SAP-28-R2-WPC

WR-28, Probe Antenna

SAP-28-R2-WPC is a Ka-band probe antenna that operates from 26.5 GHz to 40 GHz. The antenna offers 6.5 dBi nominal gain and 115 degrees typical half power beamwidth on the E-plane and 60 degrees typical half power beamwidth on the H-plane. The antenna supports linear polarized waveforms. The input of this antenna is a WR-28 waveguide with UG-599/U flange.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	26.5 GHz		40 GHz
Gain		6.5 dBi	
Polarization		Linear	
3 dB Beamwidth, E-Plane		115°	
3 dB Beamwidth, H-Plane		60°	
Side Lobes, E-Plane		-10 dB	
Side Lobes, H-Plane		-14 dB	
Return Loss		12 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Port	WR-28 Waveguide with UG-599/U Flange
Waveguide Material	Aluminum
Finish	Gold Plated
Weight	0.3 Oz
Outline	AP-RA

ECCN

EAR99

FEATURES

- Rectangular Waveguide Interface
- Precisely Machined and Gold Plated
- Linear Polarization
- High Return Loss

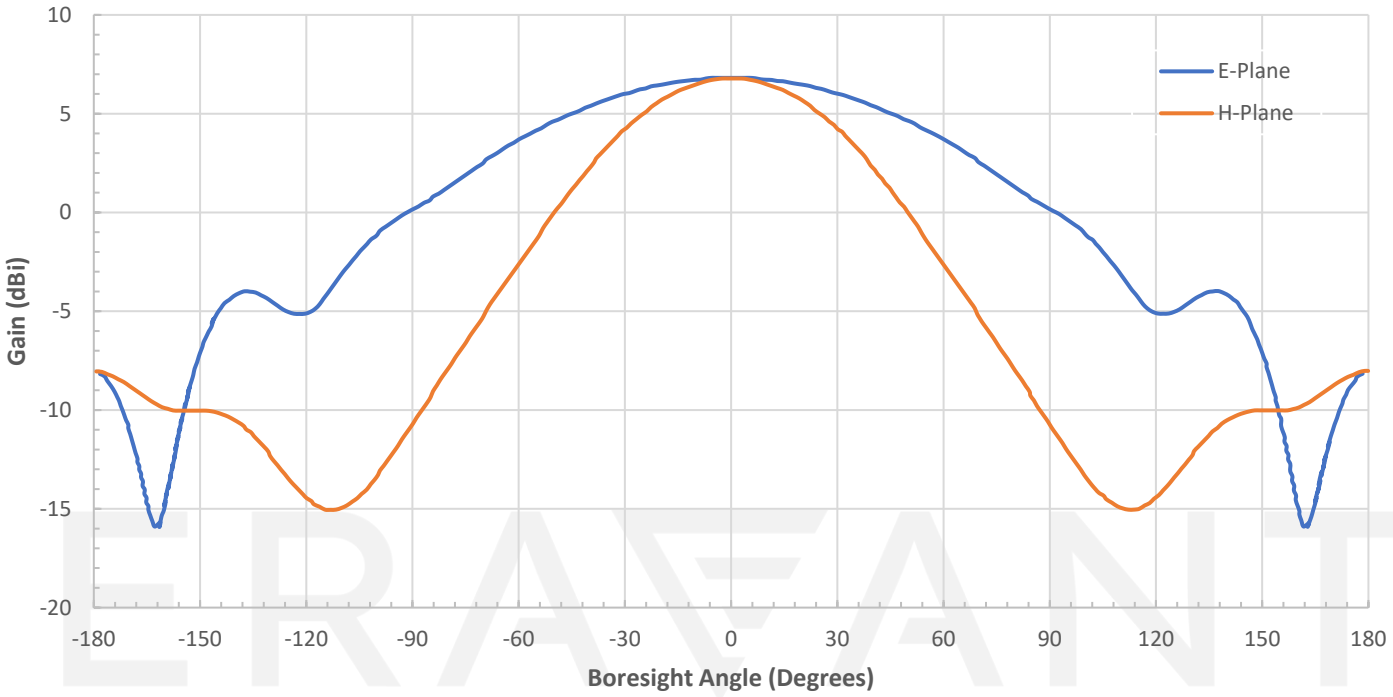
APPLICATIONS

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

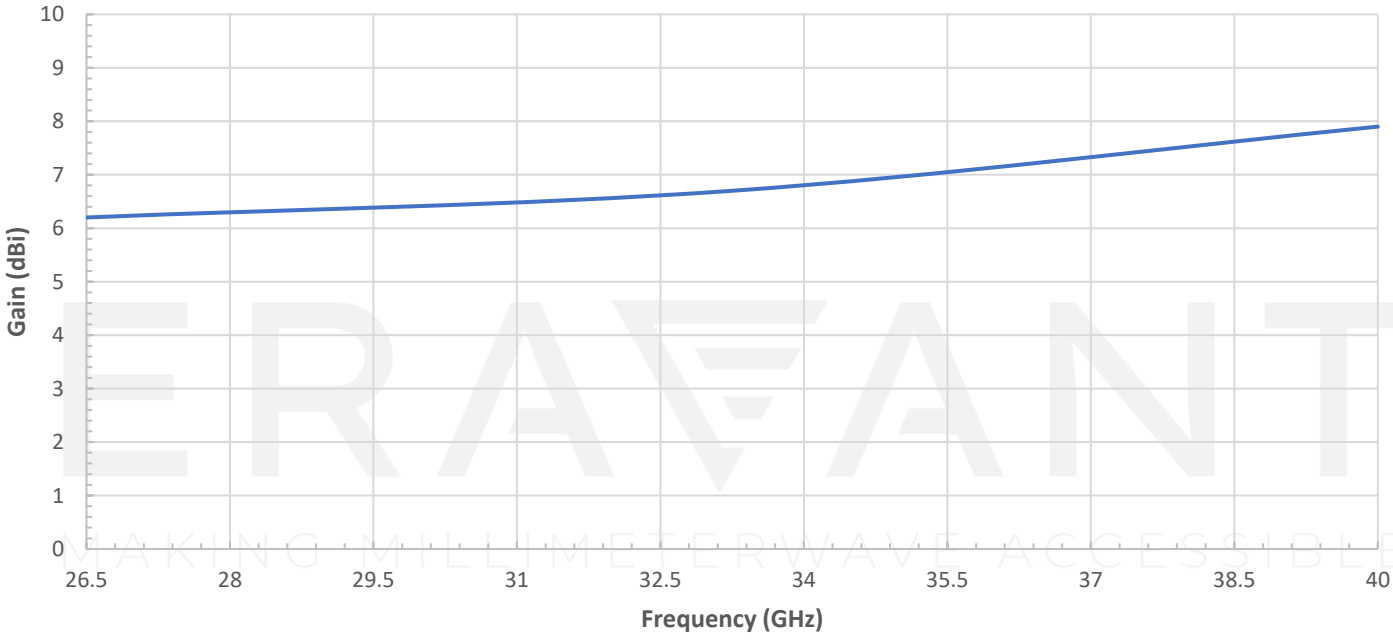
SUPPLEMENTAL DETAILS

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Simulated Antenna Pattern @ 33.25 GHz

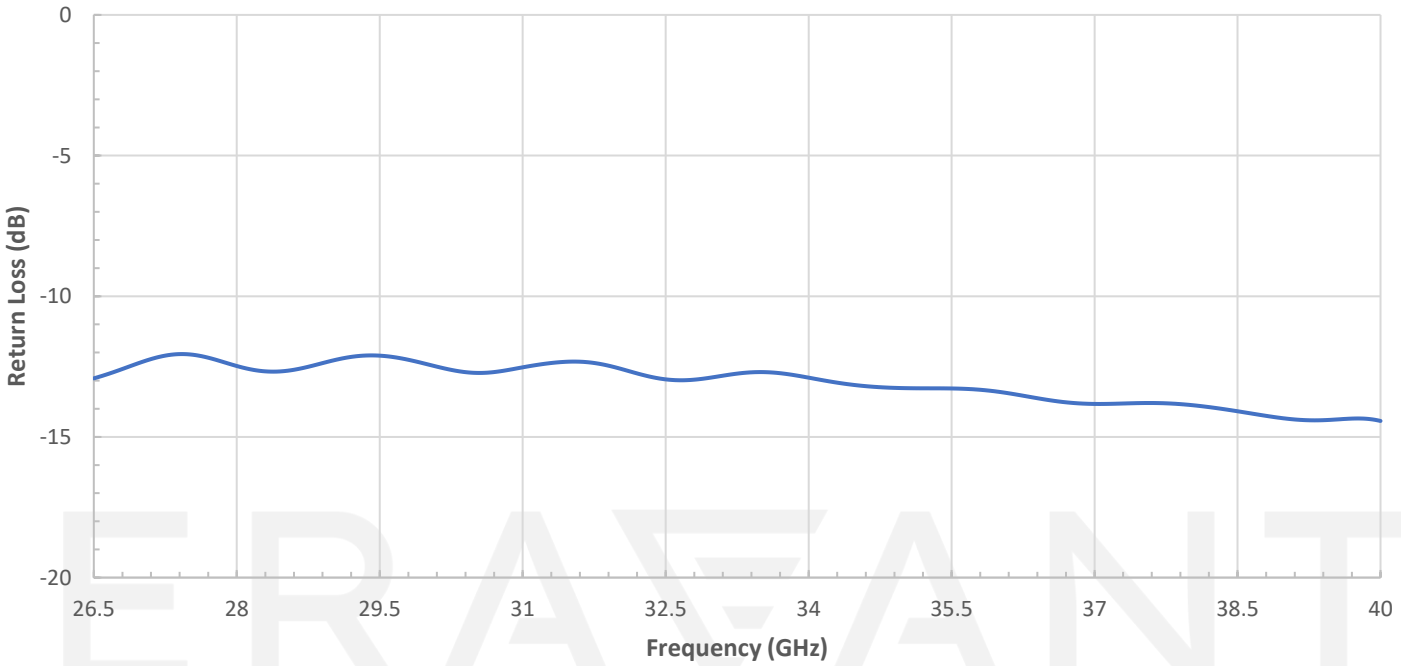


Simulated Gain vs Frequency

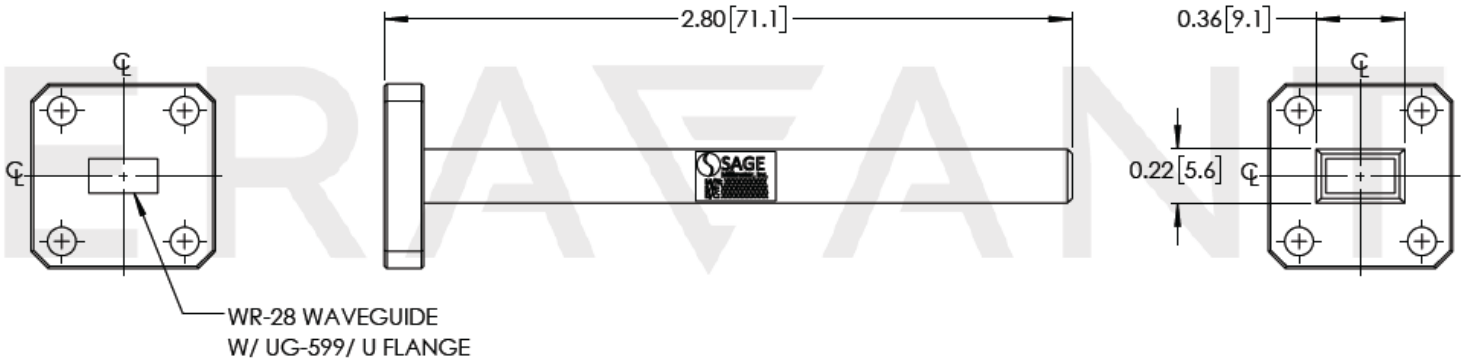


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Simulated Return Loss vs Frequency



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



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NOTE:

- All testing is performed under +25 °C room temperature. This antenna is a mature product. The reasons for only providing simulated data can be found in the following blog here.
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- 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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