RF Exposure

The Equipment under Test (EUT) is a Baby monitor for Cars, model: 1000-YG operating at 2410 – 2475MHz with channel spacing 3.25MHz. The Baby Monitor for Cars consists of two parts – the monitor and the camera plush. The camera plush is a transmitter and the monitor is a receiver. Each part is designed to be powered by an embedded and external DC 3.7V rechargeable battery. The battery can be charged by DC 5V USB output port of cigar charger or AC/DC adapter which has a input of 120VAC, 60Hz. For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna.
Antenna Gain: 2dBi.
The normal radiated output power (e.i.r.p) is: -8dBm (tolerance: +/- 3dB).
The normal conducted output power is -10dBm (tolerance: +/- 3dB).

Modulation Type: GFSK

According to the KDB 447498:

The Maximum peak radiated emission for the EUT is 86.8dBμV/m at 3m in the frequency 2475MHz
The EIRP = [(FS*D) ^2 / 30] mW = -8.43dBm
which is within the production variation.

The Minimum peak radiated emission for the EUT is 84.3dBμV/m at 3m in the frequency 2410MHz
The EIRP = [(FS*D) ^2 / 30] mW = -10.93dBm
which is within the production variation.

The maximum conducted output power specified is -5dBm = 0.3 mW
The source- based time-averaging conducted output power
= 0.3 * Duty cycle mW= 0.04 mW

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.475) 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
The duty cycle is simply the on-time divided by the period:
The duration of one cycle   = 13.2ms
Effective period of the cycle = 1.9ms
DC = 1.9ms / 13.2ms = 0.1439 or 14.39%