



LB-159-20-A Standard Gain Horn Antenna 4.9-7.05GHz 20dB Gain Rectangular Waveguide Interface

Standard Gain Horn Antenna Operating From 4.9GHz to 7.05GHz With a Nominal 20dB Gain With Rectangular Waveguide Interface

Product Information

SKU	LB-159-20-A
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Description

Standard Gain Horn Antenna LB-159-20-A, operating from 4.9 to 7.05GHz with a nominal 20dB gain and low VSWR 1.1:1 with FDP58 output. The model LB-159-20-A has uniform gain through its frequency span, providing efficient performance characteristics and directionality. Constructed of lightweight corrosion-resistant aluminum, the antenna will provide years of trouble-free indoor and outdoor service. This standard gain horn antenna is linearly polarized and ideally suited for EMI testing, direction finding, surveillance, antenna gain and pattern measurements and other applications.

Technical Specification

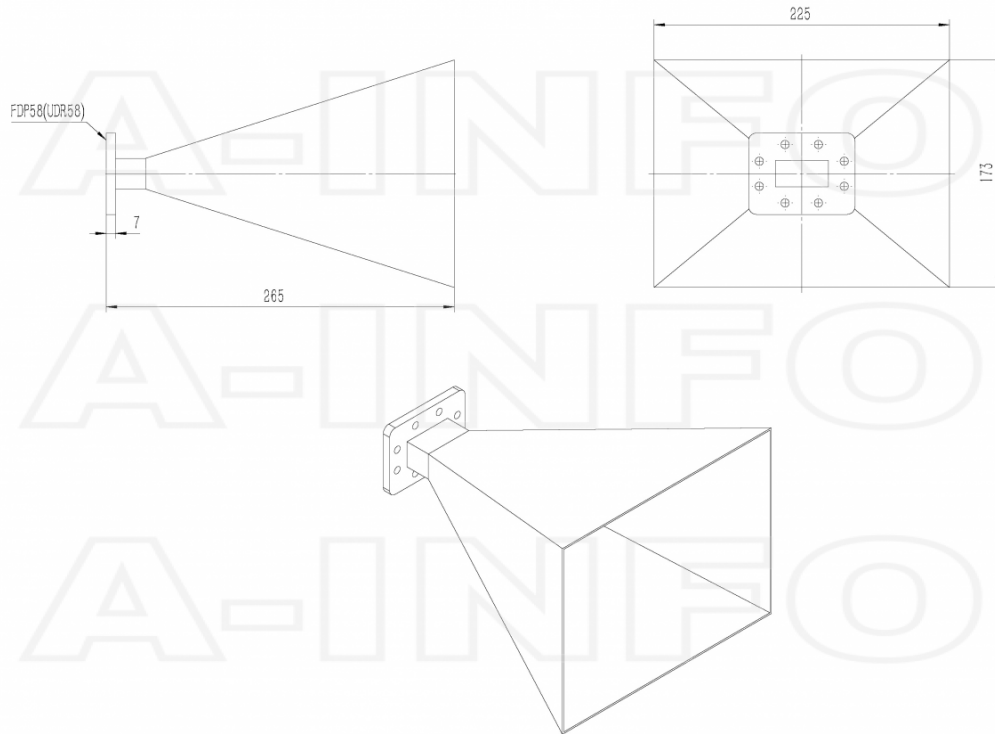
Electrical Specification		Interface	
Frequency, Min (GHz)	4.9	Output Type	Waveguide
Frequency, Max (GHz)	7.05	Flange Style	Rectangular
Waveguide Type	Rectangular	Flange Type	Cover
Waveguide Size EIA WR	WR159	Flange Designation	FDP58(UDR58)
Gain, Typ (dBi)	20	Mechanical Specification	
Polarization	Linear	Figure	A Type
3dB Beamwidth, E-Plane, Typ (Deg.)	16	Body Material	Al
3dB Beamwidth, H-Plane, Typ (Deg.)	18	Finish	Chemical Conversion Coating, Gray Paint
Cross Pol. Isolation, Typ (dB)	40	Size, W (mm)	225
VSWR, Typ	1.1:1	Size, H (mm)	173
		Size, L (mm)	265
		Weight, (kg)	0.8

Additional Information

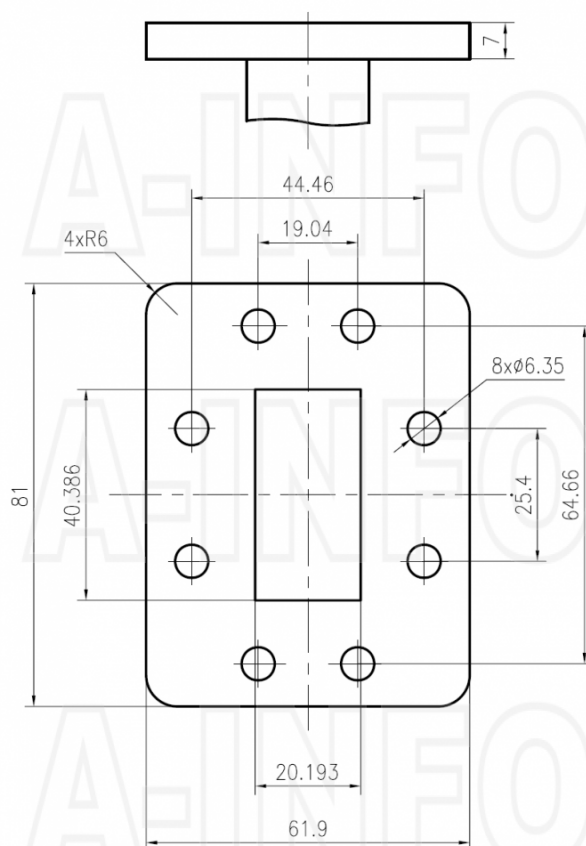
Application	General Purpose Indoor & Outdoor, Fixed	Solution for	Gain Reference Antenna Measurement Reflector Feed Far-field Measurement System Intergration Material Measurement
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Outline Drawing

FDP58 Output (P/N: LB-159-20-A)



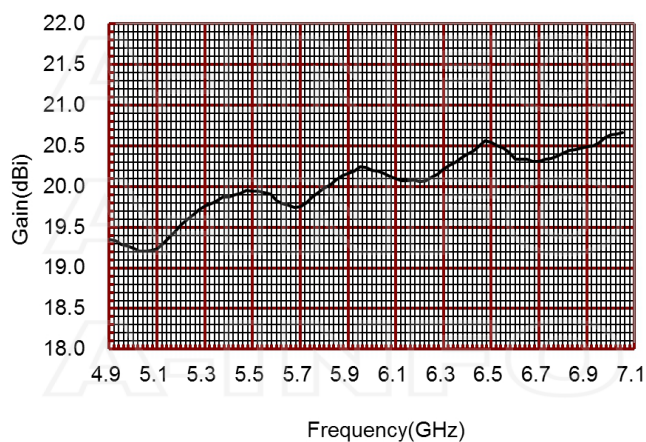
Flange Drawing



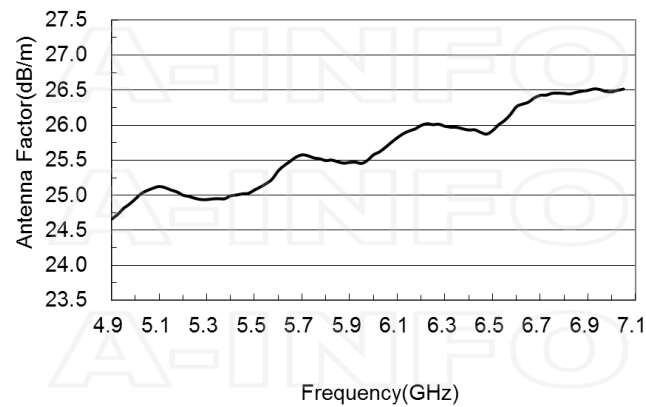
FDP58

Typical Test Results

Gain



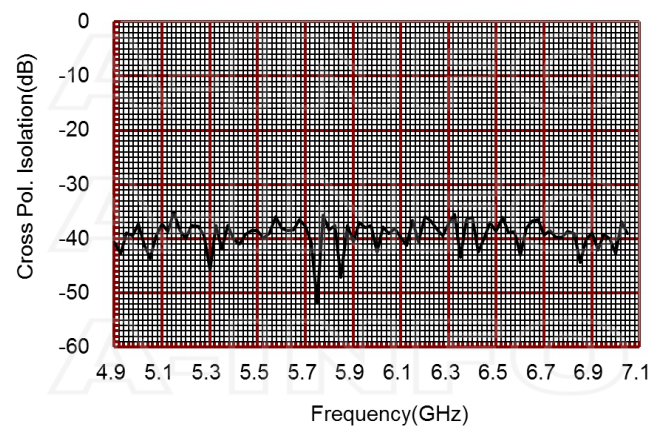
Antenna Factor



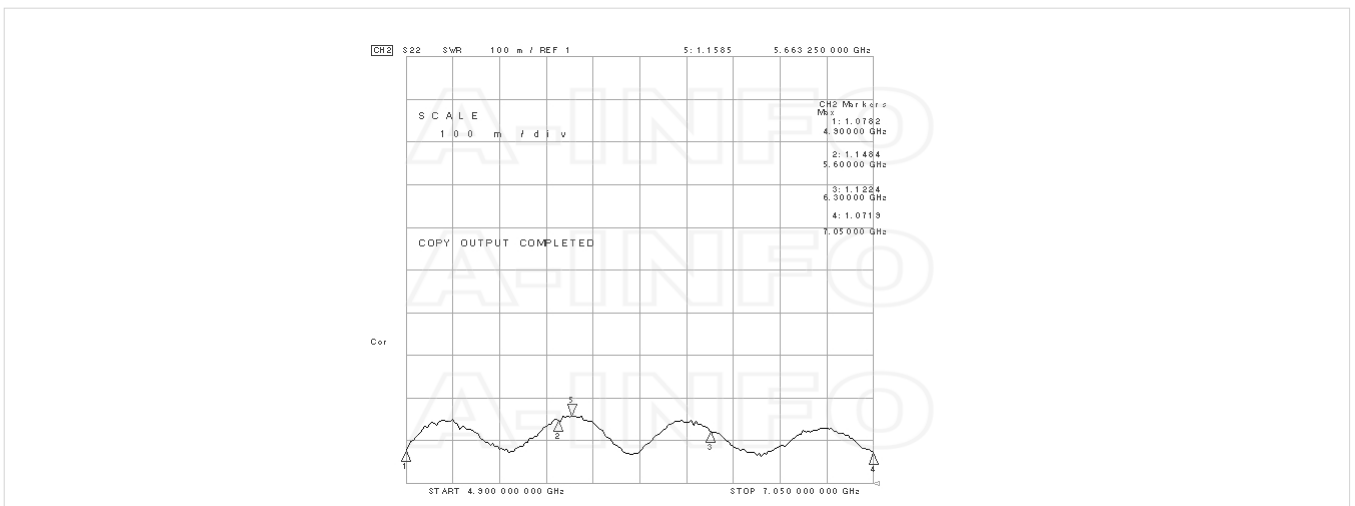
Antenna Factor (Table)

Frequency (GHz)	Gain (dBi)	Antenna Factor (dB/m)		Frequency (GHz)	Gain (dBi)	Antenna Factor (dB/m)
4.90	19.35	24.66		6.10	20.10	25.82
5.00	19.24	24.95		6.20	20.06	26.00
5.10	19.24	25.12		6.30	20.21	25.98
5.20	19.53	25.00		6.40	20.40	25.93
5.30	19.76	24.94		6.50	20.55	25.92
5.40	19.87	24.99		6.60	20.34	26.26
5.50	19.94	25.07		6.70	20.31	26.43
5.60	19.83	25.35		6.80	20.41	26.45
5.70	19.75	25.58		6.90	20.49	26.50
5.80	19.98	25.50		7.00	20.64	26.48
5.90	20.16	25.47		7.05	20.66	26.52
6.00	20.20	25.58				

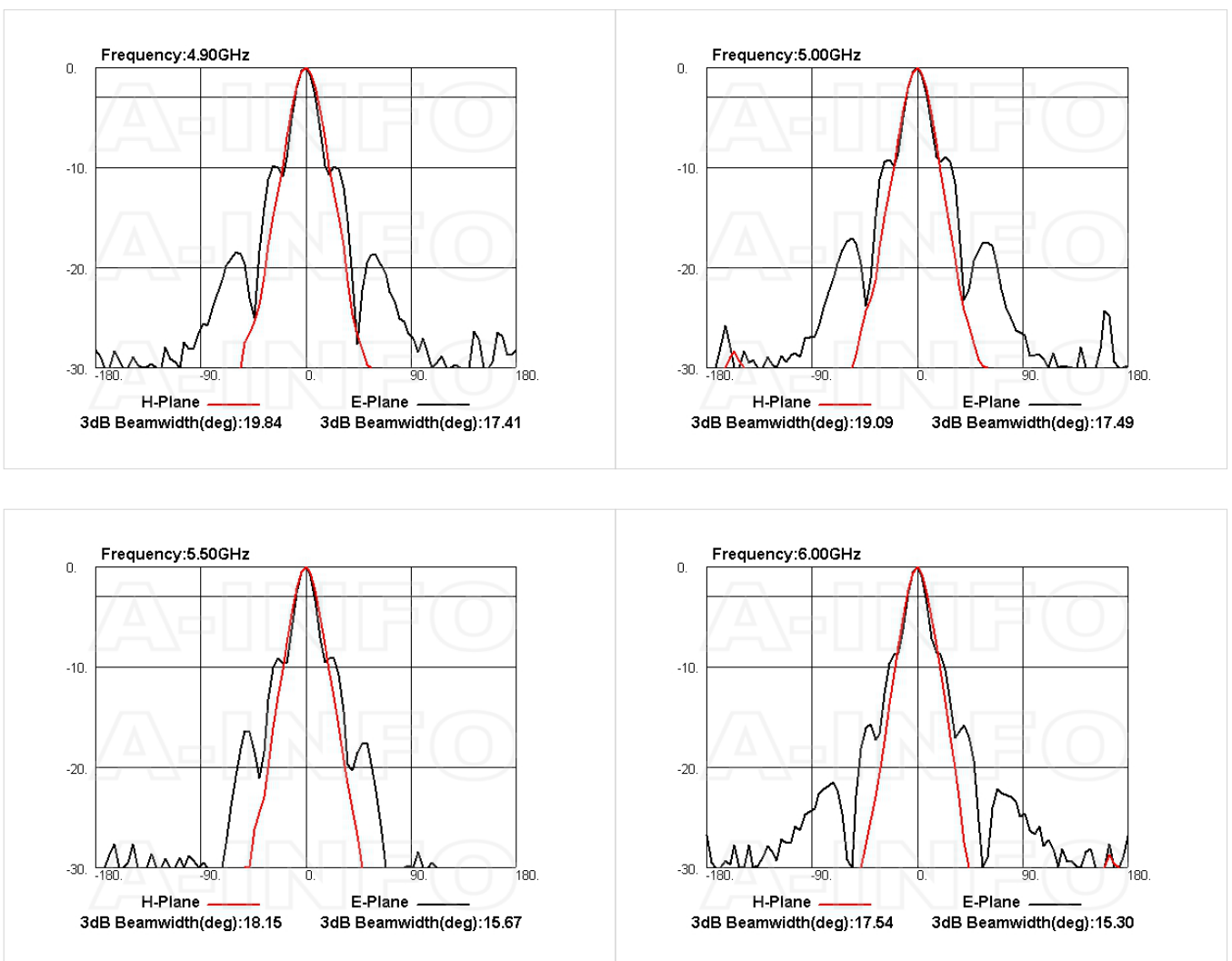
Cross Polarization Isolation

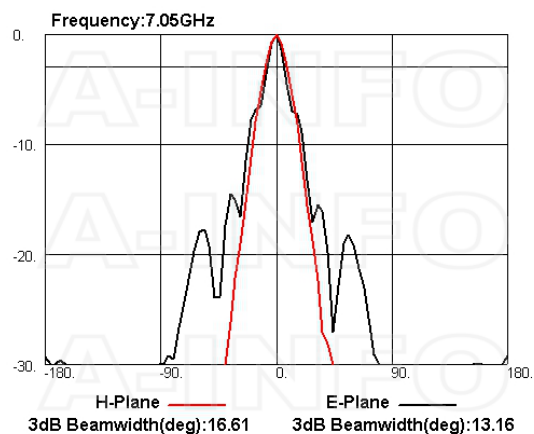
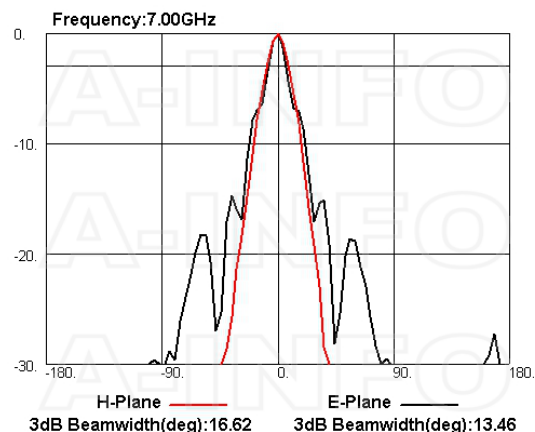
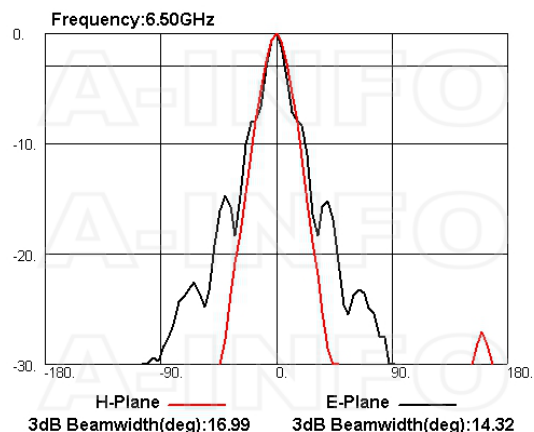


VSWR



Pattern





Related Products



159WCAN Right Angle Rectangular Waveguide to Coaxial Adapter 4.9-7.05GHz WR159 to N Type Female



159WCANM Right Angle Rectangular Waveguide to Coaxial Adapter 4.9-7.05GHz WR159 to N Type Male



159WCAS Right Angle Rectangular Waveguide to Coaxial Adapter 4.9-7.05GHz WR159 to SMA Female



159WCASM Right Angle Rectangular Waveguide to Coaxial Adapter 4.9-7.05GHz WR159 to SMA Male



159WCAT Right Angle Rectangular Waveguide to Coaxial Adapter 4.9-7.05GHz WR159 to TNC Female



159WCATM Right Angle Rectangular Waveguide to Coaxial Adapter 4.9-7.05GHz WR159 to TNC Male



159WCA7 Right Angle Rectangular Waveguide to Coaxial Adapter 4.9-7.05GHz WR159 to 7mm



159WCA3.5 Right Angle Rectangular Waveguide to Coaxial Adapter 4.9-7.05GHz WR159 to 3.5mm Female



159WCA3.5M Right Angle Rectangular Waveguide to Coaxial Adapter 4.9-7.05GHz WR159 to 3.5mm Male



159WCAK Right Angle Rectangular Waveguide to Coaxial Adapter 4.9-7.05GHz WR159 to 2.92mm Female



159WCAKM Right Angle Rectangular Waveguide to Coaxial Adapter 4.9-7.05GHz WR159 to 2.92mm Male



159WCA2.4 Right Angle Rectangular Waveguide to Coaxial Adapter 4.9-7.05GHz WR159 to 2.4mm Female



159WCA2.4M Right Angle Rectangular Waveguide to Coaxial Adapter 4.9-7.05GHz WR159 to 2.4mm Male



159WECAN Endlaunch Rectangular Waveguide to Coaxial Adapter 4.9-7.05GHz WR159 to N Type Female



159WECAS Endlaunch Rectangular Waveguide to Coaxial Adapter 4.9-7.05GHz WR159 to SMA Female



M6x30 Hex_Pack WR284-WR159 Flange Assembly Pack

Similar Products



LB-159-20-ASPO Standard Gain Horn Antenna 4.9-7.05GHz 20dB Gain Rectangular Waveguide Interface



LB-159-20-C-NF Standard Gain Horn Antenna 4.9-7.05GHz 20dB Gain N Type Female



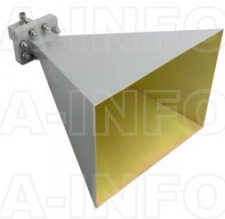
LB-159-20-C-NFSPO Standard Gain Horn Antenna 4.9-7.05GHz 20dB Gain N Type Female



LB-159-20-C-SF Standard Gain Horn Antenna 4.9-7.05GHz 20dB Gain SMA Female



LB-159-20-C-SFSPO Standard Gain Horn Antenna 4.9-7.05GHz 20dB Gain SMA Female



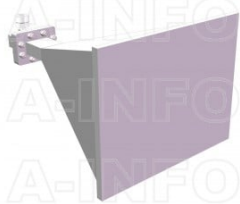
LB-159-20-C-TF Standard Gain Horn Antenna 4.9-7.05GHz 20dB Gain TNC Female



LB-159-20-C-TFSPO Standard Gain Horn Antenna 4.9-7.05GHz 20dB Gain TNC Female



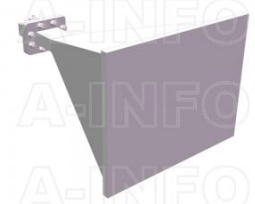
LB-159-20-C-7 Standard Gain Horn Antenna 4.9-7.05GHz 20dB Gain 7mm



LB-159-20-C-7SPO Standard Gain Horn Antenna 4.9-7.05GHz 20dB Gain 7mm



LB-159-20-C-3.5F Standard Gain Horn Antenna 4.9-7.05GHz 20dB Gain 3.5mm Female



LB-159-20-C-3.5SPO Standard Gain Horn Antenna 4.9-7.05GHz 20dB Gain 3.5mm Female

About this Datasheet

● Product Information Product Link: https://www.ainfoinc.com/lb-159-20-a-standard-gain-horn-antenna-4-9-7-05-ghz-20db-gain-fdp58 Data subject to change without notice. © A-INFO INC. 2023. All Rights Reserved	● Contact Us Address:dd 60 Tesla, Irvine, CA 92618, USA Website: www.ainfoinc.com Email: sales@ainfoinc.com	● Phone & Fax Phone: +1-949-639-9688 +1-949-639-9608 Fax: +1-949-639-9670
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