

WR-15 Lens Corrected Antenna, 50 to 75 GHz, 34 dBi Gain

SAL-5037533404-15-S1 is a lens corrected antenna that operates from 50 to 75 GHz. At the frequency of 62.5 GHz, the antenna delivers 34 dBi nominal gain, and a typical half-power beamwidth of 3 degrees E-plane and 4 degrees on the H-plane. The antenna employs a low loss lens to offer excellent aperture efficiency and low sidelobe levels. The lens corrected antenna is equipped with WR-15 waveguide as its input port. It supports linear polarized waveforms.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	50 GHz		75 GHz
Gain		34 dBi	
3 dB Beamwidth, E-Plane		3°	
3 dB Beamwidth, H-Plane		4°	
Sidelobes, E-Plane		-17 dB	
Sidelobes, H-Plane		-20 dB	
Polarization		Linear	
Return Loss		10 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
Horn Material	Aluminum
Lens Material	HDPE
Finish	Clear chem film
Weight	8.24 oz
Outline	AL-RV34-A

ECCN

EAR99

FEATURES

- Center Fed
- Low Sidelobes
- Linear Polarized Waveforms

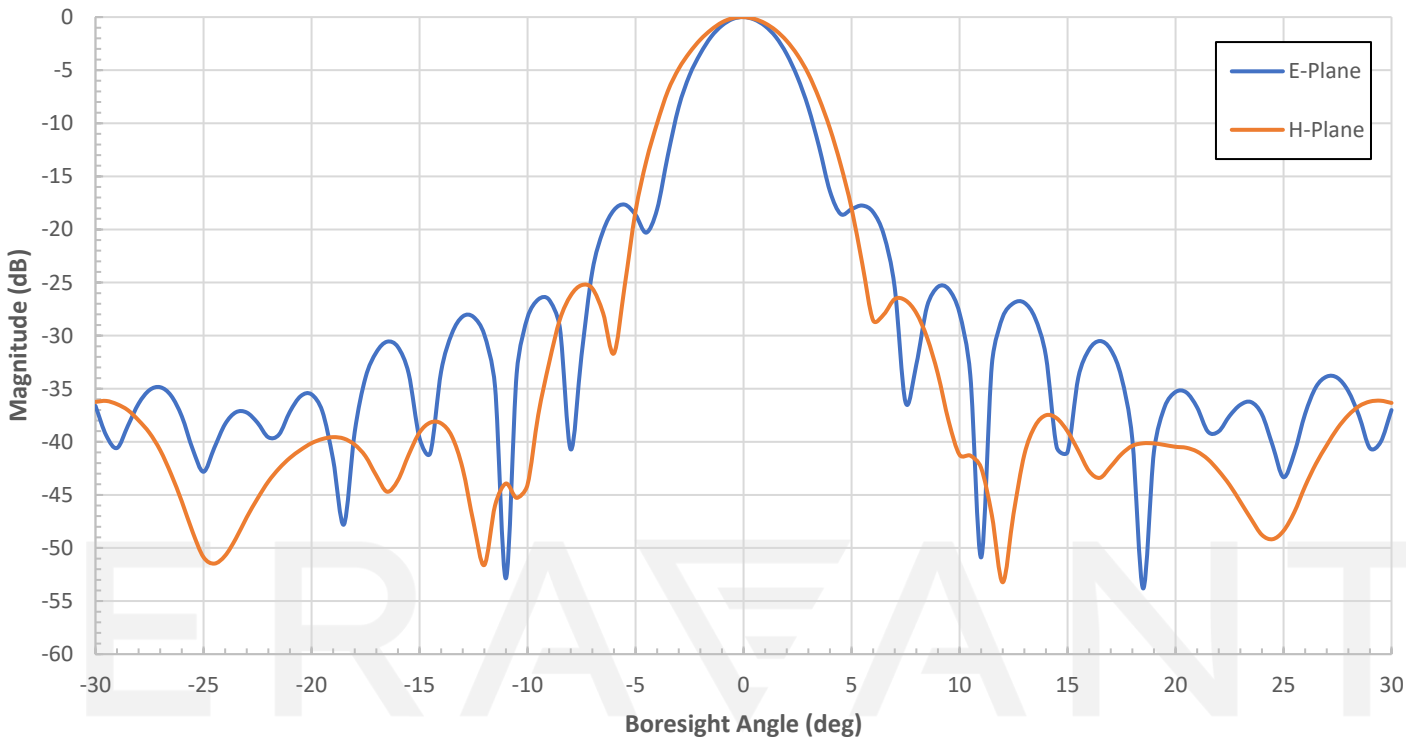
APPLICATIONS

- Radar Systems
- Communication Systems
- Sensor Systems

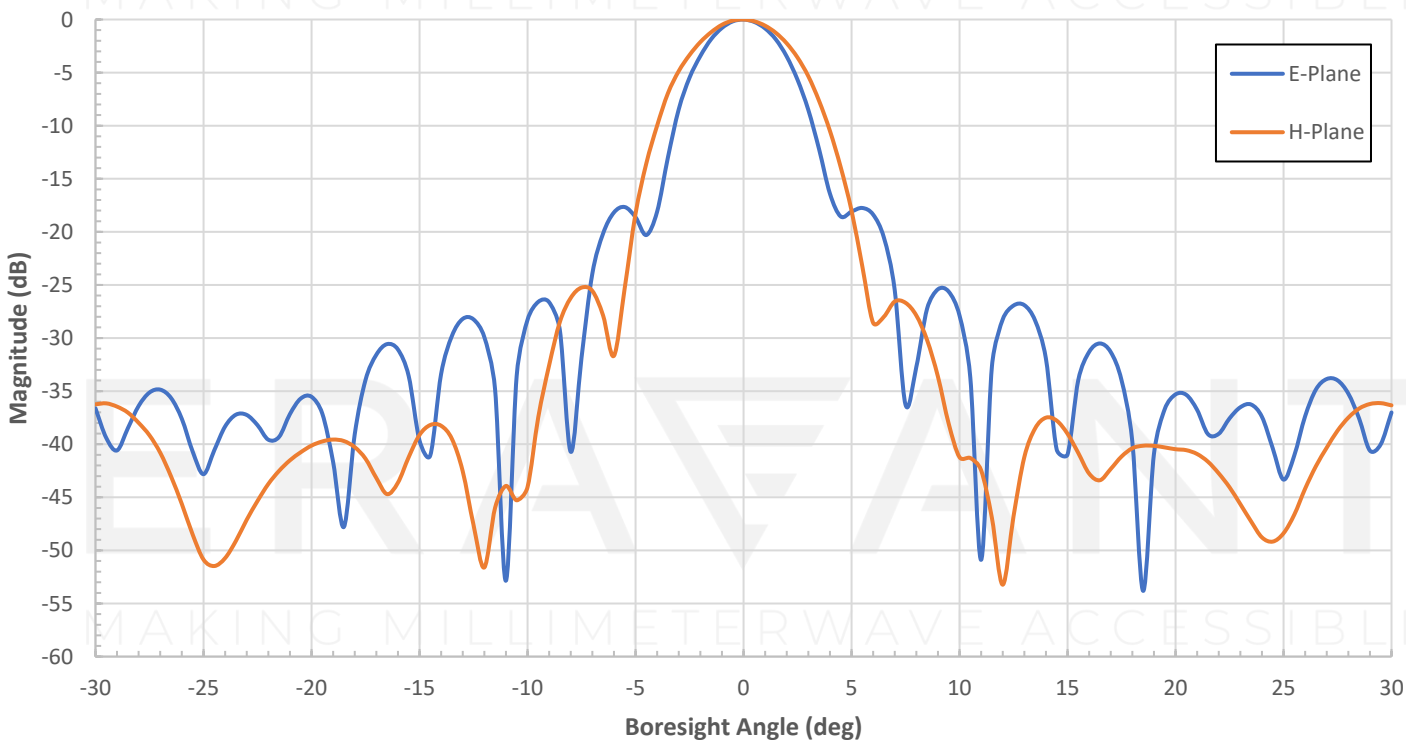
SUPPLEMENTAL DETAILS



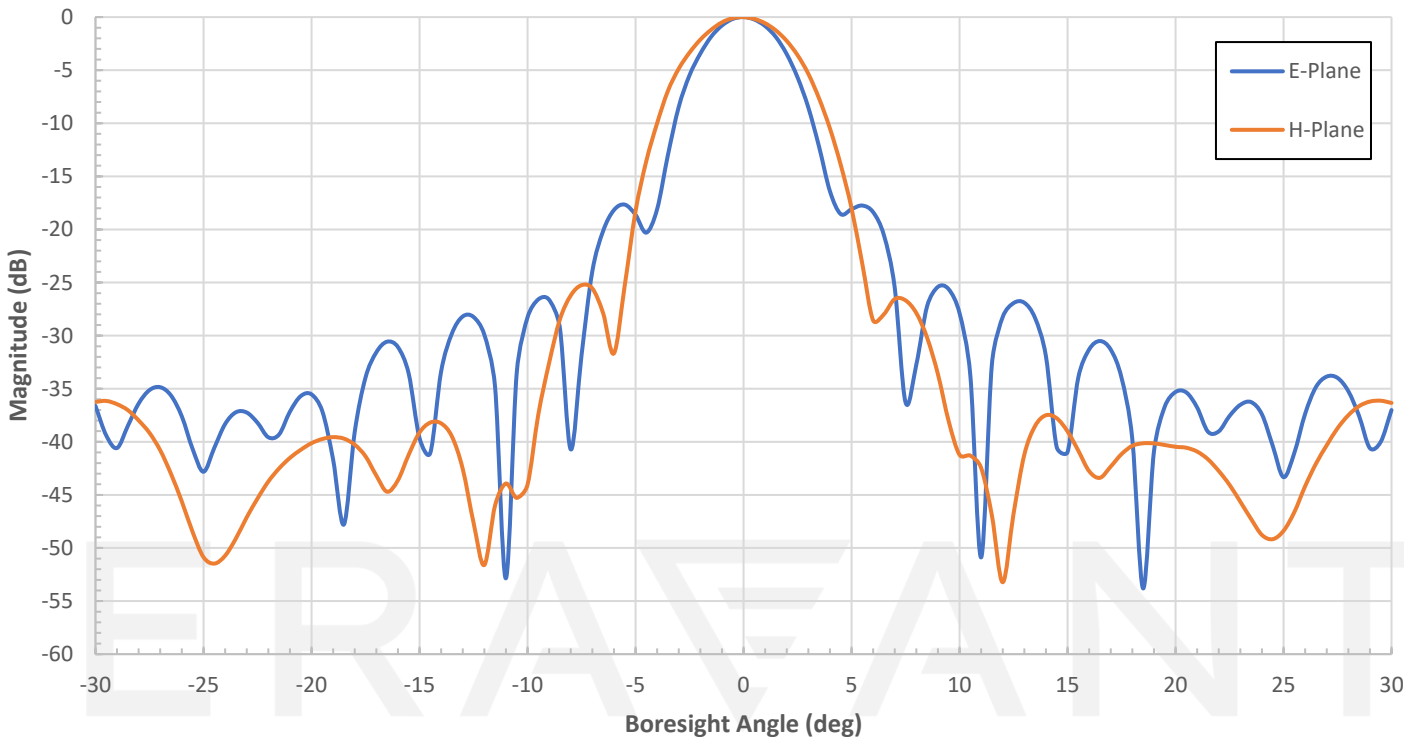
Measured Antenna Patterns @ 50 GHz



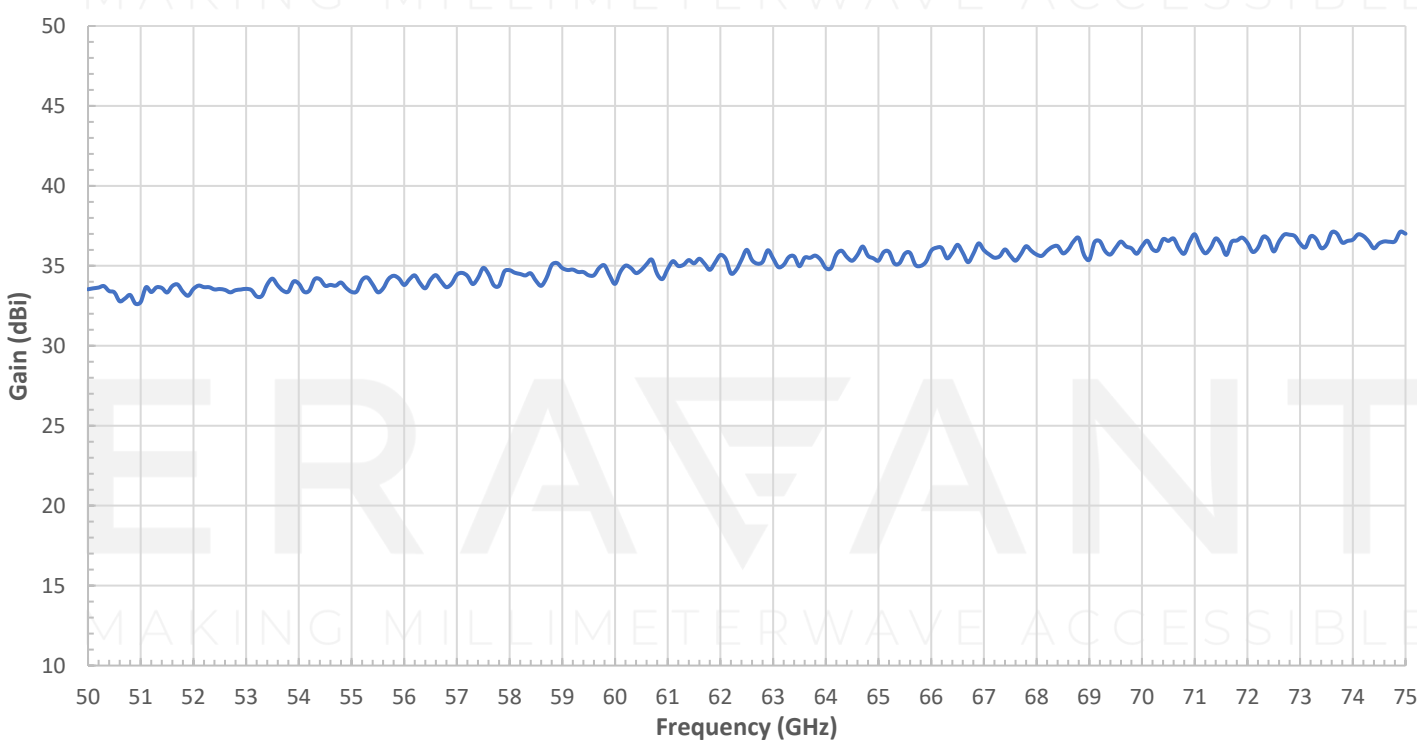
Measured Antenna Patterns @ 62.5 GHz



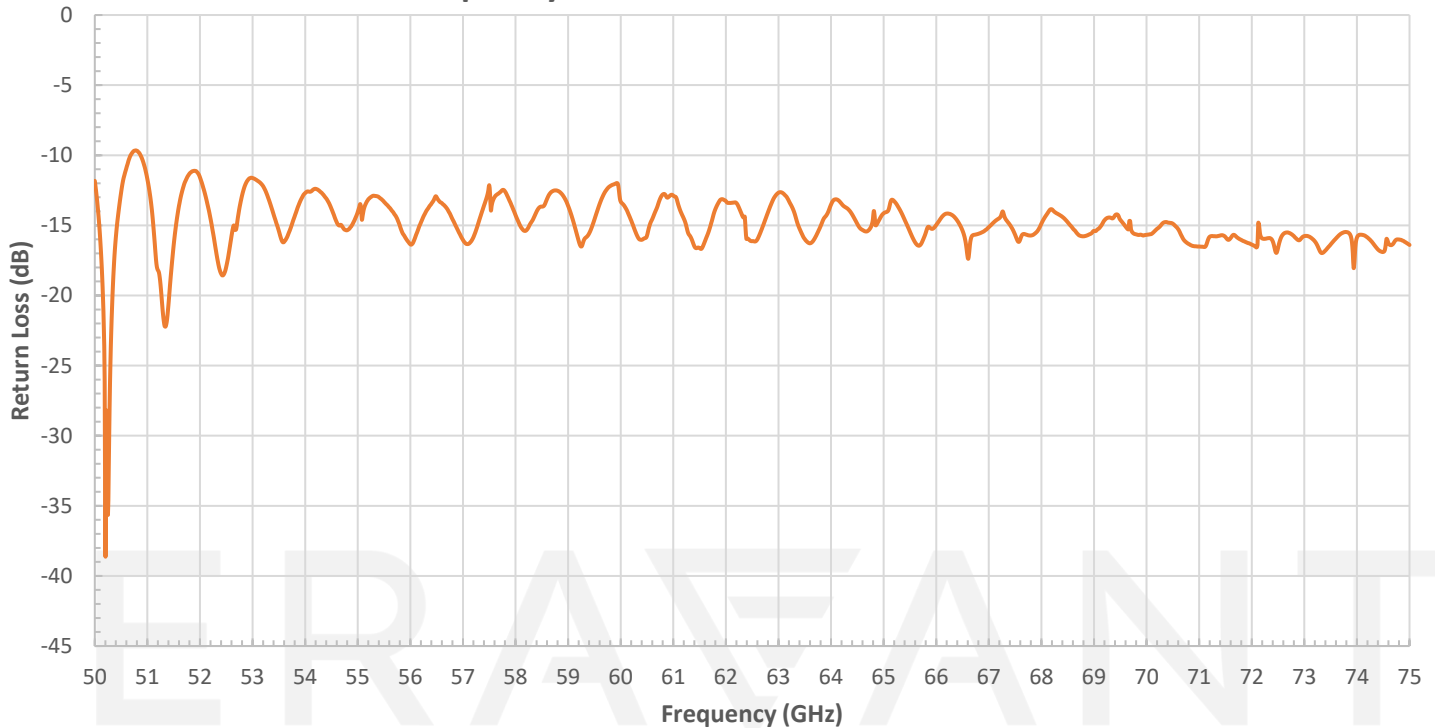
Measured Antenna Patterns @ 75 GHz



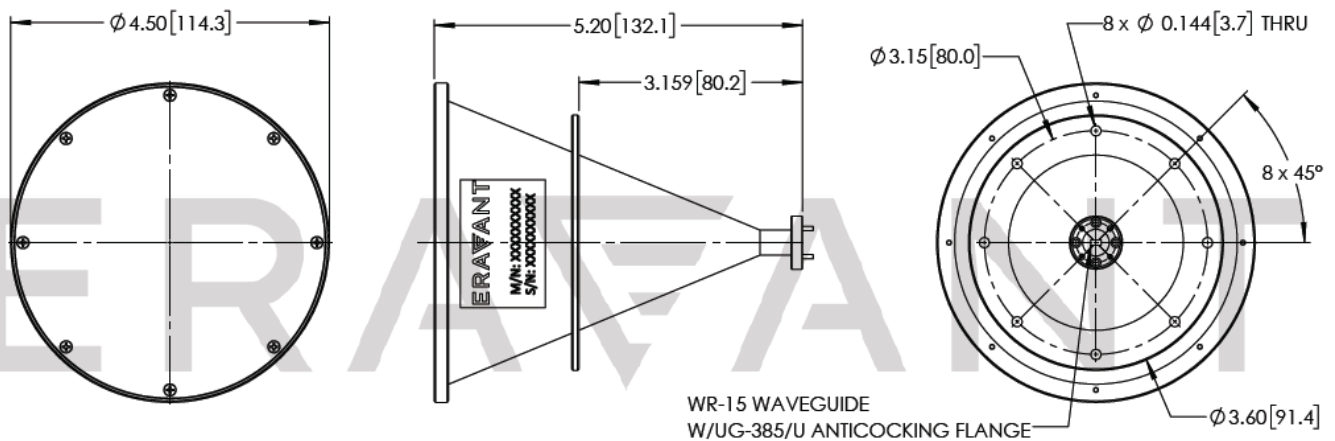
Measured Gain vs Frequency



Measured Return Loss vs Frequency



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



NOTE:

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