Standalone SAR test exclusion considerations

January 21, 2018

- Device category = ☑ Portable device   ☐ Mobile device
- Transmitting mode =   ☑ Single Transmitting   ☐ Simultaneous Transmitting
- Max. transmitting frequency =   **2480**   MHz
- Min. test separation distance =   **30**   mm
- Max. Antenna Gain =   **0.41**   dBi
- Max. power with turn-up tolerance =   **17.30**   dBm = **53.8** mW (Typical Power =   **Max. 17.30** dBm   )

Note.   Bluetooth

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

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

= [(53.8mW / 30mm)] X [$\sqrt{2.48GHz}$] = 2.8

   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.

Standalone SAR test exclusion considerations

- Device category = ☑ Portable device   ☐ Mobile device
- Transmitting mode = ☑ Single Transmitting   ☐ Simultaneous Transmitting
- Max. transmitting frequency = **2480** MHz
- Min. test separation distance = **30** mm
- Max. Antenna Gain = **0.41** dBi
- Max. power with turn-up tolerance = **1.00** dBm = **1.3** mW (Typical Power = **Max. 1.00** dBm)

Note. Bluetooth LE

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

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

= [(1.3mW / 30mm)] X [$\sqrt{2.48GHz}$] = 0.1

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.