

RF Exposure

Applicable Standard

According to § 1.1307(b)(5), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline. This is a Portable device. The Section 4.3.1 and Appendix A of KDB447498 D01 V05 was used as the guidance.

Calculation Result (Worse Case):

WIFI Mode

$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{(\text{min. test separation distance, mm})} \right] \cdot$$

$$[\sqrt{f(\text{GHz})}] = 9.48/5 \cdot \sqrt{2.412} = 2.95$$
, this value is less than 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR.

BT Mode

$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{(\text{min. test separation distance, mm})} \right] \cdot$$

$$[\sqrt{f(\text{GHz})}] = 1.14/5 \cdot \sqrt{2.402} = 0.35$$
, this value is less than 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR.

BLE Mode

$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{(\text{min. test separation distance, mm})} \right] \cdot$$

$$[\sqrt{f(\text{GHz})}] = 1.37/5 \cdot \sqrt{2.480} = 0.43$$
, this value is less than 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR.

Since BT, BLE and WIFI transmitter can't be in simultaneous transmission mode, thus, simultaneous transmission RF Exposure is not required.

As a result, the SAR measurement is not necessary.

