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 ±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.

***Photo shown is placeholder. Refer to mechanical outline for most accurate representation of the model*

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	18 GHz		40.0 GHz
Gain		3 dBi	
Azimuth Gain Variation		±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	PTFE
Finish	Gold Plated
Weight	0.51 Oz
Outline	AO-AC3-045

ECCN

EAR99

FEATURES

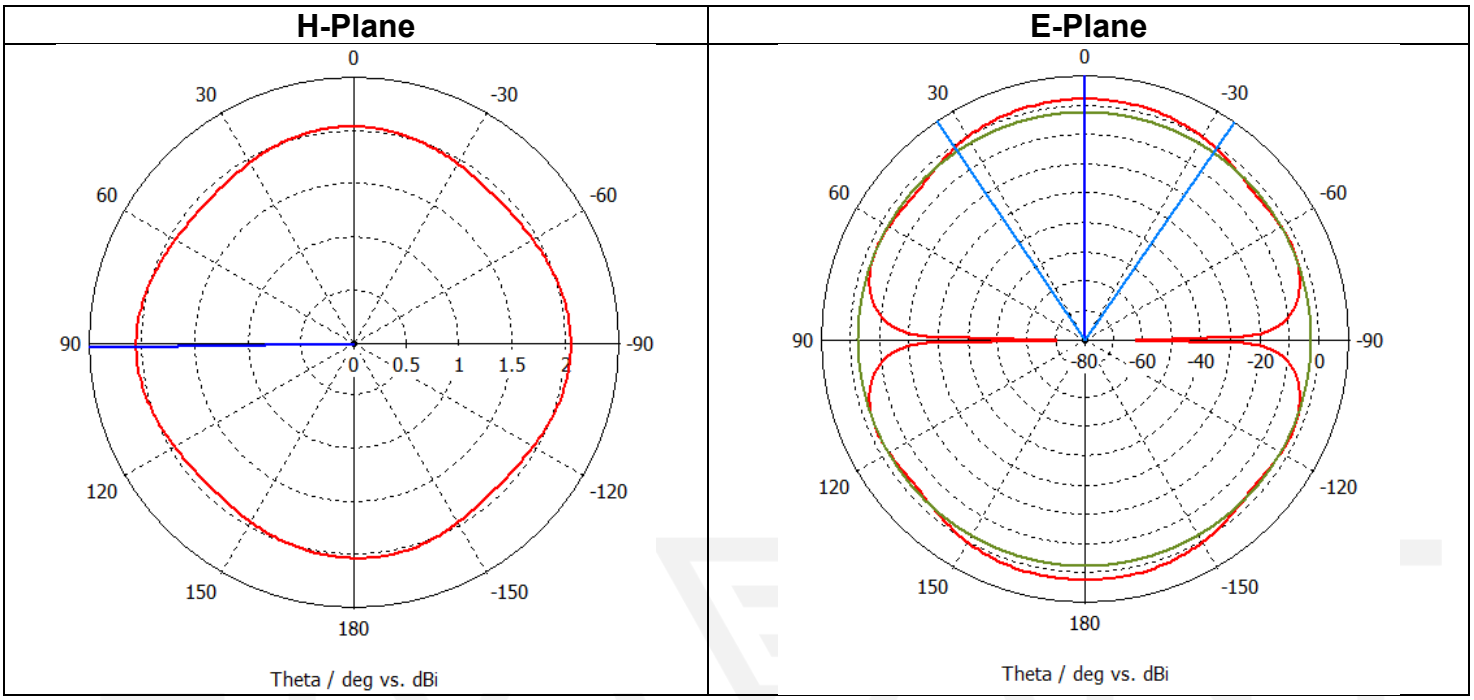
- 360˚ Azimuth Coverage
- 45° Vertical 3 dB Beamwidth
- Full Band Operation

APPLICATIONS

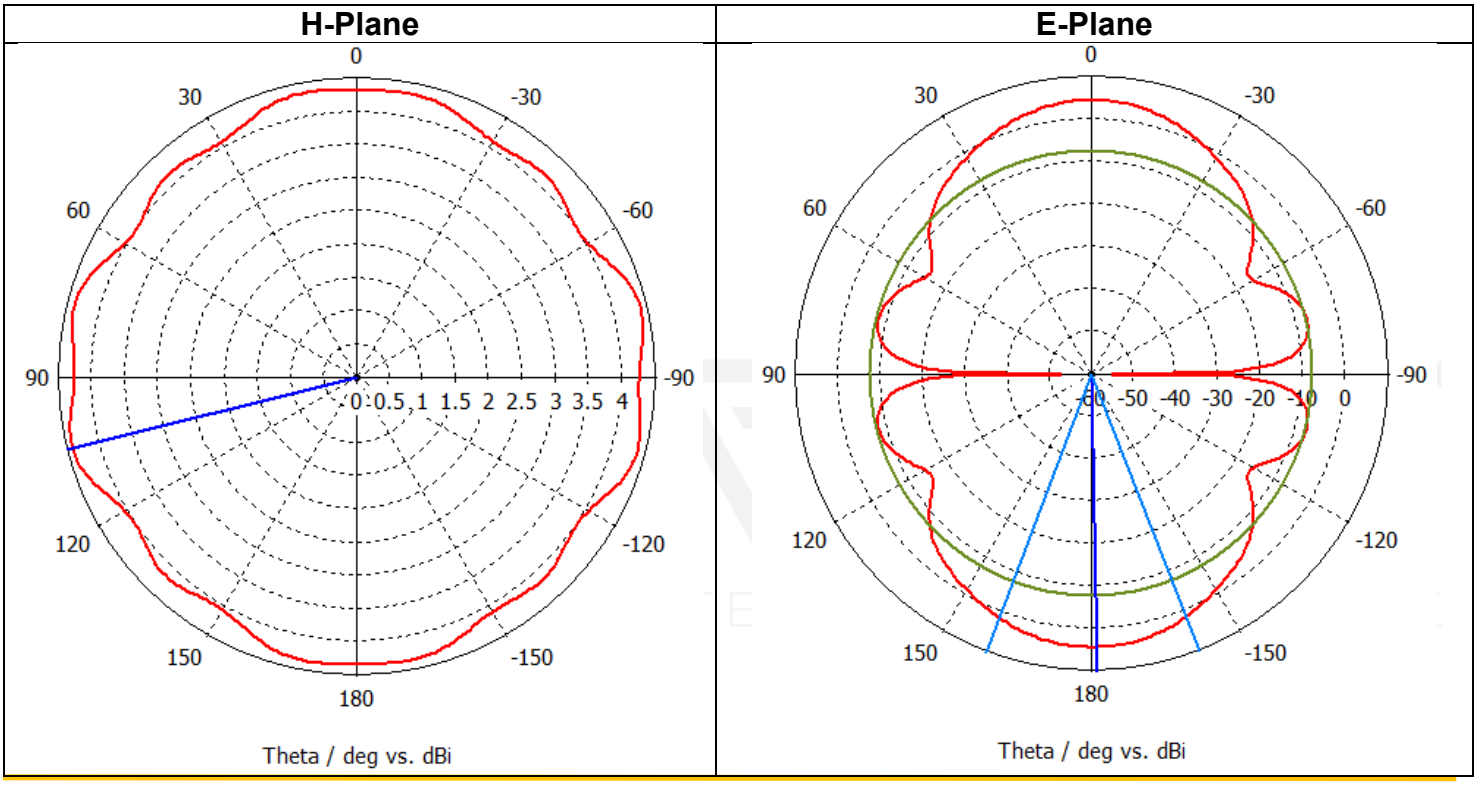
- 5G Systems
- Communication Links
- EW Systems
- Indoor Local Area Networks

SUPPLEMENTAL DETAILS

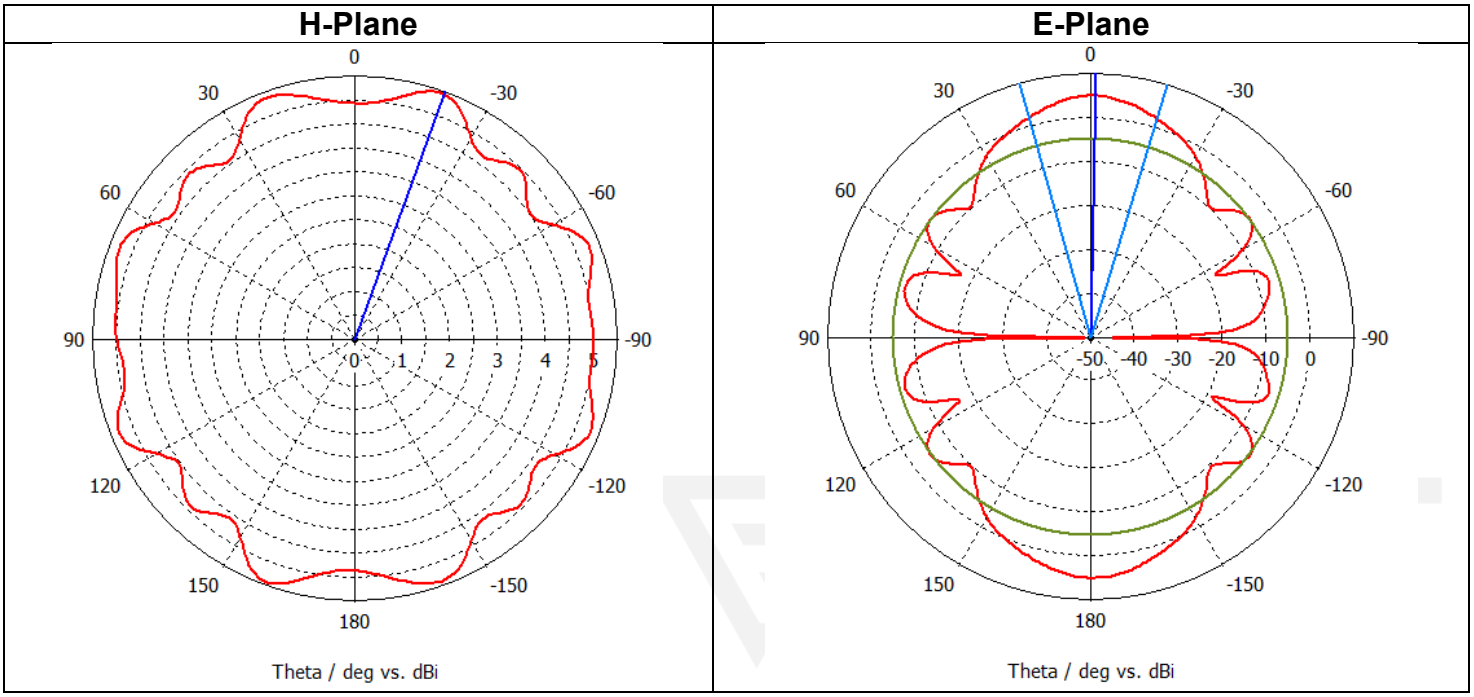
Simulated Antenna Patterns @ 18 GHz



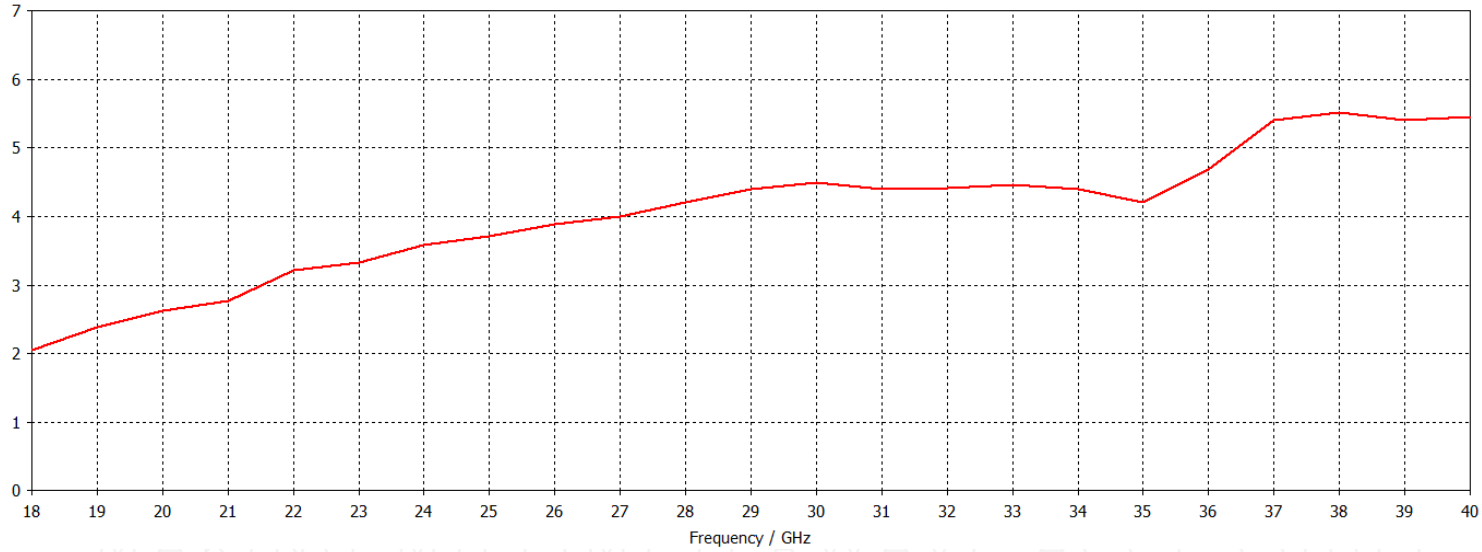
Simulated Antenna Patterns @ 29 GHz



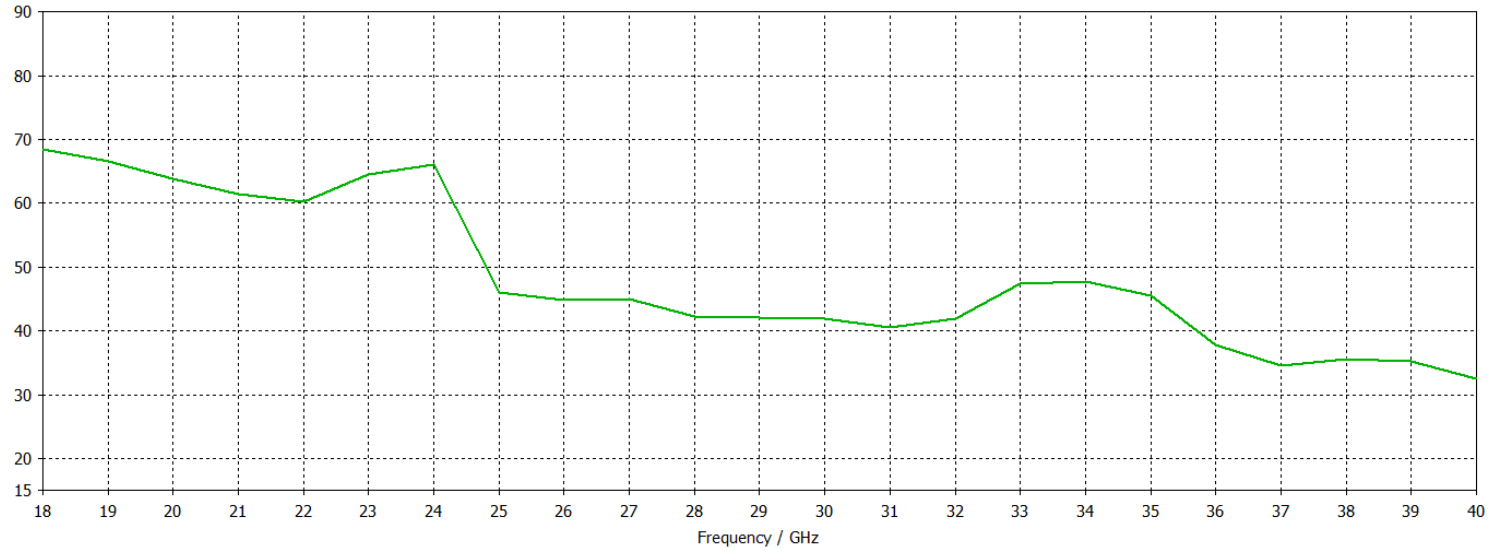
Simulated Antenna Patterns @ 40 GHz



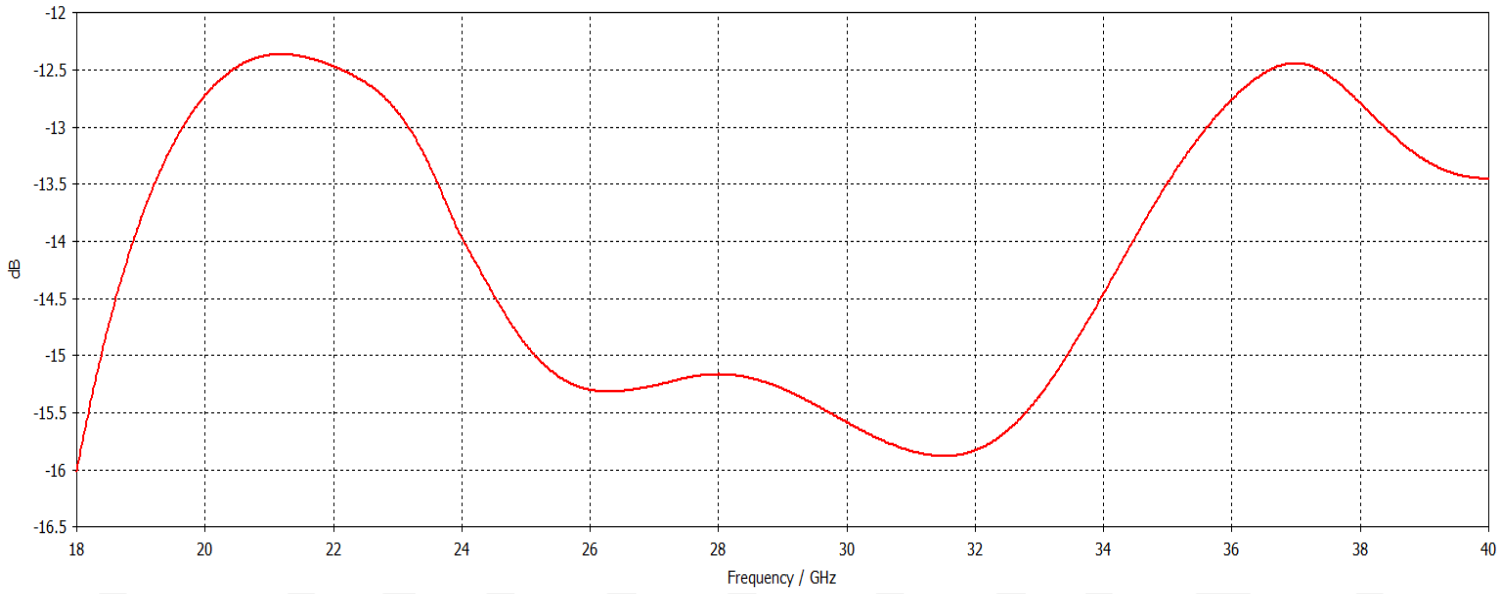
Simulated Gain vs Frequency



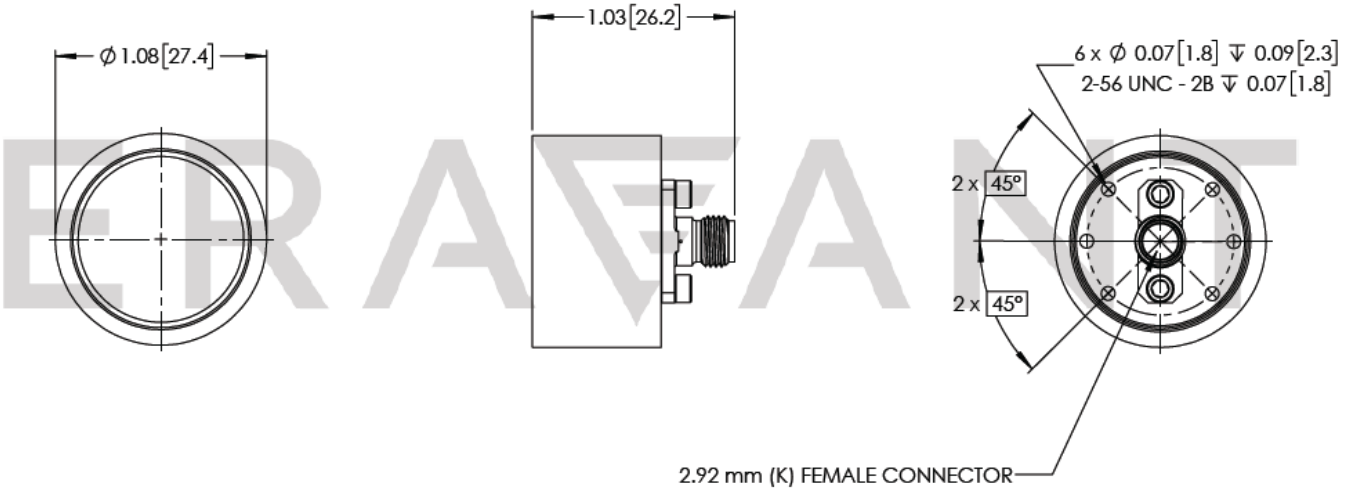
Simulated 3 dB Beamwidth vs Frequency



Simulated Return Loss vs Frequency



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



NOTE:

- All data presented is simulated. Actual data may vary.
- 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.