

SAV-0635331140-2F-U1-QR

Quad Ridged, Dual Polarized Horn Antenna, 6 to 53 GHz

SAV-0635331140-2F-U1-QR is a quad-ridged, dual polarized broadband horn antenna that operates from 6 to 53 GHz. The antenna offers a typical gain of 11 dBi and a typical 3 dB beamwidth of 40° on both the E-plane and H-plane, respectively. The antenna supports both linear and circular polarized waveforms. The antenna includes a mounting plate with a 1/4-20 threaded hole and various other mounting holes for flexible mounting capacity. The RF ports are equipped with two female 2.4 mm connectors.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	6 GHz		53 GHz
Gain		11 dBi	
Polarization		Linear and Circular	
3 dB Beamwidth, E-Plane		40°	
3 dB Beamwidth, H-Plane		40°	
Port to Port Isolation		30 dB	
E-Plane Sidelobe Levels		-10 dB	
H-Plane Sidelobe Levels		-15 dB	
Return Loss		10 dB	
Cross Polarization		25 dBm	
Power Handling			5 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Ports	2.4 mm (F), 2.4 mm (F)
Mounting	Mounting plate with 1/4-20 threaded hole
Material	Aluminum
Antenna Finish	Chem Film (Antenna), Black Anodized (Mounting Plate)
Weight	1.3 Oz
Size	2.20" (L) X 1.76" (W) X 1.76" (H)
Outline	AV-C11-QR

ECCN

EAR99

FEATURES

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

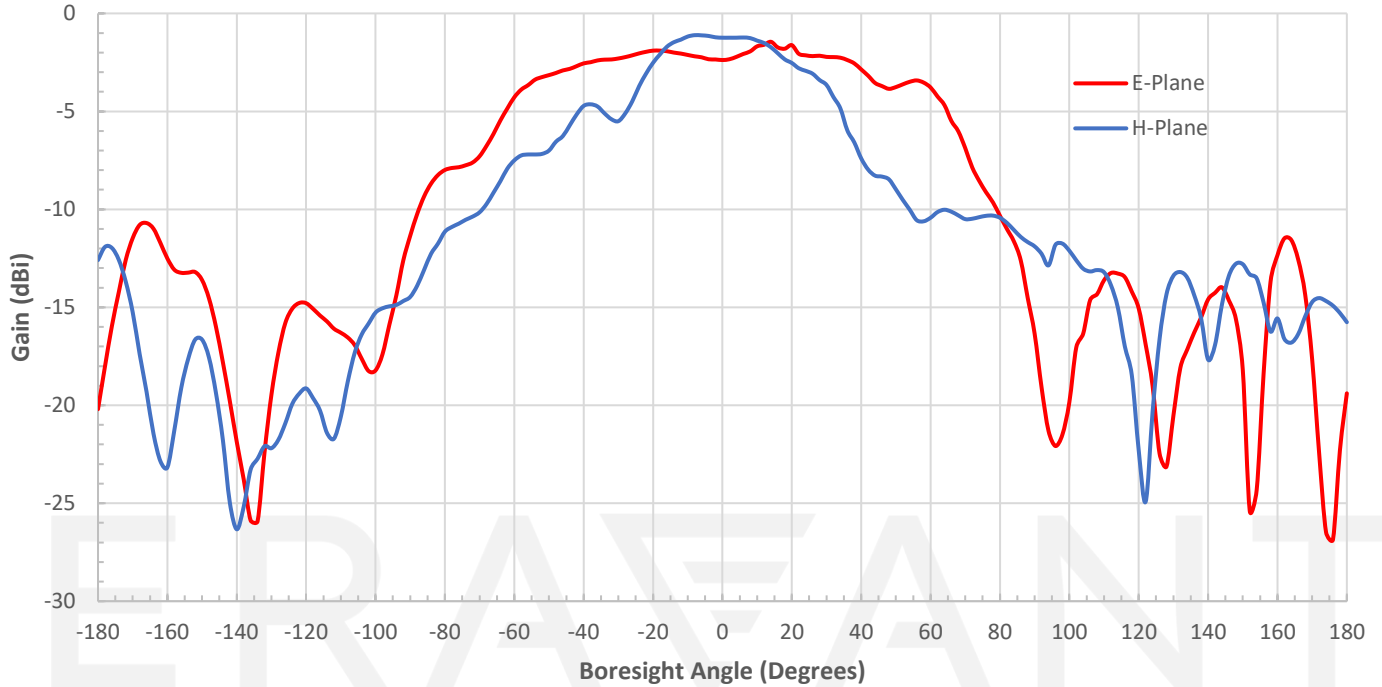
APPLICATIONS

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

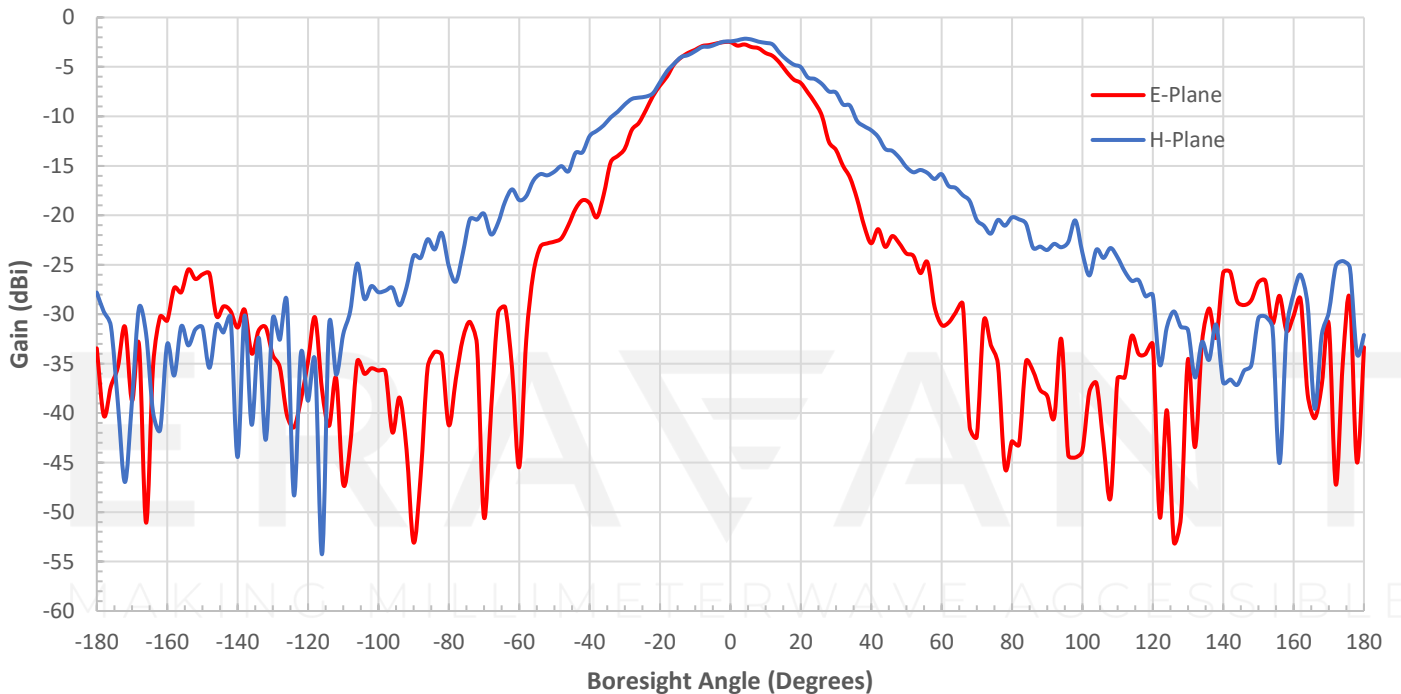
SUPPLEMENTAL DETAILS



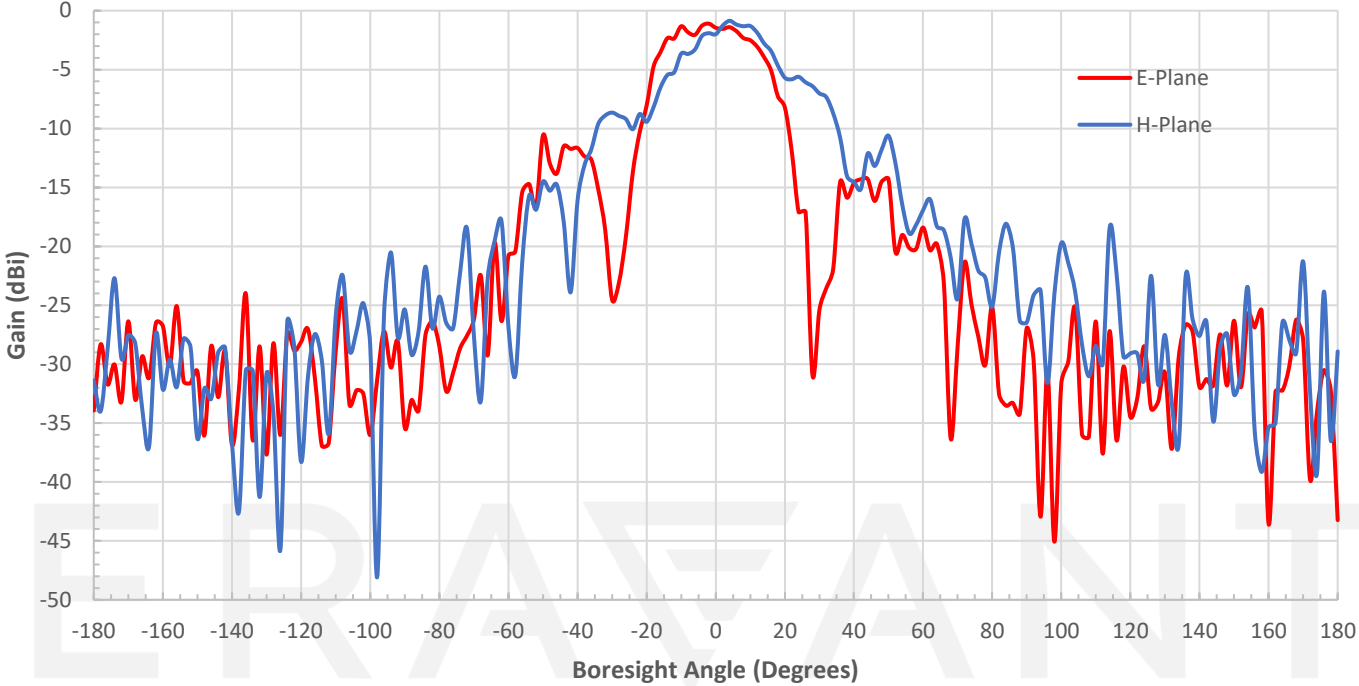
Measured Antenna Pattern @ 6 GHz



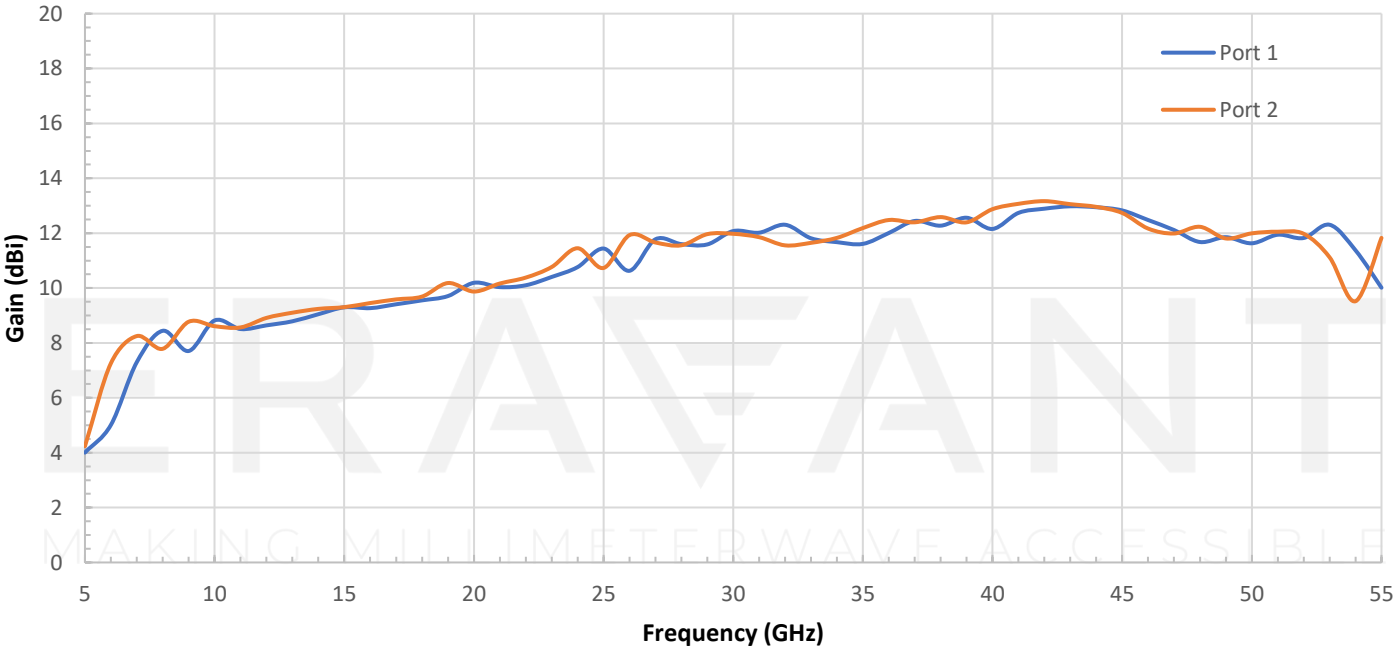
Measured Antenna Pattern @ 30 GHz



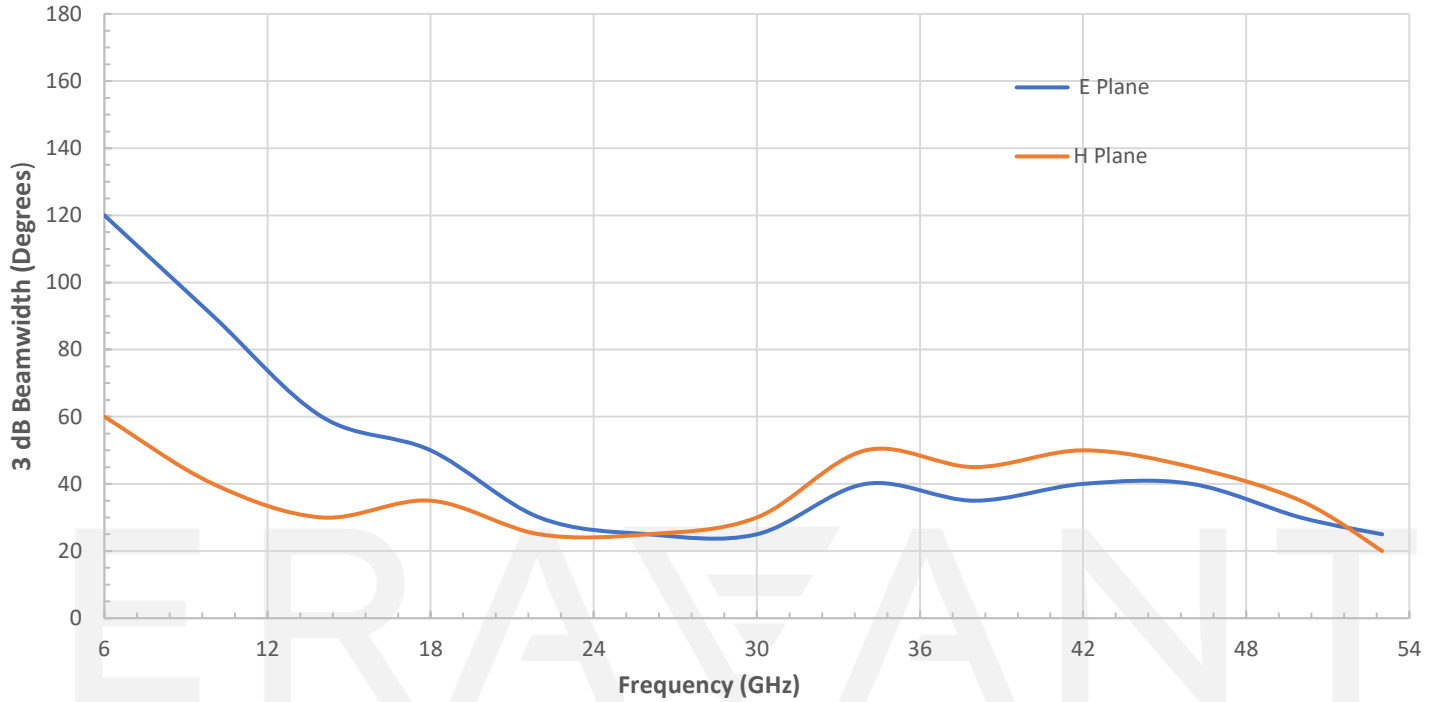
Measured Antenna Pattern @ 53 GHz



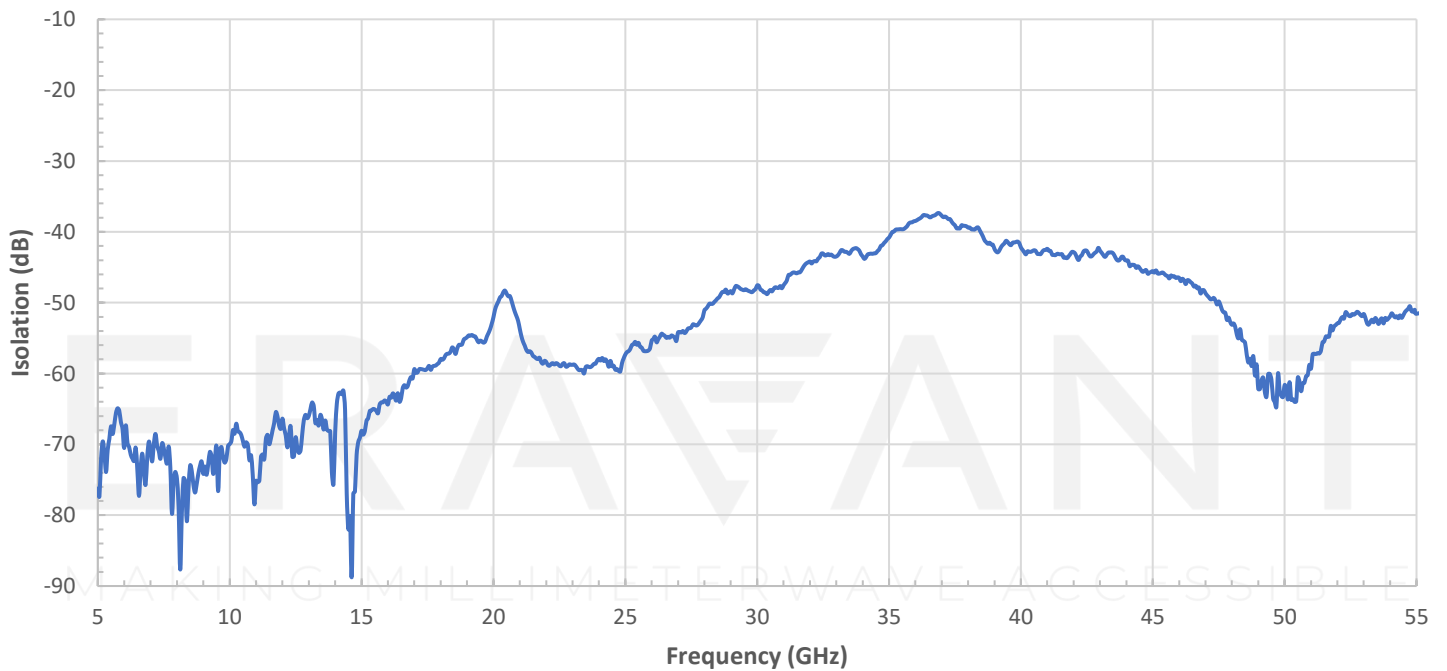
Measured Gain vs. Frequency



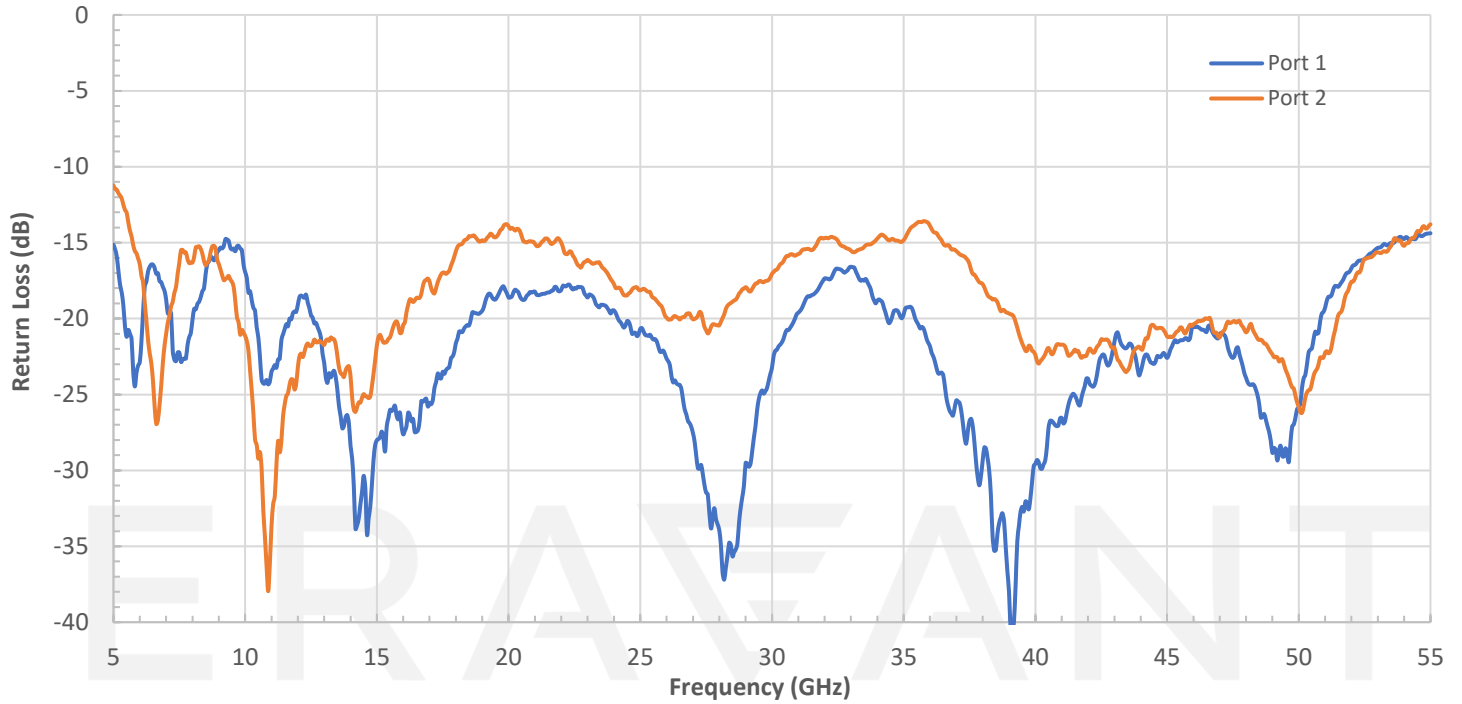
Measured 3 dB Beamwidth vs Frequency



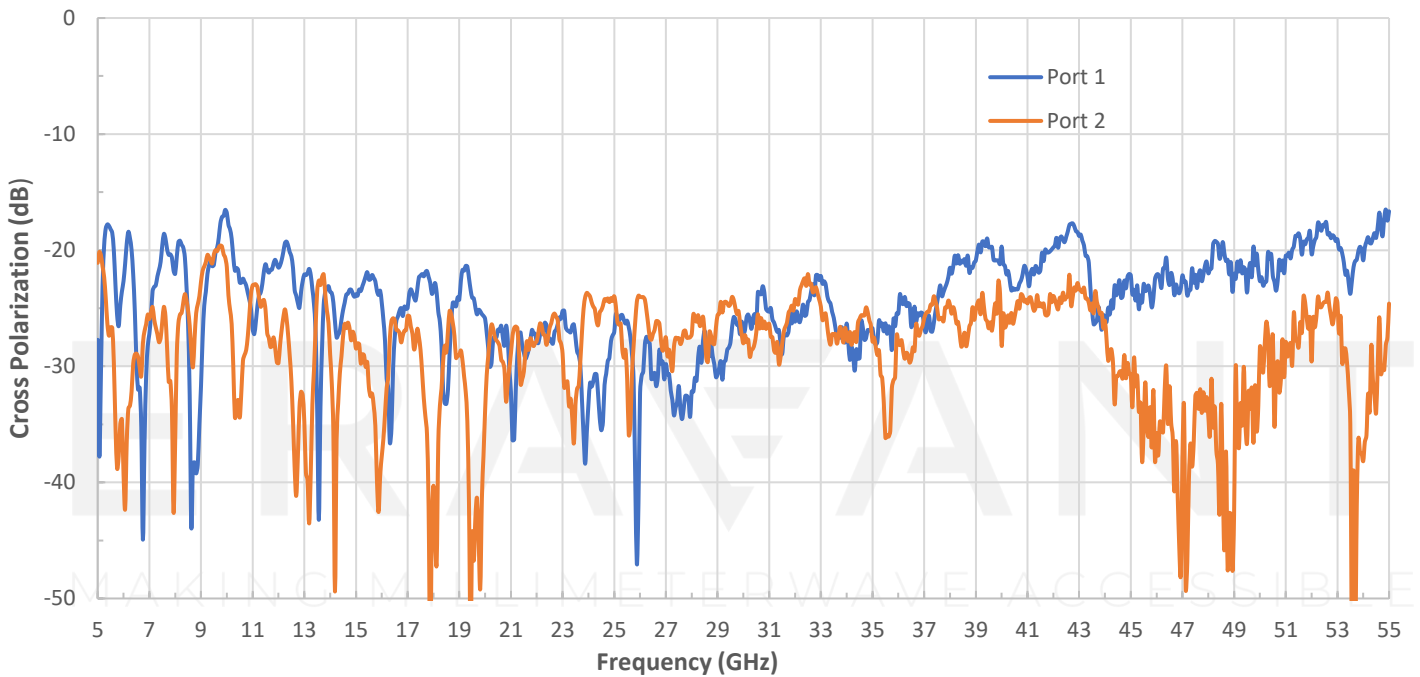
Measured Isolation vs. Frequency



Measured Return Loss vs. Frequency

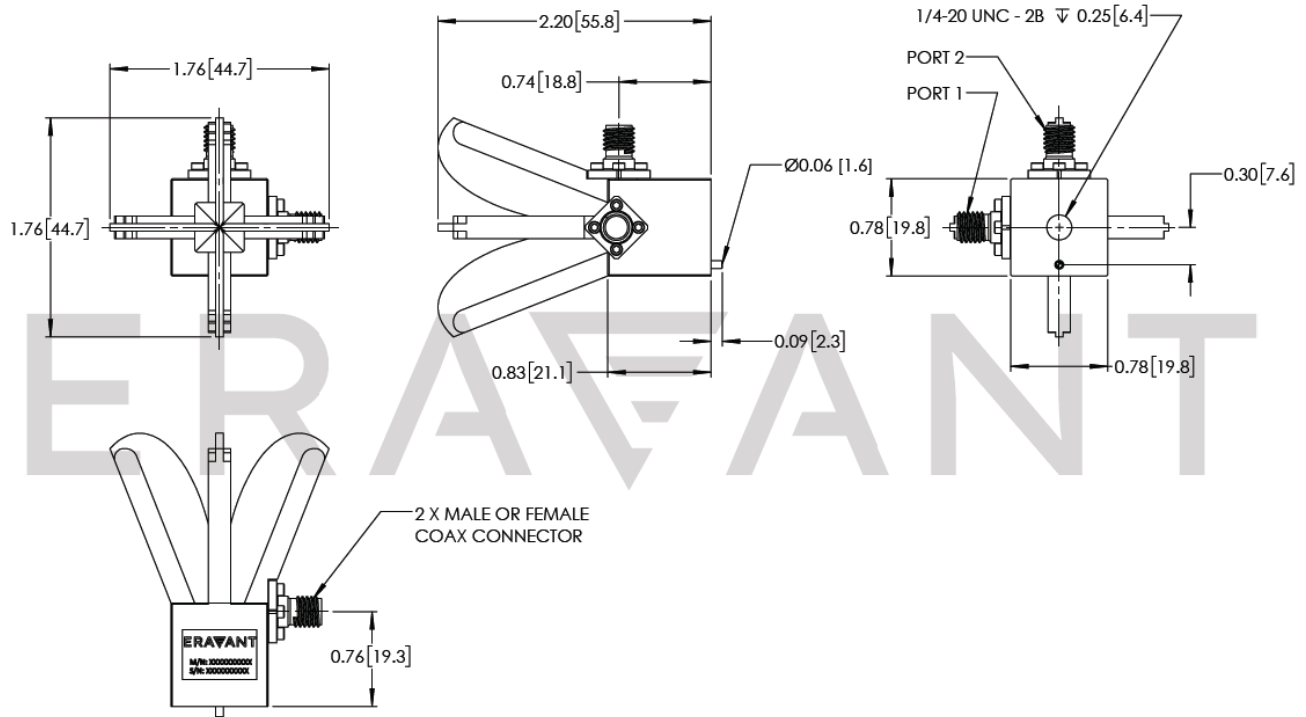


Typical Cross Polarization vs Frequency

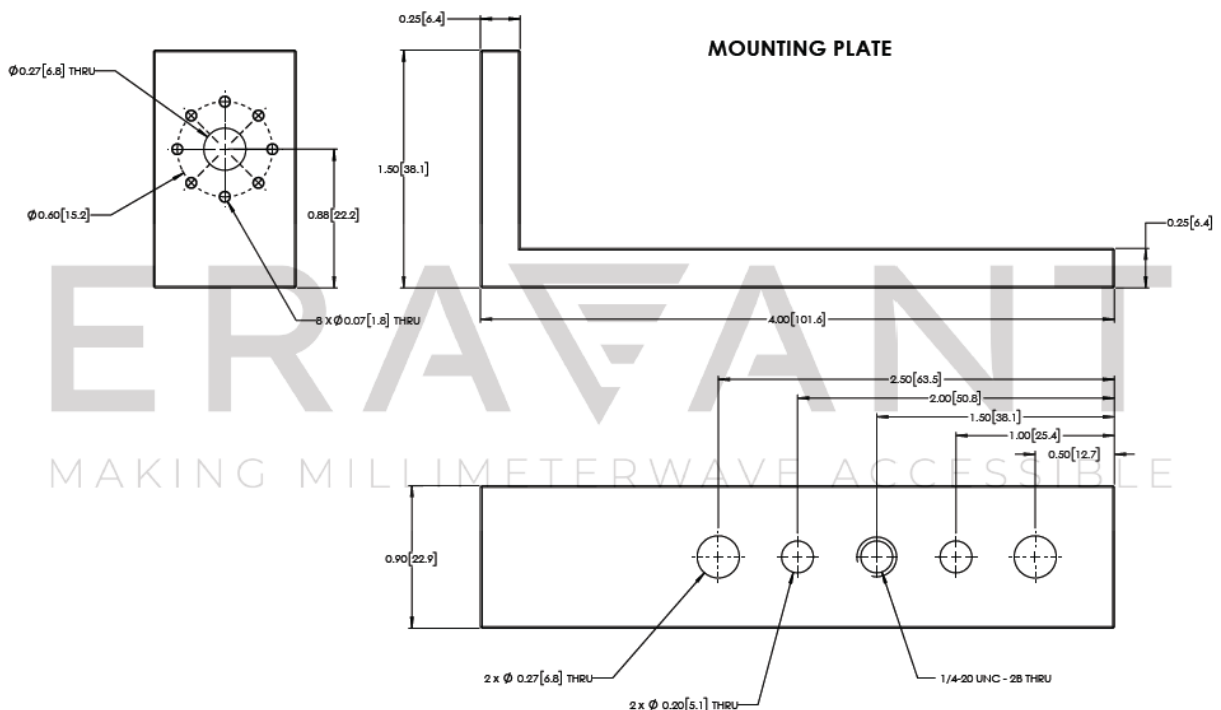


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Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



Antenna Mount Outline:



NOTE:

- Data presented is collected from a sample lot. Actual data may vary slightly unit to unit.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Any foreign objects in the antenna will cause performance degradation and possible device damage.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. **Eravant torque wrench, model SCH-08008-S1, is highly recommended.**

