



CMX69273P

698 to 960 MHz/1690 to 2700 MHz
Low PIM 2-port MIMO Ceiling Mount Antenna

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 to antenna performance data access
- RoHS compliant
- Supports AWS-3 Frequency Band

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

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

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)



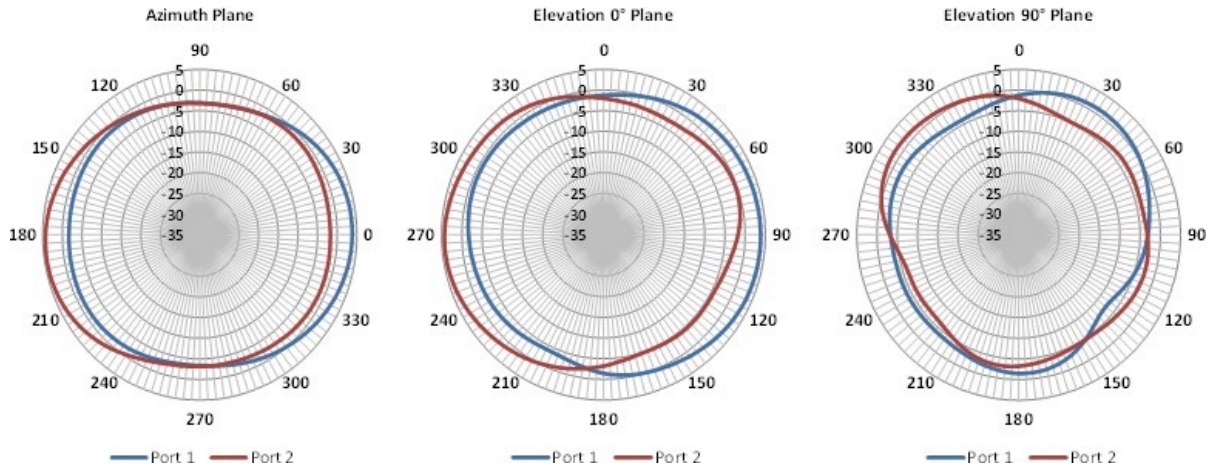
Part # HKIT-CMX-004
(ABOVE CEILING MOUNT)

| 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 25oC, 77oF) | | | | | | | | |
| Polarization | Linear H/V for each radiator | | | | | | | | |
| Radome | PC / ABS, UL94 V-O (White) | | | | | | | | |
| Mounting | Ceiling mount (drywall or tile flush mount), above ceiling | | | | | | | | |
| 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 (-40oF to 185oF) | | | | | | | | |
| Operational Temperature (°C) | -30° C to +70° C (-22oF to 158oF) | | | | | | | | |
| Standard for Safety: Information Technology Equipment | UL/CSA/EN/IEC/CB-Scheme 60950-1 Certified | | | | | | | | |
| Standard for Safety: Fire and Smoke (Plenum)* | UL 2043 Listed | | | | | | | | |
| Flammability Rating (Radome) | UL 94VO Materials | | | | | | | | |
| Material Substance Compliance | RoHS Compliant | | | | | | | | |

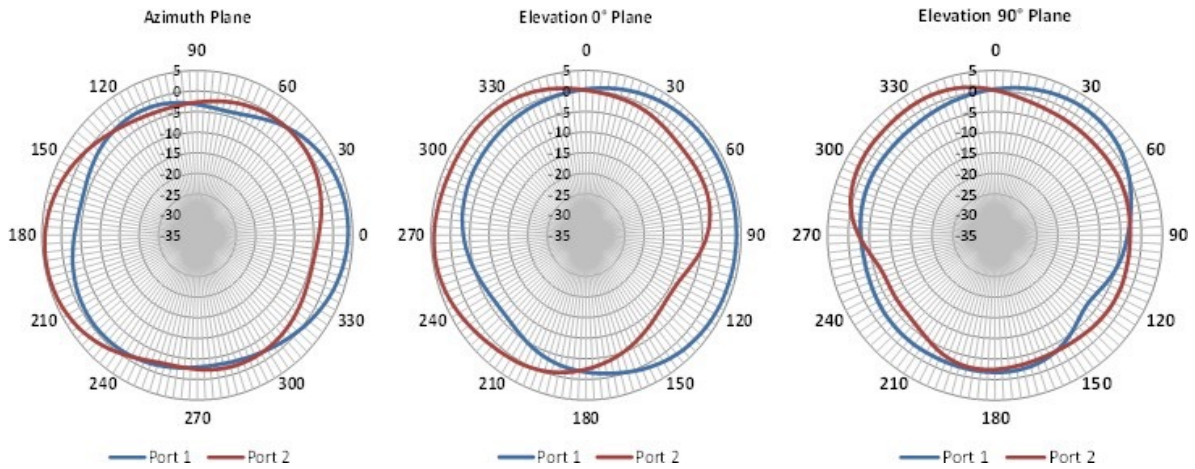
| MODEL NUMBER | CABLE LENGTH | CONNECTOR |
|------------------|---------------------|--------------------------|
| CMX69273P-30NF | 30 cm, (12"), cable | Dual Type N Female |
| CMX69273P-30D41F | 30 cm, (12"), cable | Dual Type 4.1-9.5 Female |
| CMX69273P-30D43F | 30 cm, (12"), cable | Dual Type 4.3-10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

RADIATION PATTERNS

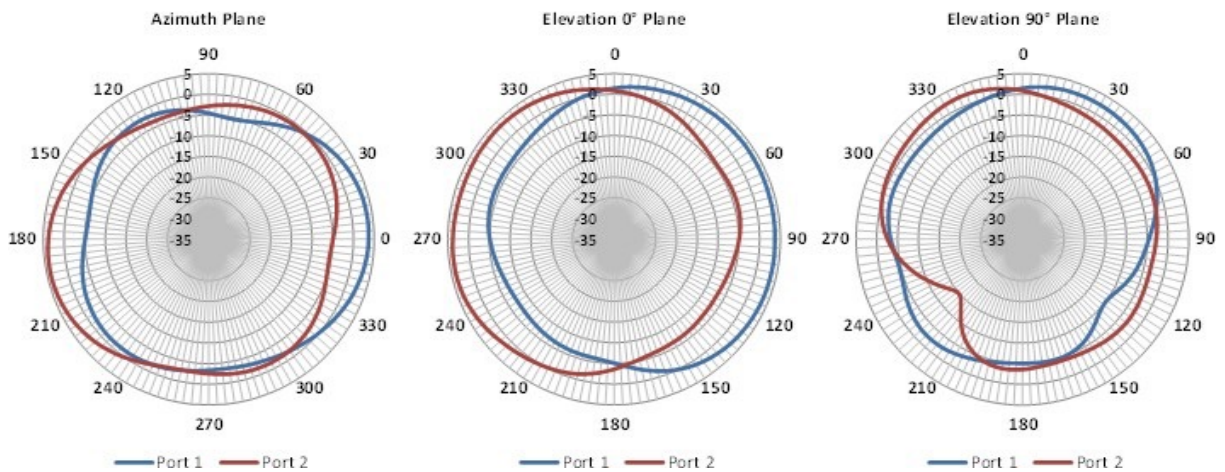
Radiation Pattern at 698 MHz



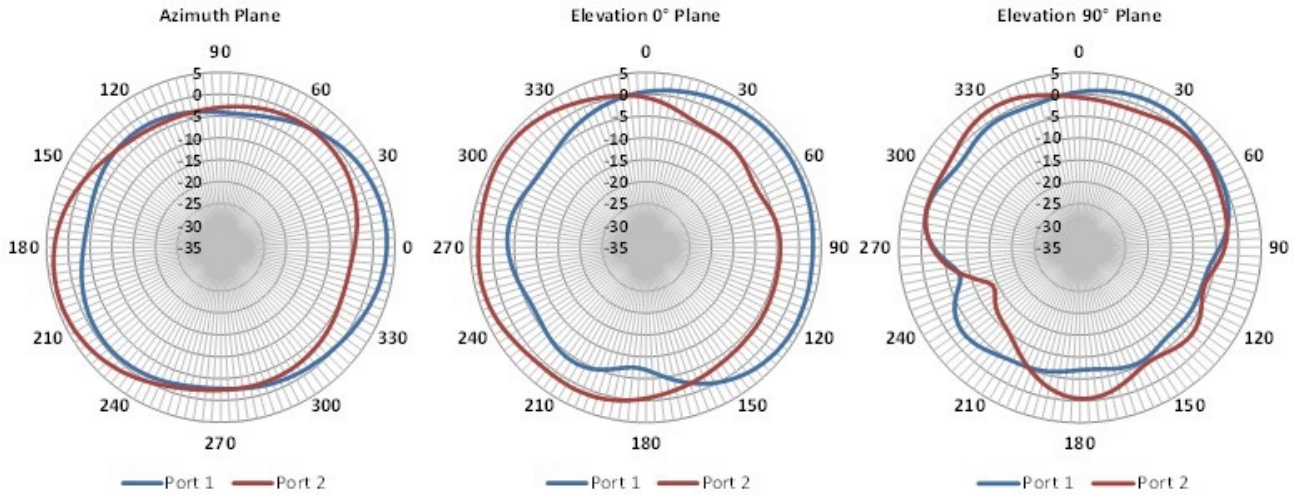
Radiation Pattern at 746 MHz



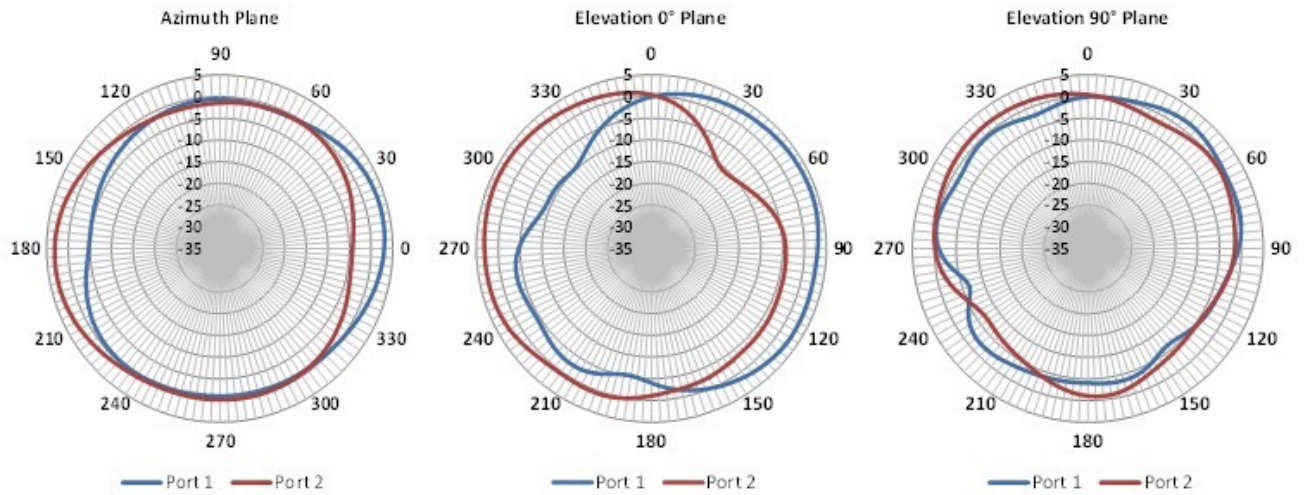
Radiation Pattern at 824 MHz



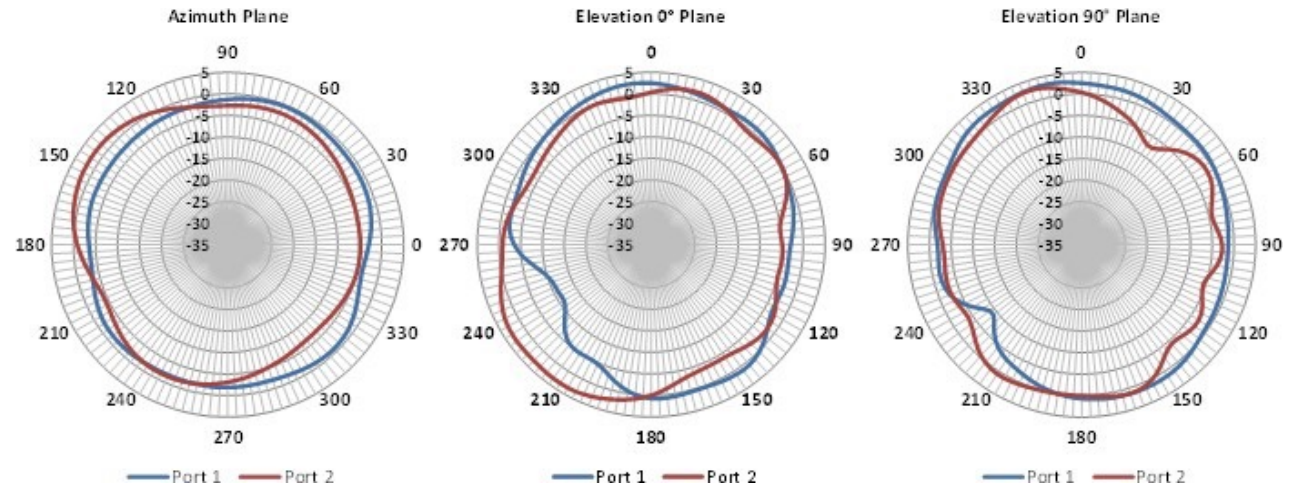
Radiation Pattern at 880 MHz



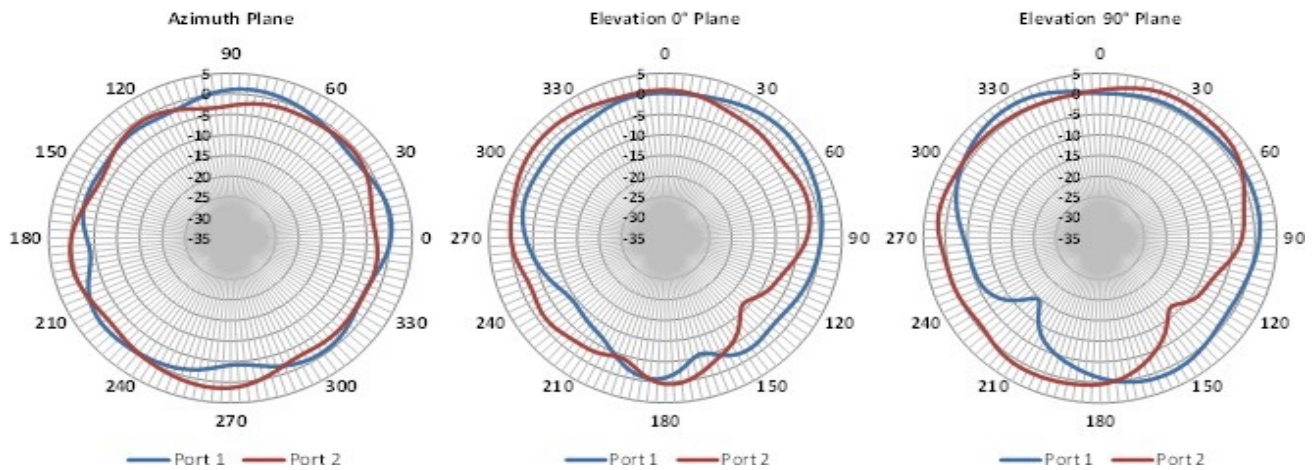
Radiation Pattern at 960 MHz



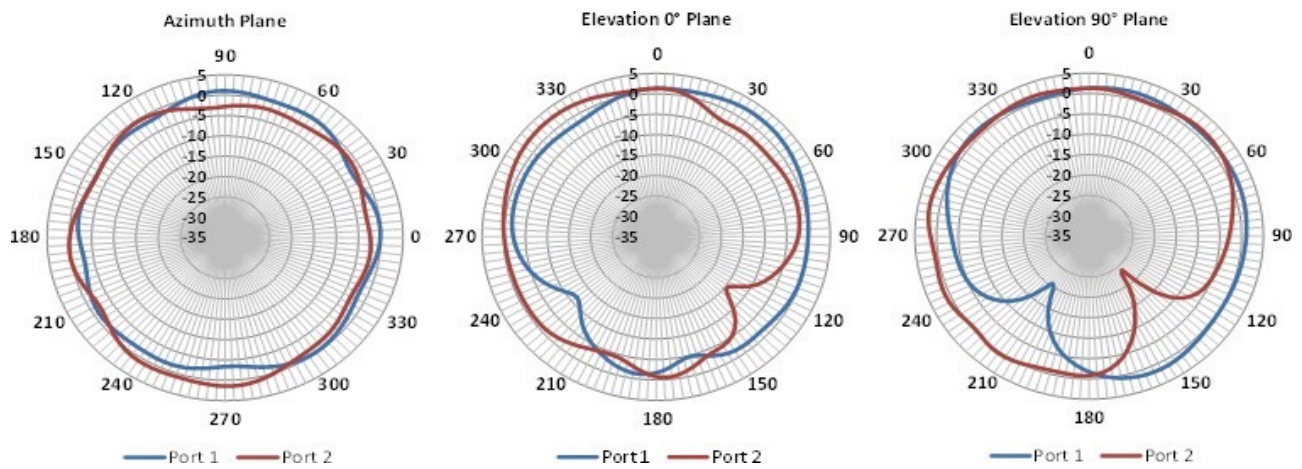
Radiation Pattern at 1680 MHz



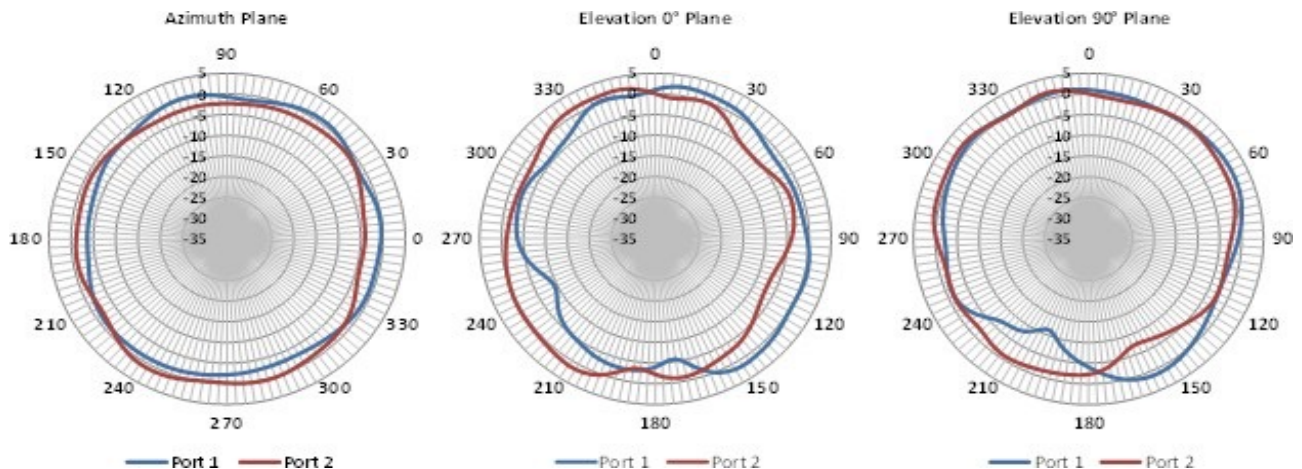
Radiation Pattern at 1880 MHz



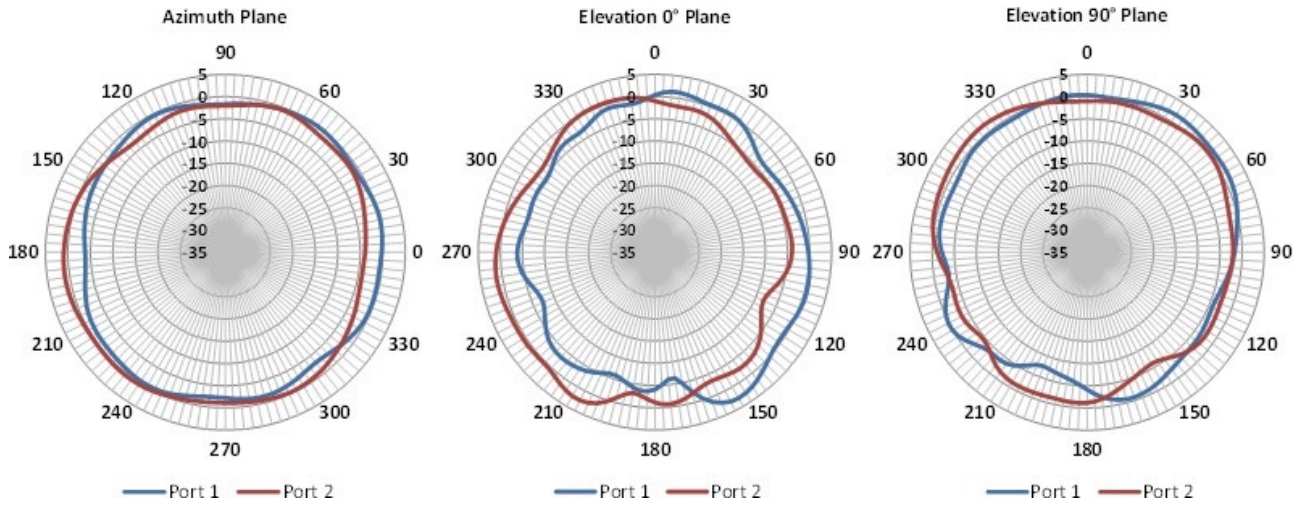
Radiation Pattern at 1950 MHz



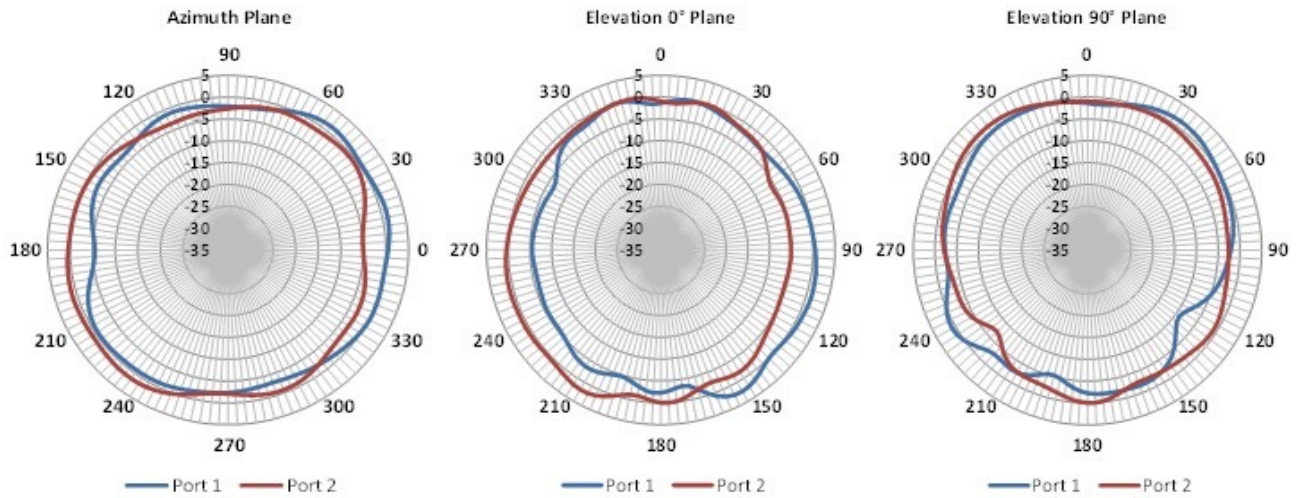
Radiation Pattern at 2170 MHz



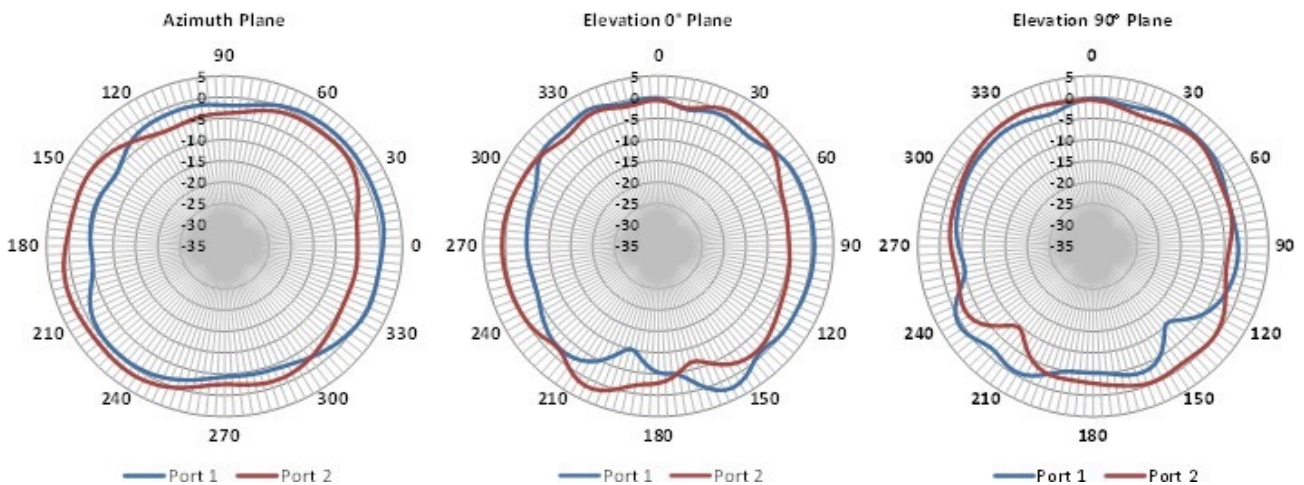
Radiation Pattern at 2305 MHz



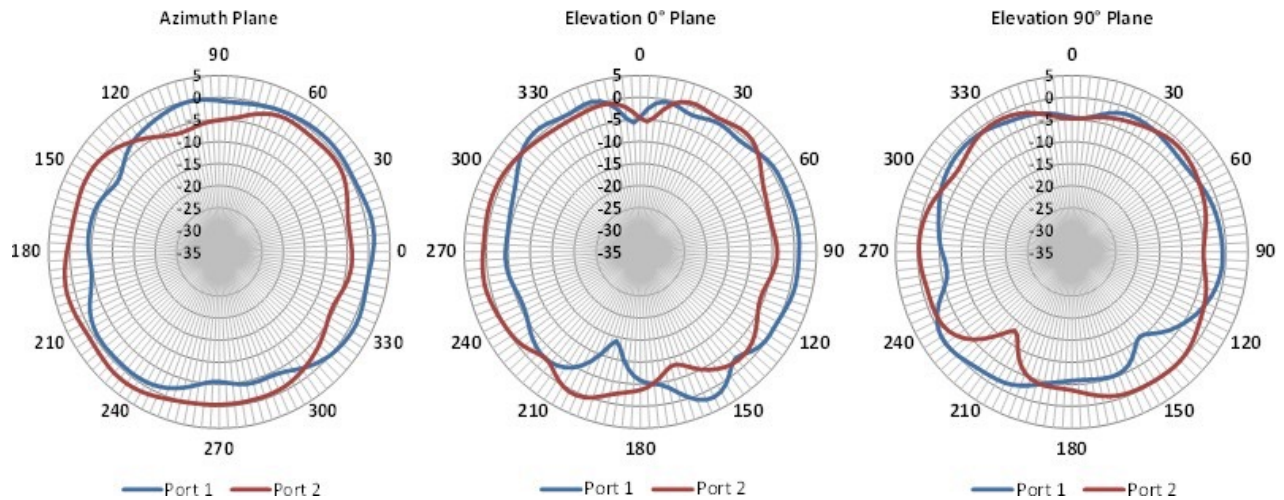
Radiation Pattern at 2412 MHz



Radiation Pattern at 2600 MHz



Radiation Pattern at 2700 MHz



TE TECHNICAL SUPPORT CENTER

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