





Xin Hengyang Antenna Test Data Report

Customer Name		Cyber Yuhua	Project Name	822
NO	Table of Contents		Elaborate	
1	Bandwidth		2.4G	
2	Project type		Watch	
3	Terminal		Welding	
4	Feedthrough type		/	
5	Line length		/	
6	Antenna types		PIFA	
7	Antenna material		FPC+Coaxial cable	
8	Note			
RF	Zhang Qun		13620917290	<u>gc@xhy-2008.com</u>

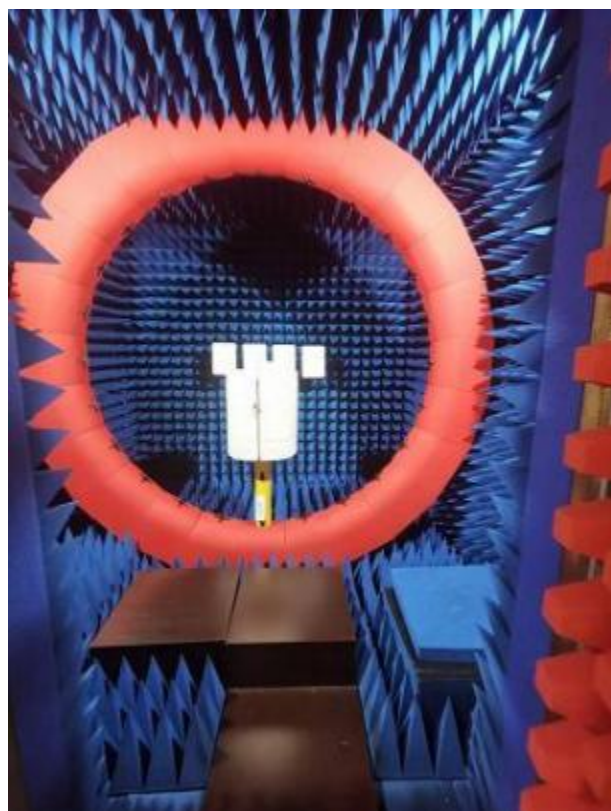
<https://www.XHY-2008.com>

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I. Introduction to the Test Chamber

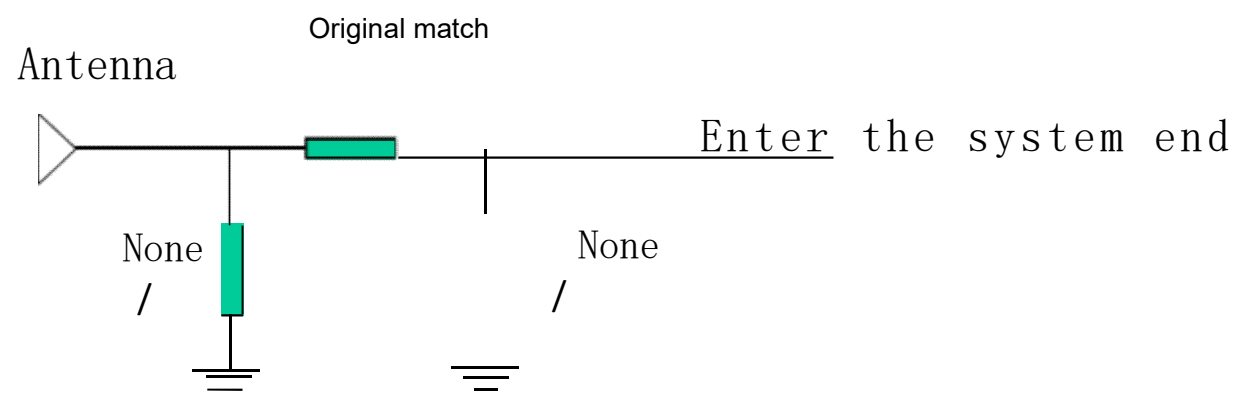
1. Active testing: Supports multi-mode measurement for 2.3.4.5G standards including NB-IoT, eMTC, CAT-1, Bluetooth 1-5, WIFI 802.11 abgn, capable of measuring TRP and TIS.
2. Passive testing: Can test gain and efficiency.
3. TWS earphone testing head model, complete head-hand set.



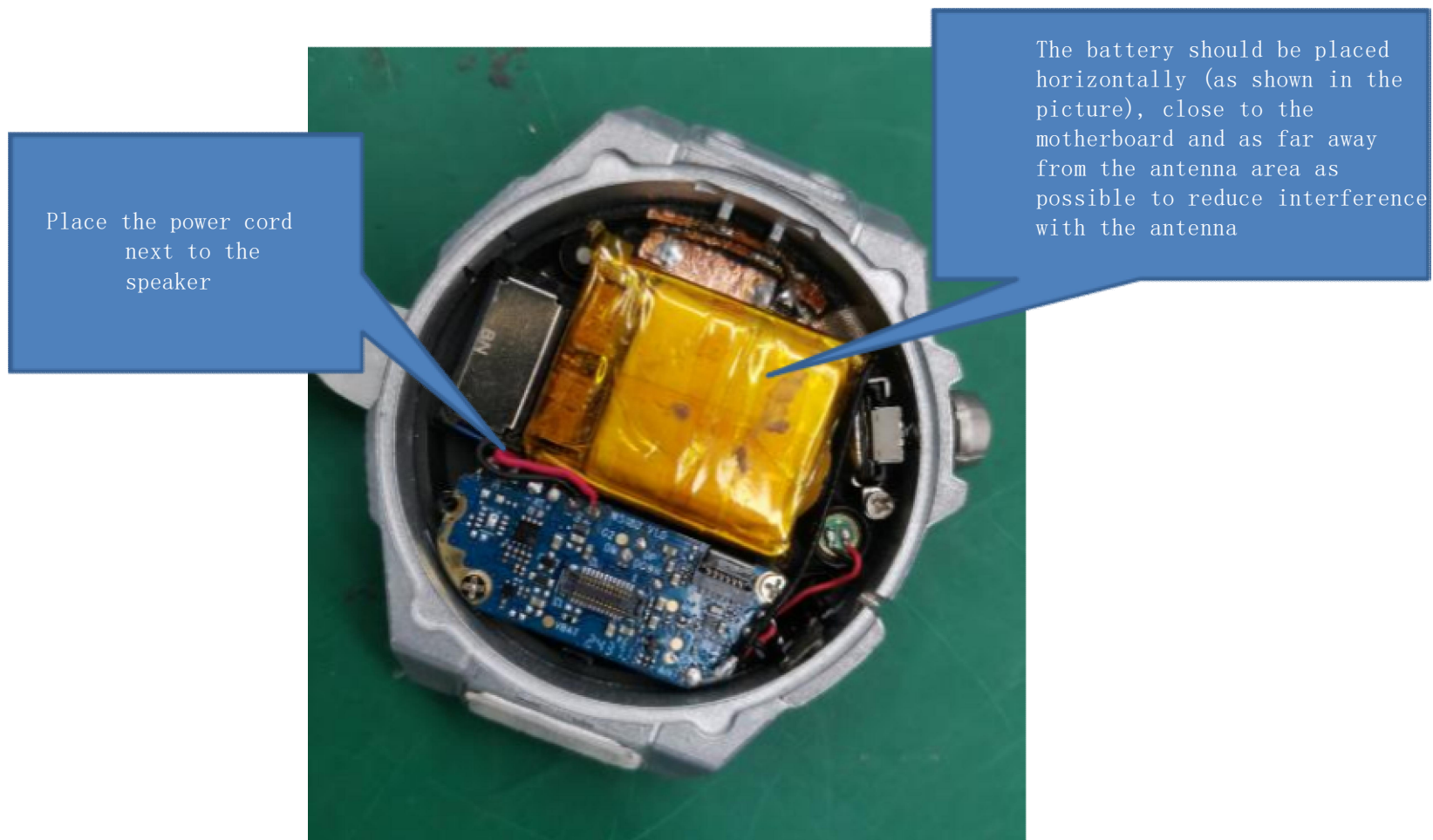
II. Machine photos



III. Matching Debugging



IV. Antenna assembly

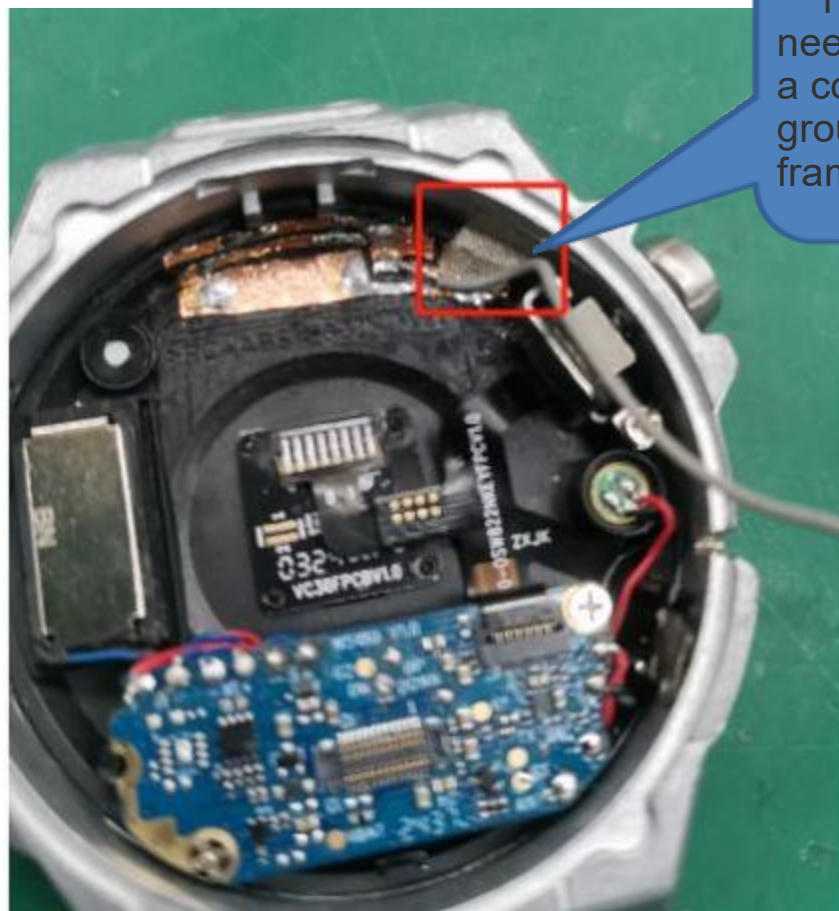


IV. Antenna assembly



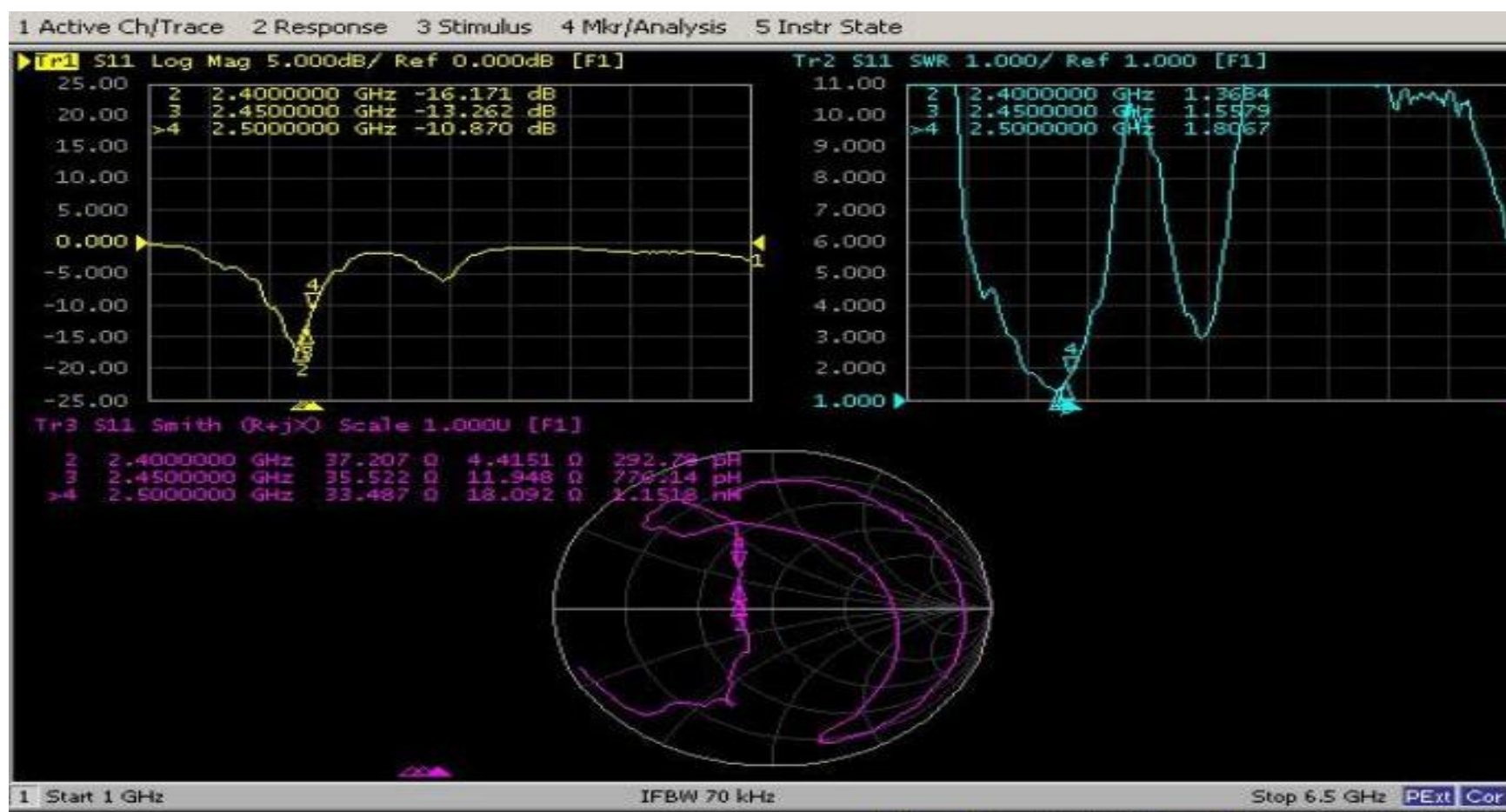
The coaxial line should be wound above the rear of the battery and should not be pressed under the battery

IV. Antenna assembly

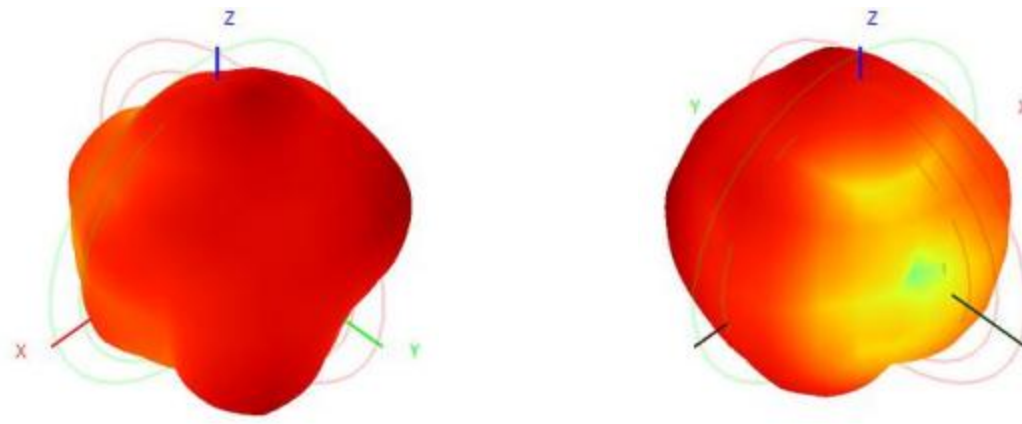


The FPC antenna needs to be attached to a conductive cloth and grounded to the metal frame

V. Passive Standing Wave



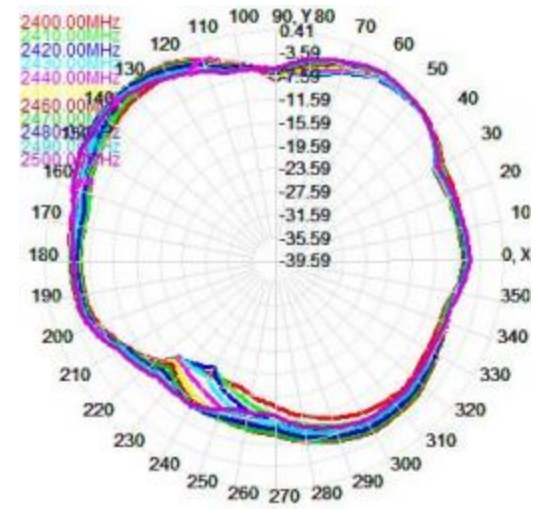
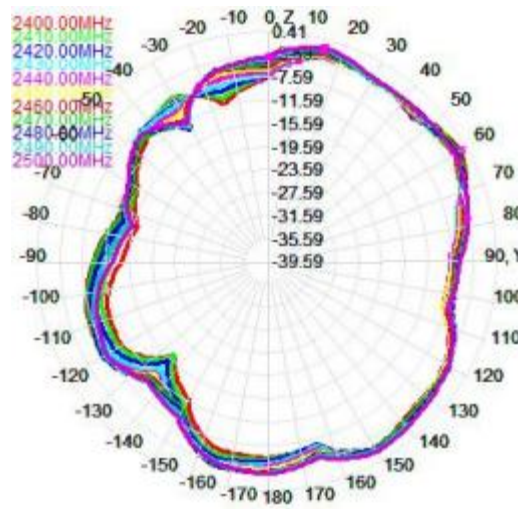
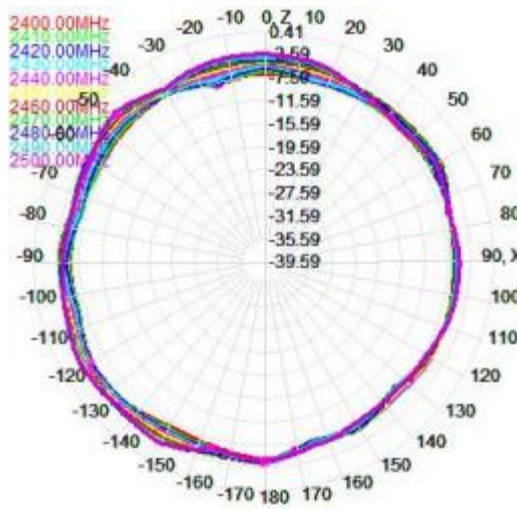
VI. Passive Field Type Diagram (2400–2500MHz)



Total(E1-XZ)

Total(E2-YZ)

Total(H-XY)



VII. Passive Efficiency & Gain(2400–2500MHz)

Frequency ID	Frequency (MHz)	Gain (dBi)	Efficiency (%)
1	2400.0	-1.01	25.74
2	2410.0	-0.85	26.69
3	2420.0	-0.58	28.05
4	2430.0	-0.29	29.74
5	2440.0	0.09	31.17
6	2450.0	0.29	32.21
7	2460.0	0.41	33.14
8	2470.0	0.59	33.23
9	2480.0	0.72	33.31
10	2490.0	0.61	32.47
11	2500.0	0.53	32.73

VIII. Actual Measurement Distance

Location: Outdoor parking lot of Micro-Electro-Mechanical Systems Building

Test weather: Clear

Test time: Afternoon

Test equipment: Huawei Honor 20

Earphone test method: Fix the watch on a tripod and connect the earphones to play music. The tester wears the earphones and walks forward; if the music plays without buffering, it is considered an effective distance.

Earphone test distance: Approximately 18 meters to the side

Bluetooth call test: Connect the test device to the phone's Bluetooth and bind the test software. Use the watch to make a call, and while the tester moves forward wearing the watch, they continuously speak. If the call voice does not buffer, it is considered an effective distance.

Bluetooth call test distance: Approximately 10 meters to the back



Shenzhen Xin Hengyang Technology Co., Ltd.

Thank you.

If there are any questions, please contact us by phone.

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