Highlights

Radio Technology

- 5 GHz 2x2:2
- 2.4 GHz 2x2:2

Radio Modes - SSR

- 5 GHz / 2.4 GHz - Fixed
- 5 GHz / 5 GHz - Dual 5 GHz

High Density Environments

- Delivers exceptional end-user experience even in dense user environments

WPA3 Support

- Includes the latest WPA3 Wi-Fi security standard delivering robust protections for users and IoT devices

Fully Functional over 802.3af

Cellular Coexistence Filter (CCF)

- Minimizes the impact of interference from cellular networks

Smart Management

- ExtremeCloud™ IQ delivers powerful, simple, and secure public or private cloud management capabilities

BUILT ON
BROADCOM®

ExtremeWireless™ AP 305C/CX

Wi-Fi 6 (802.11ax) Indoor Access Point with integrated or external antenna options

The AP 305C/CX are indoor enterprise APs based on a new system-on-a-chip (SoC) with two built-in dual-band radios providing the best value with Wi-Fi 6 high efficiency. You have your choice of models with either integrated or external antennas. Advanced radio technology delivers 802.11ax 2x2:2 data rates up to 2.4 Gbps concurrently on both the 2.4 GHz and 5 GHz radios. These 2x2:2 APs continue the Extreme tradition of software-selectable radios (SSRs) capable of dual 5 GHz connectivity for indoor and industrial environments.

Priced for the mass-market, this enterprise-grade access point is ideal for budget-conscious enterprises who do not want to sacrifice performance.

The AP 305C/CX comes in an aesthetic design and can fit in the palm of your hand. Both models are eco-friendly APs partially made from recycled materials. Also included is an integrated light sensor and integrated power meter to help conserve power consumption*. The easy install ceiling mount for quick installation and unique way to hide the Ethernet cables for an aesthetically pleasing installation.

Despite the exponential growth of users, BYOD devices, IoT, high-bandwidth applications and security threats straining the infrastructure, the AP 305C/CX combines performance, security services and insightful ML/AI management capabilities to deliver an enterprise class solution at a value price.

Ex Extreme Elements™

ExtremeWireless™ AP 305C/CX

Hu Human

IQ Extreme Cloud IQ

Wi Wireless Indoor APs

* future software release

Built to Suit Your Business Needs

Extreme Elements are the building blocks that allow you to tailor your network to your specific business environment, goals, and objectives. They enable the creation of an Autonomous Network that delivers the positive experiences and business outcomes most important to your organization.

Combining architecture, automation, and artificial intelligence, Extreme Elements enable you to ensure that your users get what they need — when and where they need it. Providing these superior user experiences is as simple as mixing and matching the right elements.

Learn more at https://www.extremenetworks.com/extreme-elements/.

Security

The AP 305C/CX delivers the highest level of security services, beginning with support for the latest Wi-Fi Alliance WPA3 security certifications. Additionally, the AP 305C/CX supports a stateful L2-L7 DPI firewall for context-based access security, Private Pre-Shared Key (PPSK) and much more.

Management Analytics

In conjunction with Extreme Management system, cloud or on-premises, the AP 305C/CX provides a very rich set of data displayed via context driven widgets, representing historical data or a combination of historical and current data. This provides context-specific granularity with perspective views for locations, network, APs, individual client devices, as well as policy roles. In each context, administrators can adjust dashboards make a widget library.

Wi-Fi 6 Technology

Prior generations of 802.11n, 802.11ac wave 1 and 2, can be considered generational improvements with an emphasis on faster speed. 802.11ax technology instead enhances Wi-Fi efficiency as well as speed, taking Wi-Fi networks to an entirely new level. To learn more about 802.11ax, go to: https://www.extremenetworks.com/are-you-ready-for-802-11ax

RF Monitoring

Network managers will appreciate a powerful choice of RF management for their Wi-Fi networks, with Adaptive RF management with AI/ML-like functionality. Adaptive RF algorithms provide intelligent selection of the best channels and transmit power for unimpaired dual 5 GHz operation. Load balancing, band steering and many other attributes of the RF can all be automated.

Programmable Radios

Extreme launched the industry's first software defined 802.11ax access point supporting not only a dual 5 GHz capability but also two software programmable modes to optimally manage radios to provide the highest level of client performance. The AP 305C/CX intelligent monitoring of the software- configurable radios enables network managers to configure network RF technology based on user environment and configure the access points in different modes as required.

Integrated BLE and USB Port

To support both IoT and Guest Engagement services the AP 305C/CX integrates Bluetooth to connect with IoT devices wireless to engage loyalty customers with Apple iBeacon. Enterprises can use API driven applications to send advertisements directly to shoppers, guests, and conference attendees. This makes it ideal for businesses to advertise their app download pages, captive portals, or site-specific information.

Product Specifications

Radio Specifications

802.11a
- 5.150–5.850 GHz Operating Frequency
- Orthogonal Frequency Division Multiplexing (OFDM) Modulation
- Rates (Mbps): 54, 48, 36, 24, 18, 12, 9, 6 w/ auto fallback

802.11b
- 2.4–2.5 GHz Operating Frequency
- Direct-Sequence Spread-Spectrum (DSSS) Modulation
- Rates (Mbps): 11, 5.5, 2, 1 w/ auto fallback

802.11g
- 2.4–2.5 GHz Operating Frequency
- Orthogonal Frequency Division Multiplexing (OFDM) Modulation
- Rates (Mbps): 54, 48, 36, 24, 18, 12, 9, 6 w/ auto fallback

802.11n
- 2.4–2.5 GHz & 5.150–5.850 GHz Operating Frequency
- 802.11n Modulation
- Rates (Mbps): MCS0 - MCS15 (6.5MBps - 300Mbps)
- 2x2 Multiple-In, Multiple-Out (MIMO) Radio
- HT20 High-Throughput (HT) Support (for both 2.4 GHz and 5 GHz)
- HT40 High-Throughput (HT) Support for 5 GHz
- A-MPDU and A-MSDU Frame Aggregation

802.11ac
- 5.150–5.850 GHz Operating Frequency
- 802.11ac Modulation (256-QAM)
- Rates (Mbps): MCS0–MCS9 (6.5Mbps – 867Mbps), NSS = 1-2.
- 2x2:2 Stream Multiple-In, Multiple-Out (MIMO) Radio
- VHT20/VHT40/VHT80 support
- TxBF (Transmit Beamforming)

802.11ax
- 2.4–2.5 GHz & 5.150–5.850 GHz Operating Frequency
- 802.11ax Modulation (1024-QAM)
- Dual-band OFDMA
- Rates (Mbps):
    - 5G: HE0-HE11 (8 Mbps – 1200 Mbps).
    - 2.4G: HE0-HE11 (8 Mbps – 574 Mbps).
- 2x2:2 Stream Multiple-In, Multiple-Out (MIMO) Radio
- HE20/HE40/HE80 support for 5 GHz
- HE20 support for 2.4 GHz
- DL SU-MIMO and MU-MIMO
- TxBF (Transmit Beamforming)

BLE 5 Radio Bluetooth® Low Energy (BLE)

Interfaces
- (1) Autosensing 10/100/1000 BASE-T Ethernet PoE (Power over Ethernet 802.3af) Port
- USB2.0, Type A 5V, 0.9A
    USB power <= 500 mA - 802.3af
    USB power > 500 mA - 802.3at

Power Options
- Power Draw: Typical: 9.98 W; Max: 11.28 W (w/o USB)
              Typical: 14.98 W; Max: 16.28 W (w/ USB)
- 802.3af Power over Ethernet (PoE) capable Gigabit Ethernet port (RJ-45 power input pins: Wires 4,5,7,8 or 1,2,3,6)
- Support 802.3af/802.3at Power over Ethernet injector

Power Specifications
- IEEE 802.3af PoE Power

Physical
- AP 305C: 5.2″ x 5.2″ x 1.5″ (133mm x 133mm x 37mm)
- AP 305CX: 5.8″ x 5.8″ x 1.5″ (147mm x 147mm x 39mm)
- AP 305C and AP 305CX: .9 lbs (.4kg)
- TPM Chip

Antennas
AP 305C - Internal Antennas
- (2) Integrated single band, 2.4-2.5 GHz omnidirectional antennas
- (2) Integrated single band, 5.1-5.8 GHz omnidirectional antennas

AP 305CX - External Antennas
- (4) RP SMAs connectors

Mounting
- AP support 15/16 flush ceiling tile and is integrated to AP
- Wall Mount sold as an accessory
- Ceiling Tile Recessed 15/16″ sold as an accessory
- Built-in slot for Kensington type locks

Environmental
- Operating: 0 to 40 °C, Storage: -40 to 70 °C
- Humidity: 10% to 95% (non-condensing)

Environmental Discharge
- +/-8 kV (contact discharge)/ +/-15 kV (Air Discharge)

Environmental Compliance
- UL2043 - Plenum Rated

Regulatory Compliance
Product Safety Certifications
- IEC 62368/60950-1, EN 62368/60950-1, USA 62368/60950-1, AS/NZS 62368/60950.1
- RoHS Directive 2011/65/EU

Radio Approvals
- FCC CFR 47 Part 15, Class B
- ICES-003, Class B
- FCC Subpart C 15.247
- FCC Subpart E 15.407
- RSS247
- AS/NZS4268 + CISPR32
- IEC/EN 60601-1-2,
- EN 62311
- EN 50385
- EN 301 489-1
- EN 301 489-17
- EN 55032, (Class B)

Power Options
- EN 55011, (Group 1, Class B)
- EN 55024
- EN 60601-1-2
- EN 61000-3-2
- EN 61000-3-3
- EN 300 328
- EN 301 893
- EN 300 440
- EN 50581

Peak Antenna Gain

	Radio 0	Radio 1	IoT
Dual Band	2.4 Ghz 2.67dBi	5 Ghz 3.75dBi	2.7dBi
Dual 5Ghz	5 Ghz 3.97dBi	5 Ghz 3.75dBi	2.7dBi

Power and Sensitivity Tables

Power - 2.4 GHz

Channel	Data Rate	Power (dBm)
11b	1 - 11 Mbps	18
11g	6 Mbps	18
	54 Mbps	17
11n HT20	MCS0, 7	18, 14
11n HT40	MCS0, 7	18, 14
11ac HT20	MCS0, 8	18, 13
11ac HT40	MCS0, 9	18, 12
11ax HE20	HE0, 11	18, 11
11ax HE40	HE0, 11	18, 11

Receive Sensitivity – 2.4 GHz

Channel	Data Rate	Power (dBm)
11b	1 - 11 Mbps	-95, -88
11g	6 Mbps	-91
	54 Mbps	-74
11n HT20	MCS0, 7	-91, -71
11n HT40	MCS0, 7	-88, -69
11ac HT20	MCS0, 8	-90, -61
11ac HT40	MCS0, 9	-88, -58
11ax HE20	HE0, 11	-90, -61
11ax HE40	HE0, 11	-88, -58

Power - 5 GHz

Channel	Data Rate	Power (dBm)
11a	6 Mbps	18
	54 Mbps	16
11n HT20	MCS0, 7	18, 15
11n HT40	MCS0, 7	18, 15
11ac VHT20	MCS0, 8	18, 14
11ac VHT40	MCS0, 9	18, 13
11ac VHT80	MCS0, 9	18, 13
11ax HE20	HE0, 11	18, 13
11ax HE40	HE0, 11	18, 13
11ax HE80	HE0, 11	18, 13

Receive Sensitivity – 5 GHz

Channel	Data Rate	Power (dBm)
11a	6 Mbps	-92
	54 Mbps	-74
11n HT20	MCS0, 7	-90, -72
11n HT40	MCS0, 7	-88, -69
11ac VHT20	MCS0, 8	-90, -68
11ac VHT40	MCS0, 9	-88, -63
11ac VHT80	MCS0, 9	-85, -58
11ax HE20	HE0, 11	-88, -59
11ax HE40	HE0, 11	-87, -57
11ax HE80	HE0, 11	-85, -54

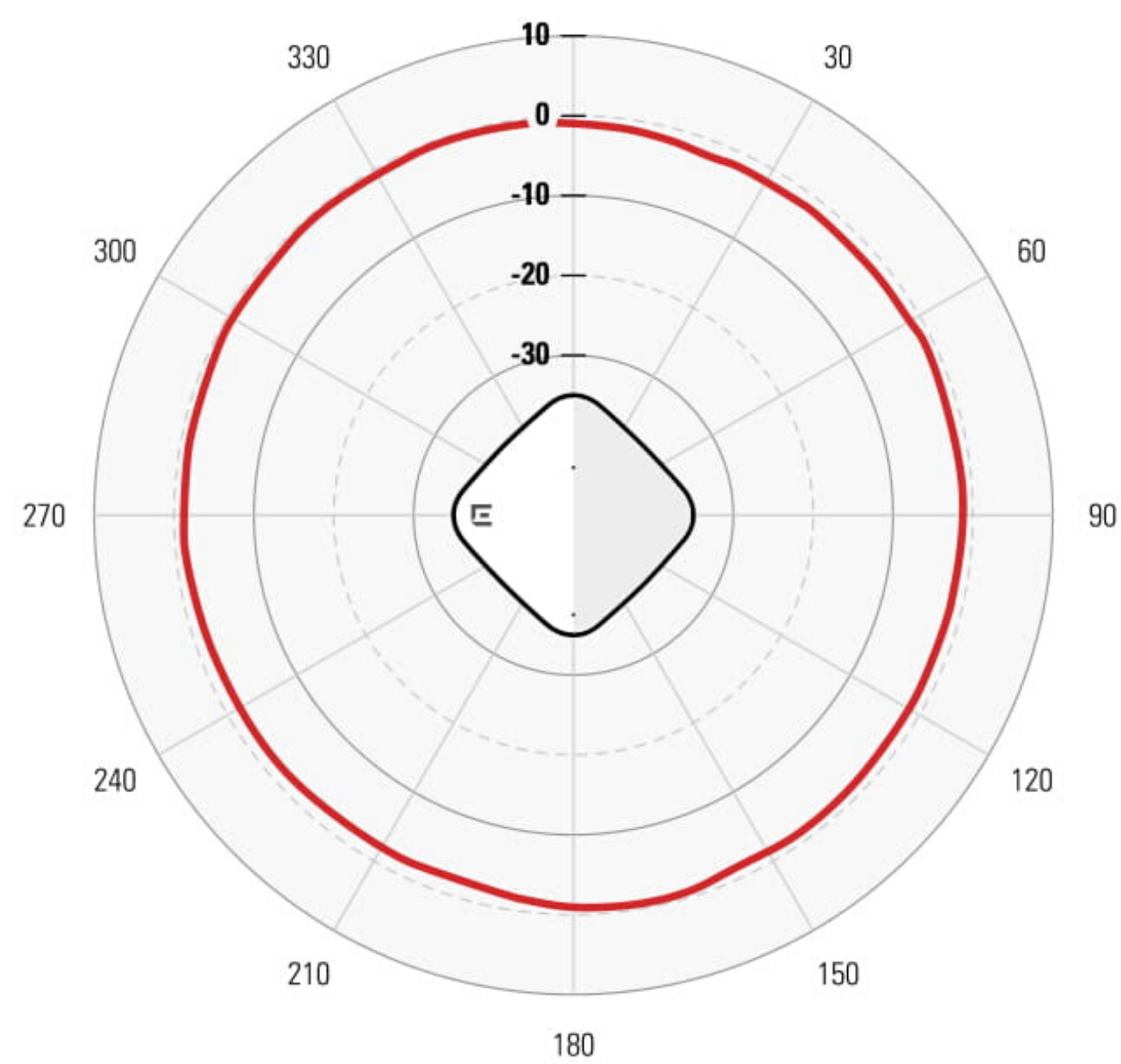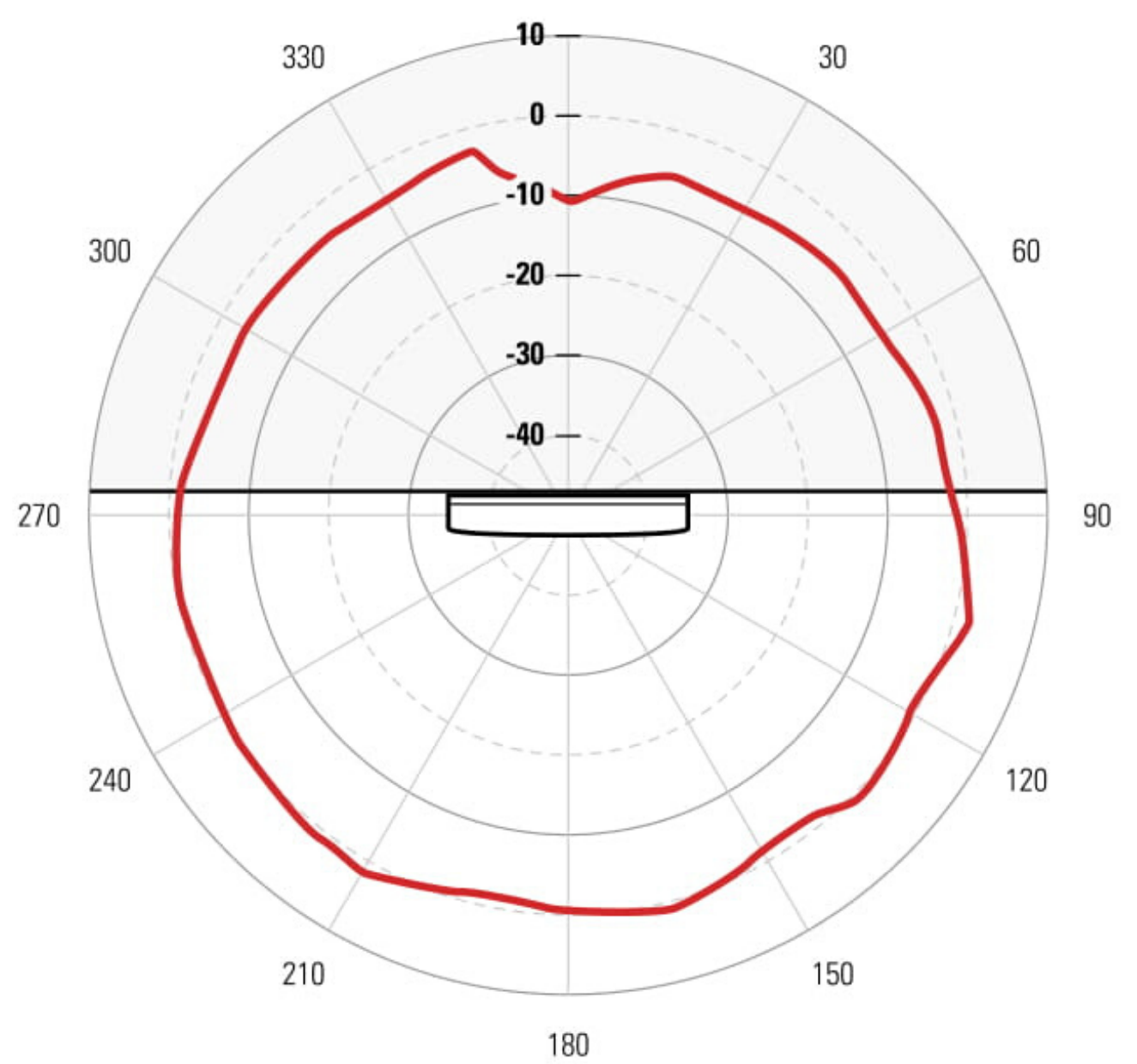# Radiation Patterns – Azimuth and Elevation

Azimuth – 2.4 GHz
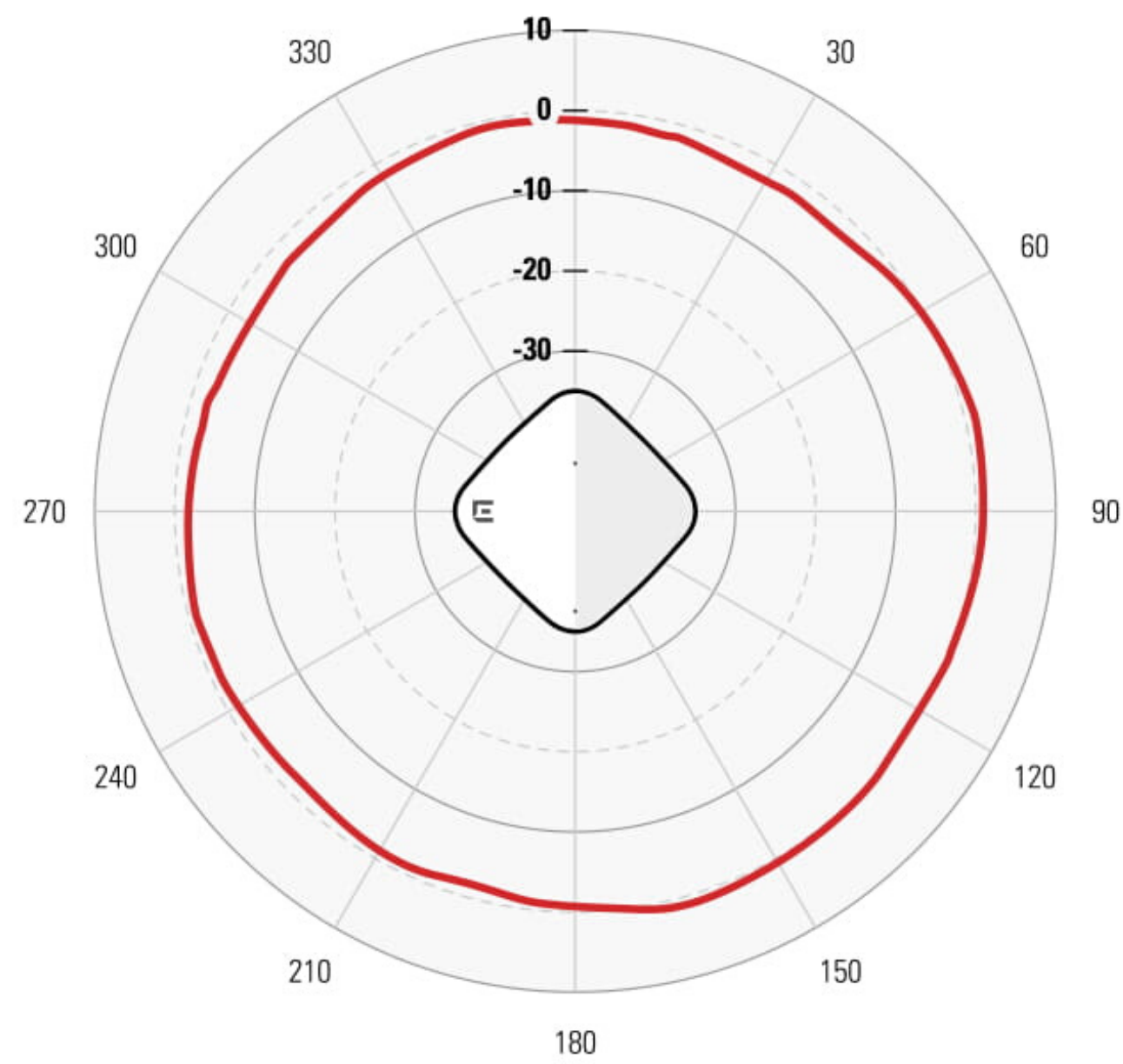
Elevation – 2.4 GHz
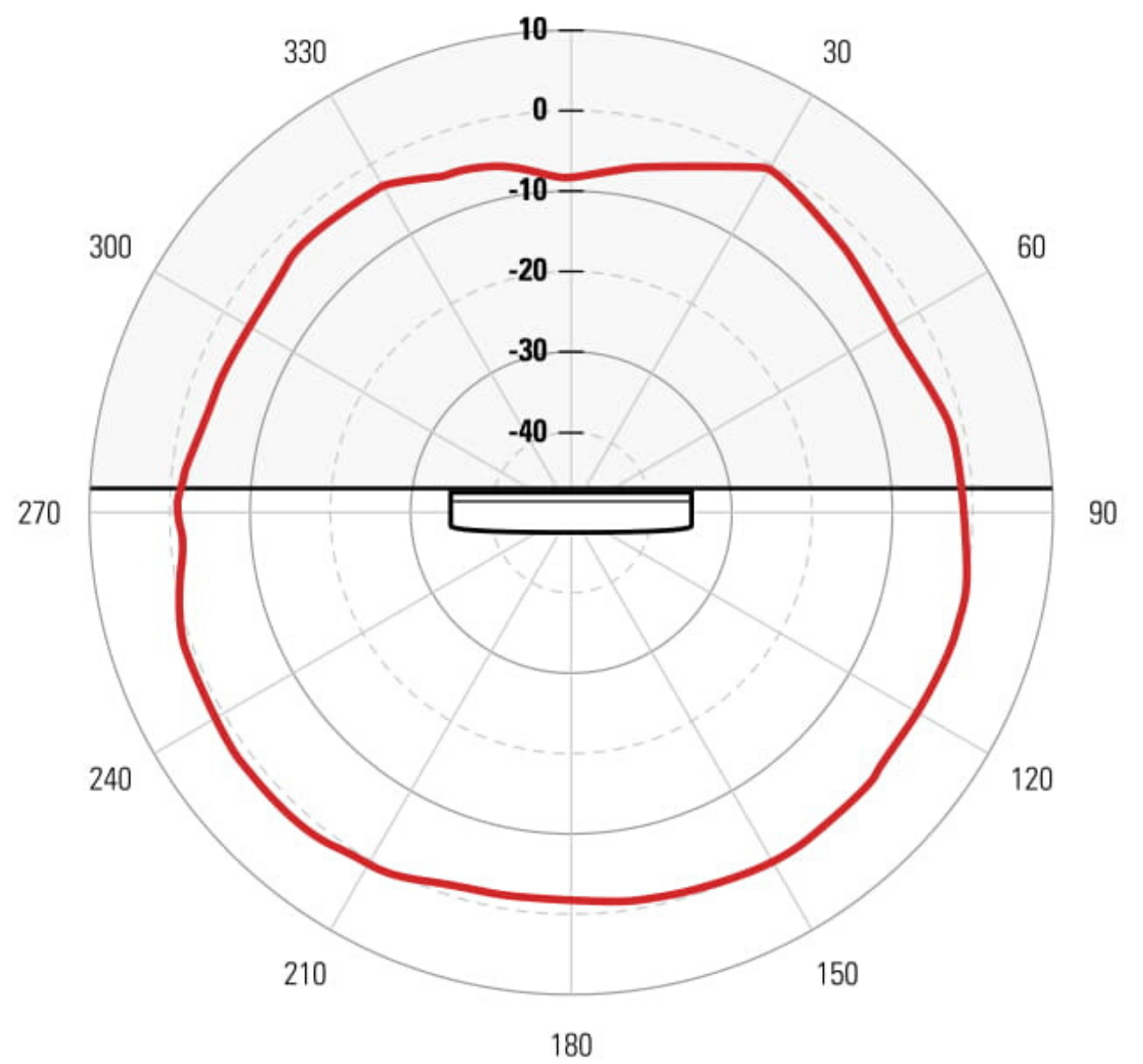
Azimuth – 5 GHz

Elevation – 5 GHz

Ordering Information

AP 305C and AP 305CX

MKT Product SKU	Description
AP 305C-FCC	ExtremeCloud IQ: Indoor WiFi6 AP, 2x2 radios with Dual 5GHz and 1x1GbE port. Integrated light/power sensors and BLE. AI/ML green mode. Internal antennas. Built-in ceiling mounts. Includes Connect. Domain: US
AP 305C-CAN	ExtremeCloud IQ: Indoor WiFi6 AP, 2x2 radios with Dual 5GHz and 1x1GbE port. Integrated light/power sensors and BLE. AI/ML green mode. Internal antennas. Built-in ceiling mounts. Includes Connect. Domain: Canada
AP 305C-WR	ExtremeCloud IQ: Indoor WiFi6 AP, 2x2 radios with Dual 5GHz and 1x1GbE port. Integrated light/power sensors and BLE. AI/ML green mode. Internal antennas. Built-in ceiling mounts. Includes Connect. Domain: EMEA, Rest of World
AP 305CX-FCC	ExtremeCloud IQ: Indoor WiFi6 AP, 2x2 radios with Dual 5GHz and 1x1GbE port. Integrated light/power sensors and BLE. AI/ML green mode. External antennas. Built-in ceiling mounts. Includes Connect. Domain: US
AP 305CX-CAN	ExtremeCloud IQ: Indoor WiFi6 AP, 2x2 radios with Dual 5GHz and 1x1GbE port. Integrated light/power sensors and BLE. AI/ML green mode. External antennas. Built-in ceiling mounts. Includes Connect. Domain: Canada
AP 305CX-WR	ExtremeCloud IQ: Indoor WiFi6 AP, 2x2 radios with Dual 5GHz and 1x1GbE port. Integrated light/power sensors and BLE. AI/ML green mode. External antennas. Built-in ceiling mounts. Includes Connect. Domain: EMEA, Rest of World

Accessories

Note: Two clips designed into the underside of the AP unit that will accommodate a 15/16 type ceiling tile rail system.

Other mounting accessories see below. Mounting descriptions are detail in the Hardware User's Guide

MKT Product SKU	Descriptions
Mounting Accessories	
AH-ACC-BKT-AX-IL (x1 per)	Mounting bracket for Interlude ceilings
AH-ACC-BKT-AX-SL (x1 per)	Mounting bracket for Silhouette 1/8" and Silhouette 1/4" ceilings
AH-ACC-BKT-AX-TB (x1 per)	Mounting bracket for Prelude 15/16" and Suprafine 9/16" ceilings
AH-ACC-BKT-AX-WL (x1 per)	Mounting bracket for direct-to-wall installations
AH-ACC-ANT-AX-KT (x8 per pack)	Articulated indoor antenna kit (8 x Dual Band 5dBi antennas)
Power Accessories	
PD-3501G-ENT	Single port 802.3af compliant midspan
AH-ACC-PW-CBL-US	6ft 18 AWG universal power cord with US plug
AH-ACC-PW-CBL-UK	6ft universal power cord with UK plug
AH-ACC-PW-CBL-EU	6ft universal power cord with EU plug
AH-ACC-PW-CBL-AU	6ft universal power cord with AU plug
AH-ACC-PW-CBL-JP	6ft universal power cord with Japan plug
AH-ACC-PW-CBL-KR	6ft universal power cord with Korea plug

Zapraszamy do kontaktu!
Więcej informacji: www.kreski.pl

http://www.extremenetworks.com/contact