

深圳市云顶通讯电子有限公司

Shenzhen Yunding Communication Electronics Co., LTD

TEL: +86 0755-23073599

FAX: +86 0755-23097189

E-mail:wht0809@163.com

承認書 APPROVAL SHEET

客 户 : **Shenzhen NNPO Technology Co., Ltd.**

品 名 规 格 FPC (Z99-FD001) 2.4G-0.81 (Low-loss wires)-L110MM-IPEX 4
DESCRIPTION:

料 号
PART NO.:

客 户 料 号
CUS PART NO.:

日 期 2025-6-13
D A T E:

云顶呈样签章 (Yunding signature)

工 程 ENGINEERING DEPARTMENT	品 保 Q C DEPARTMENT	业 务 SALES DEPARTMENT

客户承认签章 (Customer signature)

工 程 ENGINEERING DEPARTMENT	品 保 Q C DEPARTMENT	采 购 PURCHASING DEPARTMENT

联系电话 (TEL) : 0755 23073599

※ 承认书一式 三份, 惠蒙贵司承认签章

※ Approval in duplicate, please signed by your company.

地址: 深圳市宝安区航空路锦驰中心 3015

Address :3015, 3rd Floor, No. 1 Sanwei South Road, Bao 'an District, Shenzhen City, Guangdong Province

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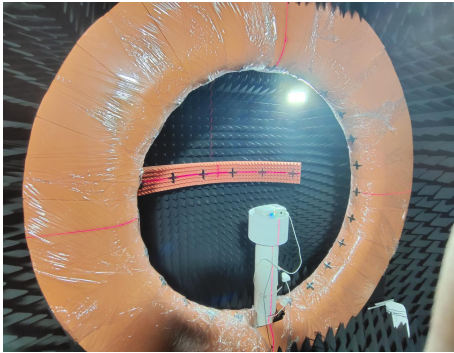
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1. 测项目与设备 (Test items and equipment) :

	测试项目 (Test items)	设备 (Equipment)
1. S11 参 数 (S-parameter)	1. 回波损耗 (Return Loss) 2. 电压驻波比 (VSWR)	网络分析仪 (network analyzer) : Agilent E5071B HP 8753D
2. 有源测试 (Active)	1. 发射功率 (TRP) Transmitting power 2. 接收灵敏度 (TIS) Receiving sensitivity	1. 暗室 (Darkroom) : ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber 2. 综合测试仪 (general-purpose teste) : Agilent 8960 E5515B ×2 StarPoint SP6011 Cmw500
3. 无源测试 (Passive)	1. 天线增益 (Gain) 2. 天线效率 (Efficiency)	1. 暗室 (Darkroom) : ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber 2. 网络分析仪 (network analyzer) : Agilent E5071B HP 8753D



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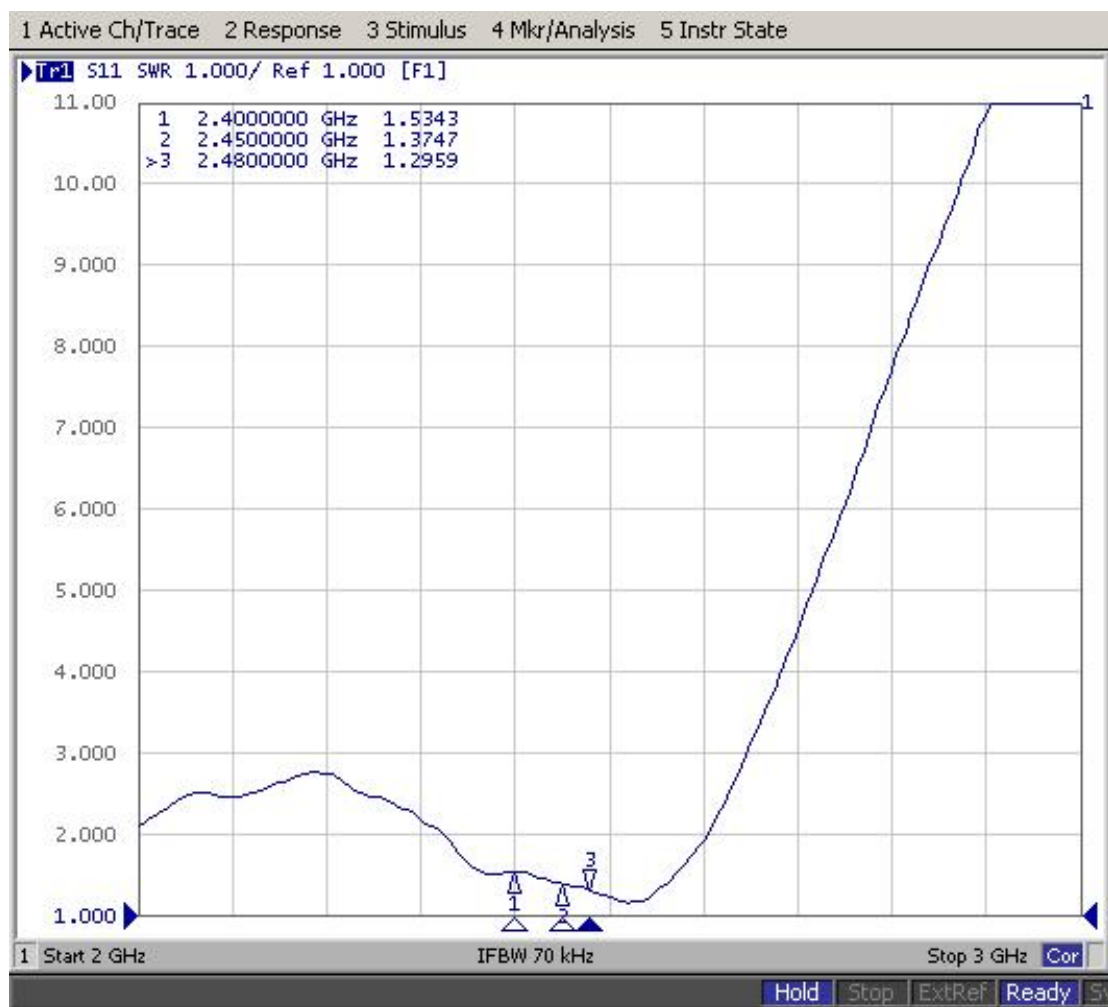
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2. 天线性能 SWR (Antenna performance SWR) :



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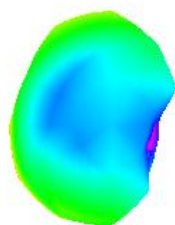
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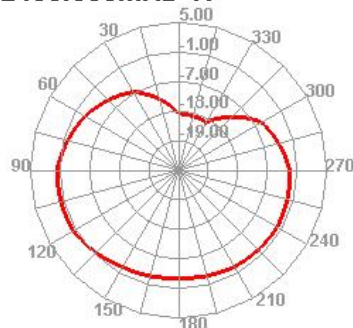
3. 天线效率与增益 (Antenna efficiency and gain) :

Passive Test For WIFI2.4		
Freq (MHz)	Effi (%)	Gain (dBi)
2400	44.9	2.08
2410	43.44	1.82
2420	40.83	1.48
2430	40.53	1.39
2440	41.86	1.49
2450	43.34	1.64
2460	43.8	1.69
2470	44.9	1.8
2480	44.15	1.76
2490	45.07	1.79
2500	46.81	1.92

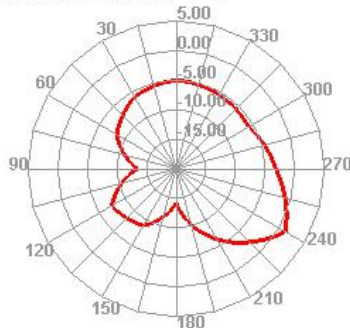
2400.000MHz



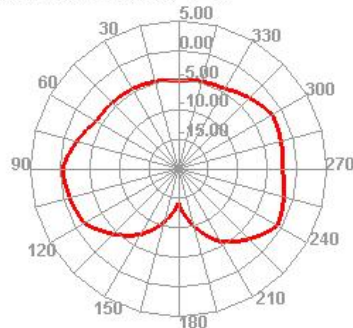
2400.000MHz H



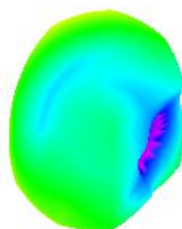
2400.000MHz E1



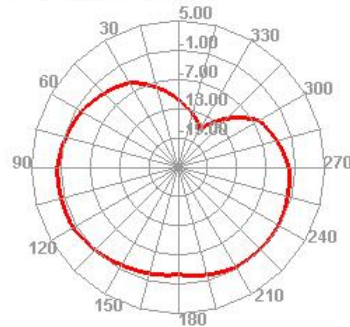
2400.000MHz E2



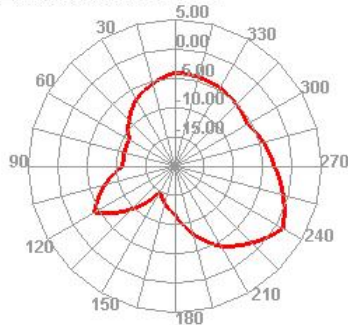
2500.000MHz



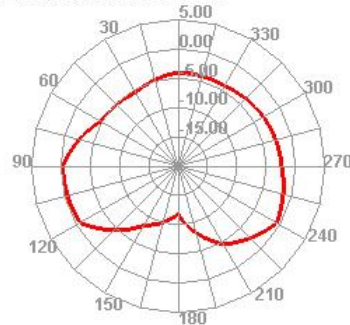
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



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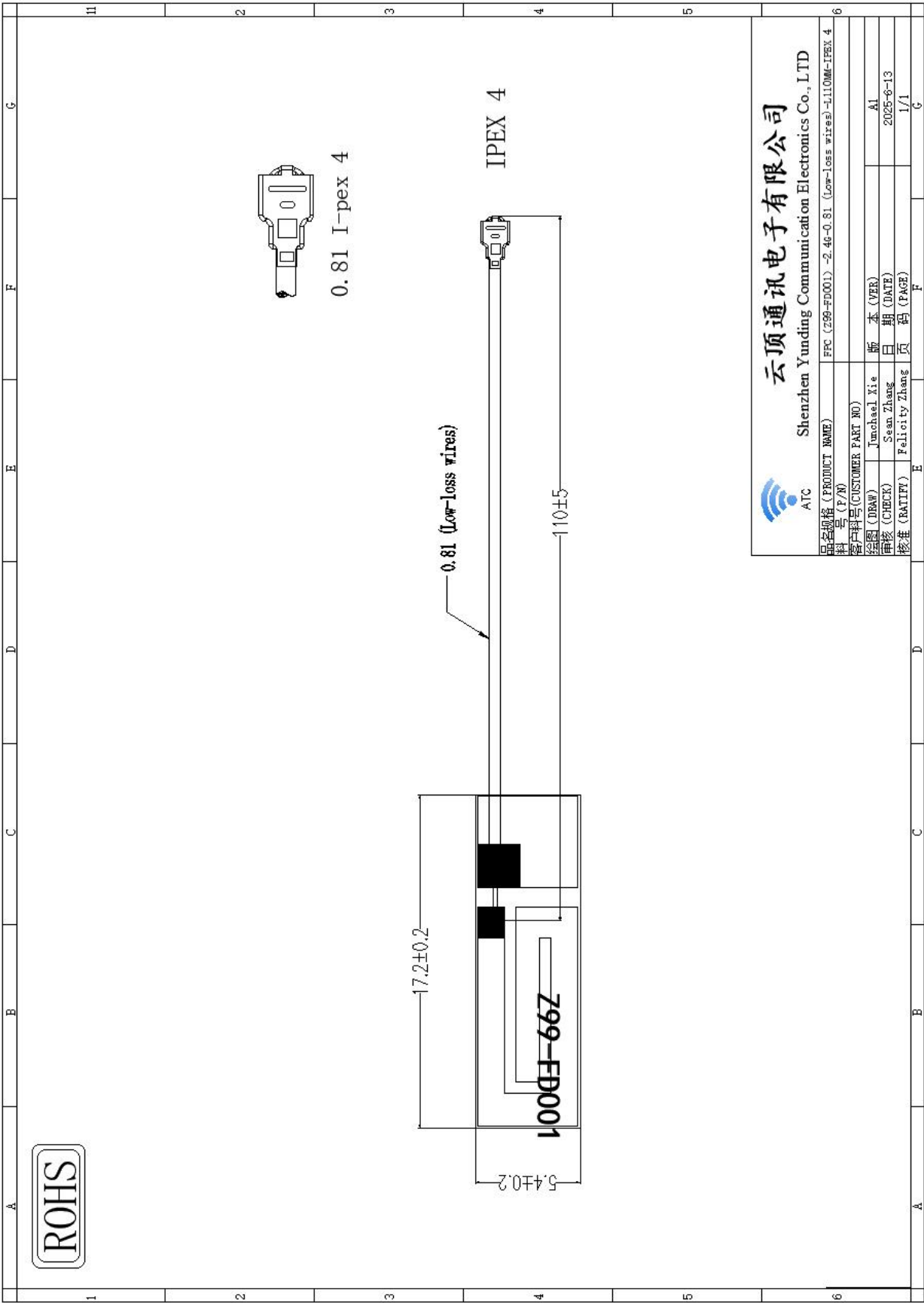
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4. 天线结构图（Antenna structure diagram）：



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电器技术参数

Technical parameters of electrical appliances

电 性 能 指 标		Electrical Specifications	
频率范围	2400~2500MHz	Frequency Range	2400~2500MHz
电压驻波比	≤2.0	VSWR	≤2.0
输入阻抗	50 Ω	Input Impedance	50 Ω
最大增益	2.08 DBI	Maximum gain	2.08 DBI
最大输入功率	50W	Maximum Input Power	50W
机 械 指 标		Mechanical Specifications	
天线颜色	黑色	Antenna Color	BLACK
接口形式	IPEX 4 代	Input connector	IPEX 4
天线线长	110MM	Cable length	110MM
工作温度	-40℃~+85℃	Working Temperature	-40℃~+85℃
工作湿度	20~80%	Working Humidity	20~80%

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