

## Standalone SAR test exclusion considerations

RF feature	Mode	Frequency Range(MHz)	Test separation distance (mm)	ANT Gain (dBi)	Max. power with tune-up tolerance (dBm) <sup>Note1</sup>	Max. power with tune-up tolerance (mW)	Power thresholds	SAR test exclusion thresholds
BLE	GFSK(1Mbps)	2 402.00 ~ 2 480.00	5.0	2.008	-1.50	0.707 9	0.22	3.00
Zigbee	O-QPSK (250 kbps)	2 480.00 ~ 2 480.00	5.0	1.381	-2.50	0.562 3	0.18	3.00

Note1. Please refer to the operation description for Max Tune-up power.

### KDB 447498 D01 clause 4.3.1 Step 1) SAR test exclusion thresholds for 100MHz to 6GHz at test separation distances ≤ 50 mm

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

#### Sample Calculation

$$= \left[ \left( \frac{0.7079\text{mW}}{5\text{mm}} \right) \right] \times \left[ \sqrt{2.48\text{GHz}} \right] = 0.22$$

Note. The calculation result was rounded to two decimal place for comparison.

**Conclusion : SAR evaluation for general population exposure conditions by measurement or numerical simulation is not required**