

TEST REPORT

Reference No...... : WTX25X05125353W
Applicant..... : Xiamen Hanin Co.,Ltd.
Address..... : Room 305A, Angye Building, Pioneer Park, Torch High-tech Zone, Xiamen city, Fujian Province, P.R. China
Manufacturer..... : The same as Applicant
Address..... : The same as Applicant
Product Name..... : BT Antenna
Model No...... : HCP-2TS25F
Standards..... : ANSI/ IEEE 149-2021
Date of Receipt sample..... : 2025-05-16
Date of Test..... : 2025-05-16 to 2025-06-05
Date of Issue..... : 2025-06-05
Test Report Form No...... : WTX_IEEE 149
Test Result..... : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

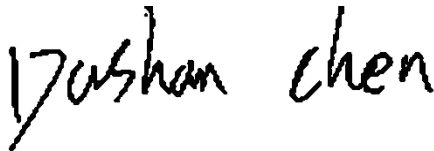
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Approved by:



Jason Su

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Report version

Version No.	Date of issue	Description
Rev.00	2025-06-05	Original
/	/	/

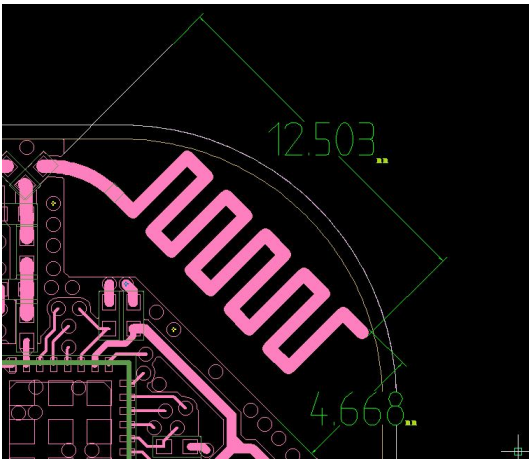
1.GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT	
Product Name:	BT Antenna
Trade Name:	/
Model No.:	HCP-2TS25F
Adding Model(s):	Z5S, HPRT Z5S
<i>Note: The test data is gathered from a production sample, provided by the manufacturer. The appearance of others models listed in the report is different from main-test model HCP-2TS25F, but the circuit and the electronic construction do not change, declared by the manufacturer.</i>	

Technical Characteristics of EUT	
Frequency Range:	2400-2500MHz
Gain of Antenna:	-5.69dBi (Max.)
Type of Antenna:	PCB Antenna

Dimension:



2. SUMMARY OF TEST RESULTS

Standards	Description of Test Item	Result
ANSI/ IEEE 149-2021	IEEE Recommended Practice for Antenna Measurements	Compliant

N/A: not applicable

3. Antenna Test Configurations

3.1 Test Location

Name:	Sushi TOWE Wireless Testing(Shenzhen)Co., Ltd.
Address:	F 401/101, Building E, Hongwei Industrial Zone, No. 6, Liuxian 3rd Road, Bao'an District, Shenzhen,518133

3.2 Test Environments

Environments Parameter	Temperature	Voltage	Humidit
NTNV	25° C	--	50%

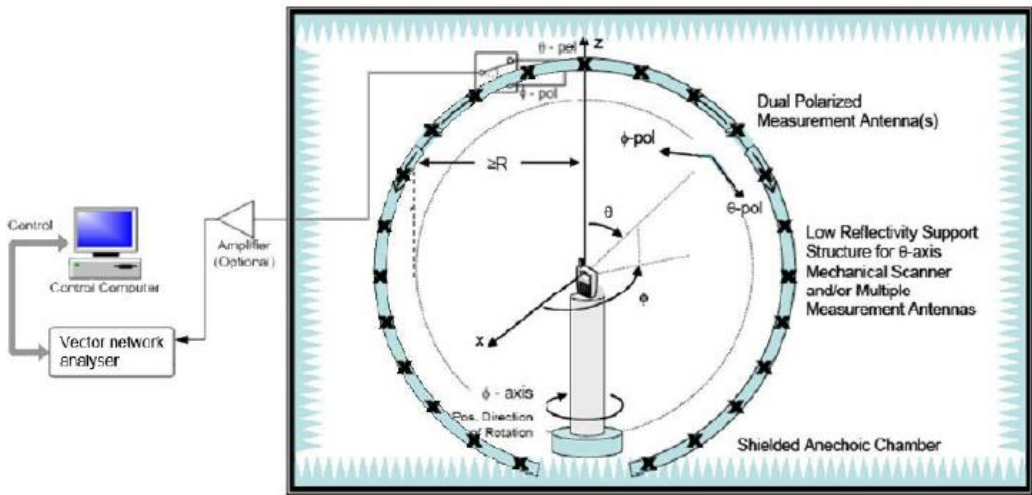
3.3 Test Equipment List

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Anechoic Chamber	ETS	AMS8923	Q2225	2023-06-09	2028-06-08
RF Switch	ETS	EMCenter	251211	/	/
Vector network analyzer	R&S	ZNB8	101413	2024-07-17	2025-07-16

3.4 Measurement Uncertainty

The uncertainty is calculated using the methods suggested in the“Guide to the Expression of Uncertainty in Measurement” (GUM) published by ISO. When the test result is a critical value,we will use the measurement uncertainty give the judgment result based on the 95%Confidence intervals.

3.5 Test Setup



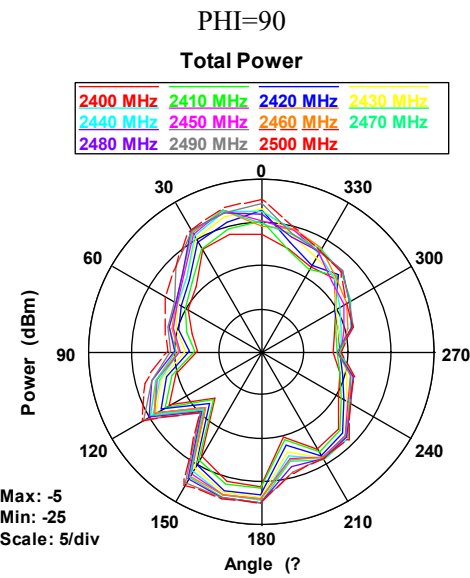
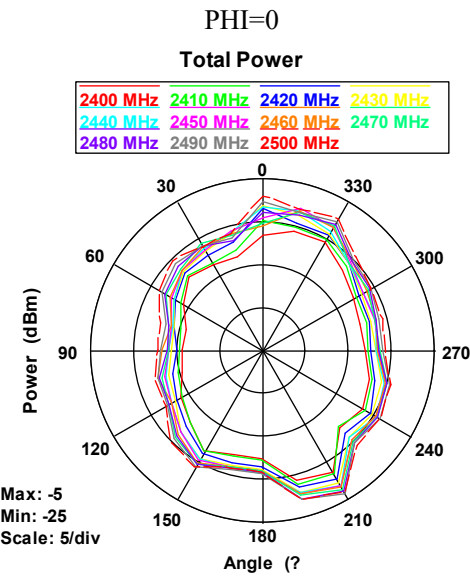
4. Antenna Test Result

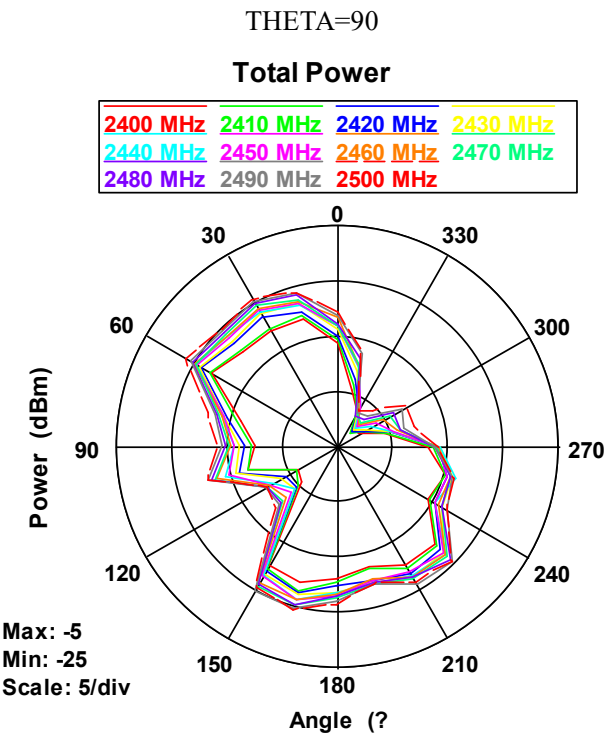
4.1 Gain and Efficiency

Frequency(MHz)	Gain(dBi)	Efficiency (%)
2400	-8.05	4.52
2410	-7.75	4.92
2420	-7.04	5.63
2430	-6.58	6.16
2440	-6.27	6.53
2450	-6.18	6.63
2460	-6.03	6.88
2470	-5.89	7.20
2480	-6.21	7.38
2490	-5.91	7.85
2500	-5.69	8.23

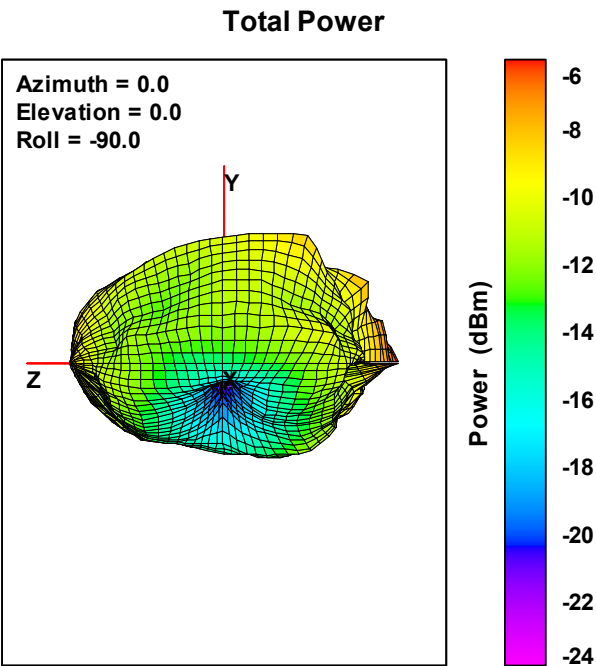
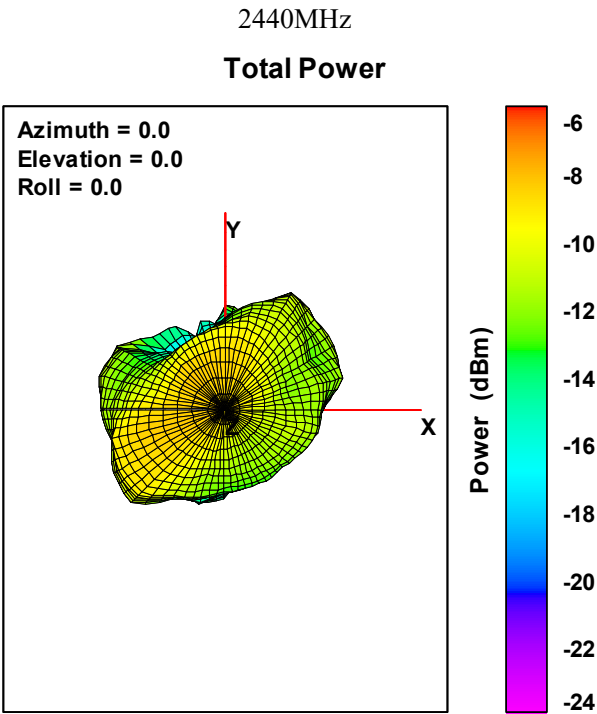
4.2 Radiation Pattern 2D View

EUT #1:





4.3 Radiation Pattern 3D View



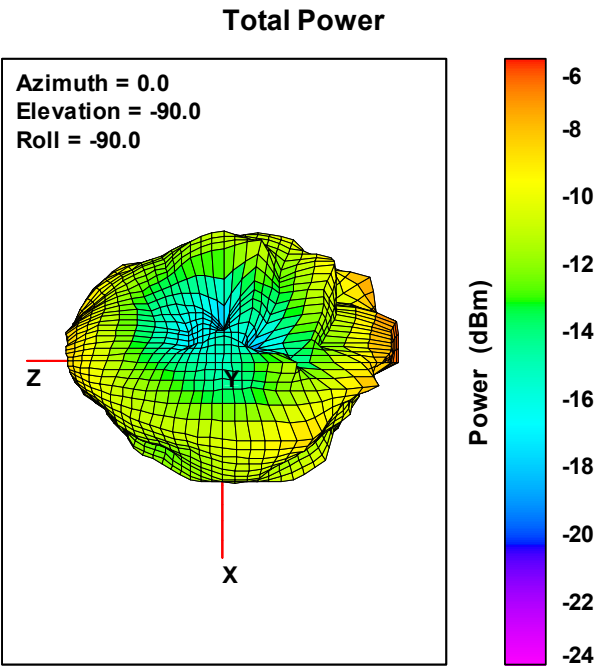


EXHIBIT 1 - EUT PHOTOGRAPHS

EUT View 1

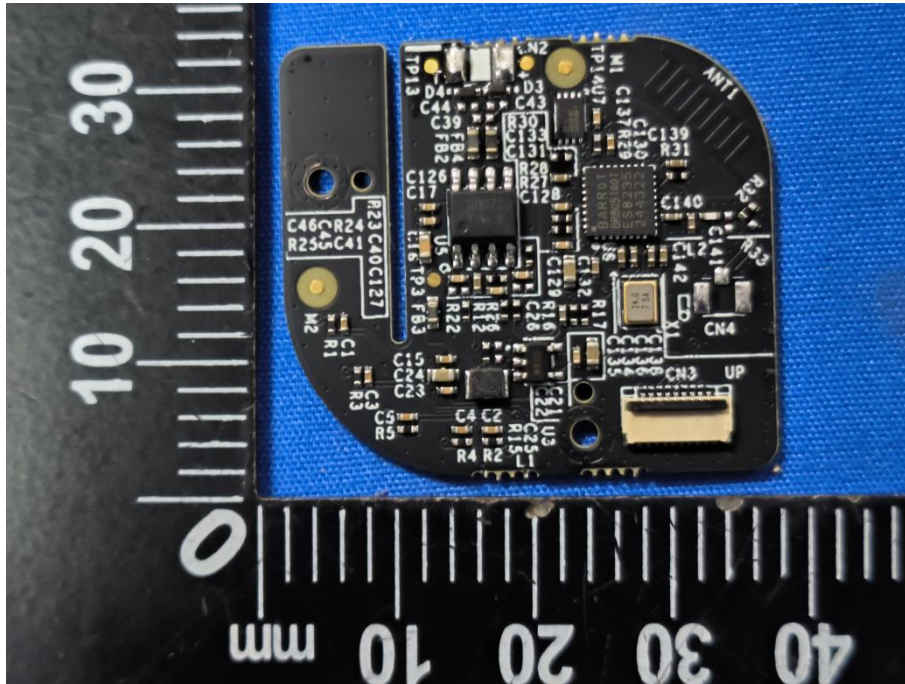
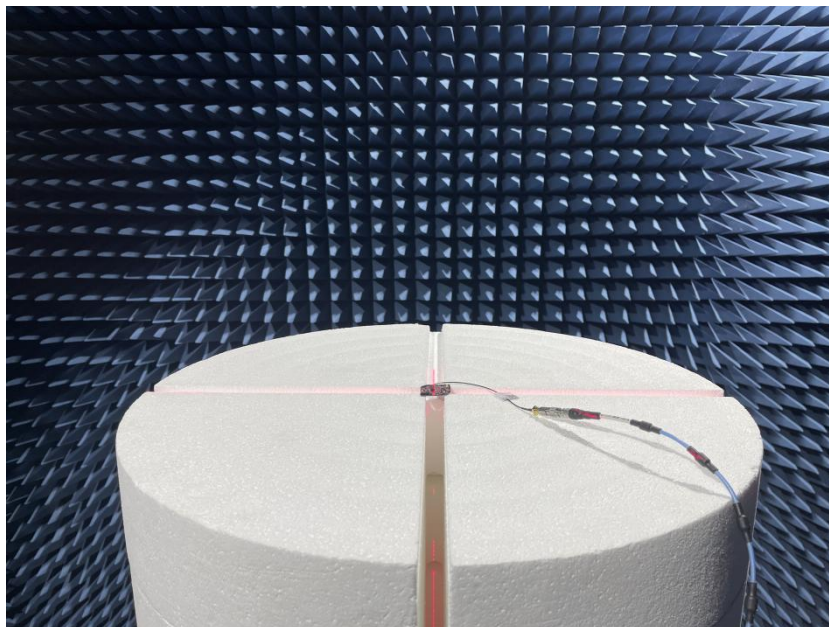


EXHIBIT 2 - TEST SETUP PHOTOGRAPHS

OTA Test View 1:



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