

**WR-90 Standard Waveguide Horn With UG-135/U Square Cover Flange and 10 dBi Nominal Gain Operating From 8.2 GHz to 12.4 GHz Frequency Range**

Fairview Microwave's SH190-10 WR-90 waveguide standard gain horn antenna operating from 8.2 GHz to 12.4 GHz with a nominal 10 dBi gain is part of our full line of RF components available for same-day shipping. This pyramidal horn antenna has a lightweight anodized aluminum body and a precision tolerance UG-135/U square cover flange. The SH190-10 WR-90 waveguide standard gain horn antenna offers low gain variation across its operating frequency range and 48.5 degrees of half power beam width.

Waveguide standard gain horn antennas are used in a wide variety of applications due to their high power handling capability, low loss, high directivity, and near constant electrical performance across a broad bandwidth. Fairview Microwave's WR-90 standard gain horns are available in 10, 15 and 20 dB models with pyramidal shape and rectangular waveguide input.

**Configuration**

Design	WR-90 Standard Gain Horn
Pattern	Directional
Polarization	Linear

**Electrical Specifications**

Description	Min	Typ	Max	Units
Frequency Range	8.2		12.4	GHz
Nominal Gain		10		dBi
Horizontal 3dB Beam Width		47.4		Deg
Vertical 3dB Beam Width		48.5		Deg

Electrical Specification Notes:  
 3 dB beam width is calculated by computer simulation.

**Mechanical Specifications**

<b>Size</b>	
Length	2 in [50.8 mm]
Width/Diameter	1.63 in [41.4 mm]
Height	1.63 in [41.4 mm]
Weight	0.104 lbs [47.17 g]

**Waveguide Interface**

Waveguide Size	WR-90
Flange Type	Square Cover
Flange Designation	UG-135/U
Body Material and Plating	Anodized Aluminum

**Environmental Specifications**

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

**Plotted and Other Data**

Notes:



**Features:**

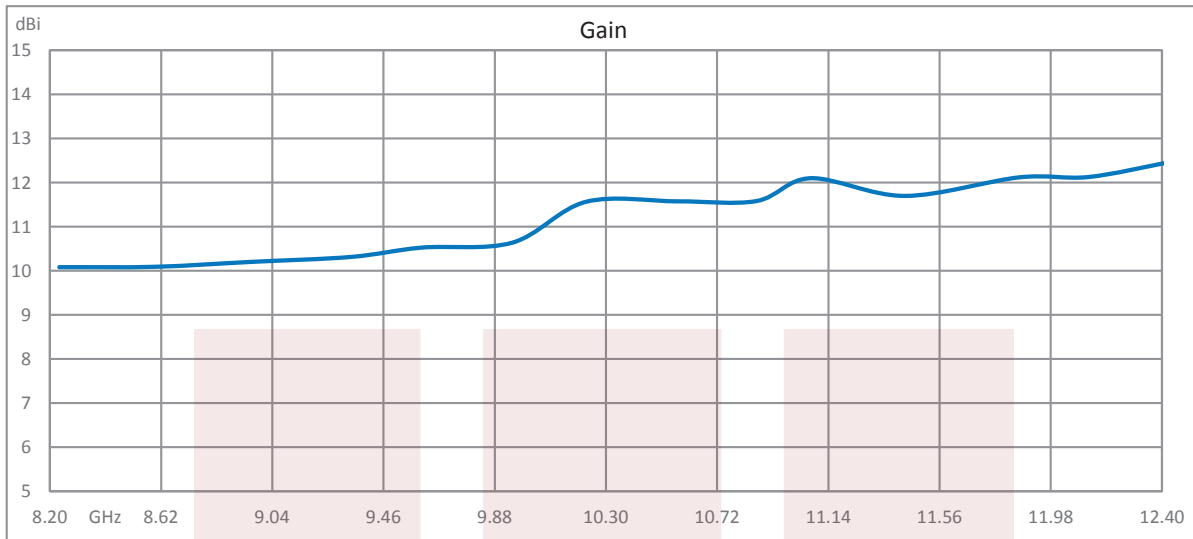
- Rectangular Waveguide Interface
- 8.2 GHz to 12.4 GHz
- 10 dBi Nominal Gain
- UG-135/U Square Cover Flange

**Applications:**

- Antenna Measurements
- Wireless Communication
- Laboratory Use
- Microwave Radio Systems

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**Typical Performance Data**

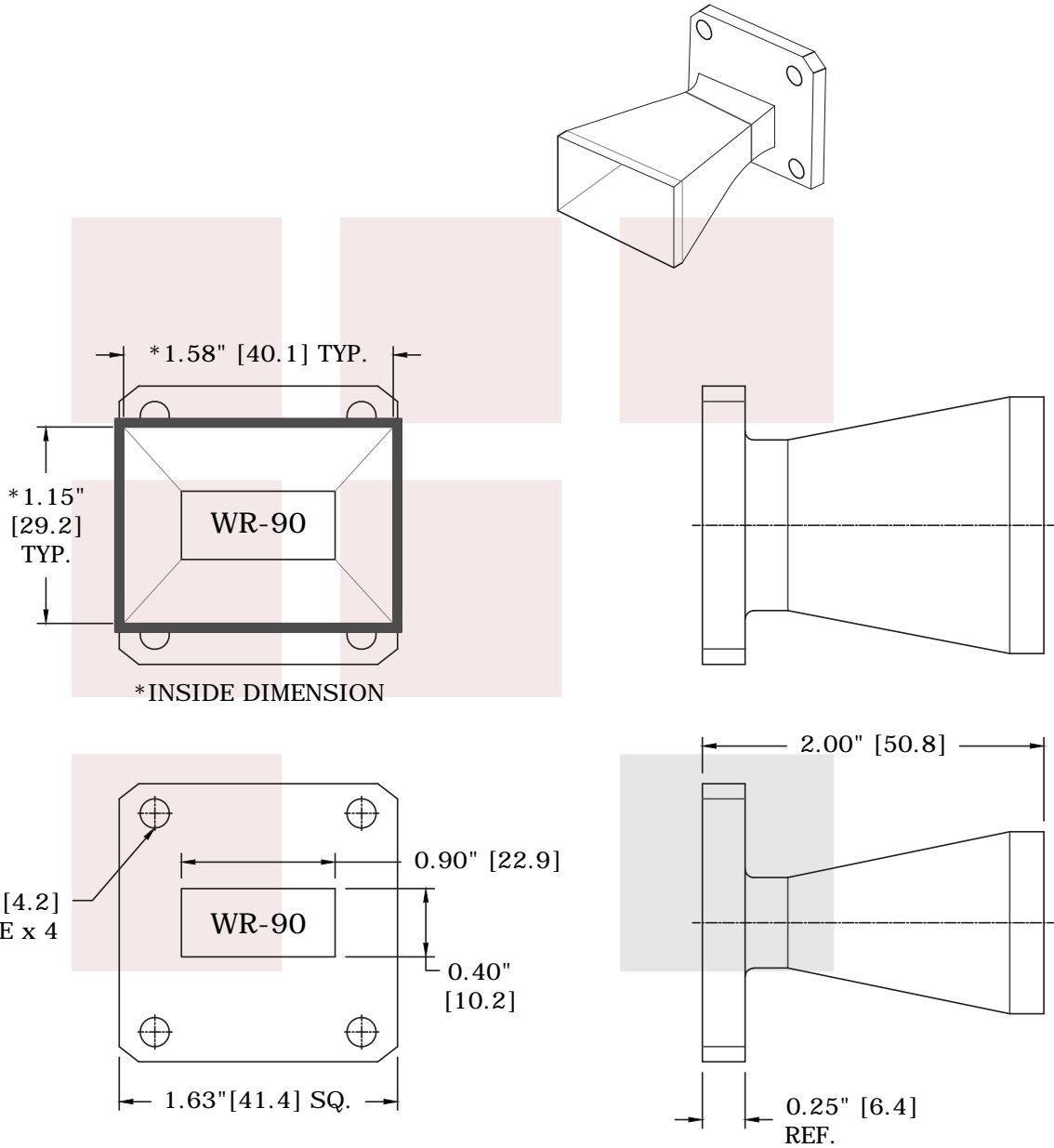


WR-90 Standard Waveguide Horn With UG-135/U Square Cover Flange and 10 dBi Nominal Gain Operating From 8.2 GHz to 12.4 GHz Frequency Range from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-90 Standard Waveguide Horn With UG-135/U Square Cover Flange and 10 dBi Nominal Gain Operating From 8.2 GHz to 12.4 GHz Frequency Range SH190-10](#)

URL: <https://www.fairviewmicrowave.com/wr-90-standard-gain-horn-antenna-0-db-sh190-10-p.aspx>

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TITLE WR-90 Standard Waveguide Horn With UG-135/U Square Cover Flange and 10 dBi Nominal Gain Operating From 8.2 GHz to 12.4 GHz Frequency		DWG NO <b>SH190-10</b>		CAGE CODE <b>3FKR5</b>
CAD FILE 011415	SHEET	SCALE N/A	SIZE A	5568