

WR-90 Standard Gain Horn with 15 dBi gain, SMA Male connector

The FMWAN090-15SM standard gain horn antenna (also known as waveguide horn) from Fairview Microwave is part of our comprehensive selection of waveguide antennas. This standard gain horn is mated with a WR-90 to SMA Male waveguide to coaxial adapter and operates from 8.2 GHz to 12.4 GHz.

Our FMWAN090-15SM standard gain horn antenna 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 SMA Male to WR-90 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and connectorized input.

Waveguide antennas, such as the FMWAN090-15SM 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-90 waveguide antennas with SMA Male 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-90 Standard Gain Horn
Coaxial Interface SMA Male

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	8.2		12.4	GHz
Waveguide Standard Gain Horn				
Gain		15		dBi
Horizontal 3dB Beam Width		31		Degrees
Vertical 3dB Beam Width		32		Degrees
Waveguide to Coaxial Adapter				
Input VSWR			1.25:1	

Mechanical Specifications

Size
Length 4.846 in 123.09 mm
Width/Diameter 2.439 in 61.95 mm
Height 1.755 in 44.58 mm
Weight 0.25 lbs 113.4 g

RF Connector
Type SMA Male

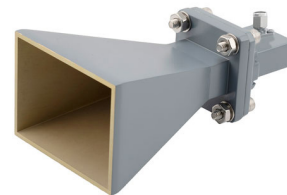
Waveguide Interface
Waveguide Size WR-90

Environmental Specifications

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

Plotted and Other Data

Notes:



Features:

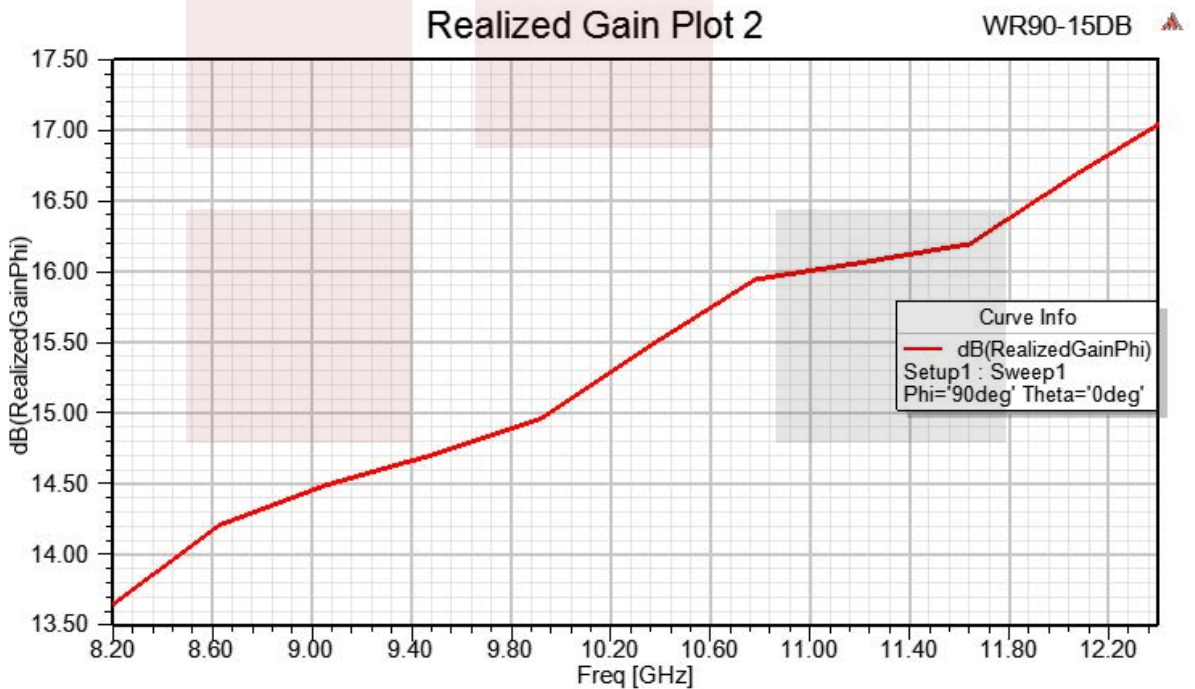
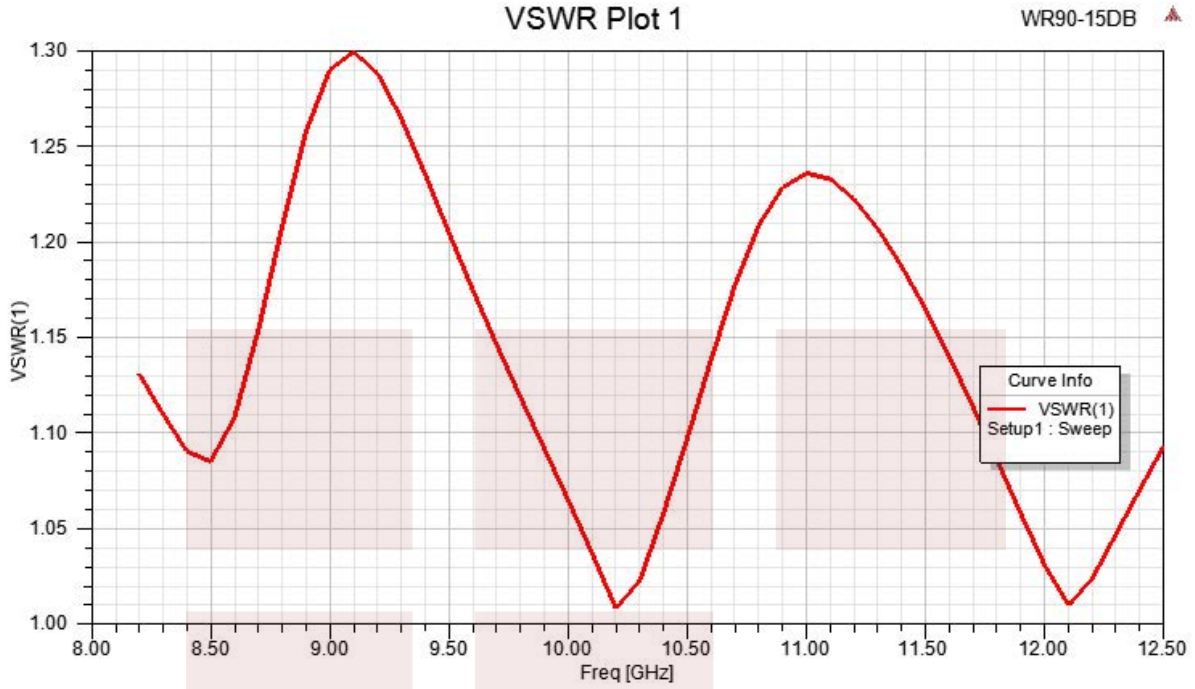
- 8.2 GHz to 12.4 GHz
- WR-90 Waveguide Band
- 15 dBi Nominal Gain
- SMA Male Connector

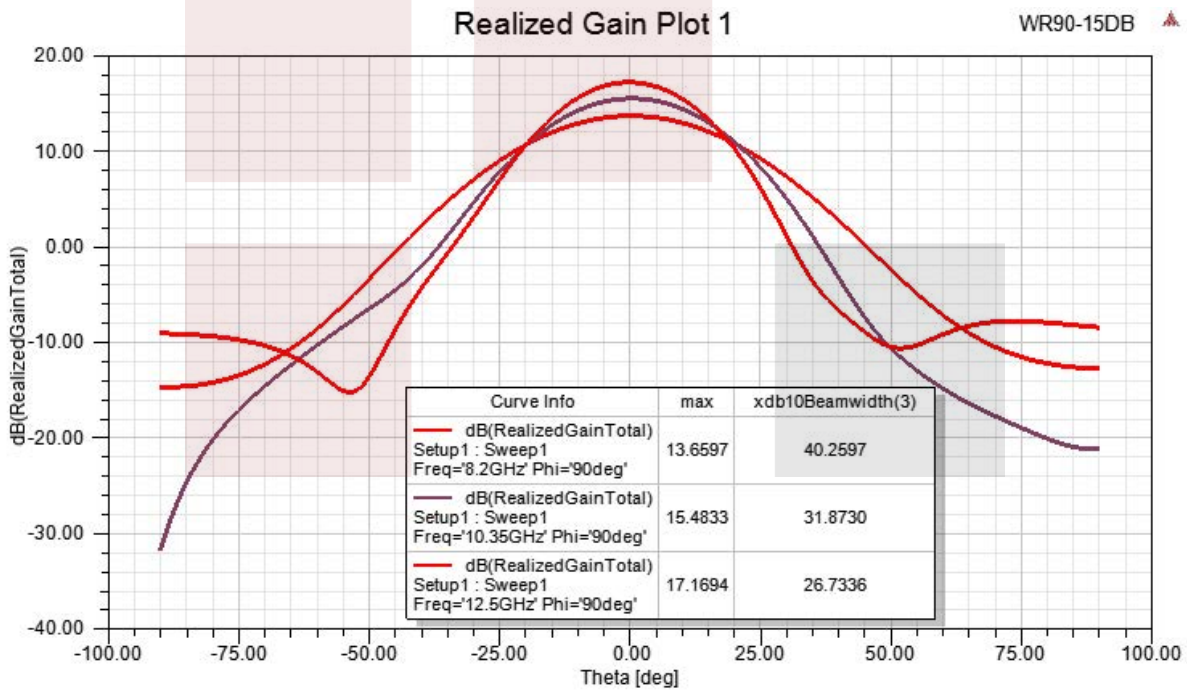
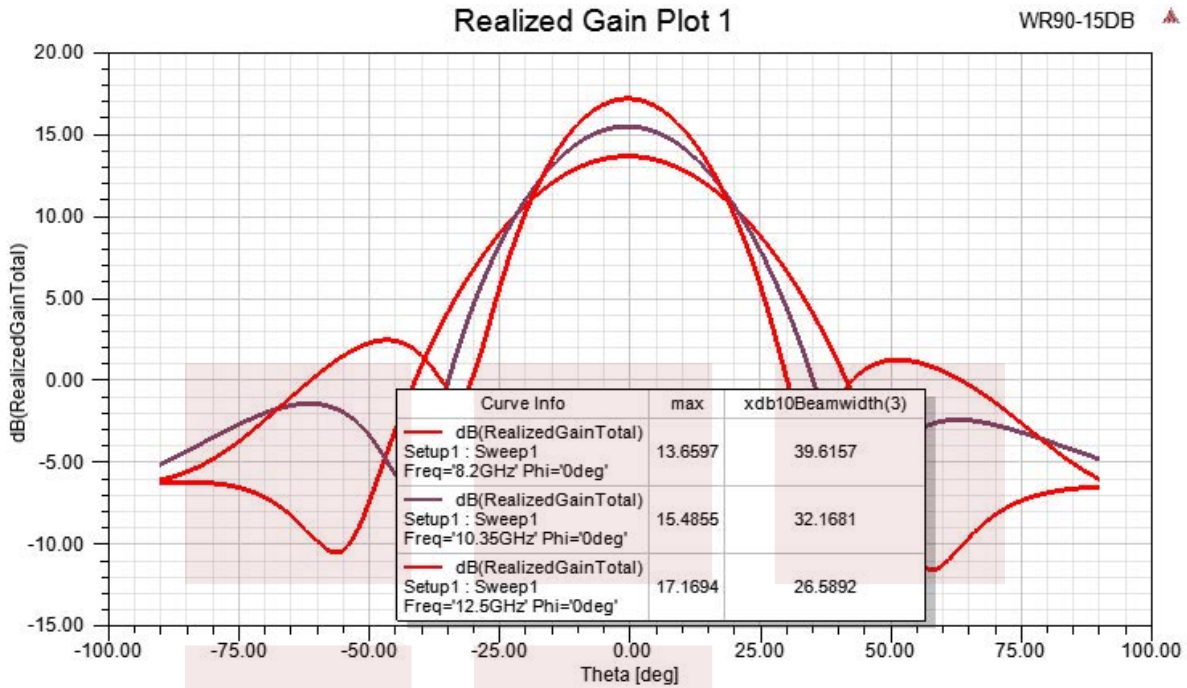
Applications:

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

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Typical Performance Data



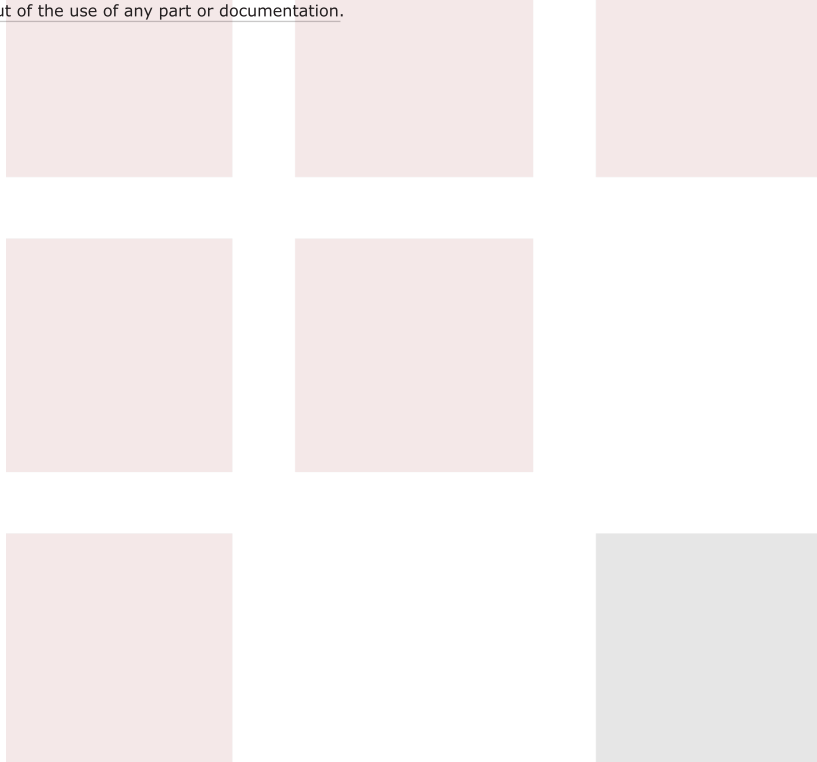


WR-90 Standard Gain Horn with 15 dBi gain, SMA Male connector from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

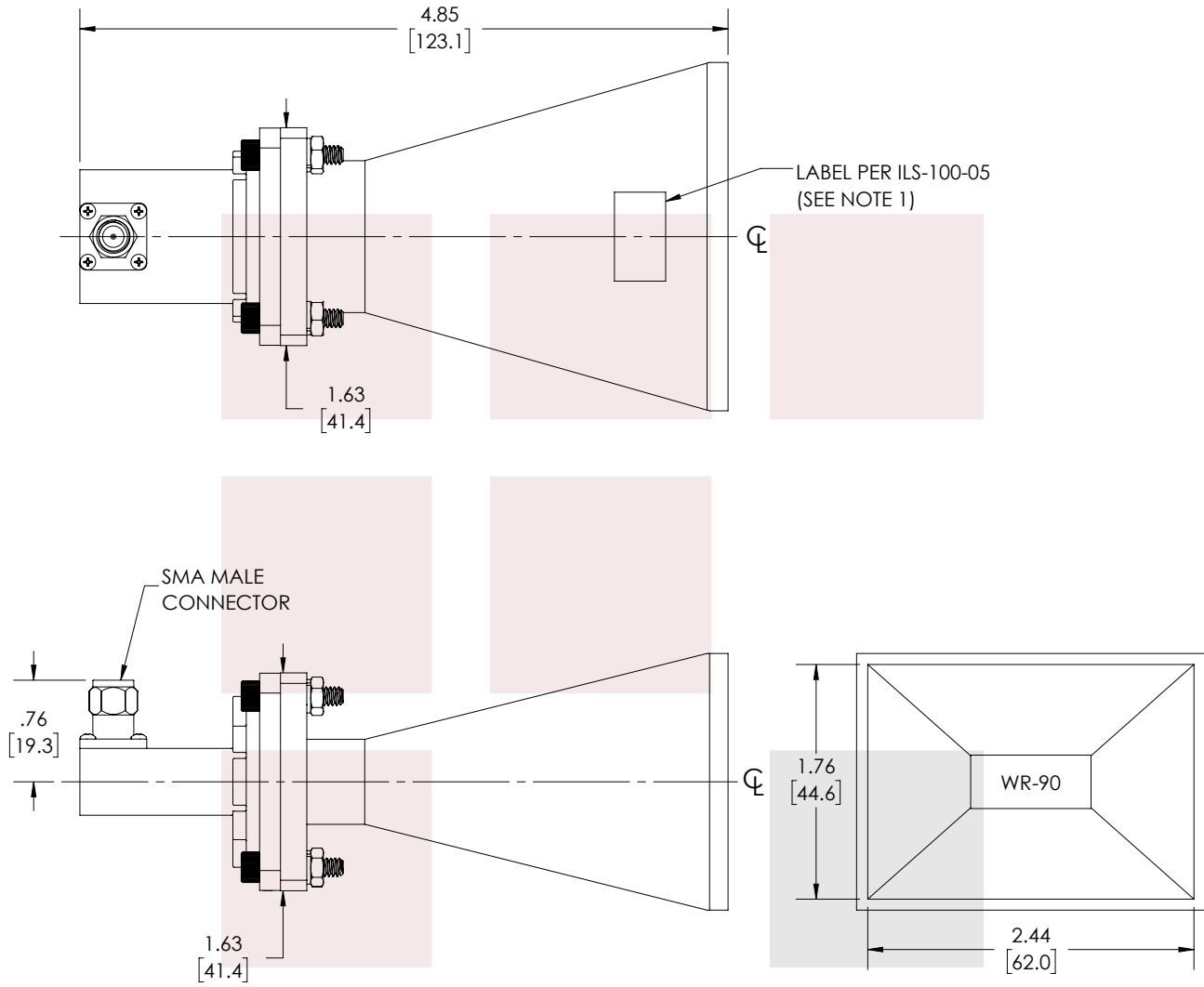
For additional information on this product, please click the following link: [WR-90 Standard Gain Horn with 15 dBi gain, SMA Male connector FMWAN090-15SM](#)

URL: <https://www.fairviewmicrowave.com/wr-90-standard-gain-horn-15-dbi-sma-fmwan090-15sm-p.aspx>

The information contained in 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 any liability arising out of the use of any part or documentation.



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	10/04/2021	KHIETPAS



- NOTES:**
 1. LABEL PER ILS-100-05 (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-90 Standard Gain Horn with 15 dBi gain, SMA Male connector	.X = ±.2 [5.08]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0	THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED. SHEET 1 OF 1
	.XX = ±.02 [.51]	ANGLES ± 1°	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	
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.				SCALE N/A
SIZE A	CAGE CODE 3FKR5	DRAWN BY BPUCHASKI	ITEM NO. FMWAN090-15SM	REV A

T-Rev.D