

TPV Component Specification

Basic Information / 基本信息			
TPV Part No. / 料号	Supplier Part Name / 厂商型号	Part Description / 品名描述	
	TF139 WIFI 天线组件 2.00005791		
Supplier Name / 厂商名称	TPV Vendor Code / 厂商代码	Manufacturing Location / 制造产地	
深圳市中天迅通信技术股份有限公司	3636101	深圳	
Safety Parts / 安规零件	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Net Weight / 净重(g)	g

Environmental Guarantee / 环境保证
<p>1. All raw materials of supplied parts shall met TPV latest version standard (RDEMS-01) and the requirement of regional or country laws and ordinances. 料件之所有原材料必须符合 TPV 环境物质管理最新版本标准(RDEMS-01)及销售国家、地区的法律法规及机型申请适用之条例。</p> <p>2. All raw materials of supplied parts shall comply below requirements (mark “√” in the “□” when needed). 料件之所有原材料必须符合以下所列 “□” 中打 “√” 项目的环保要求：</p> <p><input type="checkbox"/> HF: Low Halogen / 低卤 (氯 Cl <900ppm, 溴 Br<900ppm, Cl+Br<1500ppm)</p> <p><input checked="" type="checkbox"/> RP: Not contained any red phosphorus/无红磷：不含任何红磷</p> <p><input type="checkbox"/> VOC: 挥发性有机物(According TPV standard RDEMS-01) /(依照 TPV RDEMS-01 标准)</p>

Important Notice / 重点说明
<p>1. Any specification change for component, especially following items: Raw Material, Process, Tooling, Factory, Label, halftone, and any engineering changed of production, should be approved by TPV. 零件的任何变更，尤其原材、制程、模具、产地、标识、网版、以及任何生产之变更，必须得到 TPV 之承认。</p> <p>2. Any engineering change for component should be in version record, supplier should provide management information for old version parts to TPV if required. 任何零件之工程变更必须有版本记录，如需要，厂商必须提供库存之旧料管理信息状况。</p> <p>3. Safety parts should be ensured that all safety certificate is complete and in the period of validity. Any change of safety certificate should be noticed to TPV timely and phased-in after approved by TPV. 安规零件，须保证各项安规证书齐全且在有效期内。安规证书等任何变更必须及时报备 TPV，且必须得到 TPV 认可后导入。</p>

Supplier Information / 厂商信息					
Prepared 承办	赖宁平	Checked 确认	刘刚	Approved 核准	邹国华
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SPECIFICATION

SHEET FOR APPROVAL

(Revision: R: A0)

CUSTOMER (客户名称)	冠捷	
CS P/N (客户机种)	XDS-1078-A12	TF139
PART NAME (品名)	WIFI 天线组件	L=220mm
FREQUENCY (频率)	2.4~2.5GHz+5.15~5.85GHz	
ZTX NO. (物料编号)	2.00005791	
DATE (日期)	2022-09-29	

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	QA
邹国华		赖宁平	刘刚	



深圳市中天迅通信技术股份有限公司

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ANTENNA SPECIFICATION

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Rev: R:A0

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Revision history

版本	日期	状态
A1	2022-09-29	初版



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ANTENNA SPECIFICATION

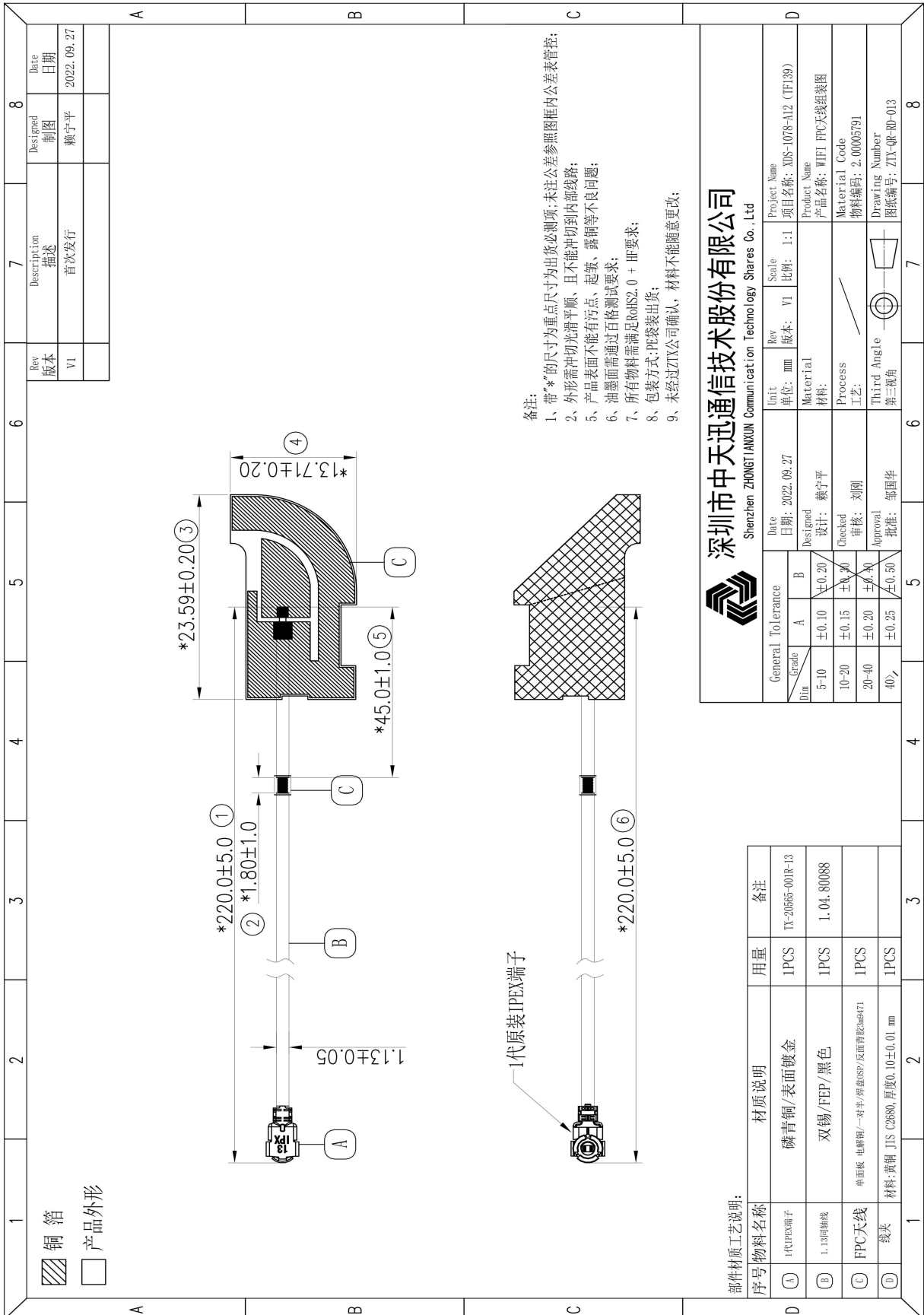
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1. Mechanical Specification

1-1 Mechanical Configuration (WIFI 天线)



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1-2 Mechanical Configuration (IPEX 端子)

Recommended P/N 20278-112R-**-**

PART No.
20278-***R-**-**

20278-*R-**-****

Cable type

- 1 Non halogen free type
- 2 Halogen free type
- 0 With notch
- 1 Without notch
- 1 Au Plating

GENERAL TOLERANCE

6 MAX.	±0.2
6 OVER MAX. 30	±0.3
30 OVER MAX. 120	±0.5
ANGLE	±2°

Confidential III C

DESIGNED BY	K.Oobayashi	DATE	Jul./13/01
CHK'D BY		DATE	
APP'D BY	K.Katabuchi	DATE	Jul./13/01
REV	ECN	BY	DATE
19	Z08056	K.O	Feb./04/08
E.K			
APP			
REV/RECORD			
R14			
SERIES No.			
CUSTOMER COPY			
PROJECTION			
SCALE			
5:1			
UNIT			
mm			
DWG. No.			
20278			
SHEET			
1/4			
REV.			
23			

IPLEX IPEX SEIKO CO.LTD.
 IPEX Business Company

TITLE: MHF PLUG ASSY (Au TYPE)

Part No. 20279-001E-**-**
 20441-001E-01

MATING

ONE-DFFD06-02 REV.1

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2. Test Report

N/A



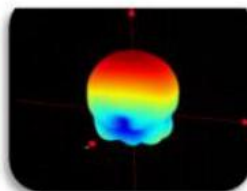
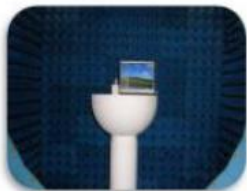
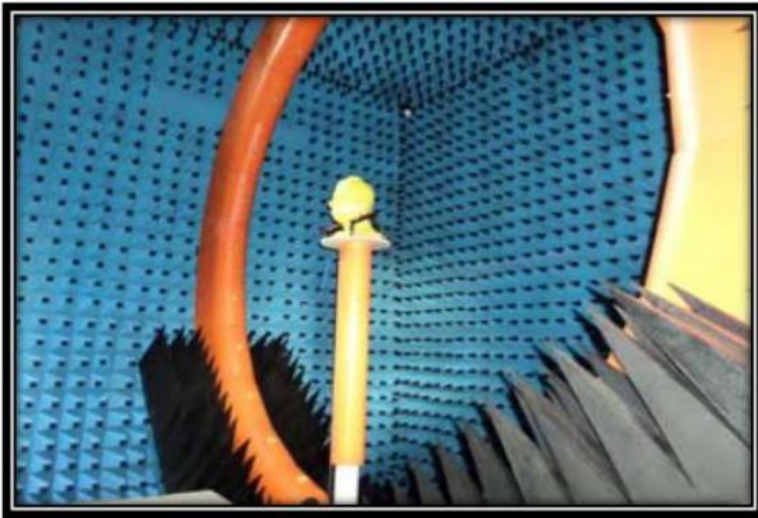
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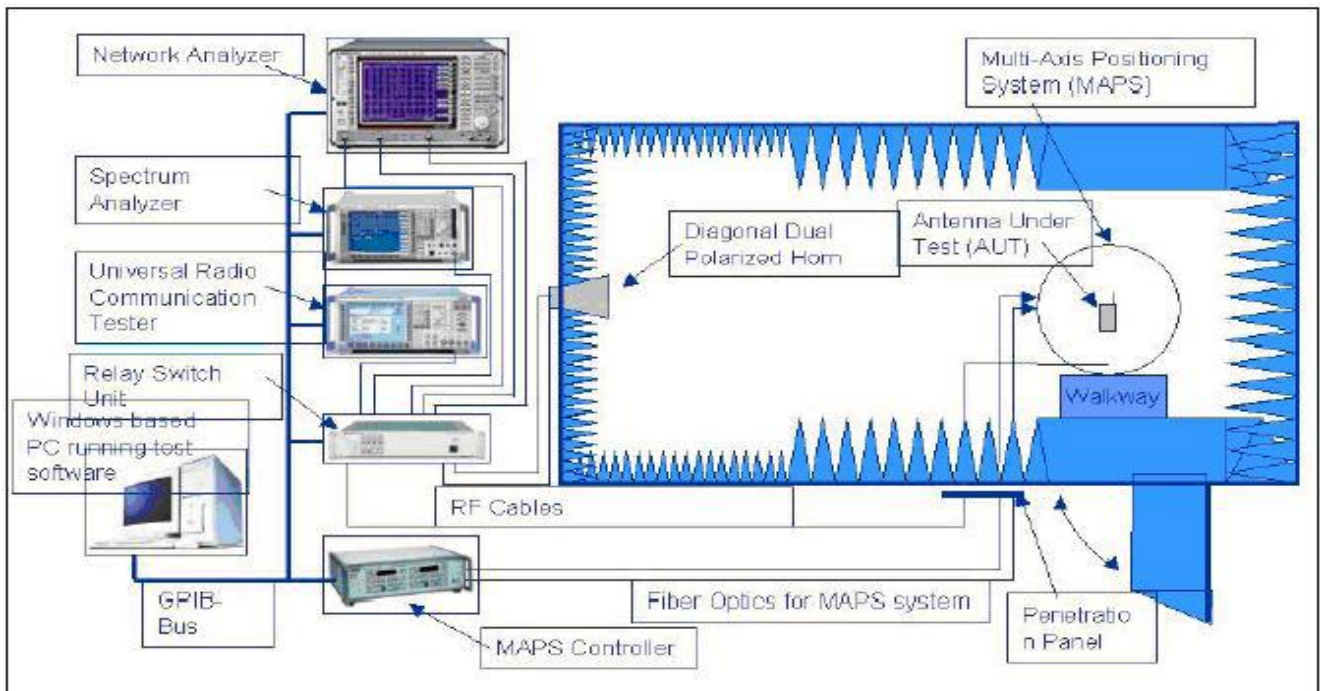
3. Test equipment



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 CTIA 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.



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4. Antenna test data

4-1 Active Test

OTA数据			
Band	信道	TRP	TIS
WIFI 11b 2.4G (11M) BW: 20M	1	11.75	-82.12
	7	12.03	-81.7
	13	12.34	-81.17
WIFI 11g 2.4G (54M) BW: 20M	1	10.91	-68.02
	7	11.14	-68.65
	13	11.21	-68.38
WIFI 11n 2.4G (MCS7) BW: 20M	1	10.01	-66.9
	7	10.12	-66.47
	13	10.22	-66.92

OTA数据			
Band	信道	TRP	TIS
WIFI 11a 5G (54M) BW: 20M	36	11.15	-69.52
	64	10.58	-70.14
	165	11.68	-70.76
WIFI 11an 5G (MCS7) BW: 20M	36	10.2	-68.66
	64	9.66	-67.49
	165	10.54	-68.9
WIFI 11ac 5G (MCS8) BW: 20M	36	9.6	-60.44
	64	9.54	-59.34
	165	8.5	-59.3

4-2 Matching circuit

N/A



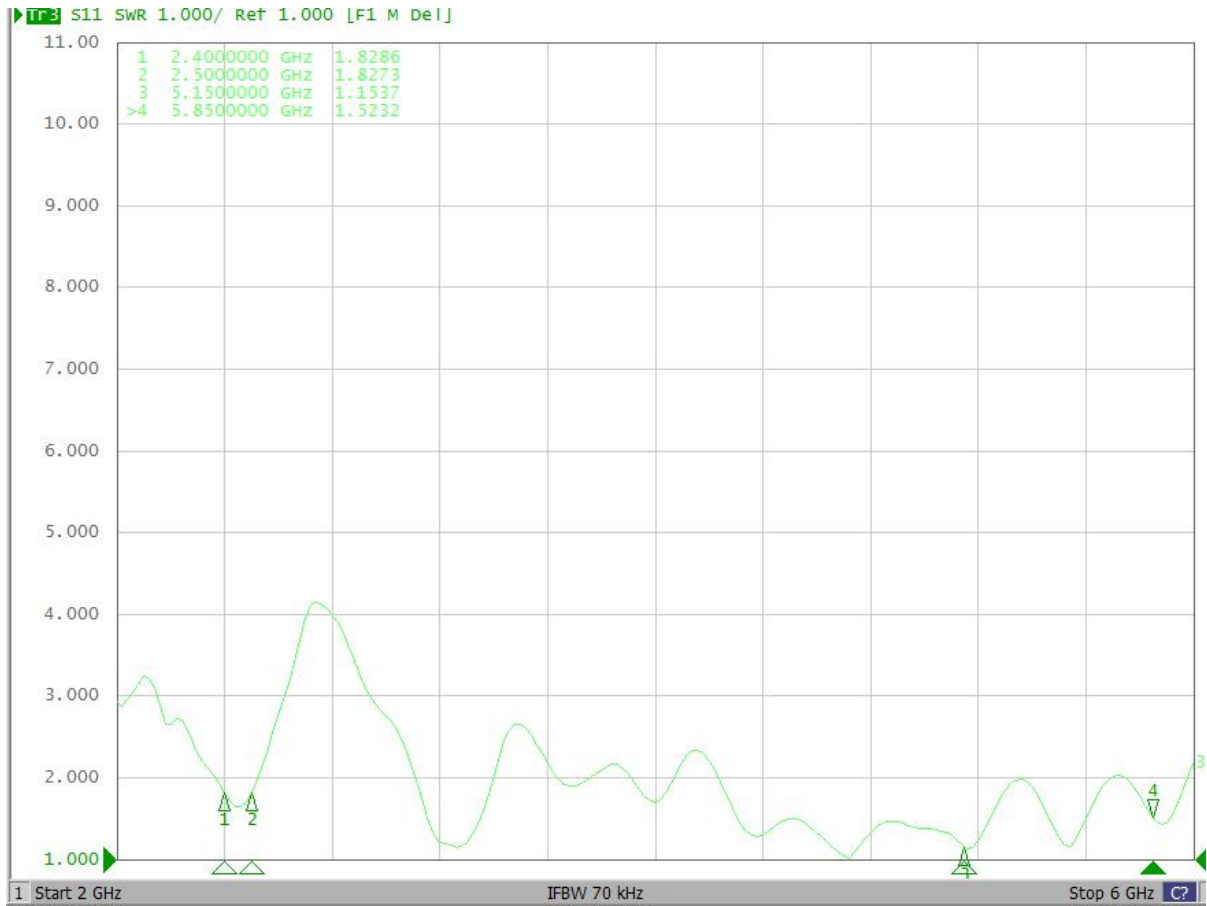
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4-3 VSWR



4-4 Passive Test

Frequency (MHz)	2400	2450	2500	5150	5250	5350	5450	5550	5650	5750	5850
Efficiency (dB)	-4.1	-3.6	-4.0	-3.9	-4.2	-4.1	-4.2	-4.3	-4.5	-4.6	-4.5
Efficiency (%)	39	43	40	41	38	39	38	37	35	35	36
Gain (dBi)	3.1	3.2	3.3	2.3	2.2	2.0	1.9	1.9	2.1	1.9	1.5

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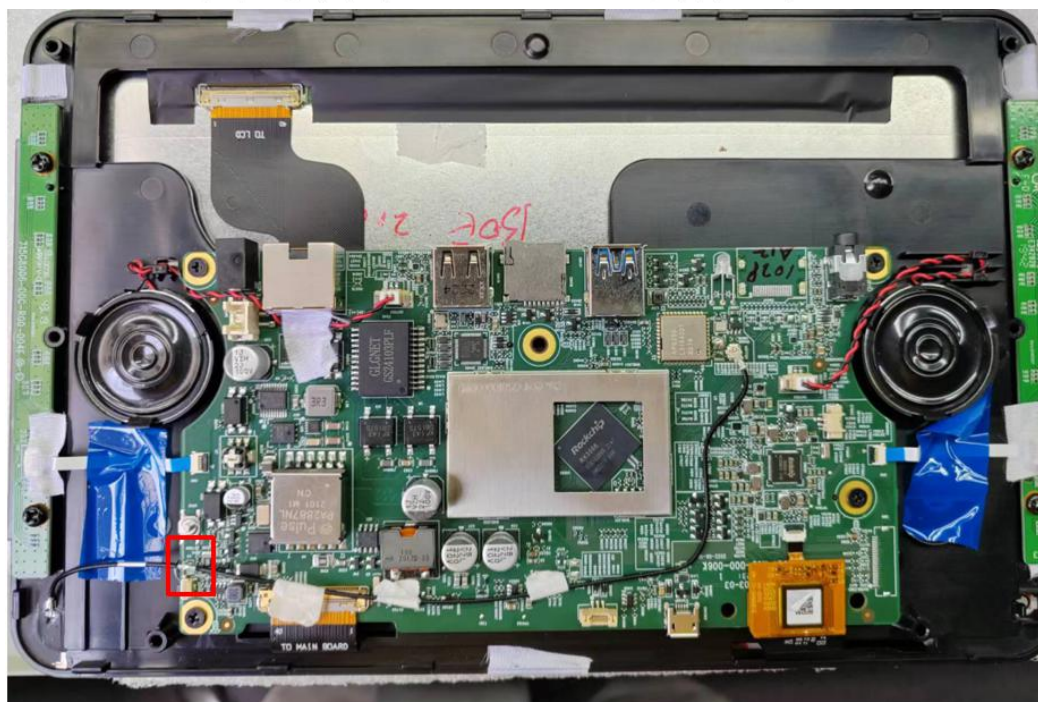
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4-5 Environment treatment



天线采用FPC+ Cable的形式



在主板第一个线扣处，cable线增加线夹与线扣接触，提升天线的一致性。

ANTENNA SPECIFICATION

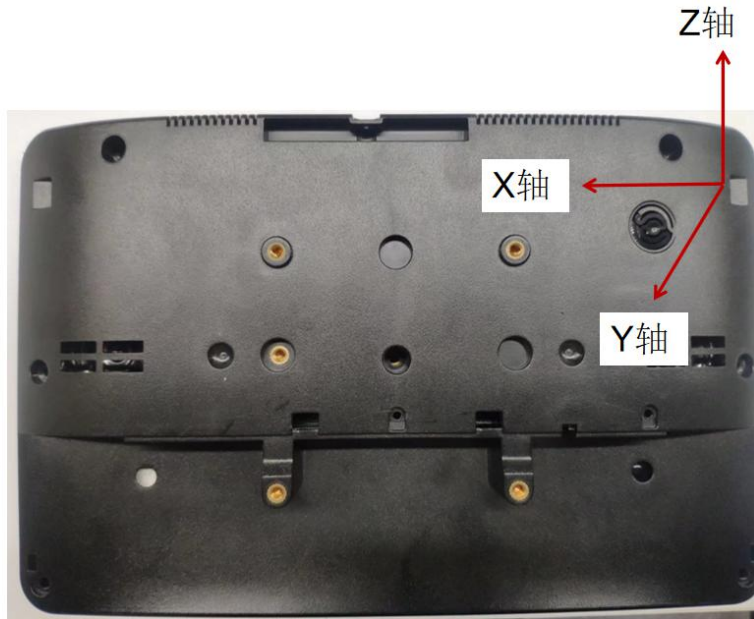
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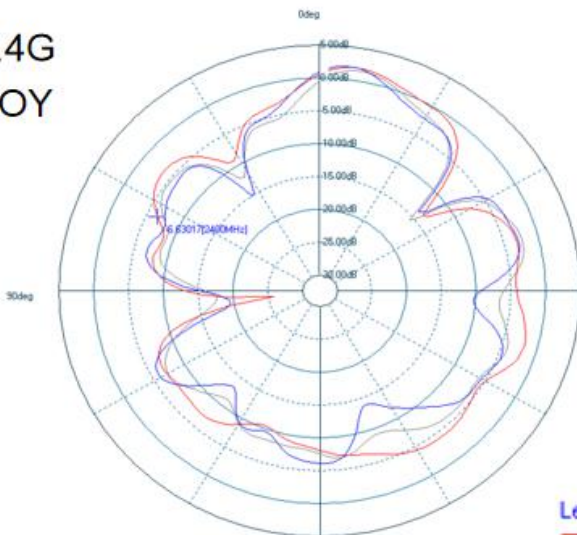
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4-6 2D/3D Radiation Pattern Results

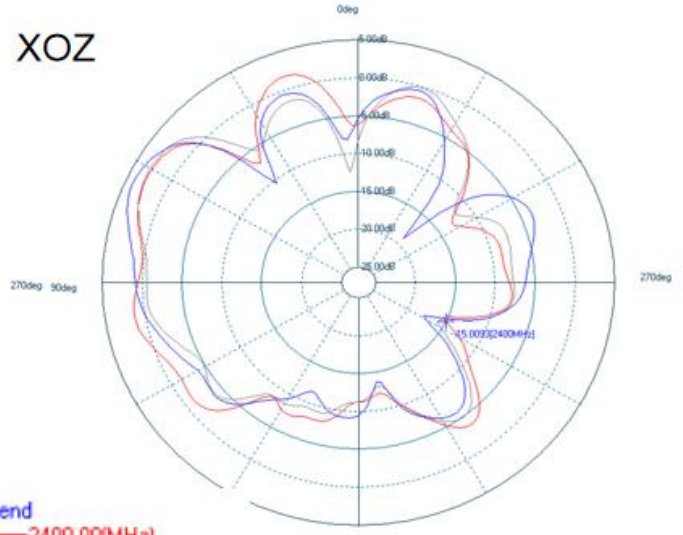
- X轴指平行于机器向左
- Y轴指平行于机器向下
- Z轴指垂直于机器向上



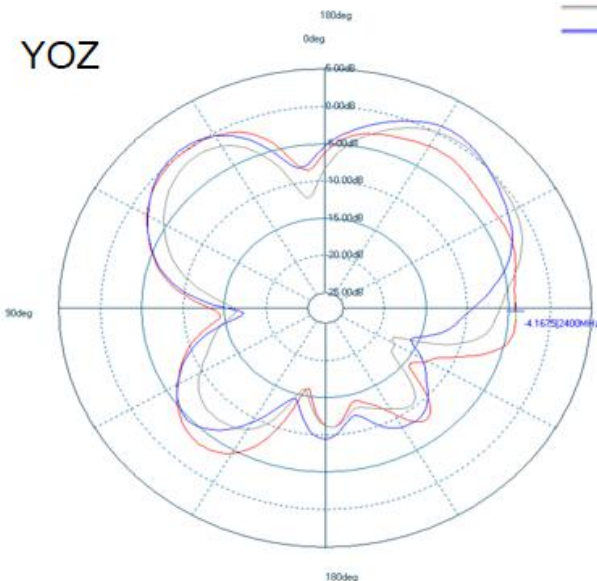
2.4G
XOY



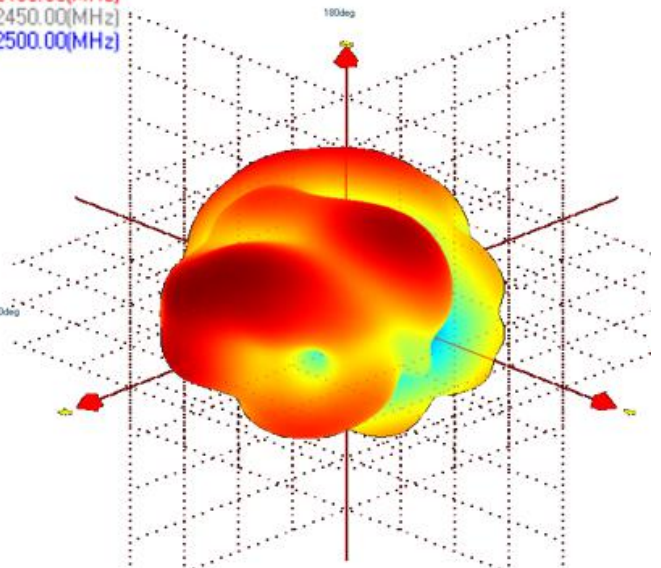
XOZ



YOZ



Legend
— 2400.00(MHz)
— 2450.00(MHz)
— 2500.00(MHz)

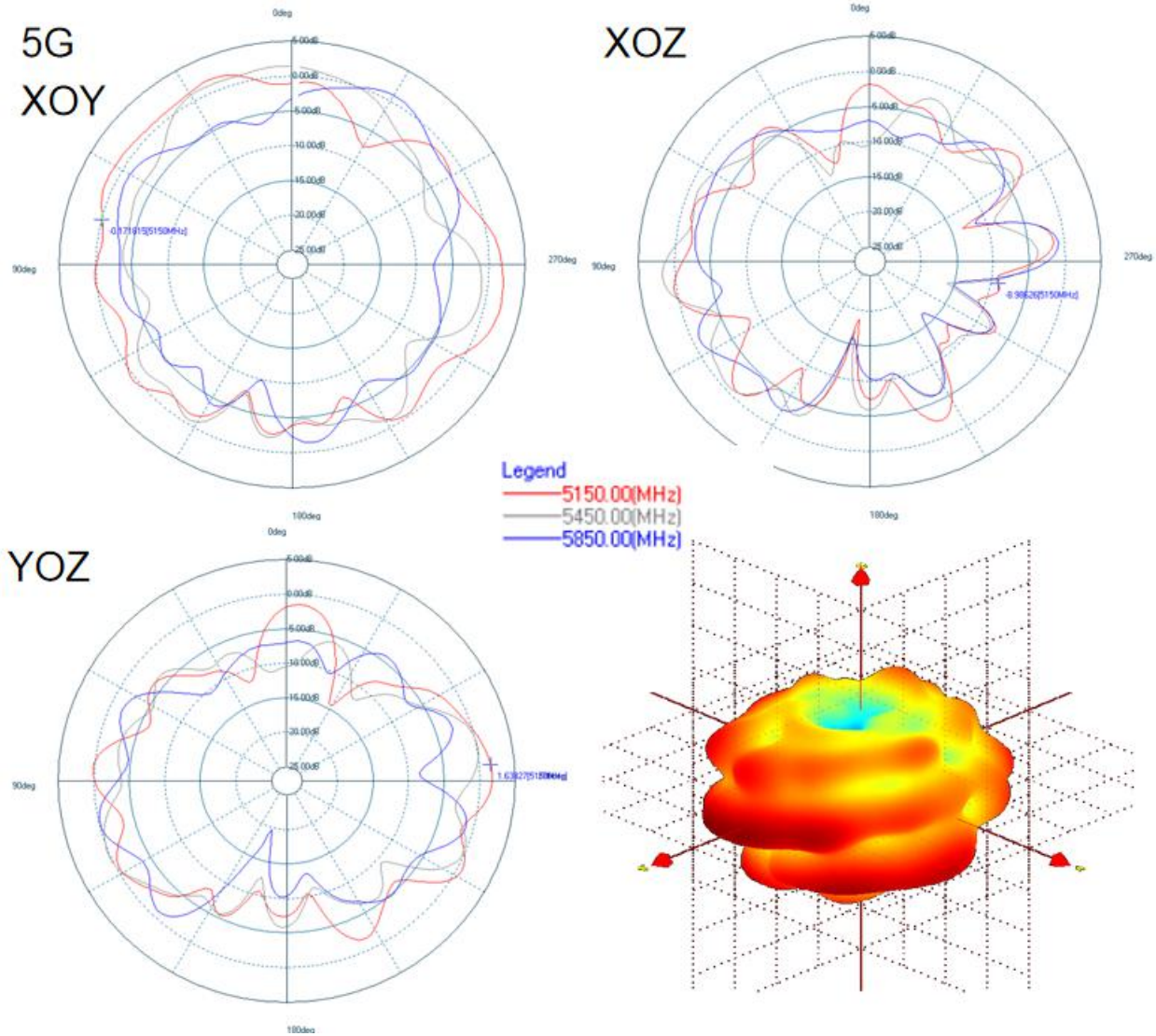


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4-7 product picture
N/A

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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.
5-2	Low Temperature/Humidity Storage Test(non operating)	1.Temperature: -30±2℃ 2.Humidity: 0%RH 3.Time:48hrs	The VSWR, Gain, Radiation Pattern must be met specifications after these test.



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6.The packing way



包装规范&作业指导书

客户名称	冠捷	产品型号	XDS-1078-A12 (TF139)		产品名称	WIFI天线组件
纸箱规格	K=K45*32.5*21CM		物料编号	1.12.000002	用量	1PCS/箱
PE封口袋	360*280*0.10mm		物料编号	1.12.000026	用量	10PCS/箱
PE开口袋	240*160*0.05mm		物料编号	1.12.000030	用量	100PCS/箱
纸板规格	2PCS/箱*2		其他物料	标签/胶带		
每箱数量	5000PCS	PE开口袋数量	50~100PCS	PE封口袋数量	500~1000PCS	
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。 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					

包装简图：

1.取（50~100pcs）产品，装袋，贴物料标签；

2.将包装好的产品装入大袋（500~1000pcs），贴物料标签；

3.将包装好的装箱（5000pcs），贴物料标签；

4.封箱。



NO	变更内容	变更人及日期
标签简图：		外箱简图：
		<p>(注意外箱标签系统的符号)</p>

制表：韦泓佳

审核：向恒锋

核准：党非非