

G-Band Choke Flange Feed Horn Antenna, 140 to 220 GHz, 10 dBi Gain

Description:

Model SAH-1442241060-059-S1 is a G-band choke flange feed horn antenna that operates from 140 to 220 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 0.059" circular waveguide with a UG-387/U-M anti-cocking flange that supports linear and circular polarization.



Features:

- Full Band Operation
- Circular Waveguide Interface
- Low Sidelobe Level
- Linear and Circular Polarization

Applications:

- Feed Horn for Gaussian Optical Antennas
- Feed Horn for Cassegrain Antennas
- Rapid System Setups
- Engineering Setups

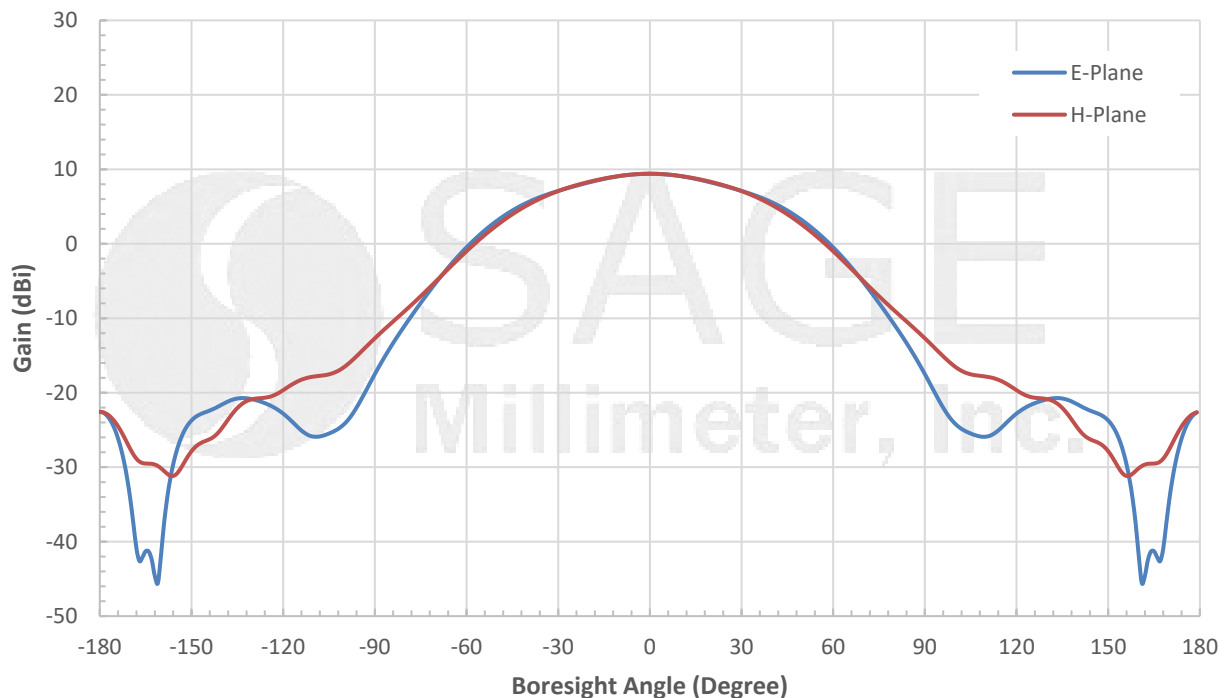
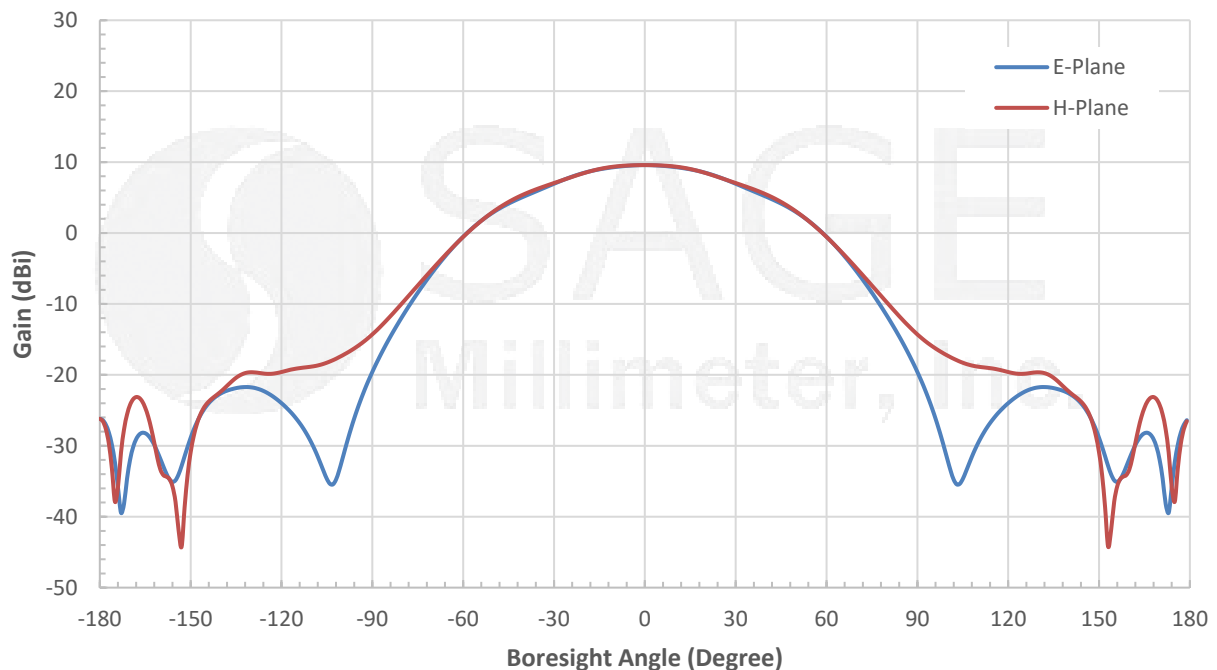
Electrical Specifications:

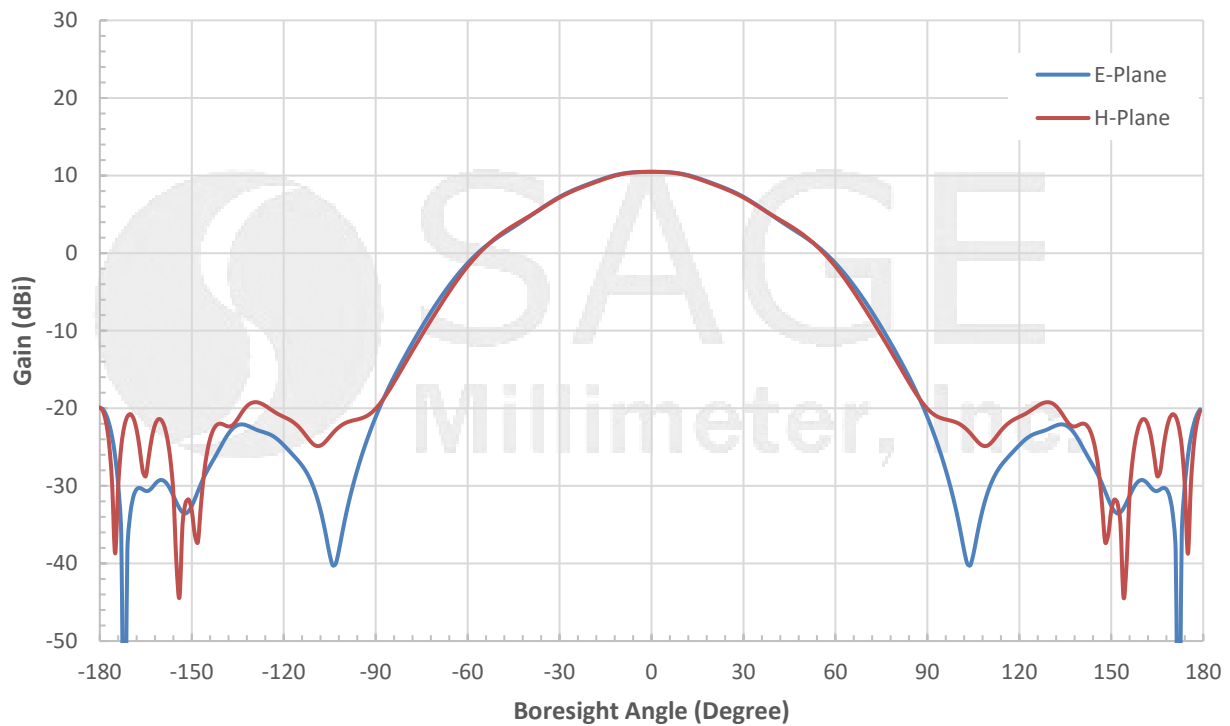
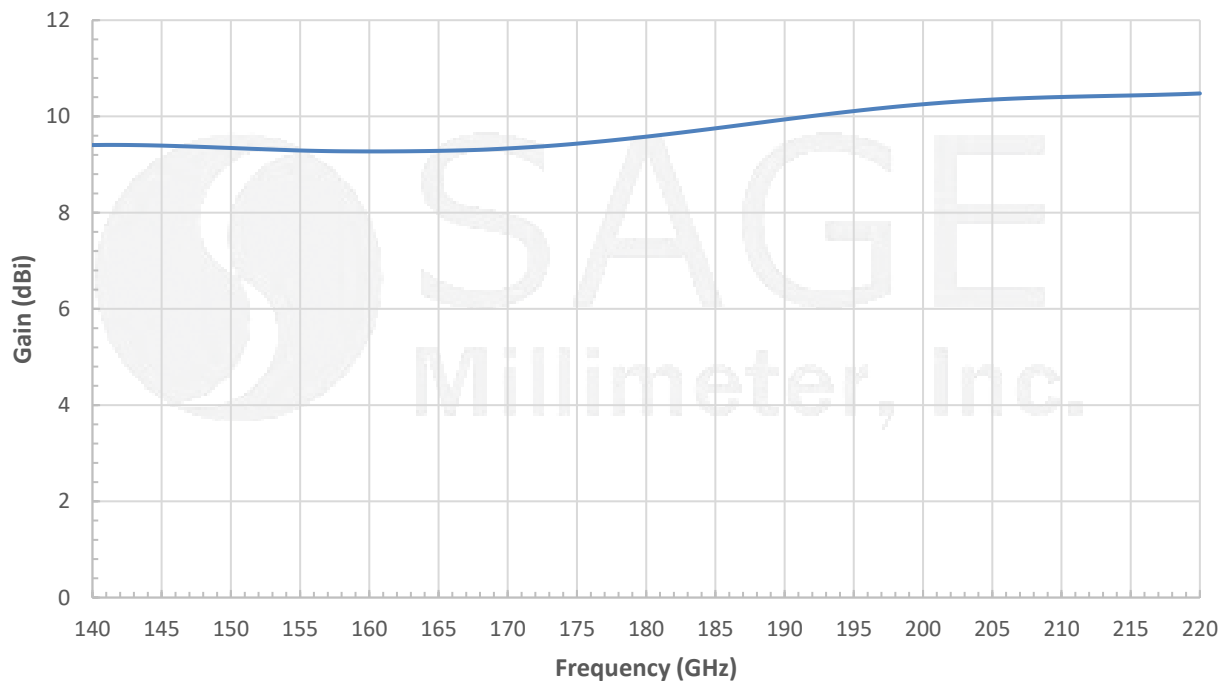
Parameter	Minimum	Typical	Maximum
Frequency	140 GHz		220 GHz
Gain		10 dBi	
3 dB Beamwidth, E-plane @ 180 GHz		60°	
3 dB Beamwidth, H-plane @ 180 GHz		60°	
Sidelobe Levels		-30 dB	
Return Loss		20 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

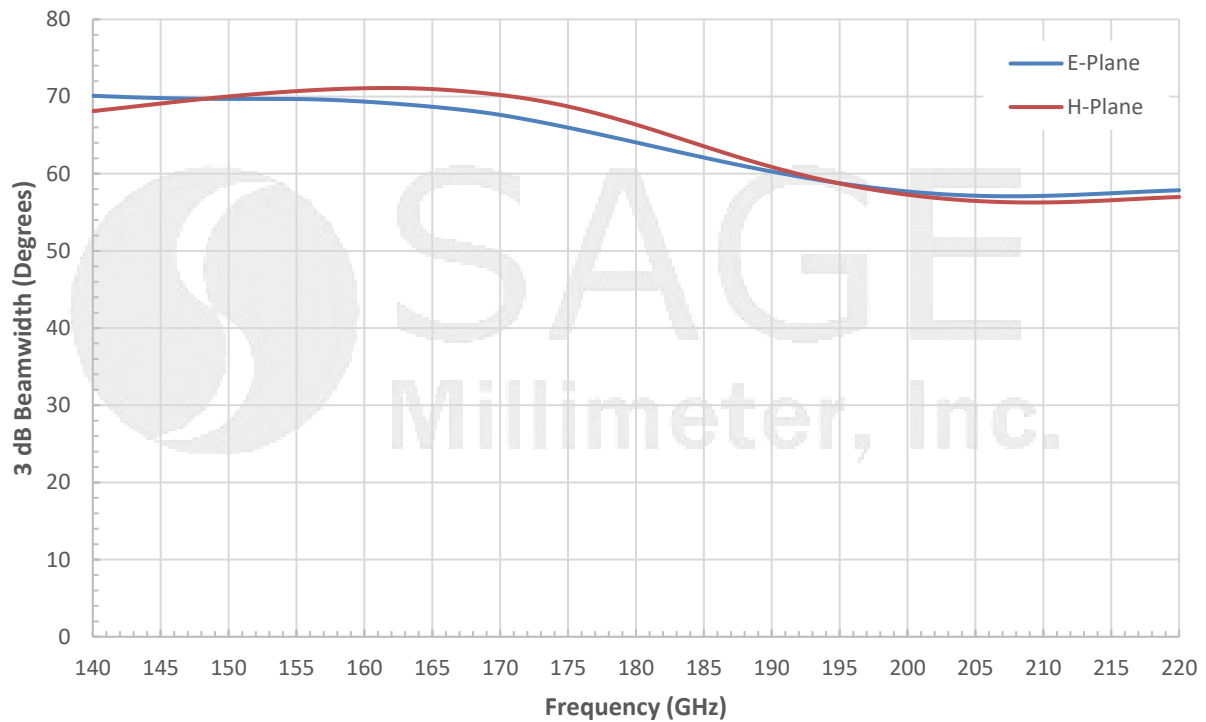
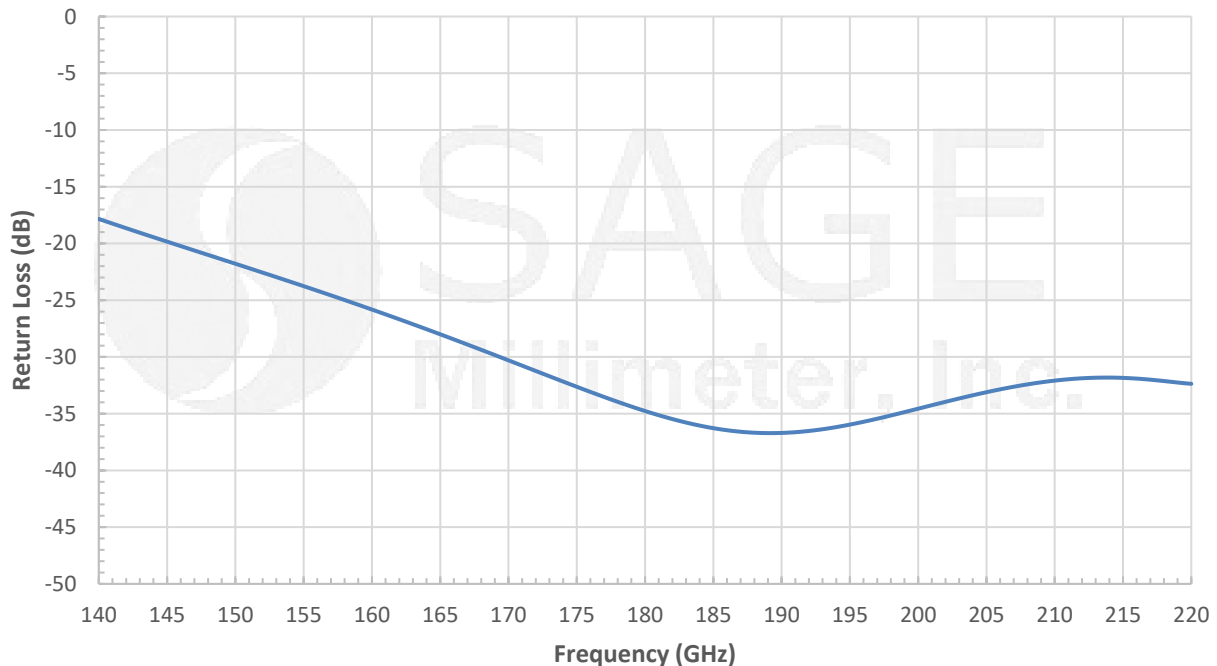
Mechanical Specifications:

Item	Specification
Antenna Port	0.059" Diameter Circular Waveguide with UG-387/U-M Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Weight	1.0 Oz
Outline	AH-CG10-059-A



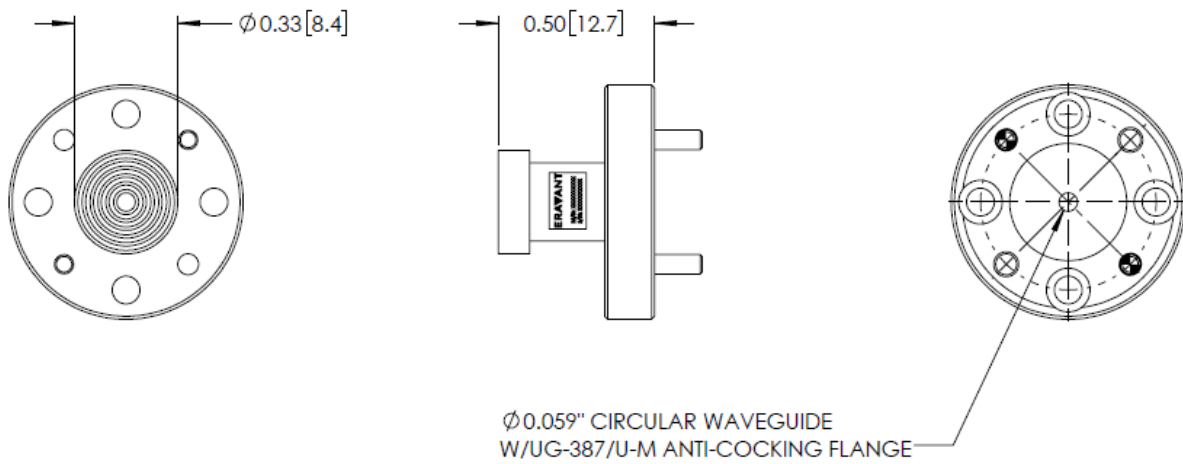
G-Band Choke Flange Feed Horn Antenna, 140 to 220 GHz, 10 dBi Gain**Simulated Antenna Patterns @ 140 GHz****Simulated Antenna Patterns @ 180 GHz**

G-Band Choke Flange Feed Horn Antenna, 140 to 220 GHz, 10 dBi Gain**Simulated Antenna Patterns @ 220 GHz****Simulated Gain vs. Frequency**

G-Band Choke Flange Feed Horn Antenna, 140 to 220 GHz, 10 dBi Gain**Simulated 3dB Beamwidth vs. Frequency****Simulated Return Loss vs. Frequency**

G-Band Choke Flange Feed Horn Antenna, 140 to 220 GHz, 10 dBi Gain

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



Note:

- All data presented are simulated. Actual data may vary, slightly.
- Eravant reserves the right to change the information presented without notice.

Caution:

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

