SAO-2434030345-28-S1

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

SAO-2434030345-28-S1 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 WR-28 waveguide with UG-599/U flange. The version with 2.92 mm (F) interface is offered under the model, SAO-2434030345-KF-E1and the version with 10 degree vertical beamwidth is offered under the model, SAO-2434230810-28-S1, respectively.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	24 GHz		40.0 GHz
Gain		3 dBi	
Azimuth Gain Variation		±1 dB	
Azimuth Beamwidth		360˚	
3 dB Vertical Beamwidth		45˚	
Return Loss		10 dB	
Power Handling		150 W (CW)	200 W (CW)
Specification Temperature		+25 ˚C	
Operating Temperature	-40 ˚C		+85 ˚C

Mechanical Specifications:

Item	Specification
Antenna Port	WR-28 Waveguide with UG-599/U Compatible Flange
Body Material	Aluminum
Radome Material	HDPE
Finish	Gold Plating
Weight	1.7 Oz
Outline	AO-A03-045

ECCN

EAR99

FEATURES

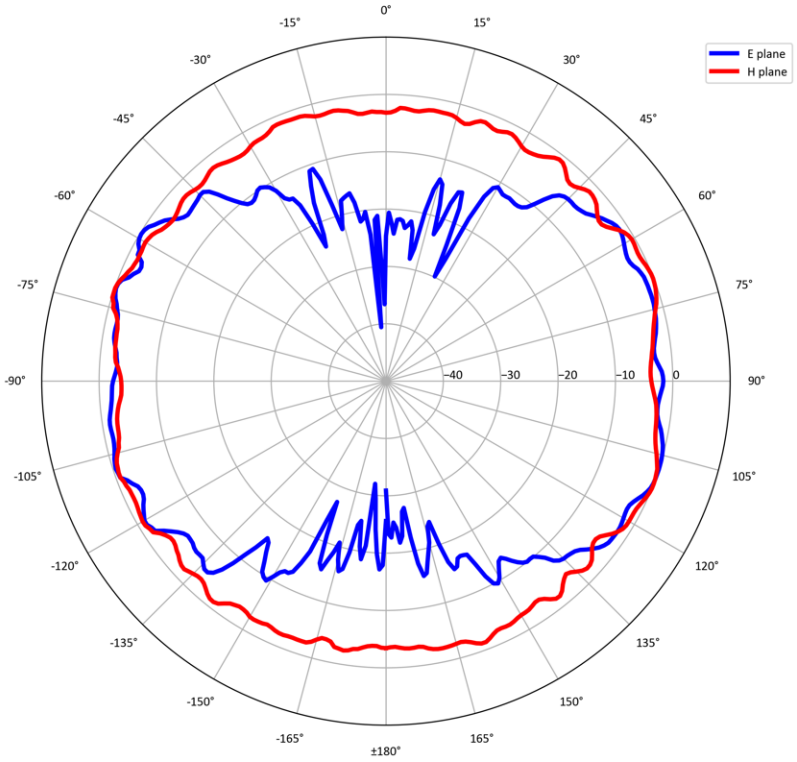
- 360˚ Azimuth Coverage
- 45° Vertical 3 dB Beamwidth
- Vertically Polarized
- Full Band Operation

APPLICATIONS

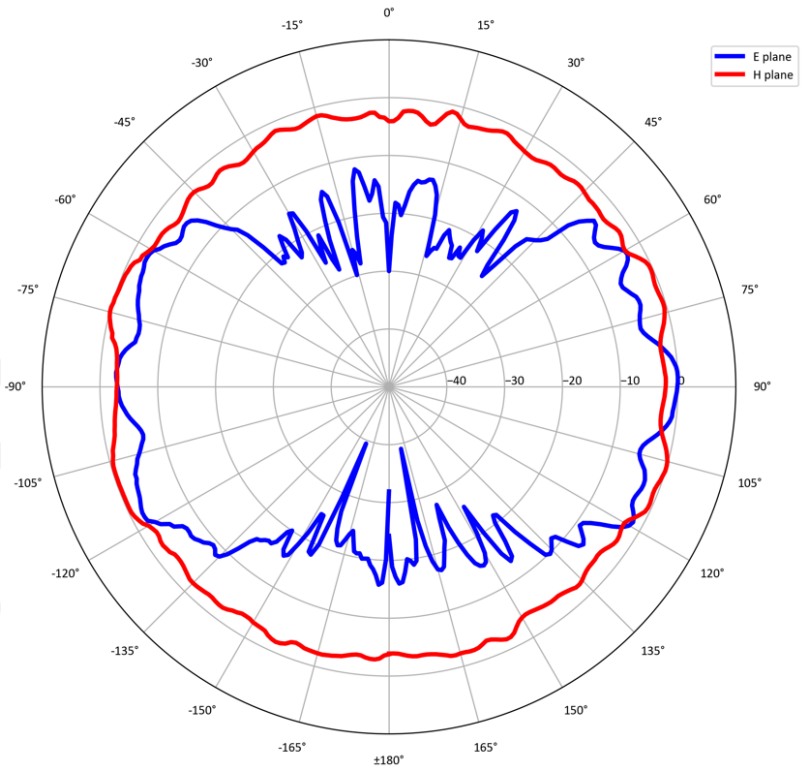
- 5G Systems
- Communication Links
- EW Systems
- Indoor Local Area Networks

SUPPLEMENTAL DETAILS

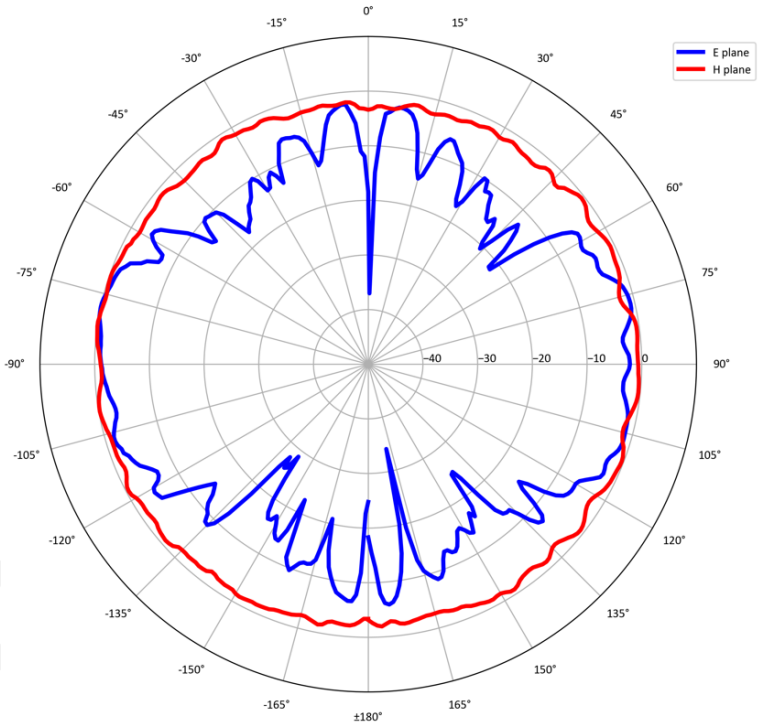
Measured Antenna Patterns @ 24 GHz



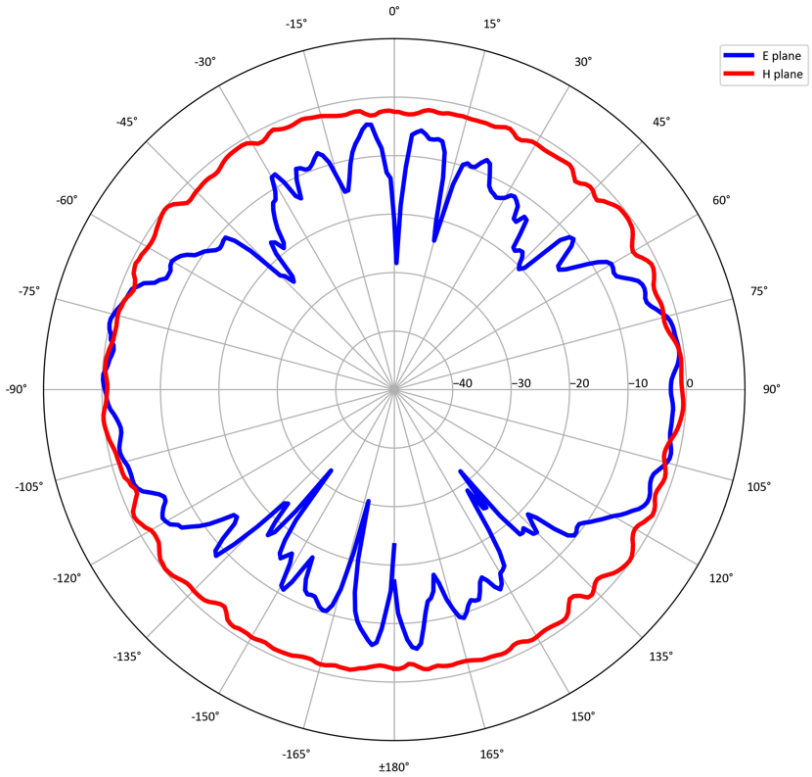
Measured Antenna Patterns @ 26.5 GHz

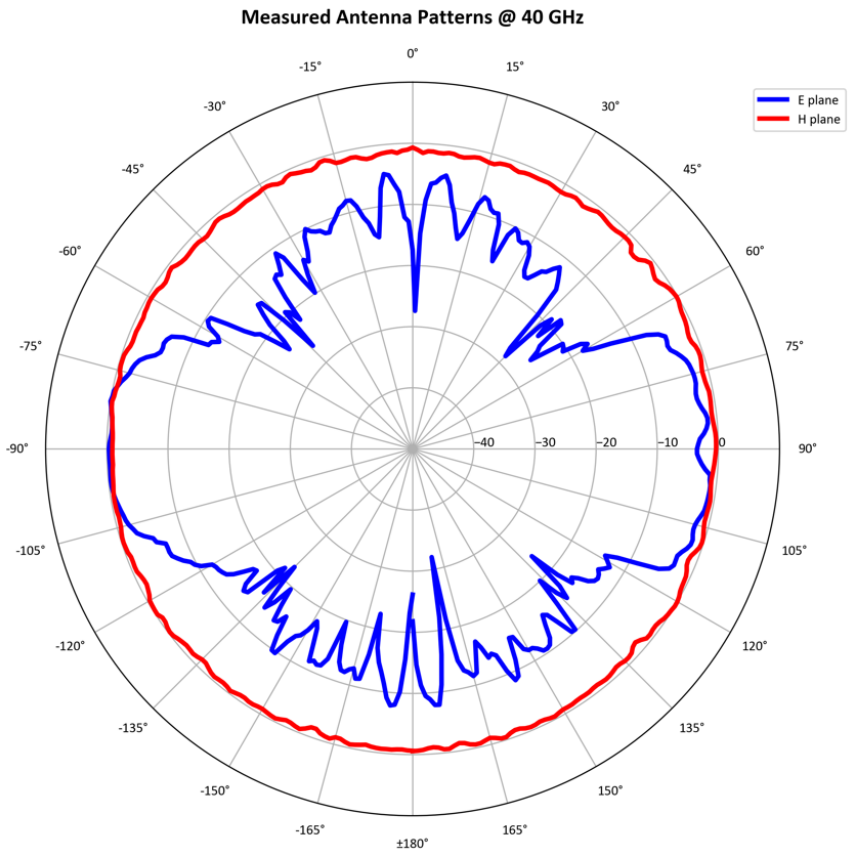


Measured Antenna Patterns @ 32 GHz

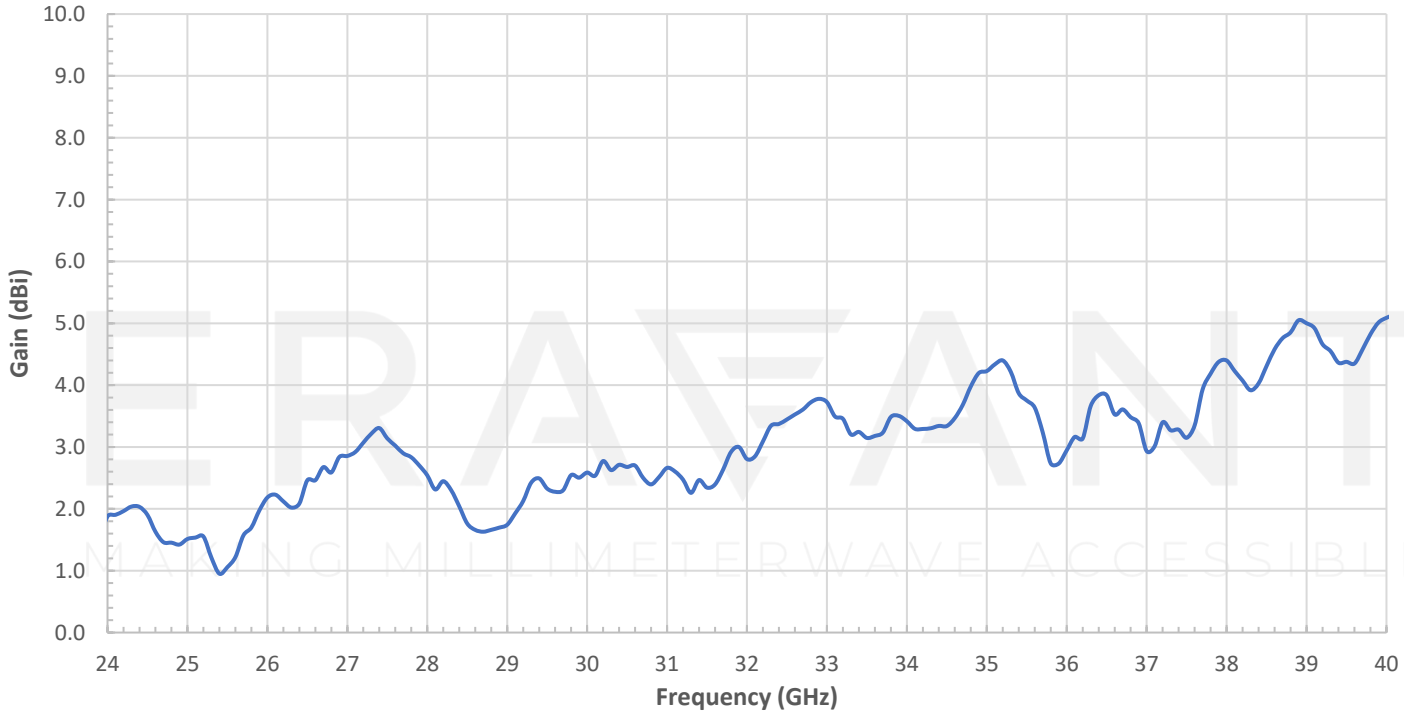


Measured Antenna Patterns @ 33.5GHz

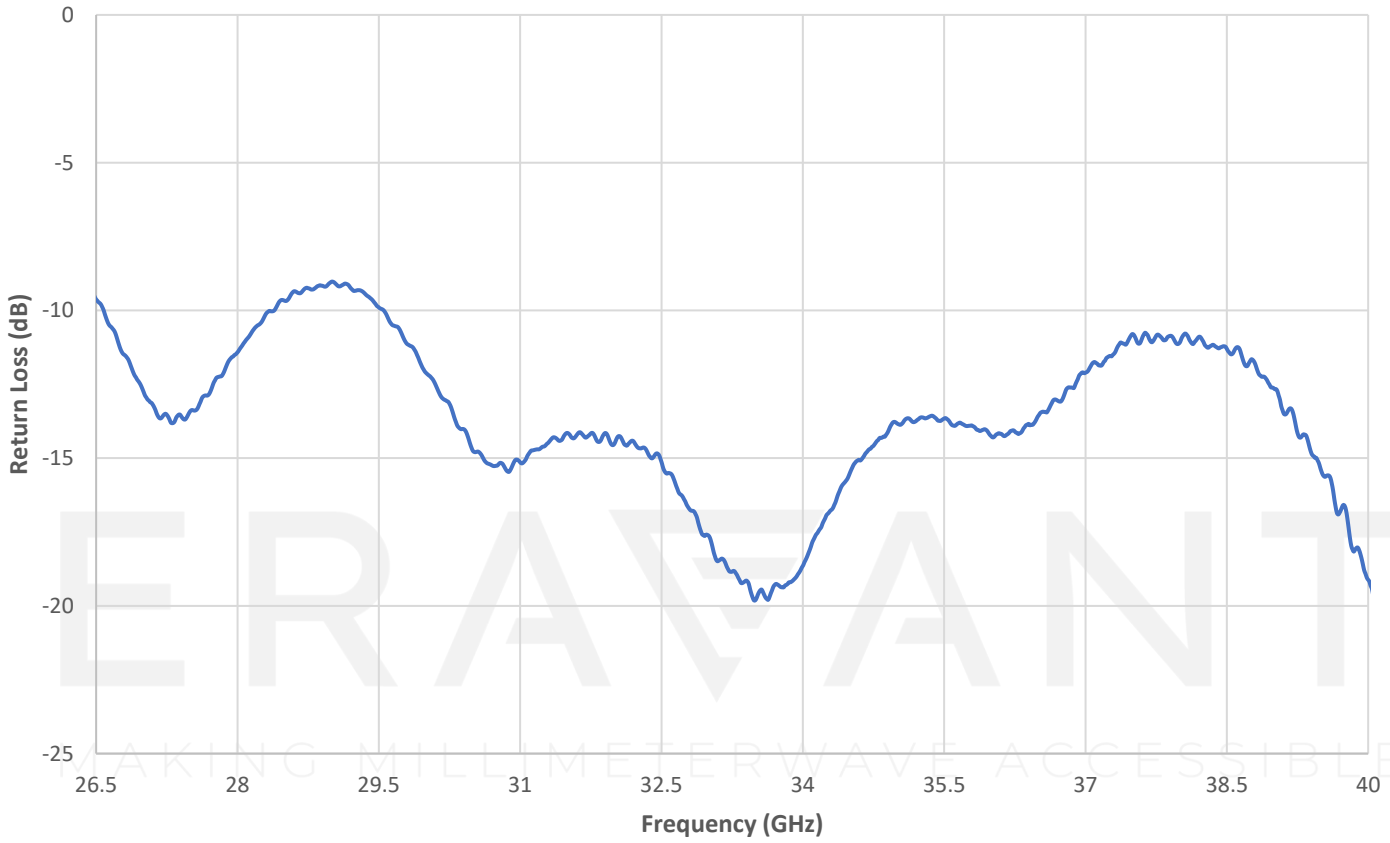




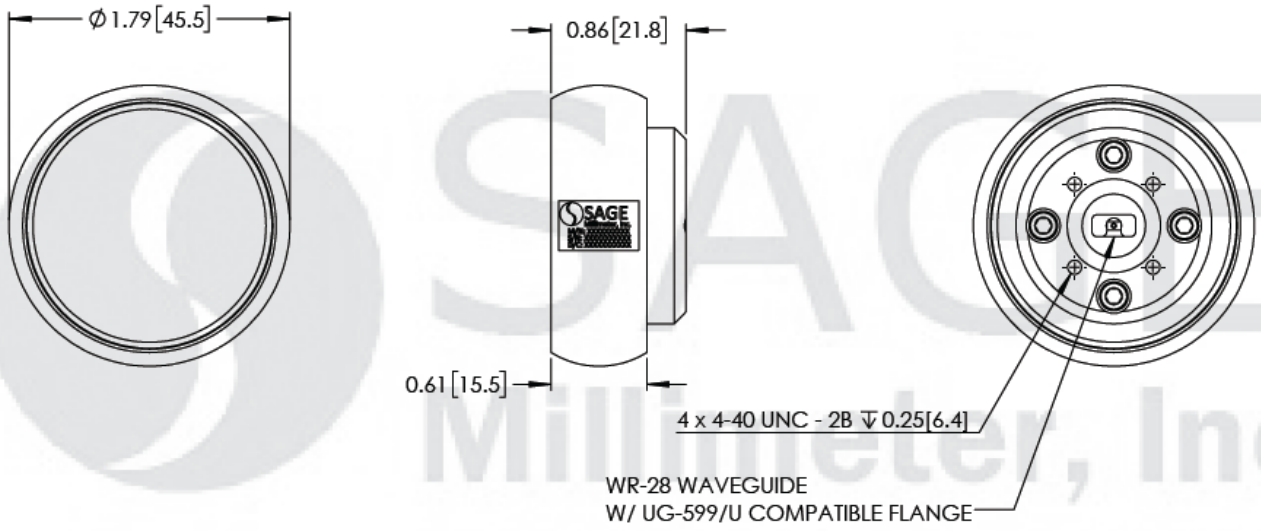
Measured Gain vs Frequency



Measured Return Loss vs Frequency



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:

- Any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.

ERAVANT
MAKING MILLIMETERWAVE ACCESSIBLE