

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 # 1001-068 features rugged black G10 fiberglass radome and a black chrome SMA(m) Non-Rotating RF connector, with an overall height of six inches.

Features:

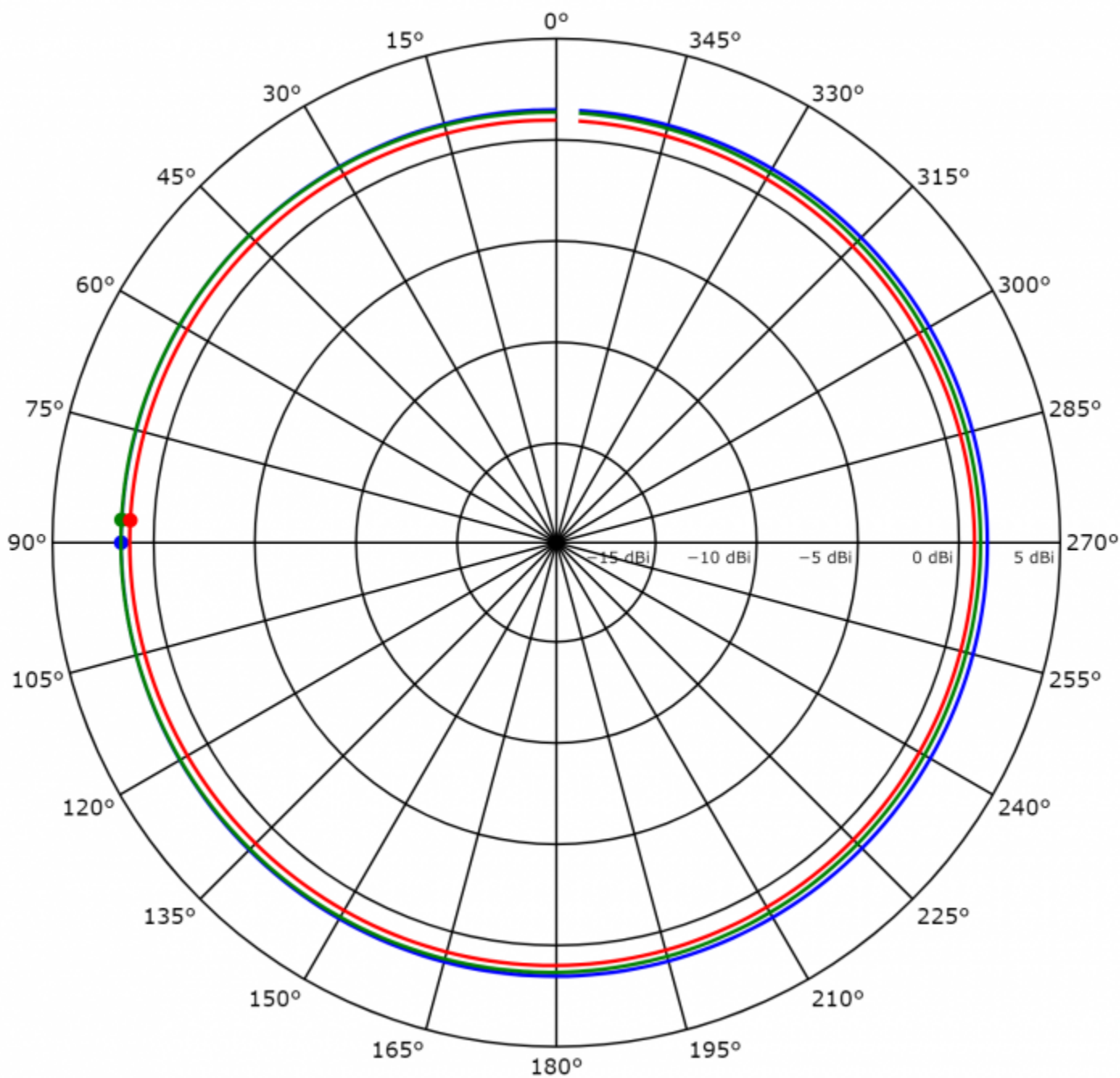
- Broad Band Coverage
- 2.1 - 2.5 GHz
- 50W Power Handling
- 2.1 dBi Omni Radiation Pattern
- Rugged Construction
- Low Glare Black Fiberglass Radome
- SMA(m) Non-Rotating Black Chrome RF Connector
- Ultra-Flexible Spring Base
- Sealed Spring / Waterproof Design
- Center Frequency Heat Shrink Label



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	2.1	dBi	
Polarization	Vertical		
Horizontal (AZ) Beamwidth	360	Degrees	
Vertical (EL) Beamwidth	70 - 83	Degrees	
Ground Plane Required	No		
Radome Material	Fiberglass G10		
Color	Black		
Spring or Gooseneck	Spring		
Spring Length	1.00 / 25.40	inches / mm	
Spring Diameter	0.50 / 12.70	inches / mm	
Spring Bend	±90	Degrees	Maximum
Maximum Wind Velocity	100 / 161	mph / kph	
RF Connector Type	SMA(m) Non-Rotating		
RF Connector Features	Black Chrome		

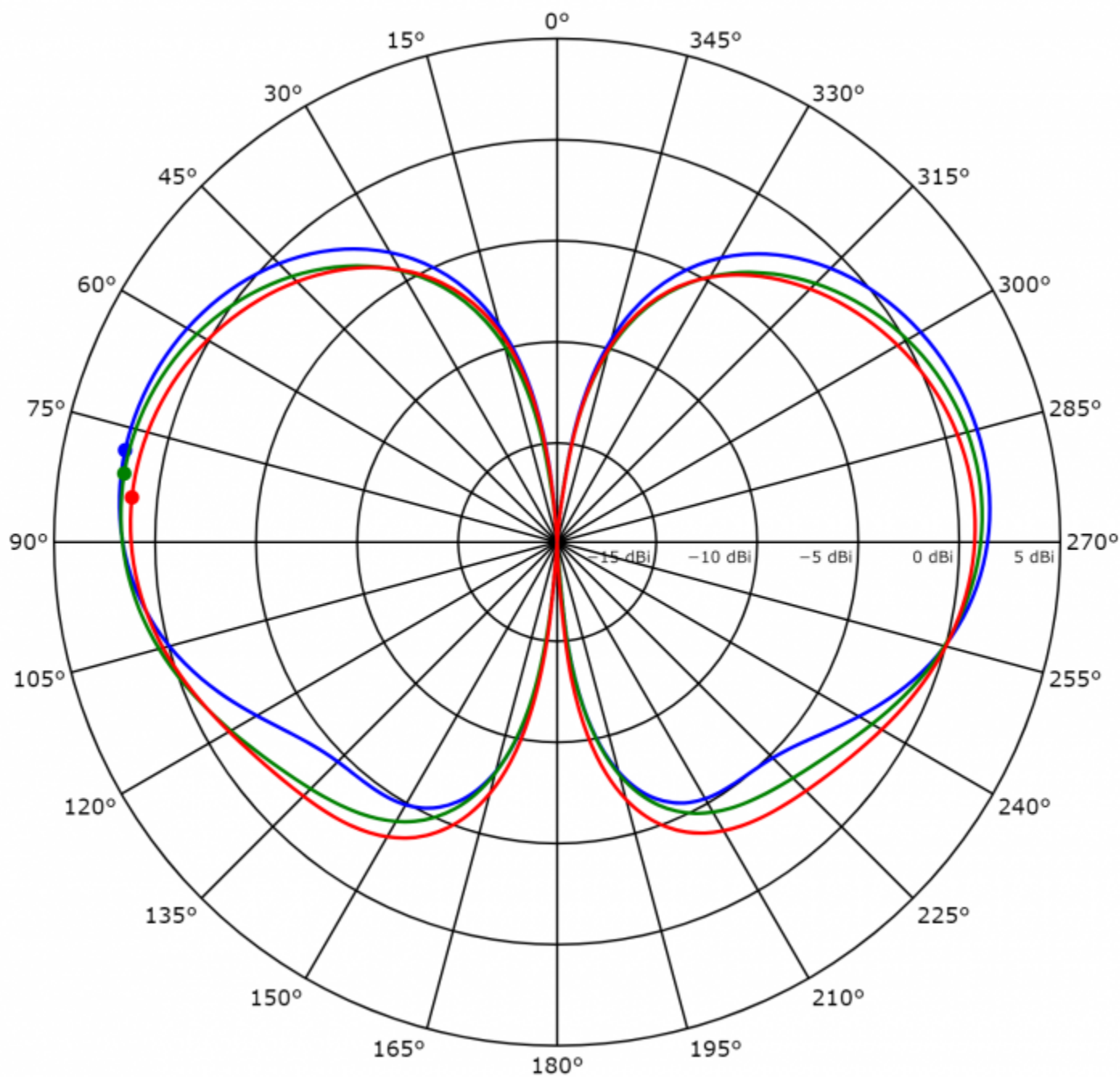
Parameter	Value	Units	Tolerance
Operating Temperature Range	-40 to +85	C	
Product Height	6.00 / 152.40	inches / mm	±0.13"
Product Diameter	0.56 / 14.27	inches / mm	+0.02" / -.000"
Product Weight	2.0 / 56.7	oz / grams	



— 2100 MHz (1.6 dBi max. @ 90 deg) — 2300 MHz (1.6 dBi max. @ 86 deg) — 2500 MHz (1.2 dBi max. @ 86 deg)

Azimuth Pattern

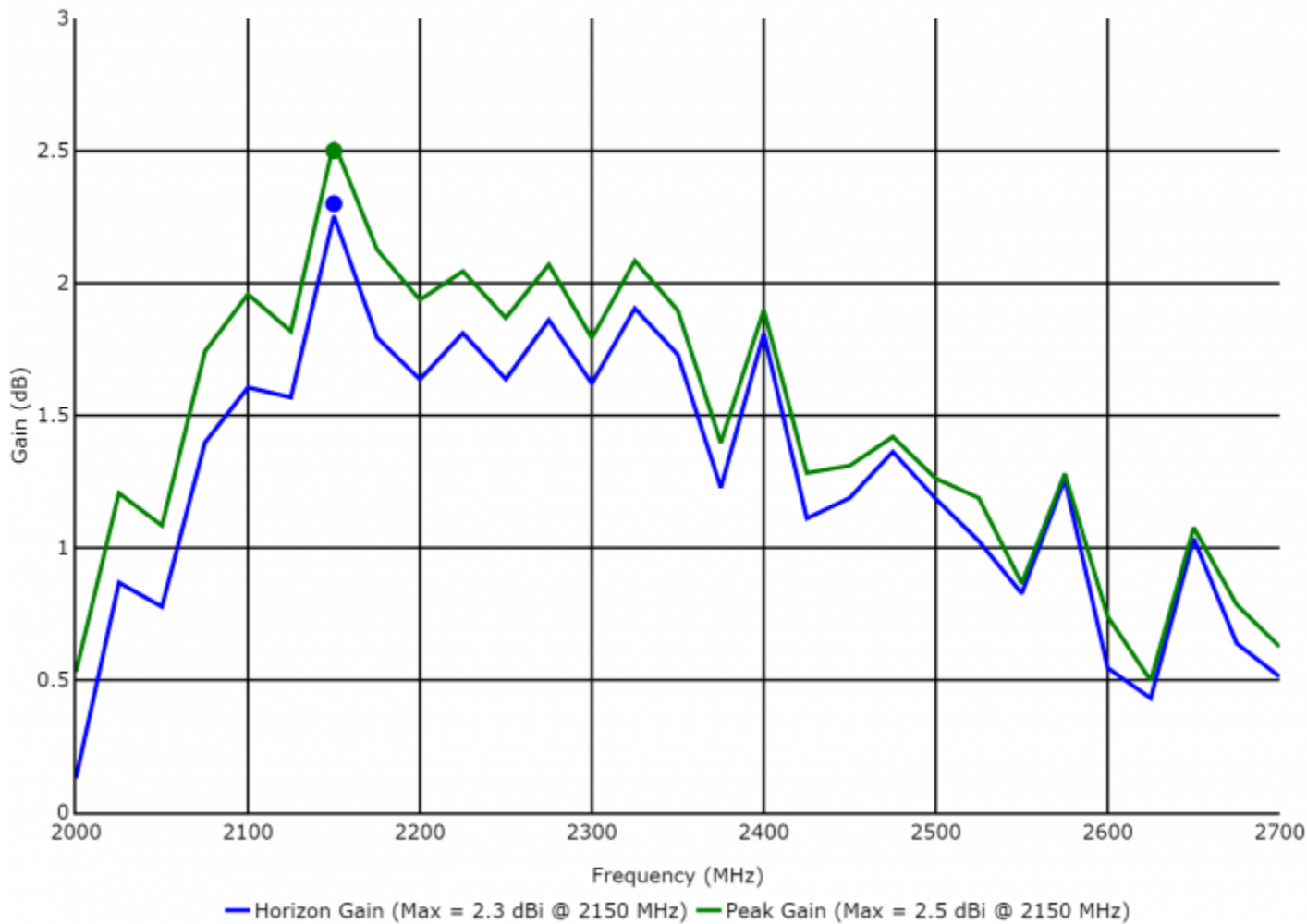
Referenced to +5 dBi



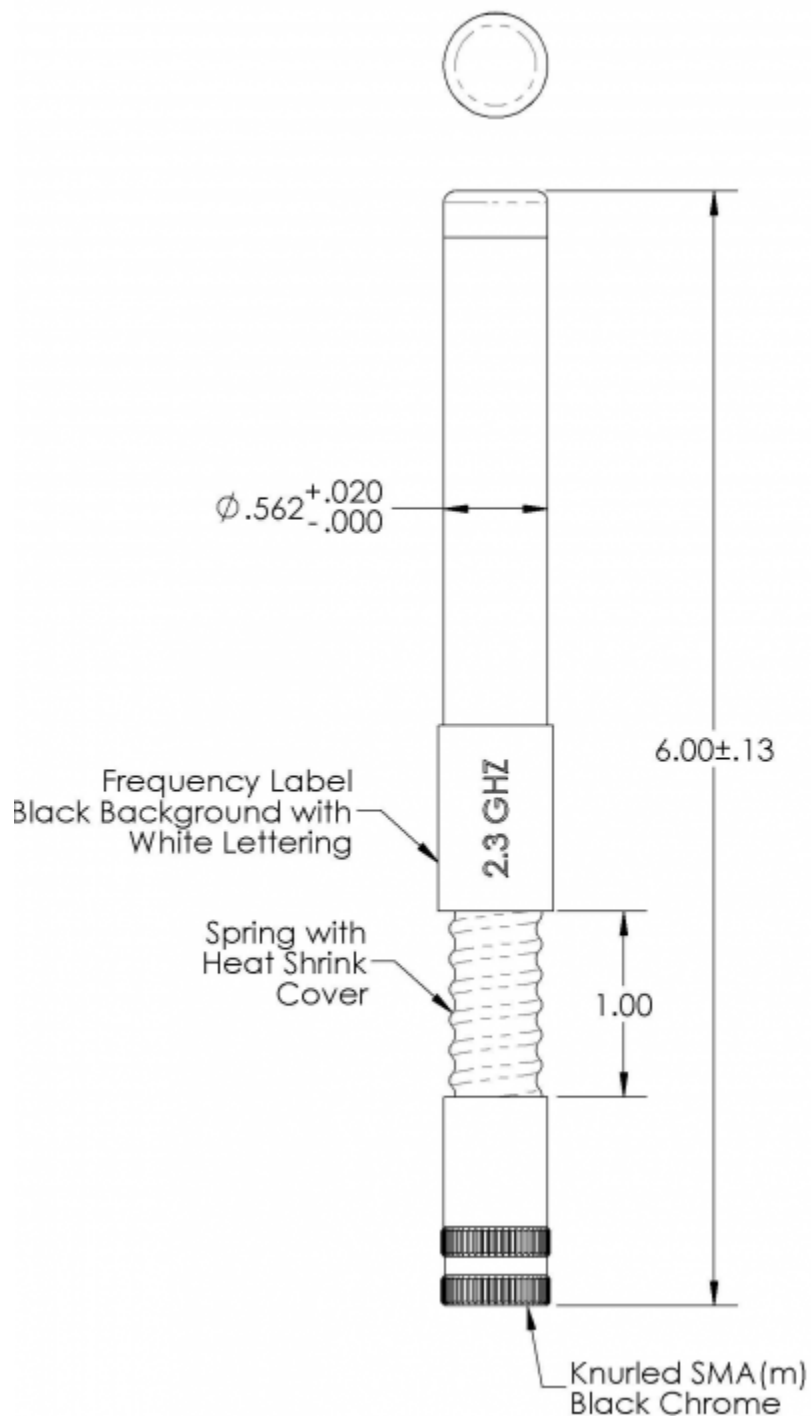
— 2100 MHz (2.0 dBi max. @ 78 deg) — 2300 MHz (1.8 dBi max. @ 80 deg) — 2500 MHz (1.3 dBi max. @ 84 deg)

Elevation Pattern

Referenced to +5 dBi



Gain vs. Frequency Plot



Engineering Drawing

All dimensions are in inches