levels at the IF passband due to the desired and interfering signals are to be measured.

(4) Tuner overload. Spurious signals within the IF passband shall be attenuated at least 55 dB below the visual carrier of the desired channel using a comb-like spectrum input with each visual carrier signal individually set at + 15 dBmV from 54 to 550 MHz. The desired input signal is to be an NTSC signal on which the visual carrier is modulated with a 10 IRE flat field with color burst and the aural carrier is unmodulated and 10 dB below the visual carrier. Measurements shall be made with the receiver tuned to at least seven evenly spaced EIA IS-132 channels covering the band 54 MHz to 550 MHz. In addition, spurious signals within the IF passband shall be attenuated at least 51 dB below the visual carrier of the desired channel using a comb spectrum input with each signal individually set at + 15 dBmV from 550 to 804 MHz. Measurements shall be made with the receiver tuned to at least three evenly spaced EIA IS-132 channels covering the band 550 MHz to 804 MHz.

(5) Cable input conducted emissions. (i) Conducted spurious emissions that appear at the cable input to the device must meet the following criteria. The input shall be an NTSC video carrier modulated with a 10 IRE flat field with color burst at a level of 0 dBmV and with a visual to aural ratio of 10 dB. The aural carrier shall he unmodulated. The peak level of the spurious signals will be measured using a spectrum analyzer connected by a directional coupler to the cable input of the equipment under test. Spurious signal levels must not exceed the limits in the following table:

From 54 MHz up to and including 300 MHz–26 dBmV

From 300 MHz up to and including 450 MHz–  $20~\mathrm{dBmV}$ 

From 450 MHz up to and including 804 MHz-  $15\;\mathrm{dBmV}$ 

(ii) The average of the measurements on multiple channels from 450 MHz up to and including 804 MHz shall be no greater than -20 dBmV. Measurements shall be made with the receiver tuned to at least four EIA IS–132 channels in each of the above bands. The test chan-

nels are to be evenly distributed across each of the bands. Measurements for conducted emissions caused by sources internal to the device are to be made in a shielded room. Measurements for conducted emissions caused by external signal sources shall be made in an ambient RF field whose field strength is 100 mV/m, following the same test conditions as described in paragraph (c)(3) of this section.

(d) The field strength of radiated emissions from cable ready consumer electronics equipment shall not exceed the limits in §15.109(a) when measured in accordance with the applicable procedures specified in §§ 15.31 and 15.35 for unintentional radiators, with the following modifications. During testing the NTSC input signal level is to be + 15 dBmV, with a visual to aural ratio of 10 dB. The visual carrier is to be modulated by a 10 IRE flat field with color burst; the aural carrier is to be unmodulated. Measurements are to be taken on six EIA IS-132 channels evenly spaced across the required RF input range of the equipment under test.

[59 FR 25341, May 16, 1994, as amended at 61 FR 18509, Apr. 26, 1996; 65 FR 64391, Oct. 27, 2000; 68 FR 68546, Dec. 9, 2003; 69 FR 2849, Jan. 21, 2004; 69 FR 57861, Sept. 28, 2004; 77 FR 4913, Feb. 1, 2012]

## §15.119 [Reserved]

## §15.120 Program blocking technology requirements for television receivers.

(a) Effective July 1, 1999, manufacturers of television broadcast receivers as defined in section 15.3(w) of this chapter, including personal computer systems meeting that definition, must ensure that one-half of their product models with picture screens 33 cm (13 in) or larger in diameter shipped in interstate commerce or manufactured in the United States comply with the provisions of paragraphs (c), (d), and (e) of this section

NOTE: This paragraph places no restrictions on the shipping or sale of television receivers that were manufactured before July 1000

(b) All TV broadcast receivers as defined in §15.3(w), including personal computer systems meeting that definition, with picture screens 33 cm (13 in)

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or larger, measured diagonally, or with displays in the 16:9 aspect ratio that are 19.8 cm (7.8 in) or greater in height and digital television receivers without an associated display device shipped in interstate commerce or manufactured in the United States shall comply with the provisions of paragraphs (c), (d), and (e) of this section.

- (c) Transmission format. (1) Analog television program rating information shall be transmitted on line 21 of field 2 of the vertical blanking interval of television signals, in accordance with §73.682(a)(22) of this chapter.
- (2) Digital television program rating information shall be transmitted in digital television signals in accordance with §73.682(d) of this chapter.
- (d) Operation. (1) Analog television receivers will receive program ratings transmitted pursuant to EIA-744: "Transport of Content Advisory Information Using Extended Data Service (XDS)" (incorporated by reference, see §15.38) and EIA-608: "Recommended Practice for Line 21 Data Service" (incorporated by reference, see §15.38). Blocking of programs shall occur when a program rating is received that meets the pre-determined user requirements.
- (2) Digital television receivers shall react in a similar manner as analog televisions when programmed to block specific rating categories. Digital television receivers will receive program rating descriptors transmitted pursuant to industry standard EIA/CEA-766-A "U.S. and Canadian Region Rating Tables (RRT) and Content Advisory Descriptors for Transport of Content Advisory Information using ATSC A/ 65-A Program and System Information Protocol (PSIP)," 2001 (incorporated by reference, see §15.38). Blocking of programs shall occur when a program rating is received that meets the pre-determined user requirements. Digital television receivers shall be able to respond to changes in the content advisory rating system.
- (e) All television receivers as described in paragraph (a) of this section shall block programming as follows:
- (1) Channel Blocking. Channel Blocking should occur as soon as a program rating packet with the appropriate Content Advisory or MPAA rating

level is received. Program blocking is described as a receiver performing all of the following:

- Muting the program audio.
- Rendering the video black or otherwise indecipherable.
- Eliminating program-related captions.
- (2) Default State. The default state of a receiver (i.e., as provided to the consumer) should not block unrated programs. However, it is permissible to include features that allow the user to reprogram the receiver to block programs that are not rated.
- (3) Picture-In-Picture (PIP). If a receiver has the ability to decode program-related rating information for the Picture-In-Picture (PIP) video signal, then it should block the PIP channel in the same manner as the main channel. If the receiver does not have the ability to decode PIP program-related rating information, then it should block or otherwise disable the PIP if the viewer has enabled program blocking.
- (4) Selection of Ratings. Each television receiver, in accordance with user input, shall block programming based on the age based ratings, the content based ratings, or a combination of the
- (i) If the user chooses to block programming according to its age based rating level, the receiver must have the ability to automatically block programs with a more restrictive age based rating. For example, if all shows with an age-based rating of TV-PG have been selected for blocking, the user should be able to automatically block programs with the more restrictive ratings of TV-14 and TV-MA.
- (ii) If the user chooses to block programming according to a combination of age based and content based ratings the receiver must have the ability to automatically block programming with a more restrictive age rating but a similar content rating. For example, if all shows rated TV-PG-V have been selected for blocking, the user should be able to block automatically shows with the more restrictive ratings of TV-14-V and TV-MA-V.
- (iii) The user should have the capability of overriding the automatic

blocking described in paragraphs (e)(4)(i) and (4)(ii) of this section.

[63 FR 20133, Apr. 23, 1998, as amended at 68 FR 68546, Dec. 9, 2003; 69 FR 2849, Jan. 21, 2004; 69 FR 59534, Oct. 4, 2004; 73 FR 5682, Jan. 30, 2008; 74 FR 63079, Dec. 2, 2009; 77 FR 4913, Feb. 1, 2012]

## § 15.121 Scanning receivers and frequency converters used with scanning receivers.

- (a) Except as provided in paragraph (c) of this section, scanning receivers and frequency converters designed or marketed for use with scanning receivers, shall:
- (1) Be incapable of operating (tuning), or readily being altered by the user to operate, within the frequency bands allocated to the Cellular Radiotelephone Service in part 22 of this chapter (cellular telephone bands). Scanning receivers capable of "readily being altered by the user" include, but are not limited to, those for which the ability to receive transmissions in the cellular telephone bands can be added by clipping the leads of, or installing, a simple component such as a diode, resistor or jumper wire; replacing a plugin semiconductor chip; or programming a semiconductor chip using special access codes or an external device, such as a personal computer. Scanning receivers, and frequency converters designed for use with scanning receivers, also shall be incapable of converting digital cellular communication transmissions to analog voice audio.
- (2) Be designed so that the tuning, control and filtering circuitry is inaccessible. The design must be such that any attempts to modify the equipment to receive transmissions from the Cellular Radiotelephone Service likely will render the receiver inoperable.
- (b) Except as provided in paragraph (c) of this section, scanning receivers shall reject any signals from the Cellular Radiotelephone Service frequency bands that are 38 dB or lower based upon a 12 dB SINAD measurement, which is considered the threshold where a signal can be clearly discerned from any interference that may be present.
- (c) Scanning receivers and frequency converters designed or marketed for use with scanning receivers, are not

- subject to the requirements of paragraphs (a) and (b) of this section provided that they are manufactured exclusively for, and marketed exclusively to, entities described in 18 U.S.C. 2512(2), or are marketed exclusively as test equipment pursuant to §15.3(dd).
- (d) Modification of a scanning receiver to receive transmissions from Cellular Radiotelephone Service frequency bands will be considered to constitute manufacture of such equipment. This includes any individual, individuals, entity or organization that modifies one or more scanners. Any modification to a scanning receiver to receive transmissions from the Cellular Radiotelephone Service frequency bands voids the certification of the scanning receiver, regardless of the date of manufacture of the original unit. In addition, the provisions of §15.23 shall not be interpreted as permitting modification of a scanning receiver to receiver Cellular Radiotelephone Service transmissions.
- (e) Scanning receivers and frequency converters designed for use with scanning receivers shall not be assembled from kits or marketed in kit form unless they comply with the requirements in paragraph (a) through (c) of this section.
- (f) Scanning receivers shall have a label permanently affixed to the product, and this label shall be readily visible to the purchaser at the time of purchase. The label shall read as follows: WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.
- (1) "Permanently affixed" means that the label is etched, engraved, stamped, silkscreened, indelible printed or otherwise permanently marked on a permanently attached part of the equipment or on a nameplate of metal. plastic or other material fastened to the equipment by welding, riveting, or permanent adhesive. The label shall be designed to last the expected lifetime of the equipment in the environment in which the equipment may be operated and must not be readily detachable. The label shall not be a stick-on, paper label.