



FCC ID: 2AHDGPW00U
Report No.: T190322W01-MF-1 Ref. No.: T190315W01-MF

Page 1 / 10
Rev.: 00

IEEE C95.1 2005
KDB 447498 D03
47 C.F.R. Part 1, Subpart I, Section 1.1310
47 C.F.R. Part 2, Subpart J, Section 2.1091

RF EXPOSURE REPORT

For

AVer Dual Band Wirelss Dongle

Model: PW00U

Trade Name: AVer

Issued to

AVer Information Inc.
8F., No.157, Da-An Rd., Tucheng Dist, New Taipei City, Taiwan

Issued by

Compliance Certification Services Inc.
No.11, Wugong 6th Rd., Wugu Dist.,
New Taipei City 24891, Taiwan. (R.O.C.)
Issue Date: June 17, 2019

Note: *This document may be altered or revised by Compliance Certification Services Inc. personnel only, and shall be noted in the revision section of the document. The client should not use it to claim product endorsement by TAF, A2LA, NIST or any government agencies. The test results in the report only apply to the tested sample.*

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部分複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: T190322W01-MF-1

Ref. No.: T190315W01-MF

Page 2 / 10

Rev.: 00

Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	June 17, 2019	Initial Issue	ALL	May Lin



Report No.: T190322W01-MF-1

Ref. No.: T190315W01-MF

Page 3 / 10
Rev.: 00

TABLE OF CONTENTS

1. TEST RESULT CERTIFICATION	4
2. LIMIT	5
3. EUT SPECIFICATION.....	6
4. TEST RESULTS.....	7
5. MAXIMUM PERMISSIBLE EXPOSURE.....	8
6. SIMULTANEOUS TRANSMISSION SAR ANALYSIS.....	10



Report No.: T190322W01-MF-1

Ref. No.: T190315W01-MF

Page 4 / 10

Rev.: 00

1. TEST RESULT CERTIFICATION

We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10: 2013 and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 15.207, 15.209, 15.247.

The test results of this report relate only to the tested sample EUT identified in this report.

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
IEEE C95.1 2005 KDB 447498 D03 47 C.F.R. Part 1, Subpart I, Section 1.1310 47 C.F.R. Part 2, Subpart J, Section 2.1091	No non-compliance noted
Statements of Conformity	
Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.	

Approved by:

Kevin Tsai
Deputy Manager
Compliance Certification Services Inc.

Reporter:

May Lin
Report coordinator
Compliance Certification Services Inc.



Report No.: T190322W01-MF-1

Ref. No.: T190315W01-MF

Page 5 / 10

Rev.: 00

2. LIMIT

According to §15.247(i), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines. See § 1.1307(b)(1) of this chapter.

3. EUT SPECIFICATION

EUT	AVer Dual Band Wirelss Dongle																																		
Model	PW00U																																		
Frequency band (Operating)	☒ Bluetooth: 2402MHz-2480MHz ☒ 802.11b/g/n HT20: 2412MHz ~ 2462 MHz 802.11n HT40: 2422MHz ~ 2452MHz 802.11a/n HT20: 5180MHz ~ 5240MHz / 5260MHz ~ 5320MHz / 5500MHz ~ 5700MHz / 5745MHz ~ 5825MHz 802.11n HT40: 5190MHz ~ 5230MHz / 5270MHz ~ 5310MHz / 5510MHz ~ 5670MHz / 5755MHz ~ 5795MHz 802.11ac VHT80: 5210MHz / 5290MHz / 5530MHz / 5775MHz ☐ Others																																		
Device category	☐ Portable (<20cm separation) ☒ Mobile (>20cm separation) ☐ Others																																		
Exposure classification	☐ Occupational/Controlled exposure (S = 5mW/cm ²) ☒ General Population/Uncontrolled exposure (S=1mW/cm ²)																																		
Antenna Specification	Bluetooth : Antenna Gain : 4.15 dBi (Numeric gain 2.60) 2.4GHz: Antenna Gain : 4.15 dBi (Numeric gain 2.60) 5GHz: Antenna Gain : 1.78 dBi (Numeric gain 1.51)																																		
Maximum tune up power	<table border="1"> <tbody> <tr> <td>Bluetooth:</td><td>8.50 dBm</td><td>(7.079 mW)</td></tr> <tr> <td>2.4GHz:</td><td></td><td></td></tr> <tr> <td>IEEE 802.11b Mode:</td><td>24.00 dBm</td><td>(251.189 mW)</td></tr> <tr> <td>IEEE 802.11g Mode:</td><td>20.50 dBm</td><td>(112.202 mW)</td></tr> <tr> <td>IEEE 802.11n HT 20 Mode:</td><td>21.00 dBm</td><td>(125.893 mW)</td></tr> <tr> <td>IEEE 802.11n HT 40 Mode:</td><td>21.00 dBm</td><td>(125.893 mW)</td></tr> <tr> <td>5GHz:</td><td></td><td></td></tr> <tr> <td>IEEE 802.11a Mode:</td><td>18.50 dBm</td><td>(70.795 mW)</td></tr> <tr> <td>IEEE 802.11n HT 20 Mode:</td><td>20.00 dBm</td><td>(100.000 mW)</td></tr> <tr> <td>IEEE 802.11n HT 40 Mode:</td><td>19.50 dBm</td><td>(89.125 mW)</td></tr> <tr> <td>IEEE 802.11ac VHT 80 Mode:</td><td>18.00 dBm</td><td>(63.096 mW)</td></tr> </tbody> </table>		Bluetooth:	8.50 dBm	(7.079 mW)	2.4GHz:			IEEE 802.11b Mode:	24.00 dBm	(251.189 mW)	IEEE 802.11g Mode:	20.50 dBm	(112.202 mW)	IEEE 802.11n HT 20 Mode:	21.00 dBm	(125.893 mW)	IEEE 802.11n HT 40 Mode:	21.00 dBm	(125.893 mW)	5GHz:			IEEE 802.11a Mode:	18.50 dBm	(70.795 mW)	IEEE 802.11n HT 20 Mode:	20.00 dBm	(100.000 mW)	IEEE 802.11n HT 40 Mode:	19.50 dBm	(89.125 mW)	IEEE 802.11ac VHT 80 Mode:	18.00 dBm	(63.096 mW)
Bluetooth:	8.50 dBm	(7.079 mW)																																	
2.4GHz:																																			
IEEE 802.11b Mode:	24.00 dBm	(251.189 mW)																																	
IEEE 802.11g Mode:	20.50 dBm	(112.202 mW)																																	
IEEE 802.11n HT 20 Mode:	21.00 dBm	(125.893 mW)																																	
IEEE 802.11n HT 40 Mode:	21.00 dBm	(125.893 mW)																																	
5GHz:																																			
IEEE 802.11a Mode:	18.50 dBm	(70.795 mW)																																	
IEEE 802.11n HT 20 Mode:	20.00 dBm	(100.000 mW)																																	
IEEE 802.11n HT 40 Mode:	19.50 dBm	(89.125 mW)																																	
IEEE 802.11ac VHT 80 Mode:	18.00 dBm	(63.096 mW)																																	
Evaluation applied	☒ MPE Evaluation* ☐ SAR Evaluation ☐ N/A																																		

4. TEST RESULTS

No non-compliance noted.

Calculation

Given $E = \frac{\sqrt{30 \times P \times G}}{d}$ & $S = \frac{E^2}{377}$

Where E = Field strength in Volts / meter

P = Power in Watts

G = Numeric antenna gain

d = Distance in meters

S = Power density in milliwatts / square centimeter

Combining equations and re-arranging the terms to express the distance as a function of the remaining variables yields:

$$S = \frac{30 \times P \times G}{377 d^2}$$

Changing to units of mW and cm, using:

$$P \text{ (mW)} = P \text{ (W)} / 1000 \text{ and}$$

$$d \text{ (cm)} = d \text{ (m)} / 100$$

Yields

$$S = \frac{30 \times (P/1000) \times G}{377 \times (d/100)^2} = 0.0796 \times \frac{P \times G}{d^2} \quad \text{Equation 1}$$

Where d = Distance in cm

P = Power in mW

G = Numeric antenna gain

S = Power density in mW / cm²

5. MAXIMUM PERMISSIBLE EXPOSURE

Substituting the MPE safe distance using $d = 20$ cm into Equation 1:

$$S = 0.000199 \times P \times G$$

Where P = Power in mW

G = Numeric antenna gain

S = Power density in mW / cm²

Bluetooth:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm2)
0	2402	7.079	2.6	20	0.0037	1

IEEE 802.11b mode:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm2)
11	2462	251.189	2.6	20	0.1300	1

IEEE 802.11g mode:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm2)
11	2462	112.202	2.6	20	0.0581	1

IEEE 802.11n HT20 mode:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm2)
6	2437	125.893	2.6	20	0.0651	1

IEEE 802.11n HT40 mode:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm2)
9	2452	125.893	2.6	20	0.0651	1

IEEE 802.11a mode:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm2)
165	5825	70.795	1.51	20	0.0213	1

IEEE 802.11n HT20 mode:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm2)
56	5820	100	1.51	20	0.0300	1

IEEE 802.11n HT40 mode:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm2)
159	5795	89.125	1.51	20	0.0268	1

IEEE 802.11ac VHT80 mode:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm2)
155	5775	63.096	1.51	20	0.0190	1



Report No.: T190322W01-MF-1

Ref. No.: T190315W01-MF

Page 10 / 10

Rev.: 00

6. SIMULTANEOUS TRANSMISSION SAR ANALYSIS

Both of the Bluetooth 、WIFI 2.4GHz and WIFI 5GHz can transmit simultaneously, the formula of calculated the MPE is:

$$CPD1 / LPD1 + CPD2 / LPD2 +etc. < 1$$

CPD = Calculation power density

LPD = Limit of power density

Bluetooth 、WIFI 2.4GHz and WIFI 5GHz

Therefore, the worst-case situation is $0.0037 / 1 + 0.0651 / 1 + 0.0268 / 1 = 0.0956$, which is less than “1”.

--End of Report--