



# Material acknowledgement

product description	<b>Manufacturer:</b> Shenzhen Yusheng Communication Equipment Co., Ltd <b>Project model:</b> CWRO1G <b>Name of material:</b> <b>Specifications / Colors:</b> <b>Material code:</b> _____ <b>Sample delivery date:</b> _____ <b>Version No. :</b> _____ <b>Note:</b> (this cover needs with supplier seal)				
	<b>appendix</b> <input type="checkbox"/> sample <input type="checkbox"/> Manufacturing flow chart / 2D diagram <input checked="" type="checkbox"/> Electrical and Mechanical Property Description (Specification) <input type="checkbox"/> Full-size measurement report <input type="checkbox"/> CPK report <input type="checkbox"/> QC schedule drawing	<input type="checkbox"/> Reliability test report <input type="checkbox"/> packaging information <input type="checkbox"/> List of raw materials / RoHS & REACH & HF Report <input type="checkbox"/> Bill of Materials, MSDS <input type="checkbox"/> Environmental material questionnaire			
<b>Supplier audit</b>	Proposed: review and approval <b>(All of the above require manual signature, and printing is not allowed)</b>				
The above is filled by the supplier, the following is filled by Xiao Che Technology					
discriminate	Confirmation of the person	Confirm content	Confirm the results	Signature of confirmation	Confirmation date
Technical confirmation	ID	<input type="checkbox"/> Appearance <input type="checkbox"/> color <input type="checkbox"/> process <input type="checkbox"/> material			
	structure	<input type="checkbox"/> Material <input type="checkbox"/> dimension (including the key control dimension annotation) <input type="checkbox"/> Specification and technical requirements <input type="checkbox"/> adaptation verification			
	hardware	<input type="checkbox"/> Specification and technical requirements (including electrical performance parameters) <input type="checkbox"/> Adaptation to verify the <input type="checkbox"/> effect			
	quality	<input type="checkbox"/> RoHS materials <input type="checkbox"/> Non-RoHS materials <input type="checkbox"/> meet the requirements of REACH <input type="checkbox"/> Compliance with halogen free requirements <input type="checkbox"/> other environmental requirements <input type="checkbox"/> test standard confirmation <input type="checkbox"/> appearance <input type="checkbox"/> normative dimension <input type="checkbox"/>			



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		reliability confirmation			
<b>Final confirmation</b>	project	<input type="checkbox"/> Acknowledge the integrity of the document <input type="checkbox"/> dimension dimensions <input type="checkbox"/> Appearance <input type="checkbox"/> Electrical performance parameter <input type="checkbox"/> function <input type="checkbox"/> effect			
<b>condition of recognition:</b>	<input type="checkbox"/> formal admission <input type="checkbox"/> Limited recognition (Limited _____ PCS) <input type="checkbox"/> disallow				
<b>Distribution Department:</b>	<input type="checkbox"/> Supplier <input type="checkbox"/> Factory IQC <input type="checkbox"/> Quality <input type="checkbox"/> Project <input type="checkbox"/> After-sales <input type="checkbox"/> Customer <input type="checkbox"/> Other _____				



## Catalogue

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# 1. Overview

## 1.1 Scope of application

This requirement, provides CWR01G Antenna technical requirements and material requirements specifications.

This requirement applies to CWR01G Antenna type selection, test, and acceptance.

## 1.2 Project basic information

Antenna name:	<u>CWR01G</u>
Antenna frequency band:	BT+GPS
edition:	V0.1

# 2. Technical index requirements

## 2.1 Introduction of test items and equipment

inventory	test item	equipment
Active test	TRP,TIS	Integrated tester, microwave darkroom

## 2.2 Active Reporting

### 2.2.1 Test instructions

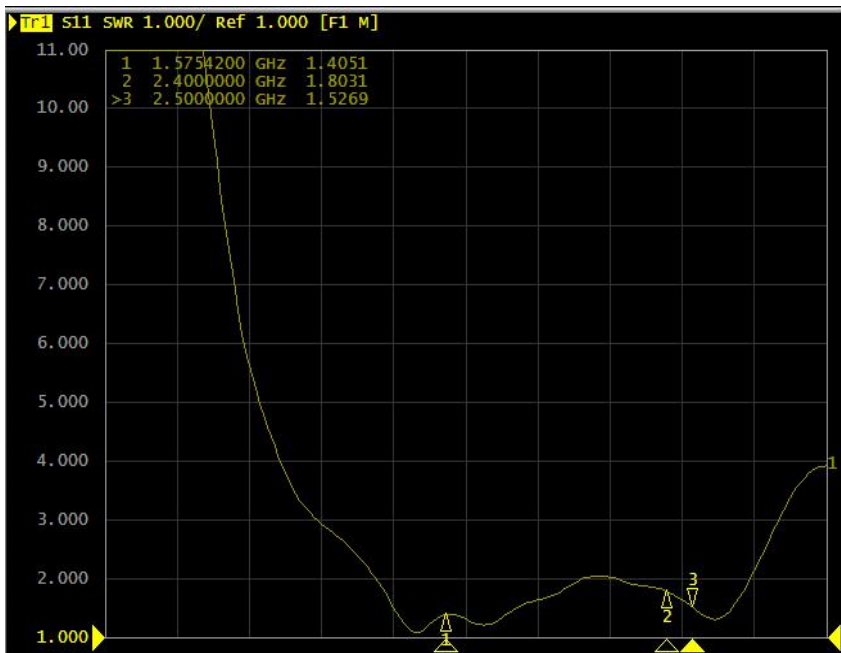
Test tools: Agilent8960 instrument, R & S CMW500, full wave far field ETS dark room, high precision positioning system and its controller and computer with automatic test program

Test environment: temperature  $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$ , humidity  $50\% \pm 15\%$

Test method: DUT is fixed in the center of the turntable with H plane, on the same horizontal line as the center of the horn antenna.

The positioning system enables the DUT to rotate in the whole sphere to satisfy the high-precision 3 D positioning. Each RF instrument and turntable controller communicate with the PC with automatic test software through the GPIB interface.

### 2.2.2 GPS / BT passive map

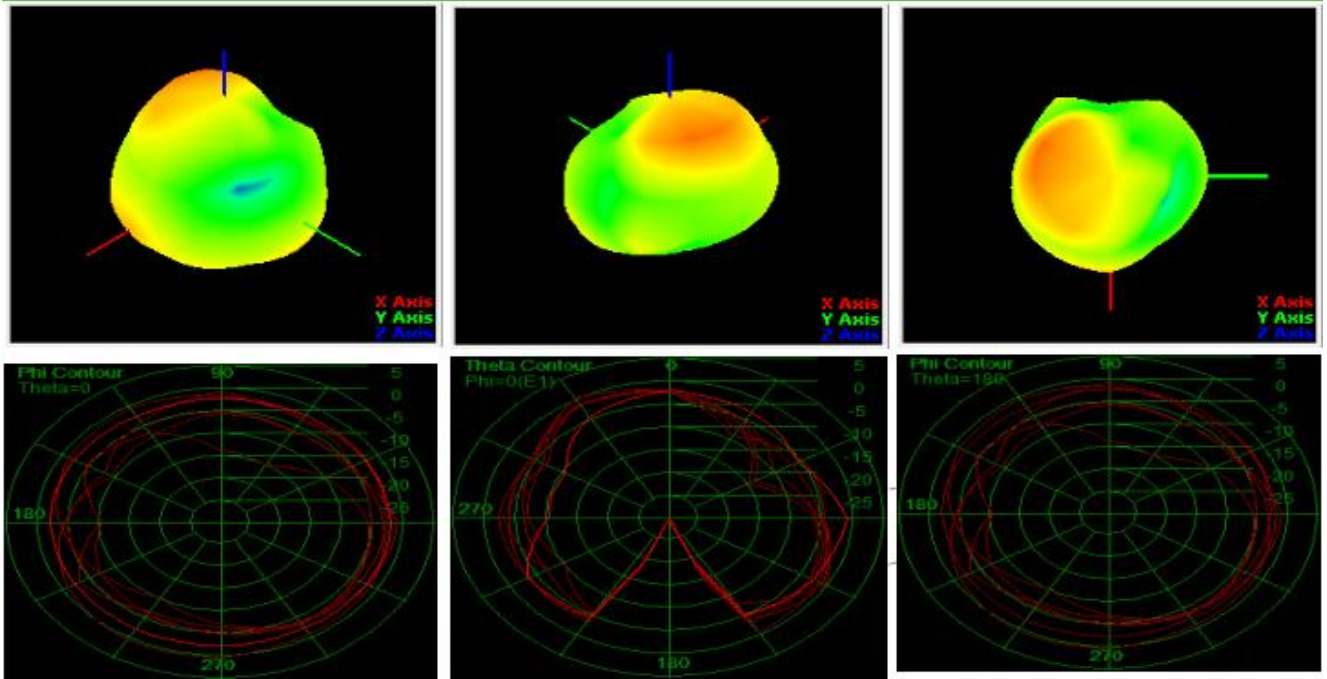


### 2.2.3 Antenna efficiency parameters test situation

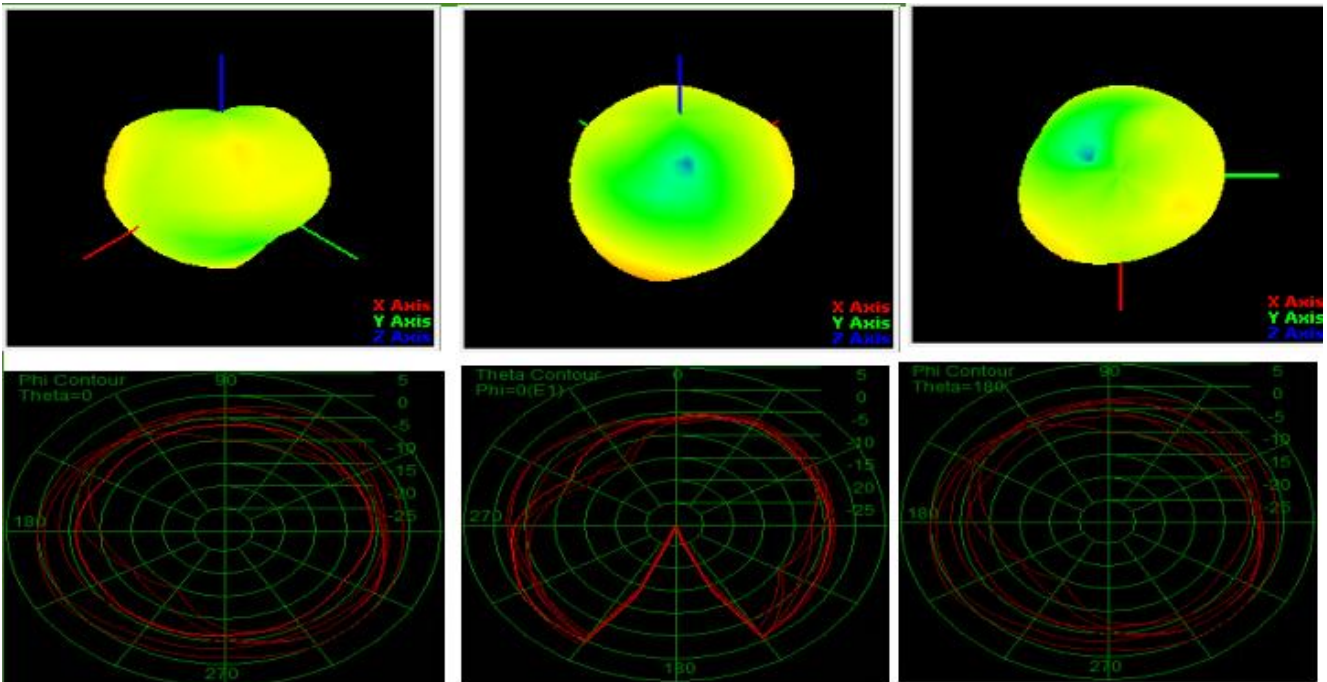
	frequency point	productiveness%	productiveness db	gain
BT Arm	2400	4%	-13.7	-6.3
	2410	5%	-13.3	-6.3
	2420	4%	-13.8	-6.1
	2430	5%	-12.8	-6.0
	2440	5%	-12.9	-5.9
	2450	6%	-11.9	-5.6
	2460	6%	-12.1	-5.6
	2470	6%	-12.4	-5.7
	2480	5%	-13.2	-6.1
	2490	4%	-13.6	-6.3
2500	4%	-14.4	-6.4	

	frequency point	productiveness%	productiveness db	gain
GPS Arm	1550	5%	-13.3	-6.2
	1555	6%	-12.5	-5.9
	1560	6%	-12.1	-5.6
	1565	7%	-11.7	-5.6
	1570	7%	-11.4	-5.6
	1575	7%	-11.3	-5.5
	1580	6%	-12.0	-5.6
	1585	6%	-11.9	-5.8
1590	5%	-12.8	-5.9	

2.2.4 1575MHZ passive direction diagram/field pattern diagram

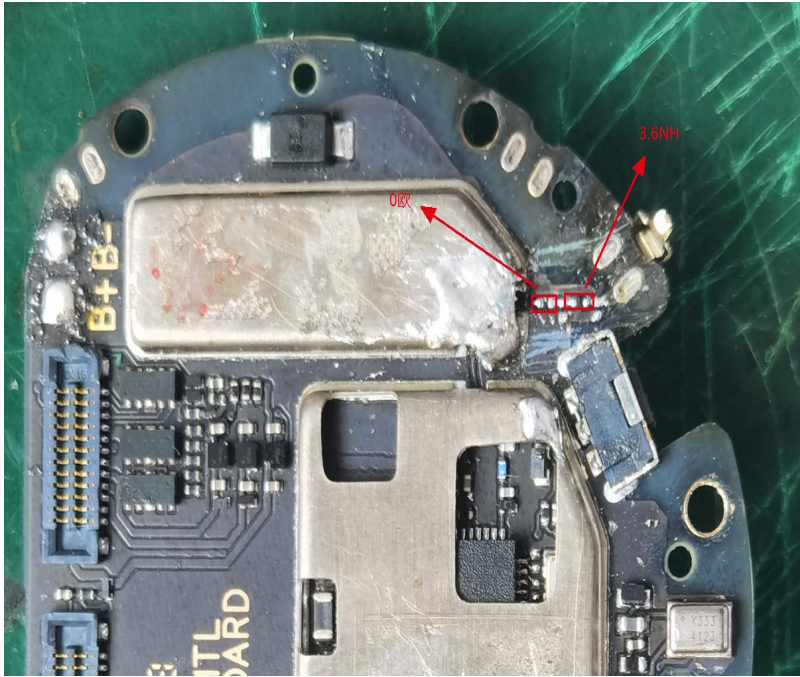


2.2.5 2450 MHz passive direction diagram/field pattern diagram

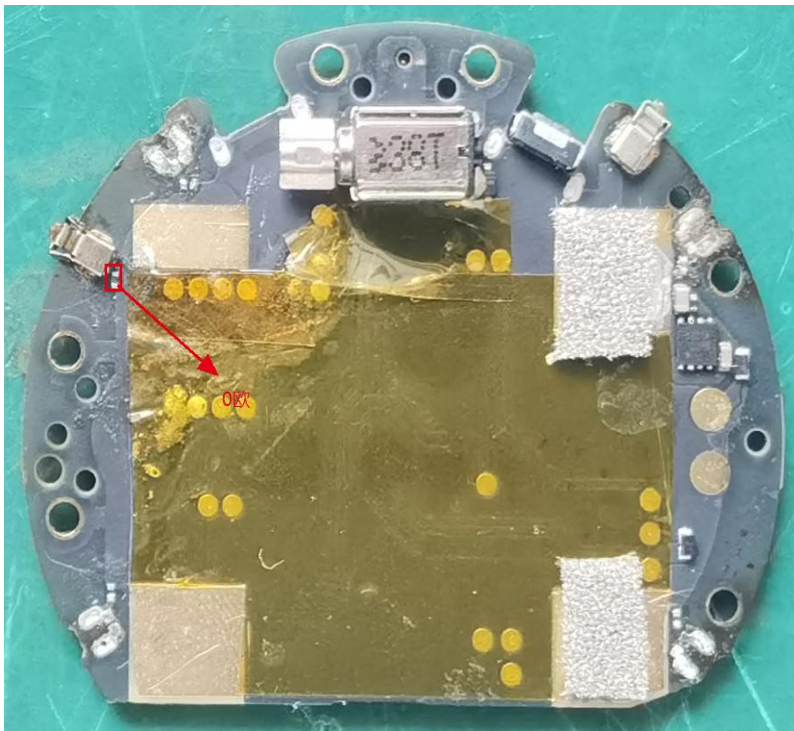




### 2.2.6 Main board matching

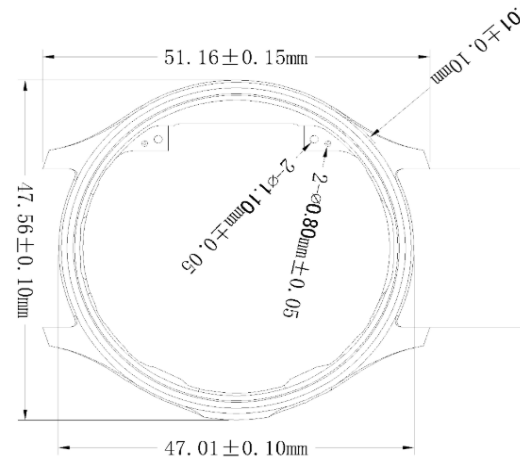
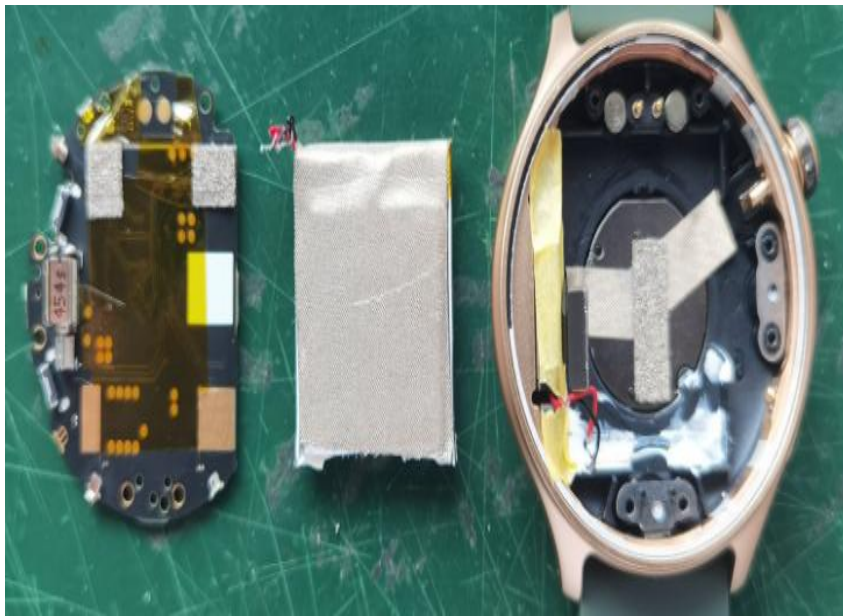


1, the main path position NC, string  
3.6 NH, position NC, 0 ohm

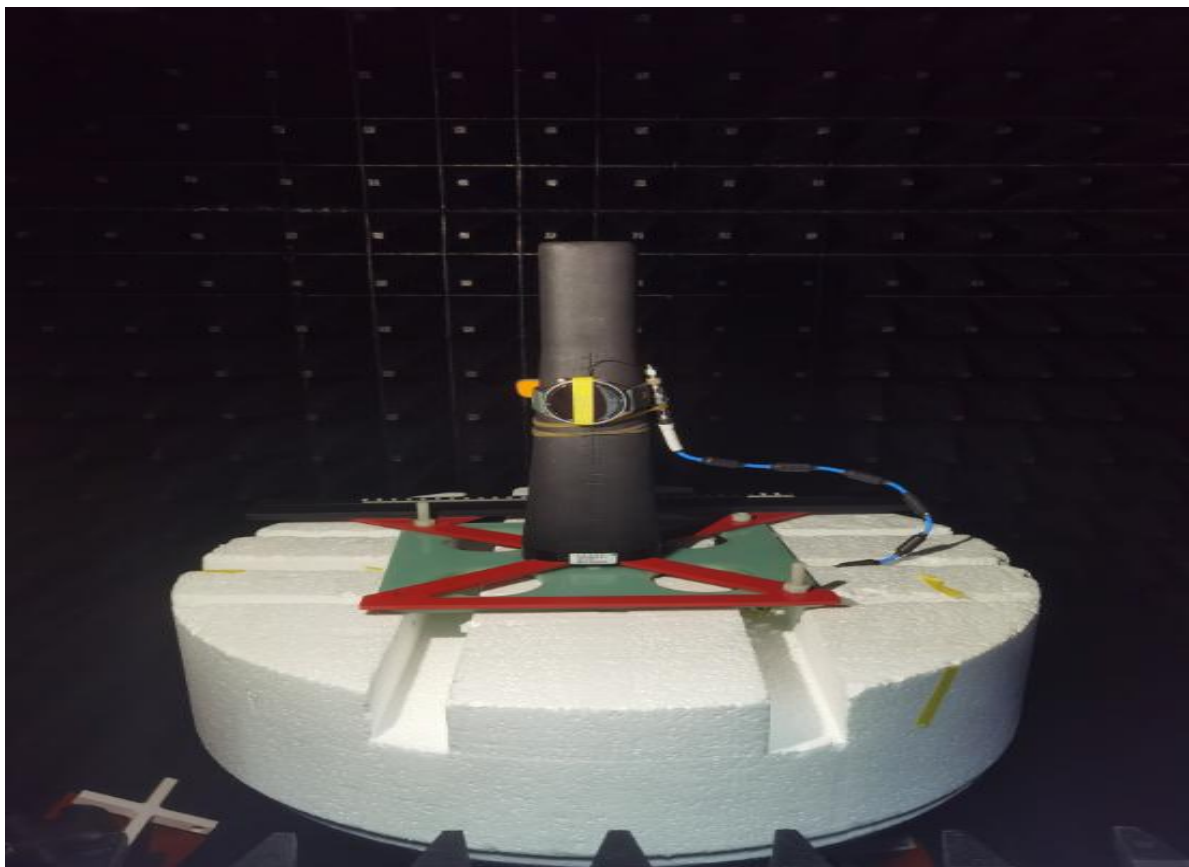


1. At five o'clock, back to 0 euro, all  
other GND are removed

**2.2.7 Environmental treatment**

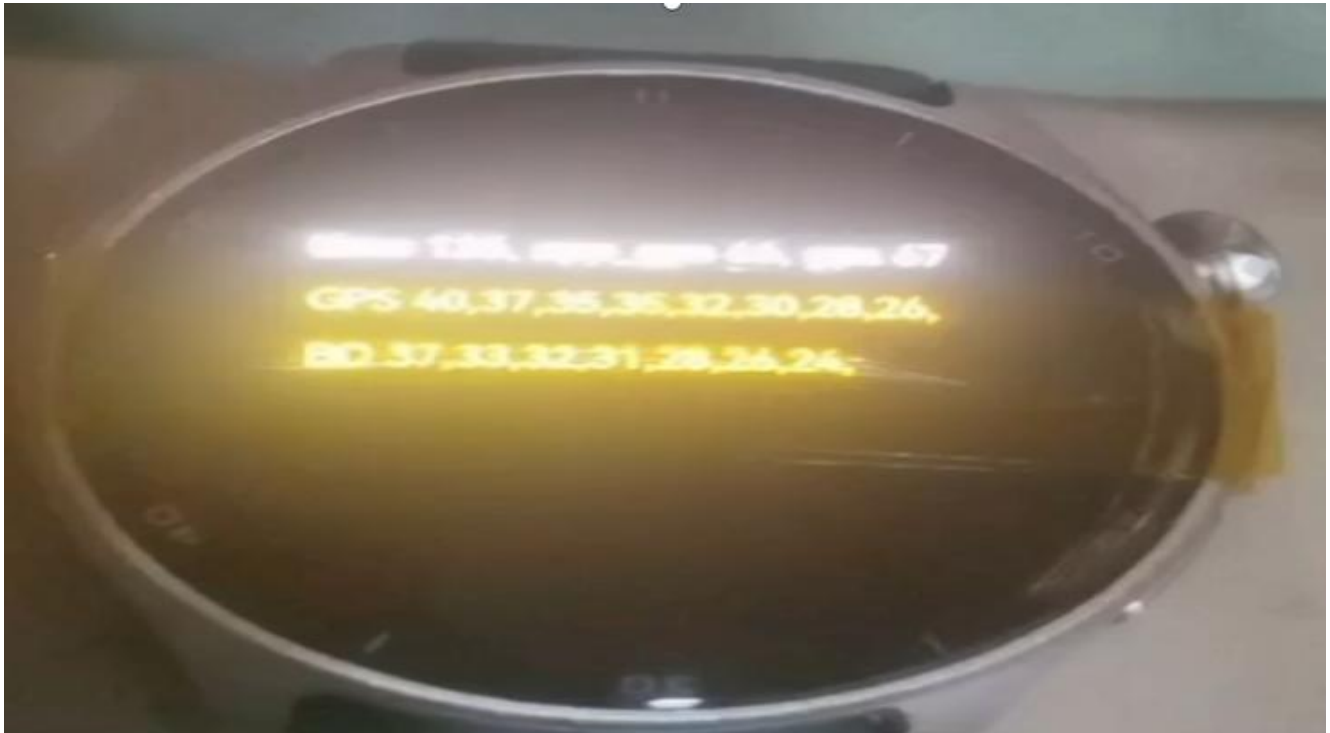


**2.2.8 Antenna test environment**





### 2.2.9 The CN value test of the whole machine



### 2.3 Summary

1. Environmental treatment is shared with CW 06 G
2. Heart rate board FPC is shielded with conductive cloth; heart rate plate is grounded with battery sponge; the battery is especially protected Plate here; horn insulation with insulating paper; battery wire and horn line welding line according to the requirements