

## RF Exposure evaluation

According to KDB 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:

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

- $f(\text{GHz})$  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

Worse case is as below: [2412 MHz  
9.35dBm (8.61mW) output power]

$$(8.61\text{mW} / 5\text{mm}) \cdot [\sqrt{2.412\text{ (GHz)}}] = 2.7$$

<3.0 for 1-g SAR

Then SAR evaluation is not required