

SAC-2309-039-S2

WR-03 Conical Horn Antenna, 23 dBi Gain

SAC-2309-039-S2 is a WR-03 conical horn antenna that operates from 220 to 325 GHz. The antenna offers 23 dBi nominal gain and a typical half power beamwidth of 11 degrees on the E-plane and 13 degrees on the H-plane. The horn also offers typical sidelobes of -16 dB on the E-plane and -28 dB on the H-plane. The conical horn can support linear and circular polarization. The input of this antenna is a 0.039" diameter circular waveguide with UG-387/U-M anti-cocking flange.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	220 GHz		325 GHz
Gain		23 dBi	
3 dB Beamwidth, E-plane		11°	
3 dB Beamwidth, H-plane		13°	
Sidelobes, E-plane		-16 dB	
Sidelobes, H-plane		-28 dB	
Return Loss		23 dB	
Specification Temperature		+25°C	
Operating Temperature	-45°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Port	0.039" Diameter Circular Waveguide
Flange Type	UG-387/U-M Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Outline	AC-C032-039-A

ECCN

EAR99

FEATURES

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

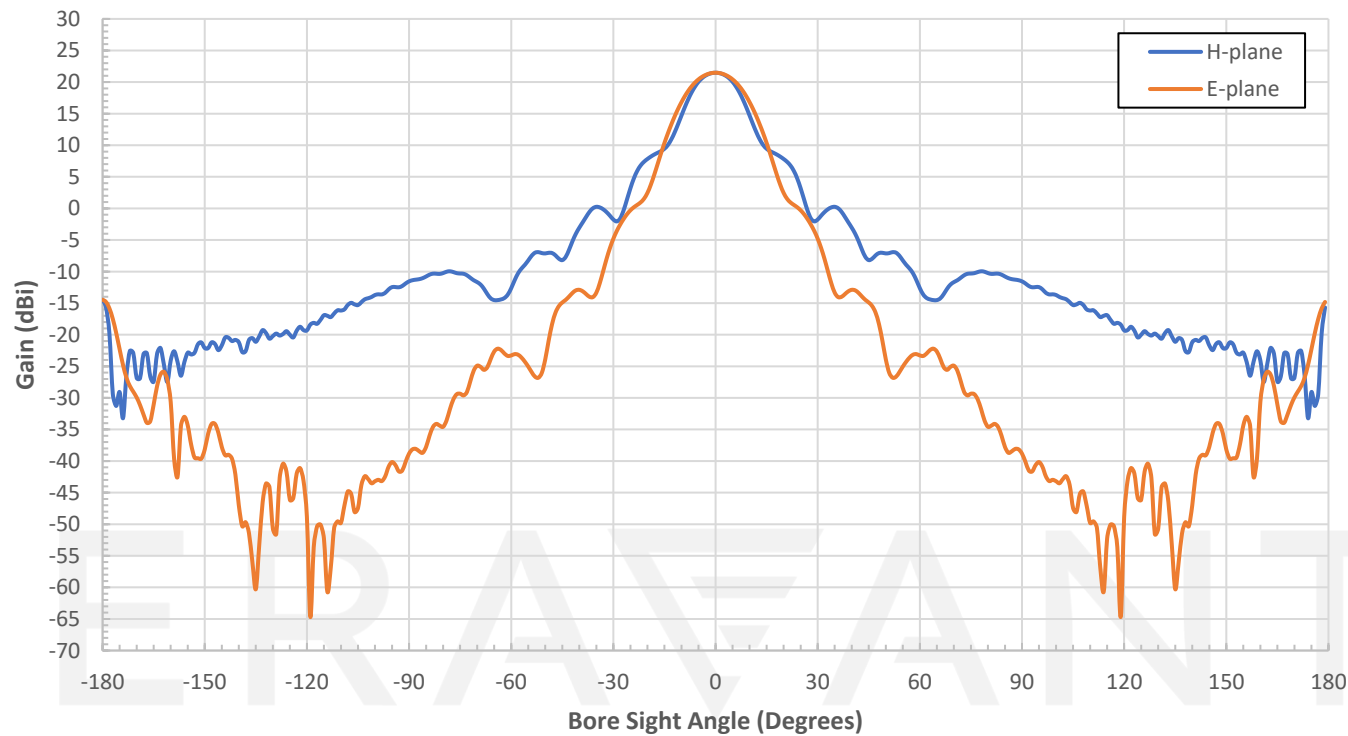
APPLICATIONS

- Test Lab
- Instrumentations
- System Integration

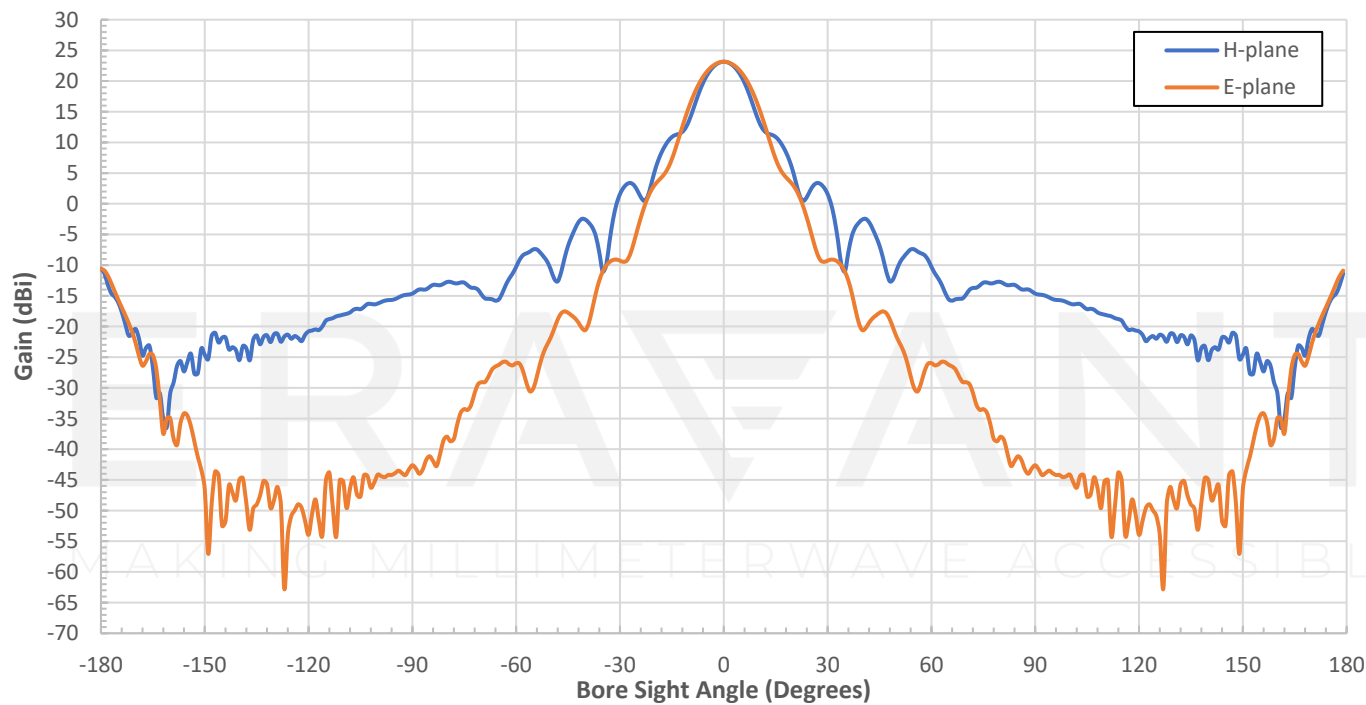
SUPPLEMENTAL DETAILS



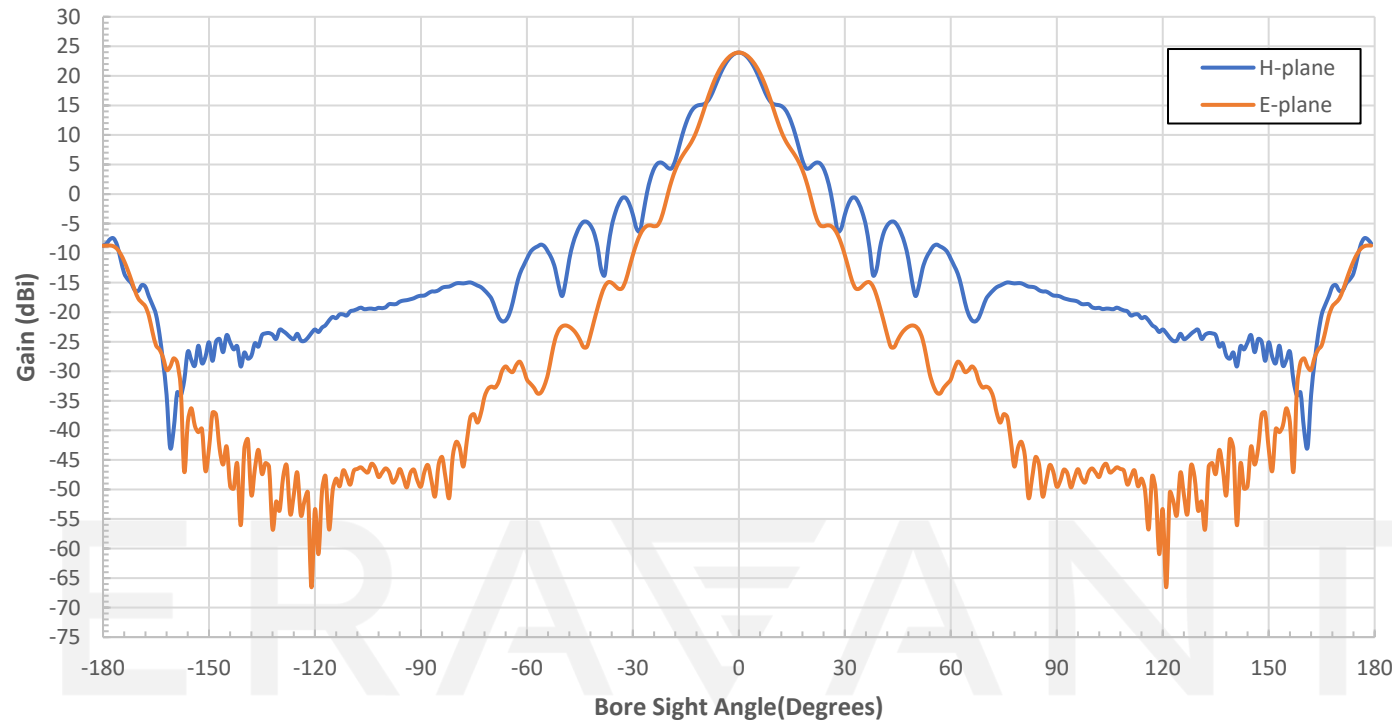
Simulated Antenna Pattern at 220 GHz



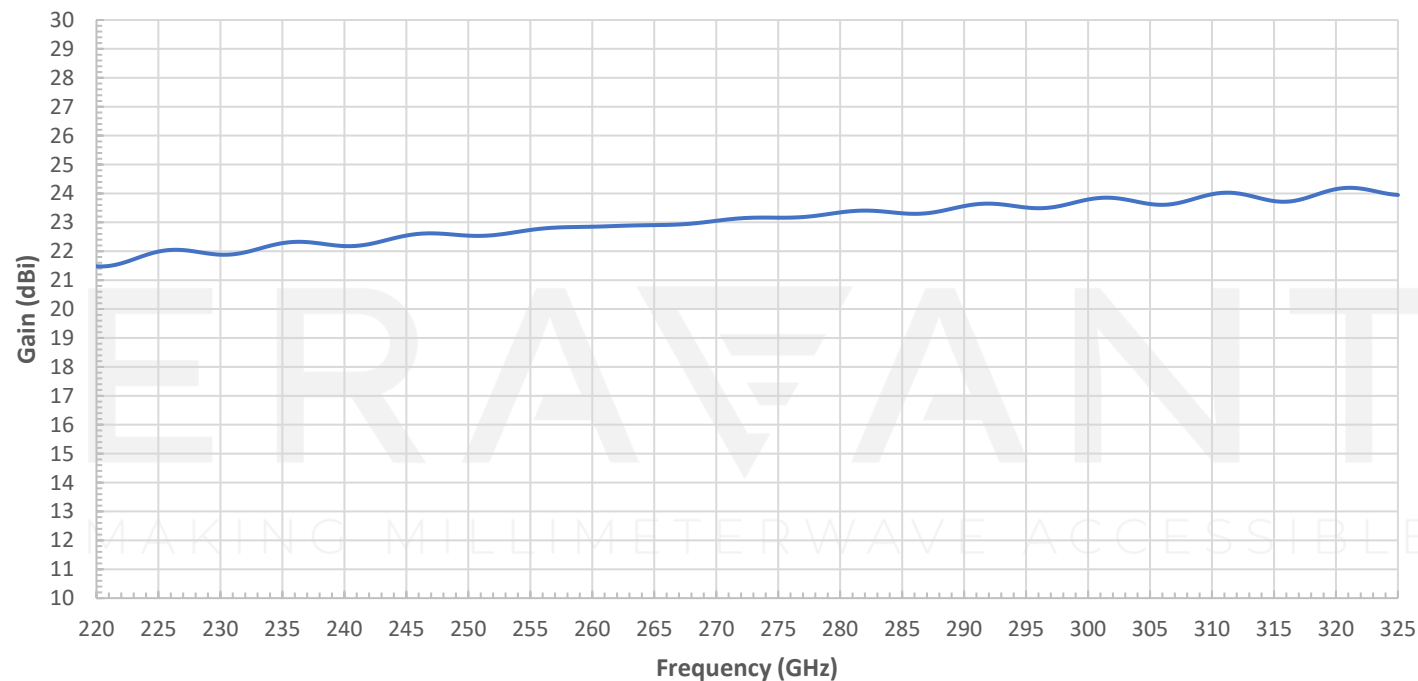
Simulated Antenna Pattern at 272.5 GHz



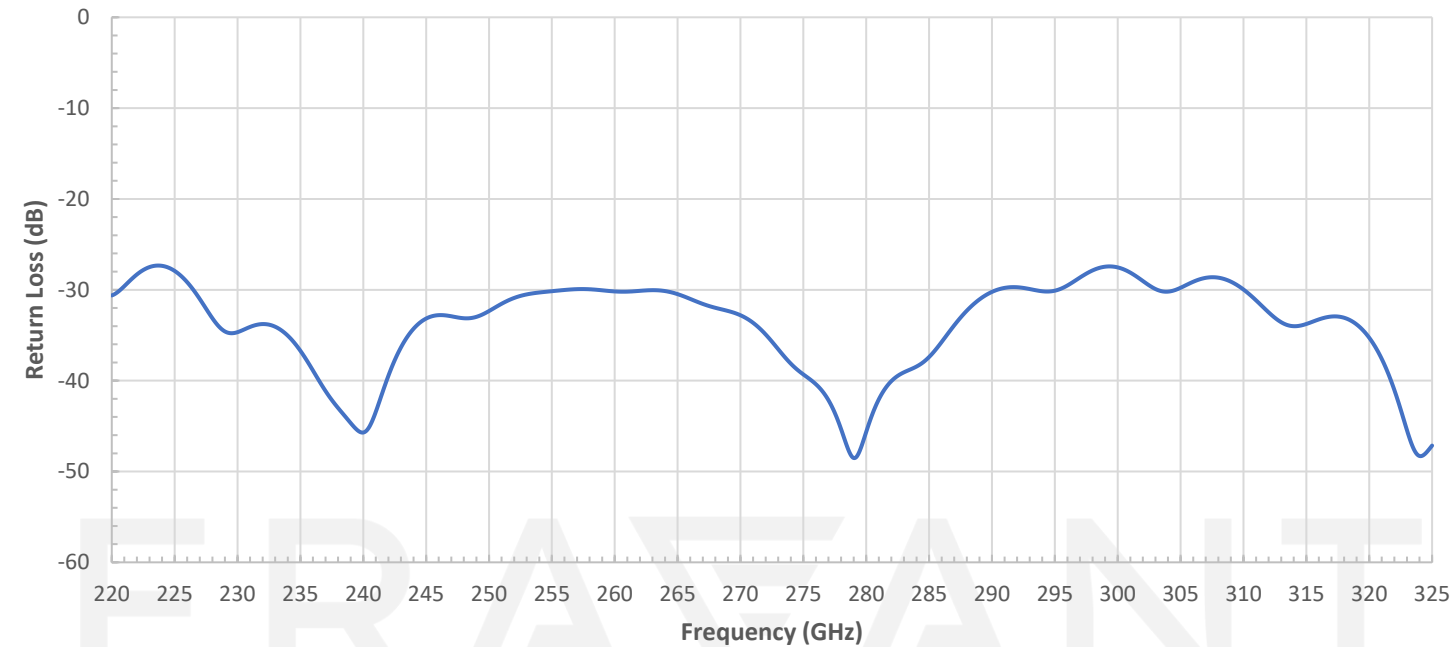
Simulated Antenna Pattern at 325 GHz



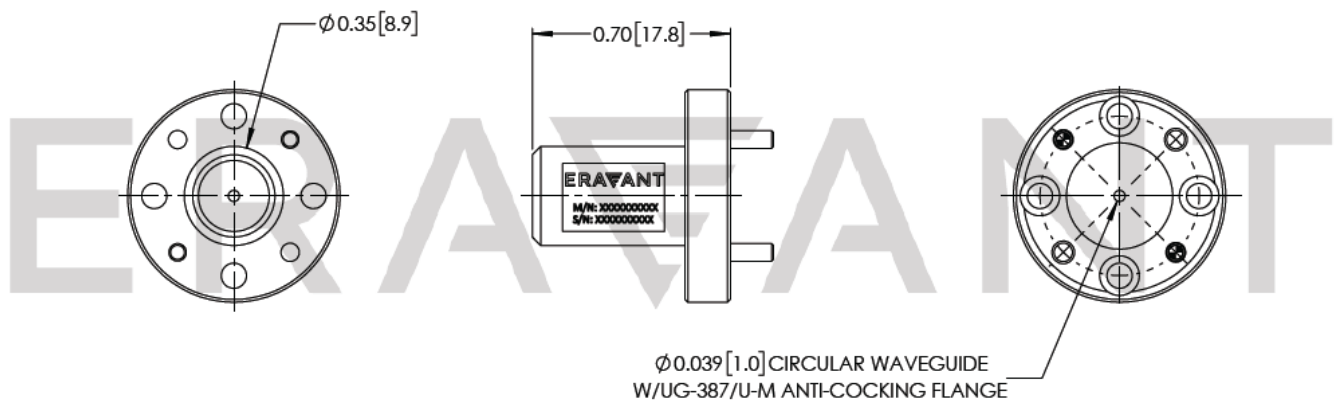
Simulated Gain Vs Frequency



Simulated Return Loss Vs Frequency



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



NOTE:

- Data provided is simulated, actual measured data may slightly vary.
- 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.