



SHENZHEN YINGJIACHUANG ELECTRONIC TECHNOLOGY CO., LTD  
<http://www.szsyjc.com>

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# APPROVAL SHEET

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Antenna Type	2.4G metal built-in antenna
Model No.	YJC-6N000-B315
APPROVAL REV.	A0
DELIVERY DATE	May 11, 2023

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### 修订履历表:



## Antenna plan:



## Antenna technical parameters and environmental performance testing

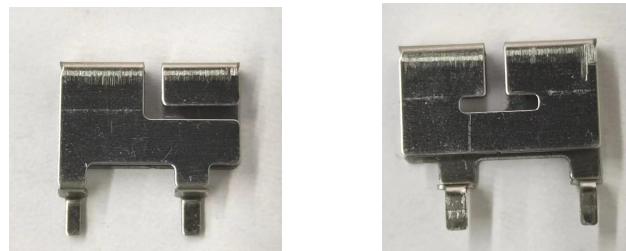
Electrical technical parameter			
Electrical Specifications		Mechanical Specifications	
Frequency Range	2400-2500MHz	Antenna material	Stainless steel
VSWR	<1.92	Working Temperature	-40°C ~ +85°C
Input Impedance	50 Ω	Working Humidity	20~80%
Direction	All		
Gain	2.5dBi		

## Environmental performance testing:

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 performance 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 machinery 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 machinery 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 performance is normal
Fall down test	1 m high altitude in accordance with the perpendicular axis free drop 3 times	Electrical and mechanical performance is normal



Actual picture of antenna:



Antenna performance test diagram:

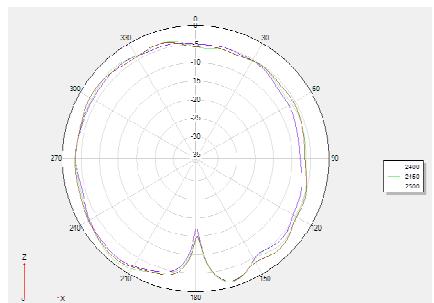




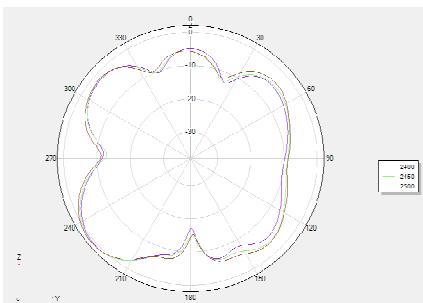
## 2D、3D 测试数据(2.4G):

Frequency	Efficiency (%)	Gain. (dBi)
2400MHz	45.19	1.47
2410MHz	47.21	1.67
2420MHz	48.98	2.12
2430MHz	46.88	1.63
2440MHz	47.1	1.6
2450MHz	47.42	1.48
2460MHz	50.35	1.96
2470MHz	46.56	1.39
2480MHz	48.53	1.86
2490MHz	46.77	1.54
2500MHz	46.88	1.49

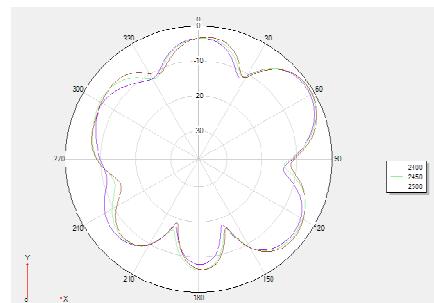
Phi 0 2D 图:



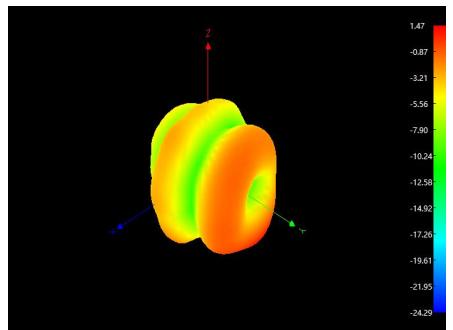
Phi 90 2D 图



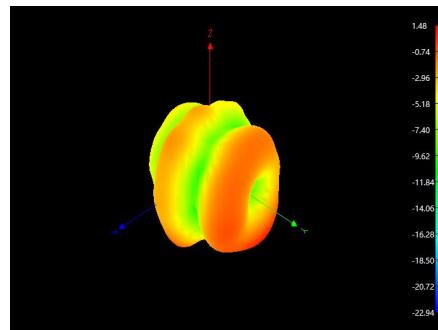
Theta 90 2D 图



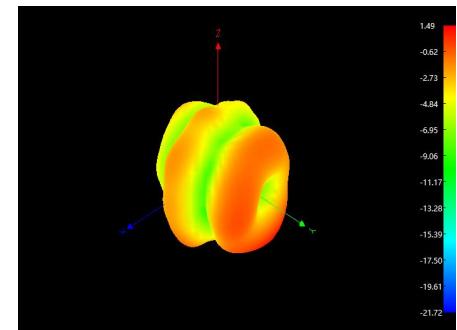
3D 2400:



3D 2450:



3D 2500:





Material RoHS conformity declaration form

We hereby certify that the raw materials used and the additives in the production engineering of the products to your company are conformed to the RoHS environmental requirements. (RoHS directive 2011/65 / EU)

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

Component /Part Name	Material Composition	ICP report #	Test Org.	Test Date	Content of harmful substances (ppm)					PASS?
					Cd	Pb	Hg	Cr <sup>6+</sup>	PBB	
201 Stainless steel	SUS201	SHAEC2206697003	SGS	22/06/17	ND	ND	ND	ND	ND	PASS