

# Inverted F Antenna Specification

**MANUFACTURE:** Shenzhen Geekbuy E-commerce Co.,Ltd.

**Address:** Warehouse 101H, No.49 South WuHe Avenue, Wuhe Community, BanTian Street, LongGang District, ShenZhen, China

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

**DATE** : 2019-10-30

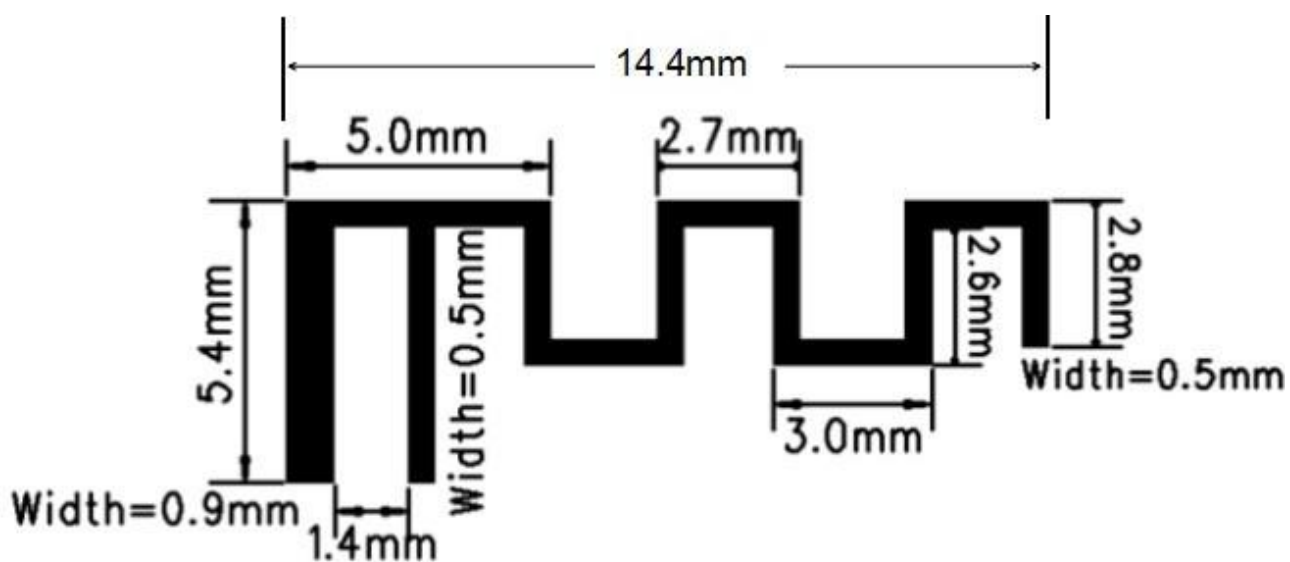
## 1. Antenna describe

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)            | 2.81( $\pm 1$ dBi)               |

## 2. Antenna Photo& Lengh ( mm )



Actual Size

### 3. Gain

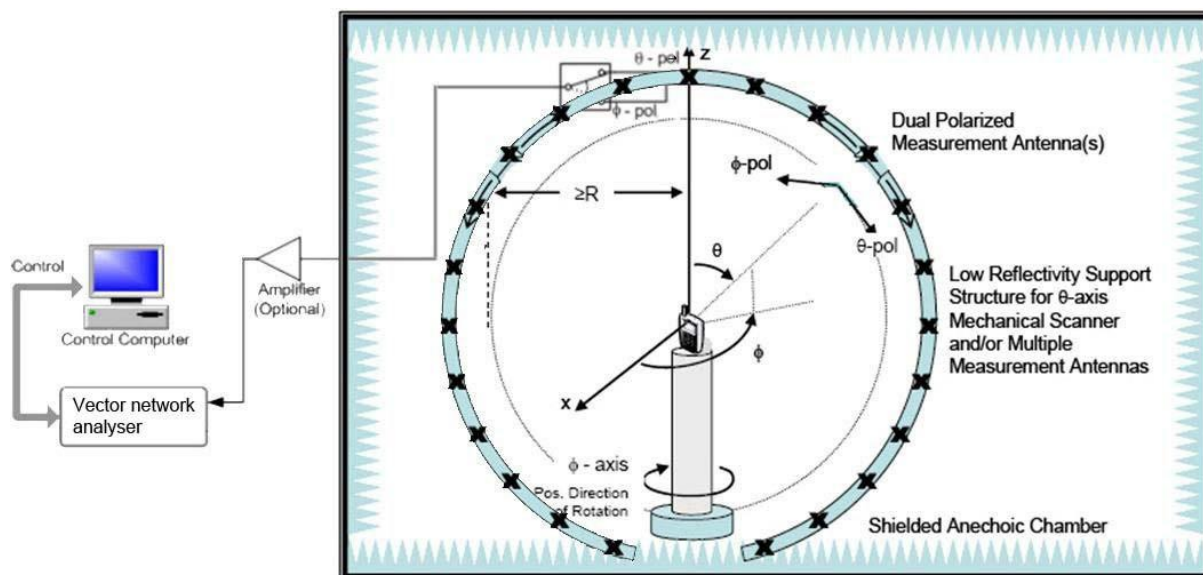
| Frequency | Gain ( dBi ) |
|-----------|--------------|
| 2400MHz   | 2.81         |
| 2410MHz   | 2.74         |
| 2420MHz   | 2.70         |
| 2430MHz   | 2.73         |
| 2440MHz   | 1.01         |
| 2450MHz   | 1.26         |
| 2460MHz   | 1.50         |
| 2470MHz   | 1.49         |
| 2480MHz 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

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

| Frequency | Return Loss<br>(dB) | VSWR | Input<br>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

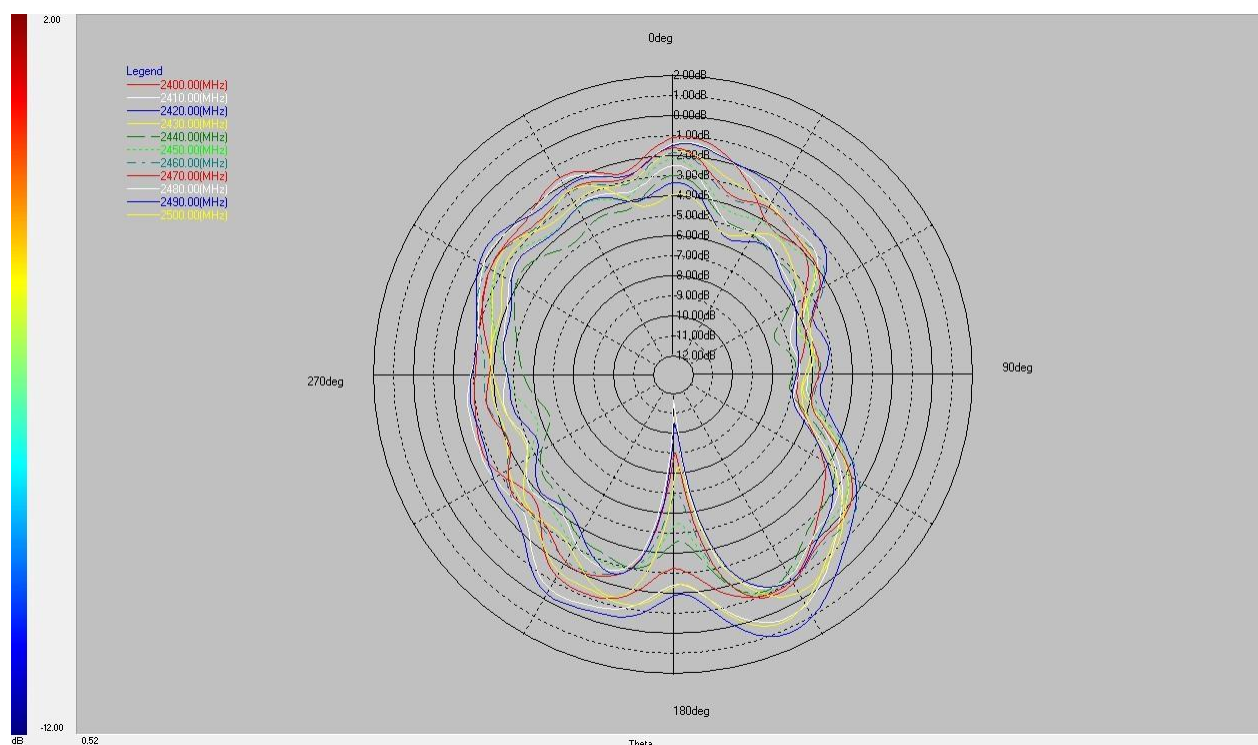
### 1. Test Setup



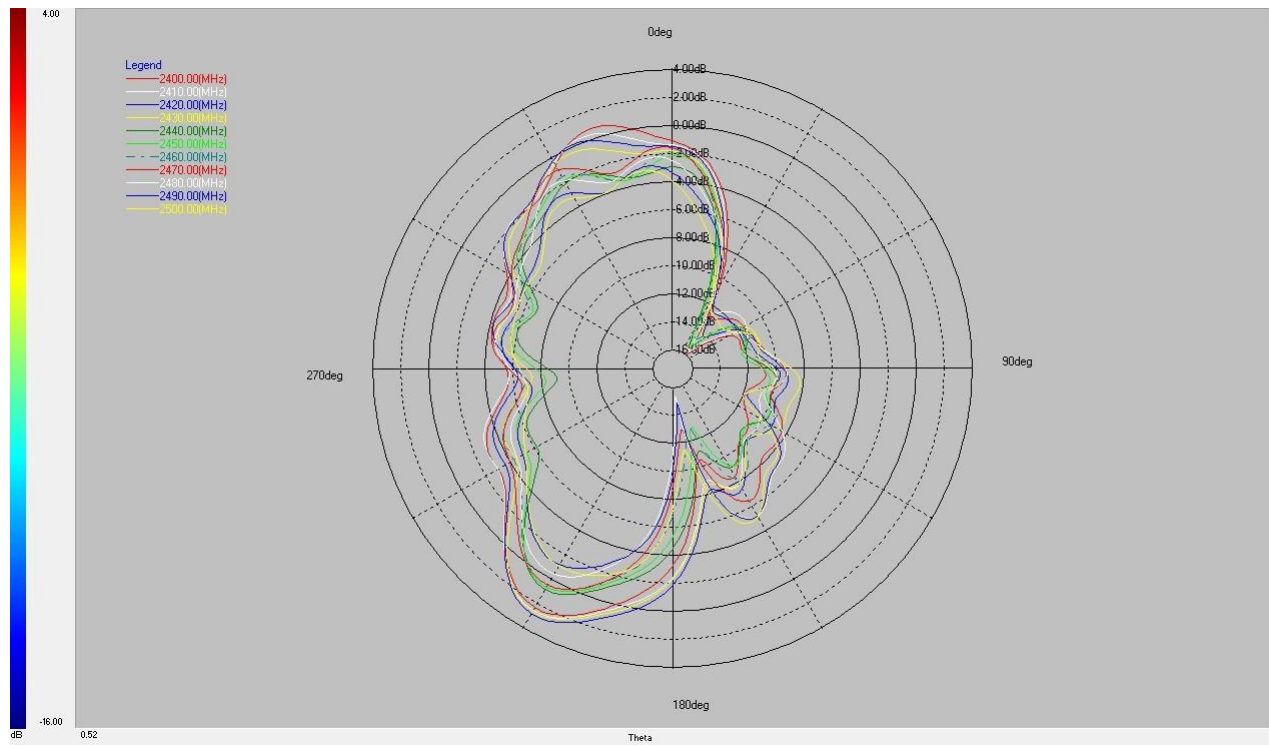
## Annex B Figures

### 1. 2D Radiation Pattern

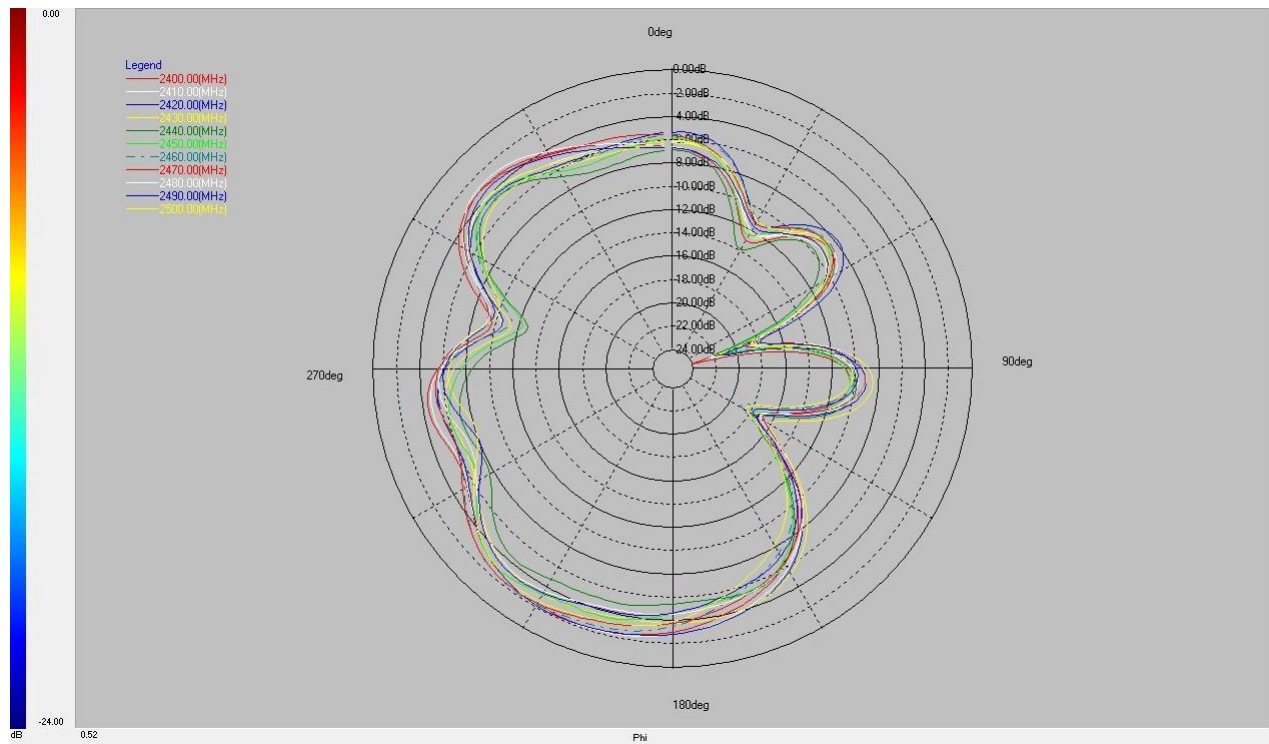
$\Phi=0^\circ$



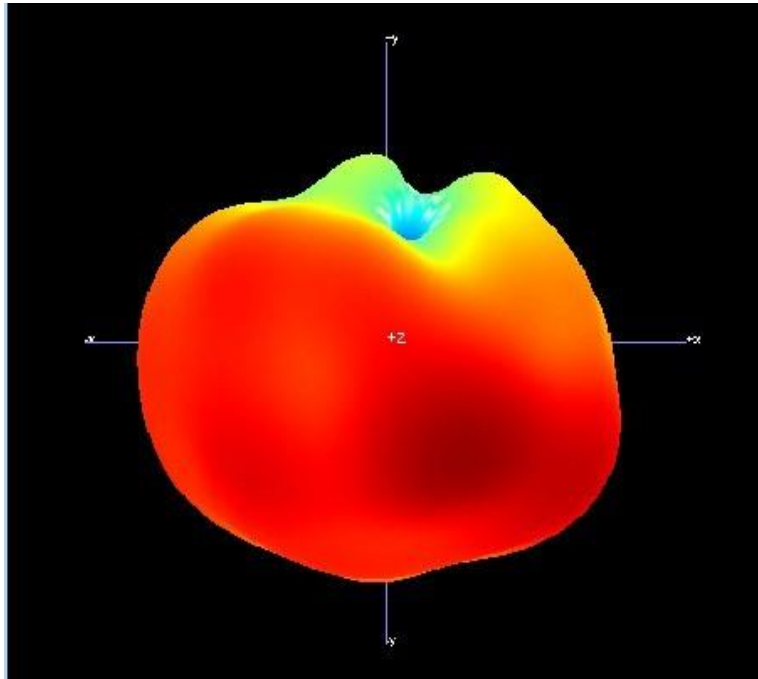
Phi=90°



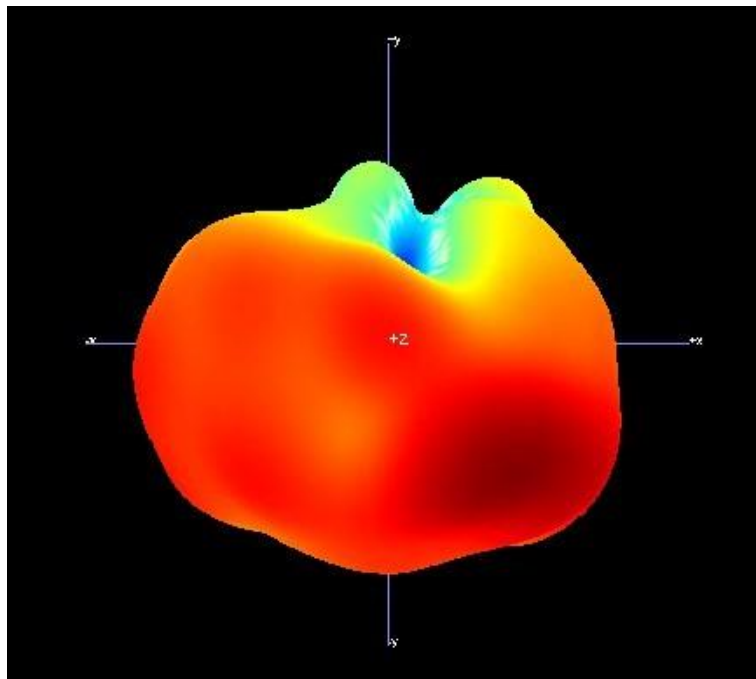
Theta=90°



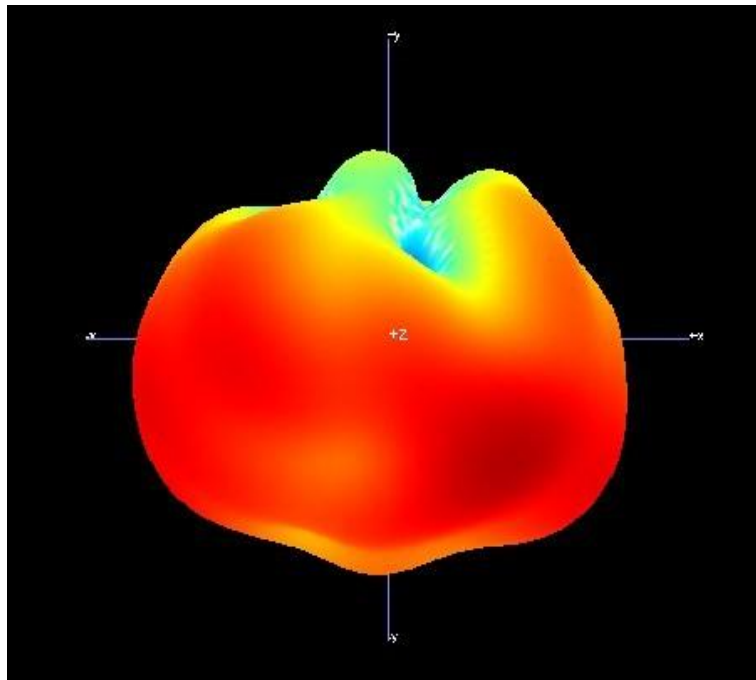
## 2. 3D Radiation Pattern



2400MHz



2450MHz

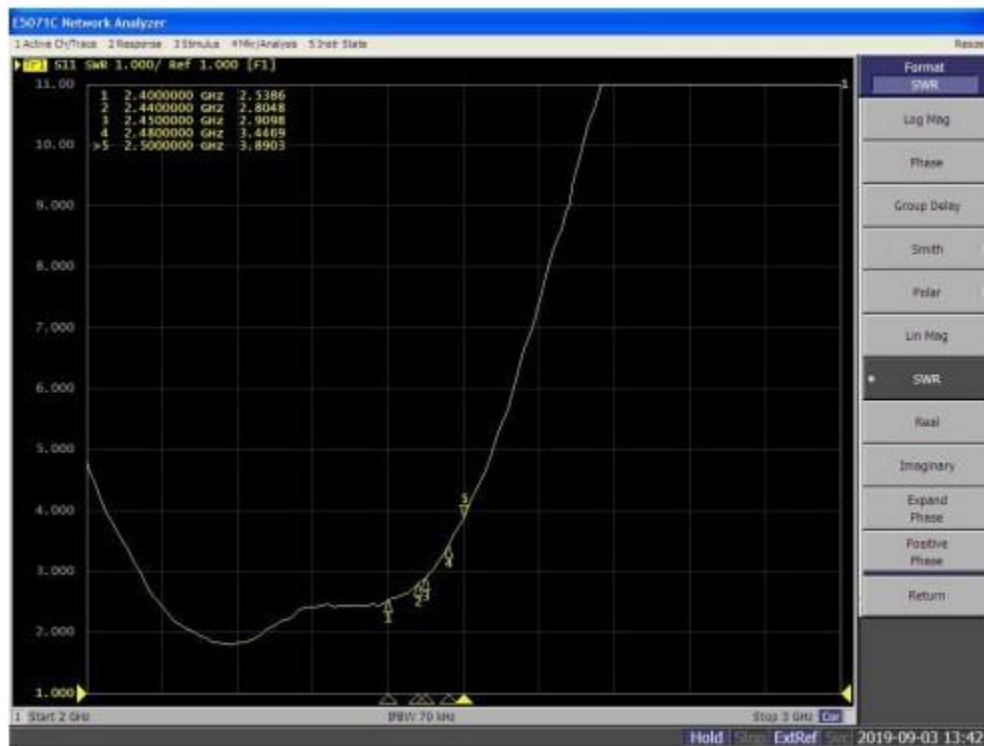


2500MH

### 3. Return Loss



#### 4. VSWR



END