产品规格承认书

Product specifications
acknowledgment

承认厂商：_____

(Recognized manufacturers)

制 造 厂 商 ： 深圳市蝙蝠无线技术有限公司

（Manufacturer） Shenzhen Bat Wireless Technology Co.,Ltd.

产 品 名 称 ： 2.4G 软板天线

（Description）

地 址： 深圳市龙华区大浪街道横朗社区华兴路13号智云ONE工业园A栋1409
1409, Building A, Zhiyun One Industrial Park, No. 13 Huaxing Road, Henglang Community, Dalang Street, Longhua District,Shenzhen.

(Address)

产品选型表：

（Product Type）

型号	说明	备注
BW2.4FND14-5B1L120	IPEX 一代 线 120mm	参数均可订制

供应商承认签栏		
制表者	**审核者**	**核准者**

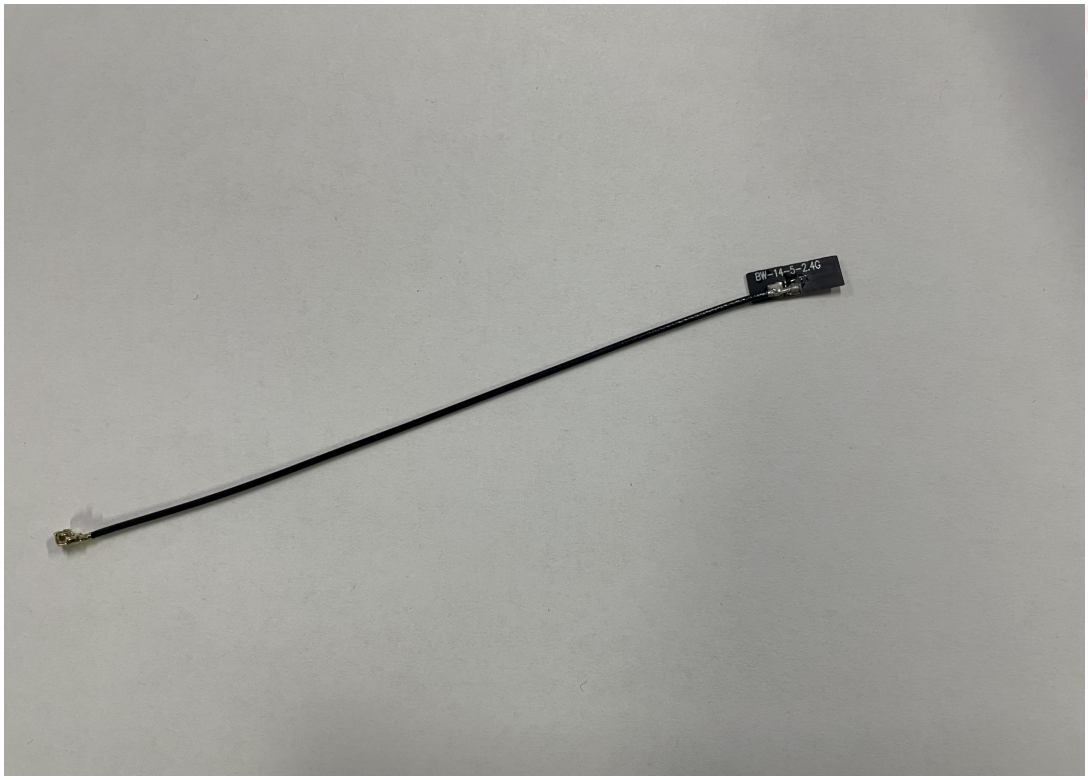
客户承认栏	
审核者	**核准者**

1.1 Specifications

天线型号 Antennas Type	BW2.4FND14-5B1L120
频率范围 Frequenc Range(MHz)	2400-2500MHz
输入阻抗 Input Impendence (Ω)	50Ω
电压驻波比 V.S.W.R	<2
增益 Gain (dBi)	2.47dBi
极化形式 Polarization Type	垂直 Vertical
功率容量 Power Capacity (w)	50
雷电保护 Lingtning Protection	None
工作电压 DC Voltage (V)	None
天线尺寸 Dimension (mm)	14x5
接口形式/Connector Type:	IPEX-1
电缆型号 Cable type (mm)	Φ1.13
电缆长度 Cable length(mm)	120
辐射体 Radiator	None
天线颜色 Color	黑色 Black
重量 Weight(g)	None
工作温度 Operating Temperature (℃)	-40~80
储藏温度 Storage Temperature (℃)	-20~85

***注：以上数据仅供参考；因天线功能较为敏感，主体周边机构有变更请通知我们评估。**

1.2 Antenna Picture



上图型号：BW2.4FND14-5B1L120，图片仅供参考

（定制客户中间连接线长度定制，天线形状定制）

***注： 因天线功能较为敏感，主体周边机构有变更请通知我们评估。**

天线装配位置图

2. Electrical Specification

2.1 Test Equipment

A. VSWR and input impedance: Agilent 8753/E5071 Network Analyzer

B. Antenna gain and efficiency: ETS three-dimensional anechoic chamber

2.2 Test Setup

2.2.1 Frequency Range

2.2.2 VSWR

Step 1: The antenna is arranged on the customer provided test fixture.

Step 2: The VSWR of the antenna is measured via Agilent 8720/8753 Network Analyzer (see figure. 1).

Figure.1

2.2.3 Radiation pattern and Gain

A. The 3D chamber provides less than -40dB reflectivity from 800MHz to 6GHz and a 40cm diameter spherical quiet zone. The measurement results are calibrated using both dipoles and standard gain horns (see figure. 2).

B. The antenna under tested is arranged in the turned table and a decoupling sleeve is used to reduce feed line radiation (see figure. 3).

C. The measured results of the radiation patterns and antenna gain are obtained from the control system and showed on the monitor (see figure. 4 and 5).

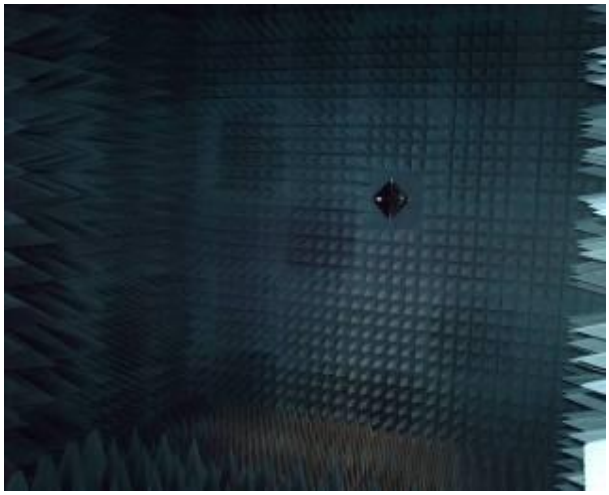


Figure.2

Figure.3

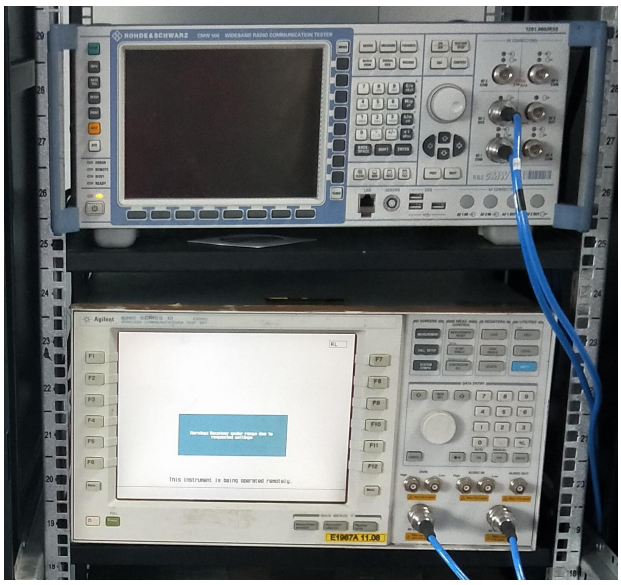


Figure.4

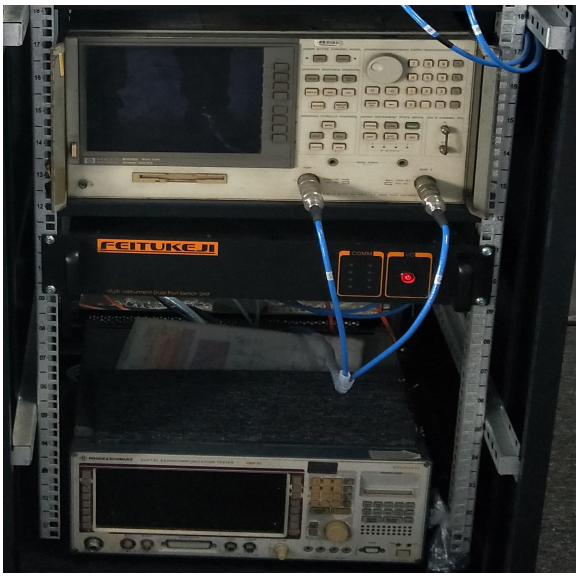
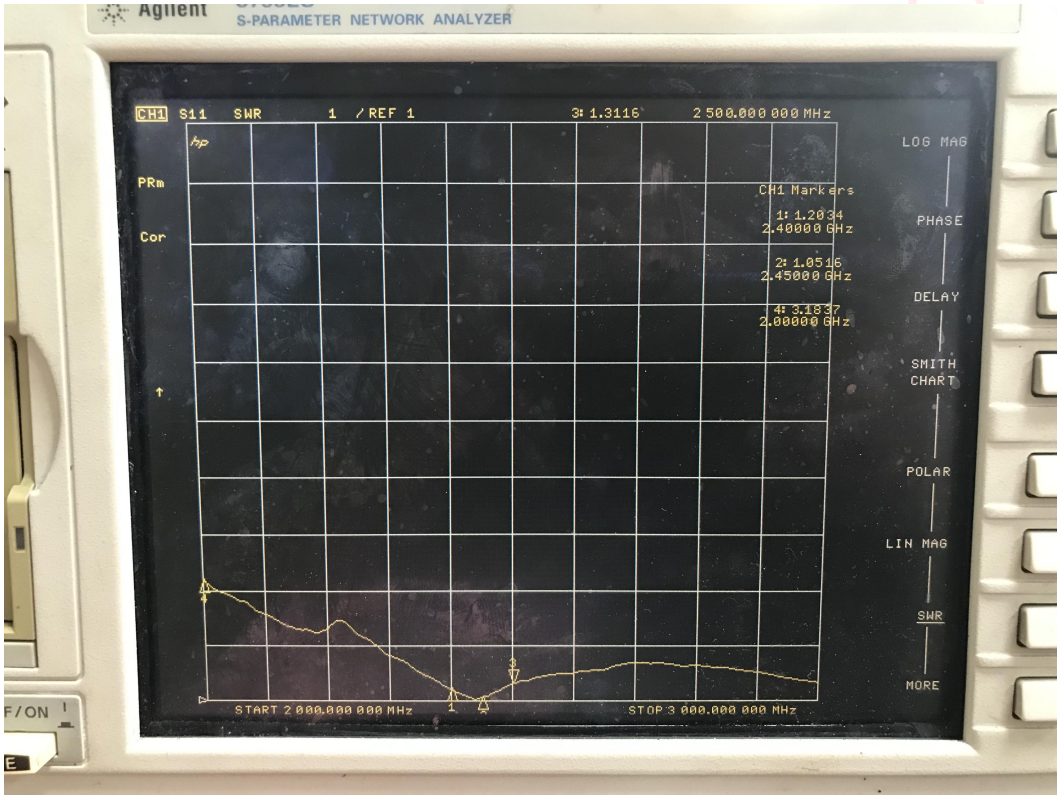


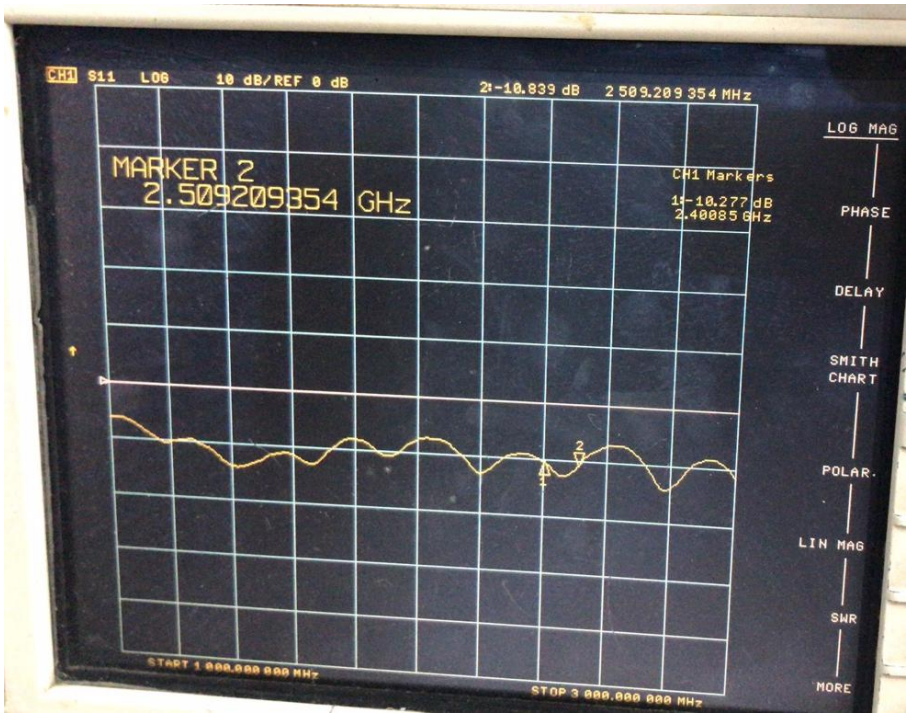
Figure.5

3. Performance Data

3.1 Passive data

VSWR（电压驻波比）/Return Loss（回波损耗）/Smith Chart（史密斯圆图）



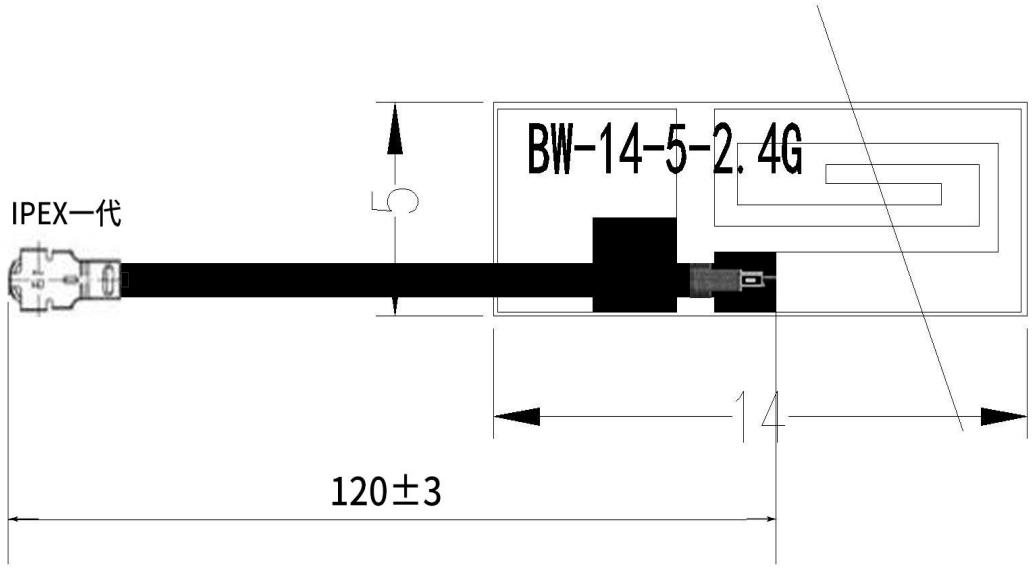


Passive Test For WIFI										
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
2400	46.24	-3.35	1.08	-1.07	24.078	22.165	1.08	-29.89	48.42	48.27
2410	45.05	-3.46	0.83	-1.32	23.595	21.456	0.83	-31.76	48.62	48.42
2420	44.27	-3.54	0.88	-1.27	23.407	20.866	0.88	-24.7	48.87	48.69
2430	42.32	-3.73	0.96	-1.19	22.684	19.638	0.96	-19.8	48.84	48.66
2440	42.02	-3.77	1.17	-0.98	22.74	19.278	1.17	-18.64	48.95	48.73
2450	43.67	-3.6	1.57	-0.58	23.811	19.855	1.57	-20.8	49.07	48.77
2460	44.83	-3.48	1.81	-0.34	24.524	20.307	1.81	-20.11	49.11	48.76
2470	46.42	-3.33	2.06	-0.09	25.45	20.971	2.06	-18.17	49.11	48.73
2480	50.38	-2.98	2.47	0.32	27.73	22.652	2.47	-16.85	49.41	48.96
2490	55.11	-2.59	2.81	0.66	30.468	24.641	2.81	-16.63	49.76	49.29
2500	54.97	-2.6	2.69	0.54	30.569	24.398	2.69	-18.06	49.65	49.12

***注：以上为实测数据，仅供参考；因天线功能较为敏感，主体周边机构有变更请通知我们评估。**

4.Mechanical Specification

4.1 Assembly Drawing



5. RF113

1. 适用范围
本规格书制定了电线的结构和电气特性

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

同轴线
AWG 32

Coaxial Wire
AWG 32

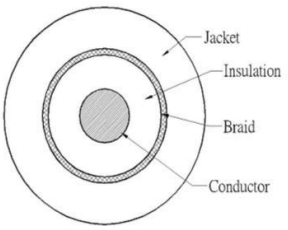
2. 结构/Construction 单位/Unit: mm

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:



6.免责声明(Disclaimer)：

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In order to provide our users with better service, Shenzhen Bat Wireless Technology Co.,Ltd (hereinafter referred to as Bat Wireless) will try to present as detailed and accurate product information as possible in this manual. However, due to the timeliness of the manual content, Bat Wireless shall not absolutely guarantee the unlimited timeliness and applicability of the file. Bat Wireless has the right to update the manual content without further notice. To get the latest edition information, pls visit the official website of Bat Wireless or contact our customer service staff. Thanks for your trust and support!