SAV-0131831240-SF-S1

Dual Ridged Horn Antenna, 1 to 18 GHz

SAV-0131831240-SF-S1 is a dual-ridged broadband horn antenna that operates from 1 to 18 GHz. The antenna offers a typical gain of 12 dBi and a typical 3 dB beamwidth of 45° on the E-plane and 35° and H-plane, respectively. The antenna supports linear polarized waveforms. The antenna features a 5/16-18 threaded hole and a mounting fixture with ¼-20 threaded holes for flexible mounting capacity. The RF port is equipped with a female SMA connector. This antenna with an N connector is available under a different model number.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	1 GHz		18 GHz
Gain		12 dBi	
Polarization		Linear	
3 dB Beamwidth, E-Plane		45°	
3 dB Beamwidth, H-Plane		35°	
Return Loss		10 dB	
Input Impedance		50 Ω	
Power Handling			50 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Port	SMA (F)
Material	Aluminum
Finish	Chem Film
Weight	4.4 lbs
Outline	AV-C12-DR

ECCN

EAR99

FEATURES

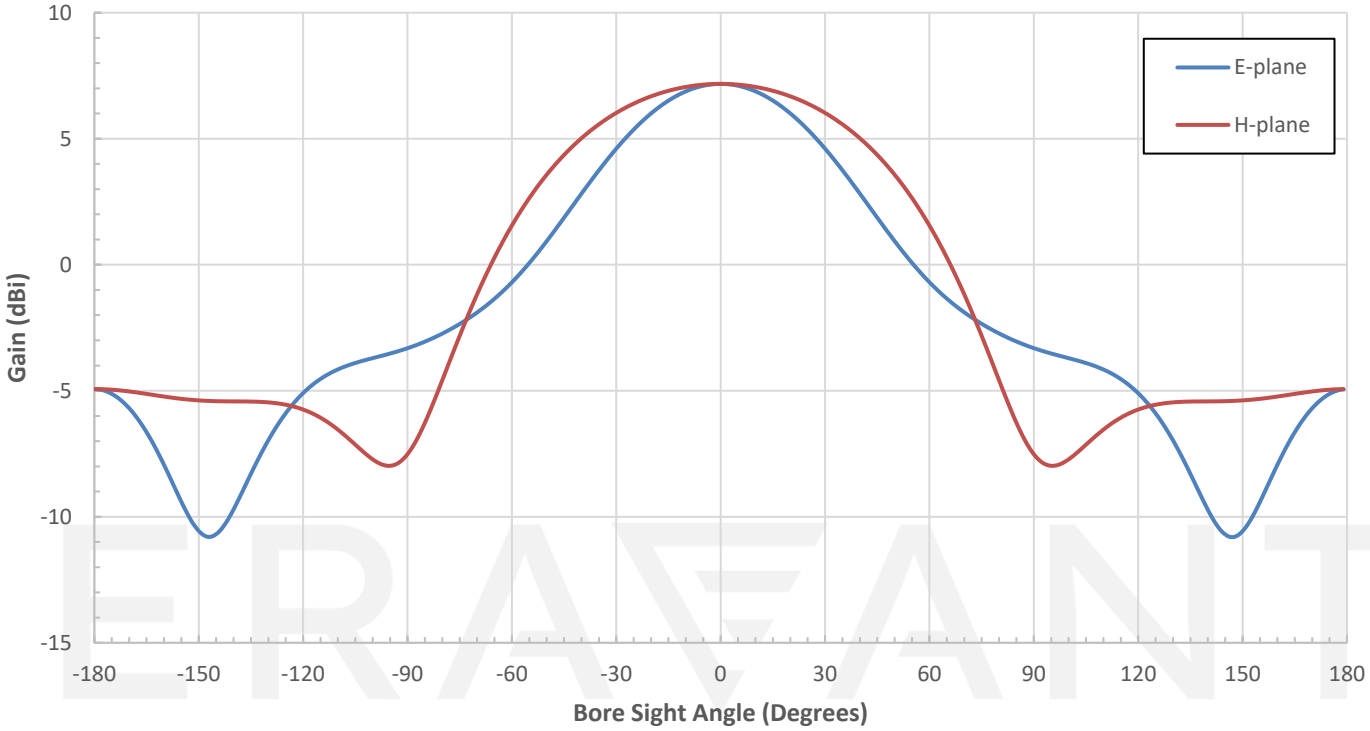
- Coaxial Connector for RF Input
- Broadband Width
- Linear Polarization
- Good Impedance Match
- Bubble Level

APPLICATIONS

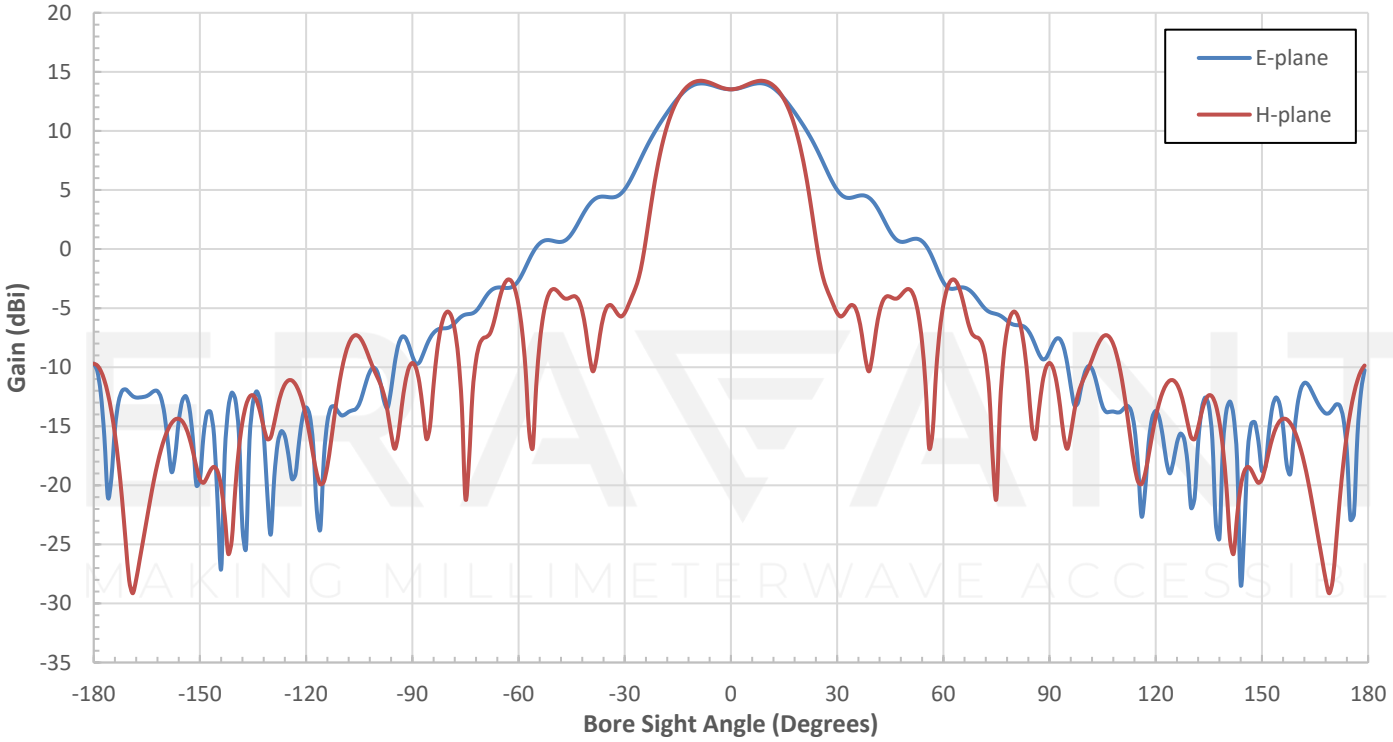
- Antenna Ranges
- Antenna Gain Measurements
- System Setups

SUPPLEMENTAL DETAILS

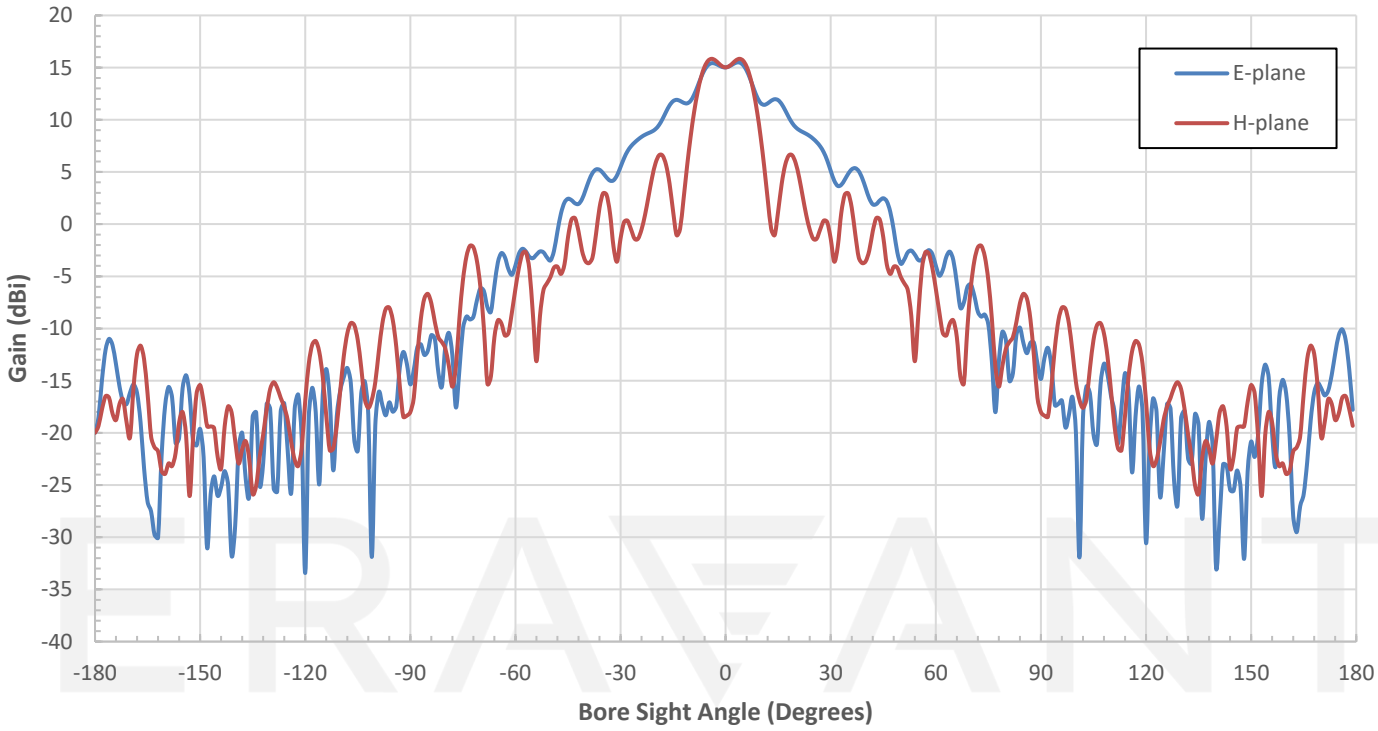
Simulated Antenna Pattern at 1 GHz



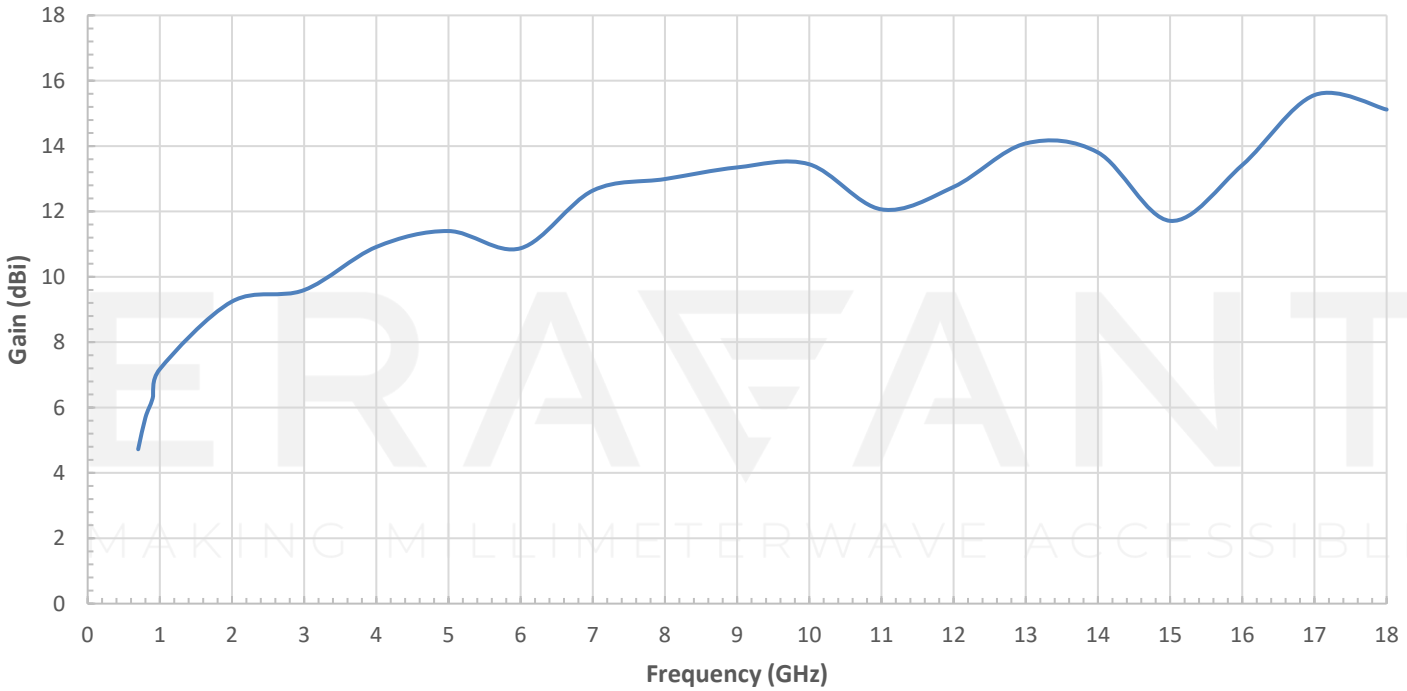
Simulated Antenna Pattern at 10 GHz



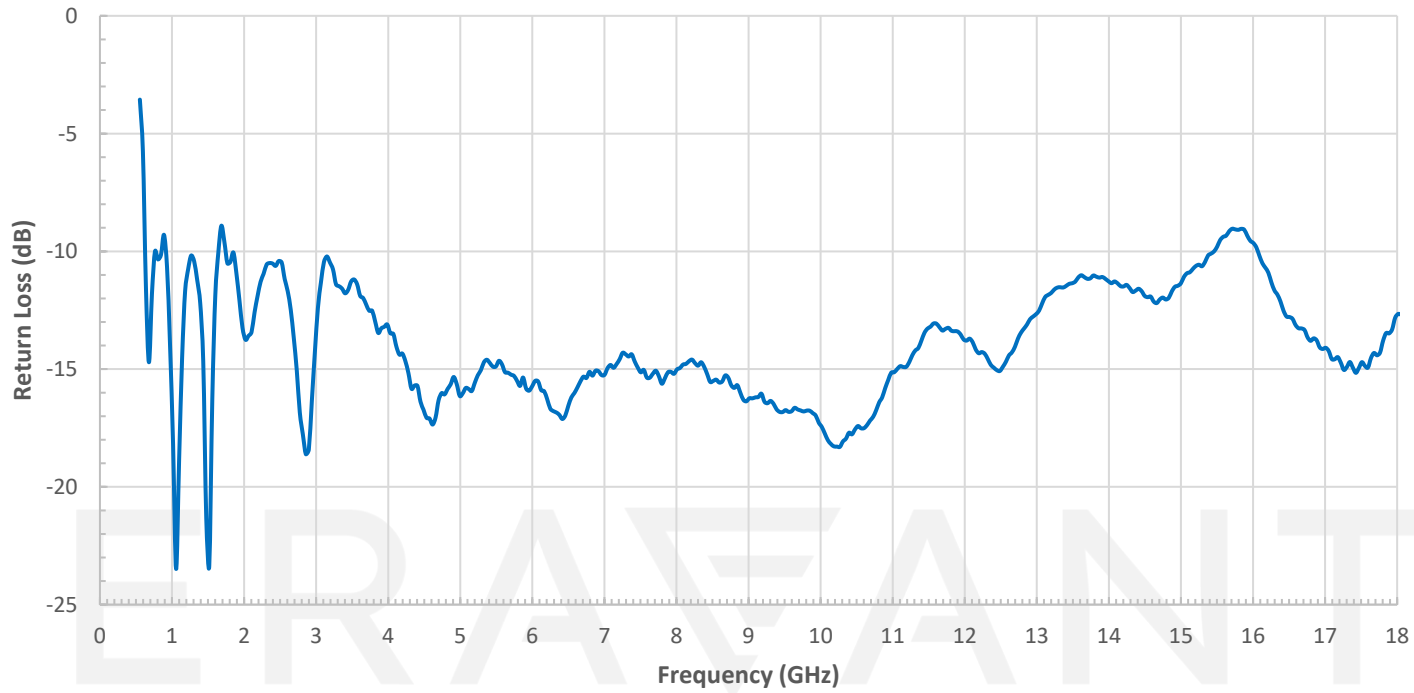
Simulated Antenna Pattern at 18 GHz



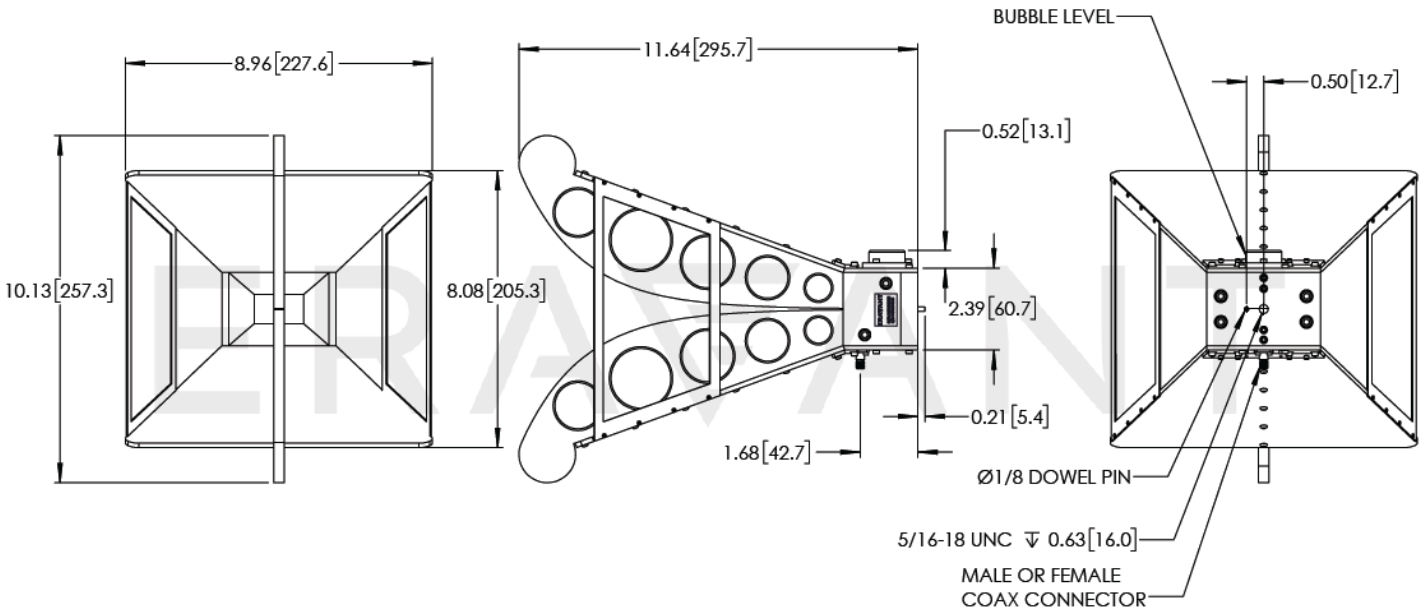
Simulated Gain Vs Frequency



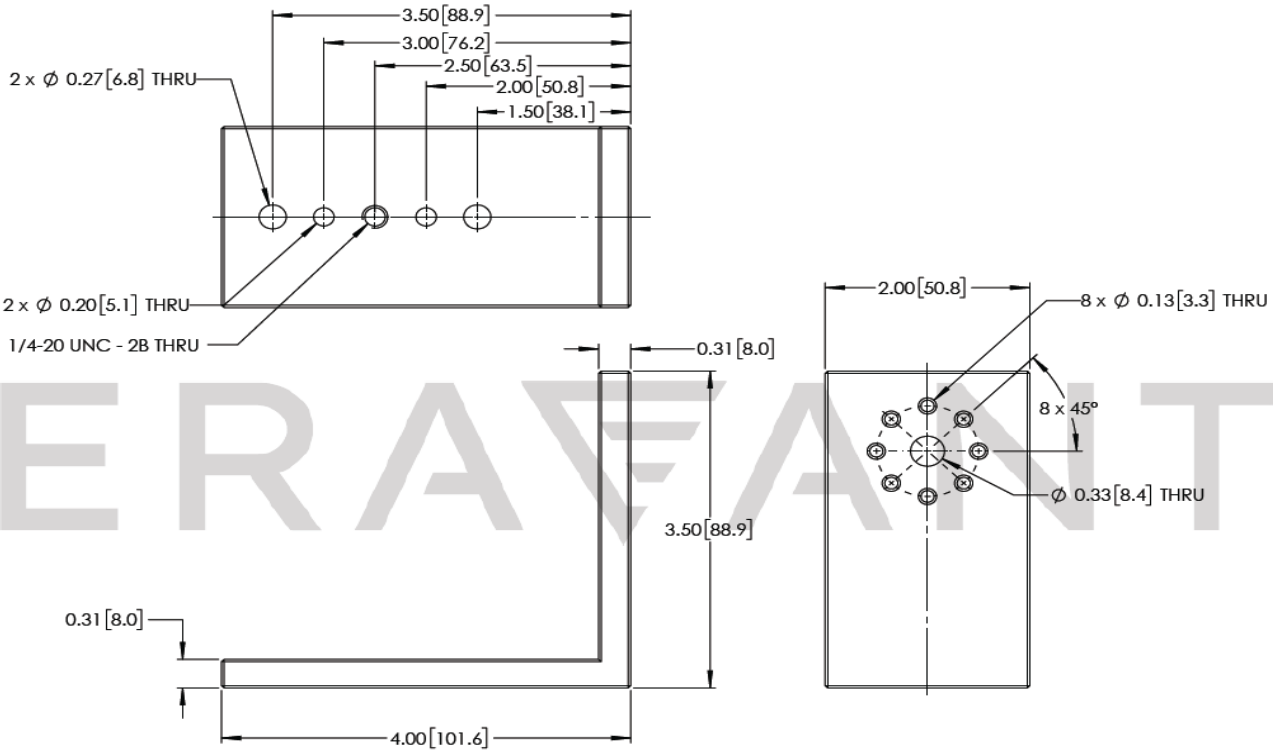
Typical Measured Return Loss Vs Frequency



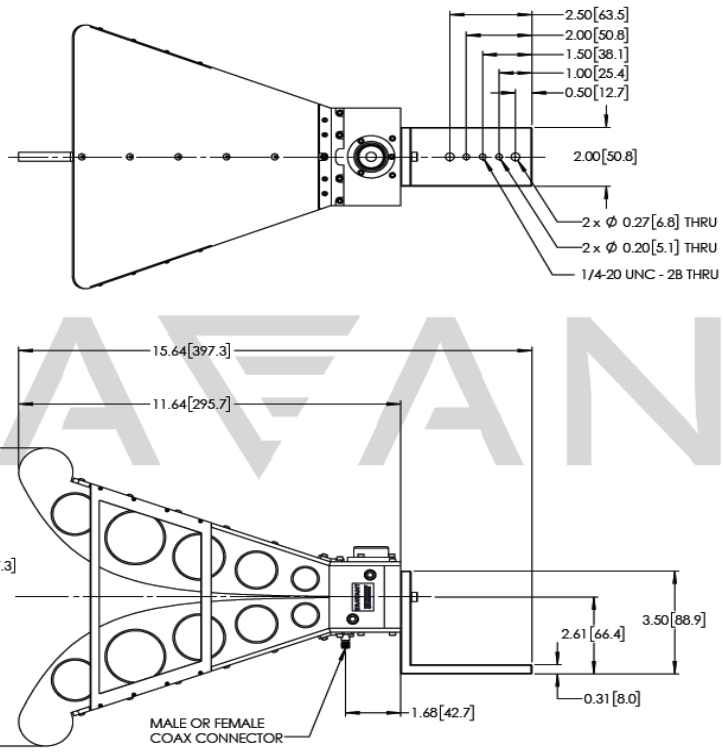
Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



Mounting Bracket Outline:



Antenna with Mounting Bracket Attached Outline:



NOTE:

- For simulated data provided, actual measurement may slightly vary.
- 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.
- 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.
- 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.

MAKING MILLIMETERWAVE ACCESSIBLE