

# V-Band Focusing Lens Horn Antenna

## 50 to 75 GHz, WR15

### DESCRIPTION

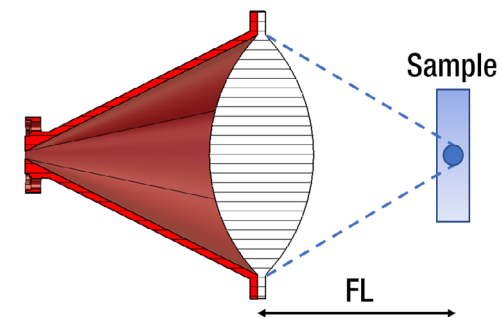
Anteral's Focusing Lens Horn Antennas are conical horn antennas with a **double-convex** Teflon (PTFE) lens added in the aperture, in order to apply phase correction and achieve superior focusing performance with minimum size.

The FLHA-F-WR15 model operates at the V-band between 50 and 75 GHz with a focal length of 84 mm and a diameter beam focus of 8 mm.

### APPLICATIONS

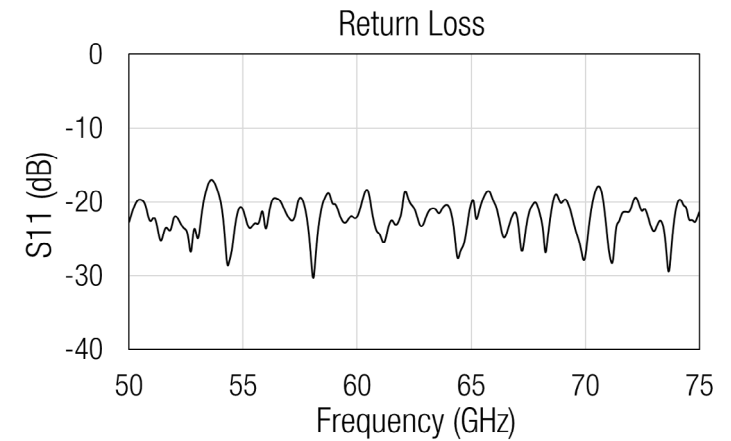
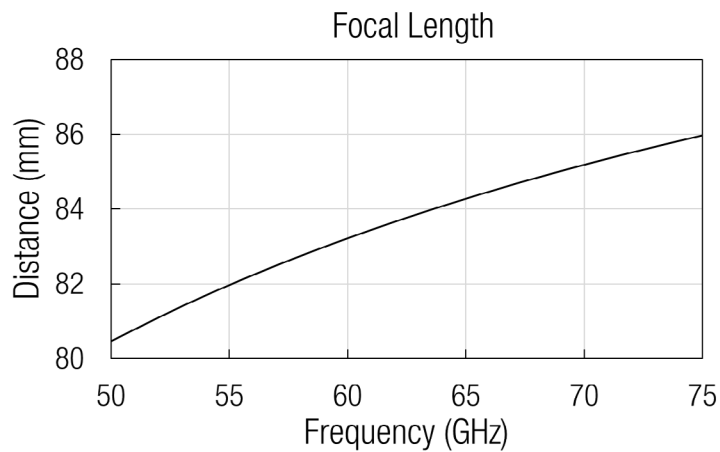
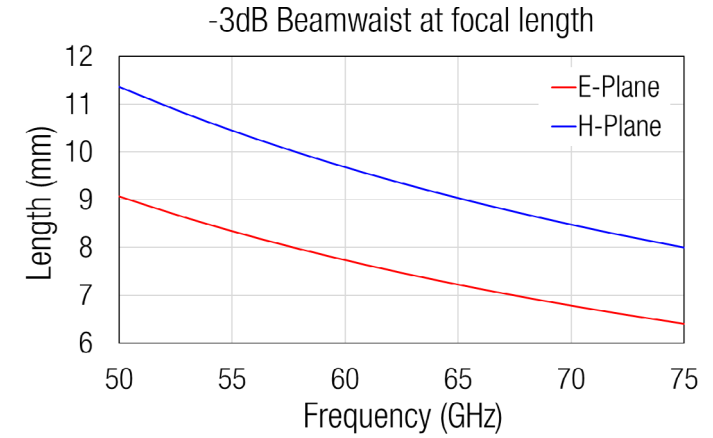
Focusing Lens Horn Antennas are especially useful when focusing beam is required with short focal distances. Therefore, these antennas are widely used in testing and material characterization.

Anteral also offers their **Lens Horn Antennas** with plano-convex lenses to exhibit high gain (>30 dB) in a very compact size which makes them optimal for radar applications, communication links or meteorological systems among others.



### ELECTRICAL SPECIFICATIONS

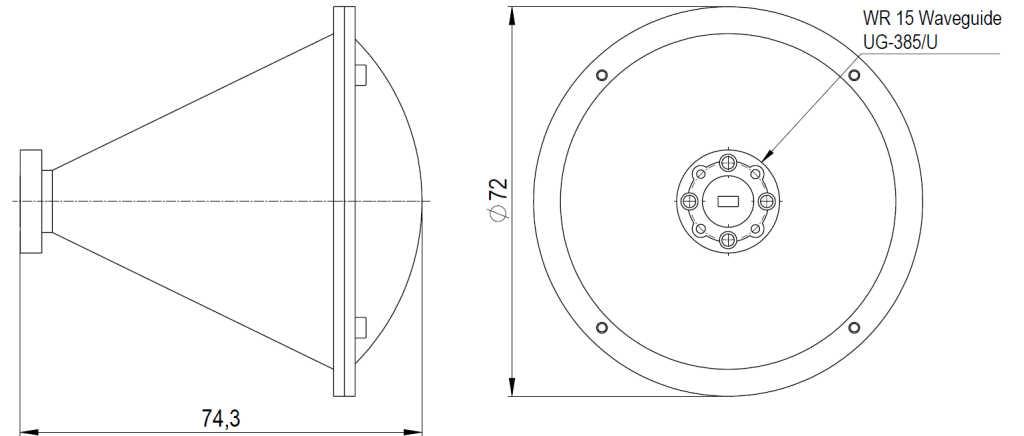
Parameter	Minimum	Typical	Maximum
Frequency	50 GHz	62.5 GHz	75 GHz
Focal Length	80.5 mm	83.8 mm	86.0 mm
3 dB Beamwaist, E-plane		7.5 mm	
3 dB Beamwaist, H-plane		9.3 mm	
S11		-20 dB	-17 dB



### MECHANICAL SPECIFICATIONS

Parameter	Description
Antenna Port*	WR-15 (3.759 mm x 1.880 mm)
Flange	UG-385/U
Total length	74.3 mm
Total diameter	72 mm
Total weight	150 g
Horn Material	Aluminum
Lens Material	PTFE
External Color	Ruby Red

### MECHANICAL OUTLINE



### Additional notes

Focal length and beamwaist data are measured from a sample. Actual values could vary slightly.  
Return loss data is measured from a sample. Actual values could vary slightly.  
The return loss performance of all items is checked before delivery.