RF Exposure / MPE Calculation

No. : 10195552-001H

Applicant	**:**	**silex technology, Inc.**
Type of Equipment	**:**	**SDIO Wireless Module (11b/g, 11n-20(2.4GHz/5745-5825MHz), 11n-40(5755-5795MHz), 11a(5745-5825MHz))**
Model No.	**:**	**SX-SDMAN**
FCC ID	**:**	**N6C-SDMAN**
IC Number	**:**	**4908B-SDMAN**

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

RF Exposure Calculations:

The following information provides the minimum separation distance for the highest gain antenna provided with the "SX-SDMAN" 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/cm^2 uncontrolled exposure limit. The Friis formula used was:

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

Where

P = 197.96 mW (Maximum peak output power)
G = 3.02 Numerical Antenna gain; equal to 4.80 dBi
r = 20.0 cm

For: SX-SDMAN **S = 0.11893 mW/cm^2**

Reference data from Original test report: 32IE0154-HO-01

Where

P = 197.96 mW (Maximum peak output power)
G = 1.78 Numerical Antenna gain; equal to 2.50 dBi
r = 20.0 cm

For: SX-SDMAN **S = 0.07003 mW/cm^2**

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