



Shenzhen Yingjiachuang Electronic Technology Co., LTD

<http://www.szsyjc.com>

# APPROVAL SHEET

CUSTOMER NAME		
CUSTOMER P/N		
PART NAME	2.4G/5.8GHz metal antenna	
P/ N	YJC-6N000-B590	
APPROVAL REV.	V1.1	
DELIVERY DATE	December 10, 2024	
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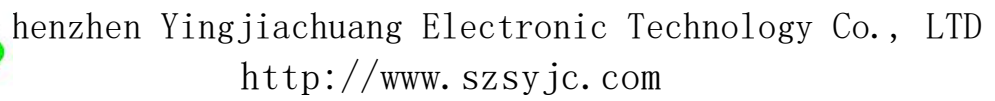
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Revise the resume:

Version	Change content and reasons for the change	Date	Issue
V1.0	First edition release	December 10, 2024	
V1.1	Add limit feet	December 13, 2024	

[illegible]



## Antenna technical parameters and environmental testing:

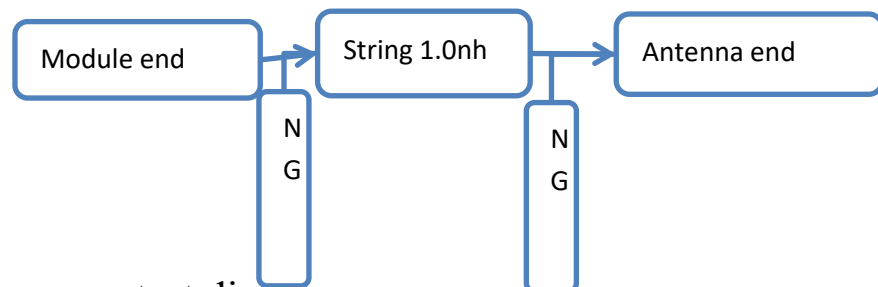
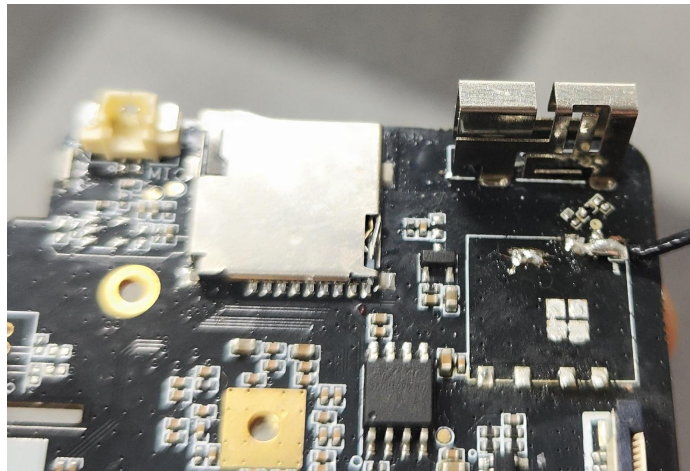
Electrical technical parameter			
Electrical Specifications		Mechanical Specifications	
Frequency Range	2400-2500MHz/5150-5850M Hz	Antenna material	Stainless steel
VSWR	<2.0	Input connector	OPEN
Input Impedance	50 $\Omega$	Working Temperature	-40℃~+85℃
Direction	All	Working Humidity	20~80%
Gain	3.76dBi		

## Environmental performance test:

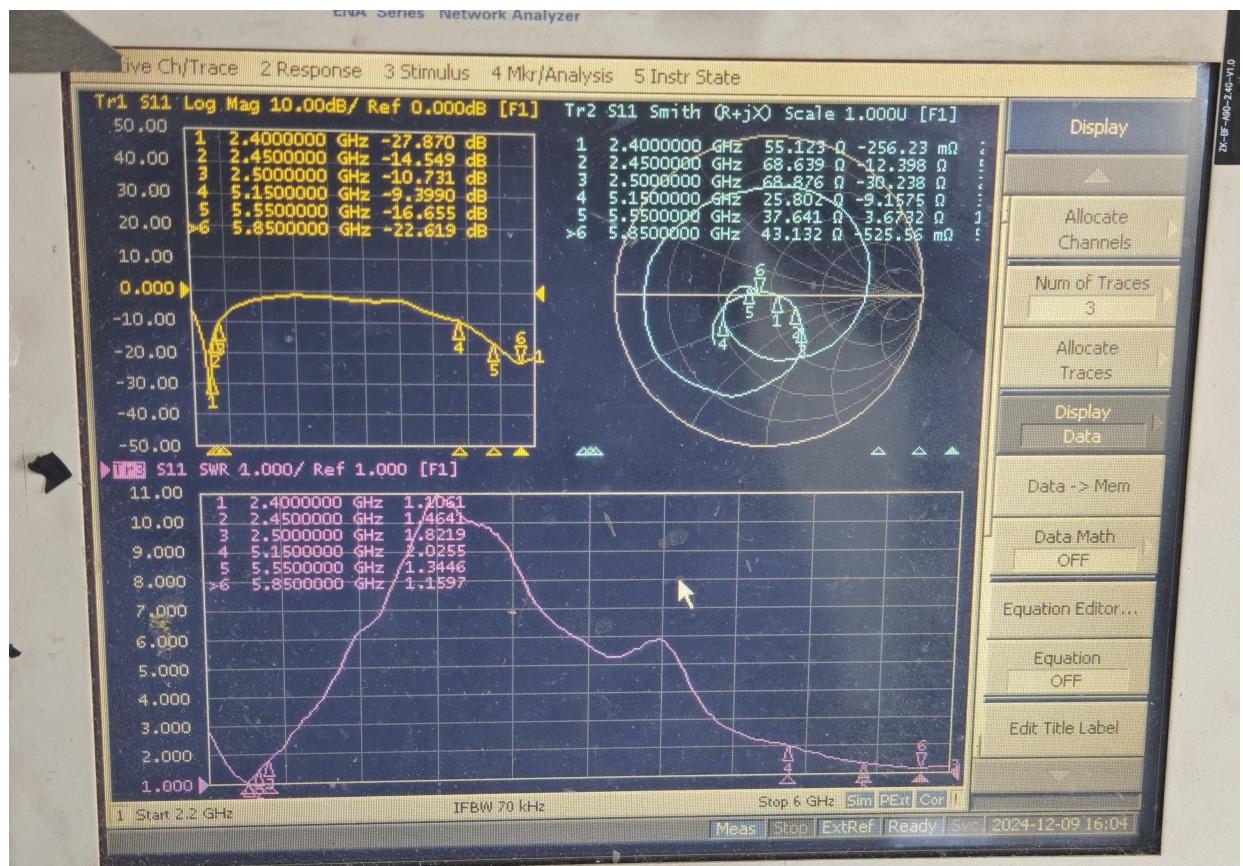
Project	Test condition	Standard
Storage Conditions	In the absence of specified test temperature, humidity, air pressure is as follows:: 1. Temperature is - 30 ℃ ~ + 80 ℃ 2. Relative humidity of 45% to 45% 3. Air pressure is 86 kpa to 106 kpa	Electrical and mechanical performace is normal
High and low 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 mechnery 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 mechnery 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



Physical antenna picture and attachment position picture:



Antenna performance test diagram:





OTA active test data statistics:

Item	Measurement	Band	Channel	Frequency	Total
1	TRP	WIFI_B (11M)	1	2412	21.96
2	TRP	WIFI_B (11M)	6	2437	21.77
3	TRP	WIFI_B (11M)	11	2462	21.06
4	TIS(EIRP)	WIFI_B (11M)	1	2412	-80.57
5	TIS(EIRP)	WIFI_B (11M)	6	2437	-80.11
6	TIS(EIRP)	WIFI_B (11M)	11	2462	-80.23
7	TRP	WIFI_A (6M)	36	5180	20.30
8	TRP	WIFI_A (6M)	100	5500	21.04
9	TRP	WIFI_A (6M)	165	5825	21.61
10	TIS(EIRP)	WIFI_A (54M)	36	5180	-69.68
11	TIS(EIRP)	WIFI_A (54M)	100	5500	-71.28
12	TIS(EIRP)	WIFI_A (54M)	165	5825	-70.43





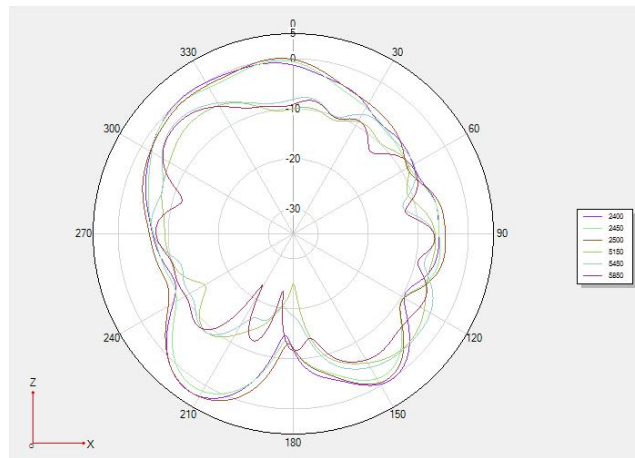
## 2D and 3D test data:

Frequency	Efficiency (%)	Gain. (dBi)
2400MHz	48.21	3.76
2410MHz	53.10	3.40
2420MHz	53.24	3.50
2430MHz	51.09	3.76
2440MHz	50.95	3.16
2450MHz	48.75	3.11
2460MHz	48.48	3.37
2470MHz	46.10	3.60
2480MHz	47.81	3.58
2490MHz	47.02	3.57
2500MHz	47.94	3.54
5150MHz	35.73	-0.11
5250MHz	37.24	0.05
5350MHz	39.99	0.74
5450MHz	39.63	1.23
5550MHz	38.19	2.13
5650MHz	36.81	2.25
5750MHz	36.73	2.66
5850MHz	34.83	3.18

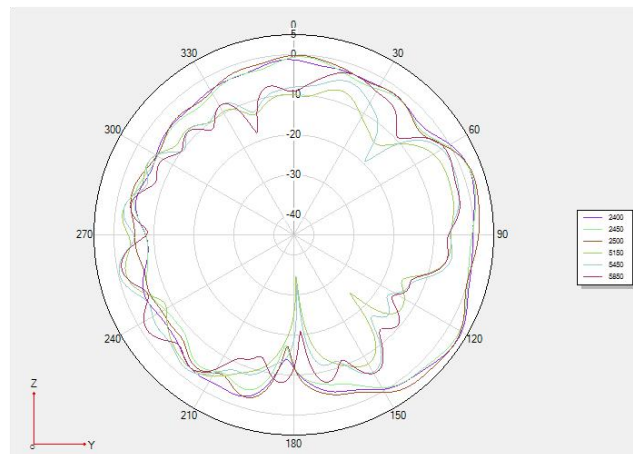




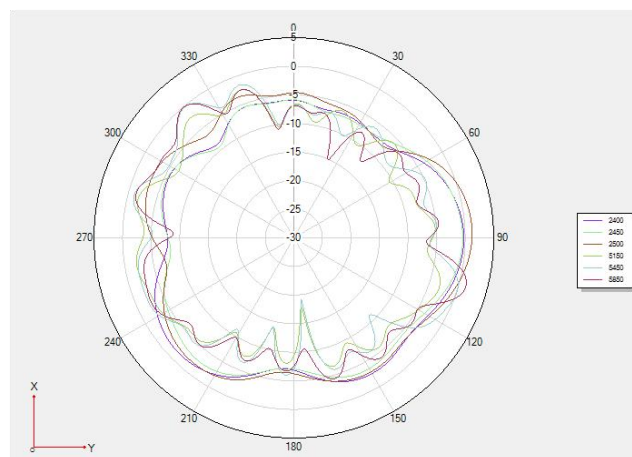
Phi 0 2D:



Phi 90 2D:



Theta 90 2D:



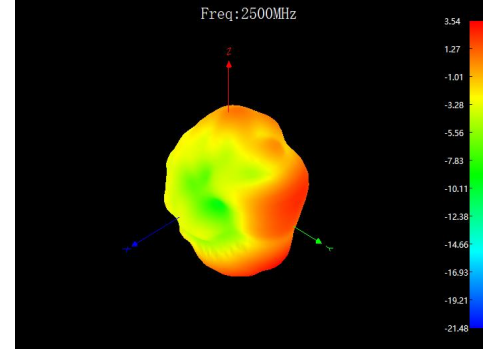
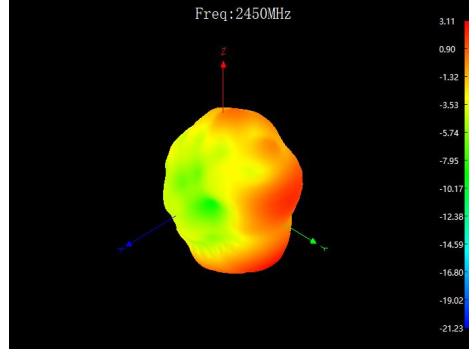
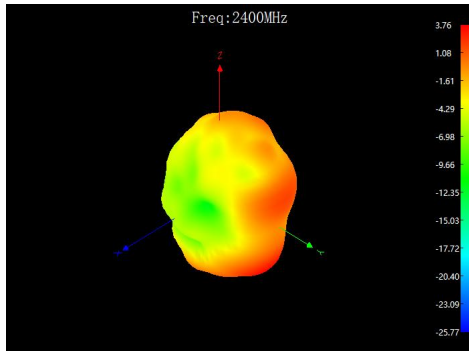
3D test diagram



(3D 2400MHz):

(3D 2450MHz):

(3D 2500MHz):



(3D 5150MHz):

(3D 5450MHz):

(3D 5850MHz):

