#### **Federal Communications Commission**

applicable unwanted emissions limits by a reasonable margin).

- (5) On or after March 1, 2014, a signal booster must be labeled to indicate whether it is a Class A or Class B device, and the label must include the following advisory
- (1) In on-line point-of-sale marketing materials,
- (2) In any print or on-line owner's manual and installation instructions,
- (3) On the outside packaging of the device, and
- (4) On a label affixed to the device: "WARNING. This is NOT a CONSUMER device. It is designed for installation by FCC LICENSEES and QUALIFIED INSTALLERS. You MUST have an FCC LICENSE or express consent of an FCC Licensee to operate this device. You MUST register Class B signal boosters (as defined in 47 CFR 90.219) online at <a href="https://www.fcc.gov/signal-boosters/registration">www.fcc.gov/signal-boosters/registration</a>. Unauthorized use may result in significant forfeiture penalties, including penalties in excess of \$100,000 for each continuing violation."

[78 FR 21564, Apr. 12, 2013, as amended at 83 FR 61097, Nov. 27, 2018]

# § 90.221 Adjacent channel power limits.

(a) For the frequency bands indicated below, operations using equipment designed to operate with a 25 kHz channel bandwidth may be authorized up to a 22 kHz bandwidth if the equipment meets the adjacent channel power (ACP) limits below. The table specifies a value for the ACP as a function of the displacement from the channel center frequency and a measurement bandwidth of 18 kHz.

(b)(1) Maximum adjacent power levels for frequencies in the 450–470 MHz band:

| Frequency offset | Maximum<br>ACP (dBc)<br>for devices<br>1 watt and<br>less | Maximum<br>ACP (dBc)<br>for devices<br>above 1<br>watt |
|------------------|---|--|
| 25 kHz           | -55 dBc   | -60 dBc  |
| 50 kHz           | -70 dBc   | -70 dBc  |
| 75 kHz           | -70 dBc   | -70 dBc  |

(2) In any case, no requirement in excess of -36 dBm shall apply.

(c)(1) Maximum adjacent power levels for frequencies in the 809-824/854-869 MHz band:

| Frequency of | offset | Maximum<br>ACP (dBc)<br>for devices<br>less than 15<br>watts | Maximum<br>ACP (dBc)<br>for devices<br>15 watts<br>and above |
|--------------|--------|--|--|
| 25 kHz       |        | - 55 dBc   | - 55 dBc   |
| 50 kHz       |        | - 65 dBc   | - 65 dBc   |
| 75 kHz       |        | - 65 dBc   | - 70 dBc   |

- (2) In any case, no requirement in excess of -36 dBm shall apply.
- (d) On any frequency removed from the assigned frequency by more than 75 kHz, the attenuation of any emission must be at least  $43 + 10 \log{(P_{watts})}$  dB.

[77 FR 61538, Oct. 10, 2012]

#### § 90.223 RF exposure.

Licensees and manufacturers shall ensure compliance with the Commission's radio frequency exposure requirements in §§1.1307(b), 2.1091, and 2.1093 of this chapter, as appropriate. Applications for equipment authorization of mobile or portable devices operating under this section must contain a statement confirming compliance with these requirements. Technical information showing the basis for this statement must be submitted to the Commission upon request.

[85 FR 18151, Apr. 1, 2020]

### Subpart J—Non-Voice and Other Specialized Operations

#### § 90.231 Scope.

This subpart sets forth requirements and standards for licensing and operation of non-voice and other specialized radio uses (other than radiolocation). Such uses include secondary signaling, telemetry, radioteleprinter, radiofacsimile, automatic vehicle monitoring (AVM), radio call box, relay, vehicular repeater, and control station operations.

## § 90.233 Base/mobile non-voice operations.

The use of A1D, A2D, F1D, F2D, G1D, or G2D emission may be authorized to base/mobile operations in accordance with the following limitations and requirements.