



SPECIFICATION

ShenZhen TianDa Communication CO., LTD

B0110 antenna

Product Recognition Letter

Customer	WUUK	Frequency band	2400-2500MHz
Project name	B0110	Version	A
Project item number	BX-B1-10-WI-A 02.06.0024	Color	natural colour
R F design	Xinchuang Wang	Structure Design	Luhong Zhou
Date	2023.06.28		

Customer confirmation:

Does the assembly meet your company's requirements: OK NG

ShenZhen TianDa Communication CO., LTD.

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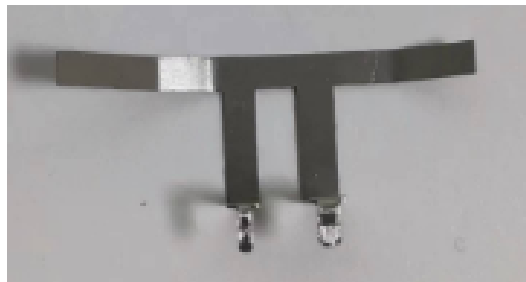
Catalogue

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1、WIFI antenna

1. Specifications

This admission letter mainly provides the test status of the electrical and structural performance parameters of the WIFI antenna in the B0110 project. Below is a picture of the WIFI antenna.

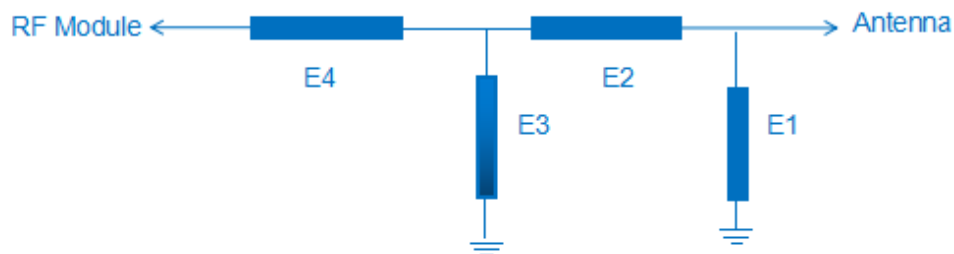


1.1、Electrical specifications

1.1.1. Electrical performance index The antenna working frequency band of the project is 2400-2500 MHz, and below are the electrical performance indicators of the antenna design and trial production.

WIFI		
frequency range	frequency (MHz)	VSWR
WIFI	2400~2500	≤2.0

1.1.2、Matching circuit diagrams

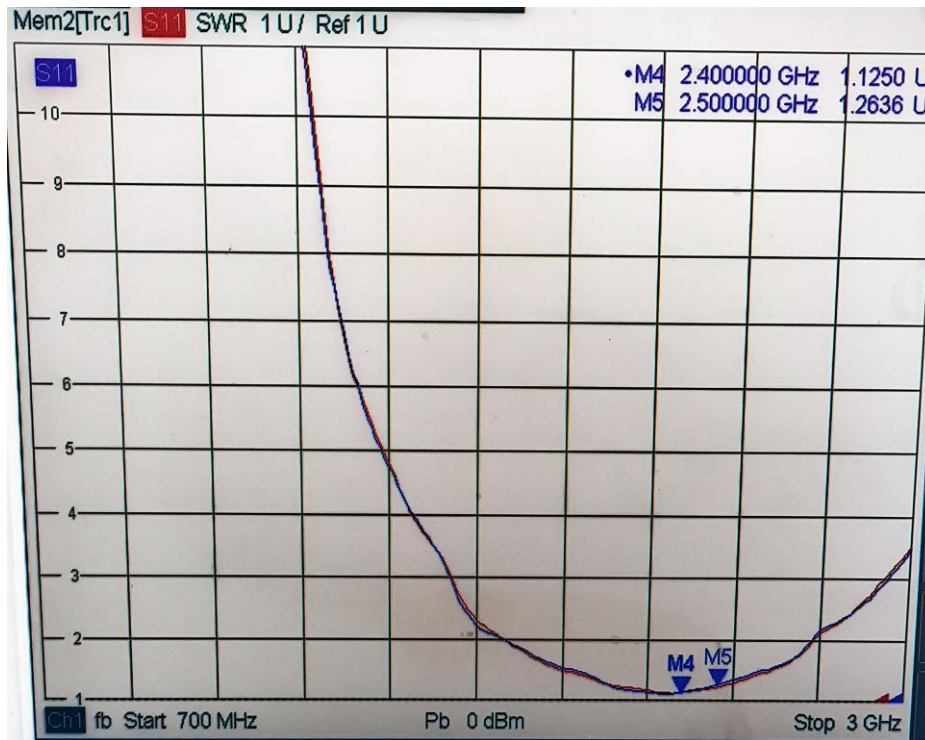


The matching circuit of WIFI antenna is 0.5 pF capacitor in parallel from the antenna end, and 3.9 nH inductance in series。

1.2. Test

1.2.1. Passive test

1.2.1.1. Antenna standing wave test (VSWR)

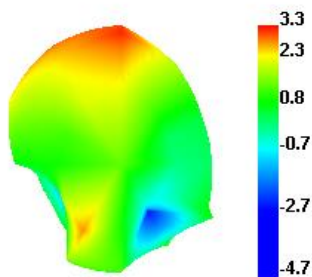


1.2.1.2. Antenna gain, and efficiency

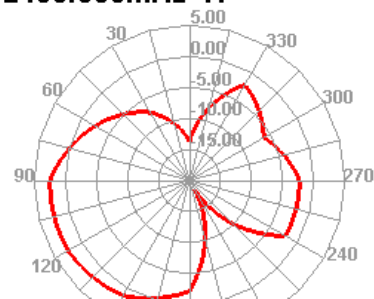
Passive Test For 2400-2500									
Freq (MHz)	Effi (%)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	AttH (dB)	AttV (dB)
2400	63.06	3.26	1.11	32.17	30.885	3.26	-18.27	49.56	50.15
2410	64.38	3.39	1.24	32.833	31.543	3.39	-19.05	49.79	50.51
2420	61.66	3.13	1.08	31.462	30.197	3.13	-19.52	49.81	50.44
2430	62.19	3.2	1.05	32.121	30.064	3.2	-21.84	49.9	50.67
2440	61.13	3.37	1.22	31.779	29.35	3.37	-22.49	50.01	50.88
2450	63.89	3.44	1.29	33.584	30.307	3.44	-20.9	50.17	50.97
2460	64.48	3.34	1.19	33.145	31.337	3.34	-18.37	50.3	51.18
2470	64.09	3.3	1.15	33.118	30.973	3.3	-17.25	50.29	51.14
2480	64.5	3.52	1.37	34.439	30.058	3.52	-15.62	50.15	50.99
2490	62.33	3.41	1.26	33.295	29.039	3.41	-14.29	50.02	50.92
2500	62.05	3.37	1.22	33.256	28.79	3.37	-12.69	50.06	50.9

1.2.1.3. antenna pattern

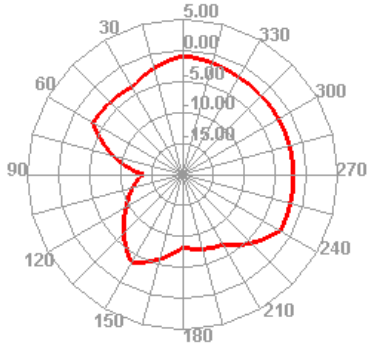
2400.000MHz



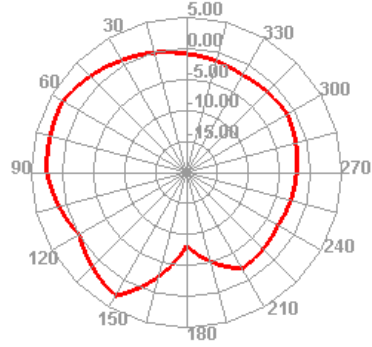
2400.000MHz H



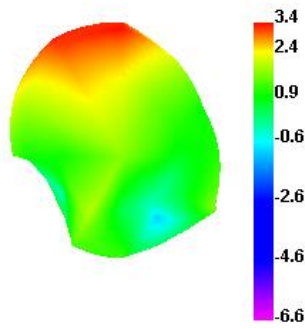
2400.000MHz E1



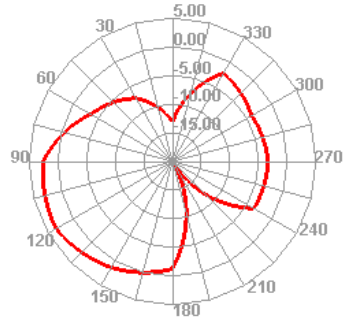
2400.000MHz E2



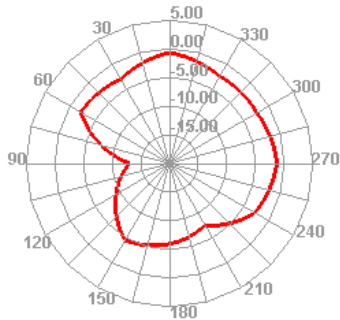
2450.000MHz



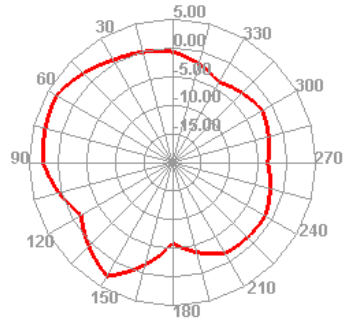
2450.000MHz H



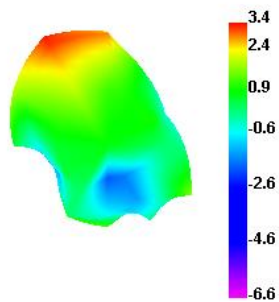
2450.000MHz E1



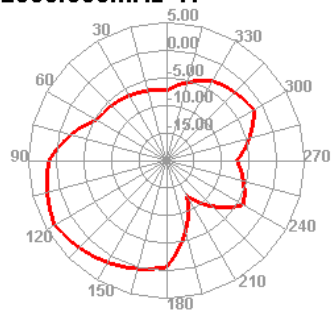
2450.000MHz E2

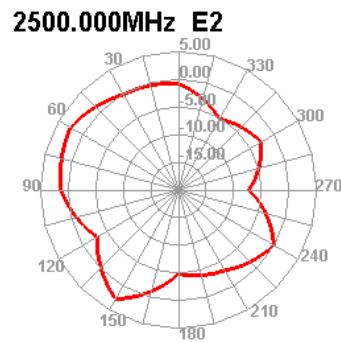
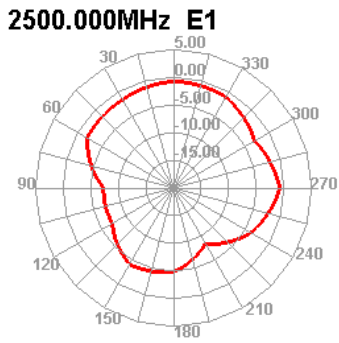


2500.000MHz



2500.000MHz H





1.2.2、Active test data of the whole machine

b模式 (11M)	暗室 ■ 三角锥 □ 屏蔽箱 □		
Band	2.4G		
Channel	1	6	13
TRP	18.6	18.1	17.3
TIS	-85.9	-87.1	-87.5

Above is the WIFI active test antenna data of the whole machine.

2、Structural specifications

2.1. Composition of the antenna The WIFI antenna is mainly composed of foreign white copper.

2.2、engineering drawing

展开图

备注：

- 打“*”的为重点尺寸。
- 弹片材料：洋白铜，厚0.3mm。
- 需锡焊，表面不能有油污和氧化。
- 各零件中Pb、Hg、Cr+6、PBBs、PBDEs各项小于500PPM，Cd小于50PPM。

TND		深圳市天达通信有限公司 Shenzhen Tiande Communication Co., Ltd	
Project	B0110	Date	
Part Name	WIFI弹片	Designed by	
Part No.	WK-B1-10-WI-A	Checked by	
Material	洋白铜	Approved by	
Unit	mm	Scale	1:1