

(2) The M-EIRP of any transmitter operating in the 401.85–402 MHz band must not exceed 25 microwatts in any 150 kHz bandwidth.

(c) *Transmitters excepted from frequency monitoring—403.65 MHz.* For MedRadio transmitters that are excepted under § 95.2559(b)(4) from the frequency monitoring requirements of § 95.2559(a), the M-EIRP must not exceed 100 nanowatts in the 300 kHz bandwidth centered at 403.65 MHz.

(d) *Transmitters—other frequency bands.* For MedRadio transmitters operating in the 413–419 MHz, 426–432 MHz, 438–444 MHz, or 451–457 MHz bands:

(1) The peak M-EIRP over the frequency bands of operation must not exceed the lesser of zero dBm (1 mW) or $10 \log (B) - 7.782$ dBm, where B is the MedRadio 20 dB emission bandwidth in megahertz.

(2) The peak power spectral density must not exceed 800 microwatts per megahertz in any one megahertz band.

(e) *Transmitters—2360–2390 MHz band.* For MedRadio transmitters operating in the 2360–2390 MHz band, the M-EIRP over the bands of operation must not exceed the lesser of zero dBm (1 mW) or $10 \log (B)$ dBm, where B is the MedRadio 20 dB emission bandwidth in megahertz.

(f) *Transmitters—2390–2400 MHz band.* For MedRadio transmitters operating in the 2390–2400 MHz band, the M-EIRP over the bands of operation must not exceed the lesser of 13 dBm (20 mW) or $16 + 10 \log (B)$ dBm, where B is the MedRadio 20 dB emission bandwidth in megahertz.

§ 95.2569 MedRadio field strength measurements.

Compliance with MedRadio equivalent isotropic radiated power (M-EIRP) limits can be determined by measuring the radiated field strength from the transmitter type, in accordance with the rules in this section.

(a) Radiated field strength values corresponding to the M-EIRP limits in § 95.2567 are given in the table in this paragraph, for an open area test site, and for a test site equivalent to free space, such as a fully anechoic test chamber. Field strength is measured at a distance of 3 meters from the equipment under test.

M-EIRP limit	Open area (mV/m)	Free space (mV/m)
1 mW	115.1	57.55
25 μ W	18.2	9.1
250 nW	1.8	0.9
100 nW	1.2	0.6

(b) Compliance with the maximum transmitter power requirements in § 95.2567 is based on measurements using a peak detector function and measured over an interval of time when transmission is continuous and at its maximum power level. In lieu of using a peak detector function, measurement procedures that have been found to be acceptable to the FCC in accordance with § 2.947 of this chapter may be used to demonstrate compliance.

(c) For a MedRadio transmitter intended to be implanted in a human body, radiated emissions and M-EIRP measurements for transmissions by stations authorized under this section may be made in accordance with an FCC-approved human body simulator and test technique. Guidance regarding SAR measurement techniques dielectric parameters for the tissue-equivalent material can be found in the Office of Engineering and Technology (OET) Laboratory Division Knowledge Database (KDB).

§ 95.2571 MedRadio emission types.

A MedRadio station may transmit any emission type appropriate for communications in this service. Voice communications, however, are prohibited.

§ 95.2573 MedRadio authorized bandwidths.

Each MedRadio transmitter type must be designed such that the MedRadio emission bandwidth does not exceed the applicable authorized bandwidth set forth in this section.

(a) For MedRadio transmitters operating in the 402–405 MHz band, the maximum authorized bandwidth is 300 kHz. Such transmitters must not use more than 300 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 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 ($\mu\text{V/m}$)
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