

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P257981

Luminaire Tested: **ARCH-L-AF72-250-D-U-T2U-7050**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P257981
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 8/21/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-250-D-U-T2U-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28154 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

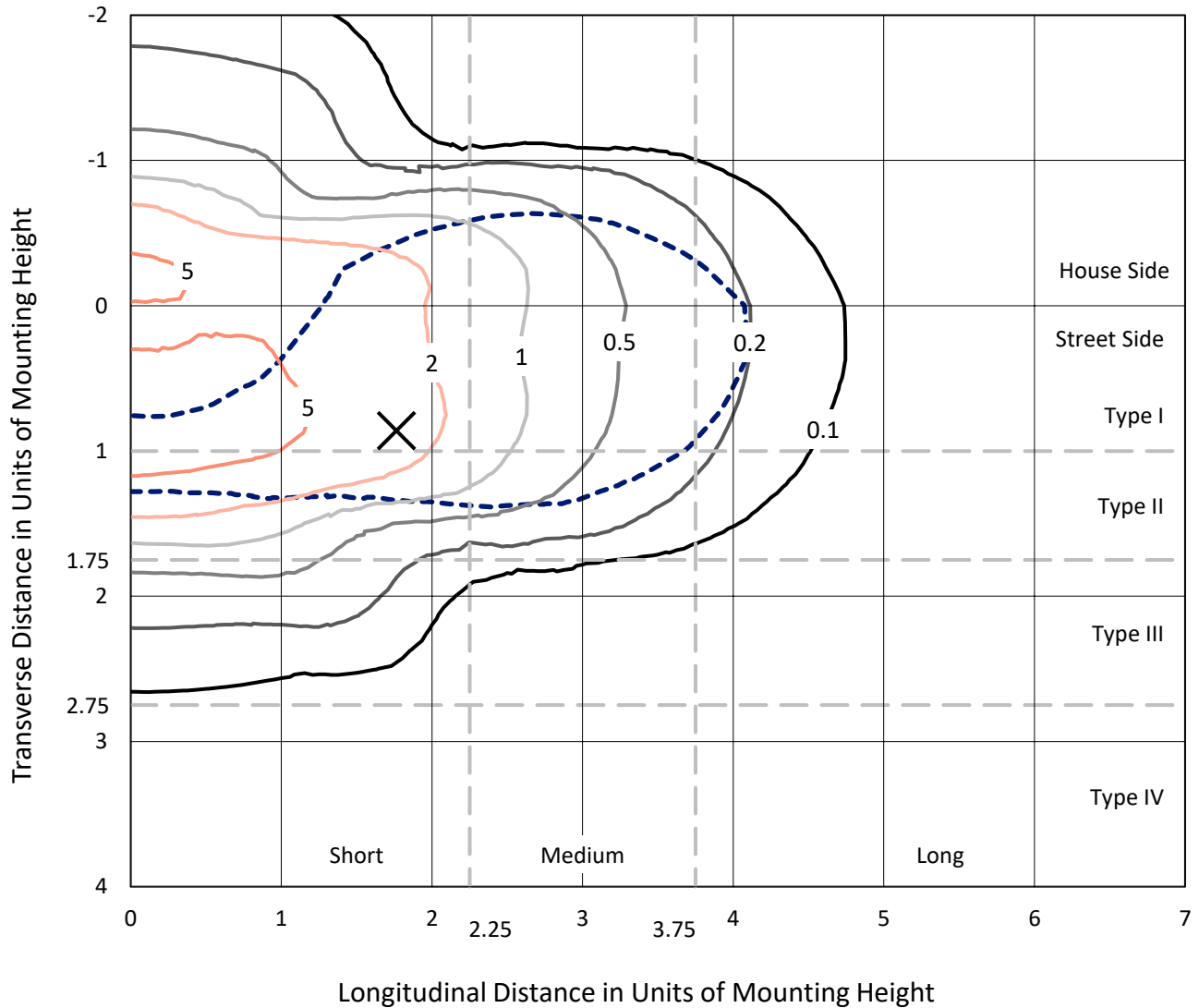
Input Watts (W): 251
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

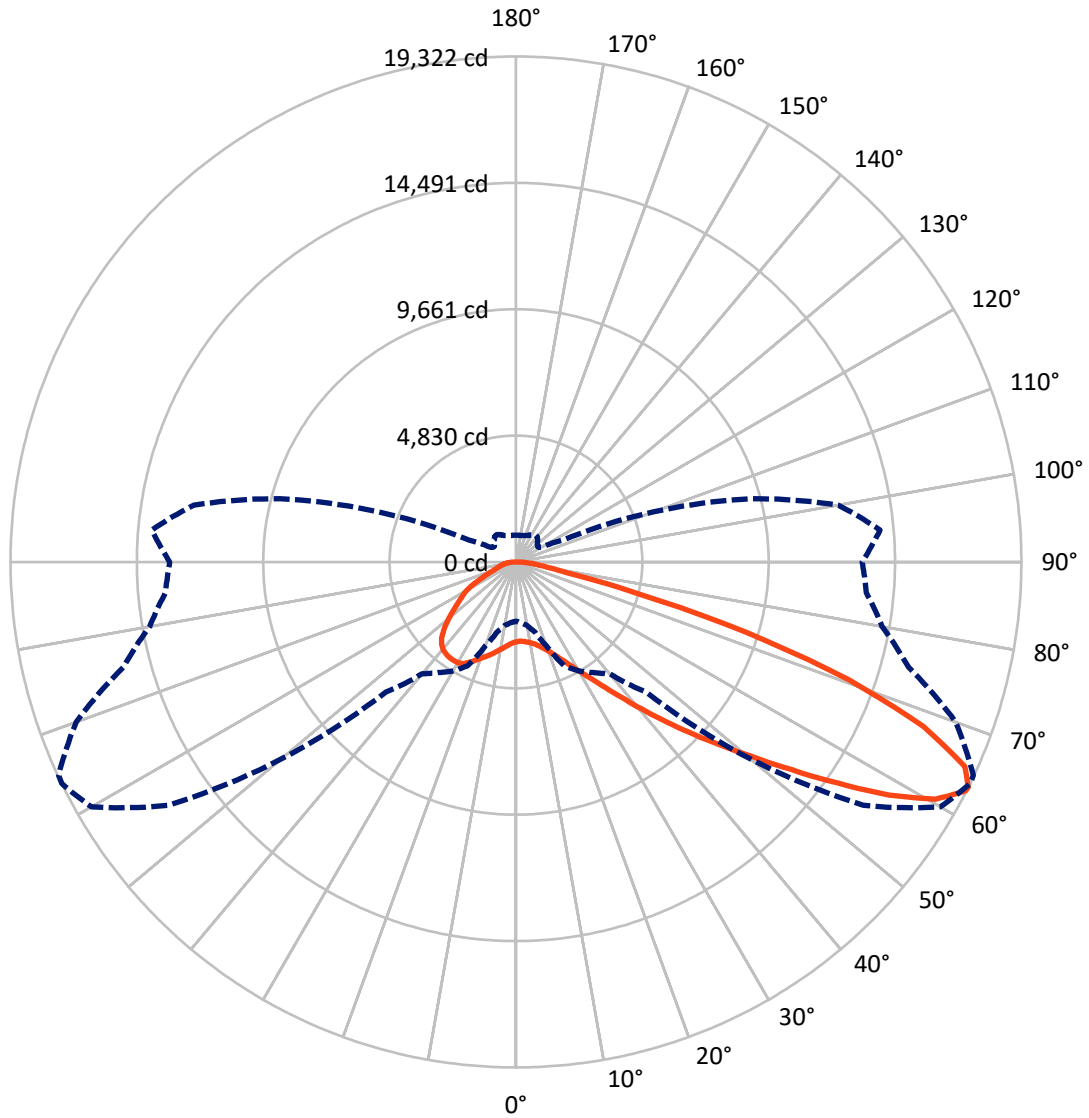
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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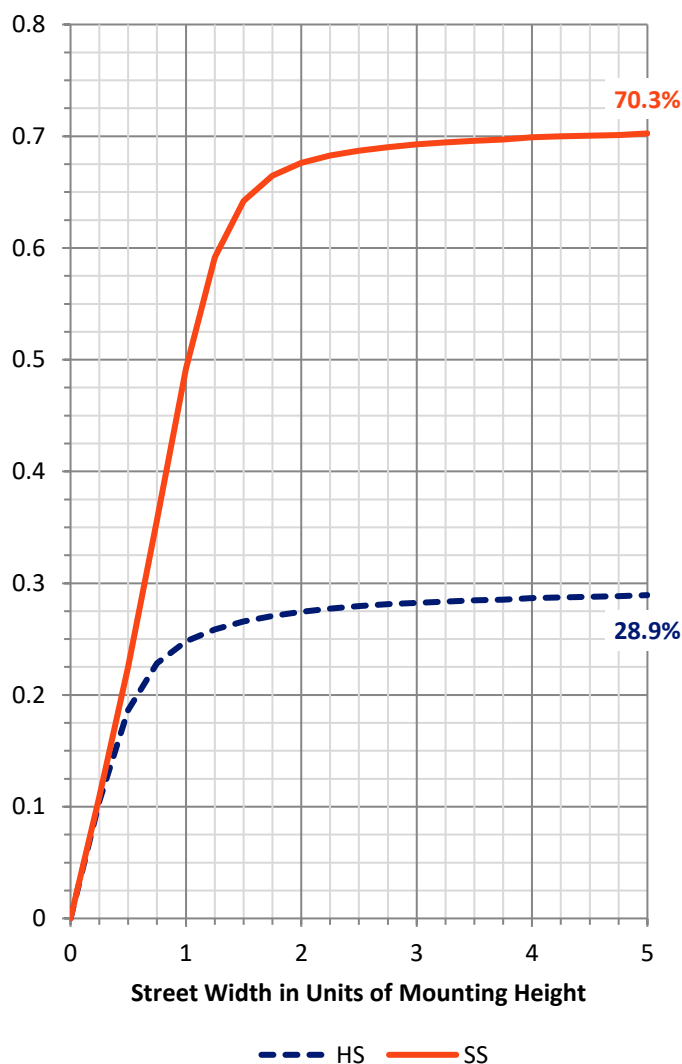
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8276.3	0.0	8276.3
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	19877.7	0.0	19877.7
	% Fixture	70.6	0.0	70.6
Total	Lumens	28154.0	0.0	28154.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	304.4	1.1
10°-20°	1014.0	3.6
20°-30°	1903.3	6.8
30°-40°	3190.2	11.3
40°-50°	5352.5	19.0
50°-60°	6785.3	24.1
60°-70°	5985.7	21.3
70°-80°	3089.9	11.0
80°-90°	528.7	1.9
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°-90°	28154.0	100.0
0°-180°	28154.0	100.0

Coefficient of Utilization

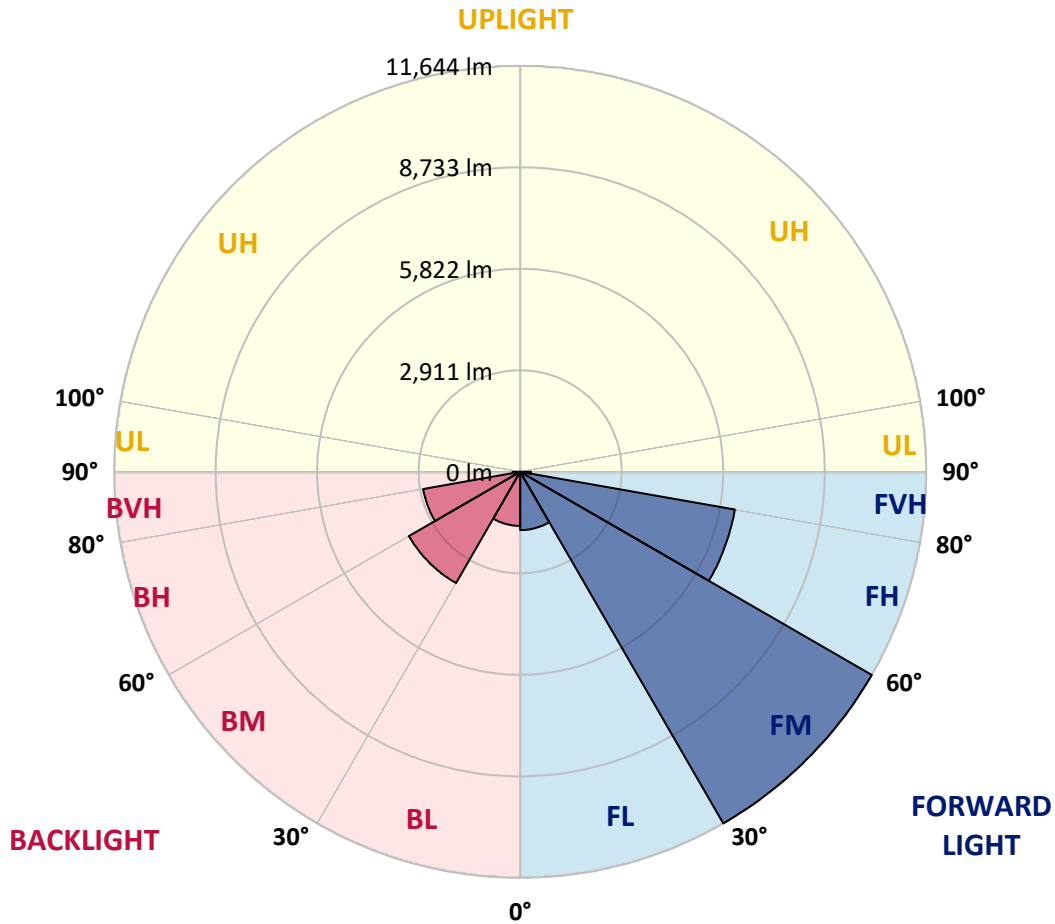


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1671.0	5.9			
FM (30°-60°)	11643.8	41.4			
FH (60°-80°)	6251.8	22.2			G3/7500
FVH (80°-90°)	311.2	1.1			G3/500
BL (0°-30°)	1550.7	5.5	B3/2500		
BM (30°-60°)	3684.2	13.1	B3/5000		
BH (60°-80°)	2823.8	10.0	B4/5000		G4/5000
BVH (80°-90°)	217.6	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1
2.5°	3030.2	3025.5	3025.5	3025.5	3025.5	3020.8	3025.5	3034.9	3030.2	3025.5	3034.9
5°	3039.6	3034.9	3034.9	3034.9	3039.6	3034.9	3039.6	3053.8	3044.4	3044.4	3053.8
7.5°	3063.2	3058.5	3063.2	3058.5	3058.5	3058.5	3063.2	3077.3	3072.6	3077.3	3091.5
10°	3091.5	3091.5	3091.5	3091.5	3091.5	3091.5	3100.9	3110.3	3115.0	3119.8	3138.6
12.5°	3176.3	3176.3	3176.3	3171.6	3171.6	3157.5	3176.3	3185.7	3195.2	3204.6	3218.7
15°	3355.4	3355.4	3350.7	3331.8	3331.8	3303.5	3308.3	3313.0	3313.0	3322.4	3331.8
17.5°	3591.0	3586.3	3576.9	3562.7	3543.9	3510.9	3501.5	3492.1	3477.9	3473.2	3473.2
20°	3920.9	3916.2	3897.3	3859.6	3836.1	3784.2	3746.5	3708.8	3694.7	3671.1	3666.4
22.5°	4392.2	4392.2	4354.5	4297.9	4279.1	4170.7	4062.3	3982.2	3953.9	3920.9	3920.9
25°	4962.4	4957.7	4905.8	4839.9	4759.7	4646.6	4514.7	4406.3	4335.6	4260.2	4231.9
27.5°	5645.7	5631.6	5560.9	5480.8	5330.0	5188.6	5033.1	4920.0	4797.4	4703.2	4618.4
30°	6446.9	6432.7	6310.2	6159.4	6003.9	5862.5	5636.3	5499.6	5306.4	5193.3	5099.1
32.5°	7375.3	7361.1	7139.6	6993.5	6828.6	6654.2	6385.6	6168.8	5923.8	5763.5	5631.6
35°	8558.1	8501.6	8185.8	7983.2	7724.0	7549.6	7266.9	6974.7	6687.2	6461.0	6267.8
37.5°	9835.2	9769.3	9491.2	9189.6	8935.1	8723.1	8322.5	7954.9	7615.6	7304.6	7064.2
40°	11168.9	10994.5	10697.7	10476.2	10301.8	10099.1	9679.7	9293.3	8760.8	8412.0	8049.2
42.5°	12092.6	11922.9	11715.6	11569.5	11484.7	11329.1	11093.5	10758.9	10282.9	10292.4	9335.7
45°	12700.5	12450.7	12309.4	12318.8	12351.8	12351.8	12309.4	12257.5	12050.2	12191.6	11390.4
47.5°	12483.7	12318.8	12229.3	12417.8	12653.4	12889.0	13162.4	13459.2	13798.6	14199.1	13214.2
50°	11211.3	11272.6	11315.0	11715.6	12219.8	12757.1	13383.8	14194.4	15141.7	15325.4	14849.5
52.5°	9180.2	9312.1	9453.5	10066.2	10730.6	11659.0	12757.1	14095.5	15367.9	16117.2	16070.0
55°	7130.2	7295.1	7596.7	8053.9	8581.7	9458.2	10815.5	12879.6	14863.6	16055.9	16781.6
57.5°	5075.5	5315.8	5711.7	6347.9	6814.5	7309.3	8313.1	10603.4	12775.9	14995.6	16663.8
60°	3374.2	3487.3	3746.5	4538.3	5325.3	5843.7	6555.3	7384.7	9161.3	12219.8	15448.0
62.5°	2394.0	2469.4	2629.6	2987.8	3699.4	4637.2	5066.1	5447.8	6018.0	7860.7	12403.6
63°	2262.1	2328.0	2460.0	2761.6	3402.5	4373.3	4811.6	5160.3	5575.0	7031.2	11734.4
65°	1875.6	1903.9	1974.6	2120.7	2464.7	3270.6	3986.9	4198.9	4269.6	4519.4	7351.7
67.5°	1583.4	1602.3	1625.9	1668.3	1804.9	2177.2	2973.7	3242.3	3162.2	2992.5	3633.4
70°	1376.1	1390.2	1427.9	1479.8	1526.9	1621.1	2045.3	2445.9	2356.3	2125.4	2224.4
72.5°	1098.0	1121.6	1164.0	1253.6	1347.8	1470.3	1574.0	1823.8	1767.2	1545.7	1569.3
75°	867.1	881.3	919.0	984.9	1074.5	1215.9	1418.5	1503.3	1347.8	1140.5	1140.5
77.5°	688.0	702.2	735.2	787.0	843.6	942.5	1083.9	1305.4	1211.1	857.7	853.0
80°	518.4	532.5	565.5	612.6	669.2	739.9	824.7	923.7	1112.2	801.1	640.9
82.5°	381.7	386.4	443.0	476.0	494.8	551.4	622.1	678.6	763.4	739.9	570.2
85°	287.5	282.8	320.5	344.0	348.7	362.9	405.3	461.8	499.5	480.7	443.0
87.5°	160.2	141.4	164.9	188.5	188.5	193.2	202.6	235.6	268.6	259.2	235.6
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):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1
2.5°	3034.9	3034.9	3030.2	3030.2	3034.9	3034.9	3030.2	3044.4	3053.8	3053.8	3058.5
5°	3049.1	3053.8	3049.1	3049.1	3053.8	3053.8	3058.5	3072.6	3086.8	3096.2	3110.3
7.5°	3091.5	3096.2	3091.5	3091.5	3096.2	3100.9	3110.3	3129.2	3138.6	3157.5	3181.0
10°	3138.6	3143.3	3138.6	3143.3	3148.0	3152.7	3166.9	3181.0	3195.2	3214.0	3251.7
12.5°	3223.4	3228.1	3218.7	3223.4	3237.6	3237.6	3247.0	3256.4	3280.0	3303.5	3341.2
15°	3341.2	3341.2	3331.8	3336.5	3350.7	3350.7	3355.4	3364.8	3393.1	3421.4	3459.1
17.5°	3477.9	3487.3	3482.6	3487.3	3496.8	3501.5	3501.5	3510.9	3529.8	3548.6	3586.3
20°	3661.7	3666.4	3657.0	3666.4	3675.8	3666.4	3657.0	3652.3	3661.7	3671.1	3713.5
22.5°	3911.5	3906.8	3883.2	3883.2	3883.2	3864.4	3840.8	3812.5	3812.5	3798.4	3831.4
25°	4208.4	4194.2	4161.2	4166.0	4133.0	4104.7	4062.3	4019.9	3982.2	3968.0	3972.7
27.5°	4557.1	4528.8	4495.8	4486.4	4453.4	4401.6	4330.9	4250.8	4189.5	4142.4	4133.0
30°	4995.4	4934.1	4877.6	4868.1	4816.3	4731.5	4618.4	4510.0	4406.3	4326.2	4297.9
32.5°	5513.8	5419.5	5330.0	5320.6	5235.7	5122.6	4986.0	4835.2	4684.3	4557.1	4495.8
35°	6121.7	5980.3	5895.5	5871.9	5749.4	5608.0	5457.2	5264.0	5051.9	4872.9	4759.7
37.5°	6861.6	6715.5	6569.4	6574.1	6404.5	6239.5	6036.9	5801.2	5532.6	5282.8	5122.6
40°	7775.8	7568.5	7380.0	7337.6	7191.5	6960.5	6739.0	6465.7	6135.8	5806.0	5575.0
42.5°	8883.3	8544.0	8284.8	8247.1	8053.9	7771.1	7502.5	7139.6	6805.0	6404.5	6126.4
45°	10141.6	9599.6	9288.6	9232.0	8921.0	8633.5	8308.4	7921.9	7511.9	7059.5	6729.6
47.5°	11706.2	10933.3	10405.5	10311.2	9882.4	9505.4	9166.0	8737.2	8247.1	7742.8	7380.0
50°	13529.9	12389.5	11677.9	11531.8	10956.8	10513.9	10080.3	9543.1	9020.0	8492.1	8072.7
52.5°	15358.4	14133.2	13185.9	13006.8	12158.6	11564.8	10994.5	10457.3	9840.0	9316.9	8840.9
55°	16828.8	16013.5	14915.4	14665.7	13449.8	12644.0	11894.7	11282.0	10669.4	10254.7	9693.9
57.5°	17714.7	17672.3	16805.2	16461.2	14797.6	13605.3	12771.2	12073.7	11479.9	11305.6	10561.0
60°	17691.2	18789.2	18416.9	18157.7	16159.6	14590.3	13506.4	12752.4	12262.2	12460.2	11432.8
62.5°	16612.0	18836.3	19284.0	19213.4	17611.1	15382.0	14109.6	13332.0	13072.8	13661.9	12337.6
63°	16220.8	18728.0	19321.8	19293.5	17889.1	15532.8	14213.3	13445.1	13233.0	13968.2	12502.6
65°	13709.0	17780.7	18864.6	18991.9	18487.6	16051.2	14453.6	13732.6	13709.0	14651.5	12893.7
67.5°	8355.5	15023.8	16805.2	17050.3	17644.1	16216.1	14316.9	13633.6	13972.9	14750.5	12775.9
70°	3572.2	9915.4	13506.4	13902.2	15353.7	15396.1	13925.8	13228.3	13911.7	13977.6	11937.1
72.5°	2116.0	4674.9	9194.3	10056.7	12149.1	13247.2	13030.4	12521.4	13105.8	12276.4	10165.1
75°	1498.6	2186.7	4670.2	5589.2	8459.2	10113.3	10947.4	11183.1	11159.5	9736.3	7629.7
77.5°	1074.5	1404.4	1969.9	2323.3	4722.0	6494.0	7511.9	8200.0	7978.5	6517.6	4703.2
80°	749.3	970.8	1206.4	1281.8	2191.4	3336.5	3958.6	4260.2	4128.3	3256.4	2106.5
82.5°	542.0	636.2	777.6	824.7	1102.8	1541.0	1833.2	1616.4	1550.5	1201.7	909.5
85°	419.4	410.0	485.4	504.3	645.6	805.9	824.7	640.9	560.8	499.5	509.0
87.5°	296.9	254.5	259.2	268.6	334.6	428.8	419.4	263.9	226.2	240.3	273.3
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1	3049.1
2.5°	3067.9	3072.6	3082.1	3086.8	3096.2	3096.2	3105.6	3110.3	3119.8	3129.2	3133.9
5°	3124.5	3138.6	3157.5	3166.9	3185.7	3199.9	3218.7	3228.1	3247.0	3261.1	3280.0
7.5°	3209.3	3232.9	3256.4	3284.7	3313.0	3336.5	3355.4	3378.9	3411.9	3435.5	3449.6
10°	3289.4	3322.4	3364.8	3397.8	3440.2	3473.2	3501.5	3543.9	3581.6	3614.6	3633.4
12.5°	3393.1	3435.5	3477.9	3529.8	3586.3	3628.7	3671.1	3727.7	3779.5	3817.2	3836.1
15°	3515.6	3567.5	3614.6	3675.8	3741.8	3798.4	3859.6	3920.9	3958.6	3958.6	3949.2
17.5°	3642.9	3685.3	3741.8	3812.5	3902.1	3972.7	4005.7	4015.2	4001.0	3968.0	3944.5
20°	3770.1	3807.8	3869.1	3953.9	4048.1	4062.3	4029.3	3986.9	3944.5	3887.9	3850.2
22.5°	3873.8	3925.6	4019.9	4118.8	4123.5	4043.4	3953.9	3883.2	3817.2	3751.2	3680.6
25°	3996.3	4067.0	4194.2	4231.9	4109.4	3958.6	3831.4	3727.7	3619.3	3510.9	3430.8
27.5°	4147.1	4250.8	4378.0	4269.6	4029.3	3817.2	3642.9	3487.3	3346.0	3195.2	3105.6
30°	4307.3	4467.6	4495.8	4213.1	3892.6	3619.3	3383.7	3148.0	2969.0	2832.3	2780.4
32.5°	4500.6	4707.9	4538.3	4114.1	3708.8	3350.7	3034.9	2752.2	2601.4	2516.5	2493.0
35°	4792.7	4962.4	4561.8	4010.4	3496.8	3030.2	2634.4	2408.1	2313.9	2257.3	2229.1
37.5°	5212.2	5207.4	4557.1	3883.2	3251.7	2681.5	2313.9	2153.7	2078.3	2031.1	1979.3
40°	5702.3	5396.0	4528.8	3699.4	2921.8	2346.9	2092.4	1941.6	1870.9	1814.4	1753.1
42.5°	6187.7	5523.2	4448.7	3426.1	2511.8	2106.5	1932.2	1795.5	1720.1	1658.8	1574.0
45°	6607.1	5575.0	4293.2	3049.1	2144.2	1918.0	1828.5	1710.7	1621.1	1526.9	1460.9
47.5°	6937.0	5565.6	4043.4	2606.1	1899.2	1786.1	1743.7	1663.6	1555.2	1437.3	1352.5
50°	7215.0	5494.9	3704.1	2214.9	1734.2	1668.3	1654.1	1630.6	1456.2	1357.2	1305.4
52.5°	7469.5	5391.2	3341.2	1951.0	1592.9	1536.3	1564.6	1541.0	1418.5	1333.7	1281.8
55°	7818.2	5320.6	2983.1	1748.4	1427.9	1413.8	1437.3	1470.3	1394.9	1314.8	1258.3
57.5°	8228.2	5358.3	2709.8	1522.2	1272.4	1281.8	1361.9	1409.1	1371.4	1286.5	1230.0
60°	8699.5	5471.4	2469.4	1305.4	1145.2	1168.7	1286.5	1352.5	1347.8	1248.8	1182.9
62.5°	9227.3	5589.2	2087.7	1140.5	1036.8	1074.5	1197.0	1281.8	1296.0	1211.1	1131.0
63°	9331.0	5598.6	1988.7	1107.5	1017.9	1060.3	1173.4	1263.0	1281.8	1201.7	1121.6
65°	9585.5	5513.8	1602.3	1017.9	942.5	989.7	1102.8	1182.9	1220.6	1149.9	1083.9
67.5°	9373.4	4821.0	1206.4	909.5	881.3	914.2	1013.2	1088.6	1121.6	1088.6	1022.6
70°	8572.3	3506.2	942.5	810.6	815.3	838.8	914.2	984.9	1022.6	1013.2	951.9
72.5°	6904.0	1988.7	787.0	725.7	739.9	768.2	820.0	886.0	919.0	914.2	871.8
75°	4547.7	1017.9	664.5	650.3	659.8	683.3	721.0	772.9	810.6	805.9	787.0
77.5°	2252.6	706.9	570.2	574.9	579.7	598.5	626.8	673.9	697.5	702.2	697.5
80°	928.4	551.4	490.1	494.8	499.5	513.7	532.5	574.9	589.1	598.5	603.2
82.5°	556.1	419.4	391.1	400.6	405.3	419.4	433.6	471.3	485.4	499.5	499.5
85°	367.6	292.2	282.8	292.2	301.6	311.0	315.7	339.3	362.9	381.7	391.1
87.5°	197.9	174.4	169.7	174.4	174.4	183.8	193.2	216.8	245.1	263.9	273.3
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):

	160°	165°	170°	175°	180°
0°	3049.1	3049.1	3049.1	3049.1	3049.1
2.5°	3124.5	3129.2	3124.5	3129.2	3133.9
5°	3280.0	3289.4	3284.7	3284.7	3303.5
7.5°	3459.1	3477.9	3477.9	3487.3	3496.8
10°	3652.3	3671.1	3685.3	3685.3	3699.4
12.5°	3845.5	3854.9	3869.1	3869.1	3869.1
15°	3944.5	3939.8	3935.0	3930.3	3930.3
17.5°	3930.3	3911.5	3902.1	3892.6	3897.3
20°	3826.6	3793.7	3784.2	3770.1	3779.5
22.5°	3647.6	3600.4	3581.6	3558.0	3567.5
25°	3378.9	3322.4	3313.0	3284.7	3298.8
27.5°	3067.9	3039.6	3034.9	3030.2	3053.8
30°	2775.7	2785.2	2789.9	2799.3	2822.9
32.5°	2507.1	2526.0	2530.7	2535.4	2568.4
35°	2243.2	2219.6	2243.2	2233.8	2262.1
37.5°	1955.7	1936.9	1918.0	1894.5	1913.3
40°	1715.4	1682.4	1625.9	1597.6	1602.3
42.5°	1526.9	1484.5	1437.3	1409.1	1409.1
45°	1404.4	1352.5	1310.1	1291.3	1291.3
47.5°	1310.1	1286.5	1263.0	1248.8	1248.8
50°	1272.4	1244.1	1230.0	1220.6	1220.6
52.5°	1244.1	1215.9	1201.7	1192.3	1182.9
55°	1220.6	1178.2	1164.0	1159.3	1159.3
57.5°	1187.6	1149.9	1131.0	1126.3	1126.3
60°	1135.7	1107.5	1088.6	1083.9	1083.9
62.5°	1083.9	1055.6	1036.8	1036.8	1036.8
63°	1074.5	1041.5	1027.4	1027.4	1027.4
65°	1032.1	999.1	984.9	984.9	980.2
67.5°	975.5	942.5	933.1	933.1	923.7
70°	909.5	881.3	871.8	876.5	857.7
72.5°	843.6	815.3	801.1	801.1	782.3
75°	768.2	739.9	721.0	716.3	697.5
77.5°	683.3	659.8	640.9	622.1	612.6
80°	593.8	574.9	551.4	537.2	523.1
82.5°	499.5	480.7	466.5	485.4	414.7
85°	391.1	372.3	353.4	381.7	296.9
87.5°	287.5	278.0	259.2	226.2	197.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)