

## 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: [2441 MHz -0.90 dBm (0.81 mW) output power]

$$(0.81 \text{ mW} / 5 \text{ mm}) \cdot [ \sqrt{2.441 \text{ (GHz)}} ] = 0.25 < 3.0 \text{ for 1-g SAR}$$

Then SAR evaluation is not required