

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 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

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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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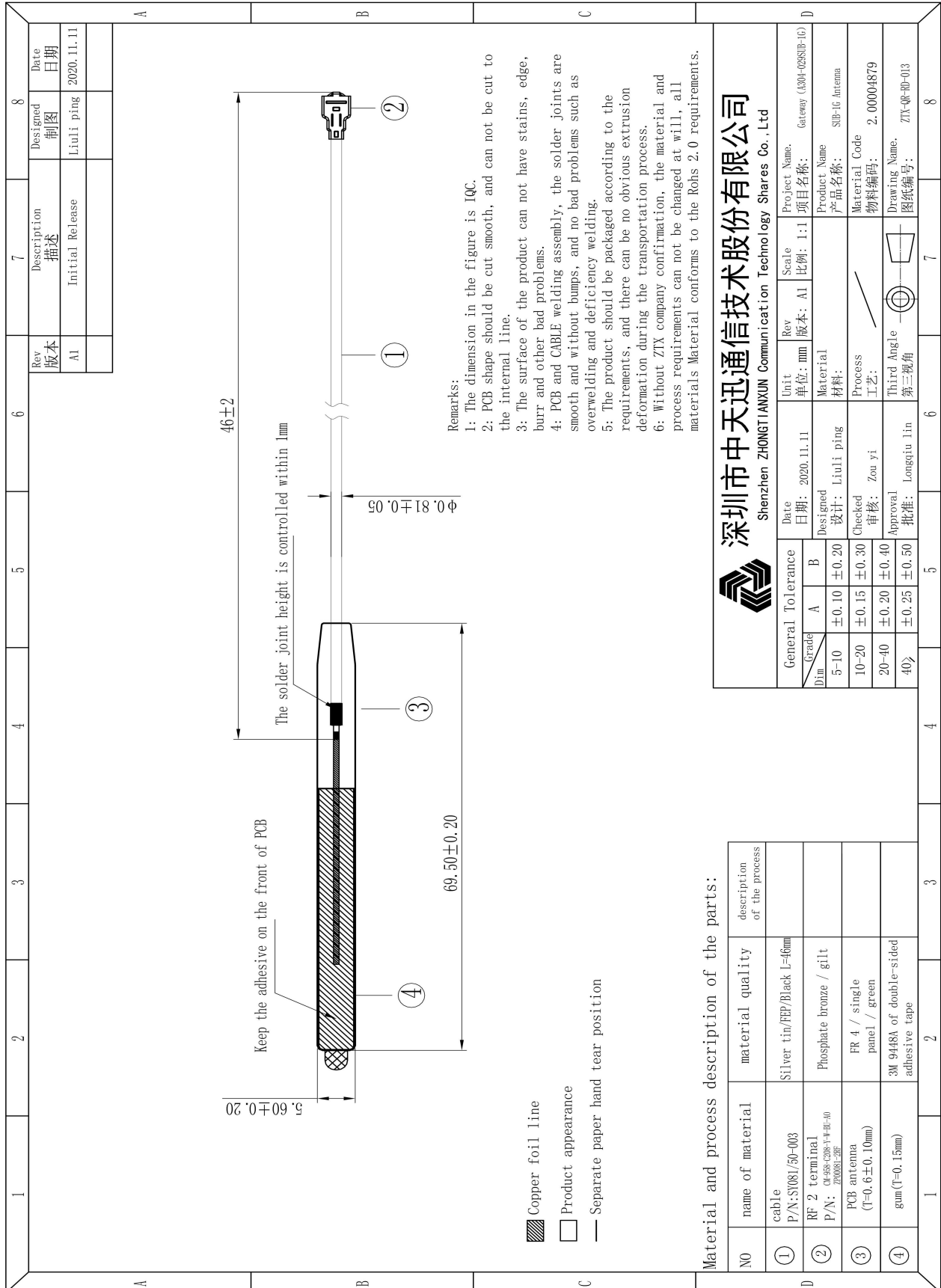
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1. Mechanical Specification

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



深圳市中天迅通信科技股份有限公司
Shenzhen ZHONGTIAN XUN Communication Technology Shares Co., Ltd

General	Tolerance	Date	Rev	Scale	Project Name
Dim	A B	日期: 2020.11.11	版本: A1	比例: 1:1	Gateway (A304-029SUB-1G)
5-10	±0.10	Designed 设计: Liuli ping			Product Name 产品名称: SUB-1G Antenna
10-20	±0.15	Checked 审核: Zou yi			Material Code 物料编码: 2.00004879
20-40	±0.20	Approval 批准: Longqiu lin			Drawing Name 图线编号: ZTX-020-013
40>	±0.25				



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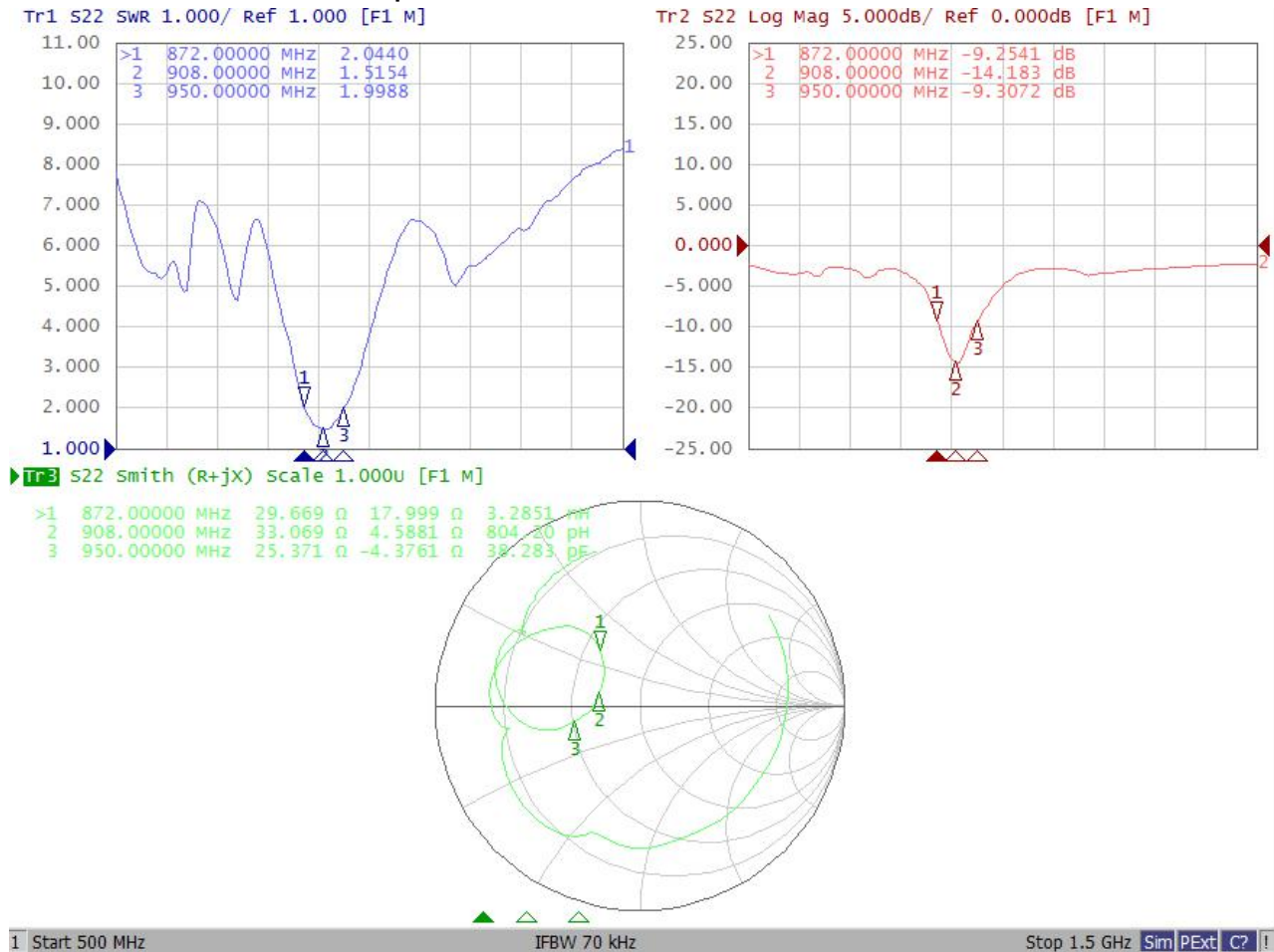
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2. Antenna test data

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

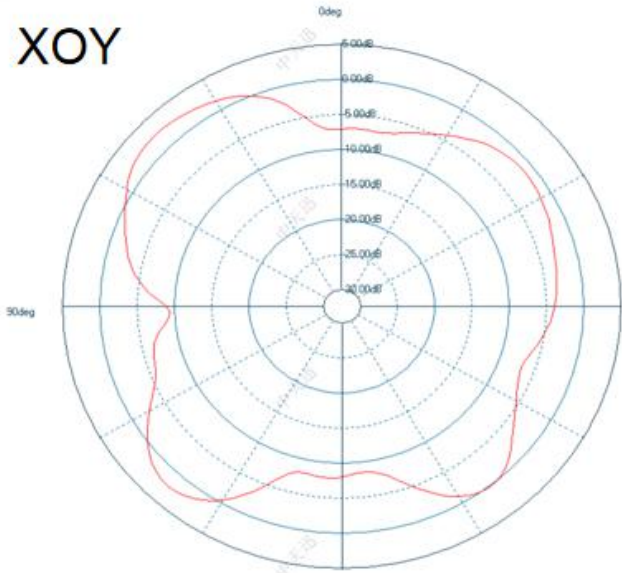
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2-4 Environment treatment

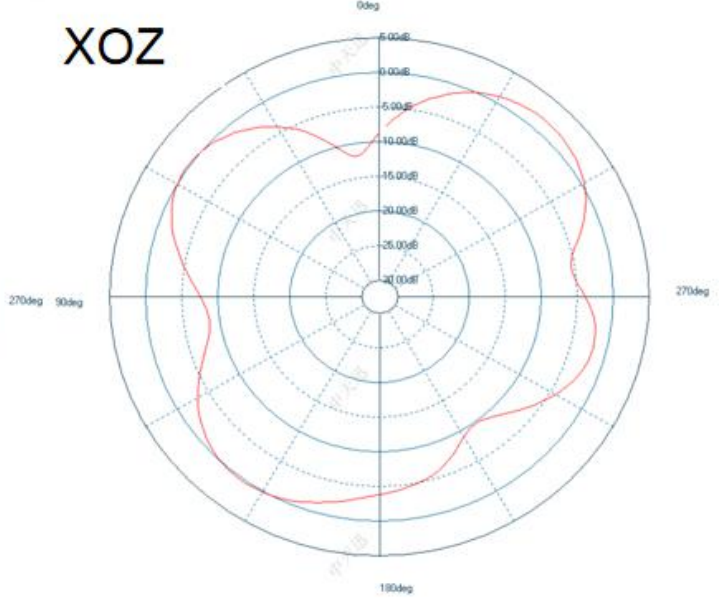
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2-5 2D/3D Radiation Pattern Results

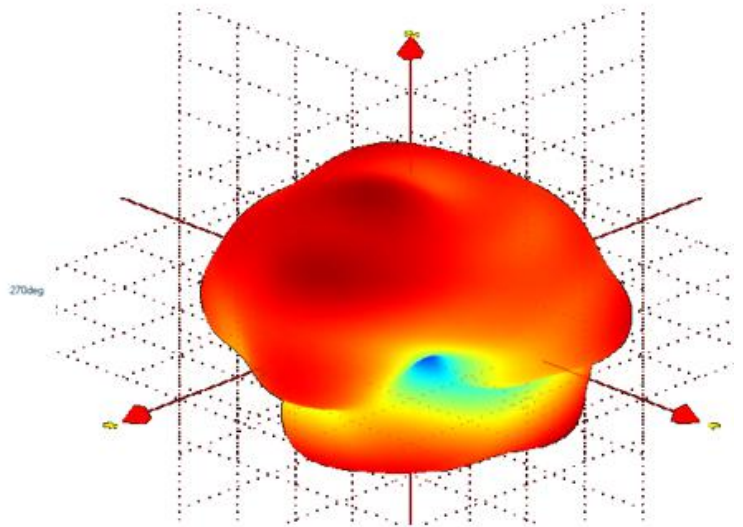
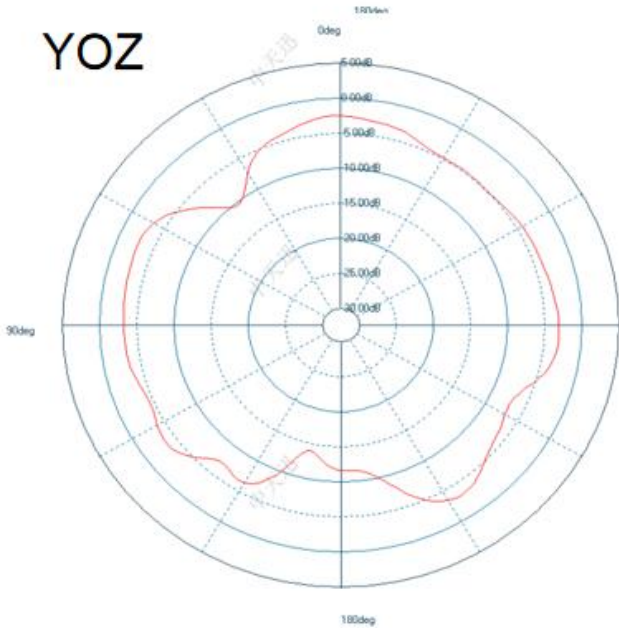
XOY



XOZ



YOZ



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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	<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						<p>The product surface without rust point, oxidation, corrosion, coating (coating) layer off 1% of the product area</p>				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					



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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.

