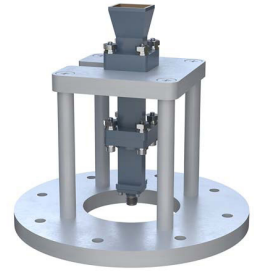


WR-42 Standard Gain Horn with 10 dBi gain, End Launch
2.92mm Female connector, Integrated Cage-Style Mount



FM1WAN042-10ELKF

Features

- 18 GHz to 26.5 GHz
- WR-42 Waveguide Band
- 10 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 FM1WAN042-10ELKF standard gain horn antenna with integrated cage-style mount (also known as waveguide horn) from Fairview Microwave 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 FM1WAN042-10ELKF standard gain horn antenna with integrated cage-style mount has a nominal gain of 10 dBi with a Horizontal and Vertical HPBW (Half Power Beam Width) of 52.1 dB and 51.6 dB respectively. Fairview Microwave'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 FM1WAN042-10ELKF 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 Fairview Microwave available worldwide and ship same day.

Configuration

Design	WR-42
Coaxial Interface	2.92mm Female

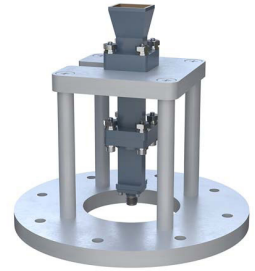
Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	18		26.5	GHz
Waveguide Standard Gain Horn		10		
Gain				
Horizontal Half Power Beam Width		52.1		Degrees
Vertical Half Power Beam Width		51.6		Degrees

Mechanical Specifications

Size	
Length	4.724 in [119.99 mm]
Width	4.724 in [119.99 mm]
Height	4.33 in [109.98 mm]
Weight	0.7195 lbs [326.36 g]

WR-42 Standard Gain Horn with 10 dBi gain, End Launch
2.92mm Female connector, Integrated Cage-Style Mount



FM1WAN042-10ELKF

RF Connector

Type 2.92mm Female
Specification End Launch

Waveguide Interface

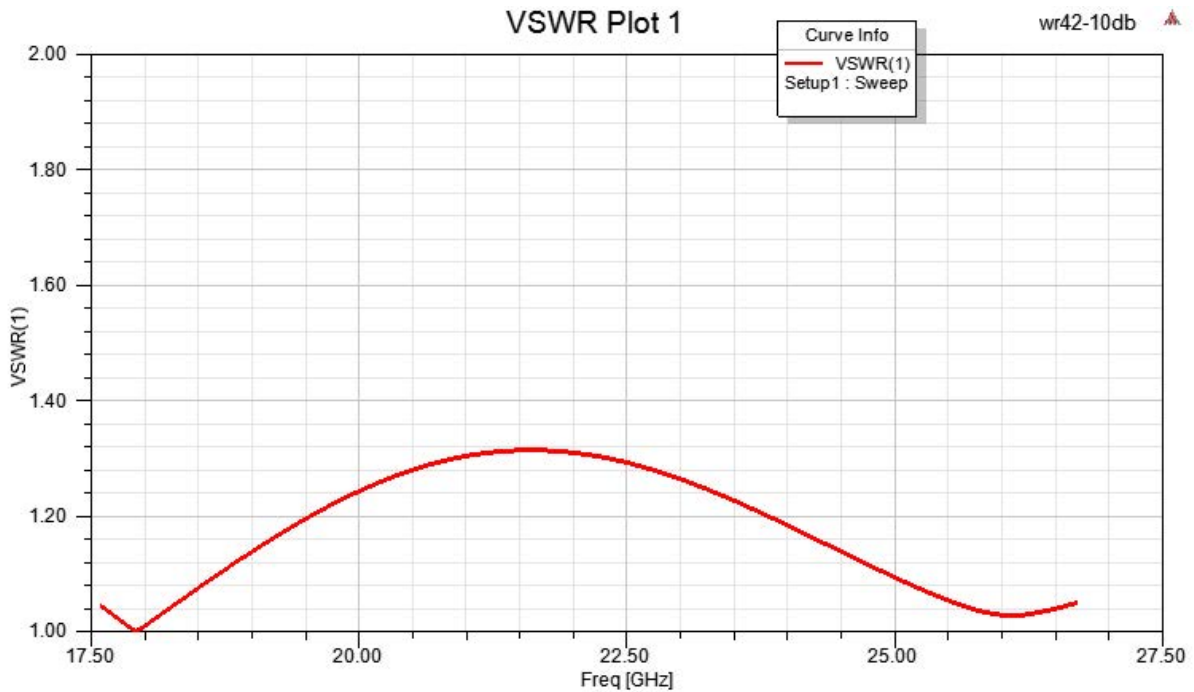
Waveguide Size WR-42

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

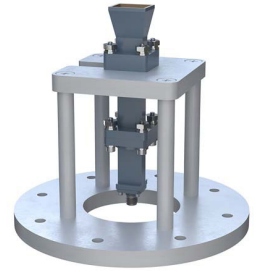
Plotted and Other Data

Notes:

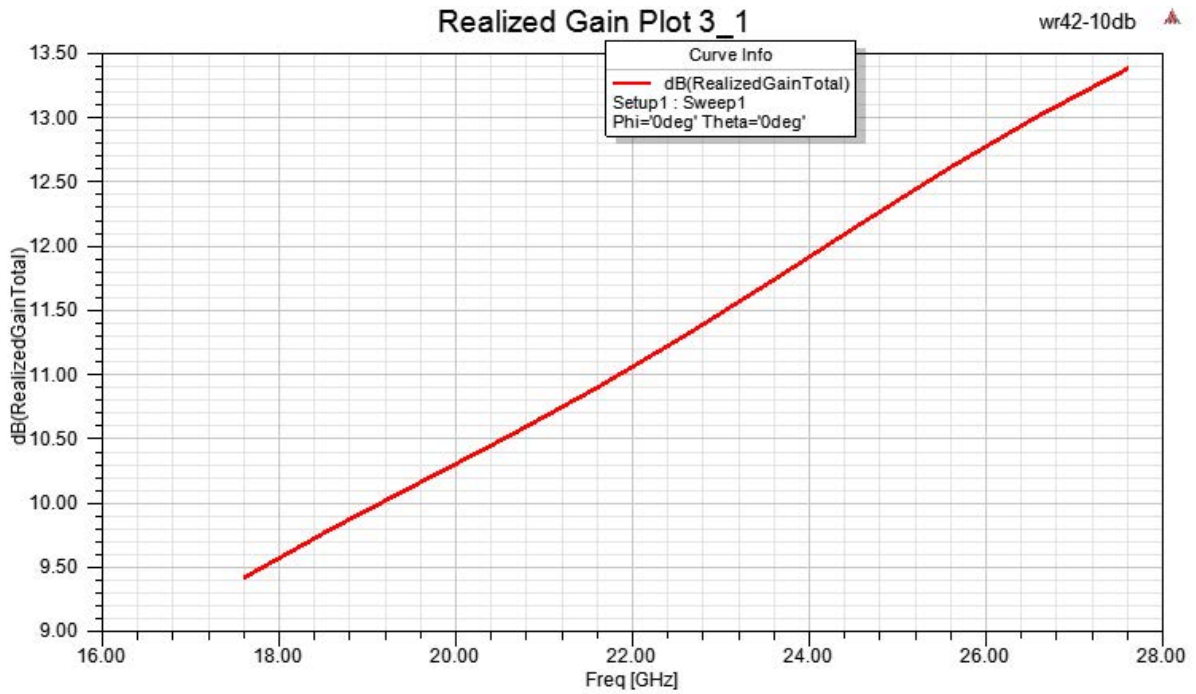
Typical Performance Data



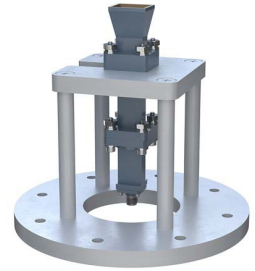
WR-42 Standard Gain Horn with 10 dBi gain, End Launch
2.92mm Female connector, Integrated Cage-Style Mount



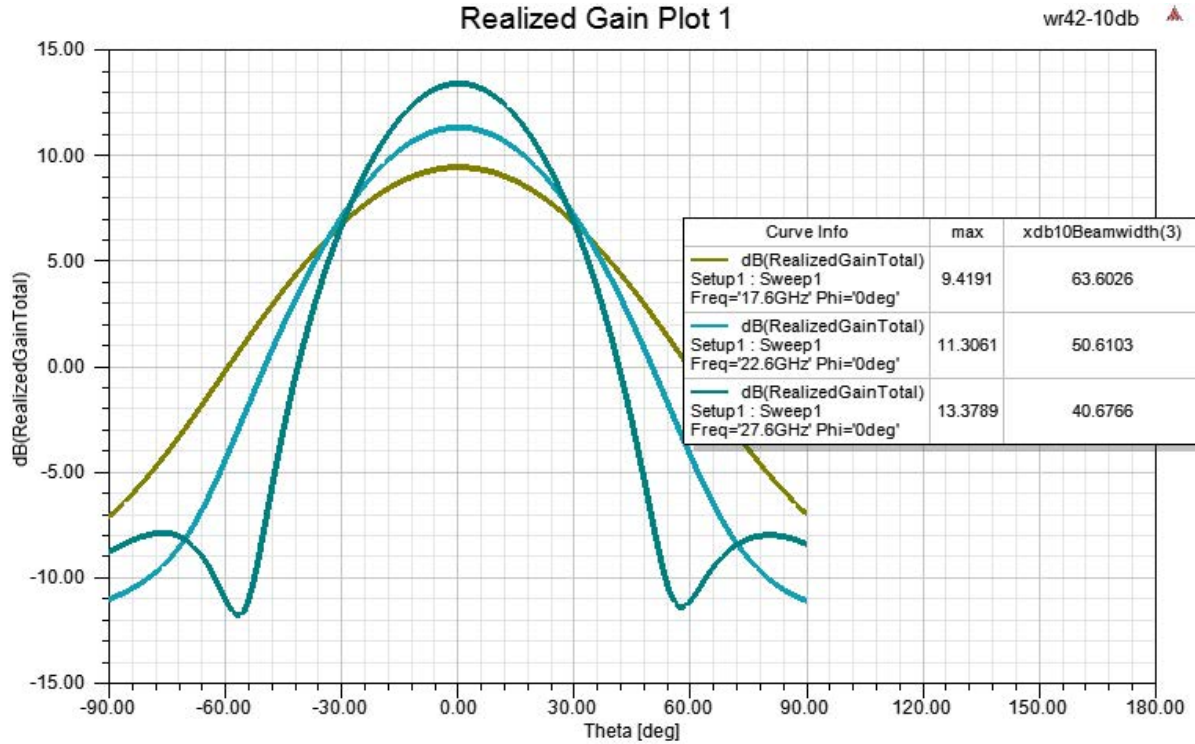
FM1WAN042-10ELKF



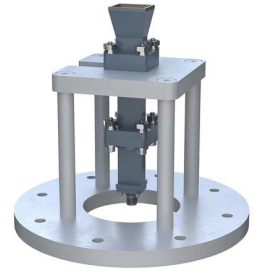
WR-42 Standard Gain Horn with 10 dBi gain, End Launch
2.92mm Female connector, Integrated Cage-Style Mount



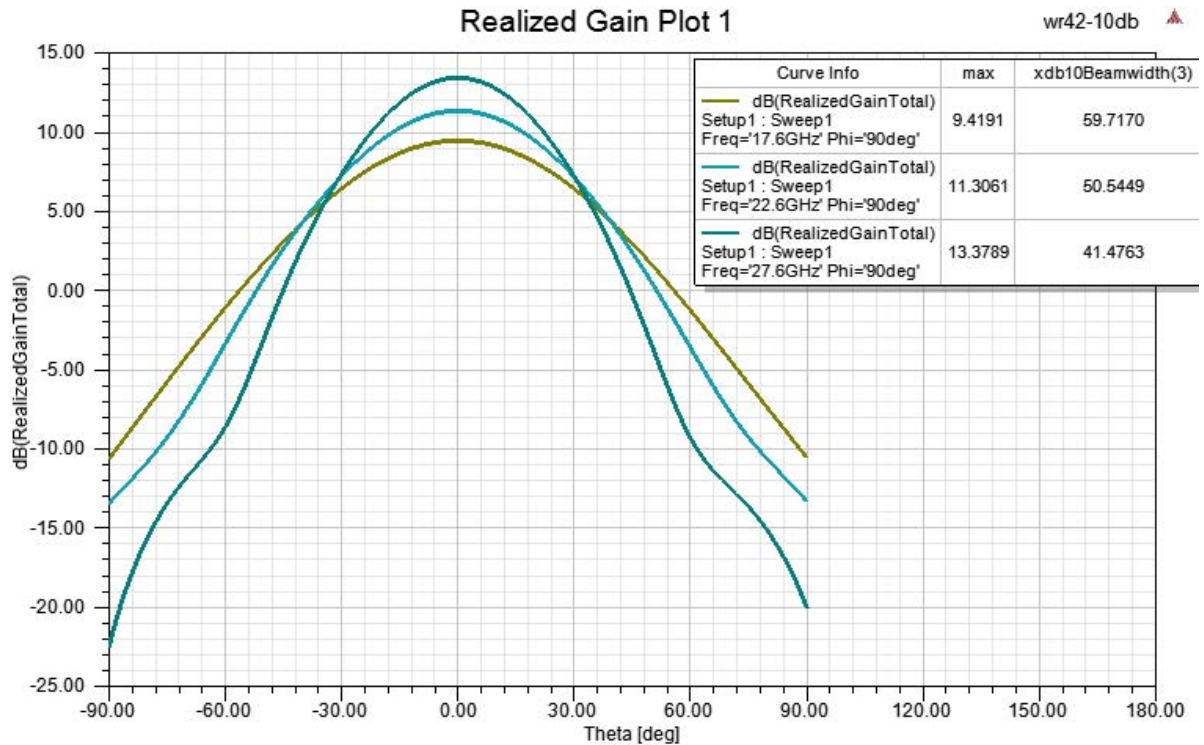
FM1WAN042-10ELKF



WR-42 Standard Gain Horn with 10 dBi gain, End Launch
2.92mm Female connector, Integrated Cage-Style Mount



FM1WAN042-10ELKF



WR-42 Standard Gain Horn with 10 dBi gain, End Launch 2.92mm Female connector, Integrated Cage-Style Mount 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.

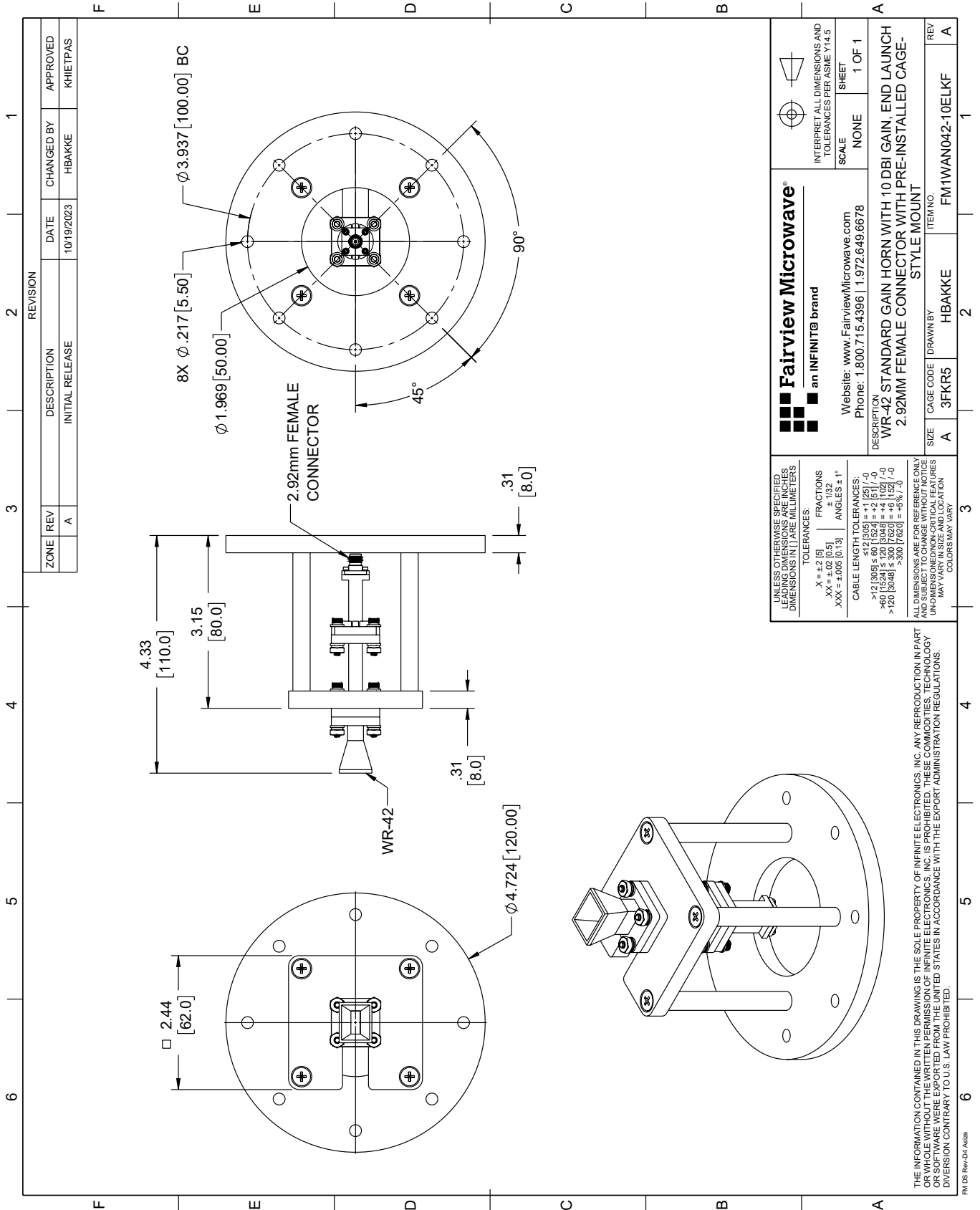
For additional information on this product, please click the following link: [WR-42 Standard Gain Horn with 10 dBi gain, End Launch 2.92mm Female connector, Integrated Cage-Style Mount FM1WAN042-10ELKF](#)

URL: <https://www.fairviewmicrowave.com/wr-42-standard-gain-horn-with-10-dbi-gain-end-launch-2.92mm-female-connector-integrated-cage-style-mount-fm1wan042-10elkf-p.aspx>

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FM1WAN042-10ELKF CAD Drawing

WR-42 Standard Gain Horn with 10 dBi gain, End Launch 2.92mm Female connector, Integrated Cage-Style Mount



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION	INITIAL RELEASE	
	A			KHETTPAS

Fairview Microwave
an INFINIT® brand

Website: www.FairviewMicrowave.com
Phone: 1.800.715.4396 | 1.972.649.6678

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE
SHEET: 1 OF 1

DESCRIPTION: WR-42 STANDARD GAIN HORN WITH 10 DBI GAIN, END LAUNCH 2.92MM FEMALE CONNECTOR WITH PRE-INSTALLED CAGE-STYLE MOUNT

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	HBAKKE	FM1WAN042-10ELKF

REV: A

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

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]
 FRACTIONS ± 1/32
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 <12 [305] ≤ 60 [1524] = ±.1 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [15] / -0

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

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FM DS Rev-D4 Alt2b