

RF Exposure Report

Report No.: SABBZS-WTW-P21080732

FCC ID: ZQ6-W522A

Test Model: W522A

Received Date: Sep. 28, 2021

Test Date: Nov. 11 ~ Dec. 11, 2021

Issued Date: Mar. 14, 2022

Applicant: AMPAK Technology Inc.

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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 (1): No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City
33383, Taiwan

Test Location (2): No. 70, Wenming Rd., Guishan Dist., Taoyuan City 333, Taiwan

**FCC Registration /
Designation Number (1):** 788550 / TW0003

**FCC Registration /
Designation Number (2):** 281270 / TW0032



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Release Control Record

Issue No.	Description	Date Issued
SABBZS-WTW-P21080732	Original release.	Mar. 14, 2022

1 Certificate of Conformity

Product: 1Tx/1Rx 802.11 ac/a/b/g/n Wi-Fi + BT 5.0 Module

Brand: AMPAK

Test Model: W522A

Sample Status: Engineering sample

Applicant: AMPAK Technology Inc.


Test Date: Nov. 11 ~ Dec. 11, 2021

Standards: FCC Part 2 (Section 2.1091)

References Test 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 :  , **Date:** Mar. 14, 2022
Polly Chien / Specialist

Approved by :  , **Date:** Mar. 14, 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				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1500	f/1500	30
1500-100,000	1.0	30

f = Frequency in MHz; *Plane-wave equivalent power density

2.2 MPE Calculation Formula

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

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

Frequency Band (MHz)	Max. AV Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
WLAN 2412~2462	17.89	2	20	0.019	1
WLAN 5180~5240	17.47	3	20	0.022	1
WLAN 5260~5320	17.47	3	20	0.022	1
WLAN 5500~5700	15.96	3	20	0.016	1
WLAN 5745~5825	15.95	3	20	0.016	1
BT EDR 2402~2480	3.45	2	20	0.001	1
BT LE 2402~2480	3.39	2	20	0.001	1

*2.4GHz & 5GHz & BT technology cannot transmit at same time.

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

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