SAW-9629822716-90-L2-WR

X-Band Slotted Waveguide Array Antenna, 9.7 GHz, 27 dBi, 16° x 2°

SAW-9629822716-90-L2-WR is a weather resistant X-band slotted waveguide array antenna that operates from 9.6 to 9.8 GHz. The antenna offers 27 dBi nominal gain and a typical half power beamwidth of 16 degrees on the E-plane and 2 degrees on the H-plane, respectively. Compared to microstrip antennas, the slotted waveguide array antenna offers higher aperture efficiency. The antenna also offers typical side lobes of -15 dB or better and supports linear, vertical polarized waveforms. The antenna port is a WR-90 waveguide with UG-39/U grooved compatible flange.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	9.6 GHz	9.7 GHz	9.8 GHz
Gain		27 dBi	
3 dB Beamwidth, E-Plane		16°	
3 dB Beamwidth, H-Plane		2°	
Side Lobe Level		-15 dB	
Return Loss		13 dB	
Polarization		Linear	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Port	WR-90 Waveguide with UG-39/U Grooved Compatible Flange
Radome Material	Black Polycarbonate
Housing Material	Aluminum
Housing Finish	Chem Film
Weight	55 lbs.
Outline	AW-RX-0216

ECCN

EAR99

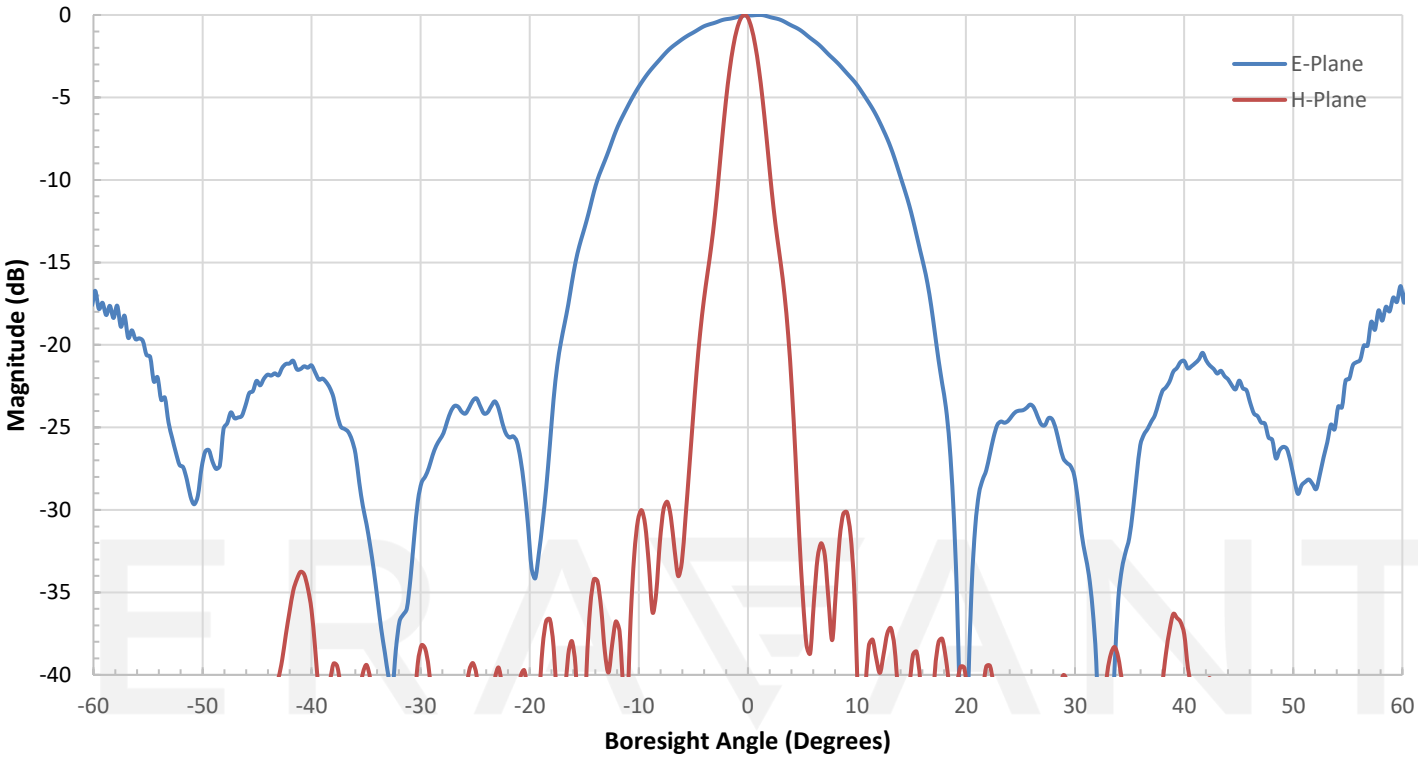
FEATURES

- Rectangular Waveguide Interface
- High Aperture Efficiency
- Flat and Low Profile
- Linear Polarization
- High Return Loss
- Weather Resistance

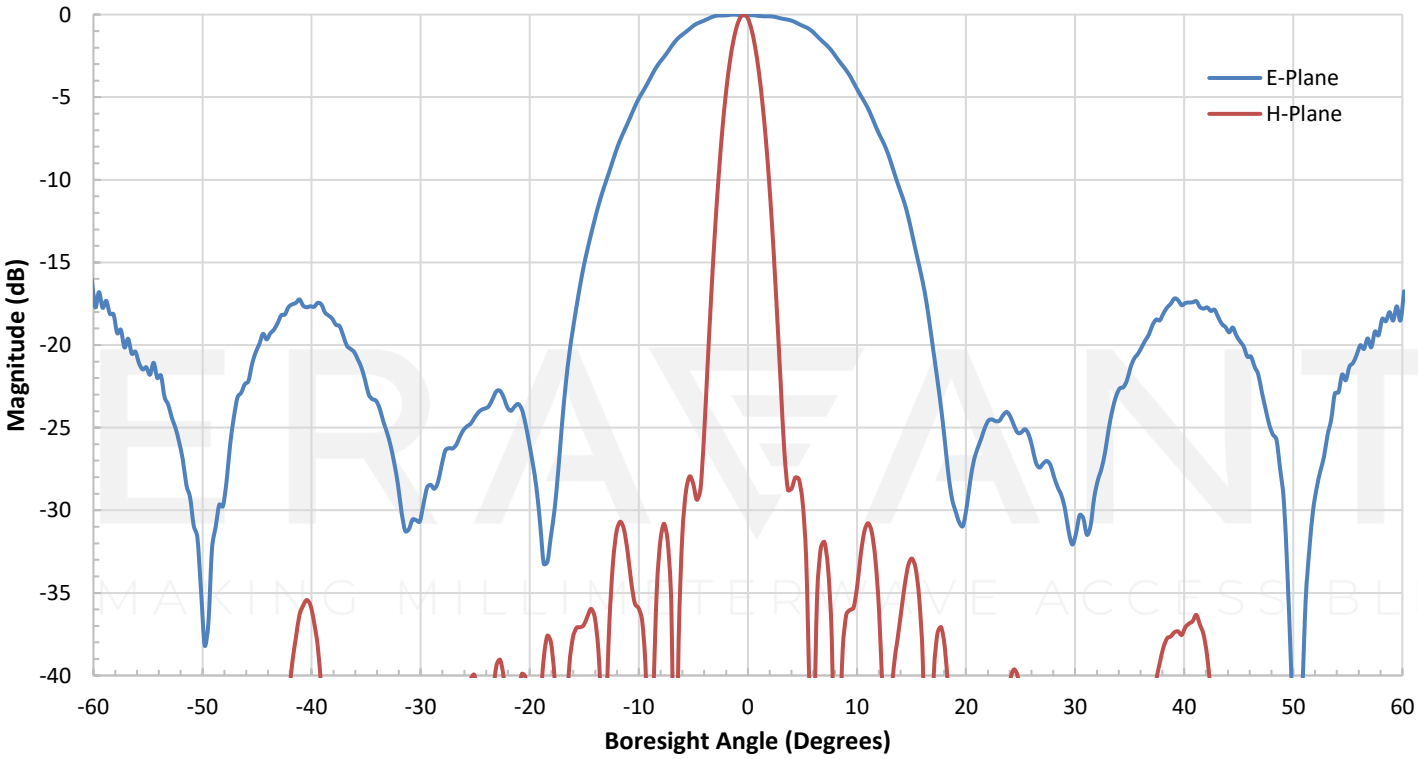
APPLICATIONS

- Antenna Ranges
- Communications Systems
- Radar Systems

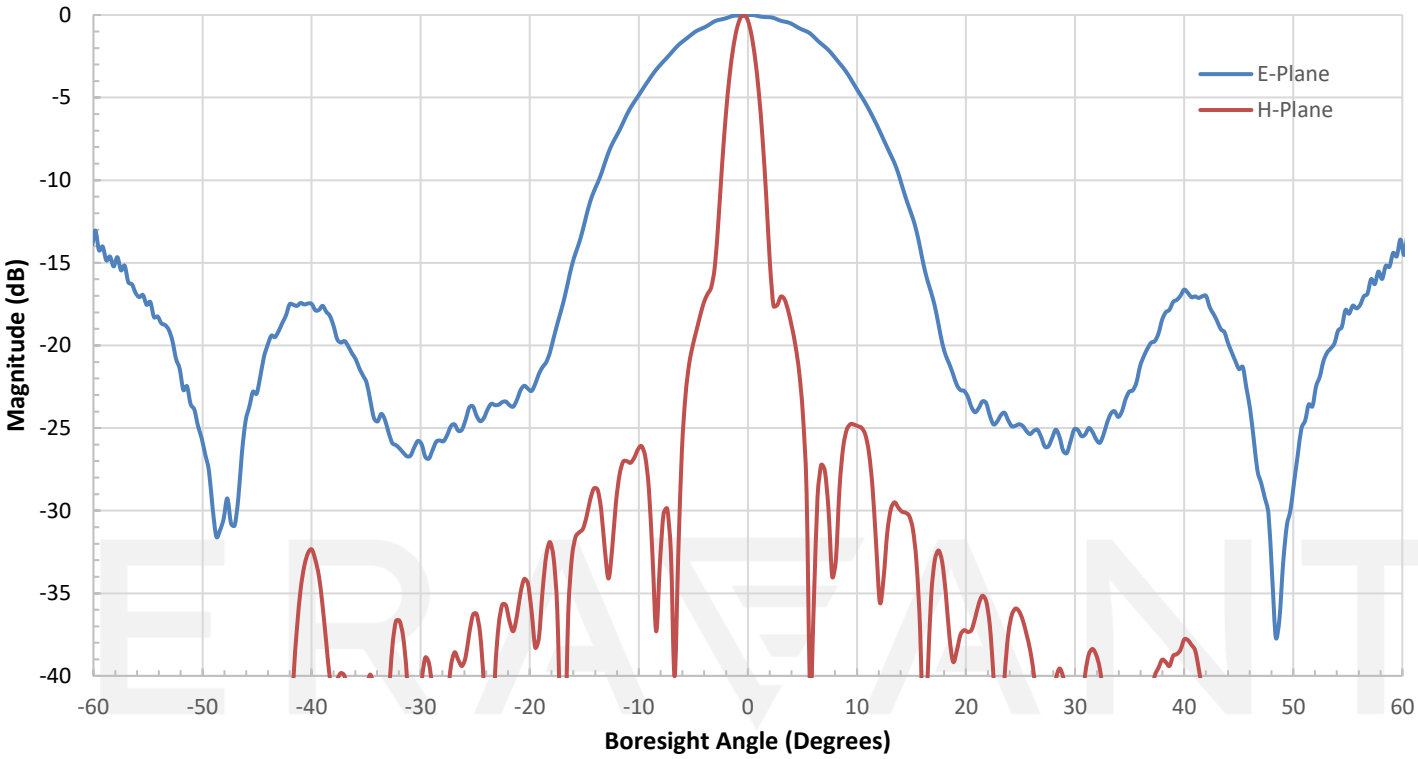
Typical Measured Antenna Patterns @ 9.6 GHz



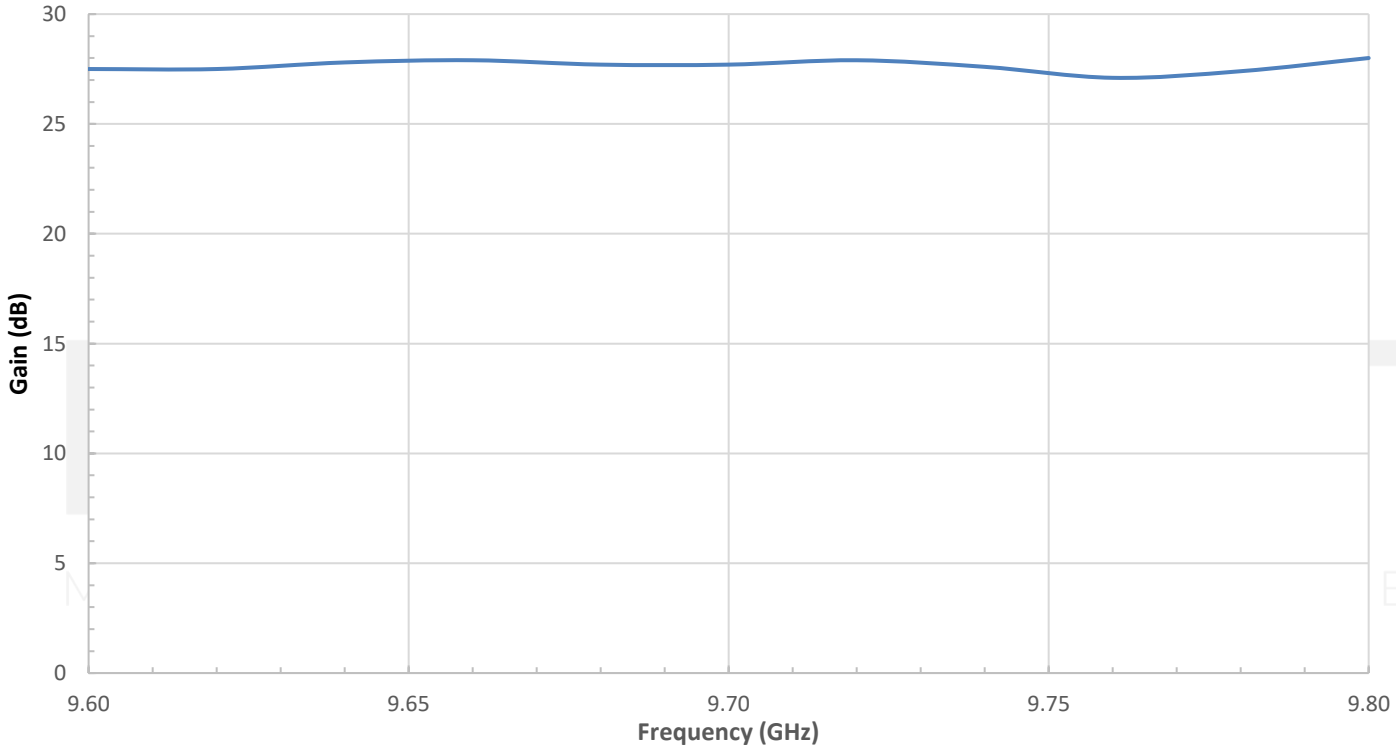
Typical Measured Antenna Patterns @ 9.7 GHz



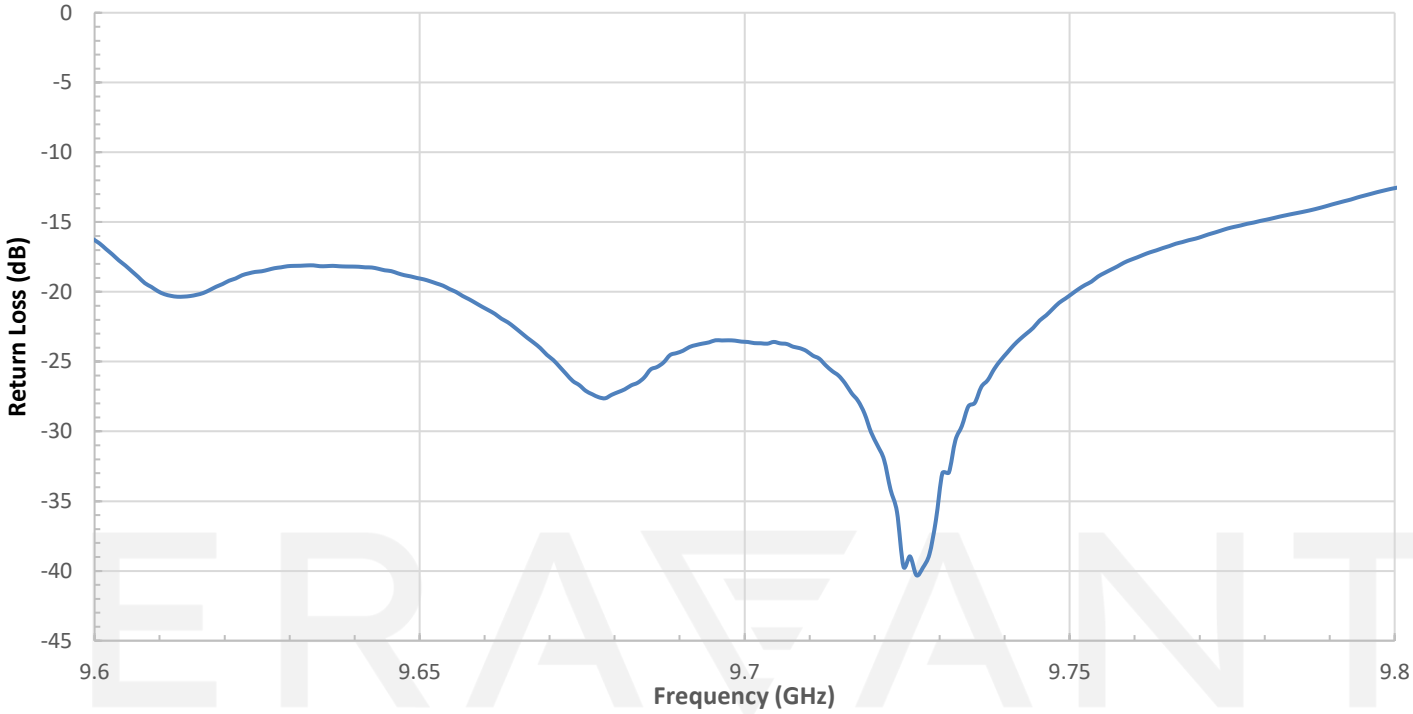
Typical Measured Antenna Patterns @ 9.8 GHz



Typical Measured Gain vs Frequency

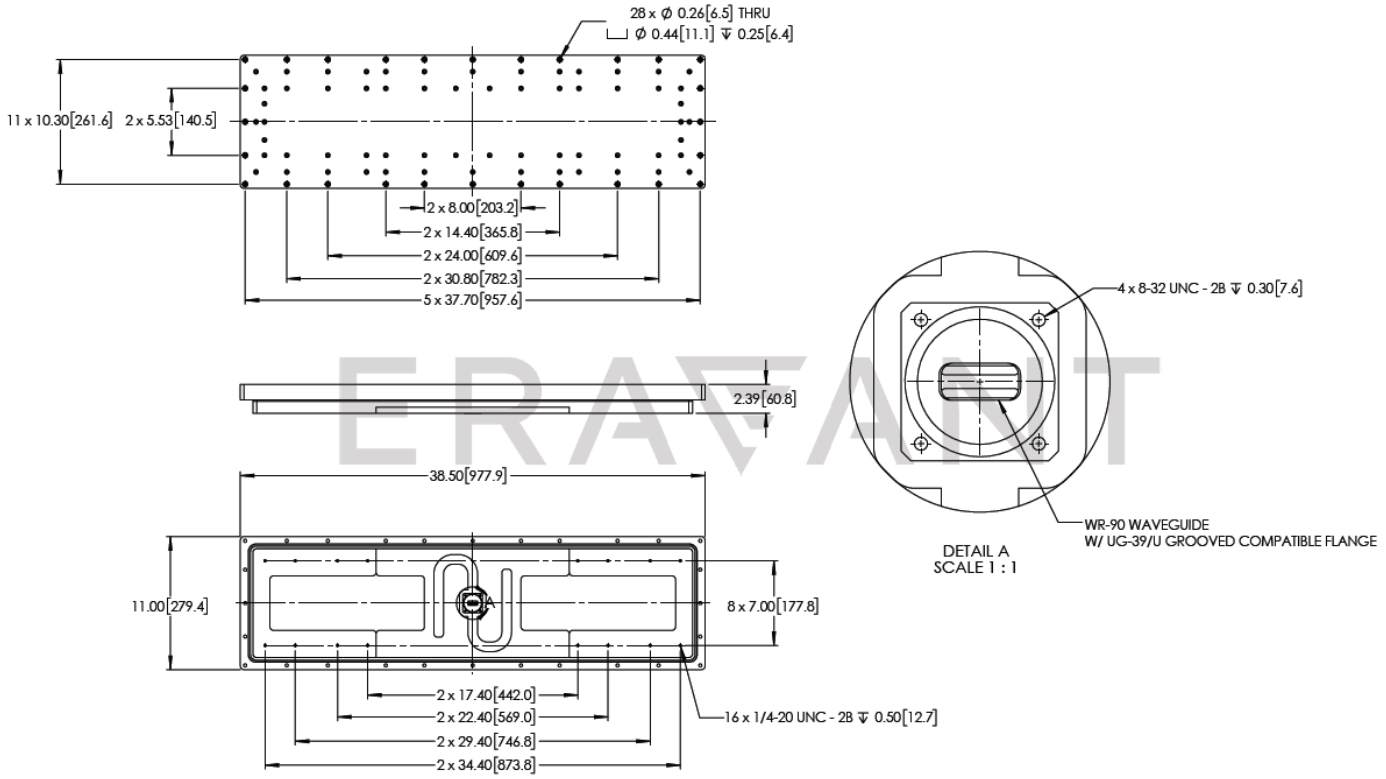


Typical Measured Return Loss vs Frequency



Mechanical Outline:

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



NOTE:

- All data presented is collected from a sample lot. Actual data may vary unit to unit, slightly.
- 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 or waveguide will cause performance degradation and possible device damage.

MAKING MILLIMETERWAVE ACCESSIBLE