



## Lens Corrected Antenna, 25 to 27 GHz, 30 dBi Gain, UG-599/U Flange

### Description:

**Model SAL-2532733005-315-S1-599** is a lens corrected antenna that operates from 25 to 27 GHz. At the frequency of 26 GHz, the antenna delivers 30 dBi nominal gain, 4.5 degrees E-plane, and 5.5 degrees H-plane half power beamwidth, respectively. The antenna employs a low loss lens to offer excellent aperture efficiency and low sidelobe levels. The lens corrected antenna is equipped with a 0.315" diameter circular waveguide and UG-599/U flange as its input port. It supports both linear and circular polarized waveforms.



### Features:

- Center Fed
- Low Sidelobes
- Linear and Circular Polarized Waveforms

### Applications:

- 5G Systems
- Radar Systems
- Communication Systems
- Sensor Systems

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range*	25 GHz		27 GHz
Gain		30 dBi	
3 dB Beamwidth, E-Plane		4.5°	
3 dB Beamwidth, H-Plane		5.5°	
Sidelobes, E-Plane		-12 dB	
Sidelobes, H-Plane		-18 dB	
Polarization	Linear and Circular		
Return Loss		-20 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

\*Note: The operating bandwidth can be extended to 25 to 33 GHz.

### Mechanical Specifications:

Parameter	Connector
Antenna Port	0.315" Diameter Circular Waveguide with UG-599/U Flange
Lens Diameter	7.58"
Lens Material	High Density PTFE
Dimensions	7.58" (Ø) x 9.62" (L)
Horn Material	Aluminum
Finish	Gold Chem Film
Weight	2.5 lbs
Outline	AL-C330-315-599

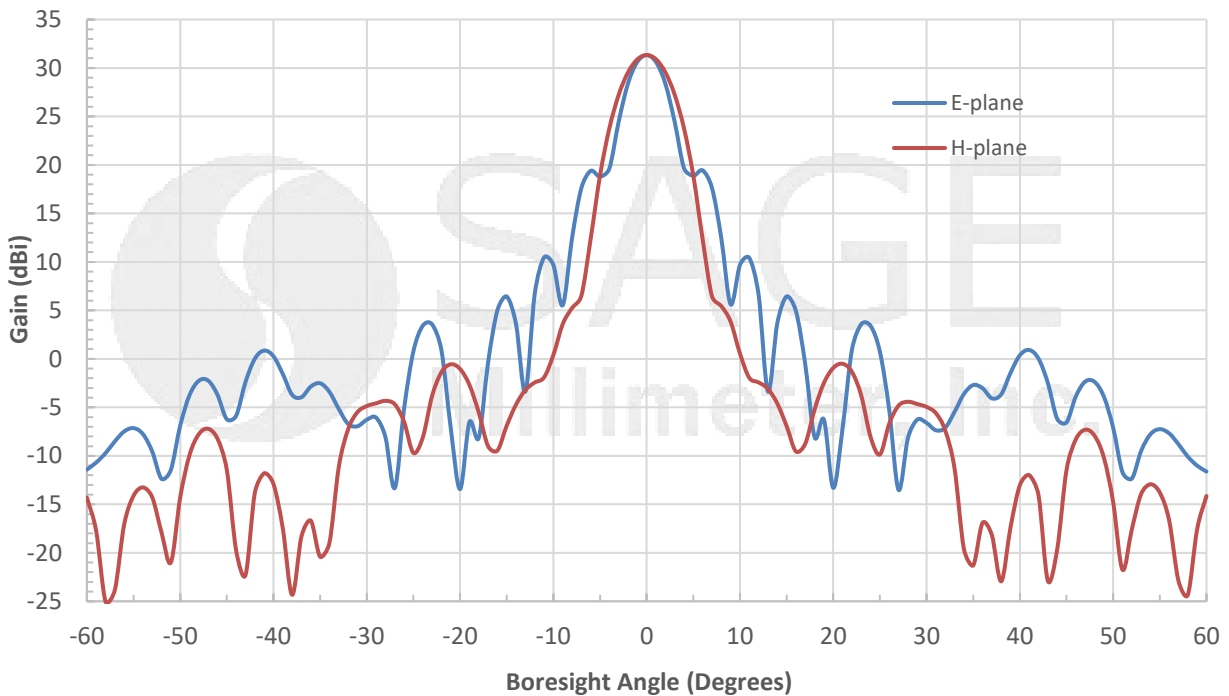


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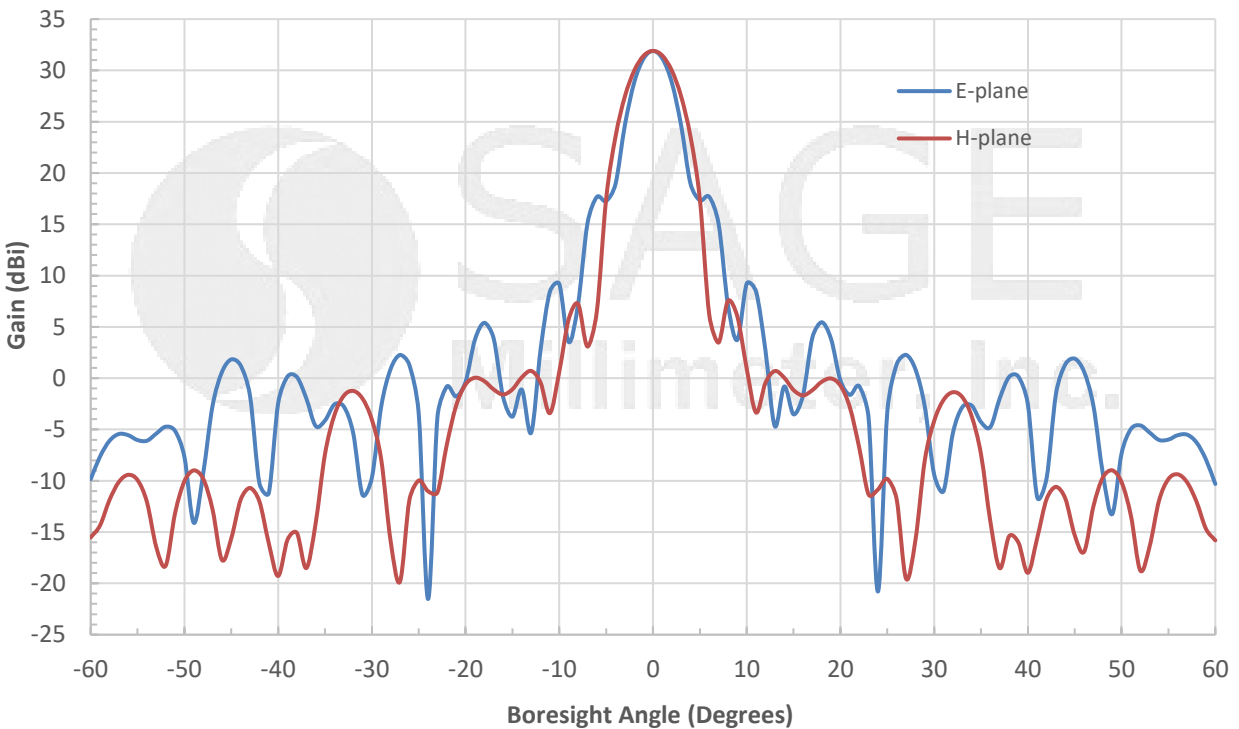


## Lens Corrected Antenna, 25 to 27 GHz, 30 dBi Gain, UG-599/U Flange

### Simulated Antenna Patterns @ 25 GHz



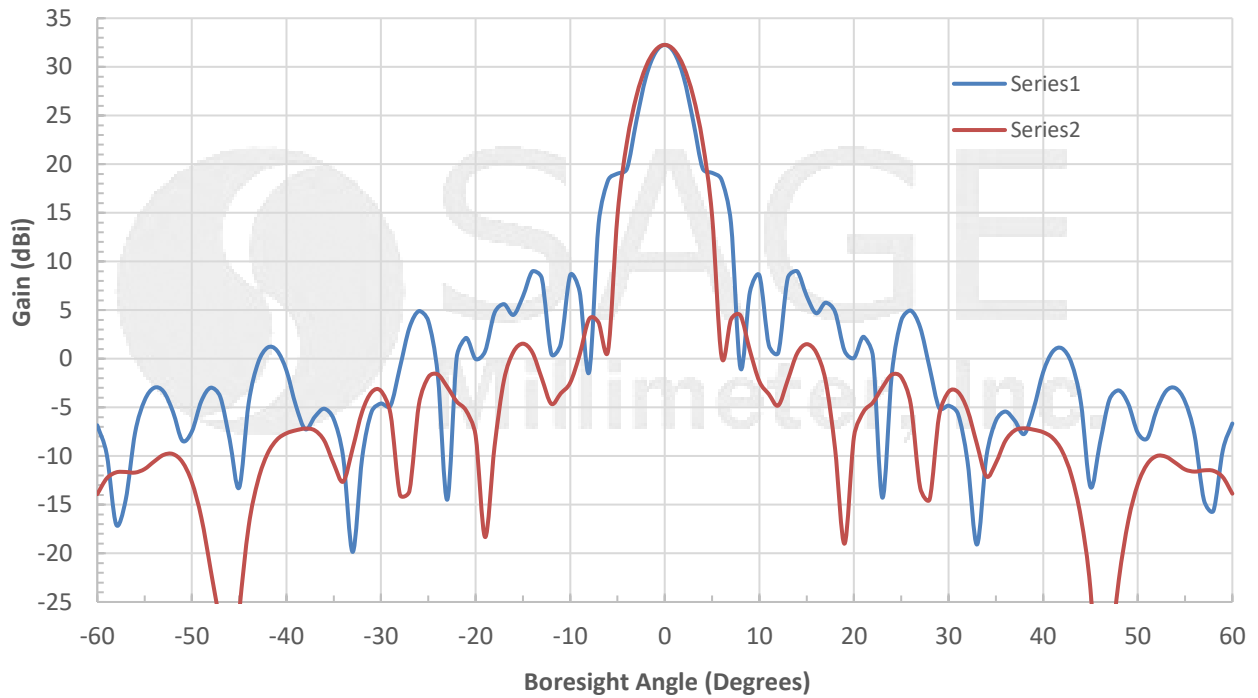
### Simulated Antenna Patterns @ 26 GHz



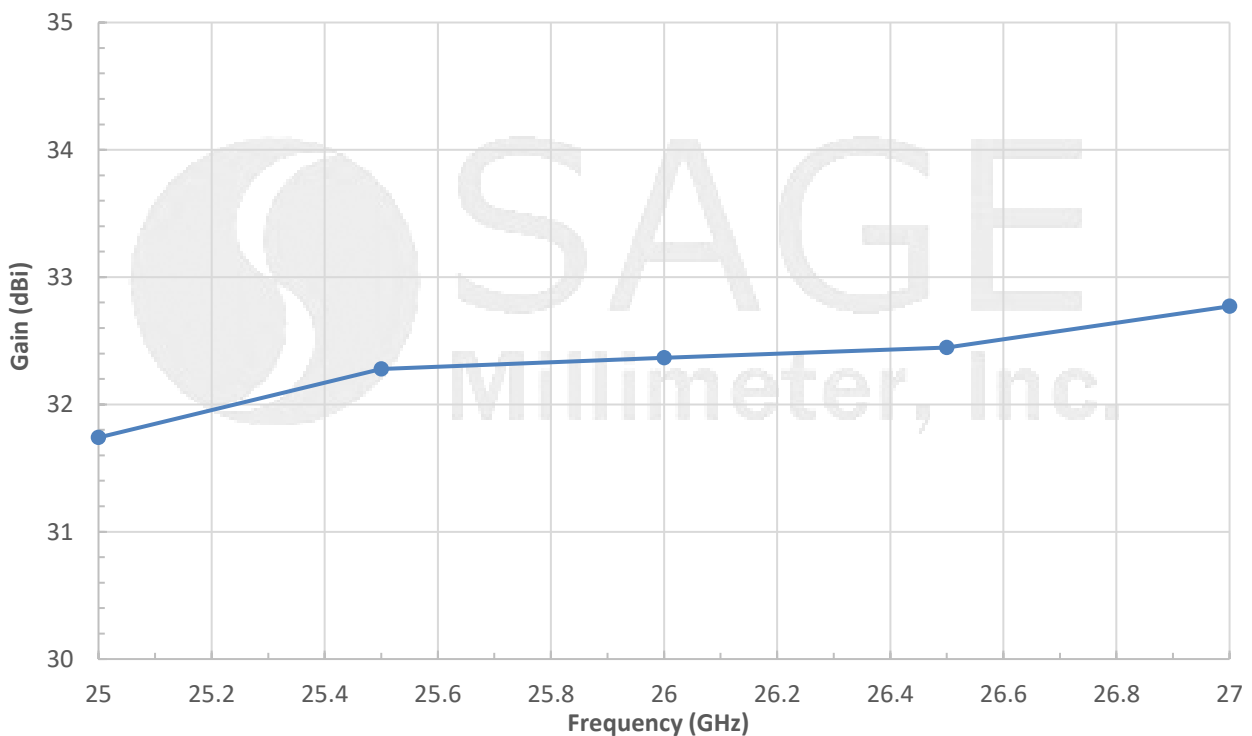


## Lens Corrected Antenna, 25 to 27 GHz, 30 dBi Gain, UG-599/U Flange

### Simulated Antenna Patterns @ 27 GHz



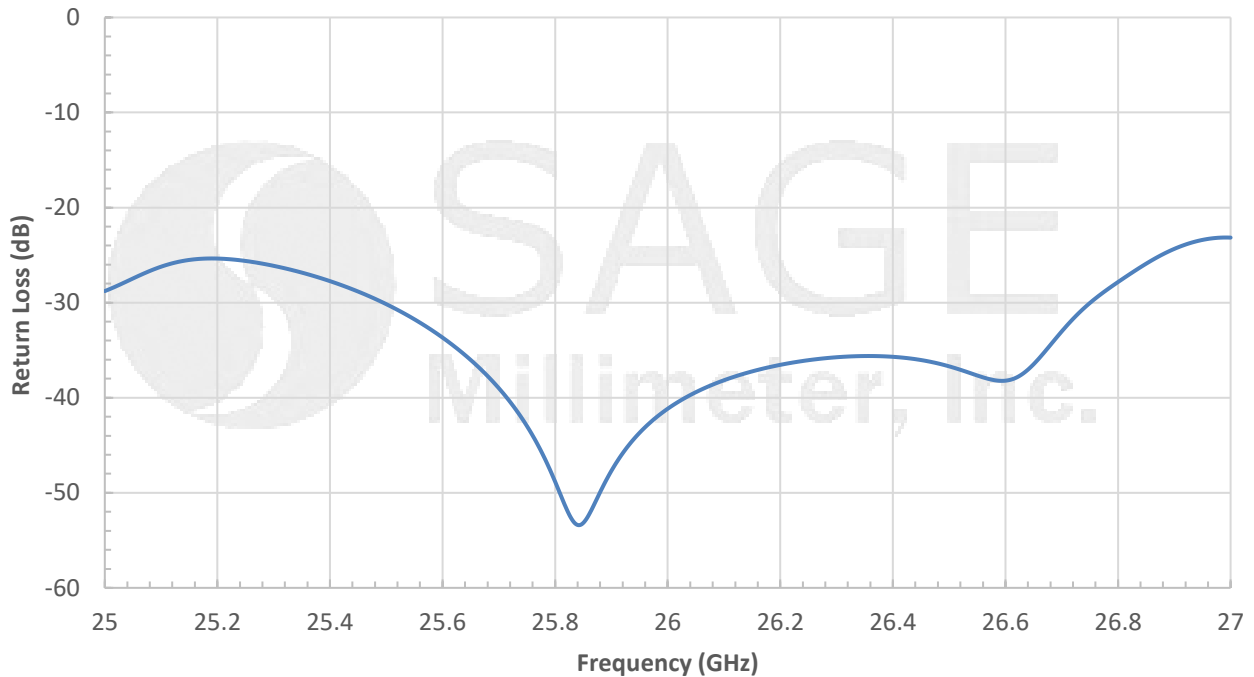
### Simulated Gain vs. Frequency



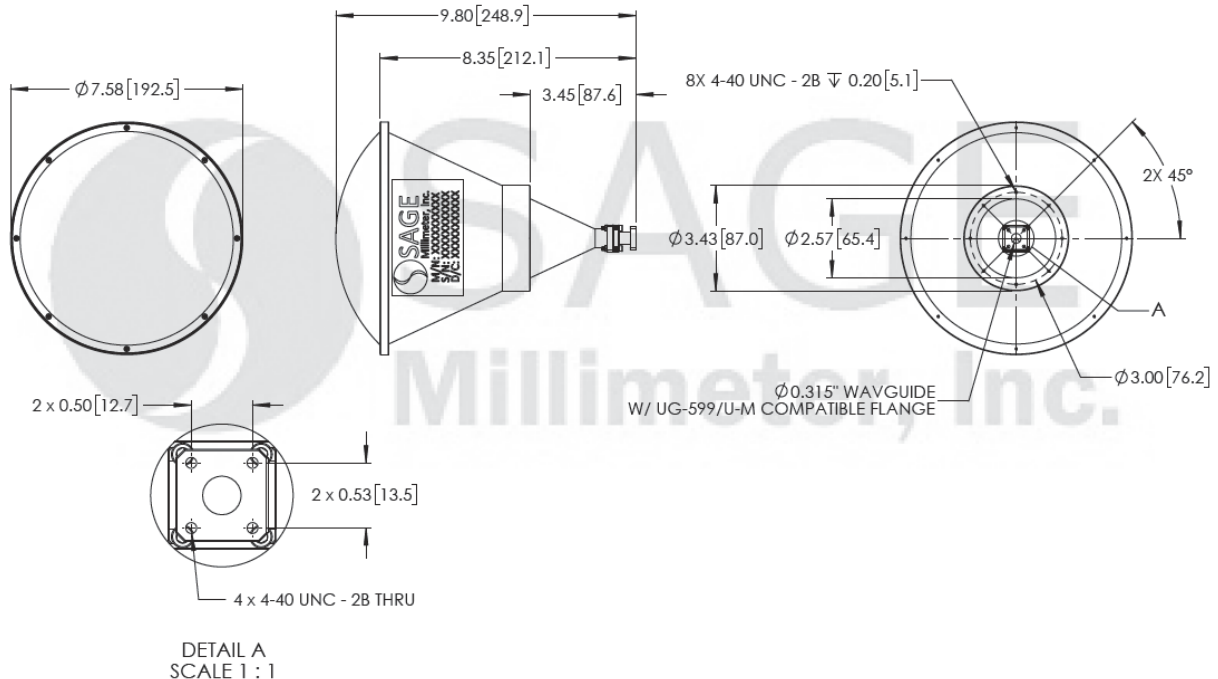


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### Simulated Return Loss vs. Frequency



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



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**Note:**

- All data presented is simulated. Actual data may vary, slightly.
- SAGE Millimeter, Inc. 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.

