



CHAPTER 7

Cisco Aironet 1250 Series Lightweight Access Points

This section lists the 1250 series lightweight access points (model: AIR-LAP1251) 2.4-GHz and 5-GHz (draft IEEE 802.11n version 2.0) radio channels and maximum power levels supported by the world's regulatory domains. The following topics are covered in this section:

- [Channels and Maximum Power Levels, page 7-2](#)
- [Special Country Restrictions, page 7-21](#)
- [Changing Lightweight Access Point Output Power, page 7-21](#)

Channels and Maximum Power Levels


Note

The access point has been designed to operate with the antennas listed in the product hardware installation guide and having a maximum gain of 10 dBi for 2.4 GHz and 6 dBi for 5 GHz. Antennas not included in this list or having a higher gain are strictly prohibited for use with the access point. The required antenna impedance is 50 ohms.


Note

To reduce potential radio interference to other users, the antenna type and its gain should be chosen so that the equivalent isotropically radiated power (e.i.r.p.) is not more than required for successful communication.

2.4 GHz Band (IEEE 802.11n Version 2.0)

An improper combination of power level and antenna gain can result in equivalent isotropic radiated power (EIRP) above the amount allowed per regulatory domain. [Table 7-1](#) indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –A regulatory domain for a 2.4-GHz radio.

Table 7-1 802.11 b/g/n 2.4-GHz Maximum Transmit Power

| Channel | Frequency (MHz) | North America | | ETSI | | Japan | |
|---------|-----------------|---------------|----|------|----|-------|----|
| | | B | G | B | G | B | G |
| 1 | 2412 | 17 | 17 | 17 | 17 | 17 | 17 |
| 2 | 2417 | 17 | 17 | 17 | 17 | 17 | 17 |
| 3 | 2422 | 17 | 17 | 17 | 17 | 17 | 17 |
| 4 | 2427 | 17 | 17 | 17 | 17 | 17 | 17 |
| 5 | 2432 | 17 | 17 | 17 | 17 | 17 | 17 |
| 6 | 2437 | 17 | 17 | 17 | 17 | 17 | 17 |
| 7 | 2442 | 17 | 17 | 17 | 17 | 17 | 17 |
| 8 | 2447 | 17 | 17 | 17 | 17 | 17 | 17 |
| 9 | 2452 | 17 | 17 | 17 | 17 | 17 | 17 |
| 10 | 2457 | 17 | 17 | 17 | 17 | 17 | 17 |
| 11 | 2462 | 17 | 17 | 17 | 17 | 17 | 17 |
| 12 | 2467 | | | 14 | 14 | 17 | 17 |
| 13 | 2472 | | | 14 | 14 | 14 | 17 |
| 14 | 2484 | | | | | 14 | 17 |

2.4 GHz Band (Draft IEEE 802.11n Version 2.0)

Table 7-2 Channels and Maximum Conducted Power in the –A Regulatory Domain with up to 10-dBi Antennas

Maximum Conducted Power Levels (dBm) in the –A Regulatory Domain for the 2.4-GHz Radio with up to 10-dBi Antennas

| Freq (MHz) | Center Channel | | 802.11b Single Antenna 1 to 11 Mbps | | | 802.11g Single Antenna 6 to 54 Mbps | | | HT-20 MHz Dual Antennas M0 to M15 ¹ | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
|------------|----------------|--------|-------------------------------------|------|-------------|-------------------------------------|------|-------------|--|------|-------------|--|------|-------------|
| | 20 MHz | 40 MHz | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power |
| 2412 | 1 | 3 | 20 | OFF | 20 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | 14 | 17 |
| 2417 | 2 | 4 | 20 | OFF | 20 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | 14 | 17 |
| 2422 | 3 | 5 | 20 | OFF | 20 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | 14 | 17 |
| 2427 | 4 | 6 | 20 | OFF | 20 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | 14 | 17 |
| 2432 | 5 | 3, 7 | 20 | OFF | 20 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | 14 | 17 |
| 2437 | 6 | 4, 8 | 23 | OFF | 23 | 20 | OFF | 20 | 17 | 17 | 20 | 17 | 17 | 20 |
| 2442 | 7 | 5, 9 | 20 | OFF | 20 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | 14 | 17 |
| 2447 | 8 | 6, 10 | 20 | OFF | 20 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | 14 | 17 |
| 2452 | 9 | 7, 11 | 20 | OFF | 20 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | 14 | 17 |
| 2457 | 10 | 8 | 20 | OFF | 20 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | 14 | 17 |
| 2462 | 11 | 9 | 20 | OFF | 20 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | 14 | 17 |
| 2467 | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 2472 | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 2484 | – | – | – | – | – | – | – | – | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Table 7-3 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –E regulatory domain for a 2.4-GHz radio with up to 3-dBi antennas.

Table 7-3 Channels and Maximum Conducted Power for –E Regulatory Domain with up to 3-dBi Antennas

Maximum Conducted Power Levels (dBm) in the –E Regulatory Domain for the 2.4-GHz Radio with up to 3-dBi Antennas

| Freq (MHz) | Center Channel | | 802.11b Single Antenna 1 to 11 Mbps | | | 802.11g Single Antenna 6 to 54 Mbps | | | HT-20 MHz Dual Antennas M0 to M15 ¹ | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
|------------|----------------|--------|-------------------------------------|------|-------------|-------------------------------------|------|-------------|--|------|-------------|--|------|-------------|
| | 20 MHz | 40 MHz | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power |
| 2412 | 1 | 3 | 17 | OFF | 17 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2417 | 2 | 4 | 17 | OFF | 17 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2422 | 3 | 5 | 17 | OFF | 17 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2427 | 4 | 6 | 17 | OFF | 17 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2432 | 5 | 3, 7 | 17 | OFF | 17 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2437 | 6 | 4, 8 | 17 | OFF | 17 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2442 | 7 | 5, 9 | 17 | OFF | 17 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2447 | 8 | 6, 10 | 17 | OFF | 17 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2452 | 9 | 7, 11 | 17 | OFF | 17 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2457 | 10 | 8 | 17 | OFF | 17 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2462 | 11 | 9 | 17 | OFF | 17 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2467 | 12 | 10 | 17 | OFF | 17 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2472 | 13 | 11 | 17 | OFF | 17 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2484 | – | – | – | – | – | – | – | – | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Table 7-4 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –E regulatory domain for a 2.4-GHz radio with up to 6-dBi antennas.

Table 7-4 Channels and Maximum Conducted Power in the –E Regulatory Domain with up to 6-dBi Antennas

| Maximum Conducted Power Levels (dBm) in the –E Regulatory Domain for the 2.4-GHz Radio with up to 6-dBi Antennas | | | | | | | | | | | | | | |
|--|----------------|--------|-------------------------------------|------|-------------|-------------------------------------|------|-------------|--|------|-------------|--|------|-------------|
| Freq (MHz) | Center Channel | | 802.11b Single Antenna 1 to 11 Mbps | | | 802.11g Single Antenna 6 to 54 Mbps | | | HT-20 MHz Dual Antennas M0 to M15 ¹ | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
| | 20 MHz | 40 MHz | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power |
| 2412 | 1 | 3 | 14 | OFF | 14 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | 11 | 14 |
| 2417 | 2 | 4 | 14 | OFF | 14 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | 11 | 14 |
| 2422 | 3 | 5 | 14 | OFF | 14 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | 11 | 14 |
| 2427 | 4 | 6 | 14 | OFF | 14 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | 11 | 14 |
| 2432 | 5 | 3, 7 | 14 | OFF | 14 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | 11 | 14 |
| 2437 | 6 | 4, 8 | 14 | OFF | 14 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | 11 | 14 |
| 2442 | 7 | 5, 9 | 14 | OFF | 14 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | 11 | 14 |
| 2447 | 8 | 6, 10 | 14 | OFF | 14 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | 11 | 14 |
| 2452 | 9 | 7, 11 | 14 | OFF | 14 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | 11 | 14 |
| 2457 | 10 | 8 | 14 | OFF | 14 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | 11 | 14 |
| 2462 | 11 | 9 | 14 | OFF | 14 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | 11 | 14 |
| 2467 | 12 | 10 | 14 | OFF | 14 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | 11 | 14 |
| 2472 | 13 | 11 | 14 | OFF | 14 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | 11 | 14 |
| 2484 | – | – | – | – | – | – | – | – | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Table 7-5 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –E regulatory domain for a 2.4-GHz radio with up to 9-dBi antennas.

Table 7-5 Channels and Maximum Conducted Power in the –E Regulatory Domain with up to 9-dBi Antennas

Maximum Conducted Power Levels (dBm) in the –E Regulatory Domain for the 2.4-GHz Radio with up to 9-dBi Antennas

| Freq (MHz) | Center Channel | | 802.11b Single Antenna 1 to 11 Mbps | | | 802.11g Single Antenna 6 to 54 Mbps | | | HT-20 MHz Dual Antennas M0 to M15 ¹ | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
|------------|----------------|--------|-------------------------------------|------|-------------|-------------------------------------|------|-------------|--|------|-------------|--|------|-------------|
| | 20 MHz | 40 MHz | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power |
| 2412 | 1 | 3 | 11 | OFF | 11 | 11 | OFF | 11 | 8 | 8 | 11 | 8 | 8 | 11 |
| 2417 | 2 | 4 | 11 | OFF | 11 | 11 | OFF | 11 | 8 | 8 | 11 | 8 | 8 | 11 |
| 2422 | 3 | 5 | 11 | OFF | 11 | 11 | OFF | 11 | 8 | 8 | 11 | 8 | 8 | 11 |
| 2427 | 4 | 6 | 11 | OFF | 11 | 11 | OFF | 11 | 8 | 8 | 11 | 8 | 8 | 11 |
| 2432 | 5 | 3, 7 | 11 | OFF | 11 | 11 | OFF | 11 | 8 | 8 | 11 | 8 | 8 | 11 |
| 2437 | 6 | 4, 8 | 11 | OFF | 11 | 11 | OFF | 11 | 8 | 8 | 11 | 8 | 8 | 11 |
| 2442 | 7 | 5, 9 | 11 | OFF | 11 | 11 | OFF | 11 | 8 | 8 | 11 | 8 | 8 | 11 |
| 2447 | 8 | 6, 10 | 11 | OFF | 11 | 11 | OFF | 11 | 8 | 8 | 11 | 8 | 8 | 11 |
| 2452 | 9 | 7, 11 | 11 | OFF | 11 | 11 | OFF | 11 | 8 | 8 | 11 | 8 | 8 | 11 |
| 2457 | 10 | 8 | 11 | OFF | 11 | 11 | OFF | 11 | 8 | 8 | 11 | 8 | 8 | 11 |
| 2462 | 11 | 9 | 11 | OFF | 11 | 11 | OFF | 11 | 8 | 8 | 11 | 8 | 8 | 11 |
| 2467 | 12 | 10 | 11 | OFF | 11 | 11 | OFF | 11 | 8 | 8 | 11 | 8 | 8 | 11 |
| 2472 | 13 | 11 | 11 | OFF | 11 | 11 | OFF | 11 | 8 | 8 | 11 | 8 | 8 | 11 |
| 2484 | – | – | – | – | – | – | – | – | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Table 7-6 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –E regulatory domain for a 2.4-GHz radio with up to 10-dBi antennas.

Table 7-6 Channels and Maximum Conducted Power in the –E Regulatory Domain with up to 10-dBi Antennas

| Maximum Conducted Power Levels (dBm) in the –E Regulatory Domain for the 2.4-GHz Radio with up to 10-dBi Antennas | | | | | | | | | | | | | | |
|---|----------------|--------|-------------------------------------|------|-------------|-------------------------------------|------|-------------|--|------|-------------|--|------|-------------|
| Freq (MHz) | Center Channel | | 802.11b Single Antenna 1 to 11 Mbps | | | 802.11g Single Antenna 6 to 54 Mbps | | | HT-20 MHz Dual Antennas M0 to M15 ¹ | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
| | 20 MHz | 40 MHz | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power |
| 2412 | 1 | 3 | 8 | OFF | 8 | 8 | OFF | 8 | 5 | 5 | 8 | 5 | 5 | 8 |
| 2417 | 2 | 4 | 8 | OFF | 8 | 8 | OFF | 8 | 5 | 5 | 8 | 5 | 5 | 8 |
| 2422 | 3 | 5 | 8 | OFF | 8 | 8 | OFF | 8 | 5 | 5 | 8 | 5 | 5 | 8 |
| 2427 | 4 | 6 | 8 | OFF | 8 | 8 | OFF | 8 | 5 | 5 | 8 | 5 | 5 | 8 |
| 2432 | 5 | 3, 7 | 8 | OFF | 8 | 8 | OFF | 8 | 5 | 5 | 8 | 5 | 5 | 8 |
| 2437 | 6 | 4, 8 | 8 | OFF | 8 | 8 | OFF | 8 | 5 | 5 | 8 | 5 | 5 | 8 |
| 2442 | 7 | 5, 9 | 8 | OFF | 8 | 8 | OFF | 8 | 5 | 5 | 8 | 5 | 5 | 8 |
| 2447 | 8 | 6, 10 | 8 | OFF | 8 | 8 | OFF | 8 | 5 | 5 | 8 | 5 | 5 | 8 |
| 2452 | 9 | 7, 11 | 8 | OFF | 8 | 8 | OFF | 8 | 5 | 5 | 8 | 5 | 5 | 8 |
| 2457 | 10 | 8 | 8 | OFF | 8 | 8 | OFF | 8 | 5 | 5 | 8 | 5 | 5 | 8 |
| 2462 | 11 | 9 | 8 | OFF | 8 | 8 | OFF | 8 | 5 | 5 | 8 | 5 | 5 | 8 |
| 2467 | 12 | 10 | 8 | OFF | 8 | 8 | OFF | 8 | 5 | 5 | 8 | 5 | 5 | 8 |
| 2472 | 13 | 11 | 8 | OFF | 8 | 8 | OFF | 8 | 5 | 5 | 8 | 5 | 5 | 8 |
| 2484 | – | – | – | – | – | – | – | – | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Table 7-7 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –P regulatory domain for a 2.4-GHz radio with up to 10-dBi antennas.

Table 7-7 Channels and Maximum Conducted Power in the –P Regulatory Domain with up to 10-dBi Antennas

Maximum Conducted Power Levels (dBm) in the –P Regulatory Domain for the 2.4 GHz Radio with up to 10 dBi Antennas

| Freq (MHz) | Center Channel | | 802.11b Single Antenna 1 to 11 Mbps | | | 802.11g Single Antenna 6 to 54 Mbps | | | HT-20 MHz Dual Antennas M0 to M15 ¹ | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
|------------|----------------|--------|-------------------------------------|------|-------------|-------------------------------------|------|-------------|--|------|-------------|--|------|-------------|
| | 20 MHz | 40 MHz | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power |
| 2412 | 1 | 3 | 14 | OFF | 14 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2417 | 2 | 4 | 14 | OFF | 14 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2422 | 3 | 5 | 14 | OFF | 14 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2427 | 4 | 6 | 14 | OFF | 14 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2432 | 5 | 3, 7 | 14 | OFF | 14 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2437 | 6 | 4, 8 | 14 | OFF | 14 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2442 | 7 | 5, 9 | 14 | OFF | 14 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2447 | 8 | 6, 10 | 14 | OFF | 14 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2452 | 9 | 7, 11 | 14 | OFF | 14 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2457 | 10 | 8 | 14 | OFF | 14 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2462 | 11 | 9 | 14 | OFF | 14 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2467 | 12 | 10 | 14 | OFF | 14 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2472 | 13 | 11 | 14 | OFF | 14 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | 14 | 17 |
| 2484 | 14 | – | – | – | – | – | – | – | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

5 GHz Band (Draft IEEE 802.11n Version 2.0)

An improper combination of power level and antenna gain can result in equivalent isotropic radiated power (EIRP) above the amount allowed per regulatory domain.

Table 7-8 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –A regulatory domain for a 5-GHz radio with up to 6-dBi antennas.

Table 7-8 Channels and Maximum Conducted Power in the –A Regulatory Domain with up to 6-dBi Antennas

Maximum Conducted Power Levels (dBm) in the –A Regulatory Domain for the 5-GHz Radio with up to 6-dBi Antennas

| Channel ID | Freq (MHz) | 802.11a Single Antenna 6 to 54 Mbps | | | HT-20 MHz Dual Antennas M0 to M15 ¹ | | | Duplicate (2x20 MHz) Single Antennas 6 Mbps | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
|------------------|------------|-------------------------------------|------|-------------|--|------|-------------|---|---|---|--|------|-------------|
| | | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | – | – | Tx A | Tx B | Total Power |
| 5150-5250 MHz | | | | | | | | | | | | | |
| 36 | 5180 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | – | – | 11 | 11 | 14 |
| 40 | 5200 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | – | – | 11 | 11 | 14 |
| 44 | 5220 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | – | – | 11 | 11 | 14 |
| 48 | 5240 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | – | – | 11 | 11 | 14 |
| 5250 to 5350 MHz | | | | | | | | | | | | | |
| 52 | 5260 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 56 | 5280 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 60 | 5300 | 17 | OFF | 17 | 17 | 17 | 20 | 11 | – | – | 11 | 11 | 14 |
| 64 | 5320 | 17 | OFF | 17 | 17 | 17 | 20 | 11 | – | – | 11 | 11 | 14 |
| 5470 to 5725 MHz | | | | | | | | | | | | | |
| 100 | 5500 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | – | – | 14 | 14 | 17 |
| 104 | 5520 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | – | – | 14 | 14 | 17 |
| 108 | 5540 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 112 | 5560 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 116 | 5580 | 17 | OFF | 17 | 17 | 17 | 20 | – | – | – | – | – | – |
| 120 | 5600 | – | – | – | – | – | – | – | – | – | – | – | – |
| 124 | 5620 | – | – | – | – | – | – | – | – | – | – | – | – |
| 128 | 5640 | – | – | – | – | – | – | – | – | – | – | – | – |
| 132 | 5660 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 136 | 5680 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 140 | 5700 | 17 | OFF | 17 | 17 | 17 | 20 | – | – | – | – | – | – |
| 5725 to 5850 MHz | | | | | | | | | | | | | |
| 149 | 5745 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 153 | 5765 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 157 | 5785 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 161 | 5805 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 165 | 5825 | 17 | OFF | 17 | 17 | 17 | 20 | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Table 7-9 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –C regulatory domain for a 5-GHz radio with up to 6-dBi antennas.

Table 7-9 Channels and Maximum Conducted Power in the –C Regulatory Domain with up to 6-dBi Antennas

Maximum Conducted Power Levels (dBm) in the –C Regulatory Domain for a 5-GHz Radio with up to 6-dBi Antennas

| Channel ID | Freq (MHz) | 802.11a Single Antenna 6 to 54 Mbps | | | HT-20 MHz Dual Antennas M0 to M15 ¹ | | | Duplicate (2x20 MHz) Dual Antennas 6 Mbps | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
|------------------------|------------|-------------------------------------|------|-------------|--|------|-------------|---|---|---|--|------|-------------|
| | | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | – | – | Tx A | Tx B | Total Power |
| UNII-1 (5150-5250 MHz) | | | | | | | | | | | | | |
| 36 | 5180 | – | – | – | – | – | – | – | – | – | – | – | – |
| 40 | 5200 | – | – | – | – | – | – | – | – | – | – | – | – |
| 44 | 5220 | – | – | – | – | – | – | – | – | – | – | – | – |
| 48 | 5240 | – | – | – | – | – | – | – | – | – | – | – | – |
| 5250 to 5350 MHz | | | | | | | | | | | | | |
| 52 | 5260 | – | – | – | – | – | – | – | – | – | – | – | – |
| 56 | 5280 | – | – | – | – | – | – | – | – | – | – | – | – |
| 60 | 5300 | – | – | – | – | – | – | – | – | – | – | – | – |
| 64 | 5320 | – | – | – | – | – | – | – | – | – | – | – | – |
| 5470 to 5725 MHz | | | | | | | | | | | | | |
| 100 | 5500 | – | – | – | – | – | – | – | – | – | – | – | – |
| 104 | 5520 | – | – | – | – | – | – | – | – | – | – | – | – |
| 108 | 5540 | – | – | – | – | – | – | – | – | – | – | – | – |
| 112 | 5560 | – | – | – | – | – | – | – | – | – | – | – | – |
| 116 | 5580 | – | – | – | – | – | – | – | – | – | – | – | – |
| 120 | 5600 | – | – | – | – | – | – | – | – | – | – | – | – |
| 124 | 5620 | – | – | – | – | – | – | – | – | – | – | – | – |
| 128 | 5640 | – | – | – | – | – | – | – | – | – | – | – | – |
| 132 | 5660 | – | – | – | – | – | – | – | – | – | – | – | – |
| 136 | 5680 | – | – | – | – | – | – | – | – | – | – | – | – |
| 140 | 5700 | – | – | – | – | – | – | – | – | – | – | – | – |
| 5725 to 5850 MHz | | | | | | | | | | | | | |
| 149 | 5745 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 153 | 5765 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 157 | 5785 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 161 | 5805 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 165 | 5825 | 17 | OFF | 17 | 17 | 17 | 20 | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Table 7-10 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –E regulatory domain for a 5-GHz radio with up to 6-dBi antennas.

Table 7-10 Channels and Maximum Conducted Power in the –E Regulatory Domain with up to 6-dBi Antennas

Maximum Conducted Power Levels (dBm) in the –E Regulatory Domain for the 5-GHz Radio with up to 6-dBi Antennas

| Channel ID | Freq (MHz) | 802.11a Single Antenna 6 to 54 Mbps | | | HT-20 MHz Dual Antennas M0 to M15 ¹ | | | Duplicate (2x20 MHz) Dual Antennas 6 Mbps | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
|------------------------|------------|---|------|-------------|--|------|-------------|--|---|---|--|------|-------------|
| | | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | – | – | Tx A | Tx B | Total Power |
| UNII-1 (5150-5250 MHz) | | | | | | | | | | | | | |
| 36 | 5180 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 40 | 5200 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 44 | 5220 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 48 | 5240 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 5250 to 5350 MHz | | | | | | | | | | | | | |
| 52 | 5260 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 56 | 5280 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 60 | 5300 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 64 | 5320 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 5470 to 5725 MHz | | | | | | | | | | | | | |
| 100 | 5500 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 104 | 5520 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 108 | 5540 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 112 | 5560 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 116 | 5580 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 120 | 5600 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 124 | 5620 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 128 | 5640 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 132 | 5660 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 136 | 5680 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 140 | 5700 | 17 | OFF | 17 | 17 | 17 | 20 | | – | – | | | |
| 5725 to 5850 MHz | | | | | | | | | | | | | |
| 149 | 5745 | – | – | – | – | – | – | – | – | – | – | – | – |
| 153 | 5765 | – | – | – | – | – | – | – | – | – | – | – | – |
| 157 | 5785 | – | – | – | – | – | – | – | – | – | – | – | – |
| 161 | 5805 | – | – | – | – | – | – | – | – | – | – | – | – |
| 165 | 5825 | – | – | – | – | – | – | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Table 7-11 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –I regulatory domain for a 5-GHz radio with up to 6-dBi antenna.s

Table 7-11 Channels and Maximum Conducted Power in the –I Regulatory Domain with up to 6-dBi Antennas

Maximum Conducted Power Levels (dBm) in the –I Regulatory Domain for a 5-GHz Radio with up to 6-dBi Antennas

| Channel ID | Freq (MHz) | 802.11a Single Antenna 6 to 54 Mbps | | | HT-20 MHz Dual Antennas M0 to M15 ¹ | | | Duplicate (2x20 MHz) Dual Antennas 6 Mbps | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
|------------------------|------------|-------------------------------------|------|-------------|--|------|-------------|---|---|---|--|------|-------------|
| | | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | – | – | Tx A | Tx B | Total Power |
| UNII-1 (5150-5250 MHz) | | | | | | | | | | | | | |
| 36 | 5180 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 40 | 5200 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 44 | 5220 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 48 | 5240 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 5250 to 5350 MHz | | | | | | | | | | | | | |
| 52 | 5260 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 56 | 5280 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 60 | 5300 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 64 | 5320 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 5470 to 5725 MHz | | | | | | | | | | | | | |
| 100 | 5500 | – | – | – | – | – | – | – | – | – | – | – | – |
| 104 | 5520 | – | – | – | – | – | – | – | – | – | – | – | – |
| 108 | 5540 | – | – | – | – | – | – | – | – | – | – | – | – |
| 112 | 5560 | – | – | – | – | – | – | – | – | – | – | – | – |
| 116 | 5580 | – | – | – | – | – | – | – | – | – | – | – | – |
| 120 | 5600 | – | – | – | – | – | – | – | – | – | – | – | – |
| 124 | 5620 | – | – | – | – | – | – | – | – | – | – | – | – |
| 128 | 5640 | – | – | – | – | – | – | – | – | – | – | – | – |
| 132 | 5660 | – | – | – | – | – | – | – | – | – | – | – | – |
| 136 | 5680 | – | – | – | – | – | – | – | – | – | – | – | – |
| 140 | 5700 | – | – | – | – | – | – | – | – | – | – | – | – |
| 5725 to 5850 MHz | | | | | | | | | | | | | |
| 149 | 5745 | – | – | – | – | – | – | – | – | – | – | – | – |
| 153 | 5765 | – | – | – | – | – | – | – | – | – | – | – | – |
| 157 | 5785 | – | – | – | – | – | – | – | – | – | – | – | – |
| 161 | 5805 | – | – | – | – | – | – | – | – | – | – | – | – |
| 165 | 5825 | – | – | – | – | – | – | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Table 7-12 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –K regulatory domain for a 5-GHz radio with up to 6-dBi antennas.

Table 7-12 Channels and Maximum Conducted Power in the –K Regulatory Domain with up to 6-dBi Antennas

Maximum Conducted Power Levels (dBm) in the –K Regulatory Domain for a 5-GHz Radio with up to 6-dBi Antennas

| Channel ID | Freq (MHz) | 802.11a Single Antenna 6 to 54 Mbps | | | HT-20 MHz Dual Antennas M0 to M15 ¹ | | | Duplicate (2x20 MHz) Dual Antennas 6 Mbps | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
|------------------------|------------|---|------|-------------|--|------|-------------|--|---|---|--|------|-------------|
| | | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | – | – | Tx A | Tx B | Total Power |
| UNII-1 (5150-5250 MHz) | | | | | | | | | | | | | |
| 36 | 5180 | 14 | OFF | 14 | 8 | 8 | 11 | 8 | – | – | 8 | 8 | 11 |
| 40 | 5200 | 14 | OFF | 14 | 8 | 8 | 11 | 8 | – | – | 8 | 8 | 11 |
| 44 | 5220 | 14 | OFF | 14 | 8 | 8 | 11 | 8 | – | – | 8 | 8 | 11 |
| 48 | 5240 | 14 | OFF | 14 | 8 | 8 | 11 | 8 | – | – | 8 | 8 | 11 |
| 5250 to 5350 MHz | | | | | | | | | | | | | |
| 52 | 5260 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 56 | 5280 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 60 | 5300 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 64 | 5320 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 5470 to 5725 MHz | | | | | | | | | | | | | |
| 100 | 5500 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 104 | 5520 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 108 | 5540 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 112 | 5560 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 116 | 5580 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 120 | 5600 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 124 | 5620 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | – | – | – |
| 128 | 5640 | – | – | – | – | – | – | – | – | – | – | – | – |
| 132 | 5660 | – | – | – | – | – | – | – | – | – | – | – | – |
| 136 | 5680 | – | – | – | – | – | – | – | – | – | – | – | – |
| 140 | 5700 | – | – | – | – | – | – | – | – | – | – | – | – |
| 5725 to 5850 MHz | | | | | | | | | | | | | |
| 149 | 5745 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 153 | 5765 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 157 | 5785 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 161 | 5805 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 165 | 5825 | – | – | – | – | – | – | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Table 7-13 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –N regulatory domain for a 5-GHz radio with up to 6-dBi antennas.

Table 7-13 Channels and Maximum Conducted Power in the –N Regulatory Domain with up to 6-dBi Antennas

Maximum Conducted Power Levels (dBm) in the –N Regulatory Domain for a 5-GHz Radio with up to 6-dBi Antennas

| Channel ID | Freq (MHz) | 802.11a Single Antenna 6 to 54 Mbps | | | HT-20 MHz Dual Antennas M0 to M15 ¹ | | | Duplicate (2x20 MHz) Dual Antennas 6 Mbps | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
|------------------------|------------|-------------------------------------|------|-------------|--|------|-------------|---|---|---|--|------|-------------|
| | | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | – | – | Tx A | Tx B | Total Power |
| UNII-1 (5150-5250 MHz) | | | | | | | | | | | | | |
| 36 | 5180 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | – | – | 11 | 11 | 14 |
| 40 | 5200 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | – | – | 11 | 11 | 14 |
| 44 | 5220 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | – | – | 11 | 11 | 14 |
| 48 | 5240 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | – | – | 11 | 11 | 14 |
| 5250 to 5350 MHz | | | | | | | | | | | | | |
| 52 | 5260 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 56 | 5280 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 60 | 5300 | 17 | OFF | 17 | 14 | 14 | 17 | 11 | – | – | 11 | 11 | 14 |
| 64 | 5320 | 11 | OFF | 11 | 14 | 14 | 17 | 11 | – | – | 11 | 11 | 14 |
| 5470 to 5725 MHz | | | | | | | | | | | | | |
| 100 | 5500 | – | – | – | – | – | – | – | – | – | – | – | – |
| 104 | 5520 | – | – | – | – | – | – | – | – | – | – | – | – |
| 108 | 5540 | – | – | – | – | – | – | – | – | – | – | – | – |
| 112 | 5560 | – | – | – | – | – | – | – | – | – | – | – | – |
| 116 | 5580 | – | – | – | – | – | – | – | – | – | – | – | – |
| 120 | 5600 | – | – | – | – | – | – | – | – | – | – | – | – |
| 124 | 5620 | – | – | – | – | – | – | – | – | – | – | – | – |
| 128 | 5640 | – | – | – | – | – | – | – | – | – | – | – | – |
| 132 | 5660 | – | – | – | – | – | – | – | – | – | – | – | – |
| 136 | 5680 | – | – | – | – | – | – | – | – | – | – | – | – |
| 140 | 5700 | – | – | – | – | – | – | – | – | – | – | – | – |
| 5725 to 5850 MHz | | | | | | | | | | | | | |
| 149 | 5745 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 153 | 5765 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 157 | 5785 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 161 | 5805 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 165 | 5825 | 17 | OFF | 17 | 17 | 17 | 20 | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Table 7-14 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –P regulatory domain for a 5-GHz radio with up to 6-dBi antennas.

Table 7-14 Channels and Maximum Conducted Power in the –P Regulatory Domain with up to 6-dBi Antennas

Maximum Conducted Power Levels (dBm) in the –P Regulatory Domain for the 5-GHz Radio with up to 6-dBi Antennas

| Channel ID | Freq (MHz) | 802.11a Single Antenna 6 to 54 Mbps | | | HT-20 MHz Dual Antennas M0 to M15 ¹ | | | Duplicate (2x20 MHz) Dual Antennas 6 Mbps | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
|------------------------|------------|---|------|-------------|--|------|-------------|--|---|---|--|------|-------------|
| | | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | – | – | Tx A | Tx B | Total Power |
| UNII-1 (5150-5250 MHz) | | | | | | | | | | | | | |
| 36 | 5180 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | – | – | 11 | 11 | 14 |
| 40 | 5200 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | – | – | 11 | 11 | 14 |
| 44 | 5220 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | – | – | 11 | 11 | 14 |
| 48 | 5240 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | – | – | 11 | 11 | 14 |
| 5250 to 5350 MHz | | | | | | | | | | | | | |
| 52 | 5260 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | – | – | 11 | 11 | 14 |
| 56 | 5280 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | – | – | 11 | 11 | 14 |
| 60 | 5300 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | – | – | 11 | 11 | 14 |
| 64 | 5320 | 14 | OFF | 14 | 11 | 11 | 14 | 11 | – | – | 11 | 11 | 14 |
| 5470 to 5725 MHz | | | | | | | | | | | | | |
| 100 | 5500 | – | – | – | – | – | – | – | – | – | – | – | – |
| 104 | 5520 | – | – | – | – | – | – | – | – | – | – | – | – |
| 108 | 5540 | – | – | – | – | – | – | – | – | – | – | – | – |
| 112 | 5560 | – | – | – | – | – | – | – | – | – | – | – | – |
| 116 | 5580 | – | – | – | – | – | – | – | – | – | – | – | – |
| 120 | 5600 | – | – | – | – | – | – | – | – | – | – | – | – |
| 124 | 5620 | – | – | – | – | – | – | – | – | – | – | – | – |
| 128 | 5640 | – | – | – | – | – | – | – | – | – | – | – | – |
| 132 | 5660 | – | – | – | – | – | – | – | – | – | – | – | – |
| 136 | 5680 | – | – | – | – | – | – | – | – | – | – | – | – |
| 140 | 5700 | – | – | – | – | – | – | – | – | – | – | – | – |
| 5725 to 5850 MHz | | | | | | | | | | | | | |
| 149 | 5745 | – | – | – | – | – | – | – | – | – | – | – | – |
| 153 | 5765 | – | – | – | – | – | – | – | – | – | – | – | – |
| 157 | 5785 | – | – | – | – | – | – | – | – | – | – | – | – |
| 161 | 5805 | – | – | – | – | – | – | – | – | – | – | – | – |
| 165 | 5825 | – | – | – | – | – | – | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Table 7-15 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –R regulatory domain for a 5-GHz radio with up to 4-dBi antennas.

Table 7-15 Channels and Maximum Conducted Power in the –R Regulatory Domain with up to 4-dBi Antennas

| Maximum Conducted Power Levels (dBm) in the –R Regulatory Domain for the 5-GHz Radio with up to 4-dBi Antennas | | | | | | | | | | | | | |
|--|------------|---|------|-------------|--|------|-------------|---|------|-------------|--|------|-------------|
| Channel ID | Freq (MHz) | Non HT-20 and HT-20 MHz Single Antenna 6 to 54 Mbps | | | Non HT-20 and HT-20 MHz Dual Antennas M0 to M15 ¹ | | | Non HT-40 and HT-40 Single Antenna 6 to 54 Mbps | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
| | | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power |
| UNII-1 (5150-5250 MHz) | | | | | | | | | | | | | |
| 36 | 5180 | 16 | OFF | 16 | 13 | 13 | 16 | 16 | OFF | 16 | 13 | 13 | 16 |
| 40 | 5200 | 16 | OFF | 16 | 13 | 13 | 16 | 16 | OFF | 16 | 13 | 13 | 16 |
| 44 | 5220 | 16 | OFF | 16 | 13 | 13 | 16 | 16 | OFF | 16 | 13 | 13 | 16 |
| 48 | 5240 | 16 | OFF | 16 | 13 | 13 | 16 | 16 | OFF | 16 | 13 | 13 | 16 |
| 5250 to 5350 MHz | | | | | | | | | | | | | |
| 52 | 5260 | 16 | OFF | 16 | 13 | 13 | 16 | 16 | OFF | 16 | 13 | 13 | 16 |
| 56 | 5280 | 16 | OFF | 16 | 13 | 13 | 16 | 16 | OFF | 16 | 13 | 13 | 16 |
| 60 | 5300 | 16 | OFF | 16 | 13 | 13 | 16 | 16 | OFF | 16 | 13 | 13 | 16 |
| 64 | 5320 | 16 | OFF | 16 | 13 | 13 | 16 | 16 | OFF | 16 | 13 | 13 | 16 |
| 5470 to 5725 MHz | | | | | | | | | | | | | |
| 100 | 5500 | – | – | – | – | – | – | – | – | – | – | – | – |
| 104 | 5520 | – | – | – | – | – | – | – | – | – | – | – | – |
| 108 | 5540 | – | – | – | – | – | – | – | – | – | – | – | – |
| 112 | 5560 | – | – | – | – | – | – | – | – | – | – | – | – |
| 116 | 5580 | – | – | – | – | – | – | – | – | – | – | – | – |
| 120 | 5600 | – | – | – | – | – | – | – | – | – | – | – | – |
| 124 | 5620 | – | – | – | – | – | – | – | – | – | – | – | – |
| 128 | 5640 | – | – | – | – | – | – | – | – | – | – | – | – |
| 132 | 5660 | 16 | OFF | 16 | 13 | 13 | 16 | 16 | OFF | 16 | 13 | 13 | 16 |
| 136 | 5680 | 16 | OFF | 16 | 13 | 13 | 16 | 16 | OFF | 16 | 13 | 13 | 16 |
| 140 | 5700 | 16 | OFF | 16 | 13 | 13 | 16 | – | – | – | – | – | – |
| 5725 to 5850 MHz | | | | | | | | | | | | | |
| 149 | 5745 | 16 | OFF | 16 | 13 | 13 | 16 | 16 | OFF | 16 | 13 | 13 | 16 |
| 153 | 5765 | 16 | OFF | 16 | 13 | 13 | 16 | 16 | OFF | 16 | 13 | 13 | 16 |
| 157 | 5785 | 16 | OFF | 16 | 13 | 13 | 16 | 16 | OFF | 16 | 13 | 13 | 16 |
| 161 | 5805 | 16 | OFF | 16 | 13 | 13 | 16 | 16 | OFF | 16 | 13 | 13 | 16 |
| 165 | 5825 | – | – | – | – | – | – | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Table 7-16 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –R regulatory domain for a 5-GHz radio with up to 5-dBi antennas.

Table 7-16 Channels and Maximum Conducted Power in the –R Regulatory Domain with up to 5-dBi Antennas

| Maximum Conducted Power Levels (dBm) in the –R Regulatory Domain for the 5-GHz Radio with up to 5-dBi Antennas | | | | | | | | | | | | | |
|--|------------|---|------|-------------|--|------|-------------|---|------|-------------|--|------|-------------|
| Channel ID | Freq (MHz) | Non HT-20 and HT-20 MHz Single Antenna 6 to 54 Mbps | | | Non HT-20 and HT-20 MHz Dual Antennas M0 to M15 ¹ | | | Non HT-40 and HT-40 Single Antenna 6 to 54 Mbps | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
| | | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power |
| UNII-1 (5150-5250 MHz) | | | | | | | | | | | | | |
| 36 | 5180 | 15 | OFF | 15 | 12 | 12 | 15 | 15 | OFF | 15 | 12 | 12 | 15 |
| 40 | 5200 | 15 | OFF | 15 | 12 | 12 | 15 | 15 | OFF | 15 | 12 | 12 | 15 |
| 44 | 5220 | 15 | OFF | 15 | 12 | 12 | 15 | 15 | OFF | 15 | 12 | 12 | 15 |
| 48 | 5240 | 15 | OFF | 15 | 12 | 12 | 15 | 15 | OFF | 15 | 12 | 12 | 15 |
| 5250 to 5350 MHz | | | | | | | | | | | | | |
| 52 | 5260 | 15 | OFF | 15 | 12 | 12 | 15 | 15 | OFF | 15 | 12 | 12 | 15 |
| 56 | 5280 | 15 | OFF | 15 | 12 | 12 | 15 | 15 | OFF | 15 | 12 | 12 | 15 |
| 60 | 5300 | 15 | OFF | 15 | 12 | 12 | 15 | 15 | OFF | 15 | 12 | 12 | 15 |
| 64 | 5320 | 15 | OFF | 15 | 12 | 12 | 15 | 15 | OFF | 15 | 12 | 12 | 15 |
| 5470 to 5725 MHz | | | | | | | | | | | | | |
| 100 | 5500 | – | – | – | – | – | – | – | – | – | – | – | – |
| 104 | 5520 | – | – | – | – | – | – | – | – | – | – | – | – |
| 108 | 5540 | – | – | – | – | – | – | – | – | – | – | – | – |
| 112 | 5560 | – | – | – | – | – | – | – | – | – | – | – | – |
| 116 | 5580 | – | – | – | – | – | – | – | – | – | – | – | – |
| 120 | 5600 | – | – | – | – | – | – | – | – | – | – | – | – |
| 124 | 5620 | – | – | – | – | – | – | – | – | – | – | – | – |
| 128 | 5640 | – | – | – | – | – | – | – | – | – | – | – | – |
| 132 | 5660 | 15 | OFF | 15 | 12 | 12 | 15 | 15 | OFF | 15 | 12 | 12 | 15 |
| 136 | 5680 | 15 | OFF | 15 | 12 | 12 | 15 | 15 | OFF | 15 | 12 | 12 | 15 |
| 140 | 5700 | 15 | OFF | 15 | 12 | 12 | 15 | – | – | – | – | – | – |
| 5725 to 5850 MHz | | | | | | | | | | | | | |
| 149 | 5745 | 15 | OFF | 15 | 12 | 12 | 15 | 15 | OFF | 15 | 12 | 12 | 15 |
| 153 | 5765 | 15 | OFF | 15 | 12 | 12 | 15 | 15 | OFF | 15 | 12 | 12 | 15 |
| 157 | 5785 | 15 | OFF | 15 | 12 | 12 | 15 | 15 | OFF | 15 | 12 | 12 | 15 |
| 161 | 5805 | 15 | OFF | 15 | 12 | 12 | 15 | 15 | OFF | 15 | 12 | 12 | 15 |
| 165 | 5825 | – | – | – | – | – | – | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Table 7-17 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –R regulatory domain for a 5-GHz radio with up to 6-dBi antennas.

Table 7-17 Channels and Maximum Conducted Power in the –R Regulatory Domain with up to 6-dBi Antennas

Maximum Conducted Power Levels (dBm) in the –R Regulatory Domain for the 5-GHz Radio with up to 6-dBi Antennas

| Channel ID | Freq (MHz) | Non HT-20 and HT-20 MHz Single Antenna 6 to 54 Mbps | | | Non HT-20 and HT-20 MHz Dual Antennas M0 to M15 ¹ | | | Non HT-40 and HT-40 Single Antenna 6 to 54 Mbps | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
|------------------------|------------|---|------|-------------|--|------|-------------|---|------|-------------|--|------|-------------|
| | | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power |
| UNII-1 (5150-5250 MHz) | | | | | | | | | | | | | |
| 36 | 5180 | 14 | OFF | 14 | 11 | 11 | 14 | 14 | OFF | 14 | 11 | 11 | 14 |
| 40 | 5200 | 14 | OFF | 14 | 11 | 11 | 14 | 14 | OFF | 14 | 11 | 11 | 14 |
| 44 | 5220 | 14 | OFF | 14 | 11 | 11 | 14 | 14 | OFF | 14 | 11 | 11 | 14 |
| 48 | 5240 | 14 | OFF | 14 | 11 | 11 | 14 | 14 | OFF | 14 | 11 | 11 | 14 |
| 5250 to 5350 MHz | | | | | | | | | | | | | |
| 52 | 5260 | 14 | OFF | 14 | 11 | 11 | 14 | 14 | OFF | 14 | 11 | 11 | 14 |
| 56 | 5280 | 14 | OFF | 14 | 11 | 11 | 14 | 14 | OFF | 14 | 11 | 11 | 14 |
| 60 | 5300 | 14 | OFF | 14 | 11 | 11 | 14 | 14 | OFF | 14 | 11 | 11 | 14 |
| 64 | 5320 | 14 | OFF | 14 | 11 | 11 | 14 | 14 | OFF | 14 | 11 | 11 | 14 |
| 5470 to 5725 MHz | | | | | | | | | | | | | |
| 100 | 5500 | – | – | – | – | – | – | – | – | – | – | – | – |
| 104 | 5520 | – | – | – | – | – | – | – | – | – | – | – | – |
| 108 | 5540 | – | – | – | – | – | – | – | – | – | – | – | – |
| 112 | 5560 | – | – | – | – | – | – | – | – | – | – | – | – |
| 116 | 5580 | – | – | – | – | – | – | – | – | – | – | – | – |
| 120 | 5600 | – | – | – | – | – | – | – | – | – | – | – | – |
| 124 | 5620 | – | – | – | – | – | – | – | – | – | – | – | – |
| 128 | 5640 | – | – | – | – | – | – | – | – | – | – | – | – |
| 132 | 5660 | 14 | OFF | 14 | 11 | 11 | 14 | 14 | OFF | 14 | 11 | 11 | 14 |
| 136 | 5680 | 14 | OFF | 14 | 11 | 11 | 14 | 14 | OFF | 14 | 11 | 11 | 14 |
| 140 | 5700 | 14 | OFF | 14 | 11 | 11 | 14 | – | – | – | – | – | – |
| 5725 to 5850 MHz | | | | | | | | | | | | | |
| 149 | 5745 | 14 | OFF | 14 | 11 | 11 | 14 | 14 | OFF | 14 | 11 | 11 | 14 |
| 153 | 5765 | 14 | OFF | 14 | 11 | 11 | 14 | 14 | OFF | 14 | 11 | 11 | 14 |
| 157 | 5785 | 14 | OFF | 14 | 11 | 11 | 14 | 14 | OFF | 14 | 11 | 11 | 14 |
| 161 | 5805 | 14 | OFF | 14 | 11 | 11 | 14 | 14 | OFF | 14 | 11 | 11 | 14 |
| 165 | 5825 | – | – | – | – | – | – | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Table 7-18 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –S regulatory domain for a 5-GHz radio with up to 6-dBi antennas.

Table 7-18 Channels and Maximum Conducted Power in the –S Regulatory Domain with up to 6-dBi Antennas

| Maximum Conducted Power Levels (dBm) in the –S Regulatory Domain for a 5-GHz Radio with up to 6-dBi Antennas | | | | | | | | | | | | | |
|--|------------|-------------------------------------|------|-------------|--|------|-------------|---|---|---|--|------|-------------|
| Channel ID | Freq (MHz) | 802.11a Single Antenna 6 to 54 Mbps | | | HT-20 MHz Dual Antennas M0 to M15 ¹ | | | Duplicate (2x20 MHz) Dual Antennas 6 Mbps | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
| | | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | – | – | Tx A | Tx B | Total Power |
| UNII-1 (5150-5250 MHz) | | | | | | | | | | | | | |
| 36 | 5180 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 40 | 5200 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 44 | 5220 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 48 | 5240 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 5250 to 5350 MHz | | | | | | | | | | | | | |
| 52 | 5260 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 56 | 5280 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 60 | 5300 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 64 | 5320 | 17 | OFF | 17 | 14 | 14 | 17 | 14 | – | – | 14 | 14 | 17 |
| 5470 to 5725 MHz | | | | | | | | | | | | | |
| 100 | 5500 | – | – | – | – | – | – | – | – | – | – | – | – |
| 104 | 5520 | – | – | – | – | – | – | – | – | – | – | – | – |
| 108 | 5540 | – | – | – | – | – | – | – | – | – | – | – | – |
| 112 | 5560 | – | – | – | – | – | – | – | – | – | – | – | – |
| 116 | 5580 | – | – | – | – | – | – | – | – | – | – | – | – |
| 120 | 5600 | – | – | – | – | – | – | – | – | – | – | – | – |
| 124 | 5620 | – | – | – | – | – | – | – | – | – | – | – | – |
| 128 | 5640 | – | – | – | – | – | – | – | – | – | – | – | – |
| 132 | 5660 | – | – | – | – | – | – | – | – | – | – | – | – |
| 136 | 5680 | – | – | – | – | – | – | – | – | – | – | – | – |
| 140 | 5700 | – | – | – | – | – | – | – | – | – | – | – | – |
| 5725 to 5850 MHz | | | | | | | | | | | | | |
| 149 | 5745 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 153 | 5765 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 157 | 5785 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 161 | 5805 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 165 | 5825 | 17 | OFF | 17 | 17 | 17 | 20 | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Table 7-19 indicates the channel identifiers, channel center frequencies, and maximum power levels for each channel allowed by the –T regulatory domain for a 5-GHz radio with up to 6-dBi antennas.

Table 7-19 Channels and Maximum Conducted Power in the –T Regulatory Domain with up to 6-dBi Antennas

| Maximum Conducted Power Levels (dBm) in the –T Regulatory Domain for a 5-GHz Radio with up to 6-dBi Antennas | | | | | | | | | | | | | |
|--|------------|-------------------------------------|------|-------------|--|------|-------------|---|---|---|--|------|-------------|
| Channel ID | Freq (MHz) | 802.11a Single Antenna 6 to 54 Mbps | | | HT-20 MHz Dual Antennas M0 to M15 ¹ | | | Duplicate (2x20 MHz) Dual Antennas 6 Mbps | | | HT-40 MHz Dual Antennas M0 to M15 ¹ | | |
| | | Tx A | Tx B | Total Power | Tx A | Tx B | Total Power | Tx A | – | – | Tx A | Tx B | Total Power |
| UNII-1 (5150-5250 MHz) | | | | | | | | | | | | | |
| 36 | 5180 | – | – | – | – | – | – | – | – | – | – | – | – |
| 40 | 5200 | – | – | – | – | – | – | – | – | – | – | – | – |
| 44 | 5220 | – | – | – | – | – | – | – | – | – | – | – | – |
| 48 | 5240 | – | – | – | – | – | – | – | – | – | – | – | – |
| 5250 to 5350 MHz | | | | | | | | | | | | | |
| 52 | 5260 | – | – | – | – | – | – | – | – | – | – | – | – |
| 56 | 5280 | 14 | OFF | 14 | 11 | 11 | 14 | – | – | – | – | – | – |
| 60 | 5300 | 14 | OFF | 14 | 11 | 11 | 14 | 8 | – | – | 11 | 11 | 14 |
| 64 | 5320 | 14 | OFF | 14 | 11 | 11 | 14 | 8 | – | – | 11 | 11 | 14 |
| 5470 to 5725 MHz | | | | | | | | | | | | | |
| 100 | 5500 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | – | – | 17 | 17 | 20 |
| 104 | 5520 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | – | – | 17 | 17 | 20 |
| 108 | 5540 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | – | – | 17 | 17 | 20 |
| 112 | 5560 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | – | – | 17 | 17 | 20 |
| 116 | 5580 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | – | – | 17 | 17 | 20 |
| 120 | 5600 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | – | – | 17 | 17 | 20 |
| 124 | 5620 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | – | – | 17 | 17 | 20 |
| 128 | 5640 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | – | – | 17 | 17 | 20 |
| 132 | 5660 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | – | – | 17 | 17 | 20 |
| 136 | 5680 | 17 | OFF | 17 | 17 | 17 | 20 | 14 | – | – | 17 | 17 | 20 |
| 140 | 5700 | 17 | OFF | 17 | 17 | 17 | 20 | – | – | – | – | – | – |
| 5725 to 5850 MHz | | | | | | | | | | | | | |
| 149 | 5745 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 153 | 5765 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 157 | 5785 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 161 | 5805 | 17 | OFF | 17 | 17 | 17 | 20 | 17 | – | – | 17 | 17 | 20 |
| 165 | 5825 | 17 | OFF | 17 | 17 | 17 | 20 | – | – | – | – | – | – |

1. M0 to M15 corresponds to the Modulation and Coding Schemes (MCS0 to MCS15). The MCS settings determine the number of spatial streams, the modulation, the coding rate, and the data rate values.

Special Country Restrictions

Table 7-20 lists special restrictions for wireless operation in some countries.

Table 7-20 Special Country Restrictions for Wireless Operation

| Country | Frequency Bands (GHz) | Regulatory Domain | Special Limitation and Restrictions |
|--------------------|-----------------------|-------------------|--|
| South Korea | 2.4 and 5 | –E and –K | Maximum antenna gain limited to 6 dBi. |
| Mexico | 2.4 | –A | End user must limit 2.4 GHz operation to 2450 to 2483.5 MHz and 36 dBm EIRP. |
| Russian Federation | 5 | –R | End user must limit 5 GHz operation to 5150 to 5350 and 5650 to 5725 MHz. |
| United States | 5 | –A | Indoor use only from 5150-5250 MHz. |

Changing Lightweight Access Point Output Power

This section provides instructions for changing the 1250 series access point output power to comply with the maximum power limits imposed by special regulatory and country restrictions (see the “[Special Country Restrictions](#)” section on page 7-21). Follow these instructions to change the output power settings using a controller and your browser:



Note

Administrator privileges may be required in order to change access point settings.



Caution

To meet regulatory restrictions, the access point and the external antenna must be professionally installed. The network administration or other IT professional responsible for installing and configuring the unit is a suitable professional installer. Following installation, access to the unit should be password-protected by the network administrator to maintain regulatory compliance.

The output power on the access points can be changed only using a Cisco wireless LAN controller (2600 series or 4400 series), the controllers on a Cisco Wireless Services Module (WiSM), or using Cisco Wireless Control System (WCS).



Note

See the *Cisco Wireless LAN Controller Configuration Guide* for more details on how to configure your access point using the web-browser interface.

Follow these steps to change the access point’s output power to meet local regulations using a controller:

- Step 1** Open your Internet browser. You must use Microsoft Internet Explorer 6.0.2800 or a later release.
- Step 2** Enter **https://IP address** (where *IP address* is the controller’s IP address) in the browser address line and press **Enter**. A user login screen appears.

Step 3 Enter the username and password and press **Enter**. The controller's summary page appears.



Note The username and password are case-sensitive.

Step 4 Click **Wireless > 802.11a/n Radios** or **802.11b/g/n Radios** and a list of associated access points appears.

Step 5 Choose the desired access point and click **Configure**. The radio settings page appears.

Step 6 Scroll down to the Tx Power Level Assignment field, and click **Custom**.

Custom indicates that the radio output power is manually controlled by the Tx Power Configuration setting field.

Step 7 In the Tx Power Level field, select the appropriate power level setting (1 to 8).

Based on the operating channel, the regulatory domain, and the controller power level setting (1 to 8), the actual transmit power at the access point can be reduced to comply with special regulatory or country restrictions.

[Table 21](#) lists the controller power settings and the corresponding output power levels for these two examples:

- 2.4 GHz) operation in EMEA (-E) regulatory domain:
 - Channel 2 using 11-Mbps data rates with 6-dBi external antenna
- 5 GHz (802.11a) operation:
 - Channel 52 with 6-dBi external antenna

Table 21 Example of Output Power Levels

| Controller Tx Power Settings ¹ | Radio Output Power | |
|--|--------------------|-----------------|
| | 802.11b/g/n (dBm) | 802.11a/n (dBm) |
| 1 (maximum) | 17 ² | 17 ² |
| 2 | 14 | 14 |
| 3 | 11 | 11 |
| 4 | 8 | 8 |
| 5 | 5 | 5 |
| 6 | 2 | 2 |
| 7 | -1 | -1 |
| 8 | - | - |

1. The Tx Power Level setting of 1 represents the maximum conducted power setting for the access point. Each subsequent controller power level (such as 2, 3, 4, etc.) represents approximately a 3-dBm reduction in transmit power from the previous power level.
2. The maximum output power levels obtained from [Table 7-2](#) and [Table 7-3](#).

- For 802.11b/g/n (see [Table 7-4](#) and [Table 21](#)), the manual controller Tx Power Level setting is 2.
- For 802.11a/n (see [Table 7-5](#) and [Table 21](#)), the manual controller Tx Power Level setting is 2.

Step 8 Click **Apply**.

Step 9 Close your Internet browser.
