

in a MedRadio communications session does not exceed 300 kHz.

(b) For MedRadio transmitters operating in the 401–401.85 MHz band or the 405–406 MHz band, the maximum authorized bandwidth is 100 kHz. Such transmitters must not use more than 100 kHz of bandwidth (total) during a MedRadio communications session. This provision does not preclude full duplex or half duplex communications provided that the total bandwidth of all of the channels employed in a MedRadio communications session does not exceed 100 kHz.

(c) For MedRadio transmitters operating in the 401.85–402 MHz band, the maximum authorized bandwidth is 150 kHz. Such transmitters must not use more than 150 kHz of bandwidth (total) during a MedRadio communications session. This provision does not preclude full duplex or half duplex communications, provided that the total bandwidth of all of the channels employed in a MedRadio communications session does not exceed 150 kHz.

(d) For MedRadio transmitters operating in the 413–419 MHz, 426–432 MHz, 438–444 MHz or 451–457 MHz bands, the maximum 20 dB authorized bandwidth is 6 MHz.

(e) For MedRadio transmitters operating in the 2360–2400 MHz band, the maximum authorized bandwidth is 5 MHz.

(f) Lesser emission bandwidths may be employed, provided that the unwanted emissions are attenuated as provided in §95.2579. See also §95.2567 regarding maximum radiated power limits, §95.2565 on frequency accuracy, §95.2569 on field strength measurements, and §95.2585 on RF exposure.

§§ 95.2575–95.2577 [Reserved]

§ 95.2579 MedRadio unwanted emissions limits.

Unwanted emission field strength limits and attenuation requirements apply to each MedRadio transmitter type, as set forth in this section and part 2.

(a) *Field strength limits.* The field strengths of unwanted emissions from each MedRadio transmitter type, measured at a distance of 3 meters, must not exceed the field strength limits

shown in the table in this paragraph for the indicated frequency ranges, if the frequencies of these emissions are:

(1) More than 250 kHz outside of the 402–405 MHz band (for devices designed to operate in the 402–405 MHz band);

(2) More than 100 kHz outside of either the 401–402 MHz or 405–406 MHz bands (for devices designed to operate in the 401–402 MHz or 405–406 MHz bands);

(3) In the 406.000–406.100 MHz band (for devices designed to operate in the 401–402 MHz or 405–406 MHz bands); or

(4) More than 2.5 MHz outside of the 413–419 MHz, 426–432 MHz, 438–444 MHz or 451–457 MHz bands (for devices designed to operate in these four bands).

(5) More than 2.5 MHz outside of the 2360–2400 MHz band (for devices designed to operate in the 2360–2400 MHz band).

Frequency range (MHz)	Field strength (µV/m)
30–88	100
88–216	150
216–960	200
960 and above	500

Note to table in paragraph (a)(5): At the boundaries between frequency ranges, the tighter limit (lower field strength) applies. Below 1 GHz, field strength is measured using a CISPR quasi-peak detector. Above 1 GHz, field strength is measured using an average detector with a minimum reference bandwidth of 1 MHz. See also part 2, subpart J of this chapter.

(b) *Harmonic emissions.* Radiated unwanted emissions from a MedRadio transmitter type must be measured to at least the tenth harmonic of the highest fundamental frequency emitted.

(c) *Attenuation requirements, 402–405 MHz.* For MedRadio transmitter types designed to operate in the 402–405 MHz band, unwanted emissions must be attenuated below the maximum permitted transmitter output power by at least:

(1) 20 dB, on any frequency within the 402–405 MHz band that is more than 150 kHz away from the center frequency of the occupied bandwidth;

(2) 20 dB, on any frequency between 401.750 MHz and 402.000 MHz, and on

any frequency between 405 MHz and 405.250 MHz.

(d) *Attenuation requirements, 401–402 MHz, 405–406 MHz.* For MedRadio transmitter types designed to operate in the 401–402 MHz band or 405–406 MHz band, the power of unwanted emissions must be attenuated below the transmitter output power by at least:

(1) 20 dB, on any frequency within the 401–401.85 MHz or 405–406 MHz bands that is:

(i) More than 75 kHz away from the center frequency of the occupied bandwidth if the MedRadio transmitter type is operating on a frequency between 401.85 and 402 MHz; or,

(ii) More than 50 kHz away from the center frequency of the occupied bandwidth and 100 kHz or less below 401 MHz or above 406 MHz.

(2) 20 dB, on any frequency between 400.900 MHz and 401.000 MHz, and on any frequency between 406.000 MHz and 406.100 MHz.

(e) *Attenuation requirements, 413–419 MHz, 426–432 MHz, 438–444 MHz, and 451–457 MHz.* For MedRadio transmitter types designed to operate in the 413–419 MHz, 426–432 MHz, 438–444 MHz and 451–457 MHz bands: In the first 2.5 megahertz above or below any of the frequency bands authorized for Medical Micropower Network operation, the EIRP of any unwanted emission must be attenuated within a 1 megahertz bandwidth by at least 20 dB relative to the maximum EIRP within any 1 megahertz bandwidth of the fundamental emission.

(f) *Attenuation requirements, 2360–2400 MHz.* For MedRadio transmitter types designed to operate in the 2360–2400 MHz band: In the first 2.5 megahertz above or below any of the frequency bands authorized for MBAN operation, the EIRP of any unwanted emission must be attenuated within a 1 megahertz bandwidth by at least 20 dB relative to the maximum EIRP within any 1 megahertz bandwidth of the fundamental emission.

(g) *Measurements.* Compliance with the limits in paragraphs (c), (d), and (e) of this section is based on the use of measurement instrumentation using a peak detector function with an instrument reference bandwidth approximately equal to 1.0 percent of the emis-

sion bandwidth of the device under measurement.

§§ 95.2581–95.22583 [Reserved]

§ 95.2585 MedRadio RF exposure evaluation.

A MedRadio medical implant device or medical body-worn transmitter is subject to the radiofrequency radiation exposure requirements specified in §§ 1.1307(b) and 2.1093 of this chapter, as appropriate. Applications for equipment authorization of devices operating under this section must demonstrate compliance with these requirements using either computational modeling or laboratory measurement techniques. Where a showing is based on computational modeling, the Commission retains the discretion to request that supporting documentation and/or specific absorption rate (SAR) measurement data be submitted, as described in § 2.1093(d)(1) of this chapter.

[85 FR 18151, Apr. 1, 2020]

§ 95.2587 MedRadio additional requirements.

(a) The antenna associated with any MedRadio transmitter must be supplied with the transmitter and is considered part of the transmitter subject to equipment authorization.

(b) MedRadio transmitters shall be tested for frequency stability, radiated emissions and EIRP limit compliance in accordance with applicable rules.

§ 95.2589 [Reserved]

§ 95.2591 MedRadio marketing limitations.

Transmitters intended for operation in the MedRadio Service may be marketed and sold only for the use in accordance with § 95.2531.

§ 95.2593 MedRadio labeling requirements.

MedRadio transmitters must be labeled in accordance with the requirements in this section.

(a) MedRadio programmer/control transmitters operating in the 401–406 MHz band shall be labeled as provided in part 2 of this chapter and shall bear the following statement in a conspicuous location on the device: