

# Chin Sun Technology Co.

QIN XIN technology CO.,LTD

## Antenna Recognition Letter

<b>Customer Name</b>	<b>First class presentation</b>	<b>Project band</b>	WiFi Antenna
<b>Project Name</b>	5002	<b>Date of Formulation</b>	2022/04/07

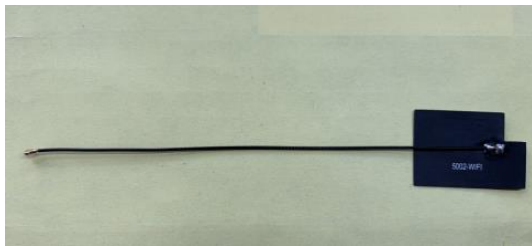
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# I . Antenna characteristics description

## 1.1 Schematic diagram of antenna



## 1.2 Description of physical properties

Function	2.4G WiFi antenna
Antenna External Dimensions	29*19.3
Antenna Material	FPC
Antenna Color	Black
Operating temperature	-20°C-65°C
Storage temperature	-20°C-80°C

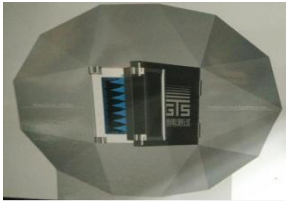

## 1.3 Description of electrical characteristics

Function	2.4G WiFi antenna
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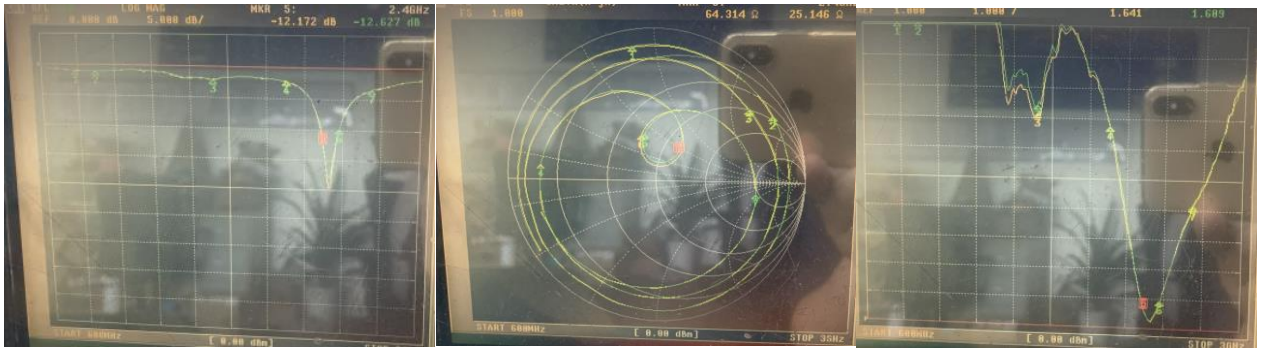
Frequency range (GHZ)	2.4GHz-2.5GHz
Voltage Standing Wave Ratio (VSWR)	$\leq 1.5$
Gain (Peak gain)	3dBi
Input Impedance( $\Omega$ )	50
Polarization method	Vertical, Linear
Antenna Form	PIFA

## II. Antenna test

### 2.1 Test Equipment

Serial number	Equipment name	Equipment pictures	Measurement indicators	Operating Environment
1	Microwave Darkroom		<b>Passive Performance</b>	No large metal objects around Normal temperature and humidity
2	<b>HP8753D</b> Network Analyzer			

### 2.2 Test results



Return loss VSWR Smith chart

### 2.3 Antenna efficiency:

Freq (MHz)	Effi (%)	Gain (dBi)
2400	64.08	2.65
2410	62.5	2.37
2420	59.49	2.13
2430	61.21	2.32
2440	63.66	2.53
2450	63.71	2.55
2460	63.03	2.44

2470	60	2
2480	61.82	2.17
2490	67.22	2.72
2500	67.01	3

## 2.4 Matching circuit

Element	Value
E1	No change
E2	No change
E3	No change

**Note:** The matching circuit is provided by the customer, and our company is responsible for debugging.

## III. Summary

This antenna is designed based on relevant standards and meets the electrical and structural performance standards, please confirm.

