



深圳市飞敏科技有限公司

ShenZhen City FeiMin Technology CO.,LTD.

产品承认书

SPECIFICATION FOR APPROVED

客户

CUSTOMER: 深圳华联讯电子有限公司

产品名称

PRODUCTS: 铜管天线

客户料号

PART NO:

产品型号

Spec.: FM-2199-20A-2012-2.4G 铜管

日期

Data: 2026. 1. 13

供应商		
SUPPLIER		
拟制 PREPARED BY	审核 CHECKED BY	批准 APPROVED BY

客户		
CUSTOMER		
承认 ACCEPTED BY	审核 CHECKED BY	批准 APPROVED BY

备注：承认盖章后请回复一份承认书（或复印件）给我司，其余由贵公司存档

REMARK:Please send us one(or copy)of this approval with stamp after accepting,other copies filed by the customer.

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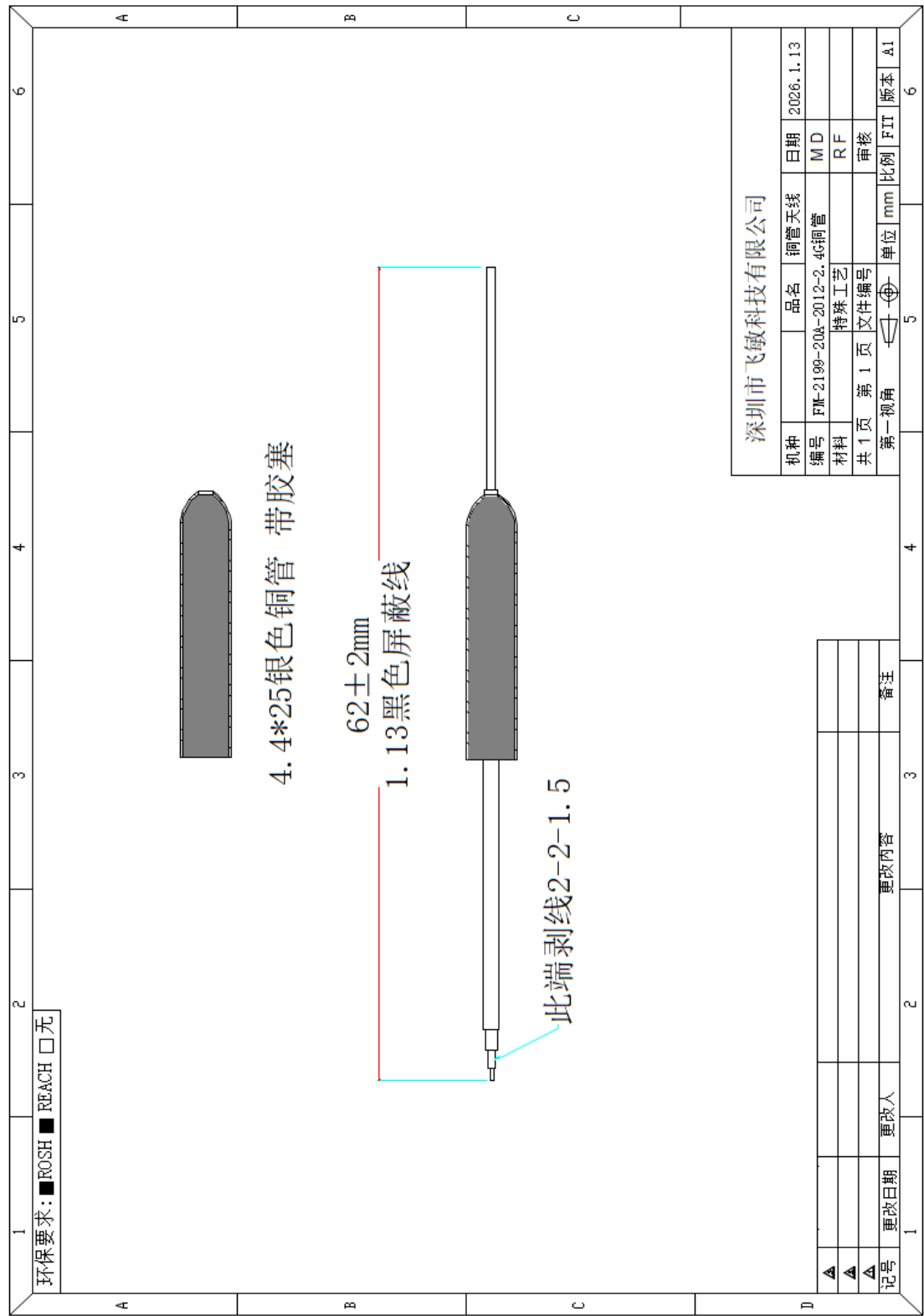
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1. 项目信息 Project Information

1.1.外观尺寸 Appearance and Dimensions

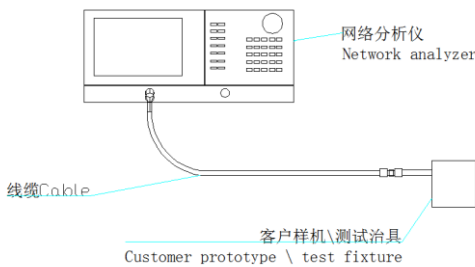


2. 电气性能 Electrical Characteristics

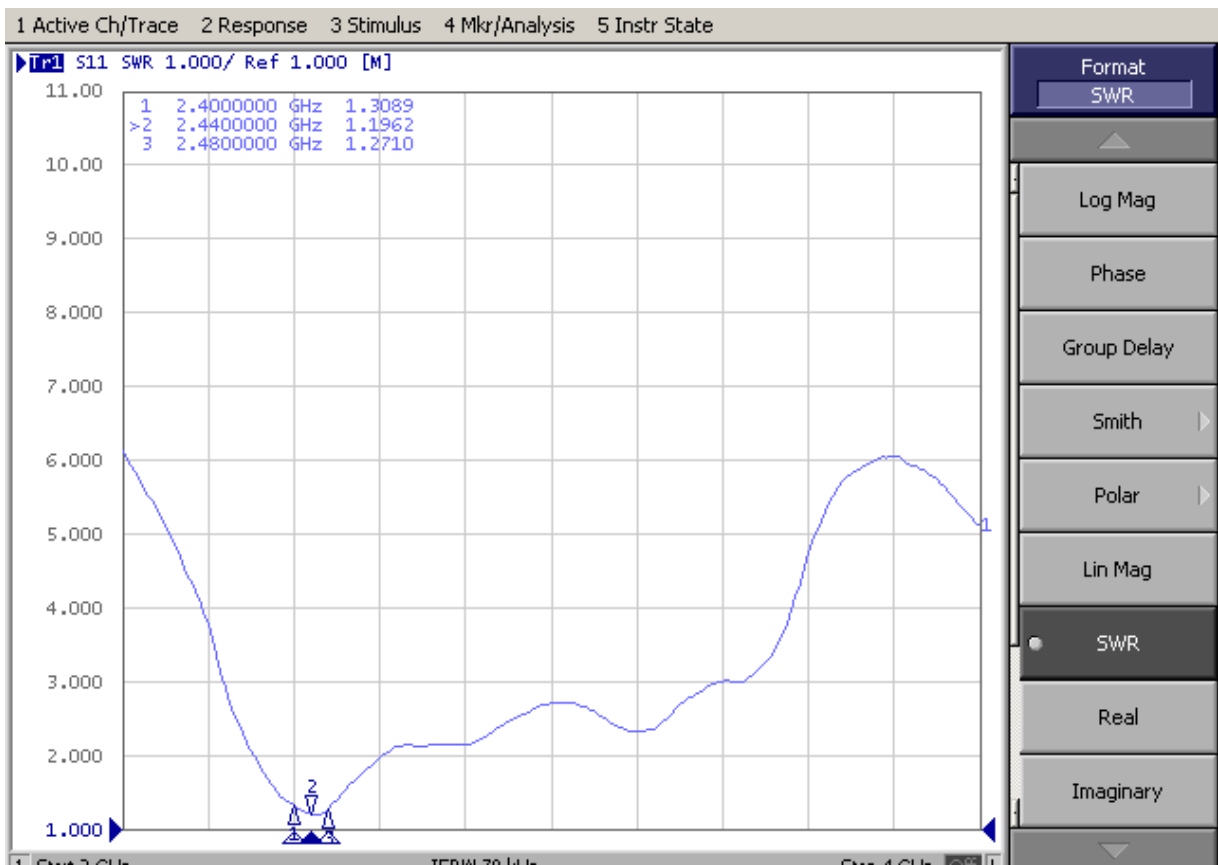
2.1.测试环境条件 Test Environment Conditions

物理性质 physical features	
温度 Temperature	Ordinary Temperature (5 to 35℃)
湿度 Humidity	Ordinary Humidity (25 to 85% RH)

2.2.测示方法 Measurement method

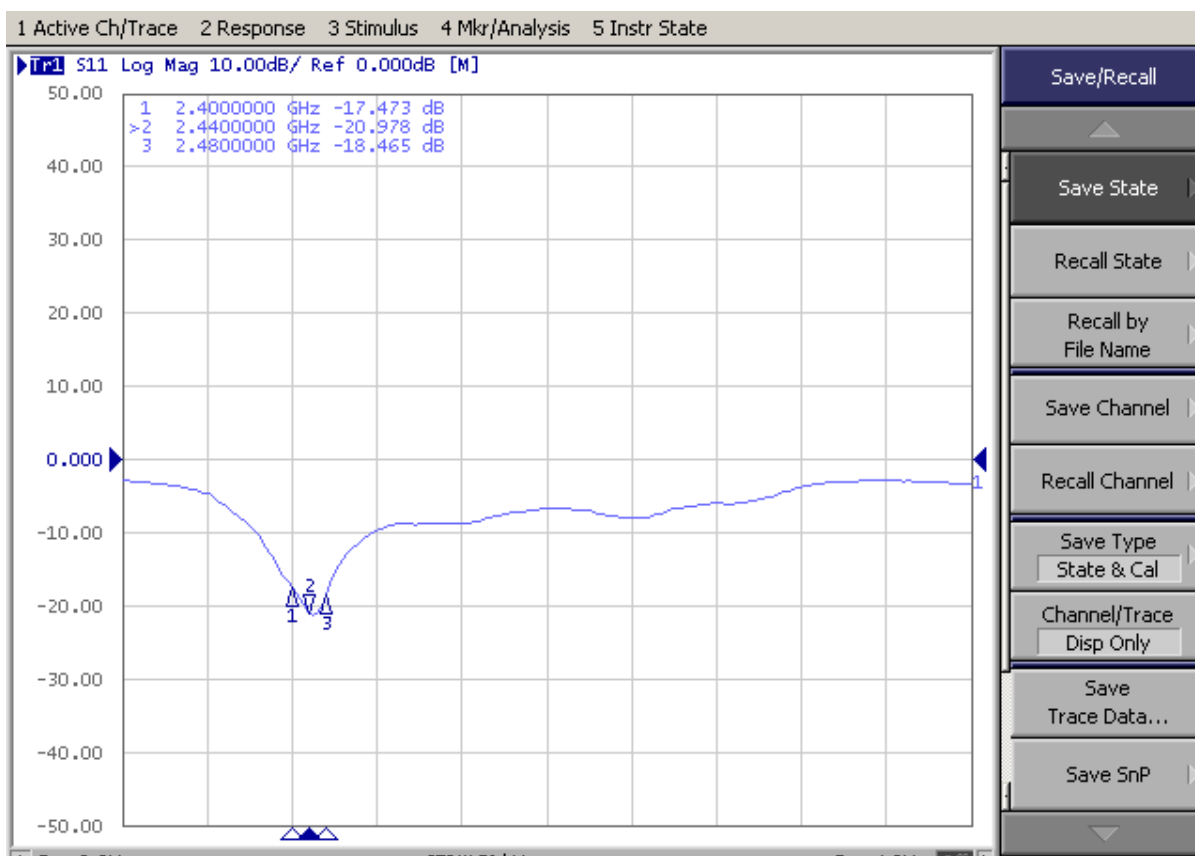


2.2.1. 天线电压驻波比. Antenna VSWR.



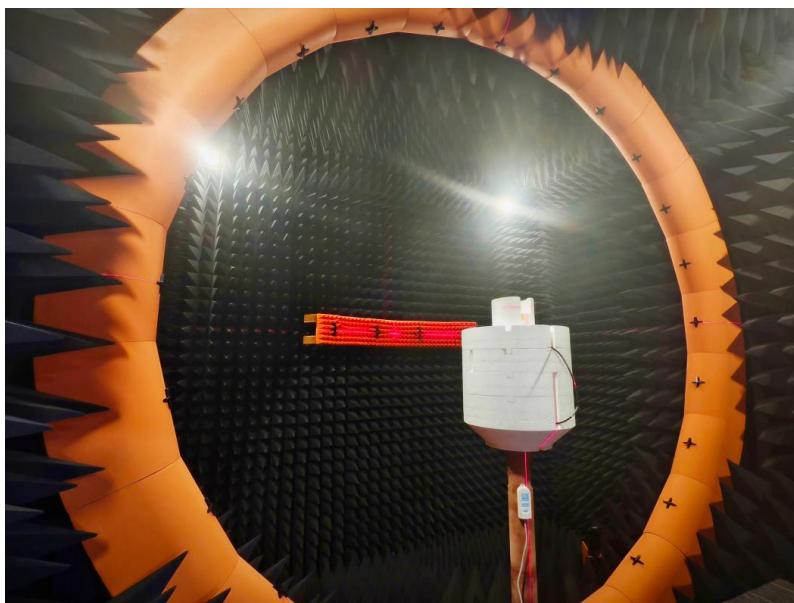
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2.2.2. 天线回波损耗 Antenna Return loss



2.3. 天线无源测试数据 Antenna passive test data

2.3.1 测试系统 Test system



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2.3.2 天线效率及增益 Antenna efficiency and gain

Freq(MHz)	Efficiency (%)	Gain(dBi)
2400	77.62	3.03
2410	71.12	2.66
2420	67.92	2.62
2430	71.45	2.87
2440	72.95	2.88
2450	63.68	2.42
2460	66.68	2.71
2470	66.07	2.84
2480	61.66	2.44
2490	63.53	2.39
2500	68.39	2.70

2.3.3. 天线辐射方向图 Antenna Radiation Pattern

