

SPECIFICATION

SHEET FOR APPROVAL

(Revision: R: A2)

CUSTOMER(客户名称)	新大陆
CS P/N(客户机种)	N950
PART NAME(品名)	WIFI
FREQUENCY(频率)	2400-2500MHz, 5150-5850MHz。
ZTX NO.(物料编号)	F.00000509
DATE(日期)	2022-9-9

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
		胡小良	王而栋	



福州中天迅通信技术有限公司

ZHONGTIAN XUN Communication Technology Co.,Ltd.

总部地址:深圳市宝安区石岩街道石龙大道 34 号 (原腾达工业园) 邮编: 518000

福州地址: 福建省福州市仓山区金山工业区桔园洲园 45 号楼 2 层 SC02 单元 邮编: 350000

电话: 0591-83582969

传真: 0591-83583660

<http://www.chinaztx.com>

ANTENNA SPECIFICATION

CUS P/N : N950 WIFI

ApplicationDate:Sep,9,2022

Rev: R:A2

ZTX P/N : N950 WIFI

Editor:

Page 2 of 14

Revision history

版本	日期	状态
A1	2022-9-9	规格书制定。



ANTENNA SPECIFICATION

CUS P/N : N950 WIFI

ApplicationDate:Sep,9,2022

Rev: R:A2

ZTX P/N : N950 WIFI

Editor:

Page 3 of 14

Index

	<i>Revision history</i>	
1.	<i>Test equipment</i>	4
2.	<i>Antenna test data</i>	5~11
2-1	<i>VSWR</i>	5
2-2	<i>Antenna passive test</i>	6
2-3	<i>3D radiation drawing</i>	7
2-4	<i>Active test data</i>	8~9
2-5	<i>Matching circuit</i>	10
2-6	<i>Environment treatment</i>	11
3.	<i>Mechanical Specification</i>	12
4.	<i>Size report</i>	13
5.	<i>Salt-Spray test</i>	14
6.	<i>Environment Characteristic</i>	14
7.	<i>The packing way</i>	14



ANTENNA SPECIFICATION

CUS P/N : N950 WIFI

ApplicationDate:Sep,9,2022

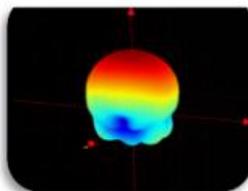
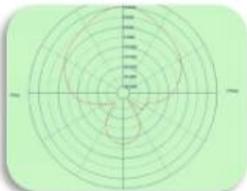
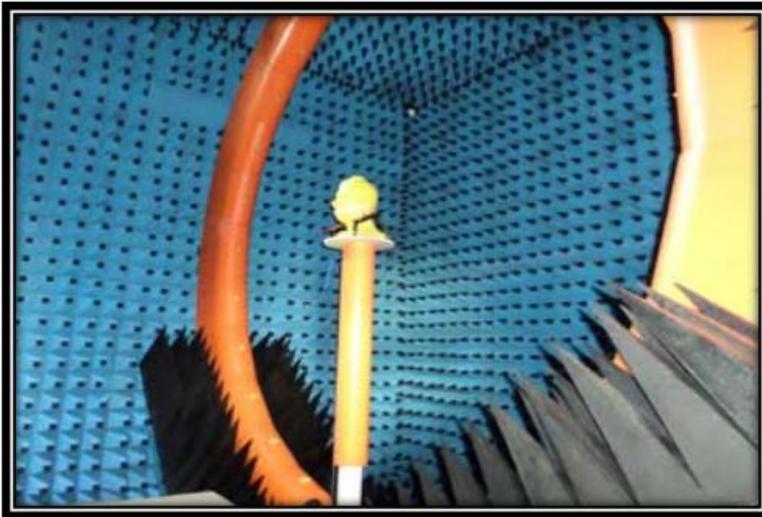
Rev: R:A2

ZTX P/N : N950 WIFI

Editor:

Page 4 of 14

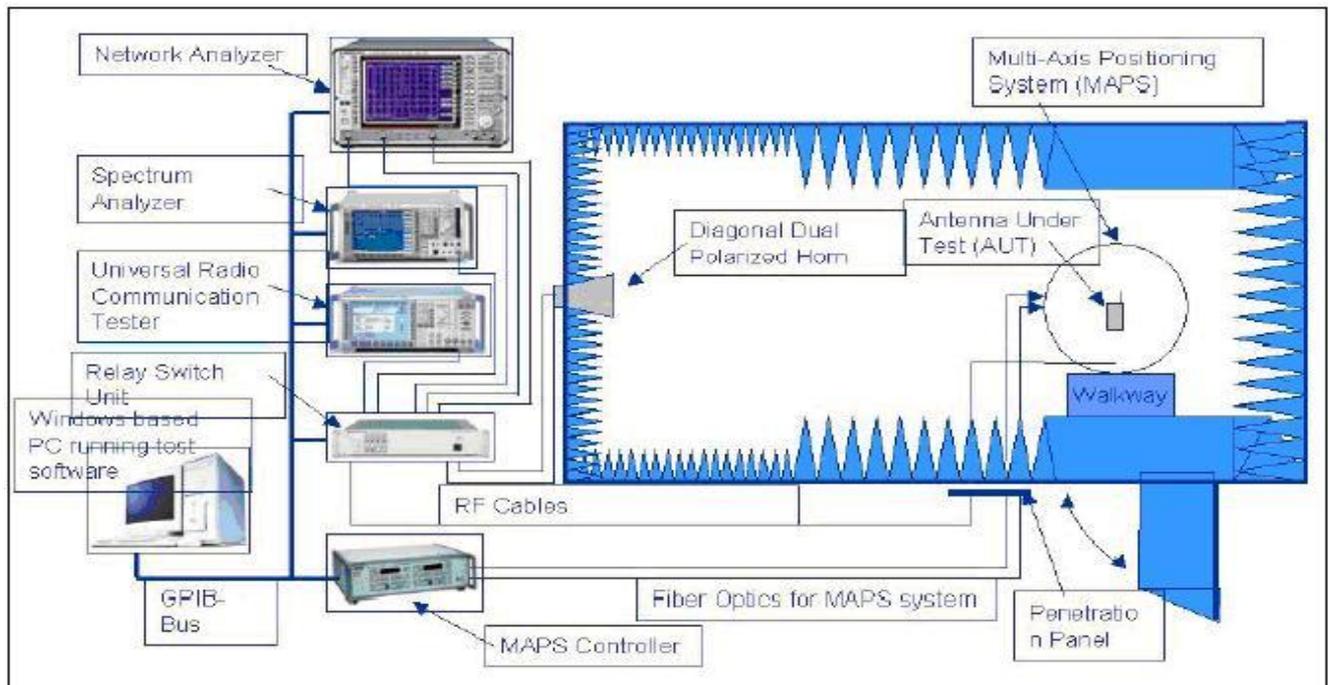
1. Test equipment



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 within 0.4-6G.



ANTENNA SPECIFICATION

CUS P/N : N950 WIFI

ApplicationDate:Sep,9,2022

Rev: R:A2

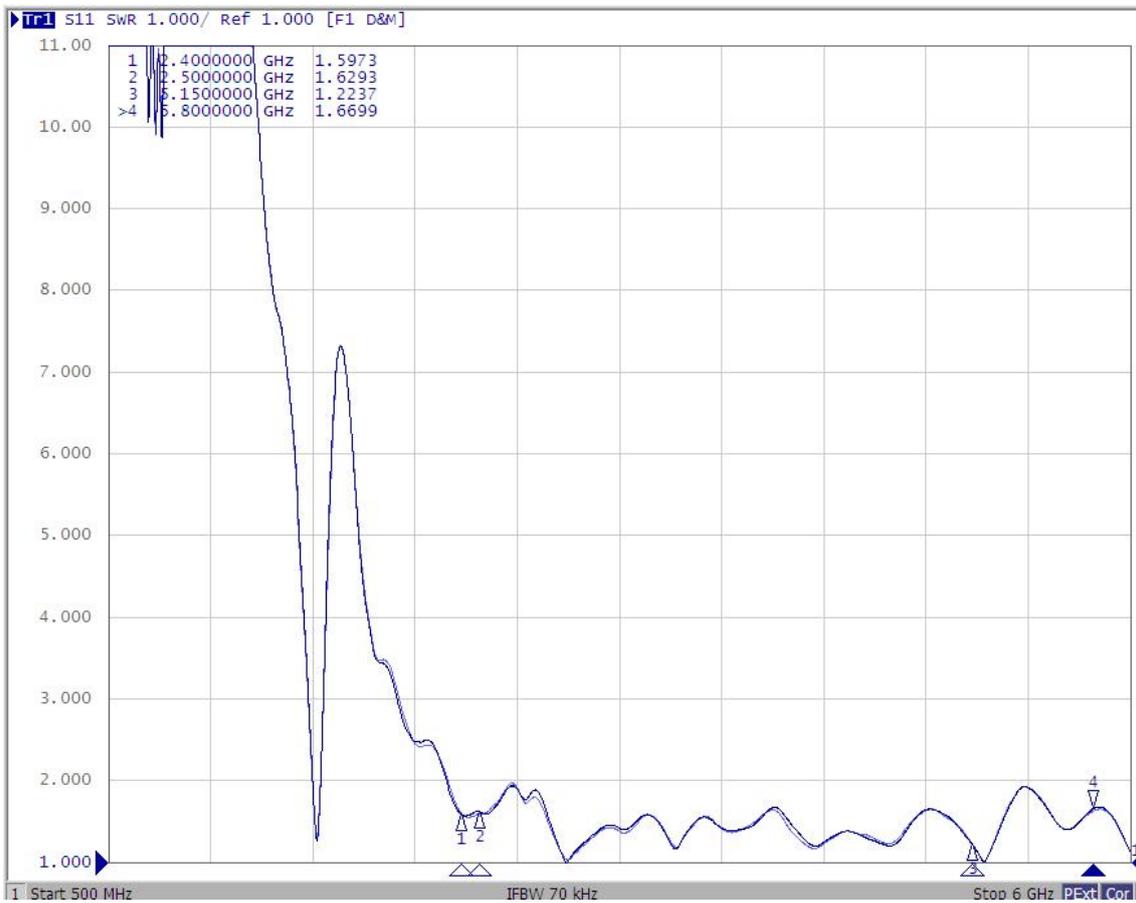
ZTX P/N : N950 WIFI

Editor:

Page 5 of 14

2. Antenna test data

2-1 VSWR



ANTENNA SPECIFICATION

CUS P/N : N950 WIFI

ApplicationDate:Sep,9,2022

Rev: R:A2

ZTX P/N : N950 WIFI

Editor:

Page 6 of 14

2-2 Antenna passive test

chNo	Freq (MHz)	Gain (dBi)	Efficiency_Pcent	chNo	Freq (MHz)	Gain (dBi)	Efficiency_Pcent
1	2400	0.315195	42.35424	16	5350	-0.57378	34.08853
2	2410	0.456693	43.76952	17	5400	-0.42462	35.16685
3	2420	0.837307	45.10086	18	5450	-1.06229	30.20873
4	2430	0.703193	44.5147	19	5500	-1.15095	32.39089
5	2440	0.320372	42.9824	20	5550	-0.05744	30.56973
6	2450	0.427159	44.19127	21	5600	1.006023	30.55984
7	2460	0.337641	44.42312	22	5650	1.352835	32.24879
8	2470	0.353612	45.87617	23	5700	0.735721	32.62423
9	2480	0.359295	44.31366	24	5750	-1.22719	30.76339
10	2490	0.371114	44.51974	25	5800	-0.13736	31.43563
11	2500	0.716495	46.34328	26	5850	0.080963	31.05619
12	5150	-0.3302	30.6478				
13	5200	-0.0176	30.90572				
14	5250	0.821039	35.05076				
15	5300	-0.76602	32.34756				



ANTENNA SPECIFICATION

CUS P/N : N950 WIFI

ApplicationDate:Sep,9,2022

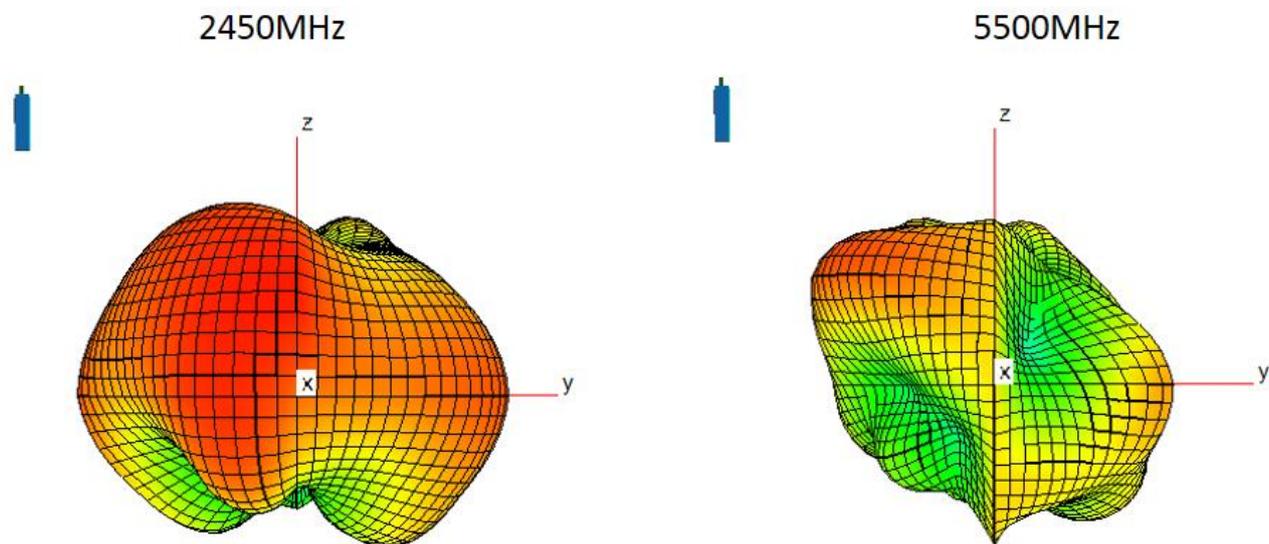
Rev: R:A2

ZTX P/N : N950 WIFI

Editor:

Page 7 of 14

2-3 3D radiation drawing



ANTENNA SPECIFICATION

CUS P/N : N950 WIFI

ApplicationDate:Sep,9,2022

Rev: R:A2

ZTX P/N : N950 WIFI

Editor:

Page 8 of 14

2-4 Active test data 11-200L 模块

2.4G 802.11g	channel	1	7	13
	TRP	13.33	14.15	13.55
	TIS	-70.83	-71.37	-70.49



ANTENNA SPECIFICATION

CUS P/N : N950 WIFI

ApplicationDate:Sep,9,2022

Rev: R:A2

ZTX P/N : N950 WIFI

Editor:

Page 9 of 14

1-200E 模块

2.4G 802.11g	channel	1	7	13
	TRP	11.26	11.04	11.34
	TIS	-69.40	-70.58	-70.31
5G 802.11a	channel	36	100	161
	TRP	8.78	9.82	9.36
	TIS	-68.05	-65.85	-66.83



ANTENNA SPECIFICATION

CUS P/N : N950 WIFI

ApplicationDate:Sep,9,2022

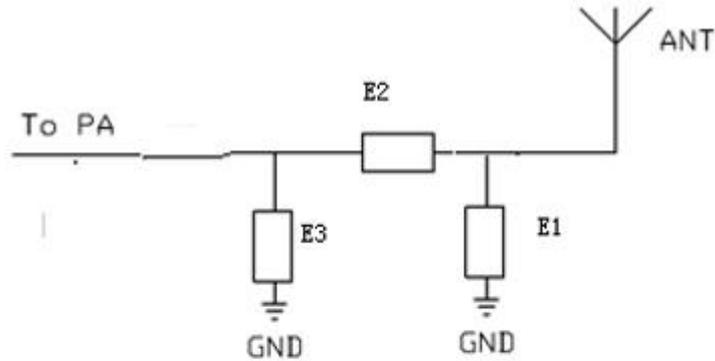
Rev: R:A2

ZTX P/N : N950 WIFI

Editor:

Page 10 of 14

2-5 Matching circuit



匹配说明	
E1	NC
E2	0Ω
E3	NC



ANTENNA SPECIFICATION

CUS P/N : N950 WIFI

ApplicationDate:Sep,9,2022

Rev: R:A2

ZTX P/N : N950 WIFI

Editor:

Page 11 of 14

2-6 Environment treatment



ANTENNA SPECIFICATION

CUS P/N : N950 WIFI

ApplicationDate: Sep,9,2022

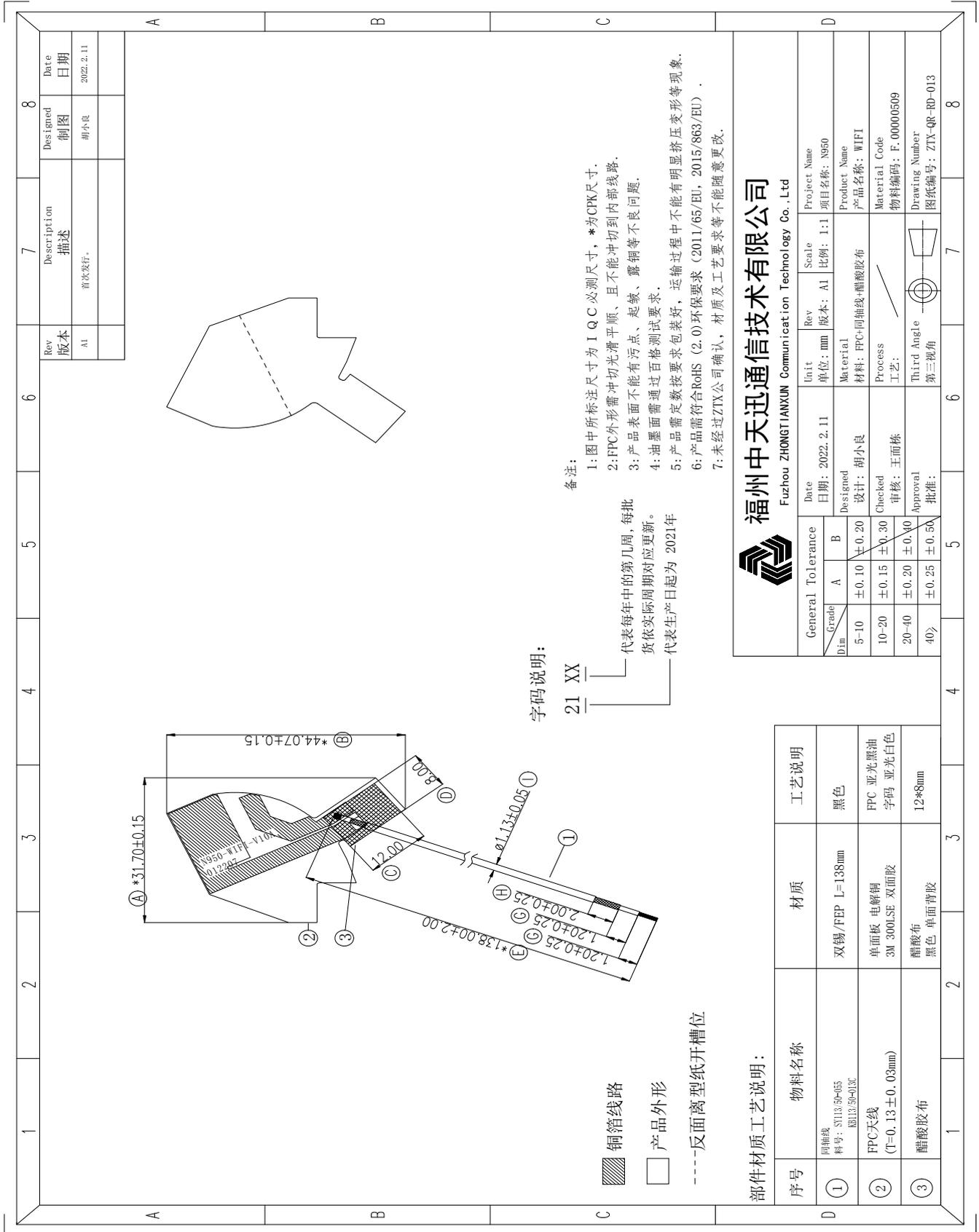
Rev: R:A2

ZTX P/N : N950 WIFI

Editor:

Page 12 of 14

3. Mechanical Specification



福州中天迅通信技术有限公司
Fuzhou ZHONGTIANXUN Communication Technology Co., Ltd

序号	物料名称	材质	工艺说明
①	同轴线 料号: ST13.5*0.05 B13.5*0.13C	双锡/FEP L=138mm	黑色
②	FPC天线 (T=0.13±0.03mm)	单面板 电铸铜 3M 300LSE 双面胶	FPC 亚光哑油 字符 亚光白色
③	醋酸胶布	醋酸布 黑色 单面背胶	12*8mm

General Tolerance	Date	Unit	Rev	Scale	Project Name
Grade	日期: 2022.2.11	单位: mm	版本: A1	比例: 1:1	项目名称: N950
A	Designed	Material			产品名称: WIFI
B	设计: 胡小良	材料: FPC+同轴线+醋酸胶布			Material Code
5-10	Checked	工艺: 王面栋			物料编码: F.00000509
10-20	审核: 王面栋	Third Angle			Drawing Number
20-40	批准:	第三视角			图纸编号: ZTX-QR-RD-013
40>					

字母说明:
21 XX
代表每年中的第九周, 每批
货依实际周期对应更新。
代表生产日期起为 2021年

- 备注:
- 1: 图中所标注尺寸为 IQC 必测尺寸, *为CPK尺寸.
 - 2: FPC外形需冲切光滑平顺, 且不能冲切到内部线路.
 - 3: 产品表面不能有污点、起皱、露铜等不良问题.
 - 4: 油墨面需通过百格测试要求.
 - 5: 产品需按客户要求包装好, 运输过程中不能有明显挤压变形等现象.
 - 6: 产品需符合RoHS (2.0) 环保要求 (2011/65/EU, 2015/863/EU).
 - 7: 未经过ZTX公司确认, 材质及工艺要求等不能随意更改.

ANTENNA SPECIFICATION

CUS P/N : N950 WIFI

ApplicationDate:Sep,9,2022

Rev: R:A2

ZTX P/N : N950 WIFI

Editor:

Page 13 of 14

4. Size report

5. Salt-Spray test

6. Environment Characteristic

NO.	ITEM	TEST CONDITION	SPECIFICATION
4-1	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.
4-2	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.



ANTENNA SPECIFICATION

CUS P/N : N950 WIFI

ApplicationDate:Sep,9,2022

Rev: R:A2

ZTX P/N : N950 WIFI

Editor:

Page 14 of 14

7.The packing way

福州中天迅通信技术有限公司 Fuzhou ZHONGTIANXUN Communication Technology Co.,Ltd		包装规范	
产品名称	产品型号	工序序号/名称	文件编号
WIFI	N950	包装	ZTX-QD-WI-023
<p>仪器校准及要求:</p> <ol style="list-style-type: none"> 测试设备必须接地; 重新连接接口后或连接测试不稳定时,需对仪器进行校正; 测试产品时保证天线悬空,并远离人体或金属器件30cm以上; 			
<p>作业方法&作业参数 (自检该工序作业合格后,方能流入下一道工序)</p> <p>取料袋袋 → 装箱贴标签 → 装箱 → 贴外箱标签 附报告 → 封箱</p> <ol style="list-style-type: none"> 确认数量50pcs产品橡皮筋包扎; 将50pcs产品装入(240*160mm) PE开口袋中,贴小标签,填写产品名称、物料号、数量、周期等信息; 每5袋装入(330*230mm) PE封口袋装好(250PCS)的PE袋袋,贴小标签,填写产品名称、物料号、数量、周期等信息; 装箱:纸箱规格(45*32.5*21cm),每箱装(5000pcs)尾数除外,并附手写检验报告一份; 标签贴于外箱的右上角,外标签内容(含:企业名称、供应商代码、客户规格号,生产周期,生产批次包装数量,供应商代码,内附检验报告,ROHS等); 将贴好标签的箱子用胶纸以“工”字型封箱; 			
<p>操作防护要求:</p> <ol style="list-style-type: none"> 作业人员需带手套进行作业,(特殊产品带棉手套); 检测过程中检测产品做到轻拿轻放; 操作测试治具时,严格按照操作规范使用,避免伤手; 			
<p>6S要求:</p> <ol style="list-style-type: none"> 保持检测现场台面整洁,无尘、水、油污; 物料摆放整齐,标识清楚; 			
<p>注意事项: 1. 客户物料编码和数量是否正确,标签必须用机打印的 2. 内标签、外标签、出货报告、送货单内容需一致。</p> <p>3. 如是试产物料或有变更均需贴相应标识,尾数箱需贴尾数标识,内附检验报告等</p>			
物料名称	物料代码	规格	用量
PE开口袋	1. 12. 000030	240*160*0.05mm	100/袋
PE封口袋	1. 12. 000023	330*230*mm	10/袋
纸板	1. 13. 000003	42*30cm	2张/箱
纸箱	1. 12. 000086	45*32.5*21cm	1/箱
标签			
橡皮筋			
版本		修订内容	修订日期
制订		审核	批准
胡小良	易爱玲	张武民	

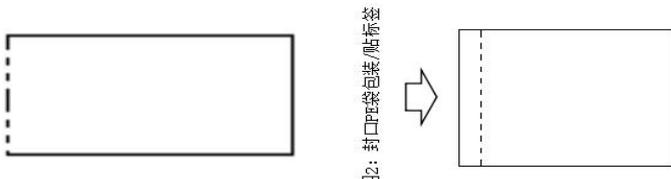


图5: 贴外箱标签/附出货检验报告