

KC.DA.00223

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 | 2400-2500MHz |

2-2. Impedance

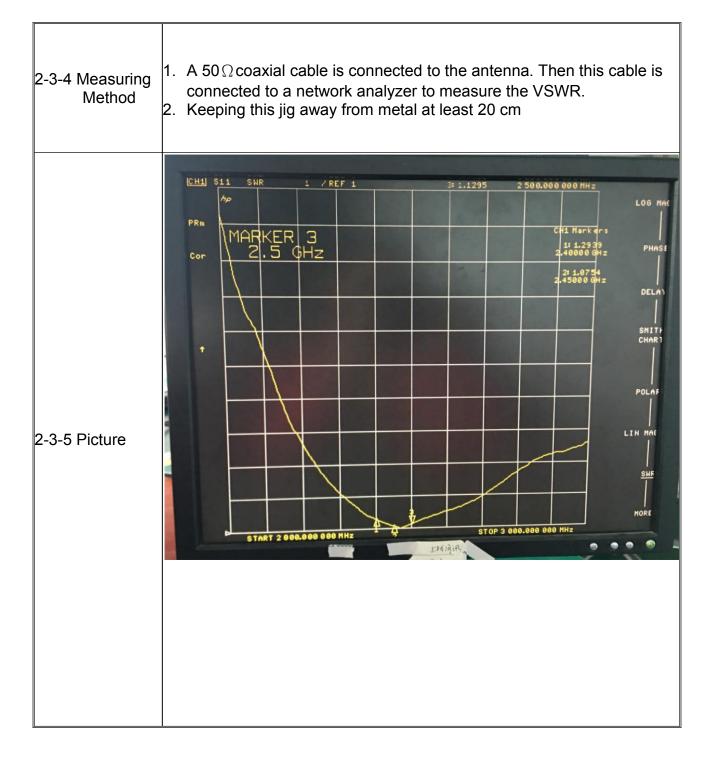
50 ohm nominal

2-3. VSWR

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

| Frequency Band(MHz) | 2400 | 2500 |
|-----------------------|------|------|
| Typical Value: (VSWR) | 1.29 | 1.12 |

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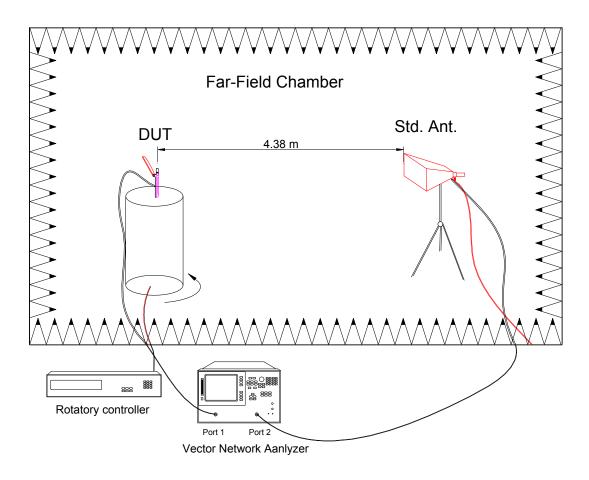


2-4. Efficiency and Gain

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



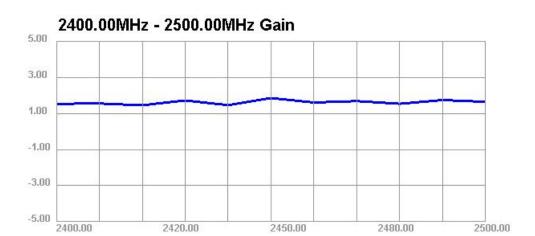
- 1. An anechoic chamber (7mx4mx3m) which satisfied far-field condition was applied to avoid multi-path effect
- 2. The quite room region is 40cmx40cmx40cm at the center of rotator
- 3. The distance between DUT and standard antenna is 4.38 m
- Probing antenna (9120D horn antenna) and standard gain horn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

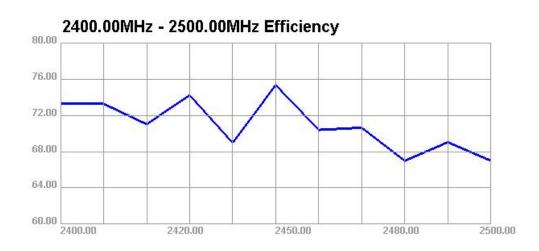
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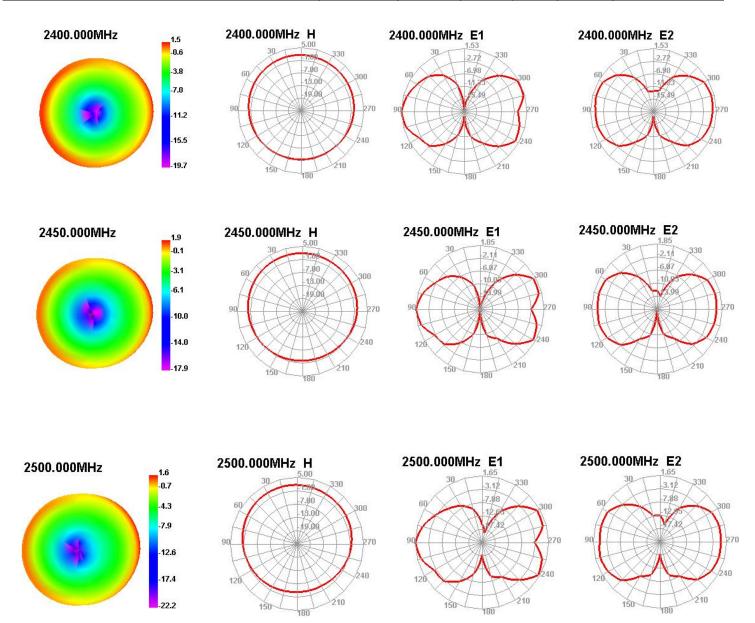
2-5-1 Efficiency and Gain and 3D Date

| | Passive Test For WIFI2 | | | | | | | | | |
|-------|------------------------|-------|-------|-------|---------|---------|-------|---------|----------|-------------|
| Freq | Effi | Effi | Gain | Gain | UHIS | DHIS | Max | Min | Attenu | Attenu t |
| (MHz) | (%) | (dB) | (dBi) | (dBd) | (%) | (%) | (dB) | (dB) | t Hor | Ver |
| 2400 | 73. 3 | -1.35 | 1.53 | -0.62 | 39. 113 | 34. 188 | 1.53 | -19. 75 | 53. 58 | 53. 59 |
| 2420 | 71.02 | -1.49 | 1. 45 | -0.7 | 37. 158 | 33.864 | 1. 45 | -18.86 | 53.83 | 53. 76 |
| 2450 | 75. 35 | -1.23 | 1.85 | -0.3 | 37. 977 | 37. 368 | 1.85 | -17. 95 | 54. 17 | 54. 08 |
| 2480 | 66. 98 | -1.74 | 1.54 | -0.61 | 32. 936 | 34. 048 | 1.54 | -20. 36 | 54. 08 | 53.86 |
| 2500 | 67 | -1.74 | 1.65 | -0.5 | 32. 476 | 34. 521 | 1.65 | -22. 18 | 54.04 | 53.84 |





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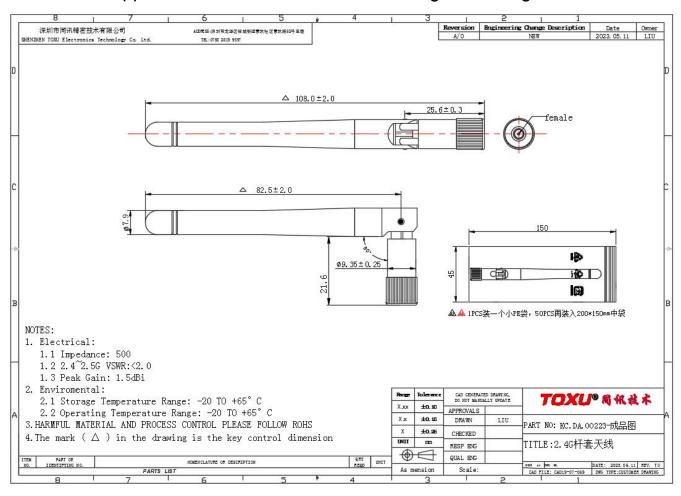


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3. Mechanical Specification:

3-1. Mechanical Configuration (Unit: mm) The appearance of the antenna is according to drawing



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4 .Packaging specification:

Product number: xxxxx

Product model: xxxxx

-. Label requirements:

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

二、Boxing:

Job description:

1. Inner packaging:

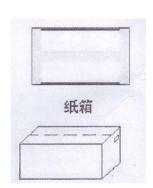
XXpcs A bag

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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