

## SAR-2309-62-S2

### WR-62 Pyramidal Horn Antenna, 23 dBi Gain

**SAR-2309-62-S2** is a Ku-band pyramidal horn antenna that operates from 12.4 GHz to 18 GHz. The antenna offers 23 dBi nominal gain and a typical half power beamwidth of 10 degrees on the E-plane and 11 degrees on the H-plane. The input of this antenna is a WR-62 waveguide with a UG-419/U flange.



#### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	12.4 GHz		18 GHz
Gain		23 dBi	
3 dB Beamwidth, E-Plane		10°	
3 dB Beamwidth, H-Plane		11°	
Sidelobes, E-Plane		-14 dB	
Sidelobes, H-Plane		-30 dB	
Return Loss		27 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

#### Mechanical Specifications:

Item	Specification
Antenna Port	WR-62 Waveguide
Flange Type	UG-419/U Flange
Material	Aluminum
Finish Inner	Silver Plated
Finish Outer	Black Paint
Weight	1.17 lbs
Size	10.70" (L) X 6.04" (W) X 4.66" (H)
Outline	AR-62

#### ECCN

EAR99

#### FEATURES

- Rectangular Waveguide Interface
- Precisely Machined
- High Return Loss

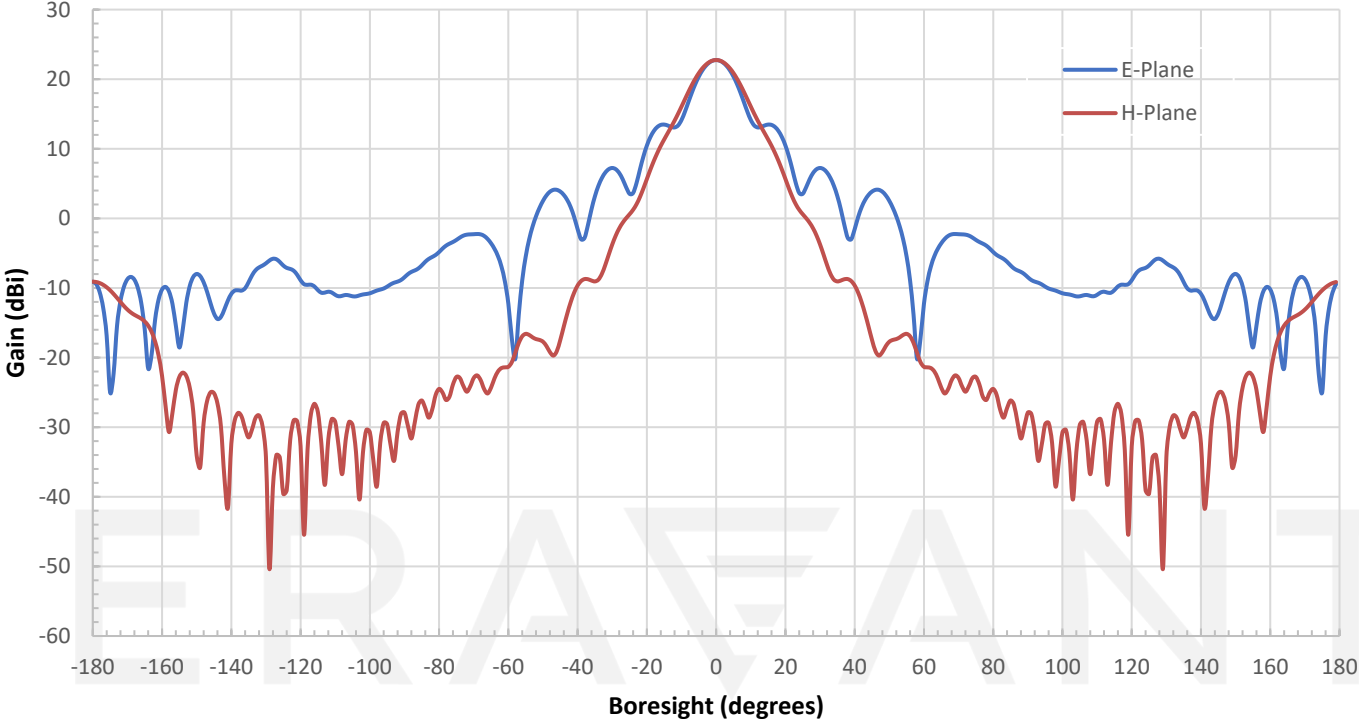
#### APPLICATIONS

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

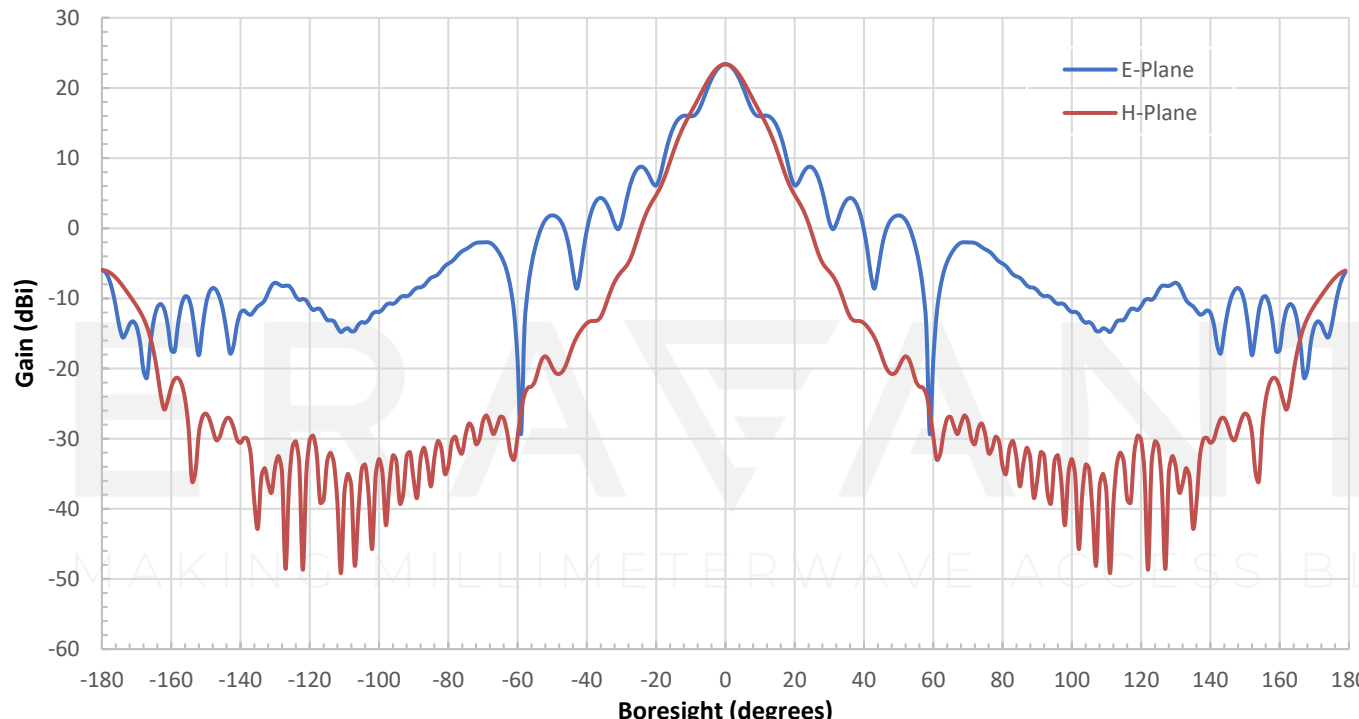
#### SUPPLEMENTAL DETAILS



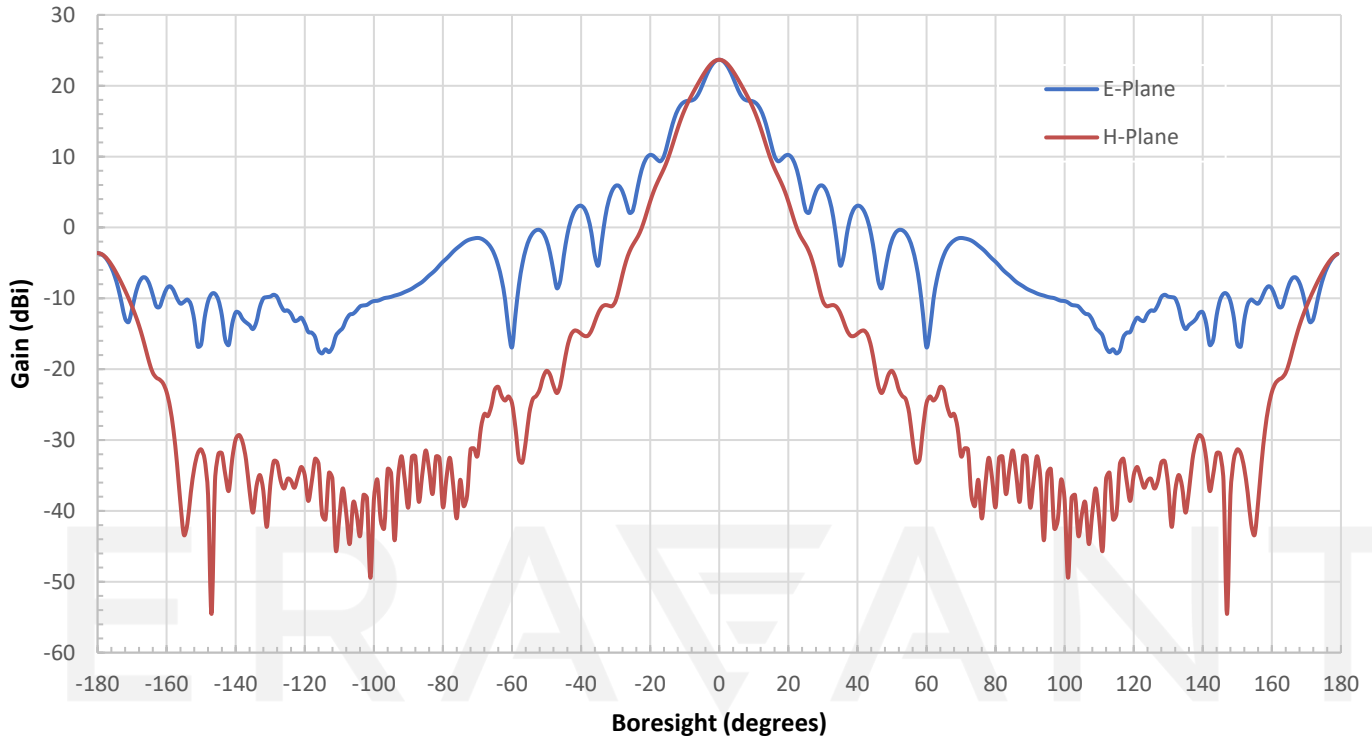
Simulated Antenna Patterns @ 12.4 GHz



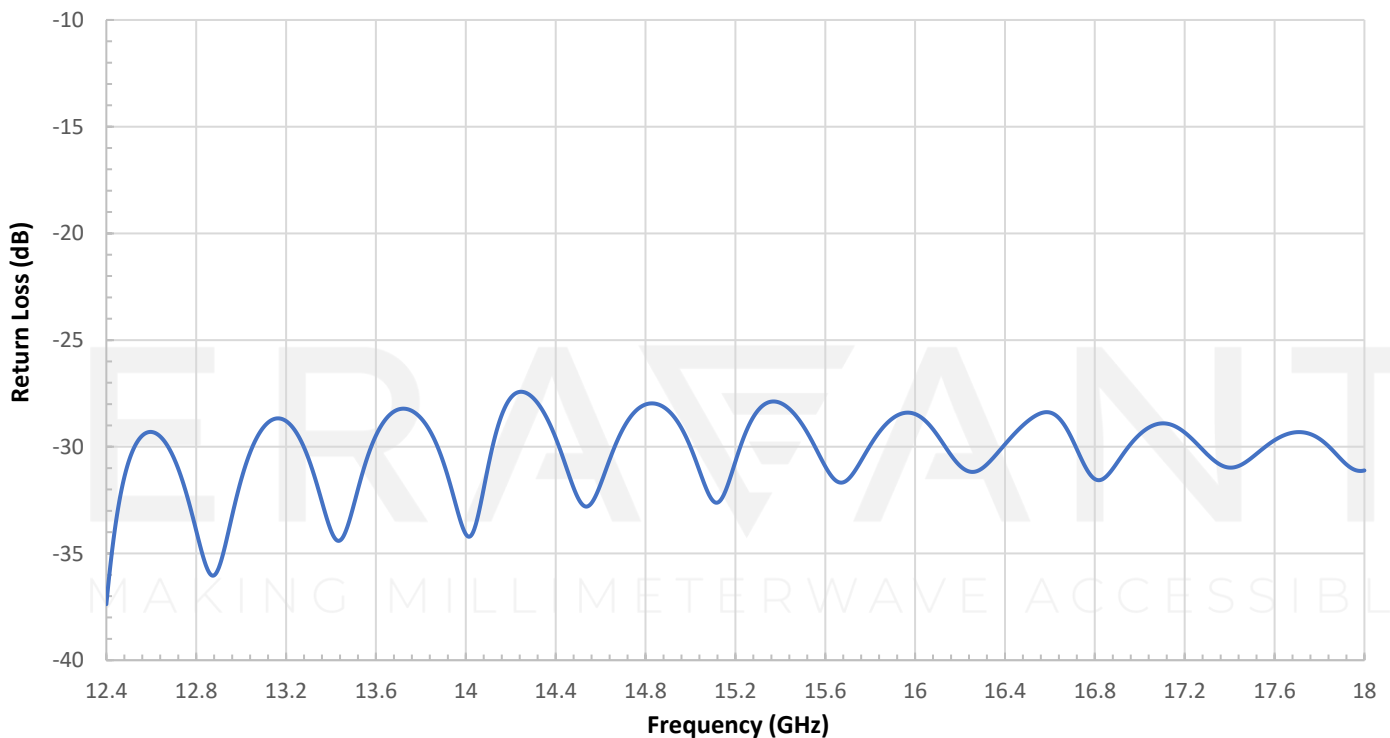
Simulated Antenna Patterns @ 15.2 GHz



### Simulated Antenna Patterns @ 18 GHz

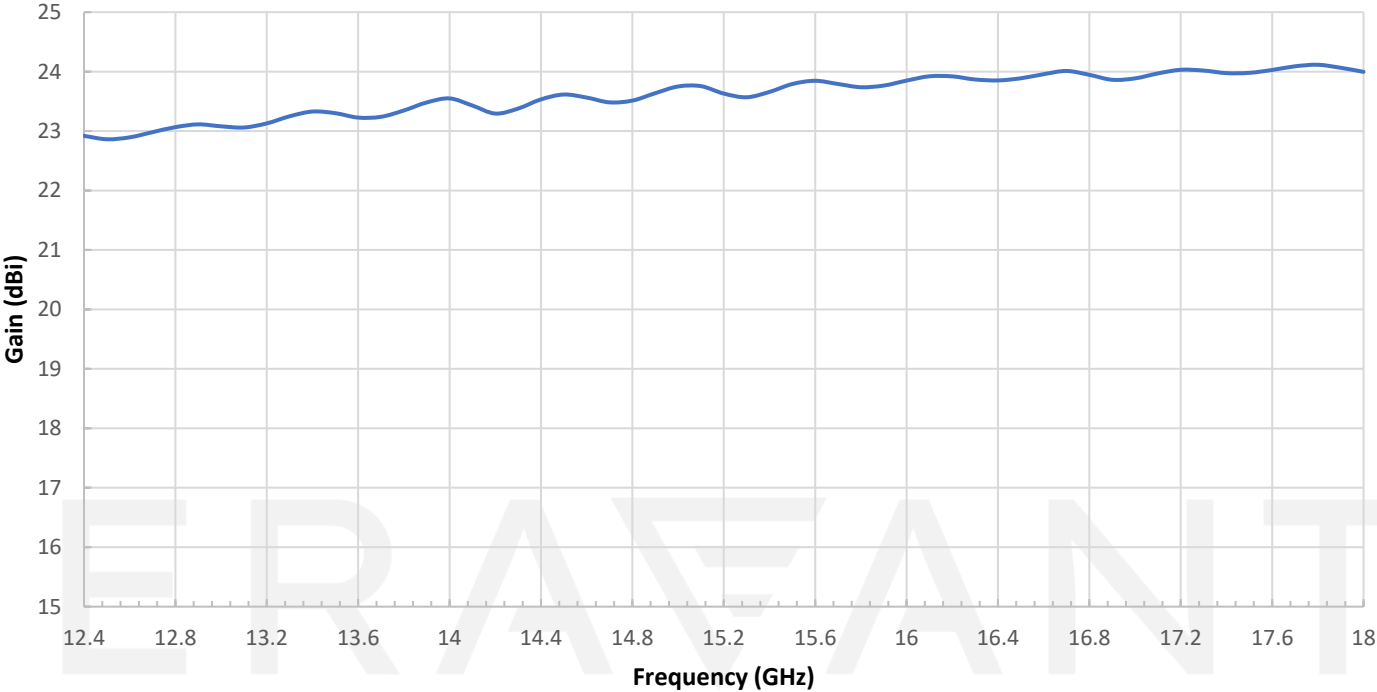


### Simulated Return Loss vs. Frequency



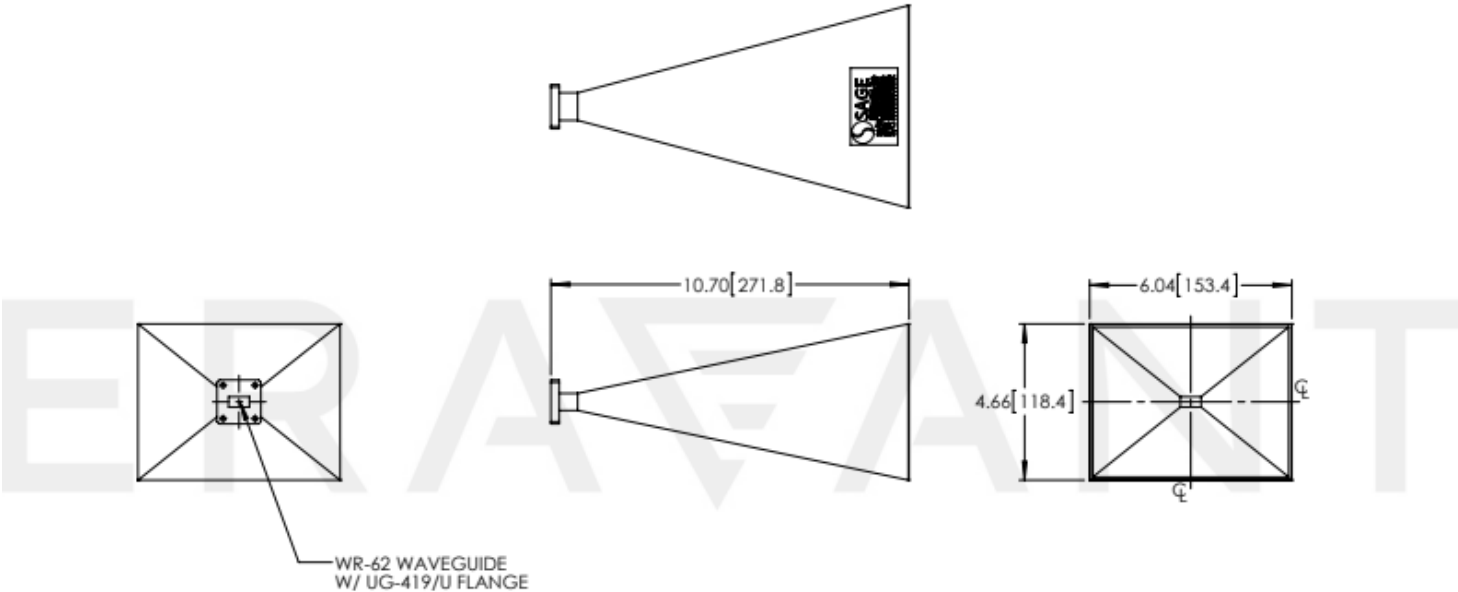
## SAR-2309-62-S2

### Simulated Gain vs. Frequency



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



**NOTE:**

- This antenna is a mature product. The reasons for only providing simulated data can be found in the following blog [here](#).
- 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.
- Any foreign objects in the antenna will cause performance degradation and possible device damage.

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