



RF Exposure evaluation

According to 447498 D01 General RF Exposure Guidance v06 and part 2.1093

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

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

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

The result is rounded to one decimal place for comparison

Here,

Mode	Max Power (dBm)	Tune-up power (dBm)	Max Power (mW)	Frequency(MHz)	Min. Distance (mm)	Calc. thresholds	limit
BLE	-0.09	0±1	1.26	2402	5	0.39	3.0
2.4GWIFI	8.19	8±1	7.94	2422	5	2.47	3.0

Remark: BLE and Wi-Fi can transmit at the same time

In the case of simultaneous launches for wifi and BLE:

The Max Calc. Thresholds : BLE: 0.39, Wi-Fi: 2.47

BLE and Wifi: $0.39/3 + 2.47/3 = 0.95 \leq 1$

So a SAR test is not required