

The publication is devoted to the memory UR0GT.

# Broadband Vertical for 430- MHz Band

**Credit Line: Forum from:**  
[www.cqham.ru](http://www.cqham.ru)

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Broadband Vertical Collinear Vertical antenna designed for 430- MHz Band. The antenna has Diagram Directivity with low-altitude maxima to the ground. Antenna has passband near 70- MHz at SWR 1.5:1.0. **Figure 1** shows design of the Broadband Vertical for 430- MHz Band.

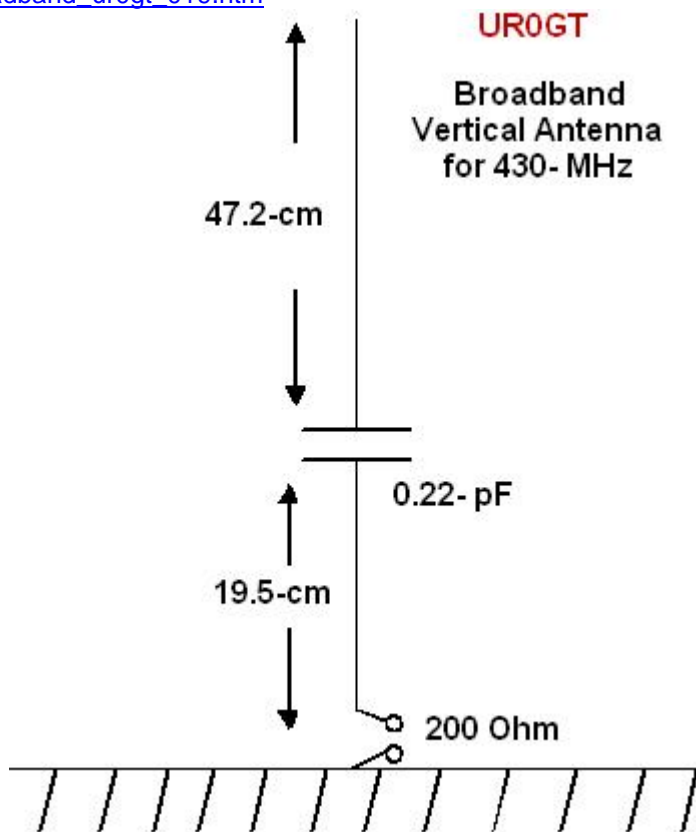
**Figure 2** shows input impedance of the antenna at 430- MHz Band. **Figure 3** shows SWR of the antenna at 430- MHz Band. **Figure 4** shows DD of the antenna at 430- MHz Band.

Antenna made from aluminum or copper rod in 3- mm diameter. Capacitor 0.22- pF may be made structurally. Just thin dielectric- mica or Teflon between the two vertical vibrators. Antenna should be places at conductivity surface or have several counterpoises. The antenna has 200- Ohm input impedance. Such input impedance may be easy matched at one Band but there are some difficulties to match such impedance in wide band by simple methods.

**Figure 5** shows input impedance of the antenna at 100- MHz pass band at 433- MHz central frequency. **Figure 6** shows SWR of the antenna at 100- MHz pass band at 433- MHz central frequency. **Figure 7** shows DD of the antenna at 100- MHz pass band at 433- MHz central frequency.

The MMANA model of the Broadband Vertical for 430- MHz Band may be loaded: [http:// www.antentop.org/019/broadband\\_ur0gt\\_019.htm](http://www.antentop.org/019/broadband_ur0gt_019.htm)

**73! de UR0GT**



**Figure 1** Design of the Broadband Vertical for 430- MHz Band

# ANTENTOP- 01- 2015, # 019

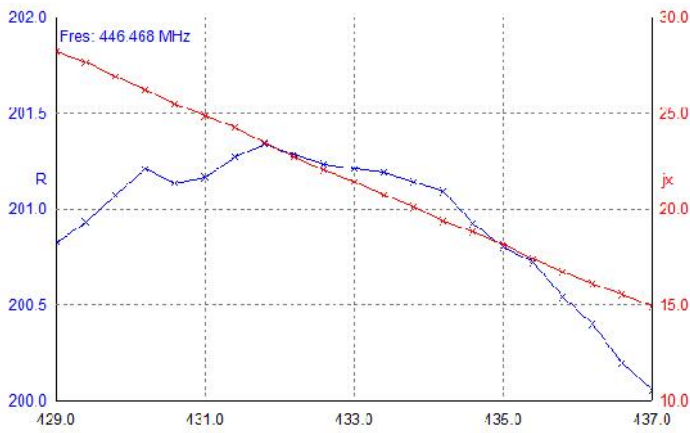


Figure 2 Z of the Antenna at 430- MHz Band

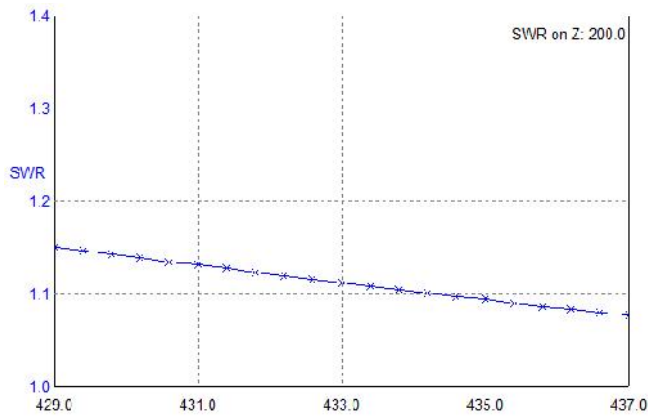


Figure 3 SWR of the Antenna at 430- MHz Band

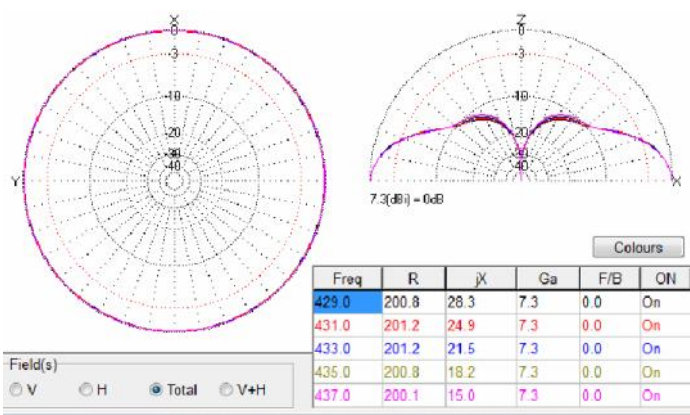


Figure 4 DD of the Antenna at 430- MHz Band

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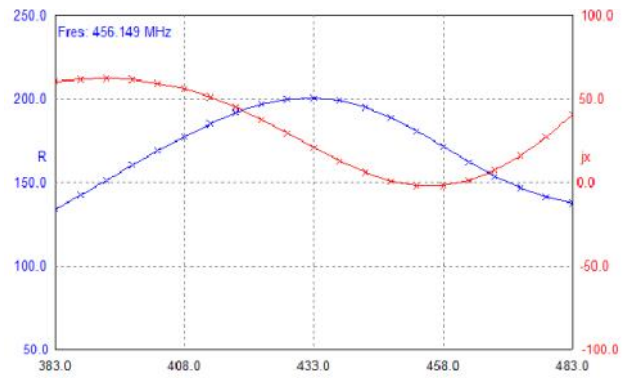


Figure 5 Z of the Antenna at 100- MHz Pass Band at 433- MHz Central Frequency

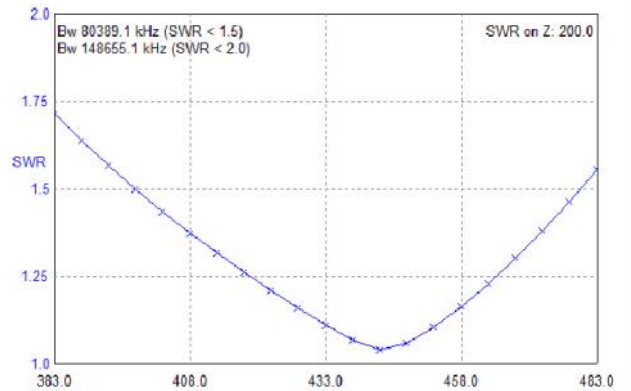


Figure 6 SWR of the Antenna at 100- MHz Pass Band at 433- MHz Central Frequency

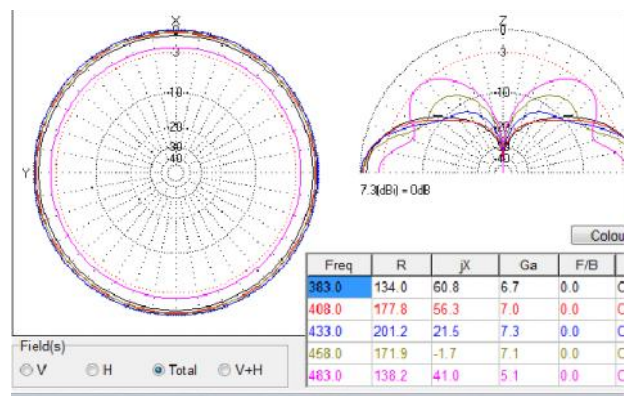


Figure 7 DD of the Antenna at 100- MHz Pass Band at 433- MHz Central Frequency