

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 (A304-029SUB-1G)	
	PART NAME(品名)	SUB-1G Antenna	
	FREQUENCY(频率)	880~950M	
	ZTX NO.(物料编号)	2.00004878	
	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 CHECKED	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

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ANTENNA SPECIFICATION

CUS P/N :网关 (A304-029SUB-1G) SUB-1G Antenna ApplicationDate:Jan,22,2021

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Revision history

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



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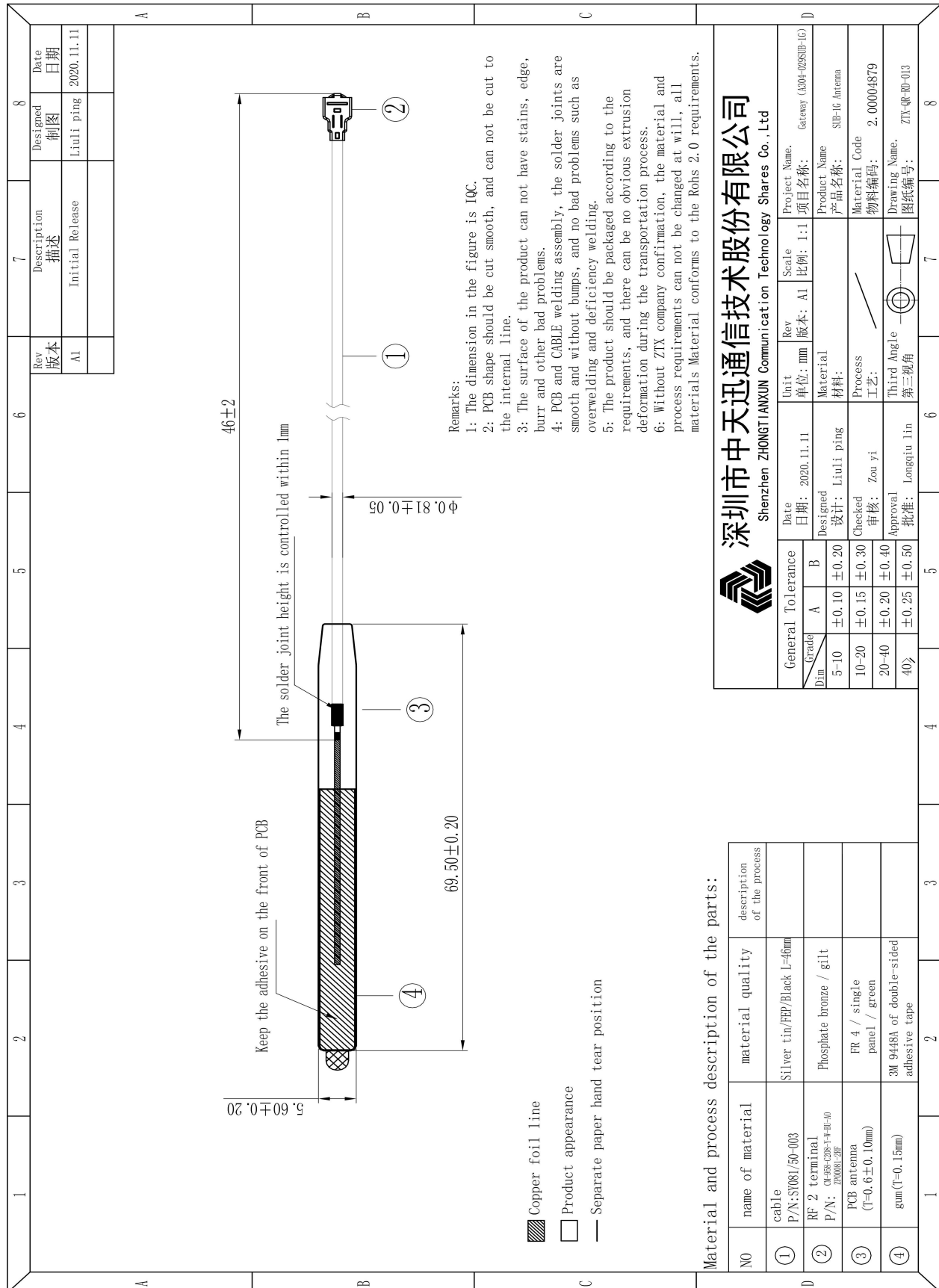
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1. Mechanical Specification

1-1 Mechanical Configuration (SUB-1G Antenna)



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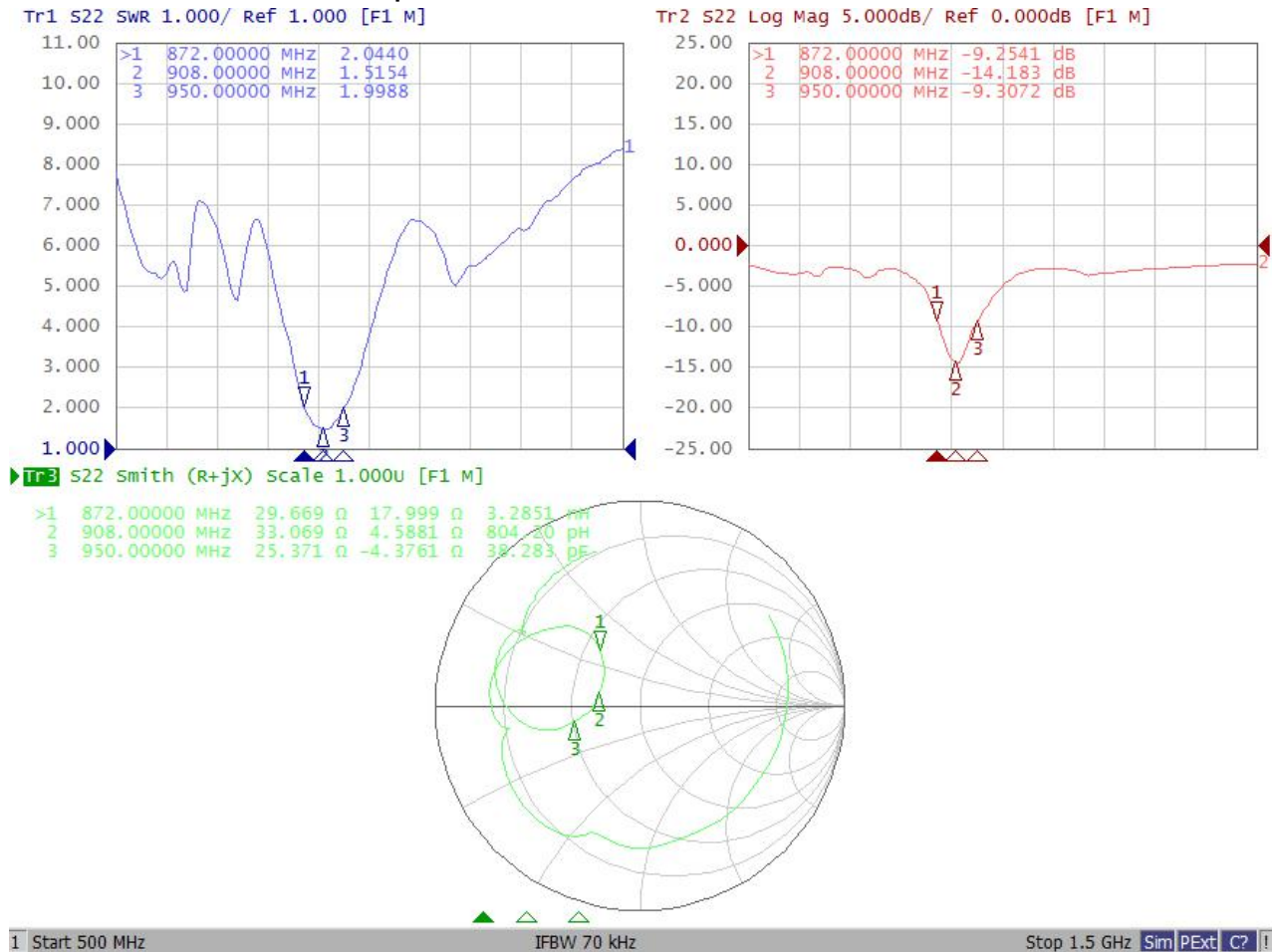
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2.Antenna test data

2-1 VSWR&Return loss plot&Smith Chart



2-2 No-source test data

Frequency	Efficiency	Efficiency (dB)	Gain (dB)
880	57%	-2.4	1.3
890	59%	-2.3	1.7
900	60%	-2.2	1.8
906	61%	-2.2	2.0
910	61%	-2.1	1.5
920	58%	-2.4	1.3
930	57%	-2.5	1.5
940	54%	-2.7	1.4
950	55%	-2.6	1.3



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2-3 Matching circuit

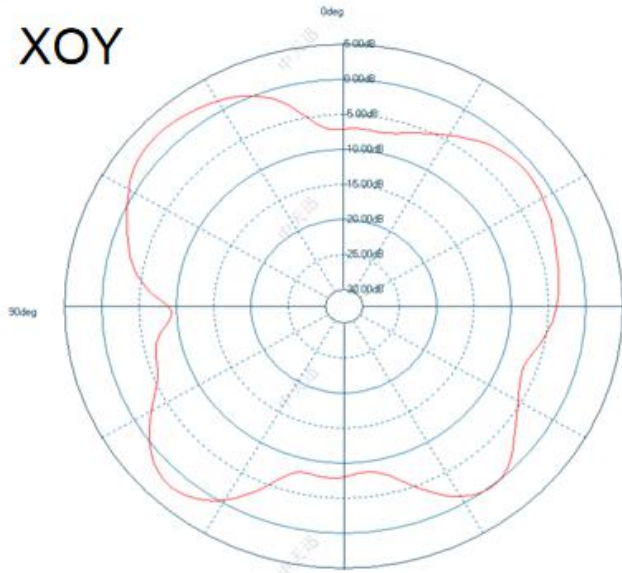
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2-4 Environment treatment

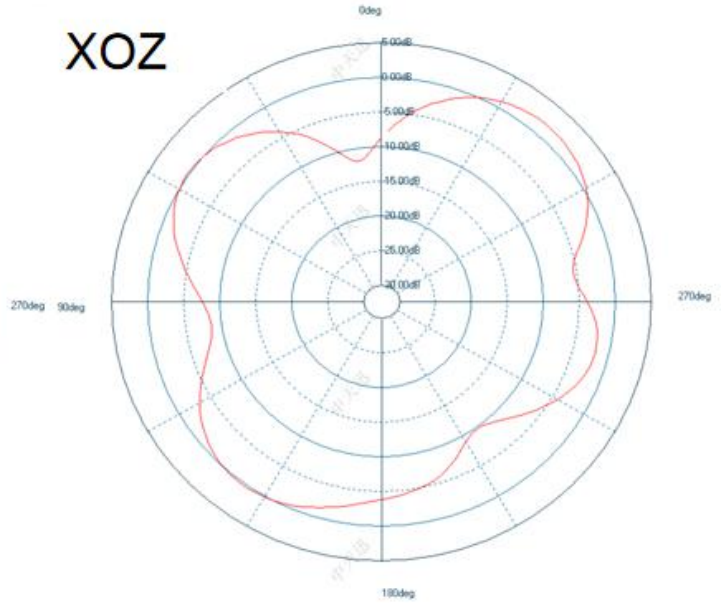
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2-5 2D/3D Radiation Pattern Results

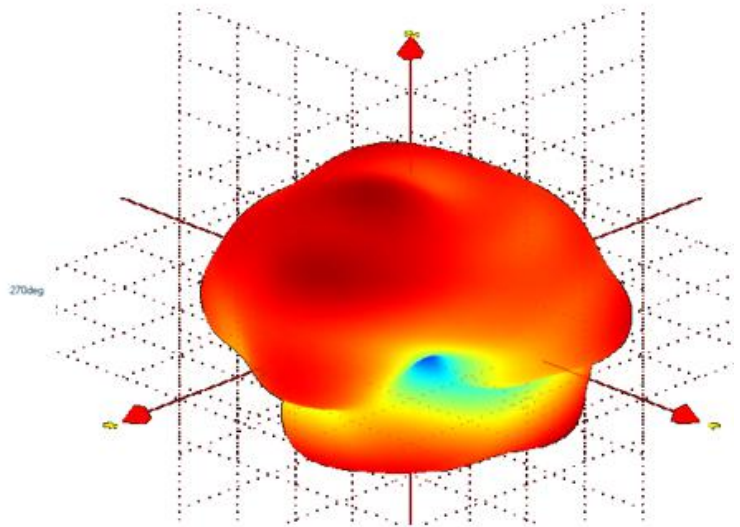
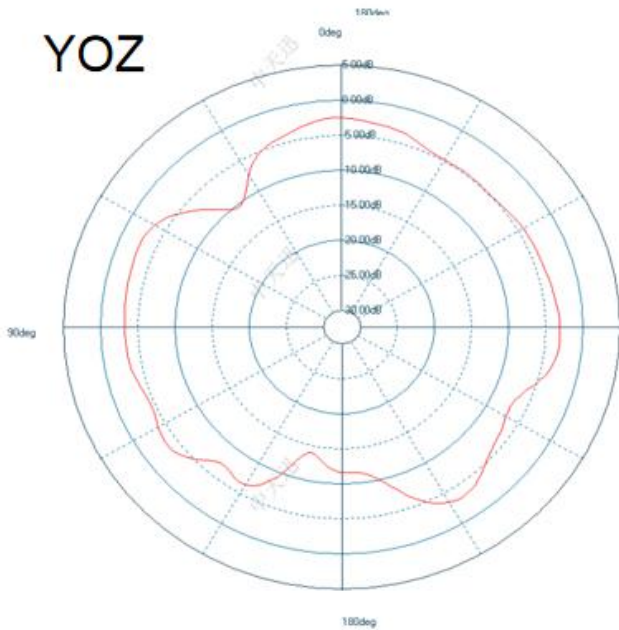
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3. Test Report



深圳市中天迅通信科技股份有限公司

SHENZHEN ZHONGTIAN XUN Communication Technology Co.,Ltd.

Sample test report

Customer name	TianJin Hualai Technology Co., Ltd	Product name	Gateway (A304-029SUB-1G) SUB-1G Antenna	quantity	5
Product material	FPC	Material color	black	date	2020/11/11

Product type: ☒ Samples of new mold production ☐ Sample after mold modification ☐ Mass production ☐ Other

[illegible]

appearance:	OK
-------------	----

other:/

Comprehensive judgment::

☐ OK☐ 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:



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SHENZHEN ZHONGTIAN XUN Communication Technology Co., Ltd.

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4.Salt-Spray test

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



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5.Environment Characteristic

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

