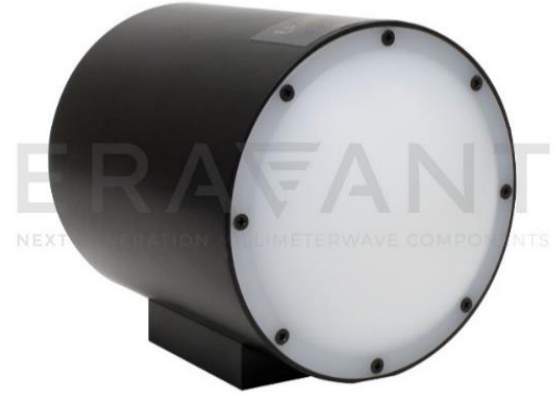


SAG-2032532806-396-S1

K-Band Gaussian Optics Antenna, 20 to 24.5 GHz, 6.2°

SAG-2032532806-396-S1 is a 6" K-Band Gaussian antenna that operates from 20 to 24.5 GHz. The Gaussian antenna delivers a 28 dBi nominal gain and 6.2 degree half power beamwidth. The antenna supports both linear and circular polarized waveforms and employs a corrugated feed horn to offer excellent aperture efficiency, high cross polarization rejections, and low sidelobe levels. This model is equipped with a 0.396" circular waveguide and UG-595/U flange as its input port. By adding the mode transition, Eravant model number SWT-42396-SB, the input port becomes a WR-42 rectangular waveguide, which can only support linear polarized waveforms.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	20 GHz		24.5 GHz
Gain		28 dBi	
3 dB Beamwidth		6.2	
Sidelobes		-25 dB	-20 dB
Cross Polarization		-20 dB	
Polarization	Linear and Circular		
Return Loss		20 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

Item	Specification
Antenna Port	0.396" Dia Circular Waveguide with UG-595/U Flange
Material	Aluminum
Finish	Black Anodized
Lens Diameter	6.0"
Outline	AG-CK28-396

ECCN

EAR99

FEATURES

- Center Fed
- Low Sidelobes
- Low Cross Polarization

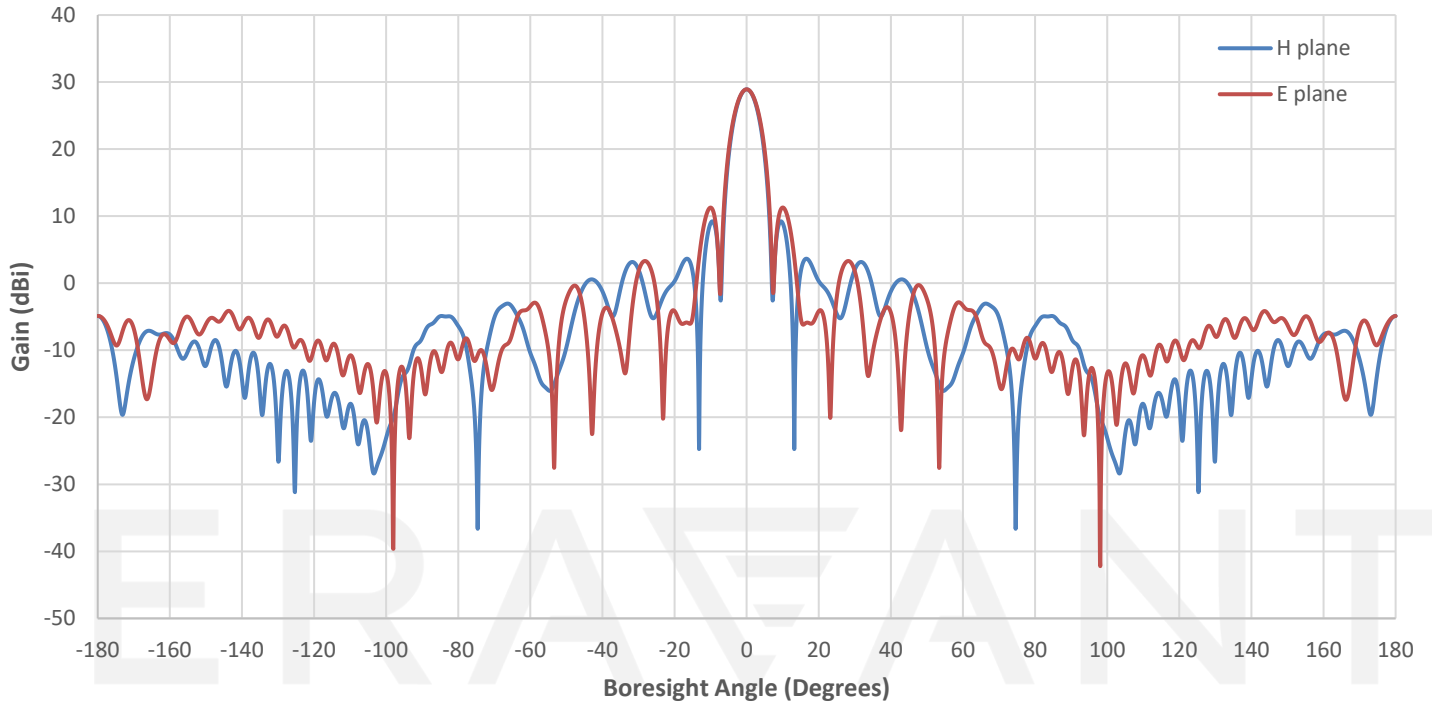
APPLICATIONS

- Radar Systems
- Communication Systems
- Plasma Systems

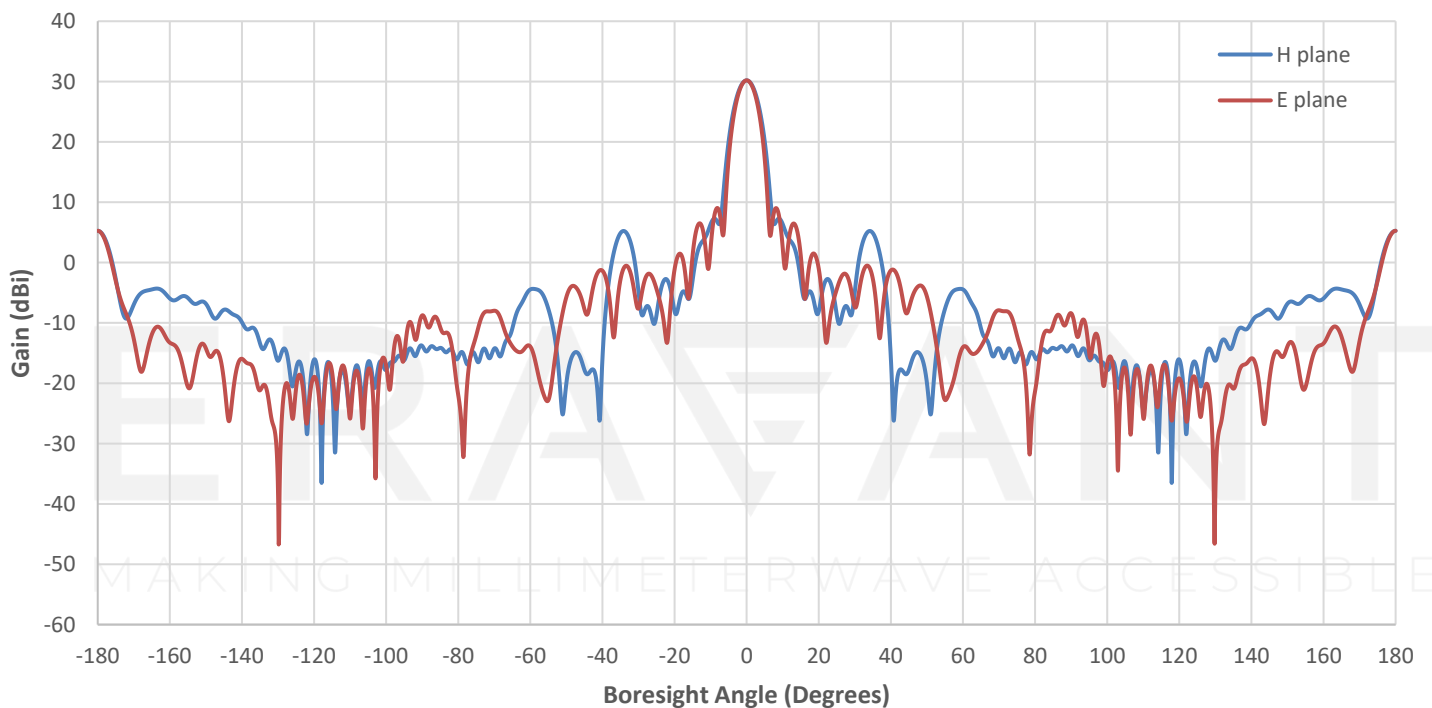
SUPPLEMENTAL DETAILS



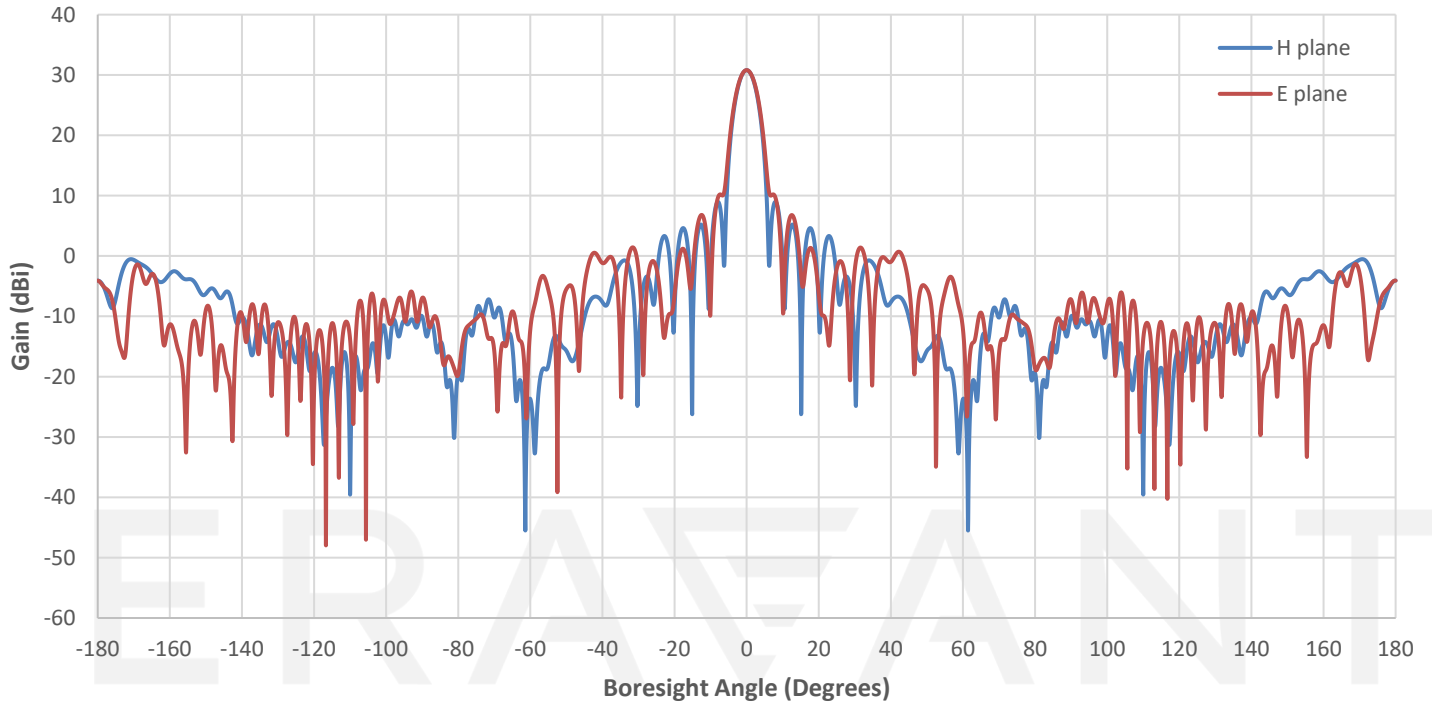
Simulated Pattern at @ 20 GHz



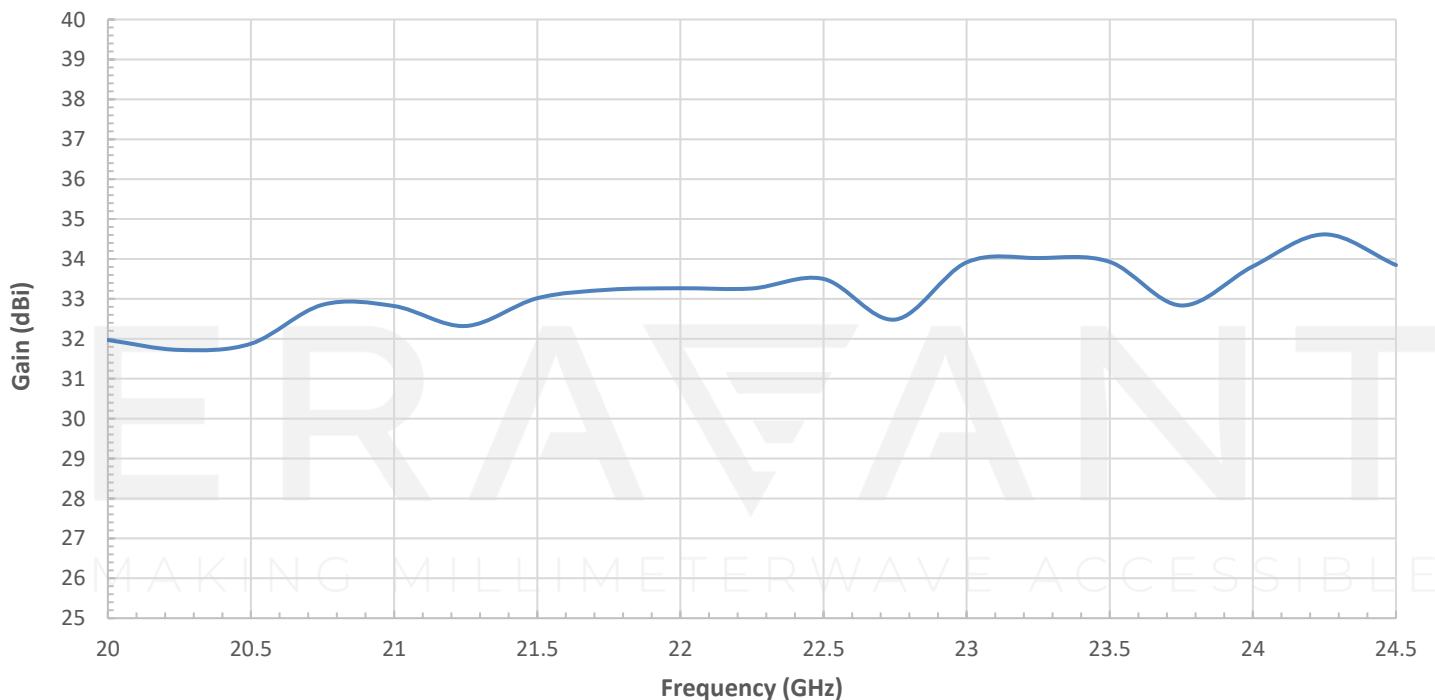
Simulated Pattern at @ 22.25 GHz



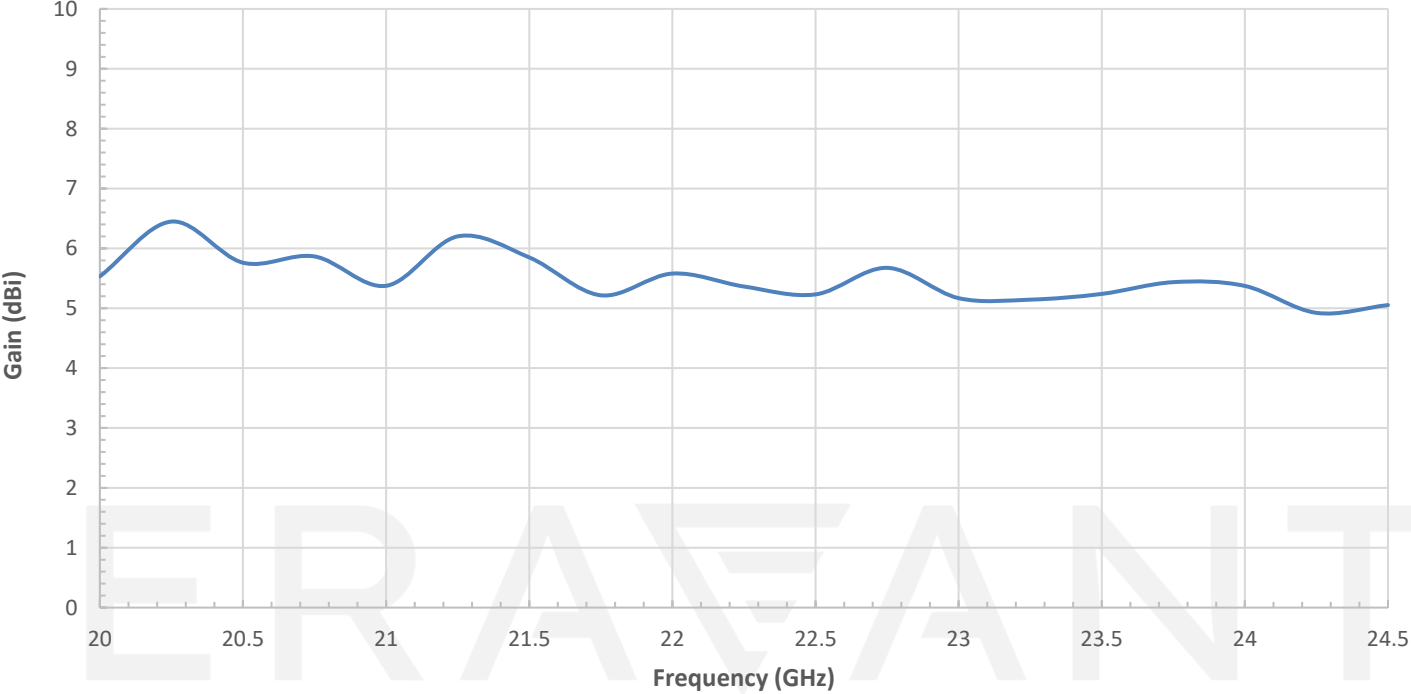
Simulated Pattern at @ 24.5 GHz



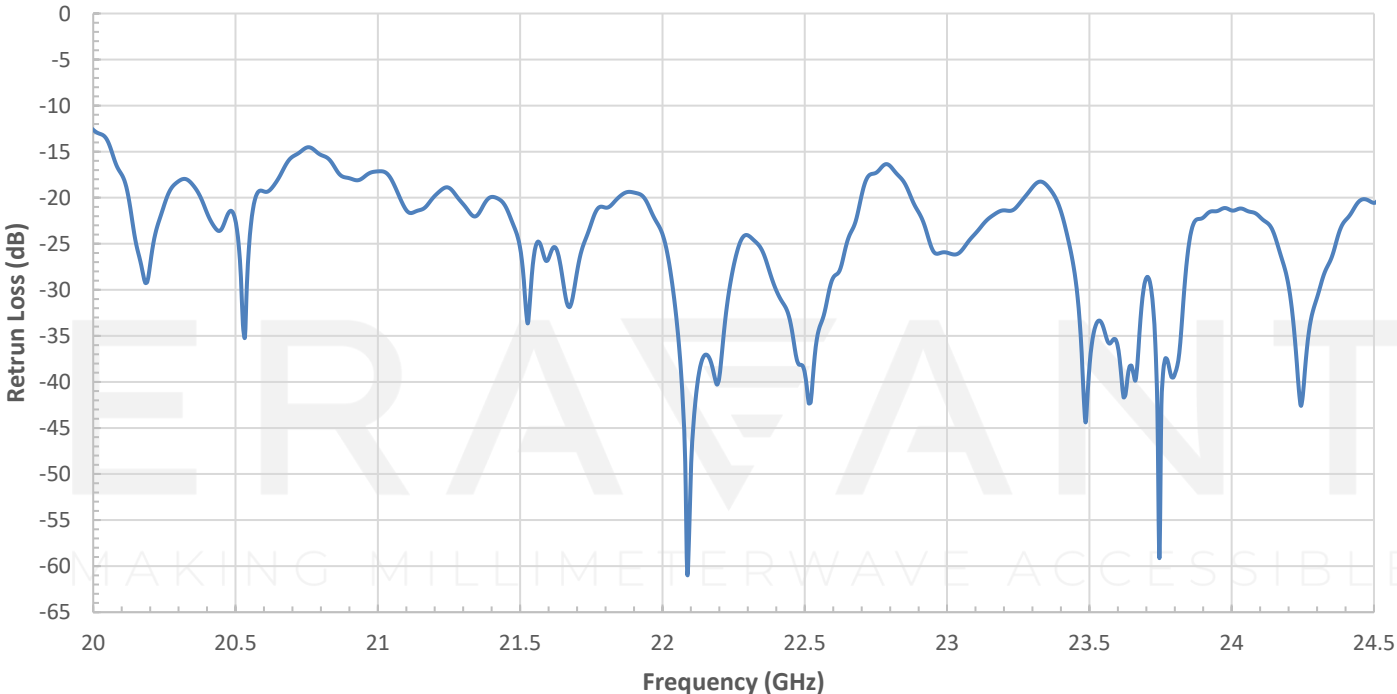
Simulated Gain vs Frequency



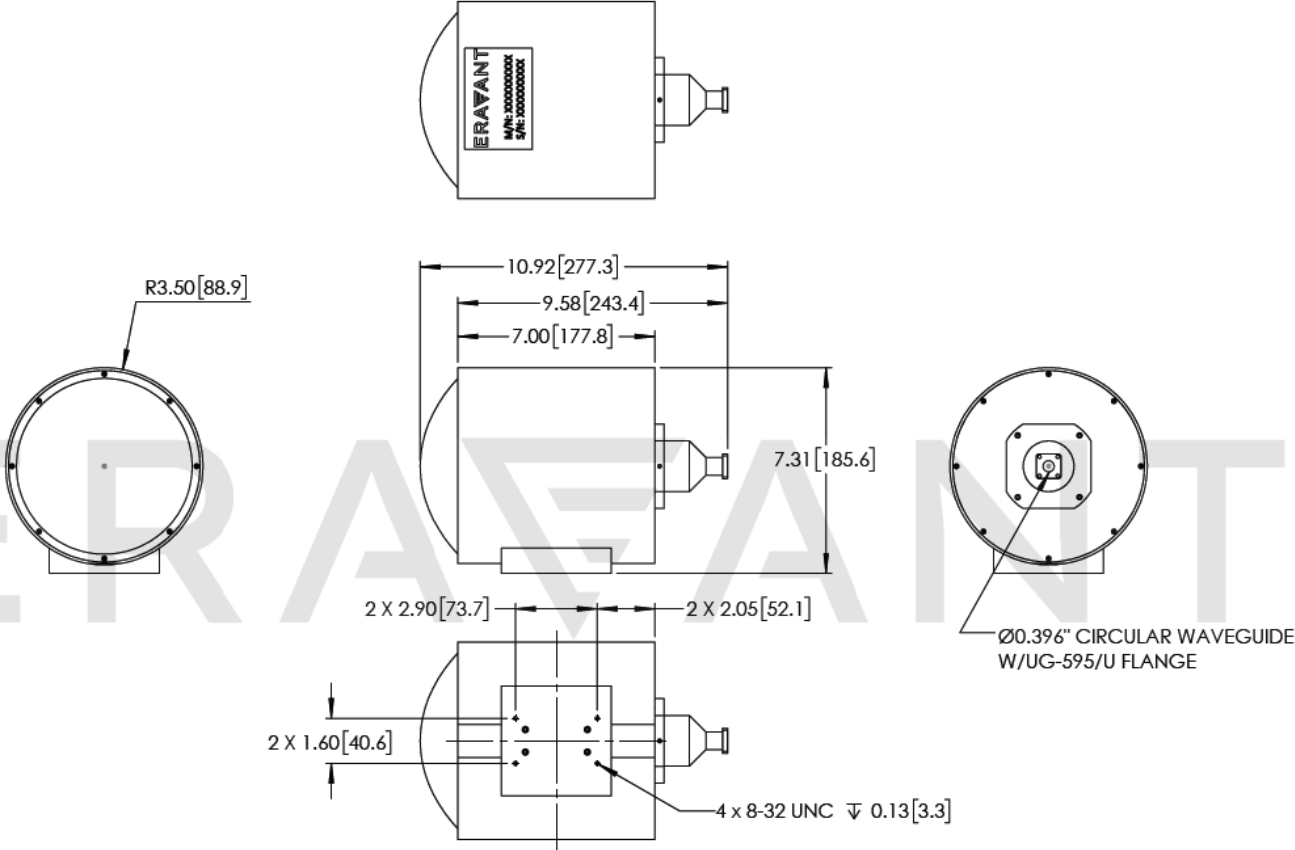
Simulated 3 dB H-Plane Beamwidth vs Frequency



Simulated Return Loss Vs Frequency



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



NOTE:

- Data provide is simulated data; actual measured data may slightly vary.
- 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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MAKING MILLIMETERWAVE ACCESSIBLE