

Federal Communications Commission

§27.51

TABLE 2 TO §27.50—PERMISSIBLE POWER AND ANTENNA HEIGHTS FOR BASE AND FIXED STATIONS IN THE 698–757 MHz, 758–763 MHz, 776–787 MHz AND 788–793 MHz BANDS TRANSMITTING A SIGNAL WITH AN EMISSION BANDWIDTH OF 1 MHz OR LESS—Continued

Antenna height (AAT) in meters (feet)	Effective radiated power (ERP) (watts)
Above 458 (1500) To 610 (2000)	700
Above 305 (1000) To 458 (1500)	1200
Up to 305 (1000)	2000

TABLE 3 TO §27.50—PERMISSIBLE POWER AND ANTENNA HEIGHTS FOR BASE AND FIXED STATIONS IN THE 698–757 MHz, 758–763 MHz, 776–787 MHz AND 788–793 MHz BANDS TRANSMITTING A SIGNAL WITH AN EMISSION BANDWIDTH GREATER THAN 1 MHz

Antenna height (AAT) in meters (feet)	Effective radiated power (ERP) per MHz (watts/MHz)
Above 1372 (4500)	65
Above 1220 (4000) To 1372 (4500)	70
Above 1067 (3500) To 1220 (4000)	75
Above 915 (3000) To 1067 (3500)	100
Above 763 (2500) To 915 (3000)	140
Above 610 (2000) To 763 (2500)	200
Above 458 (1500) To 610 (2000)	350
Above 305 (1000) To 458 (1500)	600
Up to 305 (1000)	1000

TABLE 4 TO §27.50—PERMISSIBLE POWER AND ANTENNA HEIGHTS FOR BASE AND FIXED STATIONS IN THE 698–757 MHz, 758–763 MHz, 776–787 MHz AND 788–793 MHz BANDS TRANSMITTING A SIGNAL WITH AN EMISSION BANDWIDTH GREATER THAN 1 MHz

Antenna height (AAT) in meters (feet)	Effective radiated power (ERP) per MHz (watts/MHz)
Above 1372 (4500)	130
Above 1220 (4000) To 1372 (4500)	140
Above 1067 (3500) To 1220 (4000)	150
Above 915 (3000) To 1067 (3500)	200
Above 763 (2500) To 915 (3000)	280
Above 610 (2000) To 763 (2500)	400
Above 458 (1500) To 610 (2000)	700
Above 305 (1000) To 458 (1500)	1200
Up to 305 (1000)	2000

[62 FR 16497, Apr. 7, 1997]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §27.50, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.fdsys.gov](http://www.fdsys.gov).

EFFECTIVE DATE NOTE: At 72 FR 27709, May 16, 2007, §27.50 was amended, in part, by revising paragraph (c). Paragraphs (c) (5) and (8) contain information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

§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

## § 27.52

authorization by following the procedures set forth in part 2 of this chapter.

[65 FR 3147, Jan. 20, 2000]

### § 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:

## 47 CFR Ch. I (10–1–12 Edition)

(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.

(4) For mobile and portable stations operating in the 2305–2317.5 MHz and 2347.5–2360 MHz bands:

(i) By a factor of not less than:  $43 + 10 \log(P)$  dB on all frequencies between 2305 and 2317.5 MHz and on all frequencies between 2347.5 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,