



## PDM245115H-CS2

### 4-Port Directional H/V MIMO Antenna 2400-2500 MHz / 5150-5900 MHz

The PDM245115H-CS2 antenna is a four-port directional antenna for use in 802.11 MIMO applications. Designed for low side lobe and front-to-back performance, the antenna is an excellent choice for high density Wi-Fi applications where adjacent antenna interference is of concern. Equipped with two vertically polarized ports and two Horizontally polarized ports, the antenna takes advantage of both polarization and spatial separation to mitigate multipath issues.

Enclosed in a compact/low profile polycarbonate radome and equipped with an articulating arm that can be affixed to a mast or anchored directly to a vertical surface, the antenna can be oriented to take full advantage of the antenna's directionality. Uniform and symmetrical radiation patterns provide high-level signal density into defined coverage zones. This antenna greatly enhances the performance of 802.11 systems where physical obstructions are anticipated. The dual band frequency coverage means that a single type of antenna can be deployed with any MIMO radio in the 2.4-2.5 GHz and 5.15-5.9 GHz bands.

### FEATURES AND BENEFITS

- 802.11n MIMO
- Wide band 2.4-2.5 GHz and 5.15-5.9 GHz performance
- Vertically and horizontally polarized radiating elements in a single solution
- Equitable for both indoor and outdoor solutions
- Low profile
- Multipath mitigation
- Lower adjacent antenna interference
- Frequency diplexed dual polarized radiators

### APPLICATIONS

- High density Wi-Fi
- Stadiums, arenas, convention centers
- Transport terminals
- Campuses
- Outdoor networks

### ELECTRICAL SPECIFICATIONS

|                                 |                   |           |           |
|---------------------------------|-------------------|-----------|-----------|
| Model Number                    | PDM245115H-CS2    |           |           |
| Cisco Part Number               | AIR-ANT2513P4M-NS |           |           |
| Cisco Manufacturing Number      | 07-100553-01      |           |           |
| Number of Ports                 | 4                 |           |           |
| Operating Frequency (MHz)       | 2400-2500         | 5150-5700 | 5700-5900 |
| VSWR – Max                      | <1.6:1            | <2.0:1    | <1.5:1    |
| Gain (dBi)                      | 13                | 13        |           |
| Nominal Impedance (Ohms)        | 50                |           |           |
| Vertical Plane 3 dB Beamwidth   | 35°               |           |           |
| Horizontal Plane 3 dB Beamwidth | 35°               |           |           |
| Sidelobes (db)                  | < 8               | < 12      |           |
| Front-to-Back Ratio (dB)        | > 15              | > 15      |           |

## ELECTRICAL SPECIFICATIONS

|                                 |     |     |
|---------------------------------|-----|-----|
| Vertical Plane 3 dB Beamwidth   | 33° | 27° |
| Horizontal Plane 3 dB Beamwidth | 31° | 31° |
| Sidelobes - Azimuth (dB)        | -20 | -20 |
| Sidelobes - Elevation (dB)      | -10 | -15 |
| Front-to-Back Ratio (dB)        | 35  | -   |

## MECHANICAL SPECIFICATIONS

|                                  |                                        |
|----------------------------------|----------------------------------------|
| Dimensions - mm (inches)         | 507.0 x 368 x 21.1 (20.0 x 14.5 x 0.8) |
| Weight - kg (lbs.) (no brackets) | 2.3 (5.1)                              |
| Radome Material                  | Polycarbonate, UL94-V0, medium gray    |

## ENVIRONMENTAL SPECIFICATIONS

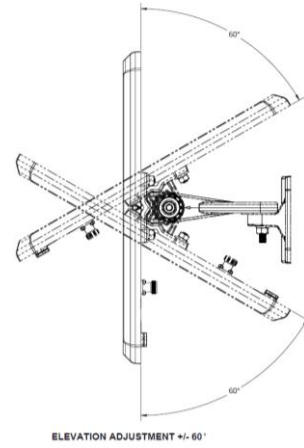
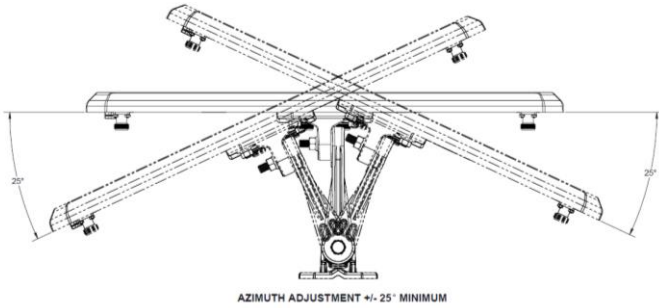
|                                           |                              |
|-------------------------------------------|------------------------------|
| Operating Environment (Indoor or Outdoor) | Indoor and Outdoor           |
| Operating Temperature - °C (°F)           | -40 to +70°C (-40 to +158°F) |
| Storage Temperature - °C (°F)             | -40 to +85°C (-40 to +185°F) |
| Ingress Protection Rating                 | IP67                         |
| Flammability Rating                       | UL 94V0 Materials            |
| Material Substance Compliance             | RoHS                         |

## CONFIGURATION

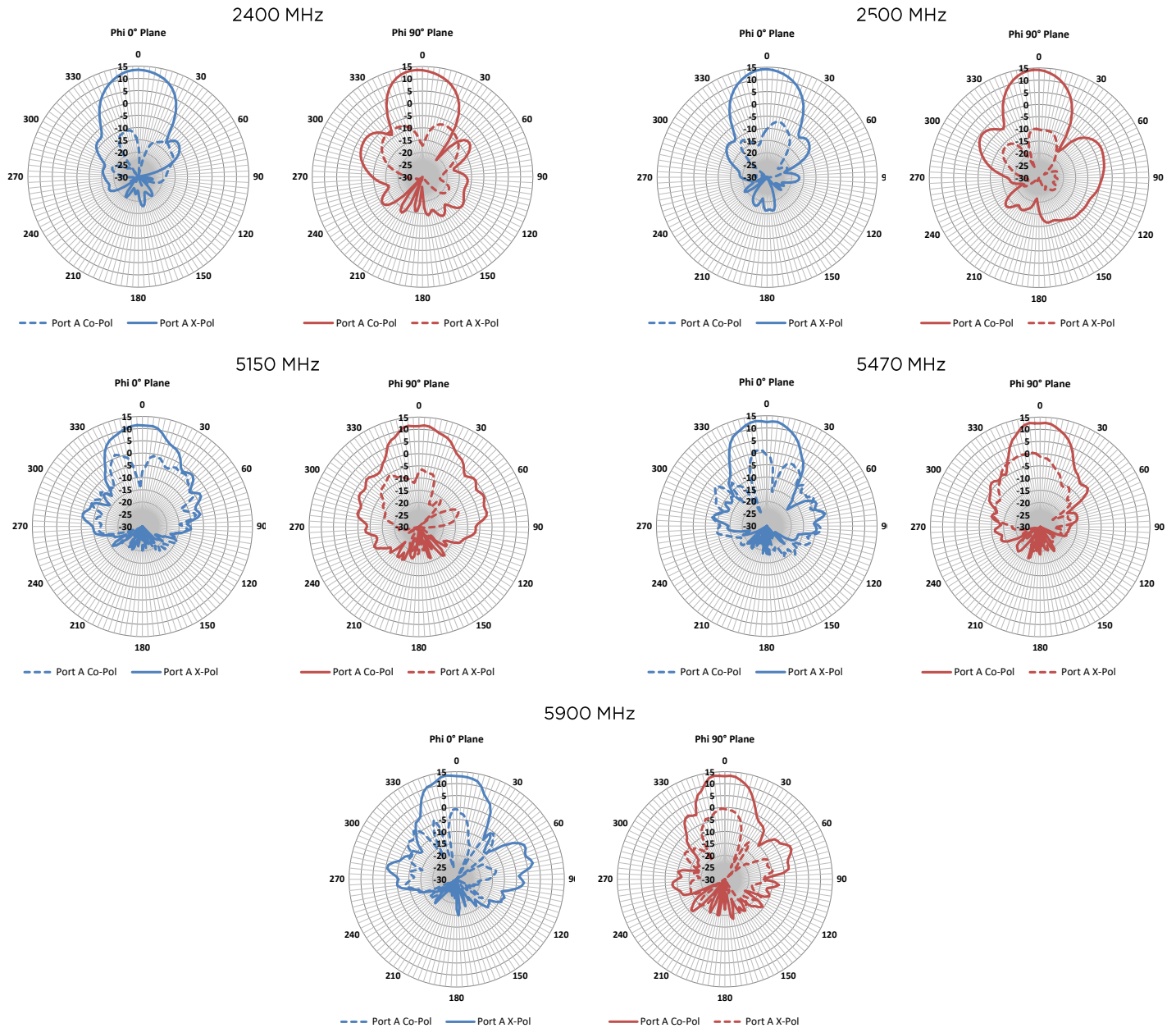
| PART NUMBER    | CONNECTOR          |
|----------------|--------------------|
| PDM245115H-CS2 | Type N Female (x4) |



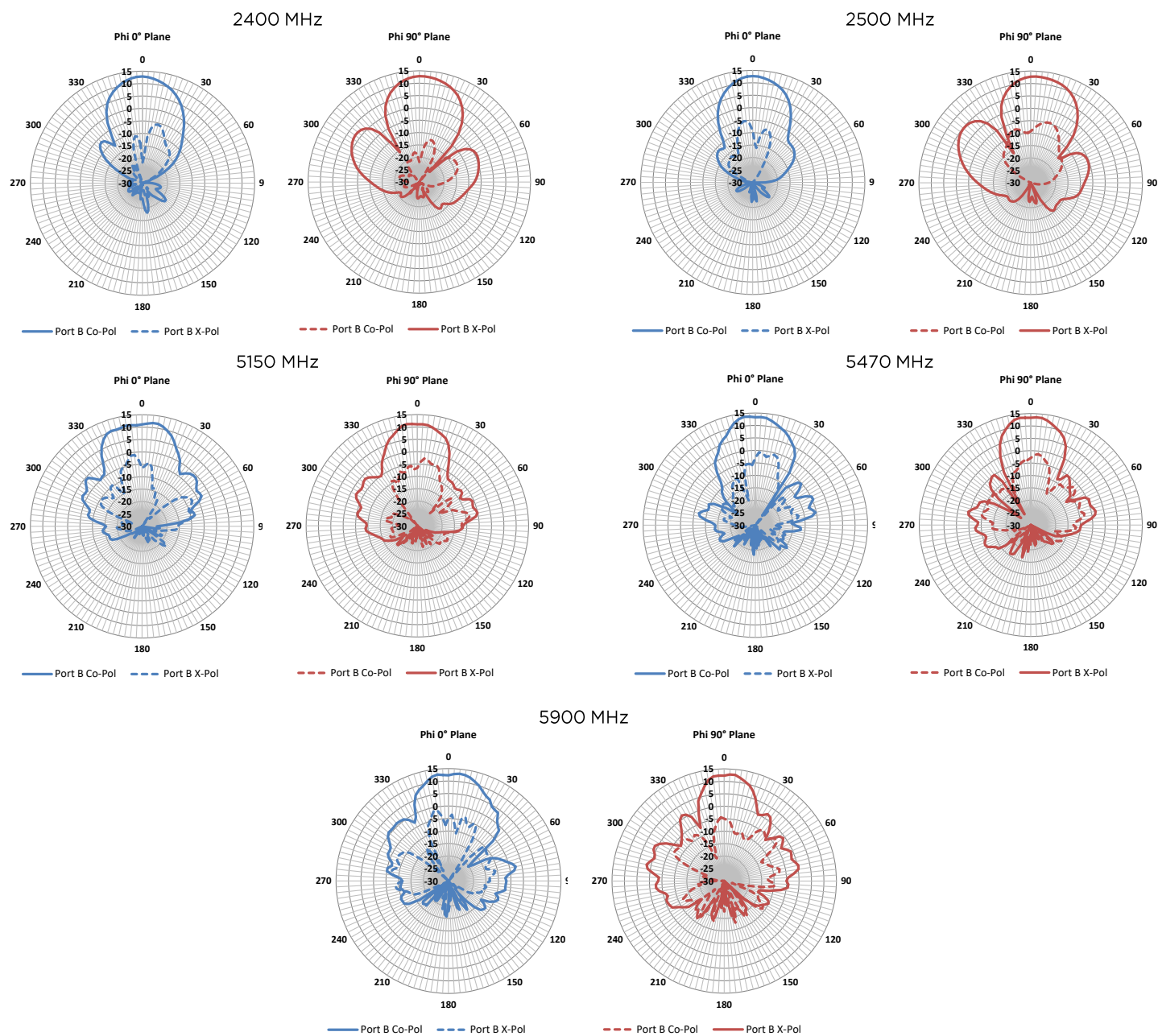
## MECHANICAL DRAWING



## RADIATION PATTERNS - PORT A

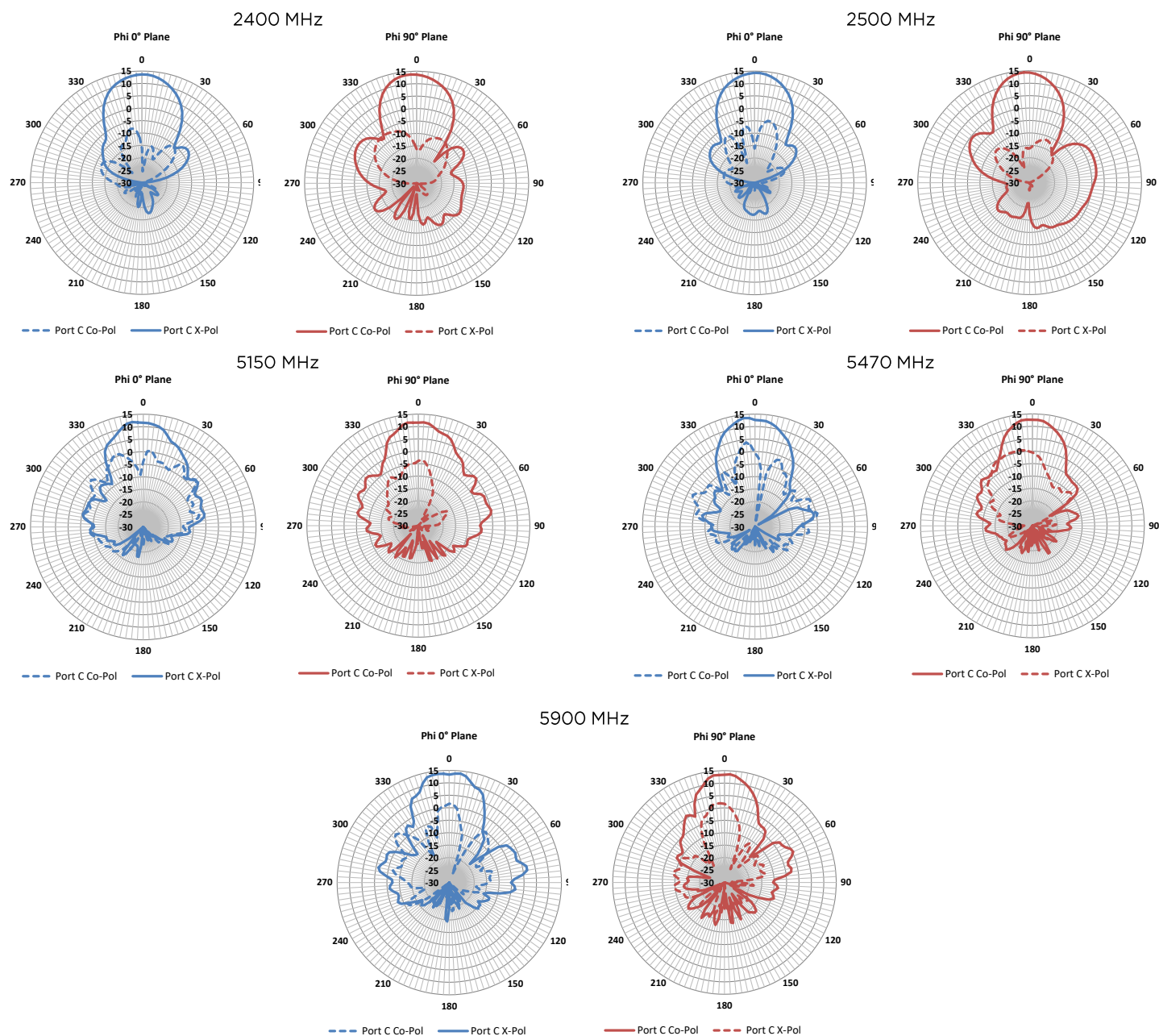


## RADIATION PATTERNS - PORT B

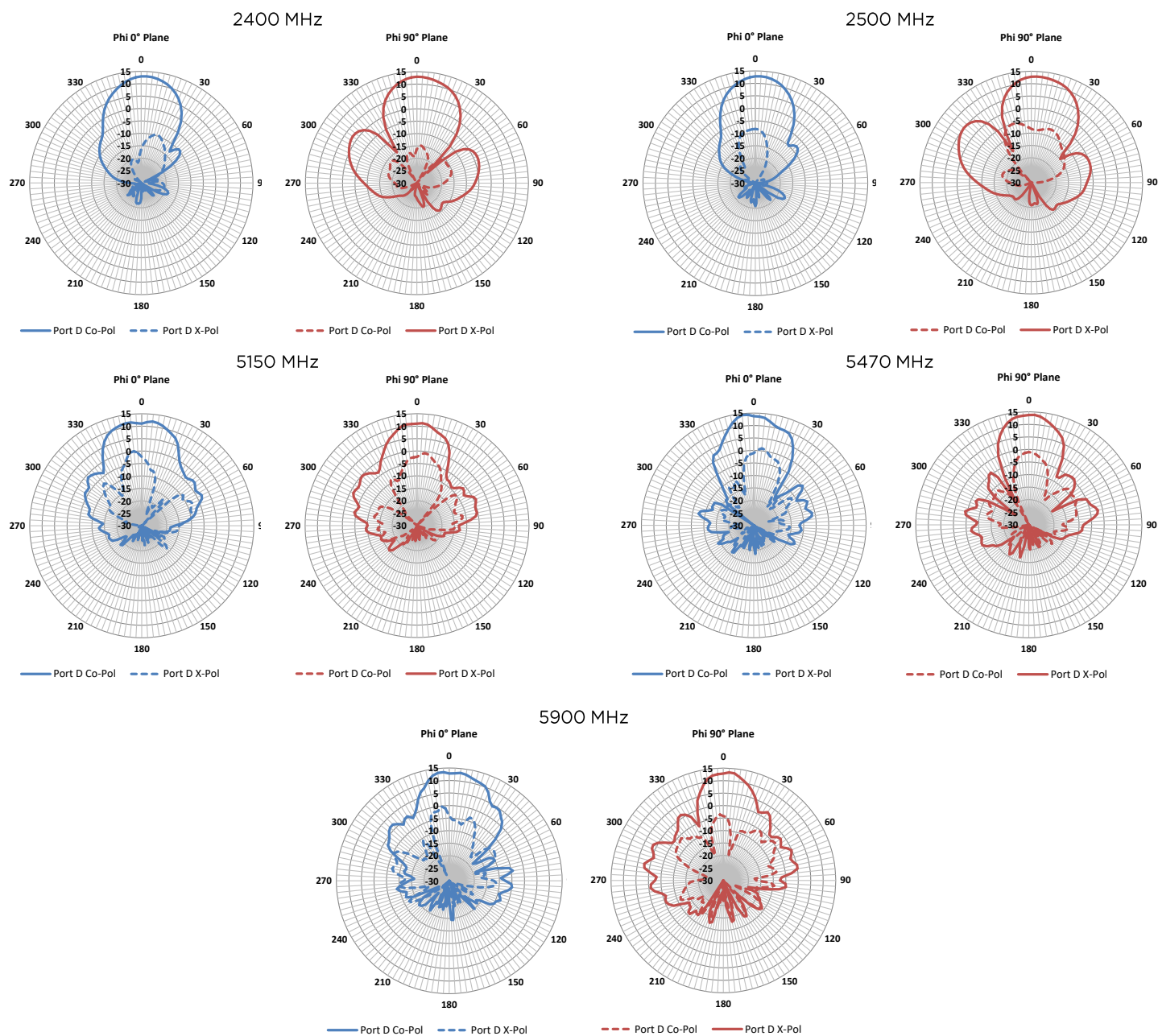




## RADIATION PATTERNS - PORT C



## RADIATION PATTERNS - PORT D



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