

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

Limit for power density for general population/uncontrolled exposure is 0.61 mW/cm².

The power density P (mW/cm²) = $\frac{P_T}{4\pi r^2}$, where

P_T is the maximum equivalent isotropically radiated power (EIRP).

In our case P_T is 17.8 dBm + 0 dBi (antenna gain) = 17.8 dBm = 60.25 mW,
and the power density at 20 cm (minimum safe distance, required for mobile devices),
calculated as follows:

$$60.25 / 4\pi 20^2 = 0.012 \text{ mW/cm}^2 \ll 0.61 \text{ mW/cm}^2$$

was found far below the limit.

Hence, no safety hazard exists for human being.