



BMS does not make claims as to what generally constitutes a “safe” limit or distance from a radiator. BMS equipment is built to best commercial practices and assumes users are familiar with basic RF equipment operation and safety concepts. Every situation is different and each user must consider many unique factors. We offer the following guidelines with the hope that each individual and/or organization will endeavor to establish an RF Safety and Awareness program based on their combination of hardware and usage environment.

The FCC reference document is OET Bulletin 65 and can be viewed here;

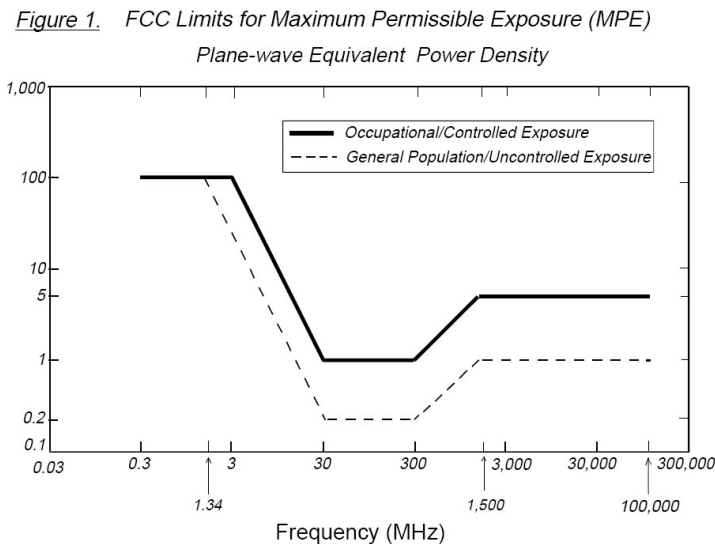
http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet65/oet65.pdf

We also reference EU Standard EN 50392 (02-2004). BMS uses these standards as reasonable guidelines.

The OET 65 document sets maximum permitted exposure (MPE) and is widely cited within the U. S. and Canada. It is divided into two categories, “controlled” and “uncontrolled” environment. The uncontrolled environment is the harshest criteria and applies to exposure where you may not be aware and/or cannot control the exposure. Examples are where a residence is located near a cell site or other radio tower. You live there, cannot remove yourself from the field and cannot control the RF. In other words exposure is long term and not in your control.

The “controlled environment” applies to most professional radio users. It is assumed they are trained in RF Safety, they are aware there is an RF field, exposure is limited by transmission duty cycles, the flight or testing ends, hang up the cell phone, put up the walkie-talkie, etc.

The limit table from Bulletin 65 is reproduced below. X axis is frequency and y axis is mW/cm².



Independent testing has shown that maintaining a 20cm (8”) distance from a 1 watt transmitter radiating from a 2dBi omnidirectional antenna more than satisfies the MPE requirements. Using other combinations of frequency, output power, antenna type, etc. will result in different MPE limits.

Your organization should develop an understanding of its unique RF usage and create a plan to train personnel about maintaining safe exposure limits according to the FCC and EU recommendations.

You can limit your exposure by raising awareness and using some common sense rules.

- Default to low power if available using hi-power only as required.
- Never stand in front of a transmitting directional antenna.
- Limit transmission duty cycles (turn on/off as needed).