

Federal Communication Commission
Authorization and Evaluation Division
7435 Oakland Mills Road
Columbia, MD 21046

Attention: Reviewing Engineer

The **LG Electronics Inc.** is a regular 802.11b Wireless LAN PCI card using spread spectrum technique for wireless access of a PC to a LAN..

Due to the construction of the PCI card and the position of the antenna at the rear of a desktop or tower/Mini-tower computer, which give a distance under normal operating conditions of more than 20 cm.

This information includes the following: *A minimum separation distance of 20 cm must be maintained between the antenna and the person for this device to satisfy the RF exposure requirements of the FCC.*

The maximum output power for is 100 mW (20 dBm).

Maximum EIRP of the equipment = 20 dBm (0.0100 W); equivalent to 8.66 V/m in 10 cm distance

Regarding MPE limits, GPUC environment limits maximum exposure to 1 mW/cm²

The power density is:

at 20 centimeters from an antenna	$S = E^2/3770 = -13 H^2 = \mathbf{0.01989 \text{ mW/cm}^2} < 1 \text{ mW/}$
at 10 centimeters from an antenna	$S = E^2/3770 = -13 H^2 = \mathbf{0.0795 \text{ mW/cm}^2} < 1 \text{ mW/}$

Where: S = Power density (mW/cm²)
E = electrical field strength (V/m)

Calculations are based on standard formula for calculating field strength at a distance and converting power density using free space impedance.

Compliance is shown for the built in module, which have an external the antenna with a unique **reversed polarity SMA connector** the module even for the distance of 10 cm. This is the distance given by the position of the antenna in the rear of the computer.

If you should have any questions regarding this submission, please feel free to contact the undersigned.

Yours truly,



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CETECOM Inc.