

## Overview

Southwest Antennas' Ultra-Flex Omni Antenna is a rugged, small form factor dipole antenna that features an innovative environmentally-sealed spring base, giving the antenna flexibility to deflect/bend with impacts and return to its original vertical position. The integrated spring design minimizes stress placed on the antenna and radio connection, and can help prevent damage to both in the event of an impact.

The spring is fully sealed to prevent rain, dust, and other debris from impacting antenna performance, which is also fully submersible once securely mated to a radio. A G10 fiberglass radome holds up to abuse in the field, and a low-glare black finish helps the antenna blend into surroundings and not draw attention.

Part # 1001-216 features 1.0 - 1.5 GHz frequency coverage with 2.15 dBi of gain, a rugged black G10 fiberglass radome, and a black chrome SMA(m) Non-Rotating RF connector. The overall product height measures 8.79 inches.

## Features

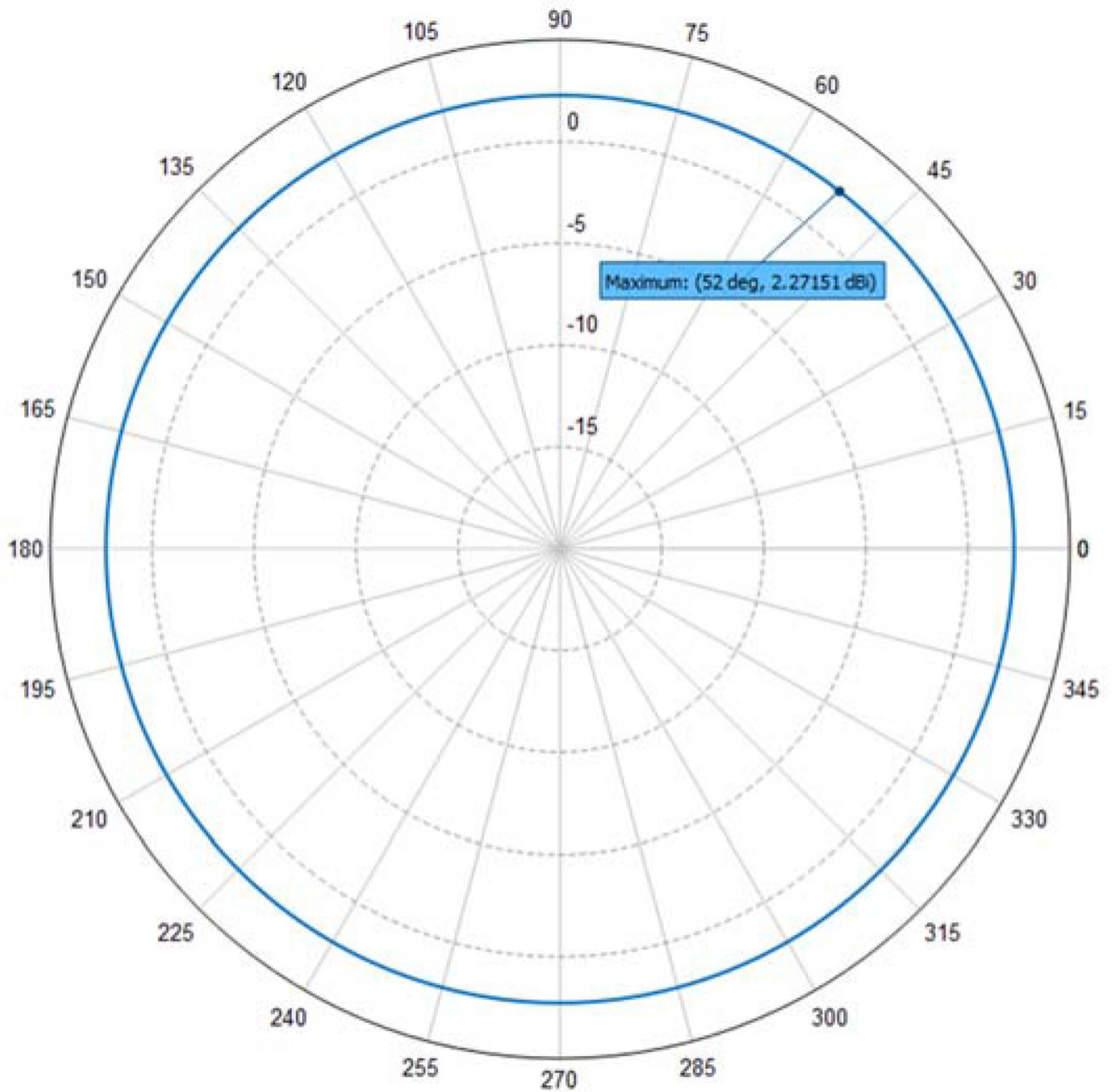
- Broad Band Coverage
- Half Wave Dipole
- 1.0 - 1.5 GHz
- 50W Power Handling
- 2.15 dBi Omni Radiation Pattern
- Black, Low-Glare Radome
- Ultra-Flexible Spring Base
- Sealed Spring / Waterproof Design
- Non-Rotating SMA(m) RF Connector, Black Chrome Finish



## Product Specifications

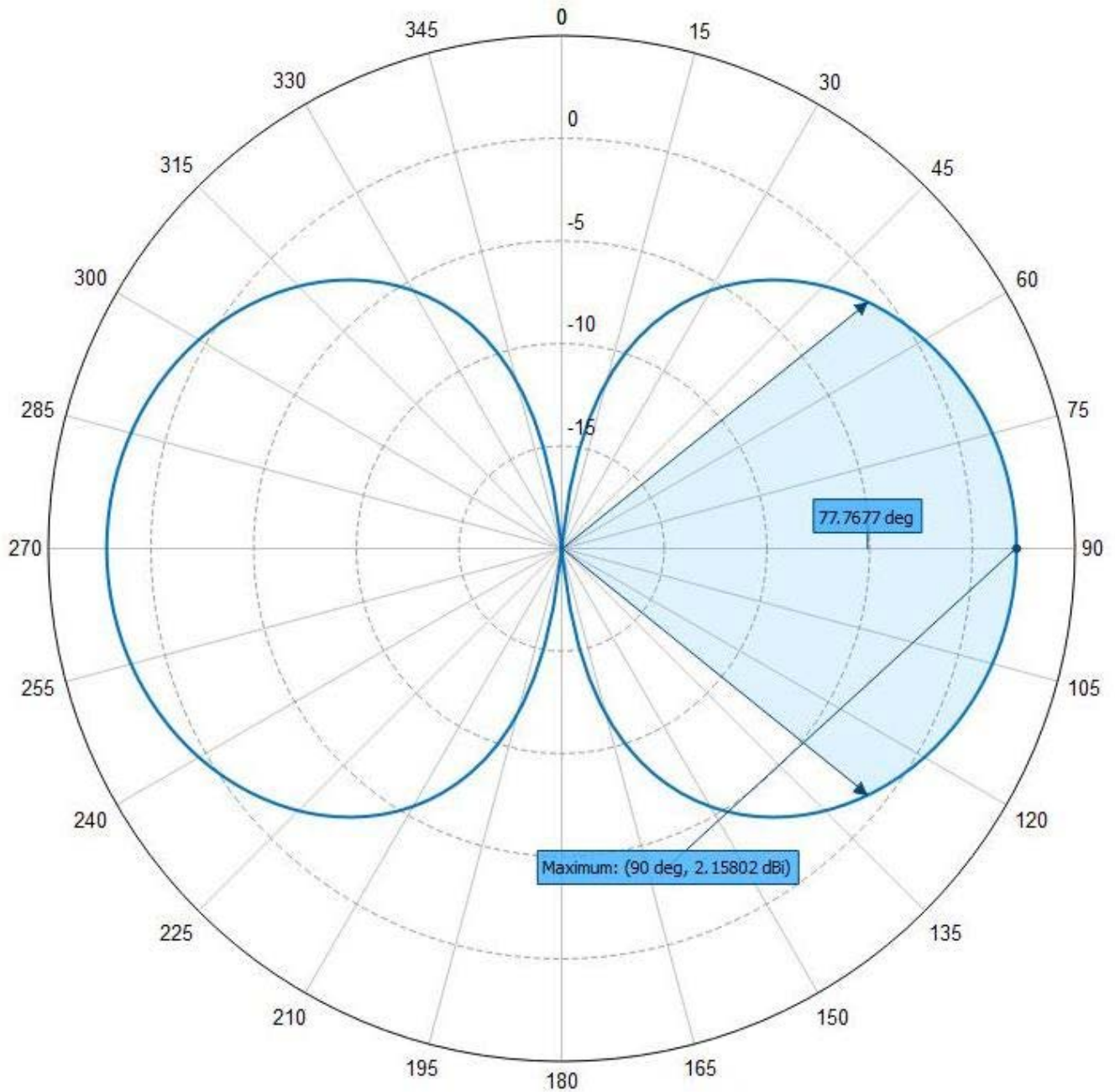
| Parameter               | Value               | Units       | Tolerance |
|-------------------------|---------------------|-------------|-----------|
| Antenna Pattern         | Omni Antenna        |             |           |
| Frequency Band          | L                   |             |           |
| Impedance               | 50                  |             |           |
| Minimum Frequency       | 1.0 / 1,000         | GHz / MHz   |           |
| Maximum Frequency       | 1.5 / 1,500         | GHz / MHz   |           |
| Frequency Bandwidth     | 0.5 / 500           | GHz / MHz   |           |
| Maximum VSWR            | 2:1                 | Ratio       |           |
| Maximum Gain            | 2.15                | dBi         |           |
| Polarization            | Vertical            |             |           |
| Color                   | Black               |             |           |
| Horizontal AZ Beamwidth | 360                 | Degrees     |           |
| Vertical EL Beamwidth   | 77                  | Degrees     |           |
| Spring Or Gooseneck     | Spring              |             |           |
| Spring                  | Yes                 |             |           |
| Spring Length           | 1.0 / 25.4          | inches / mm |           |
| Spring Diameter         | 0.5 / 12.7          | inches / mm |           |
| Spring Bend             | ±90                 | Degrees     | Maximum   |
| Gooseneck               | No                  |             |           |
| Ground Plane Required   | No                  |             |           |
| Maximum Wind Velocity   | 161                 | kph         |           |
| RF Connector Type       | SMA(m) Non-Rotating |             |           |
| RF Connector Finish     | Black Chrome        |             |           |

| Parameter                   | Value          | Units       | Tolerance       |
|-----------------------------|----------------|-------------|-----------------|
| Operating Temperature Range | -40 to +85     | C           |                 |
| Product Height              | 8.79 / 223.27  | inches / mm | ±.13"           |
| Product Diameter            | 0.562 / 14.275 | inches / mm | +.020" / -.000" |
| Product Weight              | 2.40 / 68.04   | oz / g      |                 |



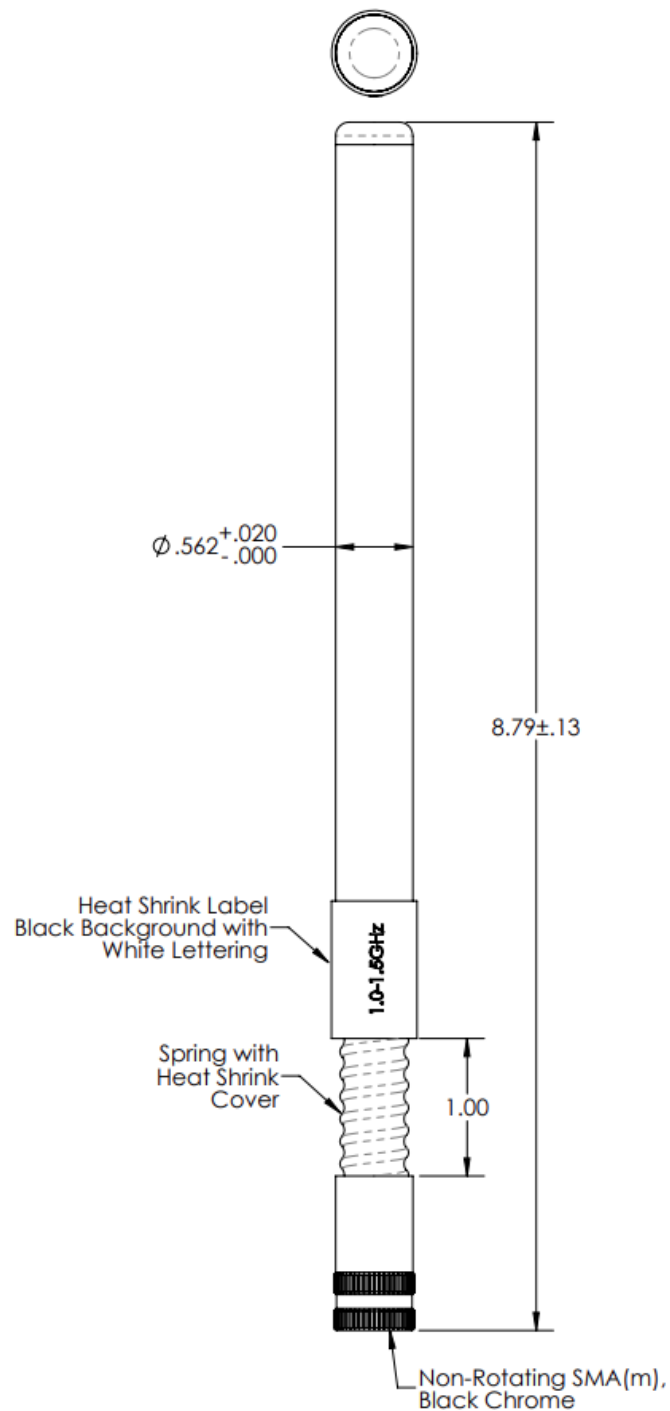
### Azimuth Pattern

Referenced to +5 dBi



### Elevation Pattern

Referenced to +5 dBi



## Engineering Drawing

All dimensions are in inches