

## 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:

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

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

Worse case is as below: [2402 MHz -2.35dBm (0.582mW)  
output power]

$$(0.582\text{mW} / 5\text{mm}) \cdot [ \sqrt{2.402(\text{GHz})} ] = 0.18 < 3.0 \text{ for 1-g SAR}$$

Then SAR evaluation is not required