

1660.5 MHz band shall suppress the power density of emissions in the 1605–1610 MHz band-segment to an extent determined by linear interpolation from –70 dBW/MHz at 1605 MHz to –46 dBW/MHz at 1610 MHz, averaged over any 2 millisecond active transmission interval. The e.i.r.p of discrete emissions of less than 700 Hz bandwidth from such stations shall not exceed a level determined by linear interpolation from –80 dBW at 1605 MHz to –56 dBW at 1610 MHz, averaged over any 2 millisecond active transmission interval.

(i) The e.i.r.p density of carrier-off state emissions from mobile earth stations manufactured more than six months after FEDERAL REGISTER publication of the rule changes adopted in FCC 03–283 with assigned uplink frequencies between 1 and 3 GHz shall not exceed –80 dBW/MHz in the 1559–1610 MHz band averaged over any two millisecond interval.

(j) A Root-Mean-Square detector shall be used for all power density measurements.

[69 FR 5710, Feb. 6, 2004, as amended at 70 FR 19318, Apr. 13, 2005]

§ 25.217 Default service rules.

(a) The technical rules in this section apply only to licenses to operate a satellite system in a frequency band granted after a domestic frequency allocation has been adopted for that frequency band, but before any frequency-band-specific service rules have been adopted for that frequency band.

(b)(1) For all NGSO-like satellite licenses, except as specified in paragraph (b)(4) of this section, for which the application was filed pursuant to the procedures set forth in §25.157 after August 27, 2003, authorizing operations in a frequency band for which the Commission has not adopted frequency band-specific service rules at the time the license is granted, the licensee will be required to comply with the technical requirements in paragraphs (b)(2) through (4) of this section, notwithstanding the frequency bands specified in these sections: §§25.143(b)(2)(ii) (except NGSO FSS systems) and (iii), 25.204(e), and 25.210(f) and (i).

(2) In addition to the requirements set forth in paragraph (b)(1) of this sec-

tion, the Commission will coordinate with the National Telecommunications and Information Administration (NTIA) regarding the operations of any licensees authorized to operate in a shared government/non-government frequency band, pursuant to the procedure set forth in §25.142(b)(2)(ii).

(3) Mobile earth station licensees authorized to operate with one or more space stations subject to paragraph (b)(1) of this section must comply with the requirements in §§25.285 and 25.287, notwithstanding the frequency bands specified in those sections. In addition, earth station licensees authorized to operate with one or more space stations described in paragraph (b)(1) of this section in frequency bands shared with terrestrial wireless services shall comply with the requirements in §25.203(c).

(4) For all small satellite licensees, for which the application was filed pursuant to §25.122 or §25.123, authorizing operations in a frequency band for which the Commission has not adopted frequency-band specific service rules at the time the license is granted, the licensee will not be required to comply with the technical requirements specified in this section.

(c)(1) For all GSO-like satellite licenses for which the application was filed pursuant to the procedures set forth in §25.158 after August 27, 2003, authorizing operations in a frequency band for which the Commission has not adopted frequency band-specific service rules at the time the license is granted, the licensee will be required to comply with the following technical requirements, notwithstanding the frequency bands specified in these rule provisions: §§25.143(b)(2)(iv), 25.204(e), and 25.210(f), (i), and (j).

(2) In addition to the requirements set forth in paragraph (c)(1) of this section, the Commission will coordinate with the National Telecommunications and Information Administration (NTIA) regarding the operations of any licensees authorized to operate in a shared government/non-government frequency band, pursuant to the procedure set forth in §25.142(b)(2)(ii).

(3) Earth station licensees authorized to operate with one or more space stations described in paragraph (c)(1) of

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this section shall comply with the earth station antenna performance verification requirements in § 25.132, and the antenna gain pattern requirements in § 25.209(a) and (b). In addition, earth station licensees authorized to operate with one or more space stations described in paragraph (c)(1) of this paragraph in frequency bands shared with terrestrial wireless services shall comply with the requirements in § 25.203(c).

(4) In addition to the requirements set forth in paragraph (c)(3) of this section, earth station licensees with a gain equivalent or higher than the gain of a 1.2 meter antenna operating in the 14.0–14.5 GHz band, authorized to operate with one or more space stations described in paragraph (c)(1) of this paragraph in frequency bands greater than 14.5 GHz shall be required to comply with the antenna input power density requirements set forth in § 25.212(c).

(d) [Reserved]

(e) In the event that the Commission adopts frequency band-specific service rules for a particular frequency band after it has granted one or more space station or earth station licenses for operations in that frequency band, those licensees will be required to come into compliance with the frequency band-specific service rules within 30 days of the effective date of those rules, unless

otherwise specified by either Commission or Bureau Order.

[68 FR 51508, Aug. 27, 2003, as amended at 70 FR 59277, Oct. 12, 2005; 79 FR 8323, Feb. 12, 2014; 82 FR 59986, Dec. 18, 2017; 85 FR 43735, July 20, 2020]

§ 25.218 Off-axis EIRP density envelopes for FSS earth stations transmitting in certain frequency bands.

(a) This section applies to applications for fixed and temporary-fixed FSS earth stations transmitting to geostationary space stations in the conventional C-band, extended C-band, conventional Ku-band, extended Ku-band, conventional Ka-band, or 24.75–25.25 GHz and applications for ESIMs transmitting in the conventional C-band, conventional Ku-band, or conventional Ka-band, except for applications proposing transmission of analog command signals at a band edge with bandwidths greater than 1 MHz or transmission of any other type of analog signal with bandwidths greater than 200 kHz.

(b) Earth station applications subject to this section may be routinely processed if they meet the applicable off-axis EIRP density envelopes set forth in this section.

(c) *Analog earth station operation in the conventional or extended C-bands.* (1) For co-polarized transmissions in the plane tangent to the GSO arc, as defined in § 25.103:

29.5–25log ₁₀ θ	dBW/4 kHz	for 1.5° ≤ θ ≤ 7°.
8.5	dBW/4 kHz	for 7° < θ ≤ 9.2°.
32.5–25log ₁₀ θ	dBW/4 kHz	for 9.2° < θ ≤ 48°.
–9.5	dBW/4 kHz	for 48° < θ ≤ 180°.

Where θ is the angle in degrees from a line from the earth station antenna to the assigned orbital location of the target satellite. The EIRP density levels specified for θ > 7° may be exceeded by up to 3 dB in up to 10% of the range of

theta (θ) angles from ±7–180°, and by up to 6 dB in the region of main reflector spillover energy.

(2) For co-polarized transmissions in the plane perpendicular to the GSO arc, as defined in § 25.103:

32.5–25log ₁₀ θ	dBW/4 kHz	for 3° ≤ θ ≤ 48°.
–9.5	dBW/4 kHz	for 48° < θ ≤ 180°.

Where θ is as defined in paragraph (c)(1) of this section. These EIRP density levels may be exceeded by up to 6

dB in the region of main reflector spillover energy and in up to 10% of the range of θ angles not included in that