



Shenzhen Yingjia Chuang electronic technology Co., LTD

<http://www.szsyjc.com>

Sample acknowledgement

supplier: Shenzhen Yingjia Chuang electronic technology Co., LTD

Item number (customer): _____

Name specification (Customer): _____

Sample delivery date: _____

New supplier or not: ☐ is ☐ no

Whether new material: ☒ is ☐ no

Whether to substitute material: ☐ is ☐ no

Whether it is environmentally friendly: ☒ is ☐ no

Supplier audit column (official seal required)			
formulate		examine	
Yin Feijie		Fang Wenfeng	
		Examine and approve	
		Chauhan	
Company confirmation audit column			
purchase		Research and development	
Audit/Date	Approval/Date	Audit/Date	Approval/Date
Quality		ENGINEERING	business
Audit/Date	Approval/Date	Audit/Date	Approval/Date



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APPROVAL SHEET

CUSTOMER NAME		
CUSTOMER P/N		
PART NAME	2.4G/5G metal built-in antenna Model: T31	
P/ N	YJC-6N000-B521	
APPROVAL REV.	A0	
DELIVERY DATE	April 06, 2024	
PREPARED BY	Yin Feijie	
CHECKED BY	Fang Wenfeng	
APPROVED BY	Chauhan	
Customer Approved		
Approved By	Checked By	Prepared By

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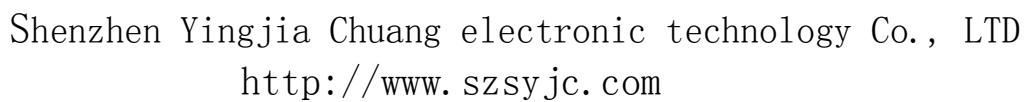
Catalogue

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resume:

Version	Changes and reasons	date	publish
A0	Initial release	April 06, 2024	



RoHS

T: 0.3MM

Note:

- Material: 304 stainless steel, nickel plated
- Products remove burrs.
- Version V1.0

Technical requirements:

- Material: stainless steel 304
- The finished product must be 100% test conduction OK
- The finished product must be 100% inspected OK.
- The finished product uses an environmentally friendly process.
- Meet ROHS requirements.
- With "*" as the key control size.

Frequency Range	Gain	VSWR	Polarization	Max power rating	Impedance
2400-2500/5150-5850MHz	4.4dBi	<1.92	Linear, Vertical	50W	50Ω

(PART NAME)	(UNIT)	(SCALE)	(REV)	(SIZE)
(PRODUCT NAME) 2.4G/5G metal built-in antenna	mm	(PRODUCT SPECIFICATION) 11.0mm*11.0mm, 3mm	A0 (PRODUCT NO.) YJC-6N000-B521	A1 (ORIGIAL DATE) 2024-04-06
DESIGNER	CHK.	APPR.	SHENZHEN YINGJIACHANG TECHNOLOGY ELECTRONIC CO., LTD	



Antenna technical parameters and environmental testing:

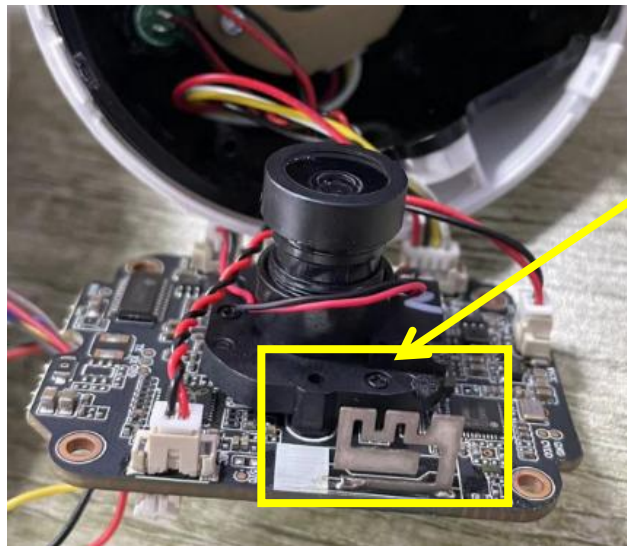
Electrical technical parameter			
Electrical Specifications		Mechanical Specifications	
Frequency Range	2400-2500/5150-5850MHz	Wire material	304 Stainless steel
VSWR	<1.92	Input connector	OP
Input Impedance	50 Ω	Working Temperature	-20℃~+70℃
Direction	All	Working Humidity	20~80%
Gain	4.3dBi		

Environmental performance test:

Project	Test condition	Standard
Storage Conditions	In the absence of specified test temperature, humidity, air pressure is as follows:: 1. Temperature is - 30 °C ~ + 80 °C 2. Relative humidity of 45% to 45% 3. Air pressure is 86 kpa to 106 kpa	Electrical and mechanical performace is normal
High and low temperature test	Between 70 °C and -20 °C for 5 loops, then 1-2 h under normal conditions, check the appearance quality.	Size should meet the requirements and meet the performance of mechinery and electric.
Constant damp and hot resistance test	95 + / - 3% relative humidity, temperature test: 40 °C. Lasts 2 h after, try to take out the determination of electrical properties, within 5 min after try 1-2 h under article normal thing, check the appearance quality	Size should meet the requirements and meet the performance of mechinery and electric.
vibration test	10-55 hz, vibration frequency range of displacement amplitude: 0.35 MM, acceleration amplitude: 50.0 M/S, sweep cycles: 30 times	Electrical and mechanical performace is normal
Fall down test	1 m high altitude in accordance with the perpendicular axis free drop 3 times	Electrical and mechanical performace is normal



Antenna physical diagram and location diagram:



Antenna
attachment
position

Antenna performance test diagram:

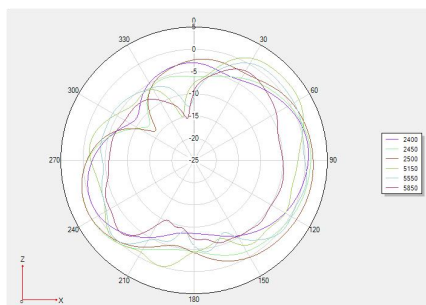




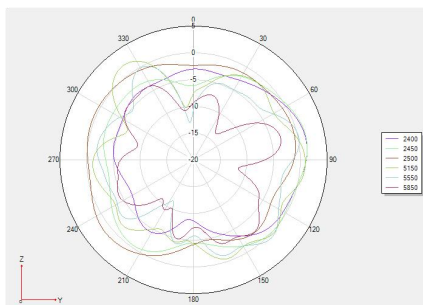
2D.3D test data (2.4G/5G):

Frequency	Efficiency (%)	Gain. (dBi)
2400MHz	45.59	2.13
2410MHz	45.41	2.35
2420MHz	46.06	3.08
2430MHz	48.85	3.05
2440MHz	48.44	3.01
2450MHz	51.41	2.33
2460MHz	51.28	2.88
2470MHz	48.11	2.48
2480MHz	50.74	2.44
2490MHz	47.85	2.35
2500MHz	49.13	2.08
5150MHz	51.55	2.52
5250MHz	49.75	2.75
5350MHz	51.32	3.02
5450MHz	56.98	3.06
5550MHz	55.7	3.07
5650MHz	58.54	3.64
5750MHz	55.83	4.21
5850MHz	57.36	4.33

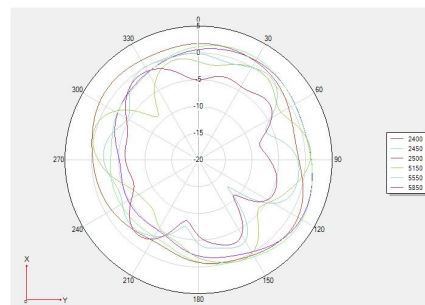
Phi 0 2D



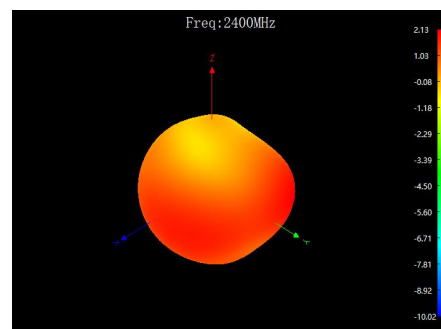
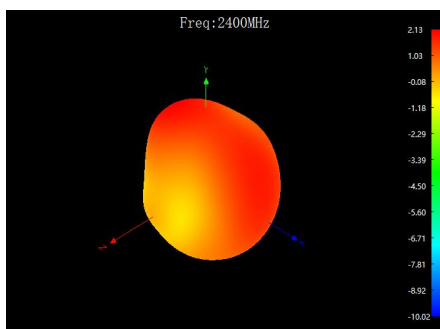
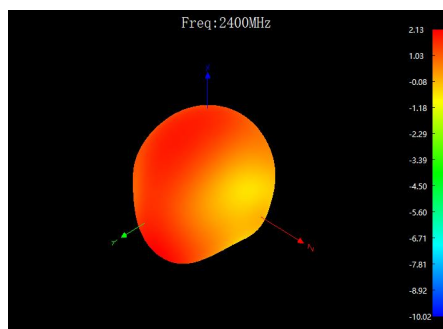
Phi 90 2D



Theta 90 2D

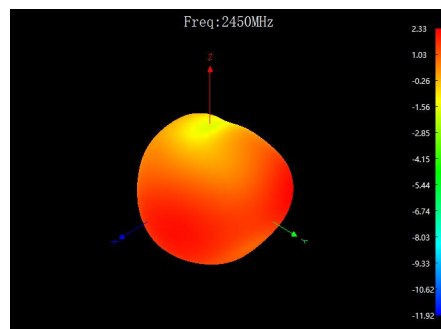
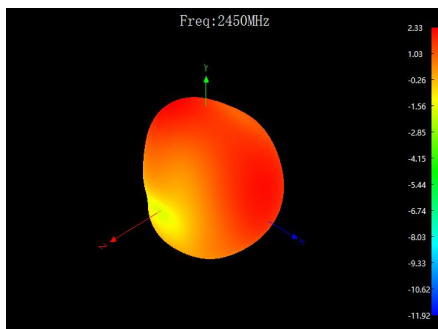
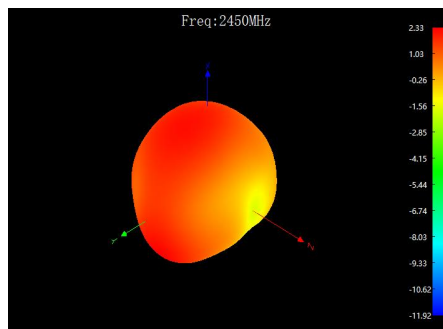


3D 2400:

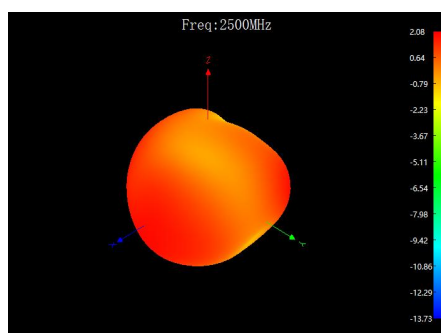
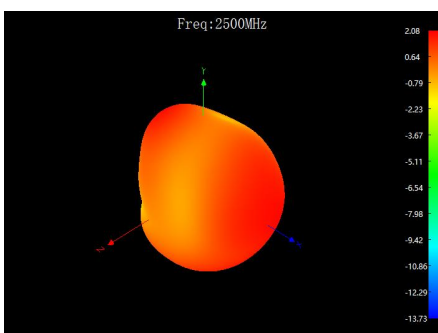
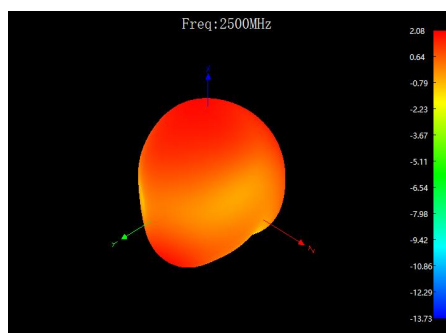




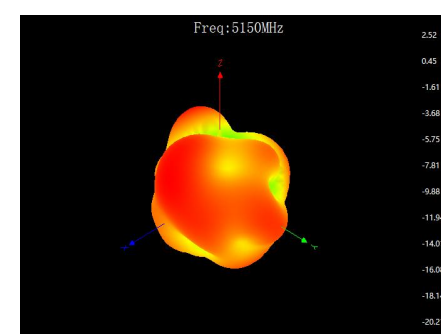
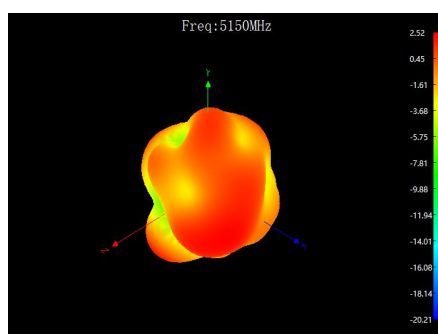
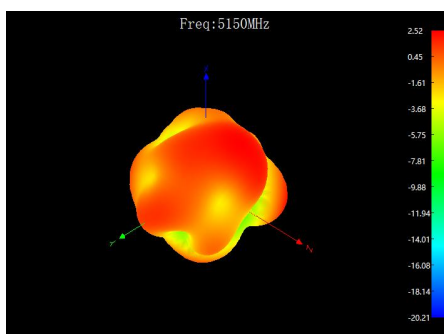
3D 2450:



3D 2500:

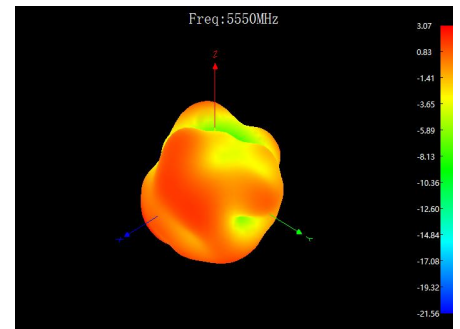
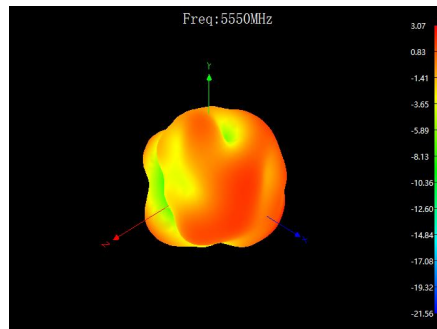
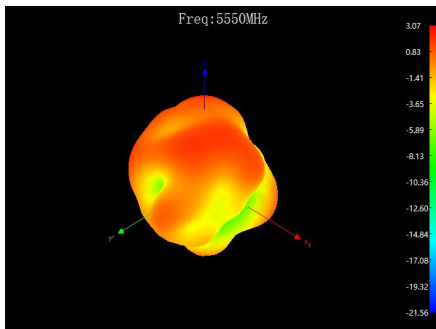


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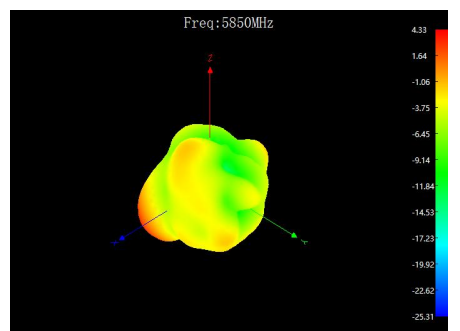
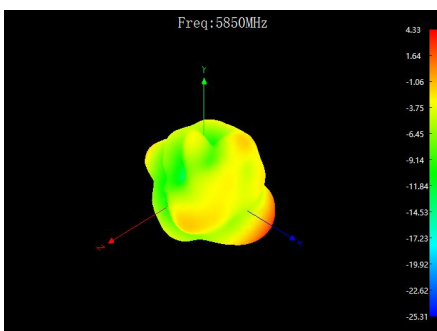
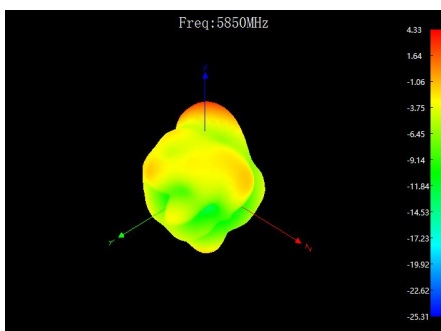




3D 5550:



3D 5850:





OTA active test data statistics:

Item	Measurement	Band	Channel	Frequency	Total
1	TRP	WIFI_B (11M)	1	2412	15.39
2	TRP	WIFI_B (11M)	6	2437	15.69
3	TRP	WIFI_B (11M)	11	2462	16.78
4	TIS(EIRP)	WIFI_B (11M)	1	2412	-76.91
5	TIS(EIRP)	WIFI_B (11M)	6	2437	-78.78
6	TIS(EIRP)	WIFI_B (11M)	11	2462	-81.5
7	TRP	WIFI_G (54M)	1	2412	13.31
8	TRP	WIFI_G (54M)	6	2437	13.36
9	TRP	WIFI_G (54M)	11	2462	13.82
10	TIS(EIRP)	WIFI_G (54M)	1	2412	-66.3
11	TIS(EIRP)	WIFI_G (54M)	6	2437	-68.03
12	TIS(EIRP)	WIFI_G (54M)	11	2462	-68.2
13	TRP	WIFI_N_ISM (65M)	1	2412	13.54
14	TRP	WIFI_N_ISM (65M)	6	2437	13.45
15	TRP	WIFI_N_ISM (65M)	11	2462	13.95
16	TIS(EIRP)	WIFI_N_ISM (65M)	1	2412	-61.65
17	TIS(EIRP)	WIFI_N_ISM (65M)	6	2437	-63.84
18	TIS(EIRP)	WIFI_N_ISM (65M)	11	2462	-64.21
19	TRP	WIFI_A (54M)	36	5180	10.41
20	TRP	WIFI_A (54M)	149	5745	10.68
21	TRP	WIFI_A (54M)	165	5825	10.65
22	TIS(EIRP)	WIFI_A (54M)	36	5180	-68.4
23	TIS(EIRP)	WIFI_A (54M)	149	5745	-62.44
24	TIS(EIRP)	WIFI_A (54M)	165	5825	-63



Material RoHS conformity declaration form

This is to certify that the delivery to your company's components, raw materials, auxiliary materials used and the additives in the production engineering are accord with RoHS environmental requirements of the restrictions on the use of hazardous substances directive (RoHS directive 2011/65 / EU)

About components used raw materials, packaging materials, auxiliary materials and additives used in the production process such as composition of the report is as follows:

Component /Part Name	Material Composition	ICP report #	Test Org.	Test Date	Content of harmful substances (ppm)						PASS?
					Cd	Pb	Hg	Cr ⁶⁺	PBB	PBDE	PASS
Copper part	304 stainless steel	A2230142930101003	SGS	23/04/06	ND	ND	ND	ND	ND	ND	PASS