

# 样品承认书

## Parts Approval Sheet

生产供应商:	物料名称:	TH13 ANT
Supplier	Parts Name	
适用项目:	NQI 料号:	NQI-TH13-M433-A
Type/Spec	Parts No	
品 牌:	客户料号:	
Brand	Quantity	
送样日期:	文件编号:	NQI-RD-SPEC-20240907
Send out Date	Document No	
承认日期:	样品版本:	V0
Approve Date	Version	

Supplier		Customer	
Approved By	Prepared By	Engineering Dept	Quality Dept

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(Resume)

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一. 样品图片及说明 (Sample picture and description) :

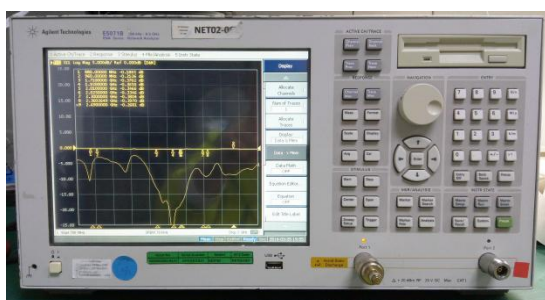
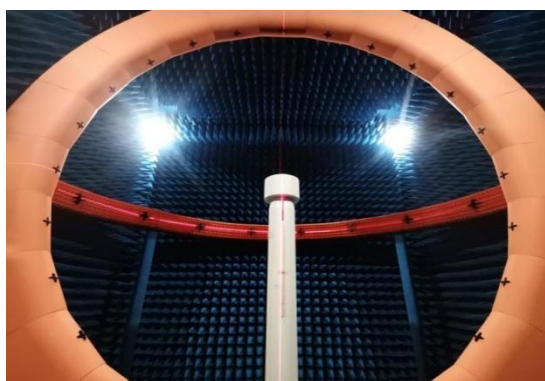
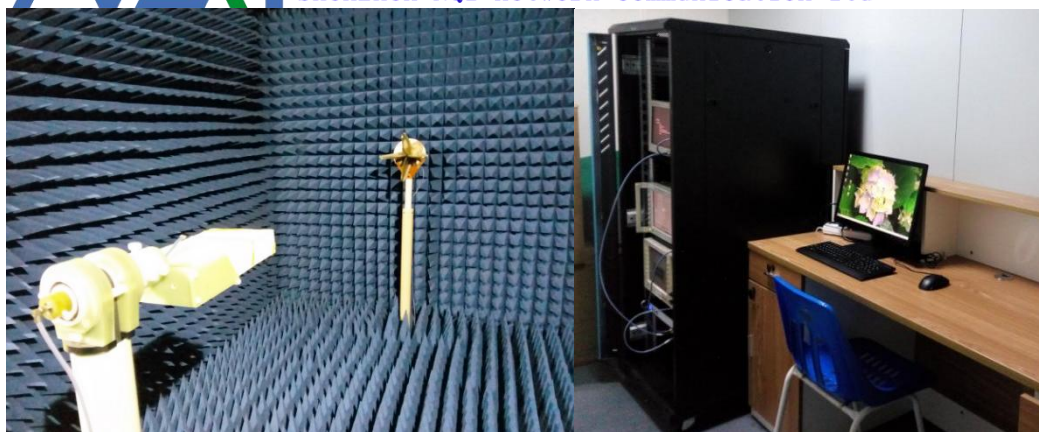


电气参数说明 (Electrical Specifications)	
频率范围 (Frequency range)	433MHz
特性阻抗 (impedance)	50 ohm
电压驻波比 (VSWR)	$\leq 3$
峰值增益 (Gain)	0
极化形式 (Polarization)	线性
辐射方向 (Radiation direction)	全向
连接方式说明 (Connection Mode Description)	
连接器 (connector)	/
线缆规格 (Cable specifications)	/
工作/储存温度 (Working/Storage temperature)	
工作温度 (Working temperature)	-30℃~65℃
储存温度 (Storage temperature)	-30℃~75℃

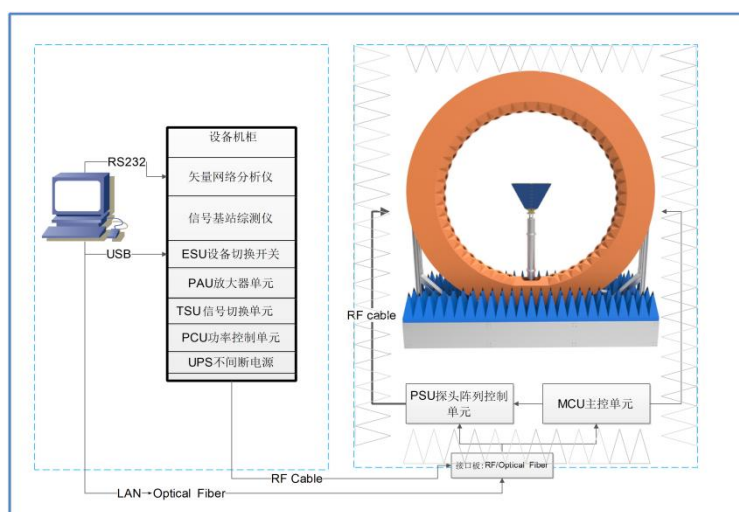


## 二. 试设备及项目 (Test equipment and items) :

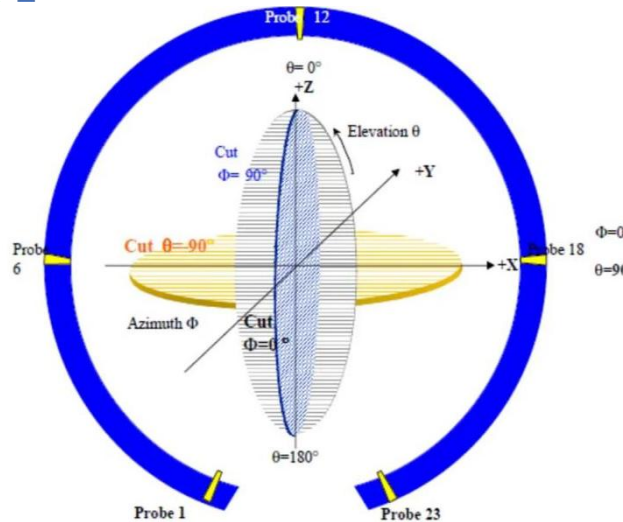
类别 (Class)	测试项目 (Test item)	设备 (Equipment)
1. S parameter	1. 回波损耗(RL) 2. 驻波比 (VSWR) 3. 史密斯原图 (Smith chart)	网分 (VNA) : Agilent E5071B  R&S ZVB8  Protek A333
2. 耦合测试 (Coupling testing)	1. 发射功率 (MAX Power) 2. 接收灵敏度 (MIN Sens)	1. 2G/3G Tester: Agilent 8960 2. The coupling box: TESCOM TC-5060A 3. 3D Chamber: ETS 3D Chamber (5x3x3)
3. 3D 无源测试 (Passive Test)	1. 效率 (Effeciency) 2. 增益 (Gain) 3. 辐射方向图 (Radiation pattern)	1. 3D Chamber: TEM24 3D Chamber (5x5x5)  ETS 3D Chamber (5x3x3) 2. 网分 (VNA) : Agilent E5071B  R&S ZVB8
4. 3D 有源测试 (Active Test)	1. 3D 功率 (TRP) 2. 3D 灵敏度 (TIS) 3. 吞吐率 (Throughput rate)	1. 3D Chamber: TEM24 3D Chamber (5x5x5)  ETS 3D Chamber (5x3x3) 2. 2G/3G Tester: Agilent 8960 3. 4G Tester: MT8820C/CMW500 4. WIFI/BT/NB-iot Tester: CMW500 5. 5G Tester: SP9500-CTS 6. Head: HEAD-P10 (FACE-P10)



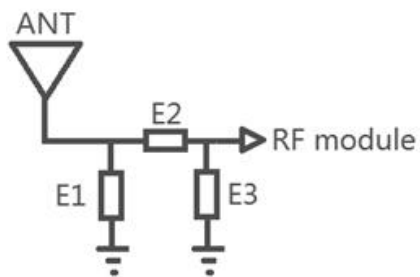
### 三. 暗室连接及坐标 (Chamber connection and coordinates) :







#### 四. 天线匹配网络 (Antenna matching network) :



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

#### 五. 天线电性能测试数据 (Antenna electrical performance test data) :

##### 5. 1. 天线无源参数 (Antenna passive parameters)

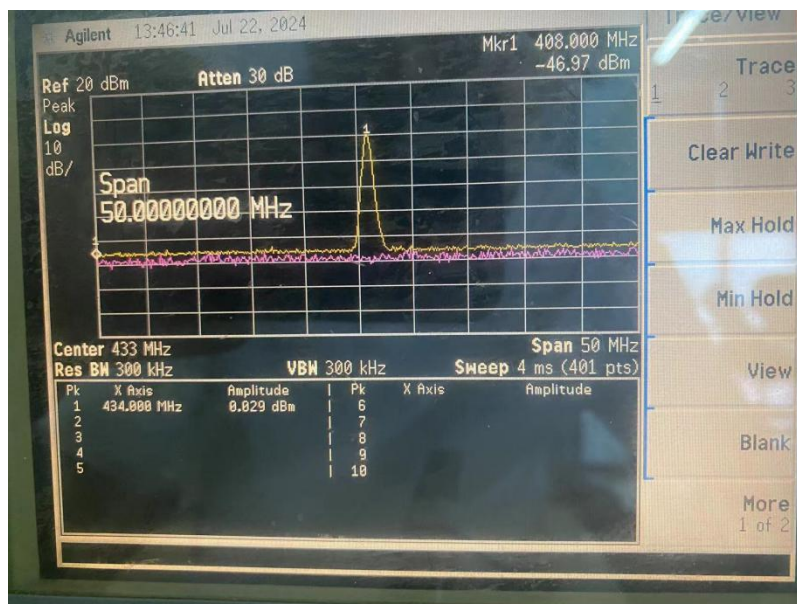
##### 5.1.1. 天线回波损耗/驻波比/史密斯圆图 (RL/VSWR/Smith Chart)





### 5.1.3 OTA 数据

	Test	Result
433M	MAX Power(dbm)	0.029







六. 天线结构图纸 (Antenna structure drawing)

