RF Exposure information

The NFC reader is classified as mobile.

The reader includes transmitters operating according to FCC part 15 subpart C section 15.225 and section 15.247 (DTS).

The standard section 15.225 does not contain RF Exposure limits.

The FCC power density limit for general population/uncontrolled exposure is 1 mW/cm² for 2.4 GHz.

Limit for power density for general population/uncontrolled exposure is 1 mW/cm² for 1500 -100000 MHz frequency range.

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

 P_{T} is the transmitted power, which is equal to the peak transmitter output power -3.49 dBm plus maximum antenna gain 0 dBi, the maximum equivalent isotropically radiated power EIRP is

$$P_T = -3.49 \text{ dBm} = 0.45 \text{ mW}.$$

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

$$0.45 \text{ mW} / 4\pi (20 \text{ cm})^2 = 8.96 \text{ x} 10^{-5} \text{ mW/cm}^2 << 1 \text{ mW/cm}^2$$

General public cannot be exposed to dangerous RF level.