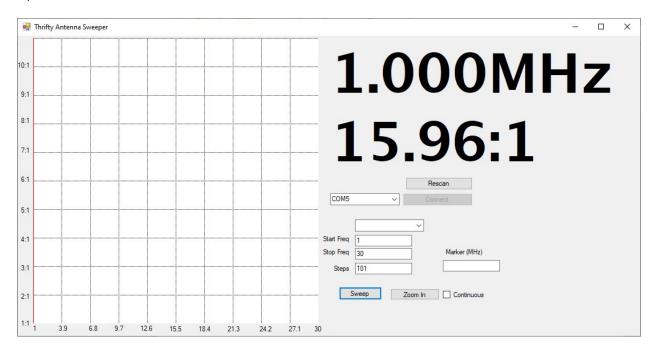
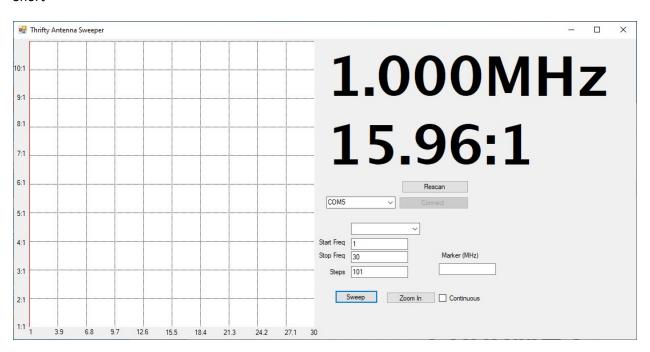
# Antenna Analyzer - PCB Version

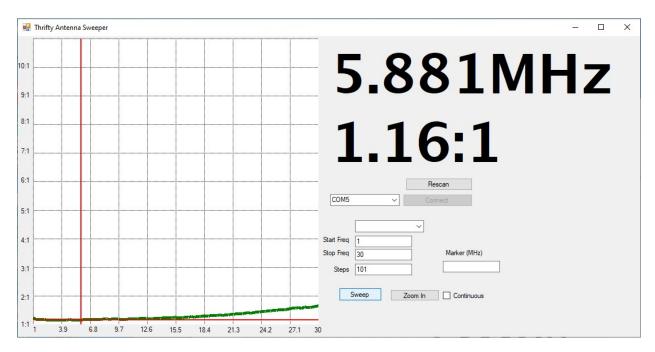
# Open



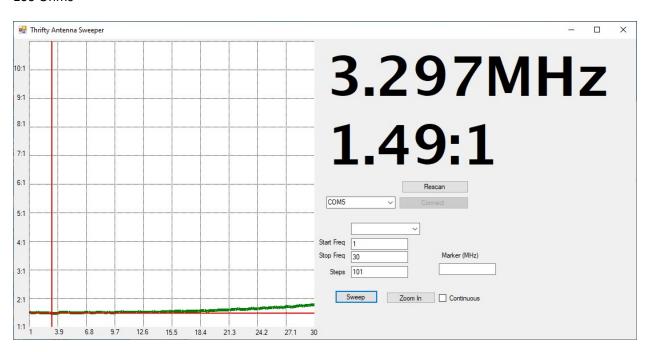
#### Short



#### 51 Ohms



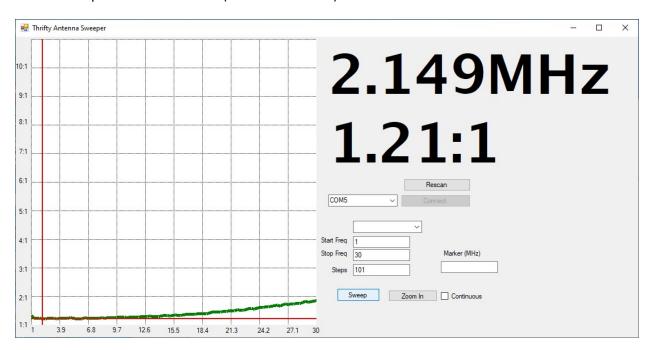
#### 100 Ohms



#### 150 ohms



### 150 ohms in parallel with 51 ohms (so about 28 ohms)



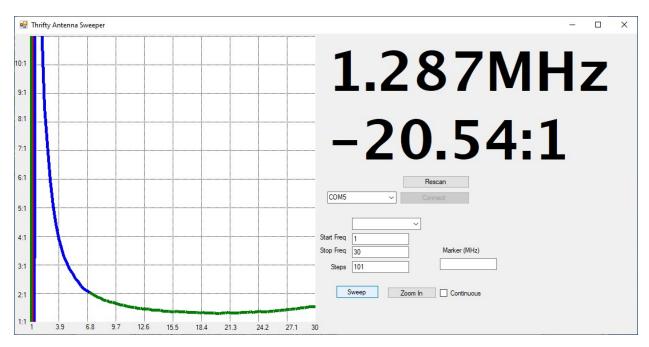
9:1 Unun, open on antenna side (Note that the software seems confused about the smallest SWR and logs a negative SWR instead of calculating the absolute value)



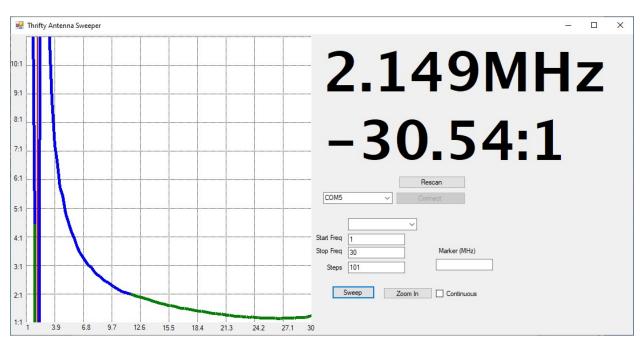
## 9:1 Unun, 51 ohms on antenna side



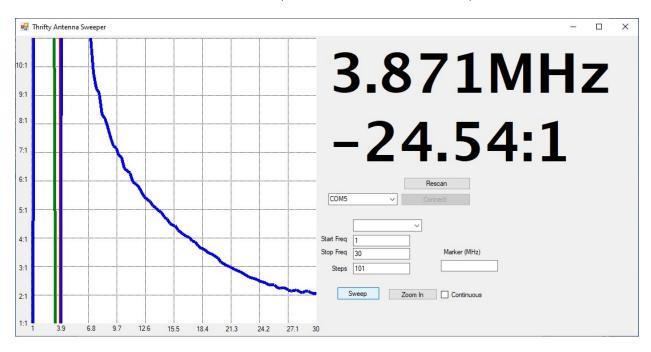
9:1 Unun, 470 ohms on antenna side. (Note that the software got confused because it isn't calculating the absolute value – it is really about 1.3:1 around 20 MHz)



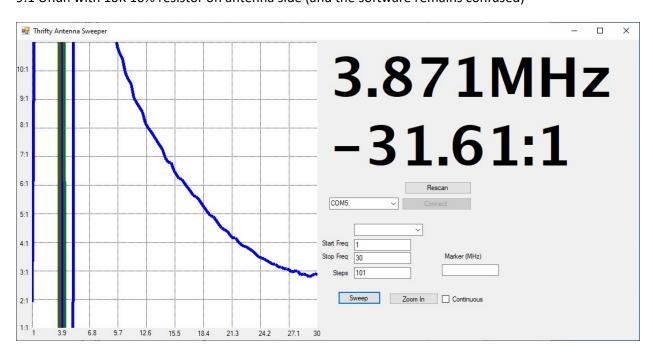
# 9:1 Unun, 1K Ohm Resistor (Again, the software is confused)



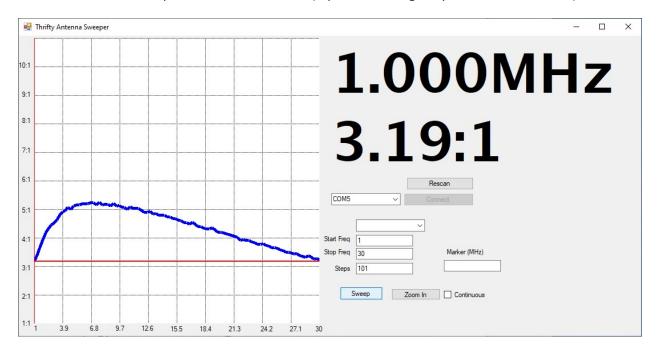
### 9:1 Unun with 4.7K resistor on antenna side (the software remains confused)



# 9:1 Unun with 10K 10% resistor on antenna side (and the software remains confused)



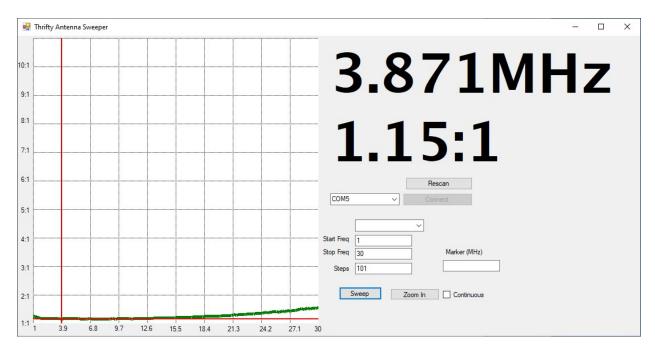
# 9:1 Commerical Balun, open on the antenna side (equivalent to high impedance random wire)



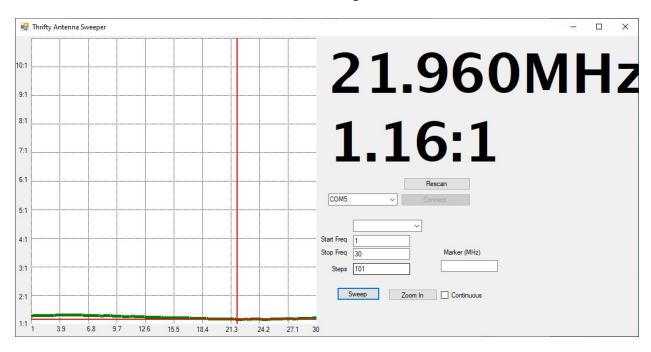
## 9:1 Commerical Balun, 51 ohms on antenna side



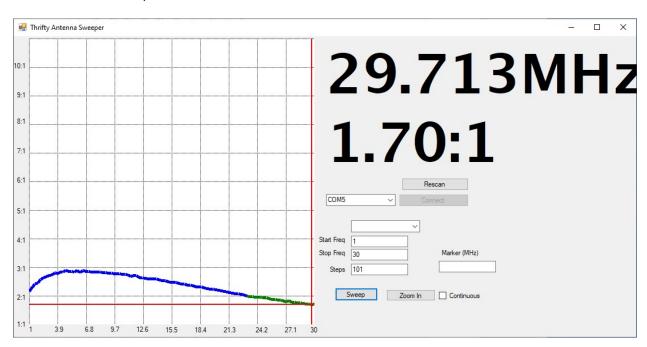
# 9:1 Commercial Balun, 470 Ohms on antenna side – match!



# 9:1 Commercial Balun, 1K Ohms on antenna side – still a good match



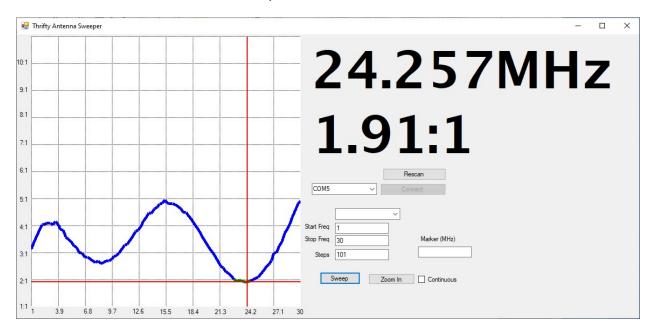
## 9:1 Commercial Balun, 4.7K Ohms on antenna side



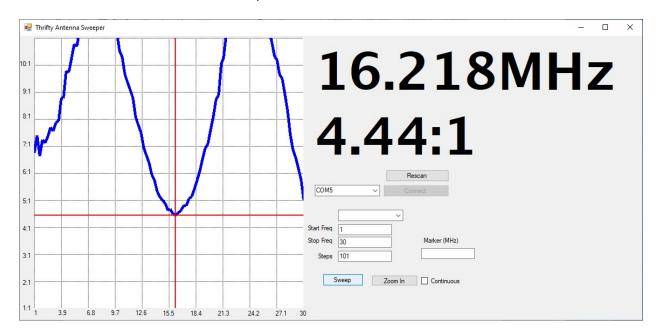
## 9:1 Commercial Balun, 10K Ohms on antenna side – approaching a random wire



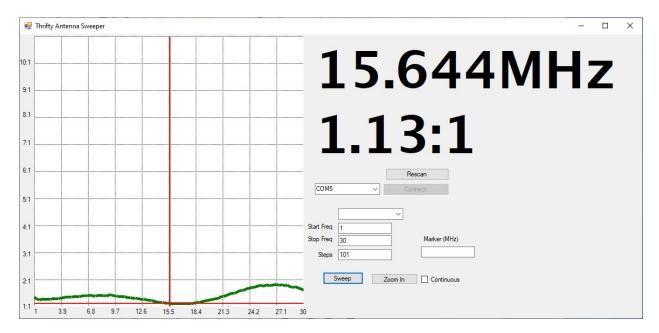
# 20 feet of coax to 9:1 Commercial Balun, open antenna side



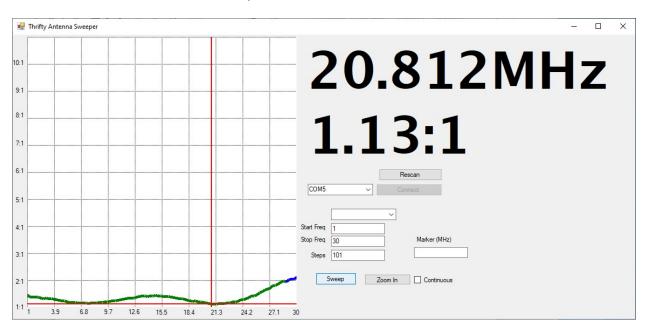
# 20 feet of coax to 9:1 Commercial Balun, 51 ohm resistor on antenna side



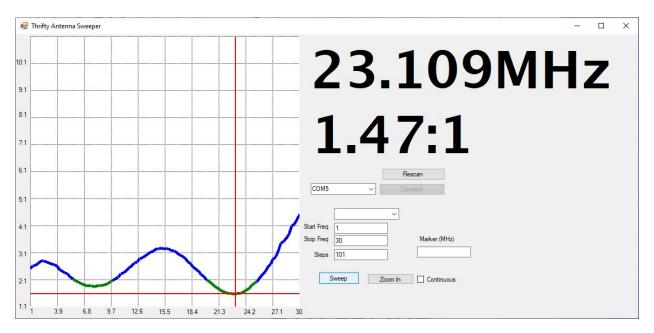
### 20 feet of coax to 9:1 commercial balun, 470 ohm resistor



#### 20 feet of coax to 9:1 commercial balun, 1k ohm resistor



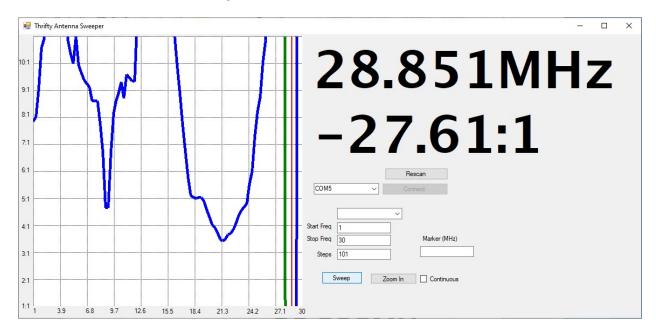
### 20 feet of coax to 9:1 commercial balun, 4.7 K ohm resistor



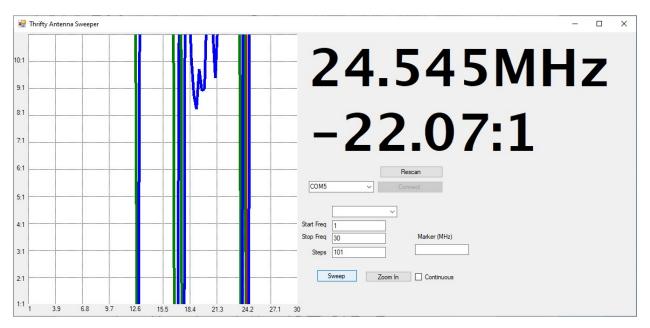
### 20 feet of coax to 9:1 commercial balun, 10K ohm resistor



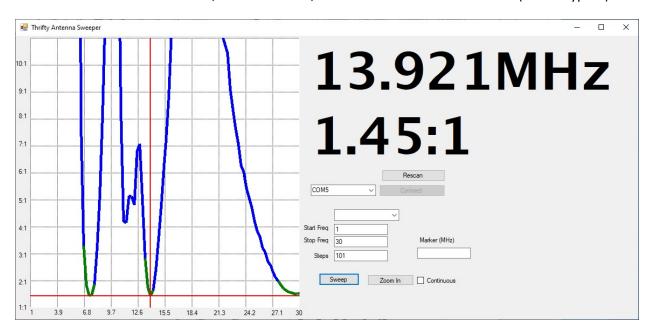
20 feet of coax to 9:1 commercial balun, actual random wire antenna, no ground (as before, it got confused because it isn't calculating an absolute value.)



20 feet of coax to 9:1 commercial balun, random wire antenna with sort-of ground (and confused software)



Thru short coax to antenna tuner, 20 feet of coax, 9:1 commercial balun to antenna (results typical)



Same as above, but inductor on antenna trimmer set for a higher frequency

