

SAR Test exclusion documentation according to FCC KDB 447498, RSS-102 and EN 62479

Report identification number: 1-1120/16-01-13-B

Certification numbers and labeling requirements	
FCC ID	W4G-RMI6
IC number	8167A-RMI6
HVIN (Hardware Version Identification Number)	PCD0142-0000
PMN (Product Marketing Name)	RMI6
FVIN (Firmware Version Identification Number)	D6
HMN (Host Marketing Name)	-/-

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Document authorized:

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EUT technologies:

Technologies:	Max. rated power:	Max. Gain:	Min. pathloss:
ISM 2.4 GHz DSSS (proprietary standard)	Declared: 10 dBm	0.2 dBi	0 dB (if applicable)
ISM 2.4 GHz FHSS (proprietary standard)	Declared peak: 20 dBm Averaged: -2.6 dBm)*	0.2 dBi	0 dB (if applicable)

)* See CTC advanced report 1-1120/16-01-03-F section 11.4 (peak value reduced by pulse width/100ms)
Worst case of both DSSS and FHSS modes used for calculation below.

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

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

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

where

Threshold_{1-g;10-g} is 3 for 1-g; 7.5 for 10-g

d_{separation} 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.

f in [MHz]	d _{separation} [mm]	Threshold _{1-g}	Powerlimit [mW]	P _{max-declared} [mW]	Exclusion
2450.00	10	3	19.17	10.47	yes
2450.00	5	7.5	23.96	10.47	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 in [MHz]	d _{separation} [mm]	tissue volume	Powerlimit [mW]	P _{max-declared} [mW]	Exclusion
2450.00	15	1 g	15.00	10.47	yes
2450.00	10	10 g	14.00	10.47	yes

(factor 2.5 for hands/wrists/limbs applied)

For hand-held devices where the 10 gram SAR value applies, the device is exempted from routine evaluation (test exclusion) if the final host justify a min. separation distance of **1 cm** from the radiating elements to the hands/wrists/limbs.

For body-worn devices where the 1 gram SAR value applies, the device is exempted from routine evaluation (test exclusion), if the final host justify a min. separation distance of **1.5 cm** from the radiating elements to the human body.

SAR test exclusion according to EN 62479

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