

2025

Antenna Matching Test Report

Customer name: Shenzhen Yikenuo Technology Development Co., LTD

Test date: July 21,2025

Chen Pengfei 18028016875

Guangzhou Cambrian Electronic Technology Co., LTD

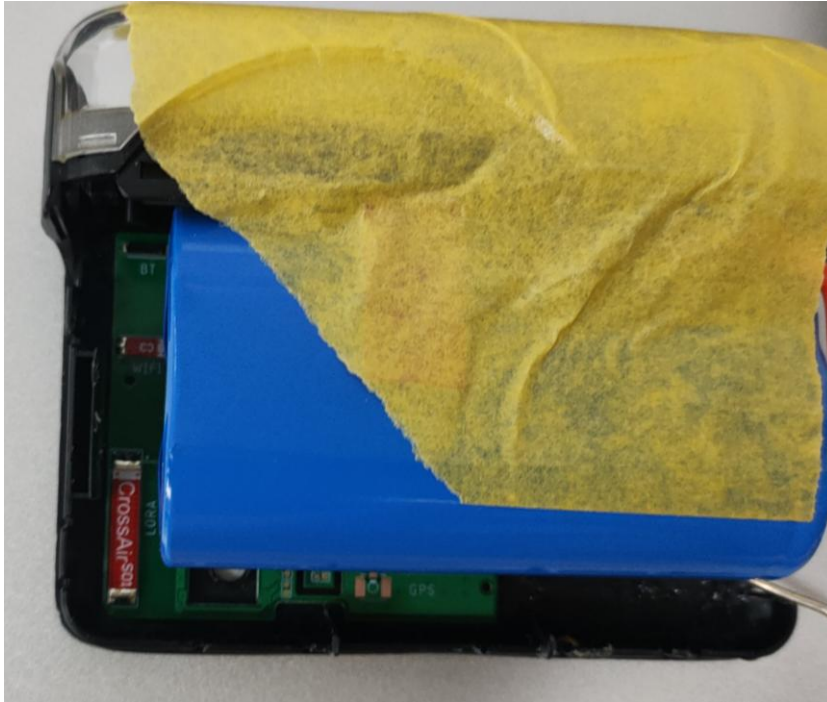
2025/7/21



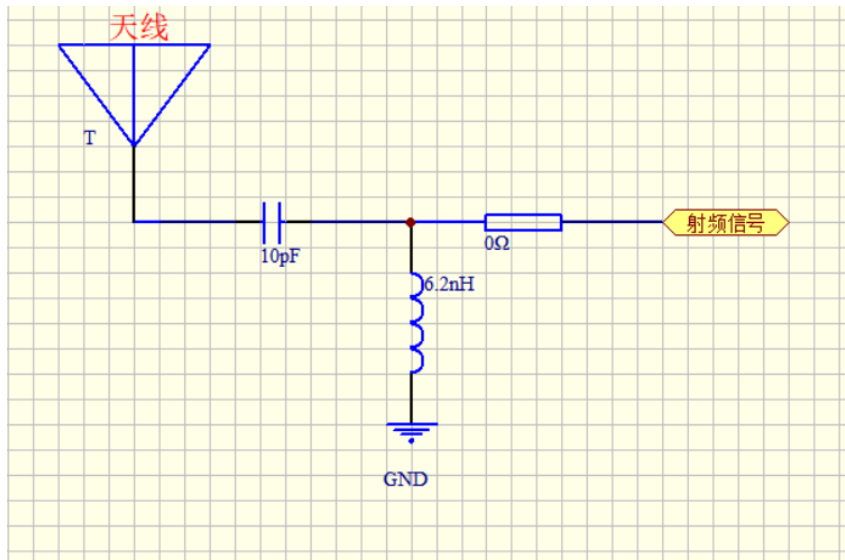
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Battery Installation Diagram



A: LORA Antenna CA-S01 868MHz-915MHz I Match Debug Data Debug the Matching Schematic of the Antenna

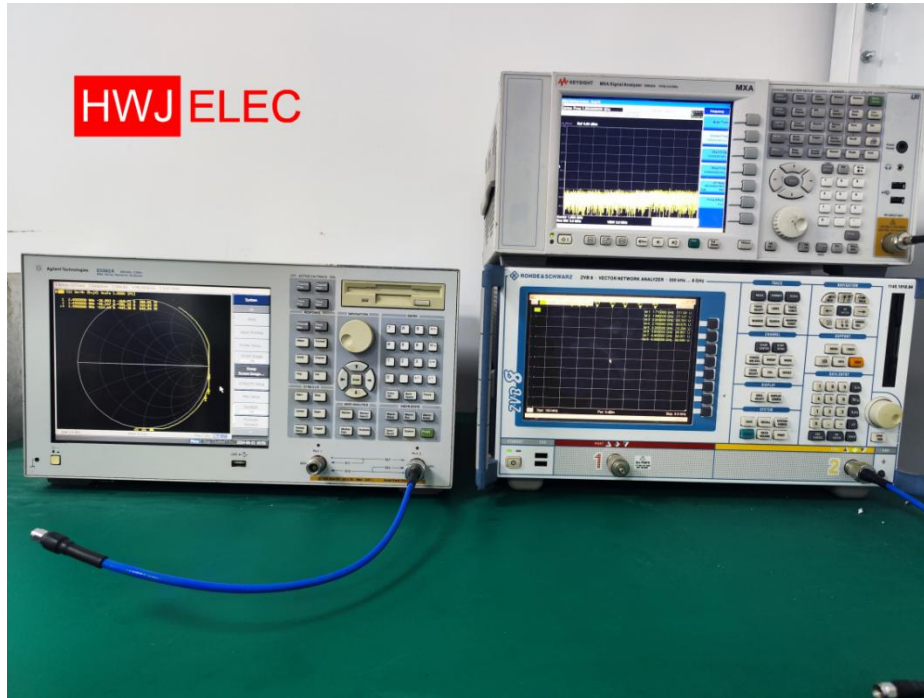


Note: The peripheral component values required by the RF chip reference design should be used according to the chip manufacturer's reference design. The above antenna matching components are independent and cannot be replaced with each other

Device Model

10pF	0402CG100J500NT	FH (elegance and talent)
6. 2nH	SDCL1005C6N2STDF	Sunlord (Shunluo)

IIS Parameter Testing

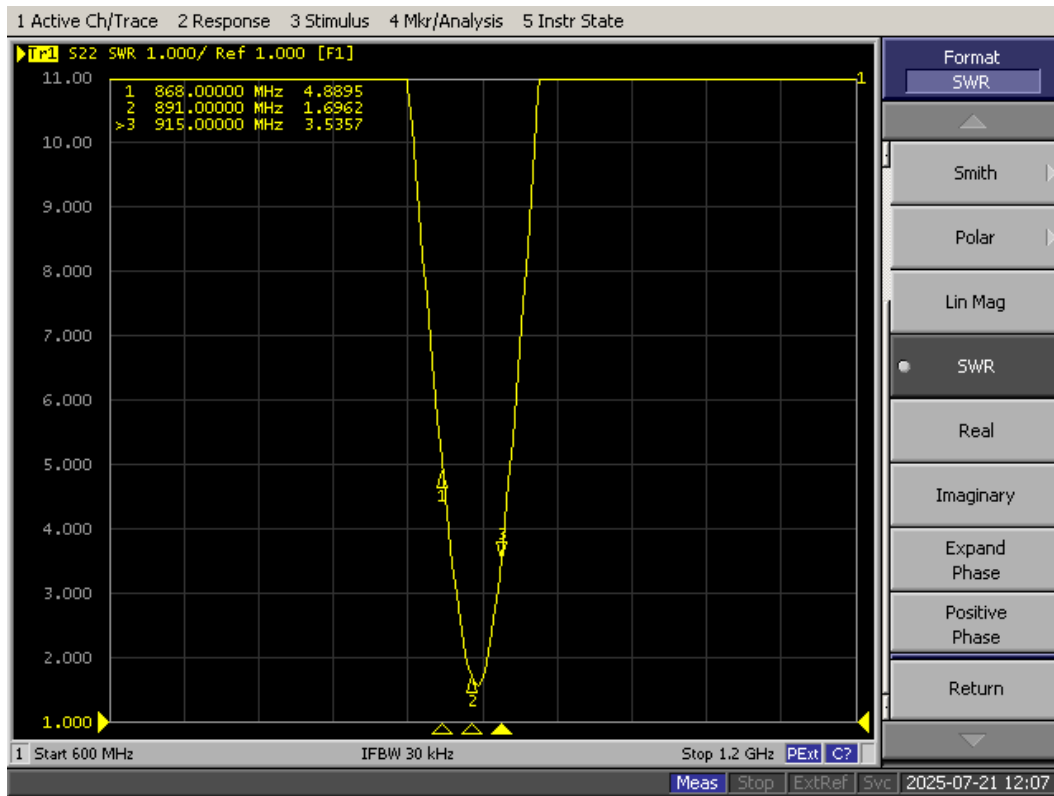


Model: E5062A, ZVB8, N9020A

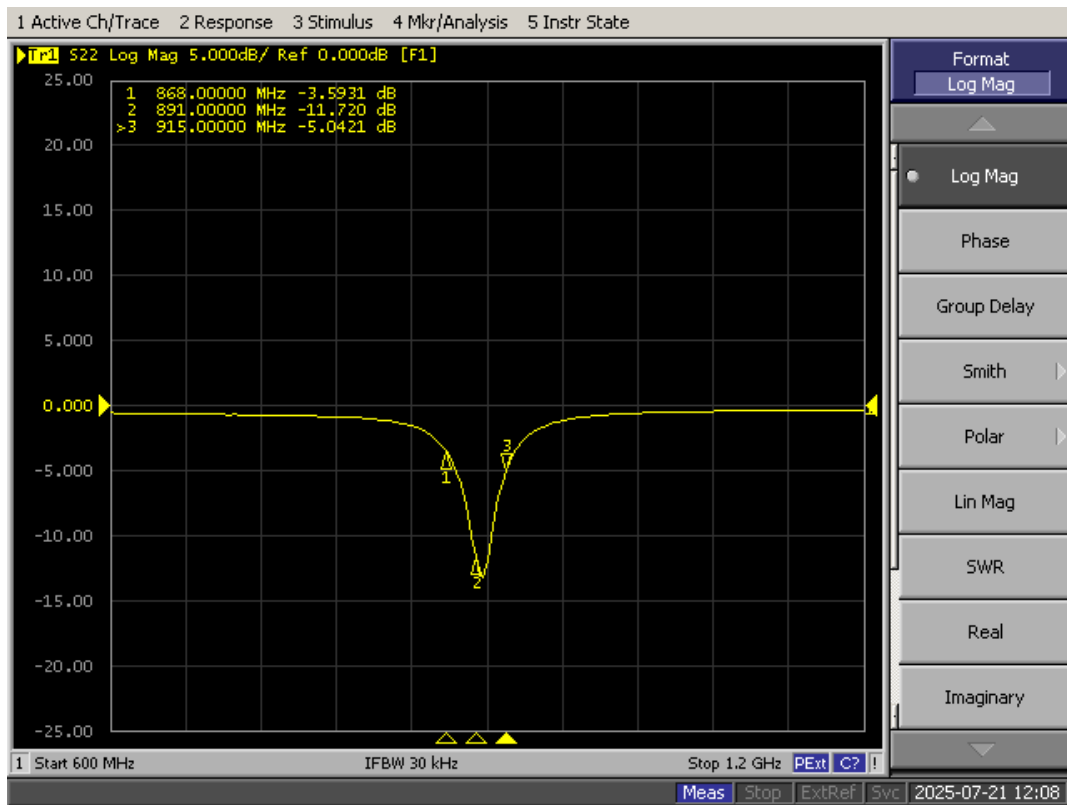
Full Machine Test Environment



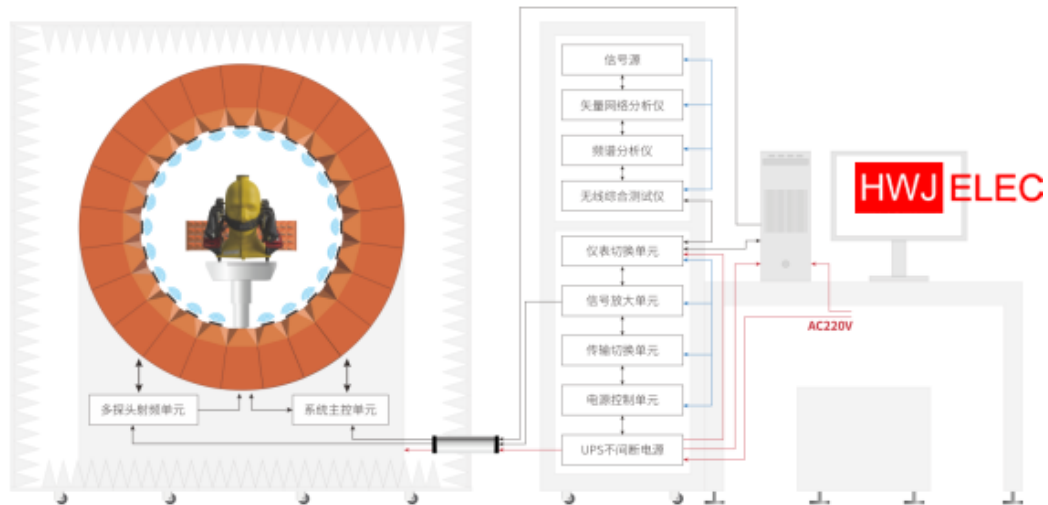
Antenna Standing Wave Ratio



Return Loss



III 3D Microwave Anechoic Chamber Test

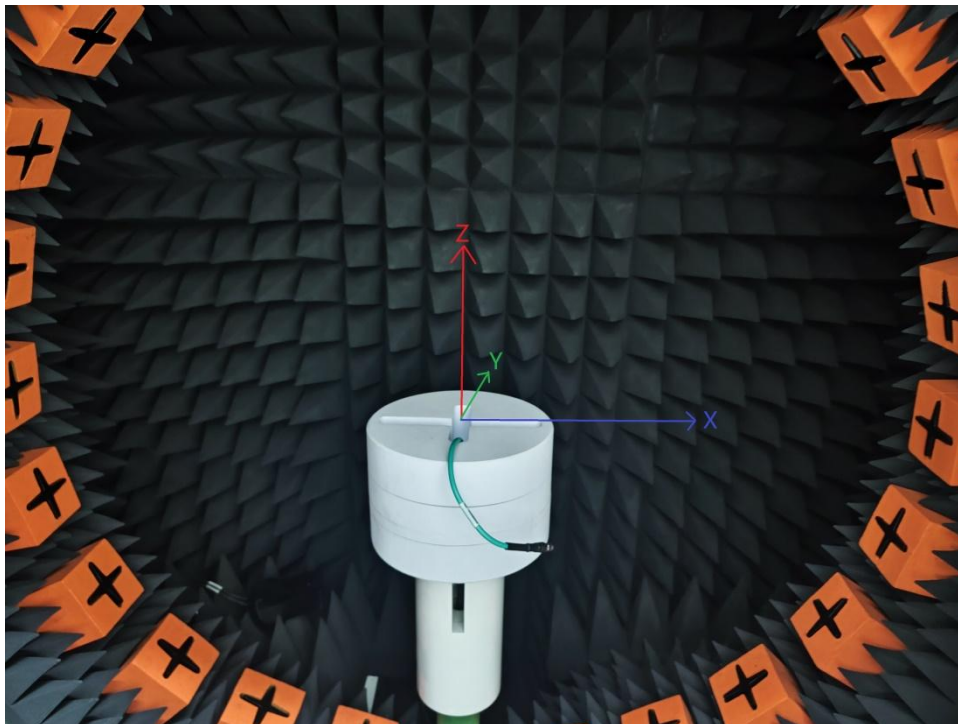


Device models: ATS-200, E5071C, CMW500

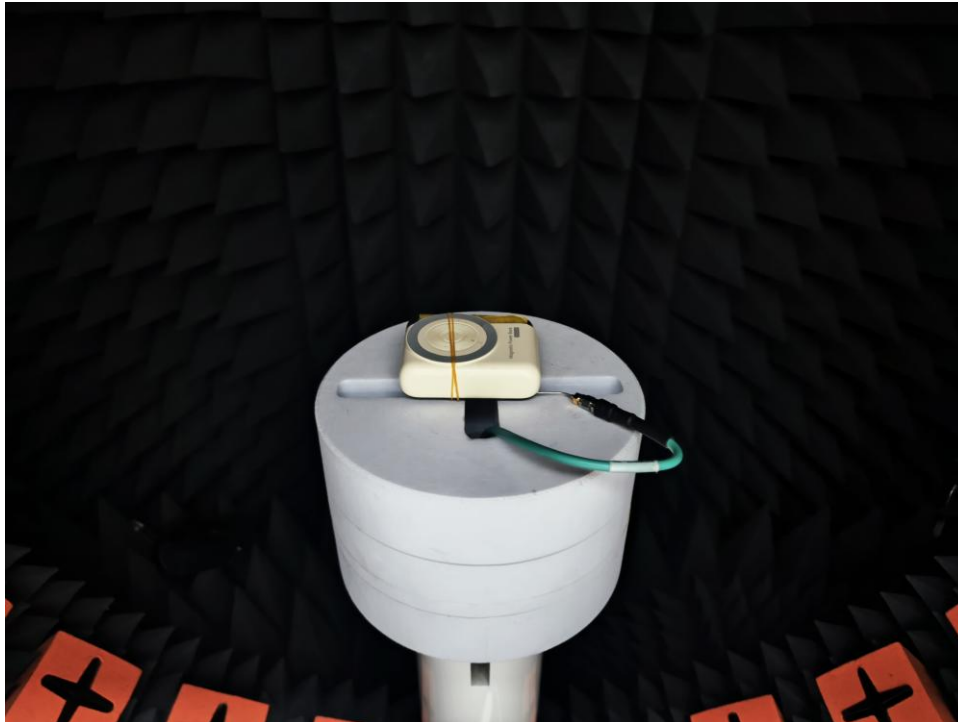
Gain and Efficiency Table

Frequency/Mhz	MaxGain/dBi	Efficiency / %
858	-6.24	10.23
863	-5.53	12.79
868	-5.05	14.49
873	-4.32	16.14
878	-3.99	18.49
883	-3.27	18.41
888	-2.8	20.37
890	-3.01	20.89
895	-1.73	20.61
900	-1.96	19.59
905	-1.64	17.46
910	-1.54	15.07
915	-2.44	12.45
920	-2.78	10.69
925	-4.1	8.67

Darkroom Direction Diagram

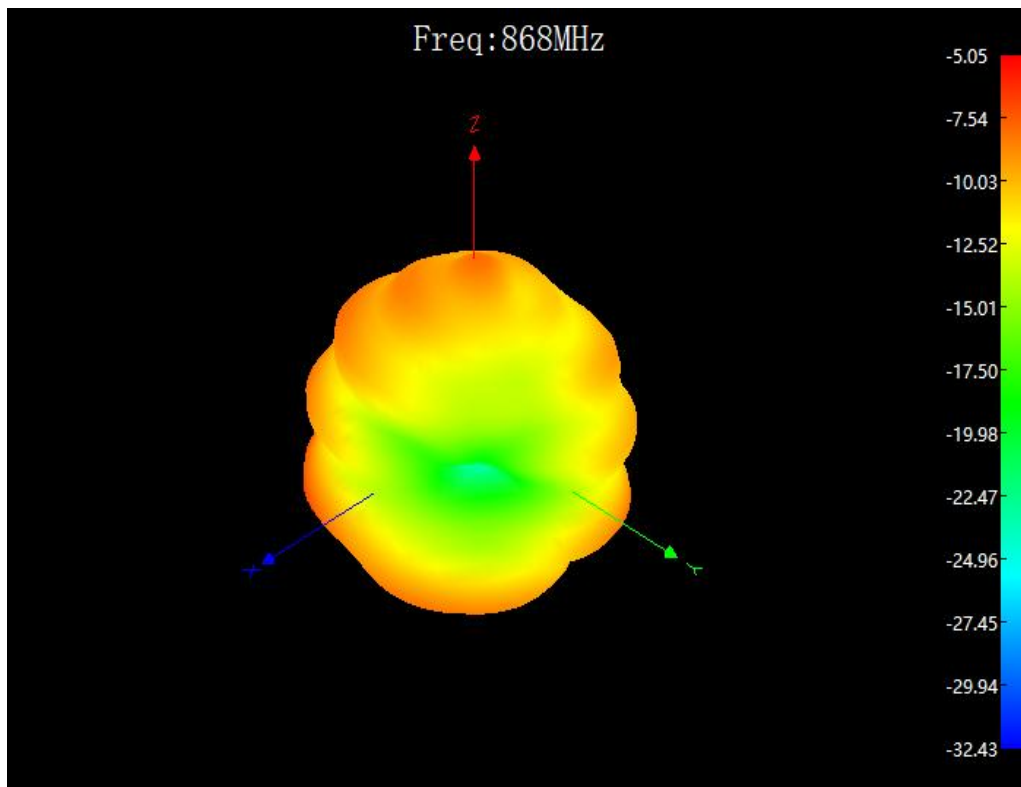


Product Darkroom Test Environment Diagram

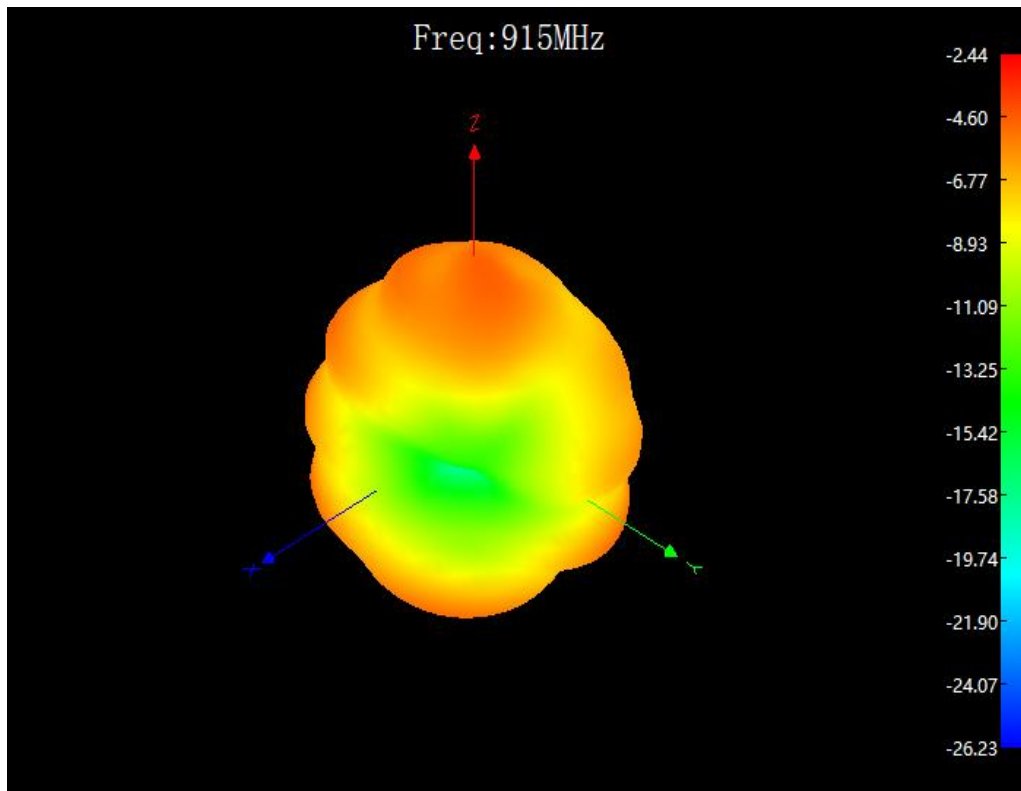


3D Directional Map

868MHz



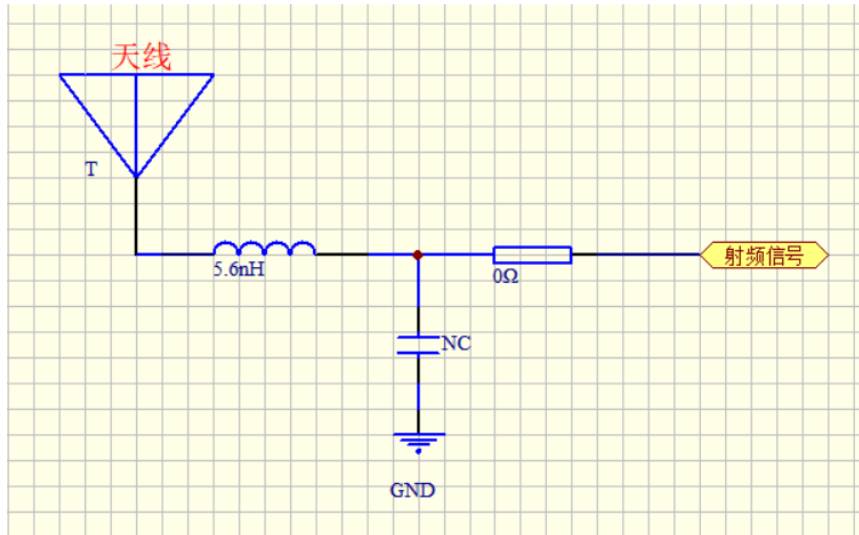
915MHz



C: BT Antenna OA-C09 2.4G

I Match Debug Data

Debug the Antenna Matching Schematic

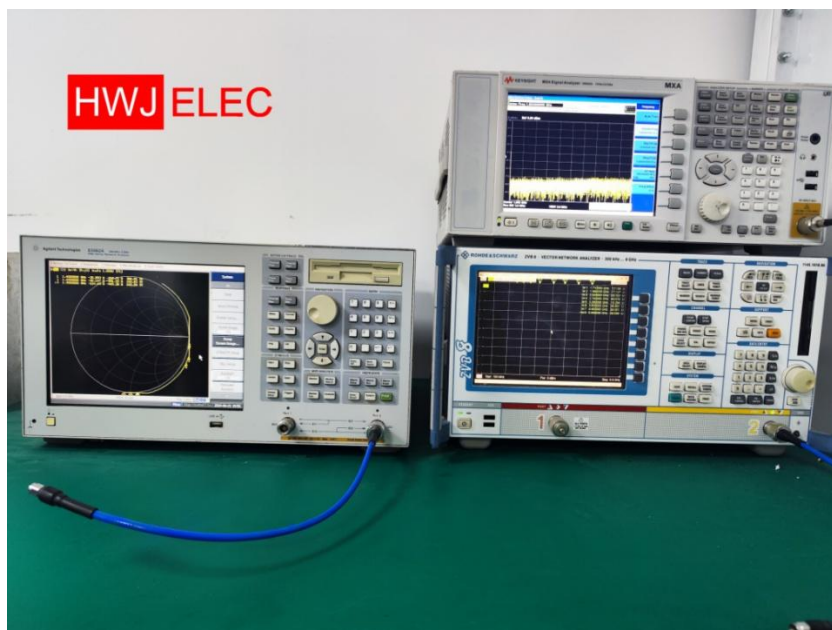


Note: The peripheral component values specified in the RF chip reference design should be used according to the manufacturer's reference design. The above antenna matching components are independent and cannot be replaced with each other.

Device Model

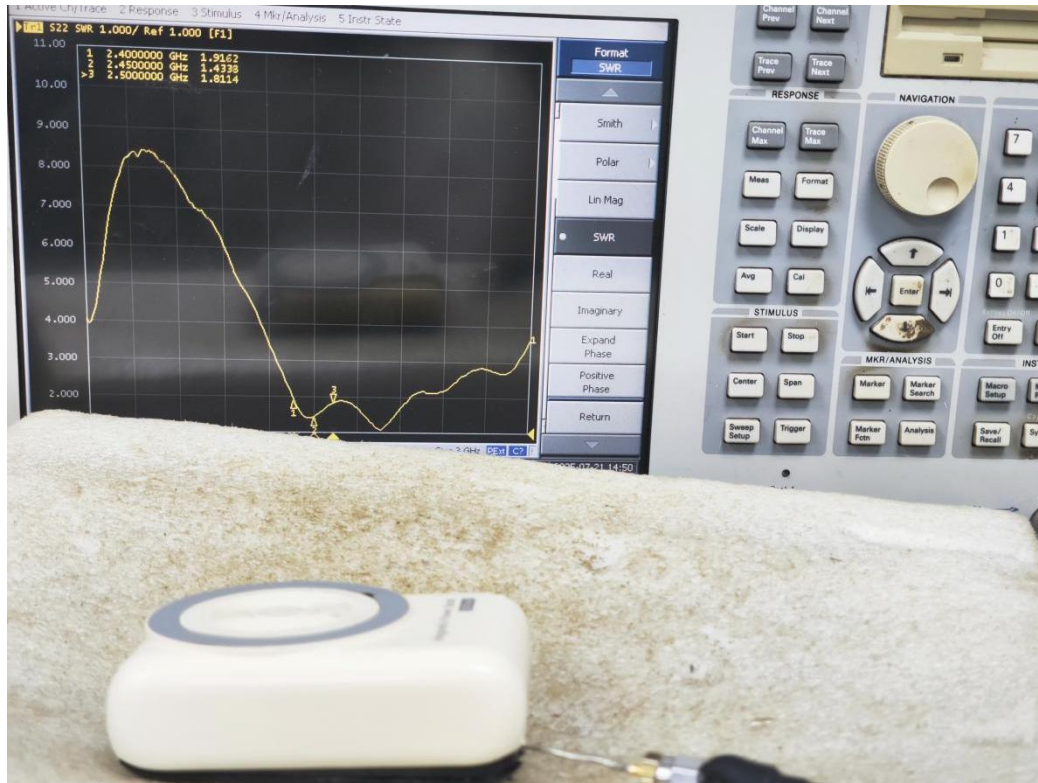
5.6nH	SDCL1005C5N6STDF	Sunlord (Shunluo)
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IIS Parameter Testing

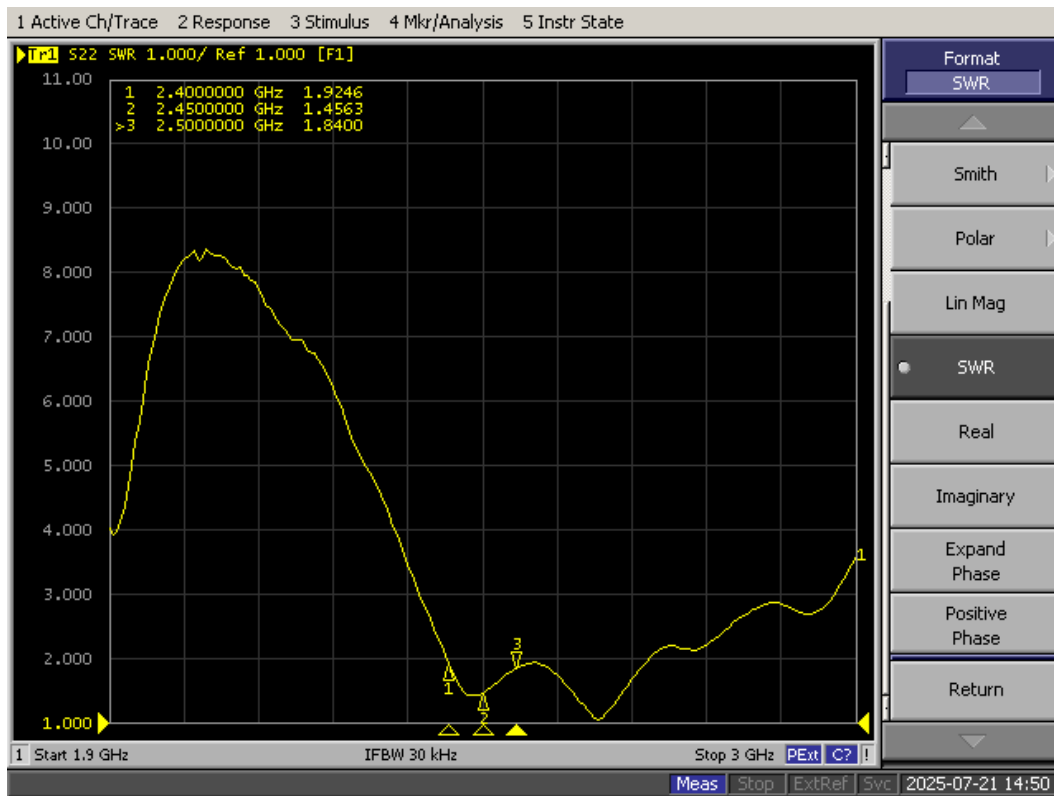


Model: E5062A, ZVB8, N9020A

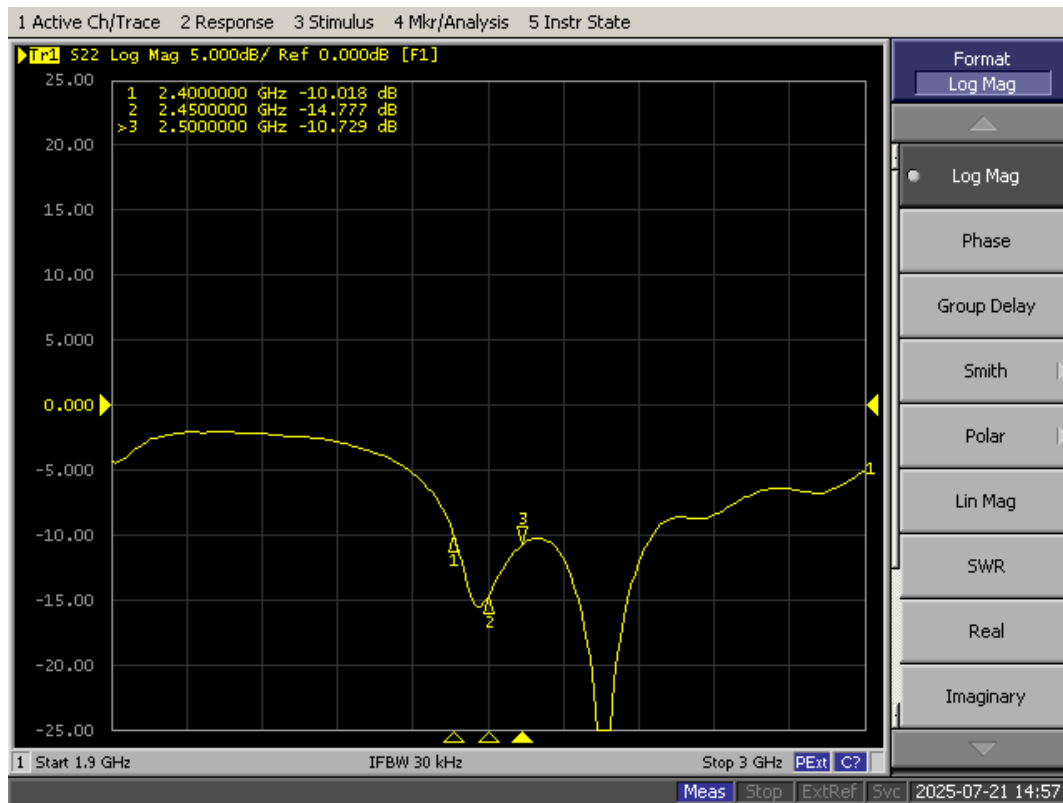
Overall Test Environment



Antenna Standing Wave Ratio

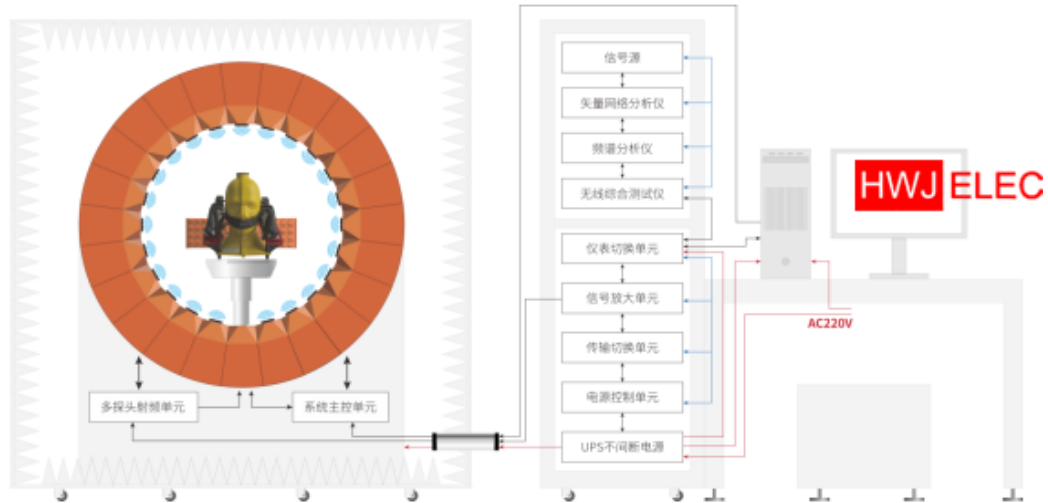


Return Loss



III 3D Microwave Dark Chamber Test



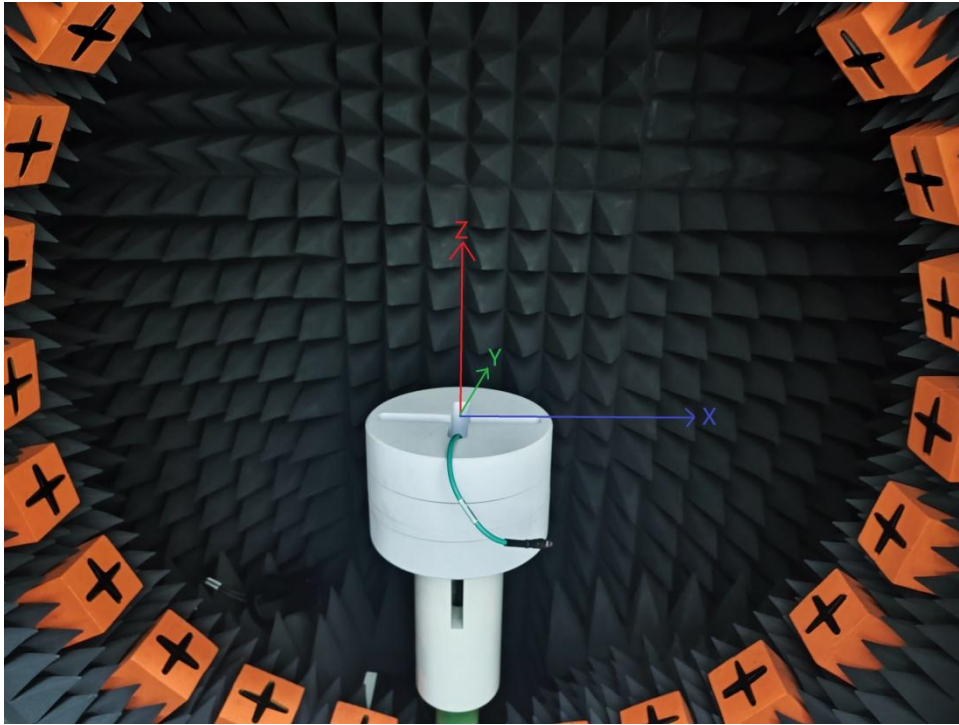


Device models: ATS-200, E5071C, CMW500

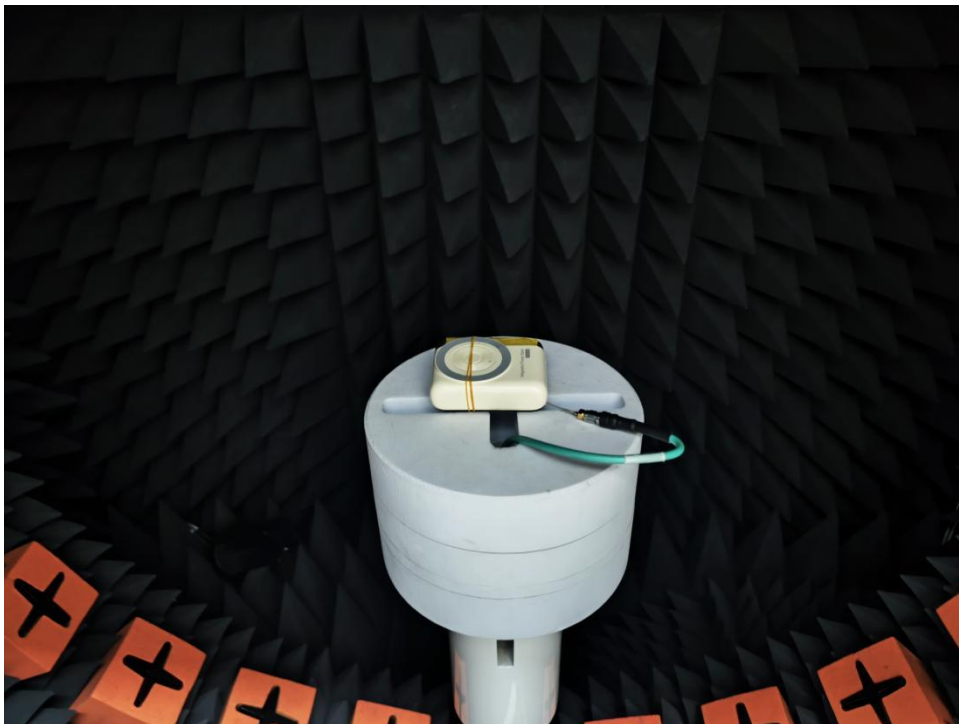
Gain and Efficiency Table

Frequency/Mhz	MaxGain/dBi	Efficiency / %
2400	-1.68	26.3
2410	-2.13	25.18
2420	-1.47	26.61
2430	-0.74	27.23
2440	-0.3	30.2
2450	-0.26	31.12
2460	-0.24	30.55
2470	-0.28	30.34
2480	-0.44	30.97
2490	-0.66	31.41
2500	-0.91	31.48

Darkroom Direction Diagram

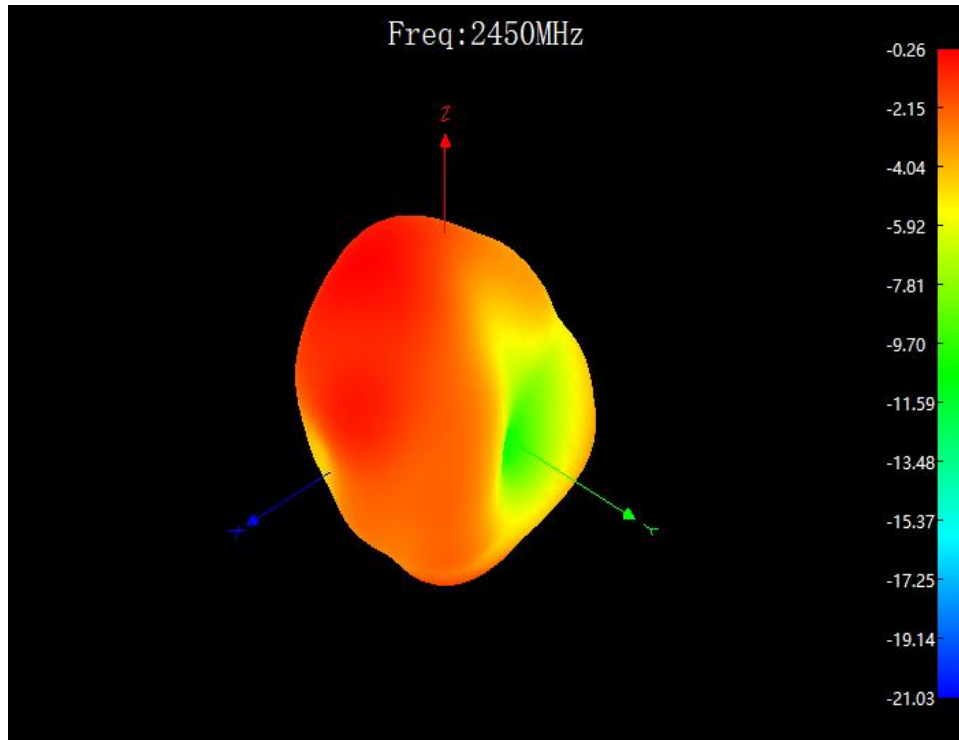


Product Darkroom Test Environment Diagram



3D Directional Chart

2450MHz



Guangzhou Cambricon Electronic Technology Co.,
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