

# Broadband Avia Antenna (DEWD)

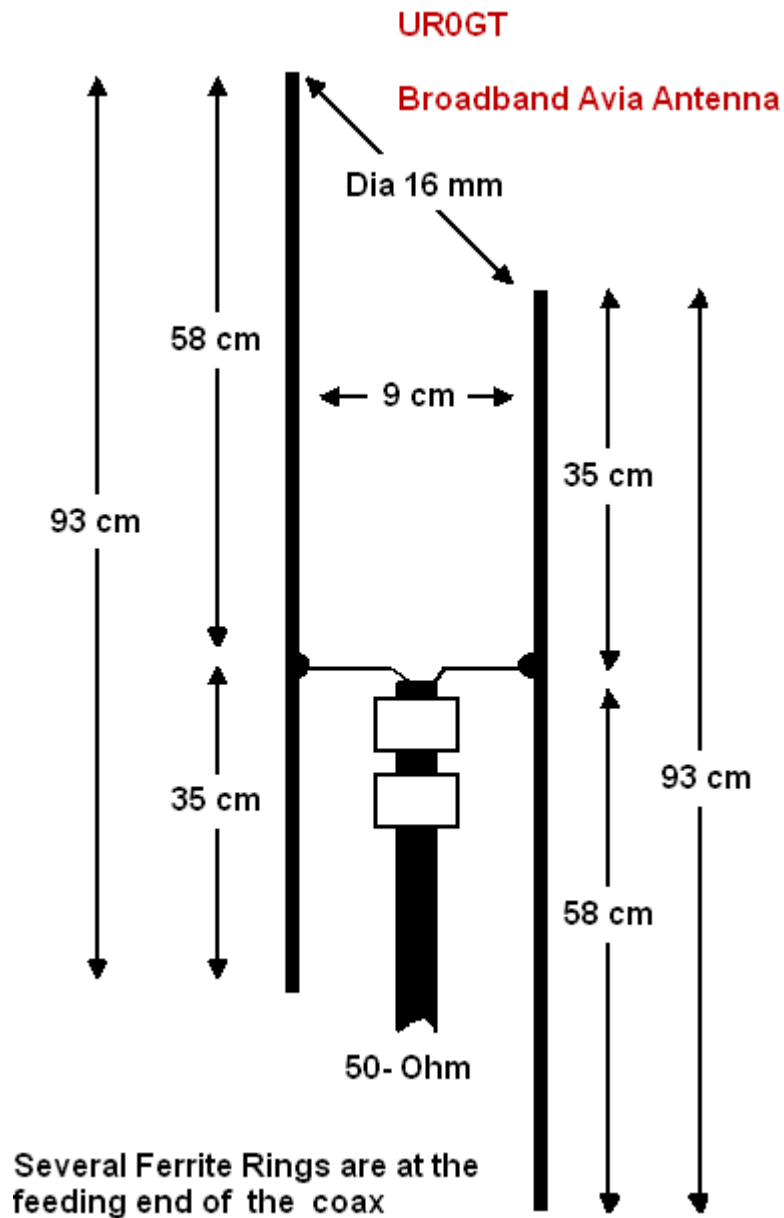
*The publications devoted to memory UR0GT.*

*Credit Line: <http://www.radioscanner.ru/forum/topic25617-3.html>*

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The antenna has SWR less the 2.0:1.0 at the frequencies from 112 up to 165- MHz. Gain and pattern belong to the antenna are almost similar to a vertical lambda/2 dipole. The antenna has three resonance frequencies at the working band (112- 165- MHz). It explains why the antenna is such broadband.

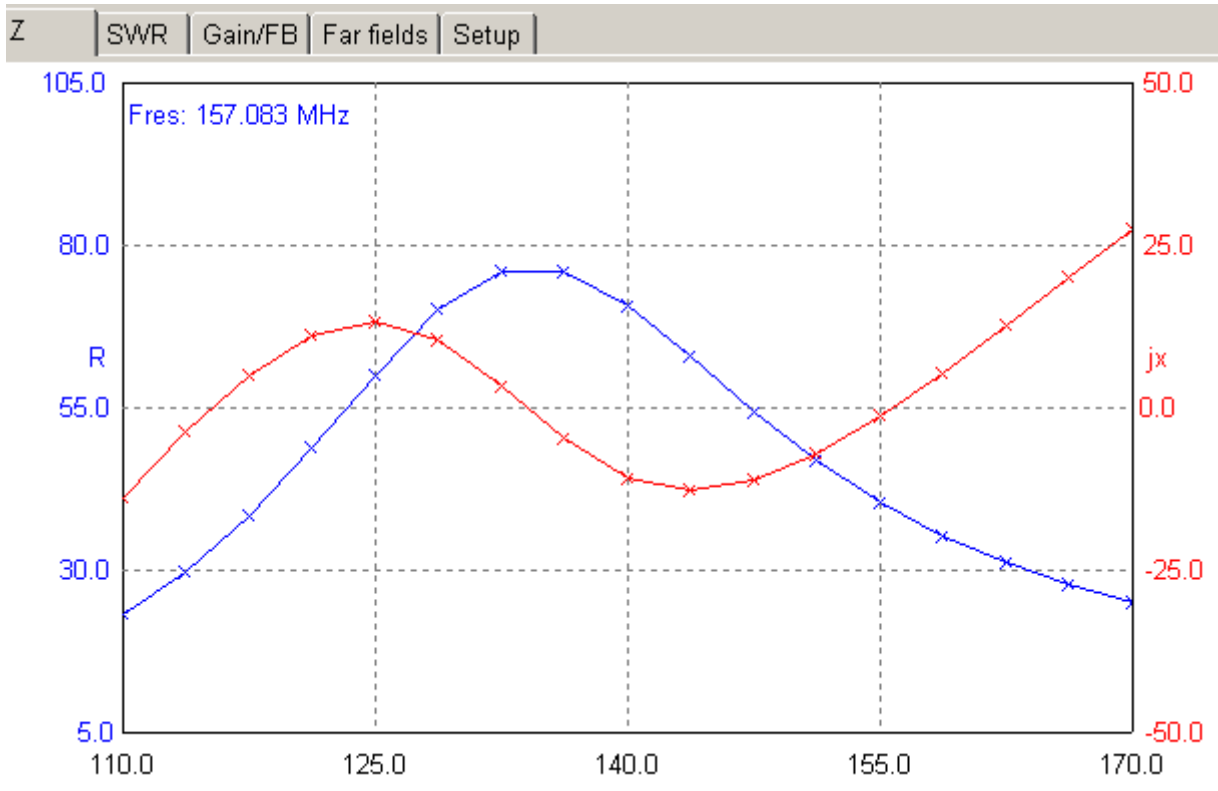
**Design:** Two aluminum tubes, each is in 16-mm diameter, are placed in parallel plane with vertical shift compare to center each other. Crosspiece between the tubes made from a 50- Ohms coaxial cable. The crosspiece is in the plane where the tubes located. **Figure 1** shows the design of the Avia Antenna.



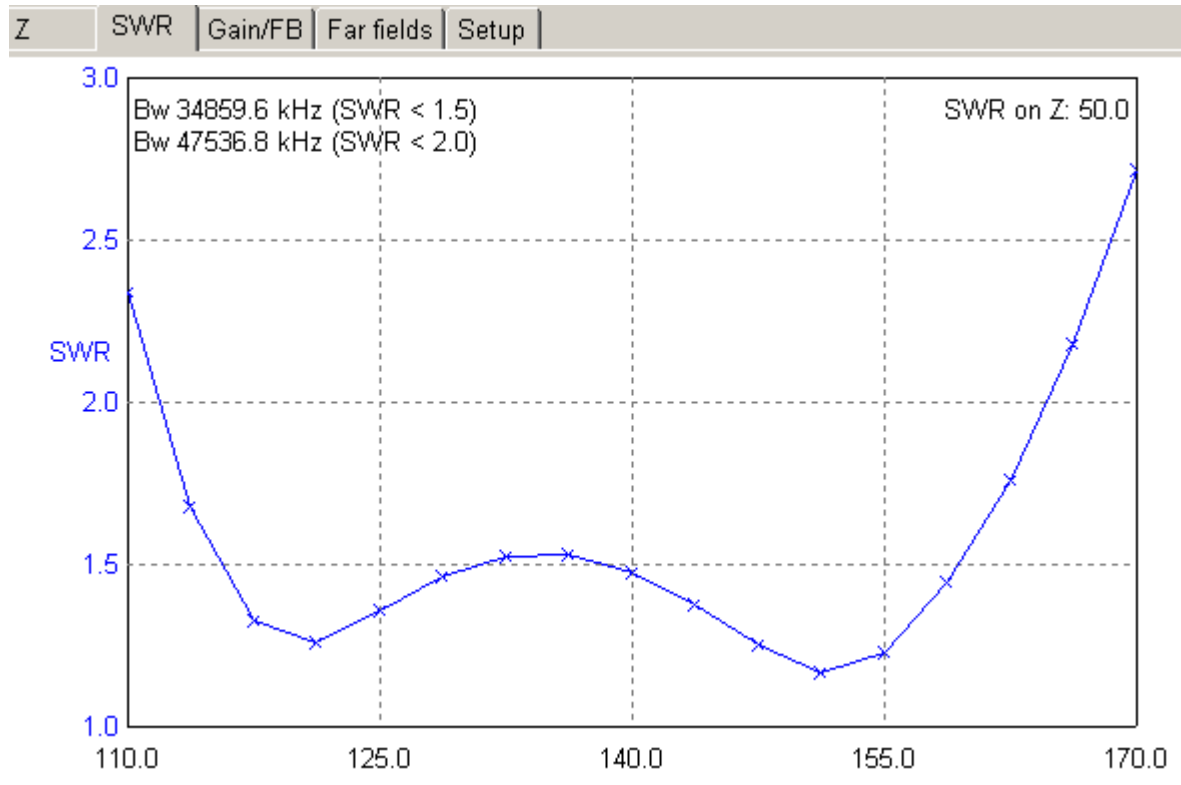
**Figure 1** Design of the Avia Antenna

Antenna may be made from a tube less or more in diameter the 16- mm. However the less diameter the less working range, and visa versa, the more

the diameter is the wider the working range of the antenna. Antenna may be made from L-Bar with width 14- 18- mm.



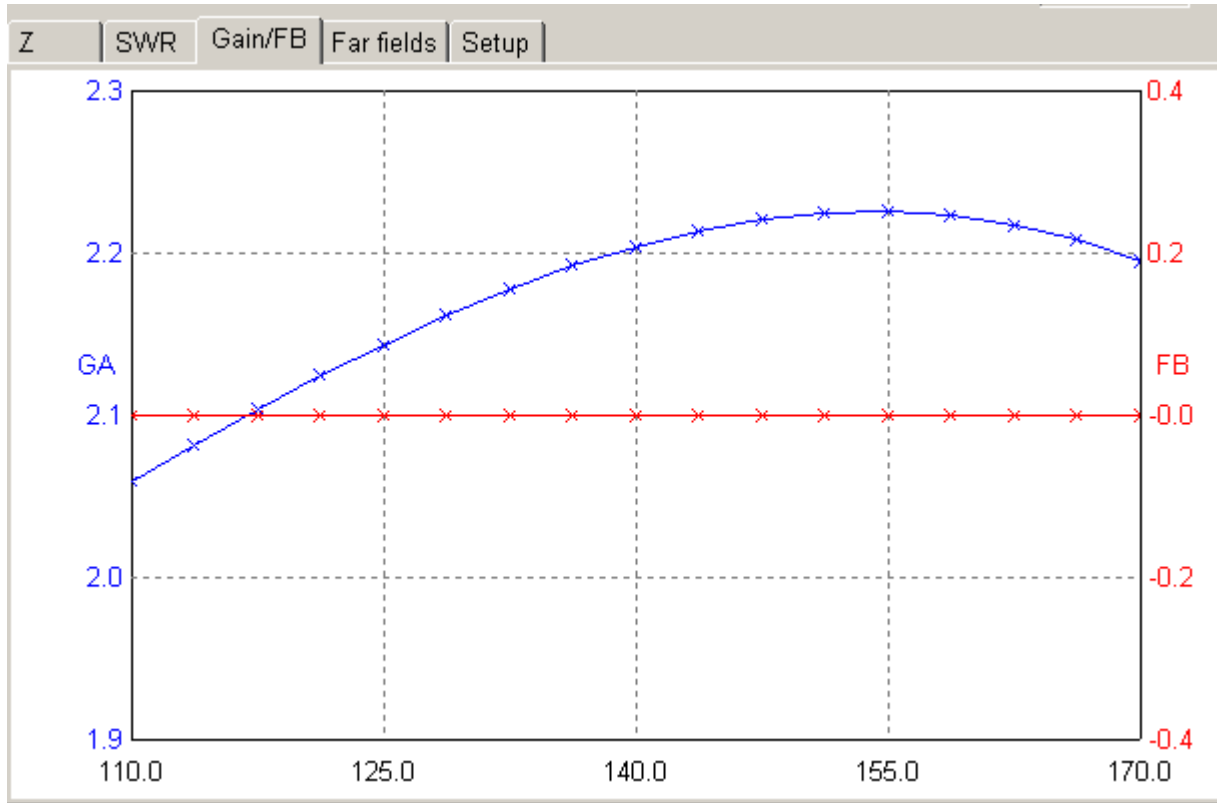
Z of the Avia Antenna



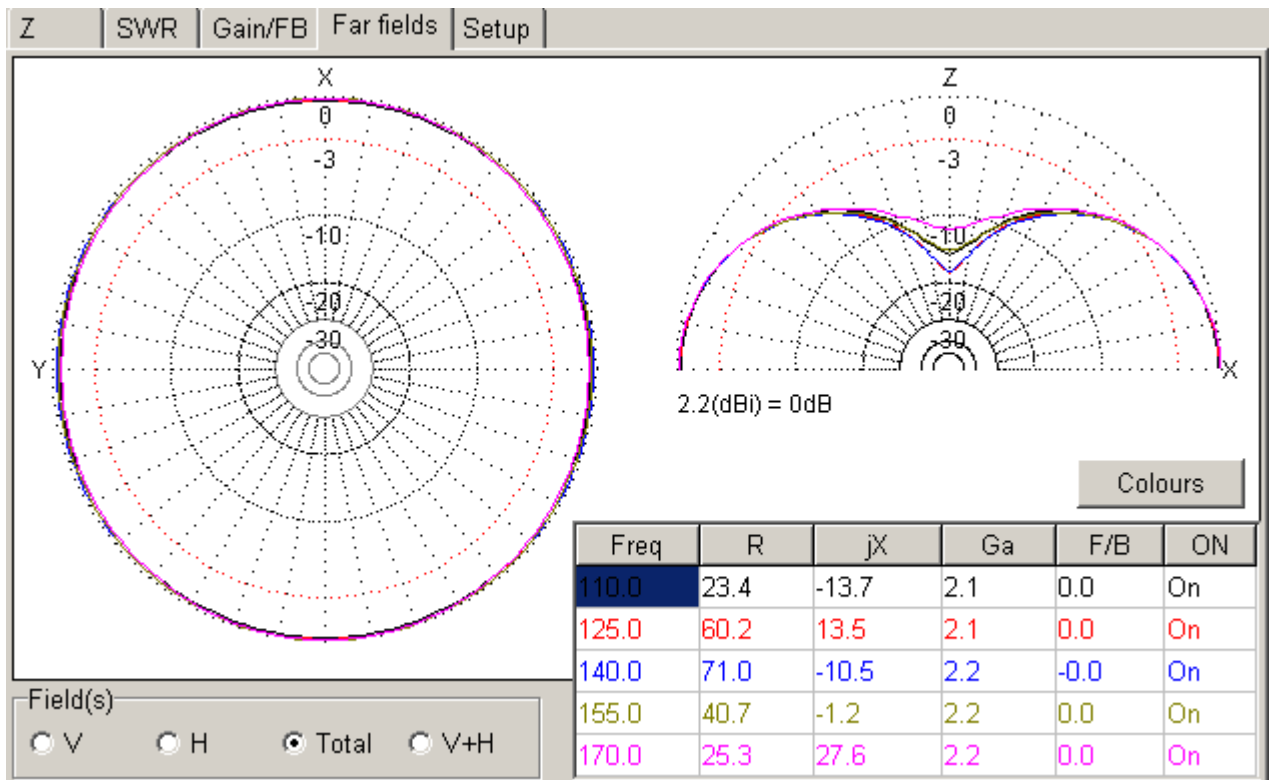
SWR of the Avia Antenna

The antenna is a symmetrical antenna, so, several ferrite rings at the feeding point will keep the symmetrical. Ferrite rings should be placed on the coaxial cable straight near “fork.”

File MMANA:  
[http://www.antentop.org/011/avia\\_011.htm](http://www.antentop.org/011/avia_011.htm)



Gain of the Avia Antenna



Pattern of the Avia Antenna