Exposure limit according to §15.247(i)

The transceiver is classified as mobile.

Limit for power density for general population/uncontrolled exposure is 1 mW/cm^2 for 1500 -100000 MHz frequency range.

The power density **P (mW/cm^2) = P$_T$ / 4π r^2**, where

P$_T$ is the transmitted power, which is equal to the peak transmitter output power plus maximum antenna gain. The maximum equivalent isotropically radiated power EIRP is

$$P_T = 7.92 \text{ dBm} + 5 \text{ dBi} = 12.92 \text{ dBm} = 19.58 \text{ mW, where}$$

7.92 dBm is the EUT maximum output power,
5 dBi – antenna gain.

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

$$19.58 \text{ mW} / 4\pi \text{ (20 cm)}^2 = 0.004 \text{ mW/cm}^2 << 1 \text{ mW/cm}^2$$

General public cannot be exposed to dangerous RF level.