

**§ 95.2775 MURS audio filter.**

The audio filter referenced in § 95.2779 must satisfy the requirements in this section.

(a) The audio filter must be between the modulation limiter and the modulated stage of the transmitter.

(b) At any frequency (f in kHz) between 3 and 15 kHz, the filter must have an attenuation of at least 40 log (f/3) dB more than the attenuation at 1 kHz. Above 15 kHz, it must have an attenuation of at least 28 dB more than the attenuation at 1 kHz.

**§ 95.2777 [Reserved]**

**§ 95.2779 MURS unwanted emissions limits.**

The requirements in this section apply to each MURS transmitter type both with and without the connection of attachments, such as an external microphone, power cord and/or antenna.

(a) *Emission masks.* Emission masks applicable to transmitting equipment in the MURS are defined by the requirements in the following table. The numbers in the paragraphs column refer to attenuation requirement rule paragraph numbers under paragraph (b) of this section. The words “audio filter” refer to the audio filter described in § 95.2775.

| Channel center frequencies (MHz)              | Paragraphs     |
|---|----------------|
| 151.820, 151.880 and 151.940 .....            | (1), (2).      |
| 154.570 & 154.600, with audio filter .....    | (3), (4), (7). |
| 154.570 & 154.600, without audio filter ..... | (5), (6), (7). |

(1) Each MURS transmitter type that transmits F3E or G3E emissions on 154.570 MHz or 154.600 MHz and incorporates an audio filter satisfying the requirements of § 95.2775 in its design may comply with the less stringent unwanted emissions attenuation requirements set forth in paragraphs (b)(3), (4), and (7) of this section.

(2) Each MURS transmitter type that transmits on 154.570 MHz or 154.600 MHz, but does not incorporate an audio filter satisfying the requirements of § 95.2775 in its design, must comply with the unwanted emissions attenuation requirements set forth in paragraphs (b)(5) through (7) of this section.

(b) *Attenuation requirements.* The power of unwanted emissions must be attenuated below the transmitter output power in Watts (P) by at least:

(1)  $7.27(f_d - 2.88)$  dB on any frequency removed from the channel center frequency by a displacement frequency ( $f_d$  in kHz) that is more than 5.625 kHz, but not more than 12.5 kHz.

(2)  $50 + 10 \log(P)$  dB or 70 dB, whichever is the lesser attenuation, on any frequency removed from the channel center frequency by more than 12.5 kHz.

(3) 25 dB on any frequency removed from the channel center frequency by more than 10 kHz, but not more than 20 kHz.

(4) 35 dB on any frequency removed from the channel center frequency by more than 20 kHz, but not more than 50 kHz.

(5)  $83 \log(f_d + 5)$  dB on any frequency removed from the center of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) that is more than 5 kHz, but not more than 10 kHz.

(6)  $29 \log(f_d^2 + 11)$  dB or 50 dB, whichever is the lesser attenuation on any frequency removed from the channel center frequency by a displacement frequency ( $f_d$  in kHz) that is more than 10 kHz, but not more than 50 kHz.

(7)  $43 + 10 \log(P)$  dB on any frequency removed from the channel center frequency by more than 50 kHz.

(c) *Measurement bandwidths.* The power of unwanted emissions in the frequency bands specified in paragraphs (b)(1) and (3) through (6) of this section is measured with a reference bandwidth of 300 Hz. The power of unwanted emissions in the frequency ranges specified in paragraphs (b)(2) and (7) of this section is measured with a reference bandwidth of at least 30 kHz.

**§§ 95.2781-95.2899 [Reserved]**

**Subpart K—Personal Locator Beacons and Maritime Survivor Locating Devices**

**§ 95.2901 Scope.**

This subpart contains rules that apply only to Personal Locator Beacons (PLBs) and Maritime Survivor Locating Devices (MSLDs).