

WR-159 Waveguide Antenna With 20 dBi Gain and 4.9 GHz to 7.05 GHz

The FMWAN159-20 standard gain horn antenna (also known as waveguide horn) from Fairview Microwave has a nominal gain of 20 dBi. The Fairview Microwave 20 dBi WR-159 horn antenna operates from 4.9 GHz to 7.05 GHz (C Band). This WR-159 standard gain horn has a CMR-159 type flange. Waveguide standard gain horn antennas are used in a wide variety of applications due to their high power handling capability, low loss, high directivity, and near constant electrical performance. These units are Aluminum and Powder coated for increased resistance to weather and corrosion with a Horizontal and Vertical Beam Width of 17.5 and 17.3 degrees respectively. Fairview Microwave's WR-159 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and rectangular input. C Band standard gain horn antenna can ship the same day to anywhere in the world. The WR-159 FMWAN159-20 waveguide horn is part of over 40,000 RF, microwave and millimeter wave components available from Fairview Microwave.

Configuration

Design	WR-159
Polarization	Linear

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	4.9		7.05	GHz
Nominal Gain		20		dB
Horizontal 3dB Beam Width		17.5		Deg
Vertical 3dB Beam Width		17.3		Deg
VSWR		1.3:1		

Mechanical Specifications

Size	
Length	16.142 in [410.01 mm]
Width/Diameter	7.775 in [197.49 mm]
Height	5.769 in [146.53 mm]
Weight	2.25 lbs [1.02 kg]

Waveguide Interface

Waveguide Size	WR-159
Flange Type	CMR-159
Body Material and Plating	Aluminum, Gray



Features:

- WR-159 Rectangular Waveguide Interface
- 4.9 GHz to 7.05 GHz
- 20 dBi Nominal Gain
- CMR-159 Cover Flange
- C Band

Applications:

- Antenna Measurements
- Wireless Communication
- Laboratory Use
- Microwave Radio Systems

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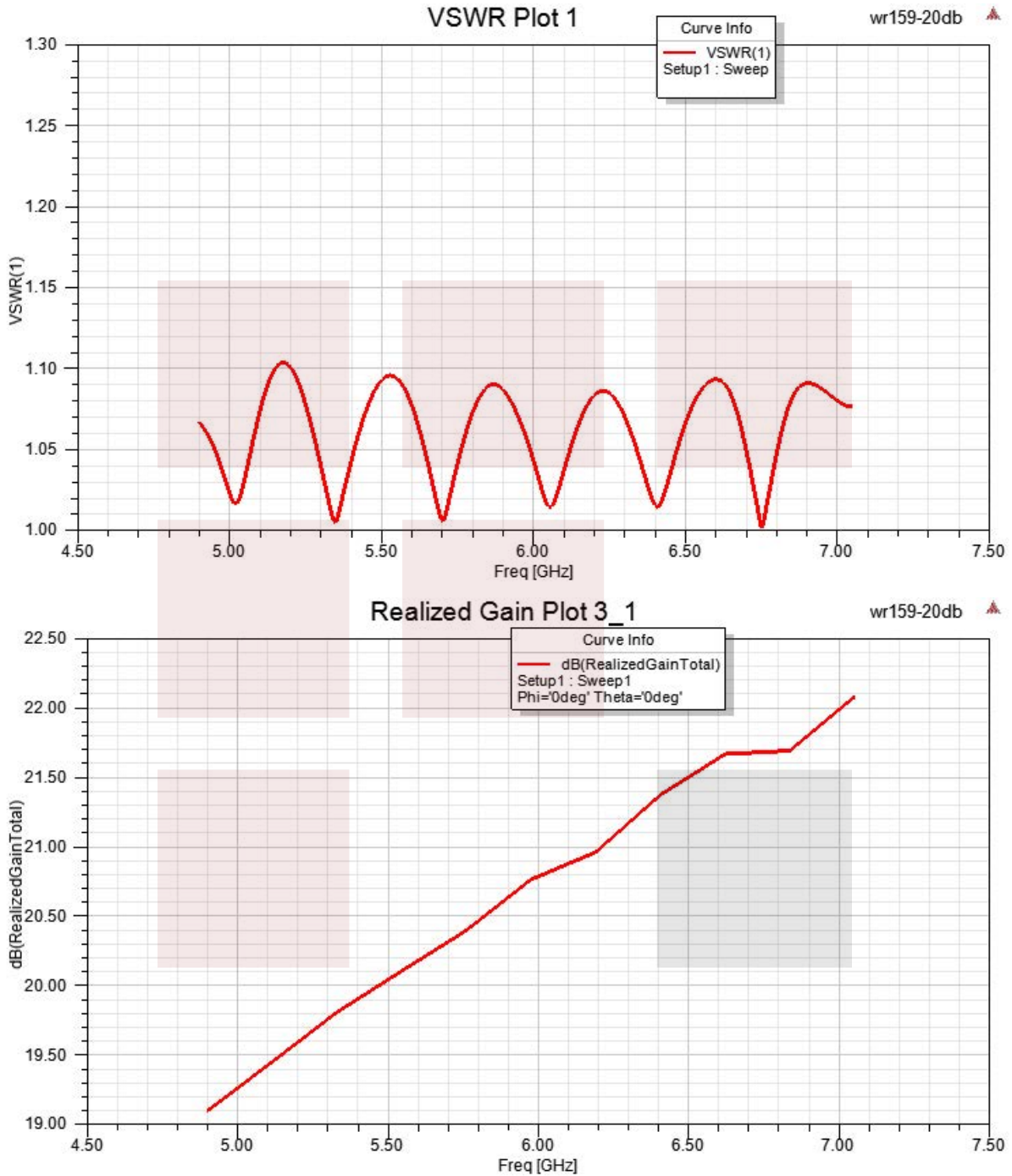
Compliance Certifications (see [product page](#) for current document)

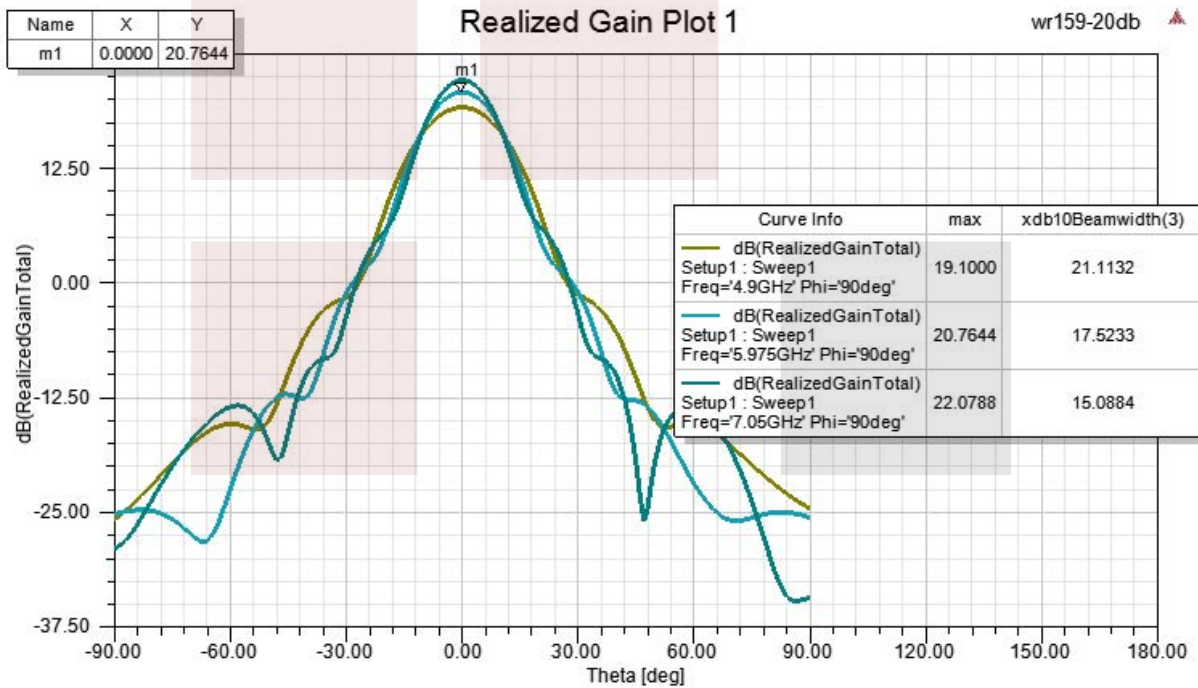
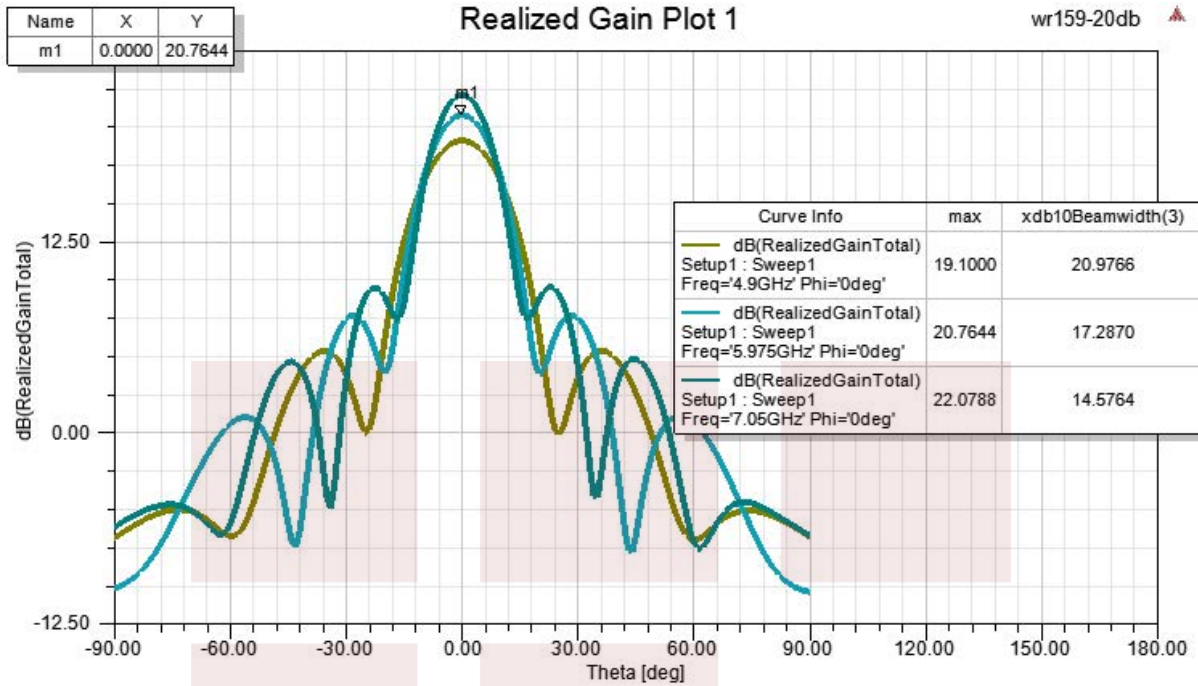
Plotted and Other Data

Notes:

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sales@fairviewmicrowave.com

Typical Performance Data



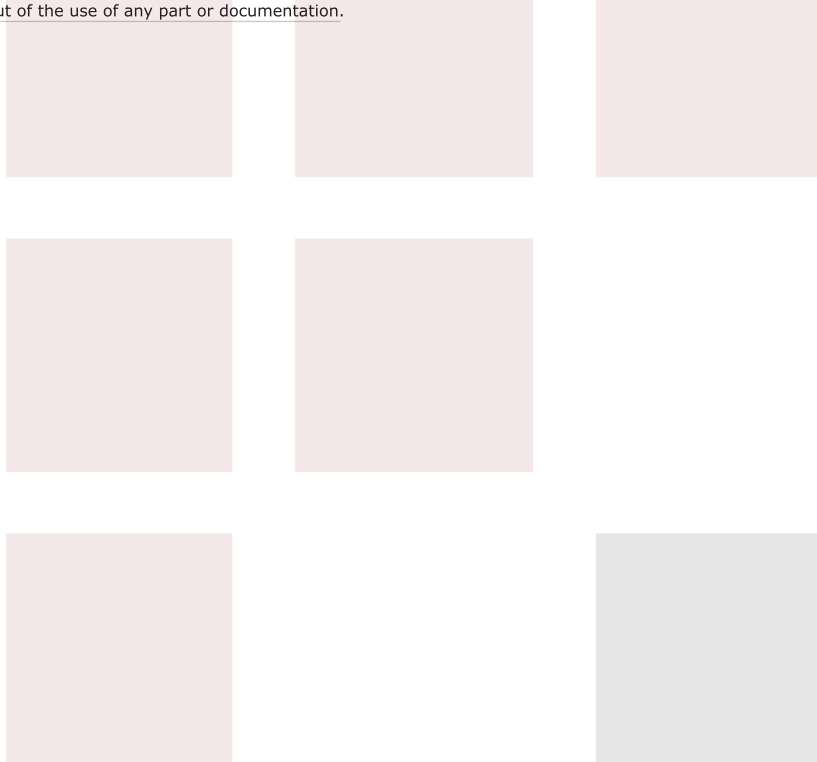


WR-159 Waveguide Antenna With 20 dBi Gain and 4.9 GHz to 7.05 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

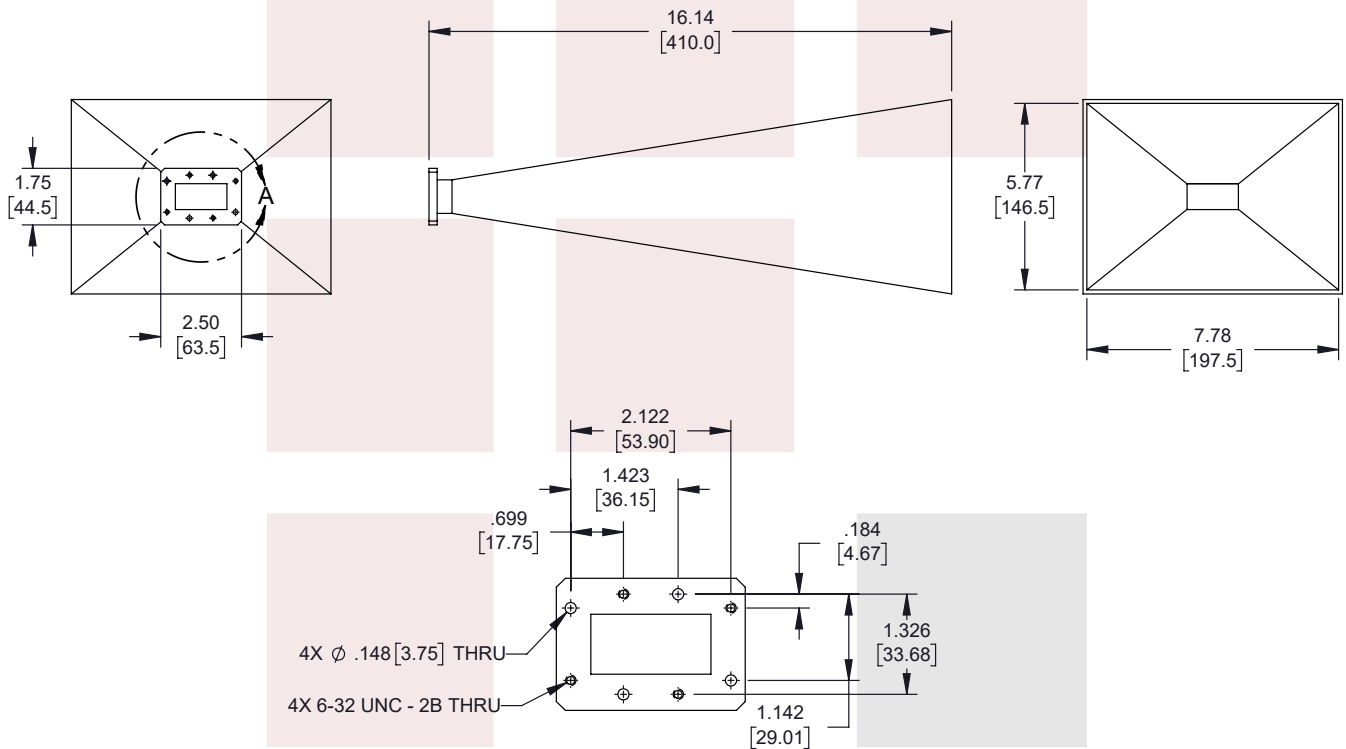
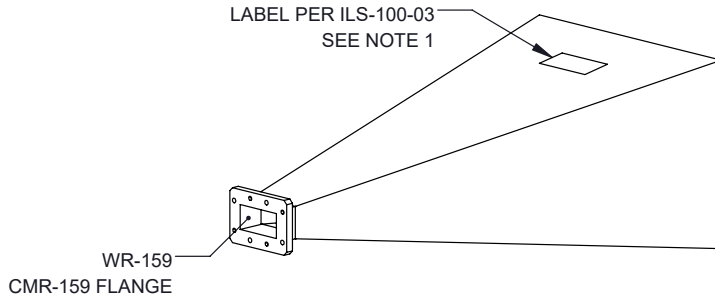
For additional information on this product, please click the following link: [WR-159 Waveguide Antenna With 20 dBi Gain and 4.9 GHz to 7.05 GHz FMWAN159-20](#)

URL: <https://www.fairviewmicrowave.com/wr-159-waveguide-standard-gain-horn-20-db-none-fmwan159-20-p.aspx>

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	06/01/2021	KHIETPAS



DETAIL A

NOTES:

1. LABEL PER ILS-100-03 (FOR INTERNAL REFERENCE ONLY)
LABEL LOCATION FOR REFERENCE ONLY

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<p>Fairview Microwave an INFINIT[®] brand</p>	UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		THIRD-ANGLE PROJECTION 		
	TOLERANCES:		CABLE LENGTH (L) TOLERANCES:		
TITLE WR-159 Waveguide Antenna With 20 dBi Gain and 4.9 GHz to 7.05 GHz	.X = ±.2 [5.08] FRACTIONS ± 1/32 .XX = ±.02 [.51] ANGLES ± 1° .XXX = ±.005 [.13]		L ≤ 12 [305] = +1 [25] / -0 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 300 [7620] < L = +5%L / -0		THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.
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SIZE A	CAGE CODE 3FKR5	DRAWN BY DZINN	ITEM NO. FMWAN159-20	REV A	

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