

## RF Exposure evaluation

According to 447498 D01 General RF Exposure Guidance v05  
The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at  
test separation distances  $\leq 50$  mm are determined by:  
$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$

$f(\text{GHz})$  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

Ant gain =0dBi; so Ant numeric gain=1.0

For Bluetooth BR/EDR

pt=1.921dBm =1.56mW at 2402MHz

So  $(1.56\text{mW}/5\text{mm}) \times \sqrt{2.402\text{GHz}} = 0.484 < 3$

For BLE

pt=-5.220dBm =0.30mW at 2440MHz

So  $(0.30\text{mW}/5\text{mm}) \times \sqrt{2.440\text{GHz}} = 0.0942 < 3$

Then SAR evaluation is not required