

Overview

Southwest Antennas Part # 1085-120 High Performance ADS-B Omni Antenna was created specifically for use with ADS-B receivers used in the aviation market to meet the FAA's NextGen system mandate by 2020.

Southwest Antennas has optimized the impedance of the antenna feed point and pattern to maximize performance and deliver 5.5 dBi of gain. Peak gain occurs 5 degrees above the horizon to deliver long-range performance with air-to-ground communication, and the horizontal pattern has been optimized to help pull in signals from aircraft that are close in to the ADS-B station or at high elevation angles.

This qualified ADS-B antenna is designed to work with any brand of ADS-B receiver, and features a Type-N(f) RF connector. An optional pole mounting kit (Part # 1070-042) is available for purchase.

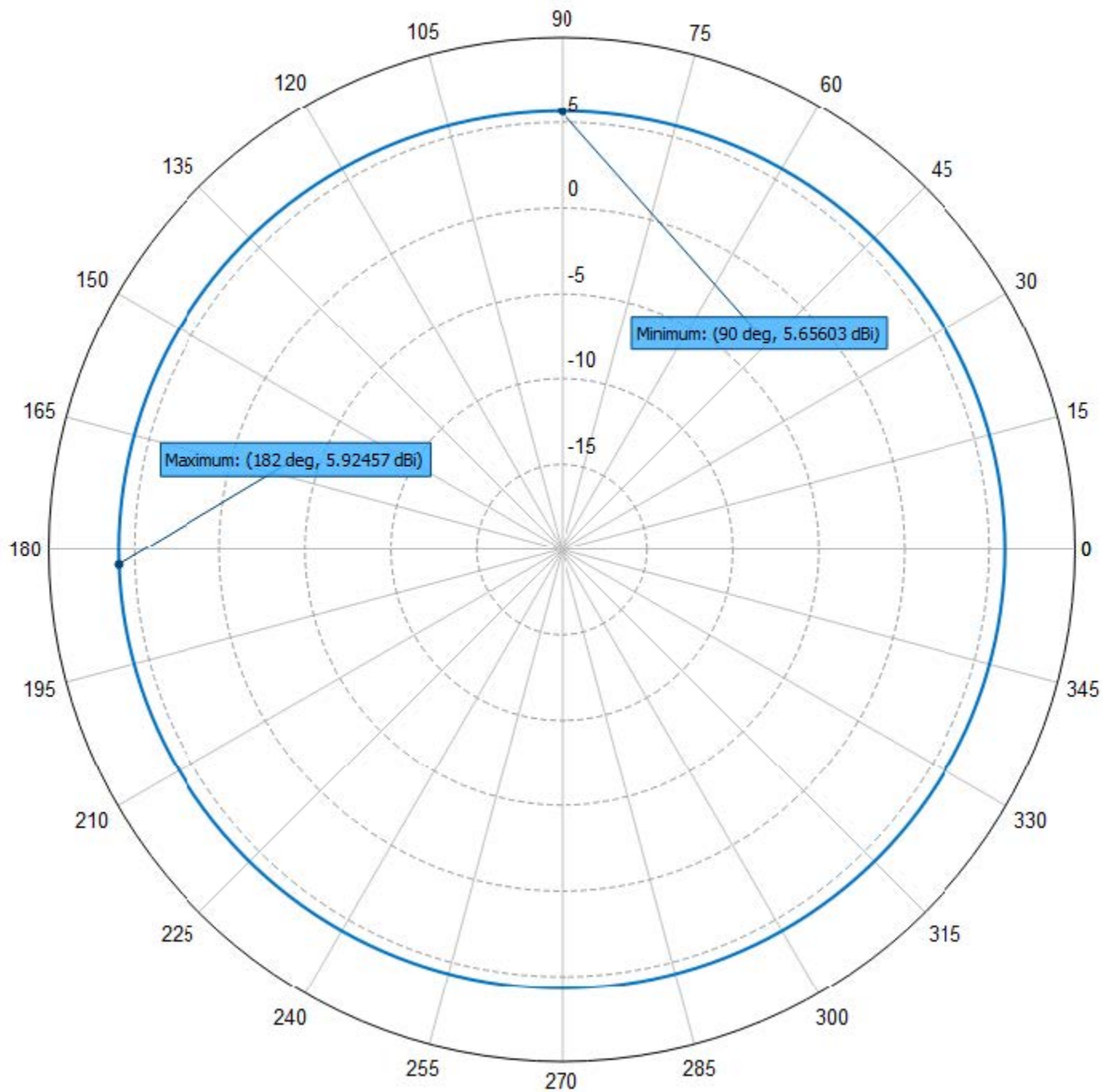
Features:

- Designed for use with ADS-B Receivers
- Omni 4-Section Collinear Design
- 1,090 MHz
- 10W Power Handling
- 5.5 dBi Omni Radiation Pattern
- Vertical Polarization
- Peak Gain Occurs 5° Above Horizon
- Rugged Construction PVC Radome
- Black End Cap, Aluminum Mounting Sleeve
- Optional Pole Mounting Kit Available



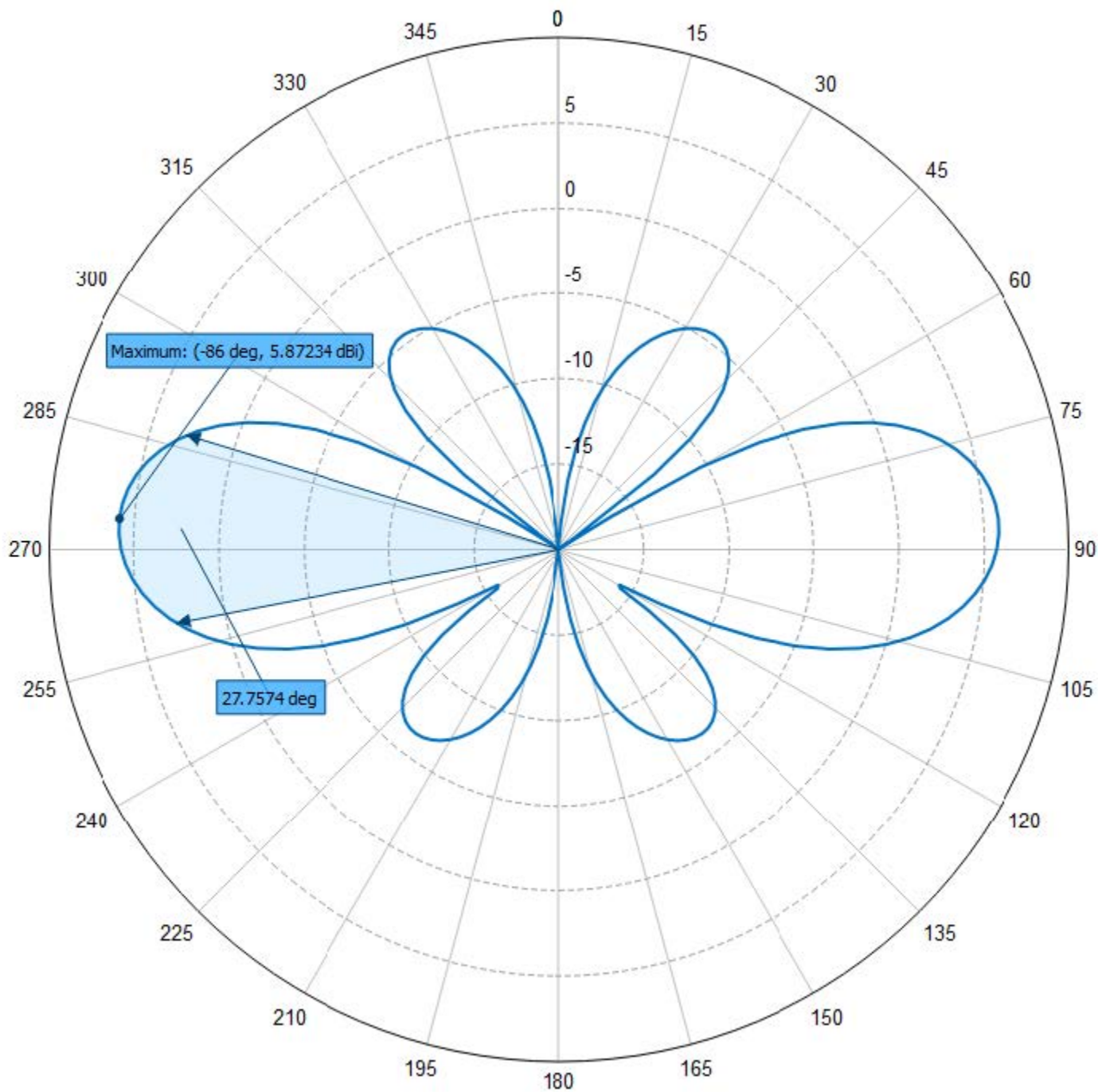
Antenna Specifications

| Parameter | Value | Units | Tolerance |
|---------------------------|----------------|-------------|-----------|
| Antenna Pattern | Omni Antenna | | |
| Frequency Band | L | | |
| Impedance | 50 | Ohms | |
| Minimum Frequency | 1.089 / 1,089 | GHz / MHz | |
| Maximum Frequency | 1.091 / 1,091 | GHz / MHz | |
| Frequency Bandwidth | 0.002 / 2 | GHz / MHz | |
| Maximum VSWR | 1.5:1 | Ratio | |
| Maximum Gain | 5.5 | dBi | |
| Polarization | Vertical | | |
| Maximum RF Input Power | 10 | Watts | |
| Horizontal (AZ) Beamwidth | 360 | Degrees | |
| Vertical (EL) Beamwidth | 28 | Degrees | |
| Ground Plane Required | No | | |
| Radome Material | PVC | | |
| Color | White | | |
| Maximum Wind Velocity | 124 / 200 | mph / kph | |
| RF Connector Type | Type-N(f) | | |
| Product Height | 27.30 / 693.42 | inches / mm | ±.13" |
| Product Diameter | 2.02 / 51.18 | inches / mm | ±.012" |
| Product Weight | 2.0 / 0.9 | lbs / kg | |



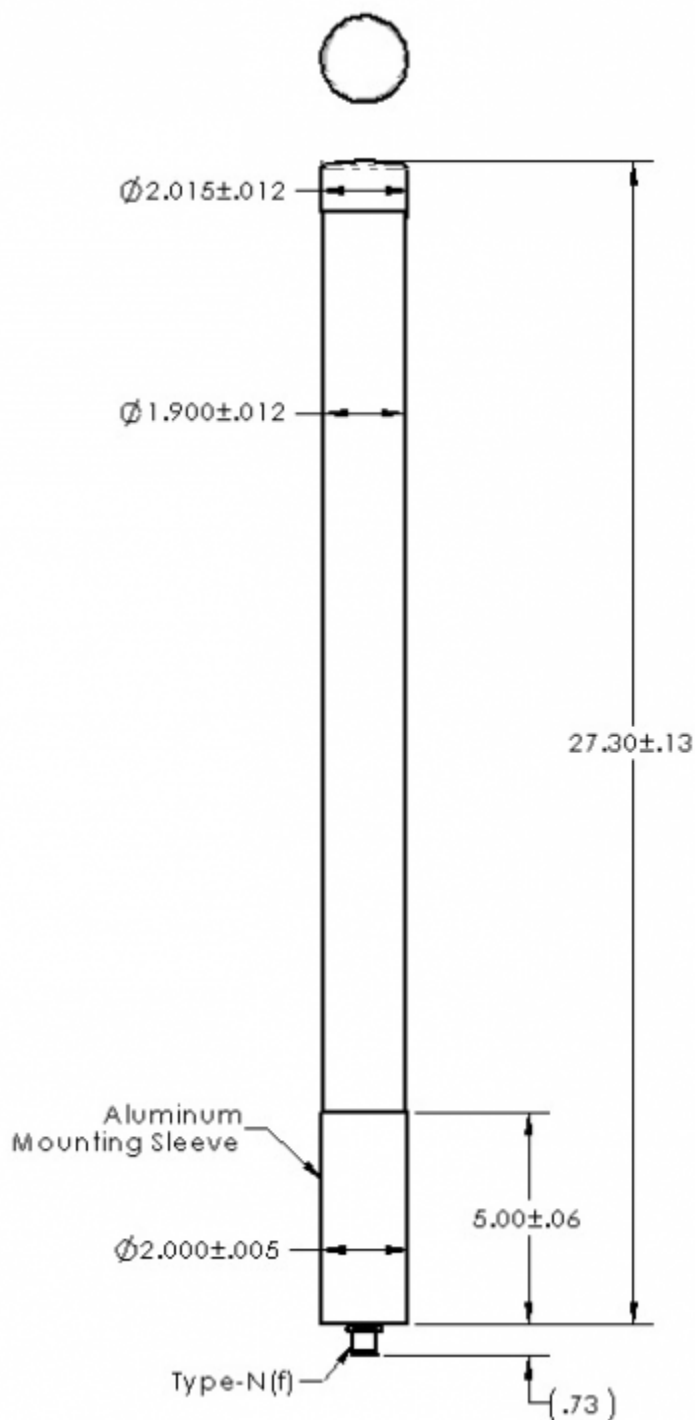
Azimuth Pattern

Referenced to +10.0 dBi



Elevation Pattern

Referenced to +10.0 dBi



Engineering Drawing

Dimensions are in inches