



Shenzhen Yingjia Chuang electronic technology Co., LTD

<http://www.szsyjc.com>

APPROVAL SHEET

CUSTOMER NAME		
CUSTOMER P/N		
PART NAME	2.4G white integrated antenna L=240mm	
P/ N	YJC-6C240-W09	
APPROVAL REV.	A0	
DELIVERY DATE	September 21, 2022	
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APPROVED BY	Chauhan	
Customer Approved		
Prepared By	Checked By	Approved By

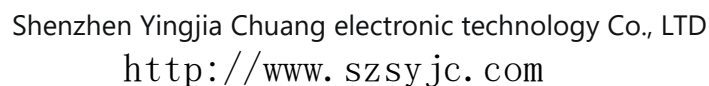
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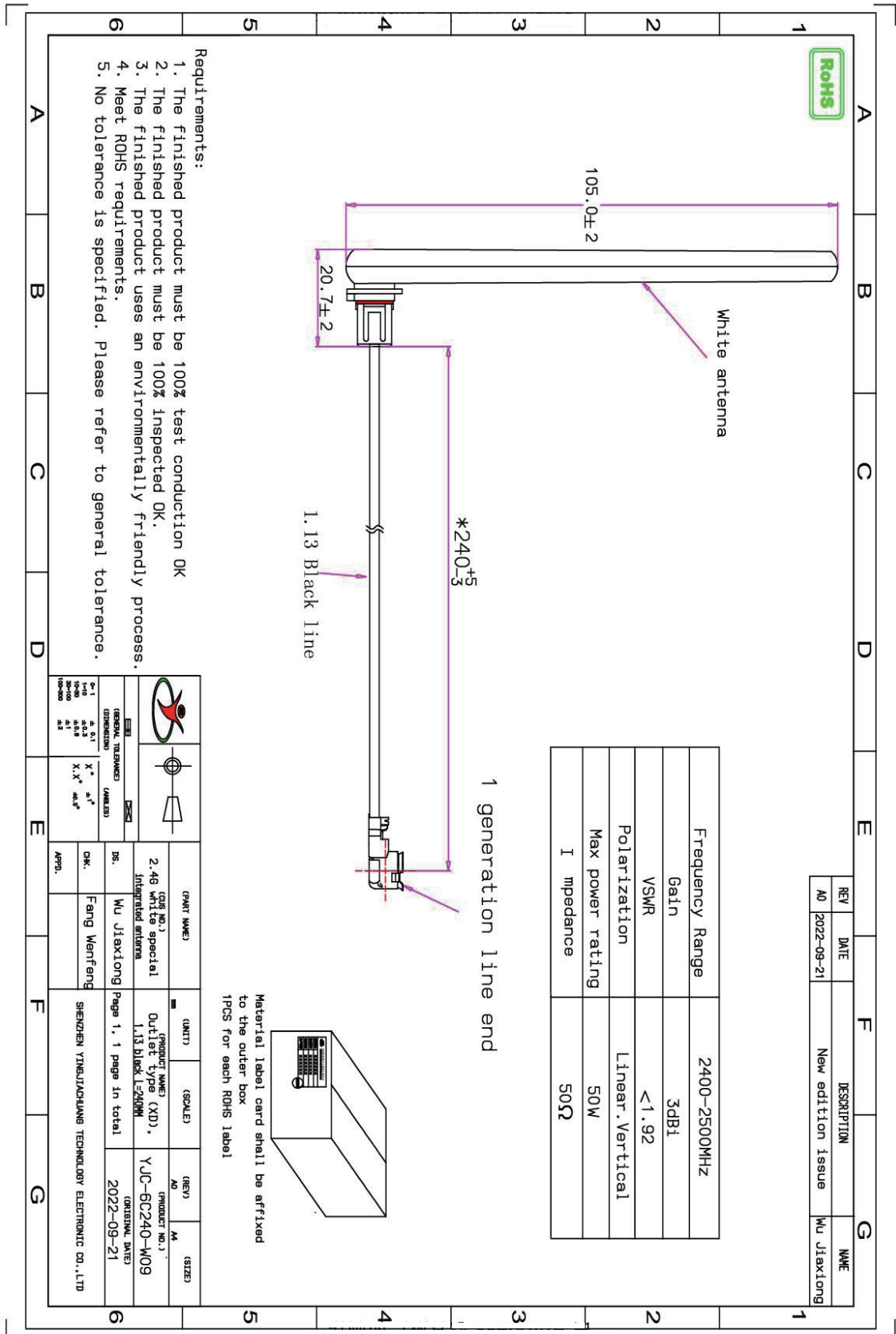
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resume:

edition	Content of change and reasons for change	date	release
A/0	Initial release	September 21, 2022	

Antenna plan:



Antenna technical parameters and environmental testing:

Electrical technical parameter			
Electrical Specifications		Mechanical Specifications	
Frequency Range	2400-2500 MHz	Antenna Color	White
VSWR	<1.92	Input connector	XD
Input Impedance	50 Ω	Wire length	240 mm
Direction	All	Working Temperature	-20℃~+70℃
Gain	3.9dBi	Working Humidity	20%~80%

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 ℃ ~ + 80 ℃ 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 ℃ and -20 ℃ 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 ℃. 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 diagram:



Antenna performance test diagram:



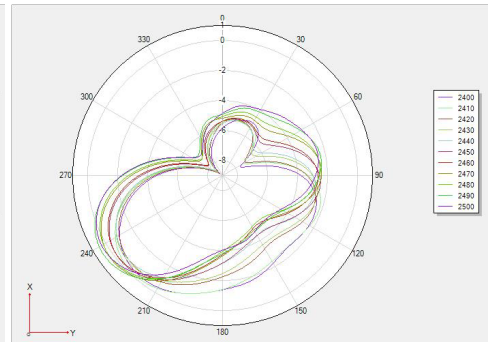
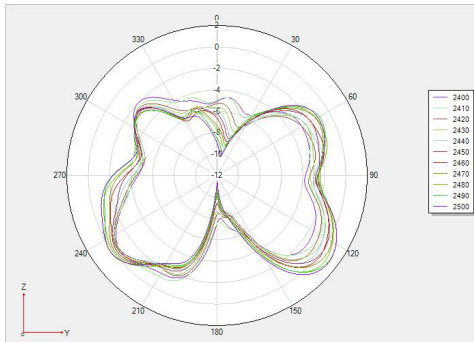
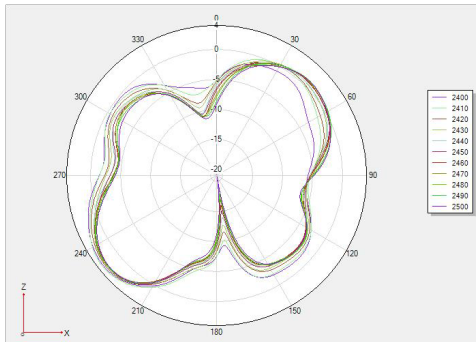
2D, 3D(2.4G) test data:

Frequency	Efficiency (%)	Gain. (dBi)
2400MHz	68.39	3.54
2410MHz	71.94	3.90
2420MHz	70.15	3.47
2430MHz	70.15	3.52
2440MHz	69.18	3.20
2450MHz	70.79	3.58
2460MHz	68.23	3.35
2470MHz	68.23	3.67
2480MHz	68.39	3.56
2490MHz	69.18	3.56
2500MHz	67.45	3.26

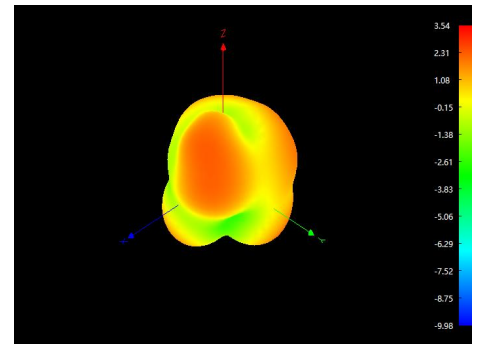
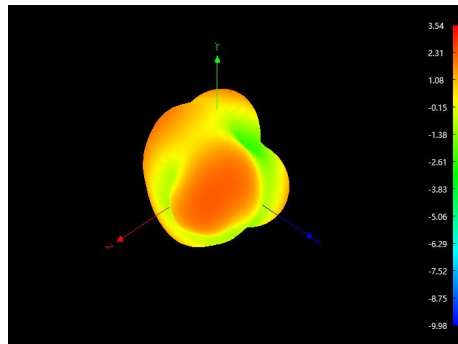
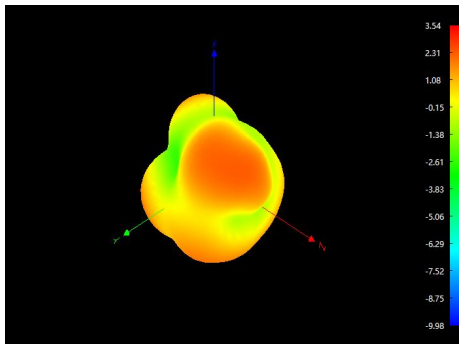
Phi 0 2D:

Phi 90 2D

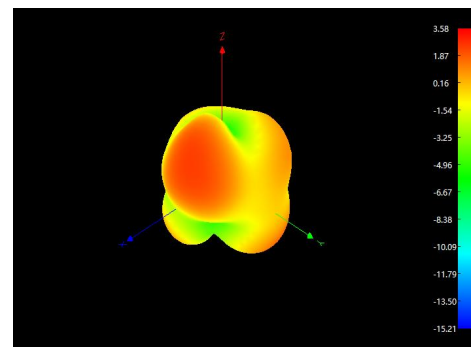
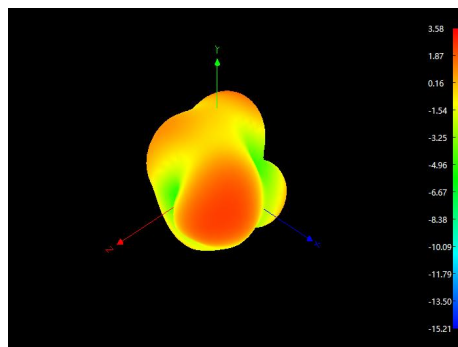
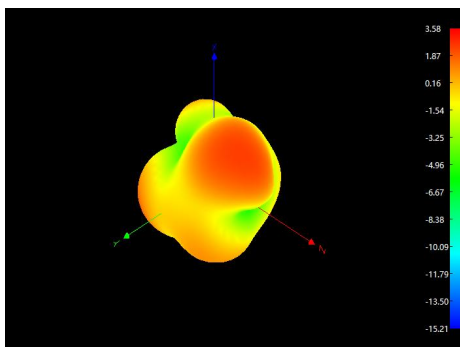
Theta 90 2D



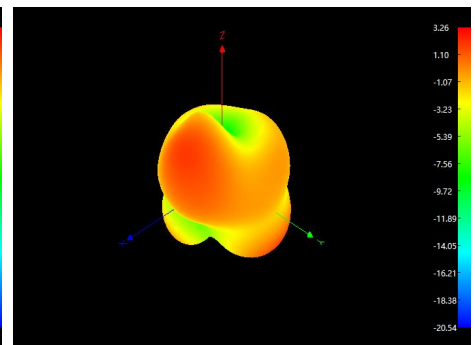
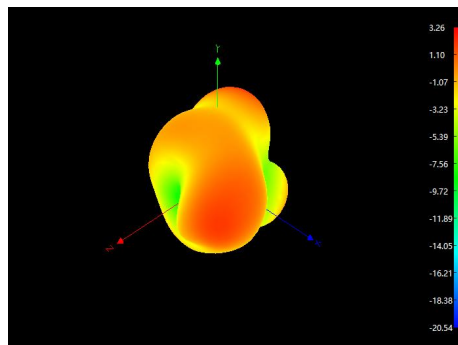
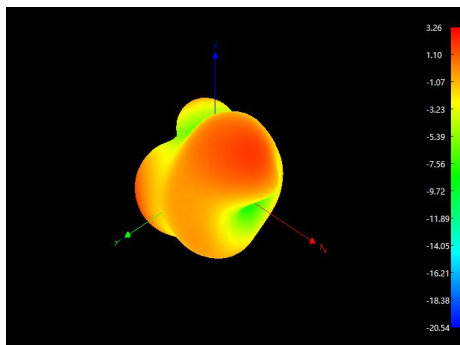
2400MHz:



2450MHz:



2500MHz:



Product Type		1.13 Wire		
Structure Drawing				
Structure Characteristics				
Structure	Item	Standard Value		
Inner Conductor	Material	Silver plated copper wire		
	(mm/Composition(No./mm))	7/0.08±0.005		
	Nom.Dia(mm)	Φ0.24±0.01		
Insulation	Material	FEP		
	Nom.Dia(mm)	Φ0.7±0.03		
Outer Conductor	Material	Tinned copper		
	From	Weaving		
	Shielding rate	≥90%		
	Nom.Dia(mm)	Φ0.92±0.03		
Jacket	Material	FEP		
	Nom.Dia(mm)	Φ1.13±0.05		
电气性能 Electrical Characteristics				
Item	Standard Value	Item	Frequency	Standard Value
Impedance (Ω)	50±3	Attenuation@20 ℃ (dB/100m)	1GHz	≤2.23
Capacitance(pF/m)	98		2GHz	≤3.15
Tensile strengthkgf/mm²	1.76		3GHz	≤3.96
VSWR	≤1.40@0-6GHz		4GHz	≤4.6
Dielectric Strength (A.C V/1min)	1000		5GHz	≤5.15
(MHz) Max.oper. frequency	6000		6GHz	≤5.7
Dependability				
Min.Bending Radius/Single		mm	4	
Min.Bending Radius/Repeated		mm	8	
Operating Temperature		℃	-20~+80	
Packing				
Packing Mode	1000 (m/disc)Reel			
Trips for Use				
Storage Environment	Temperature: below 30℃, humidity: 20-65%			
Teflon Shrink	Insulation shrinkage ≒0.2mm; Sheath shrinkage ≒0.3mm			
Processing temperature	Under the condition of 250℃~260℃, it can withstand for a short time; Thermal decomposition occurs above 300℃			
The best save cycle	After 2 months, the effect of tin becomes worse after 2 months, but the soon as possible after peeling in the high temperature and high humidity environment in summer			



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
Wire rod	Coaxial cable	SZXEC2202766604	SGS	22/08/18	ND	ND	ND	ND	ND	ND	PASS
Plastic parts	ABS	CANML2204785512	SGS	22/03/30	ND	ND	ND	ND	ND	ND	PASS
terminal	copper	CANEC2201952008	SGS	22/02/18	ND	5	ND	ND	ND	ND	PASS
	Gold coating	A2210394436101001	CTI	21/09/27	ND	ND	ND	ND	ND	ND	PASS
	Rubber core	A2220046361101002ER1	SGS	22/02/22	ND	ND	ND	ND	ND	ND	PASS
PCB	PCB	NGBML2105022604	SGS	21/11/04	ND	9	ND	ND	ND	ND	PASS
Eco-friendly tin wire	Eco-friendly tin wire	SZXEC2103042902	SGS	21/09/30	ND	34	ND	ND	ND	ND	PASS
Silicone ring	HTV	A2210542327210101C	CTI	22/01/21	ND	ND	ND	ND	ND	ND	PASS