

## Overview

Southwest Antennas Part # 1001-342 is a wideband omni-directional antenna with an operational frequency range of 1.35 to 2.5 GHz and 2.4 dBi of peak gain.

This antenna offers excellent continuous electrical performance across its entire operational band, making this antenna ideal for multi-band applications.

Part # 1001-342 features a black chrome Type-N(m) RF connector and a rugged flat black fiberglass radome which gives the antenna a low visibility finish for tactical applications.

## Features

- Wideband Omni-Directional Antenna
- 1.35 - 2.5 GHz Continuous Coverage
- 100W Power Handling
- 2.4 dBi Omni Radiation Pattern
- Rugged G10 Fiberglass Radome
- Black Chrome Type-N(m) RF Connector

## Applications:

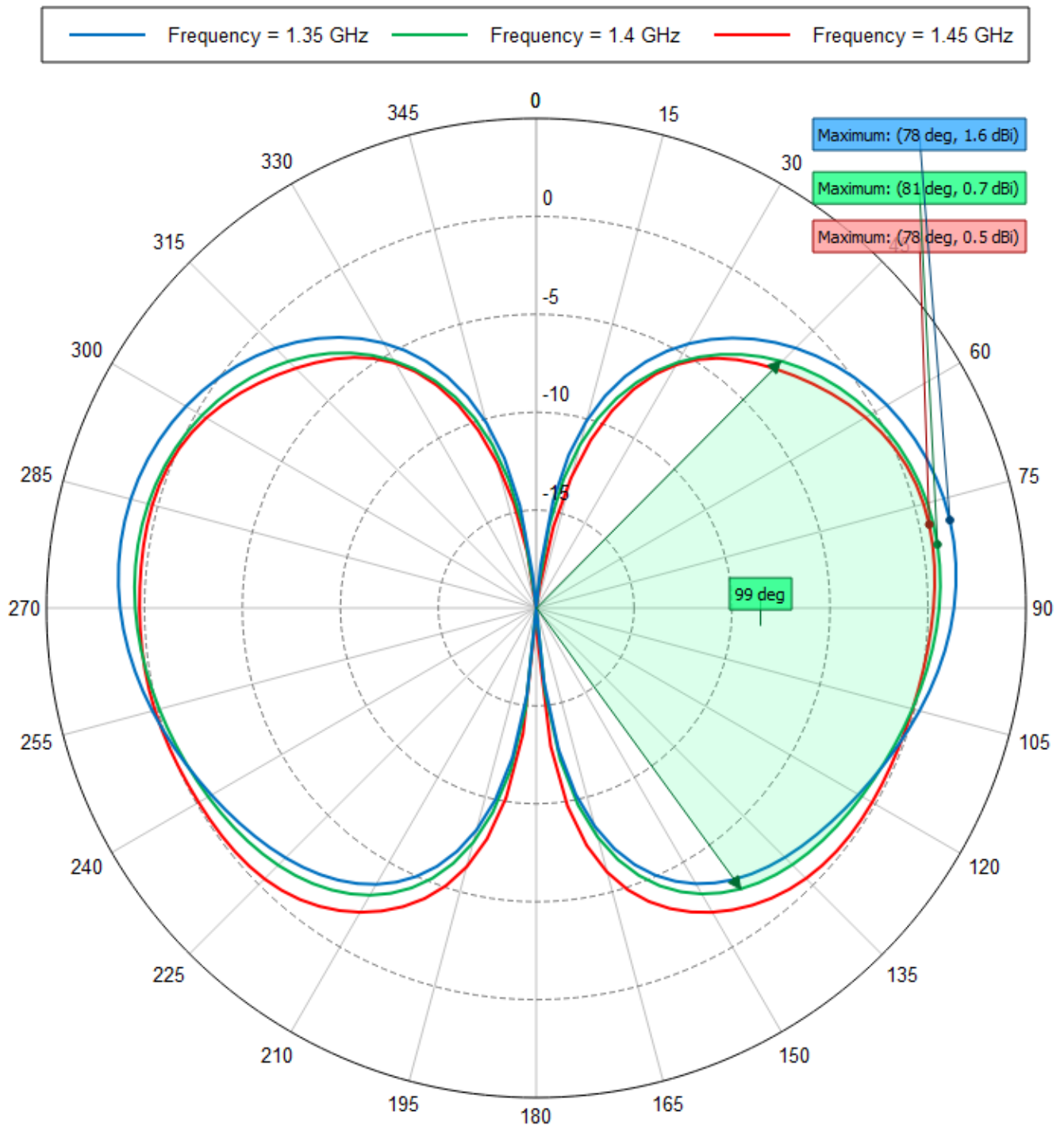
- Tactical radio systems
- Hand-held or bodyworn radios
- Support for radios with multi-band or wideband operational capabilities
- C4ISR / EW / SIGINT applications
- DOD / military band applications
- Law enforcement band applications
- Homeland Security band applications
- Unmanned systems and ground control stations
- High band cellular & 2.4 GHz ISM band coverage



## Product Specifications

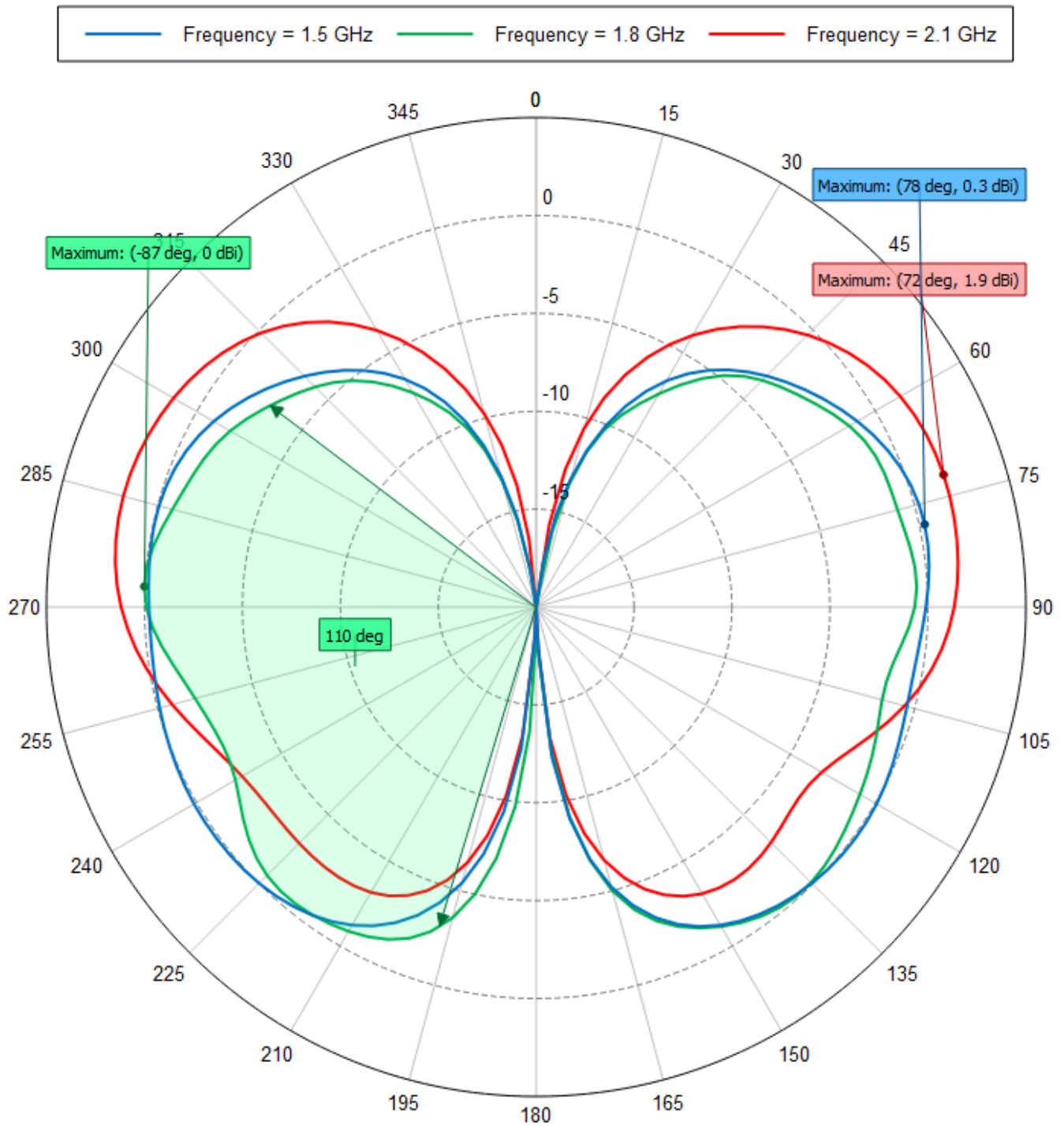
| Parameter                       | Value                  | Units       | Tolerance                |
|---------------------------------|------------------------|-------------|--------------------------|
| Antenna Pattern                 | Omni Antenna           |             |                          |
| Frequency Band                  | L & S                  |             |                          |
| Impedance                       | 50                     |             |                          |
| Minimum Frequency               | 1.35 / 1,350           | GHz / MHz   |                          |
| Maximum Frequency               | 2.5 / 2,500            | GHz / MHz   |                          |
| Frequency Bandwidth             | 1.15 / 1,150           | GHz / MHz   |                          |
| Maximum VSWR                    | 2.0:1                  | Ratio       |                          |
| Maximum Gain                    | 2.40                   | dBi         |                          |
| Polarization                    | Vertical               |             |                          |
| Color                           | Black                  |             |                          |
| Maximum RF Input Power          | 100                    | Watts       |                          |
| Horizontal AZ Beamwidth         | 360                    | Degrees     |                          |
| Low Band Vertical EL Beamwidth  | 99.3                   | Degrees     | L Band (1.35 - 1.45 GHz) |
| Mid Band Vertical EL Beamwidth  | 110                    | Degrees     | L&S Band (1.5 - 2.1 GHz) |
| High Band Vertical EL Beamwidth | 58                     | Degrees     | S Band (2.2 - 2.5 GHz)   |
| Radome Material                 | G10 Fiberglass         |             |                          |
| Spring                          | No                     |             |                          |
| Ground Plane Required           | No                     |             |                          |
| RF Connector Type               | Type-N(m) Non-Rotating |             |                          |
| RF Connector Finish             | Black Chrome           |             |                          |
| Operating Temperature Range     | -40 to +85             | C           |                          |
| Product Length                  | 6.09 / 154.69          | inches / mm | ±.13"                    |

| Parameter        | Value         | Units       | Tolerance       |
|------------------|---------------|-------------|-----------------|
| Product Diameter | .812 / 20.625 | inches / mm | +.020" / -.000" |
| Product Weight   | 2.83 / 80.23  | oz / g      |                 |



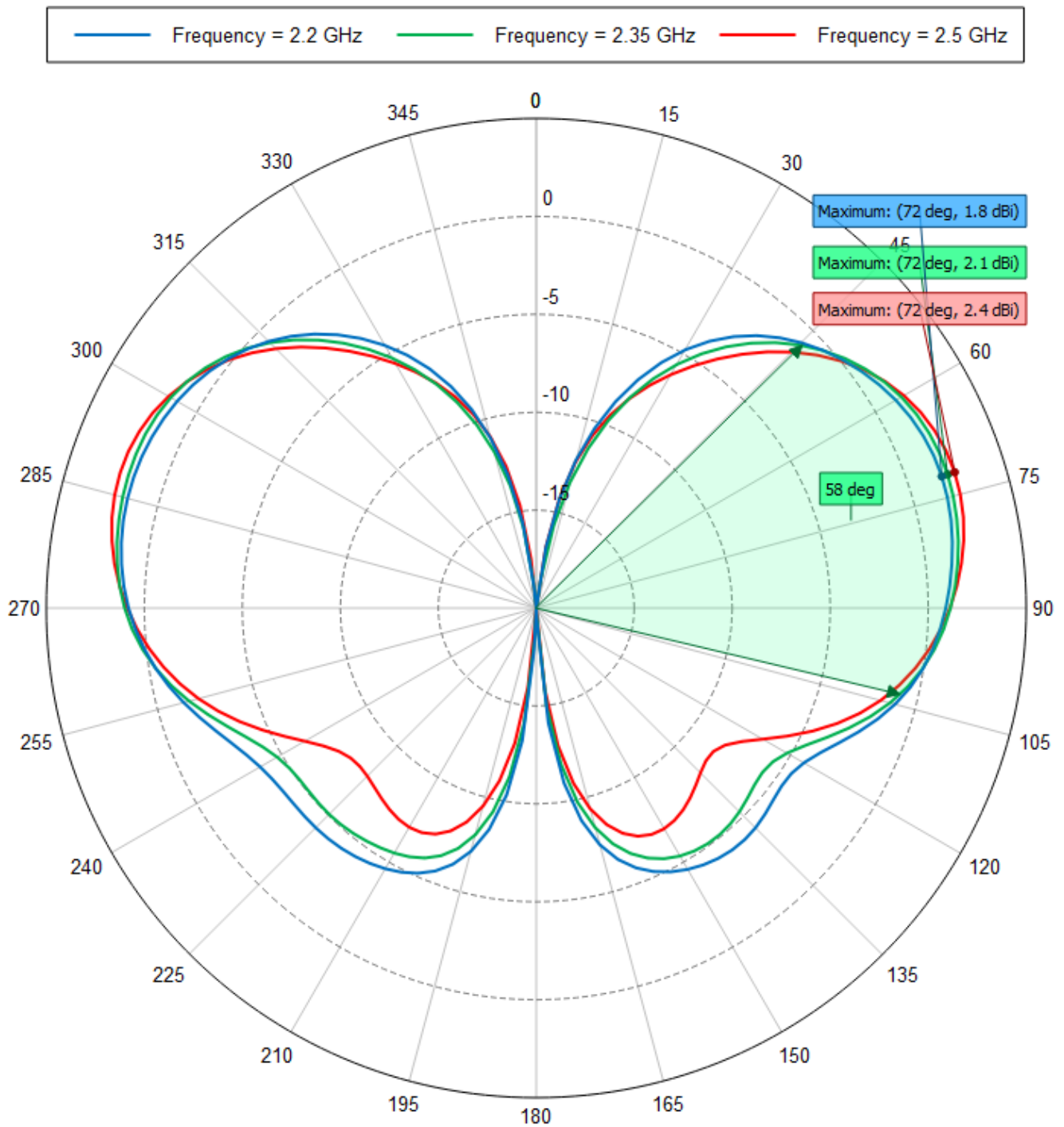
**Elevation Pattern, Low Band (1,350 - 1,450 MHz)**

Referenced to +5 dBi



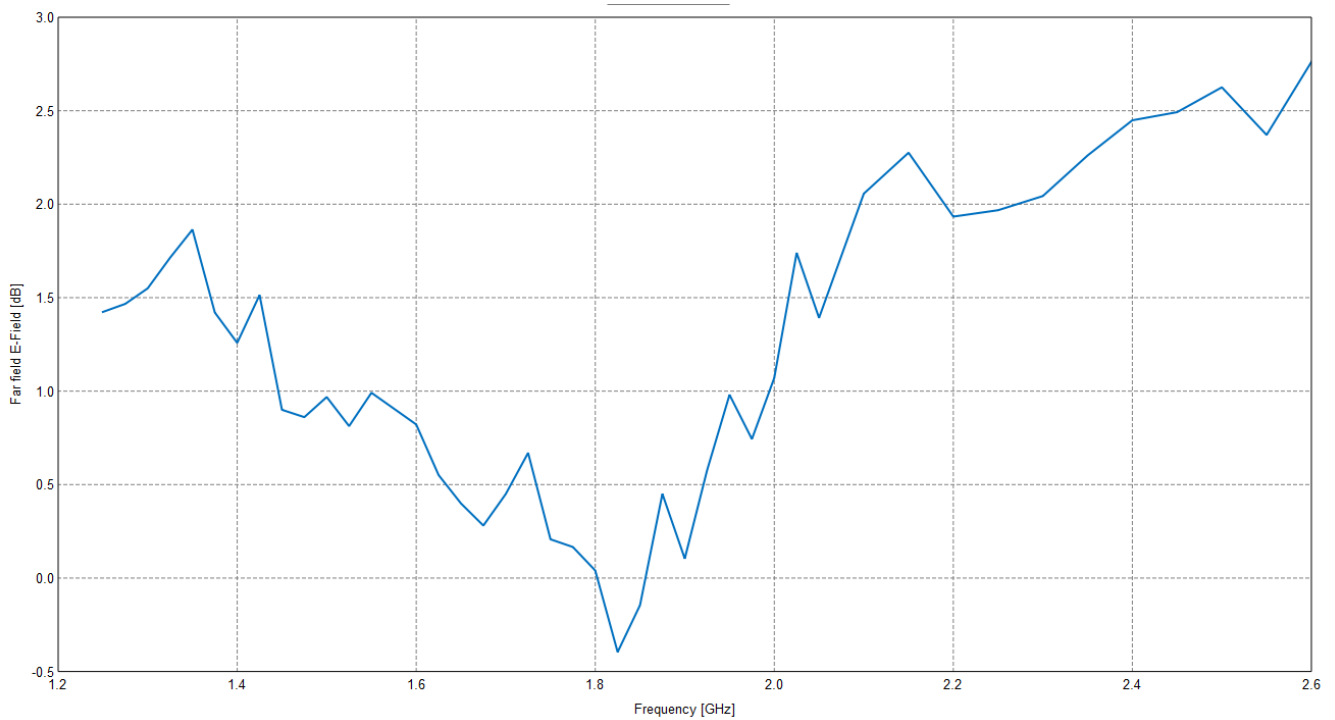
**Elevation Pattern, Mid Band (1,500 - 2,100 MHz)**

Referenced to +5 dBi

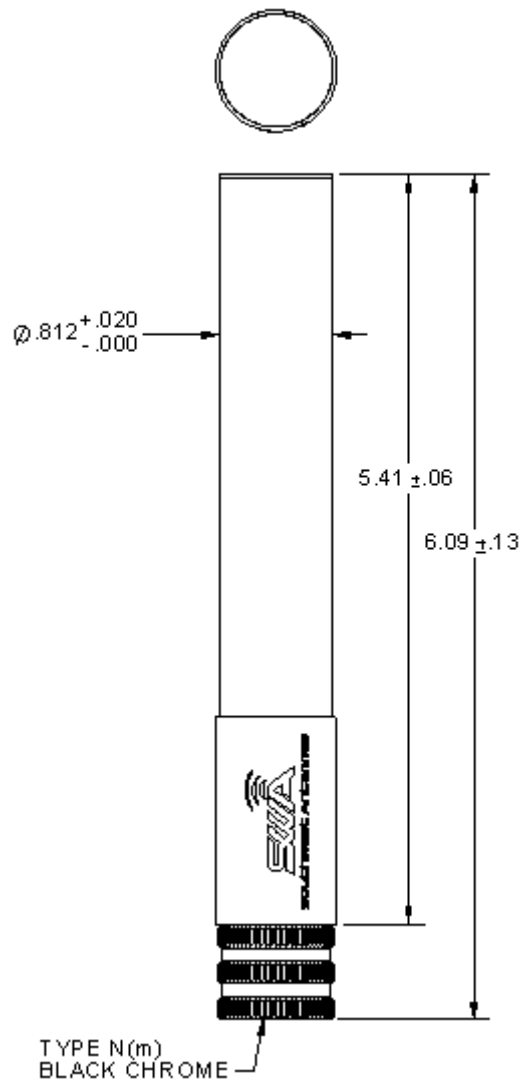


**Elevation Pattern, High Band (2,200 - 2,500 MHz)**

Referenced to +5 dBi



**Azimuth Gain vs. Frequency Plot**



### Engineering Drawing