RN3DEK 4- Element Antenna for the 145- MHz Band

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There is presented 4- element antenna for the 145- MHz Band. Antenna has good SWR at the band. Antenna has input impedance 28- Ohm. For matching of the antenna with 50- Ohm coaxial cable there is used known matching device on two parallel length of 75- Ohm coaxial cable. To compensate reactive component a capacitor is switched on with the vibrator.

Figure 1 shows schematic of the antenna. **Figure 2** shows capacitor in series with antenna vibrator. **Figure 3** shows matching device 28/50- Ohm. Antenna reflector 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.

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 4 shows Z of the antenna. **Figure 5** shows SWR of the antenna. **Figure 6** shows DD of the antenna.

73! RN3DEK

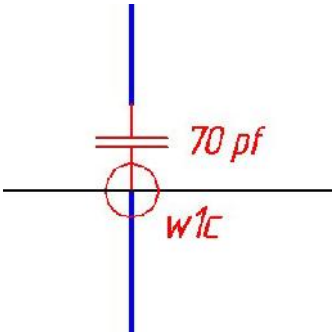

Figure 2 Capacitor in Series with Antenna Vibrator

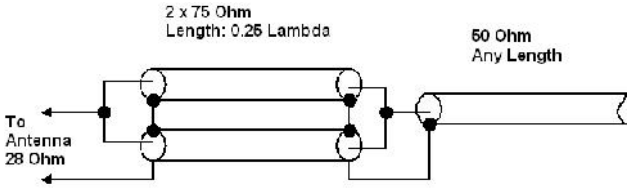

Figure 3 Matching Device 28/50- Ohm

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_022.htm

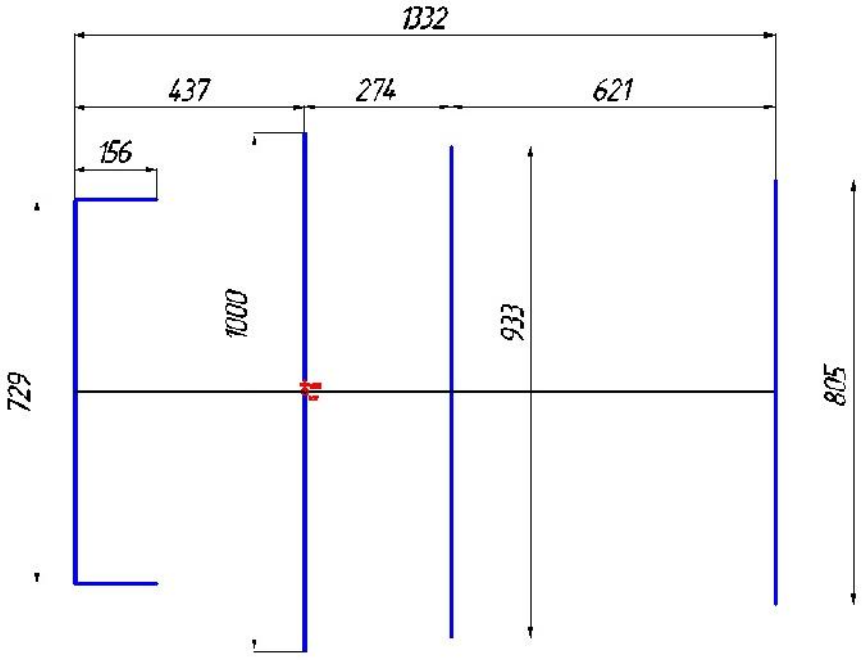

Figure 1
RN3DEK 4- Element Antenna for the 145- MHz Band

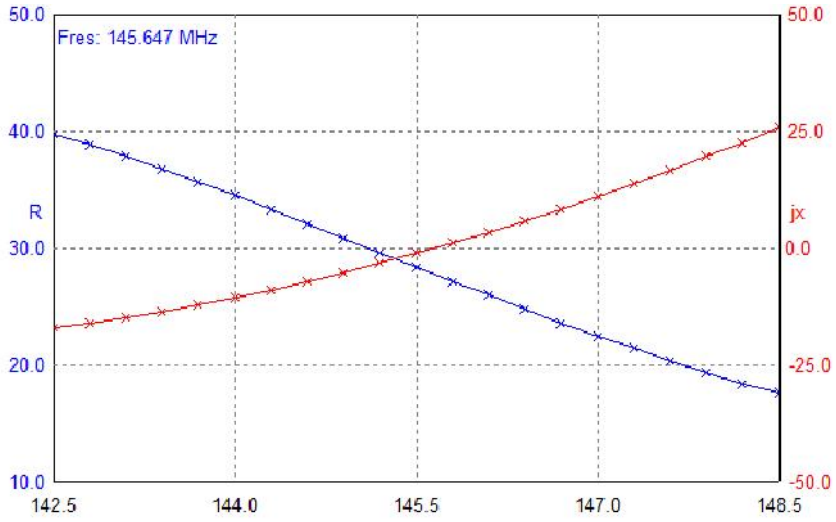

Figure 4 Z of the RN3DEK 4- Element Antenna for the 145- MHz Band

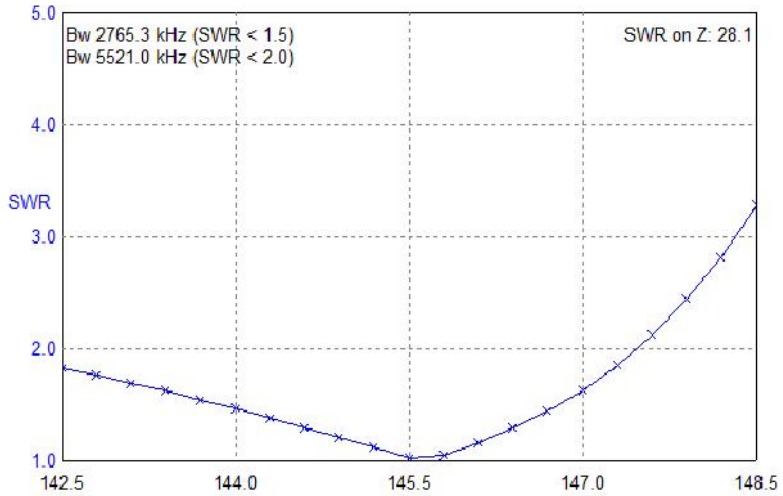

Figure 5 SWR of the RN3DEK 4- Element Antenna for the 145- MHz Band

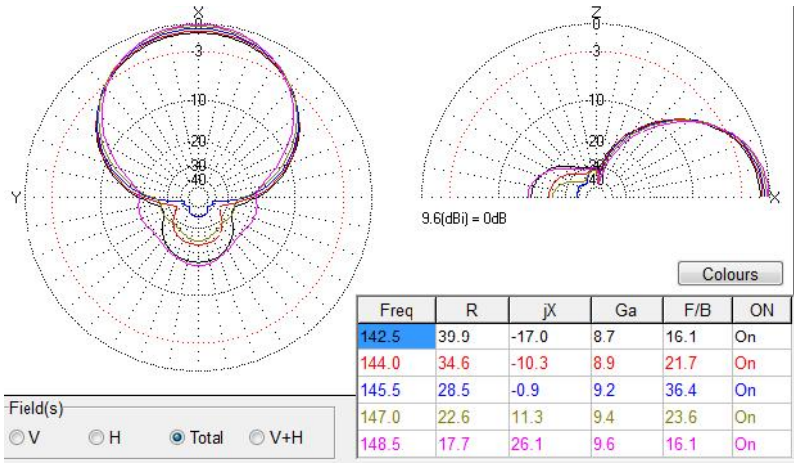

Figure 6 DD of the RN3DEK 4- Element Antenna for the 145- MHz Band