

1.0 GENERAL INFORMATION

1.1 Product Description

The Model Sensitive Sound Model 49260 (referred to as the EUT in this report) is a receiver for use in an infant's nursery.

This system is designed to be a high quality, low cost audio nursery monitor for home use. This monitor will transmit audible sounds from the Child Unit (transmitter) and receive the same sounds on the Parent Unit (receiver). The frequency band chosen for this product is the 902-928 MHz ISM band. This frequency band allows for long range reception and good quality audio. This product is part of an ongoing family of nursery monitors provided by Safety 1st and will be sold through department stores nationwide.

Parent Unit – Receiver Device Operation

This receiving device operates on one of two RF channels. Channel A is set to receive signals at 905.5 MHz and Channel B is set to 906 MHz. A switch controls the channel selection. The receiver is dual conversion superheterodyne. The 900 MHz signal is first down converted to 61 MHz through a Gilbert Cell mixer, high side injected. The local oscillator (LO) frequency is 966.5 for channel A and 967 MHz for channel B. This LO is generated by a direct 900 MHz oscillator tuned by a DC voltage on a varactor diode. A high Q coaxial resonator cut to the desired frequency range establishes frequency stability. The intermediate frequency (IF) of 61 MHz is then down converted again to 10.7 MHz. The second LO is high side injected and tuned to 71.7 MHz. The signal from the second IF is then FM detected and the recovered audio signal is amplified to a speaker for sound recovery. The unit is powered by a single 9V battery or AC/DC power adapter.

1.2 Related Submittals

Safety 1st is submitting the associated Transmitter as FCC ID: MNJ49260T.

1.3 Test Facility

The open area test site used to collect the radiated data is located on 8625 Helmar Road in Newark, Illinois. The open field test site has a metal ground screen. Details of the site characteristics are on file with the FCC. Conducted emission measurements and preliminary radiated emission scans were performed in shielded enclosure number 1 at Radiometrics' Lombard, Illinois EMI test lab. These sites have been fully described in a report and accepted by the FCC in a letter dated October 1, 1996 (31040/SIT 1300F2).

Conducted emission measurements were performed using an Electrometrics Model FCC/VDE 50/2 Line Impedance Stabilization Network (LISN) as the pick-up device. This device is constructed in accordance with the circuit diagram provided in Figure 3 of ANSI document C63.4-1992.