

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: P257973

Luminaire Tested: **ARCH-L-AF72-170-D-U-T2U-7050**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P257973
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-AF72-170-D-U-T2U-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21914 lumens
Efficiency: N/A
Efficacy: 126.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

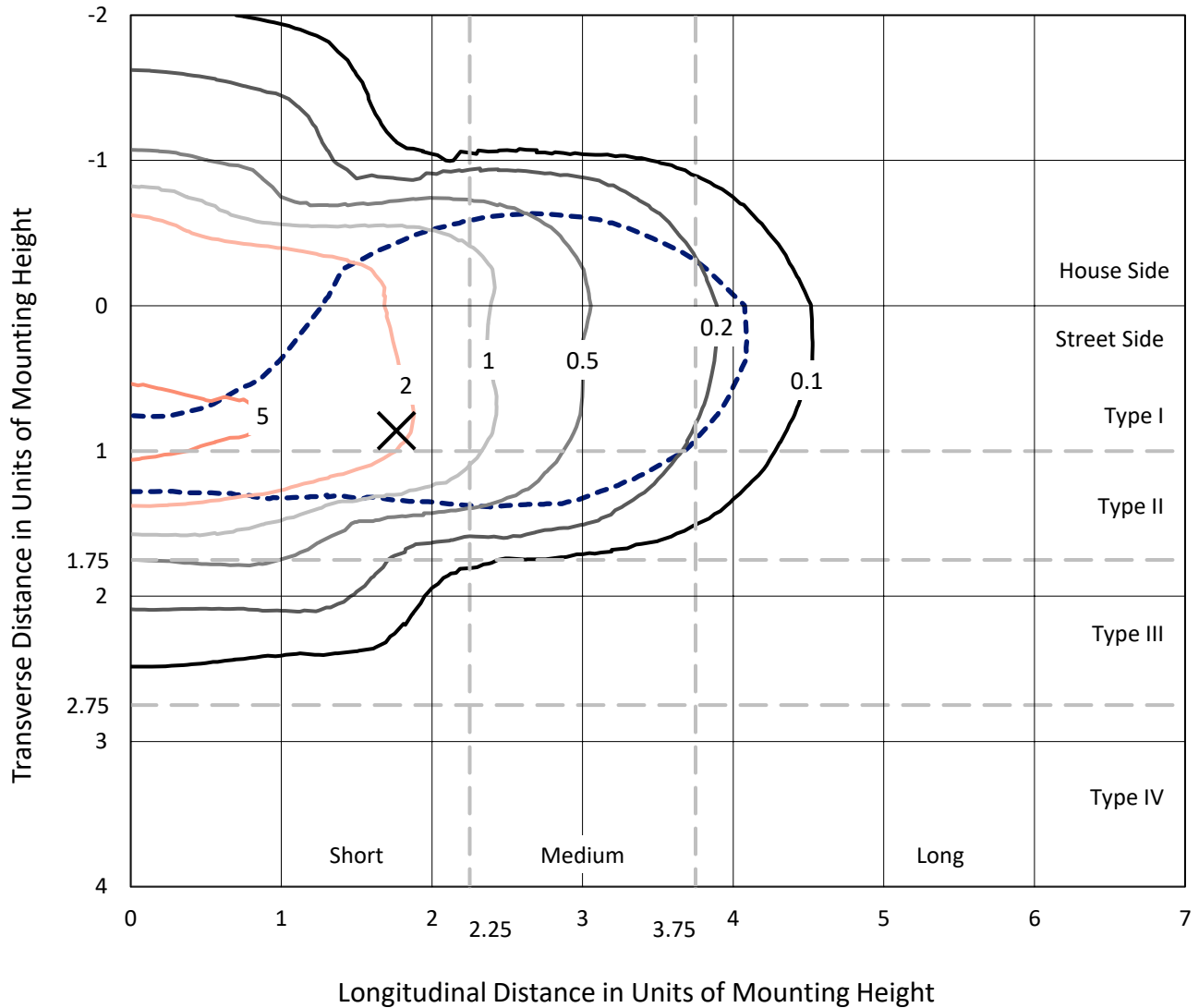
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

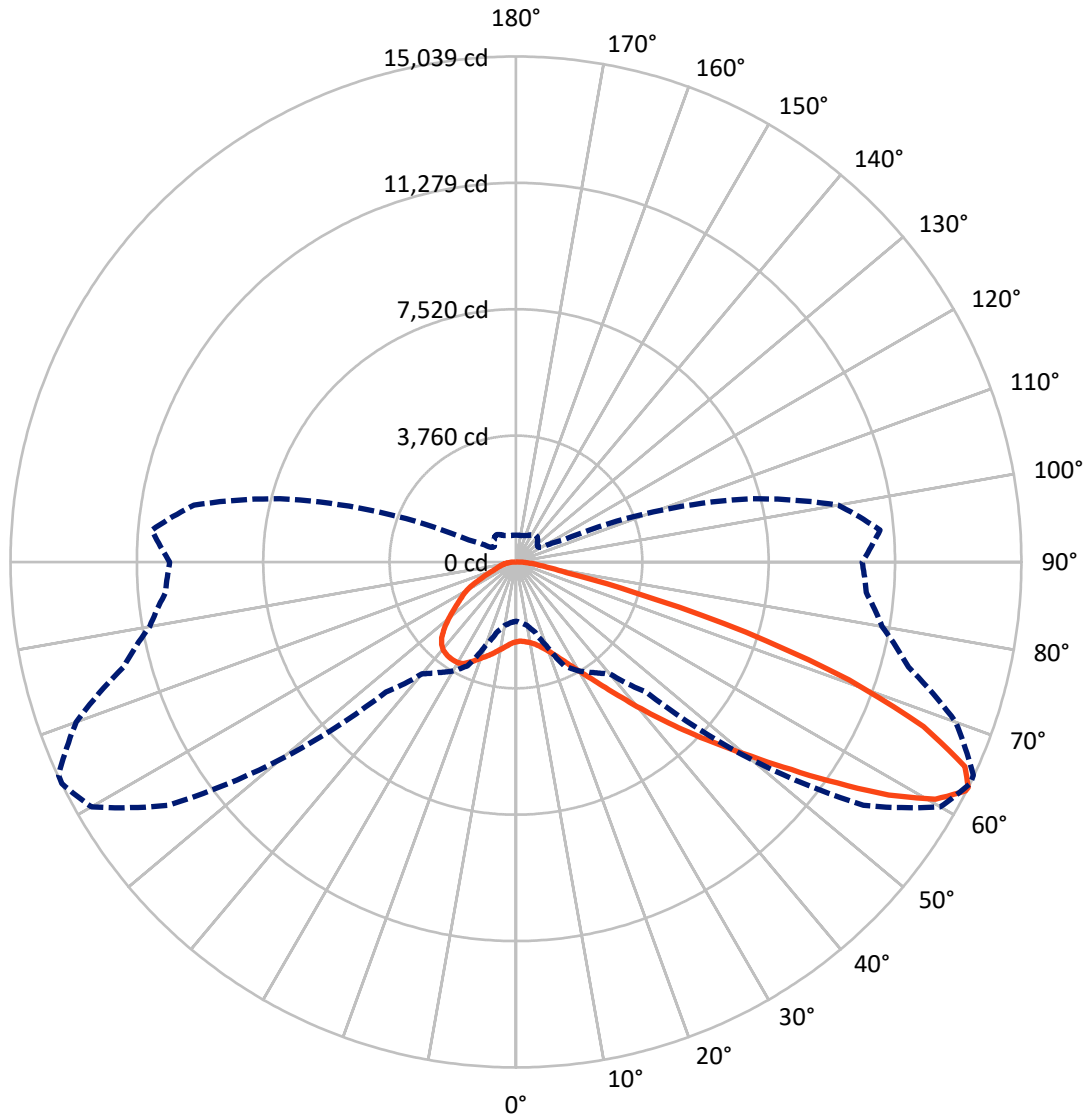
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 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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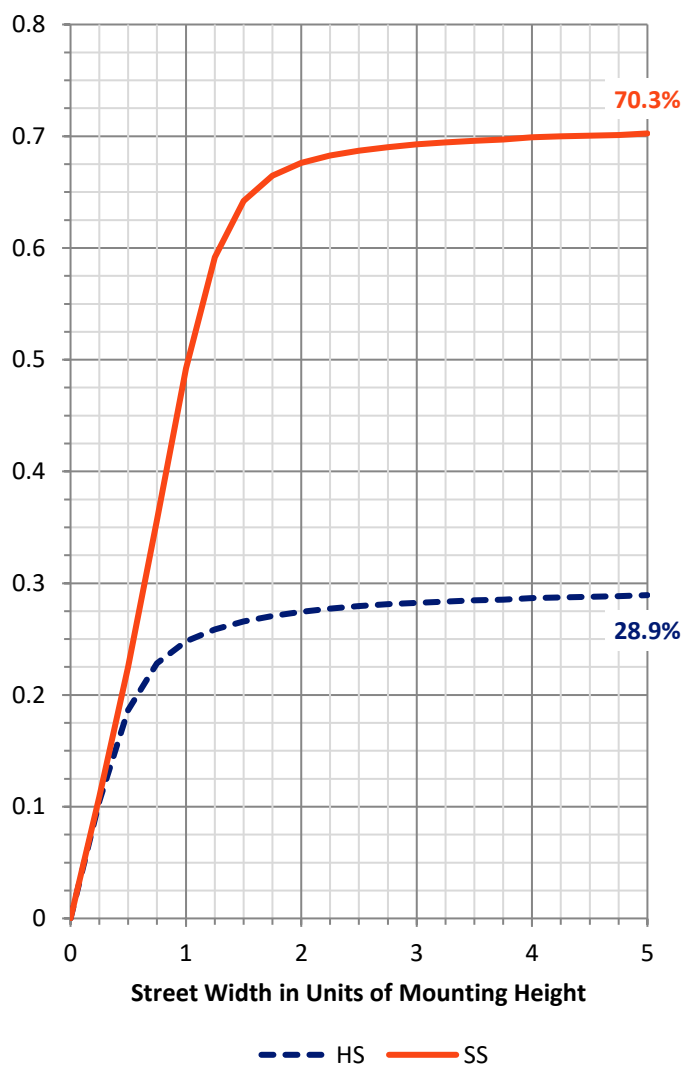
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6441.9	0.0	6441.9
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	15472.1	0.0	15472.1
	% Fixture	70.6	0.0	70.6
Total	Lumens	21914.0	0.0	21914.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.0	1.1
10°-20°	789.2	3.6
20°-30°	1481.5	6.8
30°-40°	2483.1	11.3
40°-50°	4166.1	19.0
50°-60°	5281.4	24.1
60°-70°	4659.0	21.3
70°-80°	2405.1	11.0
80°-90°	411.5	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°	21914.0	100.0
0°-180°	21914.0	100.0

Coefficient of Utilization

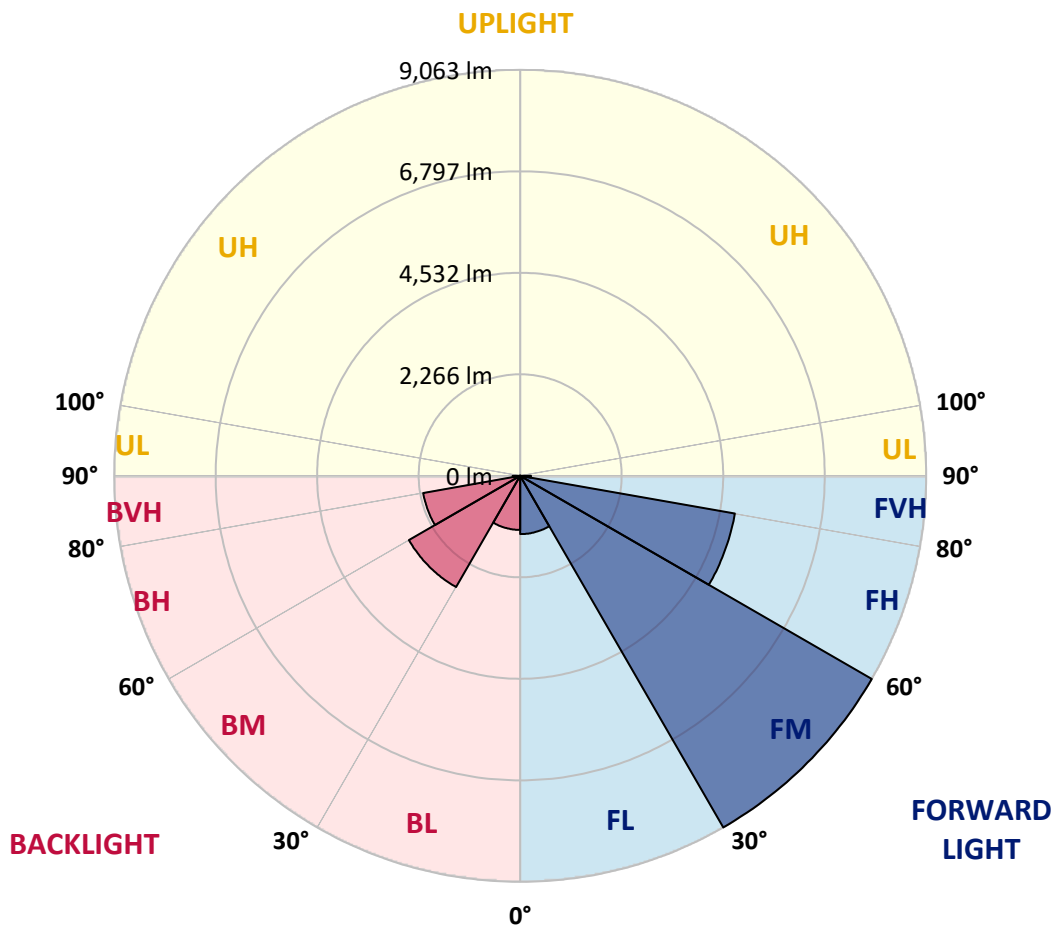


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1300.7	5.9			
FM (30°-60°)	9063.1	41.4			
FH (60°-80°)	4866.1	22.2			G2/5000
FVH (80°-90°)	242.2	1.1			G3/500
BL (0°-30°)	1207.0	5.5	B3/2500		
BM (30°-60°)	2867.6	13.1	B3/5000		
BH (60°-80°)	2197.9	10.0	B3/2500		G3/2500
BVH (80°-90°)	169.3	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3
2.5°	2358.6	2354.9	2354.9	2354.9	2354.9	2351.3	2354.9	2362.3	2358.6	2354.9	2362.3
5°	2365.9	2362.3	2362.3	2362.3	2365.9	2362.3	2365.9	2376.9	2369.6	2369.6	2376.9
7.5°	2384.3	2380.6	2384.3	2380.6	2380.6	2380.6	2384.3	2395.3	2391.6	2395.3	2406.3
10°	2406.3	2406.3	2406.3	2406.3	2406.3	2406.3	2413.6	2421.0	2424.6	2428.3	2443.0
12.5°	2472.3	2472.3	2472.3	2468.6	2468.6	2457.6	2472.3	2479.7	2487.0	2494.3	2505.3
15°	2611.7	2611.7	2608.0	2593.4	2593.4	2571.4	2575.0	2578.7	2578.7	2586.0	2593.4
17.5°	2795.1	2791.4	2784.1	2773.1	2758.4	2732.8	2725.4	2718.1	2707.1	2703.4	2703.4
20°	3051.9	3048.2	3033.5	3004.2	2985.9	2945.5	2916.2	2886.8	2875.8	2857.5	2853.8
22.5°	3418.7	3418.7	3389.3	3345.3	3330.7	3246.3	3161.9	3099.6	3077.6	3051.9	3051.9
25°	3862.5	3858.9	3818.5	3767.2	3704.8	3616.8	3514.1	3429.7	3374.7	3316.0	3294.0
27.5°	4394.4	4383.4	4328.4	4266.0	4148.6	4038.6	3917.6	3829.5	3734.2	3660.8	3594.8
30°	5018.0	5007.0	4911.6	4794.2	4673.2	4563.1	4387.1	4280.7	4130.3	4042.3	3968.9
32.5°	5740.6	5729.6	5557.2	5443.5	5315.1	5179.4	4970.3	4801.6	4610.8	4486.1	4383.4
35°	6661.3	6617.3	6371.5	6213.8	6012.1	5876.3	5656.2	5428.8	5205.1	5029.0	4878.6
37.5°	7655.4	7604.0	7387.6	7152.8	6954.8	6789.7	6477.9	6191.8	5927.7	5685.6	5498.5
40°	8693.5	8557.7	8326.6	8154.2	8018.5	7860.8	7534.3	7233.5	6819.0	6547.6	6265.2
42.5°	9412.4	9280.4	9119.0	9005.2	8939.2	8818.2	8634.8	8374.3	8003.8	8011.2	7266.6
45°	9885.6	9691.2	9581.1	9588.5	9614.2	9614.2	9581.1	9540.8	9379.4	9489.4	8865.9
47.5°	9716.9	9588.5	9518.8	9665.5	9848.9	10032.3	10245.1	10476.2	10740.3	11052.1	10285.4
50°	8726.5	8774.2	8807.2	9119.0	9511.4	9929.6	10417.5	11048.4	11785.7	11928.7	11558.3
52.5°	7145.5	7248.2	7358.3	7835.1	8352.3	9074.9	9929.6	10971.4	11961.8	12545.0	12508.3
55°	5549.9	5678.3	5913.0	6268.8	6679.7	7361.9	8418.3	10025.0	11569.3	12497.3	13062.2
57.5°	3950.6	4137.6	4445.8	4941.0	5304.1	5689.3	6470.6	8253.3	9944.3	11672.0	12970.5
60°	2626.4	2714.4	2916.2	3532.4	4145.0	4548.5	5102.4	5748.0	7130.8	9511.4	12024.1
62.5°	1863.4	1922.1	2046.8	2325.6	2879.5	3609.4	3943.2	4240.4	4684.2	6118.4	9654.5
63°	1760.7	1812.1	1914.8	2149.5	2648.4	3404.0	3745.2	4016.6	4339.4	5472.8	9133.6
65°	1459.9	1481.9	1536.9	1650.7	1918.4	2545.7	3103.2	3268.3	3323.3	3517.7	5722.3
67.5°	1232.5	1247.2	1265.5	1298.5	1404.9	1694.7	2314.6	2523.7	2461.3	2329.3	2828.1
70°	1071.1	1082.1	1111.4	1151.8	1188.5	1261.8	1592.0	1903.8	1834.1	1654.3	1731.4
72.5°	854.7	873.0	906.0	975.7	1049.1	1144.5	1225.2	1419.6	1375.5	1203.1	1221.5
75°	674.9	685.9	715.3	766.6	836.3	946.4	1104.1	1170.1	1049.1	887.7	887.7
77.5°	535.5	546.6	572.2	612.6	656.6	733.6	843.7	1016.1	942.7	667.6	663.9
80°	403.5	414.5	440.2	476.9	520.9	575.9	641.9	719.0	865.7	623.6	498.9
82.5°	297.1	300.8	344.8	370.5	385.2	429.2	484.2	528.2	594.2	575.9	443.8
85°	223.8	220.1	249.4	267.8	271.4	282.4	315.5	359.5	388.8	374.1	344.8
87.5°	124.7	110.0	128.4	146.7	146.7	150.4	157.7	183.4	209.1	201.7	183.4
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°	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3
2.5°	2362.3	2362.3	2358.6	2358.6	2362.3	2362.3	2358.6	2369.6	2376.9	2376.9	2380.6
5°	2373.3	2376.9	2373.3	2373.3	2376.9	2376.9	2380.6	2391.6	2402.6	2410.0	2421.0
7.5°	2406.3	2410.0	2406.3	2406.3	2410.0	2413.6	2421.0	2435.6	2443.0	2457.6	2476.0
10°	2443.0	2446.6	2443.0	2446.6	2450.3	2454.0	2465.0	2476.0	2487.0	2501.7	2531.0
12.5°	2509.0	2512.7	2505.3	2509.0	2520.0	2520.0	2527.3	2534.7	2553.0	2571.4	2600.7
15°	2600.7	2600.7	2593.4	2597.0	2608.0	2608.0	2611.7	2619.0	2641.1	2663.1	2692.4
17.5°	2707.1	2714.4	2710.7	2714.4	2721.7	2725.4	2725.4	2732.8	2747.4	2762.1	2791.4
20°	2850.1	2853.8	2846.5	2853.8	2861.1	2853.8	2846.5	2842.8	2850.1	2857.5	2890.5
22.5°	3044.5	3040.9	3022.5	3022.5	3022.5	3007.9	2989.5	2967.5	2967.5	2956.5	2982.2
25°	3275.6	3264.6	3239.0	3242.6	3216.9	3194.9	3161.9	3128.9	3099.6	3088.6	3092.2
27.5°	3547.1	3525.1	3499.4	3492.1	3466.4	3426.0	3371.0	3308.6	3261.0	3224.3	3216.9
30°	3888.2	3840.5	3796.5	3789.2	3748.8	3682.8	3594.8	3510.4	3429.7	3367.3	3345.3
32.5°	4291.7	4218.3	4148.6	4141.3	4075.3	3987.3	3880.9	3763.5	3646.1	3547.1	3499.4
35°	4764.9	4654.9	4588.8	4570.5	4475.1	4365.1	4247.7	4097.3	3932.2	3792.8	3704.8
37.5°	5340.8	5227.1	5113.4	5117.0	4985.0	4856.6	4698.9	4515.5	4306.4	4112.0	3987.3
40°	6052.4	5891.0	5744.3	5711.3	5597.6	5417.8	5245.4	5032.7	4775.9	4519.1	4339.4
42.5°	6914.4	6650.3	6448.6	6419.2	6268.8	6048.7	5839.7	5557.2	5296.8	4985.0	4768.6
45°	7893.8	7472.0	7229.9	7185.9	6943.8	6720.0	6466.9	6166.1	5847.0	5494.9	5238.1
47.5°	9111.6	8510.1	8099.2	8025.9	7692.1	7398.6	7134.5	6800.7	6419.2	6026.7	5744.3
50°	10531.2	9643.5	9089.6	8975.9	8528.4	8183.6	7846.1	7428.0	7020.8	6610.0	6283.5
52.5°	11954.4	11000.7	10263.4	10124.0	9463.8	9001.6	8557.7	8139.6	7659.0	7251.9	6881.4
55°	13098.9	12464.3	11609.6	11415.2	10468.8	9841.6	9258.3	8781.5	8304.6	7918.8	7545.3
57.5°	13788.5	13755.5	13080.5	12812.8	11517.9	10589.9	9940.6	9397.7	8935.6	8799.8	8220.3
60°	13770.1	14624.8	14335.0	14133.3	12578.0	11356.5	10512.8	9925.9	9544.5	9698.5	8898.9
62.5°	12930.1	14661.5	15010.0	14954.9	13707.8	11972.8	10982.4	10377.1	10175.4	10633.9	9603.2
63°	12625.7	14577.1	15039.3	15017.3	13924.2	12090.1	11063.1	10465.2	10300.1	10872.3	9731.5
65°	10670.6	13839.8	14683.5	14782.5	14390.1	12493.6	11250.1	10688.9	10670.6	11404.2	10036.0
67.5°	6503.6	11694.0	13080.5	13271.3	13733.5	12622.0	11143.8	10611.9	10876.0	11481.2	9944.3
70°	2780.4	7717.7	10512.8	10821.0	11950.8	11983.8	10839.3	10296.4	10828.3	10879.7	9291.4
72.5°	1647.0	3638.8	7156.5	7827.8	9456.4	10311.1	10142.4	9746.2	10201.1	9555.5	7912.1
75°	1166.5	1702.0	3635.1	4350.4	6584.3	7871.8	8521.1	8704.5	8686.1	7578.3	5938.7
77.5°	836.3	1093.1	1533.3	1808.4	3675.5	5054.7	5847.0	6382.5	6210.1	5073.0	3660.8
80°	583.2	755.6	939.0	997.7	1705.7	2597.0	3081.2	3316.0	3213.3	2534.7	1639.7
82.5°	421.8	495.2	605.2	641.9	858.3	1199.5	1426.9	1258.2	1206.8	935.4	707.9
85°	326.5	319.1	377.8	392.5	502.5	627.2	641.9	498.9	436.5	388.8	396.2
87.5°	231.1	198.1	201.7	209.1	260.4	333.8	326.5	205.4	176.1	187.1	212.8
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3	2373.3
2.5°	2387.9	2391.6	2399.0	2402.6	2410.0	2410.0	2417.3	2421.0	2428.3	2435.6	2439.3
5°	2432.0	2443.0	2457.6	2465.0	2479.7	2490.7	2505.3	2512.7	2527.3	2538.3	2553.0
7.5°	2498.0	2516.3	2534.7	2556.7	2578.7	2597.0	2611.7	2630.0	2655.7	2674.1	2685.1
10°	2560.4	2586.0	2619.0	2644.7	2677.7	2703.4	2725.4	2758.4	2787.8	2813.5	2828.1
12.5°	2641.1	2674.1	2707.1	2747.4	2791.4	2824.5	2857.5	2901.5	2941.8	2971.2	2985.9
15°	2736.4	2776.8	2813.5	2861.1	2912.5	2956.5	3004.2	3051.9	3081.2	3081.2	3073.9
17.5°	2835.5	2868.5	2912.5	2967.5	3037.2	3092.2	3117.9	3125.2	3114.2	3088.6	3070.2
20°	2934.5	2963.8	3011.5	3077.6	3150.9	3161.9	3136.2	3103.2	3070.2	3026.2	2996.9
22.5°	3015.2	3055.5	3128.9	3205.9	3209.6	3147.3	3077.6	3022.5	2971.2	2919.8	2864.8
25°	3110.6	3165.6	3264.6	3294.0	3198.6	3081.2	2982.2	2901.5	2817.1	2732.8	2670.4
27.5°	3228.0	3308.6	3407.7	3323.3	3136.2	2971.2	2835.5	2714.4	2604.4	2487.0	2417.3
30°	3352.7	3477.4	3499.4	3279.3	3029.9	2817.1	2633.7	2450.3	2310.9	2204.5	2164.2
32.5°	3503.1	3664.5	3532.4	3202.3	2886.8	2608.0	2362.3	2142.2	2024.8	1958.8	1940.4
35°	3730.5	3862.5	3550.7	3121.6	2721.7	2358.6	2050.5	1874.4	1801.0	1757.0	1735.0
37.5°	4056.9	4053.3	3547.1	3022.5	2531.0	2087.2	1801.0	1676.3	1617.6	1581.0	1540.6
40°	4438.4	4200.0	3525.1	2879.5	2274.2	1826.7	1628.6	1511.3	1456.2	1412.2	1364.5
42.5°	4816.2	4299.0	3462.7	2666.7	1955.1	1639.7	1503.9	1397.6	1338.9	1291.2	1225.2
45°	5142.7	4339.4	3341.7	2373.3	1669.0	1492.9	1423.2	1331.5	1261.8	1188.5	1137.1
47.5°	5399.5	4332.1	3147.3	2028.5	1478.3	1390.2	1357.2	1294.8	1210.5	1118.8	1052.8
50°	5615.9	4277.0	2883.1	1724.0	1349.9	1298.5	1287.5	1269.2	1133.5	1056.4	1016.1
52.5°	5814.0	4196.3	2600.7	1518.6	1239.8	1195.8	1217.8	1199.5	1104.1	1038.1	997.7
55°	6085.4	4141.3	2321.9	1360.9	1111.4	1100.4	1118.8	1144.5	1085.8	1023.4	979.4
57.5°	6404.5	4170.7	2109.2	1184.8	990.4	997.7	1060.1	1096.8	1067.4	1001.4	957.4
60°	6771.4	4258.7	1922.1	1016.1	891.4	909.7	1001.4	1052.8	1049.1	972.1	920.7
62.5°	7182.2	4350.4	1625.0	887.7	807.0	836.3	931.7	997.7	1008.7	942.7	880.4
63°	7262.9	4357.7	1547.9	862.0	792.3	825.3	913.4	983.1	997.7	935.4	873.0
65°	7461.0	4291.7	1247.2	792.3	733.6	770.3	858.3	920.7	950.0	895.0	843.7
67.5°	7295.9	3752.5	939.0	707.9	685.9	711.6	788.6	847.3	873.0	847.3	796.0
70°	6672.3	2729.1	733.6	630.9	634.6	652.9	711.6	766.6	796.0	788.6	741.0
72.5°	5373.8	1547.9	612.6	564.9	575.9	597.9	638.3	689.6	715.3	711.6	678.6
75°	3539.7	792.3	517.2	506.2	513.5	531.9	561.2	601.6	630.9	627.2	612.6
77.5°	1753.4	550.2	443.8	447.5	451.2	465.9	487.9	524.5	542.9	546.6	542.9
80°	722.6	429.2	381.5	385.2	388.8	399.8	414.5	447.5	458.5	465.9	469.5
82.5°	432.8	326.5	304.5	311.8	315.5	326.5	337.5	366.8	377.8	388.8	388.8
85°	286.1	227.4	220.1	227.4	234.8	242.1	245.8	264.1	282.4	297.1	304.5
87.5°	154.1	135.7	132.1	135.7	135.7	143.1	150.4	168.7	190.7	205.4	212.8
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):

	160°	165°	170°	175°	180°
0°	2373.3	2373.3	2373.3	2373.3	2373.3
2.5°	2432.0	2435.6	2432.0	2435.6	2439.3
5°	2553.0	2560.4	2556.7	2556.7	2571.4
7.5°	2692.4	2707.1	2707.1	2714.4	2721.7
10°	2842.8	2857.5	2868.5	2868.5	2879.5
12.5°	2993.2	3000.5	3011.5	3011.5	3011.5
15°	3070.2	3066.6	3062.9	3059.2	3059.2
17.5°	3059.2	3044.5	3037.2	3029.9	3033.5
20°	2978.5	2952.8	2945.5	2934.5	2941.8
22.5°	2839.1	2802.4	2787.8	2769.4	2776.8
25°	2630.0	2586.0	2578.7	2556.7	2567.7
27.5°	2387.9	2365.9	2362.3	2358.6	2376.9
30°	2160.5	2167.9	2171.5	2178.9	2197.2
32.5°	1951.4	1966.1	1969.8	1973.5	1999.1
35°	1746.0	1727.7	1746.0	1738.7	1760.7
37.5°	1522.3	1507.6	1492.9	1474.6	1489.3
40°	1335.2	1309.5	1265.5	1243.5	1247.2
42.5°	1188.5	1155.5	1118.8	1096.8	1096.8
45°	1093.1	1052.8	1019.7	1005.1	1005.1
47.5°	1019.7	1001.4	983.1	972.1	972.1
50°	990.4	968.4	957.4	950.0	950.0
52.5°	968.4	946.4	935.4	928.0	920.7
55°	950.0	917.0	906.0	902.4	902.4
57.5°	924.4	895.0	880.4	876.7	876.7
60°	884.0	862.0	847.3	843.7	843.7
62.5°	843.7	821.7	807.0	807.0	807.0
63°	836.3	810.7	799.7	799.7	799.7
65°	803.3	777.6	766.6	766.6	763.0
67.5°	759.3	733.6	726.3	726.3	719.0
70°	707.9	685.9	678.6	682.3	667.6
72.5°	656.6	634.6	623.6	623.6	608.9
75°	597.9	575.9	561.2	557.6	542.9
77.5°	531.9	513.5	498.9	484.2	476.9
80°	462.2	447.5	429.2	418.2	407.2
82.5°	388.8	374.1	363.1	377.8	322.8
85°	304.5	289.8	275.1	297.1	231.1
87.5°	223.8	216.4	201.7	176.1	154.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)