



X-Band Spot-Focusing Lens Antenna, 10.3 GHz, Focal Length 3.94"

Description:

Model SAQ-103039-90-S1 is an X-band spot-focusing lens antenna that delivers a 10 dB spot size of 1.75" at a focal length of 3.94". The antenna employs a low loss lens to offer excellent aperture efficiency at 10.3 GHz. The spot-focusing lens antenna is equipped with a WR-90 waveguide and UG-39/U flange as its antenna port. It supports linear polarized waveforms.



Features:

- Ridged Mechanical Configurations
- High Efficiency and Low loss
- Low Sidelobe Levels

Applications:

- Material Property Measurement Systems

Electrical Specifications:

Parameter		Minimum	Typical	Maximum
Frequency		8.2 GHz	10.3 GHz	12.4 GHz
Focal Length			3.94"	
Peak to First Null	Spot Size		2.51"	
	Power Captured		83.8%	
10 dB Below Peak	Spot Size		1.75"	
	Power Captured		78.9%	
3 dB Below Peak	Spot Size		1.02"	
	Power Captured		47.4%	
Polarization		Linear		
Return Loss			21 dB	
Specification Temperature			+25°C	
Operation Temperature		-45°C		+85°C

Mechanical Specifications:

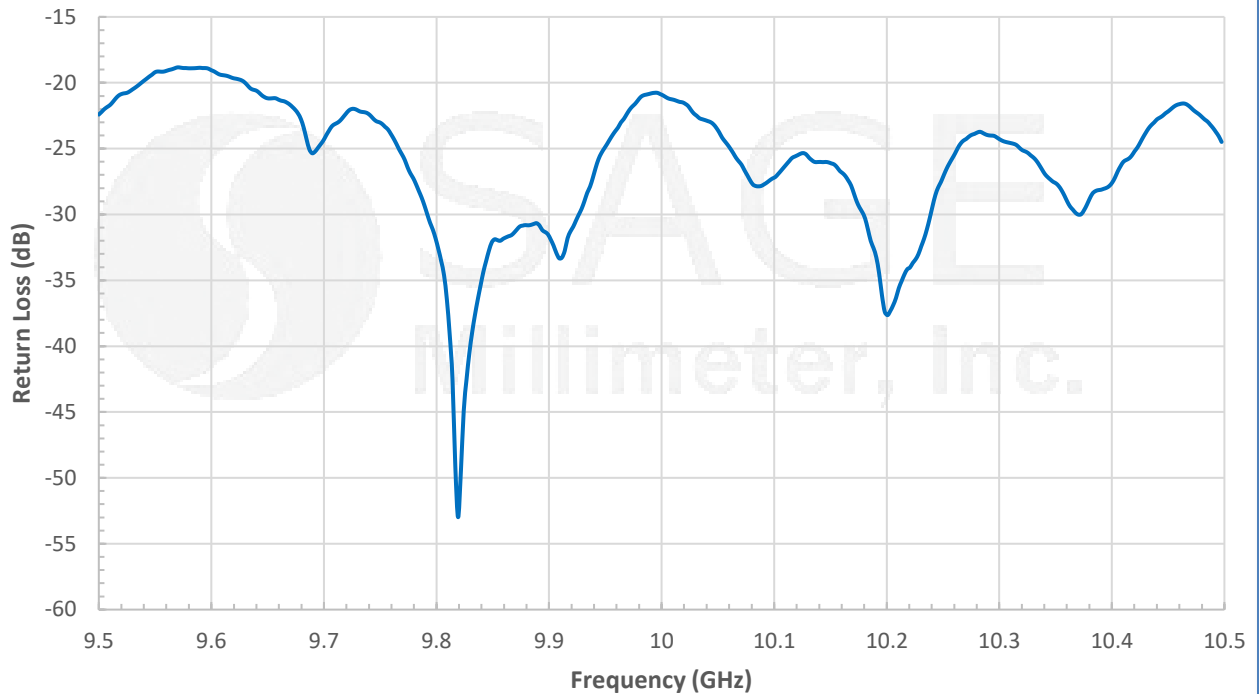
Item	Specification
Antenna Port	WR-90 Waveguide with UG-39/U Flange
Horn Material	Aluminum
Finish	Chem Film
Weight	14 Oz
Lens Diameter	4.60"
Dimensions	8.50" (L) x 4.58" (Ø)
Outline	AQ-RX-4.0



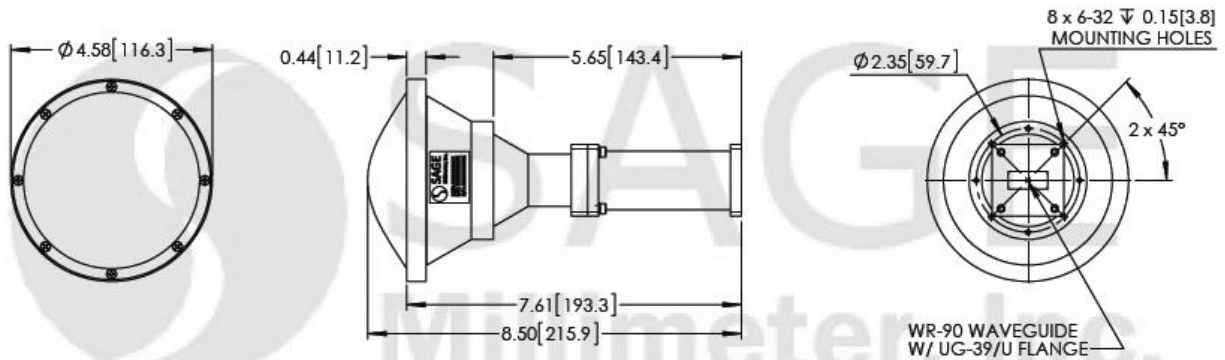


X-Band Spot-Focusing Lens Antenna, 10.3 GHz, Focal Length 3.94"

Measured Return Loss vs. Frequency



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



Note:

- 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.

