INTERTEK TESTING SERVICES

Analysis Report

The equipment under test (EUT) is a Lenovo 500 Wireless Mouse. The EUT was powered by a 1.5V AA battery. For more detail information please refer to the user manual.

Modulation Type: GFSK.
Antenna Type: Integral antenna
Antenna Gain: -0.19dBi.

The nominal conducted output power specified: -1.0dBm (Tolerance: +/- 3dB)
The nominal radiated output power (EIRP) specified: -1.19dBm (Tolerance: +/- 3dB)

According to the KDB 447498:

The maximum radiated emission for the EUT is 93.6dBμV/m at 3m in the frequency 2.403GHz
= [(FS*D) ^2 / 30] mW
= -1.6dBm which is within the production variation.

The minimum radiated emission for the EUT is 92.3dBμV/m at 3m in the frequency 2.478GHz
= [(FS*D) ^2 / 30] mW
= -2.9dBm which is within the production variation.

The maximun conducted output power specified is 2dBm = 1.6mW
The source- based time-averaging conducted output power
= 1.6 * Duty cycle mW= 1.6 mW

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.480) mW
= 9.5 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 EUT transmit continuously during the test, the duty cycle is 1.