

RF Exposure Report

Report No.: SA191009E01

FCC ID: PBLMLC21AAM

Test Model: MLC21AAM

Received Date: Oct. 09, 2019

Test Date: Nov. 19, 2019

Issued Date: Jan. 20, 2020

Applicant: AMIT Wireless Inc.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Hsin Chu Laboratory

Lab Address: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,
Taiwan

Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,
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**FCC Registration /
Designation Number:** 723255 / TW2022

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Release Control Record

Issue No.	Description	Date Issued
SA191009E01	Original release.	Jan. 20, 2020

1 Certificate of Conformity

Product: Wifi module

Brand: AMIT

Test Model: MLC21AAM

Sample Status: MASS-PRODUCTION

Applicant: AMIT Wireless Inc.

Test Date: Nov. 19, 2019

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.3-2002

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 EMC characteristics under the conditions specified in this report.

Prepared by :



Date:

Jan. 20, 2020

Claire Kuan / Specialist

Approved by :



Date:

Jan. 20, 2020

Clark Lin / Technical Manager

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 20 cm away from the body of the user. So, this device is classified as **Mobile Device**.

2.4 Antenna Gain

Ant. No.	Chain No.	Antenna Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connector Type
1	Chain 0	3	2.4~2.4835	Dipole	R-SMA
		5	5.15~5.85		
2	Chain 1	3	2.4~2.4835	Dipole	R-SMA
		5	5.15~5.85		

2.5 Calculation Result of Maximum Conducted Power

Operation Mode	Evaluation Frequency (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
WLAN (2.4GHz)	2437	793.482	6.01	20	0.62989	1
WLAN (U-NII-1)	5230	58.956	8.01	20	0.07417	1
WLAN (U-NII-3)	5755	134.125	8.01	20	0.16875	1

Note:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. 2.4GHz: The directional gain = 3dBi + 10log(2) = 6.01dBi
3. 5GHz: The directional gain = 5dBi + 10log(2) = 8.01dBi
4. 2.4GHz & 5GHz technology can't transmit at same time.

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