Standalone SAR test exclusion considerations

April 27, 2017

- 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 =   **1.2**   dBi
- Max. power with turn-up tolerance =   **17.00**   dBm =   **50.2**   mW   (Typical Power =   **Max.   17.00**   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

= [(50.2mW / 30mm)] X [$\sqrt{2.48GHz}$] = 2.6

   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.*

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- 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 =   **1.2**   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.