

Overview

Southwest Antennas Part # 1055-377 is an omni-directional S-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 # 1055-377 features an operational frequency range of 2.1 - 2.5 GHz, and 3.9 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
- 2.1 - 2.5 GHz
- 3.9 dBi Gain
- White Radome
- Flange base for secure aircraft mounting
- 4x N(f) RF Connectors



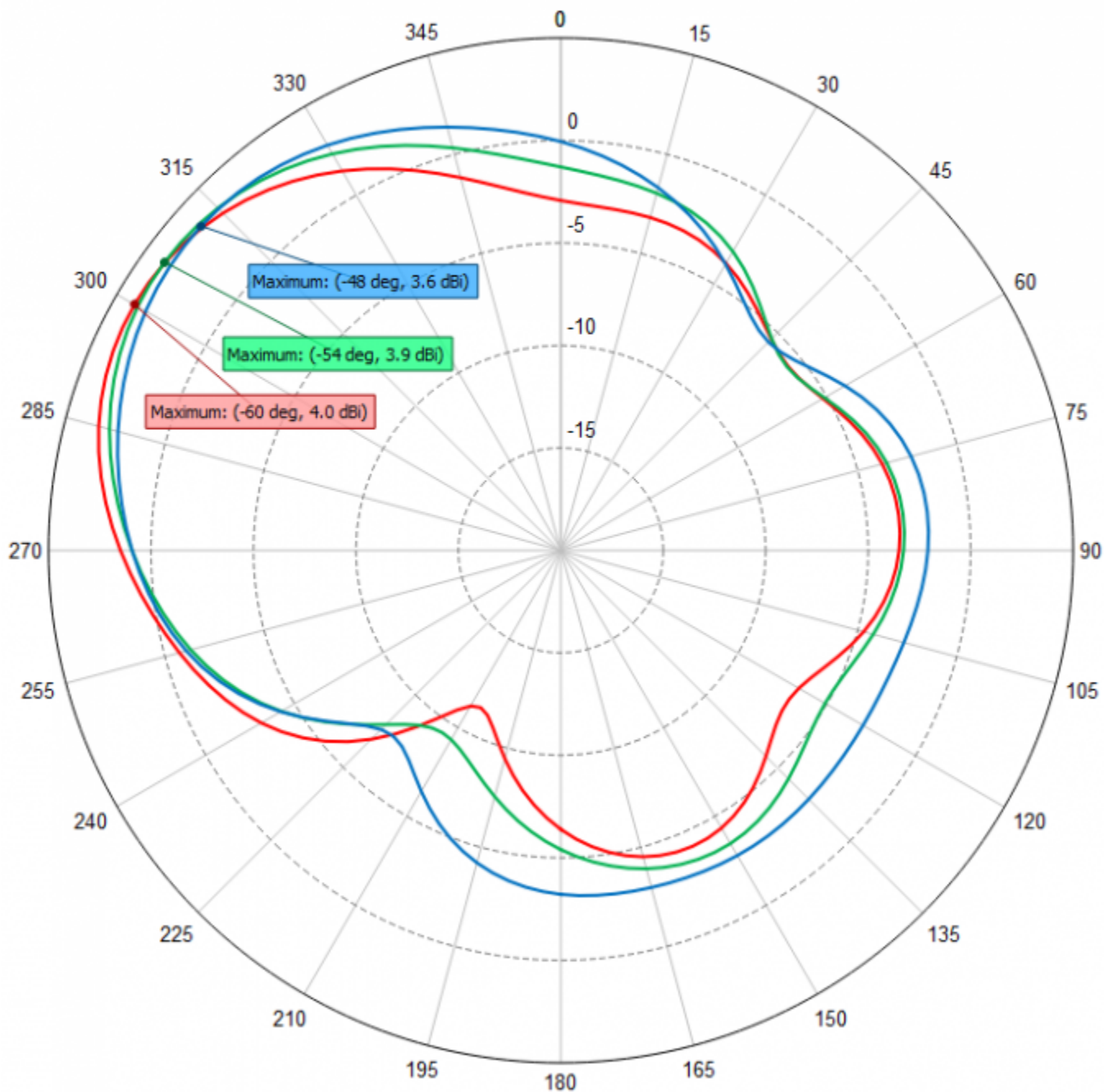
Antenna Specifications

| Parameter | Value | Units | Tolerance |
|---------------------------|------------------------------------|-------------|--------------------------------|
| Antenna Pattern | Omni Antenna | | |
| Frequency Band | S | | |
| Impedance | 50 | Ohms | |
| Minimum Frequency | 2.1 / 2,100 | GHz / MHz | |
| Maximum Frequency | 2.5 / 2,500 | GHz / MHz | |
| Frequency Bandwidth | 0.4 / 400 | GHz / MHz | |
| Maximum VSWR | 2:1 | Ratio | |
| Maximum Gain | 3.9 | 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 |



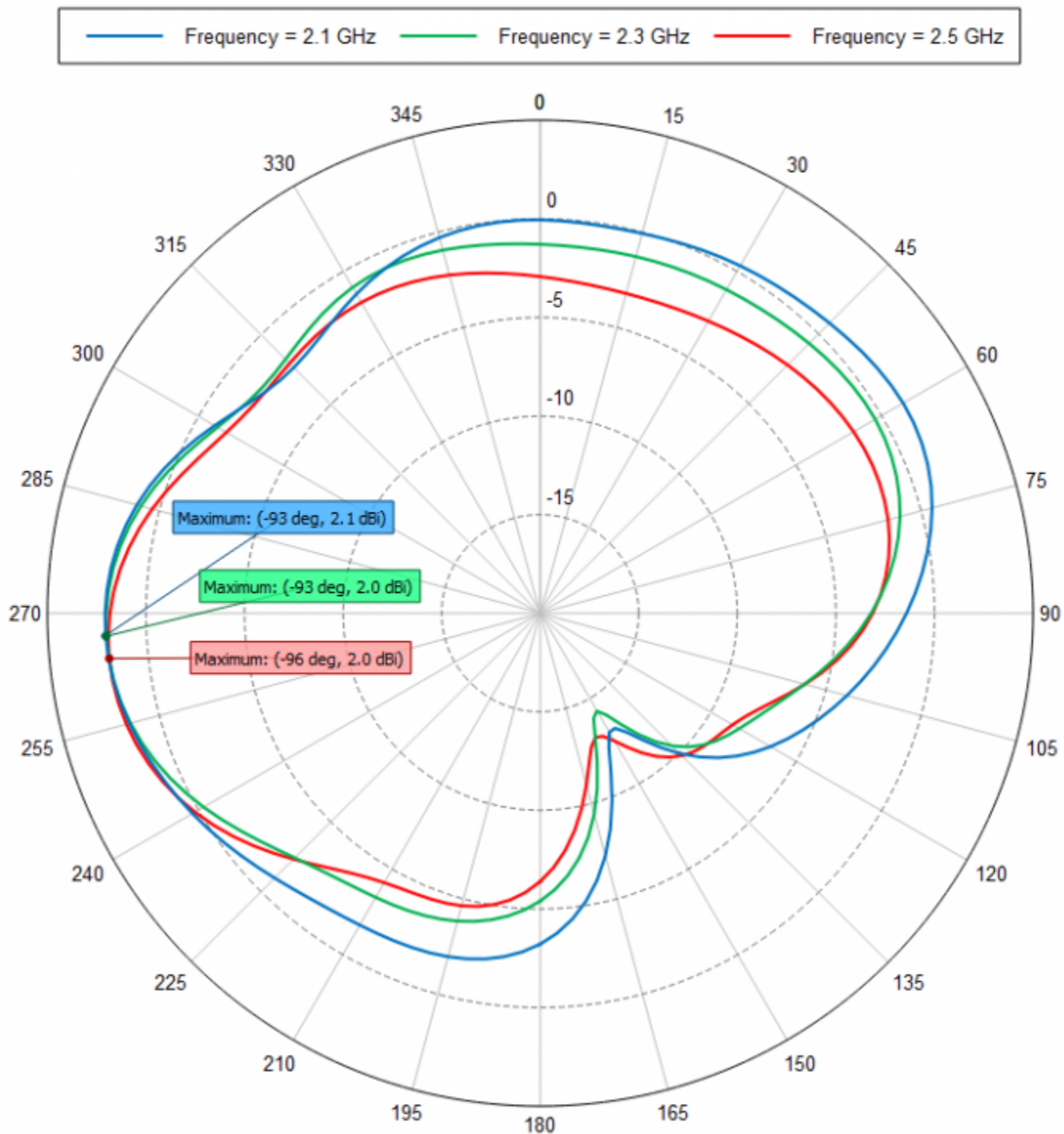
Part # 1055-377
4X4 Omni MIMO Antenna, 45° Slant Left / Right Polarized, 2.1 - 2.5 GHz,
3.9 dBi, Flange Mount Base

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



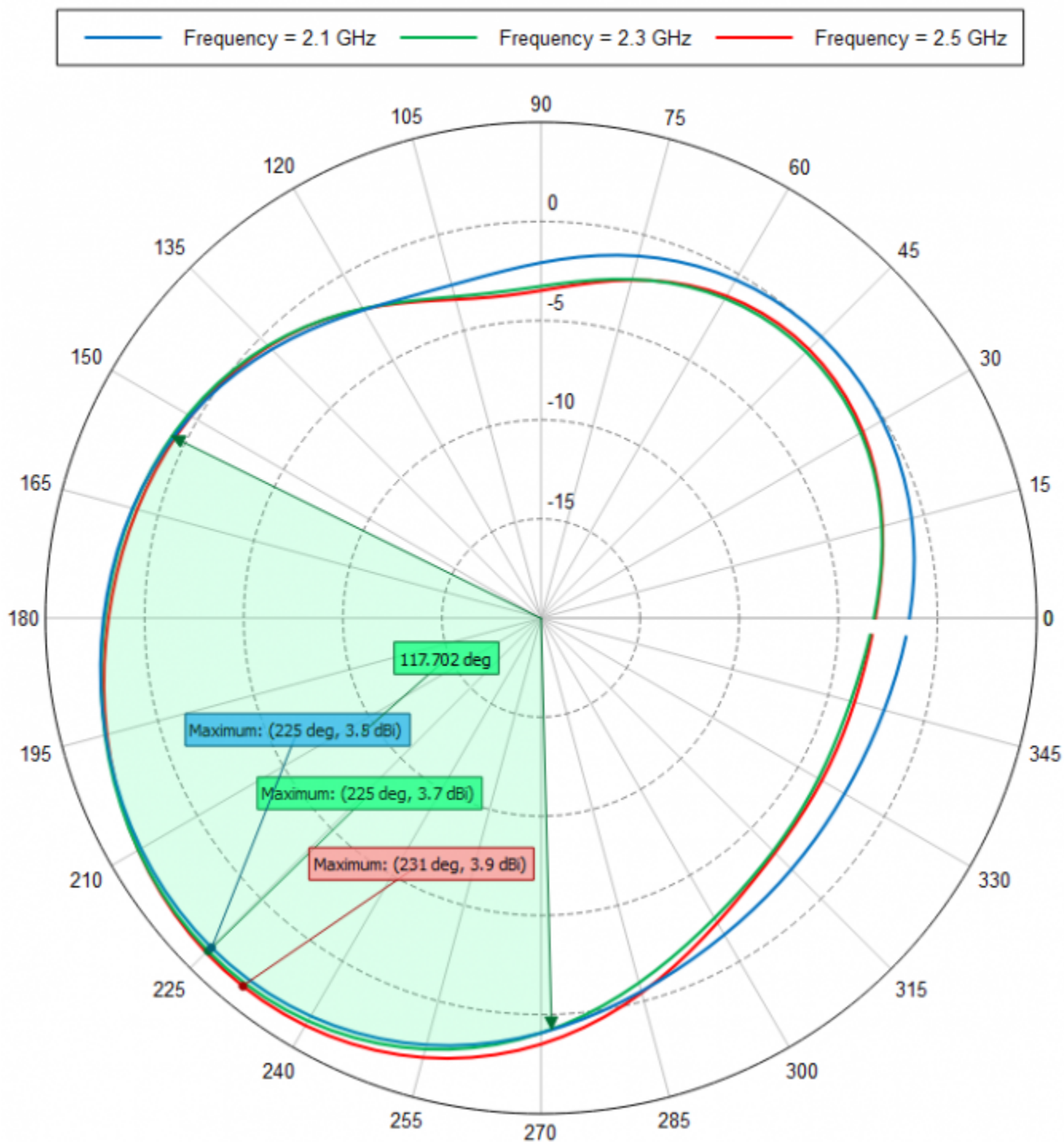
Elevation Pattern, Slant Left (Single Port Measurement)

Referenced to +10 dBi



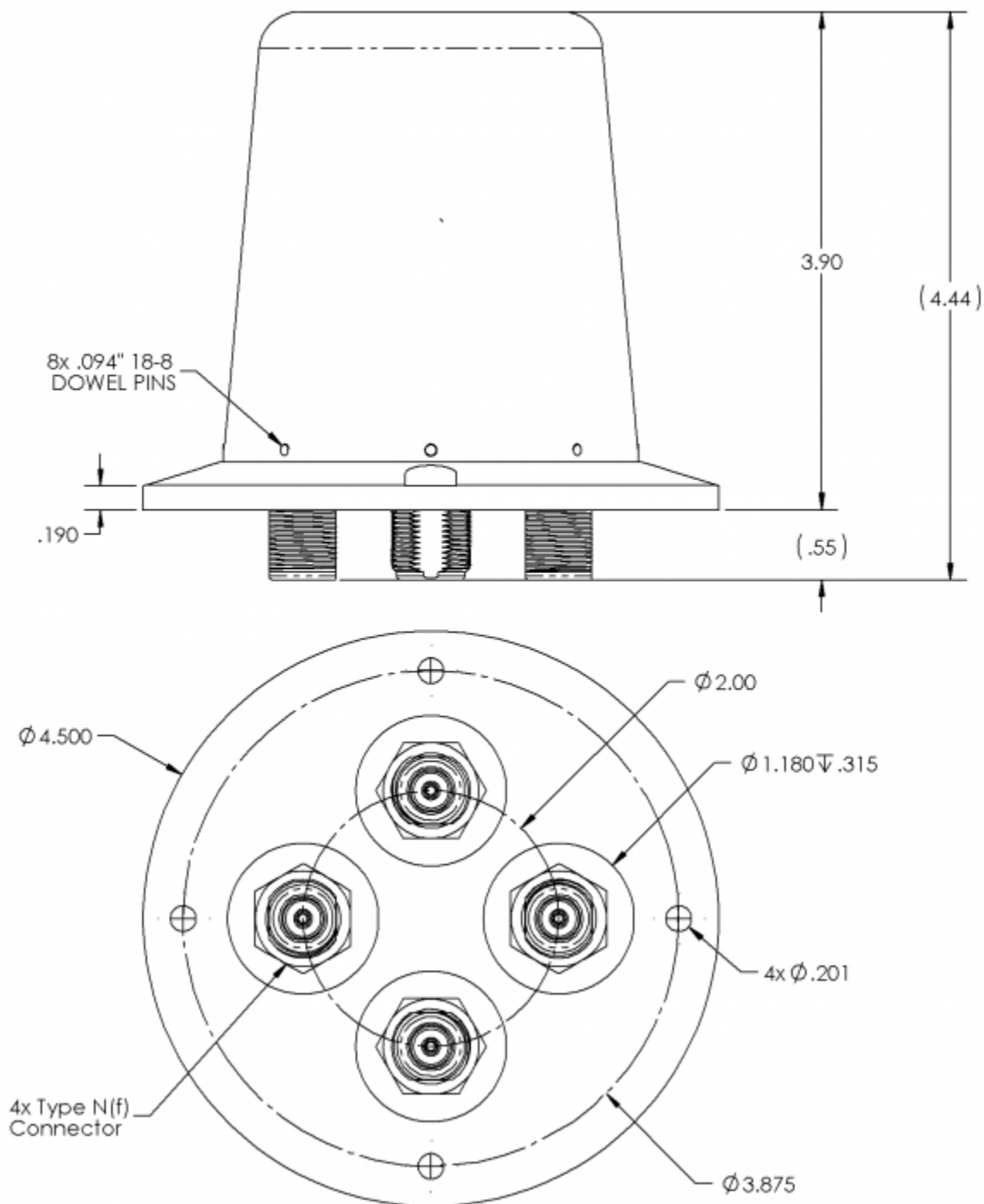
Elevation Pattern, Slant Right (Single Port Measurement)

Referenced to +10 dBi



Azimuth Pattern (Single Port Measurement)

Referenced to +10 dBi



Engineering Drawing

All dimensions are in inches