



## Xin Hengyang Antenna Test Data Report

Customer Name		Cyber Yuhua	Project Name	822	
NO		Table of	Elaborate		
1	Contents 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			
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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-loT, 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.

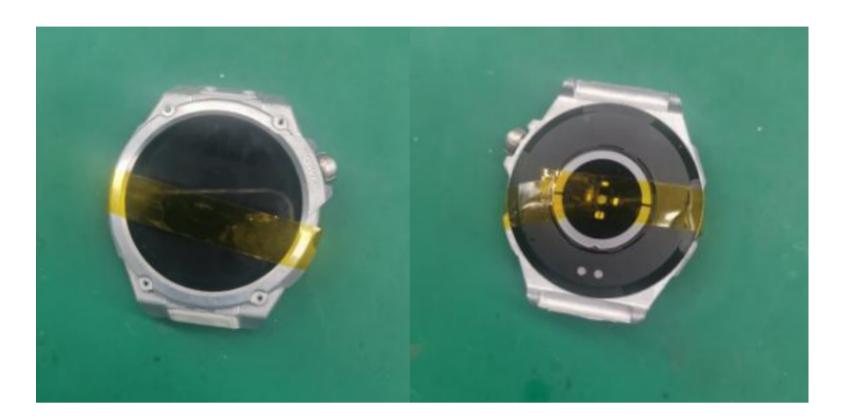






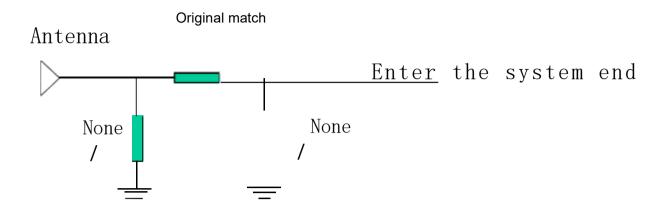


## II. Machine photos





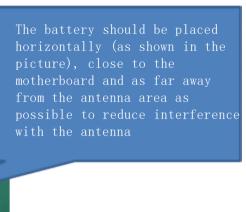
# III. Matching Debugging





### IV. Antenna assembly

Place the power cord next to the speaker





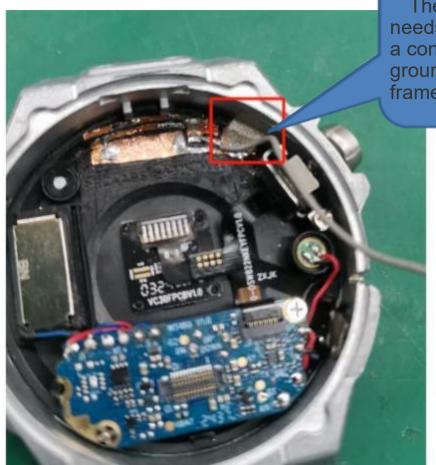
#### IV. Antenna assembly



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



#### IV. Antenna assembly



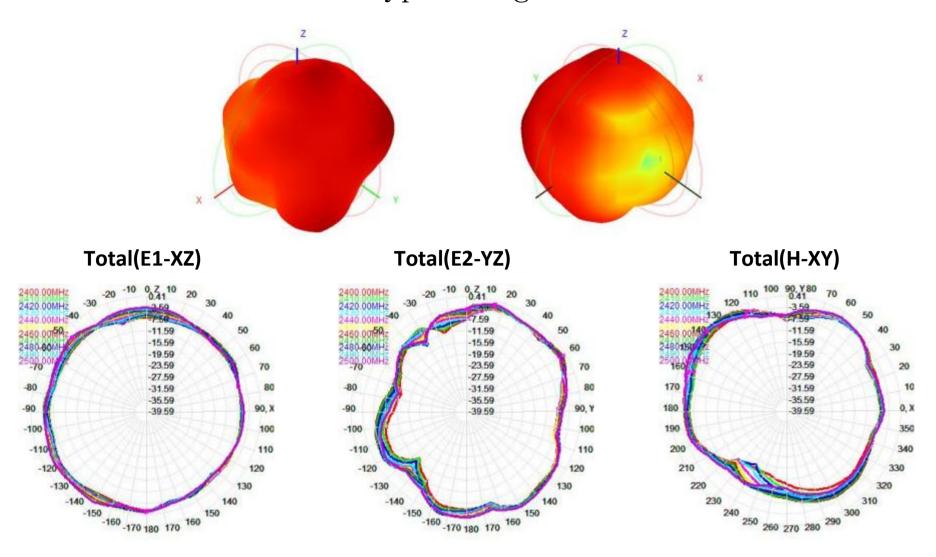
The FPC antenna needs to be attached to a conductive cloth and grounded to the metal frame

#### V. Passive Standing Wave





### VI. Passive Field Type Diagram (2400-2500MHz)





## 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



# Thank you.

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

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