

Overview

Southwest Antennas Part # 1055-404 is a three port panel antenna designed for use with 3x3 MIMO radio systems and features dual-band operation for both 1.35 - 1.9 GHz & 1.7 - 2.5 GHz, covering many popular military, federal law enforcement, and broadcast bands.

This antenna features a unique three element configuration with one vertically polarized antenna element, one 45 degree slant left antenna element, and one 45 degree slant right antenna element for enhanced polarization and spatial diversity. Multiple mounting options allow for positioning on poles, walls, windows, or other structures.

Features

- Dual band coverage:
 - 1.35 - 1.9 GHz
 - 1.7 - 2.5 GHz
- Three Independent MIMO antenna elements:
 - 1 slant right (1.7 - 2.5 GHz)
 - 1 vertical (1.35 - 1.9 GHz)
 - 1 slant left (1.7 - 2.5 GHz)
- Enhanced polarization & spatial diversity
- 10.0 dBi Gain (-9.6 dBi cross-polarized)
- 3x Type-N(f) RF connectors, one for each antenna element

Mounting Options:

- Part # 1070-039, 1.0" - 2.0" OD Pole & Tower Mounting Bracket Assembly
- Part # 1070-040, 2.0" - 4.0" OD Pole & Tower Mounting Bracket Assembly

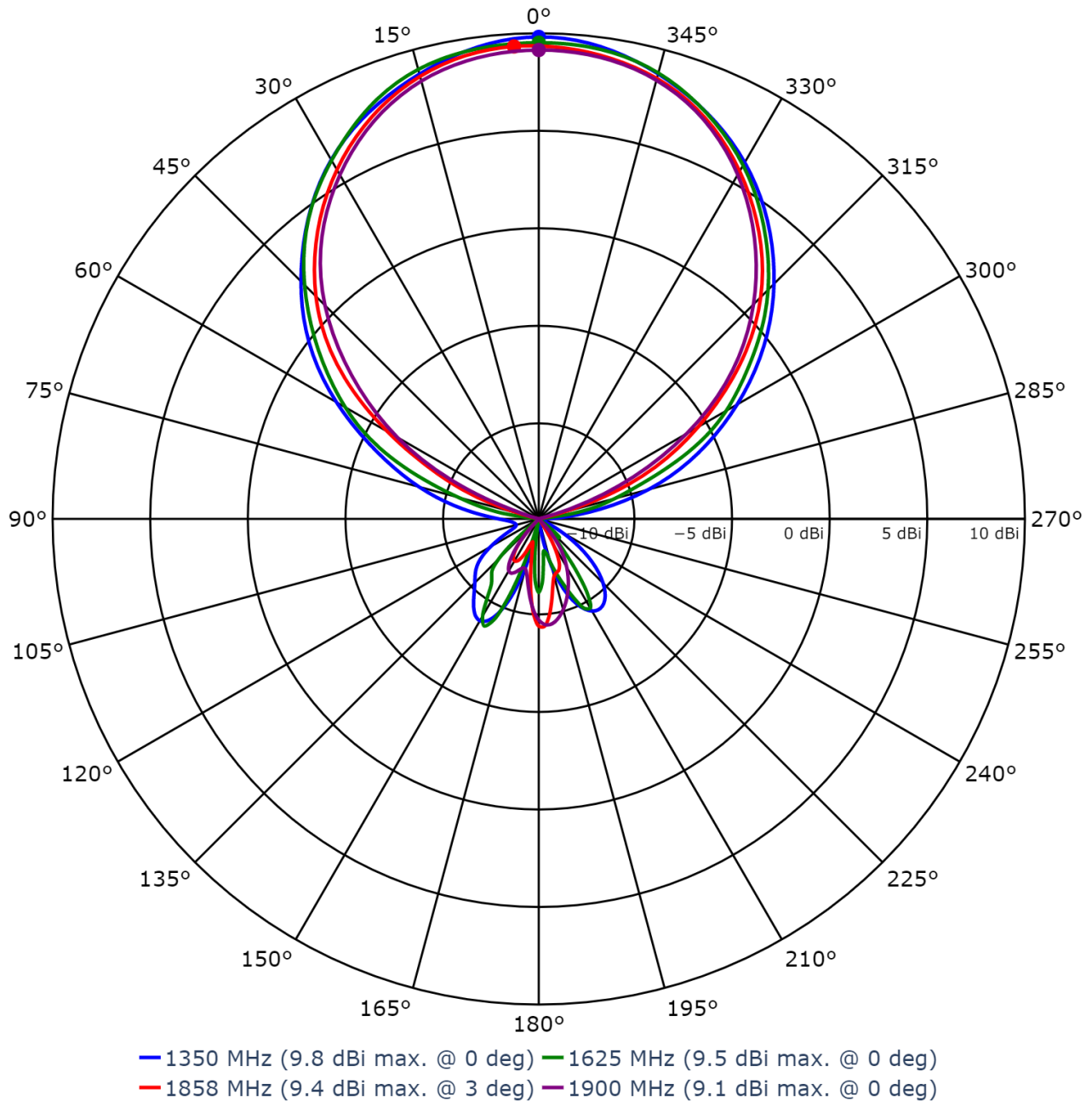


Product Specifications

Parameter	Value	Units	Tolerance
Antenna Pattern	Directional Antenna		
Frequency Band	L & S		
Impedance	50		
Minimum Frequency	1.35 / 1,350	GHz / MHz	
Maximum Frequency	1.9 / 1,900	GHz / MHz	
Minimum Frequency 2	1.7 / 1,700	GHz / MHz	
Maximum Frequency 2	2.5 / 2,500	GHz / MHz	
Maximum VSWR	1.5:1	Ratio	
Maximum Gain	10.00	dBi	(-9.6 dBi cross-polarized)
Polarization	Slant R/L & Vertical		
Color	White		
Low Band Horizontal AZ Beamwidth	53 - 59	Degrees	Vertical Element
High Band Horizontal AZ Beamwidth	54 - 70	Degrees	Slant Left/Right Elements
Low Band Vertical EL Beamwidth	52 - 58	Degrees	Vertical Element
High Band Vertical EL Beamwidth	61 - 71	Degrees	Slant Left/Right Elements
Radome Material	Kydex		
Spring	No		
Gooseneck	No		
Ground Plane Required	No		
Mount Style	Optional Suction Cup Mount, Pole Mount, or Wall Mount		
Mounting Holes Or Studs	8x 8-32 UNC x .31" Blind Holes, and 8x 10-32 UNC Stud		
RF Connector Type	Type-N(f)		

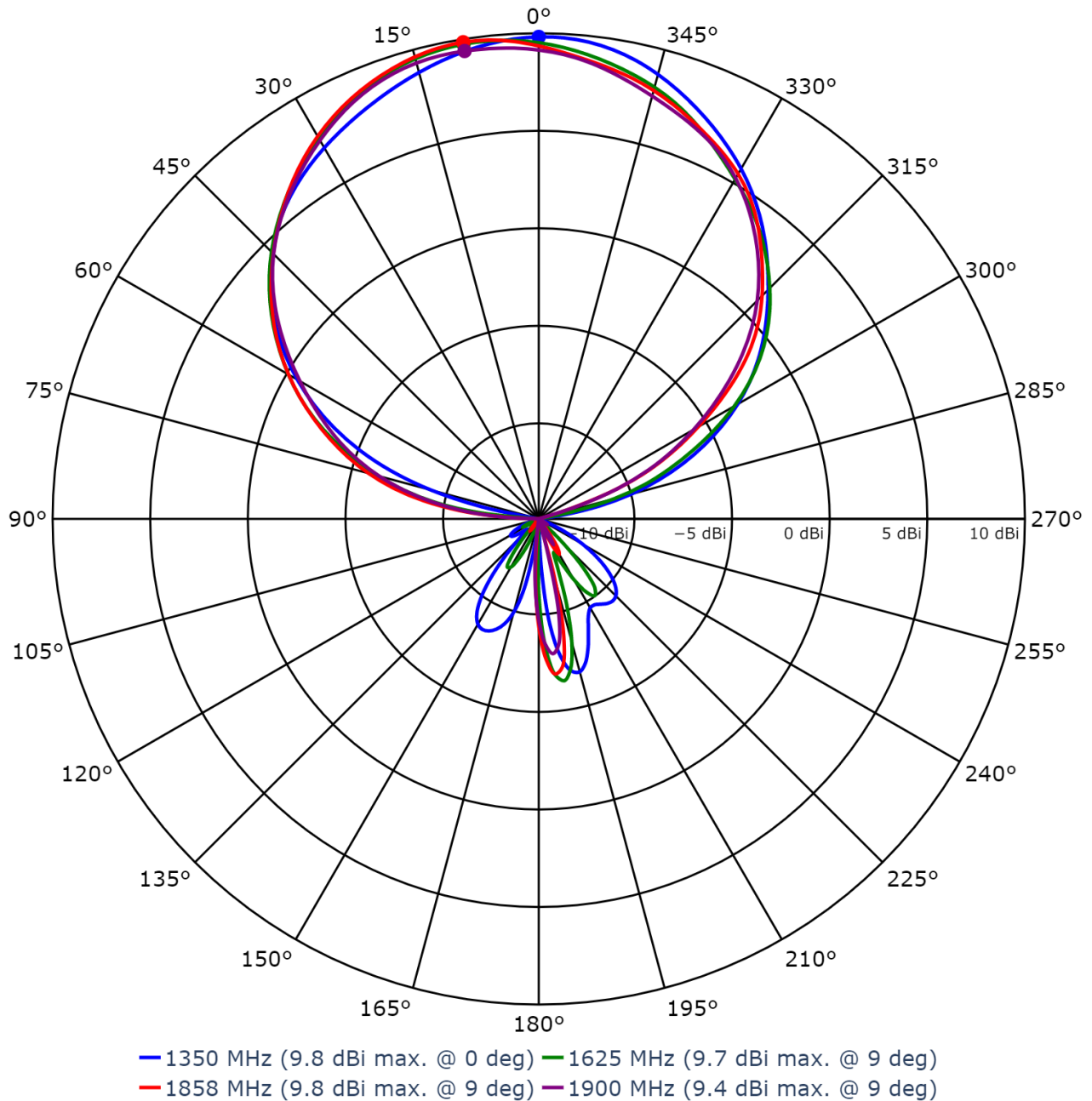
Parameter	Value	Units	Tolerance
Product Length	13.18 / 334.77	inches / mm	
Product Width	13.18 / 334.77	inches / mm	
Product Height	2.93 / 74.42	inches / mm	
Product Weight	58.00 / 1,644.27	oz / g	

1055-404 Directional Antenna (Vertical, Azimuth)



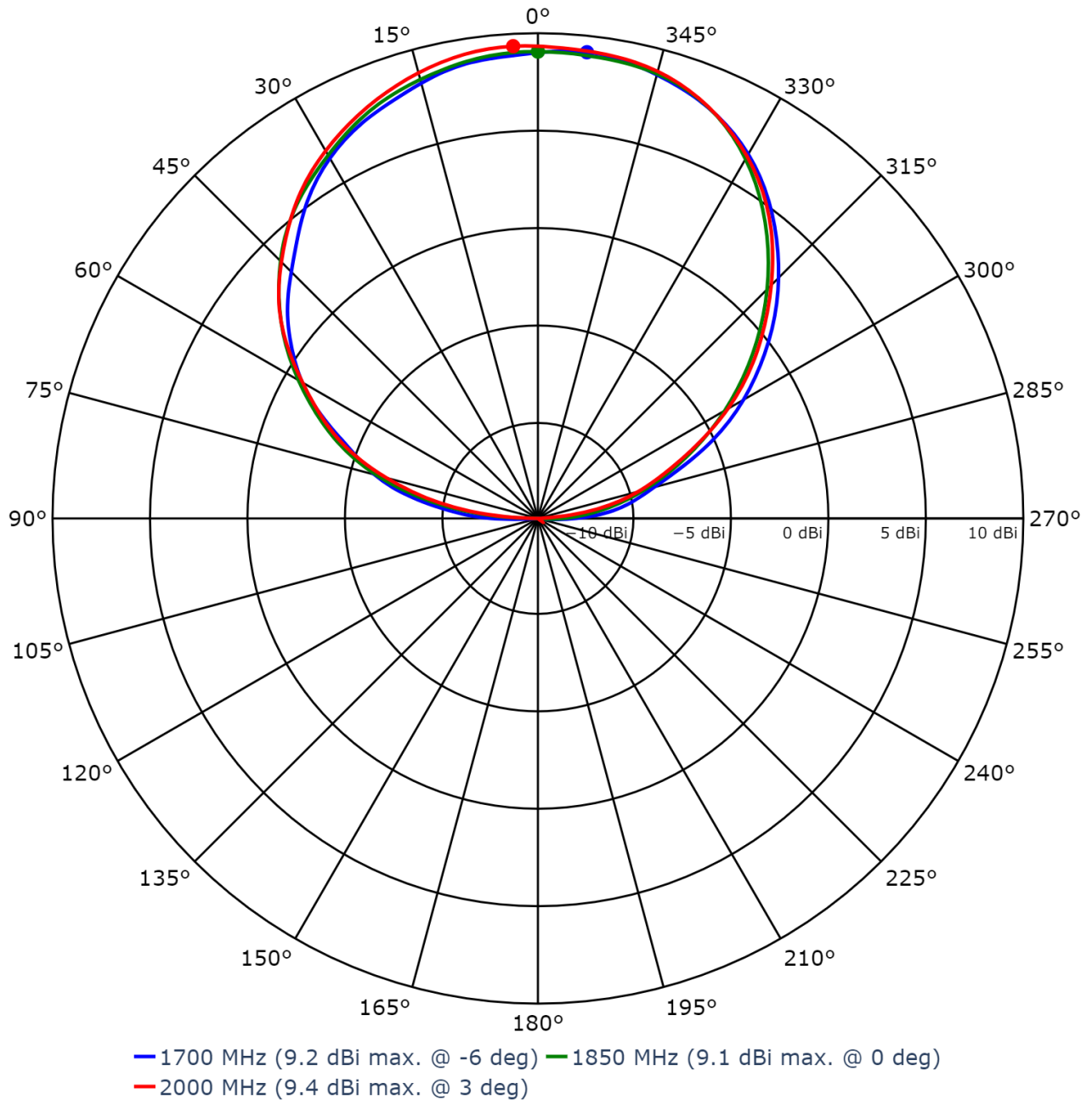
Azimuth Patterns, Vertical Port

1055-404 Directional Antenna (Vertical, Elevation)



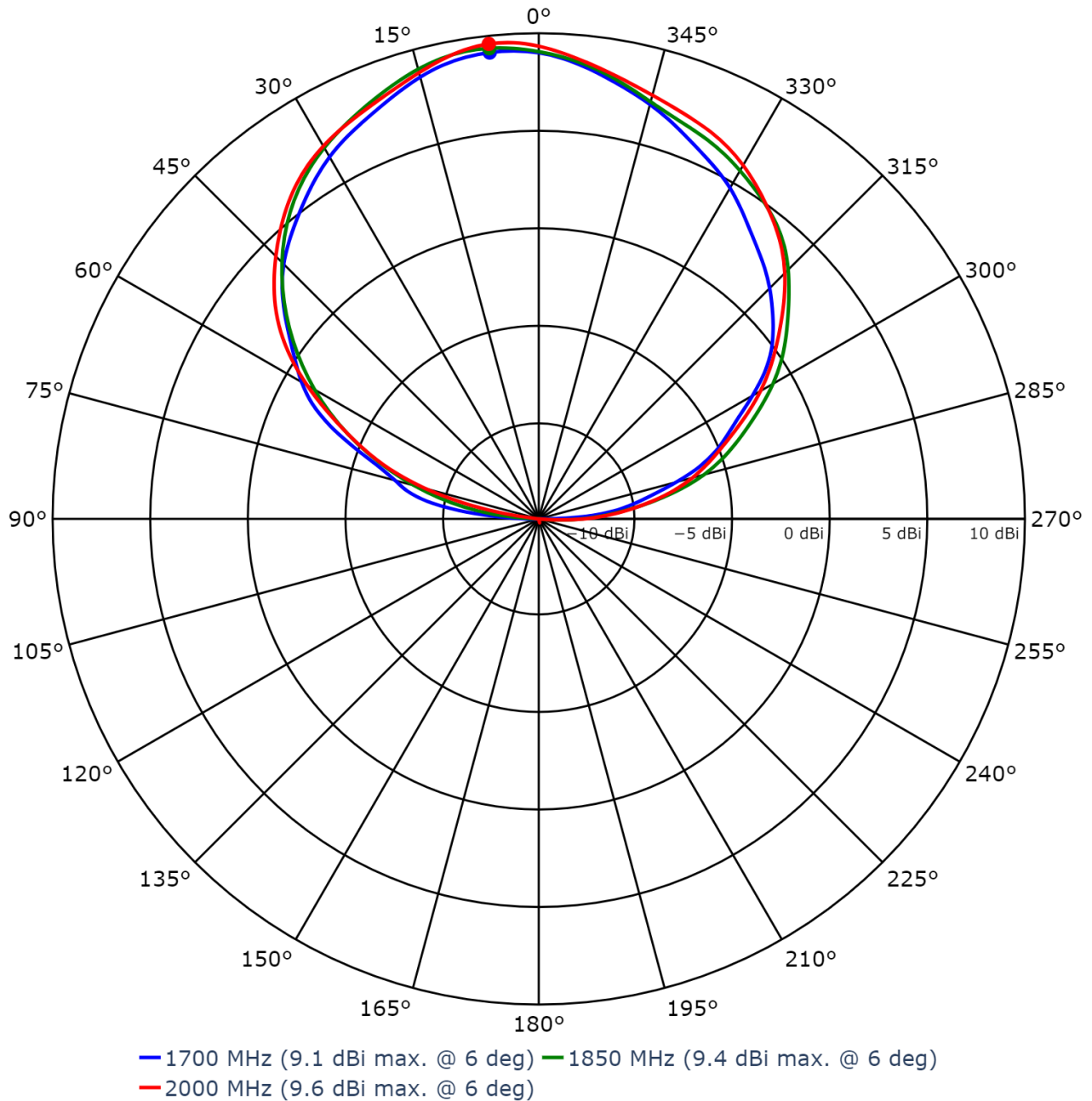
Elevation Patterns, Vertical Port

1055-404 Directional Antenna (Slant Right, Elevation)



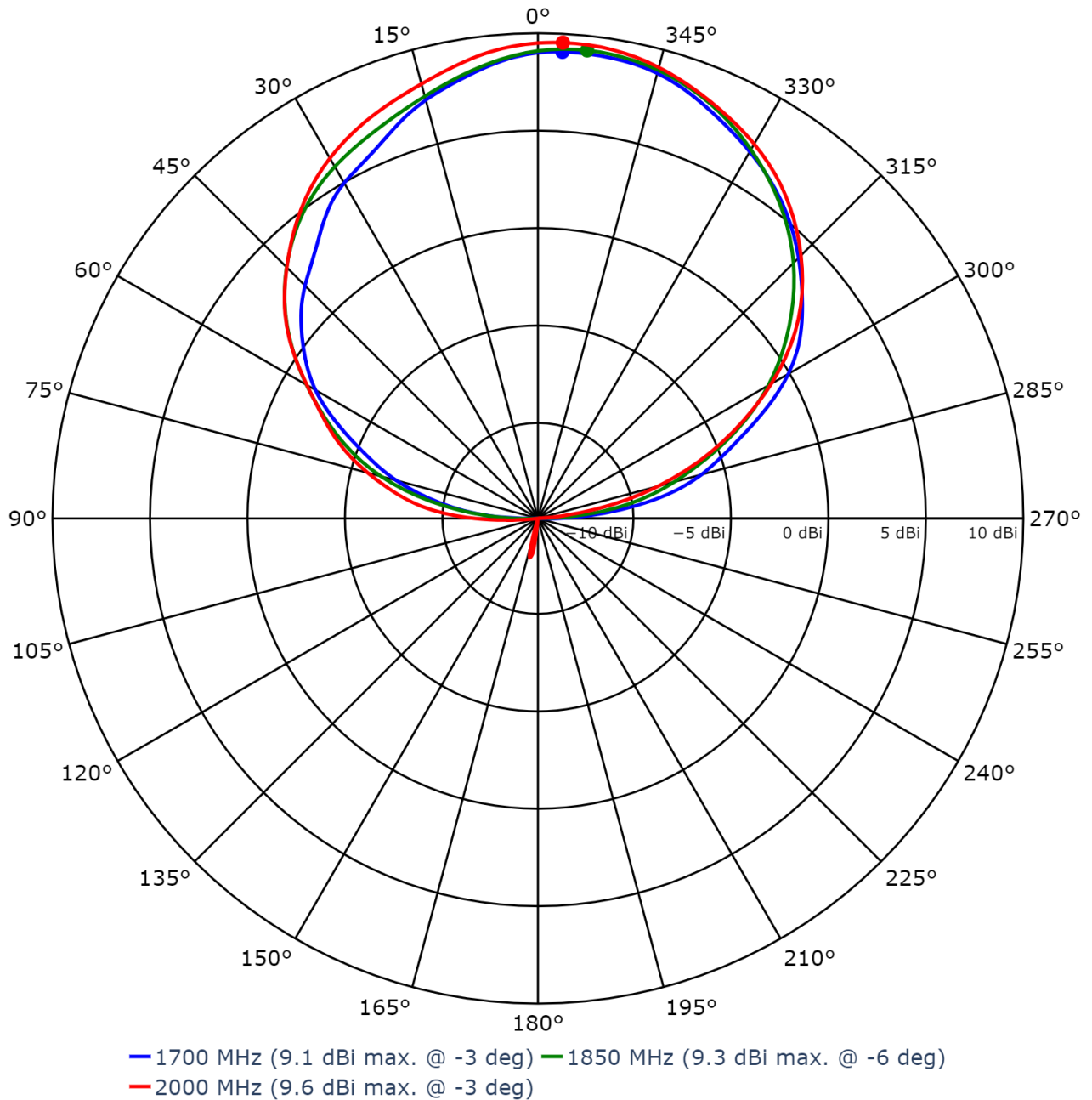
Elevation Patterns, Low Band, Slant Left Port

1055-404 Directional Antenna (Slant Right, Azimuth)



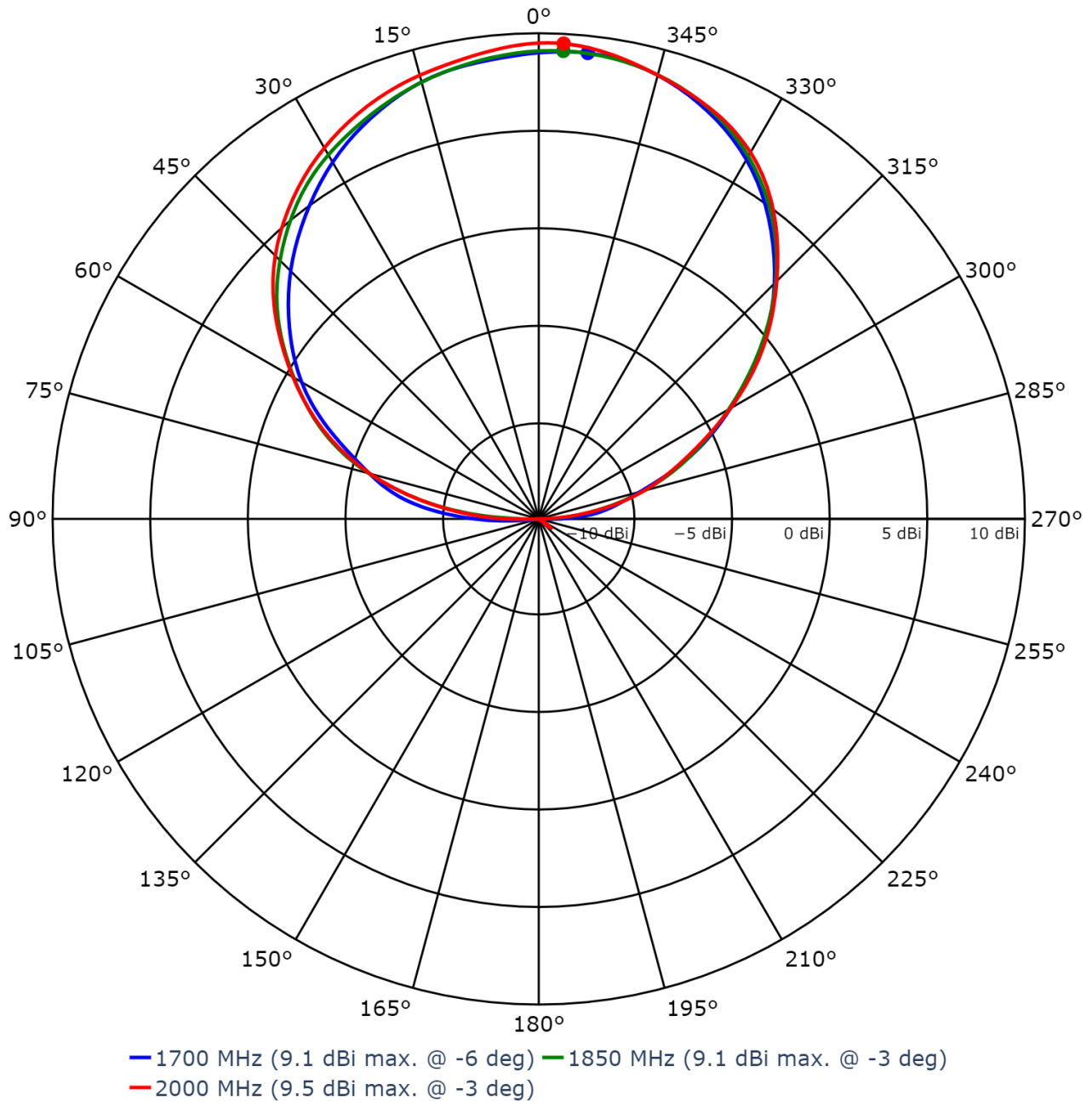
Azimuth Patterns, Low Band, Slant Right Port

1055-404 Directional Antenna (Slant Left, Azimuth)



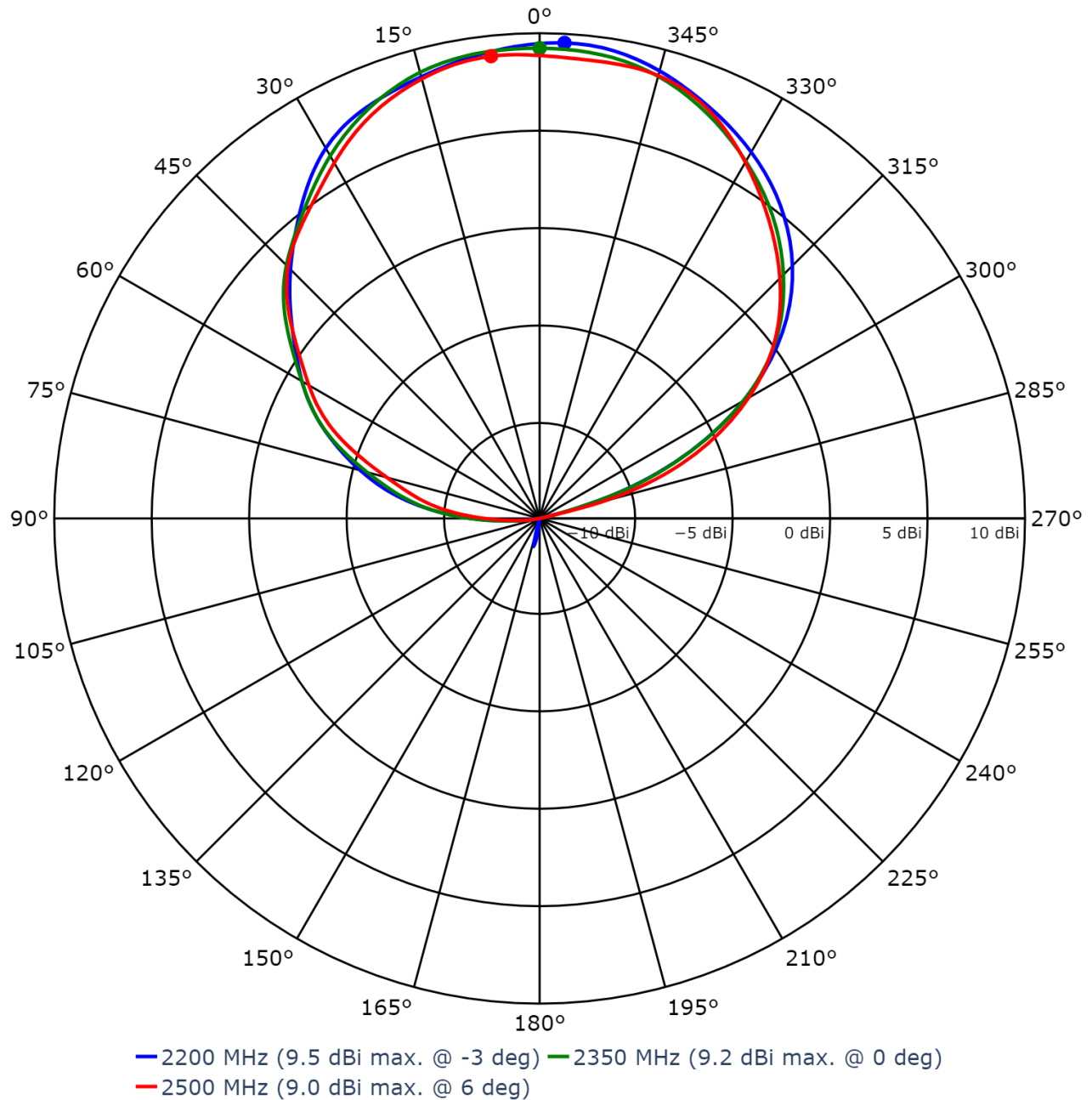
Azimuth Patterns, Low Band, Slant Left Port

1055-404 Directional Antenna (Slant Left, Elevation)



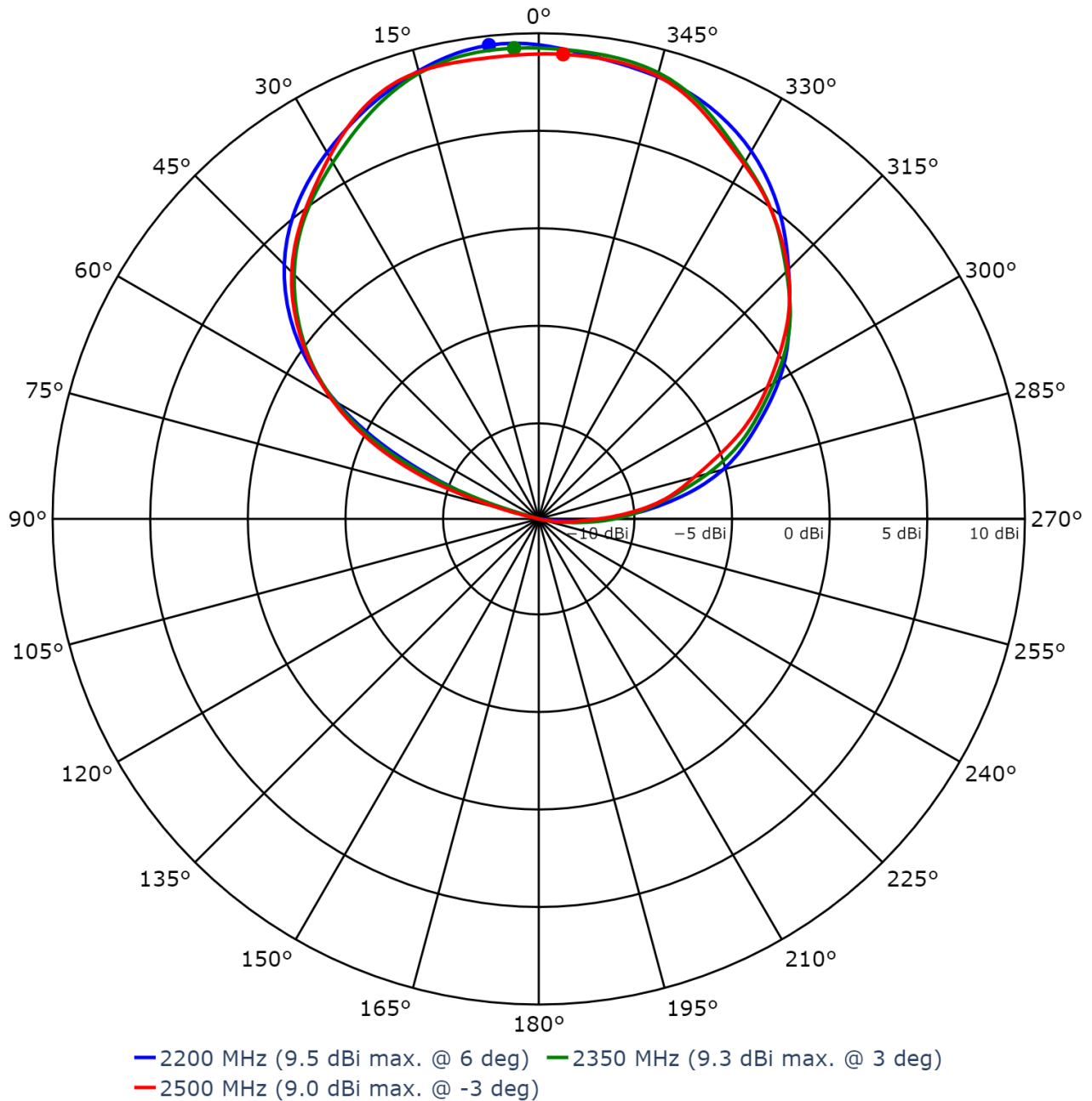
Azimuth Patterns, Low Band, Slant Left Port

1055-404 Directional Antenna (Slant Left, Azimuth)



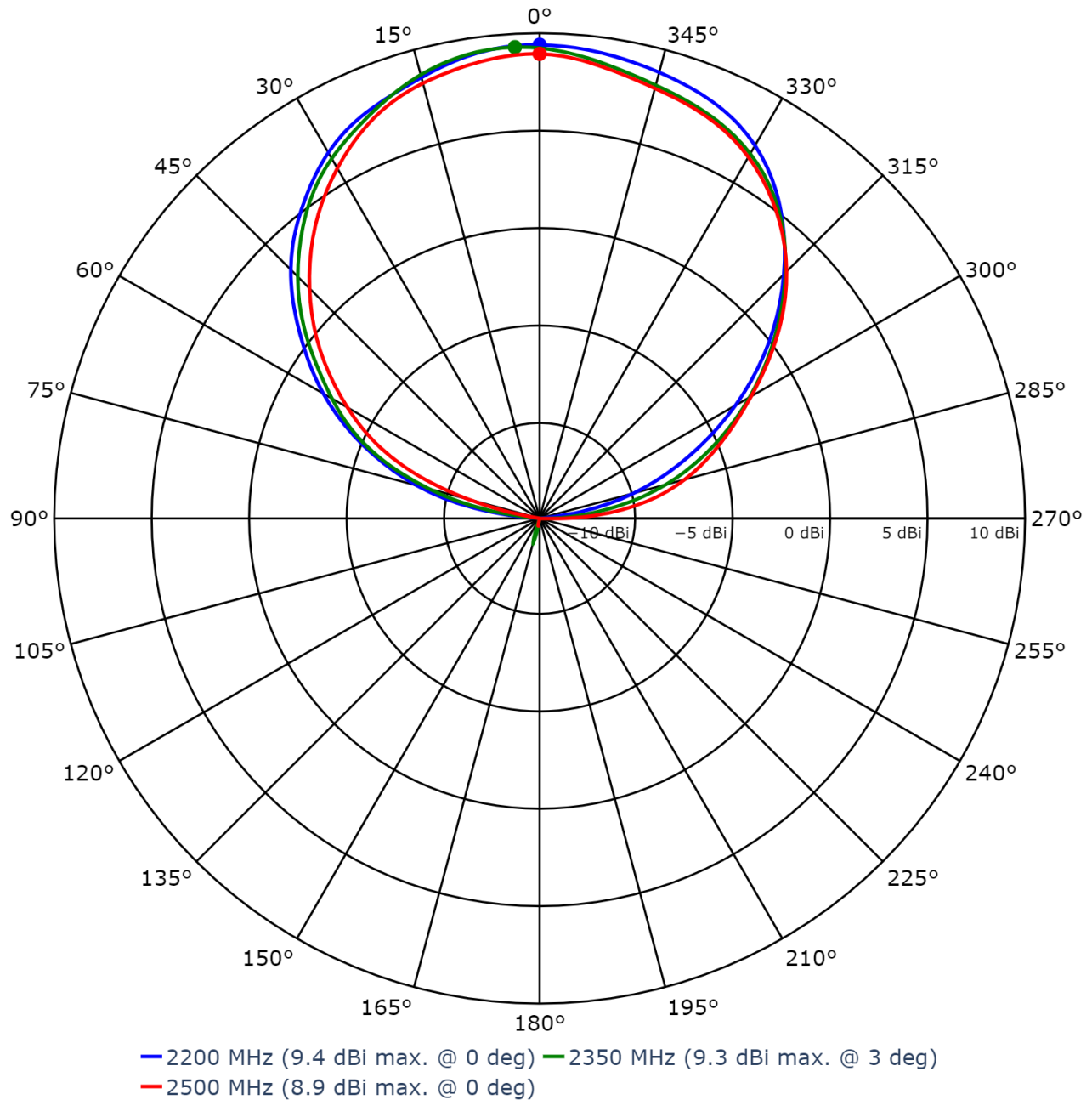
Azimuth Patterns, High Band, Slant Left Port

1055-404 Directional Antenna (Slant Right, Azimuth)



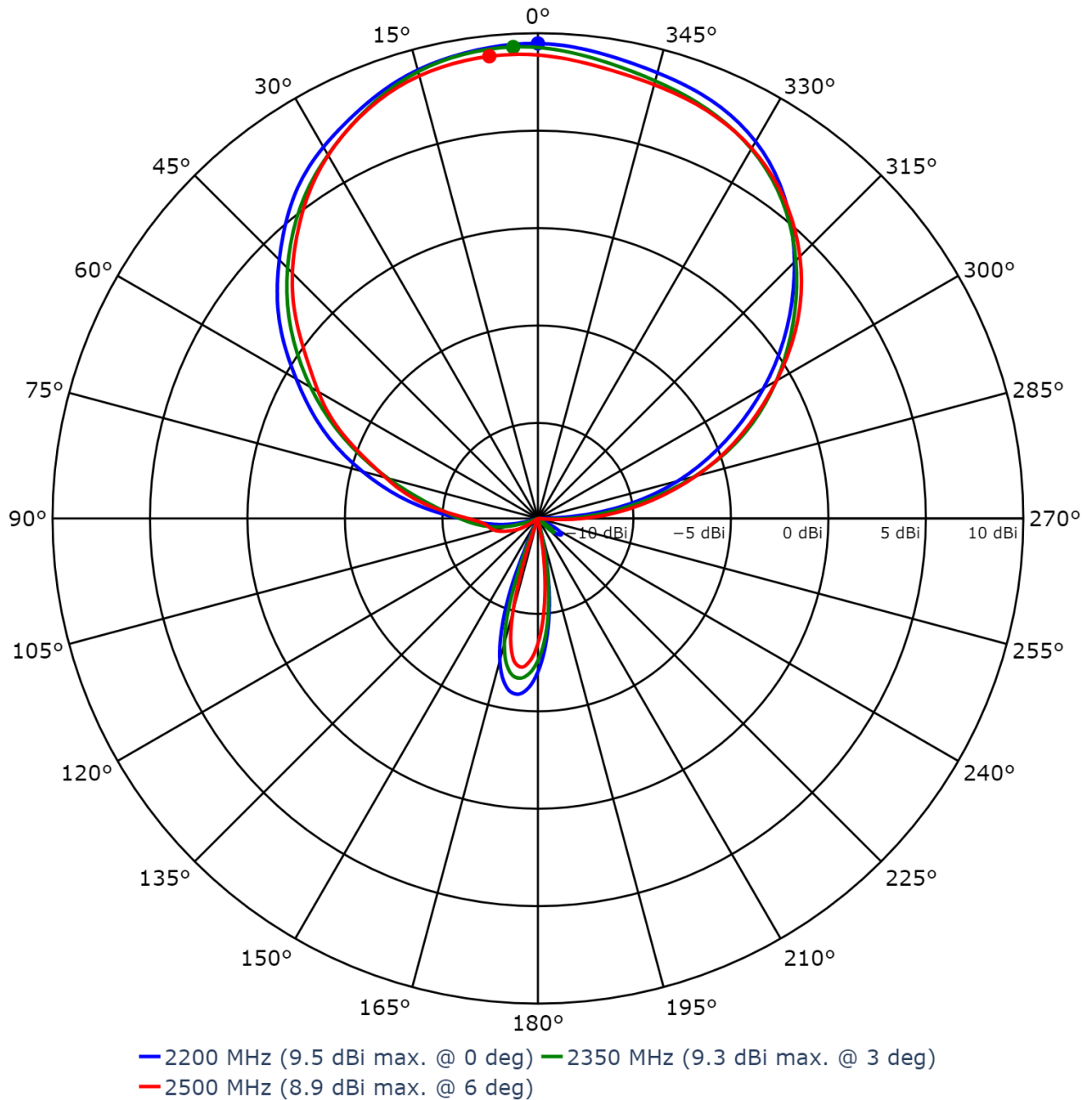
Azimuth Patterns, High Band, Slant Right Port

1055-404 Directional Antenna (Slant Right, Elevation)

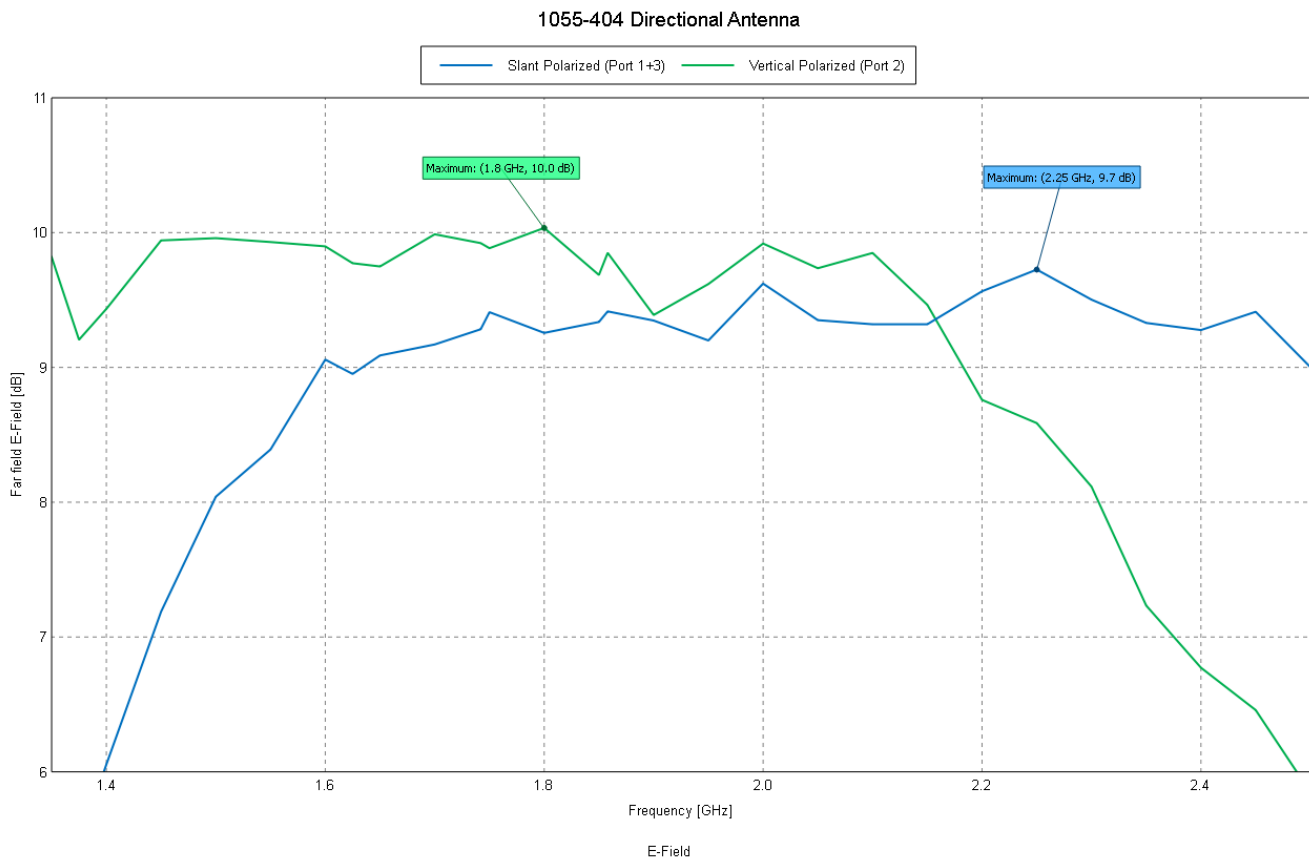


Elevation Patterns, High Band, Slant Right Port

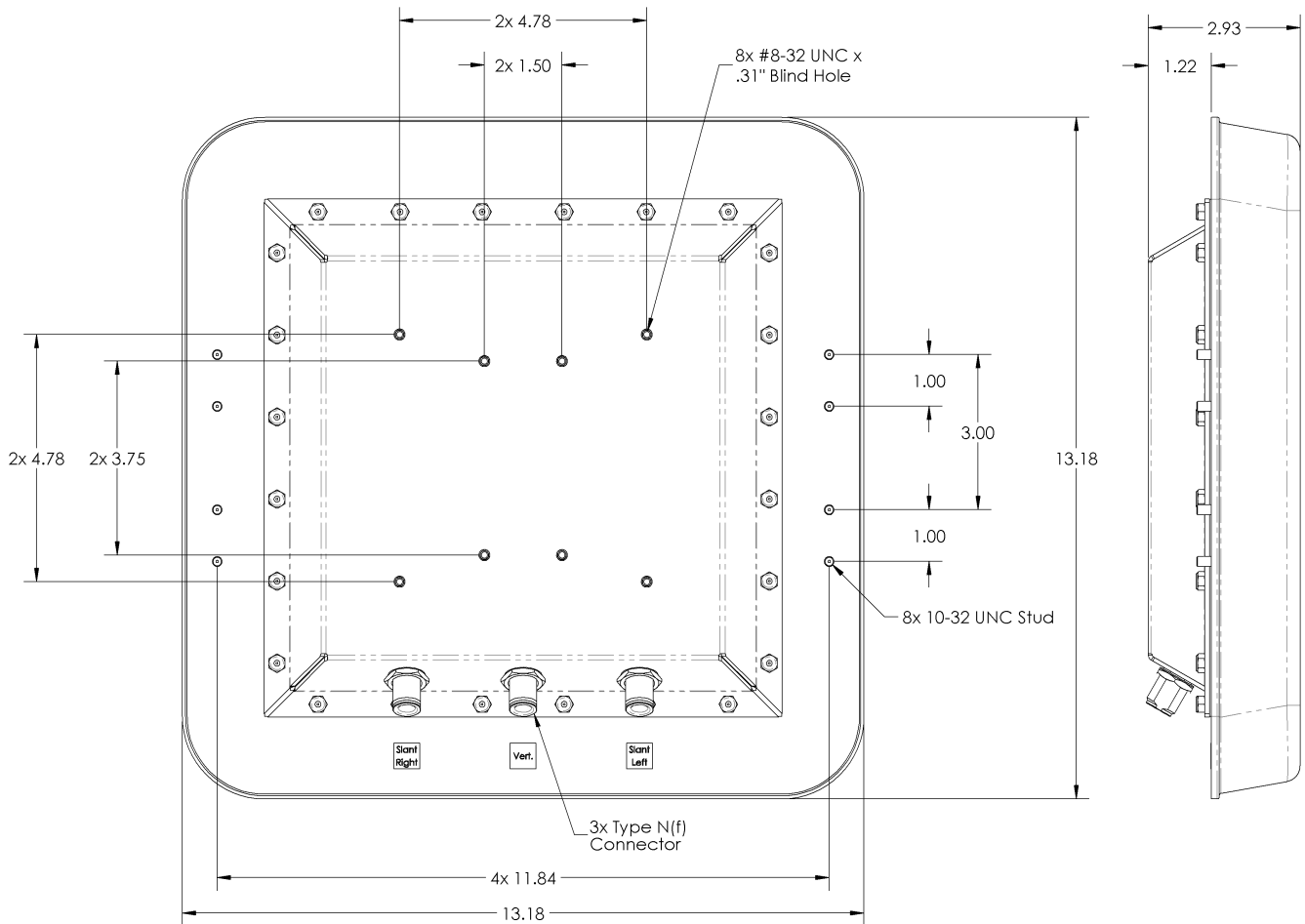
1055-404 Directional Antenna (Slant Left, Elevation)



Elevation Patterns, High Band, Slant Left Port



Gain vs. Frequency Plot



Engineering Drawing

All dimensions are in inches