

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

The BSR-5.8 transceiver is classified as mobile.

Limit for power density for general population/uncontrolled exposure is 1 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).

P_T is equal to transmitter maximum output power 25 dBm plus maximum antenna gain 11 dBi, the maximum equivalent isotropically radiated power (e.i.r.p.) is 36 dBm = 4000 mW, and the power density at 20 cm (minimum safe distance, required for mobile devices), calculated as follows:

$$4000 / 4\pi 20^2 = 0.79 \text{ mW/cm}^2 < 1 \text{ mW/cm}^2$$

was found below the limit.

Hence, no safety hazard exists for human being.