

# FCC SAR Exclusion Report

Report No. : SFBBMN-WTW-P21120099

Applicant : Wacom Co., Ltd.

Address : 2-510-1, Toyonodai, Kazo-shi Saitama 349-1148 Japan

Product Name : XPS Stylus

Brand Name : DELL

FCC ID : HV4-PN9315A

Model No. : PN9315A

Standards : FCC 47 CFR Part 2 (2.1093), IEEE C95.1:1992, IEEE Std 1528:2013  
KDB 865664 D01 v01r04, KDB 865664 D02 v01r02, KDB 447498 D01 v06

Sample Received Date : Mar. 10, 2022

Date of Evaluation : Mar. 10, 2022

Lab Address : No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

Test Location : No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City, Taiwan

**CERTIFICATION:** The above equipment have been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch – Lin Kou Laboratories**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's SAR characteristics under the conditions specified in this report. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product certification, approval, or endorsement by TAF or any government agencies.

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## 1. Summary of Maximum SAR Value

Equipment Class	Mode	Highest Reported SAR <sub>1g</sub> (W/kg)
DSS	Bluetooth	Not Required
DXX	NFC	Not Required

**Note:**

1. The SAR limit (**Head & Body: SAR<sub>1g</sub> 1.6 W/kg**) for general population / uncontrolled exposure is specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992.

## 2. Description of Equipment Under Test

Product Name	XPS Stylus
FCC ID	HV4-PN9315A
Brand Name	DELL
Model No.	PN9315A
Status of EUT	Engineering Sample
Modulation Type	BLE: GFSK NFC:ASK
Operating Frequency	BLE : 2402 – 2480 MHz NFC: 13.56 MHz
Maximum Tune-up Conducted Power (Unit: dBm)	Please refer to Annex A
Antenna Gain	2.1 dBi for BT

**Note:**

1. The above EUT information is declared by manufacturer and for more detailed features description please refers to the manufacturer's specifications or User's Manual.

### **3. SAR Measurement Evaluation**

#### **3.1 Maximum Output Power**

##### **Maximum Target Conducted Power**

Refer to Annex A.

#### **3.2 SAR Testing Exclusions**

According to KDB 447498 D01, the SAR test exclusion condition is based on source-based time-averaged maximum conducted output power, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions. The SAR exclusion threshold is determined by the following formula.

1. For the test separation distance  $\leq 50$  mm

$$\frac{\text{Max. Tune up Power}_{(mW)}}{\text{Min. Test Separation Distance}_{(mm)}} \times \sqrt{f_{(GHz)}} \leq 3.0$$

When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion.

2. (a) For the test separation distance  $> 50$  mm, and the frequency at 100 MHz to 1500 MHz

$$\left[ (\text{Threshold at 50 mm in Step 1}) + (\text{Test Separation Distance} - 50 \text{ mm}) \times \left( \frac{f_{(MHz)}}{150} \right) \right]_{(mW)}$$

(b) For the test separation distance  $> 50$  mm, and the frequency at  $> 1500$  MHz to 6 GHz

$$[(\text{Threshold at 50 mm in Step 1}) + (\text{Test Separation Distance} - 50 \text{ mm}) \times 10]_{(mW)}$$

3. (a) For the frequency below 100 MHz and the test separation distance  $> 50$  mm.

$$\left\{ \text{The Power threshold in Step 2. (a) at 100 MHz} \times \left( 1 + \log \left( \frac{100}{f_{(MHz)}} \right) \right) \right\} mW$$

(b) For the frequency below 100 MHz and the test separation distance  $< 50$  mm.

$$\{ \text{The Power threshold in Step 3. (a) at 100 MHz and 50 mm} \times 0.5 \} mW$$

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Mode	Maximum Tune-up Power (dBm)	Separation Distance (mm)	Calculated Result	Require SAR Testing?
BLE	3.0	≤5	0.63	No

Mode	Maximum Tune-up Power (dBm)	Separation Distance (mm)	Power Threshold (dBm)	Require SAR Testing?
NFC	-50.0	≤5	30.8	No

**Note:**

1. When separation distance  $\leq 50$  mm and the calculated result shown in above table is  $\leq 3.0$ , the SAR excluded section 1 is applied.
2. When operating frequency of transmitter below 100 MHz. and the device output power is less than power threshold, shown in above table, the SAR excluded section 3 is applied.

**Summary:**

Since the SAR testing for all device orientations apply SAR test exclusion per KDB 447498, SAR testing for this device is not required.

## 4. Information on the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

### **Taiwan Huaya Lab:**

Add: No. 19, Huaya 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan  
Tel: +886-(0)3-318-3232  
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Add: No. 47-2, Baodoucuokeng, Linkou Dist., New Taipei City 244, Taiwan  
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Add: B2F., No. 215, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City 231, Taiwan  
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The road map of all our labs can be found in our web site also.

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