

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: P257972

Luminaire Tested: **ARCH-L-AF72-160-D-U-T2U-7050**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P257972
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-AF72-160-D-U-T2U-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20911 lumens
Efficiency: N/A
Efficacy: 129.1 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

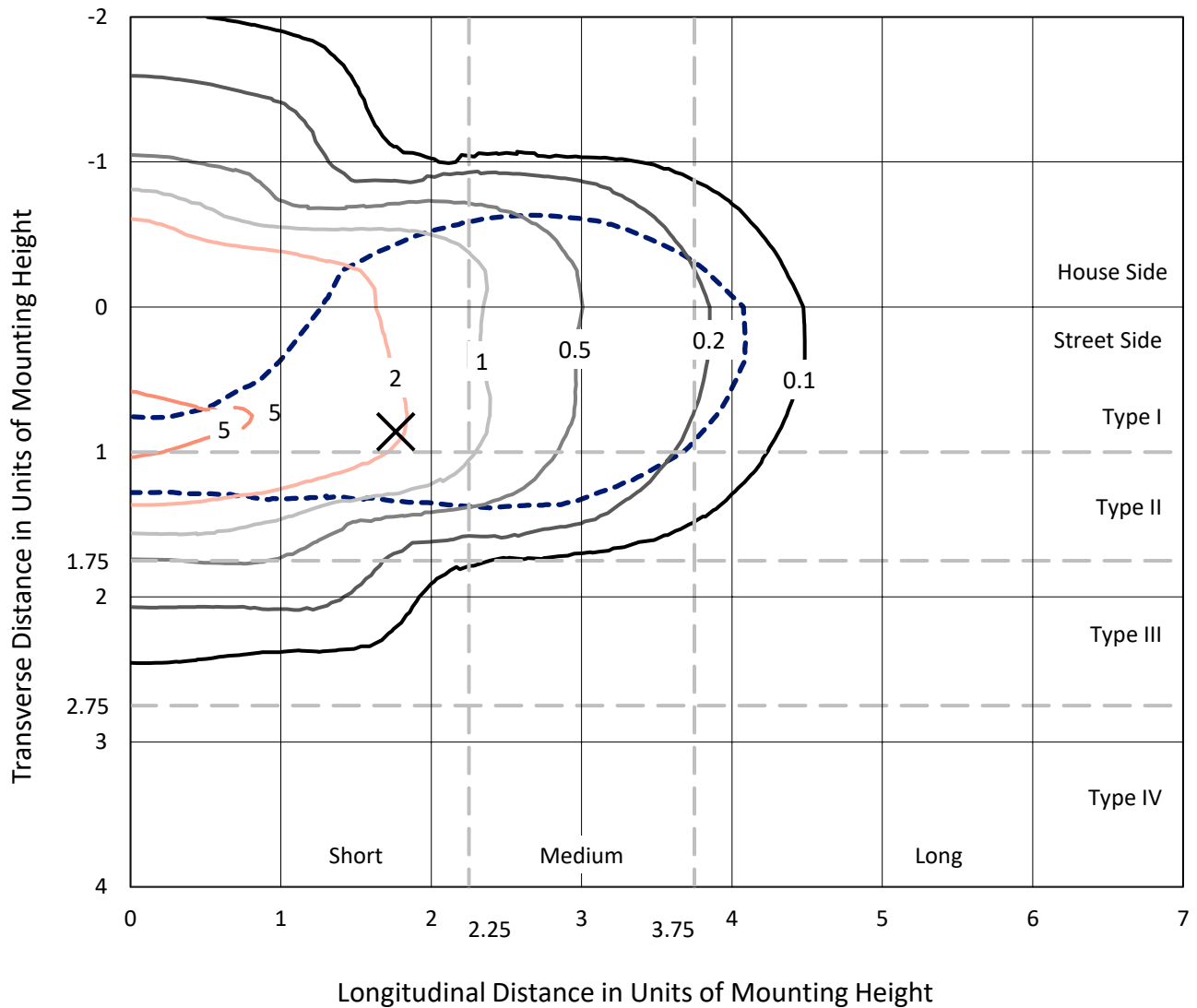
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

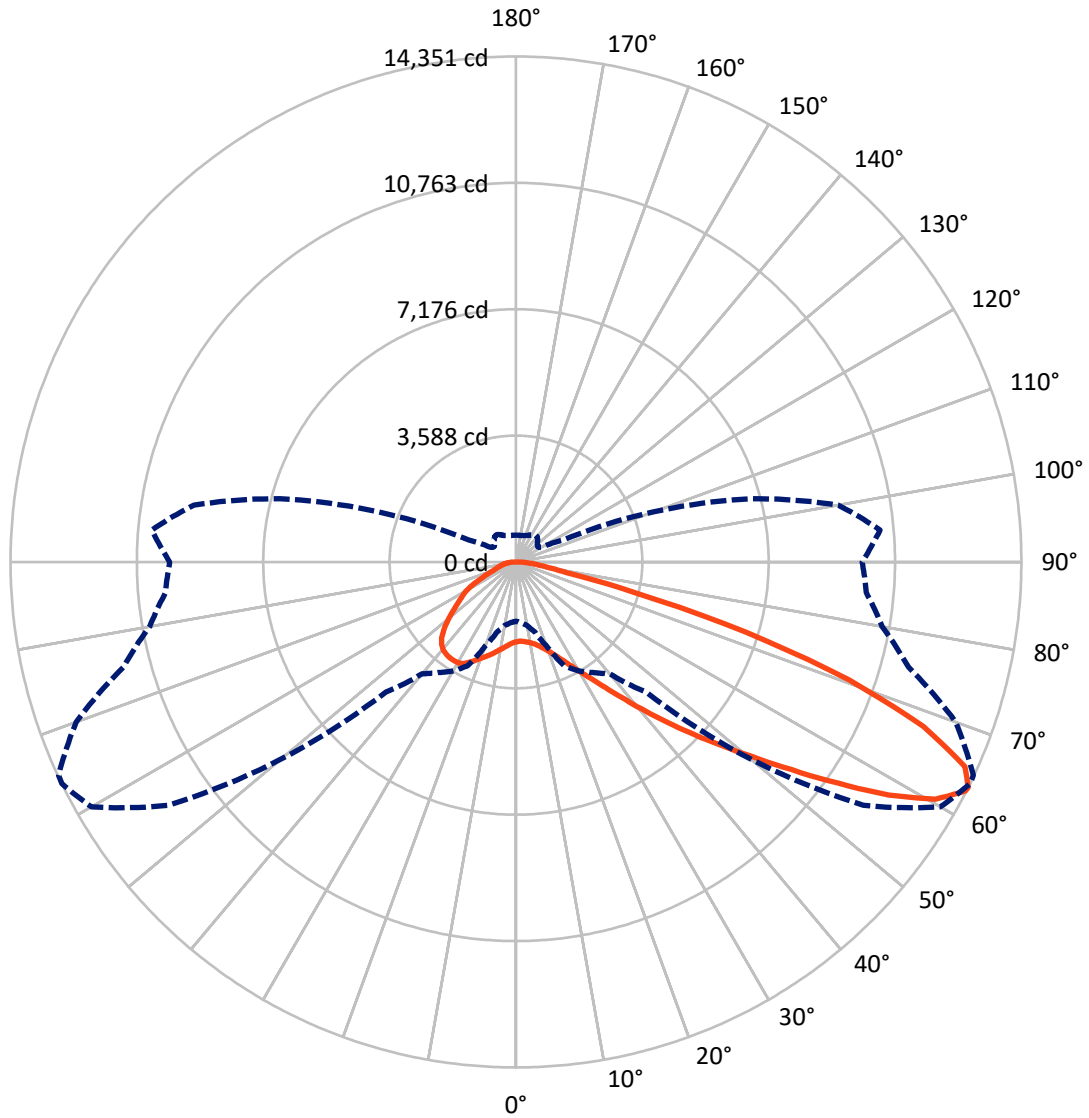
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 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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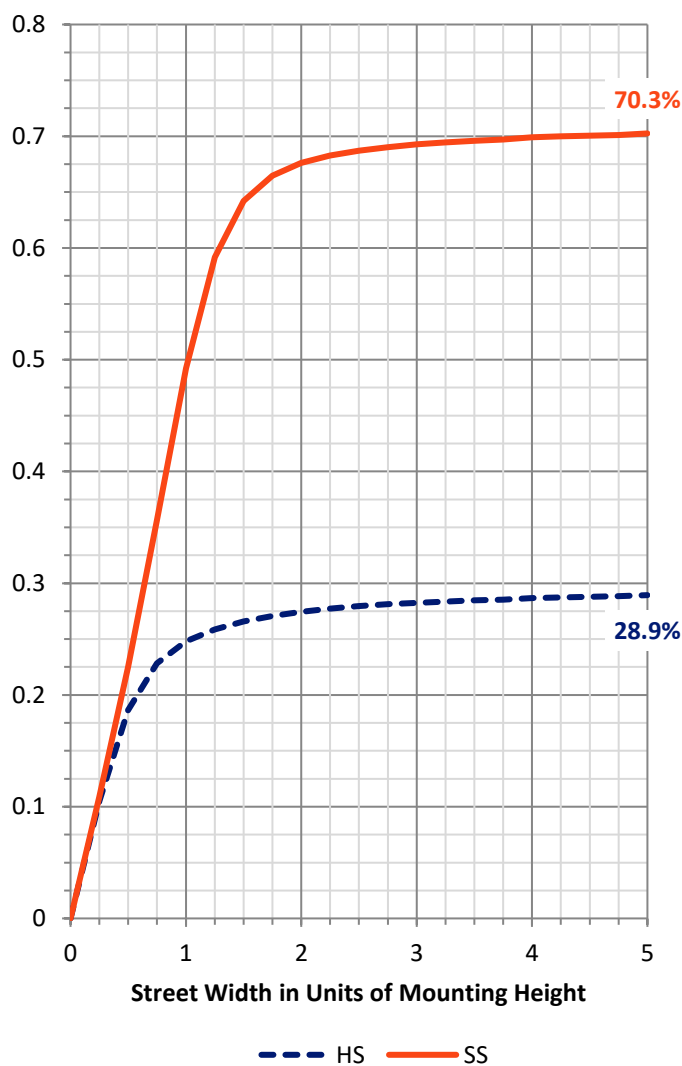
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6147.1	0.0	6147.1
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	14763.9	0.0	14763.9
	% Fixture	70.6	0.0	70.6
Total	Lumens	20911.0	0.0	20911.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.1	1.1
10°-20°	753.1	3.6
20°-30°	1413.7	6.8
30°-40°	2369.5	11.3
40°-50°	3975.5	19.0
50°-60°	5039.7	24.1
60°-70°	4445.8	21.3
70°-80°	2295.0	11.0
80°-90°	392.7	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°	20911.0	100.0
0°-180°	20911.0	100.0

Coefficient of Utilization



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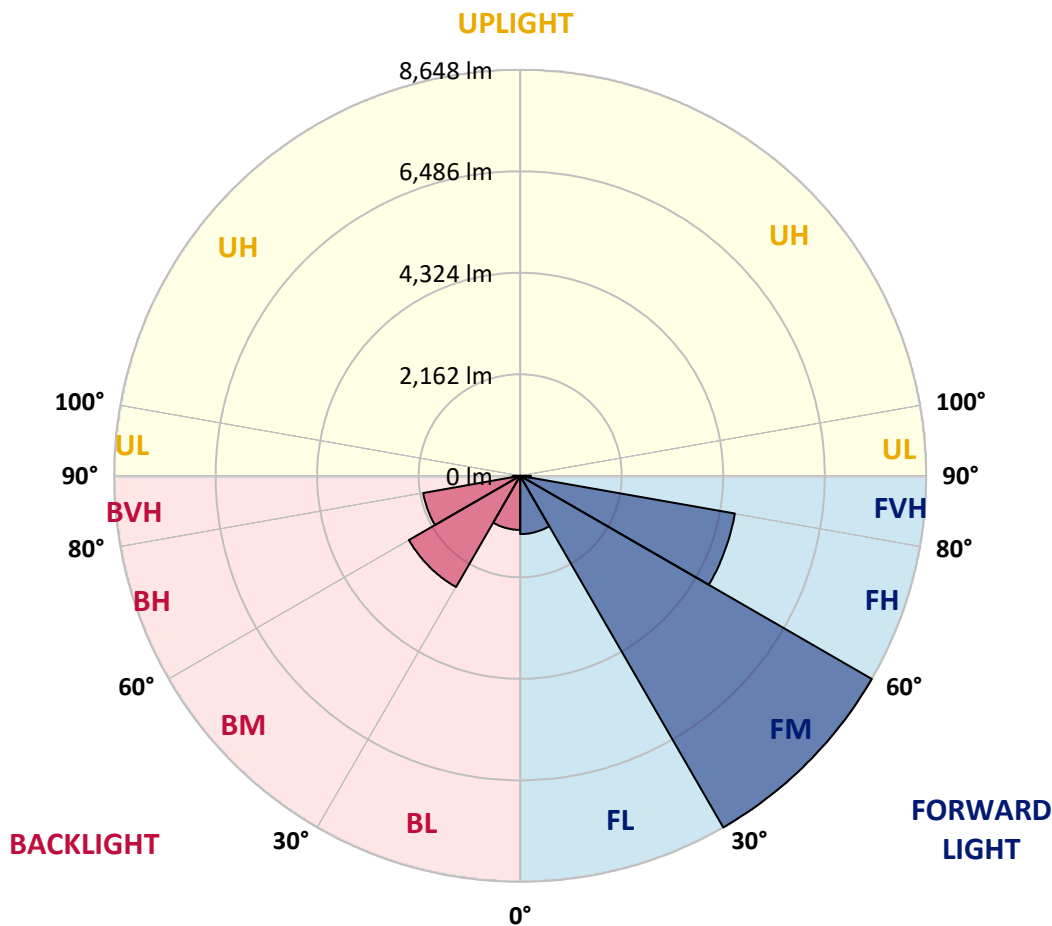
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1241.1	5.9			
FM (30°-60°)	8648.2	41.4			
FH (60°-80°)	4643.4	22.2			G2/5000
FVH (80°-90°)	231.1	1.1			G3/500
BL (0°-30°)	1151.8	5.5	B3/2500		
BM (30°-60°)	2736.4	13.1	B3/5000		
BH (60°-80°)	2097.3	10.0	B3/2500		G3/2500
BVH (80°-90°)	161.6	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7
2.5°	2250.7	2247.2	2247.2	2247.2	2247.2	2243.7	2247.2	2254.2	2250.7	2247.2	2254.2
5°	2257.7	2254.2	2254.2	2254.2	2257.7	2254.2	2257.7	2268.2	2261.2	2261.2	2268.2
7.5°	2275.2	2271.7	2275.2	2271.7	2271.7	2271.7	2275.2	2285.7	2282.2	2285.7	2296.2
10°	2296.2	2296.2	2296.2	2296.2	2296.2	2296.2	2303.2	2310.2	2313.7	2317.2	2331.2
12.5°	2359.2	2359.2	2359.2	2355.7	2355.7	2345.2	2359.2	2366.2	2373.2	2380.2	2390.7
15°	2492.2	2492.2	2488.7	2474.7	2474.7	2453.7	2457.2	2460.7	2460.7	2467.7	2474.7
17.5°	2667.2	2663.7	2656.7	2646.2	2632.2	2607.7	2600.7	2593.7	2583.2	2579.7	2579.7
20°	2912.2	2908.7	2894.7	2866.7	2849.2	2810.7	2782.7	2754.7	2744.2	2726.7	2723.2
22.5°	3262.2	3262.2	3234.2	3192.2	3178.2	3097.7	3017.2	2957.7	2936.7	2912.2	2912.2
25°	3685.7	3682.2	3643.7	3594.7	3535.2	3451.2	3353.2	3272.7	3220.2	3164.2	3143.2
27.5°	4193.3	4182.8	4130.3	4070.8	3958.8	3853.8	3738.3	3654.2	3563.2	3493.2	3430.2
30°	4788.3	4777.8	4686.8	4574.8	4459.3	4354.3	4186.3	4084.8	3941.3	3857.3	3787.3
32.5°	5477.9	5467.4	5302.9	5194.3	5071.8	4942.3	4742.8	4581.8	4399.8	4280.8	4182.8
35°	6356.4	6314.4	6079.9	5929.4	5736.9	5607.4	5397.4	5180.3	4966.8	4798.8	4655.3
37.5°	7305.0	7256.0	7049.5	6825.5	6636.4	6478.9	6181.4	5908.4	5656.4	5425.4	5246.9
40°	8295.6	8166.1	7945.5	7781.0	7651.5	7501.0	7189.5	6902.5	6506.9	6247.9	5978.4
42.5°	8981.6	8855.6	8701.6	8593.1	8530.1	8414.6	8239.6	7991.0	7637.5	7644.5	6934.0
45°	9433.1	9247.6	9142.6	9149.6	9174.1	9174.1	9142.6	9104.1	8950.1	9055.1	8460.1
47.5°	9272.1	9149.6	9083.1	9223.1	9398.1	9573.1	9776.2	9996.7	10248.7	10546.2	9814.7
50°	8327.1	8372.6	8404.1	8701.6	9076.1	9475.1	9940.7	10542.7	11246.3	11382.8	11029.2
52.5°	6818.5	6916.5	7021.5	7476.5	7970.0	8659.6	9475.1	10469.2	11414.3	11970.8	11935.8
55°	5295.9	5418.4	5642.4	5981.9	6373.9	7025.0	8033.0	9566.1	11039.7	11925.3	12464.3
57.5°	3769.8	3948.3	4242.3	4714.8	5061.3	5428.9	6174.4	7875.5	9489.1	11137.8	12376.8
60°	2506.2	2590.2	2782.7	3370.7	3955.3	4340.3	4868.8	5484.9	6804.5	9076.1	11473.8
62.5°	1778.1	1834.1	1953.1	2219.1	2747.7	3444.2	3762.8	4046.3	4469.8	5838.4	9212.6
63°	1680.1	1729.1	1827.1	2051.1	2527.2	3248.2	3573.7	3832.8	4140.8	5222.4	8715.6
65°	1393.1	1414.1	1466.6	1575.1	1830.6	2429.2	2961.2	3118.7	3171.2	3356.7	5460.4
67.5°	1176.1	1190.1	1207.6	1239.1	1340.6	1617.1	2208.6	2408.2	2348.7	2222.6	2698.7
70°	1022.1	1032.6	1060.6	1099.1	1134.1	1204.1	1519.1	1816.6	1750.1	1578.6	1652.1
72.5°	815.6	833.1	864.6	931.1	1001.1	1092.1	1169.1	1354.6	1312.6	1148.1	1165.6
75°	644.0	654.5	682.5	731.5	798.1	903.1	1053.6	1116.6	1001.1	847.1	847.1
77.5°	511.0	521.5	546.0	584.5	626.5	700.0	805.1	969.6	899.6	637.0	633.5
80°	385.0	395.5	420.0	455.0	497.0	549.5	612.5	686.0	826.1	595.0	476.0
82.5°	283.5	287.0	329.0	353.5	367.5	409.5	462.0	504.0	567.0	549.5	423.5
85°	213.5	210.0	238.0	255.5	259.0	269.5	301.0	343.0	371.0	357.0	329.0
87.5°	119.0	105.0	122.5	140.0	140.0	143.5	150.5	175.0	199.5	192.5	175.0
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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CANDELA DISTRIBUTION (continued):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7
2.5°	2254.2	2254.2	2250.7	2250.7	2254.2	2254.2	2250.7	2261.2	2268.2	2268.2	2271.7
5°	2264.7	2268.2	2264.7	2264.7	2268.2	2268.2	2271.7	2282.2	2292.7	2299.7	2310.2
7.5°	2296.2	2299.7	2296.2	2296.2	2299.7	2303.2	2310.2	2324.2	2331.2	2345.2	2362.7
10°	2331.2	2334.7	2331.2	2334.7	2338.2	2341.7	2352.2	2362.7	2373.2	2387.2	2415.2
12.5°	2394.2	2397.7	2390.7	2394.2	2404.7	2404.7	2411.7	2418.7	2436.2	2453.7	2481.7
15°	2481.7	2481.7	2474.7	2478.2	2488.7	2488.7	2492.2	2499.2	2520.2	2541.2	2569.2
17.5°	2583.2	2590.2	2586.7	2590.2	2597.2	2600.7	2600.7	2607.7	2621.7	2635.7	2663.7
20°	2719.7	2723.2	2716.2	2723.2	2730.2	2723.2	2716.2	2712.7	2719.7	2726.7	2758.2
22.5°	2905.2	2901.7	2884.2	2884.2	2884.2	2870.2	2852.7	2831.7	2831.7	2821.2	2845.7
25°	3125.7	3115.2	3090.7	3094.2	3069.7	3048.7	3017.2	2985.7	2957.7	2947.2	2950.7
27.5°	3384.7	3363.7	3339.2	3332.2	3307.7	3269.2	3216.7	3157.2	3111.7	3076.7	3069.7
30°	3710.2	3664.7	3622.7	3615.7	3577.2	3514.2	3430.2	3349.7	3272.7	3213.2	3192.2
32.5°	4095.3	4025.3	3958.8	3951.8	3888.8	3804.8	3703.2	3591.2	3479.2	3384.7	3339.2
35°	4546.8	4441.8	4378.8	4361.3	4270.3	4165.3	4053.3	3909.8	3752.3	3619.2	3535.2
37.5°	5096.3	4987.8	4879.3	4882.8	4756.8	4634.3	4483.8	4308.8	4109.3	3923.8	3804.8
40°	5775.4	5621.4	5481.4	5449.9	5341.4	5169.8	5005.3	4802.3	4557.3	4312.3	4140.8
42.5°	6597.9	6345.9	6153.4	6125.4	5981.9	5771.9	5572.4	5302.9	5054.3	4756.8	4550.3
45°	7532.5	7130.0	6899.0	6857.0	6625.9	6412.4	6170.9	5883.9	5579.4	5243.4	4998.3
47.5°	8694.6	8120.5	7728.5	7658.5	7340.0	7060.0	6808.0	6489.4	6125.4	5750.9	5481.4
50°	10049.2	9202.1	8673.6	8565.1	8138.0	7809.0	7487.0	7088.0	6699.5	6307.4	5995.9
52.5°	11407.3	10497.2	9793.7	9660.7	9030.6	8589.6	8166.1	7767.0	7308.5	6920.0	6566.4
55°	12499.3	11893.8	11078.2	10892.7	9989.7	9391.1	8834.6	8379.6	7924.5	7616.5	7200.0
57.5°	13157.4	13125.9	12481.8	12226.3	10990.7	10105.2	9485.6	8967.6	8526.6	8397.1	7844.0
60°	13139.9	13955.4	13678.9	13486.4	12002.3	10836.7	10031.7	9471.6	9107.6	9254.6	8491.6
62.5°	12338.3	13990.4	14323.0	14270.5	13080.4	11424.8	10479.7	9902.2	9709.7	10147.2	9163.6
63°	12047.8	13909.9	14351.0	14330.0	13286.9	11536.8	10556.7	9986.2	9828.7	10374.7	9286.1
65°	10182.2	13206.4	14011.4	14106.0	13731.4	11921.8	10735.2	10199.7	10182.2	10882.2	9576.6
67.5°	6205.9	11158.8	12481.8	12663.9	13104.9	12044.3	10633.7	10126.2	10378.2	10955.7	9489.1
70°	2653.2	7364.5	10031.7	10325.7	11403.8	11435.3	10343.2	9825.2	10332.7	10381.7	8866.1
72.5°	1571.6	3472.2	6829.0	7469.5	9023.6	9839.2	9678.2	9300.1	9734.2	9118.1	7550.0
75°	1113.1	1624.1	3468.7	4151.3	6282.9	7511.5	8131.0	8306.1	8288.6	7231.5	5666.9
77.5°	798.1	1043.1	1463.1	1725.6	3507.2	4823.3	5579.4	6090.4	5925.9	4840.8	3493.2
80°	556.5	721.0	896.1	952.1	1627.6	2478.2	2940.2	3164.2	3066.2	2418.7	1564.6
82.5°	402.5	472.5	577.5	612.5	819.1	1144.6	1361.6	1200.6	1151.6	892.6	675.5
85°	311.5	304.5	360.5	374.5	479.5	598.5	612.5	476.0	416.5	371.0	378.0
87.5°	220.5	189.0	192.5	199.5	248.5	318.5	311.5	196.0	168.0	178.5	203.0
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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CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7	2264.7
2.5°	2278.7	2282.2	2289.2	2292.7	2299.7	2299.7	2306.7	2310.2	2317.2	2324.2	2327.7
5°	2320.7	2331.2	2345.2	2352.2	2366.2	2376.7	2390.7	2397.7	2411.7	2422.2	2436.2
7.5°	2383.7	2401.2	2418.7	2439.7	2460.7	2478.2	2492.2	2509.7	2534.2	2551.7	2562.2
10°	2443.2	2467.7	2499.2	2523.7	2555.2	2579.7	2600.7	2632.2	2660.2	2684.7	2698.7
12.5°	2520.2	2551.7	2583.2	2621.7	2663.7	2695.2	2726.7	2768.7	2807.2	2835.2	2849.2
15°	2611.2	2649.7	2684.7	2730.2	2779.2	2821.2	2866.7	2912.2	2940.2	2940.2	2933.2
17.5°	2705.7	2737.2	2779.2	2831.7	2898.2	2950.7	2975.2	2982.2	2971.7	2947.2	2929.7
20°	2800.2	2828.2	2873.7	2936.7	3006.7	3017.2	2992.7	2961.2	2929.7	2887.7	2859.7
22.5°	2877.2	2915.7	2985.7	3059.2	3062.7	3003.2	2936.7	2884.2	2835.2	2786.2	2733.7
25°	2968.2	3020.7	3115.2	3143.2	3052.2	2940.2	2845.7	2768.7	2688.2	2607.7	2548.2
27.5°	3080.2	3157.2	3251.7	3171.2	2992.7	2835.2	2705.7	2590.2	2485.2	2373.2	2306.7
30°	3199.2	3318.2	3339.2	3129.2	2891.2	2688.2	2513.2	2338.2	2205.1	2103.6	2065.1
32.5°	3342.7	3496.7	3370.7	3055.7	2754.7	2488.7	2254.2	2044.1	1932.1	1869.1	1851.6
35°	3559.7	3685.7	3388.2	2978.7	2597.2	2250.7	1956.6	1788.6	1718.6	1676.6	1655.6
37.5°	3871.3	3867.8	3384.7	2884.2	2415.2	1991.6	1718.6	1599.6	1543.6	1508.6	1470.1
40°	4235.3	4007.8	3363.7	2747.7	2170.1	1743.1	1554.1	1442.1	1389.6	1347.6	1302.1
42.5°	4595.8	4102.3	3304.2	2544.7	1865.6	1564.6	1435.1	1333.6	1277.6	1232.1	1169.1
45°	4907.3	4140.8	3188.7	2264.7	1592.6	1424.6	1358.1	1270.6	1204.1	1134.1	1085.1
47.5°	5152.3	4133.8	3003.2	1935.6	1410.6	1326.6	1295.1	1235.6	1155.1	1067.6	1004.6
50°	5358.9	4081.3	2751.2	1645.1	1288.1	1239.1	1228.6	1211.1	1081.6	1008.1	969.6
52.5°	5547.9	4004.3	2481.7	1449.1	1183.1	1141.1	1162.1	1144.6	1053.6	990.6	952.1
55°	5806.9	3951.8	2215.6	1298.6	1060.6	1050.1	1067.6	1092.1	1036.1	976.6	934.6
57.5°	6111.4	3979.8	2012.6	1130.6	945.1	952.1	1011.6	1046.6	1018.6	955.6	913.6
60°	6461.4	4063.8	1834.1	969.6	850.6	868.1	955.6	1004.6	1001.1	927.6	878.6
62.5°	6853.5	4151.3	1550.6	847.1	770.1	798.1	889.1	952.1	962.6	899.6	840.1
63°	6930.5	4158.3	1477.1	822.6	756.1	787.6	871.6	938.1	952.1	892.6	833.1
65°	7119.5	4095.3	1190.1	756.1	700.0	735.0	819.1	878.6	906.6	854.1	805.1
67.5°	6962.0	3580.7	896.1	675.5	654.5	679.0	752.6	808.6	833.1	808.6	759.6
70°	6366.9	2604.2	700.0	602.0	605.5	623.0	679.0	731.5	759.6	752.6	707.0
72.5°	5127.8	1477.1	584.5	539.0	549.5	570.5	609.0	658.0	682.5	679.0	647.5
75°	3377.7	756.1	493.5	483.0	490.0	507.5	535.5	574.0	602.0	598.5	584.5
77.5°	1673.1	525.0	423.5	427.0	430.5	444.5	465.5	500.5	518.0	521.5	518.0
80°	689.5	409.5	364.0	367.5	371.0	381.5	395.5	427.0	437.5	444.5	448.0
82.5°	413.0	311.5	290.5	297.5	301.0	311.5	322.0	350.0	360.5	371.0	371.0
85°	273.0	217.0	210.0	217.0	224.0	231.0	234.5	252.0	269.5	283.5	290.5
87.5°	147.0	129.5	126.0	129.5	129.5	136.5	143.5	161.0	182.0	196.0	203.0
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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CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	2264.7	2264.7	2264.7	2264.7	2264.7
2.5°	2320.7	2324.2	2320.7	2324.2	2327.7
5°	2436.2	2443.2	2439.7	2439.7	2453.7
7.5°	2569.2	2583.2	2583.2	2590.2	2597.2
10°	2712.7	2726.7	2737.2	2737.2	2747.7
12.5°	2856.2	2863.2	2873.7	2873.7	2873.7
15°	2929.7	2926.2	2922.7	2919.2	2919.2
17.5°	2919.2	2905.2	2898.2	2891.2	2894.7
20°	2842.2	2817.7	2810.7	2800.2	2807.2
22.5°	2709.2	2674.2	2660.2	2642.7	2649.7
25°	2509.7	2467.7	2460.7	2439.7	2450.2
27.5°	2278.7	2257.7	2254.2	2250.7	2268.2
30°	2061.6	2068.6	2072.1	2079.1	2096.6
32.5°	1862.1	1876.1	1879.6	1883.1	1907.6
35°	1666.1	1648.6	1666.1	1659.1	1680.1
37.5°	1452.6	1438.6	1424.6	1407.1	1421.1
40°	1274.1	1249.6	1207.6	1186.6	1190.1
42.5°	1134.1	1102.6	1067.6	1046.6	1046.6
45°	1043.1	1004.6	973.1	959.1	959.1
47.5°	973.1	955.6	938.1	927.6	927.6
50°	945.1	924.1	913.6	906.6	906.6
52.5°	924.1	903.1	892.6	885.6	878.6
55°	906.6	875.1	864.6	861.1	861.1
57.5°	882.1	854.1	840.1	836.6	836.6
60°	843.6	822.6	808.6	805.1	805.1
62.5°	805.1	784.1	770.1	770.1	770.1
63°	798.1	773.6	763.1	763.1	763.1
65°	766.6	742.0	731.5	731.5	728.0
67.5°	724.5	700.0	693.0	693.0	686.0
70°	675.5	654.5	647.5	651.0	637.0
72.5°	626.5	605.5	595.0	595.0	581.0
75°	570.5	549.5	535.5	532.0	518.0
77.5°	507.5	490.0	476.0	462.0	455.0
80°	441.0	427.0	409.5	399.0	388.5
82.5°	371.0	357.0	346.5	360.5	308.0
85°	290.5	276.5	262.5	283.5	220.5
87.5°	213.5	206.5	192.5	168.0	147.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)