



WR-10 Pyramidal Horn Antenna, 15 dBi Gain with 1 mm Coax Input

Description:

Model SAR-1532-101F-R2 is a W-band pyramidal horn antenna with a right angle (90°) 1 mm (F) coax connector to cover the frequency range of 75 GHz to 110 GHz. The antenna offers 15 dBi nominal gain and a typical half power beamwidth of 32 degrees on the E-plane and 32 degrees on the H-plane. The antenna supports linear polarized waveforms. The model with 1 mm (M) connector is offered under model number **SAR-1532-101M-R2**.



Features:

- Inline Configuration
- Linear Polarization
- DC Open Circuit at Input

Applications:

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	75 GHz		110 GHz
Gain		15 dBi	
Polarization	Linear		
3 dB Beamwidth, E-Plane		32°	
3 dB Beamwidth, H-Plane		32°	
Sidelobes, E-Plane		-14 dB	
Sidelobes, H-Plane		-25 dB	
Return Loss		15 dB	
Power Handling			10 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

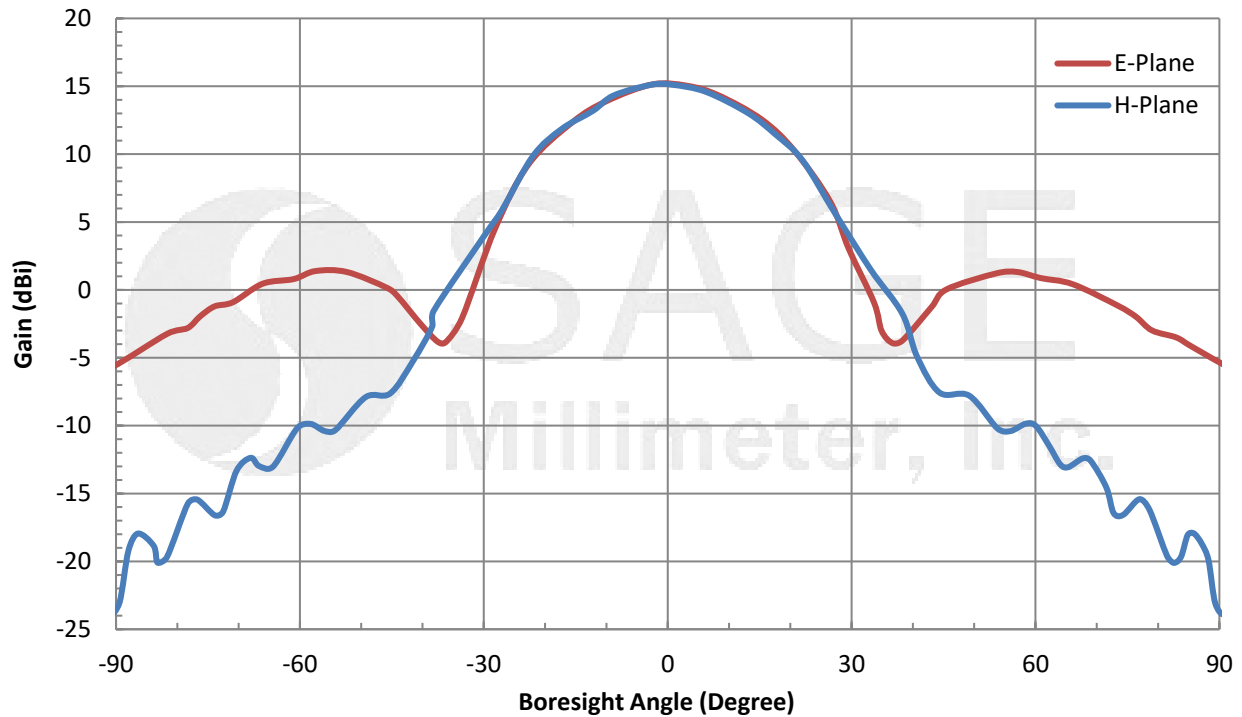
Item	Specification
Antenna Port	1 mm Female for Model Number: SAR-1532-101F-R2
	1 mm Male for Model Number: SAR-1532-101M-R2
Size	2.00" (L) X 0.34" (W) X 0.27" (H)
Material	Brass
Finish	Gold Plated
Connector Material	Stainless Steel
Weight	0.9 Oz
Outline	AR-W15-R



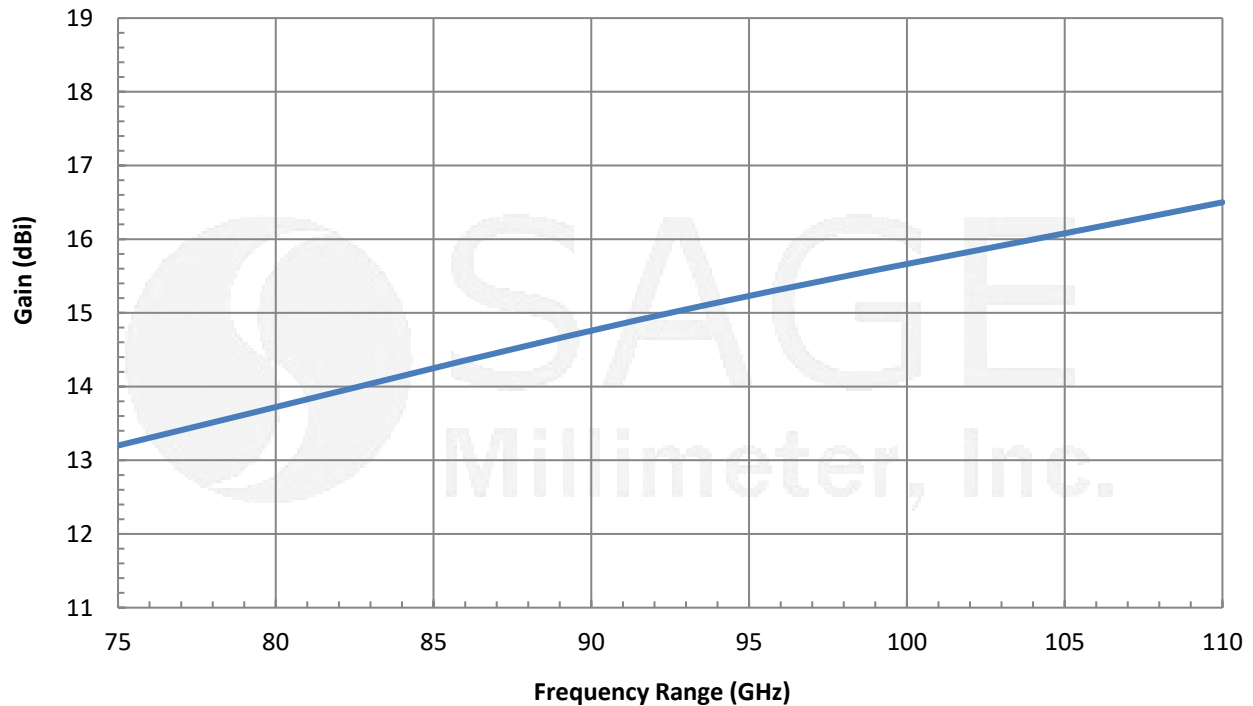


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Typical Antenna Pattern @ 92.5 GHz



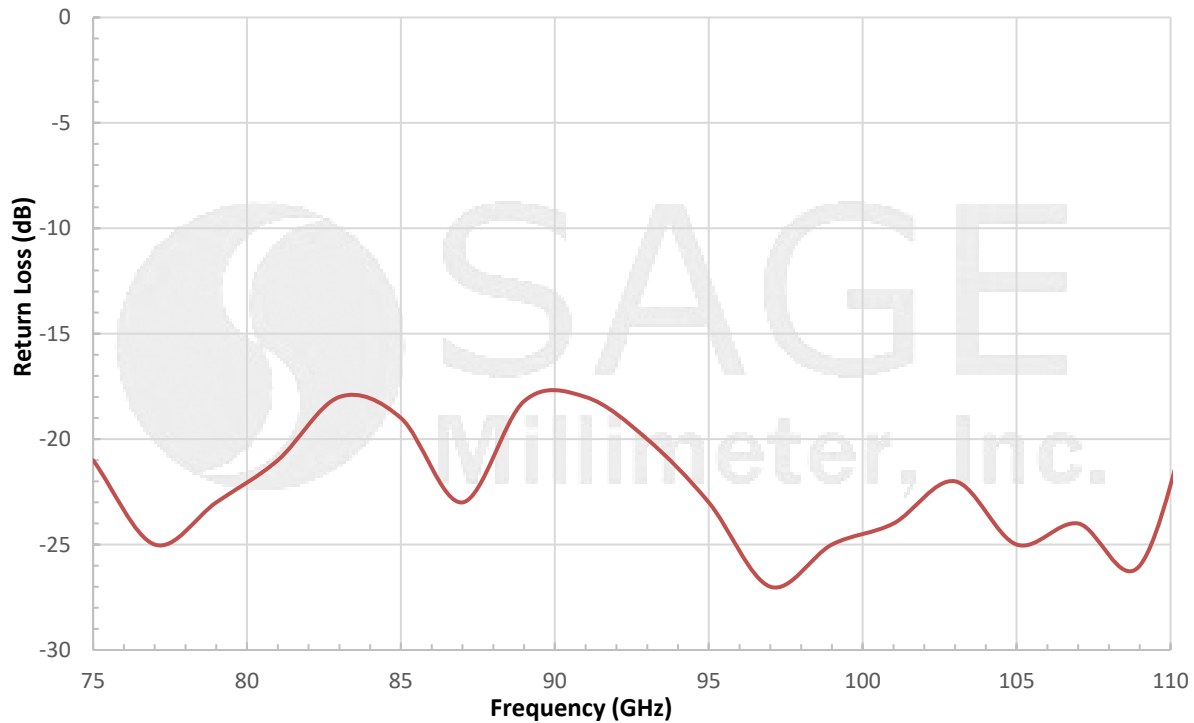
Typical Gain vs. Frequency



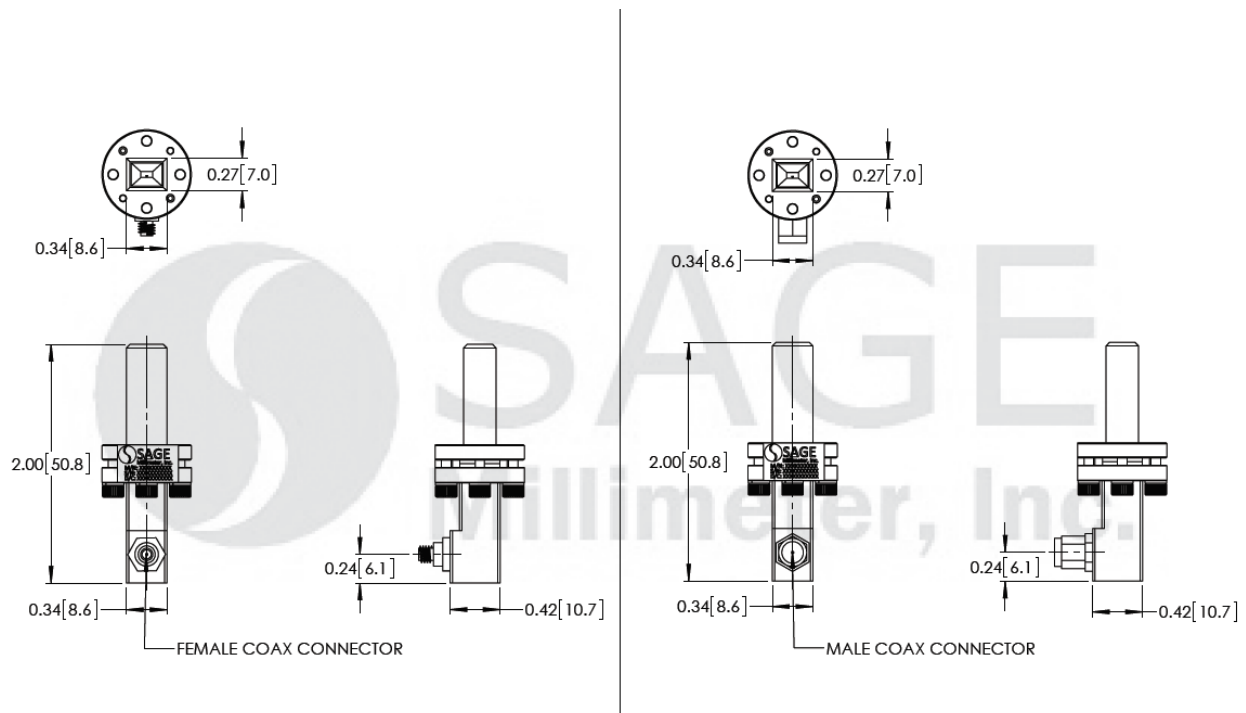


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Typical Measured Return Loss vs. Frequency



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





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Note:

- This antenna is a mature product. The reasons for only providing simulated data can be found in the following blog [here](#).
- All testing was performed under 25 °C case 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.
- Proper torque, 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm), should be used. **Eravant torque wrench, model SCH-06004-S1, is highly recommended.**

