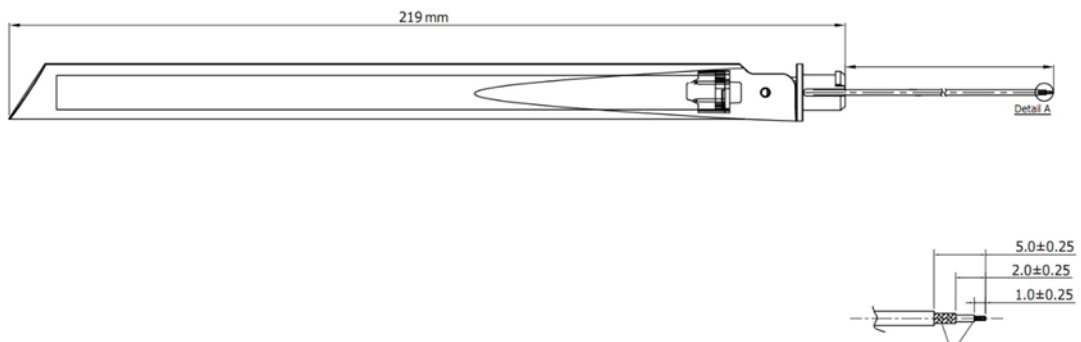


## Measurement of Antenna for RX12 Pro Project

Manufacture: SHENZHEN TENDA TECHNOLOGY CO., LTD.

### 1. Antenna Appearance:



### 2. Electrical performance test results at normal temperature

**a) 2. 4G Antenna**

| No | Test Item       | Unit | Demand Performance | Test Result |      | Judgement |
|----|-----------------|------|--------------------|-------------|------|-----------|
| 1  | Frequency Range | MHz  | 2400-2483          | 2400-2483   |      | OK        |
| 2  | Gain            | dBi  | 5                  | 2400        | 4.49 | OK        |
|    |                 |      |                    | 2450        | 4.47 | OK        |
|    |                 |      |                    | 2483        | 4.94 | OK        |
| 3  | Isolation       | dB   | $\leq -15$         | 2400        | -26  | OK        |
|    |                 |      |                    | 2450        | -25  | OK        |
|    |                 |      |                    | 2483        | -24  | OK        |
| 4  | Return loss     | dB   | $\leq -10$         | 2400        | -21  | OK        |
|    |                 |      |                    | 2450        | -19  | OK        |
|    |                 |      |                    | 2483        | -14  | OK        |

**B) 5G Antenna**

| No | Test Item       | Unit | Demand Performance | Test Result |      | Judgement |
|----|-----------------|------|--------------------|-------------|------|-----------|
| 1  | Frequency Range | MHz  | 5150-5850          | 5150-5850   |      | OK        |
| 2  | Gain            | dBi  | 5                  | 5150        | 5.93 | OK        |
|    |                 |      |                    | 5500        | 5.49 | OK        |
|    |                 |      |                    | 5850        | 5.34 | OK        |
| 3  | Isolation       | dB   | $\leq -15$         | 5150        | -25  | OK        |
|    |                 |      |                    | 5500        | -27  | OK        |
|    |                 |      |                    | 5850        | -28  | OK        |
| 4  | Return loss     | dB   | $\leq -10$         | 5150        | -14  | OK        |
|    |                 |      |                    | 5500        | -25  | OK        |
|    |                 |      |                    | 5850        | -22  | OK        |

Directional diagram for 2.4GHz

| EUT                               |                  |                  |
|-----------------------------------|------------------|------------------|
| Remark                            |                  |                  |
| Frequency                         | E Total. dB(dBi) | Efficiency( )    |
| 2400MHz                           | 4.49             | 70%              |
| 2410MHz                           | 4.56             | 73%              |
| 2420MHz                           | 4.75             | 78%              |
| 2430MHz                           | 4.83             | 82%              |
| 2440MHz                           | 4.70             | 84%              |
| 2450MHz                           | 4.47             | 85%              |
| 2460MHz                           | 4.58             | 87%              |
| 2470MHz                           | 4.84             | 92%              |
| 2480MHz                           | 5.00             | 97%              |
| 2490MHz                           | 5.09             | 98%              |
| 2500MHz                           | 4.94             | 96%              |
|                                   | <b>XOY PLANE</b> | <b>XOZ PLANE</b> |
| 3D Radiation patterns at 2450 MHz |                  |                  |
|                                   | <b>H PLANE</b>   | <b>V PLANE</b>   |
| 2D Radiation patterns             |                  |                  |

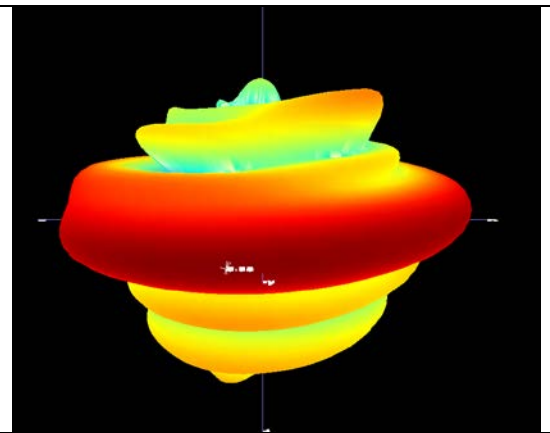
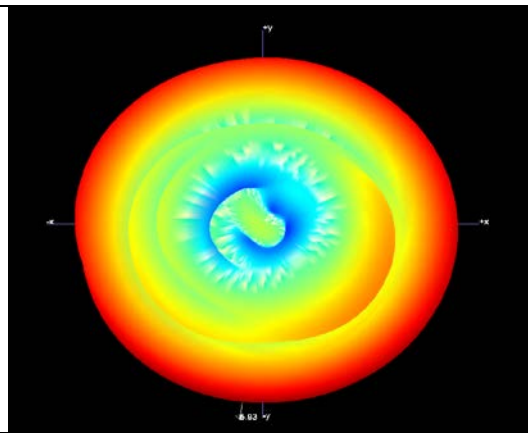
### Directional diagram for 5GHz

| Frequency | E Total. dB(dBi) | Efficiency( ) |
|-----------|------------------|---------------|
| 5000MHz   | 5.43             | 68%           |
| 5050MHz   | 5.68             | 73%           |
| 5100MHz   | 5.75             | 76%           |
| 5150MHz   | 5.93             | 77%           |
| 5200MHz   | 5.90             | 79%           |
| 5250MHz   | 5.86             | 79%           |
| 5300MHz   | 5.97             | 80%           |
| 5350MHz   | 6.02             | 82%           |
| 5400MHz   | 5.85             | 80%           |
| 5450MHz   | 5.85             | 81%           |
| 5500MHz   | 5.49             | 77%           |
| 5550MHz   | 5.41             | 76%           |
| 5600MHz   | 5.24             | 74%           |
| 5650MHz   | 4.98             | 75%           |
| 5700MHz   | 5.12             | 76%           |
| 5750MHz   | 5.24             | 77%           |
| 5800MHz   | 4.99             | 74%           |
| 5850MHz   | 5.34             | 77%           |
| 5900MHz   | 5.30             | 74%           |
| 5950MHz   | 5.91             | 84%           |
| 6000MHz   | 5.58             | 80%           |

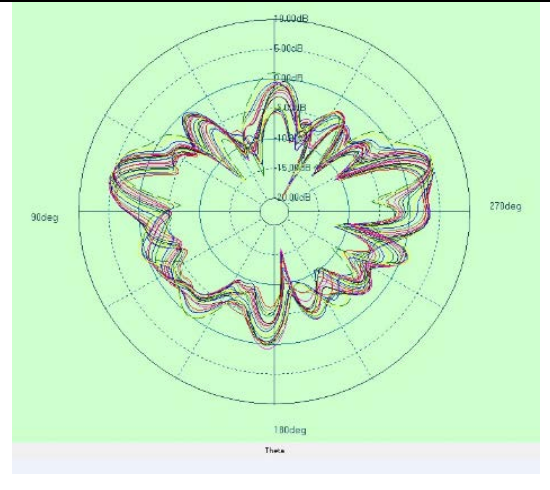
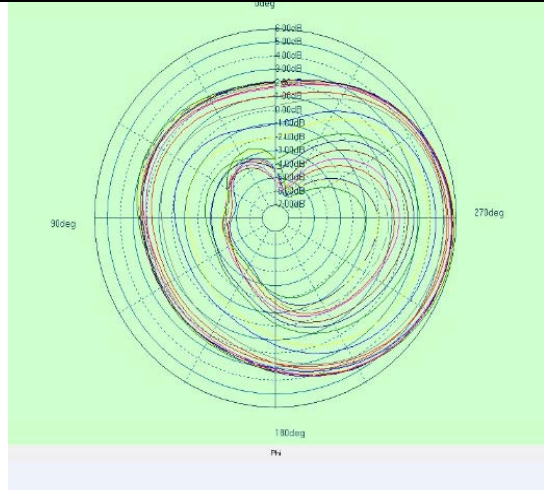
XOY\_PLANE

XOZ PLANE

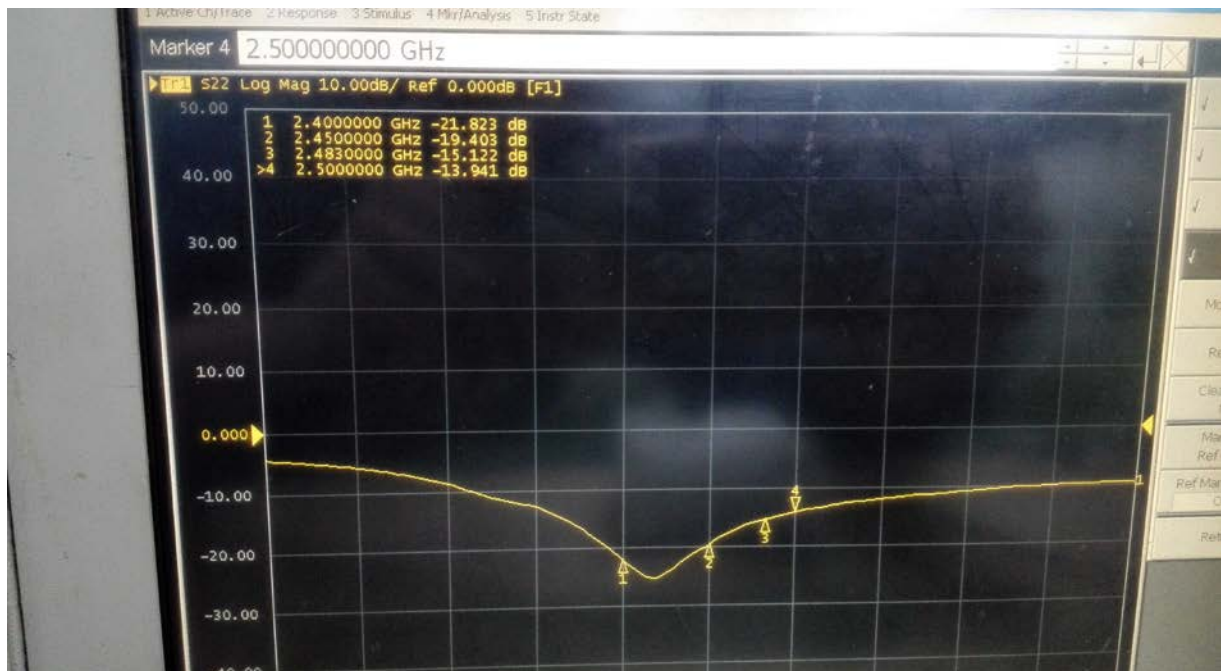
3D Radiation patterns at 5150 MHz



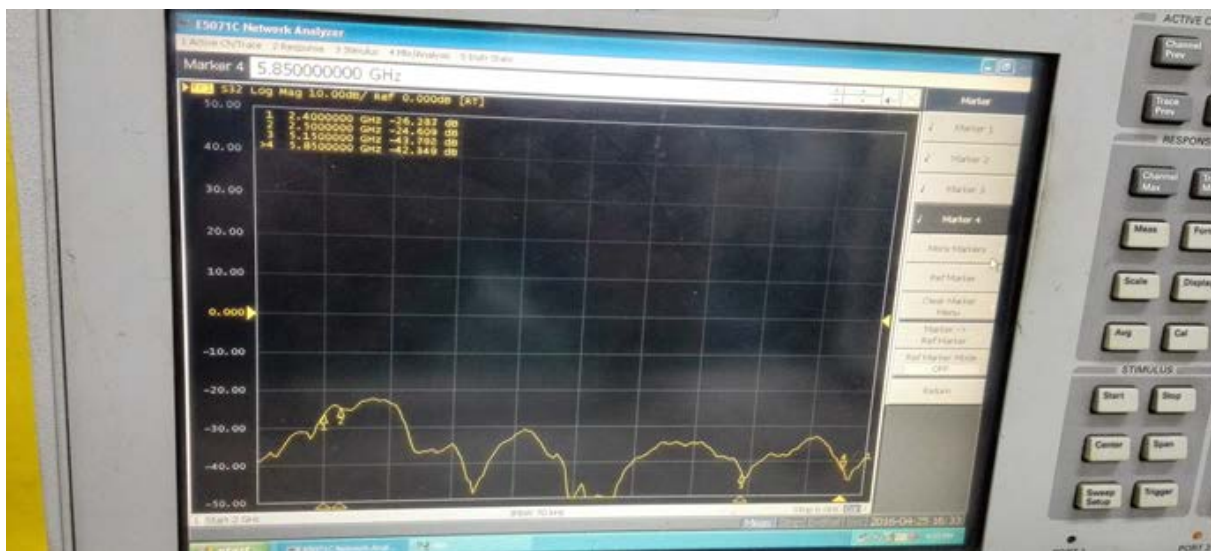
2D Radiation patterns



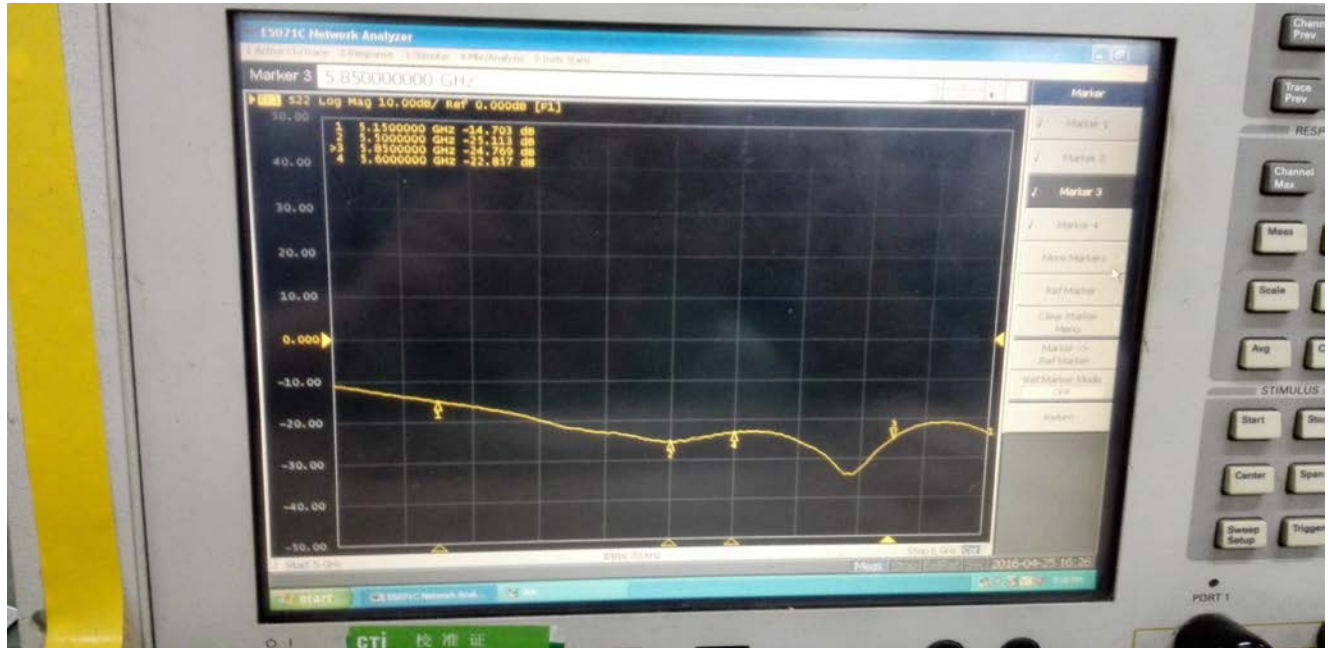
## 2. 4G Return loss test



## 2. 4G Isolation



### 5G Return loss test



### 5G Isolation

