Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30.
1.705–108	1000.
108–500	2000.
500–1000	5000.
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower.

(2) A unintentional radiator, excluding a digital device, in which the highest frequency generated in the device, the highest frequency used in the device and the highest frequency on which the device operates or tunes are less than 30 MHz and which, in accordance with §15.109, is required to comply with standards on the level of radiated emissions within the frequency range 9 kHz to 30 MHz, such as a CB receiver or a device designed to conduct its radio frequency emissions via connecting wires or cables, e.g., a carrier current system not intended to radiate, shall be investigated from the lowest radio frequency generated or used in the device, without going below 9 kHz (25 MHz for CB receivers), up to the frequency shown in the following table. If the unintentional radiator contains a digital device, the upper frequency to be investigated shall be that shown in the table below or in the table in paragraph (b)(1) of this section, as based on both the highest frequency generated and the highest frequency used in the digital device, whichever range is higher.

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705–10	400
10–30	500

(3) Except for a CB receiver, a receiver employing superheterodyne techniques shall be investigated from 30 MHz up to at least the second harmonic of the highest local oscillator frequency generated in the device. If such receiver is controlled by a digital device, the frequency range shall be investigated up to the higher of the second harmonic of the highest local oscillator frequency generated in the device or the upper frequency of the measurement range specified for the digital device in paragraph (b)(1) of this section.

(c) The above specified frequency ranges of measurements apply to the measurement of radiated emissions and, in the case of receivers, the measurement to demonstrate compliance with the antenna conduction limits specified in §15.111. The frequency range of measurements for AC power line conducted limits is specified in §§15.107 and 15.207 and applies to all equipment subject to those regulations. In some cases, depending on the frequency(ies) generated and used by the equipment, only signals conducted onto the AC power lines are required to be measured.

(d) Particular attention should be paid to harmonics and subharmonics of the fundamental frequency as well as to those frequencies removed from the fundamental by multiples of the oscillator frequency. Radiation at the frequencies of multiplier states should also be checked.

[54 FR 17714, Apr. 25, 1989, as amended at 61 FR 14502, Apr. 2, 1996; 63 FR 42278, Aug. 7, 1998; 84 FR 25691, June 4, 2019]

§15.35 Measurement detector functions and bandwidths.

The conducted and radiated emission limits shown in this part are based on the following, unless otherwise specified in this part:

(a) On any frequency or frequencies below or equal to 1000 MHz, the limits shown are based on measuring equipment employing a CISPR quasi-peak detector function and related measurement bandwidths, unless otherwise specified. The specifications for the measuring instrumentation using the CISPR quasi-peak detector can be found in ANSI C63.4–2014, clause 4 (incorporated by reference, see §15.38). As an alternative to CISPR quasi-peak measurements, the responsible party, at its option, may demonstrate compliance with the emission limits using measuring equipment employing a peak detector function as long at the same bandwidth as indicated for CISPR quasi-peak measurements are employed.

(b) Unless otherwise specified, on any frequency or frequencies above 1000

MHz, the radiated emission limits are based on the use of measurement instrumentation employing an average detector function. Unless otherwise specified, measurements above 1000 MHz shall be performed using a minimum resolution bandwidth of 1 MHz. When average radiated emission measurements are specified in this part, including average emission measurements below 1000 MHz, there also is a limit on the peak level of the radio frequency emissions. Unless otherwise specified, *e.g.*, see §§ 15.250, 15.252, 15.253(d), 15.255, 15.256, and 15.509 through 15.519, the limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device, *e.g.*, the total peak power level. Note that the use of a pulse desensitization correction factor may be needed to determine the total peak emission level. The instruction manual or application note for the measurement instrument should be consulted for determining pulse desensitization factors, as necessary.

(c) Unless otherwise specified, *e.g.*, §§ 15.255(b), and 15.256(l)(5), when the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value. The exact method of calculating the average field strength shall be submitted with any application for certification or shall be retained in the measurement data file for equipment subject to Supplier's Declaration of Conformity.

[82 FR 50832, Nov. 2, 2017]

§ 15.37 Transition provisions for compliance with this part.

(a) The manufacture or importation of scanning receivers, and frequency converters designed or marketed for use with scanning receivers, that do not comply with the provisions of § 15.121 shall cease on or before October 25, 1999. Effective July 26, 1999, the Commission will not grant equipment authorization for receivers that do not comply with the provisions of § 15.121. This paragraph does not prohibit the sale or use of authorized receivers manufactured in the United States, or imported into the United States, prior to October 25, 1999.

(b) Effective October 16, 2002, an equipment approval may no longer be obtained for medical telemetry equipment operating under the provisions of § 15.241 or § 15.242. The requirements for obtaining an approval for medical telemetry equipment after this date are found in subpart H of part 95 of this chapter.

(c) All radio frequency devices that are authorized on or after July 12, 2004 under the certification, or Supplier's Declaration of Conformity procedures (or the prior verification or declaration of conformity procedures, as applicable) shall comply with the conducted limits specified in § 15.107 or § 15.207 as appropriate. All radio frequency devices that are manufactured or imported on or after July 11, 2005 shall comply with the conducted limits specified in § 15.107 or § 15.207, as appropriate. Equipment authorized, imported or manufactured prior to these dates shall comply with the conducted limits specified in § 15.107 or § 15.207, as appropriate, or with the conducted limits that were in effect immediately prior to September 9, 2002.

(d) Radar detectors manufactured or imported after August 28, 2002 and marketed after September 27, 2002 shall comply with the regulations specified in this part. Radar detectors manufactured or imported prior to January 27, 2003 may be labeled with the information required by § 2.925 of this chapter and § 15.19(a) on the individual equipment carton rather than on the device, and are exempt from complying with the requirements of § 15.21.

(e) U–NII equipment operating in the 5.25–5.35 GHz band for which applications for certification are filed on or after July 20, 2006 shall comply with the DFS and TPC requirements specified in §15.407. U–NII equipment operating in the 5.25–5.35 GHz band that are imported or marketed on or after July 20, 2007 shall comply with the DFS and TPC requirements in §15.407.

(f) All Access BPL devices that are manufactured, imported, marketed or installed on or after July 7, 2006, shall comply with the requirements specified in subpart G of this part, including certification of the equipment.

(g) The manufacture or importation of auditory assistance devices that operate in the 72.0–73.0 MHz, 74.6–74.8 MHz, and 75.2–76.0 MHz bands that do not comply with the requirements of §15.237(c) shall cease on or before July 11, 2016. Effective January 12, 2015, equipment approval will not be granted for auditory assistance devices that operate in the 72.0–73.0 MHz, 74.6–74.8 MHz, and 75.2–76.0 MHz bands that do not comply with the requirements of §15.237(c). These rules do not prohibit the sale or use of authorized auditory assistance devices that operate in the 72.0–73.0 MHz, 74.6–74.8 MHz, and 75.2–76.0 MHz bands manufactured in the United States, or imported into the United States, prior to July 11, 2016.

(h) Effective June 2, 2015 devices using digital modulation techniques in the 5725–5850 MHz bands will no longer be certified under the provisions of §15.247. The technical requirements for obtaining certification after this date for digitally modulated devices and the digitally modulated portion of hybrid devices are found in subpart E of this part. The provisions for the frequency hopping spread spectrum portion of hybrid devices will remain in §15.247. Effective June 2, 2016 systems using digital modulation techniques in the 5725–5850 MHz band certified under the provisions of §15.247 may no longer be imported or marketed within the United States.

(i) As of December 26, 2017, wireless microphones for which an application for certification is filed must comply with the requirements of §15.236. Manufacturing and marketing of wireless microphones that would not comply with the rules for operation in §15.236 must cease no later than September 24, 2018. Only wireless microphones certified for operation under this part may be operated under this part as of July 13, 2020.

(j) White space devices for which a certification application is filed beginning June 23, 2016, must comply with the channel push requirements in §15.711(i) of this part. White space devices that are imported or marketed beginning September 23, 2016, must comply with this requirement. White space devices that do not comply with this requirement must cease operation no later than December 23, 2016.

(k) *Disclosure requirements for unlicensed wireless microphones capable of operating in the 600 MHz service band.* Any person who manufactures, sells, leases, or offers for sale or lease, unlicensed wireless microphones that are capable of operating in the 600 MHz service band, as defined in this part, on or after July 13, 2017, is subject to the following disclosure requirements:

(1) Such persons must display the consumer disclosure text, as specified by the Consumer and Governmental Affairs Bureau, at the point of sale or lease of each such unlicensed wireless microphone. The text must be displayed in a clear, conspicuous, and readily legible manner. One way to fulfill the requirement in this section is to display the consumer disclosure text in a prominent manner on the product box by using a label (either printed onto the box or otherwise affixed to the box), a sticker, or other means. Another way to fulfill this requirement is to display the text immediately adjacent to each unlicensed wireless microphone offered for sale or lease and clearly associated with the model to which it pertains.

(2) If such persons offer such unlicensed wireless microphones via direct mail, catalog, or electronic means, they shall prominently display the consumer disclosure text in close proximity to the images and descriptions of each such unlicensed wireless microphone. The text should be in a size large enough to be clear, conspicuous, and readily legible, consistent with the dimensions of the advertisement or description.

(3) If such persons have Web sites pertaining to these unlicensed wireless microphones, the consumer disclosure text must be displayed there in a clear, conspicuous, and readily legible manner (even in the event such persons do not sell unlicensed wireless microphones directly to the public).

(4) The consumer disclosure text described in paragraph (k)(1) of this section is set forth in Figure 1 to this paragraph.

Figure 1 to § 15.37(k) – Consumer Disclosure Text

CONSUMER ALERT
This particular wireless microphone device operates in portions of the 617-652 MHz or 663-698 MHz frequencies. Beginning in 2017, these frequencies are being transitioned by the Federal Communications Commission (FCC) to the 600 MHz service to meet increasing demand for wireless broadband services. Users of this device must cease operating on these frequencies no later than July 13, 2020. In addition, users of this device may be required to cease operations earlier than that date if their operations could cause harmful interference to a 600 MHz service licensee's wireless operations on these frequencies. For more information, visit the FCC's wireless microphone website at www.fcc.gov/wireless-microphones-guide or call the FCC at 1-888-CALL-FCC (TTY: 1-888-TELL-FCC).

(l) The certification of wideband vehicular radars designed to operate in the 23.12–29 GHz band under §15.252 and ultra-wideband vehicular radars designed to operate in the 22–29 GHz band under §15.515 shall not be permitted on or after September 20, 2018.

(m) The manufacture, importation, marketing, sale, and installation of wideband or ultra-wideband vehicular radars that are designed to operate in the 23.12–29 GHz band under §15.252 and/or in the 22–29 GHz band under §15.515 shall not be permitted after January 1, 2022. Notwithstanding the foregoing, sale and installation of such radars is permitted, for the life of the vehicle, when the following conditions have been met:

(1) The sale and installation is for the exclusive purpose of repairing or replacing defective, damaged, or potentially malfunctioning radars that are designed to operate in the 23.12–29 GHz band under §15.252 and/or in the 22–29 GHz band under §15.515;

(2) The equipment being repaired or replaced has been installed in the vehicle on or before January 1, 2022; and

(3) It is not possible to replace the vehicular radar equipment designed to operate in the 23.12–29 GHz and/or 22–29 GHz bands with vehicular radar equipment designed to operate in the 76–81 GHz band.

(n) Wideband or ultra-wideband vehicular radars operating in the 23.12–29 GHz band under §15.252 and/or in the 22–29 GHz band under §15.515 that are already installed or in use may continue to operate in accordance with their previously obtained certification. Class II permissive changes for such equipment shall not be permitted after January 1, 2022.

(o) Applicable July 13, 2017, the certification, manufacture, importation, marketing, sale, and installation of field disturbance sensors that are designed to operate in the 16.2–17.7 GHz and 46.7–46.9 GHz bands shall not be permitted. Field disturbance sensors already installed or in use in the 16.2–17.7 GHz band may continue to operate in accordance with their previously obtained certification. Class II permissive changes shall not be permitted for such equipment.