

## 20 dB WR-75 Directional Waveguide Broadwall Coupler With Square Cover Flange and E-Plane Coupled Port from 10 GHz to 15 GHz

The FMWCP1015 is a WR-75 Directional Broadwall waveguide coupler that operates in the frequency range of 10 to 15 GHz. This Waveguide component has a typical VSWR of 1.05:1. These designs are made of painted copper alloy and incorporate a broad wall configuration that result in a mid-band nominal coupling value of 10, 20, or 30 dB. Common applications for this component would be where power measurements are required within a system for measuring/sampling power or frequency monitoring with minimal signal loss to the main transmission line. Fairview Microwave offers a complete family of waveguide Crossguide and Broadwall couplers that are in-stock and ship same day.

### Electrical Specifications\*

Description	Min	Typ	Max	Units
Frequency Range	10		15	GHz
Directivity		40		dB
Insertion Loss		0.15		dB
Main Line VSWR		1.05:1		
Nominal Coupling Level		20		dB

\* Values at 25°C, sea level

### Mechanical Specifications

#### Size

Length	15 in [381 mm]
Height	3.25 in [82.55 mm]
Weight	1.588 lbs [720.3 g]

#### Configuration

Design	Directional E-Plane Broadwall
Size	WR-75

#### Input Flange

Flange Type	Square Cover
Material	Copper Alloy
Plating	Silver

#### Output Flange

Flange Type	Square Cover
Material	Copper Alloy
Plating	Silver

#### Coupled Flange(s)

Flange Type	Square Cover
Material	Copper Alloy
Plating	Silver

### Compliance Certifications (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)

RoHS Compliant	Yes
REACH Compliant	12/17/2015



### Features:

- Broadwall Waveguide Coupler
- 20 dB Nominal Coupling Level
- 10 GHz to 15 GHz Frequency Range
- Body and Flanges made of Copper Alloy
- Low VSWR

### Applications:

- Test Benches
- Radar
- Satellite
- Microwave Radio
- Attenuation Measurements
- Power Measurements
- Source Leveling

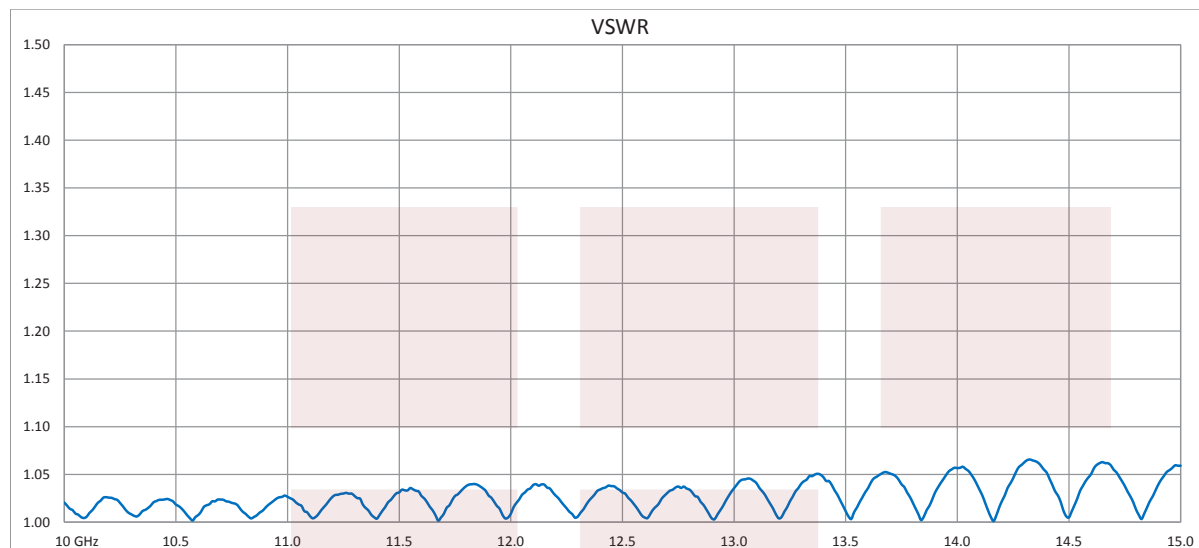
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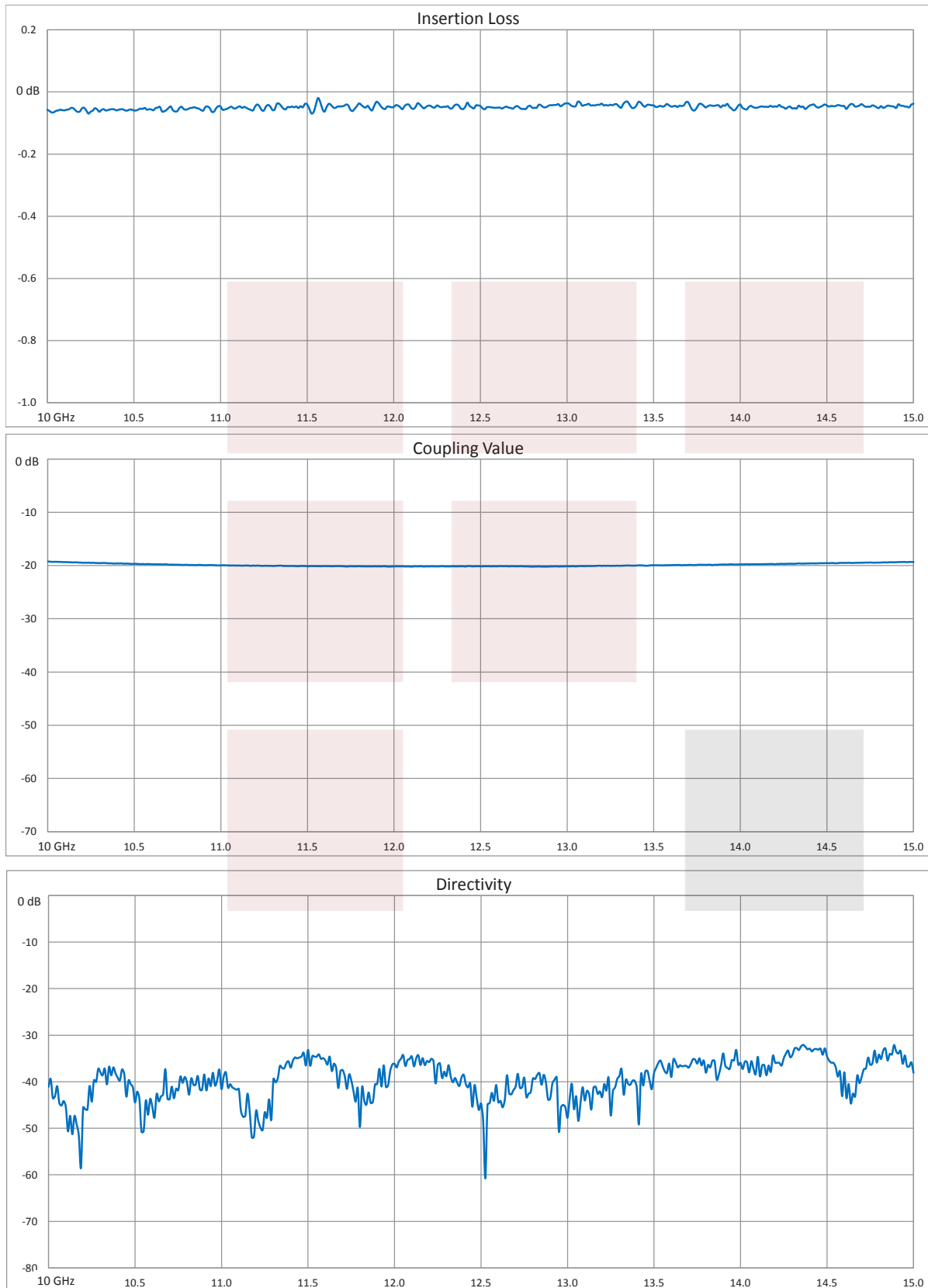
## Plotted and Other Data

Notes:

- Values at 25 °C, sea level

## Typical Performance Data





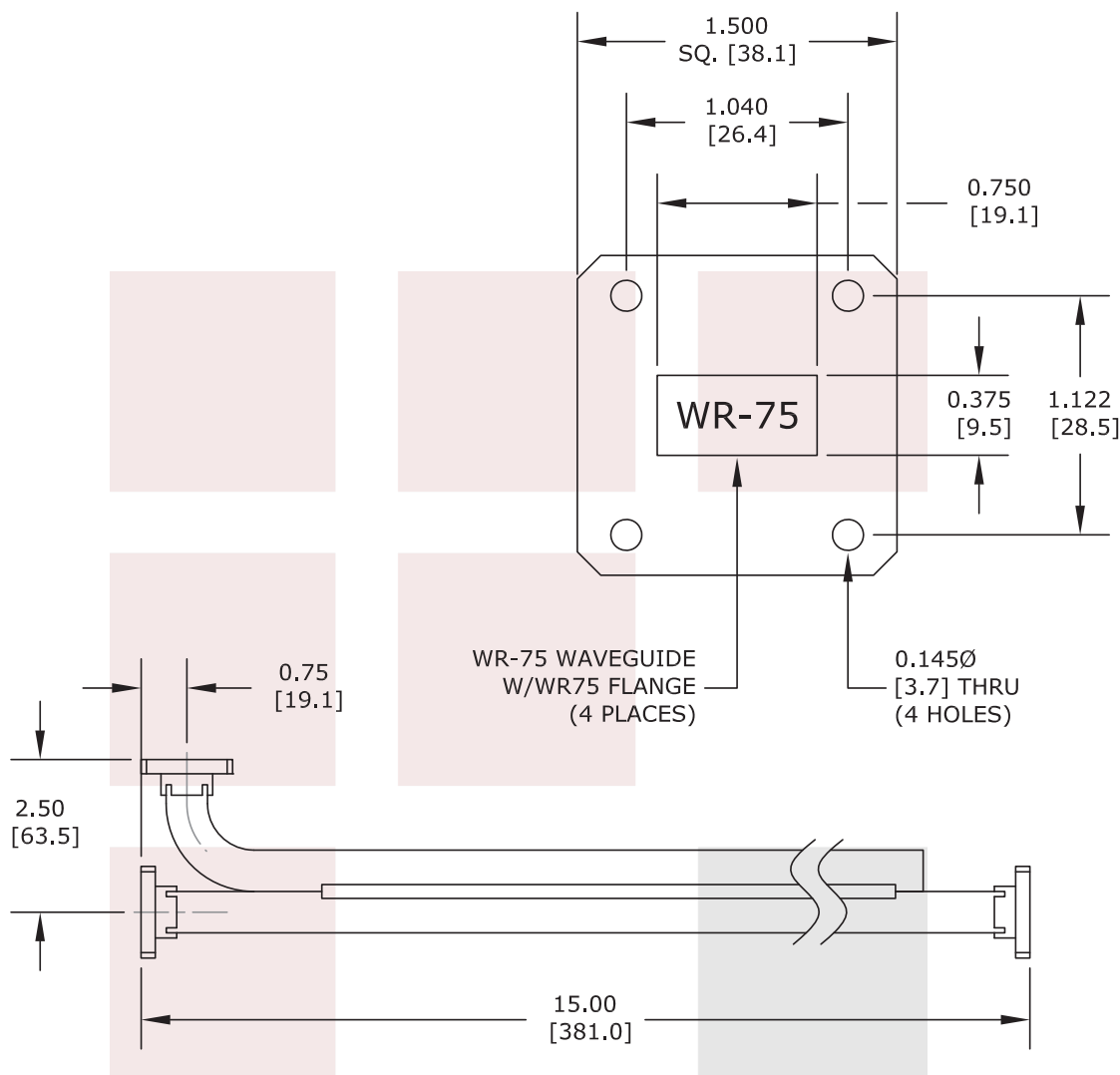
20 dB WR-75 Directional Waveguide Broadwall Coupler With Square Cover Flange and E-Plane Coupled Port from 10 GHz to 15 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [20 dB WR-75 Directional Waveguide Broadwall Coupler With Square Cover Flange and E-Plane Coupled Port from 10 GHz to 15 GHz FMWCP1015](http://www.fairviewmicrowave.com/20-db-wr-75-directional-waveguide-broadwall-coupler-square-e-fmwcp1015-p.aspx)

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UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES.

DECIMALS	ANGLES
.X ±.030	±1/2 DEG.
.XX ±.015	FRACTIONS
.XXX ±.005	±1/32

\* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

<b>FAIRVIEW MICROWAVE INC.</b> ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].			
TITLE 20 dB WR-75 Directional Waveguide Broadwall Coupler With Square Cover Flange and E-Plane Coupled Port from 10 GHz to 15 GHz		DWG NO <b>FMWCP1015</b>		CAGE CODE <b>3FKR5</b>	
CAD FILE	042816	SHEET	SCALE	N/A	SIZE A 2233