

## WR-112 Standard Gain Horn with 10 dBi gain, End Launch N Female Connector, Integrated Cage-Style Mount



### FM1WAN112-10ELNF

#### Features

- 7.05 GHz to 10 GHz
- WR-112 Waveguide Band
- 10 dBi Nominal Gain
- N Female End Launch 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 FM1WAN112-10ELNF 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-112 to N Female End Launch waveguide to coaxial adapter and operates from 7.05 GHz to 10 GHz.

Our FM1WAN112-10ELNF 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 degrees and 51.6 degrees respectively. Fairview Microwave's N Female End Launch to WR-112 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and connectorized input.

Waveguide antennas, such as the FM1WAN112-10ELNF 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-112 waveguide antennas with N Female End Launch 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-112
Coaxial Interface	N Female

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	7.05		10	GHz
Gain		10		dBi
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	6.83 in [173.48 mm]
Width	4.33 in [109.98 mm]
Height	3.15 in [80.01 mm]

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**FM1WAN112-10ELNF**

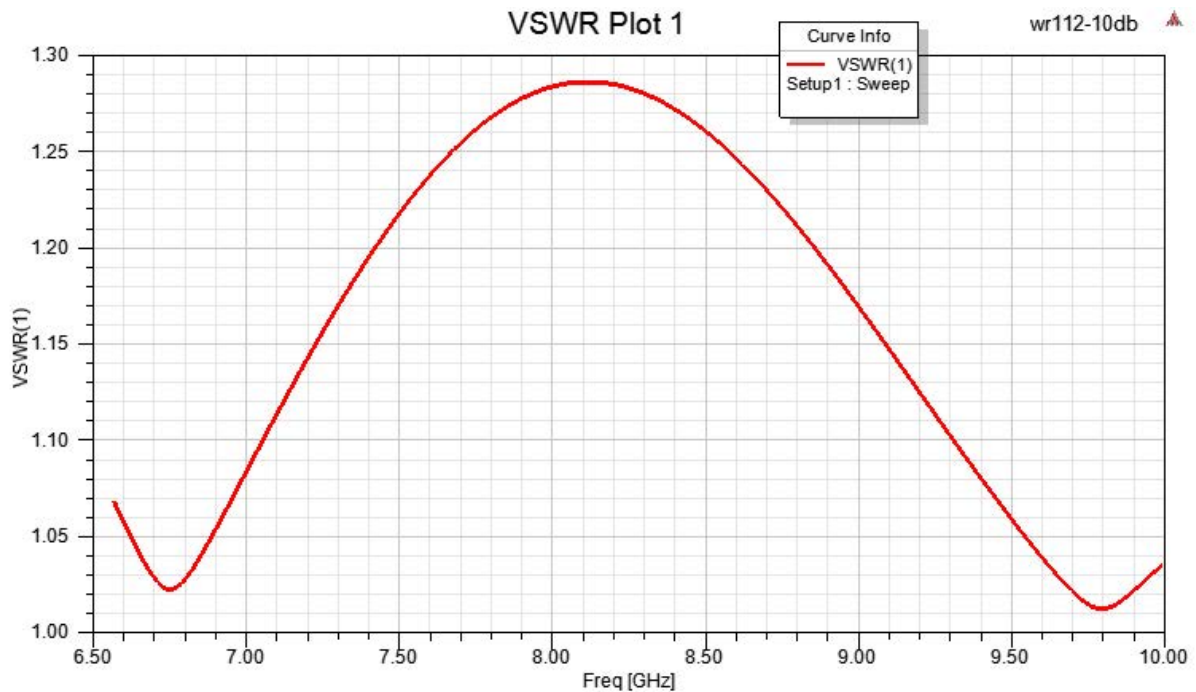
Weight	1.2585 lbs [570.85 g]
<b>RF Connector</b>	
Type	N Female
Specification	End Launch
<b>Waveguide Interface</b>	
Waveguide Size	WR-112

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

**Plotted and Other Data**

Notes:

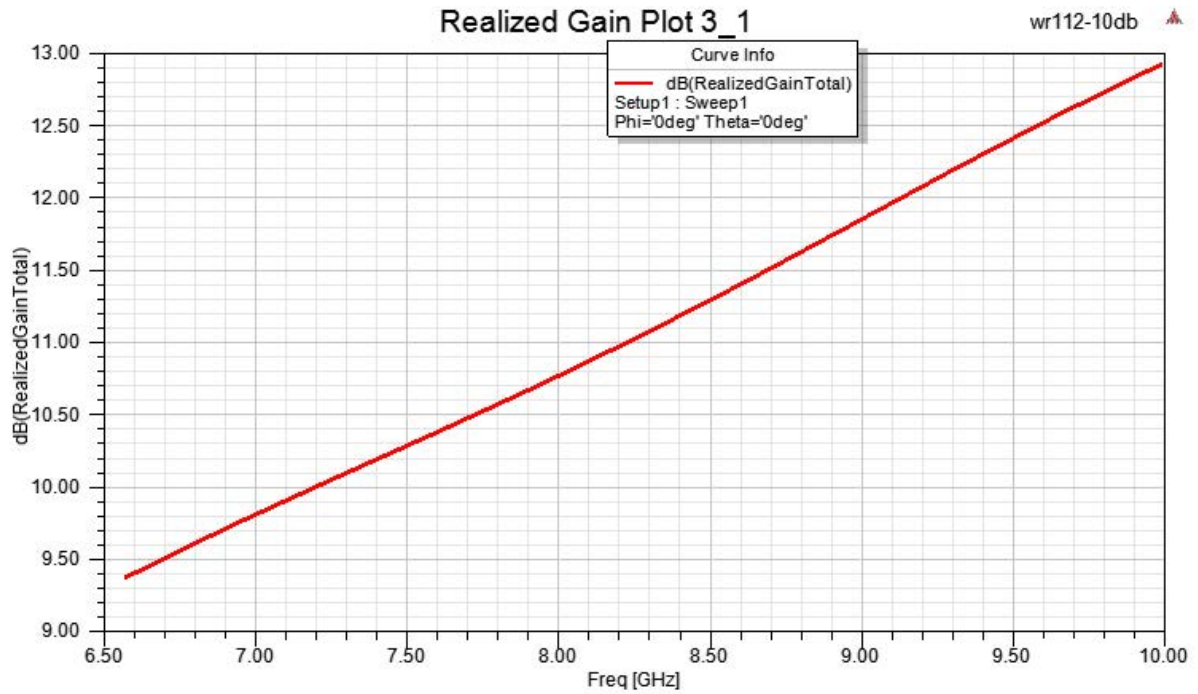
**Typical Performance Data**



WR-112 Standard Gain Horn with 10 dBi gain, End Launch  
N Female Connector, Integrated Cage-Style Mount



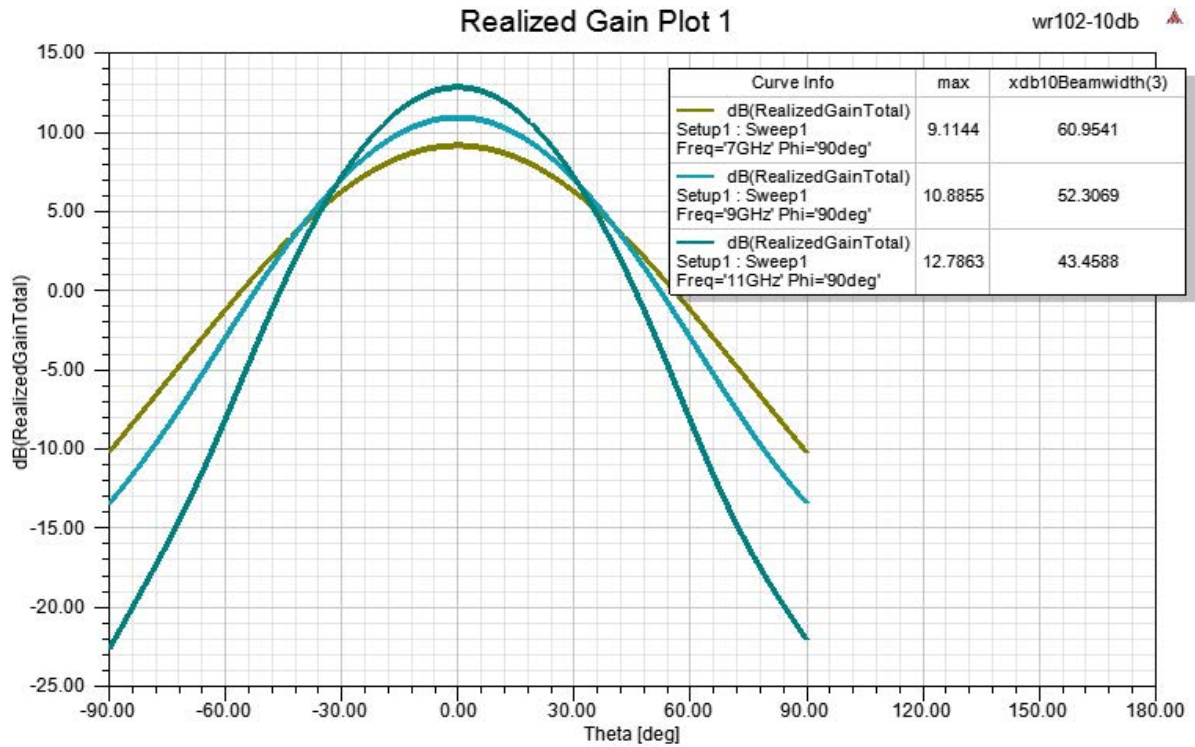
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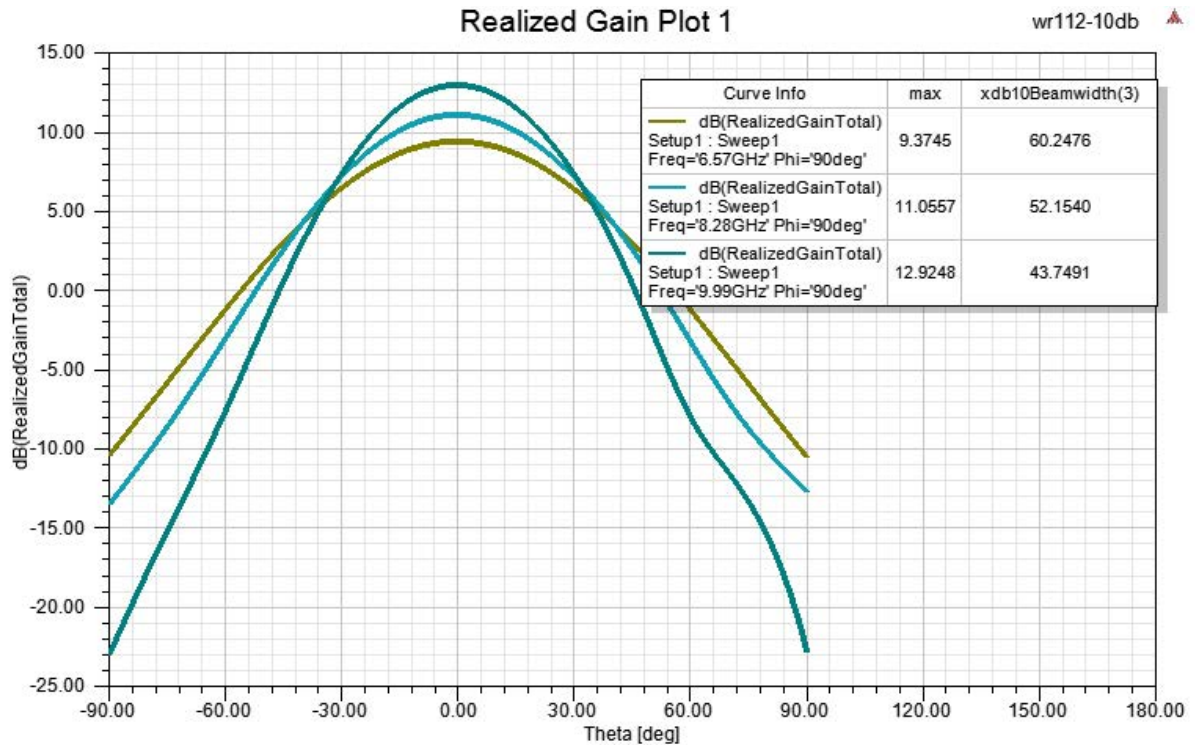
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**FM1WAN112-10ELNF**



WR-112 Standard Gain Horn with 10 dBi gain, End Launch N 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.

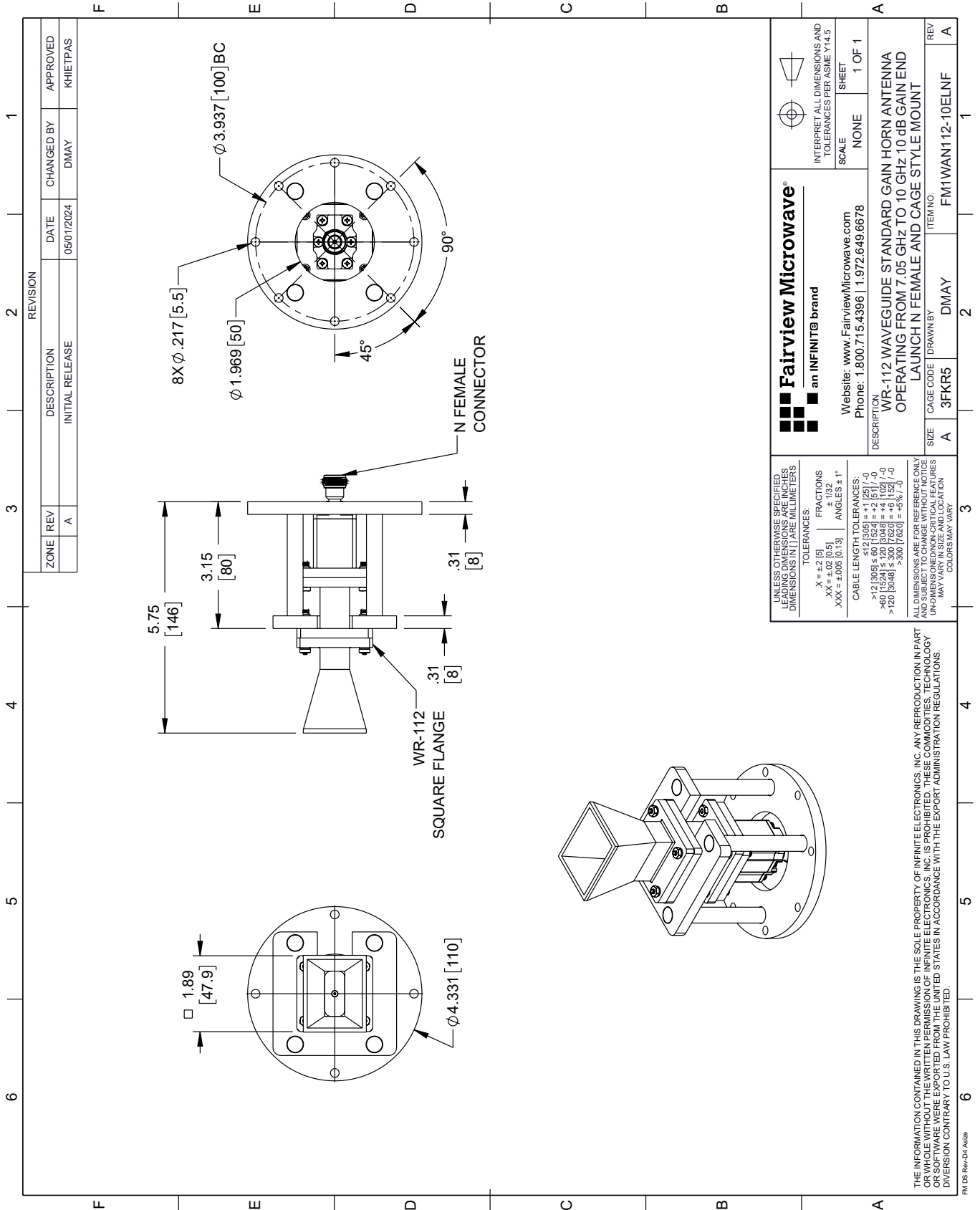
For additional information on this product, please click the following link: [WR-112 Standard Gain Horn with 10 dBi gain, End Launch N Female Connector, Integrated Cage-Style Mount FM1WAN112-10ELNF](#)

URL: <https://www.fairviewmicrowave.com/wr-112-standard-gain-horn-10-dbi-n-fm1wan112-10eInf>

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# FM1WAN12-10ELNF CAD Drawing

WR-112 Standard Gain Horn with 10 dBi gain, End Launch N Female Connector, Integrated Cage-Style Mount



REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	05/01/2024	DMAY	KHETTPAS

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Phone: 1.800.715.4396 | 1.972.649.6678

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE SHEET: 1 OF 1

DESCRIPTION: WR-112 WAVEGUIDE STANDARD GAIN HORN ANTENNA OPERATING FROM 7.05 GHz TO 10 GHz 10 dB GAIN END LAUNCH N FEMALE AND CAGE STYLE MOUNT

SIZE: A CAGE CODE: DMAY DRAWN BY: 3FKR5 ITEM NO.: FM1WAN12-10ELNF REV: A

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:  
 .X = ±.2 [5] FRACTIONS ± 1/32  
 .XX = ±.02 [0.5] ± 1/32  
 .XXX = ±.005 [0.13] ANGLES ± 1°

CABLE LENGTH TOLERANCES:  
 <12 [305] ≤ 60 [1524] = ±.1 [25] / -0  
 >60 [1524] ≤ 120 [3048] = ±.1 [25] / -0  
 >120 [3048] ≤ 300 [7620] = ±.3 [7.6] / -0  
 >300 [7620] = ±.5 [12.7] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS. DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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FM DS Rev-D4 Alt2b