



Exemption from Routine Evaluation – MPE Exposure Evaluation

Applicant: Eppendorf SE
FCC ID: 2AXZD0116800209
Model number/name: PremiumFeatures

The above device is exempt from Routine Evaluation, when compared against the MPE RF Exposure Evaluation Limits specified in **FCC Rule Part 1.1310** for mobile devices acc. to **FCC Rule Part 2.1091**:

The separation distance between the user and/or bystander and the device's radiating element must be greater than 20 cm.

For RFID (13.56 MHz):

Maximum field strength @3m = 42.054 dBμV/m

EIRP = [42.054 – 95.2] dBm = -53.146 dBm = **4.85*10⁻⁶ mW**

According to table 1(ii) of Part 1.1310(e)(1), the Power Density limit for devices operating in the frequency range 1.34-30 MHz is: $S_{Lim} = 180/f^2 \text{ mW/cm}^2 = \textbf{0.979 mW/cm}^2$ @13.56 MHz

(f = frequency in MHz)

The Power Density of this transmitter at a separation distance of 20 cm can be calculated as follows:

$$S_{EIRP} = EIRP / (4 * \pi * R^2) = \textbf{0.964 * 10^{-9} mW/cm^2}$$

(S = Power Density, EIRP = Effective Isotropic Radiated Power, R = Separation Distance)

The Power Density of 0.964*10⁻⁹ mW/cm² is below the MPE RF Exposure Evaluation Exemption Limit of 0.979 mW/cm².

Conclusion: The above device is exempt from Routine Evaluation.

Certification Body

UL International (UK) Ltd