

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: P1214223

Luminaire Tested: 4SNLED-LD5-72HL-RM-UNV-L950-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1214223
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-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

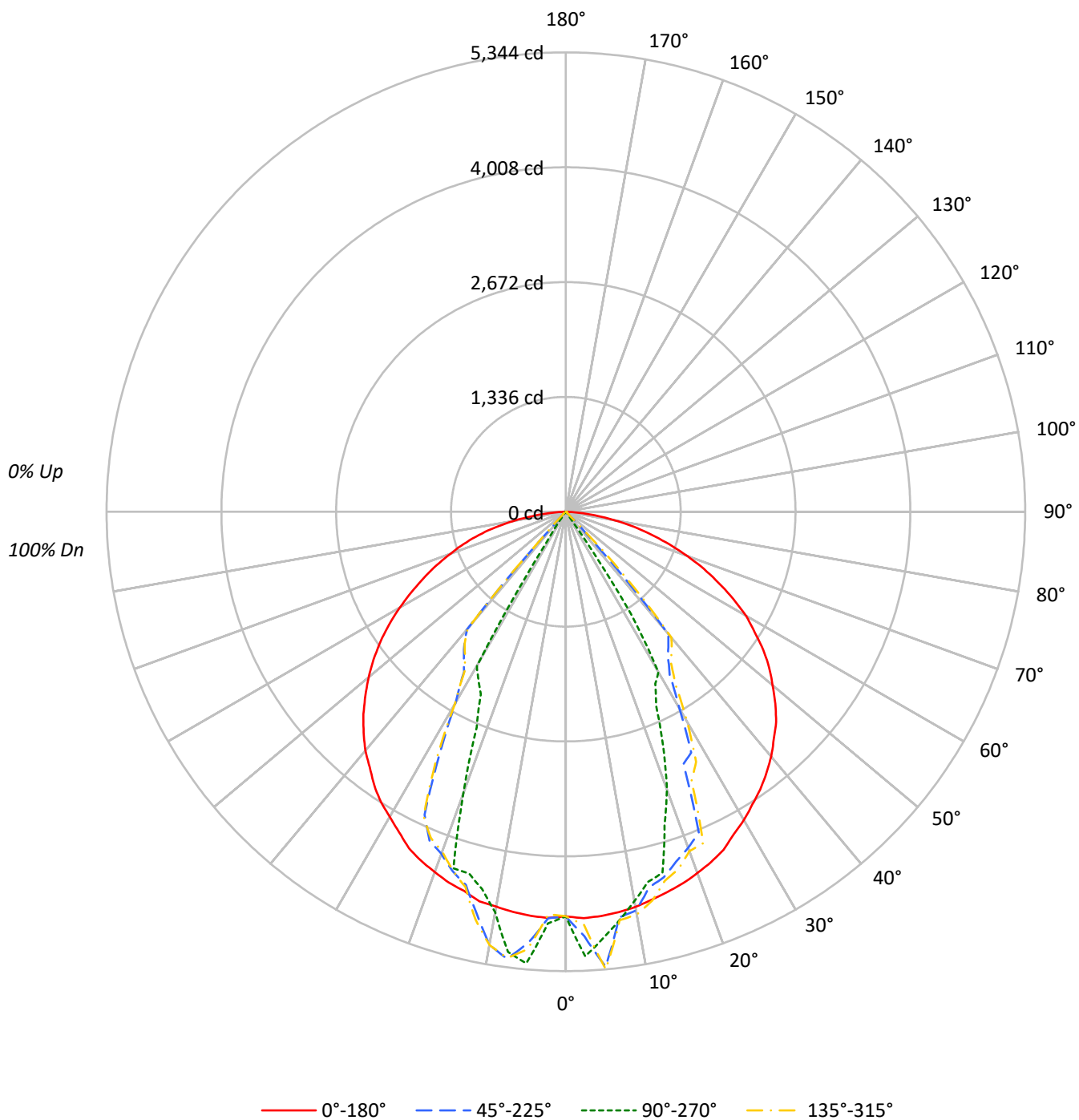
Lumens per Lamp: N/A
Luminaire Lumens: 6690.9 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	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°	38026	38026	38026	38026
5°	38181	39110	38170	41416
10°	38090	35390	38067	36411
15°	37986	33032	37892	33118
20°	38030	26018	37922	26339
25°	38140	18829	37954	17768
30°	37966	16517	37564	15878
35°	38079	364	37520	441
40°	38209	79	37295	79
45°	38344	47	36904	35
50°	38051	36	36306	36
55°	37827	26	35503	26
60°	37113	27	34212	27
65°	35178	44	32672	30
70°	32634	49	31068	49
75°	28868	55	29340	55
80°	23446	62	24786	62
85°	13800	74	14087	74

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 2°

Vertical Angle: 45°

Luminance: 41402 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	472.1	7.1
10°-20°	1287.7	19.2
20°-30°	1638.6	24.5
30°-40°	1384.2	20.7
40°-50°	904.9	13.5
50°-60°	570.2	8.5
60°-70°	303.5	4.5
70°-80°	110.6	1.7
80°-90°	19.0	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°	3398.4	50.8
0°-40°	4782.6	71.5
0°-60°	6257.8	93.5
0°-90°	6690.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6690.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4706	4706	4706	4706	4706	
5°	4720	4980	4718	5273	4720	449
15°	4578	4346	4567	4357	4578	1294
25°	4340	2481	4319	2342	4340	1996
35°	3944	47	3886	56	3944	2468
45°	3460	6	3330	4	3460	2661
55°	2805	3	2632	3	2805	2499
65°	1963	4	1823	3	1963	1944
75°	1032	4	1049	4	1032	1096
85°	202	4	206	4	202	255
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°	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6
2.5°	4732.4	4735.3	4736.7	4739.5	4743.7	4745.2	4748.0	4745.2	4745.2	4745.2	4745.2
5°	4719.7	4725.4	4729.6	4735.3	4745.2	4746.6	4757.9	4759.3	4764.9	4776.2	4784.7
7.5°	4698.6	4704.2	4712.7	4726.8	4740.9	4756.5	4776.2	4797.4	4827.1	4855.3	4890.6
10°	4667.5	4674.5	4684.4	4697.1	4766.3	4776.2	4820.0	4880.7	4897.7	4986.6	5053.0
12.5°	4622.3	4646.3	4671.7	4683.0	4749.4	4853.9	5000.8	4971.1	4938.6	5229.6	5225.3
15°	4578.5	4611.0	4598.3	4690.1	4750.8	4933.0	4870.8	5003.6	5246.5	5187.2	5190.0
17.5°	4531.9	4539.0	4609.6	4685.8	4794.6	4887.8	4964.1	5146.2	5194.2	5198.5	5146.2
20°	4472.6	4506.5	4609.6	4678.8	4862.4	4906.2	5071.4	5164.6	5144.8	5096.8	5007.8
22.5°	4411.9	4515.0	4619.5	4716.9	4845.4	4962.6	5044.6	5088.3	4985.2	4796.0	4694.3
25°	4339.8	4400.6	4537.6	4680.2	4841.2	4909.0	4957.0	4886.4	4752.2	4582.7	4411.9
27.5°	4228.3	4325.7	4500.8	4661.8	4807.3	4889.2	4811.5	4642.1	4426.0	4314.4	4236.7
30°	4142.1	4269.2	4413.3	4568.6	4719.7	4767.8	4570.0	4376.6	4228.3	4116.7	4099.8
32.5°	4037.6	4218.4	4355.4	4503.7	4630.8	4567.2	4375.1	4125.2	4002.3	3959.9	3976.9
35°	3944.4	4081.4	4260.8	4406.2	4498.0	4355.4	4051.7	3896.4	3837.1	3861.1	3830.0
37.5°	3832.8	4013.6	4178.8	4304.5	4273.5	4058.8	3801.8	3702.9	3710.0	3690.2	3630.9
40°	3717.0	3889.3	4061.6	4180.3	4071.5	3743.9	3573.0	3551.8	3556.0	3492.5	3407.8
42.5°	3581.5	3738.2	3910.5	4017.8	3783.4	3527.8	3412.0	3414.8	3378.1	3289.1	3243.9
45°	3460.0	3604.1	3783.4	3793.3	3505.2	3292.0	3258.1	3221.3	3139.4	3109.8	3075.9
47.5°	3304.7	3464.2	3612.5	3558.9	3232.6	3099.9	3074.5	2994.0	2953.0	2930.4	2902.2
50°	3139.4	3300.4	3436.0	3283.5	2975.6	2944.5	2861.2	2797.7	2769.4	2745.4	2720.0
52.5°	2982.7	3115.4	3253.8	2991.1	2777.9	2748.2	2653.6	2616.9	2588.7	2561.8	2556.2
55°	2804.7	2921.9	3016.6	2712.9	2588.7	2519.5	2451.7	2426.2	2399.4	2386.7	2407.9
57.5°	2602.8	2735.5	2721.4	2439.0	2383.9	2283.6	2258.2	2241.2	2221.5	2229.9	2053.4
60°	2420.6	2522.3	2453.1	2238.4	2145.2	2077.4	2054.8	2043.5	2054.8	1882.5	1655.2
62.5°	2196.0	2310.4	2170.6	2004.0	1905.1	1872.6	1852.9	1868.4	1703.2	1513.9	1458.9
65°	1963.0	2087.3	1881.1	1752.6	1690.5	1662.2	1660.8	1529.5	1367.1	1293.6	1293.6
67.5°	1738.5	1867.0	1601.5	1494.2	1470.2	1473.0	1391.1	1191.9	1146.7	1097.3	954.7
70°	1499.8	1612.8	1323.3	1258.3	1244.2	1234.3	1035.2	981.5	927.8	796.5	785.2
72.5°	1262.6	1317.6	1063.4	1047.9	1045.1	868.5	829.0	737.2	675.1	659.5	652.5
75°	1032.4	1015.4	840.3	854.4	720.2	658.1	594.6	540.9	532.4	526.8	131.3
77.5°	814.9	730.1	662.3	576.2	515.5	437.8	425.1	416.6	274.0	98.9	80.5
80°	593.1	473.1	440.6	374.2	319.2	306.5	313.5	96.0	76.3	63.6	55.1
82.5°	377.1	302.2	247.1	216.1	210.4	91.8	67.8	55.1	48.0	41.0	33.9
85°	202.0	134.2	124.3	104.5	62.1	42.4	35.3	26.8	22.6	18.4	16.9
87.5°	63.6	53.7	43.8	35.3	21.2	14.1	11.3	9.9	8.5	7.1	7.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6
2.5°	4742.3	4745.2	4743.7	4748.0	4748.0	4753.6	4757.9	4762.1	4770.6	4774.8	4807.3
5°	4803.1	4810.1	4831.3	4851.1	4875.1	4882.1	4923.1	4933.0	4981.0	4986.6	5144.8
7.5°	4938.6	4965.5	5016.3	5067.1	5118.0	5150.5	5207.0	5242.3	5280.4	5314.3	5440.0
10°	5102.5	5147.6	5197.1	5247.9	5277.6	5339.7	5373.6	5379.3	5369.4	5314.3	5110.9
12.5°	5263.4	5308.6	5287.5	5297.3	5332.6	5222.5	5238.0	5158.9	5214.0	4941.5	4739.5
15°	5240.9	5238.0	5185.8	5016.3	5044.6	4834.1	4749.4	4684.4	4736.7	4708.4	4677.4
17.5°	5173.1	5044.6	4954.2	4750.8	4664.7	4605.3	4606.8	4608.2	4582.7	4609.6	4530.5
20°	4886.4	4742.3	4608.2	4536.1	4510.7	4468.4	4489.5	4468.4	4469.8	4478.2	4356.8
22.5°	4505.1	4461.3	4383.6	4406.2	4397.7	4435.9	4407.6	4363.8	4378.0	4314.4	4222.6
25°	4351.1	4300.3	4297.5	4305.9	4293.2	4276.3	4250.9	4184.5	4180.3	4160.5	4118.1
27.5°	4195.8	4198.6	4207.1	4181.7	4136.5	4102.6	4064.5	4032.0	4044.7	4022.1	3964.2
30°	4088.5	4087.0	4036.2	4013.6	3930.3	3931.7	3921.8	3902.0	3889.3	3890.7	3854.0
32.5°	3935.9	3892.2	3834.3	3806.0	3798.9	3773.5	3753.8	3758.0	3767.9	3732.6	3770.7
35°	3779.2	3688.8	3680.3	3656.3	3633.7	3616.8	3623.8	3595.6	3594.2	3589.9	3279.2
37.5°	3568.8	3525.0	3520.7	3495.3	3479.8	3475.5	3448.7	3452.9	3465.7	3488.3	2796.3
40°	3395.0	3355.5	3345.6	3344.2	3310.3	3307.5	3314.5	3341.4	3359.7	3218.5	2664.9
42.5°	3208.6	3211.5	3180.4	3160.6	3164.8	3177.6	3211.5	3118.2	2701.6	2574.5	2436.1
45°	3049.0	3034.9	3018.0	3012.3	3049.0	3023.6	2650.8	2446.0	2396.6	2390.9	2002.6
47.5°	2882.4	2878.2	2871.1	2875.3	2666.3	2376.8	2292.1	2265.2	2273.7	2268.1	1720.1
50°	2714.3	2720.0	2720.0	2375.4	2180.5	2132.5	2139.6	2163.6	2013.9	1879.7	1602.9
52.5°	2568.9	2525.1	2163.6	2039.3	1995.5	2016.7	1965.8	1778.0	1642.4	1563.4	1482.9
55°	2299.1	1977.1	1896.6	1876.9	1892.4	1704.6	1588.8	1467.3	1432.0	1423.5	1376.9
57.5°	1809.1	1744.1	1751.2	1672.1	1492.7	1386.8	1340.2	1323.3	1307.7	1296.4	113.0
60°	1600.1	1618.4	1481.4	1312.0	1240.0	1225.8	1214.5	1199.0	1196.2	1176.4	72.0
62.5°	1464.5	1288.0	1169.3	1127.0	1110.0	1105.8	1084.6	1077.5	915.1	125.7	53.7
65°	1104.4	1032.4	1009.8	999.9	981.5	981.5	814.9	128.5	104.5	90.4	48.0
67.5°	901.0	895.4	884.1	871.4	593.1	124.3	108.7	94.6	81.9	72.0	42.4
70°	762.6	759.8	692.0	127.1	105.9	93.2	81.9	73.4	67.8	60.7	38.1
72.5°	625.6	127.1	107.3	93.2	80.5	73.4	66.4	59.3	53.7	49.4	31.1
75°	97.4	86.1	76.3	69.2	63.6	56.5	50.8	46.6	45.2	39.5	21.2
77.5°	70.6	60.7	55.1	49.4	43.8	39.5	33.9	29.7	26.8	22.6	15.5
80°	49.4	43.8	39.5	32.5	28.2	24.0	21.2	18.4	16.9	14.1	7.1
82.5°	28.2	24.0	21.2	16.9	15.5	12.7	11.3	9.9	9.9	7.1	7.1
85°	12.7	12.7	9.9	8.5	7.1	7.1	7.1	5.6	5.6	4.2	4.2
87.5°	5.6	5.6	5.6	5.6	5.6	4.2	4.2	4.2	4.2	4.2	2.8
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°	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6
2.5°	4852.5	4870.8	4906.2	4942.9	4901.9	5048.8	5037.5	5086.9	5113.8	5126.5	5156.1
5°	5284.6	5366.5	5393.4	5312.9	5266.3	5218.3	5109.5	5027.6	5037.5	5010.7	4913.2
7.5°	5276.2	5101.0	4865.2	4757.9	4749.4	4736.7	4770.6	4790.3	4793.2	4791.8	4788.9
10°	4829.9	4739.5	4724.0	4709.8	4715.5	4663.2	4639.2	4571.4	4608.2	4588.4	4595.5
12.5°	4694.3	4673.1	4589.8	4474.0	4543.2	4490.9	4461.3	4481.1	4458.5	4437.3	4430.2
15°	4613.8	4476.8	4430.2	4402.0	4382.2	4370.9	4380.8	4358.2	4351.1	4346.9	4356.8
17.5°	4447.2	4392.1	4341.3	4266.4	4267.8	4263.6	4291.8	4334.2	4337.0	4119.5	3923.2
20°	4315.8	4270.6	4205.7	4159.1	4222.6	4109.6	3673.3	3465.7	3433.2	3433.2	3438.8
22.5°	4211.3	4111.1	4115.3	4041.9	3447.3	3325.8	3328.7	3341.4	3283.5	3085.8	3064.6
25°	4068.7	4053.2	3743.9	3235.5	3239.7	3145.1	2999.6	2794.8	2573.1	2573.1	2536.4
27.5°	3961.4	3632.3	3180.4	3159.2	2841.4	2640.9	2516.6	2328.8	2303.4	2279.4	2282.2
30°	3869.6	3073.1	3084.4	2640.9	2406.5	2239.8	2229.9	2198.9	2183.3	2179.1	2163.6
32.5°	3058.9	2992.6	2581.6	2248.3	2156.5	2129.7	2117.0	2081.7	2080.2	2053.4	1867.0
35°	2868.3	2626.8	2160.7	2070.4	2043.5	2018.1	1996.9	1340.2	158.2	63.6	55.1
37.5°	2650.8	2194.6	1998.3	1957.4	1932.0	1427.8	142.6	49.4	35.3	25.4	22.6
40°	2246.9	1960.2	1898.1	1852.9	764.0	49.4	31.1	24.0	14.1	12.7	11.3
42.5°	1895.2	1847.2	1780.8	542.3	56.5	24.0	15.5	11.3	9.9	9.9	8.5
45°	1773.8	1731.4	717.4	53.7	35.3	11.3	9.9	9.9	8.5	5.6	5.6
47.5°	1660.8	1461.7	65.0	33.9	22.6	9.9	8.5	5.6	5.6	5.6	4.2
50°	1540.8	80.5	45.2	25.4	14.1	5.6	5.6	5.6	5.6	4.2	4.2
52.5°	288.1	56.5	36.7	22.6	7.1	5.6	5.6	5.6	4.2	4.2	4.2
55°	67.8	45.2	33.9	19.8	5.6	5.6	5.6	4.2	4.2	4.2	2.8
57.5°	50.8	33.9	26.8	18.4	5.6	4.2	4.2	4.2	4.2	4.2	2.8
60°	42.4	24.0	21.2	16.9	4.2	4.2	4.2	4.2	4.2	4.2	2.8
62.5°	29.7	19.8	15.5	12.7	4.2	4.2	4.2	4.2	4.2	4.2	4.2
65°	24.0	15.5	12.7	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
67.5°	21.2	12.7	8.5	2.8	4.2	4.2	4.2	4.2	4.2	4.2	4.2
70°	16.9	4.2	4.2	2.8	4.2	4.2	4.2	4.2	4.2	4.2	4.2
72.5°	14.1	4.2	2.8	2.8	4.2	4.2	4.2	4.2	4.2	4.2	4.2
75°	14.1	7.1	2.8	2.8	4.2	4.2	5.6	5.6	4.2	4.2	4.2
77.5°	9.9	7.1	2.8	2.8	4.2	4.2	5.6	5.6	4.2	4.2	4.2
80°	5.6	7.1	2.8	4.2	4.2	8.5	9.9	5.6	4.2	4.2	4.2
82.5°	5.6	7.1	8.5	8.5	4.2	7.1	8.5	7.1	5.6	4.2	4.2
85°	5.6	4.2	5.6	7.1	4.2	7.1	7.1	5.6	5.6	4.2	4.2
87.5°	2.8	4.2	4.2	5.6	5.6	5.6	7.1	5.6	5.6	5.6	4.2
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: P1214223

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6
2.5°	5170.2	5175.9	5086.9	5055.8	5082.7	5077.0	5053.0	4964.1	4954.2	4894.9	4808.7
5°	4941.5	4979.6	4933.0	5013.5	4975.4	5013.5	5129.3	5183.0	5270.5	5324.2	5343.9
7.5°	4781.9	4790.3	4790.3	4797.4	4804.5	4805.9	4797.4	4791.8	4767.8	4738.1	4791.8
10°	4588.4	4598.3	4615.2	4612.4	4611.0	4640.6	4647.7	4708.4	4705.6	4716.9	4757.9
12.5°	4488.1	4411.9	4481.1	4462.7	4488.1	4448.6	4522.0	4509.3	4513.5	4547.4	4635.0
15°	4321.5	4345.5	4362.4	4362.4	4372.3	4363.8	4355.4	4413.3	4448.6	4450.0	4444.3
17.5°	4000.9	3818.7	4005.1	3957.1	4339.8	4349.7	4317.2	4290.4	4290.4	4311.6	4356.8
20°	3434.6	3438.8	3440.2	3458.6	3481.2	3479.8	3481.2	4037.6	4301.7	4241.0	4200.0
22.5°	3010.9	2958.7	3056.1	3049.0	3170.5	3304.7	3433.2	3420.5	3428.9	3821.5	4174.6
25°	2413.5	2481.3	2426.2	2450.3	2587.2	2746.8	2845.7	3104.1	3385.2	3365.4	3457.2
27.5°	2272.3	2253.9	2279.4	2279.4	2297.7	2318.9	2374.0	2519.5	2769.4	3032.1	3280.7
30°	2138.1	2153.7	2156.5	2181.9	2196.0	2210.2	2218.6	2273.7	2330.2	2512.4	2818.8
32.5°	1605.7	1408.0	1852.9	1972.9	2074.6	2098.6	2115.5	2138.1	2179.1	2205.9	2359.9
35°	46.6	46.6	49.4	56.5	72.0	485.8	1850.0	2039.3	2066.1	2100.0	2128.3
37.5°	22.6	16.9	19.8	21.2	25.4	35.3	50.8	158.2	1761.1	1991.3	2022.3
40°	9.9	9.9	9.9	9.9	11.3	14.1	21.2	35.3	53.7	1416.5	1910.8
42.5°	8.5	8.5	8.5	8.5	8.5	8.5	9.9	12.7	25.4	60.7	1002.7
45°	5.6	5.6	4.2	5.6	5.6	7.1	8.5	8.5	11.3	38.1	69.2
47.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	7.1	8.5	25.4	36.7
50°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	19.8	25.4
52.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	8.5	22.6
55°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	4.2	4.2	5.6	19.8
57.5°	2.8	2.8	2.8	2.8	2.8	4.2	2.8	2.8	4.2	4.2	18.4
60°	2.8	2.8	2.8	2.8	2.8	4.2	4.2	4.2	4.2	4.2	16.9
62.5°	4.2	4.2	2.8	4.2	2.8	2.8	4.2	4.2	4.2	4.2	11.3
65°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	2.8	4.2
67.5°	4.2	4.2	4.2	4.2	2.8	4.2	2.8	4.2	4.2	2.8	2.8
70°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	2.8	2.8	2.8	2.8
72.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	2.8	2.8	2.8	2.8
75°	4.2	4.2	4.2	4.2	4.2	4.2	5.6	5.6	2.8	2.8	2.8
77.5°	4.2	4.2	4.2	4.2	4.2	4.2	7.1	8.5	7.1	7.1	2.8
80°	4.2	4.2	4.2	4.2	4.2	4.2	7.1	7.1	7.1	7.1	9.9
82.5°	4.2	4.2	4.2	4.2	4.2	4.2	5.6	5.6	5.6	5.6	7.1
85°	4.2	4.2	4.2	4.2	4.2	4.2	5.6	5.6	5.6	4.2	5.6
87.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.6	4.2	4.2	4.2
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: P1214223

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6
2.5°	4815.8	4767.8	4752.2	4719.7	4716.9	4719.7	4712.7	4702.8	4708.4	4698.6	4690.1
5°	5355.2	5226.7	5143.4	5031.8	4877.9	4844.0	4835.5	4787.5	4770.6	4764.9	4742.3
7.5°	4918.9	5153.3	5294.5	5342.5	5161.8	5119.4	5070.0	5030.4	4992.3	4920.3	4876.5
10°	4725.4	4736.7	4872.3	5030.4	5287.5	5322.8	5349.6	5263.4	5239.4	5055.8	5016.3
12.5°	4680.2	4681.6	4697.1	4793.2	4995.1	5017.7	5112.3	5163.2	5225.3	5260.6	5232.4
15°	4474.0	4588.4	4673.1	4681.6	4700.0	4739.5	4767.8	4944.3	5019.1	5219.7	5208.4
17.5°	4378.0	4414.7	4537.6	4637.8	4620.9	4606.8	4629.4	4653.4	4725.4	4925.9	4923.1
20°	4218.4	4335.6	4402.0	4506.5	4601.1	4605.3	4579.9	4565.8	4537.6	4570.0	4599.7
22.5°	4150.6	4169.0	4293.2	4366.7	4474.0	4512.1	4517.8	4519.2	4503.7	4486.7	4478.2
25°	4143.5	4085.6	4149.2	4241.0	4320.1	4361.0	4407.6	4423.2	4417.5	4417.5	4409.0
27.5°	3390.8	4067.3	4033.4	4094.1	4190.1	4218.4	4242.4	4290.4	4320.1	4341.3	4351.1
30°	3229.8	3351.3	3943.0	3951.5	4048.9	4046.1	4072.9	4112.5	4150.6	4200.0	4212.7
32.5°	2857.0	3155.0	3609.7	3808.8	3910.5	3920.4	3934.5	3945.8	3981.1	4036.2	4084.2
35°	2289.3	2873.9	3092.8	3741.0	3759.4	3779.2	3787.7	3814.5	3825.8	3848.4	3890.7
37.5°	2071.8	2375.4	2967.1	3235.5	3585.7	3602.6	3647.8	3659.1	3677.5	3695.9	3728.3
40°	1946.1	2029.4	2470.0	2889.5	3445.9	3457.2	3472.7	3501.0	3502.4	3523.6	3553.2
42.5°	1845.8	1899.5	2028.0	2759.5	3347.0	3345.6	3308.9	3327.3	3335.7	3358.3	3399.3
45°	1474.4	1782.3	1864.2	2253.9	2664.9	2857.0	3225.6	3164.8	3163.4	3171.9	3215.7
47.5°	74.8	1676.3	1734.2	1859.9	2516.6	2523.7	2571.7	2975.6	3037.7	3018.0	3022.2
50°	50.8	115.8	1615.6	1673.5	2169.2	2344.3	2379.6	2398.0	2631.0	2890.9	2848.5
52.5°	39.5	66.4	990.0	1553.5	1762.5	1891.0	2118.4	2248.3	2262.4	2366.9	2721.4
55°	35.3	50.8	107.3	1433.4	1498.4	1526.6	1659.4	1886.8	2070.4	2125.4	2129.7
57.5°	31.1	46.6	73.4	648.2	1362.8	1368.5	1391.1	1470.2	1635.4	1786.5	1957.4
60°	28.2	41.0	57.9	111.6	1238.5	1252.7	1256.9	1278.1	1297.9	1401.0	1597.3
62.5°	16.9	32.5	50.8	80.5	980.1	1125.6	1124.1	1138.3	1156.6	1167.9	1207.5
65°	14.1	25.4	43.8	67.8	120.0	149.7	909.5	1011.2	1022.5	1038.0	1045.1
67.5°	12.7	22.6	32.5	53.7	90.4	103.1	118.6	146.9	802.2	903.8	918.0
70°	11.3	15.5	26.8	45.2	73.4	79.1	89.0	101.7	120.0	148.3	725.9
72.5°	7.1	11.3	18.4	32.5	56.5	63.6	69.2	77.7	86.1	103.1	118.6
75°	2.8	8.5	15.5	24.0	43.8	48.0	52.3	57.9	65.0	76.3	84.7
77.5°	2.8	7.1	12.7	16.9	28.2	32.5	38.1	42.4	48.0	53.7	62.1
80°	9.9	5.6	8.5	12.7	19.8	21.2	24.0	26.8	31.1	35.3	41.0
82.5°	7.1	8.5	9.9	8.5	9.9	12.7	14.1	16.9	18.4	21.2	22.6
85°	5.6	5.6	7.1	7.1	7.1	7.1	7.1	7.1	8.5	9.9	12.7
87.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.6	5.6
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: P1214223

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6
2.5°	4690.1	4687.3	4678.8	4678.8	4677.4	4683.0	4687.3	4691.5	4690.1	4698.6	4690.1
5°	4725.4	4718.3	4705.6	4694.3	4690.1	4692.9	4688.7	4692.9	4687.3	4694.3	4681.6
7.5°	4822.8	4798.8	4749.4	4729.6	4704.2	4702.8	4690.1	4687.3	4678.8	4678.8	4663.2
10°	4995.1	4879.3	4865.2	4805.9	4784.7	4681.6	4704.2	4666.1	4661.8	4643.5	4636.4
12.5°	5136.3	5046.0	5019.1	4966.9	4907.6	4698.6	4745.2	4663.2	4659.0	4622.3	4584.2
15°	5139.2	5191.4	5118.0	4973.9	4961.2	4817.2	4722.6	4694.3	4657.6	4547.4	4565.8
17.5°	4973.9	5094.0	5129.3	5098.2	5007.8	4910.4	4777.6	4721.1	4611.0	4561.6	4527.7
20°	4705.6	4827.1	4978.2	4988.1	5044.6	4975.4	4801.6	4709.8	4577.1	4490.9	4462.7
22.5°	4492.4	4581.3	4755.0	4835.5	4904.7	4928.7	4818.6	4683.0	4517.8	4434.5	4417.5
25°	4379.4	4399.2	4451.4	4546.0	4698.6	4808.7	4824.2	4680.2	4594.0	4411.9	4315.8
27.5°	4338.4	4321.5	4300.3	4348.3	4462.7	4596.9	4685.8	4709.8	4495.2	4321.5	4225.4
30°	4233.9	4243.8	4211.3	4194.4	4269.2	4407.6	4565.8	4605.3	4440.1	4260.8	4150.6
32.5°	4105.4	4122.4	4128.0	4098.3	4082.8	4178.8	4349.7	4444.3	4435.9	4174.6	4051.7
35°	3944.4	3992.4	4005.1	4006.5	3981.1	3965.6	4064.5	4260.8	4335.6	4135.1	3957.1
37.5°	3774.9	3789.1	3858.3	3876.6	3876.6	3830.0	3903.5	4060.2	4164.7	4046.1	3841.3
40°	3563.1	3608.3	3673.3	3705.7	3738.2	3742.5	3701.5	3811.7	3984.0	3954.3	3732.6
42.5°	3409.2	3438.8	3478.4	3522.1	3588.5	3605.5	3563.1	3582.9	3762.2	3839.9	3591.3
45°	3229.8	3269.4	3280.7	3328.7	3397.9	3447.3	3445.9	3404.9	3549.0	3645.0	3488.3
47.5°	3046.2	3084.4	3104.1	3128.1	3179.0	3242.5	3277.8	3259.5	3287.7	3475.5	3351.3
50°	2857.0	2878.2	2917.7	2944.5	2978.4	3015.2	3099.9	3116.8	3077.3	3227.0	3200.2
52.5°	2677.6	2684.7	2711.5	2738.3	2783.5	2810.4	2878.2	2929.0	2926.2	2970.0	3032.1
55°	2537.8	2506.7	2512.4	2533.6	2563.2	2604.2	2642.3	2721.4	2748.2	2756.7	2855.6
57.5°	1982.8	2302.0	2330.2	2328.8	2364.1	2382.5	2417.8	2470.0	2566.1	2544.9	2655.0
60°	1802.0	1837.3	2104.3	2135.3	2148.0	2165.0	2207.3	2255.4	2326.0	2371.2	2419.2
62.5°	1374.1	1588.8	1669.3	1905.1	1941.8	1951.7	1980.0	2002.6	2076.0	2179.1	2159.3
65°	1063.4	1155.2	1401.0	1497.0	1697.5	1722.9	1762.5	1786.5	1807.7	1926.3	1932.0
67.5°	919.4	933.5	999.9	1184.9	1312.0	1508.3	1532.3	1553.5	1586.0	1670.7	1722.9
70°	785.2	802.2	820.5	836.1	1001.3	1131.2	1313.4	1320.5	1341.6	1398.1	1516.8
72.5°	148.3	670.8	682.1	692.0	710.4	796.5	970.2	1111.4	1119.9	1146.7	1255.5
75°	100.3	117.2	161.0	553.6	572.0	577.6	607.3	783.8	913.7	919.4	967.4
77.5°	72.0	80.5	97.4	115.8	295.2	443.4	450.5	483.0	617.2	714.6	723.1
80°	49.4	55.1	65.0	73.4	90.4	118.6	327.6	337.5	354.5	488.6	514.1
82.5°	28.2	32.5	38.1	46.6	53.7	67.8	87.6	113.0	230.2	245.7	326.2
85°	14.1	15.5	18.4	22.6	26.8	32.5	43.8	53.7	73.4	132.8	137.0
87.5°	7.1	7.1	7.1	7.1	11.3	12.7	15.5	19.8	25.4	38.1	49.4
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: P1214223

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6
2.5°	4691.5	4711.3	4728.2	4732.4	4732.4	4735.3	4739.5	4742.3	4745.2	4748.0	4745.2
5°	4683.0	4704.2	4718.3	4722.6	4722.6	4731.0	4738.1	4746.6	4750.8	4750.8	4748.0
7.5°	4661.8	4677.4	4695.7	4707.0	4708.4	4722.6	4735.3	4733.9	4739.5	4742.3	4749.4
10°	4633.6	4633.6	4664.7	4673.1	4680.2	4695.7	4700.0	4708.4	4728.2	4731.0	4749.4
12.5°	4619.5	4605.3	4642.1	4646.3	4670.3	4650.5	4676.0	4684.4	4664.7	4691.5	4656.2
15°	4555.9	4572.9	4567.2	4579.9	4622.3	4599.7	4668.9	4646.3	4697.1	4636.4	4743.7
17.5°	4503.7	4500.8	4523.4	4534.7	4543.2	4591.2	4609.6	4635.0	4654.8	4637.8	4680.2
20°	4465.5	4442.9	4459.9	4472.6	4502.2	4539.0	4550.3	4512.1	4578.5	4691.5	4718.3
22.5°	4393.5	4378.0	4397.7	4397.7	4442.9	4437.3	4479.7	4455.6	4517.8	4649.1	4786.1
25°	4296.1	4297.5	4318.7	4344.1	4352.5	4416.1	4438.7	4469.8	4547.4	4704.2	4787.5
27.5°	4197.2	4188.7	4201.4	4253.7	4297.5	4344.1	4351.1	4457.1	4563.0	4670.3	4743.7
30°	4098.3	4089.9	4098.3	4136.5	4188.7	4219.8	4297.5	4438.7	4537.6	4611.0	4680.2
32.5°	3992.4	3984.0	4003.7	4032.0	4123.8	4128.0	4281.9	4414.7	4492.4	4546.0	4533.3
35°	3879.4	3868.1	3886.5	3930.3	4015.0	4046.1	4207.1	4305.9	4393.5	4418.9	4359.6
37.5°	3743.9	3724.1	3746.7	3807.4	3896.4	3986.8	4120.9	4235.3	4281.9	4214.1	4143.5
40°	3602.6	3588.5	3628.1	3659.1	3763.6	3889.3	4043.3	4123.8	4094.1	4016.4	3938.8
42.5°	3477.0	3447.3	3482.6	3541.9	3660.5	3803.2	3927.5	3972.7	3902.0	3787.7	3697.3
45°	3323.0	3287.7	3330.1	3409.2	3536.3	3698.7	3796.1	3780.6	3660.5	3561.7	3437.4
47.5°	3162.0	3119.7	3162.0	3256.6	3399.3	3571.6	3642.2	3571.6	3420.5	3296.2	3195.9
50°	3003.9	2954.4	2995.4	3138.0	3277.8	3410.6	3409.2	3272.2	3181.8	3046.2	2958.7
52.5°	2847.1	2776.5	2817.4	2972.8	3112.6	3263.7	3152.1	3025.0	2916.3	2797.7	2769.4
55°	2653.6	2577.4	2632.4	2858.4	2965.7	3054.7	2876.7	2765.2	2657.9	2598.5	2563.2
57.5°	2470.0	2386.7	2434.7	2701.6	2780.7	2803.3	2639.5	2481.3	2417.8	2398.0	2347.2
60°	2280.8	2186.2	2231.4	2539.2	2594.3	2502.5	2341.5	2218.6	2205.9	2166.4	2126.8
62.5°	2100.0	1995.5	2023.8	2337.3	2362.7	2196.0	2047.8	2015.3	1984.2	1944.7	1923.5
65°	1892.4	1783.7	1823.2	2122.6	2098.6	1883.9	1800.6	1793.6	1752.6	1720.1	1751.2
67.5°	1701.8	1573.2	1628.3	1888.2	1779.4	1604.3	1570.4	1553.5	1521.0	1539.4	1213.1
70°	1492.7	1352.9	1427.8	1635.4	1474.4	1358.6	1345.9	1320.5	1321.9	1050.7	885.5
72.5°	1259.7	1138.3	1247.0	1358.6	1166.5	1132.6	1114.3	1111.4	896.8	728.7	687.8
75°	1054.9	932.1	1049.3	1091.7	929.3	906.7	905.3	748.5	588.9	562.1	549.4
77.5°	823.3	728.7	840.3	776.7	713.2	687.8	617.2	463.2	443.4	425.1	159.6
80°	555.0	562.1	627.0	535.2	508.4	433.6	341.8	327.6	282.4	113.0	89.0
82.5°	337.5	423.7	399.7	334.7	327.6	235.8	216.1	110.2	81.9	65.0	56.5
85°	175.1	214.7	206.2	182.2	135.6	121.5	67.8	52.3	42.4	32.5	26.8
87.5°	59.3	79.1	76.3	60.7	46.6	36.7	24.0	19.8	14.1	11.3	9.9
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: P1214223

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6
2.5°	4742.3	4742.3	4739.5	4742.3	4743.7	4740.9	4740.9	4743.7	4745.2	4746.6	4753.6
5°	4749.4	4752.2	4756.5	4764.9	4766.3	4783.3	4790.3	4794.6	4798.8	4800.2	4790.3
7.5°	4764.9	4774.8	4783.3	4781.9	4772.0	4745.2	4736.7	4729.6	4742.3	4774.8	4812.9
10°	4779.0	4733.9	4649.1	4764.9	4729.6	4762.1	4858.1	4879.3	4944.3	5036.1	5062.9
12.5°	4681.6	4805.9	4832.7	4702.8	4942.9	4853.9	4959.8	5053.0	5079.9	5173.1	5116.6
15°	4786.1	4846.8	4887.8	5017.7	5003.6	5079.9	5109.5	5091.2	5095.4	5119.4	5183.0
17.5°	4784.7	4906.2	4933.0	5020.5	5079.9	5081.3	5072.8	5064.3	5086.9	5105.3	5067.1
20°	4866.6	4906.2	4958.4	4993.7	5005.0	5019.1	5046.0	5024.8	4982.4	4941.5	4924.5
22.5°	4825.7	4914.6	4959.8	4965.5	4958.4	4914.6	4875.1	4815.8	4796.0	4774.8	4781.9
25°	4834.1	4875.1	4869.4	4846.8	4817.2	4735.3	4715.5	4690.1	4651.9	4560.2	4476.8
27.5°	4773.4	4752.2	4726.8	4671.7	4618.1	4574.3	4524.8	4442.9	4375.1	4276.3	4239.6
30°	4671.7	4587.0	4524.8	4492.4	4440.1	4366.7	4291.8	4191.6	4105.4	4085.6	4067.3
32.5°	4476.8	4393.5	4342.7	4263.6	4174.6	4087.0	4000.9	3961.4	3943.0	3945.8	3928.9
35°	4277.7	4204.3	4128.0	4009.4	3943.0	3855.4	3824.4	3815.9	3798.9	3780.6	3760.8
37.5°	4065.9	3979.7	3865.3	3794.7	3728.3	3693.0	3677.5	3664.8	3635.1	3602.6	3580.0
40°	3861.1	3705.7	3642.2	3573.0	3553.2	3537.7	3515.1	3484.0	3443.1	3437.4	3427.5
42.5°	3587.1	3475.5	3420.5	3406.3	3382.3	3355.5	3335.7	3301.8	3284.9	3296.2	3304.7
45°	3327.3	3270.8	3252.4	3235.5	3190.3	3152.1	3139.4	3128.1	3142.3	3204.4	3056.1
47.5°	3116.8	3094.2	3071.6	3043.4	3001.0	2972.8	2985.5	2996.8	3009.5	2553.3	2330.2
50°	2934.7	2903.6	2868.3	2837.2	2811.8	2809.0	2875.3	2676.2	2241.2	2229.9	2004.0
52.5°	2735.5	2688.9	2667.7	2649.4	2660.7	2703.0	2237.0	2076.0	1991.3	1730.0	1614.2
55°	2520.9	2479.9	2479.9	2496.9	2436.1	1974.3	1950.3	1686.2	1526.6	1481.4	1463.1
57.5°	2306.2	2302.0	2326.0	2126.8	1792.1	1718.7	1444.7	1386.8	1361.4	1355.8	1326.1
60°	2109.9	2149.4	1799.2	1655.2	1439.1	1297.9	1258.3	1251.3	1224.4	1214.5	1187.7
62.5°	1953.1	1619.8	1508.3	1231.5	1159.5	1141.1	1119.9	1110.0	1086.0	958.9	281.0
65°	1410.8	1333.2	1081.8	1035.2	1029.5	1002.7	994.2	894.0	210.4	141.2	120.0
67.5°	1064.8	944.8	912.3	903.8	877.0	823.3	244.3	139.8	120.0	104.5	91.8
70°	817.7	796.5	772.5	752.7	221.7	138.4	120.0	101.7	87.6	77.7	70.6
72.5°	669.4	655.3	381.3	145.5	118.6	100.3	89.0	77.7	67.8	62.1	56.5
75°	523.9	145.5	120.0	100.3	86.1	73.4	65.0	57.9	52.3	48.0	43.8
77.5°	118.6	96.0	81.9	69.2	62.1	55.1	49.4	42.4	38.1	33.9	28.2
80°	73.4	63.6	53.7	49.4	42.4	35.3	31.1	28.2	22.6	21.2	18.4
82.5°	48.0	38.1	33.9	28.2	22.6	21.2	18.4	14.1	12.7	11.3	9.9
85°	21.2	18.4	15.5	12.7	9.9	8.5	7.1	5.6	5.6	5.6	5.6
87.5°	7.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	2.8	2.8
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: P1214223

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6
2.5°	4756.5	4781.9	4805.9	4798.8	4773.4	4733.9	4722.6	4707.0	4718.3	4742.3	4752.2
5°	4790.3	4776.2	4827.1	4901.9	5023.4	5034.7	5119.4	5139.2	5207.0	5249.3	5247.9
7.5°	4838.4	5038.9	5122.2	5212.6	5253.6	5243.7	5256.4	5246.5	5231.0	5223.9	5215.4
10°	5082.7	5235.2	5266.3	5266.3	5202.7	5116.6	5079.9	5016.3	4889.2	4892.0	4870.8
12.5°	5225.3	5279.0	5205.5	5143.4	4887.8	4788.9	4681.6	4630.8	4601.1	4555.9	4572.9
15°	5150.5	5074.2	5030.4	4829.9	4673.1	4495.2	4498.0	4466.9	4434.5	4437.3	4416.1
17.5°	5040.3	4979.6	4668.9	4530.5	4454.2	4385.0	4372.3	4331.4	4310.2	4303.1	4301.7
20°	4889.2	4670.3	4438.7	4404.8	4313.0	4233.9	4221.2	4233.9	4298.9	4183.1	3790.5
22.5°	4712.7	4397.7	4330.0	4233.9	4171.8	4140.7	4218.4	3865.3	3331.5	3396.5	3327.3
25°	4413.3	4276.3	4160.5	4087.0	4080.0	3889.3	3241.1	3173.3	2830.1	2646.6	2440.4
27.5°	4194.4	4135.1	4013.6	4000.9	3909.1	3180.4	2842.9	2470.0	2333.0	2311.9	2266.7
30°	4061.6	3976.9	3903.5	3582.9	3119.7	2560.4	2280.8	2228.5	2204.5	2179.1	2139.6
32.5°	3902.0	3821.5	3856.9	3012.3	2487.0	2204.5	2148.0	2109.9	2066.1	2049.2	1906.5
35°	3739.6	3702.9	3013.7	2532.2	2138.1	2070.4	2028.0	1988.4	1581.7	382.7	129.9
37.5°	3565.9	3557.5	2708.7	2101.4	2002.6	1939.0	1819.0	375.7	89.0	60.7	45.2
40°	3430.4	2710.1	2141.0	1970.1	1889.6	1789.3	251.4	62.1	39.5	24.0	15.5
42.5°	3340.0	2437.5	1916.4	1848.6	1673.5	185.0	63.6	26.8	15.5	12.7	9.9
45°	2574.5	1924.9	1790.7	1720.1	211.8	63.6	36.7	12.7	9.9	8.5	5.6
47.5°	2375.4	1748.4	1669.3	375.7	70.6	33.9	25.4	8.5	5.6	5.6	5.6
50°	1799.2	1615.6	1328.9	91.8	45.2	24.0	18.4	5.6	5.6	5.6	4.2
52.5°	1577.5	1491.3	142.6	60.7	35.3	18.4	11.3	4.2	4.2	4.2	4.2
55°	1441.9	946.2	84.7	46.6	29.7	16.9	7.1	4.2	4.2	4.2	2.8
57.5°	1319.0	127.1	62.1	39.5	26.8	15.5	4.2	4.2	4.2	4.2	2.8
60°	1118.5	91.8	50.8	35.3	25.4	14.1	4.2	4.2	4.2	4.2	4.2
62.5°	145.5	72.0	43.8	31.1	18.4	11.3	2.8	4.2	4.2	4.2	4.2
65°	105.9	56.5	39.5	21.2	11.3	4.2	2.8	4.2	4.2	4.2	4.2
67.5°	81.9	46.6	29.7	18.4	9.9	2.8	2.8	4.2	4.2	4.2	4.2
70°	65.0	39.5	24.0	15.5	8.5	2.8	2.8	4.2	4.2	4.2	4.2
72.5°	50.8	28.2	16.9	8.5	5.6	2.8	2.8	4.2	4.2	4.2	4.2
75°	38.1	22.6	12.7	7.1	2.8	2.8	2.8	4.2	4.2	4.2	4.2
77.5°	25.4	14.1	9.9	5.6	5.6	5.6	7.1	7.1	4.2	4.2	4.2
80°	16.9	9.9	7.1	7.1	7.1	5.6	7.1	7.1	4.2	7.1	4.2
82.5°	8.5	7.1	7.1	5.6	5.6	4.2	5.6	5.6	5.6	5.6	4.2
85°	5.6	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.6	5.6	4.2
87.5°	2.8	2.8	2.8	2.8	4.2	4.2	4.2	4.2	5.6	5.6	4.2
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: P1214223

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6
2.5°	4739.5	4743.7	4732.4	4793.2	4762.1	4764.9	4777.6	4745.2	4752.2	4729.6	4714.1
5°	5253.6	5262.0	5270.5	5273.3	5279.0	5286.0	5277.6	5273.3	5264.9	5236.6	5207.0
7.5°	5173.1	5163.2	5158.9	5164.6	5174.5	5178.7	5171.7	5181.5	5218.3	5233.8	5243.7
10°	4749.4	4704.2	4735.3	4731.0	4695.7	4814.4	4781.9	4800.2	4812.9	4942.9	5022.0
12.5°	4547.4	4575.7	4522.0	4495.2	4530.5	4554.5	4578.5	4527.7	4598.3	4565.8	4670.3
15°	4378.0	4361.0	4355.4	4356.8	4349.7	4383.6	4392.1	4403.4	4413.3	4457.1	4474.0
17.5°	4301.7	4330.0	4341.3	4349.7	4335.6	4320.1	4304.5	4281.9	4289.0	4277.7	4310.2
20°	3526.4	3431.8	3426.1	3481.2	3420.5	3454.4	3536.3	4084.2	4065.9	4279.1	4207.1
22.5°	2943.1	2854.2	2777.9	2711.5	2806.1	2845.7	2998.2	3170.5	3450.1	3406.3	3710.0
25°	2403.6	2371.2	2351.4	2341.5	2348.6	2345.7	2379.6	2460.1	2587.2	2886.6	3273.6
27.5°	2248.3	2232.8	2225.7	2203.1	2220.1	2214.4	2241.2	2258.2	2296.3	2326.0	2451.7
30°	2125.4	2107.1	2094.4	2070.4	2087.3	2088.7	2097.2	2141.0	2156.5	2181.9	2221.5
32.5°	776.7	457.6	429.3	408.1	446.3	581.8	1021.1	1785.1	2036.5	2056.2	2101.4
35°	76.3	63.6	56.5	56.5	57.9	63.6	84.7	223.1	408.1	1577.5	1974.3
37.5°	29.7	25.4	21.2	19.8	21.2	24.0	32.5	42.4	57.9	120.0	535.2
40°	12.7	11.3	9.9	9.9	9.9	9.9	11.3	14.1	21.2	39.5	62.1
42.5°	8.5	7.1	7.1	7.1	7.1	7.1	7.1	7.1	9.9	12.7	25.4
45°	5.6	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.6	7.1	11.3
47.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.6
50°	4.2	4.2	4.2	4.2	2.8	4.2	2.8	4.2	4.2	4.2	4.2
52.5°	4.2	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	4.2	4.2
55°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	4.2
57.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
60°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
62.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	4.2	4.2	2.8
65°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	4.2	2.8
67.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
70°	4.2	4.2	2.8	4.2	2.8	2.8	4.2	4.2	4.2	2.8	2.8
72.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	8.5	8.5	5.6
75°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	7.1	8.5	7.1
77.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	7.1	7.1	7.1
80°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.6	5.6	5.6
82.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.6	5.6	5.6
85°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
87.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
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: P1214223

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6
2.5°	4687.3	4685.8	4715.5	4738.1	4729.6	4738.1	4748.0	4749.4	4752.2	4740.9	4736.7
5°	5150.5	5106.7	5022.0	4961.2	4890.6	4762.1	4698.6	4705.6	4707.0	4702.8	4708.4
7.5°	5239.4	5235.2	5205.5	5192.8	5144.8	5053.0	4906.2	4880.7	4818.6	4779.0	4746.6
10°	5016.3	5118.0	5144.8	5190.0	5218.3	5201.3	5077.0	5058.7	5019.1	4973.9	4983.8
12.5°	4774.8	4858.1	4862.4	5108.1	5163.2	5168.8	5120.8	5146.2	5151.9	5050.2	4990.9
15°	4478.2	4517.8	4601.1	4829.9	4996.5	5101.0	5132.1	5146.2	5077.0	5072.8	5048.8
17.5°	4348.3	4373.7	4411.9	4540.4	4793.2	4947.1	5078.4	5068.6	5095.4	5075.6	5014.9
20°	4184.5	4205.7	4273.5	4338.4	4462.7	4667.5	4913.2	4931.6	4966.9	4962.6	4979.6
22.5°	4181.7	4106.8	4118.1	4169.0	4298.9	4482.5	4743.7	4804.5	4827.1	4842.6	4861.0
25°	3317.4	3911.9	4020.7	4053.2	4137.9	4245.2	4553.1	4575.7	4618.1	4687.3	4738.1
27.5°	2873.9	3277.8	3712.8	3938.8	3992.4	4081.4	4265.0	4298.9	4442.9	4459.9	4539.0
30°	2268.1	2580.2	3229.8	3773.5	3862.5	3924.6	4054.6	4122.4	4184.5	4252.3	4335.6
32.5°	2133.9	2183.3	2543.5	3122.5	3814.5	3767.9	3863.9	3904.9	3972.7	4032.0	4092.7
35°	2011.0	2044.9	2121.2	2557.6	3106.9	3639.4	3704.3	3731.2	3769.3	3814.5	3858.3
37.5°	1882.5	1933.4	1985.6	2102.8	2873.9	3537.7	3536.3	3567.3	3589.9	3628.1	3664.8
40°	341.8	1775.2	1859.9	1936.2	2228.5	2821.7	3378.1	3392.2	3407.8	3431.8	3469.9
42.5°	55.1	296.6	1742.7	1816.2	1899.5	2526.5	3306.1	3248.2	3238.3	3255.2	3289.1
45°	28.2	72.0	350.2	1696.1	1771.0	2015.3	2703.0	3147.9	3138.0	3105.5	3112.6
47.5°	21.2	45.2	86.1	586.1	1658.0	1730.0	2494.0	2467.2	2655.0	3015.2	2960.1
50°	18.4	31.1	50.8	120.0	1464.5	1593.0	1920.7	2244.1	2342.9	2355.6	2787.8
52.5°	16.9	21.2	36.7	77.7	307.9	1473.0	1561.9	1674.9	1841.6	2198.9	2190.4
55°	15.5	19.8	31.1	52.3	107.3	1327.5	1419.3	1440.5	1475.8	1646.7	1872.6
57.5°	8.5	18.4	29.7	45.2	80.5	242.9	1288.0	1304.9	1333.2	1340.2	1420.7
60°	4.2	16.9	26.8	39.5	59.3	113.0	1158.0	1177.8	1194.8	1197.6	1223.0
62.5°	2.8	15.5	22.6	36.7	49.4	80.5	274.0	559.3	1063.4	1063.4	1093.1
65°	2.8	11.3	14.1	24.0	45.2	66.4	115.8	134.2	261.3	642.6	958.9
67.5°	2.8	4.2	12.7	19.8	33.9	50.8	84.7	98.9	118.6	135.6	251.4
70°	2.8	2.8	11.3	12.7	21.2	38.1	60.7	69.2	80.5	91.8	105.9
72.5°	2.8	2.8	9.9	9.9	14.1	25.4	46.6	50.8	57.9	65.0	74.8
75°	7.1	5.6	8.5	8.5	9.9	19.8	35.3	39.5	42.4	48.0	55.1
77.5°	7.1	7.1	7.1	7.1	7.1	12.7	22.6	25.4	29.7	32.5	38.1
80°	5.6	5.6	5.6	7.1	7.1	8.5	14.1	15.5	16.9	21.2	22.6
82.5°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	8.5	9.9	12.7
85°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.6	5.6	5.6	5.6
87.5°	4.2	4.2	4.2	2.8	2.8	4.2	4.2	4.2	4.2	4.2	4.2
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: P1214223

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6	4705.6
2.5°	4735.3	4726.8	4719.7	4724.0	4711.3	4705.6	4709.8	4711.3	4714.1	4721.1	4722.6
5°	4722.6	4719.7	4732.4	4739.5	4736.7	4739.5	4739.5	4733.9	4725.4	4731.0	4718.3
7.5°	4714.1	4695.7	4681.6	4684.4	4670.3	4687.3	4702.8	4725.4	4732.4	4732.4	4718.3
10°	4859.5	4839.8	4760.7	4707.0	4671.7	4640.6	4714.1	4639.2	4674.5	4540.4	4694.3
12.5°	4979.6	5006.4	4971.1	4824.2	4798.8	4705.6	4759.3	4667.5	4640.6	4486.7	4536.1
15°	5027.6	4976.8	4965.5	4924.5	4869.4	4842.6	4698.6	4683.0	4639.2	4656.2	4591.2
17.5°	4985.2	5010.7	4976.8	4949.9	4893.4	4829.9	4743.7	4667.5	4606.8	4471.2	4585.6
20°	4944.3	4978.2	4876.5	4893.4	4899.1	4825.7	4780.5	4716.9	4640.6	4513.5	4414.7
22.5°	4876.5	4852.5	4861.0	4835.5	4814.4	4824.2	4762.1	4718.3	4589.8	4531.9	4397.7
25°	4766.3	4757.9	4780.5	4777.6	4726.8	4709.8	4678.8	4632.2	4581.3	4488.1	4378.0
27.5°	4587.0	4630.8	4670.3	4688.7	4661.8	4616.6	4599.7	4572.9	4537.6	4442.9	4361.0
30°	4397.7	4447.2	4492.4	4531.9	4555.9	4536.1	4520.6	4505.1	4451.4	4389.3	4297.5
32.5°	4181.7	4246.6	4308.8	4356.8	4409.0	4424.6	4413.3	4400.6	4355.4	4298.9	4225.4
35°	3931.7	4020.7	4111.1	4197.2	4219.8	4256.5	4293.2	4272.1	4248.0	4191.6	4123.8
37.5°	3719.9	3783.4	3848.4	3957.1	4036.2	4082.8	4147.8	4156.2	4115.3	4088.5	3999.5
40°	3501.0	3558.9	3653.5	3717.0	3825.8	3879.4	3948.6	3979.7	3969.8	3954.3	3876.6
42.5°	3328.7	3356.9	3419.1	3475.5	3582.9	3693.0	3753.8	3787.7	3823.0	3810.2	3770.7
45°	3145.1	3170.5	3191.7	3241.1	3345.6	3443.1	3517.9	3568.8	3632.3	3662.0	3613.9
47.5°	2962.9	2970.0	2995.4	3036.3	3098.5	3173.3	3299.0	3375.3	3434.6	3492.5	3461.4
50°	2823.1	2797.7	2801.9	2827.3	2878.2	2951.6	3042.0	3149.3	3217.1	3287.7	3294.8
52.5°	2467.2	2673.4	2624.0	2638.1	2664.9	2700.2	2794.8	2900.8	2984.1	3044.8	3105.5
55°	2070.4	2111.3	2508.2	2451.7	2468.6	2499.7	2543.5	2649.4	2729.9	2814.6	2899.3
57.5°	1605.7	1910.8	1926.3	2293.5	2285.0	2287.8	2324.6	2385.3	2465.8	2571.7	2643.7
60°	1248.4	1376.9	1626.9	1754.0	2076.0	2087.3	2108.5	2143.8	2213.0	2313.3	2427.7
62.5°	1101.6	1118.5	1207.5	1398.1	1607.1	1859.9	1905.1	1910.8	1941.8	2042.1	2174.9
65°	967.4	978.7	1005.5	1025.3	1200.4	1444.7	1662.2	1697.5	1717.3	1776.6	1889.6
67.5°	666.6	843.1	867.1	881.2	898.2	1011.2	1280.9	1460.3	1482.9	1535.1	1634.0
70°	128.5	266.9	730.1	745.7	754.1	779.6	823.3	1108.6	1258.3	1307.7	1352.9
72.5°	87.6	103.1	124.3	293.7	621.4	635.5	645.4	682.1	934.9	1079.0	1103.0
75°	63.6	70.6	83.3	103.1	127.1	413.8	512.6	531.0	549.4	758.4	879.8
77.5°	45.2	50.8	56.5	66.4	77.7	100.3	144.0	396.8	415.2	425.1	600.2
80°	25.4	31.1	38.1	43.8	49.4	56.5	73.4	91.8	204.8	299.4	314.9
82.5°	14.1	16.9	19.8	24.0	26.8	33.9	41.0	49.4	65.0	96.0	203.4
85°	7.1	7.1	7.1	9.9	11.3	15.5	18.4	21.2	29.7	41.0	56.5
87.5°	4.2	4.2	5.6	5.6	5.6	7.1	7.1	7.1	8.5	12.7	18.4
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: P1214223

CATALOG NUMBER: 4SNLED-LD5-72HL-RM-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	4705.6	4705.6	4705.6	4705.6	4705.6
2.5°	4724.0	4719.7	4719.7	4736.7	4732.4
5°	4715.5	4711.3	4709.8	4728.2	4719.7
7.5°	4708.4	4692.9	4688.7	4705.6	4698.6
10°	4680.2	4668.9	4676.0	4670.3	4667.5
12.5°	4632.2	4625.1	4595.5	4598.3	4622.3
15°	4546.0	4574.3	4523.4	4568.6	4578.5
17.5°	4387.9	4451.4	4500.8	4527.7	4531.9
20°	4458.5	4479.7	4454.2	4455.6	4472.6
22.5°	4366.7	4376.6	4383.6	4375.1	4411.9
25°	4219.8	4181.7	4263.6	4280.5	4339.8
27.5°	4174.6	4143.5	4181.7	4178.8	4228.3
30°	4137.9	4037.6	4054.6	4081.4	4142.1
32.5°	4085.6	3927.5	3910.5	3969.8	4037.6
35°	3993.8	3844.1	3804.6	3842.7	3944.4
37.5°	3916.2	3728.3	3649.2	3700.1	3832.8
40°	3800.4	3638.0	3515.1	3560.3	3717.0
42.5°	3662.0	3560.3	3371.0	3402.1	3581.5
45°	3522.1	3431.8	3231.2	3246.8	3460.0
47.5°	3379.5	3296.2	3085.8	3088.6	3304.7
50°	3239.7	3129.5	2955.8	2906.4	3139.4
52.5°	3057.5	2955.8	2824.5	2744.0	2982.7
55°	2885.2	2770.8	2674.8	2550.5	2804.7
57.5°	2717.2	2590.1	2525.1	2365.5	2602.8
60°	2487.0	2426.2	2330.2	2177.7	2420.6
62.5°	2251.1	2231.4	2133.9	1975.7	2196.0
65°	1975.7	2022.3	1922.1	1786.5	1963.0
67.5°	1715.9	1799.2	1689.0	1605.7	1738.5
70°	1439.1	1535.1	1473.0	1443.3	1499.8
72.5°	1166.5	1259.7	1265.4	1244.2	1262.6
75°	901.0	1004.1	1060.6	1028.1	1032.4
77.5°	683.5	733.0	795.1	820.5	814.9
80°	422.3	508.4	559.3	611.5	593.1
82.5°	213.2	285.3	347.4	403.9	377.1
85°	89.0	114.4	159.6	210.4	202.0
87.5°	26.8	45.2	48.0	67.8	63.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)