HERMON LABORATORIES

Environmental evaluation and exposure limit according to FCC CFR 47part 1, §1.1307, §1.1310

The Wireless PIR Detector, model PMD85M are classified as a mobile device. The Wireless PIR Detector includes transmitter operating according to FCC part 15 subpart C section 15.247 (FHSS)

The FCC limit for power density for general population/uncontrolled exposure is f/1500 mW/cm^2 for 300 – 1500 MHz frequency range:

P = 902.25/1500 = 0.6 mW/cm^2

The power density **$P\ (mW/cm^2) = P_T / 4\pi r^2$**

P_T is the transmitted power, which is equal to the peak transmitter output power 22.43 dBm plus maximum antenna gain 0 dBi, the maximum equivalent isotropically radiated power EIRP is

P_T = 22.43 dBm + 0 dBi = 22.43 dBm = 174.98 mW.

The power density at 20 cm (minimum safe distance, required for mobile devices), calculated as follows:

Compliance with FCC limit: 86.09 mW / 4π (20 cm)^2 = 0.035 mW/cm^2 << 0.6 mW/cm^2

General public cannot be exposed to dangerous RF level.

Mrs. S. Peysahov Sheynin,
certification specialist, EMC & Radio

Hermon Laboratories Ltd.
POB 23, Binyamina 3055001 Israel
Phone: +972 4 628 8001, Fax: +972 4 628 8277
Email: mail@hermonlabs.com, www.hermonlabs.com