

SAR-2309-03-S2-WP

WR-03 Pyramidal Horn Antenna, 20 dBi Gain

SAR-2309-03-S2-WP is a WR-03 pyramidal horn antenna that operates from 220 GHz to 330 GHz. The antenna offers 20 dBi nominal gain and a typical half power beamwidth of 9 degrees on the E-plane and 11 degrees on the H-plane. The antenna supports linear polarized waveforms. The input of this antenna is a WR-03 waveguide with UG-387/U-M flange.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	220 GHz		330 GHz
Gain		20 dBi	
Polarization		Linear	
3 dB Beamwidth, E-Plane		9°	
3 dB Beamwidth, H-Plane		11°	
Sidelobes, E-Plane		-9 dB	
Sidelobes, H-Plane		-21 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Port	WR-03 Waveguide
Flange Type	UG-387/U-M Flange
Material	Brass
Finish	Gold Plated
Weight	0.4 Oz
Outline	AR-032

ECCN

EAR99

FEATURES

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

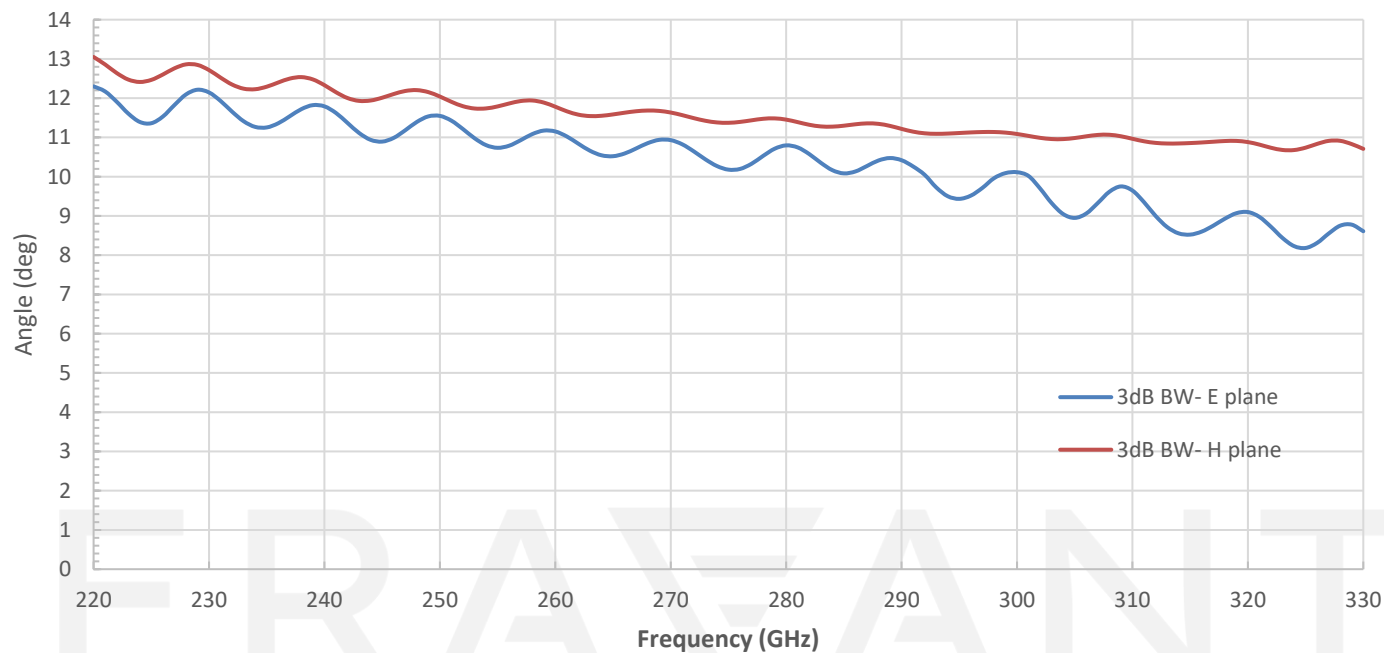
APPLICATIONS

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

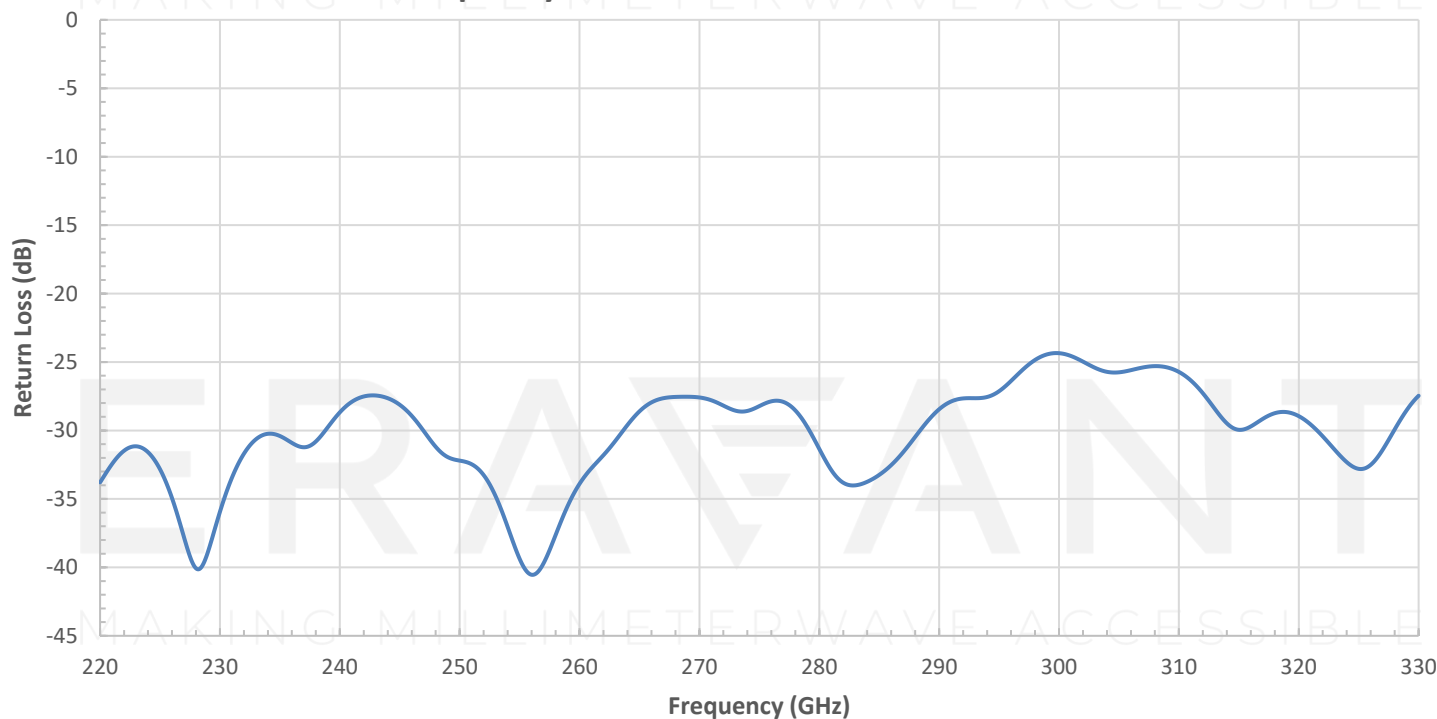
SUPPLEMENTAL DETAILS



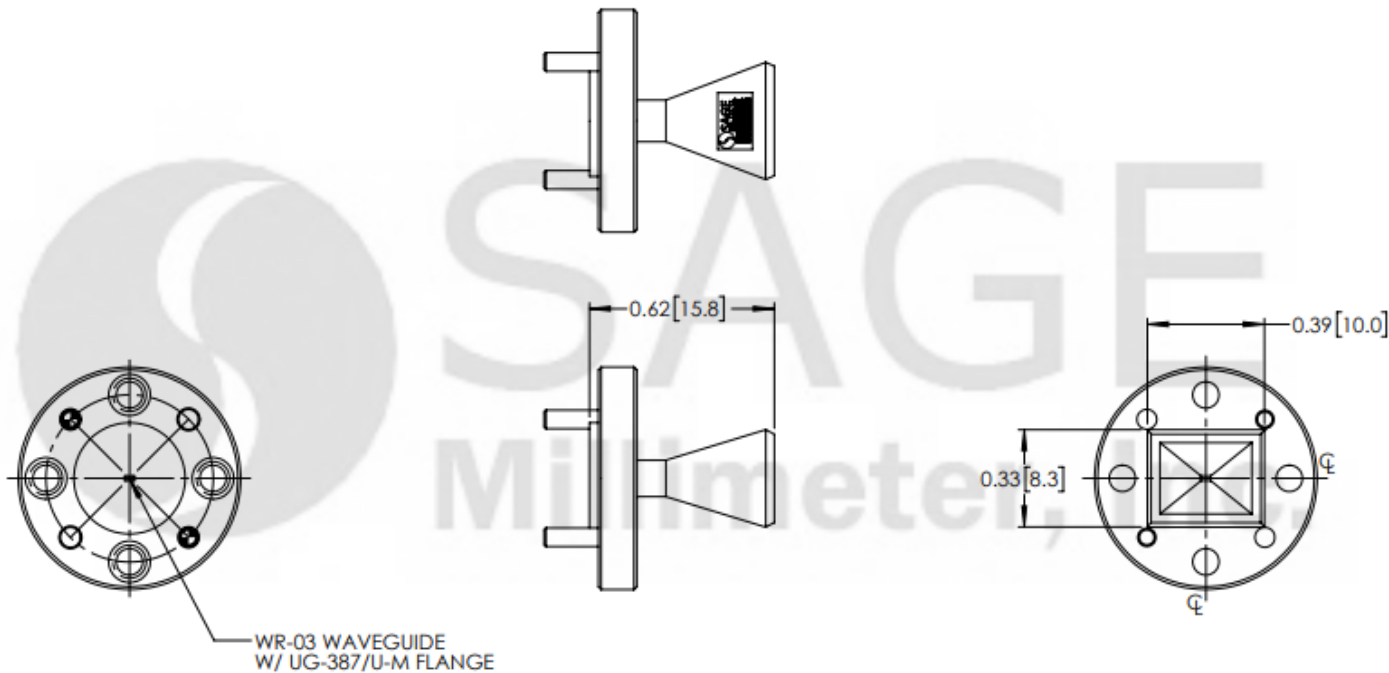
3dB Beamwidth vs Frequency



Simulated Return Loss Vs Frequency



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



NOTE:

- On condition that simulated test data is provided, actual measured data may slightly 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.