SAF-2633031728-28-S1

Ka Band Scalar Feed Horn Antenna, 26 to 30 GHz, 17 dBi Gain

SAF-2633031728-28-S1 is a Ka band scalar feed horn antenna that operates from 26 to 30 GHz. The antenna offers 17 dBi nominal gain, 28 degrees typical half power beamwidth, and -25 dB typical side lobe levels. The scalar feed horn is equipped with a WR-28 rectangular waveguide that supports vertical linear polarization. Circular waveguide ports supporting vertical and horizontal linear polarization, as well as left and right hand circular polarization, are available under a different model number.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	26 GHz	28 GHz	30 GHz
Gain		17 dBi	
3 dB Beamwidth, E-plane		28°	
3 dB Beamwidth, H-plane		28°	
Sidelobes, E-plane		-25 dB	
Sidelobes, H-plane		-25 dB	
Return Loss		13 dB	
Polarization		Linear	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
RF Ports	WR-28 Waveguide with UG-599 Flange
Material	Aluminum
Finish	Chem Film
Weight	3.7 Oz
Outline	AF-RA17

ECCN

EAR99

FEATURES

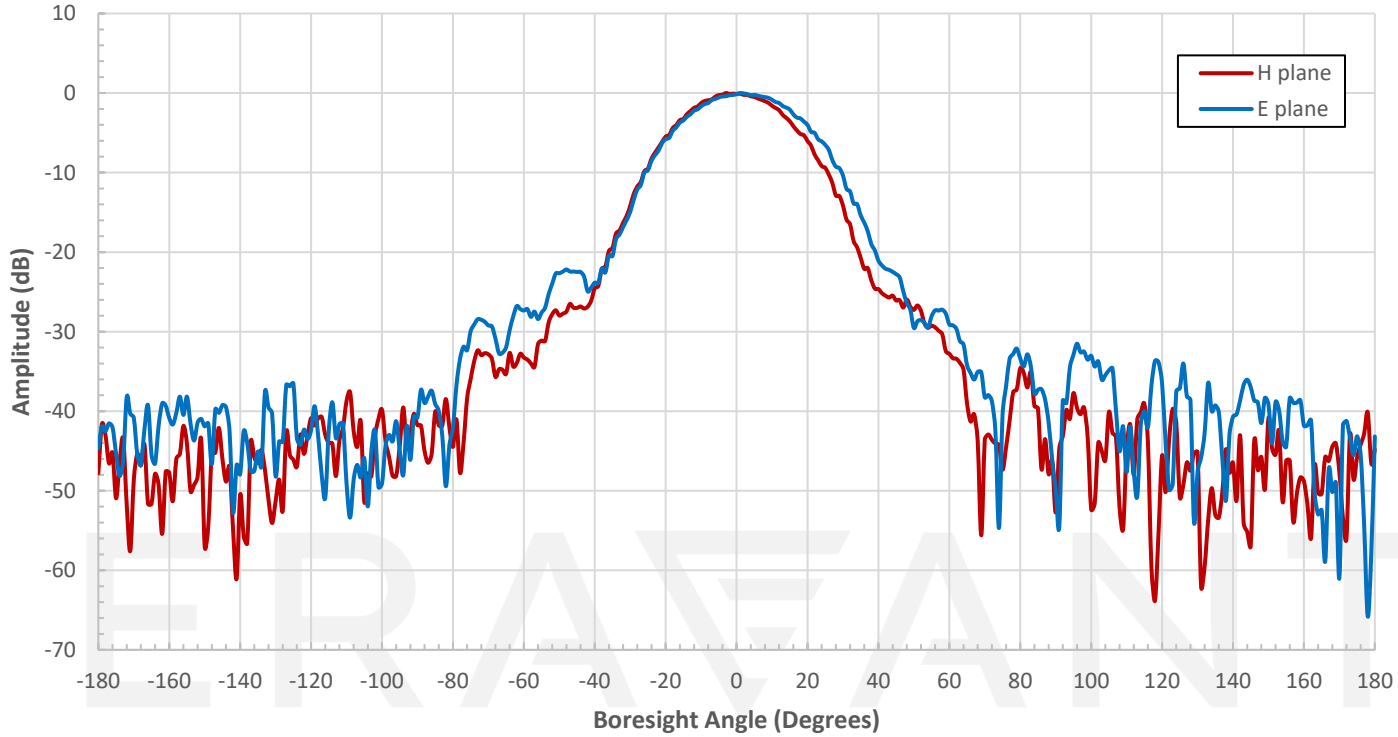
- Rectangular Waveguide Interface
- Precisely Machined
- Low Sidelobe Levels
- High Return Loss
- Linear Polarization

APPLICATIONS

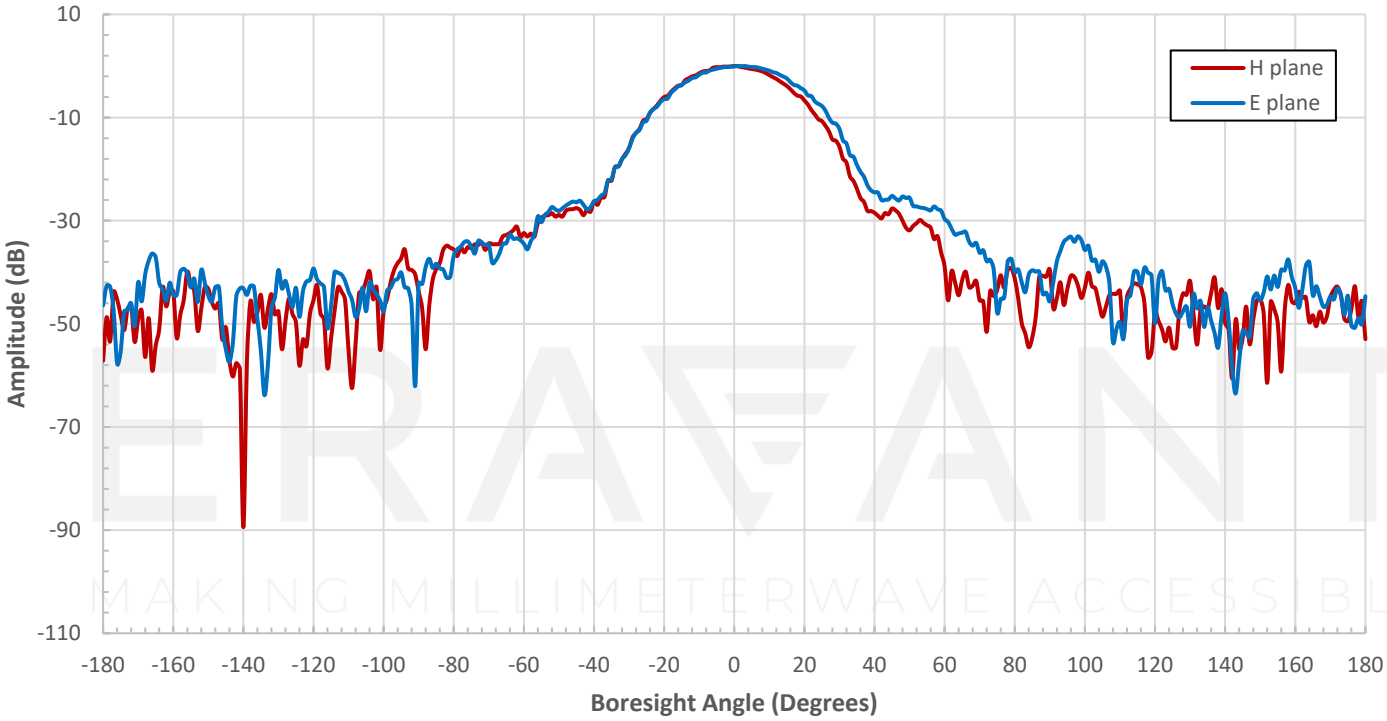
- Feed Horn for Gaussian Optical Antennas
- Feed Horn for Cassegrain Antennas
- Rapid System Setups
- Engineering Setups

SUPPLEMENTAL DETAILS

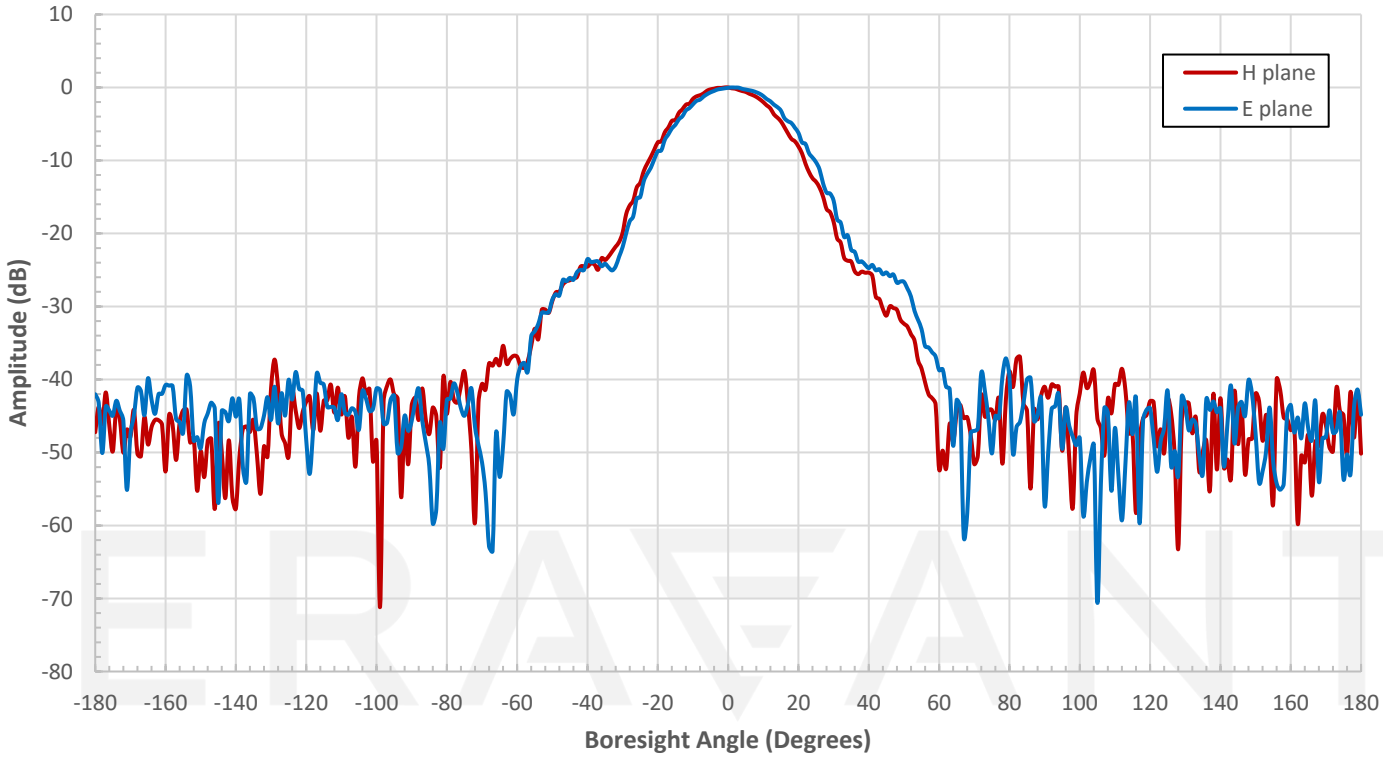
Measured Pattern @ 26 GHz



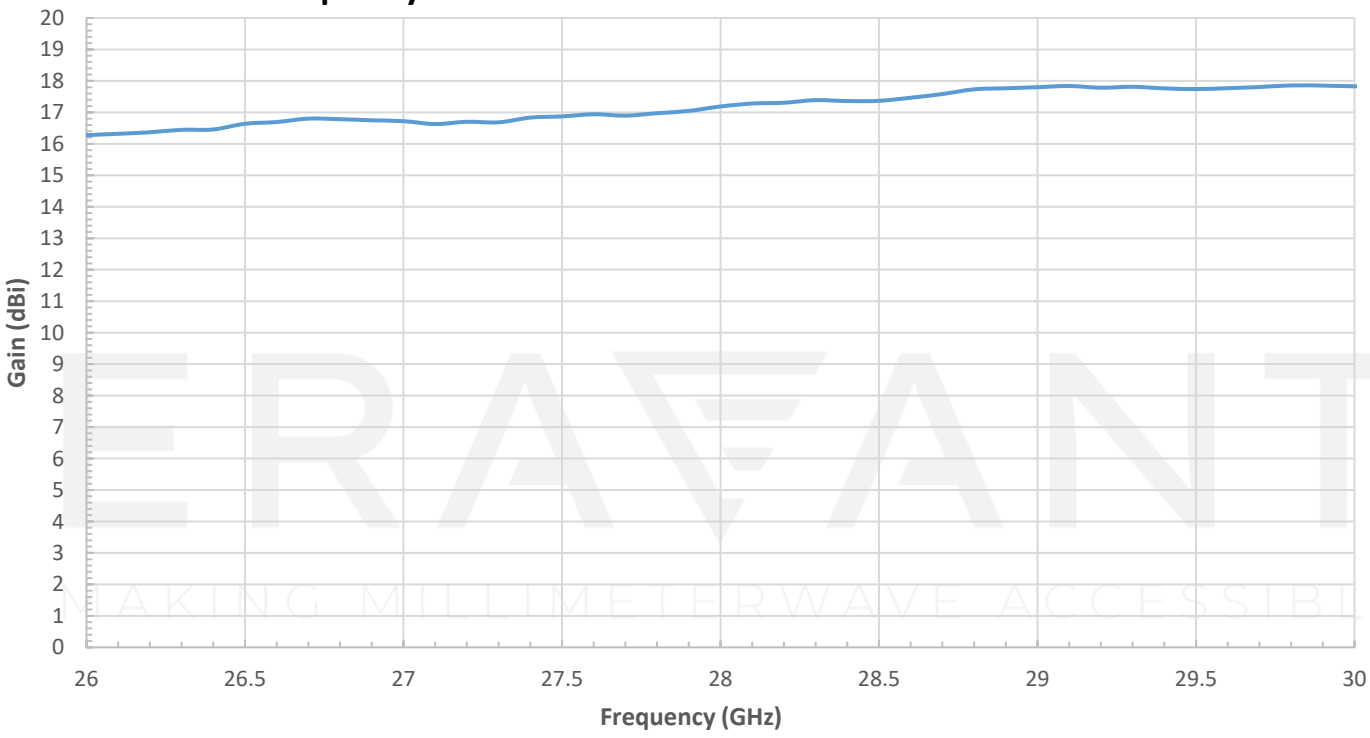
Measured Pattern @ 27.5 GHz



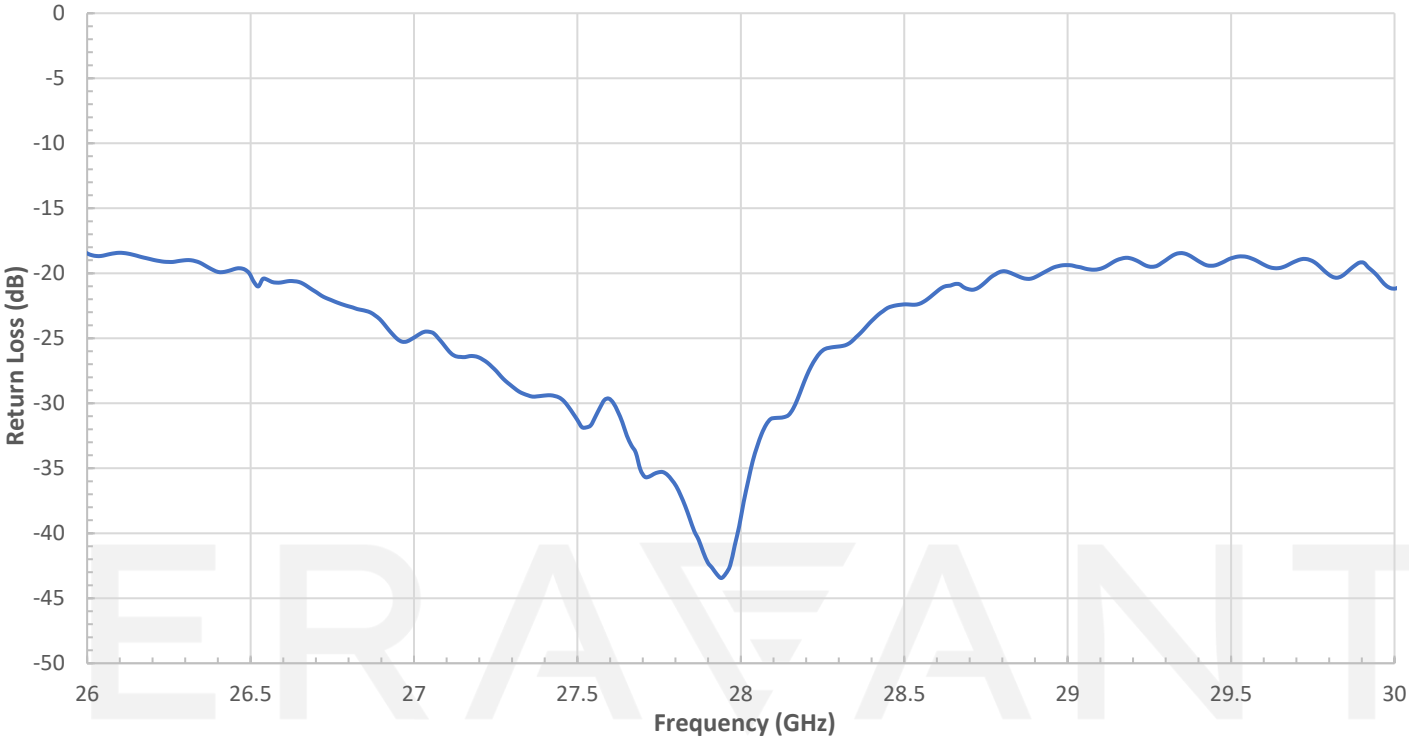
Measured Pattern @ 30 GHz



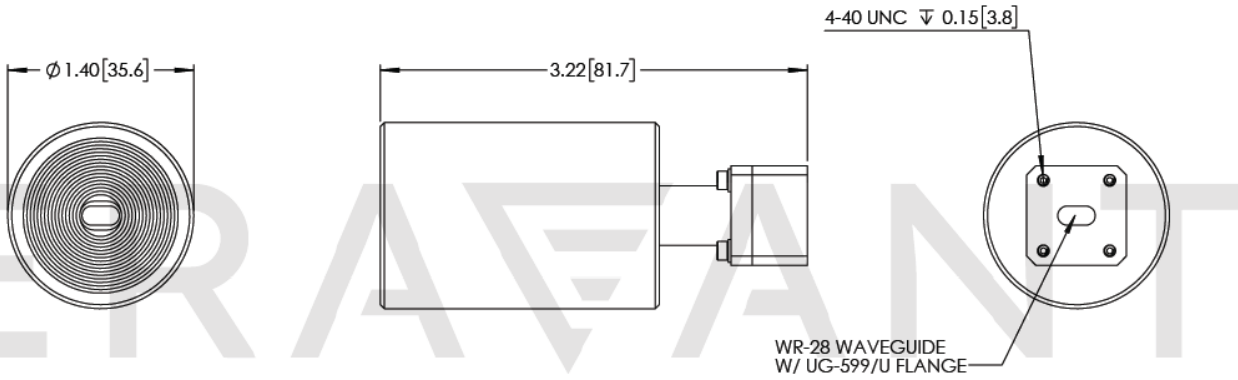
Measured Gain vs Frequency



Measured Return Loss vs. Frequency



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



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.

MAKING MILLIMETERWAVE ACCESSIBLE