

RF Exposure Evaluation

According to KDB 447498 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:

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

$f_{(\text{GHz})}$ 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 2.4G WIFI

Max tune-up Power(dBm)	Max tune-up Power(mW)	Frequency(MHz)	Min. distance(mm)	Calc. thresholds	limit
10	10	2412	5	1.29	3.0

For 5G WIFI

Max tune-up Power(dBm)	Max tune-up Power(mW)	Frequency(MHz)	Min. distance(mm)	Calc. thresholds	limit
8	6.31	5180	5	0.55	3.0

For 5.8G WIFI

Max tune-up Power(dBm)	Max tune-up Power(mW)	Frequency(MHz)	Min. distance(mm)	Calc. thresholds	limit
8	6.31	5745	5	0.53	3.0

For BT

Max tune-up Power(dBm)	Max tune-up Power(mW)	Frequency(MHz)	Min. distance(mm)	Calc. thresholds	limit
2	1.58	2402	5	0.2	3.0

For BLE

Max tune-up Power(dBm)	Max tune-up Power(mW)	Frequency(MHz)	Min. distance(mm)	Calc. thresholds	limit
2.2	1.66	2402	5	0.21	3.0

	Max tune-up		Max tune-up
5G WIFI	7 ± 1 dBm	BT-GFSK	1 ± 1 dBm
2.4G WIFI	9 ± 1 dBm	BT-Pi/4DQPSK	0 ± 1 dBm
5.8G WIFI	7 ± 1 dBm	BT-8DPSK	0 ± 1 dBm
		BLE	1.2 ± 1 dBm

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:

- 1) {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm)·(f(MHz)/150)]} mW, for 100 MHz to 1500 MHz
- 2) {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm)·10]} mW, for > 1500 MHz and ≤ 6 GHz

For 2.4G

Max output Power(dBm)	Max tune-up Power(mW)	Frequency(MHz)	Min. distance(mm)	Limit (mW)
20.43	110.41	2470	120	796



So compliance.