

## Federal Communications Commission

## § 15.511

(5) In addition to the radiated emission limits specified in the table in paragraph (c)(4) of this section, emissions from these imaging systems shall not exceed the following average limits when measured using a resolution bandwidth of no less than 1 kHz:

| Frequency in MHz | EIRP in dBm |
|------------------|-------------|
| 1164–1240 .....  | –75.3       |
| 1559–1610 .....  | –75.3       |

(d) For equipment operating with  $f_c$  and  $f_m$  between 1990 MHz and 10600 MHz:

(1) Parties operating this equipment must hold a license issued by the Federal Communications Commission to operate a transmitter in the Public Safety Radio Pool under part 90 of this chapter. The license may be held by the organization for which the UWB operator works on a paid or volunteer basis.

(2) This equipment may be operated only for law enforcement applications, the providing of emergency services, and necessary training operations.

(3) The radiated emissions at or below 960 MHz shall not exceed the emission levels in §15.209 of this chapter. The radiated emissions above 960 MHz shall not exceed the following average limits when measured using a resolution bandwidth of 1 MHz:

| Frequency in MHz  | EIRP in dBm |
|-------------------|-------------|
| 960–1610 .....    | –46.3       |
| 1610–10600 .....  | –41.3       |
| Above 10600 ..... | –51.3       |

(4) In addition to the radiated emission limits specified in the paragraph (d)(3) of this section, emissions from these imaging systems shall not exceed the following average limits when measured using a resolution bandwidth of no less than 1 kHz:

| Frequency in MHz | EIRP in dBm |
|------------------|-------------|
| 1164–1240 .....  | –56.3       |
| 1559–1610 .....  | –56.3       |

(5) There is a limit on the peak level of the emissions contained within a 50 MHz bandwidth centered on the frequency at which the highest radiated emission occurs,  $f_m$ . That limit is 0 dBm EIRP. It is acceptable to employ a different resolution bandwidth, and a

correspondingly different peak emission limit, following the procedures described in §15.521.

(e) Through-wall imaging systems operating under the provisions of this section shall bear the following or similar statement in a conspicuous location on the device: “Operation of this device is restricted to law enforcement, emergency rescue and firefighter personnel. Operation by any other party is a violation of 47 U.S.C. 301 and could subject the operator to serious legal penalties.”

[68 FR 19750, Apr. 22, 2003]

### § 15.511 Technical requirements for surveillance systems.

(a) The UWB bandwidth of an imaging system operating under the provisions of this section must be contained between 1990 MHz and 10,600 MHz.

(b) Operation under the provisions of this section is limited to fixed surveillance systems operated by law enforcement, fire or emergency rescue organizations or by manufacturers licensees, petroleum licensees or power licensees as defined in §90.7 of this chapter.

(1) Parties operating under the provisions of this section must be eligible for licensing under the provisions of part 90 of this chapter.

(2) The operation of imaging systems under this section requires coordination, as detailed in §15.525.

(c) The radiated emissions at or below 960 MHz from a device operating under the provisions of this section shall not exceed the emission levels in §15.209. The radiated emissions above 960 MHz from a device operating under the provisions of this section shall not exceed the following average limits when measured using a resolution bandwidth of 1 MHz:

| Frequency in MHz  | EIRP in dBm |
|-------------------|-------------|
| 960–1610 .....    | –53.3       |
| 1610–1990 .....   | –51.3       |
| 1990–10600 .....  | –41.3       |
| Above 10600 ..... | –51.3       |

(d) In addition to the radiated emission limits specified in the table in paragraph (c) of this section, UWB transmitters operating under the provisions of this section shall not exceed the following average limits when

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measured using a resolution bandwidth of no less than 1 kHz:

| Frequency in MHz | EIRP in dBm |
|------------------|-------------|
| 1164–1240 .....  | – 63.3      |
| 1559–1610 .....  | – 63.3      |

(e) There is a limit on the peak level of the emissions contained within a 50 MHz bandwidth centered on the frequency at which the highest radiated emission occurs,  $f_M$ . That limit is 0 dBm EIRP. It is acceptable to employ a different resolution bandwidth, and a correspondingly different peak emission limit, following the procedures described in §15.521.

(f) Imaging systems operating under the provisions of this section shall bear the following or similar statement in a conspicuous location on the device: “Operation of this device is restricted to law enforcement, fire and rescue officials, public utilities, and industrial entities. Operation by any other party is a violation of 47 U.S.C. 301 and could subject the operator to serious legal penalties.”

[68 FR 19750, Apr. 22, 2003]

### § 15.513 Technical requirements for medical imaging systems.

(a) The UWB bandwidth of an imaging system operating under the provisions of this section must be contained between 3100 MHz and 10,600 MHz.

(b) Operation under the provisions of this section is limited to medical imaging systems used at the direction of, or under the supervision of, a licensed health care practitioner. The operation of imaging systems under this section requires coordination, as detailed in §15.525.

(c) A medical imaging system shall contain a manually operated switch that causes the transmitter to cease operation within 10 seconds of being released by the operator. In lieu of a switch located on the imaging system, it is permissible to operate an imaging system by remote control provided the imaging system ceases transmission within 10 seconds of the remote switch being released by the operator.

(d) The radiated emissions at or below 960 MHz from a device operating under the provisions of this section shall not exceed the emission levels in

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§15.209. The radiated emissions above 960 MHz from a device operating under the provisions of this section shall not exceed the following average limits when measured using a resolution bandwidth of 1 MHz:

| Frequency in MHz  | EIRP in dBm |
|-------------------|-------------|
| 960–1610 .....    | – 65.3      |
| 1610–1990 .....   | – 53.3      |
| 011990–3100 ..... | – 51.3      |
| 3100–10600 .....  | – 41.3      |
| Above 10600 ..... | – 51.3      |

(e) In addition to the radiated emission limits specified in the table in paragraph (d) of this section, UWB transmitters operating under the provisions of this section shall not exceed the following average limits when measured using a resolution bandwidth of no less than 1 kHz:

| Frequency in MHz | EIRP in dBm |
|------------------|-------------|
| 1164–1240 .....  | – 75.3      |
| 1559–1610 .....  | – 75.3      |

(f) There is a limit on the peak level of the emissions contained within a 50 MHz bandwidth centered on the frequency at which the highest radiated emission occurs,  $f_M$ . That limit is 0 dBm EIRP. It is acceptable to employ a different resolution bandwidth, and a correspondingly different peak emission limit, following the procedures described in §15.521.

[68 FR 19751, Apr. 22, 2003, as amended at 72 FR 63823, Nov. 13, 2007]

### § 15.515 Technical requirements for vehicular radar systems.

(a) Operation under the provisions of this section is limited to UWB field disturbance sensors mounted in terrestrial transportation vehicles. These devices shall operate only when the vehicle is operating, e.g., the engine is running. Operation shall occur only upon specific activation, such as upon starting the vehicle, changing gears, or engaging a turn signal.

(b) The UWB bandwidth of a vehicular radar system operating under the provisions of this section shall be contained between 22 GHz and 29 GHz. In addition, the center frequency,  $f_C$ , and the frequency at which the highest level emission occurs,  $f_M$ , must be greater than 24.075 GHz.