

# Test Report

## FCC TAS COMPLIANCE

Product Name : Notebook PC  
Brand Name : ASUS  
Model No. : B9403CV  
FCC ID : PD9AX211D2

Applicant : ASUSTeK COMPUTER INC.

Address : 1F., No. 15, Lide Rd., Beitou Dist., Taipei City 112, Taiwan

Date of Receipt : 2022/12/30  
Date of Test : 2023/03/13 - 2023/03/14  
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**Revision History**

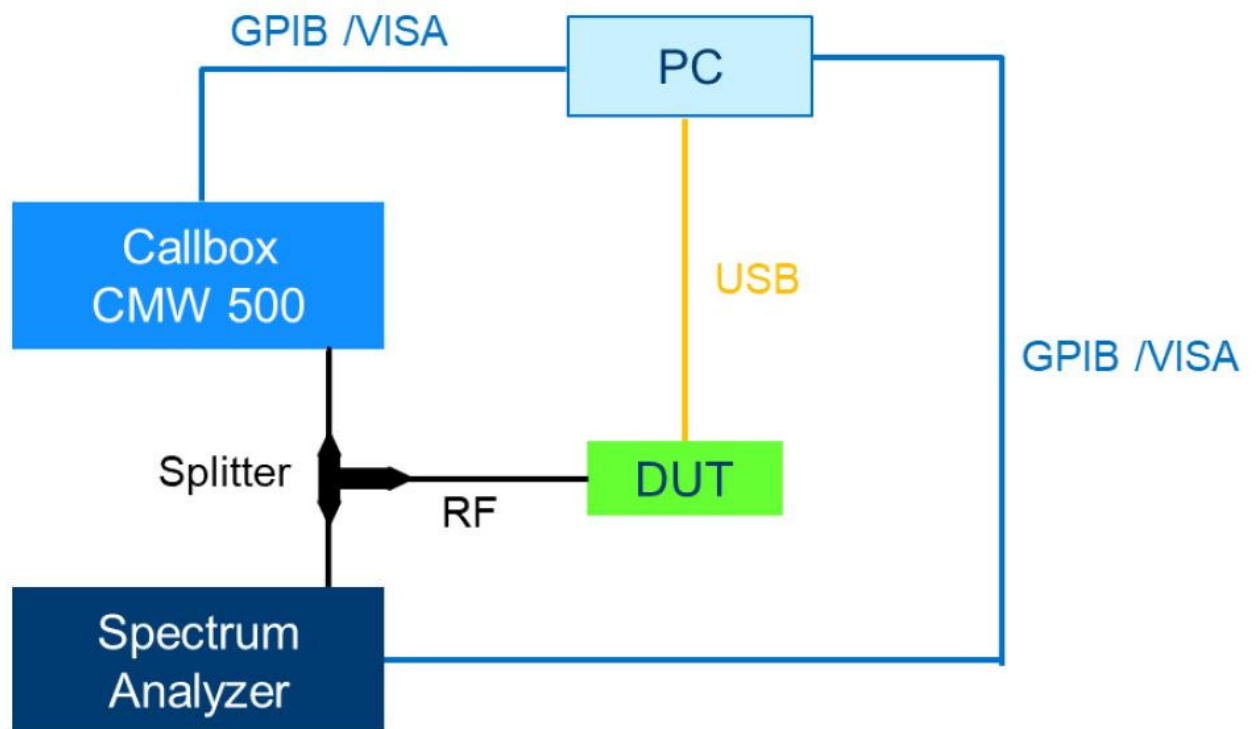
| Report No.          | Version | Description             | Issued Date |
|---------------------|---------|-------------------------|-------------|
| 22C0878R-SANAV07S-3 | V1.0    | Initial issue of report | 2023/03/17  |

## 1. Test Setup

The conducted power measurement test setup is described in the following and illustrated in Figure A.1.

- The DUT which AX211 WiFi module is installed inside Notebook PC from ASUS model B9403CV.
- A control PC is used to configure the Call Box as an access point to manage the uplink and downlink data traffic.
- Uplink signal power is measured with the Spectrum Analyzer and record by the PC with a maximum time resolution of 0.3333 msec.
- Uplink signal from the module is fed through a 3 dB Power Splitter, which delivers an equal amount of signal to the Spectrum Analyzer and the Call Box. The Splitter has high isolation between the Spectrum Analyzer and the Call Box.

Figure.1 – Validation using conducted power measurement test setup.



## 2. Test Equipment List

| Instrument                    | Manufacturer | Model No. | Serial No. | Last Calibration | Next Calibration |
|-------------------------------|--------------|-----------|------------|------------------|------------------|
| Universal Radio Communication | R&S          | CMW500    | 171674     | N/A              | N/A              |
| Spectrum Analyzer             | FSV30        | 103464    | R&S        | 2022/04/27       | 2023/04/26       |

### 3. Test Results

#### 3.1. SAR Power in Bios Table as per SAR assessment

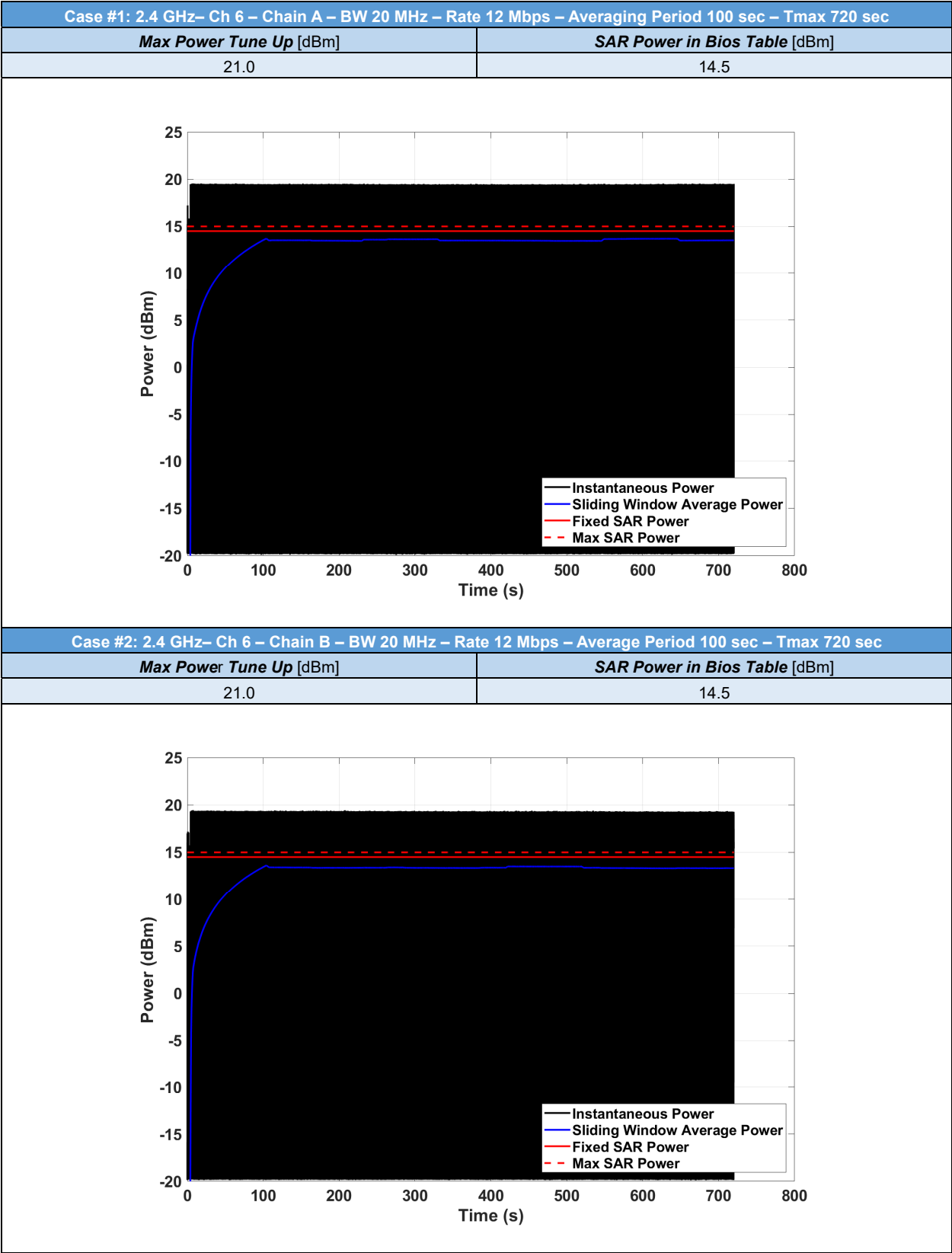
| Chain A             |                       | Chain B             |                       |
|---------------------|-----------------------|---------------------|-----------------------|
| IEEE 802.11g<br>CH6 | IEEE 802.11a<br>CH120 | IEEE 802.11g<br>CH6 | IEEE 802.11a<br>CH120 |
| 14.5                | 13                    | 14.5                | 13                    |

#### 3.2. TAS Validation for 2.4 GHz Band on Channel 6

Table 1 – Test Cases for 2.4 GHz Channel 6

| Test Case # | Channel | Chain | Channel Bandwidth | Measurement Averaging Period | Measurement Time Resolution | Max Power Tune Up [dBm] | SAR Power in Bios Table [dBm] |
|-------------|---------|-------|-------------------|------------------------------|-----------------------------|-------------------------|-------------------------------|
| 1           | 6       | A     | 20 MHz            | 100 sec                      | 0.3333 msec                 | 21.0                    | 14.5                          |
| 2           |         | B     | 20 MHz            | 100 sec                      | 0.3333 msec                 | 21.0                    | 14.5                          |

Results of test cases in Table 2 are shown in the following plots.



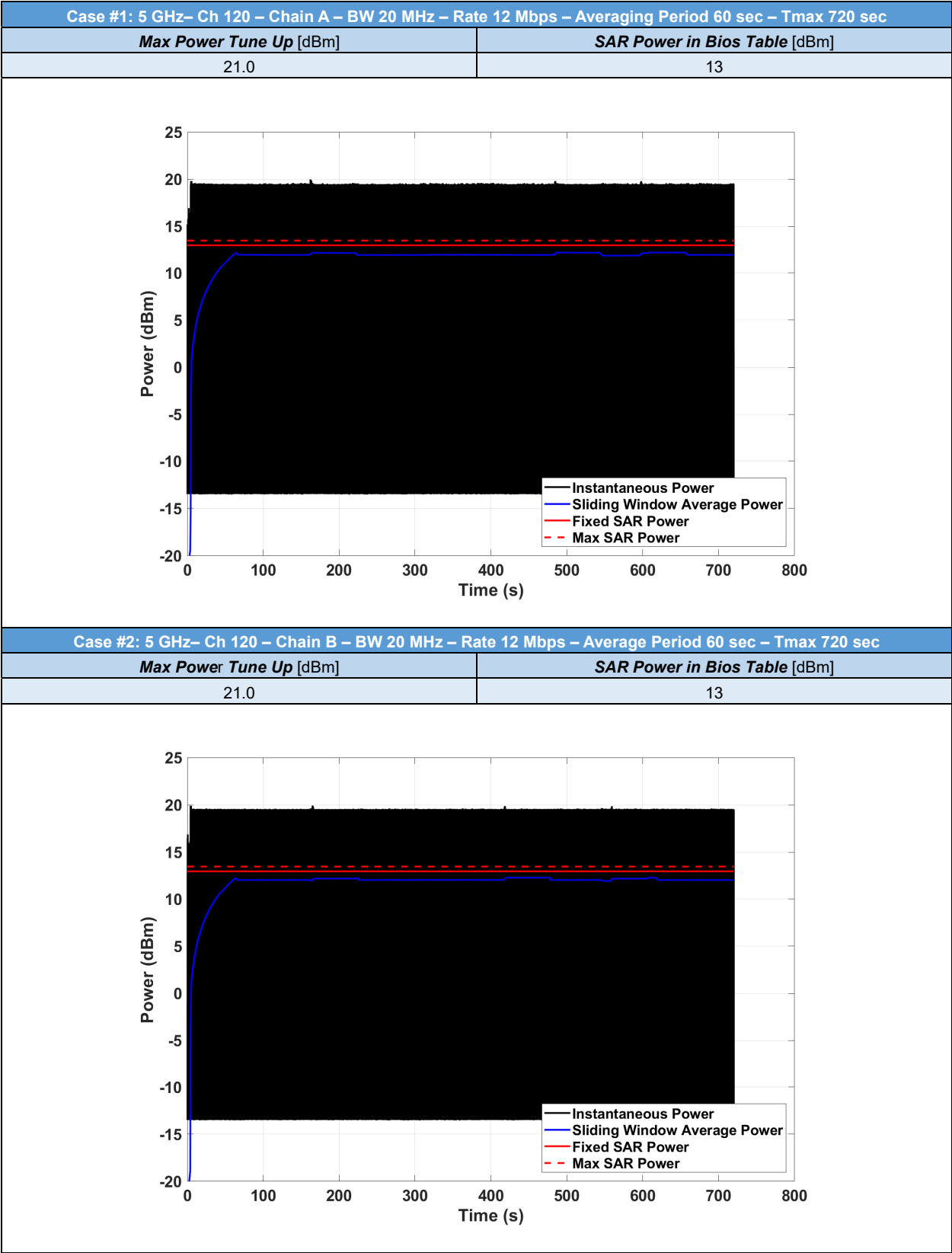
### 3.3. TAS Validation for 5 GHz Band on Channel 120

Table 2 – Test Cases for 5 GHz Channel 120

| Test Case # | Channel | Chain | Channel Bandwidth | Measurement Averaging Period | Measurement Time Resolution | Max Power Tune Up [dBm] | SAR Power in Bios Table [dBm] |
|-------------|---------|-------|-------------------|------------------------------|-----------------------------|-------------------------|-------------------------------|
| 1           | 120     | A     | 20 MHz            | 60 sec                       | 0.3333 msec                 | 21.0                    | 13                            |
| 2           |         | B     | 20 MHz            | 60 sec                       | 0.3333 msec                 | 21.0                    | 13                            |

Results of test cases in Table 2 are shown in the following plots.





## **4. Conclusion**

The TAS Intel Algorithm functionality of AX211 WiFi Module Integrated inside ASUS B9403CV is tested. All test cases are compliant with SAR limit.