RF Exposure Requirements

Product Description: Bluetooth® v4.0 Dual Mode Long Range USB Adapter
Model No.: LM1010-0970, LM1010-0974, LM1010-0971, LM1010-0972, LM1010-00973, LM1010-1010
FCC ID: VVXLM1010

According to the KDB 447498 D01 v06 section 4.3.1, for 100 MHz to 6 GHz and test separation distances ≤ 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)] · [√f(GHz)] ≤ 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 calculation17
- The result is rounded to one decimal place for comparison

Calculation Result:

Tx frequency range: 2402-2480MHz
Min. test separation distance: 5mm
Maximum Conducted Output Power: 5.006dBm
Tune-Up output power: 7.8dBm
RF channel transmit frequency: 2480MHz
Result: 1.9
Limit: 3.0

The exclusion thresholds is 1.9 < 3, so the transmitter complies with the RF exposure requirements and the SAR is not required.