

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: P1213515

Luminaire Tested: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213515
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-LD5-69SL-RM-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

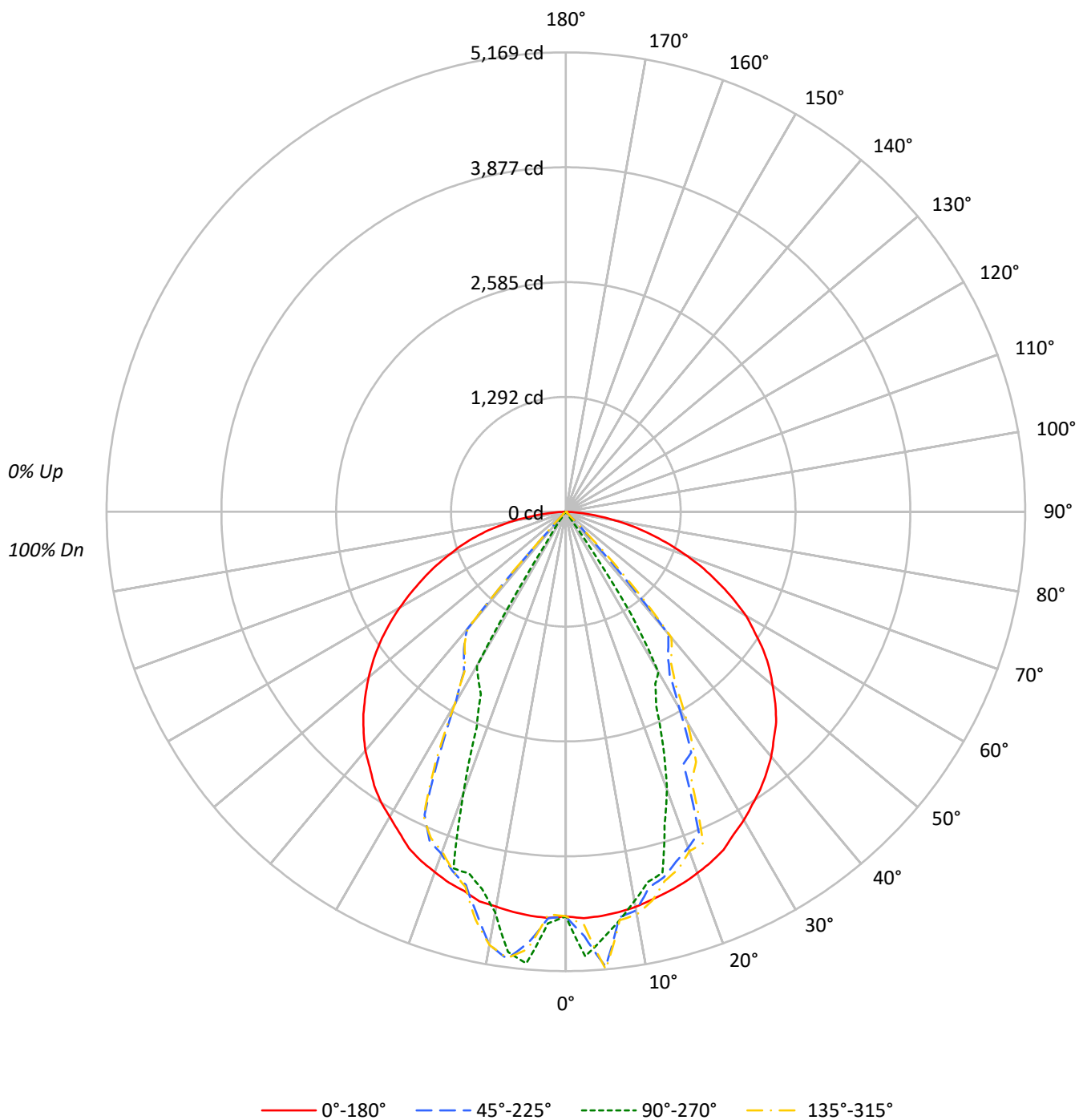
Lumens per Lamp: N/A
Luminaire Lumens: 6472.0 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 70
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: P1213515

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

Luminous Intensity Polar Plot



TEST NUMBER: P1213515

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90		
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81		
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72		
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65		
5	85	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59		
6	80	69	62	57	79	69	62	57	67	61	56	65	60	56	64	59	55	54		
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49		
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45		
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42		
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	36782	36782	36782	36782
5°	36932	37829	36921	40061
10°	36843	34231	36821	35220
15°	36743	31951	36652	32034
20°	36785	25167	36681	25477
25°	36892	18212	36712	17186
30°	36724	15976	36335	15358
35°	36832	352	36292	427
40°	36959	77	36074	77
45°	37089	46	35696	34
50°	36806	36	35117	36
55°	36589	25	34342	25
60°	35899	26	33091	26
65°	34027	43	31603	29
70°	31566	48	30052	48
75°	27922	53	28381	53
80°	22679	61	23975	61
85°	13342	72	13622	72

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2°

Vertical Angle: 45°

Luminance: 40048 cd/sqm

TEST NUMBER: P1213515

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	456.7	7.1
10°-20°	1245.6	19.2
20°-30°	1585.0	24.5
30°-40°	1338.9	20.7
40°-50°	875.3	13.5
50°-60°	551.5	8.5
60°-70°	293.6	4.5
70°-80°	107.0	1.7
80°-90°	18.4	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°	3287.2	50.8
0°-40°	4626.1	71.5
0°-60°	6053.0	93.5
0°-90°	6472.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6472.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4552	4552	4552	4552	4552	
5°	4565	4817	4564	5101	4565	434
15°	4429	4203	4418	4214	4429	1252
25°	4198	2400	4177	2265	4198	1930
35°	3815	45	3759	55	3815	2387
45°	3347	6	3221	4	3347	2574
55°	2713	3	2546	3	2713	2417
65°	1899	4	1764	3	1899	1881
75°	999	4	1015	4	999	1060
85°	195	4	199	4	195	247
90°	0	0	0	0	0	

TEST NUMBER: P1213515

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6
2.5°	4577.5	4580.3	4581.6	4584.4	4588.5	4589.8	4592.6	4589.8	4589.8	4589.8	4589.8
5°	4565.3	4570.7	4574.8	4580.3	4589.8	4591.2	4602.1	4603.5	4609.0	4619.9	4628.1
7.5°	4544.8	4550.2	4558.4	4572.1	4585.7	4600.8	4619.9	4640.4	4669.1	4696.4	4730.5
10°	4514.7	4521.5	4531.1	4543.4	4610.3	4619.9	4662.2	4721.0	4737.4	4823.4	4887.6
12.5°	4471.0	4494.2	4518.8	4529.7	4593.9	4695.0	4837.1	4808.4	4777.0	5058.4	5054.3
15°	4428.7	4460.1	4447.8	4536.6	4595.3	4771.5	4711.4	4839.8	5074.8	5017.4	5020.1
17.5°	4383.6	4390.4	4458.7	4532.5	4637.7	4727.8	4801.6	4977.8	5024.2	5028.3	4977.8
20°	4326.2	4359.0	4458.7	4525.6	4703.2	4745.6	4905.4	4995.6	4976.4	4930.0	4843.9
22.5°	4267.5	4367.2	4468.3	4562.5	4686.8	4800.2	4879.4	4921.8	4822.1	4639.0	4540.7
25°	4197.8	4256.5	4389.0	4527.0	4682.7	4748.3	4794.7	4726.4	4596.7	4432.8	4267.5
27.5°	4089.9	4184.1	4353.5	4509.2	4649.9	4729.2	4654.0	4490.1	4281.1	4173.2	4098.1
30°	4006.6	4129.5	4268.8	4419.1	4565.3	4611.7	4420.5	4233.3	4089.9	3982.0	3965.6
32.5°	3905.5	4080.3	4212.8	4356.3	4479.2	4417.7	4231.9	3990.2	3871.3	3830.3	3846.7
35°	3815.3	3947.8	4121.3	4262.0	4350.8	4212.8	3919.1	3768.9	3711.5	3734.7	3704.7
37.5°	3707.4	3882.2	4042.1	4163.6	4133.6	3926.0	3677.3	3581.7	3588.5	3569.4	3512.0
40°	3595.4	3762.0	3928.7	4043.4	3938.2	3621.3	3456.0	3435.6	3439.7	3378.2	3296.2
42.5°	3464.2	3615.9	3782.5	3886.3	3659.6	3412.3	3300.3	3303.0	3267.5	3181.5	3137.8
45°	3346.8	3486.1	3659.6	3669.1	3390.5	3184.2	3151.4	3115.9	3036.7	3008.0	2975.2
47.5°	3196.5	3350.9	3494.3	3442.4	3126.8	2998.4	2973.8	2896.0	2856.4	2834.5	2807.2
50°	3036.7	3192.4	3323.5	3176.0	2878.2	2848.2	2767.6	2706.1	2678.8	2655.6	2631.0
52.5°	2885.0	3013.5	3147.3	2893.2	2687.0	2658.3	2566.8	2531.2	2503.9	2478.0	2472.5
55°	2712.9	2826.3	2917.8	2624.1	2503.9	2437.0	2371.4	2346.8	2320.9	2308.6	2329.1
57.5°	2517.6	2646.0	2632.3	2359.1	2305.8	2208.9	2184.3	2167.9	2148.8	2157.0	1986.2
60°	2341.4	2439.7	2372.8	2165.1	2075.0	2009.4	1987.6	1976.6	1987.6	1820.9	1601.0
62.5°	2124.2	2234.8	2099.6	1938.4	1842.8	1811.3	1792.2	1807.3	1647.4	1464.4	1411.1
65°	1898.8	2019.0	1819.5	1695.2	1635.1	1607.8	1606.4	1479.4	1322.3	1251.3	1251.3
67.5°	1681.6	1805.9	1549.1	1445.3	1422.0	1424.8	1345.5	1152.9	1109.2	1061.4	923.4
70°	1450.7	1560.0	1280.0	1217.1	1203.5	1193.9	1001.3	949.4	897.5	770.4	759.5
72.5°	1221.2	1274.5	1028.6	1013.6	1010.9	840.1	801.9	713.1	653.0	637.9	631.1
75°	998.6	982.2	812.8	826.4	696.7	636.6	575.1	523.2	515.0	509.5	127.0
77.5°	788.2	706.2	640.7	557.3	498.6	423.5	411.2	403.0	265.0	95.6	77.9
80°	573.7	457.6	426.2	362.0	308.7	296.4	303.3	92.9	73.8	61.5	53.3
82.5°	364.7	292.3	239.1	209.0	203.5	88.8	65.6	53.3	46.4	39.6	32.8
85°	195.3	129.8	120.2	101.1	60.1	41.0	34.2	26.0	21.9	17.8	16.4
87.5°	61.5	51.9	42.3	34.2	20.5	13.7	10.9	9.6	8.2	6.8	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: P1213515

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6
2.5°	4587.1	4589.8	4588.5	4592.6	4592.6	4598.0	4602.1	4606.2	4614.4	4618.5	4649.9
5°	4645.9	4652.7	4673.2	4692.3	4715.5	4722.3	4762.0	4771.5	4818.0	4823.4	4976.4
7.5°	4777.0	4802.9	4852.1	4901.3	4950.5	4981.9	5036.5	5070.7	5107.6	5140.4	5261.9
10°	4935.4	4979.2	5027.0	5076.1	5104.8	5164.9	5197.7	5203.2	5193.6	5140.4	4943.6
12.5°	5091.2	5134.9	5114.4	5124.0	5158.1	5051.6	5066.6	4990.1	5043.4	4779.7	4584.4
15°	5069.3	5066.6	5016.0	4852.1	4879.4	4675.9	4593.9	4531.1	4581.6	4554.3	4524.3
17.5°	5003.7	4879.4	4792.0	4595.3	4512.0	4454.6	4456.0	4457.3	4432.8	4458.7	4382.2
20°	4726.4	4587.1	4457.3	4387.7	4363.1	4322.1	4342.6	4322.1	4323.5	4331.7	4214.2
22.5°	4357.6	4315.3	4240.1	4262.0	4253.8	4290.7	4263.4	4221.0	4234.7	4173.2	4084.4
25°	4208.7	4159.5	4156.8	4165.0	4152.7	4136.3	4111.7	4047.5	4043.4	4024.3	3983.3
27.5°	4058.5	4061.2	4069.4	4044.8	4001.1	3968.3	3931.4	3900.0	3912.3	3890.4	3834.4
30°	3954.6	3953.3	3904.1	3882.2	3801.6	3803.0	3793.5	3774.3	3762.0	3763.4	3727.9
32.5°	3807.1	3764.8	3708.8	3681.4	3674.6	3650.0	3630.9	3635.0	3644.6	3610.4	3647.3
35°	3655.5	3568.1	3559.9	3536.6	3514.8	3498.4	3505.2	3477.9	3476.5	3472.4	3171.9
37.5°	3451.9	3409.6	3405.5	3380.9	3365.9	3361.8	3335.8	3339.9	3352.2	3374.1	2704.7
40°	3283.9	3245.7	3236.1	3234.7	3202.0	3199.2	3206.1	3232.0	3249.8	3113.2	2577.7
42.5°	3103.6	3106.3	3076.3	3057.2	3061.3	3073.6	3106.3	3016.2	2613.2	2490.3	2356.4
45°	2949.2	2935.6	2919.2	2913.7	2949.2	2924.7	2564.0	2366.0	2318.1	2312.7	1937.0
47.5°	2788.1	2784.0	2777.1	2781.2	2579.1	2299.0	2217.1	2191.1	2199.3	2193.8	1663.8
50°	2625.5	2631.0	2631.0	2297.7	2109.1	2062.7	2069.5	2092.7	1948.0	1818.2	1550.4
52.5°	2484.8	2442.5	2092.7	1972.5	1930.2	1950.7	1901.5	1719.8	1588.7	1512.2	1434.3
55°	2223.9	1912.4	1834.6	1815.4	1830.5	1648.8	1536.8	1419.3	1385.1	1377.0	1331.9
57.5°	1749.9	1687.0	1693.9	1617.4	1443.9	1341.4	1296.4	1280.0	1264.9	1254.0	109.3
60°	1547.7	1565.5	1433.0	1269.0	1199.4	1185.7	1174.8	1159.8	1157.0	1137.9	69.7
62.5°	1416.6	1245.8	1131.1	1090.1	1073.7	1069.6	1049.1	1042.3	885.2	121.6	51.9
65°	1068.2	998.6	976.7	967.1	949.4	949.4	788.2	124.3	101.1	87.4	46.4
67.5°	871.5	866.1	855.1	842.8	573.7	120.2	105.2	91.5	79.2	69.7	41.0
70°	737.7	734.9	669.4	122.9	102.5	90.2	79.2	71.0	65.6	58.7	36.9
72.5°	605.1	122.9	103.8	90.2	77.9	71.0	64.2	57.4	51.9	47.8	30.1
75°	94.3	83.3	73.8	66.9	61.5	54.6	49.2	45.1	43.7	38.2	20.5
77.5°	68.3	58.7	53.3	47.8	42.3	38.2	32.8	28.7	26.0	21.9	15.0
80°	47.8	42.3	38.2	31.4	27.3	23.2	20.5	17.8	16.4	13.7	6.8
82.5°	27.3	23.2	20.5	16.4	15.0	12.3	10.9	9.6	9.6	6.8	6.8
85°	12.3	12.3	9.6	8.2	6.8	6.8	6.8	5.5	5.5	4.1	4.1
87.5°	5.5	5.5	5.5	5.5	5.5	4.1	4.1	4.1	4.1	4.1	2.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213515

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
0°	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6
2.5°	4693.7	4711.4	4745.6	4781.1	4741.5	4883.5	4872.6	4920.4	4946.4	4958.7	4987.4
5°	5111.7	5190.9	5216.8	5139.0	5093.9	5047.5	4942.3	4863.0	4872.6	4846.7	4752.4
7.5°	5103.5	4934.1	4706.0	4602.1	4593.9	4581.6	4614.4	4633.6	4636.3	4634.9	4632.2
10°	4671.8	4584.4	4569.4	4555.7	4561.2	4510.6	4487.4	4421.8	4457.3	4438.2	4445.0
12.5°	4540.7	4520.2	4439.6	4327.6	4394.5	4344.0	4315.3	4334.4	4312.5	4292.0	4285.2
15°	4462.8	4330.3	4285.2	4257.9	4238.8	4227.8	4237.4	4215.6	4208.7	4204.6	4214.2
17.5°	4301.6	4248.3	4199.2	4126.8	4128.1	4124.0	4151.3	4192.3	4195.1	3984.7	3794.8
20°	4174.6	4130.9	4068.0	4022.9	4084.4	3975.1	3553.0	3352.2	3320.8	3320.8	3326.3
22.5°	4073.5	3976.5	3980.6	3909.6	3334.5	3217.0	3219.7	3232.0	3176.0	2984.8	2964.3
25°	3935.5	3920.5	3621.3	3129.6	3133.7	3042.1	2901.4	2703.4	2488.9	2488.9	2453.4
27.5°	3831.7	3513.4	3076.3	3055.8	2748.4	2554.5	2434.3	2252.6	2228.0	2204.8	2207.5
30°	3742.9	2972.5	2983.4	2554.5	2327.7	2166.5	2157.0	2126.9	2111.9	2107.8	2092.7
32.5°	2958.8	2894.6	2497.1	2174.7	2085.9	2060.0	2047.7	2013.5	2012.2	1986.2	1805.9
35°	2774.4	2540.8	2090.0	2002.6	1976.6	1952.0	1931.6	1296.4	153.0	61.5	53.3
37.5°	2564.0	2122.8	1932.9	1893.3	1868.7	1381.1	138.0	47.8	34.2	24.6	21.9
40°	2173.3	1896.0	1835.9	1792.2	739.0	47.8	30.1	23.2	13.7	12.3	10.9
42.5°	1833.2	1786.8	1722.6	524.6	54.6	23.2	15.0	10.9	9.6	9.6	8.2
45°	1715.7	1674.7	693.9	51.9	34.2	10.9	9.6	9.6	8.2	5.5	5.5
47.5°	1606.4	1413.8	62.8	32.8	21.9	9.6	8.2	5.5	5.5	5.5	4.1
50°	1490.3	77.9	43.7	24.6	13.7	5.5	5.5	5.5	5.5	4.1	4.1
52.5°	278.7	54.6	35.5	21.9	6.8	5.5	5.5	5.5	4.1	4.1	4.1
55°	65.6	43.7	32.8	19.1	5.5	5.5	5.5	4.1	4.1	4.1	2.7
57.5°	49.2	32.8	26.0	17.8	5.5	4.1	4.1	4.1	4.1	4.1	2.7
60°	41.0	23.2	20.5	16.4	4.1	4.1	4.1	4.1	4.1	4.1	2.7
62.5°	28.7	19.1	15.0	12.3	4.1	4.1	4.1	4.1	4.1	4.1	4.1
65°	23.2	15.0	12.3	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
67.5°	20.5	12.3	8.2	2.7	4.1	4.1	4.1	4.1	4.1	4.1	4.1
70°	16.4	4.1	4.1	2.7	4.1	4.1	4.1	4.1	4.1	4.1	4.1
72.5°	13.7	4.1	2.7	2.7	4.1	4.1	4.1	4.1	4.1	4.1	4.1
75°	13.7	6.8	2.7	2.7	4.1	4.1	5.5	5.5	4.1	4.1	4.1
77.5°	9.6	6.8	2.7	2.7	4.1	4.1	5.5	5.5	4.1	4.1	4.1
80°	5.5	6.8	2.7	4.1	4.1	8.2	9.6	5.5	4.1	4.1	4.1
82.5°	5.5	6.8	8.2	8.2	4.1	6.8	8.2	6.8	5.5	4.1	4.1
85°	5.5	4.1	5.5	6.8	4.1	6.8	6.8	5.5	5.5	4.1	4.1
87.5°	2.7	4.1	4.1	5.5	5.5	5.5	6.8	5.5	5.5	5.5	4.1
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: P1213515

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6
2.5°	5001.0	5006.5	4920.4	4890.4	4916.3	4910.9	4887.6	4801.6	4792.0	4734.6	4651.3
5°	4779.7	4816.6	4771.5	4849.4	4812.5	4849.4	4961.4	5013.3	5098.0	5149.9	5169.0
7.5°	4625.4	4633.6	4633.6	4640.4	4647.2	4648.6	4640.4	4634.9	4611.7	4583.0	4634.9
10°	4438.2	4447.8	4464.2	4461.4	4460.1	4488.8	4495.6	4554.3	4551.6	4562.5	4602.1
12.5°	4341.2	4267.5	4334.4	4316.6	4341.2	4303.0	4374.0	4361.7	4365.8	4398.6	4483.3
15°	4180.0	4203.3	4219.7	4219.7	4229.2	4221.0	4212.8	4268.8	4303.0	4304.3	4298.9
17.5°	3869.9	3693.7	3874.0	3827.6	4197.8	4207.4	4175.9	4150.0	4150.0	4170.5	4214.2
20°	3322.2	3326.3	3327.6	3345.4	3367.3	3365.9	3367.3	3905.5	4160.9	4102.2	4062.6
22.5°	2912.4	2861.8	2956.1	2949.2	3066.7	3196.5	3320.8	3308.5	3316.7	3696.5	4038.0
25°	2334.5	2400.1	2346.8	2370.1	2502.6	2656.9	2752.5	3002.5	3274.4	3255.2	3344.0
27.5°	2197.9	2180.2	2204.8	2204.8	2222.5	2243.0	2296.3	2437.0	2678.8	2932.9	3173.3
30°	2068.2	2083.2	2085.9	2110.5	2124.2	2137.8	2146.0	2199.3	2253.9	2430.2	2726.6
32.5°	1553.2	1361.9	1792.2	1908.3	2006.7	2029.9	2046.3	2068.2	2107.8	2133.7	2282.6
35°	45.1	45.1	47.8	54.6	69.7	469.9	1789.5	1972.5	1998.5	2031.3	2058.6
37.5°	21.9	16.4	19.1	20.5	24.6	34.2	49.2	153.0	1703.4	1926.1	1956.1
40°	9.6	9.6	9.6	9.6	10.9	13.7	20.5	34.2	51.9	1370.1	1848.2
42.5°	8.2	8.2	8.2	8.2	8.2	8.2	9.6	12.3	24.6	58.7	969.9
45°	5.5	5.5	4.1	5.5	5.5	6.8	8.2	8.2	10.9	36.9	66.9
47.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	6.8	8.2	24.6	35.5
50°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	19.1	24.6
52.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	8.2	21.9
55°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.1	4.1	5.5	19.1
57.5°	2.7	2.7	2.7	2.7	2.7	4.1	2.7	2.7	4.1	4.1	17.8
60°	2.7	2.7	2.7	2.7	2.7	4.1	4.1	4.1	4.1	4.1	16.4
62.5°	4.1	4.1	2.7	4.1	2.7	2.7	4.1	4.1	4.1	4.1	10.9
65°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	2.7	4.1
67.5°	4.1	4.1	4.1	4.1	2.7	4.1	2.7	4.1	4.1	2.7	2.7
70°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	2.7	2.7	2.7	2.7
72.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	2.7	2.7	2.7	2.7
75°	4.1	4.1	4.1	4.1	4.1	4.1	5.5	5.5	2.7	2.7	2.7
77.5°	4.1	4.1	4.1	4.1	4.1	4.1	6.8	8.2	6.8	6.8	2.7
80°	4.1	4.1	4.1	4.1	4.1	4.1	6.8	6.8	6.8	6.8	9.6
82.5°	4.1	4.1	4.1	4.1	4.1	4.1	5.5	5.5	5.5	5.5	6.8
85°	4.1	4.1	4.1	4.1	4.1	4.1	5.5	5.5	5.5	4.1	5.5
87.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	5.5	4.1	4.1	4.1
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: P1213515

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6
2.5°	4658.1	4611.7	4596.7	4565.3	4562.5	4565.3	4558.4	4548.9	4554.3	4544.8	4536.6
5°	5180.0	5055.7	4975.1	4867.1	4718.2	4685.5	4677.3	4630.8	4614.4	4609.0	4587.1
7.5°	4757.9	4984.6	5121.2	5167.7	4992.8	4951.8	4904.0	4865.8	4828.9	4759.2	4716.9
10°	4570.7	4581.6	4712.8	4865.8	5114.4	5148.5	5174.5	5091.2	5068.0	4890.4	4852.1
12.5°	4527.0	4528.4	4543.4	4636.3	4831.6	4853.5	4945.0	4994.2	5054.3	5088.4	5061.1
15°	4327.6	4438.2	4520.2	4528.4	4546.1	4584.4	4611.7	4782.5	4854.9	5048.8	5037.9
17.5°	4234.7	4270.2	4389.0	4486.0	4469.6	4456.0	4477.8	4501.1	4570.7	4764.7	4762.0
20°	4080.3	4193.7	4257.9	4359.0	4450.5	4454.6	4430.0	4416.4	4389.0	4420.5	4449.1
22.5°	4014.7	4032.5	4152.7	4223.7	4327.6	4364.4	4369.9	4371.3	4356.3	4339.9	4331.7
25°	4007.9	3951.9	4013.4	4102.2	4178.7	4218.3	4263.4	4278.4	4272.9	4272.9	4264.7
27.5°	3279.8	3934.2	3901.4	3960.1	4053.0	4080.3	4103.5	4150.0	4178.7	4199.2	4208.7
30°	3124.1	3241.6	3813.9	3822.1	3916.4	3913.7	3939.6	3977.9	4014.7	4062.6	4074.9
32.5°	2763.5	3051.7	3491.6	3684.2	3782.5	3792.1	3805.7	3816.7	3850.8	3904.1	3950.5
35°	2214.3	2779.9	2991.6	3618.6	3636.4	3655.5	3663.7	3689.6	3700.6	3722.4	3763.4
37.5°	2004.0	2297.7	2870.0	3129.6	3468.3	3484.7	3528.4	3539.4	3557.1	3574.9	3606.3
40°	1882.4	1963.0	2389.2	2794.9	3333.1	3344.0	3359.1	3386.4	3387.7	3408.2	3436.9
42.5°	1785.4	1837.3	1961.6	2669.2	3237.5	3236.1	3200.6	3218.4	3226.6	3248.4	3288.0
45°	1426.1	1723.9	1803.2	2180.2	2577.7	2763.5	3120.0	3061.3	3059.9	3068.1	3110.4
47.5°	72.4	1621.5	1677.5	1799.1	2434.3	2441.1	2487.5	2878.2	2938.3	2919.2	2923.3
50°	49.2	112.0	1562.7	1618.7	2098.2	2267.6	2301.8	2319.5	2544.9	2796.3	2755.3
52.5°	38.2	64.2	957.6	1502.6	1704.8	1829.1	2049.0	2174.7	2188.4	2289.5	2632.3
55°	34.2	49.2	103.8	1386.5	1449.4	1476.7	1605.1	1825.0	2002.6	2055.9	2060.0
57.5°	30.1	45.1	71.0	627.0	1318.2	1323.7	1345.5	1422.0	1581.9	1728.0	1893.3
60°	27.3	39.6	56.0	107.9	1198.0	1211.7	1215.8	1236.3	1255.4	1355.1	1545.0
62.5°	16.4	31.4	49.2	77.9	948.0	1088.7	1087.4	1101.0	1118.8	1129.7	1168.0
65°	13.7	24.6	42.3	65.6	116.1	144.8	879.7	978.1	989.0	1004.0	1010.9
67.5°	12.3	21.9	31.4	51.9	87.4	99.7	114.7	142.1	775.9	874.3	887.9
70°	10.9	15.0	26.0	43.7	71.0	76.5	86.1	98.4	116.1	143.4	702.1
72.5°	6.8	10.9	17.8	31.4	54.6	61.5	66.9	75.1	83.3	99.7	114.7
75°	2.7	8.2	15.0	23.2	42.3	46.4	50.5	56.0	62.8	73.8	82.0
77.5°	2.7	6.8	12.3	16.4	27.3	31.4	36.9	41.0	46.4	51.9	60.1
80°	9.6	5.5	8.2	12.3	19.1	20.5	23.2	26.0	30.1	34.2	39.6
82.5°	6.8	8.2	9.6	8.2	9.6	12.3	13.7	16.4	17.8	20.5	21.9
85°	5.5	5.5	6.8	6.8	6.8	6.8	6.8	6.8	8.2	9.6	12.3
87.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	5.5	5.5
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: P1213515

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6
2.5°	4536.6	4533.8	4525.6	4525.6	4524.3	4529.7	4533.8	4537.9	4536.6	4544.8	4536.6
5°	4570.7	4563.9	4551.6	4540.7	4536.6	4539.3	4535.2	4539.3	4533.8	4540.7	4528.4
7.5°	4665.0	4641.8	4593.9	4574.8	4550.2	4548.9	4536.6	4533.8	4525.6	4525.6	4510.6
10°	4831.6	4719.6	4706.0	4648.6	4628.1	4528.4	4550.2	4513.3	4509.2	4491.5	4484.7
12.5°	4968.2	4880.8	4854.9	4804.3	4746.9	4544.8	4589.8	4510.6	4506.5	4471.0	4434.1
15°	4971.0	5021.5	4950.5	4811.1	4798.8	4659.5	4568.0	4540.7	4505.1	4398.6	4416.4
17.5°	4811.1	4927.3	4961.4	4931.3	4843.9	4749.7	4621.3	4566.6	4460.1	4412.3	4379.5
20°	4551.6	4669.1	4815.2	4824.8	4879.4	4812.5	4644.5	4555.7	4427.3	4344.0	4316.6
22.5°	4345.3	4431.4	4599.4	4677.3	4744.2	4767.4	4660.9	4529.7	4369.9	4289.3	4272.9
25°	4236.0	4255.2	4305.7	4397.2	4544.8	4651.3	4666.3	4527.0	4443.7	4267.5	4174.6
27.5°	4196.4	4180.0	4159.5	4206.0	4316.6	4446.4	4532.5	4555.7	4348.1	4180.0	4087.1
30°	4095.3	4104.9	4073.5	4057.1	4129.5	4263.4	4416.4	4454.6	4294.8	4121.3	4014.7
32.5°	3971.0	3987.4	3992.9	3964.2	3949.2	4042.1	4207.4	4298.9	4290.7	4038.0	3919.1
35°	3815.3	3861.8	3874.0	3875.4	3850.8	3835.8	3931.4	4121.3	4193.7	3999.7	3827.6
37.5°	3651.4	3665.0	3732.0	3749.7	3749.7	3704.7	3775.7	3927.3	4028.4	3913.7	3715.6
40°	3446.5	3490.2	3553.0	3584.4	3615.9	3620.0	3580.4	3686.9	3853.6	3824.9	3610.4
42.5°	3297.6	3326.3	3364.5	3406.9	3471.1	3487.5	3446.5	3465.6	3639.1	3714.2	3473.8
45°	3124.1	3162.3	3173.3	3219.7	3286.7	3334.5	3333.1	3293.5	3432.8	3525.7	3374.1
47.5°	2946.5	2983.4	3002.5	3025.7	3074.9	3136.4	3170.5	3152.8	3180.1	3361.8	3241.6
50°	2763.5	2784.0	2822.2	2848.2	2880.9	2916.5	2998.4	3014.8	2976.6	3121.4	3095.4
52.5°	2590.0	2596.8	2622.8	2648.7	2692.4	2718.4	2784.0	2833.1	2830.4	2872.8	2932.9
55°	2454.7	2424.7	2430.2	2450.6	2479.3	2518.9	2555.8	2632.3	2658.3	2666.5	2762.1
57.5°	1917.9	2226.6	2253.9	2252.6	2286.7	2304.5	2338.6	2389.2	2482.1	2461.6	2568.1
60°	1743.0	1777.2	2035.4	2065.4	2077.7	2094.1	2135.1	2181.5	2249.8	2293.6	2340.0
62.5°	1329.1	1536.8	1614.6	1842.8	1878.3	1887.8	1915.2	1937.0	2008.1	2107.8	2088.7
65°	1028.6	1117.4	1355.1	1448.0	1642.0	1666.6	1704.8	1728.0	1748.5	1863.3	1868.7
67.5°	889.3	902.9	967.1	1146.1	1269.0	1458.9	1482.1	1502.6	1534.0	1616.0	1666.6
70°	759.5	775.9	793.7	808.7	968.5	1094.2	1270.4	1277.2	1297.7	1352.4	1467.1
72.5°	143.4	648.9	659.8	669.4	687.1	770.4	938.5	1075.1	1083.3	1109.2	1214.4
75°	97.0	113.4	155.7	535.5	553.2	558.7	587.4	758.1	883.8	889.3	935.7
77.5°	69.7	77.9	94.3	112.0	285.5	428.9	435.8	467.2	597.0	691.2	699.4
80°	47.8	53.3	62.8	71.0	87.4	114.7	316.9	326.5	342.9	472.6	497.2
82.5°	27.3	31.4	36.9	45.1	51.9	65.6	84.7	109.3	222.7	237.7	315.6
85°	13.7	15.0	17.8	21.9	26.0	31.4	42.3	51.9	71.0	128.4	132.5
87.5°	6.8	6.8	6.8	6.8	10.9	12.3	15.0	19.1	24.6	36.9	47.8
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: P1213515

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6
2.5°	4537.9	4557.1	4573.5	4577.5	4577.5	4580.3	4584.4	4587.1	4589.8	4592.6	4589.8
5°	4529.7	4550.2	4563.9	4568.0	4568.0	4576.2	4583.0	4591.2	4595.3	4595.3	4592.6
7.5°	4509.2	4524.3	4542.0	4553.0	4554.3	4568.0	4580.3	4578.9	4584.4	4587.1	4593.9
10°	4481.9	4481.9	4512.0	4520.2	4527.0	4542.0	4546.1	4554.3	4573.5	4576.2	4593.9
12.5°	4468.3	4454.6	4490.1	4494.2	4517.4	4498.3	4522.9	4531.1	4512.0	4537.9	4503.8
15°	4406.8	4423.2	4417.7	4430.0	4471.0	4449.1	4516.1	4494.2	4543.4	4484.7	4588.5
17.5°	4356.3	4353.5	4375.4	4386.3	4394.5	4440.9	4458.7	4483.3	4502.4	4486.0	4527.0
20°	4319.4	4297.5	4313.9	4326.2	4354.9	4390.4	4401.3	4364.4	4428.7	4537.9	4563.9
22.5°	4249.7	4234.7	4253.8	4253.8	4297.5	4292.0	4333.0	4309.8	4369.9	4497.0	4629.5
25°	4155.4	4156.8	4177.3	4201.9	4210.1	4271.6	4293.4	4323.5	4398.6	4550.2	4630.8
27.5°	4059.8	4051.6	4063.9	4114.5	4156.8	4201.9	4208.7	4311.2	4413.6	4517.4	4588.5
30°	3964.2	3956.0	3964.2	4001.1	4051.6	4081.7	4156.8	4293.4	4389.0	4460.1	4527.0
32.5°	3861.8	3853.6	3872.7	3900.0	3988.8	3992.9	4141.8	4270.2	4345.3	4397.2	4384.9
35°	3752.5	3741.5	3759.3	3801.6	3883.6	3913.7	4069.4	4165.0	4249.7	4274.3	4216.9
37.5°	3621.3	3602.2	3624.1	3682.8	3768.9	3856.3	3986.1	4096.7	4141.8	4076.2	4007.9
40°	3484.7	3471.1	3509.3	3539.4	3640.5	3762.0	3910.9	3988.8	3960.1	3885.0	3809.8
42.5°	3363.2	3334.5	3368.6	3426.0	3540.7	3678.7	3798.9	3842.6	3774.3	3663.7	3576.3
45°	3214.3	3180.1	3221.1	3297.6	3420.5	3577.6	3671.9	3656.8	3540.7	3445.1	3324.9
47.5°	3058.5	3017.5	3058.5	3150.1	3288.0	3454.7	3523.0	3454.7	3308.5	3188.3	3091.3
50°	2905.5	2857.7	2897.3	3035.3	3170.5	3298.9	3297.6	3165.1	3077.7	2946.5	2861.8
52.5°	2753.9	2685.6	2725.2	2875.5	3010.7	3156.9	3049.0	2926.0	2820.8	2706.1	2678.8
55°	2566.8	2493.0	2546.3	2764.8	2868.7	2954.7	2782.6	2674.7	2570.9	2513.5	2479.3
57.5°	2389.2	2308.6	2355.0	2613.2	2689.7	2711.6	2553.1	2400.1	2338.6	2319.5	2270.3
60°	2206.1	2114.6	2158.3	2456.1	2509.4	2420.6	2264.9	2146.0	2133.7	2095.5	2057.2
62.5°	2031.3	1930.2	1957.5	2260.8	2285.4	2124.2	1980.7	1949.3	1919.3	1881.0	1860.5
65°	1830.5	1725.3	1763.5	2053.1	2029.9	1822.3	1741.7	1734.9	1695.2	1663.8	1693.9
67.5°	1646.1	1521.8	1575.0	1826.4	1721.2	1551.8	1519.0	1502.6	1471.2	1489.0	1173.4
70°	1443.9	1308.7	1381.1	1581.9	1426.1	1314.1	1301.8	1277.2	1278.6	1016.3	856.5
72.5°	1218.5	1101.0	1206.2	1314.1	1128.3	1095.6	1077.8	1075.1	867.4	704.9	665.3
75°	1020.4	901.6	1015.0	1055.9	898.8	877.0	875.6	724.0	569.6	543.7	531.4
77.5°	796.4	704.9	812.8	751.3	689.8	665.3	597.0	448.1	428.9	411.2	154.4
80°	536.8	543.7	606.5	517.7	491.8	419.4	330.6	316.9	273.2	109.3	86.1
82.5°	326.5	409.8	386.6	323.7	316.9	228.1	209.0	106.5	79.2	62.8	54.6
85°	169.4	207.6	199.4	176.2	131.1	117.5	65.6	50.5	41.0	31.4	26.0
87.5°	57.4	76.5	73.8	58.7	45.1	35.5	23.2	19.1	13.7	10.9	9.6
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: P1213515

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6
2.5°	4587.1	4587.1	4584.4	4587.1	4588.5	4585.7	4585.7	4588.5	4589.8	4591.2	4598.0
5°	4593.9	4596.7	4600.8	4609.0	4610.3	4626.7	4633.6	4637.7	4641.8	4643.1	4633.6
7.5°	4609.0	4618.5	4626.7	4625.4	4615.8	4589.8	4581.6	4574.8	4587.1	4618.5	4655.4
10°	4622.6	4578.9	4497.0	4609.0	4574.8	4606.2	4699.1	4719.6	4782.5	4871.2	4897.2
12.5°	4528.4	4648.6	4674.5	4548.9	4781.1	4695.0	4797.5	4887.6	4913.6	5003.7	4949.1
15°	4629.5	4688.2	4727.8	4853.5	4839.8	4913.6	4942.3	4924.5	4928.6	4951.8	5013.3
17.5°	4628.1	4745.6	4771.5	4856.2	4913.6	4915.0	4906.8	4898.6	4920.4	4938.2	4901.3
20°	4707.3	4745.6	4796.1	4830.3	4841.2	4854.9	4880.8	4860.3	4819.3	4779.7	4763.3
22.5°	4667.7	4753.8	4797.5	4802.9	4796.1	4753.8	4715.5	4658.1	4639.0	4618.5	4625.4
25°	4675.9	4715.5	4710.1	4688.2	4659.5	4580.3	4561.2	4536.6	4499.7	4410.9	4330.3
27.5°	4617.2	4596.7	4572.1	4518.8	4466.9	4424.6	4376.7	4297.5	4231.9	4136.3	4100.8
30°	4518.8	4436.8	4376.7	4345.3	4294.8	4223.7	4151.3	4054.4	3971.0	3951.9	3934.2
32.5°	4330.3	4249.7	4200.5	4124.0	4038.0	3953.3	3869.9	3831.7	3813.9	3816.7	3800.3
35°	4137.7	4066.7	3992.9	3878.1	3813.9	3729.2	3699.2	3691.0	3674.6	3656.8	3637.7
37.5°	3932.8	3849.5	3738.8	3670.5	3606.3	3572.2	3557.1	3544.8	3516.1	3484.7	3462.9
40°	3734.7	3584.4	3523.0	3456.0	3436.9	3421.9	3400.0	3370.0	3330.4	3324.9	3315.3
42.5°	3469.7	3361.8	3308.5	3294.9	3271.6	3245.7	3226.6	3193.8	3177.4	3188.3	3196.5
45°	3218.4	3163.7	3146.0	3129.6	3085.8	3049.0	3036.7	3025.7	3039.4	3099.5	2956.1
47.5°	3014.8	2993.0	2971.1	2943.8	2902.8	2875.5	2887.8	2898.7	2911.0	2469.8	2253.9
50°	2838.6	2808.5	2774.4	2744.3	2719.8	2717.0	2781.2	2588.6	2167.9	2157.0	1938.4
52.5°	2646.0	2600.9	2580.4	2562.7	2573.6	2614.6	2163.8	2008.1	1926.1	1673.4	1561.4
55°	2438.4	2398.7	2398.7	2415.1	2356.4	1909.7	1886.5	1631.0	1476.7	1433.0	1415.2
57.5°	2230.7	2226.6	2249.8	2057.2	1733.5	1662.5	1397.4	1341.4	1316.8	1311.4	1282.7
60°	2040.8	2079.1	1740.3	1601.0	1392.0	1255.4	1217.1	1210.3	1184.3	1174.8	1148.8
62.5°	1889.2	1566.8	1458.9	1191.2	1121.5	1103.7	1083.3	1073.7	1050.5	927.5	271.8
65°	1364.7	1289.5	1046.4	1001.3	995.8	969.9	961.7	864.7	203.5	136.6	116.1
67.5°	1030.0	913.9	882.5	874.3	848.3	796.4	236.3	135.2	116.1	101.1	88.8
70°	790.9	770.4	747.2	728.1	214.5	133.9	116.1	98.4	84.7	75.1	68.3
72.5°	647.5	633.8	368.8	140.7	114.7	97.0	86.1	75.1	65.6	60.1	54.6
75°	506.8	140.7	116.1	97.0	83.3	71.0	62.8	56.0	50.5	46.4	42.3
77.5°	114.7	92.9	79.2	66.9	60.1	53.3	47.8	41.0	36.9	32.8	27.3
80°	71.0	61.5	51.9	47.8	41.0	34.2	30.1	27.3	21.9	20.5	17.8
82.5°	46.4	36.9	32.8	27.3	21.9	20.5	17.8	13.7	12.3	10.9	9.6
85°	20.5	17.8	15.0	12.3	9.6	8.2	6.8	5.5	5.5	5.5	5.5
87.5°	6.8	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213515

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6
2.5°	4600.8	4625.4	4648.6	4641.8	4617.2	4578.9	4568.0	4553.0	4563.9	4587.1	4596.7
5°	4633.6	4619.9	4669.1	4741.5	4859.0	4869.9	4951.8	4971.0	5036.5	5077.5	5076.1
7.5°	4680.0	4874.0	4954.6	5042.0	5081.6	5072.0	5084.3	5074.8	5059.8	5052.9	5044.7
10°	4916.3	5063.9	5093.9	5093.9	5032.4	4949.1	4913.6	4852.1	4729.2	4731.9	4711.4
12.5°	5054.3	5106.2	5035.2	4975.1	4727.8	4632.2	4528.4	4479.2	4450.5	4406.8	4423.2
15°	4981.9	4908.1	4865.8	4671.8	4520.2	4348.1	4350.8	4320.7	4289.3	4292.0	4271.6
17.5°	4875.3	4816.6	4516.1	4382.2	4308.4	4241.5	4229.2	4189.6	4169.1	4162.3	4160.9
20°	4729.2	4517.4	4293.4	4260.6	4171.8	4095.3	4083.0	4095.3	4158.2	4046.2	3666.4
22.5°	4558.4	4253.8	4188.2	4095.3	4035.2	4005.2	4080.3	3738.8	3222.5	3285.3	3218.4
25°	4268.8	4136.3	4024.3	3953.3	3946.4	3762.0	3135.0	3069.5	2737.5	2559.9	2360.5
27.5°	4057.1	3999.7	3882.2	3869.9	3781.2	3076.3	2749.8	2389.2	2256.7	2236.2	2192.5
30°	3928.7	3846.7	3775.7	3465.6	3017.5	2476.6	2206.1	2155.6	2132.4	2107.8	2069.5
32.5°	3774.3	3696.5	3730.6	2913.7	2405.6	2132.4	2077.7	2040.8	1998.5	1982.1	1844.1
35°	3617.2	3581.7	2915.1	2449.3	2068.2	2002.6	1961.6	1923.4	1529.9	370.2	125.7
37.5°	3449.2	3441.0	2620.0	2032.6	1937.0	1875.6	1759.4	363.4	86.1	58.7	43.7
40°	3318.1	2621.4	2070.9	1905.6	1827.7	1730.8	243.2	60.1	38.2	23.2	15.0
42.5°	3230.6	2357.8	1853.7	1788.1	1618.7	178.9	61.5	26.0	15.0	12.3	9.6
45°	2490.3	1861.9	1732.1	1663.8	204.9	61.5	35.5	12.3	9.6	8.2	5.5
47.5°	2297.7	1691.1	1614.6	363.4	68.3	32.8	24.6	8.2	5.5	5.5	5.5
50°	1740.3	1562.7	1285.4	88.8	43.7	23.2	17.8	5.5	5.5	5.5	4.1
52.5°	1525.8	1442.5	138.0	58.7	34.2	17.8	10.9	4.1	4.1	4.1	4.1
55°	1394.7	915.2	82.0	45.1	28.7	16.4	6.8	4.1	4.1	4.1	2.7
57.5°	1275.9	122.9	60.1	38.2	26.0	15.0	4.1	4.1	4.1	4.1	2.7
60°	1081.9	88.8	49.2	34.2	24.6	13.7	4.1	4.1	4.1	4.1	4.1
62.5°	140.7	69.7	42.3	30.1	17.8	10.9	2.7	4.1	4.1	4.1	4.1
65°	102.5	54.6	38.2	20.5	10.9	4.1	2.7	4.1	4.1	4.1	4.1
67.5°	79.2	45.1	28.7	17.8	9.6	2.7	2.7	4.1	4.1	4.1	4.1
70°	62.8	38.2	23.2	15.0	8.2	2.7	2.7	4.1	4.1	4.1	4.1
72.5°	49.2	27.3	16.4	8.2	5.5	2.7	2.7	4.1	4.1	4.1	4.1
75°	36.9	21.9	12.3	6.8	2.7	2.7	2.7	4.1	4.1	4.1	4.1
77.5°	24.6	13.7	9.6	5.5	5.5	5.5	6.8	6.8	4.1	4.1	4.1
80°	16.4	9.6	6.8	6.8	6.8	5.5	6.8	6.8	4.1	6.8	4.1
82.5°	8.2	6.8	6.8	5.5	5.5	4.1	5.5	5.5	5.5	5.5	4.1
85°	5.5	4.1	4.1	4.1	4.1	4.1	4.1	4.1	5.5	5.5	4.1
87.5°	2.7	2.7	2.7	2.7	4.1	4.1	4.1	4.1	5.5	5.5	4.1
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: P1213515

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6
2.5°	4584.4	4588.5	4577.5	4636.3	4606.2	4609.0	4621.3	4589.8	4596.7	4574.8	4559.8
5°	5081.6	5089.8	5098.0	5100.7	5106.2	5113.0	5104.8	5100.7	5092.5	5065.2	5036.5
7.5°	5003.7	4994.2	4990.1	4995.6	5005.1	5009.2	5002.4	5011.9	5047.5	5062.5	5072.0
10°	4593.9	4550.2	4580.3	4576.2	4542.0	4656.8	4625.4	4643.1	4655.4	4781.1	4857.6
12.5°	4398.6	4425.9	4374.0	4348.1	4382.2	4405.4	4428.7	4379.5	4447.8	4416.4	4517.4
15°	4234.7	4218.3	4212.8	4214.2	4207.4	4240.1	4248.3	4259.3	4268.8	4311.2	4327.6
17.5°	4160.9	4188.2	4199.2	4207.4	4193.7	4178.7	4163.6	4141.8	4148.6	4137.7	4169.1
20°	3411.0	3319.4	3314.0	3367.3	3308.5	3341.3	3420.5	3950.5	3932.8	4139.1	4069.4
22.5°	2846.8	2760.7	2687.0	2622.8	2714.3	2752.5	2900.1	3066.7	3337.2	3294.9	3588.5
25°	2325.0	2293.6	2274.4	2264.9	2271.7	2269.0	2301.8	2379.6	2502.6	2792.2	3166.4
27.5°	2174.7	2159.7	2152.9	2131.0	2147.4	2141.9	2167.9	2184.3	2221.2	2249.8	2371.4
30°	2055.9	2038.1	2025.8	2002.6	2019.0	2020.4	2028.5	2070.9	2085.9	2110.5	2148.8
32.5°	751.3	442.6	415.3	394.8	431.7	562.8	987.6	1726.7	1969.8	1988.9	2032.6
35°	73.8	61.5	54.6	54.6	56.0	61.5	82.0	215.8	394.8	1525.8	1909.7
37.5°	28.7	24.6	20.5	19.1	20.5	23.2	31.4	41.0	56.0	116.1	517.7
40°	12.3	10.9	9.6	9.6	9.6	9.6	10.9	13.7	20.5	38.2	60.1
42.5°	8.2	6.8	6.8	6.8	6.8	6.8	6.8	6.8	9.6	12.3	24.6
45°	5.5	4.1	4.1	4.1	4.1	4.1	4.1	4.1	5.5	6.8	10.9
47.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	5.5
50°	4.1	4.1	4.1	4.1	2.7	4.1	2.7	4.1	4.1	4.1	4.1
52.5°	4.1	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.1	4.1
55°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.1
57.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
60°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
62.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.1	4.1	2.7
65°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.1	2.7
67.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
70°	4.1	4.1	2.7	4.1	2.7	2.7	4.1	4.1	4.1	2.7	2.7
72.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	8.2	8.2	5.5
75°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	6.8	8.2	6.8
77.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	6.8	6.8	6.8
80°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	5.5	5.5	5.5
82.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	5.5	5.5	5.5
85°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
87.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
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: P1213515

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6
2.5°	4533.8	4532.5	4561.2	4583.0	4574.8	4583.0	4592.6	4593.9	4596.7	4585.7	4581.6
5°	4981.9	4939.5	4857.6	4798.8	4730.5	4606.2	4544.8	4551.6	4553.0	4548.9	4554.3
7.5°	5068.0	5063.9	5035.2	5022.9	4976.4	4887.6	4745.6	4721.0	4660.9	4622.6	4591.2
10°	4852.1	4950.5	4976.4	5020.1	5047.5	5031.1	4910.9	4893.1	4854.9	4811.1	4820.7
12.5°	4618.5	4699.1	4703.2	4940.9	4994.2	4999.7	4953.2	4977.8	4983.3	4884.9	4827.5
15°	4331.7	4369.9	4450.5	4671.8	4833.0	4934.1	4964.1	4977.8	4910.9	4906.8	4883.5
17.5°	4206.0	4230.6	4267.5	4391.8	4636.3	4785.2	4912.2	4902.7	4928.6	4909.5	4850.8
20°	4047.5	4068.0	4133.6	4196.4	4316.6	4514.7	4752.4	4770.2	4804.3	4800.2	4816.6
22.5°	4044.8	3972.4	3983.3	4032.5	4158.2	4335.8	4588.5	4647.2	4669.1	4684.1	4701.9
25°	3208.8	3783.9	3889.1	3920.5	4002.5	4106.3	4404.1	4425.9	4466.9	4533.8	4583.0
27.5°	2779.9	3170.5	3591.3	3809.8	3861.8	3947.8	4125.4	4158.2	4297.5	4313.9	4390.4
30°	2193.8	2495.7	3124.1	3650.0	3736.1	3796.2	3921.9	3987.4	4047.5	4113.1	4193.7
32.5°	2064.1	2111.9	2460.2	3020.3	3689.6	3644.6	3737.4	3777.1	3842.6	3900.0	3958.7
35°	1945.2	1978.0	2051.8	2473.9	3005.3	3520.2	3583.1	3609.0	3645.9	3689.6	3732.0
37.5°	1820.9	1870.1	1920.6	2034.0	2779.9	3421.9	3420.5	3450.6	3472.4	3509.3	3544.8
40°	330.6	1717.1	1799.1	1872.8	2155.6	2729.3	3267.5	3281.2	3296.2	3319.4	3356.3
42.5°	53.3	286.9	1685.7	1756.7	1837.3	2443.8	3197.9	3141.9	3132.3	3148.7	3181.5
45°	27.3	69.7	338.8	1640.6	1713.0	1949.3	2614.6	3044.9	3035.3	3003.9	3010.7
47.5°	20.5	43.7	83.3	566.9	1603.7	1673.4	2412.4	2386.4	2568.1	2916.5	2863.2
50°	17.8	30.1	49.2	116.1	1416.6	1540.9	1857.8	2170.6	2266.2	2278.5	2696.5
52.5°	16.4	20.5	35.5	75.1	297.8	1424.8	1510.8	1620.1	1781.3	2126.9	2118.7
55°	15.0	19.1	30.1	50.5	103.8	1284.1	1372.9	1393.3	1427.5	1592.8	1811.3
57.5°	8.2	17.8	28.7	43.7	77.9	235.0	1245.8	1262.2	1289.5	1296.4	1374.2
60°	4.1	16.4	26.0	38.2	57.4	109.3	1120.1	1139.3	1155.7	1158.4	1183.0
62.5°	2.7	15.0	21.9	35.5	47.8	77.9	265.0	540.9	1028.6	1028.6	1057.3
65°	2.7	10.9	13.7	23.2	43.7	64.2	112.0	129.8	252.7	621.5	927.5
67.5°	2.7	4.1	12.3	19.1	32.8	49.2	82.0	95.6	114.7	131.1	243.2
70°	2.7	2.7	10.9	12.3	20.5	36.9	58.7	66.9	77.9	88.8	102.5
72.5°	2.7	2.7	9.6	9.6	13.7	24.6	45.1	49.2	56.0	62.8	72.4
75°	6.8	5.5	8.2	8.2	9.6	19.1	34.2	38.2	41.0	46.4	53.3
77.5°	6.8	6.8	6.8	6.8	6.8	12.3	21.9	24.6	28.7	31.4	36.9
80°	5.5	5.5	5.5	6.8	6.8	8.2	13.7	15.0	16.4	20.5	21.9
82.5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	8.2	9.6	12.3
85°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	5.5	5.5	5.5	5.5
87.5°	4.1	4.1	4.1	2.7	2.7	4.1	4.1	4.1	4.1	4.1	4.1
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: P1213515

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6
2.5°	4580.3	4572.1	4565.3	4569.4	4557.1	4551.6	4555.7	4557.1	4559.8	4566.6	4568.0
5°	4568.0	4565.3	4577.5	4584.4	4581.6	4584.4	4584.4	4578.9	4570.7	4576.2	4563.9
7.5°	4559.8	4542.0	4528.4	4531.1	4517.4	4533.8	4548.9	4570.7	4577.5	4577.5	4563.9
10°	4700.5	4681.4	4604.9	4553.0	4518.8	4488.8	4559.8	4487.4	4521.5	4391.8	4540.7
12.5°	4816.6	4842.6	4808.4	4666.3	4641.8	4551.6	4603.5	4514.7	4488.8	4339.9	4387.7
15°	4863.0	4813.9	4802.9	4763.3	4710.1	4684.1	4544.8	4529.7	4487.4	4503.8	4440.9
17.5°	4822.1	4846.7	4813.9	4787.9	4733.3	4671.8	4588.5	4514.7	4456.0	4324.8	4435.5
20°	4782.5	4815.2	4716.9	4733.3	4738.7	4667.7	4624.0	4562.5	4488.8	4365.8	4270.2
22.5°	4716.9	4693.7	4701.9	4677.3	4656.8	4666.3	4606.2	4563.9	4439.6	4383.6	4253.8
25°	4610.3	4602.1	4624.0	4621.3	4572.1	4555.7	4525.6	4480.6	4431.4	4341.2	4234.7
27.5°	4436.8	4479.2	4517.4	4535.2	4509.2	4465.5	4449.1	4423.2	4389.0	4297.5	4218.3
30°	4253.8	4301.6	4345.3	4383.6	4406.8	4387.7	4372.6	4357.6	4305.7	4245.6	4156.8
32.5°	4044.8	4107.6	4167.7	4214.2	4264.7	4279.8	4268.8	4256.5	4212.8	4158.2	4087.1
35°	3803.0	3889.1	3976.5	4059.8	4081.7	4117.2	4152.7	4132.2	4109.0	4054.4	3988.8
37.5°	3598.1	3659.6	3722.4	3827.6	3904.1	3949.2	4012.0	4020.2	3980.6	3954.6	3868.6
40°	3386.4	3442.4	3533.9	3595.4	3700.6	3752.5	3819.4	3849.5	3839.9	3824.9	3749.7
42.5°	3219.7	3247.0	3307.1	3361.8	3465.6	3572.2	3630.9	3663.7	3697.8	3685.5	3647.3
45°	3042.1	3066.7	3087.2	3135.0	3236.1	3330.4	3402.8	3451.9	3513.4	3542.1	3495.7
47.5°	2865.9	2872.8	2897.3	2937.0	2997.1	3069.5	3191.0	3264.8	3322.2	3378.2	3348.1
50°	2730.7	2706.1	2710.2	2734.8	2784.0	2855.0	2942.4	3046.2	3111.8	3180.1	3186.9
52.5°	2386.4	2585.9	2538.1	2551.7	2577.7	2611.8	2703.4	2805.8	2886.4	2945.1	3003.9
55°	2002.6	2042.2	2426.1	2371.4	2387.8	2417.9	2460.2	2562.7	2640.5	2722.5	2804.4
57.5°	1553.2	1848.2	1863.3	2218.4	2210.2	2213.0	2248.5	2307.2	2385.1	2487.5	2557.2
60°	1207.6	1331.9	1573.7	1696.6	2008.1	2019.0	2039.5	2073.6	2140.6	2237.5	2348.2
62.5°	1065.5	1081.9	1168.0	1352.4	1554.5	1799.1	1842.8	1848.2	1878.3	1975.3	2103.7
65°	935.7	946.7	972.6	991.7	1161.1	1397.4	1607.8	1642.0	1661.1	1718.5	1827.7
67.5°	644.8	815.5	838.7	852.4	868.8	978.1	1239.0	1412.5	1434.3	1484.9	1580.5
70°	124.3	258.2	706.2	721.3	729.5	754.0	796.4	1072.3	1217.1	1264.9	1308.7
72.5°	84.7	99.7	120.2	284.1	601.1	614.7	624.3	659.8	904.3	1043.6	1066.9
75°	61.5	68.3	80.6	99.7	122.9	400.2	495.9	513.6	531.4	733.6	851.0
77.5°	43.7	49.2	54.6	64.2	75.1	97.0	139.3	383.9	401.6	411.2	580.6
80°	24.6	30.1	36.9	42.3	47.8	54.6	71.0	88.8	198.1	289.6	304.6
82.5°	13.7	16.4	19.1	23.2	26.0	32.8	39.6	47.8	62.8	92.9	196.7
85°	6.8	6.8	6.8	9.6	10.9	15.0	17.8	20.5	28.7	39.6	54.6
87.5°	4.1	4.1	5.5	5.5	5.5	6.8	6.8	6.8	8.2	12.3	17.8
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: P1213515

CATALOG NUMBER: 4SNLED-LD5-69SL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	4551.6	4551.6	4551.6	4551.6	4551.6
2.5°	4569.4	4565.3	4565.3	4581.6	4577.5
5°	4561.2	4557.1	4555.7	4573.5	4565.3
7.5°	4554.3	4539.3	4535.2	4551.6	4544.8
10°	4527.0	4516.1	4522.9	4517.4	4514.7
12.5°	4480.6	4473.7	4445.0	4447.8	4471.0
15°	4397.2	4424.6	4375.4	4419.1	4428.7
17.5°	4244.2	4305.7	4353.5	4379.5	4383.6
20°	4312.5	4333.0	4308.4	4309.8	4326.2
22.5°	4223.7	4233.3	4240.1	4231.9	4267.5
25°	4081.7	4044.8	4124.0	4140.4	4197.8
27.5°	4038.0	4007.9	4044.8	4042.1	4089.9
30°	4002.5	3905.5	3921.9	3947.8	4006.6
32.5°	3951.9	3798.9	3782.5	3839.9	3905.5
35°	3863.1	3718.3	3680.1	3717.0	3815.3
37.5°	3788.0	3606.3	3529.8	3579.0	3707.4
40°	3676.0	3518.9	3400.0	3443.7	3595.4
42.5°	3542.1	3443.7	3260.7	3290.8	3464.2
45°	3406.9	3319.4	3125.5	3140.5	3346.8
47.5°	3268.9	3188.3	2984.8	2987.5	3196.5
50°	3133.7	3027.1	2859.1	2811.3	3036.7
52.5°	2957.4	2859.1	2732.0	2654.2	2885.0
55°	2790.8	2680.1	2587.3	2467.0	2712.9
57.5°	2628.2	2505.3	2442.5	2288.1	2517.6
60°	2405.6	2346.8	2253.9	2106.4	2341.4
62.5°	2177.4	2158.3	2064.1	1911.1	2124.2
65°	1911.1	1956.1	1859.2	1728.0	1898.8
67.5°	1659.7	1740.3	1633.8	1553.2	1681.6
70°	1392.0	1484.9	1424.8	1396.1	1450.7
72.5°	1128.3	1218.5	1224.0	1203.5	1221.2
75°	871.5	971.2	1025.9	994.5	998.6
77.5°	661.2	709.0	769.1	793.7	788.2
80°	408.4	491.8	540.9	591.5	573.7
82.5°	206.3	275.9	336.0	390.7	364.7
85°	86.1	110.6	154.4	203.5	195.3
87.5°	26.0	43.7	46.4	65.6	61.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)