

## RF Exposure Report

**Report No.:** SA170726E03

**FCC ID:** B94VCVRA1714

**Test Model:** VCVRA-1714

**Received Date:** July 26, 2017

**Test Date:** Aug. 22, 2017

**Issued Date:** Sep. 07, 2017

**Applicant:** HP Inc.

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**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
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### Release Control Record

Issue No.	Description	Date Issued
SA170726E03	Original release.	Sep. 07, 2017

## 1 Certificate of Conformity

**Product:** HP Sprocket 2-in-1 Printer

**Brand:** hp

**Test Model:** VCVRA-1714

**Sample Status:** MASS-PRODUCTION

**Applicant:** HP Inc.

**Test Date:** Aug. 22, 2017

**Standards:** FCC Part 2 (Section 2.1093)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, 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 EMC characteristics under the conditions specified in this report.

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Wendy Wu / Specialist

**Approved by :** May Chen , **Date:** Sep. 07, 2017  
May Chen / Manager

## 2 Evaluation Result

Following FCC KDB 447498 D01 “General SAR test exclusion guidance”

The corresponding SAR Exclusion Threshold condition, listed below:

- 1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:  
$$\left[ \frac{\text{max. power of channel, including tune-up tolerance, mW}}{\text{min. test separation distance, mm}} \right] \cdot \sqrt{f(\text{GHz})}$$
$$\leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$
  - $f(\text{GHz})$  is the RF channel transmit frequency in GHz.
  - Power and distance are rounded to the nearest mW and mm before calculation.
  - The result is rounded to one decimal place for comparison. The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion.
- 2) At 100 MHz to 6 GHz and for test separation distances  $> 50$  mm, the SAR test exclusion threshold is determined according to the following:
  - a) [Threshold at 50 mm in step 1) + (test separation distance - 50mm) · ( f(MHz)/150)] mW, at 100MHz to 1500 MHz
  - b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at  $> 1500$  MHz and  $\leq 6$  GHz
- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.
  - a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by  $[1 + \log(100/f(\text{MHz}))]$  for test separation distances  $> 50$  mm and  $< 200$  mm.
  - b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by  $\frac{1}{2}$  for test separation distances  $\leq 50$  mm.
  - c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.

### 3 SAR Test Exclusion Thresholds

#### BT-EDR Avg. Power Table

Channel	Frequency (MHz)	GFSK				8DPSK			
		Peak Power		Avg. Power		Peak Power		Avg. Power	
		(dBm)	(mW)	(dBm)	(mW)	(dBm)	(mW)	(dBm)	(mW)
0	2402	1.74	1.493	0.54	1.132	0.49	1.119	-1.12	0.7727
39	2441	1.91	1.552	0.69	1.172	0.83	1.211	-0.85	0.8222
78	2480	1.89	1.545	0.66	1.164	0.81	1.205	-0.91	0.811

#### For BT-EDR SAR Test Exclusion Thresholds

Frequency (GHz)	Max Avg. Power (dBm)	*Max Time Avg. Power (dBm)	Max Time Avg. Power (mW)	Min. test separation distance (mm)	SAR test exclusion calculation value <sup>(NOTE 1)</sup>	10-g extremity SAR test exclusion thresholds	Result
2.402 ~ 2.480	0.69	-14.36	0.037	5	0.012	7.5	Pass

**NOTE:** 1. Calculate SAR test exclusion thresholds from condition "1" formulas.  
 2. \*Time Avg. Power=Avg. Power+Duty factor

#### BT-EDR Duty Cycle of Test Signal

Duty Cycle	Tx on (ms)	Tx total (ms)	Duty Factor (dB)
	3.125	296.25	-15.05

**NOTE:** 1. The DH5 packet was the worse case duty cycle for a transmit dwell time on a channel, based upon bluetooth theory the transmitter is on 0.625 \* 5 per 296.25 ms per channel. Therefore, the duty cycle correlation factor be equal to:  $10\log(3.125 / 100) = -15.05$  dB

### 4 Conclusion

Since Source-base time average power is below SAR test exclusion power thresholds, the SAR evaluation is not required.

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