

## RF Exposure Report

**Report No.:** SABFKV-WTW-P21060810

**FCC ID:** L6AITF100-2

**Test Model:** ITF100-2, ITF100-3 (Refer to item 2.5 for more details)

**Received Date:** Jul. 10, 2021

**Date of Evaluation:** Oct. 19, 2021

**Issued Date:** Oct. 27, 2021

**Applicant:** BlackBerry Limited

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**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Lin Kou Laboratories

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**Test Location:** No.19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City  
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**FCC Registration /  
Designation Number:** 788550 / TW0003



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### Release Control Record

Issue No.	Description	Date Issued
SABFKV-WTW-P21060810	Original Release	Oct. 27, 2021

## 1 Certificate of Conformity

**Product:** Radar H2

**Brand:** BlackBerry

**Test Model:** ITF100-2, ITF100-3 (Refer to item 2.5 for more details)

**Sample Status:** Identical Prototype

**Applicant:** BlackBerry Limited


**Date of Evaluation:** Oct. 19, 2021

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

KDB 447498 D01 General RF Exposure Guidance v06

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:** Oct. 27, 2021  
Lena Wang / Specialist

**Approved by :** , **Date:** Oct. 27, 2021  
Dylan Chiou / Senior 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

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

where

Pd = power density in mW/cm<sup>2</sup>

Pout = 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

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	31.55	0.57	20	0.324	0.55
PCS1900	1850-1910	29.16	2.01	20	0.260	1.00
WCDMA II	1850-1910	21.27	2.01	20	0.042	1.00
WCDMA V	824-849	23.16	0.57	20	0.047	0.55
LTE 2	1850-1910	21.54	2.01	20	0.045	1.00
LTE 4	1710-1755	21.67	2.54	20	0.052	1.00
LTE 5	824-849	22.70	0.57	20	0.042	0.55
LTE 12	699-716	22.69	-3.32	20	0.017	0.47

### Note:

- Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
- 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.
- All models are listed as below.

Brand	Supplier Code	Model	Difference
BlackBerry	B13	ITF100-3	with battery model 63320-001 /7.2V,38Ah
	B12	ITF100-2	with battery model 63318-001 /7.2V,19Ah

- The EUT contains following accessory devices.

Product	Brand	Model	Description	Remark
Battery 1	BlackBerry	BAT-63320-001	7.2 Vdc, 38 A	(for ITF100-3)
Battery 2	BlackBerry	BAT-63318-001	7.2 Vdc, 19 A	(for ITF100-2)

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