



**中认信通**

CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



# RF EXPOSURE EVALUATION

**Applicant:** Iconnect

Address: No.9, Aly. 58, Ln. 112, Ruiguang Rd., Neihu Dist., Taipei City, Taiwan

**FCC ID:** 2AB877921

**Product Name:** 11ax Module

**Standard(s):** 47 CFR §1.1307,  
47 CFR §2.1091  
447498 D04 Interim General RF Exposure Guidance  
v01

The above device has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

**Report Number:** 2403S73093E-RF-00FA1

**Date Of Issue:** 2025/7/18

**Reviewed By:** Calvin Chen

Title: RF Engineer

**Approved By:** Sun Zhong

Title: Manager

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## Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 442868, the FCC Designation No. : CN1314.

## Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol “▲”. Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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Each test item follows the test standard(s) without deviation.

## DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2403S73093E-RF-00FA1	Original Report	2025/7/18

Note:

This is an application for adding a new equipment class to the existing FCC ID: 2AB877921. The differences between the original device (FCC Grant Date: 07/18/2024) and the current version are as follows:

Based on the original hardware design, the 6GHz Wi-Fi function has been enabled via software, without any hardware modifications.

## GENERAL INFORMATION

### 1.1 Product Description for Equipment under Test (EUT)

<b>EUT Name:</b>	11ax Module
<b>EUT Model:</b>	AWM27921EU
<b>Multiple Model:</b>	AWM27921U, AWM27921BU, AMLGA7921, AMST7921, AMST7921U, AWSP7921U, AWM27921XX, AMLGA7921XX, AMST7921XX, AWSP7921XX (X: Any alphanumeric character or blank)
<b>Rated Input Voltage:</b>	3.3V DC from Debug board
<b>Sample Number:</b>	2KOD-1 (2.4G/5G Wi-Fi) 2XX1-1 (6G Wi-Fi)
<b>EUT Received Date:</b>	2024/4/28 (2.4G/5G Wi-Fi) 2025/1/24 (6G Wi-Fi)
<b>EUT Received Status:</b>	Good

Note: The multiple models are electrically identical with the test model. Please refer to the declaration letter for more detail, which was provided by manufacturer.

## 1. RF EXPOSURE EVALUATION

### 2.1 Applicable Standard

According to §1.1307(b)(3)(i)

(C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least  $\lambda/2\pi$ , where  $\lambda$  is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of  $\lambda/4$  or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	$1,920 R^2$ .
1.34-30	$3,450 R^2/f^2$ .
30-300	$3.83 R^2$ .
300-1,500	$0.0128 R^2 f$ .
1,500-100,000	$19.2R^2$ .

### 2.2 Measurement Result

Radio	Frequency (MHz)	$\lambda/2\pi$ (mm)	Distance (mm)	Exemption ERP (mW)	Maximum Conducted Power including Tune-up Tolerance (dBm)	Antenna Gain (dBi)	ERP		MPE-Based Exemption
							dBm	mW	
2.4G Wi-Fi	2412-2462	19.81	200	768	21	1.76	20.61	115.08	Compliant
5.2G Wi-Fi	5180-5240	9.22	200	768	14	1.33	13.18	20.80	Compliant
5.3G Wi-Fi	5260-5320	9.08	200	768	14.5	1.47	13.82	24.10	Compliant
5.6G Wi-Fi	5500-5720	8.69	200	768	15	1.2	14.05	25.41	Compliant
5.8G Wi-Fi	5745-5825	8.32	200	768	14	0.03	11.88	15.42	Compliant
6.4G Wi-Fi	5955-6415	8.02	200	768	7	2.40	7.25	5.31	Compliant
6.5G Wi-Fi	6435-6515	7.42	200	768	7	2.40	7.25	5.31	Compliant
6.8G Wi-Fi	6535-6855	7.31	200	768	7	2.40	7.25	5.31	Compliant
7G Wi-Fi	6875-7095	6.93	200	768	7	2.40	7.25	5.31	Compliant

*Note:*

1. The Maximum Conducted Power including Tune-up Tolerance was declared by manufacturer.
2. The 2.4G Wi-Fi and 5G Wi-Fi and 6GHz Wi-Fi cannot transmit simultaneously.

**Result: The device compliant the MPE-Based Exemption at 20cm distances.**

## **2. EUT PHOTOGRAPHS**

Please refer to the attachment 2403S73093E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2403S73093E-RF-INP EUT INTERNAL PHOTOGRAPHS

**===== END OF REPORT =====**