

Overview

Southwest Antennas Part # 1009-066 is a dual-band 2X2 sector antenna for multi-port MIMO / MANET radio systems that covers both 2.2 - 2.5 GHz and 5.725-5.875 GHz frequency bands, with a peak gain of 10.2 dBi.

This antenna's 45 degree slant left and 45 degree slant right polarization design provides superior transmit and receive polarization diversity. This antenna features a 120 degree azimuth beamwidth for wide area sectorial coverage.

An integrated diplexer provides for S/C dual-band operation when these antennas are deployed with dual-band radio systems.

The included pole mounting kit allows the antenna to be tilted from 0 down to -15 degrees and connected to poles or masts up to 2.5" OD.

Features

- Two Input 2X2 Sector Antenna
- Dual-Band S/C Band Frequency Coverage:
 - 2.2 - 2.5 GHz, 10.2 dBi
 - 5.725 - 5.875 GHz, 7.2 dBi
- Integrated Diplexer
- 120° Azimuth Beamwidth (typical)
- 13° Maximum Vertical Beamwidth
- 45° Slant Polarized Design:
 - 1x 45° Slant Left
 - 1x 45° Slant Right
- 50W Power Handling
- White UV Stable Kydex Radome
- 0 to -15° Adjustable Elevation Angle Downtilt
- Includes Pole Mounting Kit for 1" - 2.5" OD Poles and Masts
- 2x Type-N(f) RF Connectors

Applications:

- 2X2 MIMO / MANET Radio Systems
- Wireless Infrastructure Base Stations
- Planned City Wide / Urban Area Mesh Radio Networks
- Private LTE Networks
- Rapid Deploy Networks for Event Management and Security
- Tactical Radio Network Infrastructure
- Point-to-Point Back Haul MIMO Radio Links
- Emergency Management & Public Safety



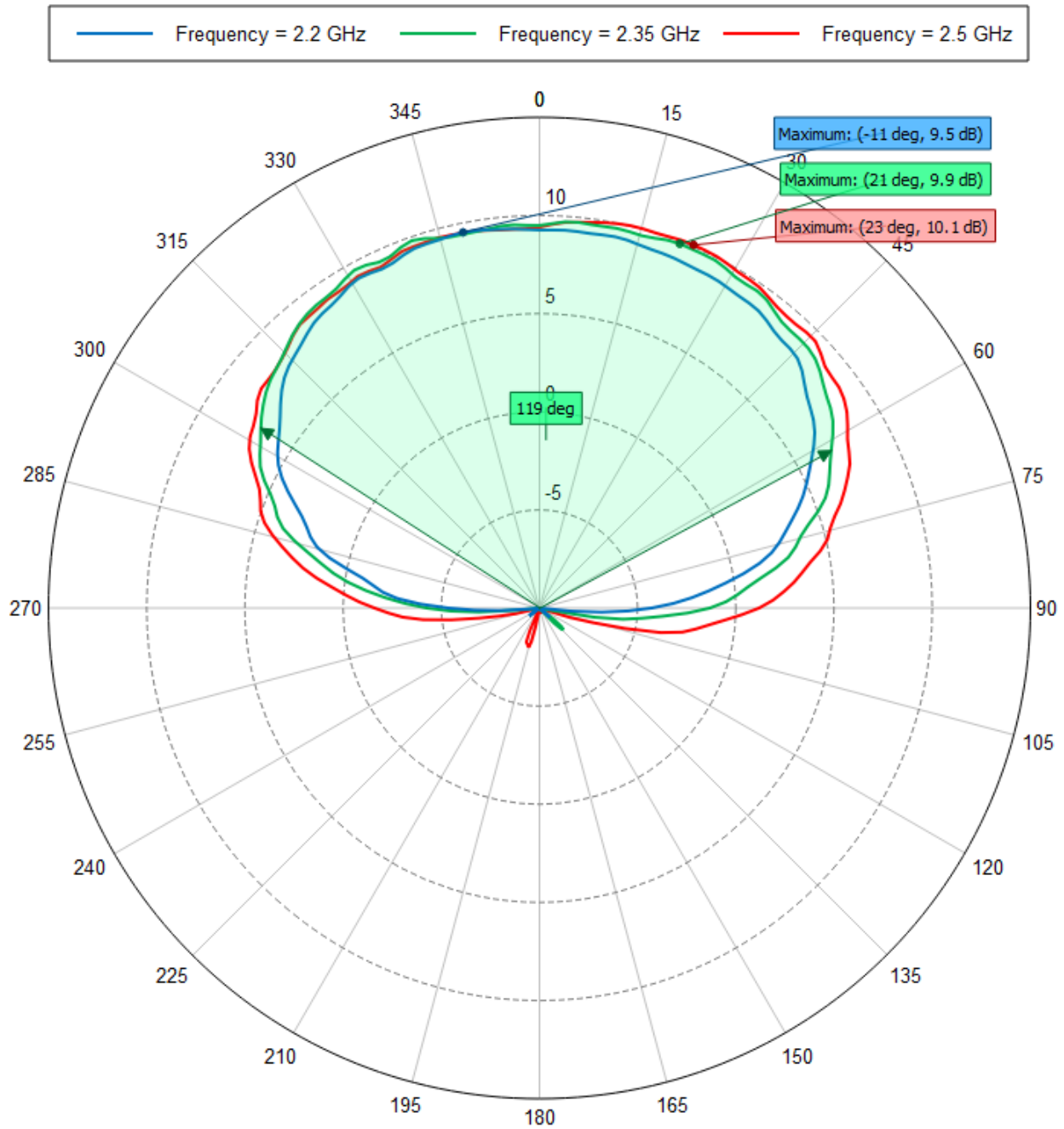
Product Specifications

Parameter	Value	Units	Tolerance
Antenna Pattern	Directional Antenna		
Frequency Band	S & C		
Impedance	50		
Minimum Frequency	2.2 / 2,200	GHz / MHz	
Maximum Frequency	2.5 / 2,500	GHz / MHz	
Minimum Frequency 2	5.725 / 5,725	GHz / MHz	
Maximum Frequency 2	5.875 / 5,875	GHz / MHz	
Maximum VSWR	<2.0:1	Ratio	
Maximum Gain	10.20	dBi	S-Band (7.6 dBi C-Band)
Polarization	Slant L/R		
Color	White		
Maximum RF Input Power	50	Watts	Per Port
Low Band Horizontal AZ Beamwidth	113 - 135	Degrees	
High Band Horizontal AZ Beamwidth	117 - 120	Degrees	
Low Band Vertical EL Beamwidth	11 - 13	Degrees	
High Band Vertical EL Beamwidth	9 - 10	Degrees	
Radome Material	UV Stable Kydex		
Ground Plane Required	No		
Mount Style	1" to 2.5" Pole Mounting Kit with 0 to -15° Elevation Downtilt Adjustment		
Maximum Wind Velocity	161	kph	
RF Connector Type	Type-N(f)		
Operating Temperature Range	-40 to +140	F	-40 to +60 C

Parameter	Value	Units	Tolerance
Product Length	50.95 / 1,294.13	inches / mm	
Product Width	7.00 / 177.80	inches / mm	
Product Height	4.38 / 111.25	inches / mm	
Product Weight	10.10 / 4.58	lbs / kg	Including Mounting Hardware

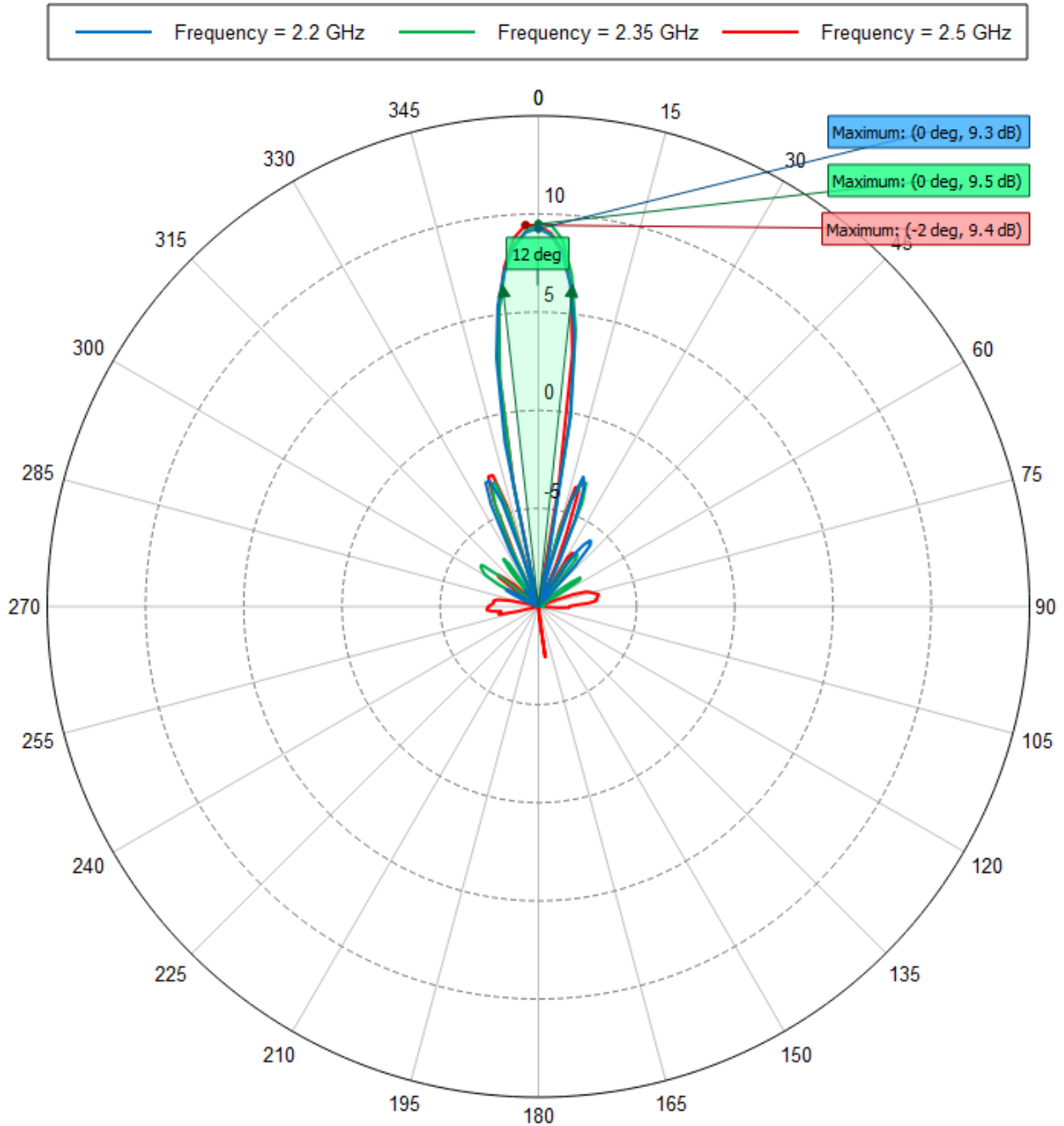
Filter Specifications

Parameter	Value	Units	Tolerance
Filter Type	Integrated S/C Band Diplexer		



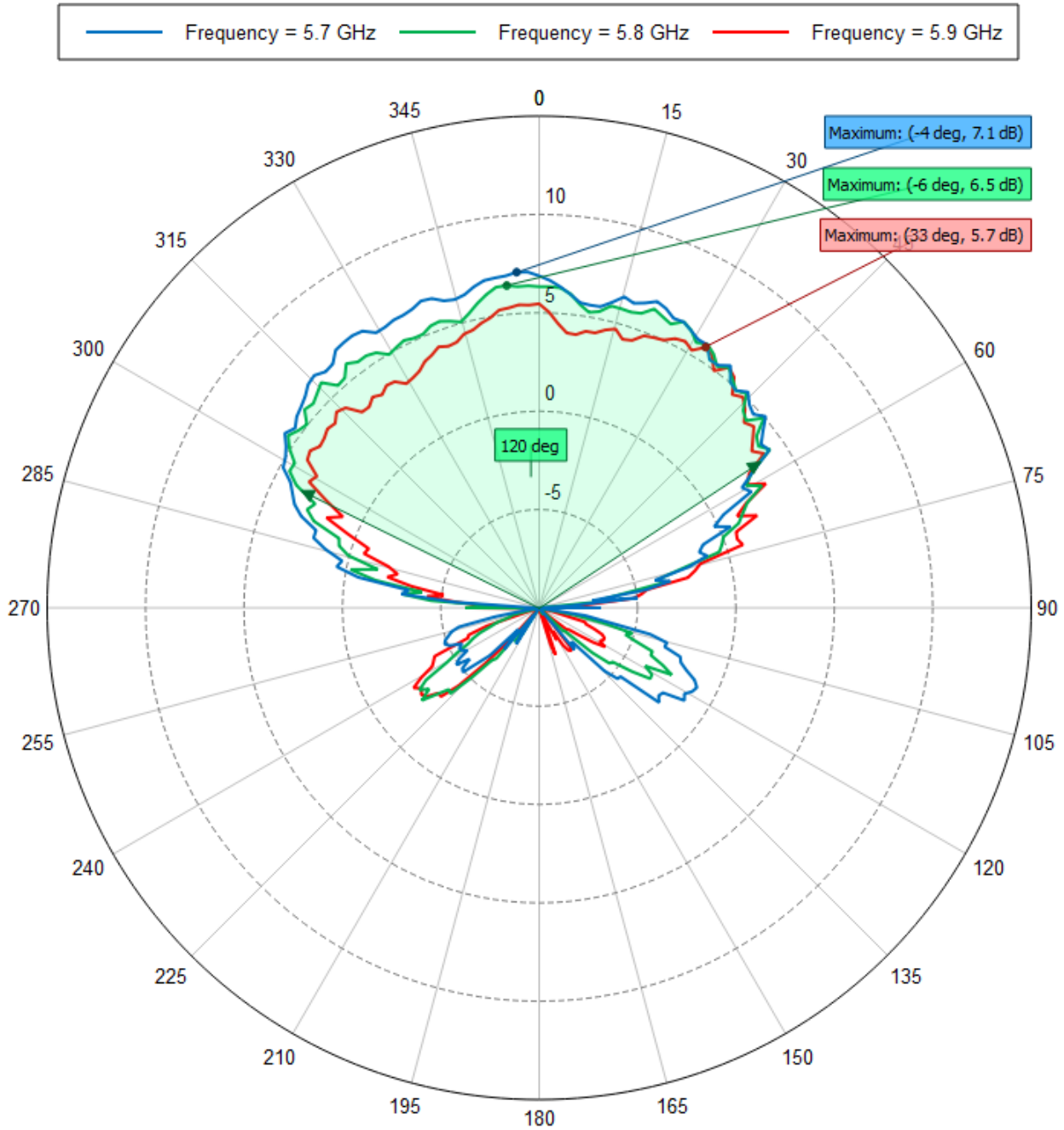
Azimuth Patterns for S-Band

Referenced to +15 dBi



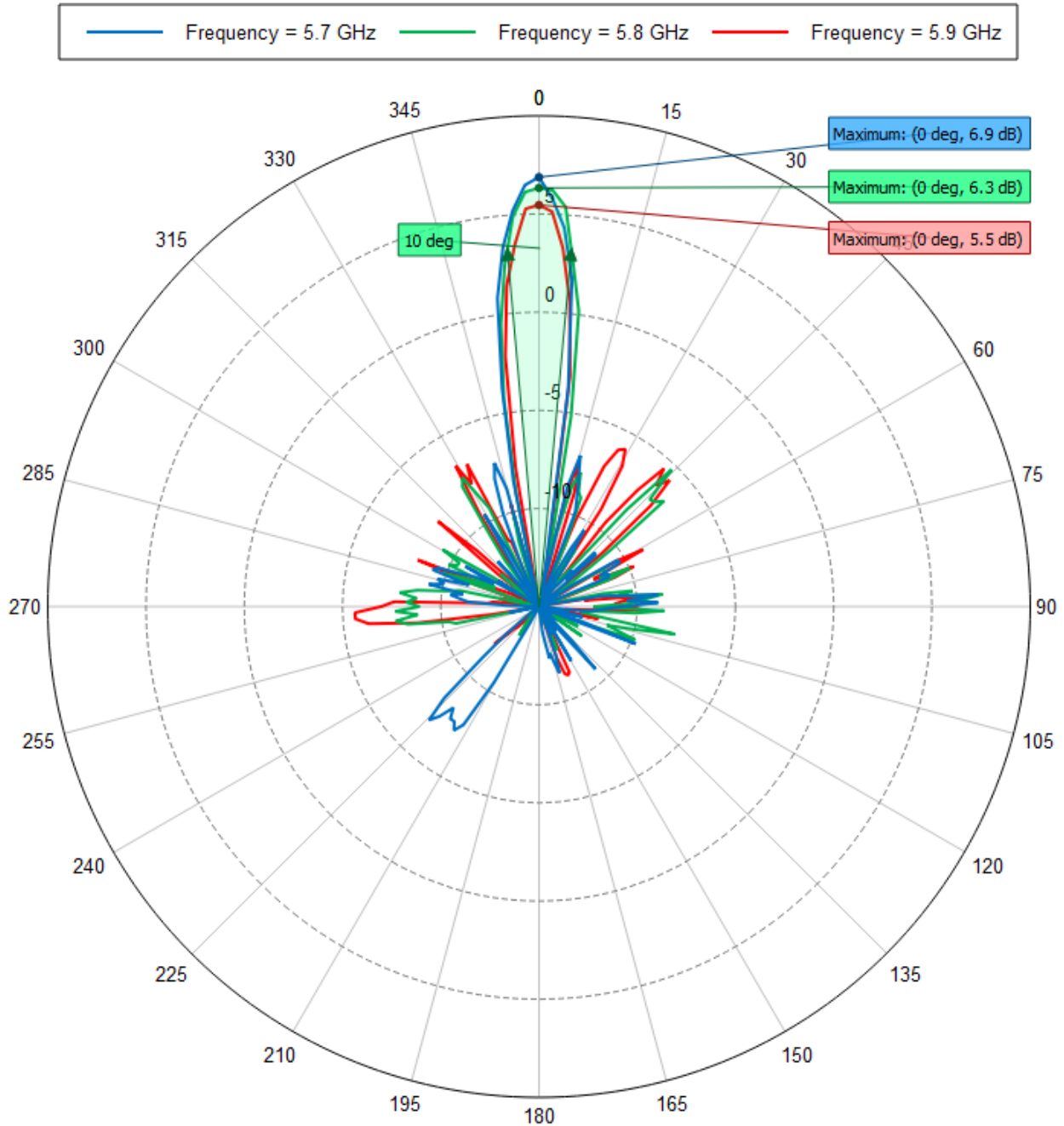
Elevation Patterns for S-Band

Referenced to +15 dBi



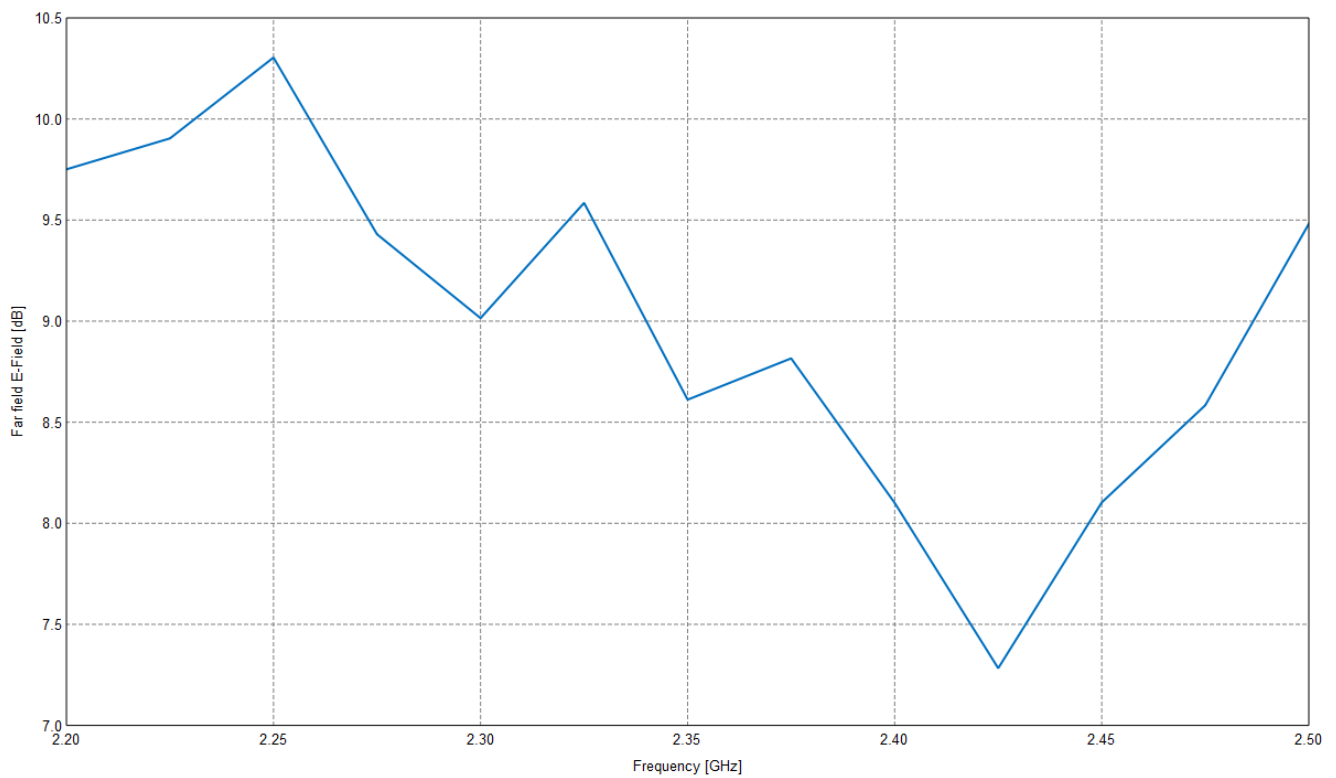
Azimuth Patterns for C-Band

Referenced to +15 dBi

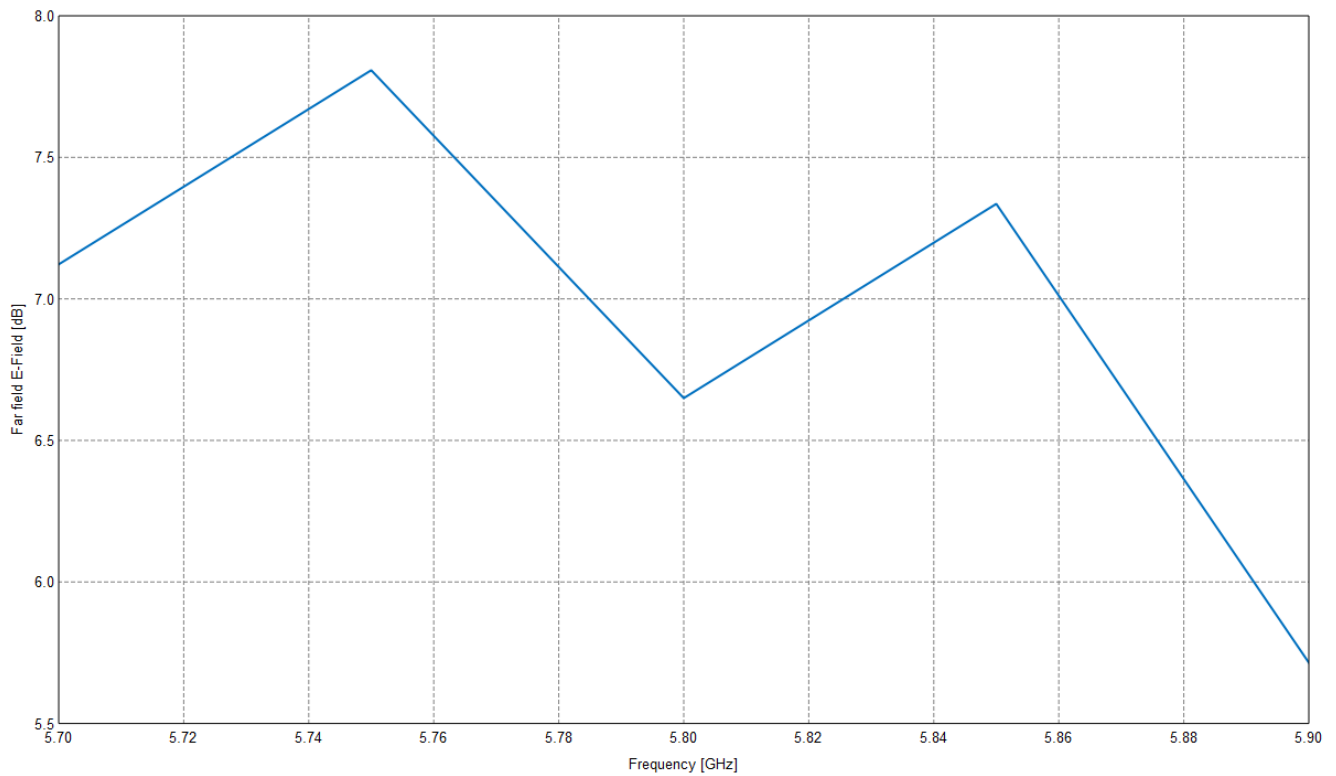


Elevation Patterns for C-Band

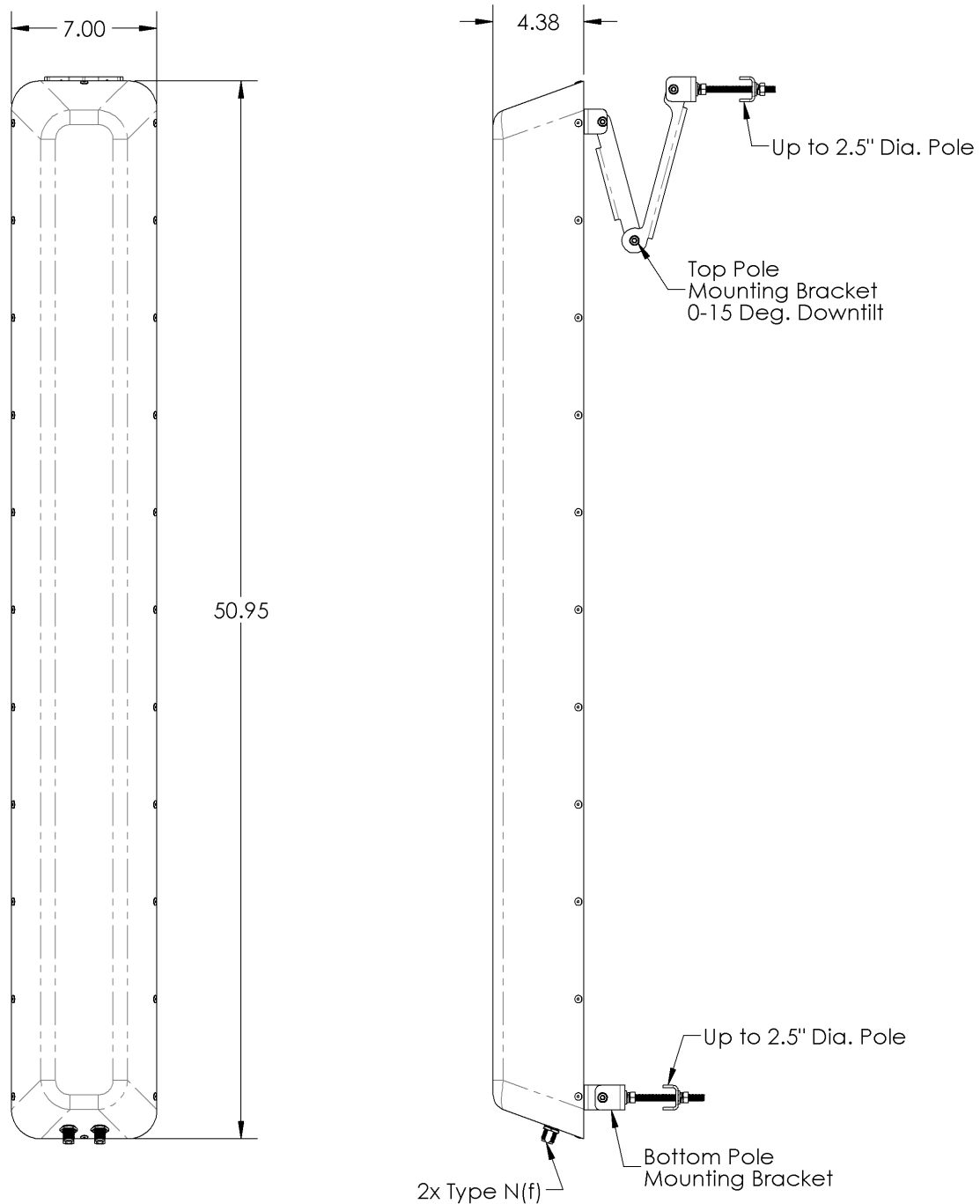
Referenced to +15 dBi



S-Band Gain vs. Frequency Plot



C-Band Gain vs. Frequency Plot



Engineering Drawing

All dimensions are in inches