

## SAO-1834030345-KF-S1

### Broad Band Omnidirectional Antenna, 45 Degree, 3 dBi Gain

**SAO-1834030345-KF-S1** is a broad band, Coax omnidirectional antenna that covers the frequency range of 18 and 40 GHz. This vertically polarized antenna offers 360 degrees azimuth coverage with a 3 dBi typical gain and  $\pm 1$  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 2.92 mm (F) interface.



#### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	18 GHz		40.0 GHz
Gain		3 dBi	
Azimuth Gain Variation		$\pm 1$ dB	
Azimuth Beamwidth		360°	
3 dB Vertical Beamwidth		45°	
Return Loss		12 dB	
Power Handling			40 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

#### Mechanical Specifications:

Item	Specification
Antenna Port	2.92 mm (K) Female Connector
Body Material	Aluminum
Radome Material	HDPE
Finish	Gold Plated
Weight	0.58 Oz
Outline	AO-AC3-045

#### ECCN

EAR99

#### FEATURES

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

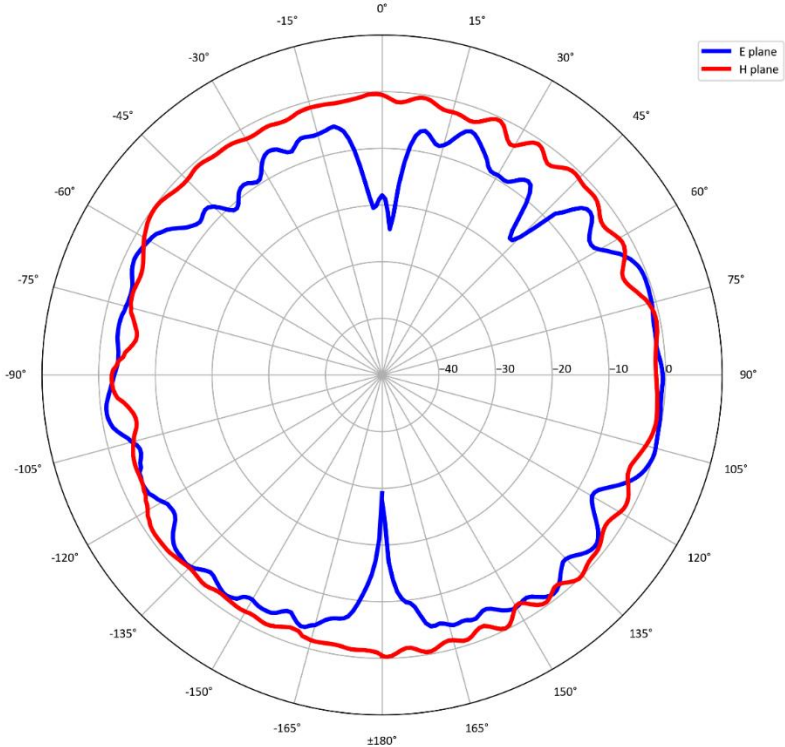
#### APPLICATIONS

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

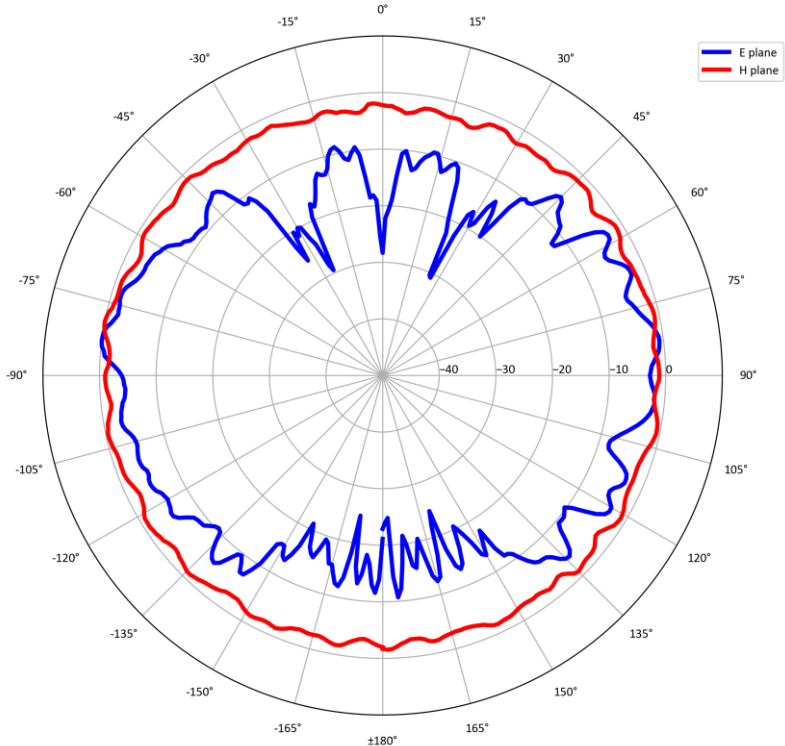
#### SUPPLEMENTAL DETAILS

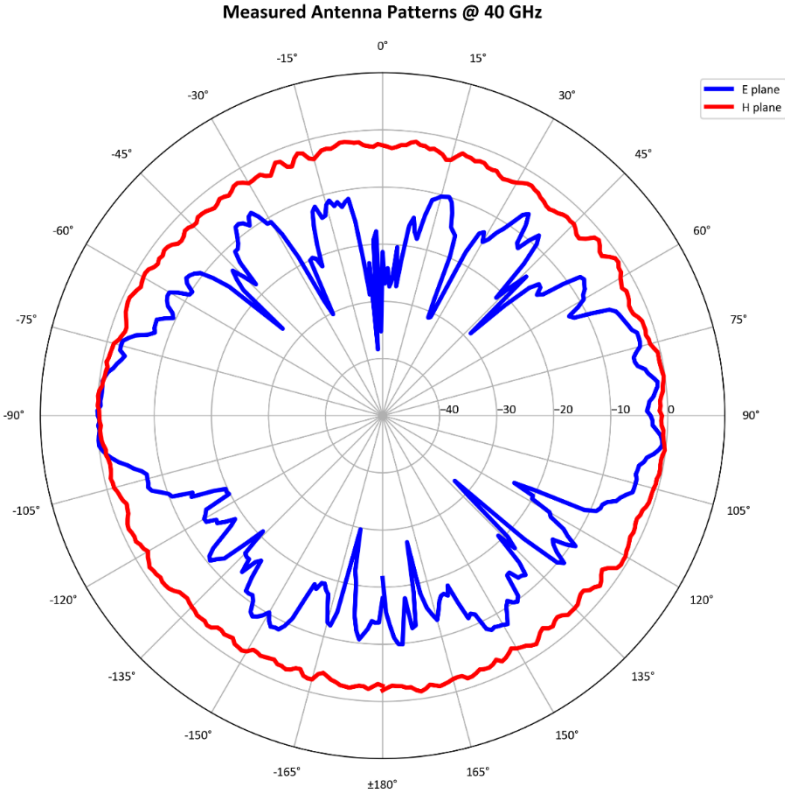


Measured Antenna Patterns @ 18 GHz

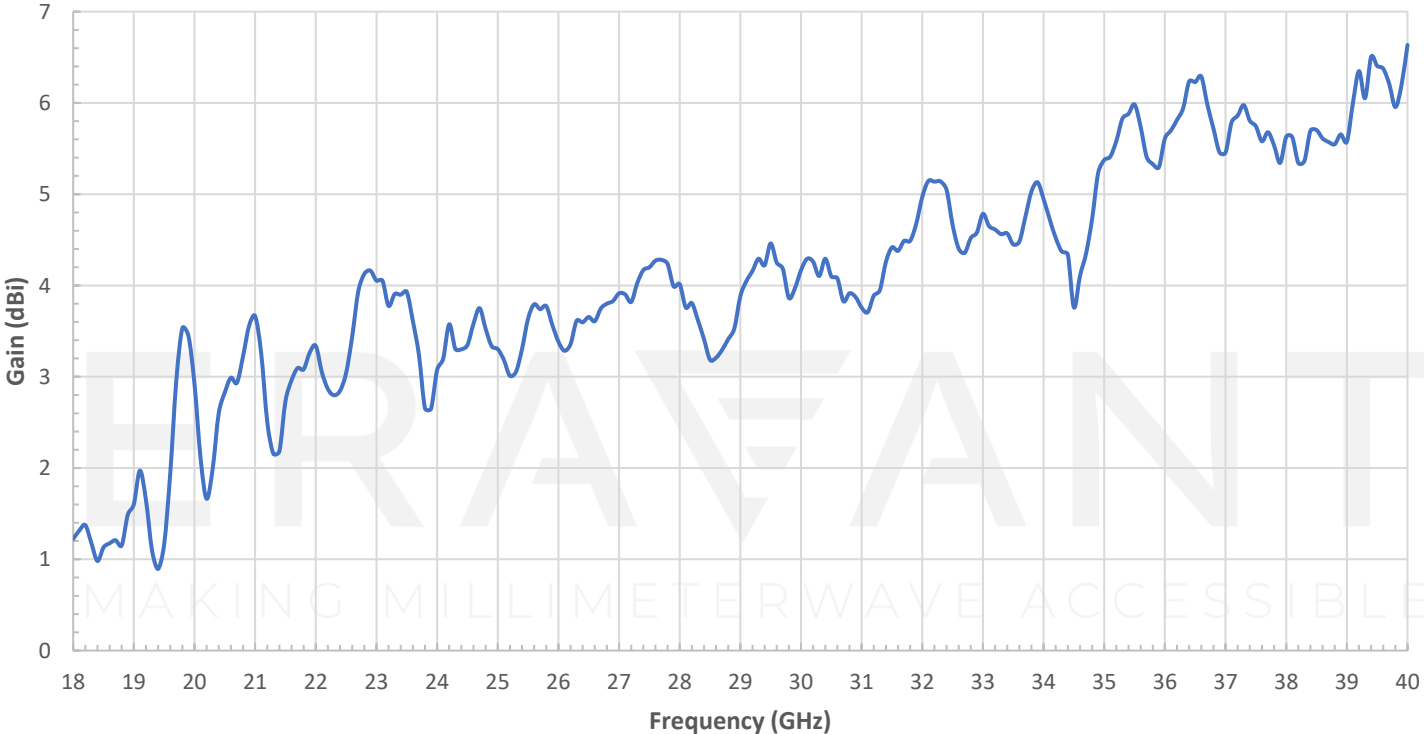


Measured Antenna Patterns @ 29 GHz



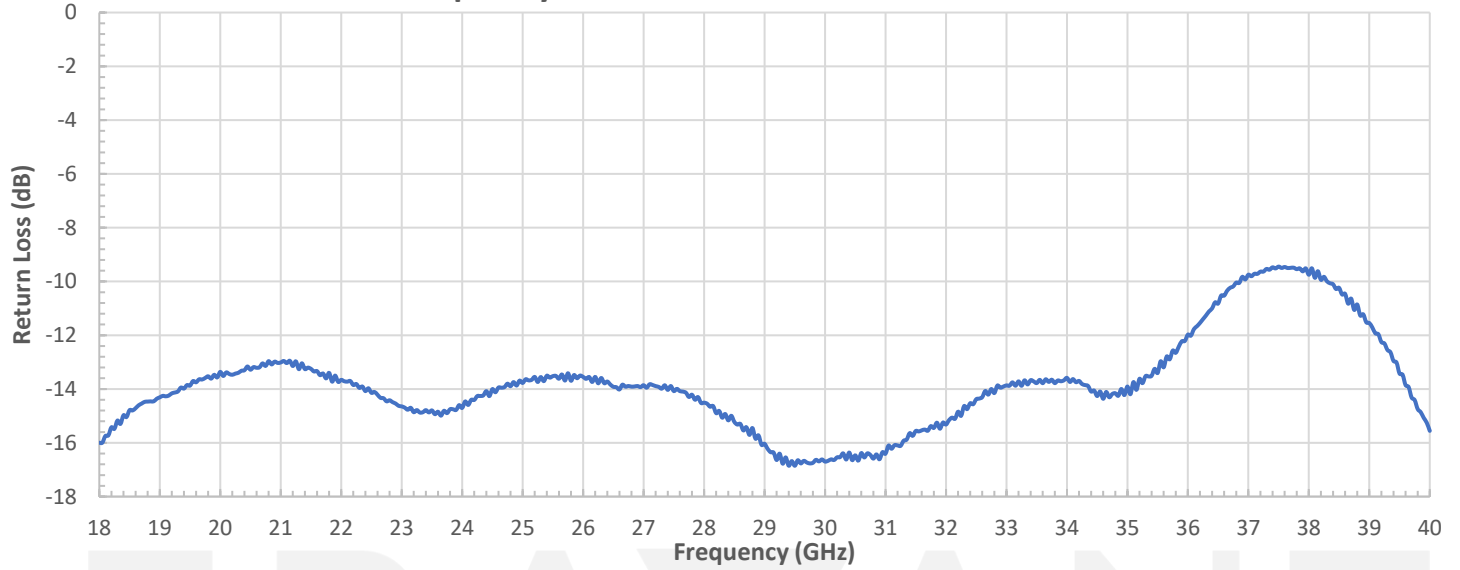


Measured Gain vs Frequency

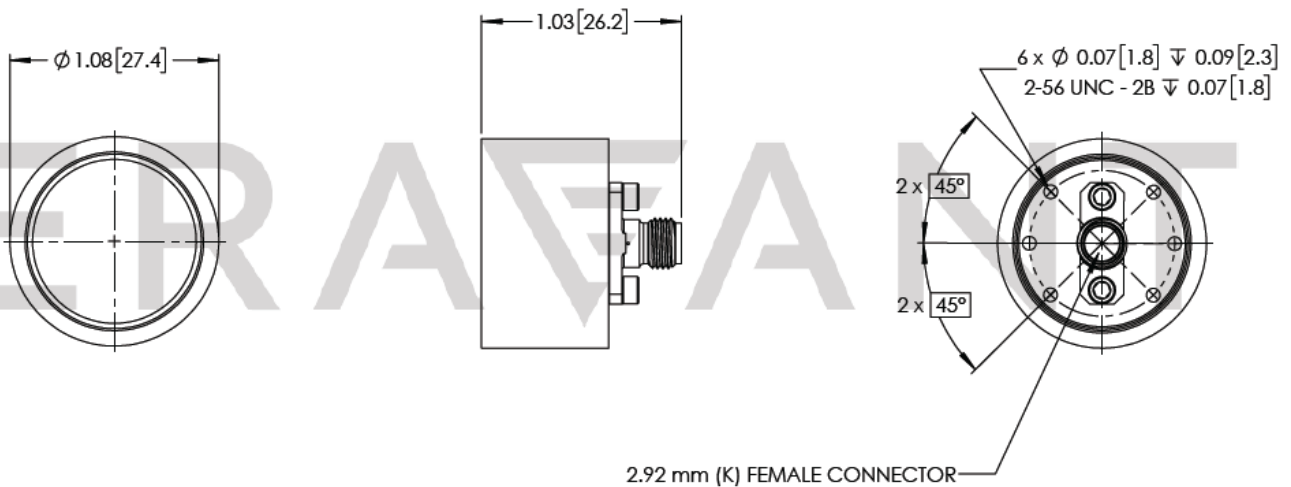


## SAO-1834030345-KF-S1

### Measured Return Loss vs Frequency



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



**NOTE:**

- All data presented is from a sample lot. Actual data may vary from unit to unit.
- Eravant reserves the right to change the information presented without notice.

**CAUTION:**

- Any foreign objects in the antenna will cause performance degradation and possible device damage.