SAR-2309-62-S2

Rev 1.5

WR-62 Pyramidal Horn Antenna, 23 dBi Gain

Description:

Model 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.

Features:

- Rectangular Waveguide Interface
- Precisely Machined
- High Return Loss

Applications:

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	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

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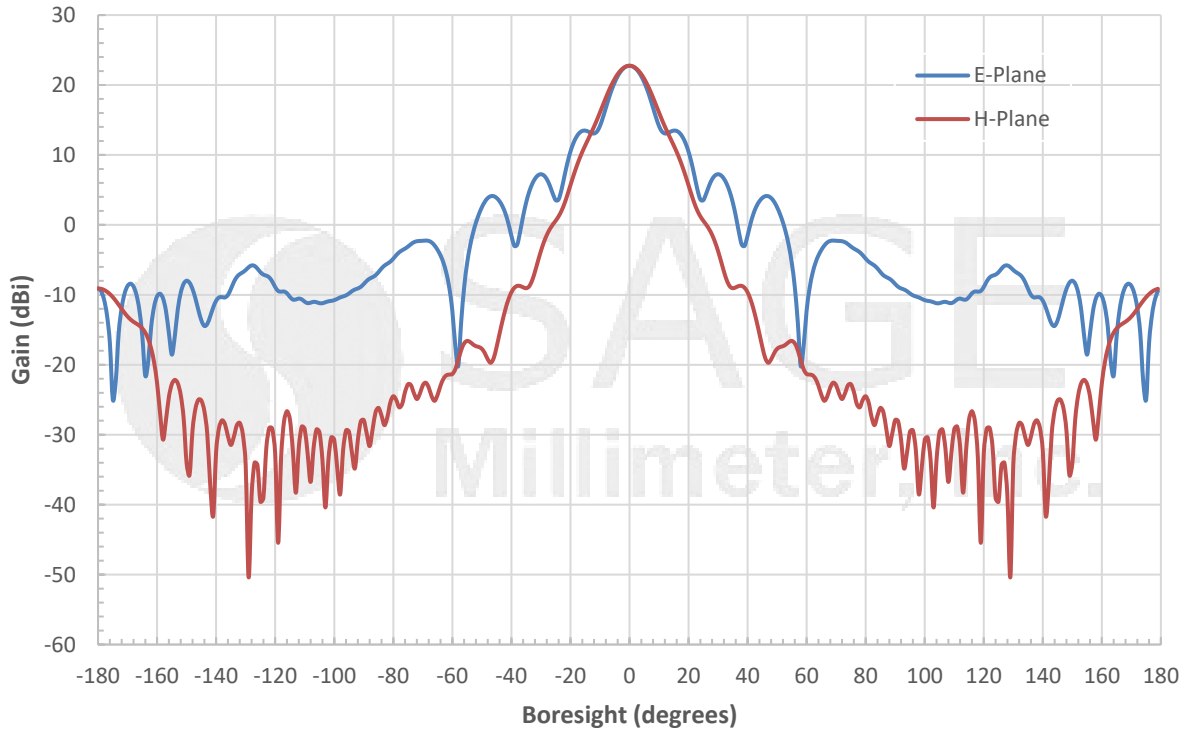
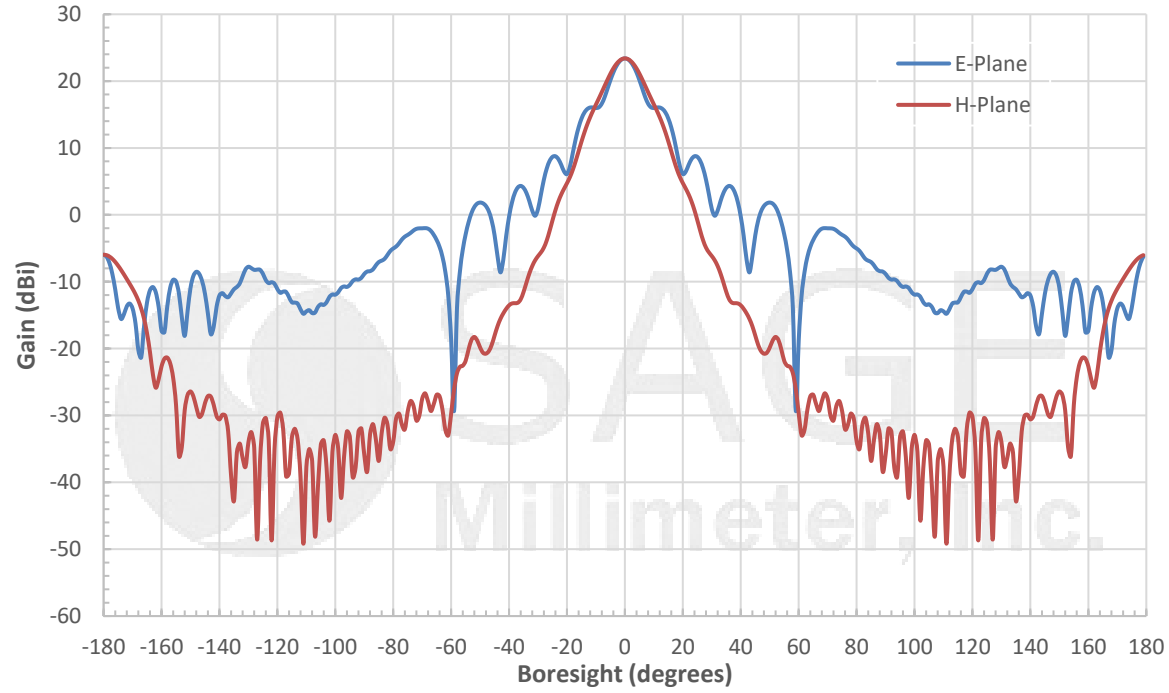
WR-62 Pyramidal Horn Antenna, 23 dBi Gain

Simulated Antenna Patterns @ 12.4 GHz



Simulated Antenna Patterns @ 15.2 GHz



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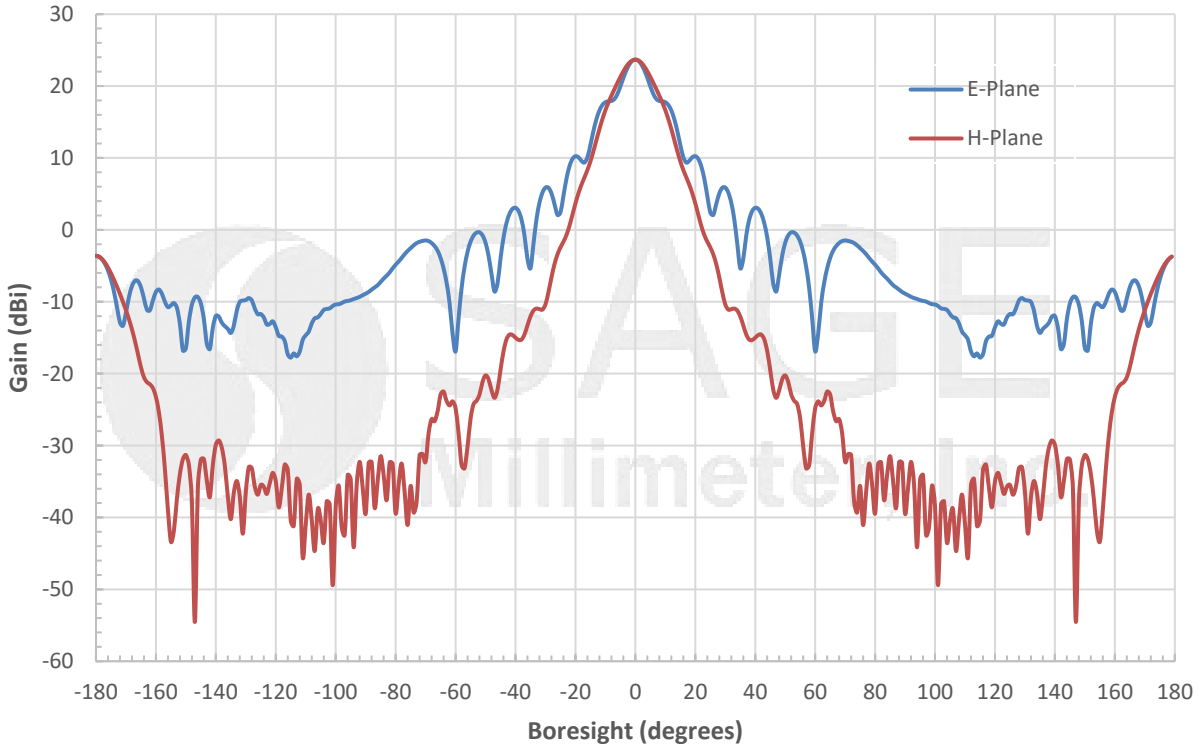
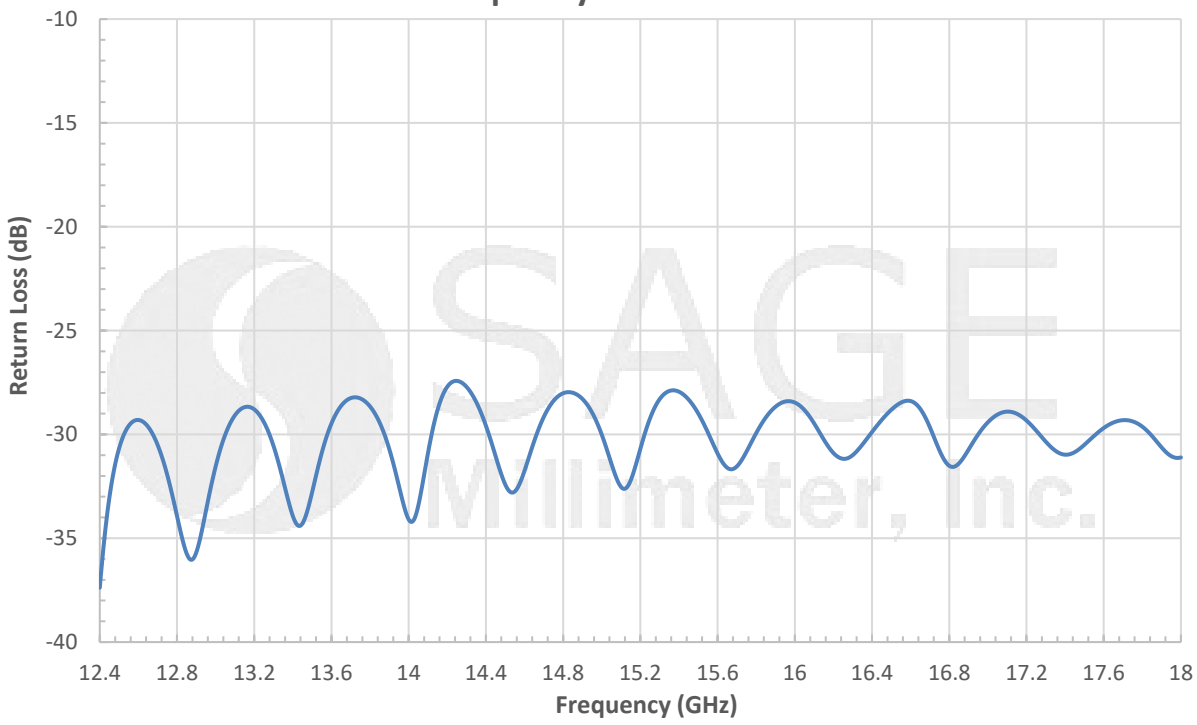
WR-62 Pyramidal Horn Antenna, 23 dBi Gain

Simulated Antenna Patterns @ 18 GHz



Simulated Return Loss vs. Frequency



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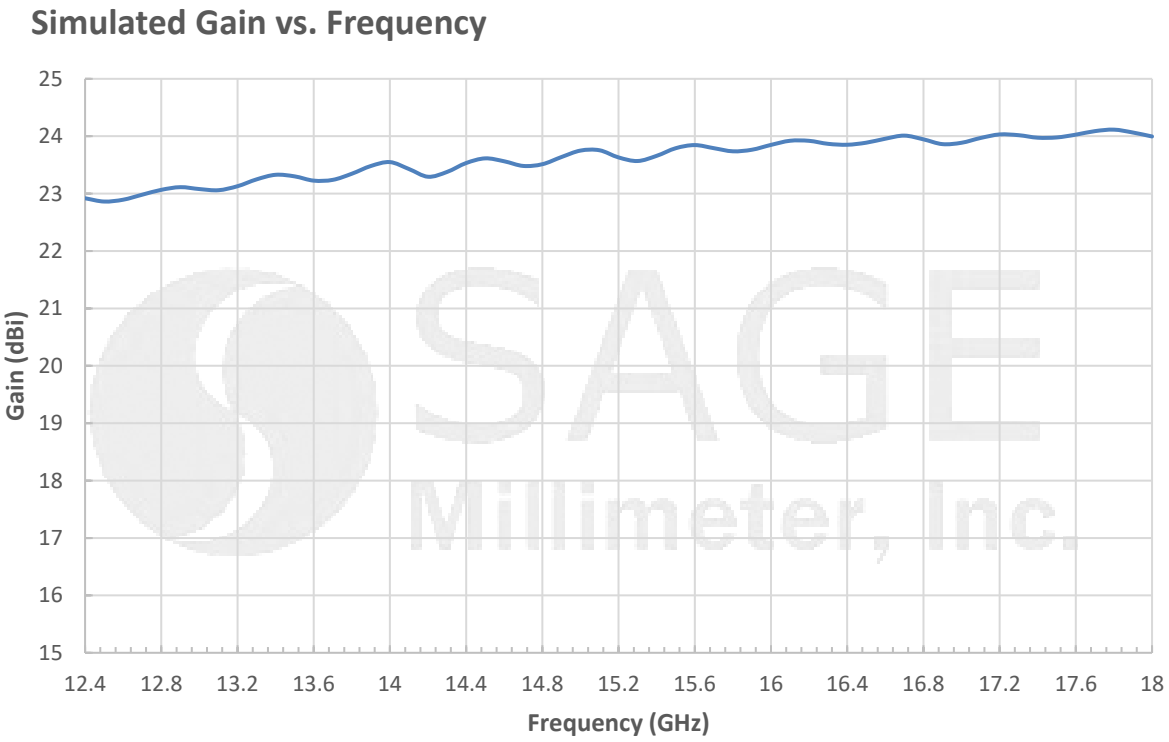
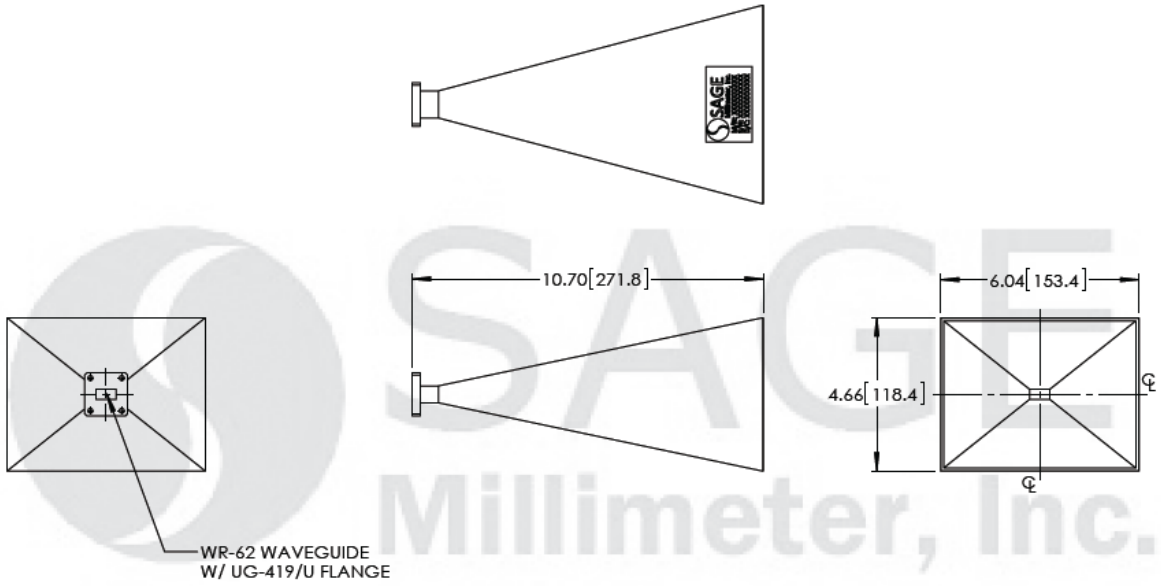


Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



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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:

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

SAGE Millimeter, Inc.

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