

RF Exposure / MPE Calculation

No. : 10517044H

Applicant : silex technology, Inc.
Type of Equipment : Low power IoT wireless LAN module
(11a/11n-20 (5180 - 5240MHz, 5260-5320MHz, 5500-5700MHz, 5745-5825))
Model No. : SX-ULPAN
FCC ID : N6C-SXULPAN

silex technology, Inc. declares that Model : SX-ULPAN
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-ULPAN" 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 = 14.76 mW (Maximum Conducted output power)
G = 2.45 Numerical Antenna gain; equal 3.90 dBi
r = 20.0 cm

For: SX-ULPAN

$$S = 0.00721 \text{ mW/cm}^2$$

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

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