规 格 承 认 书

SPECIFICATIONFORAPPROVAL

客 户 **Customer**	CVTE
项目名称 **Project Name**	AKATW03 WIFI-4 antenna
客户料号 **Customer NO.**	004.032.0052852
规 格 **specification**	WIFI-2 antenna assembly
供方料号 **Supplier NO.**	2.00000438
规格书编号 **specification NO.**	
编写人 **Write by**	Youjie.Ke
版本 **REV.**	A2
日期 **Date**	2024/9/18
备注 **Note**	

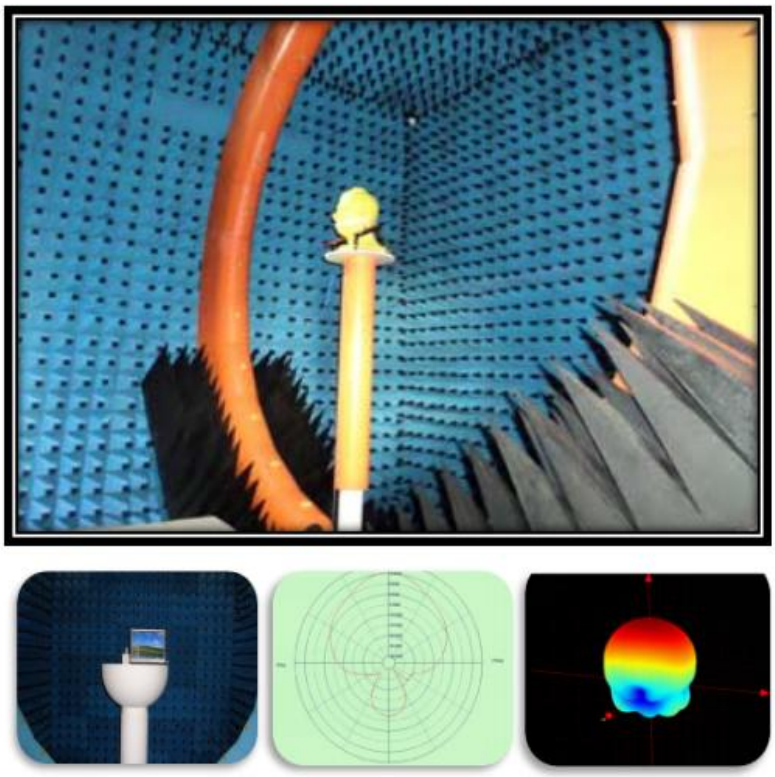
客户确认 CUSTOMERAPPROVEDBY		
批准 Approved by	审核 checked by	制表 prepared by
供方确认 SUPPLIERAPPROVEDBY		
批准 Approved by	审核 checked by	制表 prepared by
Guohua.Zou	Jianeng.Feng	Youjie.Ke

深圳市中天迅通信技术股份有限公司 2024.09.18 研发专用章

Document the revision of the resume				
Version	date	Formulate/modify/abolish content	prepared by	Check
A1	2024-01-31	First edition	Youjie.Ke	Jianeng.Feng
A2	2024-09-18	Fix the foam back glue	Youjie.Ke	Jianeng.Feng

1. Index

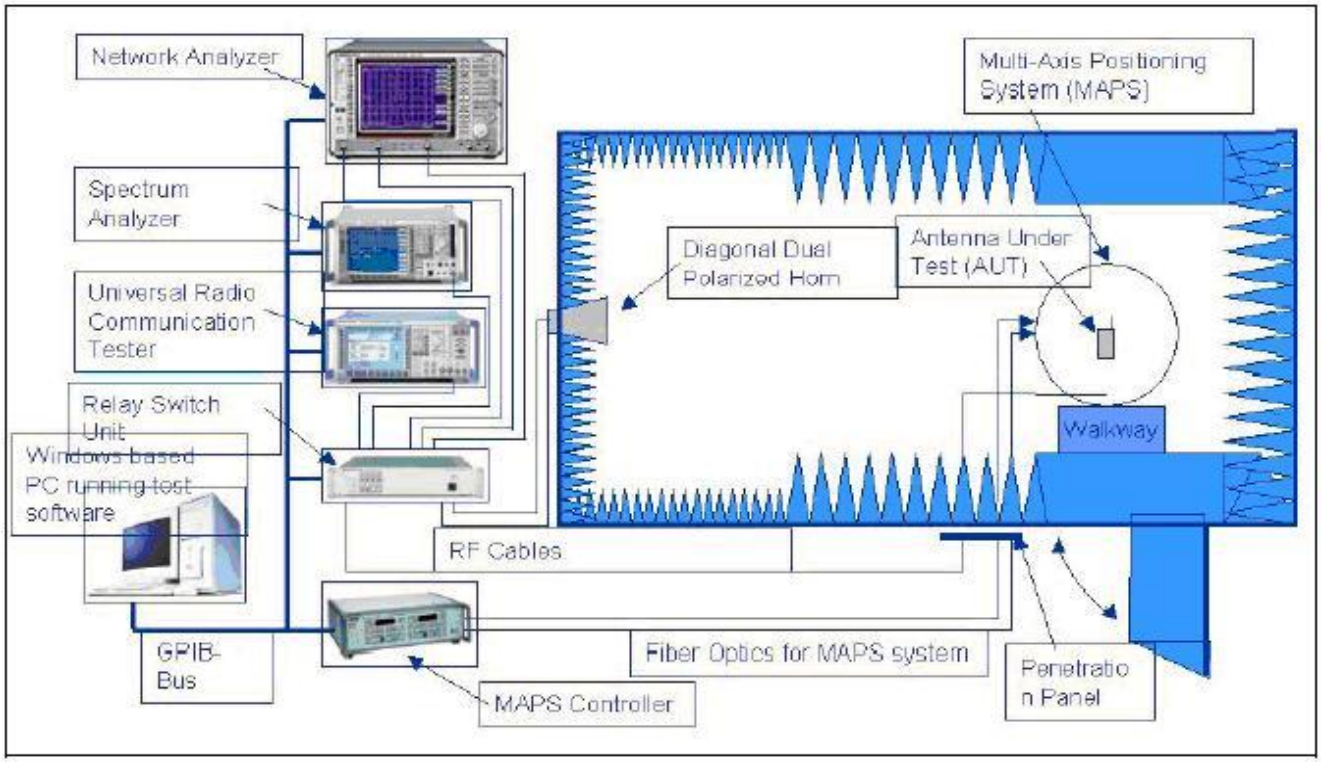
2. Test Equipment & Conditions



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 CITA standards.

Testing range:

Support active, passive testing of GSM/CDMA/WCDMA/TD-SCDMA/LTE/WIFI/WLAN/WiMax/BT /GPS/MIMO/UWB within0.4-6G.

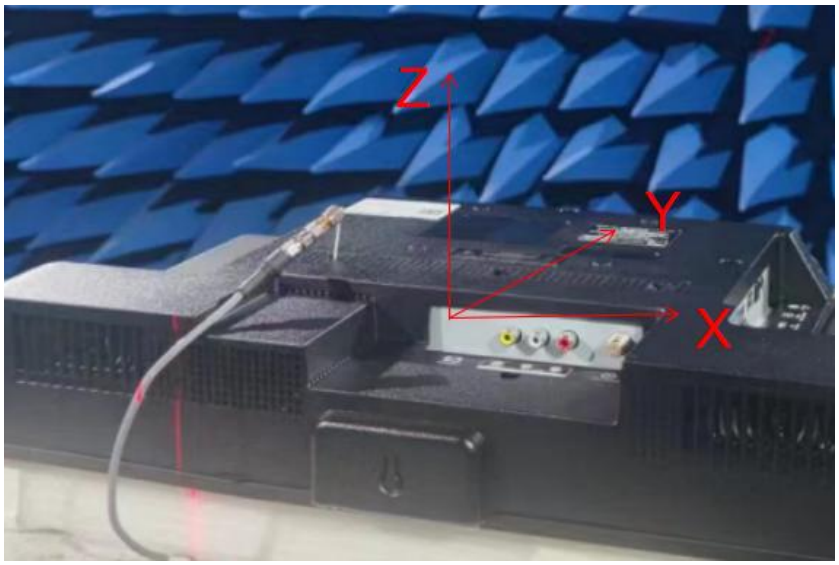


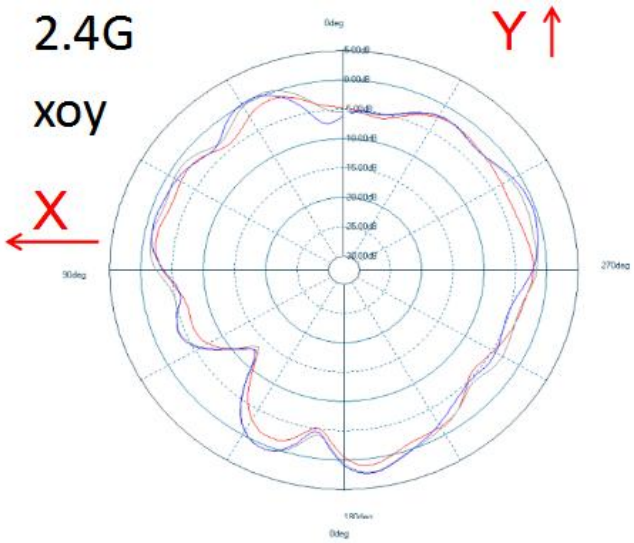
2-1 Passive Test

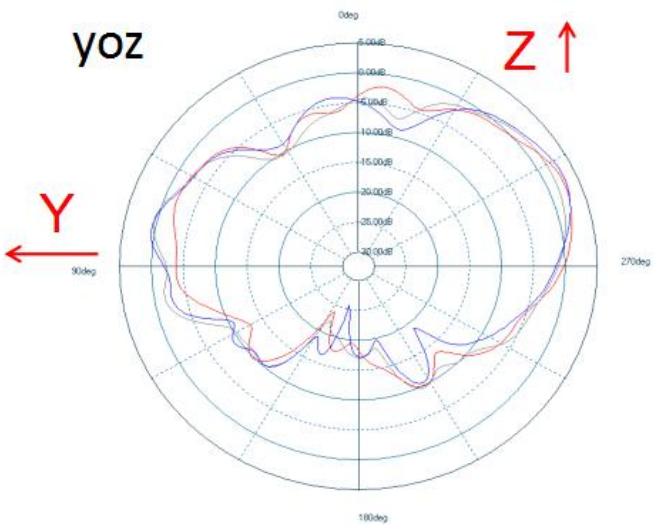
Frequency	Efficiency	Efficiency . dB	Gain . dB
2400	47%	-3.28	3.76
2410	48%	-3.19	3.99
2420	46%	-3.37	3.23
2430	47%	-3.28	3.45
2440	49%	-3.10	3.48
2450	49%	-3.10	3.41
2460	48%	-3.19	3.23
2470	49%	-3.10	3.32
2480	48%	-3.19	3.44
2490	47%	-3.28	3.27
2500	46%	-3.37	3.96

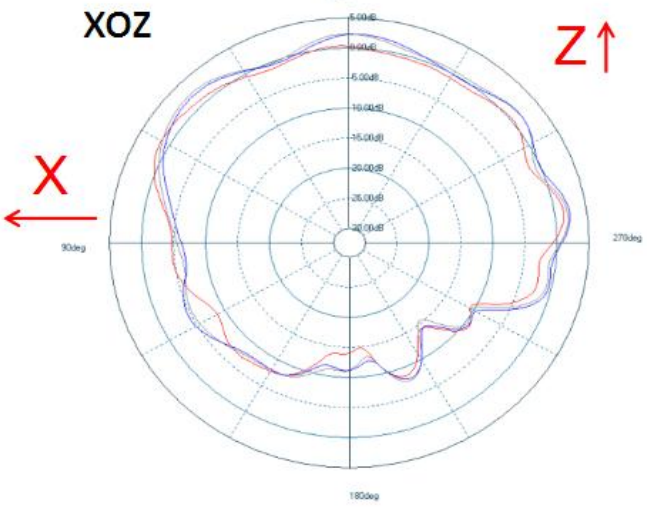
5150	40%	-3.98	2.87
5200	41%	-3.87	2.77
5250	43%	-3.67	4.02
5300	42%	-3.77	3.87
5350	42%	-3.77	3.89
5400	43%	-3.67	3.33
5450	40%	-3.98	4.05
5500	42%	-3.77	3.26
5550	44%	-3.57	3.46
5600	42%	-3.77	3.48
5650	40%	-3.98	3.43
5700	41%	-3.87	3.64
5750	41%	-3.87	3.65
5800	43%	-3.67	3.65
5850	42%	-3.77	3.87

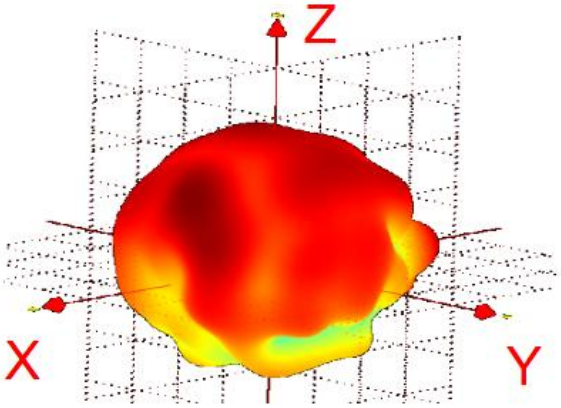
2-2 2D/3D Radiation Pattern Results

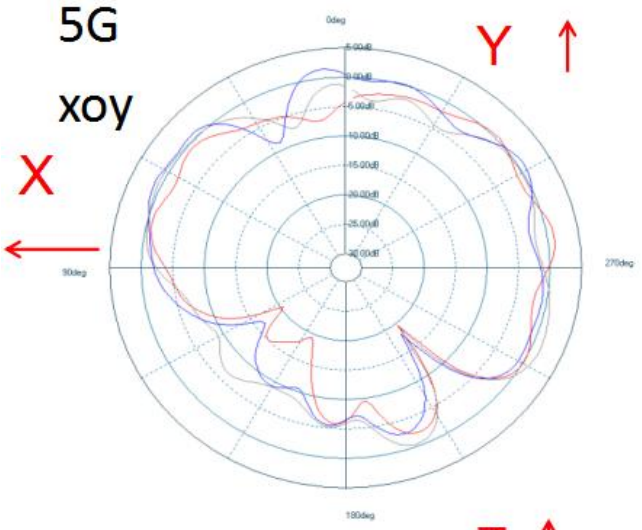


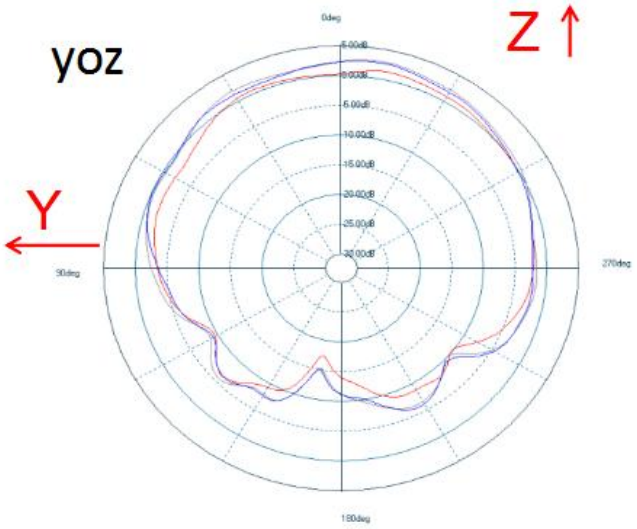


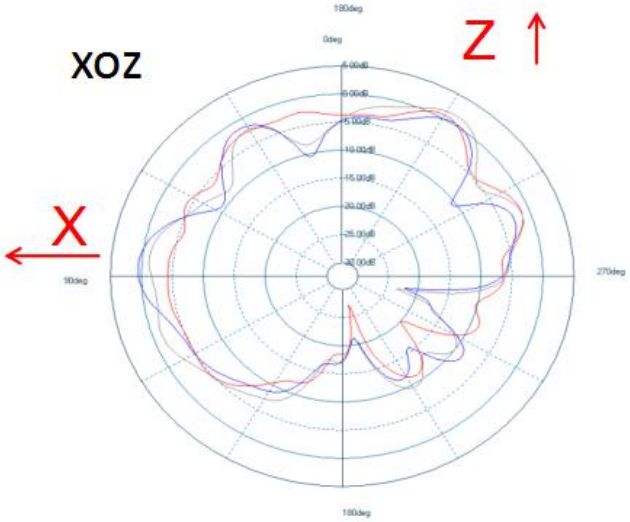


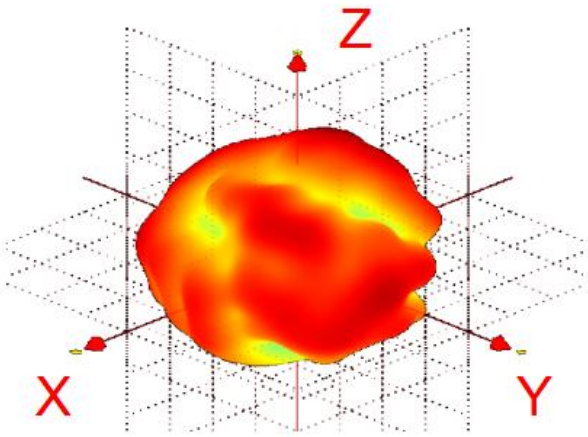





5G
xoy
Y
X


yoz
Z
Y


xoz
Z
X

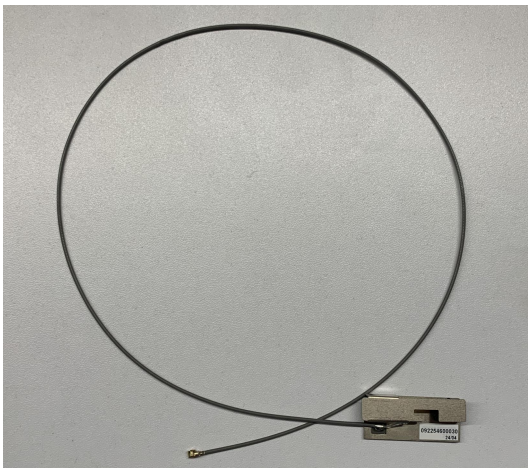

Z
X
Y

2-3 Environmental treatment

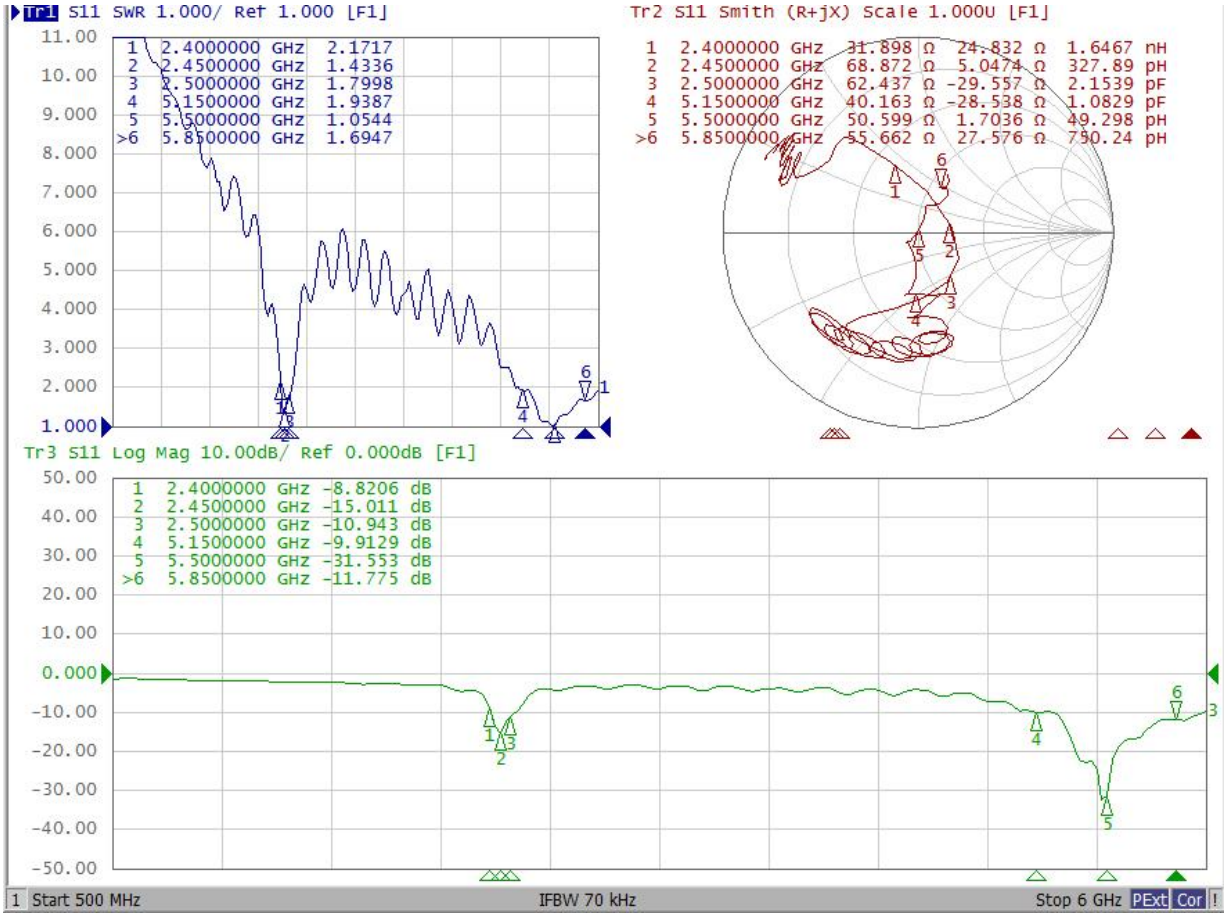
Location markers can be added to BT antenna in the later stage

The edge of the wifi antenna is positioned at the corner of the screw

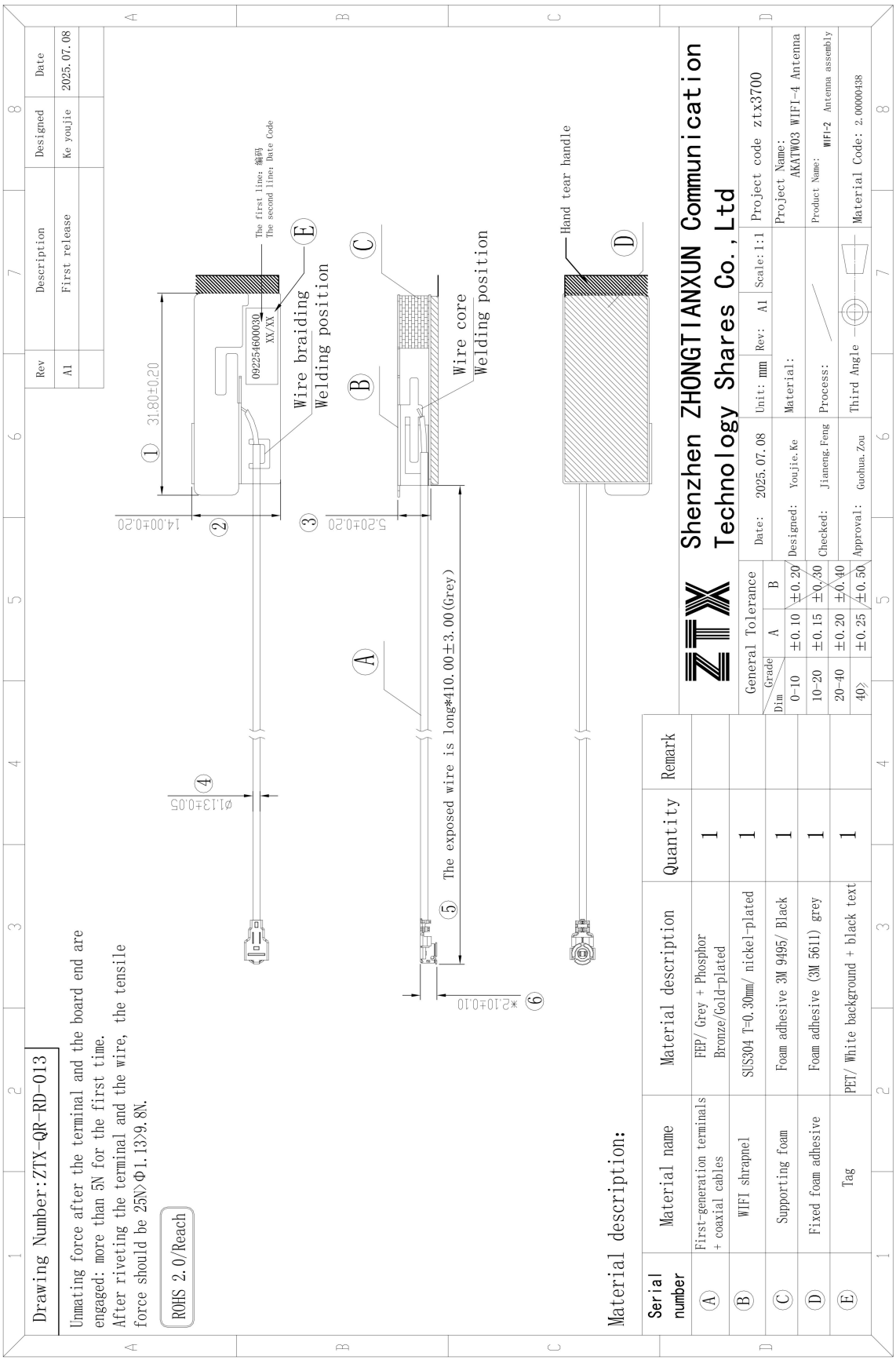
3.Antenna physical picture



4.S11


Tr1 S11 SWR 1.000/ Ref 1.000 [F1]
1 2.4000000 GHz 2.1717
2 2.4500000 GHz 1.4336
3 2.5000000 GHz 1.7998
4 5.1500000 GHz 1.9387
5 5.5000000 GHz 1.0544
>6 5.8500000 GHz 1.6947
Tr2 S11 Smith (R+jX) Scale 1.000U [F1]
1 2.4000000 GHz 31.898 Ω 24.832 Ω 1.6467 nH
2 2.4500000 GHz 68.872 Ω 5.0474 Ω 327.89 pH
3 2.5000000 GHz 62.437 Ω -29.557 Ω 2.1539 pF
4 5.1500000 GHz 40.163 Ω -28.538 Ω 1.0829 pF
5 5.5000000 GHz 50.599 Ω 1.7036 Ω 49.298 pH
>6 5.8500000 GHz 55.662 Ω 27.576 Ω 790.24 pH
Tr3 S11 Log Mag 10.00dB/ Ref 0.000dB [F1]
1 2.4000000 GHz -8.8206 dB
2 2.4500000 GHz -15.011 dB
3 2.5000000 GHz -10.943 dB
4 5.1500000 GHz -9.9129 dB
5 5.5000000 GHz -31.553 dB
>6 5.8500000 GHz -11.775 dB
1 Start 500 MHz
IFBW 70 kHz
Stop 6 GHz
PExt
Cor

5.Drawing


Drawing Number:ZTX-QR-RD-013
Unmating force after the terminal and the board end are engaged: more than 5N for the first time.
After riveting the terminal and the wire, the tensile force should be 25N>Φ1.13>9.8N.
ROHS 2.0/Reach
Material description:
Serial number
Material name
Material description
Quantity
Remark
Ⓐ First-generation terminals + coaxial cables FEP/ Grey + Phosphor Bronze/Gold-plated 1
Ⓑ WIFI shrapnel SUS304 T=0.30mm/ nickel-plated 1
Ⓒ Supporting foam Foam adhesive 3M 9495/ Black 1
Ⓓ Fixed foam adhesive Foam adhesive (3M 5611) grey 1
Ⓔ Tag PET/ White background + black text 1
Rev
Description
Designed
Date
A1
First release
Ke youjie
2025.07.08
The first line: 编码
The second line: Date Code
0922546000030
XX/XX
31.80±0.20
14.00±0.20
5.20±0.20
Ø1.13±0.05
*2.10±0.10
Wire braiding
Welding position
Wire core
Welding position
The exposed wire is long*410.00±3.00(Grey)
Hand tear handle
Shenzhen ZHONGTIANXUN Communication Technology Shares Co.,Ltd
General Tolerance
Grade
Dim
A
B
0-10 ±0.10 ±0.20
10-20 ±0.15 ±0.30
20-40 ±0.20 ±0.40
40> ±0.25 ±0.50
Date: 2025.07.08
Designed: Youjie.Ke
Checked: Jianeng.Feng
Approval: Guohua.Zou
Unit: mm
Rev: A1
Scale:1:1
Material:
Process:
Third Angle
Project code ztx3700
Project Name: AKATW03 WIFI-4 Antenna
Product Name: WIFI-2 Antenna assembly
Material Code: 2.00000438