

Test Report

FCC TAS COMPLIANCE

Product Name : Notebook PC
Brand Name : ASUS
Model No. : N6506C
FCC ID : MSQAX211NG

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

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Revision History

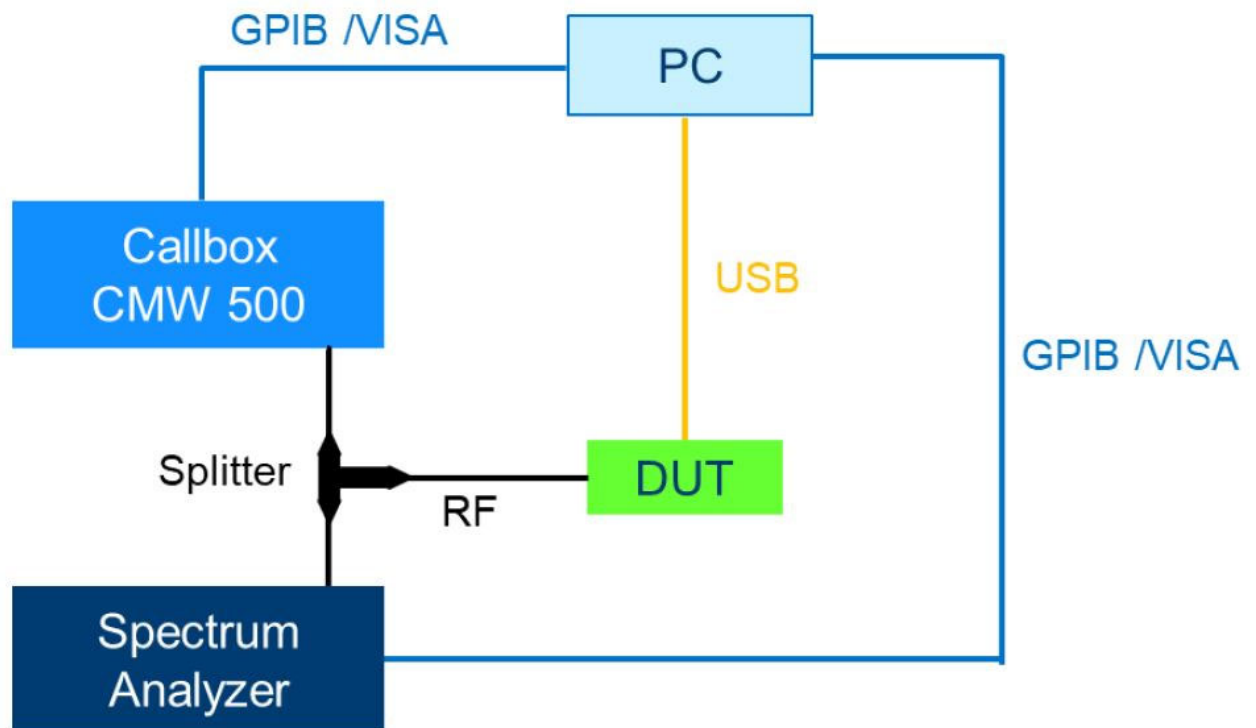
Report No.	Version	Description	Issued Date
2490228R-SANAV07S-1	V1.0	Initial issue of report	2025/05/07

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 N6506C.
- 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.



Note: Setup loss was included in the conducted power measurements shown in Figure 1. The test setup includes two paths: DUT to Callbox and DUT to Spectrum Analyzer. The loss values applied were 8.1 dB (DUT to Callbox) and 8.3 dB (DUT to Spectrum Analyzer) at 2.4 GHz, and 9.5 dB and 10.1 dB respectively at 5 GHz.

2. Test Equipment List

Instrument	Manufacturer	Model No.	Serial No.	Last Calibration	Next Calibration
Communication Tester	R&S	CMW500	157304	N/A	N/A
Spectrum Analyzer	R&S	FSV30	103464	2024/6/21	2025/6/20
Power Divider	Woken	0120A04056002D -		Attenuation and loss verified before use	

3. Test Results

3.1. SAR Power in Bios Table as per SAR assessment

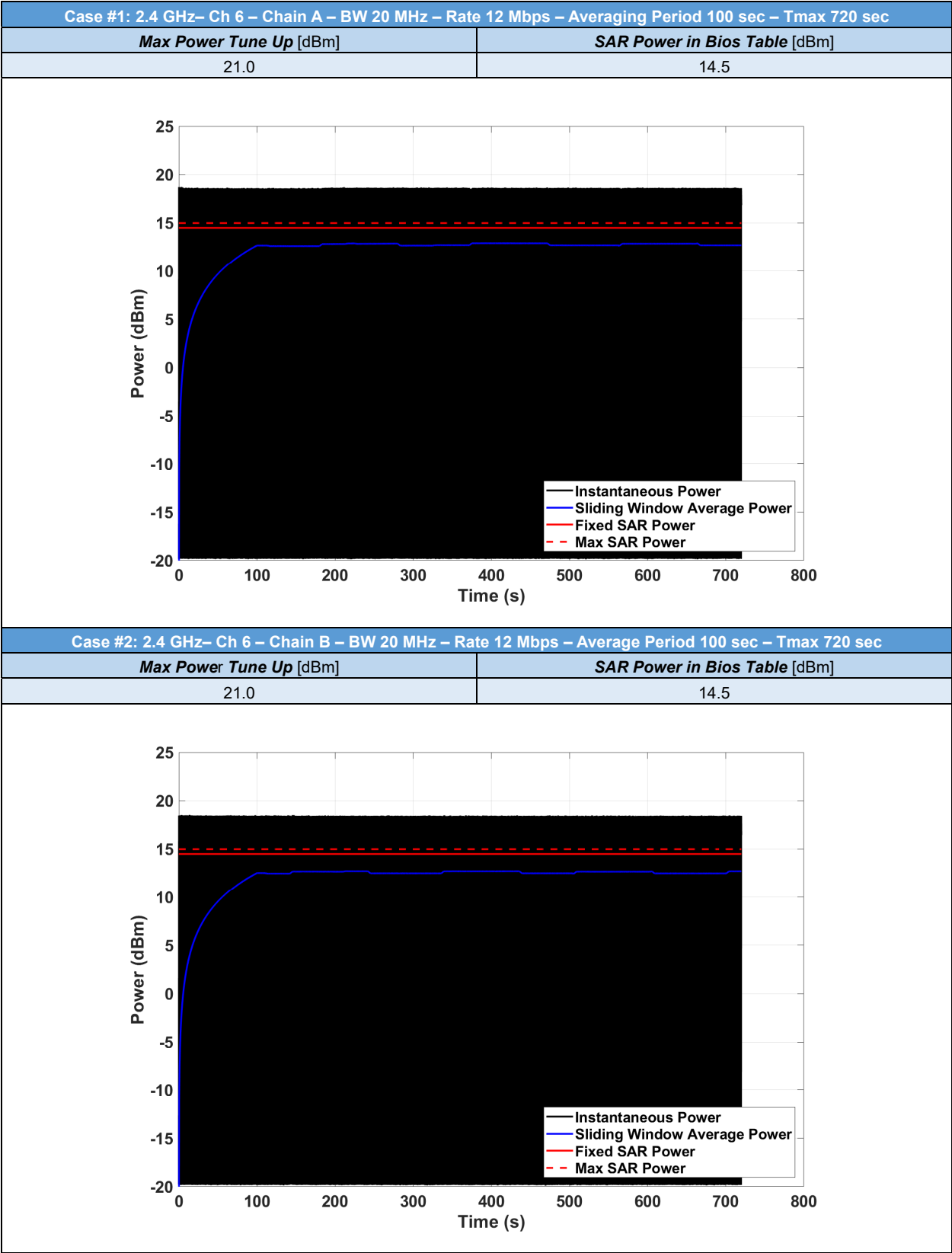
Chain A		Chain B	
IEEE 802.11g CH6	IEEE 802.11a CH120	IEEE 802.11g CH6	IEEE 802.11a CH120
14.5	13	14.5	13

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 1 are shown in the following plots.

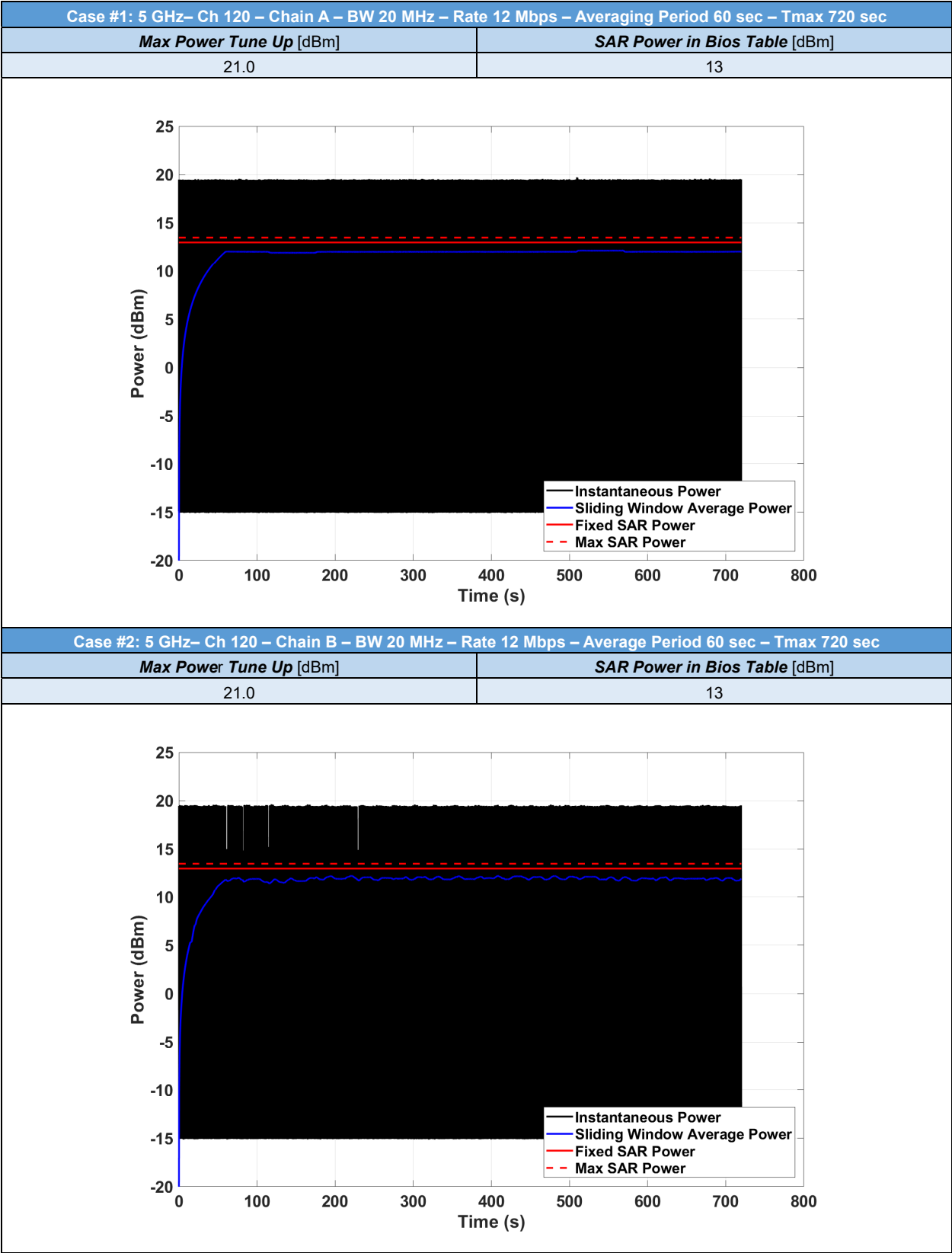


3.3. TAS Validation for 5 GHz Band on Channel 120

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 N6506C is tested. All test cases are compliant with SAR limit.