RF Exposure Evaluation

According to WS-1 General RF Exposure Guidance v06 and part 2.1093，Unless specifically required by the *published RF exposure KDB procedures*, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding *SAR Test Exclusion Threshold* condition(s), listed below, is (are) satisfied.

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:
[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] · [$\sqrt{f_{(GHz)}}$] ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR, where

$f_{(GHz)}$ is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

The result is rounded to one decimal place for comparison

Here,

For 2.4gwifi

Test Mode	Frequency	Max Power(dBm)	Tune UP tolerance (dBm)	Max Tune UP power (dBm)	Max Tune UP power (mW)	Min. distance (mm)	Calc. thresholds	limit
802.11b	2412	3.72	3±1	3	2.51	5	0.78022	3.0
802.11g	2412	6.295	6±1	7	5.01	5	1.55675	3.0
802.11n(HT20)	2412	6.124	6±1	7	3.98	5	1.55675	3.0

Conclusion:

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

SAR Test Exclusion Thresholds is 3.0 for separation distance 5mm. Therefore, SAR test is not required