



# **TAS Verification Report**

**FCC ID** : C3K2107  
**Equipment** : Portable Computing Device  
**Brand Name** : Microsoft  
**Model Name** : 2107  
**Applicant** : Microsoft Corporation  
One Microsoft Way Redmond, WA 98052-6399, U.S.A  
**Manufacturer** : Microsoft Corporation  
One Microsoft Way Redmond, WA 98052-6399, U.S.A  
**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.

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Approved by: Cona Huang / Deputy Manager

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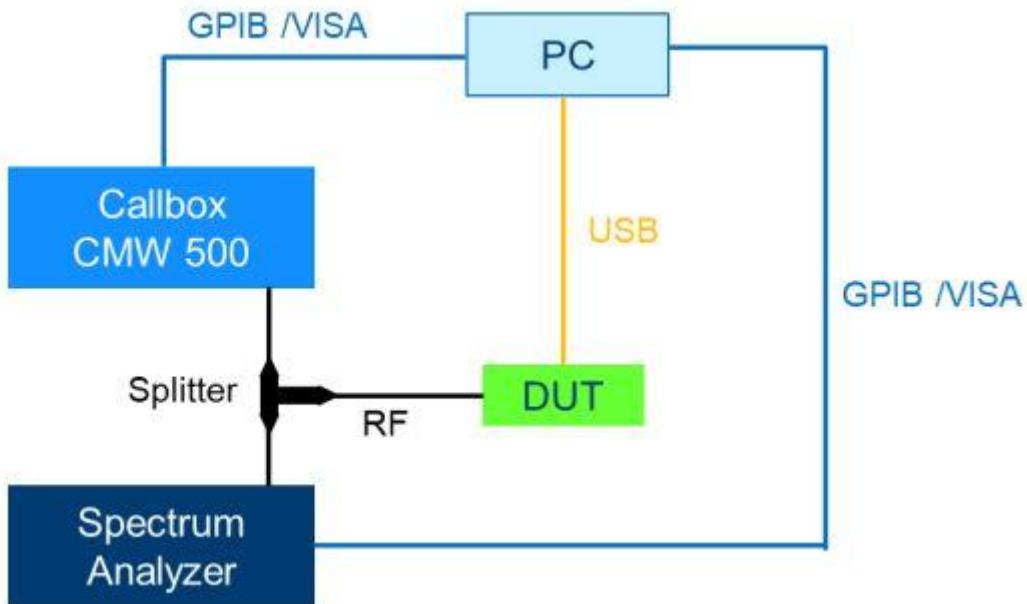
## History of this test report

## 1. Test Setup

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

- The DUT which BE201D2WP WiFi module is installed inside portable computing device from Microsoft model 2107
- 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	Sportun International Inc.
Start Date	2024/11/18
End Date	2024/11/18
Temperature (°C)	23.3
Humidity [%]	51.4
Test Operator	Bunny



### 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	169351	ROHDE&SCHWARZ	2024/07/17	2025/07/16
2	Spectrum Analyzer	FSV3044	101103	ROHDE&SCHWARZ	2024/01/31	2025/01/30

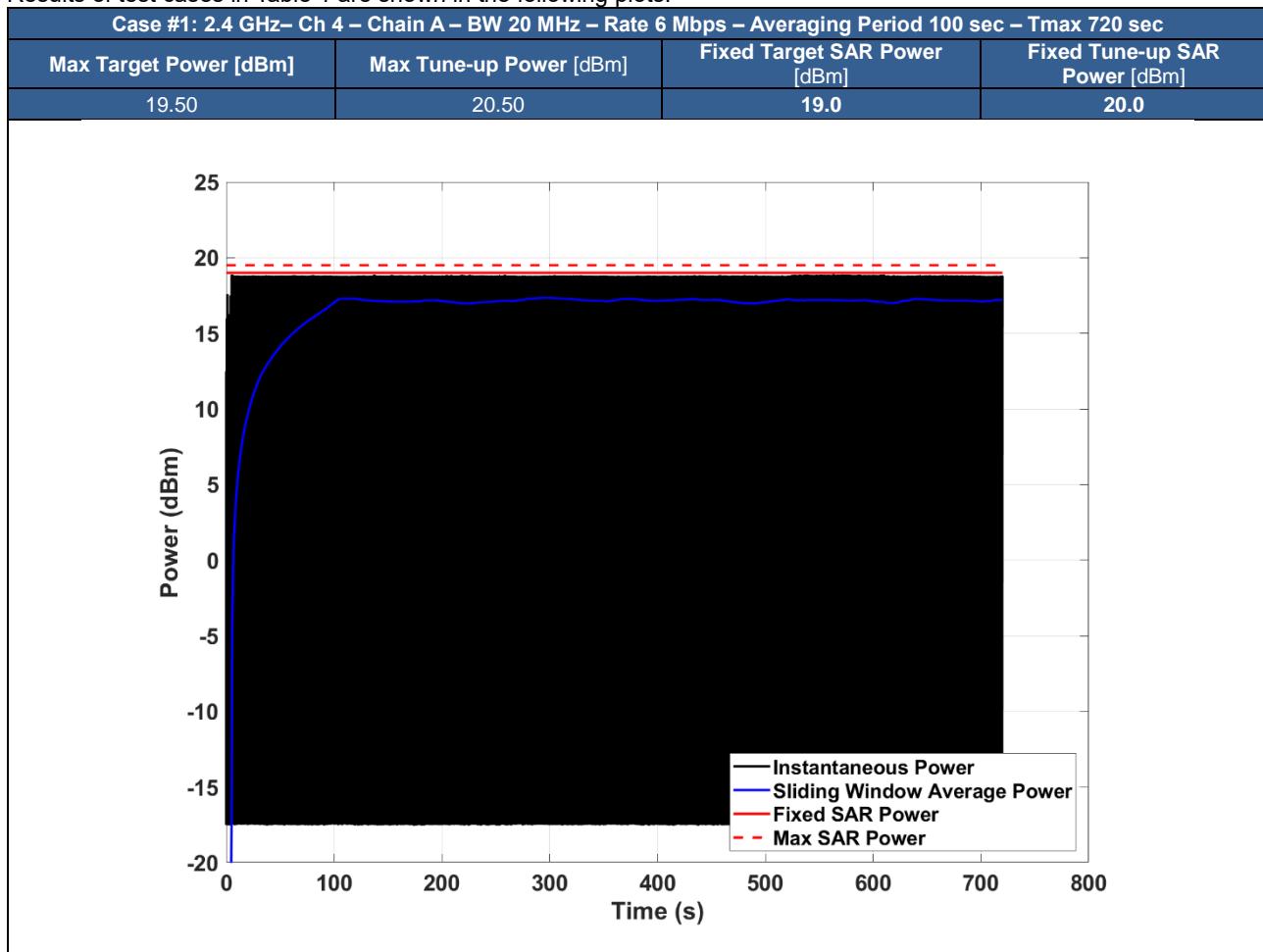
### 4. Test Result

#### 4.1 TAS Validation for 2.4 GHz Band on Channel 4

Table 1 – Test Cases for 2.4 GHz Channel 4

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	4	A	20 MHz	100 sec	0.3333	19.50	20.50	19.0	20.0
2		B	20 MHz	100 sec	0.3333	20.75	21.75	18.5	19.5

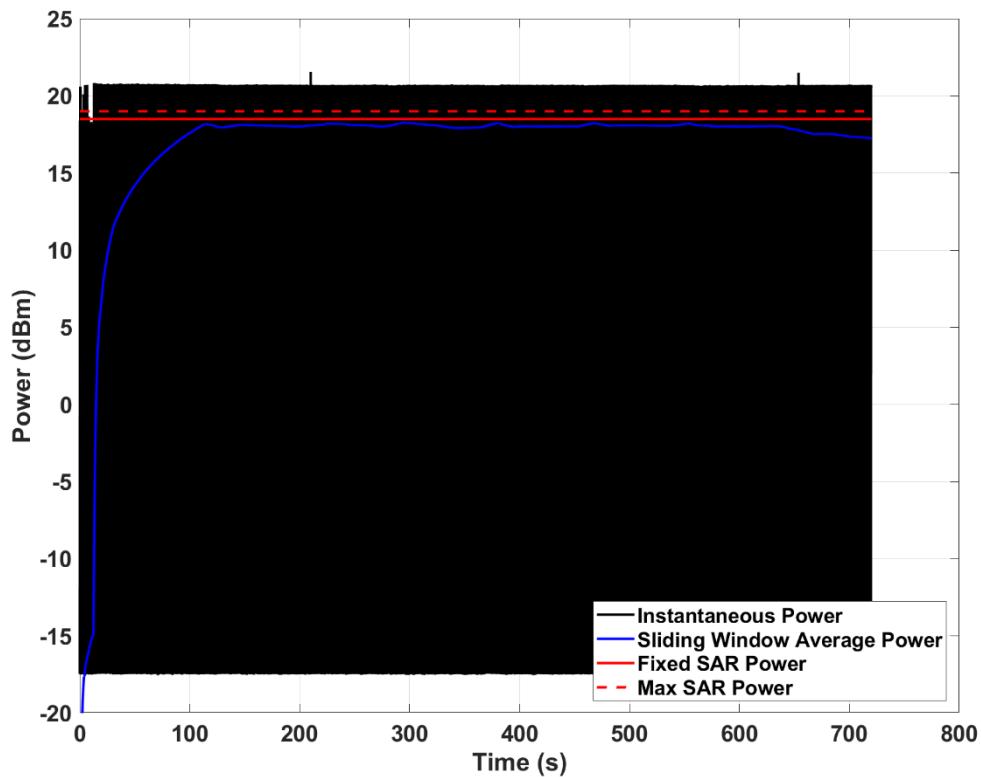
Results of test cases in Table 1 are shown in the following plots.





Case #2: 2.4 GHz – Ch 4 – Chain B – BW 20 MHz – Rate 6 Mbps – Average Period 100 sec – Tmax 720 sec

Max Target Power [dBm]	Max Tune-up Power [dBm]	Fixed Target SAR Power [dBm]	Fixed Tune-up SAR Power [dBm]
20.75	21.75	18.5	19.5

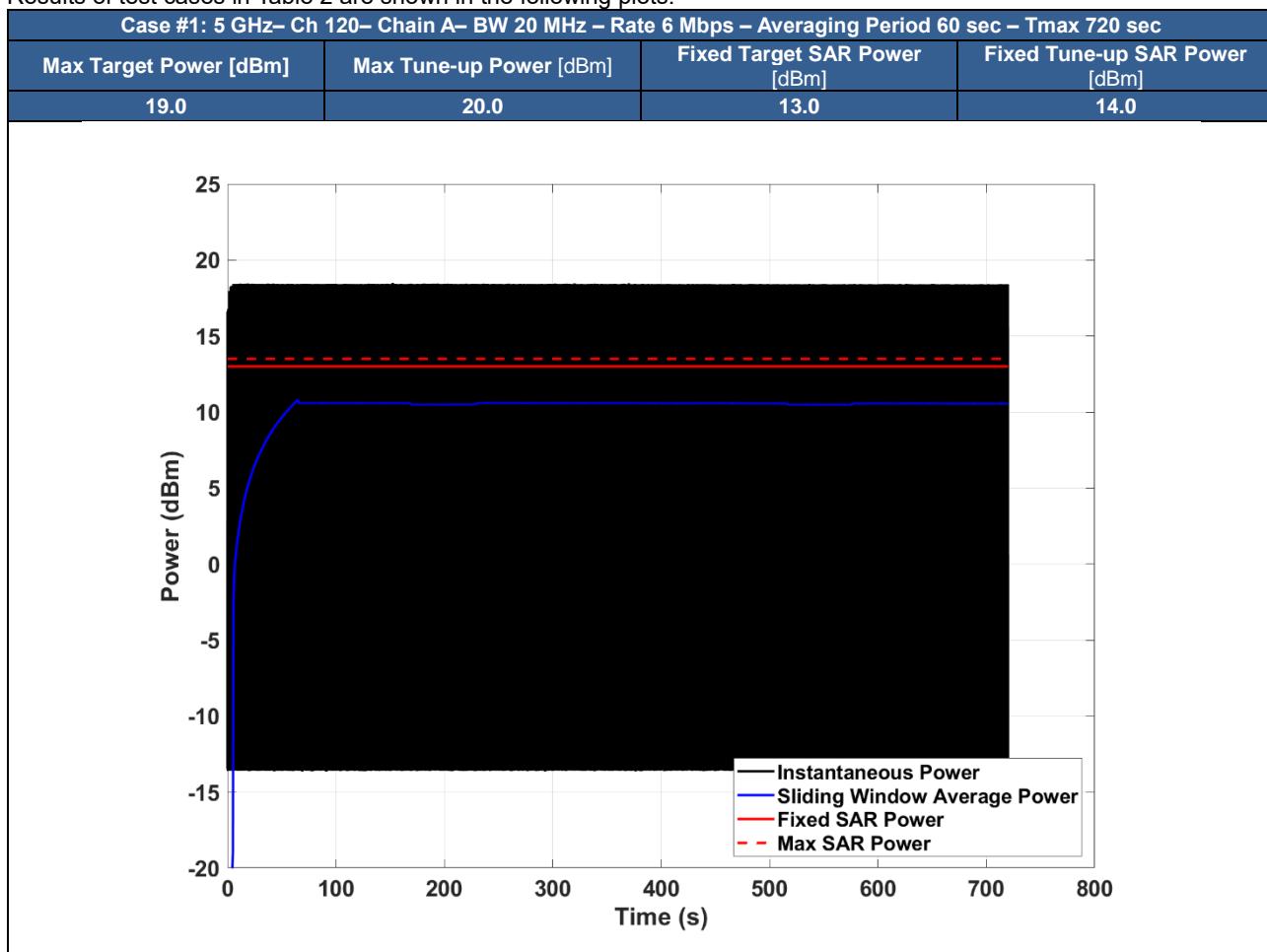


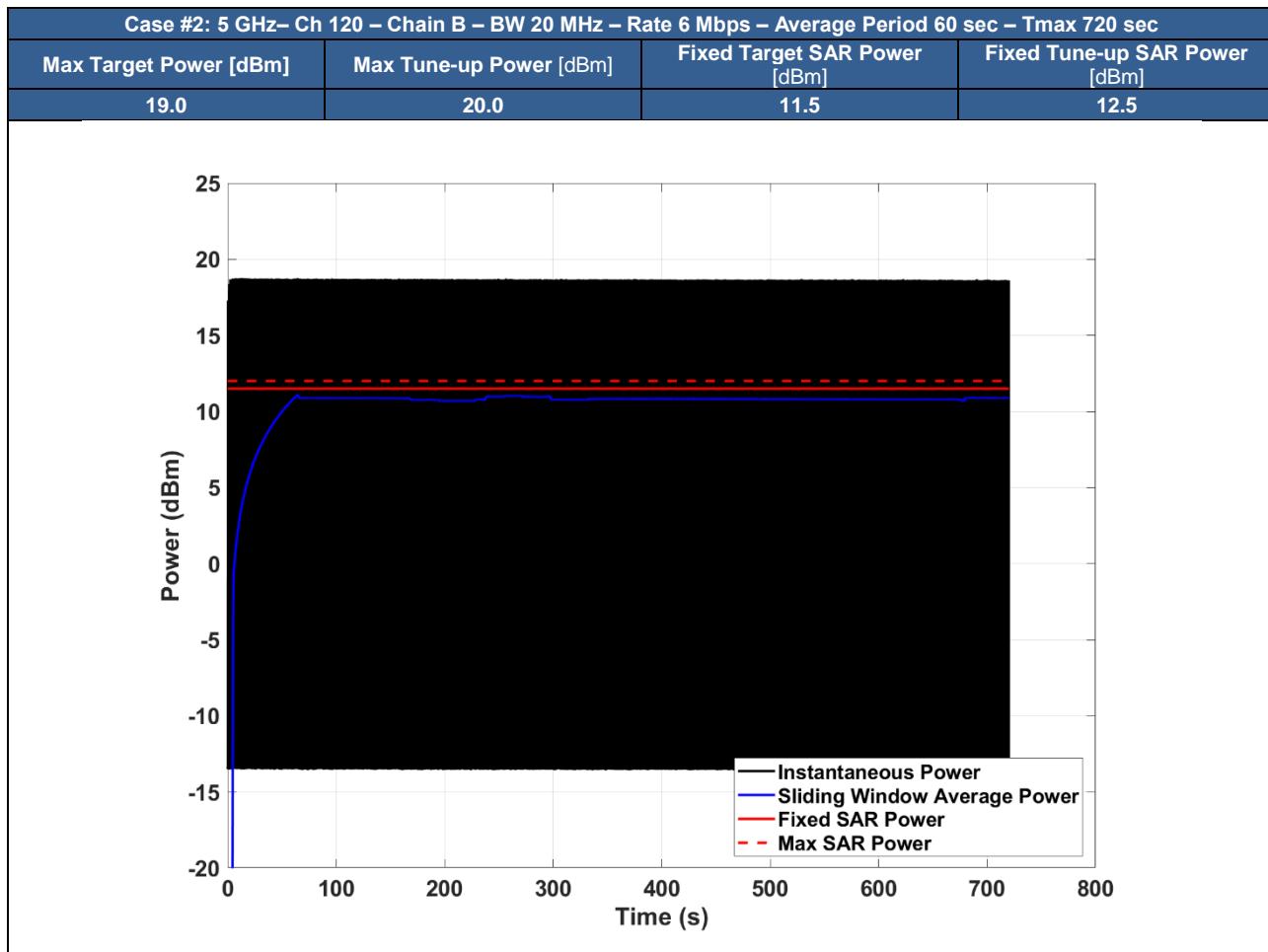
## 4.2 TAS Validation for 5 GHz Band on Channel 120

**Table 2 – Test Cases for 5 GHz Channel 120**

Test Case #	Channel	Chain	Channel Bandwidth	Measurement Averaging Period	Measurement Time Resolution	Max Target Power [dBm]	Max Tune-up Power [dBm]	Fixed Target SAR Power [dBm]	Tune-up SAR Power [dBm]
1	120	A	20 MHz	60 sec	0.3333	19.0	20.0	13.0	14.0
2		B	20 MHz	60 sec	0.3333	19.0	20.0	11.5	12.5

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





### Conclusion

The TAS Intel Algorithm functionality of BE201D2WP WIFI Module Integrated inside Microsoft portable computing device is test cases are compliant with SAR limit