

ABSTRACT

Measurement of design antenna is needed by a room which can permeate electromagnetic field transmitted from transmitter antenna. In consequence, it is needed a room without electromagnetic echo.

This final project will discuss scheme of anechoic chambers which can reduce the level of electromagnetic wave yielded from radiation transmitter antenna.

Anechoic chambers base on Anechoic Chambers theory which is emphasized by order of coats of dielectric compiler which can muted electromagnetic wave of transmitter antenna (Jaumann Absorber).

The scheme to be done is about a lot of compiler coats of a anechoic chambers determined from large of coefficient permittivity (ϵ_r) and coefficient permeability (μ_r) of a electrical substance. The value that is needed in this scheme can be determined with the measurement using Network Analyzer (NA). Parameter ϵ_r and μ_r represent comparison of the value of characteristic impedance (Z_0) at dielectric coats which is suitable with theory of Jaumann Absorber (Anechoic Chambers) so it can gain a coat of chambers without electromagnetic wave bound.