

Names: _____

The project objective is to build a Vee Dipole Antenna.

Vee Dipole Antenna Design

The vee dipole is one of the most simple and cheap type of antennas to receive images from NOAA satellites. This receiving antenna will be connected to a 50Ω transmission line. The frequency of operation is 137 MHz.

- Calculate the dimensions of the rectangular patch antenna, the aperture angle and wire length. (γ and h) with the parameters mentioned above.
- Calculate the input resistance of the antenna.
- Calculate the resulting VSWR of the antenna to the 50Ω transmission line.
- In order to match the legs of the dipole to the coaxial cable used to transmit the information, you need a two-pair screw terminal, or 'choc-block'. Determine how would you connect the choc block to the coaxial cable, and make a picture.

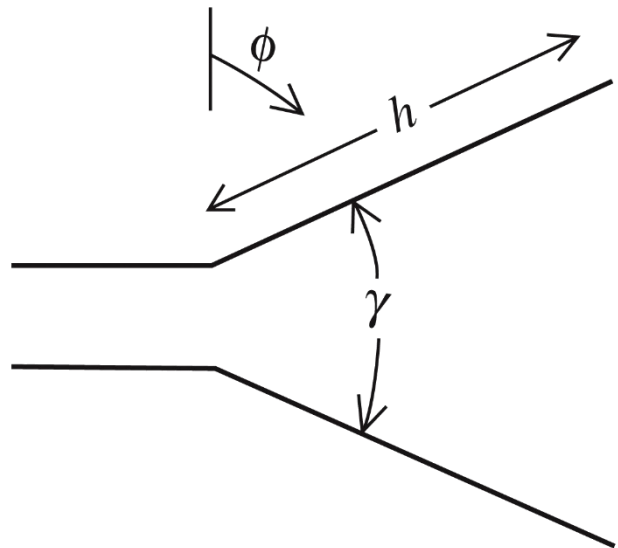


Figure 6-9
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