APPENDIX B

Declarations of Conformity and Regulatory Information

This appendix provides declarations of conformity and regulatory information for the Cisco Aironet 1250 Series Autonomous Access Point and the Cisco Aironet 1250 Series Lightweight Access Point.

This appendix contains the following sections:

Manufacturers Federal Communication Commission Declaration of Conformity Statement

Models	Certification Numbers
AIR-RM1252A-A-K9	LDK102061
AIR-RM1252G-A-K9	LDK102062

Manufacturer:

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA

This device complies with Part 15 rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and radiates radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference. However, there is no guarantee that interference will not occur. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician.

Caution The Part 15 radio device operates on a non-interference basis with other devices operating at this frequency when using the integrated antennas. Any changes or modification to the product not expressly approved by Cisco could void the user's authority to operate this device.

Caution Within the 5.15 to 5.25 GHz band (5 GHz radio channels 34 to 48) the UNII devices are restricted to indoor operations to reduce any potential for harmful interference to co-channel Mobile Satellite System (MSS) operations.

VCCI Statement for Japan

Warning **This is a Class B product based on the standard of the Voluntary Control Council for Interference from Information Technology Equipment (VCCI). If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.**

警告 VCCI 準拠クラスB機器（日本）
この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。取扱説明書に従って正しい取り扱いをしてください。

Department of Communications—Canada

Certification Numbers

2461B-102061

2461B-102062

Canadian Compliance Statement

This Class B Digital apparatus meets all the requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numerique de la classe B respecte les exigences du Reglement sur le material broilleur du Canada.

This device complies with Class B Limits of Industry Canada. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Cisco Aironet 2.4-GHz Access Points are certified to the requirements of RSS-210 for 2.4-GHz spread spectrum devices, and Cisco Aironet 54-Mbps, 5-GHz Access Points are certified to the requirements of RSS-210 for 5-GHz spread spectrum devices.The use of this device in a system operating either partially or completely outdoors may require the user to obtain a license for the system according to the Canadian regulations. For further information, contact your local Industry Canada office.

European Community, Switzerland, Norway, Iceland, and Liechtenstein

Models:

AIR-RM1252A-E-K9
AIR-RM1252G-E-K9

Declaration of Conformity with Regard to the R&TTE Directive 1999/5/EC

Česky [Czech]:	Toto zařízení je v souladu se základními požadavky a ostatními odpovídajícími ustanoveními Směrnice 1999/5/EC.
Dansk [Danish]:	Dette udstyr er i overensstemmelse med de væsentlige krav og andre relevante bestemmelser i Direktiv 1999/5/EF.
Deutsch [German]:	Dieses Gerät entspricht den grundlegenden Anforderungen und den weiteren entsprechenden Vorgaben der Richtlinie 1999/5/EU.
Eesti [Estonian]:	See seade vastab direktiivi 1999/5/EÜ olulistele nõuetele ja teistele asjakohastele sätetele.
English:	This equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Español [Spanish]:	Este equipo cumple con los requisitos esenciales asi como con otras disposiciones de la Directiva 1999/5/CE.
Ελληνική [Greek]:	Αυτός ο εξοπλισμός είναι σε συμμόρφωση με τις ουσιώδεις απαιτήσεις και άλλες σχετικές διατάξεις της Οδηγίας 1999/5/EC.
Français [French]:	Cet appareil est conforme aux exigences essentielles et aux autres dispositions pertinentes de la Directive 1999/5/EC.
Íslenska [Icelandic]:	Þetta tæki er samkvæmt grunnkröfum og öðrum viðeigandi ákvæðum Tilskipunar 1999/5/EC.
Italiano [Italian]:	Questo apparato é conforme ai requisiti essenziali ed agli altri principi sanciti dalla Direttiva 1999/5/CE.
Latviešu [Latvian]:	Šī iekārta atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]:	Šis įrenginys tenkina 1999/5/EB Direktyvos esminius reikalavimus ir kitas šios direktyvos nuostatas.

142729

Nederlands [Dutch]:	Dit apparaat voldoet aan de essentiele eisen en andere van toepassing zijnde bepalingen van de Richtlijn 1999/5/EC.
Malti [Maltese]:	Dan l-apparat huwa konformi mal-ħtiġiet essenzjali u l-provedimenti l-ohra rilevanti tad-Direttiva 1999/5/EC.
Margyar [Hungarian]:	Ez a készülék teljesíti az alapvető követelményeket és más 1999/5/EK irányelvben meghatározott vonatkozó rendelkezéseket.
Norsk [Norwegian]:	Dette utstyret er i samsvar med de grunnleggende krav og andre relevante bestemmelser i EU-direktiv 1999/5/EF.
Polski [Polish]:	Urządzenie jest zgodne z ogólnymi wymaganiami oraz szczególnymi warunkami określonymi Dyrektywą UE: 1999/5/EC.
Português [Portuguese]:	Este equipamento está em conformidade com os requisitos essenciais e outras provisões relevantes da Directiva 1999/5/EC.
Română [Romanian]	Acest echipament este in conformitate cu cerintele esentiale si cu alte prevederi relevante ale Directivei 1999/5/EC.
Slovensko [Slovenian]:	Ta naprava je skladna z bistvenimi zahtevami in ostalimi relevantnimi pogoji Direktive 1999/5/EC.
Slovensky [Slovak]:	Toto zariadenie je v zhode so základnými požiadavkami a inými príslušnými nariadeniami direktív: 1999/5/EC.
Suomi [Finnish]:	Tämä laite täyttää direktiivin 1999/5/EY olennaiset vaatimukset ja on siinä asetettujen muiden laitetta koskevien määräysten mukainen.
Svenska [Swedish]:	Denna utrustning är i överensstämmelse med de väsentliga kraven och andra relevanta bestämmelser i Direktiv 1999/5/EC. 142730

This device complies with the EMC requirements (EN 60601-1-2) of the Medical Directive 93/42/EEC.

For 2.4 GHz radios, the following standards were applied:

- Radio: EN 300.328-1, EN 300.328-2
- EMC: EN 301.489-1, EN 301.489-17
- Safety: EN 60950

Note This equipment is intended to be used in all EU and EFTA countries. Outdoor use may be restricted to certain frequencies and/or may require a license for operation. For more details, contact Cisco Corporate Compliance.

For 54 Mbps, 5 GHz access points, the following standards were applied:

- Radio: EN 301.893
- EMC: EN 301.489-1, EN 301.489-17
- Safety: EN 60950

The following CE mark is affixed to the access point with a 2.4 GHz radio and a 54 Mbps, 5 GHz radio:

Declaration of Conformity for RF Exposure

The radio has been found to be compliant to the requirements set forth in CFR 47 Sections 2.1091, and 15.247 (b) (4) addressing RF Exposure from radio frequency devices as defined in Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields. The equipment shoud be installed more than 20 cm (7.9 in.) from your body or nearby persons.

The access point must be installed to maintain a minimum 20 cm (7.9 in.) co-located separation distance from other FCC approved indoor/outdoor antennas used with the access point. Any antennas or transmitters not approved by the FCC cannot be co-located with the access point. The access point's co-located 2.4 GHz and 5 GHz integrated antennas support a minimum separation distance of 8 cm (3.2 in.) and are compliant with the applicable FCC RF exposure limit when transmitting simultaneously.

Note Dual antennas used for diversity operation are not considered co-located.

Guidelines for Operating Cisco Aironet Access Points in Japan

This section provides guidelines for avoiding interference when operating Cisco Aironet access points in Japan. These guidelines are provided in both Japanese and English.

Japanese Translation

この機器の使用周波数帯では、電子レンジ等の産業・科学・医療用機器のほか工場の製造ライン等で使用されている移動体識別用の構内無線局（免許を要する無線局）及び特定小電力無線局（免許を要しない無線局）が運用されています。

1　この機器を使用する前に、近くで移動体識別用の構内無線局及び特定小電力無線局が運用されていないことを確認して下さい。

2　万一、この機器から移動体識別用の構内無線局に対して電波干渉の事例が発生した場合には、速やかに使用周波数を変更するか又は電波の発射を停止した上、下記連絡先にご連絡頂き、混信回避のための処置等(例えば、パーティションの設置など)についてご相談して下さい。

3　その他、この機器から移動体識別用の特定小電力無線局に対して電波干渉の事例が発生した場合など何かお困りのことが起きたときは、次の連絡先へお問い合わせ下さい。

連絡先：03-5549-6500

43768

English Translation

This equipment operates in the same frequency bandwidth as industrial, scientific, and medical devices such as microwave ovens and mobile object identification (RF-ID) systems (licensed premises radio stations and unlicensed specified low-power radio stations) used in factory production lines.

1. Before using this equipment, make sure that no premises radio stations or specified low-power radio stations of RF-ID are used in the vicinity.
2. If this equipment causes RF interference to a premises radio station of RF-ID, promptly change the frequency or stop using the device; contact the number below and ask for recommendations on avoiding radio interference, such as setting partitions.
3. If this equipment causes RF interference to a specified low-power radio station of RF-ID, contact the number below.

   Contact Number: 03-5549-6500

Administrative Rules for Cisco Aironet Access Points in Taiwan

This section provides administrative rules for operatingCisco Aironet access points inTaiwan. The rules are provided in both Chinese and English.

Access Points with IEEE 802.11a Radios

Chinese Translation

English Translation

This equipment is limited for indoor use.

All Access Points

Chinese Translation

低功率電波輻射性電機管理辦法

第十二條　經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條　低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

127048

English Translation

Administrative Rules for Low-power Radio-Frequency Devices

Article 12

For those low-power radio-frequency devices that have already received a type-approval, companies, business units or users should not change its frequencies, increase its power or change its original features and functions.

Article 14

The operation of the low-power radio-frequency devices is subject to the conditions that no harmful interference is caused to aviation safety and authorized radio station; and if interference is caused, the user must stop operating the device immediately and can't re-operate it until the harmful interference is clear.

The authorized radio station means a radio-communication service operating in accordance with the Communication Act.

The operation of the low-power radio-frequency devices is subject to the interference caused by the operation of an authorized radio station, by another intentional or unintentional radiator, by industrial, scientific and medical (ISM) equipment, or by an incidental radiator.

Declaration of Conformity Statements

All the Declaration of Conformity statements related to this product can be found at the following URL:

http://www.ciscofax.com

Declaration of Conformity Statements for European Union Countries

The Declaration of Conformity statement for the European Union countries is listed below:

CHAPTER 5

Cisco Aironet 1250 Series Autonomous Access Point

This section lists the 1250 series autonomous access point (model: AIR-AP1251)2.4-GHz pre-n IEEE 802.11n and the 5-GHz pre-n IEEE 802.11n 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

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 (pre-n IEEE 802.11n)

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 5-1 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 with up to 10-dBi antennas.

Table 5-1 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			802.11g Dual Antennas 6 to 54 Mbps			802.11g Dual Antennas with Beam Forming			HT-20 MHz Dual Antennas M0 to M15			HT-40 MHz Dual Antennas M0 to M15		
	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	Tx A	Tx B	Total Power	Tx A	Tx B	Total Power
2412	1	3	20	OFF	20	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17
2417	2	4	20	OFF	20	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17
2422	3	5	20	OFF	20	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17
2427	4	6	20	OFF	20	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17
2432	5	3, 7	20	OFF	20	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17
2437	6	4, 8	23	OFF	23	20	OFF	20	20	20	23	20	20	23	17	17	20	17	17	20
2442	7	5, 9	20	OFF	20	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17
2447	8	6	20	OFF	20	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17
2452	9	7	20	OFF	20	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17
2457	10	8	20	OFF	20	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17
2462	11	9	20	OFF	20	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17
2467	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2472	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2484	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 5-2 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 5-2 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 Anetnnas

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

Table 5-3 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 6-dBi antennas.

Table 5-3 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			802.11g Dual Antennas 6 to 54 Mbps			802.11g Dual Antennas with Beam Forming			HT-20 MHz Dual Antennas M0 to M15			HT-40 MHz Dual Antennas M0 to M15		
	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	Tx A	Tx B	Total Power	Tx A	Tx B	Total Power
2412	1	3	14	OFF	14	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14
2417	2	4	14	OFF	14	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14
2422	3	5	14	OFF	14	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14
2427	4	6	14	OFF	14	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14
2432	5	3, 7	14	OFF	14	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14
2437	6	4, 8	14	OFF	14	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14
2442	7	5, 9	14	OFF	14	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14
2447	8	6	14	OFF	14	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14
2452	9	7	14	OFF	14	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14
2457	10	8	14	OFF	14	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14
2462	11	9	14	OFF	14	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14
2467	12	–	14	OFF	14	14	OFF	14	11	11	14	8	8	11	11	11	14	–	–	–
2472	13	–	14	OFF	14	14	OFF	14	11	11	14	8	8	11	11	11	14	–	–	–
2484	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 5-4 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 9-dBi antennas.

Table 5-4 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			802.11g Dual Antennas 6 to 54 Mbps			802.11g Dual Antennas with Beam Forming			HT-20 MHz Dual Antennas M0 to M15			HT-40 MHz Dual Antennas M0 to M15		
	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	Tx A	Tx B	Total Power	Tx A	Tx B	Total Power
2412	1	3	11	OFF	11	11	OFF	11	8	8	11	5	5	8	8	8	11	8	8	11
2417	2	4	11	OFF	11	11	OFF	11	8	8	11	5	5	8	8	8	11	8	8	11
2422	3	5	11	OFF	11	11	OFF	11	8	8	11	5	5	8	8	8	11	8	8	11
2427	4	6	11	OFF	11	11	OFF	11	8	8	11	5	5	8	8	8	11	8	8	11
2432	5	3, 7	11	OFF	11	11	OFF	11	8	8	11	5	5	8	8	8	11	8	8	11
2437	6	4, 8	11	OFF	11	11	OFF	11	8	8	11	5	5	8	8	8	11	8	8	11
2442	7	5, 9	11	OFF	11	11	OFF	11	8	8	11	5	5	8	8	8	11	8	8	11
2447	8	6	11	OFF	11	11	OFF	11	8	8	11	5	5	8	8	8	11	8	8	11
2452	9	7	11	OFF	11	11	OFF	11	8	8	11	5	5	8	8	8	11	8	8	11
2457	10	8	11	OFF	11	11	OFF	11	8	8	11	5	5	8	8	8	11	8	8	11
2462	11	9	11	OFF	11	11	OFF	11	8	8	11	5	5	8	8	8	11	8	8	11
2467	12	–	11	OFF	11	11	OFF	11	8	8	11	5	5	8	8	8	11	–	–	–
2472	13	–	11	OFF	11	11	OFF	11	8	8	11	5	5	8	8	8	11	–	–	–
2484	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 5-5 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 10-dBi antennas.

Table 5-5 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 Anetnnas

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

Table 5-6 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 5-6 Channels and Maximum Conducted Power for the 2.4-GHz Radio 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			802.11g Dual Antennas 6 to 54 Mbps			802.11g Dual Antennas with Beam Forming			HT-20 MHz Dual Antennas M0 to M15			HT-40 MHz Dual Antennas M0 to M15		
	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	Tx A	Tx B	Total Power	Tx A	Tx B	Total Power
2412	1	3	14	OFF	14	17	OFF	17	14	14	17	11	11	14	14	14	17	17	17	20
2417	2	4	14	OFF	14	17	OFF	17	14	14	17	11	11	14	14	14	17	17	17	20
2422	3	5	14	OFF	14	17	OFF	17	14	14	17	11	11	14	14	14	17	17	17	20
2427	4	6	14	OFF	14	17	OFF	17	14	14	17	11	11	14	14	14	17	17	17	20
2432	5	3, 7	14	OFF	14	17	OFF	17	14	14	17	11	11	14	14	14	17	17	17	20
2437	6	4, 8	14	OFF	14	17	OFF	17	14	14	17	11	11	14	14	14	17	17	17	20
2442	7	5, 9	14	OFF	14	17	OFF	17	14	14	17	11	11	14	14	14	17	17	17	20
2447	8	6	14	OFF	14	17	OFF	17	14	14	17	11	11	14	14	14	17	17	17	20
2452	9	7	14	OFF	14	17	OFF	17	14	14	17	11	11	14	14	14	17	17	17	20
2457	10	8	14	OFF	14	17	OFF	17	14	14	17	11	11	14	14	14	17	17	17	20
2462	11	9	14	OFF	14	17	OFF	17	14	14	17	11	11	14	14	14	17	17	17	20
2467	12	–	14	OFF	14	17	OFF	17	14	14	17	11	11	14	14	14	17	–	–	–
2472	13	–	14	OFF	14	17	OFF	17	14	14	17	11	11	14	14	14	17	–	–	–
2484	14	–	14	OFF	14	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

5 GHz Band (pre-n IEEE 802.11n)

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

Note Dynamic Frequency Selection (DFS) operation and operation from 5500 to 5700 MHz has not been authorized as required by the rules of the Federal Communications Commission and is not supported in the -A regulatory domain until authorization is obtained.

Table 5-7 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 5-7 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			802.11a Dual Antennas 6 to 54 Mbps			802.11a Dual Antennas with Beam Forming			HT-20 MHz Dual Antennas M0 to M15			Duplicate (2x20 MHz) Dual Antennas 6 Mbps			HT-40 MHz Dual Antennas M0 to M15		
		Tx A	Tx B	Total Power	Tx A	Tx B	Total Power	Tx A	Tx B	Total Power	Tx A	Tx B	Total Power	Tx A	Tx B	Total Power	Tx A	Tx B	Total Power
5150-5250 MHz																			
36	5180	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14	11	11	14
40	5200	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14	11	11	14
44	5220	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14	11	11	14
48	5240	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14	11	11	14
5250 to 5350 MHz																			
52	5260	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
56	5280	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
60	5300	17	OFF	17	17	17	20	14	14	17	17	17	20	11	11	14	11	11	14
64	5320	17	OFF	17	17	17	20	14	14	17	17	17	20	11	11	14	11	11	14
5470 to 5725 MHz																			
100	5500	17	OFF	17	17	OFF	20	14	14	17	17	17	20	14	14	17	14	14	17
104	5520	17	OFF	17	17	OFF	20	14	14	17	17	17	20	14	14	17	14	14	17
108	5540	17	OFF	17	17	OFF	20	14	14	17	17	17	20	17	17	20	17	17	20
112	5560	17	OFF	17	17	OFF	20	14	14	17	17	17	20	17	17	20	17	17	20
116	5580	17	OFF	17	17	OFF	20	14	14	17	17	17	20	17	17	20	17	17	20
120	5600	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
124	5620	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
128	5640	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
132	5660	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
136	5680	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
140	5700	17	OFF	17	17	17	20	14	14	17	17	17	20	–	–	–	–	–	–
5725 to 5850 MHz																			
149	5745	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
153	5765	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
157	5785	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
161	5805	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
165	5825	17	OFF	17	17	17	20	17	17	20	17	17	20	–	–	–	–	–	–

Table 5-8 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 5-8 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			802.11a Dual Antennas 6 to 54 Mbps			802.11a Dual Antennas with Beam Forming			HT-20 MHz Dual Antennas M0 to M15			Duplicate (2x20 MHz) Dual Antennas 6 Mbps			HT-40 MHz Dual Antennas M0 to M15		
		Tx A	Tx B	Total Power	Tx A	Tx B	Total Power	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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
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	20	17	17	20	17	17	20	17	17	20
153	5765	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
157	5785	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
161	5805	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
165	5825	17	OFF	17	17	17	20	17	17	20	17	17	20	–	–	–	–	–	–

Table 5-9 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 5-9 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			802.11a Dual Antennas 6 to 54 Mbps			802.11a Dual Antennas with Beam Forming			HT-20 MHz Dual Antennas M0 to M15			Duplicate (2x20 MHz) Dual Antennas 6 Mbps			HT-40 MHz Dual Antennas M0 to M15		
		Tx A	Tx B	Total Power	Tx A	Tx B	Total Power	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	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
40	5200	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
44	5220	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
48	5240	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
5250 to 5350 MHz																			
52	5260	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
56	5280	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
60	5300	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
64	5320	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
5470 to 5725 MHz																			
100	5500	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
104	5520	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
108	5540	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
112	5560	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
116	5580	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
120	5600	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
124	5620	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
128	5640	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
132	5660	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
136	5680	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
140	5700	17	OFF	17	17	17	20	17	17	20	17	17	20						
5725 to 5850 MHz																			
149	5745	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
153	5765	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
157	5785	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
161	5805	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
165	5825	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 5-10 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 5-10 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			802.11a Dual Antennas 6 to 54 Mbps			802.11a Dual Antennas with Beam Forming			HT-20 MHz Dual Antennas M0 to M15			Duplicate (2x20 MHz) Dual Antennas 6 Mbps			HT-40 MHz Dual Antennas M0 to M15		
		Tx A	Tx B	Total Power	Tx A	Tx B	Total Power	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	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
40	5200	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
44	5220	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
48	5240	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
5250 to 5350 MHz																			
52	5260	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
56	5280	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
60	5300	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
64	5320	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 5-11 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 5-11 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			802.11a Dual Antennas 6 to 54 Mbps			802.11a Dual Antennas with Beam Forming			HT-20 MHz Dual Antennas M0 to M15			Duplicate (2x20 MHz) Dual Antennas 6 Mbps			HT-40 MHz Dual Antennas M0 to M15		
		Tx A	Tx B	Total Power	Tx A	Tx B	Total Power	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	8	8	11	5	5	8	8	8	11	8	8	11	8	8	11
40	5200	14	OFF	14	8	8	11	5	5	8	8	8	11	8	8	11	8	8	11
44	5220	14	OFF	14	8	8	11	5	5	8	8	8	11	8	8	11	8	8	11
48	5240	14	OFF	14	8	8	11	5	5	8	8	8	11	8	8	11	8	8	11
5250 to 5350 MHz																			
52	5260	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
56	5280	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
60	5300	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
64	5320	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
5470 to 5725 MHz																			
100	5500	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
104	5520	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
108	5540	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
112	5560	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
116	5580	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
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	20	17	17	20	17	17	20	17	17	20
153	5765	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
157	5785	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
161	5805	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
165	5825	17	OFF	17	17	17	20	17	17	20	17	17	20	–	–	–	–	–	–

Table 5-12 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 5-12 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			802.11a Dual Antennas 6 to 54 Mbps			802.11a Dual Antennas with Beam Forming			HT-20 MHz Dual Antennas M0 to M15			Duplicate (2x20 MHz) Dual Antennas 6 Mbps			HT-40 MHz Dual Antennas M0 to M15		
		Tx A	Tx B	Total Power	Tx A	Tx B	Total Power	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	8	8	11	11	11	14	11	11	14	11	11	14
40	5200	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14	11	11	14
44	5220	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14	11	11	14
48	5240	14	OFF	14	11	11	14	8	8	11	11	11	14	11	11	14	11	11	14
5250 to 5350 MHz																			
52	5260	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
56	5280	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
60	5300	17	OFF	17	14	14	17	11	11	14	14	14	17	11	11	14	11	11	14
64	5320	11	OFF	11	14	14	17	11	11	14	14	14	17	11	11	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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
136	5680	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
140	5700	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
5725 to 5850 MHz																			
149	5745	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
153	5765	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
157	5785	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
161	5805	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
165	5825	17	OFF	17	17	17	20	17	17	20	17	17	20	–	–	–	–	–	–

Table 5-13 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 5-13 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			802.11a Dual Antennas 6 to 54 Mbps			802.11a Dual Antennas with Beam Forming			HT-20 MHz Dual Antennas M0 to M15			Duplicate (2x20 MHz) Dual Antennas 6 Mbps			HT-40 MHz Dual Antennas M0 to M15		
		Tx A	Tx B	Total Power	Tx A	Tx B	Total Power	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	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
40	5200	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
44	5220	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
48	5240	17	OFF	17	17	17	20	14	14	17	17	17	20	17	17	20	17	17	20
5250 to 5350 MHz																			
52	5260	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
56	5280	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
60	5300	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
64	5320	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 5-14 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 5-14 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			802.11a Dual Antennas 6 to 54 Mbps			802.11a Dual Antennas with Beam Forming			HT-20 MHz Dual Antennas M0 to M15			Duplicate (2x20 MHz) Dual Antennas 6 Mbps			HT-40 MHz Dual Antennas M0 to M15		
		Tx A	Tx B	Total Power	Tx A	Tx B	Total Power	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	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
40	5200	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
44	5220	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
48	5240	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
5250 to 5350 MHz																			
52	5260	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
56	5280	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
60	5300	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	14	14	17
64	5320	17	OFF	17	14	14	17	11	11	14	14	14	17	14	14	17	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	20	17	17	20	17	17	20	17	17	20
153	5765	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
157	5785	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
161	5805	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
165	5825	17	OFF	17	17	17	20	17	17	20	17	17	20	–	–	–	–	–	–

Table 5-7 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 5-15 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			802.11a Dual Antennas 6 to 54 Mbps			802.11a Dual Antennas with Beam Forming			HT-20 MHz Dual Antennas M0 to M15			Duplicate (2x20 MHz) Dual Antennas 6 Mbps			HT-40 MHz Dual Antennas M0 to M15		
		Tx A	Tx B	Total Power	Tx A	Tx B	Total Power	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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
40	5200	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
44	5220	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
48	5240	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
5250 to 5350 MHz																			
52	5260	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
56	5280	14	OFF	14	11	11	14	8	8	11	11	11	14	–	–	–1	–	–	–
60	5300	14	OFF	14	11	11	14	8	8	11	11	11	14	8	8	11	11	11	14
64	5320	14	OFF	14	11	11	14	8	8	11	11	11	14	8	8	11	11	11	14
5470 to 5725 MHz																			
100	5500	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17	17	17	20
104	5520	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17	17	17	20
108	5540	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17	17	17	20
112	5560	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17	17	17	20
116	5580	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17	17	17	20
120	5600	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17	17	17	20
124	5620	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17	17	17	20
128	5640	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17	17	17	20
132	5660	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17	17	17	20
136	5680	17	OFF	17	17	17	20	17	17	20	17	17	20	14	14	17	17	17	20
140	5700	17	OFF	17	17	17	20	17	17	20	17	17	20	–	–	–	–	–	–
5725 to 5850 MHz																			
149	5745	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
153	5765	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
157	5785	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
161	5805	17	OFF	17	17	17	20	17	17	20	17	17	20	17	17	20	17	17	20
165	5825	17	OFF	17	17	17	20	17	17	20	17	17	20	–	–	–	–	–	–

Special Country Restrictions

Table 5-16 lists special restrictions for wireless operation in some countries.

Table 5-16 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	–E	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 Autonomous Access Point Output Power

This section provides instructions for changing the 1250 series autonomous access point output power to comply with the maximum power limits imposed by special regulatory and country restrictions (see the"2.4 GHz Band (pre-n IEEE 802.11n)" section on page 5-2, the "5 GHz Band (pre-n IEEE 802.11n)" section on page 5-7, and the "Special Country Restrictions" section on page 5-17).

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 configuration, access to the unit should be password protected by the network administrator to maintain regulatory compliance.

To change the access point output power level, follow these instructions:

Step 1 Use your web-browser to access your access point.

Step 2 When the Summary Status page displays, click **Radio0-802.11G** or **Radio0-802.11A**.

Step 3 On the radio status page, click **Settings** and the radio settings page displays.

Step 4 For the 802.11G radio, follow these steps:

a. Under CCK Transmit Power (dBm), click the desired output power level.

b. Under OFDM Transmit Power (dBm), click the desired output power level.

Step 5 For the 802.11A radio, under Transmit Power (dBm), click the desired output power level.

Step 6 Scroll down to the bottom of the page and click **Apply**.

Step 7 Close your web-browser.

APPENDIX C

Access Point Specifications

Table C-1 lists the technical specifications for the Cisco Aironet 1250 Series Access Point.

Table C-1 Access Point Specifications

Category	2.4 GHz Radio Specifications	5 GHz Radio Specifications
Size	8.1 in W x 9.5 in D x 2.3 in H 20.6 cm W x 24.1 cm D x 5.8 cm H	
Weight	Base access point (without modules): 2.1 lbs (0.78 kg) 2.4- GHz radio module: 1.4 lbs (0.52 kg) 5-GHz radio module: 1.4 lbs (0.52 kg) Blank radio module: 1.1 lbs (0.41 kg)	
Indicators	Three indicators on top of unit: Ethernet traffic, status, and radio traffic.	
Connectors	Base unit (bottom of access point): DC power connector (for plug-in power module); RJ-45 connector for 10BASE-T or 100BASE-T or 1000BASE-T Ethernet connections; RJ-45 connector for serial console port connections. 2.4 GHz radio module (left to right) RP-TNC antenna connectors: Left (A-Tx/Rx); middle (C-Rx), right (B-Tx/Rx). 5-GHz radio module (left to right): Left (A-Tx/Rx); middle (C-Rx), right (B-Tx/Rx).	
Input voltage	44 to 57 VDC (56 VDC nominal)	
Input power	12.95 W (Up to 15.4 W with a 100 m CAT 5E Ethernet cable)—maximum	
Operating temperature	Access point, DC power module, and power injector: –4 to 131°F (–20 to 55°C)	
Storage temperature	-40 to 158°F (-40 to 70°C)	
Humidity	10 to 90% non-condensing	
Operating altitude	10,000 ft (3048 m) maximum	

Table C-1 Access Point Specifications (continued)

Category	2.4 GHz Radio Specifications			5 GHz Radio Specifications
Power output	**802.11b**	**802.11g and 802.11n**		**802.11n**
	23 dBm 20 dBm 17 dBm 14 dBm) 11 dBm 8 dBm 5 dBm 2 dBm -1 dBm (Depending on the regulatory domain in which the access point is installed)	17 dBm 14 dBm 11 dBm 8 dBm 5 dBm 2 dBm -1 dBm (Depending on the regulatory domain in which the access point is installed)		50 mW (17 dBm) 25 mW (14 dBm) 12 mW (11 dBm) 6 mW (8 dBm) 3 mW (5 dBm) 2 mW (2 dBm) 1 mW (-1 dBm) (Depending on the regulatory domain in which the access point is installed)
	Note For the maximum power and the channels allowed in your regulatory domain, refer to the *Channels and Maximum Power Settings for Cisco Aironet Autonomous Access Points and Bridges* or the *Channels and Maximum Power Settings for Cisco Aironet Lightweight Access Points*.			
Antenna	Three external antenna connectors on each radio module.			
Frequency	2.400 to 2.497 GHz (Depending on the regulatory domain in which the access point is installed)			5.15 to 5.25 GHz 5.25 to 5.35 GHz 5.470 to 5.725 GHz 5.725 to 5.85 GHz (Depending on the regulatory domain in which the access point is installed)
Typical indoor range (across open office environment)	105 ft (32 m) @ 54 Mbps 180 ft (55 m) @ 48 Mbps 260 ft (79 m) @ 36 Mbps 285 ft (87 m) @ 24 Mbps 330 ft (100 m) @ 18 Mbps 355 ft (108 m) @ 12 Mbps 365 ft (111 m) @ 11 Mbps 380 ft (116 m) @ 9 Mbps 410 ft (125 m) @ 6 Mbps 425 ft (130 m) @ 5.5 Mbps 445 ft (136 m) @ 2 Mbps 460 ft (140 m) @ 1 Mbps **Note** Measured with a 2.2 dBi dipole antenna			85 ft (26 m) @ 54 Mbps 150 ft (46 m) @ 48 Mbps 210 ft (64 m) @ 36 Mbps 230 ft (70 m) @ 24 Mbps 260 ft (79 m) @ 18 Mbps 280 ft (85 m) @ 12 Mbps 310 ft (94 m) @ 9 Mbps 330 ft (100 m) @ 6 Mbps **Note** Measured with 3.5 dBi Omni-directional antenna
Data Rates (Mbps)	802.11b	802.11g	802.11n	802.11n
	1, 2, 5.5, and 11	6, 9, 12, 18, 24, 36, 48, and 54	6.5, 7.22, 13, 13.5, 14.44, 15, 19.5, 21.67, 26, 27, 28.89, 30, 39, 40.5, 43.33, 45, 52, 54, 57.78, 58.5, 60, 65, 72.22, 78, 81, 86.67, 90, 104, 108, 115.56, 117, 120, 121.5, 130, 135, 144.44, 157.5, 162, 180, 216, 180, 216, 240, 243, 270, and 300	

Table C-1 Access Point Specifications (continued)

Category	2.4 GHz Radio Specifications	5 GHz Radio Specifications
Compliance	The 1250 series access point complies with UL 2043 for products installed in a building's environmental air handling spaces, such as above suspended ceilings. **Caution** The 1250 power injector (AIR-PWRINJ4), the 1250 DC power module (AIR-PWR-SPLY1), and the antennas should not be placed in a building's environmental air space, such as above suspended ceilings.	
Safety	IEC60950-1 UL60950-1 CAN/CSA C22.2 Number 60950-1-03 EN60950-1 UL 2043	
Radio approvals	FCC Parts 15.401 -15.407 FCC Part 15.247 FCC Buletin OET-65C RSS-210 RSS-102 EN 301.893 EN-300.328 AS 4268.2 ARIB-STD-33B ARIB-STD-66 ARIB STD-T71	
EMI and susceptibility	FCC Part 15.107 and 15.109 Class B ICES-003 Class B (Canada) EN 55022 B AS/NZS 3548 Class B VCCI Class B EN 301.489-1 EN 301.489-17 EN 60601-1-2	
RF exposure	OET-65C RSS-102 ANSI C95.1	