

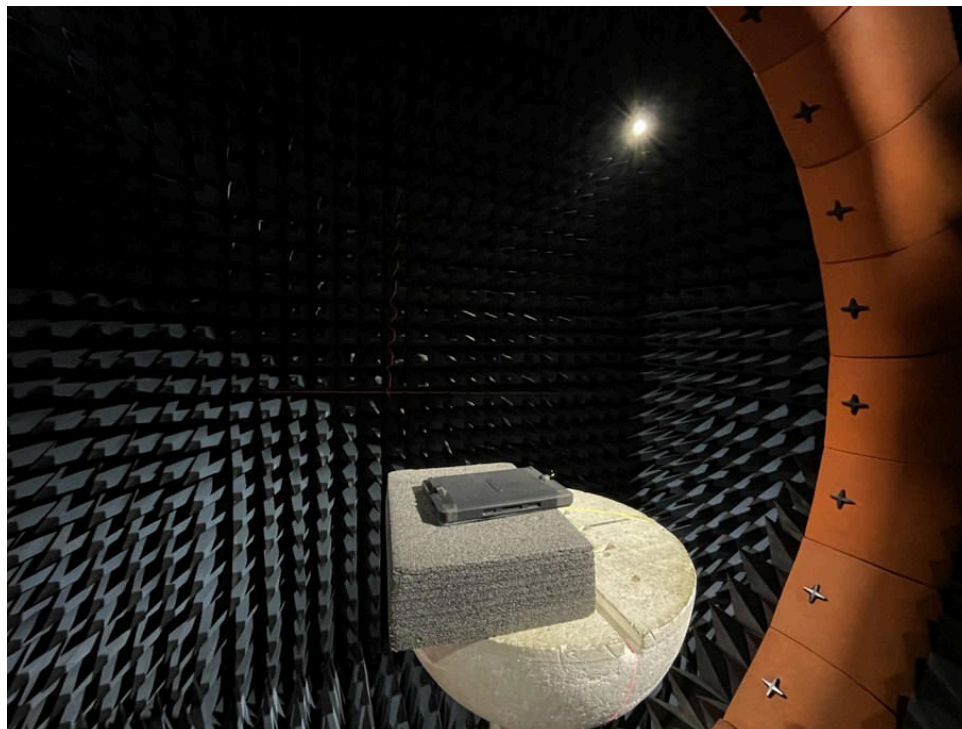
**1. Antenna specification/天线标准**

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	2400-2500/5150-5850 (MHz)	
Impedance/阻抗	50 ( $\Omega$ )	
VSWR/驻波比	$\leq 1.9$	
Directional/辐射方向	Omni directional	
Polarization/极化形式	Linear Polarization	
Peak gain/峰值增益	1.64(dBi)/ 3.51(dBi)	
Test condition/测试条件	passive test ( 无源测试 )	
Total efficiency/无源效率	> 41%	
Mechanical Specification/机械指标		
Antenna type/天线类型	FPC+CABLE	
Connector type/连接器类型	USS RF IV ( 501 )	
RF cable type/射频线型号	0.81 黑色线	
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	

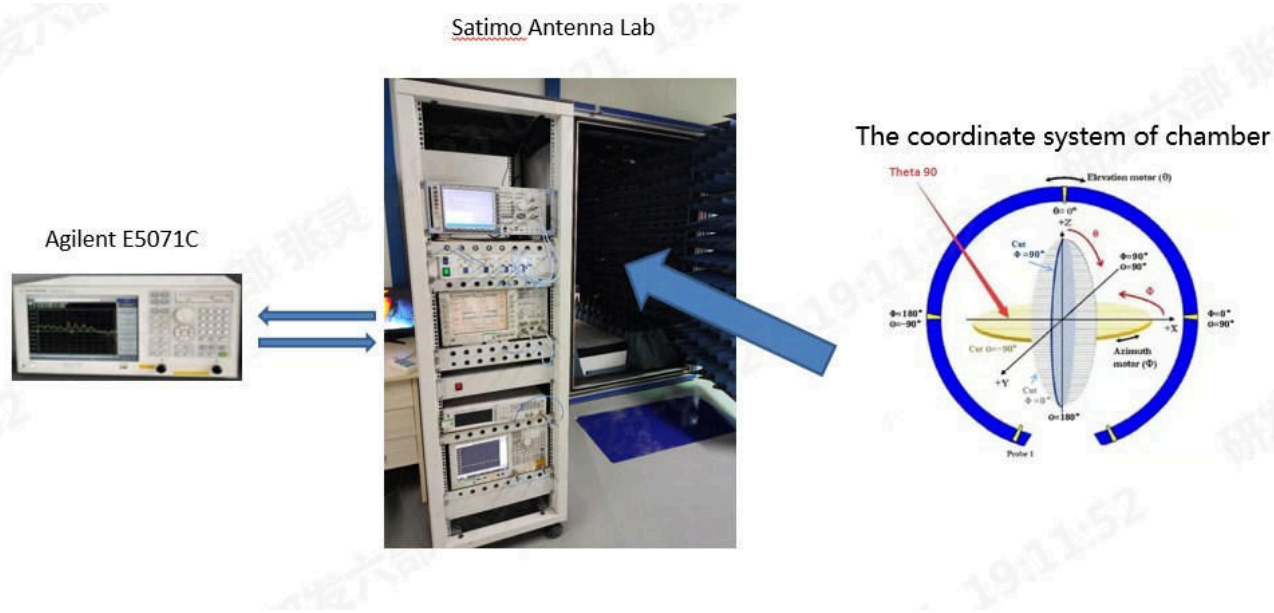
**2. Antenna picture/天线图片**



**3. 测试放置位置**



**4. 测试配置图**



## 5. 测试步骤程序

Name	Parameter	Method	Standard no.
Mobile communication antenna	VSWR	Generic specification for antennas used in the mobile communications	GB/T 9410-2008
	Antenna gain		
	Radiation pattern		
Antenna performance	Radiation efficiency	IEEE Standard Test Procedures for Antennas	ANSI IEEE Std 149-1979

## 6. 设备清单

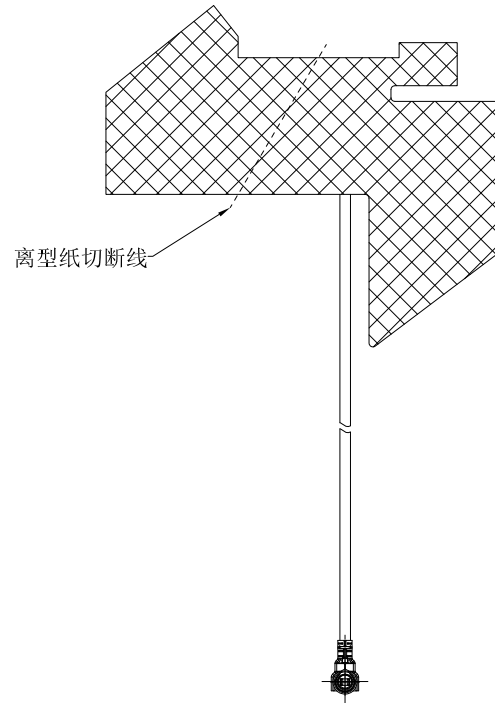
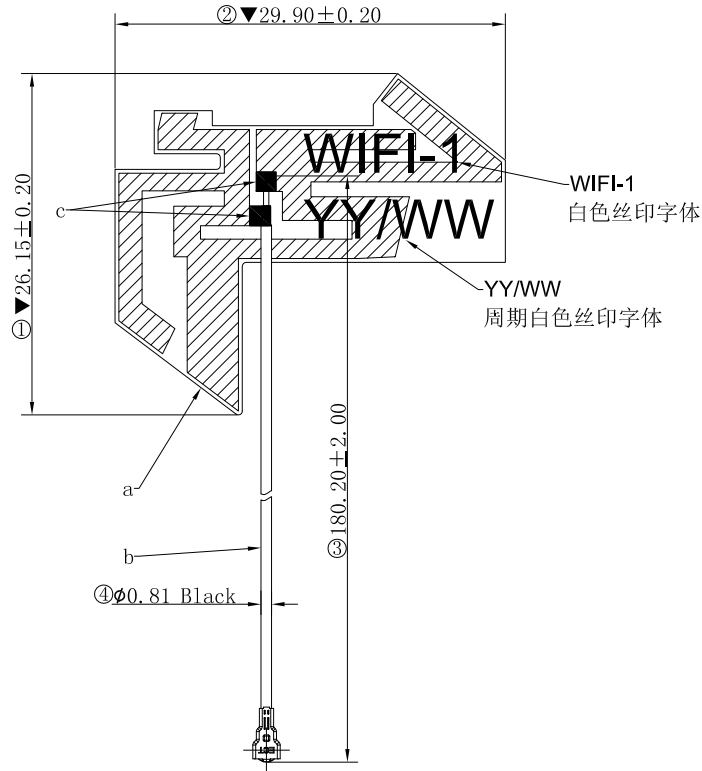
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date
Network Analyzer	Agilent	E5071C	ECT-Y6-E479	2022.07.11	2023.7.10
Antenna	ECT	81800V140			
Chamber	Satimo	XXXXX	XXXXX	2022.07.11	2023.7.10

# ROHS

REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
X1	ECN22*	初版发行	08/29' 22	梁兑泉	丁第斌	牛宝星
X2	ECN22*	线缆加长	12/09' 22	梁兑泉	丁第斌	牛宝星

正面

反面

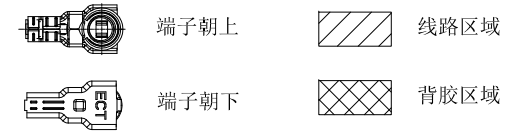


备注:

1. 焊接不能虚焊、假焊，焊点须饱满，屏蔽层不能有烫伤。
2. 允许最大毛边0.05MAX.
3. 测试要求：全检VSWR测试，矩阵测试。  
测试频率：2400-2500/5150-5850 MHz, VSWR≤2.0。
4. 标有“▼”为QC重点检测尺寸。
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：  
符合ROHS环保标准。

NOTE:

1. The welding can't virtual welding, welding, solder joints must be full, shielding layer cannot have burns.
2. Allow maximum flash 0.05 MAX.
3. The test requirements: pattern all inspection VSWR test, test matrix.  
Test frequency: 2400-2500/5150-5850 MHz, VSWR≤2.0.
4. Marked with "▼" key size detection for QC.
5. HSF shall conform to the standard QE-Q-19-001 Environmental Hazardous Substances Management;  
Comply with the ROHS environmental protection standard.



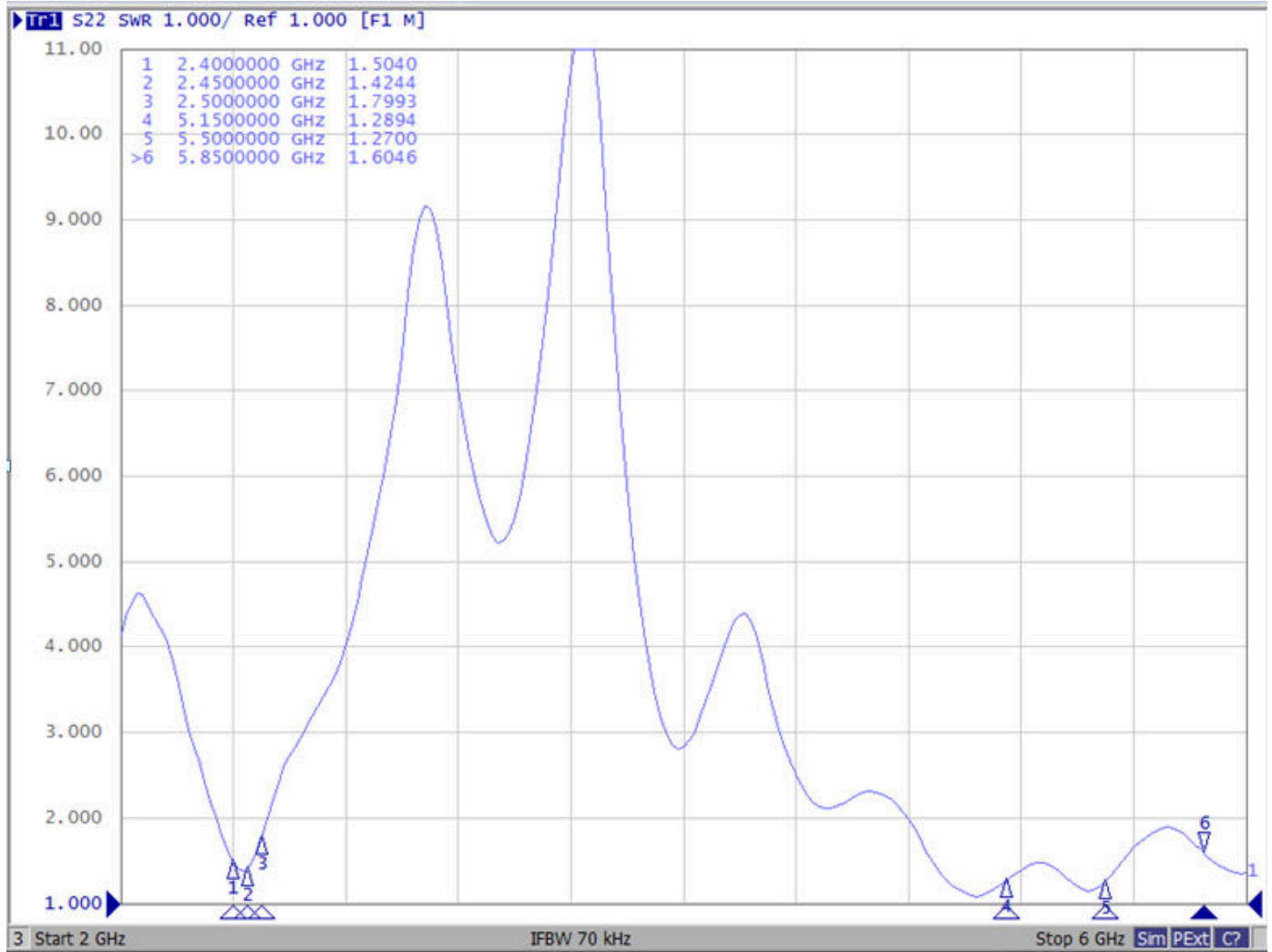
c	Tin		环保锡丝, OD0.80mm
b	CABLE (∅0.81)	1	USS RF CABLE G4, SG, 081BK, 179.2, 501
a	FPC	1	TAB10-1_1L-FPC_HF-BK_29.90*26.41
ITEM	PART NAME	Q' TY	MATERIAL / FINISH

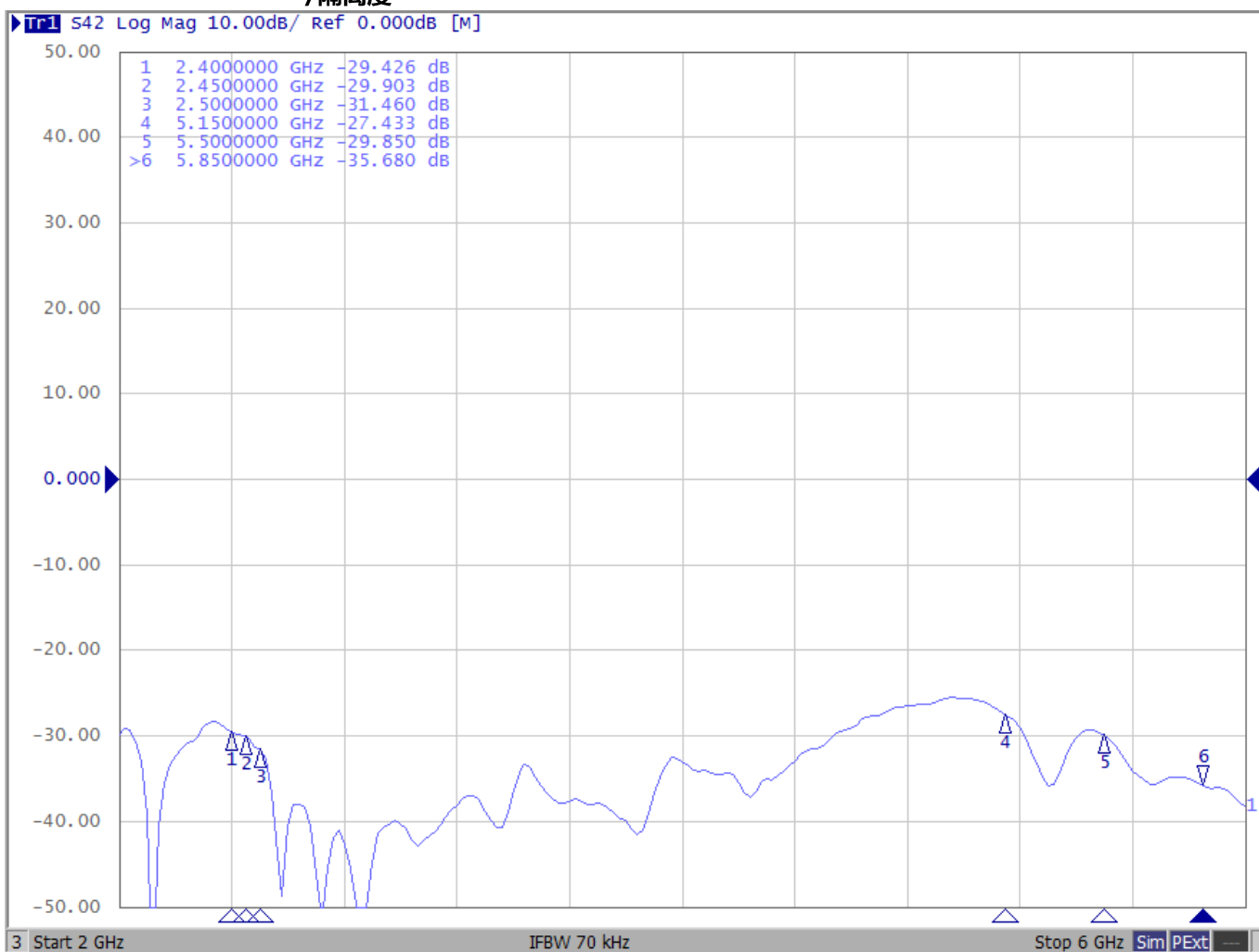


ELECTRIC CONNECTOR TECHNOLOGY	GENERAL TOLERANCE		SCALE:	DRAWN:	DATE:	DWG. NO:	TITLE:	REV.
	.XXX ± 0.05		1:1	梁兑泉	12/09' 22			600-V140-01
	.XX ± 0.10		UNIT:	CHECK:	DATE:	PARTS NO. (INTENDED USE):	SHEET:	
	.X ± 0.20		mm					81800V140
		SIZE:	APPROVE:	DATE:				

## 8. Antenna test result/测试结果

### 8.1 VSWR/驻波比



**8.2 Results – insulation/隔离度**

**8.3 The total efficiency test/效率测试**

Frequency	EFF(%)	Frequency	EFF(%)
	42%	5150MHz	52%
	41%	5200MHz	51%
	42%	5250MHz	54%
	42%	5300MHz	53%
	41%	5350MHz	53%
	41%	5400MHz	52%
	41%	5450MHz	52%
	43%	5500MHz	55%
	44%	5550MHz	53%
2490MHz	45%	5600MHz	54%
2500MHz	44%	5650MHz	54%
AVG.	42%	5700MHz	53%
		5750MHz	50%
		5800MHz	52%
		5850MHz	51%
		AVG.	53%