

Standalone SAR test exclusion considerations

September 20, 2017

- Device category = ☒ Portable device ☐ Mobile device
- Transmitting mode = ☒ Single Transmitting ☐ Simultaneous Transmitting
- Max. transmitting frequency = 2440 MHz
- Min. test separation distance = 5 mm
- Max. Antenna Gain = 1.7 dBi
- Max. power with turn-up tolerance = -1.50 dBm = 0.8 mW (Typical Power = Max. -1.50 dBm)

Note. Bluetooth LE

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

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

$$= [(0.8\text{mW} / 5\text{mm})] \times [\sqrt{2.44\text{GHz}}] = 0.2$$

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

→ SAR evaluation for general population exposure conditions by measurement or numerical simulation is not required.