

# **RF Exposure Report**

Report No.: SA200309D01

FCC ID: 2AATB-WAP-7531

Test Model: WAP-7531

Received Date: Mar. 9, 2020

Test Date: Mar. 17 to 20, 2020

**Issued Date:** Mar. 24, 2020

Applicant: Tatung Technology Inc.

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

Lin Kou Laboratories

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FCC Registration /

**Designation Number:** 198487 / TW2021





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# **Release Control Record**

Issue No.	Description	Date Issued
SA200309D01	Original release.	Mar. 24, 2020



#### 1 Certificate of Conformity

Product: Wi-Fi Dual Band Video Bridge

Brand: TTI

Test Model: WAP-7531

Sample Status: Engineering sample

Applicant: Tatung Technology Inc.

**Test Date:** Mar. 17 to 20, 2020

Standards: FCC Part 2 (Section 2.1091)

IEEE C95.3 -2002

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. 24, 2020

Celia Chen / Supervisor

Approved by: , Date: Mar. 24, 2020

Rex Lai / Associate Technical Manager



### 2 RF Exposure

# 2.1 Limits For Maximum Permissible Exposure (MPE)

Frequency Range 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								
0.3-1.34	614	1.63	(100)*	30				
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	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

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

where

Pd = power density in mW/cm<sup>2</sup>

Pout = 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**.



### 2.4 Calculation Result of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm²)	Limit (mW/cm²)
2412-2462	21.74	9.52	20	0.2659	1
5180-5240	20.83	10.92	20	0.2977	1
5745-5825	20.57	10.92	20	0.2804	1

#### Note:

- 1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
- 5.0GHz: Directional gain = 4.9dBi + 10log(4) = 10.92dBi
  2.4GHz: Directional gain = 3.5dBi + 10log(4) = 9.52dBi
- 3. The EUT was contain FCC ID: TX2RTL8192EEBT of 2.4GHz module.
- 4. 2.4GHz and 5GHz modes cannot transmit simultaneously.

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