

# WIFI Antenna Test Report



|                          |                                                                                                                                                                                                                        |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturer information | Shenzhen Feixun Lianke Electronics Co., Ltd                                                                                                                                                                            |
| Project                  | S Mini NVR 2.4G antenna                                                                                                                                                                                                |
| Antenna type             | monopole antenna                                                                                                                                                                                                       |
| Product Description      | 5DB white integrated shell material circular PCB board is a conventional 2.4G board, XMT spring 1.13 black wire bus length 213MM exposed 150MM, PCB board soldering ratio 1:2:3, client is a first generation terminal |
| Product No               | JT19113B-HX0-150-2.4G                                                                                                                                                                                                  |
| Antenna frequency band   | 2400MHz-2500MHz                                                                                                                                                                                                        |

September  
19th, 2024

## ***Purpose***

**This report is to measure the performance of antenna for All test date are showed as below.**

## ***Content***

### **1: Product Overview**

#### **1.1 Antenna schematic diagram**

#### **1.2 Antenna size diagram**

### **2: Test Result**

#### **2.1 VSWR**

#### **2.2 RETRUN LOSS**

#### **2.3 *Smith Chart***

#### **2.4 GAIN & Efficiency**

#### **2.5 *2D & 3D Directional pattern***

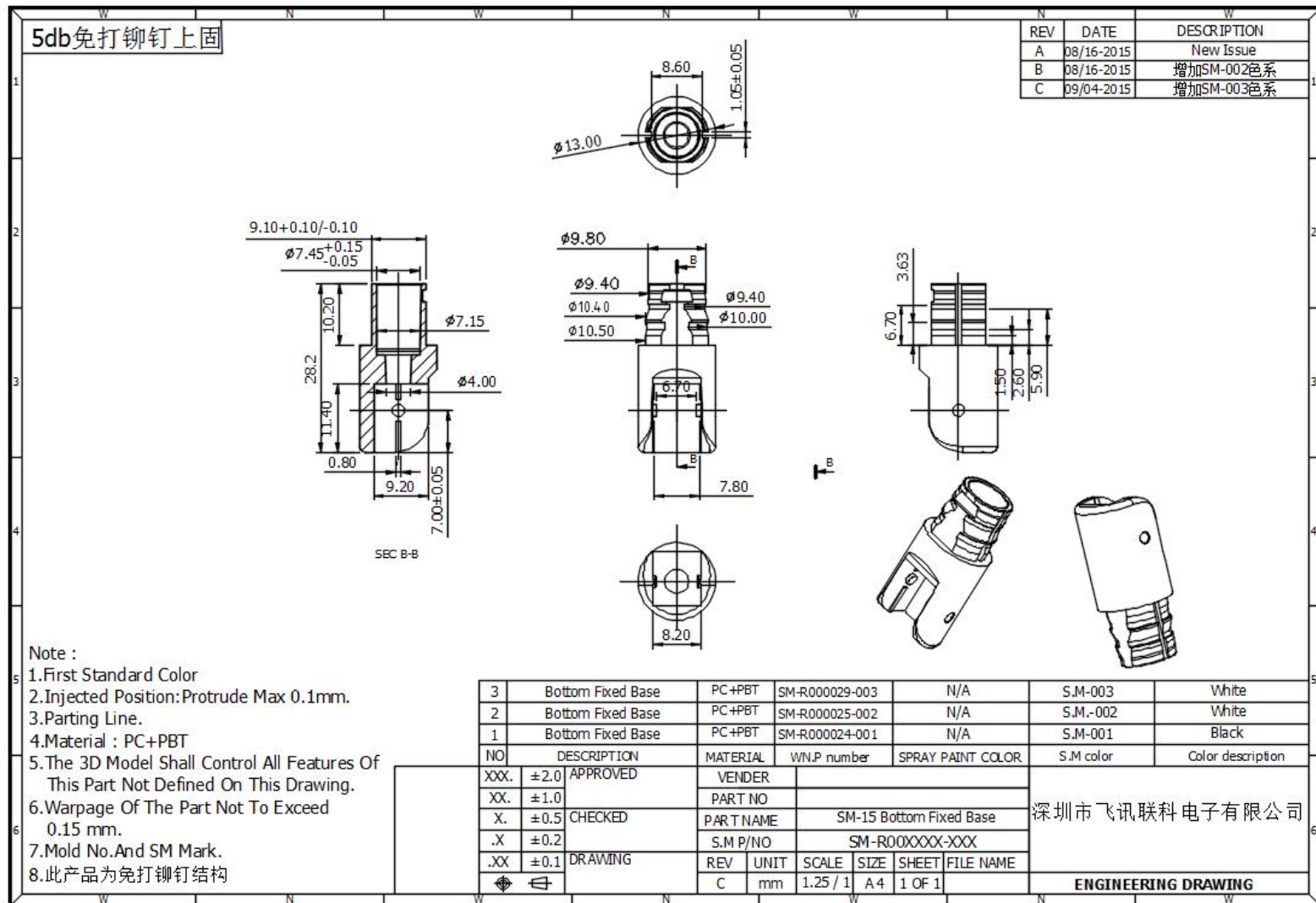
# **1. Product Overview**

## **1.1 Antenna schematic diagram**



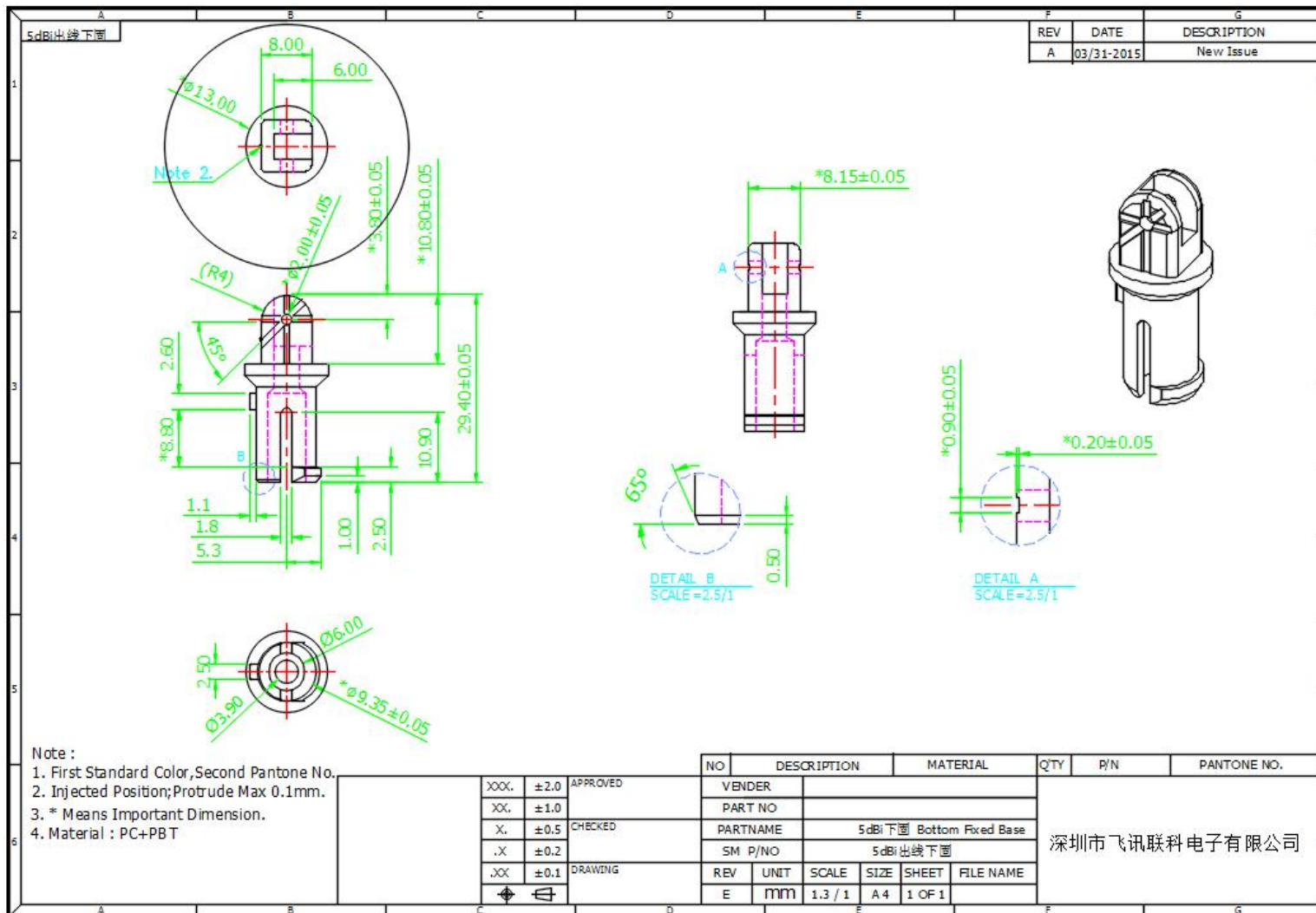
# 1. Product Overview

## 1.2 Antenna size diagram



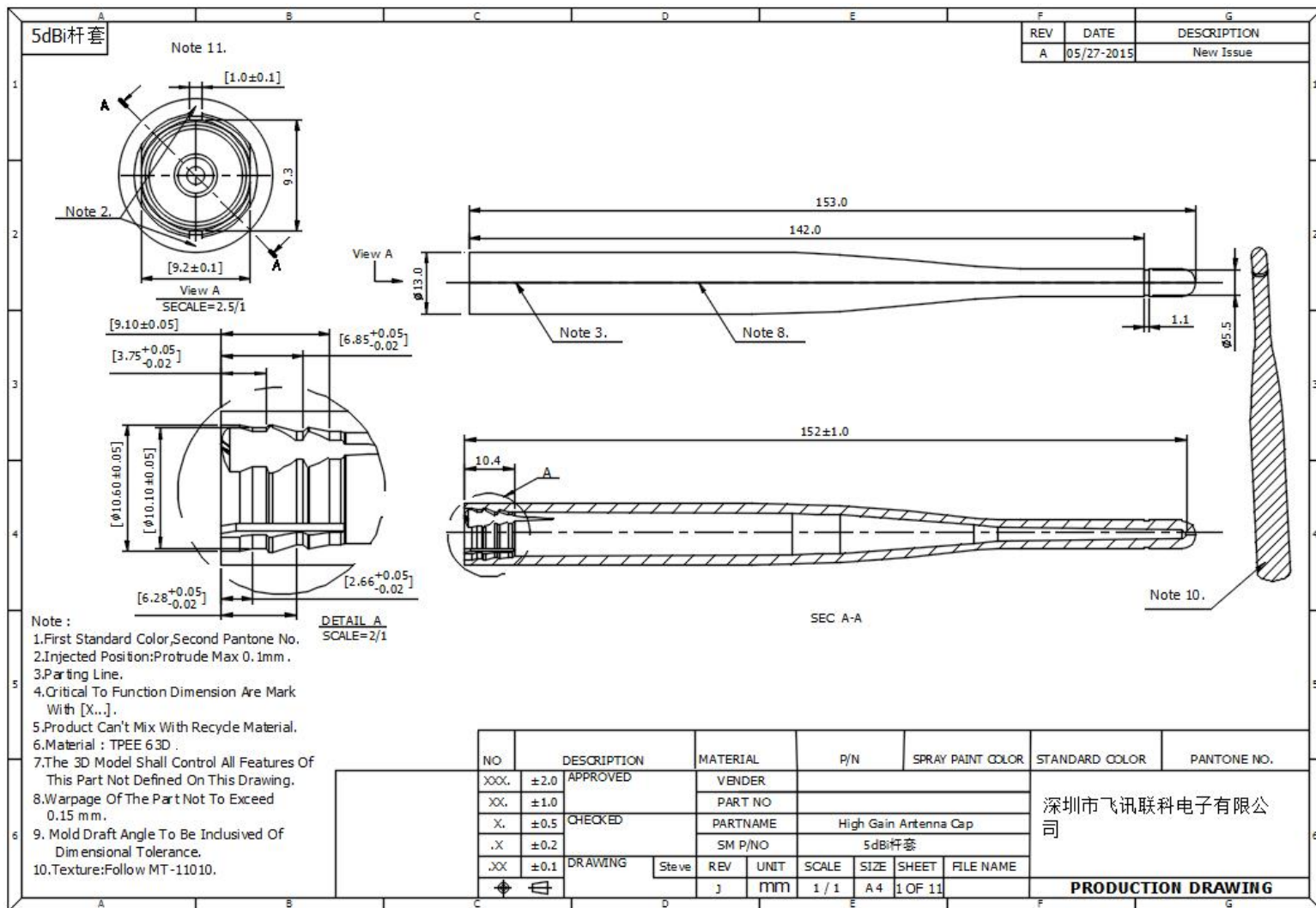
# 1. Product Overview

## 1.2 Antenna size diagram



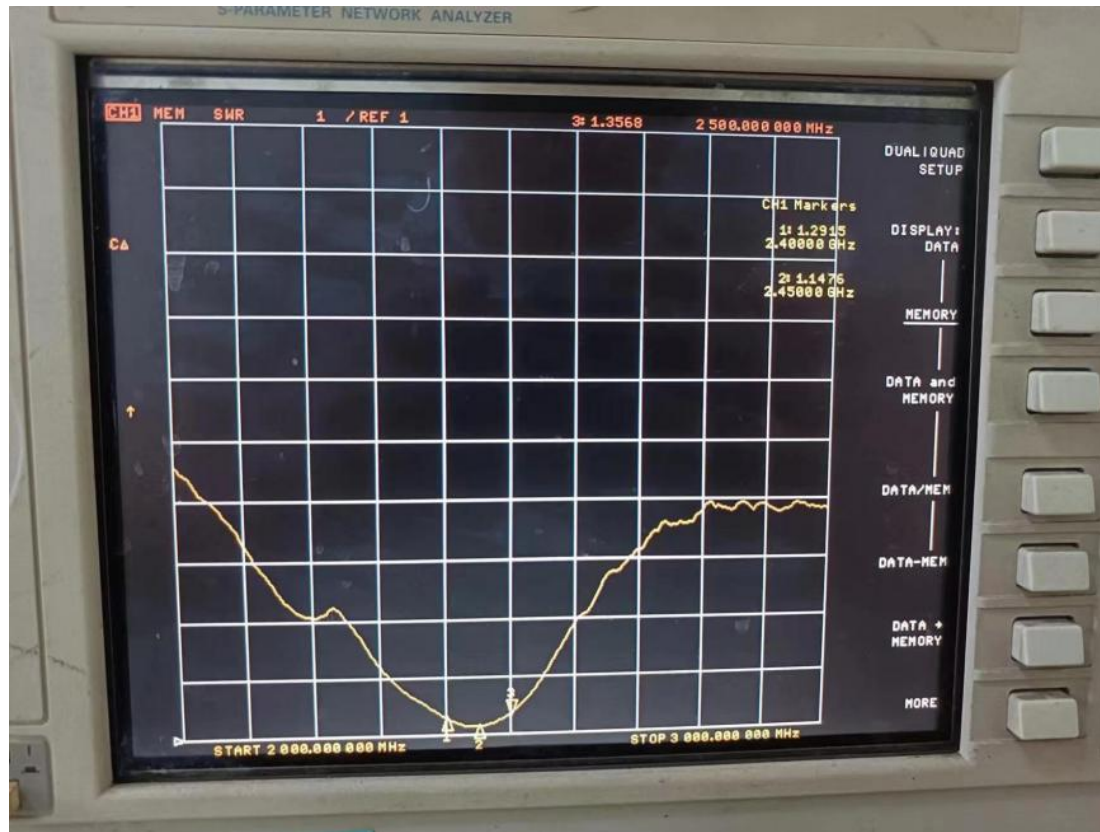
# 1. Product Overview

## 1.2 Antenna size diagram



## 2. Test Result

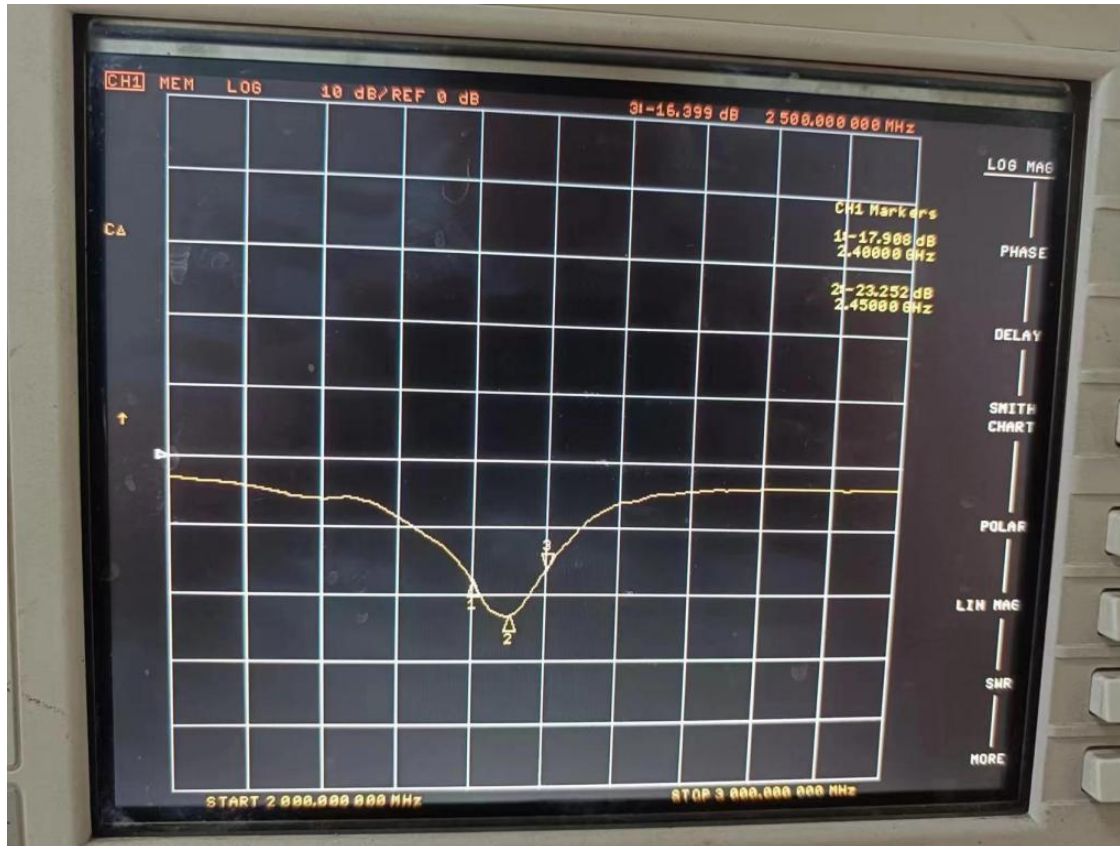
### 2.1 2.4G antenna VSWR



| Frequency (MHz) | 2400 | 2450 | 2500 |
|-----------------|------|------|------|
| VSWR            | 1.29 | 1.14 | 1.35 |

## 2. Test Result

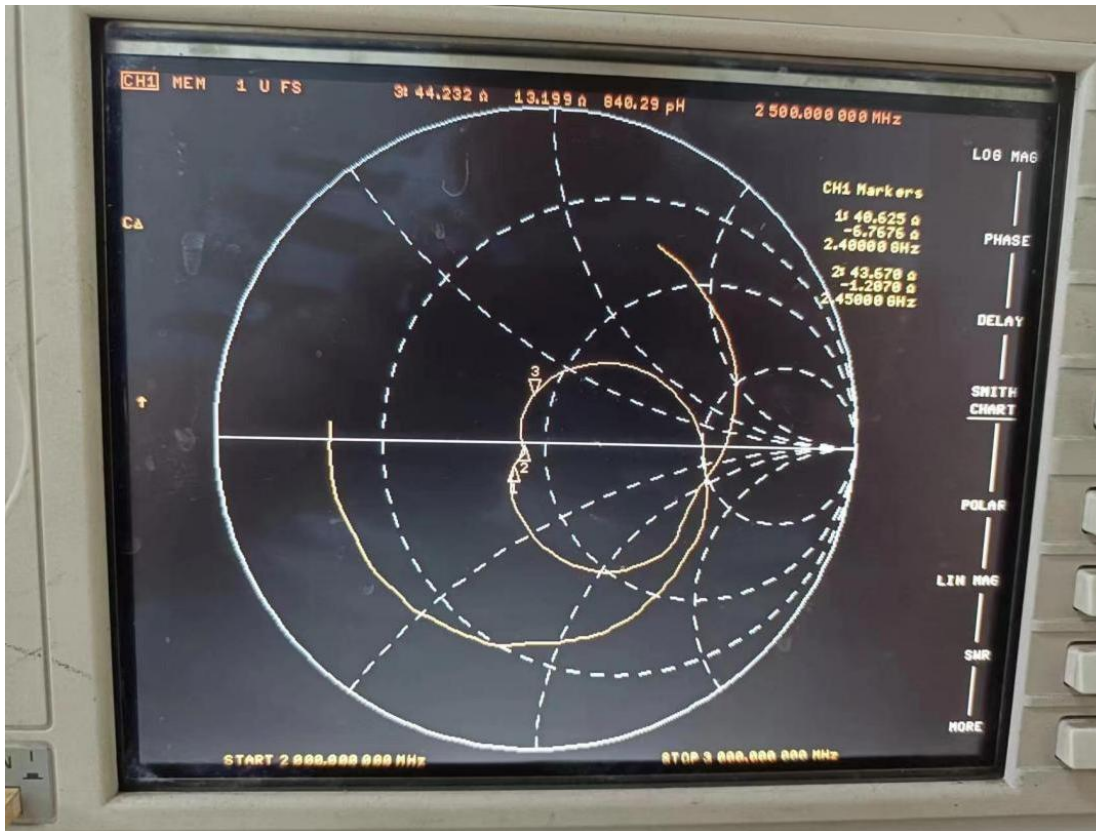
### 2.2 2.4G antenna *RETRUN LOSS*



| Frequency (MHz)  | 2400   | 2450   | 2500   |
|------------------|--------|--------|--------|
| RETRUN LOSS (DB) | -17.90 | -23.25 | -16.39 |

## 2. Test Result

### 2.3 2.4G antenna *Smith Chart*



| Frequency (MHz) | 2400  | 2450  | 2500  |
|-----------------|-------|-------|-------|
|                 | 40.62 | 43.67 | 44.23 |

## 2. Test Result

### 2.4 2.4G antenna *GAIN & Efficiency*

| Freq        | Effi  | Gain  |
|-------------|-------|-------|
| (MHz)       | (%)   | (dBi) |
| <b>2400</b> | 79.19 | 5.5   |
| <b>2410</b> | 81.71 | 5.51  |
| <b>2420</b> | 78.11 | 5.12  |
| <b>2430</b> | 81.45 | 5.2   |
| <b>2440</b> | 81.91 | 5.26  |
| <b>2450</b> | 86.47 | 5.54  |
| <b>2460</b> | 84.85 | 5.52  |
| <b>2470</b> | 76.95 | 5.11  |
| <b>2480</b> | 82.09 | 5.3   |
| <b>2490</b> | 82.03 | 5.29  |
| <b>2500</b> | 81.11 | 5.27  |

## 2. Test Result

### 2.5 2.4G antenna 2D & 3D Directional pattern

