

# Shenzhen Xiangboyi Technology Co. Ltd

## Antenna Specification

|                      |                                   |
|----------------------|-----------------------------------|
| <b>Customer</b>      | SHENZHEN FCAR TECHNOLOGY CO., LTD |
| <b>Project</b>       | HD Mobile II                      |
| <b>Antenna Model</b> | XBY220570                         |

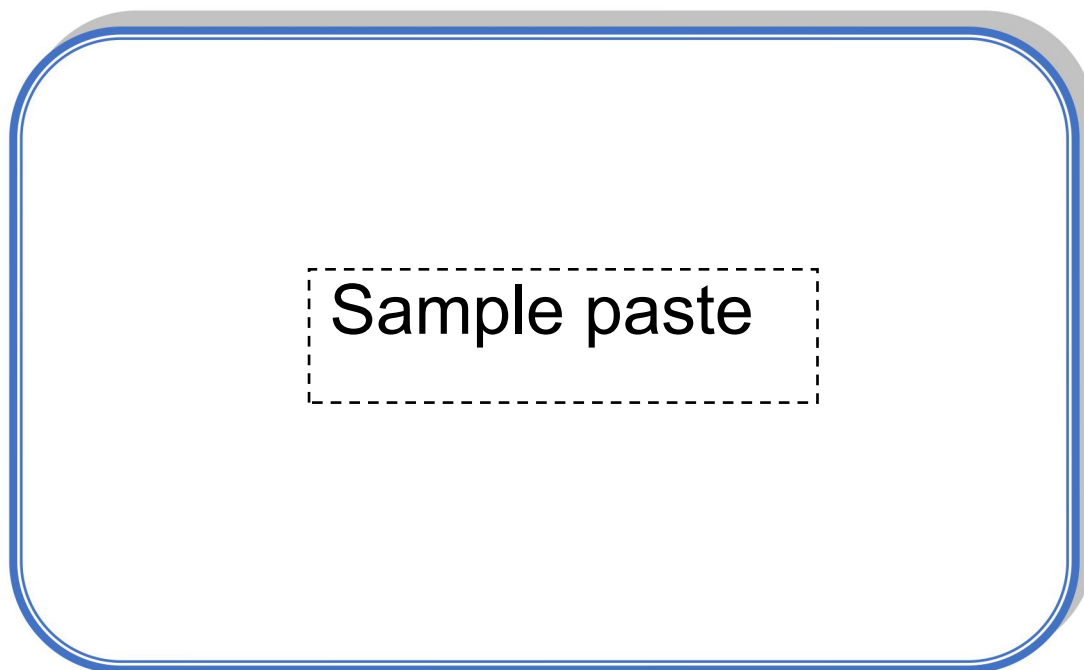
**Shenzhen Xiangboyi Technology Co. Ltd**

Date : 2022/12/02

Tel: (+86)0755-29369912 Fax: (+86)0755-61624200

**R & D Center:** 101, floor 1, Wencheng building, Yousong Cultural Innovation Park, No. 95, Yousong Road, Longhua District, Shenzhen.

**Production Base:** 5 / F, building B, Huazhi chuangu, No. 7, Yuhua street, 138 Industrial Zone, Tangxia Town, Dongguan City.



| Customer confirmation |    |         |          |
|-----------------------|----|---------|----------|
| Engineer              | PM | Quality | Approval |
|                       |    |         |          |

| Supplier confirmation |    |         |          |
|-----------------------|----|---------|----------|
| ME                    | RF | Examine | Approval |
|                       |    |         |          |

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# Catalogue

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# 1 Test System and Equipment

|                                | Test items                                        | equipment                                                                      |
|--------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------|
| 1 : S parameter                | 1. Return loss<br>2. VSWR                         | Network analyzer:<br>A338/A333/HP8753D                                         |
| 2 : Active test                | 1. Transmitting power<br>2. Receiving sensitivity | Comprehensive test instrument:<br>Agilent 8960/ CMW500                         |
| 3 : Radiation mode<br>and gain | 1. Radiation mode<br>2. Gain                      | 1. Shielding room:<br>7x4x3 m (ETS-3D)<br><br>2. Network analyzer:<br>HP 8753D |



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## 2 Product Description

| Technical requirements       | Technical index                | Remarks          |
|------------------------------|--------------------------------|------------------|
| <b>Band</b>                  | 2. 4G                          |                  |
| <b>Range Of Frequency</b>    | 2400-2500Mhz ;                 |                  |
| <b>VSWR</b>                  | 2400-2500Mhz<2. 0              | Center Frequency |
| <b>Impedance</b>             | 50Ω                            |                  |
| <b>Polarization</b>          | Linear polarization            |                  |
| <b>operating temperature</b> | -32℃ / +55℃                    |                  |
| <b>storage temperature</b>   | -55℃ / +85℃                    |                  |
| <b>Salt Fog</b>              | 24h(24h alternating wet & dry) |                  |
| <b>RoHS Compliant</b>        | yes                            |                  |

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### 3 Device Description

The whole machine photo



Antenna photo



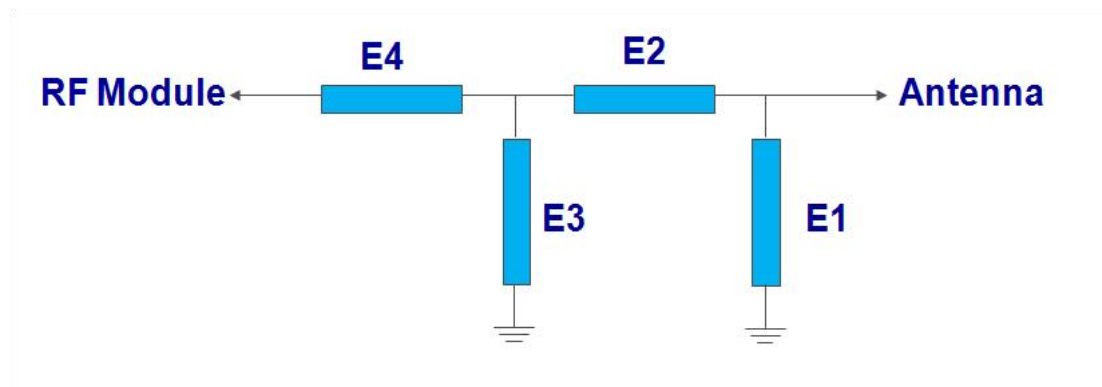
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## 4 Matching Circuits



| Element  | Value | Vender |
|----------|-------|--------|
| E1(0402) | NA    |        |
| E2(0402) | 0Ω    |        |
| E3(0402) | NA    |        |
| E4(0402) | 0Ω    |        |

Original match unchanged.

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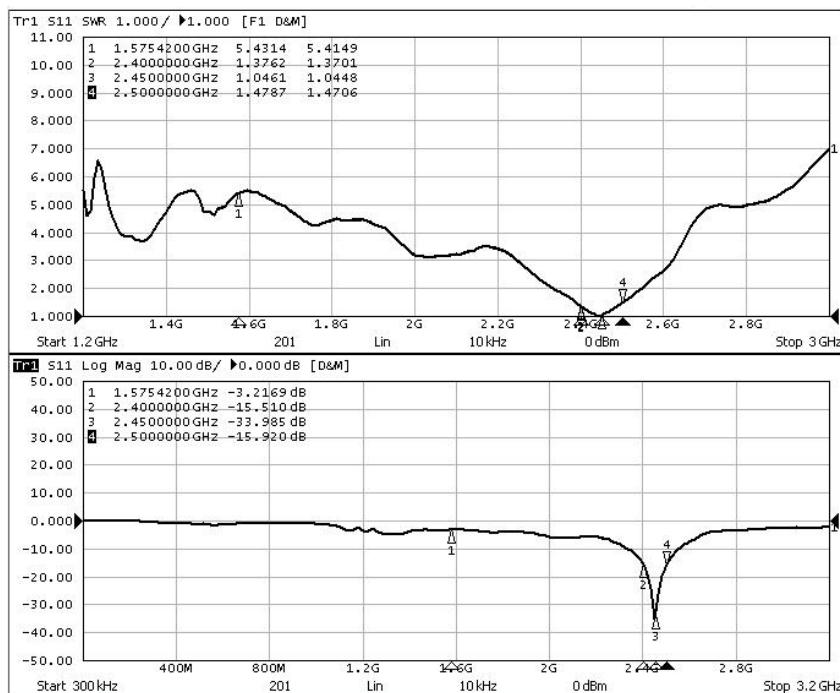
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## 5 Test Data

| Passive Test For 2.4G |          |            |
|-----------------------|----------|------------|
| Freq (MHz)            | Effi (%) | Gain (dBi) |
| 2400                  | 51.81    | 2.23       |
| 2410                  | 49.31    | 1.57       |
| 2420                  | 48.49    | 2.01       |
| 2430                  | 41.26    | 1.17       |
| 2440                  | 48.76    | 2.08       |
| 2450                  | 43.53    | 1.58       |
| 2460                  | 48.47    | 1.94       |
| 2470                  | 43.64    | 1.68       |
| 2480                  | 43.73    | 1.79       |
| 2490                  | 43.92    | 1.96       |
| 2500                  | 47       | 2.09       |



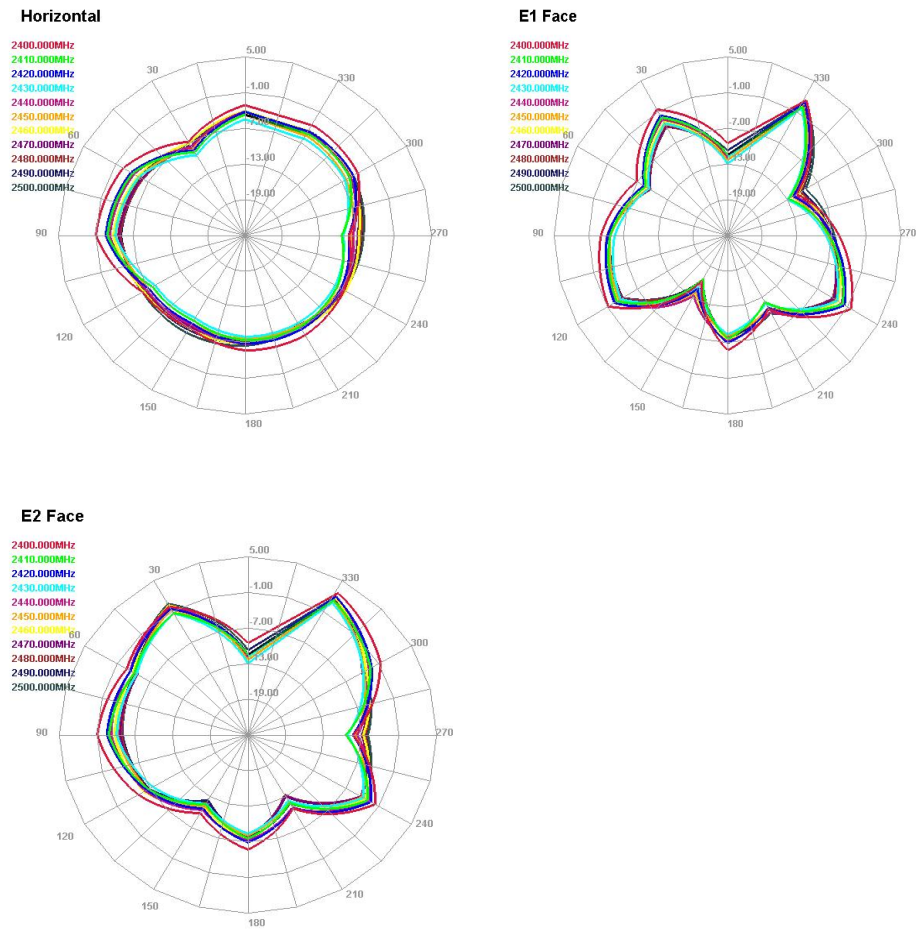
WiF idirectional diagram; directivity diagram

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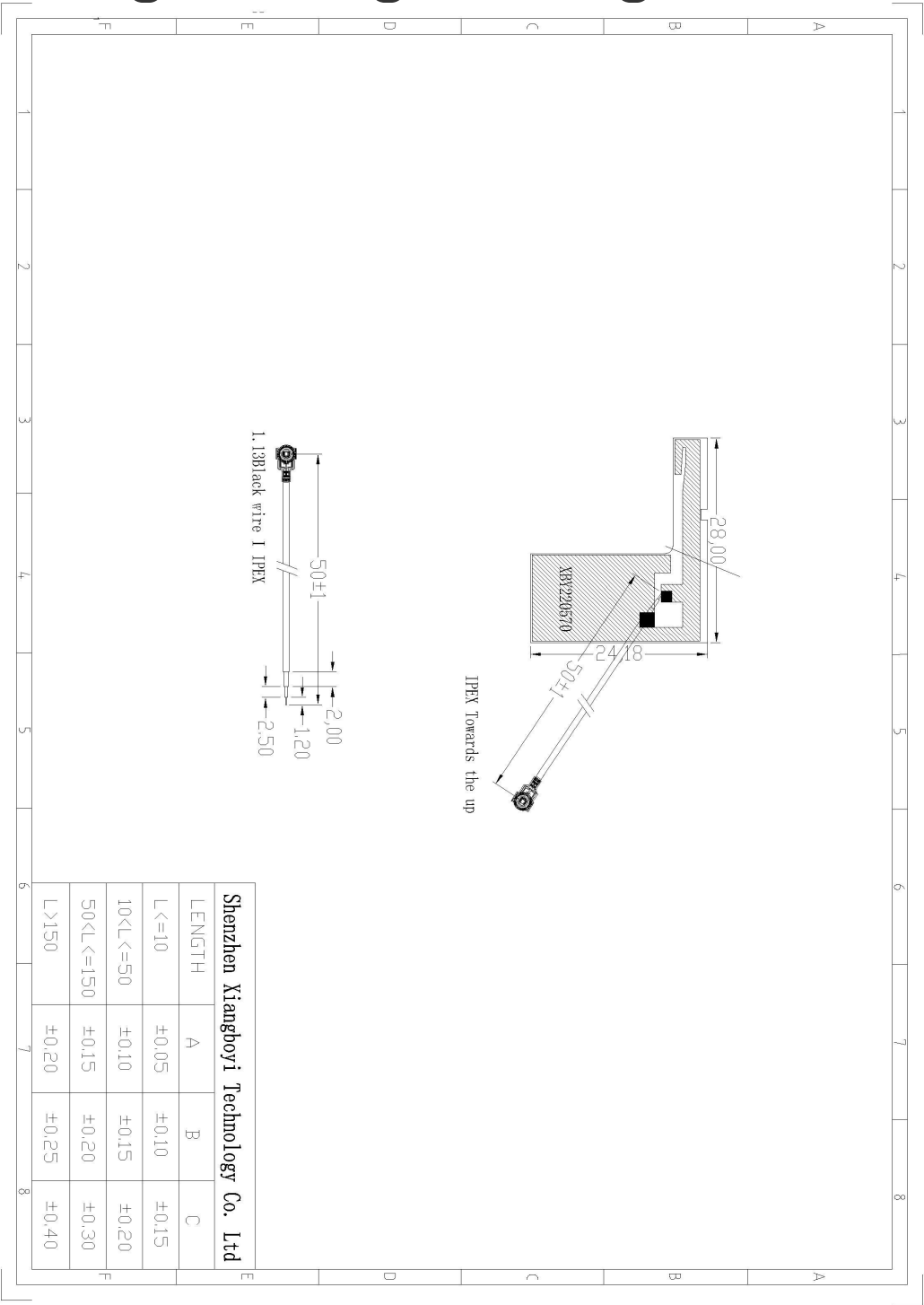
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# 6 Engineering Drawing



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## 7. Physical Assembly Picture



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