RF Exposure

The equipment under test (EUT) is a 2.4G Wireless Receiver operating at 2.4G Band. The EUT can be powered by DC 5V by the computer. For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna
Modulation Type: GFSK
Antenna Gain: 1.92dBi Max
The nominal conducted output power specified: -11.92 dBm (±3dB)
The nominal radiated output power (e.i.r.p) specified: -10.0 dBm (±3dB)

According to the KDB 447498:

The maximun peak radiated emission for the EUT is 86.0dBμV/m at 3m in the frequency 2441.65MHz
The EIRP = [(FS*D) ^2 / 30] mW = -9.23 dBm
which is within the production variation.

The minimum peak radiated emission for the EUT is 84.2dBμV/m at 3m in the frequency 2480.65MHz
The EIRP = [(FS*D) ^2 / 30] mW = -11.03dBm
which is within the production variation.

The maximun conducted output power specified is -8.92 dBm = 0.128 mW
The source- based time-averaging conducted output power
= 0.128 * Duty factor mW (where Duty Factor≤1)
= 0.128 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.