

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: P265691

Luminaire Tested: **ARCH-L-AF72-220-D-U-T2U-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265691  
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-AF72-220-D-U-T2U-7027  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 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: 22562.3 lumens  
Efficiency: N/A  
Efficacy: 101.6 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

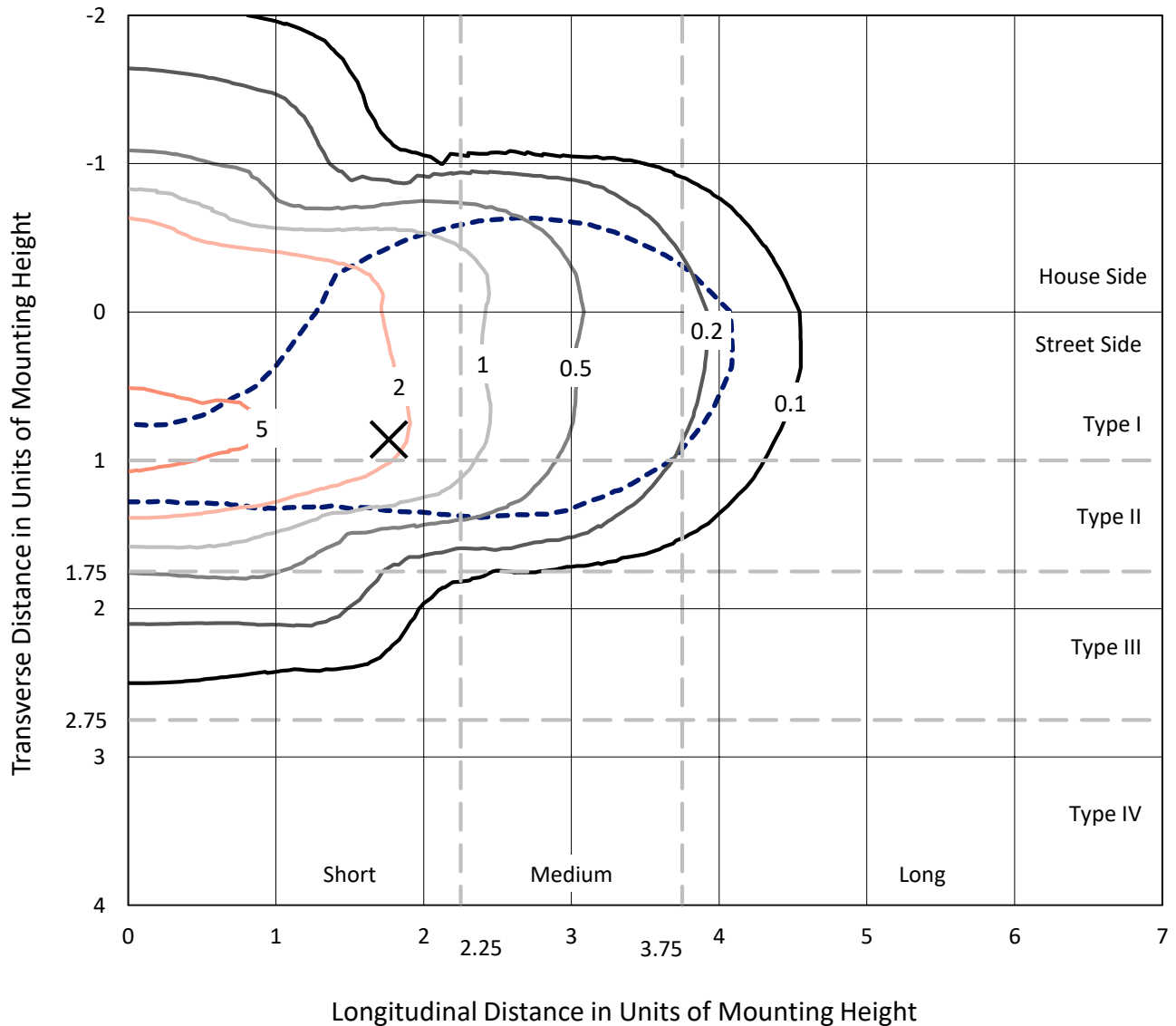
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

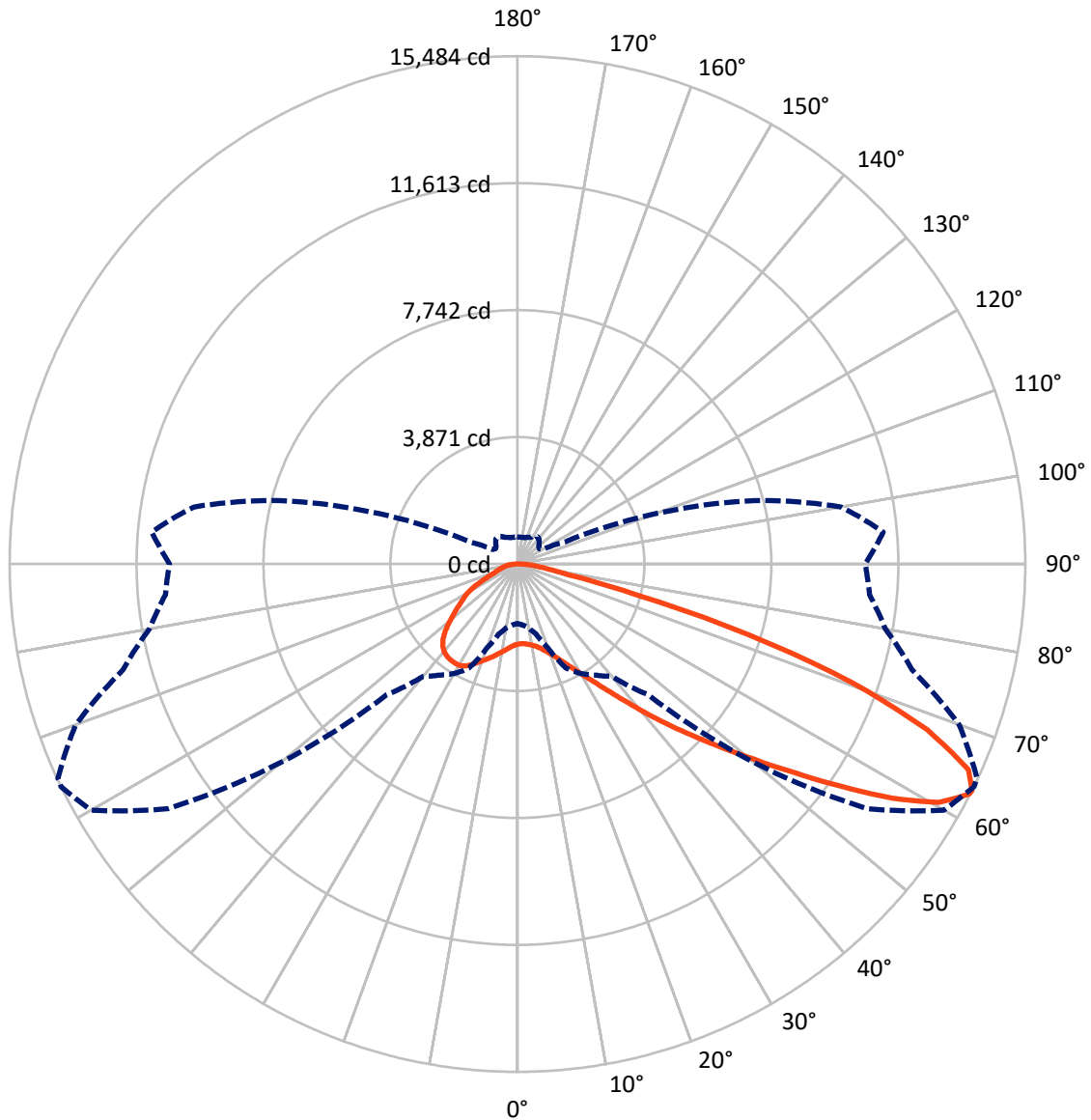


Based on 25 foot mounting height. Maximum calculated value = 6.3 fc  
 Type II - Short - Semi-Cutoff

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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	6632.5	0.0	6632.5
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	15929.8	0.0	15929.8
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	22562.3	0.0	22562.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	244.0	1.1
10°-20°	812.6	3.6
20°-30°	1525.3	6.8
30°-40°	2556.6	11.3
40°-50°	4289.4	19.0
50°-60°	5437.7	24.1
60°-70°	4796.8	21.3
70°-80°	2476.2	11.0
80°-90°	423.7	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°	22562.3	100.0
0°-180°	22562.3	100.0



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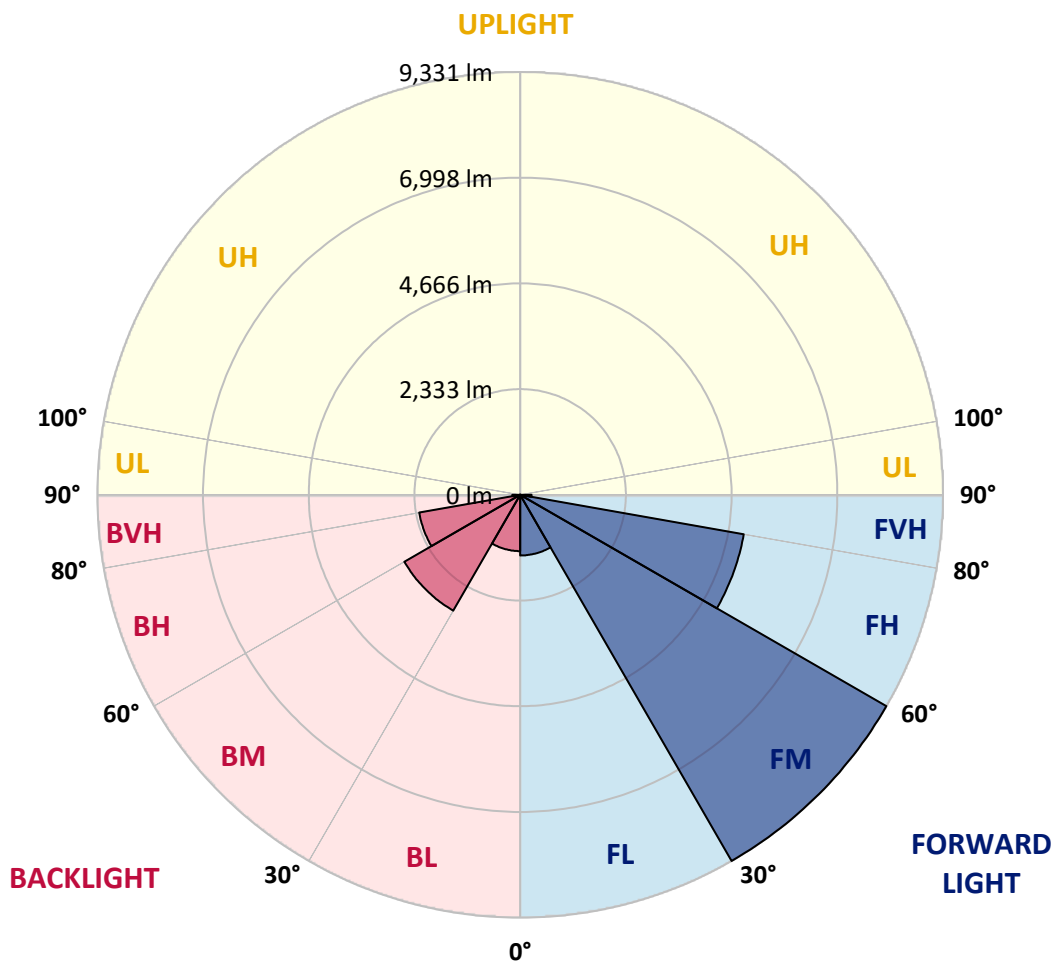
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1339.2	5.9			
FM	(30°-60°)	9331.2	41.4			
FH	(60°-80°)	5010.1	22.2			G3/7500
FVH	(80°-90°)	249.4	1.1			G3/500
BL	(0°-30°)	1242.7	5.5	B3/2500		
BM	(30°-60°)	2952.5	13.1	B3/5000		
BH	(60°-80°)	2263.0	10.0	B3/2500		G3/2500
BVH	(80°-90°)	174.4	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°	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5
2.5°	2428.4	2424.6	2424.6	2424.6	2424.6	2420.8	2424.6	2432.2	2428.4	2424.6	2432.2
5°	2435.9	2432.2	2432.2	2432.2	2435.9	2432.2	2435.9	2447.3	2439.6	2439.6	2447.3
7.5°	2454.8	2451.0	2454.8	2451.0	2451.0	2451.0	2454.8	2466.1	2462.3	2466.1	2477.4
10°	2477.4	2477.4	2477.4	2477.4	2477.4	2477.4	2485.0	2492.5	2496.4	2500.2	2515.3
12.5°	2545.4	2545.4	2545.4	2541.7	2541.7	2530.3	2545.4	2553.1	2560.6	2568.2	2579.5
15°	2688.9	2688.9	2685.3	2670.1	2670.1	2647.5	2651.2	2655.0	2655.0	2662.5	2670.1
17.5°	2877.8	2874.0	2866.5	2855.2	2840.0	2813.6	2806.0	2798.5	2787.1	2783.4	2783.4
20°	3142.2	3138.4	3123.2	3093.0	3074.2	3032.7	3002.4	2972.2	2961.0	2941.9	2938.3
22.5°	3519.7	3519.7	3489.6	3444.3	3429.2	3342.4	3255.5	3191.3	3168.6	3142.2	3142.2
25°	3976.7	3973.1	3931.5	3878.6	3814.5	3723.7	3618.1	3531.1	3474.6	3414.1	3391.5
27.5°	4524.5	4513.1	4456.4	4392.3	4271.4	4158.1	4033.5	3942.8	3844.7	3769.1	3701.0
30°	5166.4	5155.2	5056.9	4936.0	4811.4	4698.1	4516.9	4407.4	4252.4	4161.8	4086.3
32.5°	5910.5	5899.1	5721.7	5604.5	5472.4	5332.6	5117.4	4943.6	4747.3	4618.8	4513.1
35°	6858.4	6813.0	6560.1	6397.5	6190.0	6050.2	5823.6	5589.4	5359.1	5177.8	5023.0
37.5°	7881.9	7829.0	7606.2	7364.5	7160.5	6990.6	6669.6	6375.0	6103.1	5853.7	5661.2
40°	8950.6	8810.8	8573.0	8395.5	8255.8	8093.3	7757.3	7447.6	7020.8	6741.3	6450.5
42.5°	9690.8	9554.9	9388.7	9271.6	9203.7	9079.0	8890.3	8622.1	8240.6	8248.1	7481.5
45°	10178.1	9977.8	9864.6	9872.2	9898.6	9898.6	9864.6	9823.1	9656.9	9770.1	9128.1
47.5°	10004.3	9872.2	9800.4	9951.5	10140.2	10329.2	10548.2	10786.0	11058.0	11379.0	10589.7
50°	8984.7	9033.7	9067.8	9388.7	9792.9	10223.4	10725.7	11375.2	12134.3	12281.6	11900.1
52.5°	7356.8	7462.6	7575.9	8066.9	8599.5	9343.5	10223.4	11295.9	12315.7	12916.1	12878.3
55°	5714.1	5846.2	6088.0	6454.3	6877.2	7579.7	8667.3	10321.5	11911.5	12867.1	13448.6
57.5°	4067.4	4260.0	4577.4	5087.1	5461.1	5857.6	6662.0	8497.4	10238.5	12017.3	13354.3
60°	2704.1	2794.6	3002.4	3636.9	4267.6	4683.0	5253.3	5918.0	7341.8	9792.9	12379.8
62.5°	1918.5	1979.0	2107.3	2394.4	2964.6	3716.2	4059.9	4365.9	4822.8	6299.5	9940.1
63°	1812.8	1865.7	1971.4	2213.2	2726.7	3504.7	3856.0	4135.3	4467.8	5634.8	9403.8
65°	1503.1	1525.9	1582.5	1699.6	1975.3	2621.0	3195.0	3365.1	3421.6	3621.7	5891.5
67.5°	1268.9	1284.0	1302.9	1336.9	1446.5	1744.8	2383.1	2598.3	2534.1	2398.1	2911.8
70°	1102.8	1114.1	1144.4	1185.9	1223.6	1299.2	1639.0	1960.1	1888.2	1703.2	1782.5
72.5°	880.0	898.8	932.8	1004.6	1080.1	1178.2	1261.4	1461.5	1416.3	1238.8	1257.6
75°	694.8	706.2	736.4	789.3	861.0	974.4	1136.7	1204.7	1080.1	913.9	913.9
77.5°	551.4	562.7	589.2	630.7	676.1	755.4	868.7	1046.2	970.6	687.4	683.6
80°	415.5	426.8	453.1	491.0	536.3	592.9	661.0	740.3	891.3	642.0	513.7
82.5°	306.0	309.6	355.0	381.4	396.5	441.8	498.5	543.8	611.8	592.9	457.0
85°	230.3	226.6	256.8	275.7	279.5	290.8	324.7	370.1	400.4	385.3	355.0
87.5°	128.4	113.2	132.2	151.1	151.1	154.9	162.5	188.9	215.2	207.7	188.9
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°	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5
2.5°	2432.2	2432.2	2428.4	2428.4	2432.2	2432.2	2428.4	2439.6	2447.3	2447.3	2451.0
5°	2443.5	2447.3	2443.5	2443.5	2447.3	2447.3	2451.0	2462.3	2473.8	2481.3	2492.5
7.5°	2477.4	2481.3	2477.4	2477.4	2481.3	2485.0	2492.5	2507.7	2515.3	2530.3	2549.2
10°	2515.3	2518.9	2515.3	2518.9	2522.8	2526.6	2537.9	2549.2	2560.6	2575.7	2606.0
12.5°	2583.3	2586.9	2579.5	2583.3	2594.6	2594.6	2602.1	2609.7	2628.5	2647.5	2677.7
15°	2677.7	2677.7	2670.1	2673.8	2685.3	2685.3	2688.9	2696.5	2719.2	2741.8	2772.1
17.5°	2787.1	2794.6	2790.9	2794.6	2802.3	2806.0	2806.0	2813.6	2828.8	2843.9	2874.0
20°	2934.5	2938.3	2930.7	2938.3	2945.8	2938.3	2930.7	2926.9	2934.5	2941.9	2975.9
22.5°	3134.6	3130.9	3112.0	3112.0	3112.0	3096.8	3078.0	3055.3	3055.3	3043.9	3070.3
25°	3372.5	3361.2	3334.8	3338.6	3312.1	3289.5	3255.5	3221.5	3191.3	3179.9	3183.8
27.5°	3652.0	3629.3	3602.9	3595.3	3569.0	3527.4	3470.7	3406.6	3357.4	3319.6	3312.1
30°	4003.2	3954.2	3908.9	3901.2	3859.7	3791.7	3701.0	3614.2	3531.1	3467.0	3444.3
32.5°	4418.7	4343.1	4271.4	4263.9	4195.9	4105.3	3995.8	3874.7	3753.9	3652.0	3602.9
35°	4905.9	4792.5	4724.5	4705.7	4607.4	4494.2	4373.4	4218.5	4048.5	3905.0	3814.5
37.5°	5498.7	5381.7	5264.6	5268.4	5132.5	5000.2	4837.9	4649.1	4433.8	4233.6	4105.3
40°	6231.5	6065.3	5914.3	5880.2	5763.2	5578.0	5400.6	5181.6	4917.2	4652.9	4467.8
42.5°	7119.0	6847.1	6639.4	6609.1	6454.3	6227.7	6012.4	5721.7	5453.5	5132.5	4909.6
45°	8127.3	7693.1	7443.7	7398.4	7149.3	6918.8	6658.1	6348.5	6020.0	5657.4	5393.1
47.5°	9381.2	8761.8	8338.8	8263.2	7919.5	7617.4	7345.6	7001.8	6609.1	6205.0	5914.3
50°	10842.7	9928.7	9358.5	9241.5	8780.8	8425.7	8078.3	7647.7	7228.5	6805.5	6469.5
52.5°	12308.0	11326.1	10567.0	10423.6	9743.7	9267.9	8810.8	8380.4	7885.6	7466.4	7085.0
55°	13486.3	12833.0	11953.0	11753.0	10778.6	10132.7	9532.3	9041.4	8550.2	8218.0	7768.5
57.5°	14196.5	14162.4	13467.5	13191.8	11858.6	10903.2	10234.7	9675.7	9199.9	9060.1	8463.4
60°	14177.5	15057.5	14759.2	14551.5	12950.1	11692.5	10823.9	10219.6	9826.7	9985.4	9162.2
62.5°	13312.6	15095.3	15454.0	15397.4	14113.4	12326.9	11307.2	10684.1	10476.5	10948.5	9887.3
63°	12999.3	15008.4	15484.3	15461.5	14336.1	12447.9	11390.4	10774.8	10604.9	11194.0	10019.4
65°	10986.2	14249.3	15117.8	15219.9	14815.7	12863.2	11582.9	11005.1	10986.2	11741.6	10332.9
67.5°	6696.0	12040.0	13467.5	13663.8	14139.7	12995.4	11473.4	10925.8	11197.7	11820.8	10238.5
70°	2862.7	7946.0	10823.9	11141.0	12304.4	12338.3	11160.0	10601.1	11148.7	11201.5	9566.2
72.5°	1695.7	3746.4	7368.3	8059.4	9736.2	10616.1	10442.3	10034.5	10502.9	9838.1	8146.2
75°	1200.9	1752.4	3742.7	4479.0	6779.1	8104.7	8773.1	8962.0	8943.0	7802.6	6114.4
77.5°	861.0	1125.4	1578.6	1861.8	3784.2	5204.2	6020.0	6571.3	6393.9	5223.0	3769.1
80°	600.4	778.0	966.8	1027.2	1756.1	2673.8	3172.4	3414.1	3308.4	2609.7	1688.2
82.5°	434.3	509.9	623.2	661.0	883.8	1235.0	1469.1	1295.4	1242.5	963.1	728.9
85°	336.1	328.6	389.0	404.1	517.5	645.8	661.0	513.7	449.4	400.4	407.9
87.5°	238.0	203.9	207.7	215.2	268.1	343.7	336.1	211.6	181.3	192.5	219.0
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°	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5	2443.5
2.5°	2458.7	2462.3	2469.9	2473.8	2481.3	2481.3	2488.8	2492.5	2500.2	2507.7	2511.5
5°	2503.9	2515.3	2530.3	2537.9	2553.1	2564.3	2579.5	2586.9	2602.1	2613.3	2628.5
7.5°	2571.8	2590.8	2609.7	2632.4	2655.0	2673.8	2688.9	2707.9	2734.4	2753.1	2764.5
10°	2636.0	2662.5	2696.5	2722.9	2757.0	2783.4	2806.0	2840.0	2870.3	2896.7	2911.8
12.5°	2719.2	2753.1	2787.1	2828.8	2874.0	2908.1	2941.9	2987.4	3028.8	3059.1	3074.2
15°	2817.4	2858.9	2896.7	2945.8	2998.6	3043.9	3093.0	3142.2	3172.4	3172.4	3164.8
17.5°	2919.3	2953.4	2998.6	3055.3	3127.1	3183.8	3210.2	3217.6	3206.4	3179.9	3161.0
20°	3021.3	3051.5	3100.6	3168.6	3244.0	3255.5	3229.0	3195.0	3161.0	3115.7	3085.5
22.5°	3104.5	3146.0	3221.5	3300.8	3304.5	3240.4	3168.6	3112.0	3059.1	3006.2	2949.6
25°	3202.5	3259.2	3361.2	3391.5	3293.2	3172.4	3070.3	2987.4	2900.4	2813.6	2749.4
27.5°	3323.5	3406.6	3508.5	3421.6	3229.0	3059.1	2919.3	2794.6	2681.4	2560.6	2488.8
30°	3451.8	3580.3	3602.9	3376.3	3119.5	2900.4	2711.7	2522.8	2379.3	2269.7	2228.2
32.5°	3606.7	3772.9	3636.9	3297.0	2972.2	2685.3	2432.2	2205.6	2084.6	2016.8	1997.8
35°	3840.9	3976.7	3655.8	3214.0	2802.3	2428.4	2111.1	1929.9	1854.3	1808.9	1786.4
37.5°	4176.9	4173.2	3652.0	3112.0	2606.0	2148.9	1854.3	1726.0	1665.5	1627.6	1586.1
40°	4569.8	4324.3	3629.3	2964.6	2341.5	1880.8	1676.9	1556.0	1499.4	1453.9	1404.9
42.5°	4958.7	4426.2	3565.2	2745.6	2012.9	1688.2	1548.4	1438.8	1378.4	1329.4	1261.4
45°	5294.9	4467.8	3440.5	2443.5	1718.4	1537.1	1465.3	1371.0	1299.2	1223.6	1170.8
47.5°	5559.3	4460.3	3240.4	2088.5	1522.0	1431.4	1397.4	1333.2	1246.3	1151.8	1083.8
50°	5782.0	4403.6	2968.4	1775.1	1389.8	1336.9	1325.5	1306.8	1167.0	1087.7	1046.2
52.5°	5985.9	4320.5	2677.7	1563.5	1276.5	1231.1	1253.9	1235.0	1136.7	1068.9	1027.2
55°	6265.5	4263.9	2390.6	1401.1	1144.4	1133.0	1151.8	1178.2	1117.9	1053.7	1008.3
57.5°	6594.0	4294.1	2171.6	1219.9	1019.7	1027.2	1091.4	1129.2	1098.9	1031.1	985.7
60°	6971.7	4384.6	1979.0	1046.2	917.7	936.7	1031.1	1083.8	1080.1	1000.8	947.9
62.5°	7394.7	4479.0	1673.1	913.9	830.8	861.0	959.3	1027.2	1038.6	970.6	906.4
63°	7477.8	4486.7	1593.8	887.5	815.8	849.7	940.3	1012.1	1027.2	963.1	898.8
65°	7681.6	4418.7	1284.0	815.8	755.4	793.2	883.8	947.9	978.2	921.5	868.7
67.5°	7511.7	3863.5	966.8	728.9	706.2	732.7	812.0	872.4	898.8	872.4	819.6
70°	6869.7	2809.8	755.4	649.6	653.3	672.2	732.7	789.3	819.6	812.0	762.9
72.5°	5532.8	1593.8	630.7	581.7	592.9	615.6	657.1	710.0	736.4	732.7	698.7
75°	3644.5	815.8	532.5	521.1	528.7	547.5	577.8	619.4	649.6	645.8	630.7
77.5°	1805.2	566.6	457.0	460.7	464.6	479.6	502.3	540.1	558.9	562.7	558.9
80°	743.9	441.8	392.7	396.5	400.4	411.7	426.8	460.7	472.1	479.6	483.4
82.5°	445.6	336.1	313.5	321.1	324.7	336.1	347.5	377.6	389.0	400.4	400.4
85°	294.6	234.2	226.6	234.2	241.7	249.3	253.1	271.8	290.8	306.0	313.5
87.5°	158.6	139.7	136.0	139.7	139.7	147.3	154.9	173.7	196.4	211.6	219.0
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°	2443.5	2443.5	2443.5	2443.5	2443.5
2.5°	2503.9	2507.7	2503.9	2507.7	2511.5
5°	2628.5	2636.0	2632.4	2632.4	2647.5
7.5°	2772.1	2787.1	2787.1	2794.6	2802.3
10°	2926.9	2941.9	2953.4	2953.4	2964.6
12.5°	3081.7	3089.4	3100.6	3100.6	3100.6
15°	3161.0	3157.3	3153.5	3149.6	3149.6
17.5°	3149.6	3134.6	3127.1	3119.5	3123.2
20°	3066.6	3040.3	3032.7	3021.3	3028.8
22.5°	2923.2	2885.4	2870.3	2851.4	2858.9
25°	2707.9	2662.5	2655.0	2632.4	2643.6
27.5°	2458.7	2435.9	2432.2	2428.4	2447.3
30°	2224.5	2232.0	2235.8	2243.3	2262.2
32.5°	2009.1	2024.3	2028.1	2031.8	2058.2
35°	1797.7	1778.9	1797.7	1790.1	1812.8
37.5°	1567.4	1552.2	1537.1	1518.2	1533.2
40°	1374.6	1348.3	1302.9	1280.3	1284.0
42.5°	1223.6	1189.6	1151.8	1129.2	1129.2
45°	1125.4	1083.8	1049.8	1034.8	1034.8
47.5°	1049.8	1031.1	1012.1	1000.8	1000.8
50°	1019.7	996.9	985.7	978.2	978.2
52.5°	996.9	974.4	963.1	955.4	947.9
55°	978.2	944.2	932.8	929.0	929.0
57.5°	951.8	921.5	906.4	902.5	902.5
60°	910.2	887.5	872.4	868.7	868.7
62.5°	868.7	845.9	830.8	830.8	830.8
63°	861.0	834.6	823.2	823.2	823.2
65°	827.1	800.7	789.3	789.3	785.6
67.5°	781.7	755.4	747.7	747.7	740.3
70°	728.9	706.2	698.7	702.5	687.4
72.5°	676.1	653.3	642.0	642.0	626.9
75°	615.6	592.9	577.8	574.0	558.9
77.5°	547.5	528.7	513.7	498.5	491.0
80°	475.8	460.7	441.8	430.6	419.1
82.5°	400.4	385.3	373.9	389.0	332.4
85°	313.5	298.3	283.2	306.0	238.0
87.5°	230.3	222.8	207.7	181.3	158.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)