SAO-2734030345-28-S1-WP

Rev. 1.0

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

Description:

SAO-2734030345-28-S1-WP is a full band, Ka band omnidirectional antenna that covers the frequency range of 26.5 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-2734030345-KF-S1** and the version with 10 degree vertical beamwidth is offered under the model, **SAO-2734030810-28-S1**, respectively.

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

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	26.5 GHz		40.0 GHz
Gain		3 dBi	
Azimuth Gain Variation		±1 dB	
Azimuth Beamwidth		360˚	
3 dB Vertical Beamwidth		45˚	
Isolation		20 dB	
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 Flange, 4-40 Threaded Holes
Body Material	Aluminum
Radome Material	HDPE
Finish	Gold Plating
Weight	1.7 Oz
Size	0.86” (H) x 1.79” (Ø)
Outline	AO-A03-045

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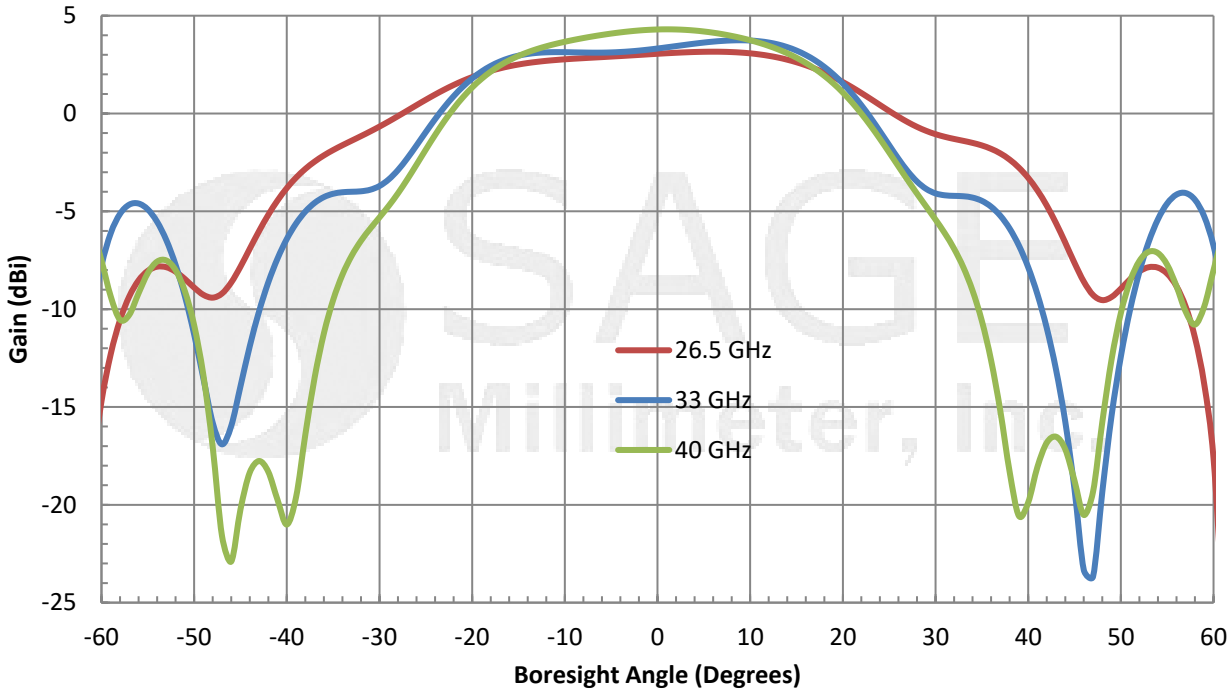
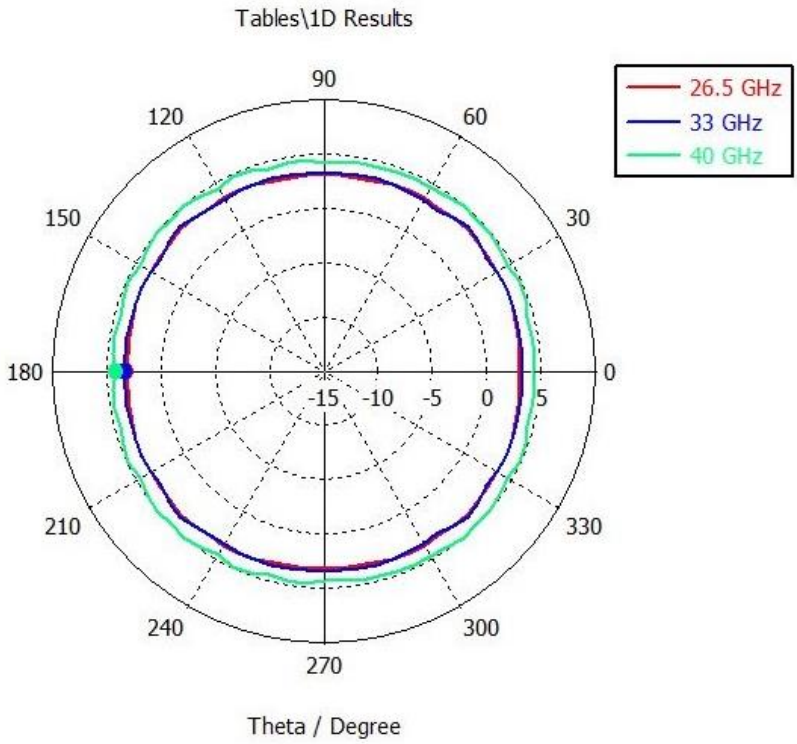
Ka-Band Omnidirectional Antenna, 45 Degree, 3 dBi Gain

Simulated E-Plane Antenna Patterns



Simulated H-Plane Antenna Patterns



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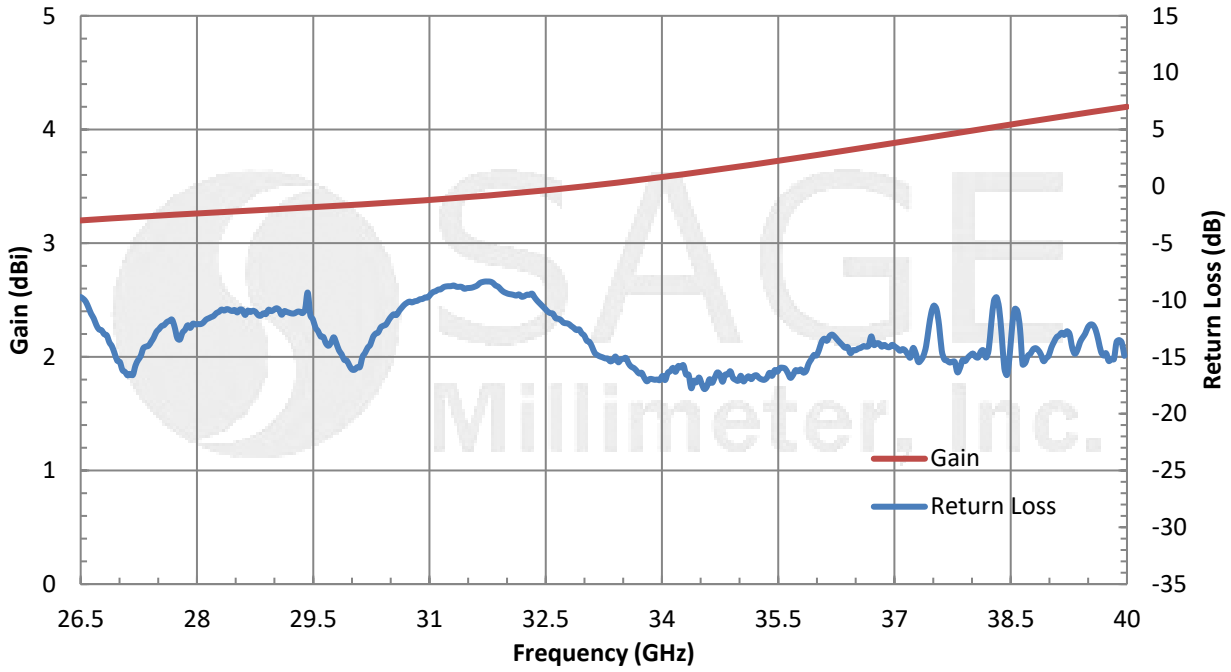
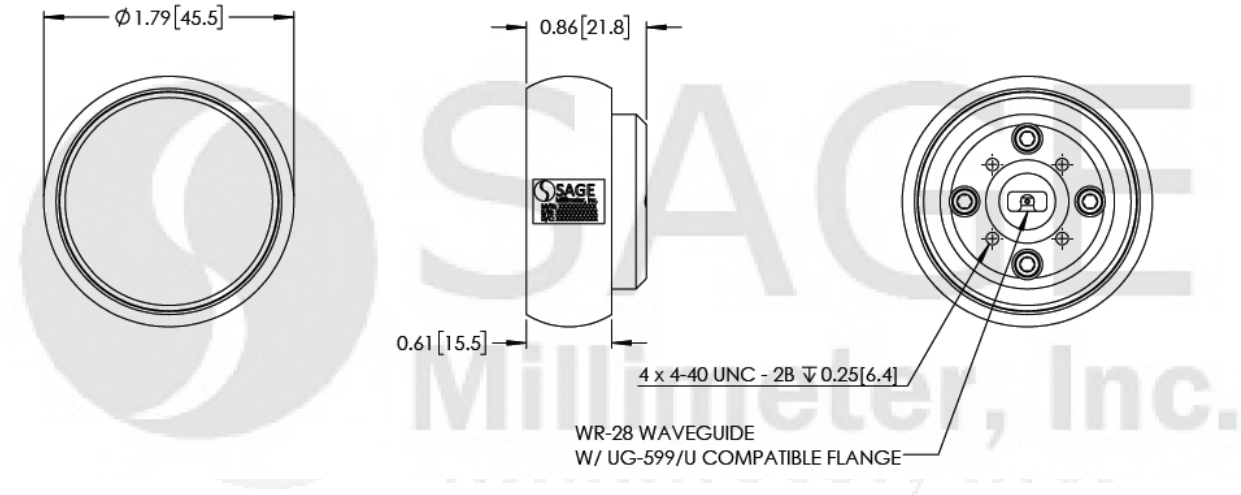
Typical Gain and Return Loss vs. Frequency



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.
- Eravant reserves the right to change the information presented without notice.

Caution:

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

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