# Shenzhen Qixin Tongda Technology Co., Ltd

## Antenna test data report

**Client: YIBOTONG**

**Project Name: E66L5**

**Frequency Band:G2/3/5/8+W1/2/4/5/8+**

**FDD-B1/2/3/4/5/7/12/17/28AB/66+TDD-B38**

**Engineering: Jason（137 6025 5827）**

**date：2026-08-20**

**Factory address: Bao'an District, Shenzhen, Shajing Street, Shayi North**

**Yongfa Science and Technology Park, the first third floor**

# 1. Test Project

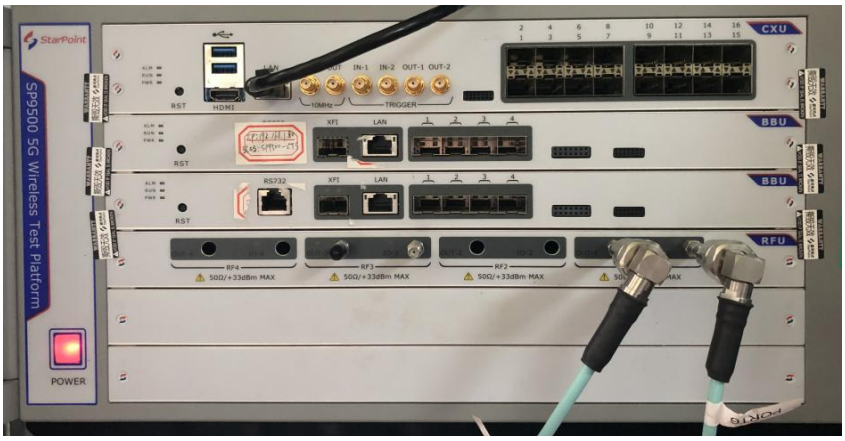
| | Test Project | Equipment |
|---|---|---|
| 1. S Parameter | 1. Return Loss(RL)<br>2. VSWR | Network Analyzer:<br>Agilent 5071B |
| 2. RF Test<br>(2/3/4/5G) | 1. power<br>2. level<br>3. TRP/TIS | Comprehensive Test:<br>SP9500/CMW500/8960<br>Test Environment:<br>Anechoic Chamber |

# 2.Test Equipment

Agilent 5071B （S Parameter（RL/VSWR）Test Equipment）

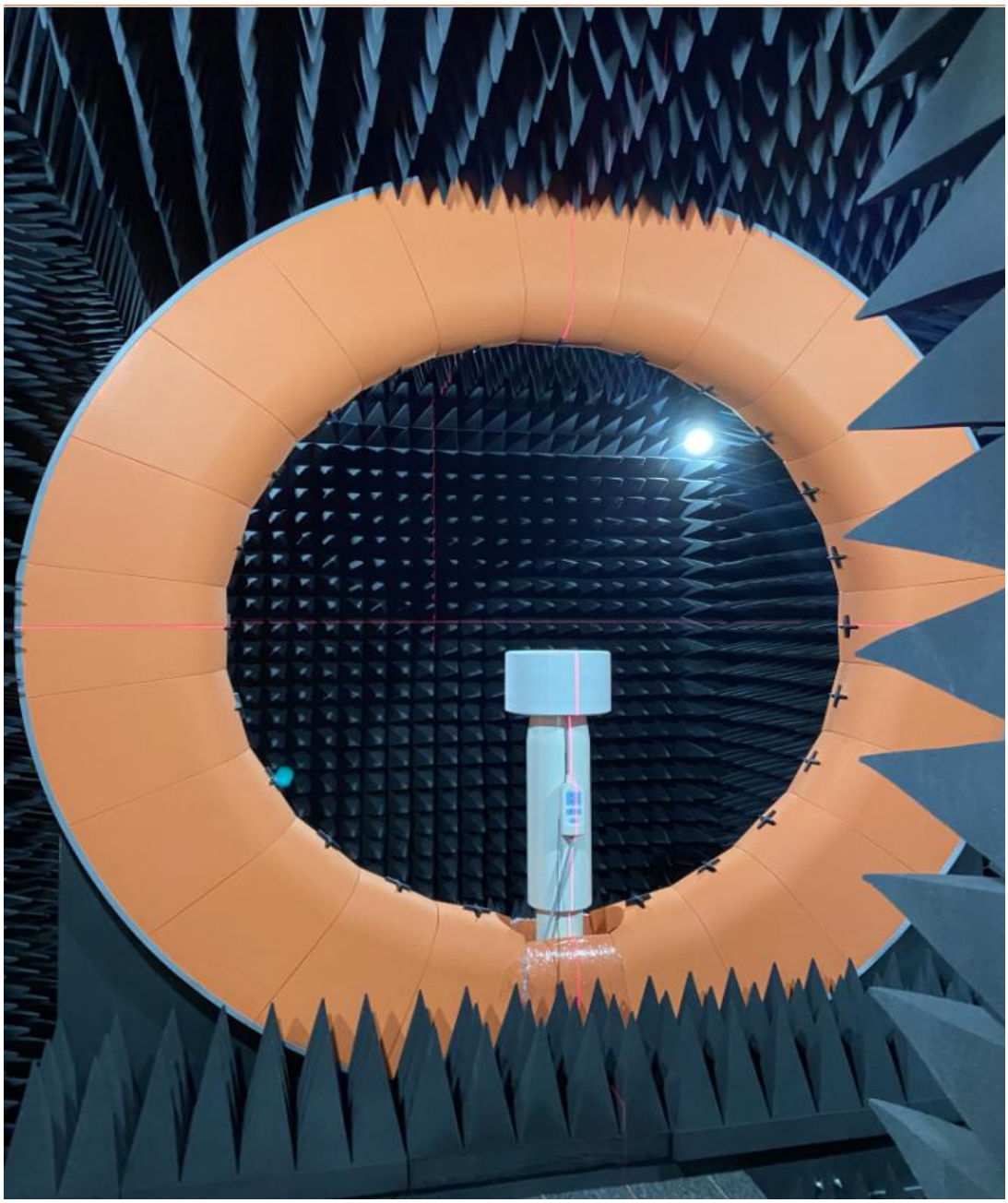
Agilent 8960 （2G/3G Test Equipment）

**CMW 500** （2G/3G/4GTest Equipment）




**SP9500** （5GTest Equipment）

# 3. TestEnvironment



Microwave Anechoic Chamber

# 4.Test Steps

**Passive VSWR/RL Test Steps:**

5071B Network Analyzer → 50Ω Coaxial Cable → 90mm Length Copper Pipe

→ Test Fixture

**Gain/Efficiency Test Steps:**

Open 5071B Test Equipment → Open Computer Gain/Efficiency Test Software → Open Turntable Switch And Reset To zero

→ Put the Tested object into the microwave darkroom to connect → OTA Software automatic testing

→ Output Data

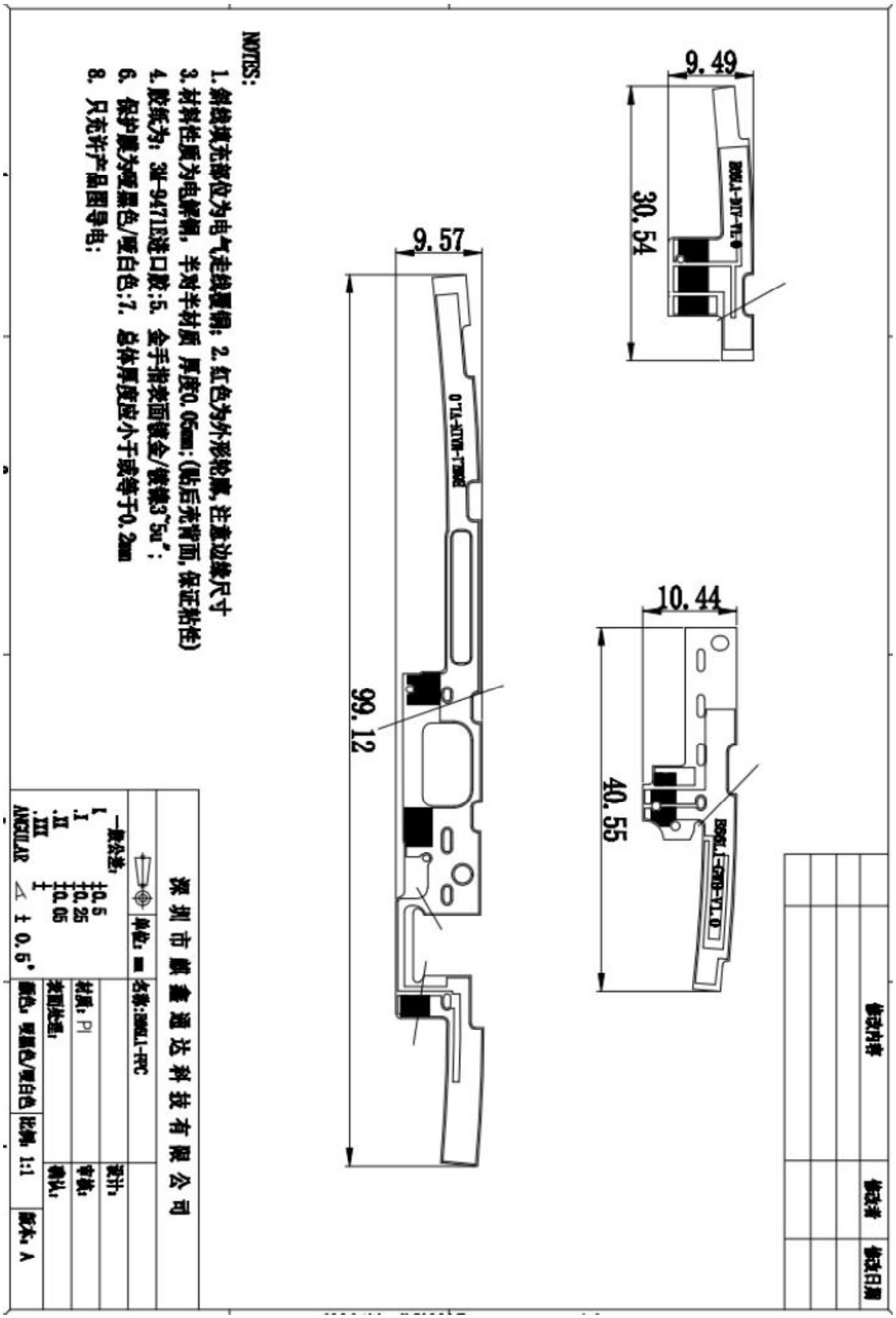
**Active TRP/TIS Test Steps:**

Open 8960/CMW500 Test Equipment → Open Computer OTA Test Software → Open Turntable Switch And Reset To zero

→ Test mobile phone insert test SIM card and Put into the microwave darkroom to connect → OTA Software automatic testing

→ Output Data

# 5. Antenna size diagram



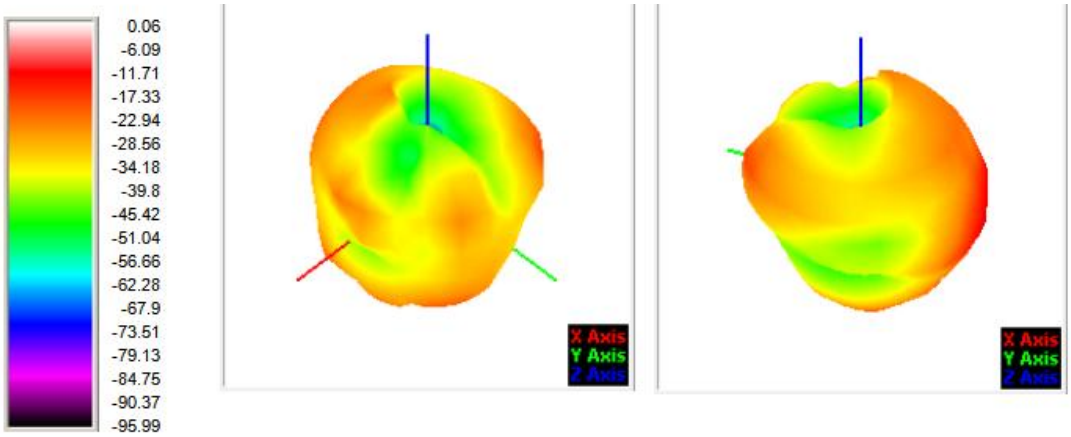
# 6.Antenna Gain

| Band | Max Gain |
|---|---|
| GSM850 (824-894MHZ) | -2.65 |
| GSM900 (880-960MHZ) | -2.32 |
| DCS1800 (1710-1880MHZ) | 0.35 |
| PCS1900 (1850-1990MHZ) | 0.28 |
| WCDMA1 (1920-2170MHZ) | 0.26 |
| WCDMA2 (1850-1990MHZ) | 0.28 |
| WCDMA4 (1710-2155MHZ) | 0.25 |
| WCDMA5 (824-894MHZ) | -2.65 |
| WCDMA8 (880-960MHZ) | -2.32 |
| LTE-B1 (1920-2170MHZ) | 0.25 |
| LTE-B2 (1850-1990MHZ) | 0.28 |
| LTE-B3 (1710-1880MHZ) | 0.32 |
| LTE-B4 (1710-2155MHZ) | 0.25 |
| LTE-B5 (824-894MHZ) | -2.65 |
| LTE-B7 (880-960MHZ) | 0.45 |
| LTE-B12 (704-741MHZ) | -2.88 |
| LTE-B17 (709-741MHZ) | -2.88 |
| LTE-B28AB (708-803MHZ) | -2.88 |
| LTE-B66 (1710-1780MHZ) | 0.35 |
| LTE-B38 (2570-2620MHZ) | 0.45 |

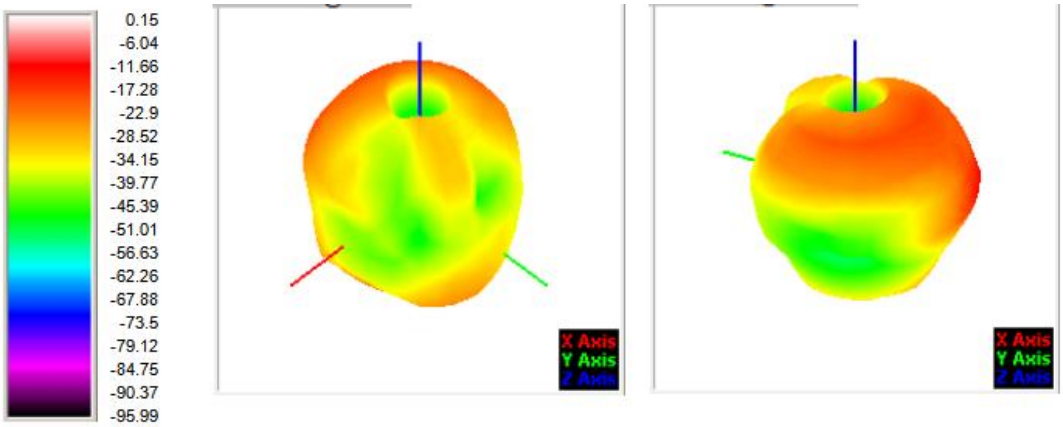
| (L1/BT/WIFI2.4/5150-5.850G/GPS) | |
|---|---|
| Band | Max Gain(dBi) |
| Bluetooth | 0.15 |
| WIFI-2.4G | 0.15 |
| WIFI-5G | 0.12 |
| GPS-L1 | 0.06 |

# 7.2D&3D Lobe Diagram

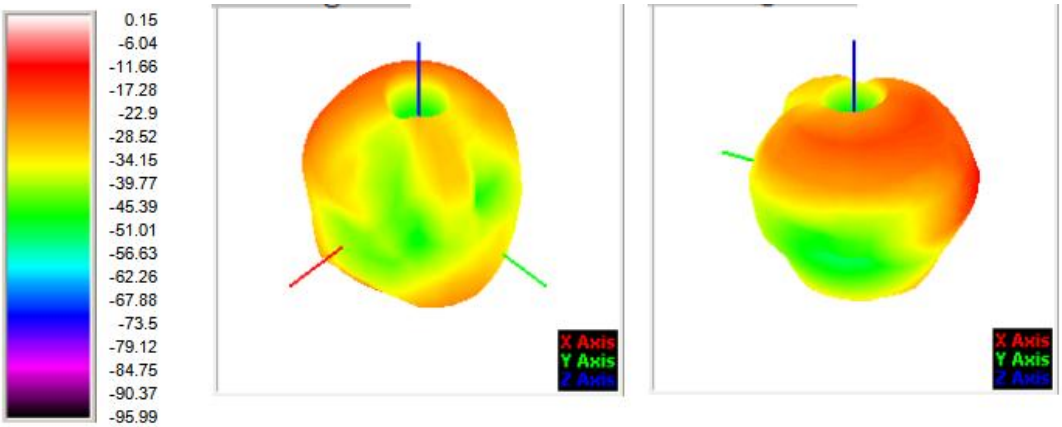
GPS-L1



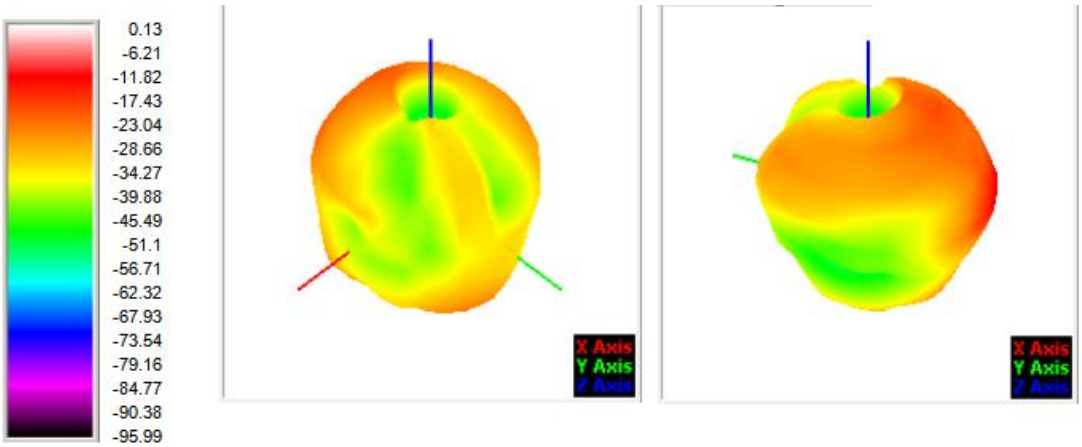

BT-2.4G



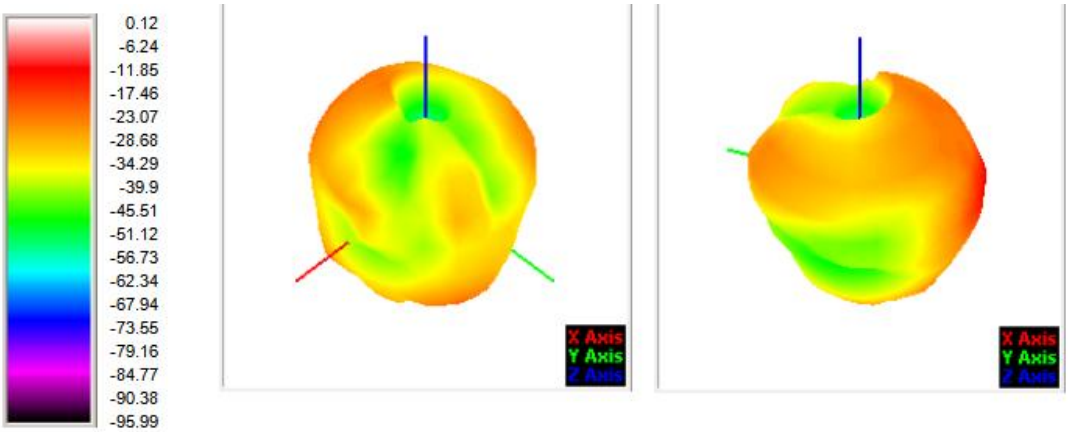
2.4G-WIFI




WIFI-5.1G




WIFI-5.8G



# 8.Introduction to Antenna Information

| E66L5-4G | |
|---|---|
| Antenna type and frequency band | MAIN ANTENNA(PIFA):2G/3G/4G<br><br>DIV ANTENNA(PIFA):2G/3G/4G<br><br>GPS/WIFI/BT ANTENNA(PIFA):GPS-L1/WIFI-2.4G/WIFI-5.8G/BT-2.4G |
| Antenna materia | FPC |