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
Shenzhen Bat Wireless Technology Co., Ltd.

（Manufacturer）

产 品 名 称 2.4G 软板天线/2.4G Flex Board Antenna

（Description）

产 品 型 号 ： BW2.4FNX26-10B1L50

（Product Type）

Shenzhen Bat Wireless Technology Co., Ltd.
1409, Building A, Zhiyun One IndustrialPark, No. 13 Huaxing Road, HenglangCommunity, Dalang Street, Shenzehn,Guangdong, China

1.1 Specifications

天线型号 Antennas Type	BW2.4FNX26-10B1L50
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	<1.5
增益 Gain (dBi)	2-3dBi
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)	26x10
接口形式/Connector Type:	IPEX-1
电缆型号 Cable type (mm)	Φ1.13
电缆长度 Cable length(mm)	50
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。

*Note: The above data is for reference only, due to the sensitive antenna function, please notify us for evaluation if there is any change in the surrounding mechanism of the main body.

1.2 Antenna Picture

上图型号：BW2.4FNX26-10B1L50，图片仅供参考

（定制客户中间连接线长度定制，天线形状定/Customized, the length of the customer's intermediate connection line is customized, and the antenna shape is fixed）

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

batwireless.com

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).

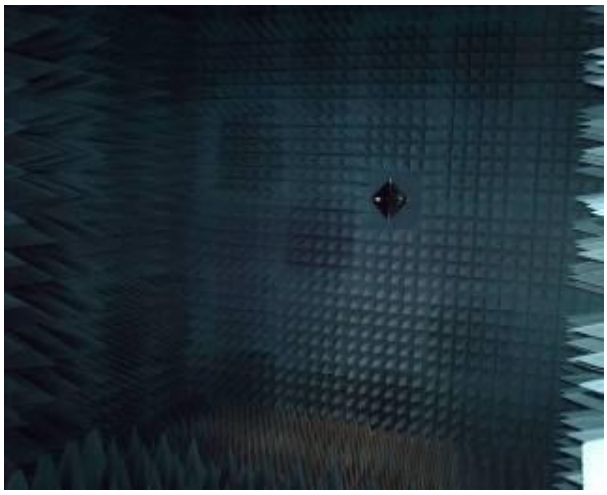


Figure.2

Figure.3

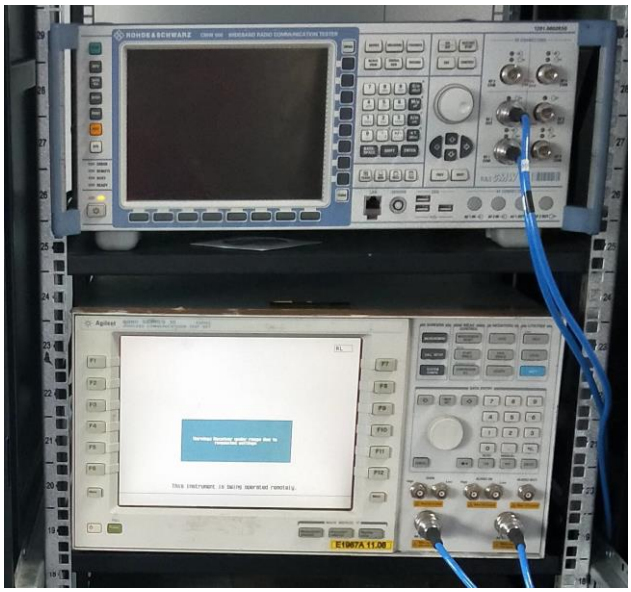


Figure.4

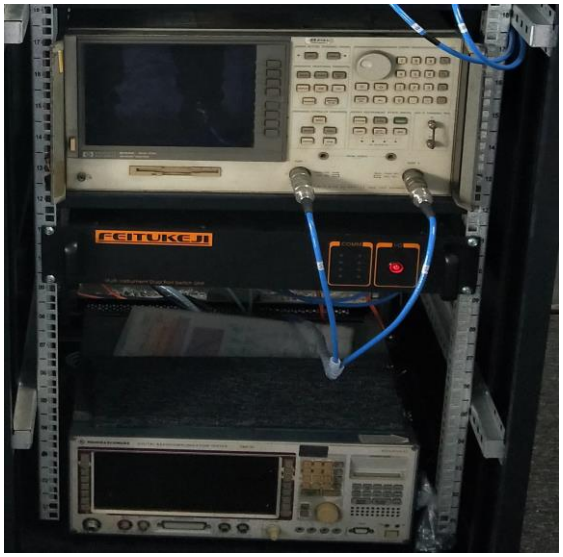
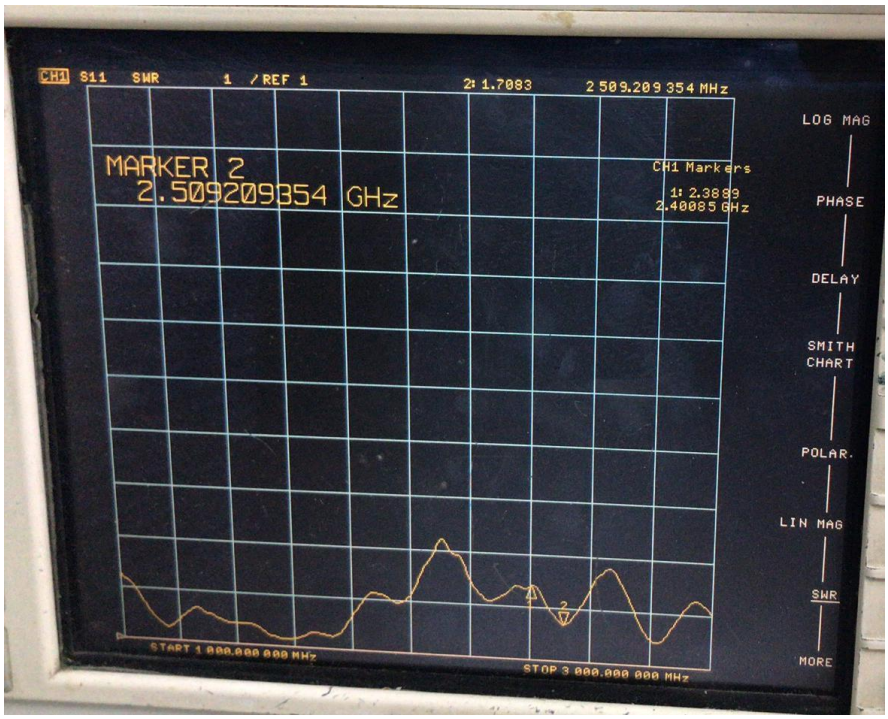


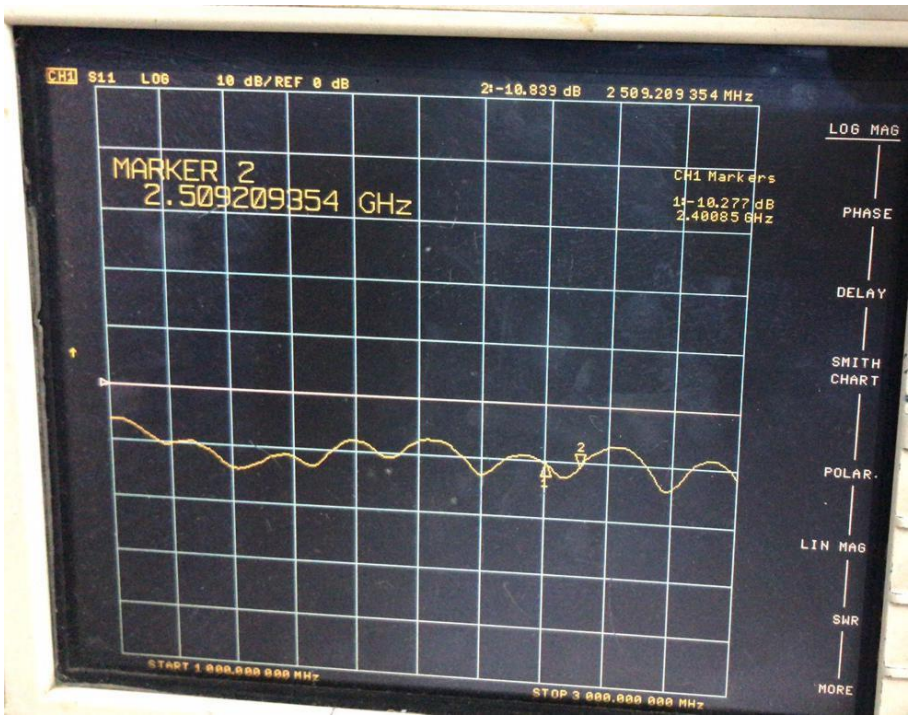
Figure.5

3. Performance Data

3.1 Passive data

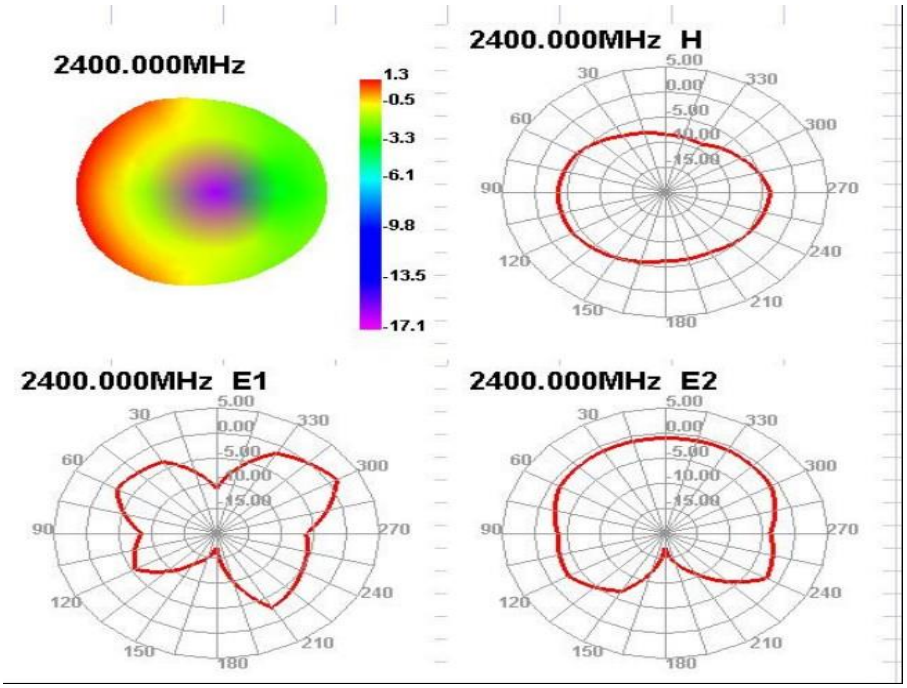
VSWR（电压驻波比）/Return Loss（回波损耗）/Smith Chart（史密斯圆图）





*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

*Note: The above is the measured data, for reference only, due to the sensitive antenna function, please notify us for evaluation if there is any change in the surrounding mechanism of the main body。

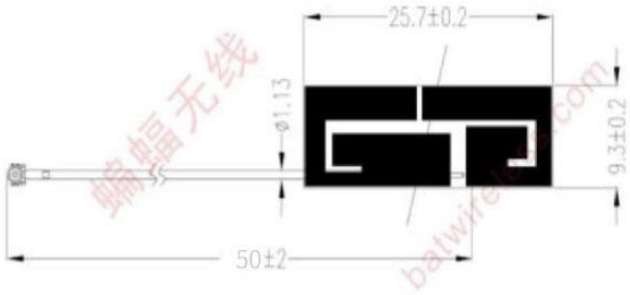


3.2 Gain and Efficiency

Frequency (MHz)	Gain (dBi)	Efficiency(%)
2400	1.37	51.76
2410	1.55	53.30
2420	1.87	55.96
2430	1.94	56.33
2440	2.25	60.26
2450	2.43	62.57
2460	2.27	61.33
2470	2.08	59.86
2480	2.07	60.71
2490	2.09	59.15
2500	1.97	55.85

4.Mechanical Specification

4.1 Assembly Drawing



技术要求:
1. 所有单位尺寸为mm。
2. 材料:
FPC 单面板 反面背胶 黑油
同轴线 1.13 一代端子 5OMM 黑色
3. 所有尺寸标注前有*符号的为管控尺寸。

Technical Requirements:
1. All unit sizes are mm.
2. Materials:
FPC single-sided side adhesive on the reverse side with black oil
Coaxial 1.13 Gen Terminal 5OMM Black
3. All dimensions with an * symbol before them are controlled dimensions.

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

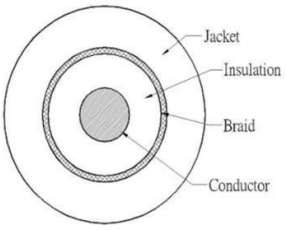
单位/Unit: mm

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)：

本着为用户提供更好服务的原则，深圳市蝙蝠无线技术限公司（下称“蝙蝠无线”）在本手册中将尽可能地为用户呈现详实、准确的产品信息。但介于本手册的内容具有一定的时效性，蝙蝠无线不能完全保证该文档在任何时段的时效性与适用性。蝙蝠无线有权在没有通知的情况下对本手册上的内容进行更新，恕不另行通知。为了得到最新版本的信息，请尊敬的用户定时访问蝙蝠无线官方网站或者与蝙蝠无线工作人员联系。感谢您的包容与支持！

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!