

## 698 to 960 MHz/1695 to 2700 MHz Low PIM 2-port MIMO Ceiling Mount Antenna

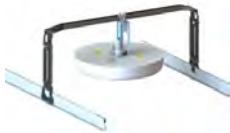


Patent Pending CMX69273P

### 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)

### 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 1695-2700 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.

#### 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
- Supports AWS-3 Frequency Band

#### 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.
- Full plenum rating allows for above ceiling installations.

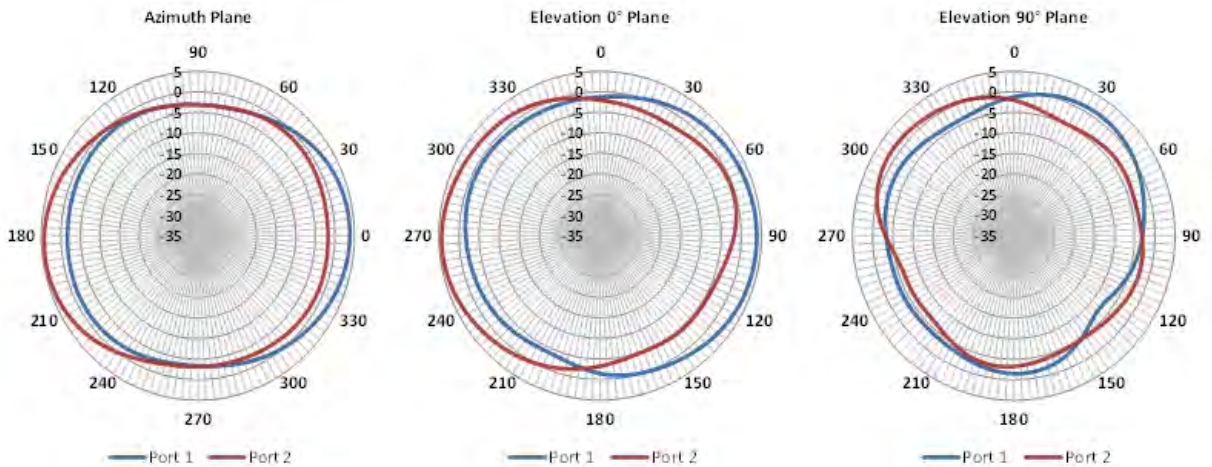
PARAMETER	SPECIFICATION									
Frequency Bands, MHz	698-806	824-894	880-960	1690-1710	1780-1880	1850-1990	1910-2170	2300-2500	2500-2700	
Peak Gain, dBi (Typ)	4.3	4.1	4.1	2.1	3.3	2.9	2.6	2.8	3.1	
Peak Gain, dBi (Max)	4.6	4.3	4.3	3.2	3.8	3.4	3.0	3.7	3.7	
VSWR (Typ)	<1.5:1	<1.3:1	<1.3:1	<1.3:1	<1.3:1	<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	<1.7:1	
Isolation, dB (Typ)	< -21	< -19	< -17	< -22	< -22	< -23	< -25	< -29	< -30	
Isolation, dB (Max)	< -16	< -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	50 Watts (@ ambient temp of 25°C, 77°F)									
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 (-40°F to 185°F)									
Operational Temperature (°C)	-30° C to +70° C (-22°F to 158°F)									
Flammability Rating (Radome)	UL 94V0 Materials									
Material Substance Compliance	RoHS Compliant									

MODEL NUMBER	CABLE LENGTH	CONNECTOR
CMX69273P-30NF	30 cm, (12"), cable	Dual Type N Female
CMX69273P-30D41F	30 cm, (12"), cable	Dual Type 4.1-9.5 Female
CMC69273P-30D43F	30 cm, (12"), cable	Dual Type 4.3-10 Female

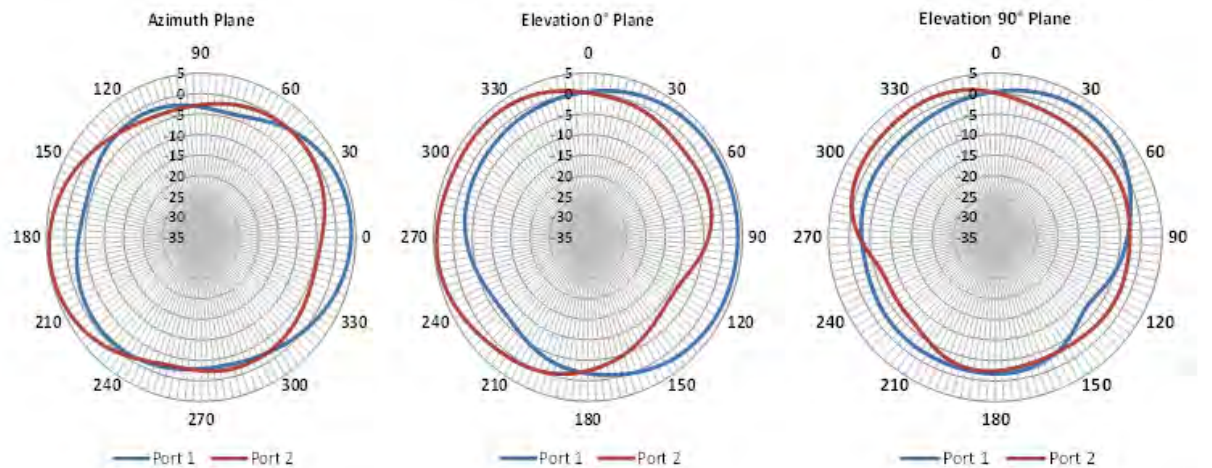
**698 to 960 MHz/1695 to 2700 MHz  
Low PIM 2-port MIMO Ceiling Mount Antenna**

**RADIATION PATTERNS**

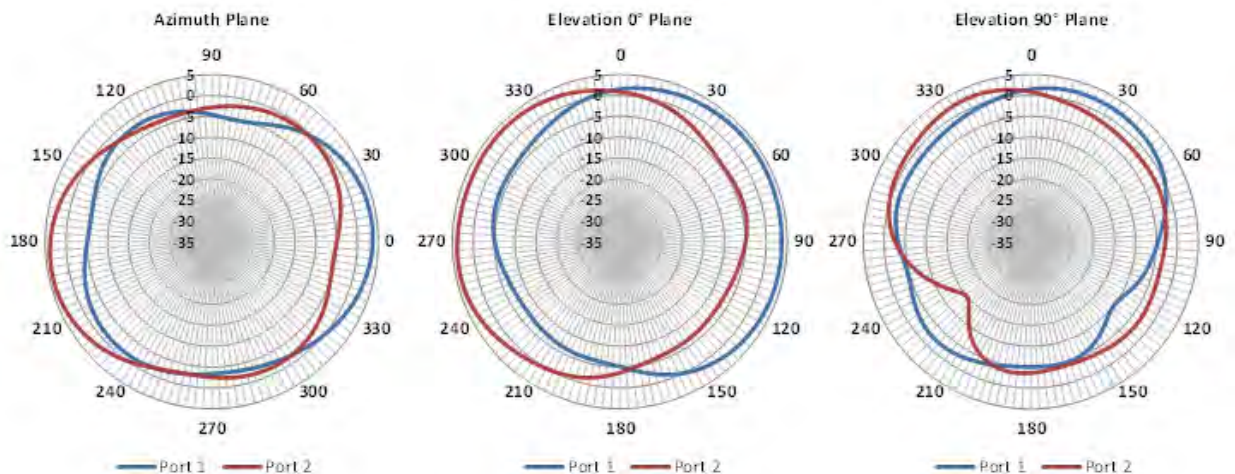
**Radiation Pattern at 698 MHz**



**Radiation Pattern at 746 MHz**



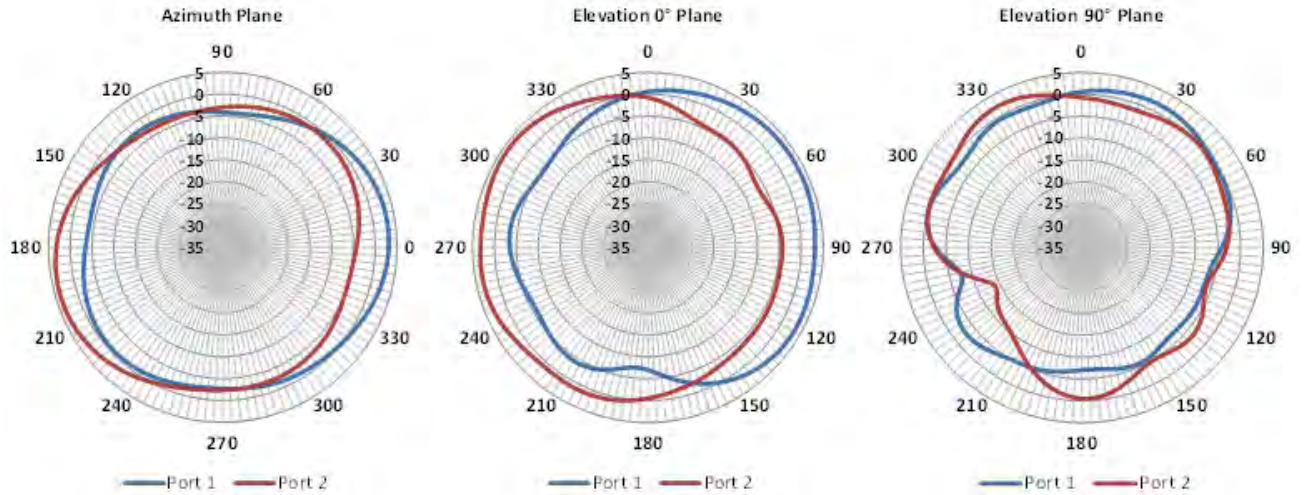
**Radiation Pattern at 824 MHz**



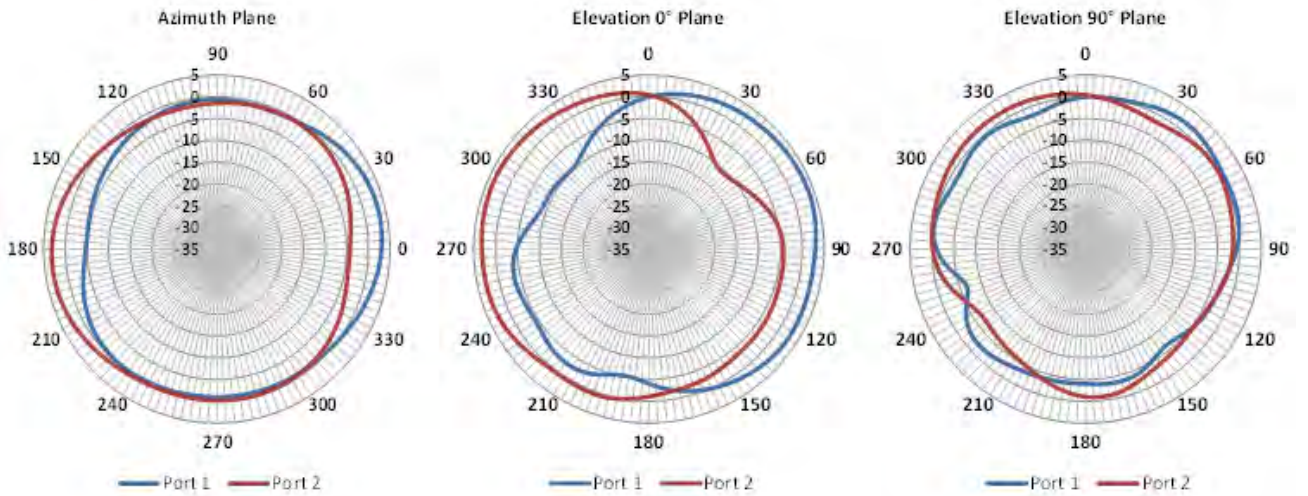
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**RADIATION PATTERNS**

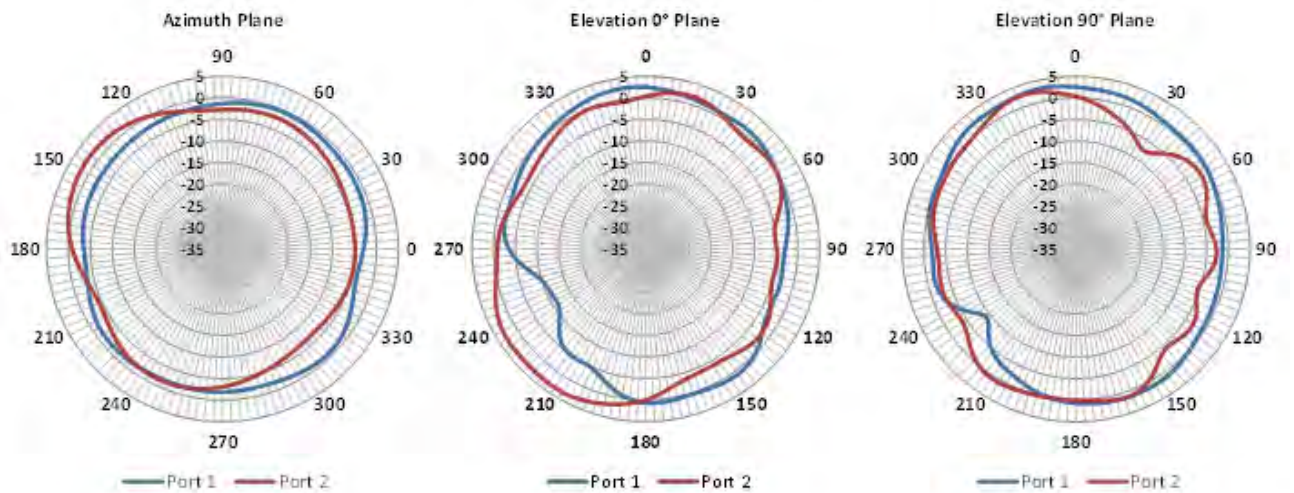
**Radiation Pattern at 880 MHz**



**Radiation Pattern at 960 MHz**



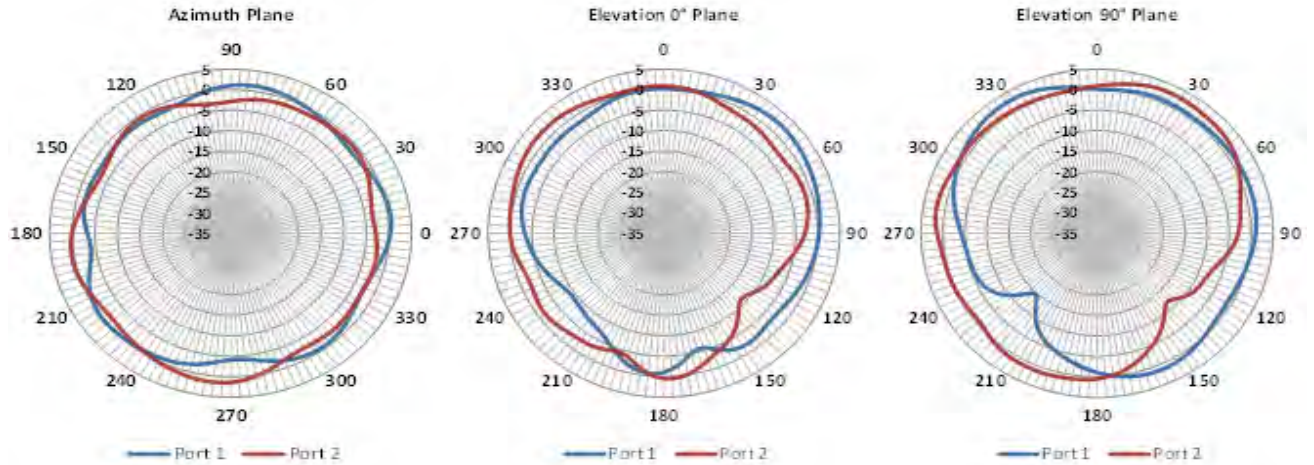
**Radiation Pattern at 1680 MHz**



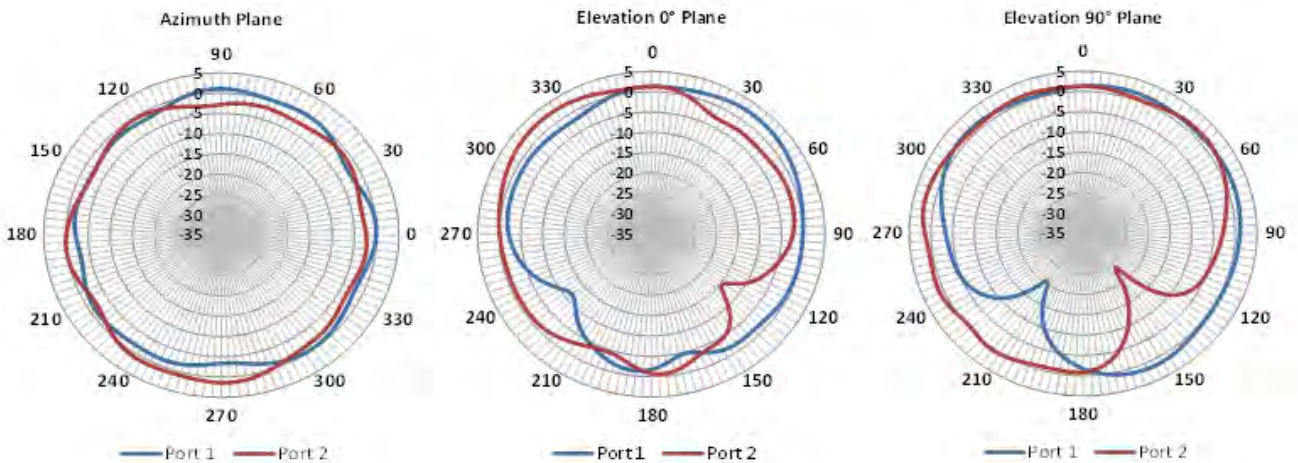
**698 to 960 MHz/1695 to 2700 MHz  
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**RADIATION PATTERNS**

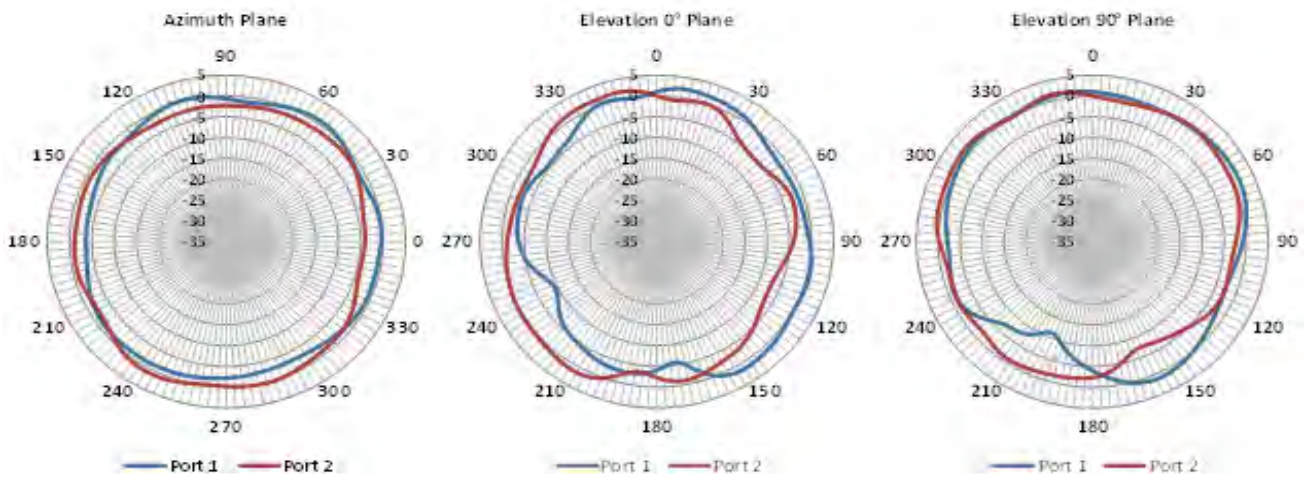
**Radiation Pattern at 1880 MHz**



**Radiation Pattern at 1950 MHz**



**Radiation Pattern at 2170 MHz**



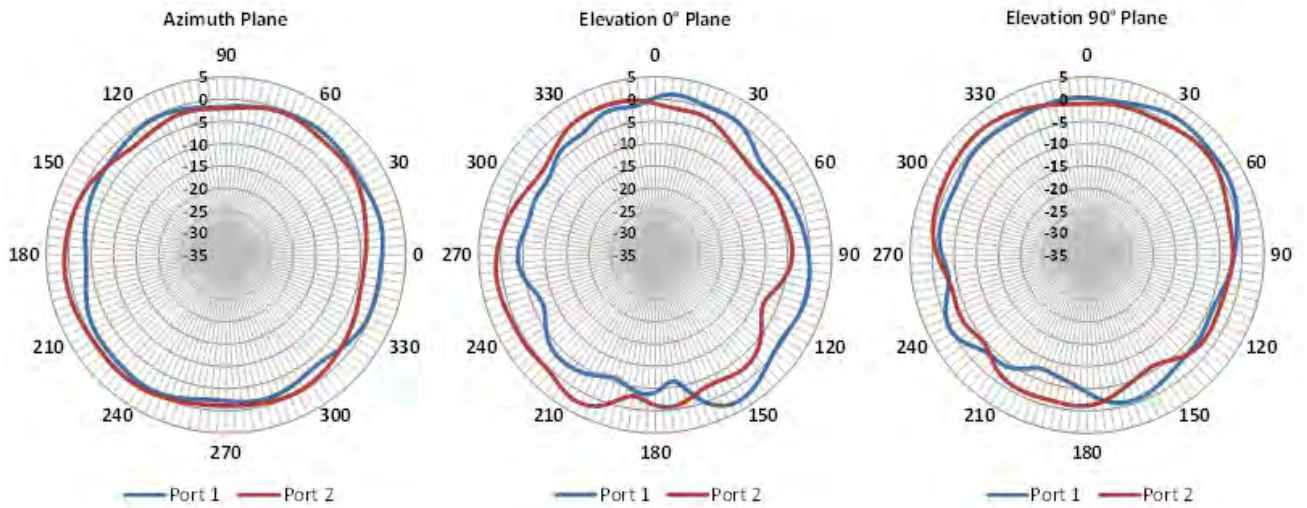
# CMX69273P

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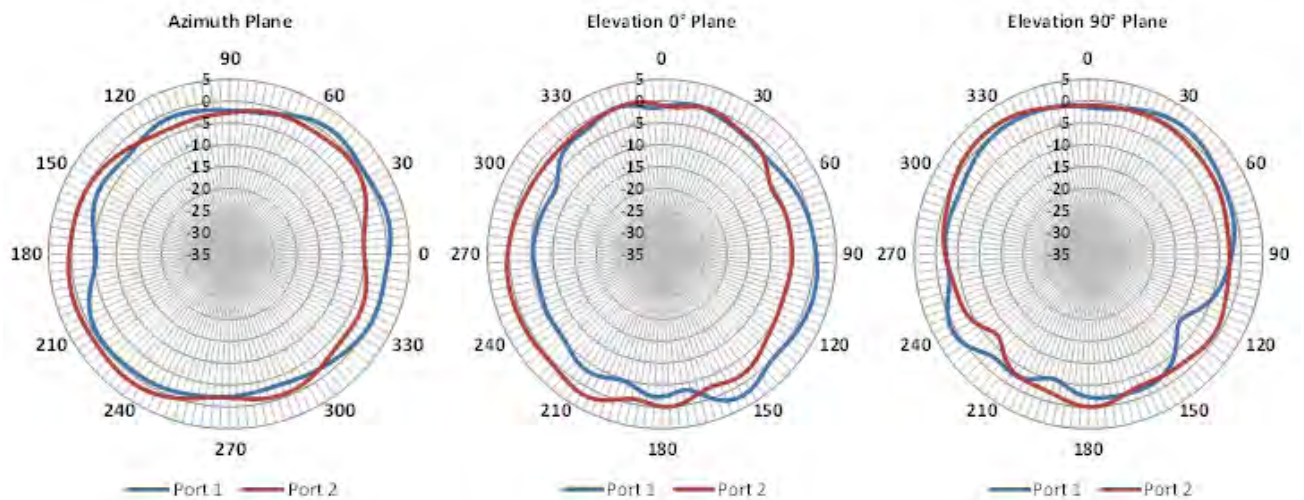
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#### RADIATION PATTERNS

Radiation Pattern at 2305 MHz



Radiation Pattern at 2412 MHz



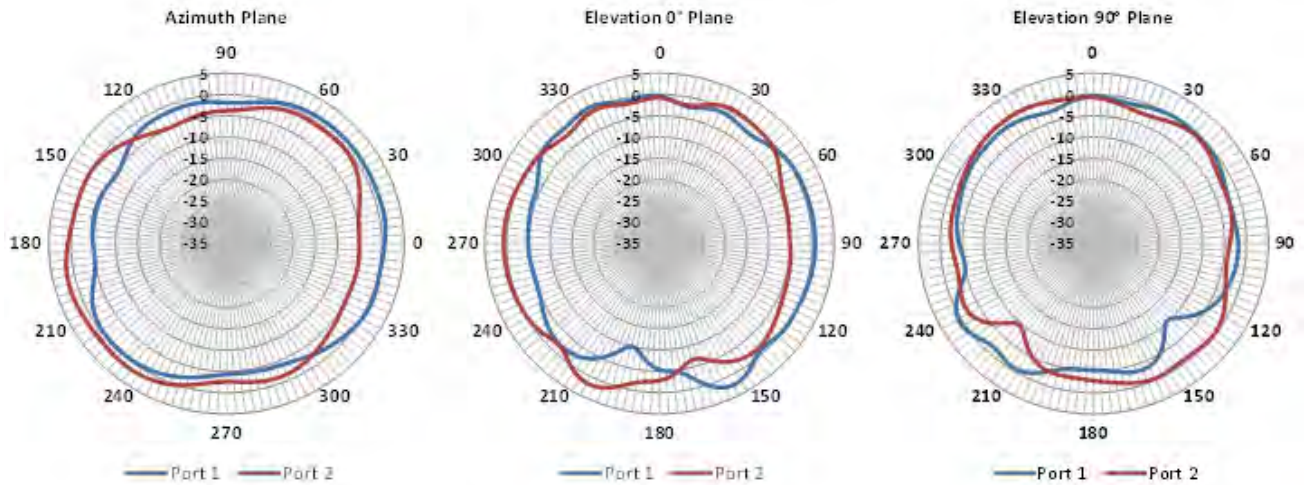
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## 698 to 960 MHz/1695 to 2700 MHz

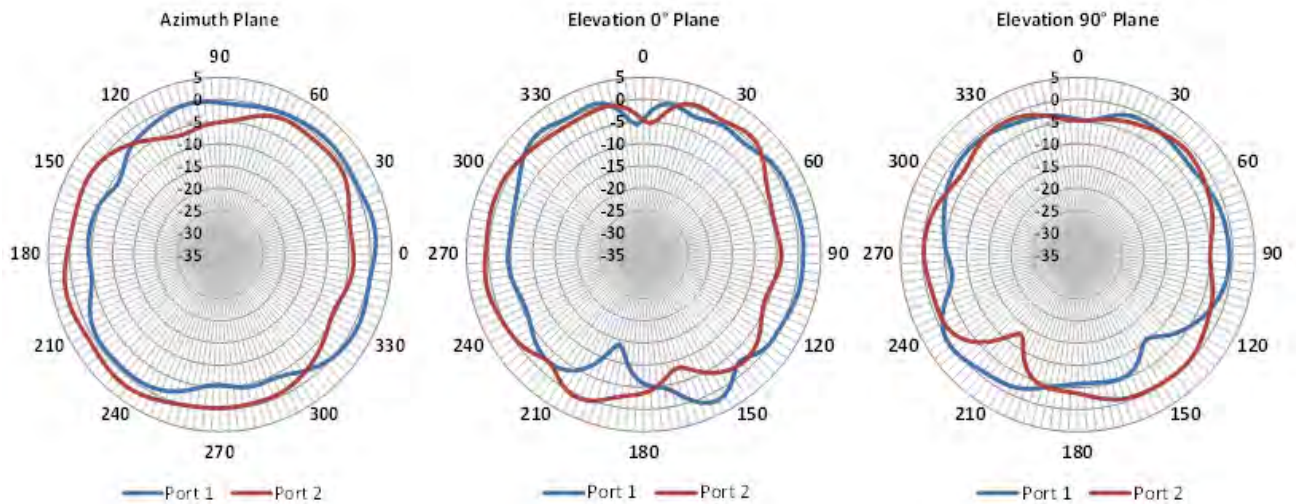
### Low PIM 2-port MIMO Ceiling Mount Antenna

#### RADIATION PATTERNS

Radiation Pattern at 2600 MHz



Radiation Pattern at 2700 MHz



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