



Simultaneous transmission SAR test exclusion

BT and WiFi could transmit simultaneously

The maximum tune-up limit power of BT is 1.06 mW @ 2.480GHz

According to KDB 447498 section 4.3.1, the 1-g SAR test exclusion thresholds at test separation distances ≤ 50 mm are determined by:

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

For the body SAR, use 5mm as the conservative minimum test separation distance,

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] = 0.33 \leq 3.0$$

So standalone SAR measurements are not required for BT.

Estimated BT SAR for Simultaneous Transmission SAR Test Exclusion:

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}/x] \text{ W/kg for test separation distances } \leq 50 \text{ mm};$$

where $x = 7.5$ for 1-g SAR, and $x = 18.75$ for 10-g SAR.

Estimated BT SAR = 0.0445 W/kg

Maximum report WiFi SAR is 0.307 W/kg (see Test Report No. ACS-SF13015)

Sum SAR of WiFi and BT is 0.3515 W/kg < 1.6 W/kg, simultaneous transmission SAR test does not required.