

Antenna Passive Testing Report

Customer Name: MacroGiga

Model Name: Basic

Issued Date: 2022-12-21

Testing Place: RFI-LAB

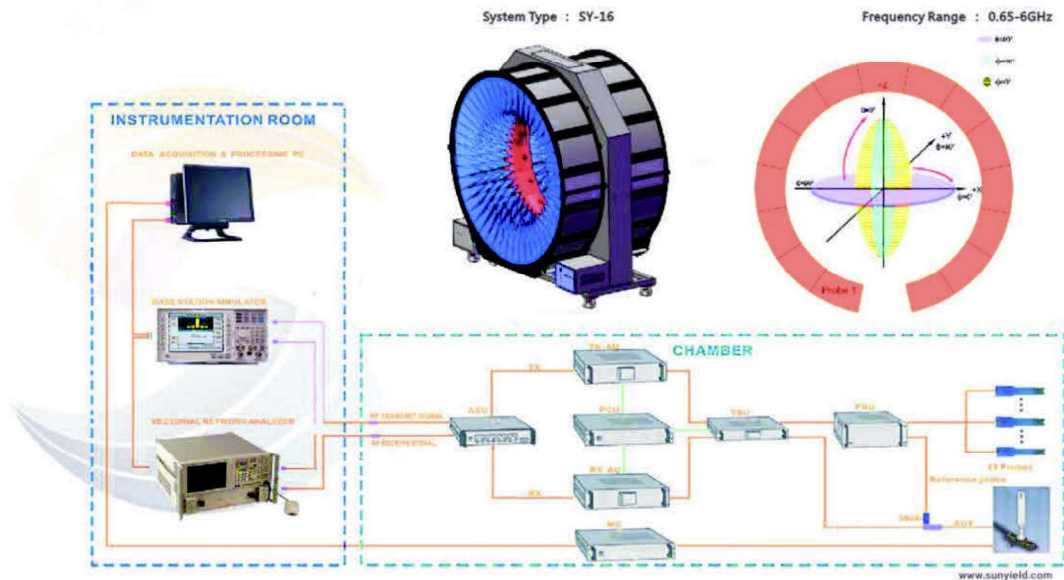
Testing Instrument: 3D Anechoic

chamber、Agilent5071C Testing Sample: Smart Body Weight Scale

Testing Engineer: Jingyong W

1. Testing principle of Microwave anechoic chamber

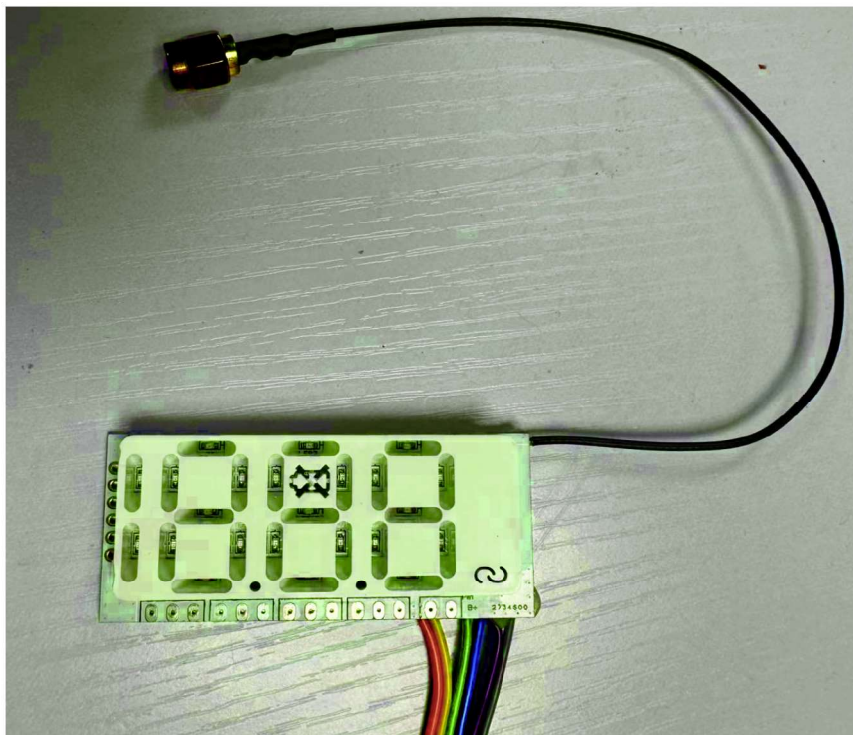
Multi-Probe OTA Measurement System

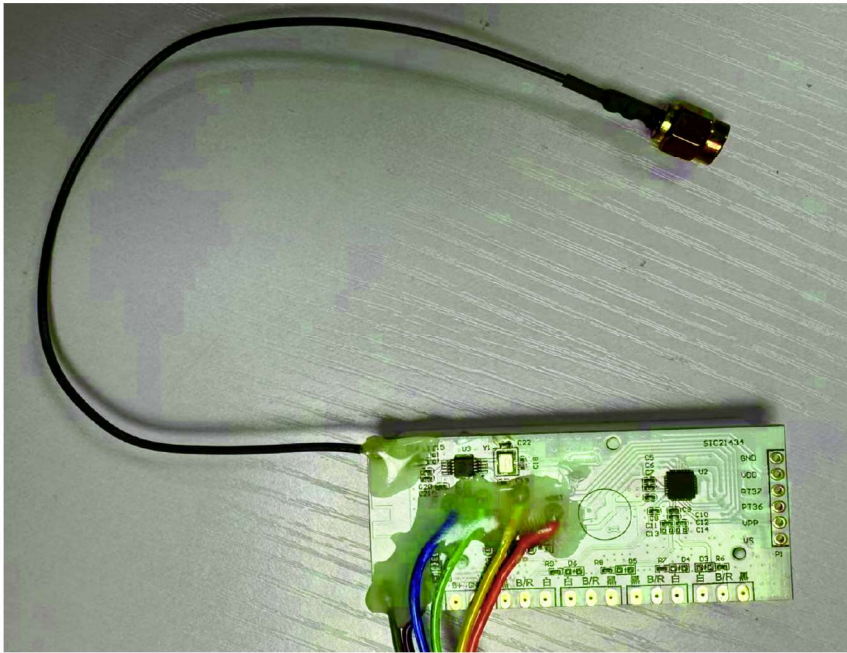


2. Testing Description

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

3. EUT Appearance





4. Passive testing data

4.1 S11 parameters

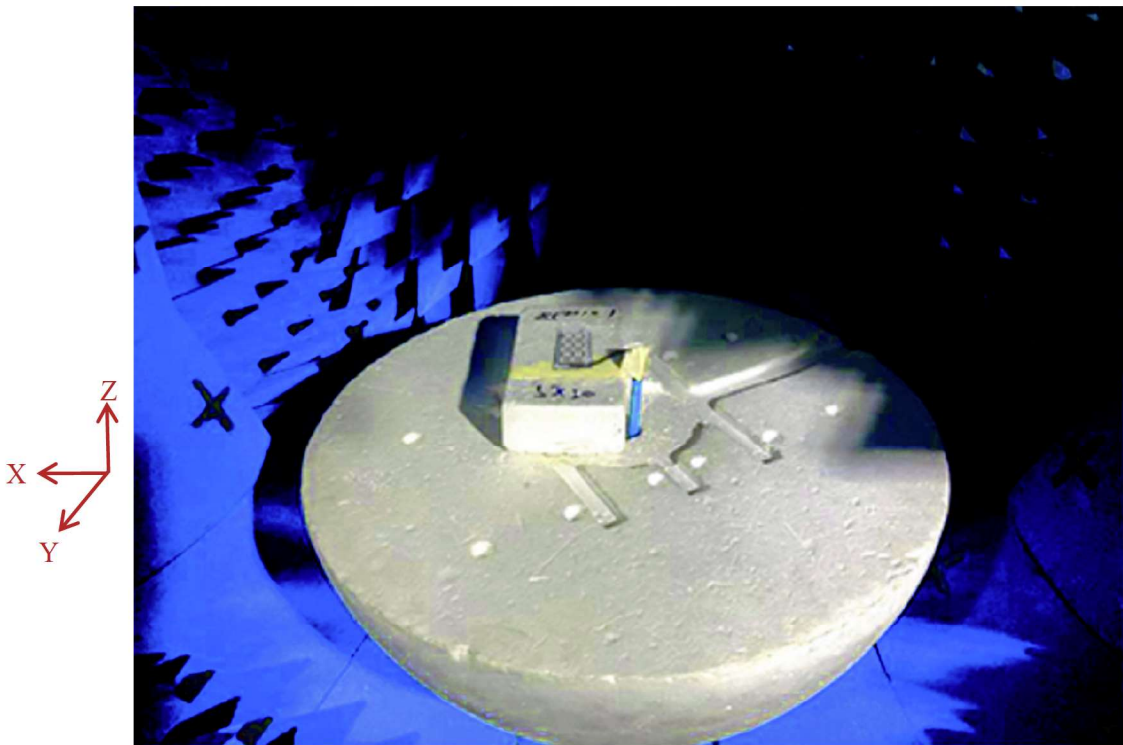


4.2 S11 testing data:

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:



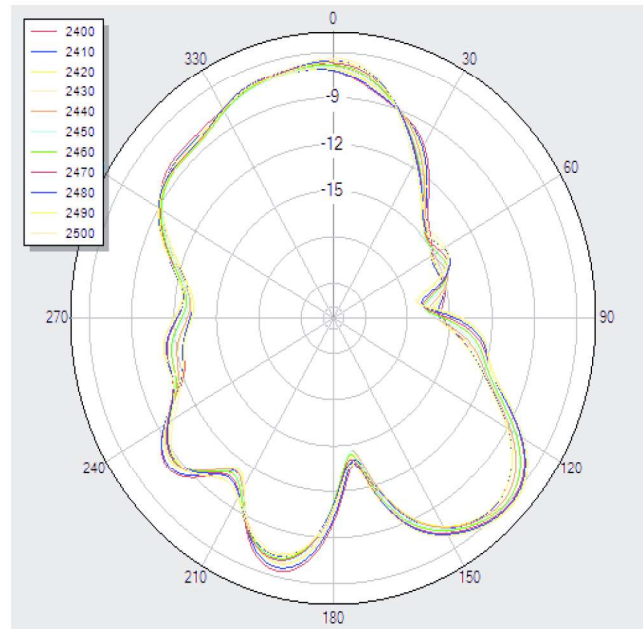
4.3.2 Typical Free Space Efficiency and Gain

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	-4.85	-4.89
Efficiency/%	11.46	11.16	10.86	11.03	10.86	10.90	10.86	11.17	11.20	11.18	11.21

4.3.3 Typical Free Space 2D Radiation Pattern range from 2.4GHz to 2.5GHz

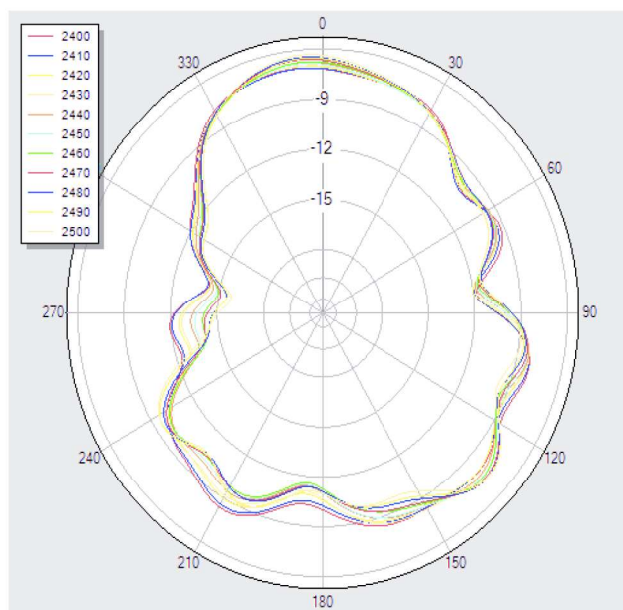
X-Z Plane:

V Phi=0



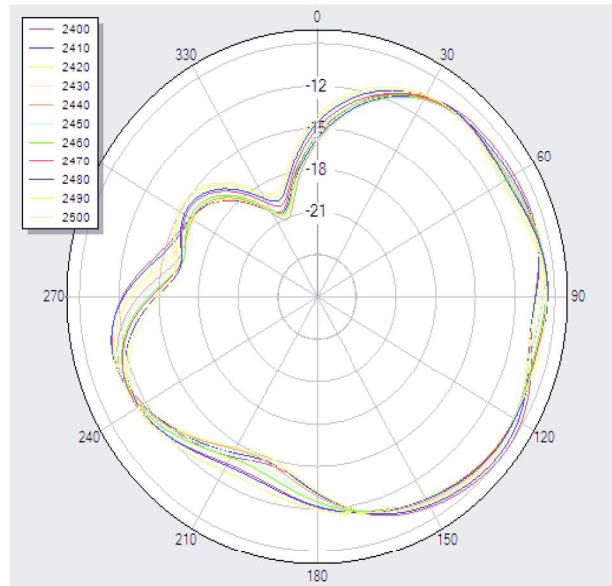
Y-Z Plane:

V Phi=90

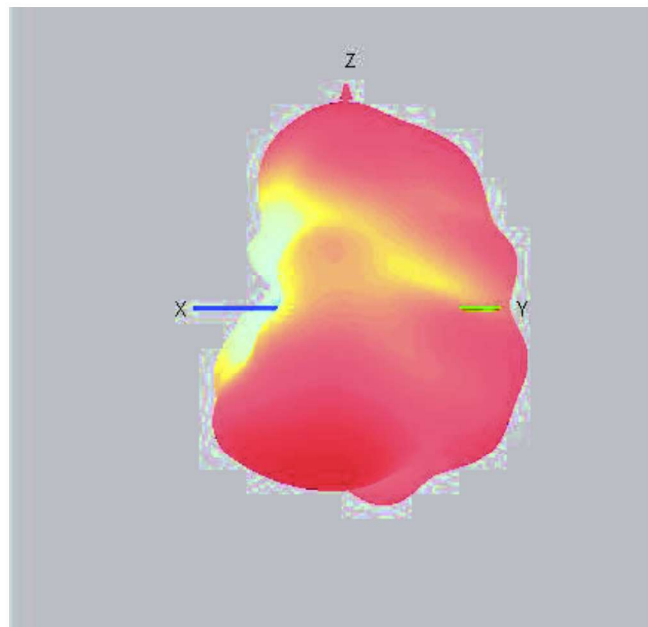


X-Y Plane:

H Theta=90



4.3.4 Typical Free Space 3D Radiation Pattern at 2.45GHz



5. Testing summary

This testing report record antenna passive testing data of the DUT, including antenna's S11 parameters, gain, efficiency, 2D/3D pattern.

SHENZHEN B&T TECHNOLOGY Co., Ltd

December 21, 2022