

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a Wireless Gaming Headset operating at 2.4G Band. The EUT is powered by DC 5V from USB port. For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna

Modulation Type: GFSK

Antenna Gain: 1.5dBi Max

The nominal conducted output power specified: -17.5dBm (+/-1dB)

The nominal radiated output power (e.i.r.p) specified: -16.0dBm (+/- 1dB)

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 80.1dBμV/m at 3m in the frequency 2478MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -15.13dBm

which is within the production variation.

The minimum peak radiated emission for the EUT is 78.6dBμV/m at 3m in the frequency 2403MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -16.63dBm

which is within the production variation.

The maximum conducted output power specified is -16.5dBm = 0.02mW

The source- based time-averaging conducted output power

= $0.02 \cdot \text{Duty factor mW}$ (where Duty Factor ≤ 1)

= 0.02mW

The SAR Exclusion Threshold Level:

= $3.0 \cdot (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$

= $3.0 \cdot 5 / \sqrt{2.478}$ 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.