

Antenna Passive Testing Report

Customer Name: FREQCHIP

Model Name: SJ03

Issued Date: 2022-12-22

Testing Place: RFI-LAB

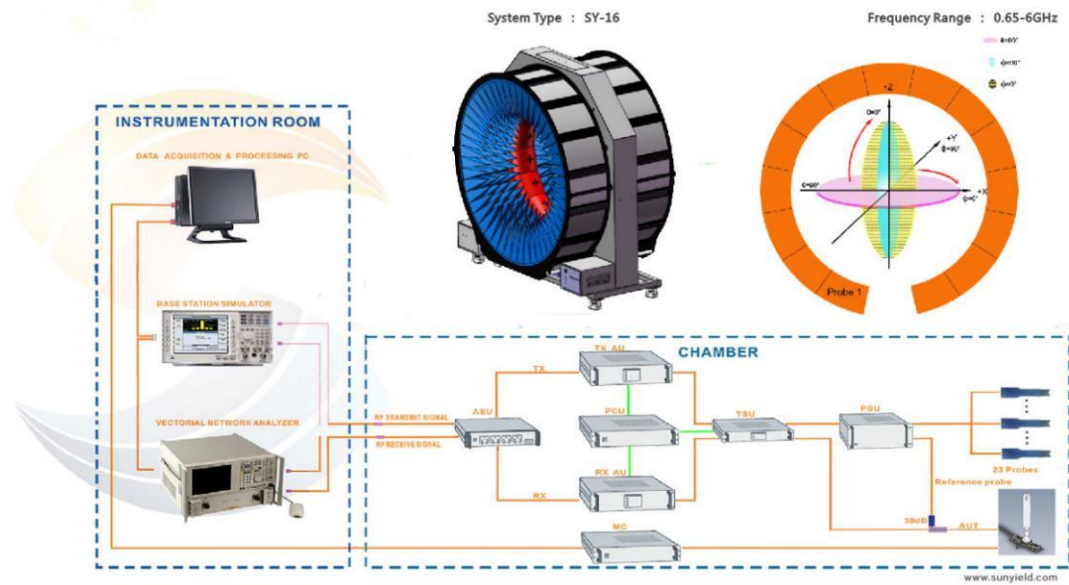
Testing Instrument: 3D Anechoic

chamber、Agilent5071C Testing Sample: Body Fat Scale

Testing Engineer: Jingyong W

1. Testing principle of Microwave anechoic chamber

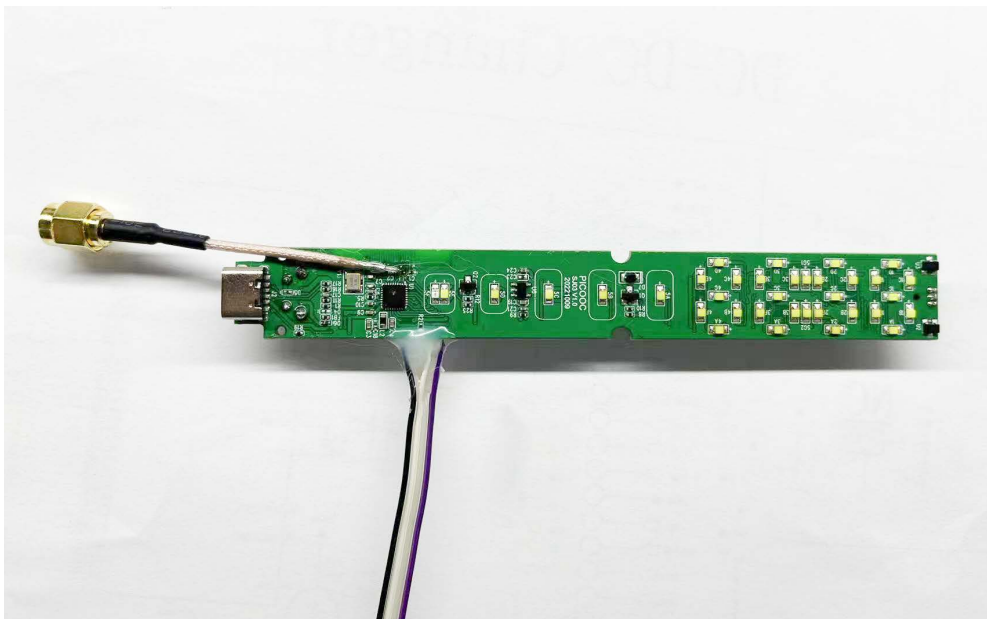
Multi-Probe OTA Measurement System



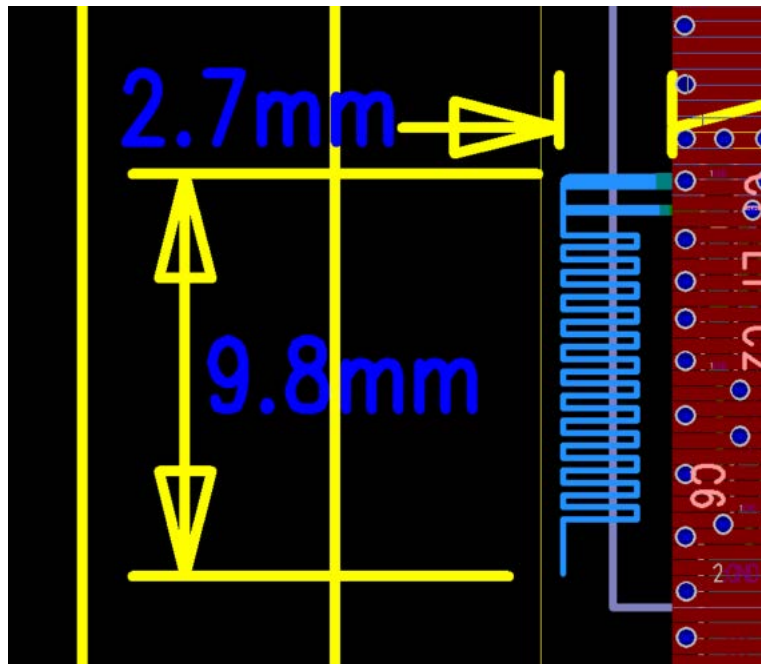
2. Testing Description

This report mainly includes the antenna passive testing data for below sample.

3. EUT Appearance

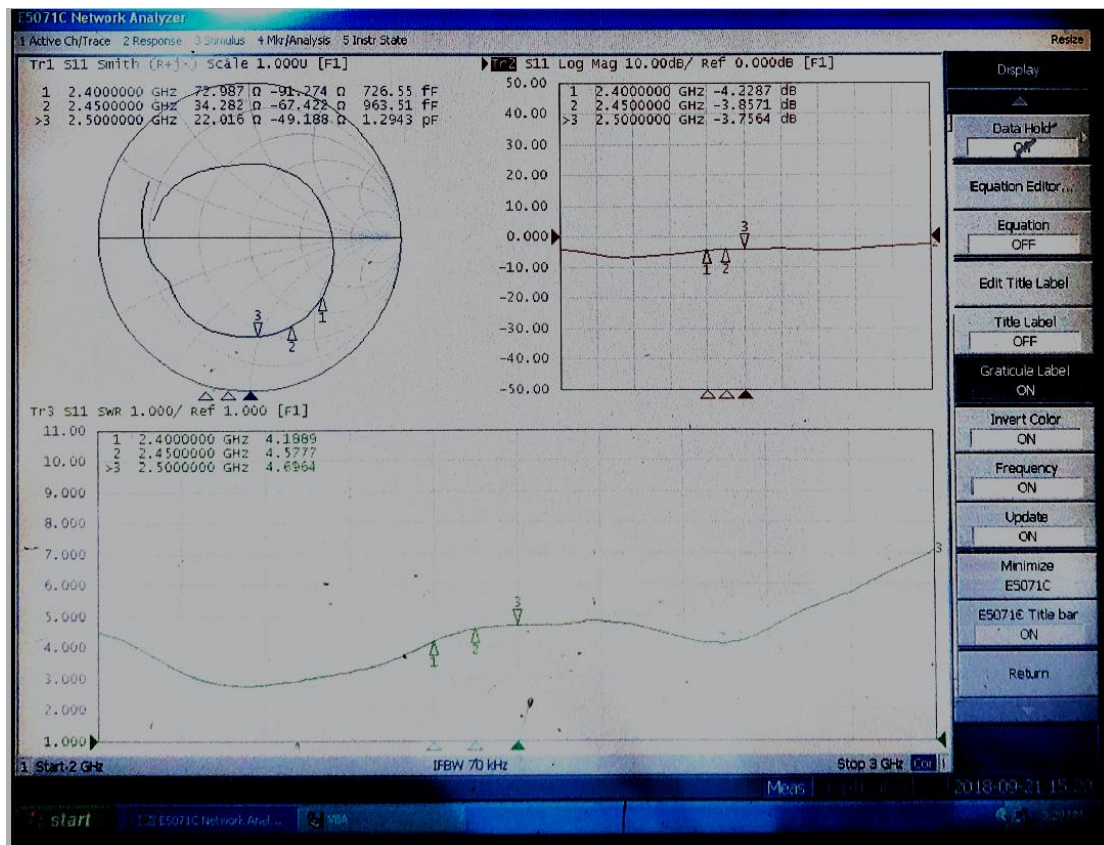


3.1 Antenna size



4. Passive testing data

4.1 S11 parameters

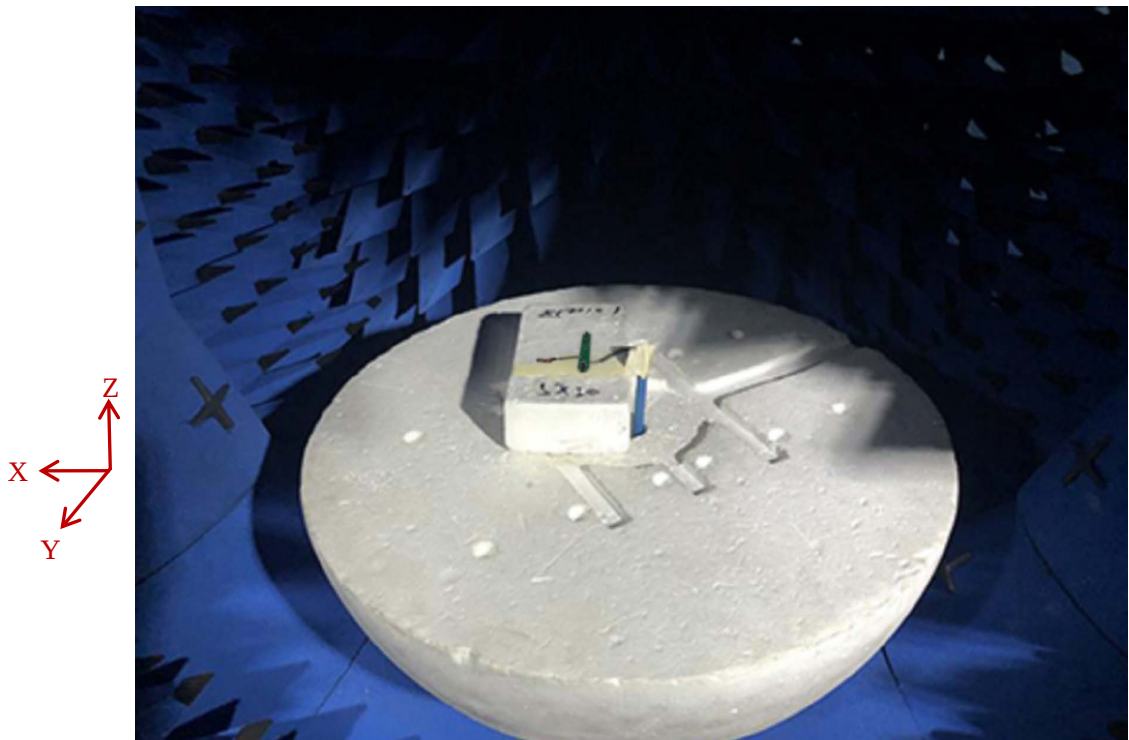


4.2 S11 testing data:

Freq/GHz	2.4	2.45	2.5
VSWR	4.19	4.58	4.70
Return Loss(dB)	-4.23	-3.86	-3.76

4.3 OTA anechoic chamber testing parameters:

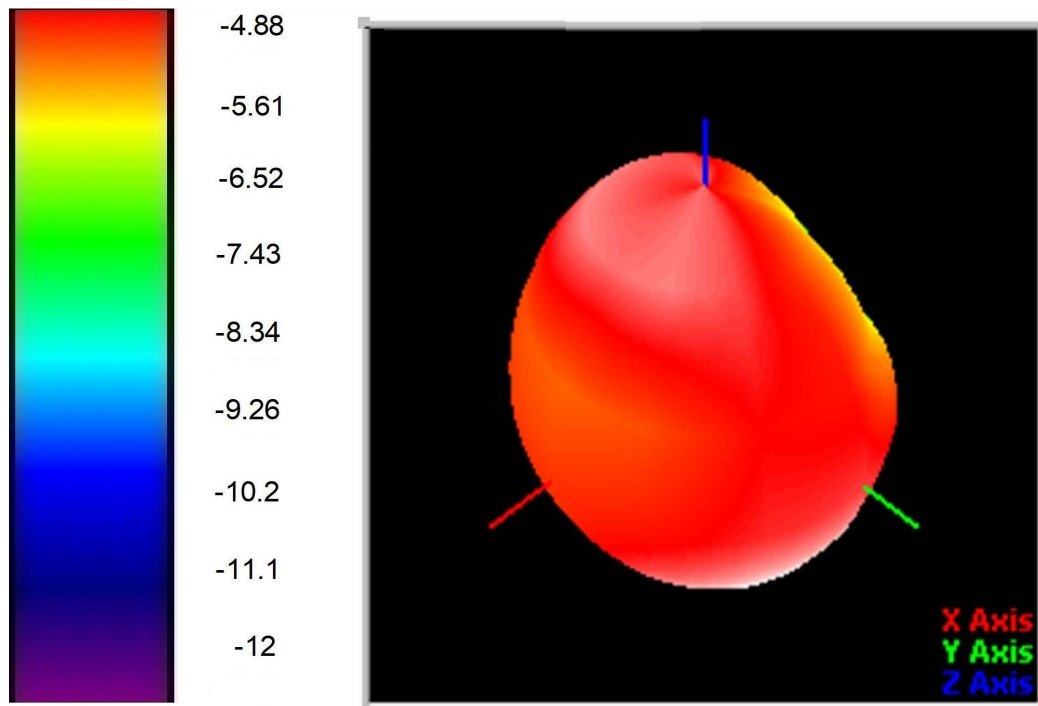
4.3.1 DUT setup photo of Free Space OTA testing:



4.3.2 Typical Free Space Efficiency and Gain

Frequency/MHz	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain/dBi	-5.49	-5.53	-5.61	-5.35	-5.42	-5.24	-5.17	-4.99	-4.88	-4.93	-4.96
Efficiency/%	11.46	11.16	10.86	11.03	10.86	10.90	10.86	11.17	11.20	11.18	11.21

4.3.4 Typical Free Space 3D Radiation Pattern at 2.48GHz



Frequency(MHz)	Max Gain(dBi)
2480	-4.88

5. Testing summary

This testing report record antenna passive testing data of the DUT, including antenna's S11 parameters, gain, efficiency, 3D pattern.

SHENZHEN B&T TECHNOLOGY Co., Ltd

December 22, 2022