

Antenna Test Report

Report No.: AGC00688241004PA01

PRODUCT DESIGNATION: PCB Antenna

BRAND NAME : N/A

MODEL NAME : AX916

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

DATE OF ISSUE : Nov. 05, 2024

REPORT VERSION: V1.0

Attestation of Global Convitance (Shenzhen) Co., Ltd



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REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Nov, 05, 2024	Valid	Initial release

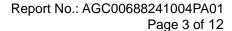




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1. PRODUCT INFORMATON

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	PCB Antenna			
Brand Name	N/A			
Test Model	AX916			
Date of receipt of test item	Oct. 15, 2024			
Date of test	Oct. 15, 2024~ Nov. 05, 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	PCB antenna			
Dimensions	48mm*5.1mm			
Impedance	50 Ω			
Maximum test values	Gain: -0.376dBi; Efficiency: 16.578%; VSWR: 1.089:1			

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

Cici Li
(Project Engineer)

Reviewed By

Calvin Liu
(Reviewer)

Max Zhang
(Authorized Officer)

Nov, 05, 2024

Nov, 05, 2024



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. 28, 2023	Nov. 27, 2024
Network Analyzer	R&S	101443	Jul. 24, 2024	Jul. 23, 2025
Test software	ETS-Lindgren	EMQuest (Ver V1.12)	N/A	N/A

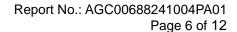
4. MEASUREMENT UNCERTAINTY

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

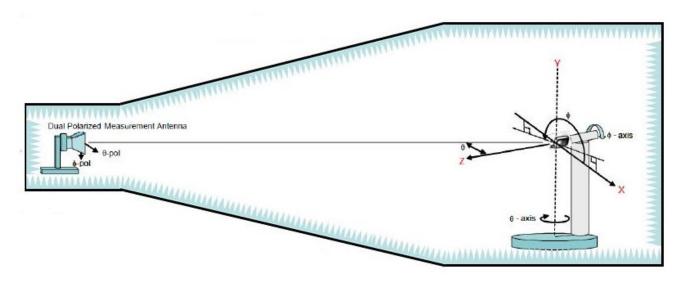
5. TEST SUMMARY LIST

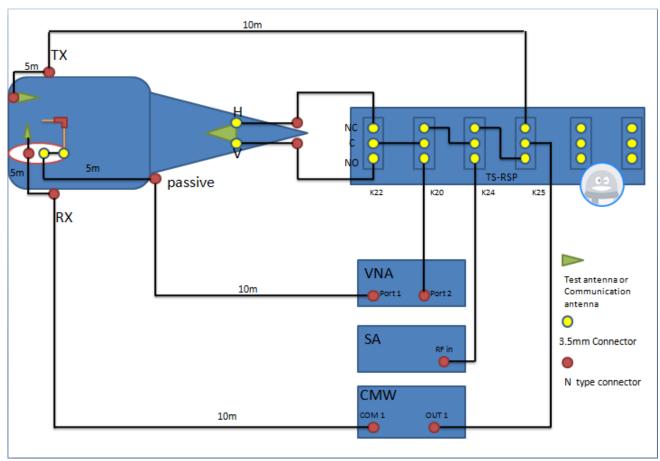
NO.	Test item	Remark
1	VSWR	
2	Gain and efficiency	
3	Radiation pattern	

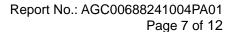




6. TEST SETUP









7. TEST RESULTS

7.1. **VSWR**

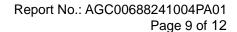
Frequency(MHz)	VSWR	
2402	1.053:1	
2450	1.064:1	
2478	1.089:1	
2480	1.081:1	





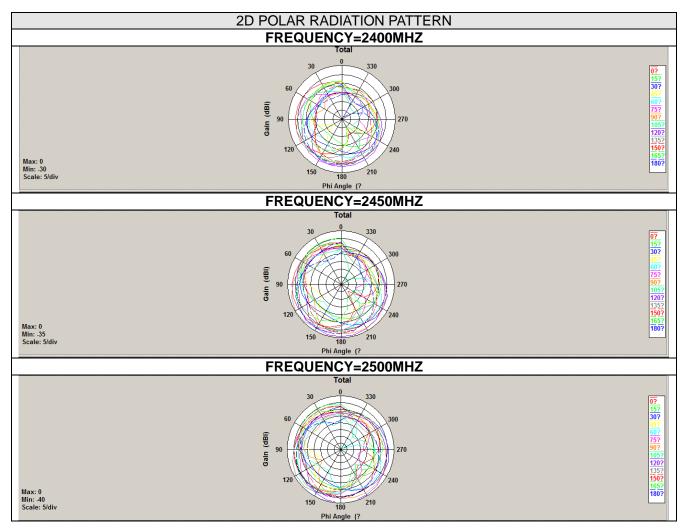
7.2. GAIN AND EFFICIENCY

Frequency(MHz)	Efficiency(dB)	Efficiency(%)	Gain(dBi)
2400	-9.637	10.872	-3.381
2410	-9.232	11.934	-2.817
2420	-8.823	13.112	-2.245
2430	-8.251	14.960	-1.497
2440	-7.903	16.208	-1.006
2450	-7.805	16.578	-0.779
2460	-7.918	16.151	-0.682
2470	-8.159	15.280	-0.682
2480	-8.095	15.507	-0.376
2490	-8.346	14.636	-0.434
2500	-8.535	14.013	-0.468

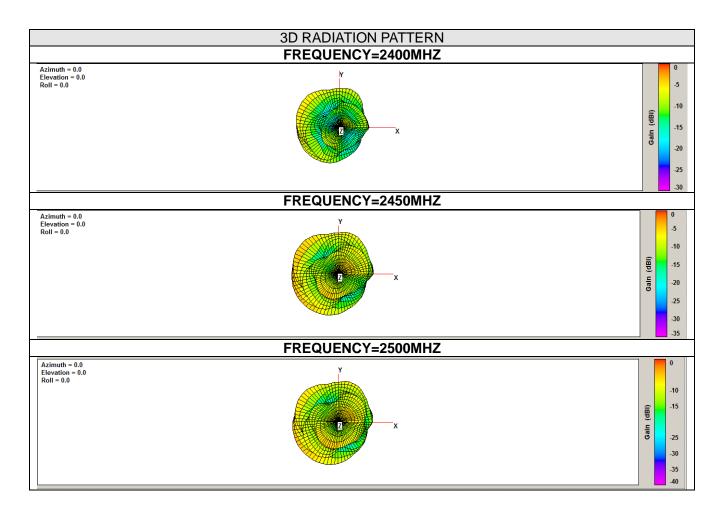


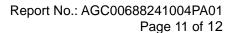


7.3. RADIATION PATTERN



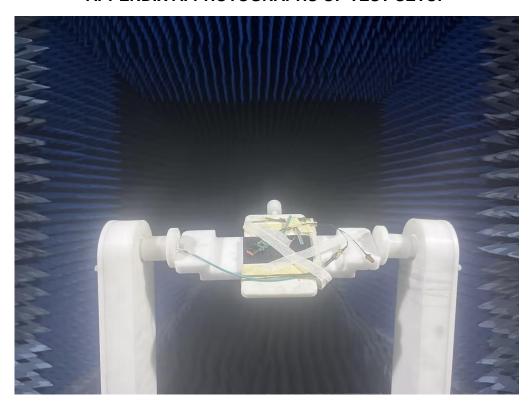


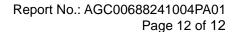






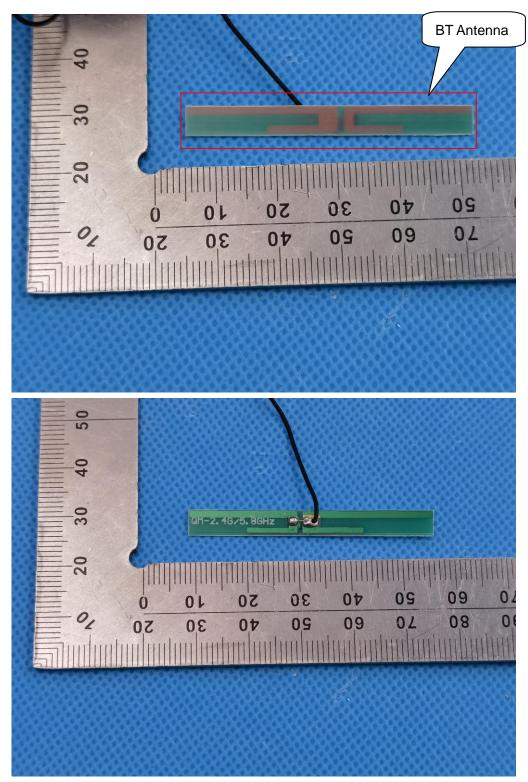
APPENDIX A: PHOTOGRAPHS OF TEST SETUP







APPENDIX B: PHOTOGRAPHS OF EUT



----END OF REPORT----

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Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/



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