Standalone SAR test exclusion considerations(Bluetooth)

May 25, 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 = 0.56 dBi
- Max. power with turn-up tolerance = 12.50 dBm = 17.8 mW (Typical Power = Max. 12.50 dBm)

Note. The minimum separation distance between antenna and user is 35.5mm. But we applied a closer distance to calculate the worst results.
Please refer to the "Attestation letter" in the FCC filing.
For Max.tune-up power, please refer to the operation description in the FCC original filing.

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)] · [√f(GHz)] ≤ 3.0 for 1g SAR and ≤ 7.5 for 10g extremity SAR

= [(17.8mW / 30mm)] X [√2.48GHz] = 0.93

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(BLE)

May 25, 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 = 0.56 dBi
- Max. power with turn-up tolerance = 6.00 dBm = 4.0 mW (Typical Power = Max. 6.00 dBm)

Note. The minimum separation distance between antenna and user is 35.5mm. But we applied a closer distance to calculate the worst results.
Please refer to the "Attestation letter" in the FCC filing.
For Max.tune-up power, please refer to the operation description in the FCC original filing.

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)] · [√f(GHz)] ≤ 3.0 for 1g SAR and ≤ 7.5 for 10g extremity SAR

= [(4mW / 30mm)] X [√2.48GHz] = 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.