



Antenna Test Report

(6147F00013)

Revision History

| Revision | Note | Date |
|----------|-----------|------------|
| X1 | New Issue | 2018.12.20 |
| A | X1-A | 2019.01.03 |
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Data Preview

6147F00013 :

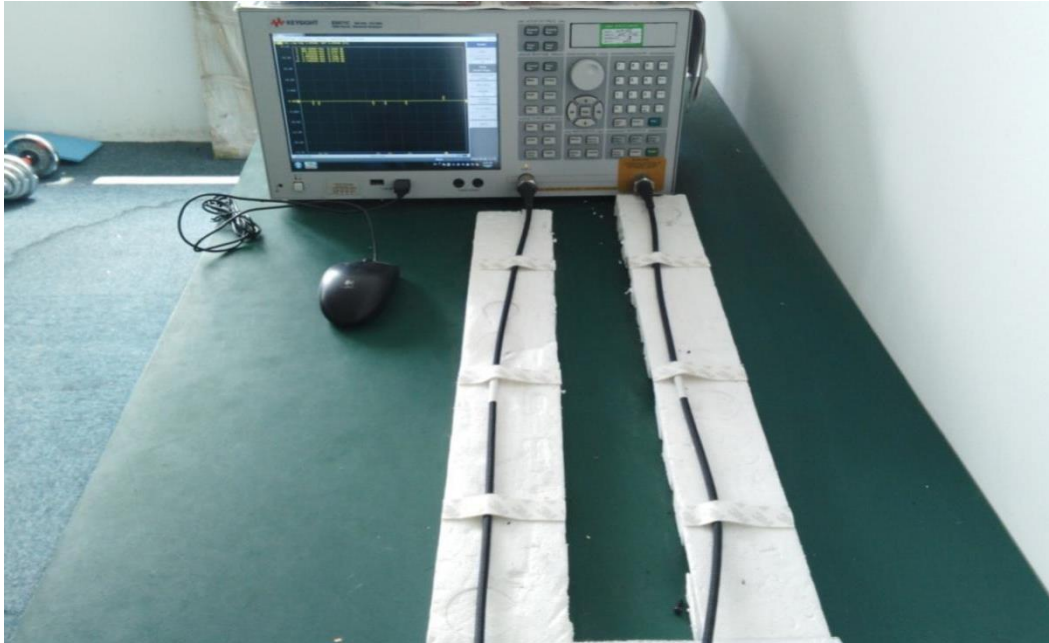
| Freq.(MHz) | 2400 | 2450 | 2500 |
|-------------------|-------------|-------------|-------------|
| VSWR | 1.19 | 1.04 | 1.16 |
| Gain(dBi) | 2.96 | 3.0 | 2.91 |
| Eff. | 71.4% | 74.4% | 74.9% |

1. RF Fixture Experiment

1.1 Test Setup

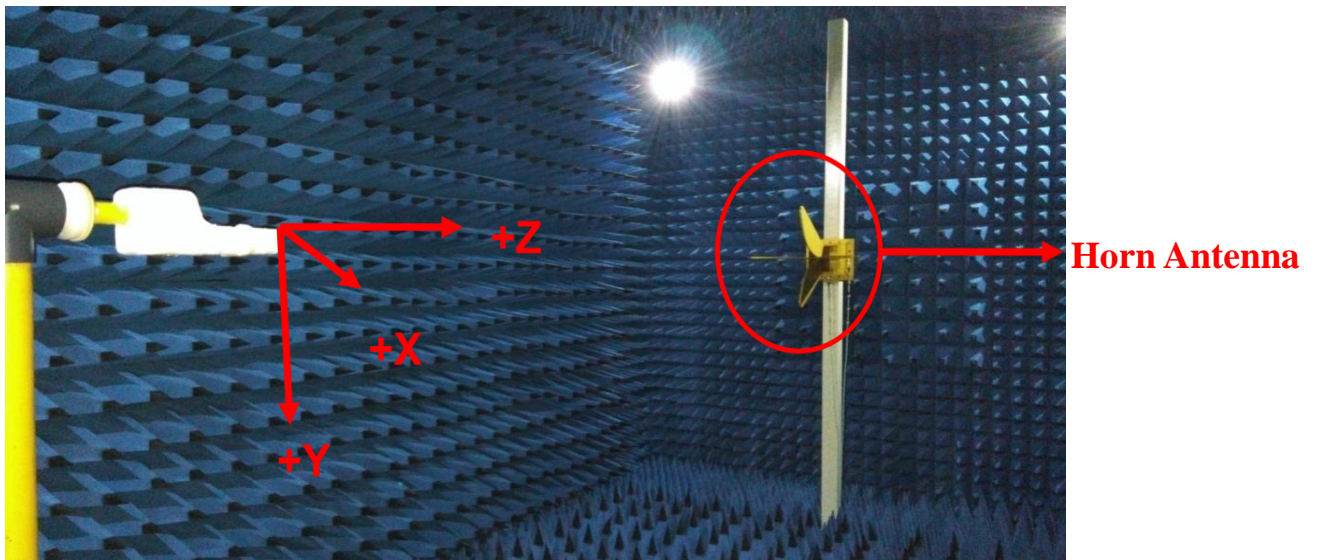
1.1.1 VNA Test Setup

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.

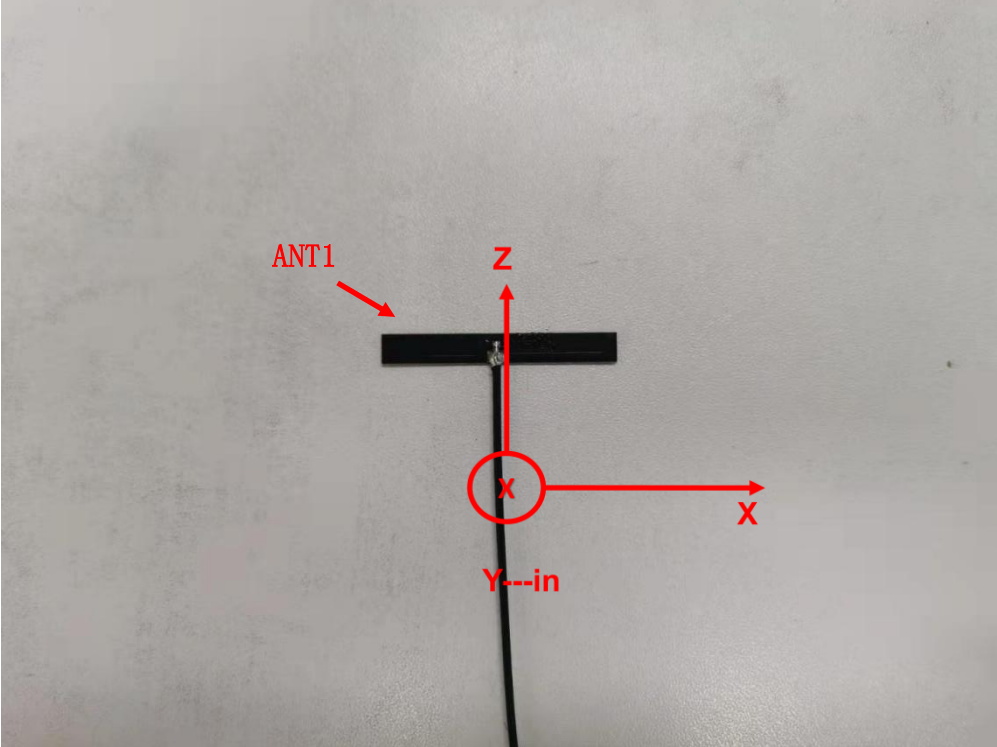


1.1.2 Anechoic Chamber Test Setup

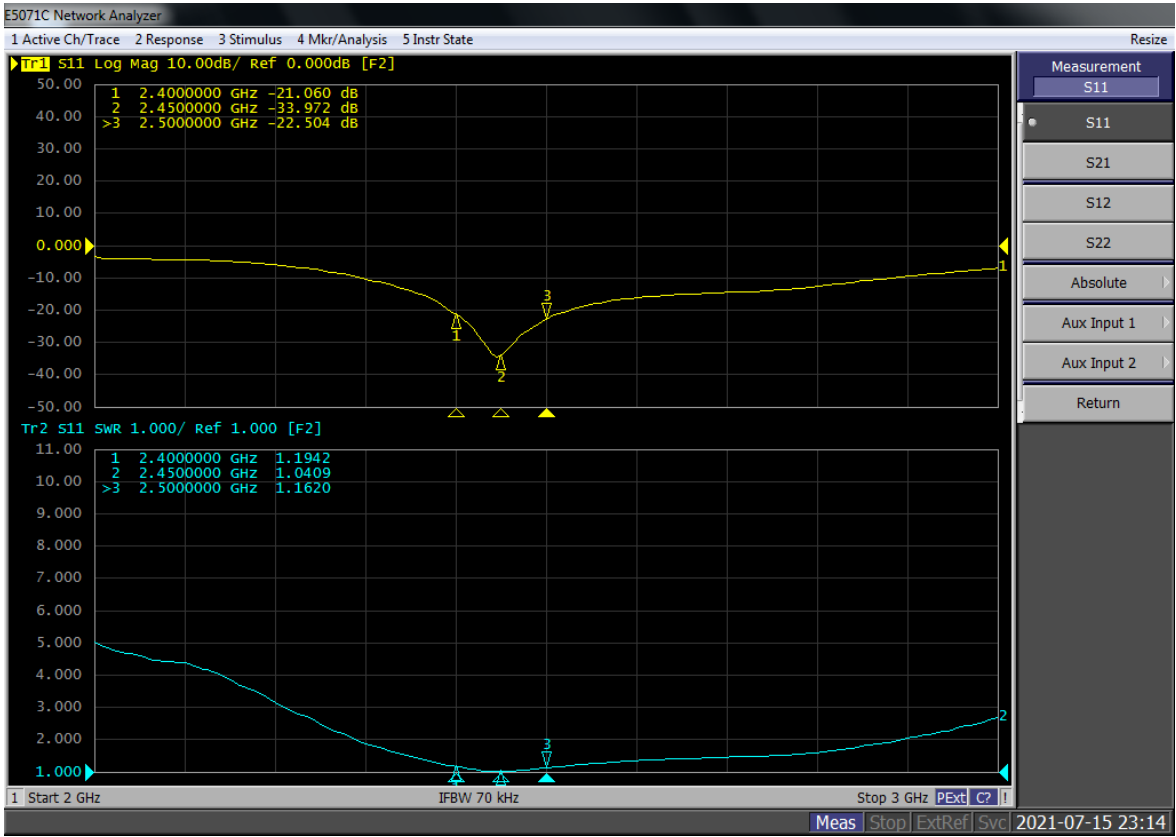
The gain of the antenna was measured in the anechoic chamber. The chamber provides less than -30 dB reflectivity from 400 MHz through 6 GHz. The chamber size is: 7m*4m*3m. The measurement results are calibrated using a leaky wave horn standard. We can measure the antenna gain and efficiency accurately.



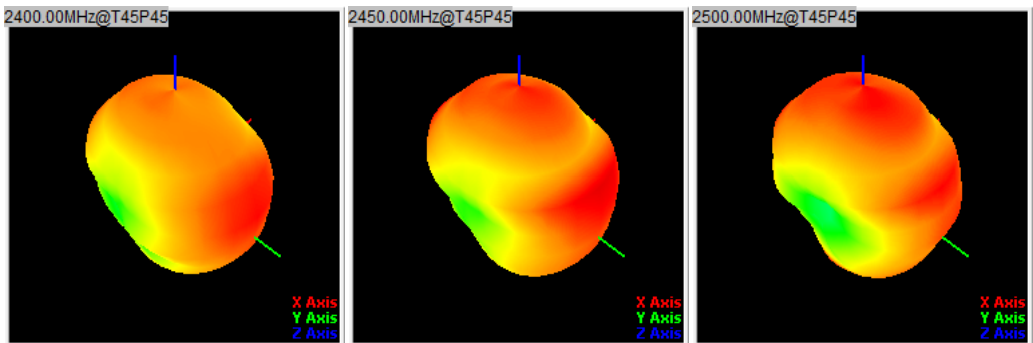
2. Antenna Solution



S11(ANT1)



Radiation patterns:3D



Radiation patterns at 2450MHz:2D

