**RF Exposure Evaluation**

According to KDB 447498 D01 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

$EIRP=E_{Meas}+20\log(d_{Meas})-104.7$

EIRP is the equivalent isotropically radiated power, in dBm
$E_{Meas}$ is the field strength of the emission at the measurement distance, in dBμV/m
$d_{Meas}$ is the measurement distance, in m

Here,
For wifi 2.4G

| Max Power(dBm) | Max Power(mW) | Frequency(MHz) | Min. distance(mm) | Calc. thresholds | limit |
|---|---|---|---|---|---|
| 5.62 | 3.6 | 2437 | 5 | 1.1 | 3.0 |

For 2.4G

| Field strength (dBuV/m) | Max Power(dBm) | Max Power(mW) | Frequency(MHz) | Min. distance(mm) | Calc. thresholds | limit |
|---|---|---|---|---|---|---|
| 91.81 | -3.3 | 0.5 | 2480 | 5 | 0.1 | 3.0 |

For Simultaneous transmitting, 1): The sum of the ratios of the spatially averaged results to the applicable frequency dependent MPE limits = 1.1/3+0.1/3= 0.43< 1 Since the sum of the MPE ratios for all simultaneously transmitting antennas incorporated in the device is ≤ 1.0, the EUT is considered to satisfy MPE compliance for simultaneous transmission operations.

So a SAR test is not required