RF Exposure information

The reader transmitter operates according to FCC part 15 subpart C section 15.249. The standard does not contain RF Exposure limits.
The reader includes a single modular approved transmitter FCC ID:TK4WLE600VX.

The power density $\mathbf{P\ (mW/cm^2) = P_T / 4\pi r^2}$
Maximum conducted output power given in FCC ID:TK4WLE600VX module grant is 0.264 mW (24.2 dBm) in 2412-2462 MHz band. Limit for power density for general population/uncontrolled exposure is 1 mW/cm^2 for 1500 -100000 MHz frequency range.

The gain of L-Com HG2403RD-RSF antenna used with the module in the reader is 2 dBi.

The maximum equivalent isotropically radiated power EIRP is

$$P_T = 24.2\ dBm + 2\ dBi = 26.2\ dBm = 416.9\ mW$$

The power density at 20 cm is calculated as follows:

$$416.9\ mW / 4\pi\ (20\ cm)^2 = 0.08\ mW/cm^2 < 1\ mW/cm^2$$

General public cannot be exposed to dangerous RF level.