RF Exposure

The equipment under test (EUT) is a Wireless Adaptor. The EUT was powered by D.C. 5V from USB port. For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna.
Antenna Gain: -0.58dBi.
The nominal conducted output power specified: -2.5dBm +/-5dB.
The nominal radiated output power (e.i.r.p) specified: -3.08dBm (+/- 5dB)

Modulation Type: π/4 –DQPSK.

According to the KDB 447498:

The maximun peak radiated emission for the EUT is 88.9dBμV/m at 3m in the frequency 2405.35MHz
The EIRP = [(FS*D) ^2 / 30] mW = -6.3dBm
which is within the production variation.

The minimum peak radiated emission for the EUT is 87.6dBμV/m at 3m in the frequency 2441.35MHz
The EIRP = [(FS*D) ^2 / 30] mW = -7.6dBm
which is within the production variation.

The maximun conducted output power specified is 2.5dBm = 1.8mW
The source- based time-averaging conducted output power
= 1.8* Duty Cycle mW < 1.8 mW

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.477) mW
= 9.5 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.

Transmitter Duty Cycle Calculation

The Duty Cycle of this product is below 1.

This requirement is according to KDB 865664 D02