



## WR-137 Standard Gain Horn with 15 dBi gain, N Female Connector, Integrated Cage-Style Mount

### FM1WAN137-15NF

#### Features

- 5.85 GHz to 8.2 GHz
- WR-137 Waveguide Band
- 15 dBi Nominal Gain
- N 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 FM1WAN137-15NF 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-137 to N Female waveguide to coaxial adapter and operates from 5.85 GHz to 8.2 GHz.

Our FM1WAN137-15NF standard gain horn antenna with integrated cage-style mount has a nominal gain of 15 dBi with a Horizontal and Vertical HPBW (Half Power Beam Width) of 31 dB and 32 dB respectively. Fairview Microwave's N Female to WR-137 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and connectorized input.

Waveguide antennas, such as the FM1WAN137-15NF 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-137 waveguide antennas with N 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-137
Coaxial Interface	N Female

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	5.85		8.2	GHz
Gain		15		
Horizontal Half Power Beam Width		31		Degrees
Vertical Half Power Beam Width		32		Degrees
<b>Waveguide to Coaxial Adapter</b>				
VSWR			1.3:1	

#### Mechanical Specifications

<b>Size</b>	
Length	7.87 in [199.9 mm]
Width	4.33 in [109.98 mm]
Height	6.38 in [162.05 mm]
Weight	1.39 lbs [630.49 g]

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**FM1WAN137-15NF**

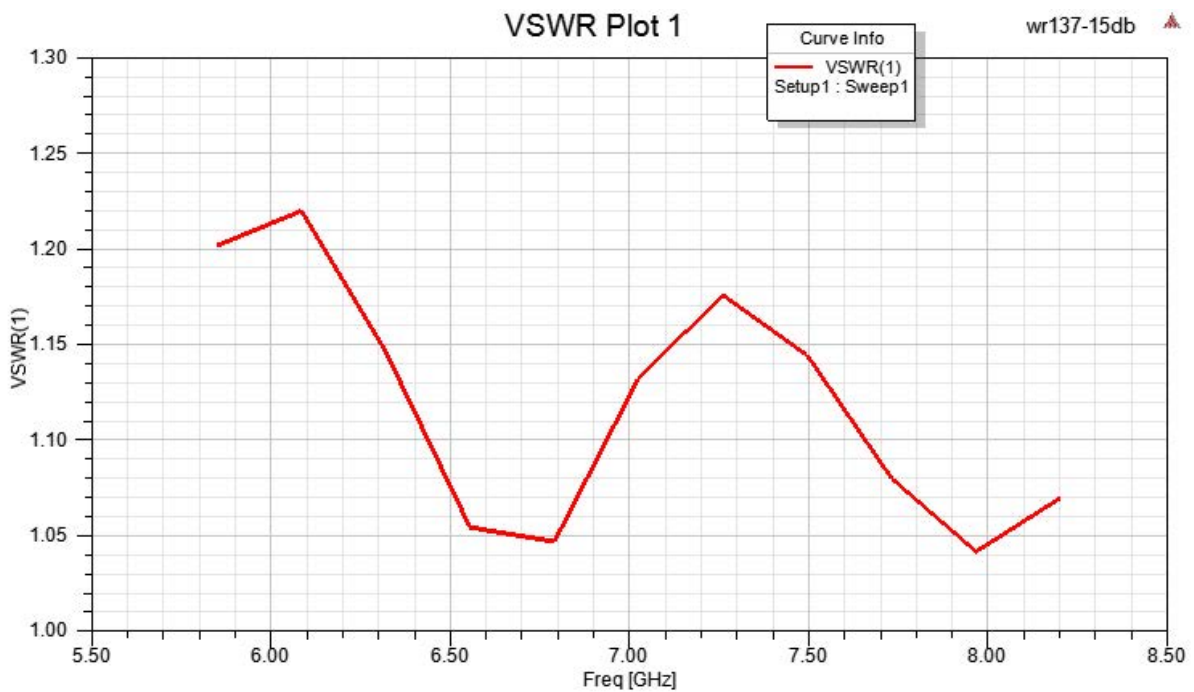
<b>RF Connector</b>	
Type	N Female
<b>Waveguide Interface</b>	
Waveguide Size	WR-137

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

**Plotted and Other Data**

Notes:

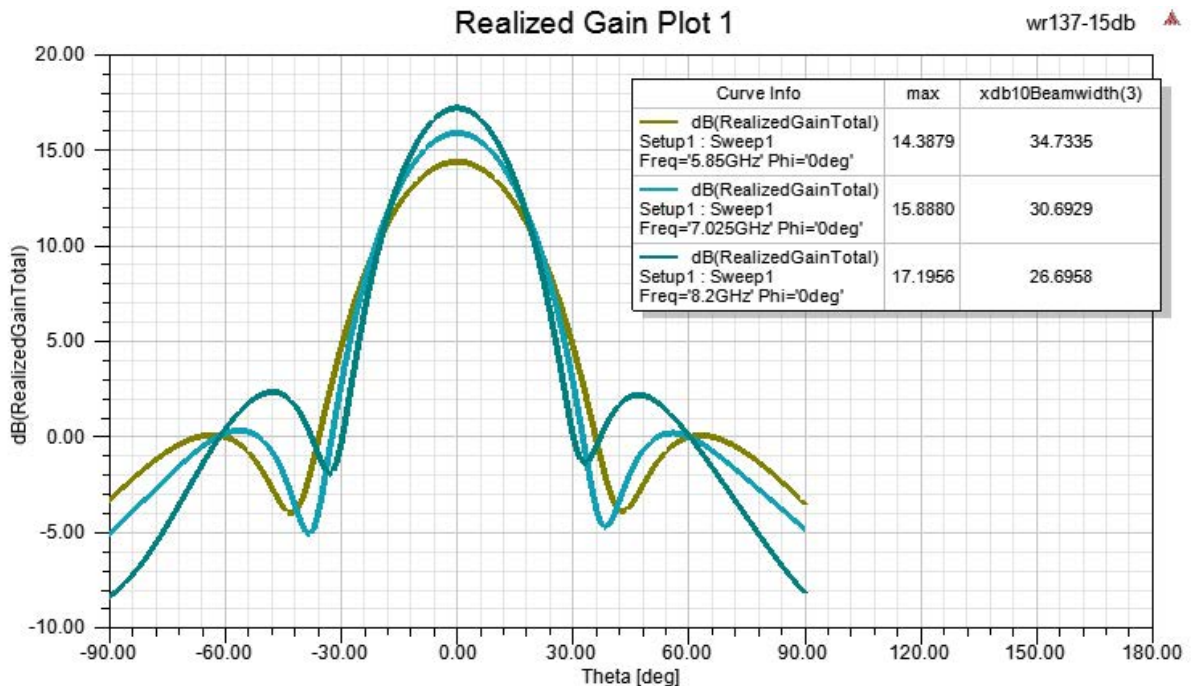
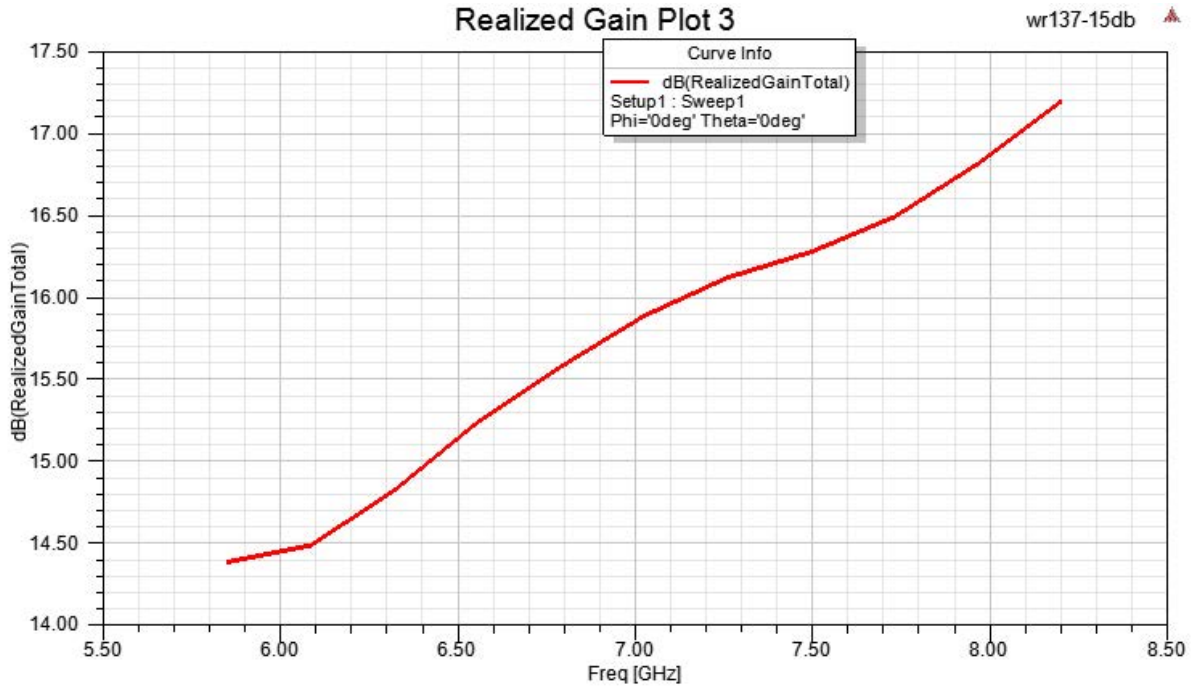
**Typical Performance Data**



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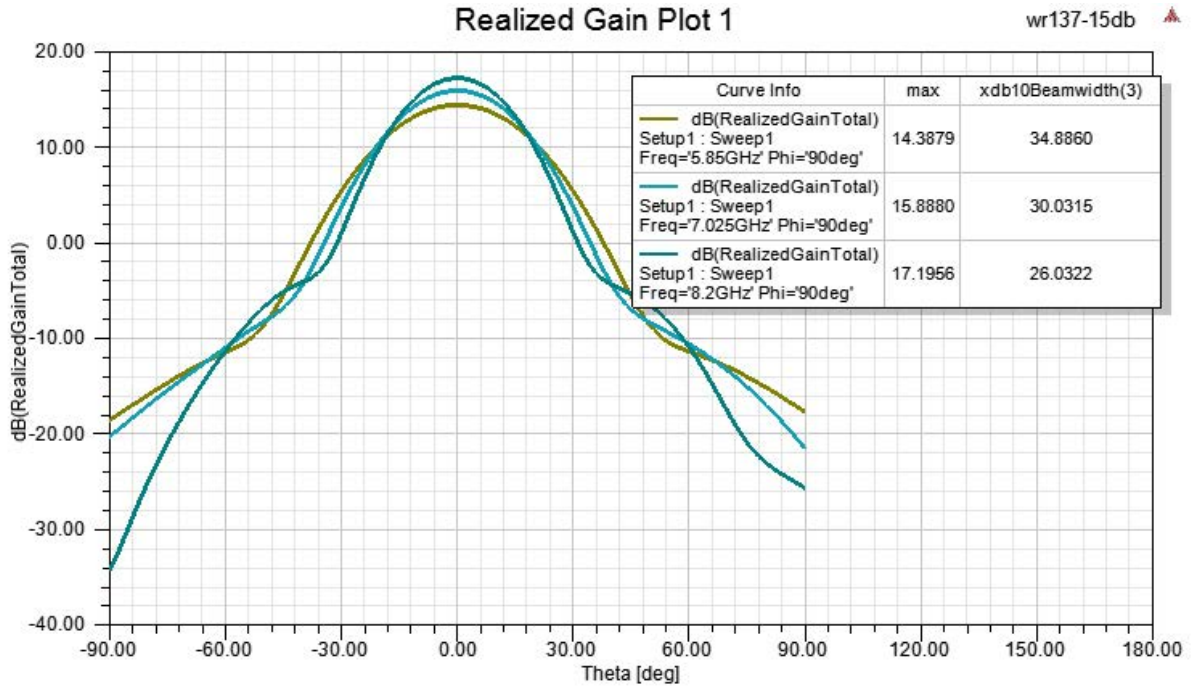
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**FM1WAN137-15NF**



WR-137 Standard Gain Horn with 15 dBi gain, 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.

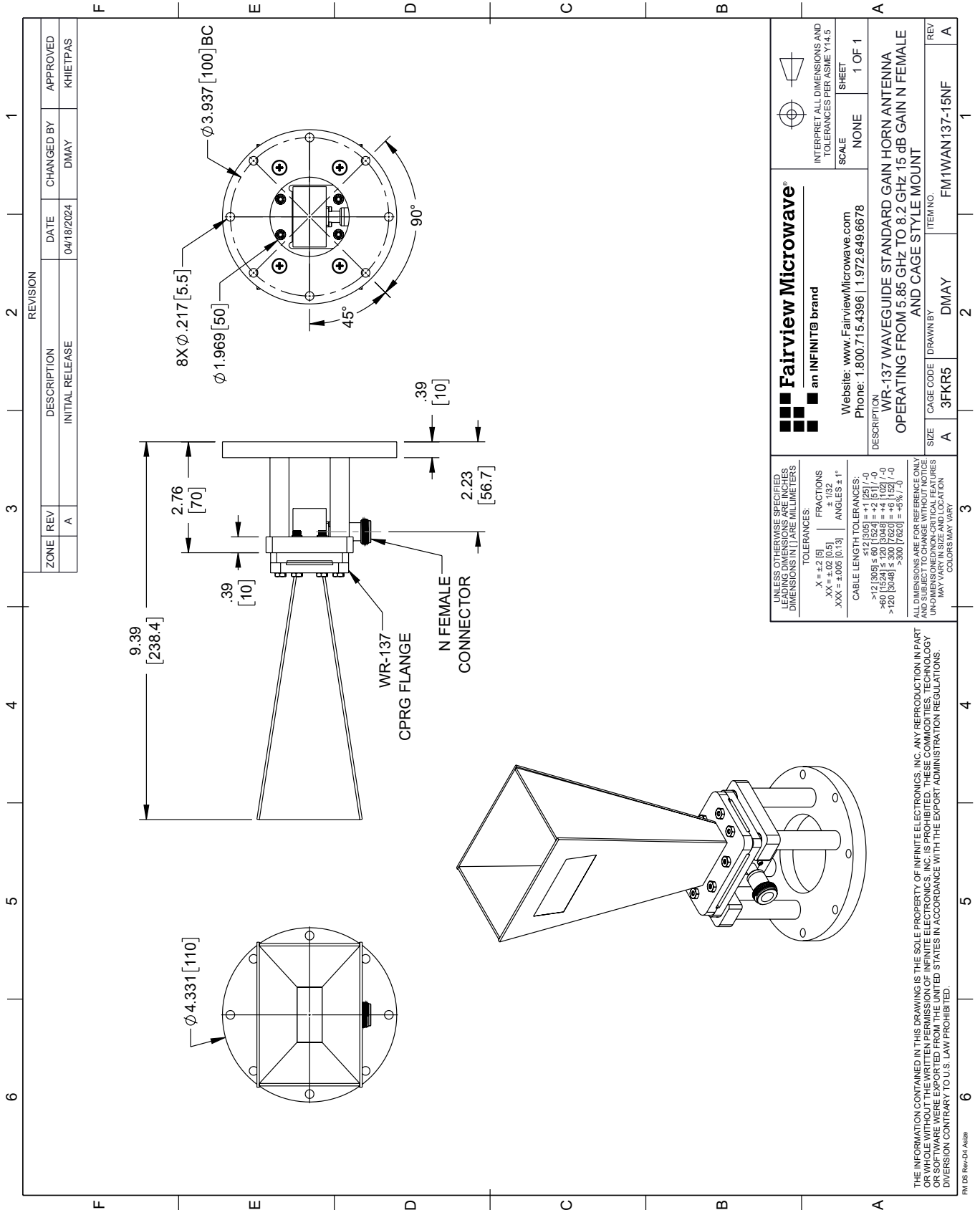
For additional information on this product, please click the following link: [WR-137 Standard Gain Horn with 15 dBi gain, N Female Connector, Integrated Cage-Style Mount FM1WAN137-15NF](#)

URL: <https://www.fairviewmicrowave.com/wr-137-standard-gain-horn-15-dbi-n-fm1wan137-15nf-p.aspx>

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# FM1WAN137-15NF CAD Drawing

WR-137 Standard Gain Horn with 15 dBi gain, N Female Connector, Integrated Cage-Style Mount



REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	04/18/2024	DMAY	KHETTPAS

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an INFINIT® brand

Website: [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com)  
Phone: 1.800.715.4396 | 1.972.649.6678

SCALE: NONE  
SHEET: 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

DESCRIPTION: WR-137 WAVEGUIDE STANDARD GAIN HORN ANTENNA OPERATING FROM 5.85 GHz TO 8.2 GHz 15 dB GAIN N FEMALE AND CAGE STYLE MOUNT

SIZE: A  
CAGE CODE: 3FKR5  
DRAWN BY: DMAY  
ITEM NO.: FM1WAN137-15NF

REV: A

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

TOLERANCES:  
 .X = ±.2 [5]  
 .XX = ±.02 [0.5]  
 .XXX = ±.005 [0.13]

FRACTIONS: ± 1/32  
 ANGLES: ± 1°

CABLE LENGTH TOLERANCES:  
 <12 [305] ≤ 60 [1524] = ±1 [25] / -0  
 >60 [1524] ≤ 120 [3048] = ±4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = ±5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE NON-CRITICAL FEATURES. DIMENSIONS MAY VARY.

COLORS MAY VARY.

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FM DS Rev-D4 Alt2b