MPE Analysis Report

The DM111 BU (35-201958BU) is a Audio Baby Monitor - Baby Unit.

The Equipment Under Test (EUT) operates at frequency range of 902MHz-928MHz. There are totally 62 non-overlapaping channels with 400kHz channel separation and 25 active channels out of the 62 channels.

The EUT is powered by an AC adaptor (Model: VT05UUS06040, Input 100-120VAC 60Hz 0.15A, Output 6VDC 0.4A).

Antenna Type: Internal, Integral
Antenna Gain: 0dBi
Nominal conducted power: 17.7dBm
Maximum allowed production tolerance: 20dBm

For Maximum Permissible Exposure (MPE) evaluation of the Audio Baby Monitor - Baby Unit, the maximum power density at 20 cm from this mobile transmitter shall be less than the General Population / Uncontrolled MPE limit in OET Bulletin 65 and meet the requirement listed in KDB447498.

Maximum conducted power of EUT is 20dBm (100mW). The antenna gain is 0 dBi = 1 (num gain) and the maximum source-based time-averaging duty factor is 100%. From these data, the exposed power density at a distance (R) of 20cm from the center of radiation of the antenna can be calculated according to OET Bulletin 65 as follow:

The Maximum Conducted Power = 20 dBm
= 100 mW

The power density at 20 cm from the antenna
= Max. Conducted Power / 4πR^2
= 0.0199 mW cm-2

In the frequency range of 902 – 928MHz, the MPE limit is 0.6mWcm-2 for general population and uncontrolled exposure. As the measured power density at 20cm from the transmitter is lower than the MPE limit, the compliance to the MPE limit can be ensured by indicating the minimum 20cm separation between the transmitter's radiating structures and body of the user or nearby persons.

The following RF exposure statement is proposed to be included in the user manual:

“ FCC RF Radiation Exposure Statement
Caution: To maintain compliance with the FCC’s RF exposure guidelines, place the product at least 20cm from nearby persons.”