

# RN3DEK 4- Element Antenna for the 145- MHz Band with Gamma Match

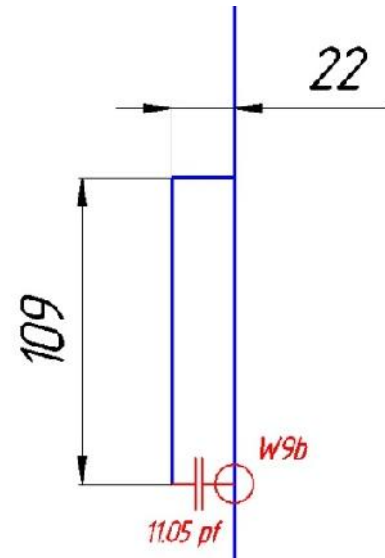
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Credit Line: Forum at cqham.ru

There is presented 4- element antenna for the 145- MHz Band. Antenna has good SWR at the band. Antenna does not require follow to strictly dimension of the elements. So the antenna may be done ever by a ham who has no large experience in the antenna building.

Antenna has 50- Ohm input impedance that allows feed the antenna directly by 50- Ohm coaxial cable. **Figure 1** shows schematic of the antenna. **Figure 2** shows design of the Gamma – Match. Antenna reflector antenna made of tube/rod in diameter of 5- mm. All others antenna elements of the antenna made of tube/rod in diameter of 8- mm. Gamma match made of wire/rod in diameter of 2.5- mm.

The antenna has reflector with bent ends. It is done to improve F/B ratio. Anyway you may play with model of the antenna in MMANA and check what you could reach.

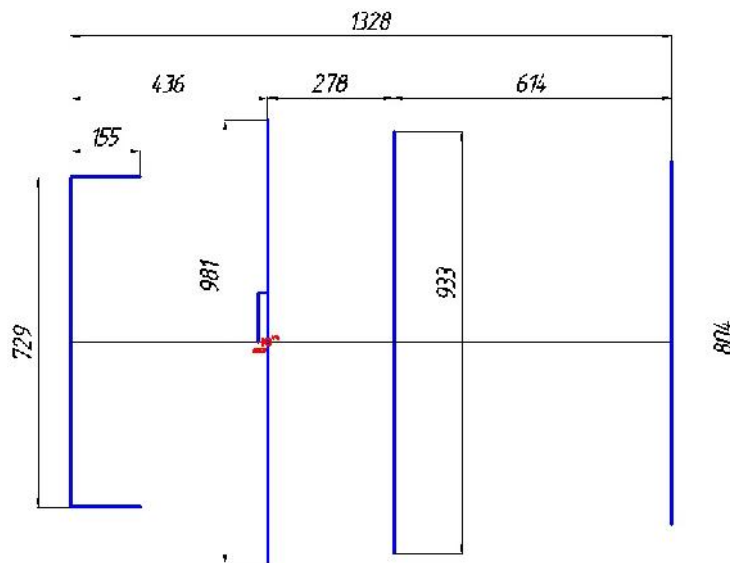
**Figure 3** shows Z of the antenna. **Figure 4** shows SWR of the antenna. **Figure 5** shows DD of the antenna.



**Figure 2** Design of the Gamma – Match.

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MMANA File of the RN3DEK 4- Element Antenna for the 145- MHz Band may be downloaded at:  
[http://www.antentop.org/022/RN3DEK\\_4\\_el\\_gamma\\_022.htm](http://www.antentop.org/022/RN3DEK_4_el_gamma_022.htm)



**Figure 1**

RN3DEK 4- Element Antenna for the 145- MHz Band

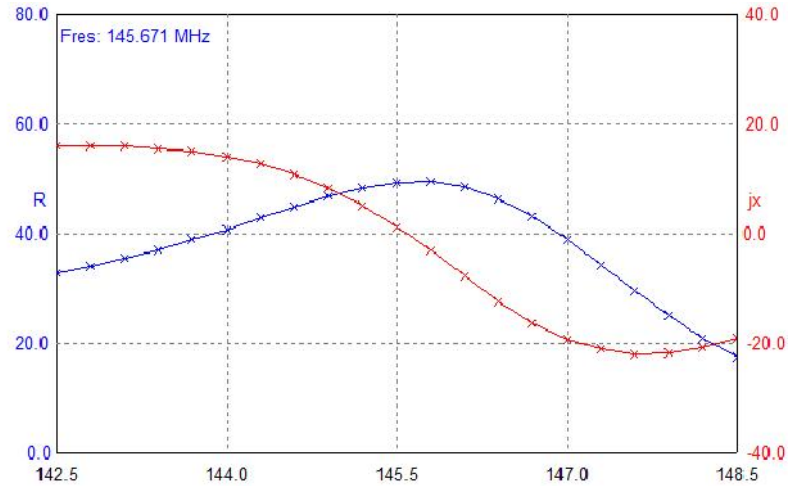


Figure 3 Z of the RN3DEK 4- Element Antenna for the 145- MHz Band

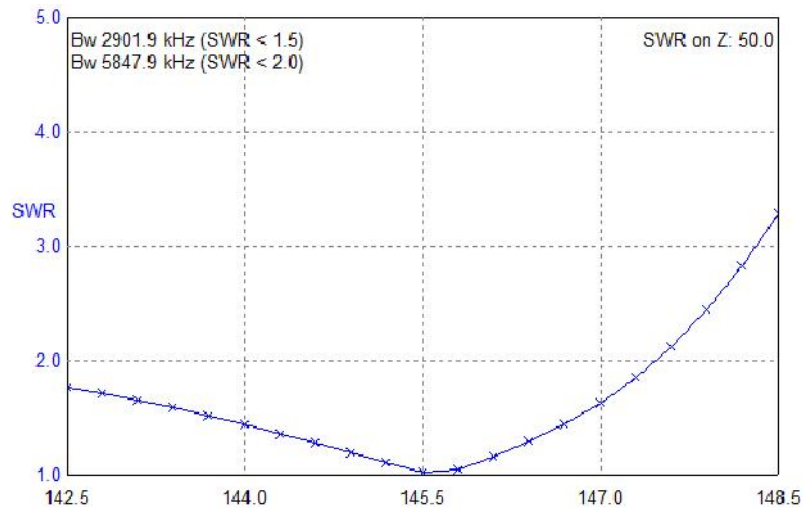


Figure 4 SWR of the RN3DEK 4- Element Antenna for the 145- MHz Band

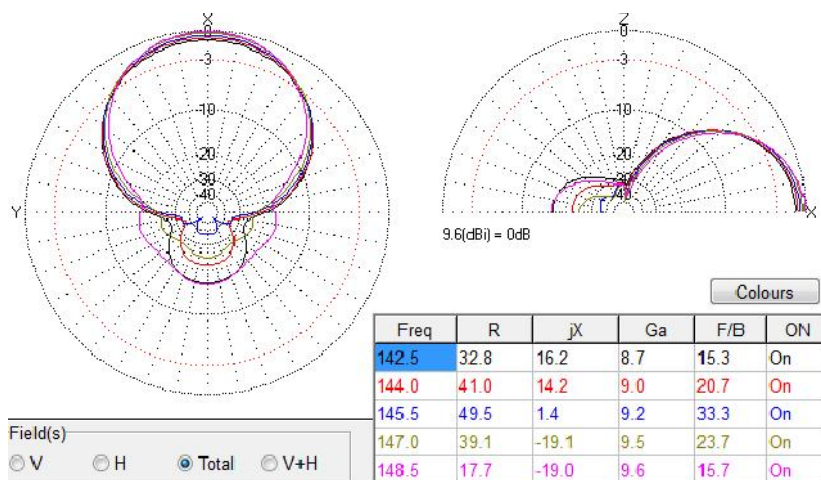


Figure 5 DD of the RN3DEK 4- Element Antenna for the 145- MHz Band