

1 RF Exposure Compliance

1.1 Test Standards

Test standard	:	FCC 47 CFR Part 2 Section 2.1093 447498 D01 General RF Exposure Guidance v06
FCC ID	:	2ADTD-K1T201AMF

1.2 Limits of FCC SAR Test Exclusion Thresholds for 100 MHz – 6 GHz

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

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

Where

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation

1.3 Limits of FCC SAR Test Exclusion Thresholds for below 100MHz

For frequencies below 100 MHz, the following may be considered for SAR test exclusion:

- 1) For *test separation distances* $>$ 50 mm and $<$ 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by $[1 + \log(100/f(\text{MHz}))]$
- 2) For *test separation distances* \leq 50 mm, the power threshold determined by the equation in 1) for 50 mm and 100 MHz is multiplied by $\frac{1}{2}$

1.4 Test Result

a) Stand-alone Operation Mode

Operating Mode	Band	Maximum Average Power level (mW)	Separation Distance (mm)	FCC Extremity SAR Test Exclusion Thresholds Limit (mW)	Result
Wi-Fi	2.4GHz	24.55	5.00	25.00	PASS
RFID	13.56MHz	$10^{(64.69-97.38)/10}$ =0.001	<50.00	442.65	PASS

b) Simultaneous Transmission Operation Mode

Operating Mode	WiFi Ratio	RFID Ratio	Sum Ratio	Limit Ratio (≤ 1)	Result
Wi-Fi + RFID	0.982	2×10^{-6}	0.982	1	PASS

Note:

1. The 10-g Extremity SAR Test Exclusion Power Thresholds are 2.5 times higher than the 1-g SAR Test Exclusion Thresholds.
2. The Max. RF output power refer to test report 60381593 001 and STS2005284W04.