SPECIFICATION

SHEET FOR APPROVAL

（Revision：R：A1）

	CUSTOMER	Hesung Innovation Limited	
	CS P/N	Seven feet Circulating Fan	Internal model：TD17
	PART NAME	WIFI Antenna	
	FREQUENCY	2400~2500MHz	
	ZTX NO.	K.00000029	
	DATE	2023-09-05	

CUSTOMER			
QA CHECKED	ME CHECKED	RF CHECKED	MANAGER CHECKED

Remark：

Sign：

ZHONG TIAN XUN TECHNOLOGY CO., LTD				
MANAGER CHECKED	MANAGER CHECKED	ME CHECKED	RF CHECKED	LISTER
		Lai Ningping	Wang Pei	

Shenzhen ZTX 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

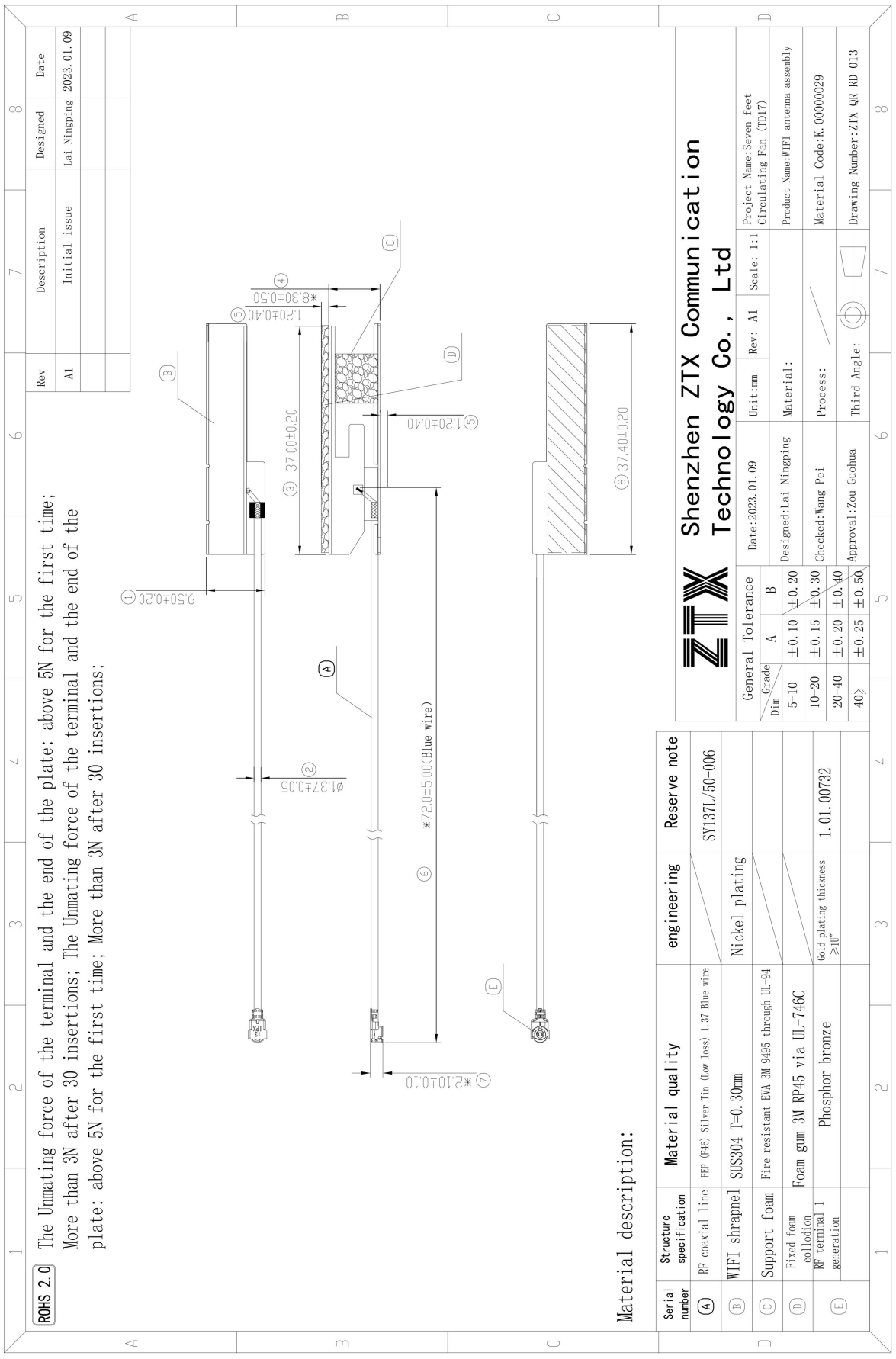
Edition	Date	State
A0	2023-09-05	The first edition

Index

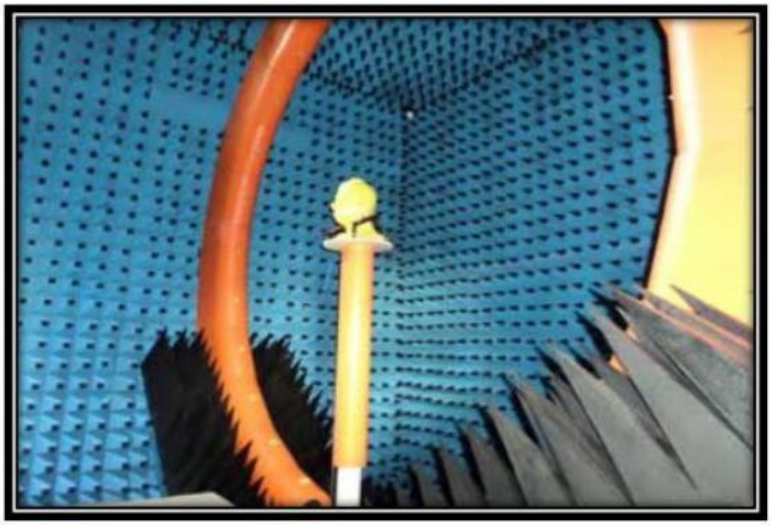
		Revision history	1
		Index	2
1		Mechanical Specification	3
	1-1	Mechanical Specification(WIFI Antenna)	3
2		Test equipment	4
3		Test Results Surmmary	5
	3-1	OTA Test	5
	3-2	Transmit Test	5
	3-3	VSWR	5
	3-4	No-source test data	6
	3-5	Environment treatment	6
	3-6	2D/3D Radiation Pattern Results	7
4		Environment Characteristic	8
5		The packing way	9

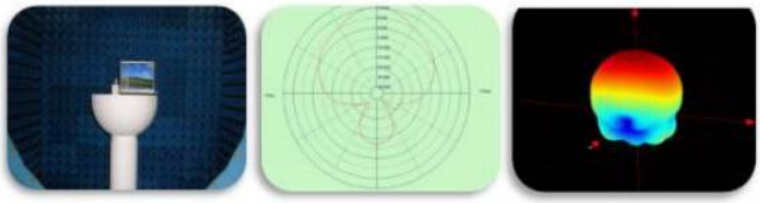
1. Mechanical Specification

1-1 Mechanical Configuration（WIFI Antenna）



2. Test equipment

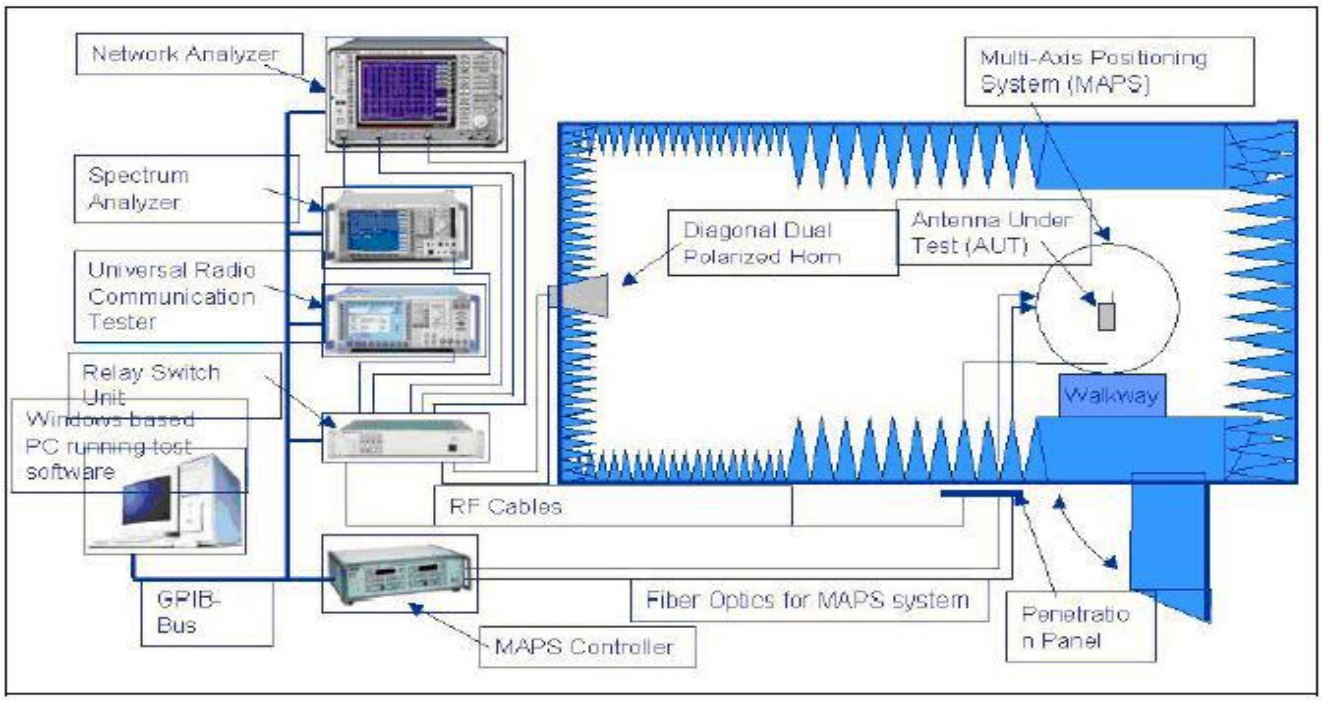




Owned 6 microwave dark room, equipped 2 sets world leading France Satimo SG24 OTA certification test systems（one in SHENZHEN, another one in Shanghai）, ETS OTA Standard test system，Blue test reverberation test system which is High repeatability, high accuracy and high resolution. It can quickly provide 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 within0.4-6G.



3.Test Results Surmmary

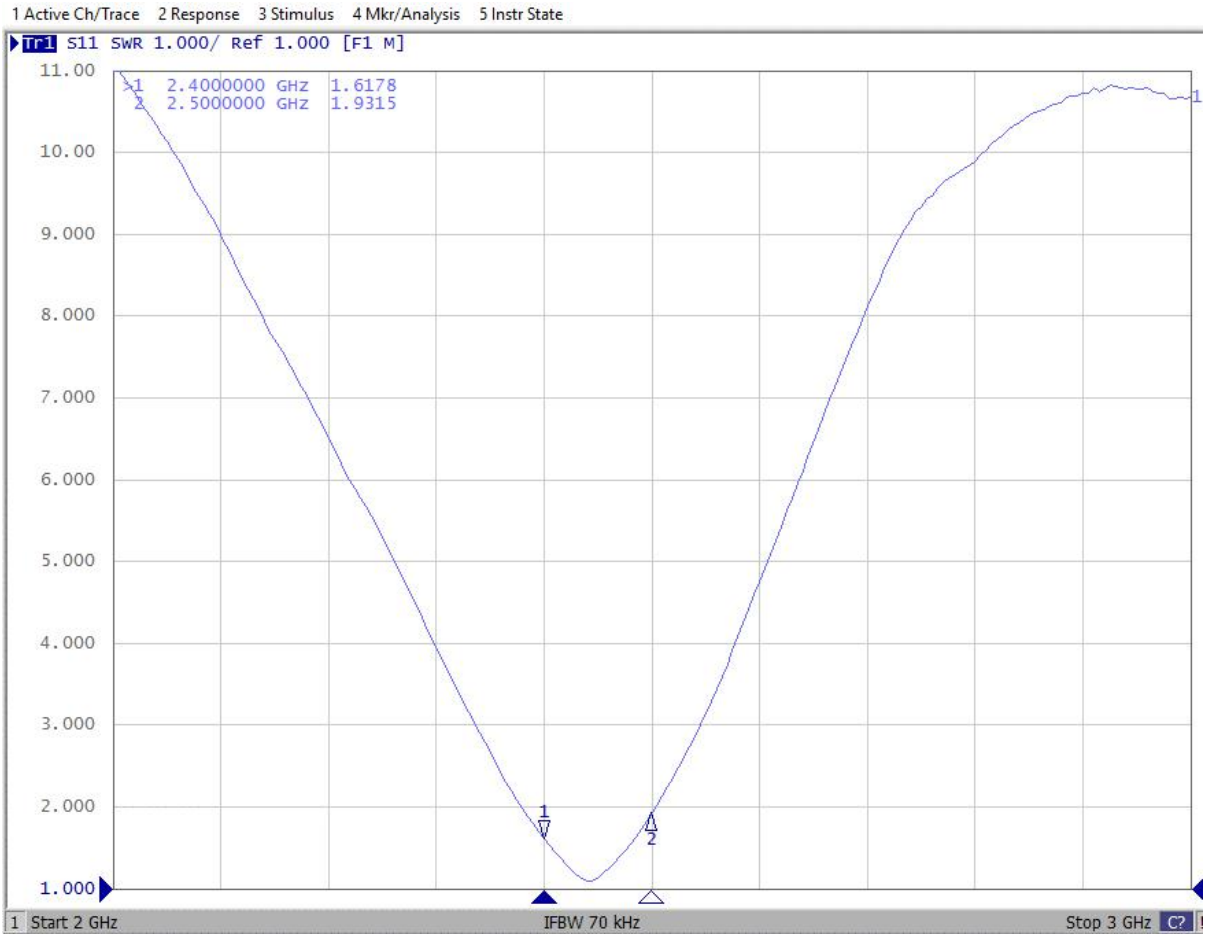
3-1 OTA Test

B			G			N		
Channels	TRP/1M	TIS/11M	Channels	TRP/6M	TIS/54M	Channels	TRP/M CS0	TIS/M CS7
1	15.09	-84.65	1	11.85	-70.46	1	11.61	-64.26
6	15.89	-84.63	6	12.74	-70.36	6	12.82	-64.58
11	15.81	-84.33	11	12.17	-70.66	11	12.77	-64.34

3-2 Transmit Test

B			G			N		
Channels	TRP/1M	TIS/11M	Channels	TRP/6M	TIS/54M	Channels	TRP/M CS0	TIS/M CS7
1	17.05	-87	1	14.23	-73	1	14.12	-66
6	17.3	-87	6	14.04	-73	6	14.28	-66
11	17.48	-87	11	14.29	-73	11	14.6	-66

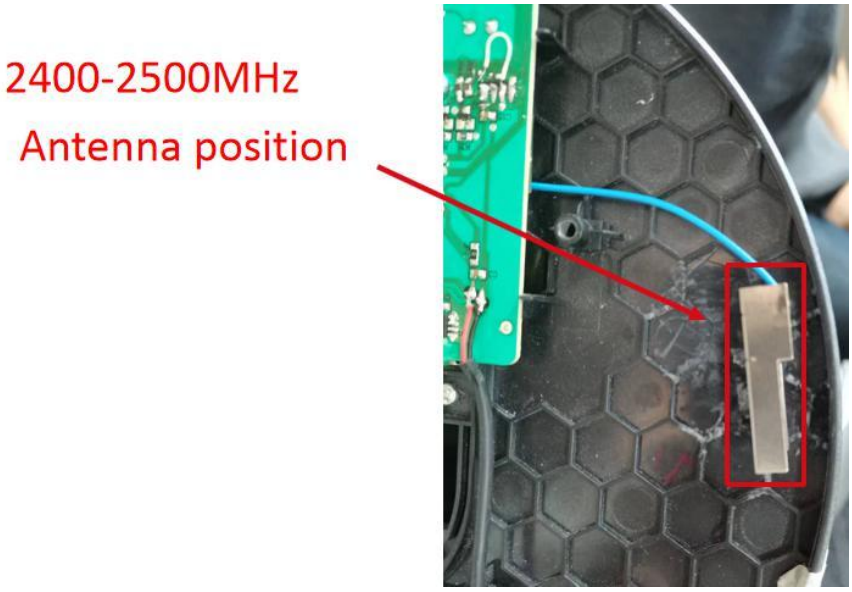
3-3 VSWR



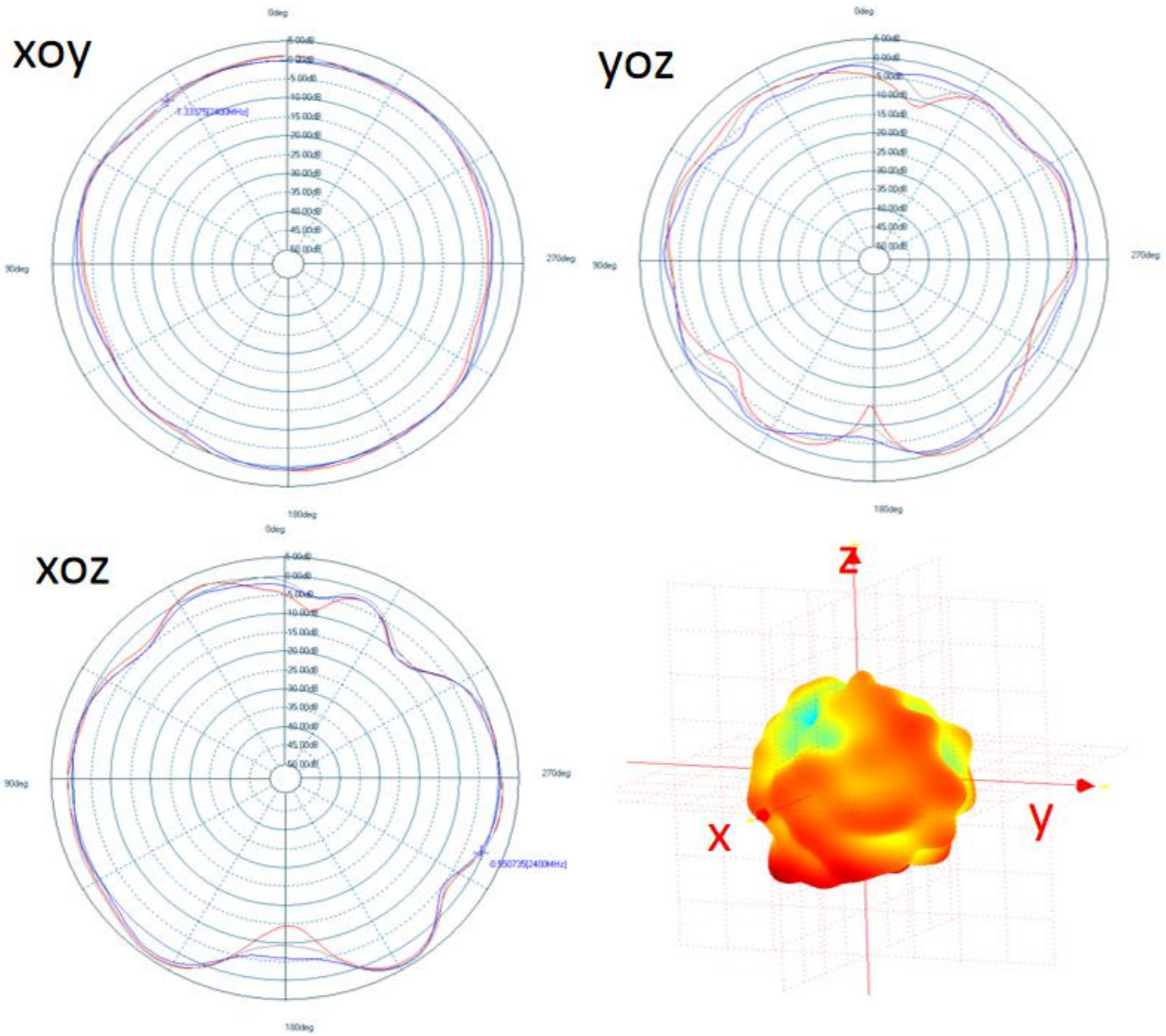
3-4 No-source test data

Frequency	Efficiency	Efficiency . dB	Gain . dB
2400M Hz	66%	-1.80	4.56
2410M Hz	68%	-1.67	4.32
2420M Hz	69%	-1.61	4.20
2430M Hz	68%	-1.67	4.41
2440M Hz	69%	-1.61	4.40
2450M Hz	68%	-1.67	4.51
2460M Hz	70%	-1.55	4.55
2470M Hz	71%	-1.49	4.53
2480M Hz	69%	-1.61	4.61
2490M Hz	68%	-1.67	4.66
2500M Hz	68%	-1.66	4.21

3-5 Environment treatment



3-6 2D/3D Radiation Pattern Results



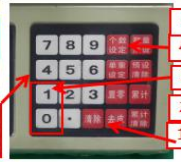
4. Environment Characteristic

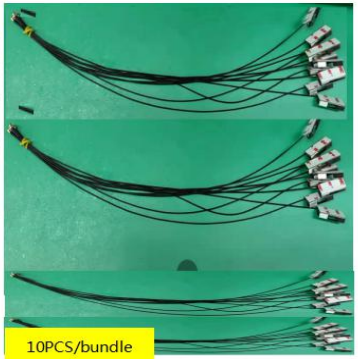
NO.	ITEM	TEST CONDITION	SPECIFICATION
4-1	High Temperature/Humidity Storage Test(non operating)	1.Temperature: +70 ±2℃ 2.Humidity: 90~95%RH 3.Time: 48hrs	No material deformation is allowed. The VSWR, Gain, Radiation Pattern must be met specifications after these test.
4-2	Low Temperature/Humidity Storage Test(non operating)	1.Temperature: -30±2℃ 2.Humidity: 0%RH 3.Time:48hrs	

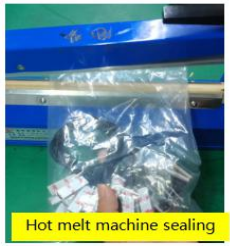
5.The packing way

working instruction

Model	product name	Process number/name	version	Post No	Document number
TD17	WIFI antenna assembly	package	A2	P01	ZTX-QD-WI-ASSY-492







Operation method and parameters (only after passing the self inspection of the operation in this process can it flow to the next process)

sample	1. Before starting the operation, it is necessary to carefully verify that the material part number is consistent with the material part number on the SOP before starting the operation;
	2. Turn on the electronic scale switch and set the weight of a single PCS;
package	3. Take 10 PCS of products that have passed the external inspection of the previous process and place them on an electronic scale to check if the display screen shows 10 (to prevent errors and omissions). Place the 1 bundle of 10 PCS products that have been counted on the desktop and gather 5 bundles of 50 PCS products. Merge them into 1 bundle and tie them tightly with rubber bands;
turnover	4. If the wire length is less than 450mm and the number of points is 50PCS/bundle, align the terminal heads and tie them tightly with rubber bands; Wire length ≥ 450mm needs to be tied, with 50pcs divided into 2 bundles and 25pcs per bundle;
	5. Take 50PCS of products and put them into PE open pockets, and then hot melt seal them as shown in Figure 3. (Adjust the gear of the hot seal machine to 5th gear, and wait for the constant temperature indicator light to automatically turn off to indicate OK) Check if the hot melt seal is OK;
	6. After sealing, place it on an electronic scale, and the weighing OK printer will automatically print one PE open pocket label, which will be attached to the PE bag;
	7. Take 4 bags of 200PCS products and put them into PE sealing bags. After pressing and sealing with sealing strips, place them on an electronic scale. The weighing OK printer will automatically print out 1 PE sealing bag label and attach it to the PE bag;
	8. Select the corresponding model in the label printing system, weigh and label it, and stick it at the center of each package. The last few bags need to be labeled with the last few labels and sent for product inspection;
	9. Place one flat card at the bottom of the outer box that has been sealed according to the "I" shape, and put 10 bags of 2000PCS products that have been bagged in the previous process into the cardboard box. Cover the top of the product with one flat card, with a total of 2 flat cards per box. Except for not many 2000PCS products that have been left in the tail box;
	10. Seal the top of the outer box according to the "I" shape and attach the corresponding label; (If less than 2000PCS of products are required to be labeled with a trailing number.)

Instrument calibration and requirements:

N/A

Operational protection requirements:

1. Operators need to wear gloves or fingertips;

2. If the finger cover is worn or dirty, it needs to be replaced in

6S requirements:

1. Keep the inspection site table clean and free of dust, water, and oil stains;

2. The materials are neatly placed and clearly marked;

2. Precautions: Weigh a bag of products and paste one label. It is prohibited to paste it in confusion, and it is strictly prohibited to label and use multiple labels for weighing a bag of products.

name	Material code	specifications	Dosage	notes
PE open pocket	1.12.000030	240*160*0.05mm	50PCS/bag	
PE sealing pocket	1.12.000026	230*330*0.10mm	200PCS/bag	
Small label paper	1.11.000134	40*25mm	1 piece/bag	

version	Revision content	Revision date	Revised by
A2	Update packaging method	2023/5/24	Cao Xianlang

Production Review	Li Daxi	quality audit	Deng Xiaohua	Engineering Approval	Dang Feifei

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