

RF Exposure / MPE Calculation

No. : 10156278H

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 = 3.16 Numerical Antenna gain; equal to 5.00 dBi
r = 20.0 cm

For: SX-SDMGN

$$S = 0.12251 \text{ mW/cm}^2$$

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

$$S = 0.06283 \text{ mW/cm}^2$$