

W-Band Omnidirectional Antenna, 360 Degree

Description:

Model SAO-9031040230-10-S1 is a W-band omnidirectional antenna that operates between 90 and 100 GHz. This vertically polarized antenna offers 360 degree azimuth coverage with 2 dBi gain and ± 3 dB gain flatness. The antenna features a half power beamwidth of 30 degrees in the vertical direction.



Features:

- 360° Azimuth Coverage
- 30° Vertical 3 dB Beamwidth
- Vertically Polarized

Applications:

- Communication Links
- EW Systems
- Indoor Local Area Networks

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	90 GHz		100 GHz
Gain		2 dBi	
Gain Variation		± 3 dB	
Azimuth		360°	
3 dB Beamwidth, Vertical		30°	
Return Loss		9 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

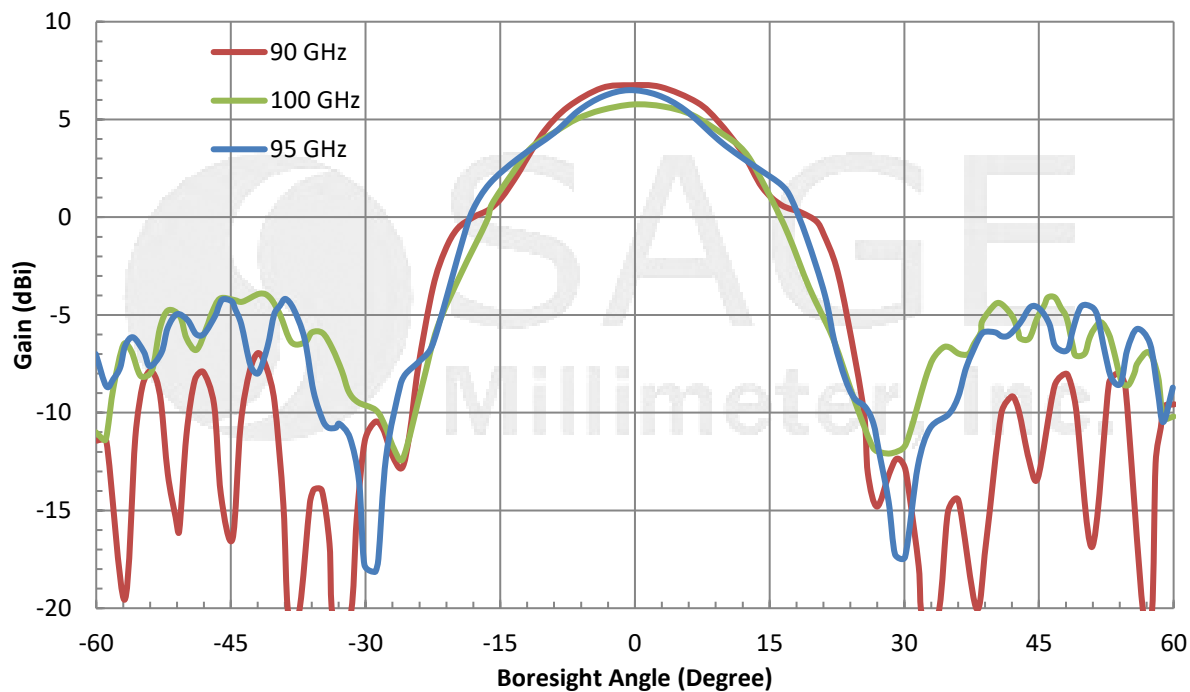
Item	Specification
Input	WR-10 Waveguide with UG-387/U-M Flange
Size	0.76" (H) x 1.54" (D)
Body Material	Aluminum
Lens Material	PTFE
Finish	Gold Plated
Weight	0.20 Oz
Outline	AO-W02-030



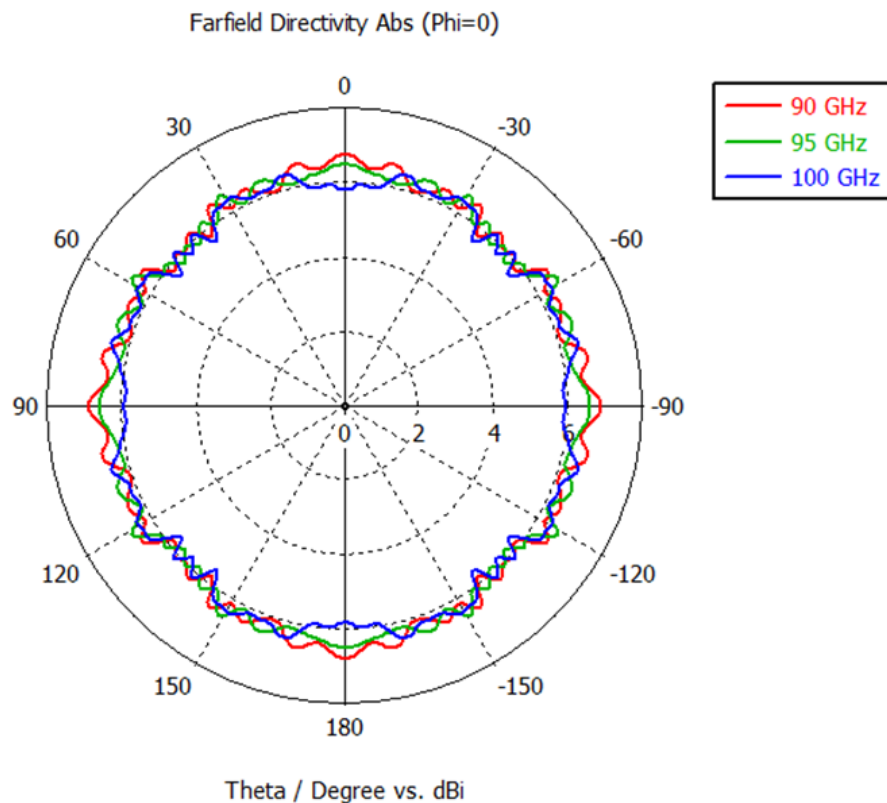


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Simulated E-Plane Patterns

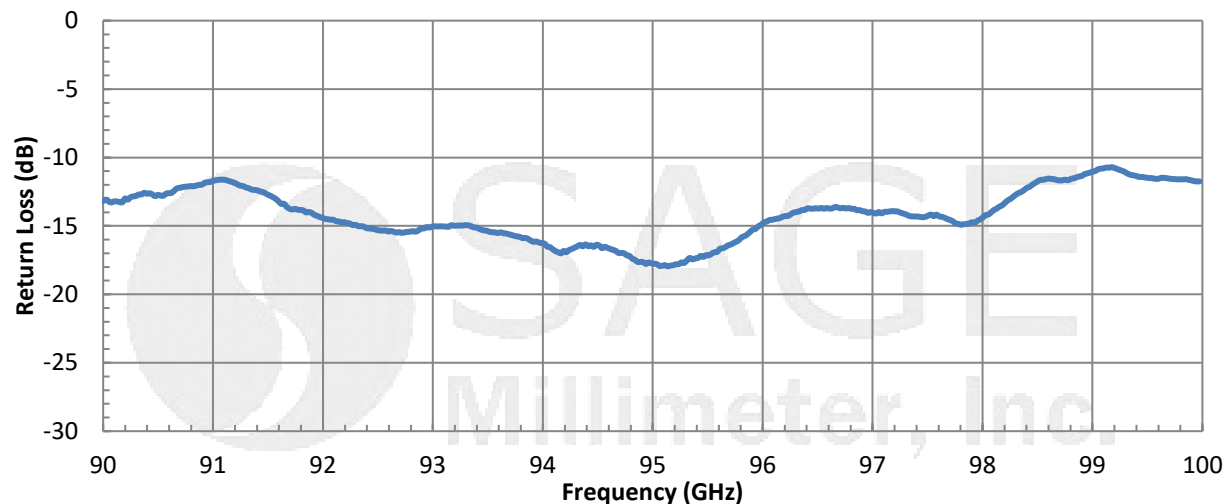


Simulated H-Plane Patterns

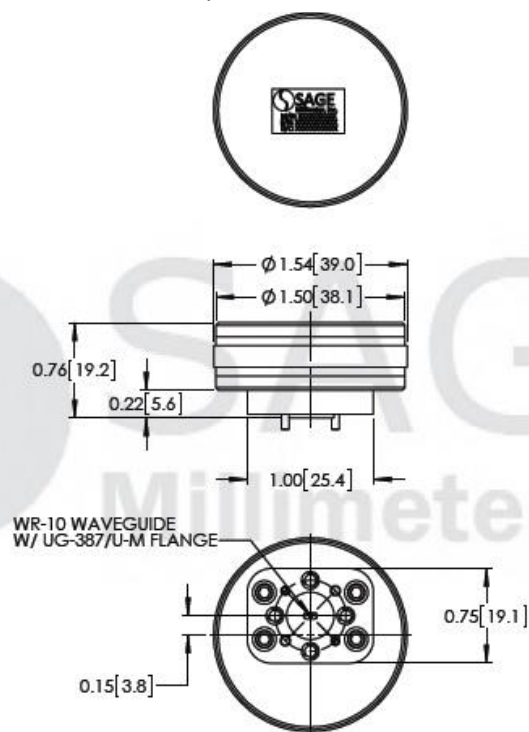


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Typical Return Loss vs. Frequency



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



Note:

- E and H plane pattern data presented is simulated.
- Some data presented uses a limited sample lot. Actual data may vary unit to unit.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

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



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