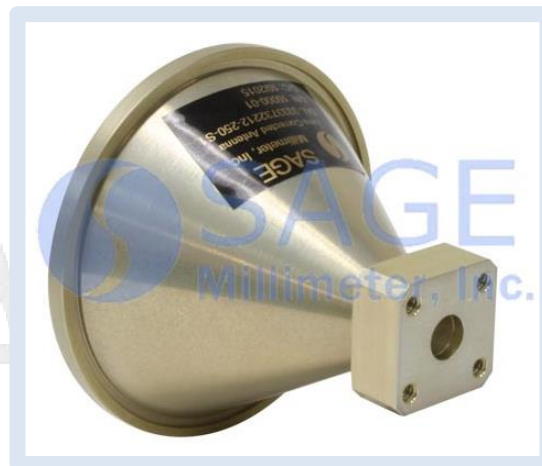




Ka-Band Lens Corrected Antenna, 33 to 37 GHz, 22 dBi Gain

Description:

Model SAL-3333732212-250-S1 is a Ka-band lens corrected antenna that operates from 33 to 37 GHz. At a center frequency of 35 GHz, 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 to support both linear and circular polarized waveforms. The lens corrected antenna is equipped with a 0.250" diameter circular waveguide and UG-599/U-M flange as its input port.



Features:

- Center Fed
- Low Side Lobes
- Low Cross Polarization

Applications:

- Radar Systems
- Communication Systems
- Sensor Systems

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range*	33 GHz	35 GHz	37 GHz
Gain		22 dBi	
3 dB Beamwidth		12°	
Sidelobe Level		-20 dBi	
Polarization	Linear and Circular		
Return Loss		-25 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

*Note: Can operate from 31 to 40 GHz if the dominant mode is maintained.

Mechanical Specifications:

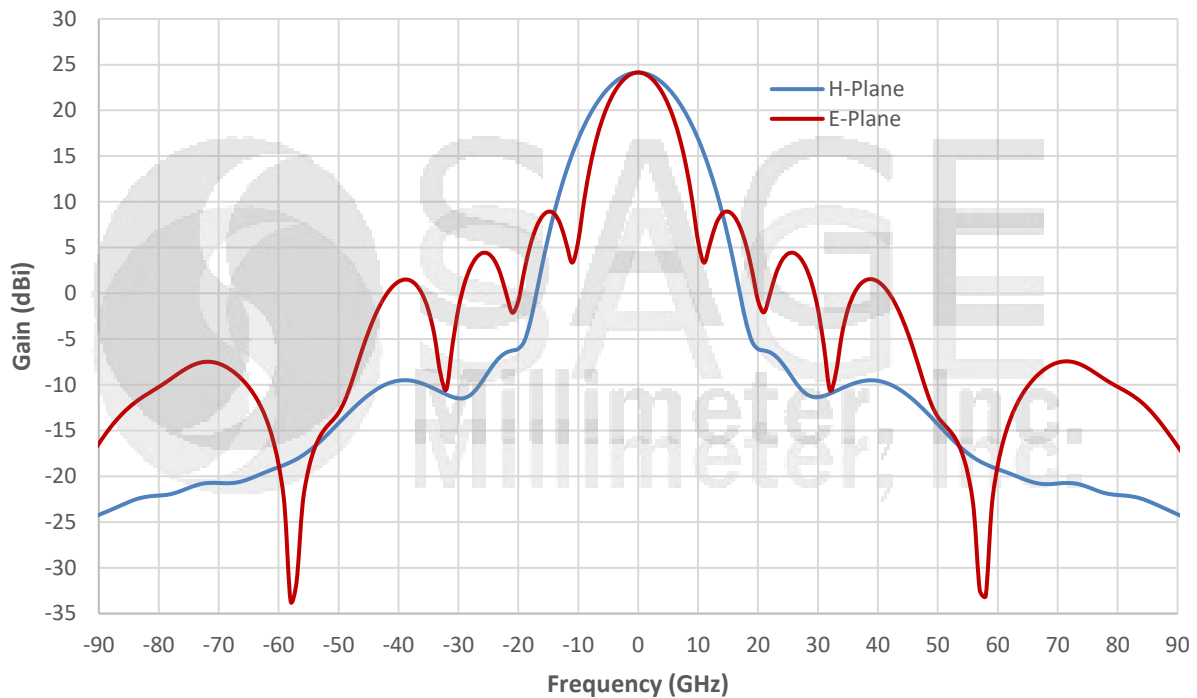
Item	Specification
Antenna Port	0.250" Dia Circular Waveguide with UG-599/U-M Flange
Lens Diameter	2.10"
Dimensions	2.38" (D) x 2.18" (L)
Material	Aluminum
Finish	Chem Film
Weight	1.6 Oz
Outline	AL-CA22-250



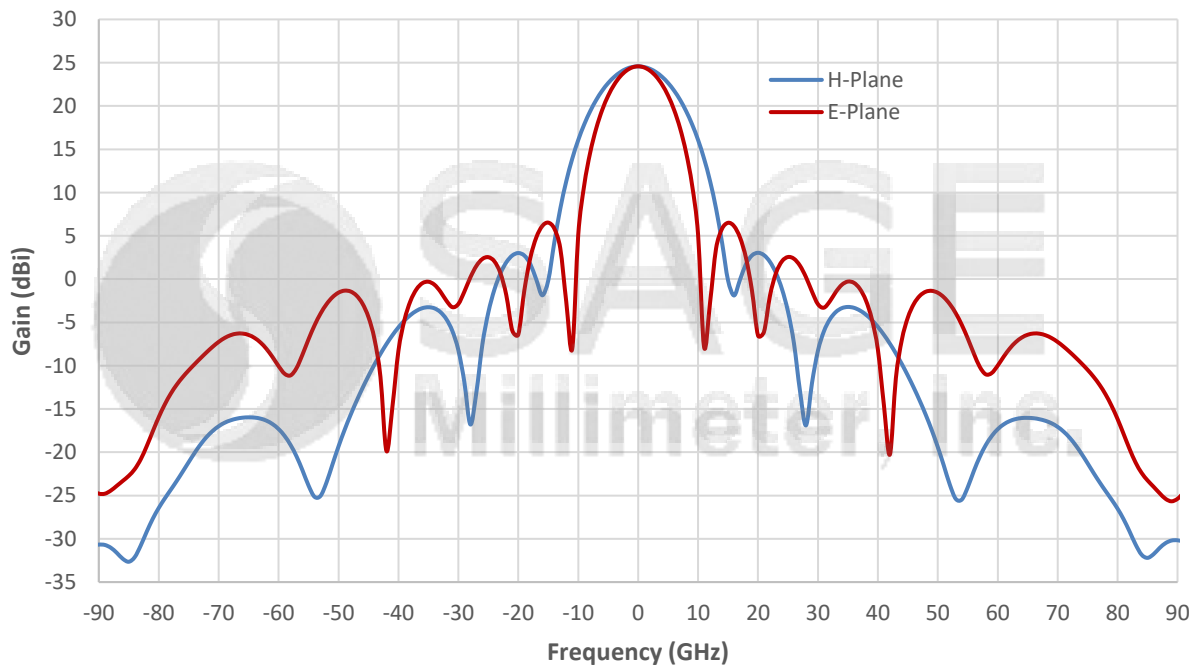


Ka-Band Lens Corrected Antenna, 33 to 37 GHz, 22 dBi Gain

Simulated Patterns @ 33 GHz



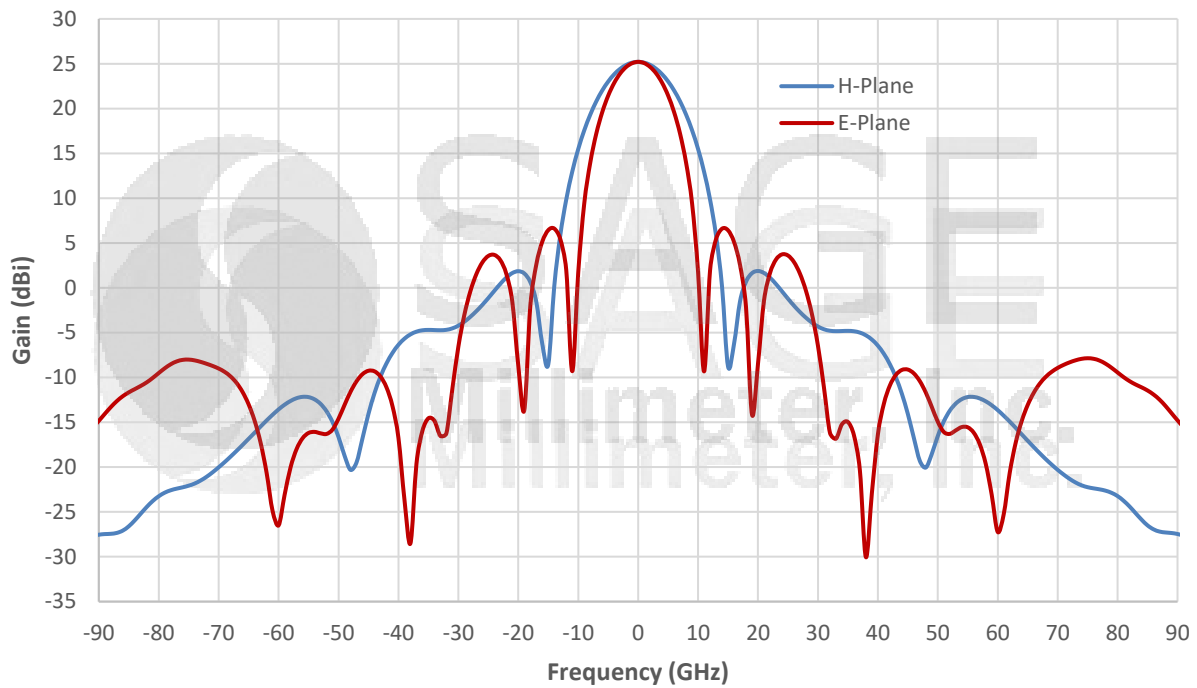
Simulated Patterns @ 35 GHz



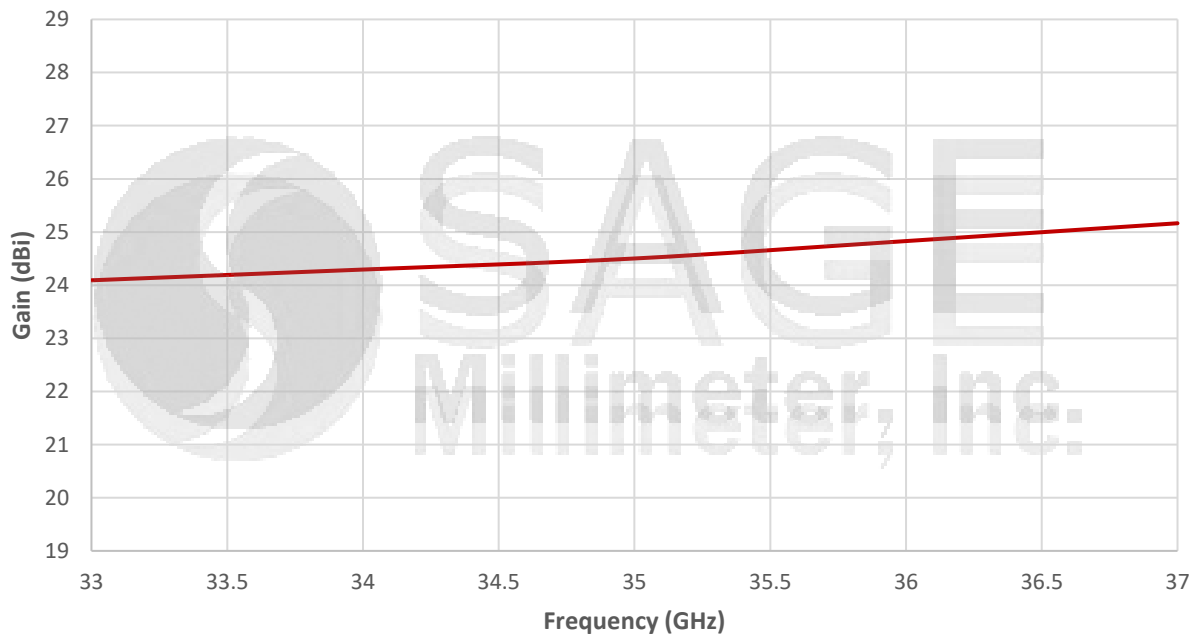


Ka-Band Lens Corrected Antenna, 33 to 37 GHz, 22 dBi Gain

Simulated Patterns @ 37 GHz



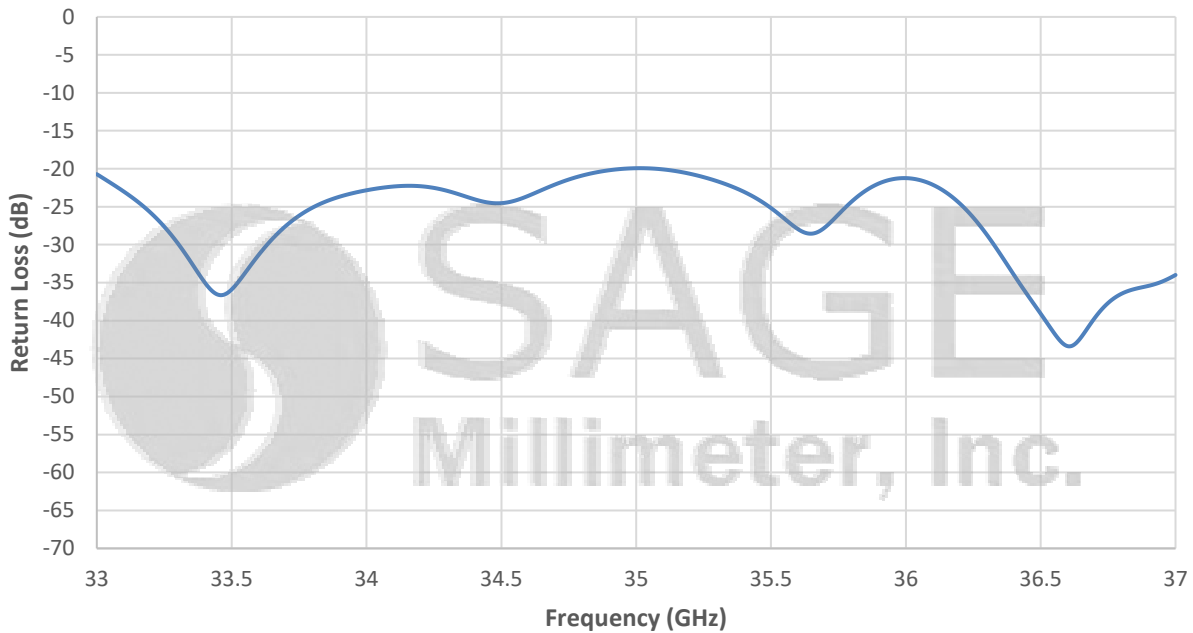
Simulated Gain vs Frequency



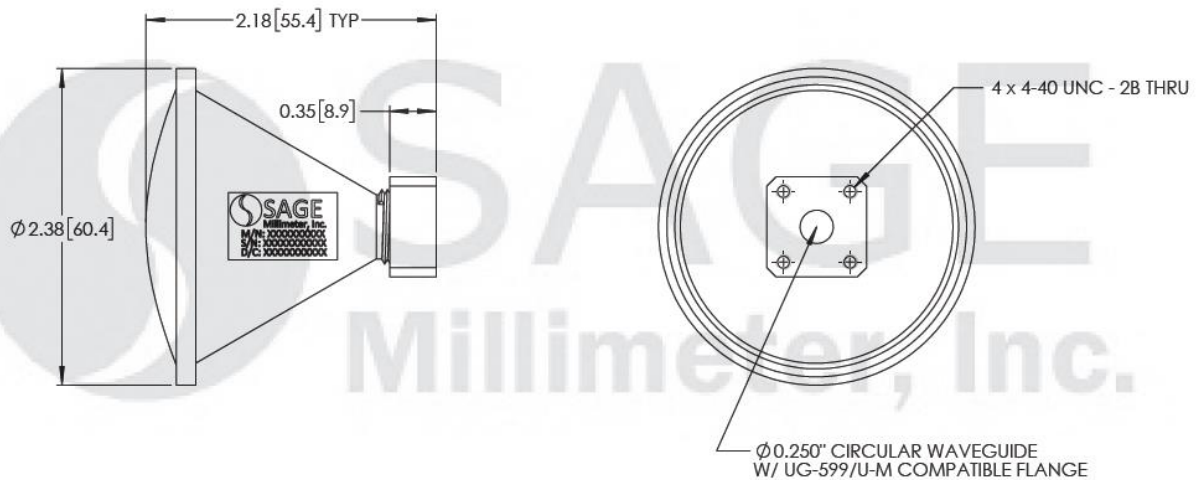


Ka-Band Lens Corrected Antenna, 33 to 37 GHz, 22 dBi Gain

Simulated Return Loss vs Frequency



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



Ka-Band Lens Corrected Antenna, 33 to 37 GHz, 22 dBi Gain

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.

