

## RF Exposure Report

**Report No.:** SA200715C05

**FCC ID:** L6AITF100-1

**Test Model:** ITF100-1

**Received Date:** Jul. 15, 2020

**Date of Evaluation:** Oct. 28, 2020

**Issued Date:** Nov. 04, 2020

**Applicant:** BlackBerry Limited

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**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
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33383, Taiwan

**FCC Registration /  
Designation Number:** 788550 / TW0003



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### Release Control Record

Issue No.	Description	Date Issued
SA200715C05	Original Release	Nov. 04, 2020

## 1 Certificate of Conformity

**Product:** Radar H2

**Brand:** BlackBerry

**Test Model:** ITF100-1

**Sample Status:** Identical Prototype

**Applicant:** BlackBerry Limited

**Date of Evaluation:** Oct. 28, 2020


**Standards:** FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.3-2002

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 RF characteristics under the conditions specified in this report.

**Prepared by :** , **Date:** Nov. 04, 2020  
Lena Wang / Specialist

**Approved by :** , **Date:** Nov. 04, 2020  
Dylan Chiou / Senior Project Engineer

## 2 RF Exposure

### 2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	...	...	f/1500	30
1500-100,000	...	...	1.0	30

f = Frequency in MHz ; \*Plane-wave equivalent power density

### 2.2 MPE Calculation Formula

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

$G$  = gain of antenna in linear scale

$\pi$  = 3.1416

$r$  = distance between observation point and center of the radiator in cm

### 2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user.

So, this device is classified as **Mobile Device**.

### 2.4 Antenna Gain

SRD 902~928 MHz: Monopole Antenna with 0.54 dBi gain

SRD 2.4G: Inverted F Antenna with 3.42 dBi gain

WWAN:

Antenna Type	Monopole with gnd resonator					
	PCS1900 / WCDMA	GSM 850 / WCDMA	LTE			
Band	2	5	2	4	5	12
Gain (dBi)	2.01	0.57	2.01	2.54	0.57	-3.32

## 2.5 Calculation Result of Maximum Conducted Power

Band	Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
GSM 850	824-849	31.45	0.57	20	0.317	0.55
PCS1900	1850-1910	29.12	2.01	20	0.258	1.00
WCDMA II	1850-1910	21.33	2.01	20	0.043	1.00
WCDMA V	824-849	23.17	0.57	20	0.047	0.55
LTE 2	1850-1910	21.51	2.01	20	0.045	1.00
LTE 4	1710-1755	21.61	2.54	20	0.052	1.00
LTE 5	824-849	22.65	0.57	20	0.042	0.55
LTE 12	699-716	22.60	-3.32	20	0.017	0.47
SRD	904 ~ 926	17.24	0.54	20	0.012	0.601
SRD	2405 ~ 2475	16.54	3.42	20	0.020	1.00

### Note:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.
3. SRD & WWAN technology cannot transmit same time.

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