

WR-90 Standard Gain Horn with 15 dBi gain, End Launch SMA Female connector, Integrated Cage-Style Mount

Technical Data Sheet

PE1WAN090-15ELSF

Features

- 8.2 GHz to 12.4 GHz
- WR-90 Waveguide Band
- 15 dBi Nominal Gain
- SMA Female End Launch Connector
- Ruggedized Aluminum Cage-Style Mount
- Integrates with Positioning Systems

Applications

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

Description

The PE1WAN090-15ELSF standard gain horn antenna with integrated cage-style mount (also known as waveguide horn) from Pasternack 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-90 to SMA Female End Launch waveguide to coaxial adapter and operates from 8.2 GHz to 12.4 GHz.

Our PE1WAN090-15ELSF 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. Pasternack's SMA Female End Launch 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 PE1WAN090-15ELSF 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 Female End Launch interface is part of over 40,000 RF, microwave and millimeter wave components from Pasternack available worldwide and ship same day.

Configuration

Design
Coaxial Interface

WR-90 Standard Gain Horn
SMA Female

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	8.2		12.4	GHz
Waveguide Standard Gain Horn				
Gain		15		dBi
Horizontal Half Power Beam Width		31		Degrees
Vertical Half Power Beam Width		32		Degrees
Waveguide to Coaxial Adapter				
Input VSWR			1.25:1	

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-90 Standard Gain Horn with 15 dBi gain, End Launch SMA Female connector, Integrated Cage-Style Mount PE1WAN090-15ELSF](#)



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Mechanical Specifications

Size

Length	4.724 in [119.99 mm]
Width	4.724 in [119.99 mm]
Height	6.69 in [169.93 mm]
Weight	0.93355 lbs [423.45 g]

RF Connector

Type	SMA Female
Specification	End Launch

Waveguide Interface

Waveguide Size	WR-90
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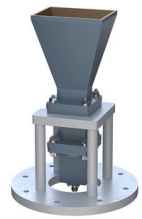
Environmental Specifications

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

Plotted and Other Data

Notes:

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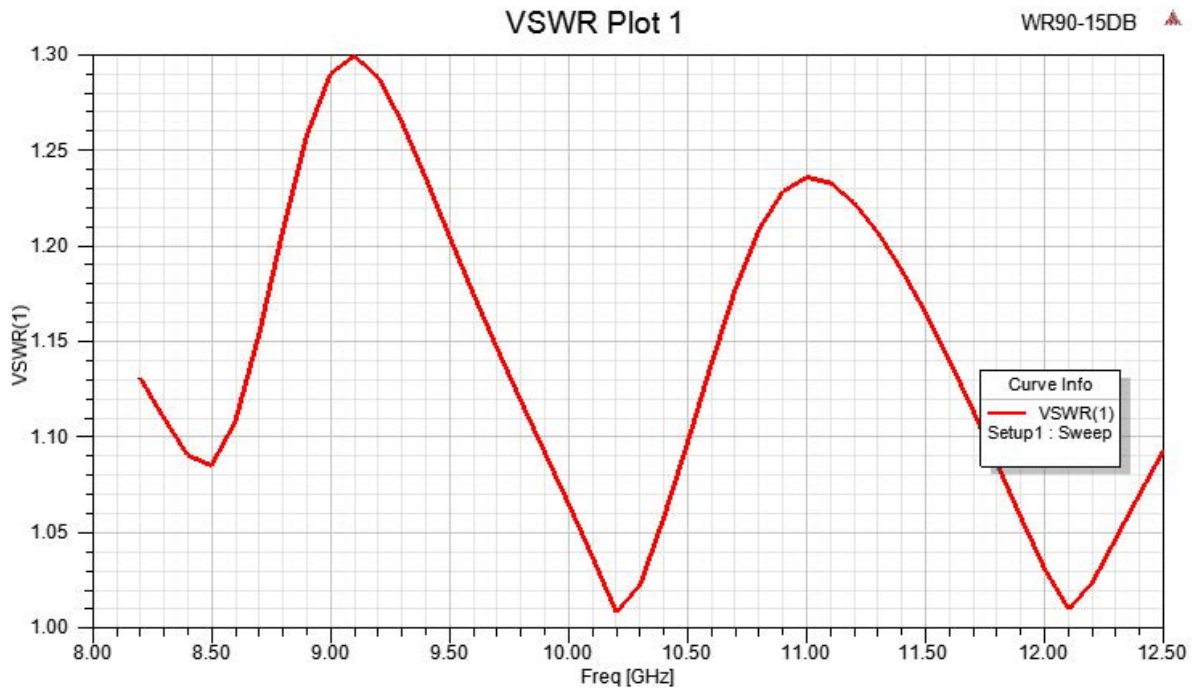


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Typical Performance Data



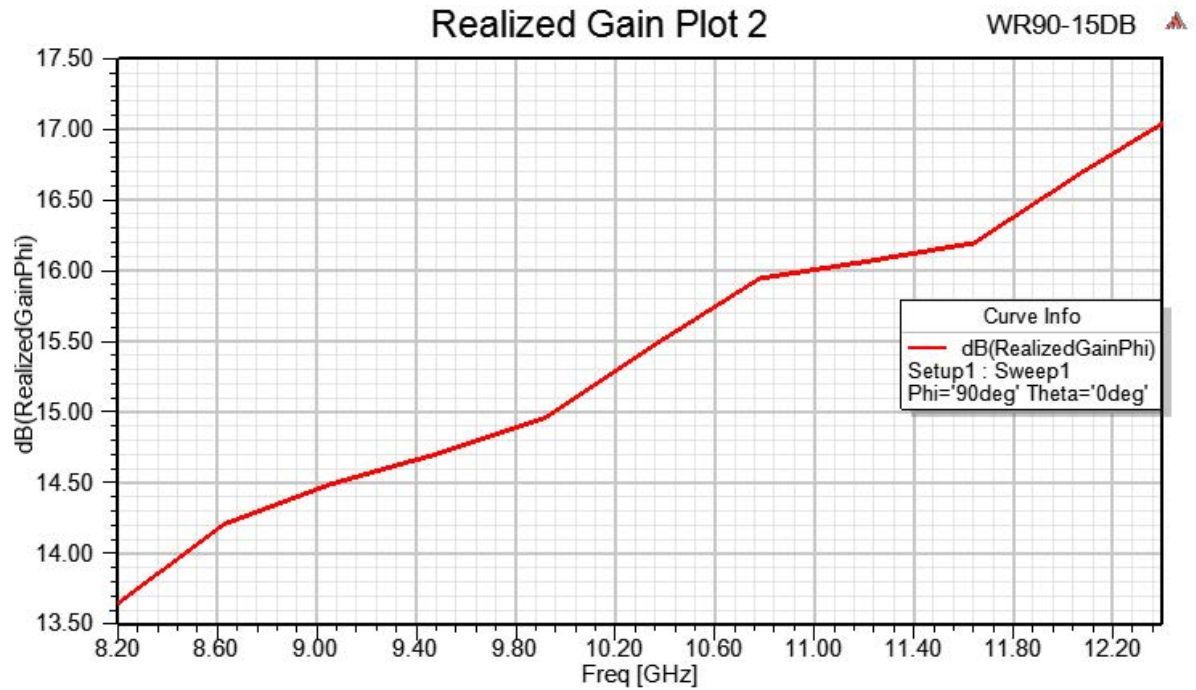
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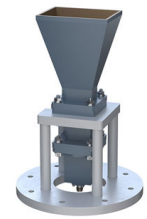
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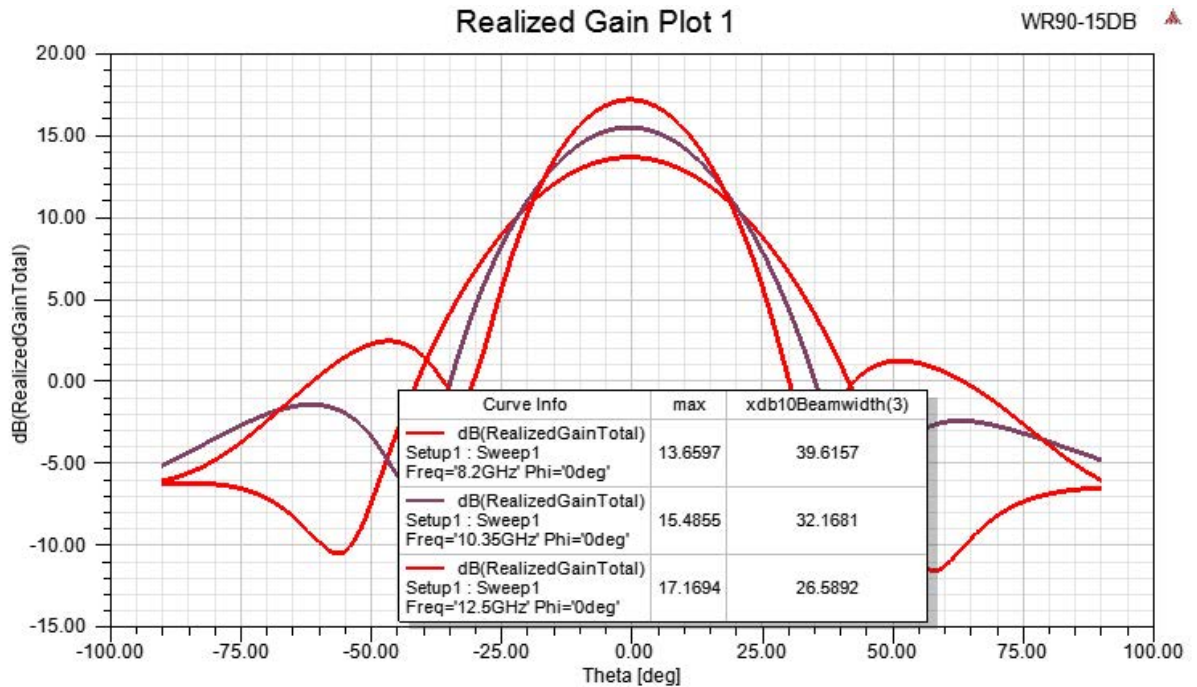
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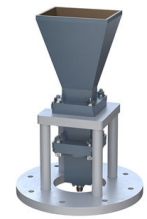
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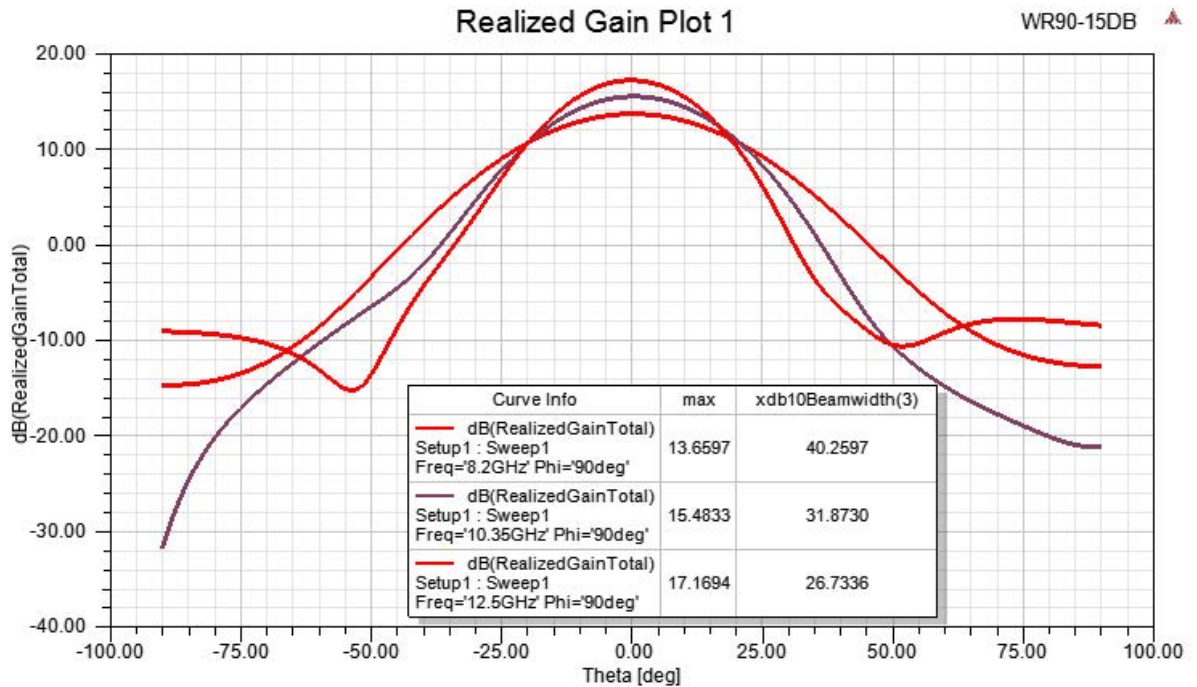
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WR-90 Standard Gain Horn with 15 dBi gain, End Launch SMA Female connector, Integrated Cage-Style Mount from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-90 Standard Gain Horn with 15 dBi gain, End Launch SMA Female connector, Integrated Cage-Style Mount PE1WAN090-15ELSF](https://www.pasternack.com/wr-90-standard-gain-horn-with-15-dbi-gain-end-launch-sma-female-connector-integrated-cage-style-mount-pe1wan090-15elsf-p.aspx)

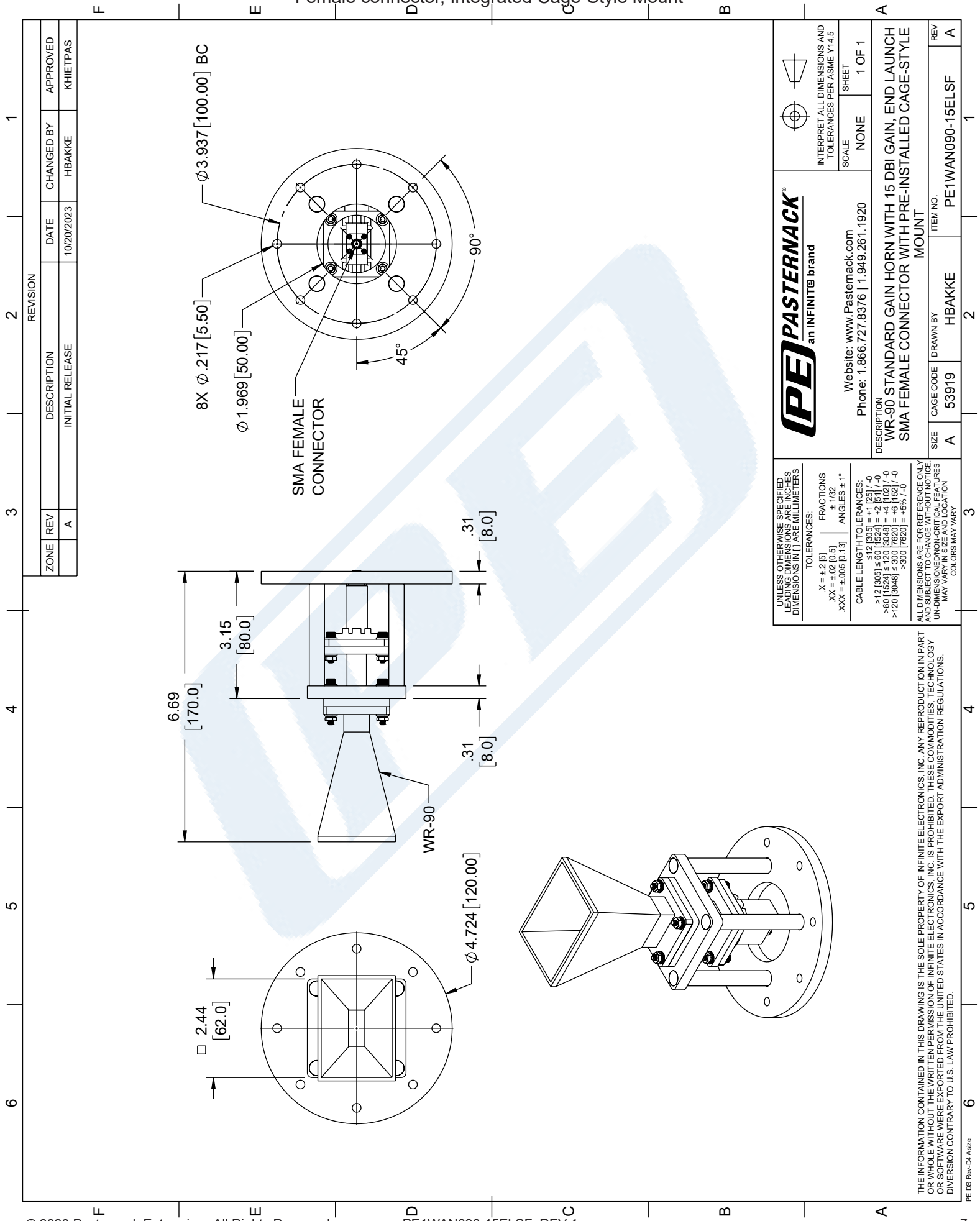
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PE1WAN090-15ELSF CAD Drawing

WR-90 Standard Gain Horn with 15 dBi gain, End Launch SMA

Female connector, Integrated Cage-Style Mount



PE PASTERNAK an INFINITI® brand			
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		SCALE NONE	SHEET 1 OF 1
DESCRIPTION WR-90 STANDARD GAIN HORN WITH 15 DBI GAIN, END LAUNCH SMA FEMALE CONNECTOR WITH PRE-INSTALLED CAGE-STYLE MOUNT			
SIZE A	CAGE CODE 53919	DRAWN BY HBAKKE	REV A
ITEM NO. PE1WAN090-15ELSF			

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS.

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

FRACTIONS
± 1/32

ANGLES ± 1°

CABLE LENGTH TOLERANCES:
≤ 12 [305] = ±.125 [-0]
>12 [305] ≤ 30 [762] = ±.25 [-0]
>30 [762] ≤ 60 [1524] = ±.5 [-0]
>60 [1524] ≤ 120 [3048] = ±1.0 [-0]
>120 [3048] ≤ 300 [7620] = ±2.0 [-0]
>300 [7620] = ±5% [-0]

ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS OF INDIVIDUAL PARTS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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