



## 承认书

客户名称：济南有人物联网技术有限公司  
Customer Name: Jinan USR IOT Technology Limited

产品名称：2.4G WIFI 天线  
Product name: 2.4GWIFI antenna

规格型号：2.4 胶棒天线 / 垂直极化 / 2400-2500MHz  
SMA 内针 丝印 2.4G

Specifications and models : 2.4 Glue Stick Antenna/Vertical  
Polarization/2400-2500MHz SMA Inner Pin Silk Screen  
Printing 2.4G

本司料号：YR01-W020001

P/N: YR01-W020001

送样日期：2023 年 5 月 24 日

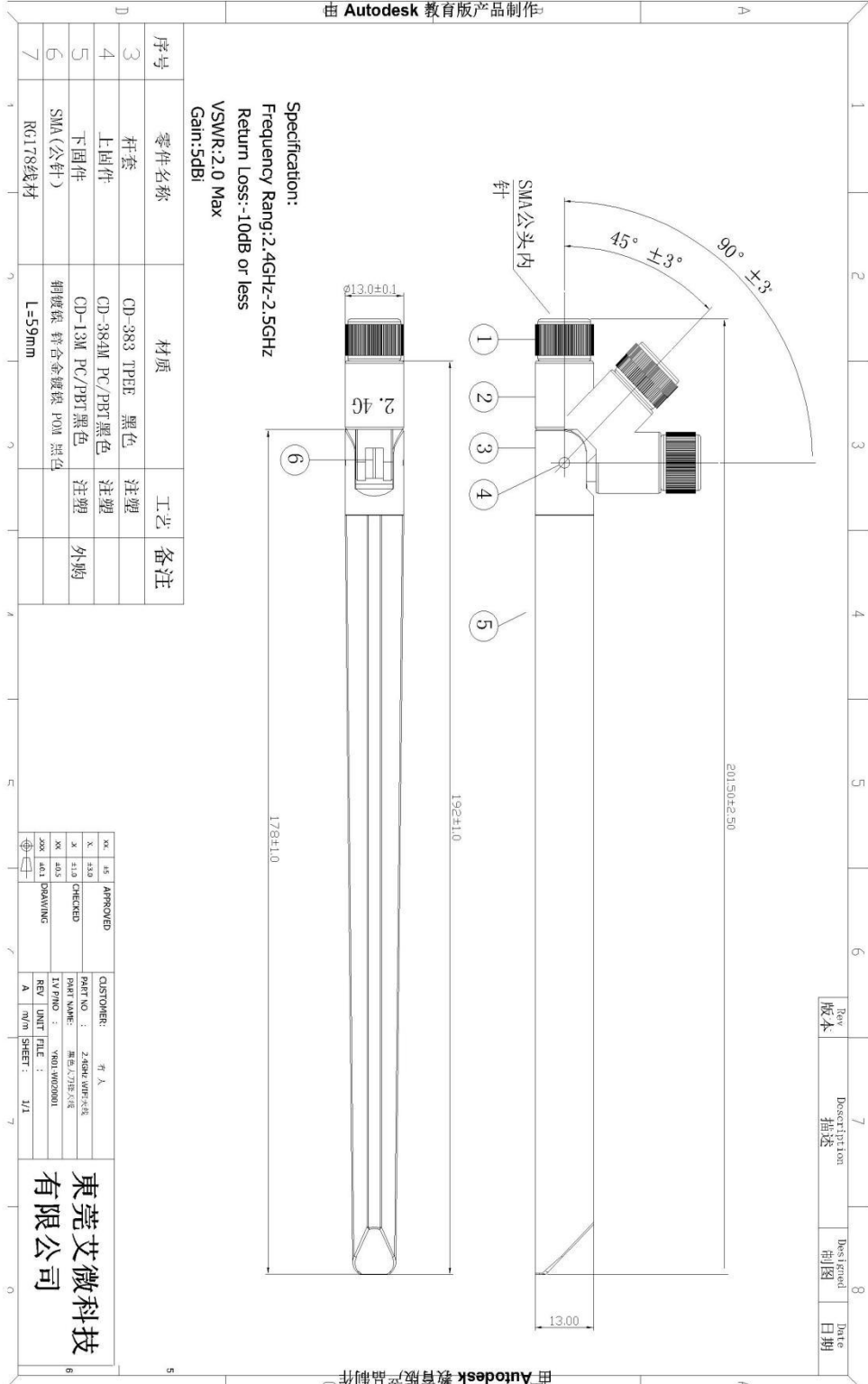
The date of sample delivery: 2023.005.24

确认：Confirmation

检查(INSPECTION)	审核(CHECKED)	批准(APPROVED)
吴娟	徐志强	万以竞



## 二、成品图 (Product drawing)





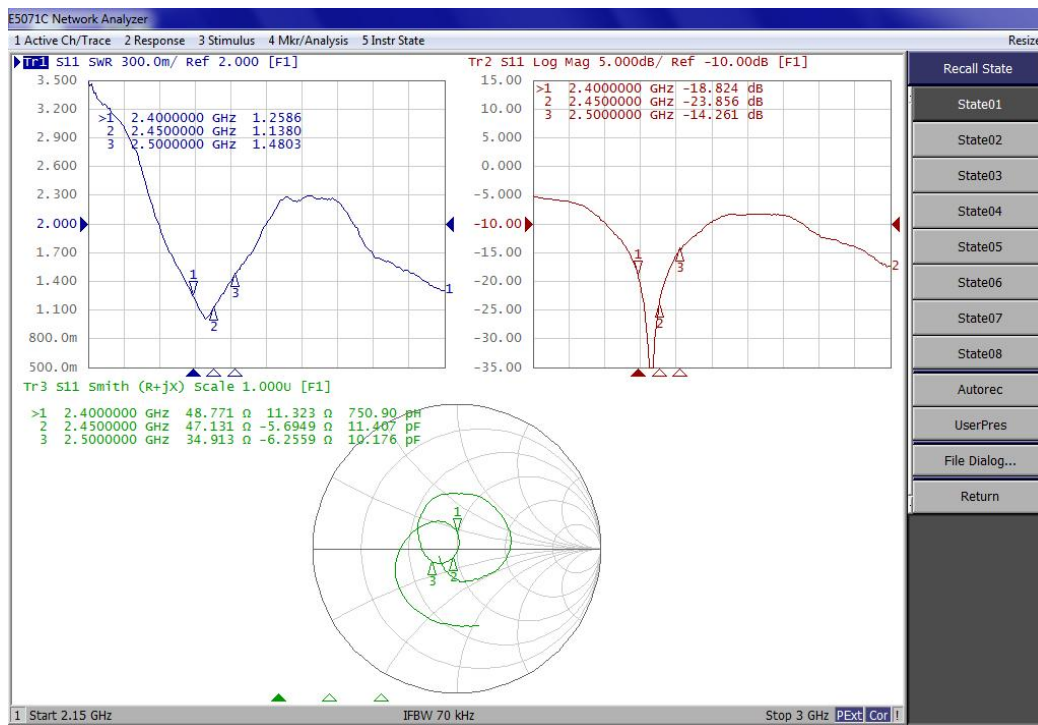
规格表: (Main technical specifications)

主要技术指标		Main technical specifications	
频率范围 Frequency Range (MHz)	2400~2500MHz	Frequency Range (MHz)	2400~2500MHz
特性阻抗 Impedance( $\Omega$ )	50 $\pm$ 5	Impedance( $\Omega$ )	50 $\pm$ 5
增益Peak Gain (dBi)	5 $\pm$ 1dBi	Peak Gain(dBi)	5 $\pm$ 1dBi
输出电压 驻波VSWR	Max 2.0	VSWR	Max 2.0
最大功率 Power Capacity	2W	Admitted Power	2W
极化方式 Polarization	垂直极化	Polarization	Linear Vertical
方向性 Radiation	全向	Radiation	Omni-directional
连接方式 Connector Type	SMA	Connector Type	SMA
物理性能		Physical Properties	
天线线材	1.78 棕色	Antenna cable	1.78 棕色 Cable
工作温度	-40 $^{\circ}$ C~+70 $^{\circ}$ C	Operating Temp	-40 $^{\circ}$ C~+70 $^{\circ}$ C
保存温度	-40 $^{\circ}$ C~+70 $^{\circ}$ C	Storage Temp	-40 $^{\circ}$ C~+70 $^{\circ}$ C

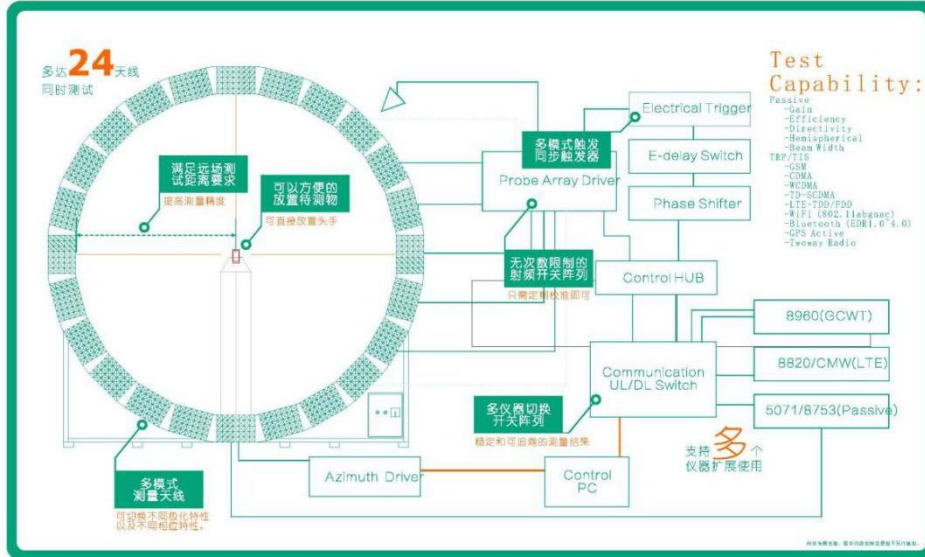
## 电测报告 Product Characteristics



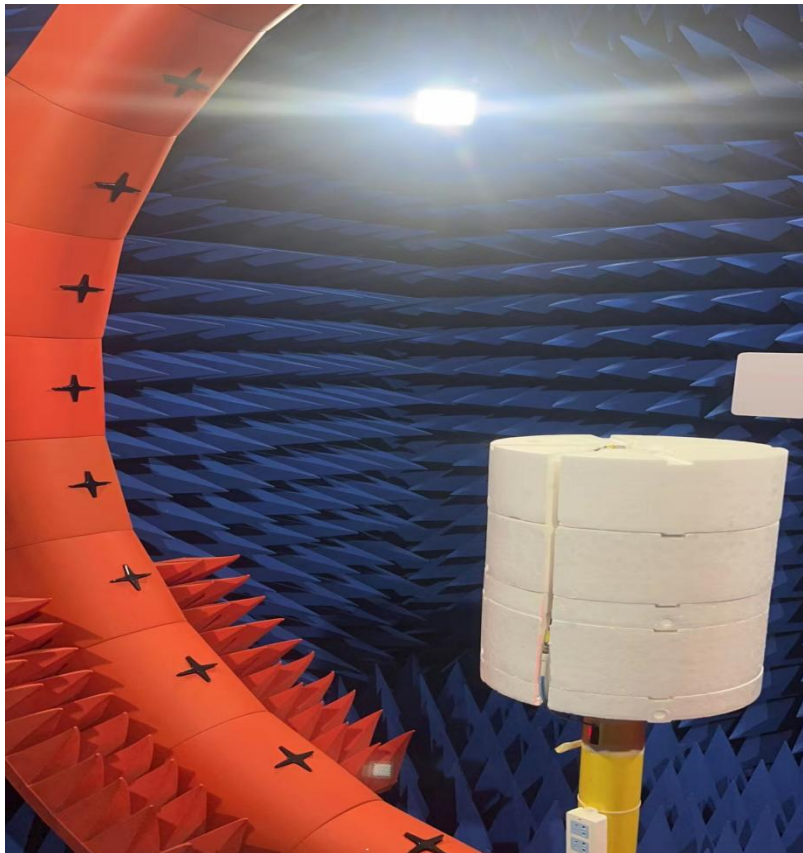
### 驻波测试 Standing wave test:



暗室测试原理框图: Block diagram of anechoic chamber test:



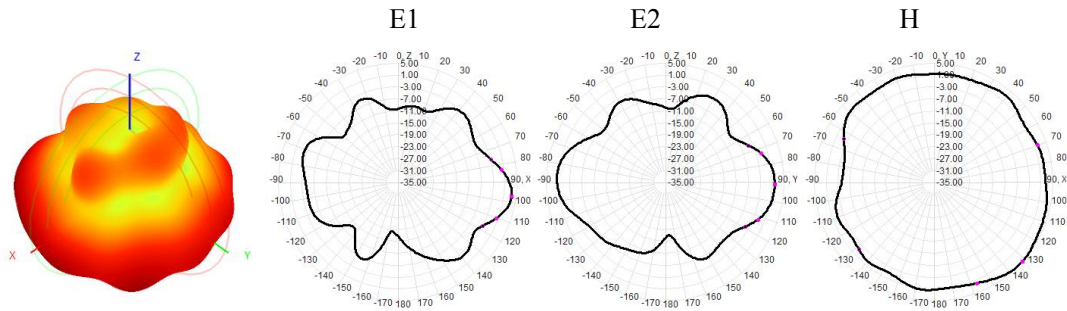
暗室内部图片: Picture of the interior of the darkroom:



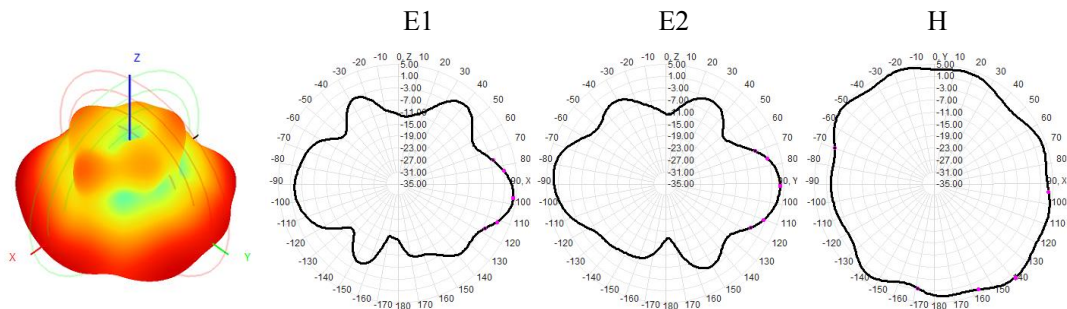
## 暗室 2D、3D Radiation Pattern

### Radiation Pattern

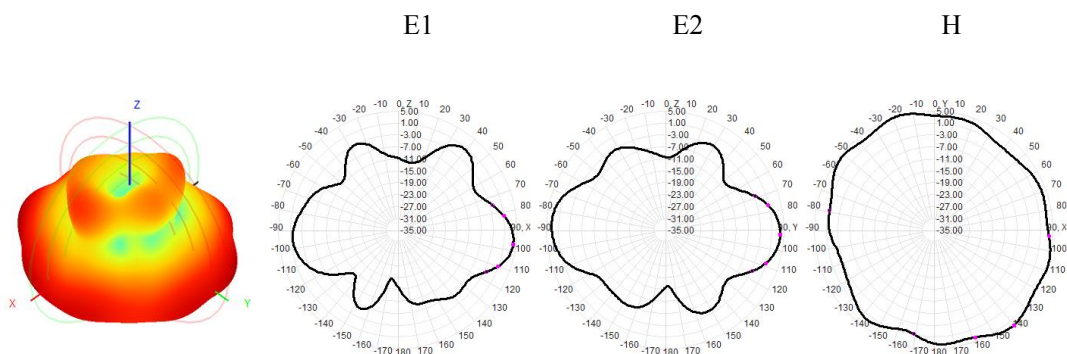
#### 2.4GHz



#### 2.45GHz



#### 2.5GHz





## Summary VSWR

	Antenna 1
2400MHz	1.25
2450MHz	1.13
2500MHz	1.48

## 3D Peak Gain & Efficiency

Frequency	Antel 2.4-2.5GHz	
	Peak Gain (dBi)	Efficiency (%)
2400	4.47	76.78
2420	4.63	70.12
2440	4.56	77.43
2460	5.24	76.45
2480	5.62	75.34
2500	5.89	78.97