

SAP-28KF-E2

WR-28 Probe Antenna, 6.5 dBi Directivity with 2.92 mm Coax Input

SAP-28KF-E2 is a Ka-band probe antenna with a end launch (180°) 2.92 mm (F) coax connector to cover the frequency range of 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. Please contact us for right angle (90°) versions.



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		10 dB	
Power Handling			40 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Port (F)	2.92 mm Female
Size	3.80" (L) x 0.75 (W) x 0.75 (H)
Material	Brass
Connector Material	Stainless Steel
Finish	Gold Plated
Weight	1.5 Oz
Outline	AP-RAC-E

ECCN

EAR99

FEATURES

- Precisely Machined and Gold Plated
- Linear Polarization

APPLICATIONS

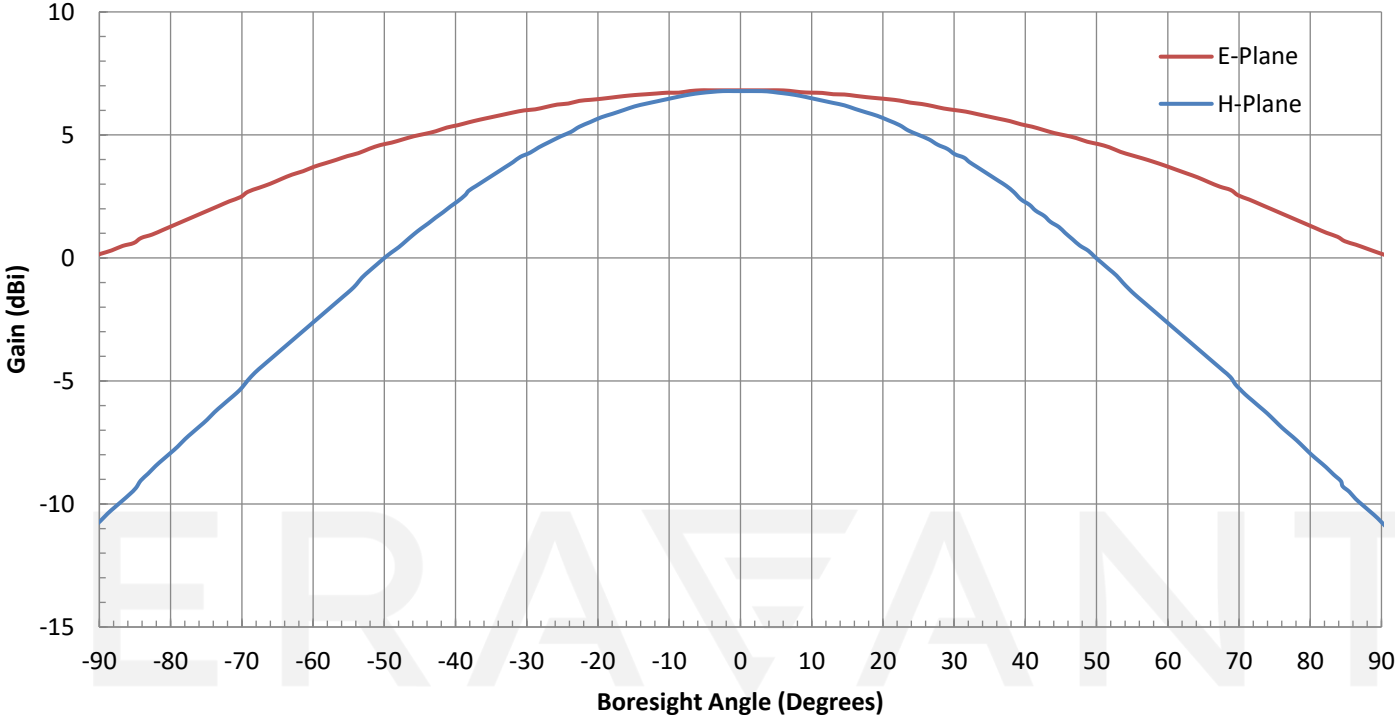
- 5G Systems
- Antenna Ranges
- Antenna Directivity Measurements
- System Setups

SUPPLEMENTAL DETAILS

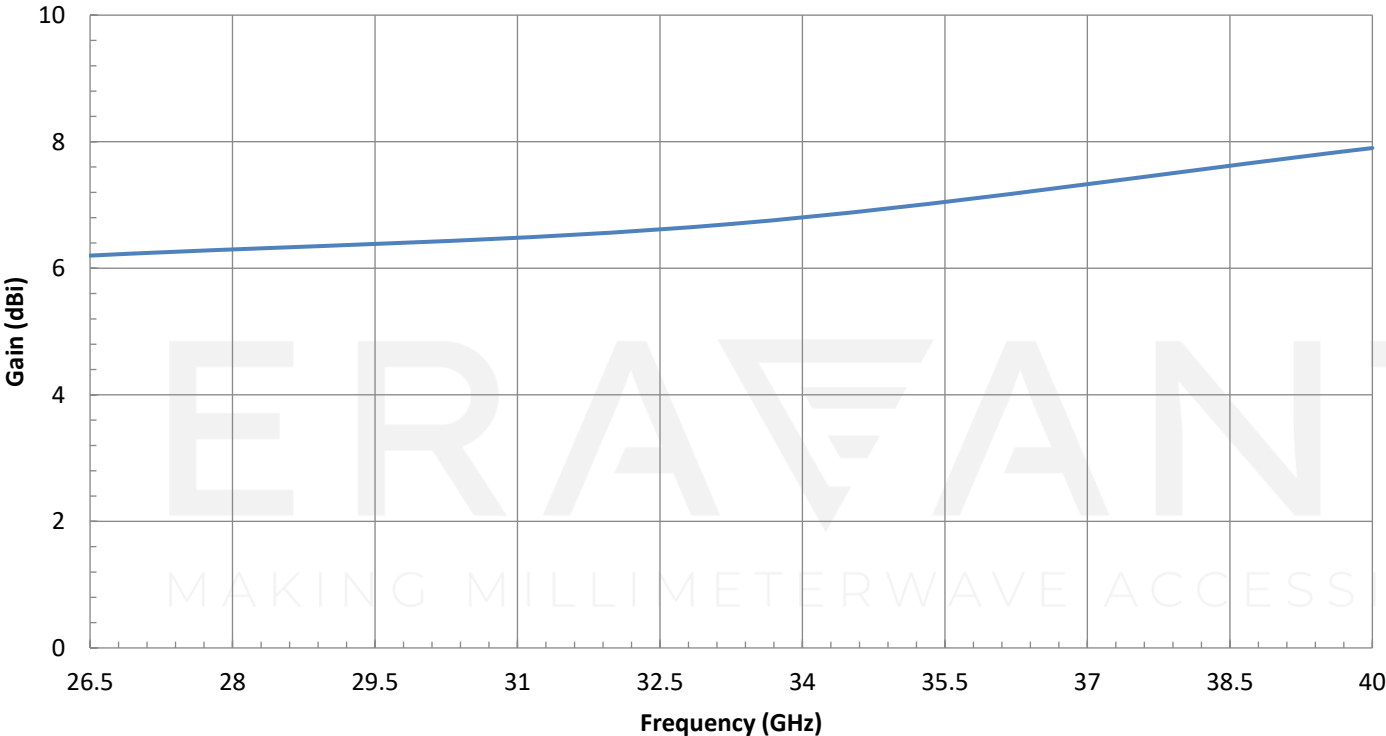


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Typical Antenna Pattern @ 33.25 GHz

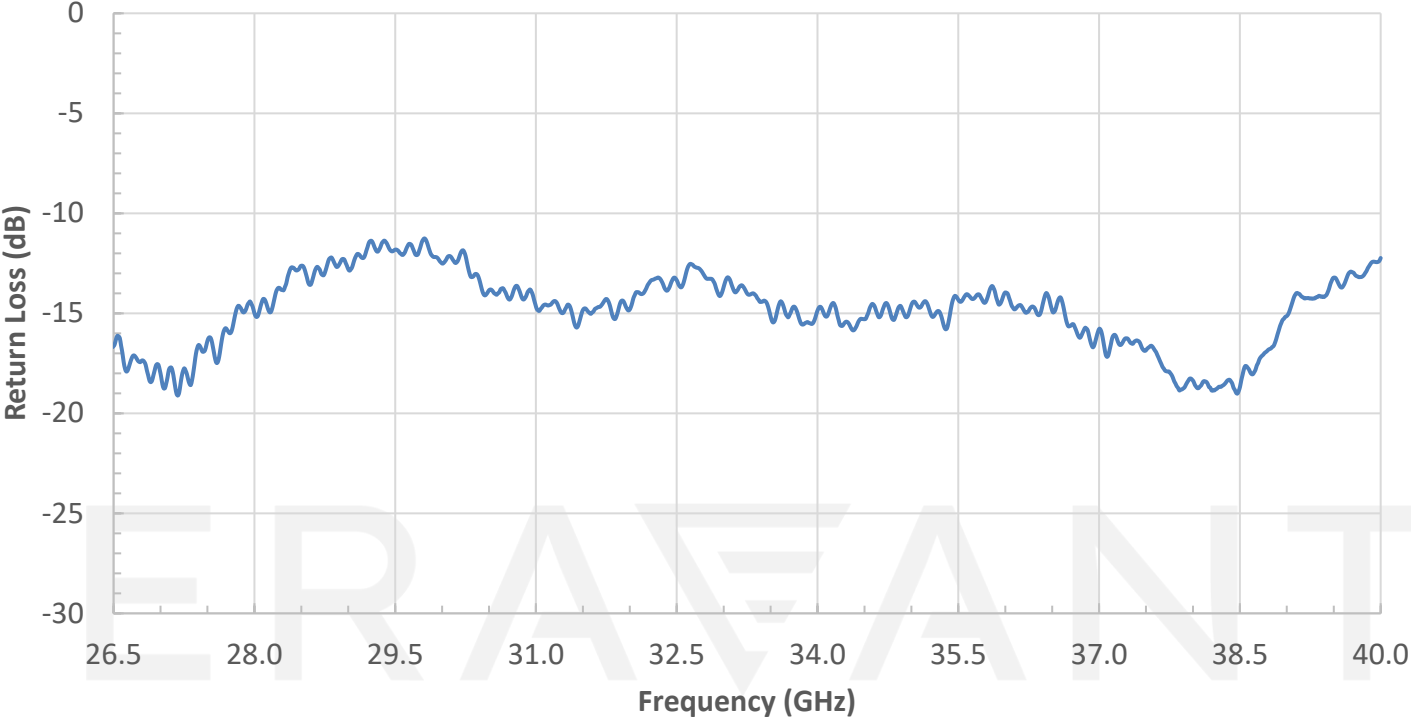


Typical Directivity vs. Frequency



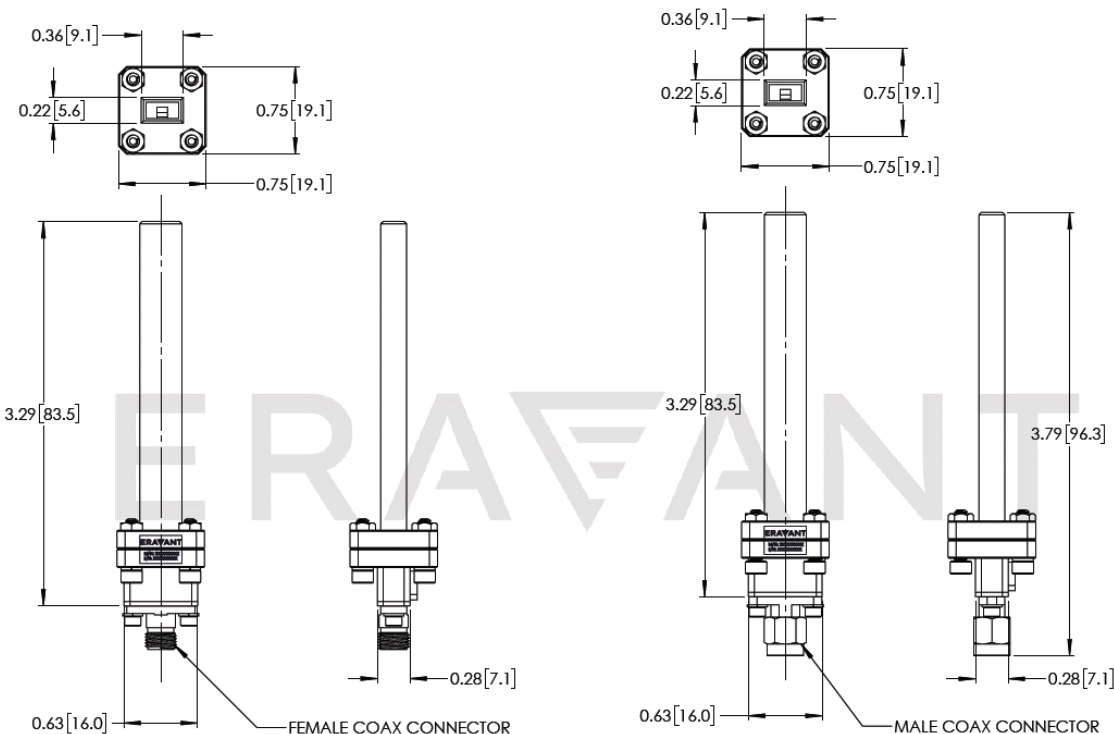
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Typical Measured Return Loss vs. Frequency



Mechanical Outline:

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



NOTE:

- On condition that test data is provided it 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 waveguide will cause performance degradation and may damage or destroy the unit.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.92 ± 0.05 Nm), should be applied. **Eravant torque wrench, model SCH-08008-S1, is highly recommended.**

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