



Antennas

DATA SHEET

Dual Band Quasi-Omni Antenna

SCA360V-EJ2B



- Two foot (0.7 m), Dualband, four port 4T4R (4x4 MIMO) quasi-omni antenna with 360° of coverage, covering 1695-2690 MHz frequencies, with Dual VET control and four port Dual 2T2R (2x2 MIMO) quasi-omni antenna with 360° of coverage, covering 5150-5925 MHz frequencies
- Four Ultra-wideband ports covering 1695-2690 MHz and two pairs of two U-NII band ports covering 5150-5925 MHz, all within in a low weight and low profile cylindrical antenna
- Full Spectrum Compliance for 1695-2690 MHz and U-NII frequencies
- Antenna meets all U-NII pattern and gain requirements per FCC/ECC regulations
- With a 29" height and 8.4" diameter, this low profile cylindrical antenna is an ideal solution for Small Cell/C-RAN Densification deployments in difficult jurisdictional urban, suburban and rural environments
- The antenna is equipped with Dual VET control for 1695-2690 MHz, with a tilt range of 4°-16°. The Dual VET control can provide independent tilt for each 2x2 paired ports or single tilt for 4x4 paired ports
- The antenna is equipped with removable center mount plate, which can be used for third party concealment applications or utilize a removeable 1.375 in (35 mm) OD center post, which makes it ideal for mounting on utility, lighting and traffic poles
- Exceeds minimum PIM performance requirements
- Equipped with 4.3-10 connectors, which is 40% smaller than 7/16 DIN connectors

Overview

The CCI Dualband Quasi-Omni array is an eight port Small Cell antenna, with four ultra-wideband ports covering 1695-2690 MHz and two pairs of two U-NII ports covering 5150-5925 MHz. The CCI Dualband Quasi-Omni Small Cell antenna provides 4x4 Multiple-input-Multiple-output (MIMO) functionality across the 1695-2690 MHz ports and provides Dual 2x2 Multiple-input-Multiple-output (MIMO) functionality across the 5150-5925 MHz ports. The CCI Dualband Quasi-Omni Small Cell antenna is equipped with Dual VET control on the 1695-2690 MHz ports, with a tilt range of 4°-16°, capable of providing independent tilt per pair ports or single tilt for 4x4 paired ports, providing flexibility for network coverage needs.

The CCI Dualband Quasi-Omni Small Cell antenna is an ideal solution for Small Cell/C-RAN/o-DAS Densification deployments in difficult jurisdictional urban, suburban and rural where antenna size and count are restricted.

CCI antennas are designed and produced to ISO 9001 certification standards for reliability and quality in our state-of-the-art manufacturing facilities.

Applications

- Microcells, Small Cells and C-RAN in Urban, Suburban and other visually sensitive environments
- Outdoor Distributed Antenna Systems (ODAS), neutral host in venues, campuses and other outdoor coverage applications



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SPECIFICATIONS

Electrical

Ports	4 × High Band Ports for 1695-2690 MHz					4 × High Band Ports for 5150-5925 MHz
Frequency Range	1695-1880 MHz	1850-1990 MHz	1920-2180 MHz	2300-2400 MHz	2496-2690 MHz	5150-5925 MHz
Gain ¹	10.3 dBi	10.3 dBi	10.5 dBi	10.2 dBi	10.1 dBi	5.5 dBi
Gain (Average) ²	9.1 dBi	9.5 dBi	9.7 dBi	9.6 dBi	9.0 dBi	4.8 dBi
Elevation Beamwidth (-3dB)	14.8°	13.7°	13.0°	11.7°	10.5°	25.8°
Electrical Downtilt	4° to 16°	4° to 16°	4° to 16°	4° to 16°	4° to 16°	5°
Elevation Sidelobes (1st Upper)	< -16 dB	< -16 dB	< -16 dB	< -18 dB	< -18 dB	< -19 dB
Cross-Polar Port-to-Port Isolation	> 25 dB	> 25 dB	> 25 dB	> 25 dB	> 25 dB	> 25 dB
Voltage Standing Wave Ratio(VSWR)	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1
Passive Intermodulation (2x20W)	≤ -153 dBc	≤ -153 dBc	≤ -153 dBc	≤ -153 dBc	≤ -153 dBc	NA
Input Power Continuous Wave (CW)	100 watts	100 watts	100 watts	100 watts	100 watts	10 watts
Polarization	Dual Pol 45°	Dual Pol 45°	Dual Pol 45°	Dual Pol 45°	Dual Pol 45°	Dual Pol 45°
Input Impedance	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground	DC Ground	DC Ground

¹Peak gain across sub-bands.

²Electrical specifications follow document "Recommendation on Base Station Antenna Standards" (BASTA) V9.6.

Mechanical

Dimensions (LxD)	29.0x8.4 in (737x214 mm)
Diameter max at top cap	8.6 in (219 mm)
Survival Wind Speed	> 150 mph (> 241 kph)
Wind Load	31 lbs (116 N) @ 100 mph (161 kph)
Equivalent Flat Plate Area	1.2 ft ² (0.1 m ²)
Weight *	15.0 lbs (6.8 kg)
Connector	8x 4.3-10 female
Mounting Pole	1.0 to 2.5 in (2.5 to 6.3 cm)

* Weight excludes mounting kit



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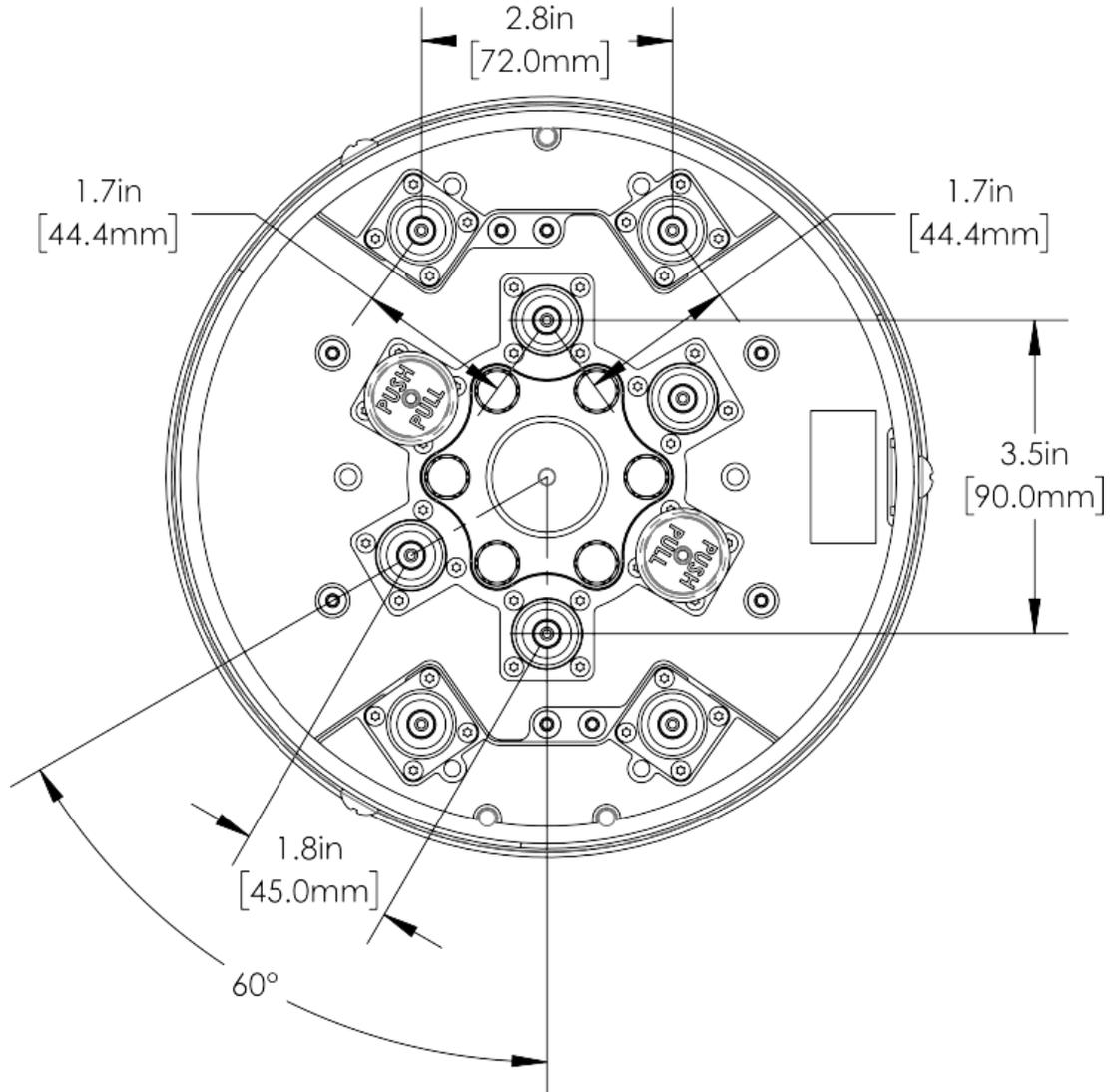
Dual Band Quasi-Omni Antenna

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SPECIFICATIONS

Mechanical

Connector Spacing





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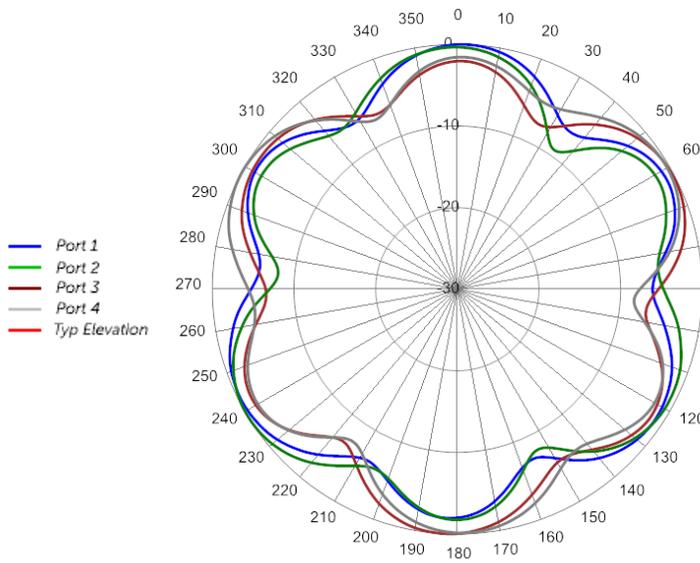
SPECIFICATIONS

Dual Band Quasi-Omni Antenna

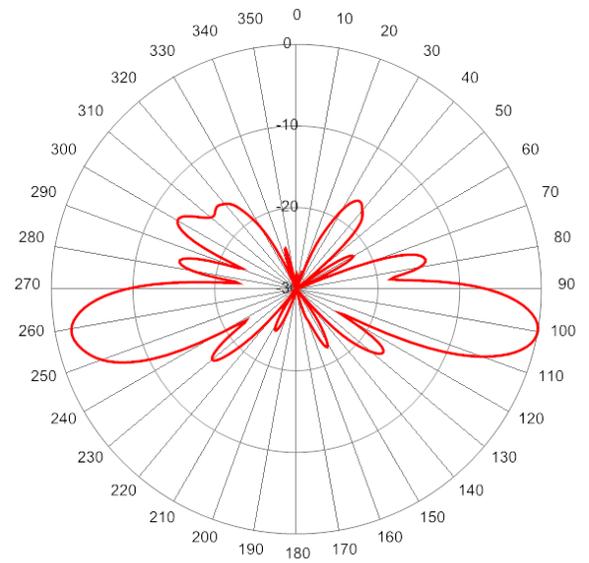
SCA360V-EJ2B

Typical Antenna Patterns

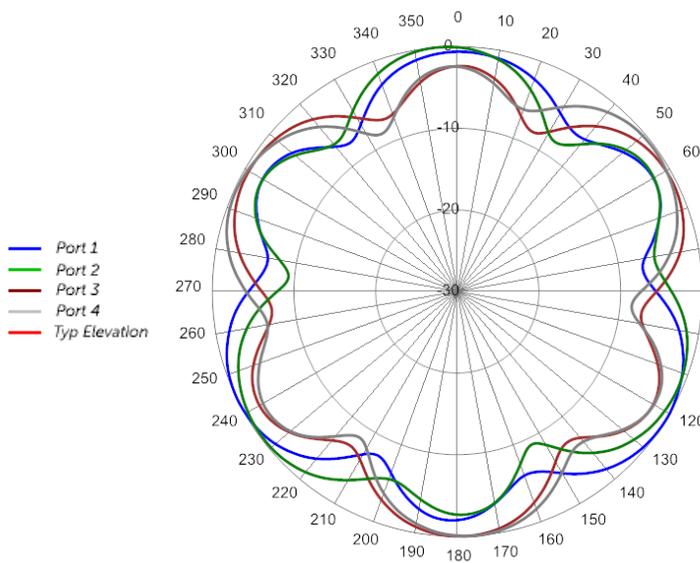
For detailed information on additional antenna patterns, contact customer support at support@cciproducts.com



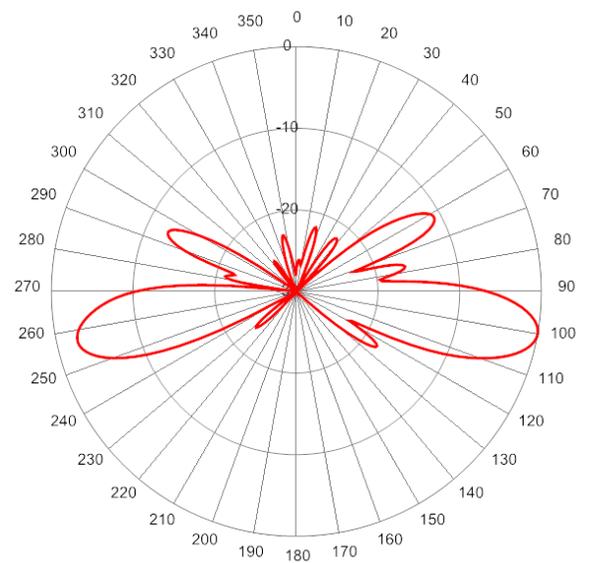
1720 MHz Azimuth



1720 MHz Elevation 10°



1920 MHz Azimuth



1920 MHz Elevation 10°



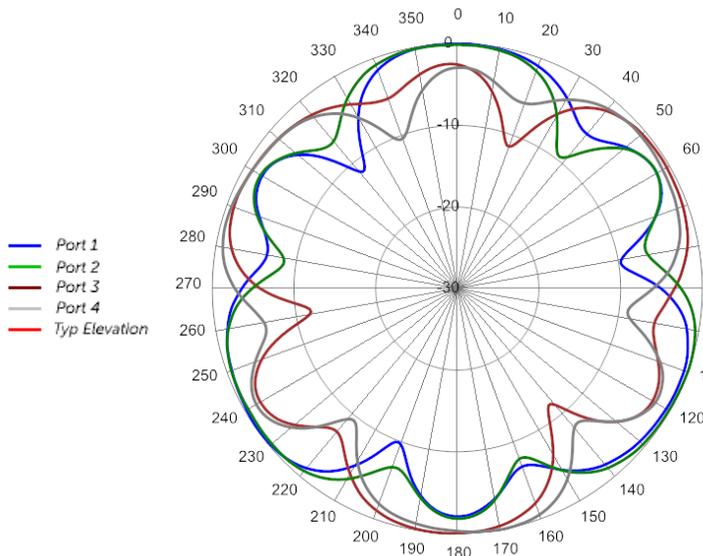
Antennas

SPECIFICATIONS

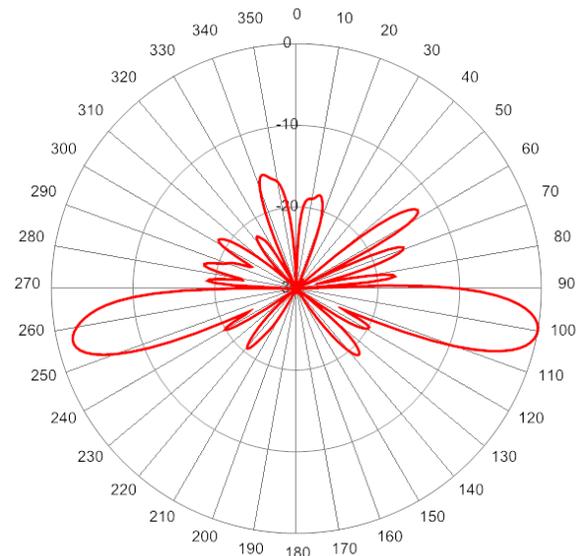
Dual Band Quasi-Omni Antenna

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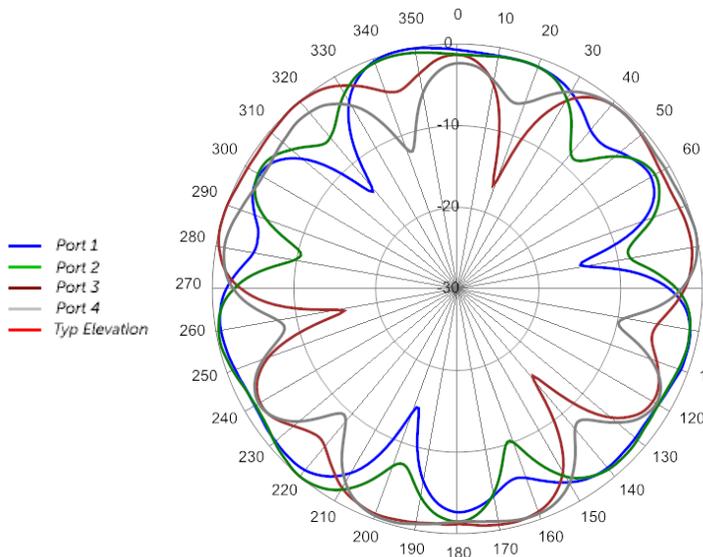
Typical Antenna Patterns



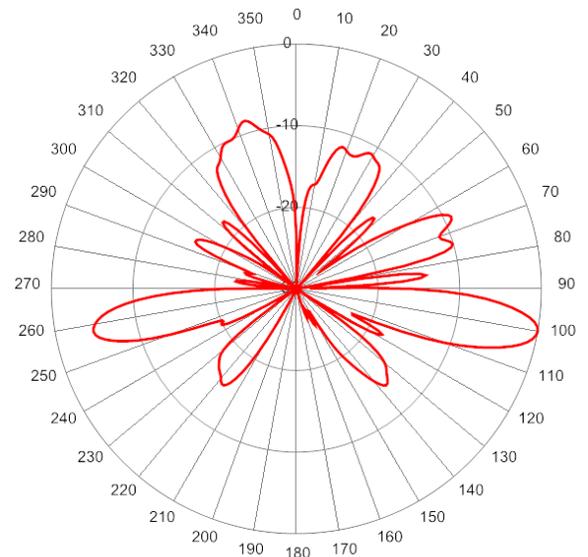
2310 MHz Azimuth



2310 MHz Elevation 10°



2650 MHz Azimuth



2650 MHz Elevation 10°



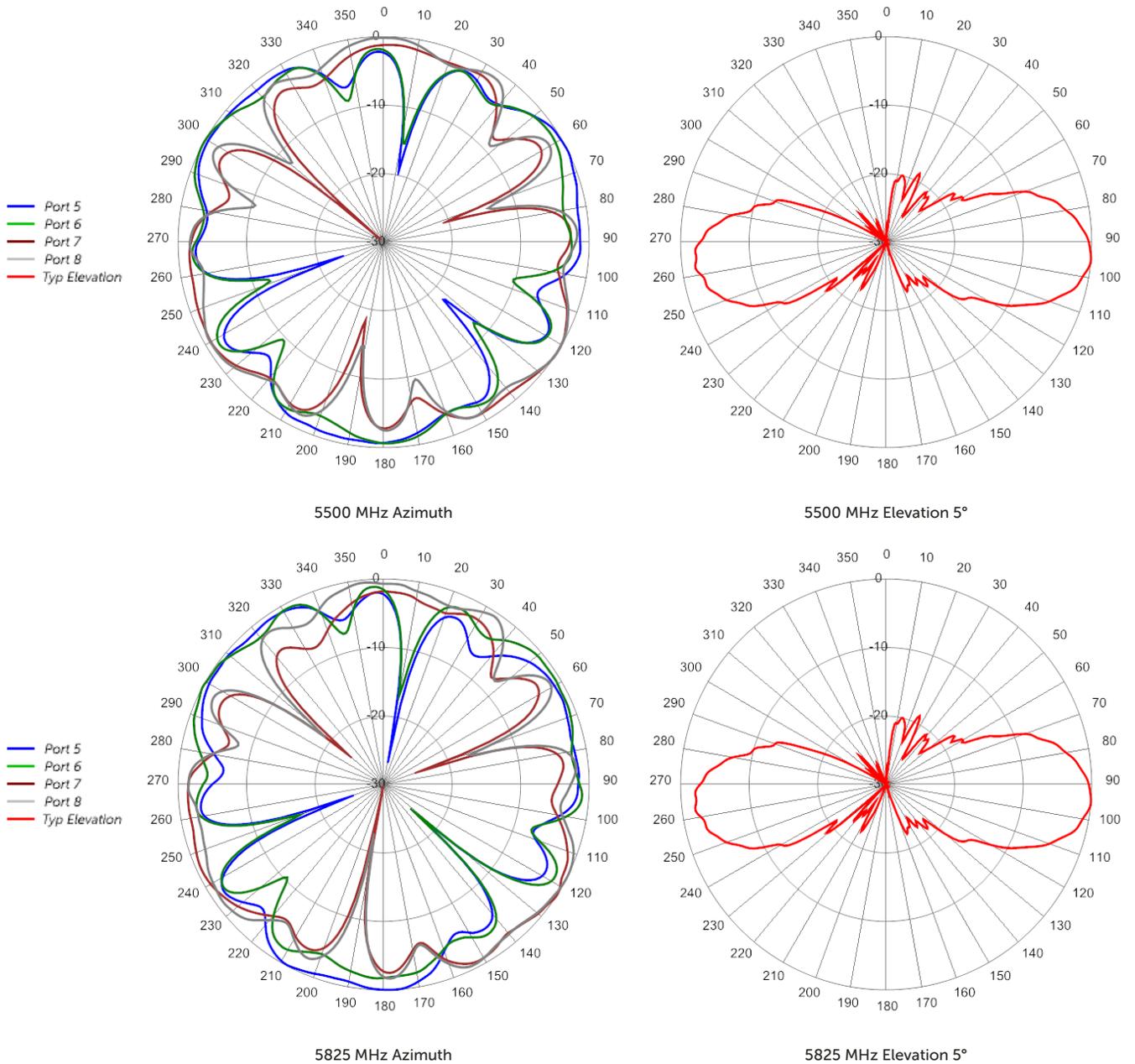
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Typical Antenna Patterns





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ORDERING

Dual Band Quasi-Omni Antenna

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Parts & Accessories

SCA360V-EJ2BA-K Two foot (0.6 m) Wideband Omni antenna with 4.3-10 connectors, two factory install manual VET actuators and MBC-02 mounting kit

MBC-02 Clamp kit, Pipe range 1-2.5 in (2.5-6.3 cm) or lag bolt to wooden pole or flat surface. (lag bolts not supplied)



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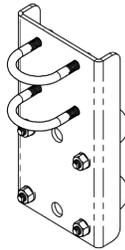
ACCESSORIES

Triple Mount Mast Bracket

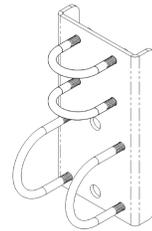
MBC-02

Mechanical

Dimensions (L x W x D)	7.9x4.3x1.1 in. (200x108x28 mm)
Weight	2.4 lbs (1.1 kg)
Fastener Size	5/16 UNC
Installation Torque (ft-lbs)	10



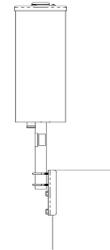
Bracket Vert. Mount View



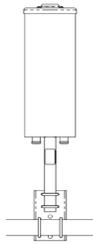
Bracket Hort. Mount View



Vertical Pole Mount



Wooden Pole Mount



Horizontal Pole Mount



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STANDARDS & CERTIFICATIONS

Dual Band Quasi-Omni Antenna

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Standards & Compliance

Environmental IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-5,
 IEC 60068-2-6, IEC-60068-2-11, IEC 60068-2-14,
 IEC 60068-2-18, IEC 60068-2-27, IEC 60068-2-29,
 IEC 60068-02-30, IEC 60068-2-52, IEC 60068-2-64,
 GR-63-CORE 4.3.1, EN 60529, IP 24

Certifications

Federal Communication Commission (FCC) Part 15 Class B, ISO 9001



CCI

Communication Components Inc.

EXTENDING WIRELESS PERFORMANCE