

Antenna Sample Confirmation From

Vendor Name	ShenZhen Aihui Technology Co., Ltd				
Customer Name	GMK				
Sample Name	G3S				
Part Number					
Specification	WIFI Main antenna: 115mm GMK-G3S-WIFI-MAIN-AH WIFI Secondary antenna: 52mm GMK-G3S-WIFI-AUX-AH				
Inspection Item	Performance	Total Appearance	structure	Others	Inspection Result
Remark					
QA Audit		Engineer Audit		Sales Confirm	
The following are filled by Customer					
Customer Evaluation					
Signation/Chapter by Customer	date:2025.10.11				

Antenna Test Report

Test by : ShenZhen Aihui Technology Co., Ltd			
Material	FPC+ coaxial line		
Antenna Type	MonopoleType	Polarization mode	Linear
Application			
Band	2.4G/5.8GWiFi / BT	VSWR	≤ 2
Power	Max : 2W	Impedance	50 Ω
Test Equipment	HPE5071C、Shielding Room、 3D automatic turntable		

Antenna Description: :

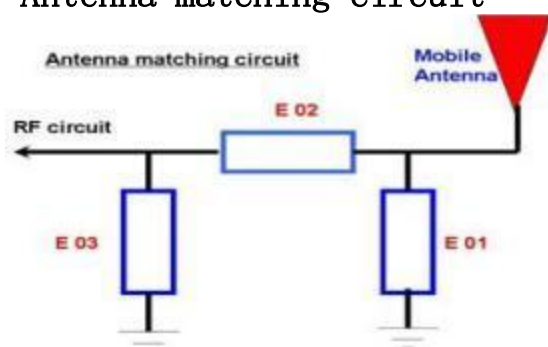
1. Grounding processing and picture description: no
2. Need to change the motherboard to match: no
 - Test voltage: 3.6V , check the antenna contact is good before testing.
 - The RF cable of the integrated tester is kept in a natural state and can not be curled.

Specification: test the specified power level, all indicators must conform to the specifications.

- 1 、 Antenna matching circuit
- 2、 S11 Test
- 3 、 Darkroom testing equipment and data
- 4 、 Antenna Active Test Report

Address: Room 402, Building C, Juxin Technology Industrial Park, Nanchang Community, Gushu,
Xixiang, Bao'an District, Shenzhen City
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1 、 Antenna matching circuit



Modify

E01	E02	E03
No	No	No

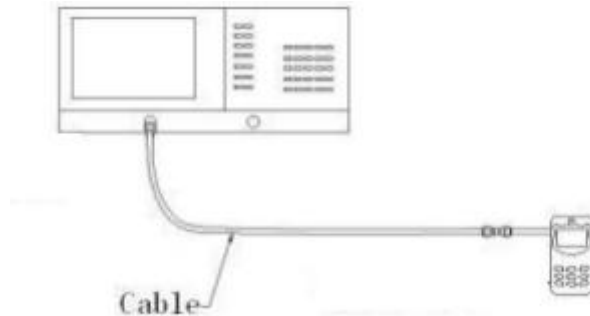
2. S11 test

S11 Test Method Description

Test equipment: Network analyzer(E5071C)

Test method: Export from the instrument's test port using a 50-ohm CABLE, After calibration with the calibration piece, connect the SMA connector of the manual mechanism, and record the return loss and standing wave ratio corresponding to the relevant frequency points.

The test schematic diagram is as follows:



3 、 Darkroom testing equipment and data

Testing equipment

Test system: Shielded anechoic chamber

Test environment: Temperature $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$, Humidity $50\% \pm 15\%$

Test equipment: When testing passive data, a network analyzer is used AgilentE5071C

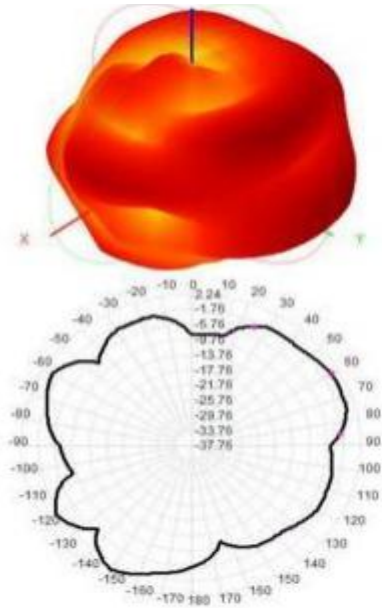
When testing active data, use a comprehensive measuring instrumentCMW500



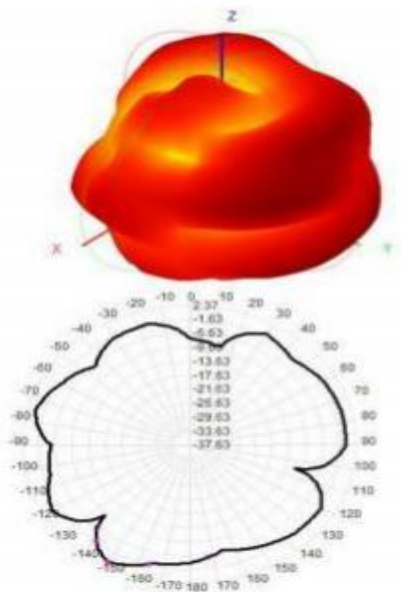
4. Antenna Active Test Report

channel	L	M	H	L	M	H
TRP	12.52	12.44	12.33	11.63	11.41	11.05
TIS			-75.14			-68.21
Frequency Band	WIFI-2.4G-N			WIFI-5.8G-A		
channel	L	M	H	L	M	H
TRP	10.62	11.06	11.47	12.25	12.44	11.41
TIS			-66.74			-71.54

Passive data of the main antenna

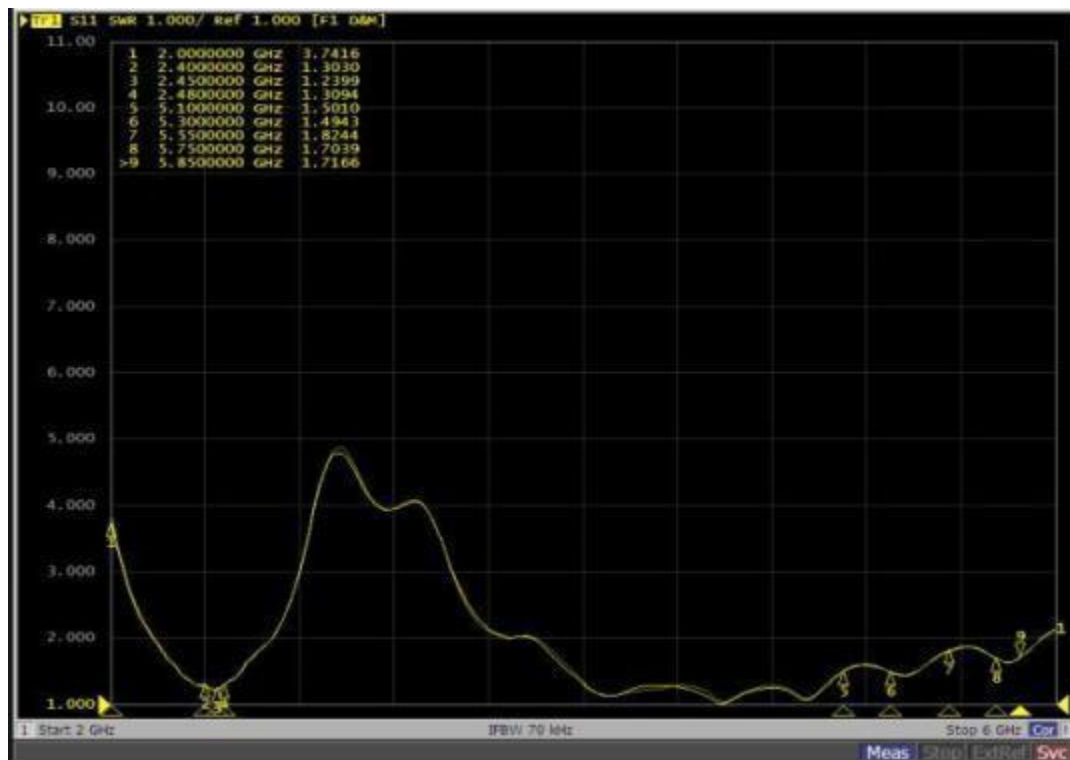


WIFI 2.4G		
Freq(MHz)	Efficiency (%)	Gain (dBi)
2400	58.62	1.82
2410	57.15	1.74
2420	59.65	1.98
2430	57.44	2.24
2440	58.25	2.06
2450	54.62	2.15
2460	55.30	1.88
2470	53.15	1.98
2480	54.26	2.01



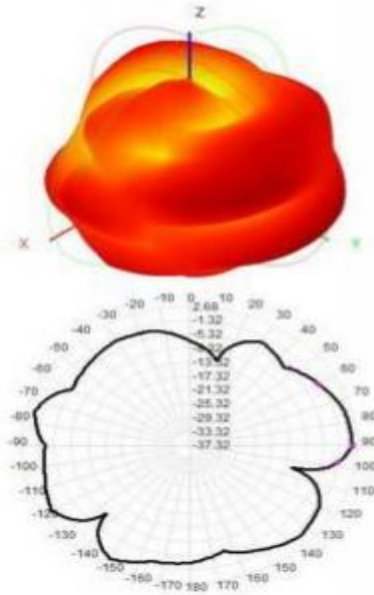
WIFI 5.8G		
Freq(MHz)	Efficiency (%)	Gain (dBi)
5000	60.25	2.15
5100	61.52	2.35
5200	58.54	2.06
5300	57.44	1.76
5400	59.65	2.37
5500	57.15	1.88
5600	58.23	1.98
5700	54.96	2.30
5800	55.30	2.25
5850	56.64	2.14

Main antenna SWR

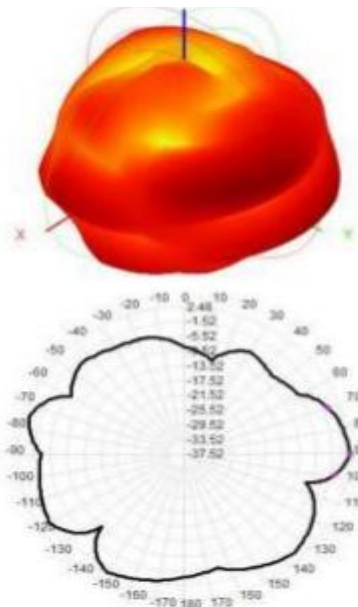


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Passive data of the secondary antenna

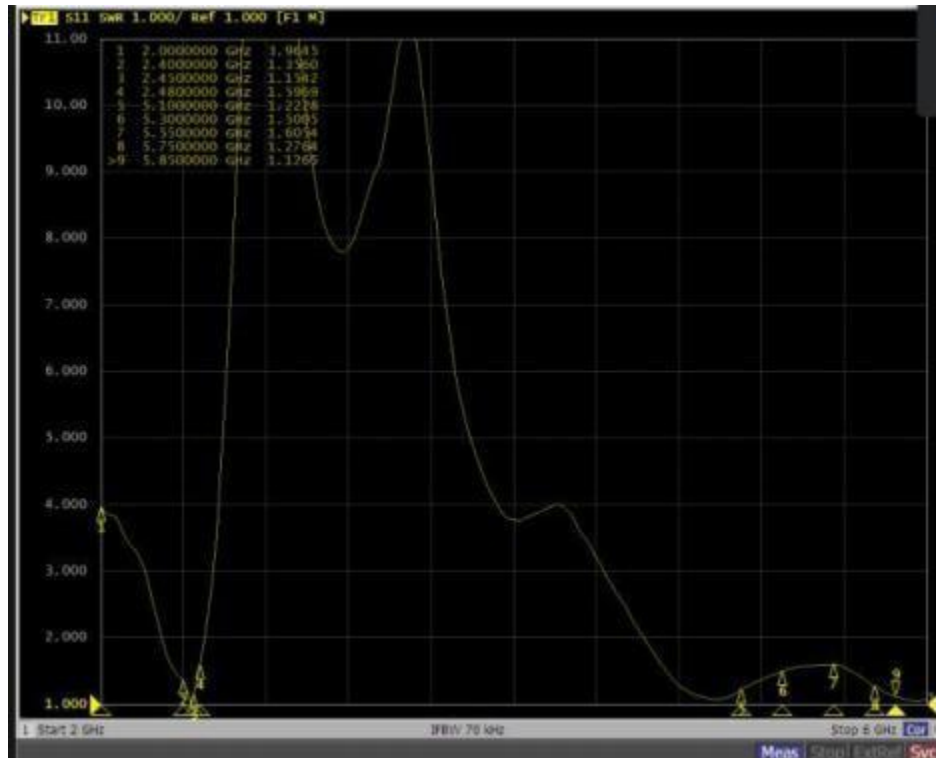


WIFI 2.4G		
Freq(MHz)	Efficiency (%)	Gain (dBi)
2400	56.35	2.30
2410	54.88	2.22
2420	58.62	2.13
2430	57.16	2.68
2440	56.35	1.82
2450	55.09	1.94
2460	57.15	2.30
2470	54.26	2.48
2480	56.30	2.55



WIFI 5.8G		
Freq(MHz)	Efficiency (%)	Gain (dBi)
5000	58.46	2.30
5100	57.15	2.15
5200	53.25	2.30
5300	54.26	2.48
5400	57.16	1.74
5500	58.66	1.66
5600	57.63	1.36
5700	57.05	1.82
5800	54.32	1.95
5850	52.36	2.25

Secondary antenna SWR

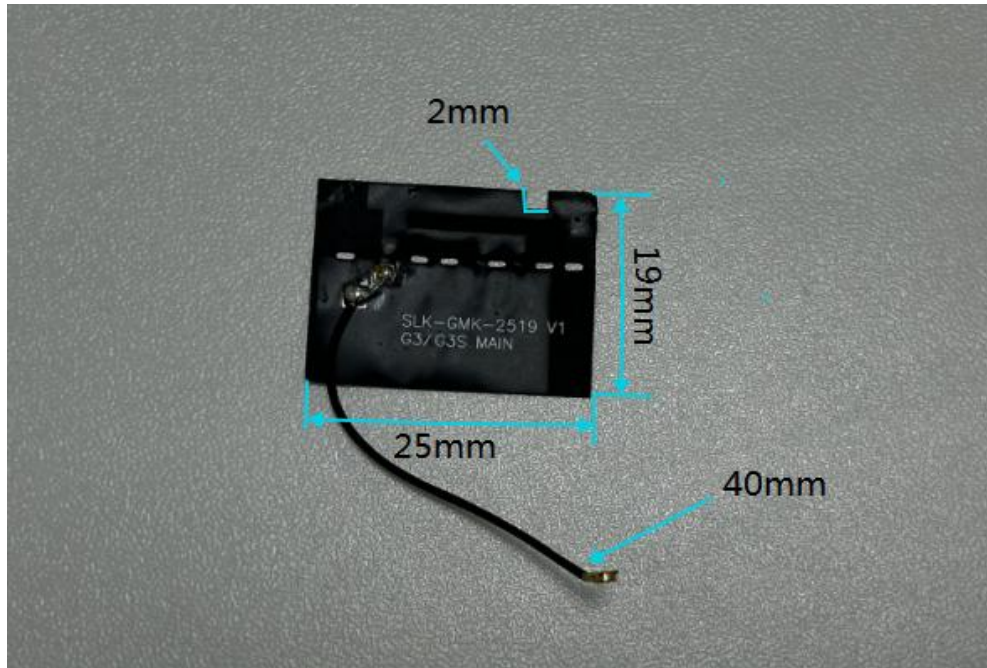


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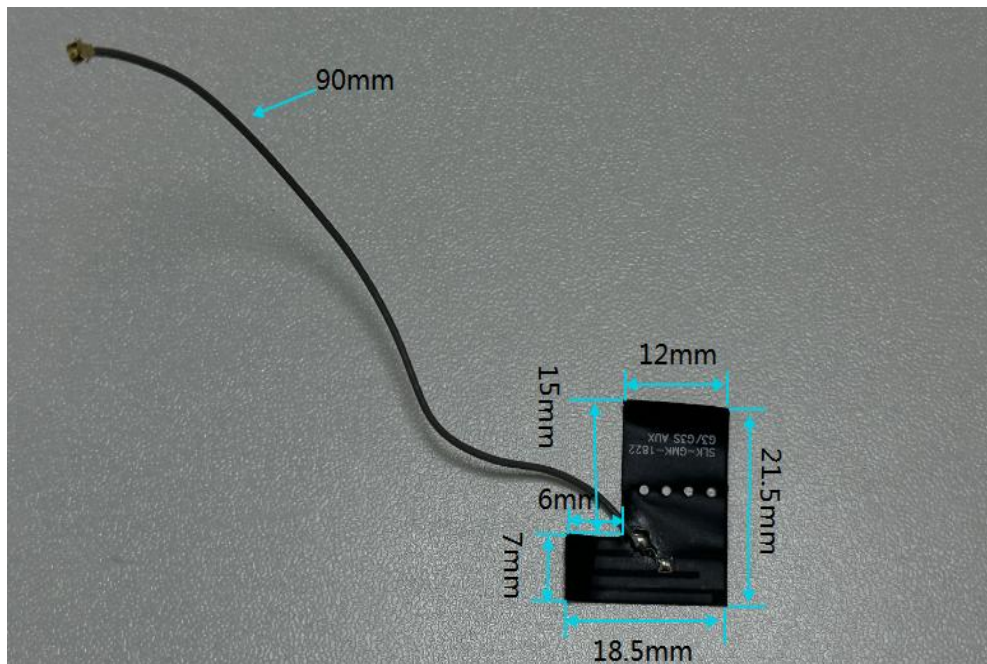
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Antenna photos & dimensions

Main antenna



Secondary antenna



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