

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: P1213889

Luminaire Tested: 4SNLED-LD5-84SL-RW-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213889
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33525)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-84SL-RW-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

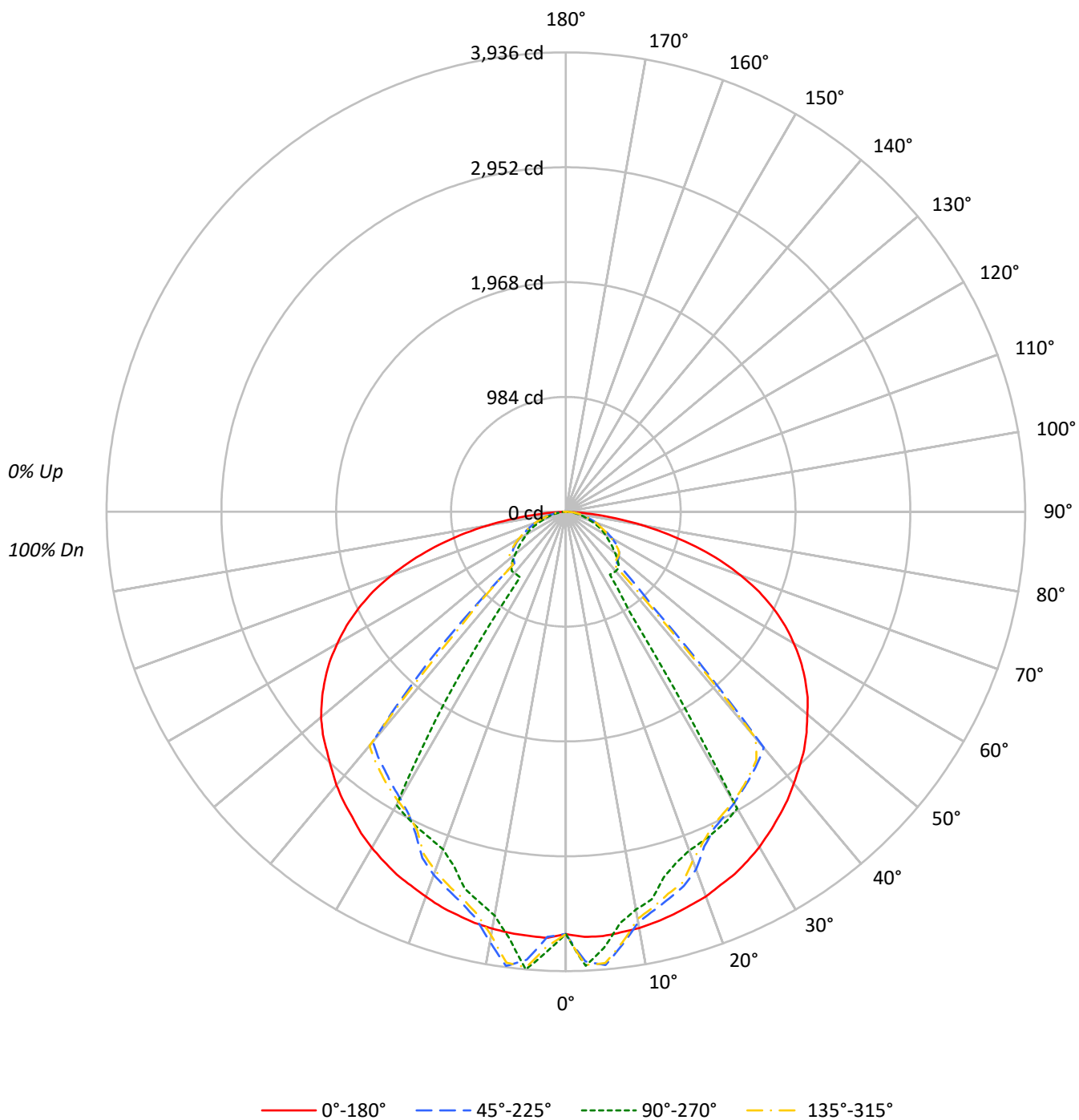
Lumens per Lamp: N/A
Luminaire Lumens: 7245.0 lumens
Efficiency: N/A
Efficacy: 85.2 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 85
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77
3	94	84	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39
9	62	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	29237	29237	29237	29237
5°	29524	29457	29510	30916
10°	29552	26632	29593	27041
15°	29618	24641	29687	25422
20°	29833	23371	29833	23283
25°	30091	22925	30134	22711
30°	30396	22520	30472	22253
35°	30749	5129	30813	5350
40°	31242	5334	31429	5507
45°	31990	5305	32101	5497
50°	32737	4796	33180	4926
55°	33746	4258	34014	4319
60°	34600	3783	34675	3832
65°	35210	3302	35122	3249
70°	34708	2661	34599	2565
75°	32223	2048	32455	1962
80°	26154	1455	27201	1331
85°	14162	871	14955	668

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 357.5°

Vertical Angle: 60°

Luminance: 35453 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	356.0	4.9
10°-20°	978.7	13.5
20°-30°	1449.7	20.0
30°-40°	1460.7	20.2
40°-50°	1141.0	15.7
50°-60°	881.4	12.2
60°-70°	591.7	8.2
70°-80°	301.9	4.2
80°-90°	84.0	1.2
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°	2784.4	38.4
0°-40°	4245.1	58.6
0°-60°	6267.4	86.5
0°-90°	7245.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7245.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3618	3618	3618	3618	3618	
5°	3650	3751	3648	3936	3650	347
15°	3570	3242	3578	3344	3570	1010
25°	3424	3021	3429	2993	3424	1579
35°	3185	657	3192	685	3185	1996
45°	2887	638	2897	662	2887	2226
55°	2502	464	2522	471	2502	2235
65°	1965	312	1960	307	1965	1932
75°	1152	158	1161	151	1152	1205
85°	207	50	219	38	207	285
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0
2.5°	3646.2	3659.4	3669.4	3676.0	3679.3	3679.3	3681.0	3682.6	3704.2	3714.1	3720.8
5°	3649.5	3662.7	3682.6	3709.2	3732.4	3752.3	3768.9	3792.1	3815.3	3840.2	3848.4
7.5°	3634.5	3651.1	3690.9	3739.0	3783.8	3815.3	3836.8	3851.8	3863.4	3865.0	3873.3
10°	3621.3	3651.1	3705.8	3768.9	3825.2	3863.4	3863.4	3855.1	3866.7	3821.9	3777.1
12.5°	3598.1	3631.2	3705.8	3788.8	3841.8	3856.7	3850.1	3816.9	3749.0	3694.2	3669.4
15°	3569.9	3614.7	3707.5	3800.4	3845.1	3850.1	3787.1	3702.5	3651.1	3618.0	3576.5
17.5°	3538.4	3598.1	3709.2	3802.0	3818.6	3795.4	3676.0	3622.9	3569.9	3492.0	3435.6
20°	3508.5	3566.6	3695.9	3778.8	3788.8	3684.3	3591.4	3535.1	3445.5	3377.5	3352.7
22.5°	3462.1	3530.1	3684.3	3747.3	3709.2	3588.1	3498.6	3409.0	3327.8	3307.9	3278.1
25°	3424.0	3495.3	3657.8	3709.2	3608.0	3500.2	3395.8	3291.3	3253.2	3225.0	3198.5
27.5°	3372.6	3460.4	3622.9	3639.5	3500.2	3405.7	3253.2	3206.8	3171.9	3140.4	3128.8
30°	3316.2	3424.0	3574.9	3543.4	3410.7	3271.4	3158.7	3115.6	3090.7	3057.5	3044.3
32.5°	3251.5	3369.3	3521.8	3432.3	3314.5	3140.4	3067.5	3034.3	3001.2	2976.3	2893.4
35°	3185.2	3321.2	3458.8	3326.1	3198.5	3040.9	2976.3	2946.4	2914.9	2823.7	2737.5
37.5°	3117.2	3268.1	3382.5	3211.7	3044.3	2938.1	2883.4	2850.3	2779.0	2662.9	2619.8
40°	3039.3	3203.4	3284.7	3094.0	2910.0	2833.7	2782.3	2749.1	2588.3	2536.9	2523.6
42.5°	2961.4	3140.4	3165.3	2979.6	2798.9	2722.6	2679.5	2570.0	2460.6	2434.1	2439.1
45°	2886.7	3072.5	3034.3	2817.1	2682.8	2619.8	2546.8	2395.9	2337.9	2351.2	2354.5
47.5°	2797.2	2991.2	2896.7	2654.6	2563.4	2500.4	2337.9	2246.7	2238.4	2256.7	2266.6
50°	2701.0	2900.0	2750.8	2507.0	2434.1	2359.5	2175.4	2129.0	2138.9	2157.2	2168.8
52.5°	2611.5	2797.2	2599.9	2369.4	2306.4	2135.6	2011.3	2019.6	2036.1	2057.7	2064.3
55°	2502.1	2672.9	2439.1	2230.1	2170.4	1946.6	1890.2	1910.1	1926.7	1944.9	1958.2
57.5°	2387.7	2530.3	2248.4	2074.3	1978.1	1779.1	1784.1	1797.4	1809.0	1830.5	756.1
60°	2256.7	2367.8	2039.5	1930.0	1739.3	1646.5	1651.5	1674.7	1686.3	941.8	520.6
62.5°	2120.7	2178.7	1850.4	1765.9	1520.5	1513.8	1537.1	1547.0	1052.9	497.4	487.5
65°	1964.8	1953.2	1664.7	1530.4	1371.2	1377.9	1402.7	1353.0	465.9	465.9	462.6
67.5°	1792.4	1722.8	1484.0	1266.8	1227.0	1241.9	1268.4	442.7	431.1	434.4	422.8
70°	1595.1	1497.3	1296.6	1072.8	1086.1	1101.0	427.8	401.3	396.3	388.0	364.8
72.5°	1386.2	1251.9	1061.2	931.9	940.1	590.3	374.7	361.5	344.9	328.3	303.4
75°	1152.4	978.3	779.3	779.3	790.9	336.6	326.6	305.1	286.9	265.3	250.4
77.5°	903.7	752.8	605.2	628.4	306.7	281.9	263.6	240.4	225.5	212.2	203.9
80°	661.6	525.6	456.0	407.9	238.8	213.9	195.7	182.4	175.8	167.5	157.5
82.5°	434.4	316.7	316.7	192.3	167.5	147.6	142.6	132.6	126.0	121.0	116.1
85°	207.3	184.0	139.3	117.7	104.5	94.5	91.2	86.2	86.2	84.6	82.9
87.5°	76.3	82.9	61.3	59.7	56.4	54.7	56.4	56.4	58.0	56.4	54.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0
2.5°	3737.3	3750.6	3760.6	3777.1	3798.7	3816.9	3833.5	3856.7	3893.2	3903.2	3911.4
5°	3848.4	3853.4	3865.0	3878.3	3881.6	3889.9	3888.2	3898.2	3903.2	3914.8	3889.9
7.5°	3855.1	3828.5	3797.0	3768.9	3749.0	3730.7	3719.1	3737.3	3747.3	3755.6	3730.7
10°	3715.8	3684.3	3666.1	3649.5	3629.6	3601.4	3563.2	3571.5	3568.2	3568.2	3559.9
12.5°	3627.9	3583.1	3536.7	3495.3	3477.0	3475.4	3477.0	3495.3	3495.3	3493.6	3483.7
15°	3490.3	3447.2	3424.0	3414.0	3414.0	3409.0	3409.0	3428.9	3424.0	3424.0	3419.0
17.5°	3399.1	3369.3	3352.7	3341.1	3336.1	3344.4	3354.3	3362.6	3364.3	3357.6	3331.1
20°	3324.5	3296.3	3276.4	3279.7	3278.1	3283.0	3288.0	3259.8	3225.0	3178.6	3157.0
22.5°	3246.6	3225.0	3210.1	3210.1	3190.2	3158.7	3112.2	3102.3	3097.3	3075.8	3057.5
25°	3171.9	3147.1	3125.5	3059.2	3017.7	3022.7	3014.4	2997.8	2996.2	2994.5	3001.2
27.5°	3097.3	3032.7	2949.8	2939.8	2923.2	2921.6	2931.5	2939.8	2939.8	2946.4	2954.7
30°	2943.1	2868.5	2853.6	2835.3	2842.0	2865.2	2870.2	2881.8	2885.1	2896.7	2903.3
32.5°	2802.2	2769.0	2755.8	2764.0	2785.6	2805.5	2817.1	2822.1	2830.4	2840.3	2848.6
35°	2687.8	2677.8	2689.4	2707.7	2729.2	2745.8	2755.8	2765.7	2774.0	2782.3	2788.9
37.5°	2603.2	2609.8	2626.4	2649.6	2671.2	2684.5	2692.7	2704.4	2716.0	2725.9	2686.1
40°	2523.6	2540.2	2558.4	2583.3	2601.6	2614.8	2623.1	2638.0	2538.5	1149.1	630.1
42.5°	2454.0	2472.2	2485.5	2505.4	2525.3	2535.2	2462.3	1099.3	621.8	618.5	626.8
45°	2369.4	2384.3	2405.9	2420.8	2439.1	1601.7	611.8	618.5	608.5	615.2	618.5
47.5°	2283.2	2306.4	2318.0	2211.9	658.3	608.5	601.9	608.5	601.9	610.2	605.2
50°	2185.4	2213.6	1575.2	595.3	590.3	587.0	593.6	590.3	595.3	601.9	588.6
52.5°	2085.9	1291.7	577.0	573.7	577.0	573.7	585.3	577.0	578.7	572.0	555.5
55°	706.3	558.8	553.8	552.1	562.1	562.1	562.1	548.8	540.5	524.0	512.4
57.5°	540.5	540.5	538.9	540.5	537.2	533.9	519.0	507.4	495.8	472.6	465.9
60°	512.4	512.4	512.4	512.4	497.4	490.8	467.6	457.6	437.7	426.1	419.5
62.5°	489.1	485.8	470.9	465.9	449.3	431.1	417.8	407.9	388.0	381.4	376.4
65°	456.0	444.4	426.1	406.2	397.9	378.0	371.4	356.5	346.5	341.6	338.3
67.5°	401.3	384.7	369.8	356.5	341.6	334.9	326.6	315.0	308.4	305.1	301.8
70°	343.2	331.6	316.7	308.4	298.5	293.5	281.9	278.6	273.6	268.6	263.6
72.5°	286.9	280.2	273.6	262.0	258.7	255.3	243.7	237.1	230.5	223.8	220.5
75°	240.4	235.4	232.1	222.2	217.2	207.3	199.0	194.0	189.0	184.0	180.7
77.5°	197.3	194.0	184.0	177.4	174.1	165.8	162.5	164.2	160.8	154.2	150.9
80°	154.2	150.9	142.6	142.6	139.3	136.0	132.6	129.3	126.0	121.0	117.7
82.5°	117.7	114.4	111.1	107.8	104.5	102.8	101.1	97.8	94.5	91.2	89.5
85°	82.9	81.2	79.6	77.9	76.3	74.6	73.0	69.6	66.3	64.7	63.0
87.5°	56.4	54.7	53.1	51.4	49.7	48.1	46.4	44.8	41.5	39.8	38.1
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):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0
2.5°	3911.4	3919.7	3911.4	3893.2	3881.6	3876.6	3886.6	3886.6	3893.2	3901.5	3903.2
5°	3850.1	3830.2	3807.0	3783.8	3772.2	3765.5	3747.3	3750.6	3755.6	3758.9	3762.2
7.5°	3697.6	3671.0	3639.5	3609.7	3598.1	3588.1	3566.6	3566.6	3566.6	3568.2	3578.2
10°	3541.7	3530.1	3516.8	3496.9	3482.0	3477.0	3458.8	3463.8	3460.4	3465.4	3477.0
12.5°	3468.7	3455.5	3443.9	3424.0	3407.4	3400.8	3392.5	3397.4	3395.8	3404.1	3414.0
15°	3402.4	3395.8	3382.5	3367.6	3352.7	3339.4	3309.6	3299.6	3293.0	3284.7	3296.3
17.5°	3293.0	3246.6	3215.0	3191.8	3175.3	3163.6	3155.4	3155.4	3160.3	3165.3	3175.3
20°	3143.8	3130.5	3115.6	3090.7	3074.1	3067.5	3062.5	3062.5	3070.8	3077.4	3095.7
22.5°	3040.9	3039.3	3034.3	3022.7	3014.4	3014.4	3016.1	3019.4	3031.0	3040.9	3059.2
25°	2992.9	2999.5	2996.2	2989.5	2984.6	2986.2	2982.9	2986.2	2997.8	3007.8	3022.7
27.5°	2954.7	2964.7	2961.4	2951.4	2943.1	2946.4	2951.4	2948.1	2958.0	2969.7	2981.3
30°	2903.3	2905.0	2911.6	2900.0	2896.7	2901.7	2903.3	2906.6	2916.6	2924.9	2934.8
32.5°	2845.3	2858.6	2856.9	2845.3	2845.3	2850.3	2851.9	2740.8	2533.6	2182.1	2085.9
35°	2788.9	2803.8	2779.0	2342.9	1621.6	865.5	668.2	645.0	650.0	653.3	656.6
37.5°	2062.7	978.3	623.4	628.4	633.4	638.4	643.3	648.3	653.3	658.3	659.9
40°	620.1	618.5	623.4	630.1	635.1	638.4	645.0	650.0	654.9	659.9	661.6
42.5°	613.5	616.8	621.8	628.4	635.1	641.7	646.7	653.3	656.6	659.9	661.6
45°	610.2	616.8	623.4	628.4	633.4	636.7	640.0	641.7	640.0	640.0	643.3
47.5°	605.2	611.8	613.5	611.8	613.5	611.8	611.8	611.8	606.9	605.2	605.2
50°	587.0	587.0	583.6	577.0	575.4	573.7	570.4	568.7	562.1	560.4	560.4
52.5°	548.8	547.2	542.2	533.9	530.6	527.3	525.6	524.0	517.3	514.0	515.7
55°	504.1	500.7	495.8	485.8	484.2	480.8	479.2	477.5	470.9	474.2	469.2
57.5°	462.6	456.0	449.3	447.7	441.1	439.4	437.7	436.1	431.1	432.8	429.4
60°	412.9	411.2	407.9	401.3	401.3	399.6	399.6	396.3	393.0	391.3	391.3
62.5°	376.4	371.4	368.1	368.1	363.1	363.1	363.1	359.8	356.5	358.1	356.5
65°	336.6	334.9	333.3	330.0	330.0	328.3	328.3	325.0	320.0	321.7	318.4
67.5°	303.4	300.1	296.8	295.1	288.5	285.2	283.5	281.9	275.2	276.9	273.6
70°	262.0	257.0	253.7	250.4	245.4	242.1	242.1	238.8	233.8	235.4	232.1
72.5°	218.9	215.6	212.2	210.6	205.6	203.9	202.3	200.6	195.7	197.3	195.7
75°	182.4	182.4	180.7	179.1	174.1	169.1	165.8	164.2	160.8	162.5	159.2
77.5°	150.9	147.6	144.3	144.3	139.3	136.0	132.6	132.6	132.6	131.0	129.3
80°	117.7	114.4	114.4	112.8	109.4	106.1	104.5	104.5	102.8	102.8	101.1
82.5°	89.5	86.2	84.6	84.6	81.2	79.6	77.9	76.3	76.3	76.3	74.6
85°	63.0	59.7	58.0	58.0	54.7	53.1	53.1	51.4	51.4	49.7	49.7
87.5°	38.1	36.5	34.8	34.8	31.5	29.8	29.8	29.8	28.2	28.2	26.5
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: P1213889

CATALOG NUMBER: 4SNLED-LD5-84SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0
2.5°	3903.2	3903.2	3891.6	3894.9	3889.9	3896.5	3888.2	3888.2	3898.2	3898.2	3904.8
5°	3763.9	3755.6	3753.9	3750.6	3734.0	3740.7	3732.4	3724.1	3735.7	3735.7	3750.6
7.5°	3573.2	3558.3	3564.9	3555.0	3545.0	3530.1	3535.1	3528.4	3536.7	3548.3	3563.2
10°	3475.4	3462.1	3470.4	3460.4	3465.4	3443.9	3445.5	3447.2	3455.5	3458.8	3472.1
12.5°	3412.4	3409.0	3405.7	3402.4	3405.7	3394.1	3387.5	3389.1	3392.5	3394.1	3404.1
15°	3279.7	3258.2	3264.8	3241.6	3243.2	3244.9	3231.6	3244.9	3243.2	3264.8	3284.7
17.5°	3171.9	3171.9	3160.3	3150.4	3143.8	3142.1	3132.1	3138.8	3132.1	3145.4	3150.4
20°	3097.3	3095.7	3094.0	3089.0	3072.5	3074.1	3079.1	3064.2	3062.5	3060.8	3070.8
22.5°	3062.5	3064.2	3057.5	3057.5	3042.6	3045.9	3047.6	3031.0	3032.7	3027.7	3032.7
25°	3026.0	3029.3	3021.1	3021.1	3017.7	3016.1	3007.8	3011.1	3001.2	2992.9	3001.2
27.5°	2982.9	2989.5	2982.9	2986.2	2979.6	2976.3	2971.3	2968.0	2958.0	2956.4	2961.4
30°	2943.1	2946.4	2944.8	2936.5	2934.8	2924.9	2929.9	2919.9	2910.0	2911.6	2914.9
32.5°	1508.9	1440.9	1110.9	1003.1	993.2	1029.7	1220.4	1485.7	1925.1	2351.2	2657.9
35°	658.3	658.3	658.3	656.6	656.6	654.9	653.3	651.6	650.0	648.3	646.7
37.5°	661.6	661.6	661.6	661.6	659.9	658.3	658.3	654.9	653.3	651.6	650.0
40°	663.2	664.9	664.9	664.9	663.2	663.2	661.6	658.3	656.6	653.3	650.0
42.5°	661.6	663.2	663.2	661.6	661.6	659.9	659.9	658.3	656.6	654.9	653.3
45°	640.0	641.7	638.4	638.4	636.7	636.7	636.7	636.7	636.7	638.4	638.4
47.5°	601.9	601.9	600.2	598.6	598.6	596.9	598.6	596.9	600.2	601.9	605.2
50°	557.1	557.1	553.8	552.1	552.1	552.1	552.1	553.8	555.5	558.8	562.1
52.5°	510.7	510.7	509.0	507.4	505.7	505.7	510.7	509.0	510.7	512.4	517.3
55°	465.9	467.6	464.3	464.3	462.6	462.6	462.6	464.3	465.9	467.6	472.6
57.5°	427.8	427.8	424.5	424.5	424.5	422.8	427.8	424.5	426.1	427.8	431.1
60°	389.7	388.0	388.0	386.3	386.3	386.3	389.7	388.0	388.0	389.7	393.0
62.5°	354.8	354.8	353.2	353.2	351.5	351.5	354.8	353.2	353.2	354.8	356.5
65°	315.0	315.0	313.4	311.7	316.7	311.7	316.7	313.4	316.7	318.4	321.7
67.5°	270.3	270.3	270.3	268.6	268.6	271.9	273.6	270.3	271.9	275.2	276.9
70°	230.5	230.5	228.8	228.8	228.8	232.1	233.8	230.5	232.1	233.8	237.1
72.5°	195.7	192.3	192.3	190.7	194.0	194.0	195.7	194.0	195.7	195.7	199.0
75°	160.8	157.5	157.5	157.5	160.8	159.2	160.8	159.2	160.8	160.8	162.5
77.5°	129.3	127.7	126.0	126.0	129.3	129.3	129.3	127.7	129.3	131.0	132.6
80°	101.1	99.5	97.8	97.8	101.1	101.1	101.1	102.8	101.1	102.8	104.5
82.5°	74.6	73.0	71.3	74.6	74.6	74.6	74.6	76.3	74.6	76.3	77.9
85°	49.7	48.1	46.4	49.7	49.7	49.7	49.7	51.4	49.7	51.4	53.1
87.5°	26.5	24.9	24.9	26.5	26.5	26.5	28.2	28.2	28.2	29.8	29.8
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: P1213889

CATALOG NUMBER: 4SNLED-LD5-84SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0
2.5°	3914.8	3919.7	3918.1	3908.1	3898.2	3886.6	3878.3	3879.9	3896.5	3901.5	3886.6
5°	3750.6	3782.1	3782.1	3803.7	3792.1	3782.1	3788.8	3825.2	3843.5	3871.7	3881.6
7.5°	3581.5	3596.4	3594.8	3616.3	3613.0	3613.0	3618.0	3666.1	3689.3	3712.5	3719.1
10°	3487.0	3501.9	3500.2	3501.9	3496.9	3485.3	3485.3	3506.9	3526.8	3538.4	3541.7
12.5°	3419.0	3427.3	3425.6	3425.6	3422.3	3412.4	3410.7	3428.9	3450.5	3465.4	3467.1
15°	3317.9	3341.1	3346.0	3367.6	3362.6	3349.4	3352.7	3367.6	3380.9	3394.1	3389.1
17.5°	3167.0	3178.6	3180.2	3188.5	3185.2	3185.2	3205.1	3259.8	3296.3	3327.8	3331.1
20°	3080.7	3089.0	3085.7	3104.0	3095.7	3094.0	3099.0	3122.2	3138.8	3153.7	3180.2
22.5°	3039.3	3045.9	3040.9	3042.6	3027.7	3014.4	3011.1	3029.3	3047.6	3067.5	3067.5
25°	3004.5	3009.4	3007.8	3004.5	2992.9	2974.6	2971.3	2974.6	2981.3	2982.9	2971.3
27.5°	2963.0	2966.3	2966.3	2968.0	2953.1	2936.5	2933.2	2929.9	2936.5	2934.8	2916.6
30°	2919.9	2914.9	2916.6	2918.2	2905.0	2890.1	2883.4	2881.8	2888.4	2886.7	2868.5
32.5°	2817.1	2855.2	2858.6	2861.9	2850.3	2837.0	2830.4	2825.4	2828.7	2827.1	2810.5
35°	645.0	656.6	804.2	1820.6	2472.2	2737.5	2765.7	2759.1	2760.7	2760.7	2747.5
37.5°	646.7	645.0	643.3	638.4	633.4	630.1	1089.4	2323.0	2691.1	2692.7	2681.1
40°	646.7	645.0	643.3	640.0	633.4	628.4	620.1	613.5	628.4	1382.9	2530.3
42.5°	650.0	646.7	643.3	640.0	633.4	626.8	620.1	611.8	616.8	613.5	605.2
45°	640.0	638.4	638.4	636.7	633.4	626.8	618.5	608.5	603.5	608.5	600.2
47.5°	608.5	610.2	615.2	616.8	616.8	618.5	613.5	606.9	598.6	603.5	593.6
50°	565.4	568.7	570.4	578.7	582.0	588.6	590.3	590.3	588.6	595.3	588.6
52.5°	519.0	522.3	530.6	533.9	537.2	547.2	550.5	555.5	558.8	568.7	575.4
55°	474.2	475.9	479.2	485.8	490.8	499.1	504.1	509.0	517.3	522.3	542.2
57.5°	432.8	434.4	441.1	442.7	446.0	452.7	457.6	464.3	470.9	474.2	497.4
60°	393.0	394.6	399.6	401.3	402.9	409.5	414.5	419.5	424.5	427.8	444.4
62.5°	358.1	358.1	363.1	363.1	364.8	369.8	373.1	376.4	381.4	383.0	391.3
65°	323.3	325.0	328.3	328.3	330.0	333.3	334.9	336.6	341.6	341.6	348.2
67.5°	280.2	281.9	286.9	290.2	291.8	298.5	300.1	301.8	305.1	306.7	310.1
70°	238.8	240.4	245.4	247.1	248.7	253.7	257.0	262.0	267.0	271.9	275.2
72.5°	200.6	202.3	207.3	207.3	212.2	213.9	217.2	218.9	223.8	227.2	232.1
75°	164.2	165.8	170.8	170.8	175.8	177.4	179.1	180.7	184.0	187.4	190.7
77.5°	134.3	134.3	140.9	144.3	147.6	147.6	149.2	149.2	149.2	150.9	154.2
80°	106.1	106.1	111.1	114.4	117.7	117.7	119.4	121.0	122.7	122.7	124.4
82.5°	79.6	79.6	84.6	86.2	89.5	89.5	89.5	91.2	92.9	91.2	94.5
85°	54.7	54.7	58.0	59.7	63.0	63.0	63.0	64.7	66.3	64.7	66.3
87.5°	31.5	33.2	34.8	36.5	38.1	39.8	39.8	39.8	41.5	41.5	43.1
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: P1213889

CATALOG NUMBER: 4SNLED-LD5-84SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0
2.5°	3870.0	3850.1	3848.4	3825.2	3818.6	3820.3	3802.0	3795.4	3765.5	3758.9	3727.4
5°	3884.9	3894.9	3889.9	3888.2	3893.2	3889.9	3876.6	3870.0	3865.0	3851.8	3825.2
7.5°	3720.8	3727.4	3732.4	3753.9	3772.2	3803.7	3836.8	3858.4	3875.0	3878.3	3856.7
10°	3553.3	3584.8	3606.4	3639.5	3666.1	3684.3	3704.2	3722.4	3770.5	3818.6	3846.8
12.5°	3467.1	3475.4	3473.7	3492.0	3510.2	3558.3	3604.7	3631.2	3667.7	3689.3	3740.7
15°	3394.1	3395.8	3400.8	3414.0	3424.0	3440.6	3462.1	3501.9	3574.9	3608.0	3636.2
17.5°	3327.8	3327.8	3331.1	3342.7	3356.0	3370.9	3384.2	3400.8	3437.2	3492.0	3561.6
20°	3221.7	3268.1	3273.1	3271.4	3278.1	3306.2	3309.6	3339.4	3357.6	3379.2	3447.2
22.5°	3064.2	3092.3	3132.1	3193.5	3216.7	3230.0	3239.9	3253.2	3281.4	3306.2	3334.4
25°	2977.9	2996.2	3007.8	3026.0	3074.1	3152.0	3167.0	3181.9	3200.1	3218.4	3253.2
27.5°	2901.7	2900.0	2908.3	2924.9	2938.1	2979.6	3052.6	3110.6	3113.9	3140.4	3170.3
30°	2847.0	2837.0	2825.4	2822.1	2840.3	2861.9	2883.4	2974.6	3037.6	3050.9	3082.4
32.5°	2795.6	2779.0	2762.4	2749.1	2737.5	2755.8	2769.0	2808.8	2890.1	2966.3	2982.9
35°	2732.5	2716.0	2696.1	2681.1	2662.9	2661.2	2659.6	2697.7	2724.3	2815.4	2895.0
37.5°	2667.9	2649.6	2633.1	2616.5	2598.2	2585.0	2576.7	2586.6	2611.5	2651.3	2783.9
40°	2599.9	2578.3	2561.8	2548.5	2523.6	2513.7	2497.1	2490.5	2492.1	2526.9	2596.6
42.5°	1553.6	2477.2	2485.5	2470.6	2449.0	2435.7	2417.5	2409.2	2392.6	2409.2	2449.0
45°	598.6	605.2	1812.3	2394.3	2367.8	2351.2	2334.6	2326.3	2308.1	2294.8	2331.3
47.5°	587.0	593.6	580.3	822.4	2260.0	2265.0	2245.1	2236.8	2218.5	2208.6	2198.6
50°	578.7	583.6	573.7	577.0	565.4	2071.0	2153.9	2143.9	2124.0	2112.4	2092.5
52.5°	570.4	570.4	563.8	555.5	552.1	553.8	1742.7	2049.4	2026.2	2014.6	1988.1
55°	543.9	547.2	553.8	540.5	537.2	535.6	530.6	1659.8	1918.4	1905.2	1881.9
57.5°	504.1	510.7	528.9	525.6	525.6	512.4	509.0	509.0	1540.4	1794.1	1770.8
60°	457.6	464.3	484.2	490.8	495.8	492.5	489.1	487.5	480.8	1623.3	1653.1
62.5°	409.5	416.2	422.8	444.4	451.0	459.3	469.2	464.3	457.6	457.6	1528.8
65°	358.1	368.1	371.4	391.3	399.6	414.5	422.8	434.4	431.1	429.4	437.7
67.5°	313.4	325.0	326.6	334.9	349.9	356.5	366.4	388.0	397.9	401.3	404.6
70°	275.2	281.9	286.9	290.2	300.1	301.8	320.0	334.9	349.9	366.4	371.4
72.5°	237.1	242.1	252.0	248.7	252.0	258.7	268.6	278.6	293.5	316.7	331.6
75°	194.0	197.3	203.9	207.3	213.9	218.9	225.5	233.8	247.1	258.7	278.6
77.5°	155.9	157.5	162.5	164.2	170.8	175.8	187.4	192.3	200.6	208.9	220.5
80°	126.0	126.0	127.7	127.7	132.6	137.6	145.9	150.9	160.8	167.5	167.5
82.5°	96.2	96.2	101.1	101.1	104.5	104.5	109.4	109.4	114.4	117.7	121.0
85°	68.0	69.6	73.0	71.3	74.6	73.0	76.3	79.6	81.2	79.6	77.9
87.5°	44.8	44.8	48.1	46.4	48.1	48.1	51.4	51.4	53.1	53.1	51.4
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: P1213889

CATALOG NUMBER: 4SNLED-LD5-84SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0
2.5°	3715.8	3690.9	3676.0	3657.8	3652.8	3647.8	3654.4	3654.4	3644.5	3636.2	3621.3
5°	3802.0	3775.5	3747.3	3717.5	3689.3	3659.4	3647.8	3646.2	3627.9	3618.0	3613.0
7.5°	3846.8	3833.5	3802.0	3760.6	3717.5	3664.4	3641.2	3627.9	3609.7	3606.4	3606.4
10°	3851.8	3836.8	3820.3	3790.4	3740.7	3671.0	3626.3	3599.7	3583.1	3594.8	3616.3
12.5°	3803.7	3831.9	3816.9	3797.0	3757.2	3672.7	3608.0	3568.2	3563.2	3593.1	3649.5
15°	3681.0	3763.9	3805.3	3785.4	3753.9	3669.4	3578.2	3531.7	3531.7	3593.1	3666.1
17.5°	3588.1	3652.8	3753.9	3770.5	3734.0	3662.7	3550.0	3495.3	3510.2	3599.7	3677.7
20°	3511.8	3551.6	3649.5	3742.3	3707.5	3647.8	3508.5	3452.2	3482.0	3589.8	3694.2
22.5°	3392.5	3472.1	3531.7	3669.4	3681.0	3619.6	3467.1	3399.1	3458.8	3589.8	3685.9
25°	3276.4	3372.6	3435.6	3569.9	3641.2	3584.8	3428.9	3342.7	3433.9	3584.8	3679.3
27.5°	3195.2	3239.9	3354.3	3450.5	3581.5	3538.4	3377.5	3281.4	3402.4	3558.3	3641.2
30°	3108.9	3138.8	3251.5	3342.7	3501.9	3485.3	3324.5	3213.4	3362.6	3533.4	3541.7
32.5°	3014.4	3047.6	3105.6	3238.3	3390.8	3435.6	3264.8	3145.4	3319.5	3495.3	3425.6
35°	2918.2	2943.1	2989.5	3132.1	3261.5	3361.0	3191.8	3067.5	3289.7	3437.2	3314.5
37.5°	2822.1	2848.6	2888.4	3007.8	3125.5	3291.3	3128.8	2989.5	3234.9	3334.4	3198.5
40°	2730.9	2745.8	2787.3	2861.9	3012.8	3220.0	3057.5	2908.3	3178.6	3203.4	3040.9
42.5°	2563.4	2638.0	2676.2	2735.9	2885.1	3122.2	2974.6	2822.1	3115.6	3072.5	2883.4
45°	2382.7	2545.2	2561.8	2621.5	2772.3	3017.7	2896.7	2737.5	3055.9	2959.7	2734.2
47.5°	2235.1	2352.8	2449.0	2498.8	2638.0	2895.0	2823.7	2666.2	2966.3	2817.1	2588.3
50°	2104.1	2167.1	2341.2	2377.7	2477.2	2747.5	2737.5	2583.3	2842.0	2638.0	2445.7
52.5°	1976.5	2021.2	2178.7	2256.7	2337.9	2588.3	2634.7	2502.1	2706.0	2459.0	2301.4
55°	1865.4	1880.3	1966.5	2130.7	2203.6	2427.5	2522.0	2407.6	2533.6	2288.2	2162.2
57.5°	1750.9	1737.7	1800.7	2011.3	2064.3	2263.3	2402.6	2311.4	2394.3	2114.1	2017.9
60°	1631.6	1613.3	1639.9	1779.1	1916.8	2100.8	2261.6	2205.3	2225.2	1941.6	1857.1
62.5°	1507.2	1489.0	1480.7	1568.6	1772.5	1933.3	2119.0	2087.5	2017.9	1784.1	1658.1
65°	1377.9	1359.6	1346.4	1381.2	1613.3	1716.1	1959.9	1951.6	1790.7	1618.3	1396.1
67.5°	419.5	1236.9	1208.8	1207.1	1359.6	1518.8	1787.4	1774.2	1561.9	1440.9	1202.1
70°	378.0	1003.1	1066.2	1051.2	1117.6	1318.2	1590.1	1580.2	1339.7	1155.7	1062.8
72.5°	346.5	354.8	941.8	925.2	940.1	1120.9	1384.5	1358.0	1135.8	912.0	918.6
75°	296.8	311.7	325.0	781.0	761.1	928.5	1160.7	1119.2	936.8	752.8	767.7
77.5°	242.1	260.3	270.3	568.7	615.2	661.6	926.9	872.2	645.0	601.9	286.9
80°	180.7	195.7	212.2	227.2	467.6	462.6	688.1	633.4	449.3	374.7	223.8
82.5°	132.6	137.6	147.6	164.2	185.7	310.1	442.7	389.7	311.7	170.8	154.2
85°	82.9	89.5	94.5	99.5	112.8	185.7	218.9	174.1	131.0	104.5	97.8
87.5°	53.1	53.1	51.4	53.1	54.7	66.3	74.6	71.3	56.4	53.1	53.1
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: P1213889

CATALOG NUMBER: 4SNLED-LD5-84SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0
2.5°	3604.7	3581.5	3581.5	3574.9	3579.8	3579.8	3578.2	3579.8	3591.4	3598.1	3609.7
5°	3603.0	3596.4	3611.3	3629.6	3651.1	3677.7	3684.3	3707.5	3729.1	3757.2	3787.1
7.5°	3624.6	3647.8	3676.0	3705.8	3749.0	3780.5	3808.6	3836.8	3856.7	3883.3	3899.8
10°	3656.1	3702.5	3750.6	3788.8	3835.2	3861.7	3879.9	3883.3	3855.1	3810.3	3773.8
12.5°	3700.9	3755.6	3800.4	3836.8	3858.4	3848.4	3795.4	3740.7	3709.2	3662.7	3598.1
15°	3739.0	3788.8	3835.2	3820.3	3762.2	3707.5	3666.1	3601.4	3538.4	3495.3	3467.1
17.5°	3755.6	3803.7	3787.1	3709.2	3654.4	3591.4	3506.9	3457.1	3415.7	3382.5	3365.9
20°	3765.5	3757.2	3667.7	3611.3	3505.2	3447.2	3392.5	3346.0	3314.5	3298.0	3294.6
22.5°	3739.0	3637.9	3561.6	3460.4	3382.5	3334.4	3291.3	3253.2	3231.6	3218.4	3210.1
25°	3651.1	3533.4	3420.7	3341.1	3274.7	3233.3	3200.1	3168.6	3142.1	3135.5	3118.9
27.5°	3528.4	3432.3	3283.0	3221.7	3163.6	3143.8	3107.3	3075.8	3052.6	3032.7	2979.6
30°	3427.3	3274.7	3167.0	3110.6	3075.8	3052.6	3011.1	2977.9	2938.1	2865.2	2835.3
32.5°	3302.9	3152.0	3049.2	3017.7	2974.6	2954.7	2908.3	2835.3	2774.0	2744.1	2742.5
35°	3142.1	3017.7	2943.1	2914.9	2880.1	2847.0	2750.8	2684.5	2654.6	2657.9	2682.8
37.5°	3007.8	2896.7	2848.6	2808.8	2769.0	2684.5	2603.2	2571.7	2580.0	2596.6	2608.2
40°	2871.8	2787.3	2732.5	2701.0	2611.5	2528.6	2485.5	2497.1	2512.0	2523.6	2538.5
42.5°	2739.2	2679.5	2624.8	2563.4	2440.7	2395.9	2405.9	2420.8	2434.1	2450.7	2465.6
45°	2613.2	2560.1	2497.1	2357.8	2296.5	2308.1	2323.0	2334.6	2354.5	2366.1	2381.0
47.5°	2493.8	2437.4	2326.3	2203.6	2197.0	2220.2	2233.5	2248.4	2263.3	2233.5	1232.0
50°	2359.5	2301.4	2132.3	2085.9	2100.8	2122.4	2138.9	2153.9	1918.4	762.7	587.0
52.5°	2226.8	2079.3	1971.5	1984.7	1999.7	2024.5	2036.1	1512.2	601.9	573.7	575.4
55°	2079.3	1890.2	1858.7	1875.3	1888.6	1913.4	1268.4	555.5	552.1	550.5	563.8
57.5°	1847.1	1732.7	1746.0	1762.6	1775.8	1253.5	540.5	537.2	538.9	540.5	542.2
60°	1639.9	1615.0	1629.9	1644.8	1164.0	522.3	512.4	514.0	520.6	515.7	502.4
62.5°	1475.7	1495.6	1510.5	1323.2	495.8	490.8	495.8	490.8	479.2	470.9	454.3
65°	1349.7	1369.6	1381.2	465.9	464.3	470.9	465.9	449.3	431.1	407.9	402.9
67.5°	1217.0	1236.9	442.7	431.1	437.7	429.4	409.5	389.7	376.4	356.5	348.2
70°	1079.4	462.6	401.3	399.6	388.0	374.7	353.2	333.3	316.7	308.4	300.1
72.5°	779.3	366.4	361.5	348.2	328.3	310.1	291.8	280.2	271.9	267.0	262.0
75°	325.0	318.4	303.4	280.2	260.3	252.0	238.8	230.5	227.2	217.2	213.9
77.5°	271.9	258.7	237.1	220.5	208.9	203.9	194.0	184.0	179.1	177.4	170.8
80°	208.9	190.7	180.7	172.4	169.1	157.5	145.9	140.9	137.6	136.0	131.0
82.5°	142.6	136.0	129.3	117.7	117.7	112.8	107.8	104.5	101.1	101.1	97.8
85°	92.9	87.9	86.2	81.2	81.2	77.9	76.3	74.6	73.0	71.3	69.6
87.5°	53.1	53.1	54.7	53.1	53.1	51.4	49.7	48.1	46.4	46.4	43.1
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: P1213889

CATALOG NUMBER: 4SNLED-LD5-84SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0
2.5°	3624.6	3641.2	3644.5	3700.9	3732.4	3730.7	3720.8	3750.6	3732.4	3722.4	3732.4
5°	3816.9	3836.8	3853.4	3914.8	3936.3	3946.3	3944.6	3961.2	3947.9	3936.3	3936.3
7.5°	3911.4	3918.1	3924.7	3909.8	3899.8	3883.3	3858.4	3821.9	3803.7	3783.8	3758.9
10°	3755.6	3734.0	3742.3	3712.5	3687.6	3669.4	3646.2	3616.3	3591.4	3573.2	3545.0
12.5°	3564.9	3563.2	3566.6	3571.5	3546.7	3531.7	3513.5	3492.0	3473.7	3453.8	3430.6
15°	3448.8	3450.5	3463.8	3458.8	3450.5	3442.2	3422.3	3415.7	3399.1	3377.5	3364.3
17.5°	3365.9	3374.2	3387.5	3380.9	3367.6	3359.3	3344.4	3329.5	3314.5	3298.0	3278.1
20°	3293.0	3301.3	3309.6	3301.3	3276.4	3264.8	3244.9	3198.5	3165.3	3132.1	3102.3
22.5°	3213.4	3218.4	3211.7	3185.2	3122.2	3092.3	3069.1	3055.9	3027.7	3009.4	2991.2
25°	3113.9	3085.7	3042.6	3012.8	2987.9	2974.6	2964.7	2963.0	2959.7	2956.4	2948.1
27.5°	2951.4	2941.5	2918.2	2906.6	2908.3	2913.3	2914.9	2919.9	2914.9	2908.3	2901.7
30°	2830.4	2835.3	2837.0	2840.3	2848.6	2853.6	2855.2	2861.9	2858.6	2853.6	2850.3
32.5°	2754.1	2765.7	2772.3	2782.3	2787.3	2795.6	2795.6	2805.5	2795.6	2793.9	2790.6
35°	2691.1	2701.0	2704.4	2719.3	2724.3	2732.5	2732.5	2740.8	2732.5	2648.0	2090.9
37.5°	2628.1	2638.0	2644.7	2657.9	2659.6	2664.6	2459.0	1799.0	1160.7	898.7	686.5
40°	2553.5	2565.1	2571.7	2576.7	1810.6	1149.1	790.9	643.3	643.3	648.3	653.3
42.5°	2473.9	2482.2	1729.4	1006.5	626.8	625.1	630.1	635.1	640.0	646.7	653.3
45°	1944.9	981.6	623.4	608.5	613.5	620.1	626.8	633.4	641.7	648.3	651.6
47.5°	638.4	598.6	606.9	600.2	608.5	616.8	623.4	630.1	631.7	633.4	631.7
50°	590.3	590.3	595.3	595.3	601.9	605.2	605.2	605.2	598.6	596.9	591.9
52.5°	570.4	583.6	577.0	580.3	577.0	572.0	567.1	562.1	552.1	548.8	542.2
55°	560.4	565.4	548.8	543.9	537.2	524.0	517.3	510.7	502.4	499.1	490.8
57.5°	537.2	525.6	507.4	499.1	487.5	474.2	467.6	462.6	454.3	451.0	446.0
60°	494.1	470.9	459.3	449.3	436.1	424.5	419.5	416.2	409.5	407.9	402.9
62.5°	441.1	421.2	411.2	397.9	388.0	381.4	376.4	374.7	368.1	368.1	364.8
65°	383.0	373.1	364.8	351.5	346.5	339.9	338.3	336.6	333.3	331.6	328.3
67.5°	336.6	330.0	318.4	311.7	308.4	303.4	300.1	296.8	290.2	286.9	281.9
70°	295.1	290.2	278.6	273.6	267.0	258.7	253.7	250.4	245.4	242.1	237.1
72.5°	255.3	240.4	232.1	227.2	222.2	213.9	212.2	208.9	203.9	202.3	197.3
75°	205.6	194.0	189.0	185.7	180.7	175.8	175.8	175.8	170.8	169.1	167.5
77.5°	164.2	157.5	154.2	150.9	149.2	145.9	140.9	139.3	134.3	134.3	132.6
80°	126.0	122.7	119.4	117.7	116.1	112.8	109.4	107.8	102.8	102.8	101.1
82.5°	92.9	91.2	89.5	87.9	86.2	84.6	79.6	77.9	74.6	74.6	73.0
85°	66.3	64.7	61.3	59.7	59.7	58.0	53.1	51.4	48.1	48.1	48.1
87.5°	41.5	39.8	38.1	36.5	34.8	33.2	29.8	28.2	28.2	24.9	23.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213889

CATALOG NUMBER: 4SNLED-LD5-84SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0
2.5°	3712.5	3740.7	3737.3	3757.2	3762.2	3772.2	3775.5	3777.1	3752.3	3772.2	3773.8
5°	3931.3	3936.3	3939.6	3947.9	3956.2	3957.9	3949.6	3939.6	3943.0	3936.3	3919.7
7.5°	3755.6	3730.7	3725.7	3719.1	3715.8	3712.5	3697.6	3710.8	3695.9	3689.3	3666.1
10°	3540.0	3516.8	3515.2	3515.2	3520.1	3518.5	3515.2	3508.5	3521.8	3513.5	3508.5
12.5°	3427.3	3419.0	3424.0	3420.7	3433.9	3437.2	3433.9	3433.9	3430.6	3424.0	3427.3
15°	3359.3	3352.7	3357.6	3352.7	3362.6	3364.3	3356.0	3361.0	3352.7	3344.4	3341.1
17.5°	3269.8	3254.8	3243.2	3226.7	3228.3	3225.0	3215.0	3215.0	3206.8	3185.2	3186.9
20°	3097.3	3082.4	3075.8	3075.8	3084.1	3087.4	3085.7	3089.0	3080.7	3077.4	3064.2
22.5°	2989.5	2987.9	2991.2	2999.5	3012.8	3031.0	3032.7	3032.7	3032.7	3031.0	3014.4
25°	2951.4	2951.4	2954.7	2966.3	2976.3	2989.5	2992.9	2996.2	2992.9	2992.9	2977.9
27.5°	2908.3	2905.0	2911.6	2923.2	2934.8	2944.8	2953.1	2954.7	2949.8	2949.8	2954.7
30°	2855.2	2853.6	2861.9	2873.5	2883.4	2893.4	2901.7	2908.3	2901.7	2901.7	2896.7
32.5°	2800.5	2800.5	2803.8	2734.2	2535.2	2283.2	2288.2	2142.3	2041.1	1913.4	2082.6
35°	1747.6	1271.8	1092.7	925.2	807.5	731.2	729.6	704.7	693.1	684.8	683.1
37.5°	659.9	663.2	669.9	673.2	678.2	681.5	683.1	683.1	683.1	683.1	681.5
40°	658.3	664.9	669.9	674.8	679.8	683.1	683.1	684.8	686.5	686.5	686.5
42.5°	659.9	666.6	673.2	678.2	681.5	683.1	684.8	686.5	686.5	686.5	686.5
45°	658.3	661.6	661.6	663.2	663.2	663.2	664.9	664.9	663.2	661.6	664.9
47.5°	633.4	633.4	628.4	626.8	625.1	621.8	623.4	621.8	620.1	618.5	621.8
50°	590.3	583.6	580.3	577.0	575.4	572.0	573.7	572.0	570.4	567.1	572.0
52.5°	538.9	537.2	530.6	527.3	525.6	527.3	524.0	522.3	520.6	519.0	520.6
55°	489.1	482.5	480.8	477.5	475.9	477.5	475.9	474.2	472.6	470.9	472.6
57.5°	444.4	439.4	437.7	434.4	434.4	434.4	434.4	432.8	431.1	429.4	431.1
60°	401.3	397.9	396.3	396.3	394.6	394.6	394.6	393.0	391.3	391.3	393.0
62.5°	364.8	364.8	359.8	358.1	358.1	359.8	358.1	356.5	354.8	353.2	356.5
65°	326.6	320.0	318.4	315.0	311.7	313.4	311.7	310.1	308.4	306.7	310.1
67.5°	280.2	278.6	271.9	268.6	267.0	268.6	267.0	265.3	263.6	262.0	265.3
70°	235.4	235.4	228.8	227.2	225.5	225.5	223.8	223.8	222.2	220.5	223.8
72.5°	195.7	195.7	194.0	190.7	189.0	187.4	185.7	184.0	184.0	185.7	185.7
75°	162.5	159.2	152.5	154.2	152.5	150.9	150.9	149.2	147.6	150.9	149.2
77.5°	127.7	126.0	121.0	122.7	121.0	119.4	119.4	117.7	116.1	117.7	117.7
80°	96.2	96.2	94.5	92.9	92.9	91.2	89.5	89.5	87.9	89.5	89.5
82.5°	69.6	69.6	68.0	66.3	64.7	64.7	63.0	63.0	63.0	63.0	63.0
85°	44.8	43.1	43.1	39.8	39.8	39.8	38.1	38.1	38.1	38.1	38.1
87.5°	21.6	21.6	19.9	19.9	18.2	16.6	16.6	14.9	14.9	16.6	16.6
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: P1213889

CATALOG NUMBER: 4SNLED-LD5-84SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0
2.5°	3744.0	3765.5	3747.3	3755.6	3757.2	3785.4	3783.8	3790.4	3778.8	3765.5	3747.3
5°	3934.7	3924.7	3911.4	3943.0	3926.4	3946.3	3952.9	3966.2	3966.2	3964.5	3949.6
7.5°	3690.9	3669.4	3685.9	3697.6	3702.5	3689.3	3715.8	3745.6	3770.5	3785.4	3787.1
10°	3500.2	3506.9	3505.2	3510.2	3521.8	3520.1	3536.7	3553.3	3559.9	3569.9	3573.2
12.5°	3410.7	3409.0	3412.4	3424.0	3430.6	3428.9	3445.5	3455.5	3458.8	3460.4	3458.8
15°	3339.4	3327.8	3336.1	3337.7	3342.7	3342.7	3362.6	3377.5	3384.2	3387.5	3384.2
17.5°	3205.1	3176.9	3203.4	3203.4	3221.7	3218.4	3249.9	3274.7	3288.0	3298.0	3298.0
20°	3072.5	3059.2	3069.1	3065.8	3079.1	3077.4	3097.3	3113.9	3125.5	3133.8	3143.8
22.5°	3019.4	3022.7	3007.8	3009.4	3009.4	3007.8	3017.7	3026.0	3029.3	3034.3	3031.0
25°	2984.6	2987.9	2982.9	2974.6	2971.3	2974.6	2979.6	2989.5	2991.2	2987.9	2976.3
27.5°	2949.8	2939.8	2948.1	2933.2	2929.9	2936.5	2943.1	2944.8	2946.4	2946.4	2936.5
30°	2896.7	2888.4	2896.7	2890.1	2883.4	2890.1	2895.0	2895.0	2898.4	2900.0	2888.4
32.5°	2024.5	2041.1	2309.7	2472.2	2701.0	2817.1	2838.7	2838.7	2842.0	2842.0	2832.0
35°	689.8	691.4	747.8	810.8	945.1	1110.9	1328.1	1440.9	1822.2	2278.2	2719.3
37.5°	681.5	679.8	678.2	676.5	674.8	673.2	669.9	668.2	678.2	804.2	1091.0
40°	684.8	683.1	679.8	678.2	676.5	673.2	671.5	668.2	664.9	661.6	658.3
42.5°	684.8	683.1	681.5	679.8	678.2	676.5	673.2	669.9	666.6	661.6	656.6
45°	661.6	661.6	663.2	663.2	664.9	664.9	664.9	663.2	663.2	661.6	654.9
47.5°	618.5	618.5	623.4	623.4	626.8	630.1	630.1	633.4	638.4	641.7	643.3
50°	568.7	568.7	573.7	575.4	578.7	583.6	588.6	590.3	595.3	601.9	608.5
52.5°	519.0	519.0	524.0	524.0	527.3	532.2	537.2	538.9	545.5	552.1	560.4
55°	472.6	472.6	475.9	477.5	479.2	482.5	487.5	487.5	494.1	499.1	507.4
57.5°	431.1	434.4	434.4	434.4	436.1	439.4	442.7	442.7	447.7	452.7	459.3
60°	391.3	394.6	394.6	394.6	396.3	397.9	401.3	401.3	404.6	407.9	414.5
62.5°	354.8	358.1	358.1	359.8	359.8	361.5	364.8	363.1	366.4	368.1	373.1
65°	308.4	311.7	313.4	315.0	316.7	320.0	325.0	323.3	328.3	331.6	336.6
67.5°	263.6	267.0	267.0	268.6	270.3	273.6	276.9	276.9	281.9	285.2	291.8
70°	222.2	225.5	225.5	227.2	228.8	232.1	235.4	233.8	238.8	242.1	247.1
72.5°	184.0	187.4	187.4	189.0	189.0	192.3	195.7	199.0	199.0	202.3	205.6
75°	149.2	150.9	152.5	152.5	154.2	155.9	159.2	162.5	164.2	165.8	169.1
77.5°	117.7	119.4	121.0	121.0	122.7	124.4	126.0	132.6	136.0	137.6	137.6
80°	89.5	91.2	91.2	91.2	92.9	94.5	97.8	97.8	104.5	104.5	106.1
82.5°	63.0	64.7	64.7	64.7	66.3	69.6	71.3	73.0	76.3	77.9	77.9
85°	38.1	39.8	39.8	39.8	41.5	43.1	46.4	48.1	49.7	49.7	51.4
87.5°	14.9	16.6	18.2	18.2	19.9	21.6	23.2	24.9	26.5	26.5	28.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0
2.5°	3727.4	3739.0	3727.4	3734.0	3742.3	3727.4	3692.6	3679.3	3674.3	3654.4	3641.2
5°	3934.7	3934.7	3929.7	3943.0	3941.3	3918.1	3881.6	3865.0	3848.4	3826.9	3810.3
7.5°	3787.1	3800.4	3808.6	3860.0	3893.2	3896.5	3919.7	3924.7	3931.3	3924.7	3914.8
10°	3574.9	3569.9	3593.1	3641.2	3669.4	3684.3	3729.1	3750.6	3768.9	3805.3	3843.5
12.5°	3455.5	3462.1	3472.1	3506.9	3533.4	3526.8	3545.0	3559.9	3581.5	3618.0	3672.7
15°	3375.9	3382.5	3392.5	3419.0	3435.6	3427.3	3437.2	3447.2	3462.1	3480.3	3513.5
17.5°	3289.7	3301.3	3312.9	3341.1	3356.0	3354.3	3362.6	3365.9	3370.9	3382.5	3405.7
20°	3155.4	3191.8	3215.0	3253.2	3274.7	3271.4	3286.3	3291.3	3298.0	3309.6	3319.5
22.5°	3032.7	3042.6	3054.2	3095.7	3132.1	3176.9	3186.9	3200.1	3216.7	3228.3	3238.3
25°	2963.0	2956.4	2961.4	2989.5	3009.4	3012.8	3027.7	3070.8	3115.6	3135.5	3158.7
27.5°	2921.6	2914.9	2913.3	2926.5	2929.9	2921.6	2918.2	2931.5	2964.7	2997.8	3067.5
30°	2876.8	2868.5	2861.9	2873.5	2878.5	2866.8	2845.3	2833.7	2853.6	2861.9	2890.1
32.5°	2823.7	2815.4	2812.1	2818.8	2822.1	2812.1	2788.9	2775.7	2772.3	2765.7	2772.3
35°	2764.0	2755.8	2750.8	2752.4	2759.1	2750.8	2730.9	2714.3	2706.0	2687.8	2674.5
37.5°	1424.3	2017.9	2619.8	2682.8	2689.4	2687.8	2667.9	2649.6	2641.3	2619.8	2613.2
40°	651.6	727.9	1092.7	1427.6	2059.4	2616.5	2598.2	2580.0	2565.1	2558.4	2533.6
42.5°	650.0	651.6	653.3	645.0	799.2	1361.3	2009.6	2508.7	2498.8	2482.2	2463.9
45°	650.0	641.7	648.3	638.4	641.7	640.0	797.5	1286.7	2289.8	2392.6	2384.3
47.5°	643.3	638.4	645.0	636.7	626.8	631.7	625.1	633.4	988.2	1676.3	2296.5
50°	613.5	616.8	628.4	626.8	618.5	625.1	613.5	623.4	615.2	674.8	1299.9
52.5°	568.7	575.4	587.0	596.9	600.2	608.5	605.2	608.5	601.9	603.5	605.2
55°	515.7	524.0	533.9	548.8	555.5	568.7	578.7	583.6	591.9	590.3	577.0
57.5°	465.9	474.2	482.5	497.4	512.4	519.0	537.2	547.2	568.7	563.8	560.4
60°	419.5	426.1	434.4	437.7	456.0	467.6	484.2	494.1	522.3	528.9	538.9
62.5°	378.0	381.4	388.0	393.0	404.6	416.2	424.5	441.1	456.0	477.5	492.5
65°	339.9	343.2	348.2	351.5	353.2	369.8	374.7	393.0	397.9	421.2	434.4
67.5°	296.8	303.4	310.1	313.4	316.7	326.6	330.0	338.3	349.9	359.8	376.4
70°	252.0	257.0	263.6	268.6	275.2	281.9	291.8	296.8	305.1	311.7	325.0
72.5°	210.6	215.6	218.9	223.8	228.8	233.8	242.1	253.7	260.3	271.9	275.2
75°	170.8	175.8	179.1	182.4	187.4	190.7	194.0	205.6	212.2	222.2	232.1
77.5°	140.9	140.9	144.3	154.2	152.5	152.5	155.9	162.5	167.5	174.1	184.0
80°	109.4	111.1	112.8	121.0	122.7	124.4	122.7	127.7	132.6	134.3	140.9
82.5°	81.2	82.9	82.9	87.9	92.9	92.9	92.9	94.5	99.5	101.1	104.5
85°	54.7	56.4	58.0	59.7	63.0	64.7	66.3	66.3	69.6	71.3	73.0
87.5°	29.8	33.2	34.8	36.5	38.1	39.8	41.5	43.1	44.8	46.4	48.1
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):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0	3618.0
2.5°	3636.2	3627.9	3622.9	3609.7	3606.4	3584.8	3588.1	3584.8	3584.8	3589.8	3606.4
5°	3792.1	3752.3	3742.3	3714.1	3690.9	3651.1	3626.3	3613.0	3593.1	3584.8	3596.4
7.5°	3898.2	3868.3	3843.5	3818.6	3785.4	3739.0	3704.2	3664.4	3631.2	3599.7	3591.4
10°	3879.9	3913.1	3913.1	3898.2	3866.7	3820.3	3778.8	3729.1	3671.0	3621.3	3591.4
12.5°	3725.7	3783.8	3830.2	3865.0	3896.5	3865.0	3823.6	3783.8	3719.1	3646.2	3591.4
15°	3556.6	3616.3	3674.3	3747.3	3823.6	3855.1	3853.4	3807.0	3749.0	3672.7	3596.4
17.5°	3437.2	3478.7	3510.2	3589.8	3682.6	3763.9	3818.6	3821.9	3765.5	3697.6	3598.1
20°	3347.7	3377.5	3404.1	3448.8	3530.1	3629.6	3730.7	3787.1	3777.1	3702.5	3603.0
22.5°	3266.5	3288.0	3309.6	3342.7	3407.4	3472.1	3589.8	3705.8	3755.6	3694.2	3598.1
25°	3185.2	3208.4	3225.0	3248.2	3299.6	3352.7	3435.6	3579.8	3690.9	3687.6	3588.1
27.5°	3089.0	3120.5	3140.4	3171.9	3206.8	3246.6	3302.9	3438.9	3598.1	3654.4	3561.6
30°	2973.0	3019.4	3049.2	3084.1	3113.9	3148.7	3193.5	3276.4	3473.7	3589.8	3533.4
32.5°	2805.5	2888.4	2954.7	2987.9	3021.1	3050.9	3090.7	3160.3	3321.2	3501.9	3501.9
35°	2686.1	2724.3	2783.9	2880.1	2921.6	2951.4	2987.9	3042.6	3145.4	3397.4	3450.5
37.5°	2593.3	2608.2	2638.0	2732.5	2810.5	2858.6	2895.0	2929.9	3031.0	3254.8	3384.2
40°	2523.6	2518.6	2515.3	2560.1	2671.2	2747.5	2788.9	2823.7	2901.7	3084.1	3296.3
42.5°	2442.4	2437.4	2420.8	2432.4	2487.1	2614.8	2677.8	2716.0	2780.6	2905.0	3200.1
45°	2357.8	2349.5	2342.9	2331.3	2351.2	2422.5	2551.8	2608.2	2644.7	2755.8	3079.1
47.5°	2271.6	2260.0	2251.7	2241.7	2230.1	2263.3	2386.0	2487.1	2550.2	2619.8	2933.2
50°	2148.9	2163.8	2153.9	2142.3	2132.3	2125.7	2177.1	2342.9	2420.8	2477.2	2755.8
52.5°	1013.1	1969.8	2052.7	2041.1	2027.9	2016.2	2027.9	2153.9	2294.8	2339.6	2541.9
55°	577.0	877.1	1825.6	1930.0	1918.4	1901.8	1891.9	1935.0	2145.6	2205.3	2346.2
57.5°	555.5	557.1	805.8	1739.3	1804.0	1789.1	1777.5	1787.4	1966.5	2067.6	2175.4
60°	537.2	537.2	537.2	769.4	1663.1	1668.0	1653.1	1636.5	1714.5	1913.4	2003.0
62.5°	497.4	507.4	512.4	512.4	759.4	1540.4	1525.4	1520.5	1523.8	1727.7	1830.5
65°	446.0	469.2	479.2	485.8	485.8	797.5	1394.5	1386.2	1374.6	1452.5	1656.4
67.5°	389.7	412.9	434.4	447.7	449.3	464.3	832.4	1248.5	1232.0	1233.6	1470.7
70°	331.6	351.5	374.7	394.6	412.9	421.2	434.4	1036.3	1091.0	1067.8	1260.2
72.5°	286.9	295.1	311.7	331.6	353.2	373.1	384.7	412.9	946.8	921.9	958.4
75°	238.8	245.4	257.0	270.3	286.9	310.1	330.0	349.9	502.4	772.7	767.7
77.5°	185.7	197.3	210.6	218.9	227.2	243.7	270.3	290.2	310.1	522.3	615.2
80°	142.6	150.9	157.5	165.8	175.8	187.4	197.3	220.5	243.7	262.0	470.9
82.5°	106.1	111.1	116.1	119.4	122.7	129.3	147.6	155.9	170.8	187.4	222.2
85°	74.6	77.9	81.2	82.9	84.6	86.2	92.9	94.5	109.4	112.8	134.3
87.5°	48.1	49.7	53.1	54.7	54.7	56.4	58.0	58.0	58.0	54.7	66.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213889

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CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	3618.0	3618.0
2.5°	3619.6	3646.2
5°	3614.7	3649.5
7.5°	3601.4	3634.5
10°	3581.5	3621.3
12.5°	3559.9	3598.1
15°	3541.7	3569.9
17.5°	3521.8	3538.4
20°	3495.3	3508.5
22.5°	3468.7	3462.1
25°	3438.9	3424.0
27.5°	3400.8	3372.6
30°	3365.9	3316.2
32.5°	3332.8	3251.5
35°	3288.0	3185.2
37.5°	3241.6	3117.2
40°	3186.9	3039.3
42.5°	3128.8	2961.4
45°	3055.9	2886.7
47.5°	2991.2	2797.2
50°	2901.7	2701.0
52.5°	2792.2	2611.5
55°	2662.9	2502.1
57.5°	2523.6	2387.7
60°	2374.4	2256.7
62.5°	2193.7	2120.7
65°	1981.4	1964.8
67.5°	1704.5	1792.4
70°	1397.8	1595.1
72.5°	1169.0	1386.2
75°	958.4	1152.4
77.5°	759.4	903.7
80°	474.2	661.6
82.5°	318.4	434.4
85°	192.3	207.3
87.5°	74.6	76.3
90°	0.0	0.0

(END OF REPORT)