



Antenna Test Report

Data Preview

BT:

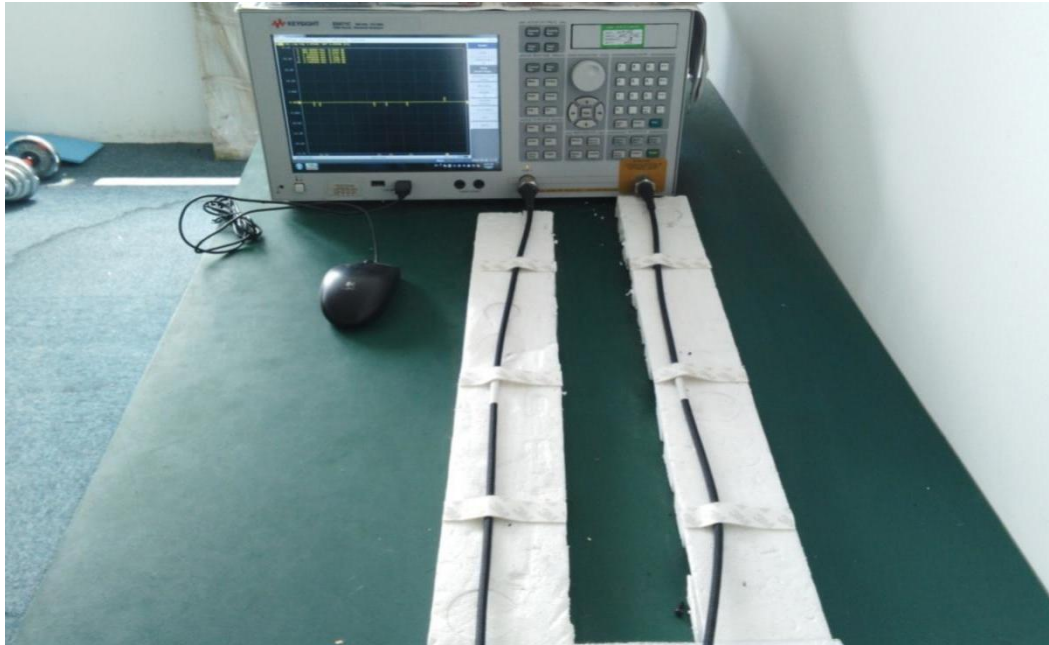
Freq.(MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	-1.51	-1	-0.34	-0.12	-0.12	0.09	0.16	0.2	0.02	-0.36	-0.75
Eff. %	29.8	30.3	32.1	32.2	31.8	33.4	34.5	34.6	33.7	32.8	31.2

1. RF Fixture Experiment

1.1 Test Setup

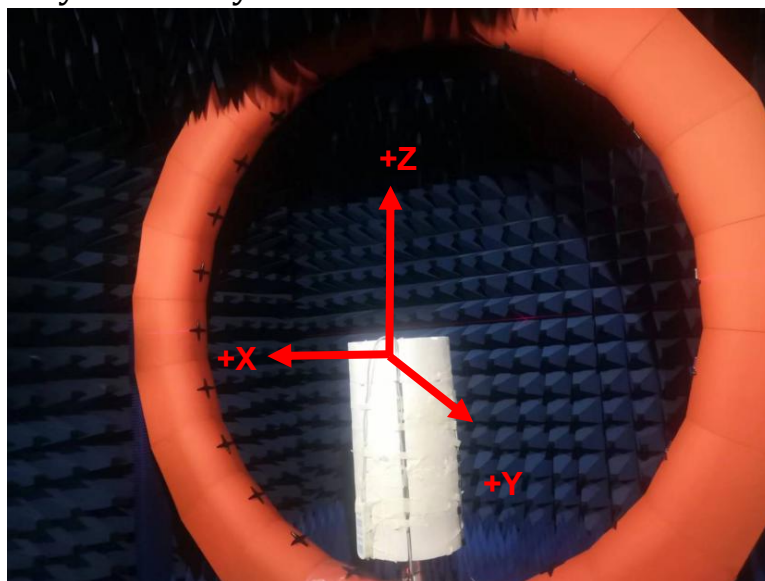
1.1.1 VNA Test Setup

VSWR and Return Loss measurements (S_{11}) were performed using an Keysight E5071C Network Analyzer. The isolation between antennas is also tested. The testing was performed with apparatus in free space.

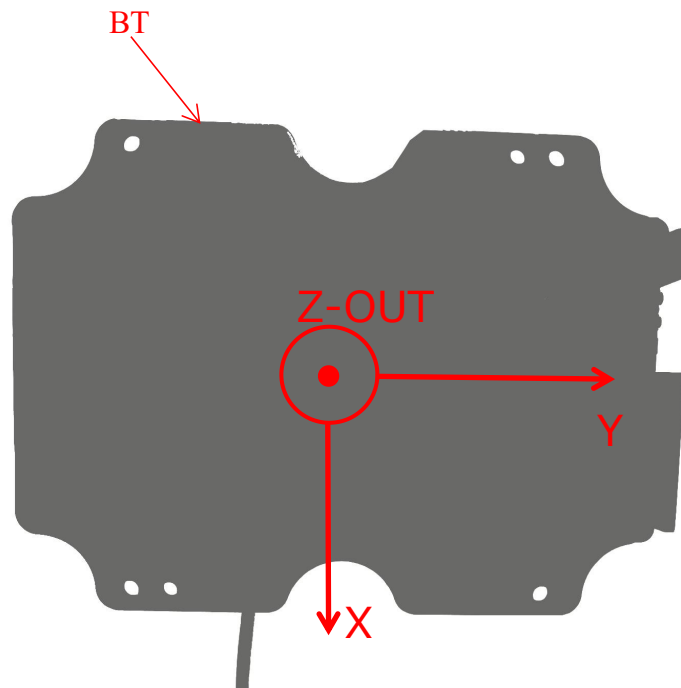


1.1.2 Anechoic Chamber Test Setup

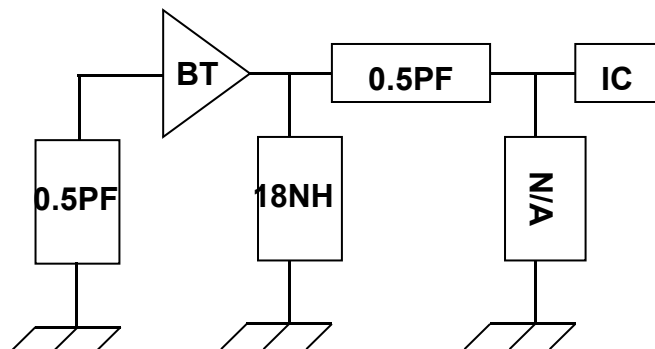
The gain of the antenna was measured in the anechoic chamber. The chamber provides less than -30 dB reflectivity from 400 MHz through 6 GHz. The chamber size is: 7m*4m*3m. The measurement results are calibrated using a leaky wave horn standard. We can measure the antenna gain and efficiency accurately.



2. Antenna Solution



3. RF matching circuit for different antennas

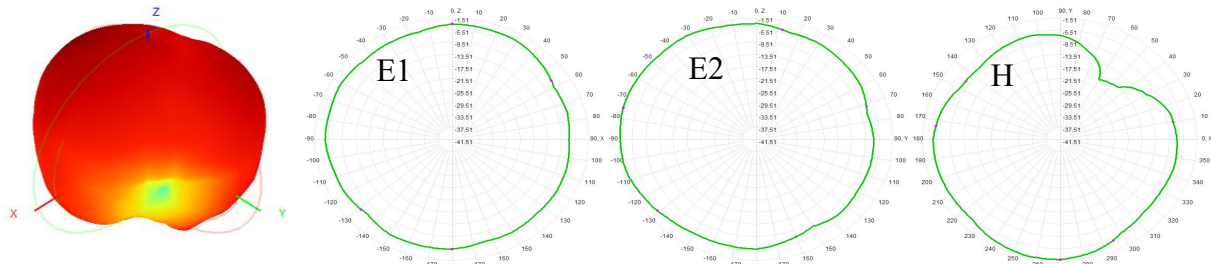


Ant 1 - S11

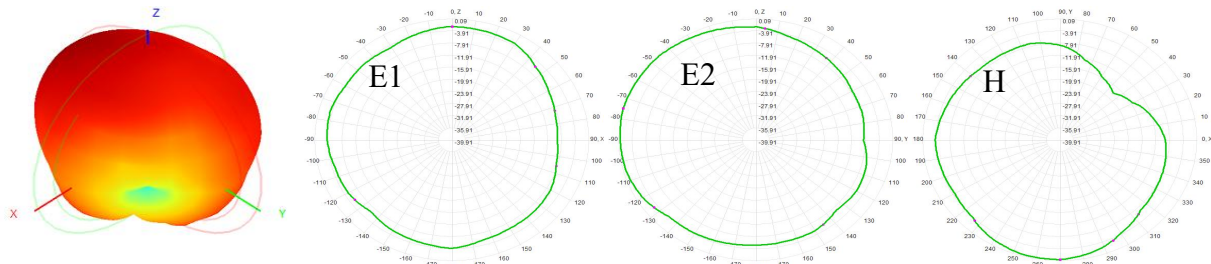


Radiation patterns:3D/2D(E1-E2-H)

2400MHz



2450MHz



2500MHz

