



Sunnyway Technology (China) Co., Ltd.

WIFI Antenna SPEC

Customer: Eques		Project Name: : A30
Working Band: 2.4-2.5GHz		
Sunnyway BOM:		
SPEC-Type	Sunnyway P/N	Eques P/N
WiFi	SH19367IA67	

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ITEM

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1. PROJECT PICTURES

project pictures shown below:



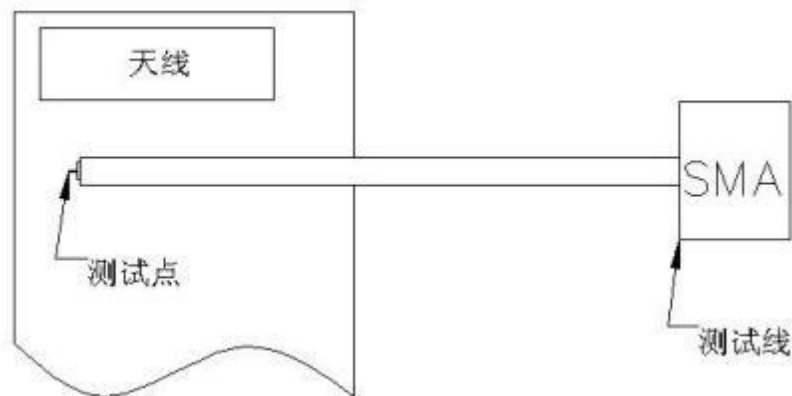
PS:

To ensure that the antenna shipment quality, the final mobile phone Clients validated the antenna's performance, should be kept in our company for at least a year time, facilitate solving antenna amount during abnormal situation,

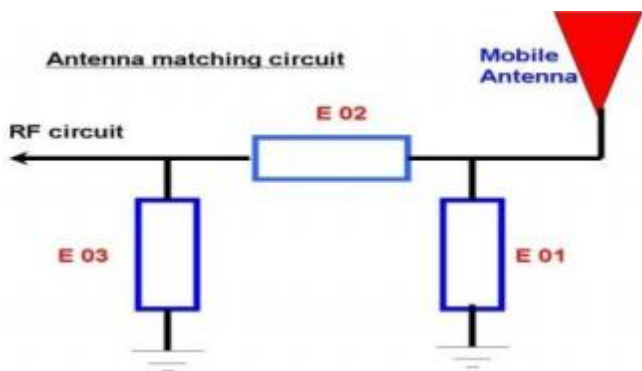
2 . TEST FIXTURE

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



	Main antenna
Element	Value
E1	N/A
E2	0 欧姆
E3	N/A

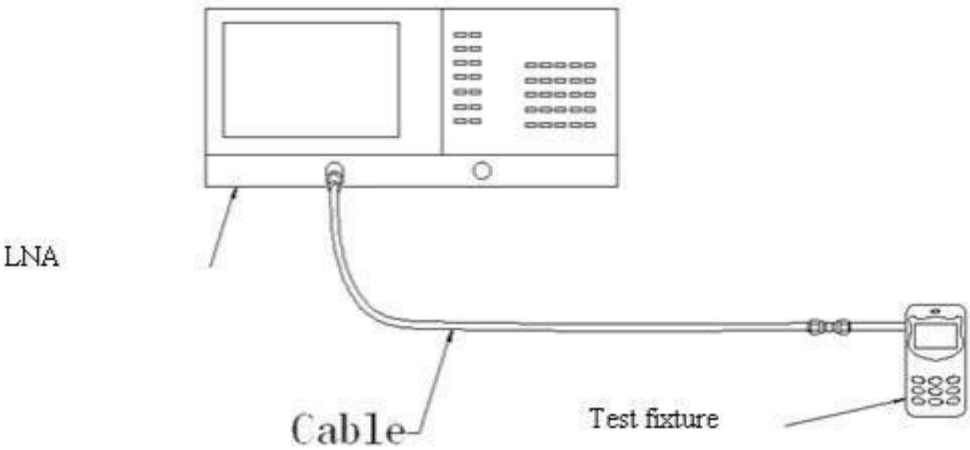
4. S11 test

4.0 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:

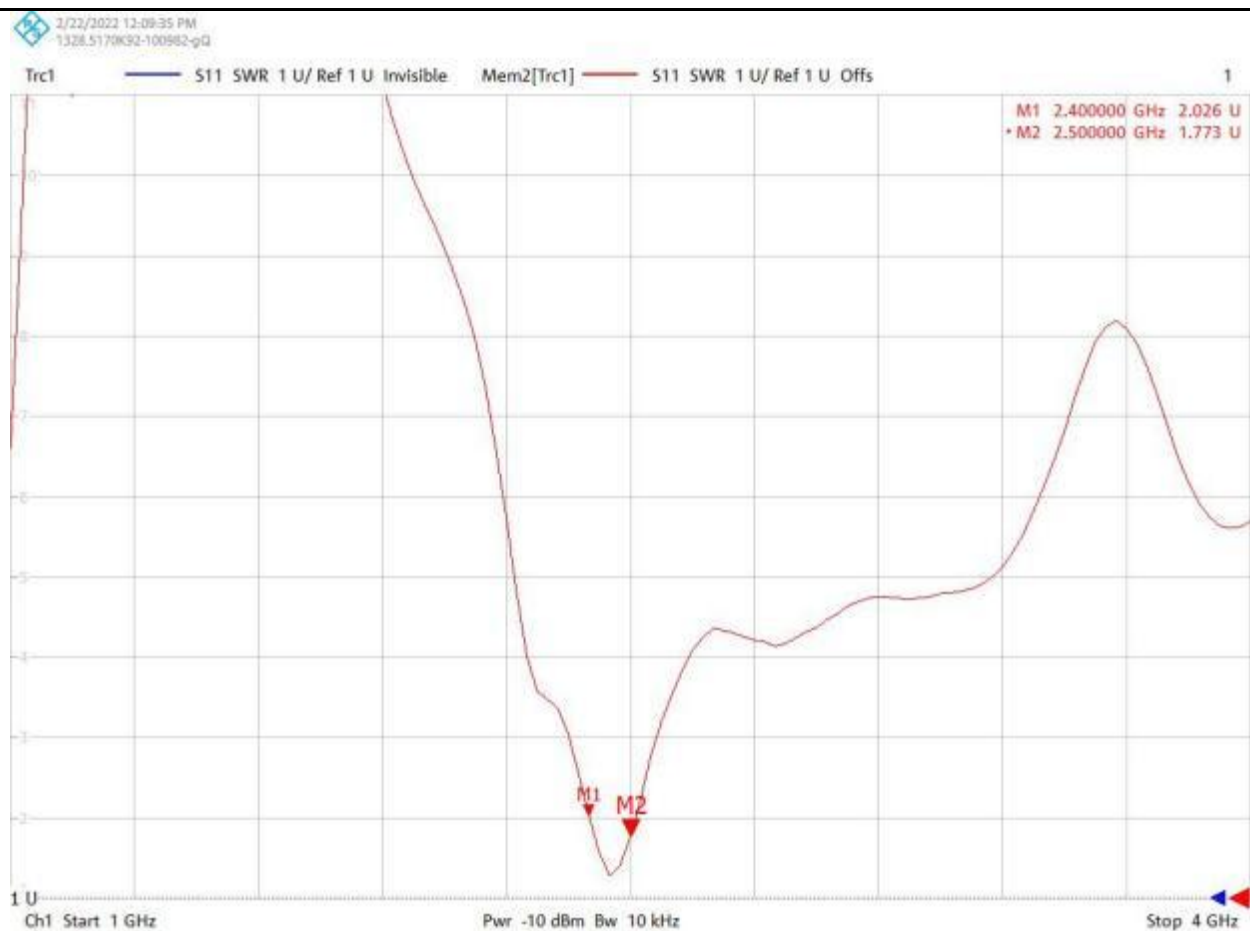


Test schematic diagram

4. 1 S11 parameter

FRq (MHZ)	2.4	2.5
Return loss	2.03	1.77

4.2Main antenna S11:



5 ACTIVE OTA TEST DATA

Test equipment

Test system: chamber

Test environment: the temperature of $22^{\circ}\text{C} + 3^{\circ}\text{C}$, humidity of 50% plus or minus 15%

Test equipment: to test passive status, use LNA Agilent E5062C to test active status, use

CMW500

Passive efficiency is as follows:

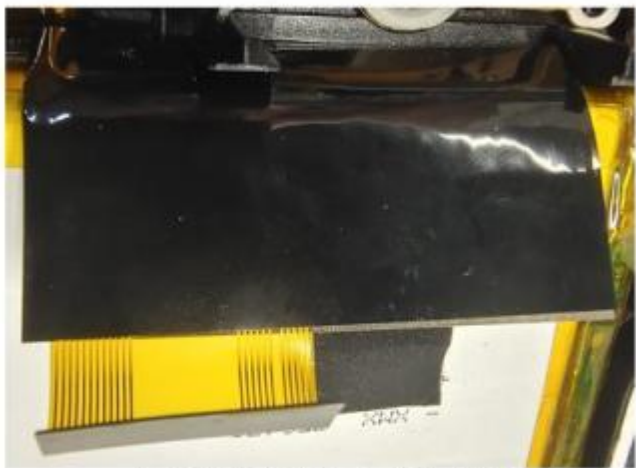
Freq (MHz)	Effi (%)	Effi (dB)
2400	48.97	-3.1
2410	49.03	-3.1

2420	49.41	-3.06
2430	49.72	-3.03
2440	50.01	-3.01
2450	50.28	-2.99
2460	51.22	-2.91
2470	50.49	-2.97
2480	50.43	-2.97
2490	49.42	-3.06
2500	49.04	-3.09

Directional and apple map :

Band	Channel	TRP(dB)	TIS(dB)
802.11b (11Mbps)	1	16.58	
	6	16.43	
	11	16.77	-78.59

6. Ground handling

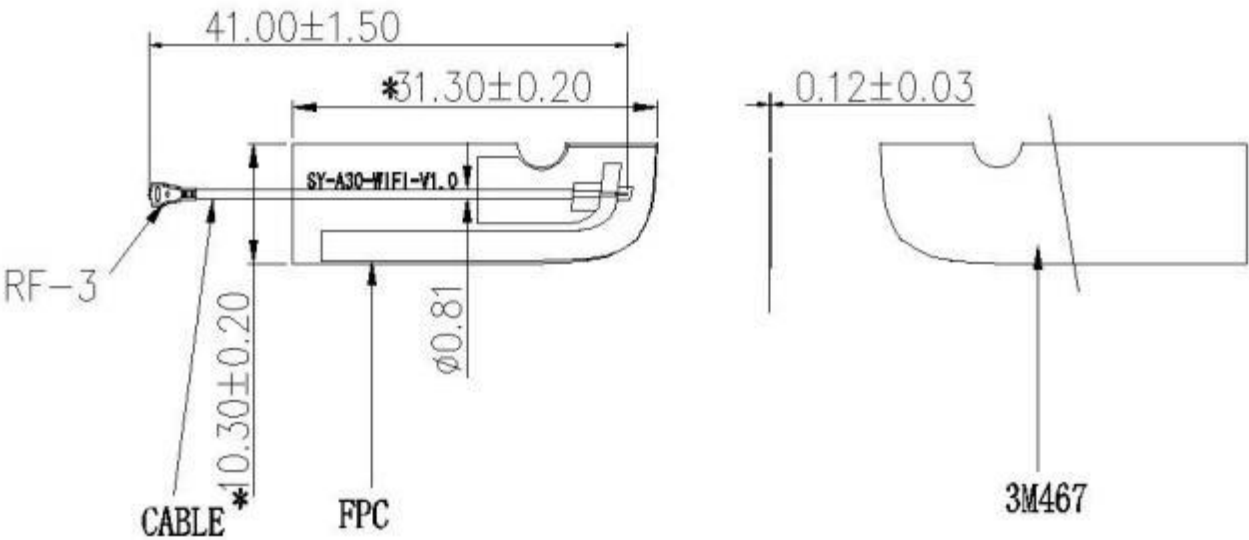


屏排线用导电布屏蔽

7. Mass production antenna Spec

During Mass production, to test VSWR as production test standard
According to the difference of the project itself, the following specification:

Frequence	SPEC ,Mass Production
2.4-2.5GHz	VSWR (MP performance) <VSWR(Verify performance)+0.5



8.Radiation Pattern:

