



## Lens Corrected Antenna, 25 to 27 GHz, 30 dB Gain

### Description:

**Model SAL-2532733005-28-S1** 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 WR-28 waveguide and UG-599/U compatible flange as its input port. It supports linear polarized waveforms.



### Features:

- Center Fed
- Low Sidelobes
- Linear Polarized Waveforms

### Applications:

- Radar Systems
- Communication Systems
- Sensor Systems

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency*	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	
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:

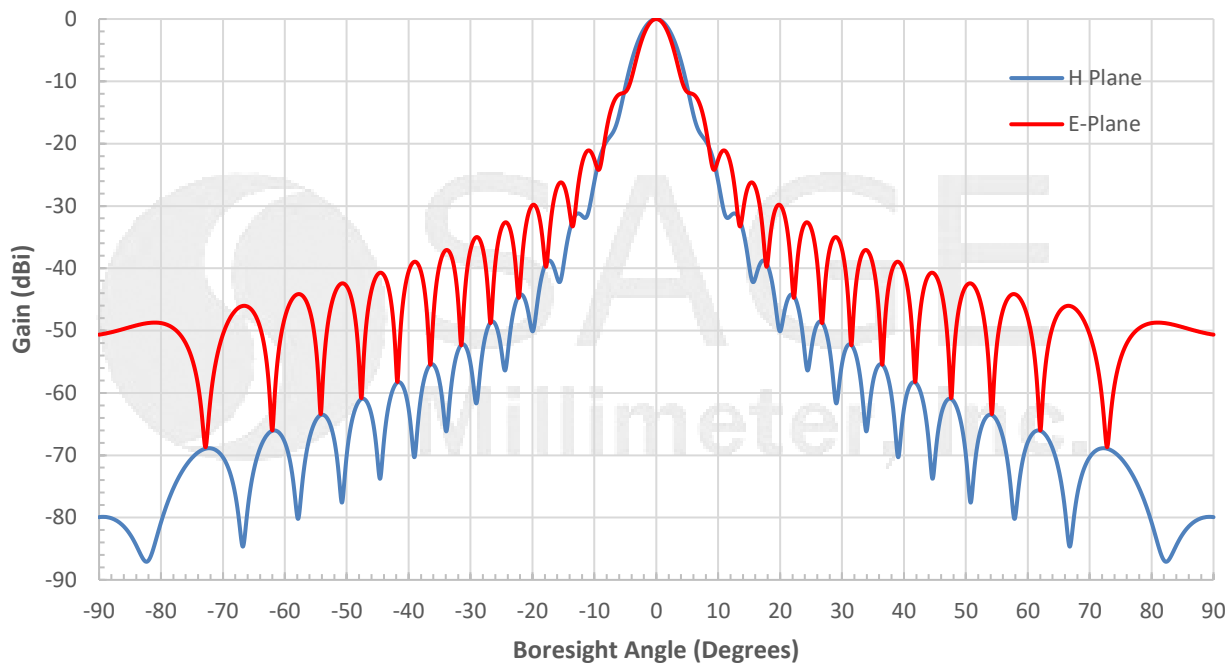
Parameter	Connector
Antenna Port	WR-28 Rectangular Waveguide with UG-599/U Compatible Flange
Horn Material	Aluminum
Finish	Gold Chem Film
Weight	14 Oz
Lens Diameter	6.0"
Dimensions	7.58" (∅) x 9.46" (L)
Outline	AL-RA30



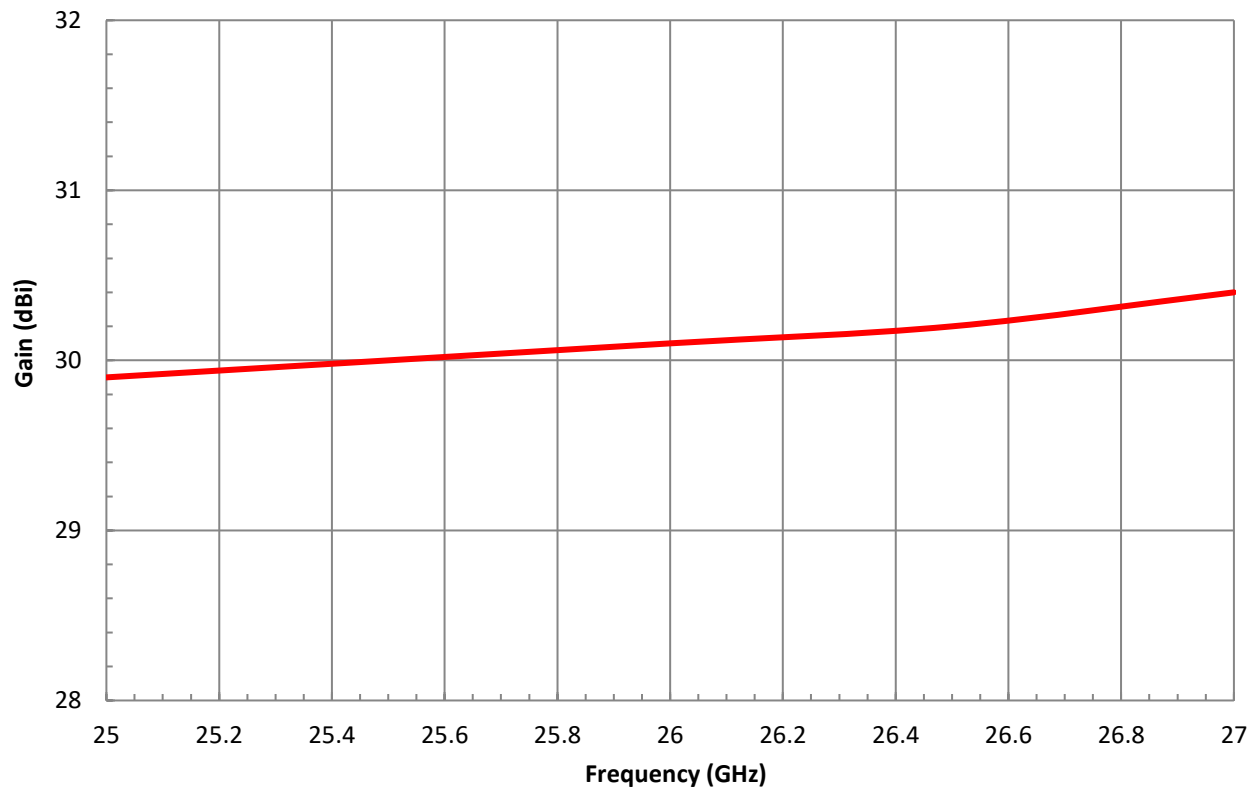


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### Typical Antenna Pattern @26 GHz

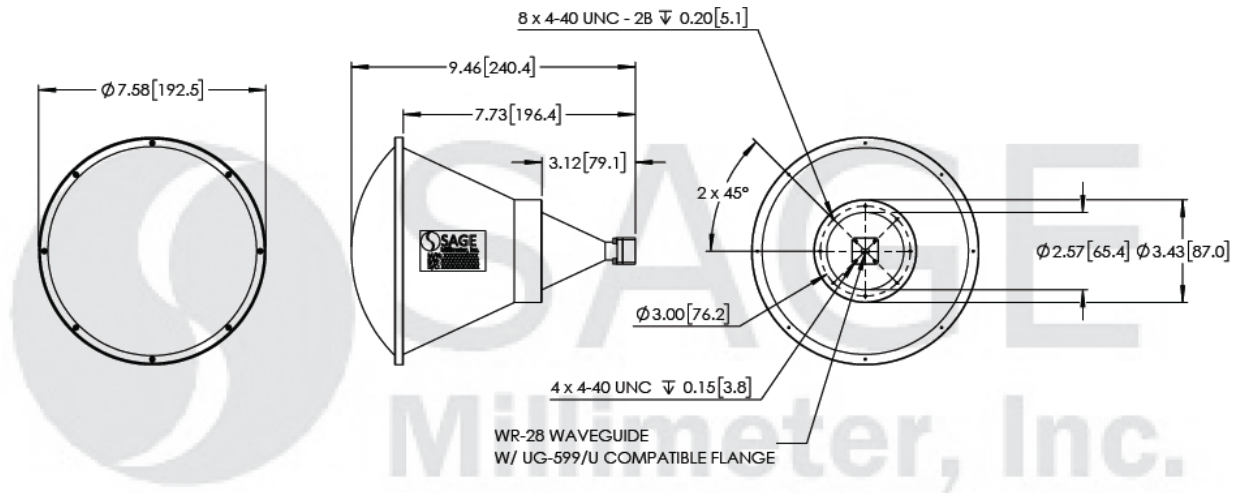


### Typical Gain vs. Frequency



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



**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.

