

RF Exposure / MPE Calculation

No. : 10008991H

Applicant : silex technology, Inc.
Type of Equipment : SDIO Wireless Module
Model No. : SX-SDMGN
FCC ID : N6C-SDMGN

silex technology, Inc. declares that Model : SX-SDMGN
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-SDMGN" 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 1.0mW/cm² uncontrolled exposure limit. The Friis formula used was:

$$S = (P * G) / (4 * \pi * r^2)$$

Where

P = 194.73 mW (Maximum average output power)
G = 2.00 Numerical Antenna gain; equal to 3.00 dBi
r = 20.0 cm

For: SX-SDMGN **S = 0.07730 mW/cm²**

Reference data from Original test report: 32IE0153-HO-01

Where

P = 194.73 mW (Maximum peak output power)
G = 1.62 Numerical Antenna gain; equal to 2.10 dBi
r = 20.0 cm

For: SX-SDMGN **S = 0.06283 mW/cm²**

UL Japan, Inc.

Head Office EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124