



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: 2024.01.23

版本
REV.: A

客户
CUSTOMER: AsiaTelco Technologies Co.

客户料号
CUSTOMER P/N:

品名
PART NAME: 内置2.4G WIFI FPC天线 for BC20

供方料号
SUPPLIER P/N: 6001F00397

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	确认 Confirm by

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

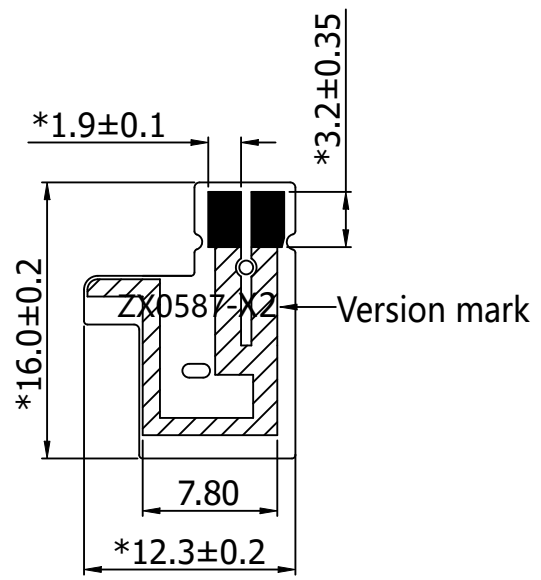
ZX-QT-RD-0011-A1

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

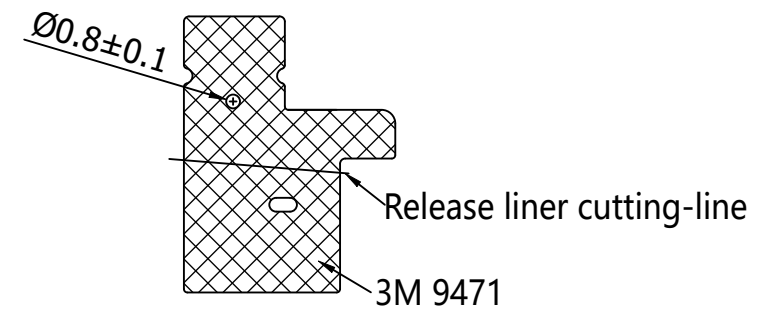
Manufacturer: Signal Plus Technology Co.,Ltd

Add: 603-605,Building 30,No.69 Gui Qing Road, Xuhui District, Shanghai
PR China

REV	DATE	DESCRIPTION
X1	01/23-2024	New Issue



Front view



Back view

- Gold Finger
- Pattern
- Adhesive

NOTE:
1.Antenna appearance :Black solder resist ink;
2.The Antenna structure: PI(0.5mil)+Cu(0.5 oz)+3M 9471 Adhesive;
3.The thickness of Gold-Plated≥0.025μm;
4.The Gold Finger complied with the 48H salt spray test;
5.The appearance can not be creased or scratched,etc;
6.The antenna complied with ROHS 2.0 ;
7.Important dimensions marked with "*" ,and () for reference.

1	2.4G Antenna	FPC:PI+Cu+3M9471;Color:Black	1	502-1-0587-X2
NO	DESCRIPTION		Q* TY	REMARK

CUSTOMER'S SINGATURE	XXX.	±2.0	APPROVED	CUSTOMER:		
	XX.	±1.0		PART NO:		
	X.	±0.5	CHECKED	PART NAME: 2.4G WIFI for BC20		
	.X	±0.2		Z&X P/NO: 6001F00397		
	.XX	±0.1	DRAWING	REV	UNIT	FILE:
	⊕	⏏		X1	mm	SHEET: 1/1



Antenna Test Report

BC20

Tel:021-54266190 Fax:021-54266191 Web:www.zxsignal.com

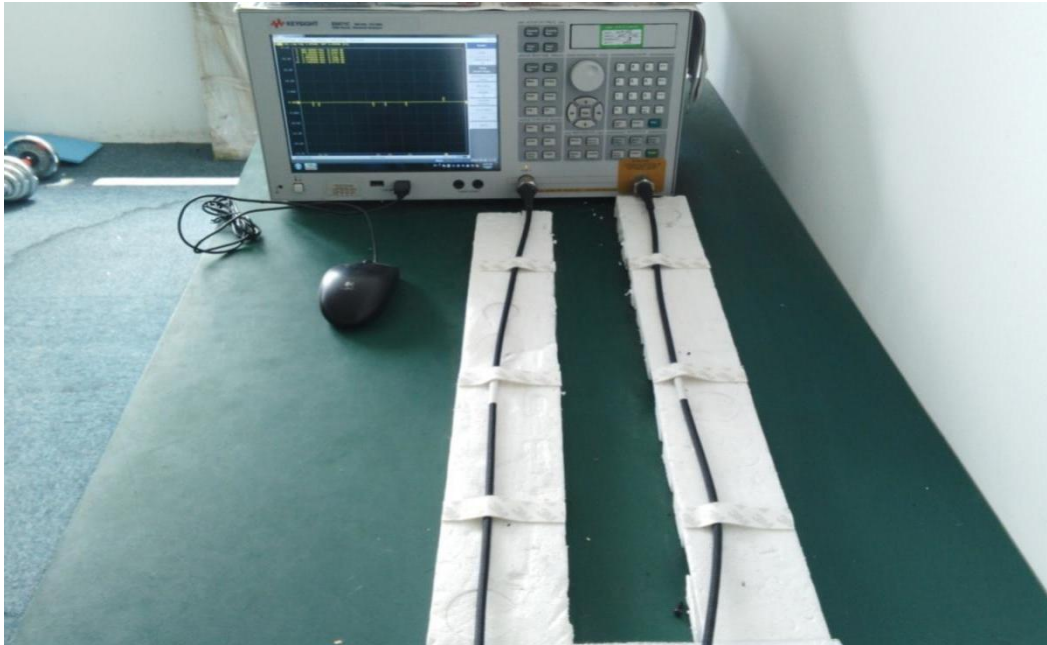
Manufacturer: Signal Plus Technology Co.,Ltd
Add: 603-605,Building 30,No.69 Gui Qing Road, Xuhui District, Shanghai
PR China

1. RF Fixture Experiment

1.1 Test Setup

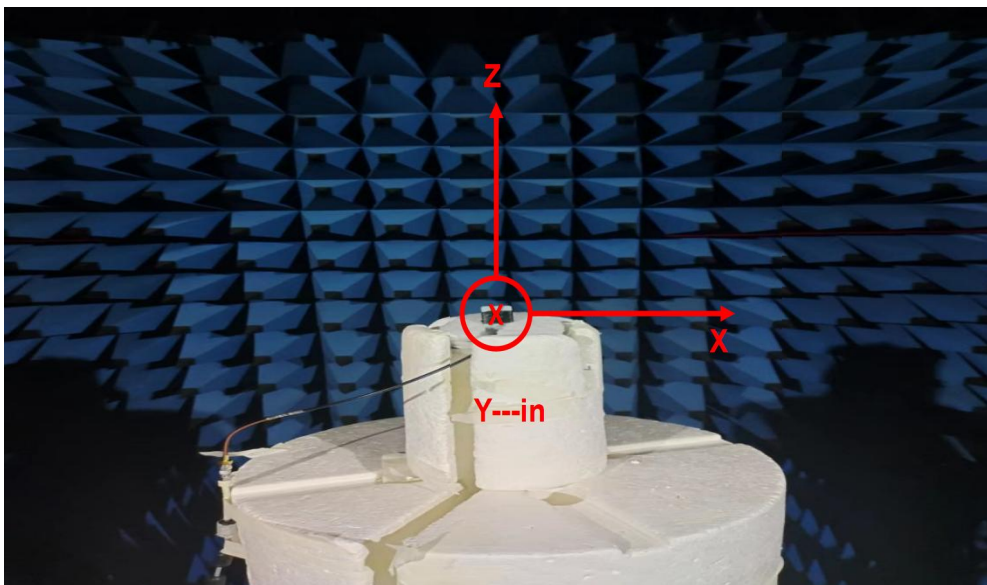
1.1.1 VNA Test Setup

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.



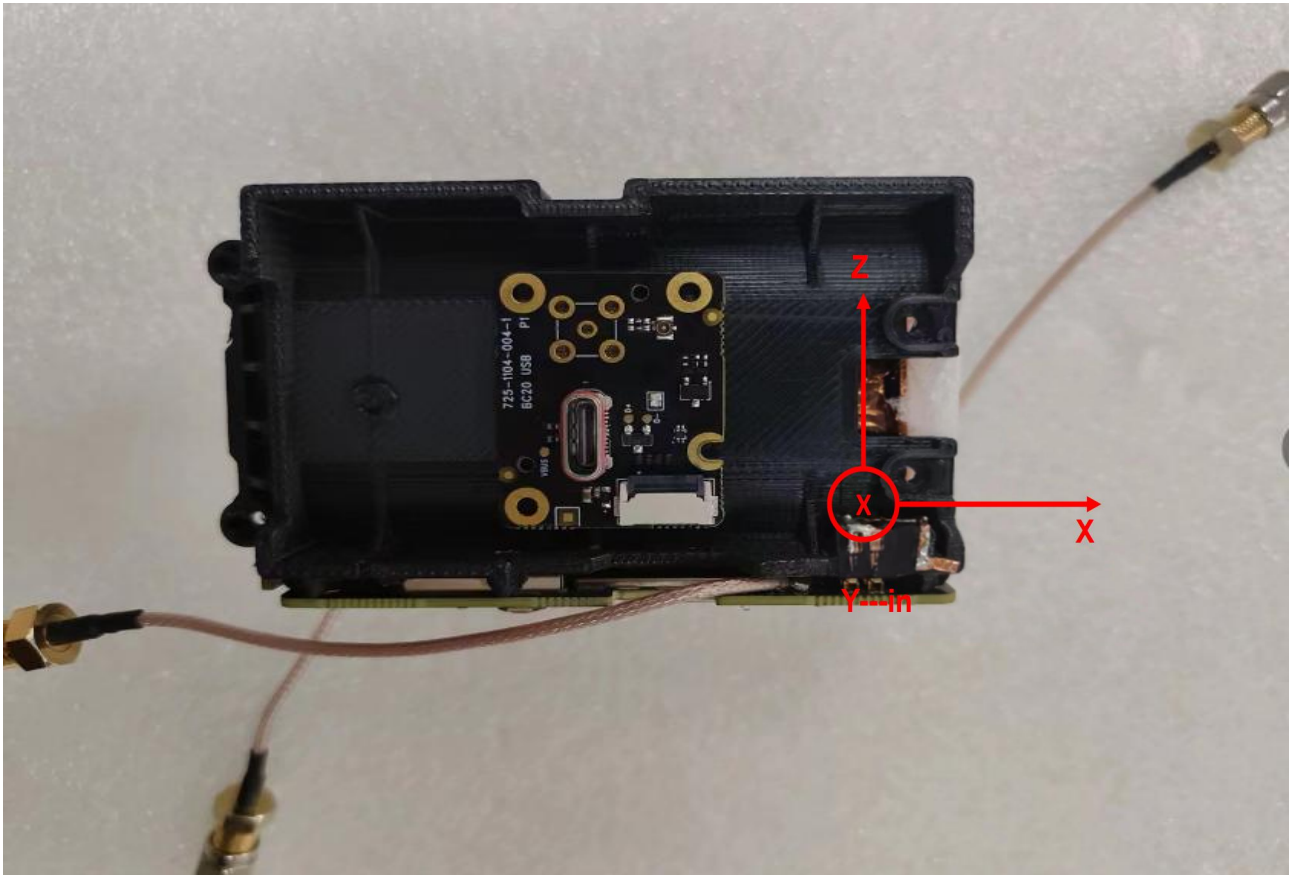
1.1.2 Anechoic Chamber Test Setup

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.

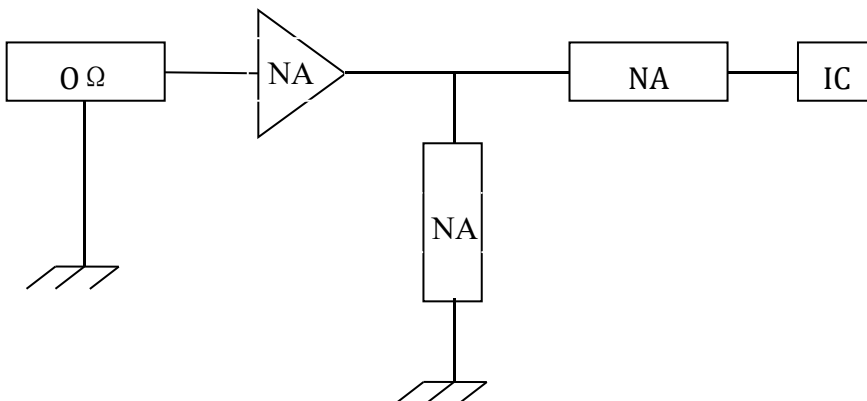


2. Antenna Solution

ANT-WIFI



3.RF matching circuit for different antennas



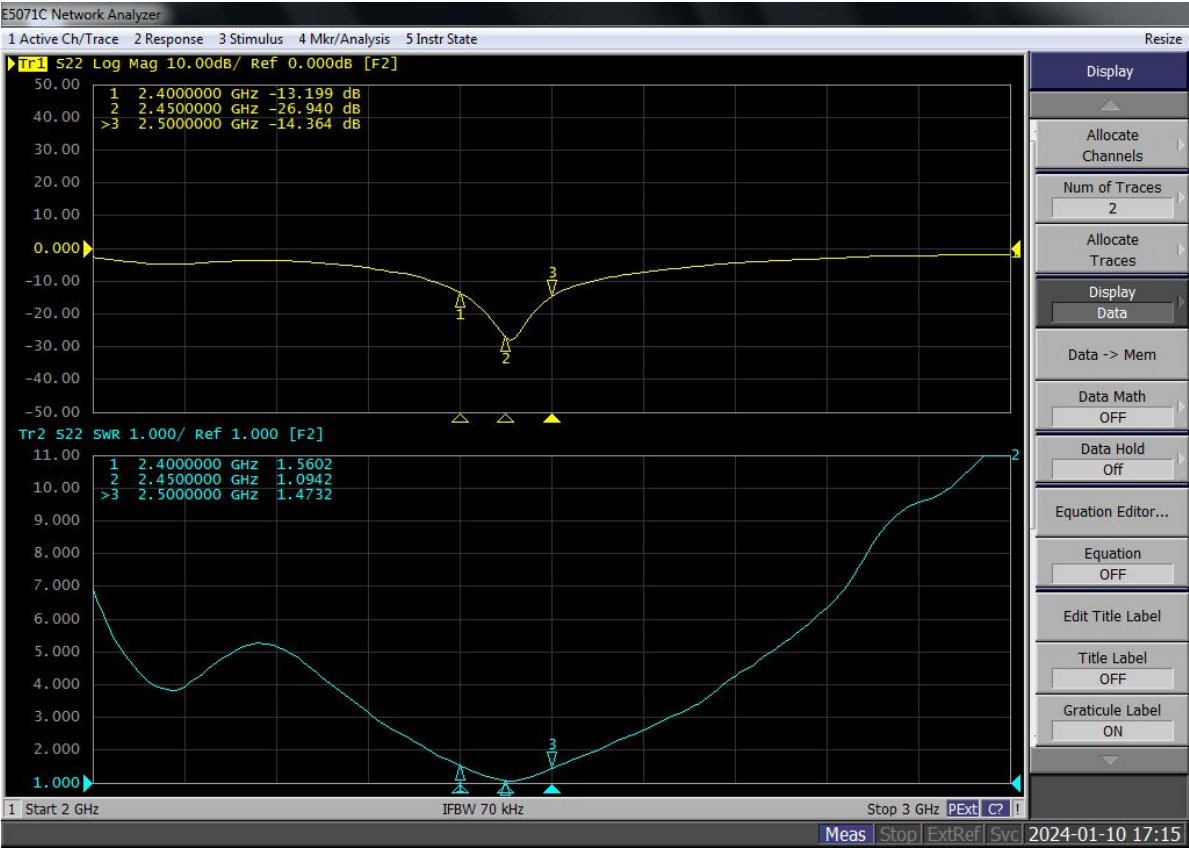
Data Preview

ANT-WIFI

Freq.(MHz)	2400	2450	2500
VSWR	1.56	1.09	1.47
Gain(dBi)	3.36	3.11	3.83
Eff. (%)	61.1	63.3	60.5

S11

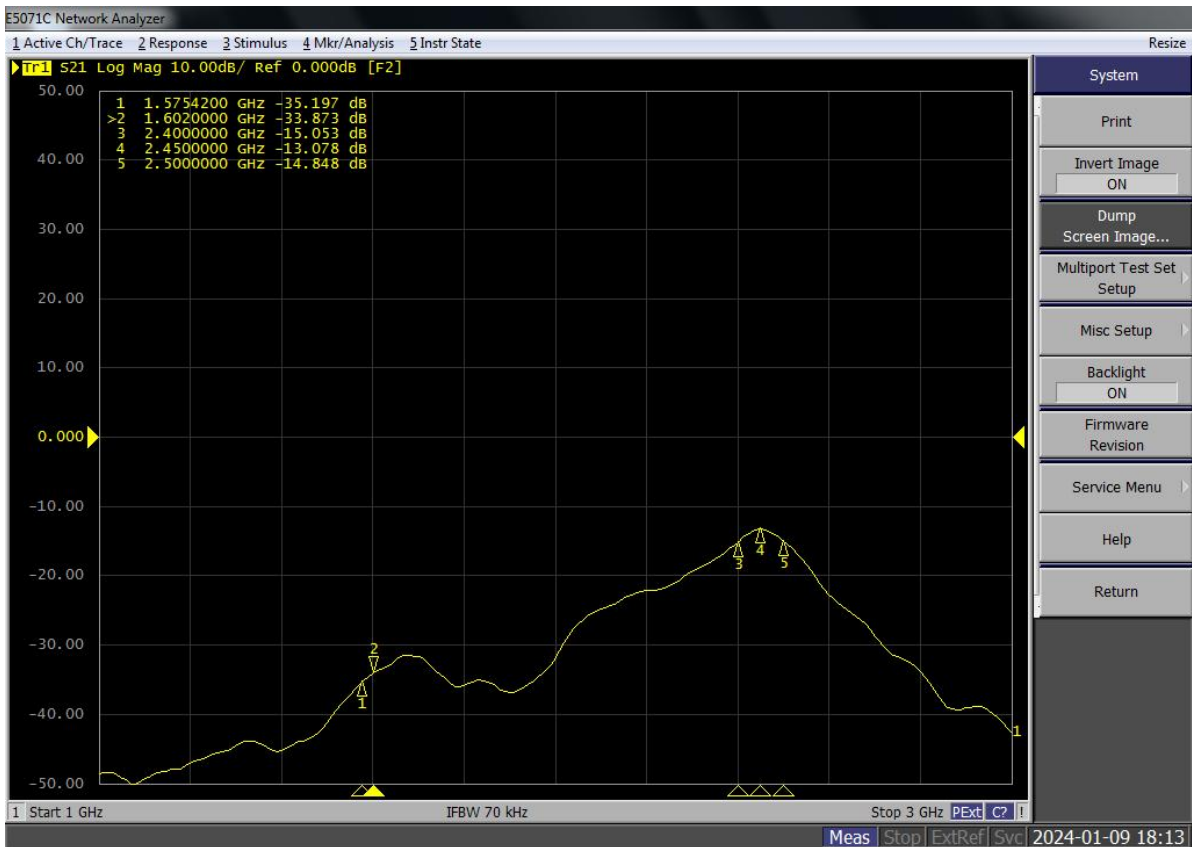
ANT-WIFI



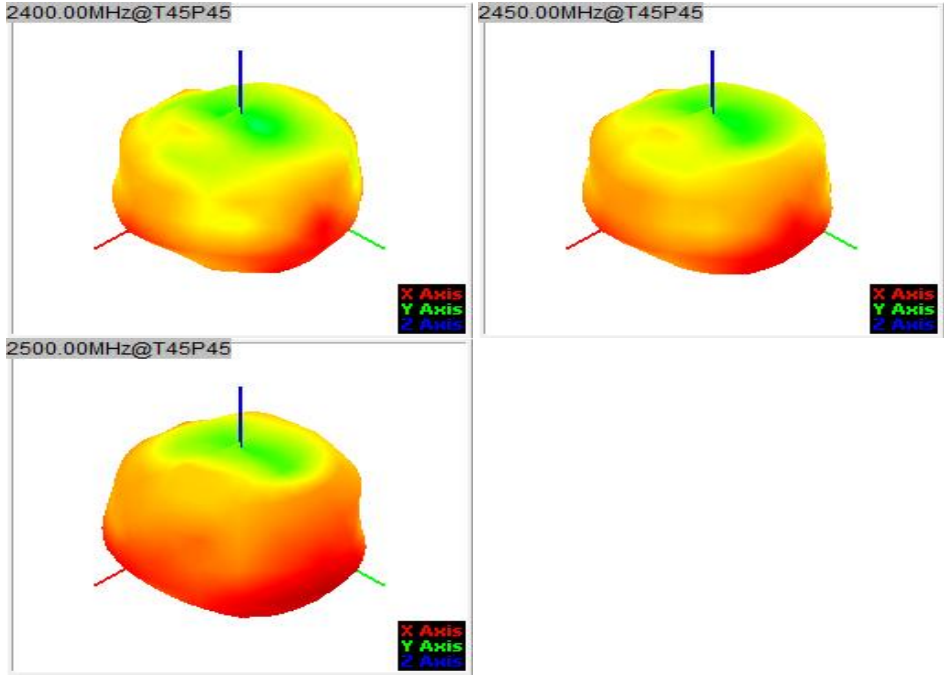
S21
WIFI&GPS



WIFI&BT



ANT-WIFI-Radiation patterns:3D(2400MHz/2450MHz/2500MHz)



ANT-WIFI-Radiation patterns:2D (2400MHz/2450MHz/2500MHz)

