

§ 15.301

(c) Within the 92–95 GHz bands, the emission levels shall not exceed the following:

(1) The average power density of any emission, measured during the transmit interval, shall not exceed 9 uW/sq. cm, as measured at 3 meters from the radiating structure, and the peak power density of any emission shall not exceed 18 uW/sq. cm, as measured 3 meters from the radiating structure.

(2) Peak power density shall be measured with an RF detector that has a detection bandwidth that encompasses the band being used and has a video bandwidth of at least 10 MHz, or uses an equivalent measurement method.

(3) The average emission limits shall be calculated based on the measured peak levels, over the actual time period during which transmission occurs.

(d) Limits on spurious emissions:

(1) The power density of any emissions outside the band being used shall consist solely of spurious emissions.

(2) Radiated emissions below 40 GHz shall not exceed the general limits in § 15.209.

(3) Between 40 GHz and 200 GHz, the level of these emissions shall not exceed 90 pW/cm² at a distance of 3 meters.

(4) The levels of the spurious emissions shall not exceed the level of the fundamental emission.

(e) The total peak transmitter output power shall not exceed 500 mW.

(f) Fundamental emissions must be contained within the frequency bands specified in this section during all conditions of operation. Equipment is presumed to operate over the temperature range –20 to +50 degrees Celsius with an input voltage variation of 85% to 115% of rated input voltage, unless justification is presented to demonstrate otherwise.

(g) Regardless of the maximum EIRP and maximum power density levels permitted under this section, devices operating under the provisions of this section are subject to the radio-frequency radiation exposure requirements specified in 47 CFR 1.1307(b), 2.1091, and 2.1093, as appropriate. Applications for equipment authorization of devices operating under this section must contain a statement confirming compliance with these requirements

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for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

(h) Any transmitter that has received the necessary FCC equipment authorization under the rules of this chapter may be mounted in a group installation for simultaneous operation with one or more other transmitter(s) that have received the necessary FCC equipment authorization, without any additional equipment authorization. However, no transmitter operating under the provisions of this section may be equipped with external phase-locking inputs that permit beam-forming arrays to be realized.

[69 FR 3265, Jan. 23, 2004]

Subpart D—Unlicensed Personal Communications Service Devices

SOURCE: 58 FR 59180, Nov. 8, 1993, unless otherwise noted.

§ 15.301 Scope.

This subpart sets out the regulations for unlicensed personal communications services (PCS) devices operating in the 1920–1930 MHz band.

[69 FR 77949, Dec. 29, 2004]

§ 15.303 Definitions.

(a) *Asynchronous devices.* Devices that transmit RF energy at irregular time intervals, as typified by local area network data systems.

(b) *Coordinatable PCS device.* PCS devices whose geographical area of operation is sufficiently controlled either by necessity of operation with a fixed infrastructure or by disabling mechanisms to allow adequate coordination of their locations relative to incumbent fixed microwave facilities.

(c) *Emission bandwidth.* For purposes of this subpart the emission bandwidth shall be determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that are 26 dB down relative to the maximum level of the modulated carrier. Compliance with the emissions limits is based on the use of measurement instrumentation employing a