

Full Ka-Band Omnidirectional Antenna, 10 Degree, 7.5 dBi Gain

Description:

Model SAO-2734030810-KF-S1 is a full band, WR-28 omnidirectional antenna that operates between 26.5 and 40 GHz. This vertically polarized antenna offers 360 degrees azimuth coverage with a 7.5 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 K(F) coaxial connector. The version with WR-28 waveguide interface is offered under model number, **SAO-2734030810-28-S1**.



Features:

- 360° Azimuth Coverage
- 10° Vertical 3 dB Beamwidth
- Vertically Polarized
- Full Band Operation

Applications:

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

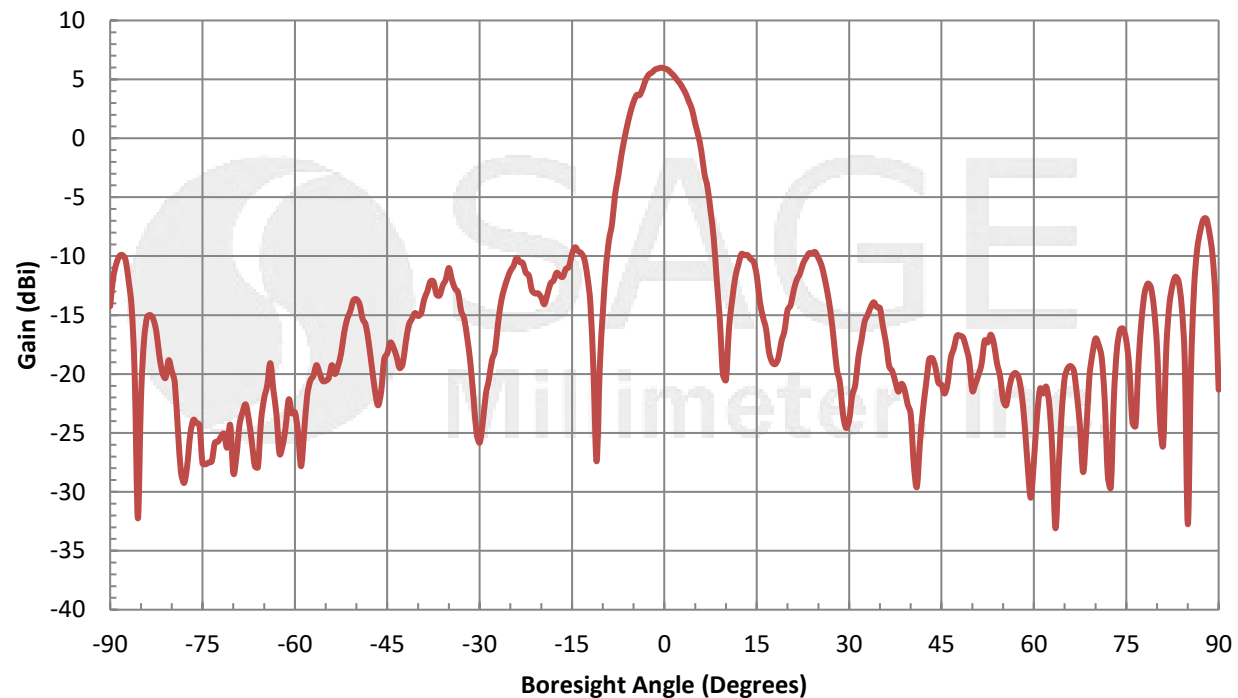
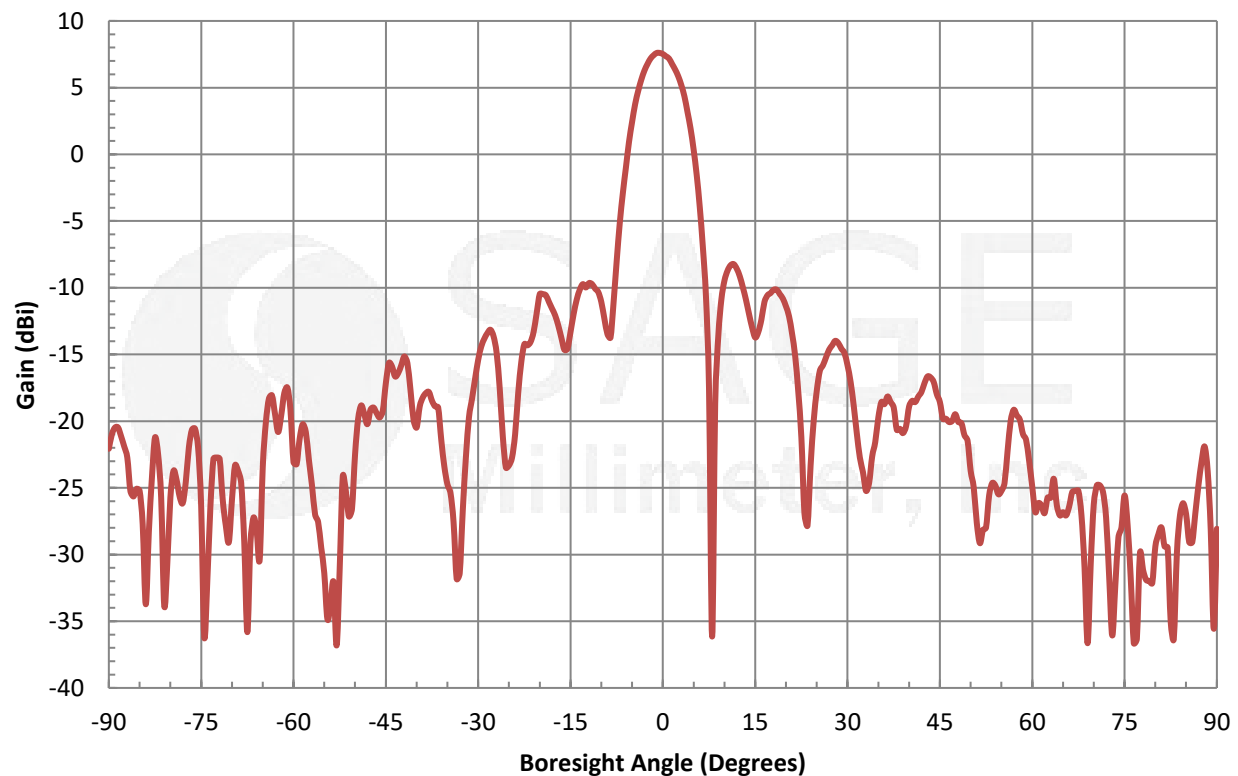
Electrical Specifications:

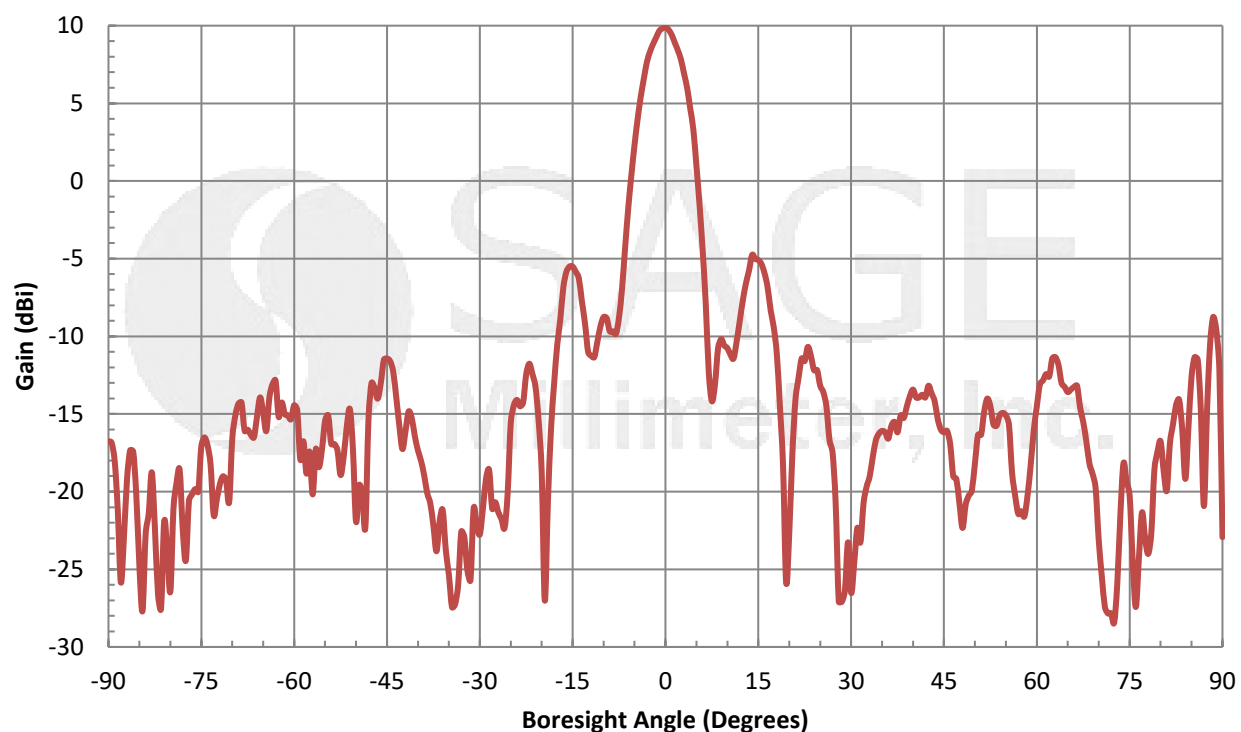
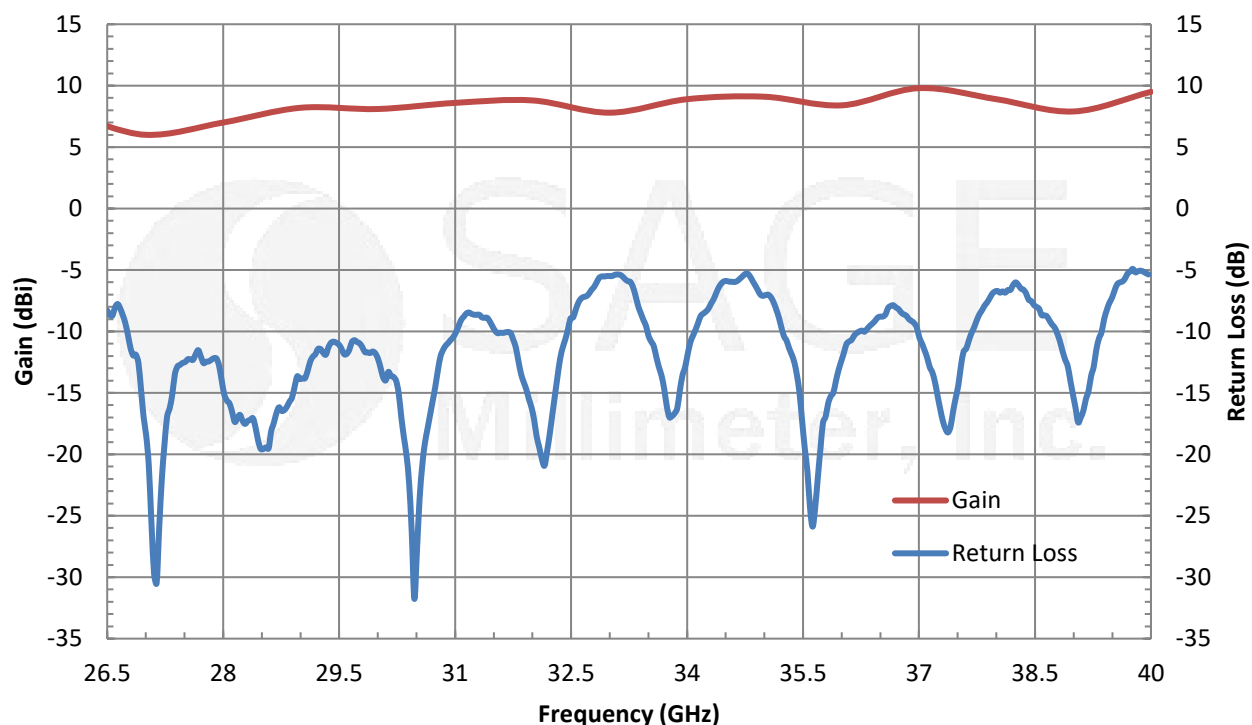
Parameter	Minimum	Typical	Maximum
Frequency Range	26.5 GHz		40.0 GHz
Gain		7.5 dBi	
Azimuth Gain Variation		± 1 dB	
Azimuth Beamwidth		360°	
3 dB Vertical Beamwidth		10°	
Return Loss		9 dB	
Power Handling		50 W (CW)	75 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

Item	Specification
Input	2.92 mm (K) Female Coaxial Connector
Body Material	Aluminum
Radome Material	HDPE
Finish	Clear Chem Film
Weight	35.5 Oz
Size	3.88" (H) x 5.66" (Ø)
Outline	AO-AC08-010-E

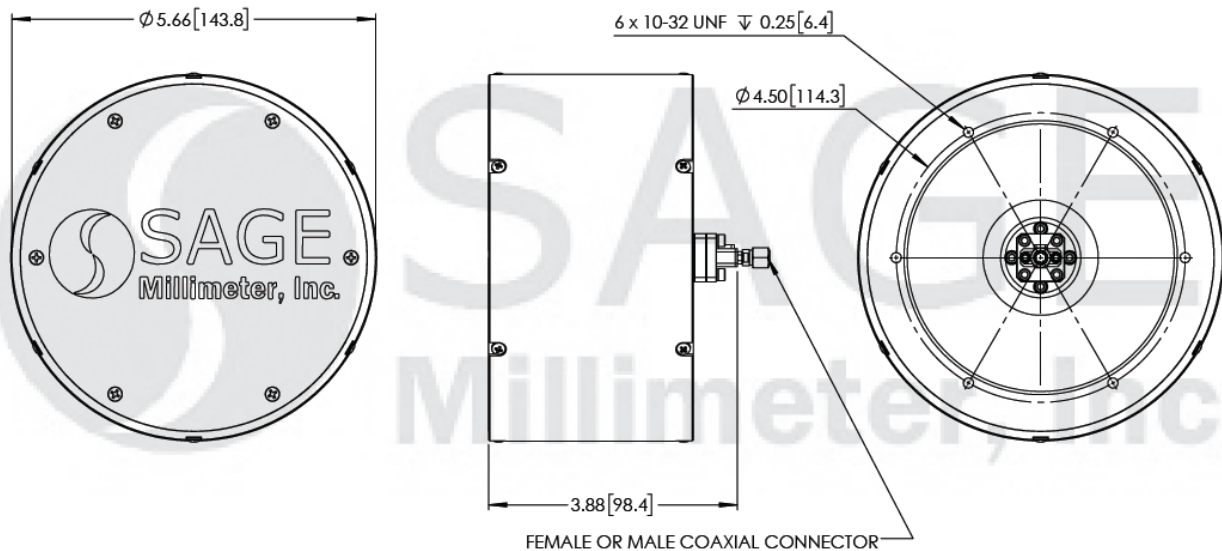


Full Ka-Band Omnidirectional Antenna, 10 Degree, 7.5 dBi Gain**Typical E-Plane Antenna Pattern @ 26.5 GHz****Typical E-Plane Antenna Pattern @ 33 GHz**

**Full Ka-Band Omnidirectional Antenna, 10 Degree, 7.5 dBi Gain****Typical E-Plane Antenna Pattern @ 40 GHz****Typical Gain and Return Loss vs. Frequency**

Full Ka-Band Omnidirectional Antenna, 10 Degree, 7.5 dBi Gain

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



Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit slightly.
- All testing was performed under +25°C case temperature.
- 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.**

