# **TAS Verification Report**

FCC ID : PD9AX211D2

**Equipment**: Portable Computing Device

**Brand Name**: Microsoft

Model Name : 2079

**Applicant**: Intel Corporation

425 rue de Goa Le Cargo B6, Antibes, 06600 France

Report No.: FA3O1204C

**Manufacturer**: Intel Corporation

425 rue de Goa Le Cargo B6, Antibes, 06600 France

**Standard** : FCC 47 CFR Part 2 (2.1093)

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Laboratory, the test report shall not be reproduced except in full.

Approved by: Cona Huang / Deputy Manager

Sporton International Inc. Wensan Laboratory

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### SPORTON LAB. TAS Verification Report

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## History of this test report

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Report No.	Version	Description	Issued Date	
FA3O1204C	01	Initial issue of report	Jan. 31, 2024	
FA3O1204C	02	Update section1, 4	Feb. 07, 2024	
FA3O1204C	03	Update section 4	Feb. 20, 2024	

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#### 1. Test Setup

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

 The DUT which AX211D2W WiFi module is installed inside portable computing device from Microsoft model 2079

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- 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 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 call box. The splitter has high isolation between the spectrum analyzer
  and the call box.
- Since WIFI6E SAR/PD was measured at the maximum output power and same as fixed SAR power level, therefore, no need to TAS behavior and validation to meet and demonstrate RF exposure compliance

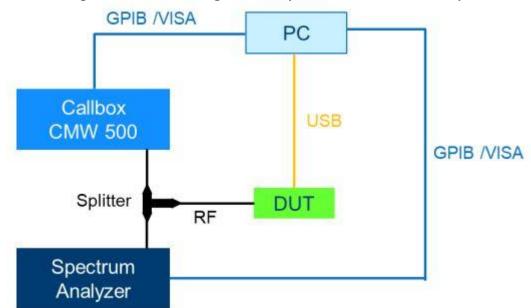


Figure.1 - Validation using conducted power measurement test setup.

#### 2. Test Information

Laboratory Name	Sporton International Inc.
Start Date	2023/1/12
End Date	2023/1/15
Temperature (°C)	23.6
Humidity [%]	50.7
Test Operator	Bunny

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3. Test Equipment

Equipment and accessories used for the conducted power measurement test setup are listed below.

ID#	Device	Type/Model	Serial #	Manufacturer	Cal. Date	Cal. Due Date
1	Wideband Radio Communication Tester	CMW500	132247	ROHDE&SCHWARZ	2023/03/31	2024/03/30
2	Spectrum Analyzer	FSV3044	101048	ROHDE&SCHWARZ	2023/05/03	2024/05/02

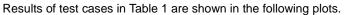
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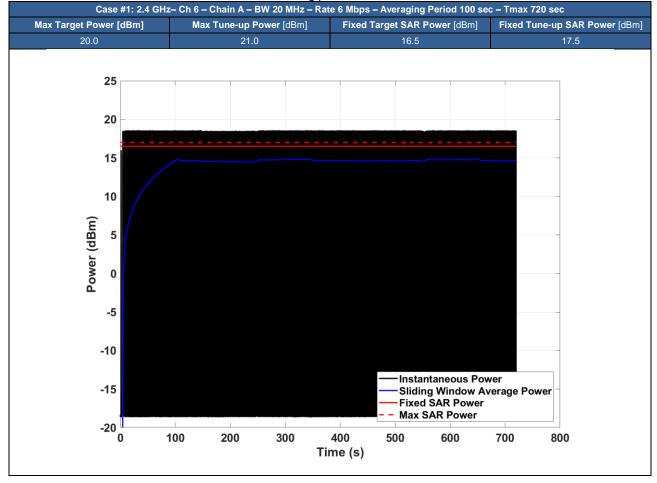
#### 4. Test Result

#### 4.1 TAS Validation for 2.4 GHz Band on Channel 6

Table 1 - Test Cases for 2.4 GHz Channel 6

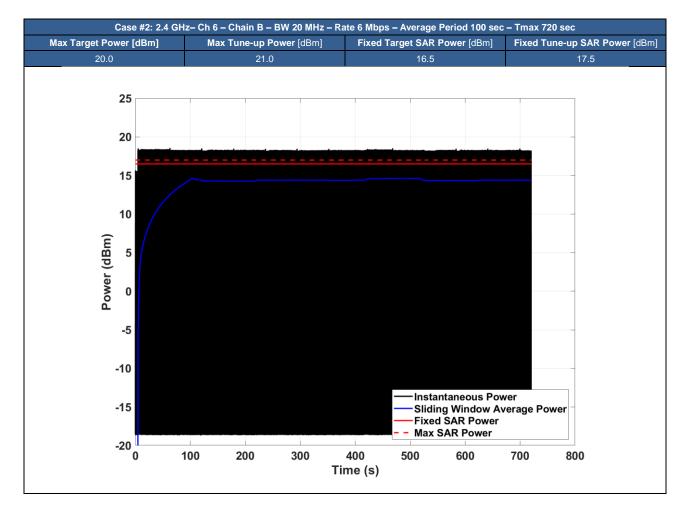
	Test Case #	Channel	Chain	Channel Bandwidth	Measurement Averaging Period	Measurement Time Resolution	Max Target Power [dBm]	Max Tune- up Power [dBm]	Fixed Target SAR Power [dBm]	Tune-up SAR Power [dBm]
ĺ	1	9	Α	20 MHz	100 sec	0.3333	20.0	21.0	16.5	17.5
ĺ	2	О	В	20 MHz	100 sec	0.3333	20.0	21.0	16.5	17.5





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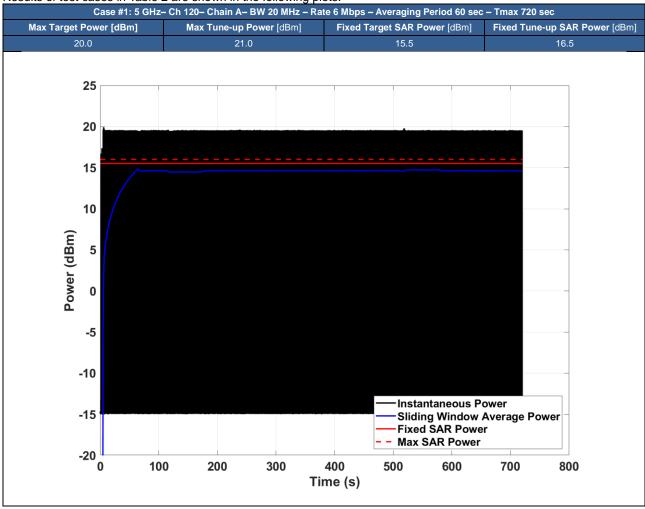
### 4.2 TAS Validation for 5 GHz Band on Channel 120

Table 2 - Test Cases for 5 GHz Channel 120

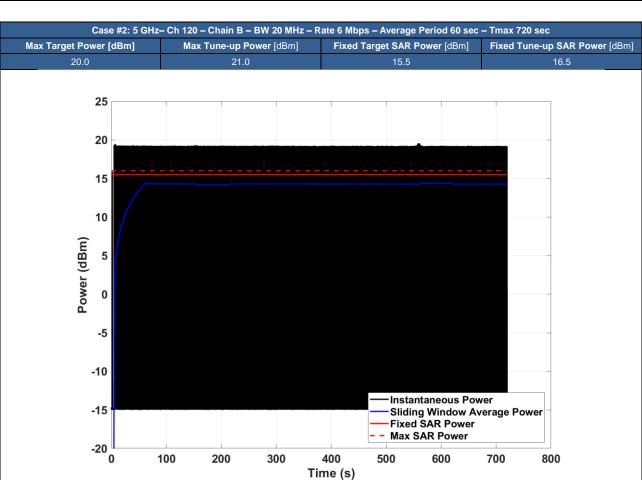
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Test Case #	Channel	Chain	Channel Bandwidth	Measurement Averaging Period	Measurement Time Resolution	Max Target Power [dBm]	Max Tune- up Power [dBm]	Fixed Target SAR Power [dBm]	Tune-up SAR Power [dBm]
1	120	Α	20 MHz	60 sec	0.3333	20.0	21.0	15.5	16.5
2	120	В	20 MHz	60 sec	0.3333	20.0	21.0	15.5	16.5

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



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#### Conclusion

The TAS Intel Algorithm functionality of AX211 WIFI Module Integrated inside this devcie is test cases are compliant with SAR limit

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