
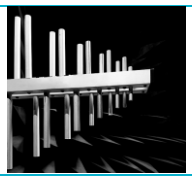
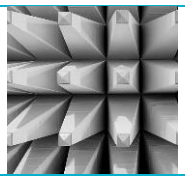

CTC advanced
member of RWTÜV group

Bundesnetzagentur

BNetzA-CAB-02/21-102

ilac-MRA DAkkS Deutsche Akkreditierungsstelle D-PL-12076-01-04

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

Report identification number: 1-0211/20-01-11 Exclusion (FCC_ISED)

contains the module with the following certification numbers	
FCC ID	QZ9-SRPES
ISED number	5927A-SRPES
HVIN (Hardware Version Identification Number)	SIM Reader for Personal eSIM
PMN (Product Marketing Name)	SIM Reader for Personal eSIM
FVIN (Firmware Version Identification Number)	-/-
HMN (Host Marketing Name)	-/-

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

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EUT technologies:

Technologies:	Max. meas. cond. output power: (AVG)	Max. gain:	Max. decl. EIRP:
BT LE 2450 MHz	-0.4 dBm	<1.3 dBi	< 1.0 dBm / 1.26 mW

Note: Declared max taken from CTC Advanced GmbH 1-0211/20-01-03
(Max. Gain page 19 / Max. conducted output power page 23)

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

$$(\text{Threshold}_{1\text{-g};10\text{-g}}) \times d_{\text{seperation}} / f^{0.5}$$

where

$\text{Threshold}_{1\text{-g};10\text{-g}}$ is 3 for 1-g; 7.5 for 10-g
$d_{\text{seperation}}$ is the min. test separation distance; 5mm is used if the distance is less
f 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 [MHz]	$d_{\text{separation}}$ [mm]	$\text{Threshold}_{1\text{-g}}$	Powerlimit [mW]	$P_{\text{max-declared}}$		Exclusion
				[dBm]	[mW]	
2450.00	**5**	3	9.58	1.00	1.26	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 [MHz]	$d_{\text{separation}}$ [mm]	tissue volume	Powerlimit [mW]	$P_{\text{max-declared}}$		Exclusion
				[dBm]	[mW]	
2450.00	**5**	1 g	4.00	1.00	1.26	yes

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