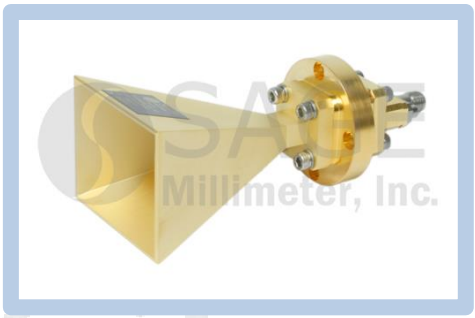
SAR-1725-28KF-E2-WR & SAR-1725-28KM-E2-WR

Rev 1.1

WR-28 Pyramidal Horn Antenna, 17 dBi Gain with 2.92 mm Coax Input, Weather Resistant

Description:



Model SAR-1725-28KF-E2-WR is a Ka-band pyramidal horn antenna with a end launch (180°) WR-28 waveguide to 2.92 mm (F) coax panel mount adapters to cover the frequency range of 26.5 GHz to 40 GHz. The antenna offers 17 dBi nominal gain and a typical half power beamwidth of 23 degrees on the E-plane and 24 degrees on the H-plane. The antenna supports linear polarized waveforms. The model with 2.92 mm (M) coax panel mount adapter is offered under model number SAR-1725-28KM-E2-WR.

Features:

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

Applications:

- 5G MIMO Systems
- Antenna Ranges
- Antenna Gain Measurements
- System Setups

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	26.5 GHz	33.25 GHz	40 GHz
Gain		17 dBi	
Polarization		Linear	
3 dB Beamwidth, E-Plane		23°	
3 dB Beamwidth, H-Plane		24°	
Sidelobes, E-Plane		-12 dB	
Sidelobes, H-Plane		-35 dB	
Return Loss		20 dB	
Power Handling			50 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

Item	Specification
Antenna Port (F)	2.92 mm Female for Model Number: SAR-1725-28KF-E2-WR
Antenna Port (M)	2.92 mm Male for Model Number: SAR-1725-28KM-E2-WR
Material	Aluminum
Connector Material	Stainless Steel
Finish	Gold Plated
Weight	2.6 Oz
Size	2.49” (L) X 1.13” (Ø)
Outline	AR-AC17-E-WR

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Phone: 424-757-0168 | Fax: 424-757-0188 | Email: support@eravant.com

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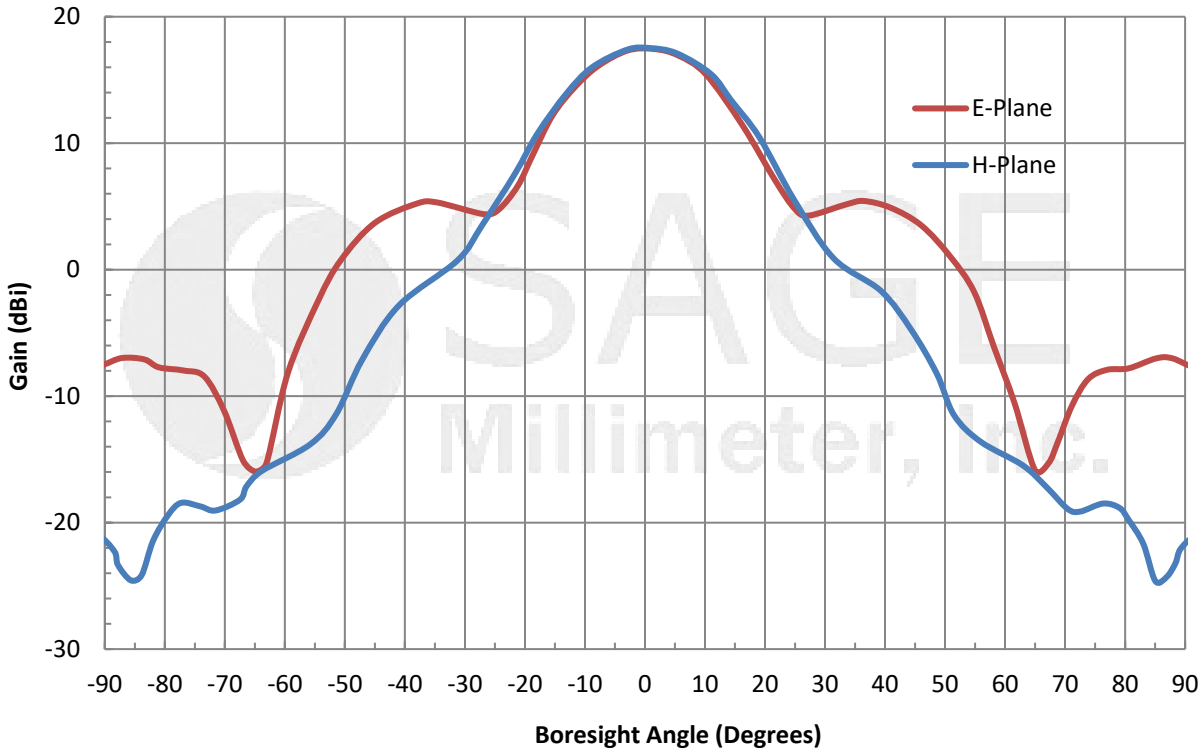
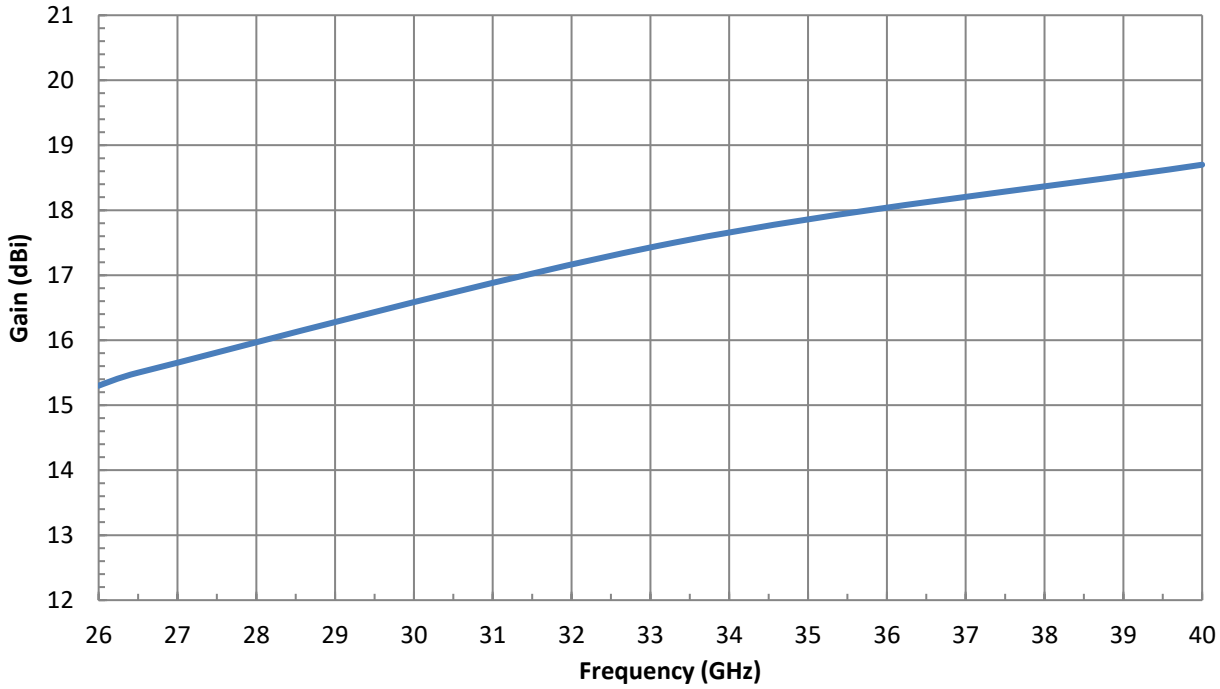
Typical Antenna Pattern @ 33.25 GHz



Typical Gain vs. Frequency



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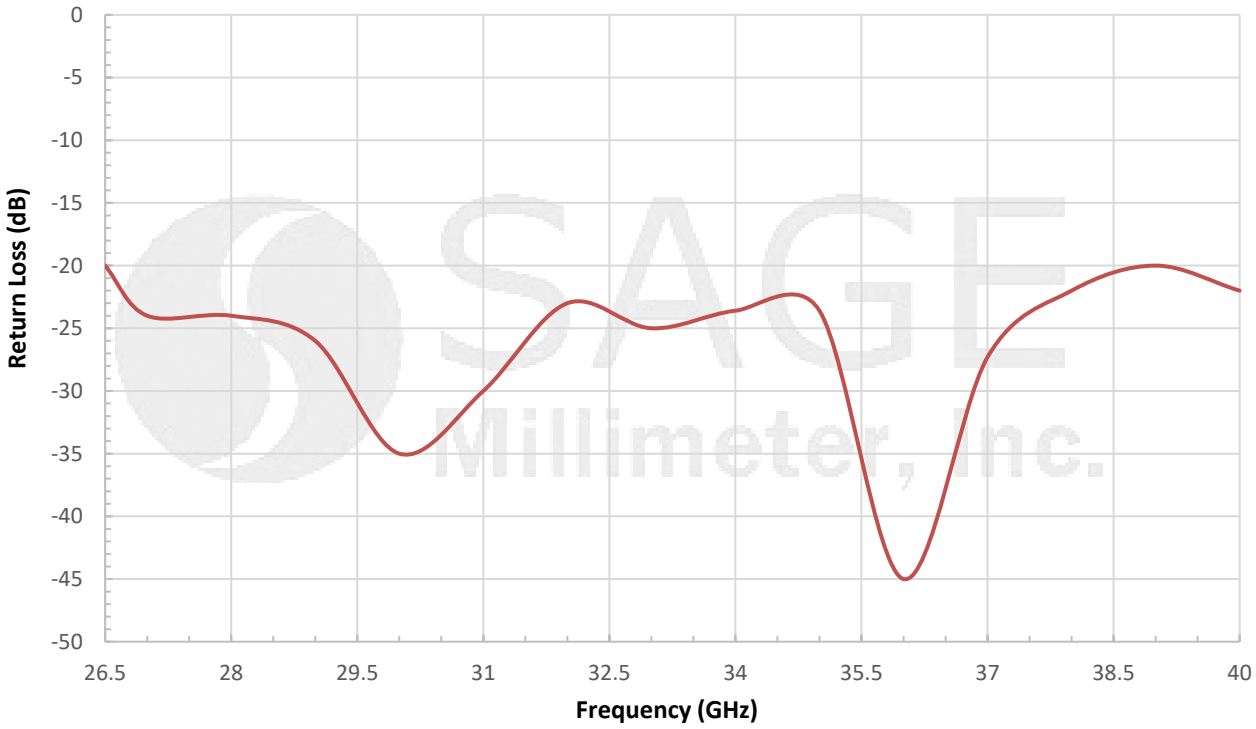
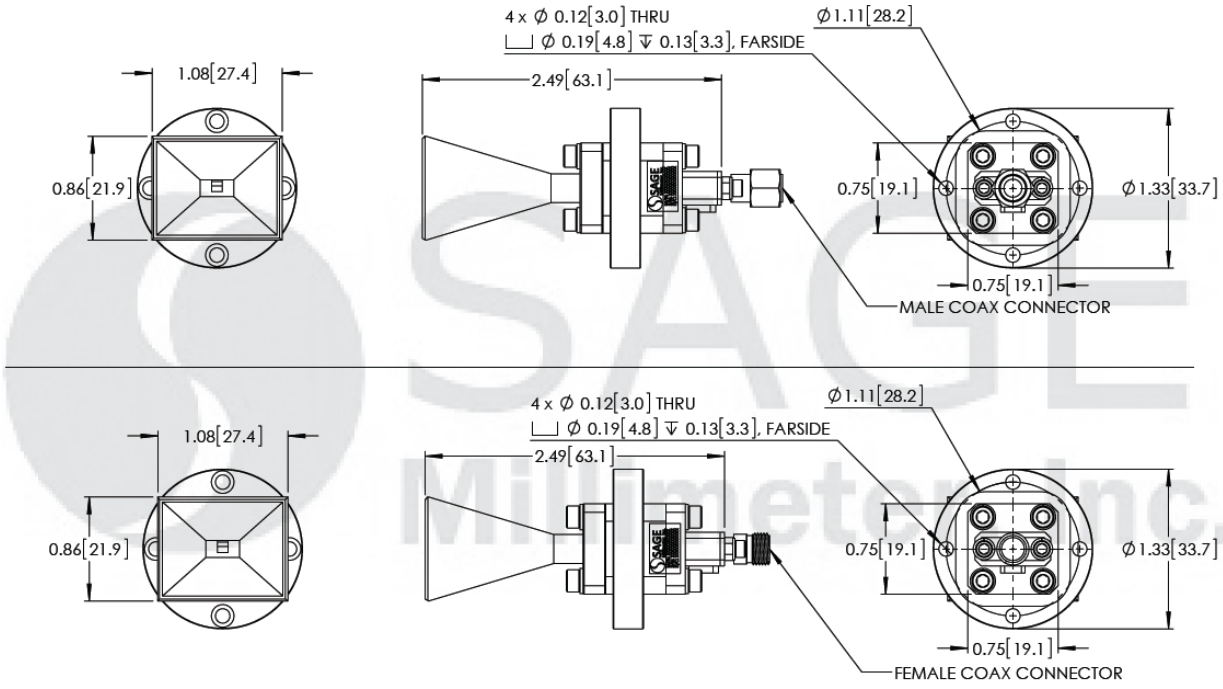
Typical Measured Return Loss vs. Frequency



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 room temperature.
- Eravant reserves the right to change the information presented without notice.

Caution:

- Any foreign objects in the horn antenna will cause performance degradation and possible device damage.
- Proper torque, 8.0 ± 0.4 inch-pounds (0.90 ± 0.02 Nm), should be applied. **Eravant torque wrench, model SCH-08008-S1, is highly recommended.**

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