

WR-42 Standard Gain Horn with 15 dBi gain, End Launch 2.92mm Female connector, Integrated Cage-Style Mount

Technical Data Sheet

PE1WAN042-15ELKF

Features

- 18 GHz to 26.5 GHz
- WR-42 Waveguide Band
- 15 dBi Nominal Gain
- 2.92mm 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 PE1WAN042-15ELKF 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-42 to 2.92mm Female End Launch waveguide to coaxial adapter and operates from 18 GHz to 26.5 GHz.

Our PE1WAN042-15ELKF 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 2.92mm Female End Launch to WR-42 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and connectorized input.

Waveguide antennas, such as the PE1WAN042-15ELKF 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-42 waveguide antennas with 2.92mm Female End Launch interface is part of over 40,000 RF, microwave and millimeter wave components from Pasternack available worldwide and ship same day.

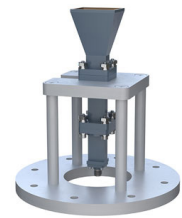
Configuration

Design: WR-42 Standard Gain Horn
Coaxial Interface: 2.92mm Female

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	18		26.5	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			1.3:1	

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-42 Standard Gain Horn with 15 dBi gain, End Launch 2.92mm Female connector, Integrated Cage-Style Mount PE1WAN042-15ELKF](#)



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Mechanical Specifications

Size

Length	4.724 in [119.99 mm]
Width	4.724 in [119.99 mm]
Height	5.08 in [129.03 mm]
Weight	0.7595 lbs [344.5 g]

RF Connector

Type	2.92mm Female
Specification	End Launch

Waveguide Interface

Waveguide Size	WR-42
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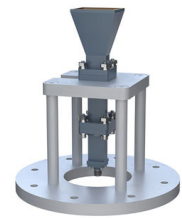
Environmental Specifications

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

Plotted and Other Data

Notes:

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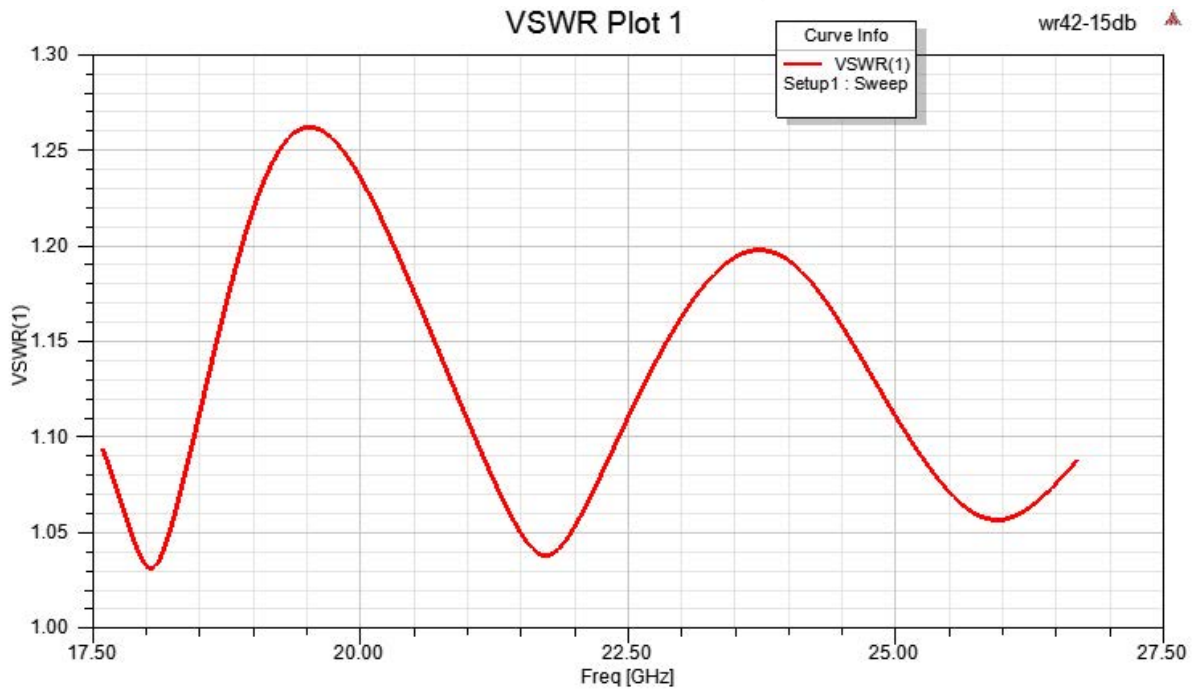


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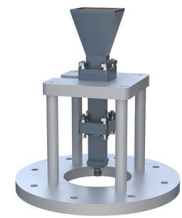
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Typical Performance Data



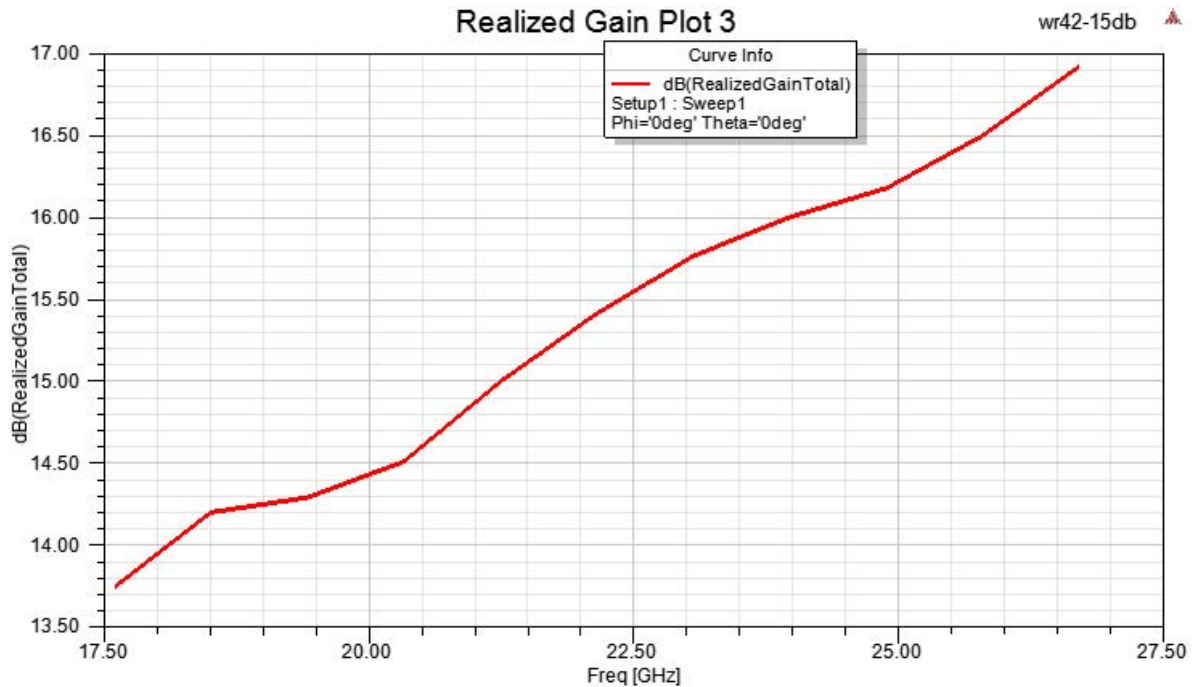
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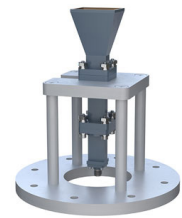
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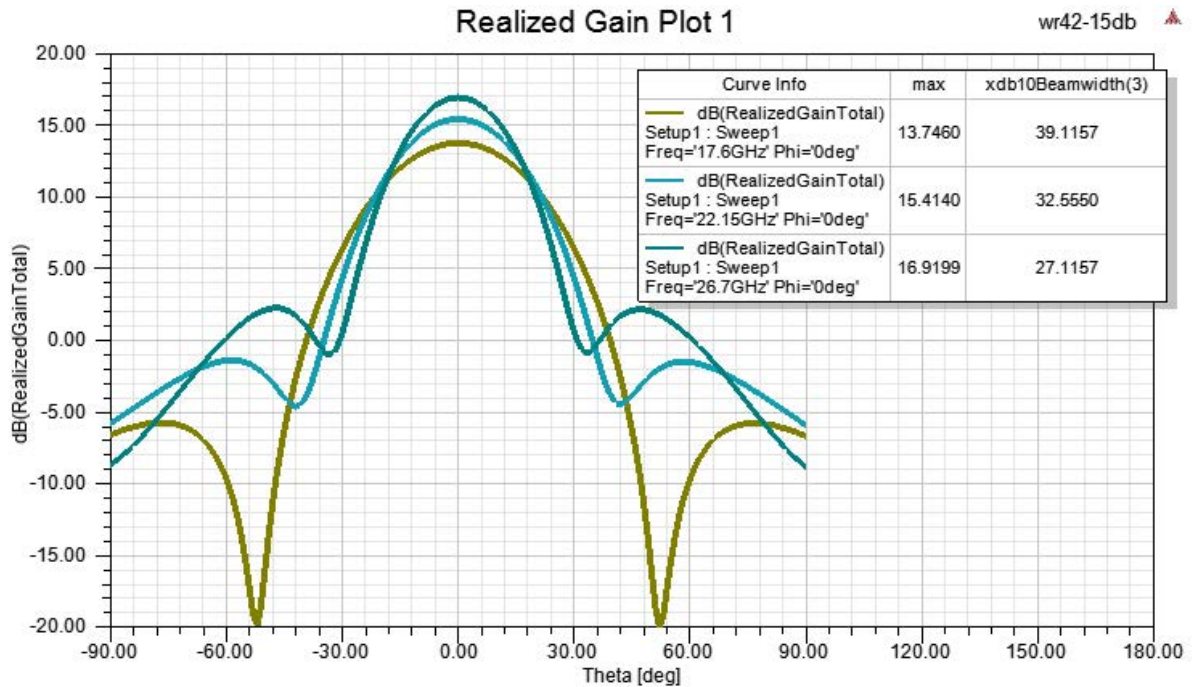
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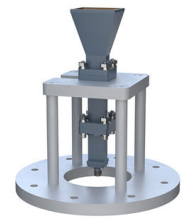
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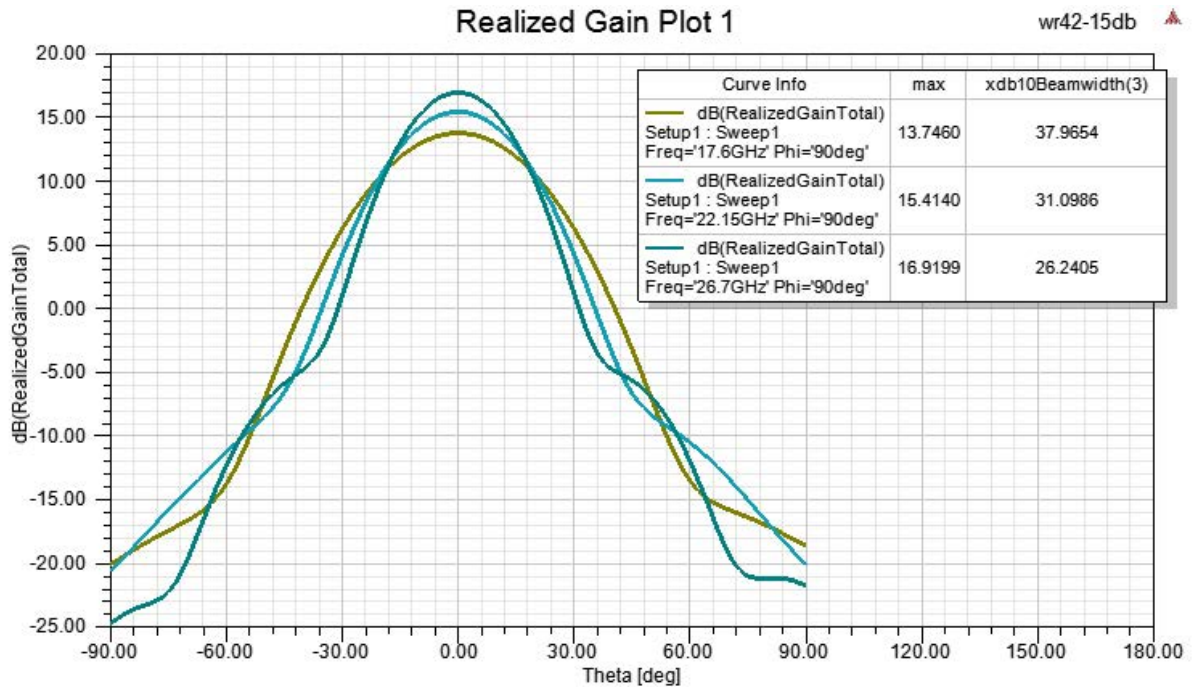
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WR-42 Standard Gain Horn with 15 dBi gain, End Launch 2.92mm Female connector, Integrated Cage-Style Mount from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain 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-42 Standard Gain Horn with 15 dBi gain, End Launch 2.92mm Female connector, Integrated Cage-Style Mount PE1WAN042-15ELKF](https://www.pasternack.com/wr-42-standard-gain-horn-with-15-dbi-gain-end-launch-2.92mm-female-connector-integrated-cage-style-mount-pe1wan042-15elkf-p.aspx)

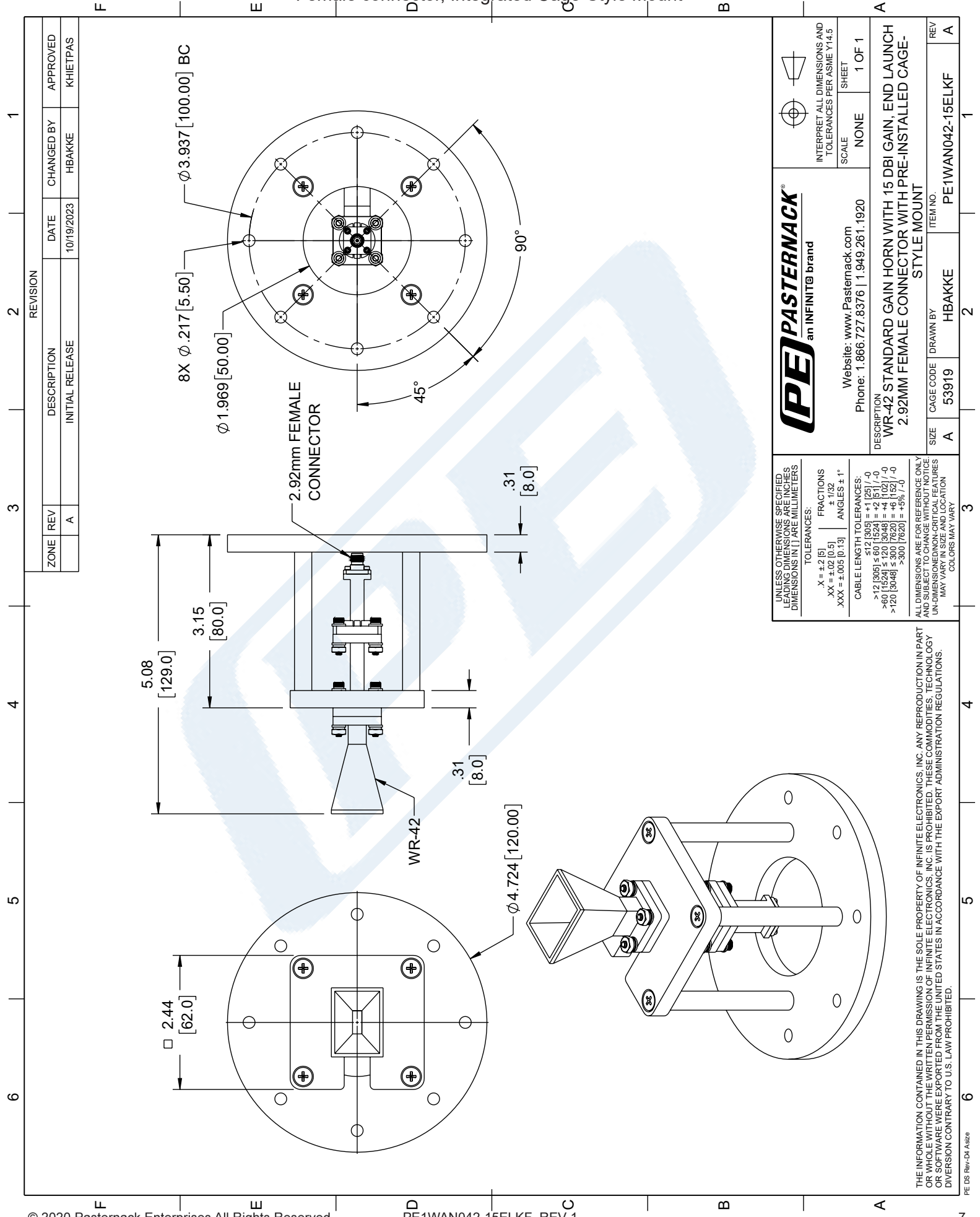
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PE1WAN042-15ELKF CAD Drawing

WR-42 Standard Gain Horn with 15 dBi gain, End Launch 2.92mm

Female connector, Integrated Cage-Style Mount



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Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE

SHEET: 1 OF 1

DESCRIPTION: WR-42 STANDARD GAIN HORN WITH 15 DBI GAIN, END LAUNCH 2.92MM FEMALE CONNECTOR WITH PRE-INSTALLED CAGE-STYLE MOUNT

SIZE: A

CAGE CODE: 53919

DRAWN BY: HBAKKE

ITEM NO.: PE1WAN042-15ELKF

REV: A

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

TOLERANCES:

XX	FRACTIONS	ANGLES
XX	±.02 [0.5]	± 1/32
XXX	±.005 [0.13]	ANGLES ± 1°

CABLE LENGTH TOLERANCES:

Length	Tolerance
>12 [305] ≤ 30 [762]	±.125 [3.18] / -0
>30 [762] ≤ 60 [1524]	±.25 [6.35] / -0
>60 [1524] ≤ 120 [3048]	±.5 [12.7] / -0
>120 [3048] ≤ 300 [7620]	±.75 [19.05] / -0
>300 [7620]	±1.5 [38.1] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. UNDIMENSIONED CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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