



TEST REPORT

COMPLIANCE TEST REPORT

| | |
|------------------------|---|
| EUT Description | Wireless Module installed in Convertible PC |
| Brand Name | Intel® Wireless- Wi-Fi 6E AX411 |
| Model Name | AX411NGW |
| FCC ID | PD9AX411NG |
| Date of Test Start/End | 2023-04-27 / 2023-04-27 |
| Features | 802.11ax, Dual Band, 2x2 Wi-Fi + Bluetooth® 5.2 |
| Description | Platform: TPN-C155 |

| | |
|----------------------|--|
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| | |
|----------------------------|---|
| Test Report identification | 220513-01.TR01 |
| Revision Control | Rev. 00 This test report replaces any previous versions of this test report (see Section 1) |

The test results relate only to the samples tested.

Reviewed by _____

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1. General conditions, competences and guarantees

- ✓ Intel WRF Lab only provides testing services and is committed to providing reliable, unbiased test results and interpretations.
- ✓ Intel WRF Lab is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.
- ✓ Intel WRF Lab has developed calibration and proficiency programs for its measurement equipment to ensure correlated and reliable results to its customers.
- ✓ This report is only referred to the item that has undergone the test.
- ✓ This report does not imply an approval of the product by the Certification Bodies or competent Authorities.

2. Environmental Conditions

- ✓ At the site where the measurements were performed the following limits were not exceeded during the tests:

| | |
|-------------|-----------------|
| Temperature | 23.8 +/- 0.5 °C |
| Humidity | 34.0 +/- 4.5 % |

3. Test Sample

| Sample | ID # | Description | Model | Serial # | Note |
|--------|----------------|---|---------------------|------------|------|
| #1 | 220513-01. S01 | Wireless Module installed in Convertible PC | TPN-C155 + AX411NGW | HPA4002307 | - |

4. EUT Features

The herein information is provided by the customer.

Intel WRF Lab declines any responsibility for the accuracy of the stated customer provided information, especially if it has any impact on the correctness of test results presented in this report.

| | | |
|------------------------|-------------------------------------|------------------------------|
| Brand Name | Intel® Wireless- Wi-Fi 6E AX411 | |
| Model Name | AX411NGW | |
| Software Version | DAU throughput measurement V2.0.0.1 | |
| Driver Version | 22.200.0.6 | |
| Prototype / Production | Production | |
| Host Identification | TPN-C155 | |
| Supported Radios | 802.11b/g/n/ax | 2.4GHz (2400.0 – 2483.5 MHz) |
| | 802.11a/n/ac/ax | 5.2GHz (5150.0 – 5350.0 MHz) |
| | | 5.6GHz (5470.0 – 5725.0 MHz) |
| | | 5.8GHz (5725.0 – 5850.0 MHz) |
| | | 5.9GHz (5850.0 – 5895.0 MHz) |
| | 802.11ax | 6.0GHz (5925.0 – 7125.0 MHz) |
| | Bluetooth | 2.4GHz (2400.0 – 2483.5 MHz) |

5. Remarks and comments

1. The test report is a validation of the FCC TAS algorithm

6. Document Revision History

| Revision # | Date | Modified by | Revision Details |
|------------|------------|----------------|------------------|
| Rev.00 | 2023-05-03 | Tanguy MATHIEU | First Issue |

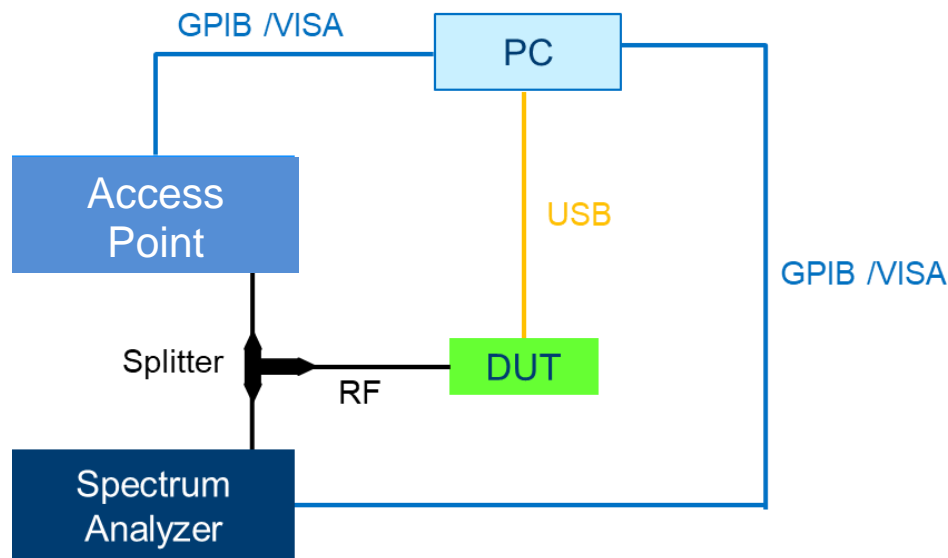
Annex A. Test & System description

A.1 Test Setup

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

- The DUT which AX411NGW Wi-Fi module is installed inside convertible PC from HP model TPN-C155.
- A control PC is used to configure the access point to manage the uplink and downlink data traffic.
- Uplink signal power is measured with the spectrum analyzer and recorded by the PC with a maximum time resolution of 0.3333 ms.
- 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 access point. The splitter has high isolation between the spectrum analyzer and the access point.

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



A.2 Test Equipment List

Equipment and accessories used for the conducted power measurement test setup are listed below. The Test Platform (DUT), test setup and associated equipment are shown in A.1.3.

| ID# | Device | Type/Model | Serial # | Manufacturer | Cal. Date | Cal. Due Date |
|---------|-------------------|------------|---------------|-----------------|------------|---------------|
| 052-001 | Access Point | RAXE500 | 6NU11C7RA0233 | NETGEAR | - | - |
| 265-000 | Spectrum Analyzer | FSV30 | 101318 | Rohde & Schwarz | 2023-03-29 | 2025-03-29 |
| 455-001 | RF Cable | - | - | - | 2023-02-23 | 2024-02-23 |
| 455-002 | RF Cable | - | - | - | 2023-02-23 | 2024-02-23 |
| 455-003 | RF Splitter | - | - | - | 2023-02-23 | 2024-02-23 |

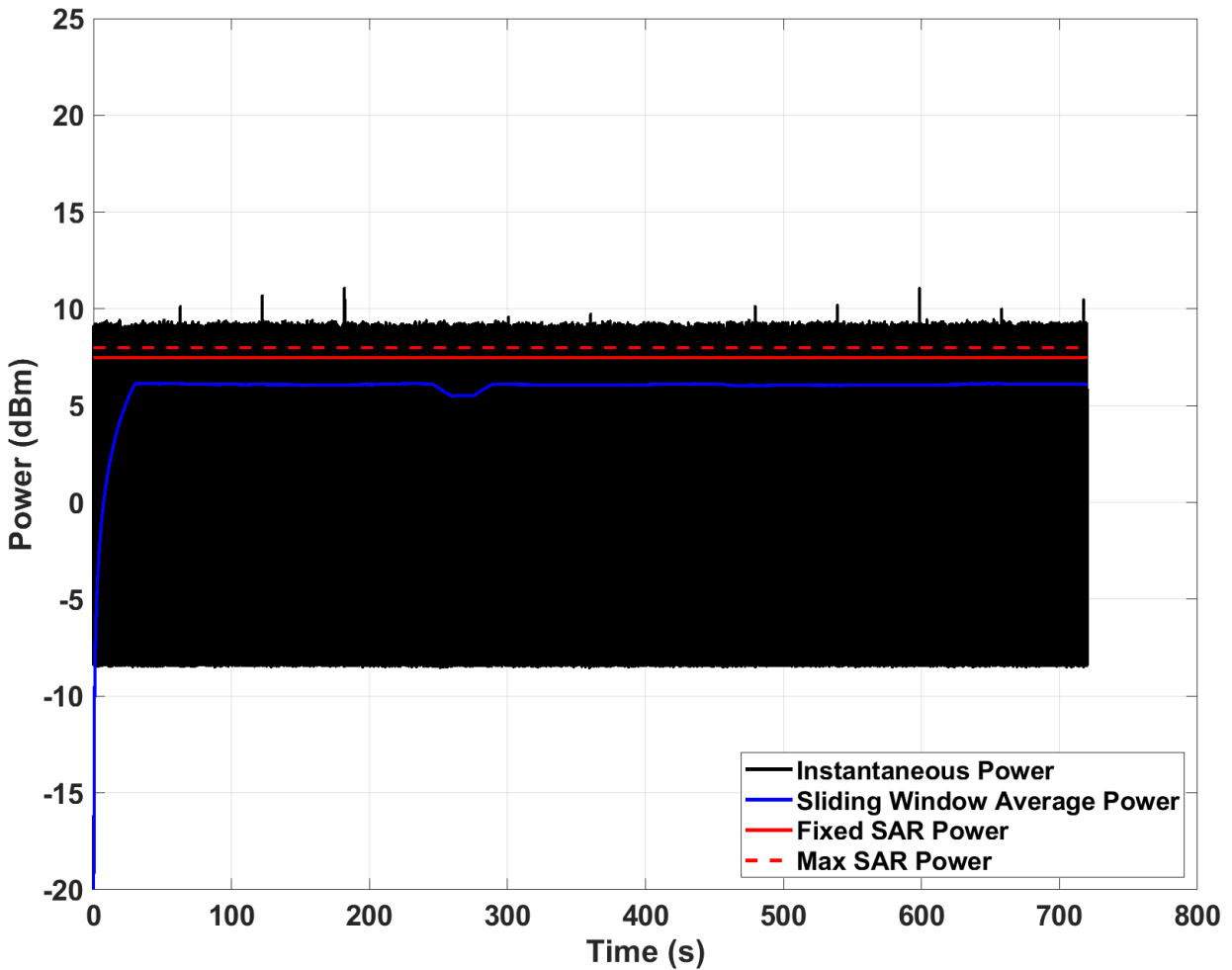
Annex B. Test Results

B.1 TAS Validation for 6 GHz Band on Channel 47

Table B1 – Test Case for 6 GHz Channel 47

| Test Case # | Channel | Chain | Channel Bandwidth | Measurement Averaging Period | Measurement Time Resolution | Max Tune-Up Power [dBm] | SAR Power (Max Tune up) [dBm] |
|-------------|---------|-------|-------------------|------------------------------|-----------------------------|-------------------------|-------------------------------|
| 1 | 47 | B | 160 MHz | 30 s | 0.3333 ms | 13.5 | 7.5 (8.0) |

| Case #1: 6 GHz– Ch 47 – Chain B – BW 160 MHz – Rate 600 Mbps Average Period 30 sec – Tmax 720 sec | |
|--|-----------------|
| Max Tune Up Power [dBm] | SAR Power [dBm] |
| 13.5 | 7.5 (8.0) |



End of the report

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