

SPECIFICATION



ShenZhen TianDa Communication Co,LTD

V8S Doorbell antenna

Product Specification

Customer	Zhi Ling	Frequency band	2400-2500MHz
Project name	V8S Doorbell	Edition	A
Item number	ZL-VS-WI-24-A	Colour	Black
R Fdesign	Wangxinchuang	Structural design	Hesenlin
Date	2022.01.19		

Customer confirmation:

Whether the assembly meets your requirements: ☐OK ☐NG

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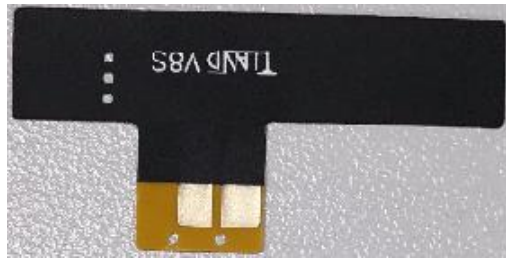
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一、WIFI Antenna

1、Specifications

The specification mainly provides the test status of electrical and structural performance parameters of WIFI antenna in V8S Doorbell project。The picture below shows the WIFI antenna designed by Tianda.



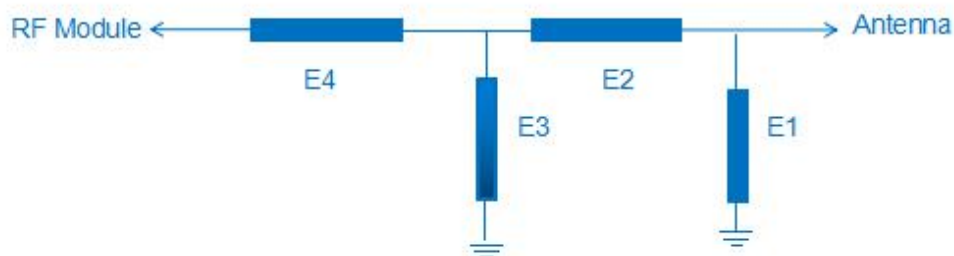
1.1、Electrical specifications

1.1.1、Electrical performance index

The operating frequency band of the antenna 2400MHz—2500MHz, The following is the electrical performance index of the antenna designed and produced by Tianda.

WIFI		
频段	频率（MHz）	VSWR
2.4G	2400~2500	≤ 2.0

1.1.2、Matching circuit diagram

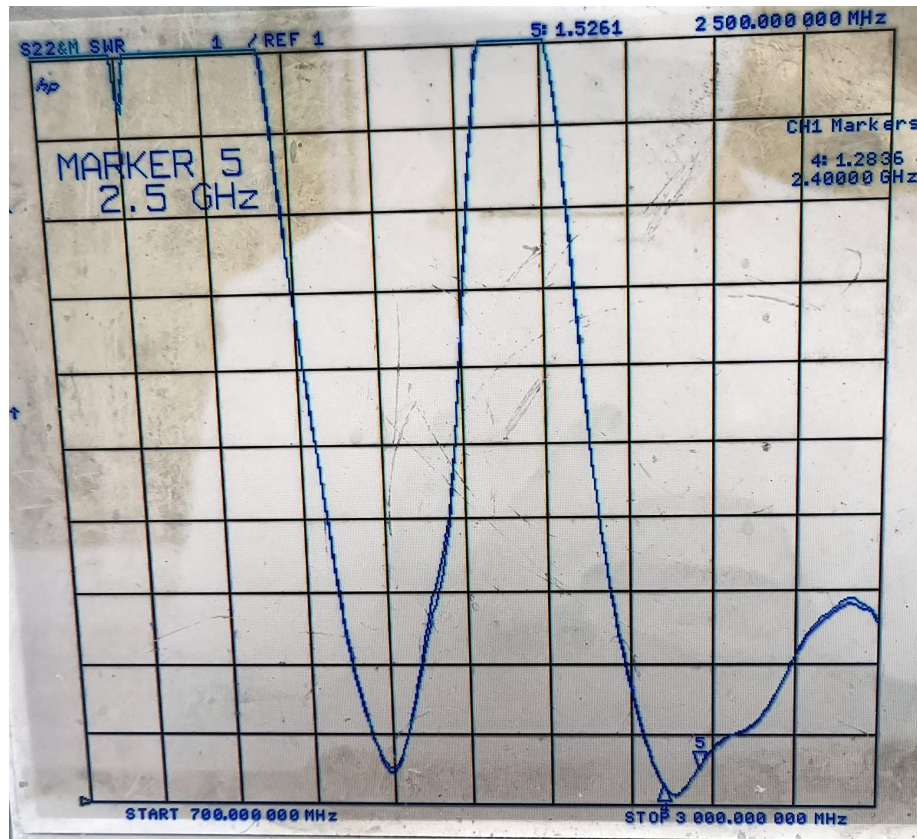


The matching circuit of WIFI antenna is a series 0 ohm resistor.

1.2、Testing

1.2.1、Passive test

1.2.1.1、VSWR

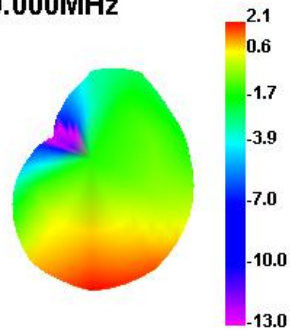


1.2.1.2、Antenna Gain and Efficiency

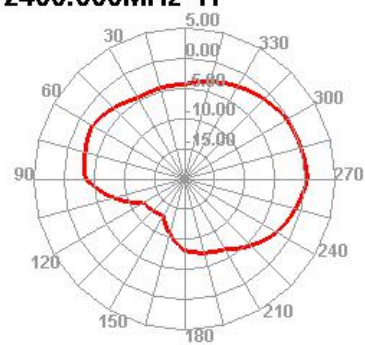
Passive Test For 2.4-2.5G									
Freq (MHz)	Effi (%)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
2400	54.22	2.1	-0.05	32.569	21.649	2.1	-13	49.59	49.32
2410	55.01	2.29	0.14	32.508	22.499	2.29	-13.05	49.53	49.31
2420	55.77	2.34	0.29	32.665	23.105	2.34	-12.01	49.5	49.25
2430	54.68	2.4	0.25	31.597	23.079	2.4	-12.7	49.38	49.27
2440	54.72	2.26	0.11	32.324	22.396	2.26	-13.52	49.49	49.33
2450	54.98	2.17	0.02	32.145	22.834	2.17	-12.84	49.7	49.52
2460	55.92	2.63	0.48	32.183	23.742	2.63	-12.23	49.78	49.55
2470	55.4	2.61	0.46	31.689	23.707	2.61	-13.14	49.87	49.8
2480	55.09	2.42	0.27	30.758	24.331	2.42	-13.09	49.88	49.72
2490	54.17	2.49	0.34	29.679	24.488	2.49	-11.93	49.91	49.78
2500	52.11	2.48	0.33	28.323	23.785	2.48	-12.07	49.7	49.51

1.2.1.3、Antenna pattern

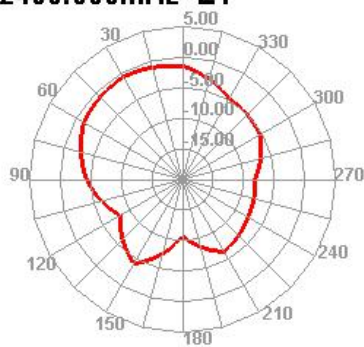
2400.000MHz



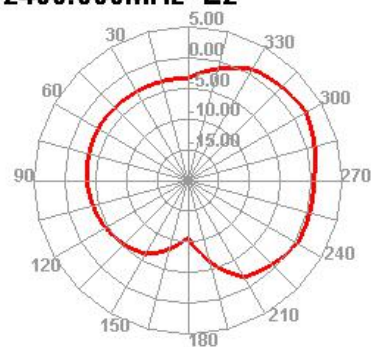
2400.000MHz H



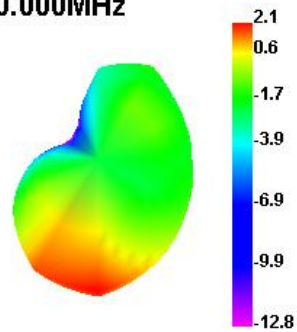
2400.000MHz E1



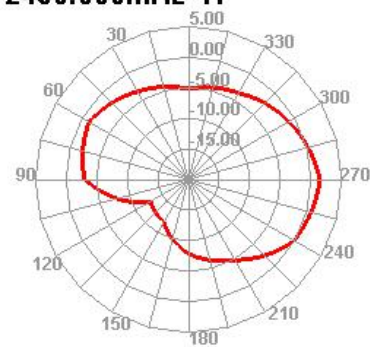
2400.000MHz E2



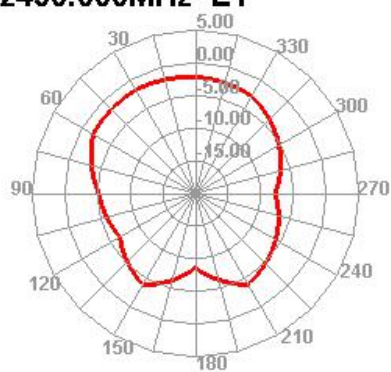
2450.000MHz



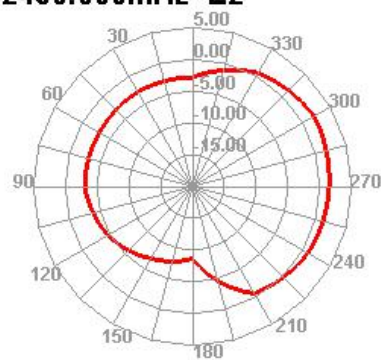
2450.000MHz H



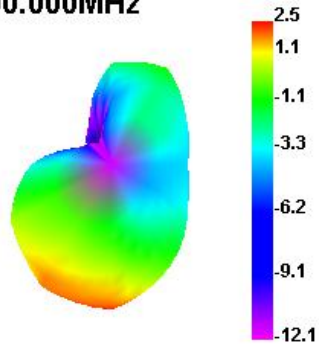
2450.000MHz E1



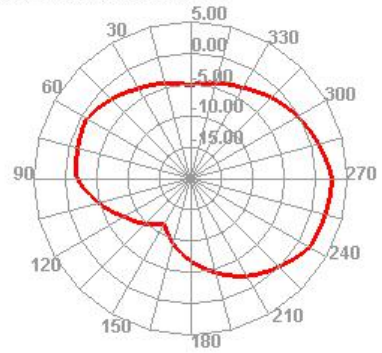
2450.000MHz E2



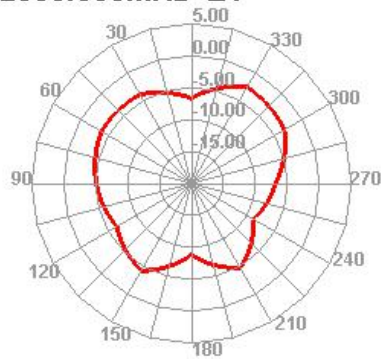
2500.000MHz



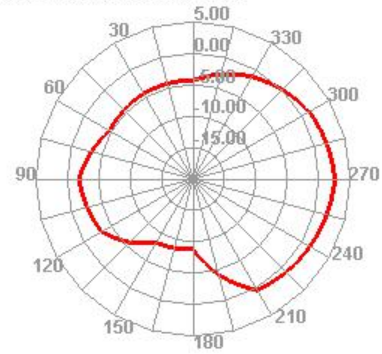
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



二、 Structural specifications

2.1、 Antenna composition

WIFI antenna is mainly composed of FPC.

2.2、Drawings

