

## 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:

$$\left[ \frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min. test separation distance, mm)}} \right] \cdot [\sqrt{f \text{ (GHz)}}]$$
  
 $\leq 3.0$  for 1-g SAR and  $\leq 7.5$  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

Worse case is as below: [2412MHz 9.29dBm(8.5mW)output  
power]

$$(8.5\text{mW} / 5\text{mm}) \cdot [\sqrt{2.412 \text{ (GHz)}}] = 2.635 < 3 \text{ for 1-g SAR}$$

Then SAR evaluation is not required