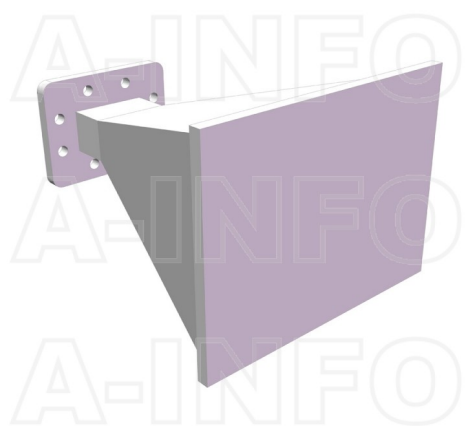




### LB-159-15-ASPO Standard Gain Horn Antenna 4.9-7.05GHz 15dB Gain Rectangular Waveguide Interface

Standard Gain Horn Antenna Operating From 4.9GHz to 7.05GHz With a Nominal 15dB Gain With Rectangular Waveguide Interface

## Product Information

|     |                |
|-----|----------------|
| SKU | LB-159-15-ASPO |
|-----|----------------|

## Description

Standard Gain Horn Antenna LB-159-15-ASPO, operating from 4.9 to 7.05GHz with a nominal 15dB gain and low VSWR 1.15:1 with FDP58 output. The model LB-159-15-ASPO has uniform gain through its frequency span, providing efficient performance characteristics and directionality. Constructed of lightweight corrosion-resistant aluminum, the horn comes with a specially designed weatherproof radome which provides excellent protection against the rain and dust but has very little loss across the full operating frequency band. 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

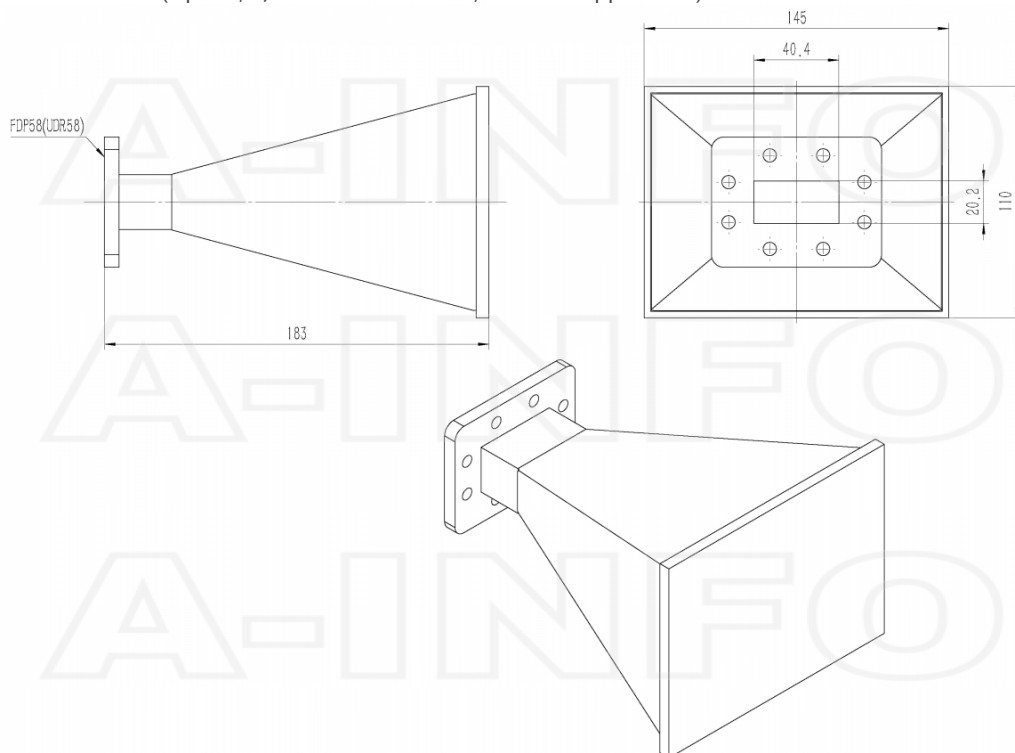
| Electrical Specification           |             | Interface                |                                         |
|------------------------------------|-------------|--------------------------|-----------------------------------------|
| Frequency, Min (GHz)               | 4.9         | Output 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)                    | 15          | Mechanical Specification |                                         |
| Polarization                       | Linear      | Figure                   | A Type                                  |
| 3dB Beamwidth, E-Plane, Typ (Deg.) | 24          | Body Material            | Al                                      |
| 3dB Beamwidth, H-Plane, Typ (Deg.) | 24          | Finish                   | Chemical Conversion Coating, Gray Paint |
| Cross Pol. Isolation, Typ (dB)     | 25          | Size, W (mm)             | 145                                     |
| VSWR, Typ                          | 1.15:1      | Size, H (mm)             | 110                                     |
|                                    |             | Size, L (mm)             | 183                                     |
|                                    |             | Weight, (kg)             | 0.42                                    |

### Additional Information

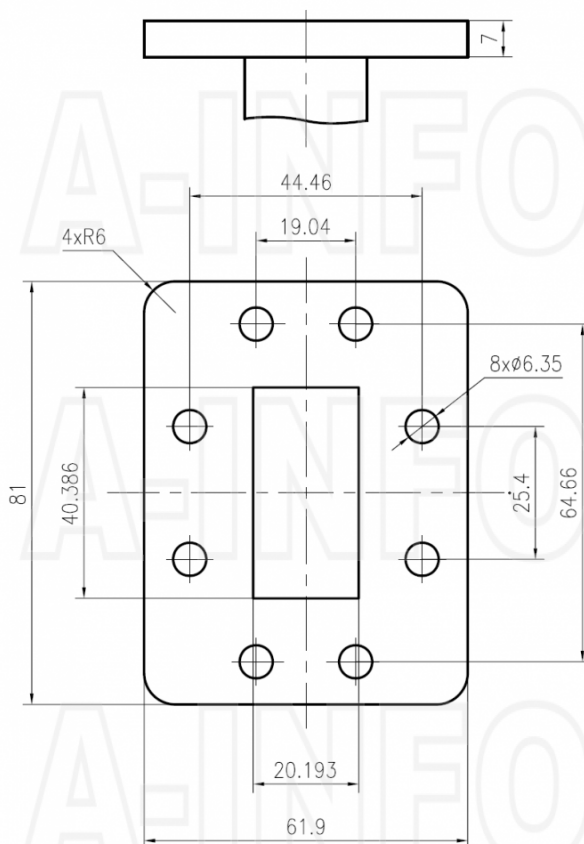
|             |                                          |              |                                                                                                                                 |
|-------------|------------------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------|
| Application | Outdoor, Waterproof and Dustproof, Fixed | Solution for | Gain Reference<br>Antenna Measurement<br>Reflector Feed<br>Far-field Measurement<br>System Intergration<br>Material Measurement |
|-------------|------------------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------|

### Outline Drawing

FDP58 Output with Radome (Option, P/N: LB-159-15-ASPO, Outdoor Application)



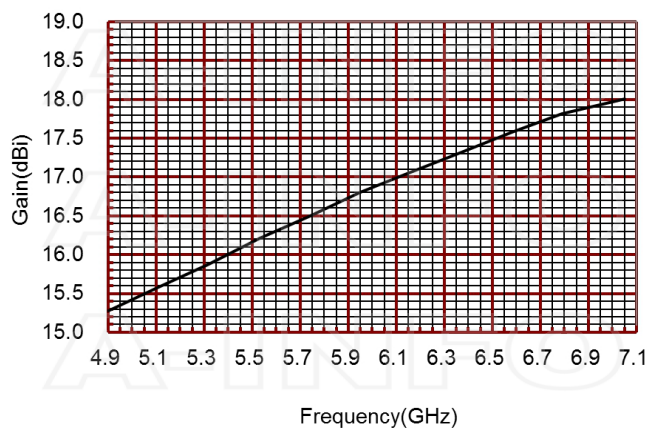
## Flange Drawing



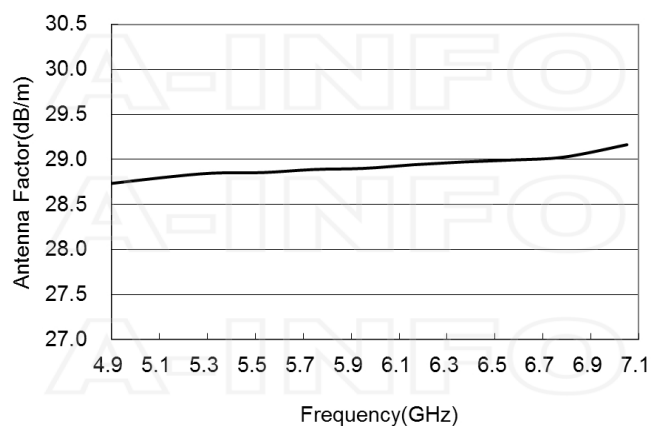
FDP58

## Typical Test Results

Gain



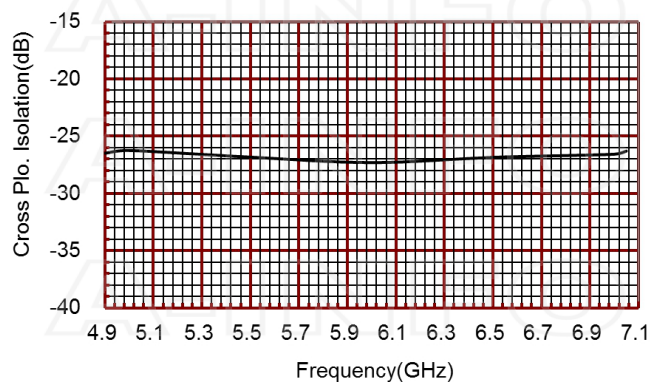
### Antenna Factor



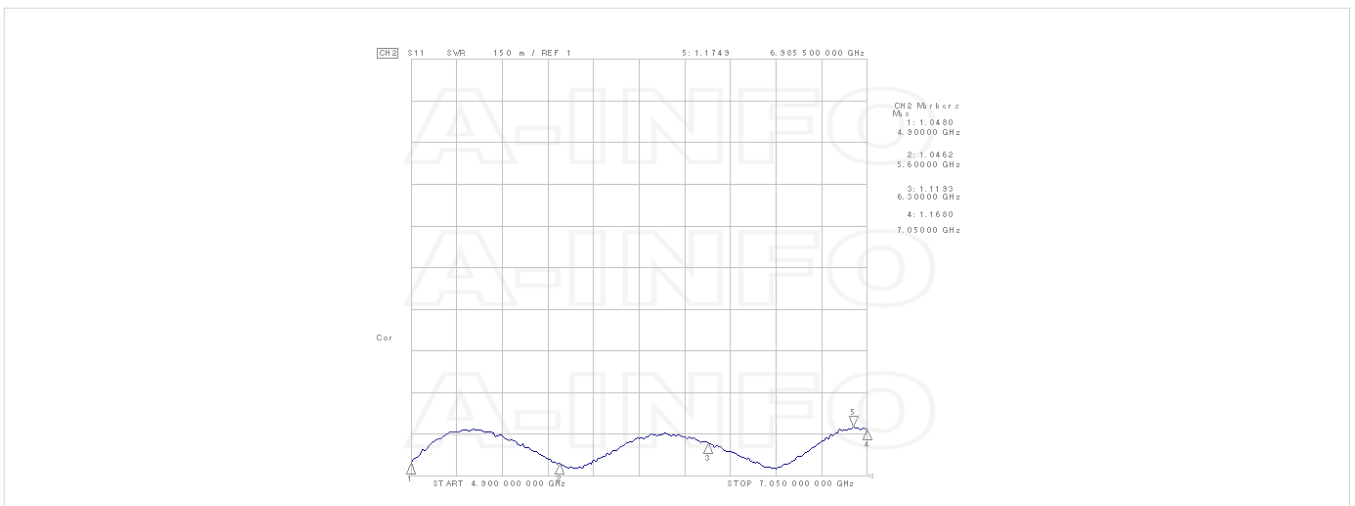
### Antenna Factor (Table)

| Frequency(GHz) | Gain(dBi) | Antenna Factor(dB/m) |
|----------------|-----------|----------------------|
| 4.90           | 15.28     | 28.73                |
| 5.11           | 15.58     | 28.80                |
| 5.32           | 15.88     | 28.85                |
| 5.53           | 16.21     | 28.85                |
| 5.74           | 16.50     | 28.89                |
| 5.95           | 16.80     | 28.90                |
| 6.16           | 17.06     | 28.94                |
| 6.37           | 17.32     | 28.97                |
| 6.58           | 17.58     | 28.99                |
| 6.79           | 17.82     | 29.03                |
| 7.05           | 18.01     | 29.16                |

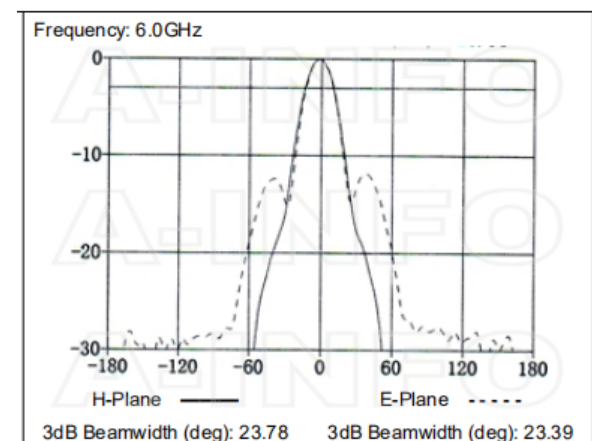
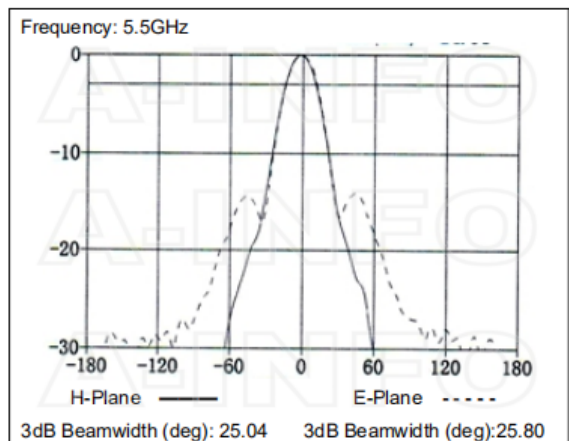
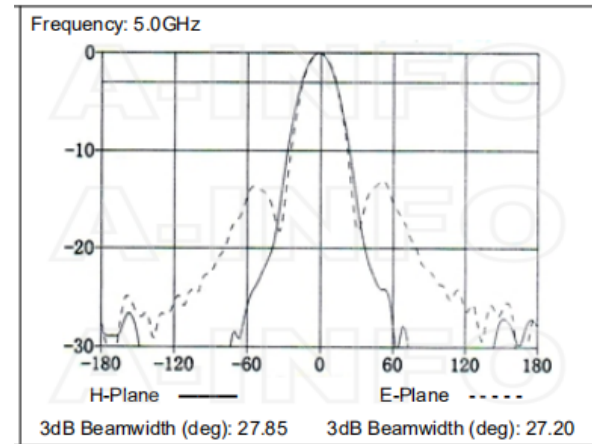
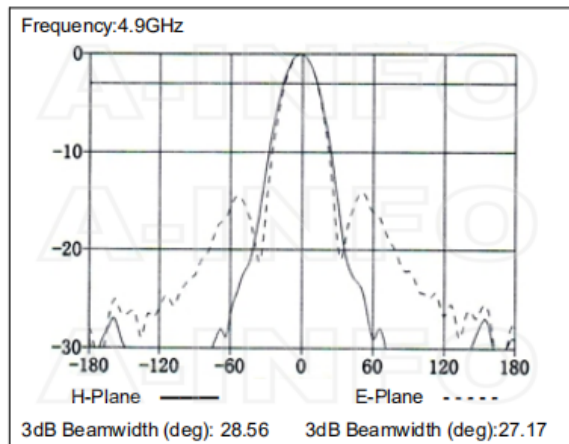
### Cross Polarization Isolation

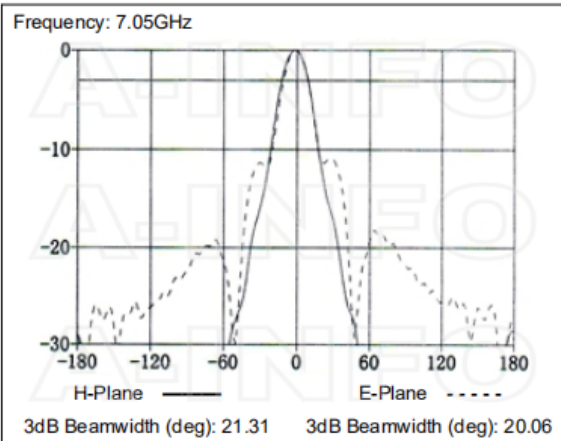
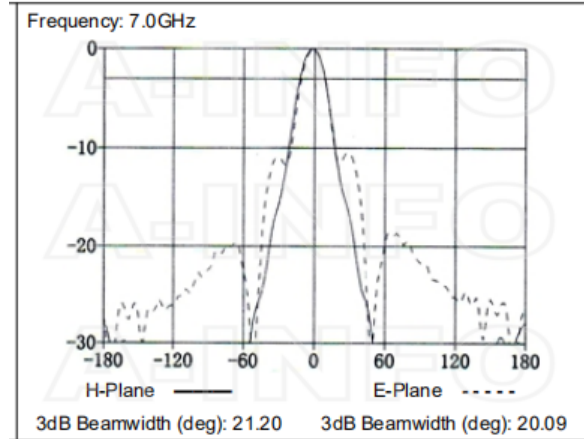
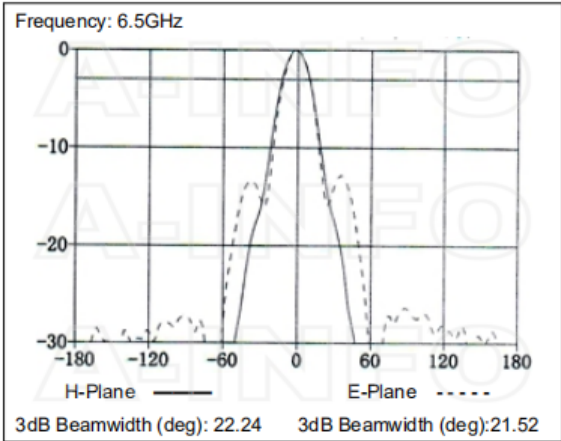


### VSWR



### 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-159-15-A Standard Gain Horn Antenna 4.9-7.05GHz 15dB Gain Rectangular Waveguide Interface



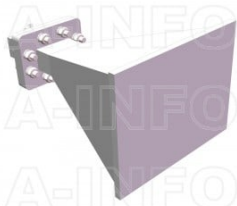
LB-159-15-C-NF Standard Gain Horn Antenna 4.9-7.05GHz 15dB Gain N Type Female



LB-159-15-C-NFSPO Standard Gain Horn Antenna 4.9-7.05GHz 15dB Gain N Type Female



LB-159-15-C-SF Standard Gain Horn Antenna 4.9-7.05GHz 15dB Gain SMA Female



LB-159-15-C-SFSPO Standard Gain Horn Antenna 4.9-7.05GHz 15dB Gain SMA Female



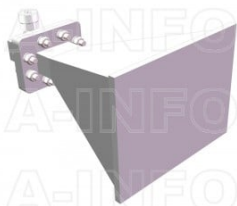
LB-159-15-C-TF Standard Gain Horn Antenna 4.9-7.05GHz 15dB Gain TNC Female



LB-159-15-C-TFSPO Standard Gain Horn Antenna 4.9-7.05GHz 15dB Gain TNC Female



LB-159-15-C-7 Standard Gain Horn Antenna 4.9-7.05GHz 15dB Gain 7mm



LB-159-15-C-7SPO Standard Gain Horn Antenna 4.9-7.05GHz 15dB Gain 7mm



LB-159-15-C-3.5F Standard Gain Horn Antenna 4.9-7.05GHz 15dB Gain 3.5mm Female



LB-159-15-C-3.5FSPO Standard Gain Horn Antenna 4.9-7.05GHz 15dB Gain 3.5mm Female

About this Datasheet

|                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                            |                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>● Product Information</li></ul> <p>Product Link:<br/><a href="https://www.ainfoinc.com/lb-159-15-aspo-standard-gain-horn-antenna-4-9-7-05-ghz-15db-gain-fdp58">https://www.ainfoinc.com/lb-159-15-aspo-standard-gain-horn-antenna-4-9-7-05-ghz-15db-gain-fdp58</a><br/>Data subject to change without notice.<br/>© A-INFO INC. 2023. All Rights Reserved</p> | <ul style="list-style-type: none"><li>● Contact Us</li></ul> <p>Address:dd<br/>60 Tesla, Irvine, CA 92618, USA</p> <p>Website:<br/><a href="http://www.ainfoinc.com">www.ainfoinc.com</a></p> <p>Email:<br/><a href="mailto:sales@ainfoinc.com">sales@ainfoinc.com</a></p> | <ul style="list-style-type: none"><li>● Phone &amp; Fax</li></ul> <p>Phone:<br/>+1-949-639-9688<br/>+1-949-639-9608</p> <p>Fax:<br/>+1-949-639-9670</p> |
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