

深圳市安威无线科技有限公司

承认书

APPROVAL SHEET

客户 Customer	维拍	规格型号 Specs	BW4-A
安威料号 Part Number	AW006-BW4-A-021-A0	频 段 Frequency Band	2.4G-WIFI
颜 色 Color	黑色	版 本 Edition	REV:A0
销 售 Salesperson	黄河	设 计 Design	黄河
结 构 Structure	覃云林	确 认 Confirm	
日 期 Date	2022.12.16	签字日期 Signing Date	

客户确认 Customer confirmation:

携手共进 共创未来

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1. Product specifications

The report mainly provides the parameter test of BW4 antenna performance.
The BW4 antenna is a WIFI antenna. (As shown in Figure 1 below)

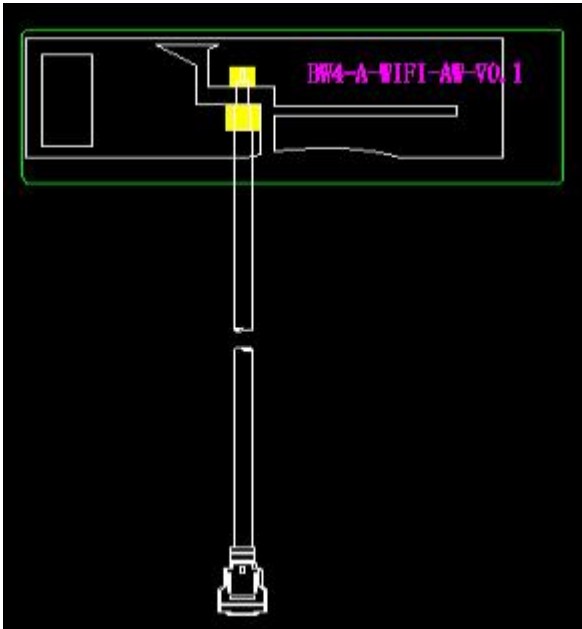


Figure 1 BW4 antenna

2. Electrical performance

1. Specifications and standards

The BW4 antenna operates at 2450mhz and resonates in this frequency band.

2. Antenna matching circuit

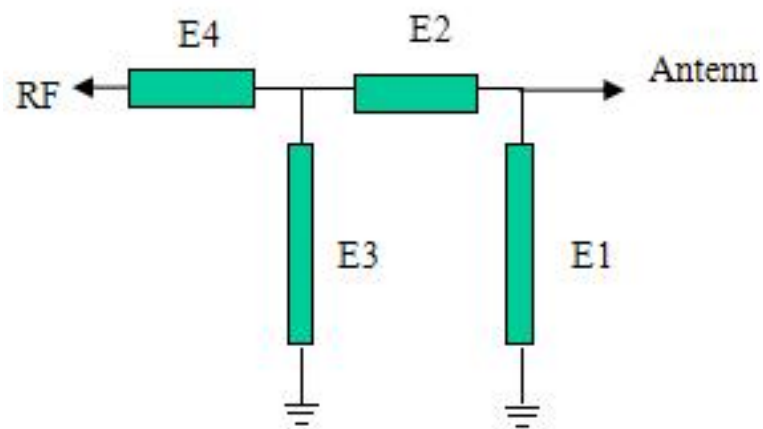
Antenna structure: FPC+ coaxial line

匹配电路（Matching circuit）

	主天线 Main Antenna	BGW	DRX	GPS
Element	Value	Value	Value	Value
E1（0201）				
E2（0201）				
E3（0201）				

E4 (0201)				
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(匹配值的精度建议采用高些的)



RF1	N/A	N/A
RF2	N/A	N/A
RF3	N/A	N/A
RF4	N/A	N/A

3. Parameter testing

1. Test Settings

The VSWR test device is connected in sequence as follows:



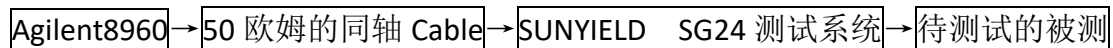
Treatment of test fixtures:
From the antenna 50 ohm test point on the PCB of the phone, a hard cable is used to lead out the SMA-J connector, which is connected to the copper tube with the choke, and then connected to the other devices in turn.

2. Test results

一切正常。

4. Setup of active test

The active test device is connected in sequence as follows:



1. Test site

AW microwave darkroom: The test frequency range is 400MHz - 6GHz, the static zone range is 40cm circle, and the reflectivity is less than -90 dB.

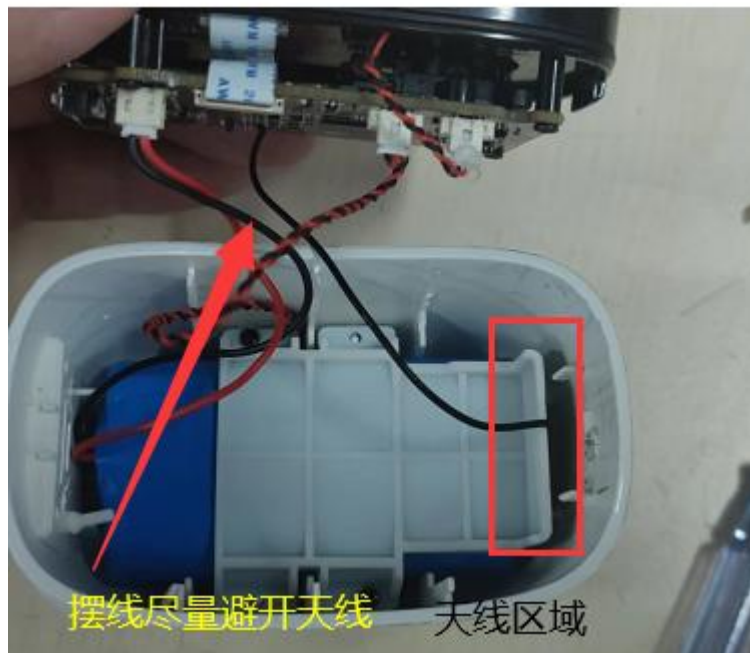
2. Test results.

The following is the test result of WIFI antenna of BW4 project:

Gain&Efficiency 增益和效率			
frequency 频率 (MHz)	gain 增益 (dBi)	mingain 最小增益 (dBi)	efficiency 效率 (%)
2400	3.53	-16.8	61.41
2410	3.58	-17.65	59.23
2420	3.22	-19.52	58.47
2430	3.37	-20.93	58.92
2440	3.55	-24.45	57.07
2450	3.48	-29.42	59.26
2460	3.09	-21.96	57.24
2470	3.45	-18.65	58.13
2480	3.49	-16.51	58.88
2490	3.41	-14.96	58.08
2500	3.35	-14.4	55.72

	Channel	TRP (dBm)	TIS (dBm)
WIFI-B	L	17.84	-83.45
	M	17.19	-83.36
	H	17.09	-83.09
WIFI-G	L	17.02	-70.23
	M	16.55	-69.96
	H	16.78	-69.82
WIFI-N	L	17.64	-66.42
	M	16.97	-66.26
	H	16.15	-65.37

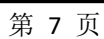
3. Environmental treatment & installation method



5. Suggestions and Conclusions.

This report is based on the antenna electrical performance measured by the terminal provided by the customer, please check it carefully.

6. Structural drawings



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