



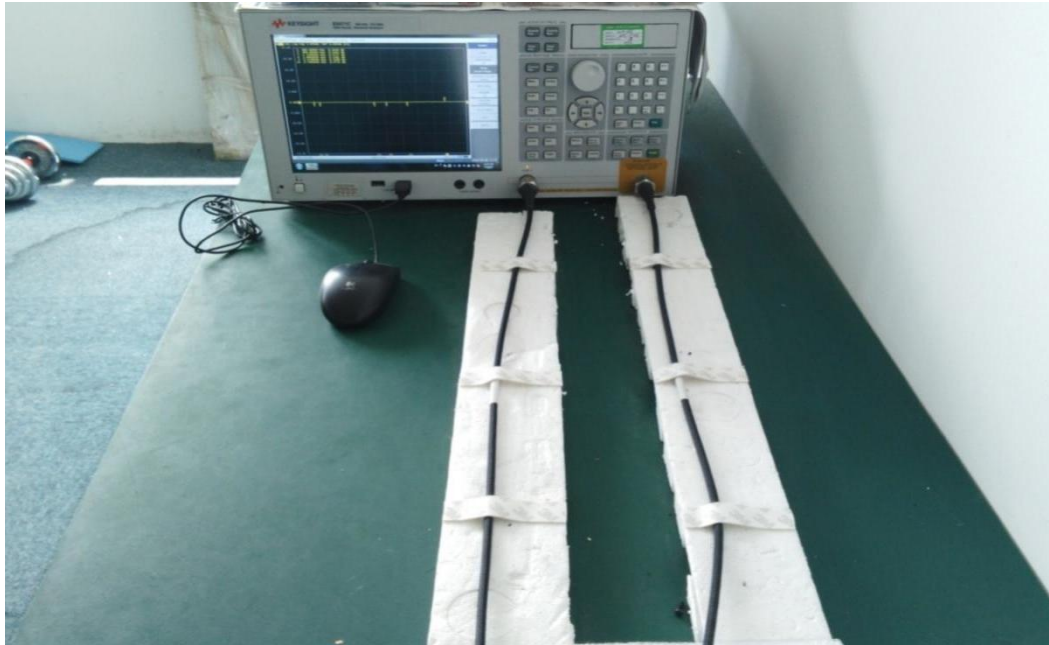
## Antenna Test Report

## 1. RF Fixture Experiment

### 1.1 Test Setup

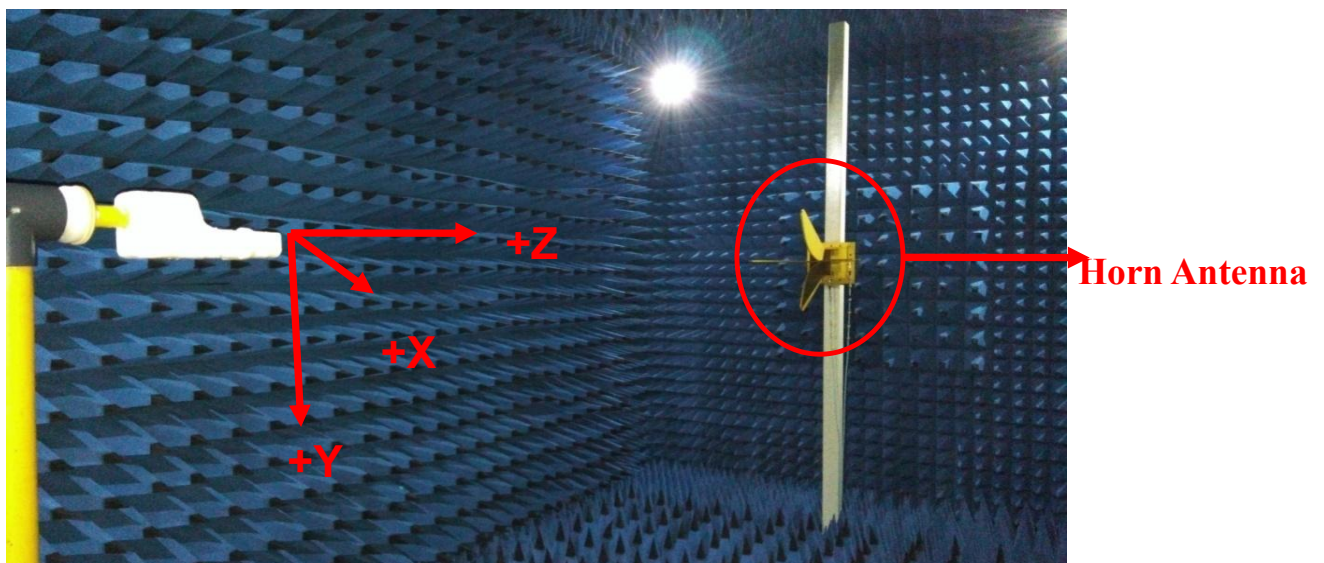
#### 1.1.1 VNA Test Setup

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

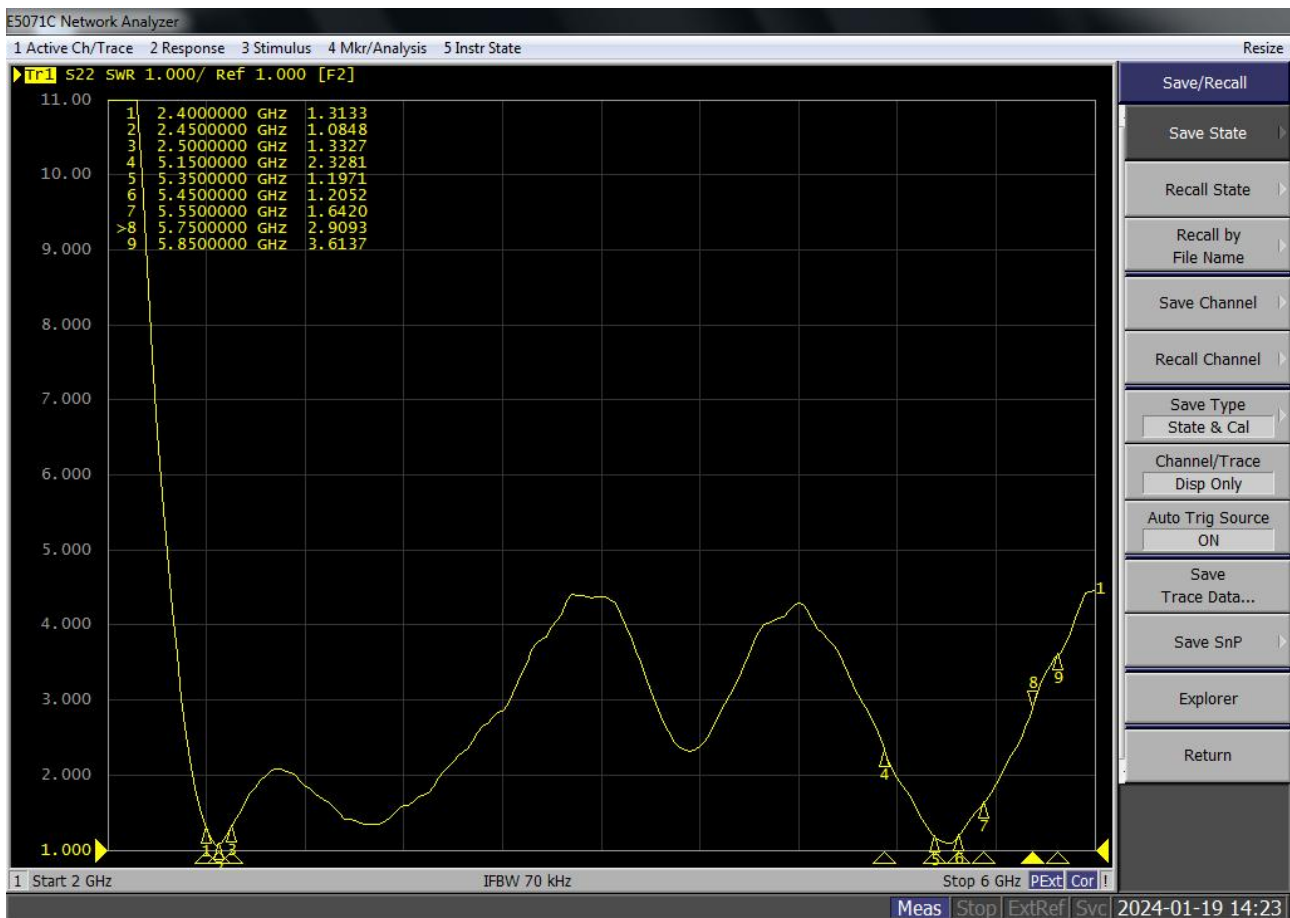


## Data Preview

ANT1

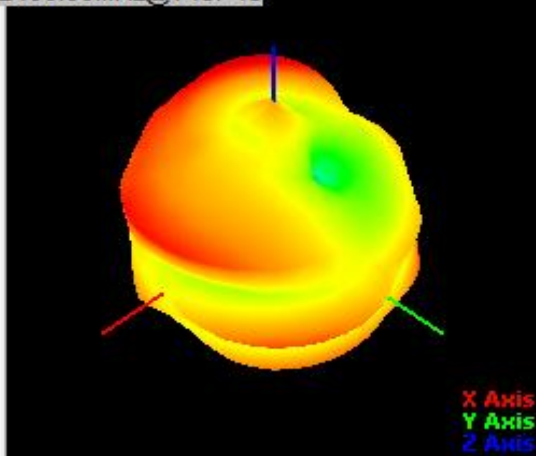
Freq.(MHz)	2400	2500	5150	5350	5450	5550	5750	5850
VSWR	1.31	1.33	2.32	1.19	1.20	1.64	2.90	3.61
Gain(dBi)	-0.73	-0.65	-0.90	0.23	0.34	0.10	0.80	0.85
Eff.%	76.2	75.5	61.1	68.7	78.4	74.4	70.1	55.5

S11

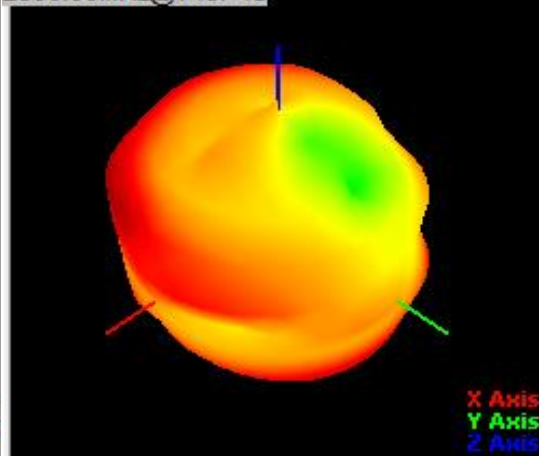


Radiation patterns:3D(2400/2500/5150/5350/5450/5550/5750/5850MHz)

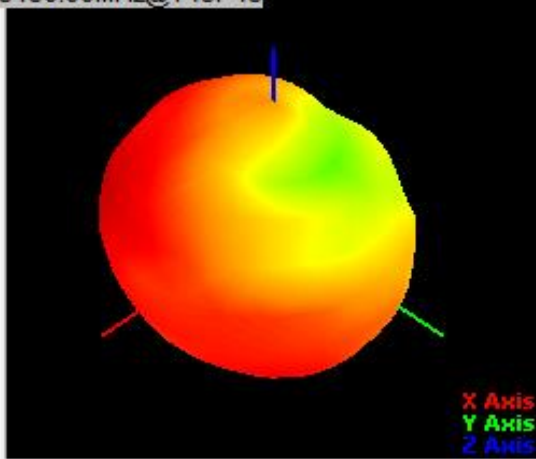
2400.00MHz@T45P45



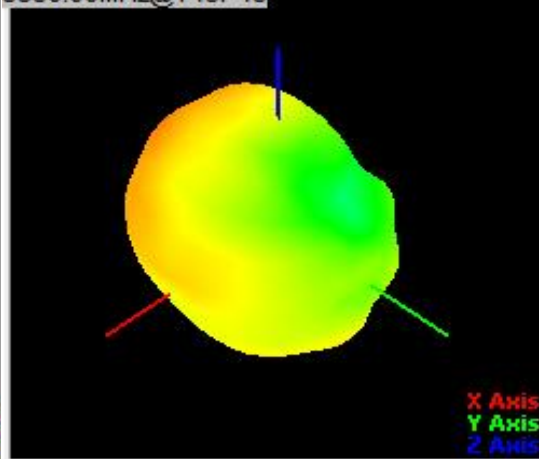
2500.00MHz@T45P45



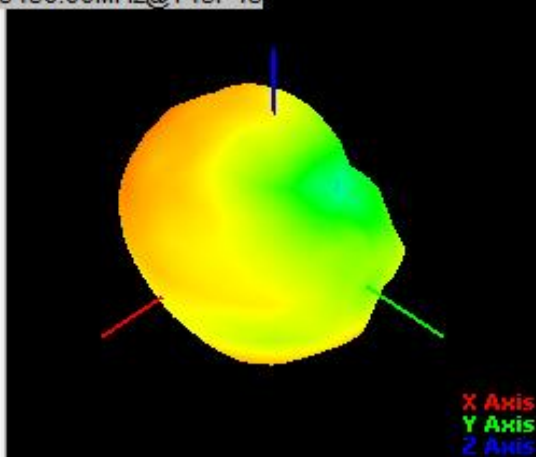
5150.00MHz@T45P45



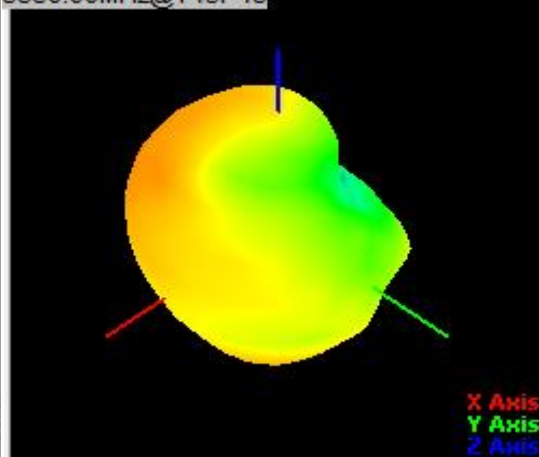
5350.00MHz@T45P45



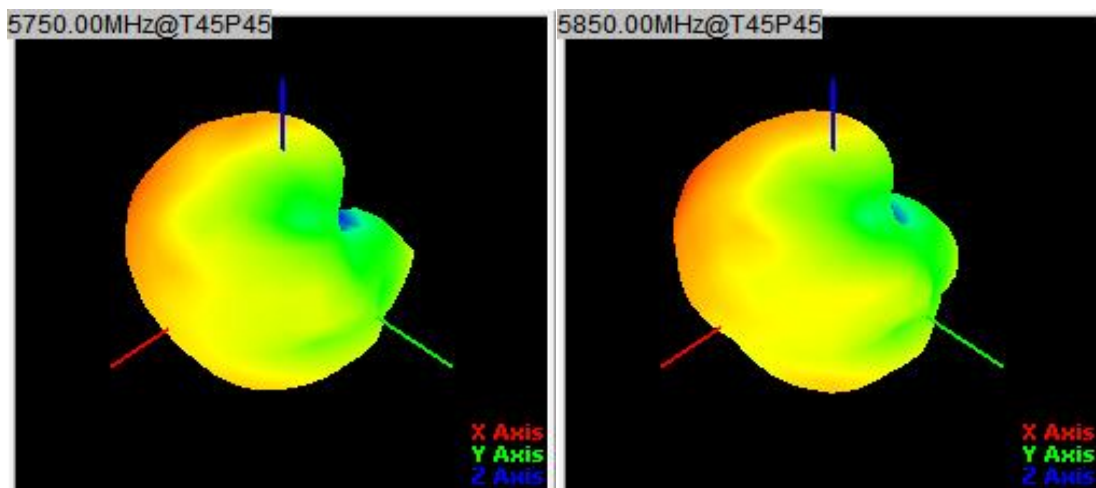
5450.00MHz@T45P45



5550.00MHz@T45P45







Radiation patterns:2D(2400/2500/5150/5350/5450/5550/55750/5850MHz)

