The following results are for a breadboard version of the antenna sweeper. Notable: Long leads on several components, long-ish jumpers on proto board, 4" long clip leads to connect to device under test. All likely sekwed the results significantly.



An open circuit yielded these results:

This is a short circuit:



51 ohm resistor, with long leads





51 ohm resistor with shorter leads (but still, the clip leads to it were about 2.5" each:

150 ohm resistor



51 ohm in parallel with 150 ohm (so, about 28 ohms)





9:1 Unun open on the antenna side (possibly hooked up incorrectly)

9:1 Unun 51 ohms on antenna side (possibly hooked up incorrectly)



9:1 Unun 450 ohms on antenna side (possibly hooked up incorrectly)





9:1 Unun 1000 ohms on antenna side (possibly hooked up incorrectly)



9:1 Unun 4700 ohms on antenna side (possibly hooked up incorrectly)

9:1 Unun 10K (10%) ohms on antenna side (possibly hooked up incorrectly)





Commercial 9:1 Balun, Open antenna connection (compare to 10K, below)

Commercial 9:1 Balun, 51 ohms on antenna side



Commercial 9:1 Balun, 470 ohms on antenna side





Commercial 9:1 Balun, 1000 ohms on antenna side

Commercial 9:1 Balun, 4700 ohms on antenna side



Commercial 9:1 Balun, 10k ohms on antenna side





Commercial 9:1 Balun, 20 foot coax, open antenna end

Commercial 9:1 Balun, 20 foot coax, 50 ohm resistor on antenna end



Commercial 9:1 Balun, 20 foot coax, 470 ohm resistor on antenna end





Commercial 9:1 Balun, 20 foot coax, 1000 ohm resistor on antenna end

Commercial 9:1 Balun, 20 foot coax, 4700 ohm resistor on antenna end





