

## ABSTRACT

As the changing times, people increasingly need a variety of technologies. With the advance technologies these day more and more ease in establishing human communication, especially in wireless communications. for its own development when viewed from the contour of the earth's increasingly crowded and the increasing number of BTS tower that had been build make it more difficult to perform measurements in order to get an appropriate result. The more distant emission that need to perform the measurement, the larger the possibility of interference from the frequencies around it.

The final project will make a horn antenna design according to near field antenna measurement applications. Design implemented in several phases, beginning with the manual design, ansoft simulation, realization of the antenna and testing the antenna where it can be seen how well this antenna works.

The horn antenna that has been realized has a  $VSWR \leq 1.152$  where the result meet the qualification ( $\leq 1.5$ ). it has linier polarization and has a gain of 7.421 dB.

Keywords: Wireless, interference, horn antennas, near field antenna.