

## RF Exposure Report

**Report No.:** MFBEAD-WTW-P21050937A

**FCC ID:** M82-WISE2410

**Test Model:** WISE-2410B

**Series Model:** WISE-2410Bxxxxxxxxxxxx (where "X" may be any alphanumeric character or blank or "-")

**Received Date:** Sep. 16, 2022

**Test Date:** Oct. 06 ~ Oct. 07, 2022

**Issued Date:** Nov. 25, 2022

**Applicant:** ADVANTECH CO., LTD

**Address:** No. 1, Alley 20, Lane 26, Rueiguang Rd, Neihu District, Taipei, Taiwan 114

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Lin Kou Laboratories

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

**Test Location:** No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City  
33383, Taiwan

**FCC Registration /  
Designation Number:** 788550 / TW0003



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### Release Control Record

Issue No.	Description	Date Issued
MFBEAD-WTW-P21050937A	Original release	Nov. 25, 2022

## 1 Certificate of Conformity

**Product:** WISE-2410B LoRa board

**Brand:** ADVANTECH

**Test Model:** WISE-2410B

**Series Model:** WISE-2410Bxxxxxxxxxxx (where "X" may be any alphanumeric character or blank or "-")

**Sample Status:** Engineering sample

**Applicant:** ADVANTECH CO., LTD


**Test Date:** Oct. 06 ~ Oct. 07, 2022

**FCC Rule Part:** FCC Part 2 (Section 2.1091)

**Standards:** KDB 447498 D04 General RF Exposure Guidance v06

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

**Prepared by :**  , **Date:** Nov. 25, 2022  
Polly Chien / Specialist

**Approved by :**  , **Date:** Nov. 25, 2022  
Jeremy Lin / Project Engineer

## 2 RF Exposure

### 2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

### 2.2 MPE Calculation Formula

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

$G$  = gain of antenna in linear scale

$\pi$  = 3.1416

$r$  = distance between observation point and center of the radiator in cm

### 2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

## 3 Calculation Result of Maximum Conducted Power

Max AV Power (dBm)	Antenna Type	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
17.50	Monopole	-0.90	20	0.009	0.601

Note:

1. Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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