

(3) The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided. Effects on frequency of transmitter keying (except for broadcast transmitters) and any heating element cycling at the nominal supply voltage and at each extreme also shall be shown.

(e) When deemed necessary, the Commission may require tests of frequency stability under conditions in addition to those specifically set out in paragraphs (a), (b), (c), and (d) of this section. (For example measurements showing the effect of proximity to large metal objects, or of various types of antennas, may be required for portable equipment.)

[39 FR 5919, Feb. 14, 1974, as amended at 51 FR 31304, Sept. 2, 1986; 56 FR 11682, Mar. 20, 1991. Redesignated at 63 FR 36599, July 7, 1998. 68 FR 68545, Dec. 9, 2003]

**§ 2.1057 Frequency spectrum to be investigated.**

(a) In all of the measurements set forth in §§ 2.1051 and 2.1053, the spectrum shall be investigated from the lowest radio frequency signal generated in the equipment, without going below 9 kHz, up to at least the frequency shown below:

(1) If the equipment operates below 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

(2) If the equipment operates at or above 10 GHz and below 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.

(3) If the equipment operates at or above 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower.

(b) Particular attention should be paid to harmonics and subharmonics of the carrier frequency as well as to those frequencies removed from the carrier by multiples of the oscillator frequency. Radiation at the frequencies of multiplier stages should also be checked.

(c) The amplitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be reported.

(d) Unless otherwise specified, measurements above 40 GHz shall be performed using a minimum resolution bandwidth of 1 MHz.

[61 FR 14502, Apr. 2, 1996. Redesignated and amended at 63 FR 36599, July 7, 1998]

**§ 2.1060 Equipment for use in the amateur radio service.**

(a) The general provisions of §§ 2.925, 2.1031, 2.1033, 2.1041, 2.1043, 2.1051, 2.1053 and 2.1057 shall apply to applications for, and grants of, certification for equipment operated under the requirements of part 97 of this chapter, the Amateur Radio Service.

(b) When performing the tests specified in §§ 2.1051 and 2.1053 of this part, the center of the transmitted bandwidth shall be within the operating frequency band by an amount equal to 50 percent of the bandwidth utilized for the tests. In addition, said tests shall be made on at least one frequency in each of the bands within which the equipment is capable of tuning.

(c) Any supplier of an external radio frequency power amplifier kit as defined by § 97.3(a)(17) of this chapter shall comply with the following requirements:

(1) Assembly of one unit of a specific type shall be made in exact accordance with the instructions being supplied with the product being marketed. If all of the necessary components are not normally furnished with the kit, assembly shall be made using the recommended components.

(2) The measurement data required for certification shall be obtained for this unit and submitted with the certification application. Unless otherwise requested, it is not necessary to submit this unit with the application.

(3) A copy of the exact instructions which will be provided for assembly of the equipment shall be provided in addition to other material required by § 2.1033 of this part.

(4) The identification label required by § 2.925 of this part shall be permanently affixed to the assembled unit and shall be of sufficient size so as to be easily read. The following information shall be shown on the label:

(Name of Grantee of Certification)