

## 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.

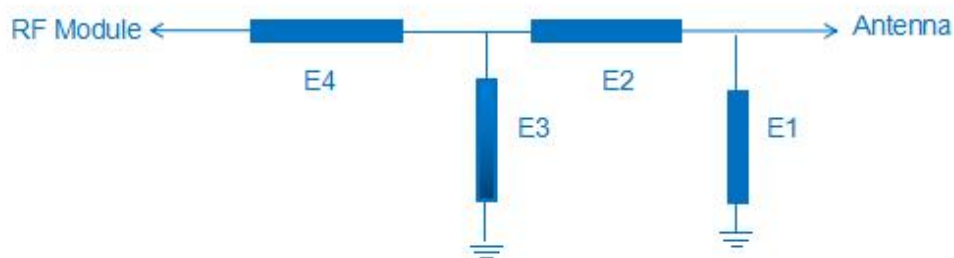
#### 1.1、Electrical specifications

##### 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

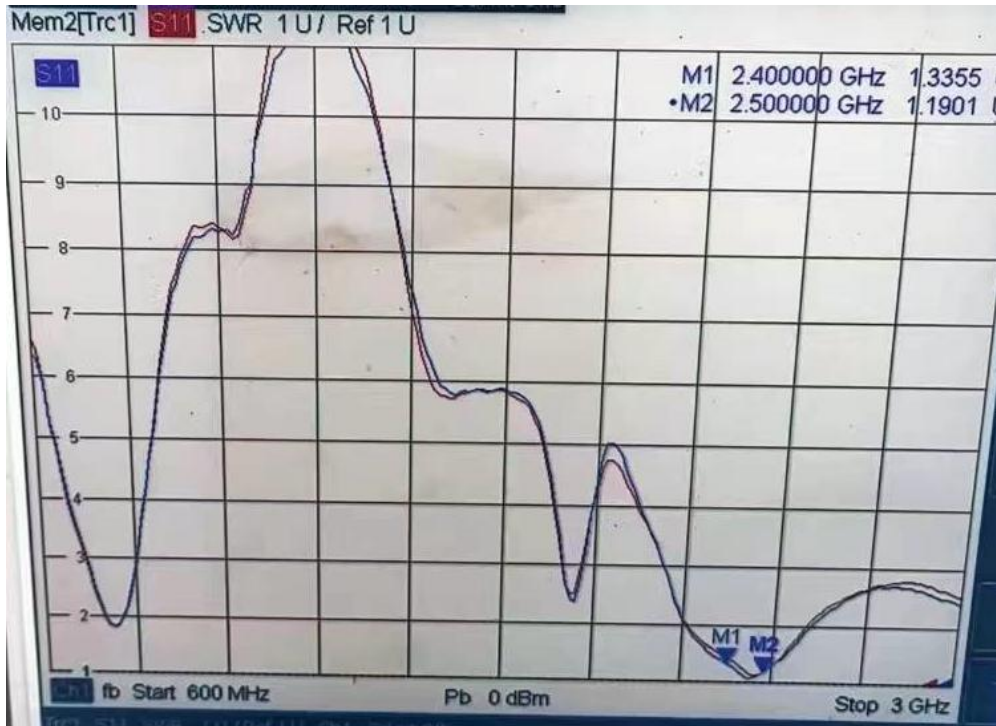


The matching circuit of the Antenna is the original matching circuit of the motherboard.

## 1.2、 Testing

### 1.2.1、 Passive test

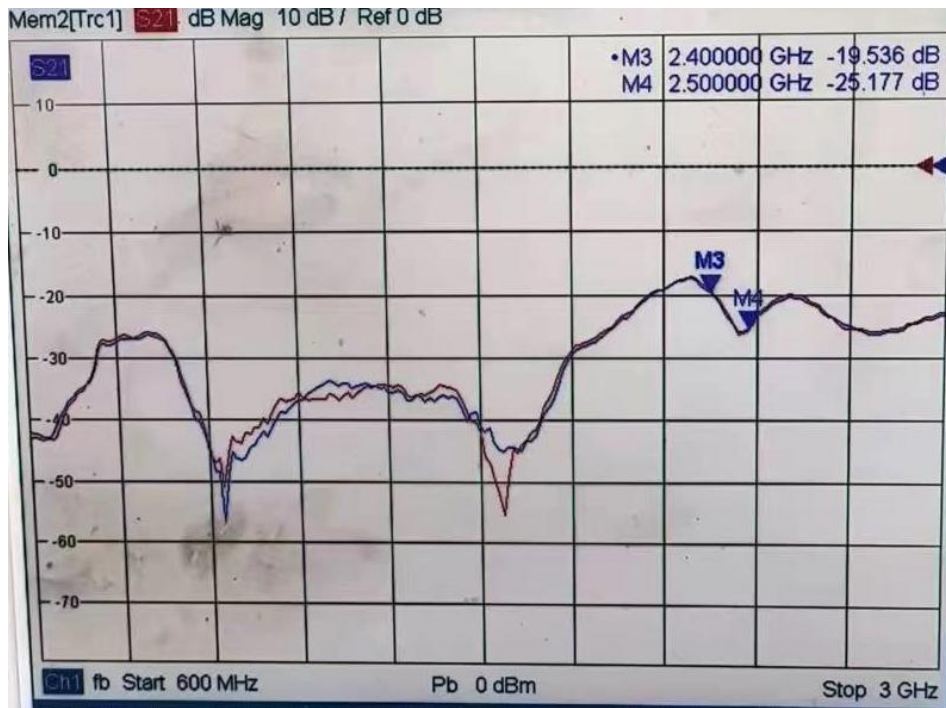
#### 1.2.1.1、 VSWR



#### 1.2.1.2、 Antenna Gain and Efficiency

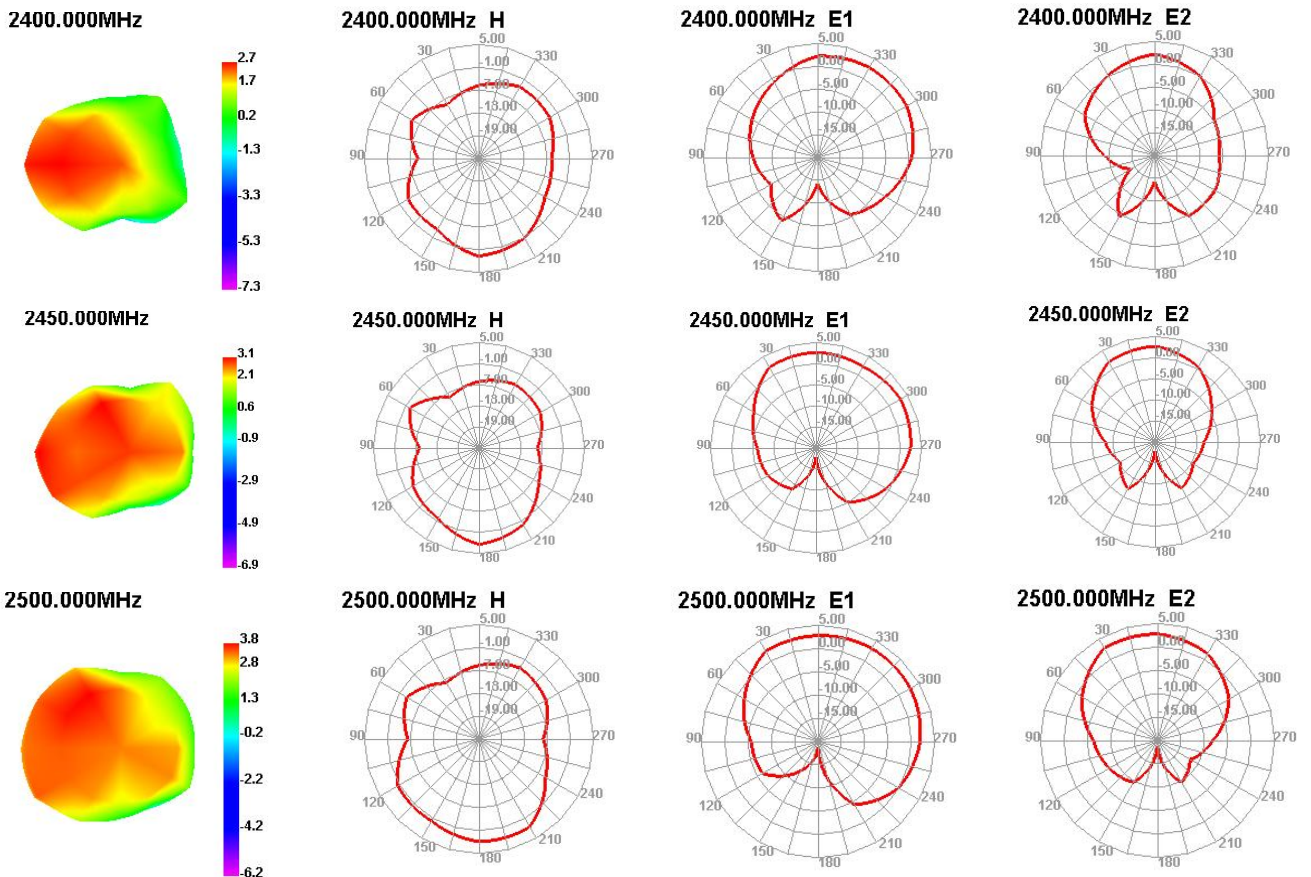
Passive Test For 2.4G-2.5G									
Freq (MHz)	Effi (%)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	AttH (dB)	AttV (dB)
2400	58.9	2.72	0.57	41.506	17.393	2.72	-14.37	46.87	46.81
2410	58.81	2.97	0.82	42.078	16.728	2.97	-14.82	47.08	47.17
2420	59.64	3.09	0.94	43.233	16.405	3.09	-15.01	47.06	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

