

# 产品规格承认书

Product specifications  
acknowledgment

承认厂商：\_\_\_\_\_

(Recognized manufacturers)

制造厂商：Shenzhen Bat Wireless Technology  
Co., Ltd

(Manufacturer)

Room 1301, 13th Floor, No. 8 Langhua Road, Xinshi Community,  
Dalang Street, Longhua District, Shenzhen, China

产品名称：2.4G 5.8G dual band adhesive stick antenna

(Description)

## 产品选型表：

(Product Type)

| 型号               | 说明   | 备注 |
|------------------|------|----|
| BW258GJWX50-10WJ | 内螺内针 |    |
|                  |      |    |
|                  |      |    |

## 1.1 Specifications

|                                                   |                     |
|---------------------------------------------------|---------------------|
| 天线型号 Antennas Type                                | BW258GJWX50-10WJ    |
| 频率范围 Frequenc Range (MHz)                         | 2400-2500 4800-5900 |
| 输入阻抗 Input Impendence ( $\Omega$ )                | 50 $\Omega$         |
| 电压驻波比 V. S. W. R                                  | <2                  |
| 增益 Gain (dBi)                                     | 3.02dBi             |
| 极化形式 Polarization Type                            | 垂直 Vertical         |
| 功率容量 Power Capacity (w)                           | 50                  |
| 雷电保护 Lingtning Protection                         | None                |
| 工作电压 DC Voltage (V)                               | None                |
| 天线尺寸 Dimension (mm)                               | 50 $\phi$ 10mm      |
| 接口形式/Connector Type:                              | 可折 SMA 内螺内针         |
| 电缆型号 Cable type (mm)                              | None                |
| 电缆长度 Cable length (mm)                            | None                |
| 辐射体 Radiator                                      |                     |
| 天线颜色 Color                                        | 黑色 Black            |
| 重量 Weight (g)                                     | None                |
| 工作温度 Operating Temperature ( $^{\circ}\text{C}$ ) | -40~80              |
| 储藏温度 Storage Temperature ( $^{\circ}\text{C}$ )   | -20~85              |

\*注：以上数据仅供参考；因天线功能较为敏感，主体周边机构有变更请通知我们评估。

## 1.2 Antenna Picture



上图型号：BW258GJWX50-10WJ

（可定制）

\*注： 因天线功能较为敏感，主体周边机构有变更请通知我们评估。

## **2. Electrical Specification**

### **2.1 Test Equipment**

- A. VSWR and input impedance: Agilent 8753/E5071 Network Analyzer
- B. Antenna gain and efficiency: ETS three-dimensional anechoic chamber

### **2.2 Test Setup**

#### **2.2.1 Frequency Range**

#### **2.2.2 VSWR**

Step 1: The antenna is arranged on the customer provided test fixture.

Step 2: The VSWR of the antenna is measured via Agilent 8720/8753 Network Analyzer (see figure. 1).



**Figure.1**

#### **2.2.3 Radiation pattern and Gain**

- A. The 3D chamber provides less than -40dB reflectivity from 800MHz to 6GHz and a 40cm diameter spherical quiet zone. The measurement results are calibrated using both dipoles and standard gain horns (see figure. 2).
- B. The antenna under tested is arranged in the turned table and a decoupling sleeve is used to reduce feed line radiation (see figure. 3).
- C. The measured results of the radiation patterns and antenna gain are obtained from the control system and showed on the monitor (see figure. 4 and 5).

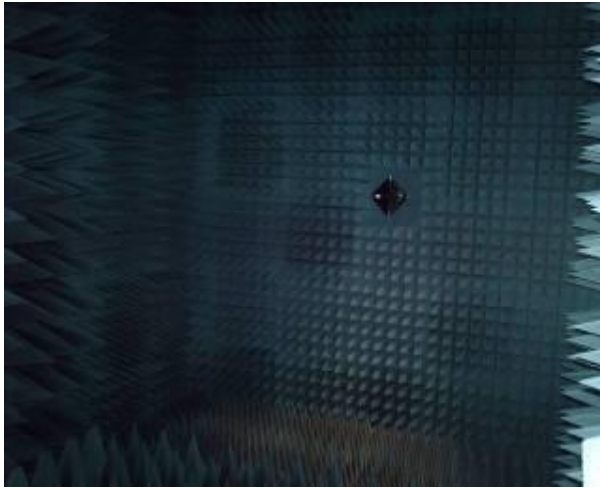


Figure.2



Figure.3



Figure.4

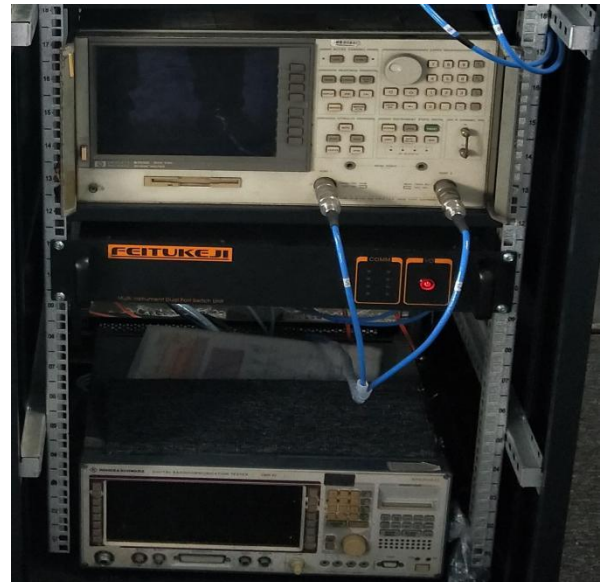
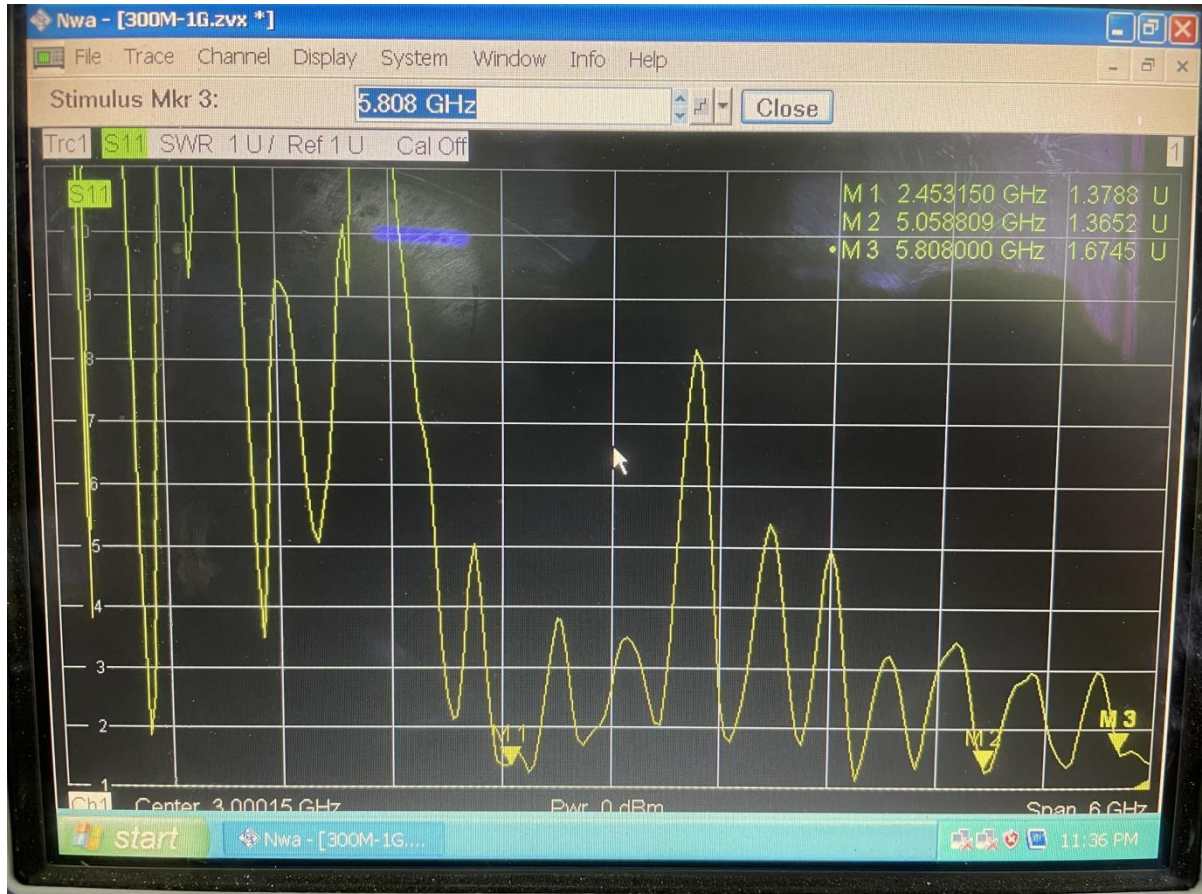


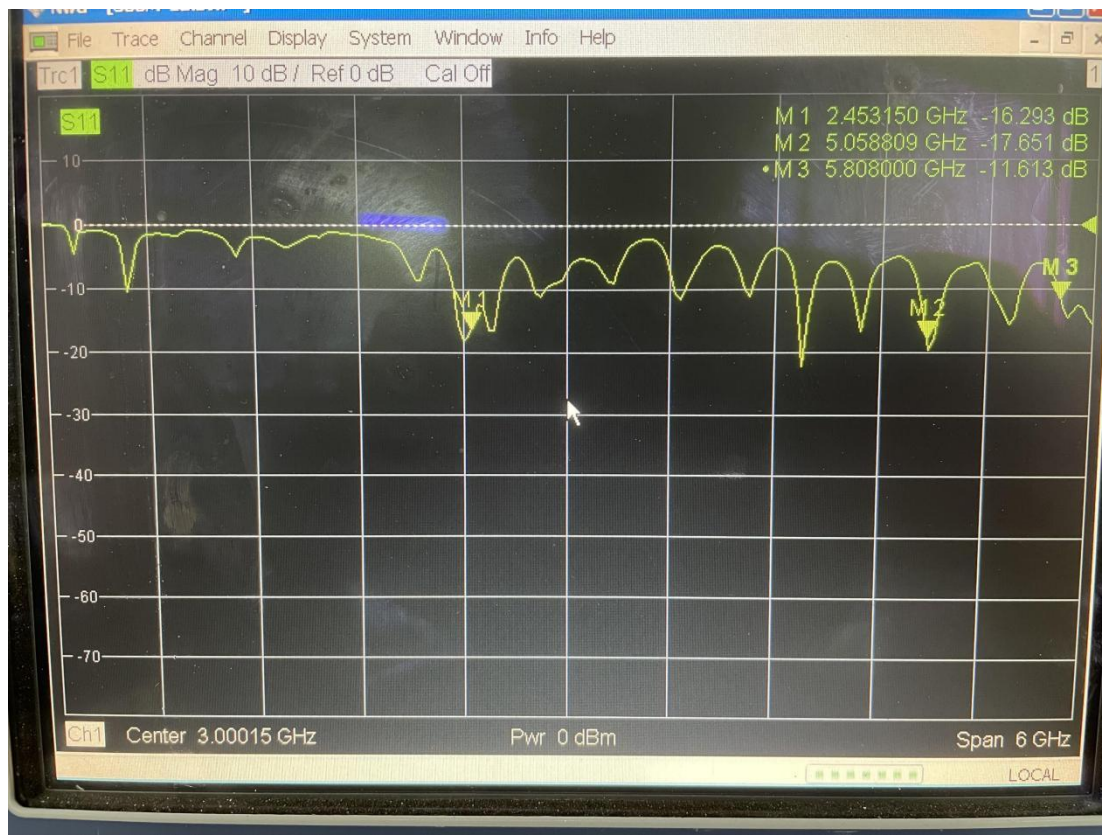
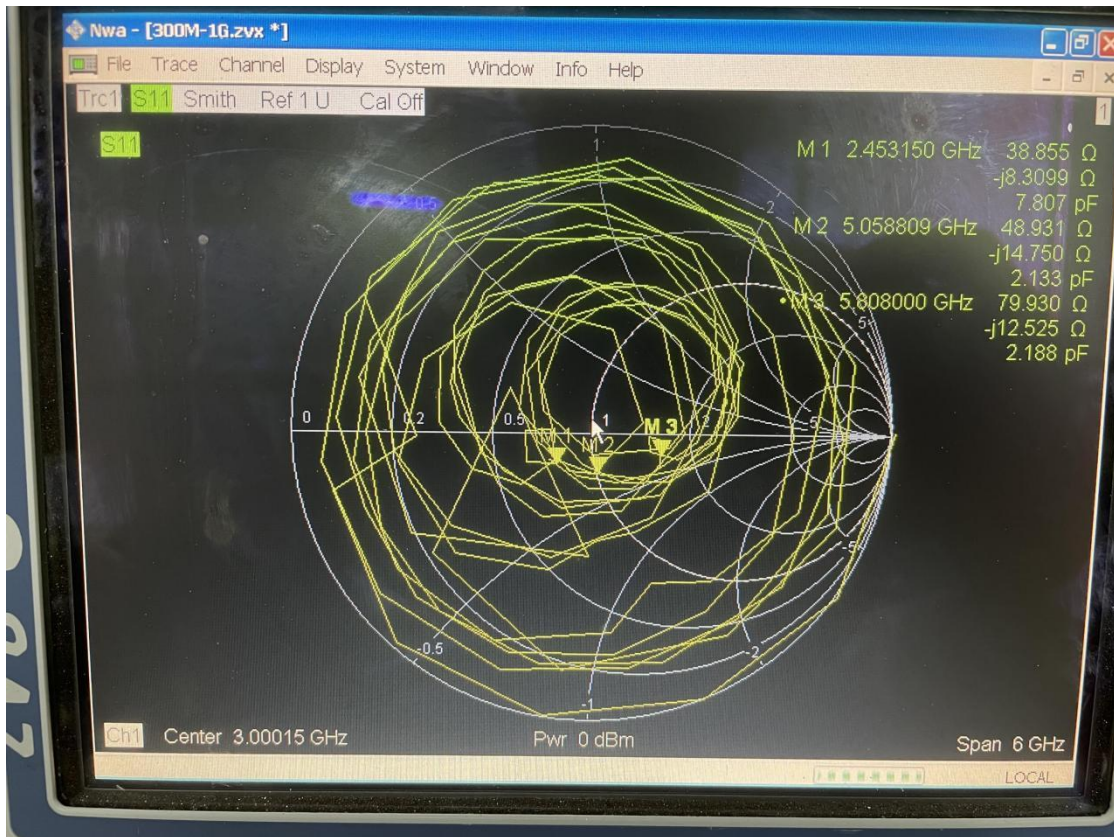
Figure.5

### 3. Performance Data

#### 3.1 Passive data

VSWR (电压驻波比) / Return Loss (回波损耗) / Smith Chart (史密斯圆图)

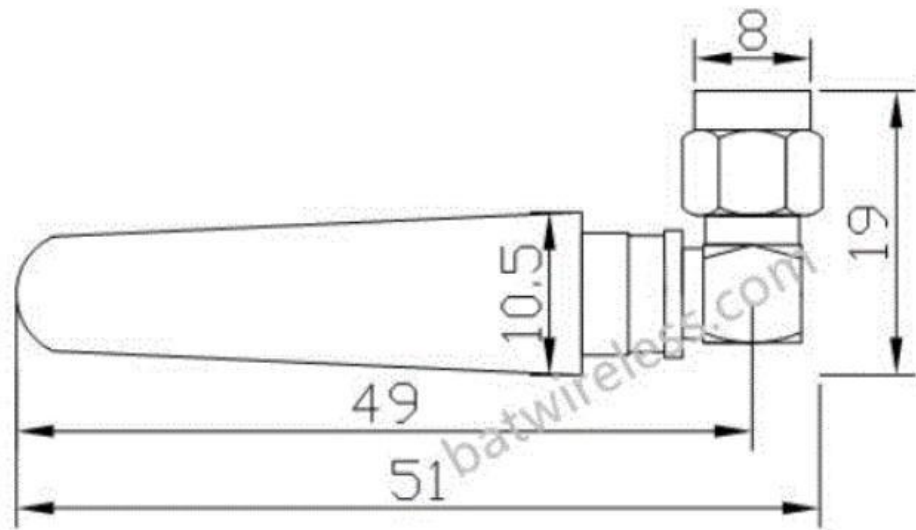




\*注：以上为实测数据，仅供参考；因天线功能较为敏感，主体周边机构有变更请通知我们评估。

单位: mm

比例: 1:1

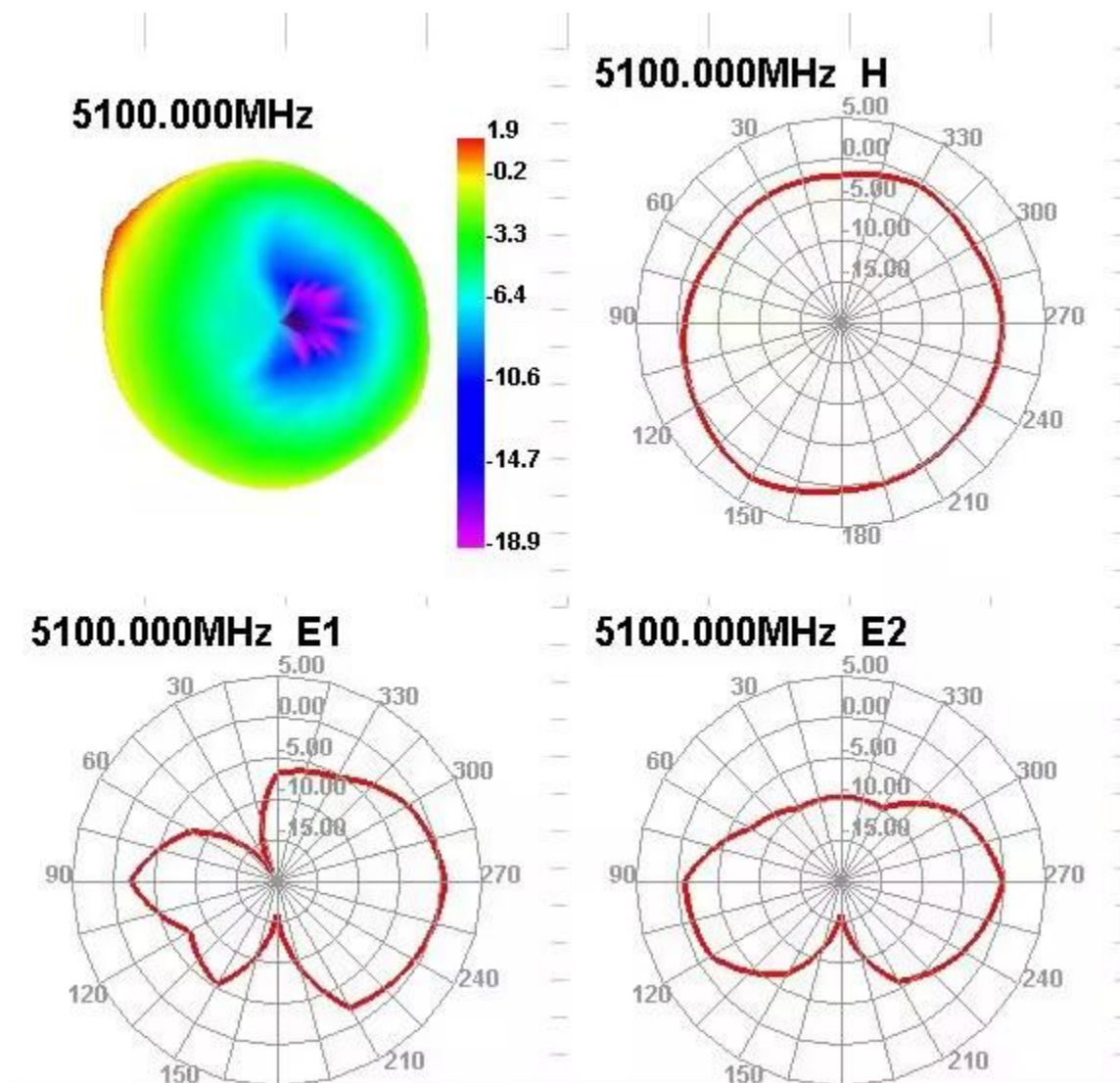


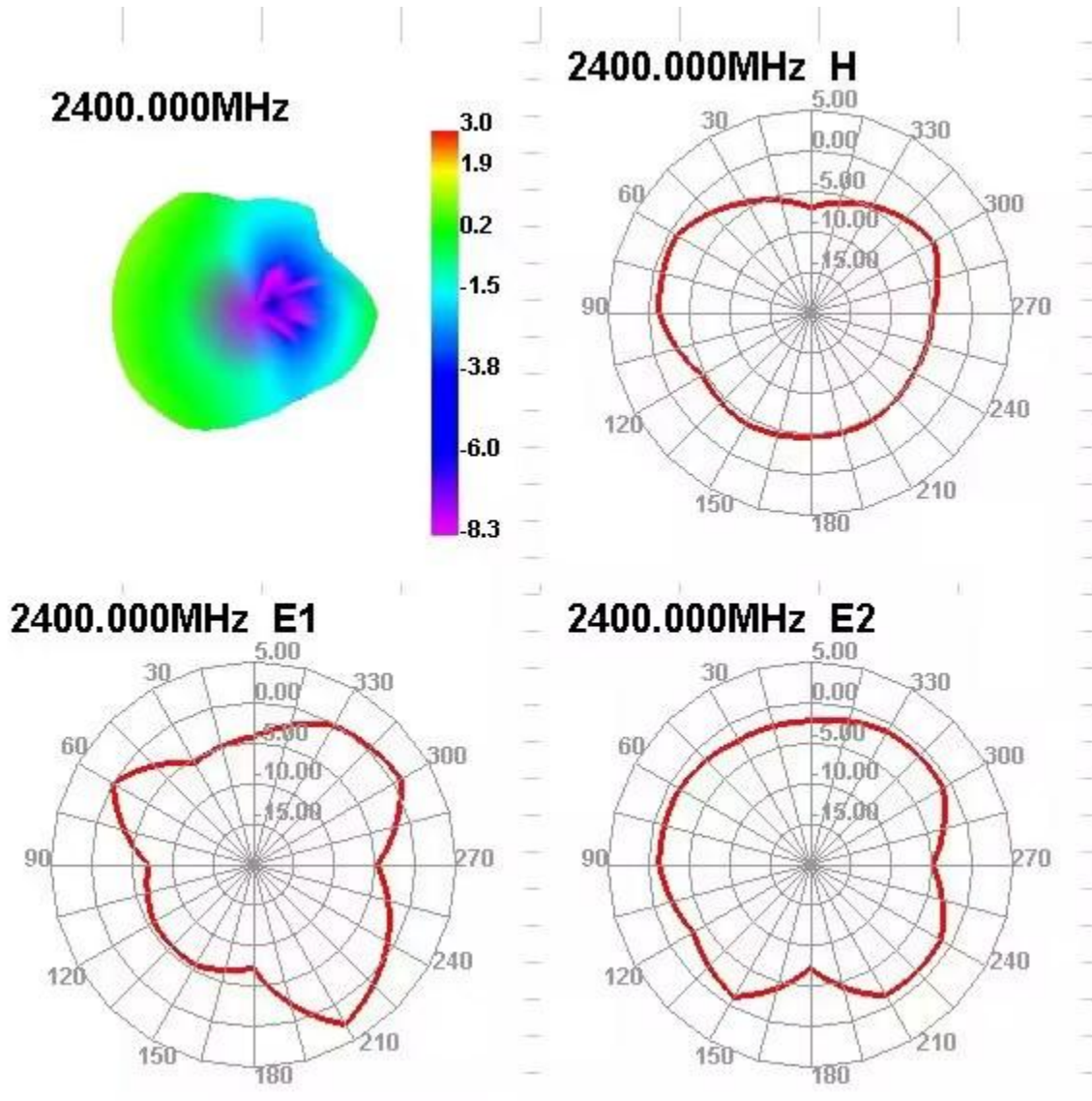
## 4. Mechanical Specification

### 4.1 Assembly Drawing

| Passive Test For WIFI |             |              |               |               |            |            |             |             |                |                |
|-----------------------|-------------|--------------|---------------|---------------|------------|------------|-------------|-------------|----------------|----------------|
| Freq<br>(MHz)         | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) | Gain<br>(dBd) | UHS<br>(%) | DHS<br>(%) | Max<br>(dB) | Min<br>(dB) | Attenut<br>Hor | Attenut<br>Ver |
| 2400                  | 65.99       | -1.8         | 2.99          | 0.84          | 35.629     | 30.365     | 2.99        | -8.28       | 48.09          | 47.94          |
| 2410                  | 61.32       | -2.12        | 2.62          | 0.47          | 32.762     | 28.557     | 2.62        | -8.32       | 48.07          | 47.87          |
| 2420                  | 60.58       | -2.18        | 2.52          | 0.37          | 32.121     | 28.457     | 2.52        | -8.49       | 48.18          | 48             |
| 2430                  | 61.75       | -2.09        | 2.58          | 0.43          | 32.561     | 29.188     | 2.58        | -9.08       | 48.17          | 47.99          |
| 2440                  | 64.63       | -1.9         | 2.73          | 0.58          | 34.122     | 30.503     | 2.73        | -9.66       | 48.33          | 48.11          |
| 2450                  | 66.86       | -1.75        | 2.86          | 0.71          | 35.326     | 31.534     | 2.86        | -9.93       | 48.44          | 48.14          |
| 2460                  | 67.45       | -1.71        | 2.92          | 0.77          | 35.514     | 31.938     | 2.92        | -9.82       | 48.41          | 48.06          |
| 2470                  | 68.53       | -1.64        | 3.02          | 0.87          | 35.718     | 32.817     | 3.02        | -9.44       | 48.49          | 48.11          |
| 2480                  | 67.12       | -1.73        | 2.94          | 0.79          | 34.493     | 32.624     | 2.94        | -11.1       | 48.63          | 48.18          |
| 2490                  | 64.57       | -1.9         | 2.74          | 0.59          | 32.811     | 31.763     | 2.74        | -12.94      | 48.76          | 48.29          |
| 2500                  | 63.95       | -1.94        | 2.7           | 0.55          | 32.027     | 31.926     | 2.7         | -14.21      | 48.69          | 48.16          |

| Passive Test For WIFI5G |             |              |               |               |            |            |             |             |                |                |
|-------------------------|-------------|--------------|---------------|---------------|------------|------------|-------------|-------------|----------------|----------------|
| Freq<br>(MHz)           | Effi<br>(%) | Effi<br>(dB) | Gain<br>(dBi) | Gain<br>(dBd) | UHS<br>(%) | DHS<br>(%) | Max<br>(dB) | Min<br>(dB) | Attenut<br>Hor | Attenut<br>Ver |
| 5100                    | 51.31       | -2.9         | 1.88          | -0.27         | 22.733     | 28.581     | 1.88        | -18.89      | 57.95          | 57.06          |
| 5200                    | 53.53       | -3.61        | 1.56          | -0.59         | 20.493     | 23.034     | 1.56        | -18.62      | 57.55          | 56.83          |
| 5300                    | 48.73       | -4.12        | 1.15          | -2            | 17.671     | 21.06      | 1.15        | -16.29      | 57.16          | 56.32          |
| 5400                    | 48.54       | -3.14        | 1.77          | -1.38         | 23.541     | 24.996     | 1.77        | -14.36      | 58.32          | 57.48          |
| 5500                    | 54.59       | -3.13        | 2.2           | -0.95         | 25.558     | 23.028     | 2.2         | -17.86      | 58.91          | 57.66          |
| 5600                    | 52          | -2.84        | 1.9           | -0.25         | 27.787     | 24.214     | 1.9         | -17.08      | 59.51          | 58.82          |
| 5700                    | 63.68       | -2.7         | 2.25          | 0.1           | 30.373     | 23.306     | 2.25        | -19.7       | 60.54          | 59.93          |
| 5800                    | 65.41       | -2.41        | 1.87          | -0.28         | 33.923     | 23.488     | 1.87        | -14.83      | 61.14          | 60.57          |





## 5.免责声明(Disclaimer):

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