

ABSTRACT

Nowadays, experimental of prototype of ultra wideband antennas has been discovered to prove hypothesis about antenna, that's antenna is matching impedance between propagation area and distribution of radio frequency. To simplify the measurement of antenna radiation, we must conduct it inside Anechoic Chamber.

To conduct measurement in Anechoic Chamber, at least we must prepare : faraday cage layered with piramidal elektromagnetik absorber attach to all side of wall inside the chamber, pencil beam antenna and dipole antenna for reference measurement, waveguide system, feeding network and grounding.

Until now in our campus, we success to develop : piramidal absorber from used styrofoam, feromagnetic sand, and gasoline. Also we have found sirculator and isolator made from clay mix with feromagnetic sand for waveguide system. All of this can be created as basic for developing of Anechoic Chamber.

Given these things, the proposed plan Anechoic Chamber with known dimension of room give result work frequency at $10000 \text{ MHz} \pm 2500 \text{ MHz}$, the self-sufficiency for less than four months. Or for other frequencies that are more likely to test the scale antenna.

Keywords : Anechoic Chamber, piramidal absorber, faraday cage, pencil beam antenna.