

# Antena Test Report



Professional design and supplier of 4G/3G/GPS/WIFI  
and other antenna solutions

Customer Name:

Project Name: XM06-82

Frequency band: GPS/ wifi 2.4G/5.8G/BT

Version: A

Production date: December 23, 2024

Manufacturer: Shenzhen Shundacheng Technology Co., LTD

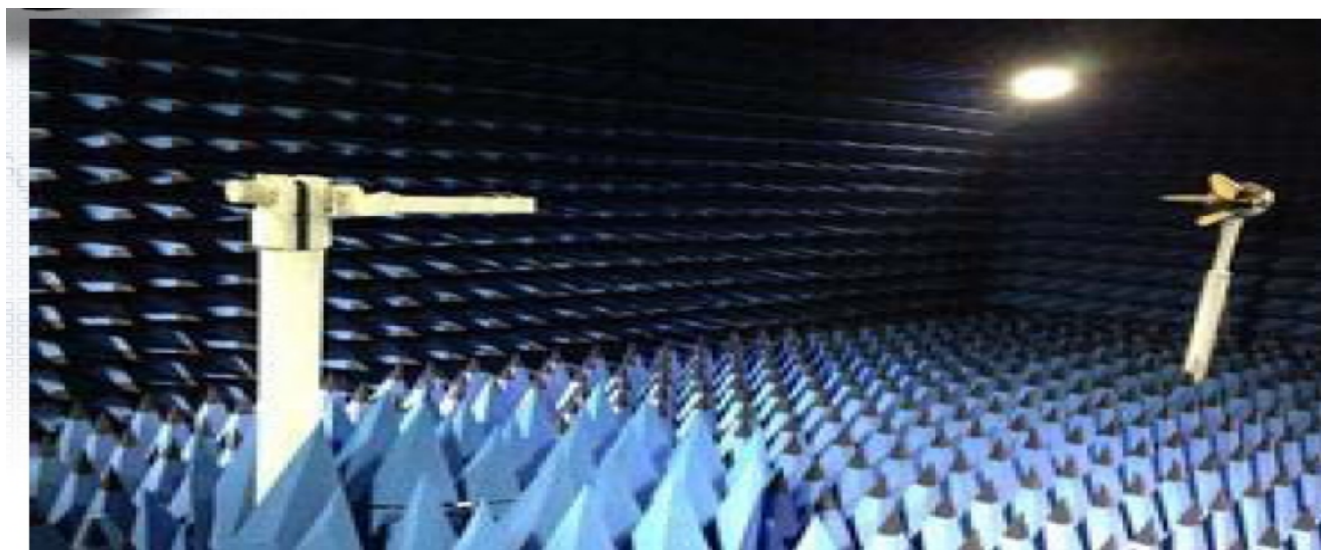
Address: Room 401A, Xinfu Industrial Park, Chongqing Road, Heping Community, Fuhai Subdistrict, Bao 'an District, Shenzhen City

# Content

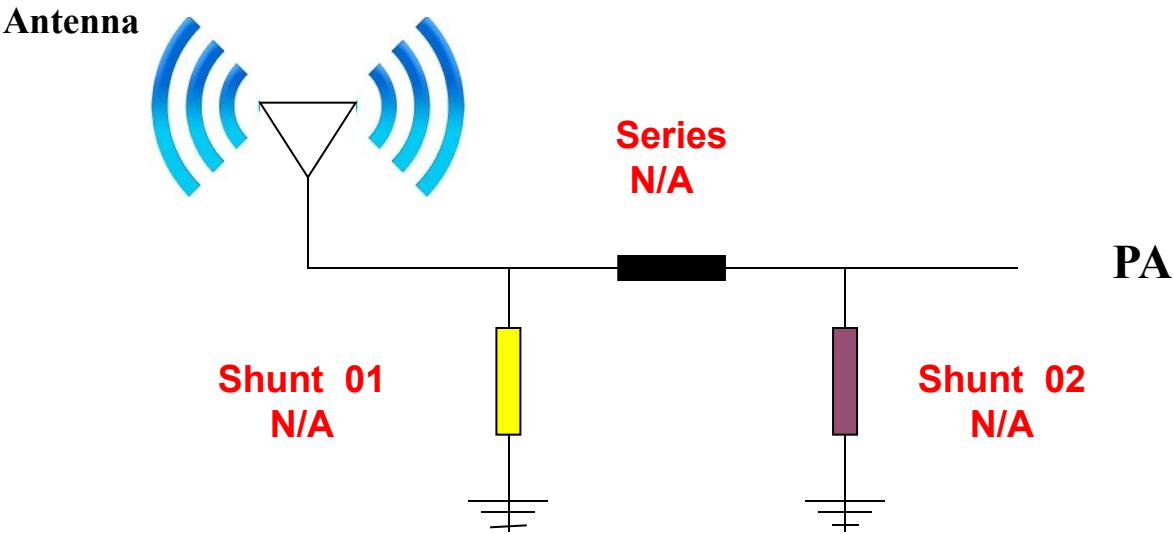
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# Test system

| Sequence Number   | Test Item         | equipment                                                       |
|-------------------|-------------------|-----------------------------------------------------------------|
| S parameter       | VSWR              | Agilent 5071C & Agilent 5062A                                   |
| OTA Test          | TRP&TIS           | Agilent 8960 E5515C& Agilent 4438C&CMW500 &CMW270<br>ETS&SATIMO |
| Gain & Efficiency | Gain & Efficiency | ETS&SATIMO<br>Agilent 5071C                                     |

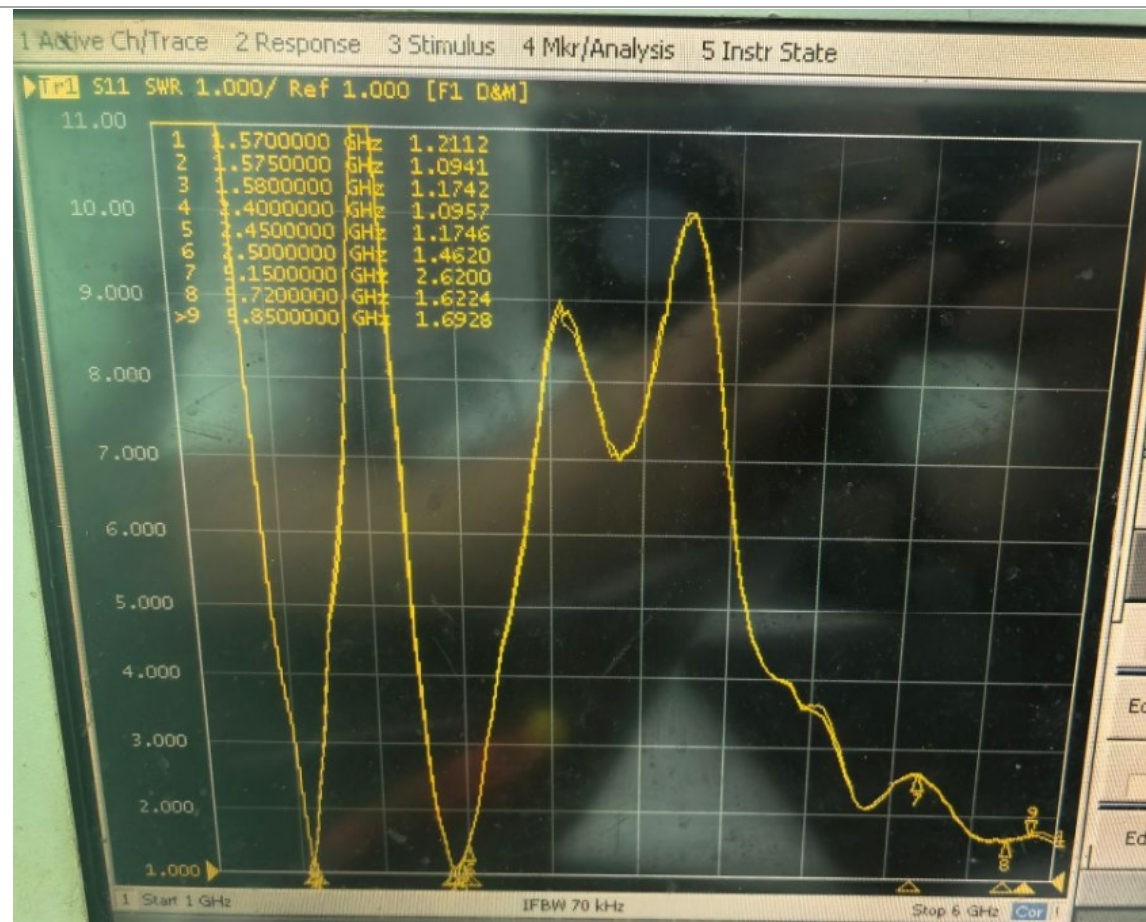


# Antenna Matching Network



| Location | Description | Vendor |
|----------|-------------|--------|
| Shunt 01 | N/A         | N/A    |
| Series   | N/A         | N/A    |
| Shunt 02 | N/A         | N/A    |

# S11 SWR



|            |      |      |      |      |      |      |      |
|------------|------|------|------|------|------|------|------|
| Freq (MHZ) | 1575 | 2400 | 2450 | 2500 | 5150 | 5720 | 5850 |
| SWR        | 1    | 1.0  | 1.1  | 1.4  | 2.6  | 1.6  | 1.6  |

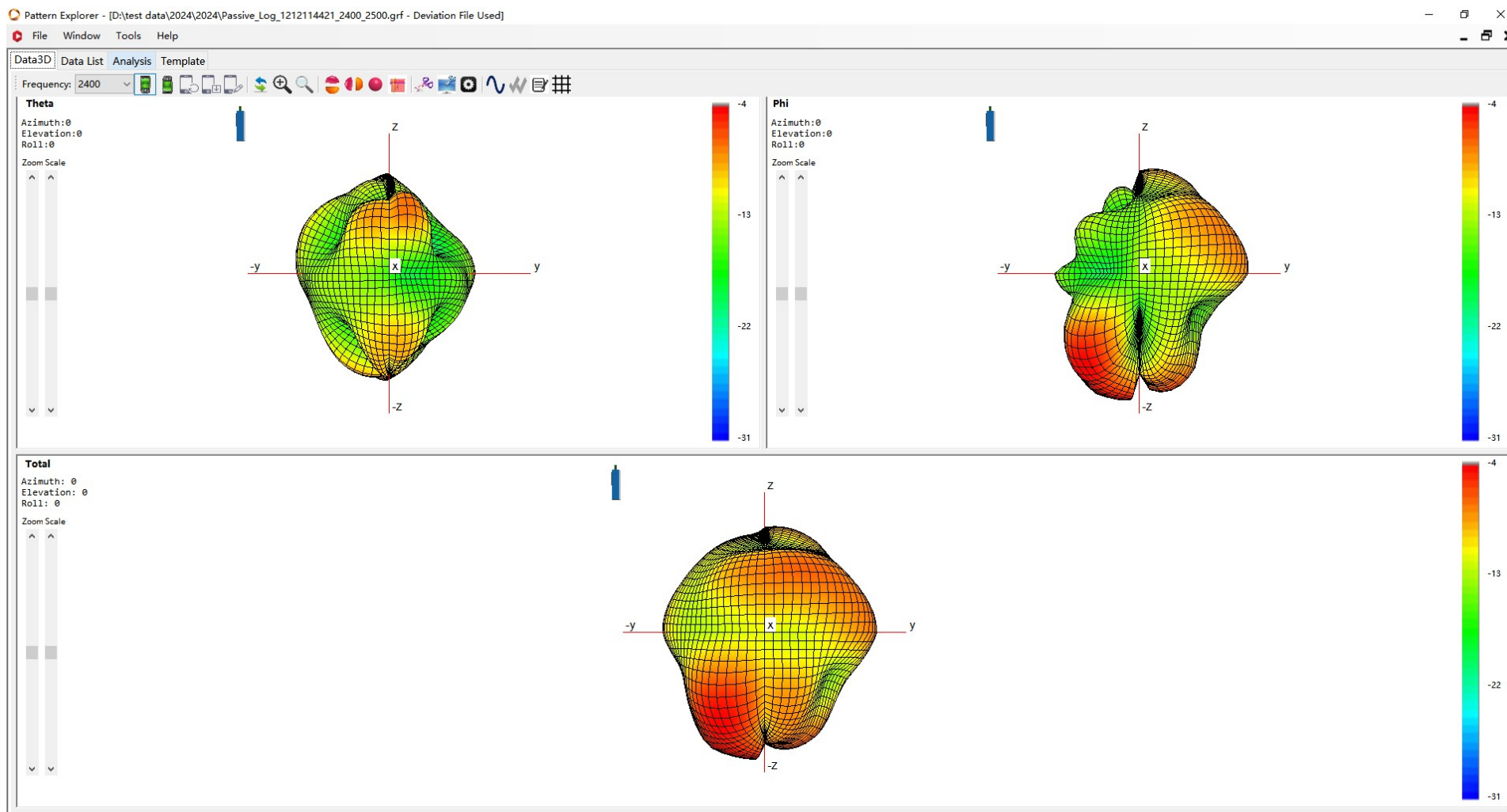
# Gain & Efficiency

| Frequency (MHz) | Efficiency (%) | Peak GAIN (dBi) |
|-----------------|----------------|-----------------|
| 1575            | 35.42          | 0.63            |
| 2400            | 36.54          | 0.84            |
| 2450            | 38.33          | 0.97            |
| 2500            | 37.26          | 0.88            |
| 5150            | 37.19          | 0.69            |
| 5350            | 38.48          | 0.81            |
| 5550            | 37.92          | 0.78            |
| 5750            | 37.63          | 0.72            |
| 5850            | 36.24          | 0.75            |

# Gain & Efficiency



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# WIFI OTA Data

| 2.4G    | 802.11b, (2.4G) 11M |        |        |
|---------|---------------------|--------|--------|
| Channel | CH1                 | CH6    | CH11   |
| TRP     | 12.16               | 12.22  | 12.39  |
| TIS     | -77.41              | -77.32 | -77.57 |

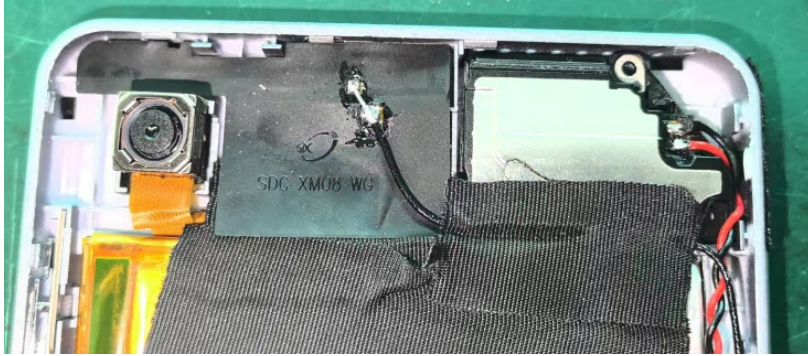
| 5G      | 802.11a, 54MBps |        |       |
|---------|-----------------|--------|-------|
| Channel | CH36            | CH60   | CH161 |
| TRP     | 9.14            | 9.25   | 9.36  |
| TIS     | -68.57          | -68.66 | -68.1 |

## GPS measured map



The external GPS device has been tested to be unable to search for stars

# Antenna installation location diagram



WIFI&GPS ANT



Thanks