

# AP5050U/D

## Highlights

### Advanced Radio Technology

#### Tri-Radio Design

- 2.4 GHz (4x4:4)
- 5 GHz (4x4:4)
- 6 GHz (4x4:4)\*

#### Operational modes

- Mode 1: 2.4 GHz/5 GHz/6 GHz Data Radios
- Mode 2: 5 GHz/6 GHz Data radios + Tri-frequency sensor (2.4 GHz/5 GHz/6 GHz)

#### Universal Hardware Platform

- Cloud: ExtremeCloud™ IQ
- On-Premises: ExtremeCloud IQ Controller

#### Designed for Harsh Environments

- IP67 Outdoor Rated
- Extended temp range: -40°C to +60°C

#### Superior Tri-Frequency Radio Performance

- Multi-band filter reduces interference and enables 5 GHz and 6 GHz operation across all available channels

#### Cellular Coexistence Filter (CCF)

- Minimizes the impact of interference from cellular networks

#### Fully Functional Wi-Fi with 802.3at

#### Smart Management Choices

- ExtremeCloud IQ for public, private, and ExtremeCloud Edge cloud management capabilities

\*6 GHz is country dependent



## Wi-Fi 6E Tri-Radio IP67-Rated Outdoor Access Point

Extreme Networks is adding a new family of purpose-built 802.11ax (Wi-Fi 6E) Access Points (APs) for stadiums to its Smart portfolio, that support more users and IoT devices with greater performance and efficiency.

The 6 GHz radio is enabled outdoors in the United States and uses Automated Frequency Coordination (AFC). 6 GHz AFC ratification and certification varies by region.

Key Benefits Include:

**Harsh Outdoor and Stadium Optimized:** As the Official Wi-Fi Solutions Provider of the National Football League (NFL) and Major League Baseball (MLB), Extreme understands firsthand the unique challenges of stadiums and harsh outdoor high-density Wi-Fi deployments. The IP67-rated AP5050 Series builds on that experience, by delivering a custom-designed family of access points that cater specifically to these types of challenging environments.

**High Performance in High Density Environments:** Improve user experience and device performance with 4x4:4 6 GHz, 4x4:4 5 GHz, and 4x4:4 2.4 GHz with OFDMA technology. With the latest Wi-Fi 6E performance and multiple software programmable radio modes, AP5050 series can serve the densest environments.

## Key Benefits (continued)

**Future-Proof with Wi-Fi 6E:** With built-in 6 GHz radios, Extreme AP5050 series increases device capacity and improves spectral efficiency, allowing stadiums and high-density environments to extract more out of the Wi-Fi spectrum and future-proof their network and investment. The AP5050 series comes with multipurpose GPS capabilities, allowing it to detect regional location for approved Wi-Fi 6E outdoor use.

**Modular Design for Flexible Deployment:** Extreme's experience has taught us there is no one-size-fits-all solution for stadiums and complex outdoor environments. From the field to bowl seating, to gate entrances, to concierge areas, to parking lots, temporary medical sites, or outdoor campus locations, each area has its own requirements. The AP5050 series delivers flexible deployment options—from under seat mounted, to pole-mounted, to APs with software selectable antennas—that ensure an exceptional mobile experience throughout the entire stadium or deployment environment.

The AP5050U and AP5050D are Enterprise Universal and World SKU Wi-Fi 6E Wireless access points. This innovation simplifies the sales ordering process and reinforces Extreme's commitment to the journey to the "Infinite Enterprise." The World SKU allows customers, partners, and distributors to order one model for any region, replacing the age-old problem of country specific models. ExtremeCloud IQ geo-locates the access point and accurately provides it with the corresponding set of channel and power specifications for that country.

The AP5050U and AP5050D Wi-Fi 6E access points, with three 4x4:4 radios, provide high-efficiency, high-performance 802.11ax aggregate data rates up to 10 Gbps in the 6 GHz, 5 GHz, and 2.4 GHz band. Designed for high density environments such as event venues, schools, transportation facilities, healthcare facilities, and stadiums, the AP5050U and AP5050D are powerful and intelligent enough to provide the highest level of client services without compromising security. Despite powerful capabilities, the AP5050U and AP5050D can operate with fully functional Wi-Fi capabilities using 802.3at PoE, simplifying power capacity planning.

The AP5050U and AP5050D are engineered to meet the challenges being placed on the infrastructure by more users, devices, applications, and security threats. The AP5050U and AP5050D combine powerful 802.11ax Wi-Fi 6E technology, advanced security, and ML/AI management capabilities together as an enterprise-class solution that allows you to deploy high speed, highly secure Wi-Fi into high-density environments.

Unlike other access points that scan only part-time, the AP5050U and AP5050D feature a dedicated tri-frequency sensor that monitors for rogue devices full time, eliminating the risk of vulnerability and attacks. This tri-radio AP is capable of multiple operating modes, optimizing for maximum performance without trading off security.



AP5050D-WW



AP5050U-WW

## Wi-Fi 6 (802.11ax) Technology

Wi-Fi 6 ushered in a new generation of Wi-Fi. While prior generations emphasized higher speeds, 802.11ax technology instead focused on improving Wi-Fi efficiency and speed, taking Wi-Fi networks to an entirely new level. With the addition of the 6 GHz band for unlicensed operation, Wi-Fi 6E has access to up to 1,200 MHz of spectrum\*, which is three times that of existing 'usable' spectrum which enables improved quality of service (QoS) in dense environments, new applications and use cases, and an improved user experience.

Visit [here](#) to learn more about 802.11ax and Wi-Fi 6E.

\* Country dependent

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## Management Analytics

In conjunction with Extreme Management system, cloud or on-premises, the AP5050U and AP5050D provide a rich set of data displayed via widgets, representing unlimited 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, and policy roles. In each context, administrators can adjust dashboards from a widget library.

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## Tri-Radio Programmable AP

Extreme launched the industry's first software defined Wi-Fi 6E access point supporting two software programmable modes to optimally manage radios to provide the highest level of client performance. The AP5050U and AP5050D are tri-radio access points that can transmit with three data radios or with two data radios and a dedicated tri-frequency sensor. The AP5050U and AP5050D intelligently monitor the software-configurable radios, enabling network managers to configure network RF technology based on the user environment and configure the access points in different modes as required.

## Security

The AP5050U and AP5050D deliver the highest level of security services, beginning with support for the latest Wi-Fi Alliance WPA3 security certifications. Additionally, supporting a stateful L2- L7 DPI firewall for context-based access security.

Leverage [Extreme Fabric Attach](#) to securely automate provisioning and deployment by connecting to a Fabric Connect-enabled switch. AP5050U and AP5050D support a stateful L2-L7 DPI firewall for context-based access security, tri-frequency security, Private Pre-Shared Key (PPSK), location analytics sensor, and much more.

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## Universal Hardware

The AP5050U and AP5050D are universal hardware platforms that come with a dual-persona capability allowing user choice of the Wi-Fi operating system (OS). Either the IQ Engine operating system or the ExtremeCloud IQ Controller Engine operating system persona can be enabled as required. The desired persona can be selected at startup or changed at a later stage. Once selected, the AP5050U or AP5050D assumes the features or capabilities of the selected OS. When first powered on, the AP5050U or AP5050D automatically connects to ExtremeCloud IQ to find its persona. The preprovisioned OS persona is then remotely enabled on the AP5050U or AP5050D system, eliminating the need for manual selection.

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## Integrated Bluetooth Low Energy

To support both IoT and Guest Engagement services, the AP5050U and AP5050D integrate Bluetooth® to connect with IoT devices 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.

## Wi-Fi 6E Enhanced Capacity

By utilizing the additional 6 GHz spectrum offered by Wi-Fi 6E, the AP5050U and AP5050D operate up to three times as much spectrum as previous generations of Wi-Fi to deliver enhanced wireless experiences, faster speeds, and less interference.

Band	Number of 20 MHz Channels	Maximum Channel Size	Maximum Throughput
6 GHz	59	160 MHz	4.8 Gbps
5 GHz	25	160 MHz	4.8 Gbps
2.4 GHz	3	20 MHz*	1.148 Gbps
Total	87		10.7 Gbps

\* For US regulatory environments (20 MHz channels)

## Product Specifications

### Radio Specifications

Max Users

SSID per Radio/Total: 8/24

Users per Radio/total: 512/1536

#### 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 and 5.150–5.850 GHz Operating Frequency

802.11n Modulation

HT 20 High-Throughput (HT) Support (for both 2.4 GHz and 5 GHz)

HT 40 High-Throughput (HT) Support for 5 GHz

A-MPDU and A-MSDU Frame Aggregation

Rates (Mbps): MCS0 – MCS31 (6.5Mbps - 600Mbps)

#### 802.11ac

5.150–5.850 GHz Operating Frequency

802.11ac Modulation (256-QAM)

5G: 4x4 Multiple-In, Multiple-Out (MIMO) Radio

2.4G: 4x4 Multiple-In, Multiple-Out (MIMO) Radio

Rates (Mbps): MCS0–MCS9 (6.5Mbps), 3466Mbps, NSS = 1-4.

4x4:4 Stream Multiple-In, Multiple-Out (MIMO) Radio

VHT20/VHT40/VHT80/VHT160

TxBF (Transmit Beamforming)

#### 802.11ax

2.4-2.5GHz, 5.50-5.850 and 5.925-7.125 GHz Operating Frequencies

802.11ax Modulation (1024-QAM)

Dual-band OFDMA

6G Rate: HE0-HE11 (8 Mbps – 4800 Mbps)

5G Rate : HE0-HE11 (8 Mbps – 4800 Mbps)

2.4G Rate: HE0-HE11 (8Mbps – 1148 Mbps)

4x4:4 Stream Multiple-In, Multiple-Out (MIMO) Radio @ 6 GHz

4x4:4 Stream Multiple-In, Multiple-Out (MIMO) Radio @ 5 GHz

4x4:4 Stream Multiple-In, Multiple-Out (MIMO) Radio @ 2.4 GHz

HE20/HE40/HE80/HE160 support for 6 GHz

HE20/HE40/HE80/HE160 support for 5 GHz

HE20/HE40 support for 2.4 GHz

DL SU-MIMO and MU-MIMO

TxBF (Transmit Beamforming)

### IoT Radio

Thread, Bluetooth® 5.2 Low Energy, IEEE 802.15.4

### GPS Radio

Support L1 frequency (1575.42 MHz)

## Interfaces

Eth0 is 5/2.5/1GE with Power over Ethernet (PoE)

Eth1 is 2.5/1GE/100 with PoE power sourcing equipment (PSE) 15.4W when 802.3bt on Eth0

## Power Options

Power Draw: 802.3at PoE: Typical 21W; Max: 25.5W (802.3at profile) w/o PoE out

Power Draw: 802.3bt: PoE out enable

Eth0 PoE 5Gbps Ethernet port RJ45

## Physical Specifications

AP5050D

Dimensions: 11.3 in. x 19.1 in. x 3.4 in. (28.6 cm x 48.3 cm x 8.7 cm)

Weight: 10.2 lbs (4.6 kg)

AP5050U

Dimensions: 11.3 in. x 10 in. x 3 in. (28.6 cm x 25.4 cm x 7.6 cm)

Weight: 7.1 lbs (3.2 kg)

## Security

Trusted Platform Module (TPM)

## Mounting

15 Degree Tilt: KT-147407-02

12 in. Extension: KT-150173-01

2x80 Deg. tilt + Ext: MBO-ART02/03

## Environmental Specifications

Operating: -40°C to 60°C (-40°F to 140°F)

Storage: -40°C to 70°C (-40°F to 158°F)

Humidity: 0% to 95% (non-condensing)

Wind resistance up to 150 mph (241 km/h) sustained winds and 165 mph (266 km/h) wind gusts

## Environmental Compliance

EU RoHS – 2011/65/EU & Amendments(EU) 2015/863

EU WEEE – 2012/19/EU

EU REACH - Regulation (EC) No 1907/2006 – Reporting

EU SCIP – EU Waste Framework Directive

China RoHS – 2 SJ/T 11364-2014

Taiwan RoHS CNS 15663 (2013.7)

## Regulatory Compliance

Radio Standards USA

Part 15C - 15.247

Part 15E - 15.407

RF exposure - FCC Part 1.1307

IEC 60601-1-2 EMC for medical devices

Radio Standards Canada

RSS 247 for 2.4G & 5GHz

RSS 248 6GHz RLAN

RF exposure - RSS-102: Issue 5, 2015

Radio Standards CE

2014/53/EU Radio Equipment Directive

EN 300 328, EN 301 893, EN 302 502, EN 300 440

EN301 489 1, EN 301 489 17, EN 62311, EN 62479

## Regulatory and Safety

North American ITE

UL 60950-1 2nd edition Listed device (U.S.)

CSA 22.2 No. 60950-1 2nd edition 2014 (Canada)

UL/CuL 62368-1 Listed

UL 2043 Plenum rated

European ITE

EN 62368-1

2014/35/EU Low Voltage Directive

International ITE

CB Report and Certificate per IEC 60950-1 + National Differences

CB Report and IEC 62368-1

AS/NZS 60950-1 (Australia /New Zealand)

## EMI/EMC Standards

North American EMC Standards

FCC CFR 47 part 15 Class B (USA)

ICES-003 Class B (Canada)

European EMC Standards

EN 55032 Class B

EN 55024

EN 55035

EN 55011, EN 60601-1-2

EN 61000-3-2: (Harmonics)

EN 61000-3-3 (Flicker)

2014/30/EU EMC Directive

International EMC Certifications

CISPR 32 Class B (International Emissions)

AS/NZS CISPR 32

CISPR 24/CISPR 35 (International Immunity)

## Antenna Gain Matrix

### Max Antenna Gain (AP5050U)

Software Mode	Radio 1	Radio 2	Radio 3	IoT Radio
Mode 1	2G 5.0 dBi	5G 5.8 dBi	6G 5.8 dBi	5dBi
Mode 2	2G 5.0 dBi	5G 5.8 dBi	2G 5.0 dBi 5G 4.9 dBi 6G 4.9 dBi	5dBi

### Max Antenna Gain (AP5050D 30 Degrees)

Software Mode	Radio 1	Radio 2	Radio 3	IoT Radio
Mode 1	2G 8.8 dBi	5G 8.1 dBi	6G 8 dBi	2.7dBi
Mode 2	2G 8.8 dBi 5G 6.7 dBi 6G 6.4 dBi	5G 8.1 dBi	6G 8 dBi	2.7dBi

### Max Antenna Gain (AP5050D 70 Degrees)

Software Mode	Radio 1	Radio 2	Radio 3	IoT Radio
Mode 1	2G 6.2 dBi	5G 6.7 dBi	6G 6.4 dBi	2.7dBi
Mode 2	2G 6.2 dBi 5G 6.7 dBi 6G 6.4 dBi	5G 6.7 dBi	6G 6.4 dBi	2.7dBi

## Power and Sensitivity Tables

### Power and Sensitivity - 2.4 GHz Radio

Channel	Data Rate	Power (dBm)	Sensitivity (dBm)
11b	1 - 11 Mbps	18	-97, -89
11g	6 Mbps	18	-95
	54 Mbps	16	-77
11n HT20	MCS0,7	18, 16	-95,-76
11n HT40	MCS0,7	18, 16	-93, -75
11ax HE20	HE0,11	18, 14	-95,-65
11axHE40	HE0,11	18, 14	-92, -62

### Power and Sensitivity - 5 GHz Radio

Channel	Data Rate	Power (dBm)	Sensitivity (dBm)
11a	6 Mbps	18	-95
	54 Mbps	16	-76
11n HT20	MCS0,7	18, 16	-95,-75
11n HT40	MCS0,7	18, 16	-92,-72
11ac VHT20	MCS0,8	18, 15	-94,-71
11ac VHT40	MCS0,9	18, 15	-92, -68
11ac VHT80	MCS0,9	18, 15	-89, -65
11ac VHT160	MCS0,9	16, 15	-85, -61
11ax HE20	HE0,11	18, 14	-94,-64
11axHE40	HE0,11	18, 14	-91,-61
11ax HE80	HE0,11	18, 14	-88, -58
11ax HE160	HE0,11	16, 14	-84, -54

### Power and Sensitivity - 6 GHz Radio

Channel	Data Rate	Power (dBm)	Sensitivity (dBm)
11a	6 Mbps	18	-93
	54 Mbps	16	-75
11n HT20	MCS0,7	18, 15	-93,-75
11n HT40	MCS0,7	17, 15	-92,-73
11ac VHT20	MCS0,8	18, 14	-93,-71
11ac VHT40	MCS0,9	17, 13	-92, -67
11ac VHT80	MCS0,9	17, 13	-89, -64
11ac VHT160	MCS0,9	16, 13	-85, -61
11ax HE20	HE0,11	18, 12	-92,-63
11axHE40	HE0,11	17, 12	-92,-60
11ax HE80	HE0,11	17, 12	-88, -58
11ax HE160	HE0,11	16, 12	-84, -54

### Power and Sensitivity - 5 GHz Radio - Sensor

Channel	Data Rate	Power (dBm)	Sensitivity (dBm)
11a	6 Mbps	18	-94
	54 Mbps	16	-75
11n HT20	MCS0,7	18, 16	-94,-75
11n HT40	MCS0,7	18, 16	-92,-72
11ac VHT20	MCS0,8	18, 15	-94,-71
11ac VHT40	MCS0,9	18, 15	-92, -68
11ac VHT80	MCS0,9	18, 15	-89, -64
11ac VHT160	MCS0,9	17, 15	-85, -61
11ax HE20	HE0,11	18, 14	-93,-64
11axHE40	HE0,11	18, 14	-91,-61
11ax HE80	HE0,11	18, 14	-88, -58
11ax HE160	HE0,11	17, 14	-84, -54

### Power and Sensitivity - 2.4 GHz Radio - Sensor

Channel	Data Rate	Power (dBm)	Sensitivity (dBm)
11b	1 - 11 Mbps	18	-97, -89
11g	6 Mbps	18	-95
	54 Mbps	16	-77
11n HT20	MCS0,7	18, 16	-95,-76
11n HT40	MCS0,7	18, 16	-93, -75
11ax HE20	HE0,11	18, 14	-95,-65
11axHE40	HE0,11	18, 14	-92, -62

### Power and Sensitivity - 6 GHz Radio - Sensor

Channel	Data Rate	Power (dBm)	Sensitivity (dBm)
11a	6 Mbps	18	-93
	54 Mbps	16	-75
11n HT20	MCS0,7	18, 16	-93,-75
11n HT40	MCS0,7	18, 16	-92,-73
11ac VHT20	MCS0,8	18, 15	-93,-71
11ac VHT40	MCS0,9	18, 15	-92, -67
11ac VHT80	MCS0,9	18, 15	-89, -64
11ac VHT160	MCS0,9	17, 15	-85, -61
11ax HE20	HE0,11	18, 14	-92,-63
11axHE40	HE0,11	18, 14	-92,-60
11ax HE80	HE0,11	18, 14	-88, -58
11ax HE160	HE0,11	17, 14	-84, -54

## Ordering Information

Product SKU	Description
AP5050U-WW	Outdoor Tri Radio Wi-Fi 6E AP (4x4:4) , 2.4 GHz, 5GHz, 6GHz & Multirate Port, Internal Omni antennas. Mounting sold separately. Domain: World SKU
AP5050D-WW	Outdoor Internal Directional Antenna Tri Radio Wi-Fi 6E AP (4x4:4), 2.4 GHz, 5GHz, 6GHz & Multirate Port, Directional Antennas: software selectable: 30° or 70°. Mounting sold separately. Domain: World SKU

## Mounting Options

### Pole Mounted: +/- 15 Degree Tilt

Item	Quantity	Marketing Part Number	Outdoor AP Mounting Accessories	Comments
Straps	2	AH-ACC- STRP-MRN	Outdoor Access Point stainless steel strap for 3 inches to 7 inches diameter pole	Order(2) for mounting to a pole
Pole Bracket	1	KT-147407-2	Outdoor Mounting Hardware kit for outdoor Access Points - stainless steel for harsh environments	Allows +/- 15 degree tilt - wall or pole mount (powder coat white)
Optional 12 inches Extension Bracket	1	KT-150173- 01	Outdoor AP 12-inch extension arm for mounting kit	Allows 12 inches of extension - can be used with KT-147407-02 (powder coat white)

The access point is attached to the tilt part (KT-147407-02) which is attached to pole part (KT-147407-02). The pole part is attached to the pole using two cable straps (AH-ACC-STRP-MRN).

The optional extension is placed between the access point and the tilt part of KT-147407-02.

### Pole Mounted: +/- 80 Degree Tilt

Item	Quantity	Marketing Part Number	Outdoor AP Mounting Accessories	Comments
Straps	2	AH-ACC- STRP-MRN	Outdoor Access Point stainless steel strap for 3 inches to 7 inches diameter pole	Order (2) for mounting to a pole
Pole Bracket	1	KT-147407-02	Outdoor Mounting Hardware kit for outdoor Access Points - stainless steel for harsh environments	Attach MBO-ART03 to KT-147407-02 prior to attaching KT-147407-02 to the pole. KT-147407-02 allows +/-15 degree tilt to walls or poles (powder coat white).
Tilt+ Extension Bracket	1	MBO-ART02	MBO-ART02 2-Axis Rotational Variable Extension Mtg Brkt for Outdoor Access Points	Allows 2 axis +/- 80 degree tilt (20 degree increments) plus 10 inches extension - wall (black and silver)



### Wall Mounted: +/- 15 Degree Tilt

Item	Quantity	Marketing Part Number	Outdoor AP Mounting Accessories	Comments
Wall	1	KT-147407-2	Outdoor mounting hardware kit for outdoor access points - stainless steel for harsh environments	Allows +/- 15 degree tilt - wall or pole mount (powder coat white)
Optional 12 inches Extension Bracket	1	KT-150173- 01	Outdoor AP 12-inch extension arm for mounting kit	Allows 12 inches extension and can be used with KT-147407-02 (powder coat white)

The access point is attached to the tilt part (KT-147407-02), which is attached to the wall part (KT-147407-02). The wall part is attached to the wall using four screws and bolts.

The optional extension is placed between the access point and the tilt part of KT-147407-02.

### Wall Mounted: +/- 80 Degree Tilt

Item	Quantity	Marketing Part Number	Outdoor AP Mounting Accessories	Comments
Tilt+ Extension	1	MBO-ART03	MBO-ART03 2-Axis Rotational Variable Extension Mtg Brkt for Outdoor Access Points	Allows 2 axis +/- 80 degree tilt (20 degree increments) and 10 inches extension - wall

The access point is attached to the large bracket (MBO-ART03) using two screws. The bracket is attached to the wall using four screws or bolts.

### Unistrut Mounted: +/- 80 Degree Tilt

Item	Quantity	Marketing Part Number	Outdoor AP Mounting Accessories	Comments
Bracket Attach Screws, Nuts, Lock Washers	2 of each	Installer Supplied Items	Stainless Steel, 1/2 inch or M13 thread diameter (2) Bolts: Hex head, machine thread (length-dependent on installation) (2) Lock Washers: Split-lock washers (2) Nuts: Hex head	Installer supplied hardware
Tilt+ Extension	1	MBO-ART03	MBO-ART03 2-Axis Rotational Variable Extension Mtg Brkt for Outdoor Access Points	Allows 2 axis +/- 80 degree tilt (10 degree increments) and 3 position (7.0 inches, 8.5 inches, and 10.0 inches) extension - wall or Unistrut bracket

### AP5050U Underseat or Underbench Mounted

Item	Quantity	Marketing Part Number	Outdoor AP Mounting Accessories	Comments
AP5050U Only	1	EIO-04	EIO-04 Underseat Mounting Slope, EIO-03- SP (Service Panel), "L" Brackets, and Hardware.	Can run conduit into or through both ends of the slope. Kit also allows for access point horizontal installation and gland protection.

### Power Accessories

Item	Description
PD-9001GO-ENT	Outdoor 802.3at PoE single port midspan

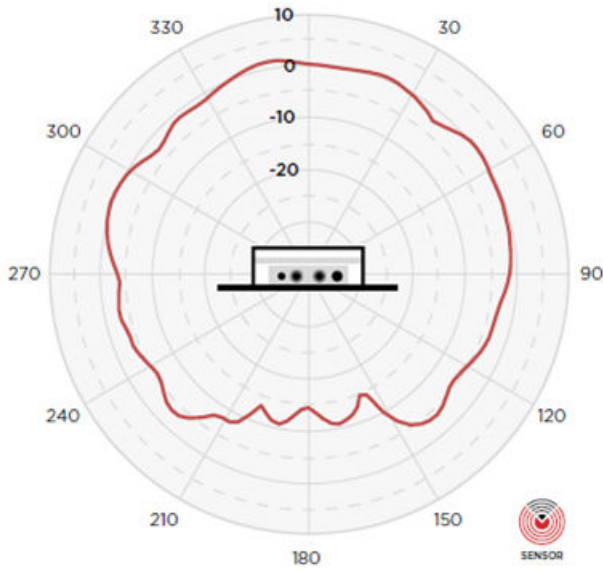
## Other Accessories

Item	Description
ACC-WIFI-MICRO-USB	Micro-USB to USB Console Adapter Cable for Extreme Wireless Access Points

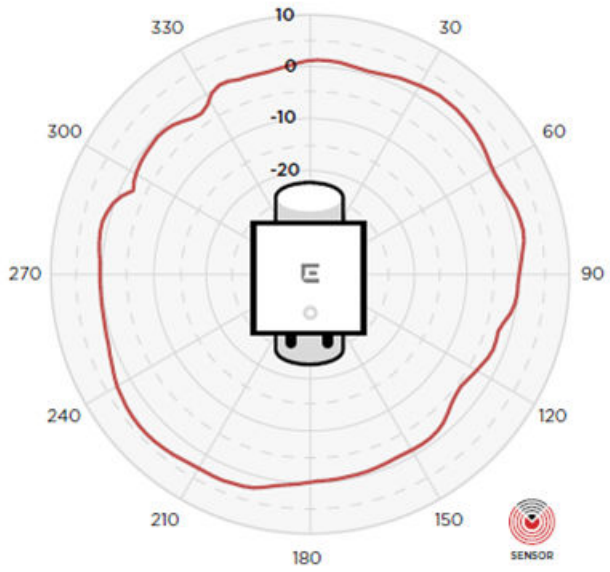
For more details, refer to the [Product Accessories Guide](#).

# Radiation Patterns – AP5050U

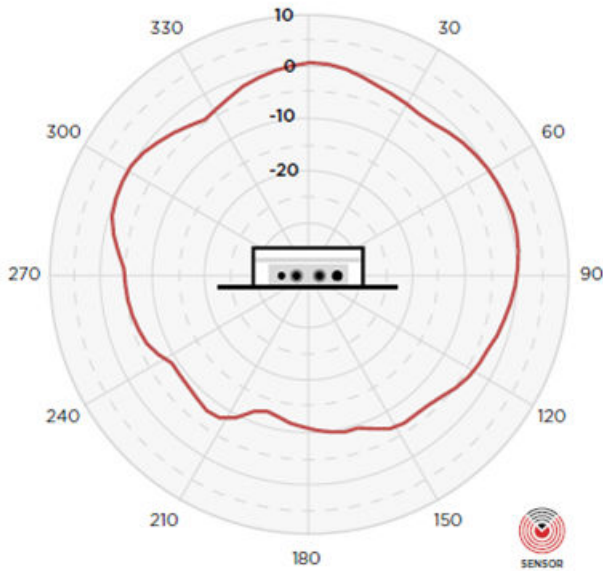
Sensor 5G Elevation



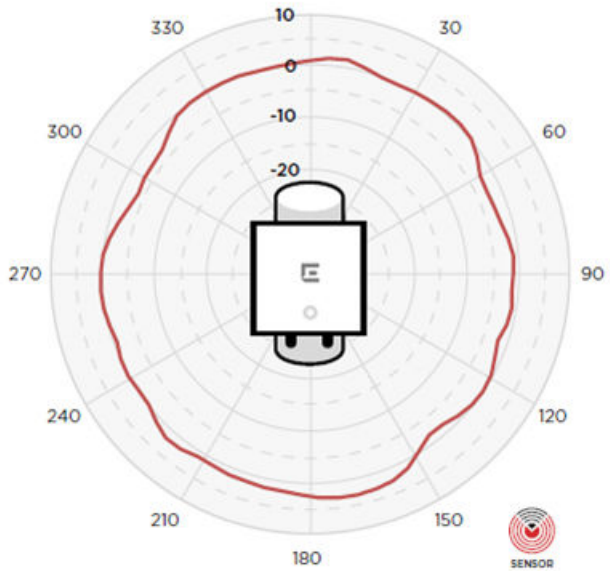
Sensor 5G Azimuth



Sensor 6G Elevation

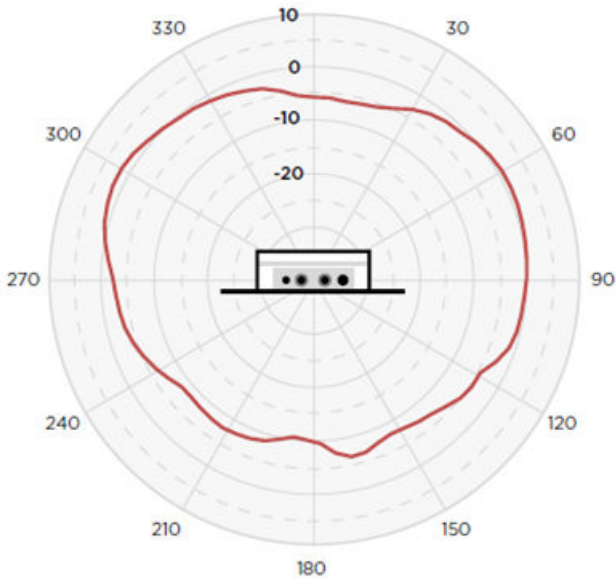


Sensor 6G Azimuth

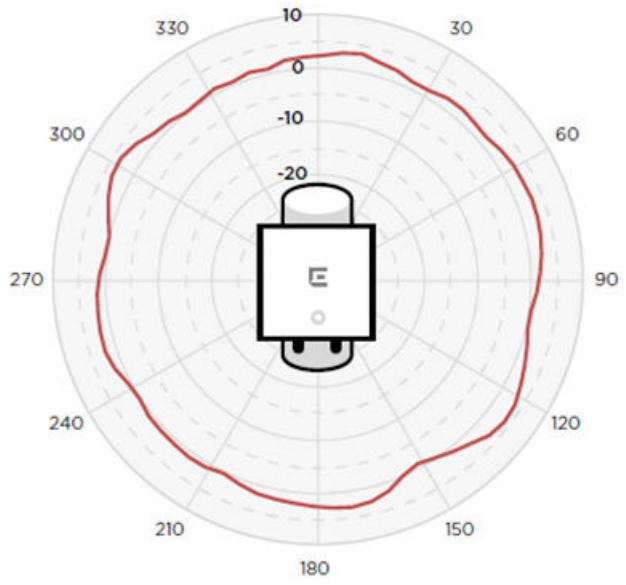


# Radiation Patterns – AP5050U

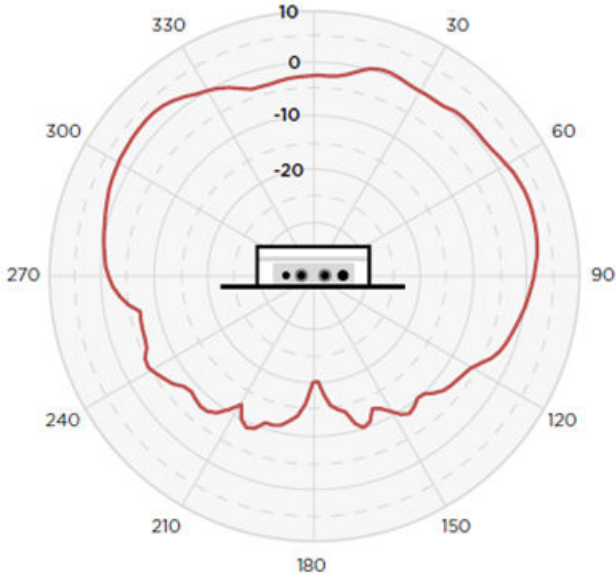
6G Elevation



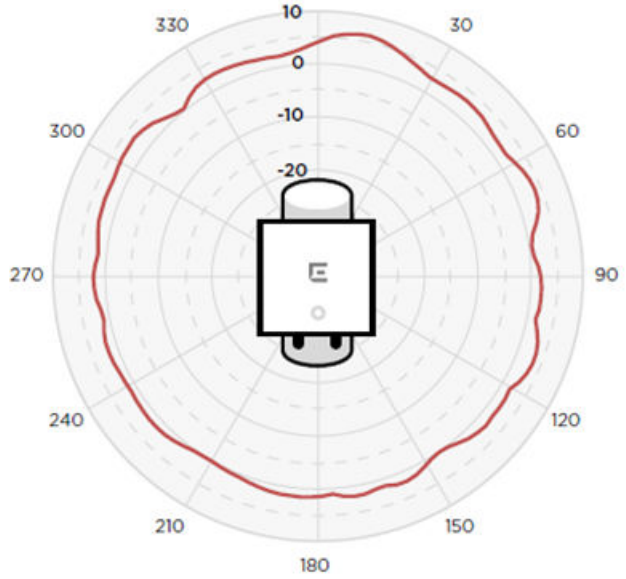
6G Azimuth



5G Elevation

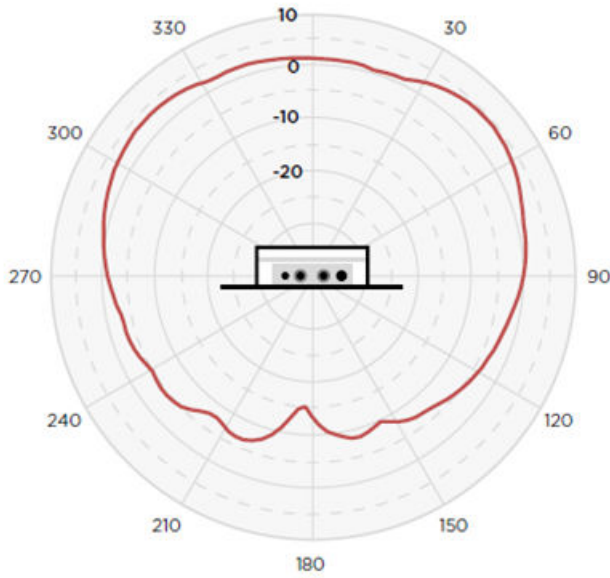


5G Azimuth

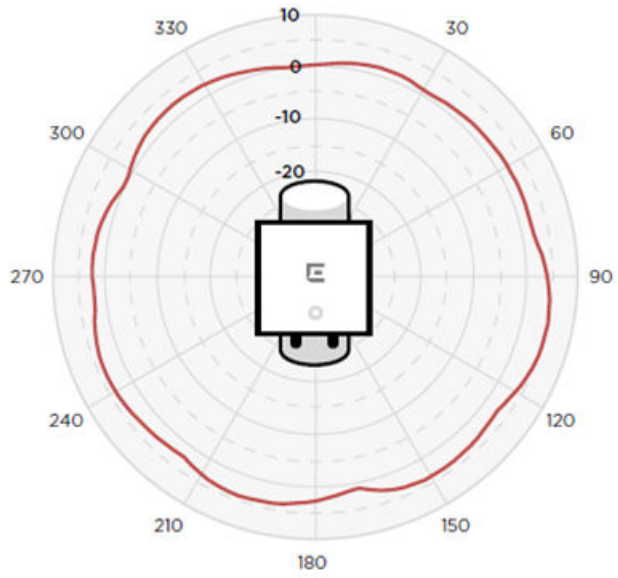


# Radiation Patterns – AP5050U

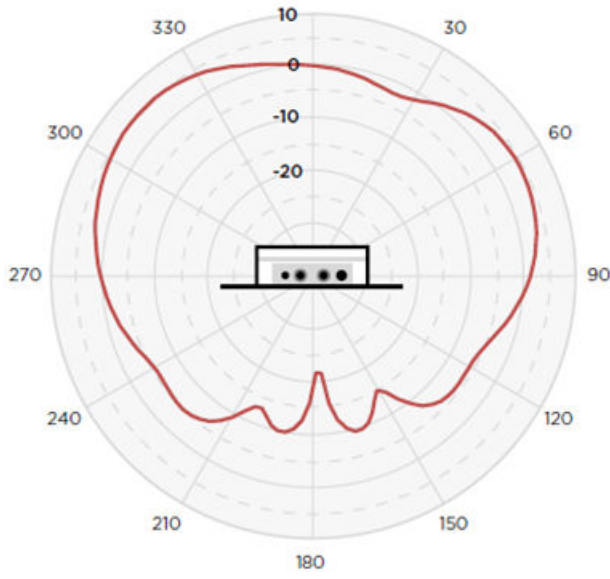
Data and Sensor 2G Azimuth



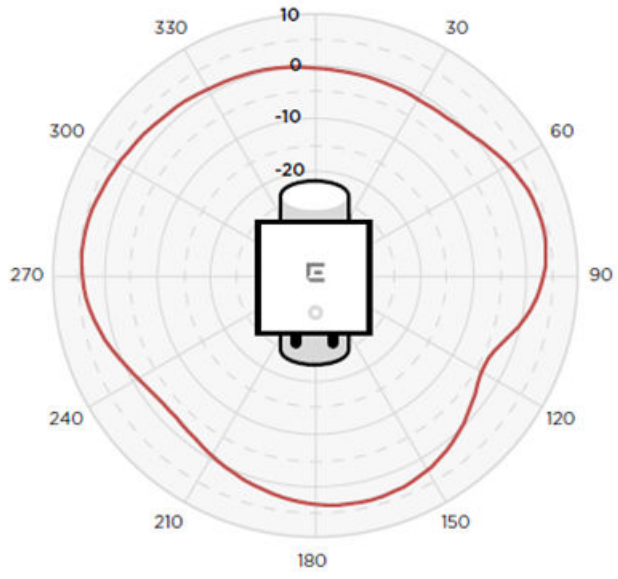
Data and Sensor 2G Elevation



BLE 2G Elevation

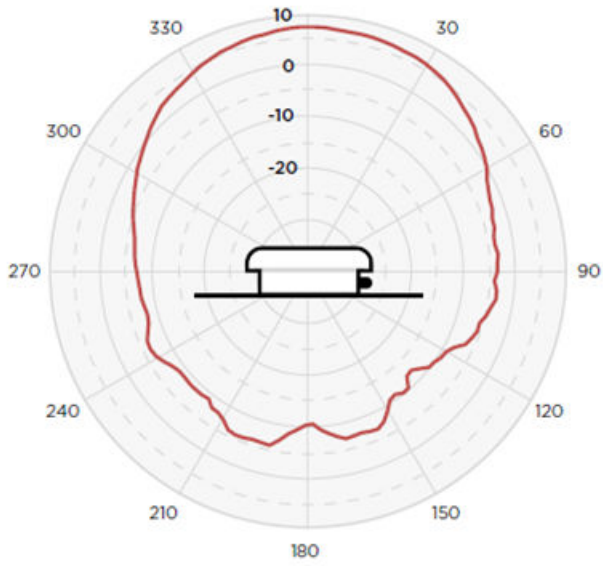


BLE 2G Azimuth

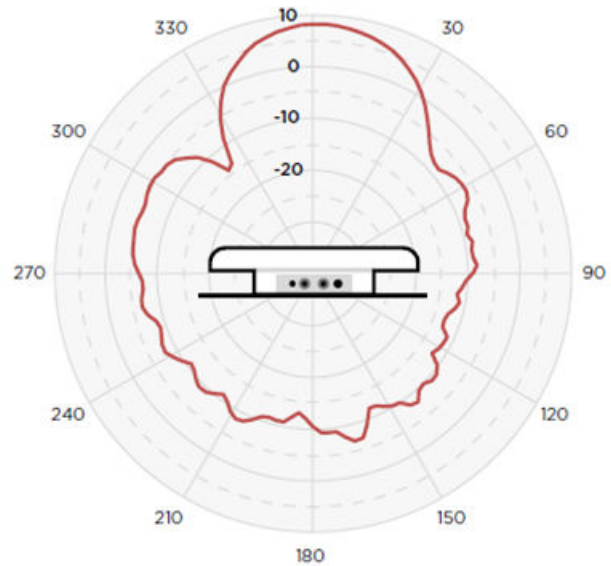


# Radiation Patterns – AP5050D

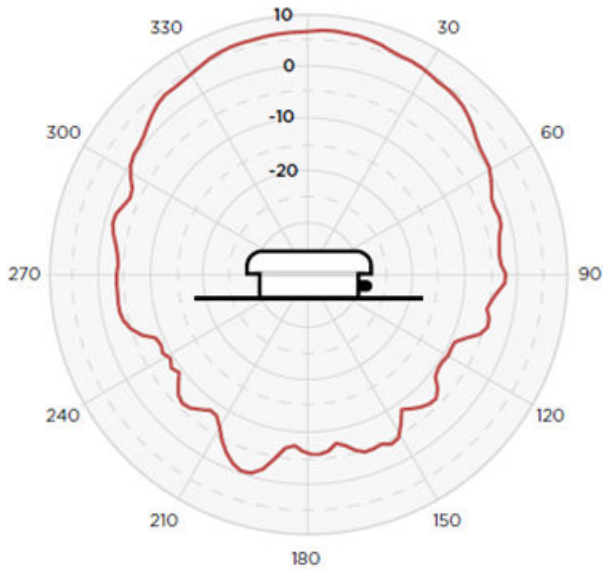
5G Narrow Elevation



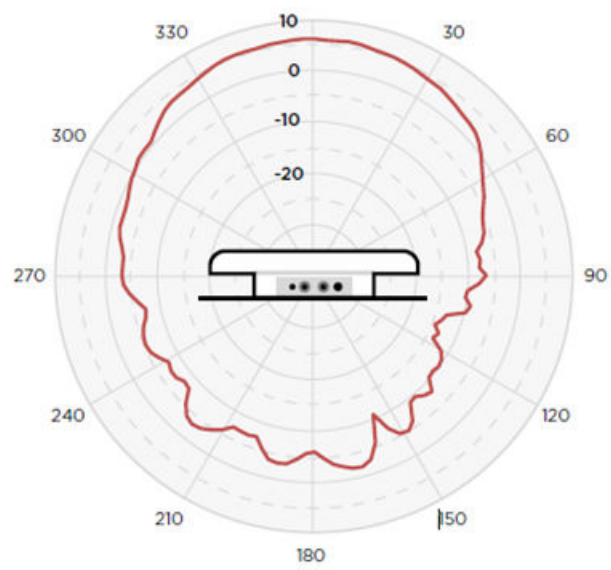
5G Narrow Azimuth



5G Wide Elevation

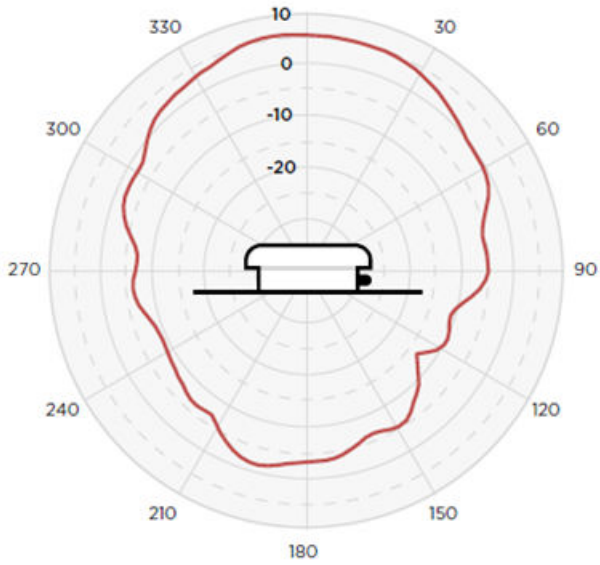


5G Wide Azimuth

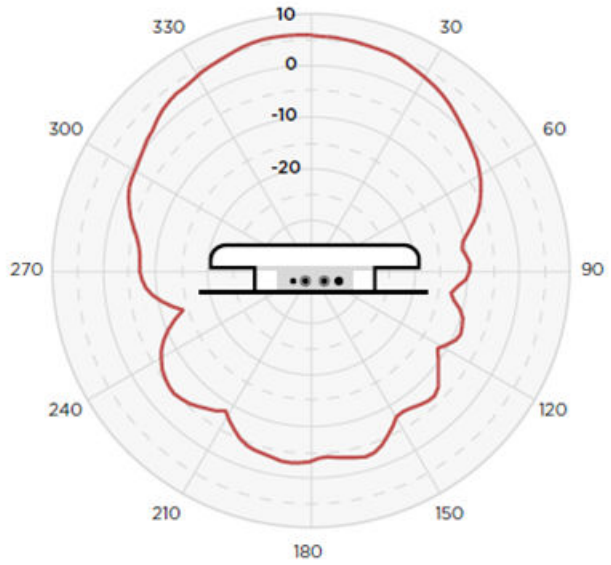


# Radiation Patterns – AP5050D

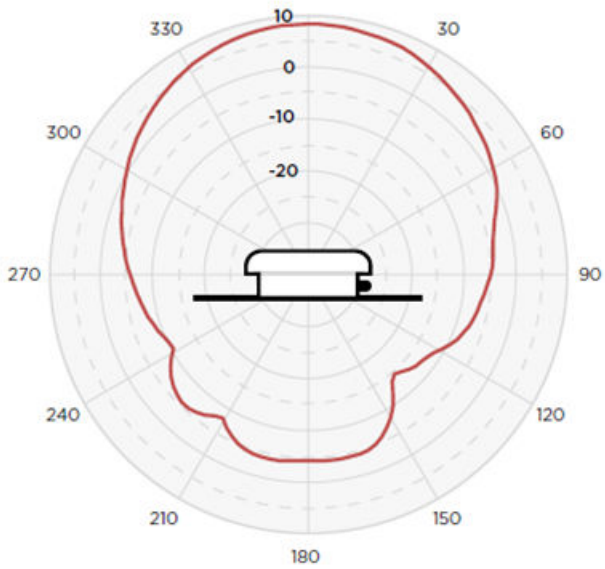
2G Wide Elevation



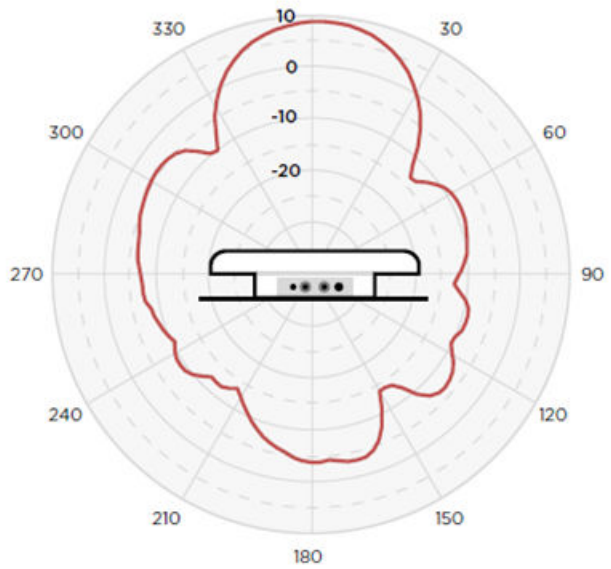
2G Wide Azimuth



2G Narrow Elevation

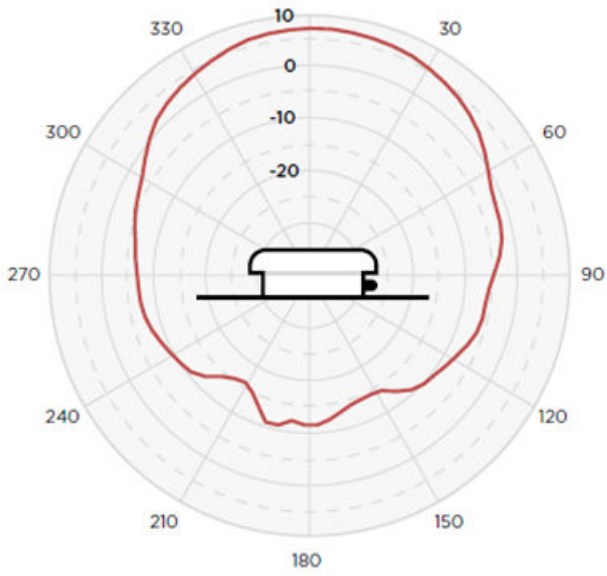


2G Narrow Azimuth

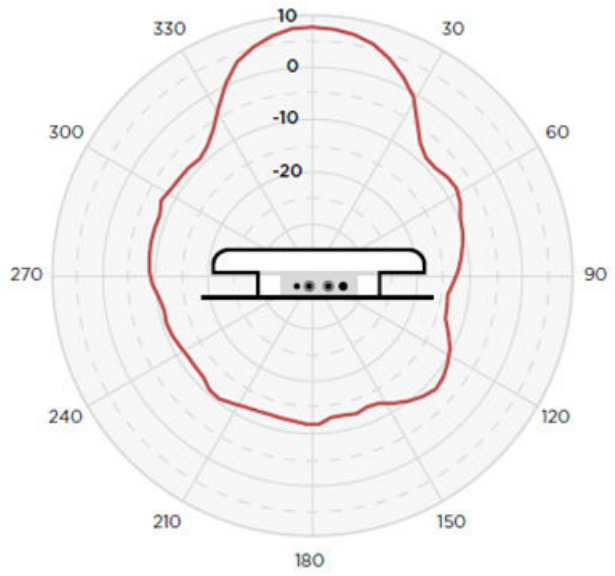


# Radiation Patterns – AP5050D

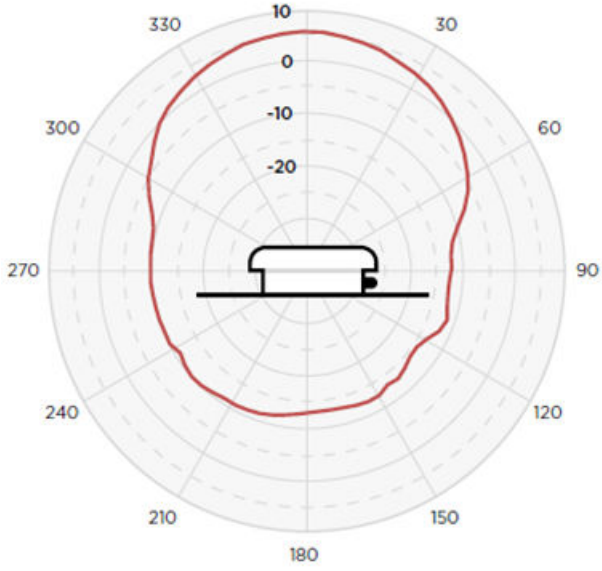
6G Narrow Elevation



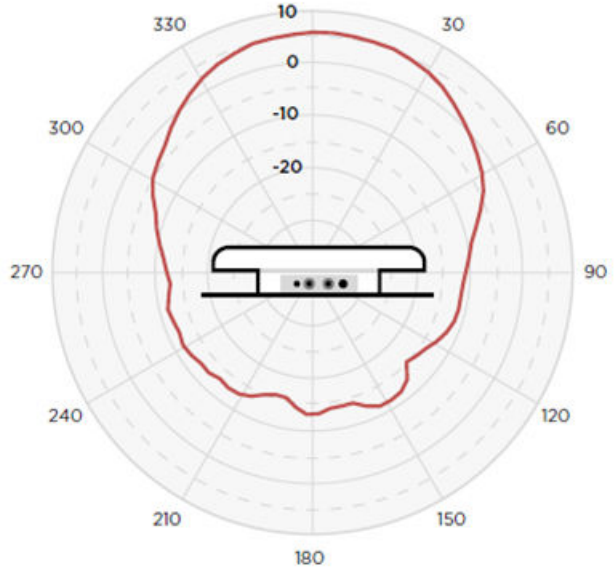
6G Narrow Azimuth



6G Wide Elevation



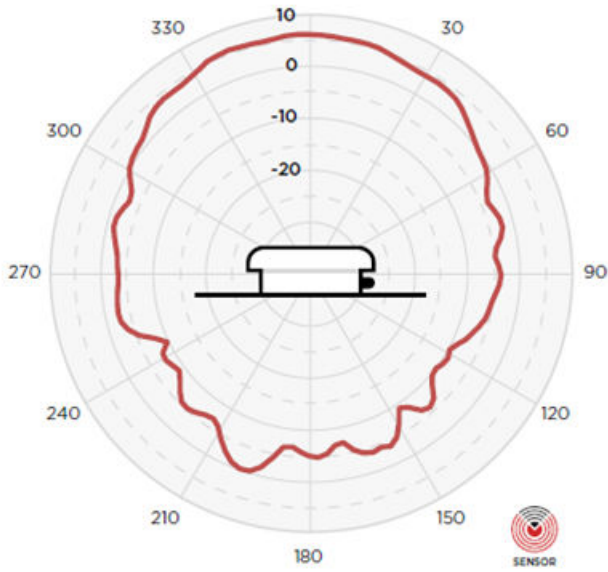
6G Wide Azimuth



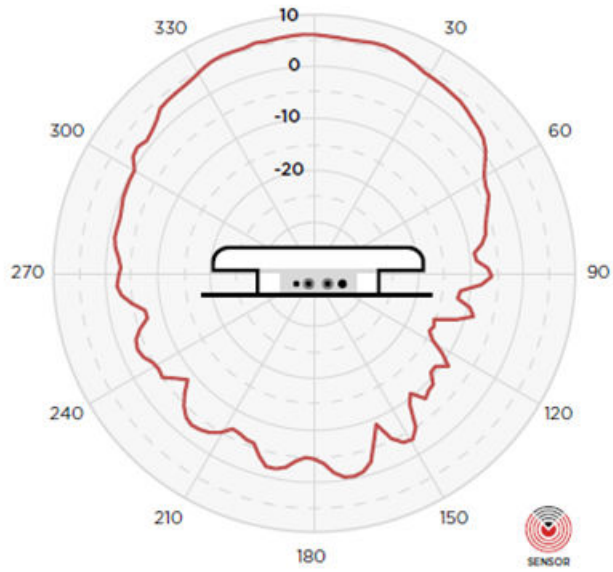


# Radiation Patterns – AP5050D

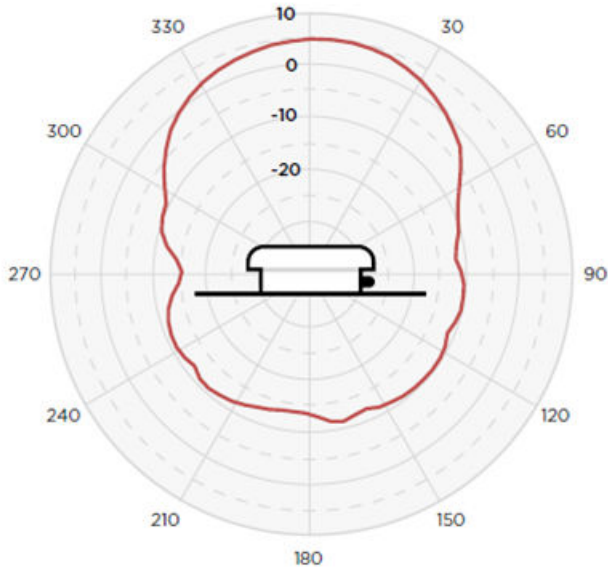
5G Scan Elevation



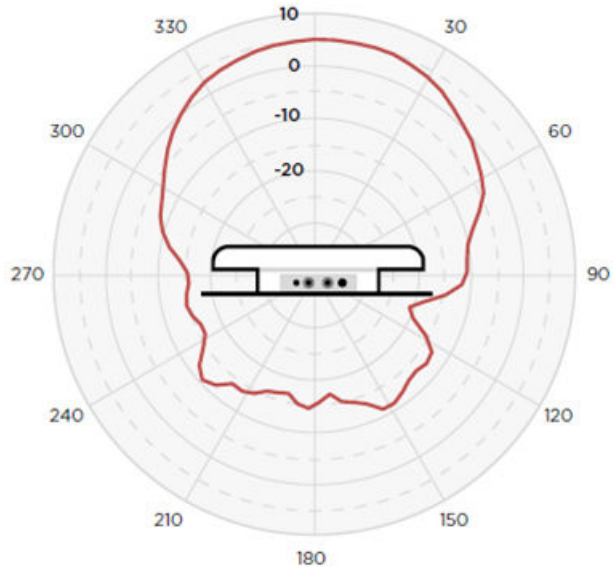
5G Scan Azimuth



6G Scan Elevation

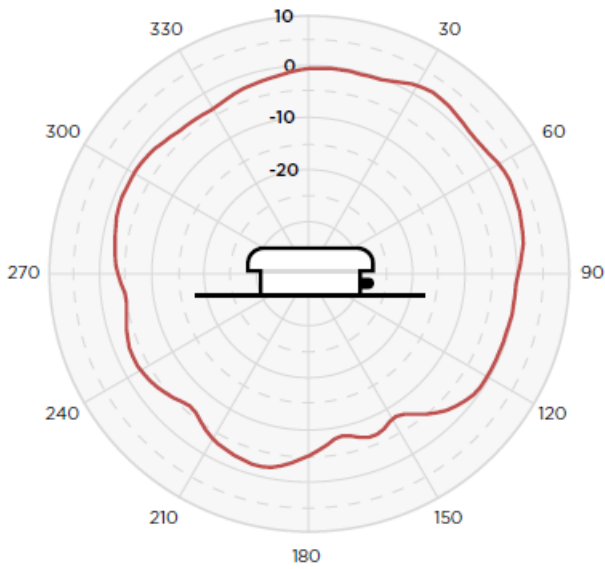


6G Scan Azimuth

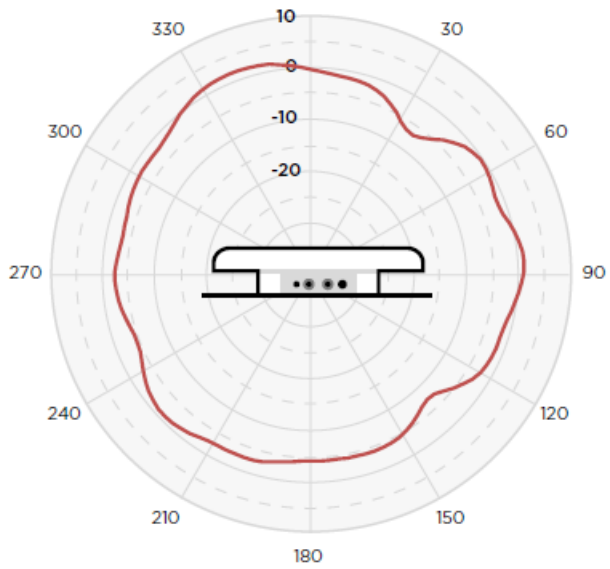


# Radiation Patterns – AP5050D

BLE 2G Elevation



BLE 2G Azimuth



## Warranty

The AP5050U and AP5050D are covered under Extreme's Warranty policy. For warranty details, visit <http://www.extremenetworks.com/support/policies>.



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