

SPECIFICATION

SHEET FOR APPROVAL

(Revision: R: A1)

CUSTOMER(客户名称)	Tianjin HualTechnology Co., LTD
CS P/N(客户机种)	网关 (A304-029T)
PART NAME(品名)	BT Antenna
FREQUENCY(频率)	2.4G~2.5G
ZTX NO.(物料编号)	1.01.01201
DATE(日期)	2021-01-22

CUSTOMER			
QA CHECKED	ME CHECKED	RF CHECKED	MANAGER CHECKED

Remark(备注):

Sign(客户确认签字盖章): _____

ZHONG TIAN XUN TECHNOLOGY CO., LTD				
MANAGE CHECKE	MANAGER CHECKED	ME CHECKED	RF CHECKED	LISTER
		Liuli ping	Zou yi	



深圳市中天迅通信技术股份有限公司

SHENZHEN ZHONGTIAN XUN Communication Technology Co., Ltd.

Address: No.34, Shilong Avenue, Shiyan Town, Baoan District, Shenzhen, (Tengda Industrial Park) 518000

Tel.: 0755-27588320

Fax: 0755-27588045

<http://www.chinaztx.com>

ANTENNA SPECIFICATION

CUS P/N :网关 (A304-029T) BT Antenna

ApplicationDate:Jan,22,2021

Rev: R:A1

ZTX P/N :网关 (A304-029T) BT Antenna

Editor:

Page 1 of 8

Revision history

NO	Date	State
A1	2022-01-22	The first edition



ANTENNA SPECIFICATION

CUS P/N :网关 (A304-029T) BT Antenna

ApplicationDate:Jan,22,2021

Rev: R:A1

ZTX P/N :网关 (A304-029T) BT Antenna

Editor:

Page 2 of 8

Index

		Revision history	1
		Index	2
1		Mechanical Specification	3
	1-1	Mechanical Specification(BT Antenna)	3
2		Antenna test data	4
	2-1	VSWR&Return loss plot&Smith Chart	4
	2-2	No-source test data	4
	2-3	Matching circuit	5
	2-4	Environment treatment	5
	2-5	2D/3D Radiation Pattern Results	6
3		Test Report	6
4		Salt-Spray test	7
5		Environment Characteristic	8



ANTENNA SPECIFICATION

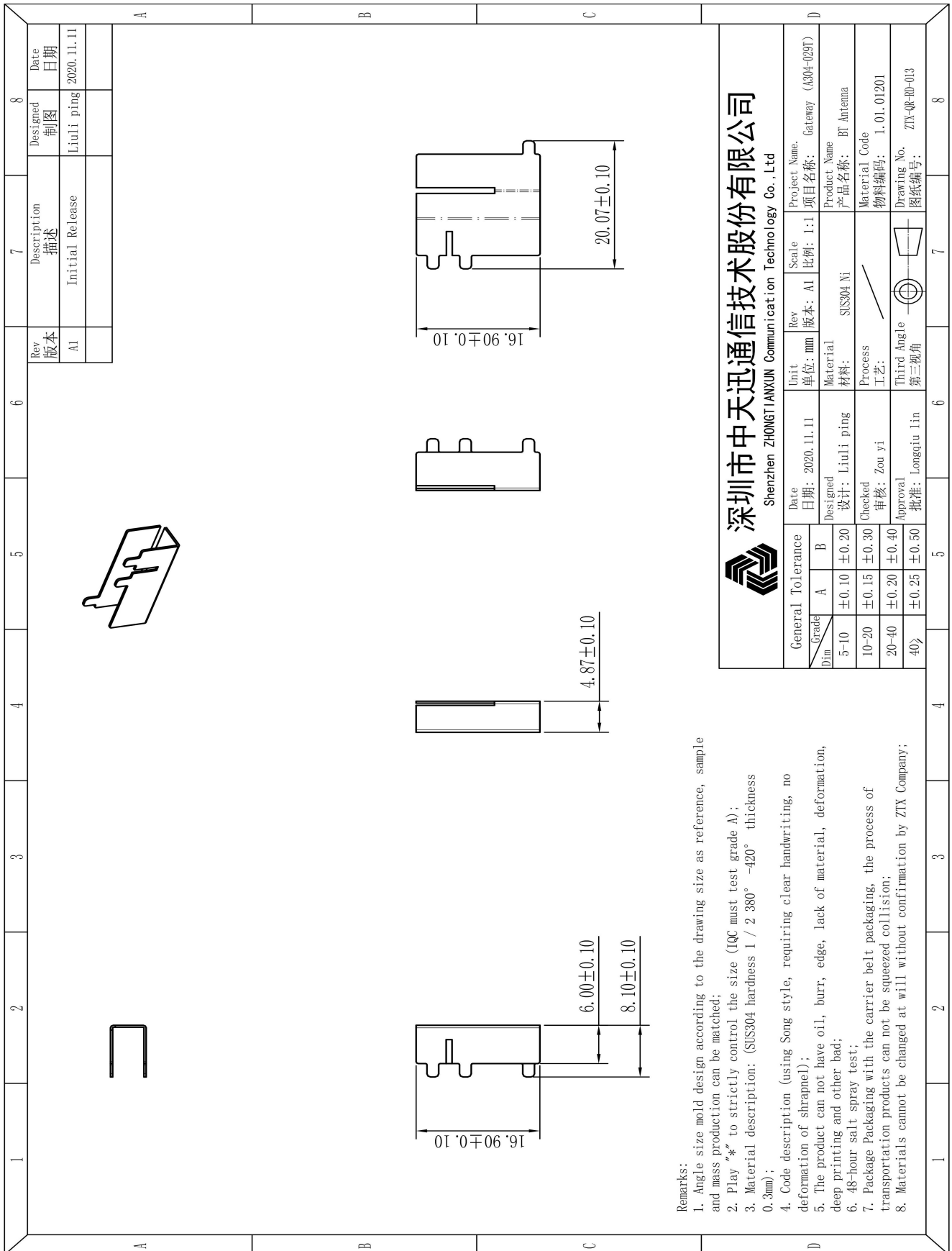
CUS P/N :网关 (A304-029T) BT Antenna
ZTX P/N :网关 (A304-029T) BT Antenna

ApplicationDate:Jan,22,2021
Editor:

Rev: R:A1
Page 3 of 8

1. Mechanical Specification

1-1 Mechanical Configuration (BT Antenna)



ANTENNA SPECIFICATION

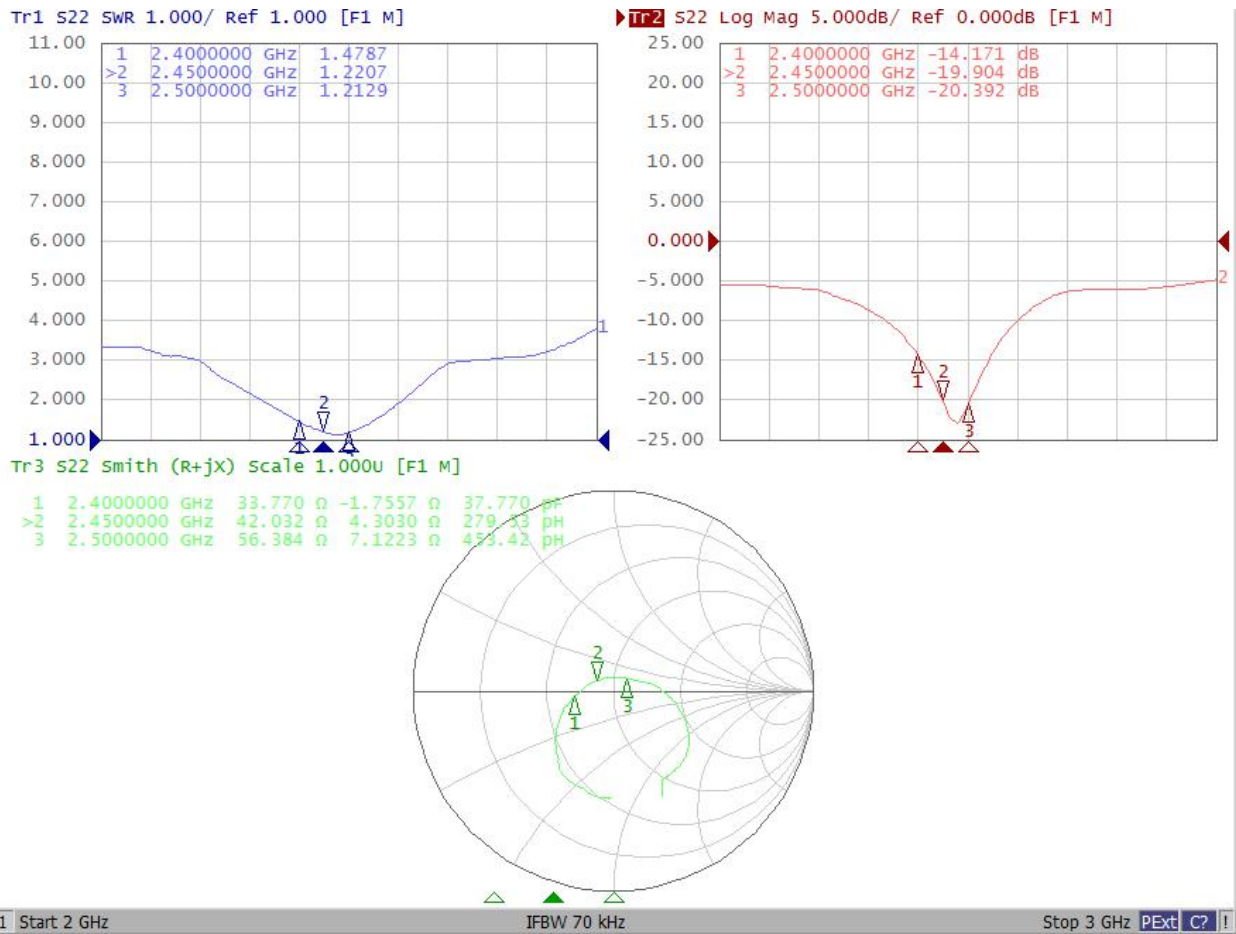
CUS P/N :网关 (A304-029T) BT Antenna
ZTX P/N :网关 (A304-029T) BT Antenna

ApplicationDate:Jan,22,2021
Editor:

Rev: R:A1
Page 4 of 8

2. Antenna test data

2-1 VSWR&Return loss plot&Smith Chart



2-2 No-source test data

Frequency	Efficiency	Efficiency (dB)	Gain (dB)
2400	52%	-2.8	3.6
2410	53%	-2.8	3.8
2420	54%	-2.7	3.4
2430	56%	-2.5	3.5
2440	58%	-2.4	3.4
2450	58%	-2.3	3.4
2460	55%	-2.6	2.9
2470	53%	-2.8	2.7
2480	55%	-2.6	2.7
2490	50%	-3.0	2.3
2500	51%	-3.0	2.4



ANTENNA SPECIFICATION

CUS P/N :网关 (A304-029T) BT Antenna
ZTX P/N :网关 (A304-029T) BT Antenna

ApplicationDate:Jan,22,2021
Editor:

Rev: R:A1
Page 5 of 8

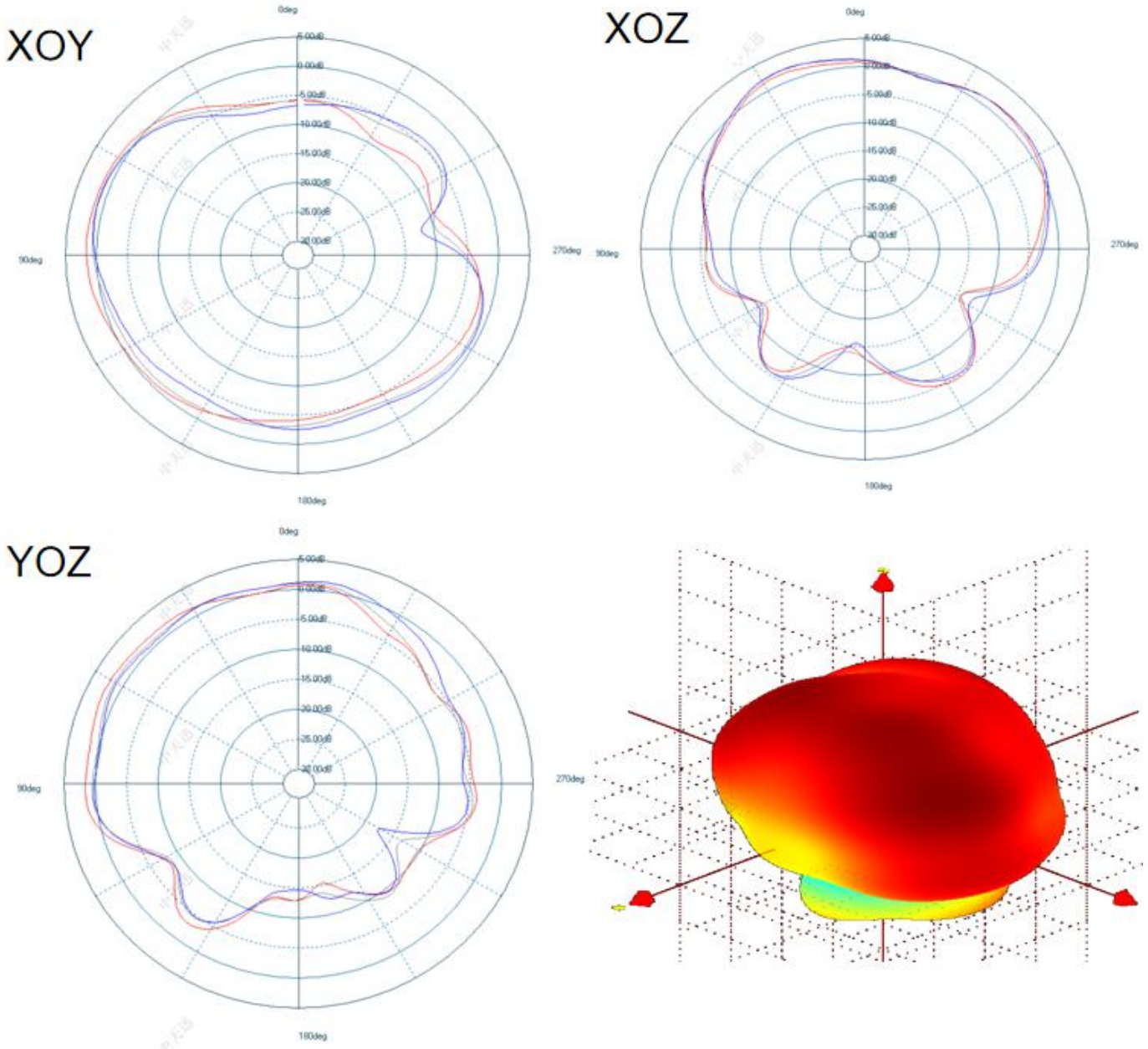
2-3 Matching circuit

N/A

2-4 Environment treatment

N/A

2-5 2D/3D Radiation Pattern Results



ANTENNA SPECIFICATION

CUS P/N :网关 (A304-029T) BT Antenna
 ZTX P/N :网关 (A304-029T) BT Antenna

ApplicationDate:Jan,22,2021
 Editor:

Rev: R:A1
 Page 6 of 8

3. Test Report



Sample test report

Customer name	TianJin HuaLai Technology Co., Ltd			Product name	网关 (A304-029T)			quantity	5								
Product material	SUS304 Ni			Material color	/			date	2020/11/11								
Product type: <input checked="" type="checkbox"/> Samples of new mold production <input type="checkbox"/> Sample after mold modification <input type="checkbox"/> Mass production <input type="checkbox"/> other																	
NO	typ e	Drawing dimensio	Upper toleran	Lower toleran	Actual measured size										deci sion	remar ks	
					1	2	3	4	5	6	7	8	9	10			
1		16.90	0.10	0.10	16.92	16.94	16.93	16.95	16.94							OK	
2		6.00	0.10	0.10	6.05	6.03	6.05	6.08	6.07							OK	
3		8.10	0.10	0.10	8.07	8.06	8.04	8.05	8.04							OK	
4		4.87	0.10	0.10	4.82	4.83	4.82	4.85	4.86							OK	
5		16.90	0.10	0.10	16.92	16.94	16.85	16.84	16.83							OK	
6		20.07	0.10	0.10	20.09	20.11	20.13	20.11	20.14							OK	
appearance: OK																	
other: /																	
Comprehensive judgment:: <input checked="" type="checkbox"/> OK <input type="checkbox"/> NG																	
核准(Approved by): Xiaohua Deng 审核(Checked by): Ailing Yi 测试(Name of operator):Lihua Li																	
remarks:																	

Form number : ZTX-QR-QA-016 Version: A.

ANTENNA SPECIFICATION

CUS P/N :网关 (A304-029T) BT Antenna

ApplicationDate:Jan,22,2021

Rev: R:A1

ZTX P/N :网关 (A304-029T) BT Antenna

Editor:

Page 7 of 8

4.Salt-Spray test

customer name	Tianjin Hualai	product name	Gateway (A304-029T) BT Antenna	date	2020/11/11
Product material	SUS304	proving time	48H	quantity	5PCS
time quantum	test condition	test criteria		bear fruit	Remarks
0-6 Hours	<p>Salt spray tester: salt liquid: NaCl (no water); concentration 5% ± 1%; pH value: 6.5~7.2; laboratory temperature: 32-38°C; compressed air pressure: 1.0 ± 0.01 (KG / M2) Spray amount: 1.0~2.0ML/80CM2/H. Relative humidity: 85% ± 2%; placement angle of test product: 30 degrees + / -10 degrees; salt spray duration: 48h,</p>	<p>Product surface without rust point, oxidation, corrosion, coating (coating) layer off and other adverse phenomena</p>		OK	2020. 11. 09 16:00 AM beginning
6-12 Hours					
12-18 Hours					
18-24 Hours					2020. 11. 11 16:00 AM stop
24-30 Hours					
30-36 Hours					
36-42 Hours					
42-48 Hours					
More than 48 hours					
conclusion	Salt Spray Test OK				
test clerk	Li Qingli	examine and verify	Yi Ailing	Ratify	Hu Chunmei



ANTENNA SPECIFICATION

CUS P/N :网关 (A304-029T) BT Antenna
ZTX P/N :网关 (A304-029T) BT Antenna

ApplicationDate:Jan,22,2021
Editor:

Rev: R:A1
Page 8 of 8

5.Environment Characteristic

NO.	ITEM	TEST CONDITION	SPECIFICATION
5-1	High Temperature/Humidity Storage Test(non operating)	1.Temperature: +70 ±2°C 2.Humidity: 90~95%RH 3.Time: 48hrs	No material deformation is allowed.
5-2	Low Temperature/Humidity Storage Test(non operating)	1.Temperature: -30±2°C 2.Humidity: 0%RH 3.Time:48hrs	The VSWR, Gain, Radiation Pattern must be met specifications after these test.

