## IEEE P802.11 Wireless LANs

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## **Revised FCC Regulations**

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## **Abstract**

This document presents the outband emission issue of FCC regulations at 5GHz U-NII band that are revised in June 24,1998.

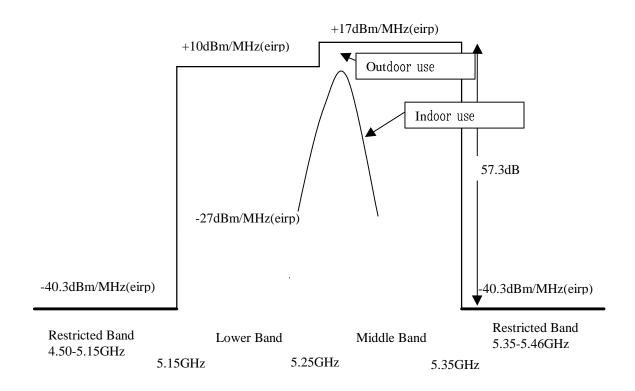
Extracts from FCC regulations(revised June 24,1998): Amendment of the Commission's Rules to provide for Operation of Unlicensed NII Devices in the 5 GHz Frequency Range

APENDIX A: FINAL RULES
PART 15 -- RADIO FREQUENCY DEVICES
§ 15.407 General technical requirements.

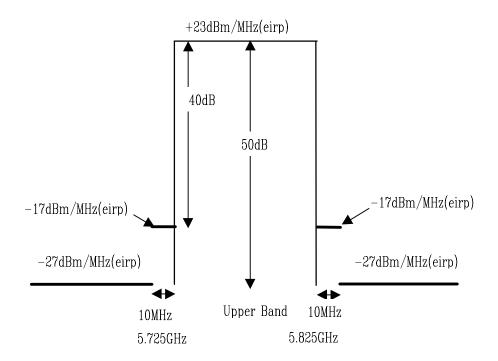
- (b) Undesirable Emission Limits: Except as shown in Paragraph (b)(6) of this Section, the peak emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:
- (1) For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band.
- (3) For transmitters operating in the 5.725-5.825 GHz band: all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an EIRP of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an EIRP of -27 dBm/MHz.
- (4) The above emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band

edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

- (5) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in Section 15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in Section 15.207.
- (6) The provisions of § 15.205 of this part apply to intentional radiators operating under this section.
- (7) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency block edges as the design of the equipment permits



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To decide to channel allocation of the Lower band and the Middle band, undesirable emission from the Middle band to the Lower band must be taken into account.