

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: P1213521

Luminaire Tested: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213521
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-LD5-72HL-RM-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

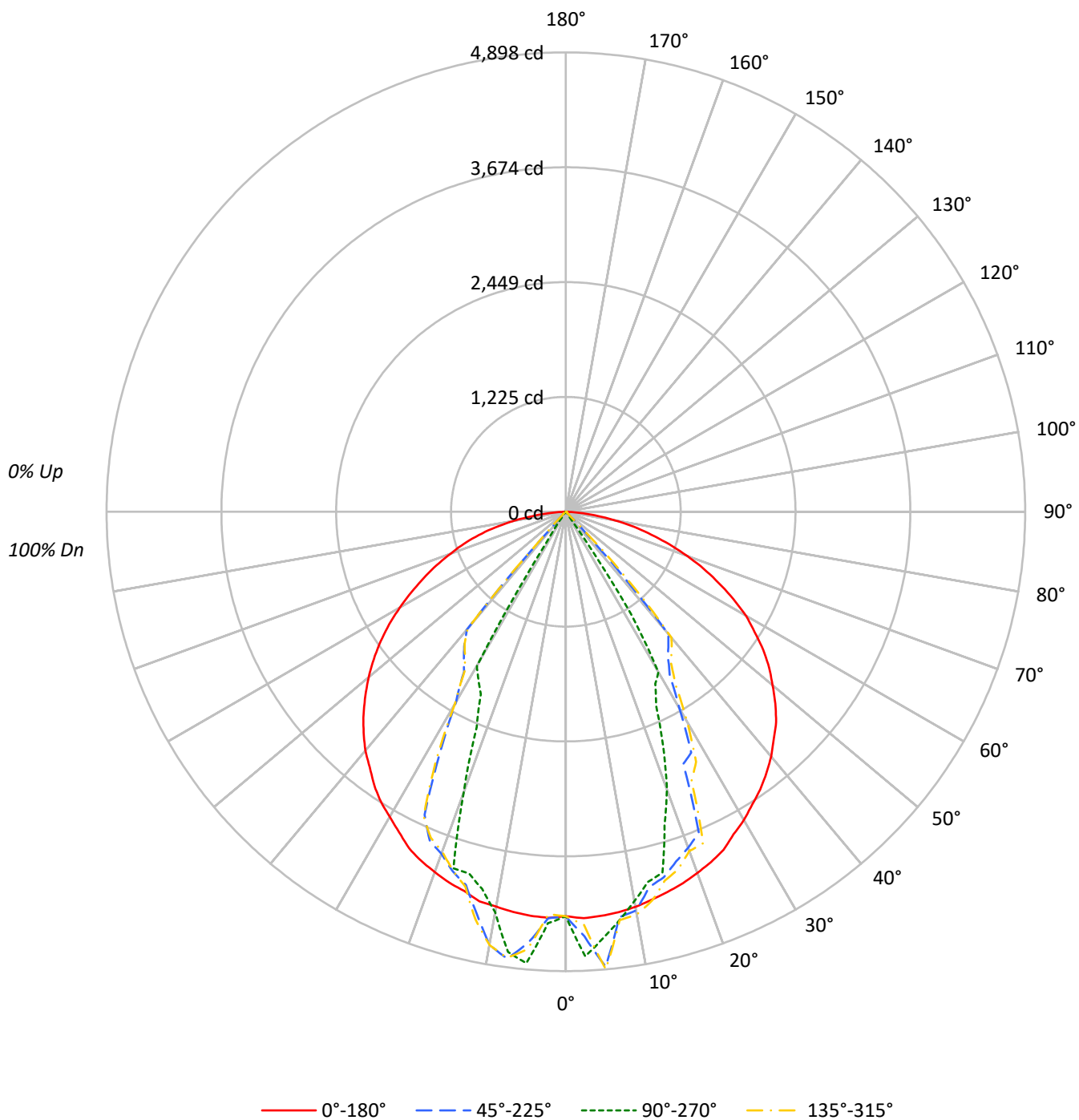
Lumens per Lamp: N/A
Luminaire Lumens: 6132.0 lumens
Efficiency: N/A
Efficacy: 98.9 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 62
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: P1213521

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

Luminous Intensity Polar Plot



TEST NUMBER: P1213521

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	34849	34849	34849	34849
5°	34991	35842	34981	37957
10°	34907	32433	34886	33370
15°	34813	30272	34726	30351
20°	34853	23844	34754	24138
25°	34954	17256	34783	16283
30°	34794	15136	34426	14551
35°	34898	334	34385	405
40°	35017	73	34179	73
45°	35140	43	33821	32
50°	34872	34	33272	34
55°	34667	24	32537	24
60°	34013	25	31353	25
65°	32239	41	29943	28
70°	29908	45	28472	45
75°	26454	51	26888	51
80°	21489	58	22718	58
85°	12646	68	12912	68

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2°

Vertical Angle: 45°

Luminance: 37943 cd/sqm

TEST NUMBER: P1213521

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	432.7	7.1
10°-20°	1180.1	19.2
20°-30°	1501.7	24.5
30°-40°	1268.5	20.7
40°-50°	829.3	13.5
50°-60°	522.6	8.5
60°-70°	278.2	4.5
70°-80°	101.4	1.7
80°-90°	17.5	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°	3114.5	50.8
0°-40°	4383.1	71.5
0°-60°	5735.0	93.5
0°-90°	6132.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6132.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4312	4312	4312	4312	4312	
5°	4325	4564	4324	4833	4325	411
15°	4196	3982	4186	3993	4196	1186
25°	3977	2274	3958	2146	3977	1829
35°	3615	43	3562	52	3615	2261
45°	3171	5	3052	4	3171	2439
55°	2570	3	2412	3	2570	2290
65°	1799	4	1671	3	1799	1782
75°	946	4	962	4	946	1004
85°	185	4	189	4	185	234
90°	0	0	0	0	0	

TEST NUMBER: P1213521

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5
2.5°	4337.1	4339.7	4341.0	4343.5	4347.4	4348.7	4351.3	4348.7	4348.7	4348.7	4348.7
5°	4325.4	4330.6	4334.5	4339.7	4348.7	4350.0	4360.4	4361.7	4366.8	4377.2	4385.0
7.5°	4306.0	4311.2	4319.0	4331.9	4344.8	4359.1	4377.2	4396.6	4423.8	4449.7	4482.0
10°	4277.5	4284.0	4293.1	4304.7	4368.1	4377.2	4417.3	4473.0	4488.5	4570.0	4630.9
12.5°	4236.1	4258.1	4281.4	4291.8	4352.6	4448.4	4583.0	4555.8	4526.0	4792.7	4788.8
15°	4196.0	4225.8	4214.1	4298.2	4353.9	4520.9	4463.9	4585.6	4808.2	4753.8	4756.4
17.5°	4153.3	4159.8	4224.5	4294.4	4394.0	4479.4	4549.3	4716.3	4760.3	4764.2	4716.3
20°	4098.9	4130.0	4224.5	4287.9	4456.1	4496.3	4647.7	4733.1	4715.0	4671.0	4589.5
22.5°	4043.3	4137.8	4233.5	4322.8	4440.6	4548.0	4623.1	4663.2	4568.7	4395.3	4302.1
25°	3977.3	4032.9	4158.5	4289.2	4436.7	4498.9	4542.9	4478.1	4355.2	4199.9	4043.3
27.5°	3875.0	3964.3	4124.8	4272.4	4405.7	4480.7	4409.6	4254.2	4056.2	3954.0	3882.8
30°	3796.1	3912.6	4044.6	4186.9	4325.4	4369.4	4188.2	4010.9	3875.0	3772.8	3757.2
32.5°	3700.3	3866.0	3991.5	4127.4	4243.9	4185.6	4009.6	3780.5	3667.9	3629.1	3644.6
35°	3614.9	3740.4	3904.8	4038.1	4122.2	3991.5	3713.2	3570.9	3516.5	3538.5	3510.0
37.5°	3512.6	3678.3	3829.7	3944.9	3916.4	3719.7	3484.2	3393.6	3400.0	3381.9	3327.5
40°	3406.5	3564.4	3722.3	3831.0	3731.4	3431.1	3274.5	3255.1	3259.0	3200.7	3123.1
42.5°	3282.2	3425.9	3583.8	3682.2	3467.3	3233.1	3126.9	3129.5	3095.9	3014.3	2972.9
45°	3170.9	3303.0	3467.3	3476.4	3212.4	3016.9	2985.9	2952.2	2877.1	2850.0	2818.9
47.5°	3028.6	3174.8	3310.7	3261.5	2962.6	2840.9	2817.6	2743.8	2706.3	2685.6	2659.7
50°	2877.1	3024.7	3148.9	3009.2	2727.0	2698.5	2622.2	2563.9	2538.0	2516.0	2492.7
52.5°	2733.5	2855.1	2982.0	2741.2	2545.8	2518.6	2431.9	2398.3	2372.4	2347.8	2342.6
55°	2570.4	2677.8	2764.5	2486.3	2372.4	2309.0	2246.8	2223.5	2199.0	2187.3	2206.7
57.5°	2385.3	2507.0	2494.0	2235.2	2184.7	2092.8	2069.5	2054.0	2035.9	2043.6	1881.9
60°	2218.4	2311.6	2248.1	2051.4	1966.0	1903.9	1883.2	1872.8	1883.2	1725.3	1516.9
62.5°	2012.6	2117.4	1989.3	1836.6	1746.0	1716.2	1698.1	1712.3	1560.9	1387.4	1337.0
65°	1799.0	1912.9	1724.0	1606.2	1549.2	1523.3	1522.1	1401.7	1252.8	1185.5	1185.5
67.5°	1593.2	1711.0	1467.7	1369.3	1347.3	1349.9	1274.8	1092.4	1050.9	1005.6	874.9
70°	1374.5	1478.0	1212.7	1153.2	1140.2	1131.2	948.7	899.5	850.3	730.0	719.6
72.5°	1157.1	1207.5	974.6	960.3	957.8	796.0	759.7	675.6	618.7	604.4	597.9
75°	946.1	930.6	770.1	783.0	660.1	603.1	544.9	495.7	487.9	482.8	120.4
77.5°	746.8	669.1	607.0	528.1	472.4	401.2	389.6	381.8	251.1	90.6	73.8
80°	543.6	433.6	403.8	343.0	292.5	280.9	287.3	88.0	69.9	58.2	50.5
82.5°	345.6	277.0	226.5	198.0	192.8	84.1	62.1	50.5	44.0	37.5	31.1
85°	185.1	123.0	113.9	95.8	56.9	38.8	32.4	24.6	20.7	16.8	15.5
87.5°	58.2	49.2	40.1	32.4	19.4	12.9	10.4	9.1	7.8	6.5	6.5
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: P1213521

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5
2.5°	4346.1	4348.7	4347.4	4351.3	4351.3	4356.5	4360.4	4364.3	4372.0	4375.9	4405.7
5°	4401.8	4408.3	4427.7	4445.8	4467.8	4474.3	4511.8	4520.9	4564.9	4570.0	4715.0
7.5°	4526.0	4550.6	4597.2	4643.8	4690.4	4720.2	4771.9	4804.3	4839.2	4870.3	4985.5
10°	4676.2	4717.6	4762.9	4809.5	4836.7	4893.6	4924.7	4929.8	4920.8	4870.3	4683.9
12.5°	4823.7	4865.1	4845.7	4854.8	4887.1	4786.2	4800.4	4727.9	4778.4	4528.6	4343.5
15°	4803.0	4800.4	4752.5	4597.2	4623.1	4430.3	4352.6	4293.1	4341.0	4315.1	4286.6
17.5°	4740.9	4623.1	4540.3	4353.9	4274.9	4220.6	4221.9	4223.2	4199.9	4224.5	4152.0
20°	4478.1	4346.1	4223.2	4157.2	4133.9	4095.0	4114.5	4095.0	4096.3	4104.1	3992.8
22.5°	4128.7	4088.6	4017.4	4038.1	4030.3	4065.3	4039.4	3999.3	4012.2	3954.0	3869.8
25°	3987.6	3941.0	3938.4	3946.2	3934.6	3919.0	3895.7	3834.9	3831.0	3812.9	3774.1
27.5°	3845.3	3847.8	3855.6	3832.3	3790.9	3759.8	3724.9	3695.1	3706.8	3686.1	3633.0
30°	3746.9	3745.6	3699.0	3678.3	3601.9	3603.2	3594.2	3576.0	3564.4	3565.7	3532.0
32.5°	3607.1	3567.0	3513.9	3488.0	3481.6	3458.3	3440.1	3444.0	3453.1	3420.7	3455.7
35°	3463.4	3380.6	3372.8	3350.8	3330.1	3314.6	3321.1	3295.2	3293.9	3290.0	3005.3
37.5°	3270.6	3230.5	3226.6	3203.3	3189.1	3185.2	3160.6	3164.5	3176.1	3196.8	2562.6
40°	3111.4	3075.2	3066.1	3064.8	3033.8	3031.2	3037.6	3062.2	3079.0	2949.6	2442.3
42.5°	2940.6	2943.2	2914.7	2896.6	2900.4	2912.1	2943.2	2857.7	2475.9	2359.4	2232.6
45°	2794.3	2781.4	2765.8	2760.7	2794.3	2771.0	2429.3	2241.7	2196.4	2191.2	1835.3
47.5°	2641.6	2637.7	2631.2	2635.1	2443.6	2178.2	2100.6	2076.0	2083.8	2078.6	1576.4
50°	2487.6	2492.7	2492.7	2176.9	1998.3	1954.3	1960.8	1982.8	1845.6	1722.7	1469.0
52.5°	2354.3	2314.1	1982.8	1868.9	1828.8	1848.2	1801.6	1629.5	1505.2	1432.7	1359.0
55°	2107.1	1812.0	1738.2	1720.1	1734.3	1562.2	1456.0	1344.7	1312.4	1304.6	1261.9
57.5°	1657.9	1598.4	1604.9	1532.4	1368.0	1271.0	1228.3	1212.7	1198.5	1188.1	103.5
60°	1466.4	1483.2	1357.7	1202.4	1136.4	1123.4	1113.1	1098.8	1096.2	1078.1	66.0
62.5°	1342.1	1180.4	1071.6	1032.8	1017.3	1013.4	994.0	987.5	838.7	115.2	49.2
65°	1012.1	946.1	925.4	916.3	899.5	899.5	746.8	117.8	95.8	82.8	44.0
67.5°	825.7	820.6	810.2	798.6	543.6	113.9	99.7	86.7	75.1	66.0	38.8
70°	698.9	696.3	634.2	116.5	97.1	85.4	75.1	67.3	62.1	55.7	34.9
72.5°	573.4	116.5	98.4	85.4	73.8	67.3	60.8	54.4	49.2	45.3	28.5
75°	89.3	78.9	69.9	63.4	58.2	51.8	46.6	42.7	41.4	36.2	19.4
77.5°	64.7	55.7	50.5	45.3	40.1	36.2	31.1	27.2	24.6	20.7	14.2
80°	45.3	40.1	36.2	29.8	25.9	22.0	19.4	16.8	15.5	12.9	6.5
82.5°	25.9	22.0	19.4	15.5	14.2	11.6	10.4	9.1	9.1	6.5	6.5
85°	11.6	11.6	9.1	7.8	6.5	6.5	6.5	5.2	5.2	3.9	3.9
87.5°	5.2	5.2	5.2	5.2	5.2	3.9	3.9	3.9	3.9	3.9	2.6
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: P1213521

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
0°	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5
2.5°	4447.1	4463.9	4496.3	4529.9	4492.4	4627.0	4616.6	4661.9	4686.5	4698.2	4725.4
5°	4843.1	4918.2	4942.8	4869.0	4826.3	4782.3	4682.6	4607.6	4616.6	4592.0	4502.7
7.5°	4835.4	4674.9	4458.7	4360.4	4352.6	4341.0	4372.0	4390.1	4392.7	4391.4	4388.8
10°	4426.4	4343.5	4329.3	4316.4	4321.5	4273.7	4251.7	4189.5	4223.2	4205.1	4211.5
12.5°	4302.1	4282.7	4206.4	4100.2	4163.6	4115.8	4088.6	4106.7	4086.0	4066.6	4060.1
15°	4228.4	4102.8	4060.1	4034.2	4016.1	4005.7	4014.8	3994.1	3987.6	3983.7	3992.8
17.5°	4075.6	4025.2	3978.6	3910.0	3911.3	3907.4	3933.3	3972.1	3974.7	3775.4	3595.5
20°	3955.3	3913.8	3854.3	3811.6	3869.8	3766.3	3366.4	3176.1	3146.4	3146.4	3151.5
22.5°	3859.5	3767.6	3771.5	3704.2	3159.3	3048.0	3050.6	3062.2	3009.2	2828.0	2808.5
25°	3728.8	3714.5	3431.1	2965.2	2969.0	2882.3	2749.0	2561.3	2358.1	2358.1	2324.5
27.5°	3630.4	3328.8	2914.7	2895.3	2604.1	2420.3	2306.4	2134.2	2110.9	2088.9	2091.5
30°	3546.3	2816.3	2826.7	2420.3	2205.4	2052.7	2043.6	2015.2	2000.9	1997.0	1982.8
32.5°	2803.4	2742.5	2365.9	2060.5	1976.3	1951.7	1940.1	1907.7	1906.4	1881.9	1711.0
35°	2628.6	2407.3	1980.2	1897.4	1872.8	1849.5	1830.1	1228.3	145.0	58.2	50.5
37.5°	2429.3	2011.3	1831.4	1793.8	1770.6	1308.5	130.7	45.3	32.4	23.3	20.7
40°	2059.2	1796.4	1739.5	1698.1	700.2	45.3	28.5	22.0	12.9	11.6	10.4
42.5°	1736.9	1692.9	1632.1	497.0	51.8	22.0	14.2	10.4	9.1	9.1	7.8
45°	1625.6	1586.8	657.5	49.2	32.4	10.4	9.1	9.1	7.8	5.2	5.2
47.5°	1522.1	1339.6	59.5	31.1	20.7	9.1	7.8	5.2	5.2	5.2	3.9
50°	1412.0	73.8	41.4	23.3	12.9	5.2	5.2	5.2	5.2	3.9	3.9
52.5°	264.0	51.8	33.7	20.7	6.5	5.2	5.2	5.2	3.9	3.9	3.9
55°	62.1	41.4	31.1	18.1	5.2	5.2	5.2	3.9	3.9	3.9	2.6
57.5°	46.6	31.1	24.6	16.8	5.2	3.9	3.9	3.9	3.9	3.9	2.6
60°	38.8	22.0	19.4	15.5	3.9	3.9	3.9	3.9	3.9	3.9	2.6
62.5°	27.2	18.1	14.2	11.6	3.9	3.9	3.9	3.9	3.9	3.9	3.9
65°	22.0	14.2	11.6	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
67.5°	19.4	11.6	7.8	2.6	3.9	3.9	3.9	3.9	3.9	3.9	3.9
70°	15.5	3.9	3.9	2.6	3.9	3.9	3.9	3.9	3.9	3.9	3.9
72.5°	12.9	3.9	2.6	2.6	3.9	3.9	3.9	3.9	3.9	3.9	3.9
75°	12.9	6.5	2.6	2.6	3.9	3.9	5.2	5.2	3.9	3.9	3.9
77.5°	9.1	6.5	2.6	2.6	3.9	3.9	5.2	5.2	3.9	3.9	3.9
80°	5.2	6.5	2.6	3.9	3.9	7.8	9.1	5.2	3.9	3.9	3.9
82.5°	5.2	6.5	7.8	7.8	3.9	6.5	7.8	6.5	5.2	3.9	3.9
85°	5.2	3.9	5.2	6.5	3.9	6.5	6.5	5.2	5.2	3.9	3.9
87.5°	2.6	3.9	3.9	5.2	5.2	5.2	6.5	5.2	5.2	5.2	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213521

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5
2.5°	4738.3	4743.5	4661.9	4633.5	4658.0	4652.9	4630.9	4549.3	4540.3	4485.9	4407.0
5°	4528.6	4563.6	4520.9	4594.6	4559.7	4594.6	4700.8	4749.9	4830.2	4879.4	4897.5
7.5°	4382.4	4390.1	4390.1	4396.6	4403.1	4404.4	4396.6	4391.4	4369.4	4342.2	4391.4
10°	4205.1	4214.1	4229.6	4227.1	4225.8	4252.9	4259.4	4315.1	4312.5	4322.8	4360.4
12.5°	4113.2	4043.3	4106.7	4089.9	4113.2	4076.9	4144.2	4132.6	4136.5	4167.5	4247.8
15°	3960.4	3982.4	3998.0	3998.0	4007.0	3999.3	3991.5	4044.6	4076.9	4078.2	4073.0
17.5°	3666.6	3499.7	3670.5	3626.5	3977.3	3986.3	3956.6	3932.0	3932.0	3951.4	3992.8
20°	3147.6	3151.5	3152.8	3169.6	3190.4	3189.1	3190.4	3700.3	3942.3	3886.7	3849.1
22.5°	2759.4	2711.5	2800.8	2794.3	2905.6	3028.6	3146.4	3134.7	3142.5	3502.3	3825.8
25°	2211.9	2274.0	2223.5	2245.5	2371.1	2517.3	2607.9	2844.8	3102.3	3084.2	3168.4
27.5°	2082.5	2065.6	2088.9	2088.9	2105.8	2125.2	2175.7	2309.0	2538.0	2778.8	3006.6
30°	1959.5	1973.7	1976.3	1999.6	2012.6	2025.5	2033.3	2083.8	2135.5	2302.5	2583.3
32.5°	1471.6	1290.4	1698.1	1808.1	1901.3	1923.3	1938.8	1959.5	1997.0	2021.6	2162.7
35°	42.7	42.7	45.3	51.8	66.0	445.2	1695.5	1868.9	1893.5	1924.6	1950.5
37.5°	20.7	15.5	18.1	19.4	23.3	32.4	46.6	145.0	1613.9	1824.9	1853.4
40°	9.1	9.1	9.1	9.1	10.4	12.9	19.4	32.4	49.2	1298.1	1751.1
42.5°	7.8	7.8	7.8	7.8	7.8	7.8	9.1	11.6	23.3	55.7	918.9
45°	5.2	5.2	3.9	5.2	5.2	6.5	7.8	7.8	10.4	34.9	63.4
47.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	6.5	7.8	23.3	33.7
50°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	18.1	23.3
52.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	7.8	20.7
55°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.9	3.9	5.2	18.1
57.5°	2.6	2.6	2.6	2.6	2.6	3.9	2.6	2.6	3.9	3.9	16.8
60°	2.6	2.6	2.6	2.6	2.6	3.9	3.9	3.9	3.9	3.9	15.5
62.5°	3.9	3.9	2.6	3.9	2.6	2.6	3.9	3.9	3.9	3.9	10.4
65°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	2.6	3.9
67.5°	3.9	3.9	3.9	3.9	2.6	3.9	2.6	3.9	3.9	2.6	2.6
70°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	2.6	2.6	2.6	2.6
72.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	2.6	2.6	2.6	2.6
75°	3.9	3.9	3.9	3.9	3.9	3.9	5.2	5.2	2.6	2.6	2.6
77.5°	3.9	3.9	3.9	3.9	3.9	3.9	6.5	7.8	6.5	6.5	2.6
80°	3.9	3.9	3.9	3.9	3.9	3.9	6.5	6.5	6.5	6.5	9.1
82.5°	3.9	3.9	3.9	3.9	3.9	3.9	5.2	5.2	5.2	5.2	6.5
85°	3.9	3.9	3.9	3.9	3.9	3.9	5.2	5.2	5.2	3.9	5.2
87.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	5.2	3.9	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213521

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5
2.5°	4413.4	4369.4	4355.2	4325.4	4322.8	4325.4	4319.0	4309.9	4315.1	4306.0	4298.2
5°	4907.8	4790.1	4713.7	4611.5	4470.4	4439.3	4431.6	4387.5	4372.0	4366.8	4346.1
7.5°	4507.9	4722.8	4852.2	4896.2	4730.5	4691.7	4646.4	4610.2	4575.2	4509.2	4469.1
10°	4330.6	4341.0	4465.2	4610.2	4845.7	4878.1	4902.7	4823.7	4801.7	4633.5	4597.2
12.5°	4289.2	4290.5	4304.7	4392.7	4577.8	4598.5	4685.2	4731.8	4788.8	4821.1	4795.2
15°	4100.2	4205.1	4282.7	4290.5	4307.3	4343.5	4369.4	4531.2	4599.8	4783.6	4773.2
17.5°	4012.2	4045.9	4158.5	4250.4	4234.8	4221.9	4242.6	4264.6	4330.6	4514.4	4511.8
20°	3866.0	3973.4	4034.2	4130.0	4216.7	4220.6	4197.3	4184.3	4158.5	4188.2	4215.4
22.5°	3803.8	3820.7	3934.6	4001.9	4100.2	4135.2	4140.3	4141.6	4127.4	4111.9	4104.1
25°	3797.4	3744.3	3802.5	3886.7	3959.1	3996.7	4039.4	4053.6	4048.5	4048.5	4040.7
27.5°	3107.5	3727.5	3696.4	3752.1	3840.1	3866.0	3888.0	3932.0	3959.1	3978.6	3987.6
30°	2960.0	3071.3	3613.6	3621.3	3710.6	3708.1	3732.7	3768.9	3803.8	3849.1	3860.8
32.5°	2618.3	2891.4	3308.1	3490.6	3583.8	3592.9	3605.8	3616.2	3648.5	3699.0	3743.0
35°	2098.0	2633.8	2834.4	3428.5	3445.3	3463.4	3471.2	3495.8	3506.2	3526.9	3565.7
37.5°	1898.7	2176.9	2719.2	2965.2	3286.1	3301.7	3343.1	3353.4	3370.3	3387.1	3416.9
40°	1783.5	1859.9	2263.7	2648.1	3158.0	3168.4	3182.6	3208.5	3209.8	3229.2	3256.4
42.5°	1691.6	1740.8	1858.6	2529.0	3067.4	3066.1	3032.5	3049.3	3057.0	3077.8	3115.3
45°	1351.2	1633.4	1708.4	2065.6	2442.3	2618.3	2956.1	2900.4	2899.1	2906.9	2947.0
47.5°	68.6	1536.3	1589.4	1704.5	2306.4	2312.8	2356.9	2727.0	2784.0	2765.8	2769.7
50°	46.6	106.1	1480.6	1533.7	1988.0	2148.5	2180.8	2197.7	2411.2	2649.4	2610.5
52.5°	36.2	60.8	907.3	1423.7	1615.2	1733.0	1941.4	2060.5	2073.4	2169.2	2494.0
55°	32.4	46.6	98.4	1313.7	1373.2	1399.1	1520.8	1729.1	1897.4	1947.9	1951.7
57.5°	28.5	42.7	67.3	594.1	1249.0	1254.1	1274.8	1347.3	1498.8	1637.2	1793.8
60°	25.9	37.5	53.1	102.2	1135.1	1148.0	1151.9	1171.3	1189.4	1283.9	1463.8
62.5°	15.5	29.8	46.6	73.8	898.2	1031.5	1030.2	1043.2	1060.0	1070.4	1106.6
65°	12.9	23.3	40.1	62.1	110.0	137.2	833.5	926.7	937.0	951.3	957.8
67.5°	11.6	20.7	29.8	49.2	82.8	94.5	108.7	134.6	735.1	828.3	841.3
70°	10.4	14.2	24.6	41.4	67.3	72.5	81.5	93.2	110.0	135.9	665.3
72.5°	6.5	10.4	16.8	29.8	51.8	58.2	63.4	71.2	78.9	94.5	108.7
75°	2.6	7.8	14.2	22.0	40.1	44.0	47.9	53.1	59.5	69.9	77.7
77.5°	2.6	6.5	11.6	15.5	25.9	29.8	34.9	38.8	44.0	49.2	56.9
80°	9.1	5.2	7.8	11.6	18.1	19.4	22.0	24.6	28.5	32.4	37.5
82.5°	6.5	7.8	9.1	7.8	9.1	11.6	12.9	15.5	16.8	19.4	20.7
85°	5.2	5.2	6.5	6.5	6.5	6.5	6.5	6.5	7.8	9.1	11.6
87.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	5.2	5.2
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: P1213521

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5
2.5°	4298.2	4295.7	4287.9	4287.9	4286.6	4291.8	4295.7	4299.5	4298.2	4306.0	4298.2
5°	4330.6	4324.1	4312.5	4302.1	4298.2	4300.8	4296.9	4300.8	4295.7	4302.1	4290.5
7.5°	4419.9	4397.9	4352.6	4334.5	4311.2	4309.9	4298.2	4295.7	4287.9	4287.9	4273.7
10°	4577.8	4471.7	4458.7	4404.4	4385.0	4290.5	4311.2	4276.2	4272.4	4255.5	4249.1
12.5°	4707.2	4624.4	4599.8	4551.9	4497.6	4306.0	4348.7	4273.7	4269.8	4236.1	4201.2
15°	4709.8	4757.7	4690.4	4558.4	4546.7	4414.7	4328.0	4302.1	4268.5	4167.5	4184.3
17.5°	4558.4	4668.4	4700.8	4672.3	4589.5	4500.1	4378.5	4326.7	4225.8	4180.5	4149.4
20°	4312.5	4423.8	4562.3	4571.3	4623.1	4559.7	4400.5	4316.4	4194.7	4115.8	4089.9
22.5°	4117.0	4198.6	4357.8	4431.6	4495.0	4517.0	4416.0	4291.8	4140.3	4064.0	4048.5
25°	4013.5	4031.6	4079.5	4166.2	4306.0	4407.0	4421.2	4289.2	4210.2	4043.3	3955.3
27.5°	3976.0	3960.4	3941.0	3985.0	4089.9	4212.8	4294.4	4316.4	4119.6	3960.4	3872.4
30°	3880.2	3889.3	3859.5	3844.0	3912.6	4039.4	4184.3	4220.6	4069.2	3904.8	3803.8
32.5°	3762.4	3778.0	3783.1	3755.9	3741.7	3829.7	3986.3	4073.0	4065.3	3825.8	3713.2
35°	3614.9	3658.9	3670.5	3671.8	3648.5	3634.3	3724.9	3904.8	3973.4	3789.6	3626.5
37.5°	3459.6	3472.5	3535.9	3552.7	3552.7	3510.0	3577.3	3721.0	3816.8	3708.1	3520.4
40°	3265.4	3306.8	3366.4	3396.1	3425.9	3429.8	3392.3	3493.2	3651.1	3623.9	3420.7
42.5°	3124.3	3151.5	3187.8	3227.9	3288.7	3304.3	3265.4	3283.5	3447.9	3519.1	3291.3
45°	2960.0	2996.2	3006.6	3050.6	3114.0	3159.3	3158.0	3120.5	3252.5	3340.5	3196.8
47.5°	2791.7	2826.7	2844.8	2866.8	2913.4	2971.6	3004.0	2987.2	3013.0	3185.2	3071.3
50°	2618.3	2637.7	2673.9	2698.5	2729.6	2763.2	2840.9	2856.4	2820.2	2957.4	2932.8
52.5°	2453.9	2460.4	2485.0	2509.6	2551.0	2575.6	2637.7	2684.3	2681.7	2721.8	2778.8
55°	2325.8	2297.3	2302.5	2321.9	2349.1	2386.6	2421.6	2494.0	2518.6	2526.4	2617.0
57.5°	1817.1	2109.6	2135.5	2134.2	2166.6	2183.4	2215.8	2263.7	2351.7	2332.3	2433.2
60°	1651.5	1683.8	1928.5	1956.9	1968.6	1984.1	2022.9	2066.9	2131.6	2173.1	2217.1
62.5°	1259.3	1456.0	1529.8	1746.0	1779.6	1788.7	1814.6	1835.3	1902.6	1997.0	1978.9
65°	974.6	1058.7	1283.9	1371.9	1555.7	1579.0	1615.2	1637.2	1656.7	1765.4	1770.6
67.5°	842.6	855.5	916.3	1085.9	1202.4	1382.3	1404.3	1423.7	1453.5	1531.1	1579.0
70°	719.6	735.1	752.0	766.2	917.6	1036.7	1203.7	1210.1	1229.5	1281.3	1390.0
72.5°	135.9	614.8	625.1	634.2	651.0	730.0	889.2	1018.6	1026.3	1050.9	1150.6
75°	91.9	107.4	147.5	507.4	524.2	529.4	556.5	718.3	837.4	842.6	886.6
77.5°	66.0	73.8	89.3	106.1	270.5	406.4	412.9	442.6	565.6	654.9	662.7
80°	45.3	50.5	59.5	67.3	82.8	108.7	300.3	309.3	324.9	447.8	471.1
82.5°	25.9	29.8	34.9	42.7	49.2	62.1	80.2	103.5	211.0	225.2	299.0
85°	12.9	14.2	16.8	20.7	24.6	29.8	40.1	49.2	67.3	121.7	125.5
87.5°	6.5	6.5	6.5	6.5	10.4	11.6	14.2	18.1	23.3	34.9	45.3
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: P1213521

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5
2.5°	4299.5	4317.7	4333.2	4337.1	4337.1	4339.7	4343.5	4346.1	4348.7	4351.3	4348.7
5°	4291.8	4311.2	4324.1	4328.0	4328.0	4335.8	4342.2	4350.0	4353.9	4353.9	4351.3
7.5°	4272.4	4286.6	4303.4	4313.8	4315.1	4328.0	4339.7	4338.4	4343.5	4346.1	4352.6
10°	4246.5	4246.5	4274.9	4282.7	4289.2	4303.4	4307.3	4315.1	4333.2	4335.8	4352.6
12.5°	4233.5	4220.6	4254.2	4258.1	4280.1	4262.0	4285.3	4293.1	4274.9	4299.5	4267.2
15°	4175.3	4190.8	4185.6	4197.3	4236.1	4215.4	4278.8	4258.1	4304.7	4249.1	4347.4
17.5°	4127.4	4124.8	4145.5	4155.9	4163.6	4207.6	4224.5	4247.8	4265.9	4250.4	4289.2
20°	4092.5	4071.7	4087.3	4098.9	4126.1	4159.8	4170.1	4135.2	4196.0	4299.5	4324.1
22.5°	4026.4	4012.2	4030.3	4030.3	4071.7	4066.6	4105.4	4083.4	4140.3	4260.7	4386.3
25°	3937.1	3938.4	3957.9	3981.1	3988.9	4047.2	4067.9	4096.3	4167.5	4311.2	4387.5
27.5°	3846.5	3838.8	3850.4	3898.3	3938.4	3981.1	3987.6	4084.7	4181.8	4280.1	4347.4
30°	3755.9	3748.2	3755.9	3790.9	3838.8	3867.3	3938.4	4067.9	4158.5	4225.8	4289.2
32.5°	3658.9	3651.1	3669.2	3695.1	3779.2	3783.1	3924.2	4045.9	4117.0	4166.2	4154.6
35°	3555.3	3545.0	3561.8	3601.9	3679.6	3708.1	3855.6	3946.2	4026.4	4049.7	3995.4
37.5°	3431.1	3413.0	3433.7	3489.3	3570.9	3653.7	3776.7	3881.5	3924.2	3862.1	3797.4
40°	3301.7	3288.7	3325.0	3353.4	3449.2	3564.4	3705.5	3779.2	3752.1	3680.9	3609.7
42.5°	3186.5	3159.3	3191.7	3246.0	3354.7	3485.4	3599.3	3640.8	3576.0	3471.2	3388.4
45°	3045.4	3013.0	3051.9	3124.3	3240.8	3389.7	3479.0	3464.7	3354.7	3264.1	3150.2
47.5°	2897.9	2859.0	2897.9	2984.6	3115.3	3273.2	3337.9	3273.2	3134.7	3020.8	2928.9
50°	2752.9	2707.6	2745.1	2875.9	3004.0	3125.6	3124.3	2998.8	2916.0	2791.7	2711.5
52.5°	2609.2	2544.5	2582.1	2724.4	2852.6	2991.0	2888.8	2772.3	2672.7	2563.9	2538.0
55°	2431.9	2362.0	2412.5	2619.6	2718.0	2799.5	2636.4	2534.2	2435.8	2381.4	2349.1
57.5°	2263.7	2187.3	2231.3	2475.9	2548.4	2569.1	2419.0	2274.0	2215.8	2197.7	2151.1
60°	2090.2	2003.5	2044.9	2327.1	2377.6	2293.4	2145.9	2033.3	2021.6	1985.4	1949.2
62.5°	1924.6	1828.8	1854.7	2142.0	2165.3	2012.6	1876.7	1846.9	1818.4	1782.2	1762.8
65°	1734.3	1634.7	1670.9	1945.3	1923.3	1726.5	1650.2	1643.7	1606.2	1576.4	1604.9
67.5°	1559.6	1441.8	1492.3	1730.4	1630.8	1470.3	1439.2	1423.7	1393.9	1410.7	1111.8
70°	1368.0	1239.9	1308.5	1498.8	1351.2	1245.1	1233.4	1210.1	1211.4	962.9	811.5
72.5°	1154.5	1043.2	1142.8	1245.1	1069.1	1038.0	1021.2	1018.6	821.9	667.8	630.3
75°	966.8	854.2	961.6	1000.5	851.6	830.9	829.6	686.0	539.7	515.1	503.5
77.5°	754.6	667.8	770.1	711.8	653.6	630.3	565.6	424.5	406.4	389.6	146.3
80°	508.6	515.1	574.7	490.5	465.9	397.3	313.2	300.3	258.9	103.5	81.5
82.5°	309.3	388.3	366.3	306.7	300.3	216.1	198.0	101.0	75.1	59.5	51.8
85°	160.5	196.7	189.0	167.0	124.2	111.3	62.1	47.9	38.8	29.8	24.6
87.5°	54.4	72.5	69.9	55.7	42.7	33.7	22.0	18.1	12.9	10.4	9.1
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: P1213521

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5
2.5°	4346.1	4346.1	4343.5	4346.1	4347.4	4344.8	4344.8	4347.4	4348.7	4350.0	4356.5
5°	4352.6	4355.2	4359.1	4366.8	4368.1	4383.7	4390.1	4394.0	4397.9	4399.2	4390.1
7.5°	4366.8	4375.9	4383.7	4382.4	4373.3	4348.7	4341.0	4334.5	4346.1	4375.9	4410.8
10°	4379.8	4338.4	4260.7	4366.8	4334.5	4364.3	4452.3	4471.7	4531.2	4615.3	4639.9
12.5°	4290.5	4404.4	4429.0	4309.9	4529.9	4448.4	4545.4	4630.9	4655.5	4740.9	4689.1
15°	4386.3	4441.9	4479.4	4598.5	4585.6	4655.5	4682.6	4665.8	4669.7	4691.7	4749.9
17.5°	4385.0	4496.3	4520.9	4601.1	4655.5	4656.8	4649.0	4641.2	4661.9	4678.8	4643.8
20°	4460.0	4496.3	4544.2	4576.5	4586.9	4599.8	4624.4	4605.0	4566.2	4528.6	4513.1
22.5°	4422.5	4504.0	4545.4	4550.6	4544.2	4504.0	4467.8	4413.4	4395.3	4375.9	4382.4
25°	4430.3	4467.8	4462.6	4441.9	4414.7	4339.7	4321.5	4298.2	4263.3	4179.2	4102.8
27.5°	4374.6	4355.2	4331.9	4281.4	4232.2	4192.1	4146.8	4071.7	4009.6	3919.0	3885.4
30°	4281.4	4203.8	4146.8	4117.0	4069.2	4001.9	3933.3	3841.4	3762.4	3744.3	3727.5
32.5°	4102.8	4026.4	3979.9	3907.4	3825.8	3745.6	3666.6	3630.4	3613.6	3616.2	3600.6
35°	3920.3	3853.0	3783.1	3674.4	3613.6	3533.3	3504.9	3497.1	3481.6	3464.7	3446.6
37.5°	3726.2	3647.2	3542.4	3477.7	3416.9	3384.5	3370.3	3358.6	3331.4	3301.7	3281.0
40°	3538.5	3396.1	3337.9	3274.5	3256.4	3242.1	3221.4	3192.9	3155.4	3150.2	3141.2
42.5°	3287.4	3185.2	3134.7	3121.8	3099.8	3075.2	3057.0	3026.0	3010.5	3020.8	3028.6
45°	3049.3	2997.5	2980.7	2965.2	2923.7	2888.8	2877.1	2866.8	2879.7	2936.7	2800.8
47.5°	2856.4	2835.7	2815.0	2789.1	2750.3	2724.4	2736.1	2746.4	2758.1	2340.0	2135.5
50°	2689.5	2661.0	2628.6	2600.2	2576.9	2574.3	2635.1	2452.6	2054.0	2043.6	1836.6
52.5°	2507.0	2464.3	2444.9	2428.0	2438.4	2477.2	2050.1	1902.6	1824.9	1585.5	1479.3
55°	2310.3	2272.7	2272.7	2288.3	2232.6	1809.4	1787.4	1545.3	1399.1	1357.7	1340.9
57.5°	2113.5	2109.6	2131.6	1949.2	1642.4	1575.1	1324.0	1271.0	1247.7	1242.5	1215.3
60°	1933.6	1969.9	1648.9	1516.9	1318.9	1189.4	1153.2	1146.7	1122.1	1113.1	1088.5
62.5°	1790.0	1484.5	1382.3	1128.6	1062.6	1045.8	1026.3	1017.3	995.3	878.8	257.6
65°	1293.0	1221.8	991.4	948.7	943.5	918.9	911.2	819.3	192.8	129.4	110.0
67.5°	975.9	865.9	836.1	828.3	803.7	754.6	223.9	128.1	110.0	95.8	84.1
70°	749.4	730.0	708.0	689.8	203.2	126.8	110.0	93.2	80.2	71.2	64.7
72.5°	613.5	600.5	349.5	133.3	108.7	91.9	81.5	71.2	62.1	56.9	51.8
75°	480.2	133.3	110.0	91.9	78.9	67.3	59.5	53.1	47.9	44.0	40.1
77.5°	108.7	88.0	75.1	63.4	56.9	50.5	45.3	38.8	34.9	31.1	25.9
80°	67.3	58.2	49.2	45.3	38.8	32.4	28.5	25.9	20.7	19.4	16.8
82.5°	44.0	34.9	31.1	25.9	20.7	19.4	16.8	12.9	11.6	10.4	9.1
85°	19.4	16.8	14.2	11.6	9.1	7.8	6.5	5.2	5.2	5.2	5.2
87.5°	6.5	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	2.6	2.6
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: P1213521

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5
2.5°	4359.1	4382.4	4404.4	4397.9	4374.6	4338.4	4328.0	4313.8	4324.1	4346.1	4355.2
5°	4390.1	4377.2	4423.8	4492.4	4603.7	4614.0	4691.7	4709.8	4771.9	4810.8	4809.5
7.5°	4434.1	4617.9	4694.3	4777.1	4814.7	4805.6	4817.2	4808.2	4793.9	4787.5	4779.7
10°	4658.0	4797.8	4826.3	4826.3	4768.1	4689.1	4655.5	4597.2	4480.7	4483.3	4463.9
12.5°	4788.8	4838.0	4770.6	4713.7	4479.4	4388.8	4290.5	4243.9	4216.7	4175.3	4190.8
15°	4720.2	4650.3	4610.2	4426.4	4282.7	4119.6	4122.2	4093.8	4064.0	4066.6	4047.2
17.5°	4619.2	4563.6	4278.8	4152.0	4082.1	4018.7	4007.0	3969.5	3950.1	3943.6	3942.3
20°	4480.7	4280.1	4067.9	4036.8	3952.7	3880.2	3868.5	3880.2	3939.7	3833.6	3473.8
22.5°	4319.0	4030.3	3968.2	3880.2	3823.3	3794.8	3866.0	3542.4	3053.2	3112.7	3049.3
25°	4044.6	3919.0	3812.9	3745.6	3739.1	3564.4	2970.3	2908.2	2593.7	2425.4	2236.5
27.5°	3844.0	3789.6	3678.3	3666.6	3582.5	2914.7	2605.3	2263.7	2138.1	2118.7	2077.3
30°	3722.3	3644.6	3577.3	3283.5	2859.0	2346.5	2090.2	2042.3	2020.3	1997.0	1960.8
32.5°	3576.0	3502.3	3534.6	2760.7	2279.2	2020.3	1968.6	1933.6	1893.5	1878.0	1747.3
35°	3427.2	3393.6	2762.0	2320.6	1959.5	1897.4	1858.6	1822.3	1449.6	350.7	119.1
37.5°	3268.0	3260.2	2482.4	1925.9	1835.3	1777.0	1667.0	344.3	81.5	55.7	41.4
40°	3143.8	2483.7	1962.1	1805.5	1731.7	1639.8	230.4	56.9	36.2	22.0	14.2
42.5°	3060.9	2233.9	1756.3	1694.2	1533.7	169.5	58.2	24.6	14.2	11.6	9.1
45°	2359.4	1764.1	1641.1	1576.4	194.1	58.2	33.7	11.6	9.1	7.8	5.2
47.5°	2176.9	1602.3	1529.8	344.3	64.7	31.1	23.3	7.8	5.2	5.2	5.2
50°	1648.9	1480.6	1217.9	84.1	41.4	22.0	16.8	5.2	5.2	5.2	3.9
52.5°	1445.7	1366.7	130.7	55.7	32.4	16.8	10.4	3.9	3.9	3.9	3.9
55°	1321.4	867.2	77.7	42.7	27.2	15.5	6.5	3.9	3.9	3.9	2.6
57.5°	1208.8	116.5	56.9	36.2	24.6	14.2	3.9	3.9	3.9	3.9	2.6
60°	1025.1	84.1	46.6	32.4	23.3	12.9	3.9	3.9	3.9	3.9	3.9
62.5°	133.3	66.0	40.1	28.5	16.8	10.4	2.6	3.9	3.9	3.9	3.9
65°	97.1	51.8	36.2	19.4	10.4	3.9	2.6	3.9	3.9	3.9	3.9
67.5°	75.1	42.7	27.2	16.8	9.1	2.6	2.6	3.9	3.9	3.9	3.9
70°	59.5	36.2	22.0	14.2	7.8	2.6	2.6	3.9	3.9	3.9	3.9
72.5°	46.6	25.9	15.5	7.8	5.2	2.6	2.6	3.9	3.9	3.9	3.9
75°	34.9	20.7	11.6	6.5	2.6	2.6	2.6	3.9	3.9	3.9	3.9
77.5°	23.3	12.9	9.1	5.2	5.2	5.2	6.5	6.5	3.9	3.9	3.9
80°	15.5	9.1	6.5	6.5	6.5	5.2	6.5	6.5	3.9	6.5	3.9
82.5°	7.8	6.5	6.5	5.2	5.2	3.9	5.2	5.2	5.2	5.2	3.9
85°	5.2	3.9	3.9	3.9	3.9	3.9	3.9	3.9	5.2	5.2	3.9
87.5°	2.6	2.6	2.6	2.6	3.9	3.9	3.9	3.9	5.2	5.2	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213521

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5
2.5°	4343.5	4347.4	4337.1	4392.7	4364.3	4366.8	4378.5	4348.7	4355.2	4334.5	4320.2
5°	4814.7	4822.4	4830.2	4832.8	4838.0	4844.4	4836.7	4832.8	4825.0	4799.1	4771.9
7.5°	4740.9	4731.8	4727.9	4733.1	4742.2	4746.1	4739.6	4748.6	4782.3	4796.5	4805.6
10°	4352.6	4311.2	4339.7	4335.8	4303.4	4412.1	4382.4	4399.2	4410.8	4529.9	4602.4
12.5°	4167.5	4193.4	4144.2	4119.6	4152.0	4174.0	4196.0	4149.4	4214.1	4184.3	4280.1
15°	4012.2	3996.7	3991.5	3992.8	3986.3	4017.4	4025.2	4035.5	4044.6	4084.7	4100.2
17.5°	3942.3	3968.2	3978.6	3986.3	3973.4	3959.1	3944.9	3924.2	3930.7	3920.3	3950.1
20°	3231.8	3145.1	3139.9	3190.4	3134.7	3165.8	3240.8	3743.0	3726.2	3921.6	3855.6
22.5°	2697.2	2615.7	2545.8	2485.0	2571.7	2607.9	2747.7	2905.6	3161.9	3121.8	3400.0
25°	2202.8	2173.1	2154.9	2145.9	2152.4	2149.8	2180.8	2254.6	2371.1	2645.5	3000.1
27.5°	2060.5	2046.2	2039.8	2019.0	2034.6	2029.4	2054.0	2069.5	2104.5	2131.6	2246.8
30°	1947.9	1931.0	1919.4	1897.4	1912.9	1914.2	1922.0	1962.1	1976.3	1999.6	2035.9
32.5°	711.8	419.3	393.5	374.0	409.0	533.2	935.8	1635.9	1866.3	1884.4	1925.9
35°	69.9	58.2	51.8	51.8	53.1	58.2	77.7	204.5	374.0	1445.7	1809.4
37.5°	27.2	23.3	19.4	18.1	19.4	22.0	29.8	38.8	53.1	110.0	490.5
40°	11.6	10.4	9.1	9.1	9.1	9.1	10.4	12.9	19.4	36.2	56.9
42.5°	7.8	6.5	6.5	6.5	6.5	6.5	6.5	6.5	9.1	11.6	23.3
45°	5.2	3.9	3.9	3.9	3.9	3.9	3.9	3.9	5.2	6.5	10.4
47.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	5.2
50°	3.9	3.9	3.9	3.9	2.6	3.9	2.6	3.9	3.9	3.9	3.9
52.5°	3.9	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.9	3.9
55°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.9
57.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
60°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
62.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.9	3.9	2.6
65°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	3.9	2.6
67.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
70°	3.9	3.9	2.6	3.9	2.6	2.6	3.9	3.9	3.9	2.6	2.6
72.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	7.8	7.8	5.2
75°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	6.5	7.8	6.5
77.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	6.5	6.5	6.5
80°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	5.2	5.2	5.2
82.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	5.2	5.2	5.2
85°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
87.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213521

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5
2.5°	4295.7	4294.4	4321.5	4342.2	4334.5	4342.2	4351.3	4352.6	4355.2	4344.8	4341.0
5°	4720.2	4680.1	4602.4	4546.7	4482.0	4364.3	4306.0	4312.5	4313.8	4309.9	4315.1
7.5°	4801.7	4797.8	4770.6	4759.0	4715.0	4630.9	4496.3	4473.0	4416.0	4379.8	4350.0
10°	4597.2	4690.4	4715.0	4756.4	4782.3	4766.8	4652.9	4636.0	4599.8	4558.4	4567.5
12.5°	4375.9	4452.3	4456.1	4681.3	4731.8	4737.0	4693.0	4716.3	4721.5	4628.3	4573.9
15°	4104.1	4140.3	4216.7	4426.4	4579.1	4674.9	4703.3	4716.3	4652.9	4649.0	4627.0
17.5°	3985.0	4008.3	4043.3	4161.1	4392.7	4533.8	4654.2	4645.1	4669.7	4651.6	4595.9
20°	3834.9	3854.3	3916.4	3976.0	4089.9	4277.5	4502.7	4519.6	4551.9	4548.0	4563.6
22.5°	3832.3	3763.7	3774.1	3820.7	3939.7	4108.0	4347.4	4403.1	4423.8	4438.0	4454.8
25°	3040.2	3585.1	3684.8	3714.5	3792.2	3890.6	4172.7	4193.4	4232.2	4295.7	4342.2
27.5°	2633.8	3004.0	3402.6	3609.7	3658.9	3740.4	3908.7	3939.7	4071.7	4087.3	4159.8
30°	2078.6	2364.6	2960.0	3458.3	3539.8	3596.8	3715.8	3778.0	3834.9	3897.0	3973.4
32.5°	1955.6	2000.9	2331.0	2861.6	3495.8	3453.1	3541.1	3578.6	3640.8	3695.1	3750.8
35°	1843.0	1874.1	1944.0	2343.9	2847.4	3335.3	3394.8	3419.4	3454.4	3495.8	3535.9
37.5°	1725.3	1771.8	1819.7	1927.2	2633.8	3242.1	3240.8	3269.3	3290.0	3325.0	3358.6
40°	313.2	1626.9	1704.5	1774.4	2042.3	2585.9	3095.9	3108.8	3123.1	3145.1	3180.0
42.5°	50.5	271.8	1597.1	1664.4	1740.8	2315.4	3029.9	2976.8	2967.7	2983.3	3014.3
45°	25.9	66.0	321.0	1554.4	1623.0	1846.9	2477.2	2884.9	2875.9	2846.1	2852.6
47.5°	19.4	41.4	78.9	537.1	1519.5	1585.5	2285.7	2261.1	2433.2	2763.2	2712.8
50°	16.8	28.5	46.6	110.0	1342.1	1459.9	1760.2	2056.6	2147.2	2158.8	2554.9
52.5°	15.5	19.4	33.7	71.2	282.1	1349.9	1431.5	1535.0	1687.7	2015.2	2007.4
55°	14.2	18.1	28.5	47.9	98.4	1216.6	1300.7	1320.1	1352.5	1509.1	1716.2
57.5°	7.8	16.8	27.2	41.4	73.8	222.6	1180.4	1195.9	1221.8	1228.3	1302.0
60°	3.9	15.5	24.6	36.2	54.4	103.5	1061.3	1079.4	1094.9	1097.5	1120.8
62.5°	2.6	14.2	20.7	33.7	45.3	73.8	251.1	512.5	974.6	974.6	1001.8
65°	2.6	10.4	12.9	22.0	41.4	60.8	106.1	123.0	239.4	588.9	878.8
67.5°	2.6	3.9	11.6	18.1	31.1	46.6	77.7	90.6	108.7	124.2	230.4
70°	2.6	2.6	10.4	11.6	19.4	34.9	55.7	63.4	73.8	84.1	97.1
72.5°	2.6	2.6	9.1	9.1	12.9	23.3	42.7	46.6	53.1	59.5	68.6
75°	6.5	5.2	7.8	7.8	9.1	18.1	32.4	36.2	38.8	44.0	50.5
77.5°	6.5	6.5	6.5	6.5	6.5	11.6	20.7	23.3	27.2	29.8	34.9
80°	5.2	5.2	5.2	6.5	6.5	7.8	12.9	14.2	15.5	19.4	20.7
82.5°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	7.8	9.1	11.6
85°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	5.2	5.2	5.2	5.2
87.5°	3.9	3.9	3.9	2.6	2.6	3.9	3.9	3.9	3.9	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213521

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5	4312.5
2.5°	4339.7	4331.9	4325.4	4329.3	4317.7	4312.5	4316.4	4317.7	4320.2	4326.7	4328.0
5°	4328.0	4325.4	4337.1	4343.5	4341.0	4343.5	4343.5	4338.4	4330.6	4335.8	4324.1
7.5°	4320.2	4303.4	4290.5	4293.1	4280.1	4295.7	4309.9	4330.6	4337.1	4337.1	4324.1
10°	4453.6	4435.4	4363.0	4313.8	4281.4	4252.9	4320.2	4251.7	4284.0	4161.1	4302.1
12.5°	4563.6	4588.2	4555.8	4421.2	4397.9	4312.5	4361.7	4277.5	4252.9	4111.9	4157.2
15°	4607.6	4561.0	4550.6	4513.1	4462.6	4438.0	4306.0	4291.8	4251.7	4267.2	4207.6
17.5°	4568.7	4592.0	4561.0	4536.4	4484.6	4426.4	4347.4	4277.5	4221.9	4097.6	4202.5
20°	4531.2	4562.3	4469.1	4484.6	4489.8	4422.5	4381.1	4322.8	4252.9	4136.5	4045.9
22.5°	4469.1	4447.1	4454.8	4431.6	4412.1	4421.2	4364.3	4324.1	4206.4	4153.3	4030.3
25°	4368.1	4360.4	4381.1	4378.5	4331.9	4316.4	4287.9	4245.2	4198.6	4113.2	4012.2
27.5°	4203.8	4243.9	4280.1	4296.9	4272.4	4230.9	4215.4	4190.8	4158.5	4071.7	3996.7
30°	4030.3	4075.6	4117.0	4153.3	4175.3	4157.2	4142.9	4128.7	4079.5	4022.6	3938.4
32.5°	3832.3	3891.8	3948.8	3992.8	4040.7	4054.9	4044.6	4032.9	3991.5	3939.7	3872.4
35°	3603.2	3684.8	3767.6	3846.5	3867.3	3900.9	3934.6	3915.1	3893.1	3841.4	3779.2
37.5°	3409.1	3467.3	3526.9	3626.5	3699.0	3741.7	3801.2	3809.0	3771.5	3746.9	3665.4
40°	3208.5	3261.5	3348.3	3406.5	3506.2	3555.3	3618.8	3647.2	3638.2	3623.9	3552.7
42.5°	3050.6	3076.5	3133.4	3185.2	3283.5	3384.5	3440.1	3471.2	3503.6	3491.9	3455.7
45°	2882.3	2905.6	2925.0	2970.3	3066.1	3155.4	3224.0	3270.6	3328.8	3356.0	3312.0
47.5°	2715.4	2721.8	2745.1	2782.7	2839.6	2908.2	3023.4	3093.3	3147.6	3200.7	3172.2
50°	2587.2	2563.9	2567.8	2591.1	2637.7	2705.0	2787.8	2886.2	2948.3	3013.0	3019.5
52.5°	2261.1	2450.0	2404.7	2417.7	2442.3	2474.6	2561.3	2658.4	2734.8	2790.4	2846.1
55°	1897.4	1934.9	2298.6	2246.8	2262.4	2290.8	2331.0	2428.0	2501.8	2579.5	2657.1
57.5°	1471.6	1751.1	1765.4	2101.9	2094.1	2096.7	2130.4	2186.0	2259.8	2356.9	2422.9
60°	1144.1	1261.9	1491.0	1607.5	1902.6	1912.9	1932.3	1964.7	2028.1	2120.0	2224.8
62.5°	1009.5	1025.1	1106.6	1281.3	1472.9	1704.5	1746.0	1751.1	1779.6	1871.5	1993.2
65°	886.6	896.9	921.5	939.6	1100.1	1324.0	1523.3	1555.7	1573.8	1628.2	1731.7
67.5°	610.9	772.7	794.7	807.6	823.2	926.7	1173.9	1338.3	1359.0	1406.9	1497.5
70°	117.8	244.6	669.1	683.4	691.1	714.4	754.6	1016.0	1153.2	1198.5	1239.9
72.5°	80.2	94.5	113.9	269.2	569.5	582.4	591.5	625.1	856.8	988.8	1010.8
75°	58.2	64.7	76.4	94.5	116.5	379.2	469.8	486.6	503.5	695.0	806.3
77.5°	41.4	46.6	51.8	60.8	71.2	91.9	132.0	363.7	380.5	389.6	550.1
80°	23.3	28.5	34.9	40.1	45.3	51.8	67.3	84.1	187.7	274.4	288.6
82.5°	12.9	15.5	18.1	22.0	24.6	31.1	37.5	45.3	59.5	88.0	186.4
85°	6.5	6.5	6.5	9.1	10.4	14.2	16.8	19.4	27.2	37.5	51.8
87.5°	3.9	3.9	5.2	5.2	5.2	6.5	6.5	6.5	7.8	11.6	16.8
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: P1213521

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	4312.5	4312.5	4312.5	4312.5	4312.5
2.5°	4329.3	4325.4	4325.4	4341.0	4337.1
5°	4321.5	4317.7	4316.4	4333.2	4325.4
7.5°	4315.1	4300.8	4296.9	4312.5	4306.0
10°	4289.2	4278.8	4285.3	4280.1	4277.5
12.5°	4245.2	4238.7	4211.5	4214.1	4236.1
15°	4166.2	4192.1	4145.5	4186.9	4196.0
17.5°	4021.3	4079.5	4124.8	4149.4	4153.3
20°	4086.0	4105.4	4082.1	4083.4	4098.9
22.5°	4001.9	4010.9	4017.4	4009.6	4043.3
25°	3867.3	3832.3	3907.4	3922.9	3977.3
27.5°	3825.8	3797.4	3832.3	3829.7	3875.0
30°	3792.2	3700.3	3715.8	3740.4	3796.1
32.5°	3744.3	3599.3	3583.8	3638.2	3700.3
35°	3660.2	3523.0	3486.7	3521.7	3614.9
37.5°	3589.0	3416.9	3344.4	3391.0	3512.6
40°	3482.9	3334.0	3221.4	3262.8	3406.5
42.5°	3356.0	3262.8	3089.4	3117.9	3282.2
45°	3227.9	3145.1	2961.3	2975.5	3170.9
47.5°	3097.2	3020.8	2828.0	2830.6	3028.6
50°	2969.0	2868.1	2708.9	2663.6	2877.1
52.5°	2802.1	2708.9	2588.5	2514.8	2733.5
55°	2644.2	2539.3	2451.3	2337.4	2570.4
57.5°	2490.2	2373.7	2314.1	2167.9	2385.3
60°	2279.2	2223.5	2135.5	1995.8	2218.4
62.5°	2063.1	2044.9	1955.6	1810.7	2012.6
65°	1810.7	1853.4	1761.5	1637.2	1799.0
67.5°	1572.5	1648.9	1547.9	1471.6	1593.2
70°	1318.9	1406.9	1349.9	1322.7	1374.5
72.5°	1069.1	1154.5	1159.7	1140.2	1157.1
75°	825.7	920.2	972.0	942.2	946.1
77.5°	626.4	671.7	728.7	752.0	746.8
80°	387.0	465.9	512.5	560.4	543.6
82.5°	195.4	261.4	318.4	370.2	345.6
85°	81.5	104.8	146.3	192.8	185.1
87.5°	24.6	41.4	44.0	62.1	58.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)