

Overview

Southwest Antennas Part# 1000-050 is a rugged monopole antenna with an operational frequency range of 225 - 450 MHz. Internal matching components within the antenna allow it to deliver a wide operational bandwidth while matching the antenna to 50 Ohm systems. An integrated highpass filter provides >44 dB of isolation in the 30 - 90 MHz band.

Features

- 225 - 450 MHz
- Monopole Design with built-in 50 Ohm matching network
- 0 dBi Gain
- Integrated highpass filter
 - >44 dB of isolation in the 30 - 90 MHz band
- Lightweight design
- Bandwidth achieved by using internal matching components (within antenna)
- Extremely rugged design
- Low visibility / reflectivity
- Highly flexible
- Waterproof & fully potted design
- Black chrome non-rotating TNC(m) RF connector
- 20 Meter waterproof design (when fully mated)

Note 1: The specifications and performance of this antenna are dependent on antenna matching network and counterpoise dimensions, and may be affected by other antennas on the radio.

Note 2: 50 Ohm impedance is measured at the antenna connector when mounted to radio counterpoise.

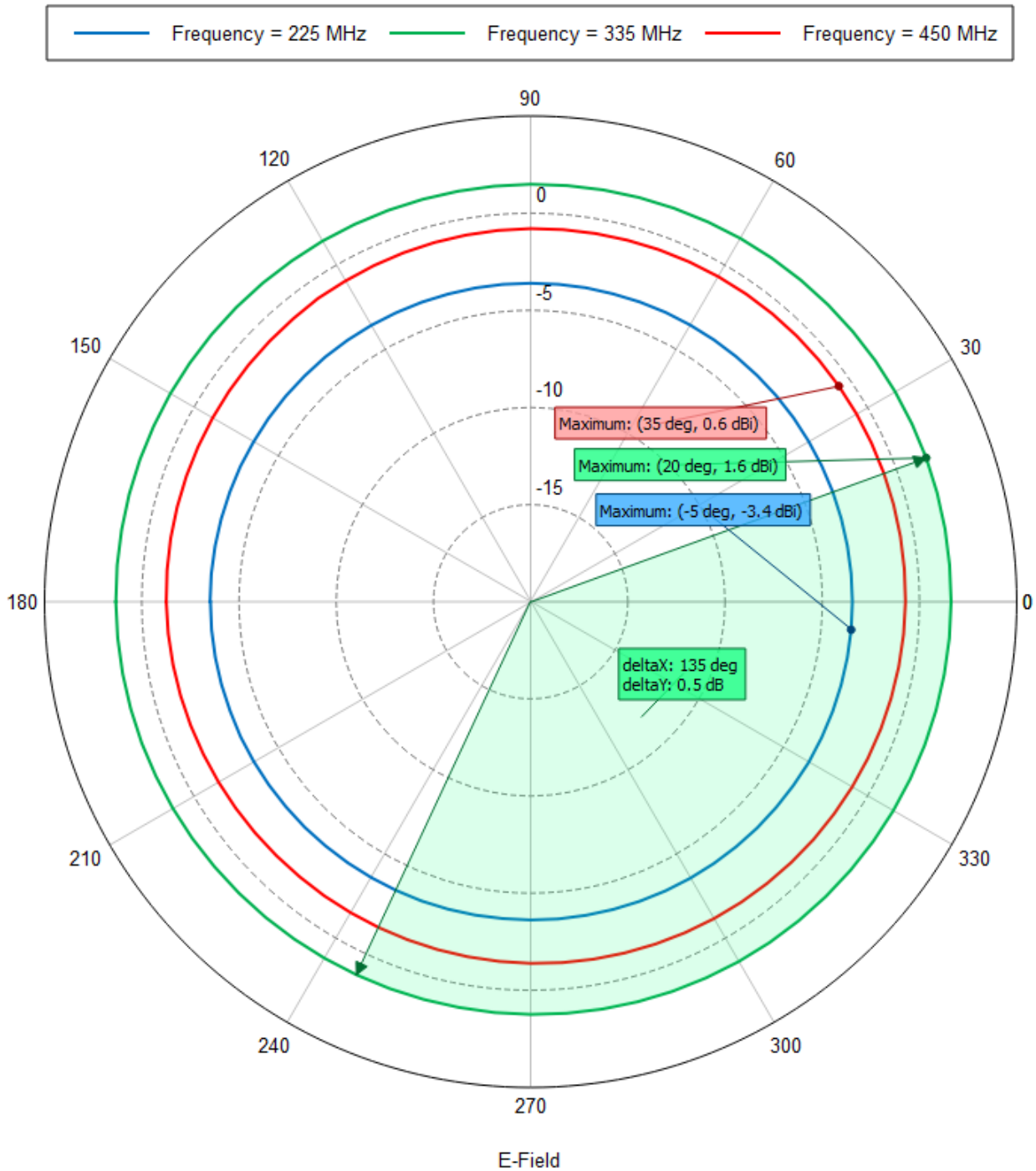


Product Specifications

Parameter	Value	Units	Tolerance
Antenna Pattern	Omni Antenna		
Frequency Band	S Band		
Impedance	50		
Minimum Frequency	0.225 / 225	GHz / MHz	
Maximum Frequency	0.45 / 450	GHz / MHz	
Frequency Bandwidth	0.225 / 225	GHz / MHz	
Maximum VSWR	4.5:1	Ratio	
Maximum Gain	0.00	dBi	When mounted to a counterpoise of 1.5" x 2.6" x 7.75"
Polarization	Vertical		
Color	Black		
Isolation	>44	dB	From 30 - 90 MHz
Maximum RF Input Power	2	Watts	
Horizontal AZ Beamwidth	360	Degrees	
Vertical EL Beamwidth	78	Degrees	
Antenna Labeling	SWA logo label and product info on radome		
Radome Material	Black Polyolefin with Black End Cap		
Ground Plane Required	Yes		
RF Connector Type	TNC(m) Non-Rotating		
RF Connector Finish	Black Chrome		
Product Height	10.62 / 269.75	inches / mm	±0.13"
Product Diameter	.57 / 14.48	inches / mm	±.02 measured at RF connector (.58" ±.02 at widest point of base)

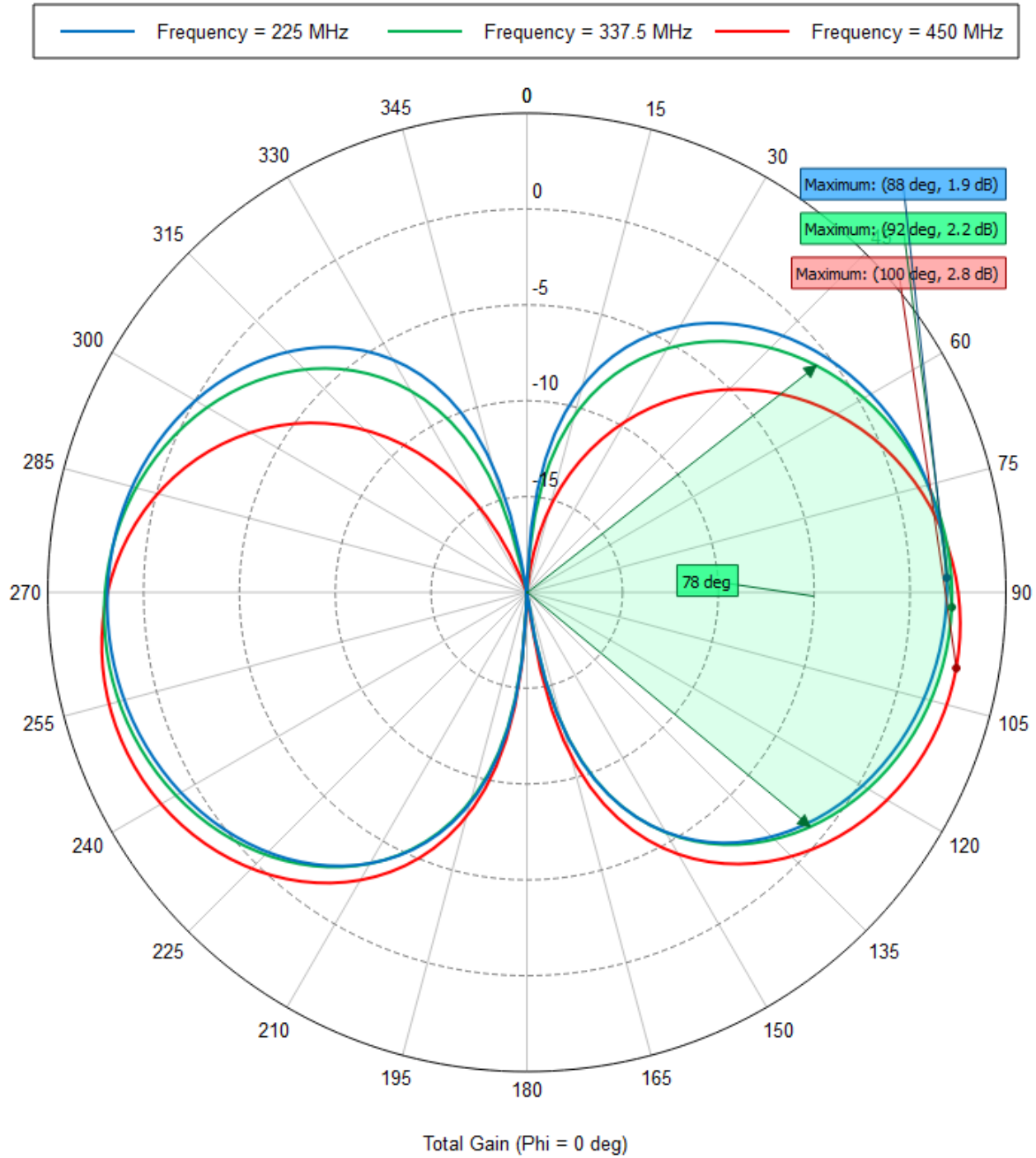


Parameter	Value	Units	Tolerance
Product Weight	1.94 / 55.00	oz / g	



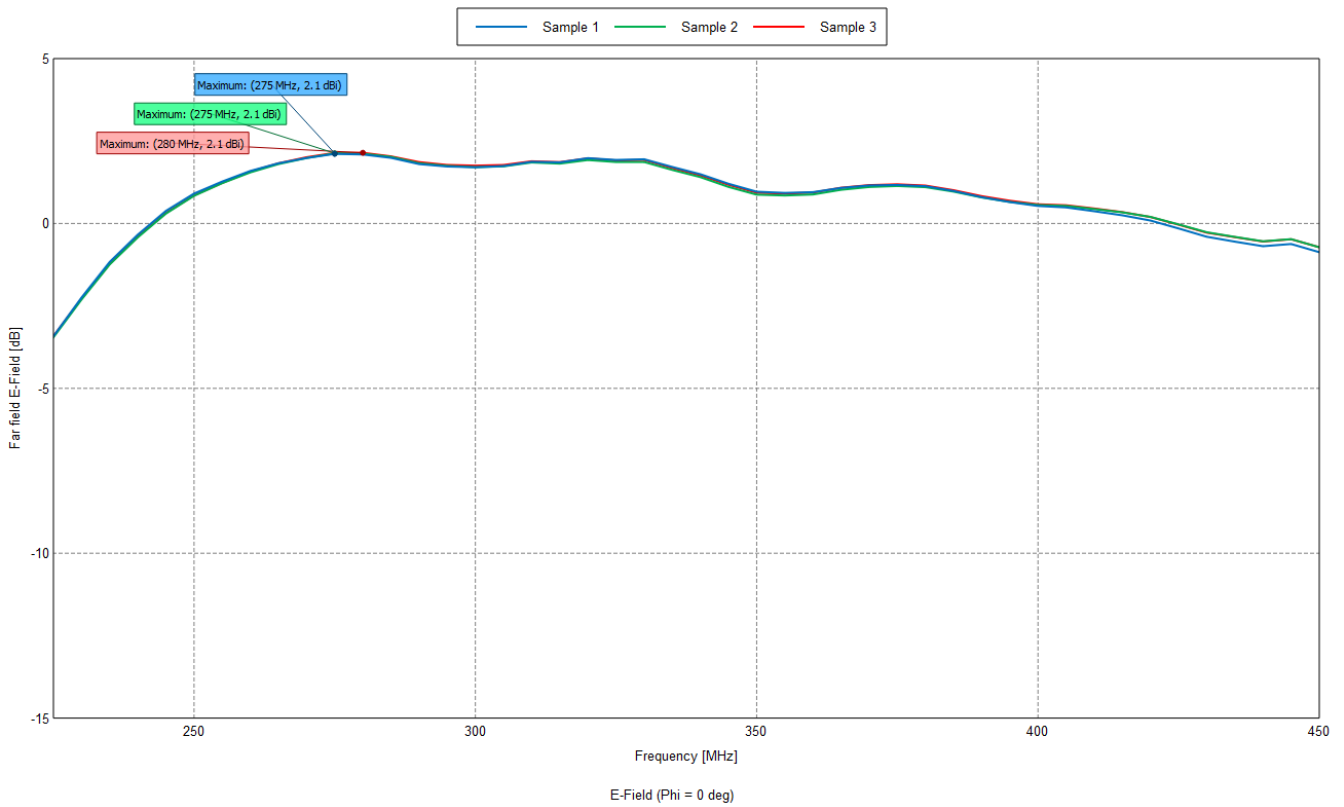
Azimuth Pattern

225 - 450 MHz with 30 - 90 MHz Co-Site Isolation (Azimuth)

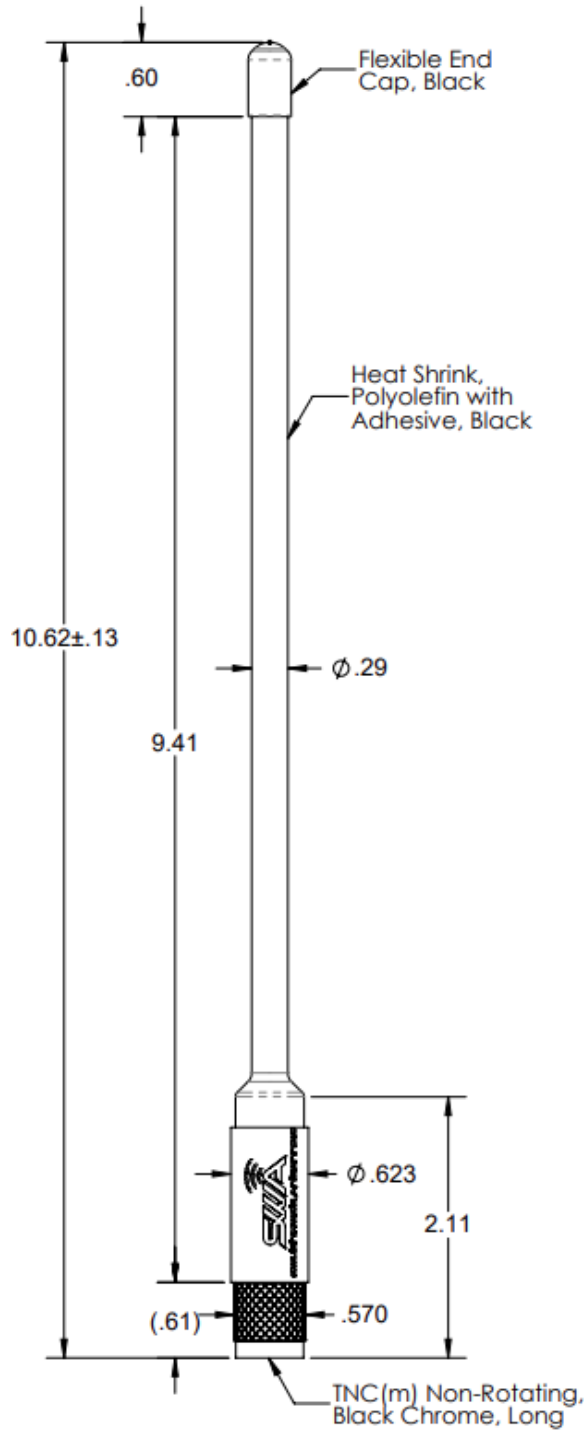


Elevation Pattern

225 - 450 MHz Monopole (Elevation)



225 - 450 MHz with 30 - 90 MHz Co-Site Isolation (Azimuth)



Engineering Drawing

All dimensions are in inches