



# 上海增信电子有限公司

ShangHai Signal Plus Technology Co.,Ltd.

## 规格承认书

SPECIFICATION FOR APPROVAL

日期  
DATE: \_\_\_\_\_

版本  
REV.: \_\_\_\_\_ A

客 户  
CUSTOMER: \_\_\_\_\_

客 户 料 号  
CUSTOMER P/N: \_\_\_\_\_

品 名  
PART NAME: 外置2.4G黑色小天线 with 90° SMA内螺纹孔

供 方 料 号  
SUPPLIER P/N: WZX02SMAJ006-20

送样日期Date:

送样数量Q'TY:

Pcs

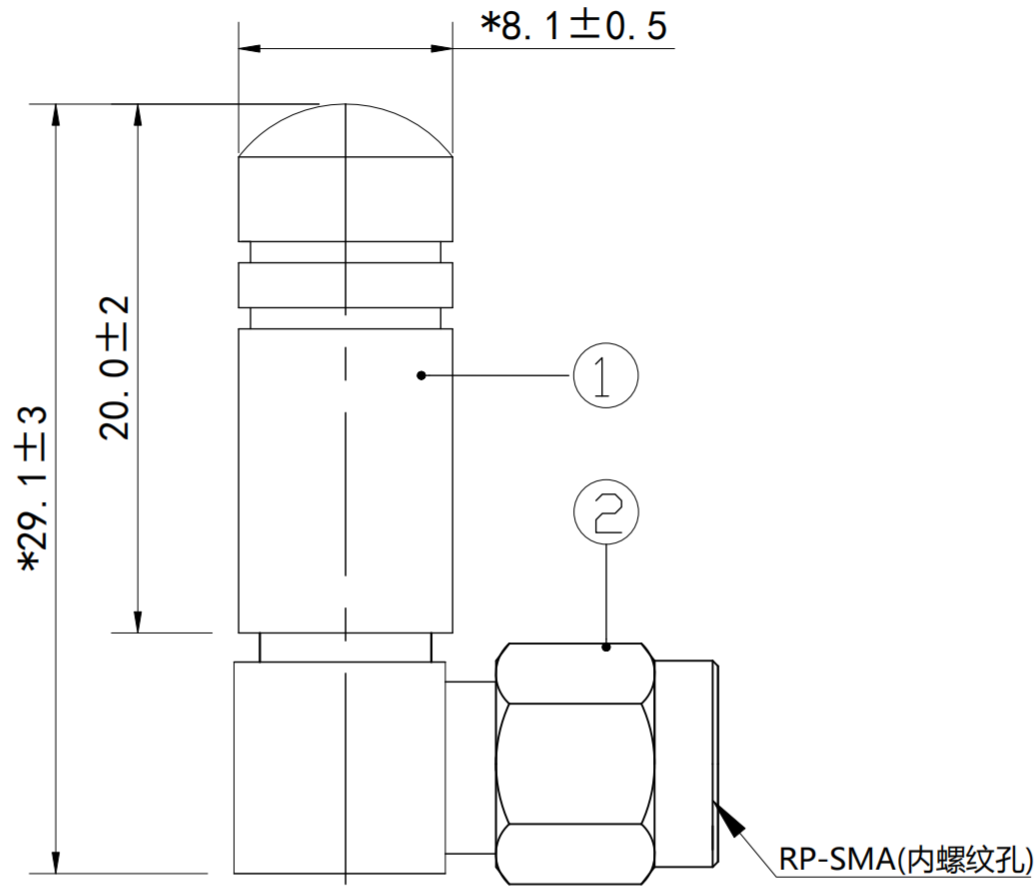
客户确认CUSTOMER APPROVED BY		
核准 Approved by	审核 Checked by	拟制 Prepared by

供方确认SUPPLIER SIGNATURE		
核准 Approved by	审核 Checked by	拟制 Prepared by
Jack		andy

ZX-QT-RD-0011-A1

Add:上海市徐汇区桂箐路69号30栋603室 Tel:021-54266190 Fax:021-54266191

REV	DATE	DESCRIPTION
X1	10/25-2024	New Issue



1.ELECTRICAL PROPERTIES :


- 1.1 Frequency Range.....2400~2500MHz
- 1.2 Impedance.....50 Ohm Nominal
- 1.3 VSWR.....2.0(Max)

2.These Products are in conformity with ROHS 2.0

3.带“\*”为重点尺寸

2	Connector	RP-SMA(内螺牙内孔), 90度弯头, 壳体镀金	1	
1	Antenna Cover	TPEE;Color:Black	1	
NO	DESCRIPTION		Q'TY	REMARK

CUSTOMER'S SINGATURE	XXX.	±2.0	APPROVED	CUSTOMER:		
	XX.	±1.0		PART NO:		
	X.	±0.5	CHECKED	PART NAME: 外置2.4G黑色小天线		
	.X	±0.3		Z&X P/NO: WZX02SMAJ006-20		
	.XX	±0.2	DRAWING	REV	UNIT	FILE:
⊕	⚡	X1		mm	SHEET: 1/1	

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Antenna Test Report

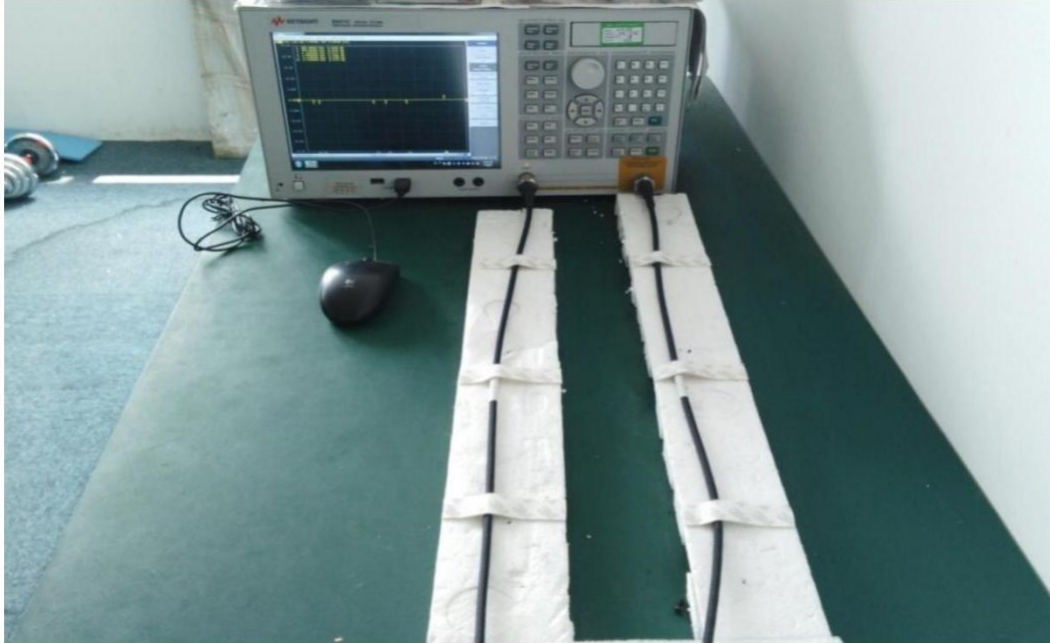
2.4G ANT

## 1. RF Fixture Experiment

### 1.1 Test Setup

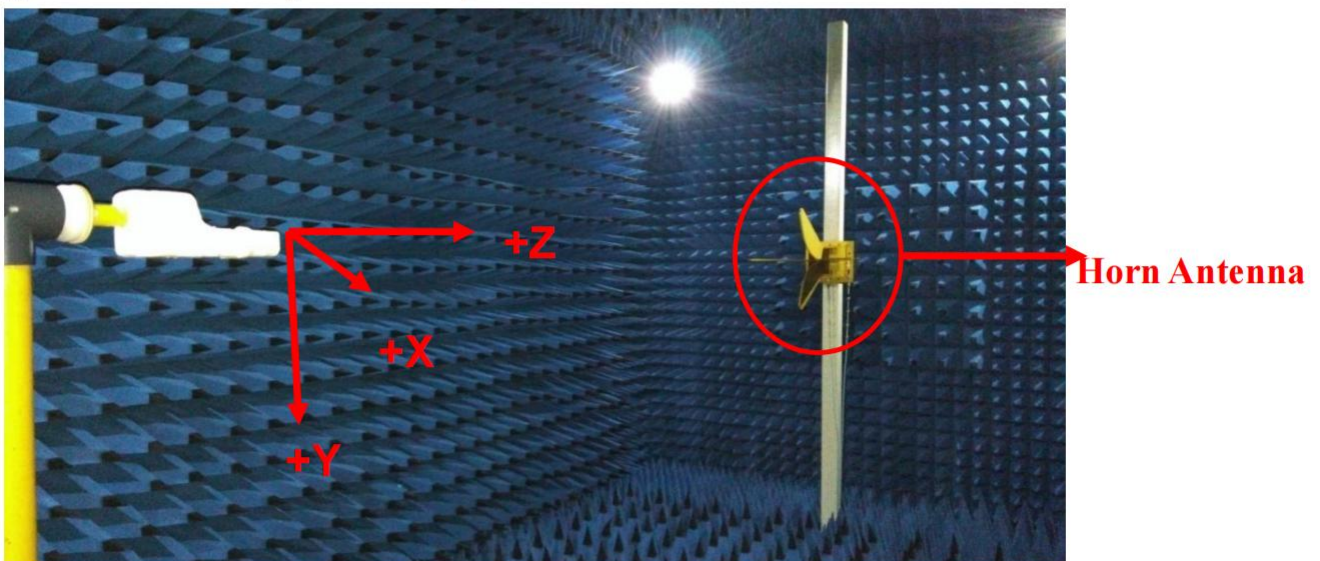
#### 1.1.1 VNA Test Setup

VSWR and Return Loss measurements ( $S_{11}$ ) were performed using an Keysight E5071C Network Analyzer. The isolation between antennas is also tested. The testing was performed with apparatus in free space.

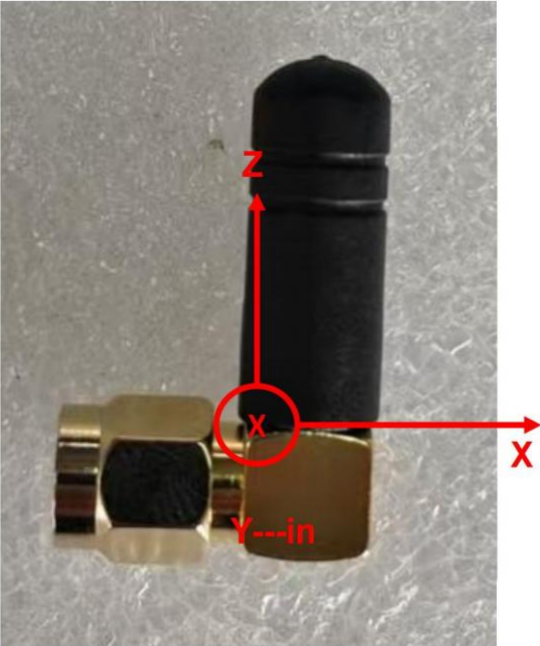


#### 1.1.2 Anechoic Chamber Test Setup

The gain of the antenna was measured in the anechoic chamber. The chamber provides less than  $-30$  dB reflectivity from 400 MHz through 6 GHz. The chamber size is: 7m\*4m\*3m. The measurement results are calibrated using a leaky wave horn standard. We can measure the antenna gain and efficiency accurately.



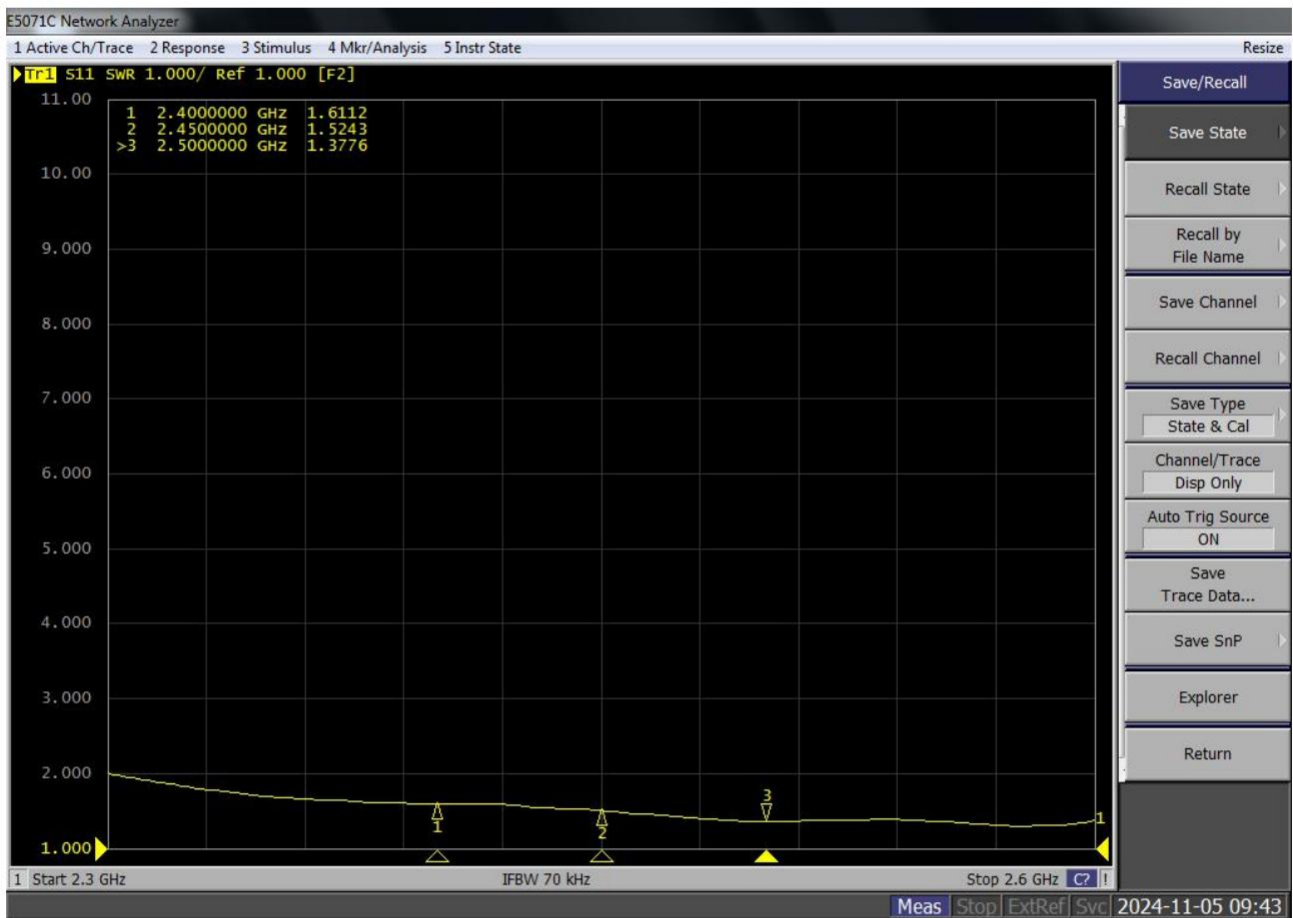
2. Antenna Solution



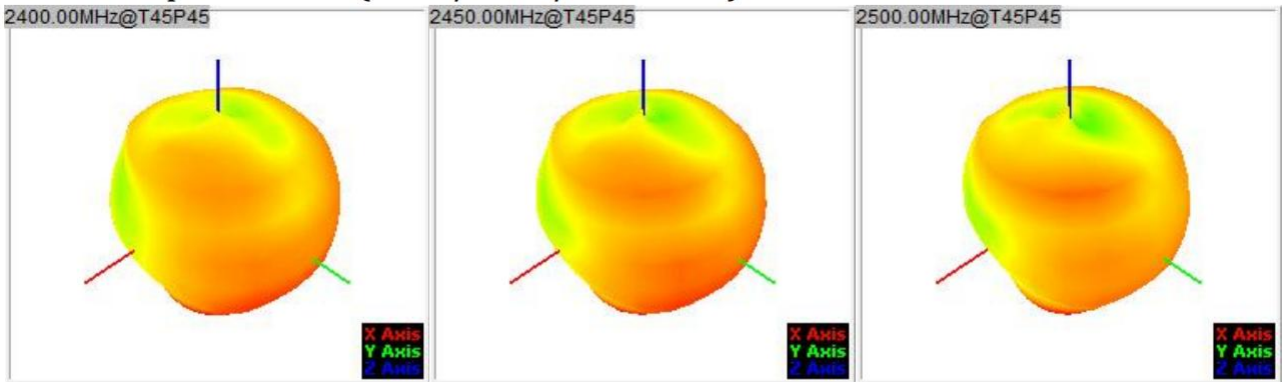
## Data Preview

Freq.(MHz)	2400	2450	2500
VSWR	1.61	1.52	1.37
Gain(dBi)	2.47	2.59	2.80
Eff.%	64.20	67.30	65.50

## S11



### Radiation patterns:3D(2400/2450/2500MHz)



### Radiation patterns:2D(2400/2450/2500MHz)

