

§ 15.241 Operation in the band 174–216 MHz.

(a) Operation under the provisions of this section is restricted to biomedical telemetry devices.

(b) Emissions from the device shall be confined within a 200 kHz band which shall lie wholly within the frequency range of 174–216 MHz.

(c) The field strength of any emissions radiated within the specified 200 kHz band shall not exceed 1500 microvolts/meter at 3 meters. The field strength of emissions radiated on any frequency outside of the specified 200 kHz band shall not exceed 150 microvolts/meter at 3 meters. The emission limits in this paragraph are based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply.

§ 15.242 Operation in the bands 174–216 MHz and 470–668 MHz.

(a) The marketing and operation of intentional radiators under the provisions of this section is restricted to biomedical telemetry devices employed solely on the premises of health care facilities.

(1) A health care facility includes hospitals and other establishments that offer services, facilities, and beds for use beyond 24 hours in rendering medical treatment and institutions and organizations regularly engaged in providing medical services through clinics, public health facilities, and similar establishments, including governmental entities and agencies for their own medical activities.

(2) This authority to operate does not extend to mobile vehicles, such as ambulances, even if those vehicles are associated with a health care facility.

(b) The fundamental emissions from a biomedical telemetry device operating under the provisions of this section shall be contained within a single television broadcast channel, as defined in part 73 of this chapter, under all conditions of operation and shall lie wholly within the frequency ranges of 174–216 MHz and 470–668 MHz.

(c) The field strength of the fundamental emissions shall not exceed 200 mV/m, as measured at a distance of 3 meters using a quasi-peak detector.

Manufacturers should note that a quasi-peak detector function indicates field strength per 120 kHz of bandwidth ± 20 kHz. Accordingly, the total signal level over the band of operation may be higher than 200 mV/m. The field strength of emissions radiated on any frequency outside of the television broadcast channel within which the fundamental is contained shall not exceed the general limits in §15.209.

(d) The user and the installer of a biomedical telemetry device operating within the frequency range 174–216 MHz, 470–608 MHz or 614–668 MHz shall ensure that the following minimum separation distances are maintained between the biomedical telemetry device and the authorized radio services operating on the same frequencies:

(1) At least 10.3 km outside of the Grade B field strength contour (56 dBuV/m) of a TV broadcast station or an associated TV booster station operating within the band 174–216 MHz.

(2) At least 5.5 km outside of the Grade B field strength contour (64 dBuV/m) of a TV broadcast station or an associated TV booster station operating within the bands 470–608 MHz or 614–668 MHz.

(3) At least 5.1 km outside of the 68 dBuV/m field strength contour of a low power TV or a TV translator station operating within the band 174–216 MHz.

(4) At least 3.1 km outside of the 74 dBuV/m field strength contour of a low power TV or a TV translator station operating within the bands 470–608 MHz or 614–668 MHz.

(5) Whatever distance is necessary to protect other authorized users within these bands.

(e) The user and the installer of a biomedical telemetry device operating within the frequency range 608–614 MHz and that will be located within 32 km of the very long baseline array (VLBA) stations or within 80 km of any of the other radio astronomy observatories noted in footnote US 311 of Section 2.106 of this chapter must coordinate with, and obtain the written concurrence of, the director of the affected radio astronomy observatory before the equipment can be installed or operated. The National Science Foundation point of contact for coordination is: