

## SAV-0634431429-2F-S1

## Dual Ridged Horn Antenna, 6 to 44 GHz

**SAV-0634431429-2F-S1** is a dual ridged broadband horn antenna that operates from 6 to 44 GHz. The antenna offers a typical gain of 14 dBi and a typical 3 dB beamwidth of 29 degrees on both the E-plane and H-plane, respectively. The antenna supports linear 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 port is equipped with a 2.4 mm (F) connector.



## Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	6 GHz		44 GHz
Gain		14 dBi	
Polarization		Linear and Circular	
E-Plane 3 dB Beamwidth		29°	
H-Plane 3 dB Beamwidth		29°	
Sidelobe Level, E Plane		-10 dB	
Sidelobe Level, H Plane		-15 dB	
Return Loss		14 dB	
Cross polarization		30 dB	
Power Handling			10 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

## Mechanical Specifications:

Item	Specification
Antenna Ports	2.4mm (F)
Mounting	Mounting Bracket with 1/4-20 Threaded Hole
Material	Aluminum
Finish	Chem Film (Antenna), Black Anodized (Mounting Bracket)
Weight	1.5 oz
Outline	AV-C14-DR-2

## ECCN

EAR99

## FEATURES

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

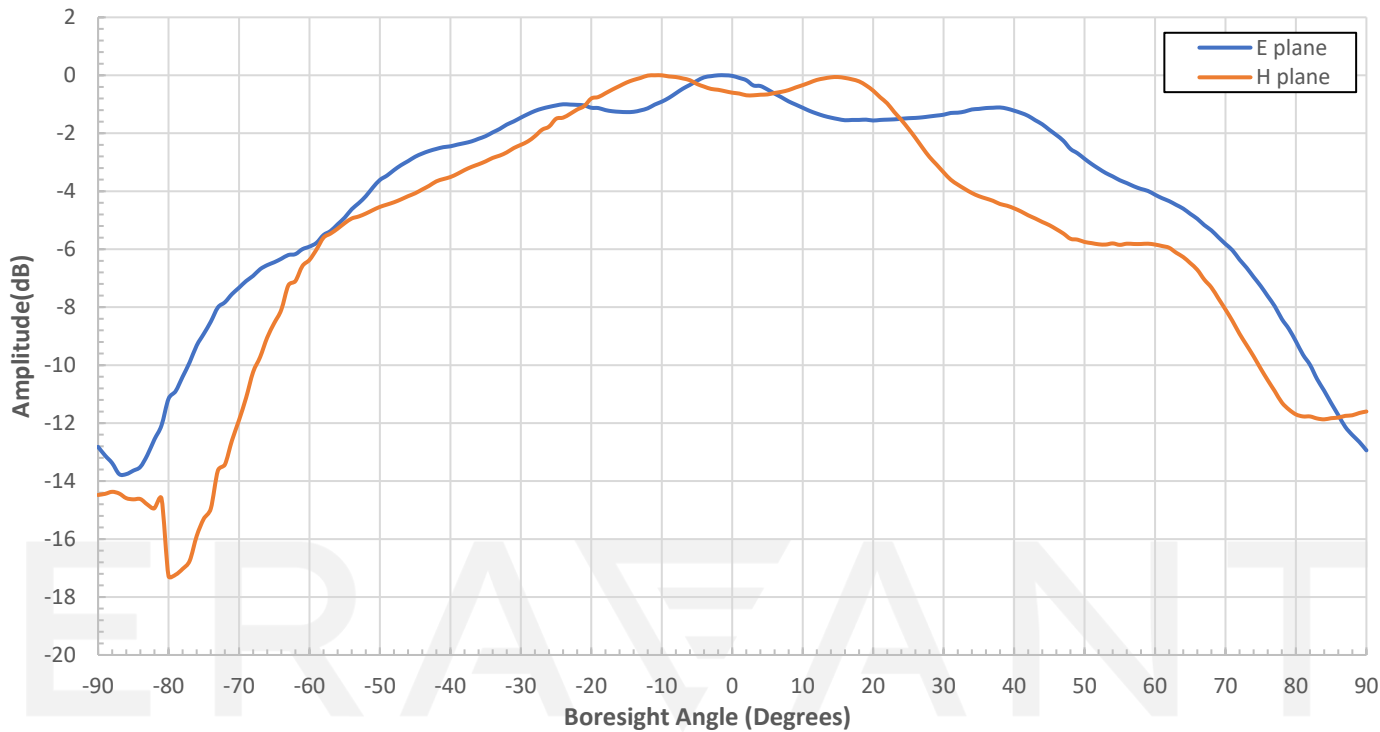
## APPLICATIONS

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

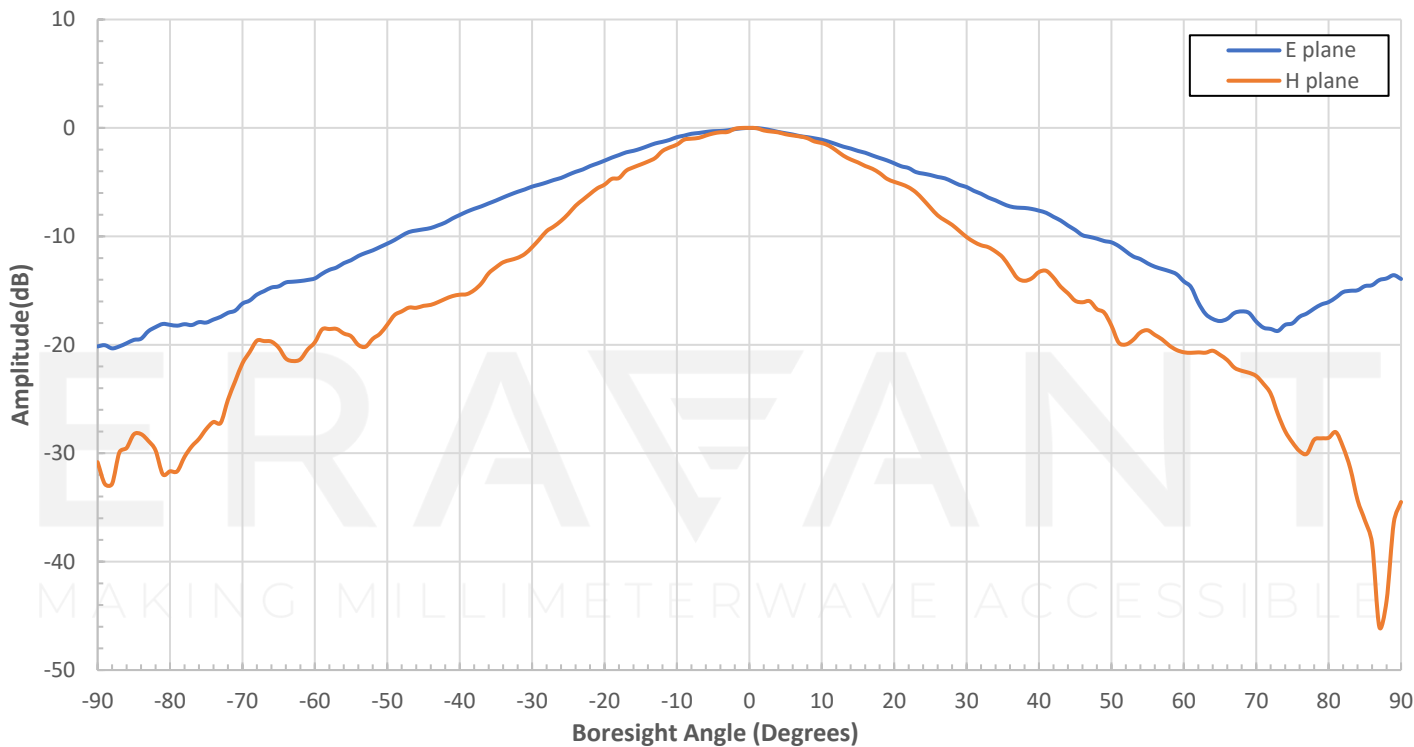
## SUPPLEMENTAL DETAILS



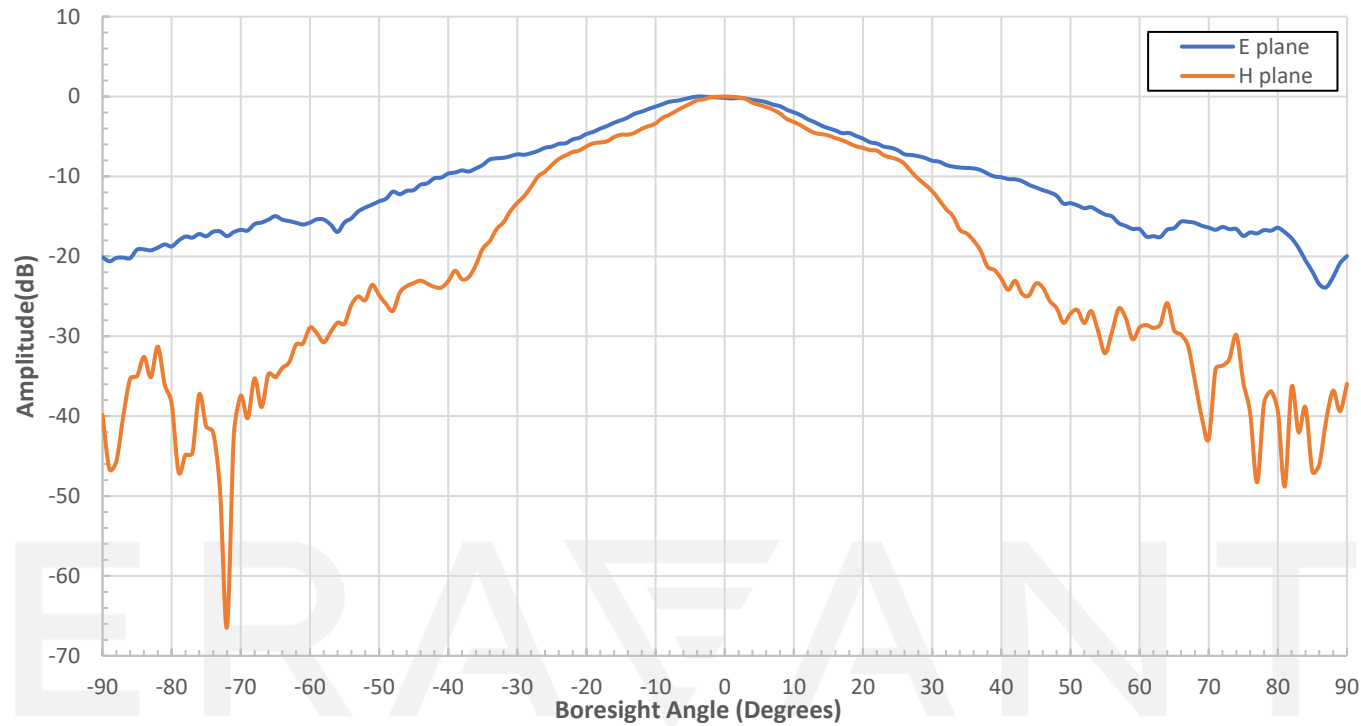
Measured Patterns at 6 GHz



Measured Patterns at 25 GHz

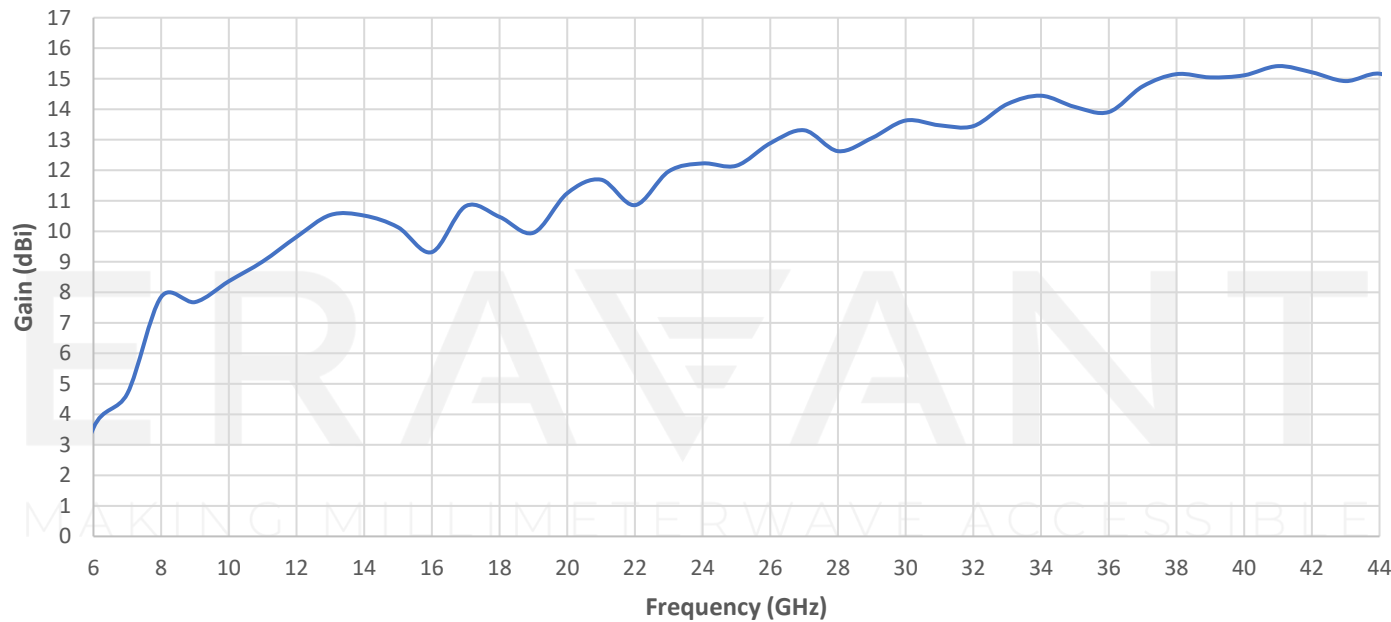


Measured Patterns at 44 GHz



MAKING MILLIMETERWAVE ACCESSIBLE

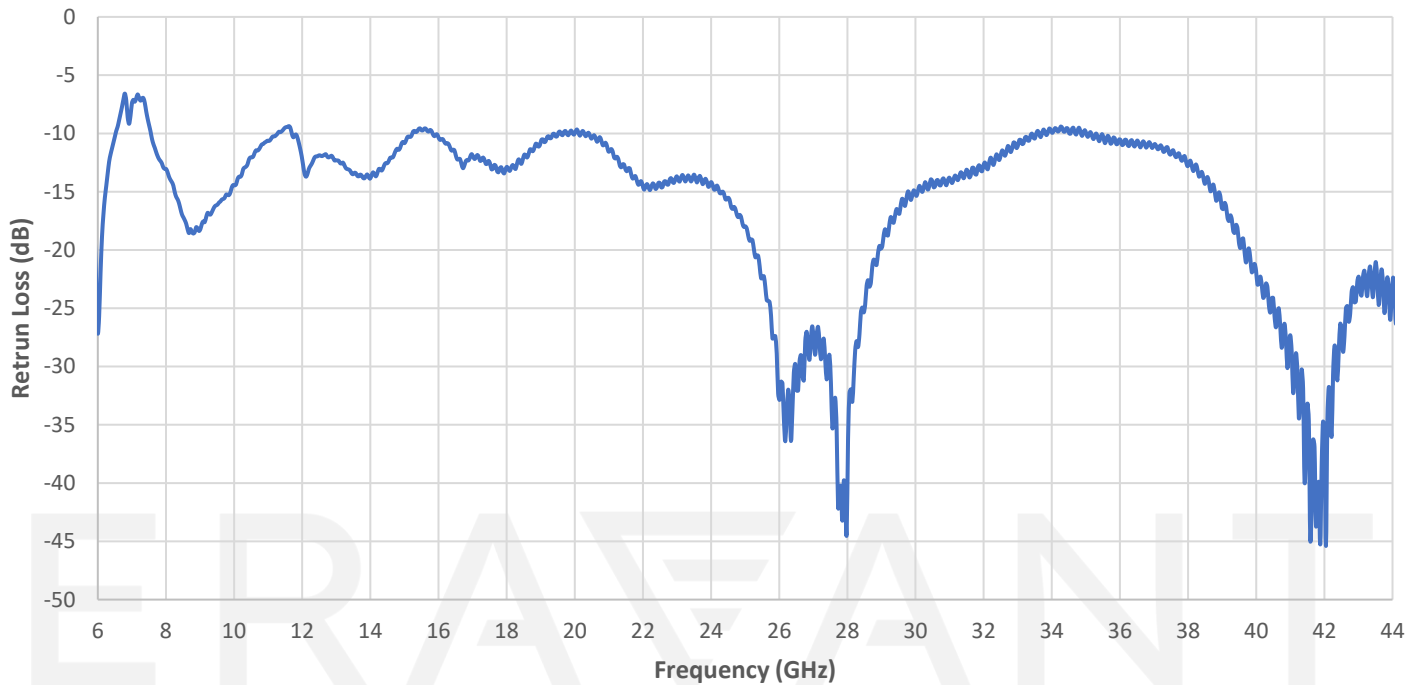
Measured Gain vs Frequency



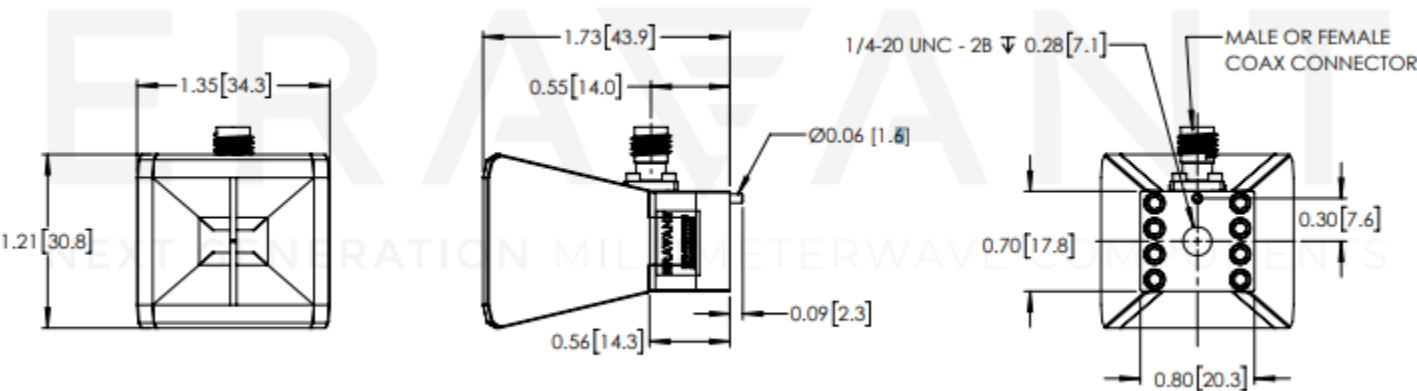
MAKING MILLIMETERWAVE ACCESSIBLE

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Measured Return Loss vs Frequency



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



**MOUNTING PLATE**

Technical drawing showing the front and top views of the MOUNTING PLATE with dimensions in inches [mm].

**Front View Dimensions:**

- Overall Width: 4.00 [101.6]
- Overall Height: 1.50 [38.1]
- Top Flange Width: 0.25 [6.4]
- Bottom Flange Width: 0.25 [6.4]
- Mounting Hole Pattern: 8 x  $\varnothing 0.07$  [1.8] THRU
- Central Hole:  $\varnothing 0.60$  [15.2]
- Outer Hole:  $\varnothing 0.27$  [6.8] THRU

**Top View Dimensions:**

- Overall Length: 2.50 [63.5]
- Overall Width: 0.90 [22.9]
- Mounting Hole Spacing (from left edge): 2.00 [50.8], 1.50 [38.1], 1.00 [25.4], 0.50 [12.7]
- Mounting Hole Pattern: 2 x  $\varnothing 0.27$  [6.8] THRU, 2 x  $\varnothing 0.20$  [5.1] THRU, 1/4-20 UNC - 2B THRU

- Test data provided 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.
- Picture shown does not represent the actual unit. The outline shows the most accurate structure of the final model.

- Any foreign objects in the antenna will cause performance degradation and may damage or destroy the unit.