

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: P257954

Luminaire Tested: **ARCH-L-AF72-180-D-U-T2U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P257954  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-180-D-U-T2U  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22953 lumens  
Efficiency: N/A  
Efficacy: 126.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G3

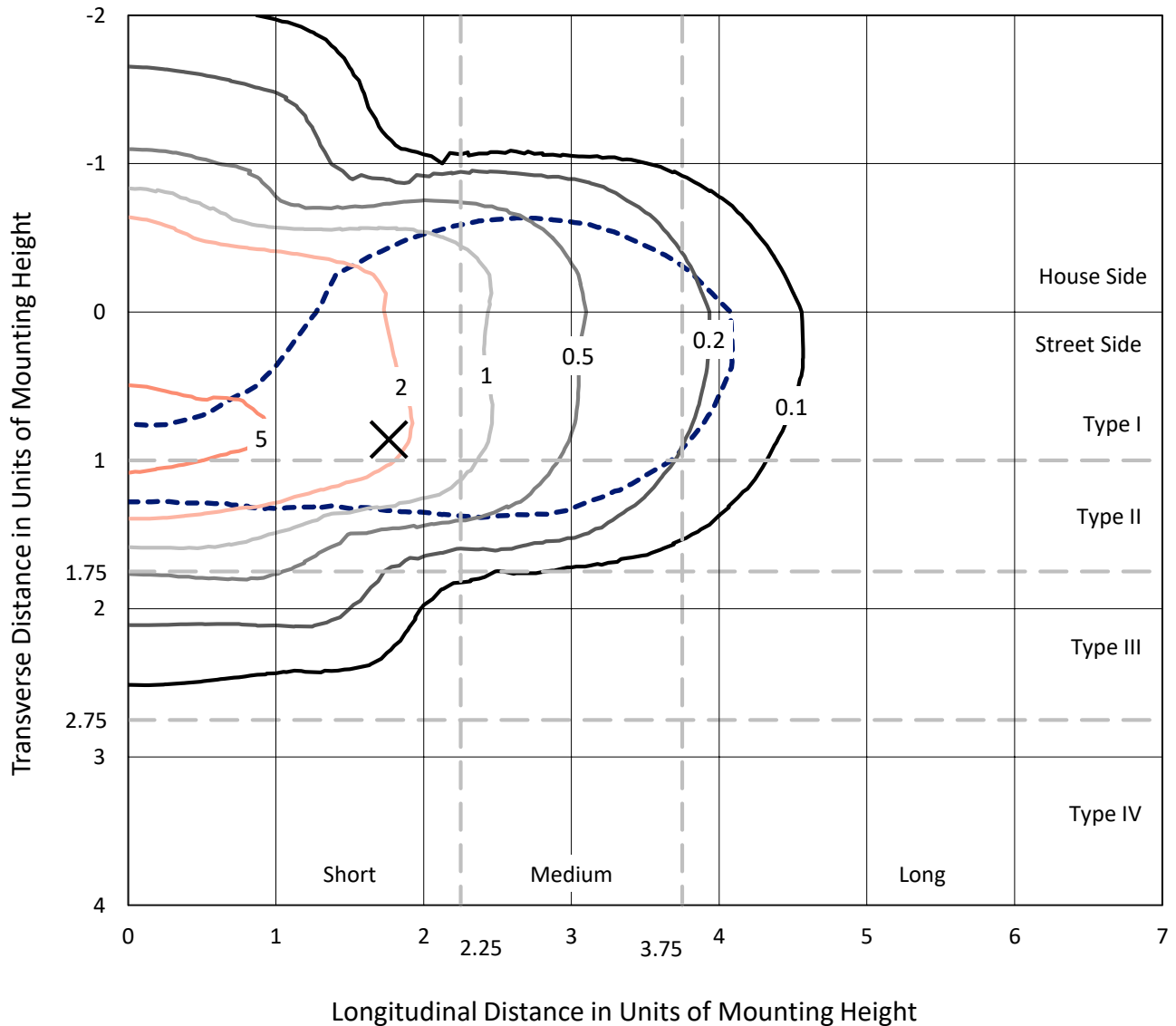
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

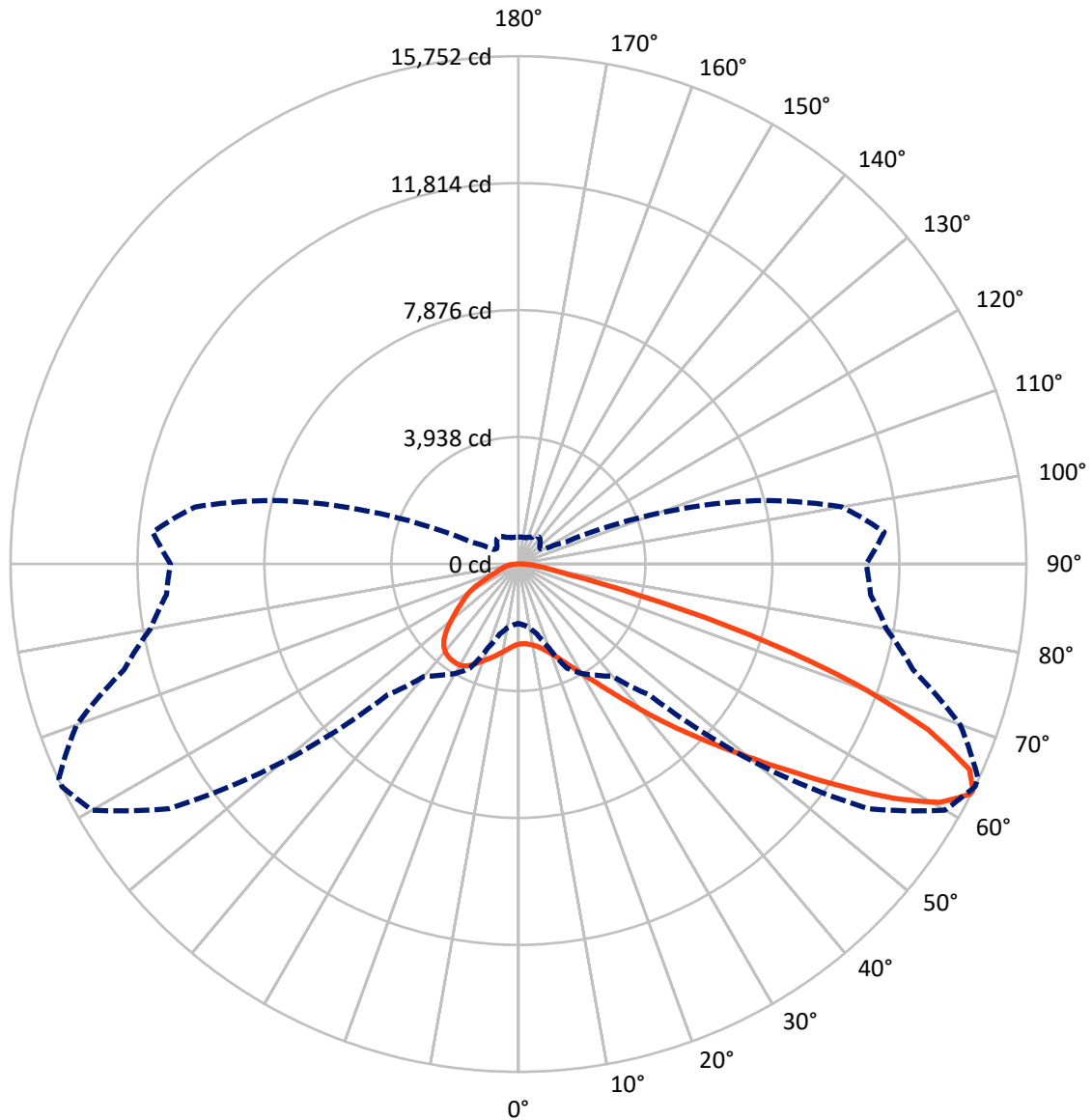


Based on 25 foot mounting height. Maximum calculated value = 6.5 fc  
 Type II - Short - Semi-Cutoff

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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
<b>House Side</b>	Lumens	6747.3	0.0	6747.3
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	16205.6	0.0	16205.6
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	22953.0	0.0	22953.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	248.2	1.1
10°-20°	826.7	3.6
20°-30°	1551.7	6.8
30°-40°	2600.9	11.3
40°-50°	4363.7	19.0
50°-60°	5531.8	24.1
60°-70°	4879.9	21.3
70°-80°	2519.1	11.0
80°-90°	431.0	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°	22953.0	100.0
0°-180°	22953.0	100.0



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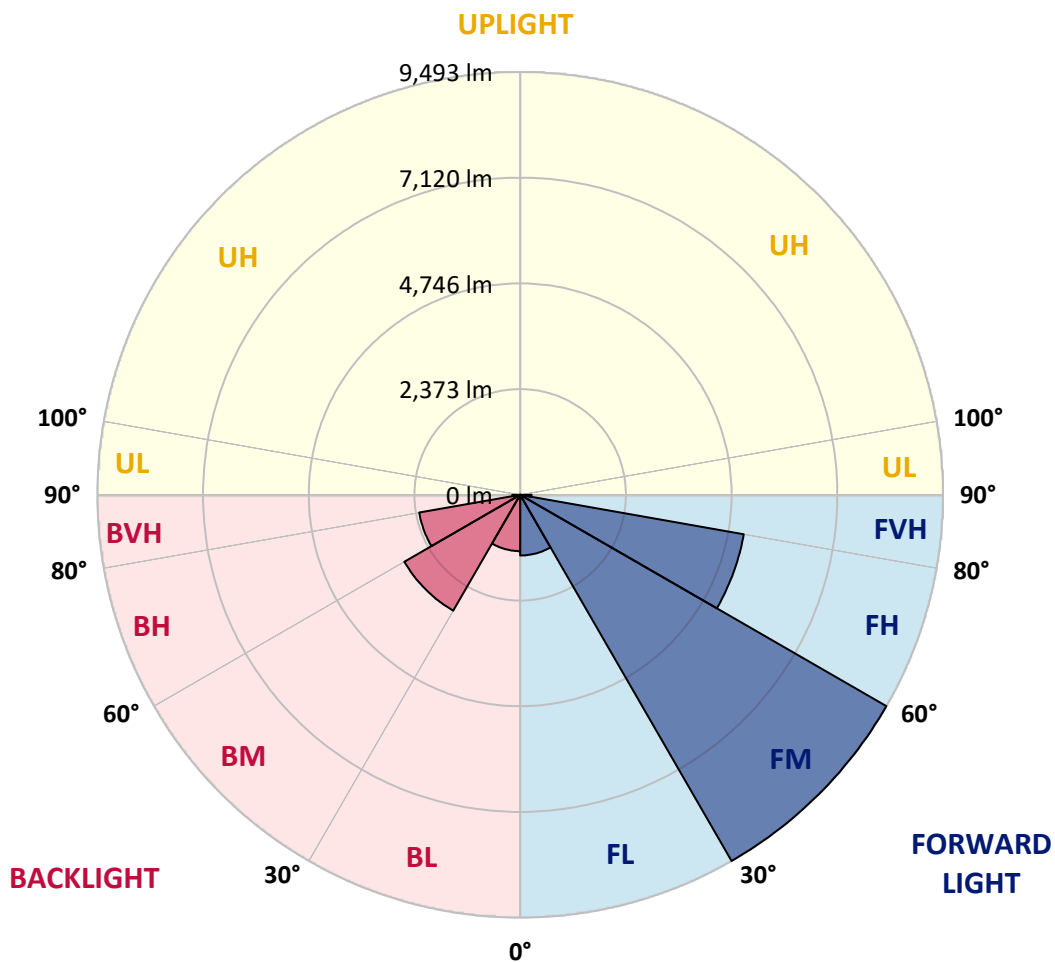
CATALOG NUMBER: ARCH-L-AF72-180-D-U-T2U

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1362.3	5.9			
FM	(30°-60°)	9492.8	41.4			
FH	(60°-80°)	5096.9	22.2			G3/7500
FVH	(80°-90°)	253.7	1.1			G3/500
BL	(0°-30°)	1264.2	5.5	B3/2500		
BM	(30°-60°)	3003.6	13.1	B3/5000		
BH	(60°-80°)	2302.1	10.0	B3/2500		G3/2500
BVH	(80°-90°)	177.4	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°	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8
2.5°	2470.4	2466.5	2466.5	2466.5	2466.5	2462.8	2466.5	2474.3	2470.4	2466.5	2474.3
5°	2478.1	2474.3	2474.3	2474.3	2478.1	2474.3	2478.1	2489.7	2482.0	2482.0	2489.7
7.5°	2497.3	2493.4	2497.3	2493.4	2493.4	2493.4	2497.3	2508.9	2505.0	2508.9	2520.3
10°	2520.3	2520.3	2520.3	2520.3	2520.3	2520.3	2528.0	2535.8	2539.6	2543.5	2558.8
12.5°	2589.5	2589.5	2589.5	2585.7	2585.7	2574.2	2589.5	2597.2	2604.9	2612.6	2624.1
15°	2735.6	2735.6	2731.7	2716.3	2716.3	2693.2	2697.1	2701.0	2701.0	2708.7	2716.3
17.5°	2927.6	2923.8	2916.1	2904.6	2889.2	2862.3	2854.6	2847.0	2835.4	2831.6	2831.6
20°	3196.6	3192.7	3177.4	3146.6	3127.5	3085.1	3054.4	3023.6	3012.2	2992.9	2989.1
22.5°	3580.7	3580.7	3550.0	3503.9	3488.6	3400.2	3311.8	3246.5	3223.4	3196.6	3196.6
25°	4045.7	4041.8	3999.5	3945.7	3880.5	3788.3	3680.7	3592.3	3534.7	3473.2	3450.1
27.5°	4602.8	4591.2	4533.6	4468.2	4345.4	4230.1	4103.3	4011.1	3911.2	3834.3	3765.2
30°	5255.9	5244.4	5144.5	5021.6	4894.7	4779.5	4595.1	4483.7	4326.2	4233.9	4157.1
32.5°	6012.8	6001.2	5820.7	5701.6	5567.1	5424.9	5206.0	5029.2	4829.5	4698.8	4591.2
35°	6977.1	6931.0	6673.6	6508.4	6297.1	6154.9	5924.4	5686.2	5451.8	5267.5	5109.9
37.5°	8018.3	7964.5	7737.9	7492.0	7284.5	7111.7	6785.0	6485.4	6208.7	5955.1	5759.2
40°	9105.6	8963.5	8721.4	8540.8	8398.7	8233.5	7891.6	7576.5	7142.3	6858.1	6562.2
42.5°	9858.7	9720.4	9551.3	9432.2	9363.1	9236.2	9044.1	8771.4	8383.3	8391.0	7611.1
45°	10354.3	10150.6	10035.4	10043.1	10069.9	10069.9	10035.4	9993.1	9824.1	9939.3	9286.2
47.5°	10177.5	10043.1	9970.1	10123.7	10315.8	10508.0	10730.9	10972.9	11249.5	11576.0	10773.1
50°	9140.2	9190.2	9224.8	9551.3	9962.4	10400.3	10911.4	11572.2	12344.5	12494.3	12106.2
52.5°	7484.3	7591.8	7707.1	8206.6	8748.3	9505.2	10400.3	11491.5	12528.9	13139.8	13101.3
55°	5813.0	5947.4	6193.4	6566.0	6996.4	7711.0	8817.4	10500.3	12117.8	13089.8	13681.5
57.5°	4137.8	4333.8	4656.6	5175.2	5555.5	5959.0	6777.4	8644.5	10415.8	12225.4	13585.4
60°	2750.9	2843.1	3054.4	3699.9	4341.5	4764.1	5344.3	6020.5	7468.9	9962.4	12594.2
62.5°	1951.8	2013.3	2143.9	2435.9	3016.0	3780.5	4130.2	4441.3	4906.3	6408.5	10112.3
63°	1844.2	1898.0	2005.5	2251.4	2773.9	3565.4	3922.7	4207.0	4545.2	5732.3	9566.6
65°	1529.1	1552.2	1609.8	1728.9	2009.4	2666.4	3250.3	3423.3	3480.9	3684.5	5993.6
67.5°	1291.0	1306.3	1325.5	1360.1	1471.5	1775.0	2424.3	2643.3	2578.0	2439.7	2962.2
70°	1121.9	1133.4	1164.1	1206.4	1244.8	1321.7	1667.4	1994.0	1921.0	1732.8	1813.5
72.5°	895.2	914.4	949.0	1022.0	1098.9	1198.7	1283.2	1486.9	1440.7	1260.2	1279.4
75°	707.0	718.4	749.2	803.0	876.0	991.2	1156.4	1225.6	1098.9	929.8	929.8
77.5°	561.0	572.4	599.3	641.6	687.7	768.4	883.6	1064.3	987.4	699.3	695.4
80°	422.6	434.1	461.0	499.5	545.5	603.2	672.4	753.0	906.7	653.2	522.5
82.5°	311.2	315.1	361.1	388.0	403.5	449.5	507.2	553.2	622.4	603.2	464.9
85°	234.4	230.6	261.3	280.5	284.3	295.8	330.4	376.5	407.2	391.9	361.1
87.5°	130.6	115.3	134.5	153.6	153.6	157.5	165.2	192.1	219.0	211.3	192.1
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):**

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8
2.5°	2474.3	2474.3	2470.4	2470.4	2474.3	2474.3	2470.4	2482.0	2489.7	2489.7	2493.4
5°	2485.8	2489.7	2485.8	2485.8	2489.7	2489.7	2493.4	2505.0	2516.6	2524.2	2535.8
7.5°	2520.3	2524.2	2520.3	2520.3	2524.2	2528.0	2535.8	2551.1	2558.8	2574.2	2593.4
10°	2558.8	2562.6	2558.8	2562.6	2566.5	2570.4	2581.8	2593.4	2604.9	2620.3	2651.0
12.5°	2628.0	2631.7	2624.1	2628.0	2639.5	2639.5	2647.2	2654.9	2674.1	2693.2	2724.0
15°	2724.0	2724.0	2716.3	2720.1	2731.7	2731.7	2735.6	2743.2	2766.3	2789.3	2820.1
17.5°	2835.4	2843.1	2839.3	2843.1	2850.8	2854.6	2854.6	2862.3	2877.7	2893.0	2923.8
20°	2985.3	2989.1	2981.4	2989.1	2996.8	2989.1	2981.4	2977.6	2985.3	2992.9	3027.5
22.5°	3188.8	3185.1	3165.8	3165.8	3165.8	3150.5	3131.3	3108.2	3108.2	3096.7	3123.6
25°	3431.0	3419.4	3392.5	3396.4	3369.5	3346.4	3311.8	3277.2	3246.5	3235.0	3238.9
27.5°	3715.3	3692.2	3665.3	3657.7	3630.8	3588.5	3530.8	3465.6	3415.5	3377.2	3369.5
30°	4072.6	4022.7	3976.5	3968.8	3926.6	3857.4	3765.2	3676.8	3592.3	3527.0	3503.9
32.5°	4495.2	4418.3	4345.4	4337.6	4268.5	4176.3	4064.9	3941.9	3819.0	3715.3	3665.3
35°	4990.8	4875.6	4806.4	4787.2	4687.3	4572.0	4449.1	4291.6	4118.7	3972.6	3880.5
37.5°	5594.0	5474.9	5355.8	5359.6	5221.3	5086.8	4921.6	4729.5	4510.6	4306.9	4176.3
40°	6339.3	6170.3	6016.6	5982.0	5862.9	5674.7	5494.1	5271.3	5002.3	4733.4	4545.2
42.5°	7242.3	6965.6	6754.3	6723.5	6566.0	6335.5	6116.5	5820.7	5547.9	5221.3	4994.7
45°	8268.1	7826.2	7572.7	7526.6	7273.0	7038.6	6773.5	6458.5	6124.2	5755.3	5486.4
47.5°	9543.6	8913.5	8483.2	8406.4	8056.8	7749.4	7472.8	7123.1	6723.5	6312.4	6016.6
50°	11030.5	10100.7	9520.6	9401.4	8932.7	8571.6	8218.1	7780.2	7353.7	6923.3	6581.4
52.5°	12521.2	11522.3	10750.0	10604.0	9912.5	9428.3	8963.5	8525.5	8022.2	7595.7	7207.6
55°	13719.9	13055.2	12160.0	11956.5	10965.2	10308.2	9697.3	9197.9	8698.4	8360.3	7903.1
57.5°	14442.2	14407.6	13700.7	13420.2	12064.0	11092.0	10411.9	9843.3	9359.2	9217.1	8610.0
60°	14423.0	15318.2	15014.7	14803.3	13174.4	11895.0	11011.2	10396.6	9997.0	10158.3	9320.8
62.5°	13543.2	15356.6	15721.6	15663.9	14357.7	12540.4	11503.1	10869.2	10657.8	11138.1	10058.5
63°	13224.3	15268.3	15752.3	15729.3	14584.4	12663.3	11587.6	10961.3	10788.4	11387.8	10192.9
65°	11176.5	14496.0	15379.7	15483.4	15072.3	13086.0	11783.5	11195.7	11176.5	11944.9	10511.8
67.5°	6811.9	12248.4	13700.7	13900.5	14384.6	13220.4	11672.1	11115.0	11391.7	12025.6	10415.8
70°	2912.2	8083.7	11011.2	11334.0	12517.3	12551.9	11353.2	10784.6	11341.7	11395.5	9731.8
72.5°	1725.1	3811.3	7495.8	8199.0	9904.7	10800.0	10623.2	10208.3	10684.7	10008.6	8287.2
75°	1221.8	1782.7	3807.4	4556.6	6896.4	8245.0	8925.0	9117.2	9097.9	7937.7	6220.3
77.5°	876.0	1144.9	1605.9	1894.1	3849.7	5294.3	6124.2	6685.2	6504.5	5313.5	3834.3
80°	610.9	791.5	983.6	1045.0	1786.6	2720.1	3227.3	3473.2	3365.6	2654.9	1717.4
82.5°	441.8	518.6	633.9	672.4	899.1	1256.4	1494.5	1317.9	1264.1	979.7	741.5
85°	342.0	334.3	395.8	411.1	526.3	656.9	672.4	522.5	457.2	407.2	414.9
87.5°	242.0	207.5	211.3	219.0	272.8	349.6	342.0	215.1	184.4	195.9	222.8
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°	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8	2485.8
2.5°	2501.1	2505.0	2512.7	2516.6	2524.2	2524.2	2531.9	2535.8	2543.5	2551.1	2554.9
5°	2547.2	2558.8	2574.2	2581.8	2597.2	2608.7	2624.1	2631.7	2647.2	2658.6	2674.1
7.5°	2616.4	2635.6	2654.9	2677.9	2701.0	2720.1	2735.6	2754.7	2781.6	2800.8	2812.4
10°	2681.8	2708.7	2743.2	2770.2	2804.7	2831.6	2854.6	2889.2	2919.9	2946.8	2962.2
12.5°	2766.3	2800.8	2835.4	2877.7	2923.8	2958.4	2992.9	3039.1	3081.3	3112.0	3127.5
15°	2866.2	2908.5	2946.8	2996.8	3050.5	3096.7	3146.6	3196.6	3227.3	3227.3	3219.6
17.5°	2969.9	3004.5	3050.5	3108.2	3181.2	3238.9	3265.8	3273.4	3261.9	3235.0	3215.7
20°	3073.7	3104.3	3154.3	3223.4	3300.3	3311.8	3284.9	3250.3	3215.7	3169.7	3138.9
22.5°	3158.2	3200.4	3277.2	3357.9	3361.8	3296.5	3223.4	3165.8	3112.0	3058.2	3000.6
25°	3258.0	3315.7	3419.4	3450.1	3350.3	3227.3	3123.6	3039.1	2950.7	2862.3	2797.0
27.5°	3381.0	3465.6	3569.3	3480.9	3284.9	3112.0	2969.9	2843.1	2727.8	2604.9	2531.9
30°	3511.6	3642.2	3665.3	3434.8	3173.5	2950.7	2758.6	2566.5	2420.5	2309.1	2266.8
32.5°	3669.1	3838.2	3699.9	3354.1	3023.6	2731.7	2474.3	2243.7	2120.8	2051.6	2032.4
35°	3907.4	4045.7	3719.0	3269.6	2850.8	2470.4	2147.7	1963.2	1886.4	1840.3	1817.3
37.5°	4249.3	4245.5	3715.3	3165.8	2651.0	2186.1	1886.4	1755.8	1694.3	1656.0	1613.7
40°	4648.9	4399.1	3692.2	3016.0	2382.0	1913.3	1705.9	1582.9	1525.3	1479.2	1429.3
42.5°	5044.6	4502.8	3626.9	2793.2	2047.8	1717.4	1575.2	1463.8	1402.4	1352.4	1283.2
45°	5386.6	4545.2	3500.1	2485.8	1748.1	1563.7	1490.7	1394.7	1321.7	1244.8	1191.0
47.5°	5655.5	4537.4	3296.5	2124.7	1548.3	1456.2	1421.6	1356.2	1267.8	1171.8	1102.6
50°	5882.2	4479.8	3019.9	1805.7	1413.8	1360.1	1348.6	1329.3	1187.2	1106.5	1064.3
52.5°	6089.6	4395.3	2724.0	1590.6	1298.6	1252.5	1275.5	1256.4	1156.4	1087.3	1045.0
55°	6373.9	4337.6	2432.0	1425.4	1164.1	1152.7	1171.8	1198.7	1137.2	1072.0	1025.8
57.5°	6708.2	4368.4	2209.2	1240.9	1037.4	1045.0	1110.3	1148.8	1118.0	1048.8	1002.8
60°	7092.4	4460.6	2013.3	1064.3	933.6	952.8	1048.8	1102.6	1098.9	1018.1	964.3
62.5°	7522.7	4556.6	1702.0	929.8	845.3	876.0	975.9	1045.0	1056.6	987.4	922.1
63°	7607.3	4564.3	1621.4	902.9	829.9	864.5	956.7	1029.7	1045.0	979.7	914.4
65°	7814.7	4495.2	1306.3	829.9	768.4	806.8	899.1	964.3	995.1	937.4	883.6
67.5°	7641.9	3930.4	983.6	741.5	718.4	745.3	826.0	887.5	914.4	887.5	833.7
70°	6988.7	2858.4	768.4	660.8	664.7	683.8	745.3	803.0	833.7	826.0	776.1
72.5°	5628.6	1621.4	641.6	591.7	603.2	626.3	668.5	722.3	749.2	745.3	710.7
75°	3707.6	829.9	541.8	530.2	537.9	557.1	587.8	630.1	660.8	656.9	641.6
77.5°	1836.5	576.3	464.9	468.7	472.6	487.9	511.0	549.4	568.7	572.4	568.7
80°	756.9	449.5	399.6	403.5	407.2	418.8	434.1	468.7	480.3	487.9	491.7
82.5°	453.4	342.0	318.9	326.5	330.4	342.0	353.4	384.2	395.8	407.2	407.2
85°	299.7	238.2	230.6	238.2	245.9	253.6	257.4	276.6	295.8	311.2	318.9
87.5°	161.3	142.2	138.3	142.2	142.2	149.9	157.5	176.8	199.8	215.1	222.8
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°	2485.8	2485.8	2485.8	2485.8	2485.8
2.5°	2547.2	2551.1	2547.2	2551.1	2554.9
5°	2674.1	2681.8	2677.9	2677.9	2693.2
7.5°	2820.1	2835.4	2835.4	2843.1	2850.8
10°	2977.6	2992.9	3004.5	3004.5	3016.0
12.5°	3135.1	3142.8	3154.3	3154.3	3154.3
15°	3215.7	3212.0	3208.1	3204.3	3204.3
17.5°	3204.3	3188.8	3181.2	3173.5	3177.4
20°	3119.7	3092.8	3085.1	3073.7	3081.3
22.5°	2973.7	2935.4	2919.9	2900.8	2908.5
25°	2754.7	2708.7	2701.0	2677.9	2689.4
27.5°	2501.1	2478.1	2474.3	2470.4	2489.7
30°	2263.0	2270.6	2274.5	2282.2	2301.3
32.5°	2044.0	2059.3	2063.2	2067.0	2093.9
35°	1828.8	1809.6	1828.8	1821.2	1844.2
37.5°	1594.5	1579.0	1563.7	1544.5	1559.9
40°	1398.5	1371.6	1325.5	1302.4	1306.3
42.5°	1244.8	1210.3	1171.8	1148.8	1148.8
45°	1144.9	1102.6	1068.1	1052.7	1052.7
47.5°	1068.1	1048.8	1029.7	1018.1	1018.1
50°	1037.4	1014.3	1002.8	995.1	995.1
52.5°	1014.3	991.2	979.7	972.0	964.3
55°	995.1	960.6	949.0	945.1	945.1
57.5°	968.2	937.4	922.1	918.2	918.2
60°	926.0	902.9	887.5	883.6	883.6
62.5°	883.6	860.6	845.3	845.3	845.3
63°	876.0	849.0	837.6	837.6	837.6
65°	841.4	814.5	803.0	803.0	799.1
67.5°	795.3	768.4	760.8	760.8	753.0
70°	741.5	718.4	710.7	714.6	699.3
72.5°	687.7	664.7	653.2	653.2	637.8
75°	626.3	603.2	587.8	584.0	568.7
77.5°	557.1	537.9	522.5	507.2	499.5
80°	484.1	468.7	449.5	438.0	426.5
82.5°	407.2	391.9	380.3	395.8	338.1
85°	318.9	303.5	288.2	311.2	242.0
87.5°	234.4	226.7	211.3	184.4	161.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)