

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: P1213872

Luminaire Tested: 4SNLED-LD5-72HL-RM-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213872
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-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

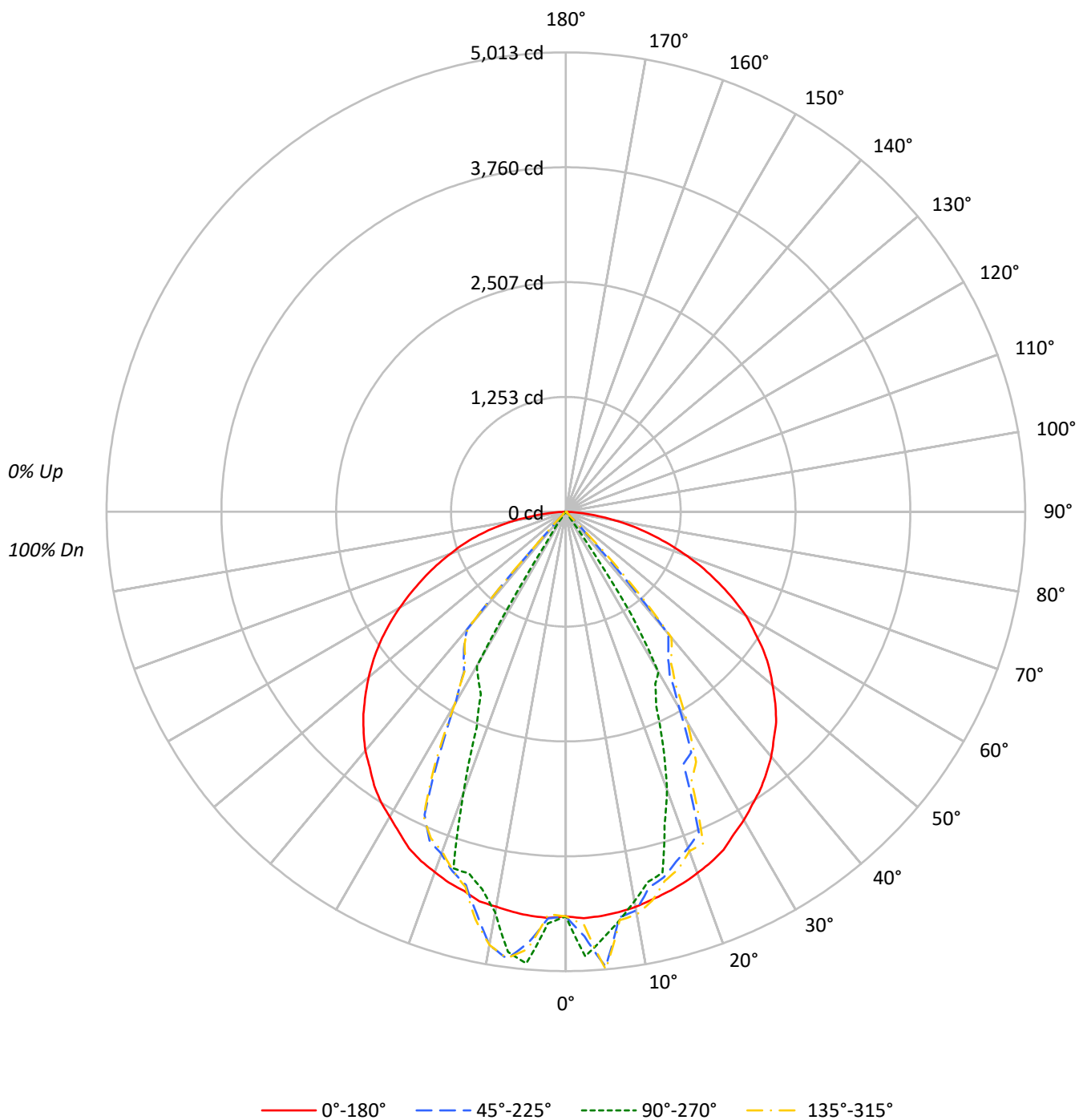
Lumens per Lamp: N/A
Luminaire Lumens: 6277.0 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	35674	35674	35674	35674
5°	35819	36690	35809	38854
10°	35733	33200	35711	34158
15°	35636	30988	35548	31069
20°	35677	24408	35575	24709
25°	35780	17664	35605	16668
30°	35616	15495	35241	14896
35°	35723	341	35198	414
40°	35845	75	34987	75
45°	35971	44	34620	33
50°	35697	35	34058	35
55°	35487	24	33307	24
60°	34816	25	32095	25
65°	33002	42	30651	28
70°	30615	47	29144	47
75°	27081	52	27525	52
80°	21995	59	23252	59
85°	12946	70	13213	70

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2°

Vertical Angle: 45°

Luminance: 38841 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	442.9	7.1
10°-20°	1208.1	19.2
20°-30°	1537.2	24.5
30°-40°	1298.5	20.7
40°-50°	848.9	13.5
50°-60°	534.9	8.5
60°-70°	284.7	4.5
70°-80°	103.8	1.7
80°-90°	17.9	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°	3188.2	50.8
0°-40°	4486.7	71.5
0°-60°	5870.6	93.5
0°-90°	6277.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6277.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4414	4414	4414	4414	4414	
5°	4428	4672	4426	4947	4428	421
15°	4295	4077	4285	4087	4295	1214
25°	4071	2328	4051	2197	4071	1872
35°	3700	44	3646	53	3700	2315
45°	3246	5	3124	4	3246	2496
55°	2631	3	2470	3	2631	2344
65°	1842	4	1710	3	1842	1824
75°	968	4	984	4	968	1028
85°	190	4	193	4	190	240
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5
2.5°	4439.6	4442.3	4443.6	4446.3	4450.2	4451.6	4454.2	4451.6	4451.6	4451.6	4451.6
5°	4427.7	4433.0	4437.0	4442.3	4451.6	4452.9	4463.5	4464.8	4470.1	4480.7	4488.6
7.5°	4407.8	4413.1	4421.1	4434.3	4447.6	4462.2	4480.7	4500.6	4528.4	4554.9	4588.0
10°	4378.7	4385.3	4394.6	4406.5	4471.4	4480.7	4521.8	4578.7	4594.6	4678.1	4740.4
12.5°	4336.3	4358.8	4382.7	4393.3	4455.5	4553.6	4691.4	4663.5	4633.1	4906.0	4902.0
15°	4295.2	4325.7	4313.8	4399.9	4456.9	4627.8	4569.5	4694.0	4921.9	4866.2	4868.9
17.5°	4251.5	4258.1	4324.4	4395.9	4497.9	4585.4	4656.9	4827.8	4872.9	4876.8	4827.8
20°	4195.9	4227.6	4324.4	4389.3	4561.5	4602.6	4757.6	4845.0	4826.5	4781.4	4698.0
22.5°	4138.9	4235.6	4333.6	4425.1	4545.6	4655.6	4732.4	4773.5	4676.8	4499.2	4403.9
25°	4071.3	4128.3	4256.8	4390.6	4541.6	4605.2	4650.3	4584.0	4458.2	4299.2	4138.9
27.5°	3966.7	4058.1	4222.4	4373.4	4509.8	4586.7	4513.8	4354.8	4152.1	4047.5	3974.6
30°	3885.8	4005.1	4140.2	4285.9	4427.7	4472.8	4287.3	4105.8	3966.7	3862.0	3846.1
32.5°	3787.8	3957.4	4085.9	4225.0	4344.2	4284.6	4104.4	3869.9	3754.7	3714.9	3730.8
35°	3700.4	3828.9	3997.1	4133.6	4219.7	4085.9	3801.0	3655.3	3599.7	3622.2	3593.0
37.5°	3595.7	3765.3	3920.3	4038.2	4009.0	3807.7	3566.5	3473.8	3480.4	3461.9	3406.2
40°	3487.0	3648.7	3810.3	3921.6	3819.6	3512.2	3351.9	3332.0	3336.0	3276.4	3196.9
42.5°	3359.9	3506.9	3668.6	3769.2	3549.3	3309.5	3200.9	3203.5	3169.1	3085.6	3043.2
45°	3245.9	3381.1	3549.3	3558.6	3288.3	3088.3	3056.5	3022.0	2945.2	2917.4	2885.6
47.5°	3100.2	3249.9	3389.0	3338.7	3032.6	2908.1	2884.2	2808.7	2770.3	2749.1	2722.6
50°	2945.2	3096.2	3223.4	3080.3	2791.5	2762.3	2684.2	2624.6	2598.1	2575.5	2551.7
52.5°	2798.1	2922.7	3052.5	2806.1	2606.0	2578.2	2489.4	2455.0	2428.5	2403.3	2398.0
55°	2631.2	2741.1	2829.9	2545.1	2428.5	2363.6	2300.0	2276.1	2250.9	2239.0	2258.9
57.5°	2441.7	2566.3	2553.0	2288.0	2236.4	2142.3	2118.5	2102.6	2084.0	2092.0	1926.4
60°	2270.8	2366.2	2301.3	2099.9	2012.5	1948.9	1927.7	1917.1	1927.7	1766.0	1552.7
62.5°	2060.2	2167.5	2036.3	1880.0	1787.2	1756.8	1738.2	1752.8	1597.8	1420.3	1368.6
65°	1841.6	1958.2	1764.7	1644.2	1585.9	1559.4	1558.0	1434.8	1282.5	1213.6	1213.6
67.5°	1630.9	1751.5	1502.4	1401.7	1379.2	1381.8	1305.0	1118.2	1075.8	1029.4	895.6
70°	1407.0	1513.0	1241.4	1180.5	1167.2	1157.9	971.1	920.8	870.4	747.2	736.6
72.5°	1184.4	1236.1	997.6	983.1	980.4	814.8	777.7	691.6	633.3	618.7	612.1
75°	968.5	952.6	788.3	801.5	675.7	617.4	557.8	507.4	499.5	494.2	123.2
77.5°	764.4	685.0	621.4	540.5	483.6	410.7	398.8	390.8	257.0	92.7	75.5
80°	556.4	443.8	413.4	351.1	299.4	287.5	294.1	90.1	71.5	59.6	51.7
82.5°	353.7	283.5	231.9	202.7	197.4	86.1	63.6	51.7	45.0	38.4	31.8
85°	189.5	125.9	116.6	98.0	58.3	39.7	33.1	25.2	21.2	17.2	15.9
87.5°	59.6	50.3	41.1	33.1	19.9	13.2	10.6	9.3	7.9	6.6	6.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5
2.5°	4448.9	4451.6	4450.2	4454.2	4454.2	4459.5	4463.5	4467.5	4475.4	4479.4	4509.8
5°	4505.9	4512.5	4532.4	4550.9	4573.4	4580.1	4618.5	4627.8	4672.8	4678.1	4826.5
7.5°	4633.1	4658.2	4705.9	4753.6	4801.3	4831.8	4884.8	4917.9	4953.7	4985.5	5103.4
10°	4786.7	4829.1	4875.5	4923.2	4951.0	5009.3	5041.1	5046.4	5037.1	4985.5	4794.7
12.5°	4937.8	4980.2	4960.3	4969.6	5002.7	4899.4	4913.9	4839.7	4891.4	4635.7	4446.3
15°	4916.6	4913.9	4864.9	4705.9	4732.4	4535.0	4455.5	4394.6	4443.6	4417.1	4388.0
17.5°	4853.0	4732.4	4647.6	4456.9	4376.0	4320.4	4321.7	4323.0	4299.2	4324.4	4250.2
20°	4584.0	4448.9	4323.0	4255.5	4231.6	4191.9	4211.8	4191.9	4193.2	4201.2	4087.2
22.5°	4226.3	4185.3	4112.4	4133.6	4125.6	4161.4	4134.9	4093.8	4107.1	4047.5	3961.4
25°	4081.9	4034.2	4031.6	4039.5	4027.6	4011.7	3987.8	3925.6	3921.6	3903.1	3863.3
27.5°	3936.2	3938.8	3946.8	3922.9	3880.5	3848.7	3813.0	3782.5	3794.4	3773.2	3718.9
30°	3835.5	3834.2	3786.5	3765.3	3687.1	3688.4	3679.2	3660.6	3648.7	3650.0	3615.6
32.5°	3692.4	3651.3	3597.0	3570.5	3563.9	3540.0	3521.5	3525.5	3534.7	3501.6	3537.4
35°	3545.3	3460.6	3452.6	3430.1	3408.9	3393.0	3399.6	3373.1	3371.8	3367.8	3076.3
37.5°	3347.9	3306.9	3302.9	3279.0	3264.5	3260.5	3235.3	3239.3	3251.2	3272.4	2623.2
40°	3185.0	3147.9	3138.6	3137.3	3105.5	3102.8	3109.5	3134.6	3151.9	3019.4	2500.0
42.5°	3010.1	3012.7	2983.6	2965.1	2969.0	2981.0	3012.7	2925.3	2534.5	2415.2	2285.4
45°	2860.4	2847.1	2831.2	2825.9	2860.4	2836.5	2486.8	2294.7	2248.3	2243.0	1878.7
47.5°	2704.1	2700.1	2693.5	2697.4	2501.3	2229.8	2150.3	2125.1	2133.0	2127.7	1613.7
50°	2546.4	2551.7	2551.7	2228.4	2045.6	2000.5	2007.2	2029.7	1889.3	1763.4	1503.7
52.5°	2409.9	2368.9	2029.7	1913.1	1872.0	1891.9	1844.2	1668.0	1540.8	1466.6	1391.1
55°	2156.9	1854.8	1779.3	1760.7	1775.3	1599.1	1490.5	1376.5	1343.4	1335.5	1291.7
57.5°	1697.2	1636.2	1642.8	1568.6	1400.4	1301.0	1257.3	1241.4	1226.8	1216.2	106.0
60°	1501.1	1518.3	1389.8	1230.8	1163.2	1150.0	1139.4	1124.8	1122.2	1103.6	67.6
62.5°	1373.9	1208.3	1097.0	1057.2	1041.3	1037.4	1017.5	1010.9	858.5	117.9	50.3
65°	1036.0	968.5	947.3	938.0	920.8	920.8	764.4	120.6	98.0	84.8	45.0
67.5°	845.3	840.0	829.4	817.4	556.4	116.6	102.0	88.8	76.8	67.6	39.7
70°	715.4	712.8	649.2	119.2	99.4	87.4	76.8	68.9	63.6	57.0	35.8
72.5°	586.9	119.2	100.7	87.4	75.5	68.9	62.3	55.6	50.3	46.4	29.1
75°	91.4	80.8	71.5	64.9	59.6	53.0	47.7	43.7	42.4	37.1	19.9
77.5°	66.2	57.0	51.7	46.4	41.1	37.1	31.8	27.8	25.2	21.2	14.6
80°	46.4	41.1	37.1	30.5	26.5	22.5	19.9	17.2	15.9	13.2	6.6
82.5°	26.5	22.5	19.9	15.9	14.6	11.9	10.6	9.3	9.3	6.6	6.6
85°	11.9	11.9	9.3	7.9	6.6	6.6	6.6	5.3	5.3	4.0	4.0
87.5°	5.3	5.3	5.3	5.3	5.3	4.0	4.0	4.0	4.0	4.0	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

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CANDELA DISTRIBUTION (continued):

	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
0°	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5
2.5°	4552.2	4569.5	4602.6	4637.0	4598.6	4736.4	4725.8	4772.2	4797.3	4809.3	4837.1
5°	4957.7	5034.5	5059.7	4984.1	4940.4	4895.4	4793.4	4716.5	4725.8	4700.6	4609.2
7.5°	4949.7	4785.4	4564.2	4463.5	4455.5	4443.6	4475.4	4493.9	4496.6	4495.3	4492.6
10°	4531.0	4446.3	4431.7	4418.4	4423.7	4374.7	4352.2	4288.6	4323.0	4304.5	4311.1
12.5°	4403.9	4384.0	4305.8	4197.2	4262.1	4213.1	4185.3	4203.8	4182.6	4162.7	4156.1
15°	4328.3	4199.8	4156.1	4129.6	4111.1	4100.5	4109.7	4088.5	4081.9	4077.9	4087.2
17.5°	4172.0	4120.3	4072.6	4002.4	4003.7	3999.8	4026.3	4066.0	4068.7	3864.6	3680.5
20°	4048.8	4006.4	3945.5	3901.7	3961.4	3855.4	3446.0	3251.2	3220.8	3220.8	3226.1
22.5°	3950.8	3856.7	3860.7	3791.8	3234.0	3120.1	3122.7	3134.6	3080.3	2894.8	2875.0
25°	3816.9	3802.4	3512.2	3035.3	3039.2	2950.5	2814.0	2621.9	2413.9	2413.9	2379.5
27.5°	3716.3	3407.6	2983.6	2963.7	2665.6	2477.5	2360.9	2184.7	2160.9	2138.3	2141.0
30°	3630.1	2882.9	2893.5	2477.5	2257.6	2101.2	2092.0	2062.8	2048.2	2044.3	2029.7
32.5°	2869.7	2807.4	2421.9	2109.2	2023.1	1997.9	1986.0	1952.9	1951.5	1926.4	1751.5
35°	2690.8	2464.3	2027.0	1942.3	1917.1	1893.2	1873.4	1257.3	148.4	59.6	51.7
37.5°	2486.8	2058.8	1874.7	1836.3	1812.4	1339.4	133.8	46.4	33.1	23.8	21.2
40°	2107.9	1838.9	1780.6	1738.2	716.8	46.4	29.1	22.5	13.2	11.9	10.6
42.5°	1778.0	1732.9	1670.7	508.7	53.0	22.5	14.6	10.6	9.3	9.3	7.9
45°	1664.0	1624.3	673.0	50.3	33.1	10.6	9.3	9.3	7.9	5.3	5.3
47.5°	1558.0	1371.2	60.9	31.8	21.2	9.3	7.9	5.3	5.3	5.3	4.0
50°	1445.4	75.5	42.4	23.8	13.2	5.3	5.3	5.3	5.3	4.0	4.0
52.5°	270.3	53.0	34.4	21.2	6.6	5.3	5.3	5.3	4.0	4.0	4.0
55°	63.6	42.4	31.8	18.5	5.3	5.3	5.3	4.0	4.0	4.0	2.6
57.5°	47.7	31.8	25.2	17.2	5.3	4.0	4.0	4.0	4.0	4.0	2.6
60°	39.7	22.5	19.9	15.9	4.0	4.0	4.0	4.0	4.0	4.0	2.6
62.5°	27.8	18.5	14.6	11.9	4.0	4.0	4.0	4.0	4.0	4.0	4.0
65°	22.5	14.6	11.9	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
67.5°	19.9	11.9	7.9	2.6	4.0	4.0	4.0	4.0	4.0	4.0	4.0
70°	15.9	4.0	4.0	2.6	4.0	4.0	4.0	4.0	4.0	4.0	4.0
72.5°	13.2	4.0	2.6	2.6	4.0	4.0	4.0	4.0	4.0	4.0	4.0
75°	13.2	6.6	2.6	2.6	4.0	4.0	5.3	5.3	4.0	4.0	4.0
77.5°	9.3	6.6	2.6	2.6	4.0	4.0	5.3	5.3	4.0	4.0	4.0
80°	5.3	6.6	2.6	4.0	4.0	7.9	9.3	5.3	4.0	4.0	4.0
82.5°	5.3	6.6	7.9	7.9	4.0	6.6	7.9	6.6	5.3	4.0	4.0
85°	5.3	4.0	5.3	6.6	4.0	6.6	6.6	5.3	5.3	4.0	4.0
87.5°	2.6	4.0	4.0	5.3	5.3	5.3	6.6	5.3	5.3	5.3	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213872

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5
2.5°	4850.3	4855.6	4772.2	4743.0	4768.2	4762.9	4740.4	4656.9	4647.6	4592.0	4511.2
5°	4635.7	4671.5	4627.8	4703.3	4667.5	4703.3	4811.9	4862.3	4944.4	4994.7	5013.3
7.5°	4486.0	4493.9	4493.9	4500.6	4507.2	4508.5	4500.6	4495.3	4472.8	4444.9	4495.3
10°	4304.5	4313.8	4329.7	4327.0	4325.7	4353.5	4360.1	4417.1	4414.5	4425.1	4463.5
12.5°	4210.4	4138.9	4203.8	4186.6	4210.4	4173.3	4242.2	4230.3	4234.3	4266.1	4348.2
15°	4054.1	4076.6	4092.5	4092.5	4101.8	4093.8	4085.9	4140.2	4173.3	4174.7	4169.4
17.5°	3753.3	3582.4	3757.3	3712.3	4071.3	4080.6	4050.1	4024.9	4024.9	4044.8	4087.2
20°	3222.1	3226.1	3227.4	3244.6	3265.8	3264.5	3265.8	3787.8	4035.5	3978.6	3940.2
22.5°	2824.6	2775.6	2867.0	2860.4	2974.3	3100.2	3220.8	3208.8	3216.8	3585.1	3916.3
25°	2264.2	2327.8	2276.1	2298.6	2427.2	2576.9	2669.6	2912.1	3175.7	3157.2	3243.3
27.5°	2131.7	2114.5	2138.3	2138.3	2155.6	2175.4	2227.1	2363.6	2598.1	2844.5	3077.7
30°	2005.8	2020.4	2023.1	2046.9	2060.2	2073.4	2081.4	2133.0	2186.0	2356.9	2644.4
32.5°	1506.4	1320.9	1738.2	1850.8	1946.2	1968.8	1984.7	2005.8	2044.3	2069.4	2213.9
35°	43.7	43.7	46.4	53.0	67.6	455.8	1735.6	1913.1	1938.3	1970.1	1996.6
37.5°	21.2	15.9	18.5	19.9	23.8	33.1	47.7	148.4	1652.1	1868.1	1897.2
40°	9.3	9.3	9.3	9.3	10.6	13.2	19.9	33.1	50.3	1328.8	1792.5
42.5°	7.9	7.9	7.9	7.9	7.9	7.9	9.3	11.9	23.8	57.0	940.7
45°	5.3	5.3	4.0	5.3	5.3	6.6	7.9	7.9	10.6	35.8	64.9
47.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	6.6	7.9	23.8	34.4
50°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	18.5	23.8
52.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	7.9	21.2
55°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	4.0	4.0	5.3	18.5
57.5°	2.6	2.6	2.6	2.6	2.6	4.0	2.6	2.6	4.0	4.0	17.2
60°	2.6	2.6	2.6	2.6	2.6	4.0	4.0	4.0	4.0	4.0	15.9
62.5°	4.0	4.0	2.6	4.0	2.6	2.6	4.0	4.0	4.0	4.0	10.6
65°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	2.6	4.0
67.5°	4.0	4.0	4.0	4.0	2.6	4.0	2.6	4.0	4.0	2.6	2.6
70°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	2.6	2.6	2.6	2.6
72.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	2.6	2.6	2.6	2.6
75°	4.0	4.0	4.0	4.0	4.0	4.0	5.3	5.3	2.6	2.6	2.6
77.5°	4.0	4.0	4.0	4.0	4.0	4.0	6.6	7.9	6.6	6.6	2.6
80°	4.0	4.0	4.0	4.0	4.0	4.0	6.6	6.6	6.6	6.6	9.3
82.5°	4.0	4.0	4.0	4.0	4.0	4.0	5.3	5.3	5.3	5.3	6.6
85°	4.0	4.0	4.0	4.0	4.0	4.0	5.3	5.3	5.3	4.0	5.3
87.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.3	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213872

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5
2.5°	4517.8	4472.8	4458.2	4427.7	4425.1	4427.7	4421.1	4411.8	4417.1	4407.8	4399.9
5°	5023.9	4903.3	4825.2	4720.5	4576.1	4544.3	4536.3	4491.3	4475.4	4470.1	4448.9
7.5°	4614.5	4834.4	4966.9	5012.0	4842.4	4802.6	4756.3	4719.2	4683.4	4615.8	4574.8
10°	4433.0	4443.6	4570.8	4719.2	4960.3	4993.4	5018.6	4937.8	4915.3	4743.0	4705.9
12.5°	4390.6	4391.9	4406.5	4496.6	4686.1	4707.3	4796.0	4843.7	4902.0	4935.1	4908.6
15°	4197.2	4304.5	4384.0	4391.9	4409.2	4446.3	4472.8	4638.4	4708.6	4896.7	4886.1
17.5°	4107.1	4141.5	4256.8	4350.9	4335.0	4321.7	4342.9	4365.4	4433.0	4621.1	4618.5
20°	3957.4	4067.3	4129.6	4227.6	4316.4	4320.4	4296.5	4283.3	4256.8	4287.3	4315.1
22.5°	3893.8	3911.0	4027.6	4096.5	4197.2	4232.9	4238.2	4239.6	4225.0	4209.1	4201.2
25°	3887.2	3832.8	3892.5	3978.6	4052.8	4091.2	4134.9	4149.5	4144.2	4144.2	4136.2
27.5°	3181.0	3815.6	3783.8	3840.8	3930.9	3957.4	3979.9	4024.9	4052.8	4072.6	4081.9
30°	3030.0	3143.9	3699.0	3707.0	3798.4	3795.7	3820.9	3858.0	3893.8	3940.2	3952.1
32.5°	2680.2	2959.8	3386.4	3573.2	3668.6	3677.8	3691.1	3701.7	3734.8	3786.5	3831.5
35°	2147.6	2696.1	2901.5	3509.6	3526.8	3545.3	3553.3	3578.5	3589.1	3610.3	3650.0
37.5°	1943.6	2228.4	2783.5	3035.3	3363.8	3379.7	3422.1	3432.7	3450.0	3467.2	3497.6
40°	1825.7	1903.8	2317.2	2710.7	3232.7	3243.3	3257.8	3284.3	3285.7	3305.5	3333.4
42.5°	1731.6	1781.9	1902.5	2588.8	3139.9	3138.6	3104.2	3121.4	3129.3	3150.5	3189.0
45°	1383.2	1672.0	1748.8	2114.5	2500.0	2680.2	3026.0	2969.0	2967.7	2975.7	3016.7
47.5°	70.2	1572.6	1626.9	1744.8	2360.9	2367.5	2412.6	2791.5	2849.8	2831.2	2835.2
50°	47.7	108.6	1515.6	1570.0	2035.0	2199.3	2232.4	2249.6	2468.2	2712.0	2672.3
52.5°	37.1	62.3	928.7	1457.4	1653.4	1774.0	1987.3	2109.2	2122.4	2220.5	2553.0
55°	33.1	47.7	100.7	1344.7	1405.7	1432.2	1556.7	1770.0	1942.3	1993.9	1997.9
57.5°	29.1	43.7	68.9	608.1	1278.5	1283.8	1305.0	1379.2	1534.2	1676.0	1836.3
60°	26.5	38.4	54.3	104.7	1161.9	1175.2	1179.1	1199.0	1217.6	1314.3	1498.4
62.5°	15.9	30.5	47.7	75.5	919.5	1055.9	1054.6	1067.8	1085.1	1095.7	1132.8
65°	13.2	23.8	41.1	63.6	112.6	140.4	853.2	948.6	959.2	973.8	980.4
67.5°	11.9	21.2	30.5	50.3	84.8	96.7	111.3	137.8	752.5	847.9	861.2
70°	10.6	14.6	25.2	42.4	68.9	74.2	83.5	95.4	112.6	139.1	681.0
72.5°	6.6	10.6	17.2	30.5	53.0	59.6	64.9	72.9	80.8	96.7	111.3
75°	2.6	7.9	14.6	22.5	41.1	45.0	49.0	54.3	60.9	71.5	79.5
77.5°	2.6	6.6	11.9	15.9	26.5	30.5	35.8	39.7	45.0	50.3	58.3
80°	9.3	5.3	7.9	11.9	18.5	19.9	22.5	25.2	29.1	33.1	38.4
82.5°	6.6	7.9	9.3	7.9	9.3	11.9	13.2	15.9	17.2	19.9	21.2
85°	5.3	5.3	6.6	6.6	6.6	6.6	6.6	6.6	7.9	9.3	11.9
87.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.3	5.3
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: P1213872

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5
2.5°	4399.9	4397.2	4389.3	4389.3	4388.0	4393.3	4397.2	4401.2	4399.9	4407.8	4399.9
5°	4433.0	4426.4	4414.5	4403.9	4399.9	4402.5	4398.6	4402.5	4397.2	4403.9	4391.9
7.5°	4524.4	4501.9	4455.5	4437.0	4413.1	4411.8	4399.9	4397.2	4389.3	4389.3	4374.7
10°	4686.1	4577.4	4564.2	4508.5	4488.6	4391.9	4413.1	4377.4	4373.4	4356.2	4349.5
12.5°	4818.5	4733.7	4708.6	4659.6	4603.9	4407.8	4451.6	4374.7	4370.7	4336.3	4300.5
15°	4821.2	4870.2	4801.3	4666.2	4654.3	4519.1	4430.4	4403.9	4369.4	4266.1	4283.3
17.5°	4666.2	4778.8	4811.9	4782.8	4698.0	4606.6	4482.0	4429.0	4325.7	4279.3	4247.5
20°	4414.5	4528.4	4670.2	4679.4	4732.4	4667.5	4504.5	4418.4	4293.9	4213.1	4186.6
22.5°	4214.4	4297.9	4460.8	4536.3	4601.3	4623.8	4520.4	4393.3	4238.2	4160.1	4144.2
25°	4108.4	4127.0	4176.0	4264.7	4407.8	4511.2	4525.7	4390.6	4309.8	4138.9	4048.8
27.5°	4070.0	4054.1	4034.2	4079.3	4186.6	4312.4	4395.9	4418.4	4217.1	4054.1	3964.0
30°	3972.0	3981.2	3950.8	3934.9	4005.1	4134.9	4283.3	4320.4	4165.4	3997.1	3893.8
32.5°	3851.4	3867.3	3872.6	3844.8	3830.2	3920.3	4080.6	4169.4	4161.4	3916.3	3801.0
35°	3700.4	3745.4	3757.3	3758.6	3734.8	3720.2	3813.0	3997.1	4067.3	3879.2	3712.3
37.5°	3541.4	3554.6	3619.5	3636.8	3636.8	3593.0	3661.9	3809.0	3907.0	3795.7	3603.6
40°	3342.6	3385.0	3446.0	3476.5	3506.9	3510.9	3472.5	3575.8	3737.4	3709.6	3501.6
42.5°	3198.2	3226.1	3263.1	3304.2	3366.5	3382.4	3342.6	3361.2	3529.4	3602.3	3369.1
45°	3030.0	3067.1	3077.7	3122.7	3187.6	3234.0	3232.7	3194.3	3329.4	3419.5	3272.4
47.5°	2857.7	2893.5	2912.1	2934.6	2982.3	3041.9	3075.0	3057.8	3084.3	3260.5	3143.9
50°	2680.2	2700.1	2737.2	2762.3	2794.1	2828.6	2908.1	2924.0	2886.9	3027.3	3002.1
52.5°	2511.9	2518.6	2543.7	2568.9	2611.3	2636.5	2700.1	2747.8	2745.1	2786.2	2844.5
55°	2380.8	2351.6	2356.9	2376.8	2404.6	2443.1	2478.8	2553.0	2578.2	2586.1	2678.9
57.5°	1860.1	2159.5	2186.0	2184.7	2217.8	2235.1	2268.2	2317.2	2407.3	2387.4	2490.7
60°	1690.5	1723.7	1974.1	2003.2	2015.1	2031.0	2070.8	2115.8	2182.1	2224.5	2269.5
62.5°	1289.1	1490.5	1566.0	1787.2	1821.7	1831.0	1857.5	1878.7	1947.6	2044.3	2025.7
65°	997.6	1083.7	1314.3	1404.4	1592.5	1616.3	1653.4	1676.0	1695.8	1807.1	1812.4
67.5°	862.5	875.7	938.0	1111.6	1230.8	1415.0	1437.5	1457.4	1487.8	1567.3	1616.3
70°	736.6	752.5	769.7	784.3	939.3	1061.2	1232.1	1238.8	1258.6	1311.6	1422.9
72.5°	139.1	629.3	639.9	649.2	666.4	747.2	910.2	1042.7	1050.6	1075.8	1177.8
75°	94.1	110.0	151.0	519.3	536.6	541.9	569.7	735.3	857.2	862.5	907.5
77.5°	67.6	75.5	91.4	108.6	276.9	416.0	422.6	453.1	579.0	670.4	678.3
80°	46.4	51.7	60.9	68.9	84.8	111.3	307.4	316.6	332.5	458.4	482.3
82.5°	26.5	30.5	35.8	43.7	50.3	63.6	82.1	106.0	216.0	230.5	306.0
85°	13.2	14.6	17.2	21.2	25.2	30.5	41.1	50.3	68.9	124.5	128.5
87.5°	6.6	6.6	6.6	6.6	10.6	11.9	14.6	18.5	23.8	35.8	46.4
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: P1213872

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5
2.5°	4401.2	4419.8	4435.7	4439.6	4439.6	4442.3	4446.3	4448.9	4451.6	4454.2	4451.6
5°	4393.3	4413.1	4426.4	4430.4	4430.4	4438.3	4444.9	4452.9	4456.9	4456.9	4454.2
7.5°	4373.4	4388.0	4405.2	4415.8	4417.1	4430.4	4442.3	4441.0	4446.3	4448.9	4455.5
10°	4346.9	4346.9	4376.0	4384.0	4390.6	4405.2	4409.2	4417.1	4435.7	4438.3	4455.5
12.5°	4333.6	4320.4	4354.8	4358.8	4381.3	4362.8	4386.6	4394.6	4376.0	4401.2	4368.1
15°	4274.0	4289.9	4284.6	4296.5	4336.3	4315.1	4380.0	4358.8	4406.5	4349.5	4450.2
17.5°	4225.0	4222.4	4243.5	4254.1	4262.1	4307.1	4324.4	4348.2	4366.8	4350.9	4390.6
20°	4189.2	4168.0	4183.9	4195.9	4223.7	4258.1	4268.7	4232.9	4295.2	4401.2	4426.4
22.5°	4121.7	4107.1	4125.6	4125.6	4168.0	4162.7	4202.5	4180.0	4238.2	4361.5	4490.0
25°	4030.2	4031.6	4051.4	4075.3	4083.2	4142.9	4164.1	4193.2	4266.1	4413.1	4491.3
27.5°	3937.5	3929.6	3941.5	3990.5	4031.6	4075.3	4081.9	4181.3	4280.6	4381.3	4450.2
30°	3844.8	3836.8	3844.8	3880.5	3929.6	3958.7	4031.6	4164.1	4256.8	4325.7	4390.6
32.5°	3745.4	3737.4	3756.0	3782.5	3868.6	3872.6	4017.0	4141.5	4214.4	4264.7	4252.8
35°	3639.4	3628.8	3646.0	3687.1	3766.6	3795.7	3946.8	4039.5	4121.7	4145.5	4089.9
37.5°	3512.2	3493.7	3514.9	3571.8	3655.3	3740.1	3866.0	3973.3	4017.0	3953.4	3887.2
40°	3379.7	3366.5	3403.6	3432.7	3530.8	3648.7	3793.1	3868.6	3840.8	3767.9	3695.1
42.5°	3261.8	3234.0	3267.1	3322.8	3434.1	3567.9	3684.5	3726.9	3660.6	3553.3	3468.5
45°	3117.4	3084.3	3124.0	3198.2	3317.5	3469.8	3561.2	3546.7	3434.1	3341.3	3224.7
47.5°	2966.4	2926.6	2966.4	3055.1	3189.0	3350.6	3416.8	3350.6	3208.8	3092.2	2998.2
50°	2818.0	2771.6	2810.0	2943.9	3075.0	3199.6	3198.2	3069.7	2984.9	2857.7	2775.6
52.5°	2670.9	2604.7	2643.1	2788.8	2920.0	3061.8	2957.1	2837.9	2735.8	2624.6	2598.1
55°	2489.4	2417.9	2469.6	2681.5	2782.2	2865.7	2698.8	2594.1	2493.4	2437.8	2404.6
57.5°	2317.2	2239.0	2284.1	2534.5	2608.7	2629.9	2476.2	2327.8	2268.2	2249.6	2201.9
60°	2139.7	2050.9	2093.3	2382.1	2433.8	2347.7	2196.6	2081.4	2069.4	2032.3	1995.2
62.5°	1970.1	1872.0	1898.5	2192.7	2216.5	2060.2	1921.1	1890.6	1861.4	1824.3	1804.5
65°	1775.3	1673.3	1710.4	1991.3	1968.8	1767.4	1689.2	1682.6	1644.2	1613.7	1642.8
67.5°	1596.5	1475.9	1527.6	1771.3	1669.3	1505.0	1473.3	1457.4	1426.9	1444.1	1138.1
70°	1400.4	1269.2	1339.4	1534.2	1383.2	1274.5	1262.6	1238.8	1240.1	985.7	830.7
72.5°	1181.8	1067.8	1169.9	1274.5	1094.3	1062.5	1045.3	1042.7	841.3	683.6	645.2
75°	989.7	874.4	984.4	1024.1	871.8	850.6	849.2	702.2	552.5	527.3	515.4
77.5°	772.4	683.6	788.3	728.7	669.1	645.2	579.0	434.6	416.0	398.8	149.7
80°	520.7	527.3	588.2	502.1	477.0	406.7	320.6	307.4	265.0	106.0	83.5
82.5°	316.6	397.5	374.9	314.0	307.4	221.3	202.7	103.3	76.8	60.9	53.0
85°	164.3	201.4	193.4	170.9	127.2	113.9	63.6	49.0	39.7	30.5	25.2
87.5°	55.6	74.2	71.5	57.0	43.7	34.4	22.5	18.5	13.2	10.6	9.3
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: P1213872

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5
2.5°	4448.9	4448.9	4446.3	4448.9	4450.2	4447.6	4447.6	4450.2	4451.6	4452.9	4459.5
5°	4455.5	4458.2	4462.2	4470.1	4471.4	4487.3	4493.9	4497.9	4501.9	4503.2	4493.9
7.5°	4470.1	4479.4	4487.3	4486.0	4476.7	4451.6	4443.6	4437.0	4448.9	4479.4	4515.1
10°	4483.3	4441.0	4361.5	4470.1	4437.0	4467.5	4557.5	4577.4	4638.4	4724.5	4749.6
12.5°	4391.9	4508.5	4533.7	4411.8	4637.0	4553.6	4652.9	4740.4	4765.5	4853.0	4800.0
15°	4490.0	4546.9	4585.4	4707.3	4694.0	4765.5	4793.4	4776.1	4780.1	4802.6	4862.3
17.5°	4488.6	4602.6	4627.8	4709.9	4765.5	4766.9	4758.9	4751.0	4772.2	4789.4	4753.6
20°	4565.5	4602.6	4651.6	4684.7	4695.3	4708.6	4733.7	4713.9	4674.1	4635.7	4619.8
22.5°	4527.1	4610.5	4652.9	4658.2	4651.6	4610.5	4573.4	4517.8	4499.2	4479.4	4486.0
25°	4535.0	4573.4	4568.1	4546.9	4519.1	4442.3	4423.7	4399.9	4364.1	4278.0	4199.8
27.5°	4478.0	4458.2	4434.3	4382.7	4332.3	4291.2	4244.9	4168.0	4104.4	4011.7	3977.2
30°	4382.7	4303.2	4244.9	4214.4	4165.4	4096.5	4026.3	3932.2	3851.4	3832.8	3815.6
32.5°	4199.8	4121.7	4074.0	3999.8	3916.3	3834.2	3753.3	3716.3	3699.0	3701.7	3685.8
35°	4013.0	3944.1	3872.6	3761.3	3699.0	3616.9	3587.7	3579.8	3563.9	3546.7	3528.1
37.5°	3814.3	3733.5	3626.2	3559.9	3497.6	3464.5	3450.0	3438.0	3410.2	3379.7	3358.5
40°	3622.2	3476.5	3416.8	3351.9	3333.4	3318.8	3297.6	3268.4	3230.0	3224.7	3215.5
42.5°	3365.2	3260.5	3208.8	3195.6	3173.1	3147.9	3129.3	3097.5	3081.6	3092.2	3100.2
45°	3121.4	3068.4	3051.2	3035.3	2992.9	2957.1	2945.2	2934.6	2947.8	3006.1	2867.0
47.5°	2924.0	2902.8	2881.6	2855.1	2815.3	2788.8	2800.8	2811.4	2823.3	2395.4	2186.0
50°	2753.1	2723.9	2690.8	2661.7	2637.8	2635.2	2697.4	2510.6	2102.6	2092.0	1880.0
52.5°	2566.3	2522.5	2502.7	2485.4	2496.0	2535.8	2098.6	1947.6	1868.1	1623.0	1514.3
55°	2364.9	2326.5	2326.5	2342.4	2285.4	1852.2	1829.6	1581.9	1432.2	1389.8	1372.6
57.5°	2163.5	2159.5	2182.1	1995.2	1681.3	1612.4	1355.3	1301.0	1277.2	1271.9	1244.0
60°	1979.4	2016.4	1687.9	1552.7	1350.0	1217.6	1180.5	1173.8	1148.7	1139.4	1114.2
62.5°	1832.3	1519.6	1415.0	1155.3	1087.7	1070.5	1050.6	1041.3	1018.8	899.6	263.6
65°	1323.5	1250.7	1014.8	971.1	965.8	940.7	932.7	838.6	197.4	132.5	112.6
67.5°	998.9	886.3	855.9	847.9	822.7	772.4	229.2	131.2	112.6	98.0	86.1
70°	767.1	747.2	724.7	706.2	208.0	129.8	112.6	95.4	82.1	72.9	66.2
72.5°	628.0	614.7	357.7	136.5	111.3	94.1	83.5	72.9	63.6	58.3	53.0
75°	491.5	136.5	112.6	94.1	80.8	68.9	60.9	54.3	49.0	45.0	41.1
77.5°	111.3	90.1	76.8	64.9	58.3	51.7	46.4	39.7	35.8	31.8	26.5
80°	68.9	59.6	50.3	46.4	39.7	33.1	29.1	26.5	21.2	19.9	17.2
82.5°	45.0	35.8	31.8	26.5	21.2	19.9	17.2	13.2	11.9	10.6	9.3
85°	19.9	17.2	14.6	11.9	9.3	7.9	6.6	5.3	5.3	5.3	5.3
87.5°	6.6	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	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: P1213872

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5
2.5°	4462.2	4486.0	4508.5	4501.9	4478.0	4441.0	4430.4	4415.8	4426.4	4448.9	4458.2
5°	4493.9	4480.7	4528.4	4598.6	4712.6	4723.1	4802.6	4821.2	4884.8	4924.5	4923.2
7.5°	4539.0	4727.1	4805.3	4890.1	4928.5	4919.2	4931.2	4921.9	4907.3	4900.7	4892.7
10°	4768.2	4911.3	4940.4	4940.4	4880.8	4800.0	4765.5	4705.9	4586.7	4589.3	4569.5
12.5°	4902.0	4952.4	4883.5	4825.2	4585.4	4492.6	4391.9	4344.2	4316.4	4274.0	4289.9
15°	4831.8	4760.2	4719.2	4531.0	4384.0	4217.1	4219.7	4190.6	4160.1	4162.7	4142.9
17.5°	4728.4	4671.5	4380.0	4250.2	4178.6	4113.7	4101.8	4063.4	4043.5	4036.9	4035.5
20°	4586.7	4381.3	4164.1	4132.3	4046.1	3972.0	3960.0	3972.0	4032.9	3924.3	3555.9
22.5°	4421.1	4125.6	4062.0	3972.0	3913.7	3884.5	3957.4	3626.2	3125.4	3186.3	3121.4
25°	4140.2	4011.7	3903.1	3834.2	3827.5	3648.7	3040.6	2977.0	2655.0	2482.8	2289.4
27.5°	3934.9	3879.2	3765.3	3753.3	3667.2	2983.6	2667.0	2317.2	2188.7	2168.8	2126.4
30°	3810.3	3730.8	3661.9	3361.2	2926.6	2402.0	2139.7	2090.6	2068.1	2044.3	2007.2
32.5°	3660.6	3585.1	3618.2	2825.9	2333.1	2068.1	2015.1	1979.4	1938.3	1922.4	1788.6
35°	3508.2	3473.8	2827.3	2375.5	2005.8	1942.3	1902.5	1865.4	1483.9	359.0	121.9
37.5°	3345.3	3337.3	2541.1	1971.4	1878.7	1819.0	1706.4	352.4	83.5	57.0	42.4
40°	3218.1	2542.4	2008.5	1848.2	1772.7	1678.6	235.8	58.3	37.1	22.5	14.6
42.5°	3133.3	2286.7	1797.8	1734.3	1570.0	173.6	59.6	25.2	14.6	11.9	9.3
45°	2415.2	1805.8	1679.9	1613.7	198.7	59.6	34.4	11.9	9.3	7.9	5.3
47.5°	2228.4	1640.2	1566.0	352.4	66.2	31.8	23.8	7.9	5.3	5.3	5.3
50°	1687.9	1515.6	1246.7	86.1	42.4	22.5	17.2	5.3	5.3	5.3	4.0
52.5°	1479.9	1399.1	133.8	57.0	33.1	17.2	10.6	4.0	4.0	4.0	4.0
55°	1352.7	887.7	79.5	43.7	27.8	15.9	6.6	4.0	4.0	4.0	2.6
57.5°	1237.4	119.2	58.3	37.1	25.2	14.6	4.0	4.0	4.0	4.0	2.6
60°	1049.3	86.1	47.7	33.1	23.8	13.2	4.0	4.0	4.0	4.0	4.0
62.5°	136.5	67.6	41.1	29.1	17.2	10.6	2.6	4.0	4.0	4.0	4.0
65°	99.4	53.0	37.1	19.9	10.6	4.0	2.6	4.0	4.0	4.0	4.0
67.5°	76.8	43.7	27.8	17.2	9.3	2.6	2.6	4.0	4.0	4.0	4.0
70°	60.9	37.1	22.5	14.6	7.9	2.6	2.6	4.0	4.0	4.0	4.0
72.5°	47.7	26.5	15.9	7.9	5.3	2.6	2.6	4.0	4.0	4.0	4.0
75°	35.8	21.2	11.9	6.6	2.6	2.6	2.6	4.0	4.0	4.0	4.0
77.5°	23.8	13.2	9.3	5.3	5.3	5.3	6.6	6.6	4.0	4.0	4.0
80°	15.9	9.3	6.6	6.6	6.6	5.3	6.6	6.6	4.0	6.6	4.0
82.5°	7.9	6.6	6.6	5.3	5.3	4.0	5.3	5.3	5.3	5.3	4.0
85°	5.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.3	5.3	4.0
87.5°	2.6	2.6	2.6	2.6	4.0	4.0	4.0	4.0	5.3	5.3	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213872

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5
2.5°	4446.3	4450.2	4439.6	4496.6	4467.5	4470.1	4482.0	4451.6	4458.2	4437.0	4422.4
5°	4928.5	4936.5	4944.4	4947.1	4952.4	4959.0	4951.0	4947.1	4939.1	4912.6	4884.8
7.5°	4853.0	4843.7	4839.7	4845.0	4854.3	4858.3	4851.7	4860.9	4895.4	4910.0	4919.2
10°	4455.5	4413.1	4442.3	4438.3	4405.2	4516.5	4486.0	4503.2	4515.1	4637.0	4711.2
12.5°	4266.1	4292.6	4242.2	4217.1	4250.2	4272.7	4295.2	4247.5	4313.8	4283.3	4381.3
15°	4107.1	4091.2	4085.9	4087.2	4080.6	4112.4	4120.3	4130.9	4140.2	4181.3	4197.2
17.5°	4035.5	4062.0	4072.6	4080.6	4067.3	4052.8	4038.2	4017.0	4023.6	4013.0	4043.5
20°	3308.2	3219.4	3214.1	3265.8	3208.8	3240.6	3317.5	3831.5	3814.3	4014.3	3946.8
22.5°	2761.0	2677.6	2606.0	2543.7	2632.5	2669.6	2812.7	2974.3	3236.6	3195.6	3480.4
25°	2254.9	2224.5	2205.9	2196.6	2203.3	2200.6	2232.4	2307.9	2427.2	2708.0	3071.0
27.5°	2109.2	2094.6	2088.0	2066.8	2082.7	2077.4	2102.6	2118.5	2154.2	2182.1	2300.0
30°	1993.9	1976.7	1964.8	1942.3	1958.2	1959.5	1967.4	2008.5	2023.1	2046.9	2084.0
32.5°	728.7	429.3	402.8	382.9	418.7	545.8	957.9	1674.6	1910.5	1929.0	1971.4
35°	71.5	59.6	53.0	53.0	54.3	59.6	79.5	209.3	382.9	1479.9	1852.2
37.5°	27.8	23.8	19.9	18.5	19.9	22.5	30.5	39.7	54.3	112.6	502.1
40°	11.9	10.6	9.3	9.3	9.3	9.3	10.6	13.2	19.9	37.1	58.3
42.5°	7.9	6.6	6.6	6.6	6.6	6.6	6.6	6.6	9.3	11.9	23.8
45°	5.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.3	6.6	10.6
47.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.3
50°	4.0	4.0	4.0	4.0	2.6	4.0	2.6	4.0	4.0	4.0	4.0
52.5°	4.0	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	4.0	4.0
55°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	4.0
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	4.0	4.0	2.6
65°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	4.0	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°	4.0	4.0	2.6	4.0	2.6	2.6	4.0	4.0	4.0	2.6	2.6
72.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	7.9	7.9	5.3
75°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	6.6	7.9	6.6
77.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	6.6	6.6	6.6
80°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.3	5.3	5.3
82.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.3	5.3	5.3
85°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
87.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213872

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5
2.5°	4397.2	4395.9	4423.7	4444.9	4437.0	4444.9	4454.2	4455.5	4458.2	4447.6	4443.6
5°	4831.8	4790.7	4711.2	4654.3	4588.0	4467.5	4407.8	4414.5	4415.8	4411.8	4417.1
7.5°	4915.3	4911.3	4883.5	4871.5	4826.5	4740.4	4602.6	4578.7	4520.4	4483.3	4452.9
10°	4705.9	4801.3	4826.5	4868.9	4895.4	4879.5	4762.9	4745.7	4708.6	4666.2	4675.5
12.5°	4479.4	4557.5	4561.5	4792.0	4843.7	4849.0	4804.0	4827.8	4833.1	4737.7	4682.1
15°	4201.2	4238.2	4316.4	4531.0	4687.4	4785.4	4814.6	4827.8	4762.9	4758.9	4736.4
17.5°	4079.3	4103.1	4138.9	4259.4	4496.6	4641.0	4764.2	4754.9	4780.1	4761.6	4704.6
20°	3925.6	3945.5	4009.0	4070.0	4186.6	4378.7	4609.2	4626.4	4659.6	4655.6	4671.5
22.5°	3922.9	3852.7	3863.3	3911.0	4032.9	4205.1	4450.2	4507.2	4528.4	4543.0	4560.2
25°	3112.1	3669.9	3771.9	3802.4	3881.9	3982.5	4271.4	4292.6	4332.3	4397.2	4444.9
27.5°	2696.1	3075.0	3483.1	3695.1	3745.4	3828.9	4001.1	4032.9	4168.0	4183.9	4258.1
30°	2127.7	2420.5	3030.0	3540.0	3623.5	3681.8	3803.7	3867.3	3925.6	3989.2	4067.3
32.5°	2001.9	2048.2	2386.1	2929.3	3578.5	3534.7	3624.8	3663.3	3726.9	3782.5	3839.5
35°	1886.6	1918.4	1989.9	2399.3	2914.7	3414.2	3475.1	3500.3	3536.1	3578.5	3619.5
37.5°	1766.0	1813.7	1862.8	1972.7	2696.1	3318.8	3317.5	3346.6	3367.8	3403.6	3438.0
40°	320.6	1665.4	1744.8	1816.4	2090.6	2647.1	3169.1	3182.3	3196.9	3219.4	3255.2
42.5°	51.7	278.2	1634.9	1703.8	1781.9	2370.2	3101.5	3047.2	3037.9	3053.8	3085.6
45°	26.5	67.6	328.6	1591.2	1661.4	1890.6	2535.8	2953.1	2943.9	2913.4	2920.0
47.5°	19.9	42.4	80.8	549.8	1555.4	1623.0	2339.7	2314.5	2490.7	2828.6	2776.9
50°	17.2	29.1	47.7	112.6	1373.9	1494.4	1801.8	2105.2	2198.0	2209.9	2615.3
52.5°	15.9	19.9	34.4	72.9	288.8	1381.8	1465.3	1571.3	1727.6	2062.8	2054.9
55°	14.6	18.5	29.1	49.0	100.7	1245.4	1331.5	1351.4	1384.5	1544.8	1756.8
57.5°	7.9	17.2	27.8	42.4	75.5	227.9	1208.3	1224.2	1250.7	1257.3	1332.8
60°	4.0	15.9	25.2	37.1	55.6	106.0	1086.4	1104.9	1120.8	1123.5	1147.3
62.5°	2.6	14.6	21.2	34.4	46.4	75.5	257.0	524.6	997.6	997.6	1025.4
65°	2.6	10.6	13.2	22.5	42.4	62.3	108.6	125.9	245.1	602.8	899.6
67.5°	2.6	4.0	11.9	18.5	31.8	47.7	79.5	92.7	111.3	127.2	235.8
70°	2.6	2.6	10.6	11.9	19.9	35.8	57.0	64.9	75.5	86.1	99.4
72.5°	2.6	2.6	9.3	9.3	13.2	23.8	43.7	47.7	54.3	60.9	70.2
75°	6.6	5.3	7.9	7.9	9.3	18.5	33.1	37.1	39.7	45.0	51.7
77.5°	6.6	6.6	6.6	6.6	6.6	11.9	21.2	23.8	27.8	30.5	35.8
80°	5.3	5.3	5.3	6.6	6.6	7.9	13.2	14.6	15.9	19.9	21.2
82.5°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	7.9	9.3	11.9
85°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.3	5.3	5.3	5.3
87.5°	4.0	4.0	4.0	2.6	2.6	4.0	4.0	4.0	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5	4414.5
2.5°	4442.3	4434.3	4427.7	4431.7	4419.8	4414.5	4418.4	4419.8	4422.4	4429.0	4430.4
5°	4430.4	4427.7	4439.6	4446.3	4443.6	4446.3	4446.3	4441.0	4433.0	4438.3	4426.4
7.5°	4422.4	4405.2	4391.9	4394.6	4381.3	4397.2	4411.8	4433.0	4439.6	4439.6	4426.4
10°	4558.9	4540.3	4466.1	4415.8	4382.7	4353.5	4422.4	4352.2	4385.3	4259.4	4403.9
12.5°	4671.5	4696.7	4663.5	4525.7	4501.9	4414.5	4464.8	4378.7	4353.5	4209.1	4255.5
15°	4716.5	4668.8	4658.2	4619.8	4568.1	4543.0	4407.8	4393.3	4352.2	4368.1	4307.1
17.5°	4676.8	4700.6	4668.8	4643.7	4590.7	4531.0	4450.2	4378.7	4321.7	4194.5	4301.8
20°	4638.4	4670.2	4574.8	4590.7	4596.0	4527.1	4484.7	4425.1	4353.5	4234.3	4141.5
22.5°	4574.8	4552.2	4560.2	4536.3	4516.5	4525.7	4467.5	4426.4	4305.8	4251.5	4125.6
25°	4471.4	4463.5	4484.7	4482.0	4434.3	4418.4	4389.3	4345.6	4297.9	4210.4	4107.1
27.5°	4303.2	4344.2	4381.3	4398.6	4373.4	4331.0	4315.1	4289.9	4256.8	4168.0	4091.2
30°	4125.6	4172.0	4214.4	4251.5	4274.0	4255.5	4240.9	4226.3	4176.0	4117.7	4031.6
32.5°	3922.9	3983.9	4042.2	4087.2	4136.2	4150.8	4140.2	4128.3	4085.9	4032.9	3964.0
35°	3688.4	3771.9	3856.7	3937.5	3958.7	3993.1	4027.6	4007.7	3985.2	3932.2	3868.6
37.5°	3489.7	3549.3	3610.3	3712.3	3786.5	3830.2	3891.1	3899.1	3860.7	3835.5	3752.0
40°	3284.3	3338.7	3427.4	3487.0	3589.1	3639.4	3704.3	3733.5	3724.2	3709.6	3636.8
42.5°	3122.7	3149.2	3207.5	3260.5	3361.2	3464.5	3521.5	3553.3	3586.4	3574.5	3537.4
45°	2950.5	2974.3	2994.2	3040.6	3138.6	3230.0	3300.2	3347.9	3407.6	3435.4	3390.3
47.5°	2779.6	2786.2	2810.0	2848.5	2906.8	2977.0	3094.9	3166.4	3222.1	3276.4	3247.2
50°	2648.4	2624.6	2628.5	2652.4	2700.1	2769.0	2853.8	2954.5	3018.0	3084.3	3090.9
52.5°	2314.5	2508.0	2461.6	2474.9	2500.0	2533.1	2621.9	2721.3	2799.4	2856.4	2913.4
55°	1942.3	1980.7	2353.0	2300.0	2315.9	2345.0	2386.1	2485.4	2561.0	2640.5	2720.0
57.5°	1506.4	1792.5	1807.1	2151.6	2143.6	2146.3	2180.7	2237.7	2313.2	2412.6	2480.2
60°	1171.2	1291.7	1526.2	1645.5	1947.6	1958.2	1978.0	2011.1	2076.1	2170.1	2277.4
62.5°	1033.4	1049.3	1132.8	1311.6	1507.7	1744.8	1787.2	1792.5	1821.7	1915.8	2040.3
65°	907.5	918.1	943.3	961.9	1126.1	1355.3	1559.4	1592.5	1611.0	1666.7	1772.7
67.5°	625.3	790.9	813.5	826.7	842.6	948.6	1201.7	1369.9	1391.1	1440.1	1532.9
70°	120.6	250.4	685.0	699.5	707.5	731.3	772.4	1040.0	1180.5	1226.8	1269.2
72.5°	82.1	96.7	116.6	275.6	582.9	596.2	605.5	639.9	877.1	1012.2	1034.7
75°	59.6	66.2	78.2	96.7	119.2	388.2	480.9	498.1	515.4	711.5	825.4
77.5°	42.4	47.7	53.0	62.3	72.9	94.1	135.1	372.3	389.5	398.8	563.1
80°	23.8	29.1	35.8	41.1	46.4	53.0	68.9	86.1	192.1	280.9	295.4
82.5°	13.2	15.9	18.5	22.5	25.2	31.8	38.4	46.4	60.9	90.1	190.8
85°	6.6	6.6	6.6	9.3	10.6	14.6	17.2	19.9	27.8	38.4	53.0
87.5°	4.0	4.0	5.3	5.3	5.3	6.6	6.6	6.6	7.9	11.9	17.2
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):

	356°	357°	358°	359°	360°
0°	4414.5	4414.5	4414.5	4414.5	4414.5
2.5°	4431.7	4427.7	4427.7	4443.6	4439.6
5°	4423.7	4419.8	4418.4	4435.7	4427.7
7.5°	4417.1	4402.5	4398.6	4414.5	4407.8
10°	4390.6	4380.0	4386.6	4381.3	4378.7
12.5°	4345.6	4338.9	4311.1	4313.8	4336.3
15°	4264.7	4291.2	4243.5	4285.9	4295.2
17.5°	4116.4	4176.0	4222.4	4247.5	4251.5
20°	4182.6	4202.5	4178.6	4180.0	4195.9
22.5°	4096.5	4105.8	4112.4	4104.4	4138.9
25°	3958.7	3922.9	3999.8	4015.7	4071.3
27.5°	3916.3	3887.2	3922.9	3920.3	3966.7
30°	3881.9	3787.8	3803.7	3828.9	3885.8
32.5°	3832.8	3684.5	3668.6	3724.2	3787.8
35°	3746.7	3606.3	3569.2	3605.0	3700.4
37.5°	3673.9	3497.6	3423.5	3471.2	3595.7
40°	3565.2	3412.9	3297.6	3340.0	3487.0
42.5°	3435.4	3340.0	3162.5	3191.6	3359.9
45°	3304.2	3219.4	3031.3	3045.9	3245.9
47.5°	3170.4	3092.2	2894.8	2897.5	3100.2
50°	3039.2	2935.9	2772.9	2726.6	2945.2
52.5°	2868.3	2772.9	2649.7	2574.2	2798.1
55°	2706.7	2599.4	2509.3	2392.7	2631.2
57.5°	2549.0	2429.8	2368.9	2219.2	2441.7
60°	2333.1	2276.1	2186.0	2042.9	2270.8
62.5°	2111.8	2093.3	2001.9	1853.5	2060.2
65°	1853.5	1897.2	1803.1	1676.0	1841.6
67.5°	1609.7	1687.9	1584.5	1506.4	1630.9
70°	1350.0	1440.1	1381.8	1354.0	1407.0
72.5°	1094.3	1181.8	1187.1	1167.2	1184.4
75°	845.3	942.0	995.0	964.5	968.5
77.5°	641.2	687.6	745.9	769.7	764.4
80°	396.1	477.0	524.6	573.7	556.4
82.5°	200.1	267.6	325.9	378.9	353.7
85°	83.5	107.3	149.7	197.4	189.5
87.5°	25.2	42.4	45.0	63.6	59.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)