


# Antenna Test Report

Product Name: iFi IoT Module	Report No. : RF230525011-01-001
Product Model: iFi Nexus Module	Security Classification: Open
Version : V1.0	Total Page: 11

## HAIYUN Laboratory Report

<b>Equipment:</b>	<b>iFi IoT Module</b>
<b>Model:</b>	<b>iFi Nexus Module</b>
<b>Applicant:</b>	<b>Abbingdon Global Limited</b>
<b>Applicant address:</b>	<b>79 SCARISBRICK NEW ROAD SOUTHPORT ENGLAND PR&amp;8 6LJ</b>
<b>Manufacture:</b>	<b>Abbingdon Global Limited</b>
<b>Address:</b>	<b>79 SCARISBRICK NEW ROAD SOUTHPORT ENGLAND PR&amp;8 6LJ</b>
<b>Date of Receipt:</b>	<b>Jun 05.2023</b>
<b>Date of Test:</b>	<b>Jun 06.2023~ Jun 06.2023</b>
<b>Issue Date:</b>	<b>Jul 12.2023</b>
<b>Tested by:</b>	<b>Shenzhen HAIYUN Testing Co., Ltd. Laboratory</b>

<b>Prepared By:</b>	<b>Checked By:</b>	<b>Approved By:</b>	
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# 1. Purpose & Environment

## 1.1 Purpose

- Meet the electrical performance index;
- Confirm the antenna scheme to meet the design requirements;

## 1.2 Environment

- Test Condition: the network analyzer(E5071C) and SATIMO microwave anechoic chamber
- Passive measurement results are presented

- TEST ENVIRONMENT CONDITIONS

Temperature	26.85°C	Relative Humidity	53.2 %
Atmosphere Pressure	101 kPa	\	\

## 2. Test Configuration and Test Method

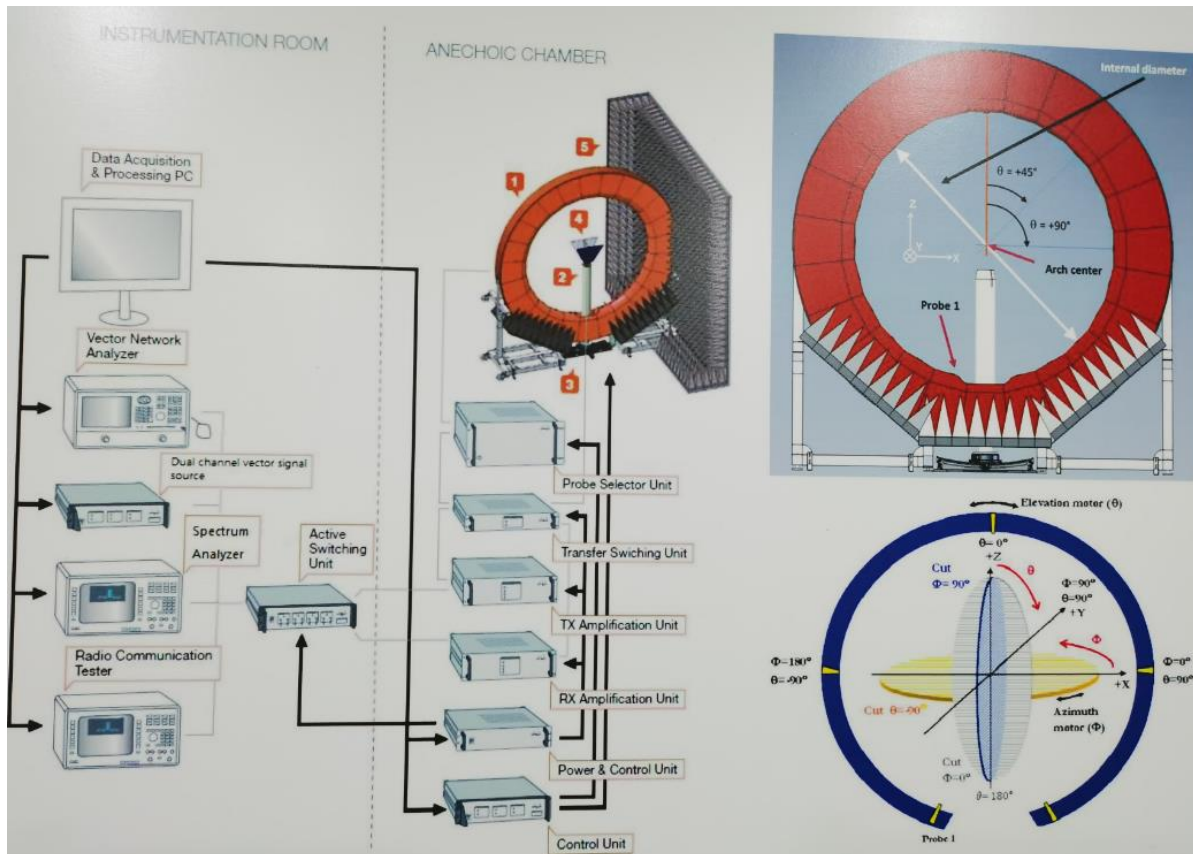
### 2.1 Test Configuration

Test configuration: Reference to CITA OTA distributed-axes system configuration.

Chamber: Fully Anechoic Chamber.

Turntable: Phi angle; Multiple antenna loop: Theta angle

Test system configuration diagram



### 2.2 Test Method

Port 1 of Network analyzer connect to antenna of EUT. Record S21 value every 15 degree from 0 to 345 degree on Theta angle and 0 to 180 on Phi angle . Repeat process to each antenna of EUT.

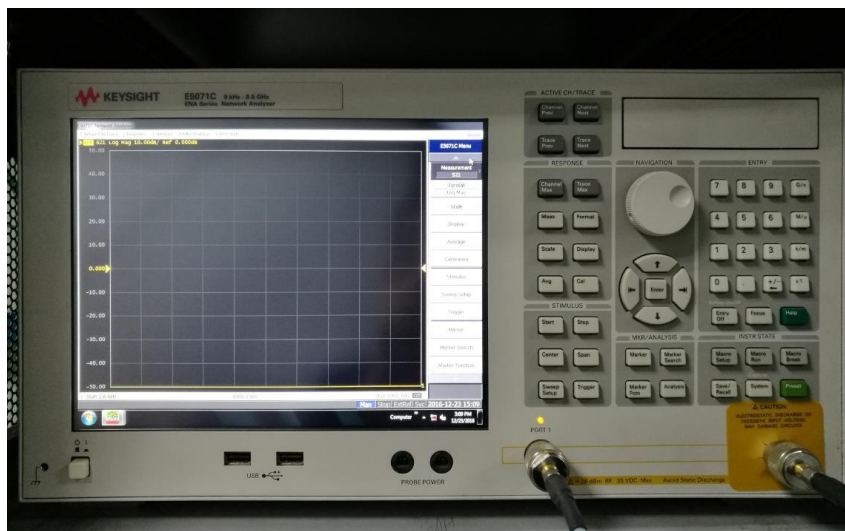
### 3.Test photos、 Test Condition and DUT Antenna

#### 3.1 Test photos



Microwave anechoic chamber

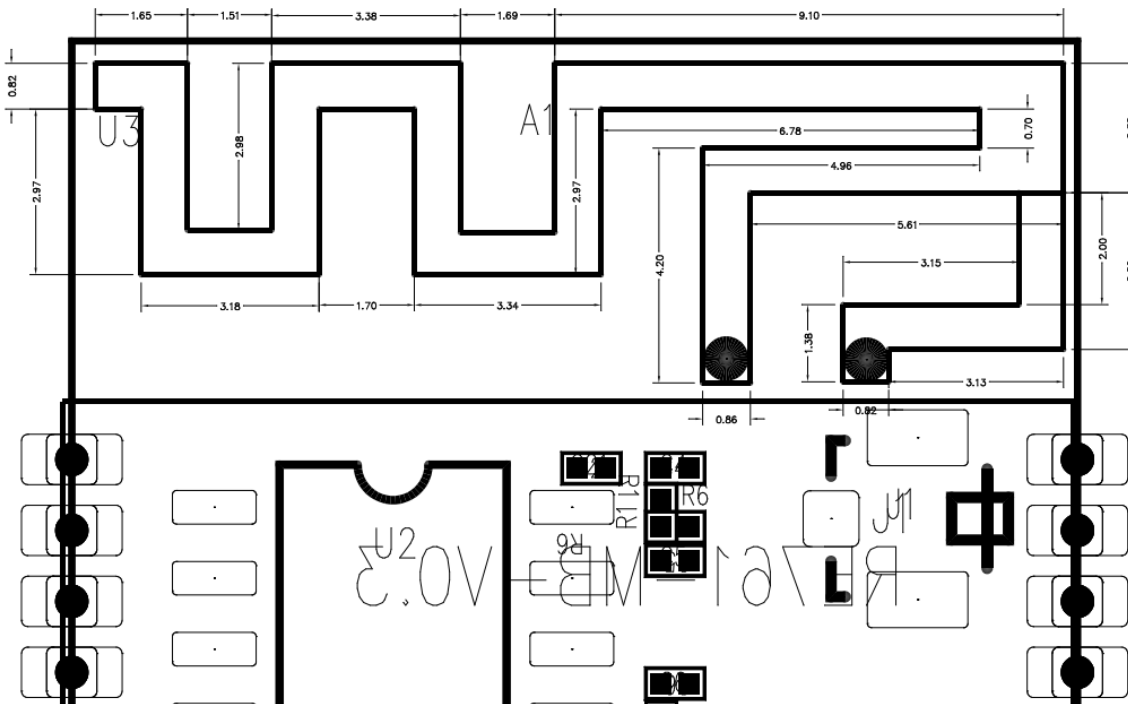
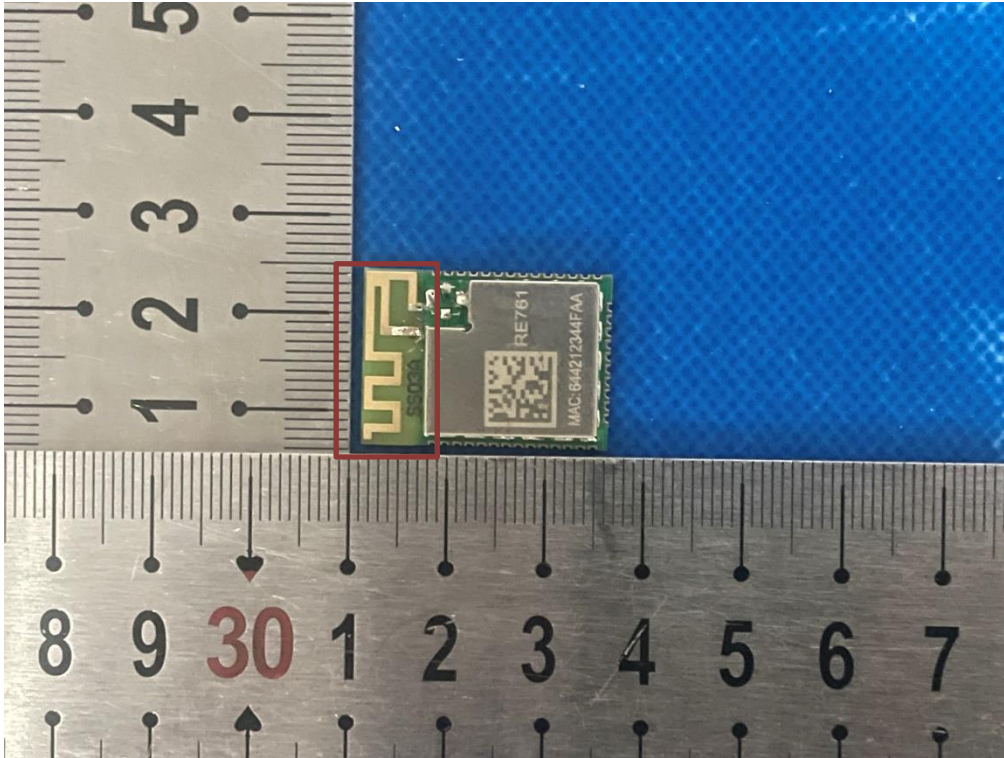
#### 3.2 Test Instruments



Name of Equipment	Manufacturer	Model Number	Serial Number	Calibrated until
Network Analyzer	Agilent	E5071C	MY46523716	2023/10/17
PROBE ARRAY	MVG	SG24-DP400-6000	/	2023/10/17
Chamber	MVG	Wave Studio 2.0	/	2023/10/17

Note: 1 The Cal. Interval was one year.

### 3.3 DUT Antenna











## 5. Peak Gain

### 5.1 2.4GHz Test results

Antenna_P	
Frequency (MHz)	Peak_Gain .dBi
2400	-4.452941204
2410	-3.881346186
2420	-3.539982798
2430	-3.03769362
2440	-2.92608348
2450	-2.614328213
2460	-2.492383302
2470	-1.94189934
2480	-1.75807356
2490	-1.320781373
2500	-1.059874013

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(END OF REPORT)