

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

Approved by : Dylan Chiou , 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

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

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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:

- 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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