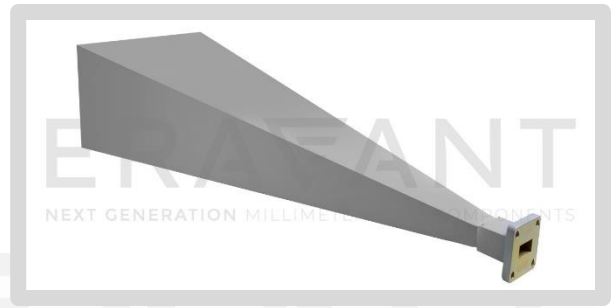


WR-90 Pyramidal Horn Antenna, 25 dBi Gain

Description:

Model SAR-2510-90-S3 is a pyramidal horn antenna that operates from 8.2 GHz to 12.4 GHz. The antenna offers 25 dBi nominal gain and a typical half power beamwidth of 9 degrees on the E-plane and 11 degrees on the H-plane. The antenna supports linear polarized waveforms. The input of this antenna is WR-90" waveguide with UG-39/U flange.



Features:

- Inline Configuration
- Linear Polarization
- DC Short Circuit at Input

Applications:

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

Electrical Specifications:

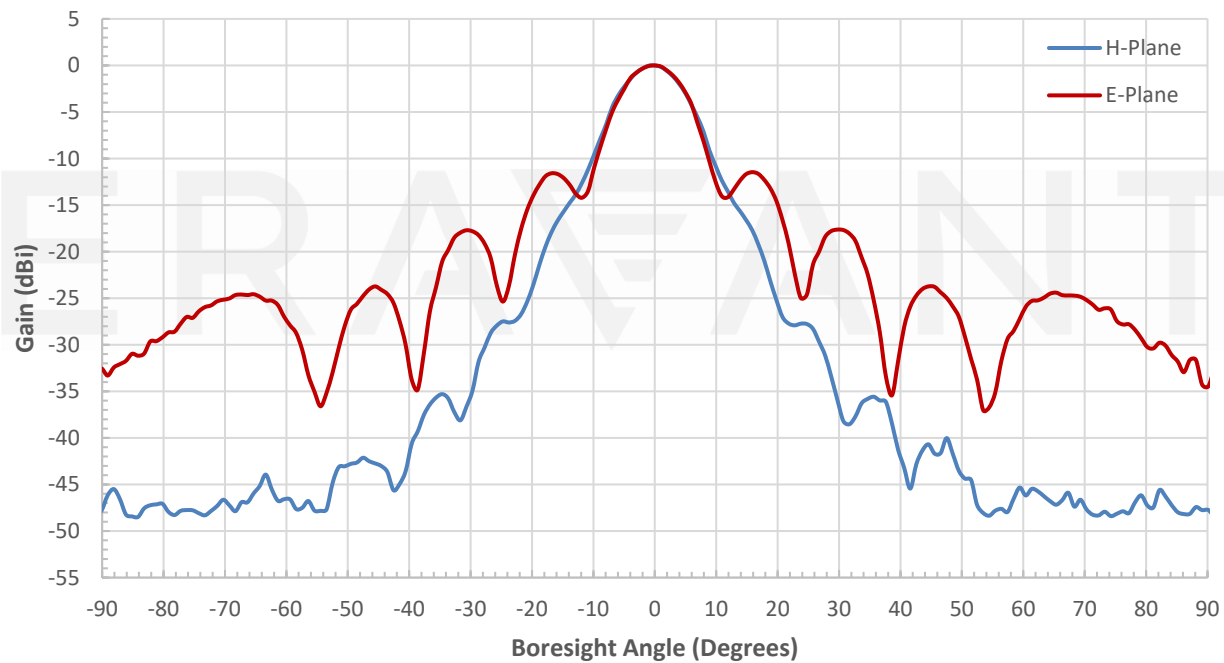
Parameter	Minimum	Typical	Maximum
Frequency	8.2 GHz		12.4 GHz
Gain		25 dBi	
Polarization		Linear	
3 dB Beamwidth, E-Plane		9°	
3 dB Beamwidth, H-Plane		11°	
Side Lobes, E-Plane		-13 dB	
Side Lobes, H-Plane		-36 dB	
Return Loss		18 dB	

Mechanical Specifications:

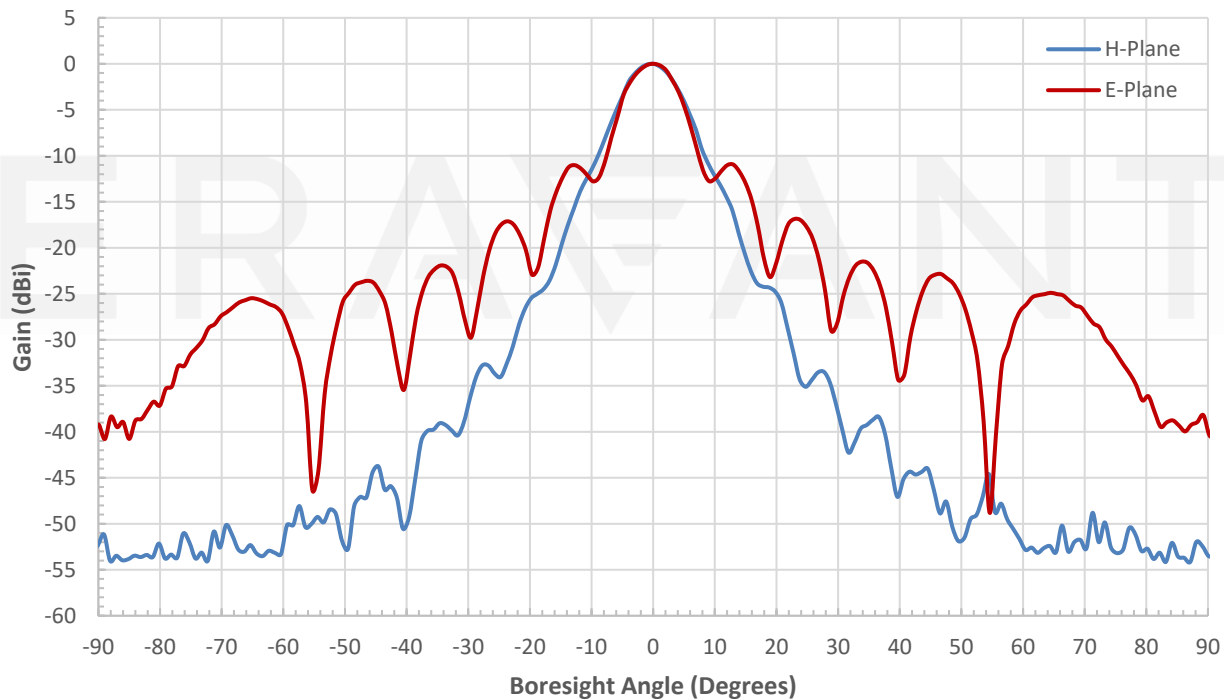
Item	Specification
Antenna Port	WR-90 Waveguide with UG-39/U Flange
Material	Aluminum
Finish	Anti-Corrosion Paint
Weight	6.38 lbs
Outline	AR-X3-H1

WR-90 Pyramidal Horn Antenna, 25 dBi Gain

Simulated Antenna Patterns @ 8.2 GHz

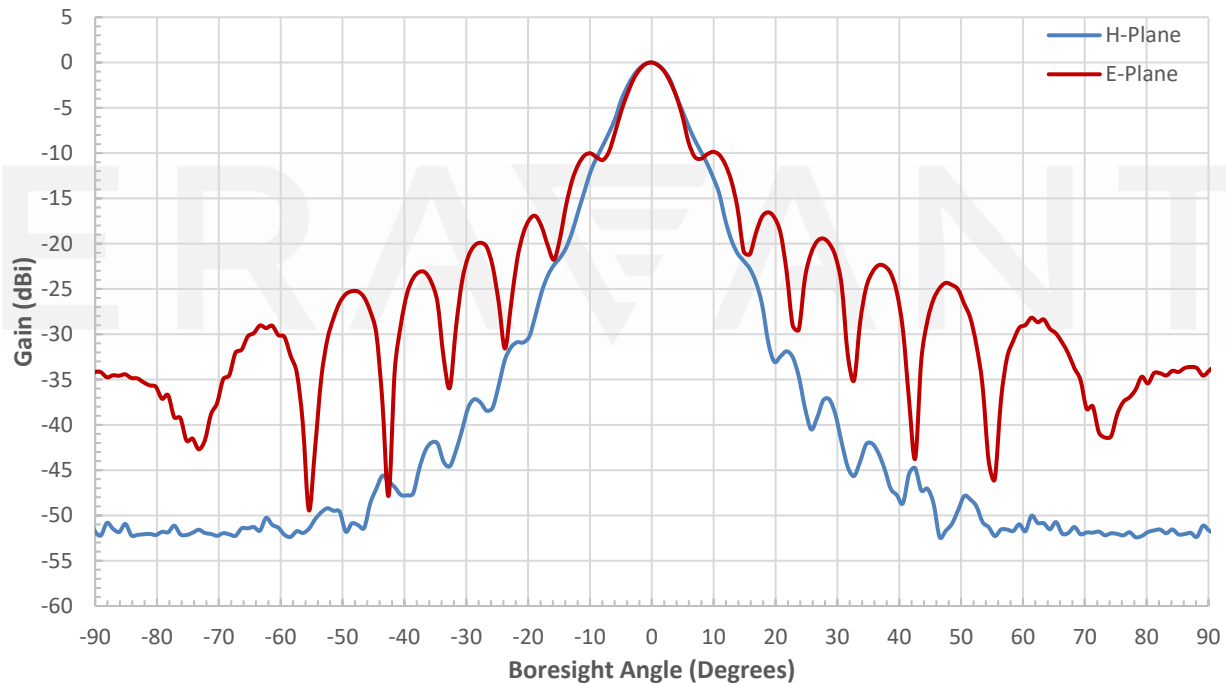


Simulated Antenna Patterns @ 10.3 GHz

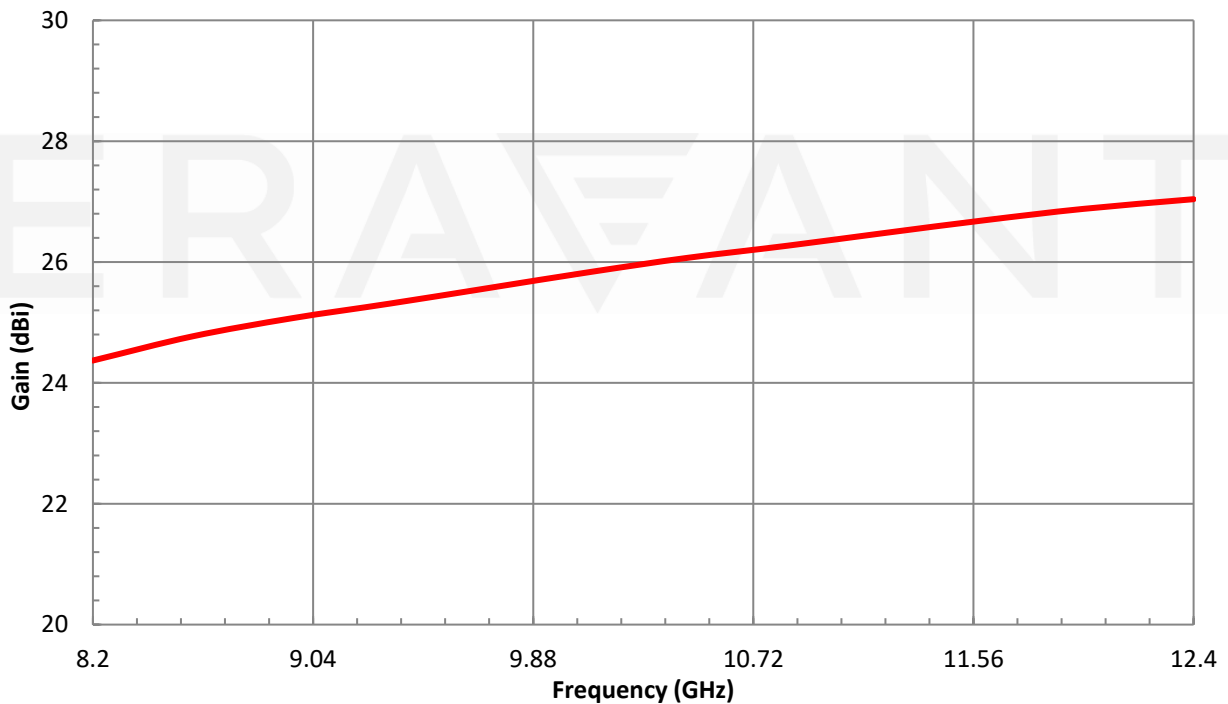


WR-90 Pyramidal Horn Antenna, 25 dBi Gain

Simulated Antenna Patterns @ 12.5 GHz

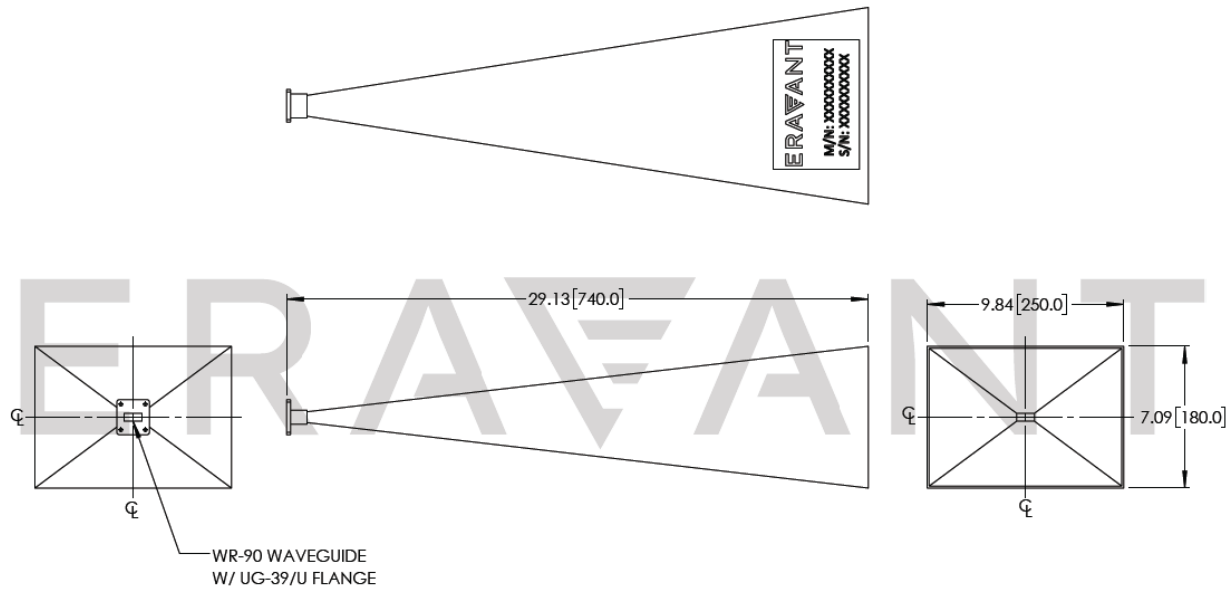


Measured Gain vs. Frequency



WR-90 Pyramidal Horn Antenna, 25 dBi Gain

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



Note:

- 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

- Any foreign objects in the waveguide will cause performance degradation and possible device damage