Sunnyway Technology （China） Co.， Ltd.

Antenna SPEC

Customer name:SUNMI	Project name:AP
Operating Band: 860-930Mhz	
Motherboard version:	

Material specifications

Specifications and models	Material No	Customer data
Main **antenna**		

Change your resume

Date of establishment/change	Change the content	Changers	Version

SUNNYWAY Will sign the box

R & D	ME:	Audit:	QE:	Approved:
	RF:	Audit:		

The customer will sign the bar

Electrical engineer	PM	ME	QE

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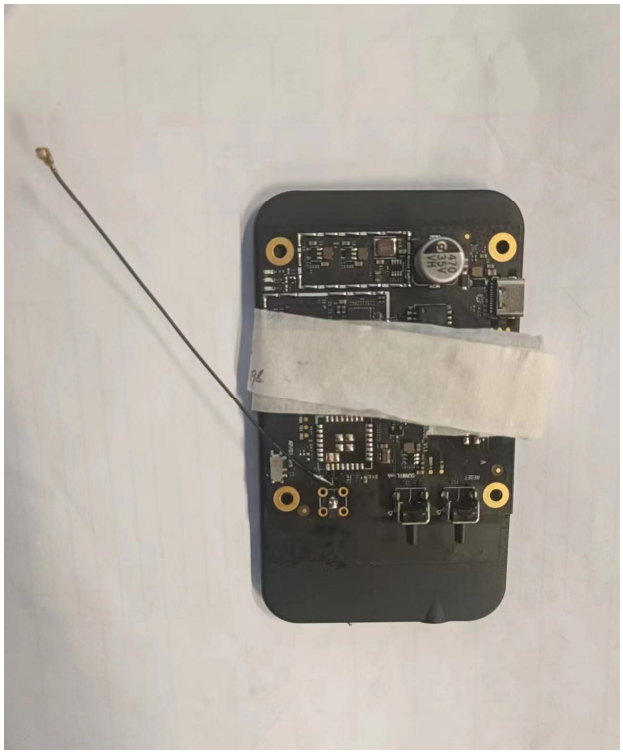
目录

1. Project information

Machine Information



Antenna information

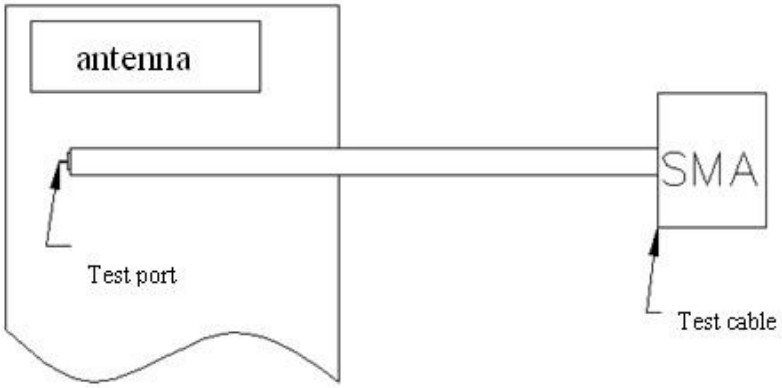
Motherboard	

The final verification antenna performance prototype is kept in our company for at least one year to facilitate the analysis and resolution of antenna production anomalies,Ensure the quality of antenna shipment

2. Test fixture

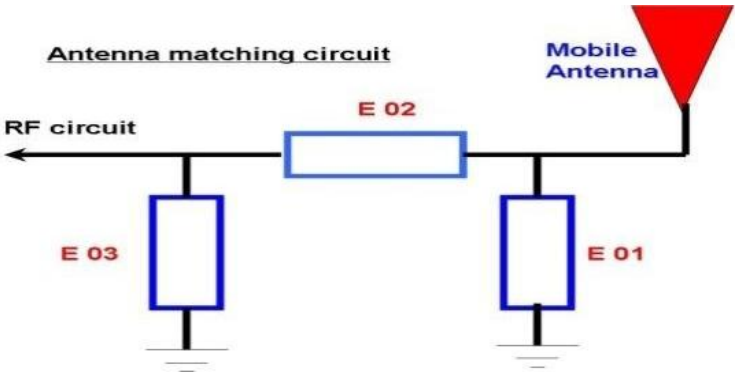
Purpose: To test antenna passive parameters as accurately as possible。

methods: the fixture is to use a 50 ohm coaxial cable, one end is connected to the pad after the antenna ‘s matching circuit (the front of the antenna switch) , and the other end is connected to the SMA connector.



3. Matching circuit

The main antenna



Element	Value
E1	N/A
E2	0Ω
E3	N/A

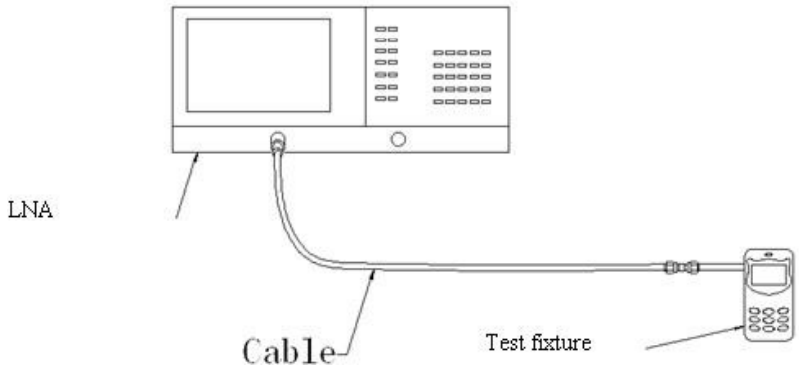
4. S11 Test

1. S11 test method instructions

Test equipment: LNA(E5062A)

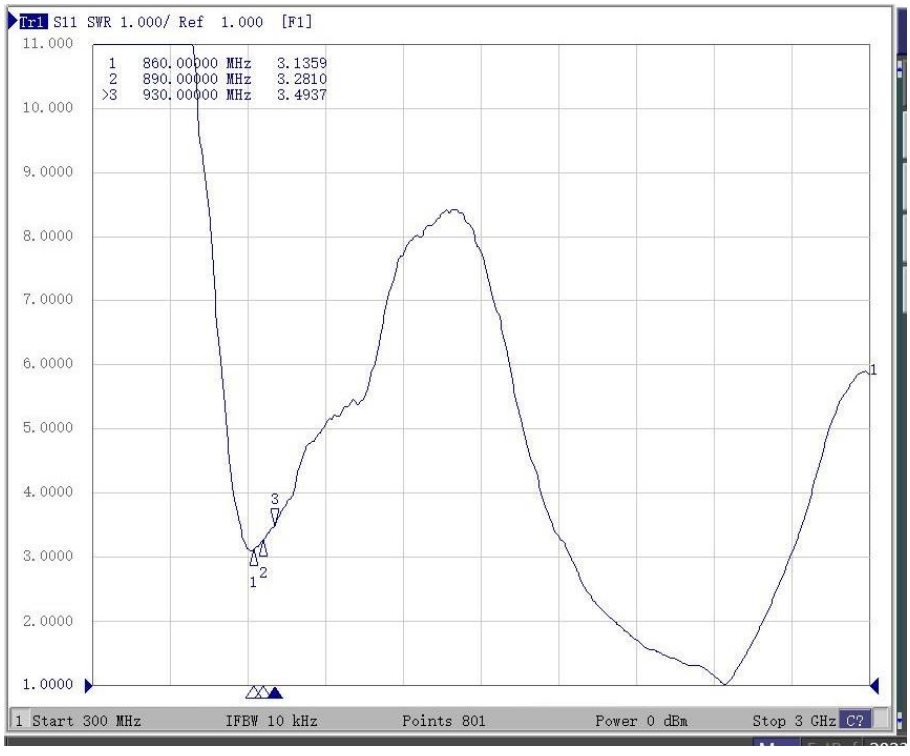
Test method: With a 50 ohm CABLE ,CABLE export from instrument testing port , After the calibration with calibration Key, connected to the SMA connector, Records the return loss and VSWR of the related frequency points.

Test schematic diagram is as follows:



4.2 S11 Parameter

The main antenna



FRq（MHz）	VSWR
860	3.14
890	3.28
930	3.49

5.Anechoic Chamber test data test system: SHIELDED ANECHOIC chamber test environment: temperature 22 °C ± 3 °C, humidity 50% ± 15% test equipment: when testing passive data, when testing active data using Network analyzer Agilent E5062C, agilent 8960/CMW500/E4438C was used

1. Passive test data

Passive efficiency of the main antennas

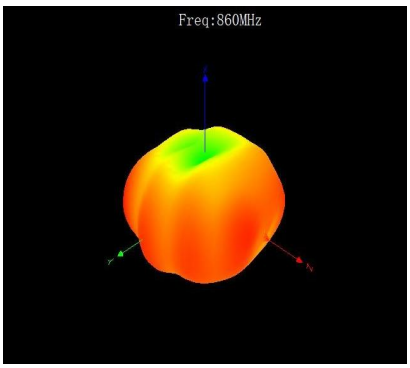
The main antenna

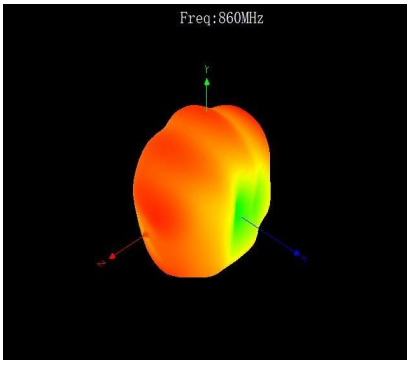
Frequency (MHz)	863.5	865.5	867.5	902.5	915.5	927.5
Gain (dBi)	2.63	2.79	2.85	3	2.61	2.66

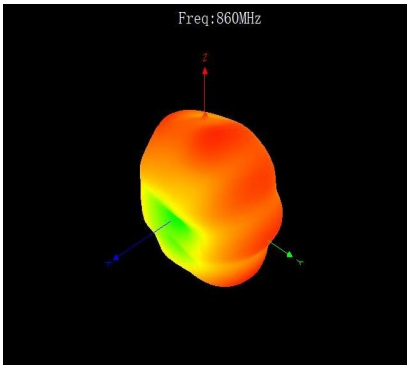
Sunnyway Technology（china）ltd. Company Antenna Specification

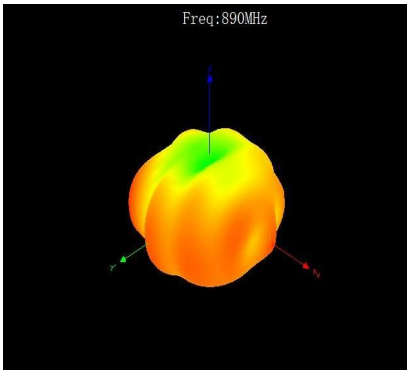
3D Etotal

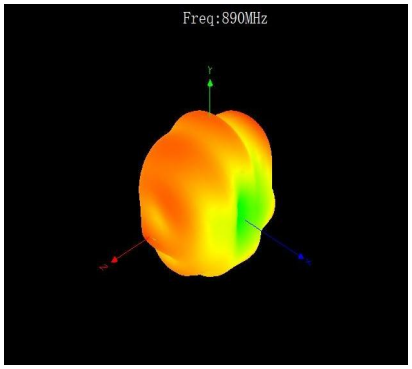
Main antenna **860MHz 890MHz 930MHz**

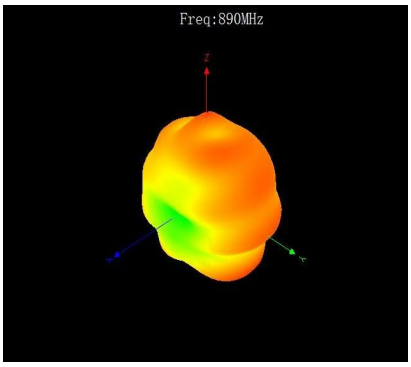


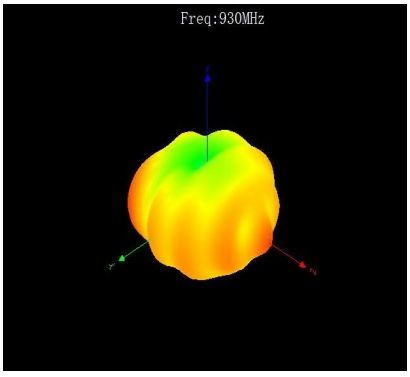


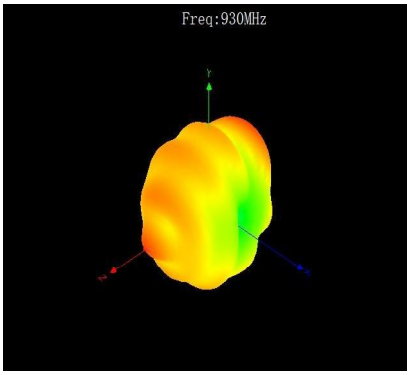


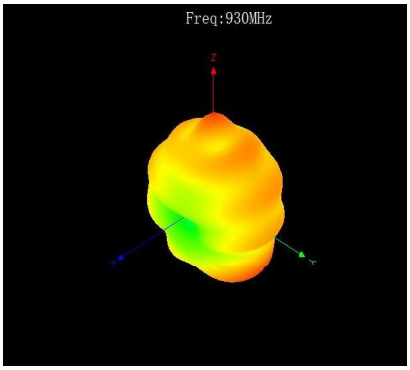






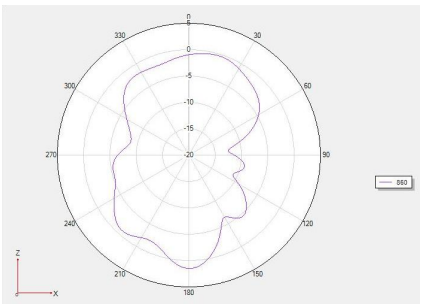
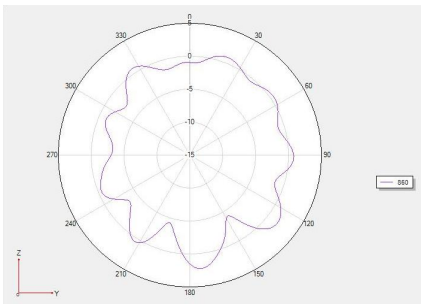
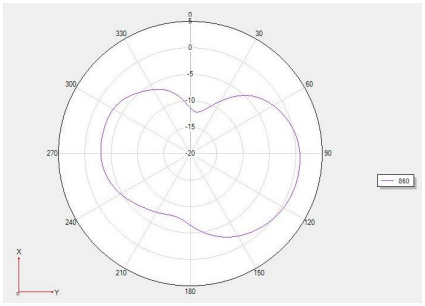
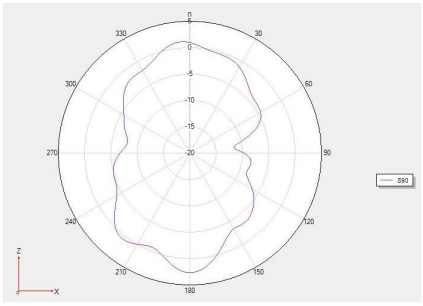
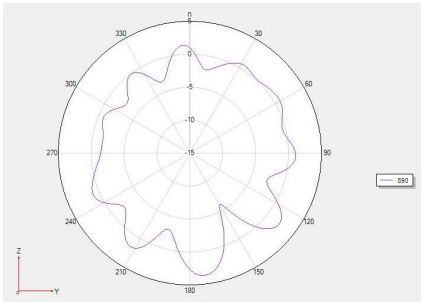
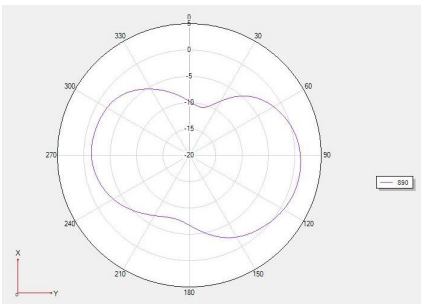
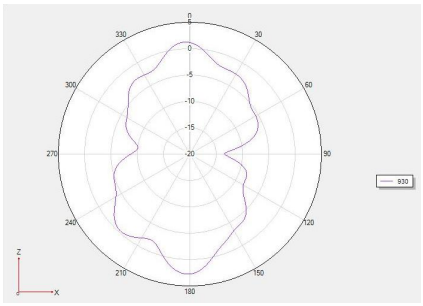
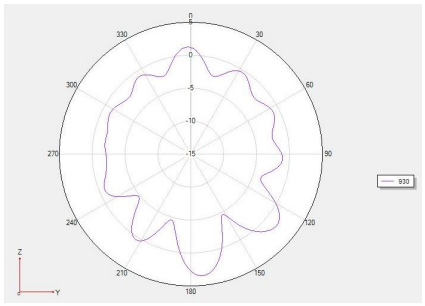
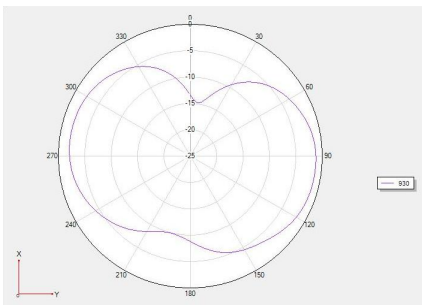






2D Etotal

Main antenna **860MHz 890MHz 930MHz**

6. Ground handling of the prototype

Note: No additional environmental treatment.

7. The standing wave ratio (SWR) is used as the test standard for antenna mass production. Based on the differences of the project itself, the following criteria are given:

Frequence	SPEC ,Mass Production
860MHz--930MHz	VSWR（MP performance）<VSWR(Verify performance)+1

8.Engineering drawings