RF Exposure Requirements

Product Description:Bluetooth Machine core

Model No.:ZD-9688

FCC ID:2AQRO-ZD-9688

According to the KDB 447498 D01 v06 section 4.3.1, for 100 MHz to 6 GHz and test separation distances \leq 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

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

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation 17
- The result is rounded to one decimal place for comparison

Calculation Result:

Tx frequency range:2402MHz Min. test separation distance: 5mm

Maximum Conducted Output Power:-0.62dBm(0.867mW)

Tune-Up output power: 2dBm(1.58mW)
RF channel transmit frequency:2402MHz

Result: 0.2 Limit: 3.0

Tx frequency range:2442MHz Min. test separation distance: 5mm

Maximum Conducted Output Power:0.95dBm(1.245 mW)

Tune-Up output power: 2dBm(1.58mW) RF channel transmit frequency:2442MHz

Result: 0.2 Limit: 3.0

Tx frequency range:2480MHz Min. test separation distance: 5mm

Maximum Conducted Output Power:-0.53dBm(0.885 mW)

Tune-Up output power: 2dBm(1.58mW) RF channel transmit frequency:2480MHz

Result: 0.2 Limit: 3.0

The exclusion thresholds is 0.31 < 3, so the transmitter complies with the RF exposure requirements and the SAR is not required.