



shenzhenTian wei xun wireless technology co. ,Ltd.

Product performance and specification

MATERIAL NO: TWX-137-002

CUSTOMER NAME: Myzi Intelligence Co. ,Ltd.

PRODUCT NAME: M25 BOARD MODEL: CW031-03

|                        |                              |            |          |
|------------------------|------------------------------|------------|----------|
| Client                 | Admit manufacturing party    |            |          |
| Customers confirmation | Quality department           | R&D        | Approval |
|                        |                              | ME:<br>RF: |          |
| Date:                  | Wednesday ,21 December ,2022 |            |          |

Shenzhen Tianweixun Wireless Technology Co.,Ltd.

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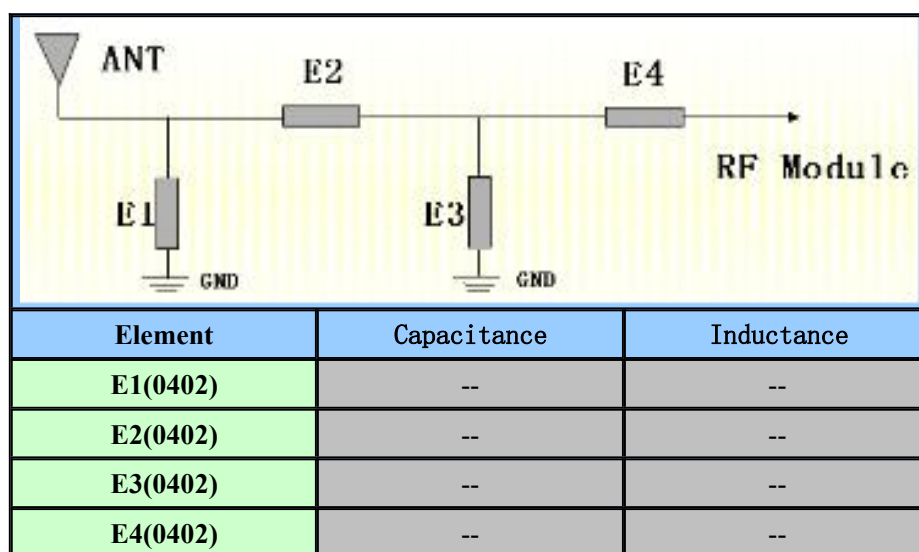
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## 1.1 Project Diagram



M25

## 1.1.1 Antenna Matching Diagram



Matching instruction: Matching according to the original motherboard matching, no changes

## 2.1 Purpose

To regulate the specifications and test methods of mobile communication terminal antenna products produced by Shenzhen Tianwei Xun Wireless Technology Co., Ltd. To avoid the error caused by the different test conditions and methods.

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### 3.1 Antenna

#### 3.1.1 Antenna Electrical Specifications and Material

This report mainly provides the test status of the structural performance parameters of M25 antenna



The physical view of the antenna designed by Tianweixun

#### 3.1.2 Antenna Form:

Realization Type: PIFA antenna Antenna Material: BlueTooth Antenna

#### 3.1.3 Antenna Design Operating Frequency Band:

Antenna operating frequency band in 2402MHz~2480MHz

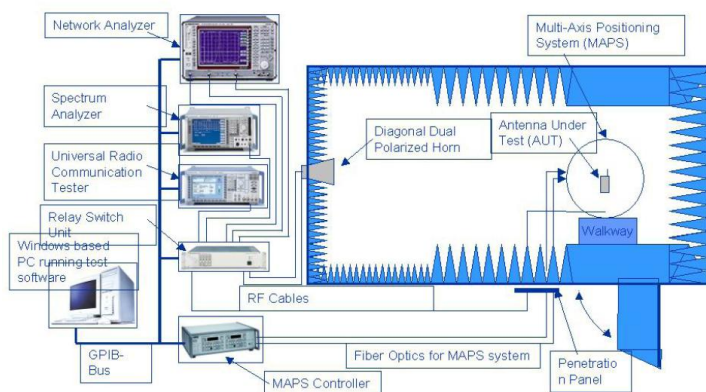
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## 3.1.4 Main Antenna Measurement Data in ETS-SG24SYSTEM 3D Test System



Picture ( 1 ) ETS Test System



Picture ( 2 ) Cell phone 3D positioning device in dark room

The following table shows the passive performance indicators of Tianweixun design:

| Frequency (MHz) | Gain (dBi) | Efficiency (%) |
|-----------------|------------|----------------|
| 2400            | -1.79      | 13.9           |
| 2410            | -1.63      | 14.5           |
| 2420            | -1.46      | 14.9           |
| 2430            | -1.27      | 15.4           |
| 2440            | -0.95      | 16.2           |
| 2450            | -0.21      | 17.4           |
| 2460            | -0.42      | 16.3           |
| 2470            | -0.76      | 15.3           |
| 2480            | -0.81      | 14.8           |
| 2490            | -0.96      | 14.2           |
| 2500            | -1.15      | 13.5           |

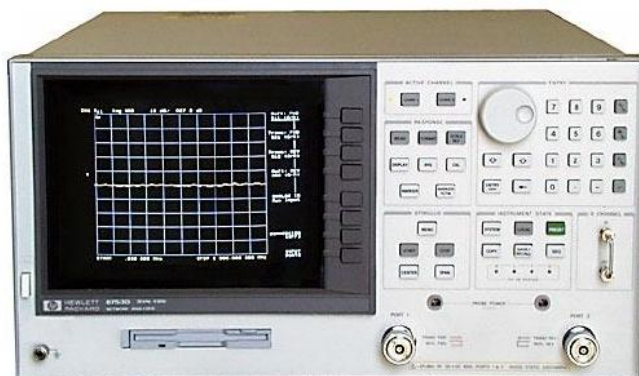
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### 3.1.5 Data measured by the main antenna in the network analyzer (antenna passive standing wave and return loss)



(SWR)



(Return loss)

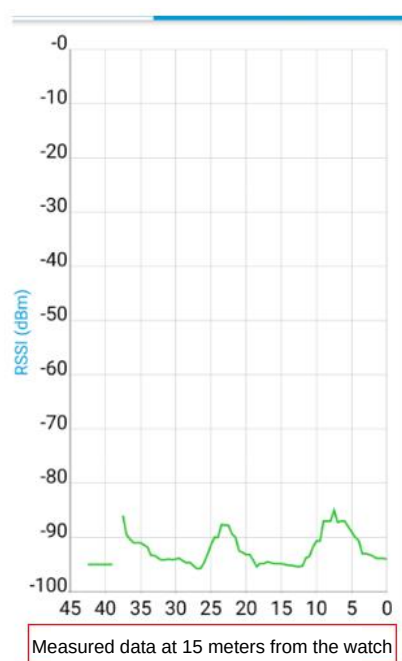
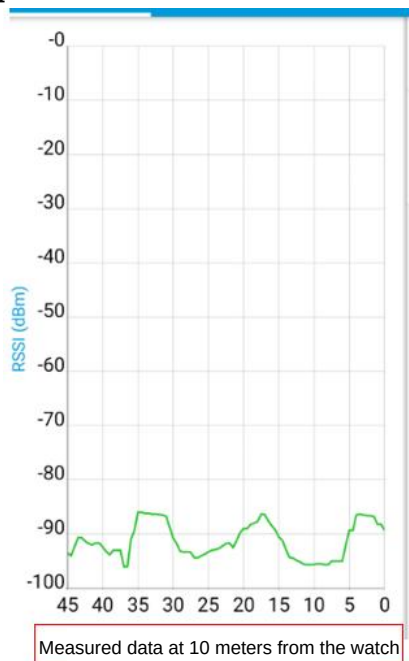
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## 3.1.6 Throughput Test Data



## 4.1 Assembly method



## 5.1 Product Design Diagram

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