



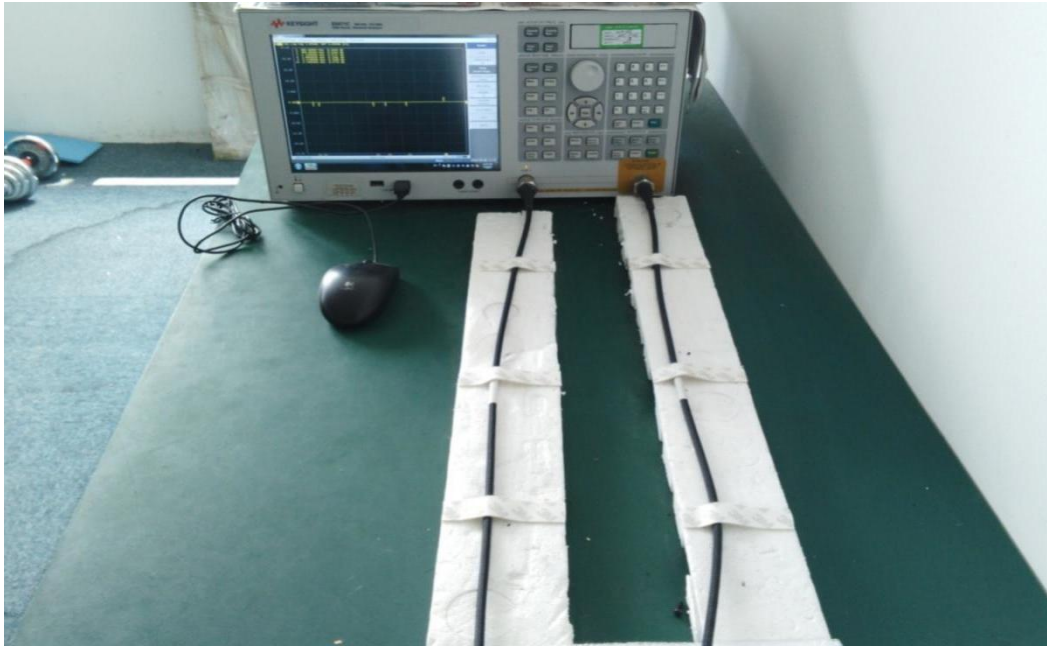
## Antenna Test Report

## 1. RF Fixture Experiment

### 1.1 Test Setup

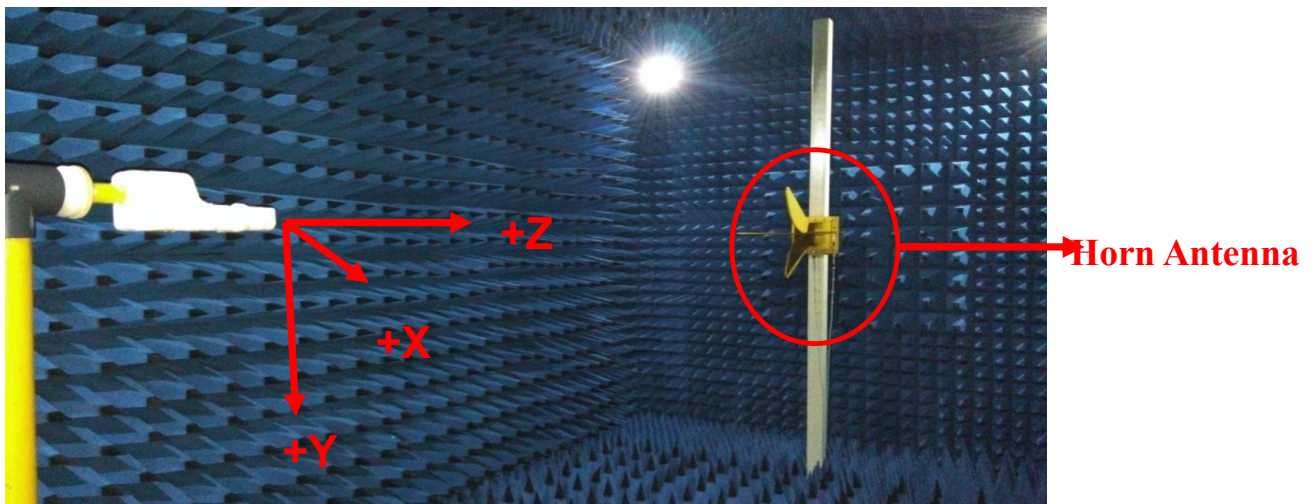
#### 1.1.1 VNA Test Setup

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.

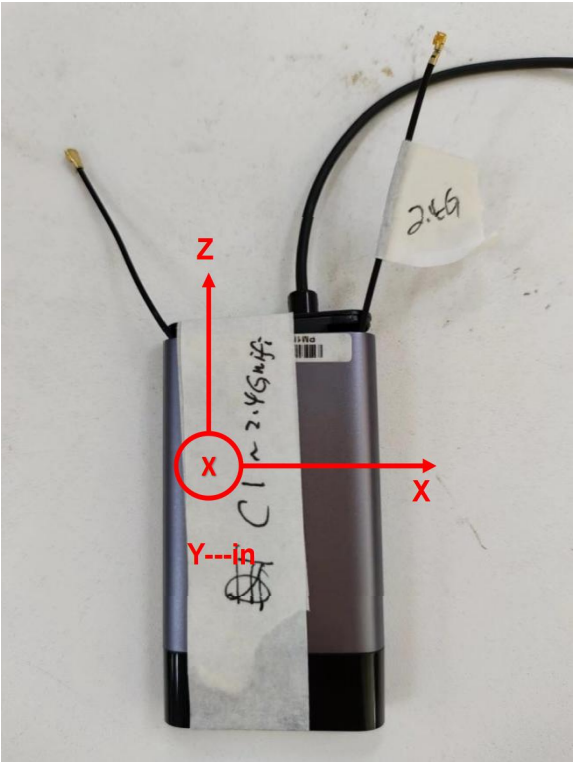


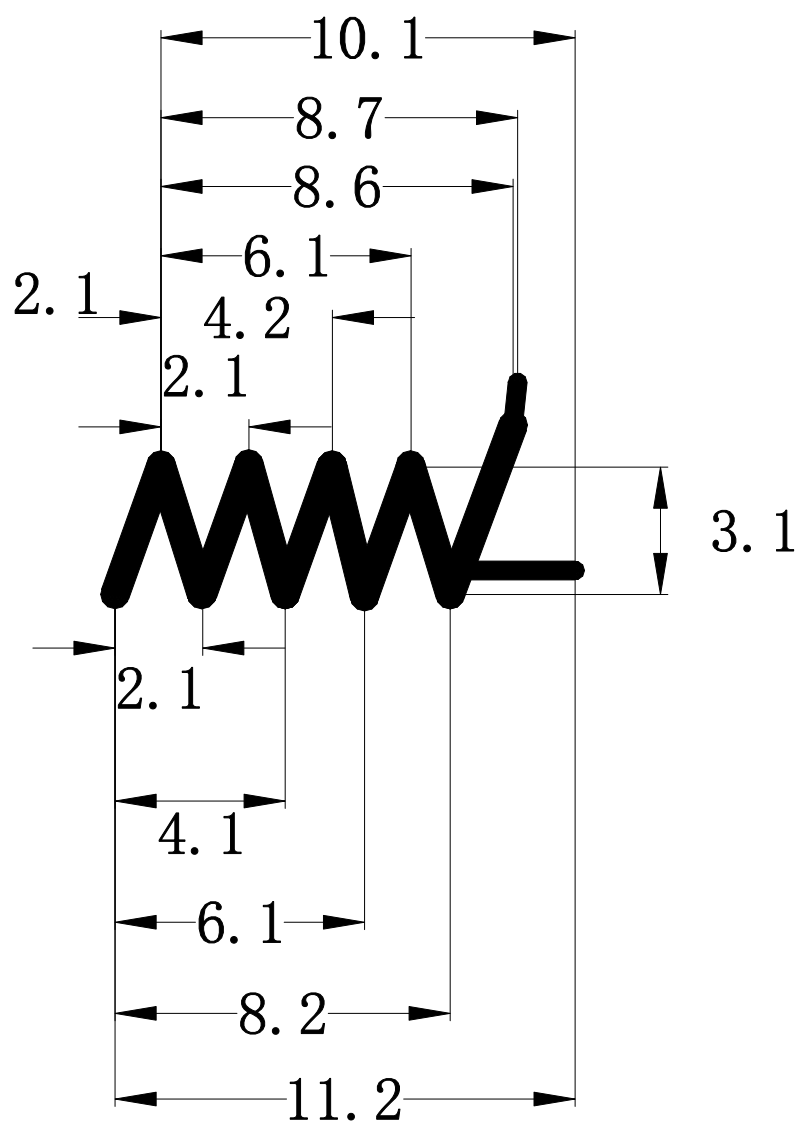
#### 1.1.2 Anechoic Chamber Test Setup

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.Data Preview

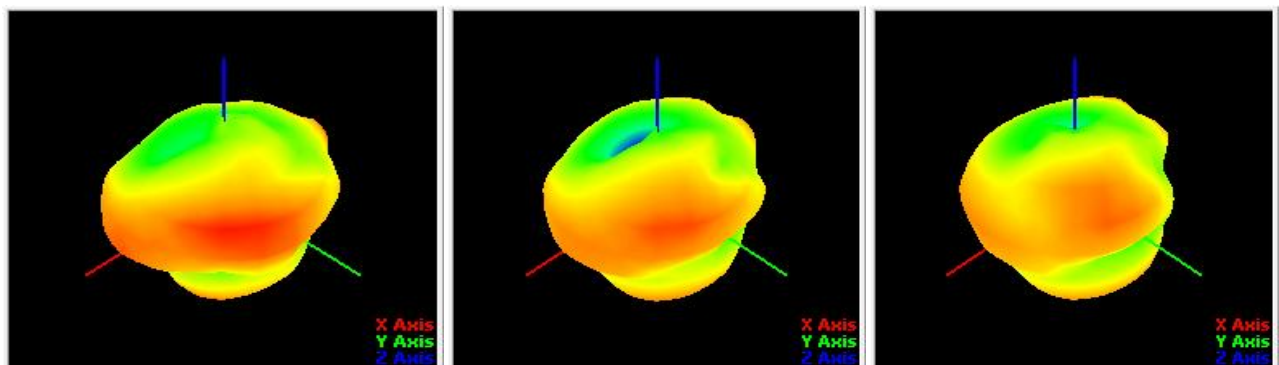
S11



Passive Data:

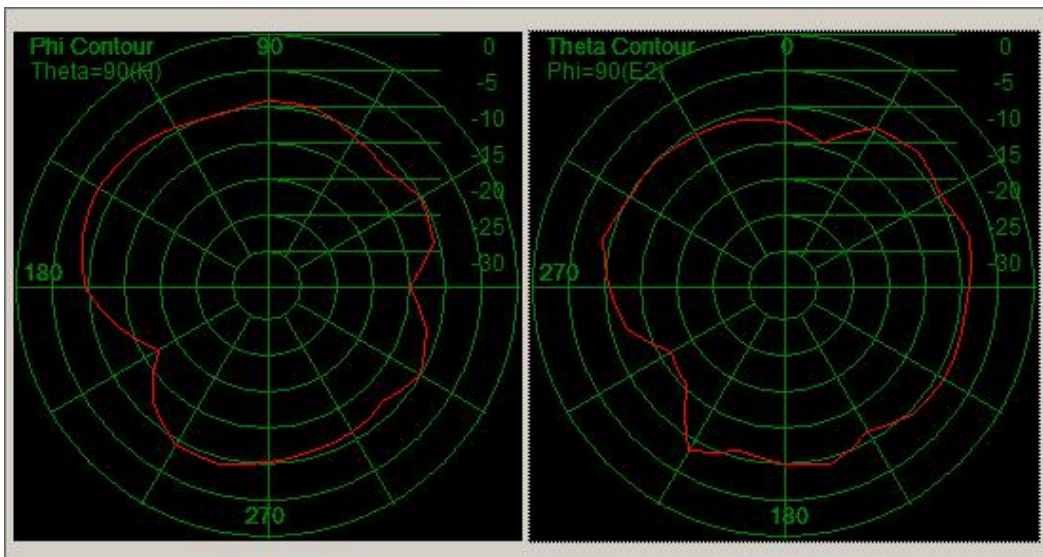
Freq.(MHz)	2400	2450	2500
Gain(dBi)	-2.52	-3.10	-3.75
Eff.%	15.4	14.5	14.1

Radiation patterns:3D (2400MHz /2450MHz/2500MHz)

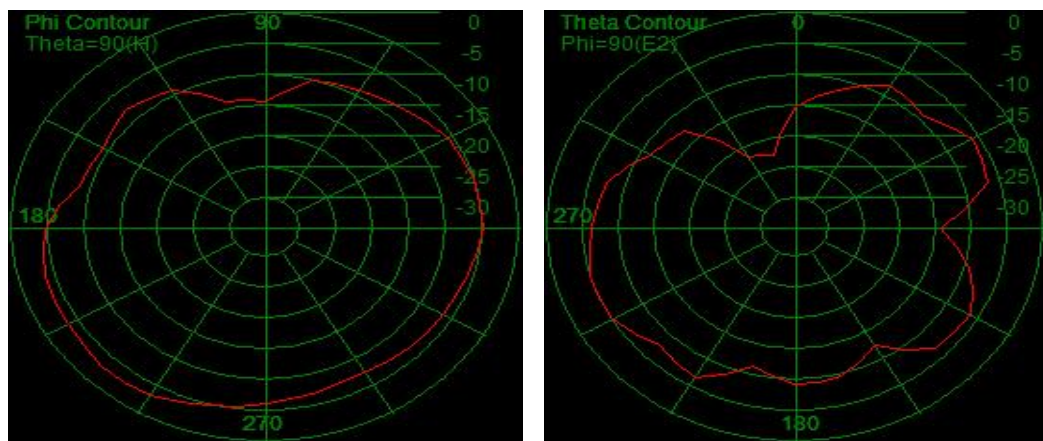




Radiation patterns:2D  
2400MHz



2450MHz



2500MHz

