

SAR Exclusion

Per FCC KDB 447498 D01v06 for 100MHz~6GHz:

- 1) The SAR exclusion threshold for distances < 50mm is defined by the following equation:

$$\frac{\text{Max Power of Channel(mW)}}{\text{Test Separation Distance(mm)}} \times \sqrt{\text{Frequency(GHz)}} \leq 7.5 \text{ for 10-g SAR}$$

Based on the maximum conducted power and the antenna to use separation distance:

1. The maximum average output power of WLAN is 10.03dBm, and the minimum distance is 5mm from user:

$$[(10.72 \text{ mW}/5) * \sqrt{2.437}] = 3.347 < 7.5, \text{ so WLAN SAR is not required}$$

2. The maximum average output power of Bluetooth is -25dBm, and the minimum distance is 5mm from user:

$$[(0.003 \text{ mW}/5) * \sqrt{2.440}] = 9.37 * 10^{-4} < 7.5, \text{ so BT SAR is not required}$$