

## 698 to 960 MHz/1710 to 2700 MHz Low PIM 2-port MIMO Ceiling Mount Antenna



Patent Pending CMX69273P

### LOW PIM 2-PORT MIMO MULTI-BAND CEILING MOUNTED OMNIDIRECTIONAL ANTENNA

The Patent Pending CMX69273P is an indoor broadband Low PIM 2-port MIMO omnidirectional ceiling mount antenna. It is designed to provide pattern coverage that is optimized for indoor requirements at 698-960 MHz and 1710-2700 MHz frequency bands. The individual antenna elements are designed to radiate a pattern that has been specifically shaped to provide optimal radiation within a coverage zone.

### CEILING MOUNTS



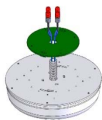
(TILE FLUSH MOUNT)  
Standard



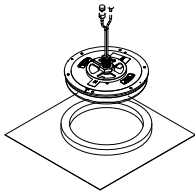
Part # HKIT-CMX-001  
(ABOVE CEILING TILE MOUNT)



Part # HKIT-CMX-002  
(HARD CEILING EXTENSION MOUNT)



Part # HKIT-CMX-003  
(HARD CEILING TILE FLUSH MOUNT)



Part # HKIT-CMX-004  
(ABOVE CEILING MOUNT)

### FEATURES

- Low Profile aesthetically neutral housing
- Mounts directly and easily to ceiling tile
- Performance optimized using Laird proprietary RF optimization tools
- Excellent flame retardancy rating
- Two radiating elements optimized for indoor applications
- Multiple mounting options for a variety of ceiling configurations
- QR Code (Quick Response) label for easy access to antenna performance data
- RoHS compliant

### MARKETS

- Indoor Distributed Antenna Systems
- Wireless Service Providers
- Small cells
- Building Operators – offices & meeting rooms
- Hospitality – hotels & casinos
- Transportation – airport, bus, & train terminals
- Retail – stores & indoor pedestrian malls
- Education – libraries & museums

### BENEFITS

- Complete cellular 3G/4G LTE data communication at each antenna port
- Low PIM performance minimizes interference and improves in building wireless network coverage and capacity.
- Attractive, compact design and form factor ideal for indoor solution applications.

PARAMETER	SPECIFICATION							
Frequency Bands, MHz	698-806	824-894	880-960	1710-1880	1850-1990	1910-2170	2300-2500	2500-2700
Peak Gain, dBi (Typ)	4.3	4.1	4.1	3.3	2.9	2.6	2.8	3.1
Peak Gain, dBi (Max)	4.5	4.2	4.2	3.5	3.3	2.9	3.3	3.3
VSWR (Typ)	<1.5:1	<1.3:1	<1.3:1	<1.3:1	<1.3:1	<1.3:1	<1.2:1	<1.5:1
VSWR (Max)	1.7:1	1.7:1	1.7:1	1.7:1	1.7:1	1.7:1	1.7:1	1.7:1
Isolation, dB (Typ)	< -21	< -19	< -17	< -22	< -23	< -25	< -29	< -30
Isolation, dB (Max)	< -16	< -16	< -16	< -16	< -16	< -16	< -16	< -16
PIM, 3rd Order, 2 x 20W (Typ)	<-154 dBc			<-153 dBc				
PIM, 3rd Order, 2 x 20W (Max)	<-150 dBc			<-150 dBc				
Nominal Impedance	-50 Ω							
Max Power (ambient temp of 25°C)	50 Watts							
Polarization	Linear H/V for each radiator							
Radome	PC / ABS, UL94 V-O (White)							
Mounting	Ceiling mount (drywall or tile flush mount )							
Dimensions (diameter x height)	250 mm x 49 mm ( 9.84" x 1.9" )							
Weight	Approximately 0.60 kg ( 1.32 lbs.)							
Storage Temperature (°C)	-40° C to +85° C							
Operational Temperature (°C)	-30° C to +70° C							
Flammability Rating (Radome)	UL 94V0 Materials							
Material Substance Compliance	RoHS Compliant							
Connectors	CMX69273P-30NF (Type N female)				CMX69273P-30D41F (4.1-9.5 Mini DIN Female)			

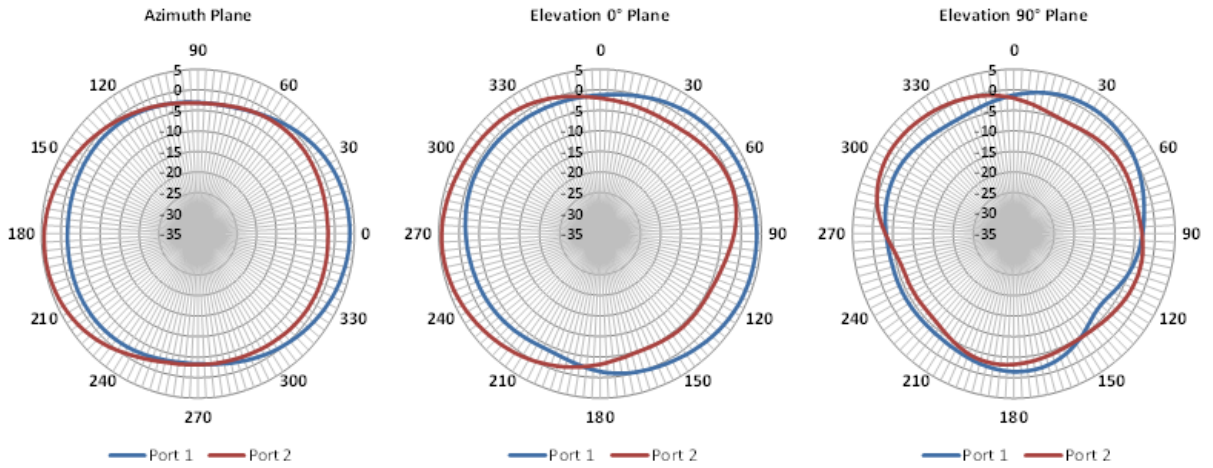
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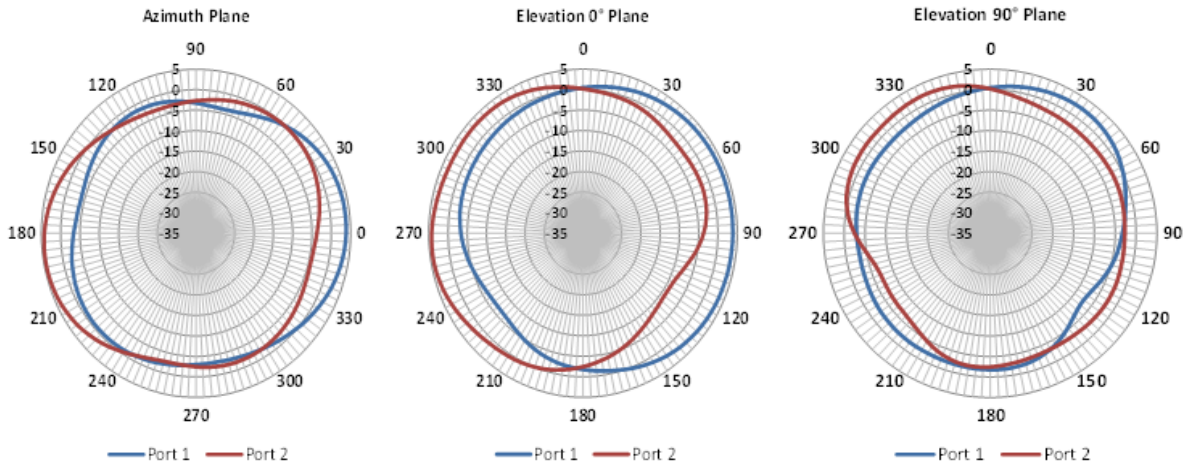
**698 to 960 MHz/1710 to 2700 MHz  
Low PIM 2-port MIMO Ceiling Mount Antenna**

**RADIATION PATTERNS**

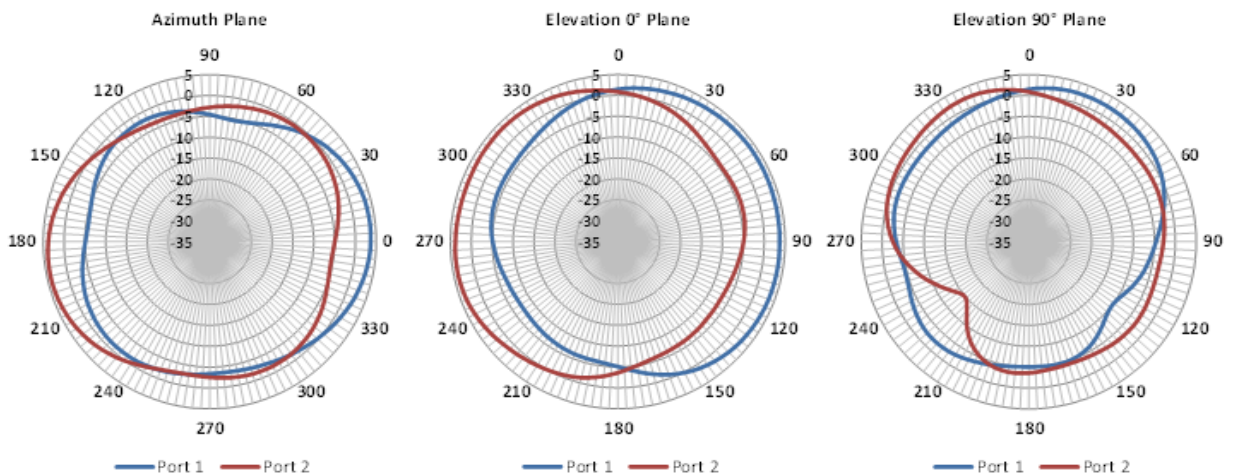
**Radiation Pattern at 698 MHz**



**Radiation Pattern at 746 MHz**



**Radiation Pattern at 824 MHz**



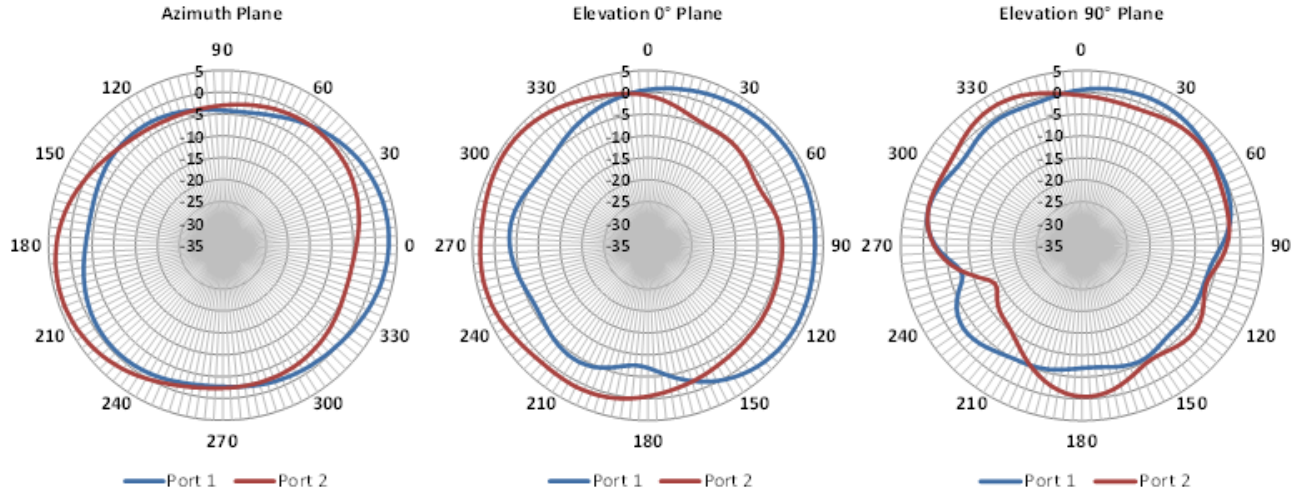
# CMX69273P

## 698 to 960 MHz/1710 to 2700 MHz

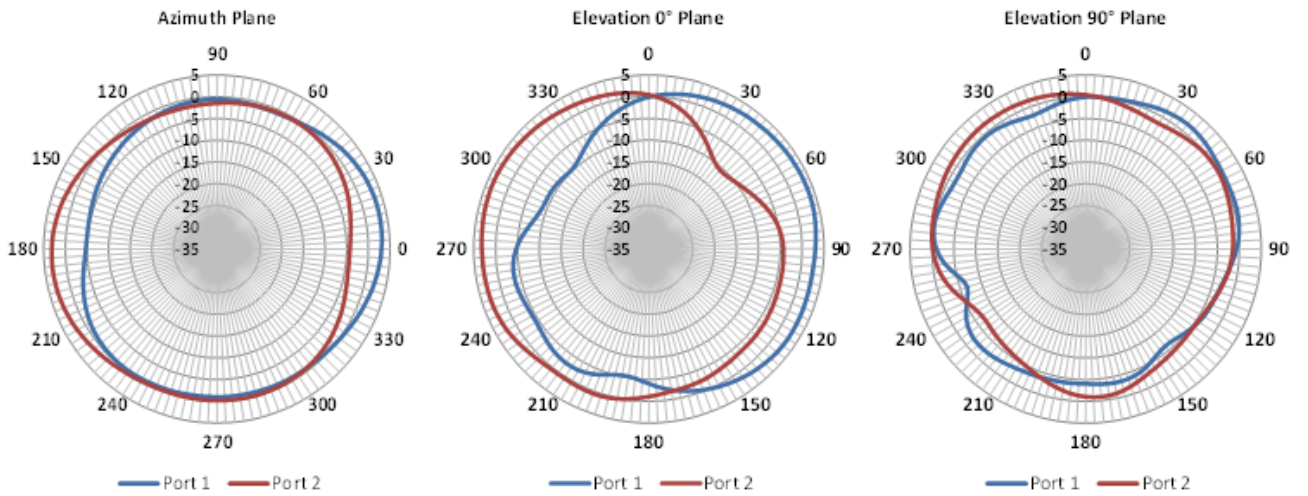
### Low PIM 2-port MIMO Ceiling Mount Antenna

#### RADIATION PATTERNS

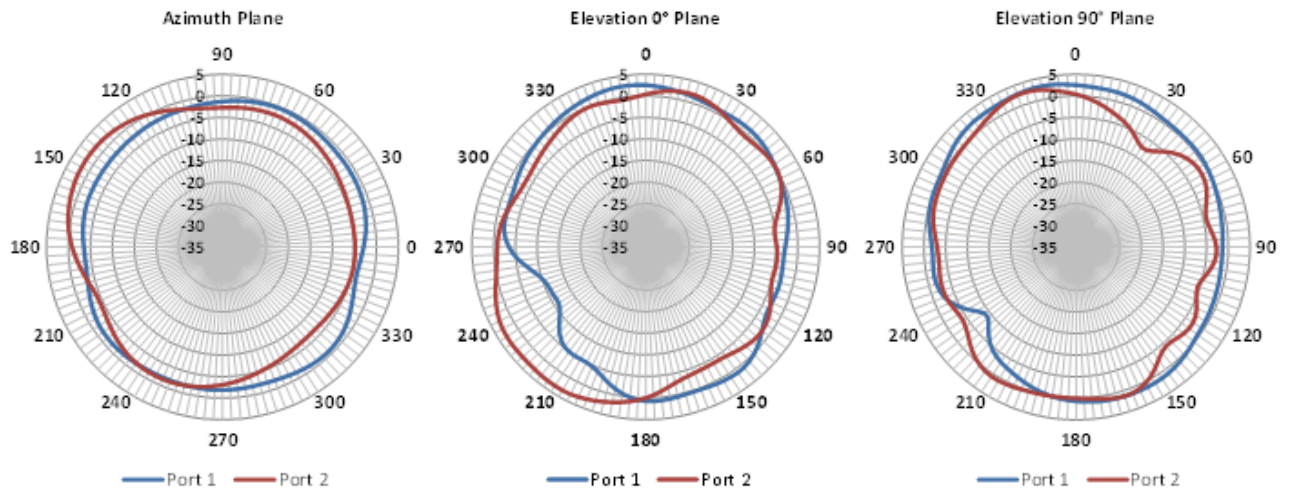
Radiation Pattern at 880 MHz



Radiation Pattern at 960 MHz



Radiation Pattern at 1680 MHz





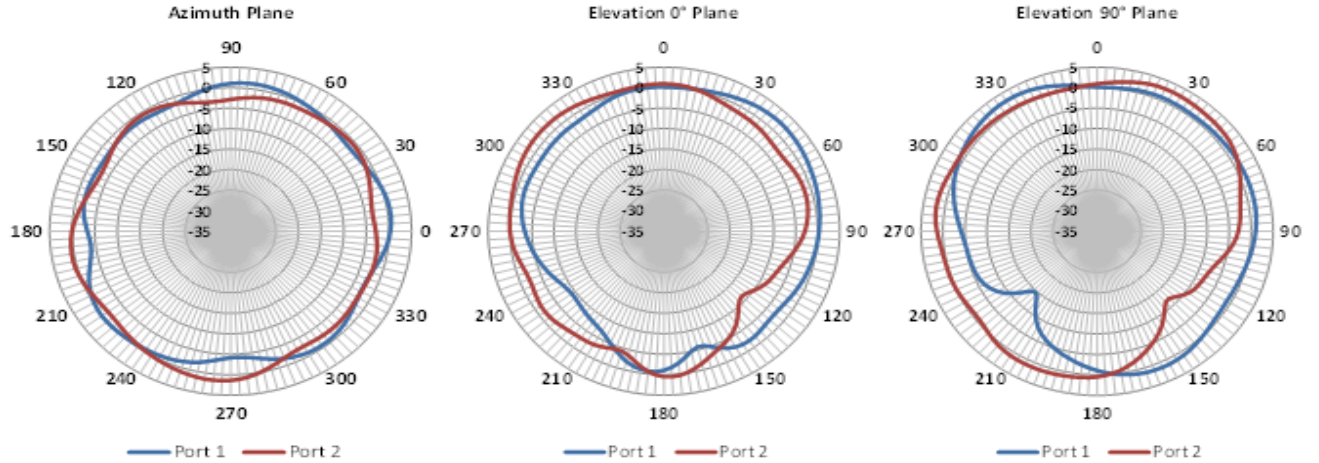
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## 698 to 960 MHz/1710 to 2700 MHz

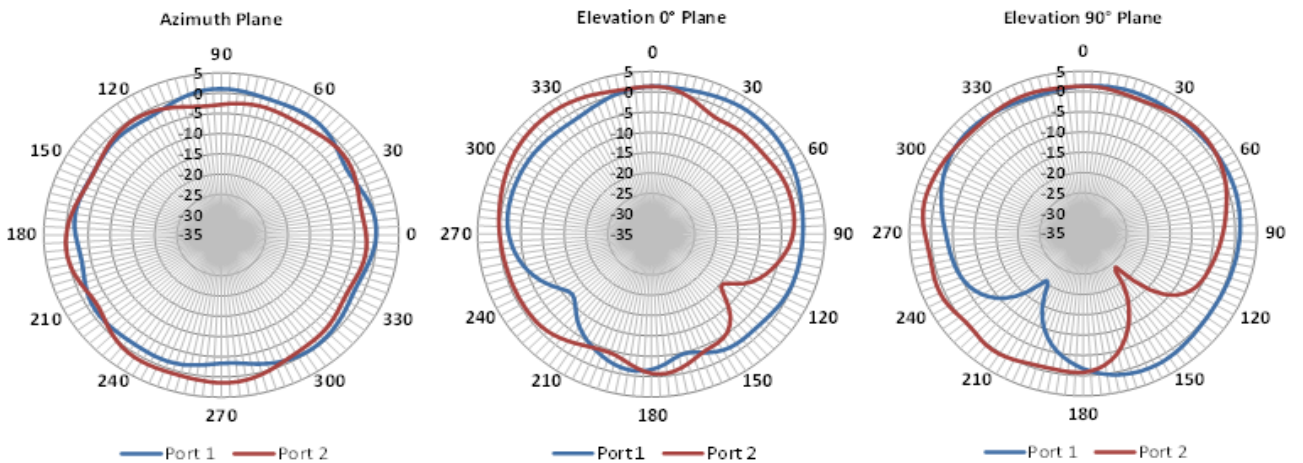
### Low PIM 2-port MIMO Ceiling Mount Antenna

#### RADIATION PATTERNS

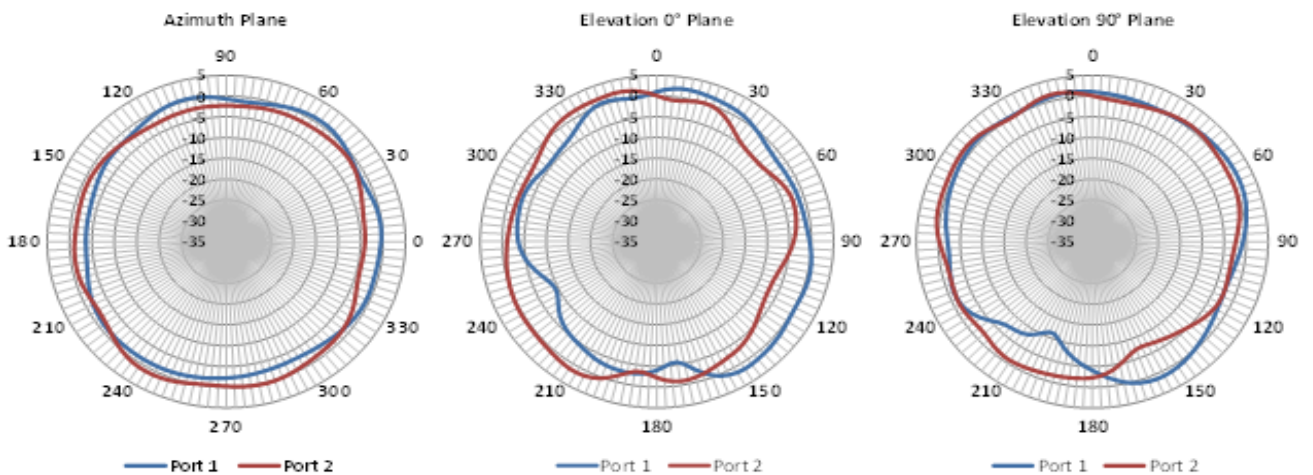
Radiation Pattern at 1880 MHz



Radiation Pattern at 1950 MHz



Radiation Pattern at 2170 MHz



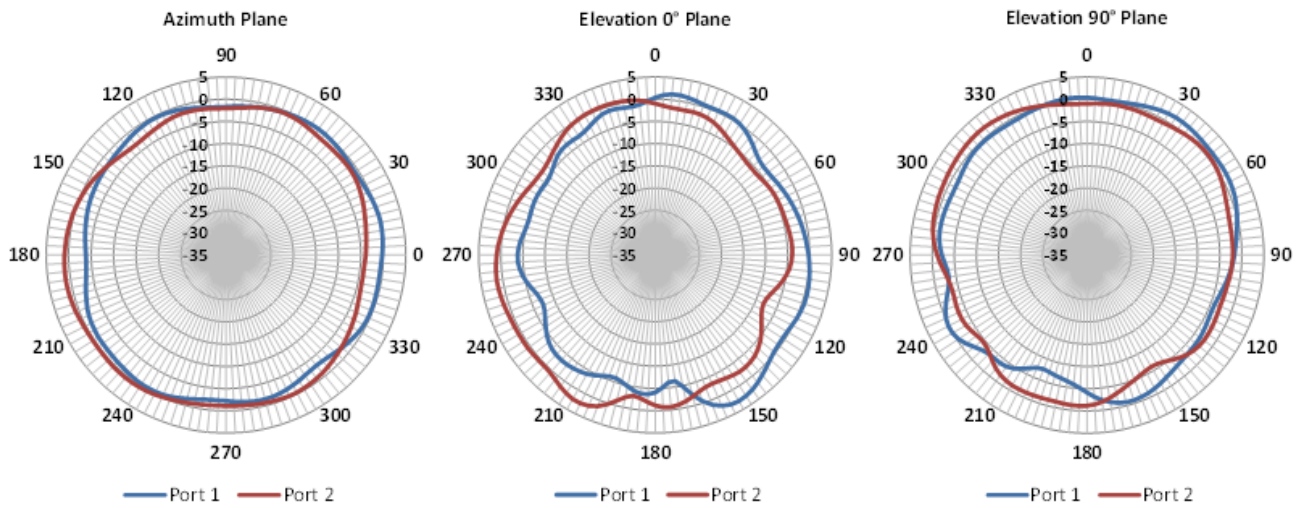
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## 698 to 960 MHz/1710 to 2700 MHz

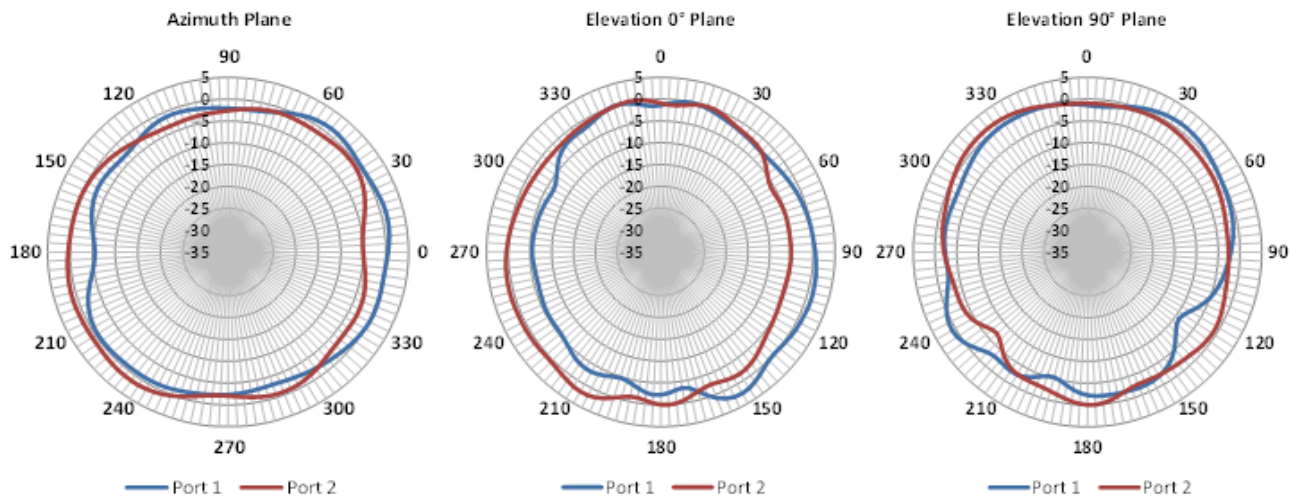
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#### RADIATION PATTERNS

Radiation Pattern at 2305 MHz



Radiation Pattern at 2412 MHz



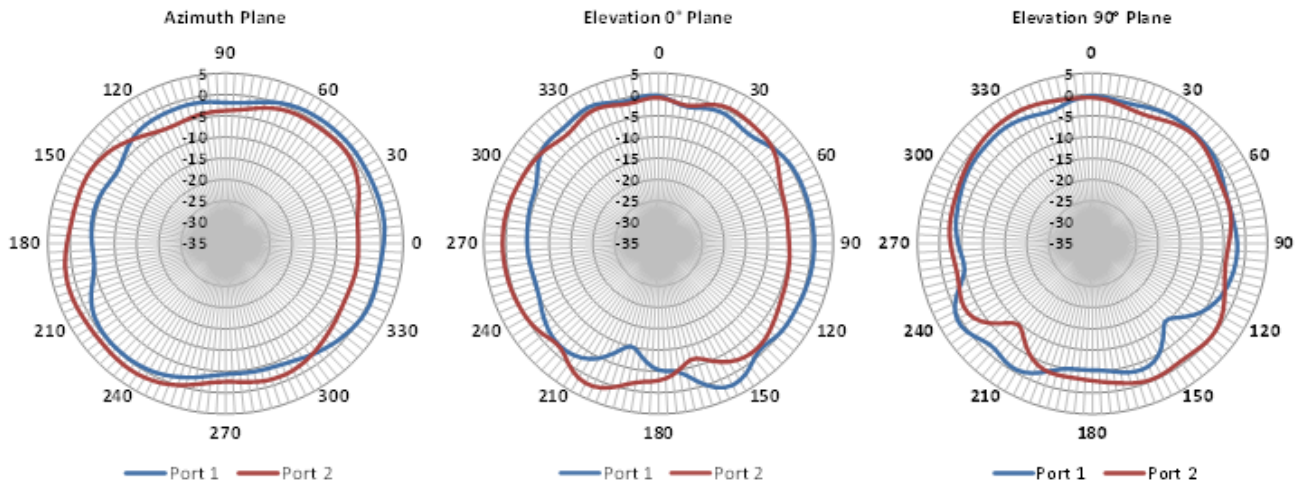
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## 698 to 960 MHz/1710 to 2700 MHz

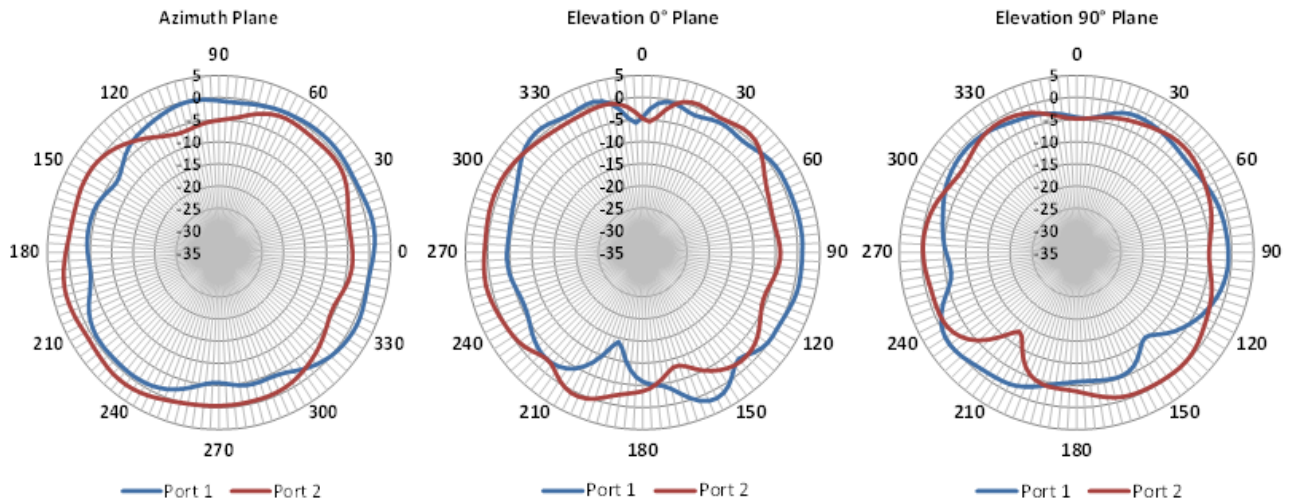
### Low PIM 2-port MIMO Ceiling Mount Antenna

#### RADIATION PATTERNS

Radiation Pattern at 2600 MHz



Radiation Pattern at 2700 MHz



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