SAR-2507-06-S2

WR-06 Pyramindal Horn Antenna, 25 dBi Gain

SAR-2507-06-S2 is a D-band pyramidal horn antenna that operates from 110 to 170 GHz. The antenna offers 25 dBi nominal gain and a typical half power beamwidth of 9 degrees on the E-plane and 10 degrees on the H-plane. The antenna supports linear polarized waveforms. The input of this antenna is a WR-06 waveguide with UG-387/U-M anti-cocking flange.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	110 GHz		170 GHz
Gain		25 dBi	
Cross-Polarization *		30 dB	
3 dB Beamwidth, E-plane		9°	
3 dB Beamwidth, H-plane		10°	
Sidelobes, E-plane		-14 dB	
Sidelobes, H-plane		-30 dB	
Return Loss		23 dB	
Specification Temperature		+25°C	
Operating Temperature	-45°C		+85°C

*Actual measured cross-polarization level shall be around 40 dB typ, 35 dB min. However, our testing service needs to be purchased to guarantee the level. Contact us for more information.

Mechanical Specifications:

Item	Specification
Antenna Port	WR-06 Waveguide
Flange Type	UG-387/ U-M Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Weight	0.7 Oz
Outline	AR-D3-A-2

ECCN

EAR99

FEATURES

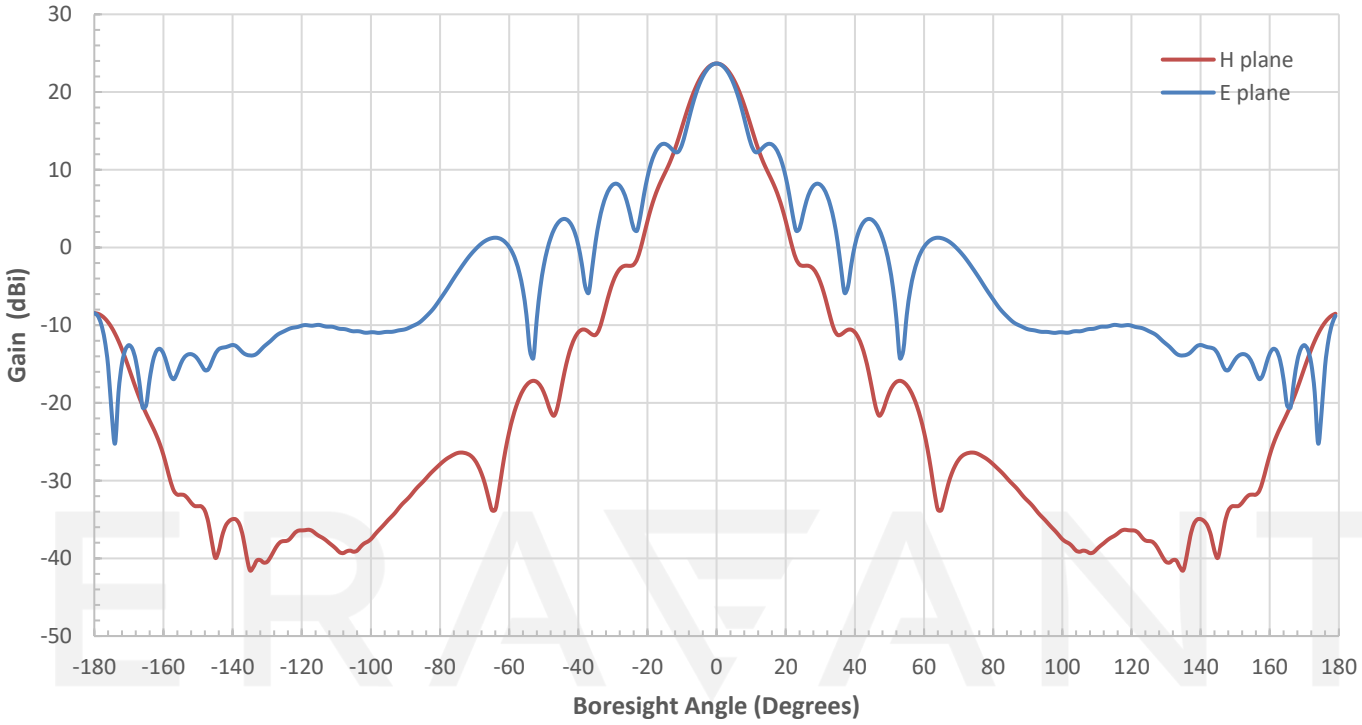
- Rectangular Waveguide Interface
- Precisely Machined and Gold Plated
- High Return Loss
- Linear Polarization

APPLICATIONS

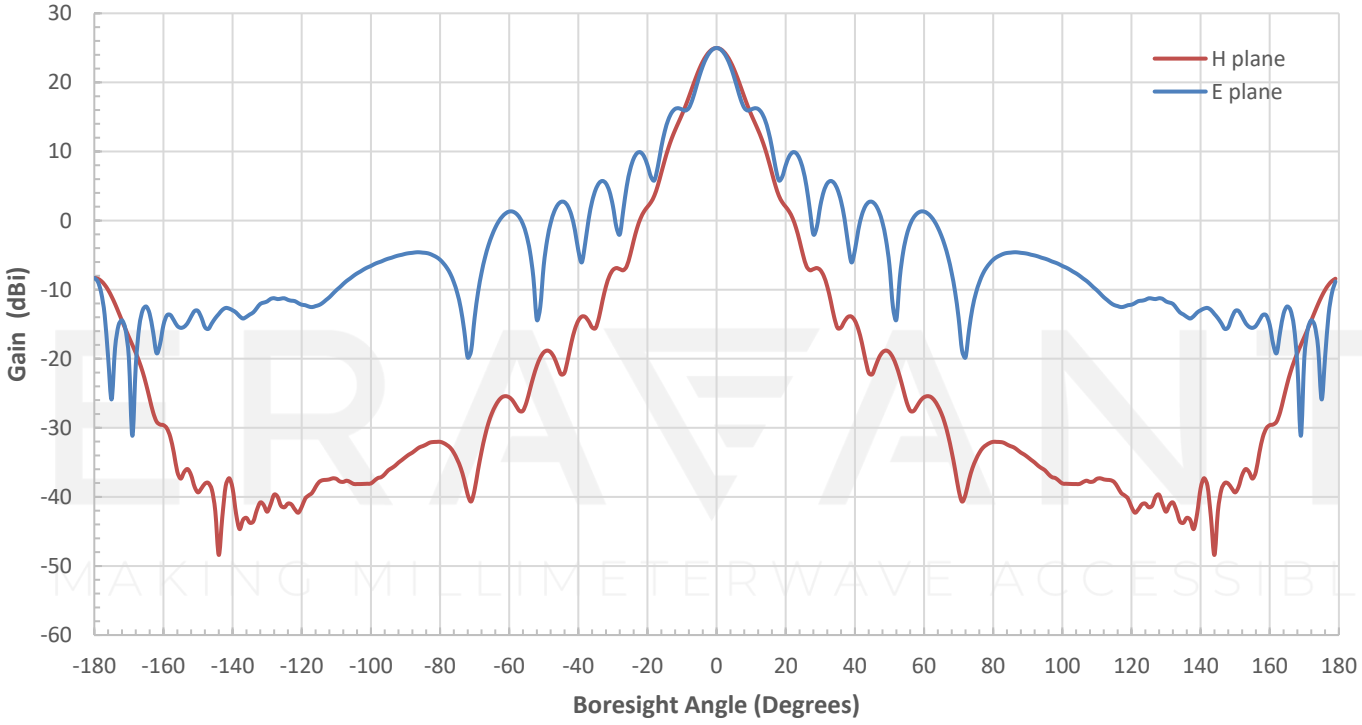
- Antenna Ranges
- Antenna Gain Measurements
- System Setups

SUPPLEMENTAL DETAILS

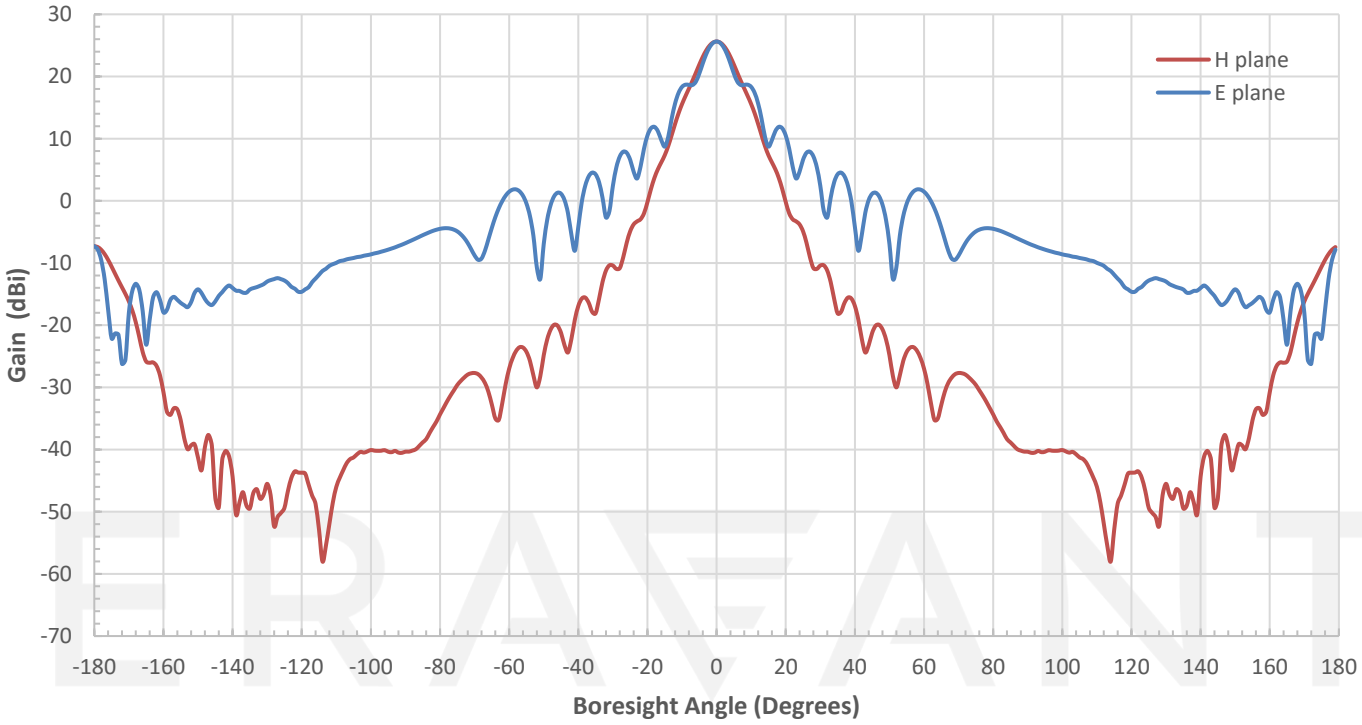
Simulated Antenna Pattern at 110 GHz



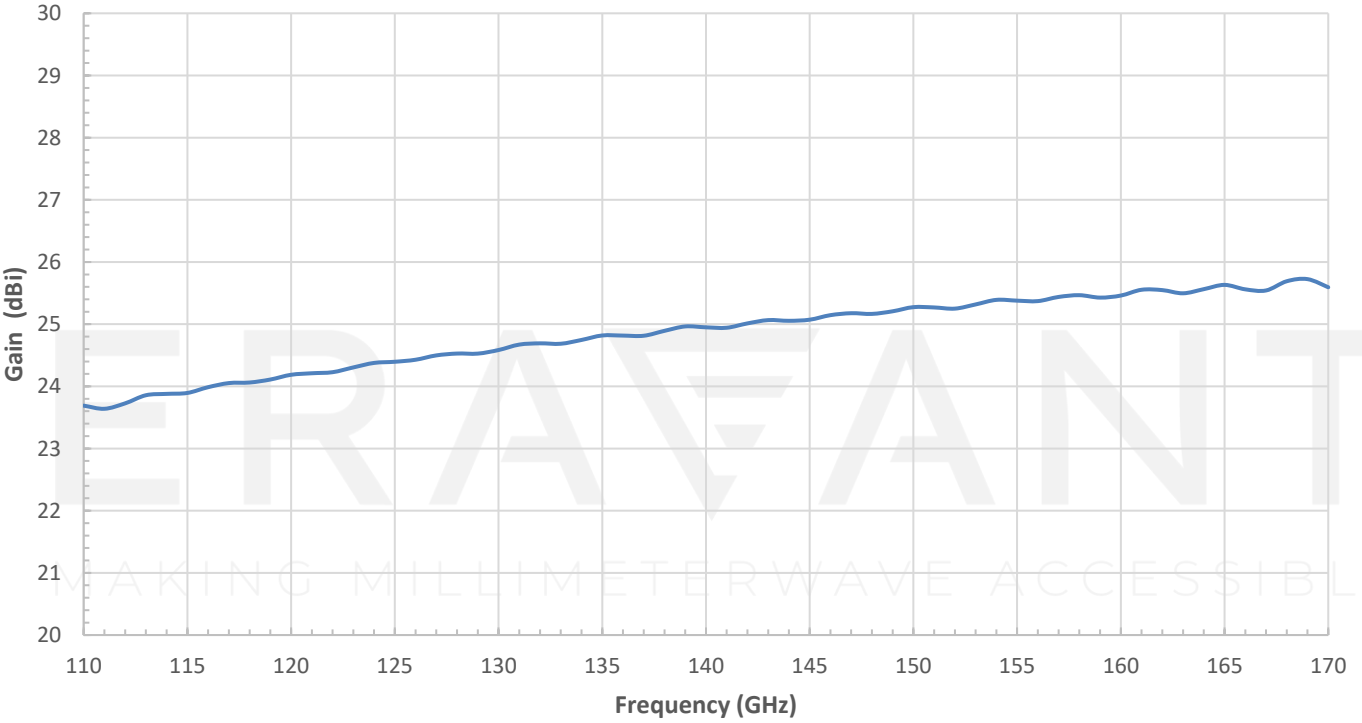
Simulated Antenna Pattern at 140 GHz



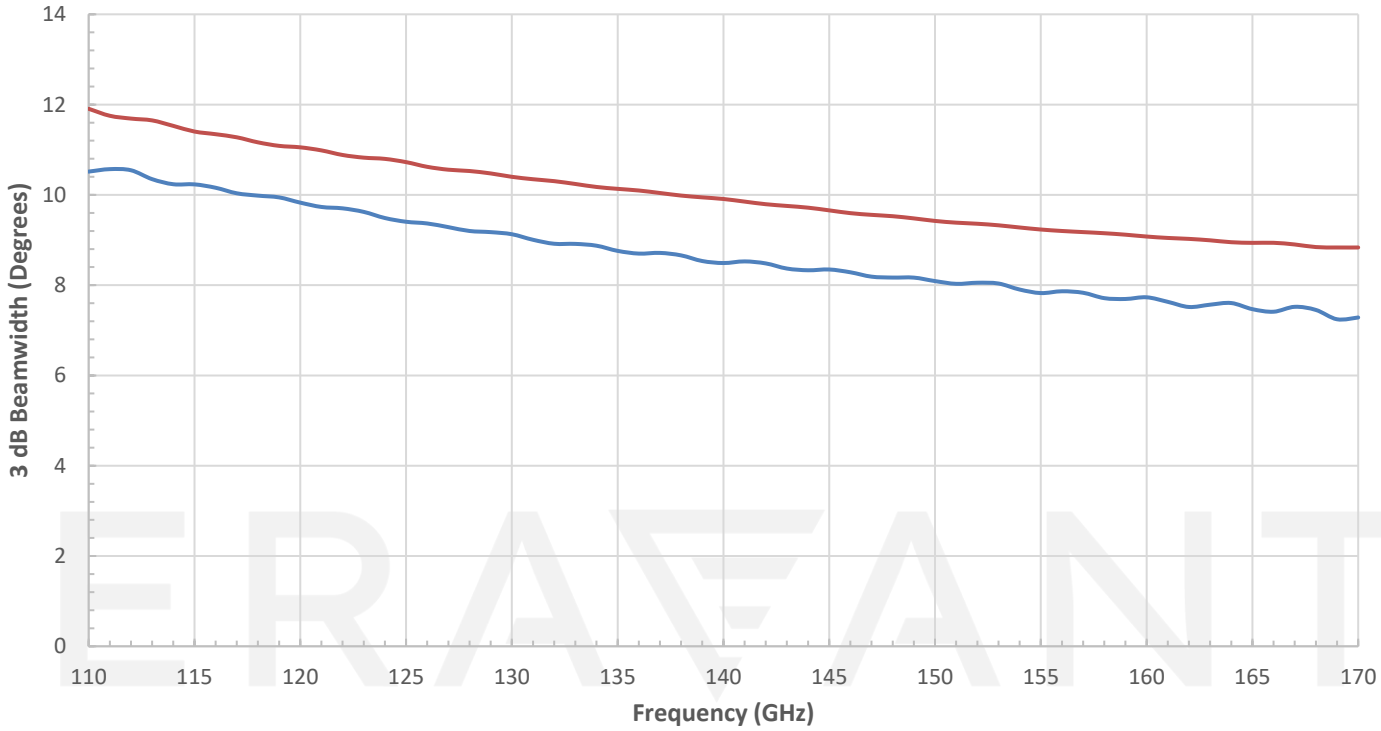
Simulated Antenna Pattern at 170 GHz



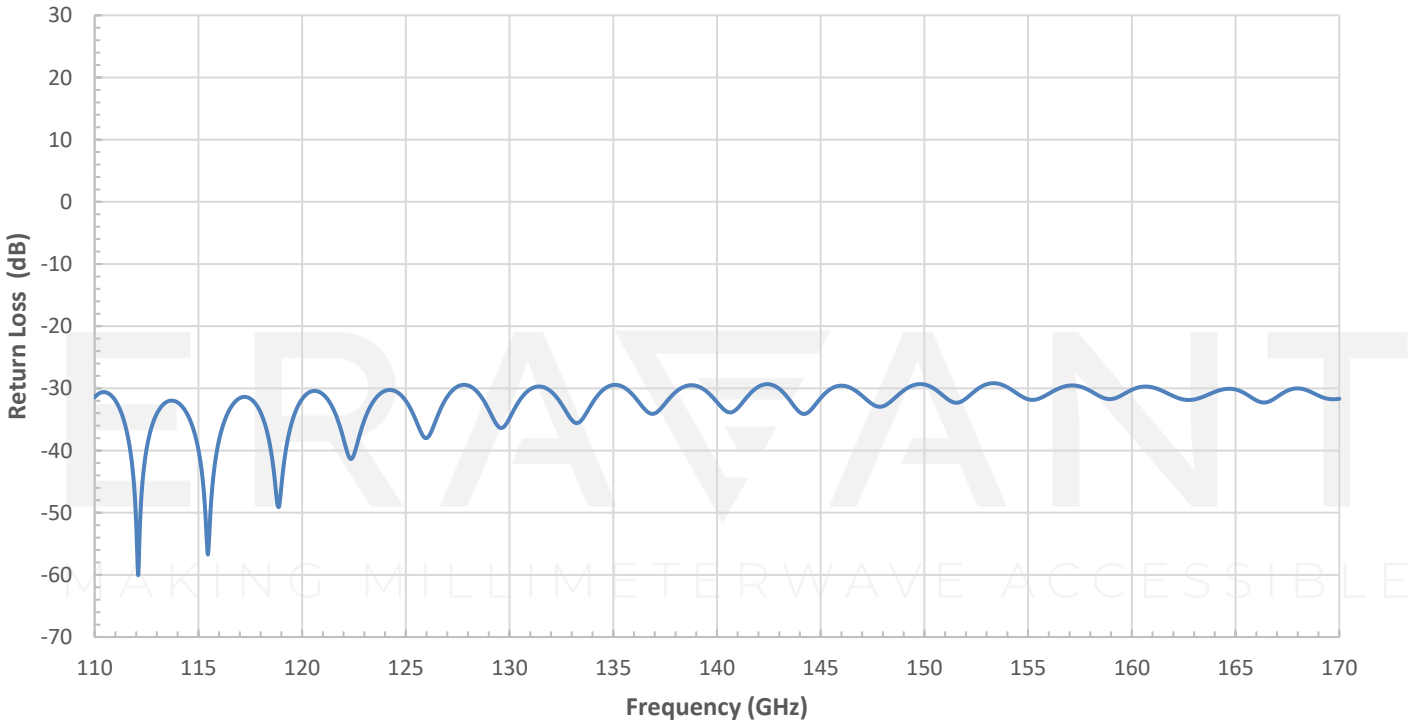
Simulated Gain vs Frequency



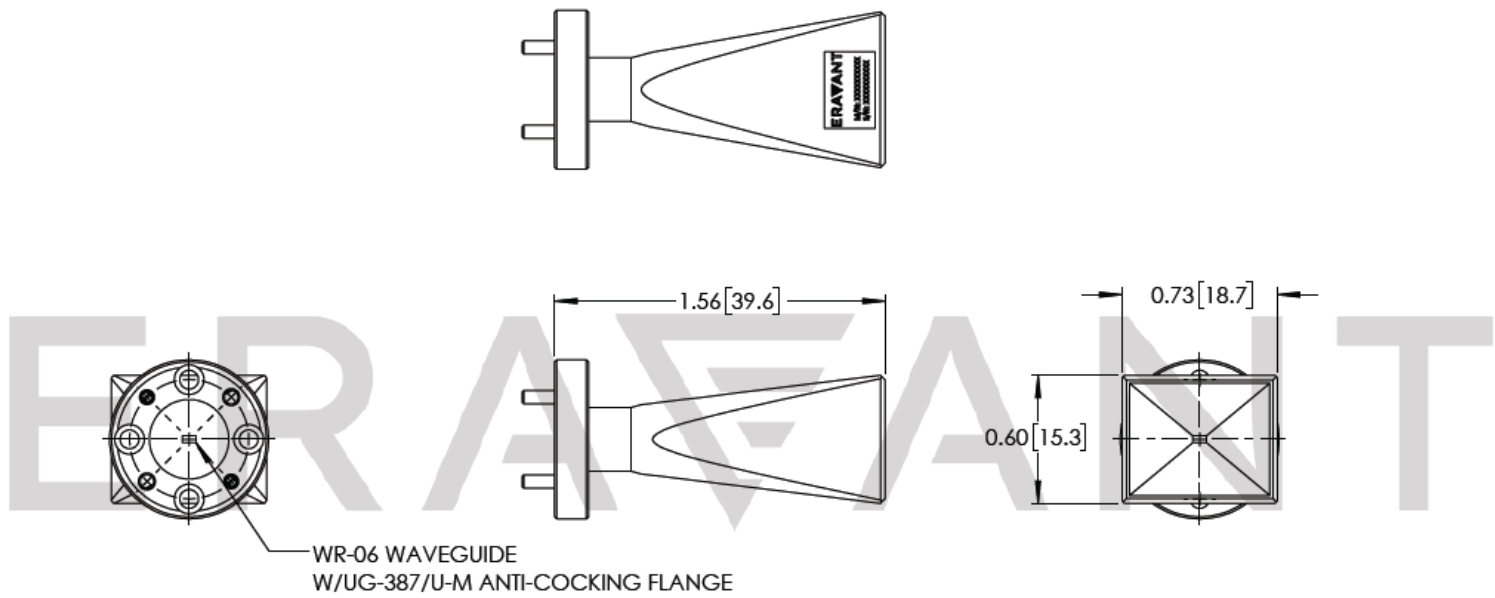
Simulated 3dB Beamwidth vs Frequency



Simulated Return Loss vs Frequency



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 may damage the device.