



**CTC**  **advanced**  
member of RWTÜV group



Bundesnetzagentur

BNetzA-CAB-02/21-102

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

**Report identification number: 1-1928/21-02-05 Exclusion (FCC\_ISED)**

Kind of test item:	Tool device
Model name:	KOMflex
FCC ID	2A2B9KOMFLEX
ISED number	27454-KOMFLEX
HVIN (Hardware Version Identification Number)	KOMflex
PMN (Product Marketing Name)	KOMflex
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.

### **Document authorised:**

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**EUT technologies:**

Technologies:	Max. rated power: (AVG)	Max. gain:	Min. pathloss:
WLAN 2450 MHz	Declared: max 0 dBm	< 0 dBi	0 dB (if applicable)

Note: Test results can be seen in CTC Advanced GmbH report 1-1928/21-02-02  
 [Max. conducted measured output power - 0.82 dBm / max. calculated antenna gain -13.11dB]

**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  $\leq 50\text{mm}$

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

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]	$d_{\text{seperation}}$ [mm]	Threshold <sub>1-g</sub>	Powerlimit [mW]	$P_{\text{max-declared}}$		Exclusion
				[dBm]	[mW]	
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 [MHz]	$d_{\text{seperation}}$ [mm]	tissue volume	Powerlimit [mW]	$P_{\text{max-declared}}$		Exclusion
				[dBm]	[mW]	
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.