

## RF Exposure evaluation

According to 447498 D01 General RF Exposure Guidance v06

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:

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

### **EDR**

Worse case output power is as below: [2480MHz: 3.563dBm]

Maximum Gain is 1.5dBi

Maximum EIRP is 5.063dBm (3.21mW).

$(3.21\text{mW} / 5\text{mm}) \cdot \sqrt{2.480(\text{GHz})} = 1.01 < 3.0$  for 1-g SAR

Then SAR evaluation is not required

### **LE**

Worse case output power is as below: [2480MHz: 2.636dBm]

Maximum Gain is 1.5Bi

Maximum EIRP is 4.136dBm (2.59mW).

$(2.59\text{mW} / 5\text{mm}) \cdot \sqrt{2.480(\text{GHz})} = 0.82 < 3.0$  for 1-g SAR

Then SAR evaluation is not required