

SAF-1832731725-396-S1

K Band Scalar Feed Horn Antenna, 20 to 24.5 GHz,
17 dBi Gain

SAF-1832731725-396-S1 is a K-band scalar feed horn antenna that operates from 20 to 24.5 GHz. The antenna offers a 17 dBi nominal gain, 35 degree typical half power beamwidth. The nominal sidelobe levels are -25 dB or lower. The scalar feed horn is equipped with a 0.396" diameter circular waveguide with UG-595/U compatible flange that supports both linear and circular polarized waveforms. A rectangular waveguide port configuration that only supports linear polarization is available under a different model number.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	20 GHz		24.5 GHz
Gain		15 dBi	
3 dB Beamwidth, E-plane		35°	
3 dB Beamwidth, H-plane		35°	
Sidelobes, E-plane		-25 dB	
Sidelobes, H-plane		-25 dB	
Return Loss		20 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
RF Ports	Ø0.396" Circular Waveguide with UG-595/U Compatible Flange
Material	Aluminum
Finish	Gold Plated
Outline	AF-CK17-396

ECCN

EAR99

FEATURES

- Full Band Operation
- Low Side Lobe Levels
- High Return Loss
- Linear Polarization

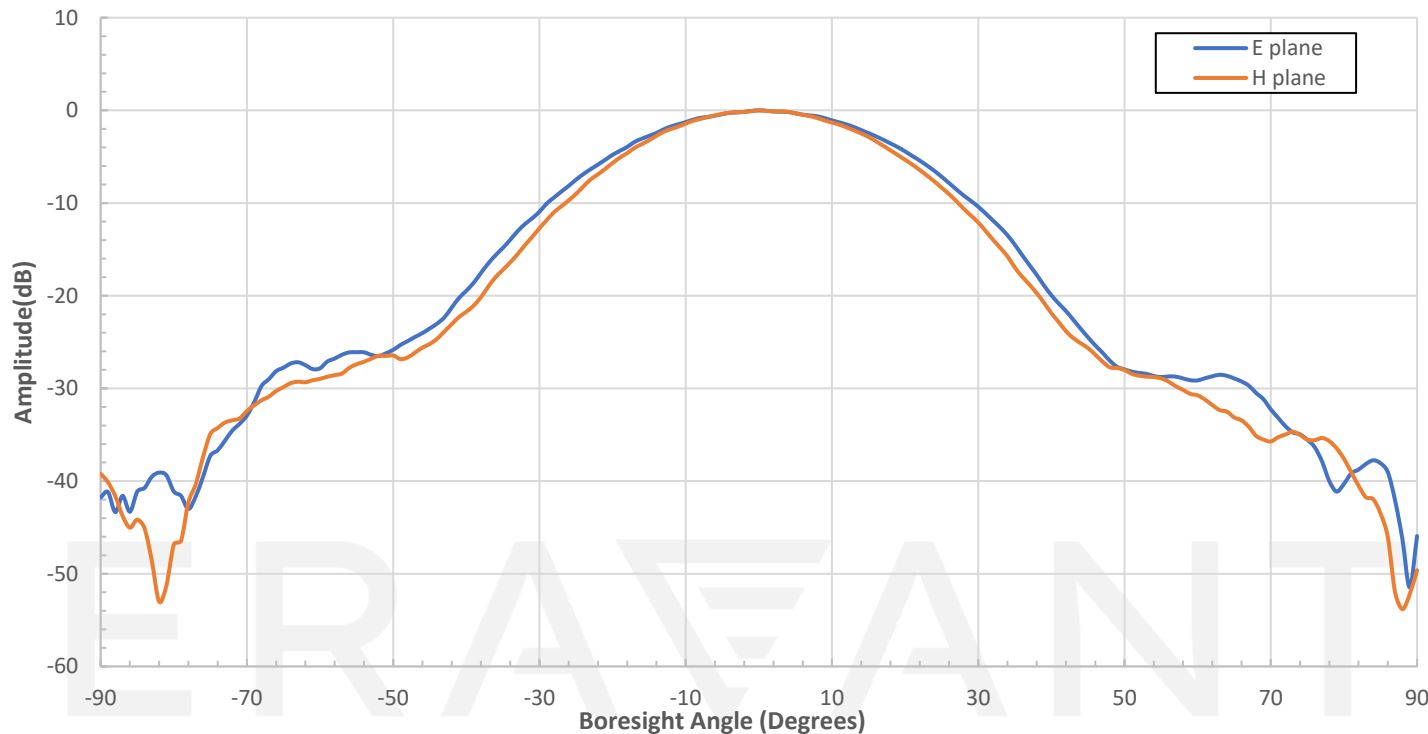
APPLICATIONS

- Feed Horn for Gaussian Optical Antennas
- Feed Horn for Cassegrain Antennas
- Rapid System Setups
- Engineering Setups

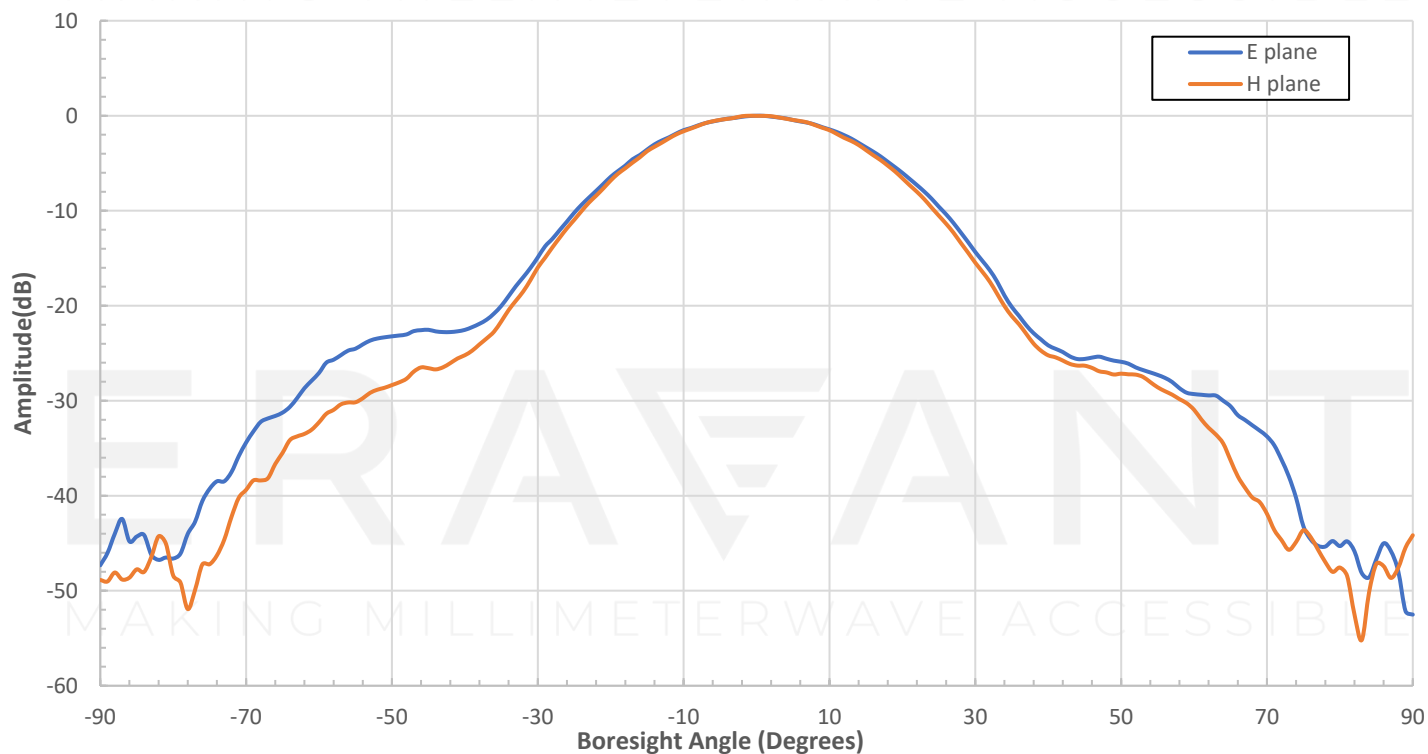
SUPPLEMENTAL DETAILS



Measured Patterns at 20 GHz

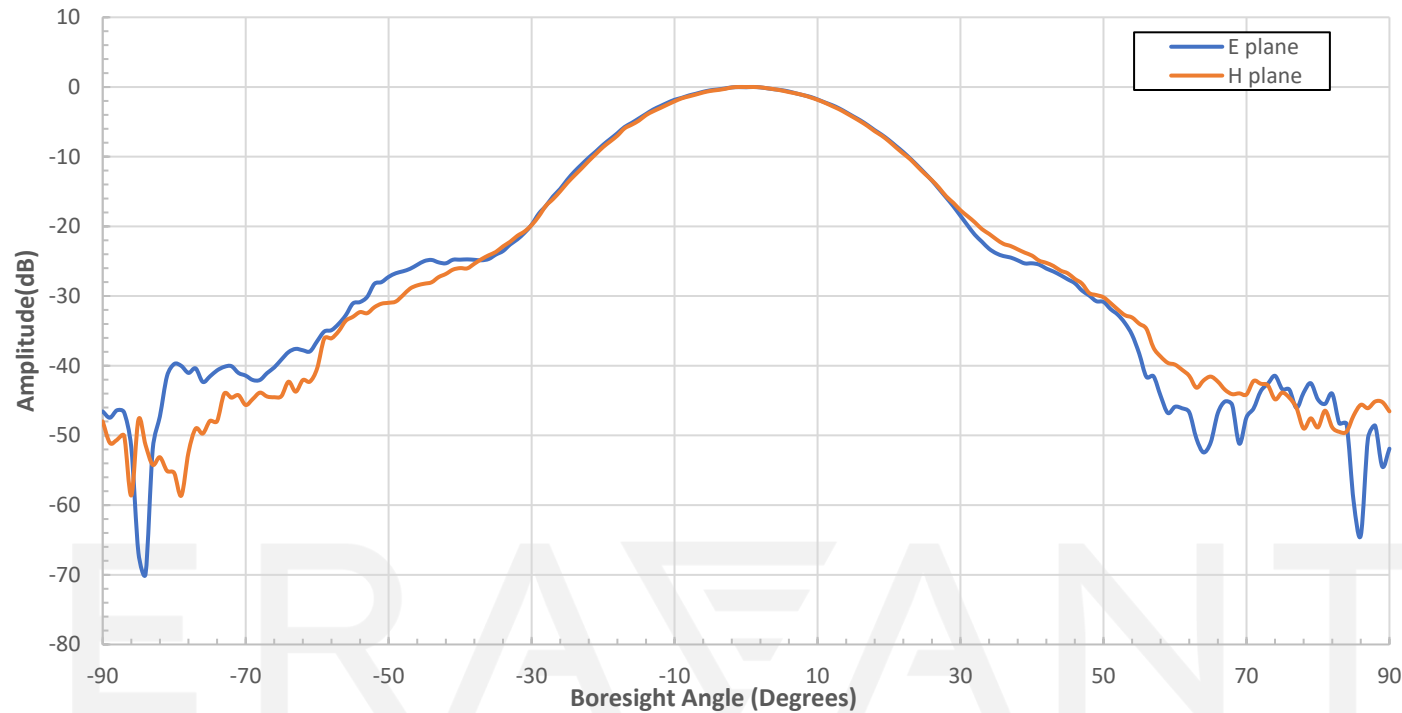


Measured Patterns at 22.3 GHz

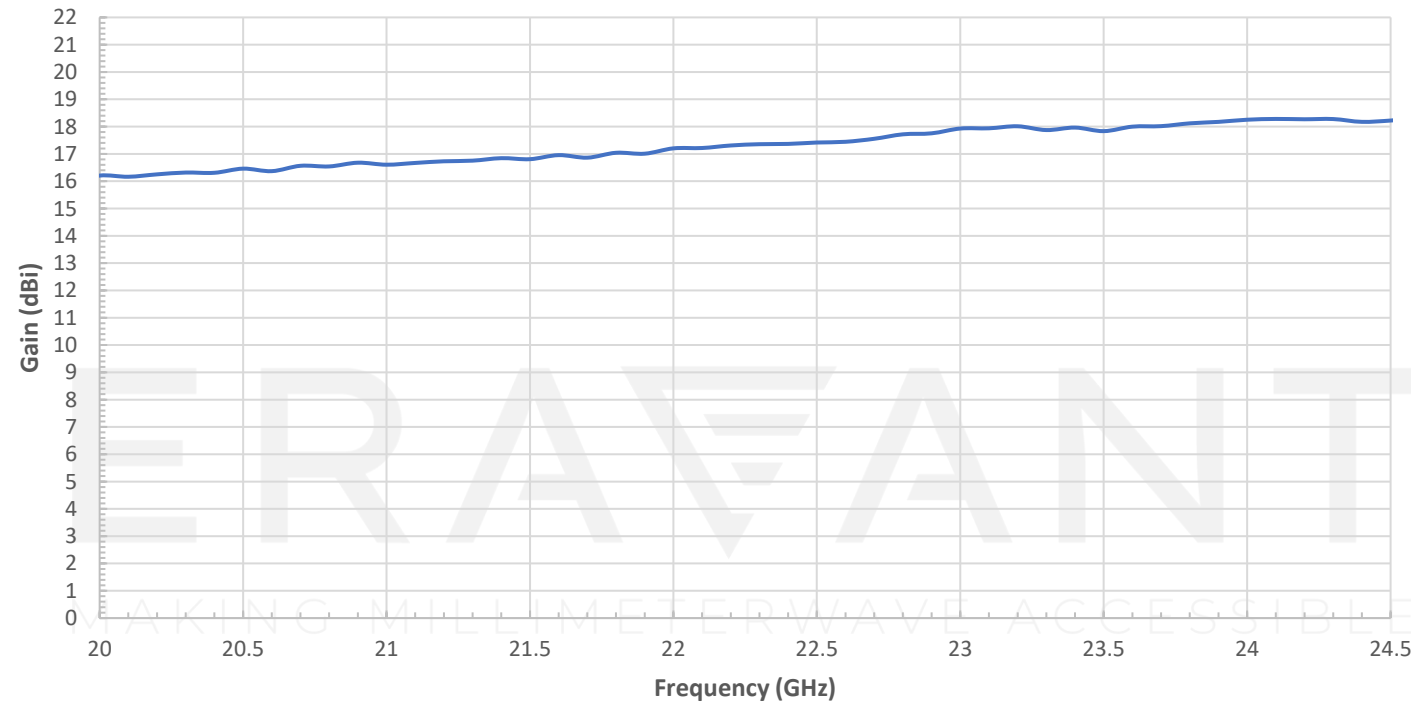


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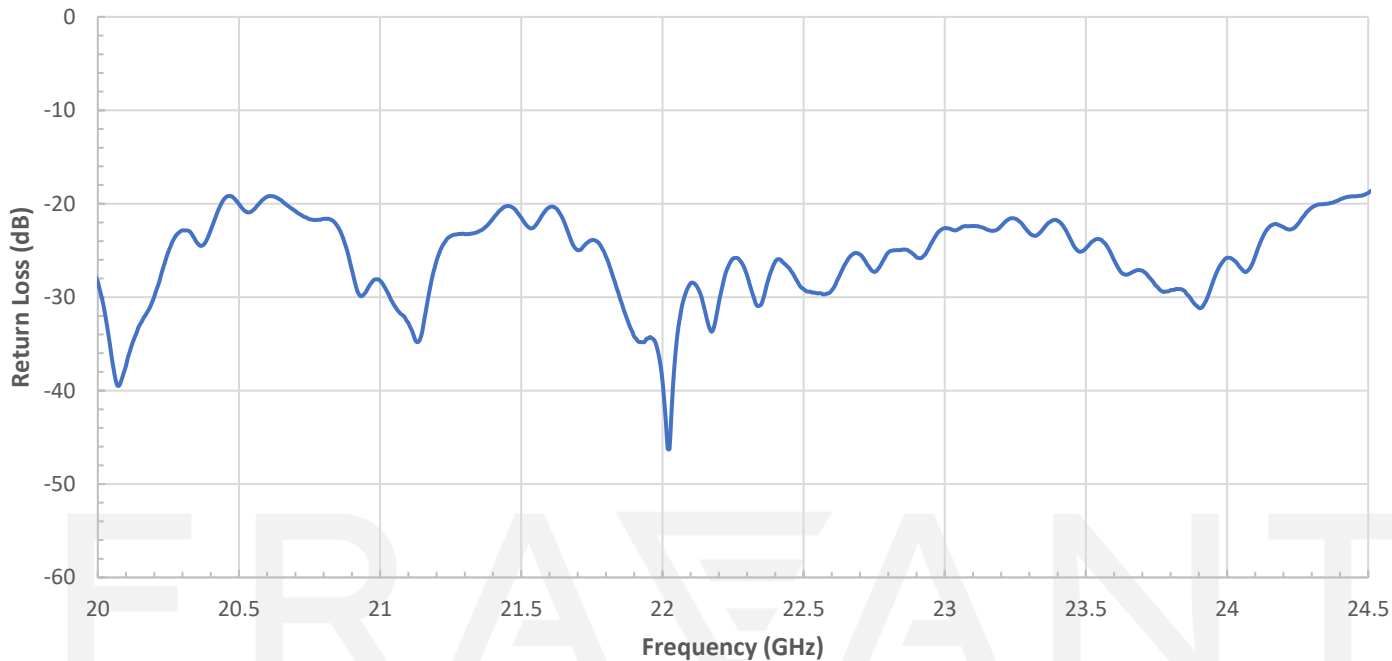
Measured Patterns at 24.5 GHz



Measured Gain vs. Frequency

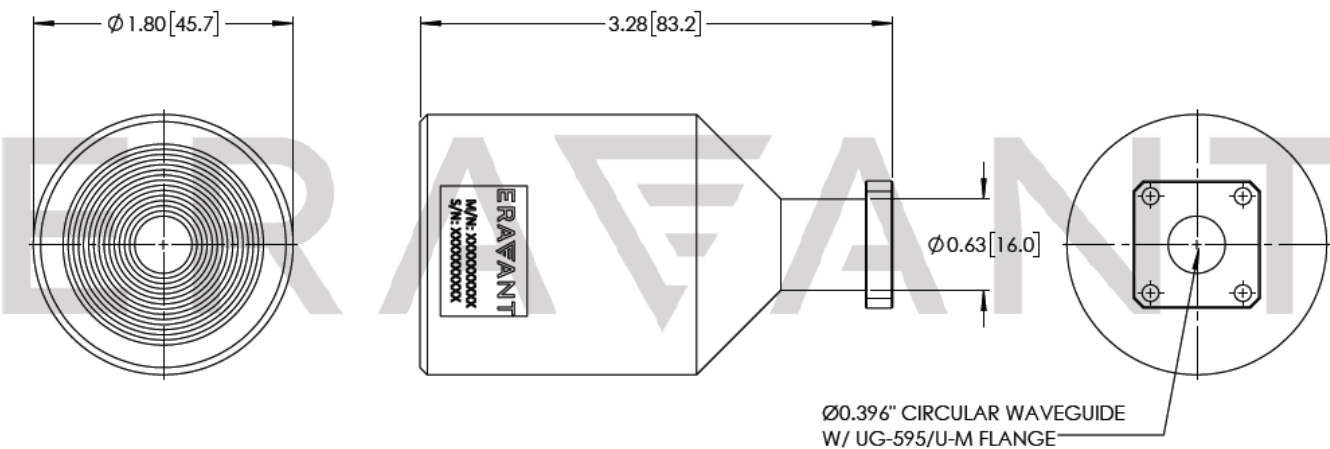


Measured Return Loss vs. Frequency



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



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NOTE:

- Test data provided is collected from a sample lot. Actual data may vary slightly 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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