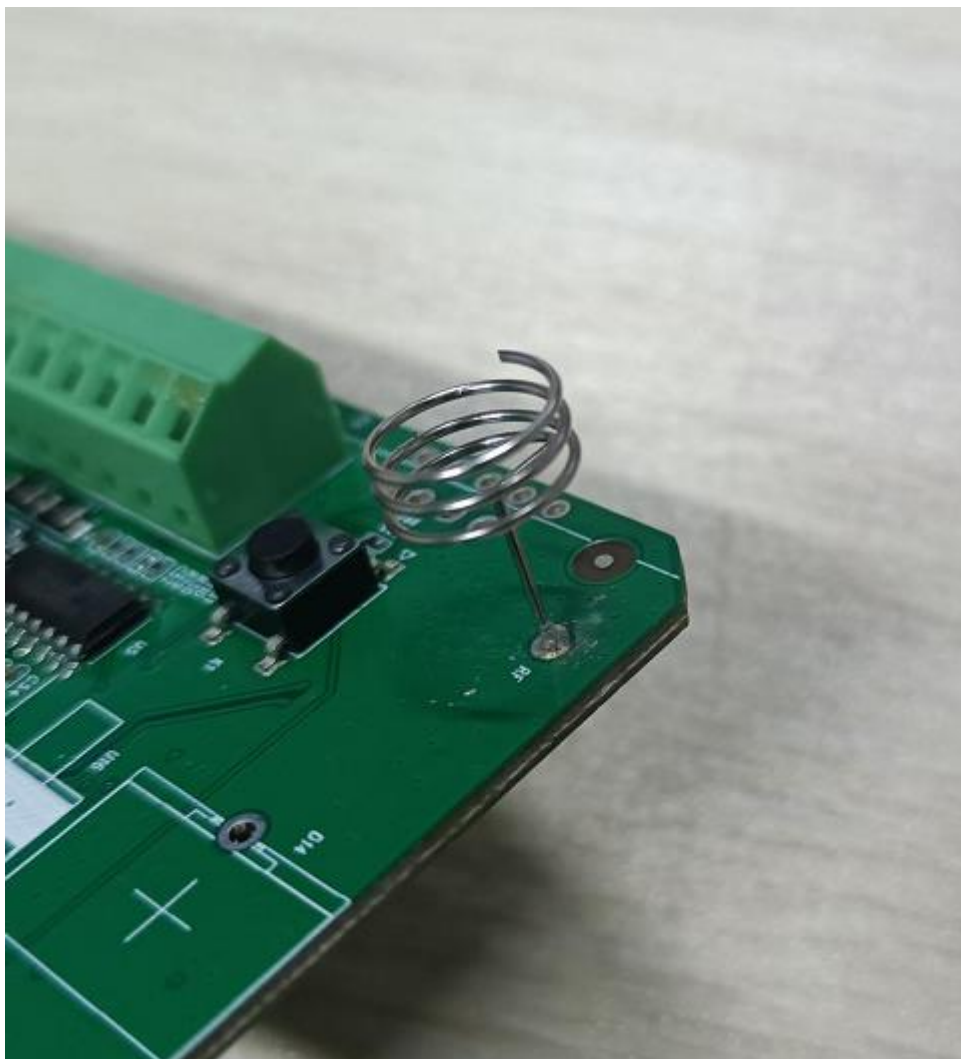


1. Antenna specification/天线标准

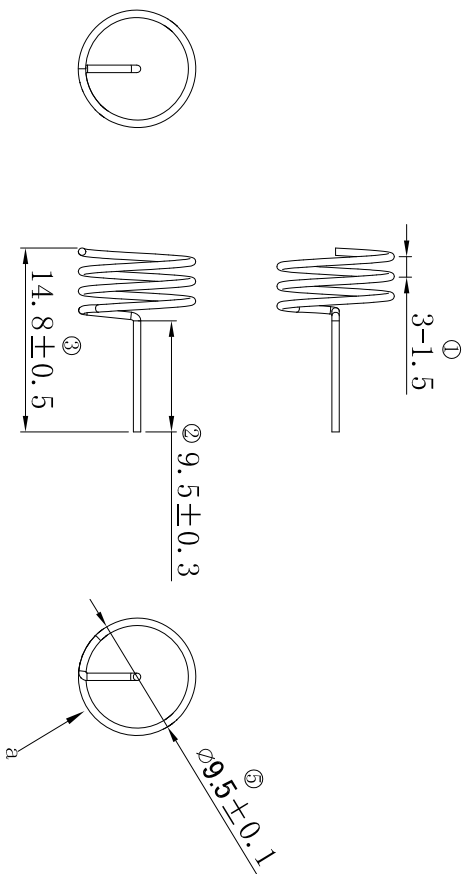
Antenna specification/天线技术参数		
Electrical specification/电气特性		
Item/目录	Specification/规格	Comment/备注
Freq. range/频段范围	850-950 (MHz)	
Impedance/阻抗	50 (Ω)	
VSWR/驻波比	≤ 2.1	
Directional/辐射方向	Omni directional	
Polarization/极化形式	Vertical	
Peak gain/峰值增益	1.58 (dBi)	
Test condition/测试条件	passive test (无源测试)	
Total efficiency/无源效率	> 49 %	
Mechanical Specification/机械指标		
Antenna type/天线类型	内置天线	
Connector type/连接器类型	N/A	
RF cable type/射频线型号	N/A	
Connector torque test/连接器扭力	N/A	
Connector pull test/连接器拉力	N/A	
Salt spray/盐雾测试	48 (H)	
Environmental specification /环境指标		
Operating temp/工作温度	-40°C ~ +80°C	
Storage temp/存储温度	-40°C ~ +80°C	

2. Antenna picture/天线图片



3. DWG/工程图纸

REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
X1	ECN22****	FIRST RELEASE	08/08'22	刘晓峰	丁第斌	牛宝星



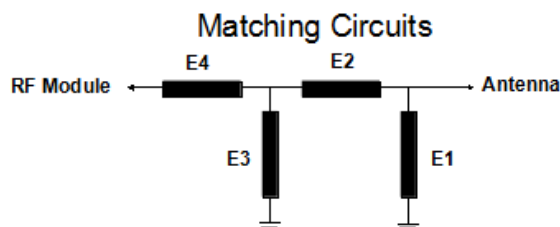
- NOTES:
- 材质：不锈钢，线径 $\phi 0.6\text{mm}$ 。
 - 表面处理：镀镍，过盐雾48H。
 - 标有“▼”为QC重点检测尺寸。
 - 有害物质须符合ECT《QE-Q-19-001环境有害物质管理基准》管控标准。

- NOTES:
- MATERIAL: Stainless steel, WIRE DIAMETER $\phi 0.6\text{MM}$.
 - SURFACE FINISH: NI PLATING, SALT SPRAY 48H.
 - THE DIMENSIONS MARKED WITH“▼”ARE THE KEY INSPECTION DIMENSIONS OF QC.
 - HSF SHALL CONFORM TO THE STANDARD QE-Q-19-001 ENVIRONMENTAL HAZARDOUS SUBSTANCES MANAGEMENT.

GENERAL TOLERANCE		SCALE:	DRAWN:	DATE:	DWG. NO:		TITLE:		REV.
.XXX $\pm$ 0.10		1:1	刘晓峰	08/08'22	600-Vxx1-01		ANT_IN_0809_SP_0.6*9.5*14.8mm		X1
.XX $\pm$ 0.20		UNIT: mm	CHECK:	DATE:	PARTS NO. (INTENDED USE):		客户图		SHEET:
.X $\pm$ 0.3		SIZE: A4	APPROVE:	DATE:	81800Vxx1				1/1

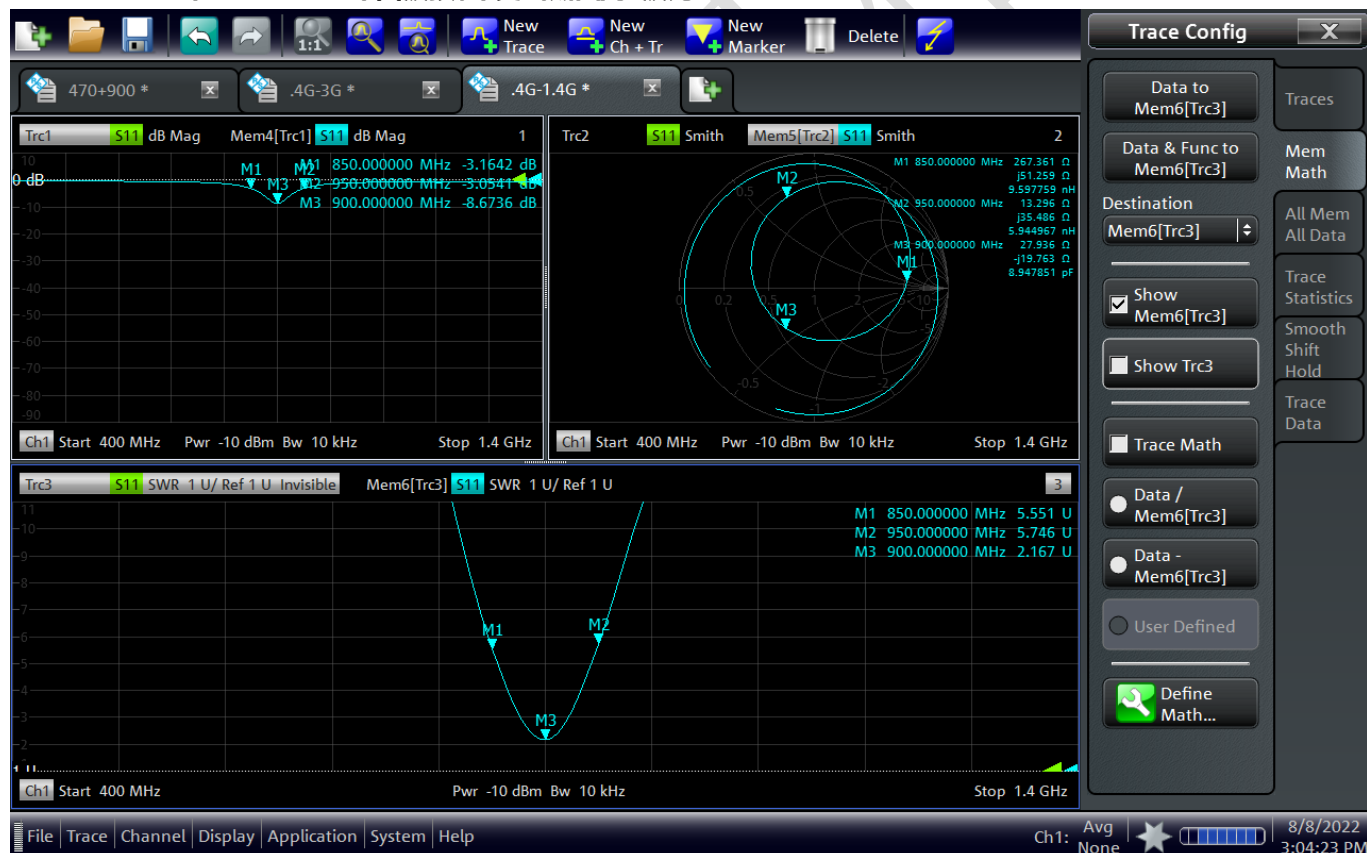
4. Antenna test result/测试结果

4.1 The matching circuits/匹配电路



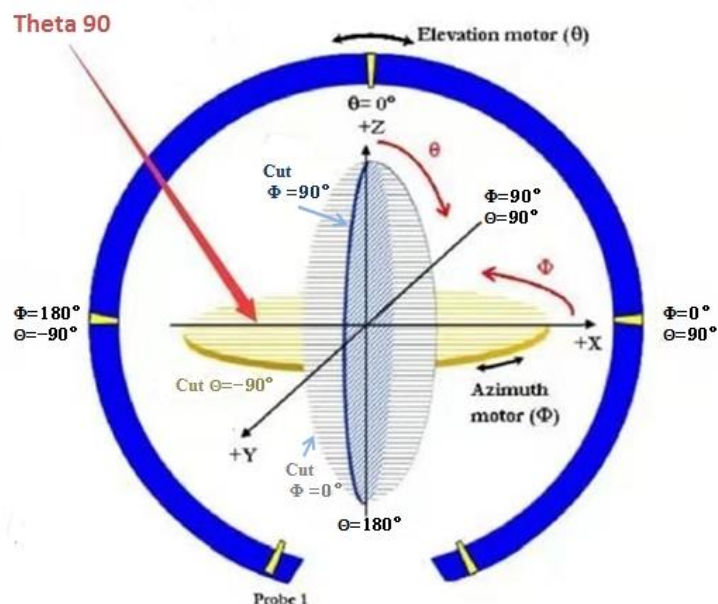
Element	Value
E1(0201)	NC
E2(0201)	0 Ω
E3(0201)	NC
E4(0201)	0 Ω

4.2 Return loss/Smith chart/回波损耗/史密斯图/驻波比

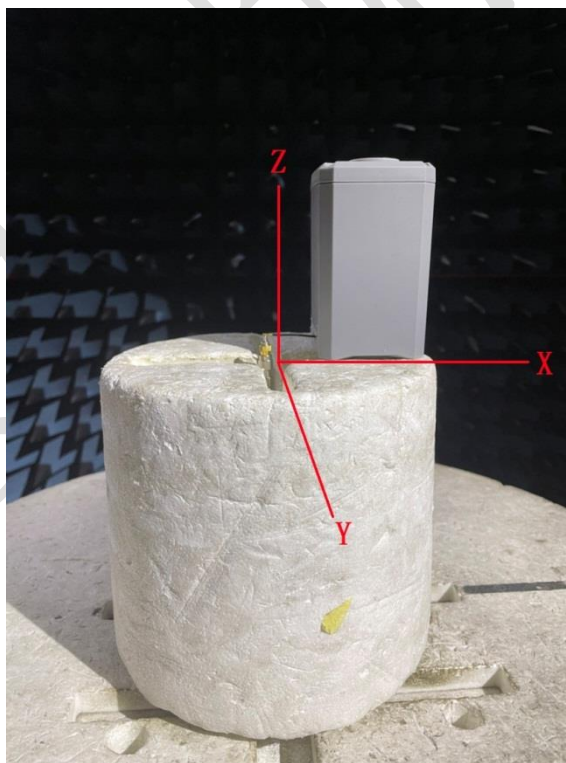


4.3 The gain and total efficiency test/增益和效率测试

4.3.1 The definition of coordinate system/坐标系定义-Satimo SG24



The coordinate system of Chamber/暗室坐标系



The production test position/天线测试放置位置

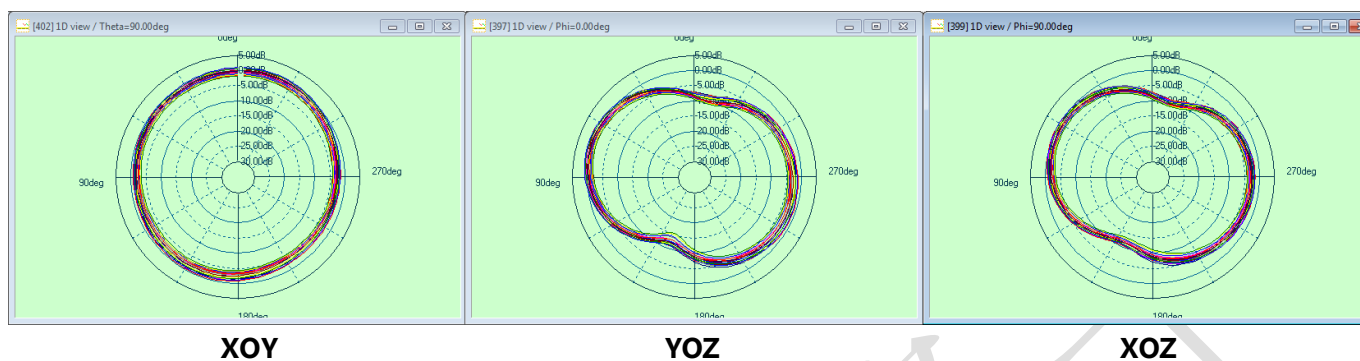
4.3.2 The test result of total efficiency and total gain/天线效率及增益测试结果

Antenna Specification

Frequency	Efficiency (%)	Gain (dBi)
850MHz	38%	-1.22
855MHz	42%	-0.85
860MHz	45%	-0.44
865MHz	49%	-0.07
870MHz	53%	0.33
875MHz	53%	0.16
880MHz	58%	0.88
885MHz	59%	0.95
890MHz	64%	1.38
895MHz	62%	1.24
900MHz	62%	1.35
905MHz	57%	1.03
910MHz	56%	1.03
915MHz	48%	0.41
920MHz	49%	0.43
925MHz	42%	-0.16
930MHz	43%	-0.18
935MHz	38%	-0.65
940MHz	37%	-0.82
945MHz	35%	-0.98
950MHz	33%	-1.30
AVG	49%	0.12

4.3.3 The antenna radiation pattern(1D View)/天线辐射方向图 (1D View)

Frequency/频点 900MHz



4.3.4 The antenna radiation pattern(3D View)/天线辐射方向图 (3D View)

Frequency/频点 900MHz

