

Measurement/Searching techniques/Experiment

To consider mitigation procedures, testing using a shielded room was carried out as shown in Figure 1.1-2. The test can be also carried out in an anechoic chamber. A signal generator was used to generate a 7 MHz signal with 80% amplitude modulation, which was then amplified and loaded to the monopole antenna. The resulting electromagnetic wave was applied to the telephone set and its host equipment. The monopole antenna was used as radiation antenna, and a loop antenna was utilized as receiving antenna. The loop antenna was connected to an electric field strength receiver (RX). The loop antenna was connected to an electric field strength receiver (RX).

The immunity level of the telephone sets are shown in Figure 1.1-3. The immunity level of Telephone 1 was less than 110 dB μ V/m, compared to the electric field at the real location. After testing, it was found that noise can be induced through the telecom port and the inner port connecting the telephone and the handset cord.

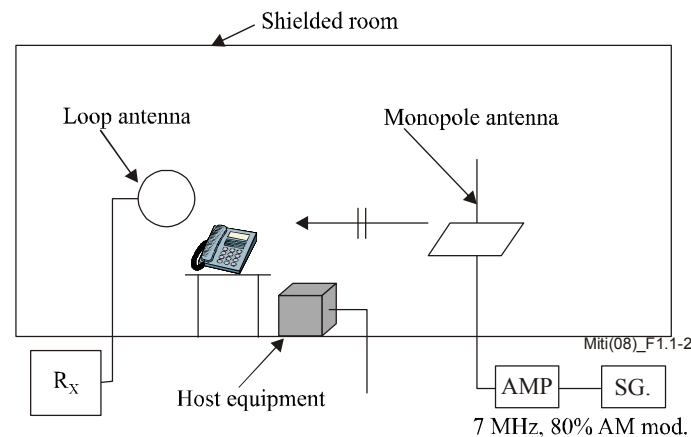


Figure 1.1-2 – Experiment configuration

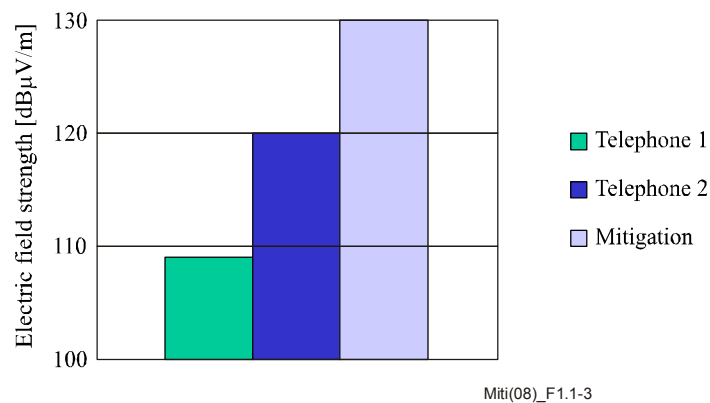


Figure 1.1-3 – Immunity levels of the telephone sets