

RF Exposure Report

Report No.: MFBEAD-WTW-P21050937A

FCC ID: M82-WISE2410

Test Model: WISE-2410B

Series Model: WISE-2410Bxxxxxxxxxxx (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

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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 / 788550 / TW0003
Designation Number:



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

Approved by : Jeremy Lin , **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 ²)	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

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

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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 ²)	Limit (mW/cm ²)
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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