INTERTEK TESTING SERVICES

RF Exposure

The Equipment under Test (EUT) is a Bluetooth headset model Lenovo W520. It is powered by DC 3.7V.   For more detail information please refer to the user manual.

Antenna Type: Integral antenna.
Antenna Gain: 0dBi.
The nominal conducted output power specified: 1dBm ±3dB.
Test radiated output power: -2dBm ~ 4dBm

Modulation Type: GFSK, $\pi/4$ –DQPSK and 8-DPSK.

According to the KDB 447498:

> The maximun conducted output power specified is 4dBm = 2.51mW
> The source- based time-averaging conducted output power
> = 2.51* Duty Cycle mW= 2.09mW
>
> 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.

Transmitter Duty Cycle Calculation

> Based on the Bluetooth Specification (BT version: 3.0 + EDR), the duty cycle is dependent of packet type (DH1, DH3 and DH5).For one period for a pseudo-random hopping through all 79 RF channels, for DH5:
> One hop set consists of 5 TX slot and 1 RX slot.
> Duty cycle = 5 / 6 = 0.833

FCC ID: A5MW520