



Shenzhen South Star Technology Co. Ltd.
Shanghai South Star Technology Co. Ltd.

SPECIFICATION FOR APPROVAL

CUSTOMER :	德明通讯
PART NAME :	CH1224(2.4GBT)
PART NO. :	
NDX NO. :	W01-0572-R0A
REV. :	

	MANUFACTURERR SIGNATURE	CUSTOMER SIGNATURE
APPROVED BY:		
DATE:		

Shenzhen southstar technology.co.,LTD

深圳市南斗星科技有限公司

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street,baoan district,Shenzhen

Shenzhen southstar technology co., LTD. Shanghai branch

深圳市南斗星科技有限公司上海分公司

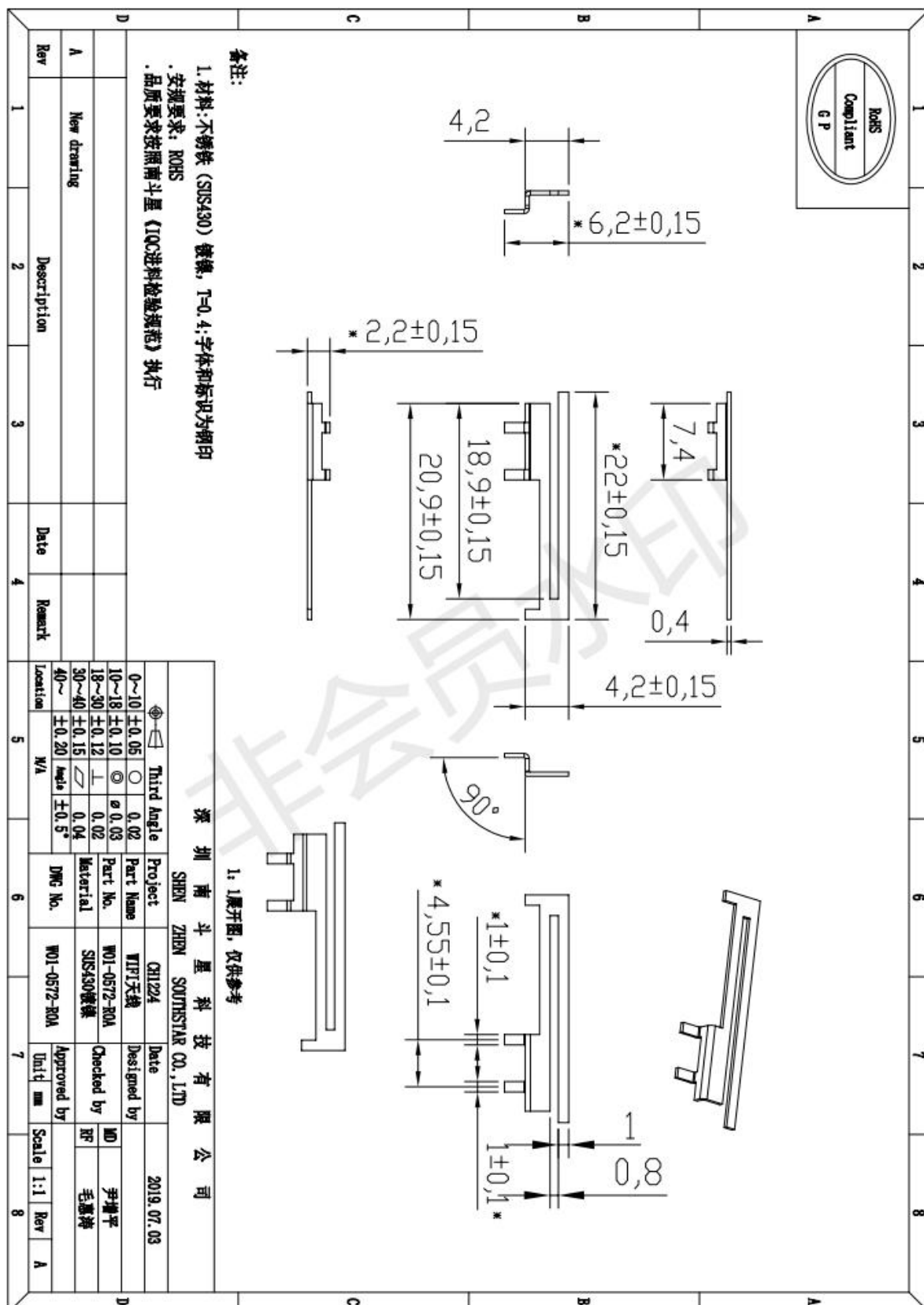
103B, Build10, No.198 Zhang Heng Road , Pudong New
Area,Shanghai

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Mechanical instruction

由 Autodesk 教育版产品制作



由 Autodesk 教育版产品制作

Antenna Assembly

Specification(With housing)

1.Electrical Properties

1.1 Frequecyrange.....	2.4G-2.5G
1.2 Impedance.....	50Ω Norminal
1.3 VSWR	<2
1.4 Radiation.....	Omni
1.5 Gain(Peak).....	3dBi
1.6 Polarization.....	Linear
1.7 Admitted Power.....	1W
1.8 Connector.....	MHF

2.Physical Properties

2.1 Working Temperature.....	-20°C~+65°C
2.2 Storage Temperature.....	-30°C~+75°C



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Antenna Design for 德明CH1224

Document Number	NDX-190816
1st Released Date	16/08/2019
Author	Maohui Tao
Review By	Zhongyi Zhao



Revised History

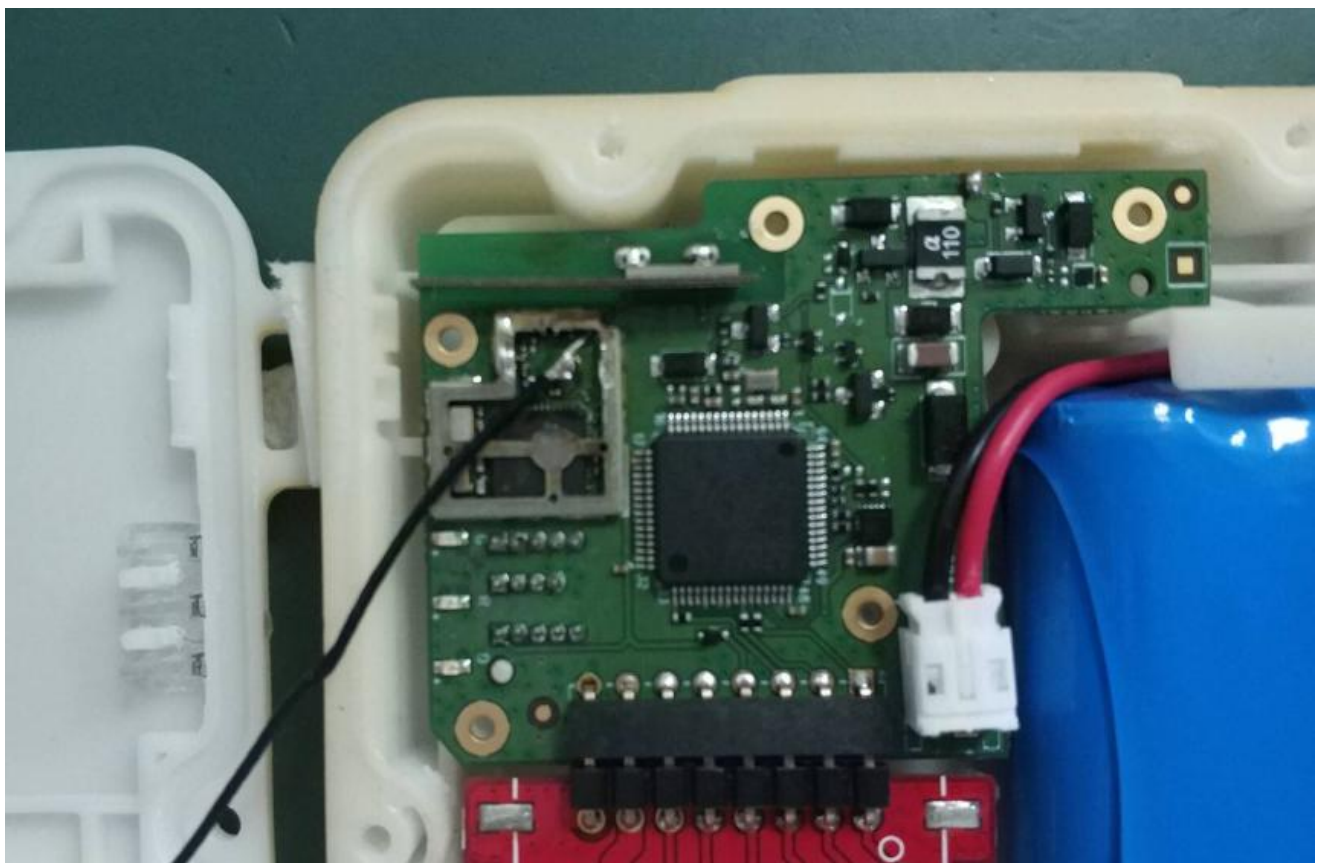
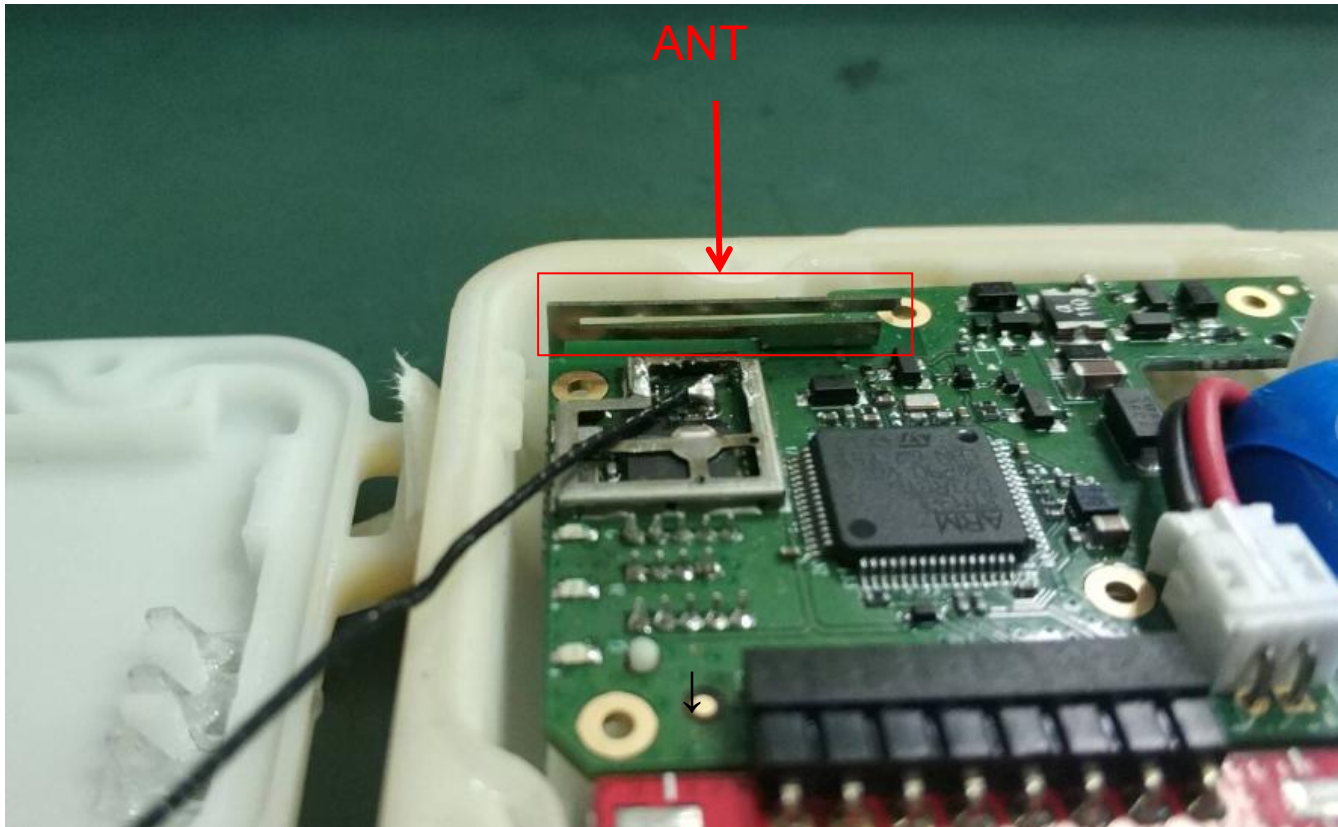
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1. Antennas' setup and enviroment With housing





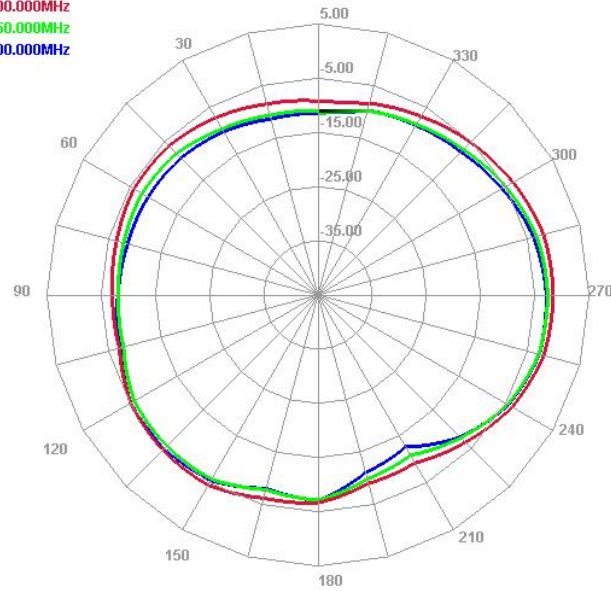
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1.2 不加铁板 2D Patterns

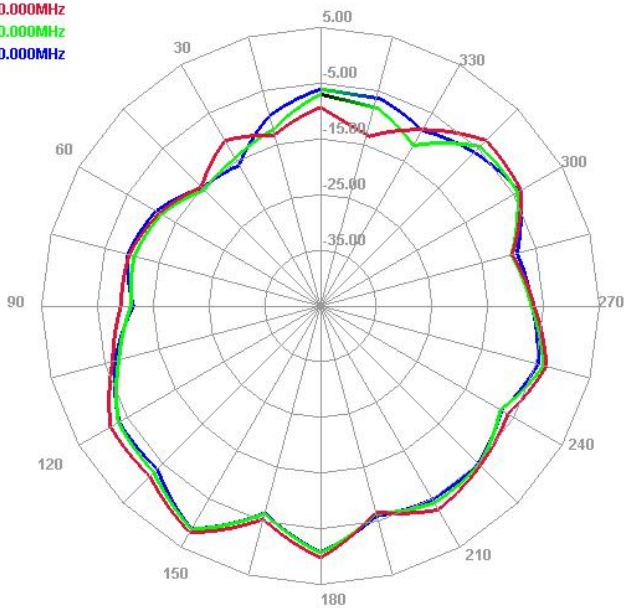
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2400.000MHz
2450.000MHz
2500.000MHz



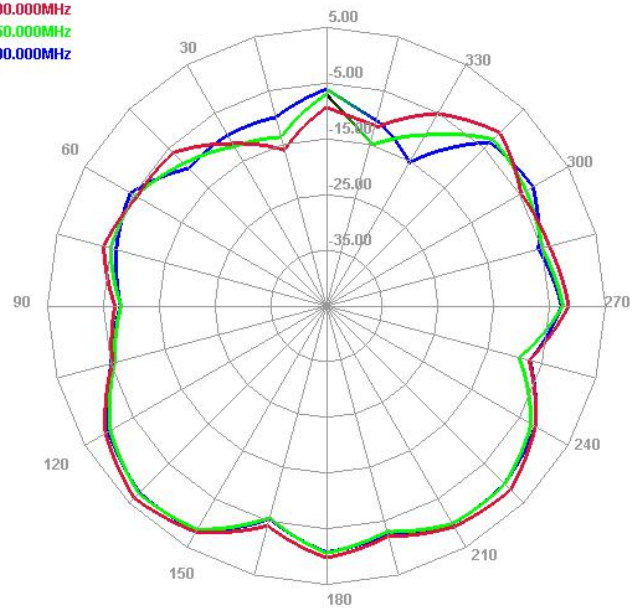
E1 Face

2400.000MHz
2450.000MHz
2500.000MHz



E2 Face

2400.000MHz
2450.000MHz
2500.000MHz





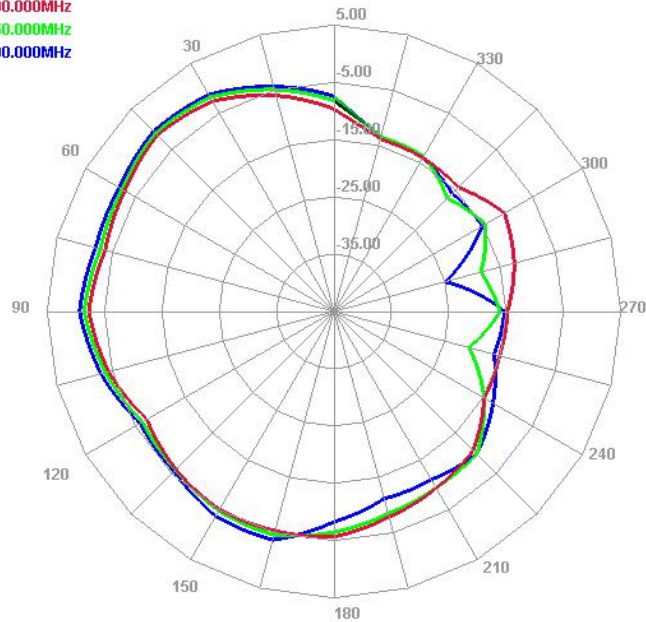
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1.3 加铁板 2D Patterns

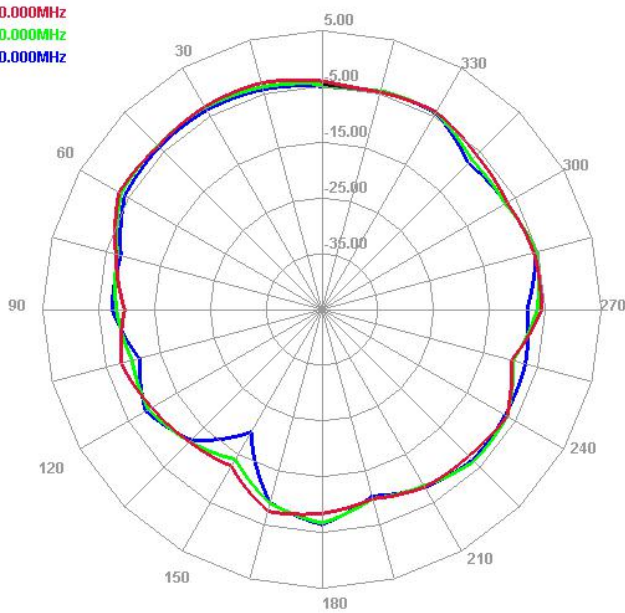
Horizontal

2400.000MHz
2450.000MHz
2500.000MHz



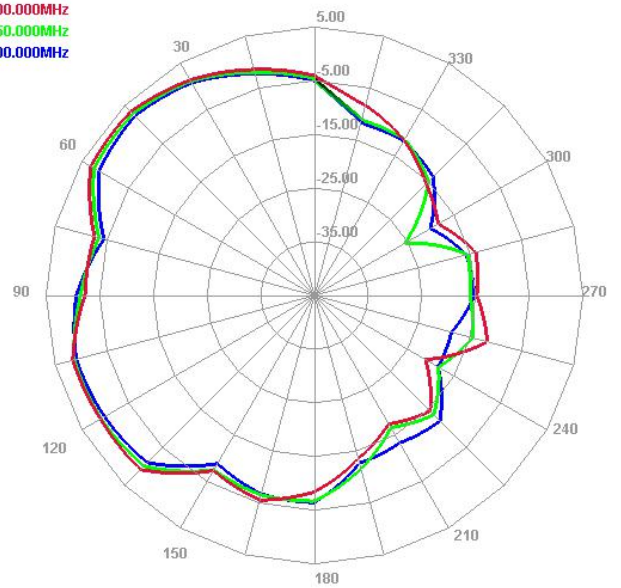
E1 Face

2400.000MHz
2450.000MHz
2500.000MHz



E2 Face

2400.000MHz
2450.000MHz
2500.000MHz



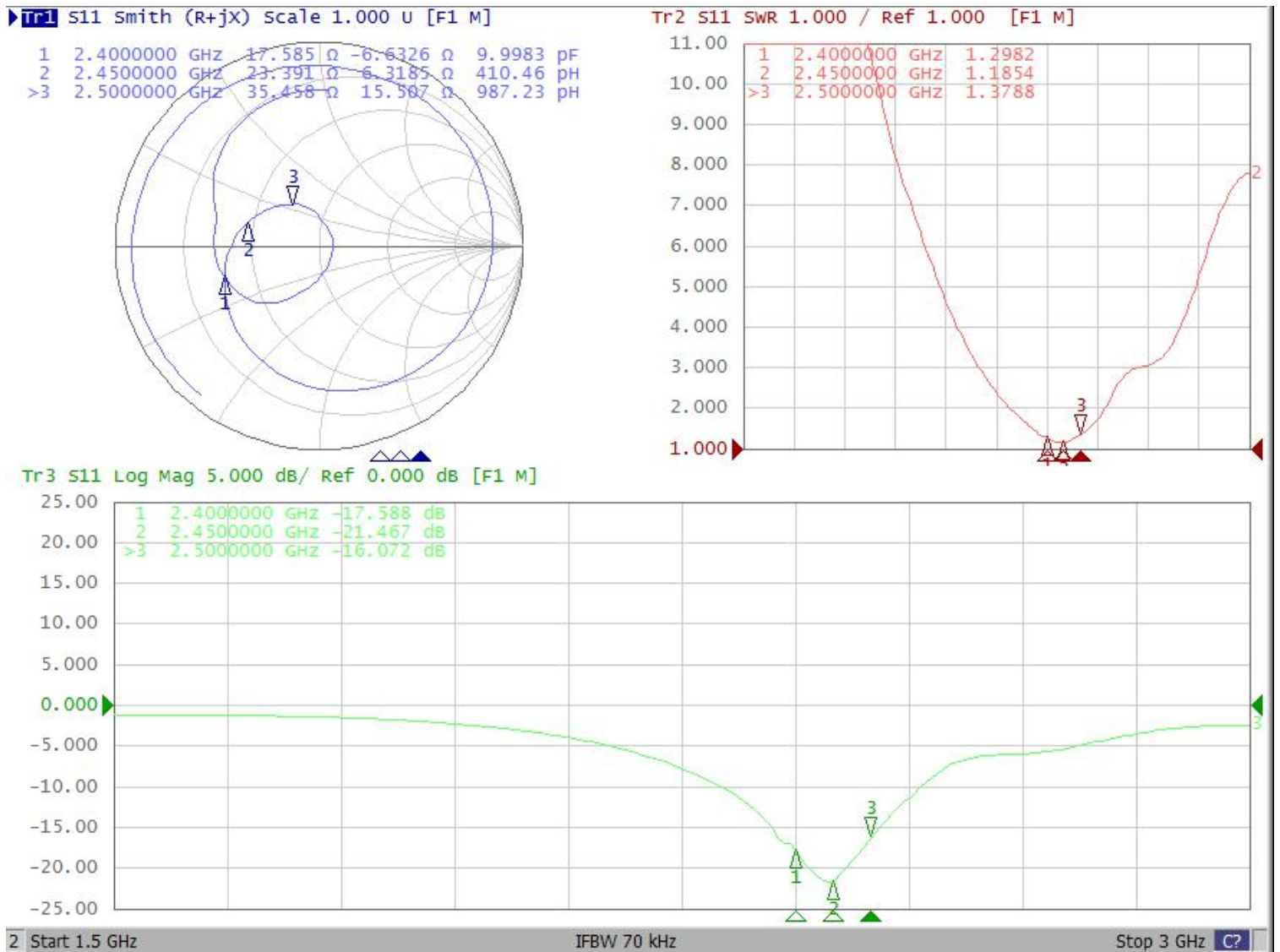


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2. Analyzer Measurement

2.1 不加铁板 passive test results

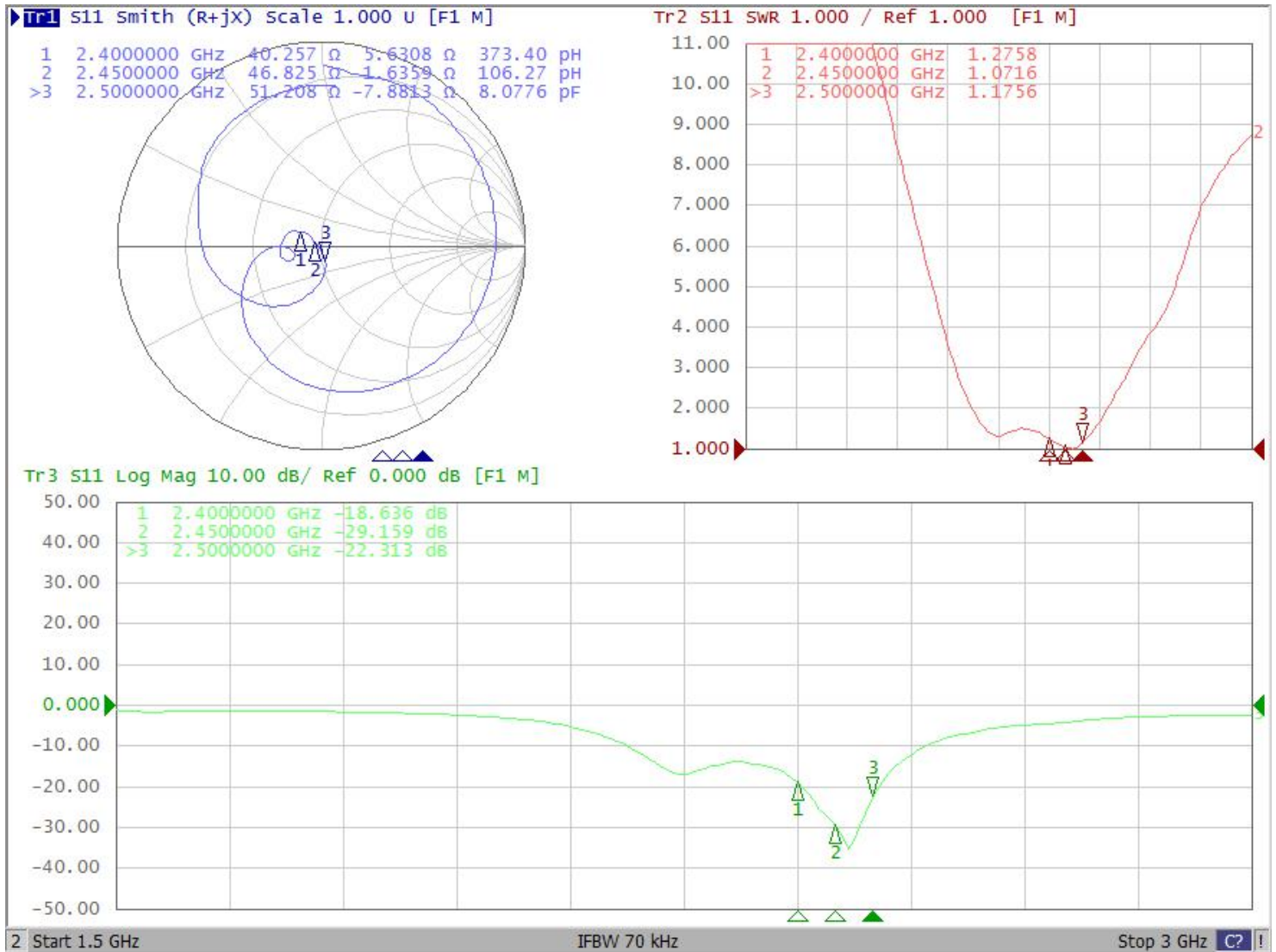




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2.2加铁板 passive test results



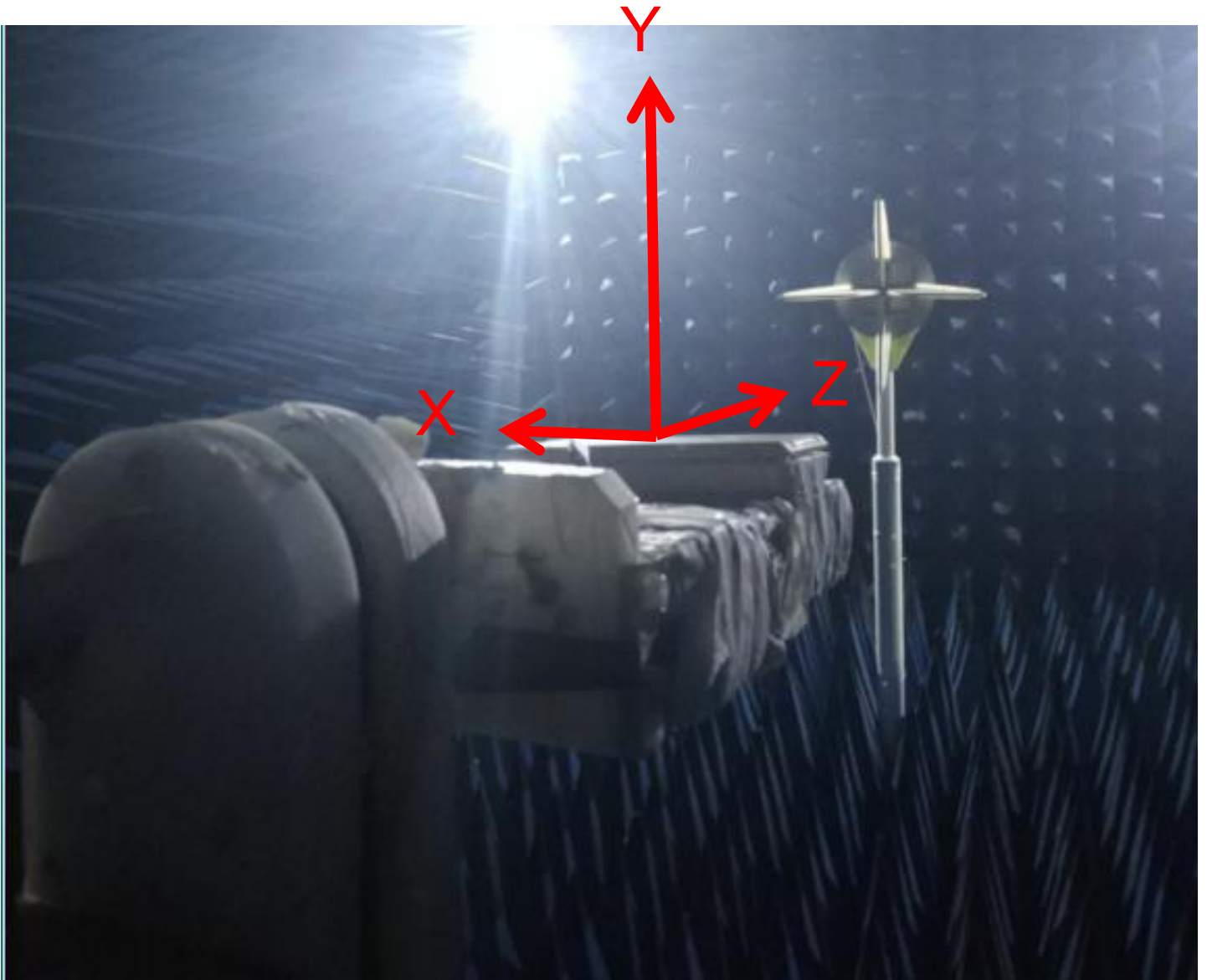


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3. Gain & Patterns test results

3.1 Measurement setting





3.3 不加铁板Peak Gain & Efficiency

Freq (MHz)	Effi (%)	Gain (dBi)
2400	44.66	3.68
2410	45.05	4.03
2420	44.99	3.99
2430	44.76	4
2440	45.56	3.74
2450	44.97	3.34
2460	44.06	3.43
2470	45.52	3.21
2480	44.24	3.42
2490	43.69	3.17
2500	43.12	2.74



3.3 加铁板Peak Gain & Efficiency

Freq (MHz)	Effi (%)	Gain (dBi)
2400	46.84	3.97
2410	47.45	4.15
2420	46.39	4.28
2430	47.13	4.08
2440	48.09	3.47
2450	46.3	2.92
2460	45.73	3.17
2470	44.79	3.15
2480	44.5	3.42
2490	44.15	3.34
2500	43.56	2.9

