SAP-28-R2-6.0

WR-28 Probe Antenna, 6.0” Long

SAP-28-R2-6.0 is a Ka-band probe antenna that operates from 26.5 GHz to 40 GHz. The antenna offers 6.5 dBi nominal directivity 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
Directivity		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		11 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Port	WR-28 Waveguide W/ UG-599/U Flange
Size	6.00” (L) x 0.75” (W) x 0.75” (H)
Flange Material	Brass
Waveguide Material	Copper
Finish	Gold Plated
Weight	1.5 Oz
Outline	AP-RA-6.0

ECCN

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FEATURES

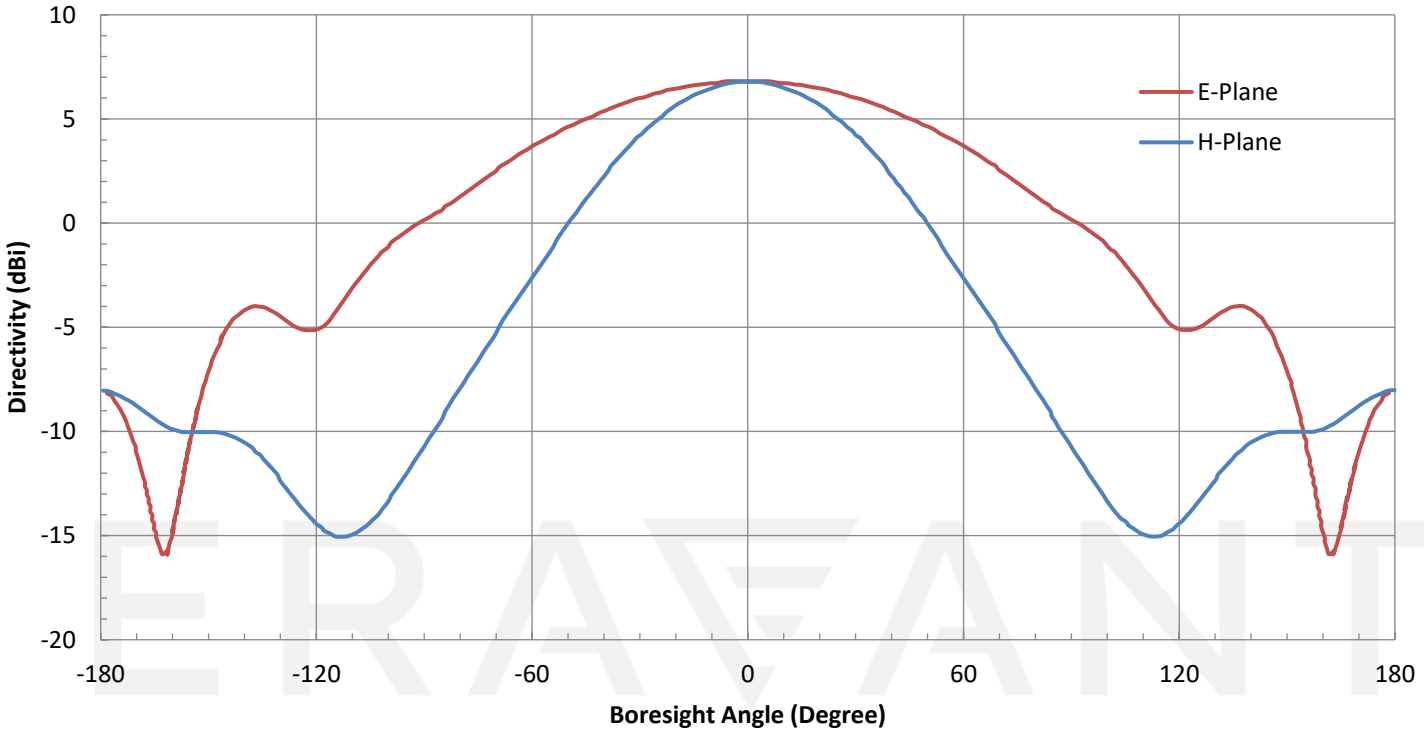
- Rectangular Waveguide Interface
- Linear Polarization

APPLICATIONS

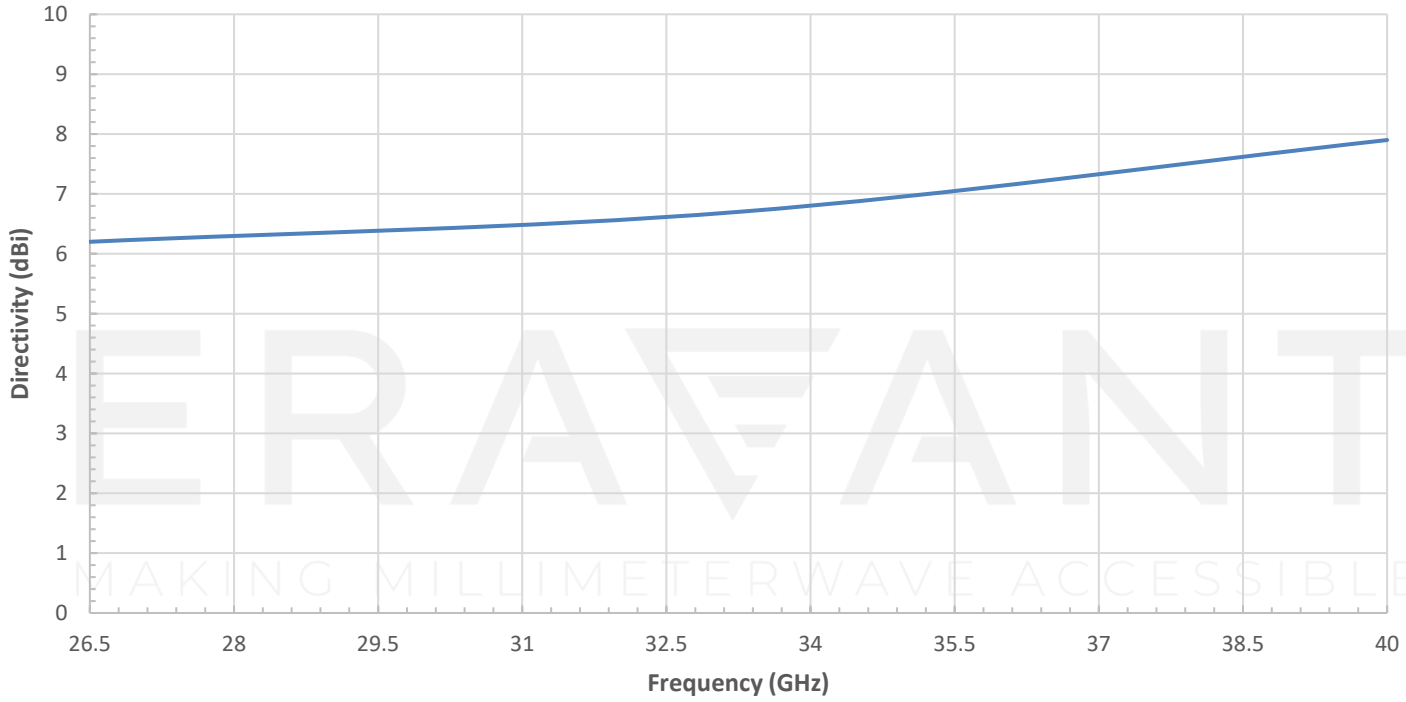
- Antenna Ranges
- Antenna Directivity Measurements
- System Setups

SUPPLEMENTAL DETAILS

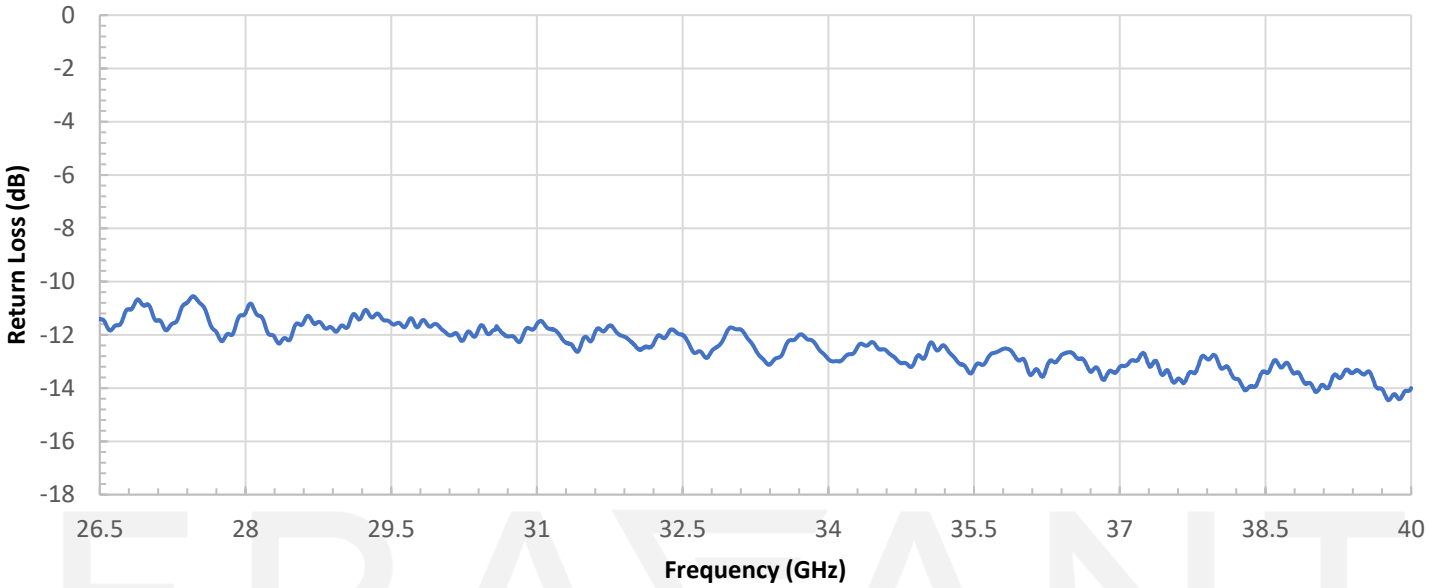
Simulated Antenna Pattern @ 33.25 GHz



Simulated Directivity vs Frequency

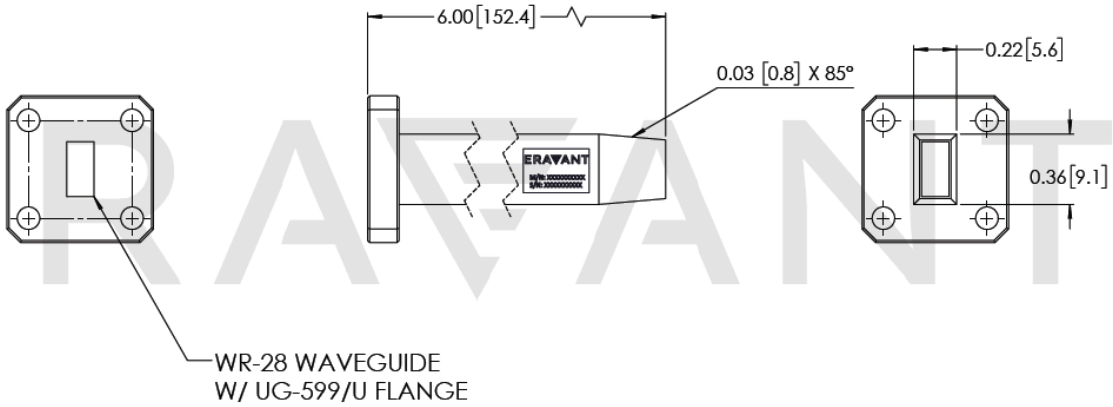


Typical Measured Return Loss vs. Frequency



Mechanical Outline:

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



NOTE:

- Data provided is collected from a sample lot. Actual data may vary slightly from unit to unit. 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.
- 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.