RF exposure limit according to FCC CFR 47part 1, §1.1307, §1.1310

The calculation was done for power density at 20 cm distance for GSM and 315 MHz transmitters operating simultaneously, no limit exists for 125-131 kHz transmitter.
Simultaneous transmission of GSM module in 824.2 –848.8 MHz and 1850.2 – 1909.8 MHz bands is not possible.

The following must be true:
a) Power density 1(P_1)/Limit$_1$ + Power density 2 (P_2)/Limit$_2$ < 1.
b) Power density 1(P_1)/Limit$_1$ + Power density 3 (P_3)/Limit$_3$ < 1

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

1) Operating frequency range 315 MHz

$$\text{Limit}_1 = 300/1500 = 0.2 \text{ mW/cm}^2$$

The 315 MHz transmitter EIRP is 0.012 mW.
$$P_1 = 0.012 \text{ mW} / 4\pi (20 \text{ cm})^2 = 2.4 \times 10^{-6}$$

2) Operating frequency range 1850.2 –1909.8 MHz

Limit for power density for general population/uncontrolled exposure is Limit$_2$ = 1 mW/cm^2
The peak transmitter output power 30.6 dBm plus maximum antenna gain 1.5 dBi, the maximum equivalent isotropically radiated power EIRP is
$$P_T = 30.6 \text{ dBm} + 1.5 \text{ dBi} = 32.1 \text{ dBm} = 1622 \text{ mW}.$$

The power density P at 20 cm calculated as follows:
$$P_2 = 1622 \text{ mW} / 4\pi (20 \text{ cm})^2 = 0.32 \text{ mW/cm}^2$$

$$P_1/\text{Limit}_1 + P_2/\text{Limit}_2 = 1.2 \times 10^{-5} + 0.32 = 0.32 < 1.$$

3) Operating frequency range 824.2 –848.8 MHz.

$$\text{Limit}_3 = 849/1500 = 0.566 \text{ mW/cm}^2$$

The peak transmitter output power 26.7 dBm plus maximum antenna gain 1.5 dBi, the maximum equivalent isotropically radiated power EIRP is
$$P_T = 26.7 \text{ dBm} + 1.5 \text{ dBi} = 28.2 \text{ dBm} = 660.7 \text{ mW}.$$

The power density P at 20 cm
$$P_3 = 660.7 \text{ mW} / 4\pi (20 \text{ cm})^2 = 0.13 \text{ mW/cm}^2.$$

$$P_1/\text{Limit}_1 + P_3/\text{Limit}_3 = 1.2 \times 10^{-5} + 0.13 \text{ mW/cm}^2 / 0.566 \text{ mW/cm}^2 = 0.53 < 1.$$