RF Exposure evaluation

According to 447498 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:

[(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 BT

Frequency (MHz)	Max power (dBm)	Max power (mW)	Min. distance (mm)	Calculation Value	Threshold Value
2402	2.63	1.37	5	0.57	3.0

For 2.4G WIFI

Frequency (MHz)	Max power (dBm)	Max power (mW)	Min. distance (mm)	Calculation Value	Threshold Value
2437	9.38	8.61	5	2.71	3.0

For 5G WIFI

Frequency (MHz)	Max power (dBm)	Max power (mW)	Min. distance (mm)	Calculation Value	Threshold Value
5180	7.39	5.36	5	2.50	3.0

For 5.8G WIFI

Frequency (MHz)	Max power (dBm)	Max power (mW)	Min. distance (mm)	Calculation Value	Threshold Value
5825	7.40	5.12	5	2.65	3.0

Operate simultaneously

BLE: (1.37mW /5mm)*[√2.402(GHz)/7.5]=0.117 w/kg

2.4GWIFI: (8.61mW /5mm)*[√2.412(GHz)/7.5]=0.563 w/kg

5.2GWIFI: (5.36mW /5mm)*[√5.180(GHz)/7.5]=0.757 w/kg

5.8GWIFI: (5.12mW /5mm)*[√5.825(GHz)/7.5]=0.854 w/kg

If BLE and 2.4G WIFI operate simultaneously, then 0.117+0.563=0.680<1.6w/kg

If BLE and 5.2G WIFI operate simultaneously, then 0.117+0.757=0.874<1.6w/kg

If BLE and 5.8G WIFI operate simultaneously, then 0.117+0.854=0.971<1.6w/kg

So SAR test is not required