

SAR test exclusion considerations

FCC Regulation(s): Part 1.1307, KDB 447498 D01v06

Guidance Applied: KDB 447498 D01v06, RF Exposure Policy Updates(TCB workshop November 2019)

Part 1.1307(b)(3) (3) Determination of exemption. (i) For single RF sources (i.e., any single fixed RF source, mobile device, or portable device, as defined in paragraph (b)(2) of this section): A single RF source is exempt if:

(A) The available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(ii)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(ii)(A);

The output power of the EUT is as below;

Tested Frequency (MHz)	Conducted average power(dBm)	Conducted average power(mW)	Requirement (mW)
6 489.6	-11.56	0.070	1.000
7 987.2	-10.93	0.081	1.000

Note1: The conducted average power was measured using a wideband gated RF power meter and gate parameters was adjusted such that the power is measured only when the EUT is transmitting at its maximum power.

Note2: The device will be installed in vehicle by vehicle manufacturer and maximum 8 devices are installed in vehicle. The aggregate output power for 8 UBW transmitters, assuming simultaneous transmission conditions, would be $0.081 \text{ mW} \times 8 = 0.648 \text{ mW}$.

Conclusion: The output power of EUT is no more than 1mW, regardless of separation distance. Therefore, this EUT is exempt from SAR test.