

Antenna Test Report

Report No.: AGC02762241206PA01

PRODUCT DESIGNATION: Wireless USB Adapter

BRAND NAME : N/A

MODEL NAME : BT09, AX900, AX910, AX919

APPLICANT: SHEN ZHEN XIN HUA TIAN TECHNOLOGY CO., LTD

DATE OF ISSUE : Dec. 12, 2024

REPORT VERSION: V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd



Report No.: AGC02762241206PA01

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REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Dec. 12, 2024	Valid	Initial release

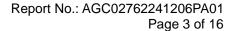




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1. PRODUCT INFORMATON

General information					
Applicant	SHEN ZHEN XIN HUA TIAN TECHNOLOGY CO., LTD				
Address	3Floor, B Buliding, DaHong Industrial Park, GuangMin District, Shenzhen City, China				
Manufacturer	SHEN ZHEN XIN HUA TIAN TECHNOLOGY CO., LTD				
Address	3Floor, B Buliding, DaHong Industrial Park, GuangMin District, Shenzhen City, China				
Factory	SHEN ZHEN XIN HUA TIAN TECHNOLOGY CO., LTD				
Address	3Floor, B Buliding, DaHong Industrial Park, GuangMin District, Shenzhen City, China				
Product Designation	Wireless USB Adapter				
Brand Name	N/A				
Test Model	BT09				
Series Model	AX900, AX910, AX919				
Difference Description All the series models are the same as the test model except for the range.					
Date of receipt of test item	Dec. 10, 2024				
Date of test	Dec. 10, 2024~Dec. 11, 2024				
Report Template	AGCRT-ER-PA/V1.0				
	Technical information				
Frequency Range	2400-2500MHz				
Test Frequencies	2400MHz, 2410MHz, 2420MHz, 2430MHz, 2440MHz, 2450MHz, 2460MHz, 2470MHz, 2480MHz, 2490MHz, 2500MHz				
Antenna Type	External Antenna				
Dimensions	126.8mm				
Impedance	50Ω				
Maximum test values	Gain: 3.228dBi; Efficiency: 8.190%; VSWR: 1.137:1				

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd.

The test results of this report relate only to the tested sample identified in this report.

Prepared By

Jack Gui
(Project Engineer)

Reviewed By

Calvin Liu
(Reviewer)

Dec. 12, 2024

Dec. 12, 2024

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2. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd
Location	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

3. TEST EQUIPMENT LIST

Equipment	Manufacturer	Model	Cal. Date	Cal. Due
ANTENNA MEASUREMENT SYSTEM	ETS-Lindgren	AMS-8600	Nov. 19, 2024	Nov. 18, 2025
Network Analyzer	R&S	ZVL-6	Oct. 02, 2024	Oct. 01, 2025
Test software	ETS-Lindgren	EMQuest	Ver V1.12	N/A

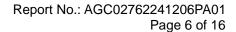
4. MEASUREMENT UNCERTAINTY

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in measurement" (GUM) published by CISPR and ANSI.

- Uncertainty of VSWR, Uc = ±1.5dB
- Uncertainty of Gain, Uc = ±0.8dB

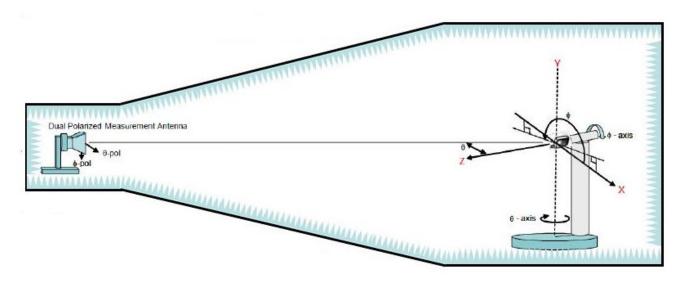
5. TEST SUMMARY LIST

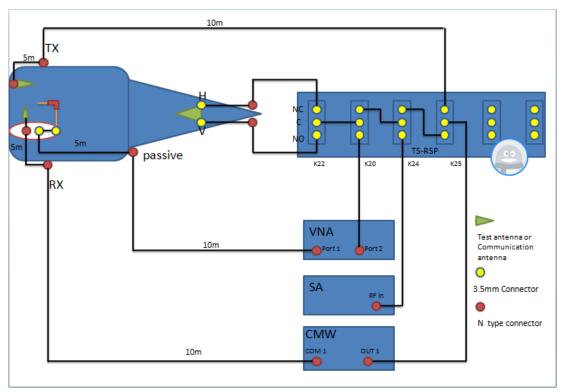
NO.	Test item	Remark
1	VSWR	
2	Gain and efficiency	
3	Radiation pattern	





6. TEST SETUP





Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

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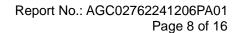


7. TEST RESULTS

7.1. **VSWR**

Frequency(MHz)	VSWR
2402	1.093:1
2450	1.121:1
2456	1.137:1
2480	1.121:1



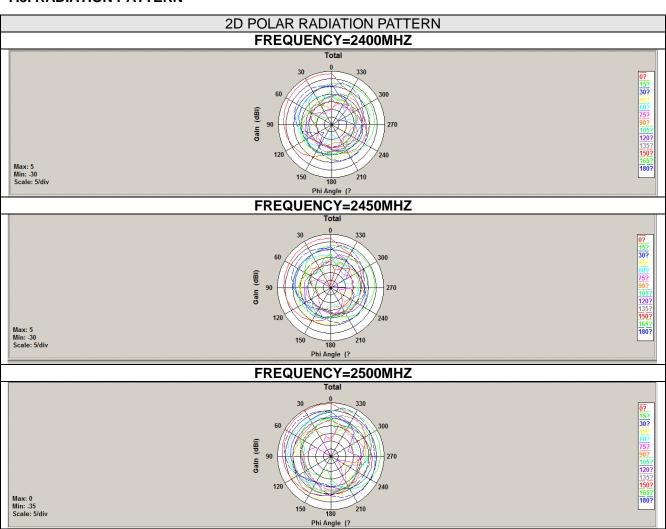




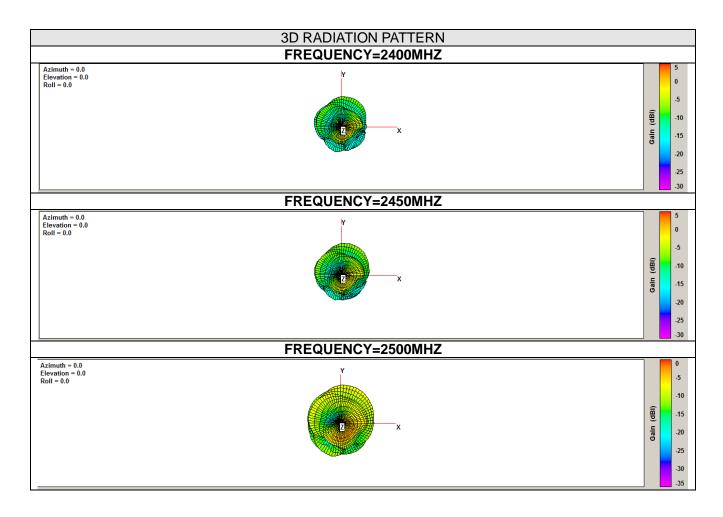
7.2. GAIN AND EFFICIENCY

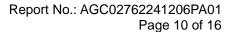
Frequency(MHz)	Efficiency(dB)	Efficiency(%)	Gain(dBi)
2400	-11.510	7.063	3.228
2410	11.582	6.948	2.814
2420	-11.616	6.893	2.516
2430	-10.276	7.454	2.505
2440	-10.915	8.100	2.521
2450	-10.867	8.190	2.248
2460	-10.959	8.018	1.749
2470	-11.100	7.763	0.879
2480	-11.106	7.751	0.337
2490	-11.173	7.633	-0.332
2500	-11.360	7.312	-0.626

7.3. RADIATION PATTERN



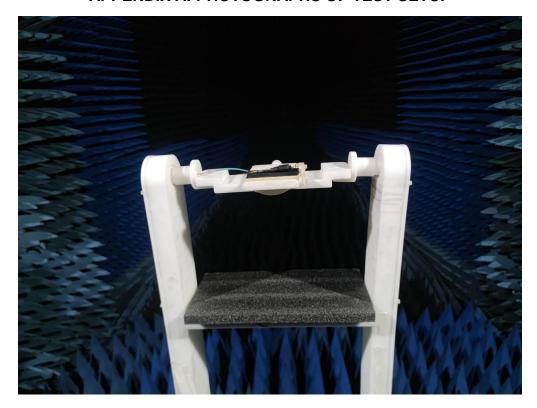


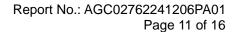






APPENDIX A: PHOTOGRAPHS OF TEST SETUP







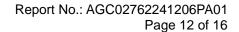
APPENDIX B: PHOTOGRAPHS OF EUT

TOP VIEW OF EUT



BOTTOM VIEW OF EUT





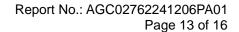


FRONT VIEW OF EUT



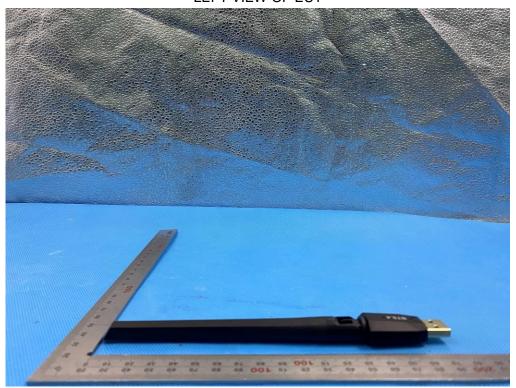
BACK VIEW OF EUT



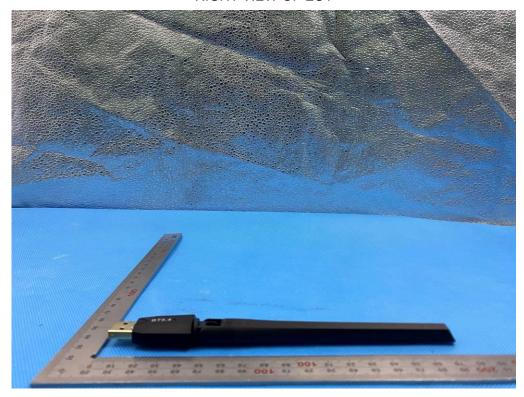


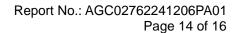


LEFT VIEW OF EUT



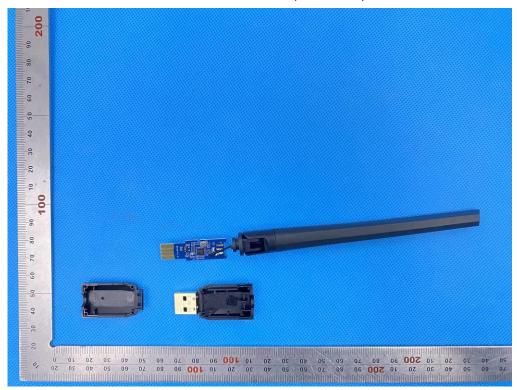
RIGHT VIEW OF EUT



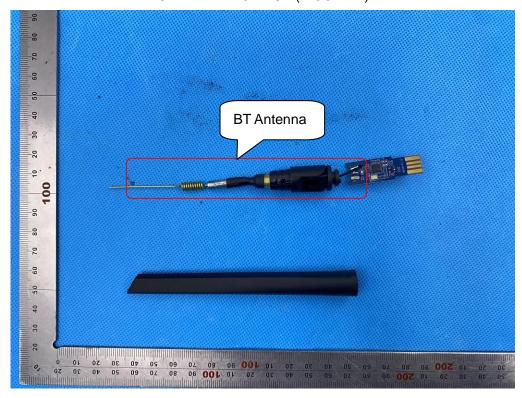




OPEN VIEW OF EUT (FIGURE 1)

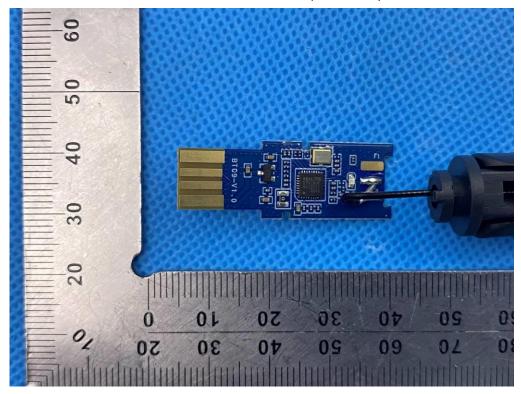


OPEN VIEW OF EUT (FIGURE 2)

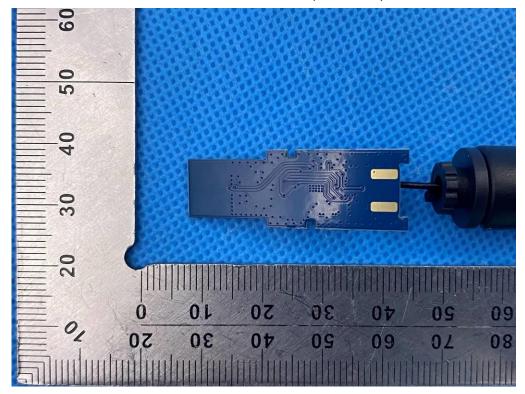




INTERNAL VIEW OF EUT (FIGURE 1)



INTERNAL VIEW OF EUT (FIGURE 2)

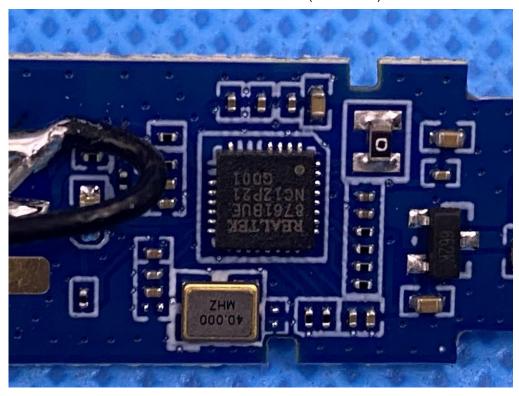


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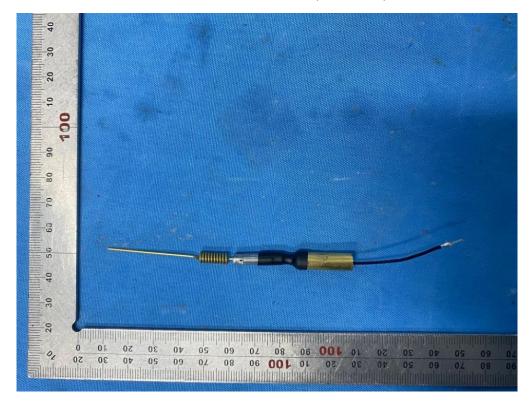
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INTERNAL VIEW OF EUT (FIGURE 3)



INTERNAL VIEW OF EUT (FIGURE 4)



----END OF REPORT----



Conditions of Issuance of Test Reports

- 1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Clients").
- 2. Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
- 3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
- 4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
- 5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
- 6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
- 7.Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
- 8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
- 9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.