

FCC ID: 2AV7A-S1A

According to KDB 447498 D01 General RF Exposure Guidance v06, section 4.3.1

At 100 MHz to 6 GHz and for test separation distances ≤ 50 mm, the SAR test exclusion threshold is determined according to the following

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

$\times [\sqrt{f(\text{GHz})}] \leq 3.0$

1. SAR test exclusion threshold

1) Frequency: 2462MHz (min. separation distances = 50 mm)

SAR test exclusion thresholds (50 mm) = $3 \times 50 / (\sqrt{2.462}) = 96.60$ mW

2) Frequency: 2480MHz (min. separation distances = 50 mm)

SAR test exclusion thresholds (50 mm) = $3 \times 50 / (\sqrt{2.480}) = 95.25$ mW

So:

1) For 1-g SAR:

Standards SAR exclusion-(1-g SAR)-Separation distance ≤ 50 mm 100MHz~6GHz							
Position	Frequency (MHz)	Power (dBm)	Power (mW)	Separation distance (mm)	Calculation Result	Threshold	SAR Test
Front surface	2462	15.5	35.48	50.00	1.11	3.0	Excluded
	2480	12.5	17.78	50.00	0.56	3.0	Excluded

2) For 10-g SAR:

Standards SAR exclusion-(1-g SAR)-Separation distance ≤ 50 mm 100MHz~6GHz							
Position	Frequency (MHz)	Power (dBm)	Power (mW)	Separation distance (mm)	Calculation Result	Threshold	SAR Test
Front surface	2462	15.5	35.48	50.00	1.11	7.5	Excluded
	2480	12.5	17.78	50.00	0.56	7.5	Excluded

Calculation Value:

1) $36 \text{ (mW)} / 50 \text{ (mm)} \times \sqrt{2.462} = 1.13;$

2) $18 \text{ (mW)} / 50 \text{ (mm)} \times \sqrt{2.480} = 0.57;$

So, Calculation value ≤ 3.0

Remark:

-When the minimum test separation distance is 50 mm, a distance of 50mm between the radiating structure and the hand so 50mm is used

-For 2.4WIFI mode, the max. conducted power is 35.48 mW close to 36mW. So, 36mW was calculated.

-For BLE mode, the max. conducted power is 17.78 mW close to 18mW. So, 18mW was calculated.



2. Conclusion: No SAR is required.