3392.4	3406.4	3408.4	3407.4	3405.4
10°	3434.6	3370.3	3359.2	3349.2	3353.2	3316.1	3299.0	3250.8	3276.9	3262.8	3267.8
12.5°	3338.1	3323.1	3263.8	3181.5	3230.7	3193.5	3172.4	3186.5	3170.4	3155.4	3150.4
15°	3280.9	3183.5	3150.4	3130.3	3116.2	3108.2	3115.2	3099.1	3094.1	3091.1	3098.1
17.5°	3162.4	3123.2	3087.1	3033.9	3034.9	3031.8	3051.9	3082.1	3084.1	2929.4	2789.8
20°	3069.0	3036.9	2990.7	2957.5	3002.7	2922.4	2612.1	2464.4	2441.3	2441.3	2445.4
22.5°	2994.7	2923.4	2926.4	2874.2	2451.4	2365.0	2367.0	2376.1	2334.9	2194.3	2179.2
25°	2893.3	2882.2	2662.3	2300.8	2303.8	2236.5	2133.0	1987.4	1829.8	1829.8	1803.6
27.5°	2816.9	2582.9	2261.6	2246.5	2020.6	1878.0	1789.6	1656.0	1637.9	1620.9	1622.9
30°	2751.7	2185.3	2193.3	1878.0	1711.3	1592.8	1585.7	1563.6	1552.6	1549.6	1538.5
32.5°	2175.2	2128.0	1835.8	1598.8	1533.5	1514.4	1505.4	1480.3	1479.3	1460.2	1327.6
35°	2039.6	1867.9	1536.5	1472.2	1453.2	1435.1	1420.0	953.0	112.5	45.2	39.2
37.5°	1885.0	1560.6	1421.0	1391.9	1373.8	1015.3	101.4	35.1	25.1	18.1	16.1
40°	1597.8	1393.9	1349.7	1317.6	543.3	35.1	22.1	17.1	10.0	9.0	8.0
42.5°	1347.7	1313.6	1266.4	385.6	40.2	17.1	11.0	8.0	7.0	7.0	6.0
45°	1261.3	1231.2	510.2	38.2	25.1	8.0	7.0	7.0	6.0	4.0	4.0
47.5°	1181.0	1039.4	46.2	24.1	16.1	7.0	6.0	4.0	4.0	4.0	3.0
50°	1095.6	57.2	32.1	18.1	10.0	4.0	4.0	4.0	4.0	3.0	3.0
52.5°	204.9	40.2	26.1	16.1	5.0	4.0	4.0	4.0	3.0	3.0	3.0
55°	48.2	32.1	24.1	14.1	4.0	4.0	4.0	3.0	3.0	3.0	2.0
57.5°	36.2	24.1	19.1	13.1	4.0	3.0	3.0	3.0	3.0	3.0	2.0
60°	30.1	17.1	15.1	12.1	3.0	3.0	3.0	3.0	3.0	3.0	2.0
62.5°	21.1	14.1	11.0	9.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
65°	17.1	11.0	9.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
67.5°	15.1	9.0	6.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
70°	12.1	3.0	3.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
72.5°	10.0	3.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
75°	10.0	5.0	2.0	2.0	3.0	3.0	4.0	4.0	3.0	3.0	3.0
77.5°	7.0	5.0	2.0	2.0	3.0	3.0	4.0	4.0	3.0	3.0	3.0
80°	4.0	5.0	2.0	3.0	3.0	6.0	7.0	4.0	3.0	3.0	3.0
82.5°	4.0	5.0	6.0	6.0	3.0	5.0	6.0	5.0	4.0	3.0	3.0
85°	4.0	3.0	4.0	5.0	3.0	5.0	5.0	4.0	4.0	3.0	3.0
87.5°	2.0	3.0	3.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0	3.0
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: P1213845

CATALOG NUMBER: 4SNLED-LD5-62HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2
2.5°	3676.6	3680.6	3617.3	3595.2	3614.3	3610.3	3593.2	3530.0	3522.9	3480.8	3419.5
5°	3513.9	3541.0	3507.9	3565.1	3538.0	3565.1	3647.5	3685.6	3747.9	3786.0	3800.1
7.5°	3400.4	3406.4	3406.4	3411.5	3416.5	3417.5	3411.5	3407.4	3390.4	3369.3	3407.4
10°	3262.8	3269.9	3281.9	3279.9	3278.9	3300.0	3305.0	3348.2	3346.2	3354.2	3383.3
12.5°	3191.5	3137.3	3186.5	3173.4	3191.5	3163.4	3215.6	3206.6	3209.6	3233.7	3296.0
15°	3073.0	3090.1	3102.1	3102.1	3109.2	3103.2	3097.1	3138.3	3163.4	3164.4	3160.4
17.5°	2845.1	2715.5	2848.1	2813.9	3086.1	3093.1	3070.0	3050.9	3050.9	3066.0	3098.1
20°	2442.4	2445.4	2446.4	2459.4	2475.5	2474.5	2475.5	2871.2	3059.0	3015.8	2986.7
22.5°	2141.1	2103.9	2173.2	2168.2	2254.6	2350.0	2441.3	2432.3	2438.3	2717.5	2968.6
25°	1716.3	1764.5	1725.3	1742.4	1839.8	1953.3	2023.6	2207.4	2407.2	2393.1	2458.4
27.5°	1615.8	1602.8	1620.9	1620.9	1633.9	1649.0	1688.2	1791.6	1969.3	2156.1	2332.9
30°	1520.4	1531.5	1533.5	1551.6	1561.6	1571.7	1577.7	1616.9	1657.0	1786.6	2004.5
32.5°	1141.8	1001.2	1317.6	1402.9	1475.3	1492.3	1504.4	1520.4	1549.6	1568.6	1678.1
35°	33.1	33.1	35.1	40.2	51.2	345.5	1315.6	1450.1	1469.2	1493.3	1513.4
37.5°	16.1	12.1	14.1	15.1	18.1	25.1	36.2	112.5	1252.3	1416.0	1438.1
40°	7.0	7.0	7.0	7.0	8.0	10.0	15.1	25.1	38.2	1007.3	1358.8
42.5°	6.0	6.0	6.0	6.0	6.0	6.0	7.0	9.0	18.1	43.2	713.0
45°	4.0	4.0	3.0	4.0	4.0	5.0	6.0	6.0	8.0	27.1	49.2
47.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	6.0	18.1	26.1
50°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	14.1	18.1
52.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	16.1
55°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	4.0	14.1
57.5°	2.0	2.0	2.0	2.0	2.0	3.0	2.0	2.0	3.0	3.0	13.1
60°	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0	12.1
62.5°	3.0	3.0	2.0	3.0	2.0	2.0	3.0	3.0	3.0	3.0	8.0
65°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0	3.0
67.5°	3.0	3.0	3.0	3.0	2.0	3.0	2.0	3.0	3.0	2.0	2.0
70°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0
72.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0
75°	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	2.0	2.0	2.0
77.5°	3.0	3.0	3.0	3.0	3.0	3.0	5.0	6.0	5.0	5.0	2.0
80°	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	5.0	5.0	7.0
82.5°	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	5.0
85°	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	3.0	4.0
87.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0
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: P1213845

CATALOG NUMBER: 4SNLED-LD5-62HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2
2.5°	3424.5	3390.4	3379.3	3356.2	3354.2	3356.2	3351.2	3344.2	3348.2	3341.2	3335.1
5°	3808.1	3716.8	3657.5	3578.2	3468.7	3444.6	3438.6	3404.4	3392.4	3388.4	3372.3
7.5°	3497.8	3664.5	3765.0	3799.1	3670.6	3640.4	3605.3	3577.2	3550.0	3498.8	3467.7
10°	3360.2	3368.3	3464.7	3577.2	3759.9	3785.0	3804.1	3742.9	3725.8	3595.2	3567.1
12.5°	3328.1	3329.1	3340.2	3408.4	3552.1	3568.1	3635.4	3671.6	3715.7	3740.9	3720.8
15°	3181.5	3262.8	3323.1	3329.1	3342.2	3370.3	3390.4	3515.9	3569.1	3711.7	3703.7
17.5°	3113.2	3139.3	3226.7	3298.0	3285.9	3275.9	3292.0	3309.0	3360.2	3502.8	3500.8
20°	2999.7	3083.1	3130.3	3204.6	3271.9	3274.9	3256.8	3246.8	3226.7	3249.8	3270.9
22.5°	2951.5	2964.6	3052.9	3105.2	3181.5	3208.6	3212.6	3213.6	3202.6	3190.5	3184.5
25°	2946.5	2905.3	2950.5	3015.8	3072.0	3101.1	3134.3	3145.3	3141.3	3141.3	3135.3
27.5°	2411.2	2892.3	2868.2	2911.3	2979.6	2999.7	3016.8	3050.9	3072.0	3087.1	3094.1
30°	2296.7	2383.1	2803.9	2809.9	2879.2	2877.2	2896.3	2924.4	2951.5	2986.7	2995.7
32.5°	2031.6	2243.5	2566.9	2708.5	2780.8	2787.8	2797.9	2805.9	2831.0	2870.2	2904.3
35°	1627.9	2043.7	2199.3	2660.3	2673.3	2687.4	2693.4	2712.5	2720.5	2736.6	2766.7
37.5°	1473.2	1689.2	2109.9	2300.8	2549.8	2561.9	2594.0	2602.0	2615.1	2628.1	2651.2
40°	1383.9	1443.1	1756.4	2054.7	2450.4	2458.4	2469.5	2489.6	2490.6	2505.6	2526.7
42.5°	1312.6	1350.7	1442.1	1962.3	2380.1	2379.1	2353.0	2366.0	2372.1	2388.1	2417.2
45°	1048.4	1267.4	1325.6	1602.8	1895.0	2031.6	2293.7	2250.5	2249.5	2255.6	2286.7
47.5°	53.2	1192.1	1233.2	1322.6	1789.6	1794.6	1828.8	2116.0	2160.2	2146.1	2149.1
50°	36.2	82.3	1148.9	1190.0	1542.5	1667.1	1692.2	1705.2	1870.9	2055.7	2025.6
52.5°	28.1	47.2	704.0	1104.7	1253.3	1344.7	1506.4	1598.8	1608.8	1683.1	1935.2
55°	25.1	36.2	76.3	1019.3	1065.5	1085.6	1180.0	1341.7	1472.2	1511.4	1514.4
57.5°	22.1	33.1	52.2	461.0	969.1	973.1	989.2	1045.4	1162.9	1270.4	1391.9
60°	20.1	29.1	41.2	79.3	880.7	890.8	893.8	908.9	922.9	996.2	1135.8
62.5°	12.1	23.1	36.2	57.2	697.0	800.4	799.4	809.4	822.5	830.5	858.6
65°	10.0	18.1	31.1	48.2	85.4	106.5	646.7	719.0	727.1	738.1	743.1
67.5°	9.0	16.1	23.1	38.2	64.3	73.3	84.4	104.4	570.4	642.7	652.8
70°	8.0	11.0	19.1	32.1	52.2	56.2	63.3	72.3	85.4	105.4	516.2
72.5°	5.0	8.0	13.1	23.1	40.2	45.2	49.2	55.2	61.3	73.3	84.4
75°	2.0	6.0	11.0	17.1	31.1	34.1	37.2	41.2	46.2	54.2	60.3
77.5°	2.0	5.0	9.0	12.1	20.1	23.1	27.1	30.1	34.1	38.2	44.2
80°	7.0	4.0	6.0	9.0	14.1	15.1	17.1	19.1	22.1	25.1	29.1
82.5°	5.0	6.0	7.0	6.0	7.0	9.0	10.0	12.1	13.1	15.1	16.1
85°	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	6.0	7.0	9.0
87.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0
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: P1213845

CATALOG NUMBER: 4SNLED-LD5-62HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2
2.5°	3335.1	3333.1	3327.1	3327.1	3326.1	3330.1	3333.1	3336.1	3335.1	3341.2	3335.1
5°	3360.2	3355.2	3346.2	3338.1	3335.1	3337.1	3334.1	3337.1	3333.1	3338.1	3329.1
7.5°	3429.5	3412.5	3377.3	3363.3	3345.2	3344.2	3335.1	3333.1	3327.1	3327.1	3316.1
10°	3552.1	3469.7	3459.7	3417.5	3402.4	3329.1	3345.2	3318.1	3315.0	3302.0	3297.0
12.5°	3652.5	3588.2	3569.1	3532.0	3489.8	3341.2	3374.3	3316.1	3313.0	3286.9	3259.8
15°	3654.5	3691.6	3639.4	3537.0	3528.0	3425.5	3358.2	3338.1	3312.0	3233.7	3246.8
17.5°	3537.0	3622.4	3647.5	3625.4	3561.1	3491.8	3397.4	3357.2	3278.9	3243.7	3219.6
20°	3346.2	3432.5	3540.0	3547.0	3587.2	3538.0	3414.5	3349.2	3254.8	3193.5	3173.4
22.5°	3194.5	3257.8	3381.3	3438.6	3487.8	3504.9	3426.5	3330.1	3212.6	3153.4	3141.3
25°	3114.2	3128.3	3165.4	3232.7	3341.2	3419.5	3430.5	3328.1	3266.8	3137.3	3069.0
27.5°	3085.1	3073.0	3058.0	3092.1	3173.4	3268.9	3332.1	3349.2	3196.5	3073.0	3004.7
30°	3010.8	3017.8	2994.7	2982.6	3035.9	3134.3	3246.8	3274.9	3157.4	3029.8	2951.5
32.5°	2919.4	2931.4	2935.4	2914.4	2903.3	2971.6	3093.1	3160.4	3154.4	2968.6	2881.2
35°	2804.9	2839.0	2848.1	2849.1	2831.0	2820.0	2890.2	3029.8	3083.1	2940.5	2813.9
37.5°	2684.4	2694.4	2743.6	2756.7	2756.7	2723.5	2775.8	2887.2	2961.6	2877.2	2731.6
40°	2533.7	2565.9	2612.1	2635.2	2658.3	2661.3	2632.2	2710.5	2833.0	2811.9	2654.2
42.5°	2424.3	2445.4	2473.5	2504.6	2551.8	2563.9	2533.7	2547.8	2675.3	2730.6	2553.8
45°	2296.7	2324.9	2332.9	2367.0	2416.2	2451.4	2450.4	2421.3	2523.7	2592.0	2480.5
47.5°	2166.2	2193.3	2207.4	2224.4	2260.6	2305.8	2330.9	2317.8	2337.9	2471.5	2383.1
50°	2031.6	2046.7	2074.8	2093.9	2118.0	2144.1	2204.3	2216.4	2188.3	2294.7	2275.6
52.5°	1904.1	1909.1	1928.2	1947.3	1979.4	1998.5	2046.7	2082.8	2080.8	2112.0	2156.1
55°	1804.6	1782.6	1786.6	1801.6	1822.7	1851.8	1879.0	1935.2	1954.3	1960.3	2030.6
57.5°	1410.0	1636.9	1657.0	1656.0	1681.1	1694.2	1719.3	1756.4	1824.7	1809.7	1888.0
60°	1281.4	1306.5	1496.3	1518.4	1527.5	1539.5	1569.7	1603.8	1654.0	1686.1	1720.3
62.5°	977.1	1129.8	1187.0	1354.7	1380.9	1387.9	1408.0	1424.0	1476.3	1549.6	1535.5
65°	756.2	821.5	996.2	1064.5	1207.1	1225.2	1253.3	1270.4	1285.4	1369.8	1373.8
67.5°	653.8	663.8	711.0	842.6	933.0	1072.5	1089.6	1104.7	1127.8	1188.0	1225.2
70°	558.4	570.4	583.5	594.5	712.0	804.4	934.0	939.0	954.0	994.2	1078.6
72.5°	105.4	477.0	485.1	492.1	505.1	566.4	689.9	790.3	796.4	815.5	892.8
75°	71.3	83.4	114.5	393.7	406.7	410.7	431.8	557.4	649.8	653.8	687.9
77.5°	51.2	57.2	69.3	82.3	209.9	315.3	320.4	343.5	438.9	508.2	514.2
80°	35.1	39.2	46.2	52.2	64.3	84.4	233.0	240.0	252.1	347.5	365.5
82.5°	20.1	23.1	27.1	33.1	38.2	48.2	62.3	80.3	163.7	174.7	232.0
85°	10.0	11.0	13.1	16.1	19.1	23.1	31.1	38.2	52.2	94.4	97.4
87.5°	5.0	5.0	5.0	5.0	8.0	9.0	11.0	14.1	18.1	27.1	35.1
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: P1213845

CATALOG NUMBER: 4SNLED-LD5-62HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2
2.5°	3336.1	3350.2	3362.2	3365.3	3365.3	3367.3	3370.3	3372.3	3374.3	3376.3	3374.3
5°	3330.1	3345.2	3355.2	3358.2	3358.2	3364.3	3369.3	3375.3	3378.3	3378.3	3376.3
7.5°	3315.0	3326.1	3339.2	3347.2	3348.2	3358.2	3367.3	3366.3	3370.3	3372.3	3377.3
10°	3295.0	3295.0	3317.1	3323.1	3328.1	3339.2	3342.2	3348.2	3362.2	3364.3	3377.3
12.5°	3284.9	3274.9	3301.0	3304.0	3321.1	3307.0	3325.1	3331.1	3317.1	3336.1	3311.0
15°	3239.7	3251.8	3247.8	3256.8	3286.9	3270.9	3320.1	3304.0	3340.2	3297.0	3373.3
17.5°	3202.6	3200.6	3216.6	3224.7	3230.7	3264.8	3277.9	3296.0	3310.0	3298.0	3328.1
20°	3175.5	3159.4	3171.4	3180.5	3201.6	3227.7	3235.7	3208.6	3255.8	3336.1	3355.2
22.5°	3124.2	3113.2	3127.3	3127.3	3159.4	3155.4	3185.5	3168.4	3212.6	3306.0	3403.4
25°	3054.9	3056.0	3071.0	3089.1	3095.1	3140.3	3156.4	3178.5	3233.7	3345.2	3404.4
27.5°	2984.6	2978.6	2987.7	3024.8	3056.0	3089.1	3094.1	3169.4	3244.8	3321.1	3373.3
30°	2914.4	2908.3	2914.4	2941.5	2978.6	3000.7	3056.0	3156.4	3226.7	3278.9	3328.1
32.5°	2839.0	2833.0	2847.1	2867.2	2932.4	2935.4	3044.9	3139.3	3194.5	3232.7	3223.7
35°	2758.7	2750.7	2763.7	2794.8	2855.1	2877.2	2991.7	3062.0	3124.2	3142.3	3100.1
37.5°	2662.3	2648.2	2664.3	2707.5	2770.7	2835.0	2930.4	3011.8	3044.9	2996.7	2946.5
40°	2561.9	2551.8	2579.9	2602.0	2676.3	2765.7	2875.2	2932.4	2911.3	2856.1	2800.9
42.5°	2472.5	2451.4	2476.5	2518.7	2603.0	2704.5	2792.8	2825.0	2774.8	2693.4	2629.1
45°	2363.0	2337.9	2368.0	2424.3	2514.7	2630.1	2699.4	2688.4	2603.0	2532.7	2444.4
47.5°	2248.5	2218.4	2248.5	2315.8	2417.2	2539.8	2590.0	2539.8	2432.3	2343.9	2272.6
50°	2136.1	2100.9	2130.0	2231.5	2330.9	2425.3	2424.3	2326.9	2262.6	2166.2	2103.9
52.5°	2024.6	1974.4	2003.5	2114.0	2213.4	2320.8	2241.5	2151.1	2073.8	1989.4	1969.3
55°	1887.0	1832.8	1871.9	2032.6	2108.9	2172.2	2045.7	1966.3	1890.0	1847.8	1822.7
57.5°	1756.4	1697.2	1731.3	1921.1	1977.4	1993.4	1877.0	1764.5	1719.3	1705.2	1669.1
60°	1621.9	1554.6	1586.7	1805.7	1844.8	1779.5	1665.1	1577.7	1568.6	1540.5	1512.4
62.5°	1493.3	1419.0	1439.1	1662.0	1680.1	1561.6	1456.2	1433.1	1411.0	1382.9	1367.8
65°	1345.7	1268.4	1296.5	1509.4	1492.3	1339.7	1280.4	1275.4	1246.3	1223.2	1245.3
67.5°	1210.1	1118.7	1157.9	1342.7	1265.4	1140.8	1116.7	1104.7	1081.6	1094.6	862.7
70°	1061.5	962.1	1015.3	1162.9	1048.4	966.1	957.1	939.0	940.0	747.2	629.7
72.5°	895.8	809.4	886.8	966.1	829.5	805.4	792.4	790.3	637.7	518.2	489.1
75°	750.2	662.8	746.2	776.3	660.8	644.7	643.7	532.3	418.8	399.7	390.7
77.5°	585.5	518.2	597.5	552.3	507.1	489.1	438.9	329.4	315.3	302.3	113.5
80°	394.7	399.7	445.9	380.6	361.5	308.3	243.0	233.0	200.9	80.3	63.3
82.5°	240.0	301.3	284.2	238.0	233.0	167.7	153.7	78.3	58.2	46.2	40.2
85°	124.5	152.6	146.6	129.5	96.4	86.4	48.2	37.2	30.1	23.1	19.1
87.5°	42.2	56.2	54.2	43.2	33.1	26.1	17.1	14.1	10.0	8.0	7.0
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: P1213845

CATALOG NUMBER: 4SNLED-LD5-62HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2
2.5°	3372.3	3372.3	3370.3	3372.3	3373.3	3371.3	3371.3	3373.3	3374.3	3375.3	3380.3
5°	3377.3	3379.3	3382.3	3388.4	3389.4	3401.4	3406.4	3409.4	3412.5	3413.5	3406.4
7.5°	3388.4	3395.4	3401.4	3400.4	3393.4	3374.3	3368.3	3363.3	3372.3	3395.4	3422.5
10°	3398.4	3366.3	3306.0	3388.4	3363.3	3386.4	3454.6	3469.7	3515.9	3581.2	3600.3
12.5°	3329.1	3417.5	3436.6	3344.2	3514.9	3451.6	3526.9	3593.2	3612.3	3678.6	3638.4
15°	3403.4	3446.6	3475.7	3568.1	3558.1	3612.3	3633.4	3620.3	3623.4	3640.4	3685.6
17.5°	3402.4	3488.8	3507.9	3570.1	3612.3	3613.3	3607.3	3601.3	3617.3	3630.4	3603.3
20°	3460.7	3488.8	3525.9	3551.0	3559.1	3569.1	3588.2	3573.1	3543.0	3513.9	3501.8
22.5°	3431.5	3494.8	3526.9	3531.0	3525.9	3494.8	3466.7	3424.5	3410.5	3395.4	3400.4
25°	3437.6	3466.7	3462.7	3446.6	3425.5	3367.3	3353.2	3335.1	3308.0	3242.7	3183.5
27.5°	3394.4	3379.3	3361.2	3322.1	3283.9	3252.8	3217.6	3159.4	3111.2	3040.9	3014.8
30°	3322.1	3261.8	3217.6	3194.5	3157.4	3105.2	3051.9	2980.6	2919.4	2905.3	2892.3
32.5°	3183.5	3124.2	3088.1	3031.8	2968.6	2906.3	2845.1	2816.9	2803.9	2805.9	2793.8
35°	3041.9	2989.7	2935.4	2851.1	2803.9	2741.6	2719.5	2713.5	2701.4	2688.4	2674.3
37.5°	2891.3	2830.0	2748.6	2698.4	2651.2	2626.1	2615.1	2606.0	2585.0	2561.9	2545.8
40°	2745.6	2635.2	2590.0	2540.8	2526.7	2515.7	2499.6	2477.5	2448.4	2444.4	2437.3
42.5°	2550.8	2471.5	2432.3	2422.3	2405.2	2386.1	2372.1	2348.0	2335.9	2343.9	2350.0
45°	2366.0	2325.9	2312.8	2300.8	2268.6	2241.5	2232.5	2224.4	2234.5	2278.7	2173.2
47.5°	2216.4	2200.3	2184.3	2164.2	2134.0	2114.0	2123.0	2131.0	2140.1	1815.7	1657.0
50°	2086.8	2064.8	2039.6	2017.6	1999.5	1997.5	2044.7	1903.1	1593.8	1585.7	1425.0
52.5°	1945.2	1912.1	1897.0	1884.0	1892.0	1922.1	1590.7	1476.3	1416.0	1230.2	1147.9
55°	1792.6	1763.5	1763.5	1775.5	1732.3	1404.0	1386.9	1199.1	1085.6	1053.5	1040.4
57.5°	1640.0	1636.9	1654.0	1512.4	1274.4	1222.2	1027.4	986.2	968.1	964.1	943.0
60°	1500.4	1528.5	1279.4	1177.0	1023.3	922.9	894.8	889.8	870.7	863.7	844.6
62.5°	1388.9	1151.9	1072.5	875.7	824.5	811.4	796.4	789.3	772.3	681.9	199.8
65°	1003.3	948.0	769.3	736.1	732.1	713.0	707.0	635.7	149.6	100.4	85.4
67.5°	757.2	671.8	648.7	642.7	623.6	585.5	173.7	99.4	85.4	74.3	65.3
70°	581.5	566.4	549.3	535.3	157.7	98.4	85.4	72.3	62.3	55.2	50.2
72.5°	476.0	466.0	271.1	103.4	84.4	71.3	63.3	55.2	48.2	44.2	40.2
75°	372.6	103.4	85.4	71.3	61.3	52.2	46.2	41.2	37.2	34.1	31.1
77.5°	84.4	68.3	58.2	49.2	44.2	39.2	35.1	30.1	27.1	24.1	20.1
80°	52.2	45.2	38.2	35.1	30.1	25.1	22.1	20.1	16.1	15.1	13.1
82.5°	34.1	27.1	24.1	20.1	16.1	15.1	13.1	10.0	9.0	8.0	7.0
85°	15.1	13.1	11.0	9.0	7.0	6.0	5.0	4.0	4.0	4.0	4.0
87.5°	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0
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: P1213845

CATALOG NUMBER: 4SNLED-LD5-62HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2
2.5°	3382.3	3400.4	3417.5	3412.5	3394.4	3366.3	3358.2	3347.2	3355.2	3372.3	3379.3
5°	3406.4	3396.4	3432.5	3485.8	3572.1	3580.2	3640.4	3654.5	3702.7	3732.8	3731.8
7.5°	3440.6	3583.2	3642.4	3706.7	3735.8	3728.8	3737.8	3730.8	3719.8	3714.7	3708.7
10°	3614.3	3722.8	3744.9	3744.9	3699.7	3638.4	3612.3	3567.1	3476.7	3478.7	3463.7
12.5°	3715.7	3753.9	3701.7	3657.5	3475.7	3405.4	3329.1	3293.0	3271.9	3239.7	3251.8
15°	3662.5	3608.3	3577.2	3434.6	3323.1	3196.5	3198.6	3176.5	3153.4	3155.4	3140.3
17.5°	3584.2	3541.0	3320.1	3221.7	3167.4	3118.2	3109.2	3080.1	3065.0	3060.0	3059.0
20°	3476.7	3321.1	3156.4	3132.3	3067.0	3010.8	3001.7	3010.8	3057.0	2974.6	2695.4
22.5°	3351.2	3127.3	3079.0	3010.8	2966.6	2944.5	2999.7	2748.6	2369.0	2415.2	2366.0
25°	3138.3	3040.9	2958.5	2906.3	2901.3	2765.7	2304.8	2256.6	2012.5	1882.0	1735.4
27.5°	2982.6	2940.5	2854.1	2845.1	2779.8	2261.6	2021.6	1756.4	1659.0	1644.0	1611.8
30°	2888.2	2828.0	2775.8	2547.8	2218.4	1820.7	1621.9	1584.7	1567.6	1549.6	1521.4
32.5°	2774.8	2717.5	2742.6	2142.1	1768.5	1567.6	1527.5	1500.4	1469.2	1457.2	1355.7
35°	2659.3	2633.2	2143.1	1800.6	1520.4	1472.2	1442.1	1414.0	1124.8	272.2	92.4
37.5°	2535.7	2529.7	1926.2	1494.3	1424.0	1378.8	1293.5	267.1	63.3	43.2	32.1
40°	2439.3	1927.2	1522.5	1400.9	1343.7	1272.4	178.8	44.2	28.1	17.1	11.0
42.5°	2375.1	1733.3	1362.8	1314.6	1190.0	131.6	45.2	19.1	11.0	9.0	7.0
45°	1830.8	1368.8	1273.4	1223.2	150.6	45.2	26.1	9.0	7.0	6.0	4.0
47.5°	1689.2	1243.3	1187.0	267.1	50.2	24.1	18.1	6.0	4.0	4.0	4.0
50°	1279.4	1148.9	945.0	65.3	32.1	17.1	13.1	4.0	4.0	4.0	3.0
52.5°	1121.8	1060.5	101.4	43.2	25.1	13.1	8.0	3.0	3.0	3.0	3.0
55°	1025.3	672.9	60.3	33.1	21.1	12.1	5.0	3.0	3.0	3.0	2.0
57.5°	938.0	90.4	44.2	28.1	19.1	11.0	3.0	3.0	3.0	3.0	2.0
60°	795.4	65.3	36.2	25.1	18.1	10.0	3.0	3.0	3.0	3.0	3.0
62.5°	103.4	51.2	31.1	22.1	13.1	8.0	2.0	3.0	3.0	3.0	3.0
65°	75.3	40.2	28.1	15.1	8.0	3.0	2.0	3.0	3.0	3.0	3.0
67.5°	58.2	33.1	21.1	13.1	7.0	2.0	2.0	3.0	3.0	3.0	3.0
70°	46.2	28.1	17.1	11.0	6.0	2.0	2.0	3.0	3.0	3.0	3.0
72.5°	36.2	20.1	12.1	6.0	4.0	2.0	2.0	3.0	3.0	3.0	3.0
75°	27.1	16.1	9.0	5.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0
77.5°	18.1	10.0	7.0	4.0	4.0	4.0	5.0	5.0	3.0	3.0	3.0
80°	12.1	7.0	5.0	5.0	5.0	4.0	5.0	5.0	3.0	5.0	3.0
82.5°	6.0	5.0	5.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	3.0
85°	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0
87.5°	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0
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: P1213845

CATALOG NUMBER: 4SNLED-LD5-62HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2
2.5°	3370.3	3373.3	3365.3	3408.4	3386.4	3388.4	3397.4	3374.3	3379.3	3363.3	3352.2
5°	3735.8	3741.9	3747.9	3749.9	3753.9	3758.9	3752.9	3749.9	3743.9	3723.8	3702.7
7.5°	3678.6	3671.6	3668.5	3672.6	3679.6	3682.6	3677.6	3684.6	3710.7	3721.8	3728.8
10°	3377.3	3345.2	3367.3	3364.3	3339.2	3423.5	3400.4	3413.5	3422.5	3514.9	3571.1
12.5°	3233.7	3253.8	3215.6	3196.5	3221.7	3238.7	3255.8	3219.6	3269.9	3246.8	3321.1
15°	3113.2	3101.1	3097.1	3098.1	3093.1	3117.2	3123.2	3131.3	3138.3	3169.4	3181.5
17.5°	3059.0	3079.0	3087.1	3093.1	3083.1	3072.0	3061.0	3044.9	3049.9	3041.9	3065.0
20°	2507.6	2440.3	2436.3	2475.5	2432.3	2456.4	2514.7	2904.3	2891.3	3042.9	2991.7
22.5°	2092.9	2029.6	1975.4	1928.2	1995.5	2023.6	2132.0	2254.6	2453.4	2422.3	2638.2
25°	1709.2	1686.1	1672.1	1665.1	1670.1	1668.1	1692.2	1749.4	1839.8	2052.7	2327.9
27.5°	1598.8	1587.7	1582.7	1566.6	1578.7	1574.7	1593.8	1605.8	1632.9	1654.0	1743.4
30°	1511.4	1498.4	1489.3	1472.2	1484.3	1485.3	1491.3	1522.5	1533.5	1551.6	1579.7
32.5°	552.3	325.4	305.3	290.2	317.3	413.8	726.1	1269.4	1448.1	1462.2	1494.3
35°	54.2	45.2	40.2	40.2	41.2	45.2	60.3	158.7	290.2	1121.8	1404.0
37.5°	21.1	18.1	15.1	14.1	15.1	17.1	23.1	30.1	41.2	85.4	380.6
40°	9.0	8.0	7.0	7.0	7.0	7.0	8.0	10.0	15.1	28.1	44.2
42.5°	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	7.0	9.0	18.1
45°	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	5.0	8.0
47.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0
50°	3.0	3.0	3.0	3.0	2.0	3.0	2.0	3.0	3.0	3.0	3.0
52.5°	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
55°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0
57.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
60°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
62.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	2.0
65°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	2.0
67.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
70°	3.0	3.0	2.0	3.0	2.0	2.0	3.0	3.0	3.0	2.0	2.0
72.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0	4.0
75°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	6.0	5.0
77.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	5.0
80°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0
82.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0
85°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
87.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
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: P1213845

CATALOG NUMBER: 4SNLED-LD5-62HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2
2.5°	3333.1	3332.1	3353.2	3369.3	3363.3	3369.3	3376.3	3377.3	3379.3	3371.3	3368.3
5°	3662.5	3631.4	3571.1	3528.0	3477.7	3386.4	3341.2	3346.2	3347.2	3344.2	3348.2
7.5°	3725.8	3722.8	3701.7	3692.6	3658.5	3593.2	3488.8	3470.7	3426.5	3398.4	3375.3
10°	3567.1	3639.4	3658.5	3690.6	3710.7	3698.7	3610.3	3597.2	3569.1	3537.0	3544.0
12.5°	3395.4	3454.6	3457.7	3632.4	3671.6	3675.6	3641.4	3659.5	3663.5	3591.2	3549.0
15°	3184.5	3212.6	3271.9	3434.6	3553.1	3627.4	3649.5	3659.5	3610.3	3607.3	3590.2
17.5°	3092.1	3110.2	3137.3	3228.7	3408.4	3517.9	3611.3	3604.3	3623.4	3609.3	3566.1
20°	2975.6	2990.7	3038.9	3085.1	3173.4	3319.1	3493.8	3506.9	3532.0	3529.0	3541.0
22.5°	2973.6	2920.4	2928.4	2964.6	3057.0	3187.5	3373.3	3416.5	3432.5	3443.6	3456.6
25°	2359.0	2781.8	2859.1	2882.2	2942.5	3018.8	3237.7	3253.8	3283.9	3333.1	3369.3
27.5°	2043.7	2330.9	2640.2	2800.9	2839.0	2902.3	3032.9	3057.0	3159.4	3171.4	3227.7
30°	1612.8	1834.8	2296.7	2683.4	2746.6	2790.8	2883.2	2931.4	2975.6	3023.8	3083.1
32.5°	1517.4	1552.6	1808.7	2220.4	2712.5	2679.4	2747.6	2776.8	2825.0	2867.2	2910.3
35°	1430.1	1454.2	1508.4	1818.7	2209.4	2588.0	2634.2	2653.2	2680.4	2712.5	2743.6
37.5°	1338.7	1374.8	1412.0	1495.3	2043.7	2515.7	2514.7	2536.8	2552.8	2579.9	2606.0
40°	243.0	1262.3	1322.6	1376.8	1584.7	2006.5	2402.2	2412.2	2423.3	2440.3	2467.5
42.5°	39.2	210.9	1239.3	1291.5	1350.7	1796.6	2351.0	2309.8	2302.8	2314.8	2338.9
45°	20.1	51.2	249.1	1206.1	1259.3	1433.1	1922.1	2238.5	2231.5	2208.4	2213.4
47.5°	15.1	32.1	61.3	416.8	1179.0	1230.2	1773.5	1754.4	1888.0	2144.1	2104.9
50°	13.1	22.1	36.2	85.4	1041.4	1132.8	1365.8	1595.8	1666.1	1675.1	1982.4
52.5°	12.1	15.1	26.1	55.2	218.9	1047.4	1110.7	1191.0	1309.6	1563.6	1557.6
55°	11.0	14.1	22.1	37.2	76.3	944.0	1009.3	1024.3	1049.4	1171.0	1331.6
57.5°	6.0	13.1	21.1	32.1	57.2	172.7	915.9	927.9	948.0	953.0	1010.3
60°	3.0	12.1	19.1	28.1	42.2	80.3	823.5	837.5	849.6	851.6	869.7
62.5°	2.0	11.0	16.1	26.1	35.1	57.2	194.8	397.7	756.2	756.2	777.3
65°	2.0	8.0	10.0	17.1	32.1	47.2	82.3	95.4	185.8	456.9	681.9
67.5°	2.0	3.0	9.0	14.1	24.1	36.2	60.3	70.3	84.4	96.4	178.8
70°	2.0	2.0	8.0	9.0	15.1	27.1	43.2	49.2	57.2	65.3	75.3
72.5°	2.0	2.0	7.0	7.0	10.0	18.1	33.1	36.2	41.2	46.2	53.2
75°	5.0	4.0	6.0	6.0	7.0	14.1	25.1	28.1	30.1	34.1	39.2
77.5°	5.0	5.0	5.0	5.0	5.0	9.0	16.1	18.1	21.1	23.1	27.1
80°	4.0	4.0	4.0	5.0	5.0	6.0	10.0	11.0	12.1	15.1	16.1
82.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	6.0	7.0	9.0
85°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0
87.5°	3.0	3.0	3.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0
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: P1213845

CATALOG NUMBER: 4SNLED-LD5-62HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2	3346.2
2.5°	3367.3	3361.2	3356.2	3359.2	3350.2	3346.2	3349.2	3350.2	3352.2	3357.2	3358.2
5°	3358.2	3356.2	3365.3	3370.3	3368.3	3370.3	3370.3	3366.3	3360.2	3364.3	3355.2
7.5°	3352.2	3339.2	3329.1	3331.1	3321.1	3333.1	3344.2	3360.2	3365.3	3365.3	3355.2
10°	3455.6	3441.6	3385.3	3347.2	3322.1	3300.0	3352.2	3299.0	3324.1	3228.7	3338.1
12.5°	3541.0	3560.1	3535.0	3430.5	3412.5	3346.2	3384.3	3319.1	3300.0	3190.5	3225.7
15°	3575.2	3539.0	3531.0	3501.8	3462.7	3443.6	3341.2	3330.1	3299.0	3311.0	3264.8
17.5°	3545.0	3563.1	3539.0	3519.9	3479.7	3434.6	3373.3	3319.1	3275.9	3179.5	3260.8
20°	3515.9	3540.0	3467.7	3479.7	3483.8	3431.5	3399.4	3354.2	3300.0	3209.6	3139.3
22.5°	3467.7	3450.6	3456.6	3438.6	3423.5	3430.5	3386.4	3355.2	3263.8	3222.7	3127.3
25°	3389.4	3383.3	3399.4	3397.4	3361.2	3349.2	3327.1	3294.0	3257.8	3191.5	3113.2
27.5°	3261.8	3293.0	3321.1	3334.1	3315.0	3282.9	3270.9	3251.8	3226.7	3159.4	3101.1
30°	3127.3	3162.4	3194.5	3222.7	3239.7	3225.7	3214.6	3203.6	3165.4	3121.2	3056.0
32.5°	2973.6	3019.8	3064.0	3098.1	3135.3	3146.3	3138.3	3129.3	3097.1	3057.0	3004.7
35°	2795.8	2859.1	2923.4	2984.6	3000.7	3026.8	3052.9	3037.9	3020.8	2980.6	2932.4
37.5°	2645.2	2690.4	2736.6	2813.9	2870.2	2903.3	2949.5	2955.5	2926.4	2907.3	2844.1
40°	2489.6	2530.7	2598.0	2643.2	2720.5	2758.7	2807.9	2830.0	2823.0	2811.9	2756.7
42.5°	2367.0	2387.1	2431.3	2471.5	2547.8	2626.1	2669.3	2693.4	2718.5	2709.5	2681.4
45°	2236.5	2254.6	2269.6	2304.8	2379.1	2448.4	2501.6	2537.8	2582.9	2604.0	2569.9
47.5°	2106.9	2112.0	2130.0	2159.2	2203.3	2256.6	2345.9	2400.2	2442.4	2483.5	2461.4
50°	2007.5	1989.4	1992.4	2010.5	2046.7	2098.9	2163.2	2239.5	2287.7	2337.9	2342.9
52.5°	1754.4	1901.1	1865.9	1876.0	1895.0	1920.1	1987.4	2062.7	2122.0	2165.2	2208.4
55°	1472.2	1501.4	1783.6	1743.4	1755.4	1777.5	1808.7	1884.0	1941.2	2001.5	2061.7
57.5°	1141.8	1358.8	1369.8	1630.9	1624.9	1626.9	1653.0	1696.2	1753.4	1828.8	1880.0
60°	887.8	979.1	1156.9	1247.3	1476.3	1484.3	1499.4	1524.5	1573.7	1645.0	1726.3
62.5°	783.3	795.4	858.6	994.2	1142.8	1322.6	1354.7	1358.8	1380.9	1452.2	1546.6
65°	687.9	695.9	715.0	729.1	853.6	1027.4	1182.0	1207.1	1221.2	1263.4	1343.7
67.5°	474.0	599.5	616.6	626.7	638.7	719.0	910.9	1038.4	1054.5	1091.6	1161.9
70°	91.4	189.8	519.2	530.2	536.3	554.3	585.5	788.3	894.8	929.9	962.1
72.5°	62.3	73.3	88.4	208.9	441.9	451.9	458.9	485.1	664.8	767.3	784.3
75°	45.2	50.2	59.3	73.3	90.4	294.2	364.5	377.6	390.7	539.3	625.7
77.5°	32.1	36.2	40.2	47.2	55.2	71.3	102.4	282.2	295.3	302.3	426.8
80°	18.1	22.1	27.1	31.1	35.1	40.2	52.2	65.3	145.6	212.9	223.9
82.5°	10.0	12.1	14.1	17.1	19.1	24.1	29.1	35.1	46.2	68.3	144.6
85°	5.0	5.0	5.0	7.0	8.0	11.0	13.1	15.1	21.1	29.1	40.2
87.5°	3.0	3.0	4.0	4.0	4.0	5.0	5.0	5.0	6.0	9.0	13.1
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: P1213845

CATALOG NUMBER: 4SNLED-LD5-62HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	3346.2	3346.2	3346.2	3346.2	3346.2
2.5°	3359.2	3356.2	3356.2	3368.3	3365.3
5°	3353.2	3350.2	3349.2	3362.2	3356.2
7.5°	3348.2	3337.1	3334.1	3346.2	3341.2
10°	3328.1	3320.1	3325.1	3321.1	3319.1
12.5°	3294.0	3288.9	3267.8	3269.9	3286.9
15°	3232.7	3252.8	3216.6	3248.8	3255.8
17.5°	3120.2	3165.4	3200.6	3219.6	3222.7
20°	3170.4	3185.5	3167.4	3168.4	3180.5
22.5°	3105.2	3112.2	3117.2	3111.2	3137.3
25°	3000.7	2973.6	3031.8	3043.9	3086.1
27.5°	2968.6	2946.5	2973.6	2971.6	3006.7
30°	2942.5	2871.2	2883.2	2902.3	2945.5
32.5°	2905.3	2792.8	2780.8	2823.0	2871.2
35°	2840.0	2733.6	2705.5	2732.6	2804.9
37.5°	2784.8	2651.2	2595.0	2631.2	2725.6
40°	2702.5	2587.0	2499.6	2531.7	2643.2
42.5°	2604.0	2531.7	2397.2	2419.3	2546.8
45°	2504.6	2440.3	2297.7	2308.8	2460.4
47.5°	2403.2	2343.9	2194.3	2196.3	2350.0
50°	2303.8	2225.4	2101.9	2066.8	2232.5
52.5°	2174.2	2101.9	2008.5	1951.3	2121.0
55°	2051.7	1970.4	1902.1	1813.7	1994.5
57.5°	1932.2	1841.8	1795.6	1682.1	1850.8
60°	1768.5	1725.3	1657.0	1548.6	1721.3
62.5°	1600.8	1586.7	1517.4	1405.0	1561.6
65°	1405.0	1438.1	1366.8	1270.4	1395.9
67.5°	1220.2	1279.4	1201.1	1141.8	1236.2
70°	1023.3	1091.6	1047.4	1026.3	1066.5
72.5°	829.5	895.8	899.8	884.7	897.8
75°	640.7	714.0	754.2	731.1	734.1
77.5°	486.1	521.2	565.4	583.5	579.5
80°	300.3	361.5	397.7	434.8	421.8
82.5°	151.6	202.9	247.0	287.2	268.1
85°	63.3	81.3	113.5	149.6	143.6
87.5°	19.1	32.1	34.1	48.2	45.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)