

### LB-58160-15-A Multi Octave Horn Antenna 5.8-16GHz 15dB Gain Double Ridge Waveguide Interface



Multi Octave Horn Antenna From 5.8GHz to 16GHz With a Nominal 15dB Gain With Double Ridge Waveguide Interface

## Product Information

SKU	LB-58160-15-A
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## Description

Multi octave horn antenna LB-58160-15-A, operating from 5.8 to 16GHz with a nominal 15dB gain and low VSWR 1.5:1 with FPWRD580D28 output. The model LB-58160-15-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 multi octave horn antenna is linearly polarized and ideally suited for EMI testing, direction finding, surveillance, antenna gain and pattern measurements and other applications.

## Technical Specification

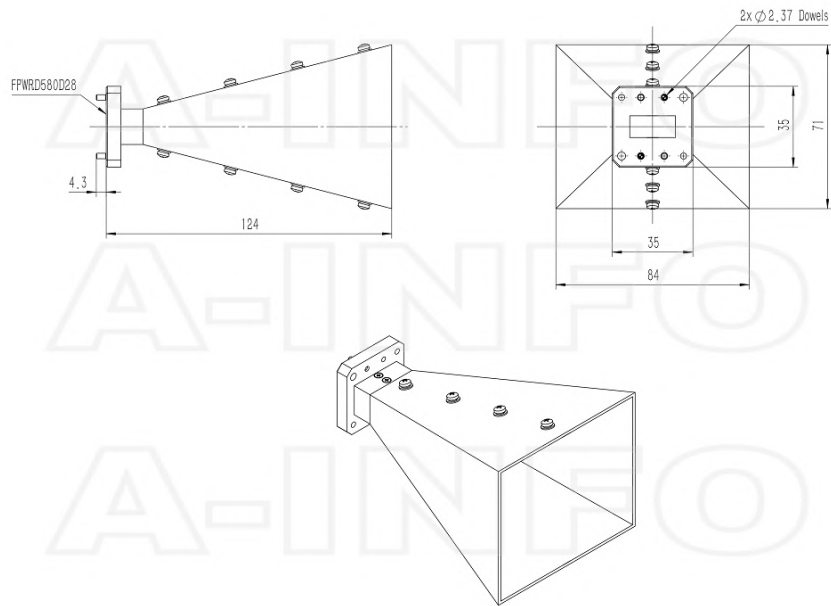
Electrical Specification		Interface	
Frequency, Min (GHz)	5.8	Output Type	Waveguide
Frequency, Max (GHz)	16	Flange Designation, WRD	FPWRD580D28
Waveguide Type	Double Ridge	Connector Gender	Female
Waveguide Size EIA WRD	WRD580	Mechanical Specification	
Gain, Typ (dBi)	15	Figure	A Type
Polarization	Linear	Body Material	Al
3dB Beamwidth, E-Plane, Min (Deg.)	17	Finish	Chemical Conversion Coating, Gray Paint
3dB Beamwidth, E-Plane, Max (Deg.)	39	Size, W (mm)	84
3dB Beamwidth, H-Plane, Min (Deg.)	17	Size, H (mm)	71
3dB Beamwidth, H-Plane, Max (Deg.)	47	Size, L (mm)	124
Cross Pol. Isolation, Typ (dB)	40	Weight, (kg)	0.13
VSWR, Typ	1.5:1		

## Additional Information

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

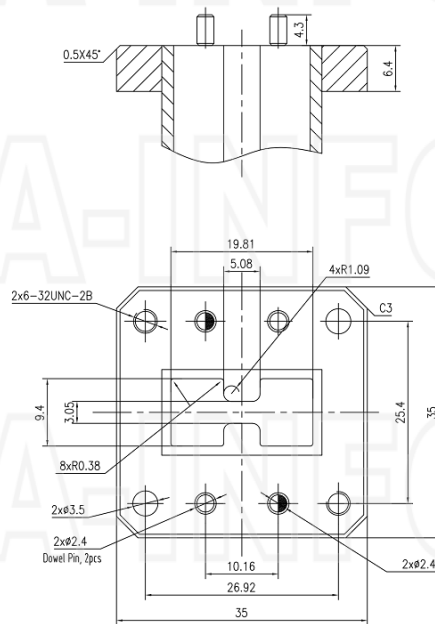
FPWRD580D28 Output (P/N: LB-58160-15-A)



Flange Drawing

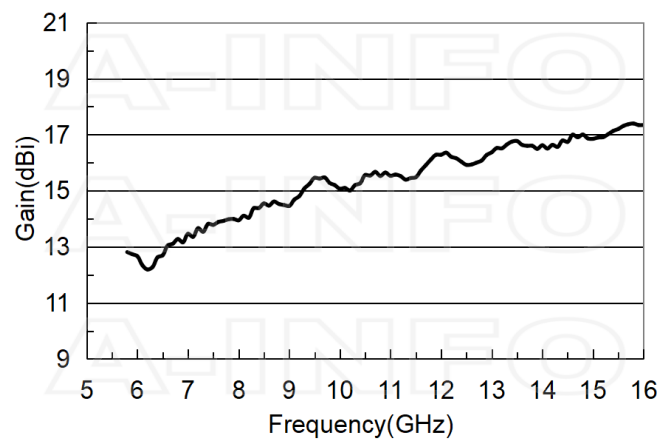
FPWRD580D28

(With two through mounting holes and two screws holes)

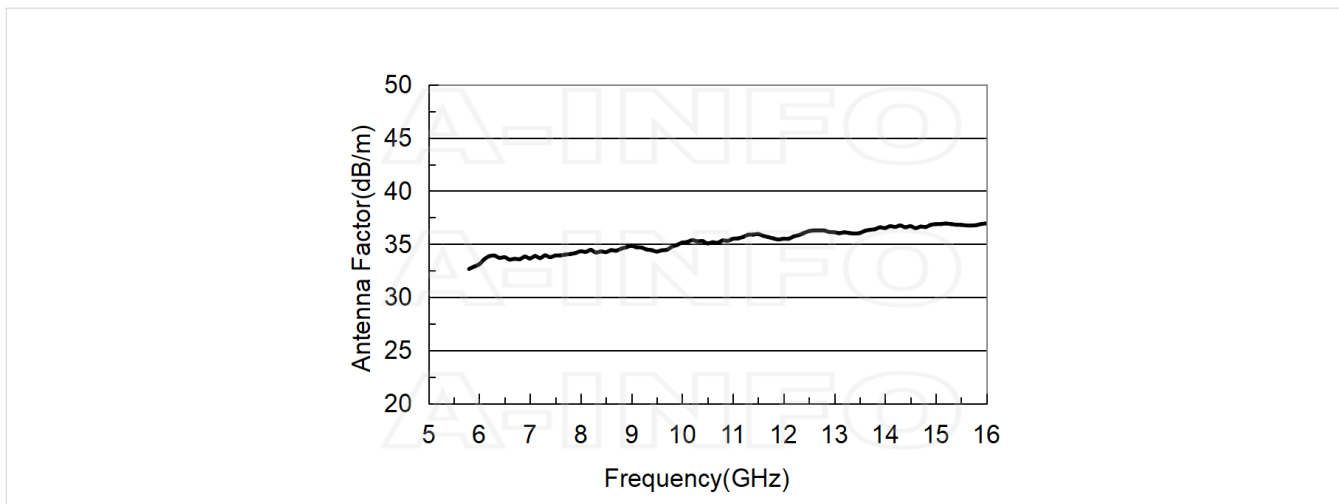


Typical Test Results

Gain



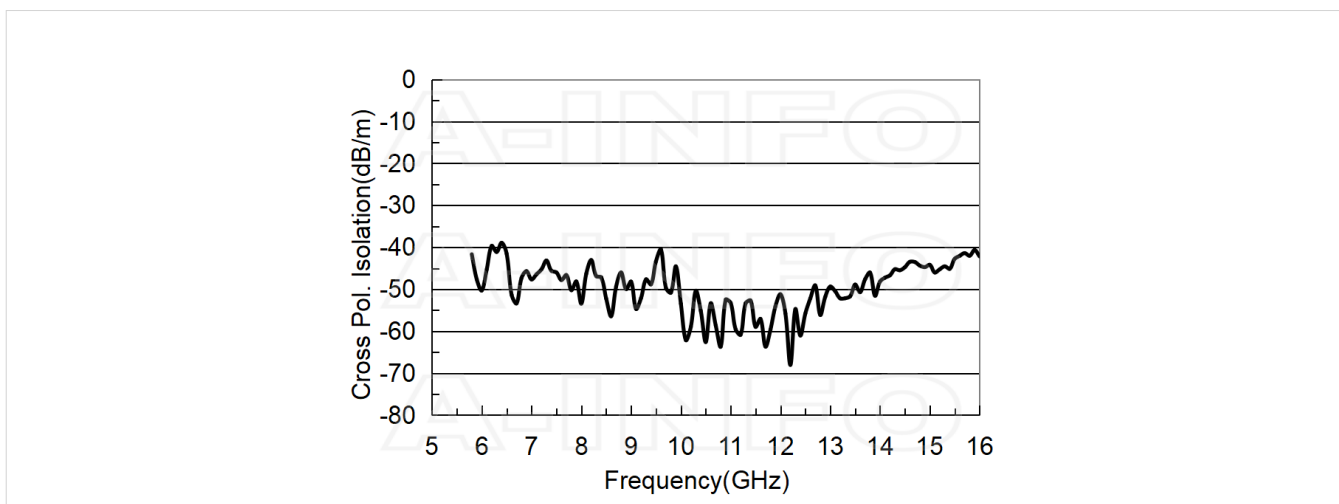
## Antenna Factor



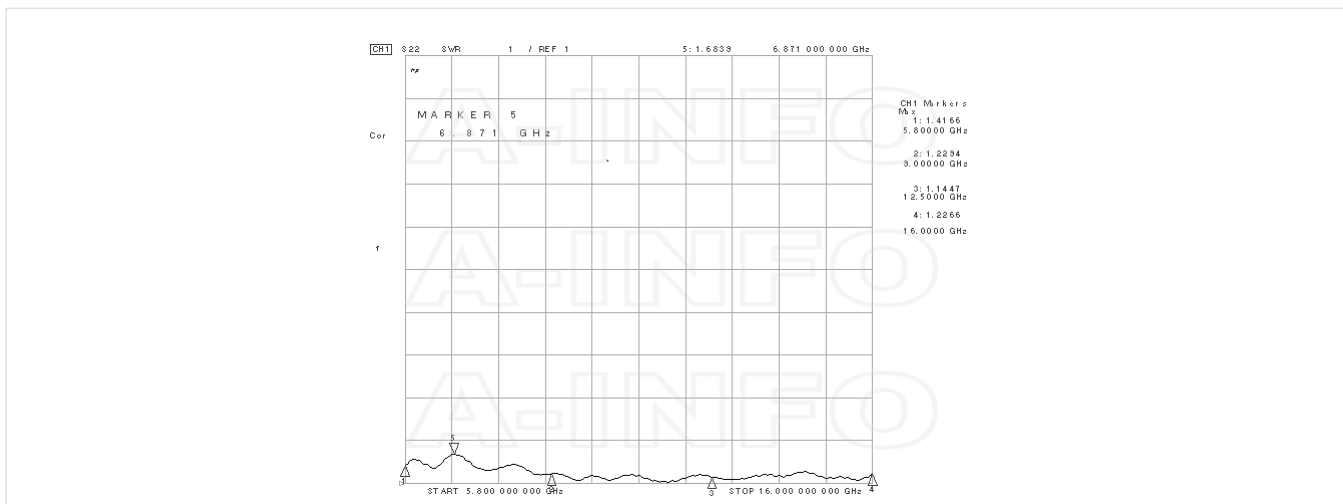
## Antenna Factor (Table)

Frequency(GHz)	Gain(dBi)	AF(dB/m)
5.8	12.81	32.67
6.0	12.66	33.11
7.0	13.46	33.65
8.0	13.94	34.33
9.0	14.46	34.84
10.0	15.07	35.14
11.0	15.53	35.51
12.0	16.28	35.51
13.0	16.37	36.12
14.0	16.62	36.51
15.0	16.85	36.88
16.0	17.34	36.95

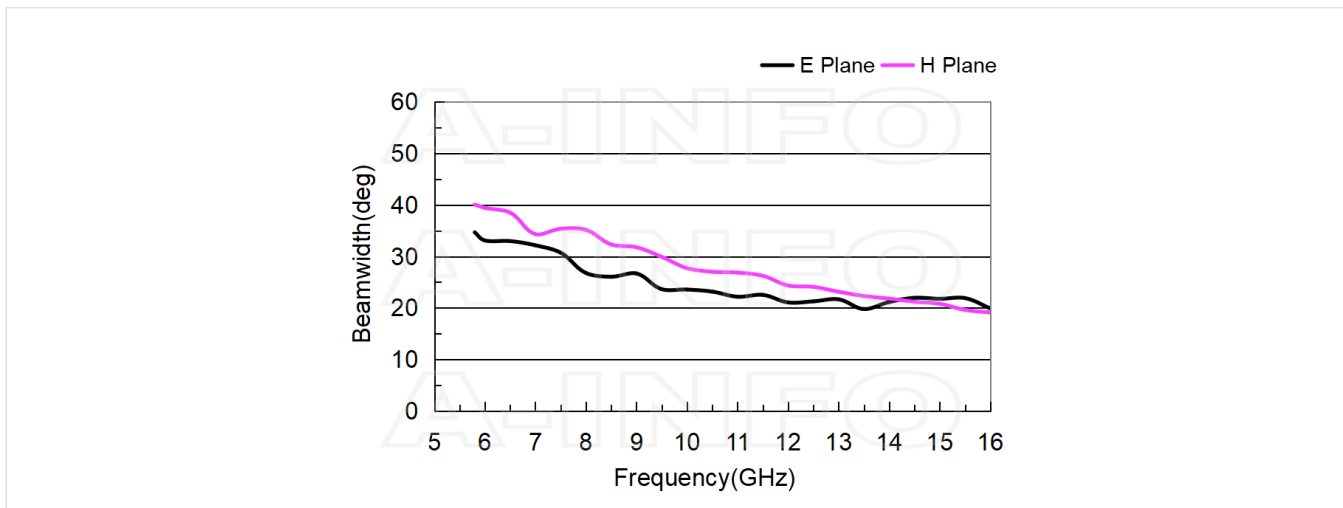
## Cross Polarization Isolation



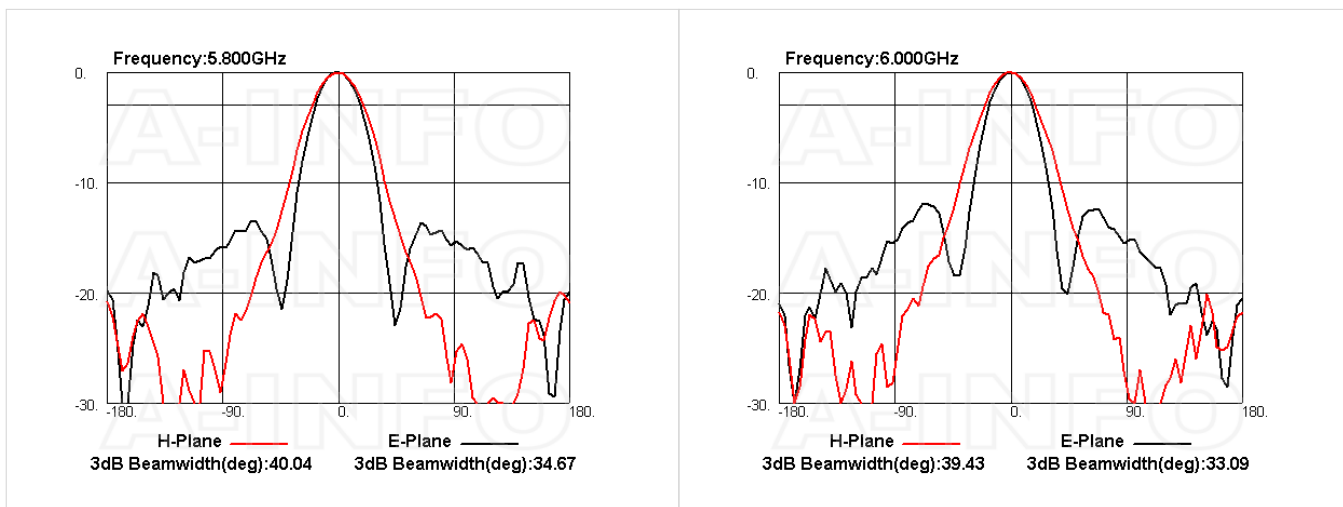
## VSWR

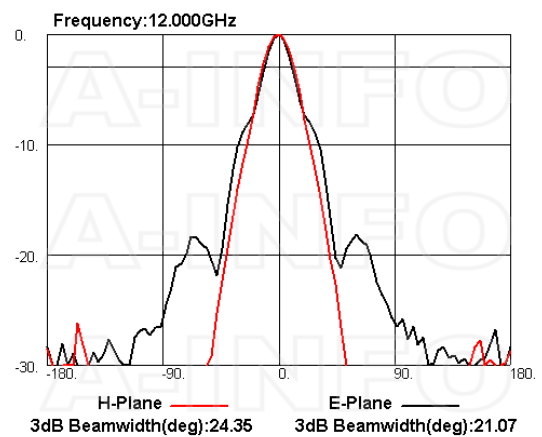
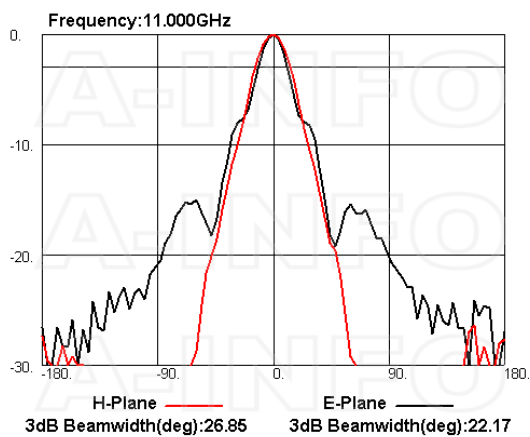
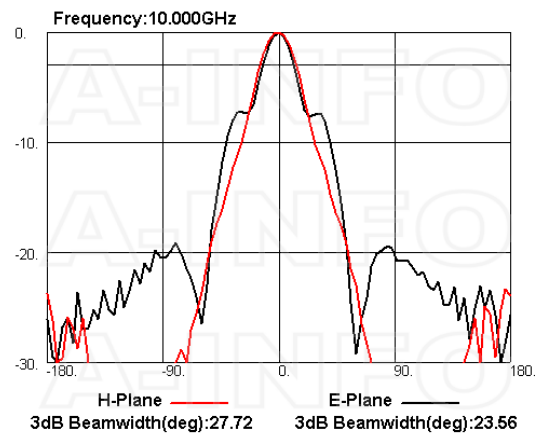
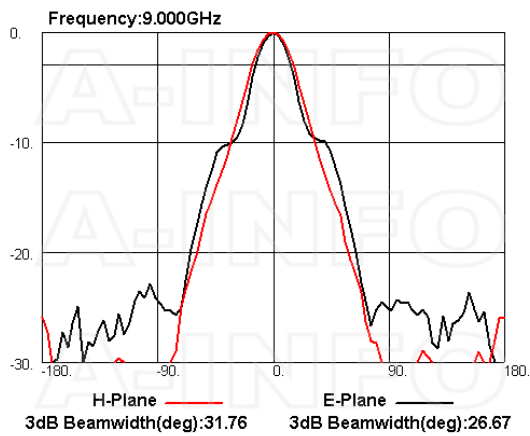
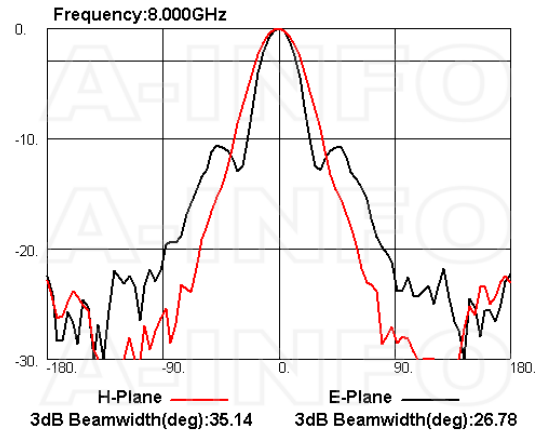
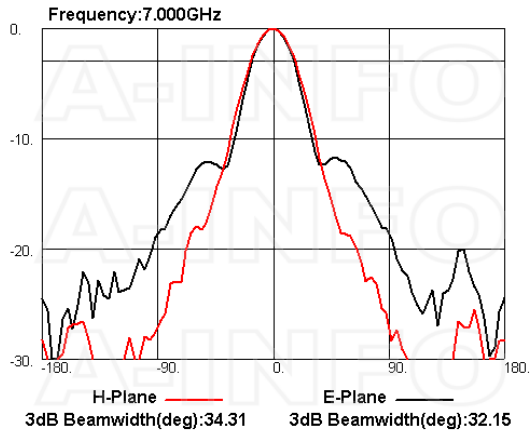


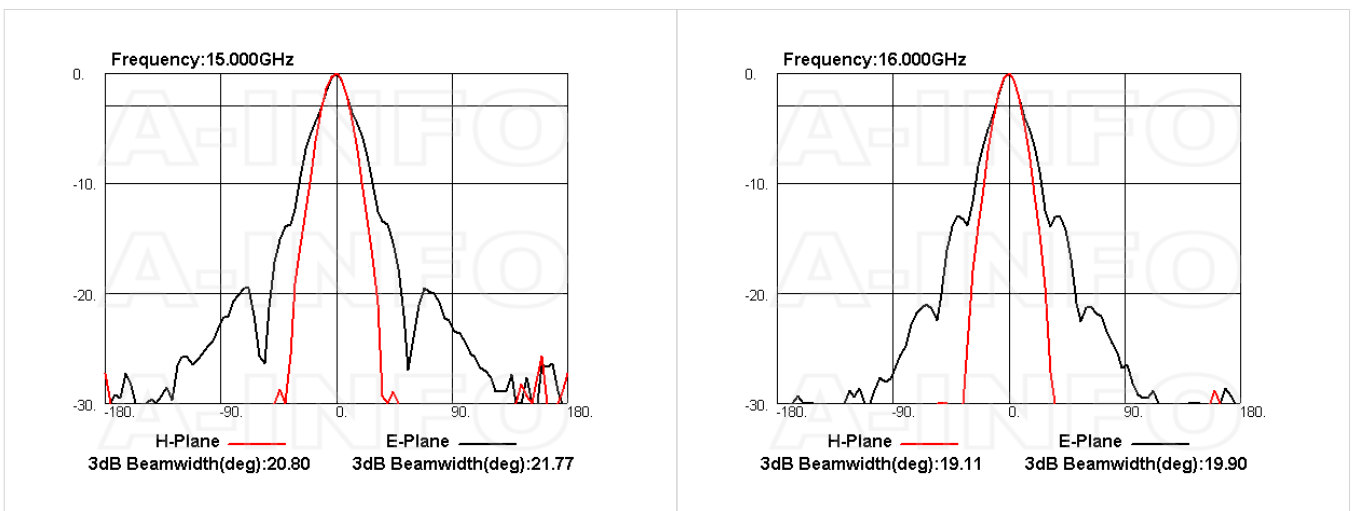
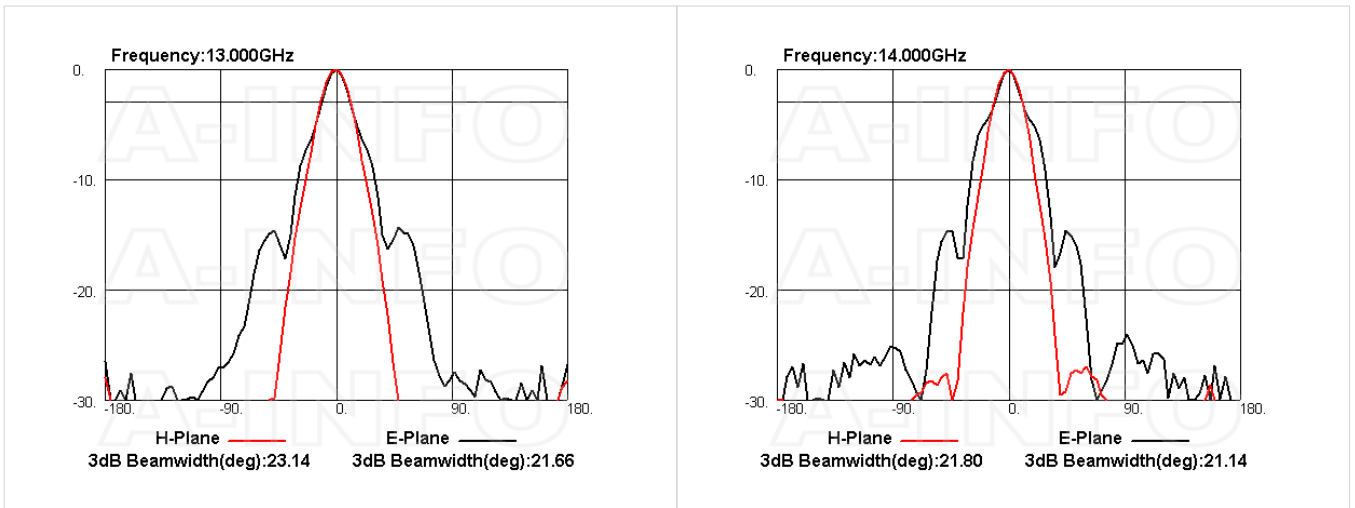
## Beamwidth



## Pattern







## Related Products



580DRWCAN\_Cu Right Angle Double Ridge Waveguide to Coaxial Adapter 5.8-16GHz WRD580 to N Type Female



580DRWCAS\_Cu Right Angle Double Ridge Waveguide to Coaxial Adapter 5.8-16GHz WRD580 to SMA Female



580DRWECAN\_Cu Endlaunch Double Ridge Waveguide to Coaxial Adapter 5.8-16GHz WRD580 to N Type Female

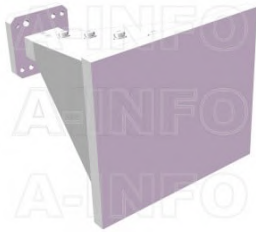


580DRWECAS\_Cu Endlaunch Double Ridge Waveguide to Coaxial Adapter 5.8-16GHz WRD580 to SMA Female



580DRWHCAN\_Cu Right Angle  
High Power Double Ridge  
Waveguide to Coaxial Adapter  
5.8-16GHz WRD580 to N Type  
Female

## Similar Products



LB-58160-15-ASPO Multi Octave  
Horn Antenna 5.8-16GHz 15dB  
Gain Double Ridge Waveguide  
Interface



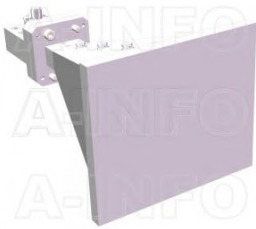
LB-58160-15-C-NF Multi Octave  
Horn Antenna 5.8-16GHz 15dB  
Gain N Type Female



LB-58160-15-C-NFSPO Multi  
Octave Horn Antenna 5.8-16GHz  
15dB Gain N Type Female



LB-58160-15-C-SF Multi Octave  
Horn Antenna 5.8-16GHz 15dB  
Gain SMA Female



LB-58160-15-C-SFSPO Multi  
Octave Horn Antenna 5.8-16GHz  
15dB Gain SMA Female

## About this Datasheet

<ul style="list-style-type: none"><li>● <b>Product Information</b></li></ul> Product Link: <a href="https://www.ainfoinc.com/lb-58160-15-a-multi-octave-horn-antenna-5-8-16-ghz-15db-gain-fpwr580d28">https://www.ainfoinc.com/lb-58160-15-a-multi-octave-horn-antenna-5-8-16-ghz-15db-gain-fpwr580d28</a> Data subject to change without notice. © A-INFO INC. 2024. All Rights Reserved	<ul style="list-style-type: none"><li>● <b>Contact Us</b></li></ul> Address: 60 Tesla, Irvine, CA 92618, USA  Website: <a href="http://www.ainfoinc.com">www.ainfoinc.com</a>  Email: <a href="mailto:sales@ainfoinc.com">sales@ainfoinc.com</a>	<ul style="list-style-type: none"><li>● <b>Phone &amp; Fax</b></li></ul> Phone: +1-949-639-9688 +1-949-639-9608  Fax: +1-949-639-9670
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