

SAR-1536-08-S2

WR-08 Pyramidal Horn Antenna, 15 dBi Gain

SAR-1536-08-S2 is an F-band pyramidal horn antenna that operates from 90 to 140 GHz. The antenna offers 15 dBi nominal gain and typical half power beamwidth of 37° on the E-plane and 36° on the H-plane. The antenna supports linear polarized waveforms. The input of this antenna is a WR-08 waveguide with UG-387/U-M anti-cocking flange.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	90 GHz		140 GHz
Gain		15 dBi	
Polarization		linear	
3 dB Beamwidth, E-Plane		37°	
3 dB Beamwidth, H-Plane		36°	
Sidelobes, E-Plane		-14 dB	
Sidelobes, H-Plane		-27 dB	
Return Loss		20 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Port	WR-08 Waveguide with UG-387/U-M Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Outline	AR-F15-A

ECCN

EAR99

FEATURES

- Rectangular Waveguide Interface
- Precisely Machined
- Linear Polarization
- High Return Loss

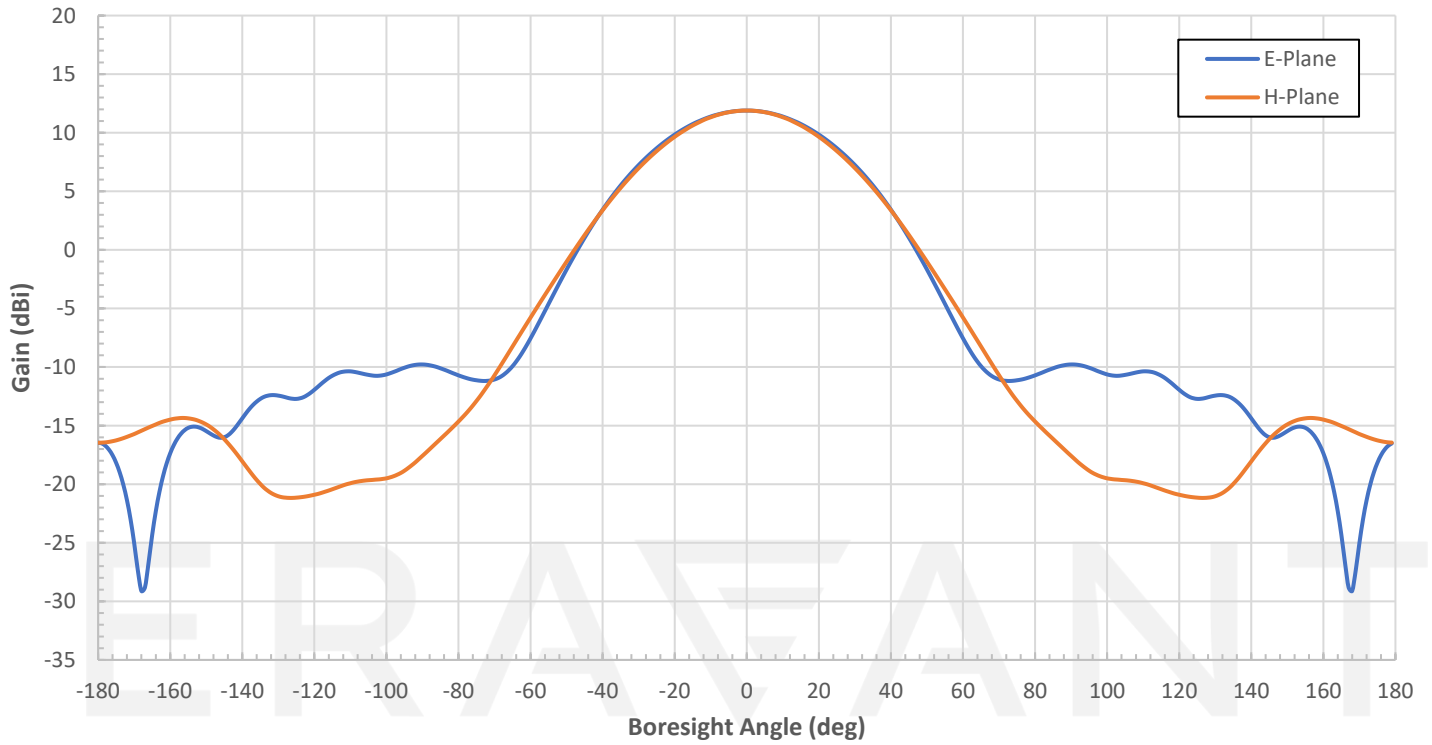
APPLICATIONS

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

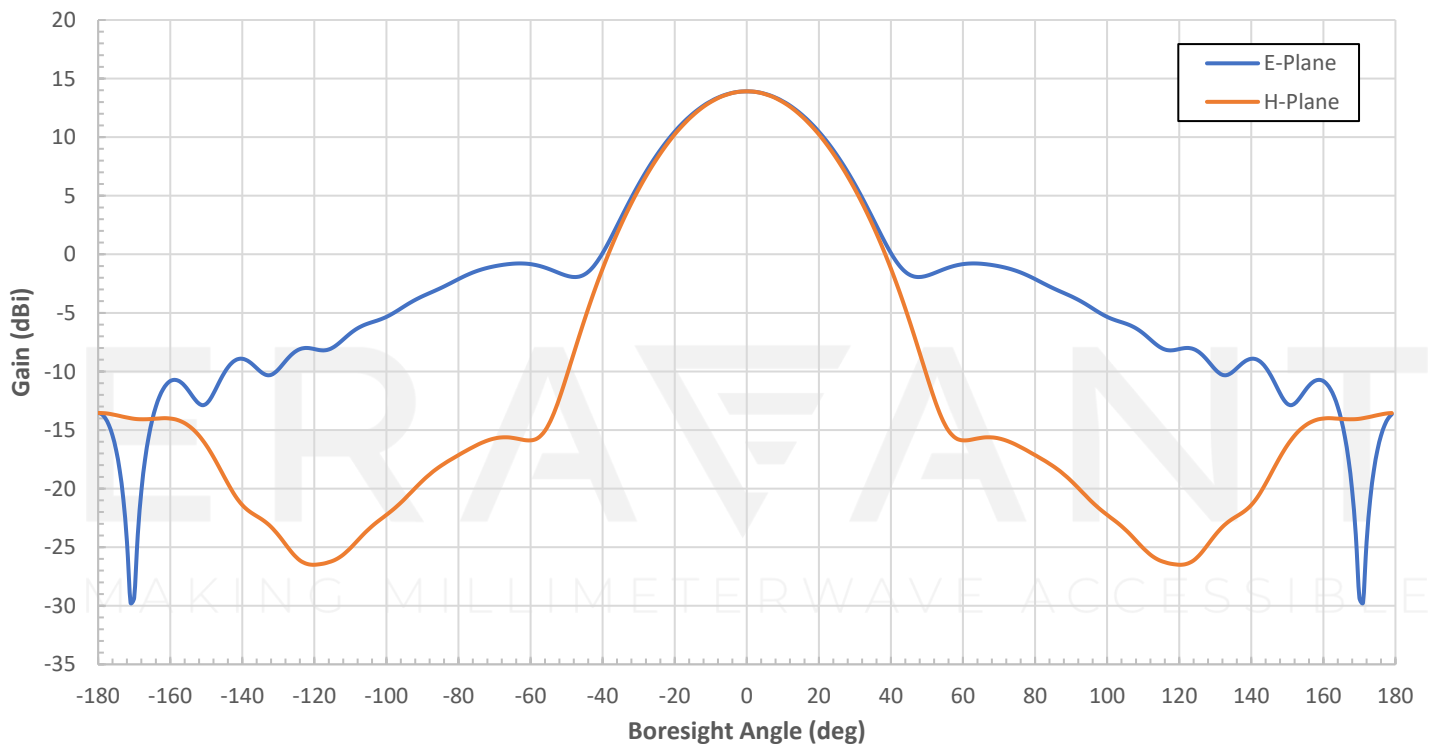
SUPPLEMENTAL DETAILS



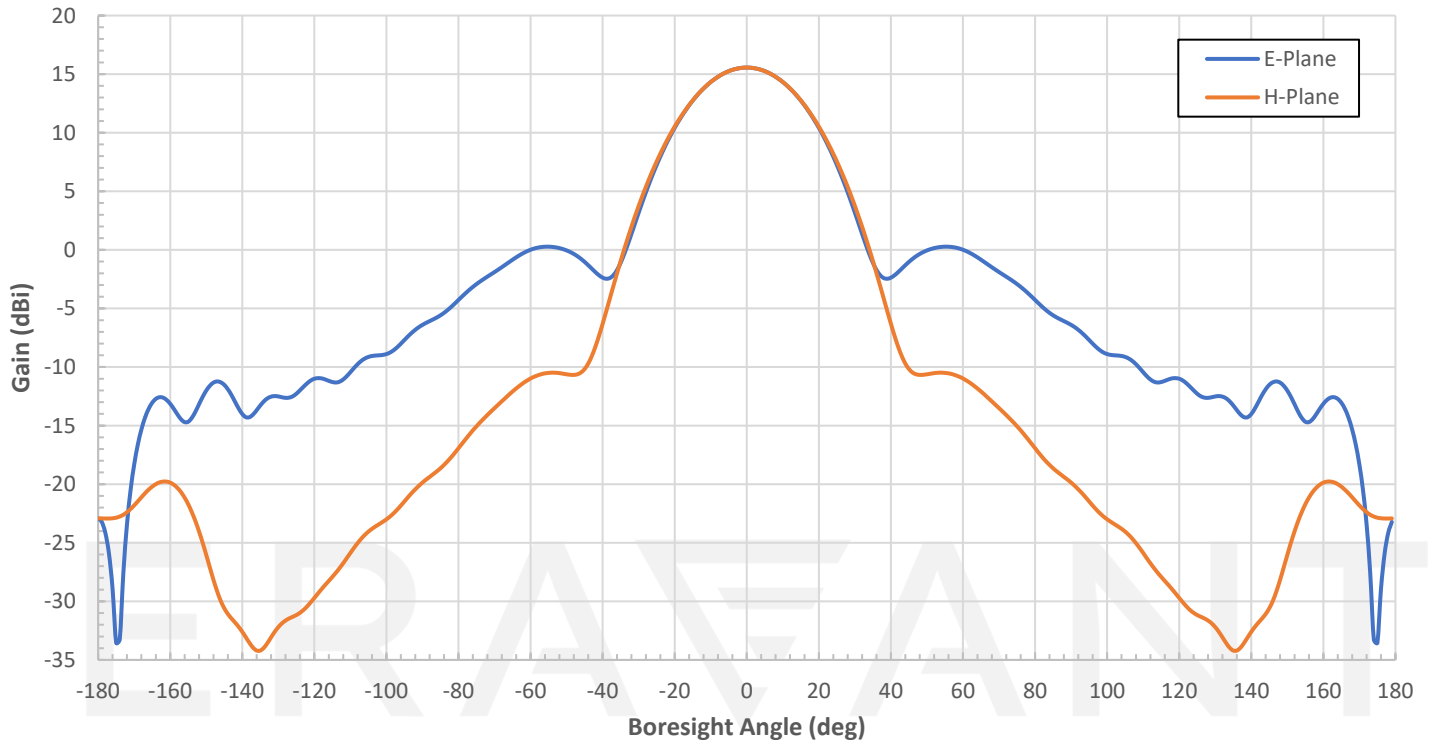
Simulated Antenna Patterns @ 90 GHz



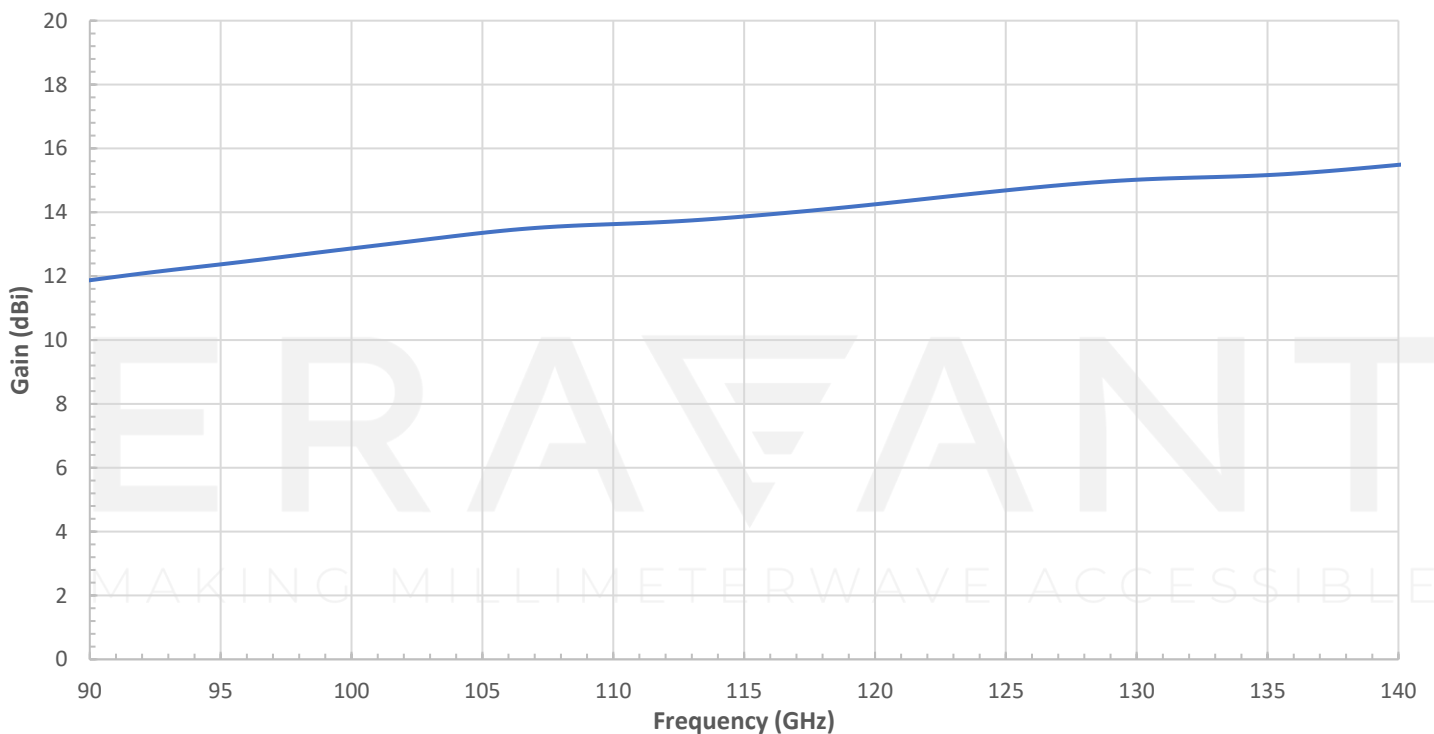
Simulated Antenna Patterns @ 115 GHz



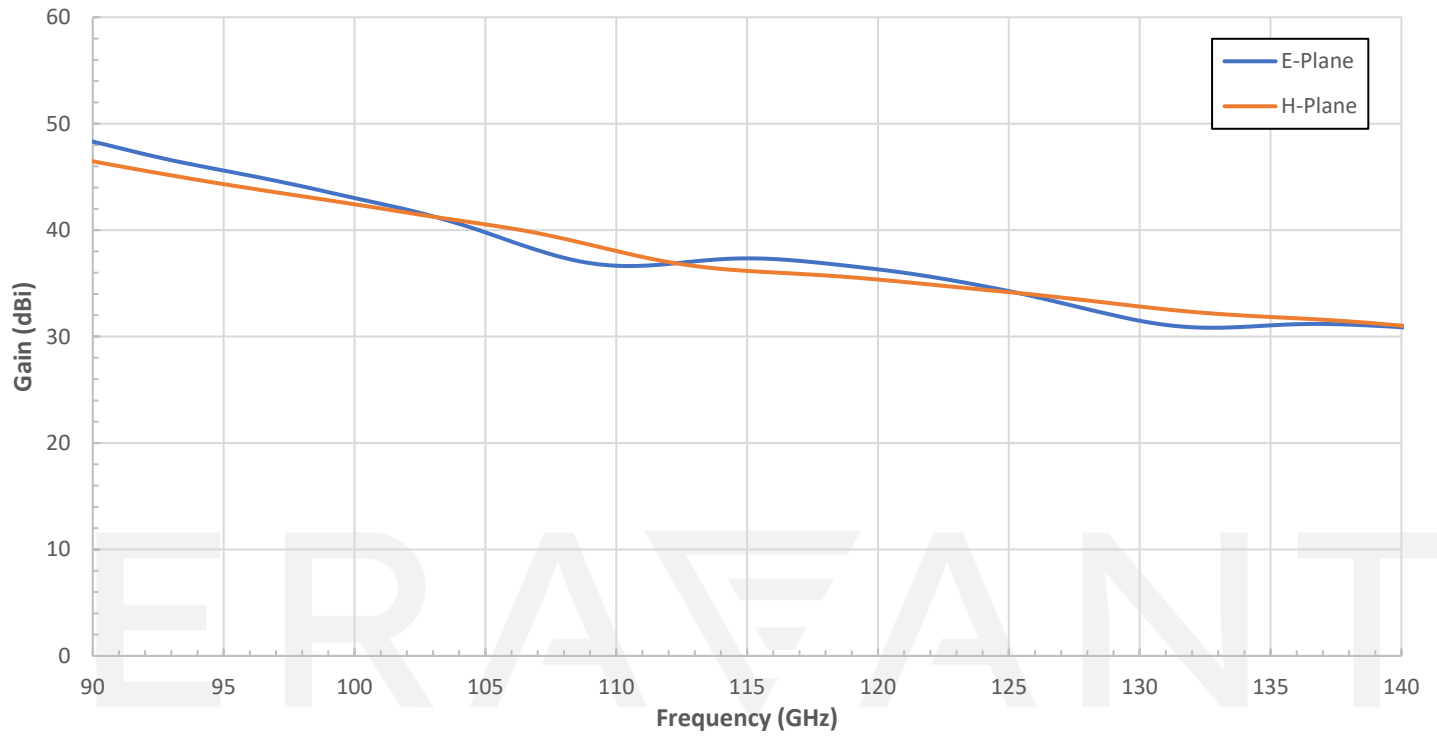
Simulated Antenna Patterns @ 140 GHz



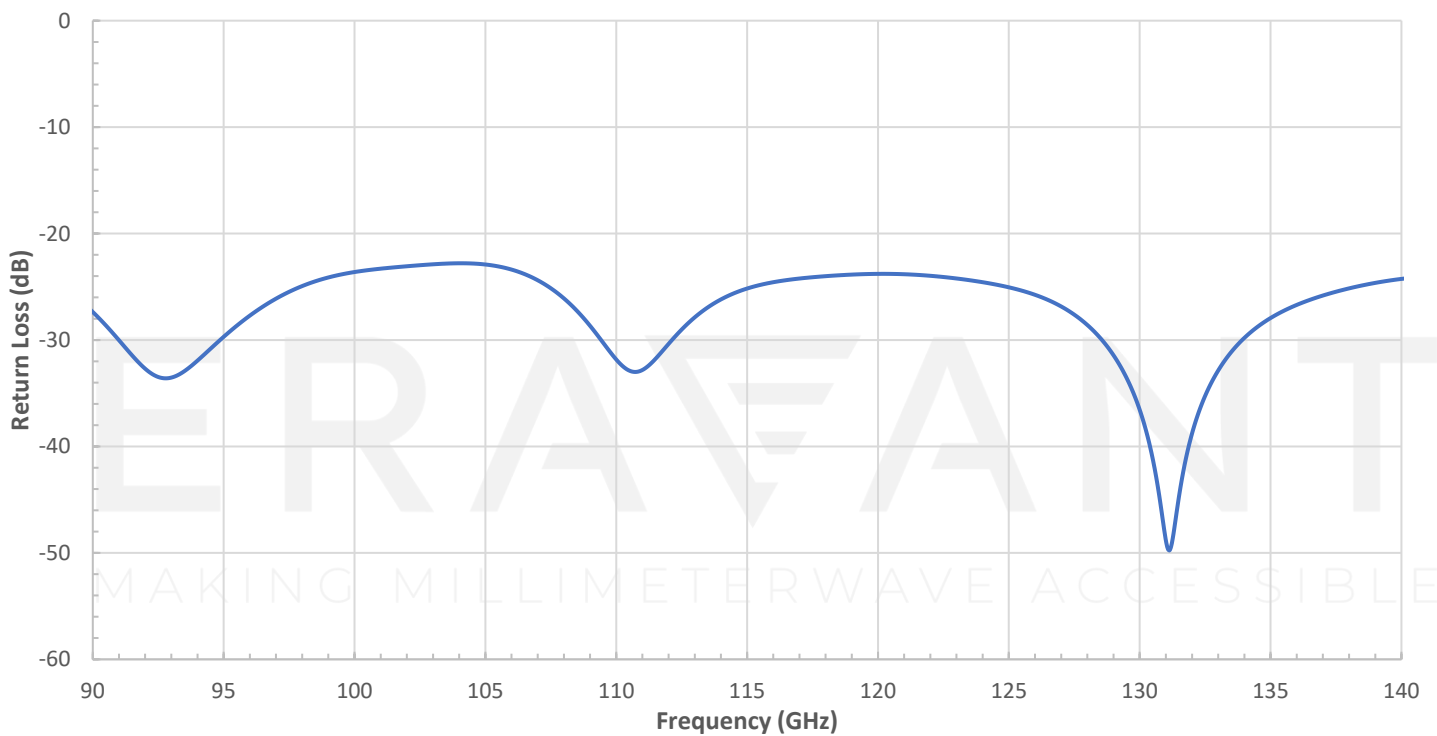
Simulated Gain vs Frequency



Simulated Gain vs Frequency

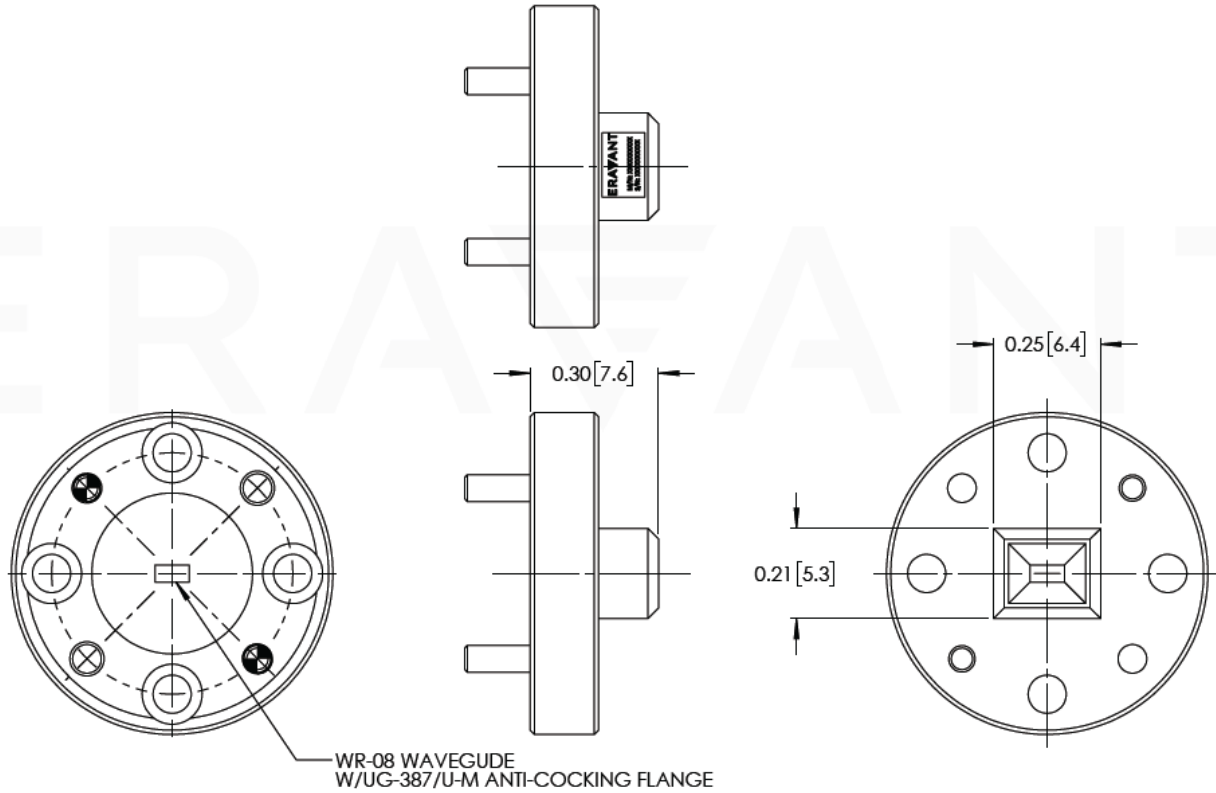


Simulated Return Loss vs Frequency



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



NOTE:

- All data provided is simulated. Actual measured data may slightly vary from unit to unit.
- 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.

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