

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: P257970

Luminaire Tested: **ARCH-L-AF72-140-D-U-T2U-7050**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P257970
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-AF72-140-D-U-T2U-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18858 lumens
Efficiency: N/A
Efficacy: 131.9 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

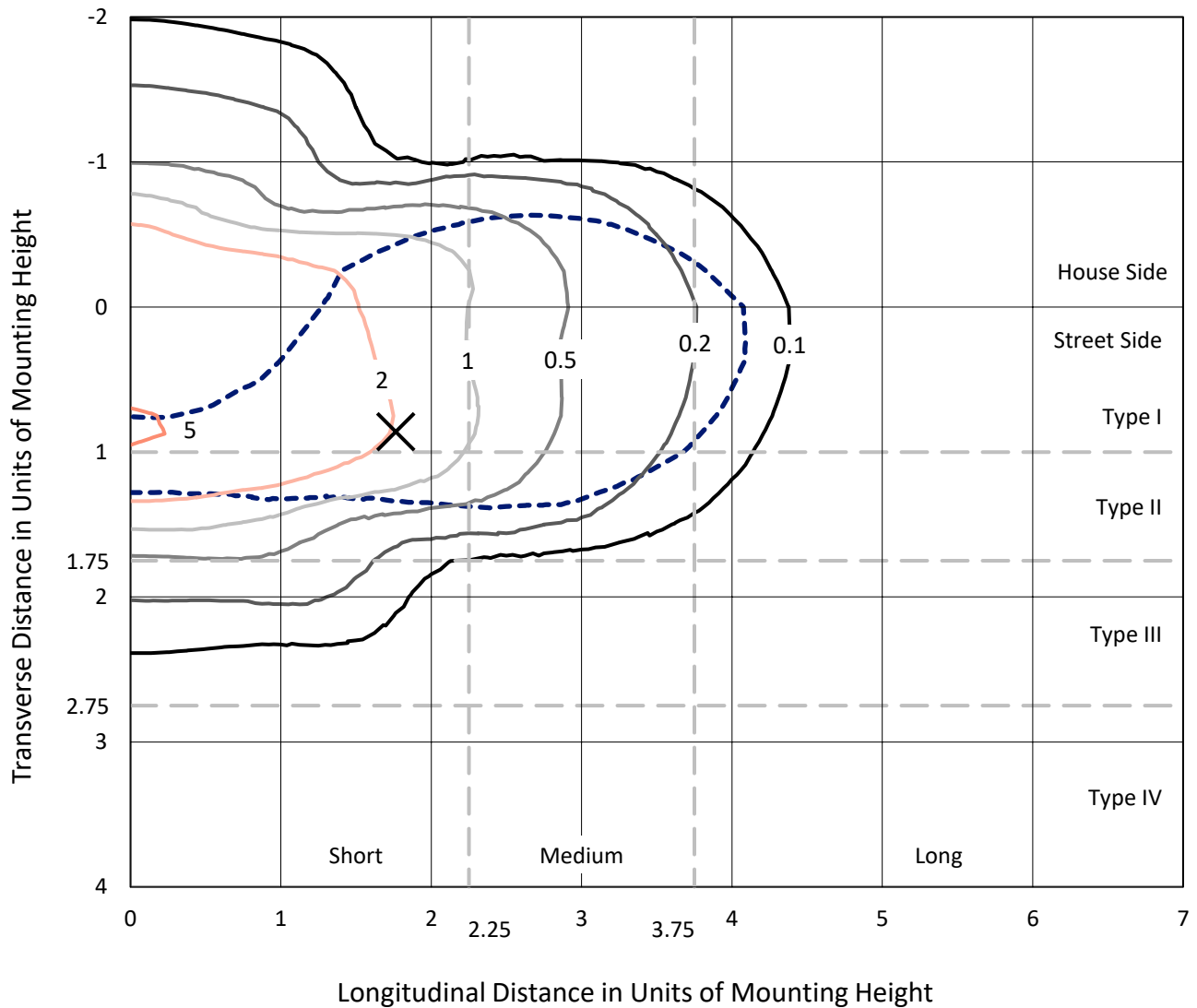
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

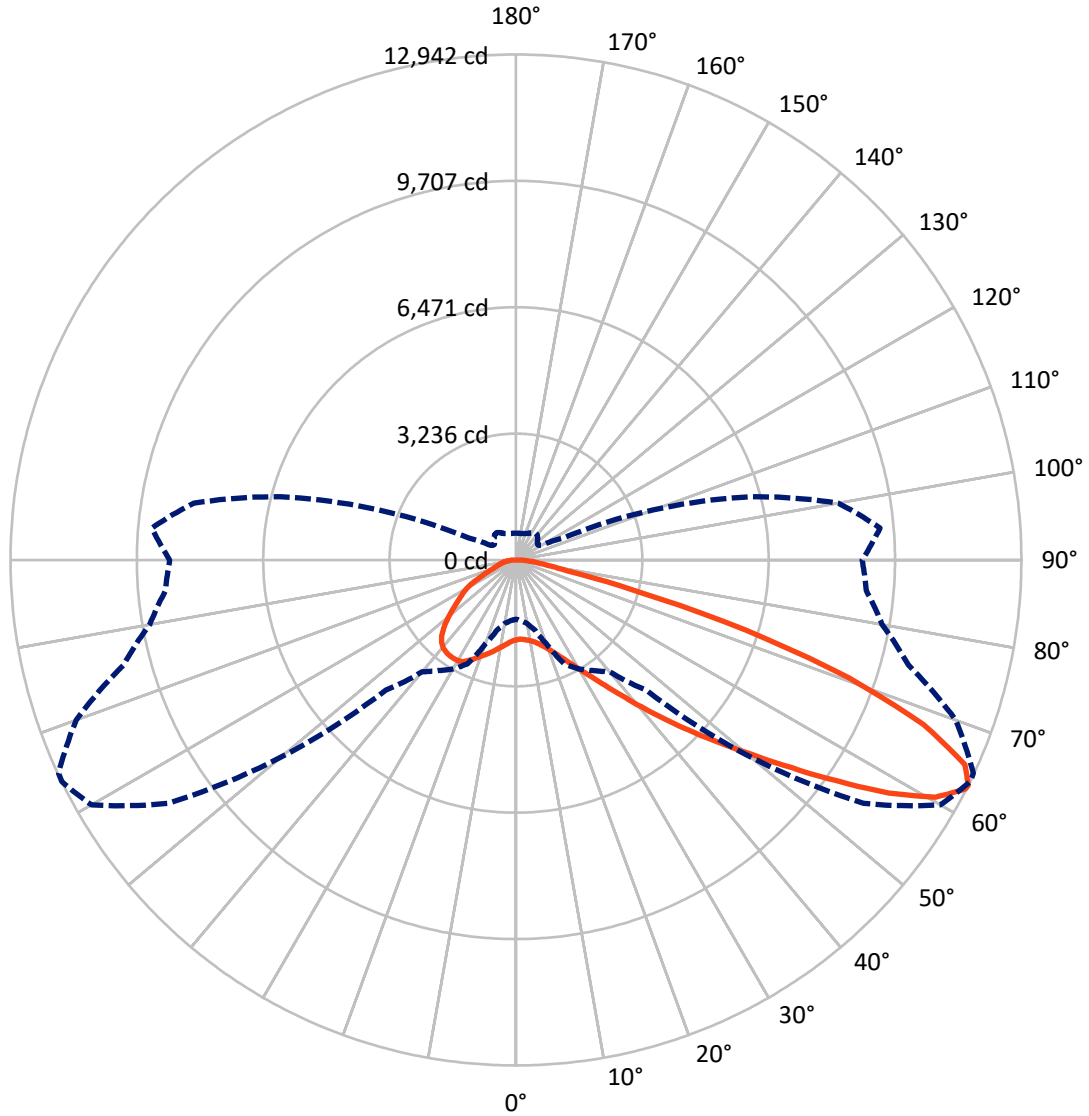
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 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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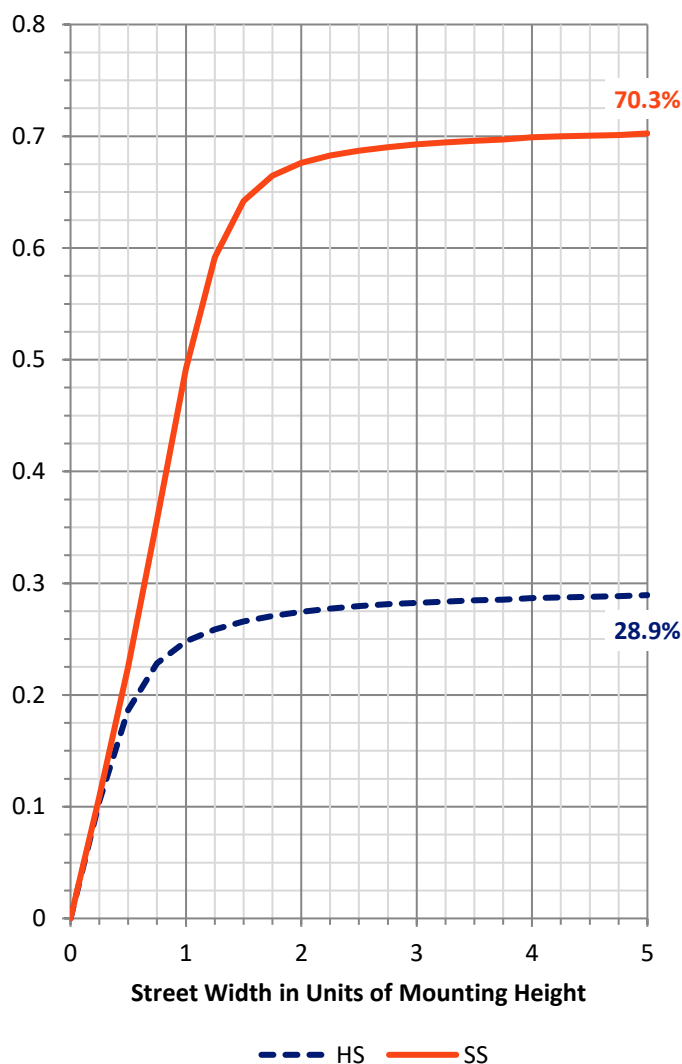
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5543.6	0.0	5543.6
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	13314.4	0.0	13314.4
	% Fixture	70.6	0.0	70.6
Total	Lumens	18858.0	0.0	18858.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.9	1.1
10°-20°	679.2	3.6
20°-30°	1274.9	6.8
30°-40°	2136.8	11.3
40°-50°	3585.2	19.0
50°-60°	4544.9	24.1
60°-70°	4009.3	21.3
70°-80°	2069.7	11.0
80°-90°	354.1	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°	18858.0	100.0
0°-180°	18858.0	100.0

Coefficient of Utilization

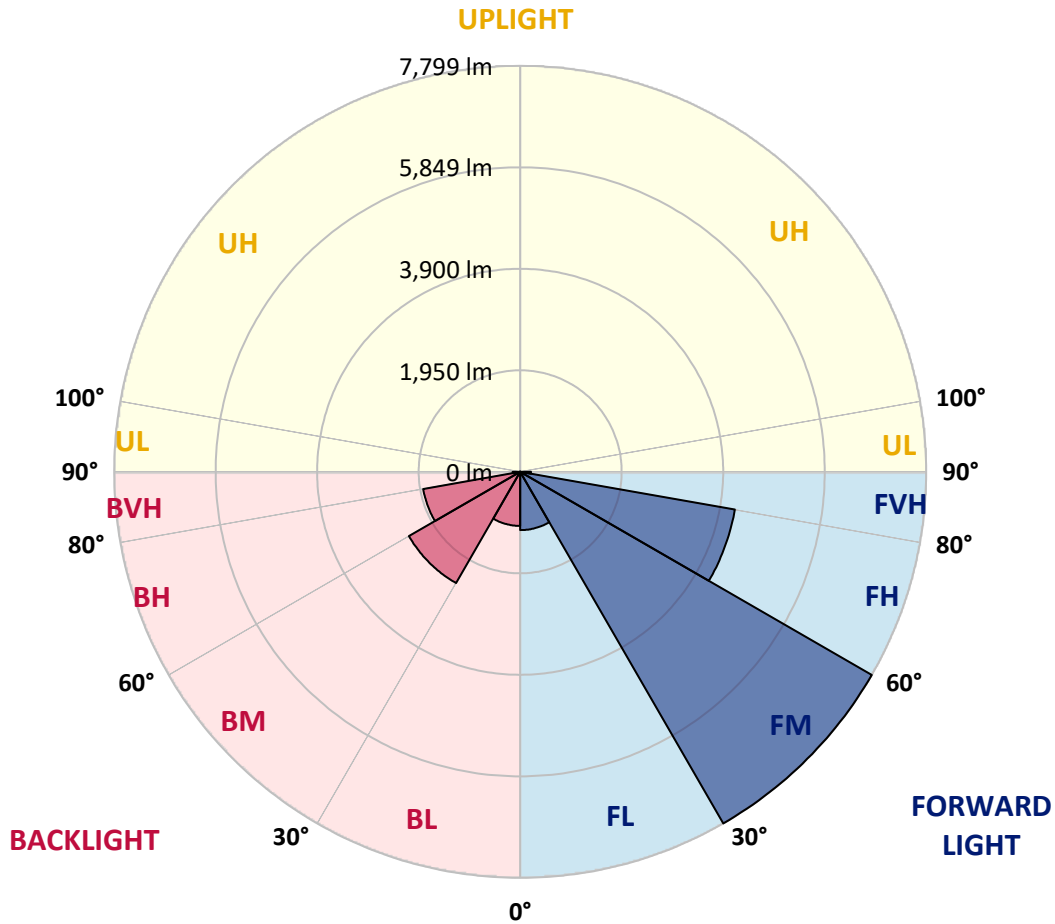


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1119.3	5.9			
FM (30°-60°)	7799.2	41.4			
FH (60°-80°)	4187.5	22.2			G2/5000
FVH (80°-90°)	208.4	1.1			G2/225
BL (0°-30°)	1038.7	5.5	B3/2500		
BM (30°-60°)	2467.7	13.1	B2/2500		
BH (60°-80°)	1891.4	10.0	B3/2500		G3/2500
BVH (80°-90°)	145.7	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3
2.5°	2029.7	2026.5	2026.5	2026.5	2026.5	2023.4	2026.5	2032.8	2029.7	2026.5	2032.8
5°	2036.0	2032.8	2032.8	2032.8	2036.0	2032.8	2036.0	2045.5	2039.2	2039.2	2045.5
7.5°	2051.8	2048.6	2051.8	2048.6	2048.6	2048.6	2051.8	2061.3	2058.1	2061.3	2070.7
10°	2070.7	2070.7	2070.7	2070.7	2070.7	2070.7	2077.0	2083.3	2086.5	2089.7	2102.3
12.5°	2127.5	2127.5	2127.5	2124.4	2124.4	2114.9	2127.5	2133.9	2140.2	2146.5	2156.0
15°	2247.5	2247.5	2244.3	2231.7	2231.7	2212.8	2215.9	2219.1	2219.1	2225.4	2231.7
17.5°	2405.3	2402.2	2395.9	2386.4	2373.8	2351.7	2345.3	2339.0	2329.6	2326.4	2326.4
20°	2626.3	2623.1	2610.5	2585.2	2569.5	2534.7	2509.5	2484.2	2474.8	2459.0	2455.8
22.5°	2941.9	2941.9	2916.7	2878.8	2866.2	2793.6	2721.0	2667.3	2648.4	2626.3	2626.3
25°	3323.9	3320.7	3286.0	3241.8	3188.2	3112.4	3024.0	2951.4	2904.1	2853.6	2834.6
27.5°	3781.6	3772.1	3724.8	3671.1	3570.1	3475.4	3371.2	3295.5	3213.4	3150.3	3093.5
30°	4318.2	4308.7	4226.7	4125.7	4021.5	3926.8	3775.3	3683.7	3554.3	3478.6	3415.4
32.5°	4940.1	4930.6	4782.2	4684.4	4573.9	4457.1	4277.2	4132.0	3967.8	3860.5	3772.1
35°	5732.4	5694.5	5483.0	5347.3	5173.7	5056.9	4867.5	4671.8	4479.2	4327.7	4198.3
37.5°	6587.8	6543.6	6357.4	6155.3	5984.9	5842.8	5574.5	5328.3	5101.0	4892.7	4731.7
40°	7481.1	7364.3	7165.5	7017.1	6900.3	6764.6	6483.6	6224.8	5868.1	5634.5	5391.5
42.5°	8099.8	7986.2	7847.3	7749.4	7692.6	7588.4	7430.6	7206.5	6887.7	6894.0	6253.2
45°	8507.0	8339.7	8245.0	8251.3	8273.4	8273.4	8245.0	8210.3	8071.4	8166.1	7629.5
47.5°	8361.8	8251.3	8191.4	8317.6	8475.4	8633.3	8816.4	9015.2	9242.5	9510.8	8851.1
50°	7509.5	7550.6	7579.0	7847.3	8185.0	8544.9	8964.7	9507.6	10142.1	10265.2	9946.4
52.5°	6149.0	6237.4	6332.1	6742.5	7187.6	7809.4	8544.9	9441.4	10293.6	10795.5	10764.0
55°	4775.9	4886.4	5088.4	5394.6	5748.1	6335.3	7244.4	8627.0	9955.9	10754.5	11240.6
57.5°	3399.6	3560.6	3825.8	4251.9	4564.4	4895.9	5568.2	7102.3	8557.5	10044.3	11161.7
60°	2260.1	2335.9	2509.5	3039.8	3566.9	3914.2	4390.8	4946.4	6136.4	8185.0	10347.3
62.5°	1603.5	1654.1	1761.4	2001.3	2477.9	3106.1	3393.3	3649.0	4031.0	5265.2	8308.1
63°	1515.2	1559.4	1647.7	1849.8	2279.1	2929.3	3222.9	3456.5	3734.2	4709.6	7859.9
65°	1256.3	1275.3	1322.6	1420.5	1650.9	2190.7	2670.5	2812.5	2859.9	3027.2	4924.3
67.5°	1060.6	1073.2	1089.0	1117.4	1209.0	1458.3	1991.8	2171.7	2118.1	2004.4	2433.7
70°	921.7	931.2	956.4	991.2	1022.7	1085.9	1370.0	1638.3	1578.3	1423.6	1489.9
72.5°	735.5	751.3	779.7	839.7	902.8	984.9	1054.3	1221.6	1183.7	1035.4	1051.1
75°	580.8	590.3	615.5	659.7	719.7	814.4	950.1	1007.0	902.8	763.9	763.9
77.5°	460.9	470.3	492.4	527.2	565.0	631.3	726.0	874.4	811.2	574.5	571.3
80°	347.2	356.7	378.8	410.4	448.2	495.6	552.4	618.7	745.0	536.6	429.3
82.5°	255.7	258.8	296.7	318.8	331.4	369.3	416.7	454.5	511.4	495.6	381.9
85°	192.6	189.4	214.6	230.4	233.6	243.1	271.5	309.3	334.6	322.0	296.7
87.5°	107.3	94.7	110.5	126.3	126.3	129.4	135.7	157.8	179.9	173.6	157.8
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):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3
2.5°	2032.8	2032.8	2029.7	2029.7	2032.8	2032.8	2029.7	2039.2	2045.5	2045.5	2048.6
5°	2042.3	2045.5	2042.3	2042.3	2045.5	2045.5	2048.6	2058.1	2067.6	2073.9	2083.3
7.5°	2070.7	2073.9	2070.7	2070.7	2073.9	2077.0	2083.3	2096.0	2102.3	2114.9	2130.7
10°	2102.3	2105.4	2102.3	2105.4	2108.6	2111.8	2121.2	2130.7	2140.2	2152.8	2178.0
12.5°	2159.1	2162.3	2156.0	2159.1	2168.6	2168.6	2174.9	2181.2	2197.0	2212.8	2238.0
15°	2238.0	2238.0	2231.7	2234.9	2244.3	2244.3	2247.5	2253.8	2272.7	2291.7	2316.9
17.5°	2329.6	2335.9	2332.7	2335.9	2342.2	2345.3	2345.3	2351.7	2364.3	2376.9	2402.2
20°	2452.7	2455.8	2449.5	2455.8	2462.1	2455.8	2449.5	2446.4	2452.7	2459.0	2487.4
22.5°	2620.0	2616.8	2601.0	2601.0	2601.0	2588.4	2572.6	2553.7	2553.7	2544.2	2566.3
25°	2818.8	2809.4	2787.3	2790.4	2768.3	2749.4	2721.0	2692.6	2667.3	2657.8	2661.0
27.5°	3052.4	3033.5	3011.4	3005.1	2983.0	2948.3	2900.9	2847.2	2806.2	2774.6	2768.3
30°	3346.0	3304.9	3267.1	3260.8	3226.0	3169.2	3093.5	3020.9	2951.4	2897.7	2878.8
32.5°	3693.2	3630.1	3570.1	3563.8	3507.0	3431.2	3339.7	3238.7	3137.7	3052.4	3011.4
35°	4100.4	4005.7	3948.9	3933.1	3851.0	3756.3	3655.3	3525.9	3383.9	3263.9	3188.2
37.5°	4596.0	4498.1	4400.3	4403.4	4289.8	4179.3	4043.6	3885.8	3705.8	3538.5	3431.2
40°	5208.4	5069.5	4943.2	4914.8	4817.0	4662.3	4513.9	4330.8	4109.9	3888.9	3734.2
42.5°	5950.2	5722.9	5549.3	5524.0	5394.6	5205.2	5025.3	4782.2	4558.1	4289.8	4103.6
45°	6793.0	6430.0	6221.6	6183.8	5975.4	5782.9	5565.1	5306.2	5031.6	4728.6	4507.6
47.5°	7841.0	7323.3	6969.7	6906.6	6619.4	6366.8	6139.6	5852.3	5524.0	5186.3	4943.2
50°	9062.6	8298.7	7822.0	7724.2	7339.1	7042.4	6751.9	6392.1	6041.7	5688.2	5407.2
52.5°	10287.3	9466.6	8832.1	8712.2	8144.0	7746.3	7364.3	7004.5	6591.0	6240.6	5921.8
55°	11272.2	10726.1	9990.6	9823.3	9008.9	8469.1	7967.2	7556.9	7146.5	6868.7	6493.1
57.5°	11865.6	11837.2	11256.4	11026.0	9911.7	9113.1	8554.4	8087.2	7689.5	7572.7	7073.9
60°	11849.8	12585.3	12336.0	12162.3	10823.9	9772.8	9046.8	8541.7	8213.4	8346.0	7657.9
62.5°	11127.0	12616.9	12916.8	12869.4	11796.2	10303.1	9450.8	8930.0	8756.4	9151.0	8264.0
63°	10865.0	12544.3	12942.0	12923.1	11982.4	10404.1	9520.3	9005.8	8863.7	9356.1	8374.4
65°	9182.5	11909.8	12635.8	12721.1	12383.3	10751.3	9681.3	9198.3	9182.5	9813.8	8636.4
67.5°	5596.6	10063.2	11256.4	11420.5	11818.3	10861.8	9589.7	9132.0	9359.3	9880.1	8557.5
70°	2392.7	6641.5	9046.8	9311.9	10284.2	10312.6	9327.7	8860.5	9318.3	9362.4	7995.6
72.5°	1417.3	3131.3	6158.5	6736.2	8137.7	8873.2	8728.0	8387.1	8778.5	8222.9	6808.8
75°	1003.8	1464.7	3128.2	3743.7	5666.1	6774.0	7332.8	7490.6	7474.8	6521.5	5110.5
77.5°	719.7	940.7	1319.5	1556.2	3162.9	4349.8	5031.6	5492.5	5344.1	4365.6	3150.3
80°	501.9	650.3	808.1	858.6	1467.8	2234.9	2651.5	2853.6	2765.2	2181.2	1411.0
82.5°	363.0	426.1	520.8	552.4	738.6	1032.2	1227.9	1082.7	1038.5	804.9	609.2
85°	280.9	274.6	325.1	337.8	432.5	539.8	552.4	429.3	375.6	334.6	340.9
87.5°	198.9	170.5	173.6	179.9	224.1	287.2	280.9	176.8	151.5	161.0	183.1
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°	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3	2042.3
2.5°	2054.9	2058.1	2064.4	2067.6	2073.9	2073.9	2080.2	2083.3	2089.7	2096.0	2099.1
5°	2092.8	2102.3	2114.9	2121.2	2133.9	2143.3	2156.0	2162.3	2174.9	2184.4	2197.0
7.5°	2149.6	2165.4	2181.2	2200.1	2219.1	2234.9	2247.5	2263.3	2285.4	2301.2	2310.6
10°	2203.3	2225.4	2253.8	2275.9	2304.3	2326.4	2345.3	2373.8	2399.0	2421.1	2433.7
12.5°	2272.7	2301.2	2329.6	2364.3	2402.2	2430.6	2459.0	2496.9	2531.6	2556.8	2569.5
15°	2354.8	2389.5	2421.1	2462.1	2506.3	2544.2	2585.2	2626.3	2651.5	2651.5	2645.2
17.5°	2440.0	2468.5	2506.3	2553.7	2613.7	2661.0	2683.1	2689.4	2679.9	2657.8	2642.1
20°	2525.3	2550.5	2591.6	2648.4	2711.5	2721.0	2698.9	2670.5	2642.1	2604.2	2578.9
22.5°	2594.7	2629.4	2692.6	2758.9	2762.0	2708.4	2648.4	2601.0	2556.8	2512.6	2465.3
25°	2676.8	2724.1	2809.4	2834.6	2752.5	2651.5	2566.3	2496.9	2424.3	2351.7	2298.0
27.5°	2777.8	2847.2	2932.5	2859.9	2698.9	2556.8	2440.0	2335.9	2241.2	2140.2	2080.2
30°	2885.1	2992.4	3011.4	2822.0	2607.3	2424.3	2266.4	2108.6	1988.7	1897.1	1862.4
32.5°	3014.5	3153.4	3039.8	2755.7	2484.2	2244.3	2032.8	1843.4	1742.4	1685.6	1669.8
35°	3210.3	3323.9	3055.6	2686.3	2342.2	2029.7	1764.5	1613.0	1549.9	1512.0	1493.1
37.5°	3491.2	3488.0	3052.4	2601.0	2178.0	1796.1	1549.9	1442.6	1392.1	1360.5	1325.8
40°	3819.5	3614.3	3033.5	2477.9	1957.1	1572.0	1401.5	1300.5	1253.2	1215.3	1174.3
42.5°	4144.6	3699.5	2979.8	2294.8	1682.5	1411.0	1294.2	1202.7	1152.2	1111.1	1054.3
45°	4425.5	3734.2	2875.7	2042.3	1436.2	1284.7	1224.8	1145.8	1085.9	1022.7	978.5
47.5°	4646.5	3727.9	2708.4	1745.6	1272.1	1196.3	1167.9	1114.3	1041.7	962.8	905.9
50°	4832.7	3680.6	2481.1	1483.6	1161.6	1117.4	1108.0	1092.2	975.4	909.1	874.4
52.5°	5003.2	3611.1	2238.0	1306.8	1066.9	1029.0	1048.0	1032.2	950.1	893.3	858.6
55°	5236.8	3563.8	1998.1	1171.1	956.4	947.0	962.8	984.9	934.4	880.7	842.8
57.5°	5511.4	3589.0	1815.0	1019.6	852.3	858.6	912.3	943.8	918.6	861.7	823.9
60°	5827.1	3664.8	1654.1	874.4	767.1	782.8	861.7	905.9	902.8	836.5	792.3
62.5°	6180.6	3743.7	1398.4	763.9	694.4	719.7	801.8	858.6	868.1	811.2	757.6
63°	6250.0	3750.0	1332.1	741.8	681.8	710.2	786.0	846.0	858.6	804.9	751.3
65°	6420.5	3693.2	1073.2	681.8	631.3	662.9	738.6	792.3	817.6	770.2	726.0
67.5°	6278.5	3229.2	808.1	609.2	590.3	612.4	678.7	729.2	751.3	729.2	685.0
70°	5741.8	2348.5	631.3	542.9	546.1	561.9	612.4	659.7	685.0	678.7	637.6
72.5°	4624.4	1332.1	527.2	486.1	495.6	514.5	549.2	593.4	615.5	612.4	584.0
75°	3046.1	681.8	445.1	435.6	441.9	457.7	483.0	517.7	542.9	539.8	527.2
77.5°	1508.8	473.5	381.9	385.1	388.3	400.9	419.8	451.4	467.2	470.3	467.2
80°	621.8	369.3	328.3	331.4	334.6	344.1	356.7	385.1	394.6	400.9	404.0
82.5°	372.5	280.9	262.0	268.3	271.5	280.9	290.4	315.7	325.1	334.6	334.6
85°	246.2	195.7	189.4	195.7	202.0	208.3	211.5	227.3	243.1	255.7	262.0
87.5°	132.6	116.8	113.6	116.8	116.8	123.1	129.4	145.2	164.1	176.8	183.1
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°	2042.3	2042.3	2042.3	2042.3	2042.3
2.5°	2092.8	2096.0	2092.8	2096.0	2099.1
5°	2197.0	2203.3	2200.1	2200.1	2212.8
7.5°	2316.9	2329.6	2329.6	2335.9	2342.2
10°	2446.4	2459.0	2468.5	2468.5	2477.9
12.5°	2575.8	2582.1	2591.6	2591.6	2591.6
15°	2642.1	2638.9	2635.8	2632.6	2632.6
17.5°	2632.6	2620.0	2613.7	2607.3	2610.5
20°	2563.2	2541.1	2534.7	2525.3	2531.6
22.5°	2443.2	2411.6	2399.0	2383.2	2389.5
25°	2263.3	2225.4	2219.1	2200.1	2209.6
27.5°	2054.9	2036.0	2032.8	2029.7	2045.5
30°	1859.2	1865.5	1868.7	1875.0	1890.8
32.5°	1679.3	1691.9	1695.1	1698.2	1720.3
35°	1502.5	1486.8	1502.5	1496.2	1515.2
37.5°	1310.0	1297.4	1284.7	1268.9	1281.6
40°	1149.0	1126.9	1089.0	1070.1	1073.2
42.5°	1022.7	994.3	962.8	943.8	943.8
45°	940.7	905.9	877.5	864.9	864.9
47.5°	877.5	861.7	846.0	836.5	836.5
50°	852.3	833.3	823.9	817.6	817.6
52.5°	833.3	814.4	804.9	798.6	792.3
55°	817.6	789.1	779.7	776.5	776.5
57.5°	795.5	770.2	757.6	754.4	754.4
60°	760.7	741.8	729.2	726.0	726.0
62.5°	726.0	707.1	694.4	694.4	694.4
63°	719.7	697.6	688.1	688.1	688.1
65°	691.3	669.2	659.7	659.7	656.6
67.5°	653.4	631.3	625.0	625.0	618.7
70°	609.2	590.3	584.0	587.1	574.5
72.5°	565.0	546.1	536.6	536.6	524.0
75°	514.5	495.6	483.0	479.8	467.2
77.5°	457.7	441.9	429.3	416.7	410.4
80°	397.7	385.1	369.3	359.9	350.4
82.5°	334.6	322.0	312.5	325.1	277.8
85°	262.0	249.4	236.7	255.7	198.9
87.5°	192.6	186.2	173.6	151.5	132.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)