

Dual Ridged Horn Antenna, 1 to 12 GHz

Description:

Model SAV-0131831040-NF-U2-WP is a dual ridged horn antenna that operates from 1 GHz to 12 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 polarized 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		12 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

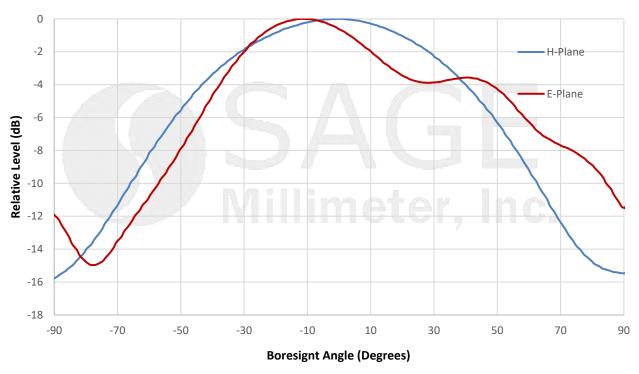
Mechanical Specifications:

Mechanical Spo	ecifications:	
Item	Specification	, III U.
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	

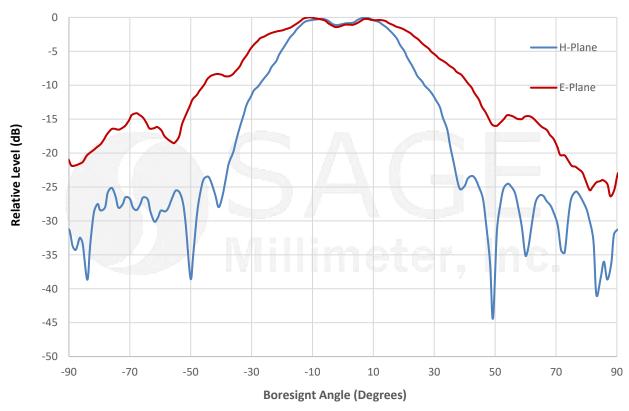




Measured Antenna Pattern @ 1 GHz



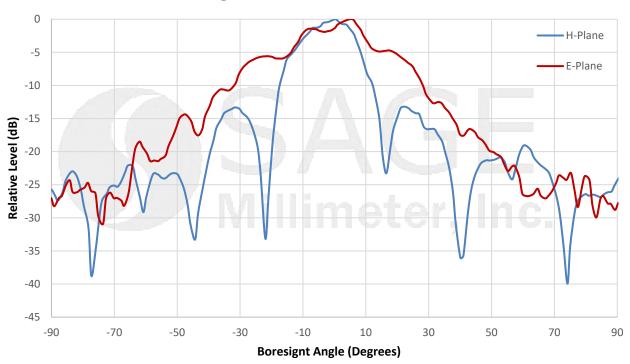
Measured Antenna Pattern @ 10 GHz



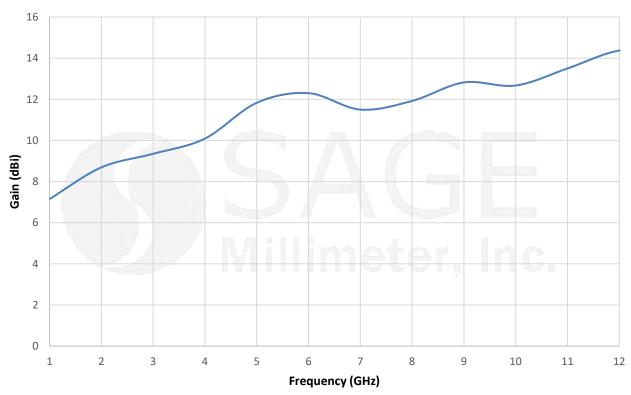




Measured Antenna Pattern @ 18 GHz



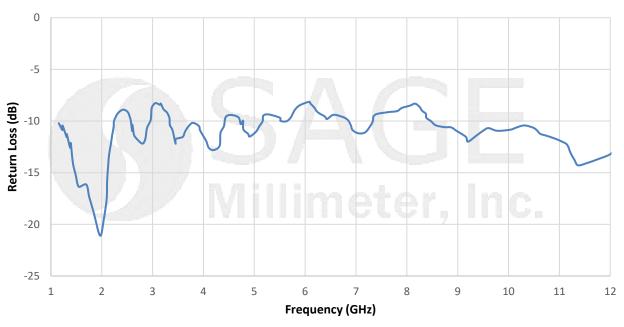
Measured Gain vs. Frequency



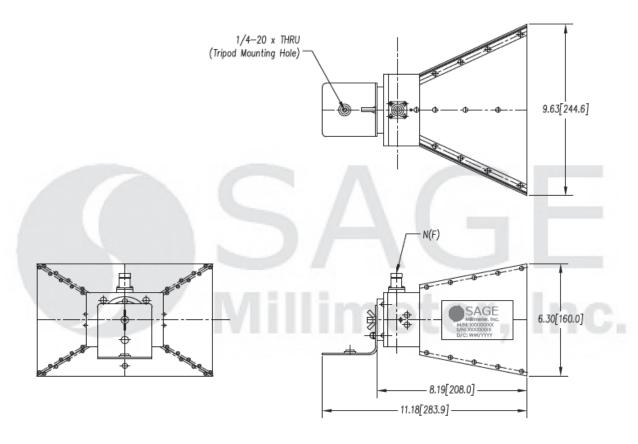




Return Loss vs. Frequency



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







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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



