SAV-0721831730-SF-S1-QR

Quad-Ridged, Dual Polarized Horn Antenna, 0.7 to 18 GHz

SAV-0721831730-SF-S1-QR is a quad-ridged horn antenna that operates from 0.7 to 18 GHz. The antenna offers a typical gain of 17 dBi and a nominal 3 dB beamwidth of 30˚ for the E-plane and H-plane. The antenna supports both circular and linear polarized waveforms. The antenna includes a mounting bracket with a ¼-20 threaded hole and various other mounting holes for flexible mounting. The antenna ports are two female SMA connectors.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	0.7 GHz		18 GHz
Gain		17 dBi	
Polarization		Linear and Circular	
E-Plane 3 dB Beamwidth		30°	
H-Plane 3 dB Beamwidth		30°	
Port Isolation		20 dB	
Cross Polarization		20 dB	
Port Return Loss		10 dB	
Power Handling			25 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Ports	2x SMA (F) Coax Connectors
Mounting	Mounting Bracket with ¼-20 Threaded Hole
Body Material	Aluminum
Len Material	HDPE
Finish	Chem Film (Antenna), Black Anodized (Mounting Bracket)
Weight	3.0 lbs. (Antenna), 6.9 Oz. (Mounting Bracket)
Outline	AV-C17-QR

ECCN

EAR99

FEATURES

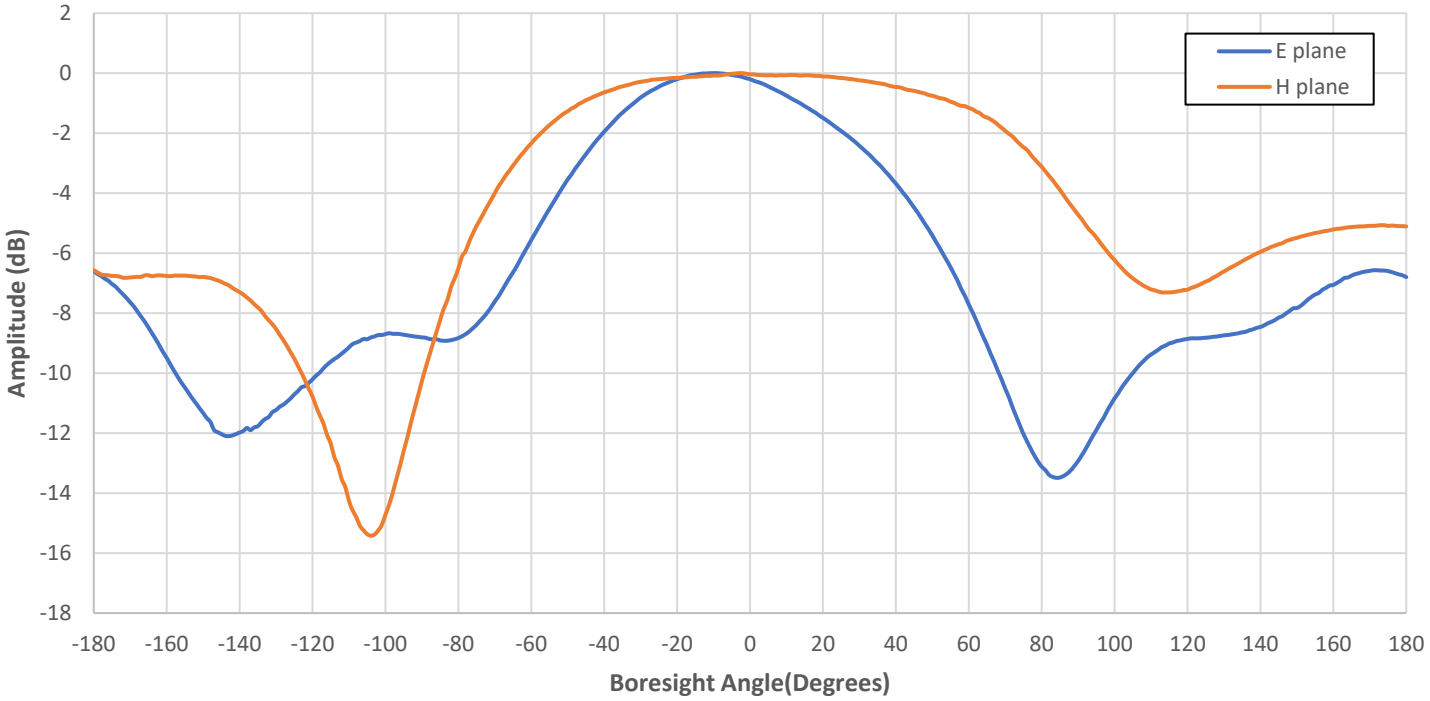
- Coaxial Connector for RF Input
- Broadband Coverage
- Circular and Linear Polarization
- Good Impedance Match

APPLICATIONS

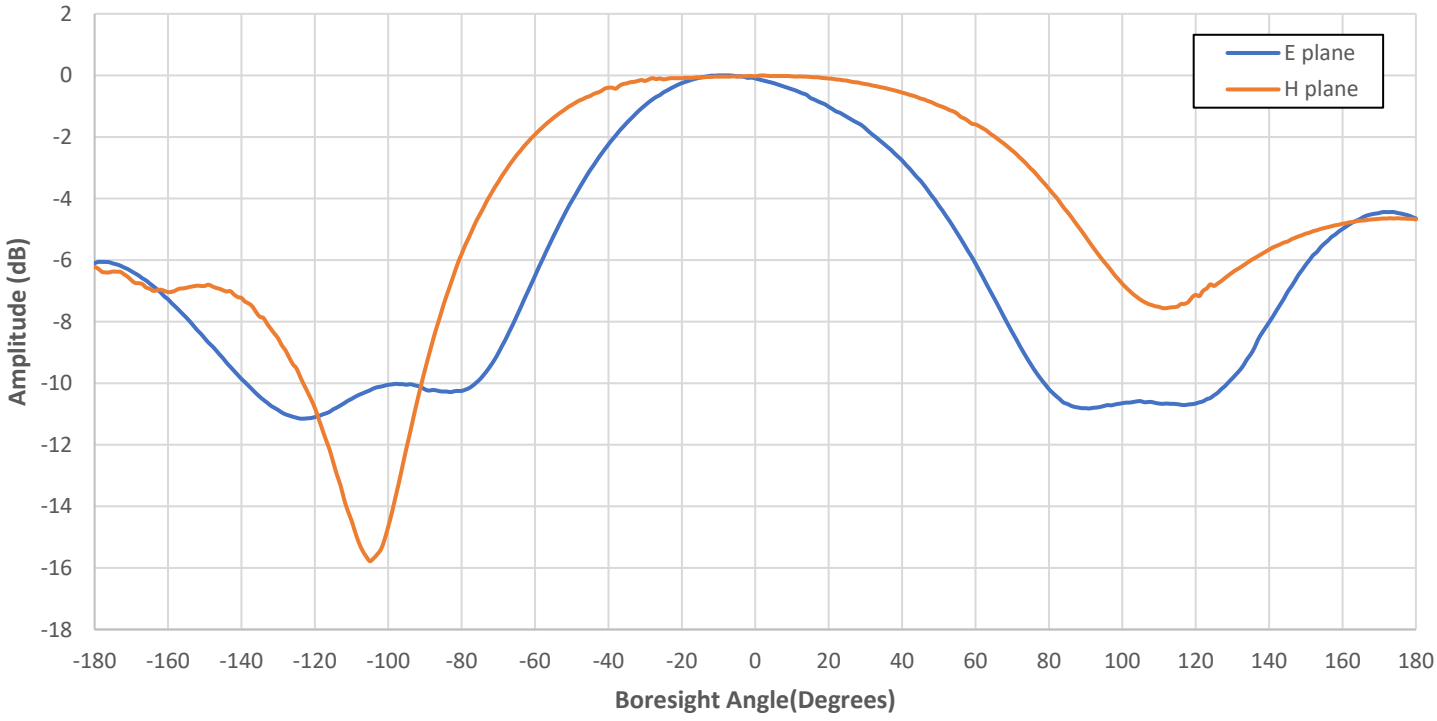
- Antenna Ranges
- Antenna Gain Measurements
- System Setups

SUPPLEMENTAL DETAILS

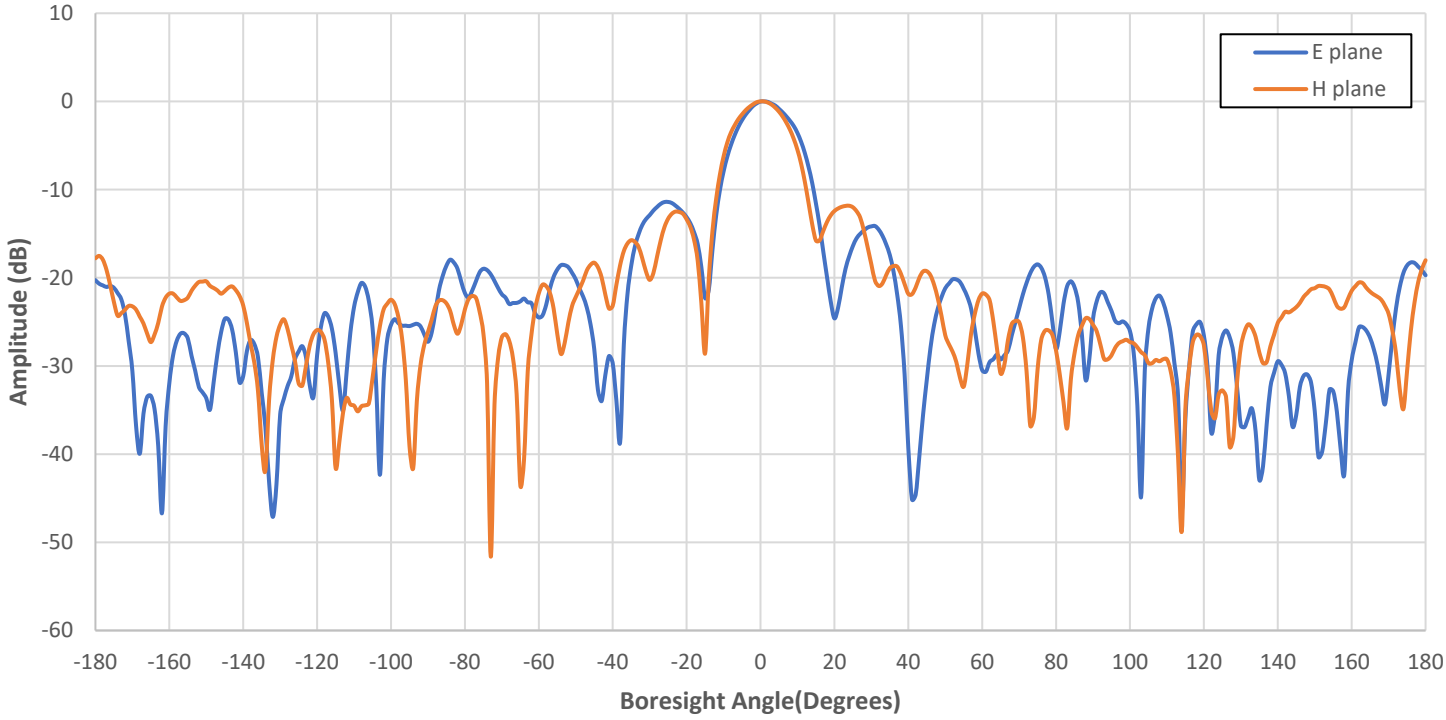
Measured Patterns Port 1 at 0.7 GHz



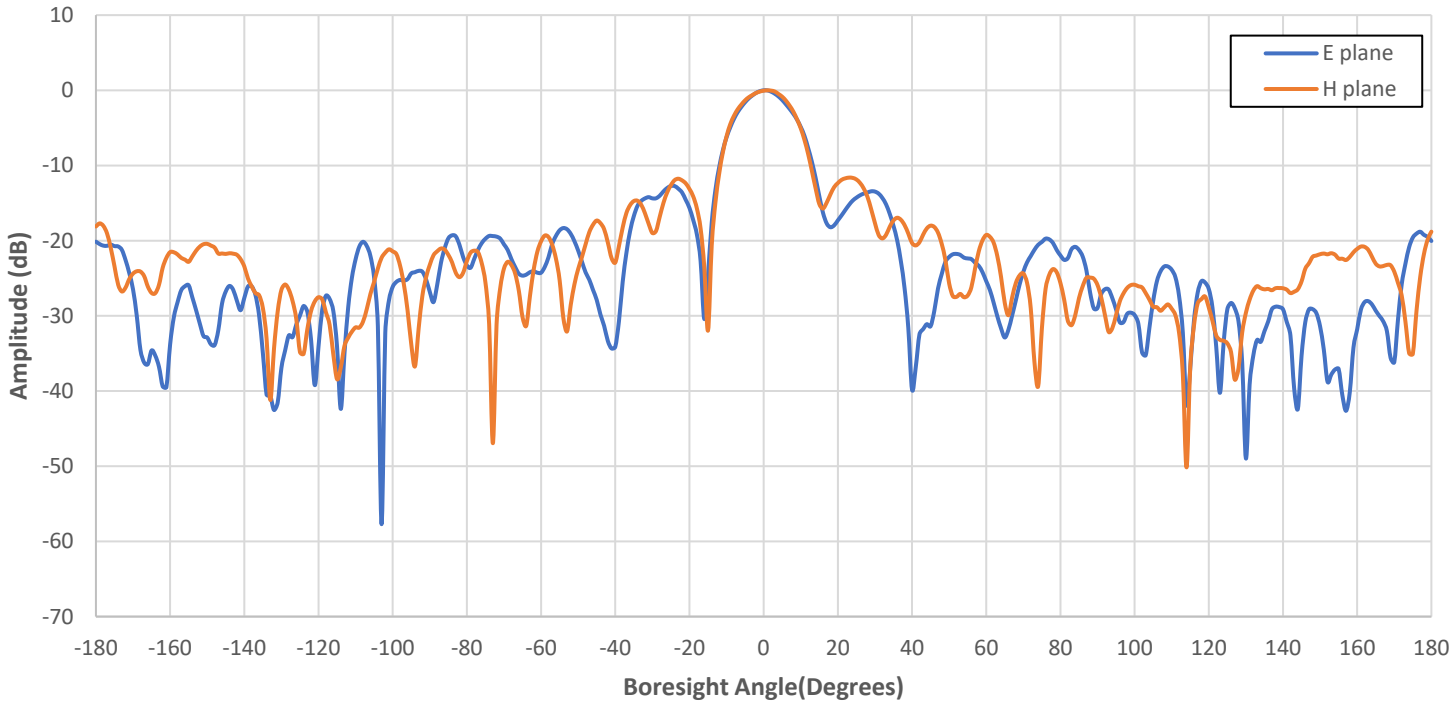
Measured Patterns Port 2 at 0.7 GHz



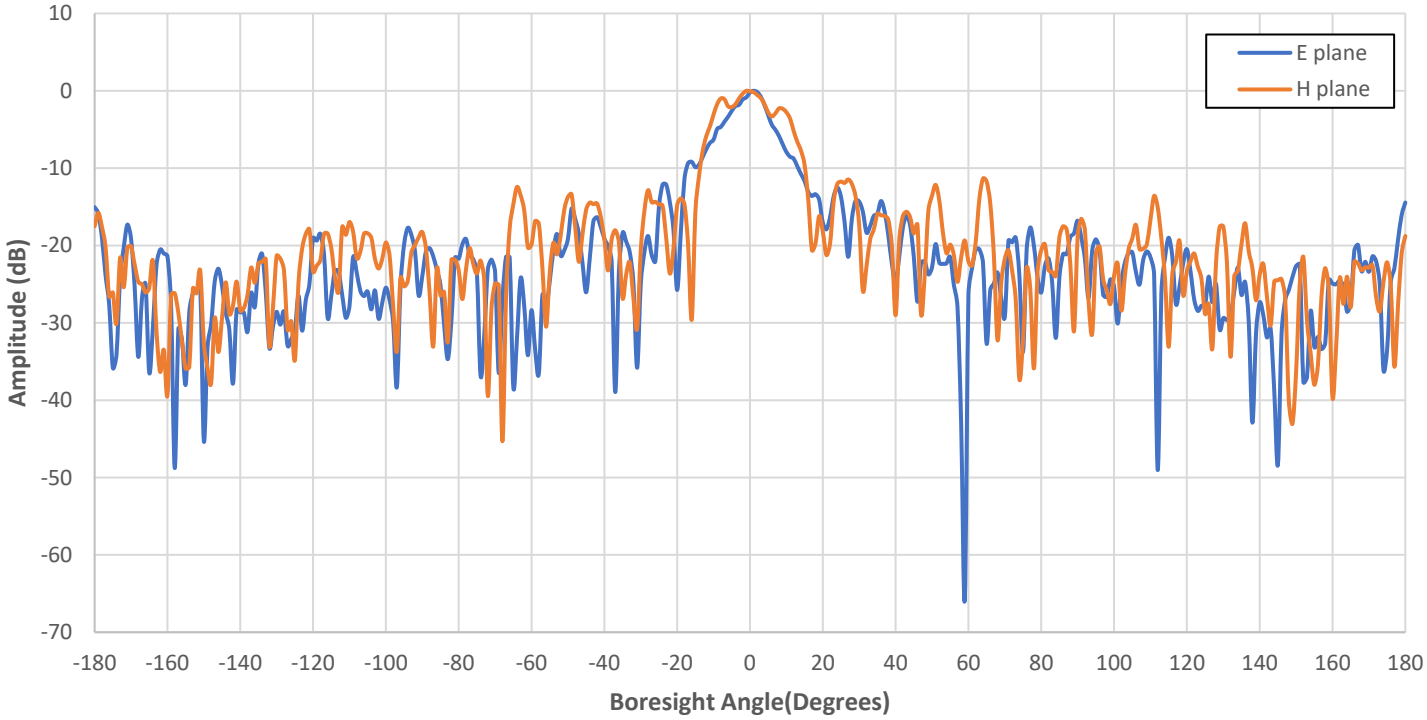
Measured Patterns Port 1 at 9 GHz



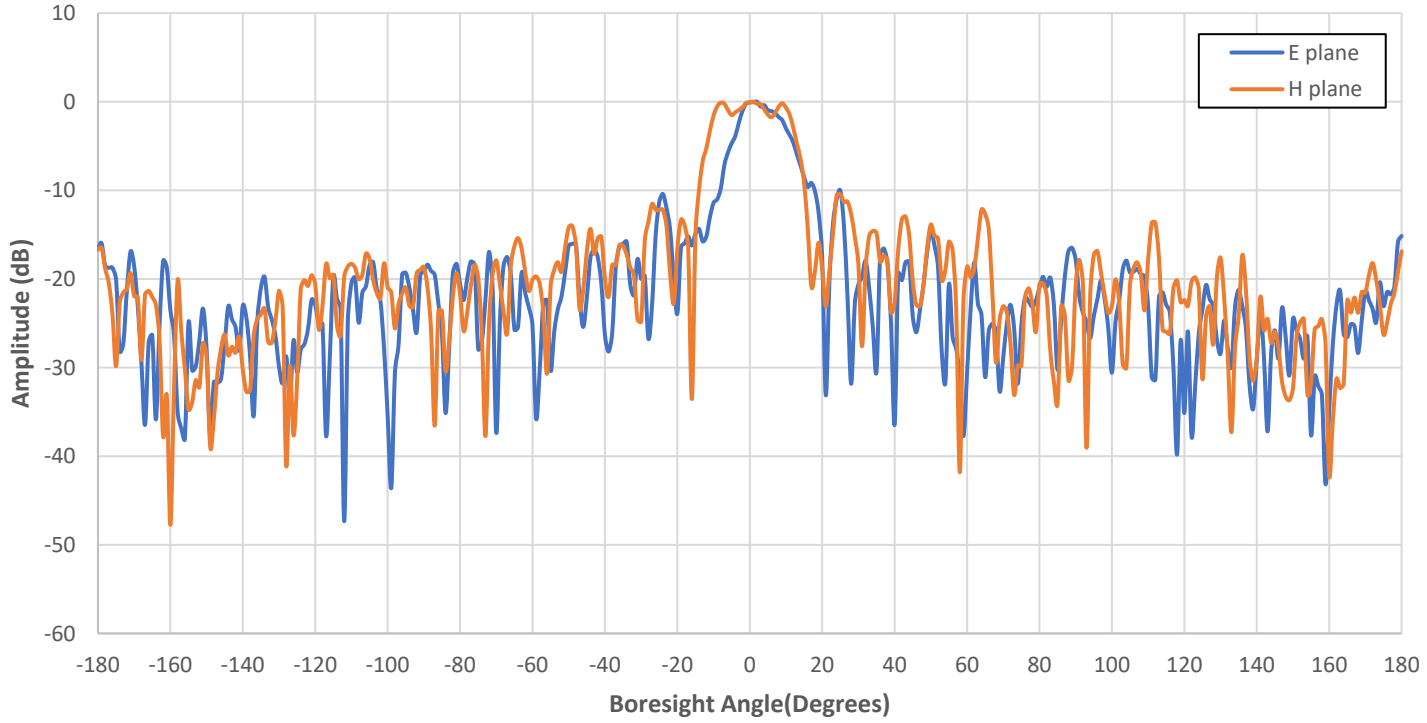
Measured Patterns Port 2 at 9 GHz



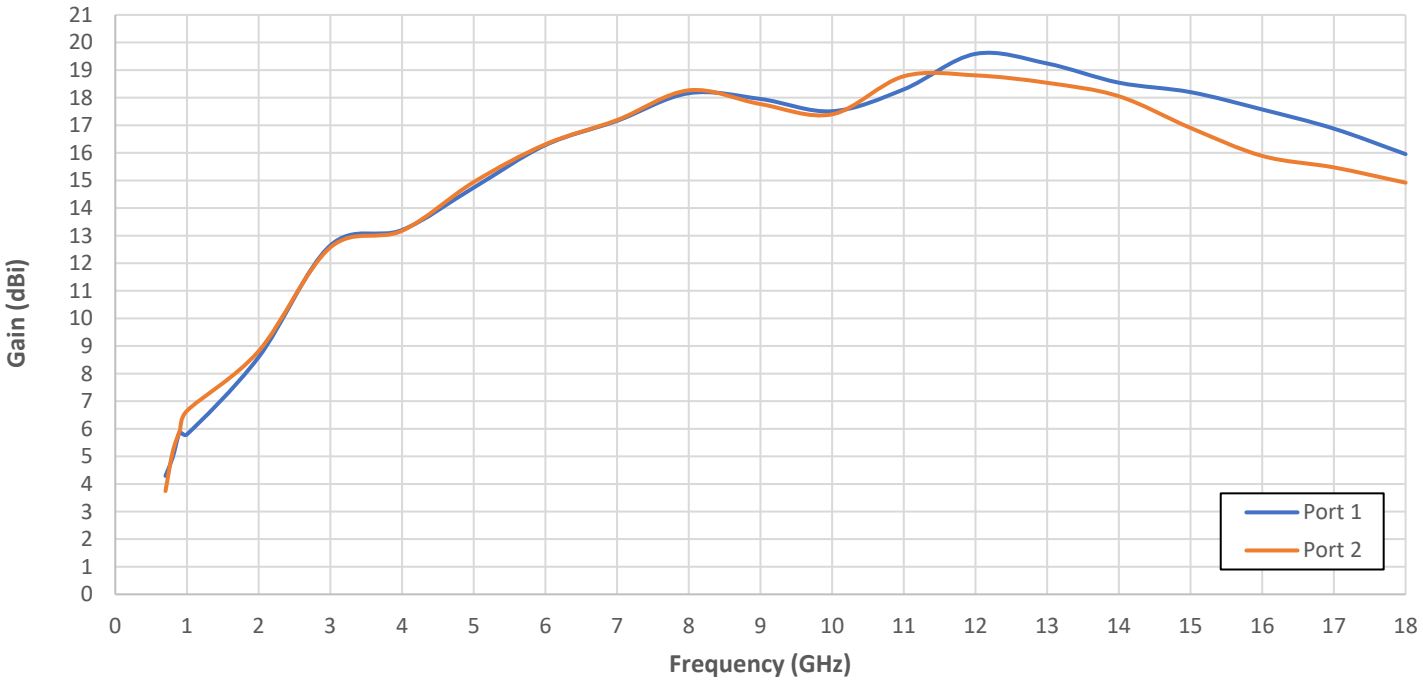
Measured Patterns Port 1 at 18 GHz



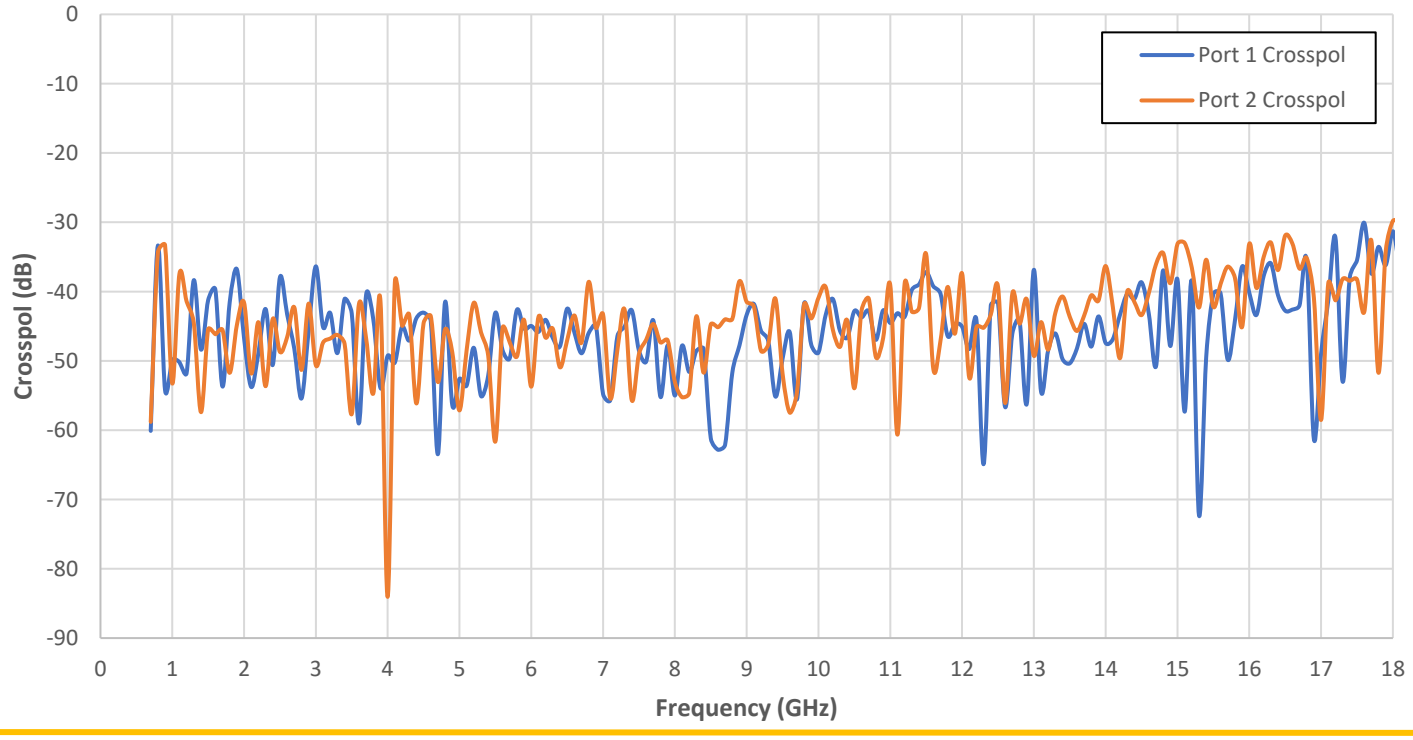
Measured Patterns Port 2 at 18 GHz



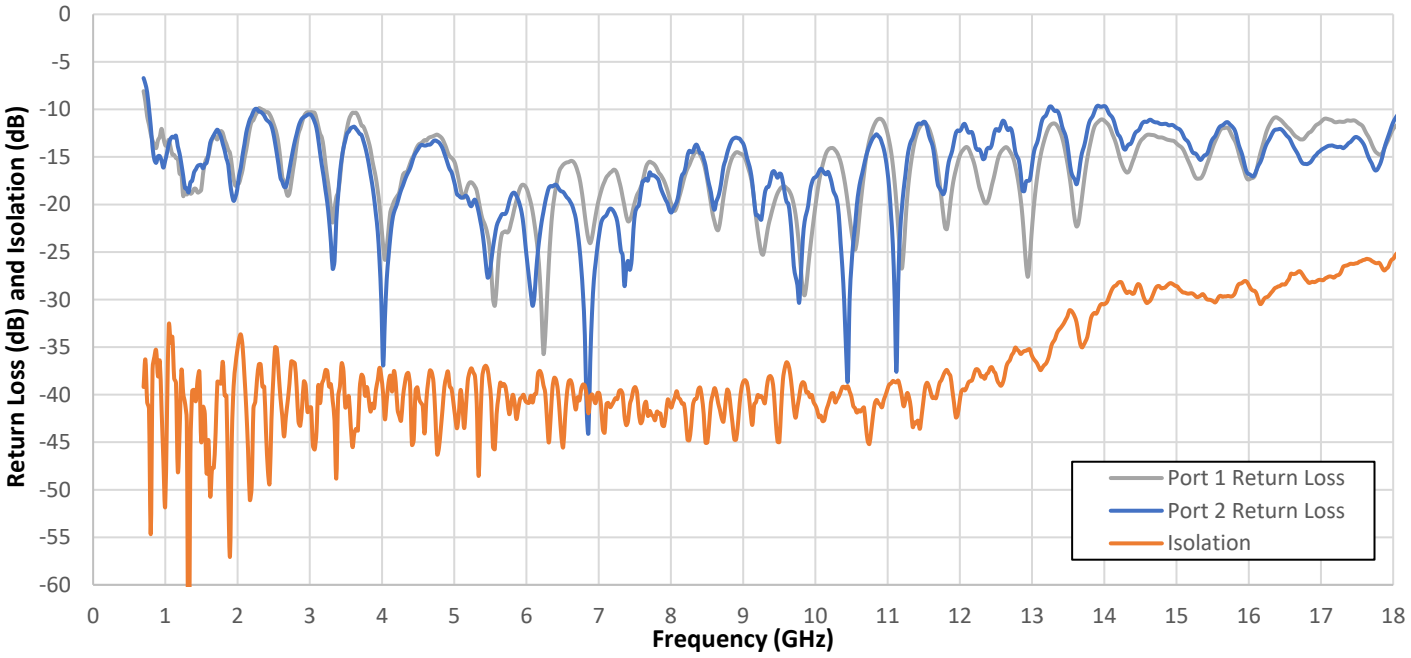
Measured Gain vs Frequency



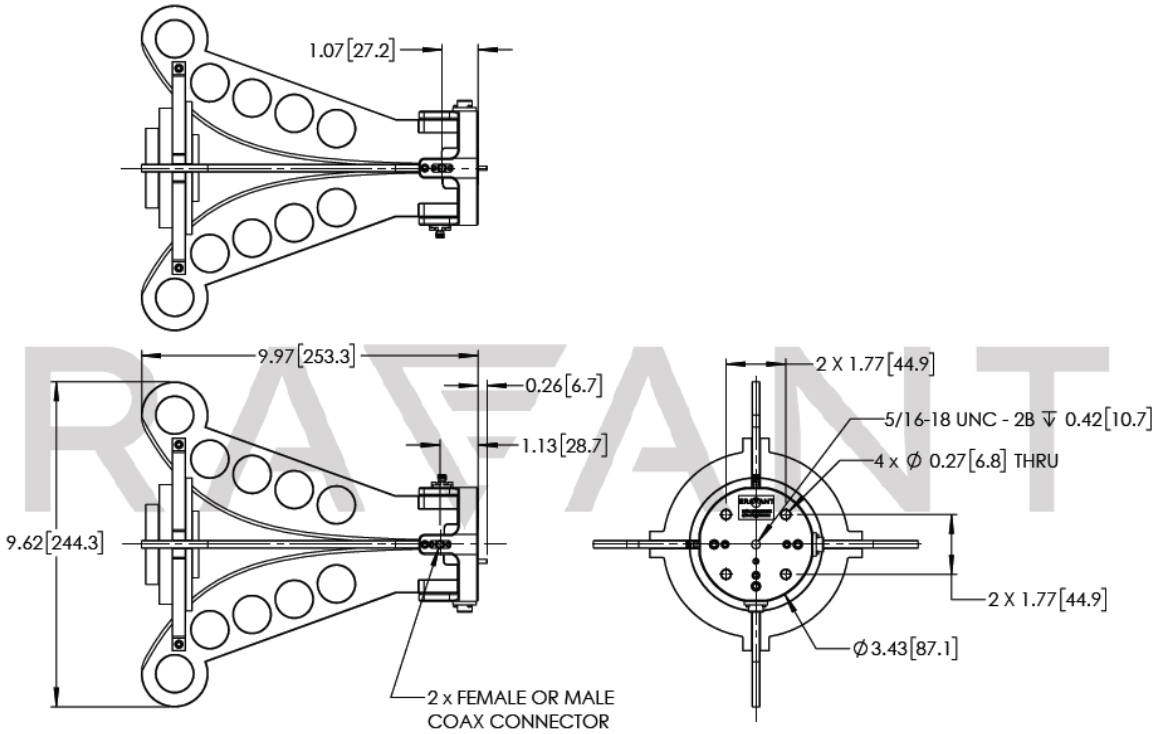
Measured Crosspol vs Frequency



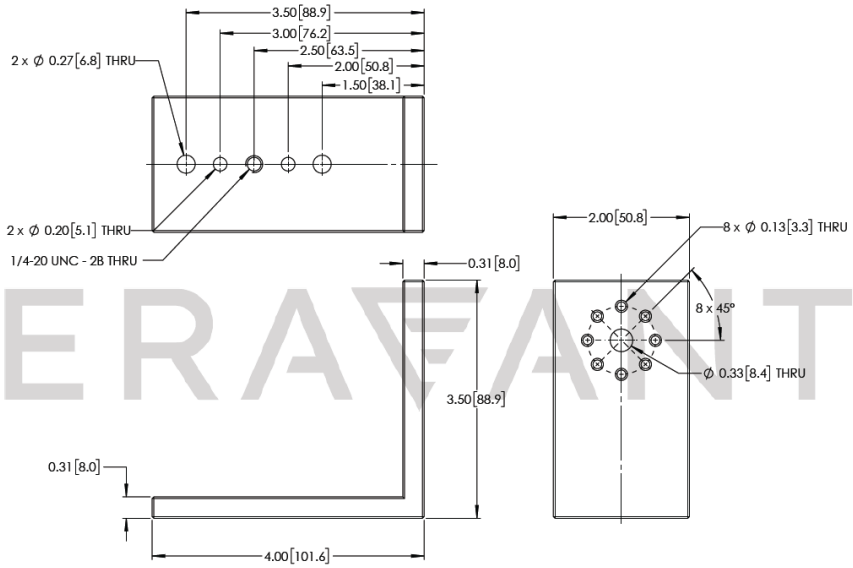
Measured Return loss and Isolation vs Frequency



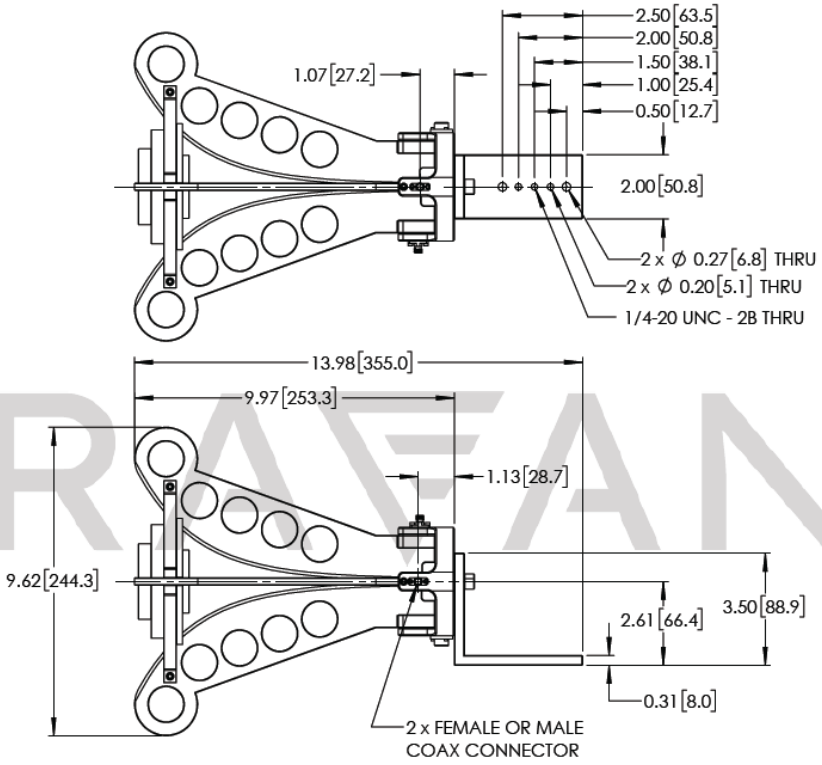
Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



Mounting Bracket Outline:



Antenna with Mounting Bracket Attached Outline:



NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Any foreign objects in the waveguide or antenna will cause performance degradation and may damage or destroy the unit.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended