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
Address:	2200 University Avenue East, Waterloo, Ontario, Canada N2K 0A7
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
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 33383, Taiwan
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 : Lena Wang , **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^2)	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	($180/f^2$)*	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^2

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**					
Band	**PCS1900 / WCDMA**	**GSM 850 / WCDMA**	**LTE**			
	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^2)	Limit (mW/cm^2)
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:

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. 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

4. 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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