

RF Exposure / MPE Calculation

No. : 10993397H
Applicant : silex technology, Inc.
Type of Equipment : Wireless LAN PCI Express Mini Card
Module
Model No. : SX-PCEGN
FCC ID : N6C-SXPCEGN

silex technology, Inc. declares that Model: SX-PCEGN complies with FCC radiation exposure requirement specified in the FCC Rule 2.1091 (for mobile).

RF Exposure Calculations:

The following information provides the minimum separation distance for the highest gain antenna provided with the "SX-PCEGN" as calculated from (B) Limits for General Population / Uncontrolled Exposure of TABLE 1- LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE) of §1.1310 Radiofrequency radiation exposure limits.

This calculation is based on the highest EIRP possible from the system, considering maximum power and antenna gain, and considering a 1mW/cm² uncontrolled exposure limit. The Friis formula used was:

$$S = \frac{P \times G}{4 \times \pi \times r^2}$$

Where

$P =$ 438.11 mW (Maximum peak output power)
 $G =$ 1.629 Numerical Antenna gain; equal to 2.12dBi
 $r =$ 20 cm (Separation distance)

$$\text{Power Density Result } S = 0.14201 \text{ mW/cm}^2$$

Even taking into account the tolerance, this device can be satisfied with the limits.

UL Japan, Inc.

Ise EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124