Environmental evaluation and exposure limit according to FCC CFR 47part 1, §1.1307, §1.1310

The IDR 900 MHz transceiver is classified as mobile.

Limit for power density for general population/uncontrolled exposure is f/1500 mW/cm^2 for 300 – 1500 MHz frequency range:

P = 927/1500 = 0.618 mW/cm^2

The power density **$P\ (mW/cm^2) = P_T / 4\pi r^2$**, where

P_T is the maximum equivalent isotropically radiated power (EIRP), which is equal to:

transmitter maximum output power 17.83 dBm plus maximum antenna gain 10 dBi and the maximum equivalent isotropically radiated power is 27.83 dBm = 606.7 mW.

The power density at 20 cm (minimum safe distance, required for mobile devices), calculated as follows:

$$606.7\ mW / 4\pi\ (20\ cm)^2 = 0.12\ mW/cm^2 < 0.618\ mW/cm^2$$

was found far below the limit.

Hence, no safety hazard exists for human being.