



## PDM24499-CS1

### 4-Port MIMO Antenna

#### 2.4-2.5 AND 4.9-5.95 GHZ 9 DBI WALL/POLE-MOUNTED MIMO ANTENNA

The PDM24499-CS1 antenna is a four-port dual-band, dual polarized directional panel antenna for use in 802.11 MIMO indoor and outdoor applications. The antenna is an excellent choice for high density Wi-Fi applications. . The dual-band frequency coverage means that a single type of antenna can be deployed with any MIMO radio in the 2400-2500 MHz and 5150-5900 MHz bands. In addition, the uniform and symmetrical radiation patterns will provide a high-level signal density into engineered coverage areas.

#### FEATURES

- Thin, compact UV stable housing
- Four radiating elements optimized for indoor and outdoor 802.11 MIMO applications
- Articulating arm mount can be anchored directly to a vertical surface or mast mounted and oriented for optimal signal radiation
- Horizontal and vertical polarization for multipath mitigation
- IP67-rated and RoHS-compliant
- Self-Identification Circuitry Included

#### APPLICATIONS

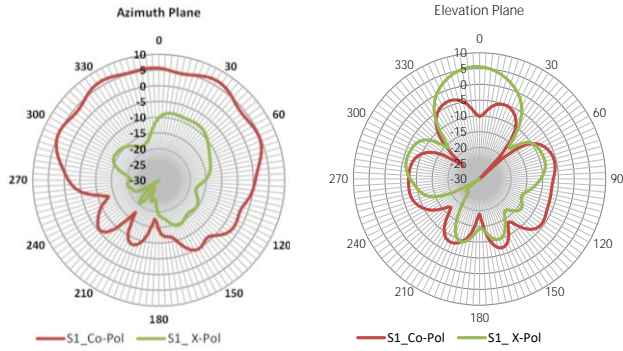
- High density Wi-Fi
- Outdoor stadiums, arenas, and convention centers
- Hotels and casinos
- Airport, bus, and train terminals
- Retail stores and indoor pedestrian malls
- Libraries and museums

## SPECIFICATIONS

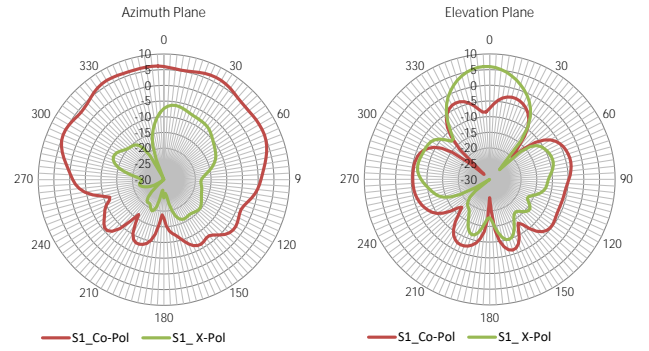
PARAMETER	SPECIFICATIONS	
Antenna Model	PDM24499-CS1	
Number of Ports	AIR-ANT2588P4M-NS	
Number of Ports	07-100555-01	
Number of Ports	4	
Frequency Bands, MHz	2400-2500	4900-5950
Peak Gain, Max. V-pol, dBi	9.1	9.6
Peak Gain, Max. H-pol, dBi	7.1	7.8
Max Gain $\pm$ 30° above Horizon, dBi	NA	3.8
Azimuth 3 dB Beamwidth, Typ (V-pol/H-pol)	95°/144°	148°/150°
Elevation 3 dB Beamwidth, Typ (V-pol/H-pol)	44°/34°	30°/33°
Azimuth 6 dB Beamwidth, Typ (V-pol/H-pol)	120°/171°	172°/179°
VSWR (Max)	<2.0:1	
Front-to-Back Ratio V-pol	>20 dB	
Front-to-Back Ratio H-pol	>10 dB	
Nominal Impedance	50 $\Omega$	
Polarization	Vertical (2 ports), Horizontal (2 ports)	
Maximum Input Power (per port)	10 W (ambient temperature of 25°C/77°F)	
Dimensions H x L x W mm (in.)	26.2 x 304.8 x 177.8 (1.0 x 12.0 x 7.0)	
Weight (without mount) g. (lbs.)	696.5 (1.54)	
Mounting	Articulating Mount, Mast, or Flush Mount	
Wind Survival	220 km/hr (136 mph)	
Wind Operational	160 km/hr (100 mph)	
Operating Temperature	-30°C to +70°C (-22°F to +158°F)	
Storage Temperature	-40°C to +85°C (-40°F to +185°F)	
Radome	PC + ABS, UL94-V0, Gray	
Ingress Protection	IP67	
Material Compliance	RoHS	

# RADIATION PATTERNS - PORT A (HORIZONTAL POLARIZATION PORT)

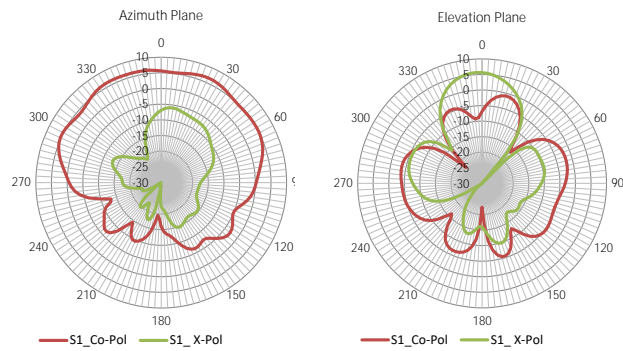
**2400 MHz**



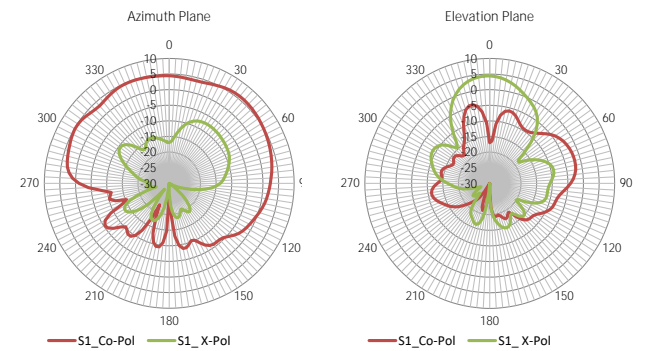
**2450 MHz**



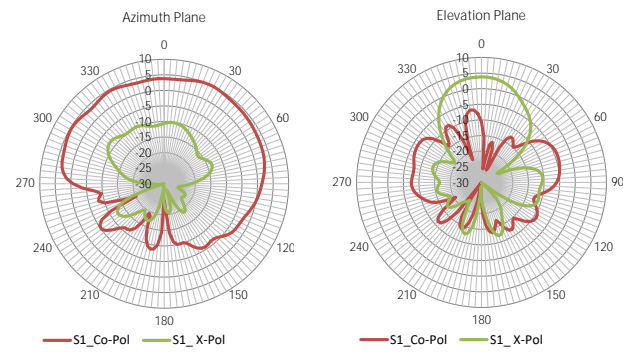
**2500 MHz**



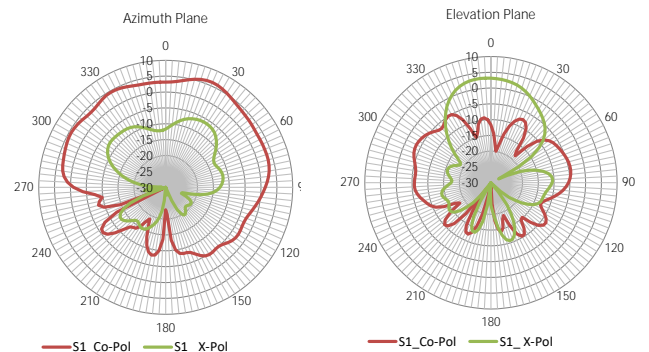
**5150 MHz**



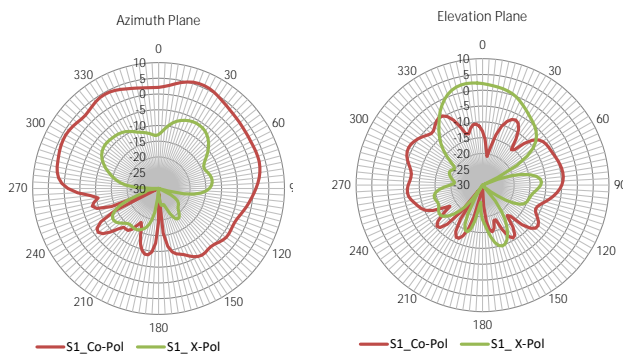
**5350 MHz**



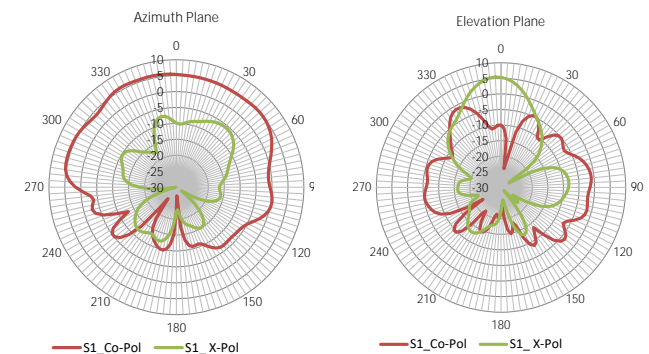
**5470 MHz**



**5500 MHz**

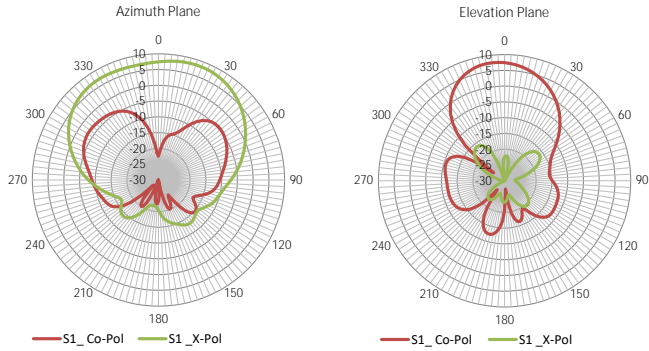


**5900 MHz**

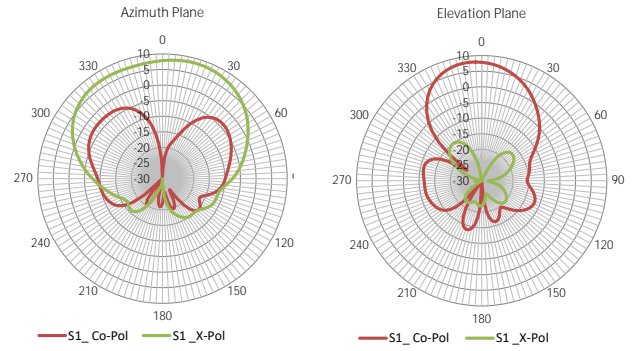


# RADIATION PATTERNS - PORT B (VERTICAL POLARIZATION PORT)

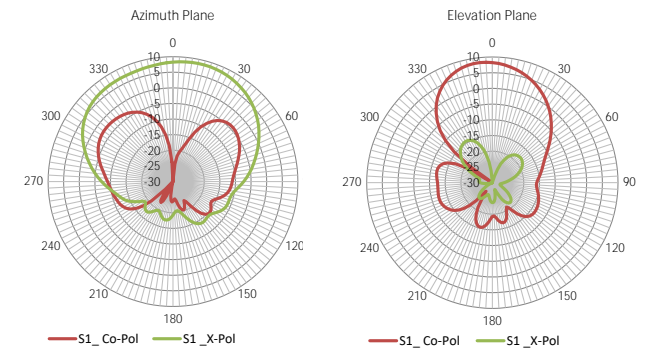
**2400 MHz**



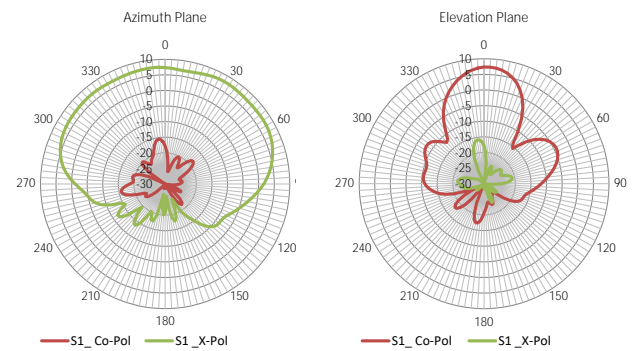
**2450 MHz**



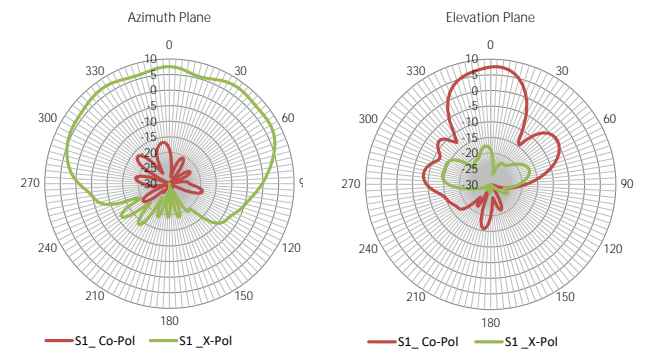
**2500 MHz**



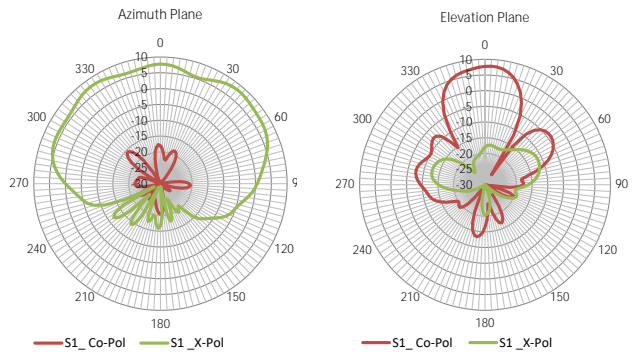
**5150 MHz**



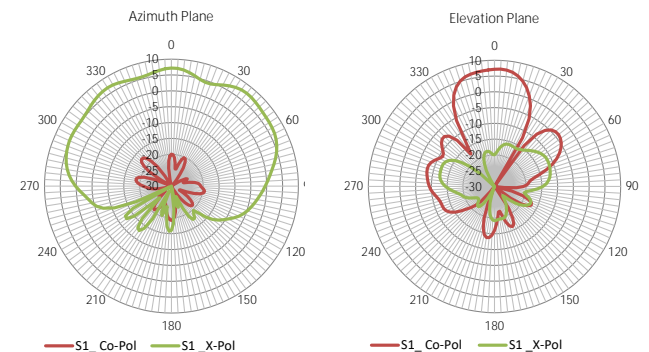
**5350 MHz**



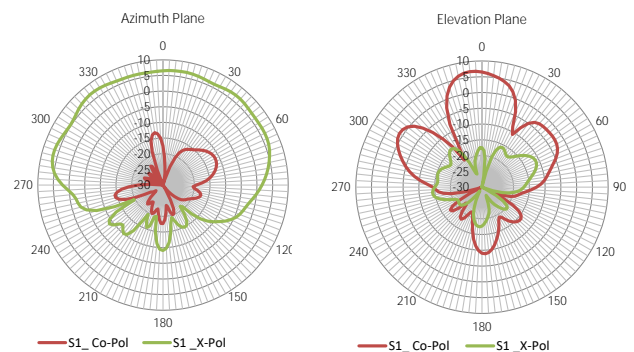
**5470 MHz**



**5500 MHz**



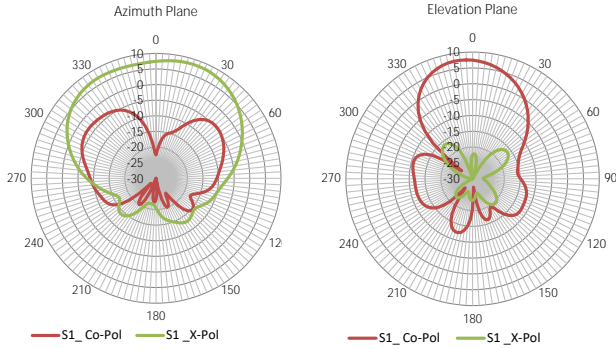
**5900 MHz**



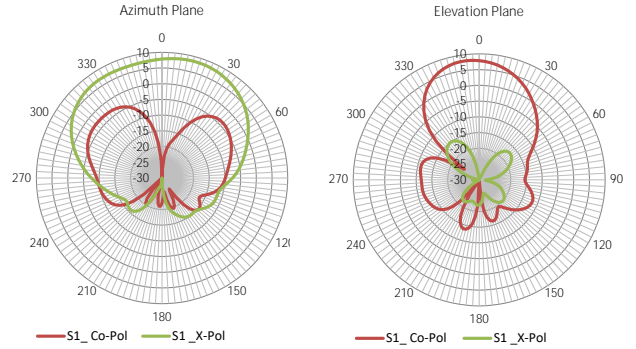


# RADIATION PATTERNS - PORT C (VERTICAL POLARIZATION PORT)

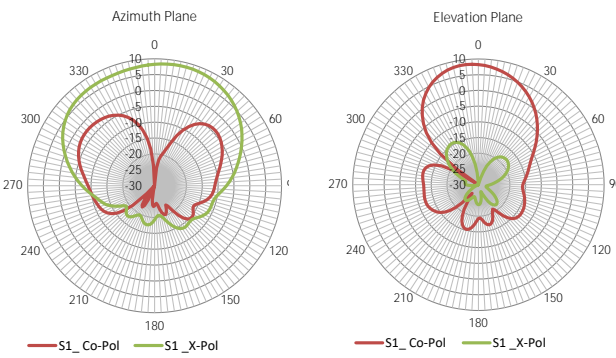
**2400 MHz**



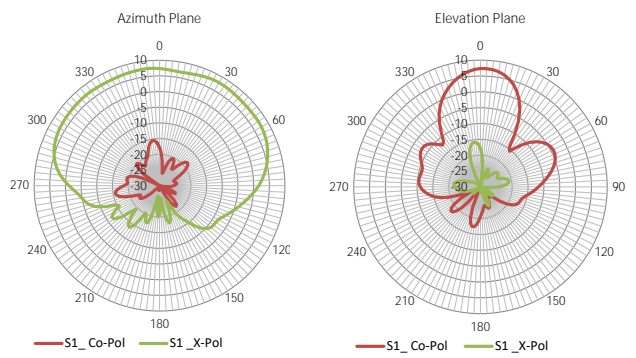
**2450 MHz**



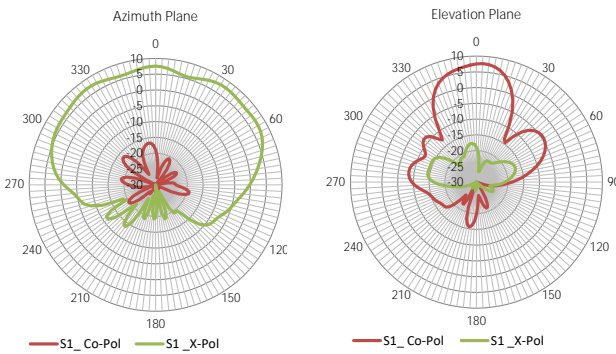
**2500 MHz**



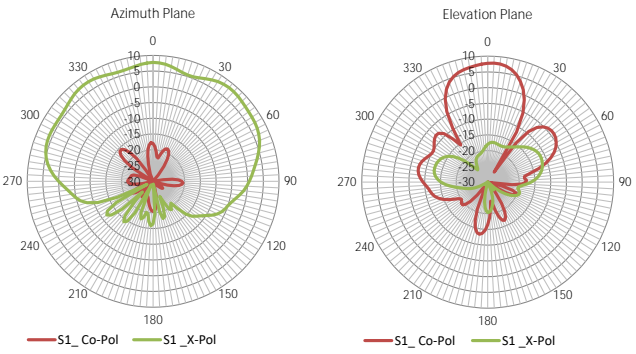
**5150 MHz**



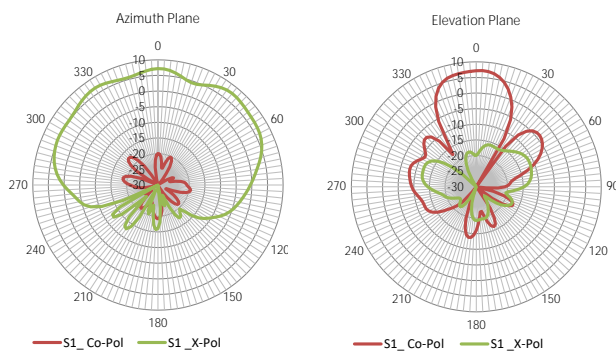
**5350 MHz**



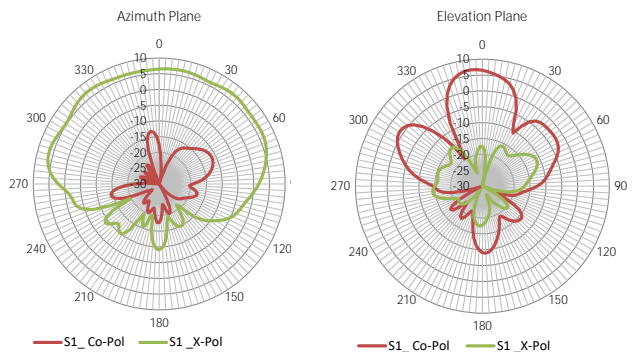
**5470 MHz**



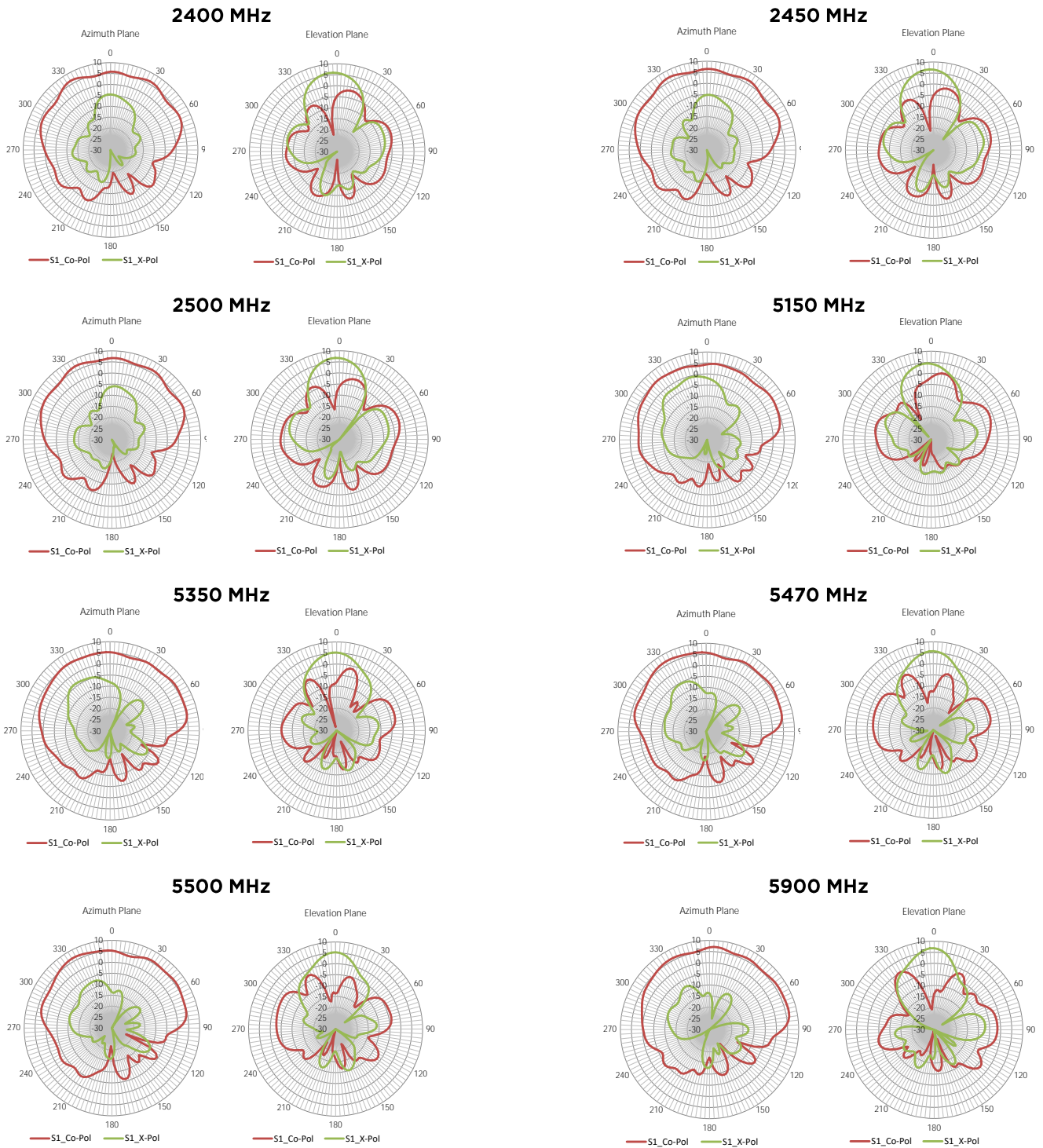
**5500 MHz**



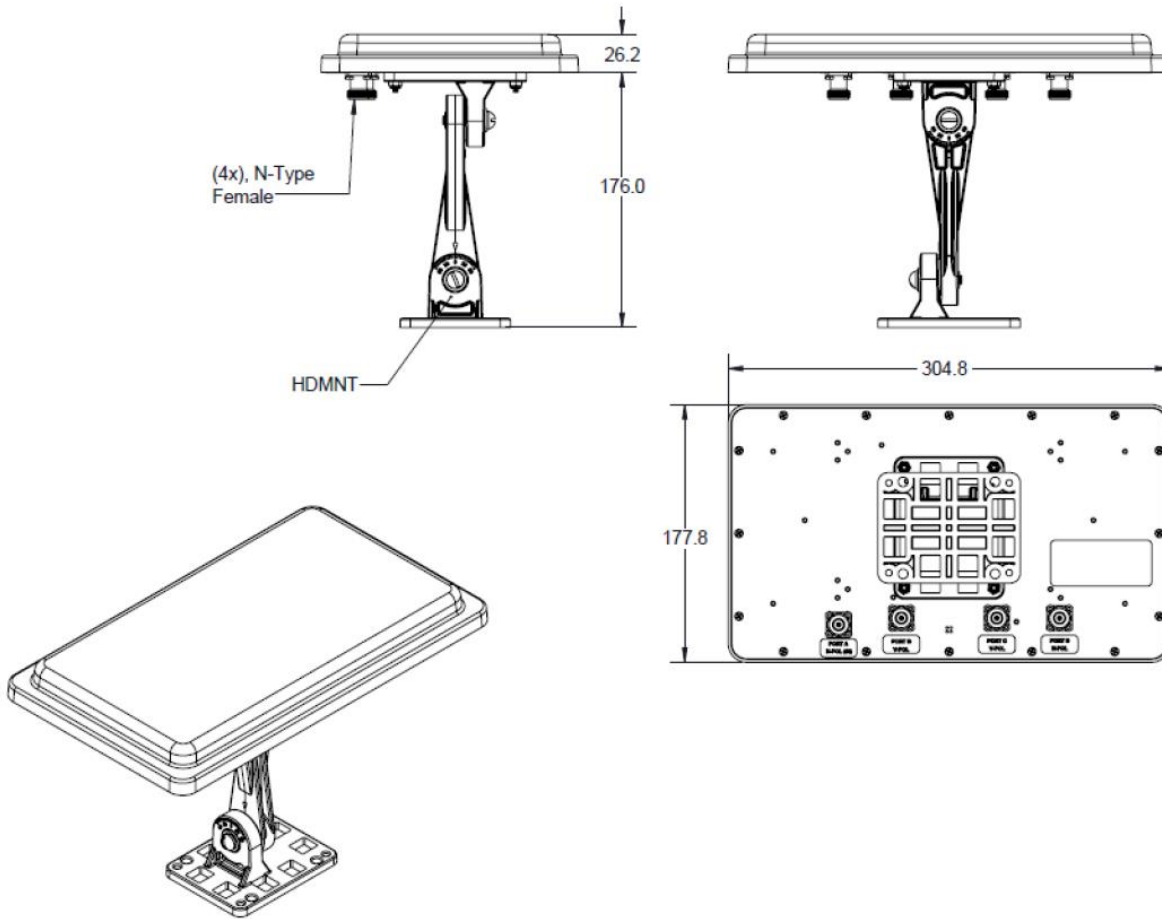
**5900 MHz**



# RADIATION PATTERNS - PORT D (HORIZONTAL POLARIZATION PORT)



# MECHANICAL DRAWINGS



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