

RF Exposure Report

Report No.: SA190520C05

FCC ID: M82-WISE2410

Test Model: WISE-2410B

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

Received Date: Jul. 31, 2019

Test Date: Dec. 29, 2019 ~ Feb. 05, 2020

Issued Date: Feb. 05, 2020

Applicant: ADVANTECH CO., LTD

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

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Test Location: No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City
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FCC Registration / Designation Number: 788550 / TW0003



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Release Control Record

Issue No.	Description	Date Issued
SA190520C05	Original release	Feb. 05, 2020

1 Certificate of Conformity

Product: WISE-2410B LoRa board

Brand: Advantech

Test Model: WISE-2410B

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

Sample Status: Engineering sample

Applicant: ADVANTECH CO., LTD

Test Date: Dec. 29, 2019 ~ Feb. 05, 2020

Standards: FCC Part 2 (Section 2.1091)

References Test IEEE C95.3 -2002

Guidance: KDB 447498 D01 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 : Celine Chou, **Date:** Feb. 05, 2020
Celine Chou / Senior Specialist

Approved by : Bruce Chen, **Date:** Feb. 05, 2020
Bruce Chen / Senior 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

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

where

Pd = power density in mW/cm²

Pout = 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 Tune-up Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
20.00	1.00	20	0.025	0.601

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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