

SAH-6039031060-141-S1

E-Band Choke Flange Feed Horn Antenna, 60 to 90 GHz, 10 dBi Gain

SAH-6039031060-141-S1 is an E-band choke flange feed horn antenna that operates from 60 to 90 GHz. The antenna offers a nominal gain of 10 dBi, typical half power beamwidth in E and H plane of 60 degrees and typical side lobe levels of -30 dB for both E and H plane. The antenna port is a 0.141" diameter circular waveguide with a UG-387/U anti-cocking flange that supports both linear and circular polarized waveforms. A dual polarized configuration with an integrated orthomode transducer is available under the model **SAH-6039031060-141-S1-122-DP**.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	60 GHz		90 GHz
Gain		10 dBi	
3dB Beamwidth, E-Plane@75 GHz		60°	
3dB Beamwidth, H-Plane@75 GHz		60°	
Sidelobe Levels		-30 dB	
Return Loss		20 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Port	Ø0.141" Circular Waveguide with UG-387/U Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Weight	1.0 Oz
Outline	AH-CE10-141-A

ECCN

EAR99

FEATURES

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

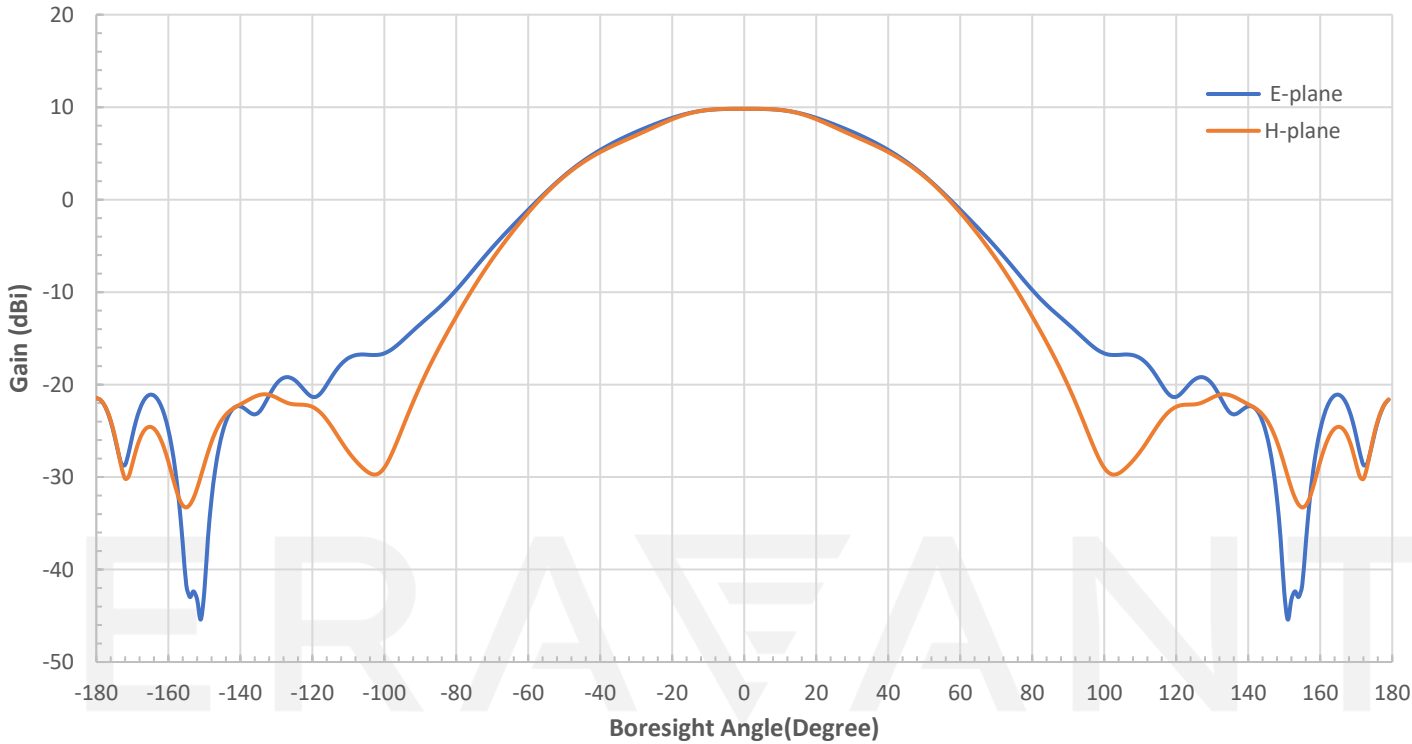
APPLICATIONS

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

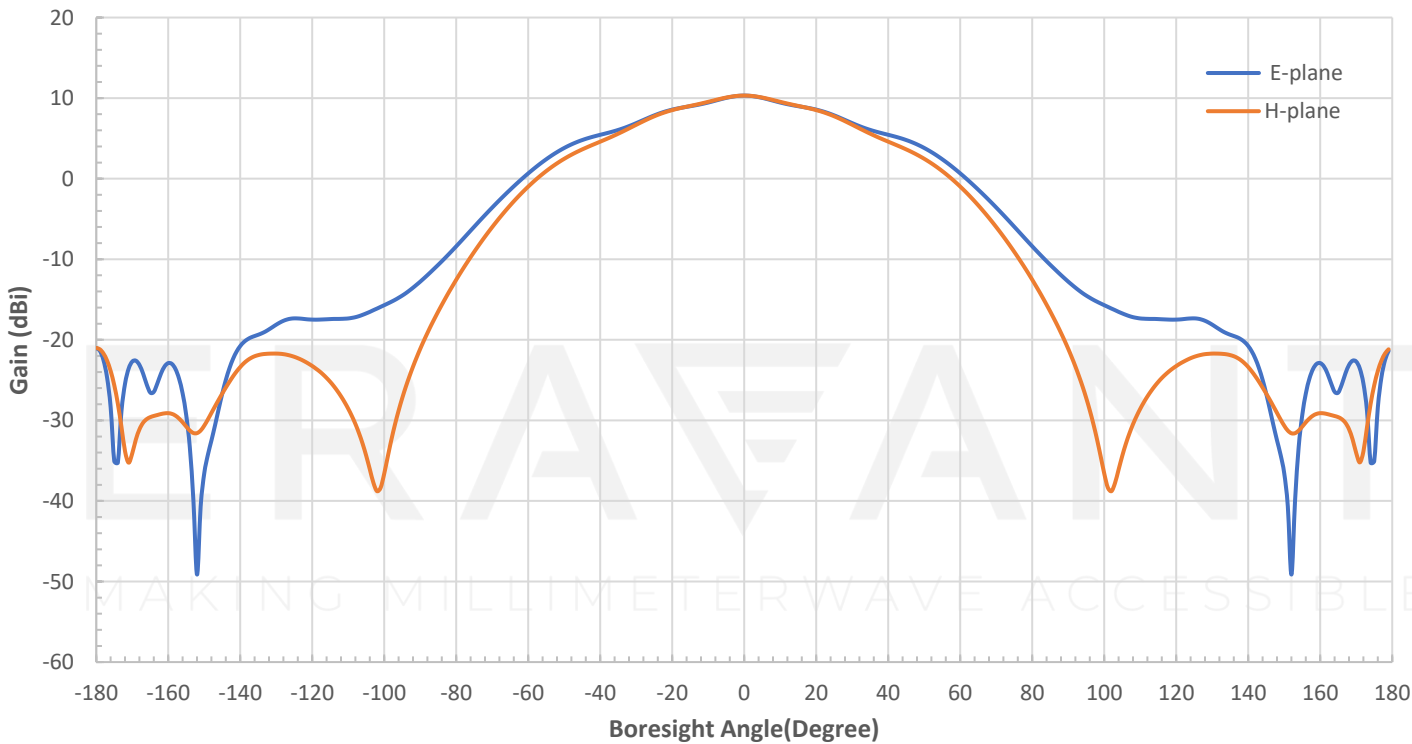
SUPPLEMENTAL DETAILS



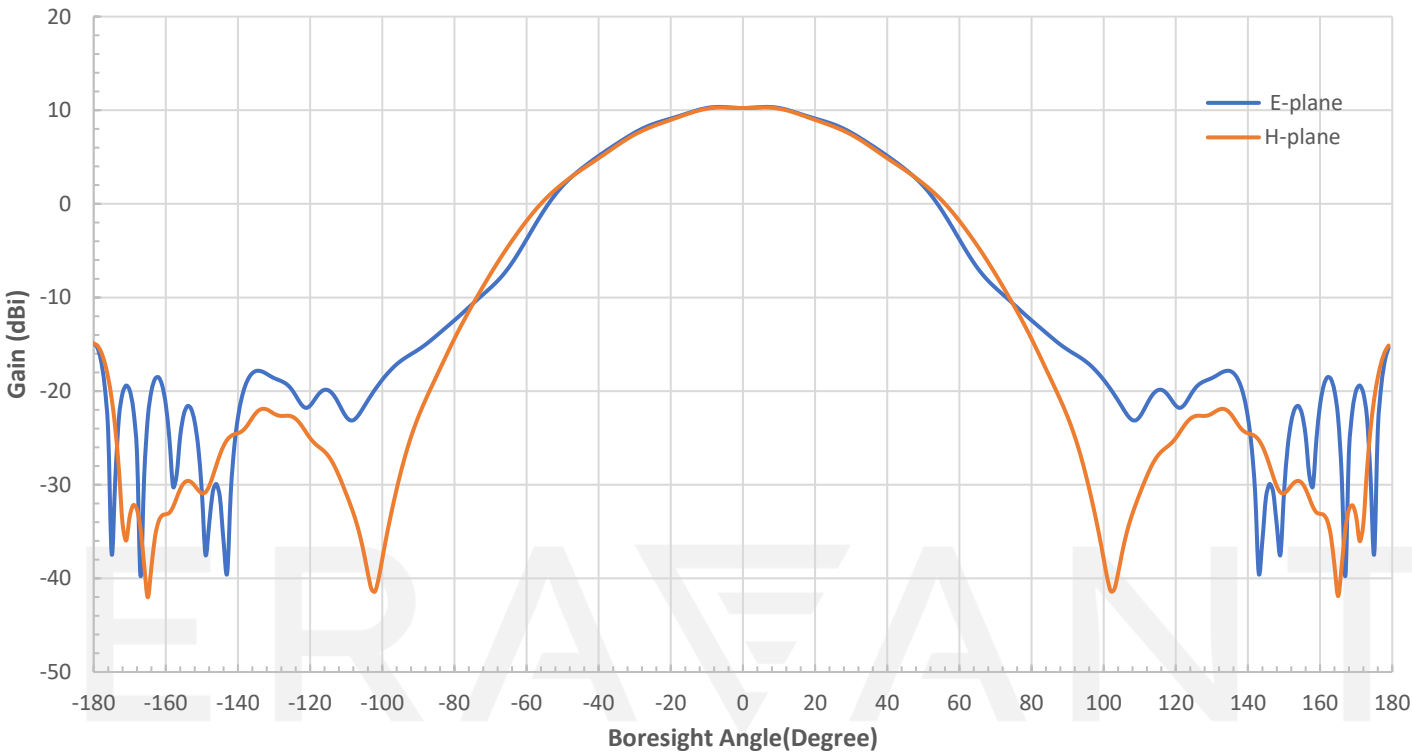
Simulated Pattern @ 60 GHz



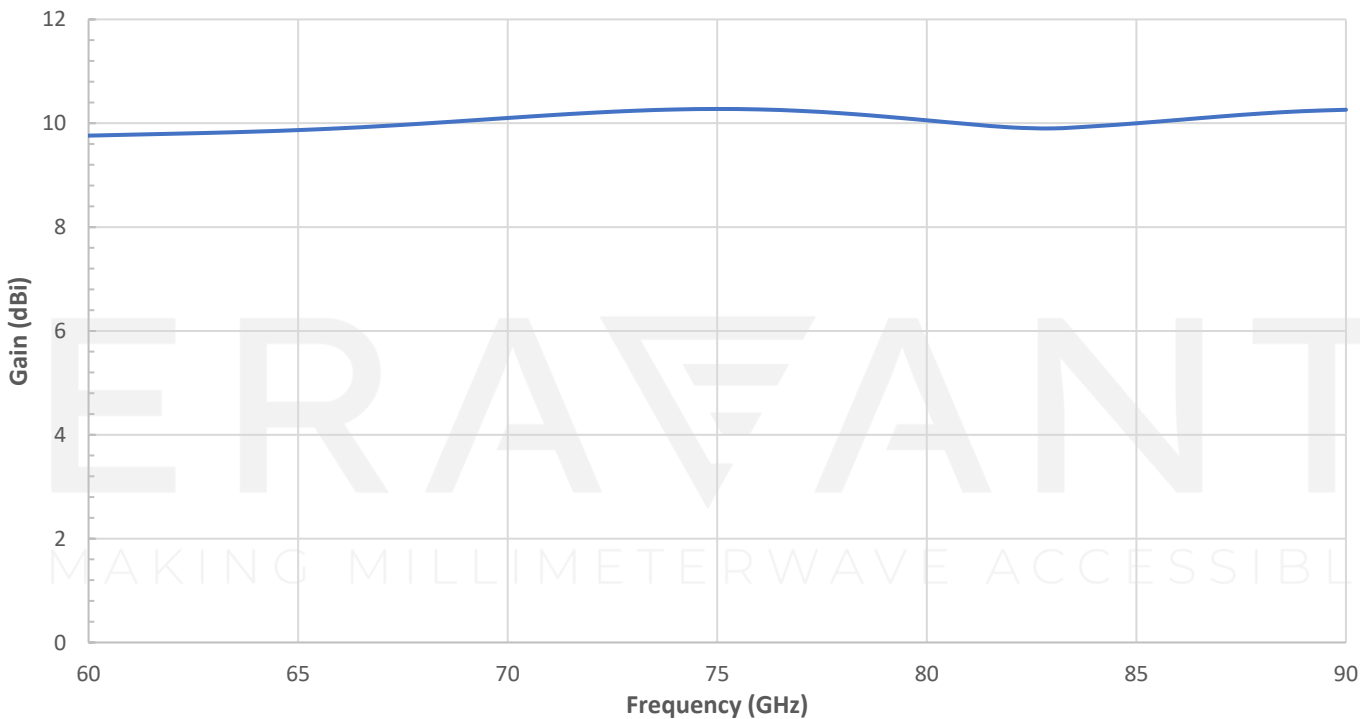
Simulated Pattern @ 75 GHz



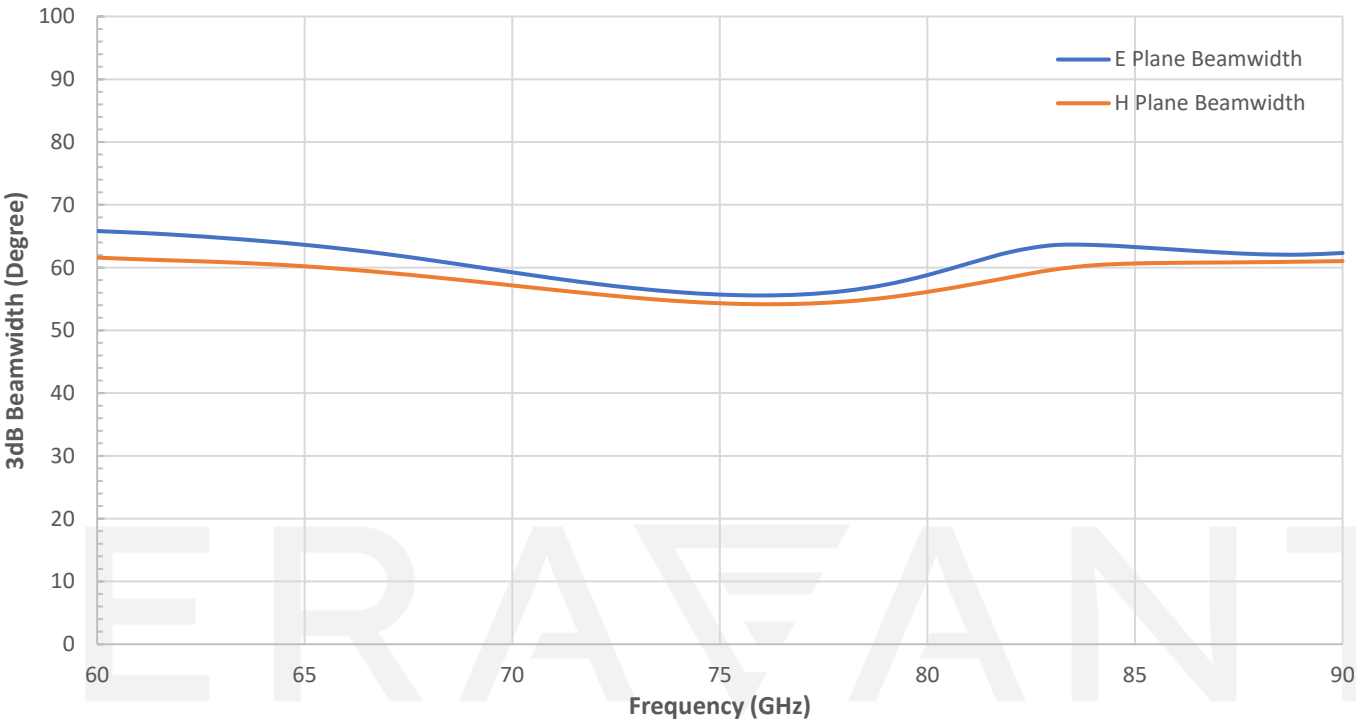
Simulated Pattern @ 90 GHz



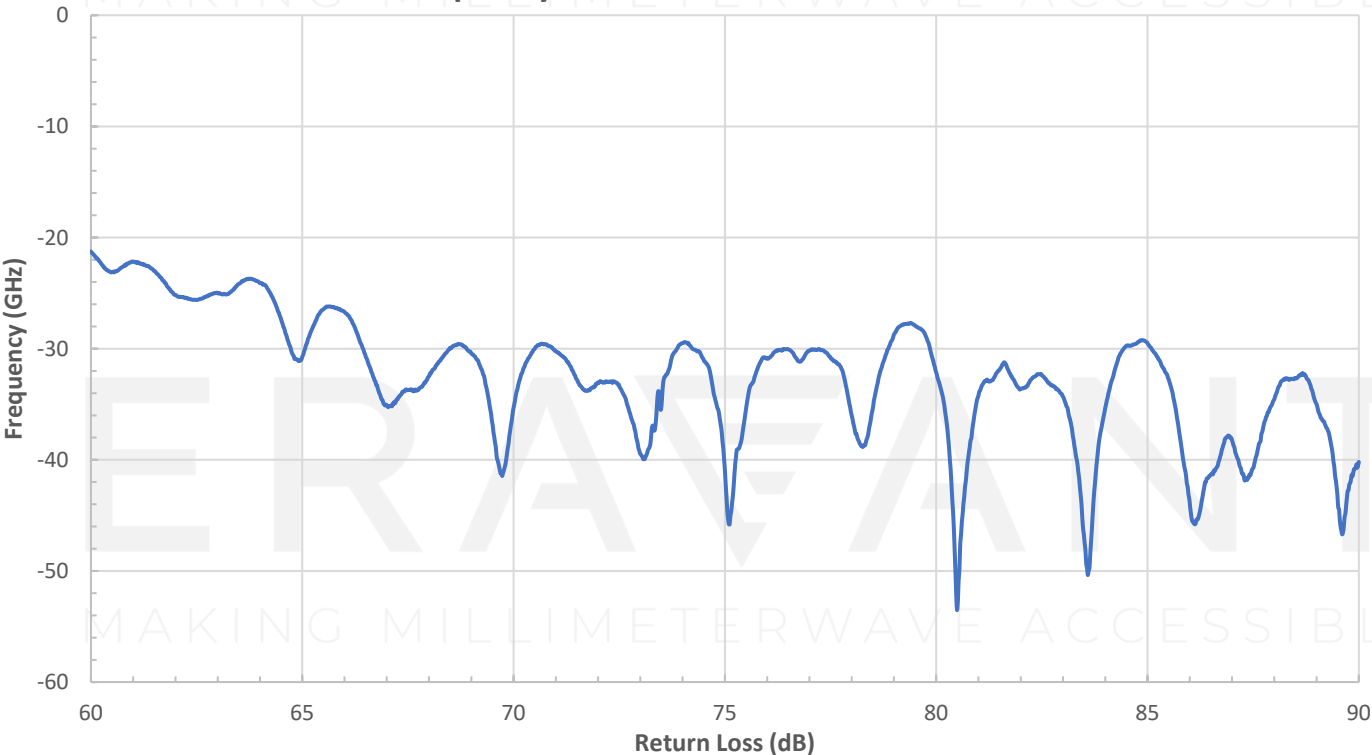
Simulated Gain vs Frequency



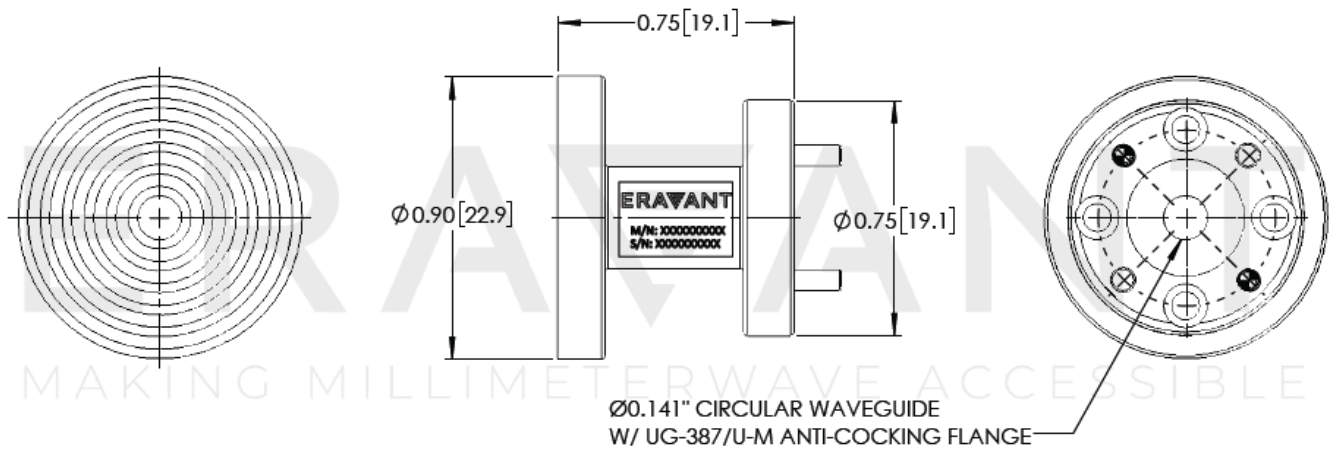
Simulated 3dB Beamwidth vs Frequency



Measured Return Loss vs Frequency



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



NOTE:

- Data provided is simulated test data, 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.