

Overview

Southwest Antennas Part # 1055-378 is an omni-directional C-Band antenna designed specifically for aircraft installation with multi-port MIMO and MANET tactical radio systems. The antenna's four RF ports and 45 degree slant left and slant right cross-polarized design provide enhanced polarization and spatial diversity for attached radio systems, allowing them to maximize data throughput and overall link budget.

The antenna features an integrated flange base for secure mounting to an aircraft, helicopter, UAS, or other vehicle. The mechanical design of this product has been specifically engineered and reinforced to withstand the higher wind speeds and low pressure environment while in flight.

Part # 1055-378 features an operational frequency range of 4.4 - 5.0 GHz, and 5.3 dBi of peak gain.

Features:

- 4-Input MIMO / MANET antenna for aircraft installation
 - 2 ports, 45° slant right polarization
 - 2 ports, 45° slant left polarization
- 4.4 - 5.0 GHz
- 5.3 dBi peak gain
- White radome
- Flange base for secure aircraft mounting
- 4x Type-N(f) RF connectors



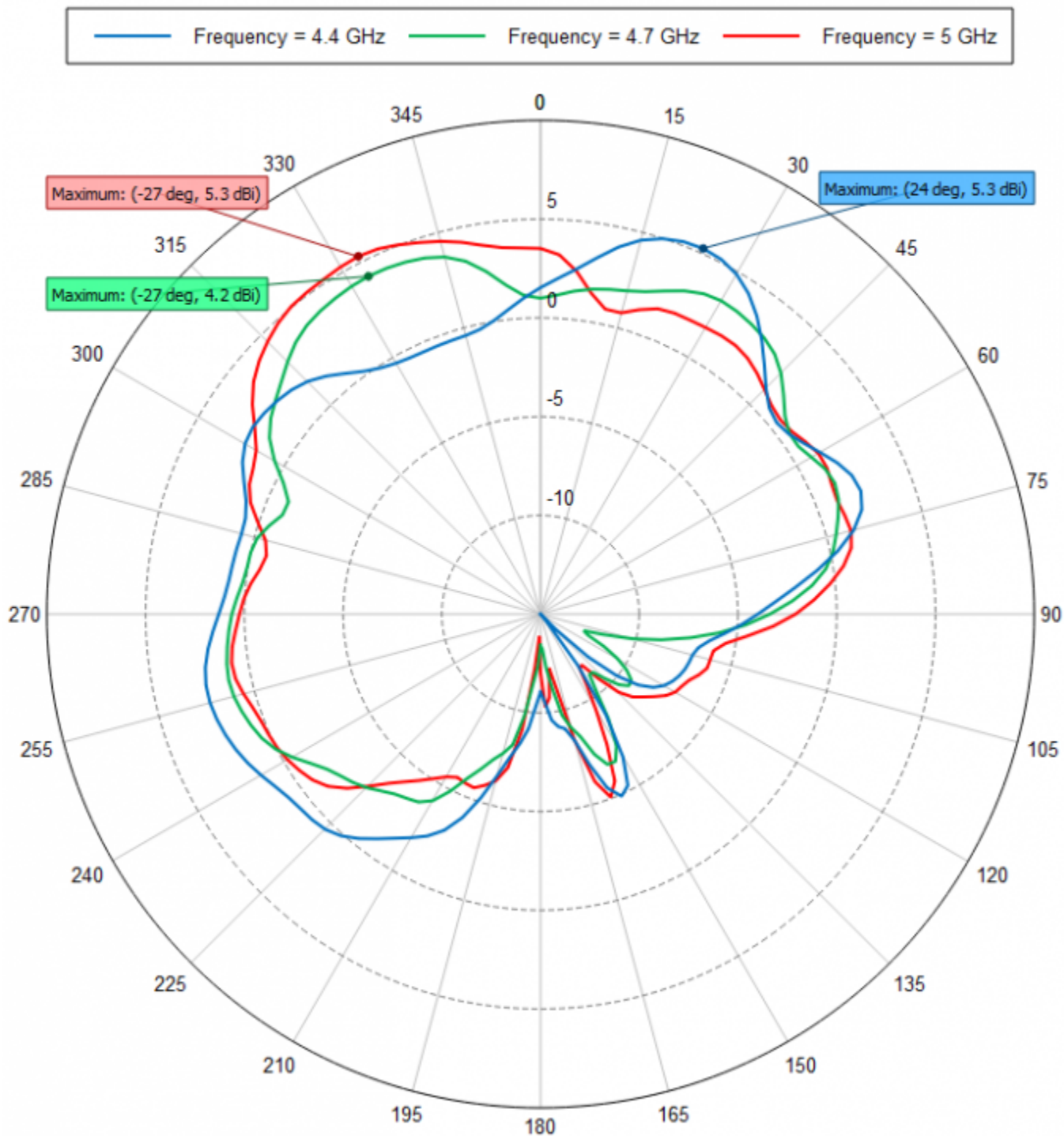
Antenna Specifications

Parameter	Value	Units	Tolerance
Antenna Pattern	Omni Antenna		
Frequency Band	C		
Impedance	50	Ohms	
Minimum Frequency	4.4 / 4,400	GHz / MHz	
Maximum Frequency	5.0 / 5,000	GHz / MHz	
Frequency Bandwidth	0.6 / 600	GHz / MHz	
Maximum VSWR	<2:1	Ratio	
Maximum Gain	5.3	dBi	
Polarization	Slant L/R		
Maximum RF Input Power	50	Watts	Per Port
Horizontal (AZ) Beamwidth	360	Degrees	
Vertical (EL) Beamwidth	100	Degrees	
Ground Plane Required	No		
Color	White		
Mount Style	Flange Mount		
Mounting Holes or Studs	4x 0.201" diameter holes in flange		
Mount Diameter	4.50 / 114.30	inches / mm	
Maximum Wind Velocity	374	MPH	
RF Connector Type	Type-N(f)		
IP Rating	IP67		
Product Height	3.90 / 99.06	inches / mm	Not including connector height



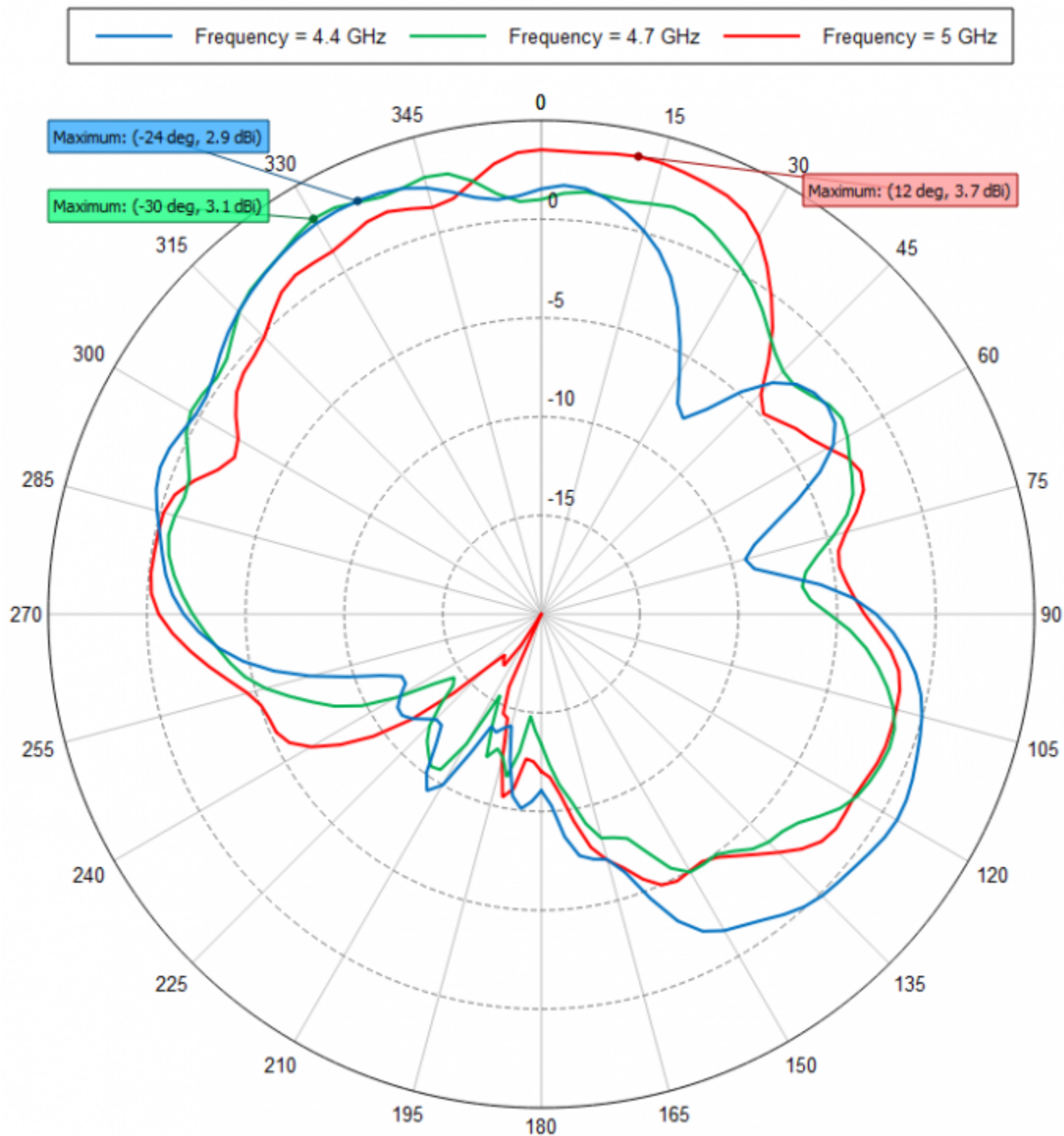
Part # 1055-378
4X4 Omni MIMO Antenna, 45° Slant Left / Right Polarized, 4.4 - 5.0 GHz,
5.3 dBi, Flange Mount Base

Parameter	Value	Units	Tolerance
Product Diameter	4.50 / 114.30	inches / mm	
Product Weight	1.1 / 0.5	lbs / kg	



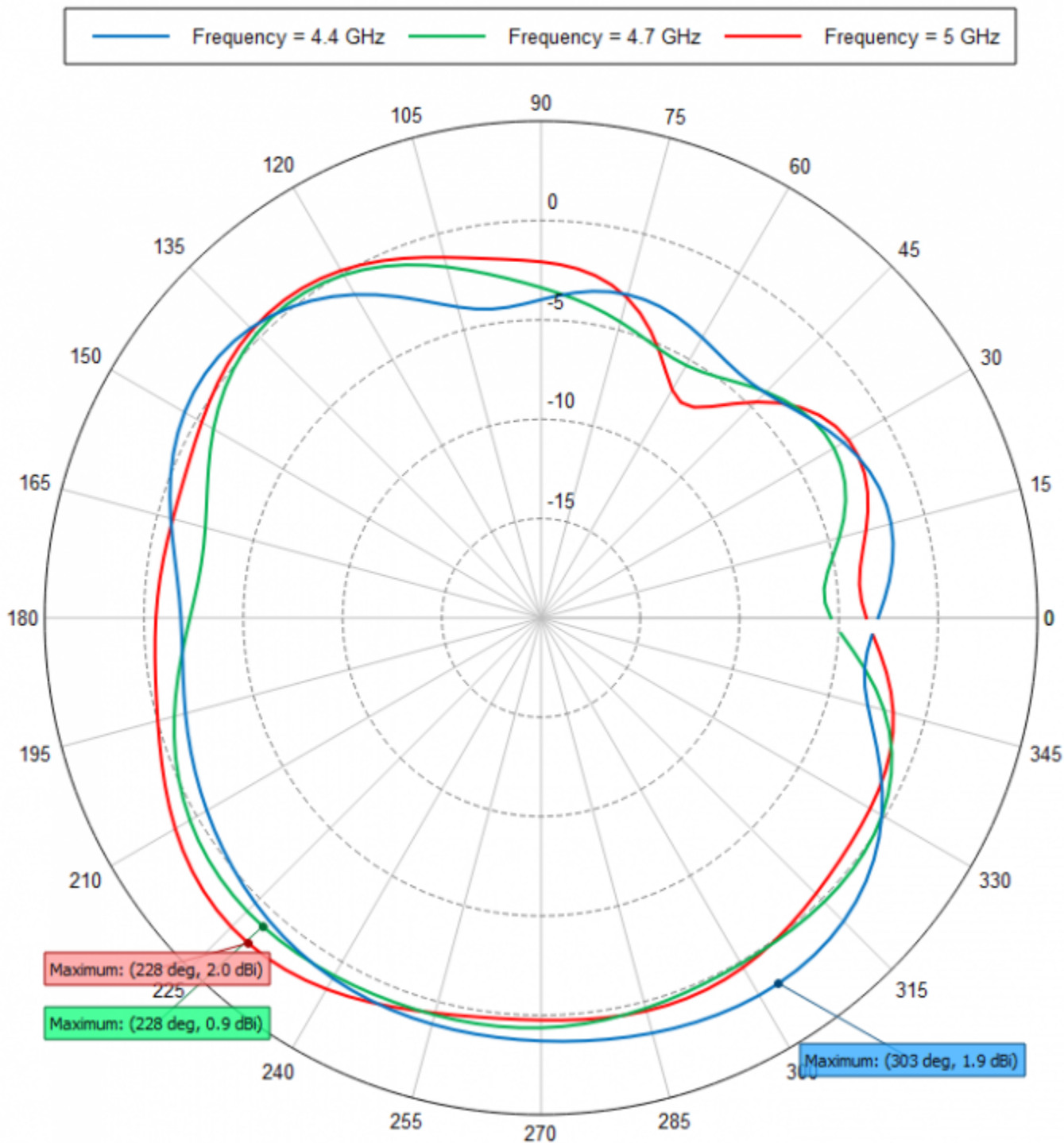
Elevation Pattern, Slant Left (Single Port Measurement)

Referenced to +10 dBi



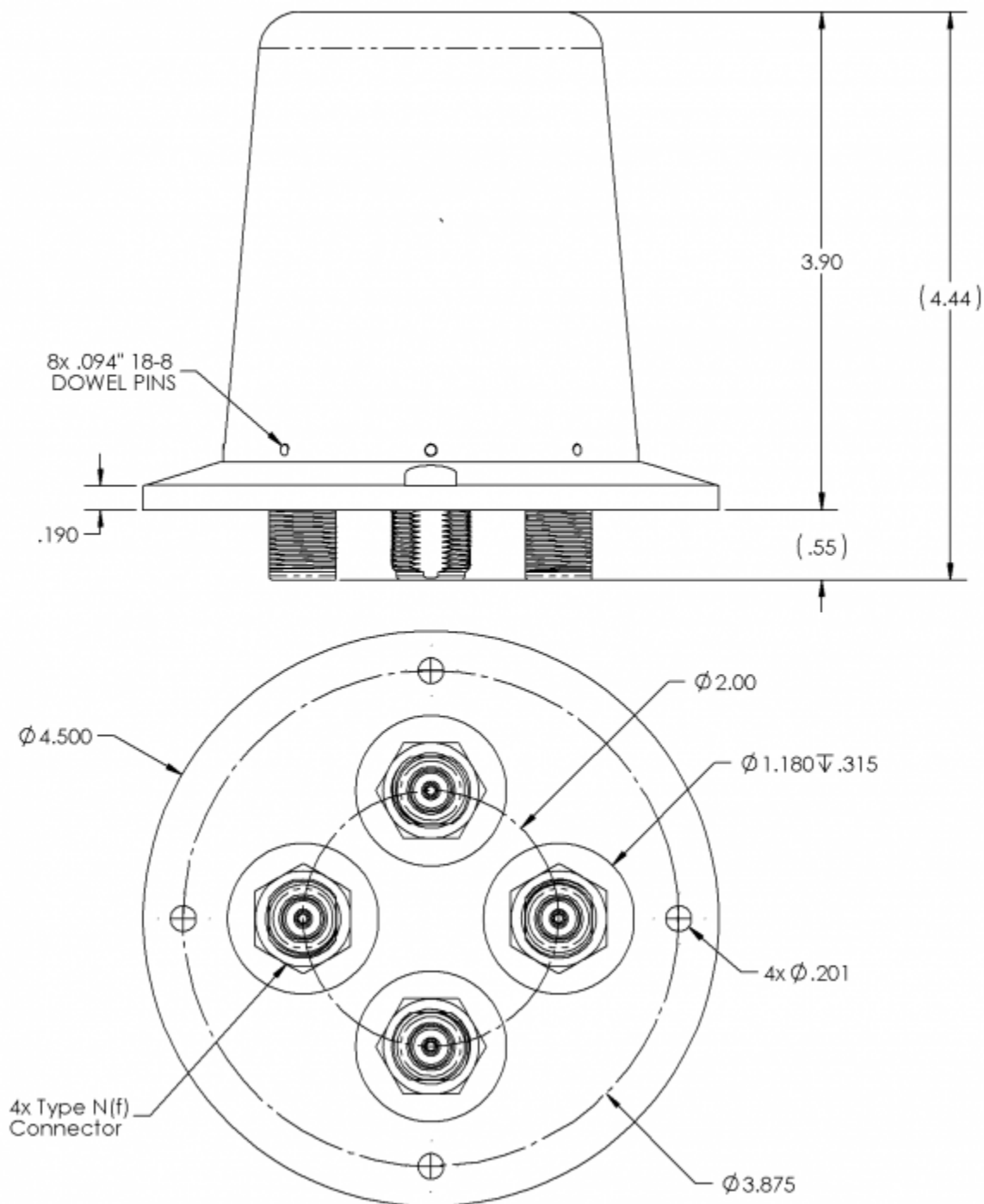
Elevation Pattern, Slant Right (Single Port Measurement)

Referenced to +10 dBi



Azimuth Pattern (Single Port Measurement)

Referenced to +10 dBi



Engineering Drawing

All dimensions are in inches