



WR-34 Pyramidal Horn Antenna, 25 dBi Gain

Description:

Model SAR-2507-34-S2 is a pyramidal horn antenna that operates from 22 GHz to 33 GHz. The antenna offers 25 dBi nominal gain and a typical half power beamwidth of 7 degrees on the E-plane and 9 degrees on the H-plane. The antenna supports linear polarized waveforms. The input of this antenna is a WR-34 waveguide with UG-1530/U flange.



Features:

- Rectangular Waveguide Interface
- Precisely Machined and Gold Plated
- Linear Polarization
- High Return Loss

Applications:

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	22 GHz		33 GHz
Gain		25 dBi	
Polarization		Linear	
3 dB Beamwidth, E-Plane		7°	
3 dB Beamwidth, H-Plane		9°	
Sidelobes, E-Plane		-14 dB	
Sidelobes, H-Plane		-30 dB	
Return Loss		23 dB	

Mechanical Specifications:

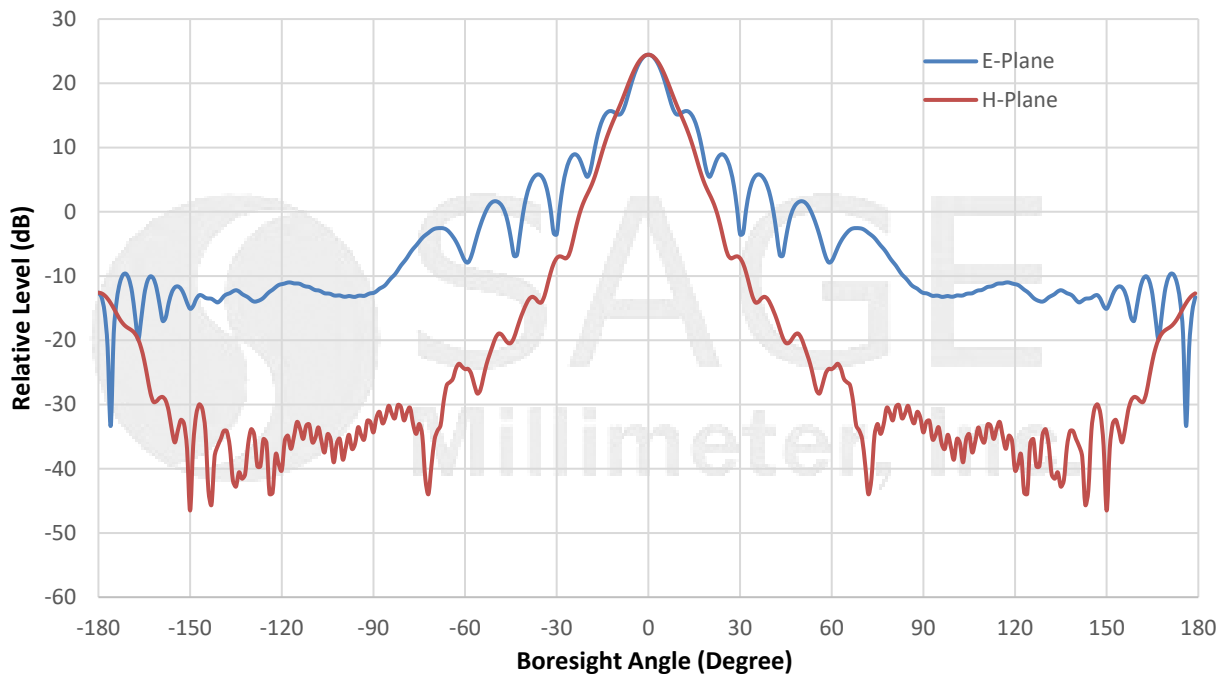
Item	Specification
Antenna Port	WR-34 Waveguide
Flange Type	UG-1530/U Flange
Size	8.19" (L) X 3.47" (W) X 2.78" (H)
Material	Aluminum
Finish	Gold Plated
Weight	2.8 Oz
Outline	AR-33



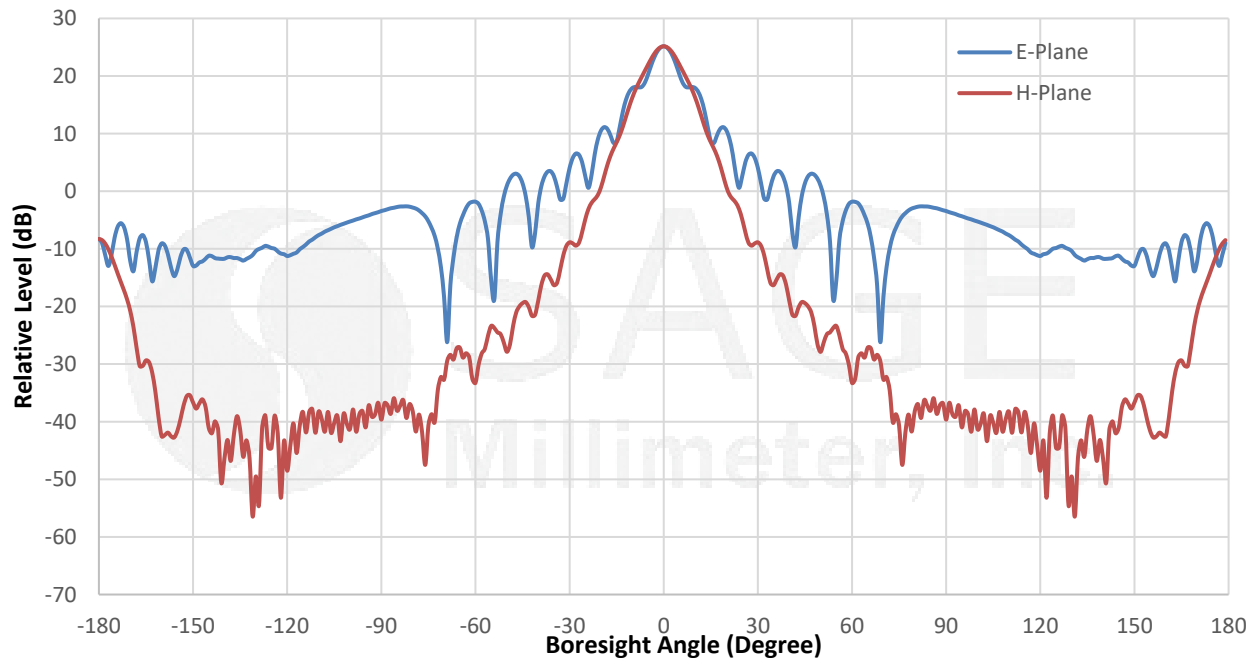


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Simulated Antenna Pattern @ 22 GHz



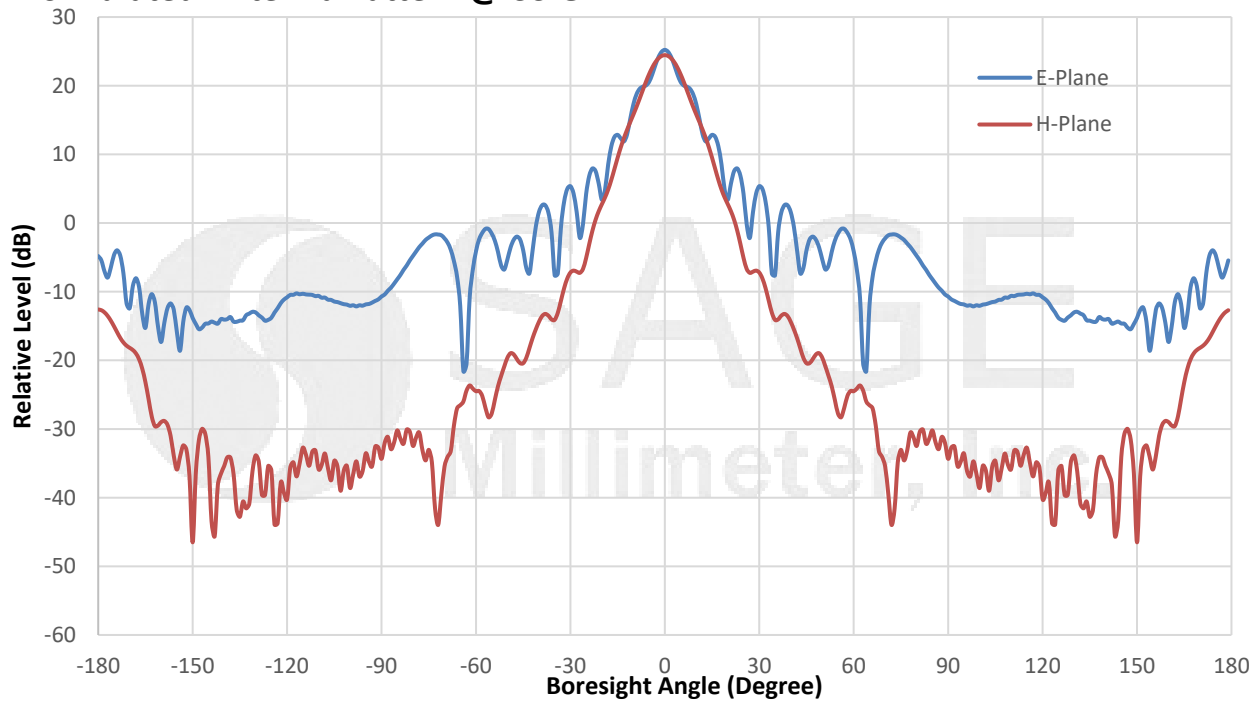
Simulated Antenna Pattern @ 27.5 GHz



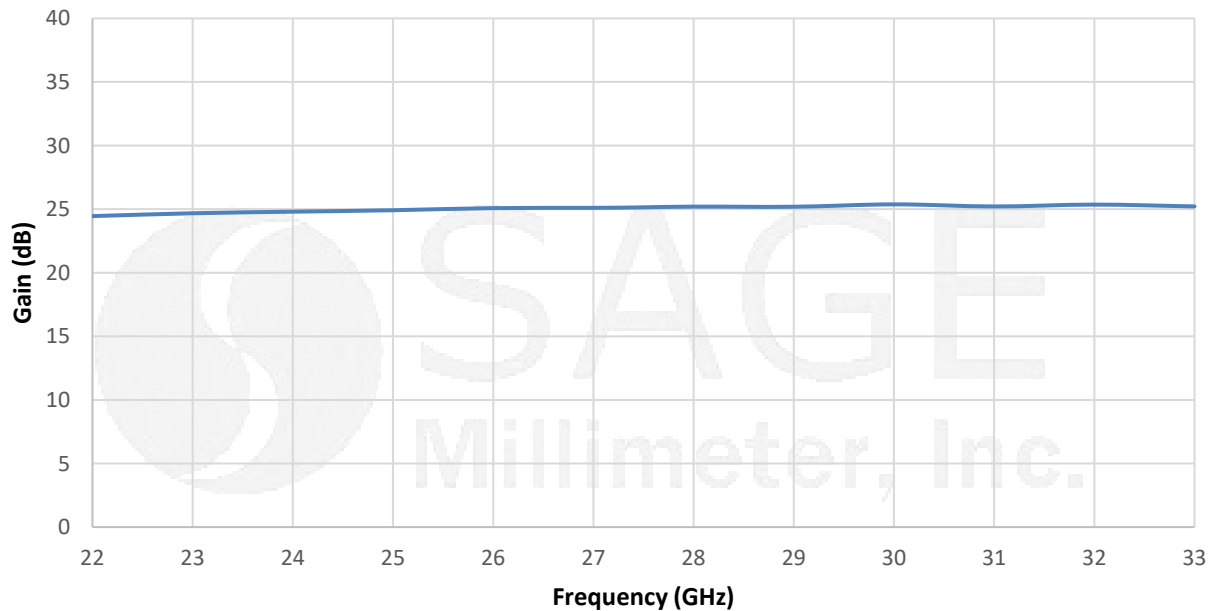


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Simulated Antenna Pattern @ 33 GHz



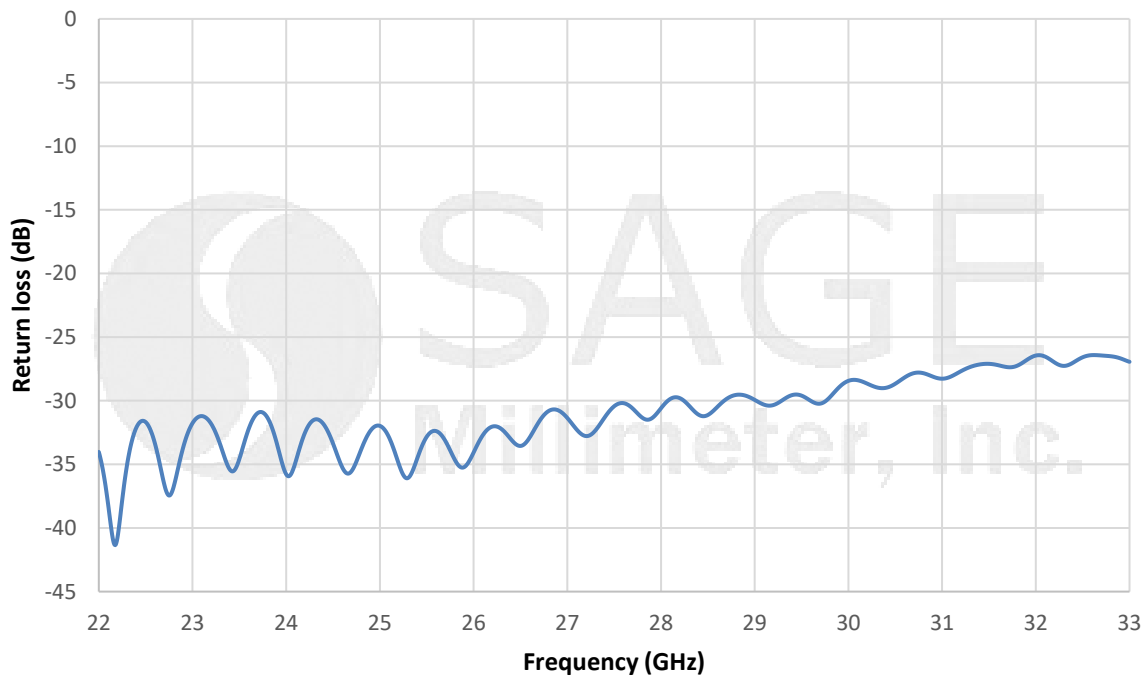
Simulated Gain vs. Frequency



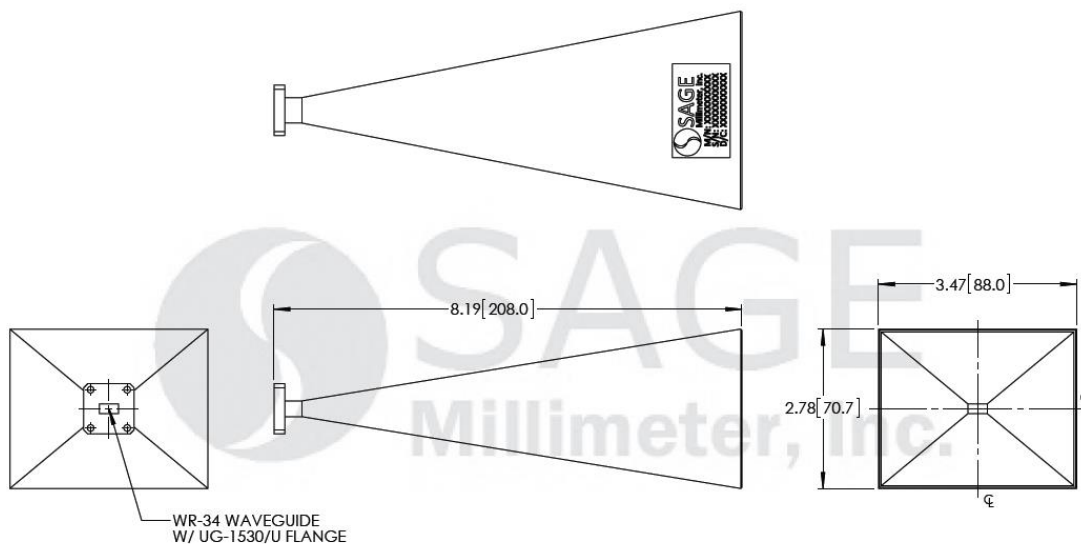


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Simulated Return Loss vs. Frequency



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.

