

## WR-159 Standard Gain Horn with 10 dBi gain, SMA Female Connector, Integrated Cage-Style Mount

### FM1WAN159-10SF



#### Features

- 4.9 GHz to 7.05 GHz
- WR-159 Waveguide Band
- 10 dBi Nominal Gain
- SMA Female Connector
- Ruggedized Aluminum Cage-Style Mount

#### Applications

- Antenna Measurements
- Wireless Communication
- Laboratory Use
- Microwave Radio Systems
- Radome Testing
- Automotive Antenna Test Solutions
- Radar Cross Section
- Satellite Antenna Testing

#### Description

The FM1WAN159-10SF standard gain horn antenna (also known as waveguide horn) from Fairview Microwave is part of our comprehensive selection of waveguide antennas. The cage-style mount is a ruggedized aluminum mounting solution that integrates with test and measurement positioning systems, ensuring precise alignment and protection of the antenna. This standard gain horn is mated with a WR-159 to SMA Female waveguide to coaxial adapter and operates from 4.9 GHz to 7.05 GHz.

Our FM1WAN159-10SF standard gain horn antenna with integrated cage-style mount has a nominal gain of 10 dBi with a Horizontal and Vertical HPBW (Half Power Beam Width) of 52.1 dB and 51.6 dB respectively. Fairview Microwave's SMA Female to WR-159 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and connectorized input.

Waveguide antennas, such as the FM1WAN159-10SF are used in a wide variety of applications due to the high-power handling capability, low loss, high directivity, and near constant electrical performance. Our WR-159 waveguide antennas with SMA Female interface is part of over 40,000 RF, microwave and millimeter wave components from Fairview Microwave available worldwide and ship same day.

#### Configuration

Design	WR-159
Coaxial Interface	SMA Female

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	4.9		7.05	GHz
Gain		10		
Horizontal Half Power Beam Width		52.1		Degrees
Vertical Half Power Beam Width		51.6		Degrees
<b>Waveguide to Coaxial Adapter</b>				
VSWR			1.3:1	

#### Mechanical Specifications

<b>Size</b>	
Length	7.52 in [191.01 mm]
Width	4.33 in [109.98 mm]
Height	4.24 in [107.7 mm]
Weight	2.4 lbs [1.09 kg]

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**FM1WAN159-10SF**



**RF Connector**

Type SMA Female

**Waveguide Interface**

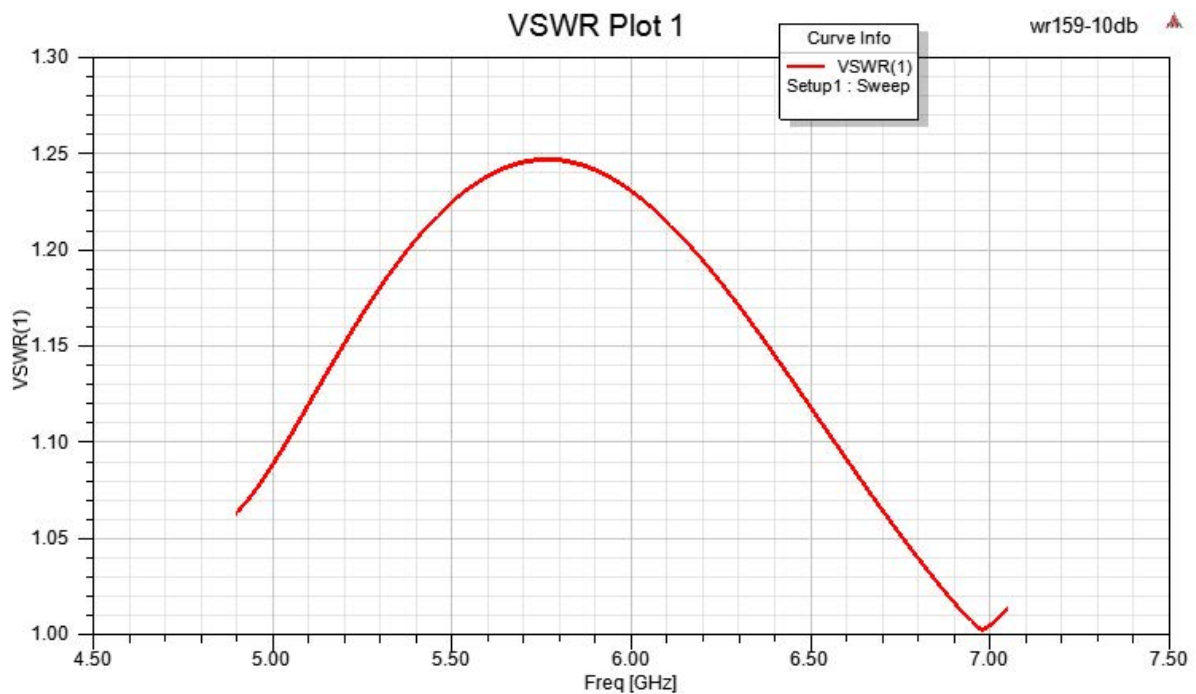
Waveguide Size WR-159

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

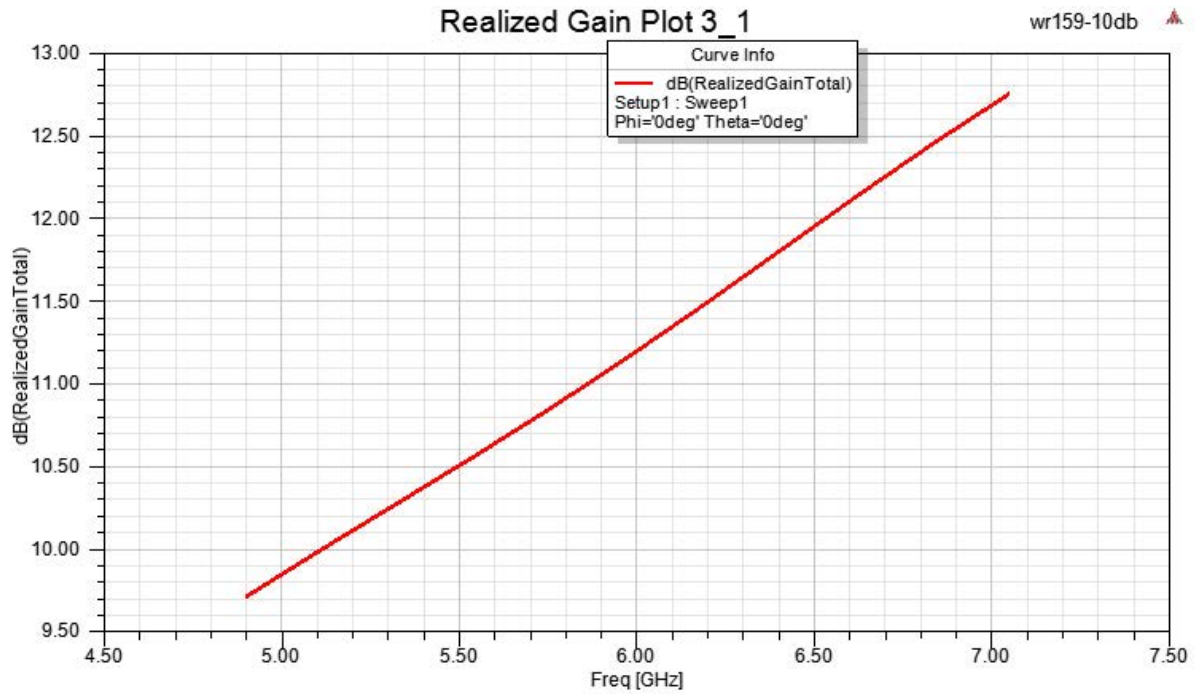
**Typical Performance Data**



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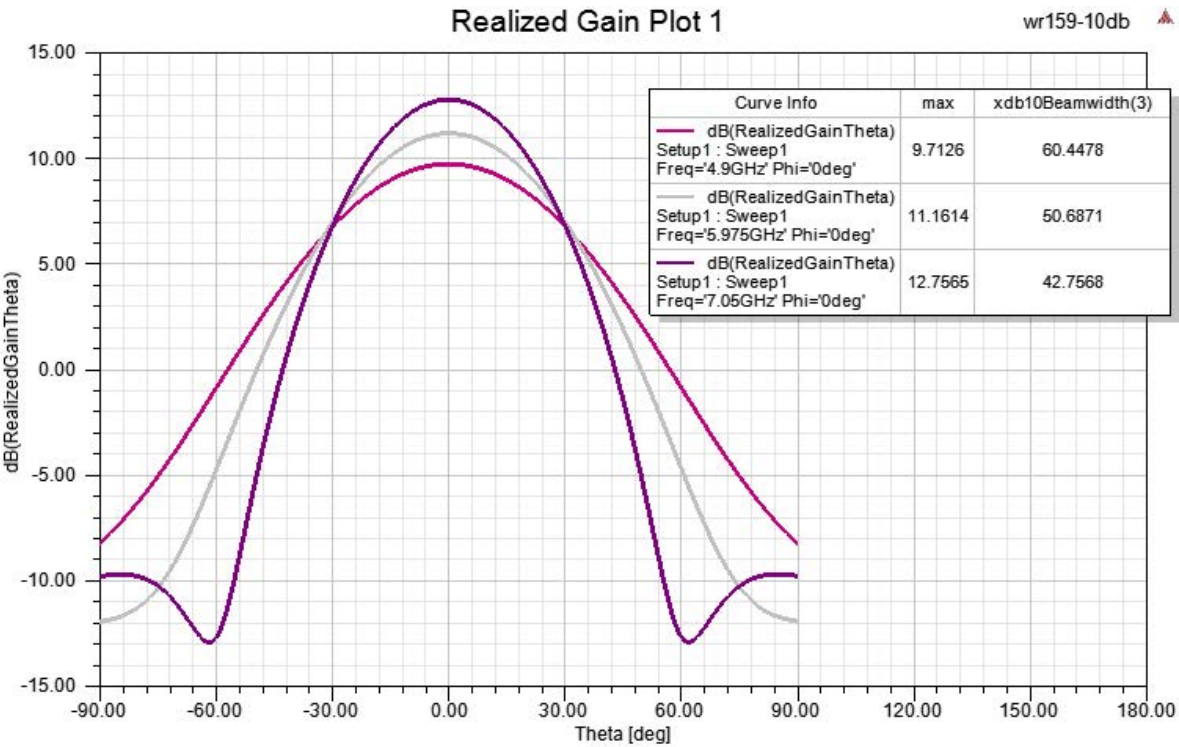


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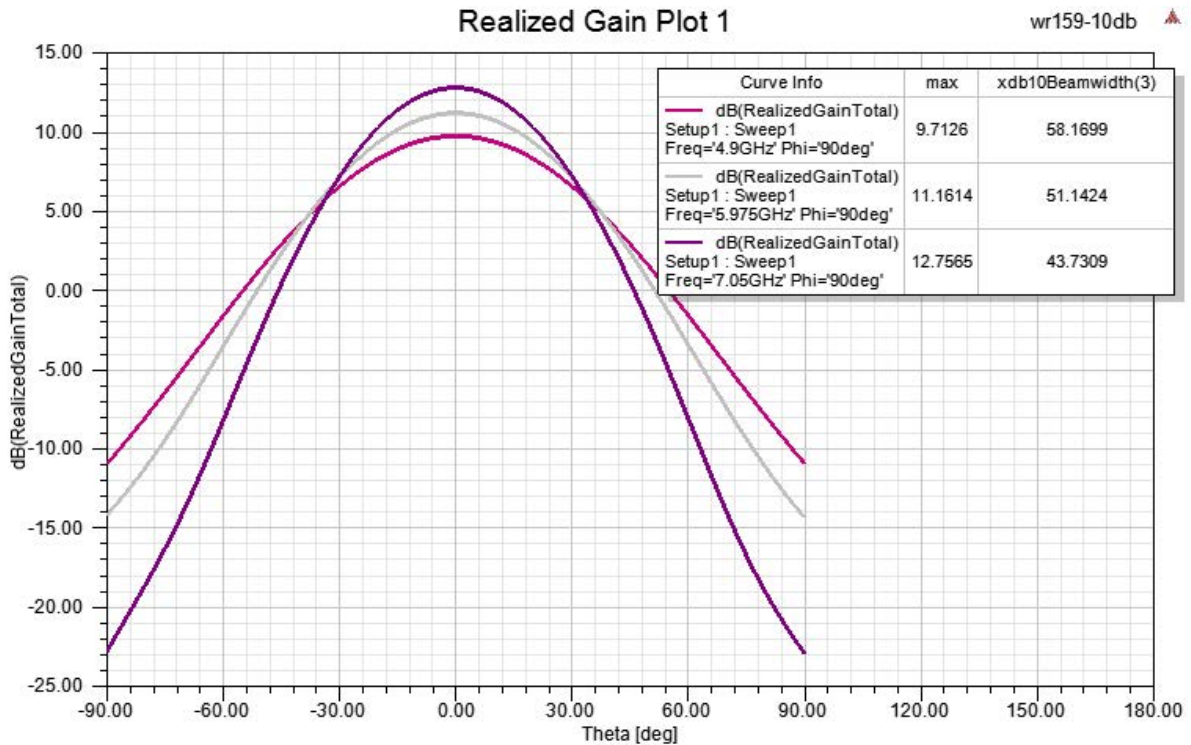
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**FM1WAN159-10SF**



WR-159 Standard Gain Horn with 10 dBi gain, SMA Female Connector, Integrated Cage-Style Mount from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-159 Standard Gain Horn with 10 dBi gain, SMA Female Connector, Integrated Cage-Style Mount FM1WAN159-10SF](#)

URL: <https://www.fairviewmicrowave.com/wr-159-standard-gain-horn-10-dbi-sma-fm1wan159-10sf-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

FM1WAN159-10SF CAD Drawing

WR-159 Standard Gain Horn with 10 dBi gain, SMA Female Connector, Integrated Cage-Style Mount

