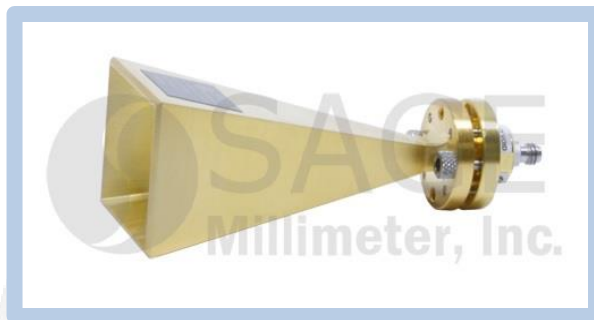




WR-10 Pyramidal Horn Antenna, 25 dBi Gain with 1 mm Coax Input

Description:

Models SAR-2507-101F-E2 and SAR-2507-101M-E2 are W-band pyramidal horn antennas with end launch (180°) 1 mm coax connectors to cover the frequency range of 75 GHz to 110 GHz. The antennas offer 25 dBi nominal gain and a typical half power beamwidth of 9 degrees on the E-plane and 10 degrees on the H-plane. The antennas support linear polarized waveforms. Right angle (90°) 1 mm coax connector configurations are offered under models **SAR-2507-101F-R2 and SAR-2507-101M-R2**.



Features:

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

Applications:

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	75 GHz		110 GHz
Gain	23.5 dBi	25 dBi	26 dBi
Polarization	Linear		
E-Plane 3 dB Beamwidth		9°	
H-Plane 3 dB Beamwidth		10°	
Sidelobes, E-Plane		-14 dB	
Sidelobes, H-Plane		-30 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 (F)	1 mm Female for Model Number : SAR-2507-101F-E2
Antenna Port (M)	1 mm Male for Model Number : SAR-2507-101M-E2
Size	3.10" (L) X 1.09" (W) X 0.89"(H)
Material	Brass
Finish	Gold Plated
Connector Material	Stainless Steel
Weight	1.6 Oz
Outline	AR-WC3-E

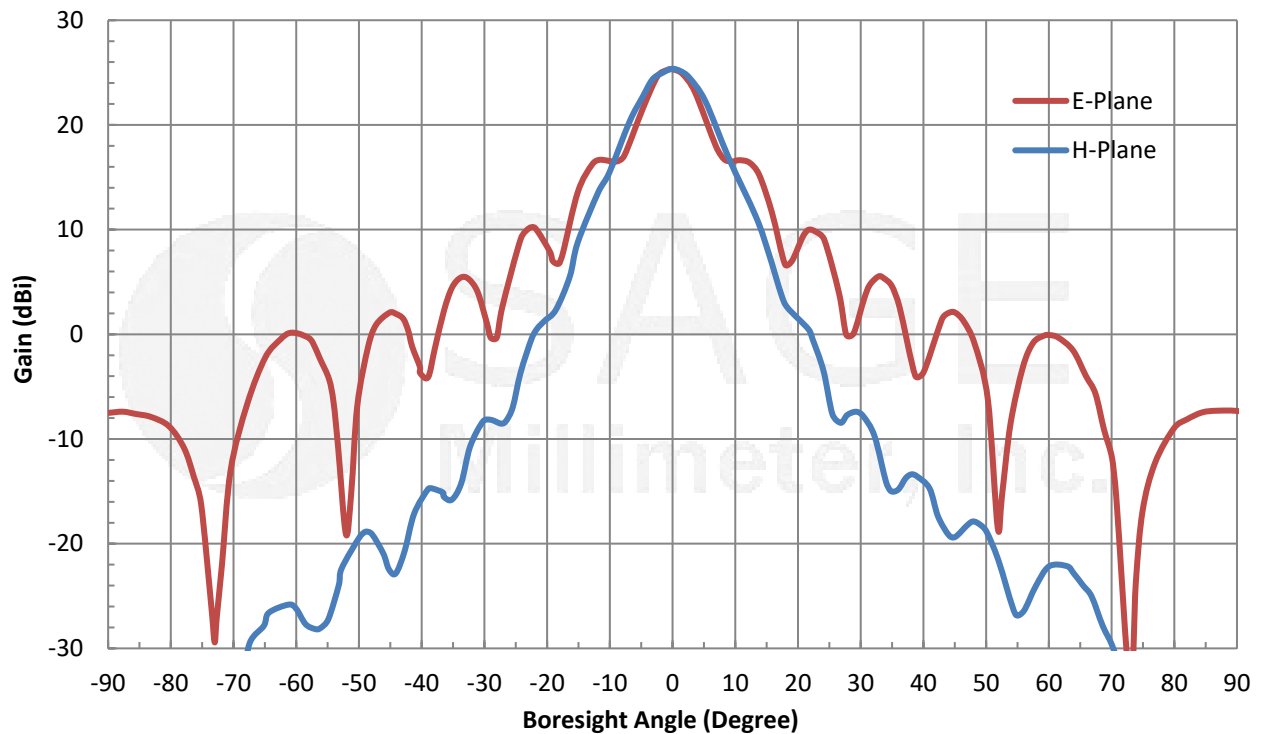


www.eravant.com | 501 Amapola Avenue, Torrance, CA 90501
 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: support@eravant.com

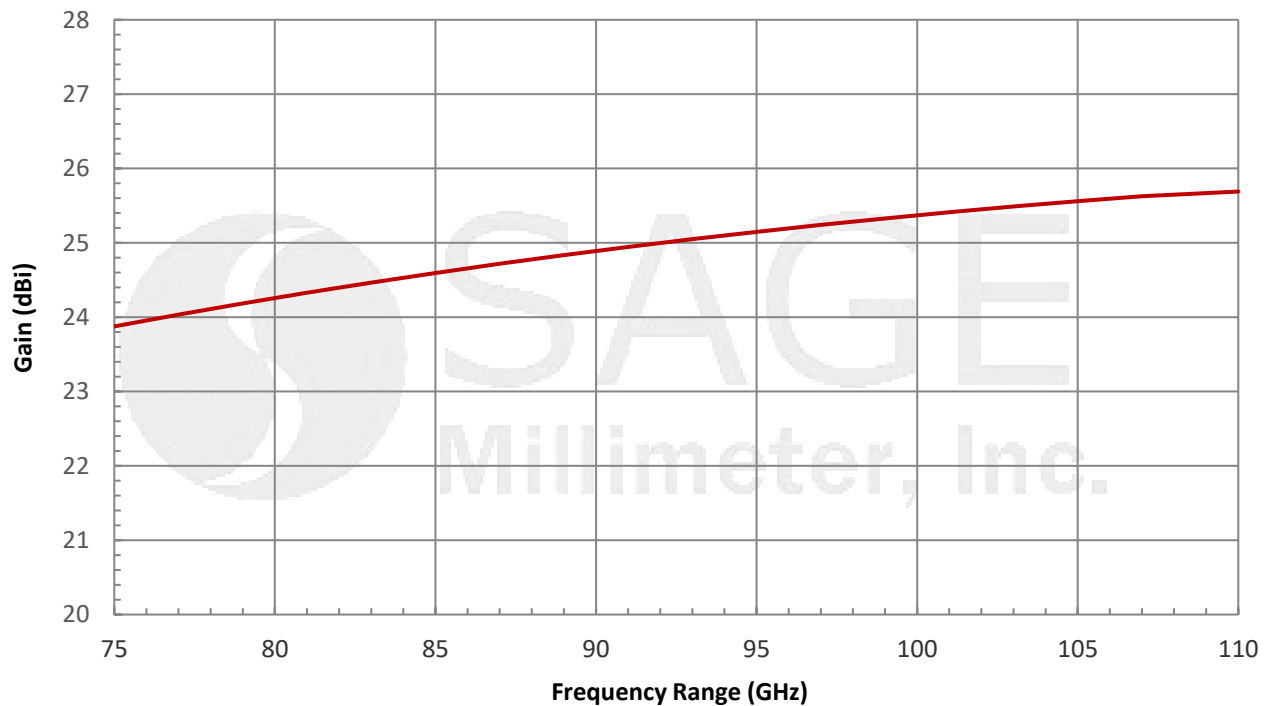


WR-10 Pyramidal Horn Antenna, 25 dBi Gain with 1 mm Coax Input

Typical Antenna Pattern @ 92.5 GHz



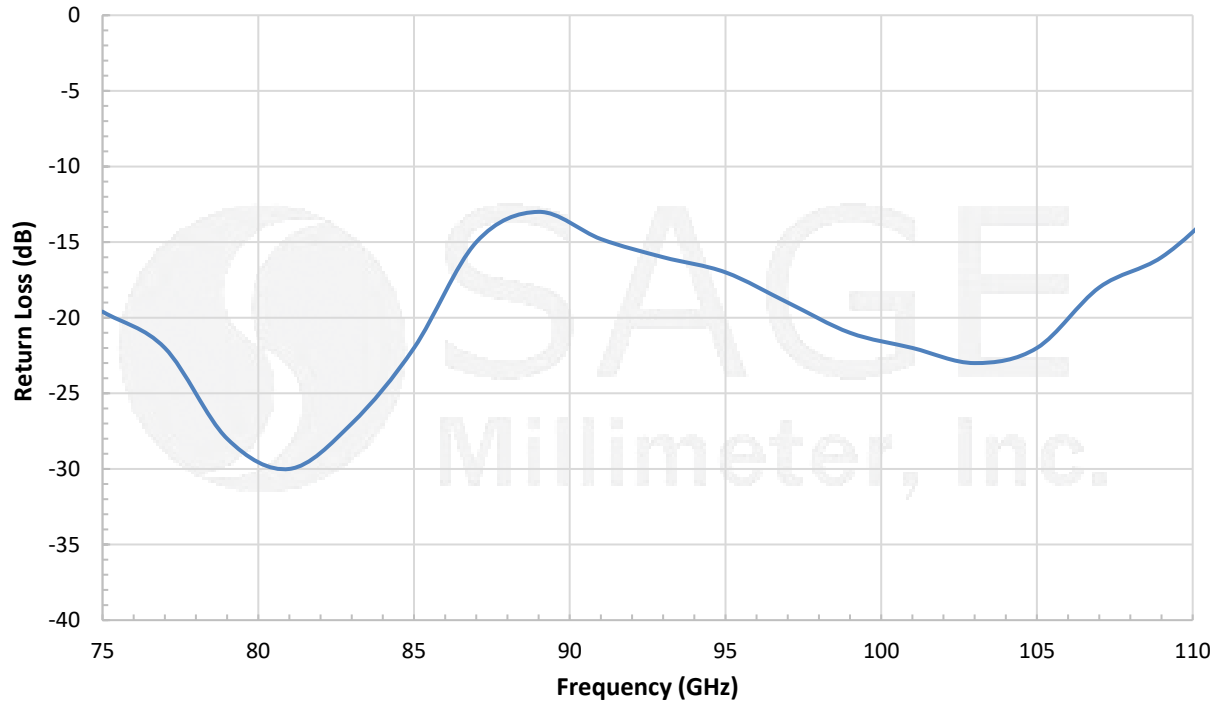
Typical Gain vs. Frequency



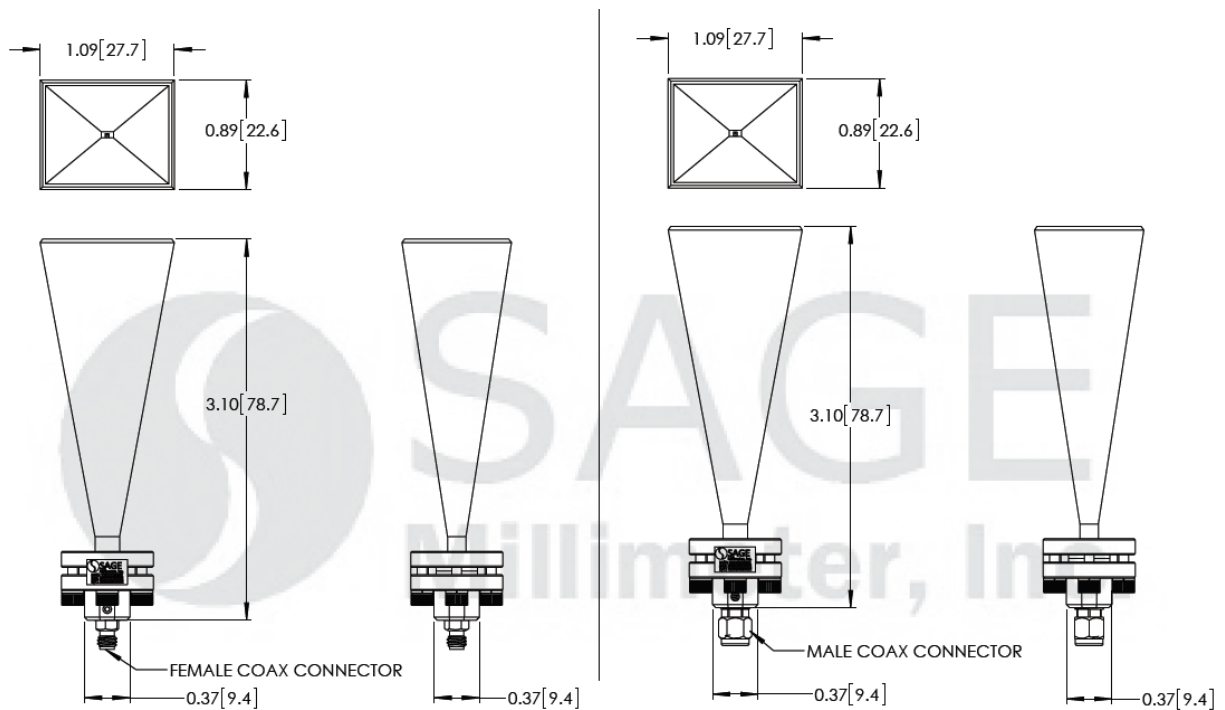


WR-10 Pyramidal Horn Antenna, 25 dBi Gain with 1 mm Coax Input

Typical Measured Return Loss vs. Frequency



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



WR-10 Pyramidal Horn Antenna, 25 dBi Gain with 1 mm Coax Input

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 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.
- 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.**

