

structure. The responsible party shall take reasonable steps to ensure that LPR devices intended for use in these types of enclosures shall not be installed in open-air environments or inside enclosures with lower radio-frequency attenuating characteristics (e.g., fiberglass, plastic, etc.). An LPR device approved under this subsection may only be operated in the type of enclosure for which it was approved.

(2) Except as provided in paragraph (q)(1) of this section, an LPR device shall be placed in testing positions that ensure the field strength values of the radiated emissions are maximized, including in the main beam of the LPR antenna.

[54 FR 17714, Apr. 25, 1989, as amended at 56 FR 13083, Mar. 29, 1991; 57 FR 24990, June 12, 1992; 57 FR 33448, July 29, 1992; 58 FR 37430, July 12, 1993; 58 FR 51249, Oct. 1, 1993; 61 FR 14502, Apr. 2, 1996; 62 FR 41881, Aug. 4, 1997; 62 FR 45333, Aug. 27, 1997; 63 FR 36602, July 7, 1998; 63 FR 42278, Aug. 7, 1998; 65 FR 58466, Sept. 29, 2000; 68 FR 68545, Dec. 9, 2003; 69 FR 54034, Sept. 7, 2004; 70 FR 1373, Jan. 7, 2005; 76 FR 71908, Nov. 21, 2011; 77 FR 4913, Feb. 1, 2012; 77 FR 43013, July 23, 2012; 79 FR 12677, Mar. 6, 2014; 80 FR 2838, Jan. 21, 2015; 80 FR 33447, June 12, 2015; 82 FR 50831, Nov. 2, 2017]

**§ 15.32 Test procedures for CPU boards and computer power supplies.**

Power supplies and CPU boards used with personal computers and for which separate authorizations are required to be obtained shall be tested in accordance with the specific procedures published or otherwise authorized by the Commission.

[82 FR 50832, Nov. 2, 2017]

**§ 15.33 Frequency range of radiated measurements.**

(a) For an intentional radiator, the spectrum shall be investigated from the lowest radio frequency signal generated in the device, without going below 9 kHz, up to at least the frequency shown in this paragraph:

(1) If the intentional radiator operates below 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

(2) If the intentional radiator operates at or above 10 GHz and below 30 GHz: to the fifth harmonic of the high-

est fundamental frequency or to 100 GHz, whichever is lower.

(3) If the intentional radiator operates at or above 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower, unless specified otherwise elsewhere in the rules.

(4) If the intentional radiator operates at or above 95 GHz: To the third harmonic of the highest fundamental frequency or to 750 GHz, whichever is lower, unless specified otherwise elsewhere in the rules.

(5) If the intentional radiator contains a digital device, regardless of whether this digital device controls the functions of the intentional radiator or the digital device is used for additional control or function purposes other than to enable the operation of the intentional radiator, the frequency range shall be investigated up to the range specified in paragraphs (a)(1) through (4) of this section or the range applicable to the digital device, as shown in paragraph (b)(1) of this section, whichever is the higher frequency range of investigation.

(b) For unintentional radiators:

(1) Except as otherwise indicated in paragraphs (b)(2) or (b)(3) of this section, for an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

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