



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

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

For WLAN

The tune-up power is 7 dBm +/- 2dB, therefore the highest tune-up power is 9.0 dBm (7.94 mW) @ 2437 MHz

When the minimum *test separation distance* is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

So,

$$(8\text{mW} / 5\text{mm}) * (2.437\text{GHz} ^{0.5}) = 2.5$$

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] = 2.5 < 3.0$$

For UNII

The tune-up power is 6 dBm +/- 2dB, therefore the highest tune-up power is 8.0 dBm (6.31 mW) @ 5190 MHz

When the minimum *test separation distance* is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

So,

$$(6\text{mW} / 5\text{mm}) * (5.190\text{GHz} ^{0.5}) = 2.9$$

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] = 2.9 < 3.0$$

Therefore, standalone SAR measurements are not required for both head and body.