SPECIFICATION

SHEET FOR APPROVAL

（Revision：R：A1）

	CUSTOMER	Tianjin HualTechnology Co., LTD	
	CS P/N	PIR3U-V2（A304-033F）	
	PART NAME	FPC Antenna	
	FREQUENCY	906.8-913.2MHz	
	ZTX NO.	1.03.02529	
	DATE	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				
MANAGER CHECKED	MANAGER CHECKED	ME CHECKED	RF CHECKED	LISTER
		Luiting Ru	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

Revision history

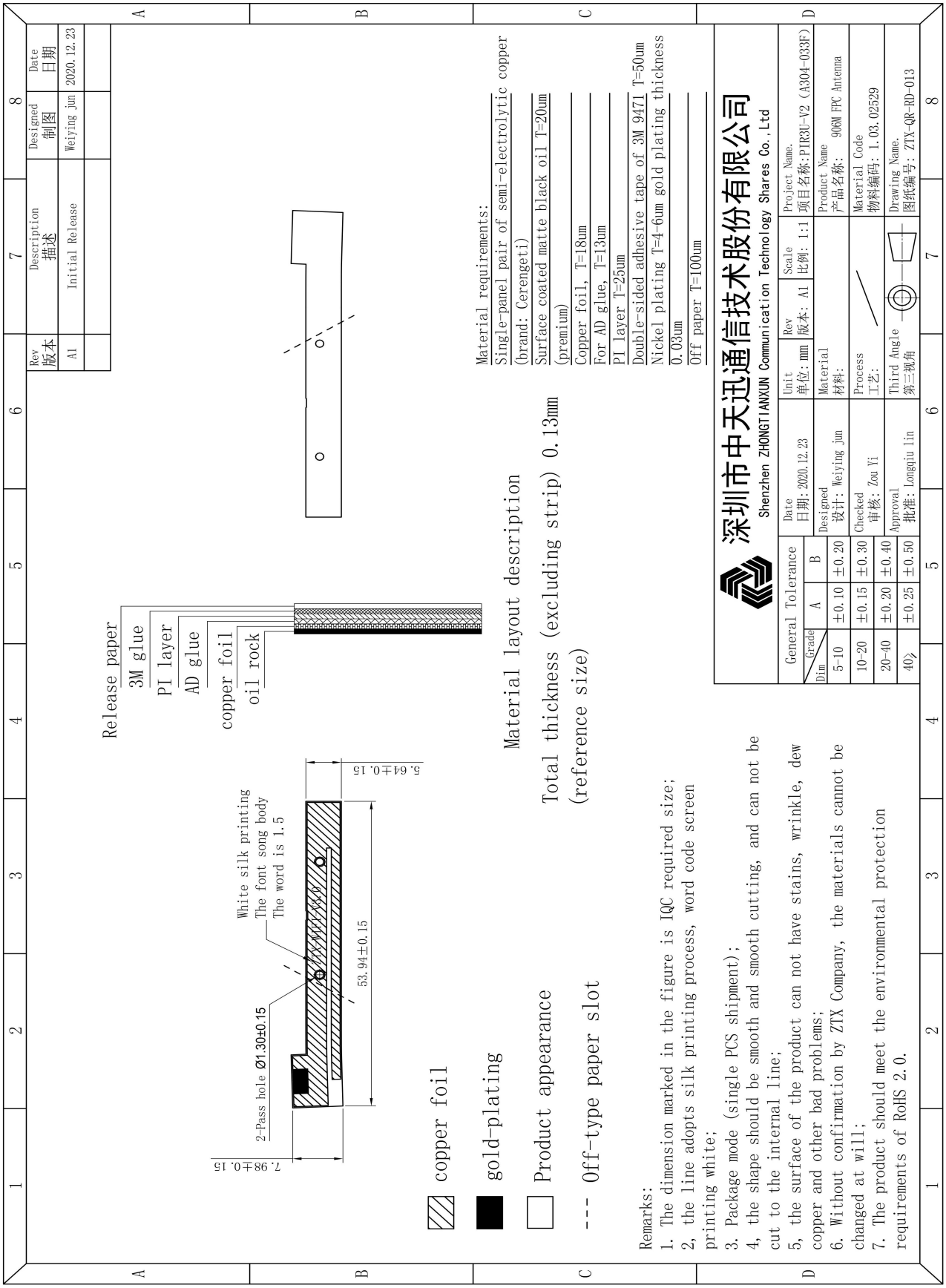
NO	Date	State
A1	2022-01-22	The first edition

Index

		Revision history	1
		Index	2
1		Mechanical Specification	3
	1-1	Mechanical Specification(FPC 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	7
4		Salt-Spray test	8
5		Environment Characteristic	9

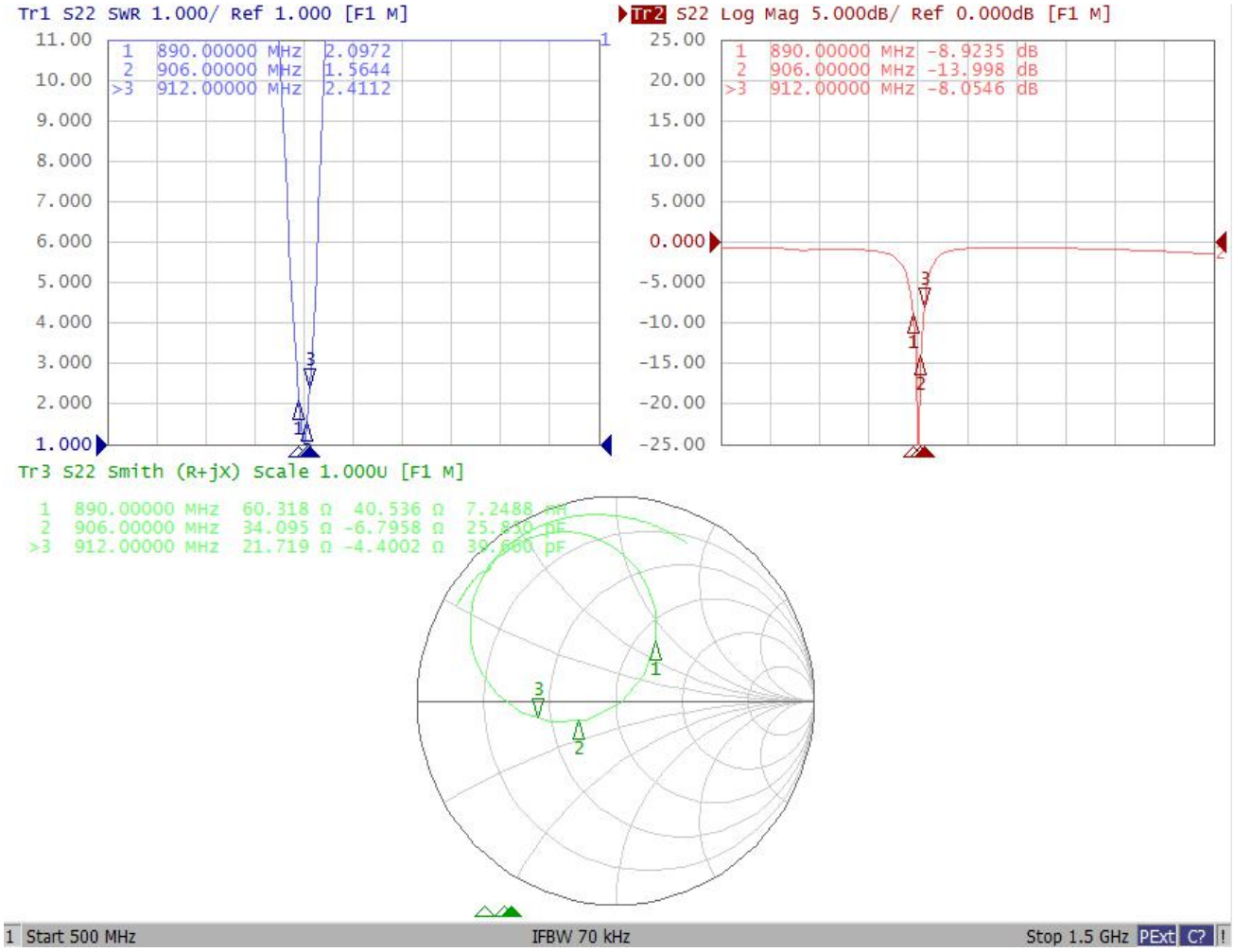
1. Mechanical Specification

1-1 Mechanical Configuration(FPC Antenna)



2.Antenna test data

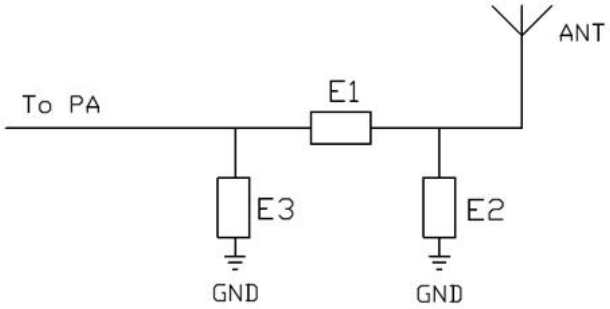
2-1 VSWR&Return loss plot&Smith Chart



2-2 No-source test data

Frequency(MHz)	Efficiency	Efficiency (dB)	Gain (dB)
890	17%	-7.69	0.6
900	18%	-7.33	0.6
908	21%	-6.71	0.6
910	21%	-6.70	0.5
920	23%	-6.46	0.5
930	22%	-6.52	0.5
940	20%	-6.90	0.5
950	17%	-7.62	0.4

2-3 Matching circuit

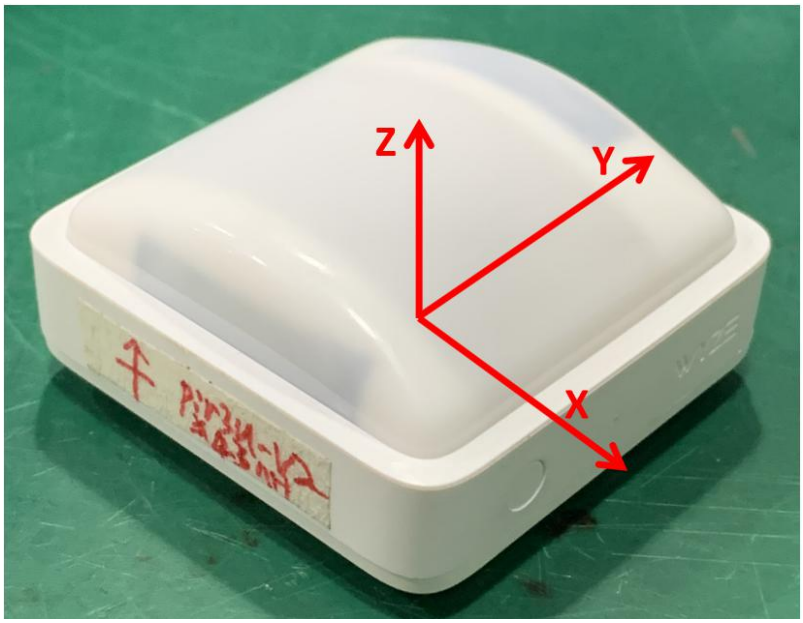


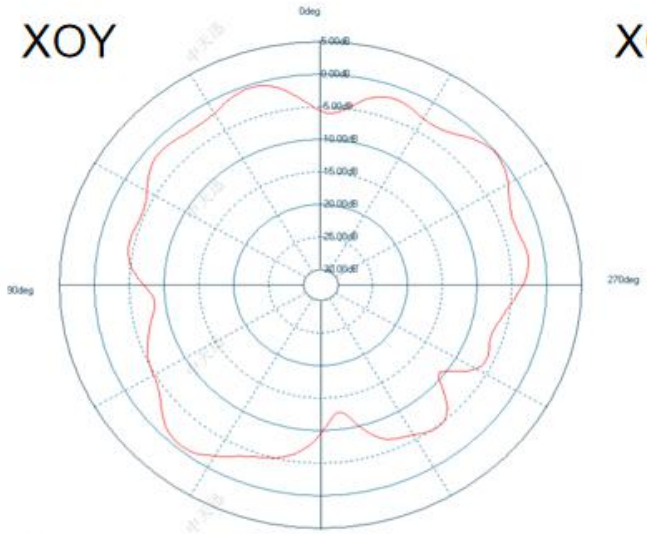
匹配说明	
E1	0Ω
E2	4.3nH
E3	NC

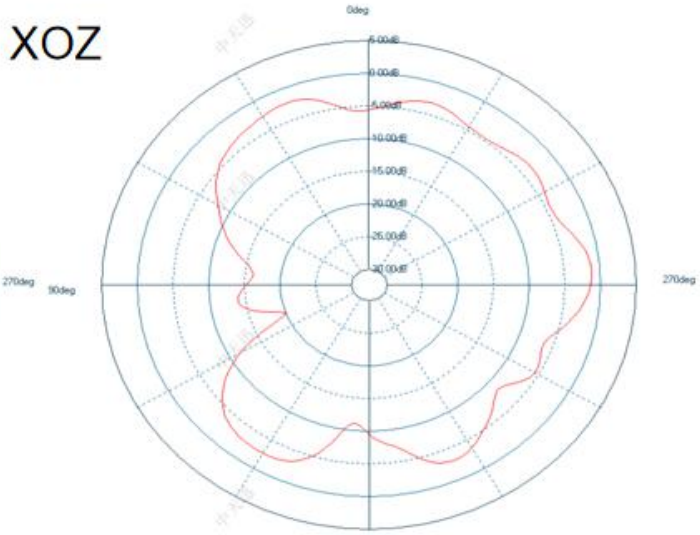
2-4 Environment treatment

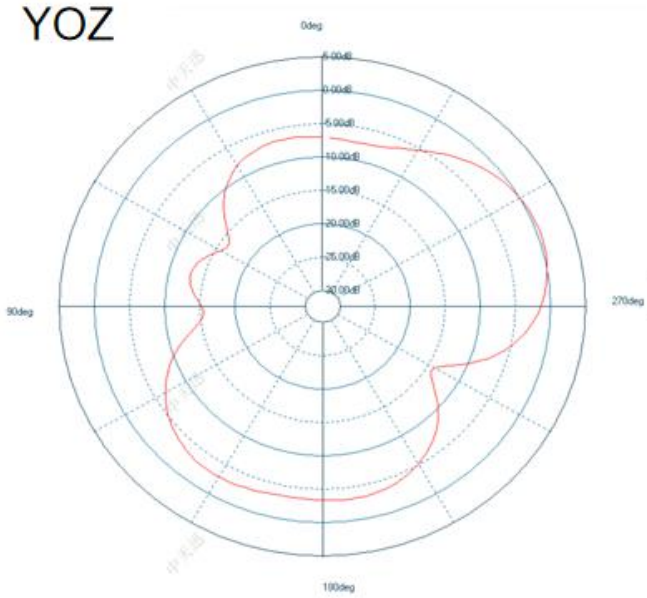
N/A

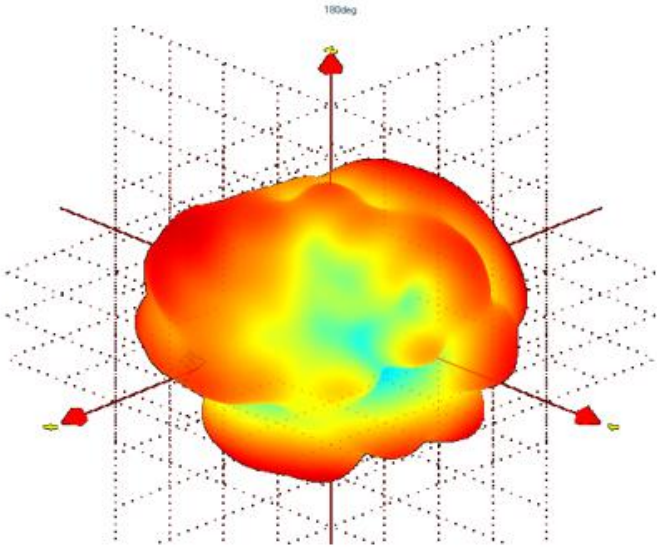
2-5 2D/3D Radiation Pattern Results











3.Test Report

深圳市中天迅通信技术股份有限公司
SHENZHEN ZHONGTIAN XUN Communication Technology Co.,Ltd.

Sample test report

Customer name	TianJin HuaLai Technology Co., Ltd	Product name	PIR3U-V2 FPC Antenna	quantity	5
Product material	FPC	Material color	black	date	2021/1/8

Product type: ■Samples of new mold production ☐Sample after mold modification ☐Mass production ☐other

NO	type	Drawing dimensioning	Upper tolerance	Lower tolerance	Actual measured size										decision	remarks
					1	2	3	4	5	6	7	8	9	10		
1		53.94	0.15	0.15	53.94	53.95	53.94	53.95	53.94						OK	
2		5.64	0.15	0.15	5.63	5.64	5.63	5.64	5.65						OK	
3		0.13			0.13	0.13	0.13	0.13	0.13						OK	

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

4.Salt-Spray test

<table>
<tr><td>customer name</td><td>Tianjin Hualai</td><td>product name</td><td colspan="2">PIR3U-V2
FPC Antenna</td><td>date</td><td>2021/01/08</td></tr>
<tr><td>Product material</td><td>FPC</td><td>proving time</td><td colspan="2">48H</td><td>quantity</td><td>5PCS</td></tr>
<tr><td>time quantum</td><td>test condition</td><td colspan="3">test criteria</td><td>bear fruit</td><td>Remarks</td></tr>
<tr><td>0-6 Hours</td><td rowspan="9">Salt spray tester: salt liquid: NaCl (no water); concentration 5% ± 1%; pH value: 6.5~7.2; laboratory temperature: 32-38℃; 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,</td><td colspan="3" rowspan="8">Product surface without rust point, oxidation, corrosion, coating (coating) layer off and other adverse phenomena</td><td rowspan="8">OK</td><td rowspan="4">2021.01.06
10:00 AM
beginning</td></tr>
<tr><td>6-12 Hours</td></tr>
<tr><td>12-18 Hours</td></tr>
<tr><td>18-24 Hours</td></tr>
<tr><td>24-30 Hours</td><td rowspan="4">2021.01.08
10:00 AM
stop</td></tr>
<tr><td>30-36 Hours</td></tr>
<tr><td>36-42 Hours</td></tr>
<tr><td>42-48 Hours</td></tr>
<tr><td>More than 48 hours</td><td colspan="3">The product surface without rust point, oxidation, corrosion, coating (coating) layer off 1% of the product area</td><td></td><td></td></tr>
<tr><td>conclusion</td><td colspan="6">Salt Spray Test OK</td></tr>
<tr><td>test clerk</td><td>Li Qingli</td><td>examine and verify</td><td>Yi Ailing</td><td>Ratify</td><td colspan="2">Hu Chunmei</td></tr>
</table>

5.Environment Characteristic

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