

RF Exposure Requirements

Product Description: Notebook

Model No.: R1168G

FCC ID: 2AS9KR1168G

According to the KDB 447498 D01 v06 section 4.3.1, for 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

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

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz

- Power and distance are rounded to the nearest mW and mm before calculation¹⁷

- The result is rounded to one decimal place for comparison

Calculation Result:

BT

Tx frequency range: 2402-2480MHz

Min. test separation distance: 5mm

Maximum Conducted Output Power: 6.474dBm

Tune-Up output power: 6.5dBm

RF channel transmit frequency: 2480MHz

Result: 1.40

Limit: 3.0

Wi-Fi

Tx frequency range: 2412-2462MHz

Min. test separation distance: 5mm

Maximum Conducted Output Power: 9.38dBm

Tune-Up output power: 9.5dBm

RF channel transmit frequency: 2412MHz

Result: 2.77

Limit: 3.0

Wi-Fi

Tx frequency range: 5745-5825MHz MHz

Min. test separation distance: 5mm

Maximum Conducted Output Power: 6.39dBm

Tune-Up output power: 6.5dBm

RF channel transmit frequency: 5825MHz

Result: 2.16

Limit: 3.0

The max exclusion thresholds is $2.77 < 3$, so the transmitter complies with the RF exposure requirements and the SAR is not required.