

Ka-Band Omnidirectional Antenna, 45 Degree, 3 dBi Gain

Description:

Model SAO-2734030345-KF-R1 is a full band, Ka band omnidirectional antenna that covers the frequency range of 26.5 and 40 GHz. This vertically polarized antenna offers 360 degrees azimuth coverage with a 3 dBi typical gain and ± 1 dB nominal gain flatness. The antenna features a half power beamwidth of 45 degrees in its vertical direction. The RF port of the antenna is equipped with right angle K(F) coaxial connector. The version with an end launch K(F) connector is offered under model number, **SAO-2734030345-KF-S1**, the WR-28 waveguide interface is offered under model number, **SAO-2734030345-28-S1**.



Features:

- 360° Azimuth Coverage
- 45° Vertical 3 dB Beamwidth
- Vertically Polarized
- Full Band Operation

Applications:

- 5G Systems
- Communication Links
- EW Systems
- Indoor Local Area Networks

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	26.5 GHz		40.0 GHz
Gain		3 dBi	
Azimuth Gain Variation		± 1 dB	
Azimuth Beamwidth		360°	
3 dB Vertical Beamwidth		45°	
Return Loss		8 dB	
Power Handling		50 W (CW)	75 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

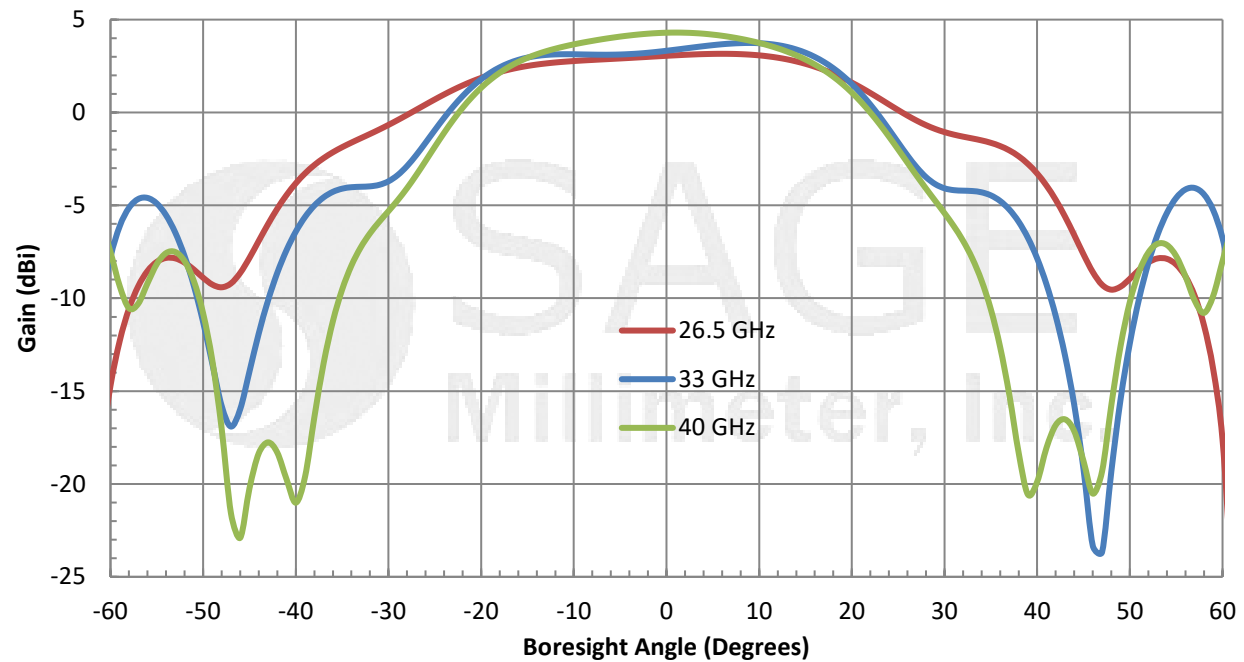
Item	Specification
Input	2.92 mm (K) Female Connector
Size	1.91" (H) x 1.79" (Ø)
Body Material	Aluminum
Radome Material	HDPE
Finish	Gold Plating
Weight	3 Oz
Outline	AO-AC03-045-R



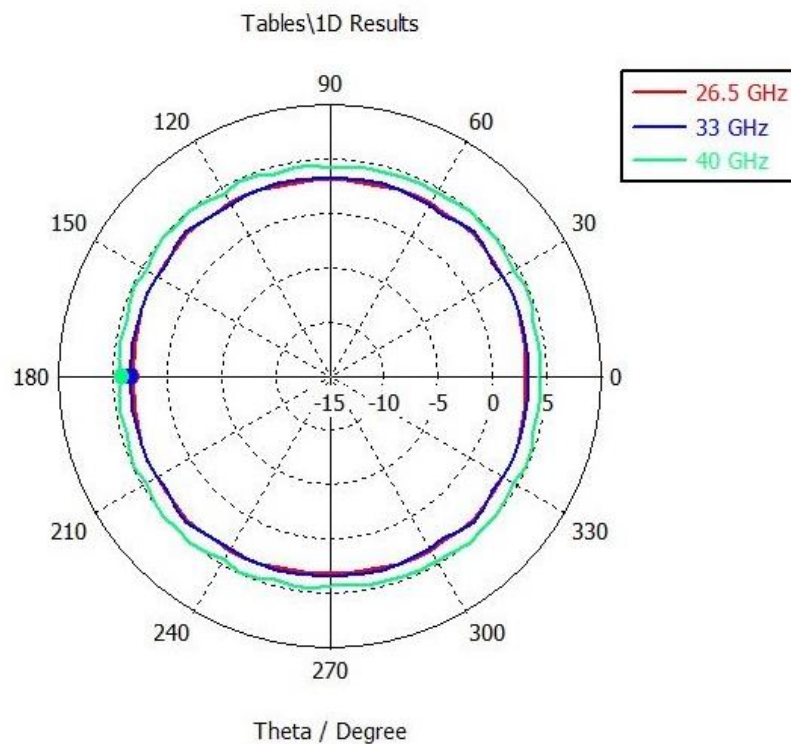


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Simulated E-Plane Patterns

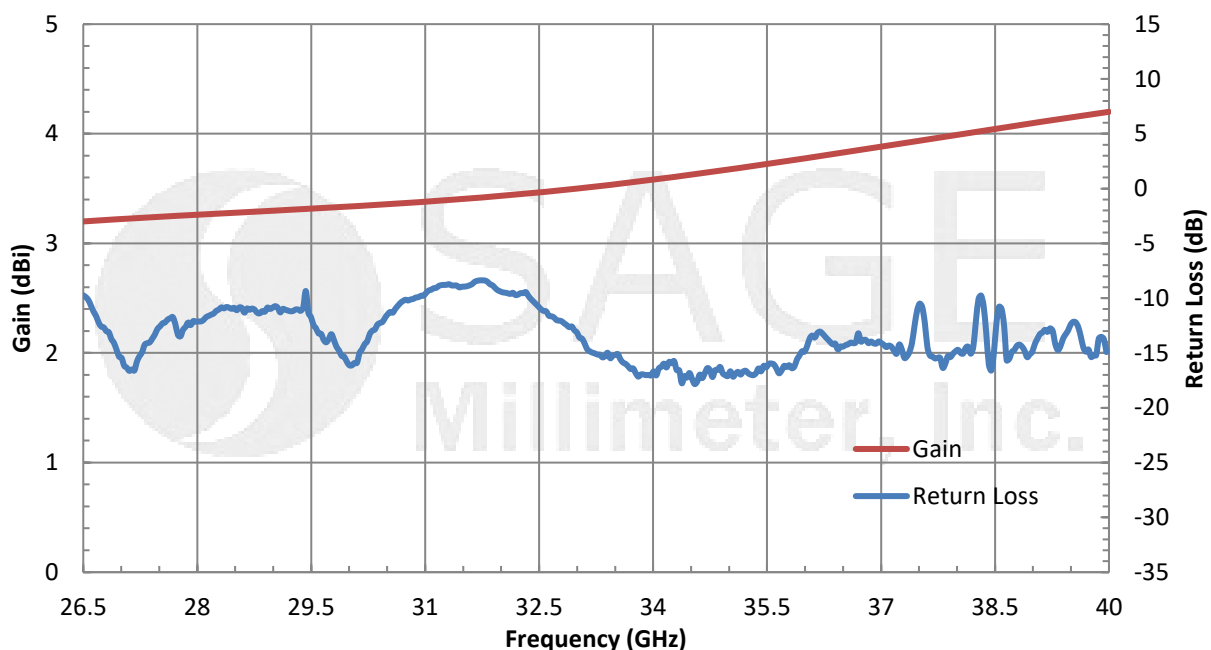


Simulated H-Plane Patterns

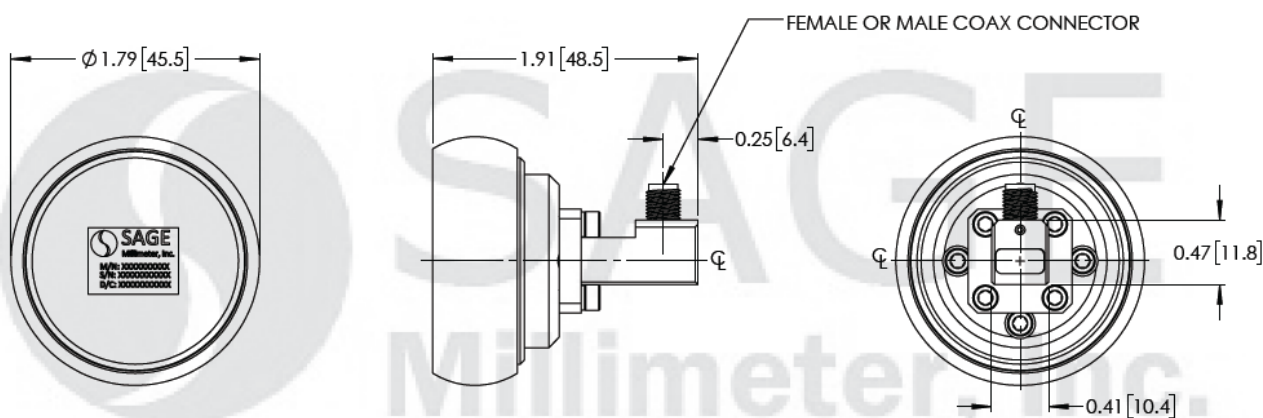


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Typical Gain and Return Loss vs. Frequency



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.
- Antenna Pattern and Gain Data presented are simulated. Actual data may vary slightly.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

- Proper torque, 8.0 ± 0.15 inch-pounds (0.92 ± 0.05 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**

