产品规格书
Product Specification

客户名称 Customer Name:

项目名称 Project Name：5DB 2.4G External antenna80mm+IPEX

地址 Customer Address:

规格描述 Product Spec：5DB 2. .4G External antenna80mm+IPEX

版　　本 REV：　V1.0

日　　期 Date：　：　2024.12.24

制 作 drawing	审 核 check	批 准 approved
周景峰	卢朝阳	岳猛

测试设备及原理 Testing Equipment and Principle

1. 测试设备：Test equipment

网络分析仪 Network Analyzers ：

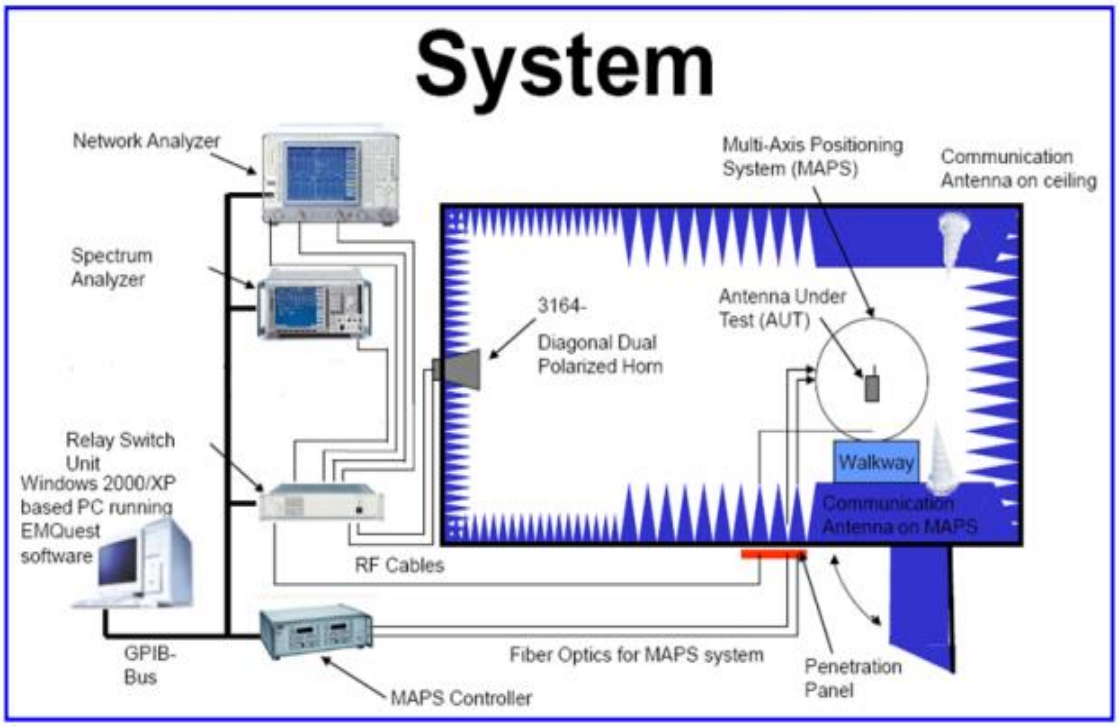
Agilent 8753D 5071B

综合测试仪 Communications Test Set:

Agilent E5515C

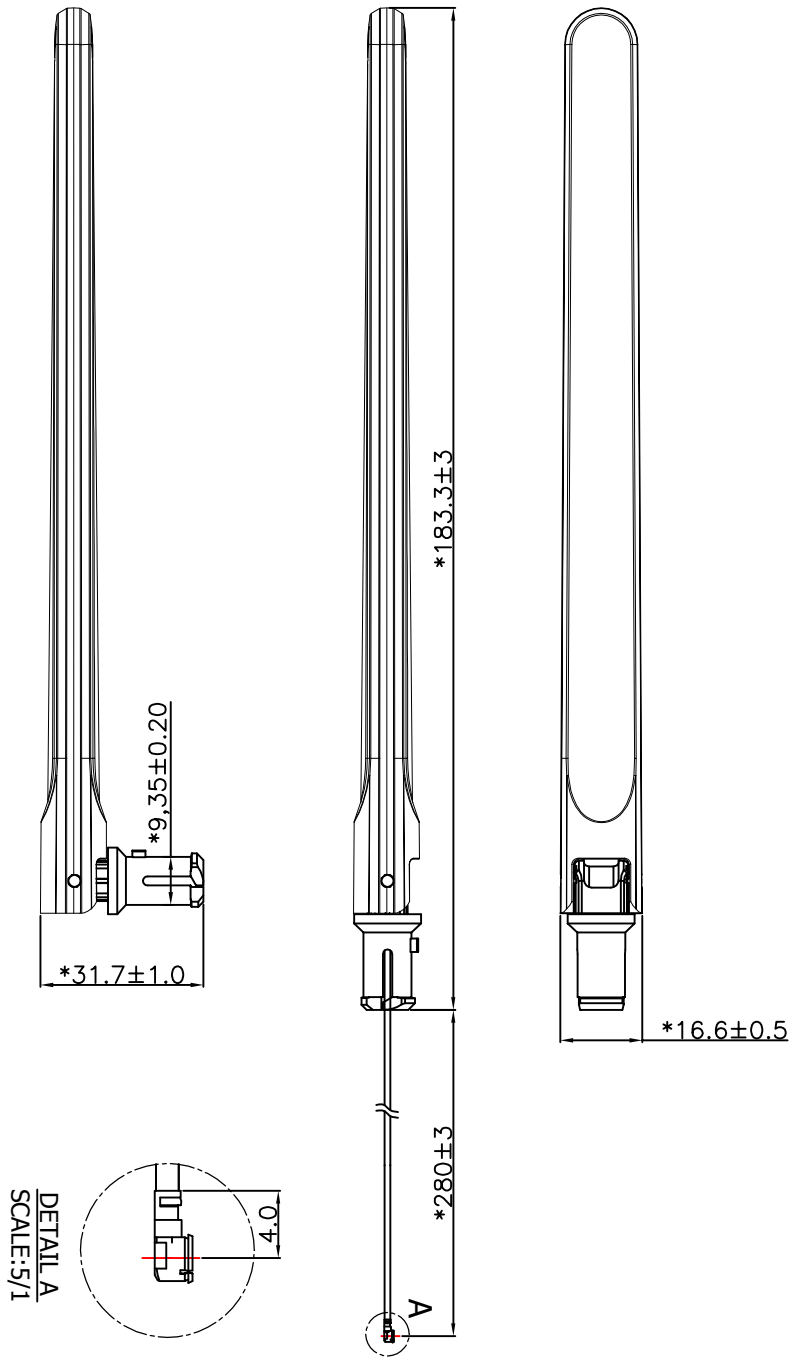
3D 暗室测试系统 3D Chamber Test System:

2. 测试原理：Test principle



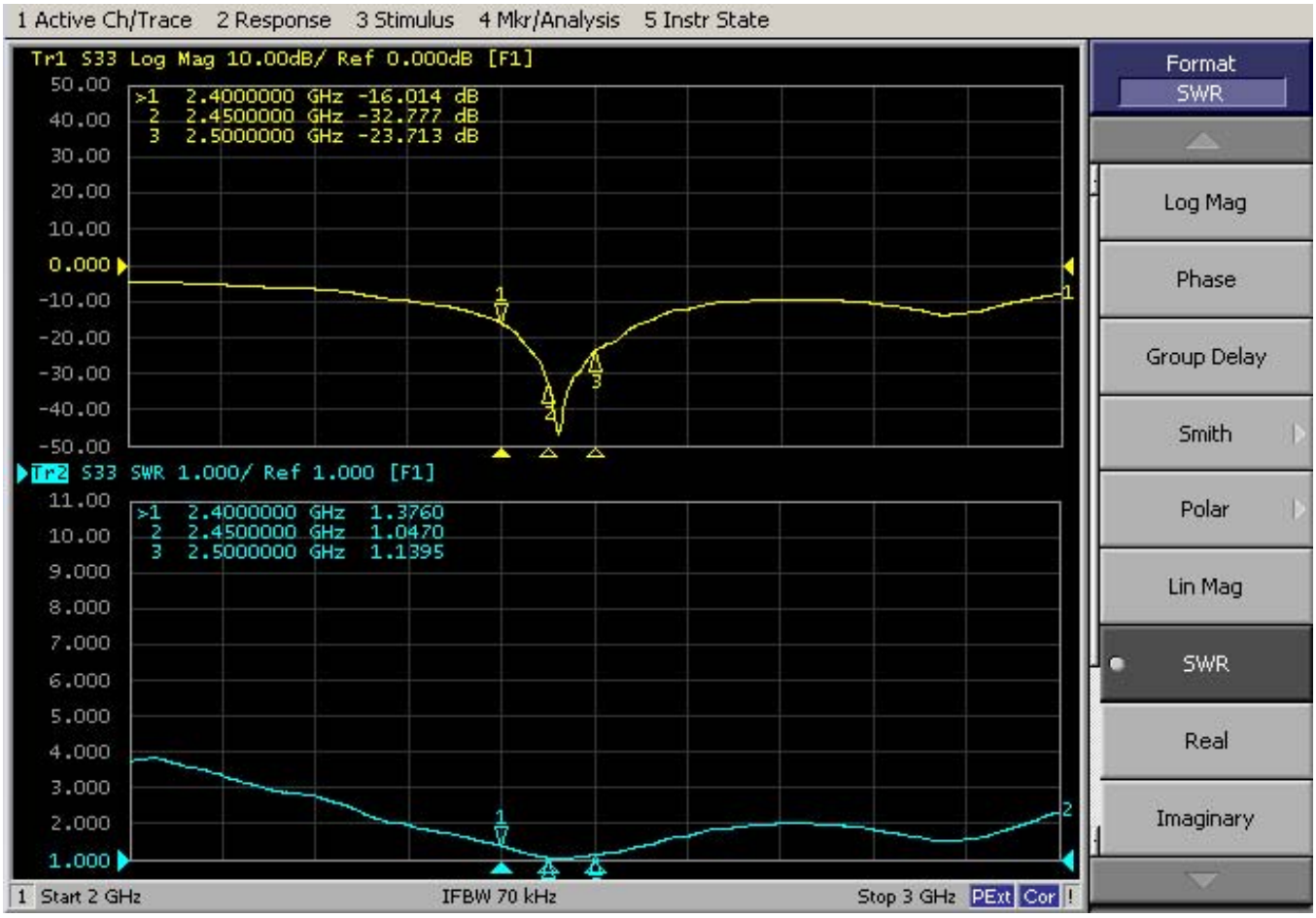
一、电性能以及机械性能Electrical and mechanical properties

电 性 能 指 标		Electrical Specifications	
频率范围	2.4GHZ	Frequency Range	2400-2500MHz
电压驻波比	≤2.0	VSWR	≤2.0
增益	≤5DBI	GAIN	5.01 DBI
辐射方式	全向	Radiation	OMNI
极化方式	垂直	Polarizatin	LINEAR
输入阻抗	50 Ω	Input Impedance	50 Ω
机 械 指 标		Mechanical Specifications	
接口形式	一代端子	Input connector	Primary terminal
天线材质	ABS & COPPER	Antenna materia	ABS & COPPER
工作温度	-30℃~+80℃	Working Temperature	-30℃~+80℃
工作湿度	40~85%	Working Humidity	40~85%



			设计：				
未标注公差指示			校对：				
一般公差	0～5	0.5	批准：				品名：WIFI External antenna
	5～10	1.0					
	10～50	2.0					型号：309-WIFI External antenna
	50～	5.0	阶段标记	单位	比例	图幅	
孔径公差	0.05			mm		A4	客户：
角度公差	?0.5?		共 1页		第 1页		

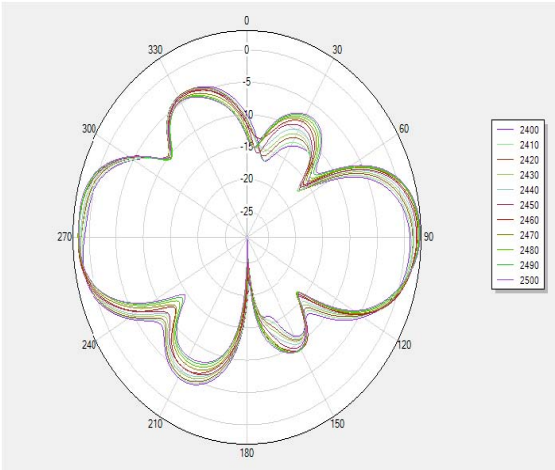
二、无源测试数据Passive test data



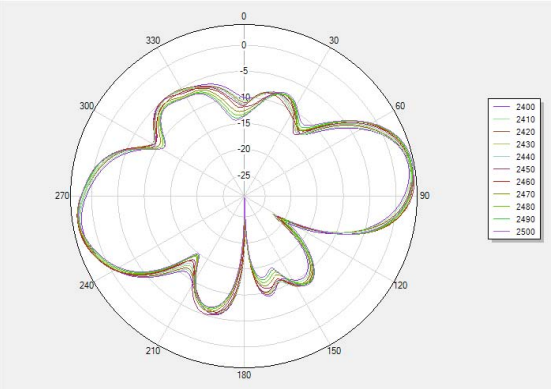
四、增益效率测试数据Gain efficiency test data

Frequency (MHz)	Efficiency (%)	Peak Gain / dB
2400	56.23	4.54
2450	67.92	5.01
2500	65.01	4.76

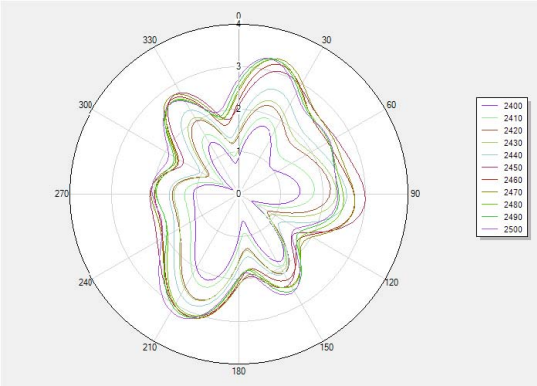
四、方向性测试数据Directivity test data



Phi 0 2D图



Phi 90 2D图



Theta 90 2D图

五、 可靠性试验报告 5. Reliability test report

项目 item	测试条件 Test condition	规格 specification
储存环境 Storage environment	在没有指定的情况下测试温度、湿度、气压如下： 1. 温度为-40℃～+85℃ 2. 相对湿度为45%-85% 3. 气压为86kpa-106kpa The temperature, humidity, and air pressure are tested in the absence of a specified temperature as follows: 1. The temperature is -40℃~+85℃2, the relative humidity is 45%-85%3, and the air pressure is 86kpa-106kpa	电气机械性能正常 Electrical and mechanical properties are normal
高低温试验 High and low temperature test	在70℃与-40℃之间进行5次循环，然后在正常条件下1-2H，检查外观质量。 The appearance quality is checked after 5 cycles between 70 ° C and -40 ° C, and then 1-2H under normal conditions.	尺寸应满足规定并应满足满足于机械、电气性能 The dimensions shall meet the requirements and shall meet the mechanical and electrical properties
耐恒定湿热试验 Resistance to constant damp heat test	相对湿度95±3%，试验温度：40℃.持续2H作用后，试品取出后5min之内测定电气性能，试品在正常条件下1-2H，检查外观质量 The relative humidity was 95±3%, and the test temperature was 40℃. After 2H treatment, the electrical properties were measured within 5min after the samples were taken out, and the appearance quality of the samples was checked under normal conditions for 1-2H	尺寸应满足规定并应满足满足于机械、电气性能 The dimensions shall meet the requirements and shall meet the mechanical and electrical properties
振动试验 Vibration test	振频范围10-55HZ，位移幅值：0.35MM，加速度幅值：50.0M/S，扫频循环次数：30次 Vibration frequency range 10-55HZ, displacement amplitude: 0.35MM, acceleration amplitude :50.0M/S, frequency sweep cycle: 30 times	电气机械性能正常 Electrical and mechanical properties are normal
跌落试验 Drop test	1M高空按照互相垂直的轴方向自由跌落3次 Free fall 3 times at 1M altitude in the direction of perpendicular axes	电气机械性能正常 Electrical and mechanical properties are normal

产品包装规范 Code for product packaging

产品名称/规格 Product name/specification

一、标签要求 1. Label requirements

		******
Purchase order number	采购单号	**********
Material code	物料编码	**********
Name specification	品名规格	********
Quantity/unit	数量/单位	*****
remark	备注	**********

	******
采购单号	**********
物料编码	**********
品名规格	*******
数量/单位	*****
备注	**********

二、装箱要求

作业说明：

1. 内包装：

产品 50 PCS 一小袋

2, packing requirements
Operation description: 1, inner packaging: 50 PCS one bag of products

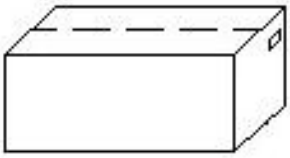
PE bag

2. 外包装：

根据实际数量定数量/箱

2. Outer packing: quantity/box according to actual quantity

纸箱 Paper box



注意事项：

1. 是否要增设隔板、珍珠棉；
2. 标签的贴附，如 ROHS 等；

Note:
one Whether to add partitions, pearl cotton; 2. Labeling, such as ROHS, etc.