CW9176I / CW9176D1 Datasheet

High-Performance Wi-Fi 7 Wireless

Cisco Wireless 9176 Series Wi-Fi 7 access points are ideal for high-density environments and critical applications. These access points support both on-premises and cloud management. Cisco Wireless' Wi-Fi 7 access points can leverage Wi-Fi 7 to support video streaming, augmented reality (AR), and virtual reality (VR) applications. These access points offer real-time insights and personalized user experiences.

The Cisco Wireless 9176 Series Wi-Fi 7 access points enable operation in the 2.4, 5 and 6GHz bands for higher throughput and capacity. These access points provide three 4x4 radios and IoT radios.

The Cisco Wireless 9176 Series offers an Omni-directional antenna model, the CW9176I, suitable for most enterprise deployments and an internal directional antenna model, the CW9176D1, designed for use cases and areas with high ceilings such as auditoriums, warehouses, and other large open space areas. The CW9176D1 is suitable for areas that typically require external antennas. Since the CW9176D1 uses a built-in directional antenna, eliminating the need for additional hardware to achieve effective wireless coverage.

Operational management is flexible, allowing network management to be switched at any time. 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.

Cisco Meraki Cloud Management

Management of the CW9176 is through the dashboard utilizing a browser-based interface that enables quick deployment without extensive staging. Since the CW9176 is self-configuring and managed over the web, it can be deployed at a remote location in a matter of minutes, facilitating remote deployment.

24x7 monitoring via the Meraki cloud provides real-time alerts for network issues. Remote diagnostic tools facilitate troubleshooting over the web, enabling efficient management of distributed networks.

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 eliminates manual software updates and ensures security patches are applied.

Pairing the Cisco Wireless 9176 Series access points with the Meraki cloud platform provides a unified IT experience for network monitoring and management.

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

Working together, the Cisco Wireless 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 managed 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 Cisco Wireless 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 tri-band configuration.

Tri-band configuration uses the spectrum in the 6 GHz frequency range, which provides additional channels to increase throughput and reduce interference 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 emphasizes 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 supports Bluetooth scanning and beaconing.

Combining cloud management, robust hardware, multiple radios, and extensive software features, the CW9176 supports demanding uses, including high-density deployments and applications such as voice and video.

Product Highlights

- 4x4:4 UL/DL MU-MIMO 802.11be compatible
- Built-in USB, GPS/GNSS module

- 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
- 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 Mbps 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 CW9176 can operate in multiple bands simultaneously to achieve higher throughput and improved SLA. This improves network performance and the end-user experience.

Multi User Multiple Input Multiple Output (MU-MIMO)

With support for features of 802.11be, the CW9176 offers DL/UL MU-MIMO and OFDMA for more efficient transmission to multiple clients. Suited for environments with numerous mobile devices, MU-MIMO and OFDMA enable multiple clients to receive data simultaneously.

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.

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 technologies to provide secure connectivity for employees and guests alike. Advanced security features such as AES hardware-based encryption, Enterprise authentication with 802.1X, and Active Directory integration provide wired-like security while still being easy to configure. CW9176 also supports WPA3 192-bit encryption for added wireless network security. 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 supports 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. Additionally, the CW9176 provides 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 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 radio ⓘ Due to the 6 GHz band requiring PMF some Air Marshal functions may not be effective • 2.4 GHz Bluetooth Low Energy (BLE) radio with Beacon and BLE scanning support Concurrent operation of all five radios. BLE Version 5.3, software upgradable to 6.0 in the future.
GPS	Built-in GPS/ GNSS module for location analytics

Category	Specifications
Antenna	• CW9176I ◦ 2.4 GHz: Peak gain 5 dBi, internal antenna, omnidirectional in azimuth ◦ 5 GHz: (XOR) Peak gain 5 dBi, internal antenna, omnidirectional in azimuth ◦ 5 GHz: Peak gain 6 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: (XOR) Peak gain 7 dBi, internal antenna, directional in azimuth ◦ 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 MHz channels (802.11ax) **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	• Power over Ethernet: 42.5 - 57 V 802.3bt / 802.3at (Low Power Mode) / 802.3af compliant (Low Power Mode)

Category	Specifications

	• Minimum power consumption: (15.4W min 802.3af - low power mode)
	• Maximum power consumption: (39W max 802.3bt)
	• Power over Ethernet injector sold separately
	• 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-7 802.3bt
	Power cord - MA-PWR-CORD-XX (XX Country Code) should be ordered separately for the Ethernet injector

Interfaces	• 1x 100M / 1G / 2.5G / 5G / 10G BASE-T Ethernet (RJ45) • Management console port (RJ-45) with default speed of 115200 bps (this port will be disabled once the AP is in Meraki Managed Mode) • 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)

Category	Specifications

	• 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 • WPA2-PSK, WPA2-Enterprise with 802.1X, WPA3 - Personal**, WPA3 - Enterprise**, WPA3 - Enhanced Open (OWE)*** • EAP-TLS, EAP-TTLS, EAP-MSCHAPv2, EAP-SIM • Advanced Encryption Standard (AES) • 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)

Category	Specifications
	• 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 • 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-7 802.3bt Power cord - MA-PWR-CORD-XX (XX Country Code) should be ordered separately for the Ethernet injector **Note:** Cisco Subscription or Meraki access point license required.

9176 Power Negotiation and Features

Power source	2.4-GHz radio	5-GHz radio	6 -GHz radio	Link Speed	USB	Max PoE power consumption
802.3bt (Class 5) (UPOE)	4x4	4x4	4x4	1 x 10G	Y (9W)	39W
802.3at (PoE+)	2x2	4x4	4x4	1x 2.5G	N	25.5W
802.3af (PoE)	-	-	-	1x 1G	N	13.95W

9176D1 Power Negotiation and Features

Power source	2.4-GHz radio	5-GHz radio	6 -GHz radio	Link Speed	USB	Max PoE power consumption
802.3bt (Class 5) (UPOE)	4x4	4x4	4x4	1 x 10G	Y (9W)	39W
802.3at (PoE+)	2x2	4x4	4x4	1x 2.5G	N	25.5W
802.3af (PoE)	-	-	-	1x 1G	N	13.95W

Note: Actual power consumption may vary depending on the AP usage. CW9176 models need 802.3bt, Class 6 that can supply 60W of power for full operation.

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

Category	Standard
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: 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	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*, 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.

MR44	MR46	CW9166	CW9176I	CW9176D1
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/5G/10G BASE-T Ethernet (RJ45)	1x 1000/2.5G/5G/10G BASE-T Ethernet (RJ45)

MR44	MR46	CW9166I	CW9176I	CW9176D1
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

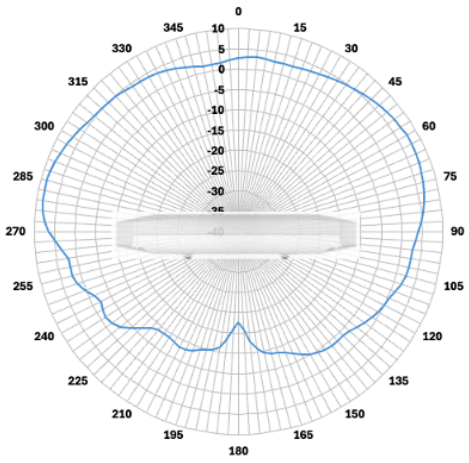
Physical Dimensions

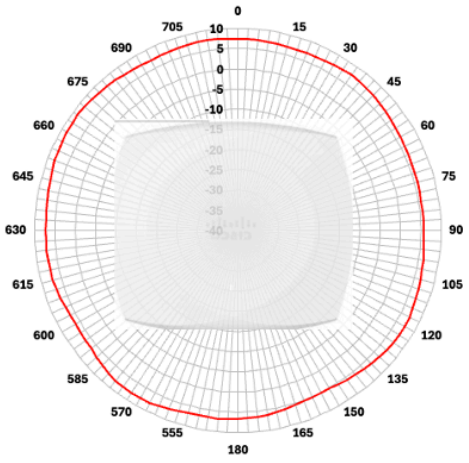
MR44	MR46	CW9166I	CW9176I	CW9176D1
12.05" × 5.06" × 1.74" (306.0 × 12.8.4 × 44.3 mm), not including mount plate	12.05" × 5.06" × 1.74" (306.0 × 12.8.4 × 44.3 mm), not including mount plate	9.5 x 9.5 x 2.2 in. (241.3 x 241.3 x 56.9 mm), not including mount plate	9.5 x 9.5 x 2.0 in. (241.3 x 241.3 x 50.8 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: 3.54 lb. (1.60 kg)	Weight: 3.40lbs (1.56kg)	Weight: 3.40lbs (1.56kg)

Signal Coverage Patterns

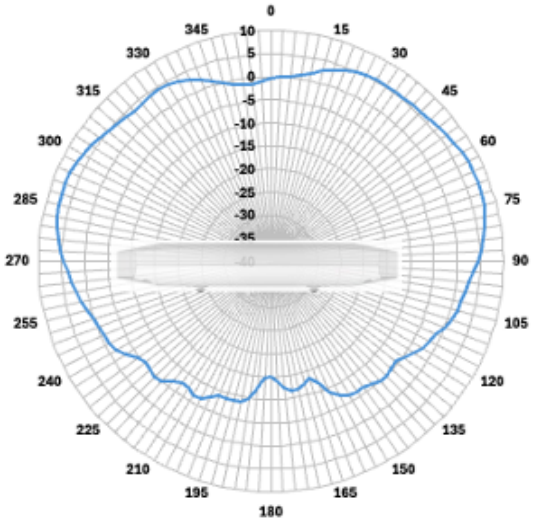
Client Serving Radios

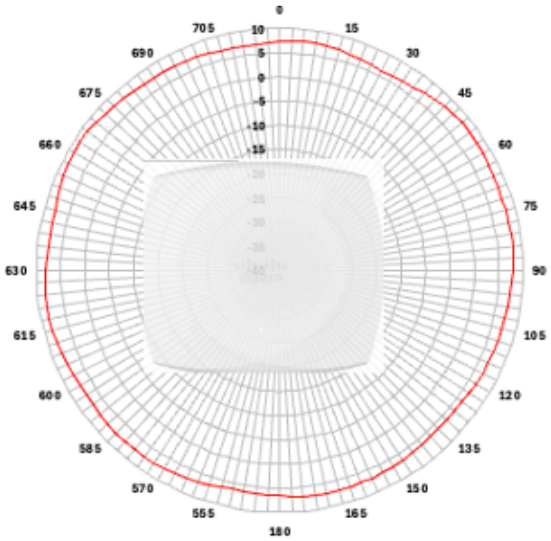
CW9176I 6 GHz Radio



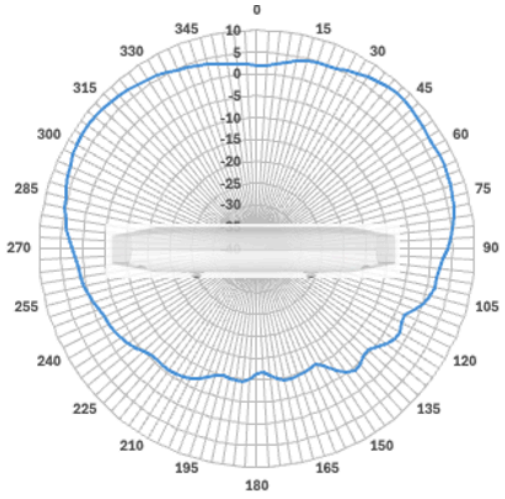


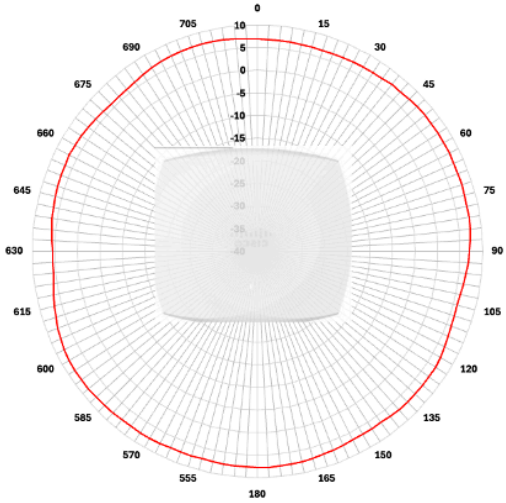
CW9176I 5 GHz Radio Slot 1



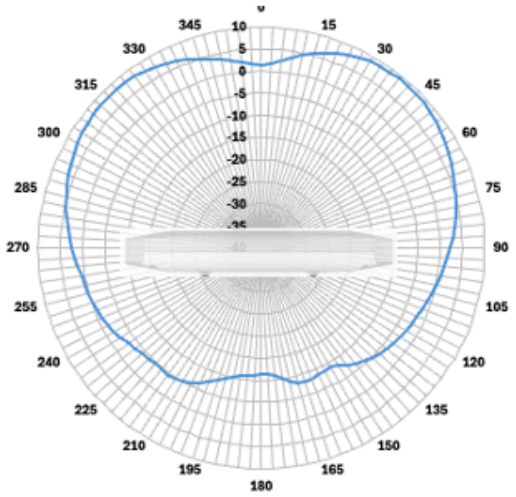


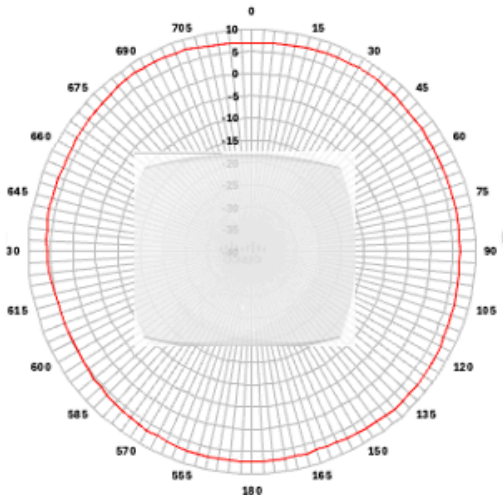
CW9176I 5 GHz Radio Slot 2





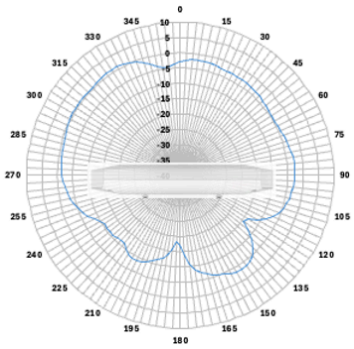
CW9176I 2.4 GHz Radio



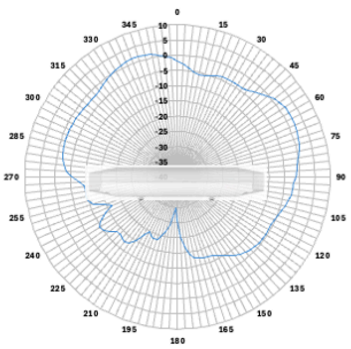


CW9176I AI/ML-Driven Scan Radio

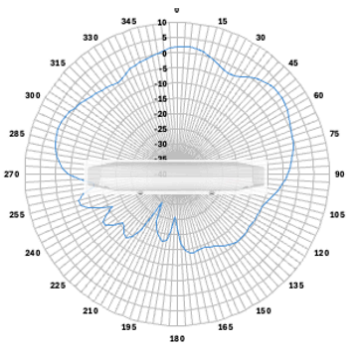
2.4 GHz

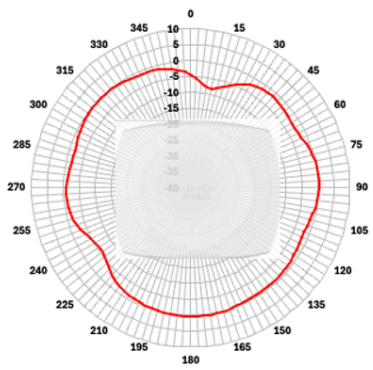


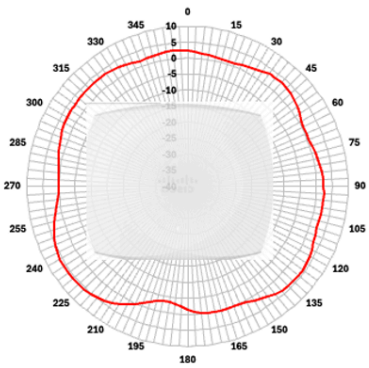
5 GHz

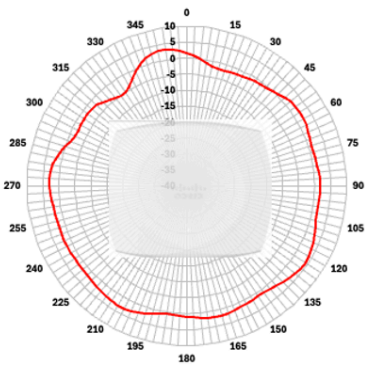


6 Ghz

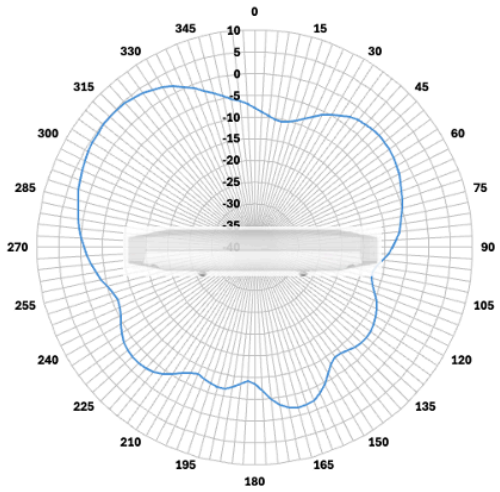


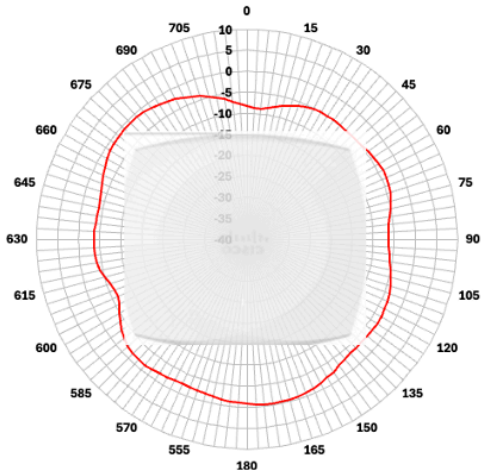




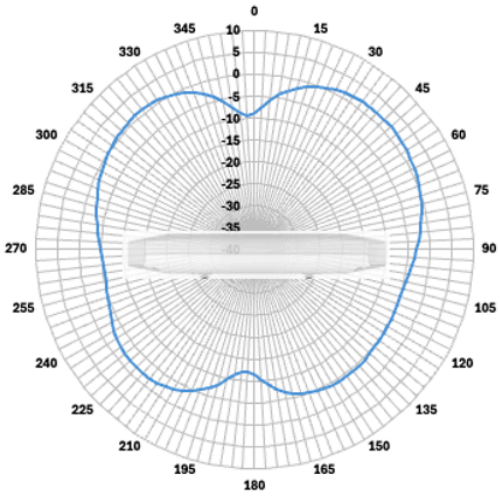


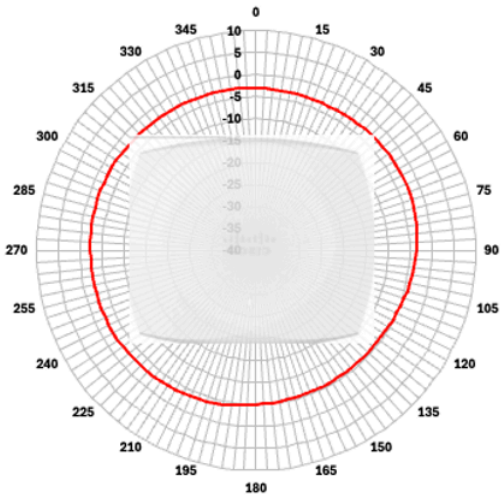
CW9176I IoT Radio



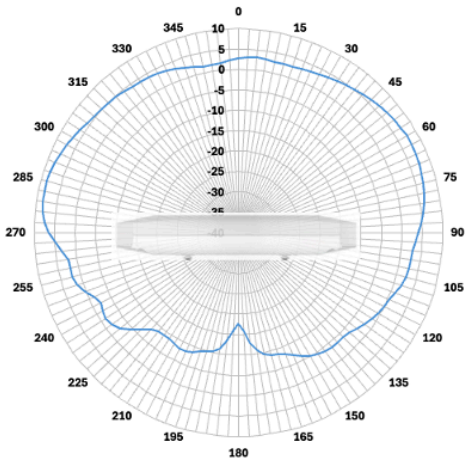


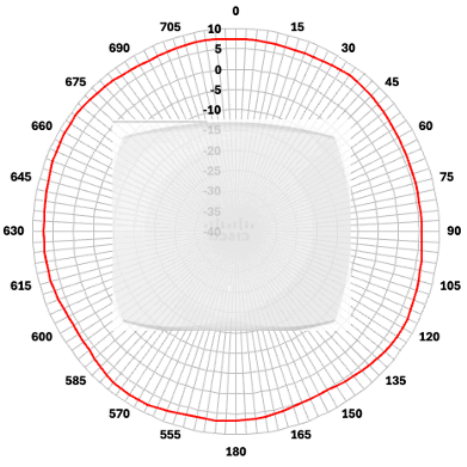
CW9176I GNSS Radio



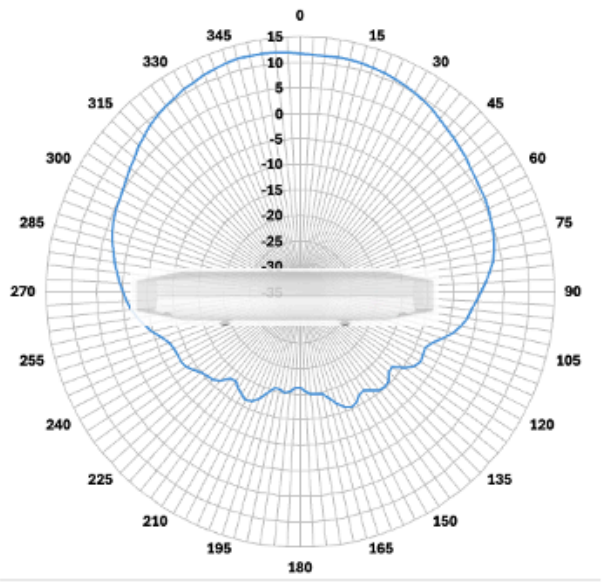


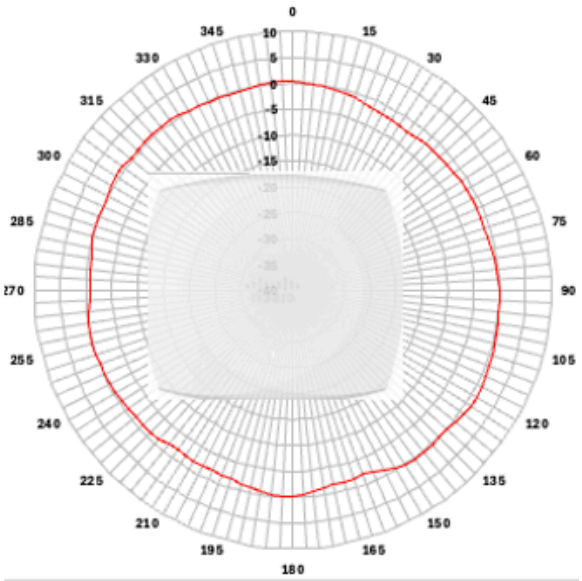
CW9176D1 6 GHz Radio



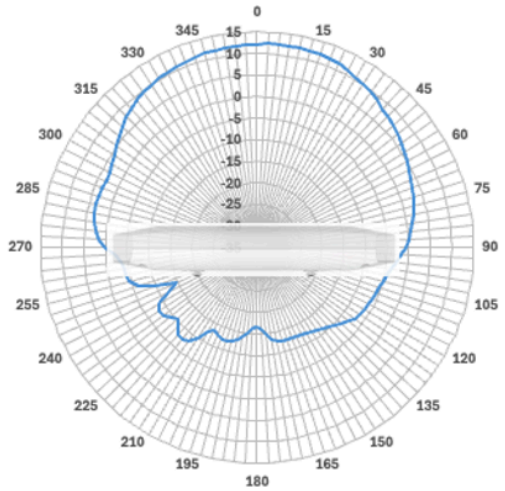


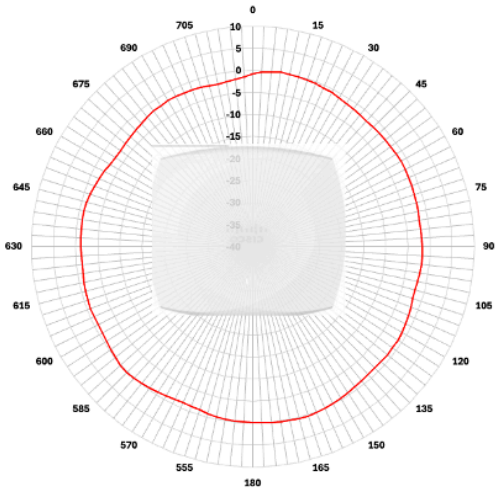
CW9176D1 5 GHz Radio Slot 1



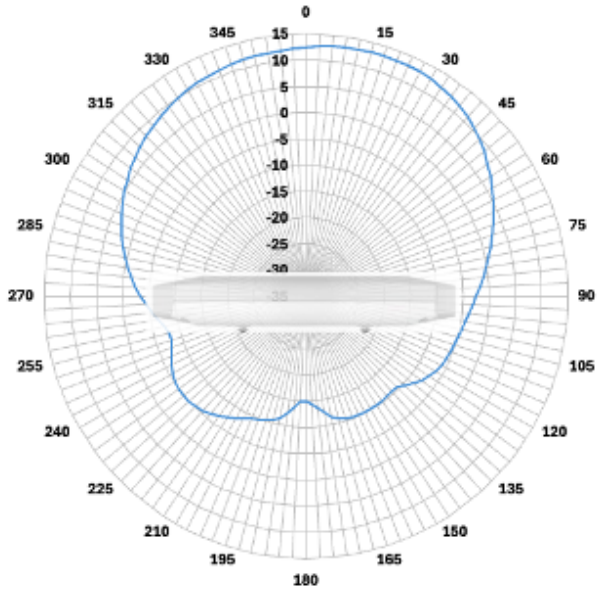


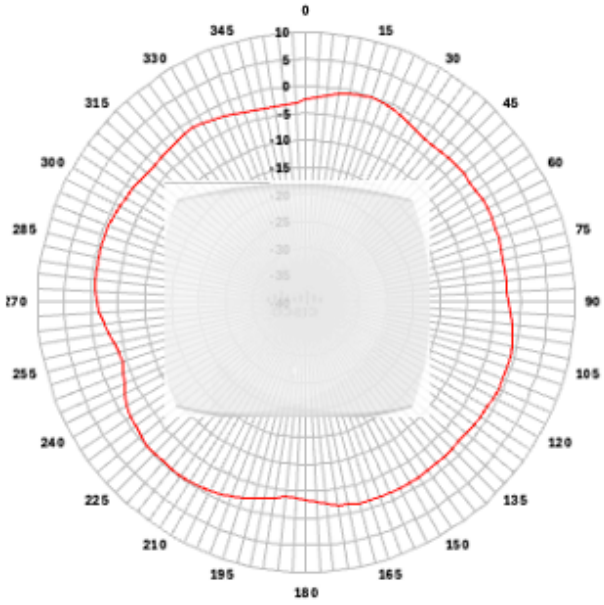
CW9176D1 5 GHz Radio Slot 2





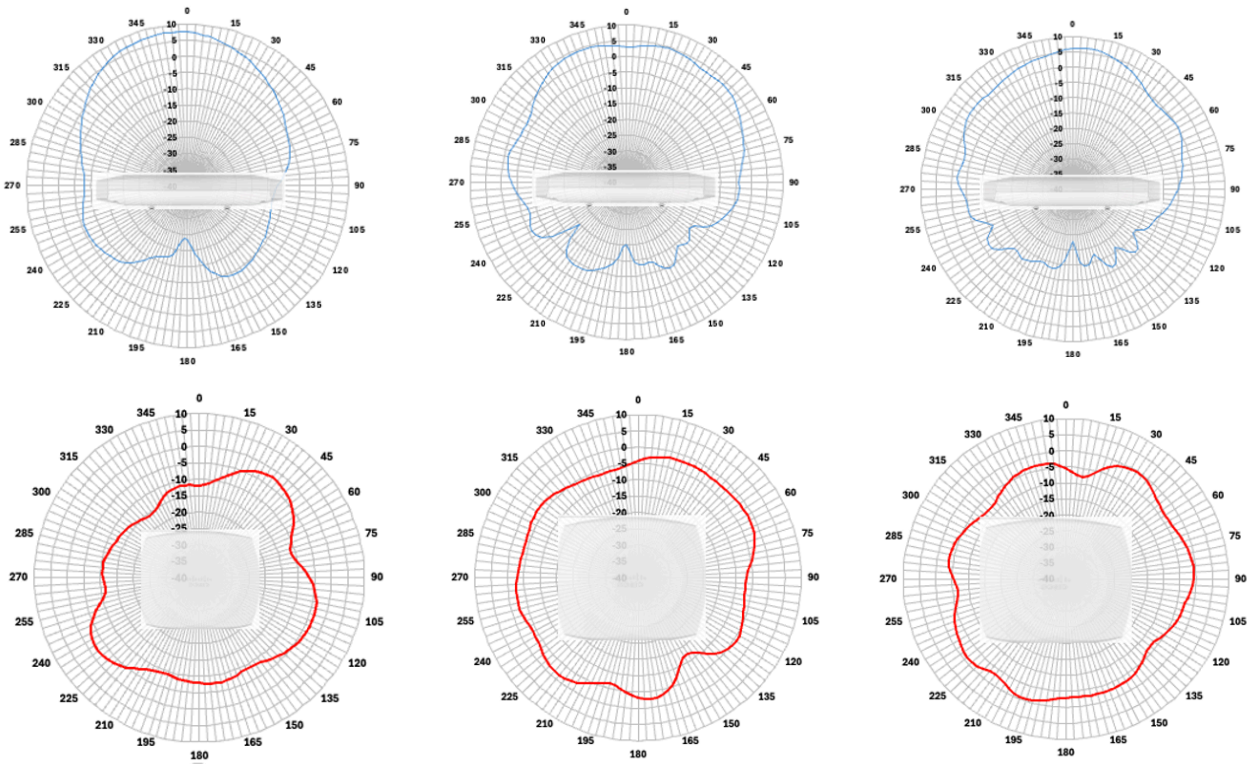
CW9176D1 2.4 GHz Radio



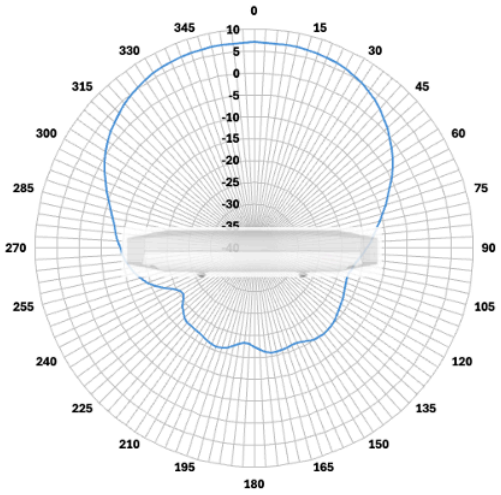


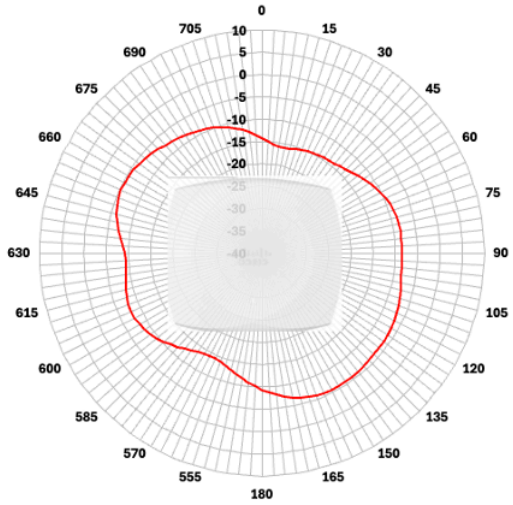
CW9176D1 AI/ML-Driven Scan Radio

2.4 GHz **5 GHz** **6 Ghz**



CW9176D1 IoT Radio





CW9176D1 GNSS Radio