

SAH-2243341050-039-S1

WR-03 Choke Flange Feed Horn Antenna, 220 to 330 GHz,
10 dBi Gain

SAH-2243341050-039-S1 is a WR-03 choke flange feed horn antenna that operates from 220 to 330 GHz. The antenna offers a nominal gain of 10 dBi, typical half power beamwidth in E and H plane of 50 degrees and typical side lobe levels of -25 dB for both E and H plane. The antenna port is a 0.039" diameter circular waveguide with a UG-387/U-M anti-cocking flange that supports both linear and circular polarized waveforms.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	220 GHz		330 GHz
Gain		10 dBi	
3dB Beamwidth, E-Plane@140 GHz		50°	
3dB Beamwidth, H-Plane@140 GHz		50°	
Sidelobe Levels		-25 dB	
Return Loss		15 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Port	Ø0.039" Circular Waveguide with UG-387/U-M Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Weight	1.0 Oz
Outline	AH-C0310-039-A

ECCN

EAR99

FEATURES

- Full Band Coverage
- Circular waveguide interface
- Low Sidelobe level
- Linear and circular Polarization

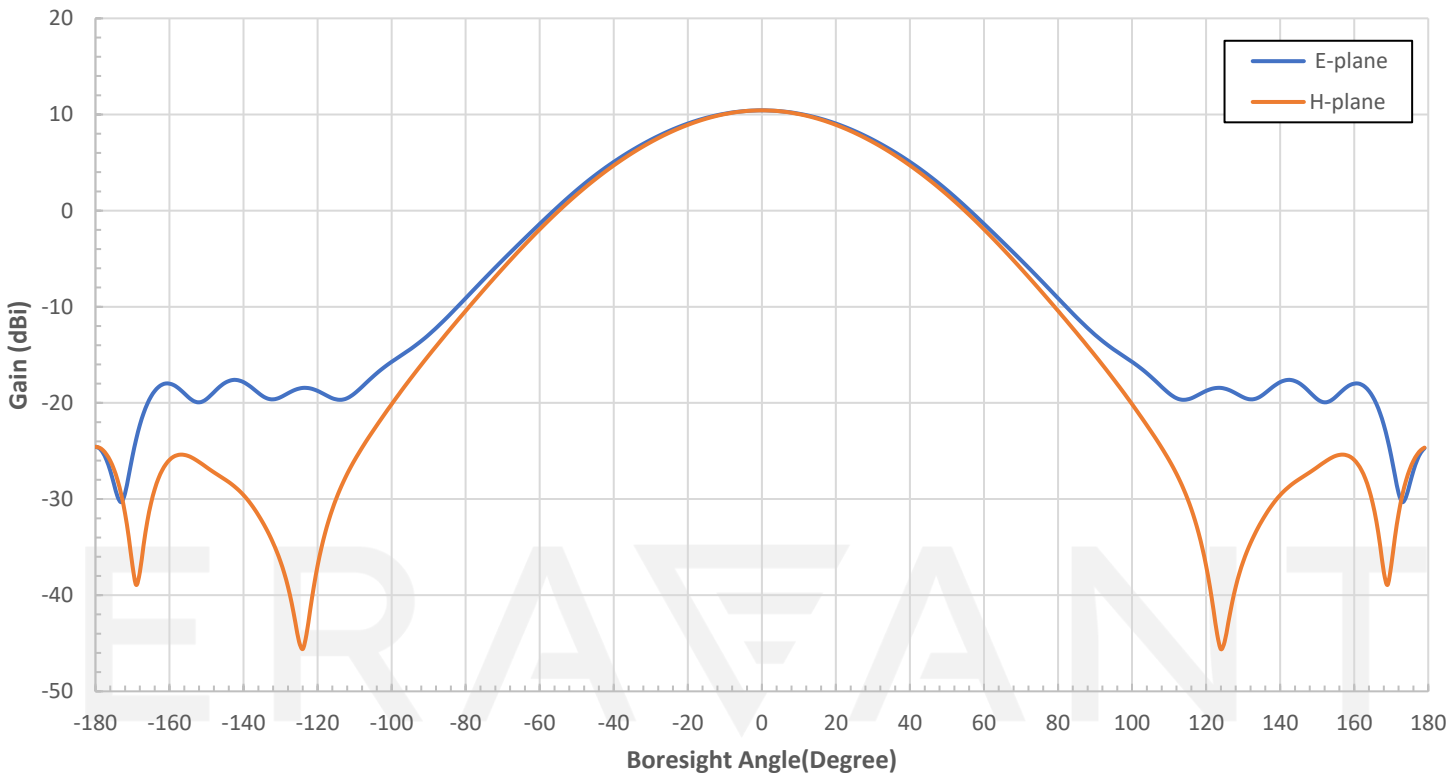
APPLICATIONS

- Feed Horn for Antenna Range Setups
- Rapid System Setups
- Engineering Setups

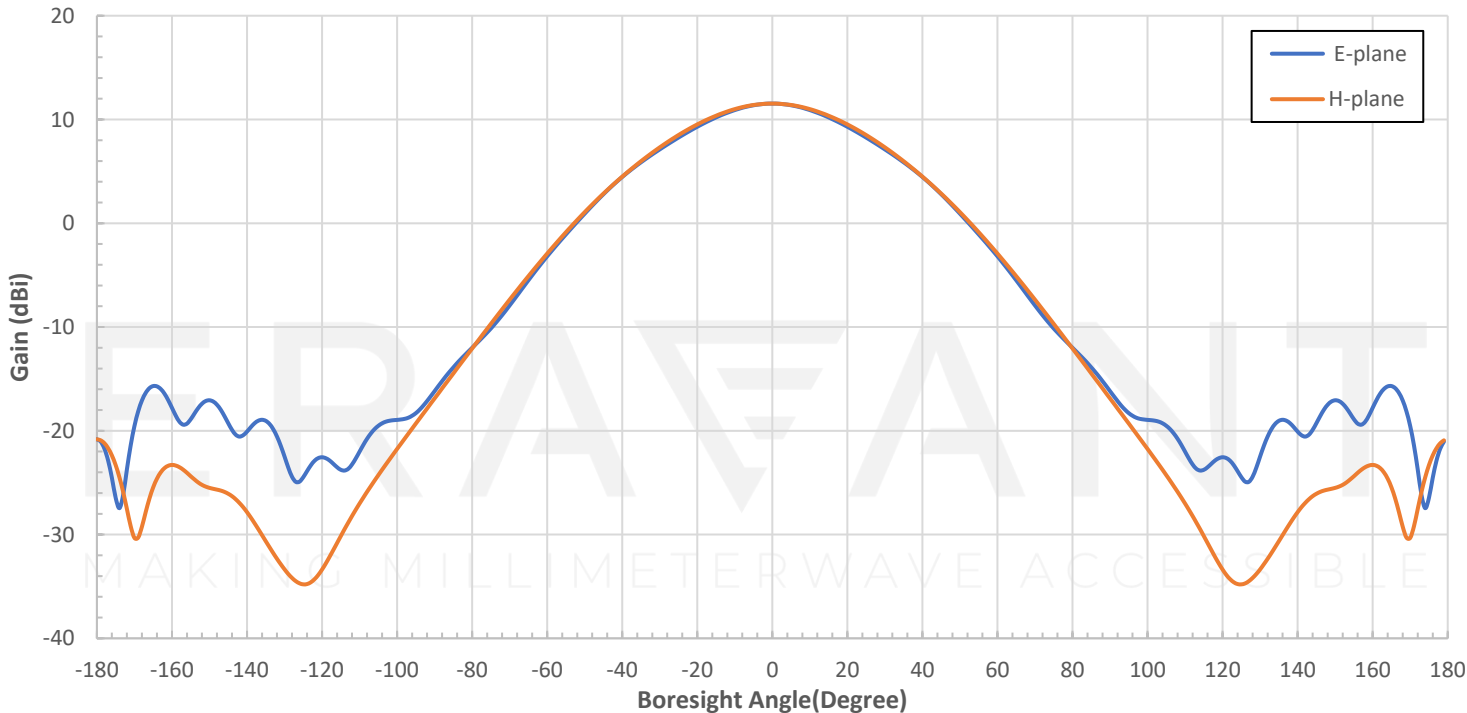
SUPPLEMENTAL DETAILS



Simulated Pattern @ 220 GHz

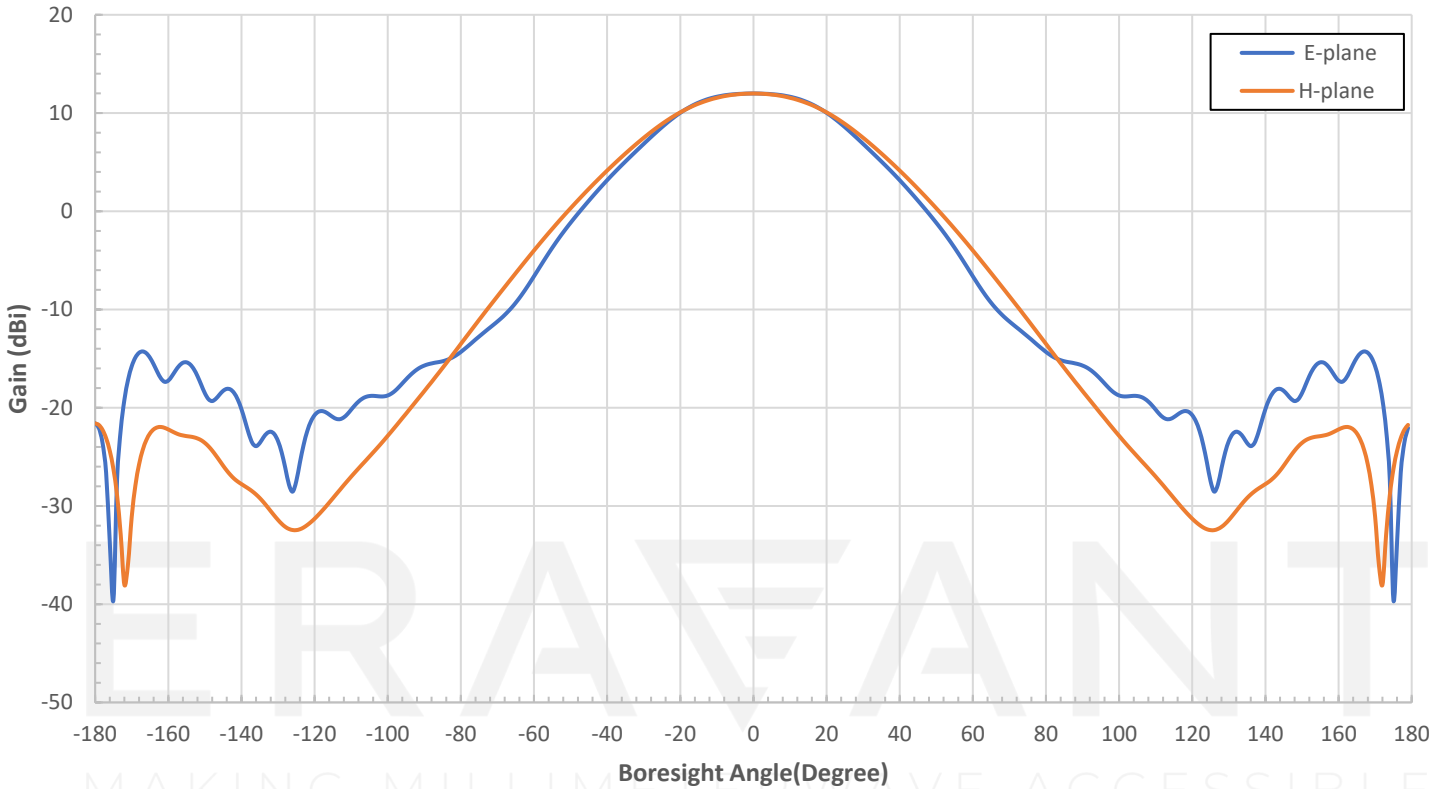


Simulated Pattern @ 275 GHz

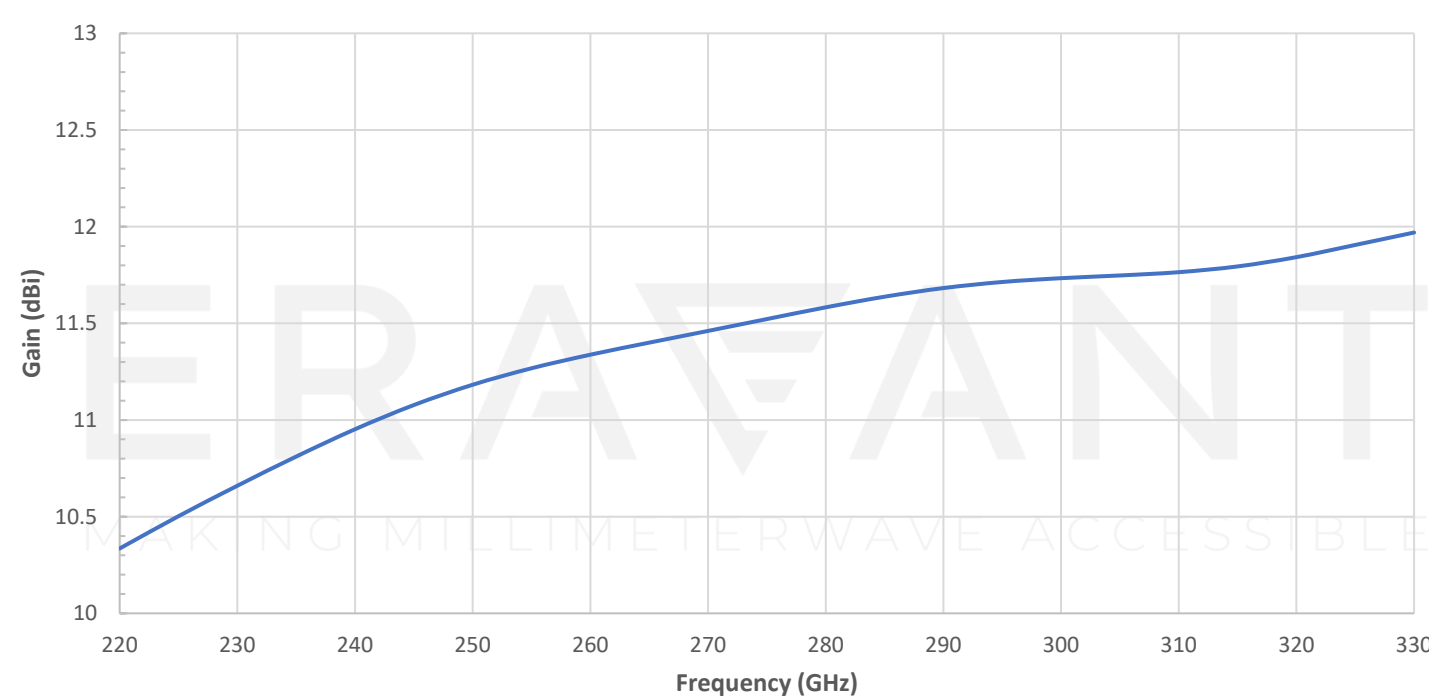


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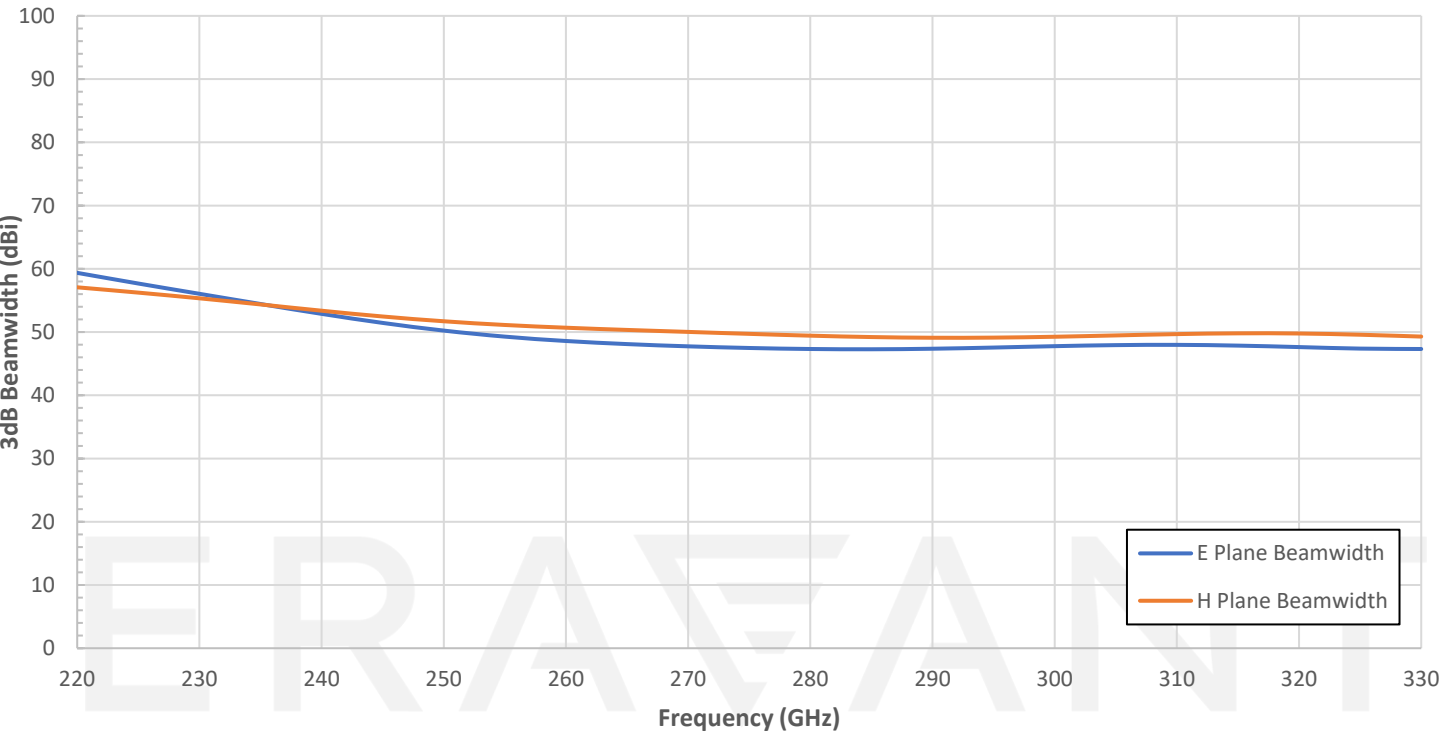
Simulated Pattern @ 330 GHz



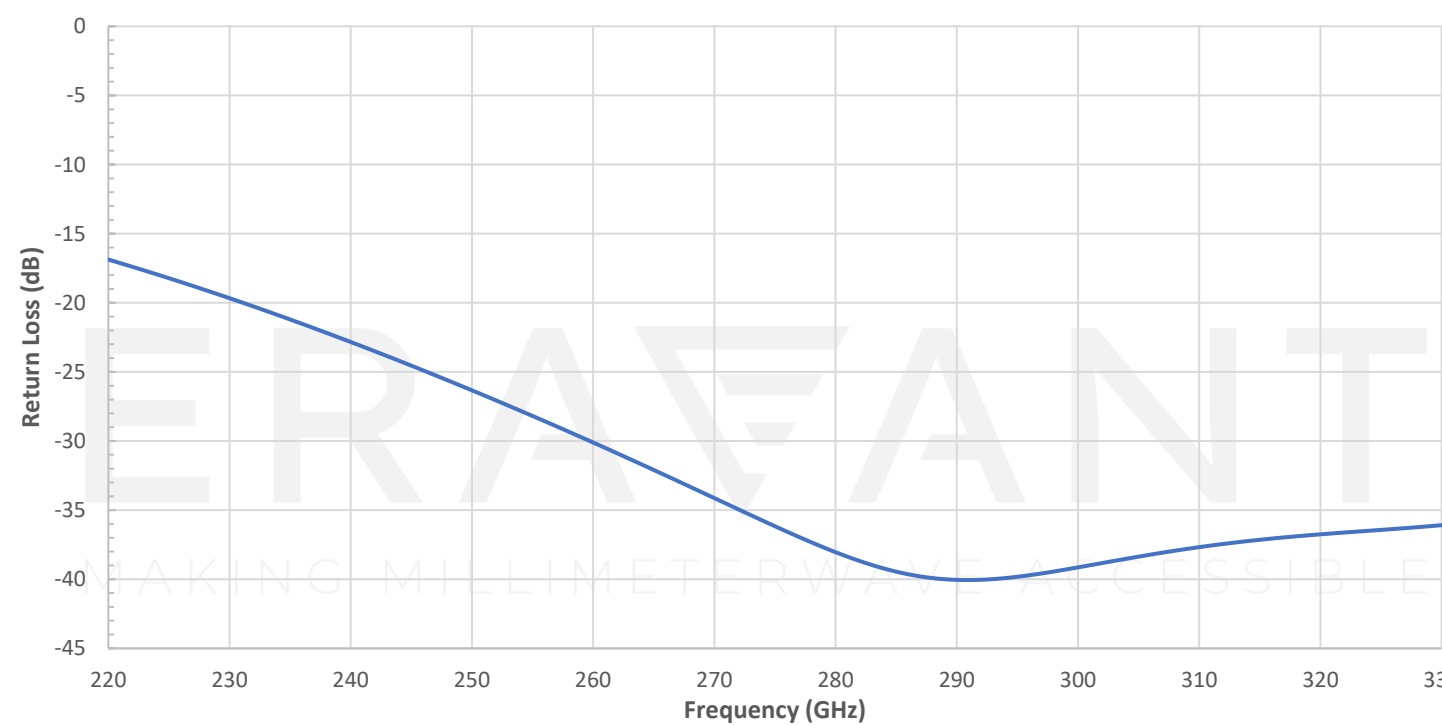
Simulated Gain vs Frequency



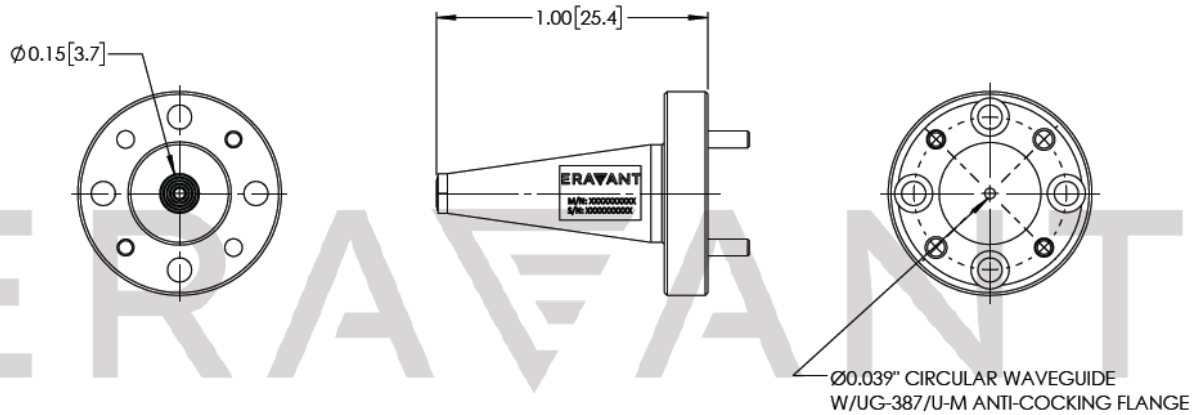
Simulated 3dB Beamwidth vs Frequency



Simulated Return Loss vs Frequency



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



NOTE:

- Data provided is simulated, actual measured data may slightly vary.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.