

Overview

Southwest Antennas Part # 1066-094 is an L-Band omni-directional concealment antenna designed for operation from 1.35 - 1.40 GHz. This product is designed to be integrated inside of other systems such as unmanned vehicles, or concealments for covert surveillance applications.

The antenna can be tuned to optimize performance inside of specific concealments. This antenna features 53.94 inches of LMR-100 RF cable and a rotating SMA(m) RF connector.

Features

- 1.35 - 1.40 GHz Operational Frequency Range
- 1.9 dBi Max Gain
- Half Wave Dipole Design
- Small Form Factor
- High Performance
- Vertical Polarization
- Extremely Light Weight
- Easily Concealed
- Rotating SMA(m) RF Connector
- 53.94" LMR-100 RF Cable
- Robust Heat Shrink Strain Relief Epoxied to RF Cable
- Ideal for Concealment & Surveillance Applications

Markets and Applications Include:

- Military / Defense
- Surveillance
- Security
- Unmanned Systems

Note 1: Antenna horizontal and vertical beamwidth measured in free space. Antenna pattern may differ when antenna is placed in concealment. Long axis of antenna corresponds to vertical polarization.

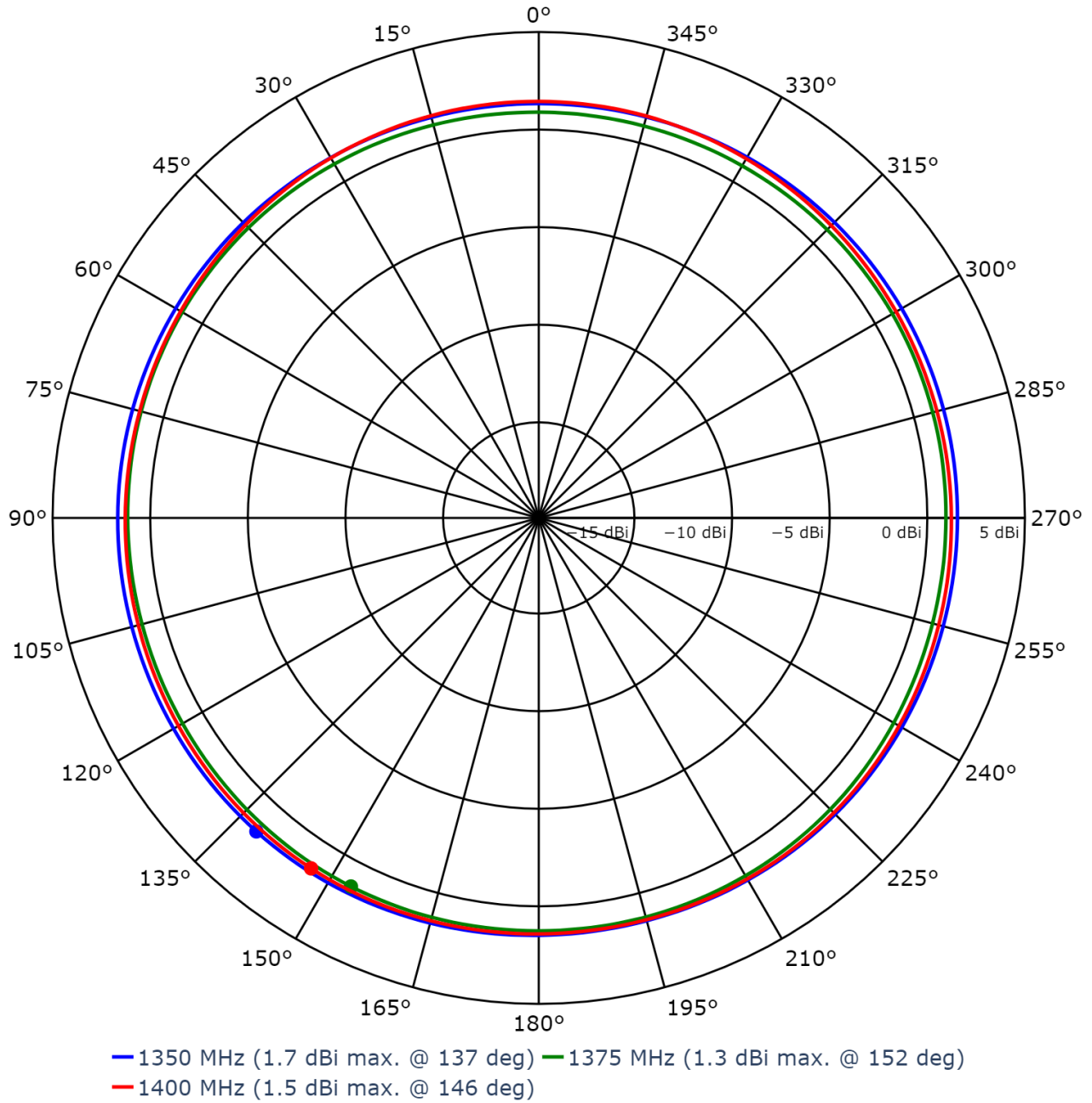
Note 2: Antenna performance is highly dependent on proper use of adhesive backing to stand antenna off of concealment inner wall / substrate material far enough to achieve optimum RF performance.



Product Specifications

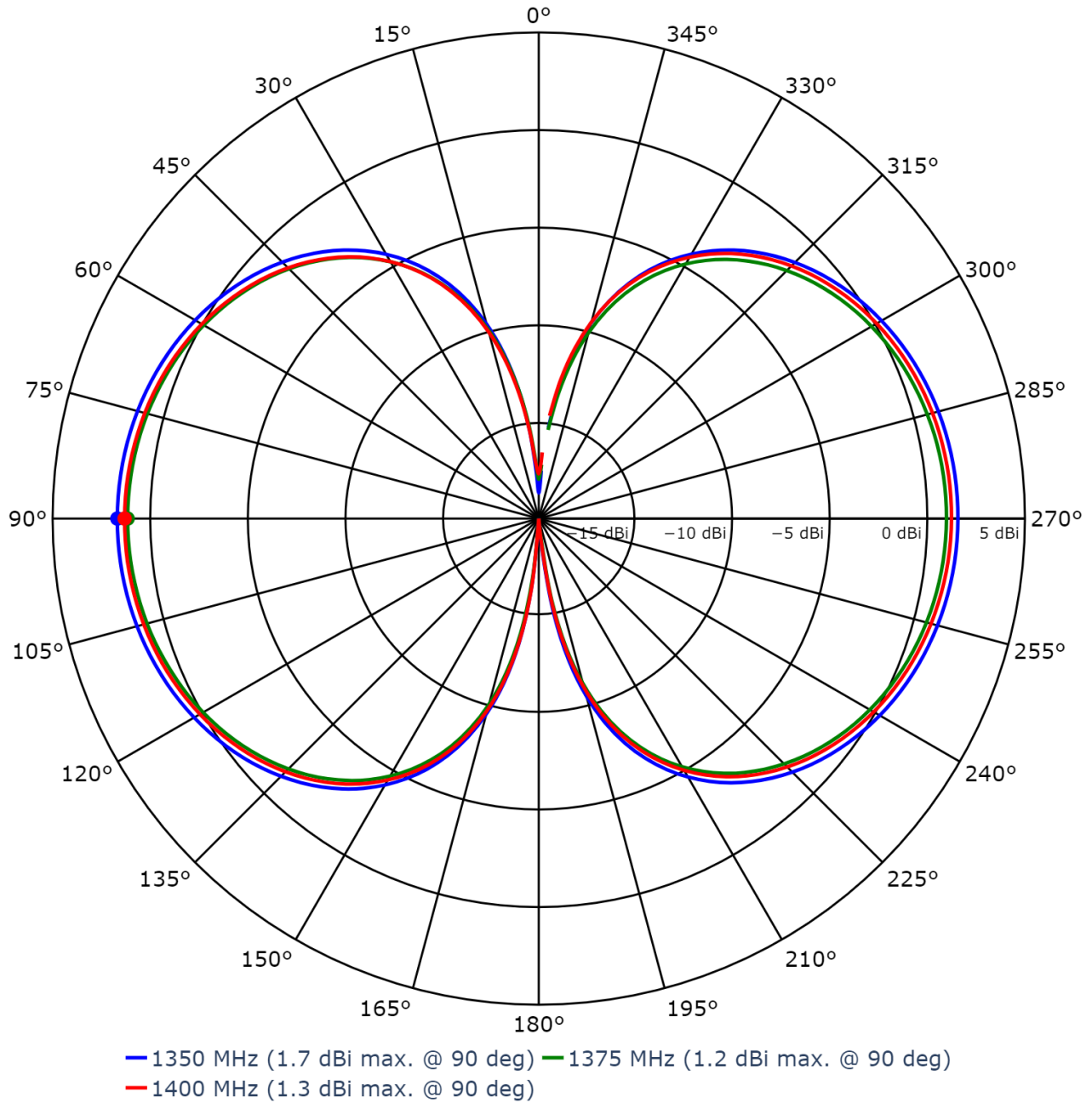
Parameter	Value	Units	Tolerance
Antenna Pattern	Omni Antenna		
Frequency Band	L		
Impedance	50		
Minimum Frequency	1.35 / 1,350	GHz / MHz	
Maximum Frequency	1.4 / 1,400	GHz / MHz	
Frequency Bandwidth	0.05 / 50	GHz / MHz	
Maximum VSWR	2:1	Ratio	
Maximum Gain	1.90	dBi	
Polarization	Vertical		
Maximum RF Input Power	10	Watts	
Horizontal AZ Beamwidth	360	Degrees	
Vertical EL Beamwidth	90 - 91	Degrees	
Spring	No		
Gooseneck	No		
Ground Plane Required	No		
Mount Style	Optional Double Stick Tape		
RF Connector Type	SMA(m)		
RF Connector Finish	Gold-Plated Brass		
RF Cable Type	LMR-100		1.5 dB max insertion loss
RF Cable Length	53.94 / 1,370.08	inches / mm	
Operating Temperature Range	-40 to +185	F	(-40 to +85 C)
Storage Temperature Range	-58 to +185	F	(-50 to +85 C)

Parameter	Value	Units	Tolerance
Product Length	3.38 / 85.85	inches / mm	
Product Width	1.25 / 31.75	inches / mm	
Product Height	.15 / 3.81	inches / mm	
Product Weight	0.80 / 22.68	oz / g	



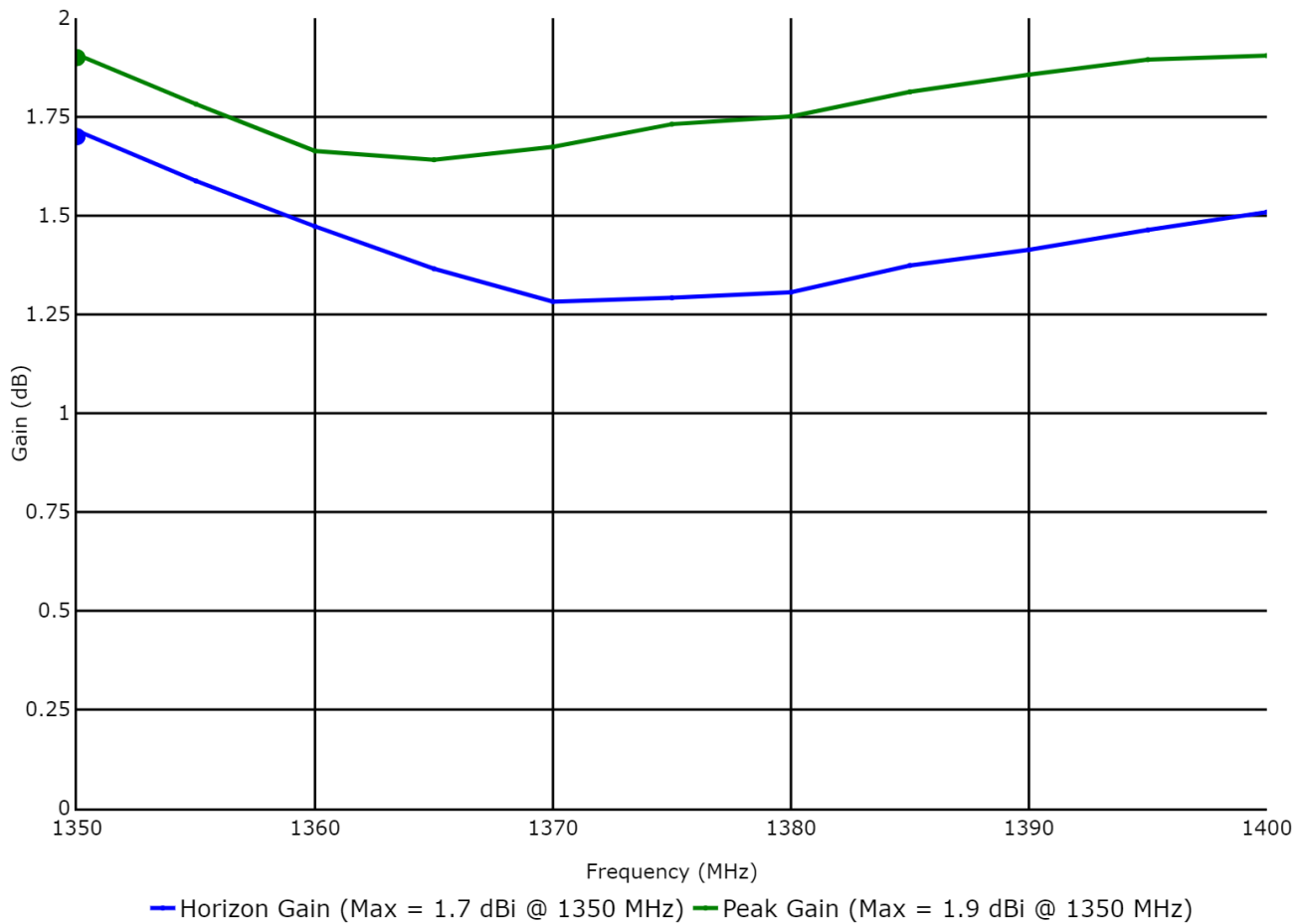
Azimuth Pattern

Free Space Measurement

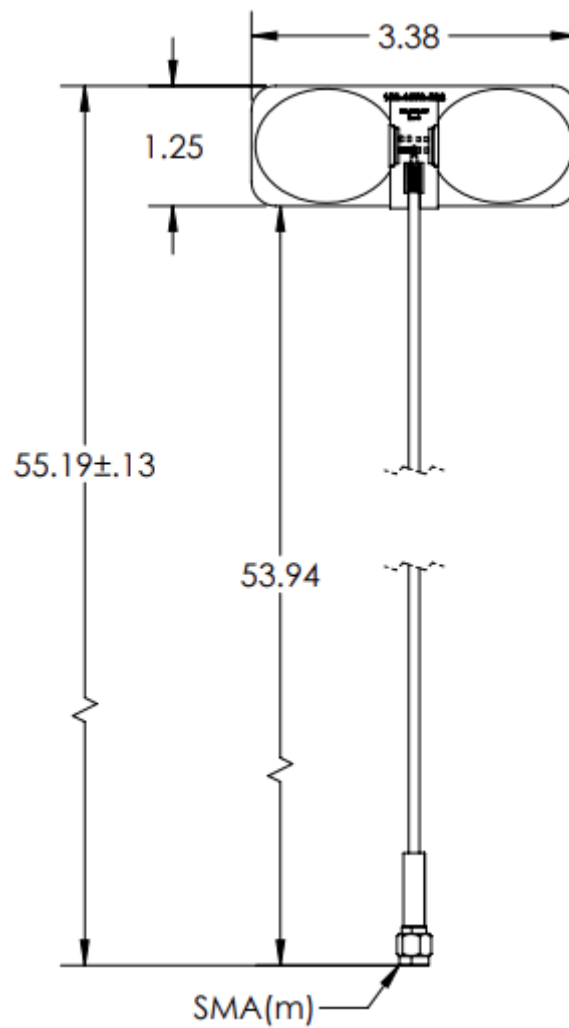


Elevation Pattern

Free Space Measurement



Gain vs. Frequency Plot



Engineering Drawing

All dimensions are in inches