

ABSTRACT

At present the need for communication antennas, particularly for wireless telecommunications is growing by leaps and bounds. Since communication today requires an antenna that can work in multiband.

In this final project, will be designed a fractal Sierpinski carpet microstrip antenna is working on three frequencies (tripleband) by using FR4 Epoxy substrate. The antenna is designed to work at a frequency of 900MHz, 1800MHz, and 2100 MHz with the $VSWR \leq 2$, for this antenna design and simulation, the authors use the help software CST 2010, to obtain the desired dimensions and specifications. After all the desired specifications that have been reached, the next step is to do with the realization of antenna fabrication and testing of antenna parameters.

After fabrication, the antenna was then measured in accordance with the specifications defined in the initial design. After the measurement, the results obtained is the frequency of 900MHz VSWR is 1.7, while the 1800MHz and 2100MHz VSWR is ≥ 2 .

Key words: microstrip antenna; trippleband; frequency; Software CST 2010.