

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	820MHz-900MHz	
Impedance/阻抗	50 (Ω)	
VSWR/驻波比	820MHz-900MHz \leq 2.5	
Directional/辐射方向	Omni directional	
Polarization/极化形式	Vertical	
Peak Gain/峰值增益	820MHz-900MHz 峰值增益为 1.95(dBi);	
Test condition/测试条件	passive test	
Total Efficiency/无源效率	820MHz-900MHz 平均效率为 36.22%	

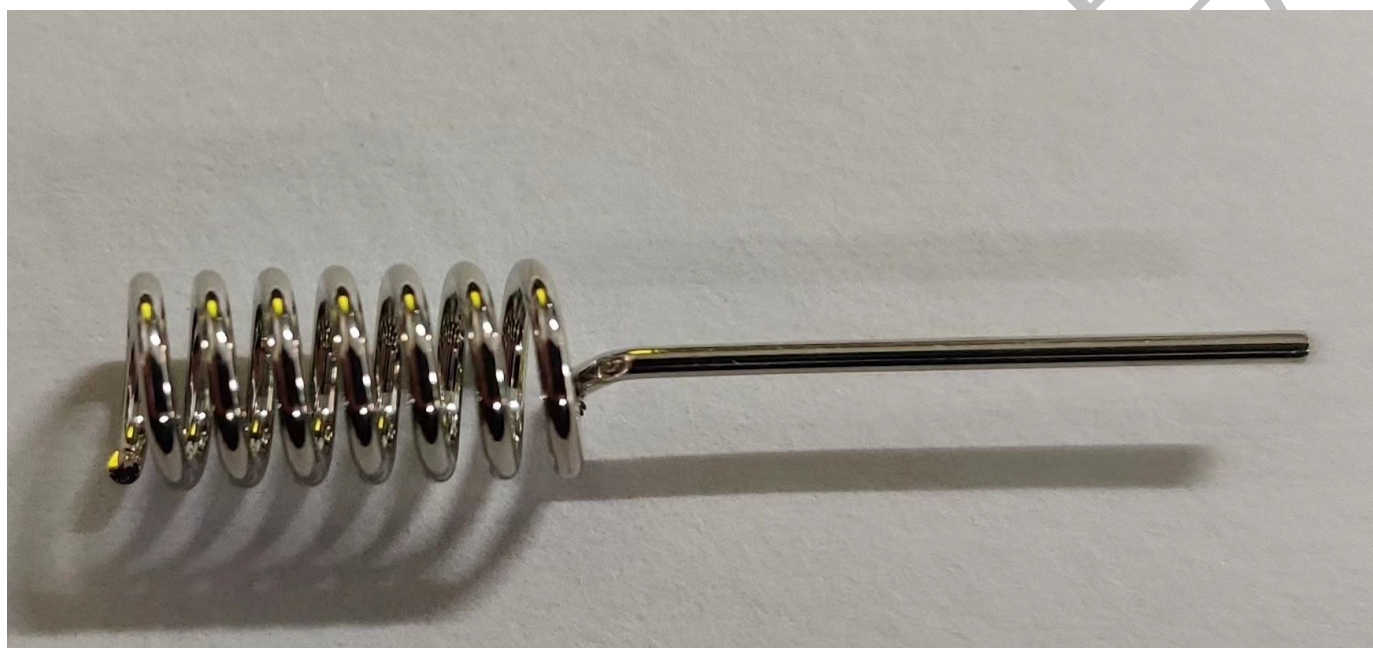
Mechanical Specification/机械指标

Antenna type/天线类型	Spring	
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	24 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	

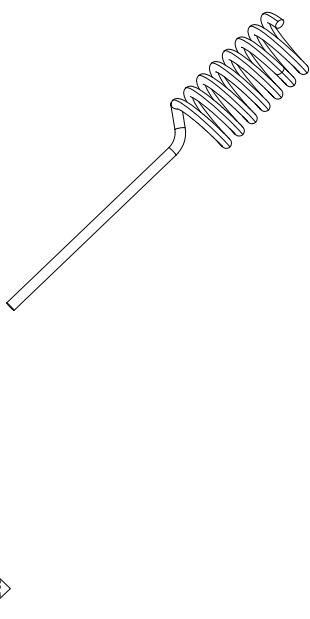
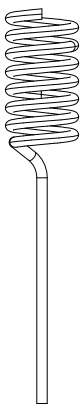
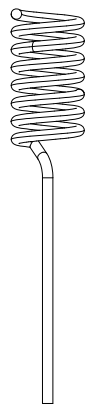
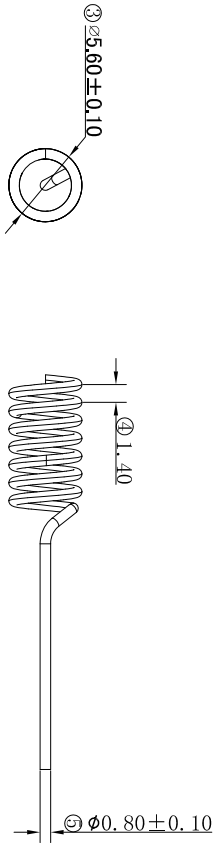
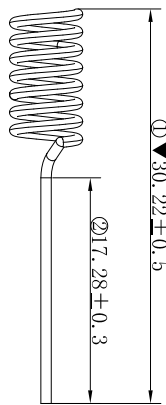
2. Antenna Picture/天线图片



REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
X1	ECN214226	初版发行	12/15' 21	梁克泉	丁第斌	牛宝星
X2	ECN214226	新增表面处理	04/07' 22	梁克泉	丁第斌	牛宝星

备注:

1. 表面不得有油污、变形等外观不良。
 2. 未标尺寸以此电子档实测为准。
 3. 标有“▼”为QC重点检测尺寸。
 4. 测试要求: VSWR全检, 矩阵测试;
频率范围: 820-890MHz ≤ 4.0
 5. 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。
- NOTE:
1. The surface can not have oil, deformation and other bad appearance.
 2. Without the size to electronic measurement shall prevail.
 3. Marked "▼" key size detection for QC.
 4. Test requirements: VSWR full inspection, matrix tests;
Frequency range: 820-890MHz, 4.0 or less.
 5. HSP shall conform to the standard QE-Q-19-001 Environmental Hazardous Substances Management.



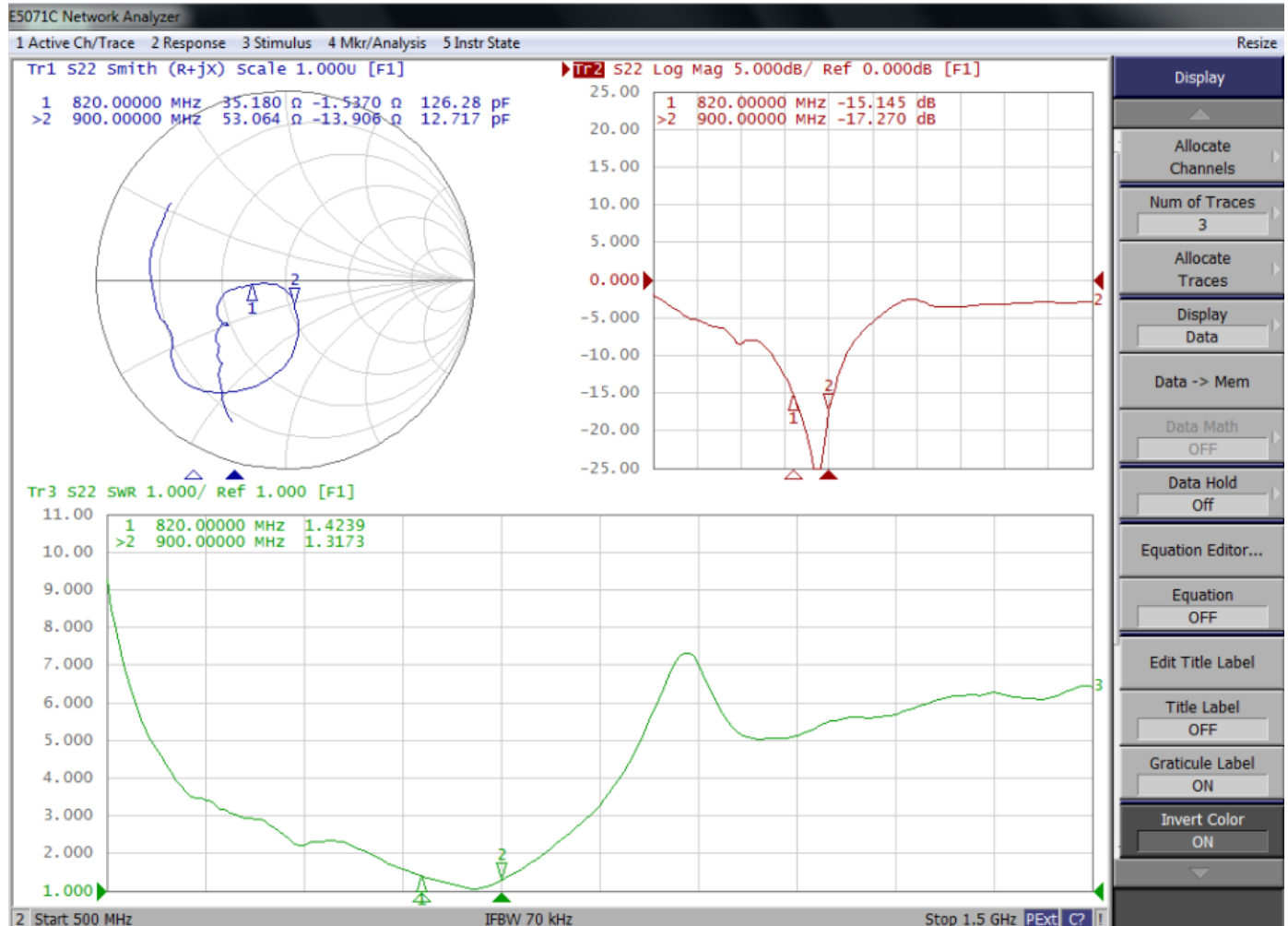
ITEM	PART NAME	Q'TY	MATERIAL / FINISH
a	弹簧	1	SY-ANT弹簧_黄铜镀镍_0D0.8*30.2

ELECTRIC CONNECTOR TECHNOLOGY		GENERAL TOLERANCE		SCALE: 1:1		DRAWN: 梁克泉		DATE: 04/07' 22		DWG. NO: 600-V023-01		TITLE: ANT_IN_820-890_30.22*5.60-SY-ANT		REV. X2	
		.XXX ± 0.05		.XX ± 2°		CHECK: 梁克泉		DATE:		PARTS NO. (INTENDED USED): 81800V023		SHEET: 1/1			
		.XX ± 0.10		.X ± 1°		APPROVE:		DATE:							
		.X ± 0.2				SIZE: A4									



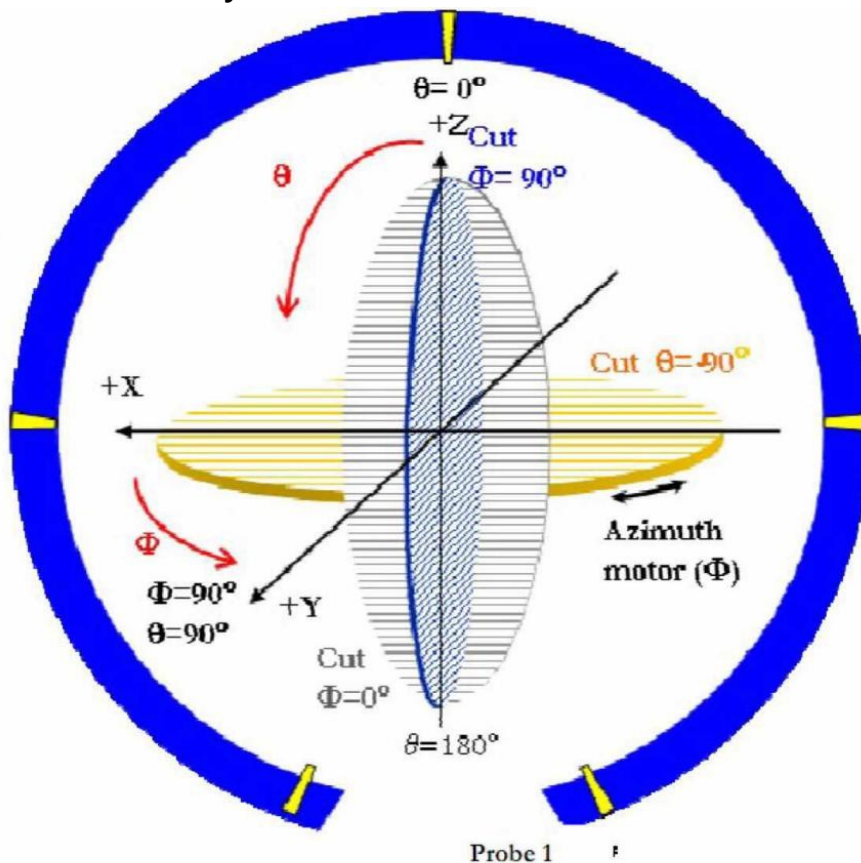
4. Antenna test result/测试结果

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

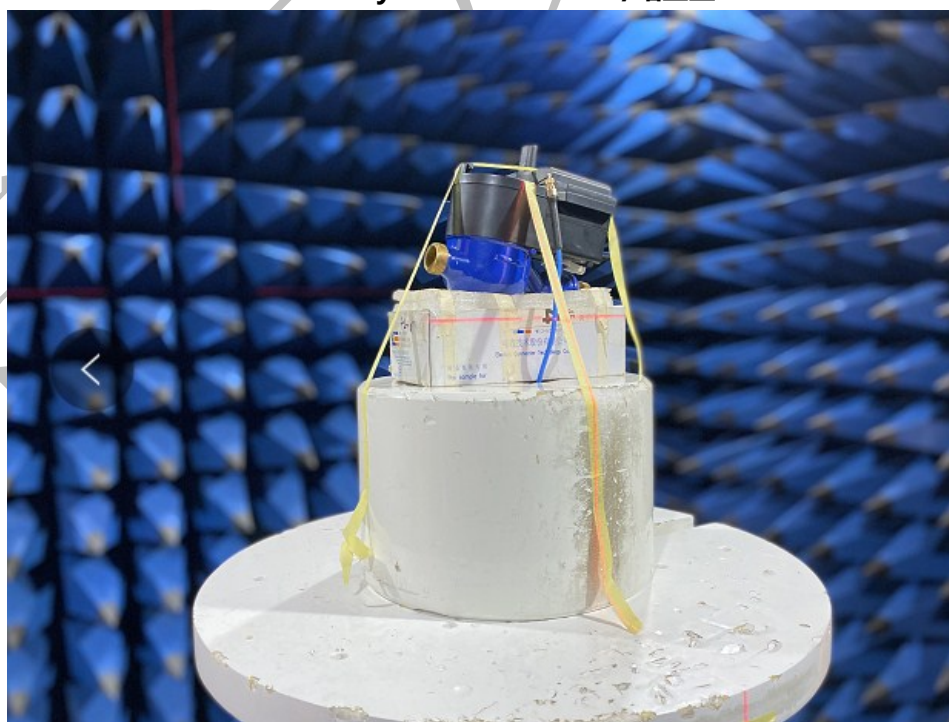


4.2 The gain and total efficiency test/增益和效率测试

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



The coordinate system of Chamber/暗室坐



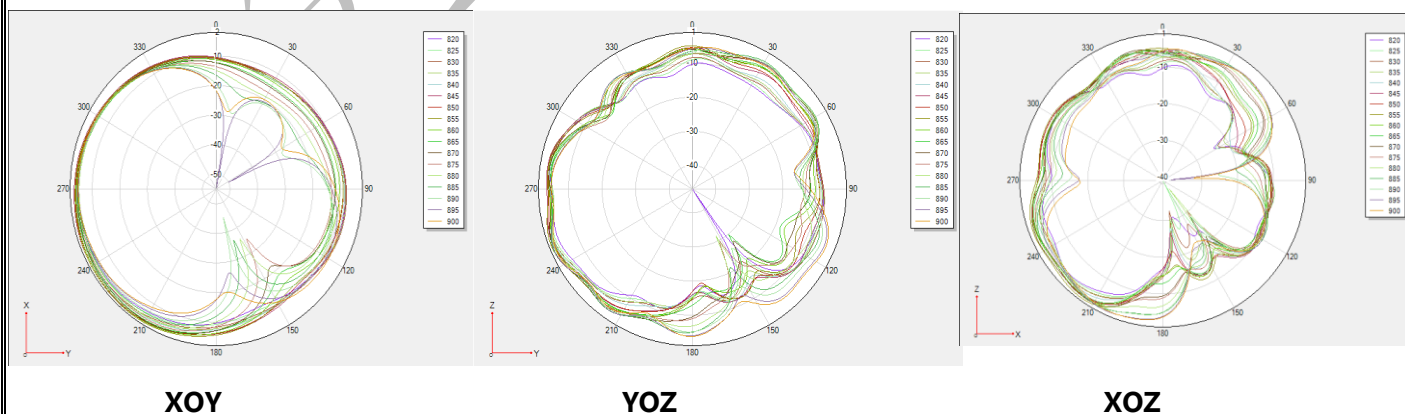
The production test position/天线测试放置位置

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

Frequency / MHz	Efficiency / %	Gain/ dB
820	34.79	-1.46
825	33.5	-0.94
830	36.14	-0.59
835	37.24	-0.73
840	39.63	-0.89
845	39.45	0.02
850	38.37	-0.16
855	42.66	0.68
860	35.32	0.08
865	36.19	-0.15
870	35.06	1.16
875	35.92	0.46
880	35.38	1.10
885	35.34	1.95
890	32.35	1.20
895	34.65	1.72
900	33.77	1.53
AVG	36.22	0.29

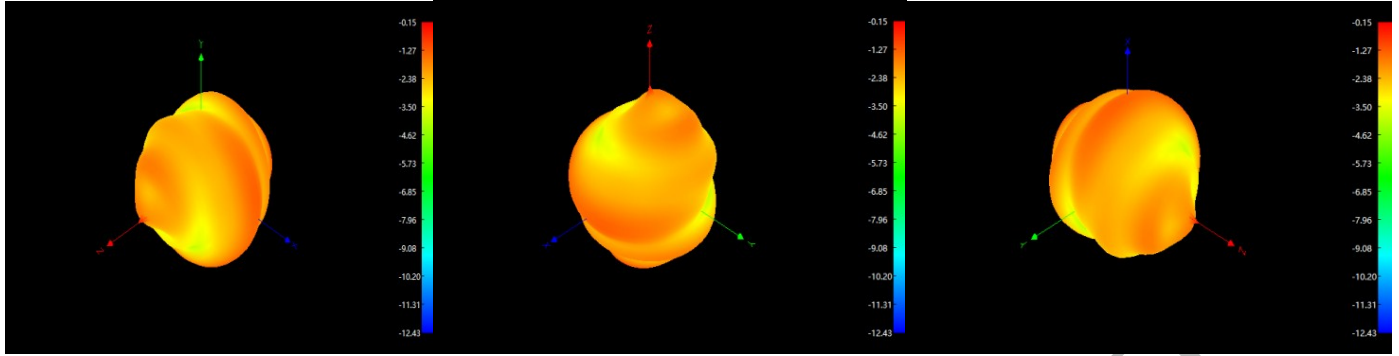
4.2.3 The antenna radiation pattern(2D)/天线辐射方向图 (2D)

820MHz-900MHz



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

Frequency/频点 865MHz



XOY

YOZ

XOZ

海祥规格