

## § 25.207

with the exception of satellite uplinks carrying broadband video information which are required to incorporate ATIS in accordance with the provisions set forth under § 25.308 of these rules.

[55 FR 21551, May 25, 1990]

### § 25.207 Cessation of emissions.

Space stations shall be made capable of ceasing radio emissions by the use of appropriate devices (battery life, timing devices, ground command, etc.) that will ensure definite cessation of emissions.

### § 25.208 Power flux density limits.

(a) In the band 3650–4200 MHz, the power flux density at the Earth's surface produced by emissions from a space station for all conditions and for all methods of modulation shall not exceed the following values:

- 152 dB(W/m<sup>2</sup>) in any 4 kHz band for angles of arrival between 0 and 5 degrees above the horizontal plane;
- 152+( $\delta$ –5)/2 dB(W/m<sup>2</sup>) in any 4 kHz band for angles of arrival  $\delta$  (in degrees) between 5 and 25 degrees above the horizontal plane; and
- 142 dB(W/m<sup>2</sup>) in any 4 kHz band for angles of arrival between 25 and 90 degrees above the horizontal plane

These limits relate to the power flux density which would be obtained under assumed free-space propagation conditions.

(b) In the bands 10.95–11.2 and 11.45–11.7 GHz for GSO FSS space stations and 10.7–11.7 GHz for NGSO FSS space stations, the power flux-density at the Earth's surface produced by emissions from a space station for all conditions and for all methods of modulation shall not exceed the lower of the following values:

- (1) –150 dB(W/m<sup>2</sup>) in any 4 kHz band for angles of arrival between 0 and 5 degrees above the horizontal plane; –150 + ( $\delta$ –5)/2 dB(W/m<sup>2</sup>) in any 4 kHz band for angles of arrival ( $\delta$ ) (in degrees) between 5 and 25 degrees above the horizontal plane; and –140 dB(W/m<sup>2</sup>) in any

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4 kHz band for angles of arrival between 25 and 90 degrees above the horizontal plane; or

- (2) –126 dB(W/m<sup>2</sup>) in any 1 MHz band for angles of arrival between 0 and 5 degrees above the horizontal plane; –126 + ( $\delta$ –5)/2 dB(W/m<sup>2</sup>) in any 1 MHz band for angles of arrival ( $\delta$ ) (in degrees) between 5 and 25 degrees above the horizontal plane; and –116 dB(W/m<sup>2</sup>) in any 1 MHz band for angles of arrival between 25 and 90 degrees above the horizontal plane.

NOTE TO PARAGRAPH (b): These limits relate to the power flux density, which would be obtained under assumed free-space propagation conditions.

(c) In the 17.7–17.8 GHz, 18.3–18.8 GHz, 19.3–19.7 GHz, 22.55–23.00 GHz, 23.00–23.55 GHz, and 24.45–24.75 GHz frequency bands, the power flux density at the Earth's surface produced by emissions from a space station for all conditions and for all methods of modulation shall not exceed the following values:

- (1) –115 dB (W/m<sup>2</sup>) in any 1 MHz band for angles of arrival between 0 and 5 degrees above the horizontal plane.
- (2) –115 + 0.5 ( $\delta$ –5) dB (W/m<sup>2</sup>) in any 1 MHz band for angles of arrival  $\delta$  (in degrees) between 5 and 25 degrees above the horizontal plane.
- (3) –105 dB (W/m<sup>2</sup>) in any 1 MHz band for angles of arrival between 25 and 90 degrees above the horizontal plane.

(d) In addition to the limits specified in paragraph (c) of this section, the power flux-density across the 200 MHz band 18.6–18.8 GHz produced at the Earth's surface by emissions from a space station under assumed free-space propagation conditions shall not exceed –95 dB (W/m<sup>2</sup>) for all angles of arrival. This limit may be exceeded by up to 3 dB for no more than 5% of the time.

(e) In the 18.8–19.3 GHz frequency band, the power flux-density at the Earth's surface produced by emissions from a space station for all conditions and for all methods of modulation shall not exceed the following values:

- 115 – X dB(W/m<sup>2</sup>+MHz) ..... for  $0^\circ \leq \delta < 5^\circ$
- 115 – X+((10+X)/20)( $\delta$ –5)dB(W/m<sup>2</sup>+MHz) ..... for  $5^\circ \leq \delta < 25^\circ$
- 105 dB(W/m<sup>2</sup>+MHz) ..... for  $25^\circ \leq \delta < 90^\circ$