

# ANTENNA SPECIFICATION

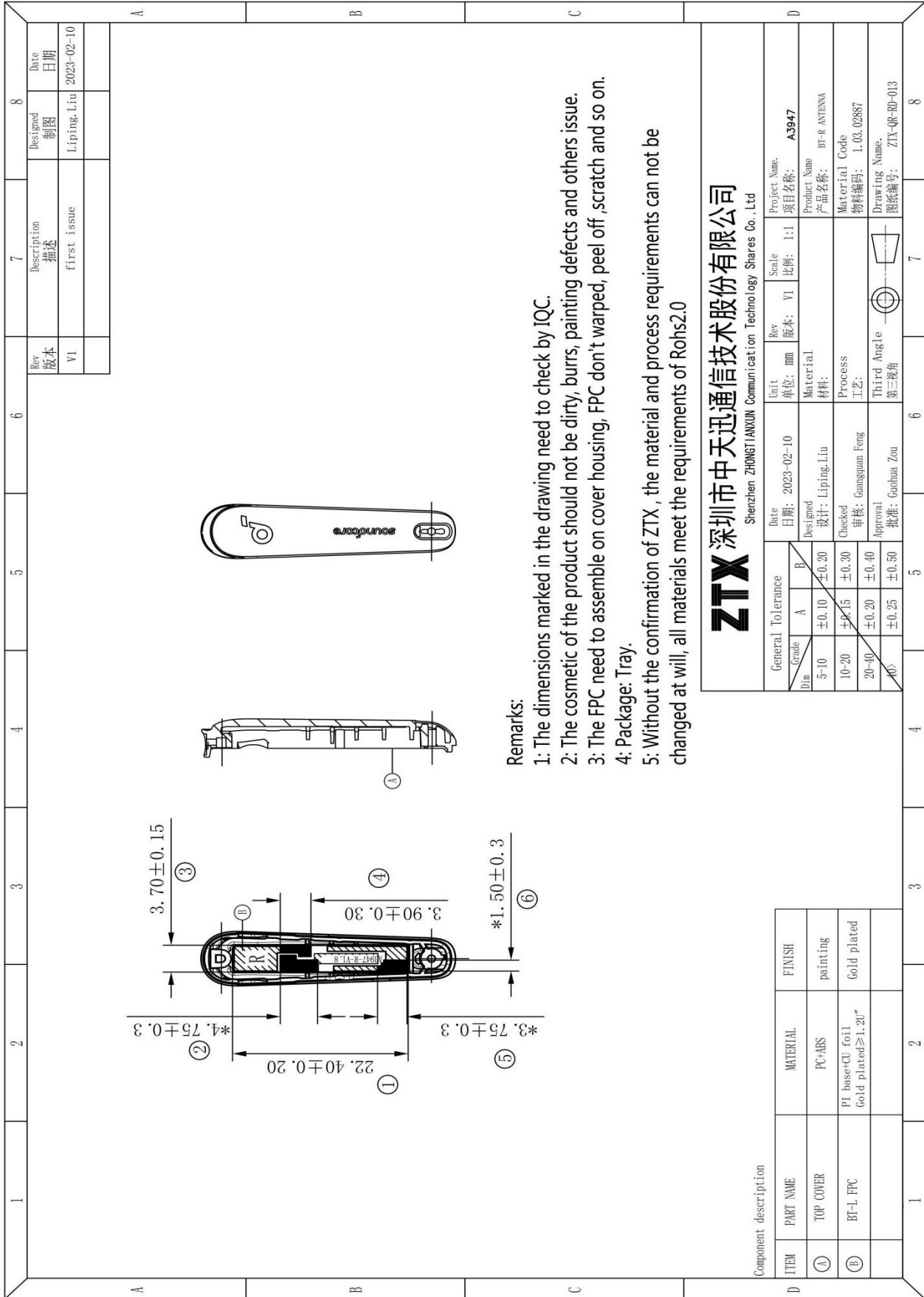
CUS P/N :A3947 BT-R天线  
ZTX P/N :A3947 BT-R天线

ApplicationDate:Feb,10,2023  
Editor:

Rev: R:A0  
Page 3 of 7

## 1. Mechanical Specification

### 1-1 Mechanical Configuration (A3947 BT-R Antenna)



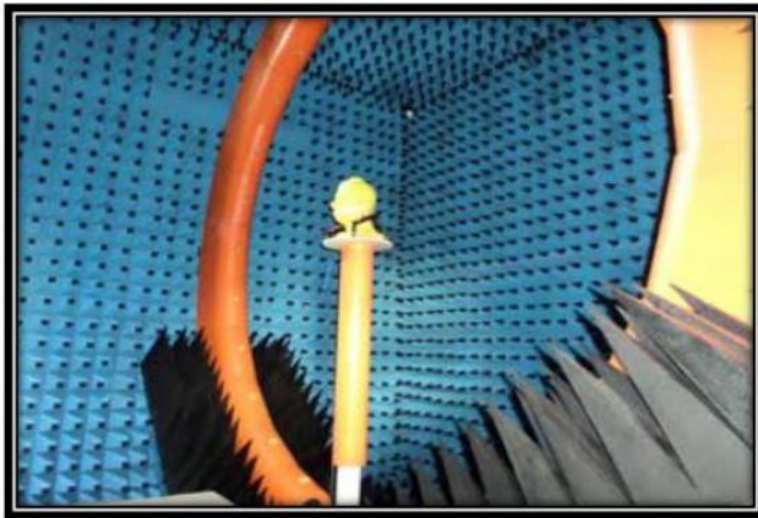
# ANTENNA SPECIFICATION

CUS P/N :A3947 BT-R Antenna  
ZTX P/N :A3947 BT-R Antenna

ApplicationDate:Feb,10,2023  
Editor:

Rev: R:A0  
Page 4 of 7

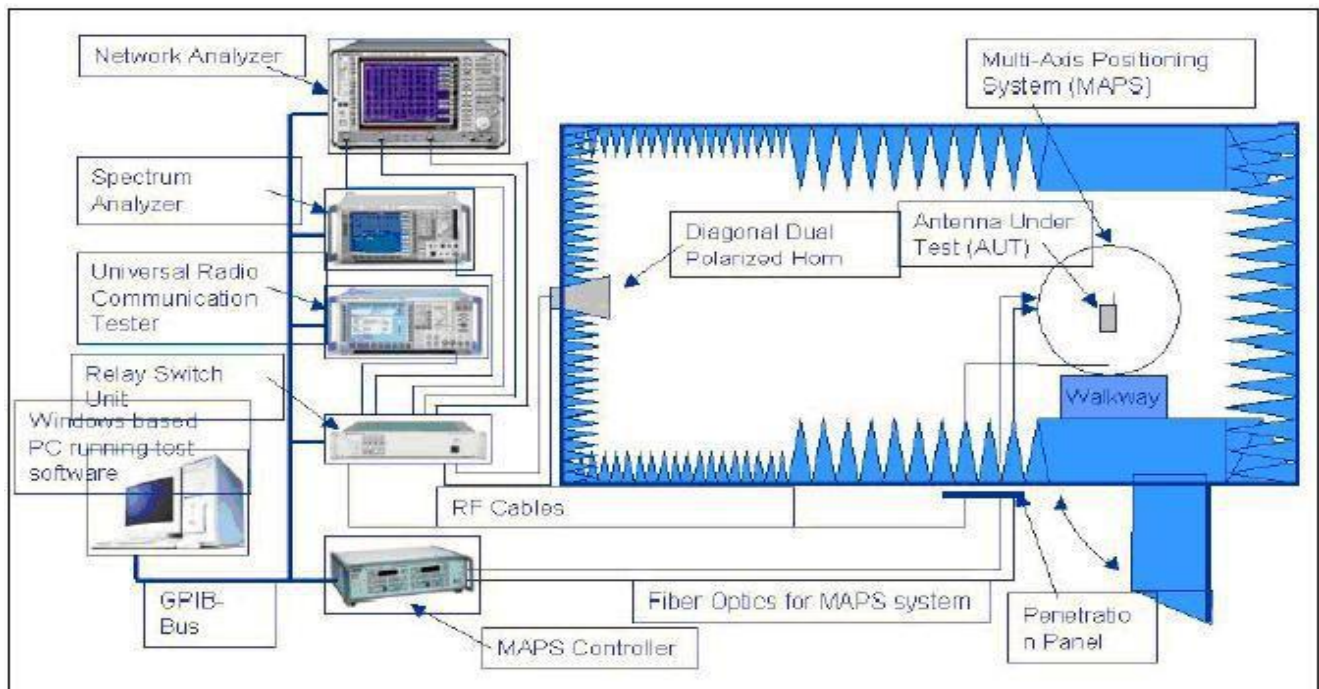
## 2.Test equipment



Owned 6 microwave dark room, equipped 2 sets world leading France Satimo SG24 OTA certification test systems (one in SHENZHEN, another one in Shanghai), ETS OTA Standard test system, Blue test reverberation test system which is High repeatability, high accuracy and high resolution. It can quickly provide accurate test reports, fully meet the CTIA standards.

Testing range:

Support active, passive testing of GSM/CDMA/WCDMA/TD-SCDMA/LTE/WIFI/WLAN/WiMax/BT/GPS/MIMO/UWB within 0.4-6G.



# ANTENNA SPECIFICATION

CUS P/N :A3947 BT-R Antenna  
ZTX P/N :A3947 BT-R Antenna

ApplicationDate:Feb,10,2023  
Editor:

Rev: R:A0  
Page 5 of 7

## 3.Test Results Summary

### 3-1 Active Test

Main board conduction	channel	TX	RX
BT-R	0	11.5	-93.5
	39	11.5	-93.5
	78	11.5	-93.5

free space	channel	TRP	TIS
BT-R	0	6.3	-88.0
	39	7.2	-88.2
	78	6.8	-88.3

The second generation of head	channel	TRP	TIS
BT-R	0	1.8	-83.7
	39	2.4	-83.1
	78	2.0	-83.4

### 3-2 Passive Test

Fre	Effi	Effi . dB	Gain.dB
2400	31%	-4.93	-2.03
2410	31%	-5.07	-1.83
2420	31%	-5.15	-1.45
2430	30%	-5.27	-1.19
2440	29%	-5.41	-1.32
2450	29%	-5.45	-1.32
2460	29%	-5.38	-2.03
2470	29%	-5.32	-1.74
2480	29%	-5.34	-1.63
2490	28%	-5.58	-1.84
2500	27%	-5.78	-2.03

# ANTENNA SPECIFICATION

CUS P/N :A3947 BT-R Antenna

ApplicationDate:Feb,10,2023

Rev: R:A0

ZTX P/N :A3947 BT-R Antenna

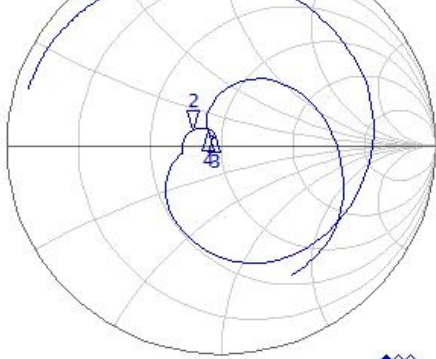
Editor:

Page 6 of 7

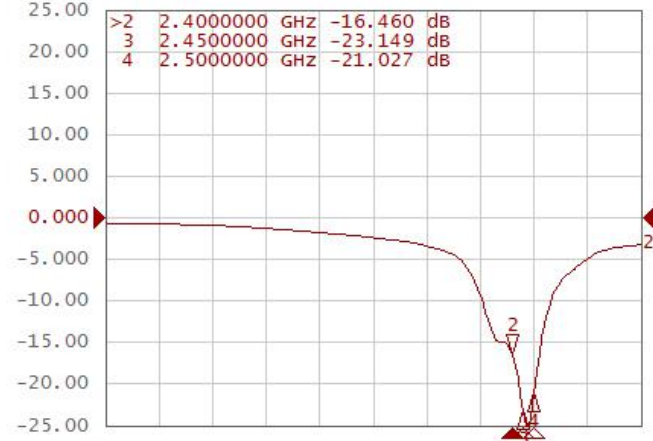
## 3-4 VSWR&Return loss plot&Smith Chart

Tr1 S22 Smith (Re/Im) scale 1.000U [F1]

>2	2.4000000	GHZ	-132.57	mU	70.843	mU
3	2.4500000	GHZ	-31.966	mU	61.818	mU
4	2.5000000	GHZ	-59.815	mU	65.699	mU

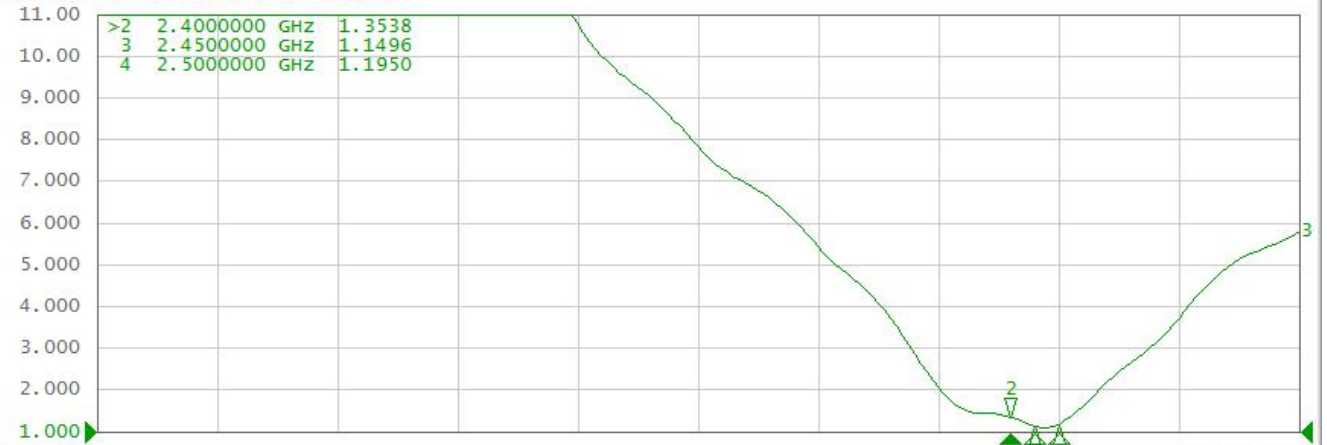


Tr2 S22 Log Mag 5.000dB/ Ref 0.000dB [F1]



Tr3 S22 SWR 1.000/ Ref 1.000 [F1]

>2	2.4000000	GHZ	1.3538
3	2.4500000 <td>GHZ</td> <td>1.1496</td>	GHZ	1.1496
4	2.5000000 <td>GHZ</td> <td>1.1950</td>	GHZ	1.1950

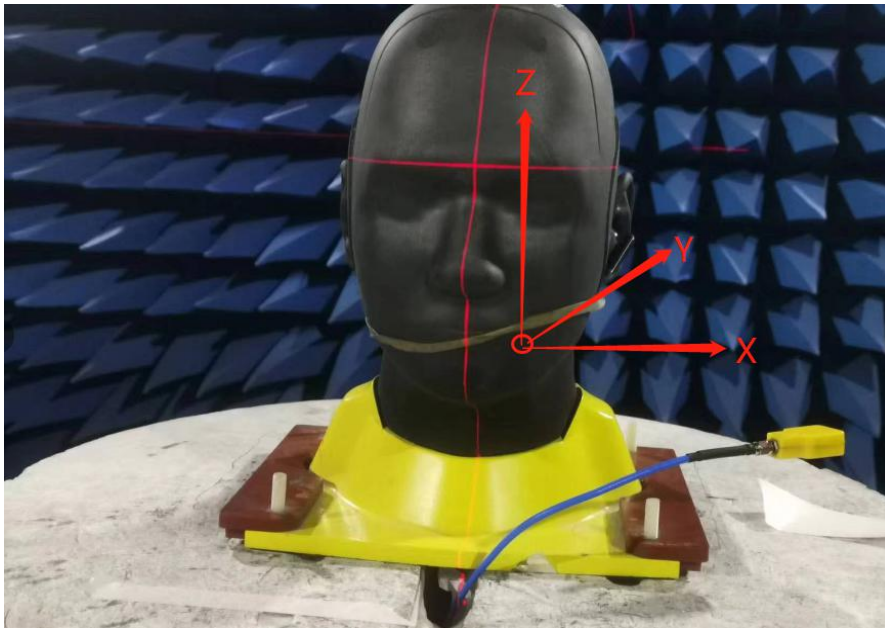


1 Start 500 MHz

IFBW 70 kHz

Stop 3 GHz Sim PExt Cor

## 3-5 2D/3D Radiation Pattern Results



# ANTENNA SPECIFICATION

CUS P/N :A3947 BT-R Antenna

ApplicationDate:Feb,10,2023

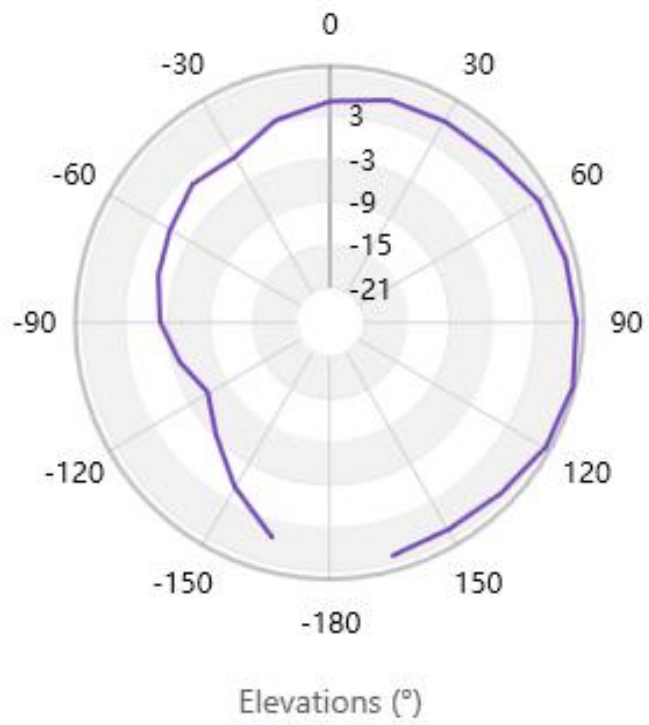
Rev: R:A0

ZTX P/N :A3947 BT-R Antenna

Editor:

Page 7 of 7

— 2.441 GHz 0.00 ° Total



3-6 Environment treatment  
N/A