

Sample acknowledgement

su	pplier: Shenzhen Yingjia Chuang electronic technology Co., L7									
Ιte	em number (cus	stomer):								
Na	ame specification (Customer):									
Sa	mple delivery date:									
Nε	ew supplier or not	a: □is		□no						
W	hether new mater	ial: ∠ is		□no						
W	hether to substitu	te materia	al: □is	\Box no						
W	hether it is enviro	nmentall	y friendly:	⊿ is □no						
	hether it is environmentally friendly: ✓is □no Supplier audit column (official seal required)									
	formulate	e	ex	camine	examine and approve					
	Yin Fe	ijie	Fa	ing Wenteng	Chauhan					
	Company con	firmatio	n audit co	olumn						
	purchase			Research and development						
	Audit/Date	Appro	val/Date	Audit/Date	Approval/Date					
	Quality			ENGINEERING	business					
	Audit/Date	Appro	val/Date	Audit/Date	Approval/Date					

APPROVAL SHEET

CUSTOMER NAME						
CUSTOMER P/N						
PART NAME	2.4G/5G metal built-in antenna Model: T31					
P/ N	YJC-6N00	0-B521				
APPROVAL REV.	AO					
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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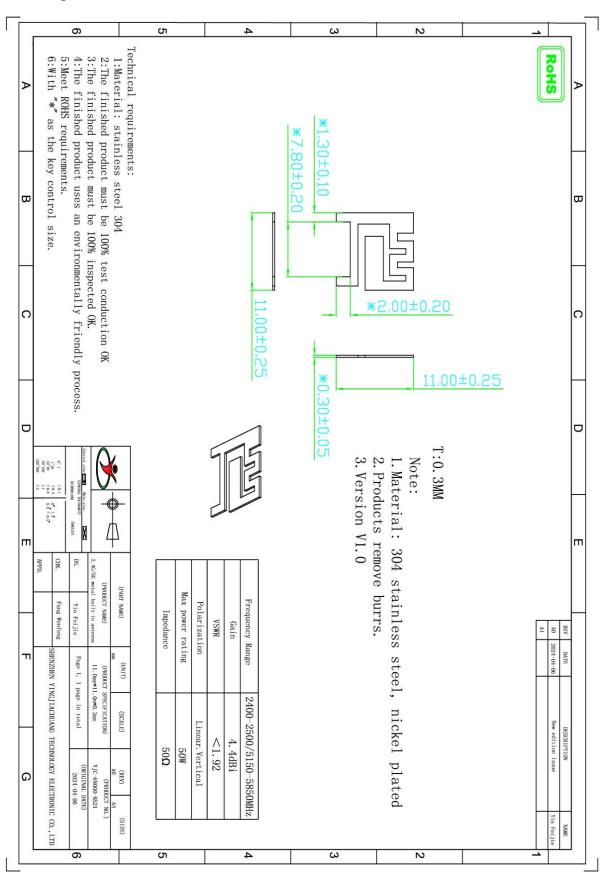


resume:

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



Product plan:



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°C~+70°C					
Direction	All	Working Humidity	20~80%					
Gain 4.3dBi								

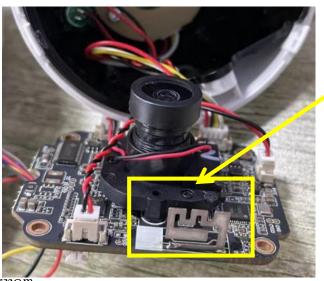
Environmental performance test:

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

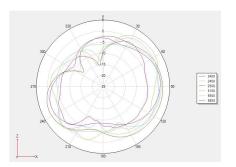
Antenna performance test diagram:



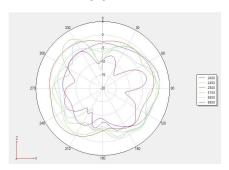
2D.3D test data (2.4G/5G):

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

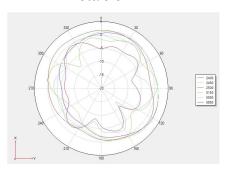
Phi 0 2D



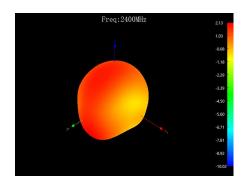
Phi 90 2D

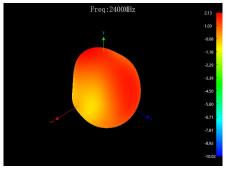


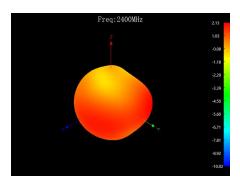
Theta 90 2D



3D 2400:

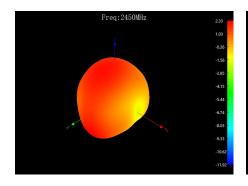


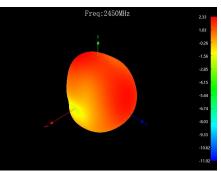


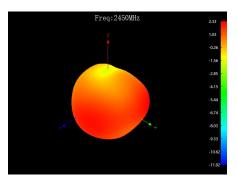


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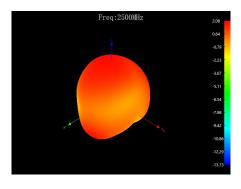
3D 2450:

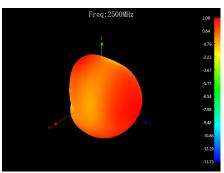


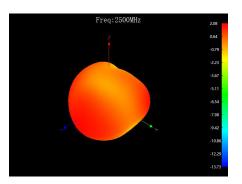




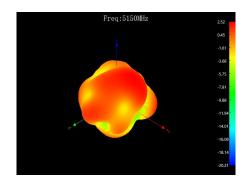
3D 2500:

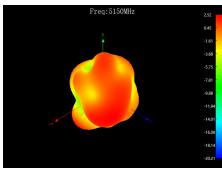


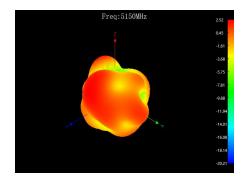




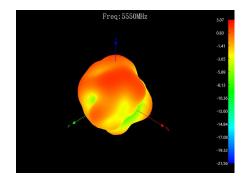
3D 5150:

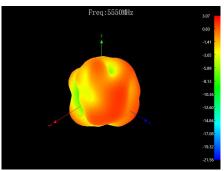


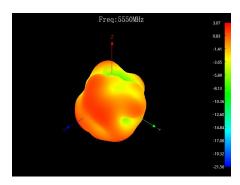




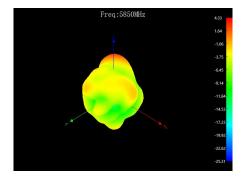
3D 5550:

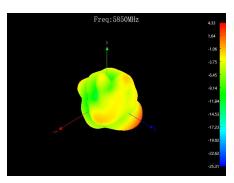


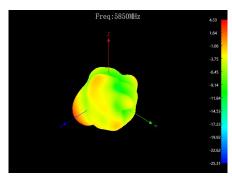




3D 5850:









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 -78.78	
5	TIS(EIRP)	WIFI_B (11M)	6	2437		
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	Material	ICP report #	Test Org.	Test Date	Content of harmful substances (ppm)					PASS?	
/Part Name	Composition				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