

1 specifications



figure 1

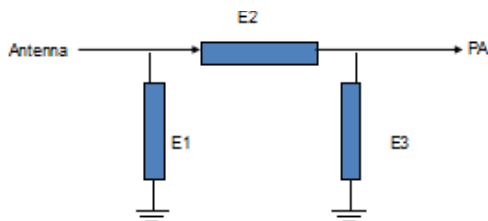
1.1 Electrical specification standard

1.1.1 Electrical performance index

The working frequency band of the antenna is 2400-2480MHz.____. The following table is the electrical performance index of antenna designed by our company.

aerial	
frequency band	2400-2480MHz
standing-wave ratio	< 2
efficiency	14-15%
impedance	50 ohm
Polarization mode	Linear polarization

1.1.2 Matching circuit diagram



Element	Value
E1(0402)	N/A
E2(0402)	0R
E3(0402)	N/A

2 test

The antenna is debugged and tested with the prototype provided by the customer.

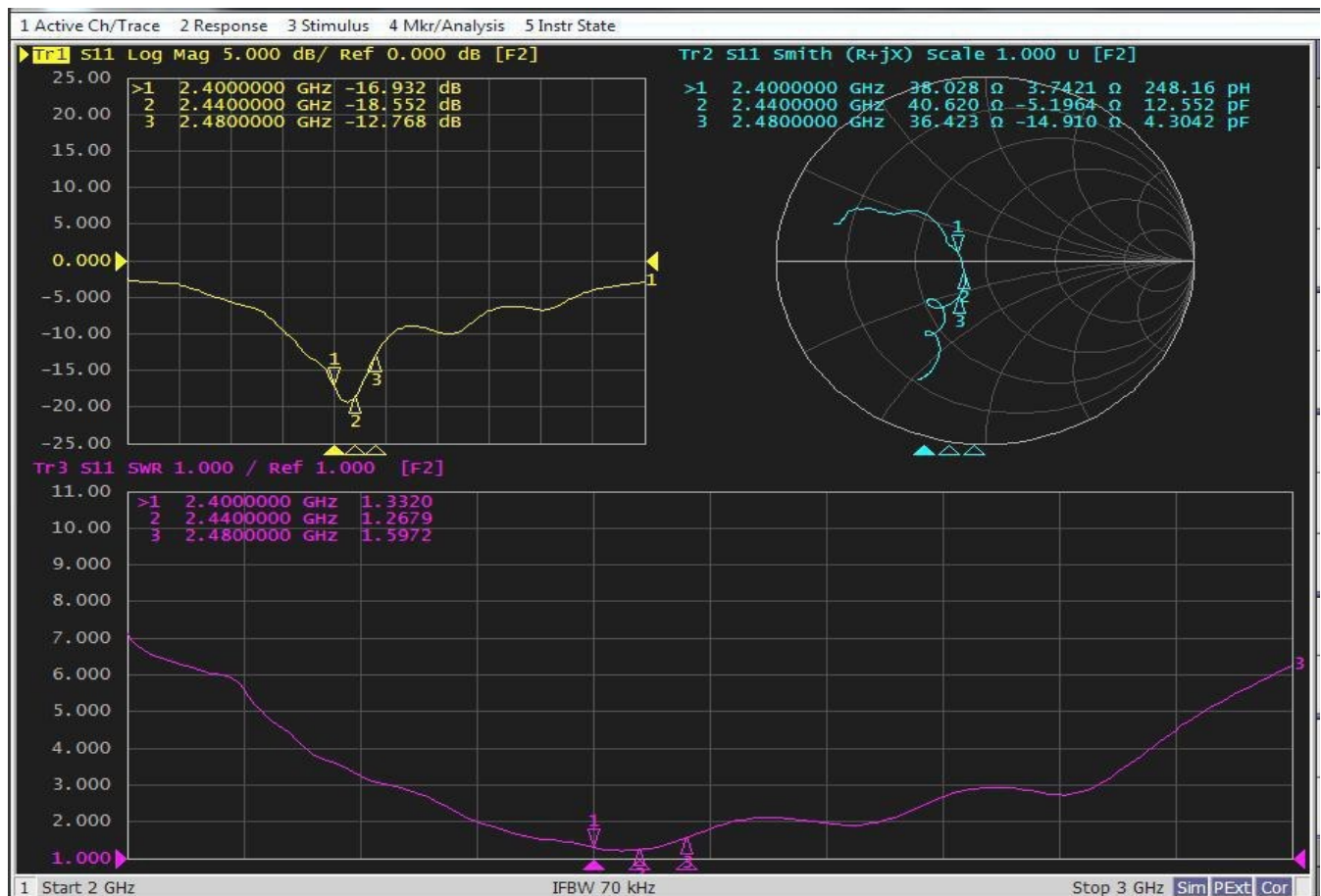
2.1 Test of Passive S11

2.1.1 test connection

2.1.2 Passive S11

The following table shows the standing wave ratio values of the edge frequency points of the antenna working frequency band. The waveforms of Return Loss, VSWR obtained from the test are shown in the following figure.

Frequency (MHz)	2400	2440	2480
VSWR	1.33	1.27	1.60
Return Loss	-16.93	-18.55	-12.77



2.2 Test of gain and efficiency

2.2.1 Test site

Valet microwave anechoic chamber: the test frequency range is 400 MHz-6 GHz.

2.2.2 Tested instrument

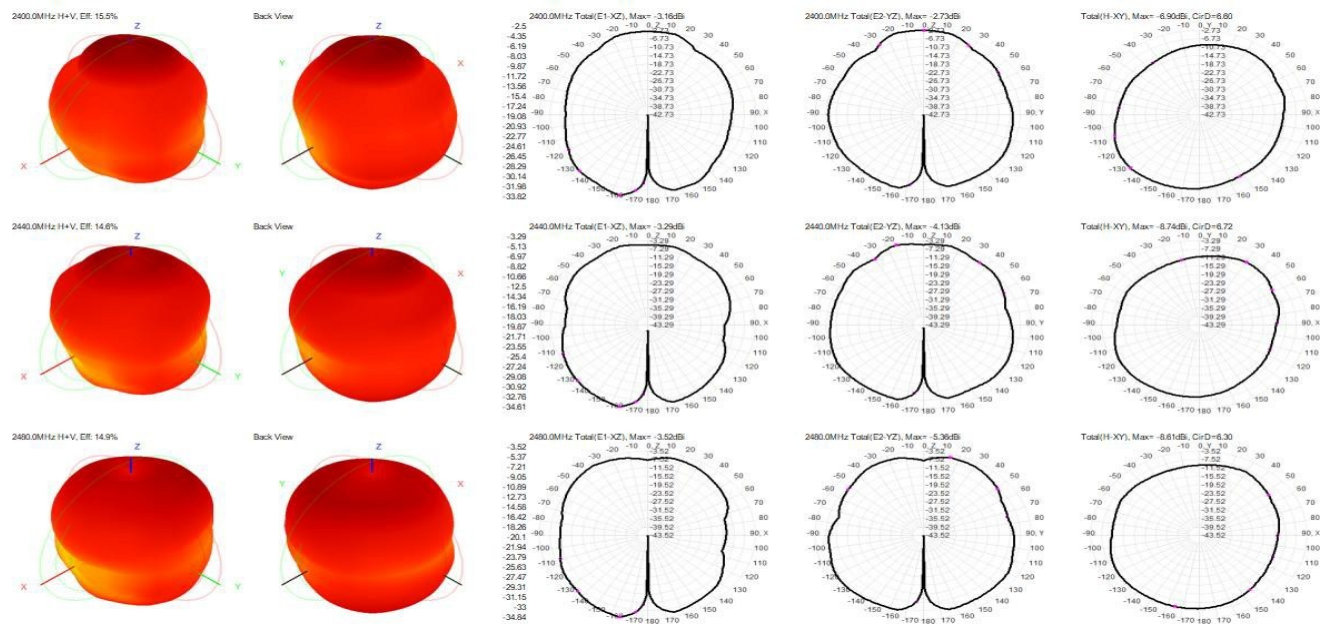
Network analyzer, standard horn antenna, multi-probe near-field antenna test system, test computer, etc.

2.2.3 test result

In the microwave anechoic chamber, the measured values related to efficiency and gain are shown in the following table.

Frequency(MHz)	Gain(dBi)	Efficiency(%)
2400	-2.50	15.48
2410	-2.91	15.14
2420	-3.14	14.73
2430	-3.21	14.61
2440	-3.29	14.56
2450	-3.21	14.73
2460	-3.24	14.81
2470	-3.47	14.89
2480	-3.52	14.92
2490	-3.54	15.04
two thousand and five hundred	-3.53	15.31

2.2.4 Passive radiation pattern



3. Conclusion

This antenna is designed on the basis of the prototype provided by the customer. The above electrical performance parameters are tested under the environmental treatment conditions of the prototype. The electrical parameters and structural performance have reached the technical requirements. Please confirm!