

## § 15.401

hertz. Compliance with the emission limits is based on the use of measurement instrumentation employing peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

(e) The frame period (a set of consecutive time slots in which the position of each time slot can be identified by reference to a synchronizing source) of an intentional radiator operating in this band shall be 20 milliseconds or 10 milliseconds/X where X is a positive whole number. Each device that implements time division for the purposes of maintaining a duplex connection on a given frequency carrier shall maintain a frame repetition rate with a frequency stability of at least 50 parts per million (ppm). Each device which further divides access in time in order to support multiple communication links on a given frequency carrier shall maintain a frame repetition rate with a frequency stability of at least 10 ppm. The jitter (time-related, abrupt, spurious variations in the duration of the frame interval) introduced at the two ends of such a communication link shall not exceed 25 microseconds for any two consecutive transmissions. Transmissions shall be continuous in every time and spectrum window during the frame period defined for the device.

(f) The frequency stability of the carrier frequency of the intentional radiator shall be maintained within  $\pm 10$  ppm over 1 hour or the interval between channel access monitoring, whichever is shorter. The frequency stability shall be maintained over a temperature variation of  $-20^{\circ}$  to  $+ 50^{\circ}$  C at normal supply voltage, and over a variation in the primary supply voltage of 85 percent to 115 percent of the rated supply voltage at a temperature of  $20^{\circ}$  C. For equipment that is capable only of operating from a battery, the frequency stability tests shall be performed using a new battery without

## 47 CFR Ch. I (10–1–19 Edition)

any further requirement to vary supply voltage.

[58 FR 59180, Nov. 8, 1993; 59 FR 15269, Mar. 31, 1994. Redesignated at 59 FR 32852, June 24, 1994, as amended at 59 FR 32853, June 24, 1994; 59 FR 40835, Aug. 10, 1994; 59 FR 55373, Nov. 7, 1994; 60 FR 3303, Jan. 13, 1995; 69 FR 62621, Oct. 27, 2004; 77 FR 43013, July 23, 2012]

### Subpart E—Unlicensed National Information Infrastructure Devices

#### § 15.401 Scope.

This subpart sets out the regulations for unlicensed National Information Infrastructure (U-NII) devices operating in the 5.15–5.35 GHz, 5.47–5.725 GHz and 5.725–5.85 GHz bands.

[79 FR 24579, May 1, 2014]

#### § 15.403 Definitions.

(a) *Access Point (AP)*. A U-NII transceiver that operates either as a bridge in a peer-to-peer connection or as a connector between the wired and wireless segments of the network.

(b) *Available Channel*. A radio channel on which a *Channel Availability Check* has not identified the presence of a radar.

(c) *Average Symbol Envelope Power*. The average symbol envelope power is the average, taken over all symbols in the signaling alphabet, of the envelope power for each symbol.

(d) *Channel Availability Check*. A check during which the U-NII device listens on a particular radio channel to identify whether there is a radar operating on that radio channel.

(e) *Channel Move Time*. The time needed by a U-NII device to cease all transmissions on the current channel upon detection of a radar signal above the DFS detection threshold.

(f) *Digital modulation*. The process by which the characteristics of a carrier wave are varied among a set of predetermined discrete values in accordance with a digital modulating function as specified in document ANSI C63.17–1998.

(g) *Dynamic Frequency Selection (DFS)* is a mechanism that dynamically detects signals from other systems and avoids co-channel operation with these systems, notably radar systems.