



Material acknowledgement

product description	Manufacturer: Shenzhen Yusheng Communication Equipment Co., Ltd		Project model: CW 08		
	address: 407-411, Floor 4, Building 2, South Taiyun Chuangu Park, Southeast of intersection of Guangming Avenue and Dongchang Road, Guangming District, Shenzhen				
appendix	Material name: Base case antenna (LAP Bluetooth antenna) assembly		Material code: _____		
	Version number: _____		Sample delivery date: _____		
	Description (Specification)		Note: (this cover requires supplier seal)		
	<input type="checkbox"/> sample <input type="checkbox"/> Manufacturing flow chart / 2D diagram <input type="checkbox"/> Electrical and Mechanical Property <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		
Supplier audit	Formulation:, Li Jieyi		review: He Lei	approval: Feng Jiwu	
(All of the above require manual signature, and printing is not allowed)					
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"/> reliability confirmation			
Final confirmation	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			
condition of recognition:	<input type="checkbox"/> formal admission <input type="checkbox"/> Limited recognition (Limited _____ PCS) <input type="checkbox"/> disallow				
Distribution Department:	<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 _____				



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1. Overview

1.1 Scope of application

This requirement, specifies CW08 Antenna technical requirements and material requirements specifications.

This requirement applies to CW08 Antenna type selection, test, and acceptance.

1.2 Project basic information

Antenna name:	<u>CW08</u>
Antenna frequency band:	BT
Antenna material:	Shell material + radium carving and plating
edition:	V0.3

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

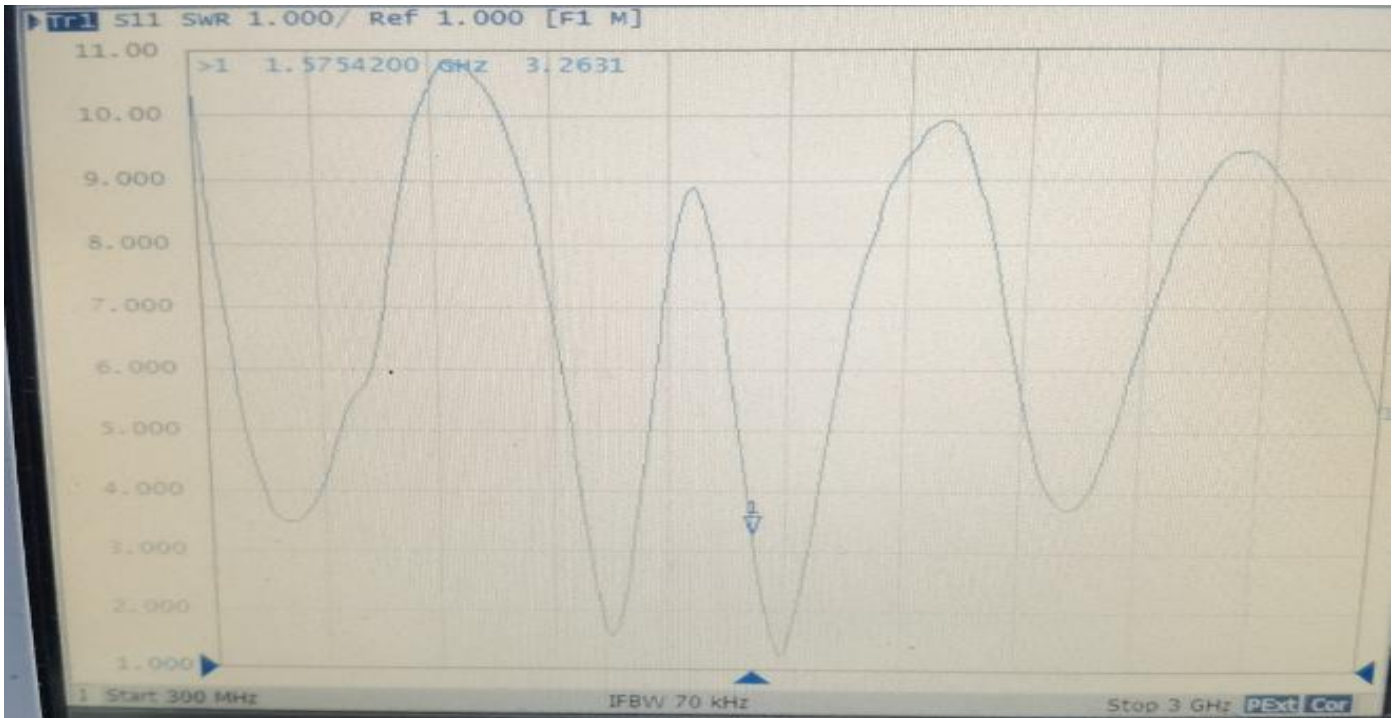
Test tools: Agilent8960 instrument, R & S CMW500, full wave far field ETS dark room, high precision positioning system and its controller and computer with automatic test program

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

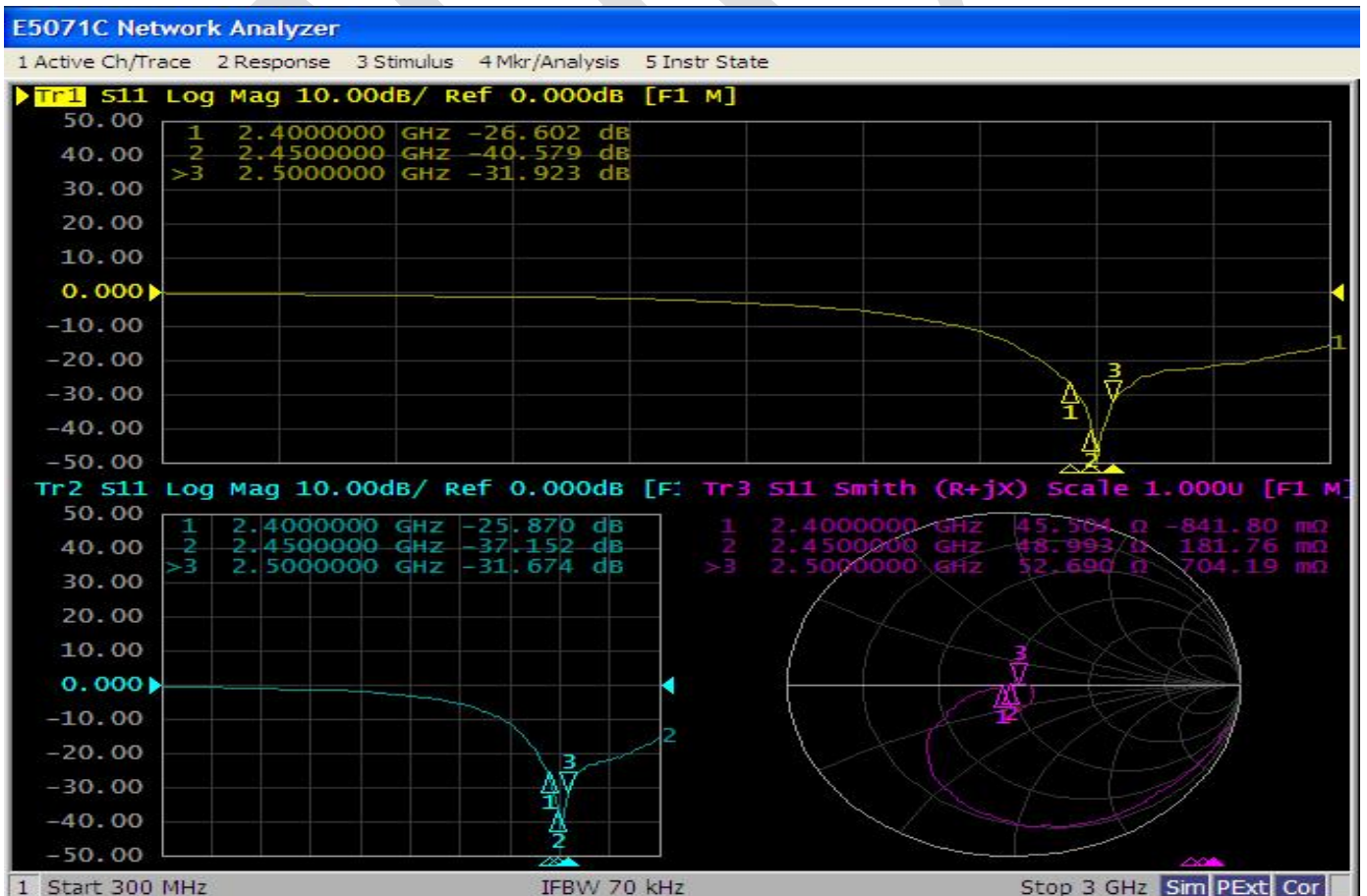
Test method: DUT is fixed in the center of the turntable with H plane, on the same horizontal line as the center of the horn antenna.

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 GPS / BT passive map

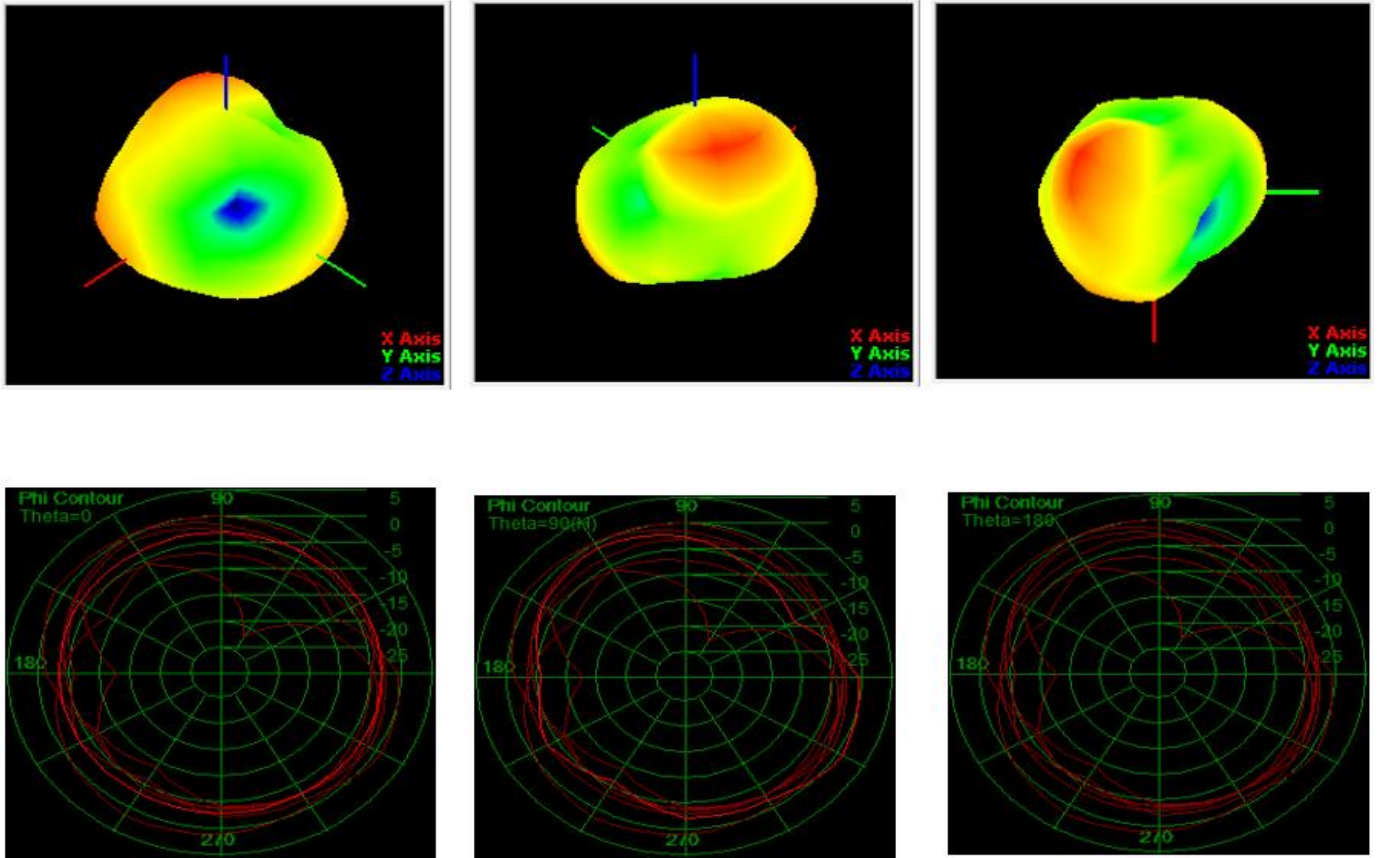


2.2.4 Testing situation of antenna efficiency parameters

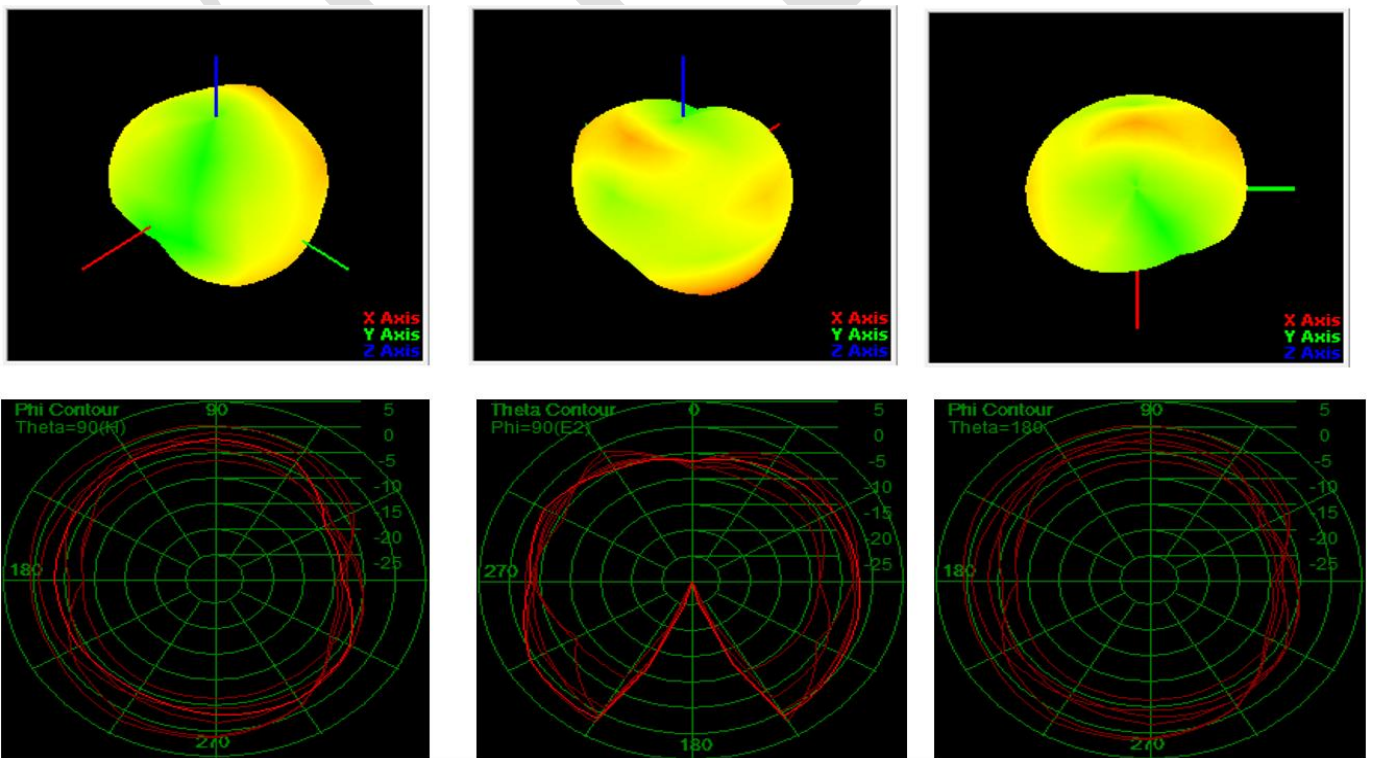
	frequency point	productiveness%	productiveness db	gain
BT Arm	2400	4%	-13.8	-4.9
	2410	5%	-13.4	-4.8
	2420	5%	-12.9	-4.5
	2430	6%	-12.5	-4.1
	2440	7%	-11.9	-4.0
	2450	8%	-10.8	-3.8
	2460	7%	-11.4	-4.0
	2470	6%	-11.9	-4.1
	2480	6%	-12.5	-4.4
	2490	5%	-13.3	-4.5
	2500	5%	-13.1	-4.7

	frequency point	productiveness%	productiveness db	gain
GPS Arm	1550	5%	-13.4	-4.4
	1555	5%	-12.8	-4.2
	1560	6%	-12.6	-4.2
	1565	6%	-11.9	-4.1
	1570	7%	-11.5	-4.0
	1575	7%	-11.5	-3.8
	1580	6%	-11.9	-3.9
	1585	6%	-12.1	-4.1
	1590	5%	-12.9	-4.3

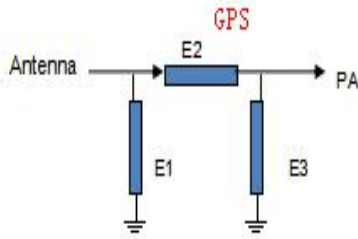
2.2.5 1575MHZ passive direction diagram/field pattern diagram



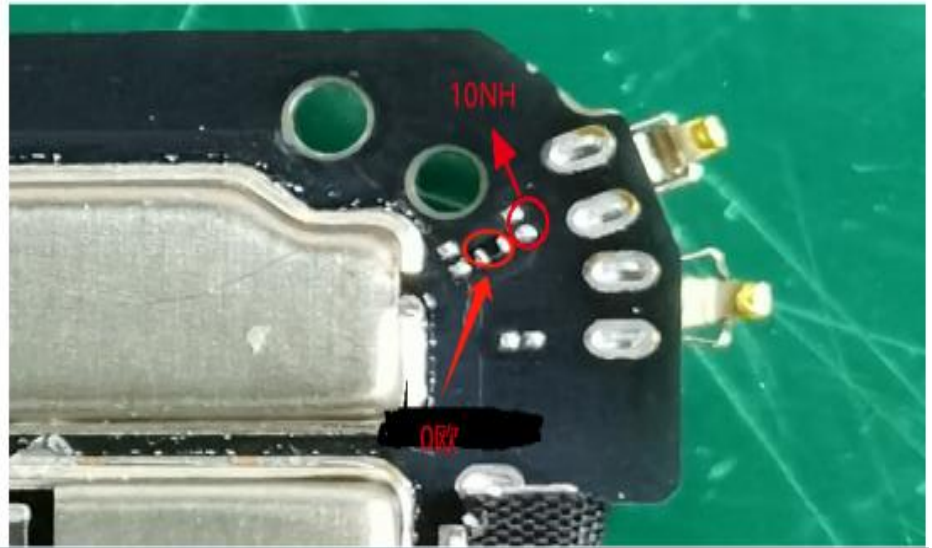
2.2.6 2450MHZ passive direction diagram/field pattern diagram



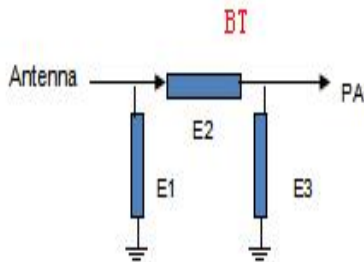
2.2.7 GPS matching



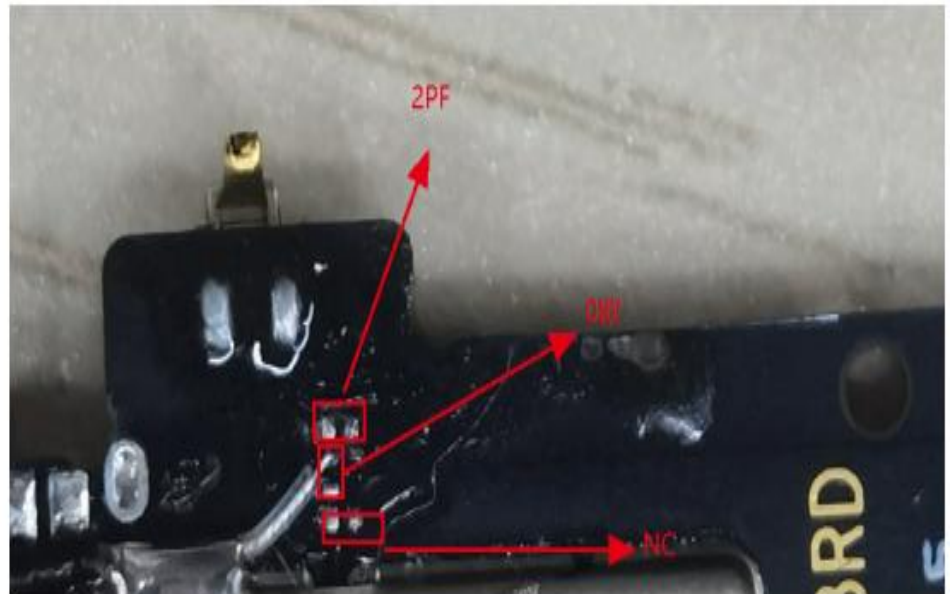
Element	Value
E1(0201)	10NH
E2(0201)	0欧
E3(0201)	N/A



2.2.8 for BT matching



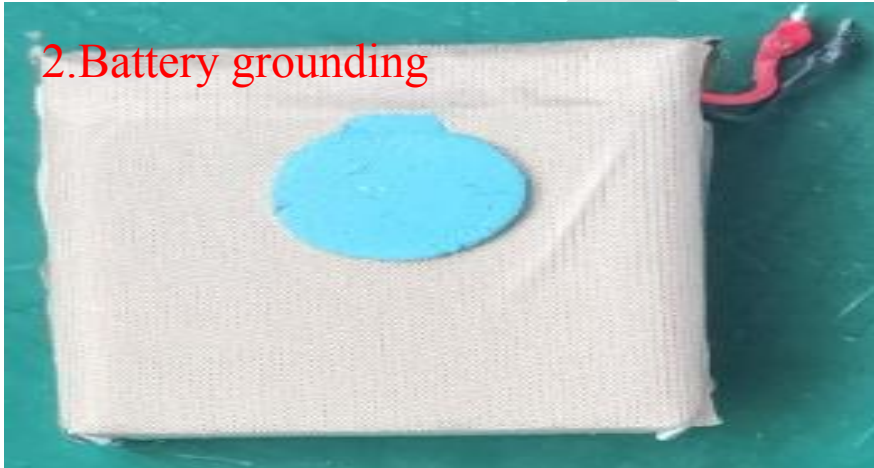
Element	Value
E1(0201)	2PF
E2(0201)	0欧
E3(0201)	N/A



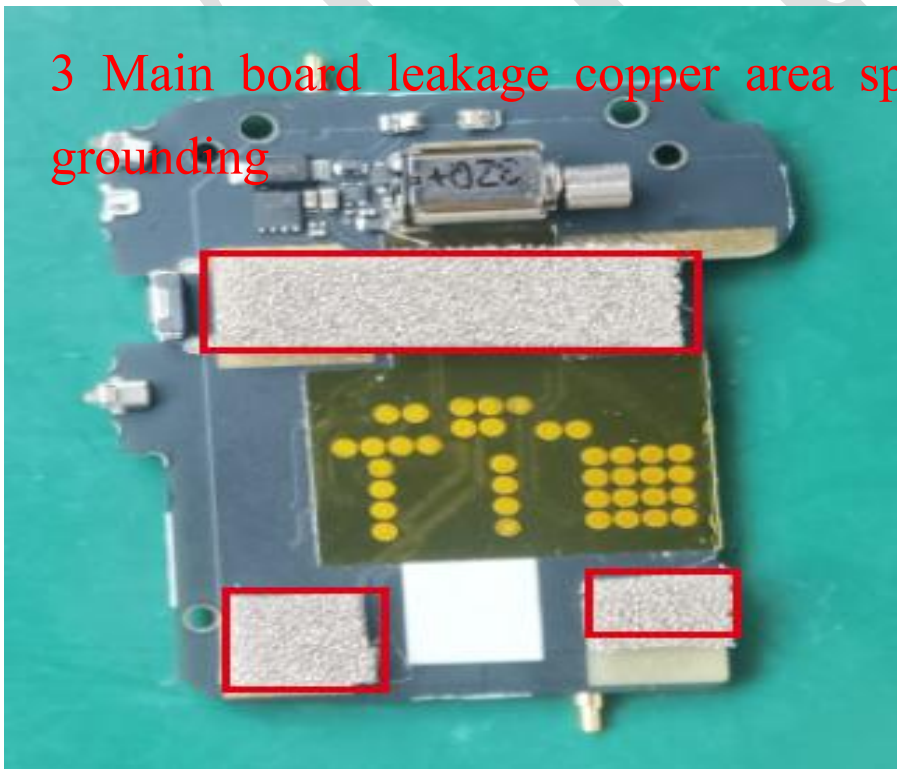
2.2.9 Environmental treatment



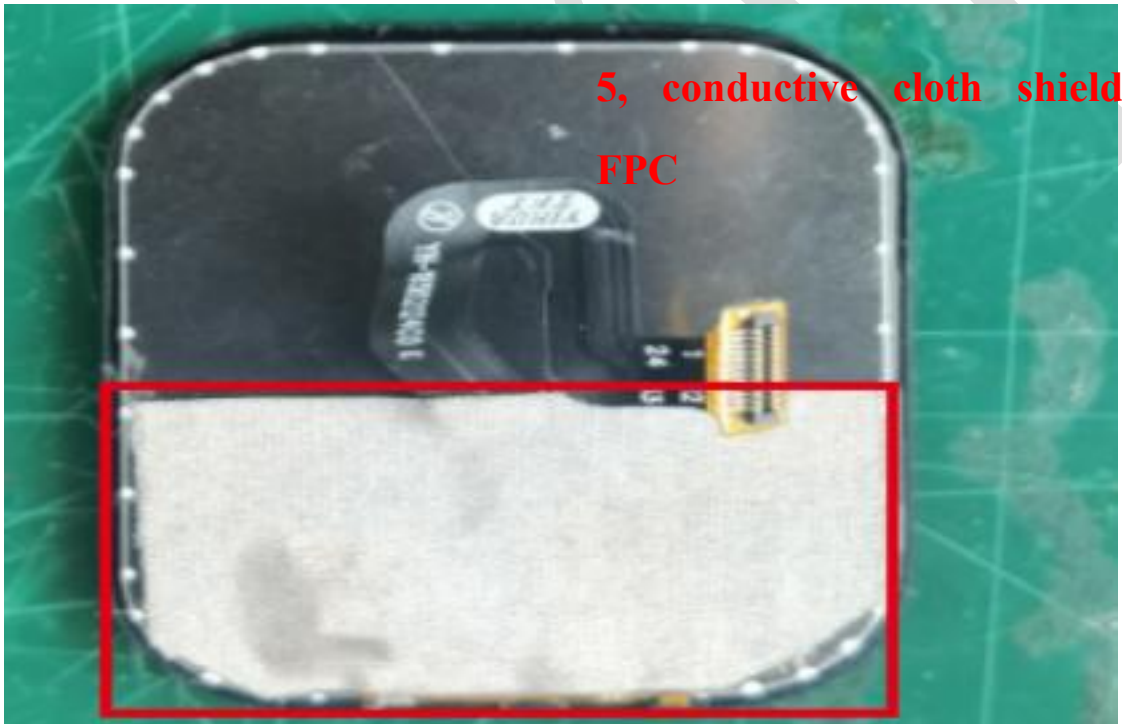
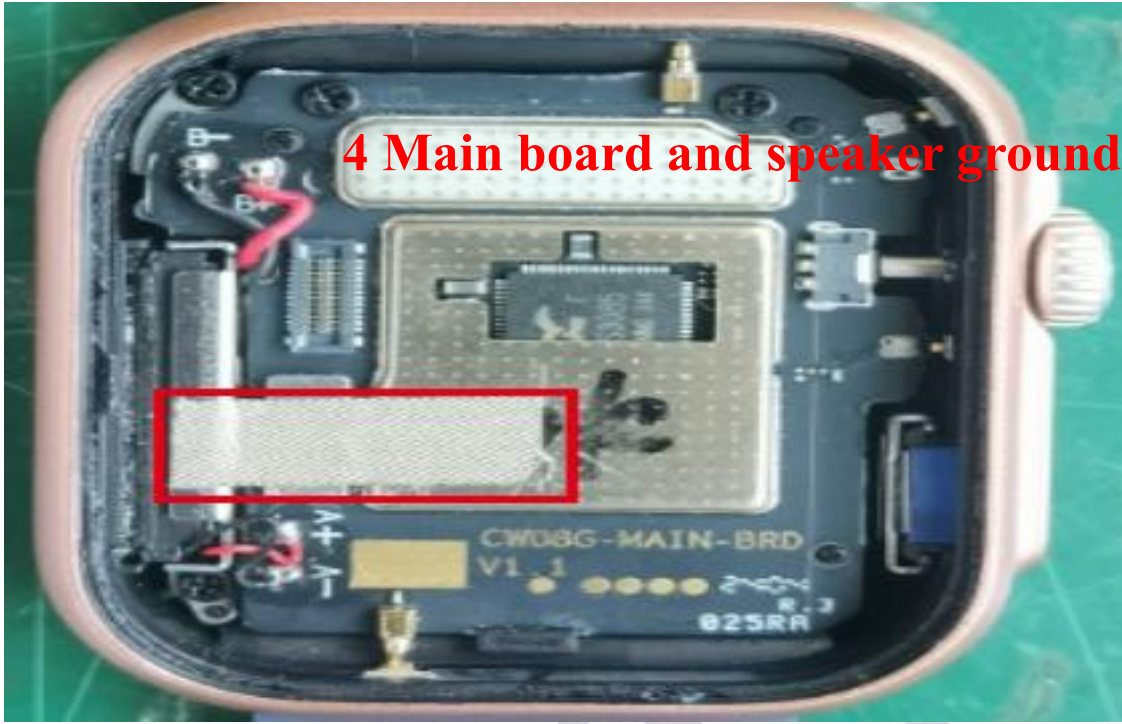
1, the horn magnetic steelsponge grounding



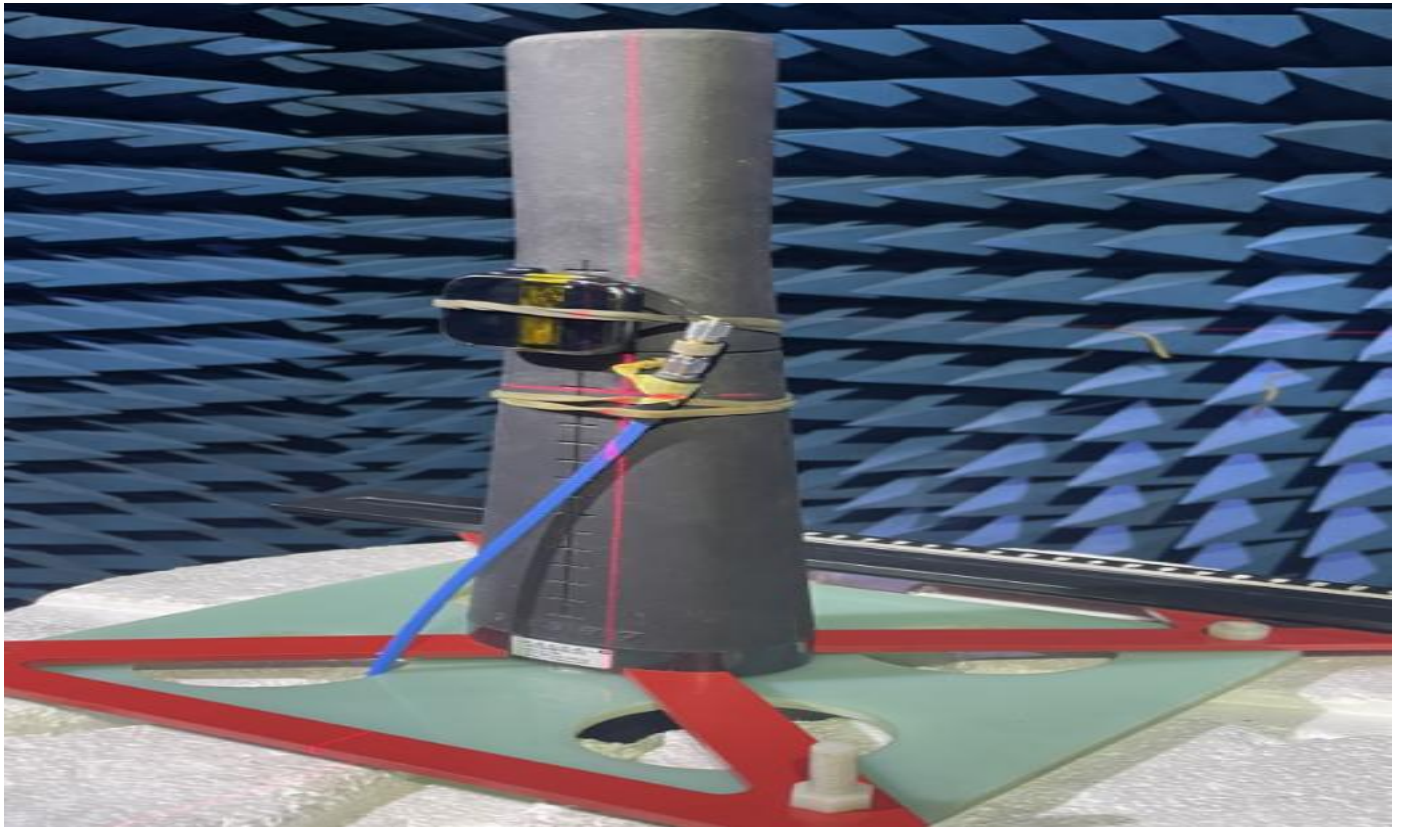
2. Battery grounding



3 Main board leakage copper area sponge grounding



2.3.10 the antenna test environment



3. structural drawings

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Skills requirement:
 1. The dimensions marked with numbers are regarded as important dimensions, and the others refer to 2D drawings
 2 MATERIAL: Black: LDS PC-BKNAT
 (BLACK 100% pure ingredients)
 3 Parameter requirement: CU:8-12 UM
 NI:2-4UM
 4. Flatness of the finished product is less than or equal to 0.50;
 5. Ds Antenna can not crack and fall off after electroless plating. Obvious scratch, overflow plating, such as lack of plating, bad phenomenon.
 6. LDS antenna products require 100% test conduction.
 7. Parts meet ROHS2.0/HP/Reach/GP environmental protection requirements

DATE	Modify the content	Version	Revise

Shenzhen Yu Sheng Communication Equipment Co., Ltd.

Model	Name	DATE	Design
CK08	Antenna	20230227	JFB
Part NO	604006-1A	MD	JFB
Material quality	CU 8-12 um NI 2-4um	Review	CKX
40~50	±0.20	RF	
位置	0.02	Material treatment	confirm
位置	0.02	Appearance treatment	UNIT

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4. Bill Of Material

YUSHENG COMMUNICATION TECHNOLOGY CO.,LTD.

604006 (CW08) –BOM表

Edition: R:A

client:604

Model: 604006

date: 20240227

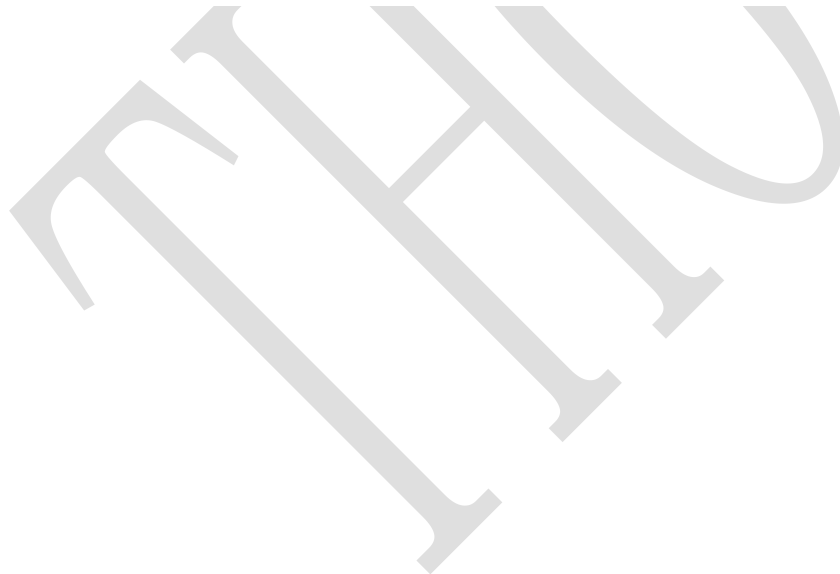
Item	Part No	Name	Types of	version	specification	Material quality	colour	unit	Quantity	Craft
1	604006-IA	Antenna	Z	R:A	46.58*39.69*10.75MM				PCS	1
1.1	604006-IA-01	Trestle	W	R:A	46.58*39.69*10.75MM	LDS -PC	black	V#18	PCS	1
1.2	604006-IA-02	Pattern	W	R:A	CU 8-12um NI 2-4um	CU NI		Chemistry NI	PCS	1

Type: W. Outsourcing B. Semi-finished products Z. Finished products C. Customer supply

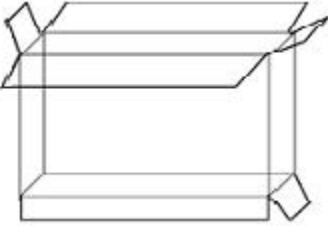
Confirmation:

Review:

Production: FJW



5. Package schematic diagram

Packaging method diagram		
product name	LDS antenna	
Project model	<u>CW08G</u>	
File details	Carton Size 1: 270*260*200MM Carton Size 2: 260*200*200MM Carton Size 3: Depending on the order quantity / volume	
	Boating method	Depending on the project situation
	Total number of binning	Packaging by order quantity
labeling requirement	Tag Size 1: Universal use 100 * 100mm Tag Size 2: According to customer requirements	
matters need attention		
1. Due to the limitation of order quantity, the packing method of each material is the size of the box according to the total quantity of the order or the physical volume		
2. Storage temperature: room temperature		
3. Preservation conditions: store them in a cool and dry place		