

## SAR test exclusion

According to KDB 447498 D01 General RF Exposure Guidance v05, section 4.3.1

At 100 MHz to 6 GHz and for test separation distances  $\leq 50$  mm, the SAR test exclusion threshold is determined according to the following;

a) 
$$\left[ \frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min. test separation distance, mm)}} \right] \times \sqrt{f(\text{GHz})} \leq 3.0$$

### 1. SAR test exclusion threshold

Frequency : 2480 MHz (min. separation distances = 5 mm)

SAR test exclusion thresholds(5 mm) =  $\left[ \frac{0.01}{5} \times \sqrt{2.480} \right] = 0.00315 \leq 3.0$ .

Mode	Frequency (MHz)	Tune up output Power (dBm)	Measured max output power (dBm)	Separation Distance (mm)	$\leq 3.0$
Bluetooth	2402	$-26 \pm 3$	-23.21	5	0.00155
Bluetooth	2440	$-27 \pm 3$	-24.02	5	0.00125
Bluetooth	2480	$-24 \pm 3$	-21.67	5	0.00315

$$[\text{Tune up power, dBm}] = [\text{Target power, dBm} \pm \text{tune-up tolerance, dBm}]$$

Maximum tuned up power =  $(-24 \text{ dBm} \pm 3 \text{ dBm}) = -21.0 \text{ dBm} = 0.01 \text{ mW}$

Measured max output power =  $-21.67 \text{ dBm}$

### 2. Conclusion : Bluetooth SAR was not required

