

Antenna 2

1、Specifications

The specification mainly provides the test status of electrical and structural performance parameters of antenna 2 in SH0111 project。 The picture below shows the antenna 2 designed by Tianda.

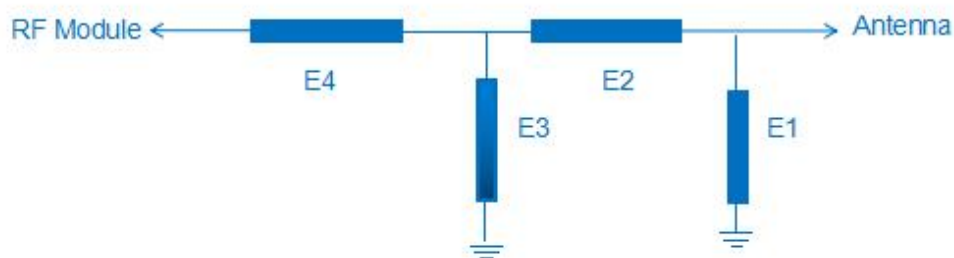
1.1、Electrical specifications

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.

Ant 2		
Frequency band	Frequency (MHz)	VSWR
2.4G	2400~2500	≤ 2.0

1.1.2、Matching circuit diagram

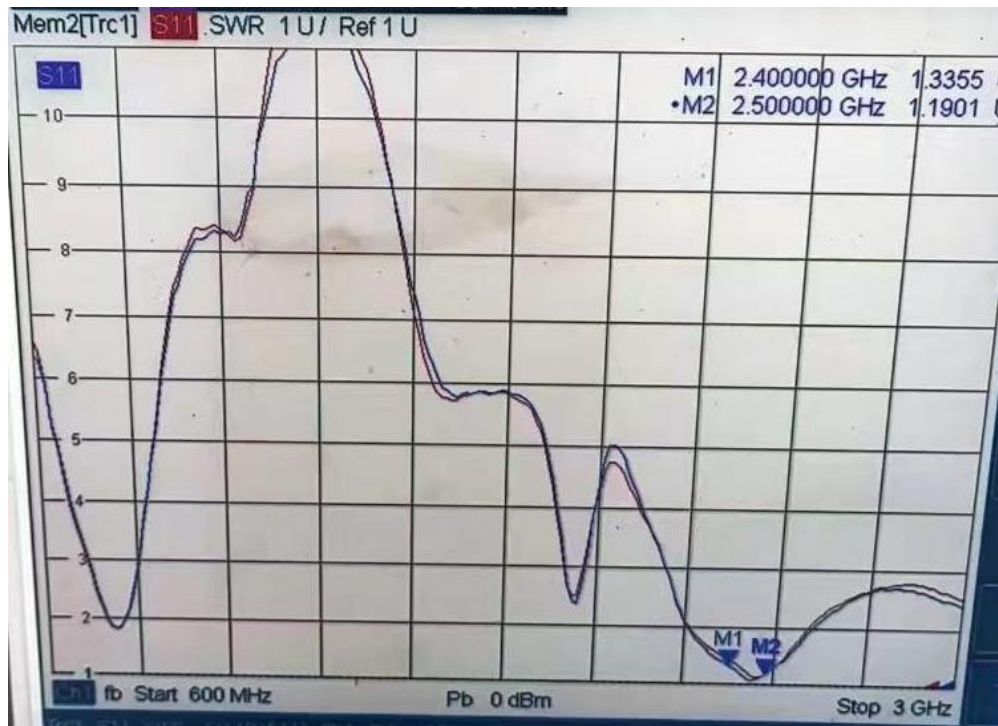


The matching circuit of the Antenna is the original matching circuit of the motherboard.

1.2、Testing

1.2.1、Passive test

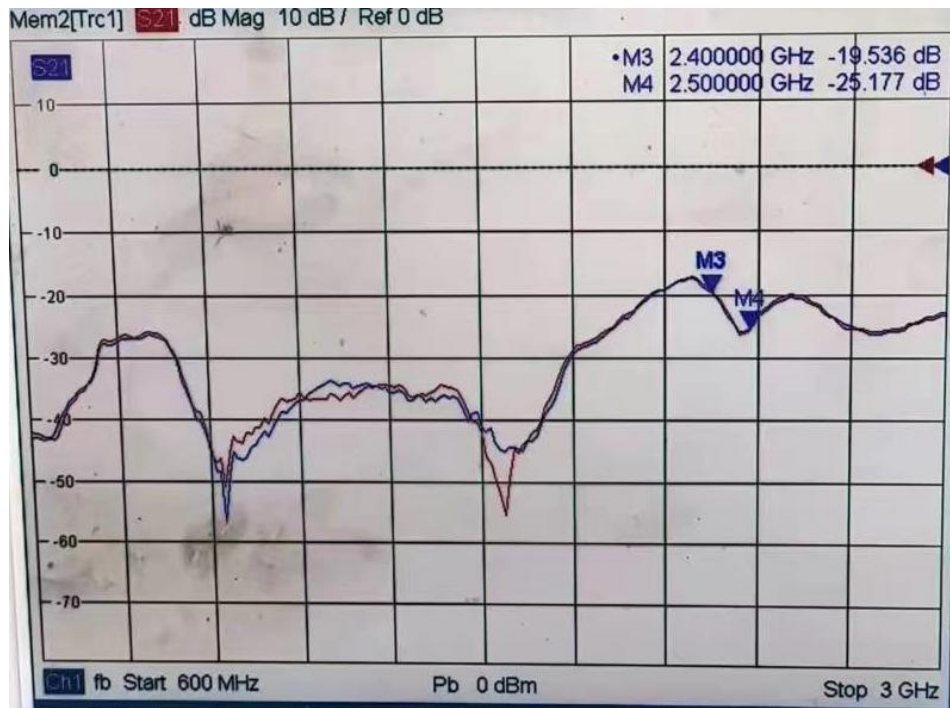
1.2.1.1、VSWR



1.2.1.2、Antenna Gain and Efficiency

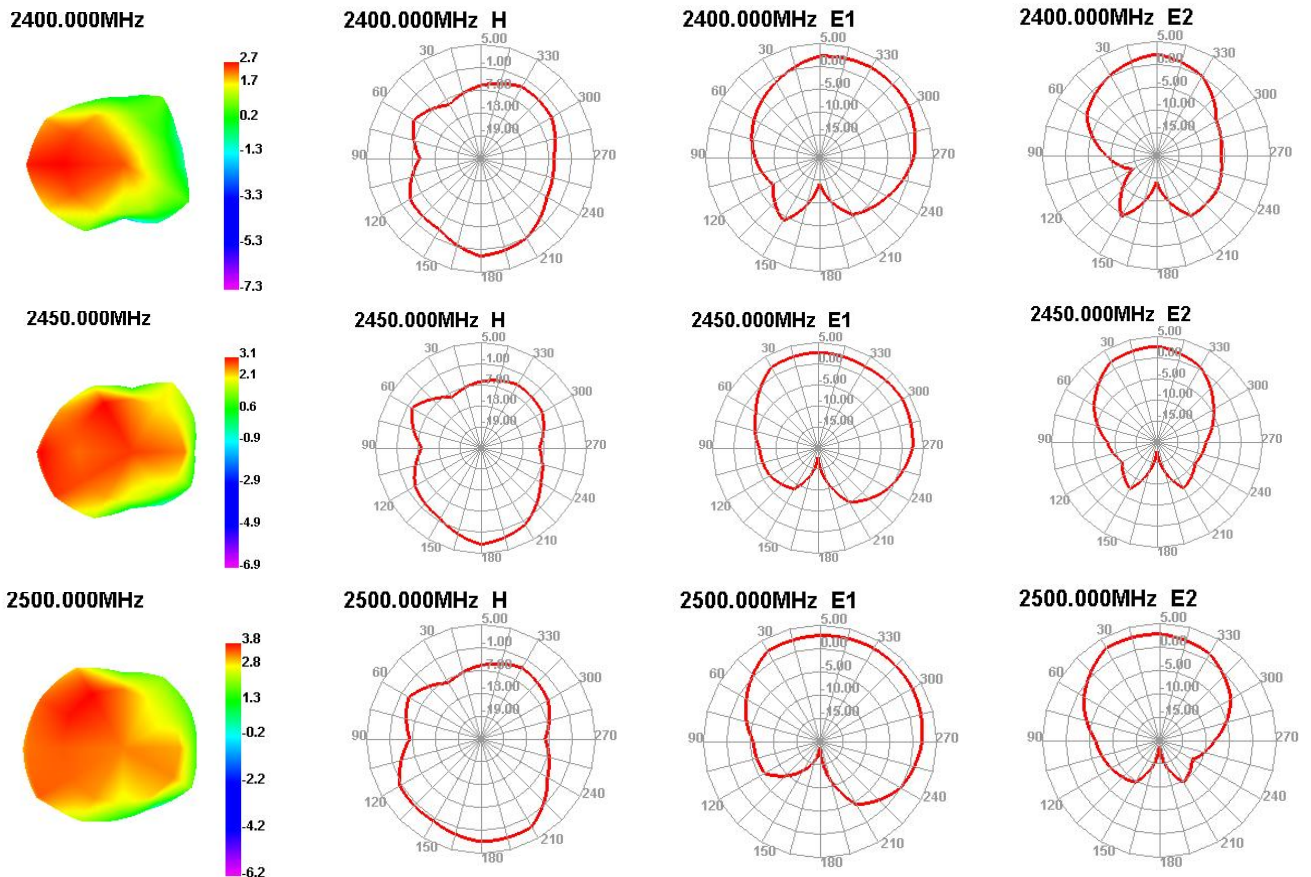
Passive Test For 2.4G-2.5G									
Freq (MHz)	Effi (%)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	Max (dB)	Min (dB)	AttH (dB)	AttV (dB)
2400	58.9	2.72	0.57	41.506	17.393	2.72	-14.37	46.87	46.81
2410	58.81	2.97	0.82	42.078	16.728	2.97	-14.82	47.08	47.17
2420	59.64	3.09	0.94	43.233	16.405	3.09	-15.01	47.06	47.12
2430	60.13	3.05	0.9	44.418	15.711	3.05	-15.43	47	47.09
2440	63.32	3.16	1.01	47.222	16.097	3.16	-16.32	47.5	47.69
2450	64.95	3.1	0.95	48.715	16.237	3.1	-17.95	47.48	47.63
2460	66.91	3.38	1.23	50.278	16.631	3.38	-20.21	47.73	47.89
2470	70.07	3.58	1.43	52.751	17.32	3.58	-21.97	47.81	48.06
2480	70.07	3.61	1.46	53.086	16.98	3.61	-23.23	47.79	47.96
2490	72.02	3.95	1.8	55.768	16.252	3.95	-20.25	48.2	48.46
2500	71.19	3.85	1.7	55.24	15.949	3.85	-18.7	47.83	48.01

1.2.1.3、Antenna Isolation



The isolation between antennas is - 19.5dB~ -25.1dB.

1.2.3、Antenna pattern Unit: dBi



2、Structural specifications

2.1、Antenna composition

The type of antenna is PCB antenna, mainly composed of PCB+Cable lines.

2.2、Drawings

