

KC.IA.00382 (THINK DIAG MINI4)**Antenna Specification****1. Application:**

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

1. 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/BT 2.4G | 2400-2500 |

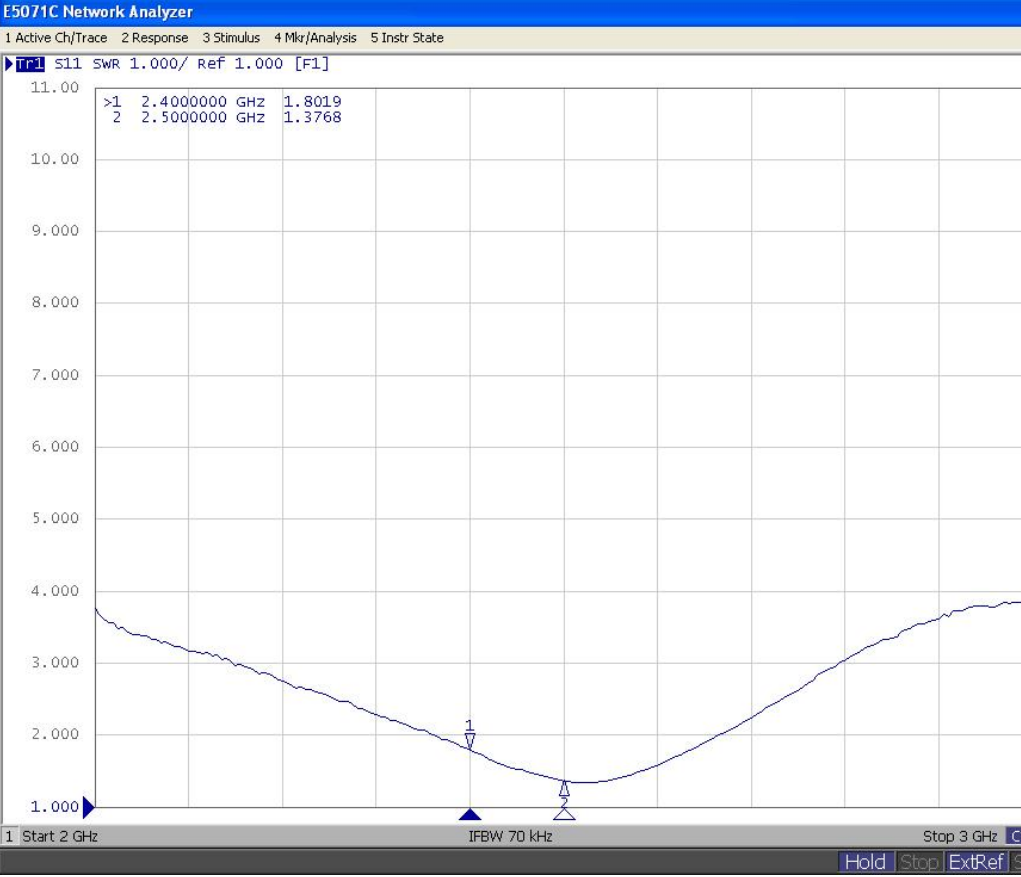
2-2. Impedance


50 ohm nominal

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

| Frequency Band(MHz) | 2400 | 2500 |
|-----------------------|------|------|
| 2-3-3. Typical Value: | 1.8 | 1.3 |

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|------------------------|---|
| 2-3-4 Measuring Method | <ol style="list-style-type: none"> 1. A 50Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR. 2. Keeping this jig away from metal at least 20 cm |
| 2-3-5 Picture |  |

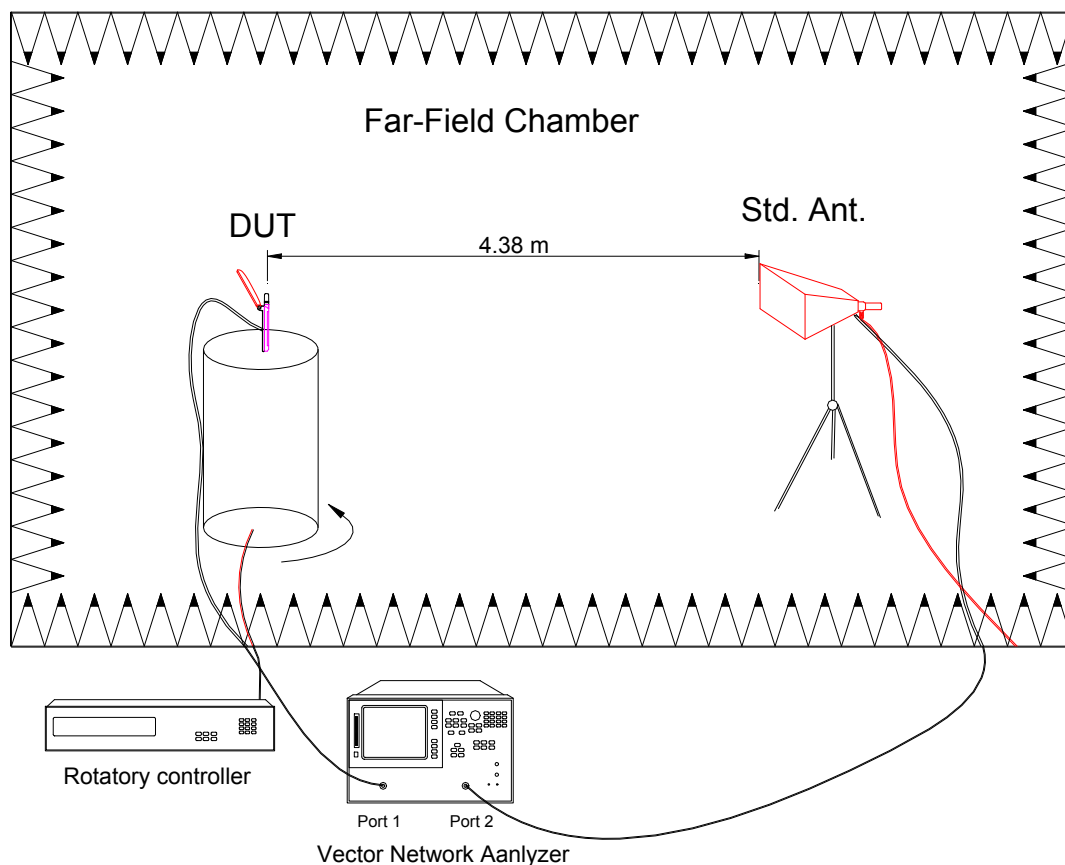
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2-4. Efficiency and Gain


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

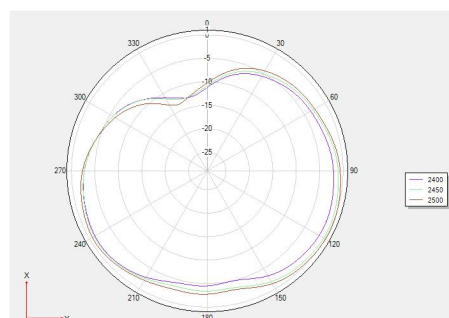
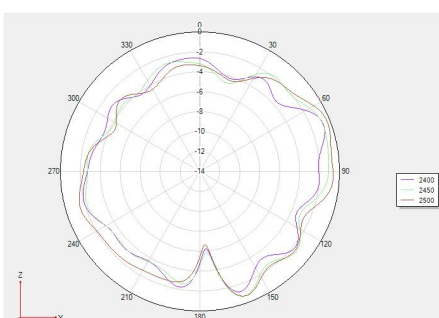
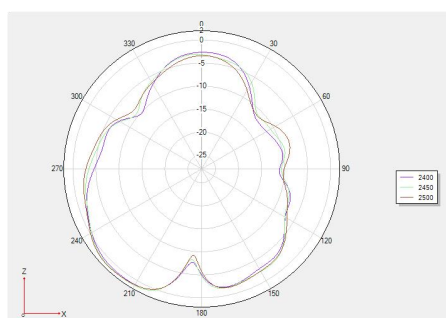
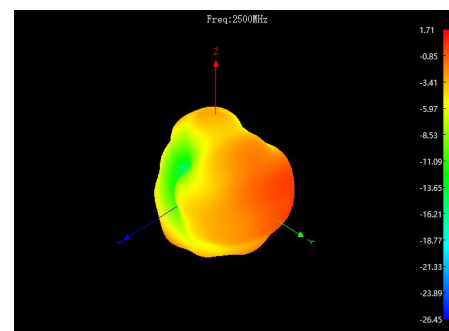
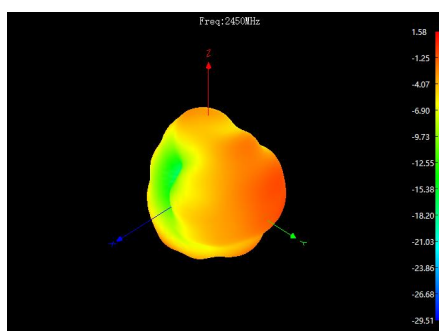
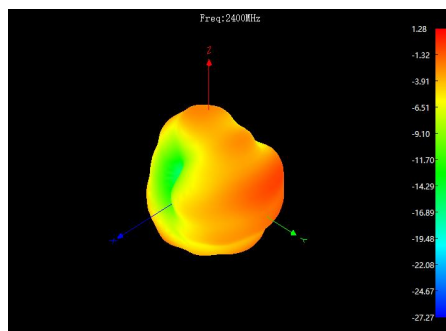


1. An anechoic chamber (7mx4mx3m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quite room region is 40cmx40cmx40cm at the center of rotator
3. The distance between DUT and standard antenna is 4.38 m
4. Probing antenna (9120D horn antenna) and standard gain horn antenna (BBHA9120 LPF 700MHz ~6GHz)

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2-4-1 Efficiency and Gain

| Frequency/Mhz | MaxGain/dBi | Efficiency / % |
|---------------|-------------|----------------|
| 2400 | 1.28 | 51.4 |
| 2410 | 2.3 | 54.83 |
| 2420 | 1.91 | 56.49 |
| 2430 | 2.35 | 54.2 |
| 2440 | 1.67 | 52.84 |
| 2450 | 1.58 | 51.4 |
| 2460 | 1.43 | 52.6 |
| 2470 | 1.35 | 52.24 |
| 2480 | 1.77 | 55.98 |
| 2490 | 1.37 | 56.89 |
| 2500 | 1.71 | 58.88 |

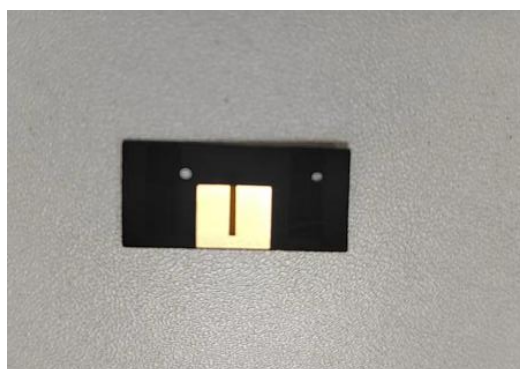
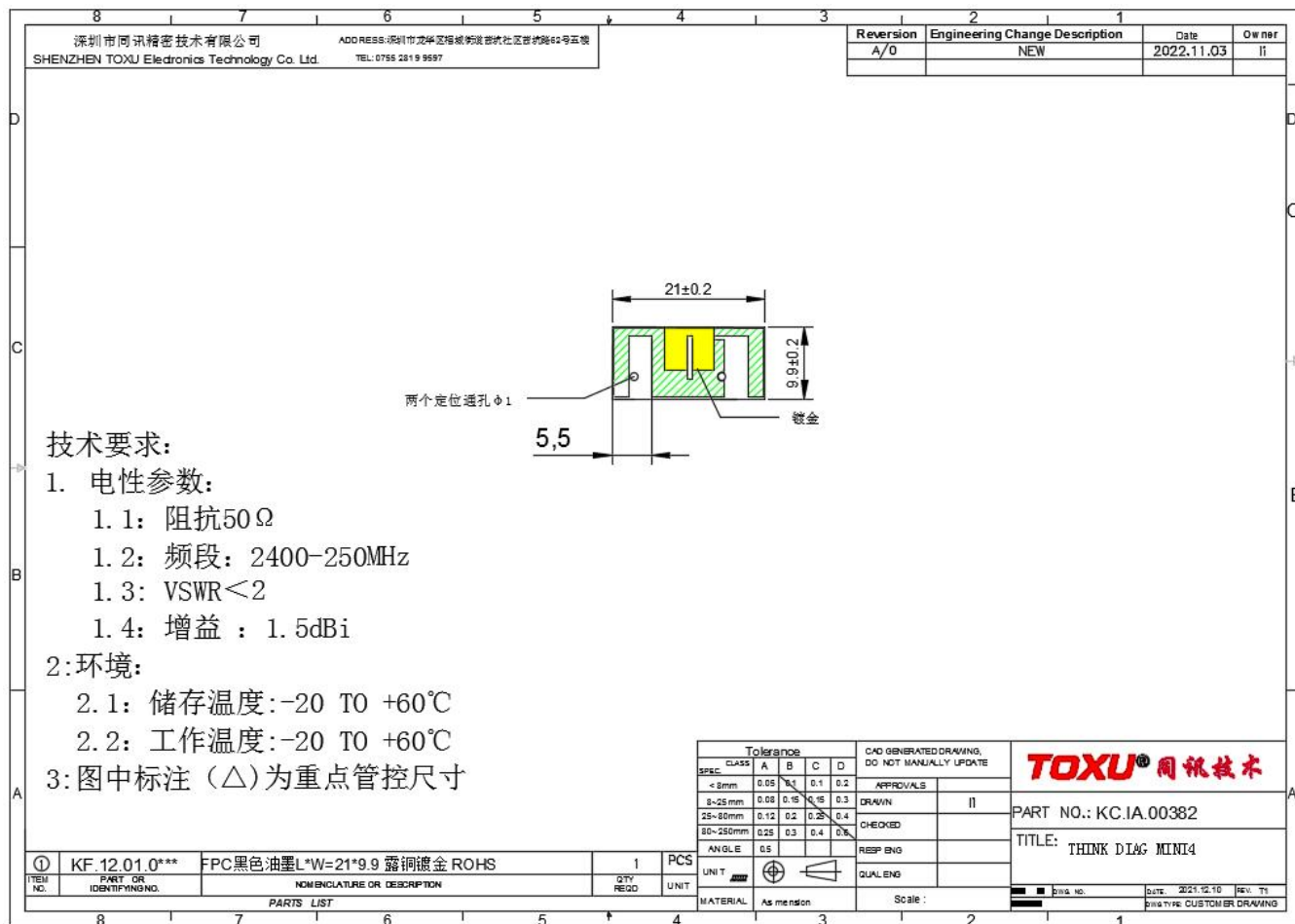



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3. Mechanical Specification:

3-1. Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing



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4 .Packaging specification:

Product number: KC.IA.00382

Product model: WIFI/BT

一、 Label requirements:

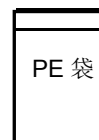
| | | | |
|------------------------|---------|---------------------|-------|
| Customer | xxx | | |
| supplier | xxxxx | | |
| Material coding | xx | | |
| Product model | xx | | |
| Number | XXX PCS | Factory date | X X X |
| Remarks | | | |

二、 Boxing:

Job description:

1. Inner packaging:

XXpcs A bag

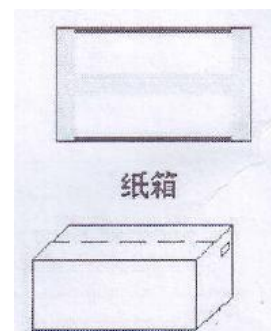


2. External packaging:

Xx PCS ;

3. Matters needing attention:

- Whether to add partition and pearl cotton;
- Label attachments, such as ROHS, etc.;



UNLESS OTHER SPECIFIED TOLERANCES ON :
 $X=\pm$ $X.X=\pm$ $X.XX=\pm$
ANGLES $=\pm$ **HOLEDIA** $=\pm$

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