



上海增信电子有限公司
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: Shanghai LiulianIntelligent Technology Co., LTD
Address: 2405-06, Baotai Building, 182 Design Park, 182 Bulan Road,Lilan gComm unity,Nan wan Street,Lon ggangDistrict ,Shen zhen
型号
Model: 0584-X2-Right
品名
PART NAME: 内置 2.4G&5G WiFi FPC天线, 1.13黑色普通线L=170mm with RF CONN(4代) for ARB39 副端口
供方料号
SUPPLIER P/N: 6241F00018

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 Confirmed by

供方确认SUPPLIER SIGNATURE		
核准 Approved by	审核 Checked by	拟制 Prepared by
Andy		Cindy

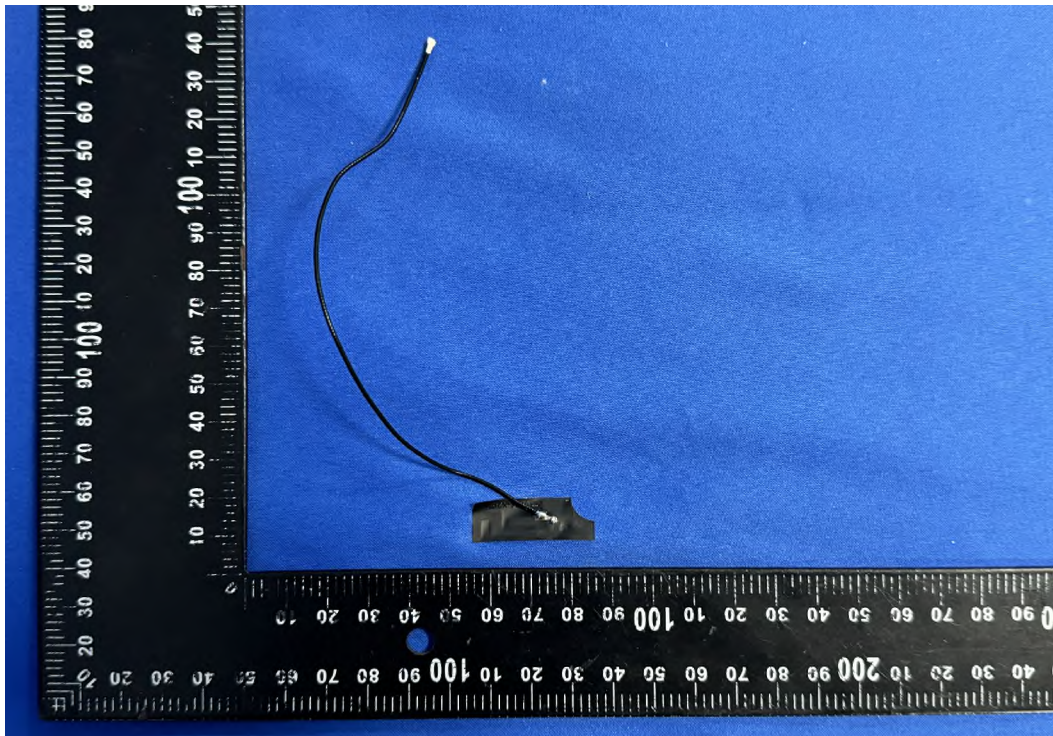
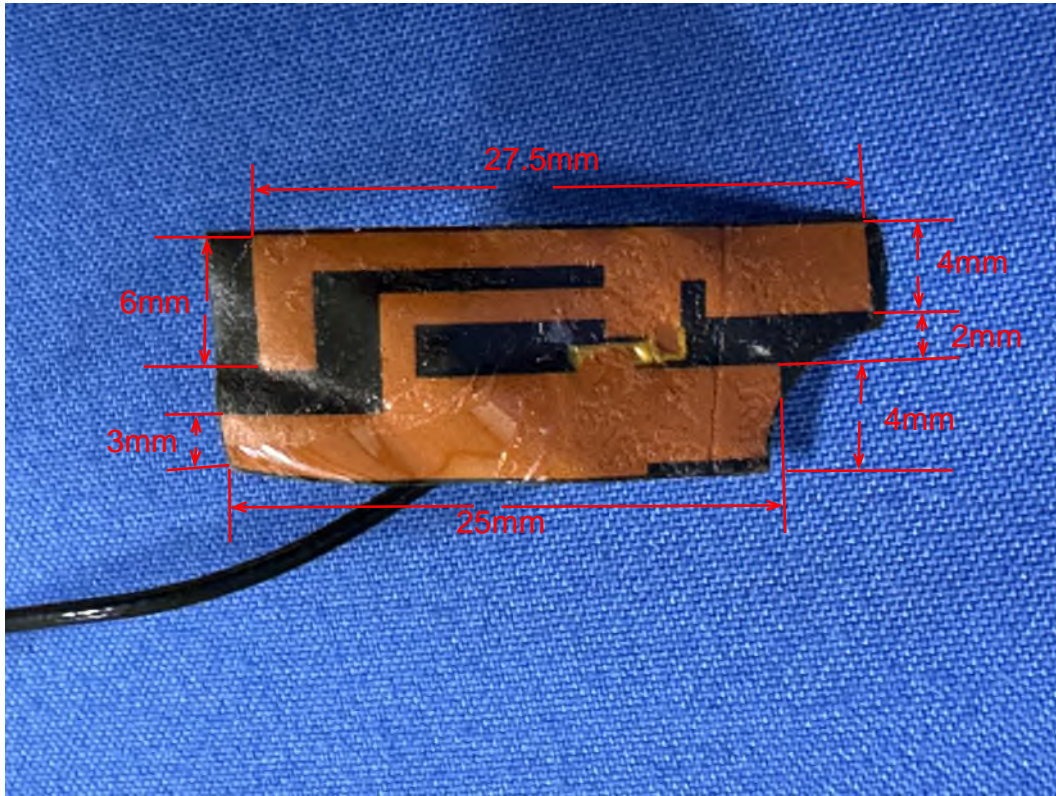
ZX-QT-RD-0011-A1

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

Contents

<i>Item</i>	<i>Description</i>	<i>Page</i>
1.	Cover 1
2.	Content 2
3.	Drawing 3
4.	Antenna Test Report 4~14

Antenna size





上海增信电子有限公司

Signal Plus Technology Co., Ltd.

Antenna Test Report

©V2

2024.1.19

Signal Plus Technology Co., Ltd

List of contents

Test setup
Antenna Solution
S Parameter --- Return Loss, Isolation
Efficiency and Peak Gain
Radiation Patterns
Summary

1. Test system description---S Parameter

1.1. Test Setup

1.1.1 VNA Test Setup

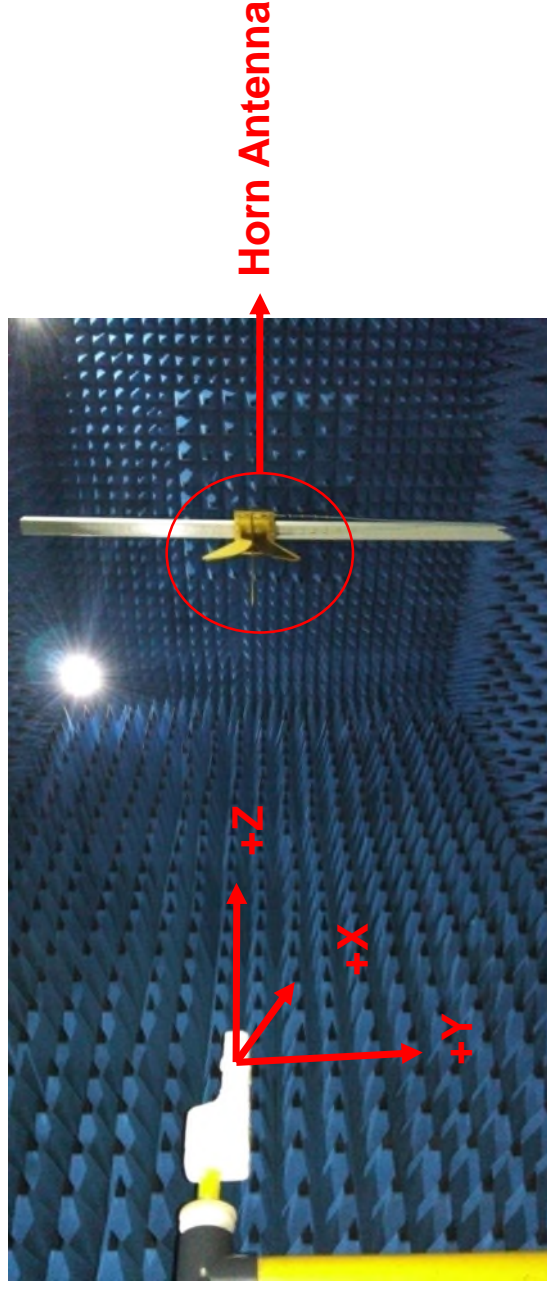
S parameter measurements (S) were performed using an Keysight E5071C Network Analyzer and previously described test fixtures. The isolation between antennas is also tested. The testing was performed with apparatus in free space.



1. Test system description--- Anechoic Chamber Test Setup

1.1.2 Anechoic Chamber Test Setup

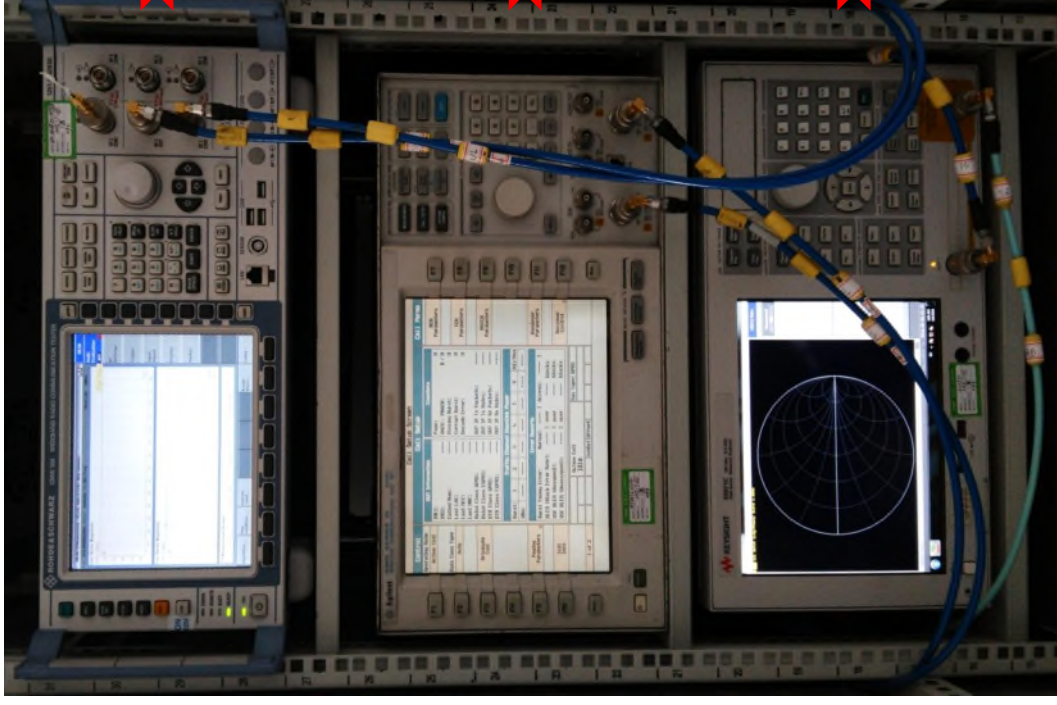
The gain of the antenna was measured in the anechoic chamber(ETS 3D). The chamber provides less than -30 dB reflectivity from 400 MHz through 6 GHz. The chamber size is: $7\text{m} \times 4\text{m} \times 3\text{m}$. The measurement results are calibrated using a leaky wave horn standard. We can measure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



Signal Plus
Antennas

1. Test system description--- Test Instruments

1.1.3 Instruments



R&S CMW500
4G/WIFI
(LTE/WIFI b/g/a)

Agilent 8960
2G/3G
(GSM/CDMA/WCDMA)

KeySight E5071C
(400MHz~6GHz)

Signal Plus
Antennas

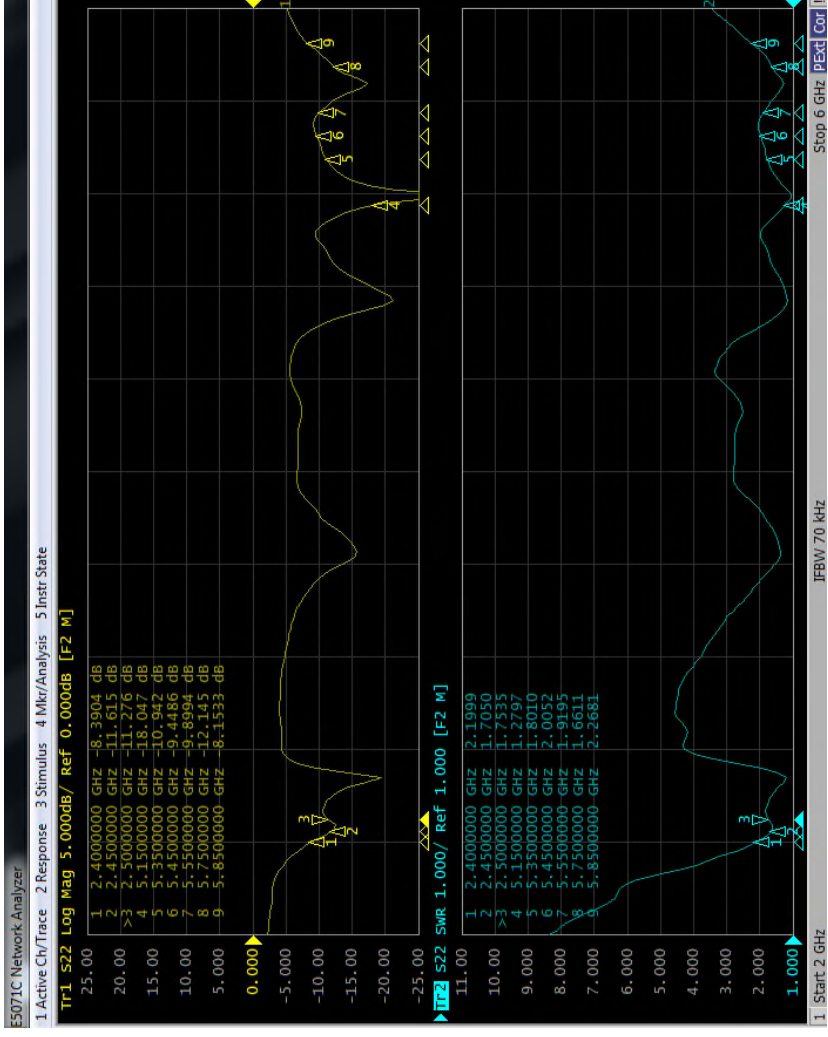
2. Antenna Solution

2.1 Antenna Location Pictures for passive



3. Test Result---Return Loss

S11(AUX):



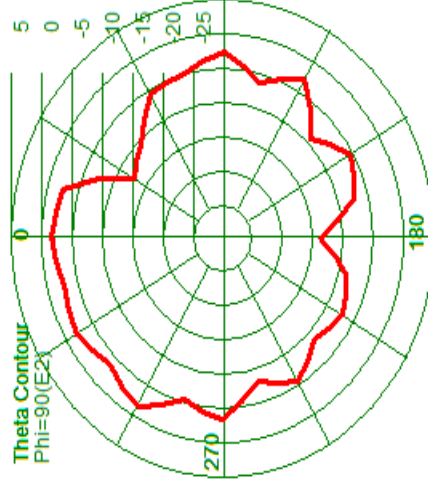
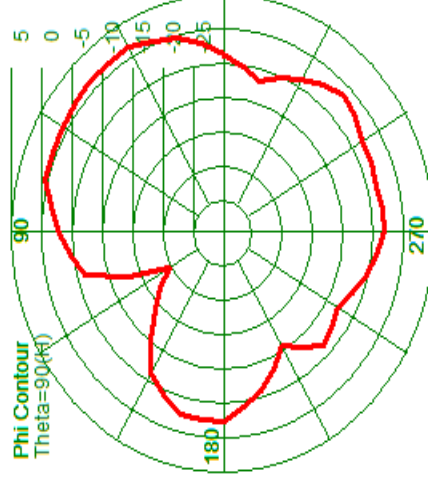
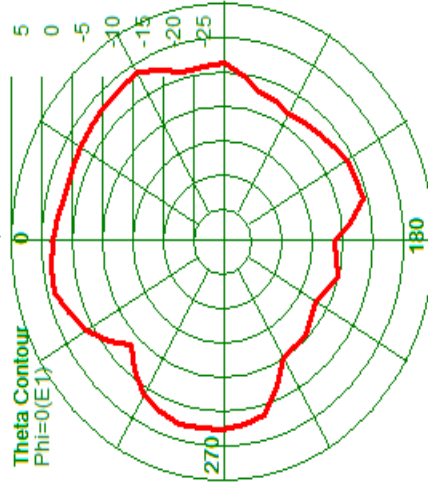
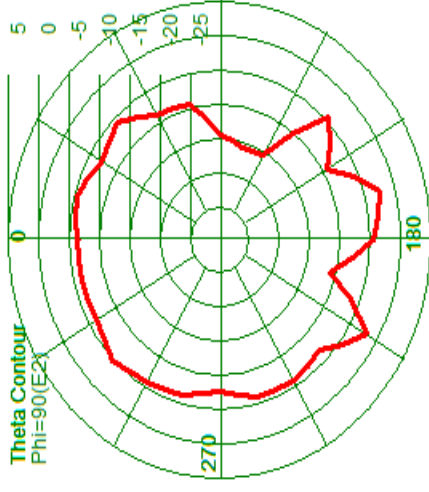
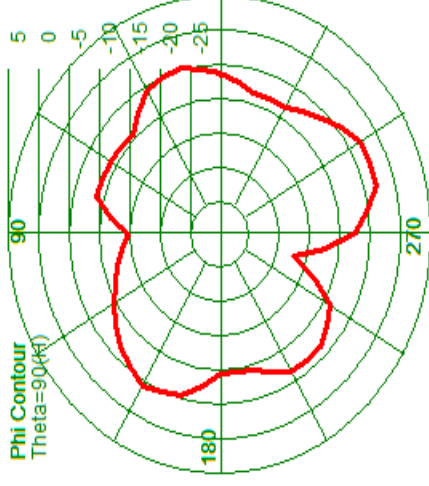
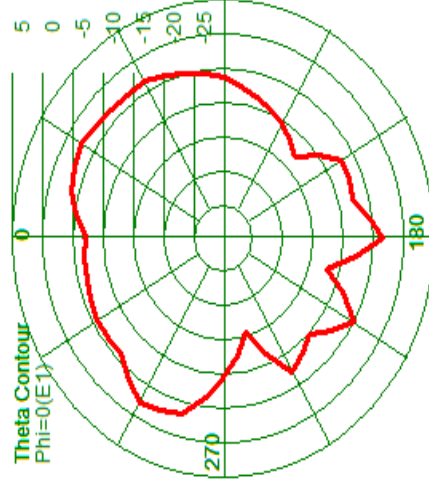
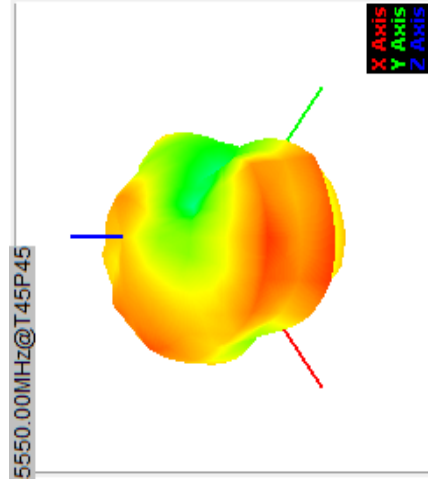
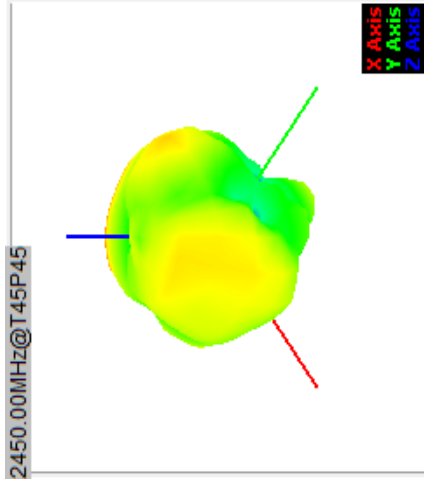
3. Test Result---Efficiency, Gain

Data :

Freq. (MHz)	Gain (dBi)	Efficiency (%)

3. Test Result---Efficiency、Gain

Radiation patterns:



Signal Plus
Antennas

3. Test Result---Active data

Mode	Channel		
2.4G 802.11 g/n			
5G 802.11a/n			

4.Isolation

