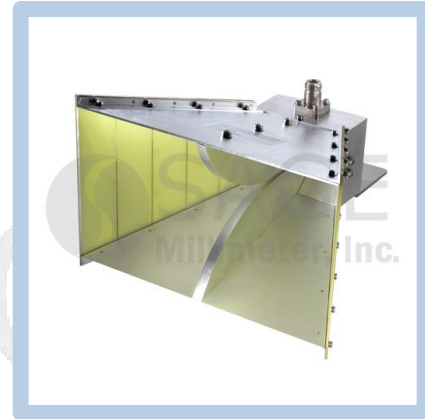




## Dual Ridged Horn Antenna, 1 to 18 GHz

### Description:

**Model SAV-0131831040-NF-U2** is a dual ridged horn antenna that operates from 1 GHz to 18 GHz. The antenna offers 10 dBi nominal gain and a typical half power beamwidth of 45 degrees on the E-plane and 35 degrees on the H-plane. The typical cross polarization is 20 dB. The antenna supports linear polarization waveforms. The RF connector of this model is an N female coax connector. However, an SMA female coax connector is available under a different model number.



### Features:

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

### Applications:

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	1 GHz		18 GHz
Gain		10 dBi	
Polarization		Linear	
3 dB Beamwidth, E-Plane		45°	
3 dB Beamwidth, H-Plane		35°	
Cross Polarization		20 dB	
Return Loss		10 dB	
Input Impedance		50 Ohm	
Power Handling			200 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

### Mechanical Specifications:

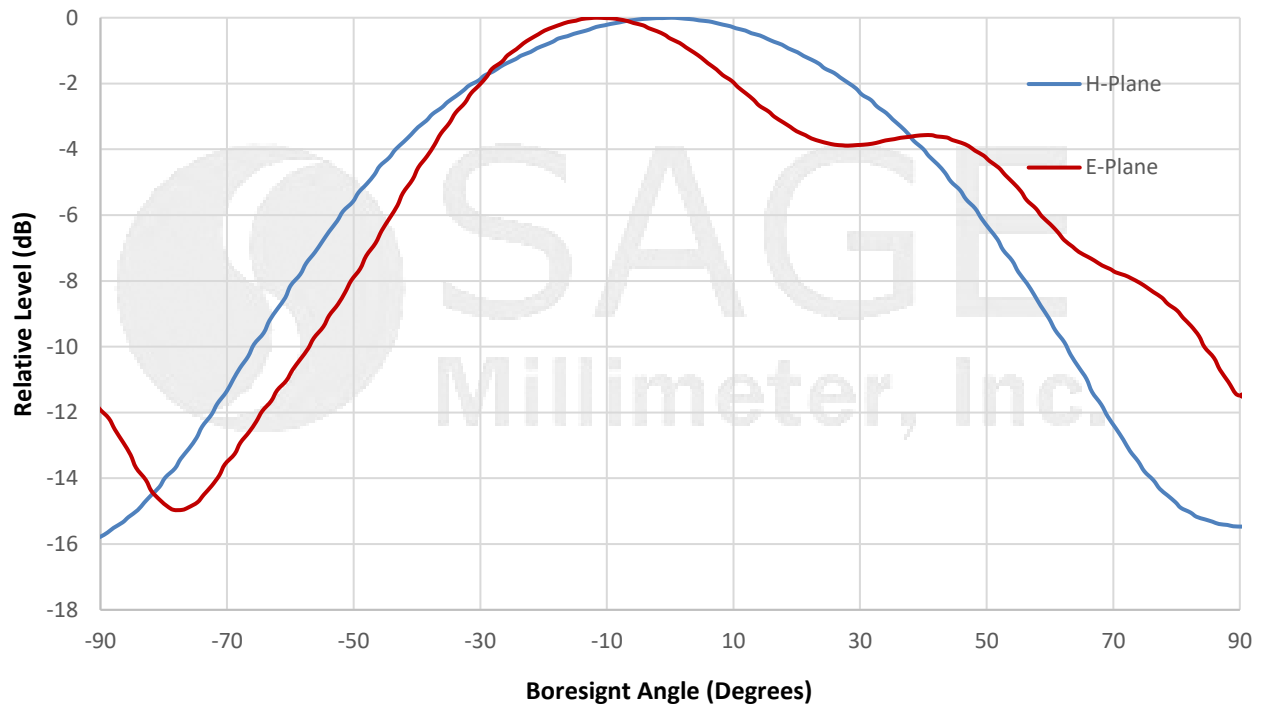
Item	Specification
Antenna Port	N (F)
Material	Aluminum
Finish	Chem Film
Weight	2.4 Lbs
Size	11.18" (L) X 9.63" (W) X 6.30" (H)
Outline	AV-C10-DR-H1



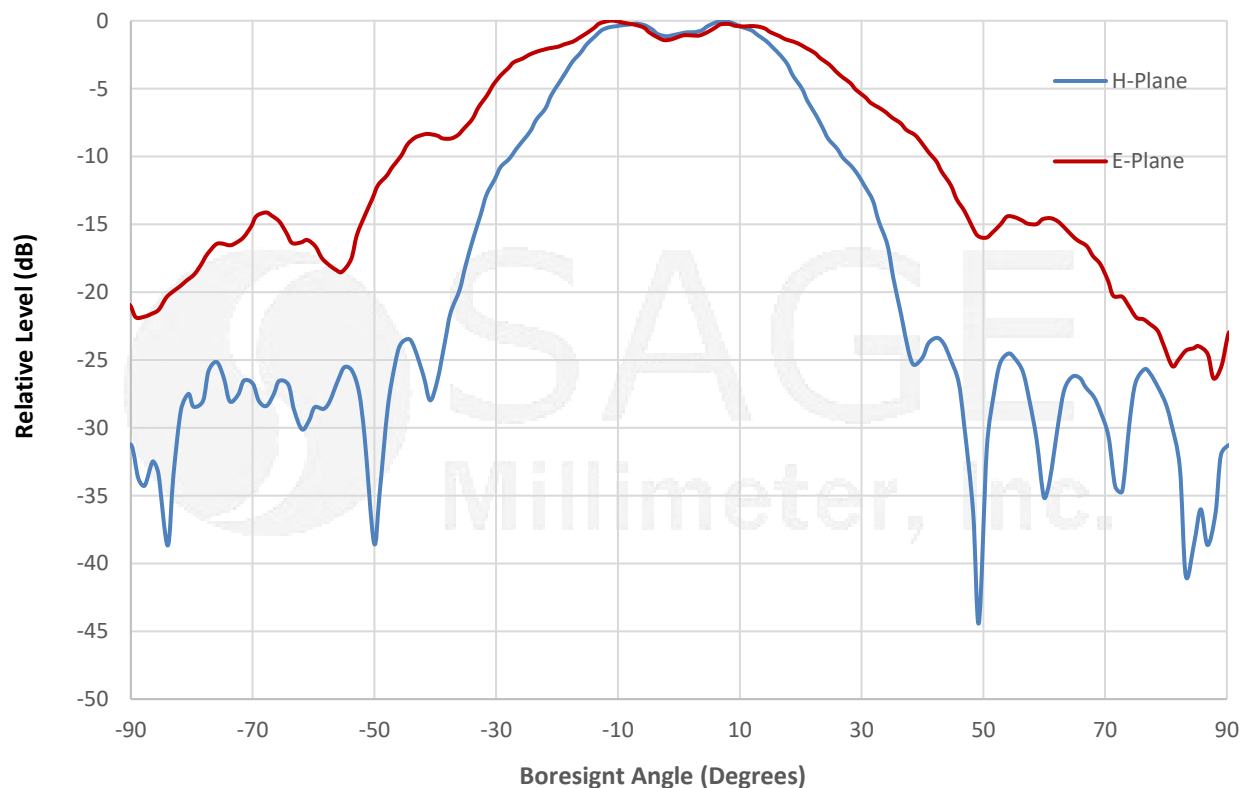


## Dual Ridged Horn Antenna, 1 to 18 GHz

### Measured Antenna Pattern @ 1 GHz



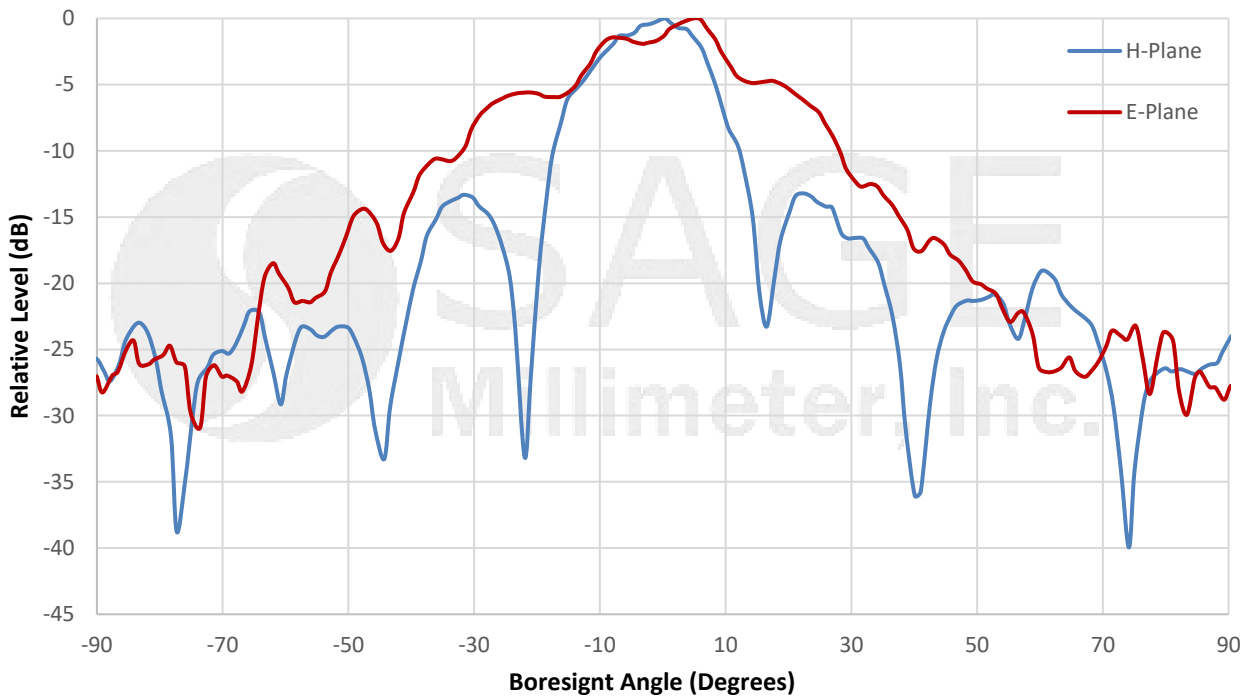
### Measured Antenna Pattern @ 10 GHz



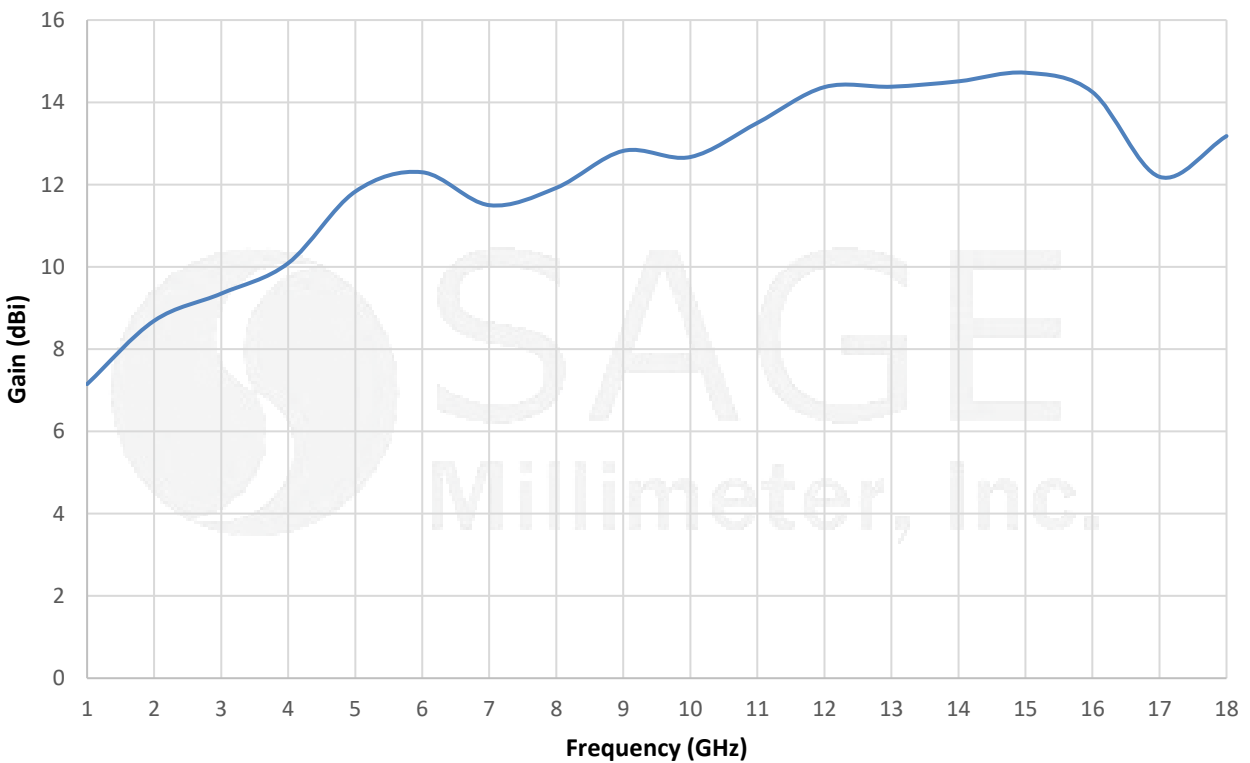


## Dual Ridged Horn Antenna, 1 to 18 GHz

### Measured Antenna Pattern @ 18 GHz



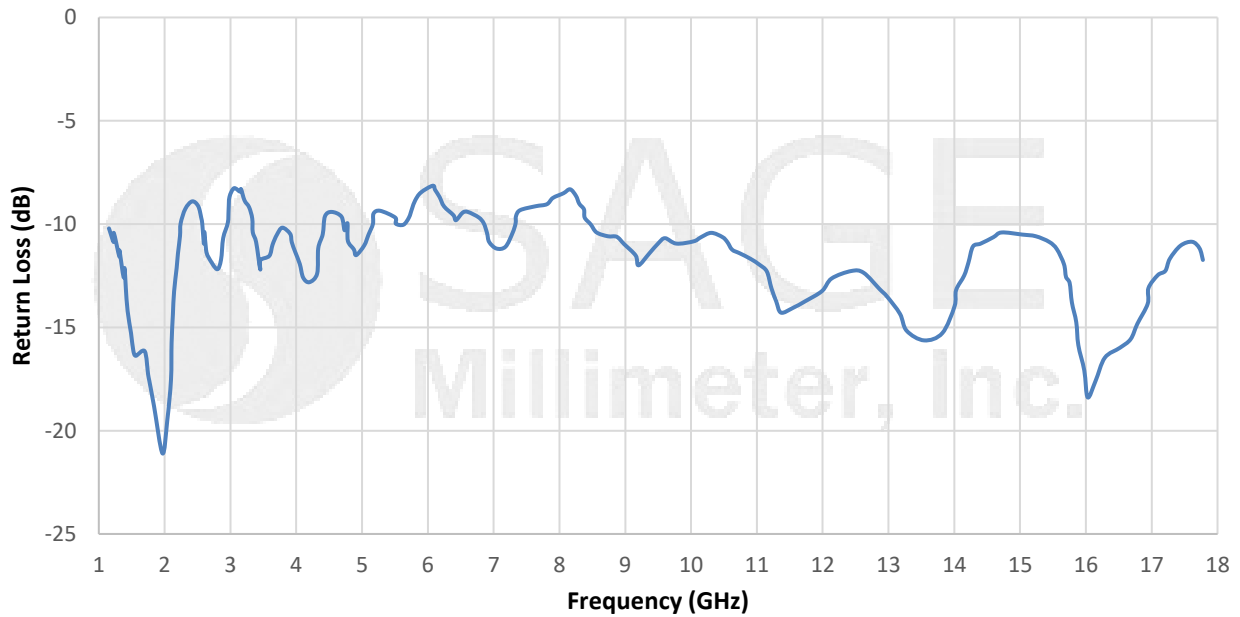
### Measured Gain vs. Frequency



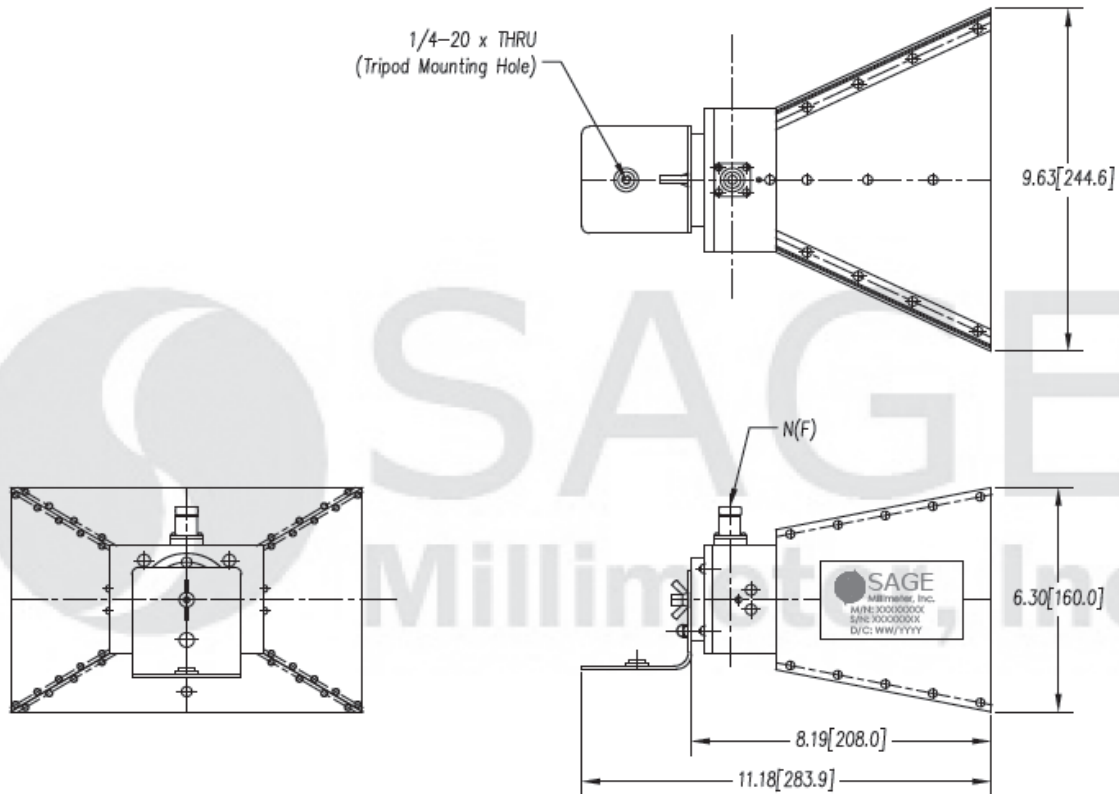


## Dual Ridged Horn Antenna, 1 to 18 GHz

### Return Loss vs. Frequency



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



## Dual Ridged Horn Antenna, 1 to 18 GHz

### Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit.
- All testing was performed under +25 °C room temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

### Caution:

- Any foreign objects in the waveguide will cause performance degradation and possible device damage.

