V Band Gaussian Optics Antenna, 58 to 68 GHz, 12"

SAG-5836834201-15-S1 is a 12" V-band Gaussian antenna that operates from 58 to 68 GHz. The Gaussian antenna delivers a 42 dBi nominal gain and 1.2 degree half power beamwidth. The antenna supports linear polarized waveforms and employs a corrugated feed horn to offer excellent aperture efficiency, high cross polarization rejections, and low sidelobe levels. This model is equipped with a standard WR-15 waveguide and UG-385/U flange as its input port. By removing the mode transition, Eravant model number SWT-15141-SB, the input port becomes a 0.141" diameter circular waveguide, which can support both linear and circular polarized waveforms.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	58 GHz	63 GHz	68 GHz
Gain		42 dBi	
3 dB Beamwidth		1.2˚	
Side Lobes		-25 dB	
Polarization		Linear	
Return Loss		15 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

*Note: Can operate from 54 to 75 GHz if the dominant mode is maintained

Mechanical Specifications:

Item	Specification
Antenna Port	WR-15 Waveguide with UG-385/U Flange
Lens Diameter	12.0"
Material	Aluminum
Finish	Black Anodized
Weight	19.5 lb.
Outline	AG-RV42

ECCN

EAR99

FEATURES

- Center Fed
- Low Side Lobes
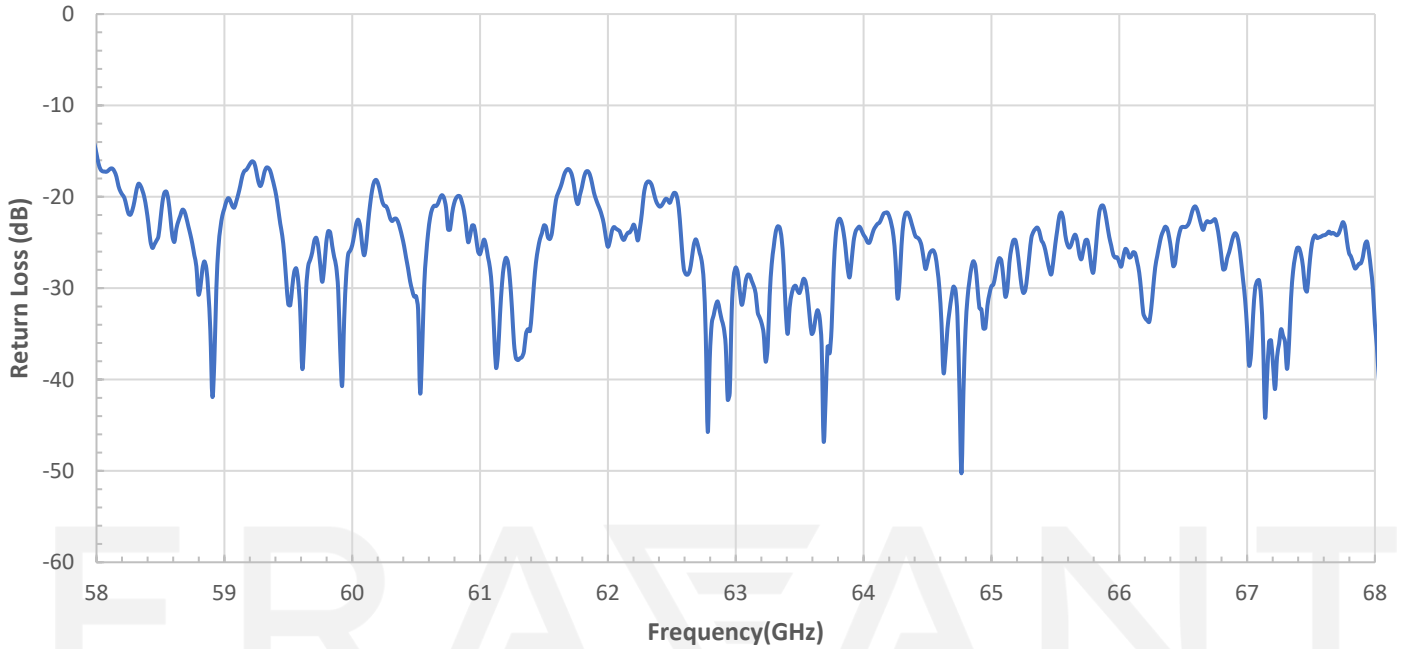- Low Cross Polarization

APPLICATIONS
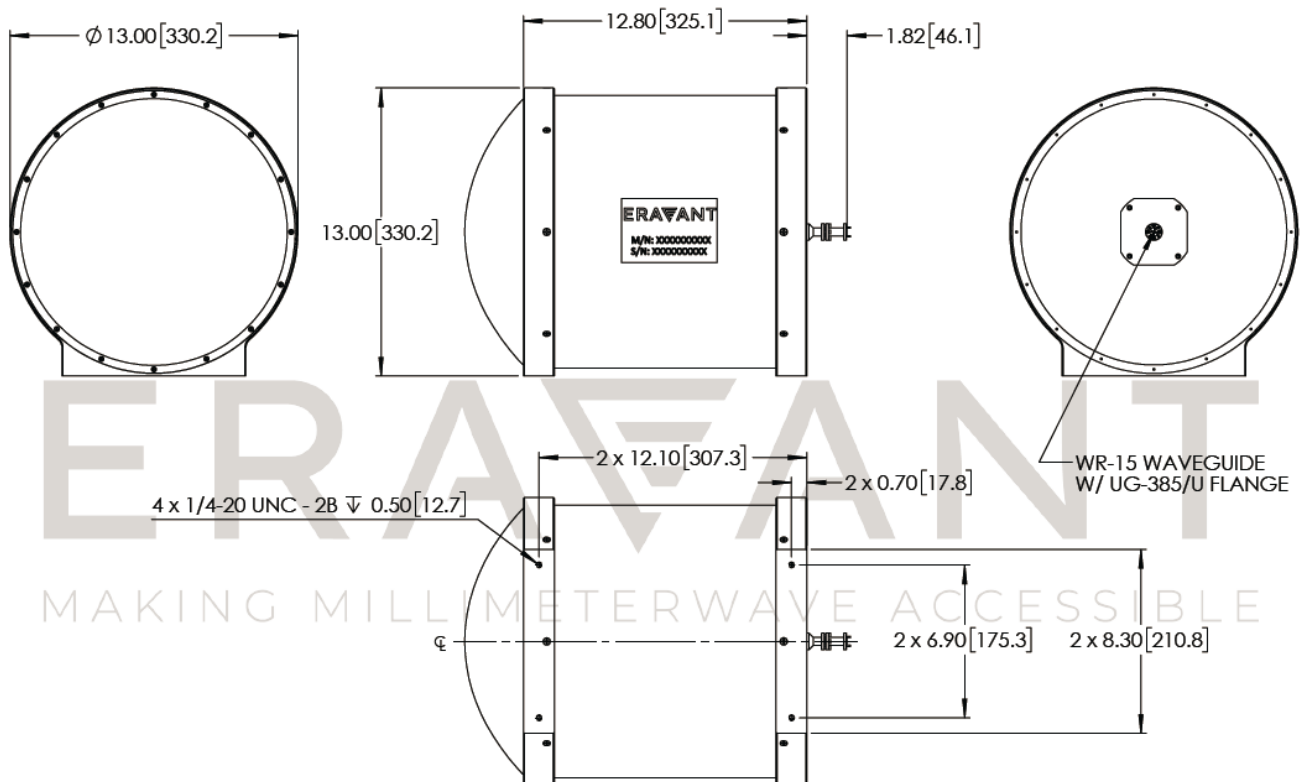
- Radar Systems
- Communication Systems
- Plasma Systems

SUPPLEMENTAL DETAILS

ERAVANT

Measured Return Loss vs Frequency

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

NOTE:
- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- 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.