



APPROVAL SHEET

承认书

CUSTOMER NAME Customer name	ShenzhenJichenTechnologyCo.,Ltd.	
CUSTOMER P/N Customer Part Number		
PART NAME	2.4G black FPC built-in antenna, 1.13 black line L=117MM	
P/N Part Number	YJC-6N117-B01	
APPROVAL REV.	A0	
DELIVERY DATE Sample delivery date	January 10, 2024	
PREPARED BY	Yin Feijie	
CHECKED BY	Fang Wenfeng	
APPROVED BY	Xiao Han	
Customer Approved		
Prepared By	Checked By Review	Approved By

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Resume:

Version	Changes and reasons for changes	date	issued
A0	First edition released	January 10, 2024	



Antenna plan:

A		B		C		D		E		F		G																								
1		2		3		4		5		6		7																								
RoHS												<table border="1"><thead><tr><th>REV</th><th>DATE</th><th>DESCRIPTION</th><th>NAME</th></tr></thead><tbody><tr><td>A0</td><td>2024-01-10</td><td>新版发行</td><td>殷飞杰</td></tr><tr><td>A1</td><td></td><td></td><td></td></tr></tbody></table>		REV	DATE	DESCRIPTION	NAME	A0	2024-01-10	新版发行	殷飞杰	A1														
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要求: 1. 成品须100%测试导通OK 2. 成品须100%全检OK. 3. 成品采用环保制程. 4. 符合ROHS要求. 5. 未注公差请以一般公差为准. 6. *为重点标注尺寸.																																				
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Antenna technical parameters and environmental testing:

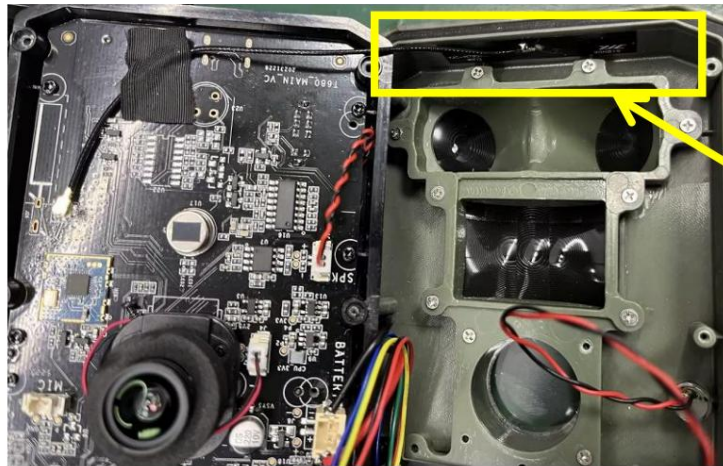
Electrical Specifications			
Electrical performance indicators		Electrical Specifications	
Frequency range 2400-2500MHz		Frequency Range 2400-2500MHz	
VSWR $\leq$ 1.92		VSWR	$\leq$ 1.92
Input impedance 50 Ω		Input Impedance	50 Ω
direction	Omnidirectional	Direction	All
Gain	2.0 $\pm$ 1dBi	Gain	2.0 $\pm$ 1dBi
Mechanical indicators		Mechanical Specifications	
Wire color Black		Wire Color	Black
Interface type XD		Input connector	XD
Cable length 117MM		Wire Length	117MM
Working temperature -20 $\circ$ C~+70 $\circ$ C		Working Temperature	-20 $\circ$ C~+70 $\circ$ C
Working humidity 20%~80%		Working Humidity 20%~80%	

Environmental performance test:

project	Test conditions	Specification
Storage environment	When not specified, the test temperature, humidity and air pressure are as follows: 1. Temperature: -20 $\circ$ C~+70 $\circ$ C 2. Relative humidity is 45%-85% 3. Air pressure is 86kpa-106kpa	Electrical and mechanical performance is normal
High and low temperature test	Cycle between 70 $\circ$ C and -20 $\circ$ C for 5 times, then 1-2H, check the appearance quality.	The size should meet the requirements and should meet the full Sufficient mechanical and electrical performance
Constant resistance Wet heat test	Relative humidity 95 $\pm$ 3%, test temperature: 40 $\circ$ C. After 2 hours of continuous action, The electrical performance of the test sample shall be measured within 5 minutes after it is taken out. 1-2 hours after the parts are removed, check the appearance quality	The size should meet the requirements and should meet the full Sufficient mechanical and electrical performance
Vibration test	Frequency range: 10-55HZ, displacement amplitude: 0.35MM, acceleration amplitude: 50.0M/S, sweep cycle times: 30 times	Electrical and mechanical performance is normal
Drop test: 1M high	altitude free fall 3 times in mutually perpendicular axis directions	Electrical and mechanical performance is normal

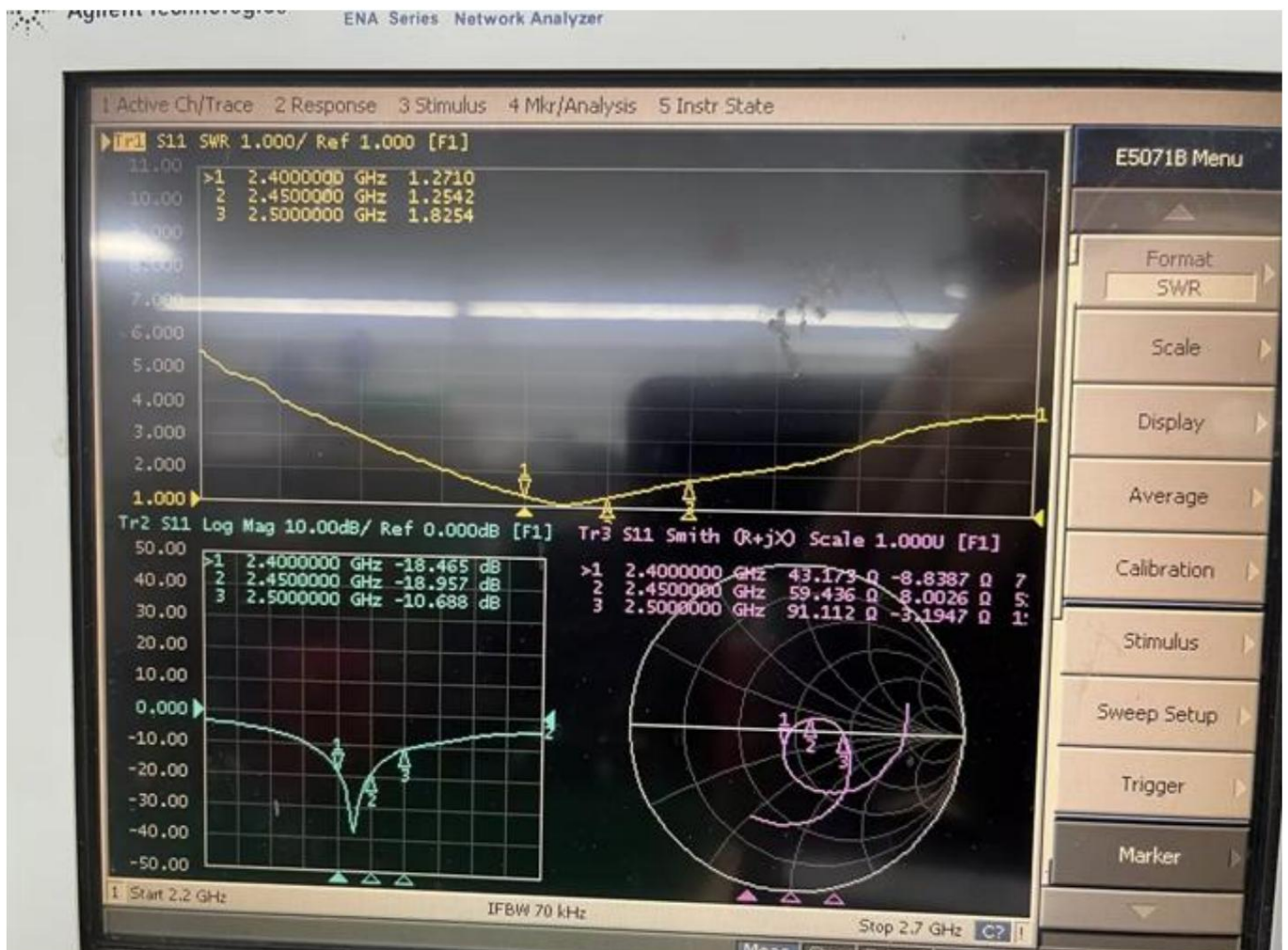


Antenna physical picture and attachment location map:



Antenna attachment location

Antenna performance test chart:

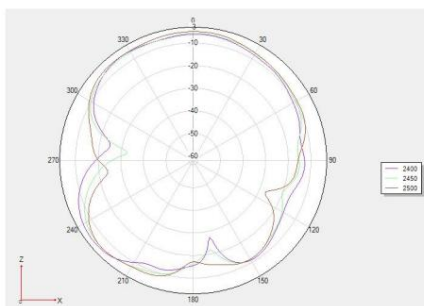




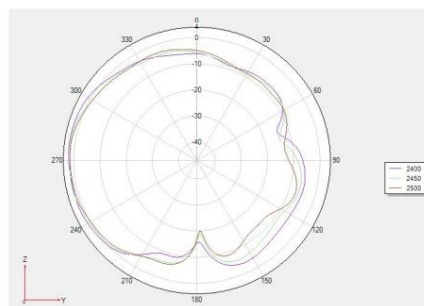
2D, 3D (2.4G) test data:

Frequency(MHz)	Efficiency (%)	Gain(dBi)
2400MHz	64.30	2.48
2410MHz	63.11	2.55
2420MHz	61.12	2.33
2430MHz	62.95	2.51
2440MHz	60.79	2.30
2450MHz	65.76	2.17
2460MHz	66.50	2.46
2470MHz	65.01	1.85
2480MHz	63.24	1.97
2490MHz	60.67	1.59
2500MHz	61.80	1.74

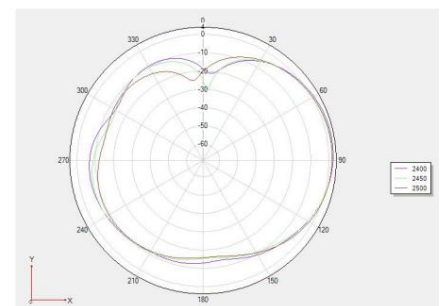
Phi 0 2D graph:



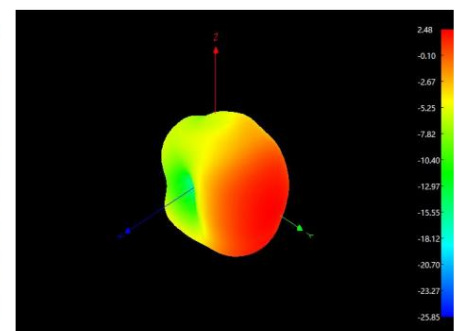
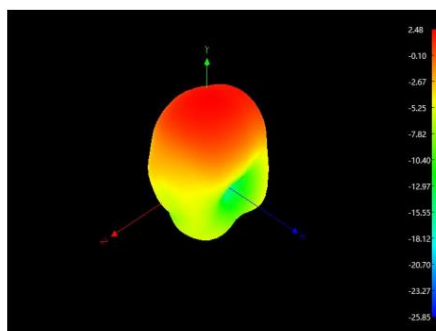
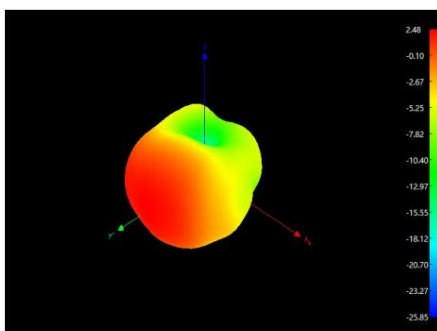
Phi 90 2D Graph



Theta 90 2D Graph

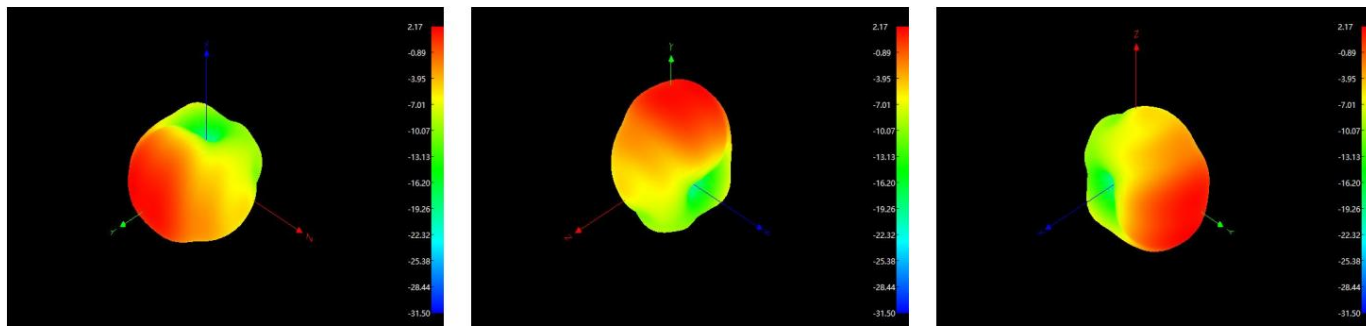


3D 2400

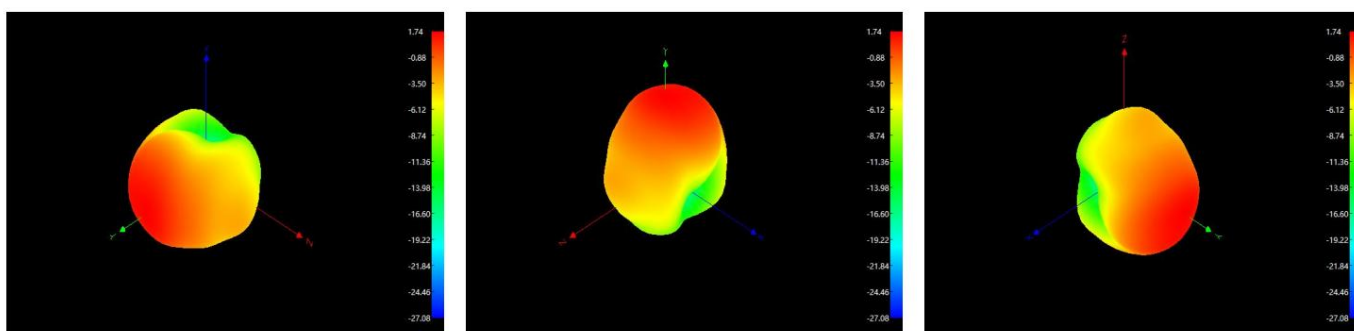




3D 2450



3D 2500



OTA active test data statistics:

Item	Measurement	Band	Channel	Frequency	Total
1	TRP	WIFI_B (11M)	1	2412	18.79
2	TIS(EIRP)	WIFI_B (11M)	1	2412	-82.93
3	TRP	WIFI_G (54M)	1	2412	15.06
4	TIS(EIRP)	WIFI_G (54M)	1	2412	-68.13
5	TRP	WIFI_N_ISM (65M)	1	2412	16.48
6	TIS(EIRP)	WIFI_N_ISM (65M)	1	2412	-64.04



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ROHS Material Control Report											
This is to certify that the raw materials used in the components and auxiliary materials delivered to your company, as well as the additives in the production process, etc. are in compliance with the environmental requirements of the RoHS Restriction of the Use of Hazardous Substances Directive (RoHS Directive) 2011/65/EC)											
The composition of the raw materials, packaging materials and additives used in the production process of components and auxiliary materials is reported as follows:											
Name of ingredients Component /Part Name	Composition Materials Material Composition	ICP Report Number ICP report #	Testing agency Test Org.	Testing time Test Date	Hazardous substance content (ppm)						Qualified? PASS?
					Cd	Pb	Hg	Cr ⁶⁺	PBB PBDE		PASS
Wire	Teflon coaxial Cables	CANEC2301851703	SGS	23/02/23	ND	ND	ND	ND	ND	ND	PASS
FPC	FPC soft board	FTS2302160201-01C1	SGS	23/02/20	ND	ND	ND	ND	ND	ND	PASS
Environmentally friendly tin wire	Environmentally friendly tin wire	SHAEC23006357502	SGS	23/05/23	ND	43	ND	ND	ND	ND	PASS
Terminals	Phosphor bronze	CANEC2301145810	SGS	23/02/08	ND	5	ND	ND	ND	ND	PASS
	Gold plating A2230400553101001E		CTI	23/08/12	ND	ND	ND	ND	ND	ND	PASS
	Rubber core A2230035037101002E		SGS	23/02/06	ND	ND	ND	ND	ND	ND	PASS