Name of supplier： **SUNNYWAY TECHNOLOGY(CHINA)**

Specification for Approval

Client Name： PAX Computer Technology (Shenzhen) Co., Ltd

Brand Name： SUNNYWAY

Part No： SZ23134IB77-3

Part Description： FPC ANTENNA

Manufacturer: SUNNYWAY TECHNOLOGY(CHINA)

Name of factory: SUNNYWAY TECHNOLOGY(CHINA)

PAX Part Name：

PAX Materiel No.： 200212000000538

SUNNYWAY TECHNOLOGY(CHINA)

ANTENNA SPEC

Customer name : PAX Computer Technology (Shenzhen) Co., Ltd	Entry name: E700A PRO
Working band: WIFI 2.4/5.8G + GPS +WIFI	
Motherboard version:	

Sunnyway Material specification

Specification type	Sunnyway number	Customer number
GWB Antenna	SZ23134IB77-3	

Revision history

Date of preparation/change	Change content	Altered person	Edition

Sunnyway Countersign column

R&D	ME:	To examine:	QE:	Approval:
	RF:	To examine:		

Customer will sign the column

Electronic Engineer	Project manager	Structural Engineer	Quality Engineer

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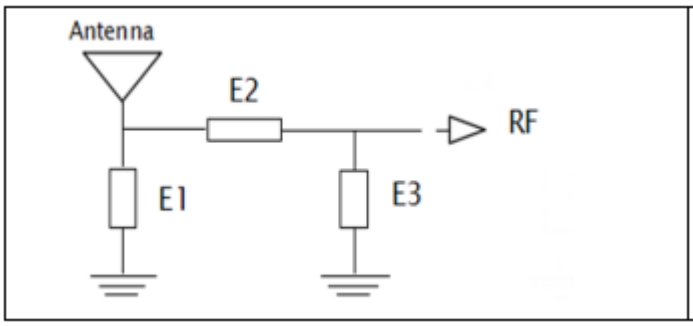
Email: sales@sunnyway-iot.com Web: www.sunnyway-iot.com

目录 Directory

1. Matching circuit



Element	GWB
E1(0402)	n/a
E2(0402)	0ohm
E3(0402)	n/a

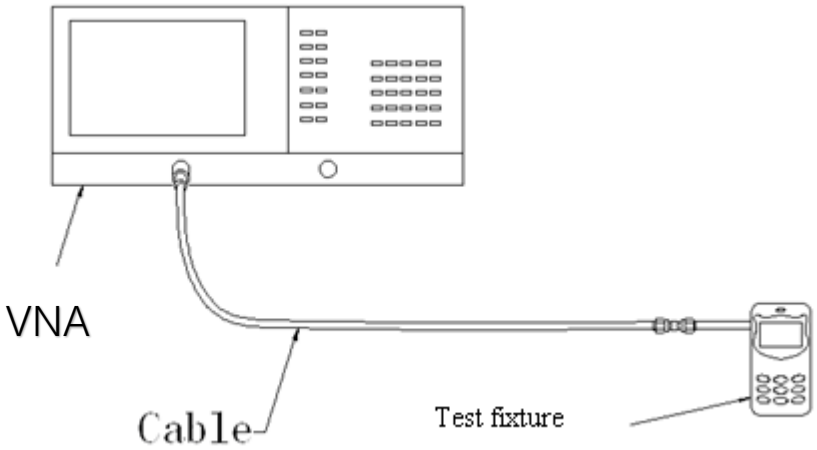
2. Antenna passive testing data

3.1 S11 Description of the test method

Test the equipment: Vector network analyzer (Agilent E5071C)

Test methodology: Use a 50 ohm CABLE cable to export from the instrument test port, use the calibration piece to calibrate and connect the SMA connector of the test fixture, and record the return loss and standing wave ratio corresponding to the relevant frequency point.

Below is a schematic picture of the test:

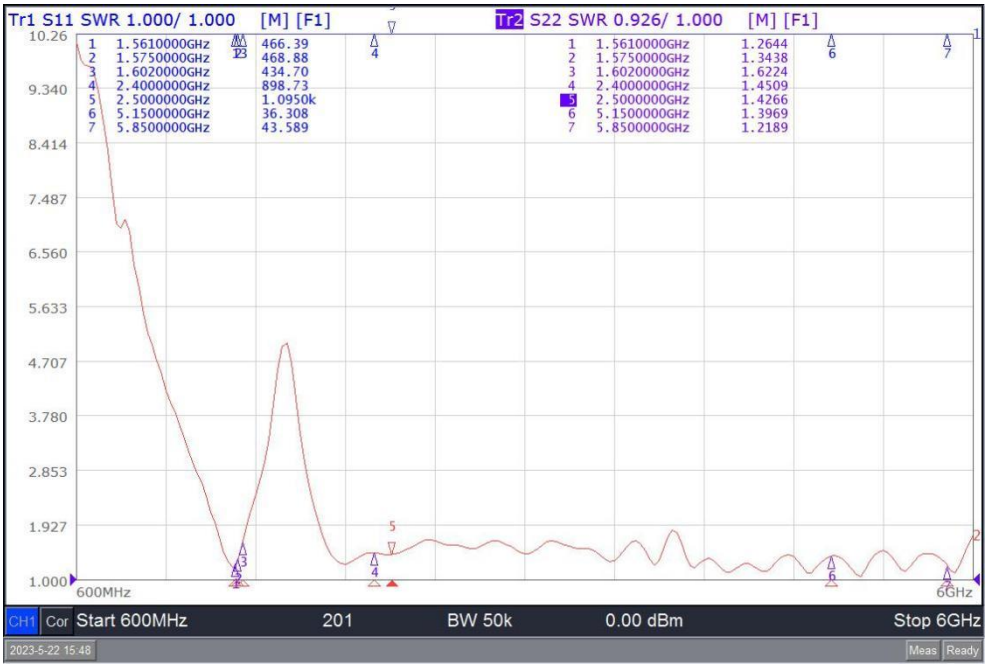


Test schematic diagram

3.2 S11 Test parameters

(Freq.) MHz	1561	1575	1602	2400	2500	5150	5850
VSWR	1.2	1.3	1.6	1.4	1.4	1.3	1.2

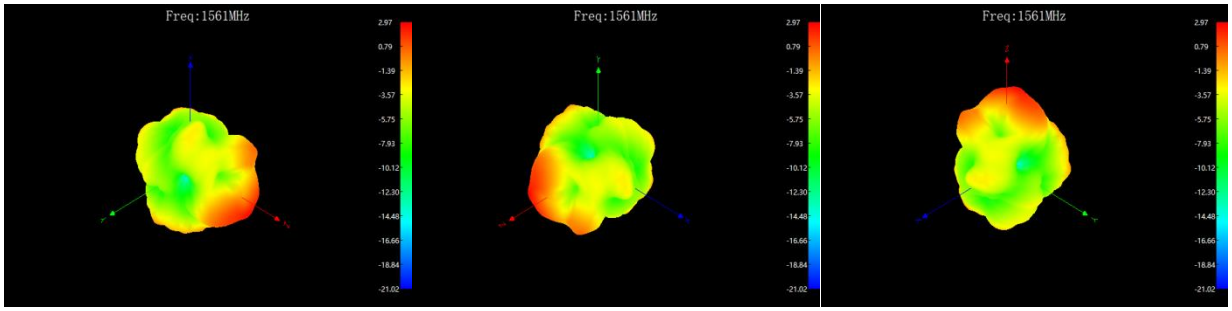
驻波比 VSWR

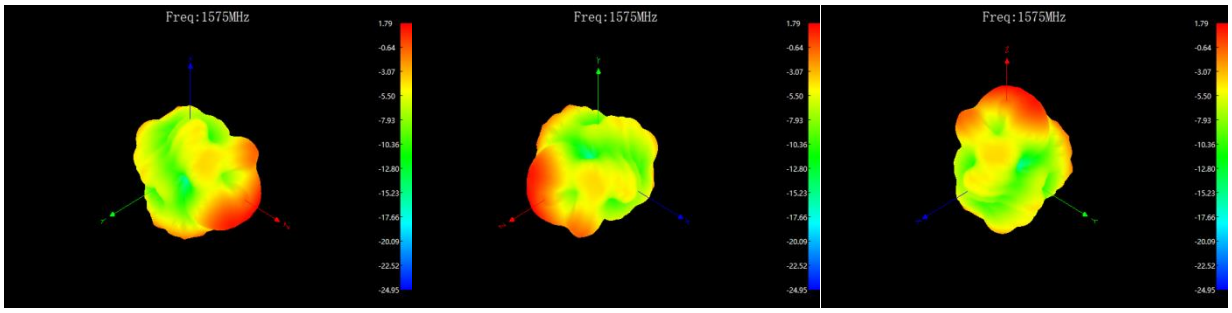


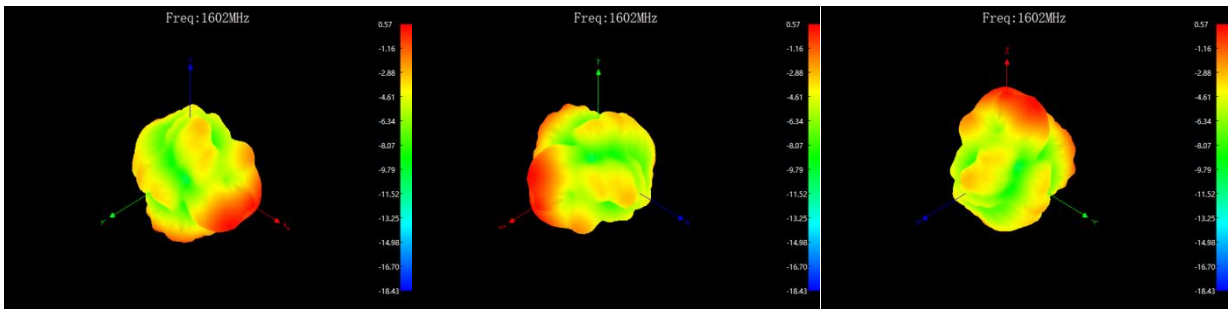
3.3 Antenna efficiency and gain

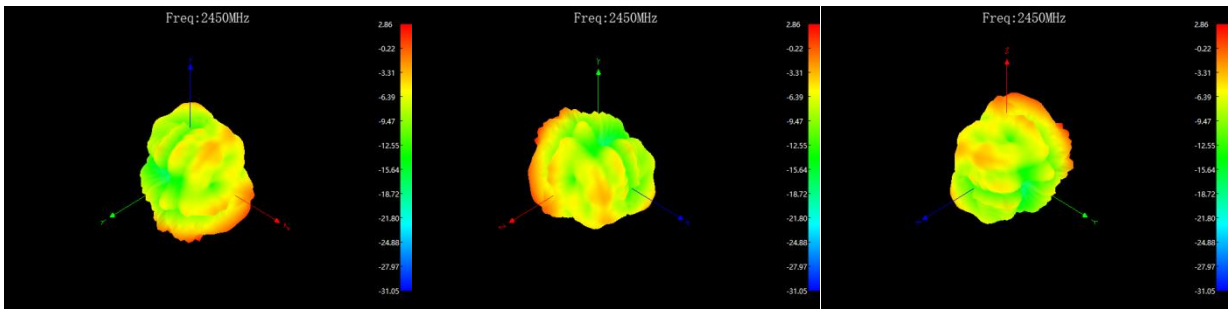
Frequency/Mhz	MaxGain/dBi	Efficiency / %
1561	2.97	38.99
1575	1.79	37.84
1602	0.57	32.43
2400	0.91	30.83
2410	0.05	31.41
2420	1	30.48
2430	1.69	31.26
2440	1.43	30.13
2450	2.86	30.83
2460	1.05	29.04
2470	2	28.91
2480	1.72	27.8
2490	1.77	28.31
2500	2.4	28.18
5150	4.12	19.91
5200	3.65	17.99
5250	4.37	17.74
5300	5.08	18.37
5350	4.89	17.02
5400	4.79	17.34
5450	4.81	17.06
5500	4.81	16
5550	4.38	14.93
5600	4.18	15.63
5650	2.97	14.93
5700	1.68	14.16
5750	1.05	14.35
5800	0.72	13.68
5850	-0.03	11.91

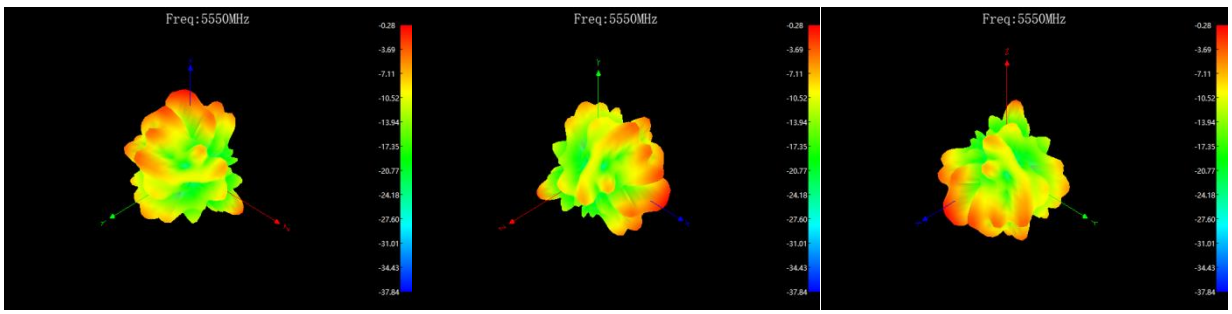
3.4 Radiation Pattern











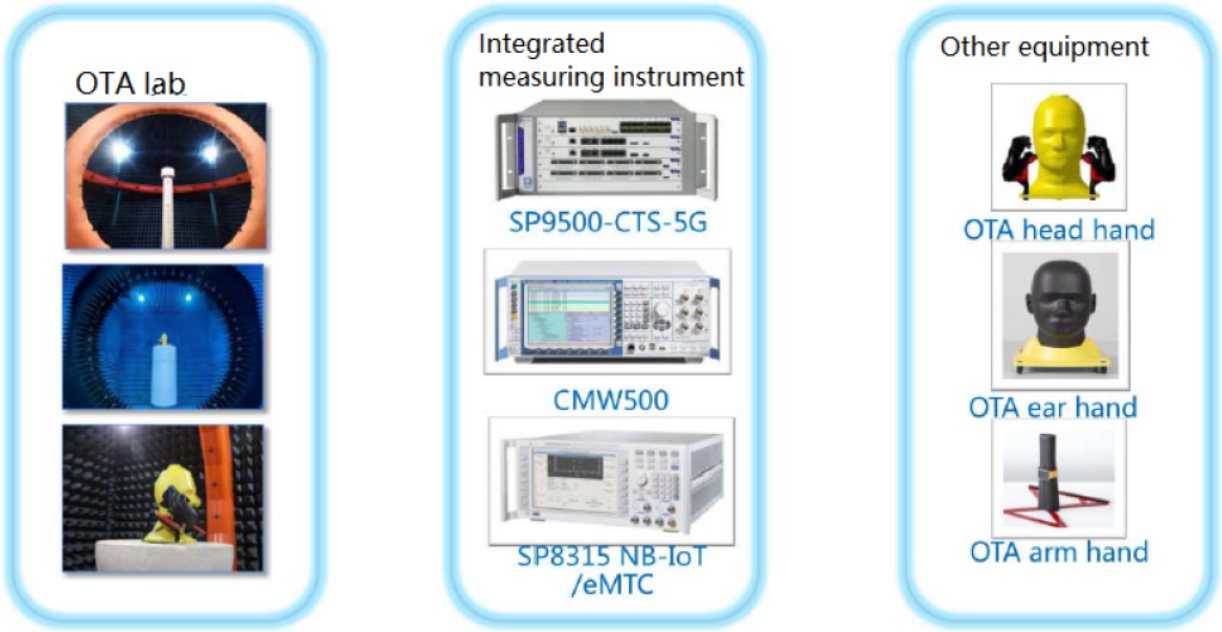
3. Antenna active testing data

4.1 Test the environment

Test the system: Multi-probe OTA measurement system (XH-IoT)

Test the environment: Temperature 22°C±3°C, humidity 50%±15%

Test the equipment: When testing passive data, use the network analyzer R&S ZND/ Agilent E5071C
When testing active data, use the Agilent 8960/CMW500/SP9500E/SP8315



4. Environmental treatment methods

Untreated

5. Standard for mass production antennas

When the antenna is mass-produced, the VSWR is used as the mass production test standard.

According to the differences in the project itself, the following criteria are given:

Freq. (MHz)	Mass production standards
1550-1610	VSWR(Production performance)<VSWR(Confirmed performance)+0.5
2400-2500	VSWR (Production performance)<VSWR(Confirmed performance)+0.5
5150-5850	VSWR (Production performance)<VSWR(Confirmed performance)+0.5