

# TEST REPORT

**Name of the sample:** WH-8399\_BLE Hook-Shaped Antenna

**Model/Type:** WH-8399\_BLE

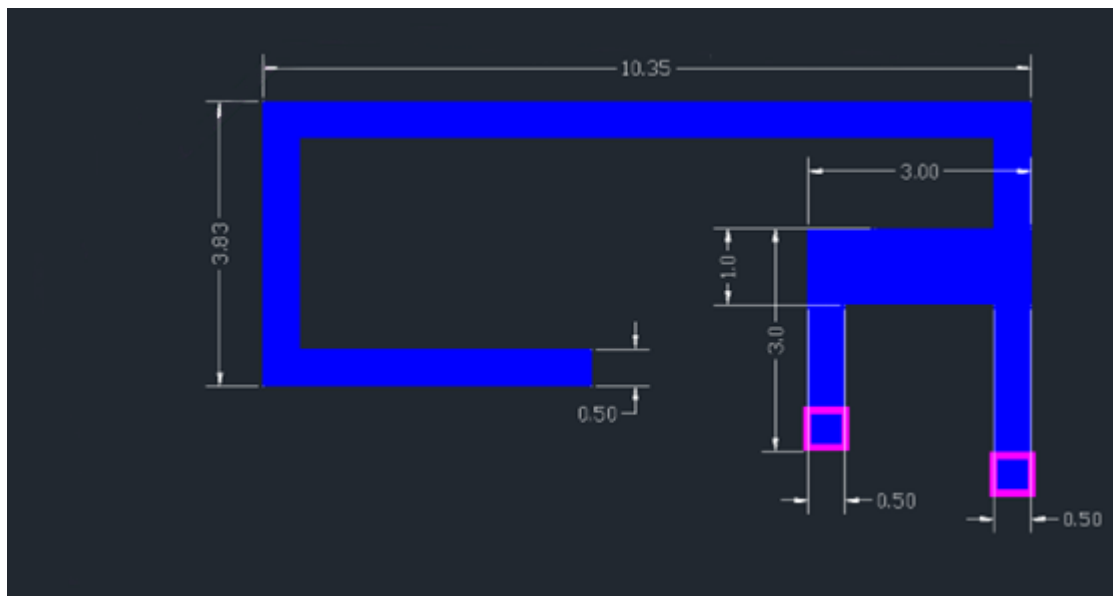
**Applicant:** Wuxi Weida Intelligent Electronics Co.,Ltd.

Specifications

Summary

| ITEM                 | SPEC.                            |                                  |
|----------------------|----------------------------------|----------------------------------|
| Model Name           | ISM 2.4 GHz                      |                                  |
| Center Frequency     | 2400 MHz<br>2450 MHz<br>2500 MHz | 1.92 dBi<br>1.58 dBi<br>0.49 dBi |
| MAX. GAIN            | 1.92 dBi                         |                                  |
| Polarization         | Horizontal                       |                                  |
| Azimuth Beam Pattern | Omni-directional                 |                                  |
| Impedance            | 50 Ω                             |                                  |
| Antenna Length       | 10.35 mm                         |                                  |

## Antenna Photo & Length



## 1. List of Test Instrument

| No. | Instrument                                   | Manufacturer | Model No. | S/N           | Version  | Calibration Cycle     |
|-----|----------------------------------------------|--------------|-----------|---------------|----------|-----------------------|
| 1   | Network Analyzer                             | R&S          | ZVB8      | 101348        | 4.31.7.2 | 2025/04/03~2026/04/02 |
| 2   | Antenna Measurement System (OTA Test System) | EM-Testing   | EMT68FF   | EMT68FF-ZZ001 | /        | 2024/11/09~2027/11/08 |
| 3   | Antenna Measurement System (OTA) Shielding   | EM-Testing   | EMT68FF   | EMT68FF-ZZ001 | /        | 2025/10/22~2026/10/21 |
| 4   | EMT-AMS Antenna Measurement System Software  | /            | /         | /             | V2.0.1   | /                     |

## 2. Photos

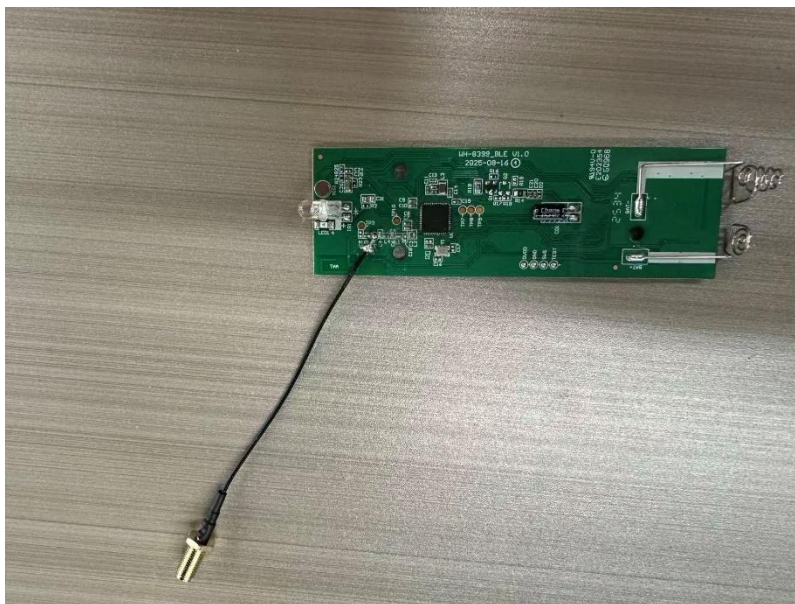
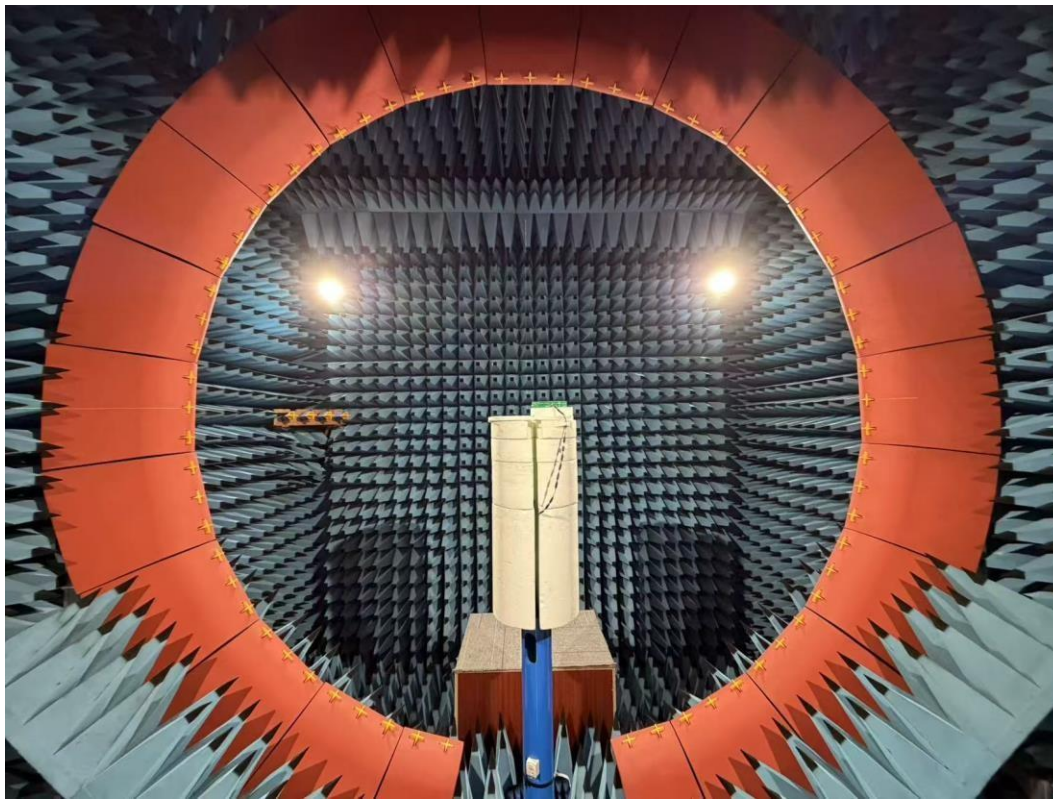


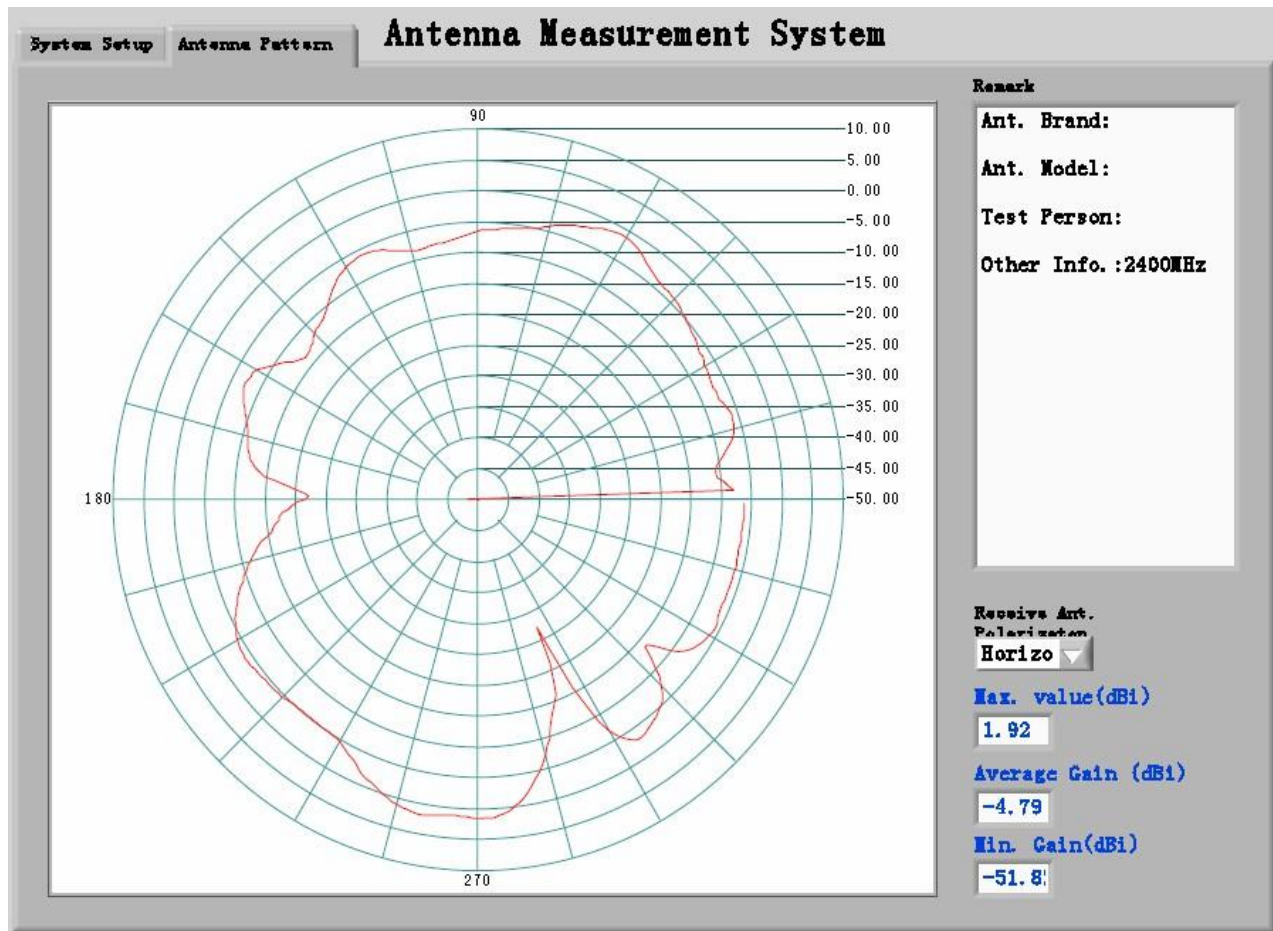
Figure1 . Front view of the EUT



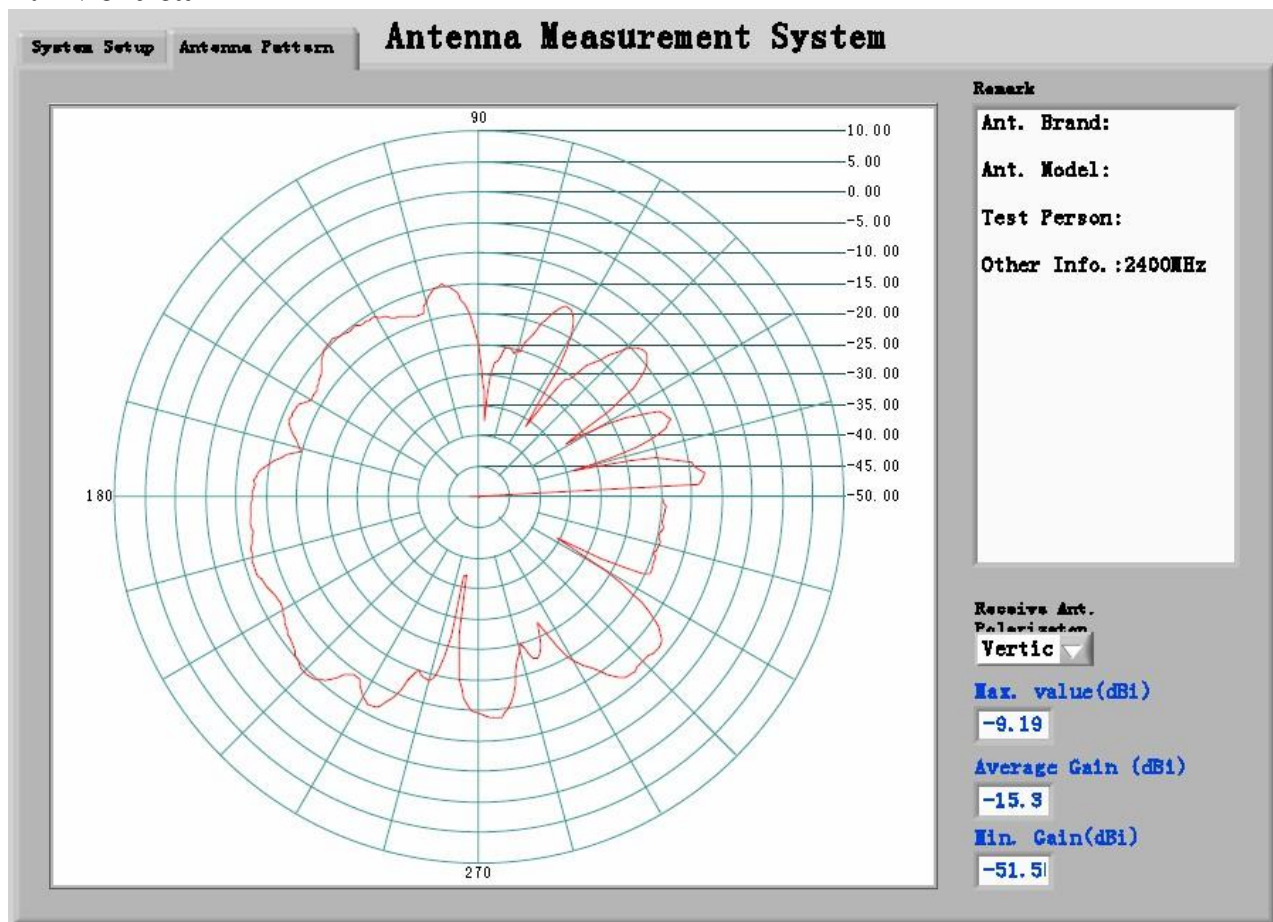
**Figure 2. Photo of Sample Testing Environment**

# Main antenna : 2400 MHz

## 1.1 Horizontal

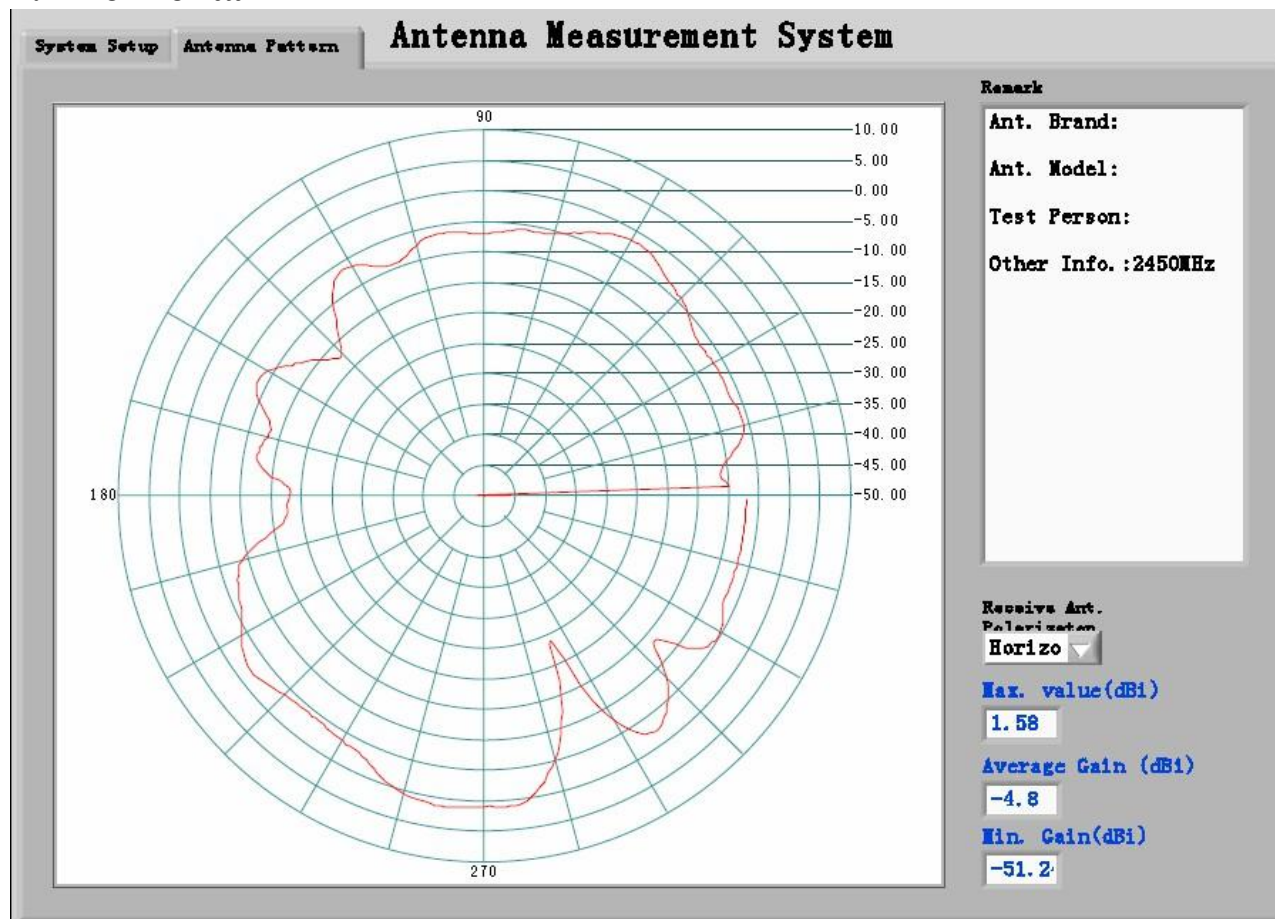


## 1.2 Vertical

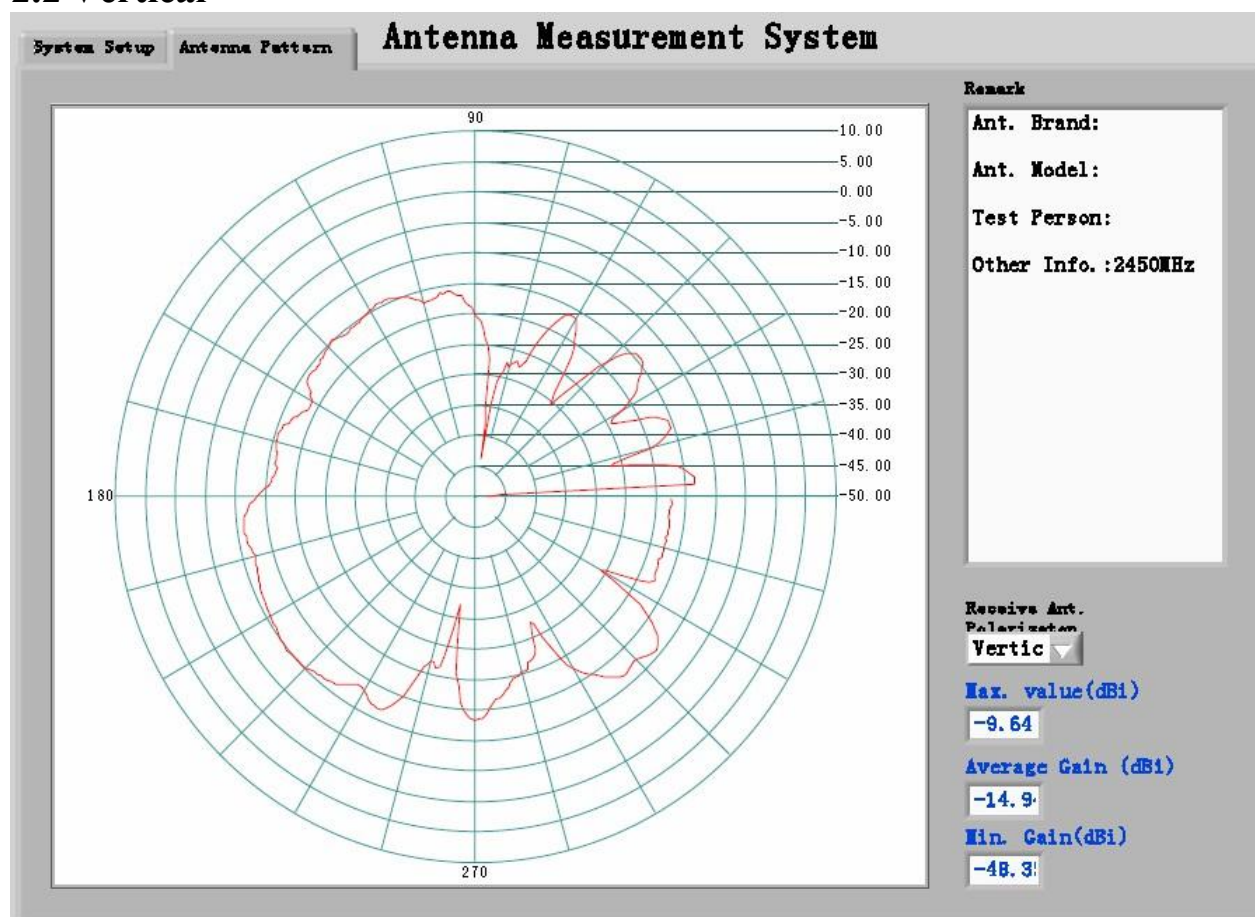


## 2. Main antenna : 2450 MHz

### 2.1 Horizontal

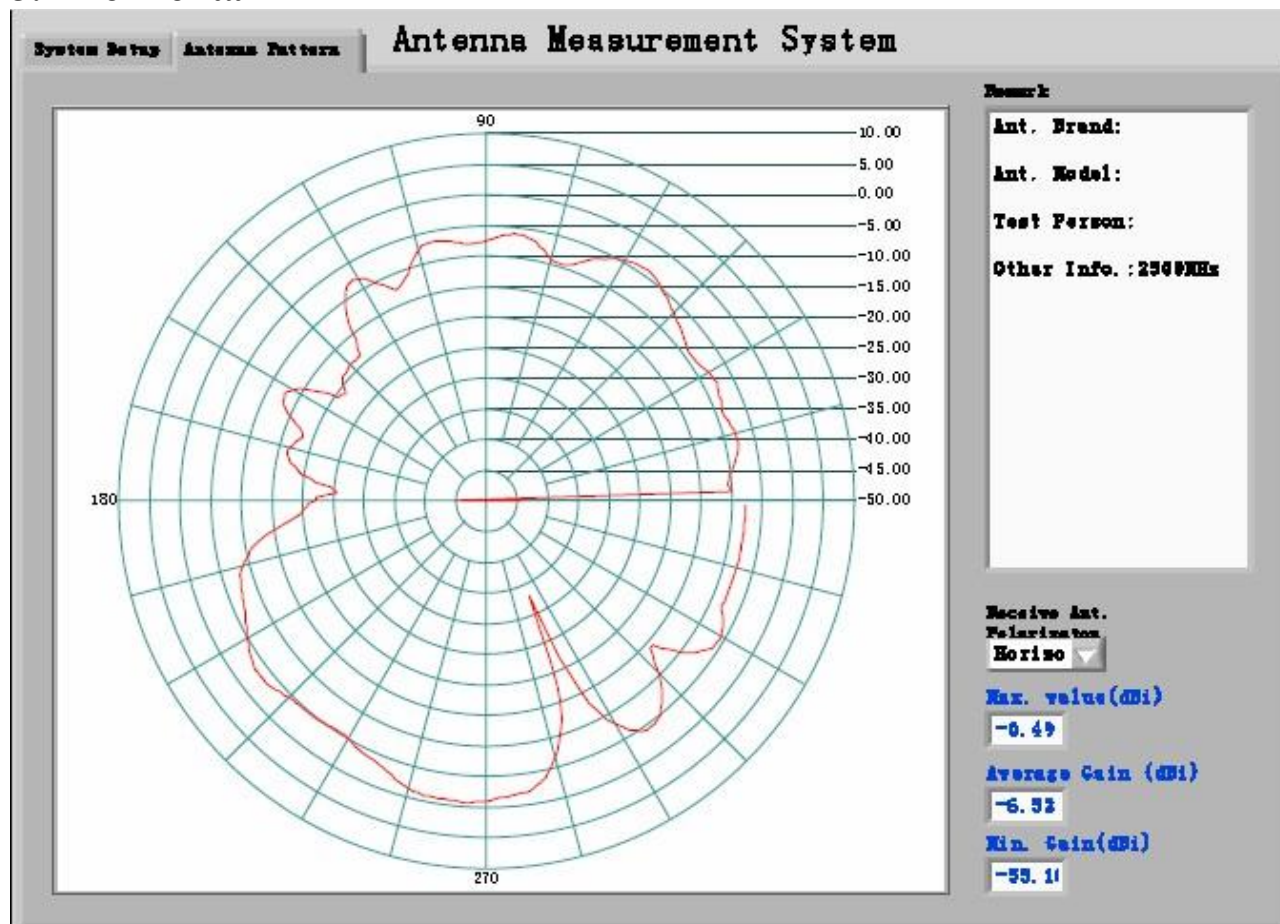


### 2.2 Vertical

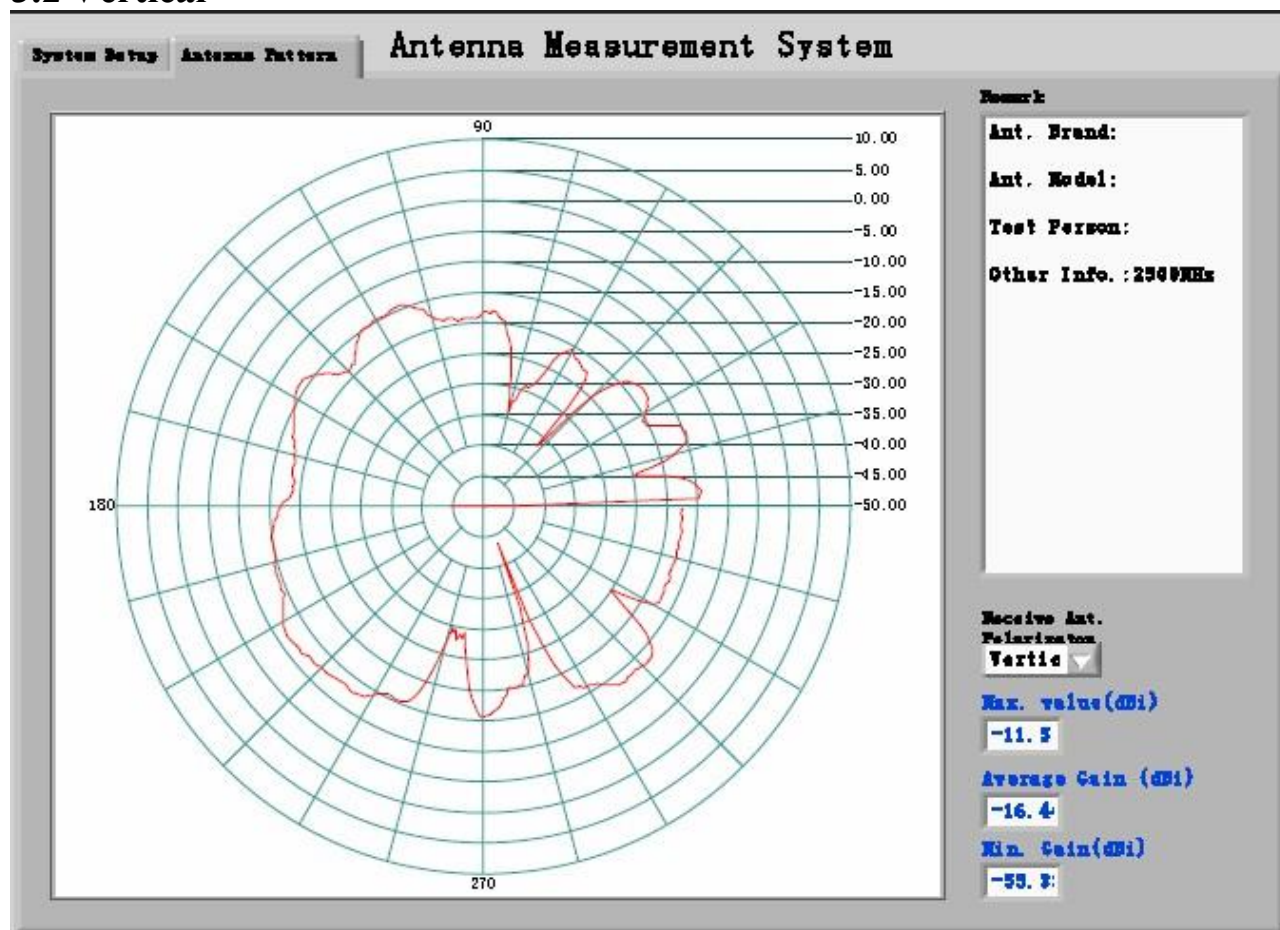


### 3. Main antenna : 2500 MHz

#### 3.1 Horizontal



#### 3.2 Vertical



#### 4. Result

| Center Frequency |   | Maximum Ant Gain |
|------------------|---|------------------|
| 2400 MHz         | H | 1.92 dBi         |
|                  | V | -9.19 dBi        |
| 2450 MHz         | H | 1.58 dBi         |
|                  | V | -9.64 dBi        |
| 2500 MHz         | H | 0.49 dBi         |
|                  | V | -11.5 dBi        |