



Shenzhen Yingjia Chuang electronic technology Co., LTD

<http://www.szsyjc.com>

# APPROVAL SHEET

## acknowledgement

CUSTOMER NAME 客户名称		
CUSTOMER P/N 客户料号		
PART NAME 品 名	2.4G onboard antenna (Model: PR4000)	
P/ N 料 号		
APPROVAL REV. 版 次	A0	
DELIVERY DATE 送样日期	August 12th, 2024	
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APPROVED BY 核 准	Chauhan	
Customer Approved 客 户 承 认		
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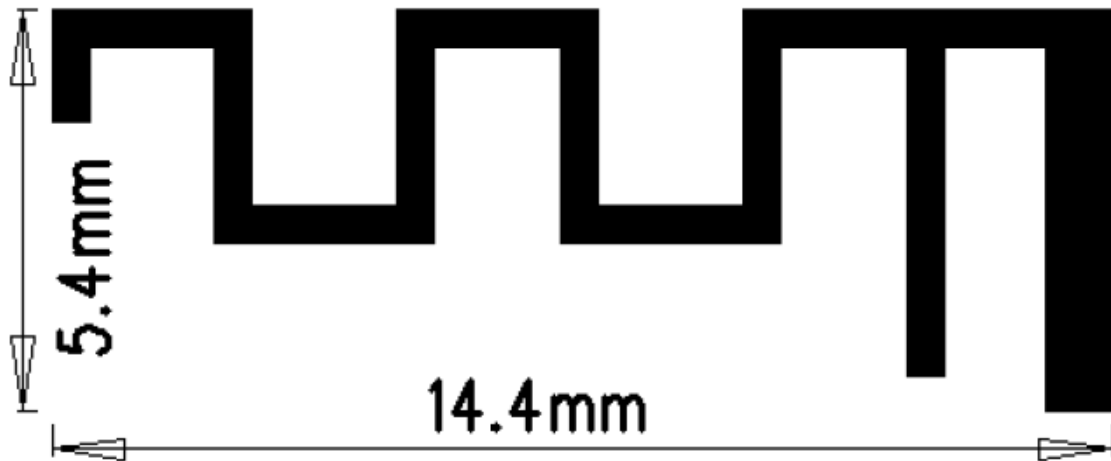
Revise your resume:

edition	Content of change and reasons for change	Day period	issue
A/0	Initial release	August 12th, 2024	



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Antenna plan:





Antenna technical parameters and environmental testing:

Electrical technical parameter			
Electrical signifier		Electrical Specifications	
Frequency range	2400-2500MHz	Frequency Range	2400-2500MHz
Voltage standing wave ratio	<1.92	VSWR	<1.92
Input impedance	50 $\Omega$	Input Impedance	50 $\Omega$
direction	全向	Direction	All
gain	1.88	Gain	1.88
Mechanical index		Mechanical Specifications	
Interface form	OPEN	Input connector	OPEN
Operating temperature	-20℃~+70℃	Working Temperature	-20℃~+70℃
Working humidity	20%~80%	Working Humidity	20%~80%

Environmental performance test:

item	Test condition	specification
Storage environment	The temperature, humidity, and air pressure are tested as follows: 1. The temperature ranges from -20 ° C to +70 ° C 2. Relative humidity is 45%-85% 3. Air pressure is 86kpa-106kpa	Electrical and mechanical properties are normal

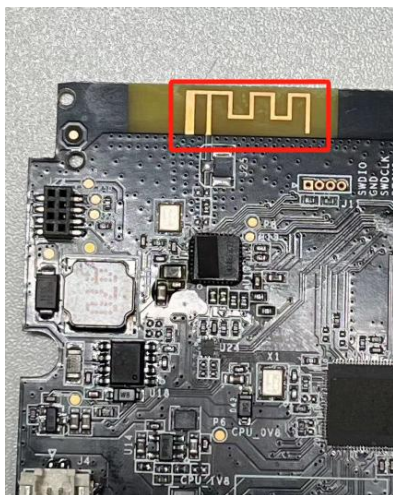


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High and low temperature test	The appearance quality is checked after 5 cycles between 70 ° C and -20 ° C, and then 1-2H under normal conditions.	Dimensions shall meet the requirements and shall be satisfied with mechanical and electrical properties
Resistance to constant damp heat test	The relative humidity was 95±3%, and the test temperature was 40°C. After 2H treatment, the electrical properties were measured within 5min after the samples were taken out, and the appearance quality of the samples was checked under normal conditions for 1-2H	Dimensions shall meet the requirements and shall be satisfied with mechanical and electrical properties
Vibration test	Vibration frequency range 10-55HZ, displacement amplitude: 0.35MM, acceleration amplitude: 50.0M/S, frequency sweep cycle: 30 times	Electrical and mechanical properties are normal
Drop test	Free fall 3 times at 1M altitude in the direction of perpendicular axes	Electrical and mechanical properties are normal

Antenna diagram:



Antenna performance test diagram:

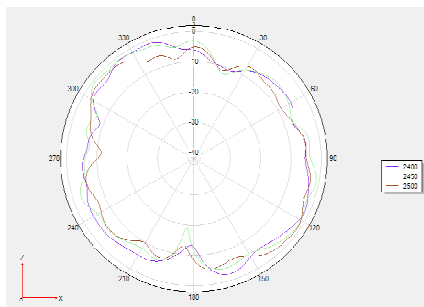




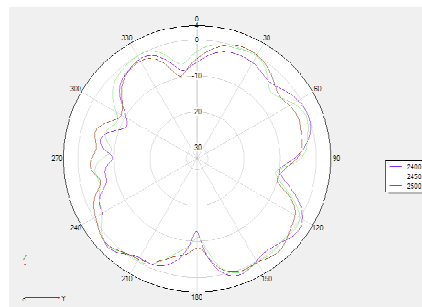
## 2D.3D Test data (2.4G) :

Frequency	Efficiency (%)	Gain. (dBi)
2400MHz	52.36	1.88
2410MHz	55.08	1.65
2420MHz	54.33	1.75
2430MHz	47.75	1.73
2440MHz	49.89	1.59
2450MHz	48.31	1.62
2460MHz	50.12	1.69
2470MHz	48.35	1.47
2480MHz	47.27	1.55
2490MHz	45.36	1.41
2500MHz	46.88	1.65

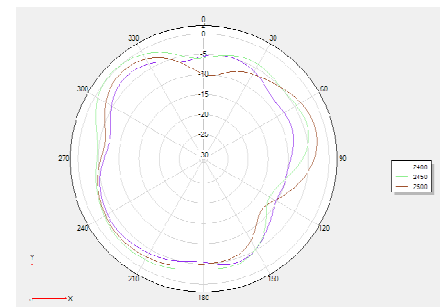
Phi 0 2D figure:



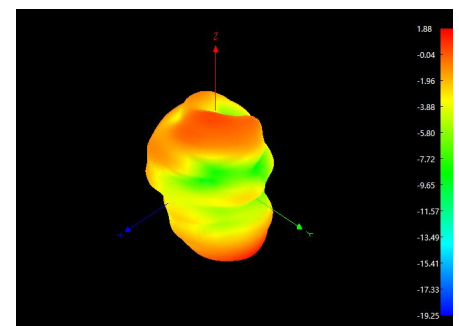
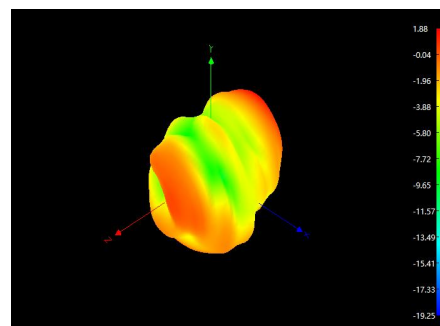
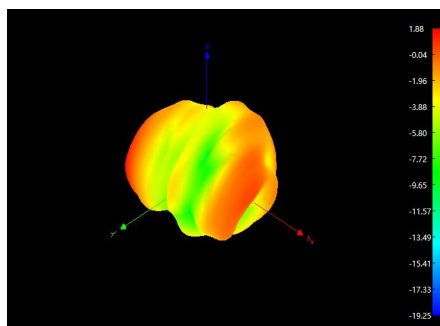
Phi 90 2D figure



Theta 90 2D figure

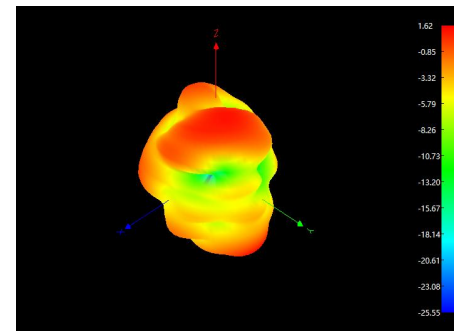
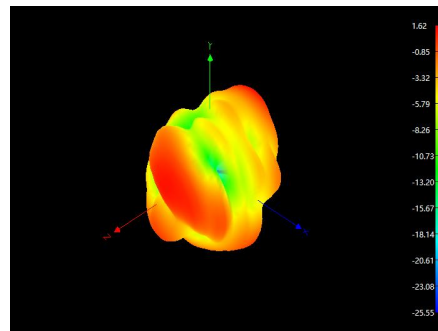
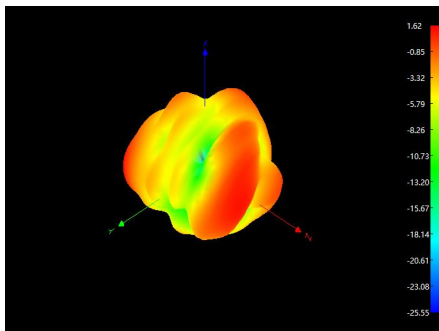


## 3D 2400:





3D 2450:



3D 2500

