RF Exposure

The Equipment Under Test (EUT) is a Wireless touch Keyboard which has Bluetooth and 2.4G SRD function operating at 2402-2480MHz while Bluetooth and 2.4G SRD can`t be used at the same time. The EUT can be powered by DC 3.0V by AAA battery. For more detailed features description, please refer to the user's manual.

Bluetooth Version: 5.0 BLE
Antenna Type: Integral antenna.
Antenna Gain: 0dBi.
Modulation Type: GFSK
The nominal conducted output power specified: 0dBm (+/-3dB).

The maximun conducted output power for the EUT is -2.80dBm in the frequency 2480MHz which is within the production variation.

The minimun conducted output power for the EUT is -2.94dBm in the frequency 2440MHz which is within the production variation.

The maximun conducted output power specified is 3dBm = 2mW
The source- based time-averaging conducted output power
= 2 * Duty factor mW (where Duty Factor$\leqslant$1)
= 2 mW

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.480) mW
= 9.53 mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.

2.4GHz SRD:
Antenna Type: Integral Antenna.
Antenna Gain: 0dBi.
Modulation Type: GFSK
The nominal conducted output power specified: 0dBm (Tolerance: +/-3dB).

The maximun conducted output power for the EUT is -2.24dBm in the frequency 2402MHz which is within the production variation.

The minimun conducted output power for the EUT is -2.35dBm in the frequency 2480MHz which is within the production variation.

The maximun conducted output power specified is 3dBm = 2mW
The source- based time-averaging conducted output power
= 2 * Duty factor mW (where Duty Factor≤1)
= 2 mW

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.480) mW
= 9.53 mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.