

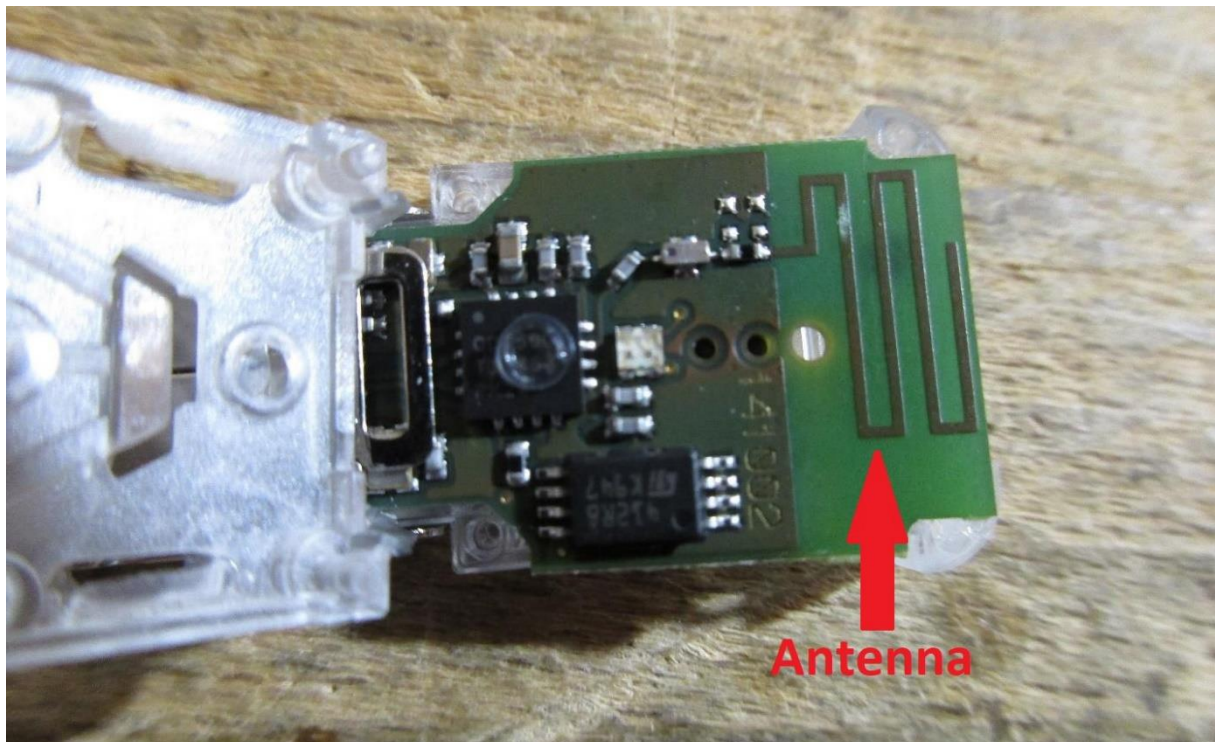
SAR test exclusion for FCC-ID: 2AD4M-A4100

according to KDB 447498 D01 General RF Exposure Guidance v06 “RF EXPOSURE PROCEDURES AND EQUIPMENT AUTHORIZATION POLICIES FOR MOBILE AND PORTABLE DEVICES”.

The device has only one antenna and simultaneous transmission does not apply.

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition(s), listed below, is (are) satisfied.



The minimum test separation distance has been determined to be < 5 mm, and 5 mm distance according to 4.1 f) has been applied to determine SAR test exclusion.

- a) For 100 MHz to 6 GHz and *test separation distances* ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f_{\text{(GHz)}}}] \leq 3.0 \text{ for 1-g SAR, and } \leq 7.5 \text{ for 10-g extremity SAR,}^{30} \text{ where}$$

- $f_{\text{(GHz)}}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation³¹
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as *numeric thresholds* in step b) below

The test exclusions are applicable only when the minimum *test separation distance* is ≤ 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum *test separation distance* is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

KDB 447498 D01 v06 section 4.3.1.a) exemption calculation

Maximum transmit power values are taken from test report: INE-AT/FG-21/155

Duty cycle values are taken from test report: INE-AT/FG-21/165

Channel [GHz]	Max. Transmit Power (EIRP) [mW]	Duty Cycle [%]	Time-averaged power (rounded to up to mW) [mW]	min. separation distance [mm]	SAR test exclusion
2.4061	8.51	22.76	2	5	0.6
2.4381	6.92	22.76	2	5	0.6
2.4741	7.94	22.76	2	5	0.6

All values for SAR test exclusion are smaller than the SAR test exclusion thresholds 3.0 for 1-g SAR, and 7.5 for 10-g extremity SAR.

The DUT is excluded from SAR tests.

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