CW9176I / CW9176D1 Datasheet

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 9176 Series access points provide the foundation for the future of wireless.

The Cisco Wireless 9176 Series Wi-Fi 7 access points enable operation in the 2.4, 5 and 6GHz bands to produce a network that is more reliable and secure, with higher throughput, more capacity, and less device interference. These access points provide three 4x4 radios and a host of cutting-edge features, and IoT radios.

The Catalyst 9176 Series even offers an Omni-directional antenna model - the Catalyst 9176I suitable for most enterprise deployments and an internal directional antenna model - the Catalyst 9176D1 - designed for use cases and areas with high ceilings such as auditoriums, warehouses, and other large open space areas. The Catalyst 9176D1U should be leveraged where typically external antennas would be required. And because the Catalyst 9176D1 uses a built-in directional antenna, it eliminates the need for additional hardware to achieve ideal wireless coverage.

Operational management is flexible because customers can change their network management whenever they want. If a network with Cisco Wireless 9176 Series Access Points was originally an on-premises deployment, it can be changed to cloud-based management without the need to purchase and redistribute additional hardware, saving you money as you network your way.

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 9176 Series Access Points are the best choice.

Cisco Meraki Cloud Management

Pairing the Cisco Wireless 9176 Series Access Points with the Meraki cloud platform gives organizations a unified IT experience for network monitoring and management. The Meraki dashboard provides an intuitive and interactive web interface connecting your network to the industry's leading cloud IT platform.

Through the 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 to IoT technologies. The platform supports over 3.5 million active networks around the world.

Working together, the Catalyst 9176 Series and Cisco Meraki offer such features 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

Cisco Wireless 9176 Series Access Points can also be paired with Catalyst 9800 WLC and Cisco Wireless Center. Cisco Wireless 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 Catalyst 9176 Series and Catalyst Center offer such features as:

- Cisco Spaces

- Cisco Identity Services Engine

- Cisco Catalyst Center Analytics and Assurance along with Intelligence Capture (iCAP)

- For information about Cisco Catalyst Center, refer to the Cisco Networking Solution Overview.

Software configurable flex radio architecture for Dual 5 GHz support

The Cisco Wireless 9176 supports a software-defined flex radio which can be operated in either a 2.4 GHz or 5 GHz mode. This provides an option to operate the AP in either a dual-band configuration with 5 GHz and 6 GHz configuration or a true tri-band configuration.

Tri-band configuration unlocks the use of the new spectrum in the 6 GHz frequency range, which provides additional channels to increase throughput and reduce interference and noise from legacy devices. 6 GHz support ensures that the CW9176 supports future technologies.

High-Performance 802.11be compatible wireless

The CW9176 is a cloud-managed 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 CW9176 offers high throughput, enterprise-grade security, and simple management.

The CW9176 provides a maximum of 18 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.

With the combination of cloud management, high-performance hardware, multiple radios, and advanced software features, the CW9176 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.

CW9176 and Meraki cloud management

Management of the CW9176 is through Dashboard with an intuitive browser-based interface that enables rapid deployment without time-consuming deployment complexity and time-consuming staging process. Since the CW9176 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 CW9176's firmware is automatically kept up to date via the cloud. 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

- 4x4:4 UL/DL MU-MIMO 802.11be compatible
- 18 Gbps tri-radio aggregate frame rate
- 24x7 real-time WIDS/WIPS and spectrum analytics via dedicated Scanning radio
- Integrated Bluetooth Low Energy Beacon and scanning radio
- Single 10 Gbps mGig Ethernet port support
- USB 2.0 host interface (Type A connector) with 9W power budget

- Built-in USB, GPS/GNSS module
- Dedicated 2.4 GHz IoT Radio with Application hosting technology
- Full-time Wi-Fi location tracking via dedicated Scanning radio
- Integrated enterprise security and guest access
- Application-aware traffic shaping
- Optimized for voice and video
- Self-configuring, plug-and-play deployment
- Enhanced transmit power and receive sensitivity

Features

Tri–radio aggregate frame rate of up to 18 Gbps*

A 6 GHz 4x4:4, 5 GHz 4x4:4 and 2.4 GHz 4x4:4 radio offer a combined tri–radio aggregate frame rate of 18 Gbps*, with upto 11,520 Mbps in 6 GHz band, 5700 bps in 5 GHz band and 688 Mbps in 2.4 GHz band. Technologies like transmit beamforming and enhanced receive sensitivity allow the CW9176 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 CW9178 can operate in multiple bands simultaneously to achieve higher throughput and improved SLA. 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 802.11be, the CW9176 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 CW9176 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 CW9176 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. CW9176 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 CW9176'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 CW9176 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 CW9176 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 per 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 CW9176 but on other devices in the network. Unscheduled Automatic Power Save Delivery (U-APSD) and the 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 CW9176 automatically connects to the Meraki cloud, downloads its configuration, and joins the appropriate network. Administrators can schedule automatic 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

CW9176 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, CW9176 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 9176 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	• 2.4 GHz 802.11b/g/n/ax/be client access radio (or) • 5 GHz 802.11a/n/ac/ax/be client access radio (XOR flexible radio) • 5 GHz 802.11a/n/ac/ax/be client access radio • 6 GHz 802.11 ax/be client access radio • 2.4 GHz IoT Radio • 2.4 GHz, 5 GHz, and 6 GHz tri-band Air Marshal WIDS/WIPS, spectrum analysis, & location analytics ra • 2.4 GHz Bluetooth Low Energy (BLE) radio with Beacon and BLE scanning support Concurrent operatior future.
GPS	Built-in GPS/ GNSS module for location analytics

Antenna	• CW9176I
	
	  ◦ 2.4 GHz: Peak gain 5 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
	
	• CW9176D1
	
	  ◦ 2.4 GHz: Peak gain 7 dBi, internal antenna, directional, 80x80 beamwidth
	
	  ◦ 5 GHz: Peak gain 8 dBi, internal antenna, directional, 70x70 beamwidth
	
	  ◦ 6 GHz: Peak gain 8 dBi, internal antenna, directional 70x70 beamwidth

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 ⓘ **Note:** *40MHz channels are supported only in the 5GHz band.
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: 42.5 - 57 V 802.3bt/802.3at/802.3af compliant

- Minimum power consumption: (15.4W min 802.3af)

- Maximum power consumption: (39W max 802.3bt)

- Power over Ethernet injector sold separately

9176

Power

Power source	2.4-GHz radio	5-GHz radio	6 -GHz radio	Link Speed	USB
802.3bt (Class 6) (UPOE)	4x4	4x4	4x4	1 x 10G	Y (9W)
802.3at (PoE+)	2x2	4x4	4x4	1x 2.5G	N
802.3af (PoE)	-	-	-	1x 1G	N

9176D1

Power source	2.4-GHz radio	5-GHz radio	6 -GHz radio	Link Speed	USB
802.3bt (Class 6) (UPOE)	4x4	4x4	4x4	1 x 10G	Y (9W)
802.3at (PoE+)	2x2	4x4	4x4	1x 2.5G	N
802.3af (PoE)	-	-	-	1x 1G	N

ⓘ **Note:** Actual power consumption may vary depending on the AP usage.

Interfaces

- 1x 100/1,000/2.5/10G BASE-T Ethernet (RJ45)

- 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

	• Bubble level on the mounting cradle for accurate horizontal wall mounting
Physical Security	• Kensington lock slot

Environment	• CW9176I
	  ◦ 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)
	• CW9176D1
	  ◦ 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)

Reliability	• Mean time between failure (MTBF): 981,608 hrs at 25°C operating temperature • Mean time between failure (MTBF): 349,710 hrs at 50°C operating temperature

Physical Dimensions	• CW9176I
	  ◦ 9.5 x 9.5 x 2.0 in. (24 x 24 x 5.1cm)
	  ◦ Weight: 3.4 lb. (1.56 kg)
	• CW9176D1
	  ◦ 9.5 x 9.5 x 2.0 in. (24 x 24 x 5.1cm)
	  ◦ Weight: 3.4 lb. (1.56 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

- WEP*, WPA, WPA2-PSK, WPA2-Enterprise with 802.1X, WPA3 - Personal**, WPA3 - Enterprise**, WPA

- EAP-TLS, EAP-TTLS, EAP-MSCHAPv2, EAP-SIM

- TKIP and AES encryption

- Enterprise mobility management (EMM) and 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
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	- CW9176I Cloud Managed Omnidirectional 802.11be Compatible AP
	- CW9176D1 Cloud Managed Directional 802.11be Compatible AP
	- MA-PWR-50WAC: Meraki AC Adapter for MR Series (power cable separate SKU)
	- 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 E

ⓘ **Note:** 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)

ⓘ **Note:** 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	CW9166	CW9176I	CW9176D1
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	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 6 GHz: 4 x 4 multiple input, multiple output (MIMO) with four	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	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	spatial streams	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*, 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)	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)

> ⓘ **Note:** *40MHz channels are supported only in 5 & 6 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	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	CW9166I	CW9176I	CW9176D1
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 and 802.3bt 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: 54 V DC input	Alternative: Power Injectors	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: 30.5W max with USB support and 25W max without USB support	Power consumption: 39W max with USB support and 30W max without USB support	Power consumption: 39W max with USB support and 30W 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 sold separately	Power over Ethernet injector sold separately

> ⓘ **Note:** ** features can be enabled via future firmware updates

Interfaces

MR44	MR46	CW9166I	CW9176I	CW9176D1
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/5/10G BASE-T Ethernet (RJ45)	1x 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 (8 mm, center positive)	Alternative: Power Injectors	Alternative: Power Injectors

Physical Dimensions

MR44	MR46	CW9166I	CW9176I	CW9176D1
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 2.0 in. (241.3 x 241.3 x 50.8 mm), not including mount plate	9.5 x 9.5 x 2.0 in. (241.3 x 241.3 x 50.8 mm), not including mount plate
Weight: 26.07 oz (0.739 kg)	Weight: 1.76lbs (0.800 kg)	Weight: 2.2lbs (1 kg)	Weight: 3.40lbs (1.56kg)	Weight: 3.40lbs (1.56kg)

Signal Coverage Patterns

Client Serving Radios

CW9176I 6 GHz Radio
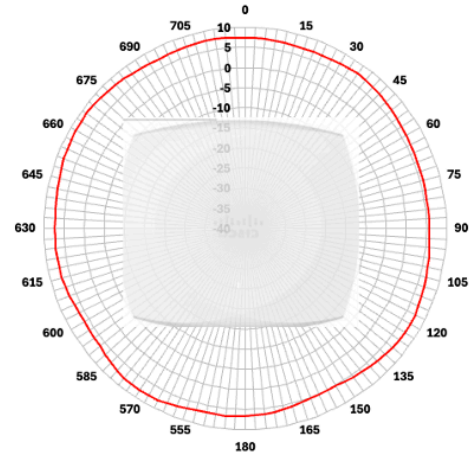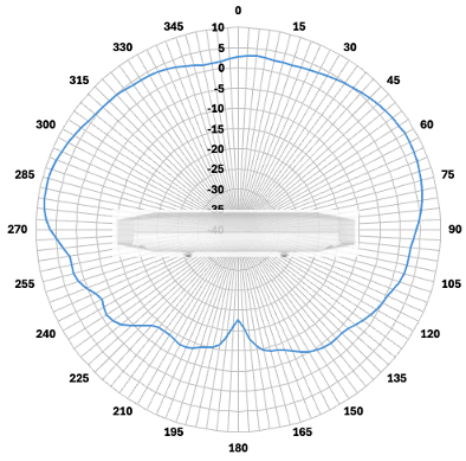
CW9176I 5 GHz Radio
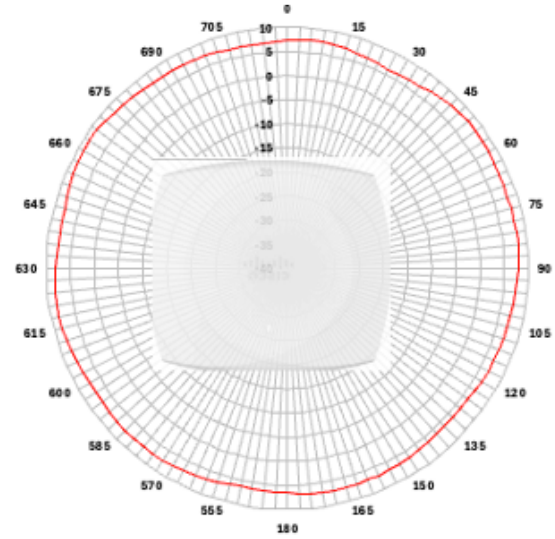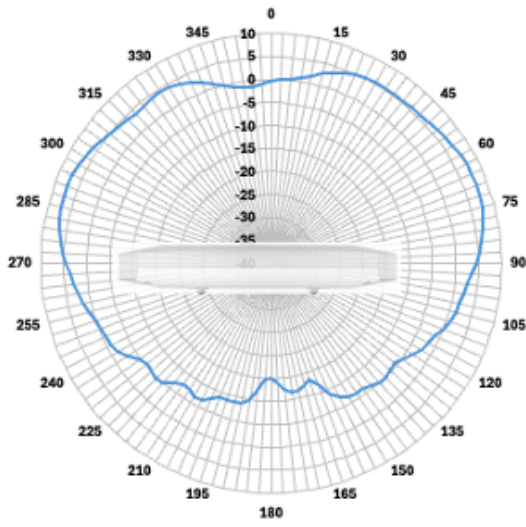
CW9176I 5 GHz Radio Slot 2
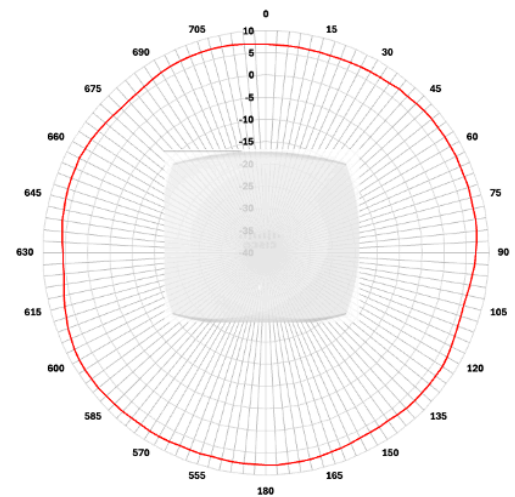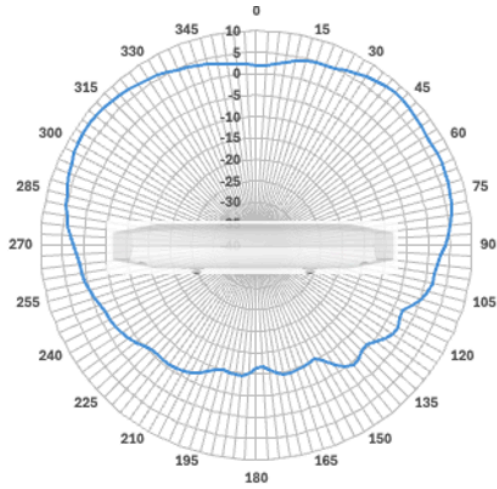
CW9176I 2.4 GHz Radio
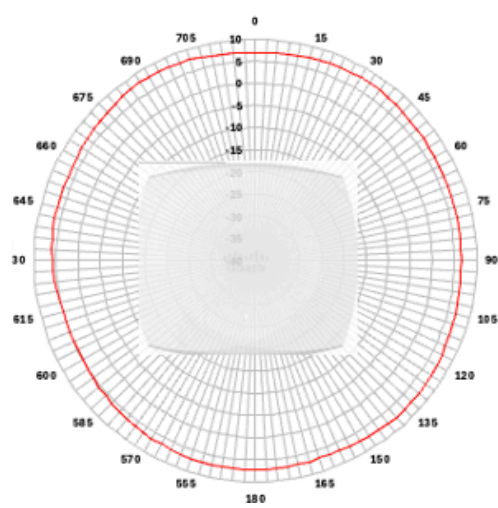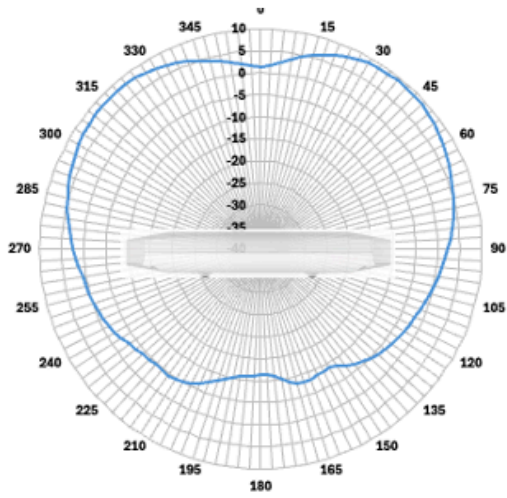
CW9176I AI/ML-Driven Scan Radio
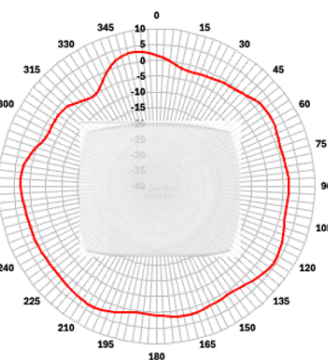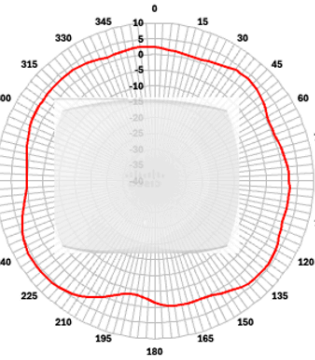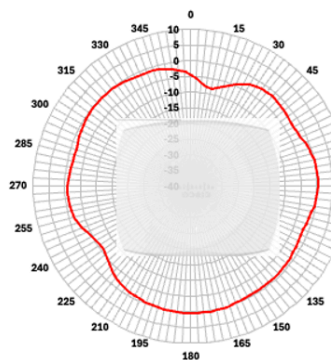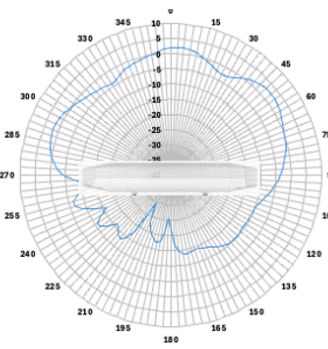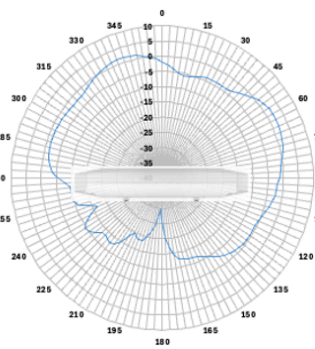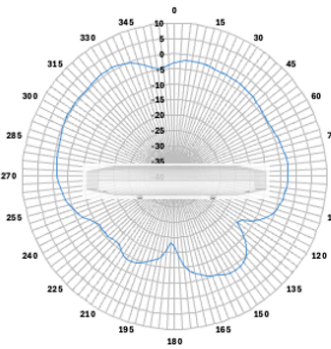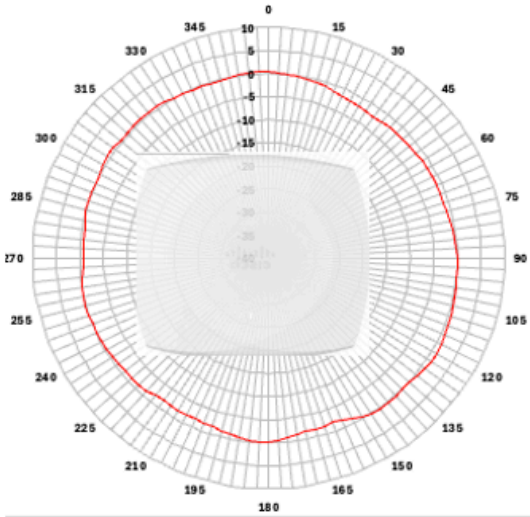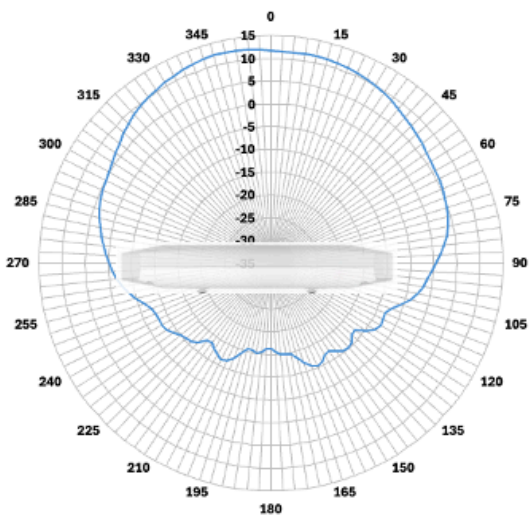
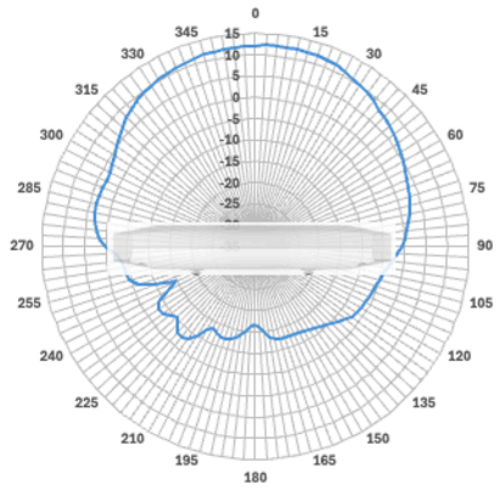| 2.4 GHz	5 GHz	6 Ghz

CW9176I IoT Radio
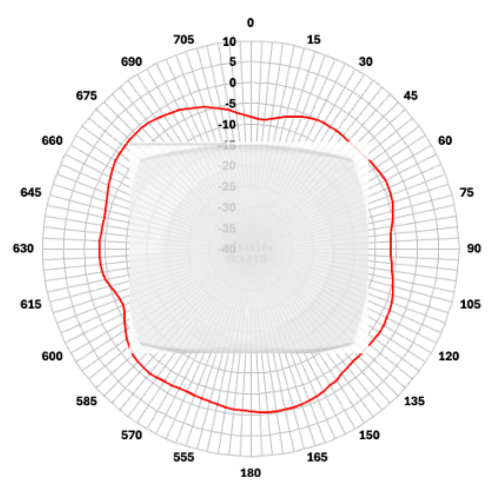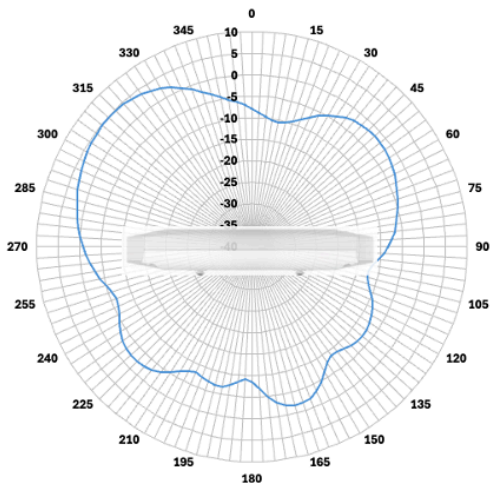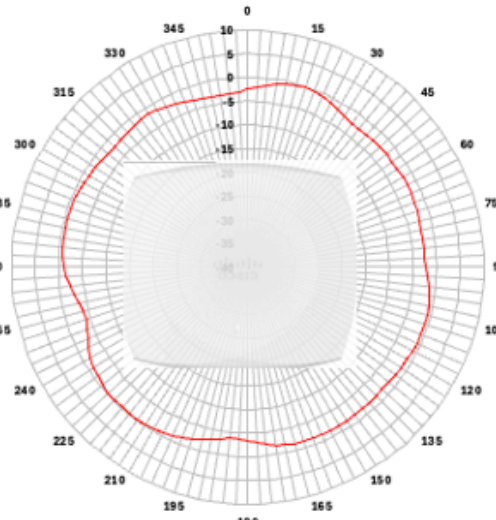
CW9176I GNSS Radio
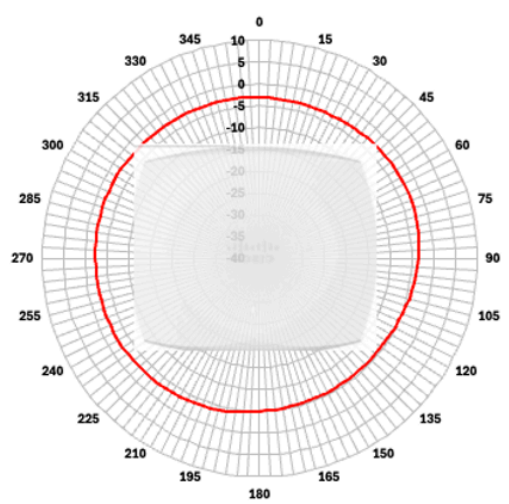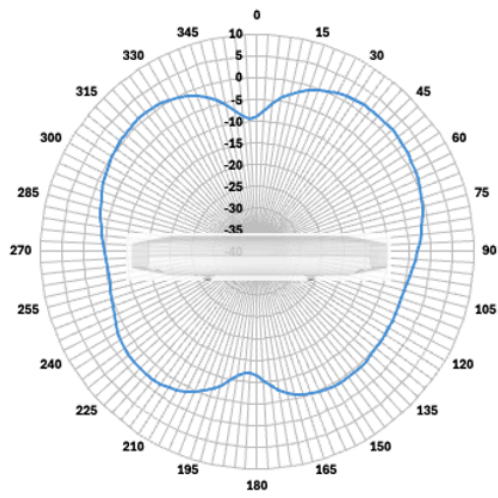
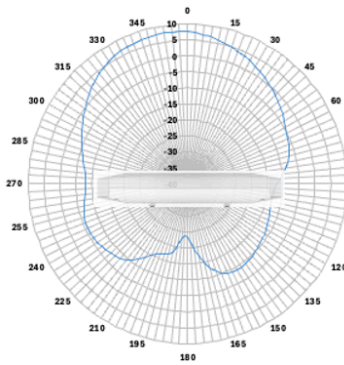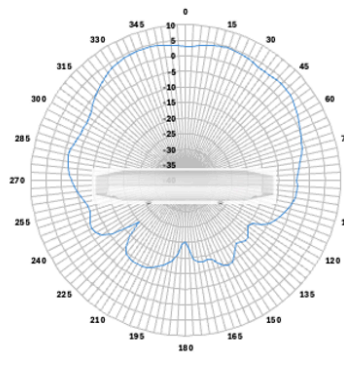**CW9176D 6 GHz Radio**
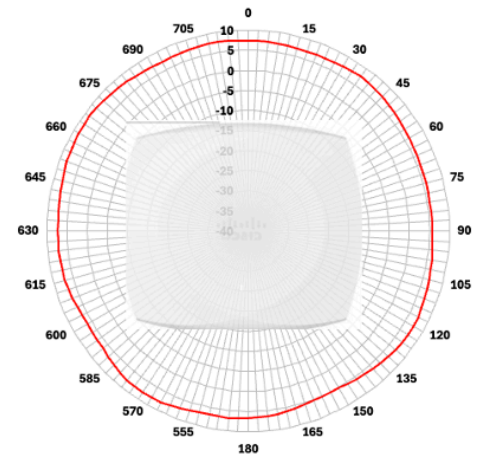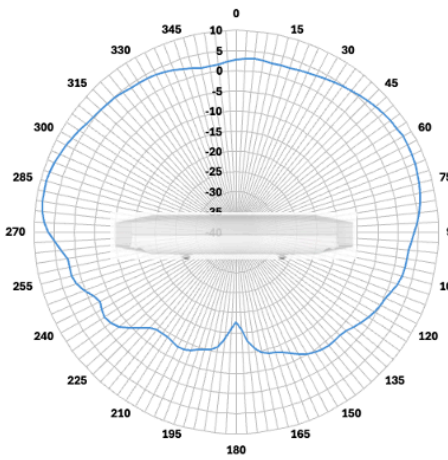
CW9176D 5 GHz Radio

CW9176D 5 GHz Radio Slot 1
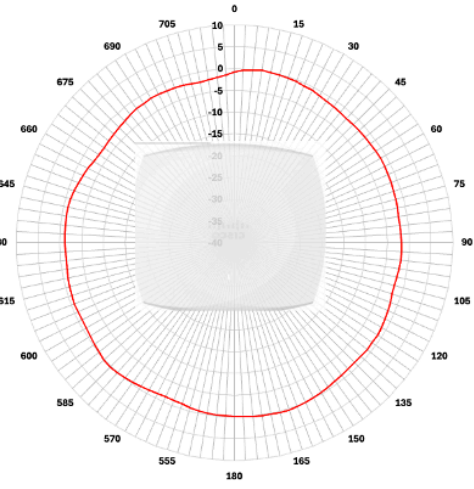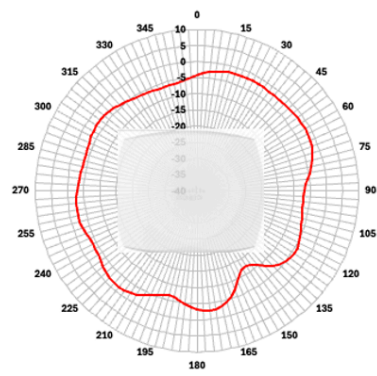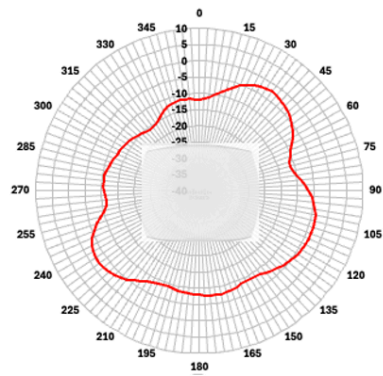

CW9176D 2.4 GHz Radio
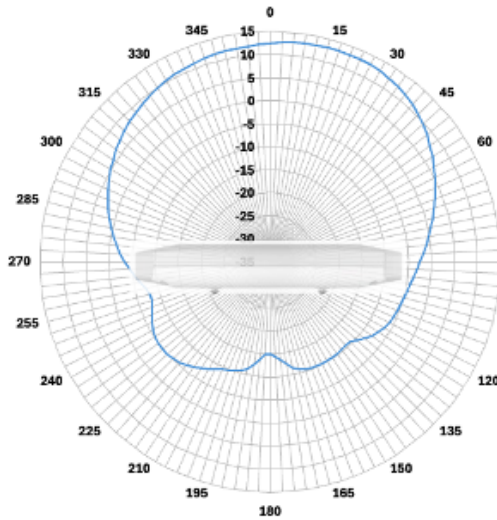
CW9176D AI/ML-Driven Scan Radio

2.4 GHz	5 GHz	6 Ghz
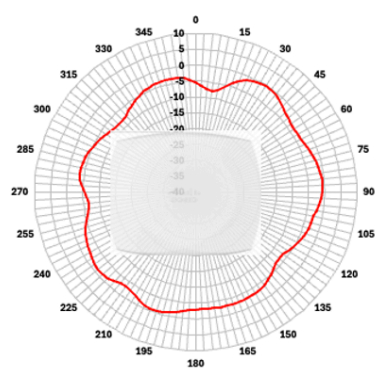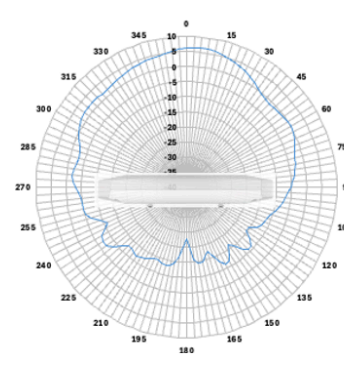
CW9176D IoT Radio

CW9176D GNSS Radio