RF Exposure evaluation

According to 447498 D01 and 47CRF 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:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] *[√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 BLE

Frequency (MHz)	Max power (dBm)	Max power (mW)	Min. distance (mm)	Calculation Value	Threshold Value
2440	1.85	1.53	5	0.48	3.0

For 2.4G

Fre. (GHz)	E (dBuV/m)	EIRP (dBm)	Max ERP (dBm)	Max ERP (mW)	Separation distance (mm)	Calculation Value	Threshold Value
2.480	95.88	0.68	-1.47	0.71	5	0.22	3.0

1. EIRP(dBm)= E(dBuV/m)-95.2=95.88 (dBuV/m)-95.2=0.68dBm

2. ERP= EIRP(dBm)-2.15

So SAR test is not required