

INTERTEK TESTING SERVICES

Analysis Report

The equipment under test (EUT) is a Baby Monitor - Parent Unit with 2.4GHz wireless control function operating in 2417-2468MHz. There are total 24 channels. The EUT is powered by 3.7V 1900mAh Li-Polymer rechargeable battery which can be charged by a 100-240VAC to 5.0VDC 1A AC adaptor. For more detail information pls. refer to the user manual.

Modulation Type: GFSK

Antenna Type: Integral antenna (Gain: 0 dBi)

The nominal radiated output power (e.i.r.p) specified: 11dBm (Tolerance: +/-3dB)

The nominal conducted output power specified: 11dBm (Tolerance: +/-3dB)

According to the KDB 447498:

The maximum radiated emission for the EUT is 109.1dB μ V/m at 3m in the frequency 2.468GHz = $[(FS \cdot D)^2 / 30]$ mW
= 13.87dBm which is within the production variation

The minimum radiated emission for the EUT is 108.7dB μ V/m for at 3m in the frequency 2.443GHz = $[(FS \cdot D)^2 / 30]$ mW
= 13.47dBm which is within the production variation

The maximum conducted output power specified is 14dBm = 25.12mW

The source- based time-averaging conducted output power
= 25.12 * Duty cycle mW = 25.1 mW * 0.15652 = 3.93 mW

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.468) mW
= 9.55 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 duration of one cycle = 100 ms

Effective period of the cycle = 15.652 ms

DC = 15.652 ms / 100 ms = 0.15652