

§ 15.236 Operation of wireless microphones in the bands 54–72 MHz, 76–88 MHz, 174–216 MHz, 470–608 MHz and 614–698 MHz.

(a) *Definitions.* The following definitions apply in this section.

(1) *Wireless Microphone.* An intentional radiator that converts sound into electrical audio signals that are transmitted using radio signals to a receiver which converts the radio signals back into audio signals that are sent through a sound recording or amplifying system. Wireless microphones may be used for cue and control communications and synchronization of TV camera signals as defined in §74.801 of this chapter. Wireless microphones do not include auditory assistance devices as defined in §15.3(a) of this part.

(2) *600 MHz duplex gap.* An 11 megahertz guard band at 652–663 MHz that separates part 27 600 MHz service uplink and downlink frequencies.

(3) *600 MHz guard band.* Designated frequency band at 614–617 MHz that prevents interference between licensed services in the 600 MHz service band and channel 37.

(4) *600 MHz service band.* Frequencies in the 617–652 MHz and 663–698 MHz bands that are reallocated and reassigned for 600 MHz band services under part 27.

NOTE TO PARAGRAPHS (a)(2), (3) AND (4): The specific frequencies will be determined in light of further proceedings pursuant to GN Docket No. 12–268 and the rules will be updated accordingly pursuant to a future public notice.

(5) *Spectrum Act.* Title VI of the Middle Class Tax Relief and Job Creation Act of 2012 (Pub. L. 112–96).

(b) Operation under this section is limited to wireless microphones as defined in this section.

(c) Operation is permitted in the following frequency bands.

(1) Channels allocated and assigned for the broadcast television service.

(2) Frequencies in the 600 MHz service band on which a 600 MHz service licensee has not commenced operations, as defined in §27.4 of this chapter. Operation on these frequencies must cease no later than the end of the post-auction transition period, as defined in §27.4 of this chapter. Operation must cease immediately if harmful interference occurs to a 600 MHz service licensee.

(3) The 657–663 MHz segment of the 600 MHz duplex gap.

(4) [Reserved]

(5) The 614–616 MHz segment of the 600 MHz guard band.

(6) Prior to operation in the frequencies identified in paragraphs (c)(2) through (5) of this section, wireless microphone users shall rely on the white space databases in part 15, Subpart H to determine that their intended operating frequencies are available for unlicensed wireless microphone operation at the location where they will be used. Wireless microphone users must register with and check a white space database to determine available channels prior to beginning operation at a given location. A user must re-check the database for available channels if it moves to another location.

(d) The maximum radiated power shall not exceed the following values:

(1) In the bands allocated and assigned for broadcast television and in the 600 MHz service band: 50 mW EIRP

(2) In the 600 MHz guard band and the 600 MHz duplex gap: 20 mW EIRP.

(e) Operation is limited to locations separated from licensed services by the following distances.

(1) Four kilometers outside the following protected service contours of co-channel TV stations.

Type of station	Protected contour		
	Channel	Contour (dBu)	Propagation curve
Analog: Class A TV, LPTV, translator and booster	Low VHF (2–6)	47	F(50,50)
	High VHF (7–13)	56	F(50,50)
	UHF (14–51)	64	F(50,50)
Digital: Full service TV, Class A TV, LPTV, translator and booster.	Low VHF (2–6)	28	F(50,90)
	High VHF (7–13)	36	F(50,90)
	UHF (14–51)	41	F(50,90)