

IC Certification ID:	21724-CONNECT
FCC ID:	2AI5J-CONNECT
Model Number:	CLIQ CONNECT KEY
RF exposure environment:	General Public
Exposure category:	Portable, Body / Limb worn equipment
Needed separation distance from body/limb:	No separation needed

SAR testing are not done, because with our best understanding the equipment clearly meets the RSS-102 Issue 5 Section 2.5 Exemption Limits for Routine Evaluation and also the FCC KDB 447498 D01 General RF Exposure Guidance v06 4.3.1 threshold value requirements for exemption.

Technical brief (Industry Canada RSS-102)

Measured maximum conducted peak RF power is: -11.35dBm (**0.073mW**) (SGS Fimko Test Report 280597-1) It is not possible use other power sources than battery to operate equipment. Equipment are delivered with Renata CR2450N lithium battery, which is one of highest performing battery in market. It is not expected that any other CR2450 battery in market can increase measured RF power.

Our statement:

Because RF transceiver maximum measured conducted power are 0.073mW (2.439GHz), and the exemption limits over used frequency range (2402-2480MHz) are 4.2mW ... 3.9mW, for equipment with separation of <5mm from body, this equipment complies the RF exposure requirements in Canada. There is good marginal to the limits.

FCC RF exposure report

KDB 447498 D01 General RF Exposure Guidance v06 describes following:

4.3. General SAR test exclusion guidance

4.3.1. Standalone SAR test exclusion considerations

For 100 MHz to 6 GHz and test separation distances \leq 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR, where $f(\text{GHz})$ is the RF channel transmit frequency in GHz

Calculated threshold for measured highest conducted peak power. Tune up tolerance are 0dBm.

Used parameters: 0.073mW rounded to 1mW and separation from body <5mm.

$1\text{mW} / 5\text{mm} * \sqrt{2.439\text{GHz}} = \mathbf{0.312}$

Our statement:

Because calculated threshold value (1-g) are not exceeds, equipment does not need SAR testing and equipment therefore complies FCC requirements with good marginal.