WA-P-LB-03-130 Specification

1. Explanation of part number:

$$\frac{WA}{(1)}$$
 - $\frac{P}{(2)}$ - $\frac{LB}{(3)}$ - $\frac{03}{(4)}$ - $\frac{130}{(5)}$

- (1) Product Type: Wireless Antenna
- (2) Material: PCB+Cable
- (3) Frequency: 2400~2500MHz&5100-5900MHz
- (4) Coaxial Cable Type: 03
- (5) Suffix:130

2. Storage Condition:

Temperature -40 to +70 °C Humidity 65 ± 20 % RH

3. Operating Condition:

Temperature -40 to +70 °C Humidity 65 ± 20 % RH

4. Electrical Specification:

Those specifications were specially defined for 超声 CA22 WIFI-2 model, and all characteristics were measured under the model's handset testing.

4-1. Frequency Band:

| Frequency Band | MHz |
|----------------|---------------------|
| WiFi | 2400~2500&5100-5900 |

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| ANGLES=± | HOLEDIA=± | | INPAQ TECHNOLOGY CO. | ., LTD. |
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4-2. Impedance

50 ohm nominal

4-3. Matching circuit

None

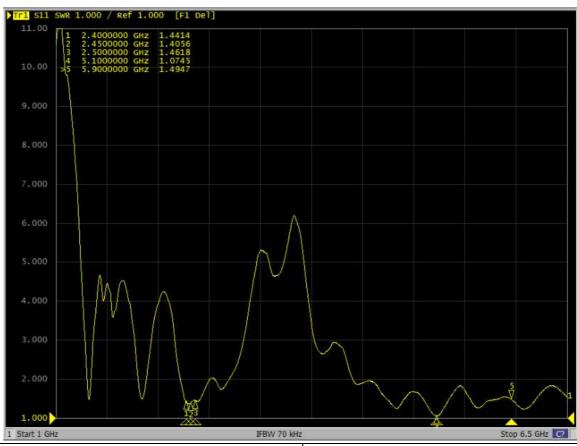
4-4. **VSWR**

4-4.1 Measuring Method

- 1.A 50 Ω 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 20cm

4-4.2 Measurement frequency points and VSWR value

| Frequency (Unit MHz) | 2400 | 2450 | 2500 | 5100 | 5900 |
|-------------------------|------|------|------|------|------|
| VSWR | 1.44 | 1.41 | 1.46 | 1.07 | 1.49 |
| Typical Value: | ≦2.5 | ≦2.5 | ≦2.5 | ≦2.5 | ≦2.5 |



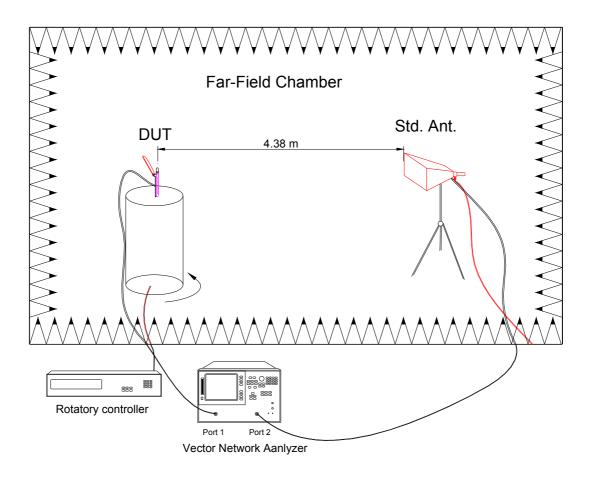
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4-5. Efficiency and Gain

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



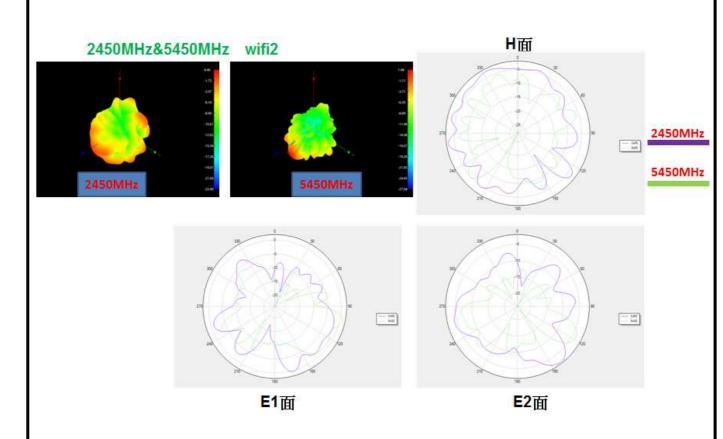
- 1. An anechoic chamber (7mx4mx3m) which satisfied far-field condition was applied to avoid multi-path effect
- 2. The quite room region is 40cmx40cmx40cm at the center of rotator
- 3. The distance between DUT and standard antenna is 4.38 m
- Probing antenna (9120D horn antenna) and standard gain horn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

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4-5.3 Efficiency and Gain

Antenna gain is marked (dBi) and is based on STANDARD HORN antenna. The data shows Peak Gain and Average Gain.

| Frequency (MHz) | 2400 | 2450 | 2500 | 5150 | 5450 | 5850 |
|-----------------|-------|-------|-------|-------|-------|-------|
| Efficiency (%) | 41.83 | 43.98 | 41.56 | 32.81 | 34.43 | 32.06 |
| Gain (dBi) | 0.46 | 0.46 | 0.11 | 1.89 | 1.48 | 1.98 |

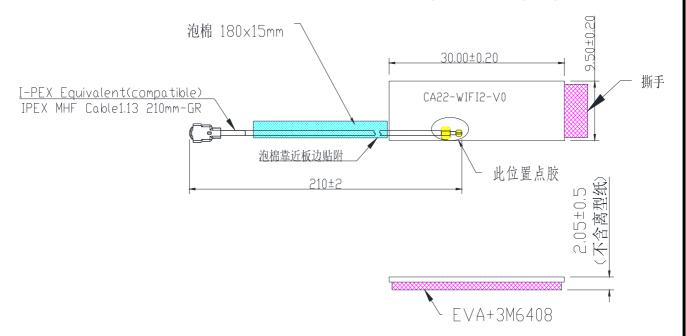


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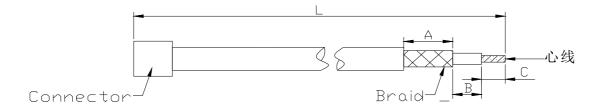
5.Mechanical Specification:

5-1. Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing Figure 5-1-1



5-2. Cable Length:



Connector: I-PEX MHF I-PEX Equivalent(compatible);

Cable: RF Cable 1.13 (灰色)

L: 210±2mm

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