# KC.DA.00265

# Antenna Specification

## 1. Application:

This application shall apply for antenna unit which shall be used such as automotive, conventional communications, smart home, etc..

## 2.Electrical Specification:

*Those specifications were specially defined for customer's model, and all characteristics were measured under the model's handset testing jig .*

### 2-1. Frequency Band:

| Frequency Band | MHz |
|---|---|
| WiFi | 2400-2500/5150-5850MHz |

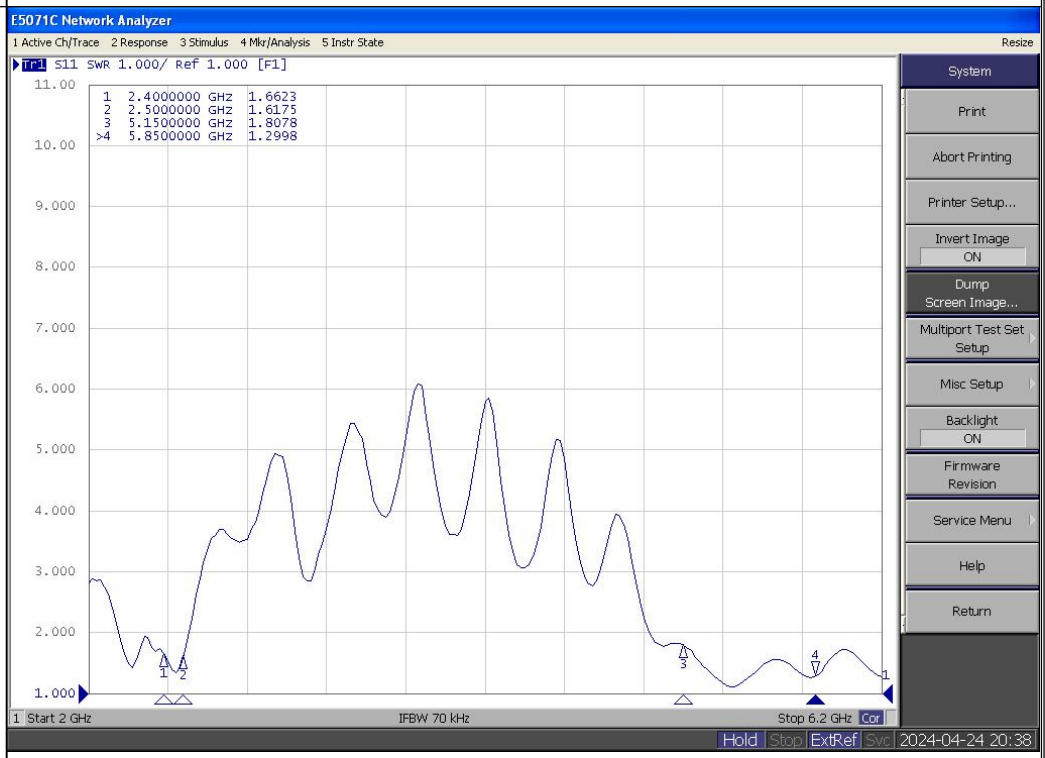
### 2-2. Impedance

50 ohm nominal

### 2-3. VSWR

#### 2-3-1.Measurement frequency points and VSWR value

| Frequency Band(MHz) | 2400 | 2500 | 5150 | 5850 |
|---|---|---|---|---|
| Typical Value:（VSWR） | 1.6 | 1.6 | 1.8 | 1.2 |

| | |
|---|---|
| 2-3-4 Measuring Method | 1. A 50Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR.<br>2. Keeping this jig away from metal at least 20 cm |
| 2-3-5 Picture |  |



| | | | |
|---|---|---|---|
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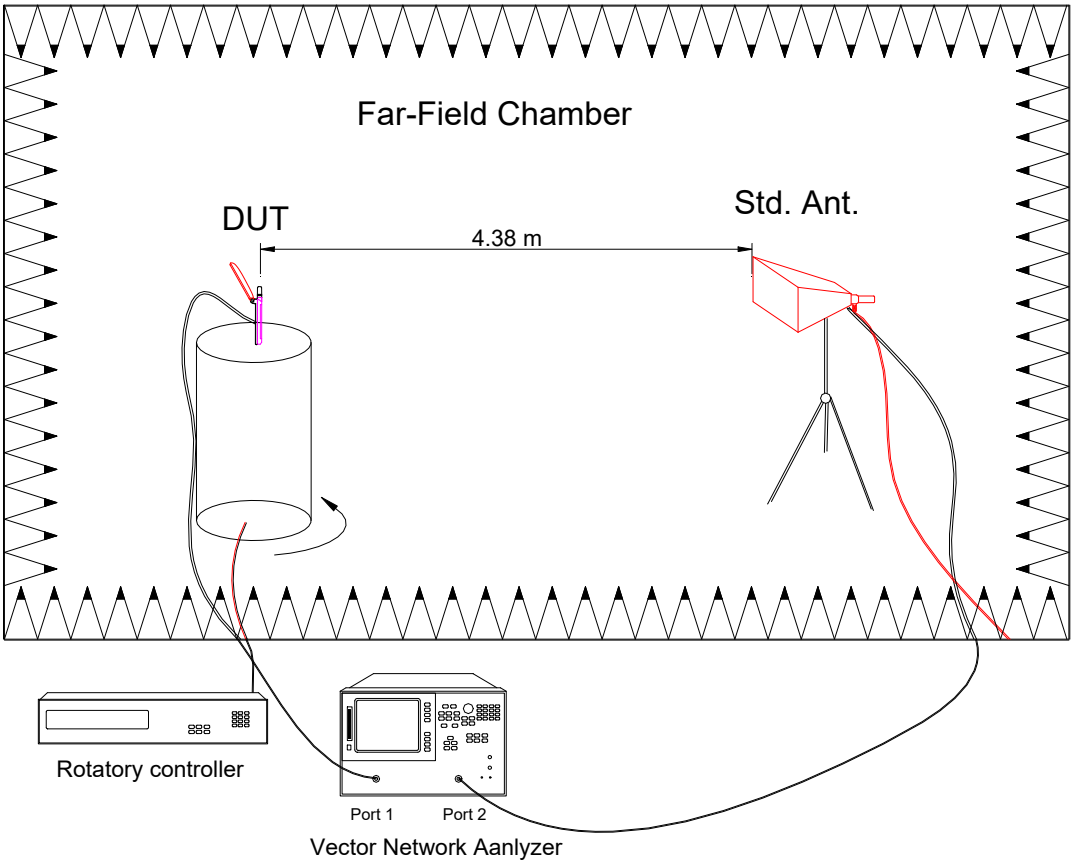
## 2-4. Efficiency and Gain

### 4-5.1 Measure method

1. Using a low loss coaxial cable to link a standard handset jig
2. Fixed this handset jig on chamber's rotator plane
3. Linking jig into network analyzer port and using a probing horn antenna to collect data.
4. Using another standard gain horn antenna to calibrated those data

### 4-5.2 Chamber definition




1. An anechoic chamber (7mx4mx3m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quite room region is 40cmx40cmx40cm at the center of rotator
3. The distance between DUT and standard antenna is 4.38 m
4. Probing antenna (9120D horn antenna) and standard gain horn antenna (BBHA9120 LPF

700MHz ~6GHz)

## 2-4-1 Efficiency and Gain and 3D Date

| Frequency/MHz | Efficiency / % | MaxGain/dBi | Frequency/MHz | Efficiency / % | MaxGain/dBi |
|---|---|---|---|---|---|
| 2400 | 51.88 | 2.76 | 5390 | 55.72 | 2.28 |
| 2410 | 54.95 | 3.06 | 5410 | 54.95 | 1.87 |
| 2420 | 54.2 | 3.03 | 5430 | 55.72 | 1.59 |
| 2430 | 55.21 | 3.11 | 5450 | 59.16 | 1.58 |
| 2440 | 56.75 | 3.2 | 5470 | 63.24 | 1.84 |
| 2450 | 57.94 | 2.67 | 5490 | 62.52 | 1.67 |
| 2460 | 57.28 | 2.62 | 5510 | 61.8 | 1.43 |
| 2470 | 58.61 | 2.51 | 5530 | 60.26 | 1.27 |
| 2480 | 60.12 | 2.58 | 5550 | 58.34 | 1.23 |
| 2490 | 63.53 | 2.59 | 5570 | 56.89 | 1.27 |
| 2500 | 63.68 | 2.33 | 5590 | 58.75 | 1.46 |
| | | | 5610 | 59.7 | 1.69 |
| 5150 | 51.88 | 1.09 | 5630 | 60.53 | 1.58 |
| 5170 | 53.7 | 1.29 | 5650 | 58.75 | 1.32 |
| 5190 | 54.58 | 1.35 | 5670 | 56.89 | 1.2 |
| 5210 | 56.49 | 1.65 | 5690 | 52.84 | 1.04 |
| 5230 | 55.85 | 1.71 | 5710 | 51.05 | 1.03 |
| 5250 | 52.97 | 1.54 | 5730 | 47.1 | 0.62 |
| 5270 | 51.17 | 1.54 | 5750 | 47.1 | 0.86 |
| 5290 | 53.09 | 1.9 | 5770 | 49.2 | 1.32 |
| 5310 | 54.2 | 2.22 | 5790 | 51.29 | 1.45 |
| 5330 | 54.2 | 2.31 | 5810 | 48.98 | 1.11 |
| 5350 | 53.95 | 2.16 | 5830 | 50.82 | 1.31 |
| 5370 | 54.58 | 2.21 | 5850 | 51.76 | 1.51 |



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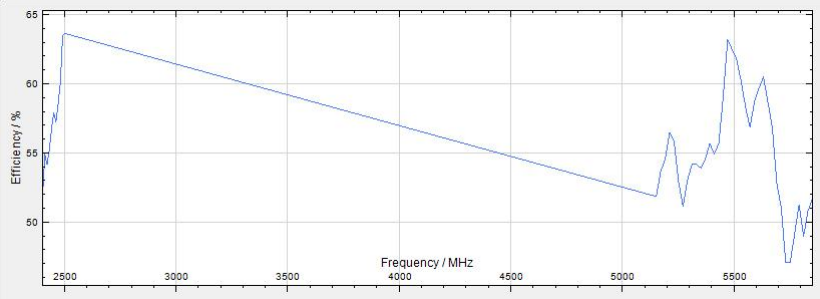


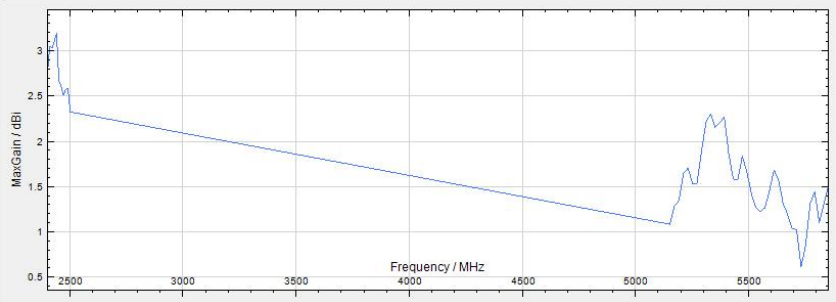


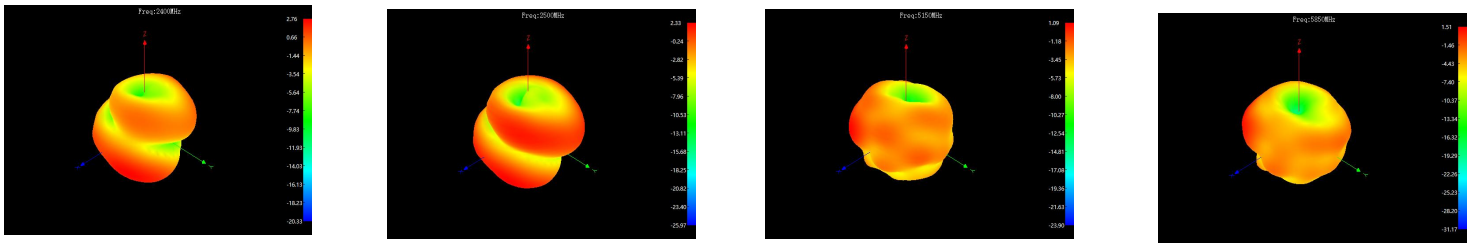

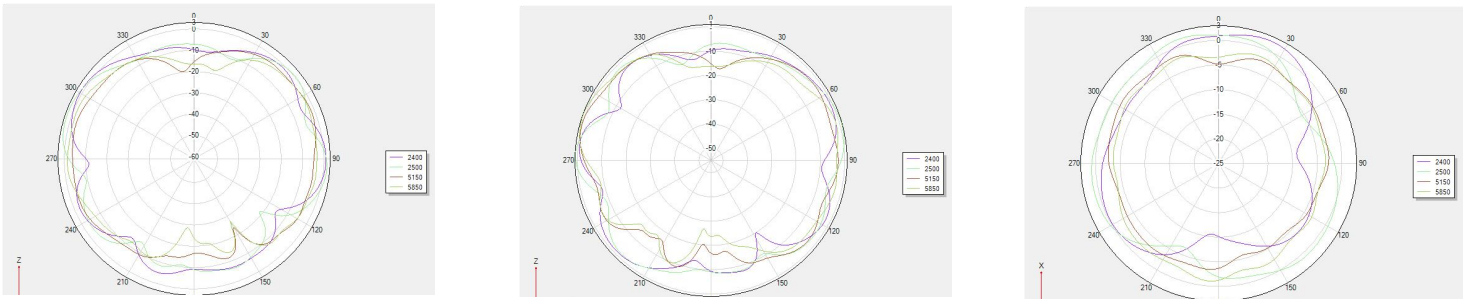

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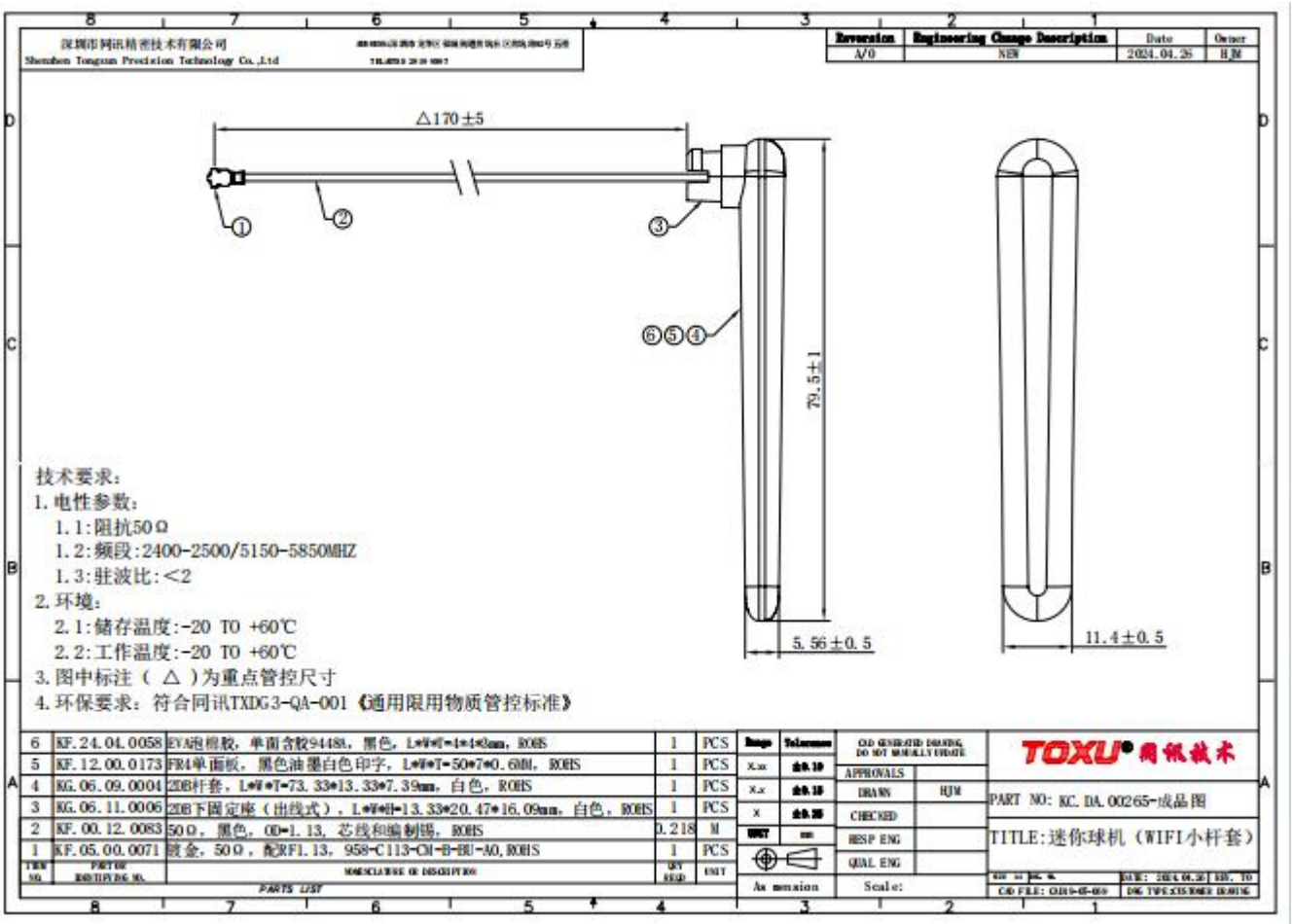
# 3. Mechanical Specification:

## 3-1. Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing

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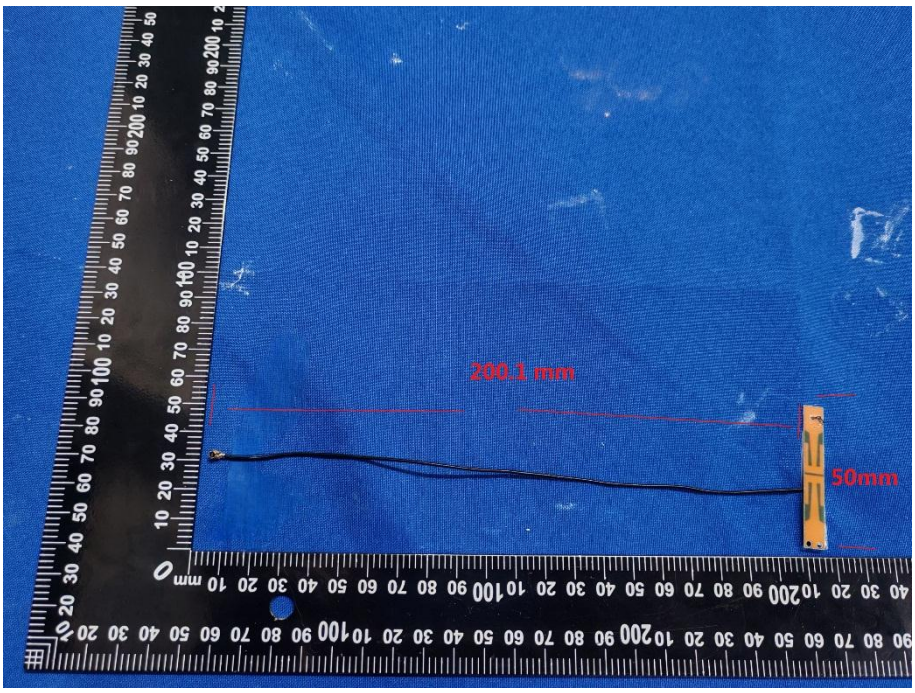

200.1 mm
50mm

# 4 .Packaging specification：

| | | | |
|---|---|---|---|
| **Product number： xxxxx** | | | |
| **Product model： xxxxx** | | | |

**一、Label requirements：**

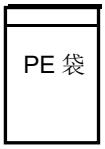
| | | | |
|---|---|---|---|
| **Customer** | **xxx** | | |
| **supplier** | **xxxxx** | | |
| **Material coding** | **xx** | | |
| **Product model** | **xx** | | |
| **Number** | **XXX PCS** | **Factory date** | **X X X** |
| **Remarks** | | | |

**二、Boxing：**

**Job description：**

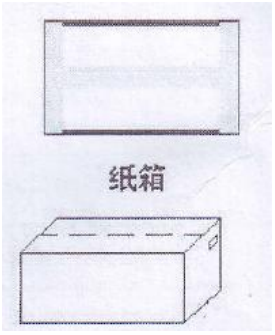
**1. Inner packaging：**

**XXpcs A bag**




**2. External packaging：**

**Xx PCS ；**




**3. Matters needing attention：**

**a. Whether to add partition and pearl cotton；**

**b. Label attachments, such as ROHS, etc.；**

| | | | |
|---|---|---|---|
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