

Standalone SAR test exclusion considerations

November 24, 2017

- Device category = ☒ Portable device ☐ Mobile device
- Transmitting mode = ☒ Single Transmitting ☐ Simultaneous Transmitting
- Max. transmitting frequency = 2412 MHz
- Min. test separation distance = 15 mm
- Max. Antenna Gain = 0.535 dBi
- Max. power with turn-up tolerance = 8.50 dBm = 7.1 mW (Typical Power = Max. 8.50 dBm)

Note. 2.4GHz WLAN

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

$$\left[\left(\text{max. power of channel, including tune-up tolerance, mW} \right) / \left(\text{min. test separation distance, mm} \right) \right] \cdot \left[\sqrt{f(\text{GHz})} \right] \leq 3.0 \text{ for 1g SAR and } \leq 7.5 \text{ for 10g extremity SAR}$$
$$= \left[\left(7.1\text{mW} / 15\text{mm} \right) \right] \times \left[\sqrt{2.412\text{GHz}} \right] = 0.7$$

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.