SAL-2532733005-315-S1-599-1

Rev 1.0

Lens Corrected Antenna, 30 dBi Gain, Rexolite Lens, UG-599/U Flange

Description:

Model SAL-2532733005-315-S1-599-1 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	26 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

*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	7.0"
Lens Material	Rexolite
Dimensions	7.58" (Ø) x 9.62" (L)
Horn Material	Aluminum
Finish	Gold Chem Film
Weight	2.3 lbs
Outline	AL-C330-315-599

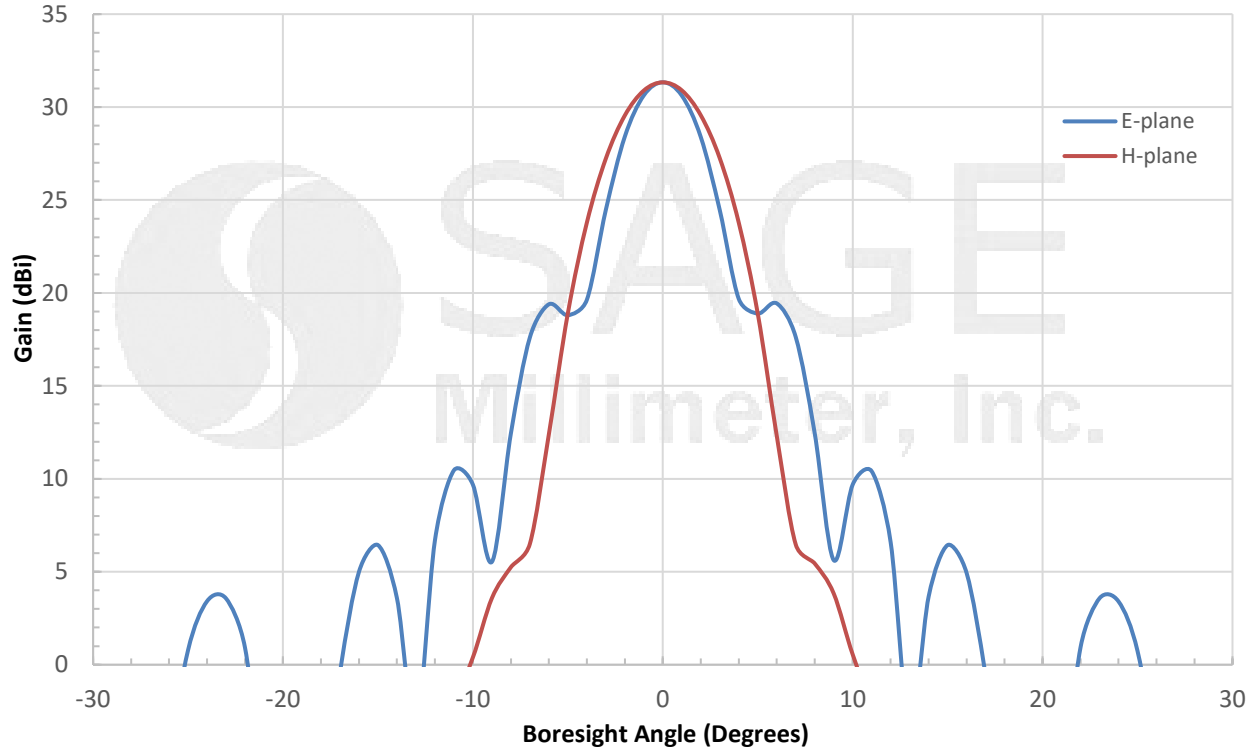
www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

Copyright © 2018 by SAGE Millimeter, Inc.

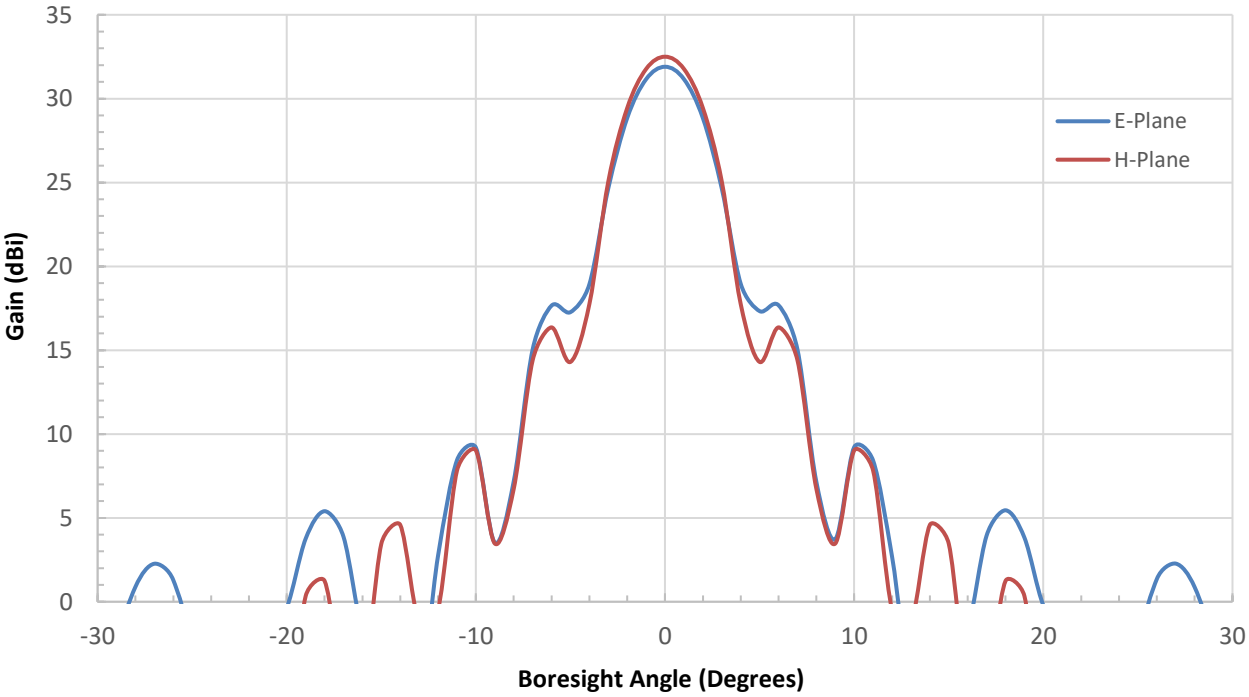
SAGE Millimeter, Inc.

Lens Corrected Antenna, 30 dBi Gain, Rexolite Lens, UG-599/U Flange

Simulated Antenna Patterns @ 25 GHz



Simulated Antenna Pattern @ 26 GHz



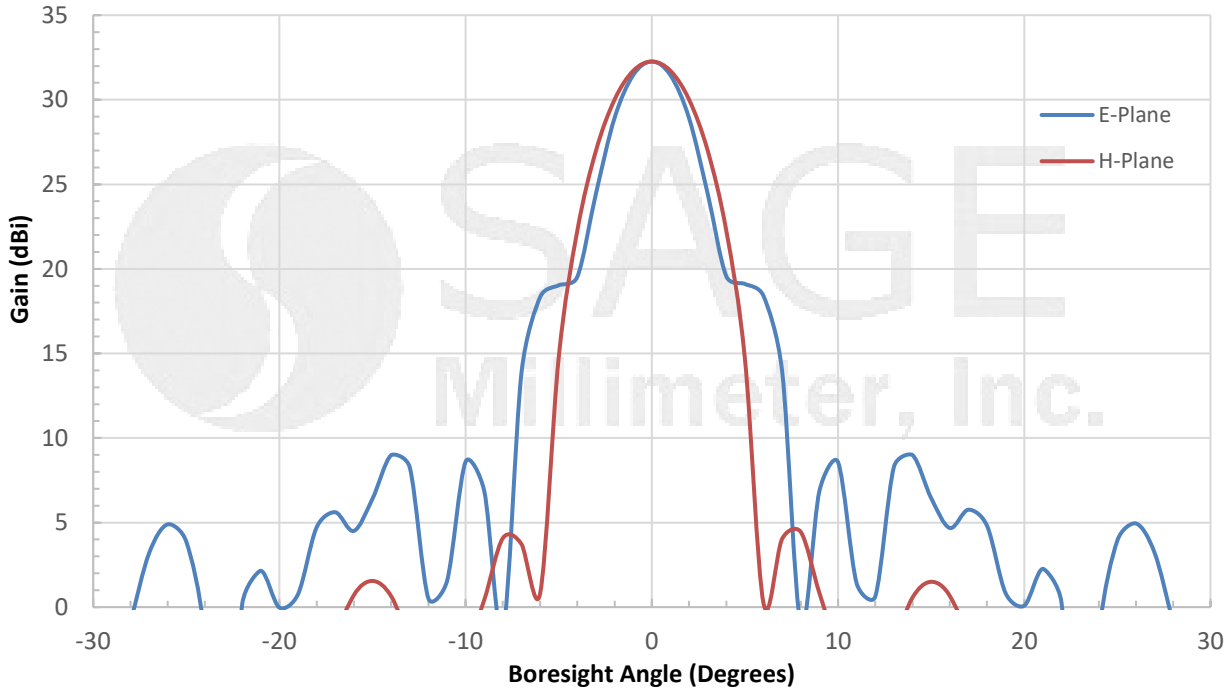
www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

Copyright © 2018 by SAGE Millimeter, Inc.

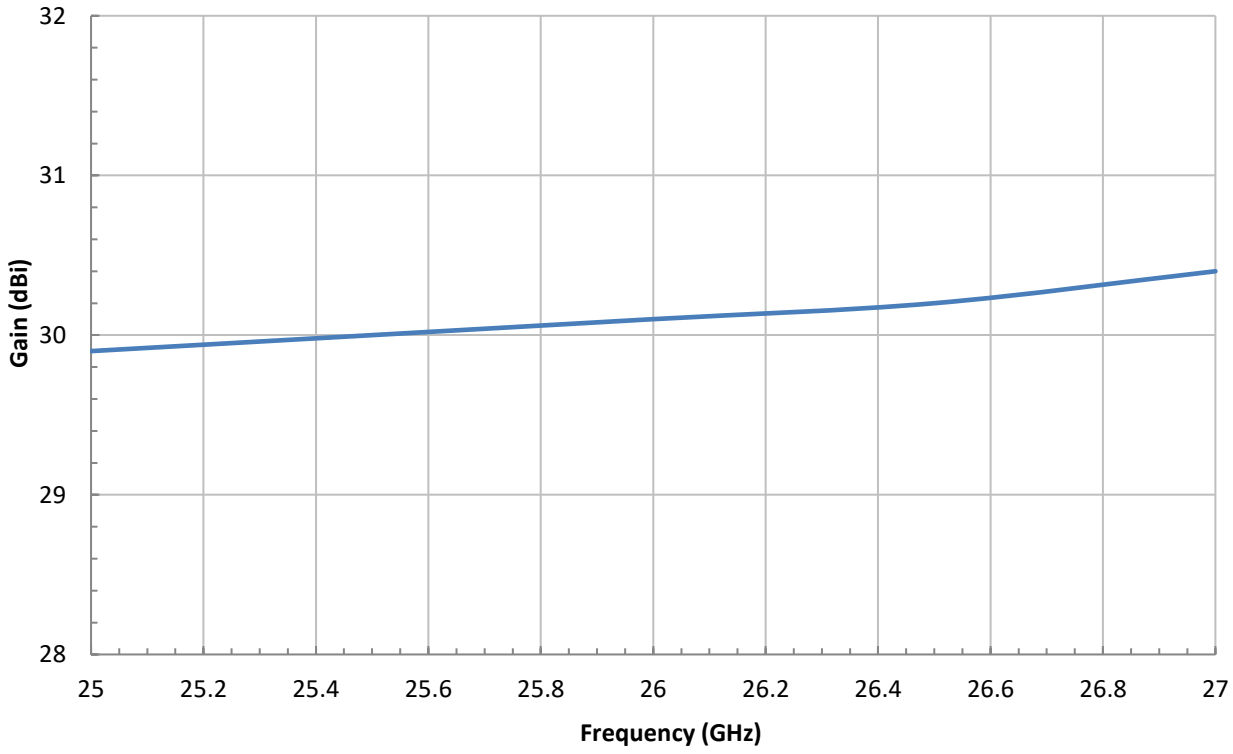
SAGE Millimeter, Inc.

Lens Corrected Antenna, 30 dBi Gain, Rexolite Lens, UG-599/U Flange

Simulated Antenna Patterns @ 27 GHz



Simulated Gain vs. Frequency



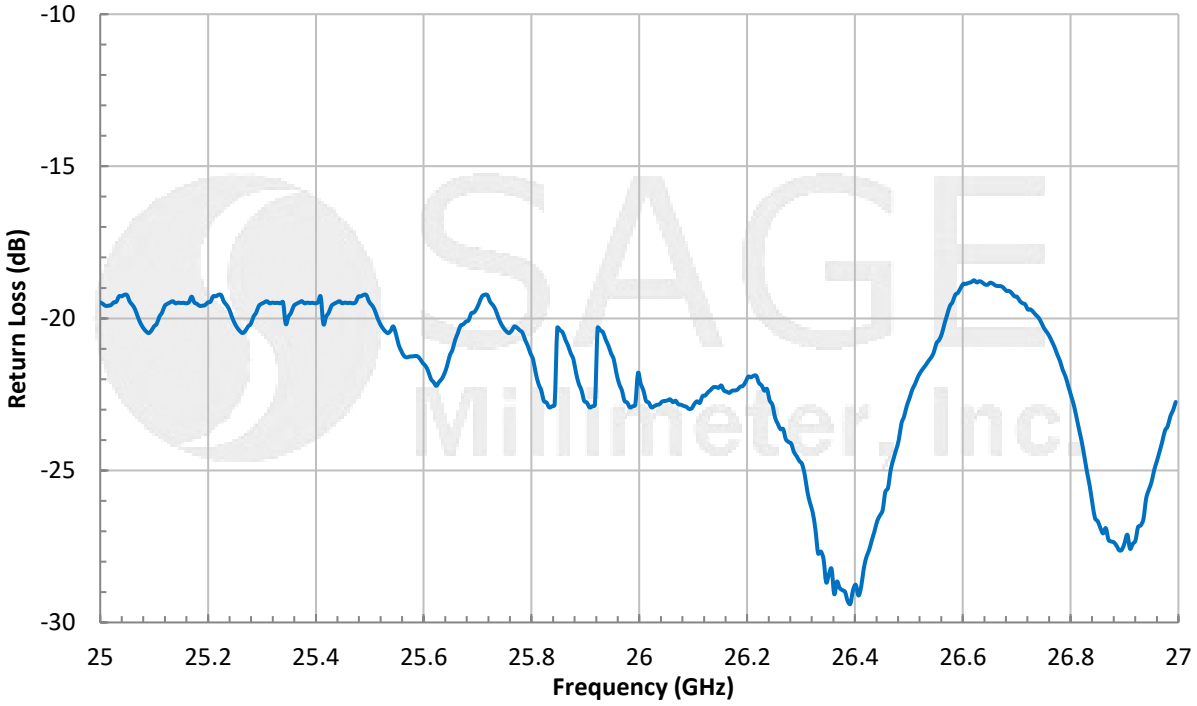
www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

Copyright © 2018 by SAGE Millimeter, Inc.

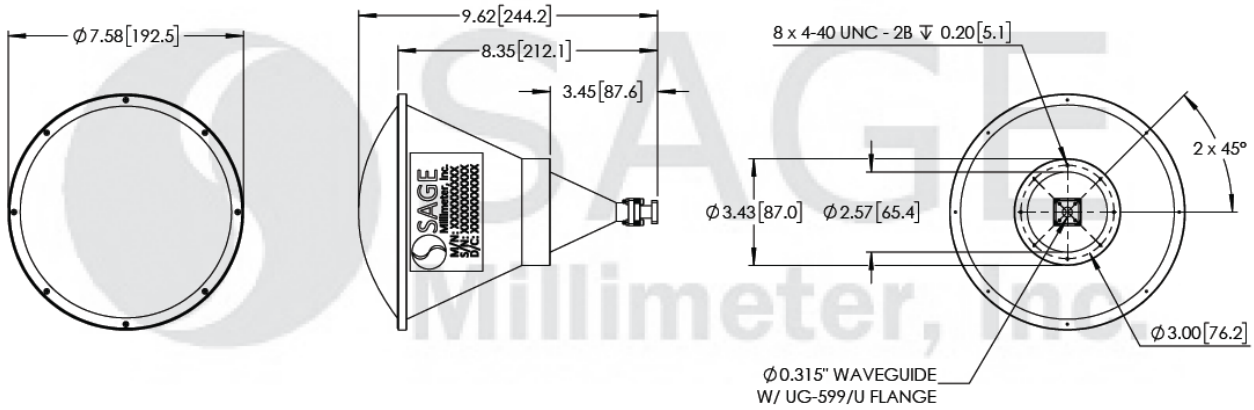
SAGE Millimeter, Inc.

Lens Corrected Antenna, 30 dBi Gain, Rexolite Lens, UG-599/U Flange

Measured Return Loss vs. Frequency



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



Note:

- Return Loss data presented is collected from a sample lot. Actual data may vary unit to unit, slightly.
- Antenna Pattern & Gain 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.

www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505
Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

Copyright © 2018 by SAGE Millimeter, Inc.