

Standalone SAR test exclusion considerations: WLAN

 Date: **April 26, 2019**

RF feaature	Mode	Transmitting Frequency(MHz)	Test separation distance (mm)	ANT Gain (dBi)	Max. power with tune-up tolerance (dBm) ^{Note1}	Max. power with tune-up tolerance (mW)	Power thresholds	SAR test exclusion thresholds
WLAN	802.11b	2462.00	5.0	4.140	1.00	1.2589	0.40	3.00
WLAN	802.11g	2462.00	5.0	4.140	5.00	3.1623	0.99	3.00

Note1. Please refer to the operation description for Max tune-up.

KDB 447498 D01 clause 4.3.1 Step 1) SAR test exclusion thresholds for 100MHz to 6GHz at test separationn distances ≤ 50 mm

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

$$= [(1.2589\text{mW} / 5\text{mm})] \times [\sqrt{2.462\text{GHz}}] = 0.4$$

Note. The calculation result was rounded to two decimal place for comparison.

Conclusion : SAR evaluation for general population exposure conditions by measurement or numerical simulation is not required