



深圳信诺山通信技术有限公司

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Shenzhen SignalSenTelecom Technology Co, .Ltd



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## BT 天线规格书

BT Antenna specification

我司料号 Our material No: W183-1B2000B-A

客户:		项目名:	
Customer:		Project:	
频段: BT	日期: 2023/11/16	版本: R:A	
FB: BT	Data: 11/16/2023	Version: R:A	
研发	结构:	审核:	批准:
	射频:	审核:	
天线型号:2.4G BT 天线,黑色,一代端子同轴线 L=200mm			

### Address:

Room 211, Hengbo science and technology Industrial Park, Qingning road, Longhua District, Shenzhen



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## 1. Project information and Electrical Specification

*Those specifications were specially defined for **BT** model, and all characteristics were measured under the model's handset testing jig.*

1-1 Project picture



1-2 Frequency Band:

Frequency Band	MHz
BT	2400-2500

1-3 Impedance matching

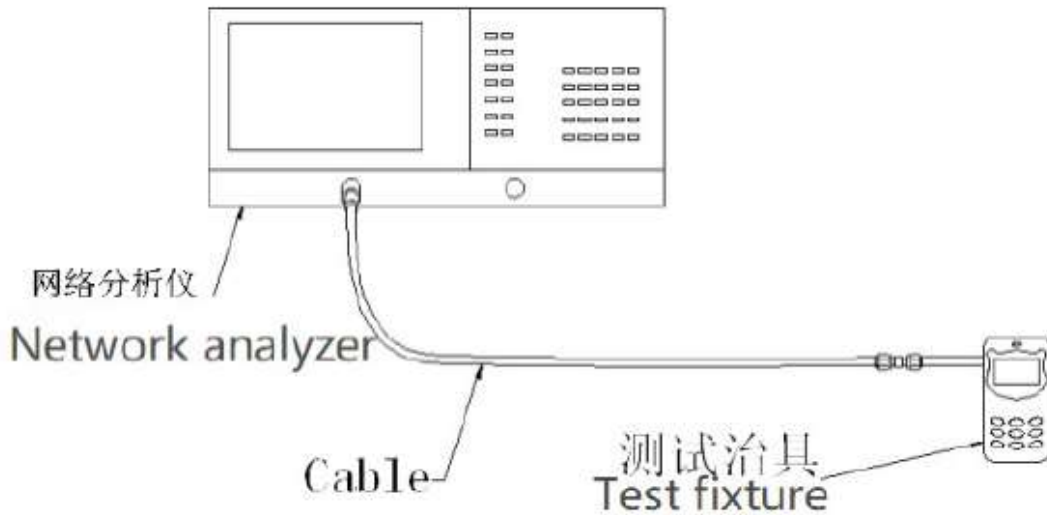
DUT 的 RF 线路上的所有匹配器件都保持不变 All matching devices on the RF circuit of DUT remain unchanged

## 2.VSWR

### 2-1 Measuring Method:

- 1. A 50  $\Omega$  coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,*
- 2. Keeping this jig away from metal at least 20cm.*

测试示意图如下 The test diagram is as follows:



### 2-2 S11 parameter values

频率 (MHZ)	2400	2500
驻波	1.04	1.32



### 3. Efficiency and Gain

#### \*measuring and test instruments:

微波暗室 Microwave anechoic chamber

Agilent 网络分析仪 Microwave anechoic chamber

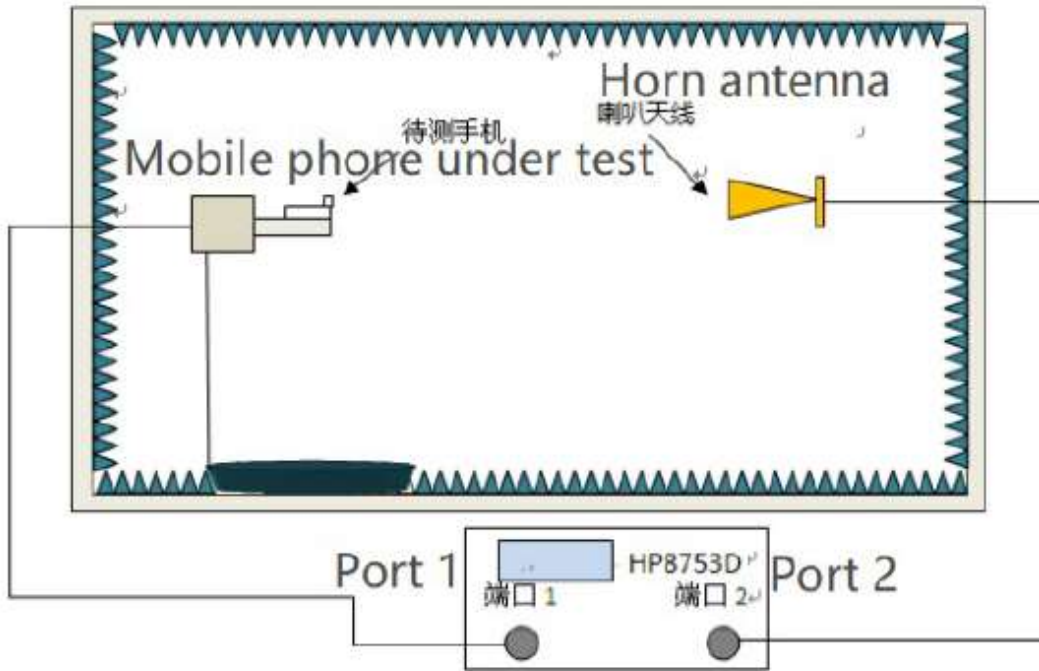
Agilent 频谱分析仪 Spectrum analyzer

8960 综合测试仪 Network analyzer

标准天线 Standard antenna

**\*test method:**

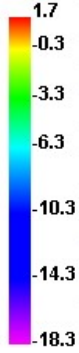
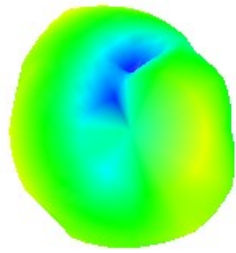
equipment 以 H 面放于转台中心位置固定，与喇叭天线中心位置在同一个水平线上。



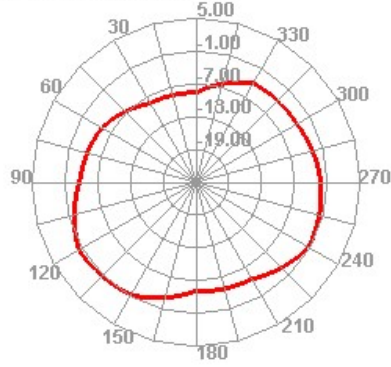
3-1 Efficiency/Gain- BT

Passive Test For BT								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
2400	50.67	-2.95	1.73	-0.42	1.73	-18.33	51.53	51.61
2450	50.75	-2.95	1.69	-0.46	1.69	-18.53	51.67	51.63
2500	51.75	-2.86	1.9	-0.25	1.9	-12.83	51.56	51.46

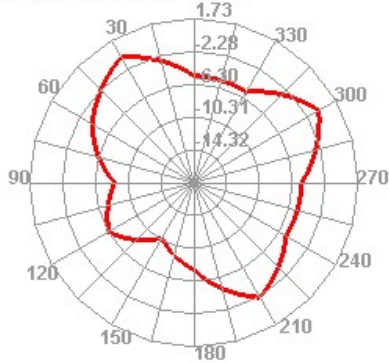
2400.000MHz



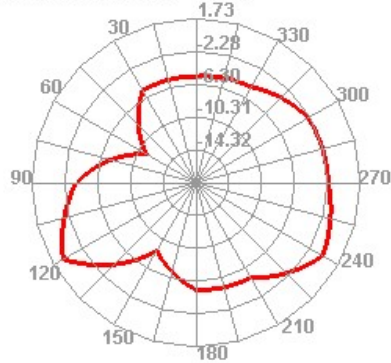
2400.000MHz H



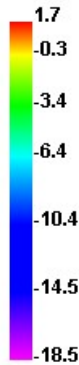
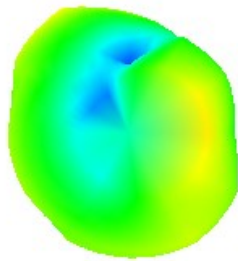
2400.000MHz E1



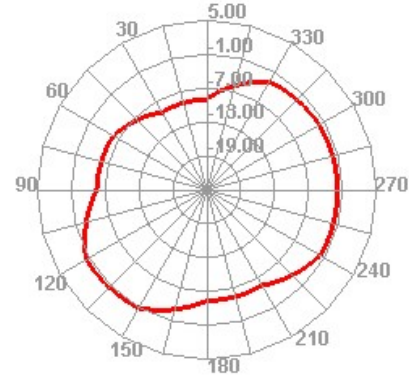
2400.000MHz E2



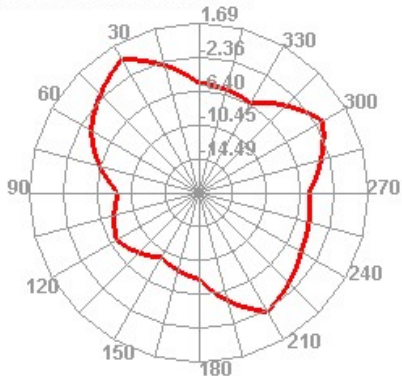
2450.000MHz



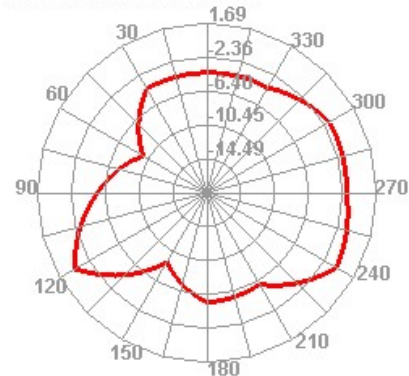
2450.000MHz H



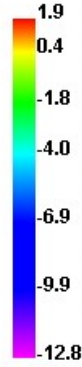
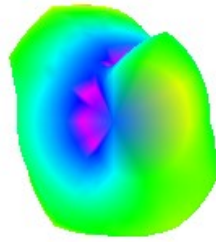
2450.000MHz E1



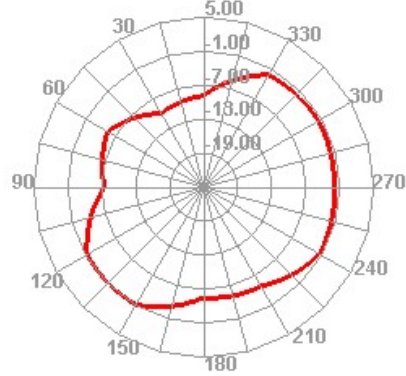
2450.000MHz E2



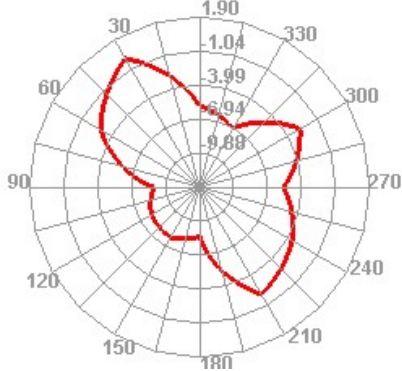
2500.000MHz



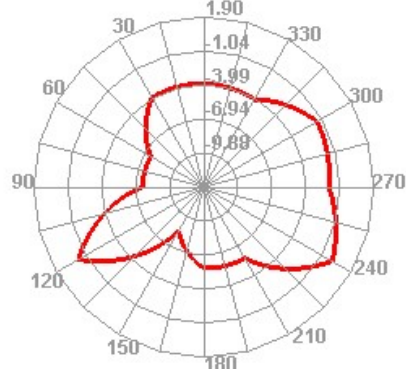
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



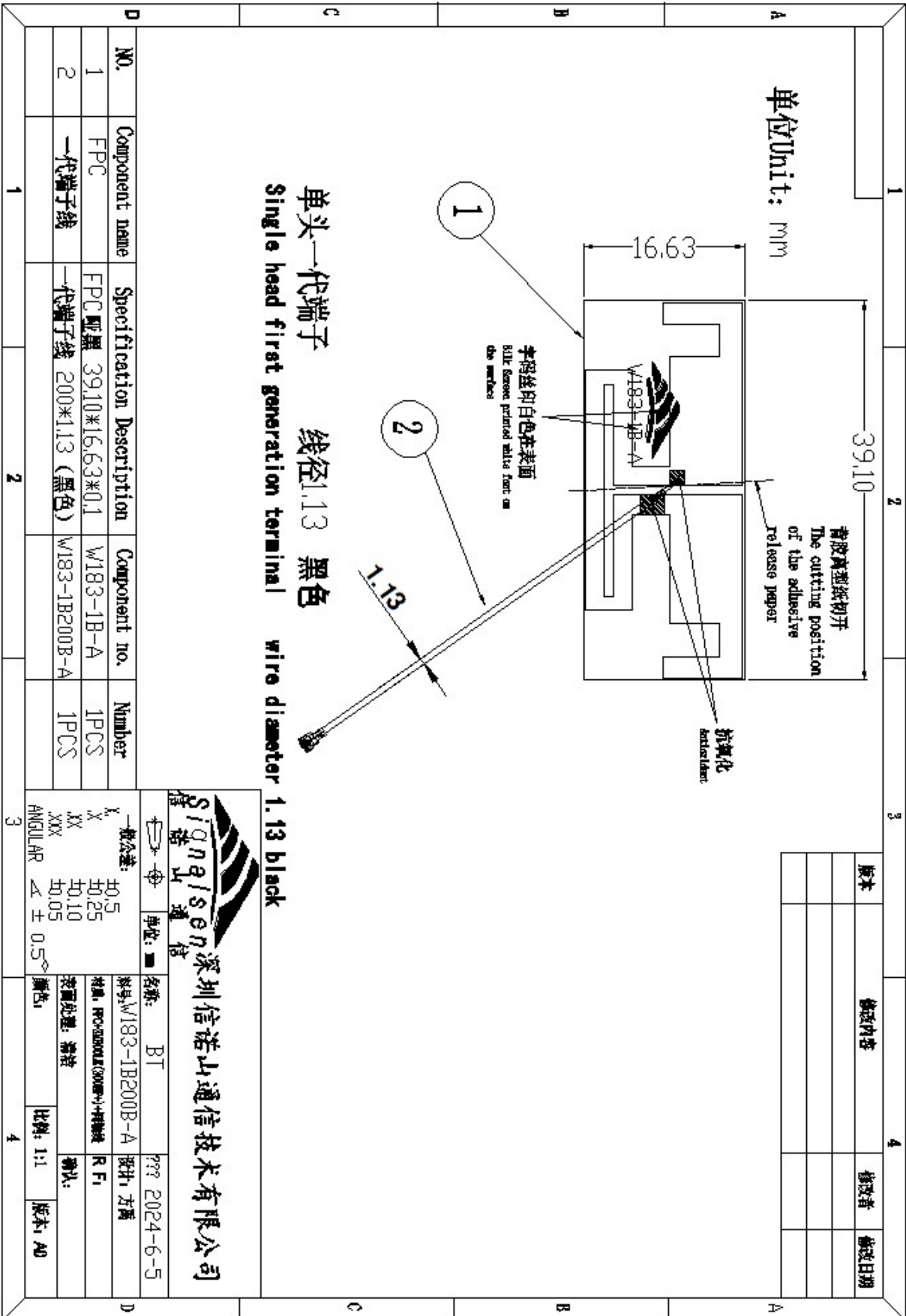
#### 4. The production index

天线量产时，以驻波比作为量产测试标准 In the mass production of antenna, the standing-wave ratio is used as the test standard.

根据项目本身的差异,给出如下标准 According to the differences of the project itself, the following standards are given:

频率 Frequency (MHZ)	量产标准 Mass production standard
BT(2400-2500)	VSWR (量产产品 Mass production products) <) <VSWR(设计样品 Design sample)+)+0.5

### 5. structural drawings





备注：增益测试设备及环境如图：

