

Bundesnetzagentur

BNetzA-CAB-02/21-102



# SAR Test exclusion documentation according to FCC KDB 447498, RSS-102

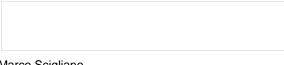
Report identification number: 1-9045/19-01-06 Exclusion (FCC\_ISED)

contains the module with the following certification numbers			
FCC ID	TTY-MRB2D		
ISED number	5676B-MRB2D		
HVIN (Hardware Version Identification Number)	MRB2D		
PMN (Product Marketing Name)	MRB2D		
FVIN (Firmware Version Identification Number)	-/-		
HMN (Host Marketing Name)	-/-		

This report is electronically signed and valid without handwriting signature. For verification of the electronic signatures, the public keys can be requested at the testing laboratory.

## **Document authorised:**

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#### Test report no.: 1-9045/19-01-06



### **EUT technologies:**

Technologies:	Max. power conducted: (AVG)	Max. antenna gain:
Bluetooth Low Energy	Declared: ≤ 0 dBm	≤ -6 dBi¹
10.6 MHz module )*		Fieldstrength 41.8 dBµV/m @ 1 m = - 63.10 dBm

)\* exempt from routine evaluation

1) Measured in CTC advanced report 1-9045/19-01-09

#### SAR test exclusion according to KDB447498 (General RF Exposure Guidance v06)

Equation from Chapter 4.3.1: Standalone SAR test exclusion considerations page 11 and ff.

(1) Standalone SAR test exclusion for 100 MHz to 6 GHz at test separation distances ≤ 50mm

(Threshold<sub>1-g;10-g</sub>) × d<sub>seperation</sub> / f<sup>0.5</sup>

where

f

Threshold<sub>1-g;10-g</sub> is 3 for 1-g; 7.5 for 10-g

is the min. test separation distance; 5mm is used if the distance is less dseperation is the RF channel transmit frequency

The table below gives the calculated maximal power that could be used for source based time averaged conducted or radiated power, adjusted for tune up tolerance. If this is at or below the calculated value the DUT is exempted from SAR evaluation.

frequency	d <sub>separation</sub>	Threshold <sub>1-g</sub>	Powerlimit	P <sub>max-declared</sub>		Exclusion
[MHz]	[mm]	The shou <sub>1-g</sub>	[mW]	[dBm]	[mW]	Exclusion
2450.00	5	3	9.58	0.00	1.00	yes

## SAR test exclusion according to RSS-102 Issue 5 Section 2.5.1/Table 1

The table below gives the calculated maximal power that could be used for source based time averaged conducted or radiated power, adjusted for tune up tolerance. If this is at or below the calculated value the DUT is exempted from SAR evaluation.

frequency	d <sub>separation</sub>	tissue volume	Powerlimit	P <sub>max-</sub>	declared	Exclusion
[MHz]	[mm]		[mW]	[dBm]	[mW]	Exclusion
2450.00	5	1 g	4.00	0.00	1.00	yes

The limits above are defined for body worn application and therefore cover all use cases.