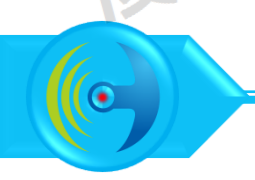


Professional Antenna Supplier

SHENZHEN FEIMIN TECHNOLOGY CO., LTD.



Antenna test report

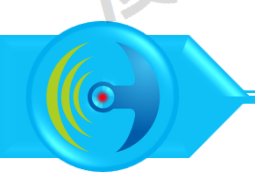
Project Model DM51BT

Antenna Model

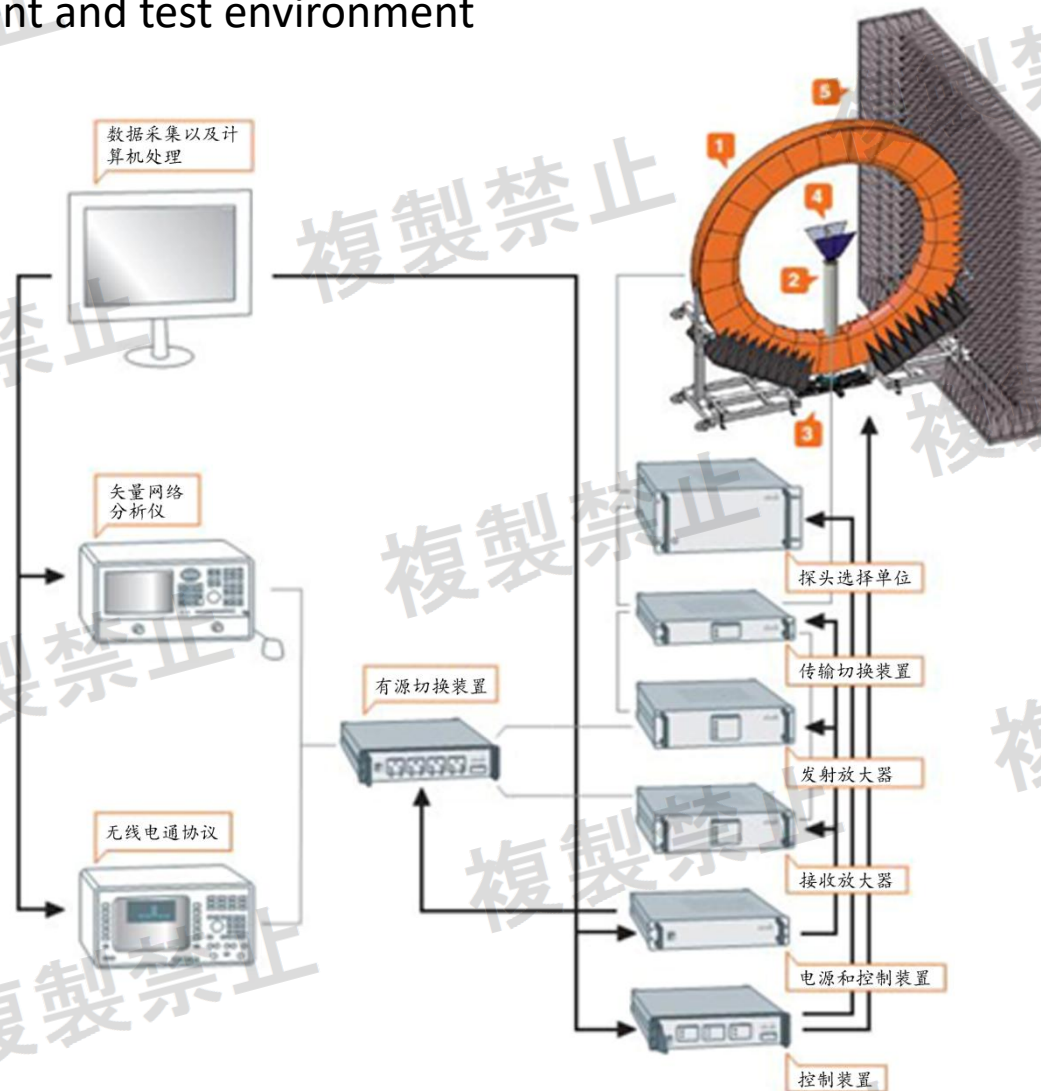
Tested By Xu Gongfu

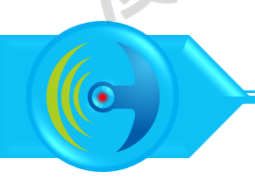
Reviewed By Chen Zexiong

Date 2025-9-18

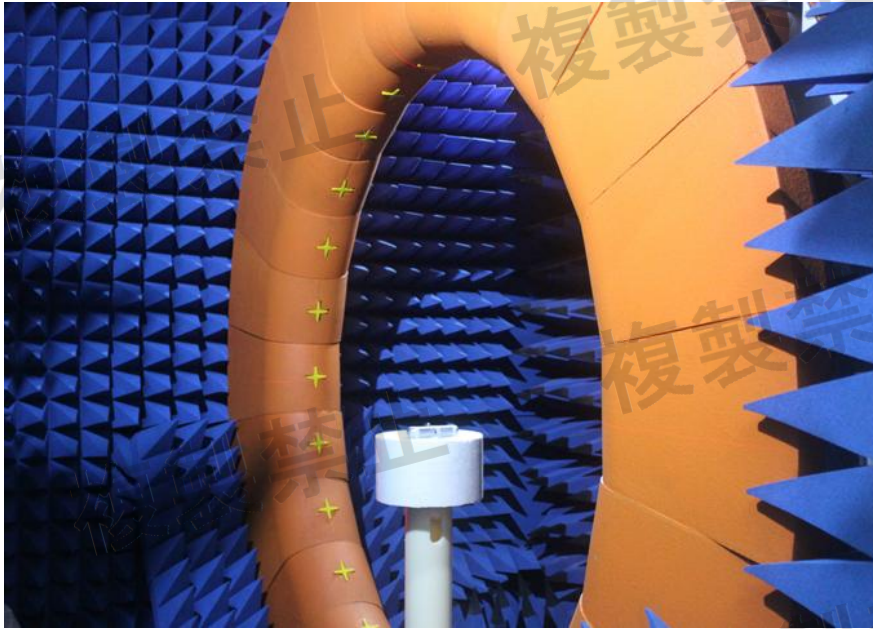


Test equipment and test environment





Test equipment

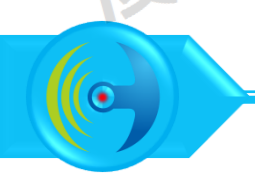


Probe Microwave Anechoic Chamber

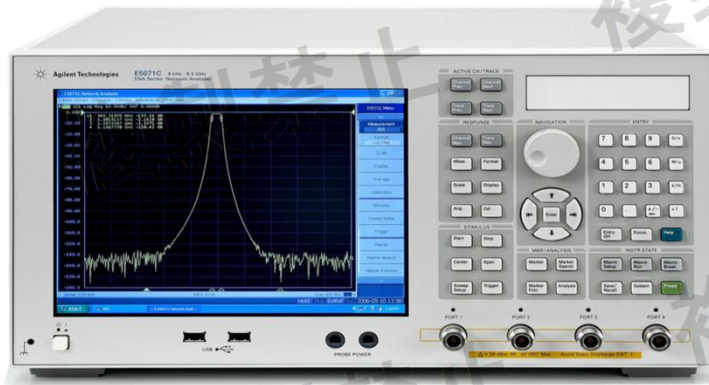
► freq: 0.4GHz ~ 6GHz

Main Test Indicators

- ◆ Passive Indicators
 - ◆ Gain
 - ◆ Efficiency
 - ◆ 3D Radiation Pattern
- Active Indicators
 - TRP (Total Radiated Power)
 - TIS (Total Isotropic Sensitivity)



Test equipment



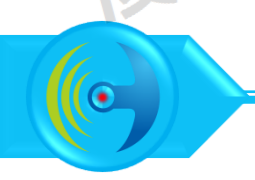
Agilent E5071C Vector Network Analyzer

- freq: 300 kHz - 8.5GHz



R&S CMW500 Wideband Radio Communication Tester

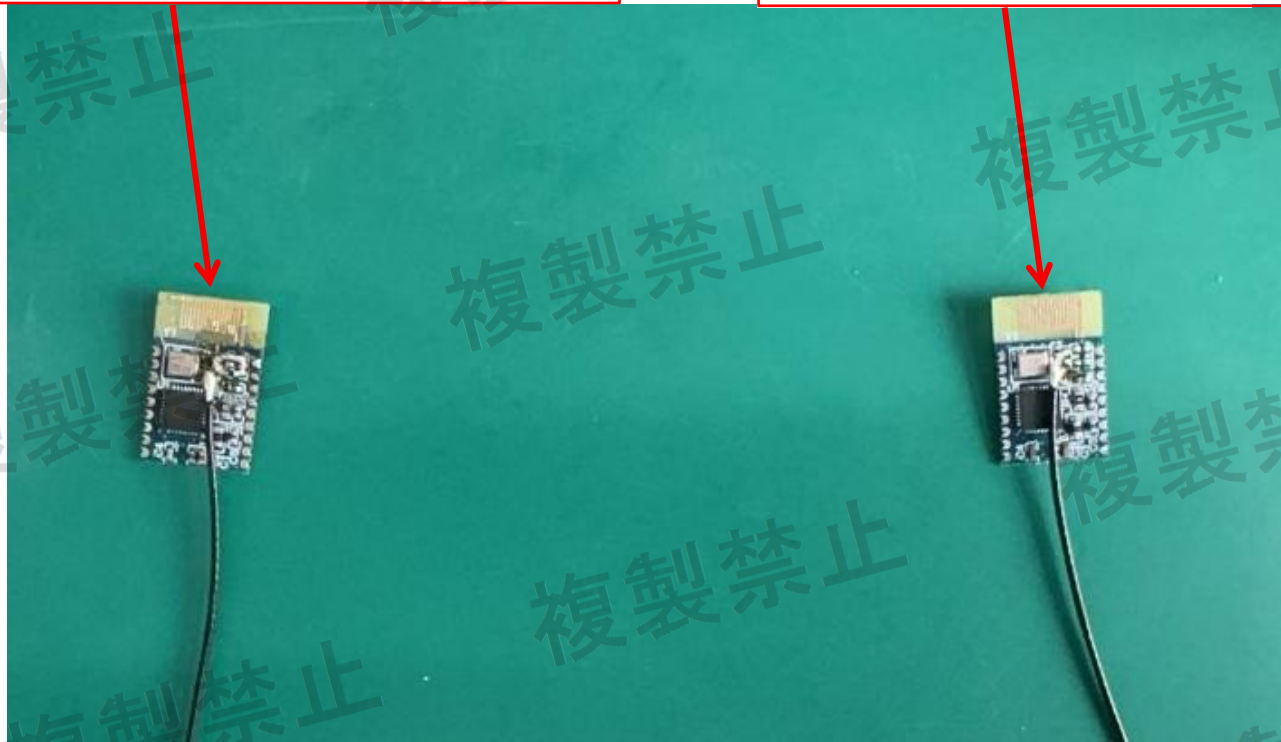
- GSM/3G/4G
- WIFI/ Bluetooth
- NB-IoT

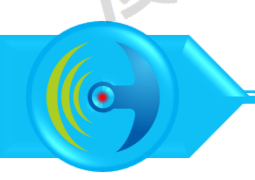


Passive antenna data

On-board Antenna - Feimin Tuned Matching

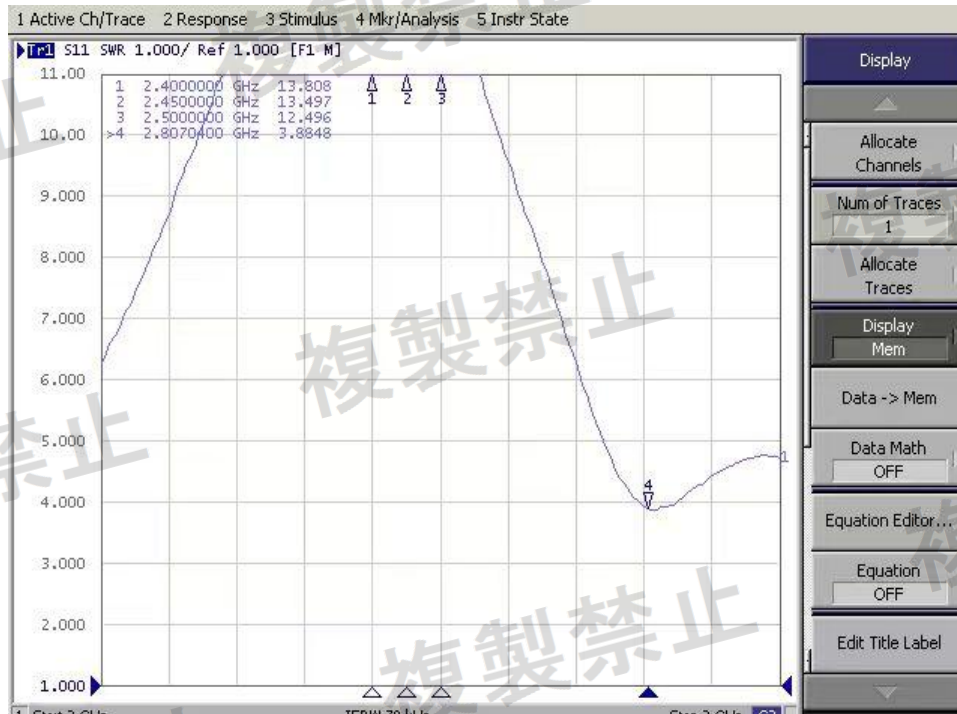
On-board Antenna - Original Matching



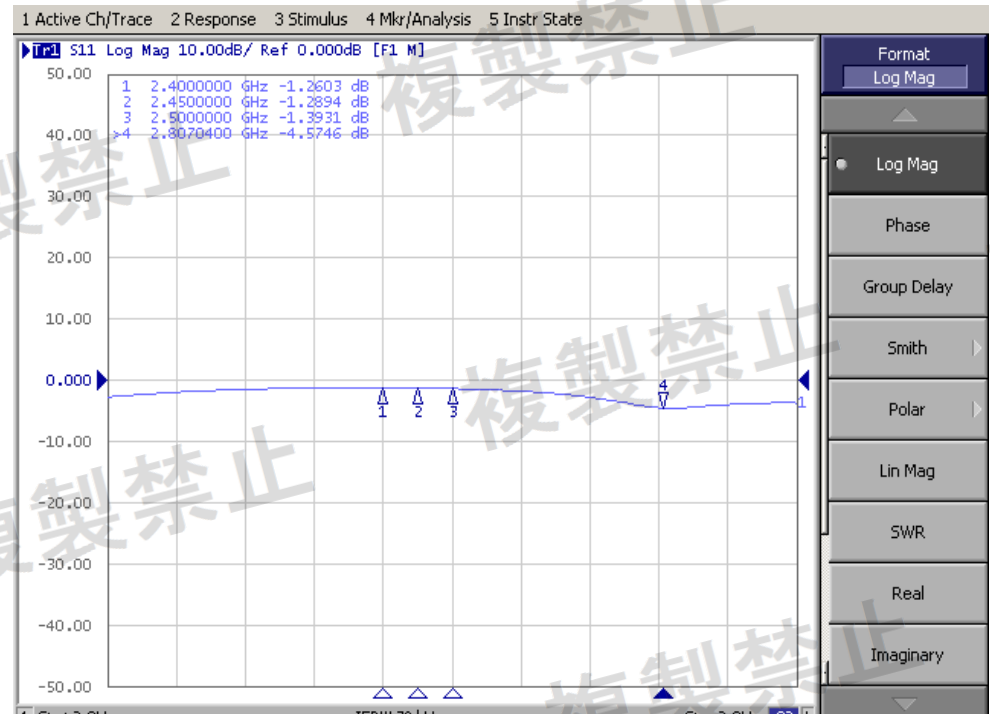


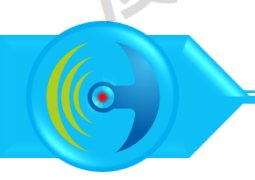
On-board Antenna - Original Matching

Antenna SWR



Antenna Return loss

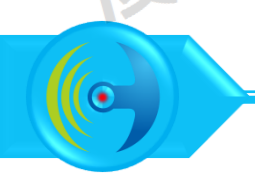




On-board Antenna - Original Matching

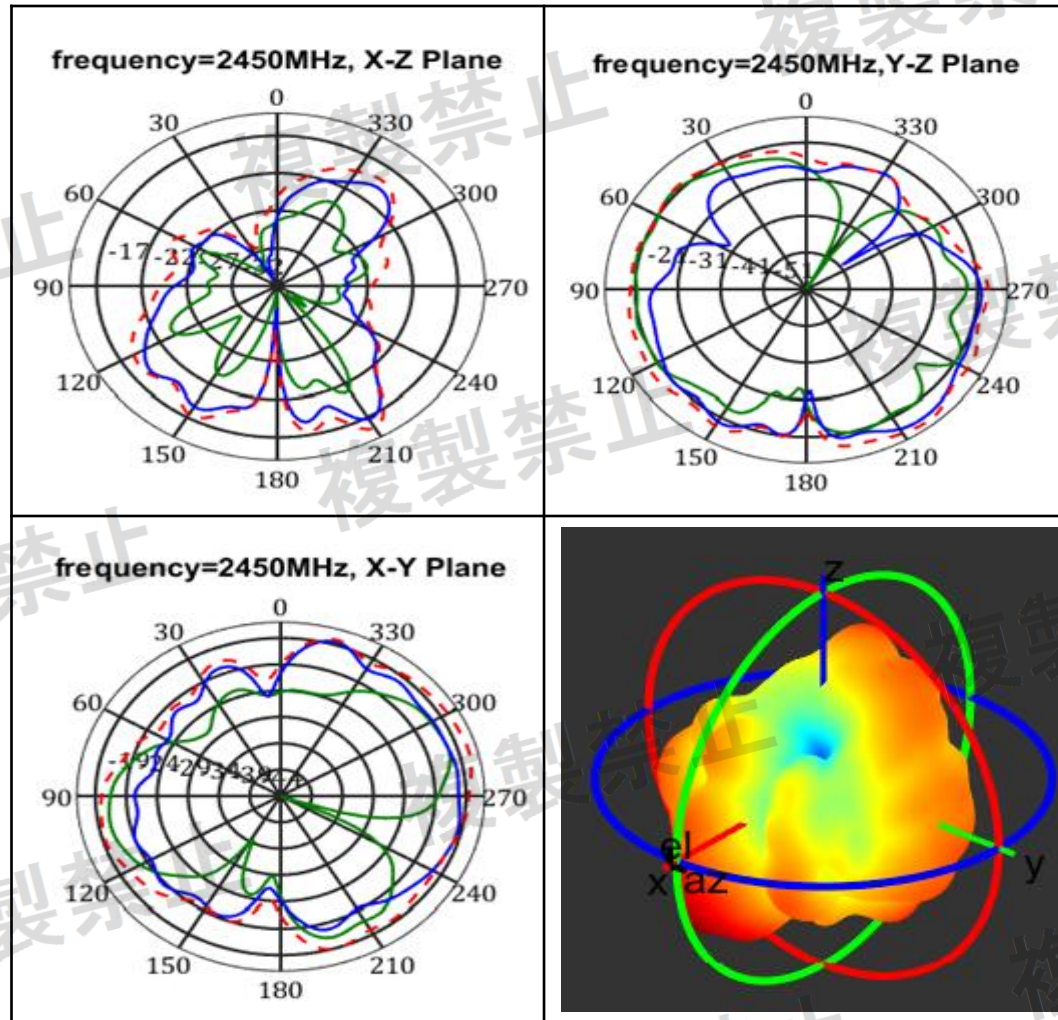
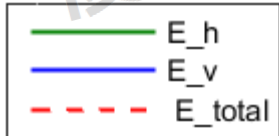
Antenna gain and efficiency

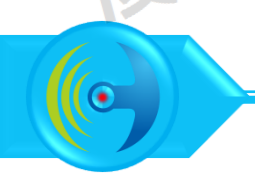
Freq(MHz)	Efficiency (%)	Gian(dBi)
2400	4.68	-10.36
2410	4.72	-9.94
2420	4.72	-9.84
2430	4.76	-9.66
2440	4.84	-9.20
2450	4.96	-8.63
2460	5.04	-8.37
2470	5.02	-8.41
2480	5.02	-8.40
2490	5.10	-7.89
2500	5.25	-7.03



On-board Antenna - Original Matching

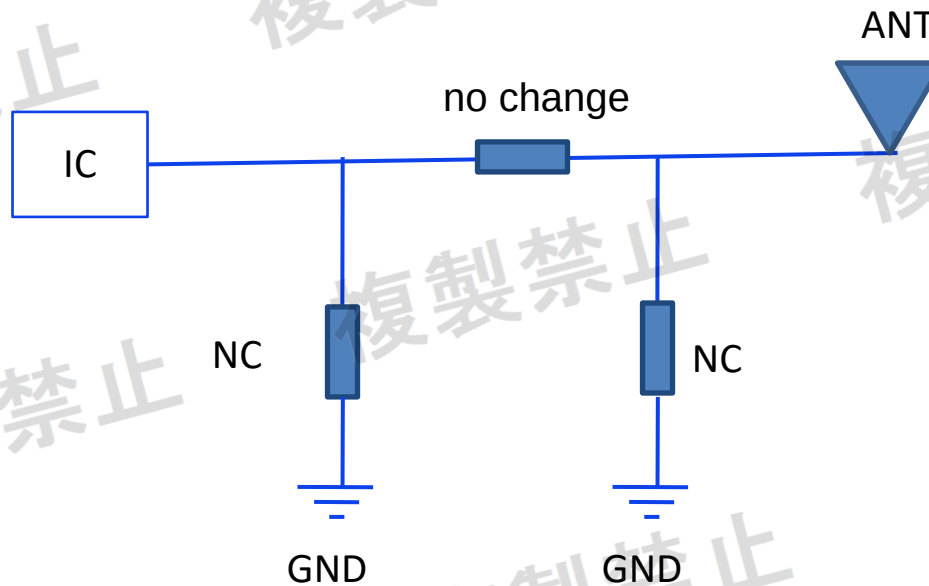
Antenna Radiation Pattern

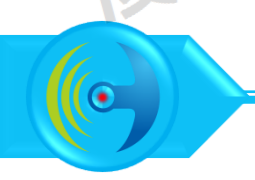




On-board Antenna - Original Matching

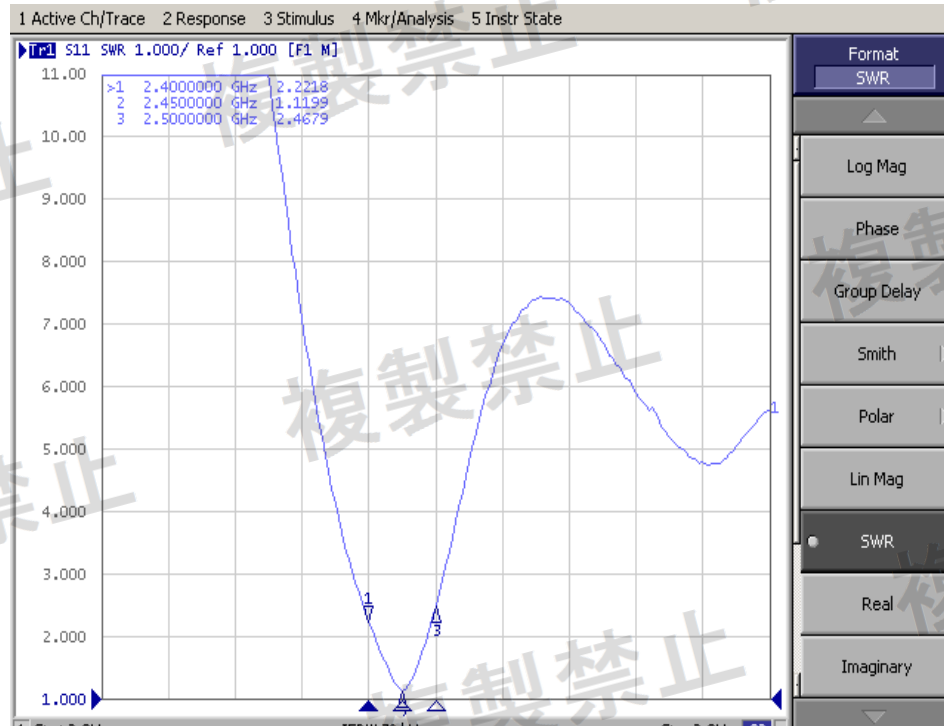
Antenna Matching Parameters



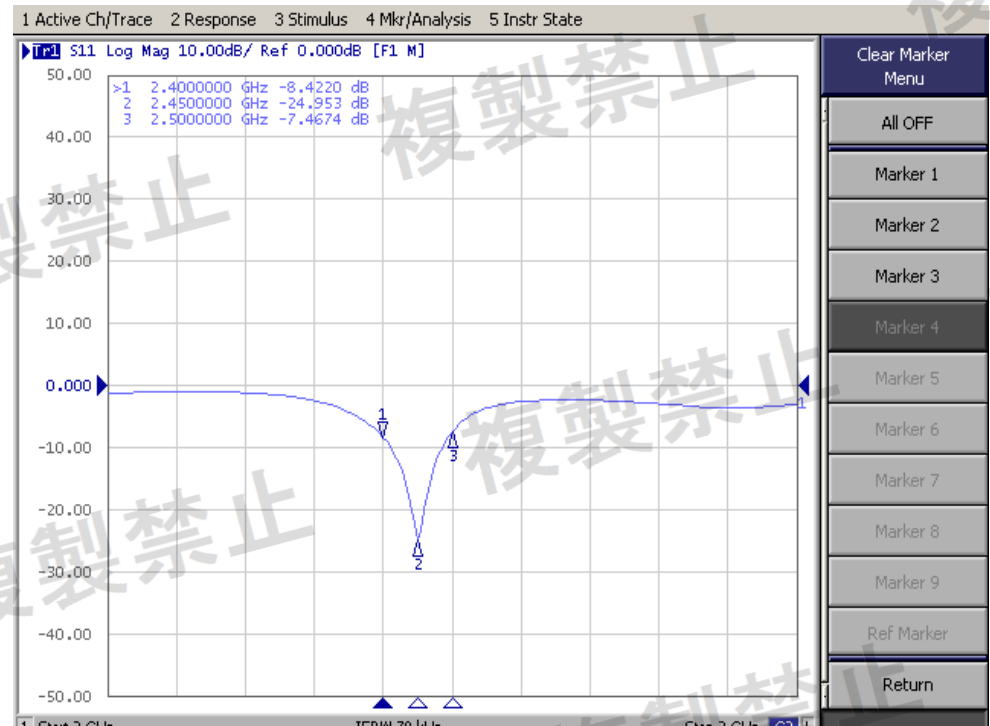


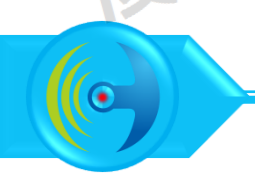
On-board Antenna - Feimin Tuned Matching

Antenna SWR



Antenna Return loss

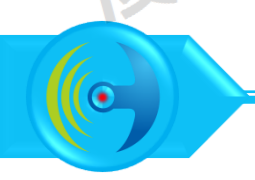




On-board Antenna - Feimin Tuned Matching

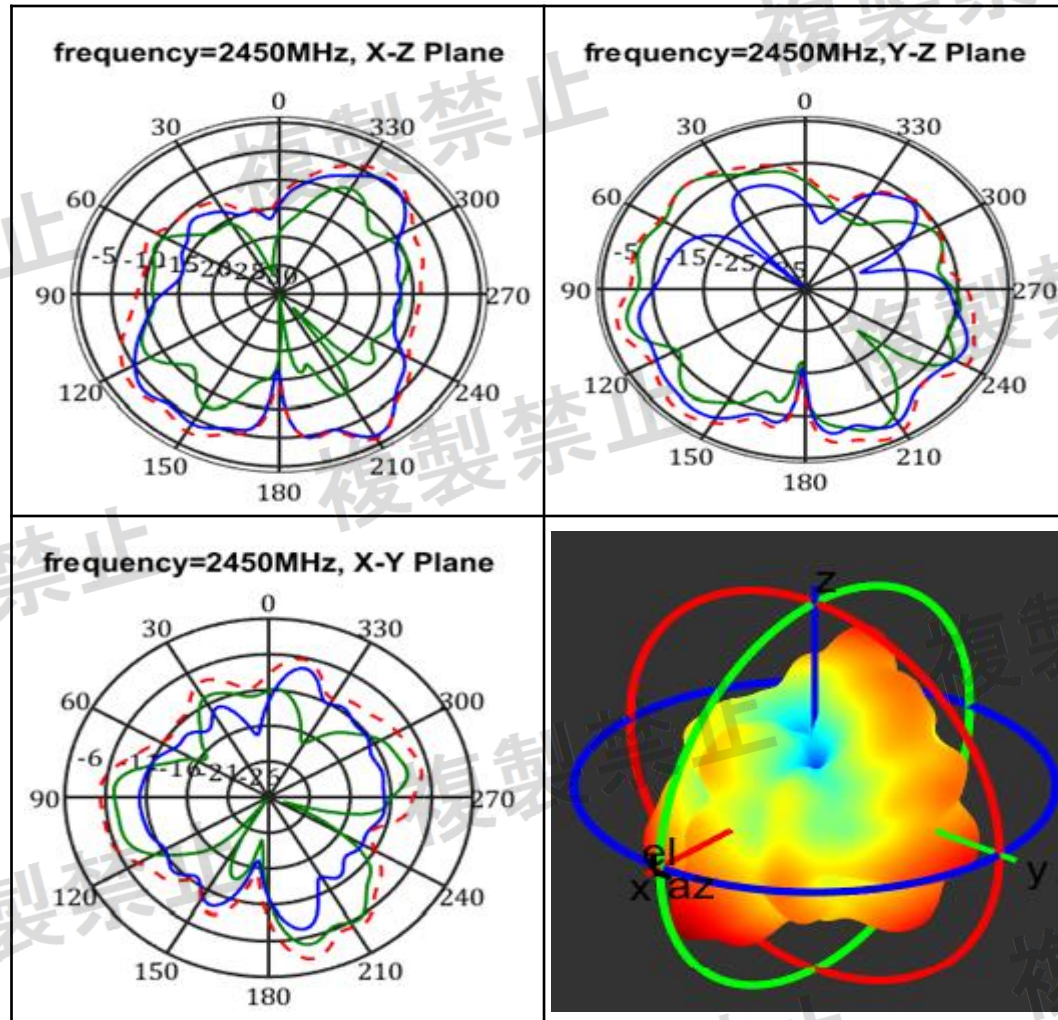
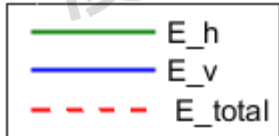
Antenna gain and efficiency

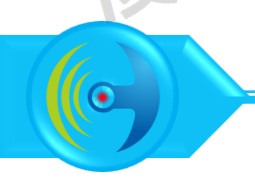
Freq(MHz)	Efficiency (%)	Gian(dBi)
2400	10.84	-5.56
2410	11.48	-4.81
2420	12.23	-4.16
2430	13.08	-3.63
2440	13.64	-3.45
2450	13.98	-3.46
2460	14.61	-3.24
2470	13.77	-4.13
2480	12.88	-4.00
2490	12.80	-3.94
2500	11.72	-4.68



On-board Antenna - Feimin Tuned Matching

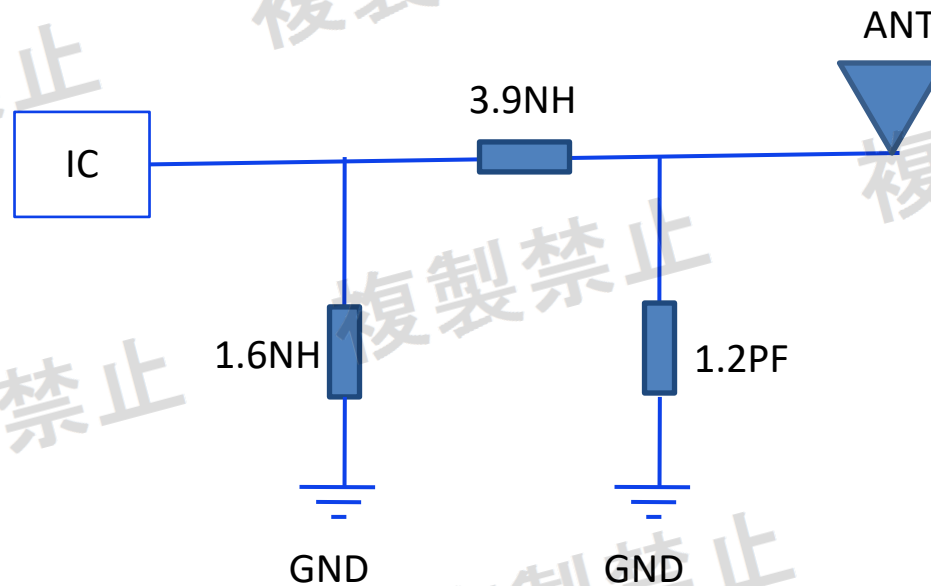
Antenna Radiation Pattern





On-board Antenna - Feimin Tuned Matching

Antenna Matching Parameters



Thanks for your support!

TEL:(86)755-23035723. FAX:0755-23036702

E-mail:ant001@fmant.cn

Room 801, 8th Floor,Keyunnda E-commerce Base,No. 4 Shenghui Road, Guxing Community,Xixiang Street,Bao'an,District,Shenzhen