

Dongguan Yongfeng Hardware Products Co., Ltd

Address: No. 10, Third Lane, Jinhe Zhupai Village, Zhangmutou Town,
Dongguan City, China.

APPROVAL

客 户 :	
品 名 规 格 DESCRIPTION:	Copper antenna
料 号 PART NO.:	
客 户 料 号 CUS PART NO.:	
日 期 D A T E:	2025. 1. 8

深超呈样签章		
工 程 ENGINEERING DEPARTMENT	品 保 Q C DEPARTMENT	业 务 SALES DEPARTMENT

客户承认签章		
工 程 ENGINEERING DEPARTMENT	品 保 Q C DEPARTMENT	采 购 PURCHASING DEPARTMENT

联系电话:

※ 承认书一式三份, 惠蒙贵司承认签章

※ Approval in duplicate, please signed by your company.

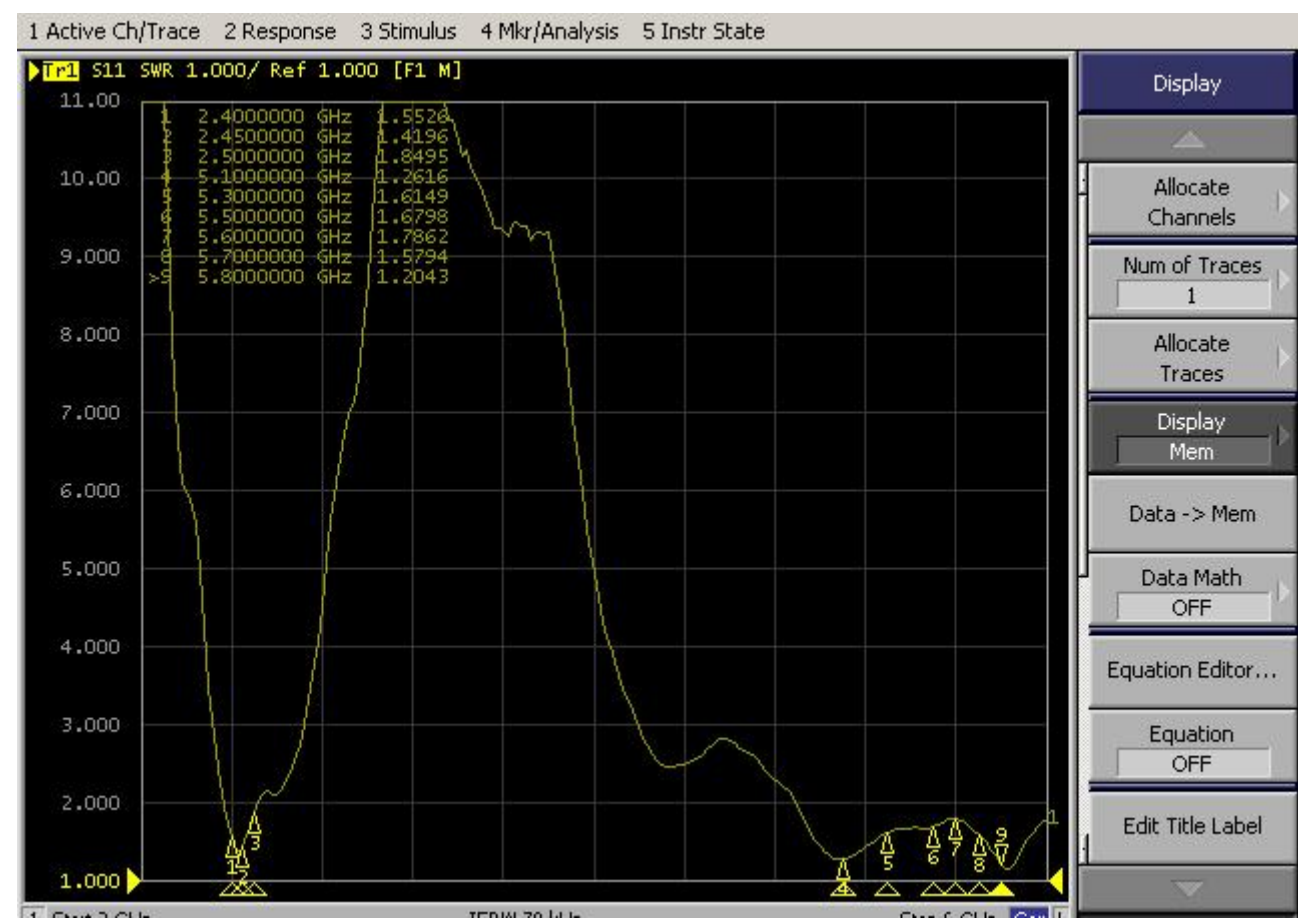
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1.测试项目与设备

	测试项目	设备
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: Agilent E5071B HP 8753D
2. 有源测试 (Active)	1. 发射功率 (TRP) 2. 接收灵敏度 (TIS)	1. 暗室: ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber 2.综合测试仪: Agilent 8960 E5515B ×2 StarPoint SP6011
3.无源测试 (Passive)	1.天线增益 (Gain) 2.天线效率 (Efficiency)	1. 暗室: ETS 7x4x3 m (3D) Chamber ETS 5x3x3 m (3D) Chamber 2. 网络分析仪: Agilent E5071B HP 8753D



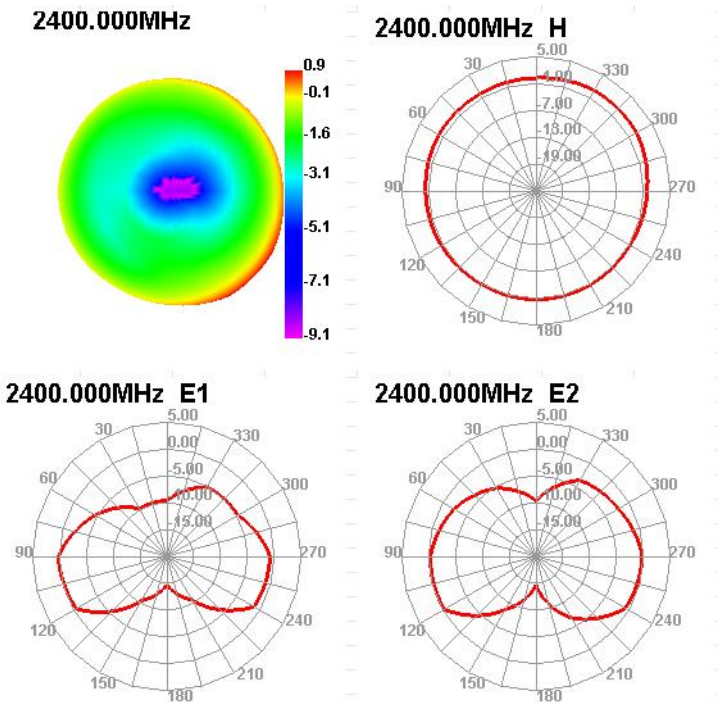
2.天线性能



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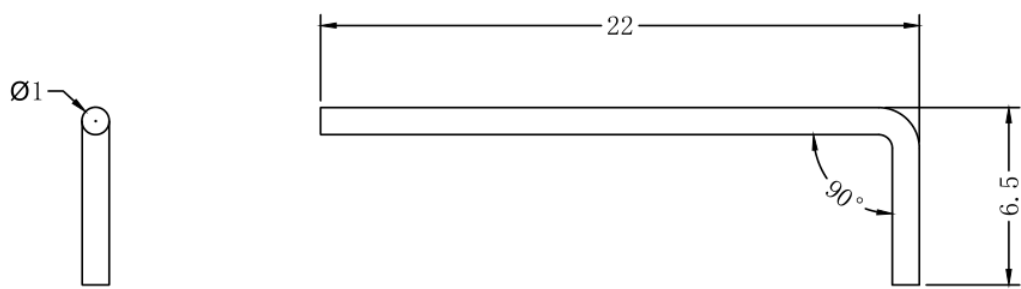
3. Antenna Gain and Efficiency

Passive Test For BLE			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	60.39	-2.19	0.93
2410	60.45	-2.19	0.94
2420	59.37	-2.26	0.84
2430	61.08	-2.14	0.93
2440	65.59	-1.83	1.25
2450	71.14	-1.48	1.61
2460	72.69	-1.39	1.69
2470	74.23	-1.29	1.69
2480	75.58	-1.22	1.72
2490	78.12	-1.07	1.86
2500	73.51	-1.34	1.58



深圳市深超通讯电子有限公司

4.ANT SIZE (Unit mm)



电器技术参数

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
增益	1.86DB	Gain	1.86DB
辐射方向	全向	Radiation direction	omnidirectional

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RF113 规格

1. 适用范围
- 本规格书制定了电线的结构和电气特性

同轴线
AWG 32

1. Scope
- This specification covers the construction and the electrical properties of wire.

Coaxial Wire
AWG 32

2. 结构/Construction

单位/Unit: mm

项目/Item		单位/Unit	详细资料/Details
Conductor 导体	材料/Material	-	绞合镀银铜丝 Silver-coated copper wire
	构成/Composition	(No./mm)	7/0.08
	外径/OD.	mm	0.24
	绞向/Orientation	-	S
Insulation 绝缘层	材料/Material	-	FEP(进口料)
	绝缘颜色/Insulation color	-	本色/Natural
	标称绝缘厚度/	mm	0.22
	绝缘线径/OD.	mm	0.69
Braid Shield 编织	材料/Material	-	镀锡铜丝 Tinned copper wire
	构成/Composition	(No./mm)	16/4/0.05
	编织密度/Coverage	(%)	>=90
Jacket 外被	材料/Material	-	FEP
	标称绝缘厚度/ Nom. Thickness	mm	0.12
	外径/OD.	mm	1.13±0.10

3. Electrical Properties (at 20℃) /电气特性(20℃时)

项目/Item	单位/Unit	详细资料/Details
导体电阻/Conductor Resistance	Ω/km	571 (Max.)
绝缘电阻/Insulation Resistance	MΩ • km	100 (Min.)
耐压强度(AC)/Dielectric Strength(AC)	V/ 1 Min	500
特性阻抗/Impedance	Ω	50±3
耐温等级/ Temperature	℃	200
额定电压/rated voltage	V	30

4. 电线截面图示如下：

