

RF Exposure evaluation

The MDC 1xRTT is a Wireless Mobile Data Device used in a vehicle with antenna installed on the roof. Since the device used in mobile application, it may consider that antenna is located at least 20 cm from any body part of the user or nearby persons.

The maximum calculated EIRP is 0.4 W. The Power Density can be calculated using the formula

$$S = \text{EIRP} / 4\pi D^2$$

Where: S is Power Density in W/m^2
D is the distance from the antenna.

At 0.2 m, $S = 0.8 \text{ W}/\text{m}^2$ - well below the MPE limit which is $6 \text{ W}/\text{m}^2$ - in the Cellular band, and $12.5 \text{ W}/\text{m}^2$ - in the PCS band, for General Population/Uncontrolled Exposure.