

SAO-2434030345-KF-R1

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

SAO-2434030345-KF-R1 is a full band, Ka band omnidirectional antenna that covers the frequency range of 24 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-2434030345-KF-E1**.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	24 GHz		40 GHz
Gain		3 dBi	
Azimuth Gain Variation		± 1 dB	
Azimuth Beamwidth		360°	
3 dB Vertical Beamwidth		45°	
Return Loss, 24.0 to 26.5 GHz		6 dB	
Return Loss, 26.5 to 40.0 GHz		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

ECCN

EAR99

FEATURES

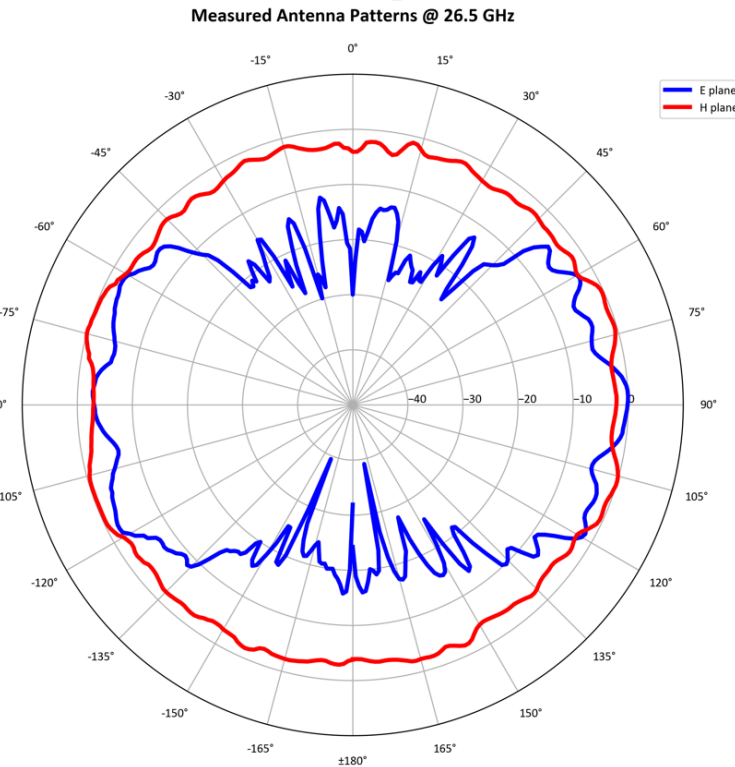
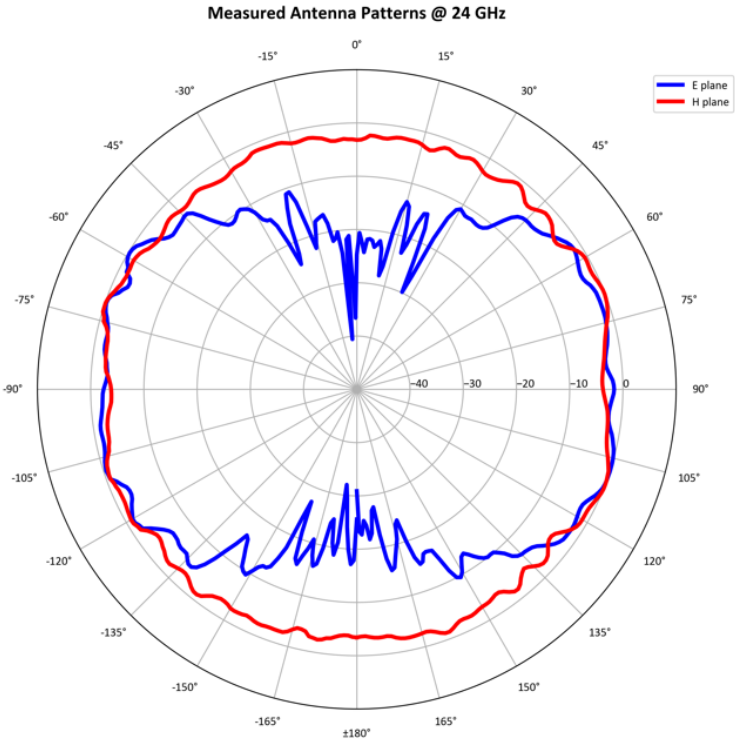
- 360° Azimuth Coverage
- 45° Vertical 3 dB Beamwidth
- Vertically Polarized
- Full Band Operation

APPLICATIONS

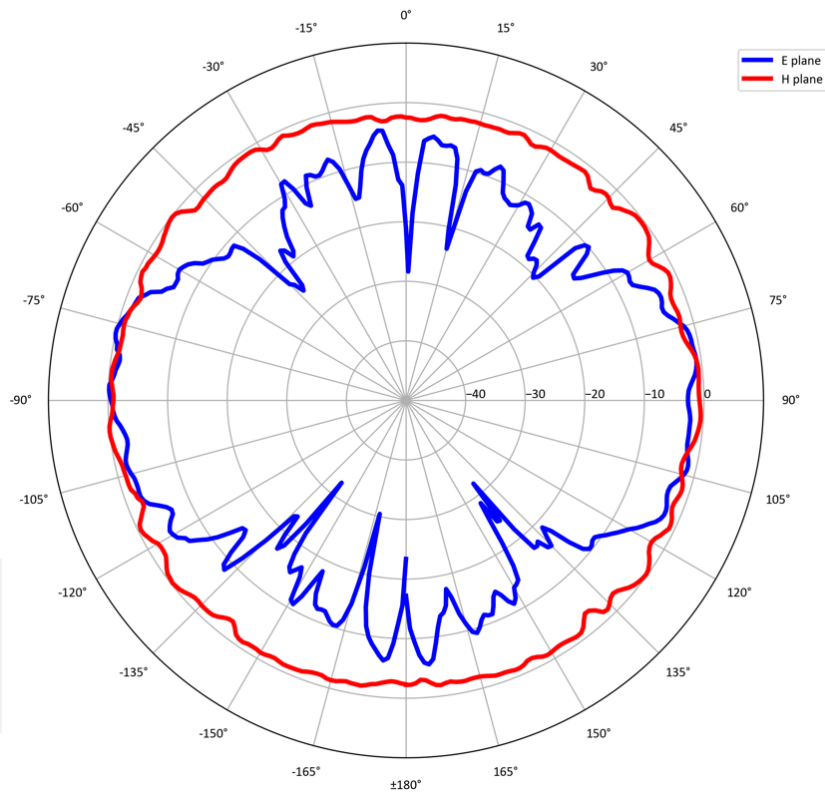
- 5G Systems
- Communication Links
- EW Systems
- Indoor Local Area Networks

SUPPLEMENTAL DETAILS

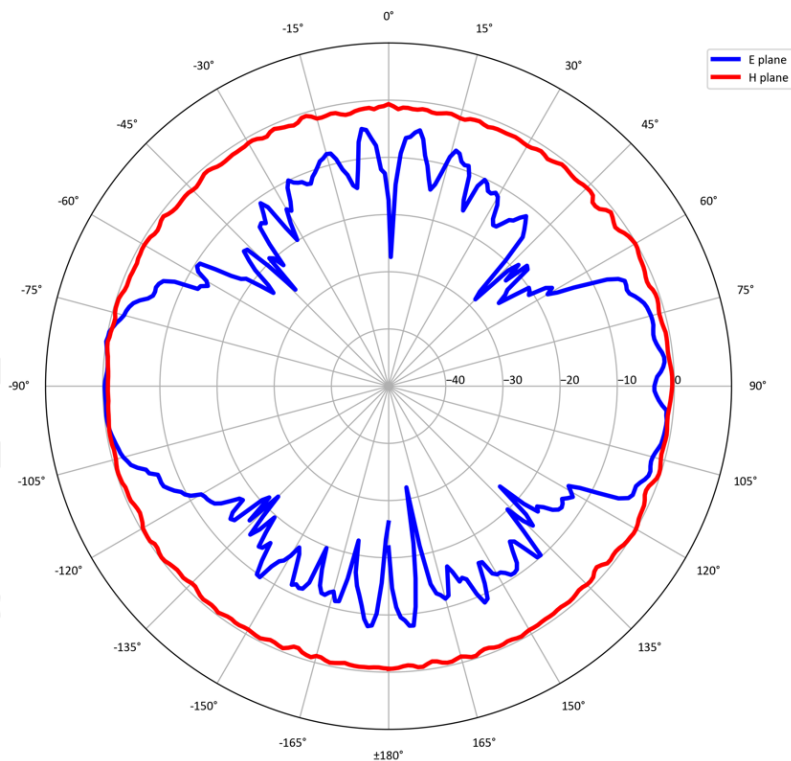




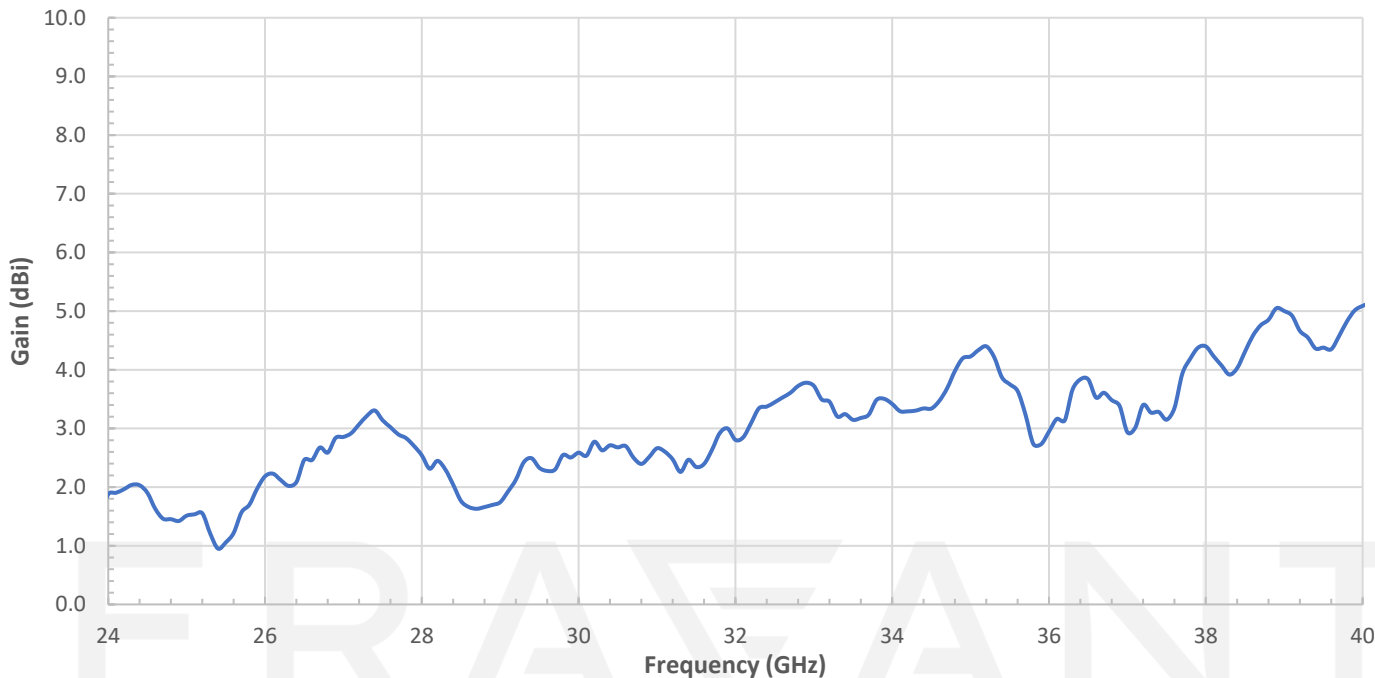
Measured Antenna Patterns @ 33.5GHz



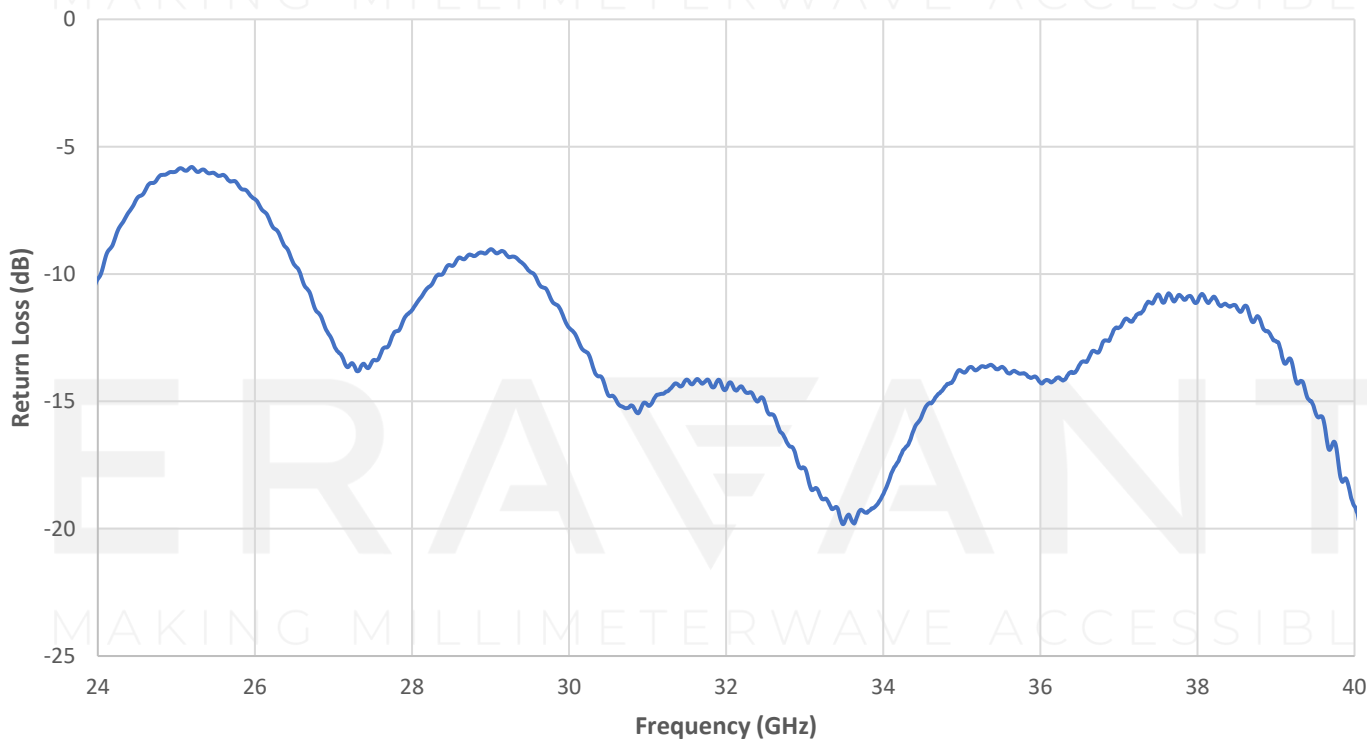
Measured Antenna Patterns @ 40 GHz



Measured Gain vs Frequency

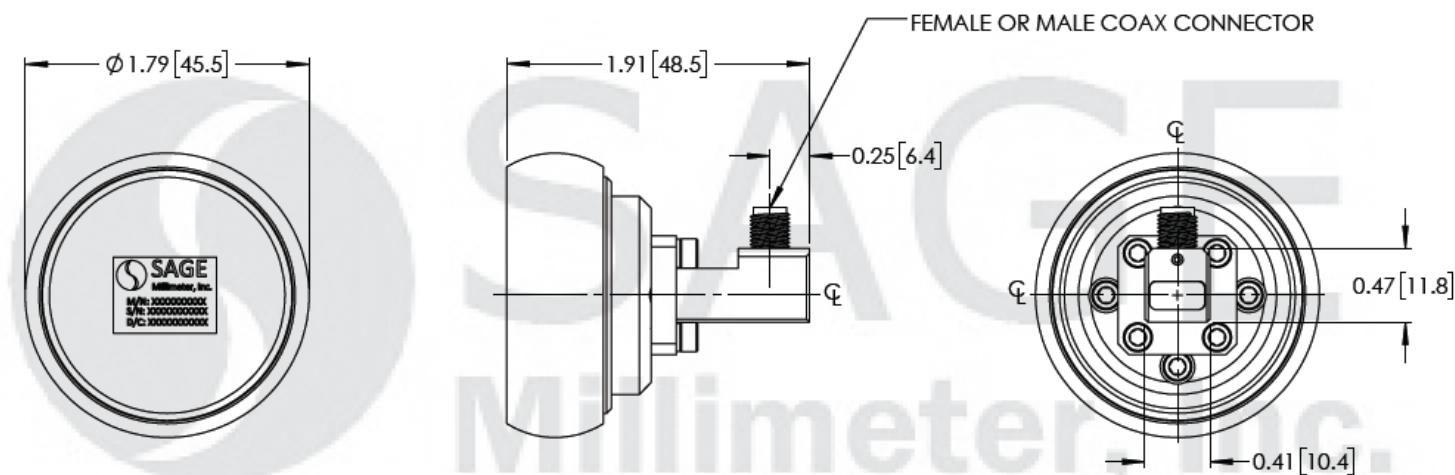


Measured Return Loss vs Frequency



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



NOTE:

- Test data provided is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.92 ± 0.05 Nm), should be applied. Eravant torque wrench, model SCH-08008-S1, is highly recommended.