

Shenzhen yGalax Technologies
Limited

Name: Sample Approval

Ver: V1.0

date: 2025.9.15

Sample Approval Sheet

Project Name: TM46P-T9NA

Sample Name: WIFI antenna

Sample SPEC: WIFI—PCB Antenna

Customer PN.:

Transfer Date: 2025.09.15

Supplier Confirm	Project	Engineer	Quality
date			

Customer confirm	PM	Electron	MD	PD	QE
date					

conclusion	☐ MP	☐ Limits use () K	☐ ROHS
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Supplier name: Shenzhen yGalax Technologies LimitedThe Supplier address: Unit F, 4/F,
BlockA, Junxiangda Plaza, Zhongshanyuan Road,
Nanshan District, Shenzhen, China

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1. Specification overview

This specification describes the condition of built-in WIFI antenna of STONEOIM JC06. It is

frequency band WCDMA+LTE is manufactured by **Shenzhen yGalax Technologies Limited.**



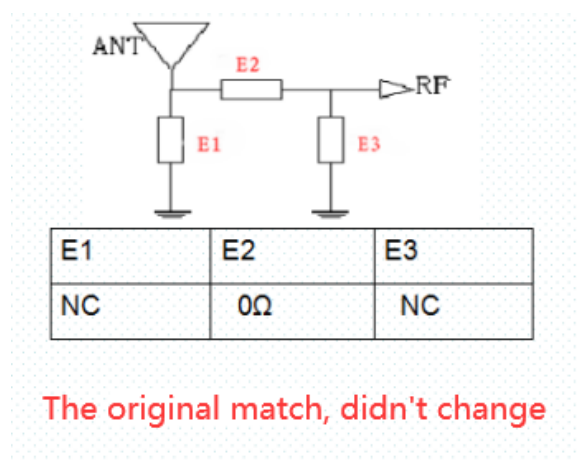
2. Appearance

3. Electrical properties

3.1. Antenna frequency band

	WIFI
Emission spectrum(MHz)	2400~2500
Receiving frequency band(MHz)	2400~2500

3.2. Matching circuit

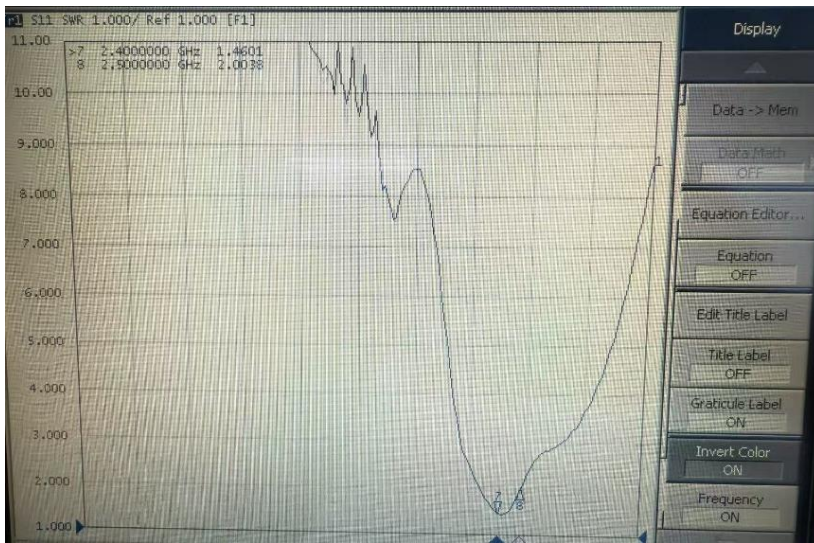


3.3 Impedance requirements

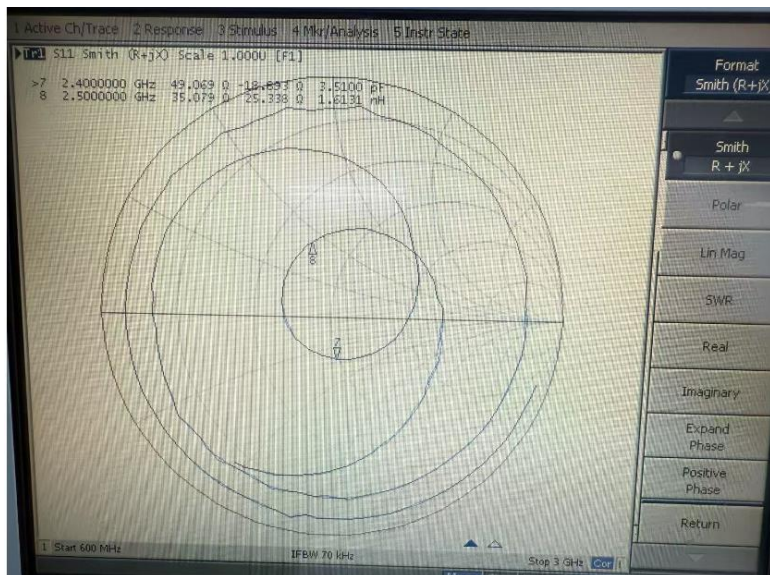
50 ohm

3.4 Antenna test data

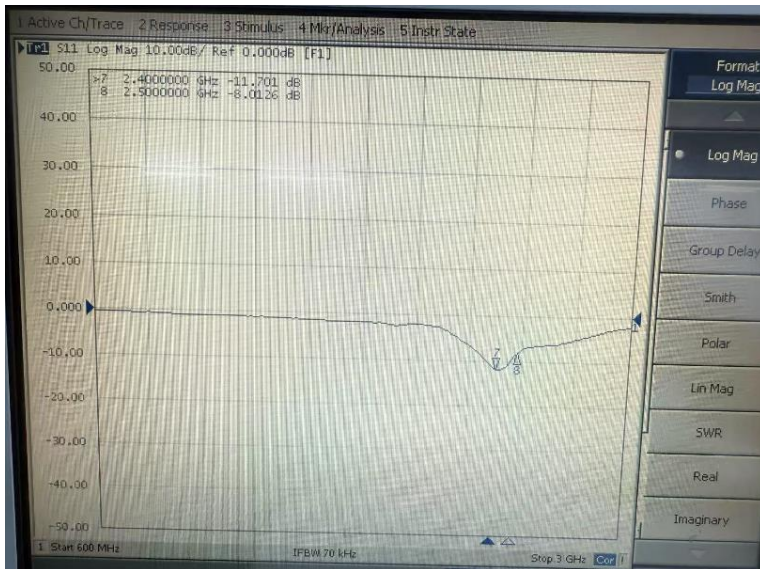
1. The Main antenna test data Passive standing wave diagram of main antenna;



2. Smith chart of main antenna:

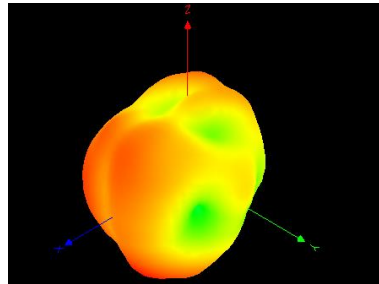
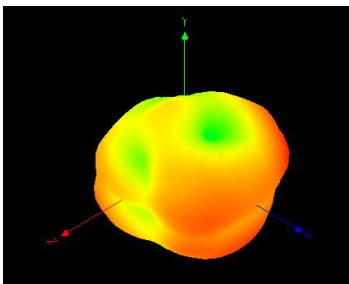
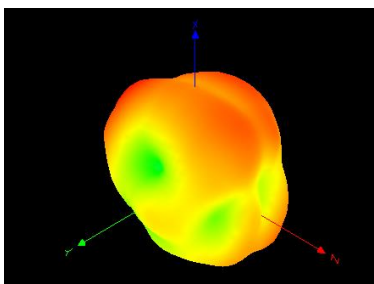
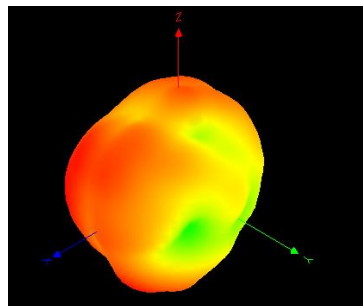
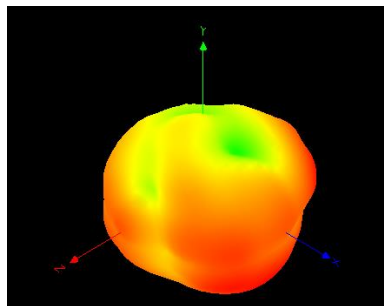
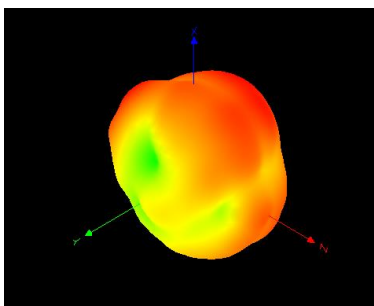


3 Return loss of main antenna:



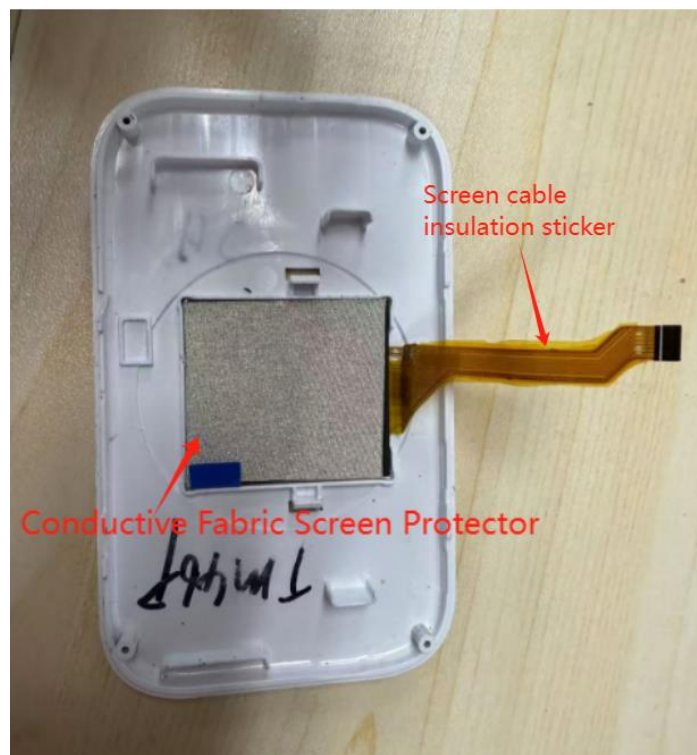
4.Passive gain efficiency of main antenna:

Frequency/Mhz	Efficiency / dB	Efficiency / %	MaxGain/dBi
2400	-5.63	27.35	-0.29
2410	-5.37	29.04	0.05
2420	-5.1	30.9	0.52
2430	-4.92	32.21	1.15
2440	-4.82	32.96	1.5
2450	-4.73	33.65	1.9
2460	-4.72	33.73	1.99
2470	-4.79	33.19	1.96
2480	-4.87	32.58	1.89
2490	-5.06	31.19	1.76
2500	-5.2	30.2	1.61



FS	Channel	TX (dBm)	RX (dBm)	FS	Channel	TX (dBm)	RX (dBm)	FS	Channel	TX (dBm)	RX (dBm)
LTE-2	L	19.08		LTE-17	L	17.48		WIFI-2.4G	1	14.26	
	M	19.5			M	18.06			6	15.56	
	H	20.88	-97.44		H	18.79	-93.41		11	15.47	-82.15
LTE-4	L	20.14		LTE-25	L	20.65					
	M	22.05			M	20.17					
	H	22.57	-96.48		H	19.48	-95.82				
LTE-5	L	19.12		LTE-26	L	20.45					
	M	20.62			M	19.73					
	H	19.51	-95.6		H	19.56	-94				
LTE-7	L	19.96		LTE-66	L	19.58					
	M	21.18			M	22.88					
	H	18.66	-95.33		H	22.64	-94.77				
LTE-12	1	17.77		LTE-40	L	19.24					
	6	18.03			M	19.07					
	13	18.74	-93.51		H	21.04	-92.2				
LTE-13	36			LTE-41	L	20.99					
	149	18.86	-91.72		M	21.57					
	156				H	21.4	-92.2				

3.5 Environmental treatment



Appearance structure

4.1 Antenna material

Antenna material: PCB antenna, black ink, gold plating on exposed copper area.

Substrate + double sided adhesive tape + release paper

Cable line: the total length of the cable is 33.00mm, the wire diameter is 0.81mm, With four generations terminals.

4.2 Structural drawings



5. List of raw materials (BOM)

List of main materials								
number	Product information						Test report	
	Code (component Code)	Product name	重量 (g)	Name of raw material	Raw material No Chemical registration number	Raw material supplier	Certification company	Report no
1	FPC antenna	Copper foil substrate (PI)	0.0542	CU	SP14-033405-SH	Cai lungeti	SGS	SHA16-245544-02
			0.03	polyimide film				
2		Ink (black)	0.005	PRINT INK (Printing ink)	P800	Youli	SGS	
3		Adhesive paper	0.1132	3M	3M9471LSE	Weilihua	SGS	
4		Electrogold	/	additive	JSTD8001	Kingsoft	SGS	CANEC1617433203
5	Coaxial line	wire rod	/	Teflon		Jiang Lian	SGS	
		Tabulation:	hejuan				sushaolong	

6 .Production flow chart

