

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: yOK yNG

Shenzhen TianDa Communication CO ., LTD.

Room 302, Building A, Jingang Technology Park, Qiaotou Community, Fuhai Street, Baoan District, Shenzhen

302 Building A, JinGang science and Technology Park, Qiaotou community, Fuhai Street, Bao'an District, Shenzhen

Confidential Information

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Confidentiality requirements

Shenzhen Tianda Communication Co., Ltd. has the information provided by the proprietary technology. These proprietary information should be kept strictly confidential and will not be used without the prior written consent of Shenzhen Tianda Communication Co., Ltd.

It is not allowed to disclose to any person or company without face-to-face consent.

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.



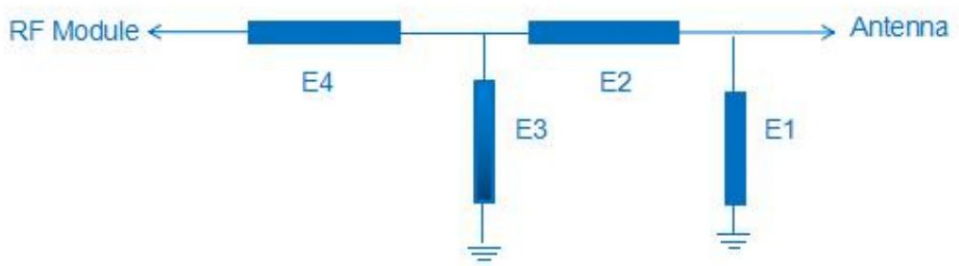
1.1 Electrical specifications

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	≤2.0

1.1.2 Matching circuit diagram



WIFI ANTENNA	
Element	Value
E1	
E2	
E3	
E4	

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

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1.2 Testing

1.2.1 Passive test

1.2.1.1 Antenna Standing Wave Test (VSWR)



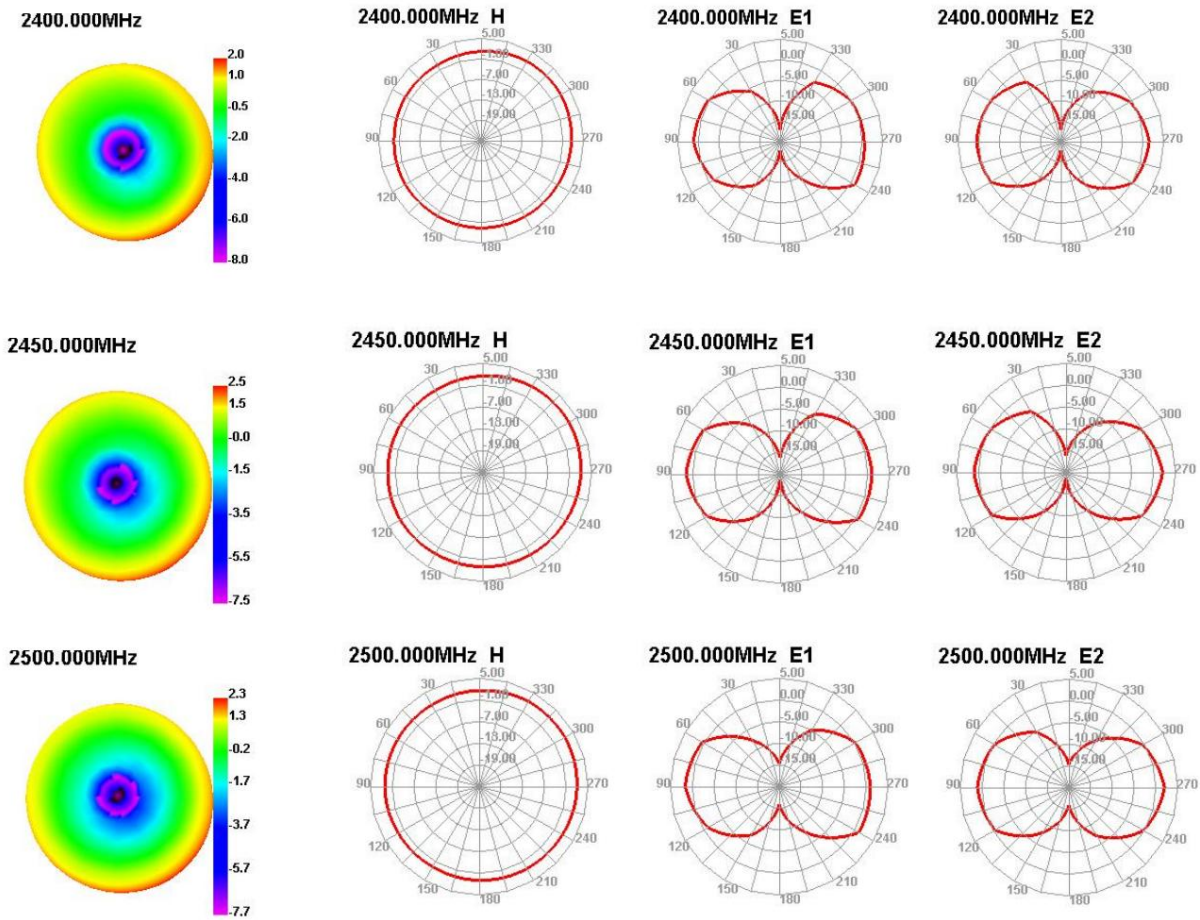
1.2.1.2 Antenna gain and efficiency

Passive Test For 2.4G-2.5G							
Freq (MHz)	Effi (%)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	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

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1.2.2 Antenna Pattern



1.2.3 Complete 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.

Confidentiality requirements

1	2	3	4	5	6	7	8																																			
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备注: 1. 打“*”号的为重点尺寸. 2. Pb、Hg、Cr+6、PBBs、PBDEs各项小于500PPM, Cd小于50PPM.																																										
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