

SPECIFICATION

Shenzhen Tianda Communication Co., Ltd

ShenZhen TianDa Communication CO., LTD

Y0910 antenna Product Acknowledgement

Customers	WUUK	Frequency band	2400-2500MHz
Project name	Y0910	Version	A
Project part number	WK-Y9-10-WI-A 02.06.0030	Color	/
R F design	Huang Zhilin	Structural design	Zhou Luhong
Day	2023.07.31		

Customer acknowledges:

Whether the assembly meets your requirements: OK NG

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1. WIFI antenna

1. Specifications

The acknowledgment mainly provides the test status of the electrical and structural performance parameters of the WIFI antenna of the Y0910 project. The picture below is a picture of Investec's design of the WIFI antenna.



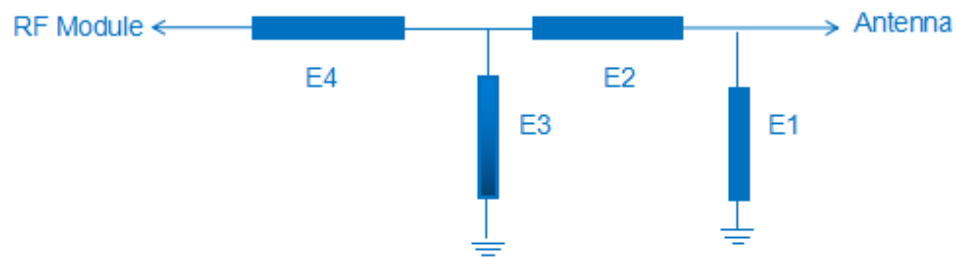
1.1、 Electrical specifications

1.1.1. Electrical performance indicators

The working frequency band of the antenna of the project is 2400-2500MHz, and the following are the electrical performance indicators of the antenna designed and trial-produced by Investec.

WIFI		
Band	Frequency (MHz).	VSWR
WIFI	2400~2500	≤ 2.0

1.1.2. Matching circuit diagram



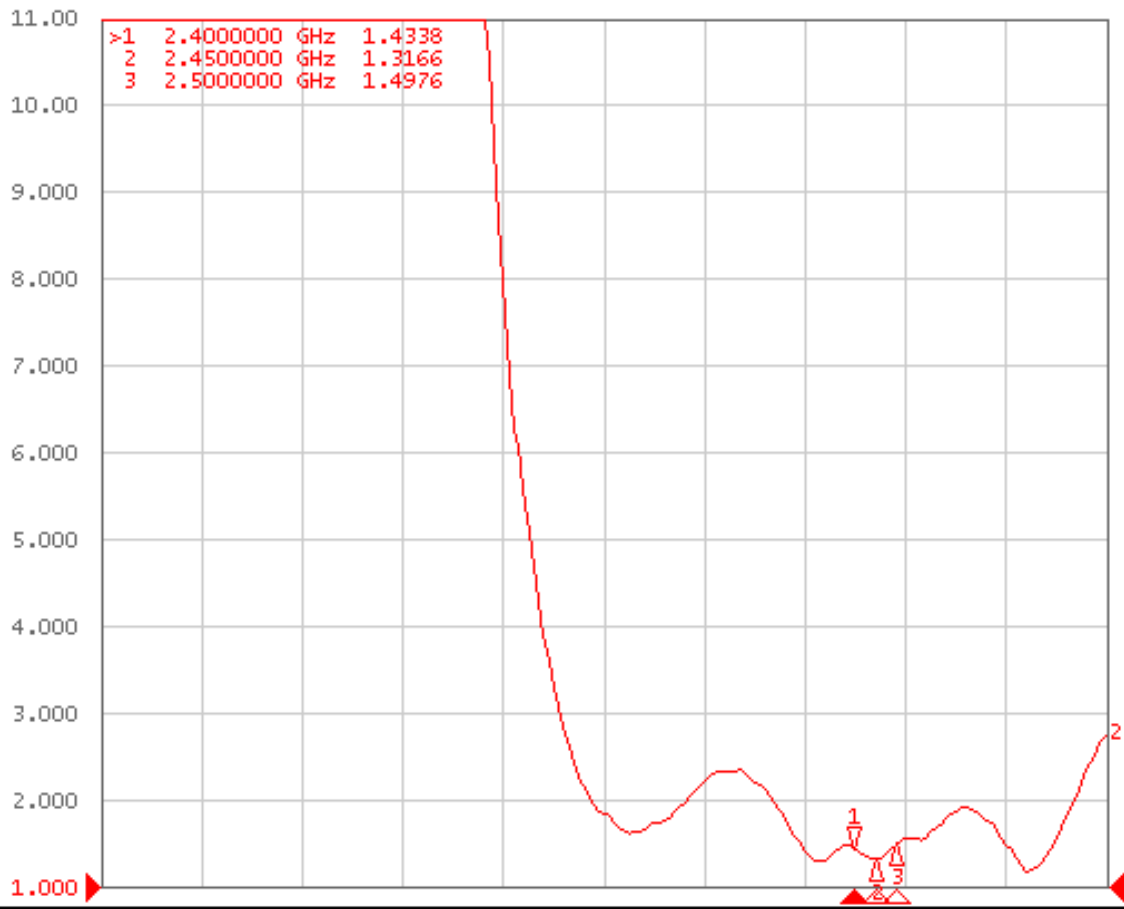
The matching circuit of the WIFI antenna is a parallel 5.6nH inductor and a series 0.75pF capacitor from the antenna end.

1.2、 Test

1.2.1、 Passive test

1.2.1.1, Antenna standing wave test (VSWR).

▶ Tr2 S11 SWR 1.000/ Ref 1.000 [F1]



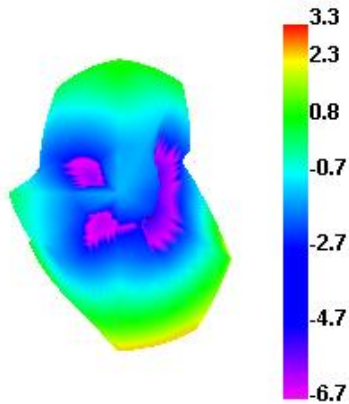
1.2.1.2, antenna gain, efficiency

Passive Test For WiFi Antenna(2.4G)			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	51.18	-2.91	3.27
2410	51.47	-2.88	3.1
2420	54.53	-2.63	3.14
2430	51.32	-2.9	2.93
2440	58.54	-2.33	3.2
2450	59.72	-2.24	3.45
2460	60.62	-2.17	3.29
2470	64.18	-1.93	3.34
2480	61.06	-2.14	3.24
2490	66.84	-1.75	3.09
2500	64.32	-1.92	3.04

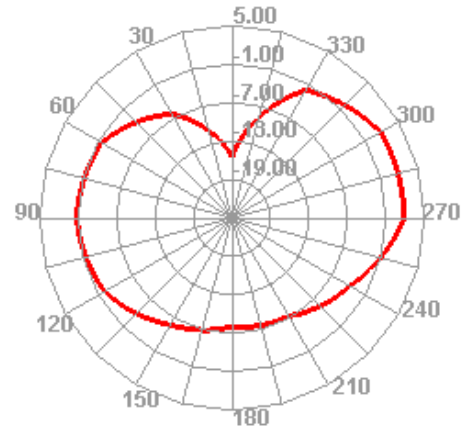
1.2.1.3. Antenna pattern

Radiation Pattern For WiFi Antenna(2400MHz)

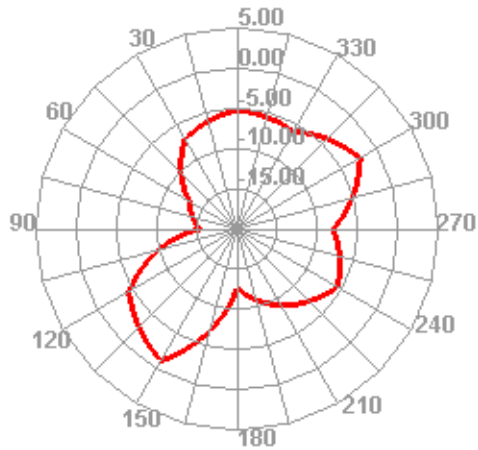
2400.000MHz



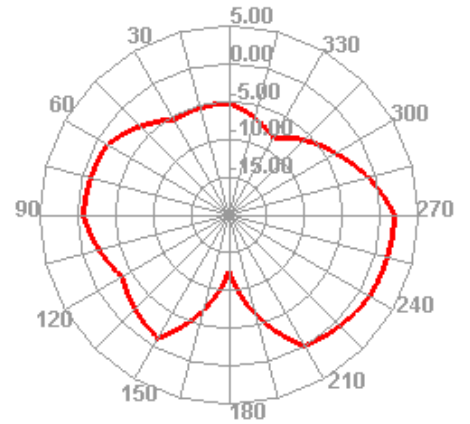
2400.000MHz H



2400.000MHz E1

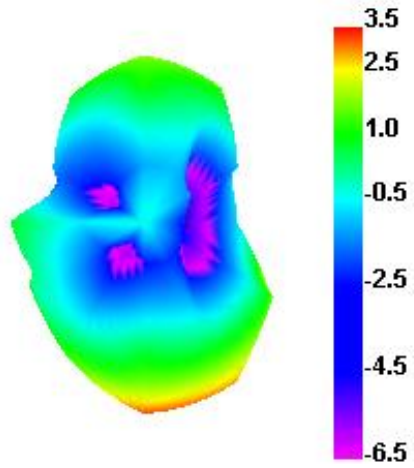


2400.000MHz E2

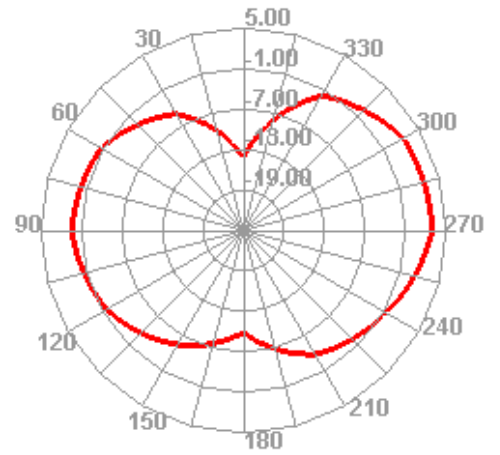


Radiation Pattern For WiFi Antenna(2450MHz)

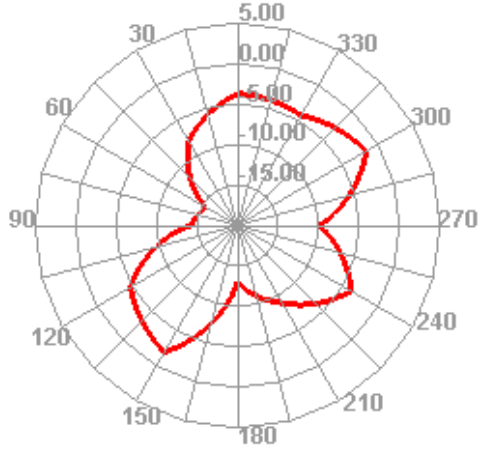
2450.000MHz



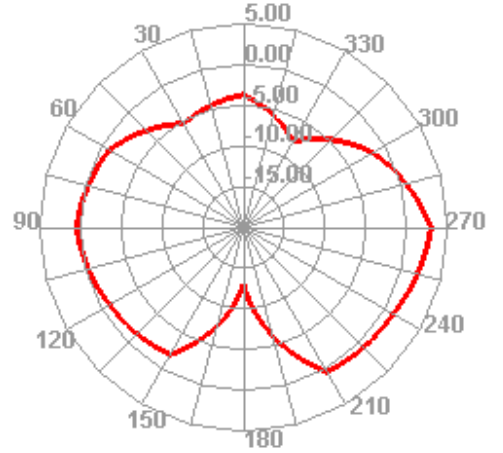
2450.000MHz H



2450.000MHz E1

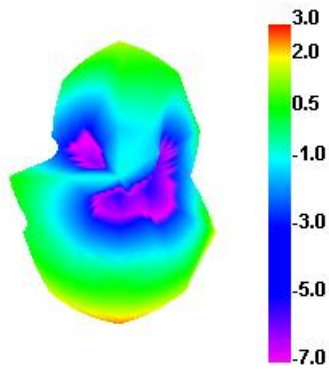


2450.000MHz E2

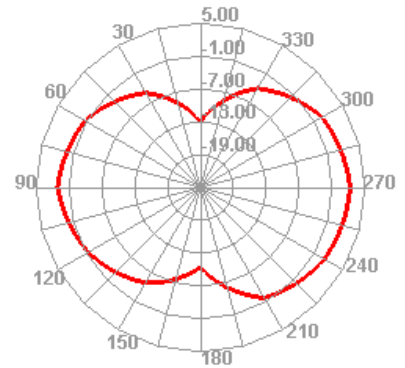


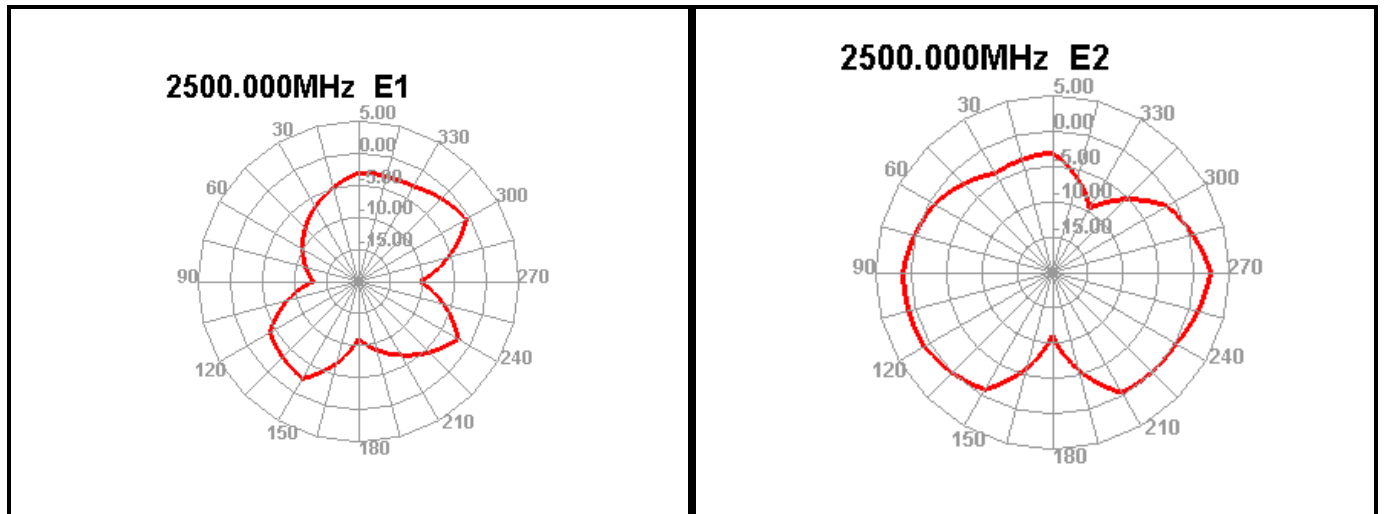
Radiation Pattern For WiFi Antenna (2500MHz)

2500.000MHz



2500.000MHz H





1.2.2、 The whole machine has active test data

b模式 (11M)	暗室 ■ 三角锥 □ 屏蔽箱 □		
Band	2.4G		
Channel	1	6	13
TRP	16.16	16.14	16.46
TIS	-85.39	-86.77	-84.55

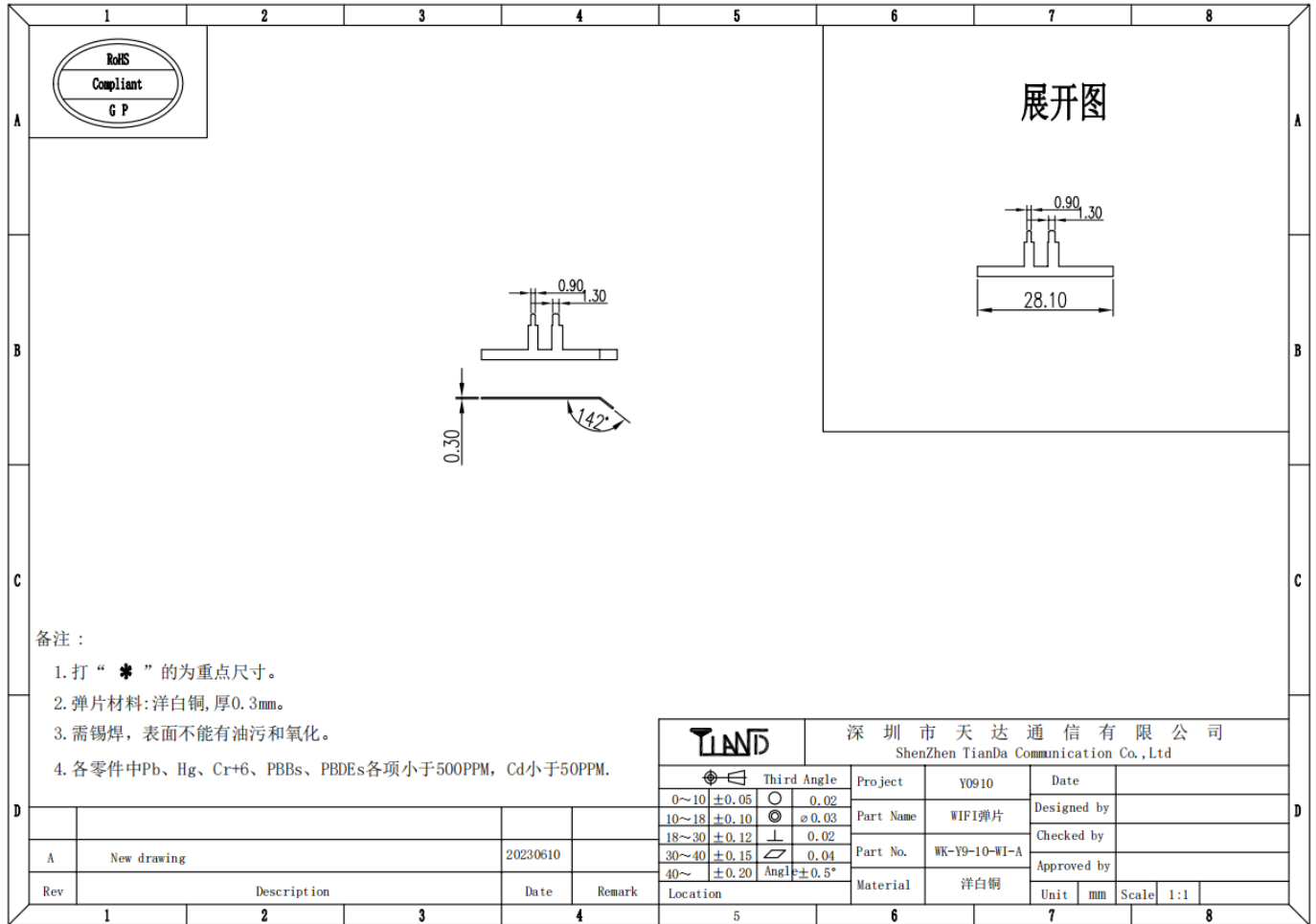
Above is the active test data of the WIFI antenna of the whole machine.

2. Structural specifications

2.1. Antenna composition

WIFI antennas are mainly composed of white copper.

2.2. Engineering drawings



III. Conclusion

This antenna is designed on the prototype currently provided by the customer, the electrical parameters and structural dimensions have met the technical requirements, please confirm!

4. Packaging

Packed in a plastic box.