

SAO-6039030230-12-S1

E-Band Omnidirectional Antenna, 360°

SAO-6039030230-12-S1 is a WR-12 omnidirectional antenna that operates between 60 and 90 GHz. This vertically polarized antenna offers 360 degrees azimuth coverage with ± 3 dB angular gain flatness. The antenna features a half power beamwidth of 30 degrees in the vertical direction and typical 2 dBi gain across the entire frequency range.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	60 GHz		90 GHz
Gain		2 dBi	
Gain Variation		± 3 dB	
Azimuth		360°	
3 dB Vertical Beamwidth		30°	
Return Loss		9 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

Item	Specification
RF Port	WR-12 Waveguide with UG-387/U Flange
Body Material	Aluminum
Finish	Gold Plated
Weight	0.2 oz
Outline	AO-E02-030-1

ECCN

EAR99

FEATURES

- 360° Azimuth Coverage
- 30° Vertical 3 dB Beamwidth
- Vertically Polarized

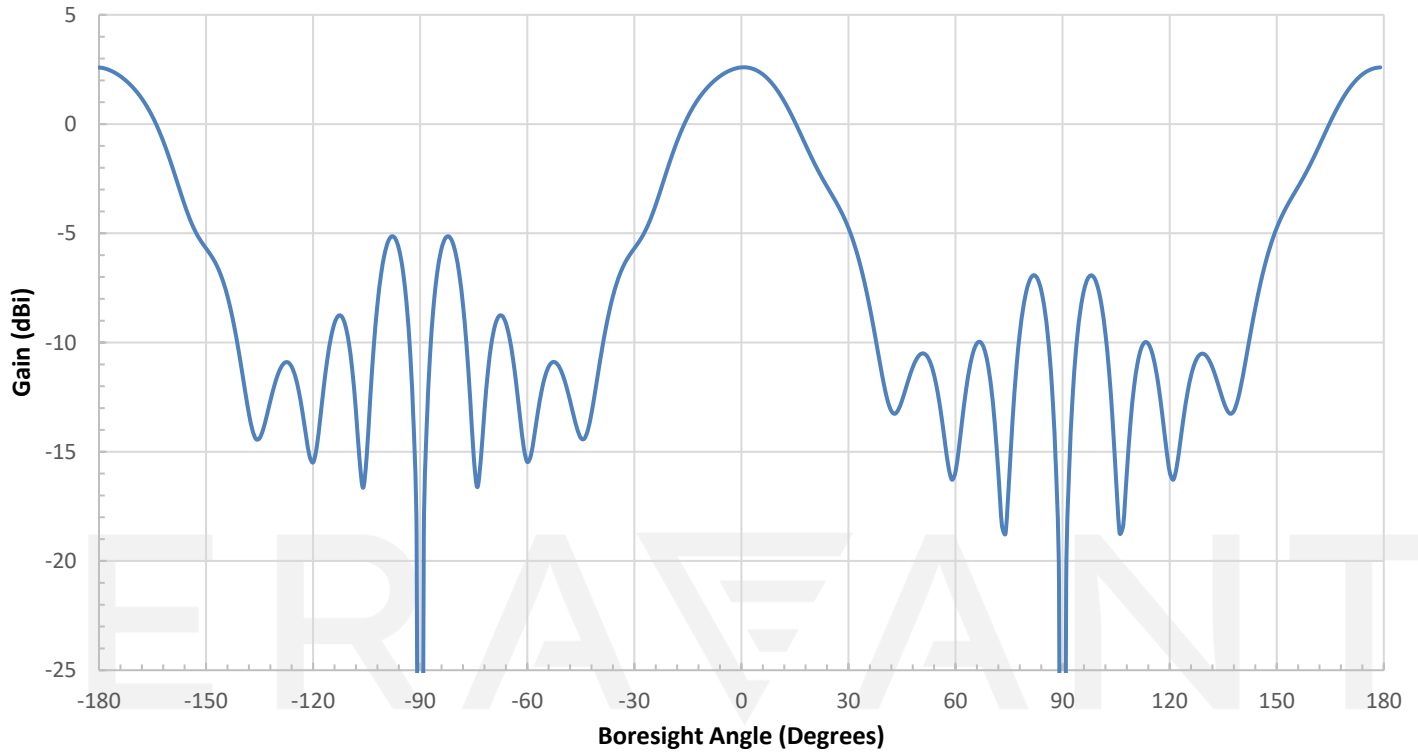
APPLICATIONS

- Communication Links
- EW Systems
- Indoor Local Area Networks

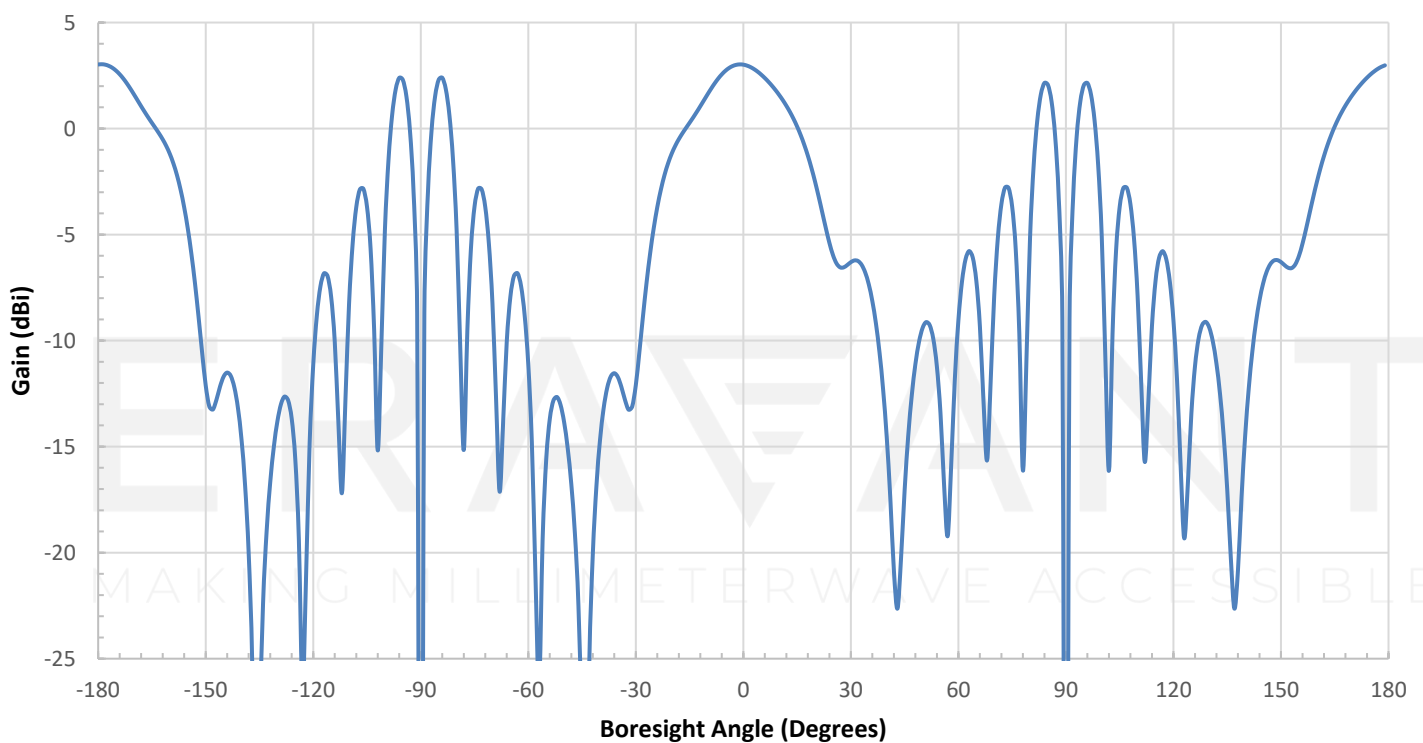
SUPPLEMENTAL DETAILS



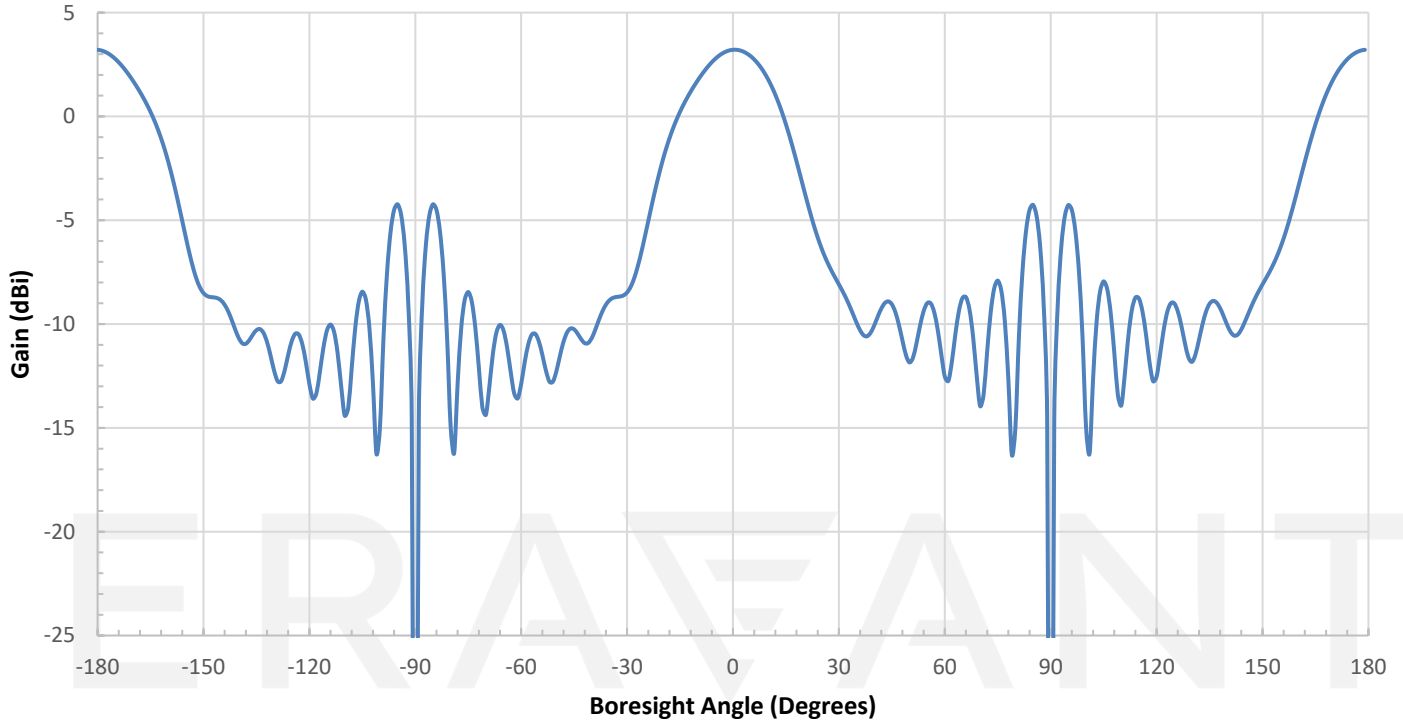
Simulated E-Plane Antenna Pattern @ 60 GHz



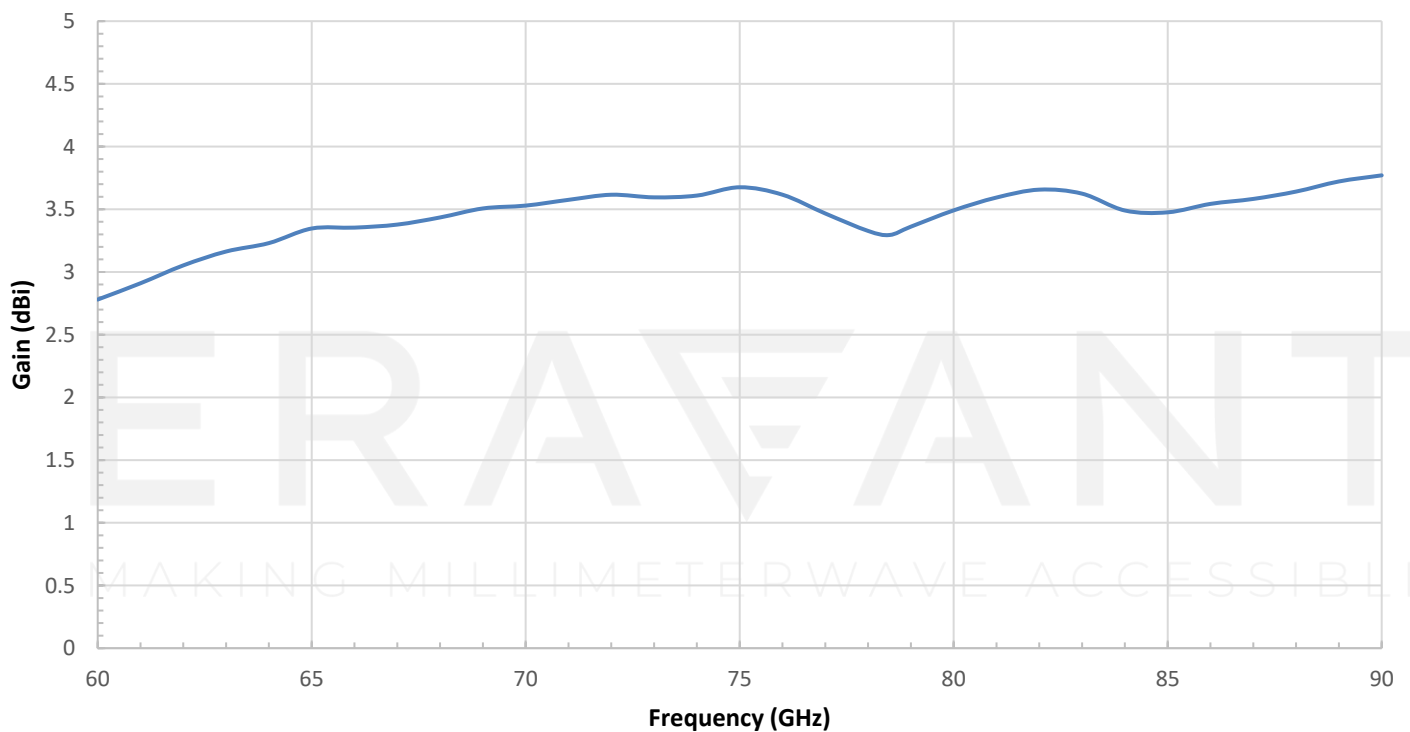
Simulated E-Plane Antenna Pattern @ 75 GHz



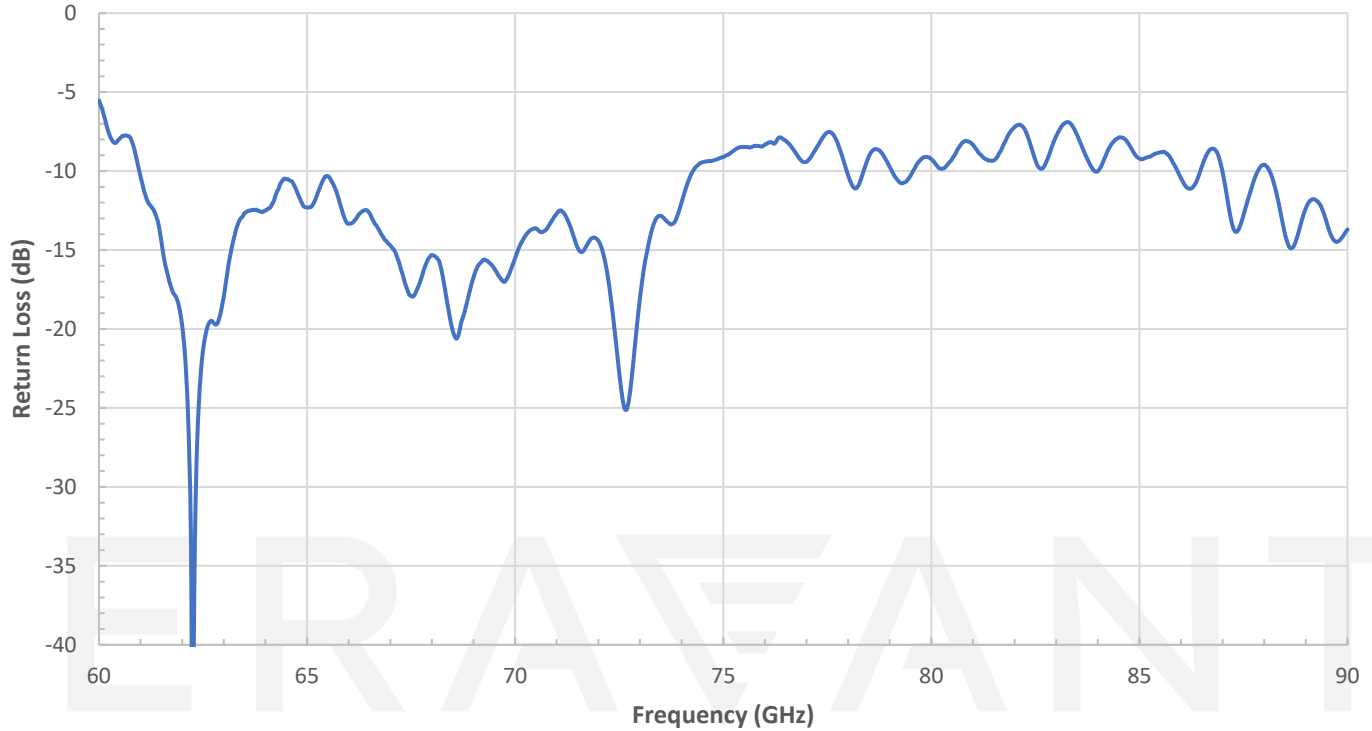
Simulated E-Plane Antenna Pattern @ 90 GHz



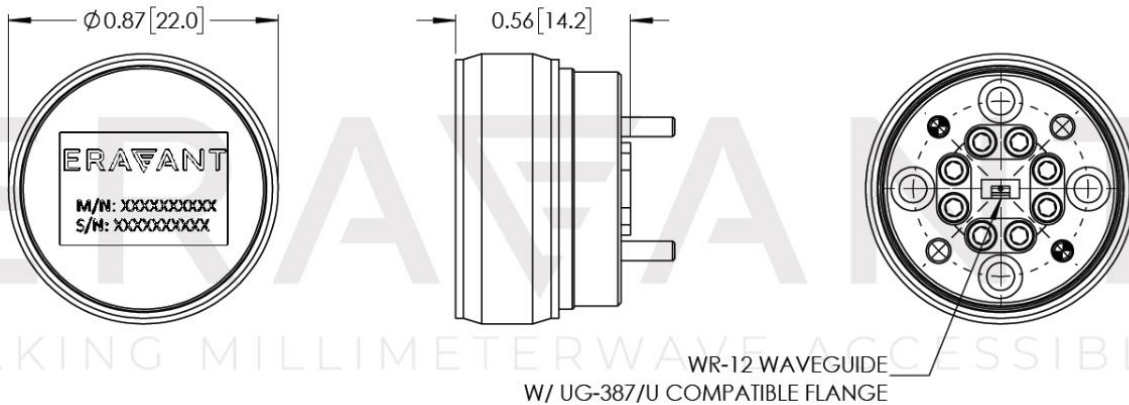
Simulated Gain vs. Frequency



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. 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.