

SAR-1834031432-KF-S2-DR

WR-06 Compact Level Setting Attenuator

SAR-1834031432-KF-S2-DR is a dual-ridged horn antenna that operates from 18 to 40 GHz. The antenna offers a nominal gain between 12 and 17 dBi and a typical 3 dB beamwidth between 20° and 43°. The antenna supports linear polarized waveforms and features a four-hole mounting plate. The RF port offers a female K connector.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	18 GHz		40 GHz
Gain		12 to 17 dBi	
Polarization		Linear	
3 dB Beamwidth		20 to 43°	
10 dB Beamwidth		36 to 92°	
Return Loss		10 dB	
Power Handling		20 W (CW)	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Port	K(F)
Mounting	Ø 0.16" Thru Holes
Size	2.84" (L) x 2.00" (W), 2.00" (H)
Material	Aluminum
Finish	Gold Plated
Mounting Plate Finish	Chem Film
Weight	2.5 Oz
Outline	AR-AK14-DR

ECCN

EAR99

FEATURES

- Coaxial Connector for RF Input
- Broadband
- Linear Polarization
- Good Impedance Match

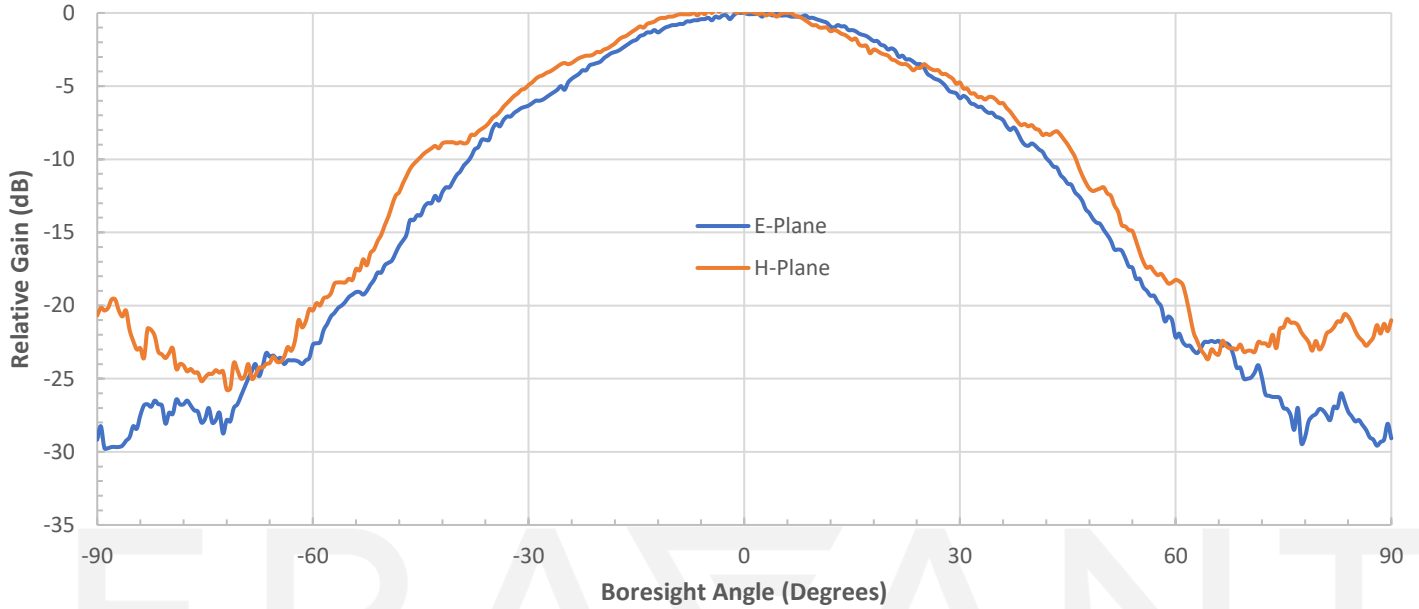
APPLICATIONS

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

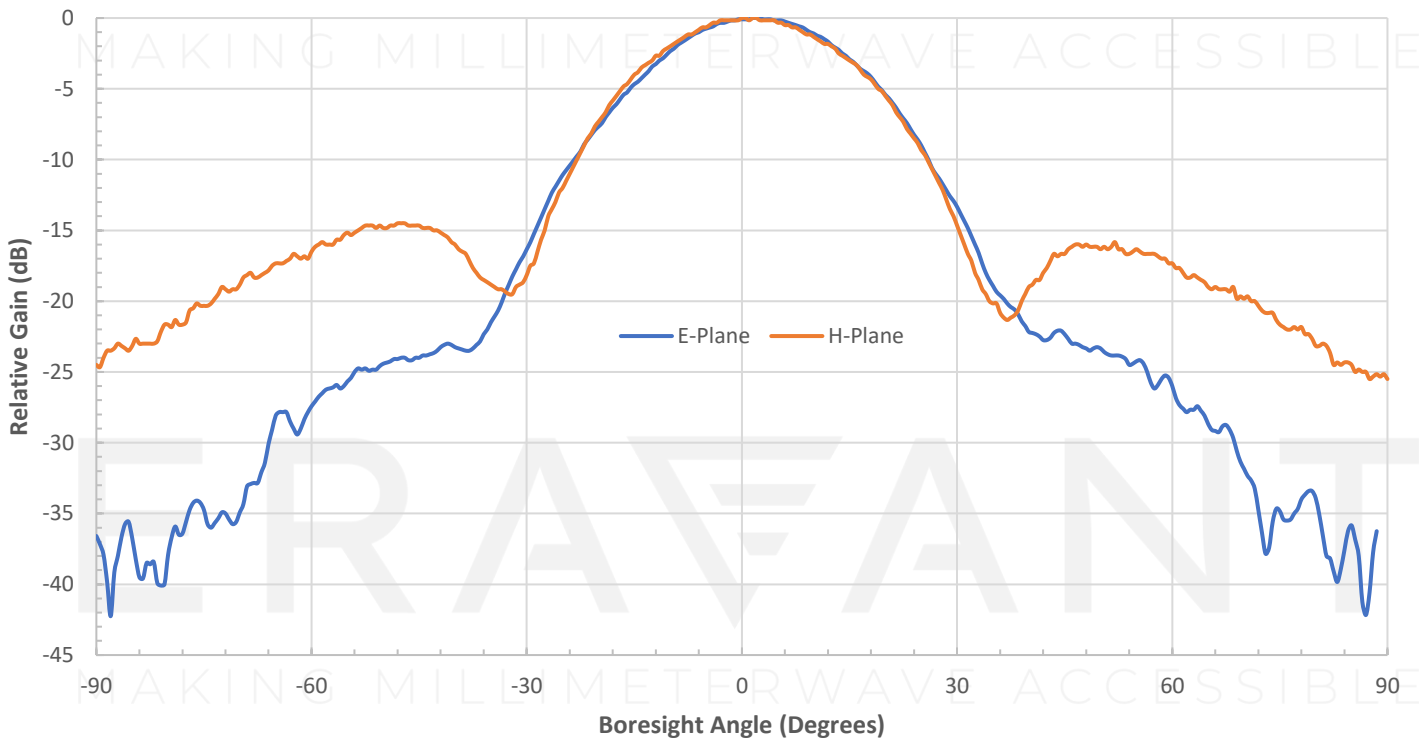
SUPPLEMENTAL DETAILS



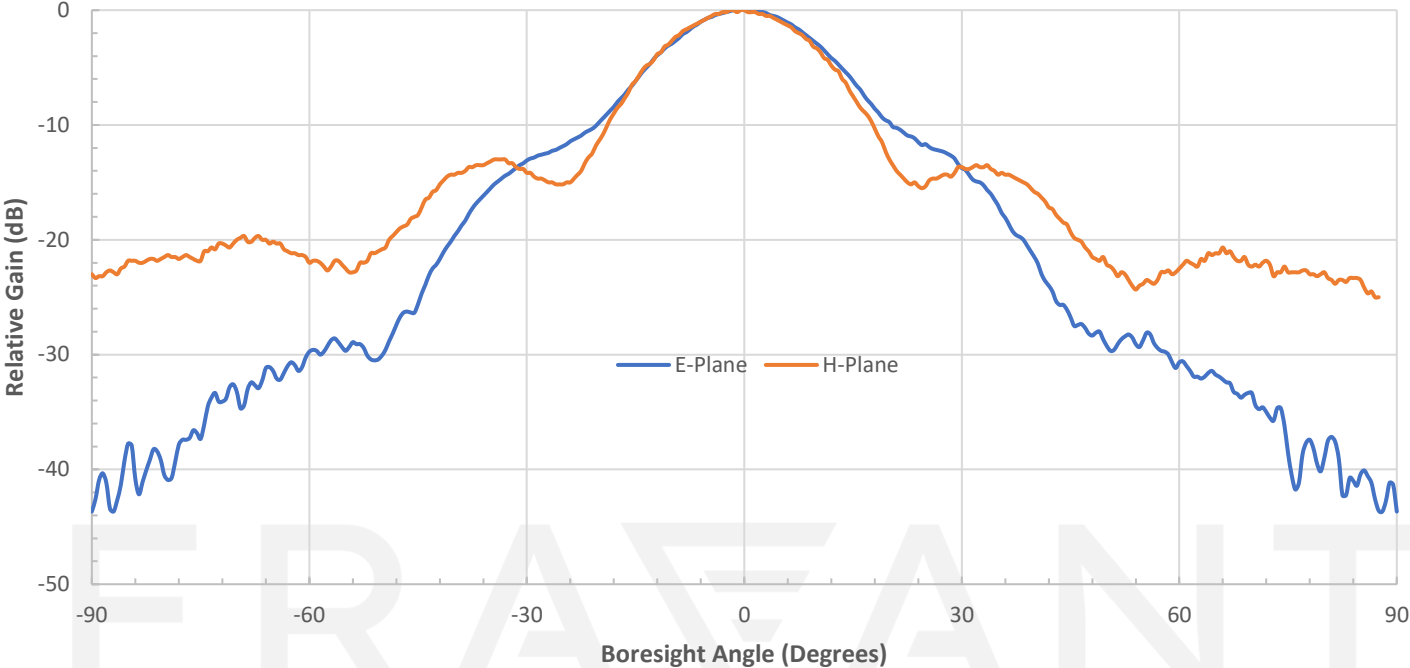
Typical Antenna Pattern @ 18 GHz



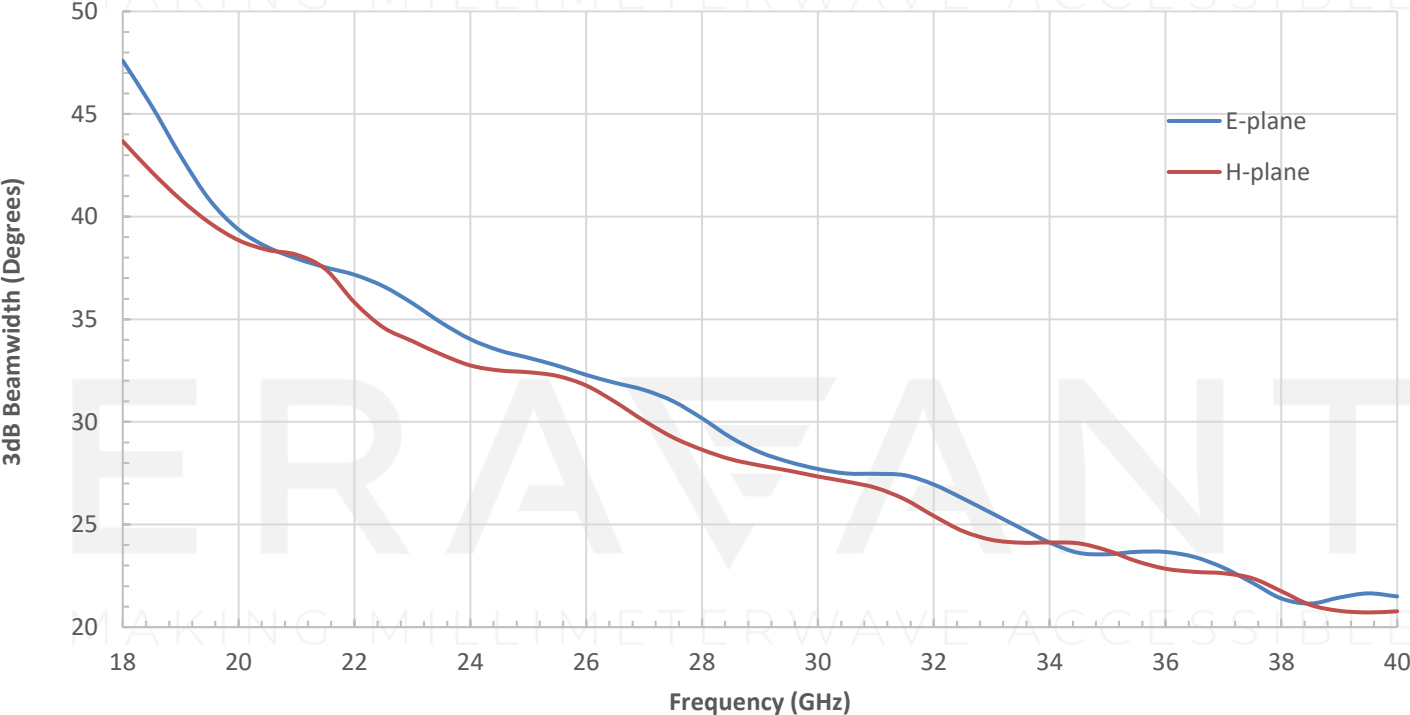
Typical Antenna Pattern @ 29 GHz



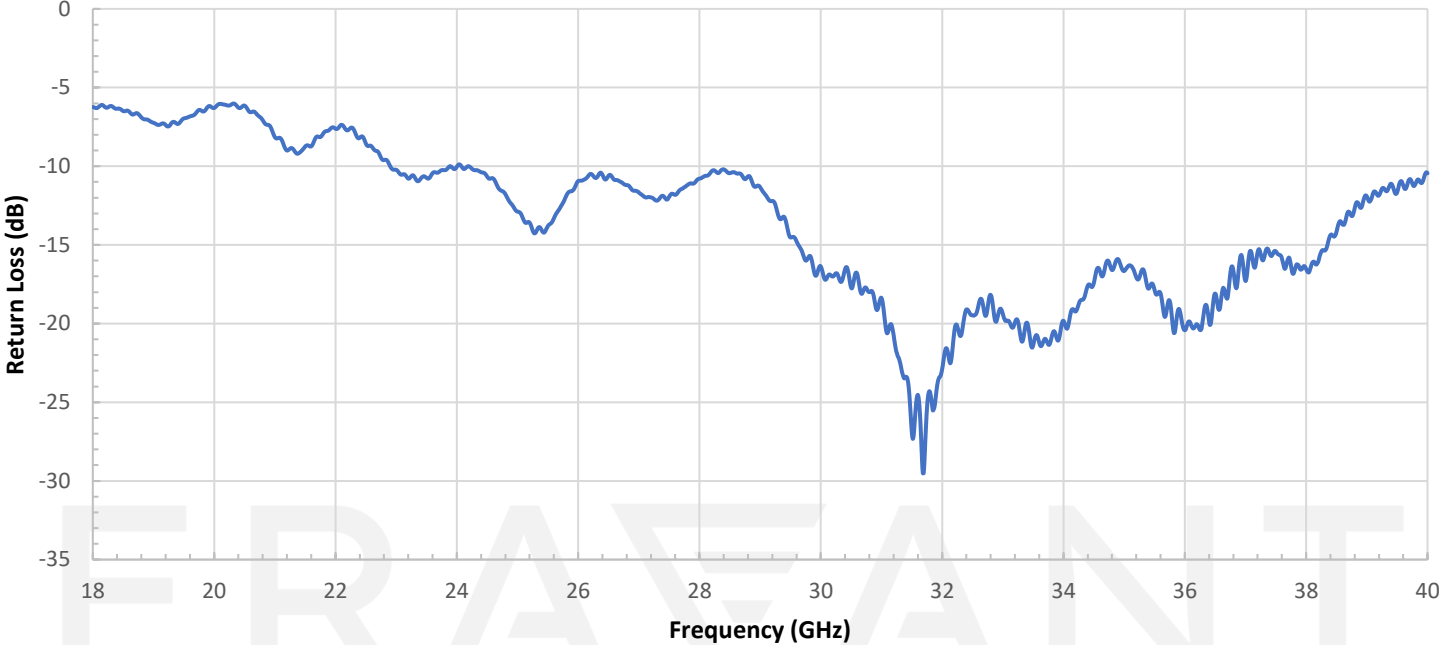
Typical Antenna Pattern @ 40 GHz



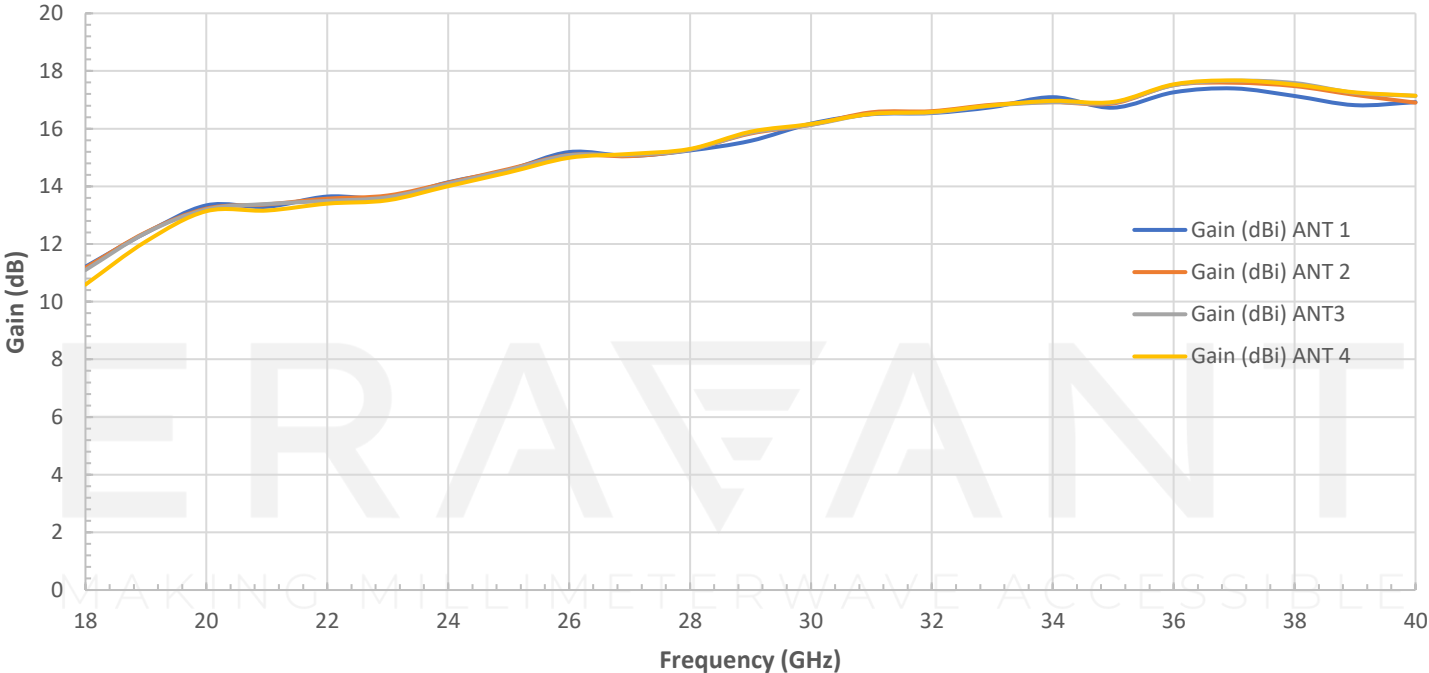
Simulated E and H Plane 3dB Beamwidth vs. Frequency



Typical Return Loss vs. Frequency

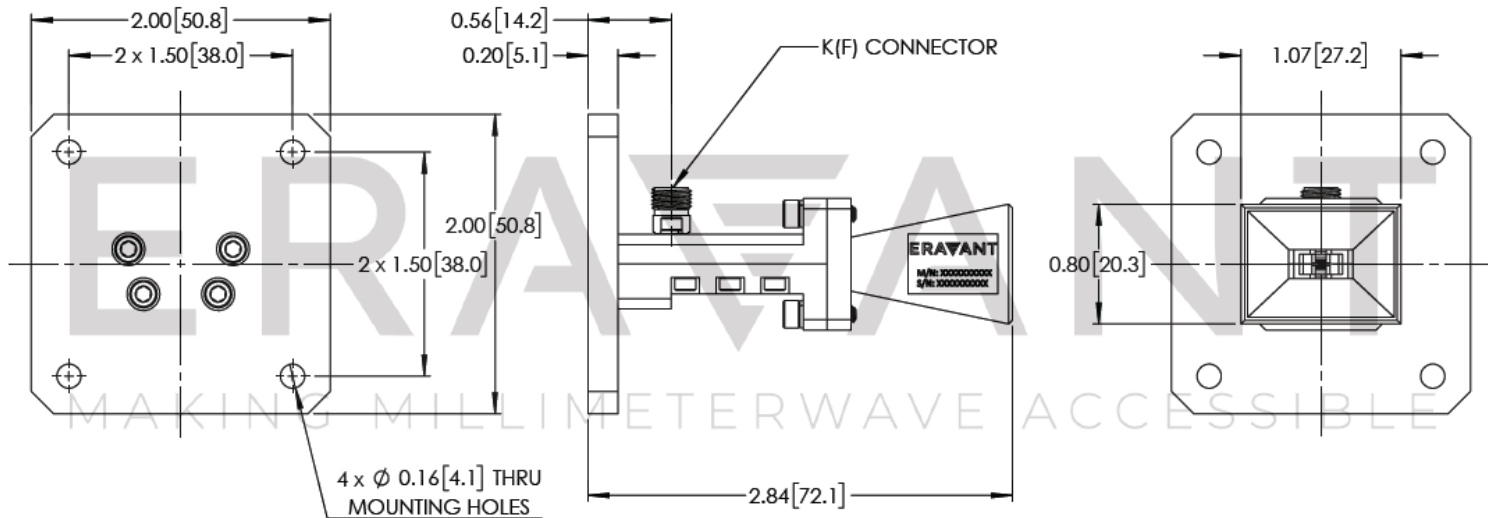


Typical Gain vs. Frequency



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



NOTE:

- This antenna is a mature product. The reason for only providing simulated data can be found in the following [blog here](#).
- Test 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.
- 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.
- For 1 mm connectors proper torque should be applied: 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm). Torque wrench model SCH-06004-S1 is highly recommended.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model [SCH-08008-S1](#) is highly recommended.