

2.4G 5.6x12.3MM Antenna Testing Report

Fangge Technology Co.

Date: 2023-02-22

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Approval: Grant. Lin

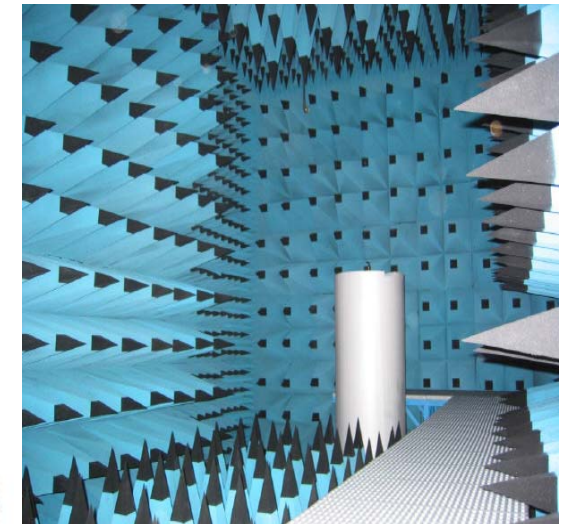
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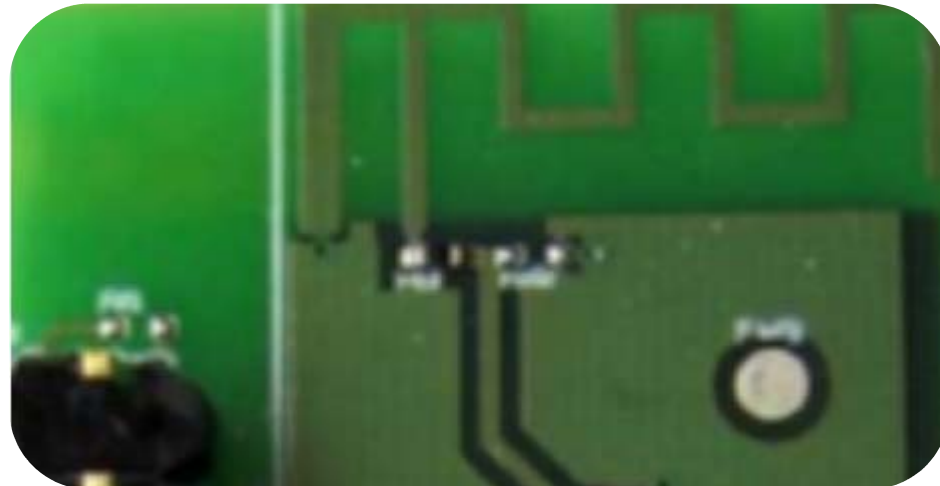
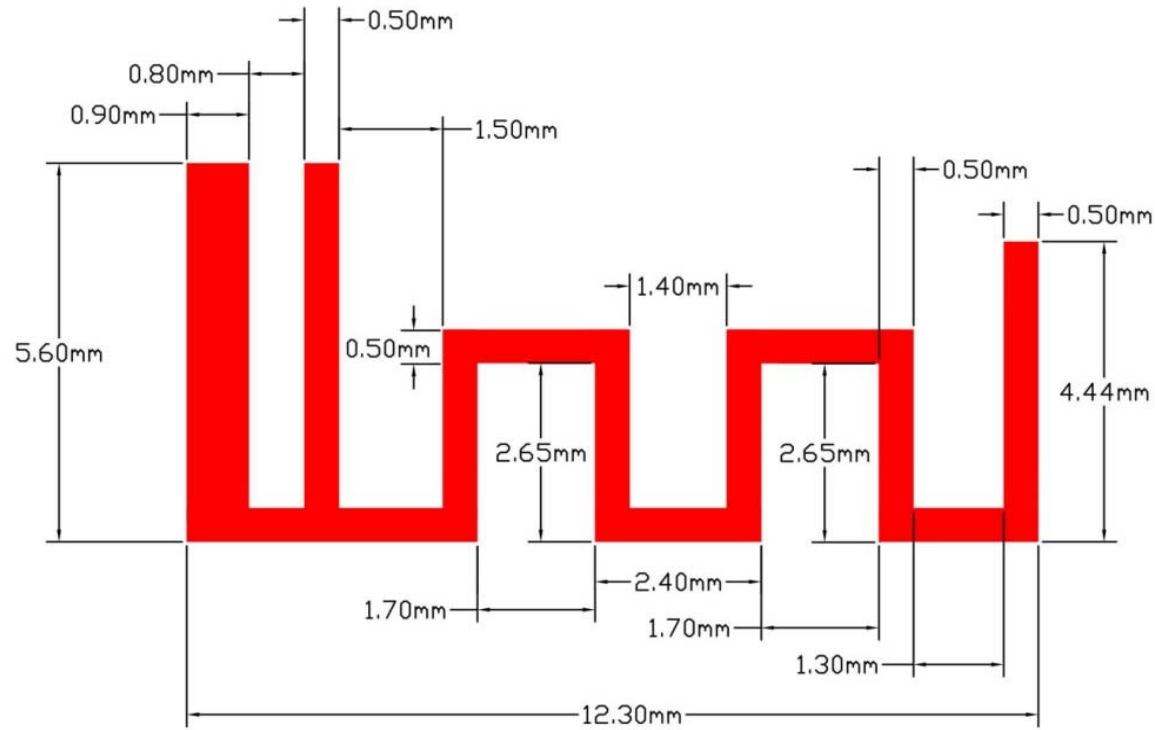
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1. Testing Item & Equipments

	Testing Item	Equipment
1. S Parameter	1. Return Loss 2. S.W.R.	Network Analyzer-AGILENT ENA5071B
2. Coupling Power Test	1. TX Power 2. Sensitivity	1. GSM Tester: R&S CMD 55 2. Shielding Box: R&S CMU-Z11
3. Radiation Pattern & Gain	1. Radiation Pattern 2. Antenna Gain	1. Anechoic Chamber 8x4x4 m (3D) 2. Network Analyzer-AGILENT 8753ET

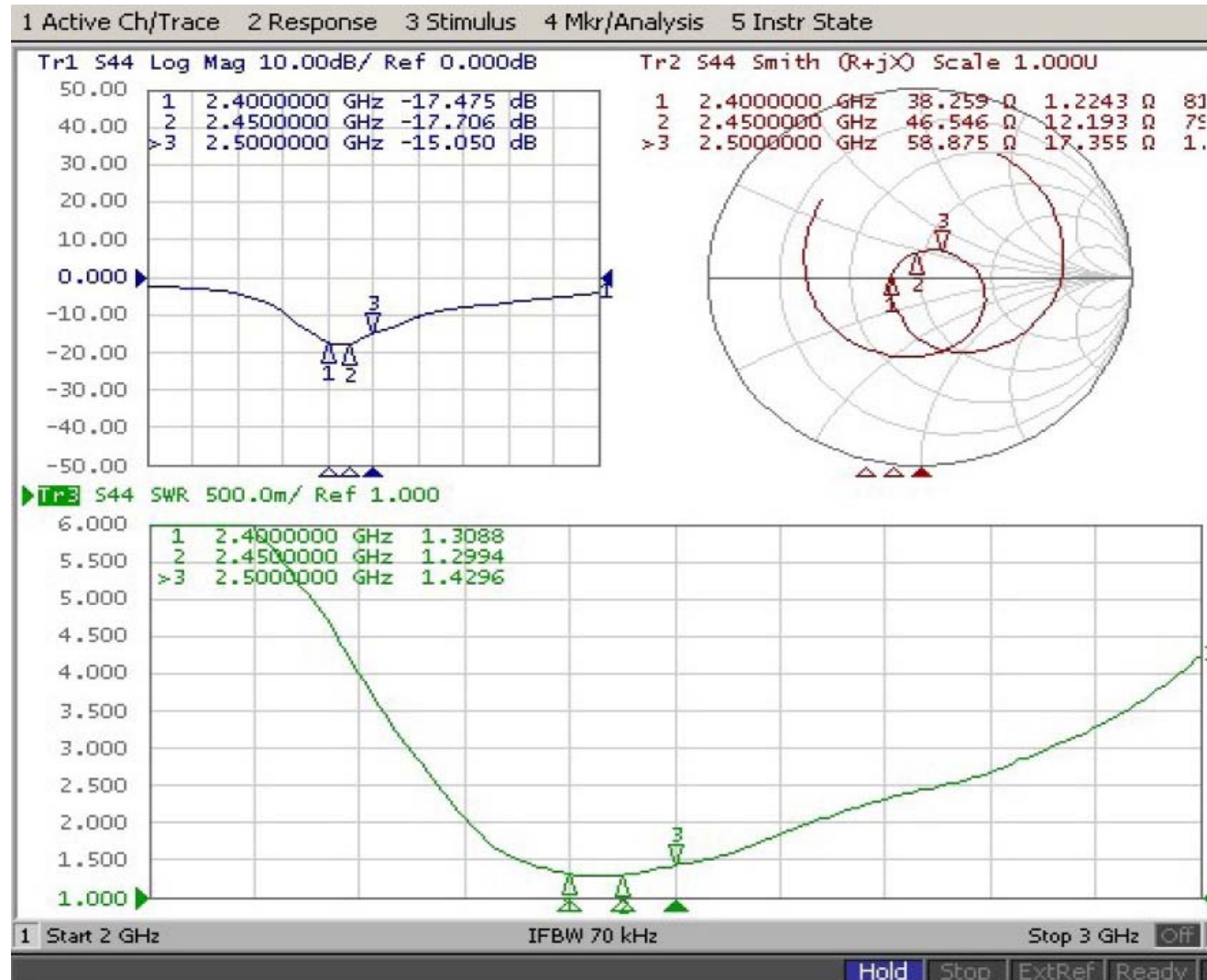


2. Antenna Structure

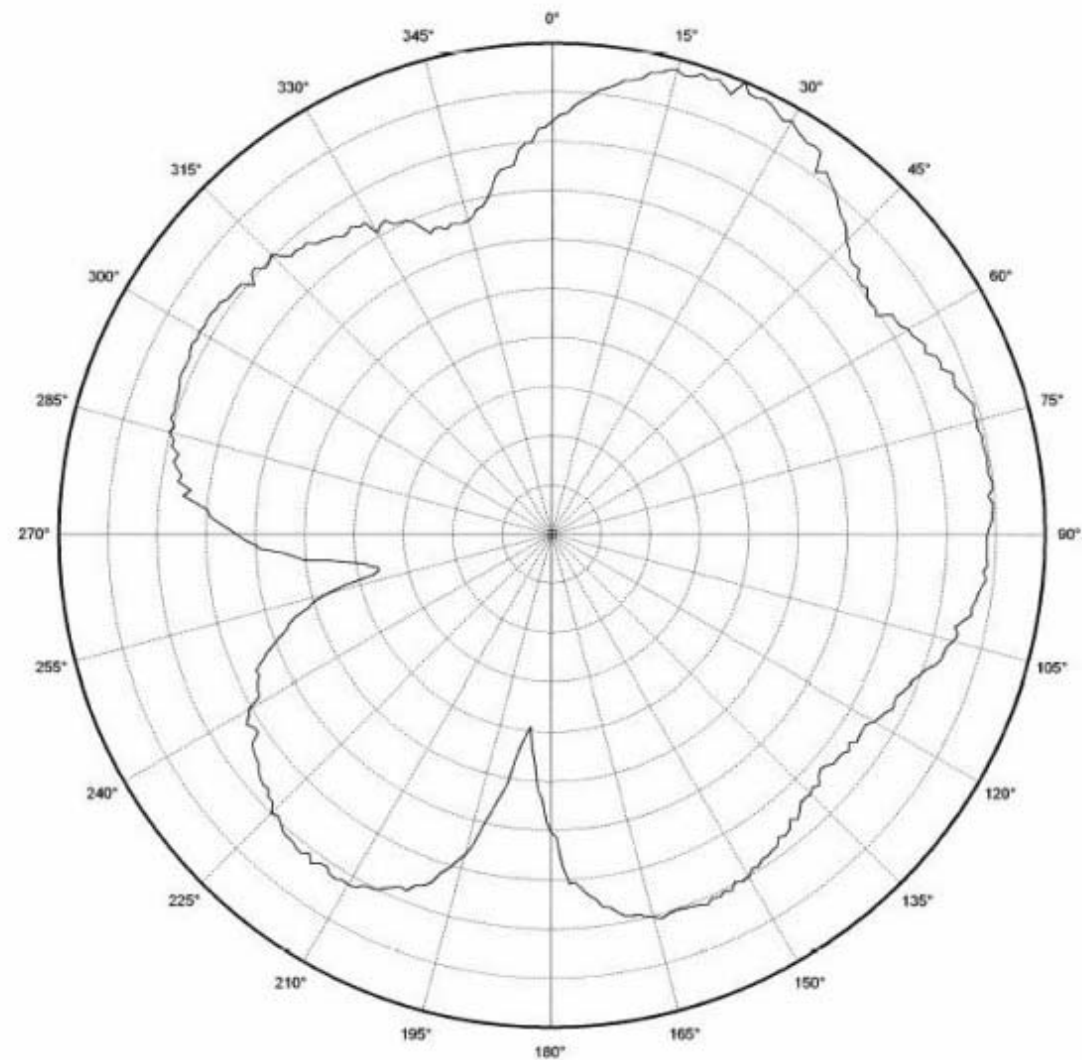


3. S Parameter Test

No.1 SWR



Application Note AN043



Vertical Polarization

usb XZ

CF 2450.000 MHz

4 dB/ div

Ref Lev: 2.2 dBm

Figure 9: USB Dongle XZ Plane

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4. Gain Test Results

A. Electrical Characteristics	
Frequency	2400 ~ 2500 MHz
S.W.R.	<= 2.0
Antenna Gain	2.2dBi
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Size	5.6*12.3mm
Connector Type	Welding
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C
Antenna Color Storage life	< 2 year