



RF Exposure Evaluation Report

For Metaflow Ltd.

Equipment Under Test:

***Device measuring the metabolism through
the breath***

Model: MF-V2-01

FCC ID: 2ATLN-MFV2

***From The Standards Institution
Of Israel***

Industry Division

Electronics & Telematics Laboratory

EMC Branch



1. Applicant information

Applicant:	Metaflow Ltd.
Address:	6 David Elazar St., Tel-Aviv, 6107402, Israel
Sample for test selected by:	The customer
The date of tests:	15 July, 25 Aug 2018

Equipment under test information

Description of Equipment Under Test (EUT):	The battery hand held mobile device acquires user specific energy burning source by sensing and sending acquired values from user's breath maneuver via BLE to an app.
Model:	nRF51822
Software version of radio unit:	100219
Hardware version:	HW Version 2.0
Manufactured by:	Metaflow Ltd.

2. Test performance

Location:	SII EMC Section
Purpose of test:	To prove the safety of radiation harmfulness to the human body for our product
Test specifications:	FCC KDB 447498 D01 General RF Exposure Guidance v06

This Test Report contains 4 pages and may be used only in full.	This Test Report applies only to the specimen tested and may not be applied to other specimens of the same product.
---	---

3. Summary of test:

Using the general SAR test exclusion guidance in Section 4.2.4 of KDB 447498 D01 v06, we show the device meeting the SAR exemption.

Electronics and
Telematics Laboratory

August 15, 2019

Name: Eng. Yuri Rozenberg
Position: Head of EMC Branch.

Name: Michael Feldman.
Position: Test engineer.



4. Equipment under test description.

*The applicant provided description.

4.1 General description

The Equipment Under Test (hereinafter: EUT) is a battery chargeable mobile device with a BLE BT ability used for sensing and acquiring values from a user's breath maneuver, and sending acquired values from user's breath maneuver via BLE to an app.

EUT technical characteristics

Transmitter technical characteristics:		Note
Assigned frequency band	2400 MHz – 2483.5 MHz	-
Operating frequency range:	2402 MHz – 2480 MHz	-
DTS transmitter:	BLE 4.1	-
Types of modulation:	GFSK	-
Declare temperature range:	0°C - 35°C	Normal indoor use
Antenna information		
Type	Manufacturer/Model	Antenna gain, dBi
Internal on PCB. Inverted F	Metaflow Ltd.	-0.5



5. FCC and ISED Exemption Limits for Routine Evaluation

FCC SAR test exclusions per KDB 447498

KDB 447498 D01 General RF Exposure Guidance v06 Section: 4.3.1.

Standalone SAR test exclusion considerations states:

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{(\text{min. test separation distance, mm}) \cdot [\sqrt{f(\text{GHz})}]} \right] \leq 3.0 \text{ for 1-g SAR, and } \leq 7.5 \text{ for 10-g extremity SAR, 30 where}$$

- $f(\text{GHz})$ 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 values 3.0 and 7.5 are referred to as numeric thresholds.

The test exclusions are applicable only when the minimum test separation distance is ≤ 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 according to 4.1 f) is applied to determine SAR test exclusion.

SAR Test Exclusion Threshold

Freq. [GHz]	d [mm]	Max. power [mW]	Calculation result	FCC Limit @ 5 mm [mW]	SAR Exclusion applicable (Yes/No)
2.4	5	0.2	0.062	3.0	Yes

Summary: SAR test exclusion threshold is < 3 for separation distance of 5 mm. Therefore, SAR test is not required.