

RF Exposure / MPE Calculation

No. : 10604551H

Applicant : silex technology, Inc.
Type of Equipment : PCI Express Half mini card WLAN module
Model No. : SX-PCEAN2 (2412-2462MHz, 2422-2452MHz, 5745-5825MHz, and 5755-5795MHz)
FCC ID : N6C-SXPCEAN2

silex technology, Inc. declares that Model : SX-PCEAN2 (2412-2462MHz, 2422-2452MHz, 5745-5825MHz, and 5755-5795MHz)
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-PCEAN2 (2412-2462MHz, 2422-2452MHz, 5745-5825MHz, and 5755-5795MHz)" 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 = 70.47 mW (Maximum average output power)
G = 1.51 Numerical Antenna gain; equal to 1.80 dBi
r = 20.0 cm

For: SX-PCEAN2 (2412-2462MHz, 2422-2452MHz, 5745-5825MHz, and 5755-5795MHz) S = 0.02122 mW/cm²

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

UL Japan, Inc.

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