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SAR Test exclusion documentation according to FCC KDB 44798, RSS-102 and EN 62479 2612011024000

November 23, 2021

Certification numbers and labeling requirements			
IC number	5136A-1201102		
HVIN (Hardware Version Identification Number)	1201102		
PMN (Product Marketing Name)	1201102		
FVIN (Firmware Version Identification Number)	-		
HMN (Host Marketing Name)	-		

Information how the EIRP was derived is demonstrated in the test reports attached in this filling.

EUT technologies:

Technologies:	Max. power: (AVG)	Max. gain:	Min. pathloss:
Bluetooth LE	Declared 4 dBm	Measured: -7.9 dBi	0 dB (if applicable)
	Measured: +4.4 dBm		

Bluetooth LE test results see Test Report Reference 1-1754_21-04-02

SAR test exclusion according to KDB447498 General RF Exposure Guidance v05

Equation from Chapter 4.3.1: Standalone SAR test exclusion considerations page 11 and ff. a) For 100 MHz to 6 GHz and test separation distances \leq 50 mm, ((max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)) x ($\sqrt{f_{(GHz)}}$) \leq 3.0 for 1-g SAR, and \leq 7.5 for 10-g extremity SAR, where

- f_(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 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.

f [MHz]	d _{separation} [mm]	Threshold 1-g	Powerlimit [mW]	P max-measured [mW]	Exclusion
2450	5	3	9.58	2.75	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.

f [MHz]	d _{separation} [mm]	Tissue volume	Powerlimit [mW]	P max-measured [mW]	Exclusion
2450	5	1 g	7	2.75	yes

SAR test exclusion according to EN 62479

Compliance is given according to EN 62479 because the output power of the DUT is smaller than 20 mW.