

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: P257978

Luminaire Tested: **ARCH-L-AF72-220-D-U-T2U-7050**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P257978
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-AF72-220-D-U-T2U-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25969 lumens
Efficiency: N/A
Efficacy: 117.0 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

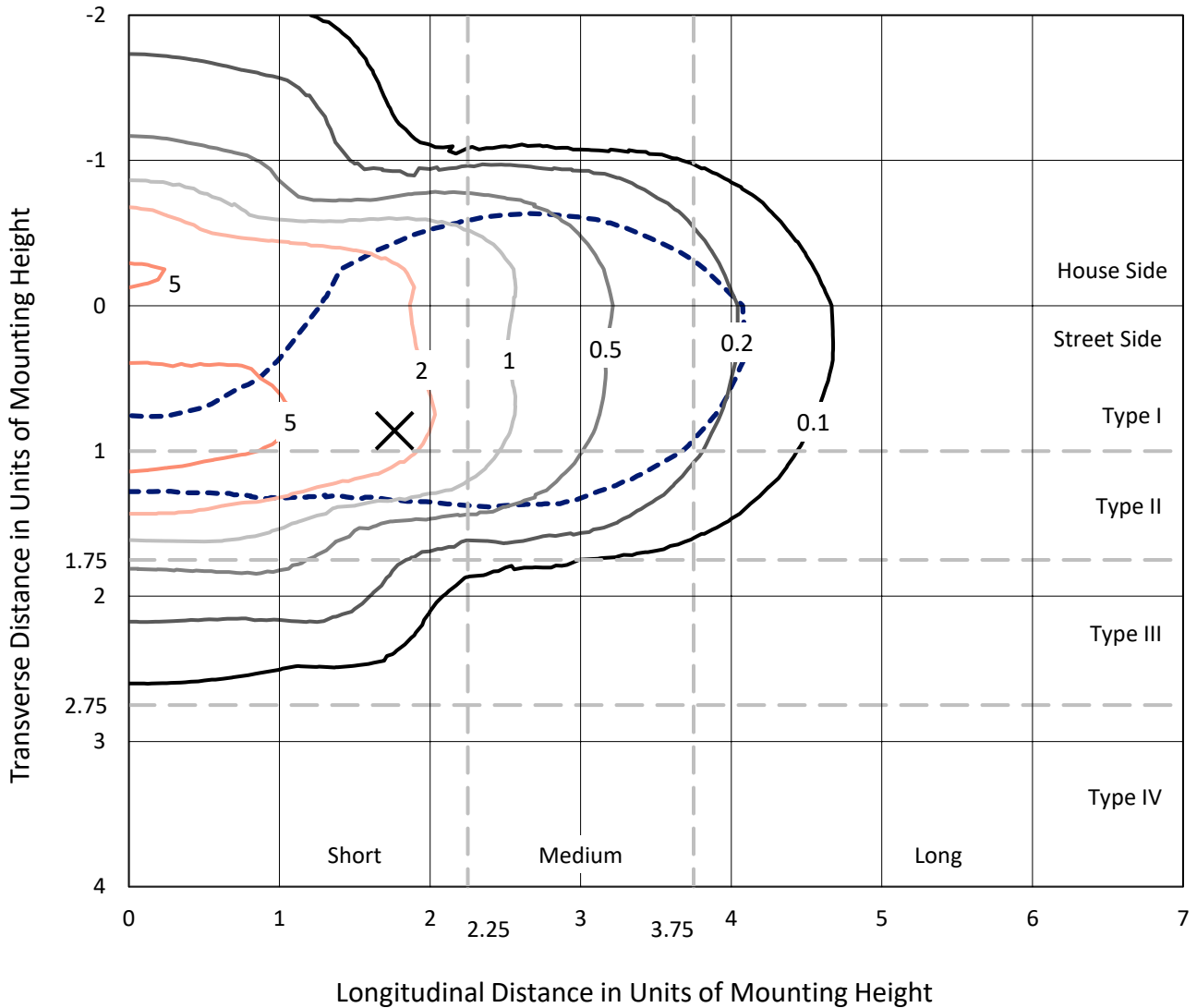
Input Watts (W): 222
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

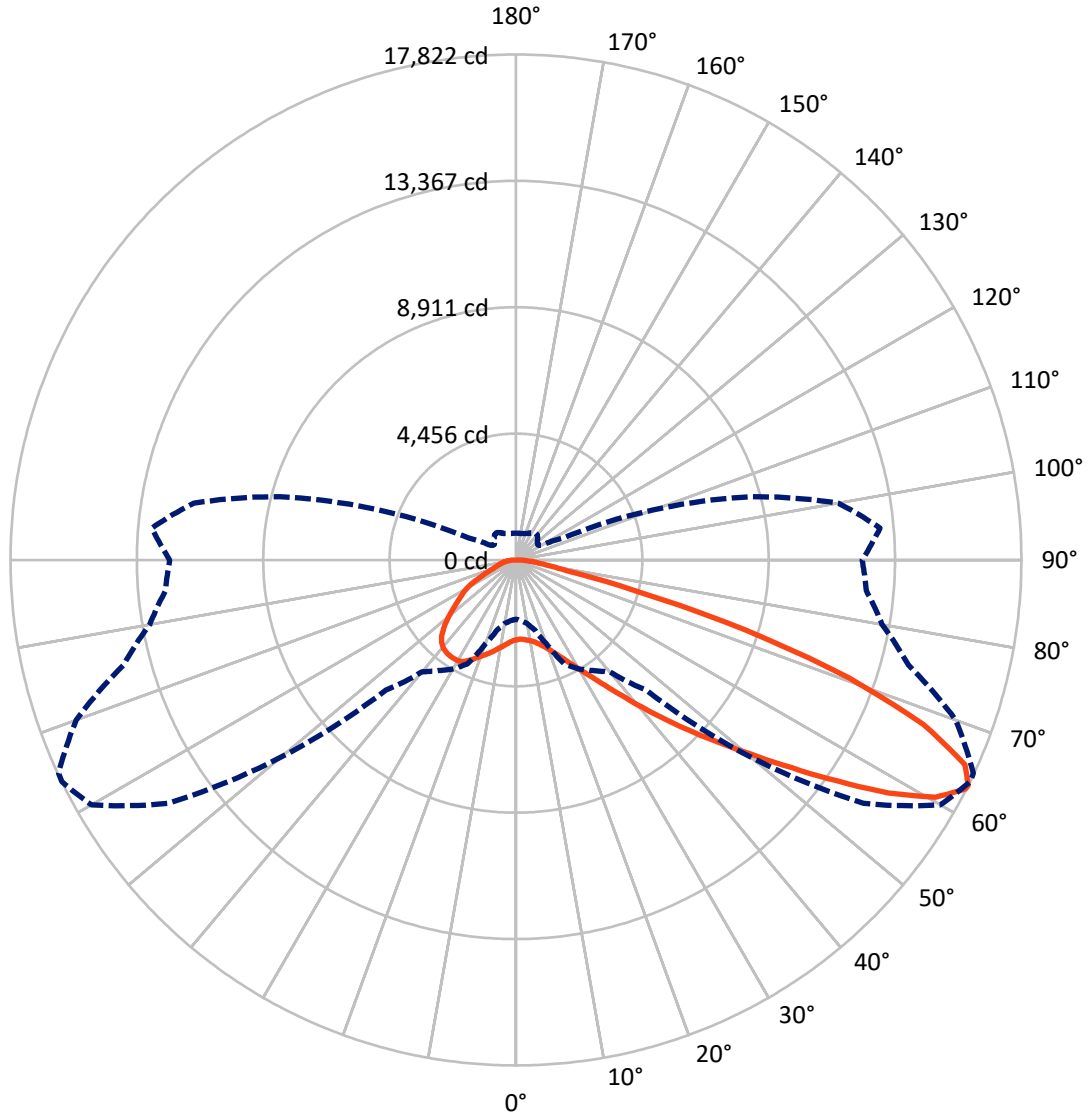
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 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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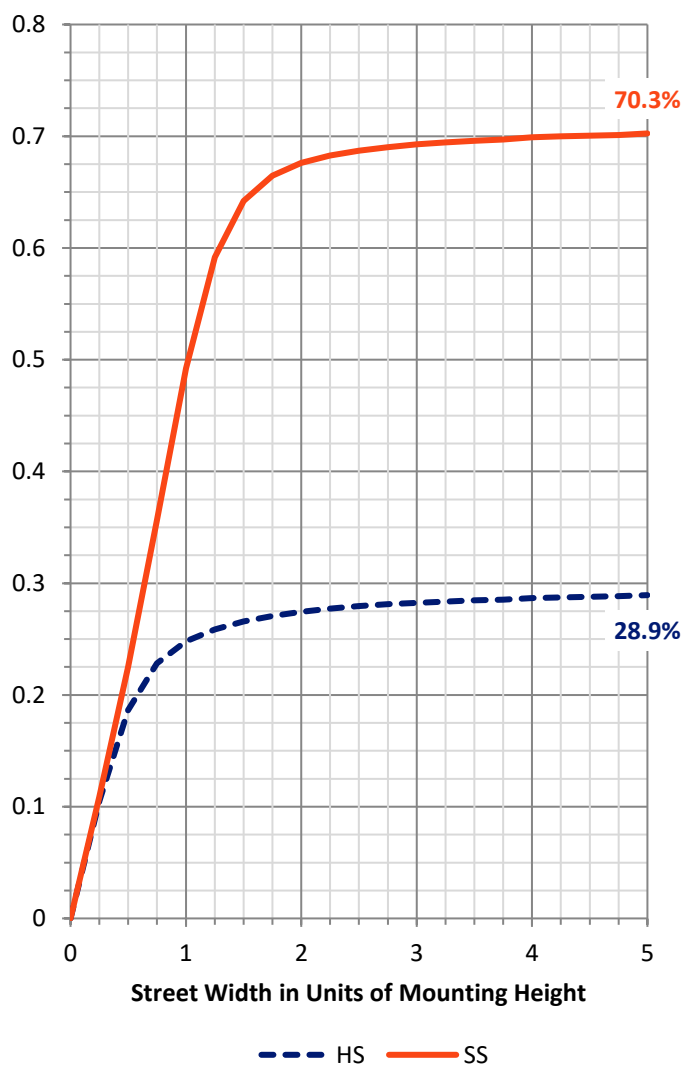
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7634.0	0.0	7634.0
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	18335.1	0.0	18335.1
	% Fixture	70.6	0.0	70.6
Total	Lumens	25969.0	0.0	25969.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.8	1.1
10°-20°	935.3	3.6
20°-30°	1755.6	6.8
30°-40°	2942.6	11.3
40°-50°	4937.1	19.0
50°-60°	6258.7	24.1
60°-70°	5521.1	21.3
70°-80°	2850.1	11.0
80°-90°	487.7	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°	25969.0	100.0
0°-180°	25969.0	100.0

Coefficient of Utilization



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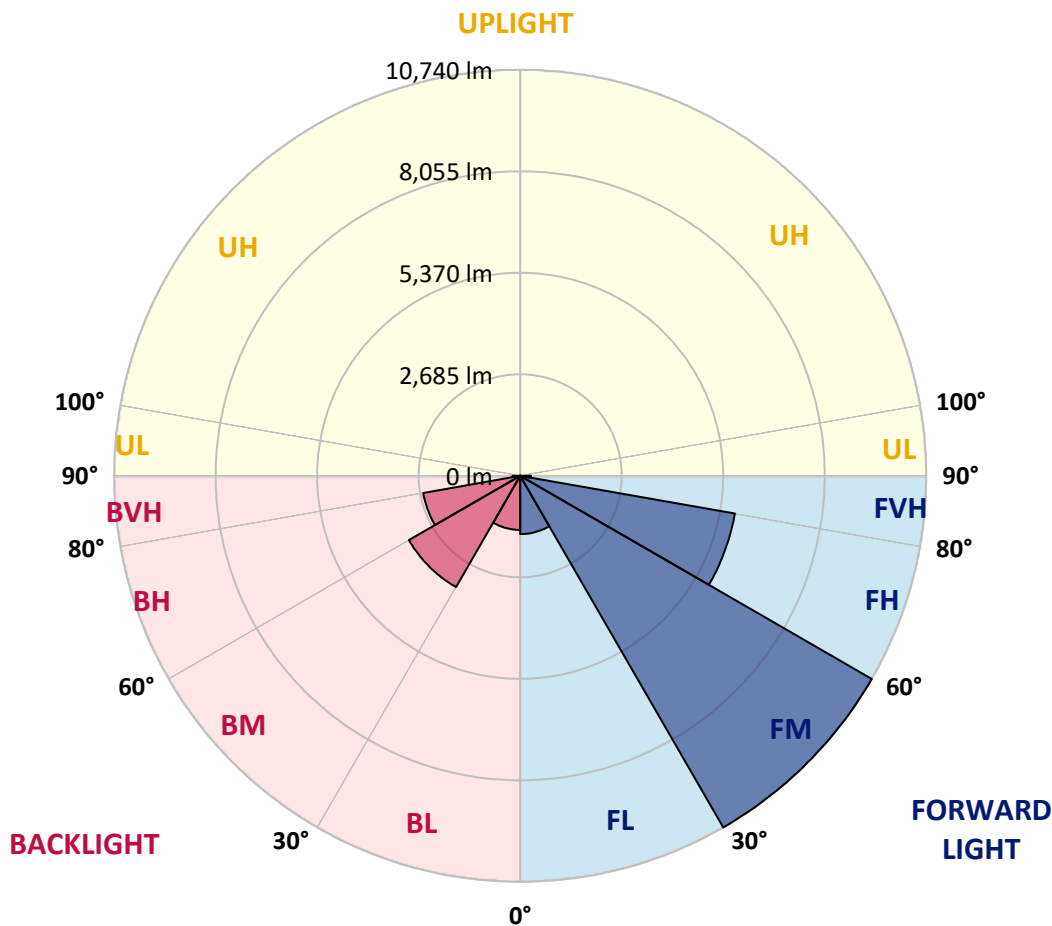
CATALOG NUMBER: ARCH-L-AF72-220-D-U-T2U-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1541.4	5.9			
FM (30°-60°)	10740.1	41.4			
FH (60°-80°)	5766.6	22.2			G3/7500
FVH (80°-90°)	287.0	1.1			G3/500
BL (0°-30°)	1430.3	5.5	B3/2500		
BM (30°-60°)	3398.3	13.1	B3/5000		
BH (60°-80°)	2604.7	10.0	B4/5000		G4/5000
BVH (80°-90°)	200.7	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°	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4
2.5°	2795.0	2790.7	2790.7	2790.7	2790.7	2786.4	2790.7	2799.4	2795.0	2790.7	2799.4
5°	2803.7	2799.4	2799.4	2799.4	2803.7	2799.4	2803.7	2816.8	2808.1	2808.1	2816.8
7.5°	2825.5	2821.1	2825.5	2821.1	2821.1	2821.1	2825.5	2838.5	2834.2	2838.5	2851.6
10°	2851.6	2851.6	2851.6	2851.6	2851.6	2851.6	2860.2	2868.9	2873.3	2877.6	2895.0
12.5°	2929.8	2929.8	2929.8	2925.5	2925.5	2912.4	2929.8	2938.5	2947.2	2955.9	2968.9
15°	3095.0	3095.0	3090.6	3073.2	3073.2	3047.2	3051.5	3055.9	3055.9	3064.6	3073.2
17.5°	3312.3	3308.0	3299.3	3286.2	3268.9	3238.4	3229.7	3221.0	3208.0	3203.7	3203.7
20°	3616.6	3612.3	3594.9	3560.1	3538.4	3490.5	3455.8	3421.0	3408.0	3386.2	3381.9
22.5°	4051.3	4051.3	4016.5	3964.4	3947.0	3847.0	3747.0	3673.1	3647.0	3616.6	3616.6
25°	4577.3	4572.9	4525.1	4464.2	4390.3	4286.0	4164.3	4064.3	3999.1	3929.6	3903.5
27.5°	5207.6	5194.5	5129.3	5055.4	4916.3	4785.9	4642.5	4538.1	4425.1	4338.2	4259.9
30°	5946.5	5933.5	5820.5	5681.4	5537.9	5407.5	5198.9	5072.8	4894.6	4790.3	4703.3
32.5°	6802.9	6789.8	6585.5	6450.8	6298.6	6137.8	5890.0	5690.1	5464.0	5316.2	5194.5
35°	7893.9	7841.8	7550.5	7363.6	7124.5	6963.7	6702.9	6433.4	6168.2	5959.6	5781.4
37.5°	9071.9	9011.1	8754.6	8476.4	8241.7	8046.1	7676.6	7337.5	7024.6	6737.7	6516.0
40°	10302.1	10141.3	9867.4	9663.1	9502.3	9315.4	8928.5	8572.0	8080.9	7759.2	7424.5
42.5°	11154.1	10997.6	10806.3	10671.6	10593.3	10449.9	10232.6	9923.9	9484.9	9493.6	8611.2
45°	11714.8	11484.5	11354.1	11362.7	11393.2	11393.2	11354.1	11306.2	11115.0	11245.4	10506.4
47.5°	11514.9	11362.7	11280.2	11454.0	11671.4	11888.7	12140.8	12414.7	12727.7	13097.2	12188.7
50°	10341.2	10397.7	10436.9	10806.3	11271.5	11767.0	12345.1	13092.8	13966.5	14136.1	13697.0
52.5°	8467.7	8589.4	8719.8	9284.9	9897.8	10754.2	11767.0	13001.5	14175.2	14866.3	14822.9
55°	6576.8	6729.0	7007.2	7428.8	7915.7	8724.2	9976.1	11880.0	13710.1	14809.8	15479.2
57.5°	4681.6	4903.3	5268.4	5855.2	6285.6	6742.0	7667.9	9780.5	11784.4	13831.8	15370.6
60°	3112.4	3216.7	3455.8	4186.0	4912.0	5390.1	6046.5	6811.6	8450.3	11271.5	14249.1
62.5°	2208.2	2277.8	2425.6	2755.9	3412.3	4277.3	4672.9	5025.0	5551.0	7250.6	11441.0
63°	2086.5	2147.4	2269.1	2547.3	3138.4	4033.9	4438.2	4759.8	5142.4	6485.5	10823.7
65°	1730.1	1756.1	1821.3	1956.1	2273.4	3016.7	3677.5	3873.1	3938.3	4168.7	6781.1
67.5°	1460.6	1477.9	1499.7	1538.8	1664.9	2008.3	2742.9	2990.7	2916.8	2760.3	3351.4
70°	1269.3	1282.3	1317.1	1364.9	1408.4	1495.3	1886.5	2256.0	2173.4	1960.4	2051.7
72.5°	1012.8	1034.6	1073.7	1156.3	1243.2	1356.2	1451.9	1682.2	1630.1	1425.8	1447.5
75°	799.8	812.9	847.6	908.5	991.1	1121.5	1308.4	1386.7	1243.2	1051.9	1051.9
77.5°	634.6	647.7	678.1	725.9	778.1	869.4	999.8	1204.1	1117.1	791.1	786.8
80°	478.2	491.2	521.6	565.1	617.3	682.5	760.7	852.0	1025.9	739.0	591.2
82.5°	352.1	356.4	408.6	439.0	456.4	508.6	573.8	626.0	704.2	682.5	526.0
85°	265.2	260.8	295.6	317.3	321.7	334.7	373.8	426.0	460.8	443.4	408.6
87.5°	147.8	130.4	152.1	173.9	173.9	178.2	186.9	217.3	247.8	239.1	217.3
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):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4
2.5°	2799.4	2799.4	2795.0	2795.0	2799.4	2799.4	2795.0	2808.1	2816.8	2816.8	2821.1
5°	2812.4	2816.8	2812.4	2812.4	2816.8	2816.8	2821.1	2834.2	2847.2	2855.9	2868.9
7.5°	2851.6	2855.9	2851.6	2851.6	2855.9	2860.2	2868.9	2886.3	2895.0	2912.4	2934.1
10°	2895.0	2899.4	2895.0	2899.4	2903.7	2908.1	2921.1	2934.1	2947.2	2964.6	2999.3
12.5°	2973.3	2977.6	2968.9	2973.3	2986.3	2986.3	2995.0	3003.7	3025.4	3047.2	3081.9
15°	3081.9	3081.9	3073.2	3077.6	3090.6	3090.6	3095.0	3103.7	3129.8	3155.8	3190.6
17.5°	3208.0	3216.7	3212.3	3216.7	3225.4	3229.7	3229.7	3238.4	3255.8	3273.2	3308.0
20°	3377.5	3381.9	3373.2	3381.9	3390.6	3381.9	3373.2	3368.8	3377.5	3386.2	3425.3
22.5°	3607.9	3603.6	3581.8	3581.8	3581.8	3564.4	3542.7	3516.6	3516.6	3503.6	3534.0
25°	3881.8	3868.7	3838.3	3842.6	3812.2	3786.1	3747.0	3707.9	3673.1	3660.1	3664.4
27.5°	4203.4	4177.4	4146.9	4138.2	4107.8	4060.0	3994.8	3920.9	3864.4	3820.9	3812.2
30°	4607.7	4551.2	4499.0	4490.3	4442.5	4364.3	4259.9	4160.0	4064.3	3990.4	3964.4
32.5°	5085.9	4998.9	4916.3	4907.6	4829.4	4725.1	4599.0	4459.9	4320.8	4203.4	4146.9
35°	5646.6	5516.2	5437.9	5416.2	5303.2	5172.8	5033.7	4855.5	4659.9	4494.7	4390.3
37.5°	6329.1	6194.3	6059.6	6063.9	5907.4	5755.3	5568.4	5351.0	5103.2	4872.9	4725.1
40°	7172.4	6981.1	6807.2	6768.1	6633.3	6420.3	6216.0	5963.9	5659.6	5355.4	5142.4
42.5°	8193.9	7880.9	7641.8	7607.0	7428.8	7168.0	6920.2	6585.5	6276.9	5907.4	5650.9
45°	9354.5	8854.6	8567.7	8515.5	8228.6	7963.5	7663.6	7307.1	6928.9	6511.6	6207.3
47.5°	10797.7	10084.8	9597.9	9511.0	9115.4	8767.7	8454.7	8059.1	7607.0	7141.9	6807.2
50°	12479.9	11427.9	10771.6	10636.8	10106.5	9697.9	9298.0	8802.4	8319.9	7833.1	7446.2
52.5°	14166.5	13036.3	12162.6	11997.4	11215.0	10667.2	10141.3	9645.7	9076.3	8593.8	8154.7
55°	15522.7	14770.7	13757.9	13527.5	12406.0	11662.7	10971.5	10406.4	9841.3	9458.8	8941.5
57.5°	16339.9	16300.8	15501.0	15183.7	13649.2	12549.4	11780.0	11136.7	10589.0	10428.2	9741.4
60°	16318.2	17331.0	16987.6	16748.5	14905.5	13457.9	12458.2	11762.7	11310.6	11493.2	10545.5
62.5°	15322.8	17374.5	17787.4	17722.2	16244.3	14188.2	13014.6	12297.3	12058.2	12601.6	11380.1
63°	14962.0	17274.5	17822.2	17796.1	16500.8	14327.3	13110.2	12401.7	12206.0	12884.2	11532.3
65°	12645.1	16400.8	17400.6	17517.9	17052.8	14805.5	13331.9	12666.8	12645.1	13514.5	11893.1
67.5°	7707.0	13857.9	15501.0	15727.0	16274.7	14957.6	13205.8	12575.5	12888.5	13605.7	11784.4
70°	3294.9	9145.8	12458.2	12823.3	14162.1	14201.3	12845.0	12201.7	12832.0	12892.8	11010.6
72.5°	1951.7	4312.1	8480.8	9276.2	11206.3	12219.1	12019.1	11549.7	12088.7	11323.6	9376.2
75°	1382.3	2017.0	4307.8	5155.4	7802.7	9328.4	10097.8	10315.1	10293.4	8980.7	7037.6
77.5°	991.1	1295.4	1817.0	2143.0	4355.6	5990.0	6928.9	7563.6	7359.3	6011.7	4338.2
80°	691.2	895.5	1112.8	1182.4	2021.3	3077.6	3651.4	3929.6	3807.9	3003.7	1943.1
82.5°	499.9	586.8	717.2	760.7	1017.2	1421.4	1690.9	1491.0	1430.1	1108.5	838.9
85°	386.9	378.2	447.7	465.1	595.5	743.3	760.7	591.2	517.3	460.8	469.5
87.5°	273.9	234.7	239.1	247.8	308.6	395.6	386.9	243.4	208.7	221.7	252.1
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4	2812.4
2.5°	2829.8	2834.2	2842.9	2847.2	2855.9	2855.9	2864.6	2868.9	2877.6	2886.3	2890.7
5°	2882.0	2895.0	2912.4	2921.1	2938.5	2951.5	2968.9	2977.6	2995.0	3008.0	3025.4
7.5°	2960.2	2982.0	3003.7	3029.8	3055.9	3077.6	3095.0	3116.7	3147.1	3168.9	3181.9
10°	3034.1	3064.6	3103.7	3134.1	3173.2	3203.7	3229.7	3268.9	3303.6	3334.1	3351.4
12.5°	3129.8	3168.9	3208.0	3255.8	3308.0	3347.1	3386.2	3438.4	3486.2	3521.0	3538.4
15°	3242.8	3290.6	3334.1	3390.6	3451.4	3503.6	3560.1	3616.6	3651.4	3651.4	3642.7
17.5°	3360.1	3399.3	3451.4	3516.6	3599.2	3664.4	3694.8	3703.5	3690.5	3660.1	3638.3
20°	3477.5	3512.3	3568.8	3647.0	3734.0	3747.0	3716.6	3677.5	3638.3	3586.2	3551.4
22.5°	3573.1	3621.0	3707.9	3799.2	3803.5	3729.6	3647.0	3581.8	3521.0	3460.1	3394.9
25°	3686.2	3751.4	3868.7	3903.5	3790.5	3651.4	3534.0	3438.4	3338.4	3238.4	3164.5
27.5°	3825.3	3920.9	4038.3	3938.3	3716.6	3521.0	3360.1	3216.7	3086.3	2947.2	2864.6
30°	3973.0	4120.8	4146.9	3886.1	3590.5	3338.4	3121.1	2903.7	2738.5	2612.5	2564.7
32.5°	4151.3	4342.5	4186.0	3794.8	3421.0	3090.6	2799.4	2538.6	2399.5	2321.2	2299.5
35°	4420.8	4577.3	4207.8	3699.2	3225.4	2795.0	2429.9	2221.3	2134.3	2082.2	2056.1
37.5°	4807.7	4803.3	4203.4	3581.8	2999.3	2473.4	2134.3	1986.5	1917.0	1873.5	1825.7
40°	5259.7	4977.2	4177.4	3412.3	2695.1	2164.7	1930.0	1790.9	1725.7	1673.5	1617.0
42.5°	5707.5	5094.5	4103.5	3160.2	2316.9	1943.1	1782.2	1656.2	1586.6	1530.1	1451.9
45°	6094.3	5142.4	3960.0	2812.4	1977.8	1769.2	1686.6	1577.9	1495.3	1408.4	1347.5
47.5°	6398.6	5133.7	3729.6	2403.8	1751.8	1647.5	1608.3	1534.4	1434.5	1325.8	1247.6
50°	6655.1	5068.5	3416.6	2043.0	1599.7	1538.8	1525.8	1504.0	1343.2	1251.9	1204.1
52.5°	6889.8	4972.8	3081.9	1799.6	1469.2	1417.1	1443.2	1421.4	1308.4	1230.2	1182.4
55°	7211.5	4907.6	2751.6	1612.7	1317.1	1304.1	1325.8	1356.2	1286.7	1212.8	1160.6
57.5°	7589.7	4942.4	2499.5	1404.0	1173.7	1182.4	1256.2	1299.7	1264.9	1186.7	1134.5
60°	8024.3	5046.7	2277.8	1204.1	1056.3	1078.0	1186.7	1247.6	1243.2	1151.9	1091.1
62.5°	8511.2	5155.4	1925.7	1051.9	956.3	991.1	1104.1	1182.4	1195.4	1117.1	1043.3
63°	8606.8	5164.1	1834.4	1021.5	938.9	978.0	1082.4	1165.0	1182.4	1108.5	1034.6
65°	8841.6	5085.9	1477.9	938.9	869.4	912.8	1017.2	1091.1	1125.8	1060.6	999.8
67.5°	8645.9	4446.9	1112.8	838.9	812.9	843.3	934.6	1004.1	1034.6	1004.1	943.3
70°	7907.0	3234.1	869.4	747.7	752.0	773.7	843.3	908.5	943.3	934.6	878.1
72.5°	6368.2	1834.4	725.9	669.4	682.5	708.5	756.4	817.2	847.6	843.3	804.2
75°	4194.7	938.9	612.9	599.9	608.6	630.3	665.1	712.9	747.7	743.3	725.9
77.5°	2077.8	652.0	526.0	530.3	534.7	552.1	578.1	621.6	643.3	647.7	643.3
80°	856.3	508.6	452.1	456.4	460.8	473.8	491.2	530.3	543.4	552.1	556.4
82.5°	512.9	386.9	360.8	369.5	373.8	386.9	399.9	434.7	447.7	460.8	460.8
85°	339.1	269.5	260.8	269.5	278.2	286.9	291.2	313.0	334.7	352.1	360.8
87.5°	182.6	160.8	156.5	160.8	160.8	169.5	178.2	200.0	226.0	243.4	252.1
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):

	160°	165°	170°	175°	180°
0°	2812.4	2812.4	2812.4	2812.4	2812.4
2.5°	2882.0	2886.3	2882.0	2886.3	2890.7
5°	3025.4	3034.1	3029.8	3029.8	3047.2
7.5°	3190.6	3208.0	3208.0	3216.7	3225.4
10°	3368.8	3386.2	3399.3	3399.3	3412.3
12.5°	3547.1	3555.7	3568.8	3568.8	3568.8
15°	3638.3	3634.0	3629.6	3625.3	3625.3
17.5°	3625.3	3607.9	3599.2	3590.5	3594.9
20°	3529.7	3499.2	3490.5	3477.5	3486.2
22.5°	3364.5	3321.0	3303.6	3281.9	3290.6
25°	3116.7	3064.6	3055.9	3029.8	3042.8
27.5°	2829.8	2803.7	2799.4	2795.0	2816.8
30°	2560.3	2569.0	2573.4	2582.0	2603.8
32.5°	2312.5	2329.9	2334.3	2338.6	2369.0
35°	2069.1	2047.4	2069.1	2060.4	2086.5
37.5°	1804.0	1786.6	1769.2	1747.4	1764.8
40°	1582.3	1551.8	1499.7	1473.6	1477.9
42.5°	1408.4	1369.3	1325.8	1299.7	1299.7
45°	1295.4	1247.6	1208.4	1191.0	1191.0
47.5°	1208.4	1186.7	1165.0	1151.9	1151.9
50°	1173.7	1147.6	1134.5	1125.8	1125.8
52.5°	1147.6	1121.5	1108.5	1099.8	1091.1
55°	1125.8	1086.7	1073.7	1069.3	1069.3
57.5°	1095.4	1060.6	1043.3	1038.9	1038.9
60°	1047.6	1021.5	1004.1	999.8	999.8
62.5°	999.8	973.7	956.3	956.3	956.3
63°	991.1	960.7	947.6	947.6	947.6
65°	952.0	921.5	908.5	908.5	904.2
67.5°	899.8	869.4	860.7	860.7	852.0
70°	838.9	812.9	804.2	808.5	791.1
72.5°	778.1	752.0	739.0	739.0	721.6
75°	708.5	682.5	665.1	660.7	643.3
77.5°	630.3	608.6	591.2	573.8	565.1
80°	547.7	530.3	508.6	495.5	482.5
82.5°	460.8	443.4	430.3	447.7	382.5
85°	360.8	343.4	326.0	352.1	273.9
87.5°	265.2	256.5	239.1	208.7	182.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)