

§ 27.51 Equipment authorization.

(a) Each transmitter utilized for operation under this part must be of a type that has been authorized by the Commission under its certification procedure.

(b) Any manufacturer of radio transmitting equipment to be used in these services may request equipment authorization following the procedures set forth in subpart J of part 2 of this chapter. Equipment authorization for an individual transmitter may be requested by an applicant for a station authorization by following the procedures set forth in part 2 of this chapter.

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§ 27.52 RF safety.

Licensees and manufacturers are subject to the radio frequency radiation exposure requirements specified in sections 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 for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

§ 27.53 Emission limits.

(a) For operations in the 2305–2320 MHz band and the 2345–2360 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power P (with averaging performed only during periods of transmission) within the licensed band(s) of operation, in watts, by the following amounts:

(1) For base and fixed stations' operations in the 2305–2320 MHz band and the 2345–2360 MHz band:

(i) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band of operation, and not less than $75 + 10 \log(P)$ dB on all frequencies between 2320 and 2345 MHz;

(ii) By a factor of not less than: $43 + 10 \log(P)$ dB at 2305 MHz, $70 + 10 \log(P)$

dB at 2300 MHz, $72 + 10 \log(P)$ dB at 2287.5 MHz, and $75 + 10 \log(P)$ dB below 2285 MHz;

(iii) By a factor of not less than: $43 + 10 \log(P)$ dB at 2360 MHz, $55 + 10 \log(P)$ dB at 2362.5 MHz, $70 + 10 \log(P)$ dB at 2365 MHz, $72 + 10 \log(P)$ dB at 2367.5 MHz, and $75 + 10 \log(P)$ dB above 2370 MHz.

(2) For fixed customer premises equipment (CPE) stations operating in the 2305–2320 MHz band and the 2345–2360 MHz band transmitting with more than 2 watts per 5 megahertz average EIRP:

(i) By a factor of not less than: $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band of operation, and not less than $75 + 10 \log(P)$ dB on all frequencies between 2320 and 2345 MHz.

(ii) By a factor of not less than: $43 + 10 \log(P)$ dB at 2305 MHz, $70 + 10 \log(P)$ dB at 2300 MHz, $72 + 10 \log(P)$ dB at 2287.5 MHz, and $75 + 10 \log(P)$ dB below 2285 MHz;

(iii) By a factor of not less than: $43 + 10 \log(P)$ dB at 2360 MHz, $55 + 10 \log(P)$ dB at 2362.5 MHz, $70 + 10 \log(P)$ dB at 2365 MHz, $72 + 10 \log(P)$ dB at 2367.5 MHz, and $75 + 10 \log(P)$ dB above 2370 MHz.

(3) For fixed CPE stations transmitting with 2 watts per 5 megahertz average EIRP or less:

(i) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band of operation, not less than $55 + 10 \log(P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log(P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, not less than $67 + 10 \log(P)$ dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of not less than $43 + 10 \log(P)$ dB at 2305 MHz, $55 + 10 \log(P)$ dB at 2300 MHz, $61 + 10 \log(P)$ dB at 2296 MHz, $67 + 10 \log(P)$ dB at 2292 MHz, $70 + 10 \log(P)$ dB below 2288 MHz.

(iii) By a factor of not less than: $43 + 10 \log(P)$ dB at 2360 MHz and $70 + 10 \log(P)$ dB above 2365 MHz.