

SAR-1532-15-S2

WR-15 Pyramidal Horn Antenna, 15 dBi Gain

SAR-1532-15-S2 is a V-band pyramidal horn antenna that operates from 50 GHz to 75 GHz. The antenna offers 15 dBi nominal gain and a typical half power beamwidth of 41 degrees on the E-plane and 32 degrees on the H-plane. The antenna supports linear polarized waveforms. The input of this antenna is a WR-15 waveguide with UG-385/U anti-cocking flange.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	50 GHz		75 GHz
Gain		15 dBi	
Polarization		Linear	
3 dB Beamwidth, E-Plane		41	
3 dB Beamwidth, H-Plane		32	
Sidelobes, E-Plane		-23 dB	
Sidelobes, H-Plane		-30 dB	
Return Loss		23 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Port	WR-15 Waveguide with UG-385/U Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Weight	0.5 Oz
Outline	AR-V15-A

ECCN

EAR99

FEATURES

- Full Band Coverage
- Compact Size
- High Resolution Micrometer
- Low Insertion Loss

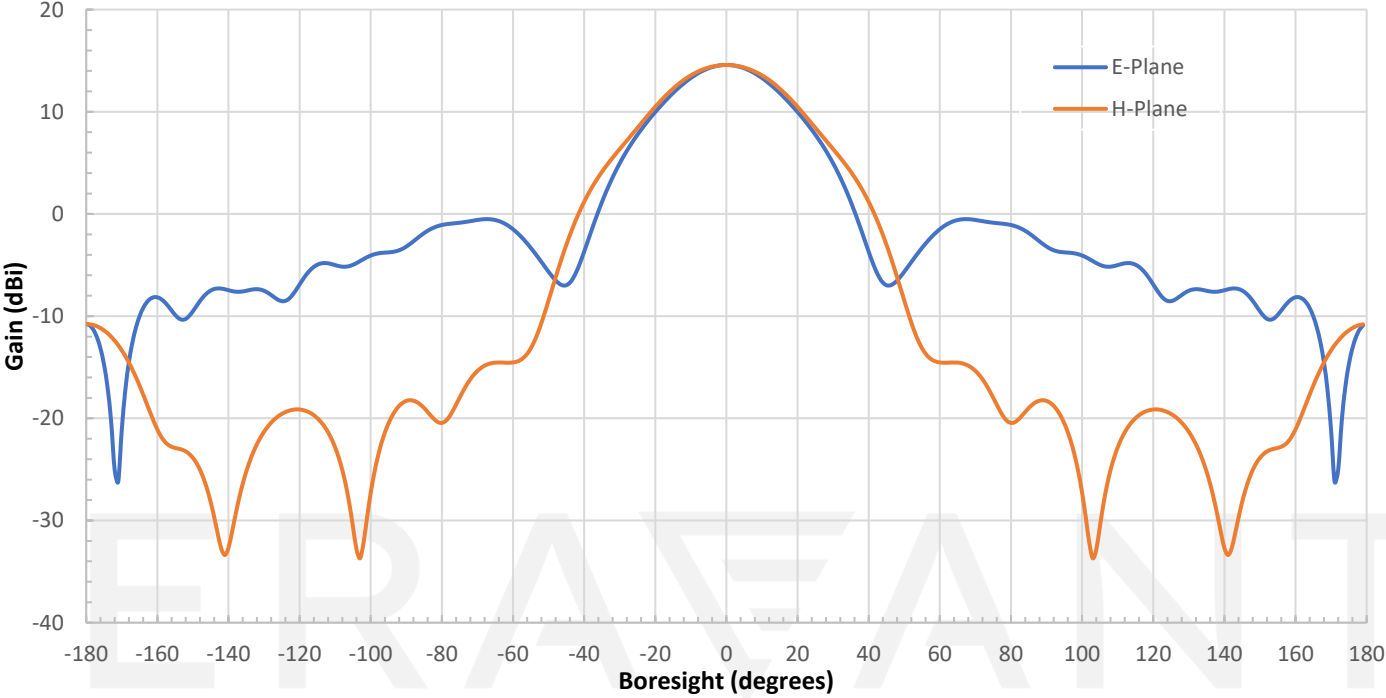
APPLICATIONS

- Test Lab
- Instrumentations
- System Integration

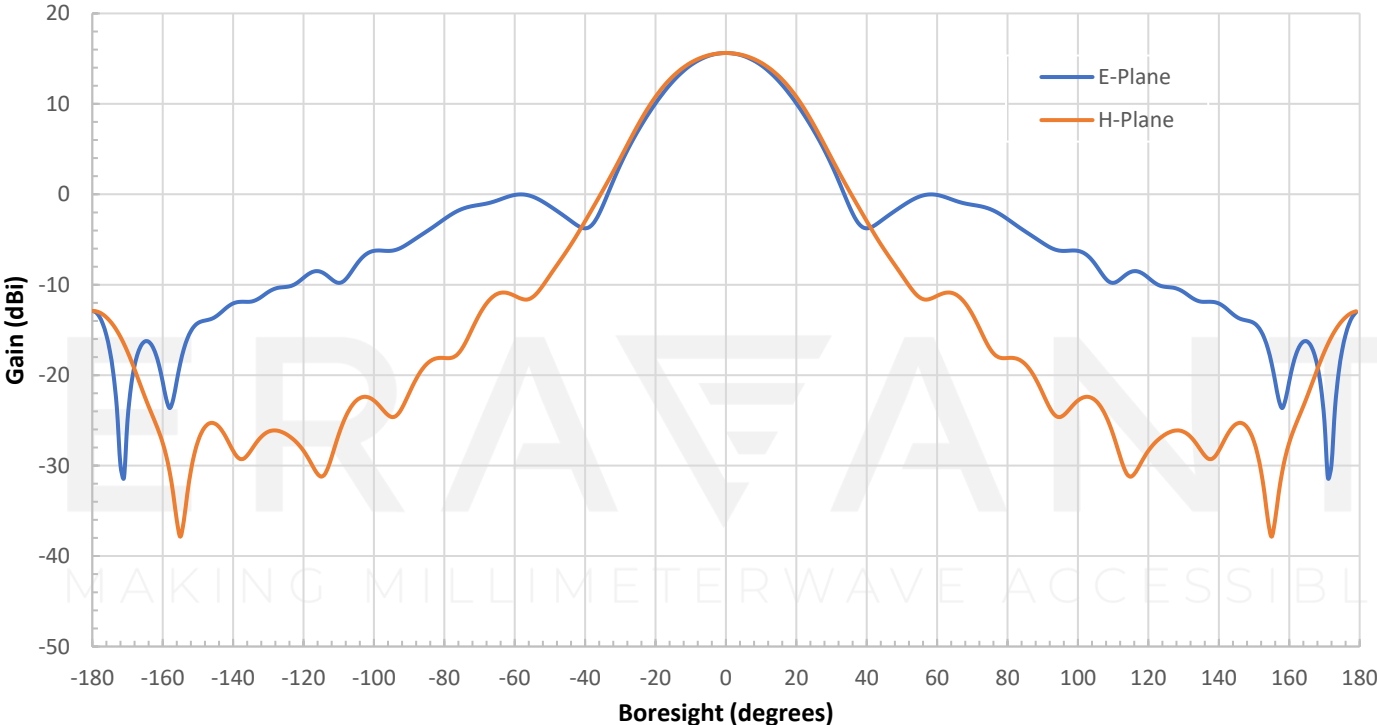
SUPPLEMENTAL DETAILS



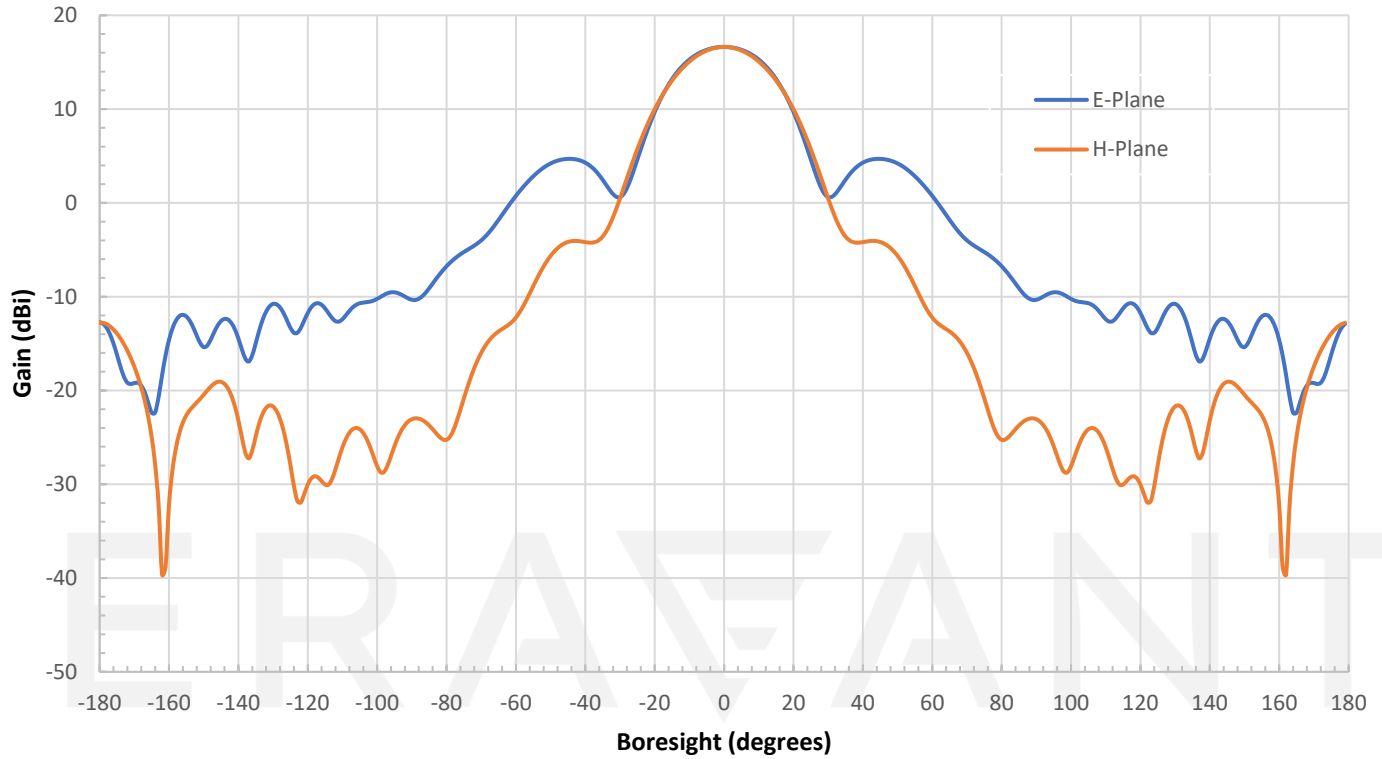
Simulated Antenna Patterns @ 50 GHz



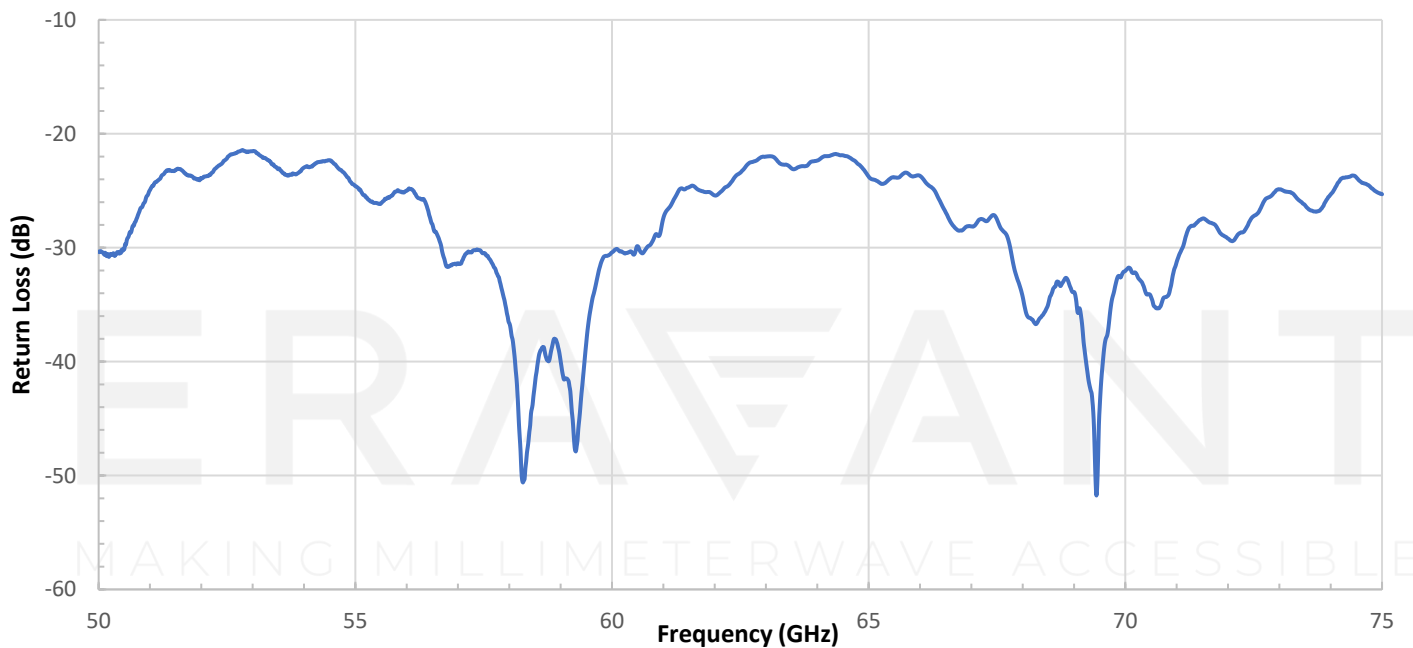
Simulated Antenna Patterns @ 62.5GHz



Simulated Antenna Patterns @ 75 GHz

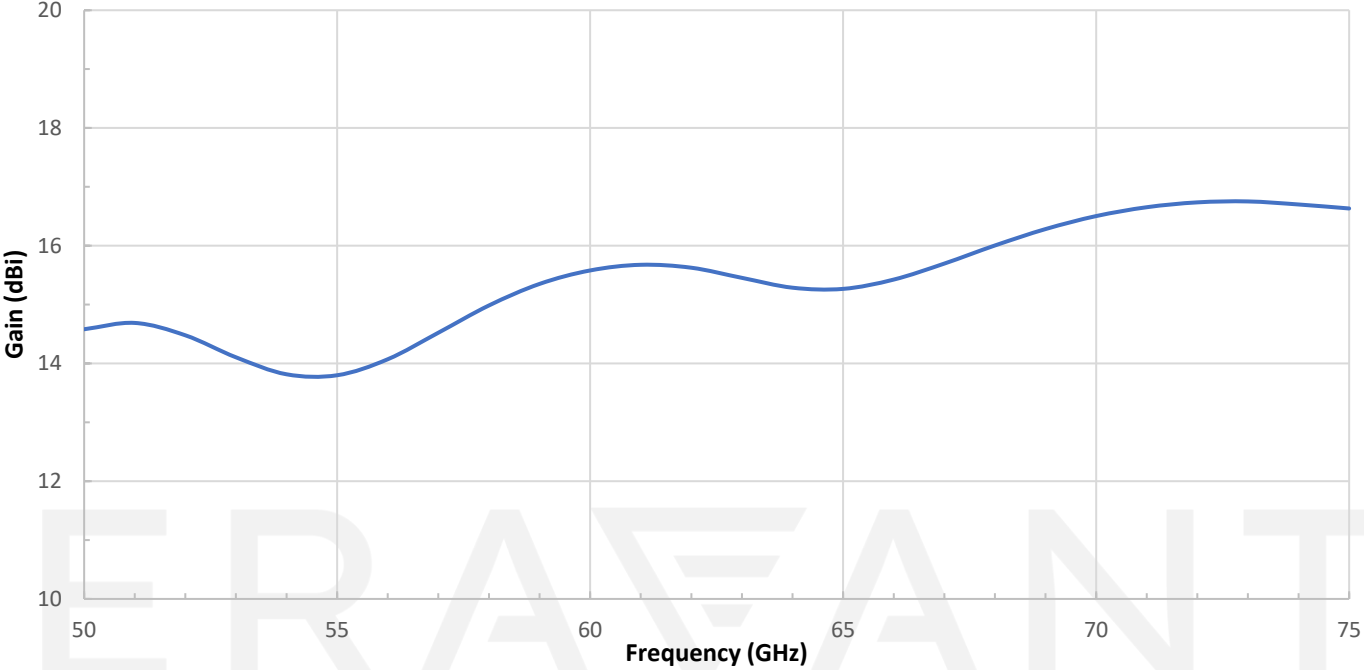


Measured Return Loss vs. Frequency

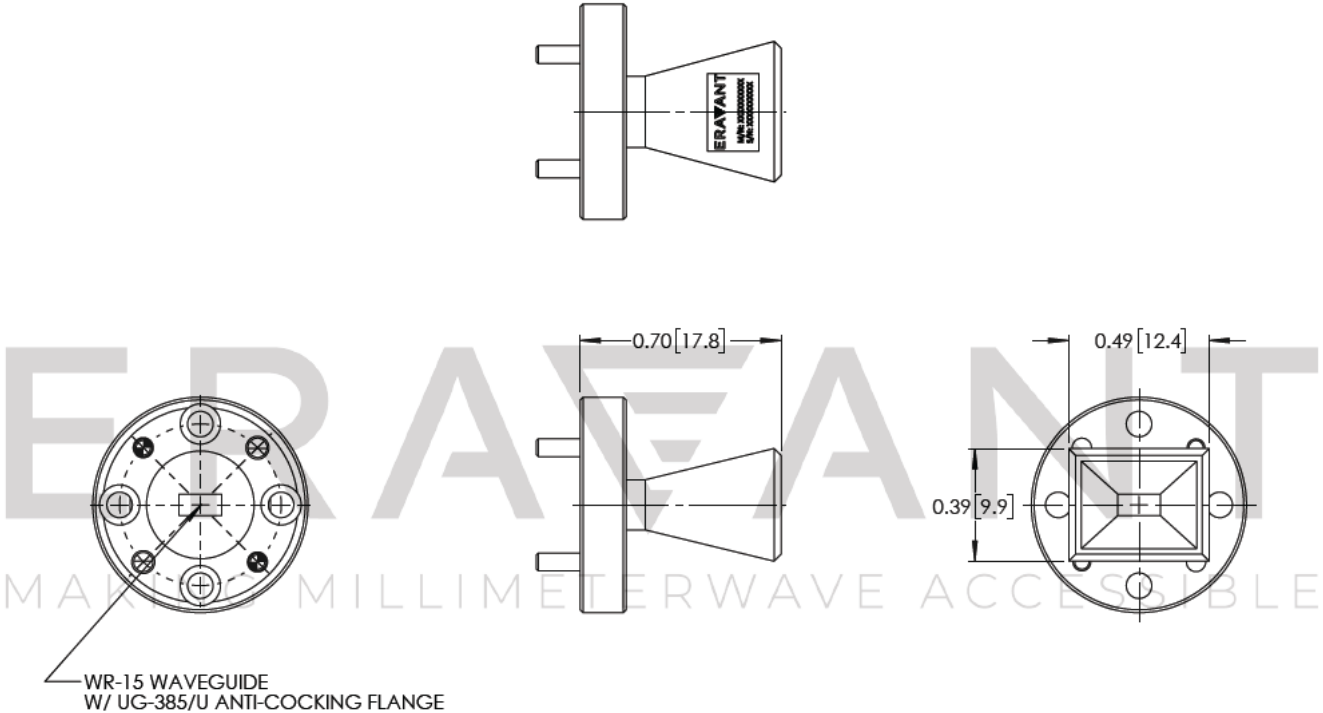


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Simulated Gain vs. Frequency



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.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- 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:

- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- 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.

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