



Standalone SAR test exclusion considerations

April 2, 2024

- Device category = Portable device Mobile device
- Transmitting mode = Single Transmitting Simultaneous Transmitting
- Max. transmitting frequency = 433.92 MHz
- Min. test separation distance = 0 mm
- Max. Antenna Gain = -4.09 dBi
- Max. power with turn-up tolerance = 5.31 dBm = 3.4 mW (Typical Power = Max. 5.31 dBm)

Note. The max power includes a correction factor of $10\log(0.10)$ to cover an operational duty factor of 10% as the device transmit a maximum of 10ms in period 100 msec.

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

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

$$= [(3.4\text{mW} / 5\text{mm})] \times [\sqrt{0.43392\text{GHz}}] = 0.4$$

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.