SPECIFICATION

Shenzhen Tianda Communication Co., Ltd.

ShenZhen TianDa Communication CO., LTD

KB10 Antenna

Product Specifications

Client Costa		Frequency band	2400-2500MHz
Project Name	KB10 Version A		
Item Number	KS -KB-10-WF - A	Color	Natural
RF Design Wang		Structural Design: Zhou Luhong	
Xinchuang Date 2024.08.26			

Customer confirms:

Whether the assembly meets your company's requirements: ÿOK ÿNG

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1. **WIFI** Antenna

1. Specifications

This letter of acknowledgment mainly provides the test conditions of the electrical and structural performance parameters of the KB10 project WIFI antenna.

Picture of a WIFI antenna.

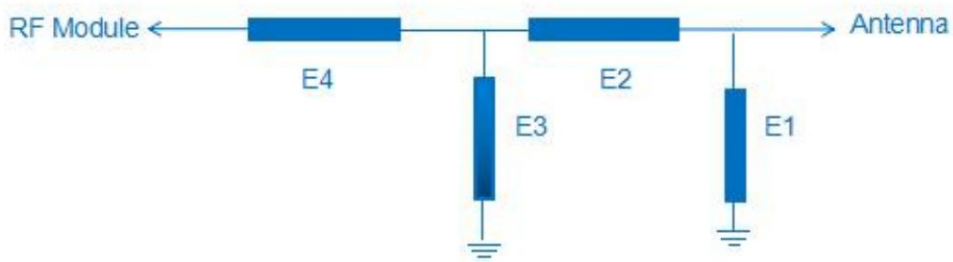
1.1 Electrical specifications

1.1.1 Electrical performance indicators

The antenna operating frequency band of this project is 2400-2500MHz. The following are the electrical performance indicators of the antenna designed and trial-produced by Tianda.

WIFI		
Frequency	Frequency (MHz)	VSWR
band 2.4G	2400~2500	ÿ2.0

1.1.2 Matching circuit diagram



WIFI ANTENNA	
Element	Value
E1ÿ0402ÿ	
E2ÿ0402ÿ	
E3ÿ0402ÿ	
E4ÿ0402ÿ	

The WIFI antenna matching circuit is the original matching circuit of the mainboard.

1.2 Testing

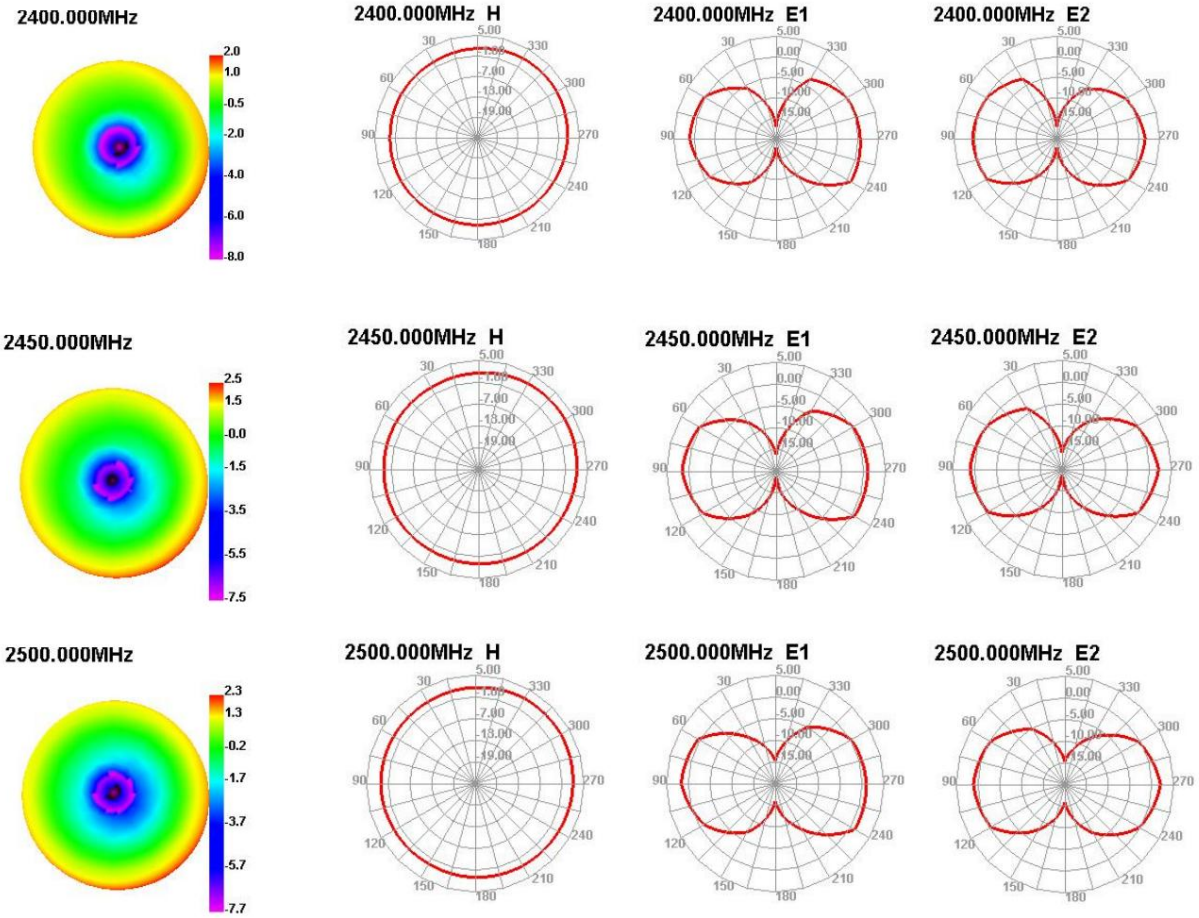
1.2.1 Passive test

1.2.1.1 Antenna Standing Wave Test (VSWR)

1.2.1.2 Antenna gain and efficiency

Passive Test For 2.4G-2.5G							
Freq (MHz)	Effi (%)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	AttH (dB)	AttV (dB)
2400	83.29	1.98	-0.17	42.793	40.497	46.87	46.81
2410	81.31	1.86	-0.29	42.054	39.256	47.08	47.17
2420	81.44	1.97	-0.18	42.533	38.906	47.06	47.12
2430	78.71	2	-0.15	41.652	37.061	47	47.09
2440	84.47	2.31	0.16	44.431	40.036	47.5	47.69
2450	86.42	2.48	0.33	44.881	41.543	47.48	47.63
2460	84.92	2.25	0.1	43.323	41.594	47.73	47.89
2470	88.16	2.28	0.13	44.43	43.732	47.81	48.06
2480	83.98	2.03	-0.12	42.086	41.898	47.79	47.96
2490	86.04	2.14	-0.01	43.343	42.698	48.2	48.46
2500	86.38	2.29	0.14	43.891	42.488	47.83	48.01

1.2.2 Antenna Pattern



1.2.3ÿComplete machine active test data

b模式（11M）	暗室 ■ 三角锥 □ 屏蔽箱 □		
Band	2. 4G		
Channel	1	7	13
TRP	16.8	17.0	17.3
TIS	-85.3	-87.6	-87.4

The above is the whole machine data tested in our darkroom on the customer-supplied trial production machine.

2. Structural specifications

2.1 Antenna composition

The WIFI antenna is mainly composed of cable + copper tube.

2.2 Engineering drawings