

Professional RF research and development institutions



Shenzhen dwm Communication Equipment Co., Ltd.

Antenna Test Report

Shenzhen R&D Center Laboratory

Completion Date: September 2, 2022

Project Information

1

Client: Hangzhou Ruze e-commerce Co., Ltd

2

Model: woo

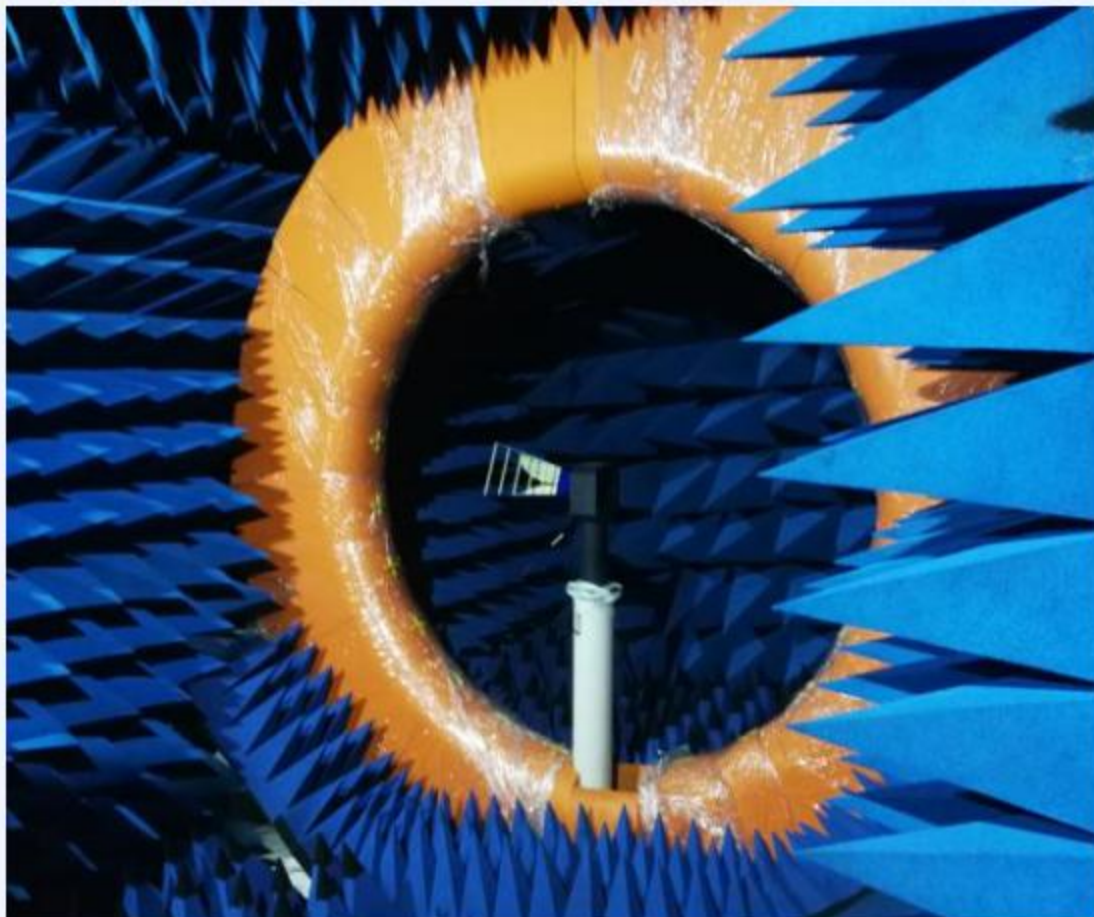
3

Frequency band: BT

4

Remark:

Test Equipment



A 24-probe microwave chamber



R&S CMW500




Agilent E5515C

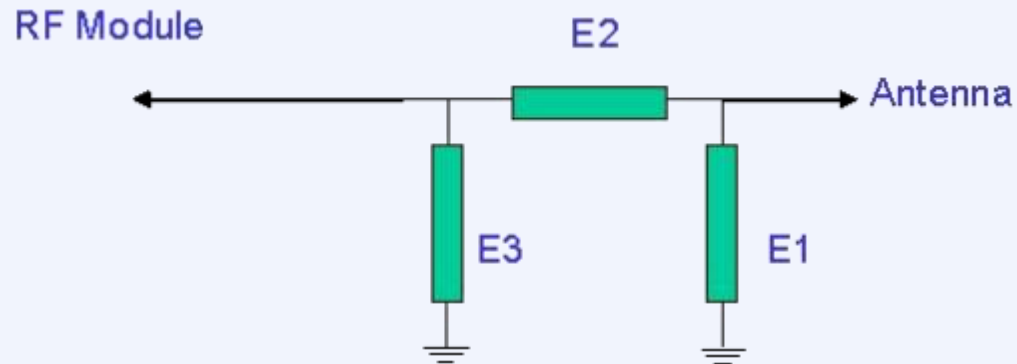


Agilent Technologies E5071B

Antenna project design and debugging instruction

Working frequency	BT:2400~2500MHz	Test Engineer	Version	DWM- V1.0
Product		Antenna matching circuit		
		original match		
Remarks for the whole antenna		Antenna Matching Instructions		
1. BT antenna form: monopole 2. BT matching circuit: unchanged		E1		
		E2		
		E3		

Matching Circuit



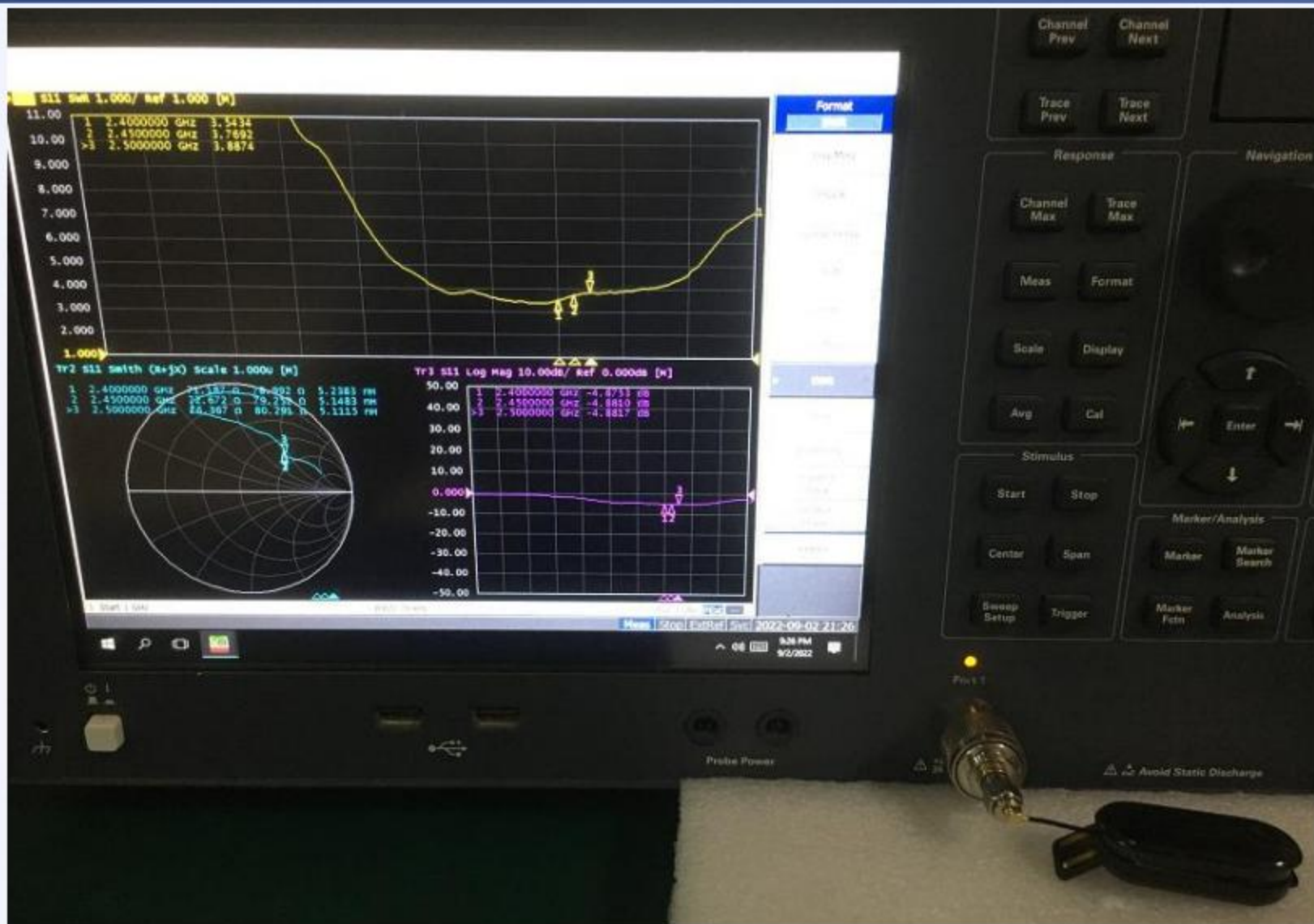
Element	Value	Vender
E1(0402)		
E2(0402)		
E3(0402)		

Our company has not modified the original matching circuit of the BT antenna

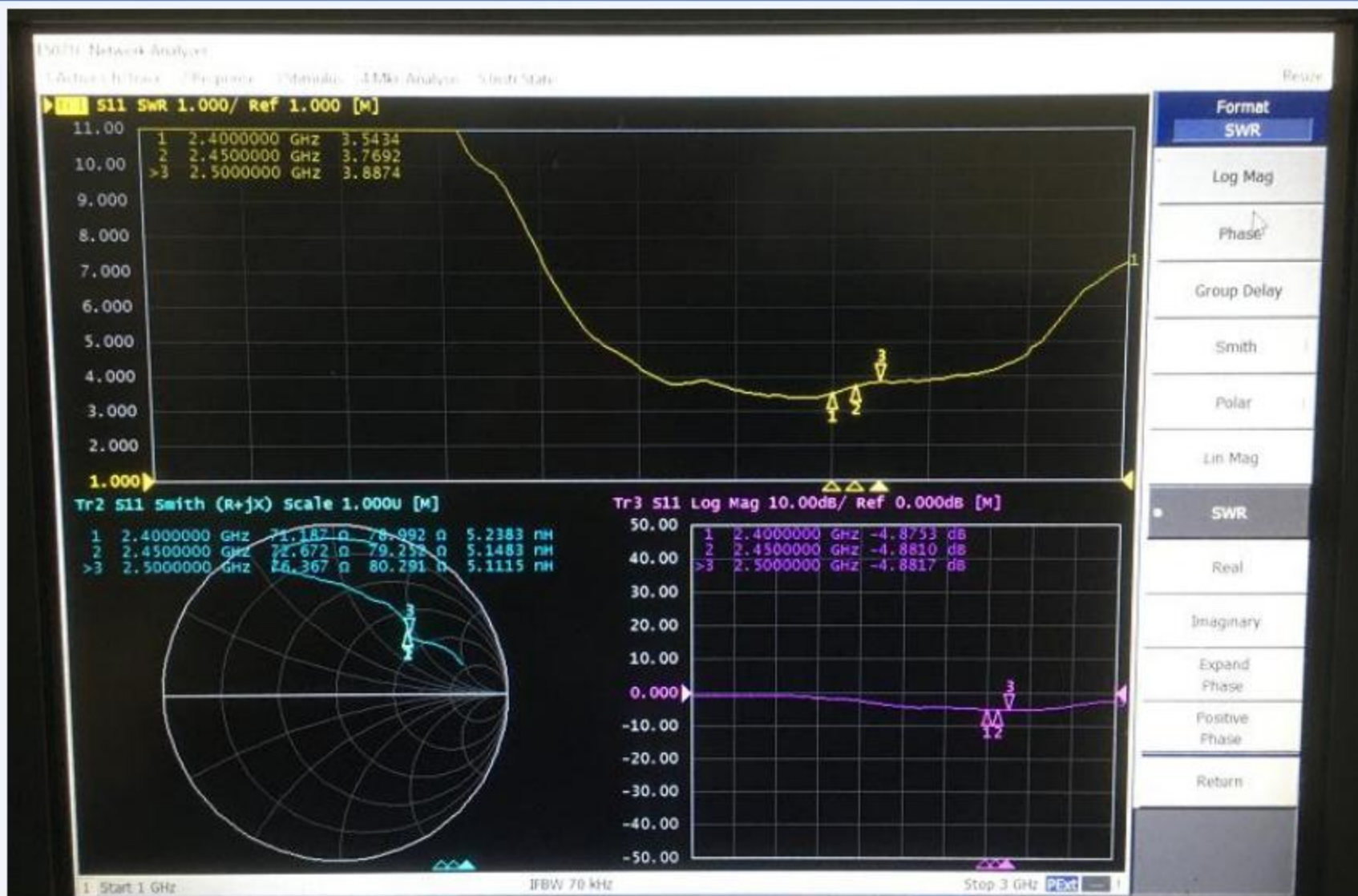
EUT Appearance



Passive Test Condition



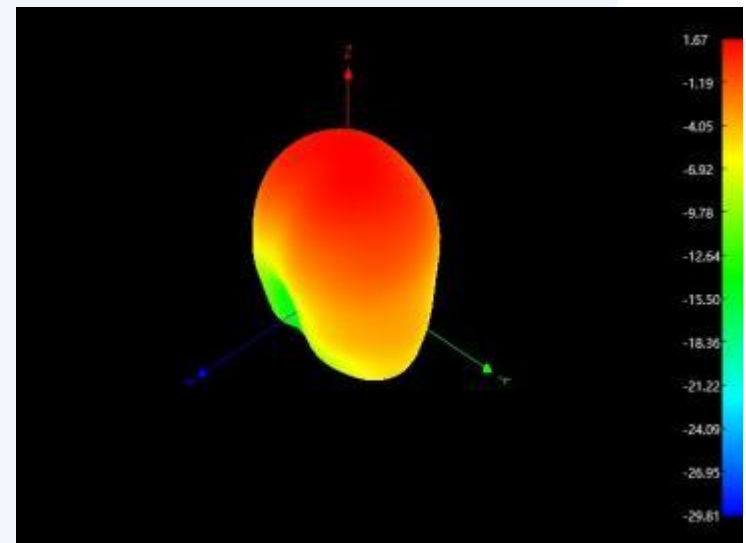
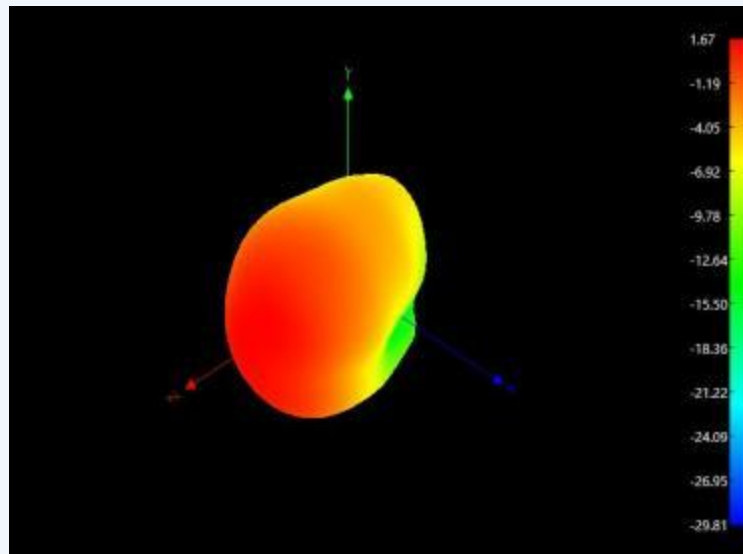
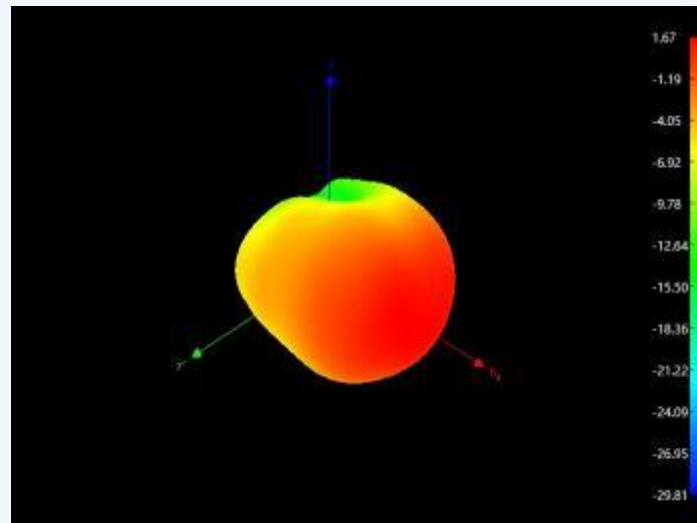
SWR+Return Loss+Smith



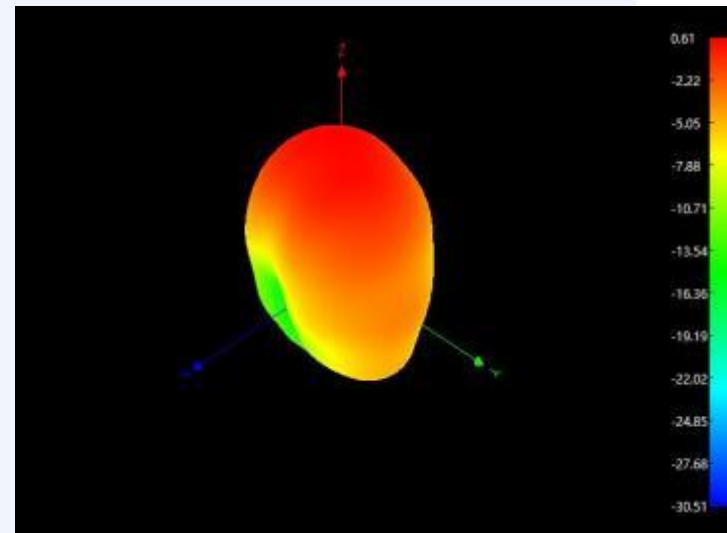
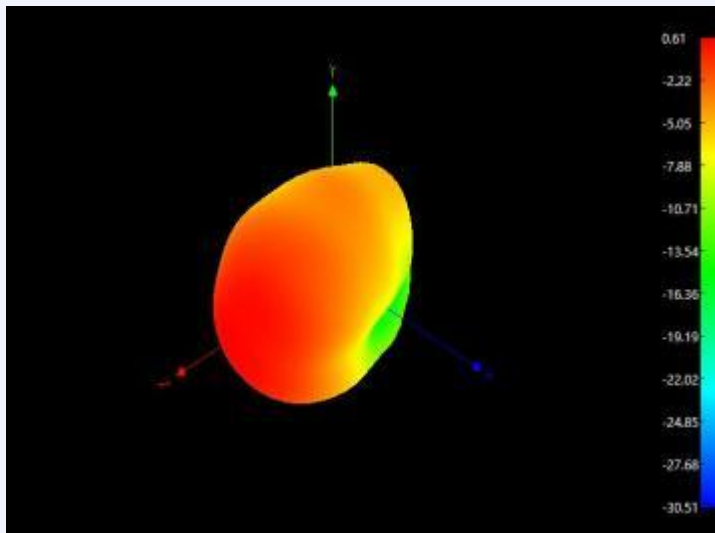
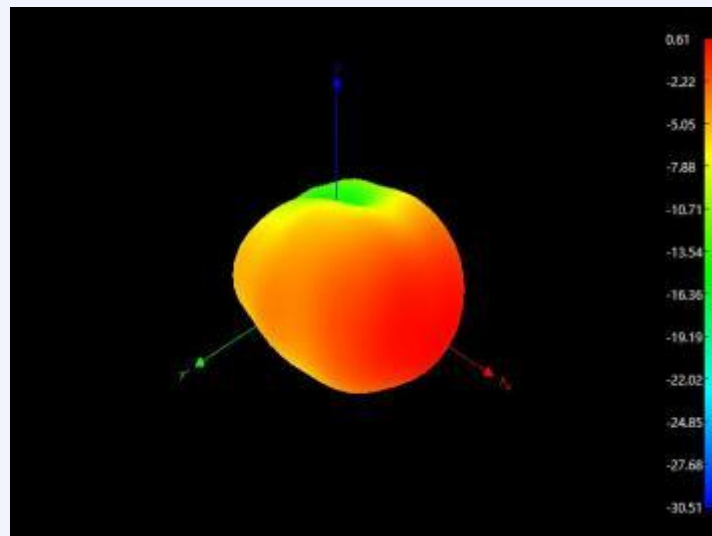
Gain And Efficiency

Frequency / MHz	Gain/ dBi	Frequency / MHz	Efficiency / dB	Efficiency / %
2400	-0.35	2400	-6.49	22.44
2410	-0.48	2410	-6.35	23.17
2420	-0.52	2420	-6.58	21.98
2430	-0.74	2430	-7.4	18.2
2440	-0.92	2440	-7.58	17.46
2450	-0.83	2450	-7.15	19.28
2460	-0.77	2460	-6.73	21.23
2470	-0.71	2470	-6.54	22.18
2480	-0.85	2480	-6.31	23.39
2490	-0.93	2490	-6.09	24.6
2500	-1.01	2500	-6.27	23.6

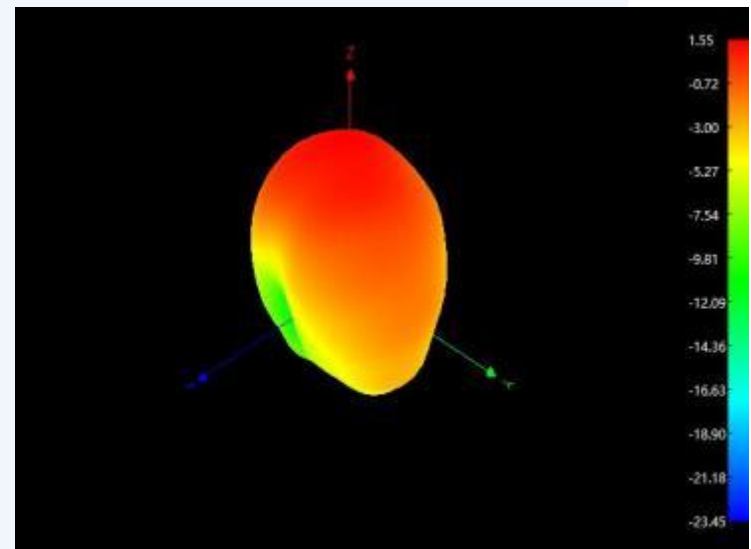
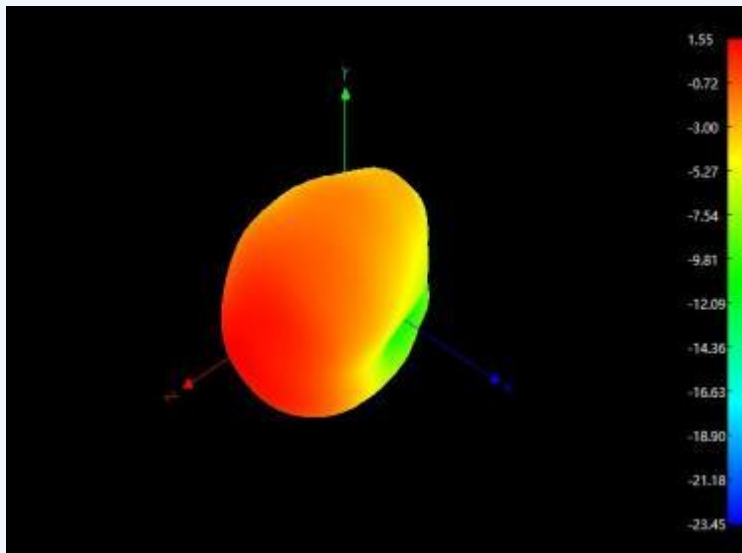
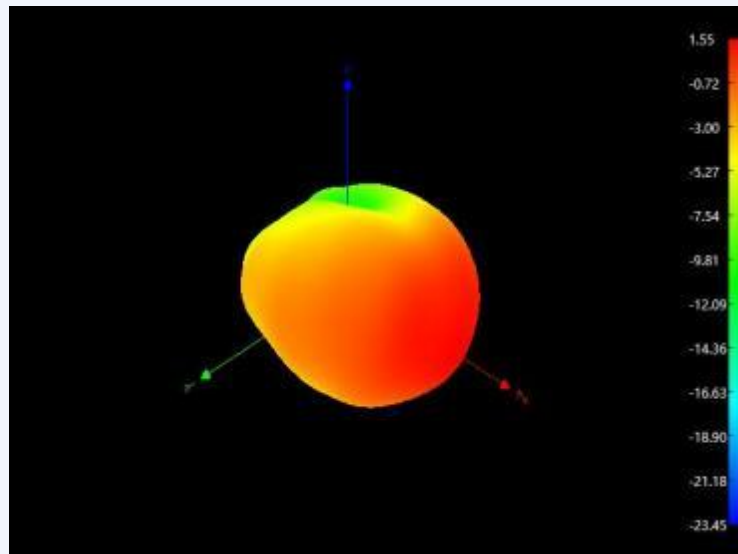
3D Pattern(2400MHz)

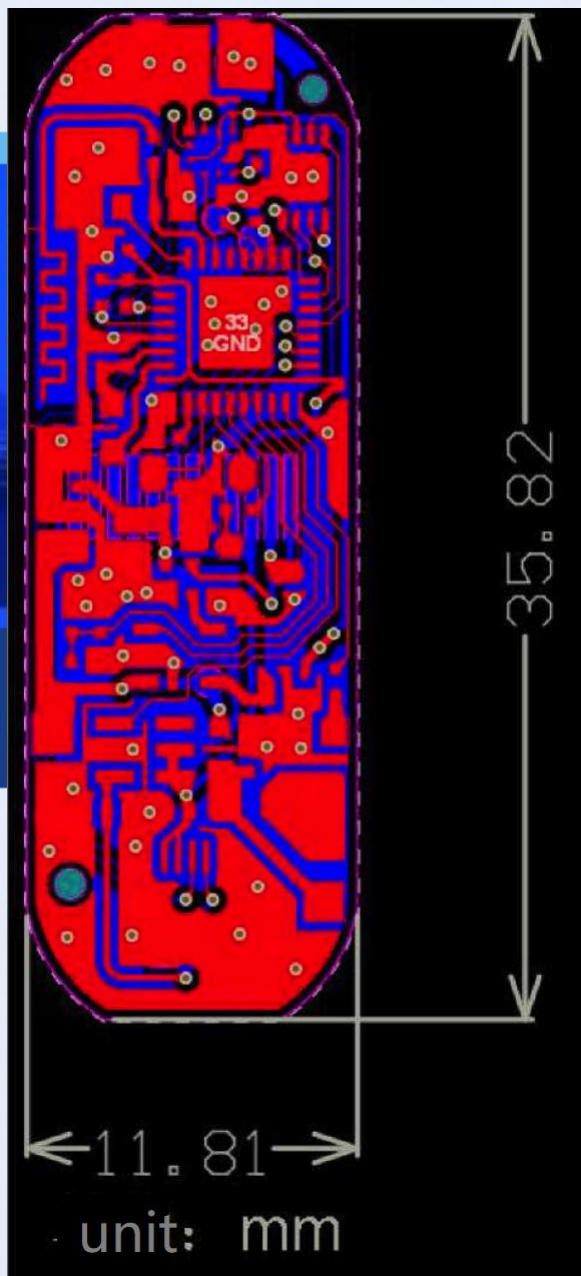


3D Pattern(2450MHz)

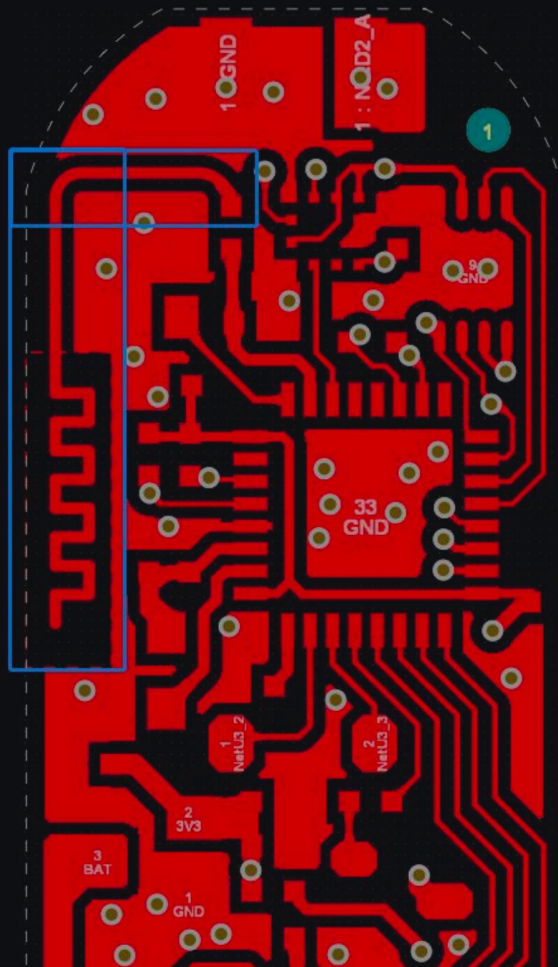


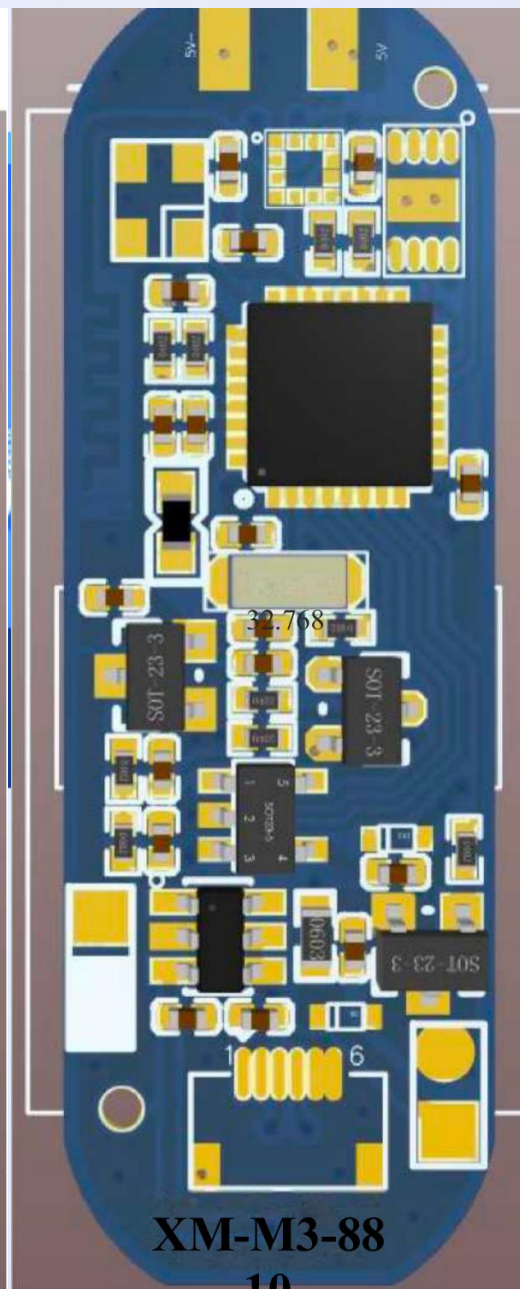
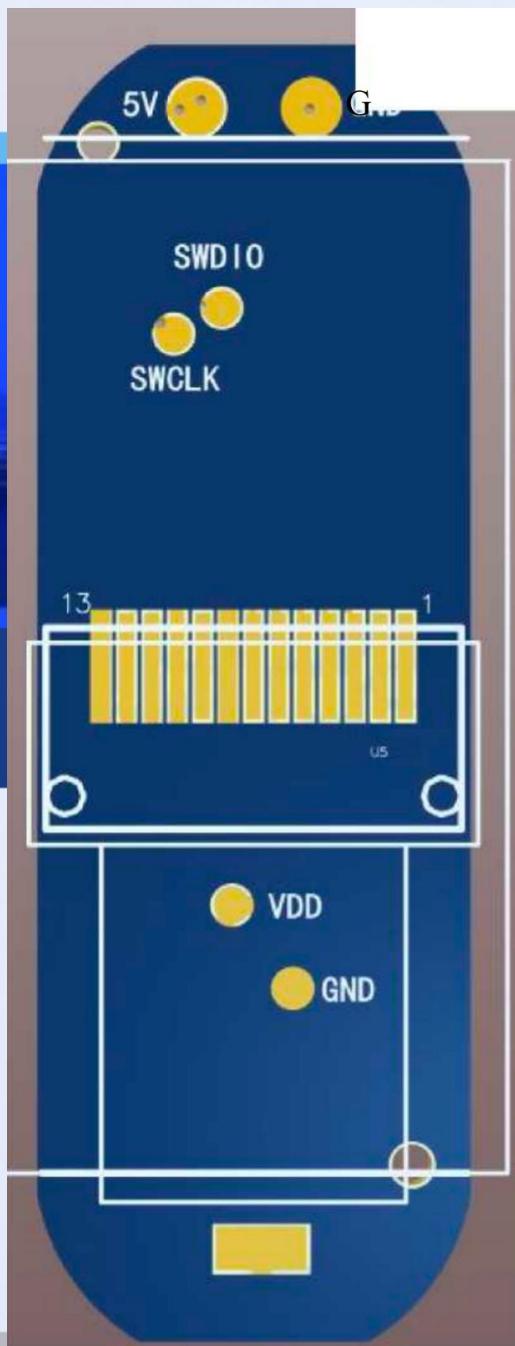
3D Pattern(2500MHz)





Specific location of RF antenna





XM-M3-88

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2022/09/07

Professional RF research and development institutions



Thank You !

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