

# Inverted F Antenna Specification

**MANUFACTURE** : SHANGHAI MOUNTAIN VIEW SILICON CO., LTD

**PRODUCT NAME** : MV\_BP10xx PCB Antenna

**DATE** : 2019-10-30

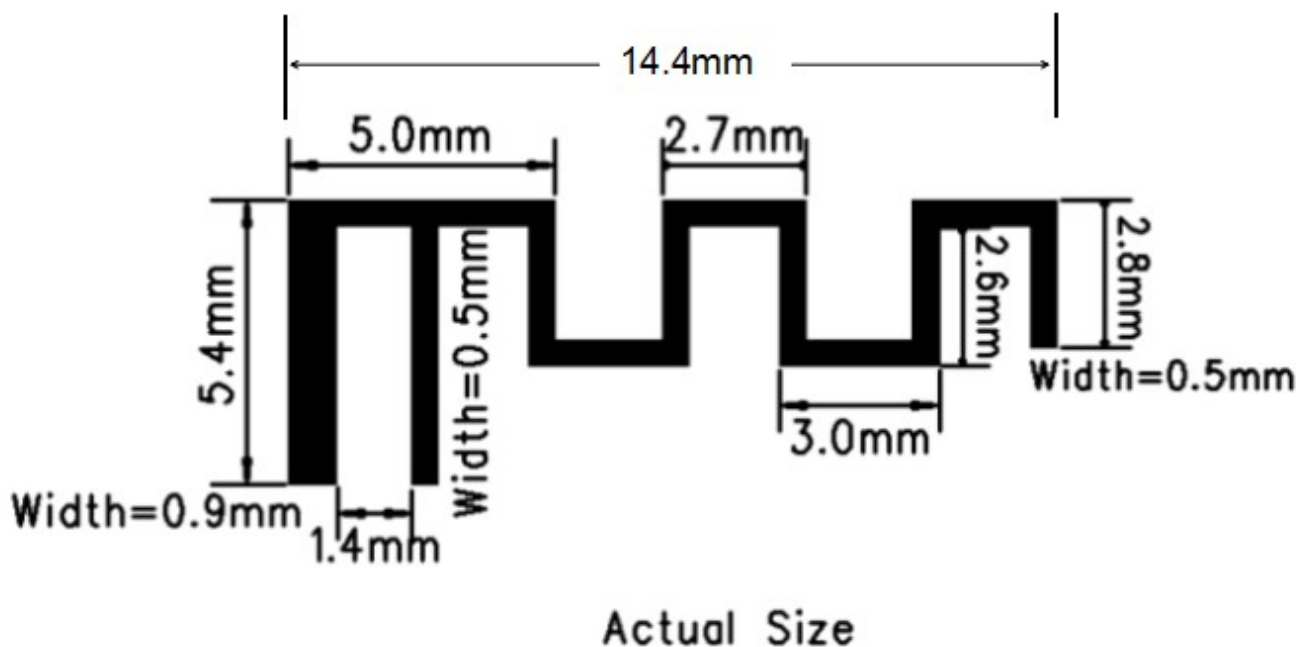
## 1. Antenna describe

Antenna plate: Inverted F Antenna

Frequency range: 2.4GHz-2.48GHz

|                      |                                  |
|----------------------|----------------------------------|
| ITEM Name            | Inverted F Antenna Specification |
| Model Name           | 2.4GHz Antenna                   |
| Polarization         | Horizontal and Vertical          |
| Azimuth Beam Pattern | Omni-directional                 |
| Impedance            | 50 Ohm                           |
| Antenna Lengh        | 14.4mm                           |
| Gain(Max)            | 3.38dBi                          |

## 2. Antenna Photo& Lengh (mm)



### 3. Gain

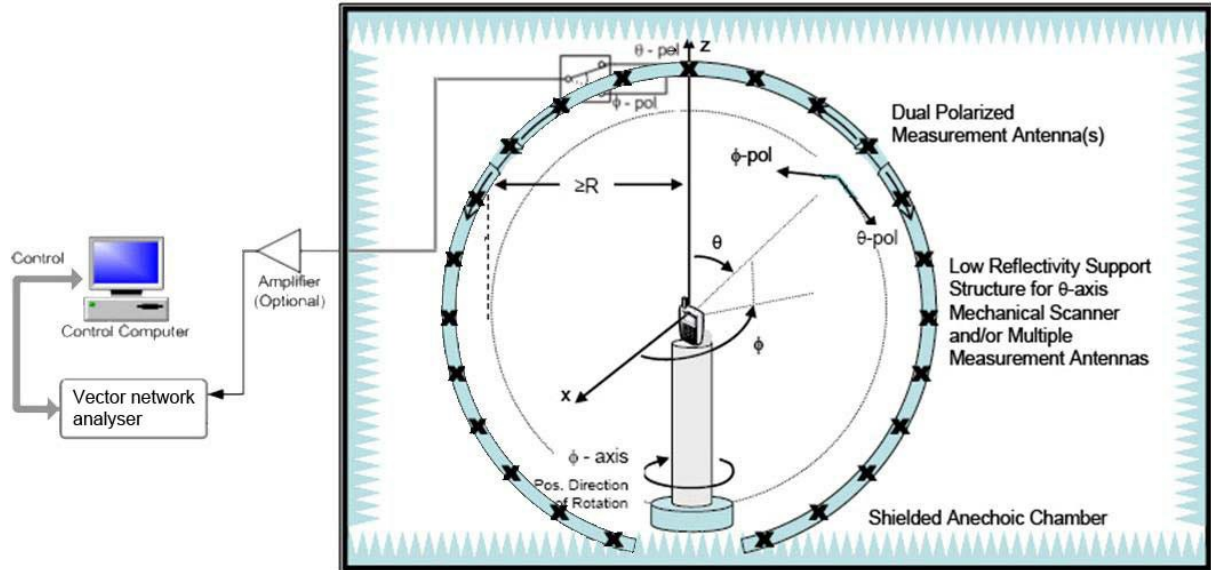
| Frequency | Gain (dBi) |
|-----------|------------|
| 2400MHz   | 2.81       |
| 2410MHz   | 2.74       |
| 2420MHz   | 2.70       |
| 2430MHz   | 2.73       |
| 2440MHz   | 1.01       |
| 2450MHz   | 1.26       |
| 2460MHz   | 1.50       |
| 2470MHz   | 1.49       |
| 2480MHz   | 1.42       |
| 2490MHz   | 0.36       |
| 2500MHz   | 0.33       |

### 4. Return Loss/VSWR/Input Impedance

| Frequency | Return Loss (dB) | VSWR | Input Impedance( $\Omega$ ) |
|-----------|------------------|------|-----------------------------|
| 2400MHz   | -7.23            | 2.53 | 25.37                       |
| 2400MHz   | -6.47            | 2.80 | 17.99                       |
| 2450MHz   | -6.22            | 2.90 | 17.18                       |
| 2480MHz   | -5.18            | 3.44 | 15.55                       |
| 2500MHz   | -4.56            | 3.89 | 15.48                       |

## Annex A Photographs

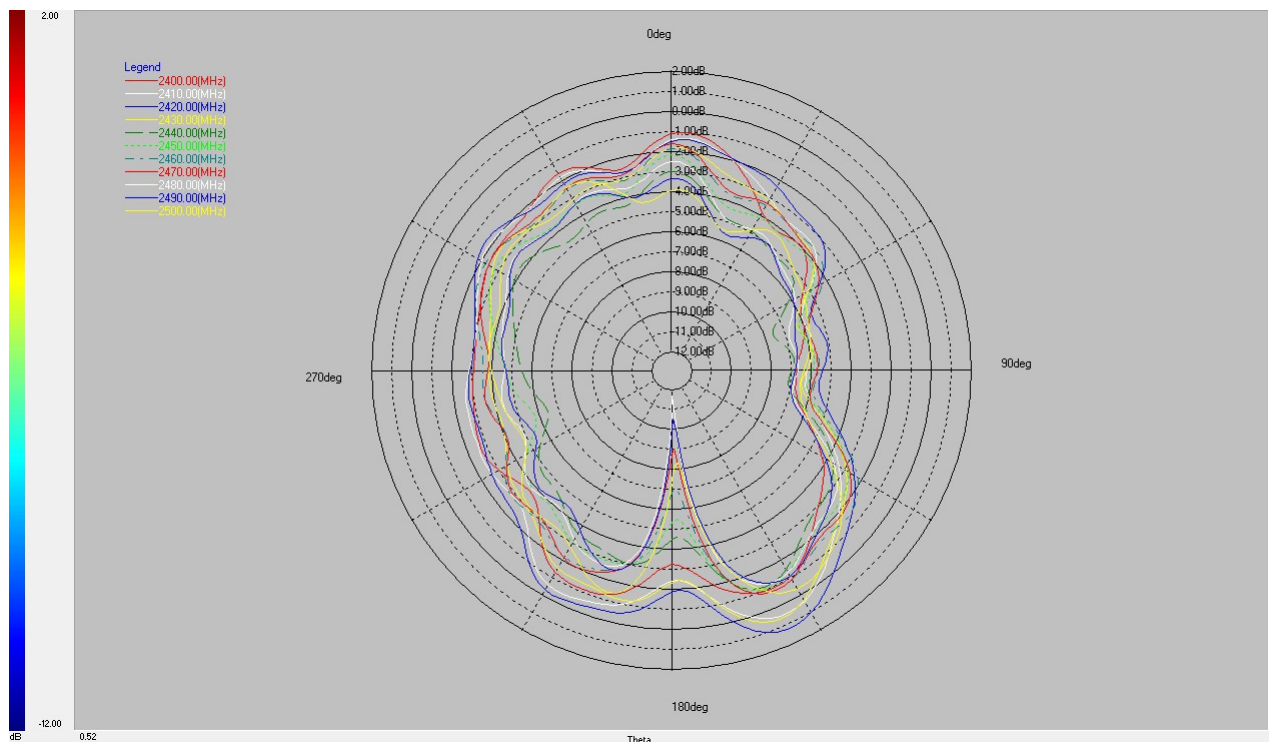
### 1. Test Setup



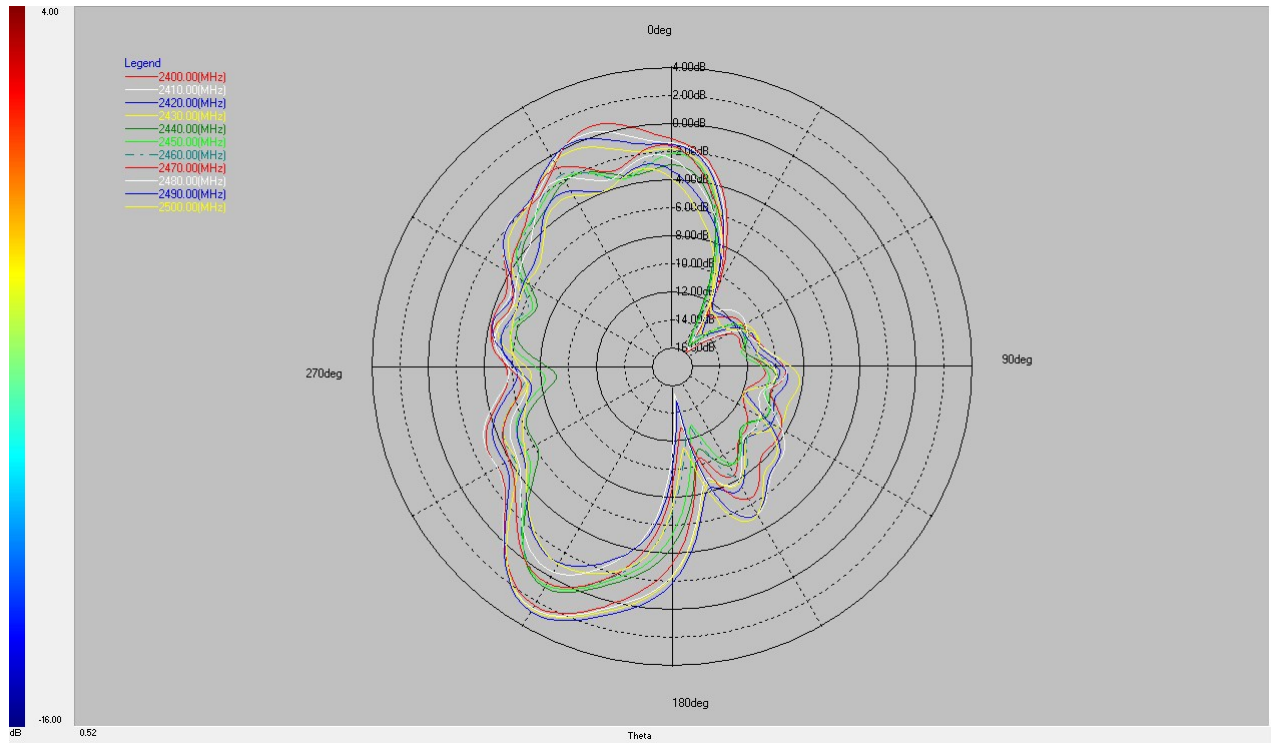
## Annex B Figures

### 1. 2D Radiation Pattern

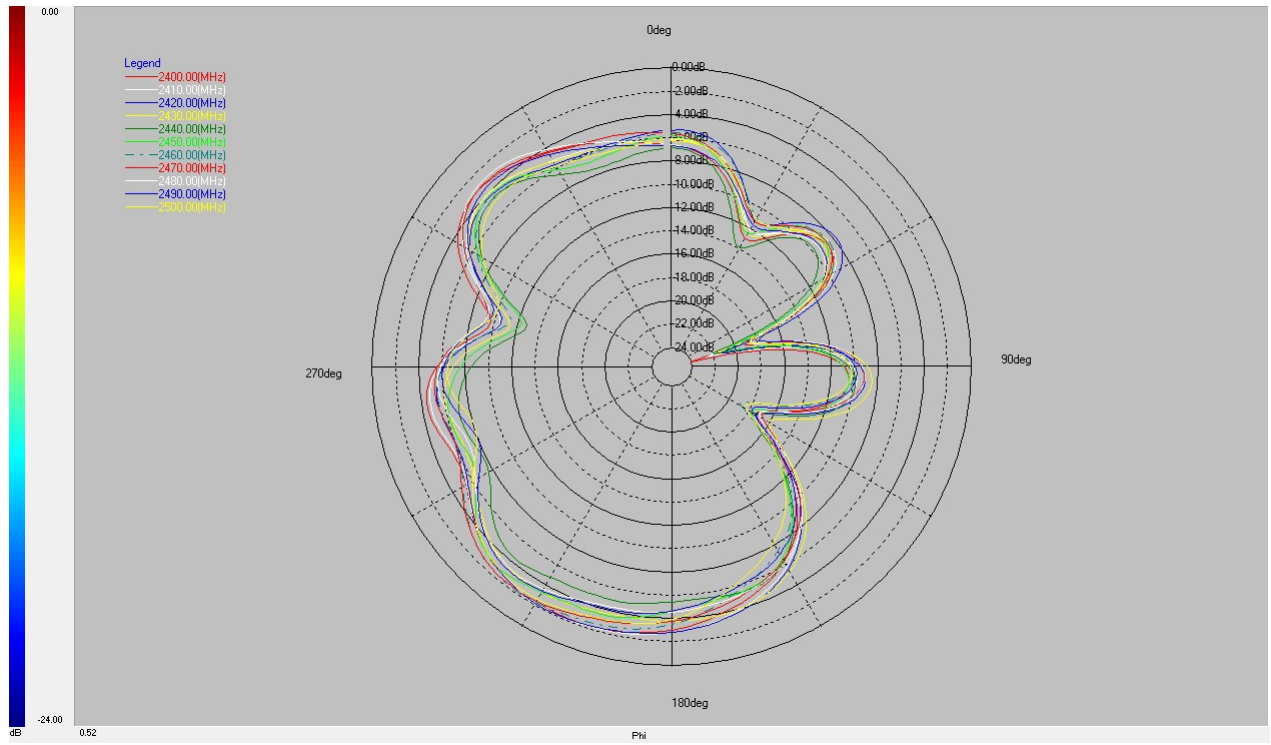
$\Phi=0^\circ$



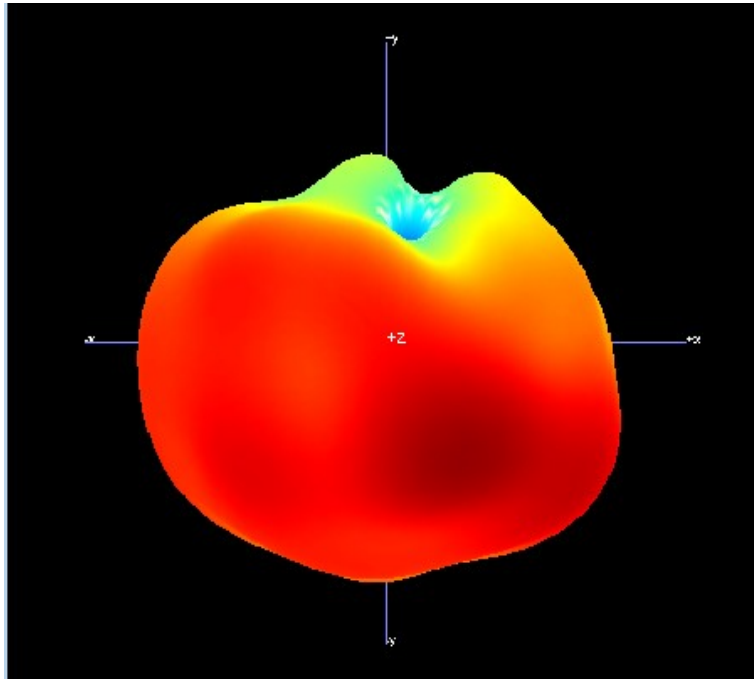
Phi=90°



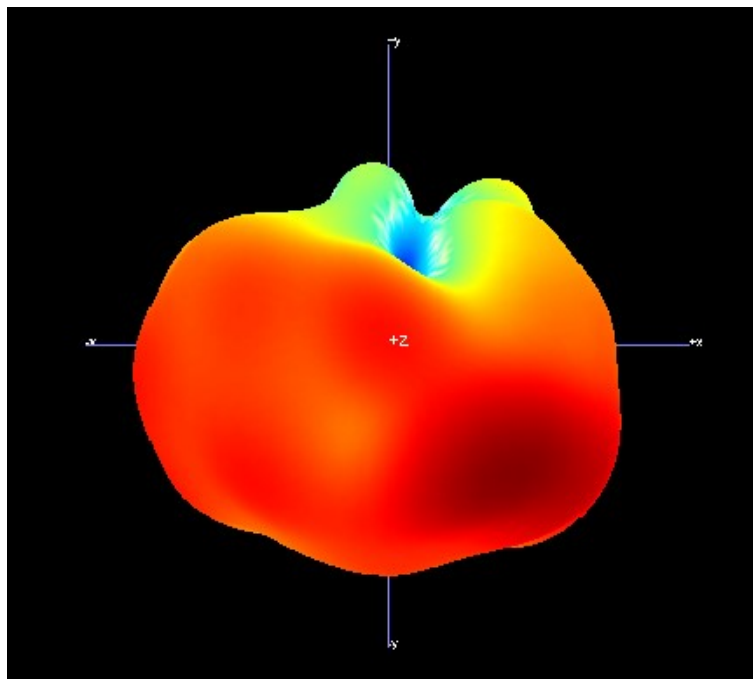
Theta=90°



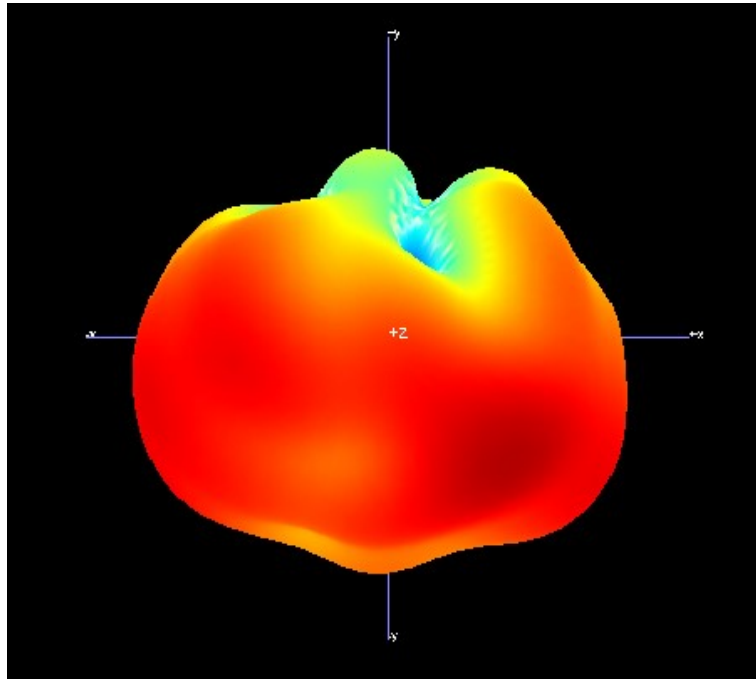
## 2. 3D Radiation Pattern



2400MHz

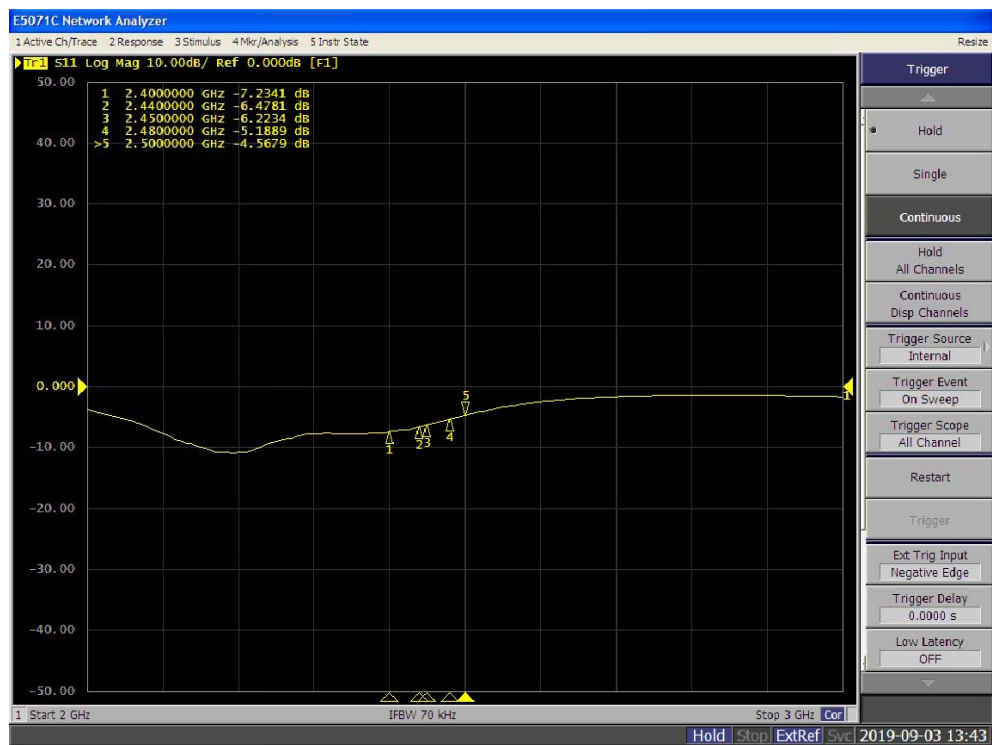


2450MHz

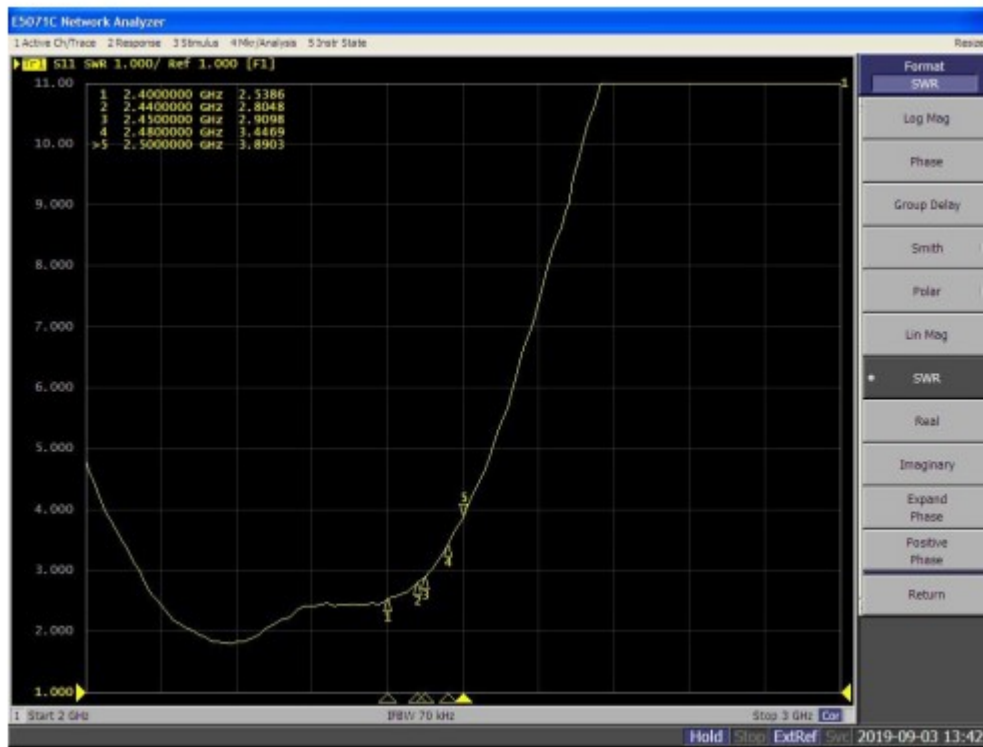


2500MH

### 3. Return Loss



#### 4. VSWR



END