



**Shenzhen Shuodian Electronic Technology Co.,Ltd**  
**Page number 1-10**

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# **SPECIFICATION**

for

**Curtain\_Pro BT Antenna**

**Woan Technology (Shenzhen) Co., Ltd**

**Customer No.**

**Product No.**

**WA-Curtain\_Pro BT metal antenna**

**Author: XiaofengZeng      Review: Liming**

**Release Date:    2023. 03. 20**

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## **1. Bilateral Confirmation page**

### **1.1 Customer signature**

**Customer:** Woan Technology (Shenzhen) Co., Ltd

| <b>Seapartment/post</b> | <b>Sign</b> | <b>Date</b> |
|-------------------------|-------------|-------------|
| Hardware Engineer/RD    |             |             |
| Mechanical/MD           |             |             |
| Project Manager/PM      |             |             |
| Commercial/Puchasing    |             |             |
| Checker                 |             |             |

### **1.2 Signature of ShuoDian Technology company**

| <b>Seapartment/post</b> | <b>Sign</b> | <b>Date</b> |
|-------------------------|-------------|-------------|
| Antenna Engineer/RD     |             |             |
| Mechanical/MD           |             |             |
| Project Manager/PM      |             |             |
| QA                      |             |             |
| Checker                 |             |             |



## 2. General

### 2.1 Scope of application

This specification is only applicable to Woan technology **Curtain\_Pro** 2.4G BT metal antenna

### 2.2 Operating temperature range

Temperature range of this product: -20 ~ +65 °C

### 2.3 Storage temperature range:

This product is stored at - 30 ~ + 75 °C

## 3. General product specifications

| NO. | ITEMS                    | DETAILS                   |
|-----|--------------------------|---------------------------|
| 1   | Type                     | <b>Curtain_Pro</b>        |
| 2   | Operating Frequency Band | 2.4~2.5GHz                |
| 3   | VSWR                     | $\leq 2.0$                |
| 4   | Gain                     | $2.45 \pm 0.5 \text{dBi}$ |
| 5   | Radiation Efficiency     | $\geq 50\%$               |
| 6   | Impedance                | $50\Omega$                |
| 7   | Antenna Type             | Monopoly                  |
| 8   | Antenna composition      | Metlas (White Copper)     |
| 9   | Entity Picture           |                           |



## **4. Specification Detials**

### **4.1 Mechanical Properties**

#### **4.11 Product Composition:**

| <b>No.</b> | <b>Material</b>       | <b>Size (MM)</b>          |
|------------|-----------------------|---------------------------|
| 1          | Metals (White Copper) | 23.16*9.25    Thick 0.3mm |

#### **4.12 Apperance**

Good appearance without scars 、 dirt、 protuberances, etc.

#### **4.13 Antenna Picture and Structure Dimension**

Refer to product drawings:

**Product drawings:**





## 4.2 Electric Performance

### 4.21 Test condition

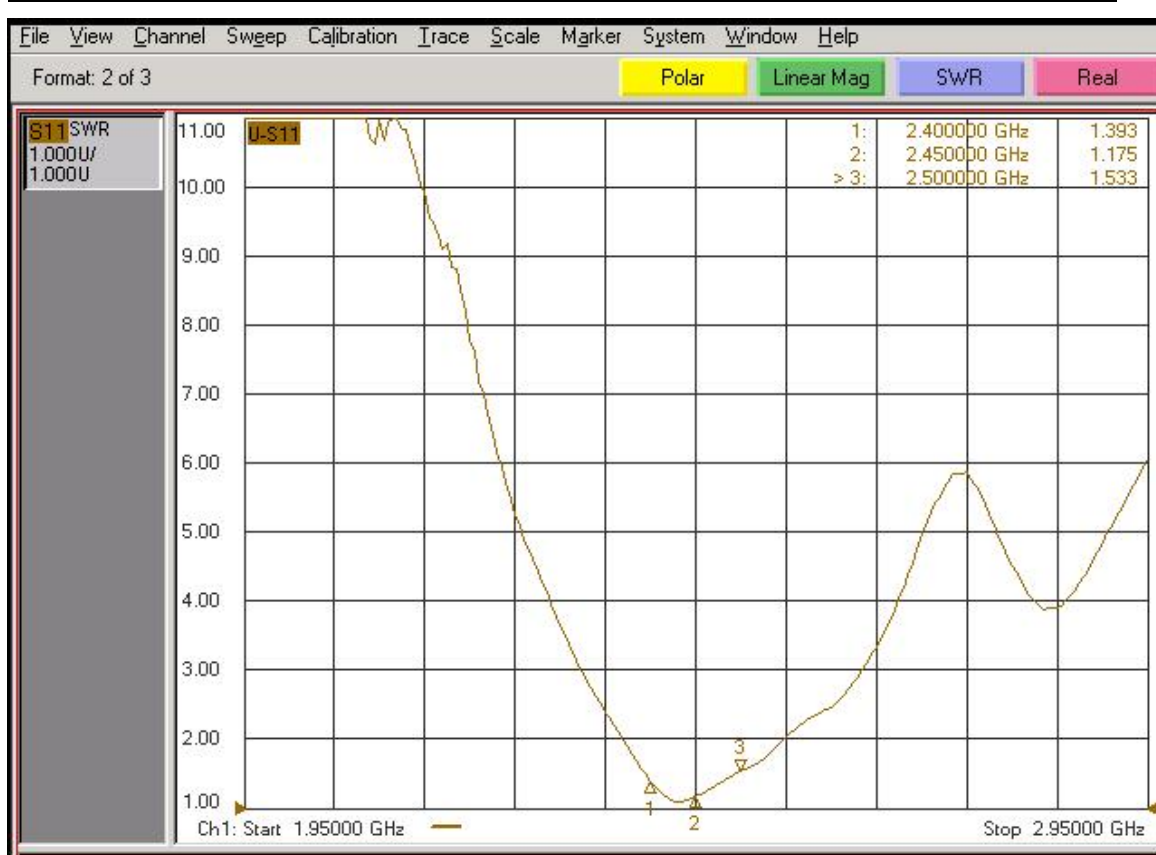
| Environment:              | Equipment:                       |
|---------------------------|----------------------------------|
| Temperature: 10℃——+30℃    | Network Analyzer: Agilent E8358A |
| Humidity: ≤80% (+40℃)     | Anechior Chamber: ETS            |
| Atmospher: 750mmkg±30mmkg |                                  |

### 4.22 Test Data for Electrical Performance:

#### 4.22.1 S11 of the Antenna:

| Marker     | 2400MHz | 2450MHz | 2500MHz |
|------------|---------|---------|---------|
| Returnloss | -15.54  | -22.28  | -13.78  |
| VSWR       | 1.39    | 1.17    | 1.53    |



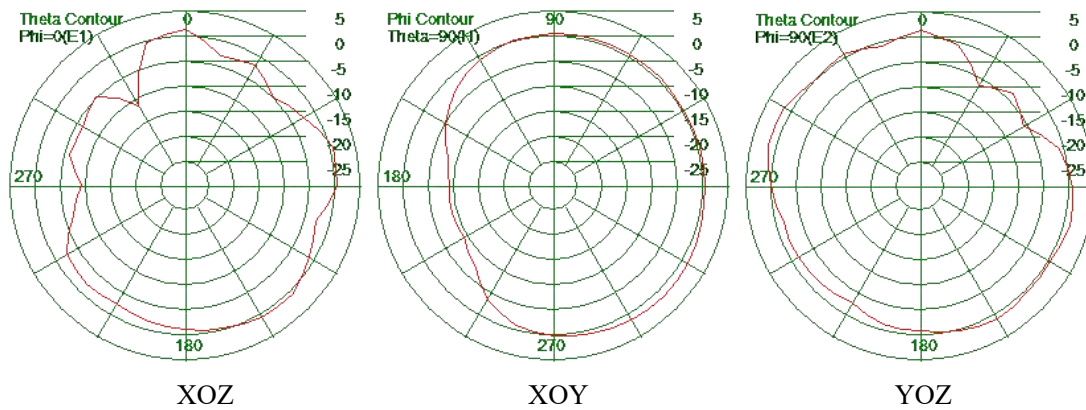
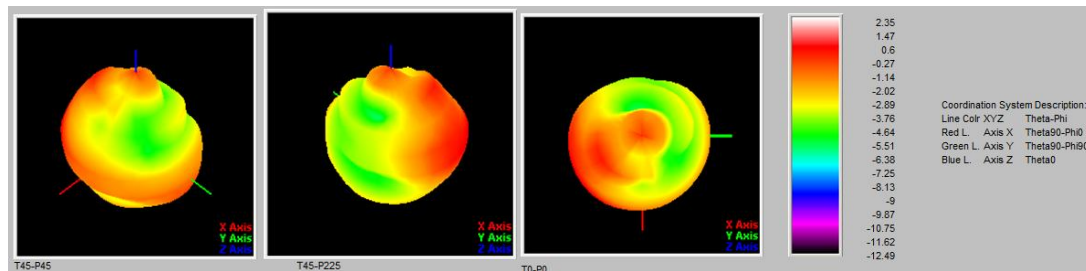


#### 4.22.2 Passive gain、 efficiency and Radiation Pattern:

| Freq. (MHz) | Gain (dBi) | Efficiency (%) |
|-------------|------------|----------------|
| 2400.0      | 2.54       | 66.6           |
| 2410.0      | 2.32       | 63.2           |
| 2420.0      | 2.33       | 62.8           |
| 2430.0      | 2.20       | 60.9           |
| 2440.0      | 2.31       | 61.4           |
| 2450.0      | 2.35       | 62.3           |
| 2460.0      | 2.44       | 63.6           |
| 2470.0      | 2.43       | 63.7           |
| 2480.0      | 2.45       | 63.9           |
| 2490.0      | 2.40       | 63.8           |
| 2500.0      | 2.21       | 62.5           |



#### 4.22.3 Radiation Pattern @2450MHz





## 5. Product Packaging

Manner of packing:

Packed in self sealed bags, 200 pcs each.

## 6. Document Resume

|              |             |
|--------------|-------------|
| Document No. |             |
| Release Date | 2023/03/20  |
| Author       | XiofengZeng |
| Review       | LiMing      |

## Revised History

| Date       | Version | Revised Record |
|------------|---------|----------------|
| 2023/03/20 | 1.00    | New Project    |
|            |         |                |