

UR0GT Broadband Avia Antenna Modified by RW4HFN

By: Igor Vakhreev, RW4HFN

I have made the UR0GT Broadband Avia Antenna (see [Picture](#)). The antenna works good like it was stated. However, I have decided a little modified the antenna to meet my requirements. First modification is to make the antenna work at the 430- MHz.

Figure 1 shows design of the antenna. The antenna has almost uniform SWR at 115- 150 MHz and SWR less 2:1 at 422- 442-MHz. Then I modified the antenna that SWR at 145 MHz became 1:1. **Figure 2** shows design of the antenna.

Figure 3 shows Z of the dual band antenna at the 110-150 MHz. **Figure 4** shows SWR of the dual band antenna at the 110-150 MHz. **Figure 5** shows DD of the dual band antenna at the 110-150 MHz. **Figure 6** shows Z of the dual band antenna at the 422-442 MHz. **Figure 7** shows SWR of the dual band antenna at the 422-442 MHz. **Figure 8** shows DD of the dual band antenna at the 422-442 MHz.

Figure 9 shows Z of the antenna intended for 145 MHz at the 110-150 MHz. **Figure 10** shows SWR of the antenna intended for 145 MHz at the 110-150 MHz. **Figure 11** shows DD of the antenna intended for 145 MHz at the 110-150 MHz.

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UR0GT Broadband Avia Antenna Modified by RW4HFN
SWR less 1.75:1 at 110- 150-MHz
SWR 1:1 at 145 MHz

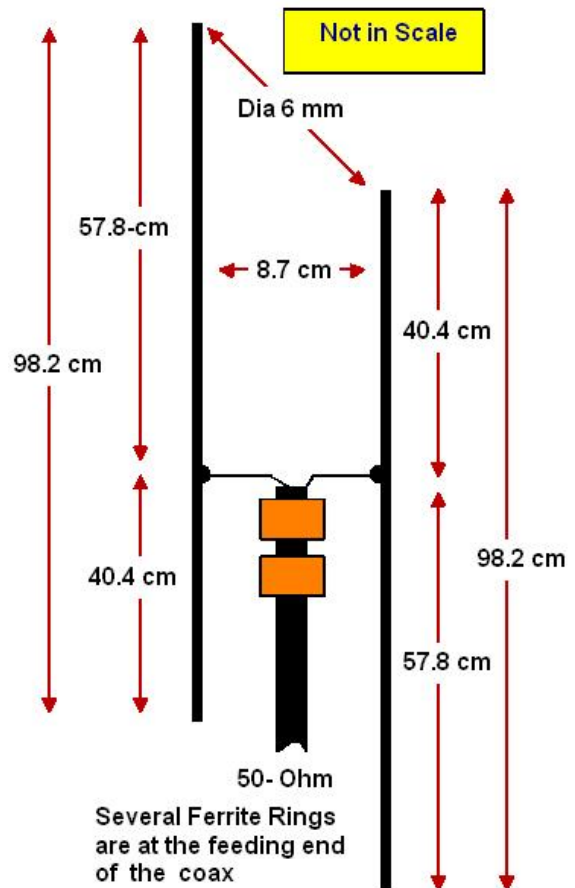


Figure 2 UR0GT Broadband Avia Antenna Modified by RW4HFN for 145 MHz



UR0GT Broadband Avia Antenna Made by RW4HFN

References: UR0GT Broadband Avia Antenna (DEWD): http://www.antentop.org/011/avia_011.htm

MMANA file for UR0GT Broadband Avia antenna modified by RW4HFN for 145 MHz may be downloaded at: http://www.antentop.org/024/RW4HFN_024.htm

MMANA file for UR0GT Broadband Avia Antenna modified by RW4HFN for dual Band operation at 115- 150-MHz and for 430- MHz may be downloaded at: http://www.antentop.org/024/RW4HFN_024.htm

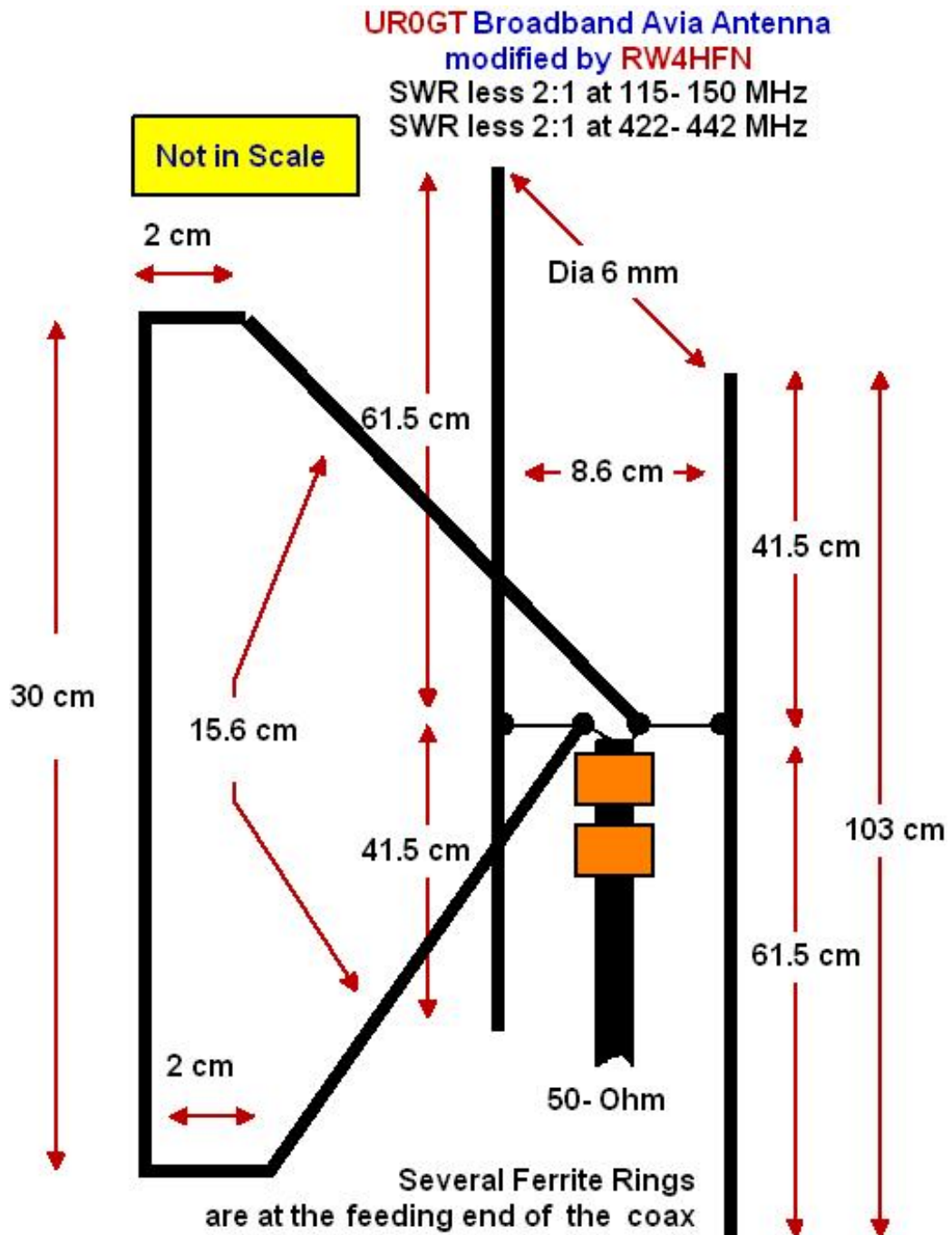


Figure 1 UR0GT Broadband Avia Antenna Modified by RW4HFN for Dual Band operation at 115- 150-MHz and for 430- MHz

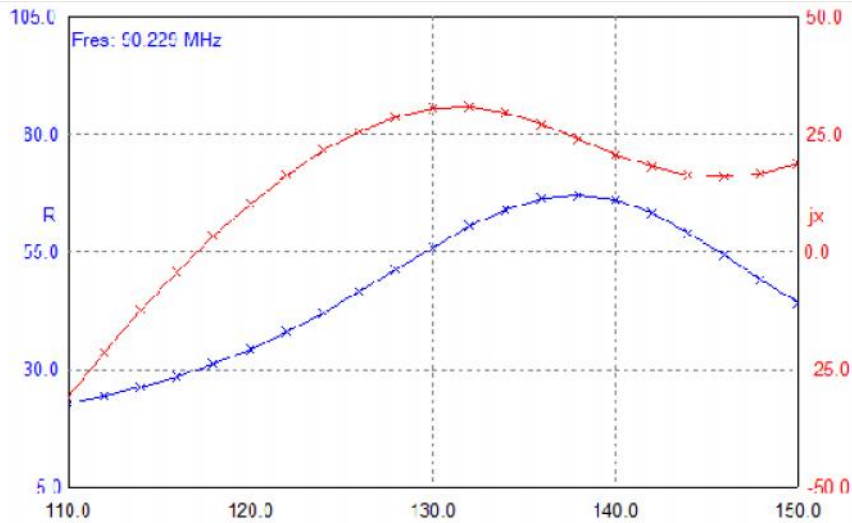


Figure 3 Z of the Dual Band Antenna at the 110-150 MHz

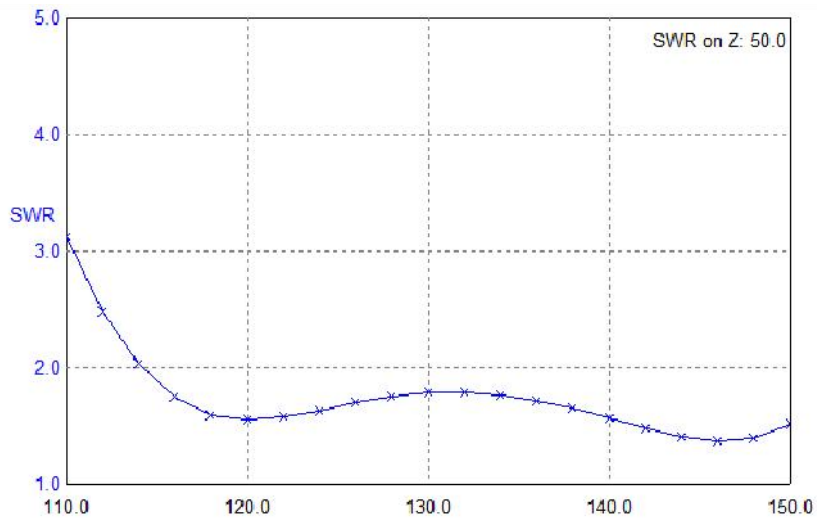


Figure 4 SWR of the Dual Band Antenna at the 110-150 MHz

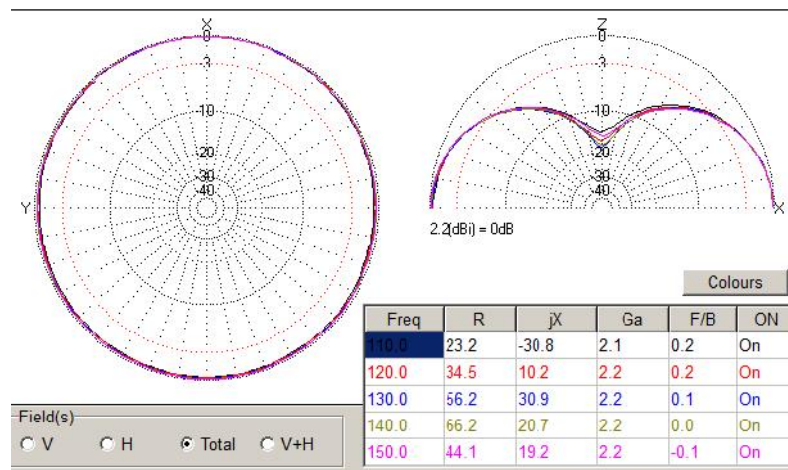


Figure 5 DD of the Dual Band Antenna at the 110-150 MHz

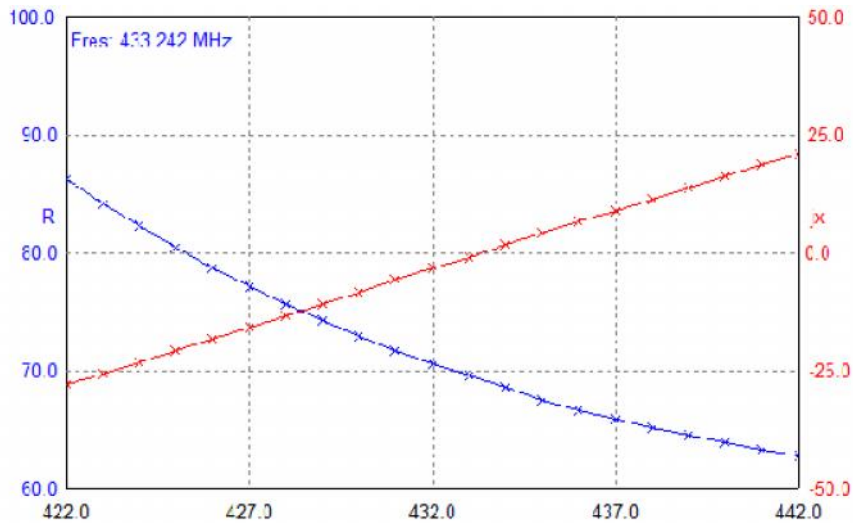


Figure 6 Z of the Dual Band Antenna at the 422-442 MHz

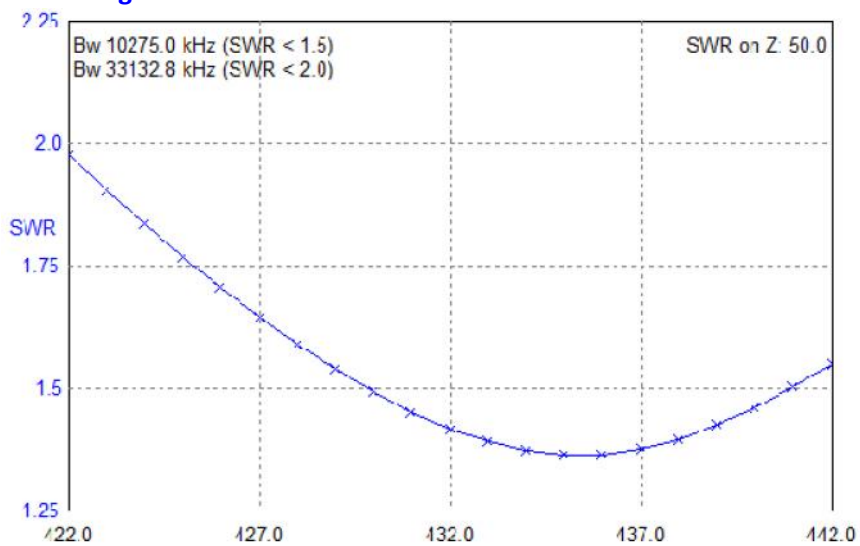


Figure 7 SWR of the Dual Band Antenna at the 422-442 MHz

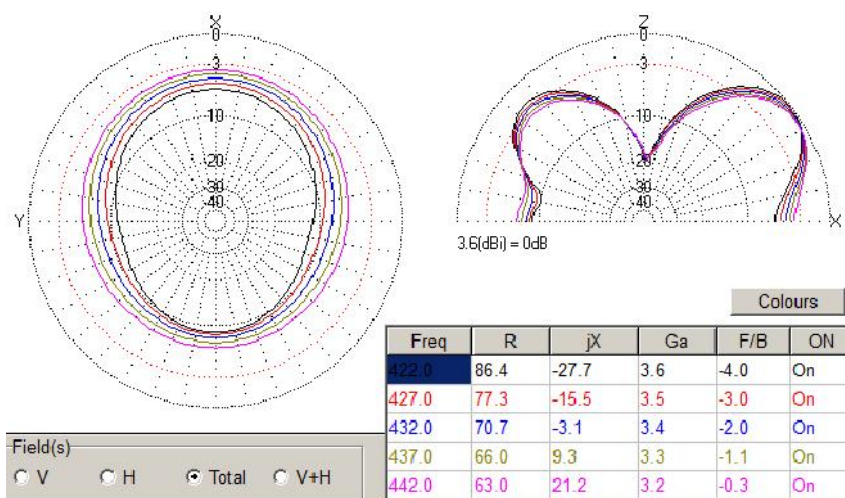


Figure 8 DD of the Dual Band Antenna at the 422-442 MHz

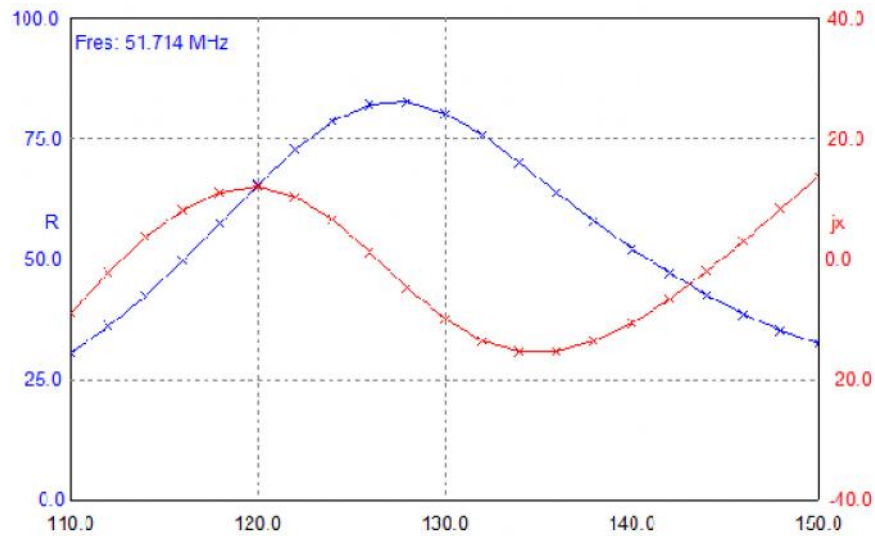


Figure 9 Z of the Antenna Intended for 145 MHz at the 110-150 MHz

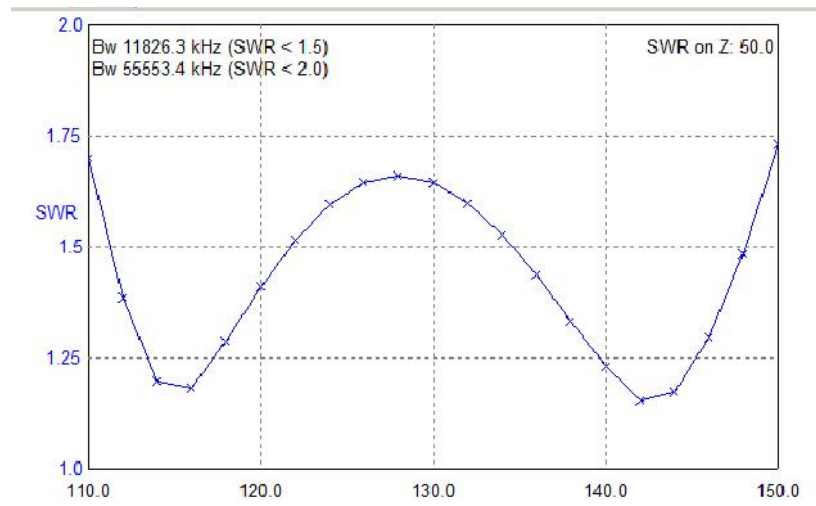


Figure 10 SWR of the Antenna Intended for 145 MHz at the 110-150 MHz

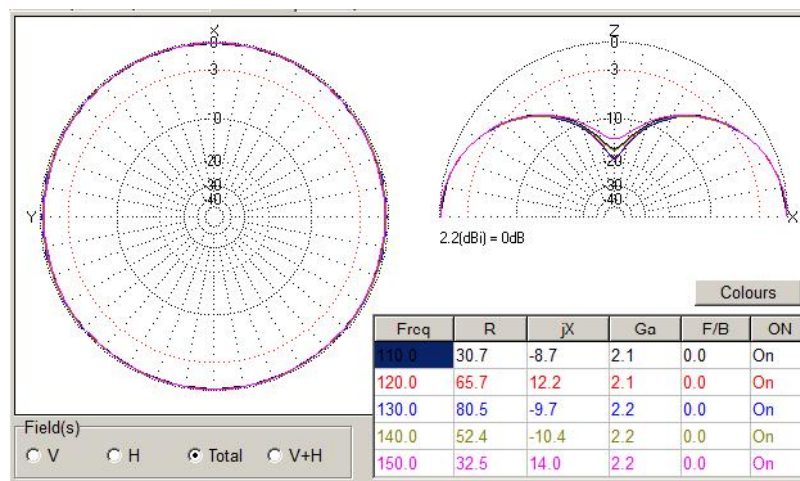


Figure 11 DD of the Antenna Intended for 145 MHz at the 110-150 MHz