CW9178 Datasheet

Ultra High-Performance Wi-Fi 7 Wireless

Cisco's new Wi-Fi 7 access points power the next generation of wireless experiences, designed to revolutionize connectivity and digital experiences. Offering unprecedented speeds, enhanced security, and resilient connectivity, these products are ideal for high-density environments and critical applications. They seamlessly integrate into your existing network, whether on-premises, cloud-based, or hybrid, providing flexible deployment options to suit various organizational needs.

Cisco Wireless' Wi-Fi 7 access points enable transformative user experiences. Enterprises can leverage the predictability and low latency of Wi-Fi 7 to support better video streaming, augmented reality (AR), and virtual reality (VR) applications. By connecting people and things within physical spaces, Cisco's wireless solutions with Wi-Fi 7 offer real-time insights and actions such as indoor navigation and personalized user experiences.

Create differentiated customer experiences, accelerate digital business transformation, and prepare networks for the future with Cisco's Wi-Fi 7 solutions. With faster data transfer rates, reduced network congestion, and simplified network management with AI-driven insights and automation, Cisco Wireless 9178 Series access points provide the foundation for the future of wireless.

The Cisco Wireless 9178 Series Access Points (AP) allow you to choose between on-premise and cloud management. They are the next-generation AP perfect for mission-critical deployments and support the new 6GHz Wi-Fi band and Wi-Fi 7 capabilities. They are resilient, secure, and intelligent.

The Cisco Wireless 9178I Wi-Fi 7 access points enable operation in the 2.4, 5 and 6 GHz bands to provide more reliable and secure networks, with higher throughput, more capacity, and less device interference. These access points provide four 4x4 radios and a host of cutting-edge features, and IoT radios.

Operational management is flexible because customers can change their network management whenever they want. If a network with Cisco Wireless 9178I Access Point was originally an on-premises deployment (WLC Management Mode), it can be changed to cloud-based management without the need to purchase and redistribute additional hardware, saving you money when deploying your network.

With the industry’s leading on-premises network platform (Catalyst) joining the industry’s leading cloud IT platform (Meraki), these access points provide an unparalleled network experience. For organizations that need a wireless solution to deliver a reliable, flexible, and superior experience for their users, the Cisco Wireless 9178 Series Access Point is the best choice.

Cisco Meraki Cloud Management

Pairing Cisco Wireless 9178I Series Access Points with the Meraki dashboard gives organizations a unified IT experience for network monitoring and management. Dashboard provides an intuitive and interactive web interface connecting your network to the industry’s leading cloud IT platform.

Through Dashboard, Meraki provides sophisticated and scalable tools to automate network optimization, deploy policy and segmentation configurations across thousands of sites and devices, and manage a full-stack network from SD-WAN to Access and IoT technologies. The platform supports over 3.5 million active networks around the world.

The Cisco Wireless 9178I and dashboard allow for the integration of features such as:

- Cisco Spaces
- Cisco Identity Services Engine
- Meraki Health intelligent optimization and assurance
- Meraki Vision, smart cameras, and sensors for network closet monitoring

Cisco Catalyst Center and Catalyst 9800 WLC support

The Cisco Wireless 9178I Access Points can also be paired with Catalyst 9800 WLC and Cisco Catalyst Center. Cisco Catalyst Center allows you to understand your network with real-time analytics, quickly detect and contain security threats, and easily provide network-wide consistency through automation and virtualization.

Working together, the CW9178I Access Point Series and Cisco DNA offer such features as:

- Cisco Spaces
- Cisco Identity Services Engine

- Cisco DNA Analytics and Assurance along with Intelligence Capture (iCAP)
- For information about Cisco DNA, refer to the Cisco DNA Solution Overview.

Extremely High-Performance 802.11be compatible wireless

The CW9178I is a cloud-managed Tri-band 4x4:4 802.11be compatible access point that raises the bar for wireless performance and efficiency. Designed for next-generation deployments in offices, schools, hospitals, retail shops, and hotels, the CW9178I offers high throughput, enterprise-grade security, and simple management.

The CW9178I provides a maximum of 24 Gbps aggregate frame rate with concurrent 2.4 GHz, 5 GHz, and 6 GHz radios. A dedicated fourth radio provides real-time WIDS/WIPS with automated RF optimization, and a fifth integrated IoT radio delivers Bluetooth scanning and beaconing.

The Cisco Wireless CW9178I supports a software-defined flex radio which can be operated in a Tri-Radio or Quad-Radio. The option to operate in Quad-Radio provides dual 5 GHz configuration that will help in high-density deployments.

With the combination of cloud management, high-performance hardware, multiple radios, and advanced software features, the CW9178 makes an outstanding platform for the most demanding of uses—including high-density deployments and bandwidth or performance-intensive applications like voice (Cisco WebEx) and high-definition video.

CW9178I and Meraki cloud management

Management of the Cisco Wireless 9178I is through the Meraki cloud, with an intuitive browser-based interface that enables rapid deployment without time-consuming deployment complexity and time-consuming staging process. Since the CW9178I is self-configuring and managed over the web, it can be deployed at a remote location in a matter of minutes, even without on-site IT staff.

24x7 monitoring via the Meraki cloud delivers real-time alerts if the network encounters problems. Remote diagnostic tools enable immediate troubleshooting over the web so that distributed networks can be managed with a minimum of hassle.

The Cisco Wireless 9178I firmware can be scheduled to upgrade to a latest version at will by the customer. New features, bug fixes, and enhancements are delivered seamlessly over the web. This means no manual software updates to download or missing security patches to worry about.

Product Highlights

- Four 4x4:4 MU-MIMO 802.11be compatible
- 24 Gbps quad-radio aggregate frame rate
- 24x7 real-time WIDS/WIPS and spectrum analytics via dedicated fourth radio
- Integrated Bluetooth Low Energy beacon and scanning radio
- Dual 10 Gbps mGig ethernet port support for PoE and link redundancy
- USB 2.0 host interface (Type A connector) with 9.0W power budget
- Enhanced transmit power and receive sensitivity
- Full-time Wi-Fi location tracking via a dedicated t
- Integrated enterprise security and guest access
- Application-aware traffic shaping
- Optimized for voice and video
- Self-configuring, plug-and-play deployment
- Common hardware capable of connecting to Me

Features

Quad–radio aggregate frame rate of up to 24 Gbps

A 6 GHz 4x4:4, Dual 5 GHz 4x4:4 and 2.4 GHz 4x4:4 radio offer a combined Quad radio aggregate frame rate of 24 Gbps*, with up to 11,520 Mbps in 6GHz band, 5,700 Mbps 5 GHz band (each Radio) and, 688 Mbps in the 2.4 GHz band. Technologies like transmit beamforming and enhanced receive sensitivity allow the CW9178I to support a higher client density than typical enterprise-class access points, resulting in better performance for more clients, from each AP.

* Refers to maximum over-the-air data frame rate capability of the radio chipset, and may exceed data rates allowed by IEEE 802.11be operation.

Multi Link Operation (MLO)

With support for features of 802.11be, the CW9178I can operate in multiple bands simultaneously to achieve higher throughput and reduced latency. This increases the total network performance and improves the end-user experience.

Multi User Multiple Input Multiple Output (MU-MIMO)

With support for features of 802.11ax, the CW9178I offers DL and UL MU-MIMO and OFDMA for more efficient transmission to multiple clients. Especially suited to environments with numerous mobile devices, MU-MIMO and OFDMA enable multiple clients to receive data simultaneously. This increases the total network performance and improves the end-user experience.

Bluetooth Low Energy Beacon and Scanning Radio

An integrated Bluetooth radio provides seamless deployment of BLE Beacon functionality and effortless visibility of Bluetooth devices. The CW9178I enables the next generation of location-aware applications while future-proofing deployments, ensuring it’s ready for any new customer engagement strategies.

Automatic Cloud-Based RF Optimization

The RF data collected by the dedicated fourth radio is continuously fed back to the Meraki cloud. This data is then used to automatically tune the channel selection, transmit power, and client connection settings for optimal performance under even the most challenging RF conditions.

Integrated Enterprise Security and Guest Access

The CW9178I features integrated, easy-to-use security technologies to provide secure connectivity for employees and guests alike. Advanced security features such as AES hardware-based encryption and Enterprise authentication with 802.1X and Active Directory integration provide wired-like security while still being easy to configure. CW9178I will also support 192-bit encryption along with WPA3 support for added security of the wireless network. One-click guest isolation provides secure, Internet-only access for visitors. PCI compliance reports check network settings against PCI requirements to simplify secure retail deployments.

Dedicated Scanning Radio Delivers 24x7 Air Marshal and RF analytics

The CW9178I’s dedicated tri-band scanning and security radio continually assesses the environment, characterizing RF interference and containing (in 2.4GHz and 5GHz only, since 6GHz mandates PMF) wireless threats like rogue access points. There’s no need to choose between wireless security (AirMarshal), advanced RF analysis, and serving client data - a dedicated fourth radio means that all functions occur in real-time, without any impact on client traffic or AP throughput.

Enterprise Mobility Management (EMM) & Mobile Device Management (MDM) Integration

Meraki Systems Manager natively integrates with the CW9178I to offer automatic, context-aware security. Meraki Systems Manager’s self-service enrollment helps to rapidly deploy MDM without installing additional equipment, and then dynamically tie firewall and traffic shaping policies to client posture.

Application-Aware Traffic Shaping

The CW9178I includes an integrated layer 7 packet inspection, classification, and control engine, enabling the configuration of QoS policies based on traffic type, helping to prioritize mission-critical applications while setting limits on recreational traffic like peer-to-peer and video streaming. Policies can be implemented per network, per SSID, per user group, or individual user for maximum flexibility and control.

Voice and Video Optimizations

Industry-standard QoS features are built-in and easy to configure. Wireless Multimedia (WMM) access categories, 802.1p, and DSCP standards support, all ensure important applications get prioritized correctly, not only on the CW9178I, but on other devices in the network. Unscheduled Automatic Power Save Delivery (U-APSD) and new Target Wait Time feature in 802.11ax clients ensure minimal battery drain on wireless VoIP phones.

Self-configuring, Self-Maintaining, Always Up-to-Date

When plugged in, the CW9178I automatically connects to the Meraki cloud, downloads its configuration, and joins the appropriate network. Administrators can schedule firmware upgrades for their dashboard network seamlessly. This ensures the network is kept up-to-date with bug fixes, security updates, and new features.

Meraki Health

CW9178I will support all the latest and greatest analytics to provide machine learning-based anomaly detection, server root cause analysis, wireless client scoring based on performance and connectivity metrics and network benchmarking for networks of similar size and vertical. Along with these features, CW9178 will provide advanced location analytics via API and graphs in the dashboard to provide a clear picture of client density and their movement across the floor plan.

Choice of Mode

Cisco Wireless 9178 Series Access Points can be managed either on-premises with Catalyst 9800 Wireless Lan Controllers (WLC) or cloud-managed through the Meraki dashboard. Customers have the flexibility to deploy these access points in one mode and migrate to the other mode in the future.

Specifications

Category	Specifications

Radios	• Tri-radio mode (Default):
	  ◦ 2.4 GHz 802.11 b/g/n/ac/ax/be client access radio
	  ◦ 5 GHz 802.11 a/n/ac/ax/be client access radio
	  ◦ 6 GHz 802.11 ax/be client access radio
	• Quad-radio mode:
	  ◦ 2.4 GHz 802.11 b/g/n/ac/ax/be client access radio
	  ◦ 5 GHz 802.11 a/n/ac/ax/be client access radio (UNII-1 & 2 bands)
	  ◦ 5 GHz 802.11 a/n/ac/ax/be client access radio (UNII-2E & 3 bands)
	  ◦ 6 GHz 802.11 ax/be client access radio

	• 2.4 GHz, 5 GHz, and 6 GHz tri-band Air Marshal WIDS/WIPS, spectrum analysis, & location analytics radio
	• 2.4 GHz Bluetooth Low Energy (BLE) radio with Beacon and BLE scanning support Concurrent operation of all upgradable to 6.0 in the future.
	• Supported frequency bands (country-specific restrictions apply):
	  ◦ 2.401 - 2.484 GHz
	  ◦ 5.150 - 5.250 GHz (UNII-1)
	  ◦ 5.250 - 5.350 GHZ (UNII-2A)
	  ◦ 5.490 - 5.730 GHz (UNII-2C)
	  ◦ 5.735 -5.825 GHz (UNII-3)

GPS	Built-in GPS/ GNSS
Antenna	• 2.4-GHz: Peak gain 4 dBi, internal antenna, omnidirectional in azimuth • 5-GHz: Peak gain 5 dBi, internal antenna, omnidirectional in azimuth • 6-GHz: Peak gain 6 dBi, internal antenna, omnidirectional in azimuth
802.11ax, 802.11ac Wave 2 and 802.11n Capabilities	• DL-OFDMA, UL-OFDMA, TWT support, BSS coloring • 4 x 4 multiple input, multiple output (MIMO) with four spatial streams • SU-MIMO, UL MU-MIMO, and DL MU-MIMO support • Maximal ratio combining (MRC) & beamforming • 20 and 40 MHz channels (802.11n); 20, 40 and 80 MHz channels (802.11ac Wave 2); 20, 40 and 80 MHz char **Note:** 40MHz channels are supported only in the 5GHz band. • Up to 1024-QAM on both 2.4 GHz and 5 GHz bands • Packet aggregation
802.11be Capabilities	• Up to 4096-QAM on 2.4 GHz, 5 GHz and 6 GHz bands • 20 MHz channels on 2.4 GHz bands • 20, 40, 80, 160 MHz on 5 GHz bands • 20, 40, 80, 160, 320 MHz on 6 GHz bands • MLO (Multi-link operation) across different bands

- MRU (Multiple Resource Unit) allocation in OFDMA
- 4 x 4 multiple input, multiple output (MIMO) with four spatial streams

- Power over Ethernet: 802.3bt/ 802.3at/ 802.3af
- Power reservation: 60W max (802.3bt **required** for full operation)
- Power over Ethernet injector sold separately

Note: Actual power consumption may vary depending on access point usage. It is recommended that you (LLDP)/Cisco Discovery Protocol is enabled to allow proper power negotiation.

Power

Power Source	2.4-GHz radio	5-GHz radio	6-GHz radio	Link speed
802.3bt (Class 6) (UPOE)	4x4	4x4(LB) + 4x4(HB)	4x4(LB) + 4x4(HB)	2x 10G
802.3at (PoE+) (Quad Radio mode)	2x2	2x2 (LB) + 2x2 (HB)	2x2	2x 2.5 G
802.3at (POE+) (Tri Radio Mode)	2x2	4x4 (FB)	2x2	2x 1G
802.3af (PoE)	–	–	–	–

- Recommended Power Injector:
  - CW-INJ-8: Cisco Wireless 802.3bt Power Over Ethernet Injector (power cable separate SKU)
- Supported Power Injectors:
  - MA-INJ-6: Meraki Multigigabit 802.3bt Power over Ethernet Injector (power cable separate SKU)
  - Cisco AIR-PWRINJ-6 802.3at
  - Cisco AIR-PWRINJ-7 802.3bt

Power cord - MA-PWR-CORD-XX (XX Country Code) should be ordered separately for the AC adapter and Etherne

Interfaces

- 2x 100M/ 1G/ 2.5G/ 5G/ 10G BASE-T Ethernet (RJ45)
- Management console port (RJ-45)

	• USB 2.0 at 9W
Mounting	• All standard mounting hardware included • Desktop, ceiling, and wall mount capable • Ceiling tile rail (9/16, 15/16 or 1 1⁄2” flush or recessed rails), assorted cable junction boxes
Physical Security	• Kensington lock slot
Environment	• Nonoperating (storage) temperature: -22° to 158°F (-30° to 70°C) • Nonoperating (storage) altitude test: 25°C (77°F) at 15,000 ft (4570 m) • Operating temperature: 32° to 122°F (0° to 50°C) • Operating humidity: 10% to 90% (noncondensing) • Operating altitude test: 40°C (104°F) at 9843 ft (3000 m) • Humidity:10% to 90% non-condensing
Reliability	• Mean time between failure (MTBF): 942,282 hrs at +25°C operating temperature
Physical Dimensions	• 9.9x9.9x2.0 inches (25x25x5.1 cm) • Weight: 4.1 lb (1.87 kg)
Security	• Integrated Layer 7 firewall with mobile device policy management • Real-time WIDS/WIPS with alerting and automatic rogue AP containment with Air Marshal • Flexible guest access with device isolation • VLAN tagging (802.1q) and tunneling with IPsec VPN • PCI compliance reporting • WPA2-PSK, WPA2-Enterprise, WPA3 - Personal, WPA3 - Enterprise, WPA3 - Enhanced Open (OWE) • EAP Local authentication - EAP-TTLS/PAP, PEAP-GTC, EAP-TLS • Advanced Encryption Standard (AES) • Enterprise Mobility Management (EMM) & Mobile Device Management (MDM) integration • Cisco ISE integration for Guest access and BYOD Posturing

Quality of Service	• Advanced power save (U-APSD) • WMM access categories with DSCP and 802.1p support • Layer 7 application traffic identification and shaping
Mobility	• PMK, OKC, and 802.11r for fast layer 2 roaming • Distributed or centralized layer 3 roaming
Analytics	• Embedded location analytics reporting and device tracking • Global layer 7 traffic analytics reporting per network, per device, and per application
LED Indicators	• 1 power/booting/firmware upgrade status • 1 link state, 1 Tx/ Rx LED ethernet port
Regulatory	• RoHS • For additional country-specific regulatory information, please contact Meraki sales
Warranty	• Indoor access point • Lifetime hardware warranty with advanced replacement included
Ordering Information	• CW9178: Cisco Wireless 9178I (Wi-Fi 7, 4 radio, 3 band 4x4, UWB), Global Use • MA-INJ-6: Meraki Multigigabit 802.3bt Power over Ethernet Injector (power cable separate SKU) • Cisco AIR-PWRINJ-6 802.3at • Cisco AIR-PWRINJ-7 802.3bt Power cord - MA-PWR-CORD-XX (XX Country Code) should be ordered separately for the AC adapter and Etherne • Mounting bracket: ◦ AIR-AP-BRACKET-1 ◦ AIR-AP-BRACKET-2 • Meraki access point license required

Compliance and Standards

Category	Standard
IEEE Standards	• 802.3 ab/bz • 802.3 af/at/bt • 802.11a/b/g/n/ac/ax/be • 802.11d/h/i/k/r/u/v/w
Certifications	• **Wi-Fi Alliance:** Wi-Fi 7 (R1), Wi-Fi 6 (R2), Wi-Fi 6E, WPA3-R3, WPA3-Suite B, Enhanced Open Security • **Bluetooth SIG:** Bluetooth Low Energy
Safety Approvals	• CSA and CB 60950 & 62368 • EN 60601 certified • Conforms to UL 2043 (Plenum Rating)
Radio Approvals	• FCC Part 15C • 15E RSS-247 (Canada) • EN 300 328 (v2.1.1) • EN 301 893 (v2.1.1) • AS/NZS 4268 (Australia/NZ) • NOM-121 (Mexico) • NCC LP0002 (Taiwan) For additional country-specific regulatory information, please contact Meraki sales
EMI Approvals (Class B)	• FCC Part 15B • ICES-003 (Canada) • EN 301 489-1-17 • EN 55032

	• EN 55024 (Europe) • CISPR 32 (Australia/NZ) VCCI (Japan)
Exposure Approvals	• FCC Part 2 RSS-102 (Canada) • EN 50385 • EN 6231 • EN 62479 (Europe) • AS/NZS 2772 (Australia/NZ)

Context and Comparisons

802.11be, 802.11ax, 802.11ac Wave 2 and 802.11n, 802.11be Capabilities

MR44	MR46	MR56	CW9166I	CW9178I
DL-OFDMA, UL-OFDMA, TWT support**, BSS coloring**	DL-OFDMA, UL-OFDMA, TWT support**, BSS coloring**	DL-OFDMA, UL-OFDMA, TWT support**, BSS coloring**	DL-OFDMA, UL-OFDMA, TWT support**, BSS coloring**	DL-OFDMA, UL-OFDMA, TWT support**, BSS coloring** MLO
2.4 GHz: 2 x 2 multiple input, multiple output (MIMO) with two spatial streams 5 GHz: 4 x 4 multiple input, multiple output (MIMO) with four spatial streams	2:4GHz: 4 x 4 multiple input, multiple output (MIMO) with four spatial streams 5 GHz: 4 x 4 multiple input, multiple output (MIMO) with four spatial streams	2.4 GHz: 4 x 4 multiple input, multiple output (MIMO) with four spatial streams 5 GHz: 8 x 8 multiple input, multiple output (MIMO) with eight spatial streams	2.4 GHz 4 x 4 multiple input, multiple output (MIMO) with four spatial streams 5 GHz: 4 x 4 multiple input, multiple output (MIMO) with four spatial streams 6 GHz: 4 x 4 multiple input, multiple output (MIMO) with four spatial streams	2.4 GHz 4 x 4 multiple input, multiple output (MIMO) with four spatial streams 5 GHz: 4 x 4 multiple input, multiple output (MIMO) with four spatial streams 6 GHz: 4 x 4 multiple input, multiple output (MIMO) with four spatial streams
Maximal ratio combining (MRC) & beamforming	Maximal ratio combining (MRC) & beamforming	Maximal ratio combining (MRC) & beamforming	Maximal ratio combining (MRC) & beamforming	Maximal ratio combining (MRC) & beamforming

SU-MIMO, UL MU-MIMO and DL MU-MIMO support	SU-MIMO, UL MU-MIMO and DL MU-MIMO support	SU-MIMO, UL MU-MIMO and DL MU-MIMO support	SU-MIMO, UL MU-MIMO and DL MU-MIMO support	SU-MIMO, UL MU-MIMO and DL MU-MIMO support
20 and 40 MHz* channels (802.11n); 20, 40*, and 80 MHz channels (802.11ac Wave 2); 20, 40* and 80 MHz channels (802.11ax)	20 and 40 MHz* channels (802.11n); 20, 40*, and 80 MHz channels (802.11ac Wave 2); 20, 40* and 80 MHz channels (802.11ax)	20 and 40 MHz* channels (802.11n); 20, 40*, and 80 MHz channels (802.11ac Wave 2); 20, 40* and 80 MHz channels (802.11ax)	20 and 40 MHz* channels (802.11n); 20, 40*, and 80 MHz channels (802.11ac Wave 2); 20, 40*, 80MHz and 160MHz channels (802.11ax)	20 and 40 MHz* channels (802.11n); 20, 40*, and 80 MHz channels (802.11ac Wave 2); 20, 40*, 80MHz and 160MHz channels (802.11ax) 320MHz channels (802.11be)
Up to 1024-QAM on both 2.4 GHz & 5 GHz bands	Up to 1024-QAM on both 2.4 GHz & 5 GHz bands	Up to 1024-QAM on both 2.4 GHz & 5 GHz bands	Up to 1024-QAM on all three - 2.4 GHz, 5 GHz and 6 GHz bands	Up to 4096-QAM on all three - 2.4 GHz, 5 GHz and 6 GHz bands
Packet aggregation	Packet aggregation	Packet aggregation	Packet aggregation	Packet aggregation

Power

MR44	MR46	MR56	CW9166I	CW9178I
Power over Ethernet: 42.5 - 57 V (802.3at) **or** 37 - 57 V (802.3af) - low power mode **	Power over Ethernet: 42.5 - 57 V (802.3at compliant)	Power over Ethernet: 42.5 - 57 V (802.3at compliant)	Power over Ethernet: 42.5 - 57 V (802.3at and 802.3bt compliant)	Power over Ethernet: 42.5 - 57 V (802.3at and 802.3bt compliant)
Alternative: 12 V DC input	Alternative: 12 V DC input	Alternative: 12 V DC input	Alternative: 54 V DC input	Alternative: Power Injectors
Power consumption: 30W max (802.3at) **or** 15W max (802.3af) - low power mode **	Power consumption: 30W max (802.3at **required**)	Power consumption: 30W max (802.3at **required**)	Power consumption: 30.5W max with USB support and 25W max without USB support	Power consumption: 47W max with USB support and 38W max without USB support
Power over Ethernet injector and DC adapter sold separately	Power over Ethernet injector and DC adapter sold separately	Power over Ethernet injector and DC adapter sold separately	Power over Ethernet injector and DC adapter sold separately	Power over Ethernet injector sold separately

Interfaces

MR44	MR46	MR56	CW9166I	CW9178I
1x 100/1000/2.5G BASE-T Ethernet (RJ45)	1x 100/1000/2.5G BASE-T Ethernet (RJ45)	1x 100/1000/2.5G/5G BASE-T Ethernet (RJ45)	1x 1000/2.5G/5G BASE-T Ethernet (RJ45)	2x 1000/2.5G/5/10G BASE-T Ethernet (RJ45)
1x DC power connector (5.5 mm x 2.5 mm, center positive)	1x DC power connector (5.5 mm x 2.5 mm, center positive)	1x DC power connector (5.5 mm x 2.5 mm, center positive)	1x DC power connector (8 mm, center positive)	

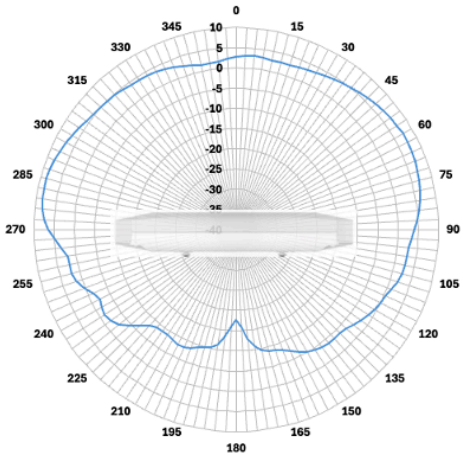
Physical Dimensions

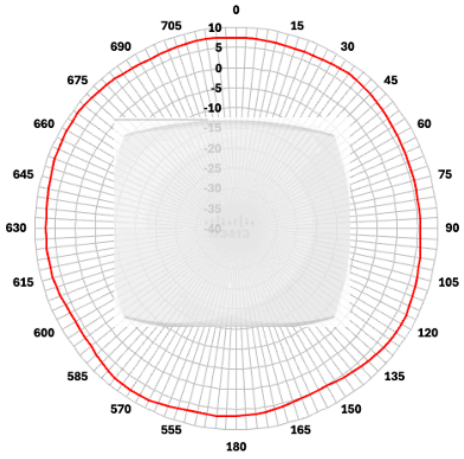
MR44	MR46	MR56	CW9166I	CW9178I
12.05" × 5.06" × 1.74" (306.0 × 12.8.4 × 44.3 mm), not including mount plate	12.05" × 5.06" × 1.74" (306.0 × 12.8.4 × 44.3 mm), not including mount plate	12.83” x 5.54” x 1.76” (326.0 x 140.79 x 44.7 mm), not including mount plate	9.5 x 9.5 x 2.2 in. (241.3 x 241.3 x 56.9 mm), not including mount plate	9.9 x 9.9 x 2.0 in. (250 x 250 x 51 mm), not including mount plate
Weight: 26.07 oz (0.739 kg)	Weight: 1.76lbs (0.800 kg)	Weight: 2.2lbs (1 kg)	Weight: 3.54lbs (1.60kg)	Weight: 4.1lbs (1.87kg)

Signal Coverage Pattern

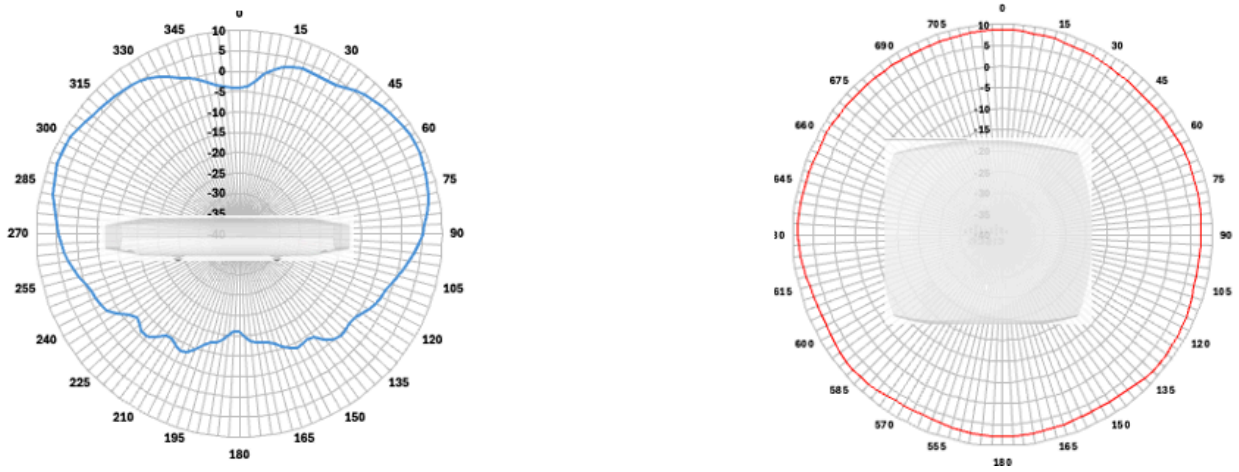
Client Serving Radios

CW9178I 6 GHz Radio

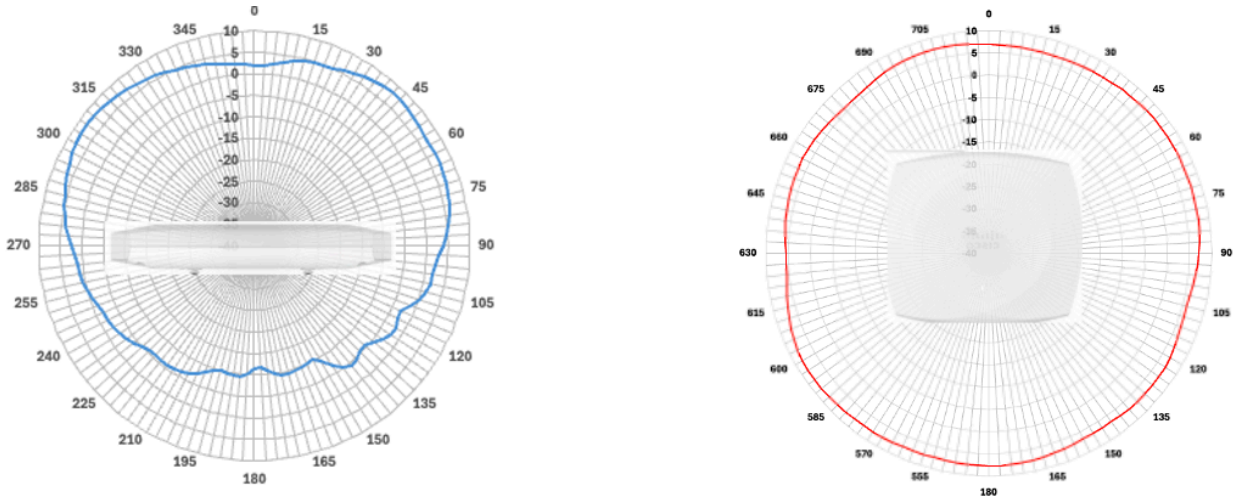




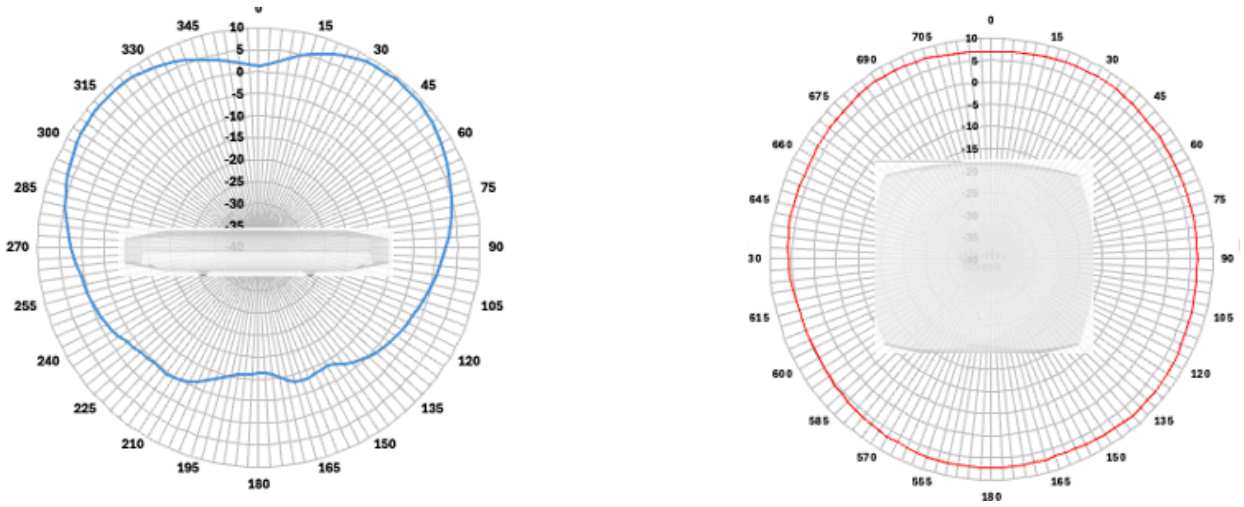
CW9178I 5 GHz Radio



CW9178I – 5 GHz Radio (Slot 2) Antenna Pattern

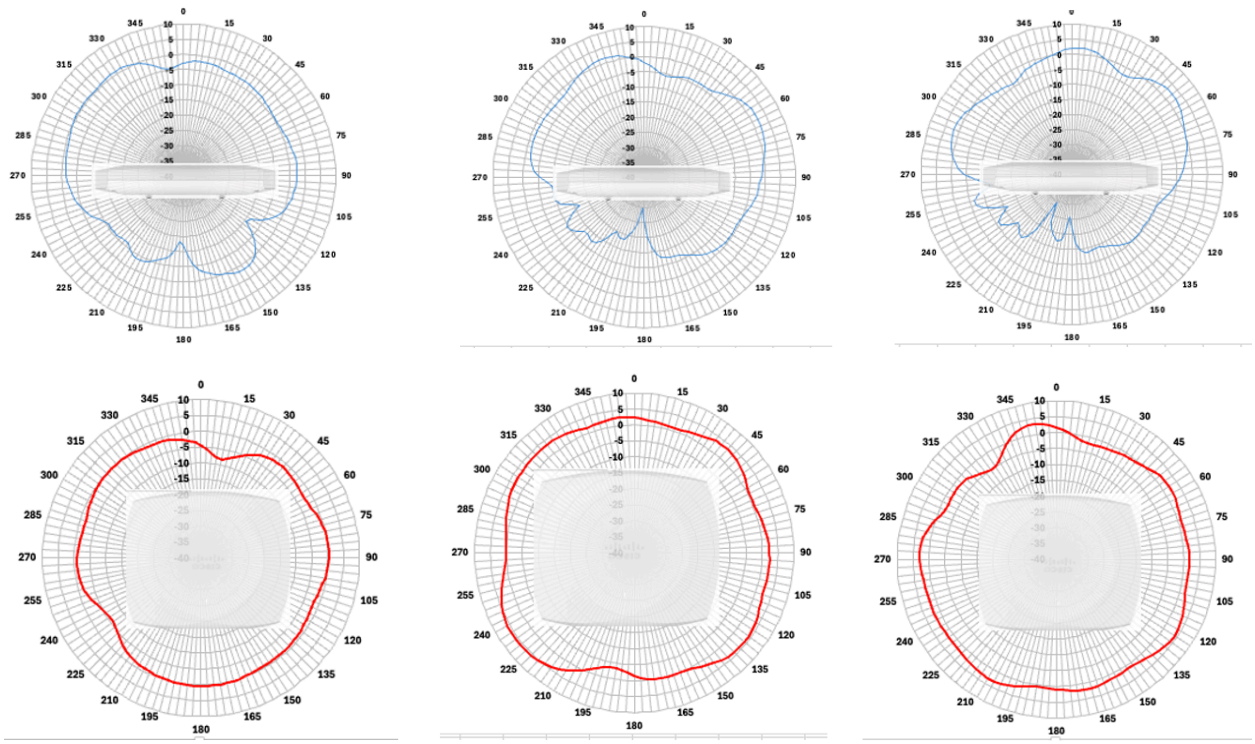


CW9178I – 2.4 GHz Radio Antenna Pattern

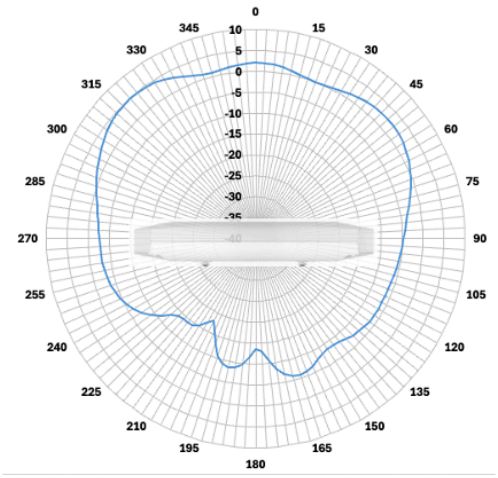


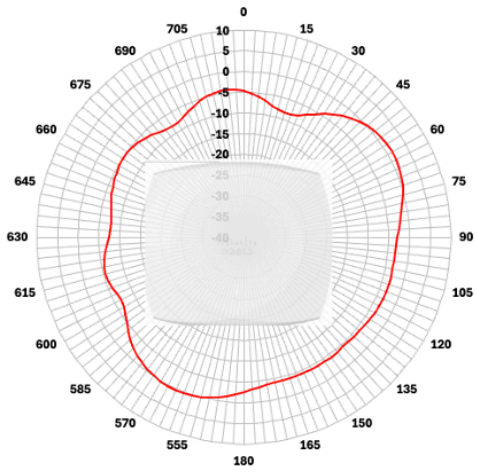
CW9178I AI/ML-Driven Scan Radio Antenna Pattern

2.4 GHz Radio **5 GHz Radio** **6 GHz Radio**



CW9178I IoT Radio Antenna Pattern





CW 9178I GNSS Antenna Pattern