

1.1 Specifications

天线型号 Antennas Type	BW4GFNX80-21B1
频率范围 Frequenc Range (MHz)	700-2700
输入阻抗 Input Impedence (Ω)	50 Ω
电压驻波比 V. S. W. R	<1.5
增益 Gain (dBi)	6dBi
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)	80x21
接口形式/Connector Type:	IPEX-1
电缆型号 Cable type (mm)	ϕ 1.13
电缆长度 Cable length (mm)	120
辐射体 Radiator	
天线颜色 Color	黑色 Black
重量 Weight (g)	None
工作温度 Operating Temperature ($^{\circ}$ C)	-40~80
储藏温度 Storage Temperature ($^{\circ}$ C)	-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：BW4GFNX80-21B1

（定制客户中间连接线长度定制，天线形状定制）

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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).

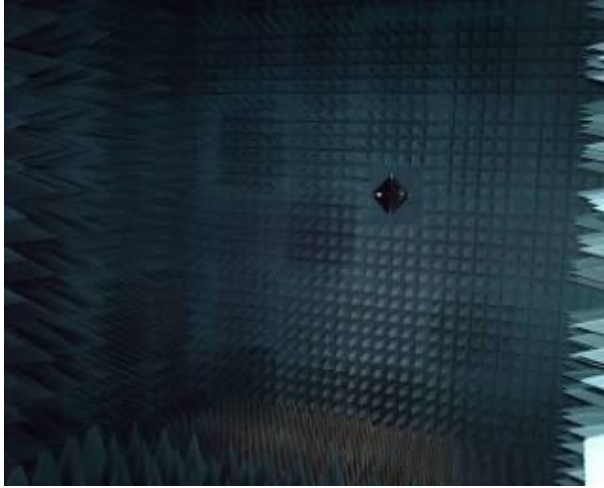


Figure.2



Figure.3

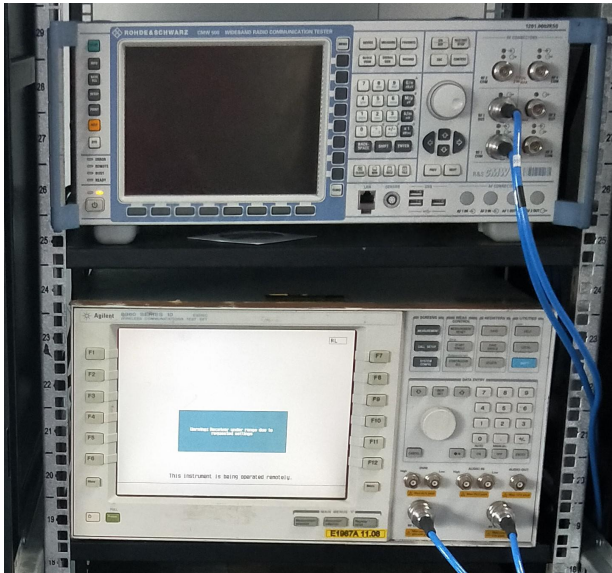


Figure.4

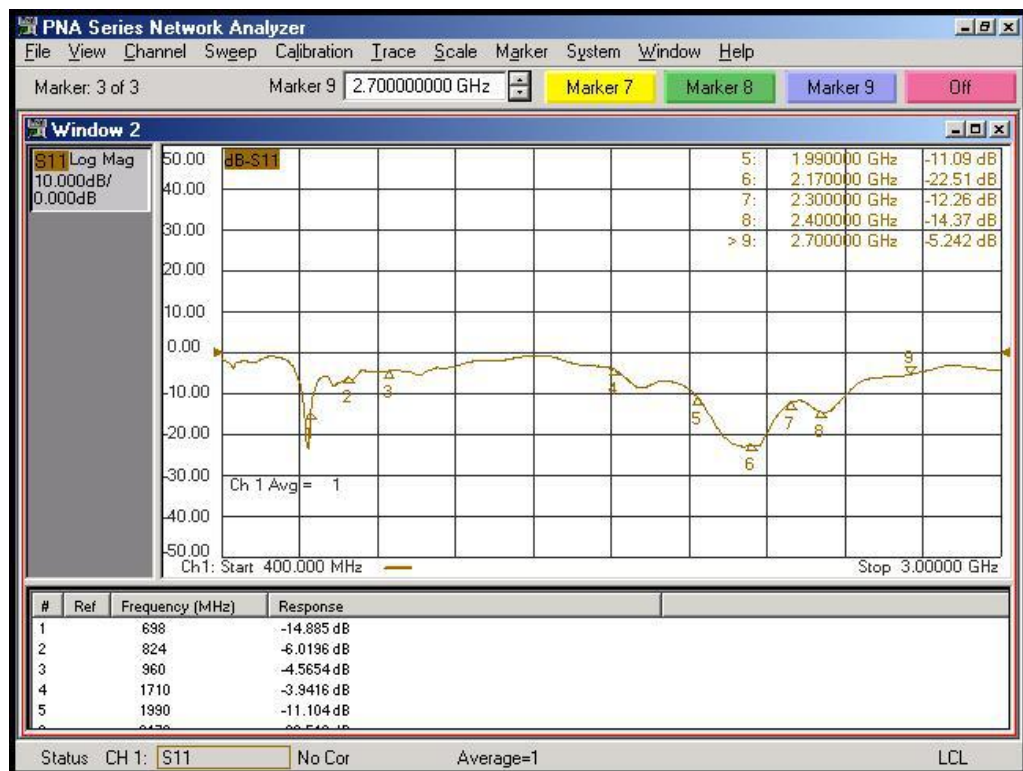


Figure.5

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)

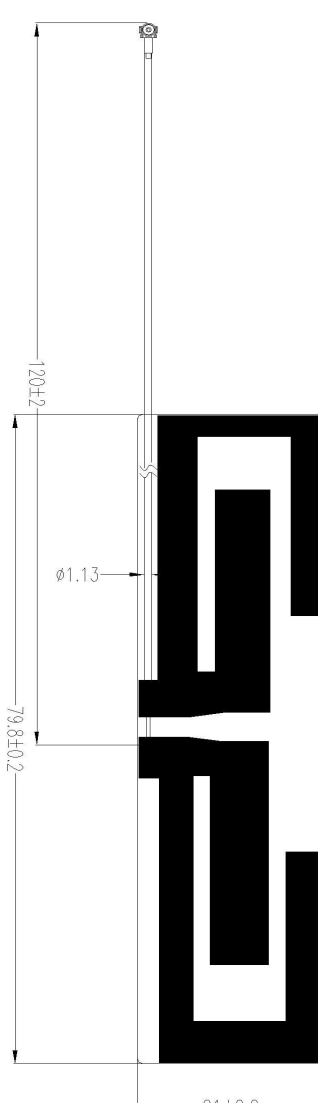


*注：以上为实测数据，仅供参考；因天线功能较为敏感，主体周边机构有变更请通知我们评估。

4. Mechanical Specification

4.1 Assembly Drawing

REV	DESCRIPTION	DATE	APPD



GENERAL TOLERANCE		DIMENSION		ANGLES	
		±0.20		±2°	
		.0	±0.15	.0	±1°
		.00	±0.10	.00	±1°
		.000	±0.05		

技术要求:

1. 所有单位尺寸为mm。
2. 材料:
FPC 黑色
3. 同轴线 1.13 黑色 一代端子
3. 所有尺寸标注前有*符号的为管控尺寸。

图号		比例	1:1	材料		名称	RF-LTE
图名		数量	1	颜色	黑色	零件编号	
日期		设计					第 1 页
							共 1 页

制图:

审核:

批准:

5. RF113

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

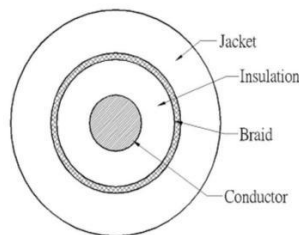
单位/Unit: mm

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/ Nom. Thickness	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°C) /电气特性 (20°C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	$\text{M}\Omega \cdot \text{km}$	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	$^{\circ}\text{C}$	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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