



## Antenna Test Report

(FJ1600)

# Revision History

Revision	Note	Date
V1	New Issue	2022.07.25

## Data Preview

BT :

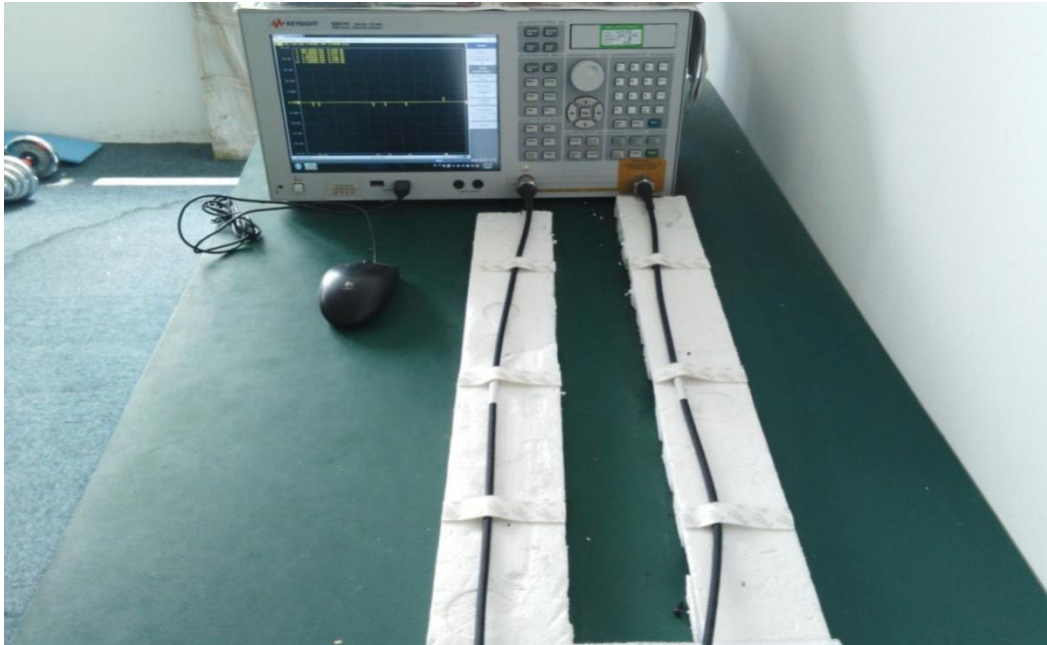
<b>Freq.(MHz)</b>	<b>2400</b>	<b>2450</b>	<b>2500</b>
VSWR	1.70	1.26	1.74
Gain(dBi)	2.40	3.62	3.33
Eff.	57.9%	64%	61.6%

## 1. RF Fixture Experiment

### 1.1 Test Setup

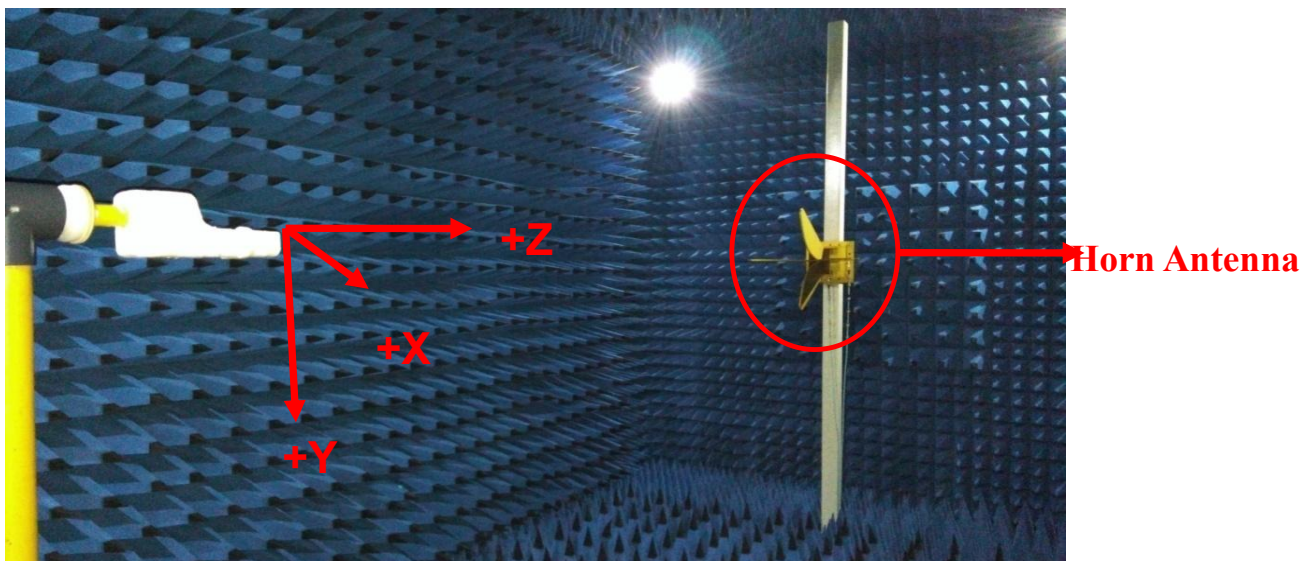
#### 1.1.1 VNA Test Setup

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

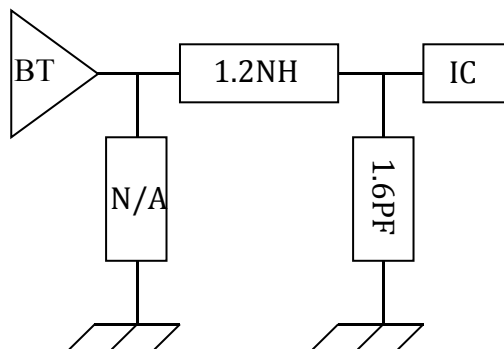
The gain of the antenna was measured in the anechoic chamber. The chamber provides less than  $-30$  dB reflectivity from 400 MHz through 6 GHz. The chamber size is: 7m\*4m\*3m. The measurement results are calibrated using a leaky wave horn standard. We can measure the antenna gain and efficiency accurately.



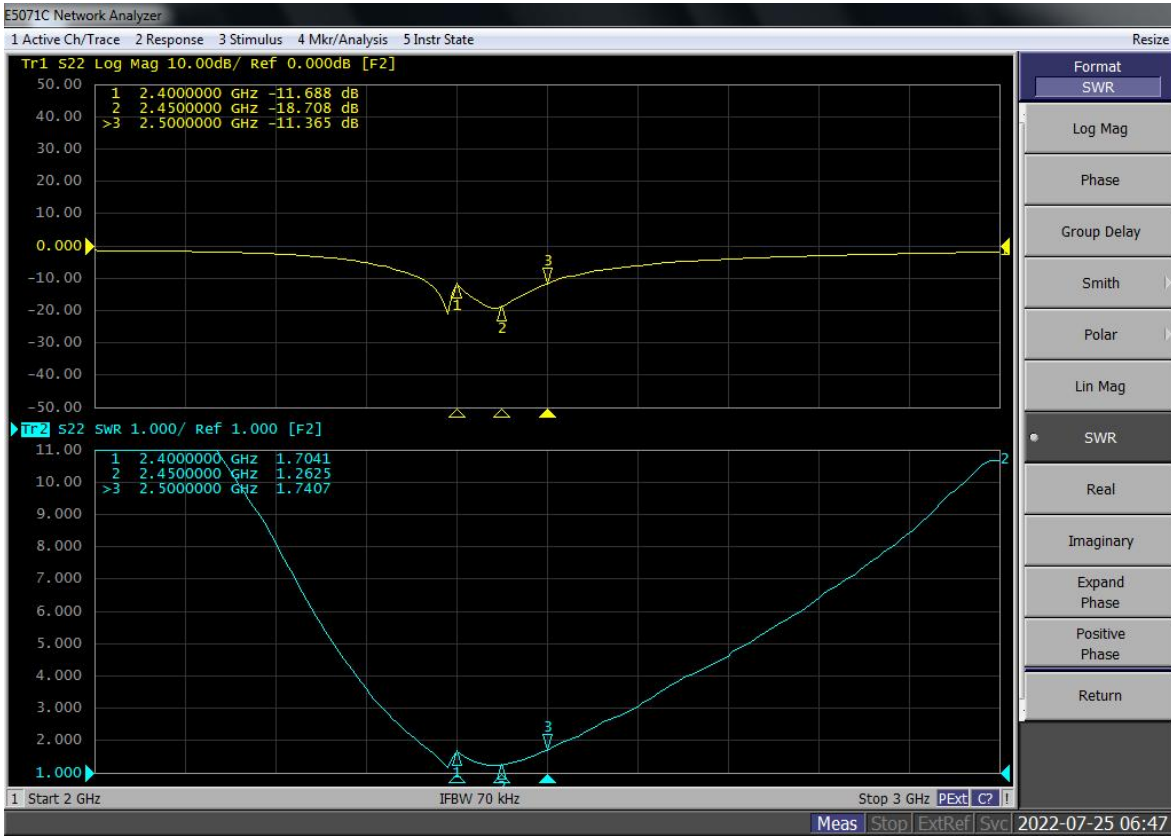
## 2. Antenna Solution



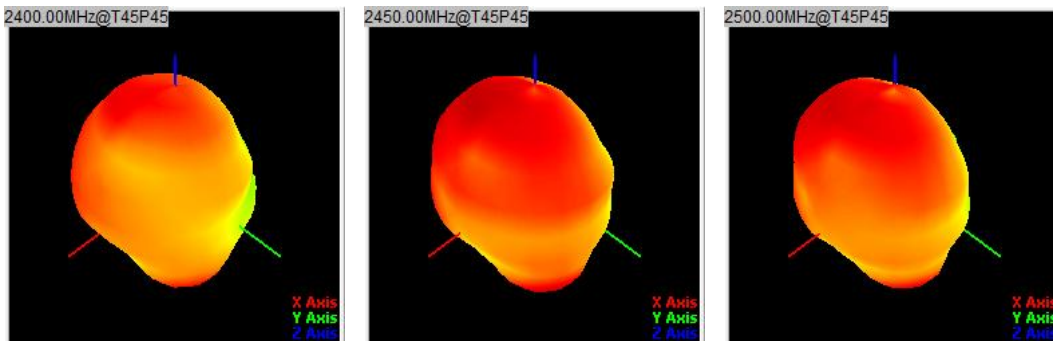
## 3. RF matching circuit for different antennas



# S11(BT)



## Radiation patterns:3D



## Radiation patterns:2D

