SAL-2232732212-368-S1

Rev. 1.1

K-Band Lens Corrected Antenna

Description:

Model SAL-2232732212-368-S1 is a K-band lens corrected antenna that operates from 22 to 27 GHz. At center frequency, the antenna delivers 22 dBi nominal gain and 12 degrees typical half power beamwidth. The antenna employs a low loss lens to offer excellent aperture efficiency and low sidelobe levels. The lens corrected antenna is equipped with a 0.368" diameter circular waveguide and UG-595/U flange as its input port. It supports both linear and circular polarized waveforms.

Features:

- Center Fed
- Low Sidelobes
- Low Cross Polarization

Applications:

- Radar Systems
- Communication Systems
- Sensor Systems

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	22.0 GHz		27 GHz
Gain		22 dBi	
3 dB Beamwidth		12˚	
Sidelobe Level			-20 dB
Polarization		Linear and Circular	
Return Loss		18 dB	
Specification Temperature		+25 °C	
Operation Temperature	-45 °C		+85 °C

Mechanical Specifications:

Item	Specification
Antenna Port	0.368" Diameter Circular Waveguide with UG-595/U Flange
Lens Diameter	2.95"
Dimensions	3.24" (Ø) x 3.41" (L)
Material	Aluminum
Finish	Chem Film
Weight	3.0 Oz
Outline	AL-CK22-368

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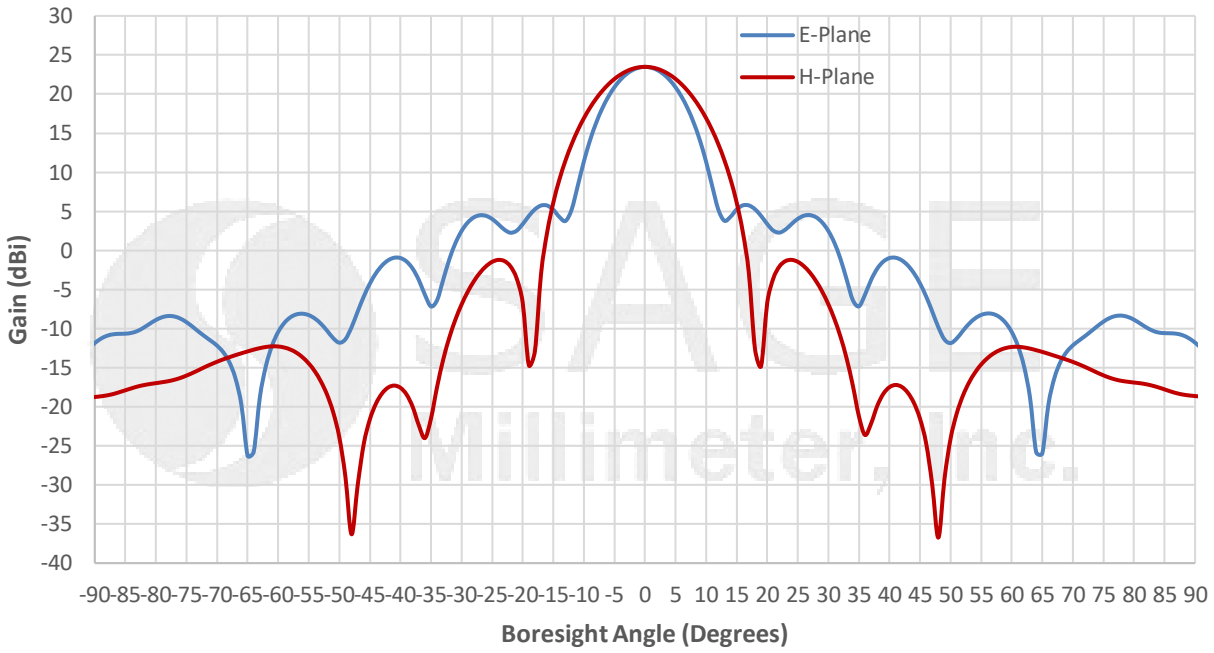
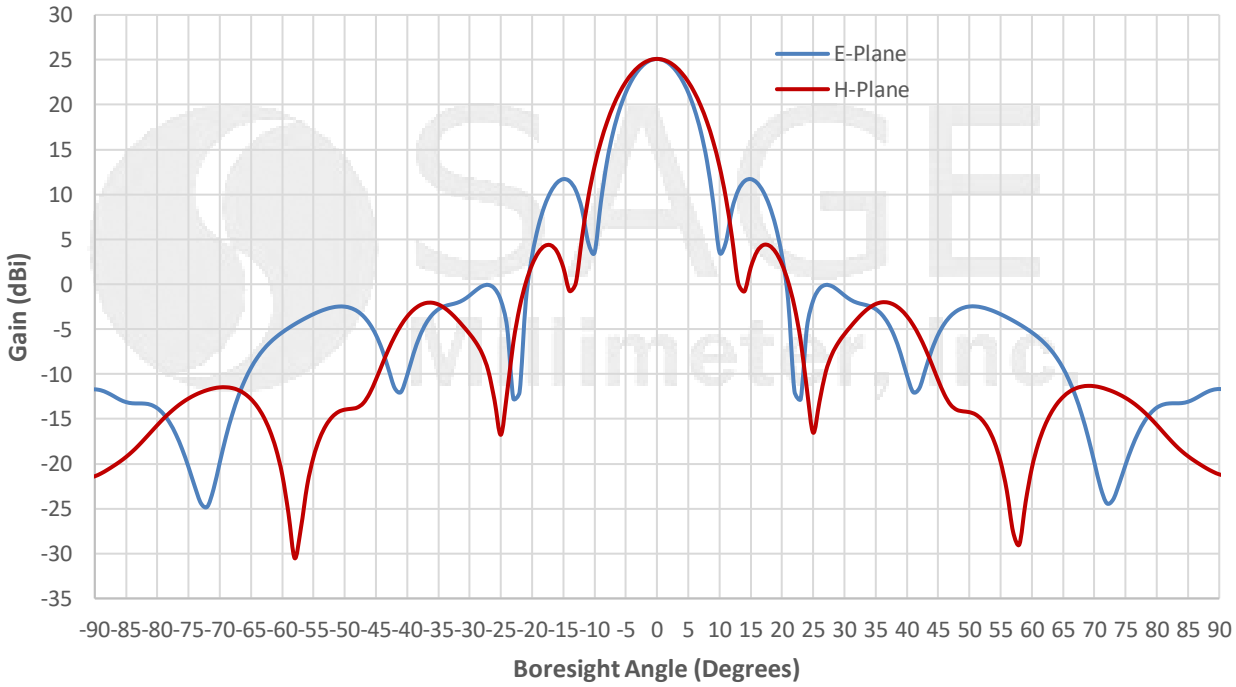
K-Band Lens Corrected Antenna

Simulated Patterns @ 22 GHz



Simulated Patterns @ 24.5 GHz



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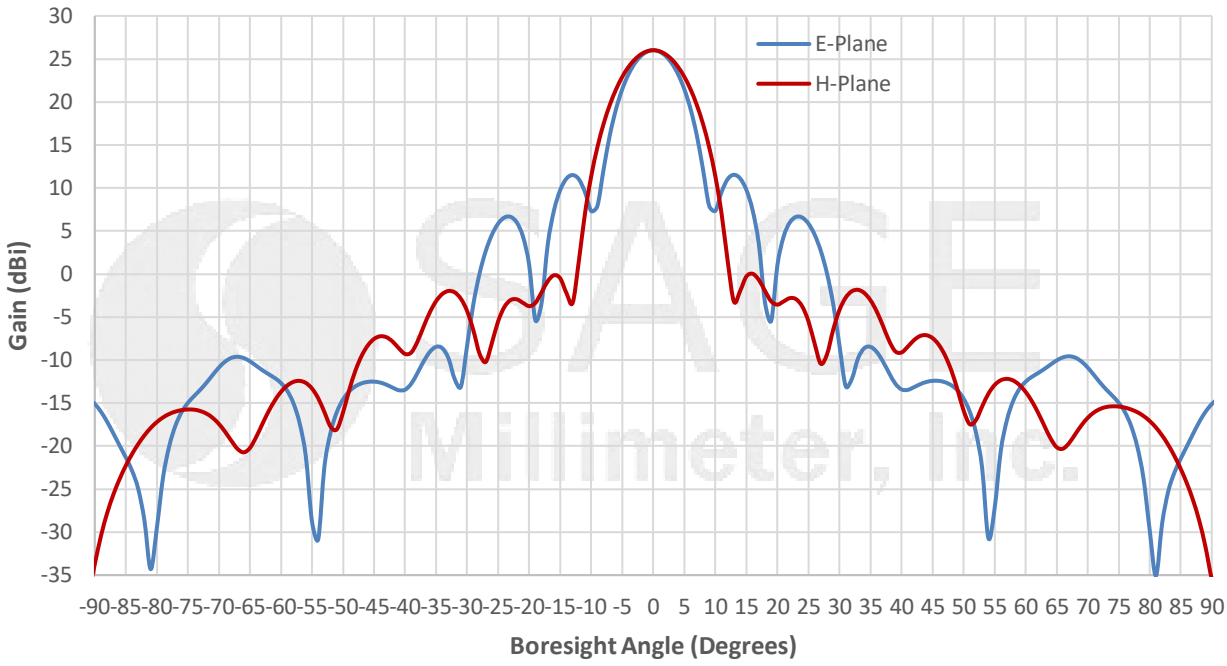
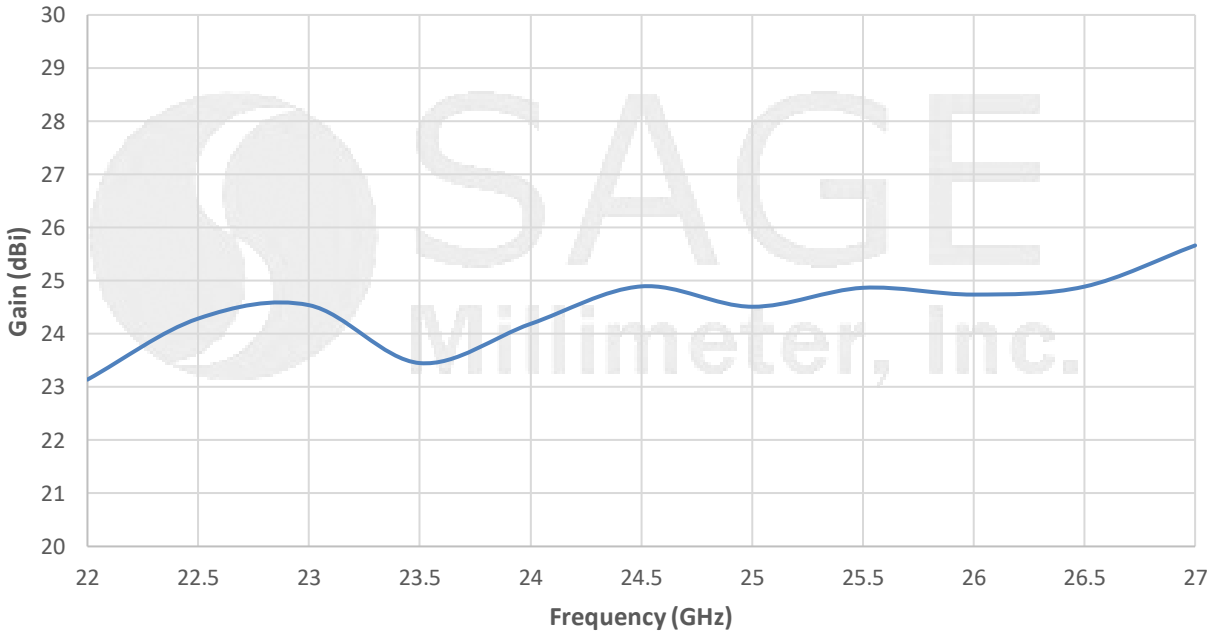
K-Band Lens Corrected Antenna

Simulated Patterns @ 27 GHz



Simulated Gain vs Frequency



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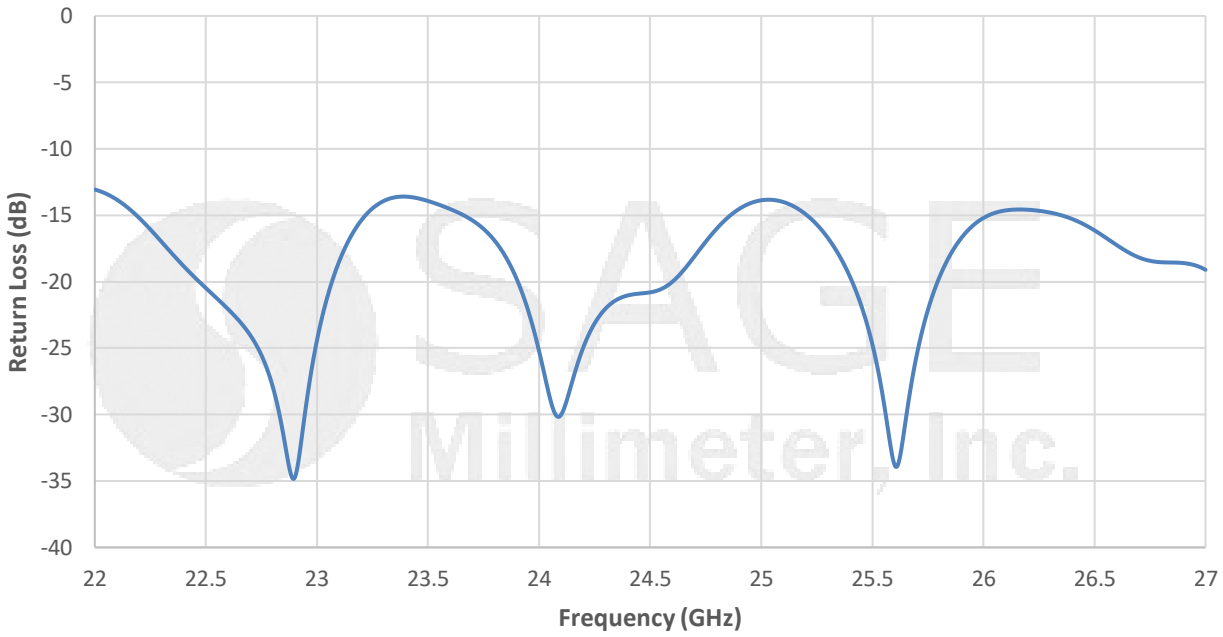
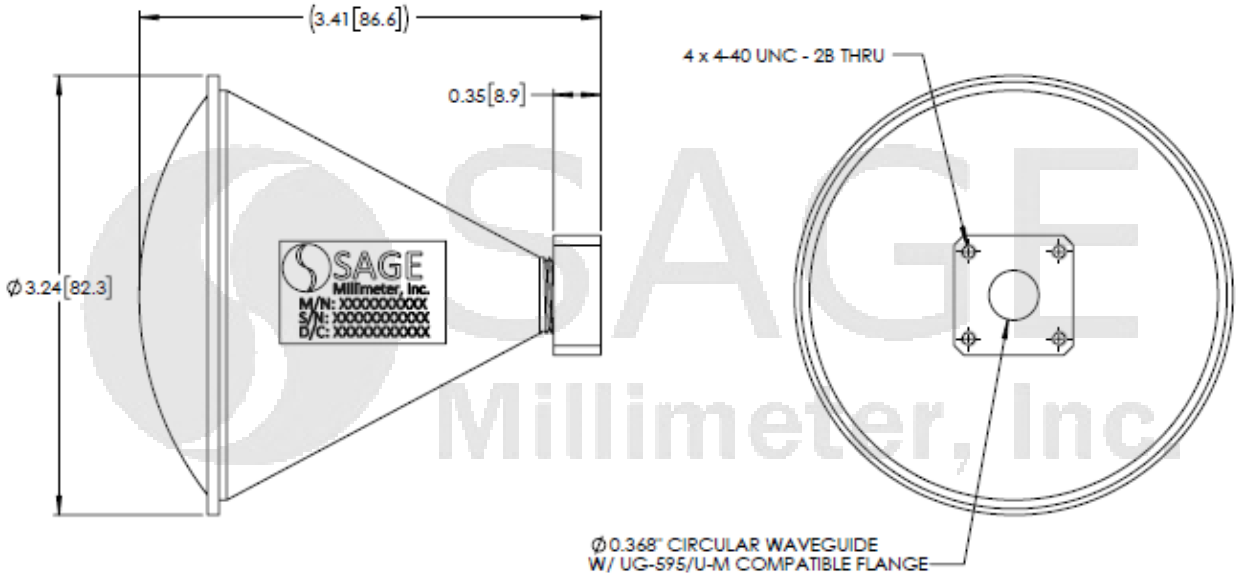
Simulated Return Loss vs Frequency



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:

- Foreign objects in the waveguide will affect the antenna performance and may damage the antenna.

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