

再丰达(德施曼)

样品承认书

Parts Approval Sheet

生产供应商: 国质信

Supplier

物料名称: WF 天线

Parts Name

适用项目: HMI-2507-D212

Type/Spec

NQI 规格: NQI-HMI-2507-D212-WF-50X

Parts No

品 牌: NQI

Brand

客户料号:

Quantity

送样日期: 2025/08/28

Send out Date

文件编号: NQI-RD-SPEC-20260304

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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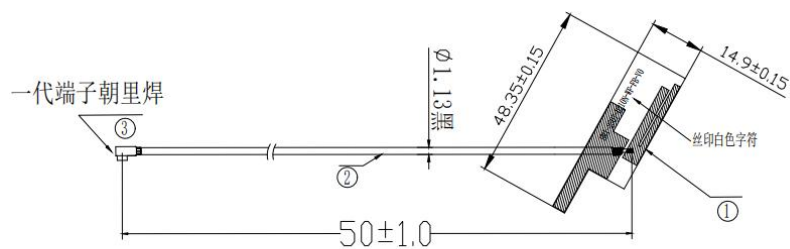
承认书履历表 (Resume)

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目录

一. 样品及说明 (Sample picture and description)	4
二. 测试设备及项目 (Test equipment and items)	5-6
三. 暗室连接及坐标 (Chamber connection and coordinates)	6-7
四. 天线匹配络 (Antenna matching network)	7
五. 天线电性能测试数据 (Electrical performance test Data)	8-10
六. 天线结构图纸 (Antenna structure drawing)	10
七. 重点尺寸检验报告 (Key dimension inspection report)	11

一. 样品及说明 (Sample picture and description) :

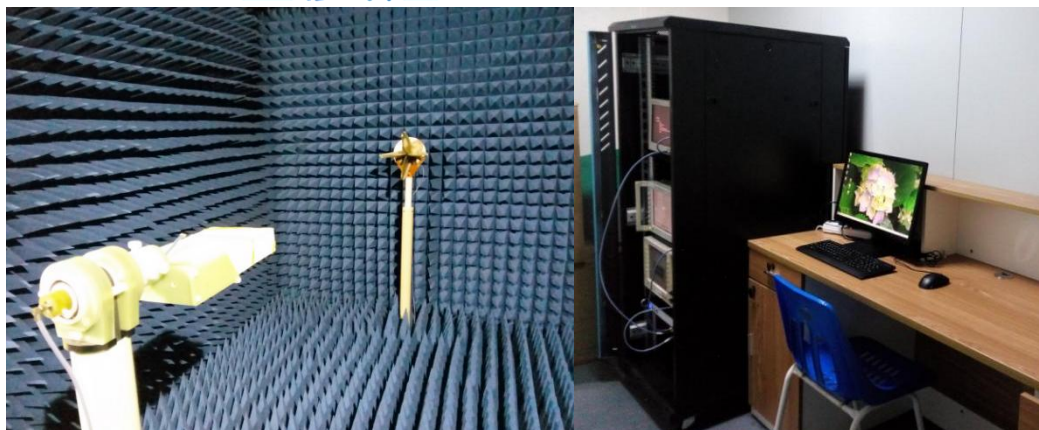


白色字符:HMI-2507-D210N-WF-FB-V0

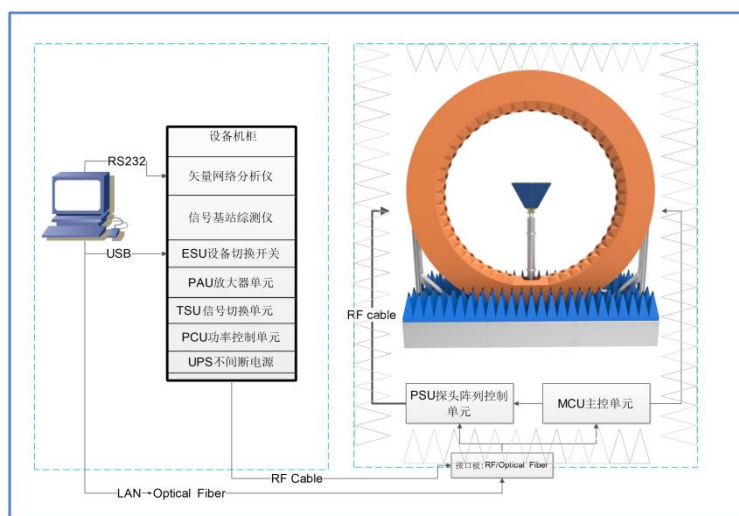
电气参数说明 (Electrical Specifications)	
频率范围 (Frequency range)	2400-2500MHz
特性阻抗 (impedance)	50 ohm
电压驻波比 (VSWR)	≤2.3
峰值增益 (Gain)	3.75DBi
极化形式 (Polarization)	线性
辐射方向 (Radiation direction)	全向
连接方式说明 (Connection Mode Description)	
连接器 (connector)	IPEX (一代)
线缆规格 (Cable specifications)	1.13*50MM 同轴线
工作/储存温度 (Working/Storage temperature)	
工作温度 (Working temperature)	-30℃~65℃
储存温度 (Storage temperature)	-30℃~75℃

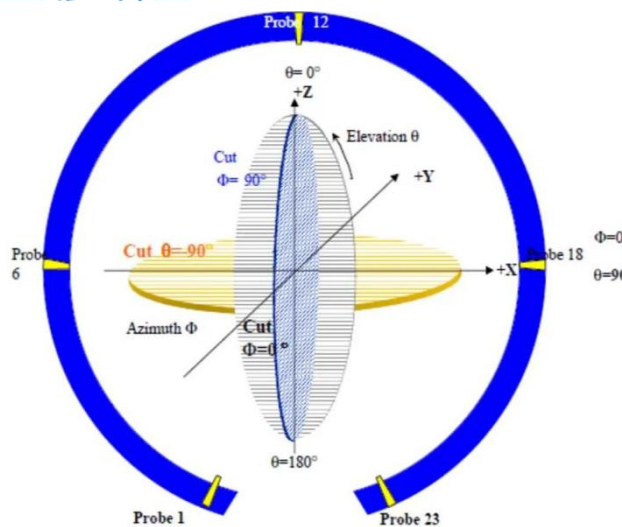
二. 试设备及项目 (Test equipment and items) :

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.斯密斯原图(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)

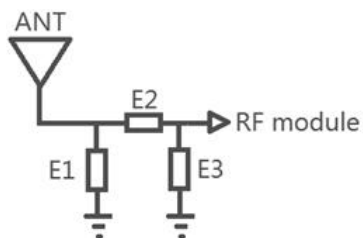


三. 暗室连接及坐标 (Chamber connection and coordinates) :





四. 天线匹配网络 (Antenna matching network)：主板原匹配

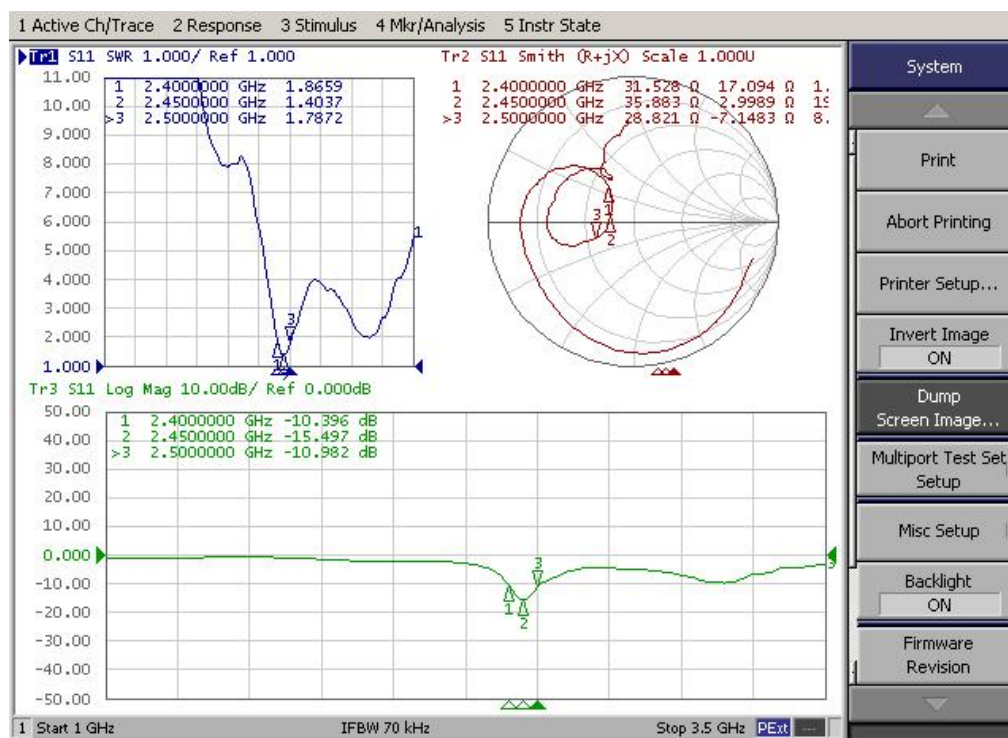


Element	(Value)
E1(0201)	NC
E2(0201)	0 Ω
E3(0201)	NC

4.1 天线贴装以及注意事项



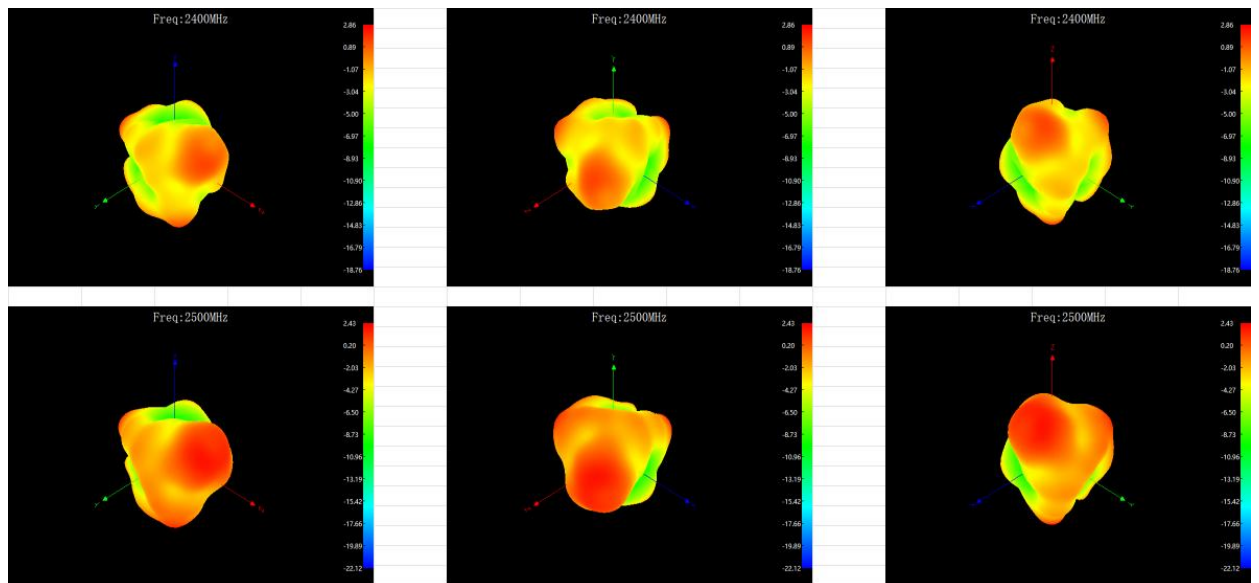
五. RL/VSWR/Smith Chat (回波损耗/驻波比/Smith)



5.1 增益及效率(Gain and efficiency)

Frequency/Mhz	MaxGain/dBi	Efficiency / %
2400	2.86	49.43
2410	2.83	48.98
2420	3.35	51.05
2430	3.25	50.23
2440	3.39	54.08
2450	3.75	58.61
2460	3.57	61.8
2470	3.47	60.81
2480	2.81	55.08
2490	2.87	54.2
2500	2.43	53.09

5.2 3D 图



5.3 TRP&TIS OTA 数据

NQI ANT TRP&TIS parameter Summary of						
BAND	WIFA-B (11b) (11M)					
CHANNEL	1	6	11			
TRP (dBm)	14.54	15.15	15.32			
TIS (dBm)	-76.25	-75.87	-76.38			



