



### LB-7180-NF Broadband Horn Antenna 0.7-18.0 GHz 12dB Gain N Type Female

Broadband Horn Antenna Operating From 0.7 GHz to 18.0 GHz With a Nominal 12 dB Gain With N Type Female Connector

## Product Information

SKU	LB-7180-NF	Patents	ZL201621014310.X (China) ZL201630454754.4 (China)
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## Description

Broadband horn antenna LB-7180-NF, operating from 0.7 to 18 GHz with a nominal 12dB gain and low VSWR 2.0:1 with N Type Female output connector. The model LB-7180-NF has uniform gain through its frequency span, providing efficient performance characteristics and directionality. It can handle 300 W continuously and 500 W peak power. Constructed of lightweight corrosion-resistant aluminum, the antenna will provide years of trouble-free indoor and outdoor service. This broadband horn antenna is linearly polarized and ideally suited for EMI testing, direction finding, surveillance, antenna gain and pattern measurements and other applications.

## Technical Specification

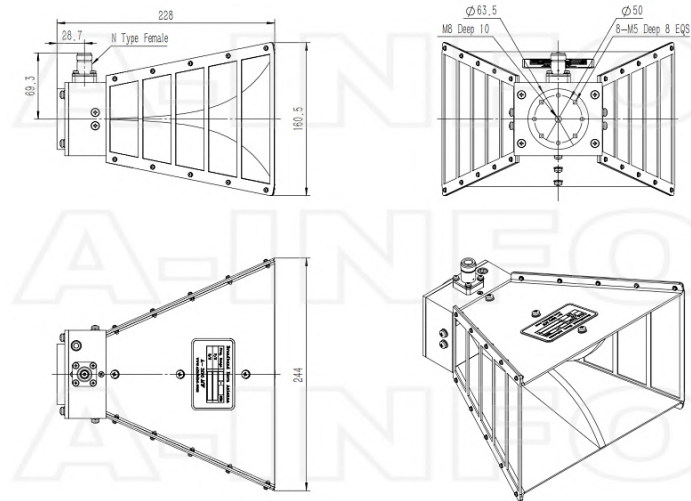
Electrical Specification		Interface	
Frequency, Min (GHz)	0.7	Output Type	Coaxial
Frequency, Max (GHz)	18	Connector	N Type
Gain, Typ (dBi)	12	Connector Gender	Female
Polarization	Linear	Mechanical Specification	
3dB Beamwidth, E-Plane, Min (Deg.)	10	Body Material	Al
3dB Beamwidth, E-Plane, Max (Deg.)	155	Finish	Chemical Conversion Coating
3dB Beamwidth, H-Plane, Min (Deg.)	9	Size, W (mm)	244
3dB Beamwidth, H-Plane, Max (Deg.)	95	Size, H (mm)	160.5
Cross Pol. Isolation, Typ (dB)	25	Size, L (mm)	228
VSWR, Typ	2.0:1	Weight, (kg)	1.5
Impedance, (Ohm)	50		
Power Handling, CW, (W)	300		
Power Handling, Peak, (W)	500		

## Additional Information

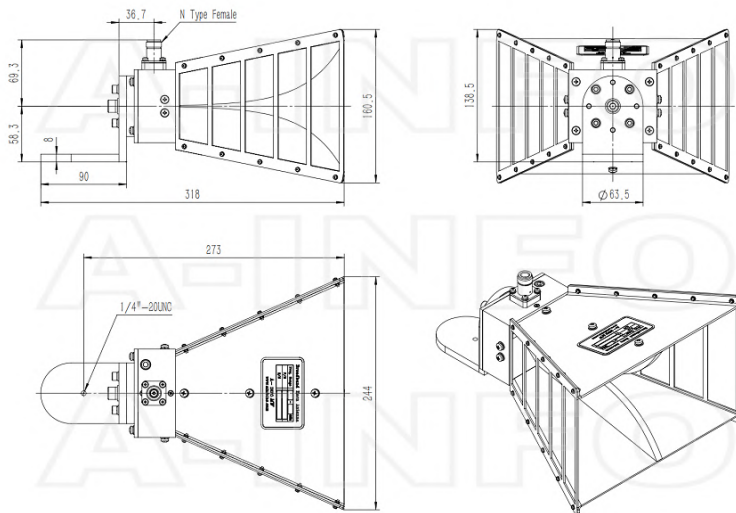
Application	General Purpose Indoor & Outdoor, Fixed	Solution for	Gain Reference Antenna Measurement Reflector Feed Far-field Measurement System Intergration
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## Outline Drawing

N-Female Output (P/N: LB-7180-NF)

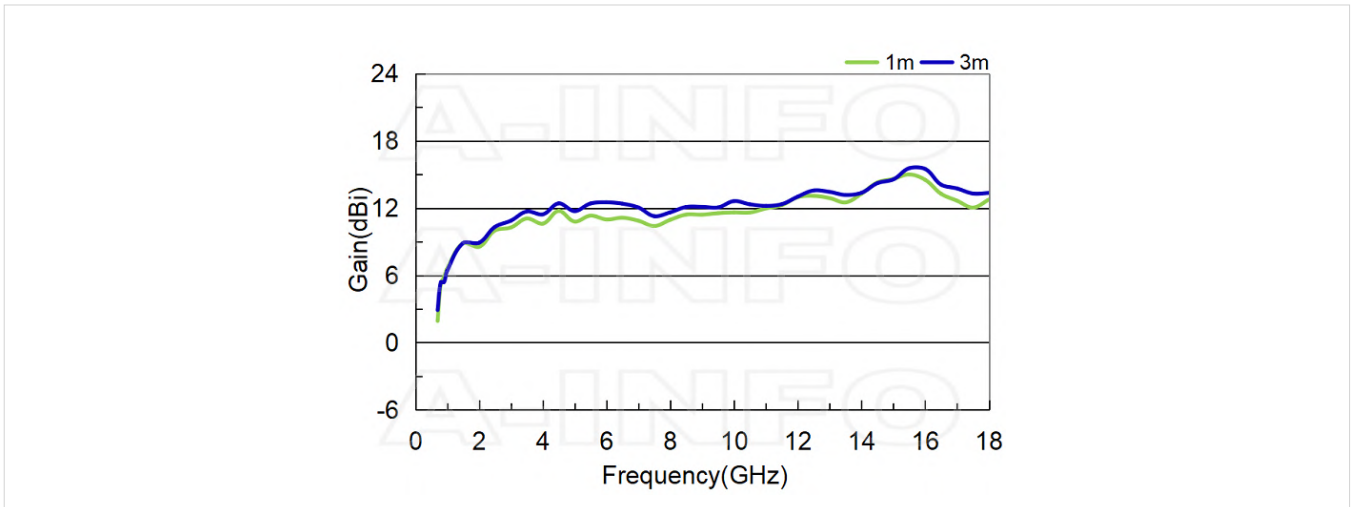


N-Female Output with L Type Mounting Bracket (Option, P/N: LB-10180-L)

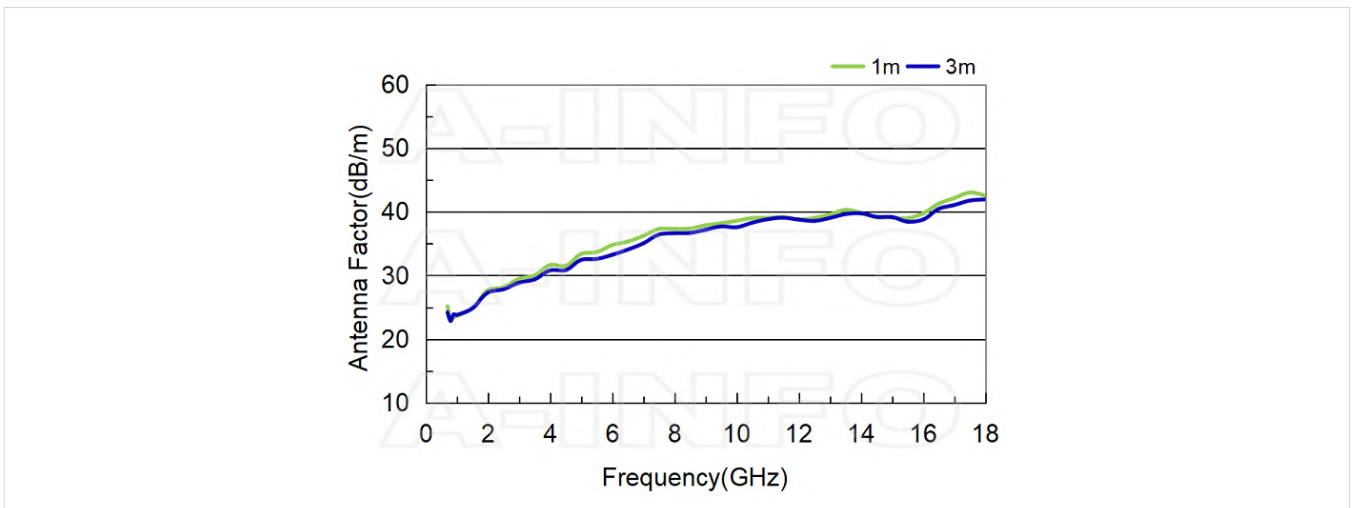


## Typical Test Results

### Gain



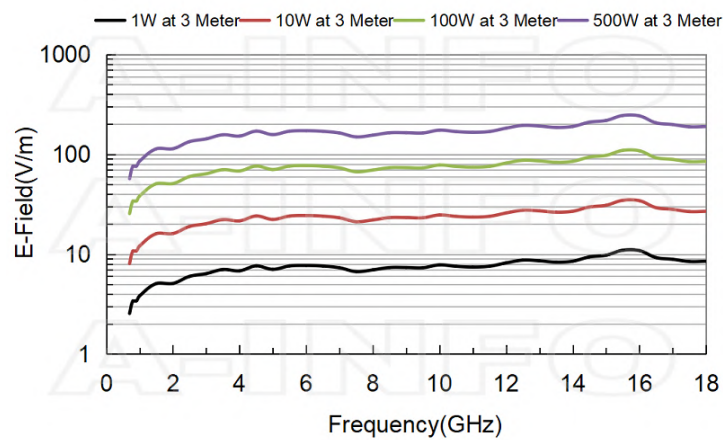
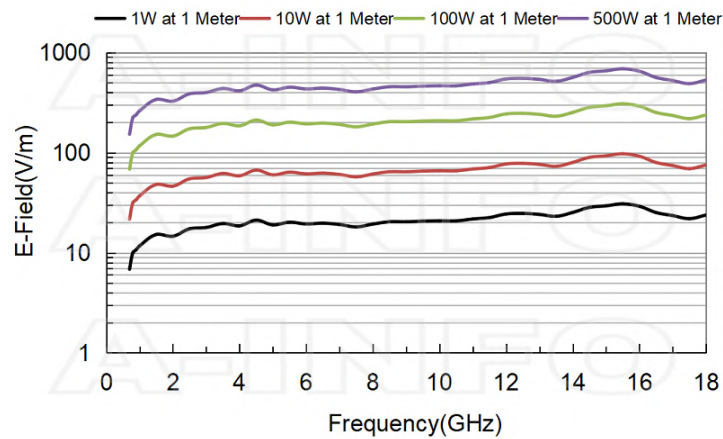
### Antenna Factor



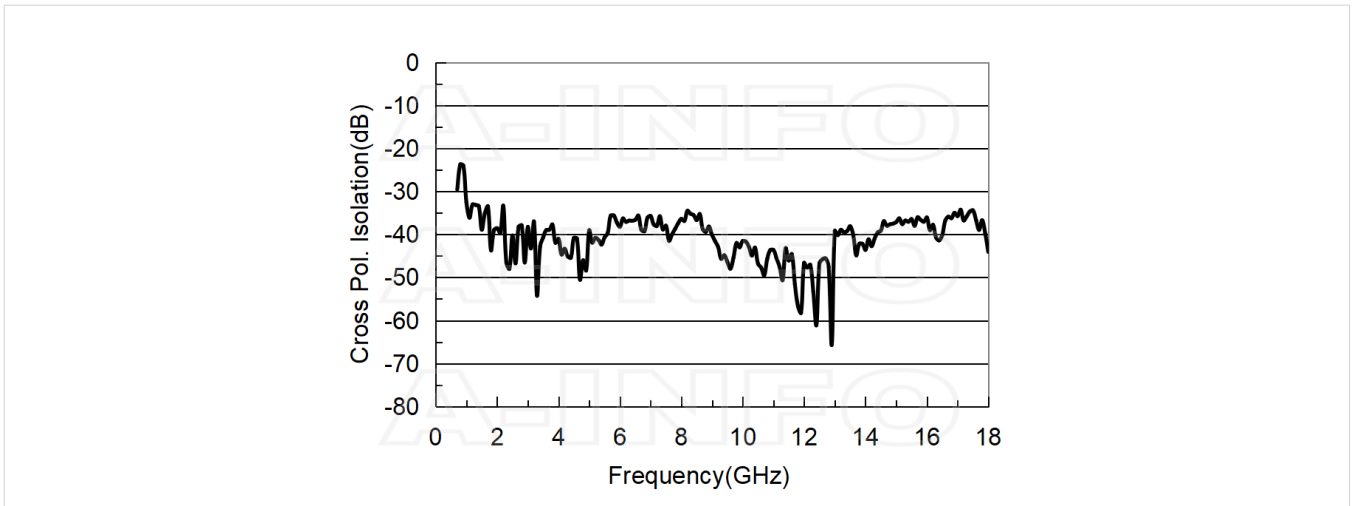
## Antenna Factor (Table)

Frequency(GHz)	1m		3m	
	Gain(dBi)	AF(dB/m)	Gain(dBi)	AF(dB/m)
0.7	1.93	25.18	2.90	24.21
0.8	5.25	23.02	5.39	22.88
0.9	5.83	23.46	5.40	23.89
1.0	6.59	23.62	6.40	23.81
2.0	8.54	27.69	8.90	27.33
3.0	10.27	29.48	10.88	28.88
4.0	10.61	31.64	11.44	30.81
5.0	10.79	33.40	11.73	32.46
6.0	10.98	34.79	12.51	33.26
7.0	10.87	36.24	12.05	35.06
8.0	10.95	37.32	11.62	36.65
9.0	11.41	37.88	12.11	37.19
10.0	11.61	38.60	12.62	37.59
12.0	12.97	38.82	13.02	38.78
14.0	13.28	39.85	13.36	39.77
16.0	14.51	39.78	15.48	38.81
18.0	12.76	42.55	13.35	41.97

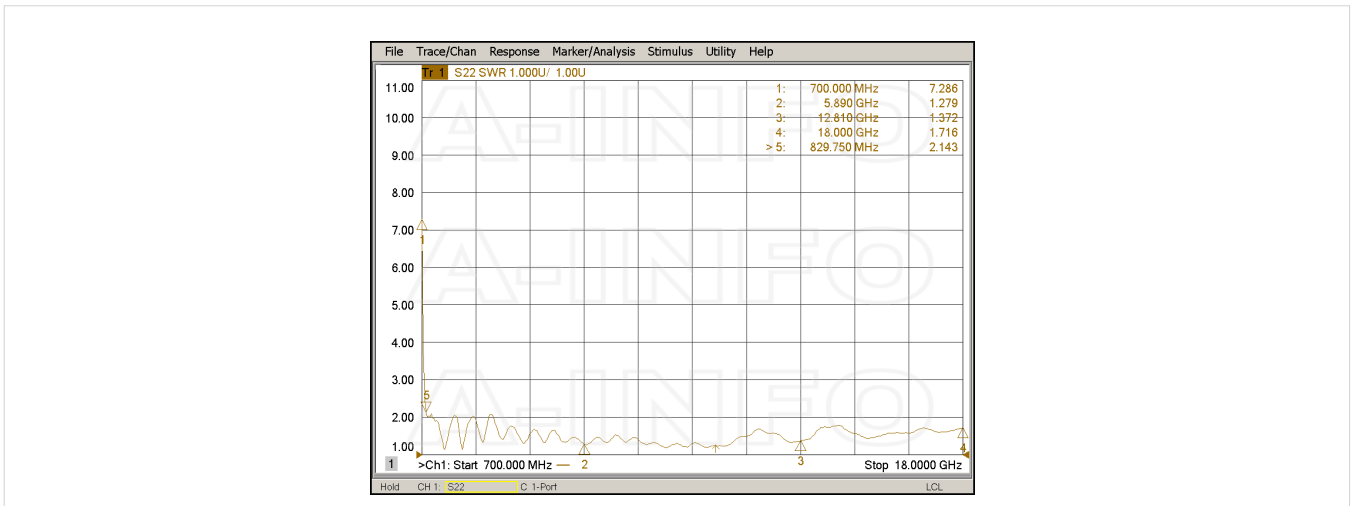
## Field Strength



## Cross Polarization Isolation

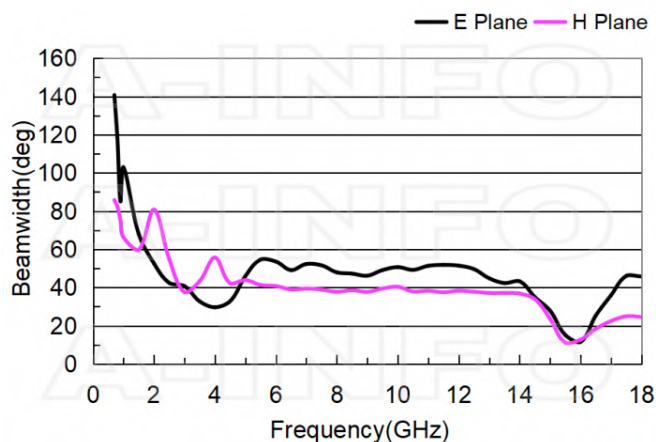


## VSWR

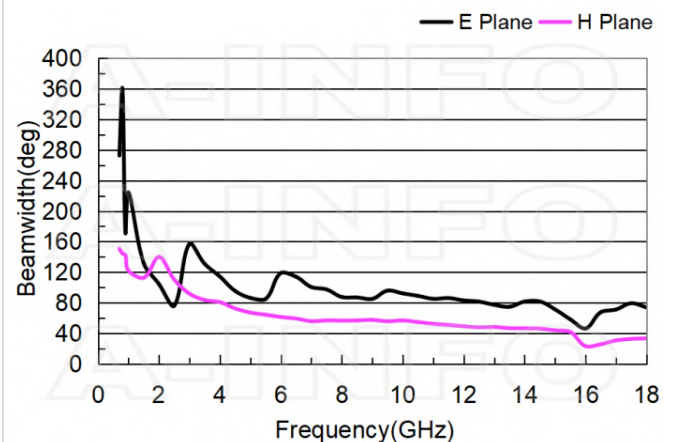


## Beamwidth

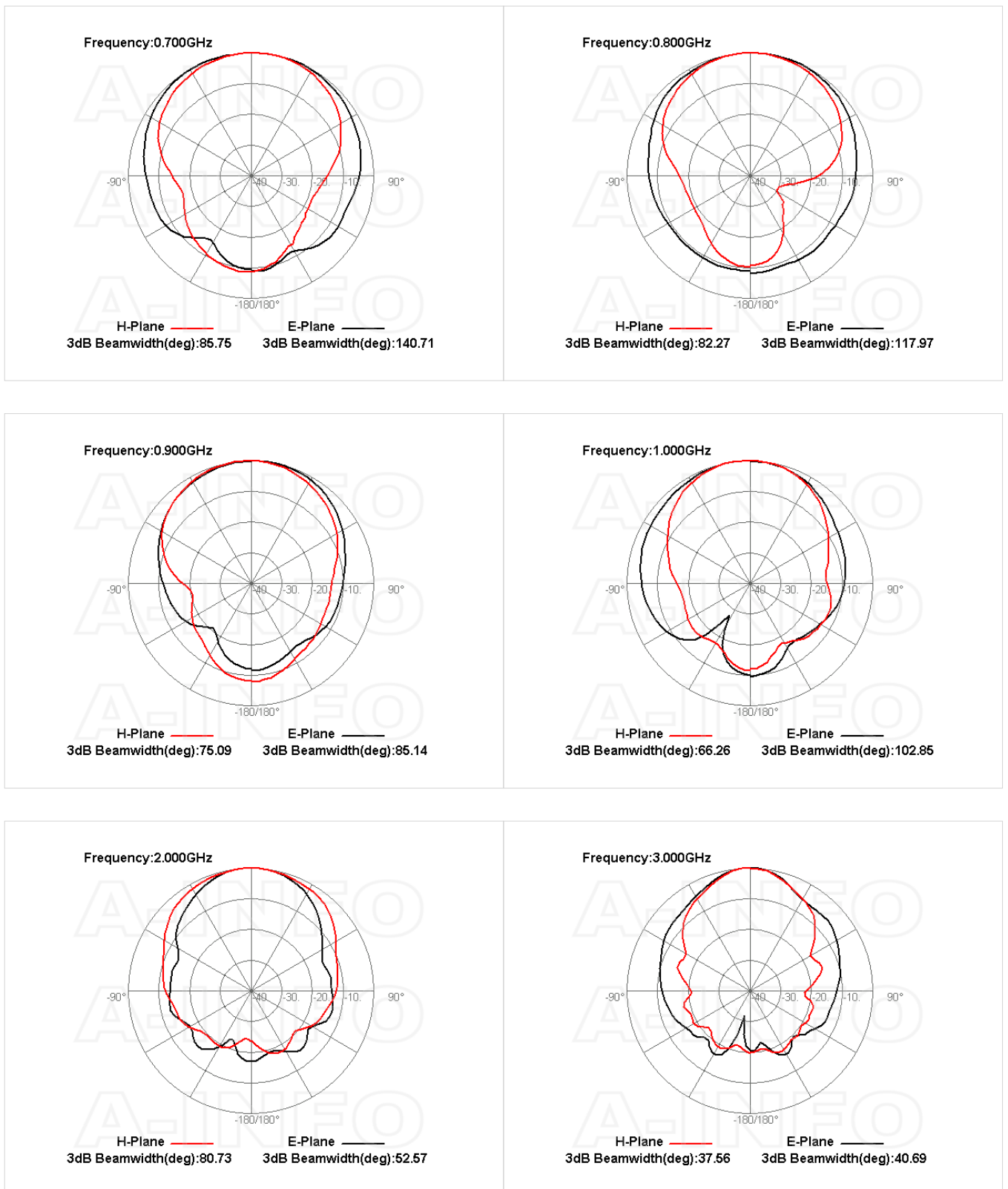
### 3dB Beamwidth



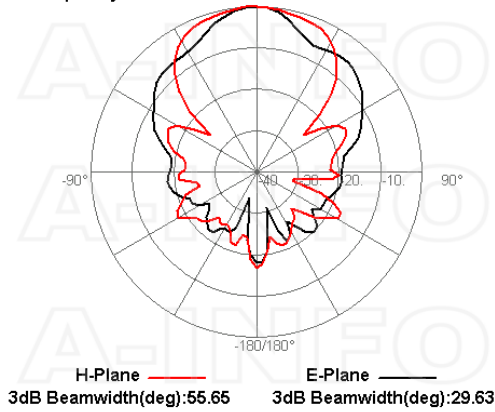
### 10dB Beamwidth



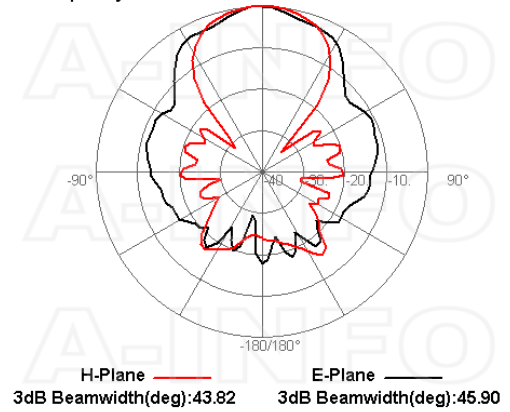
Pattern



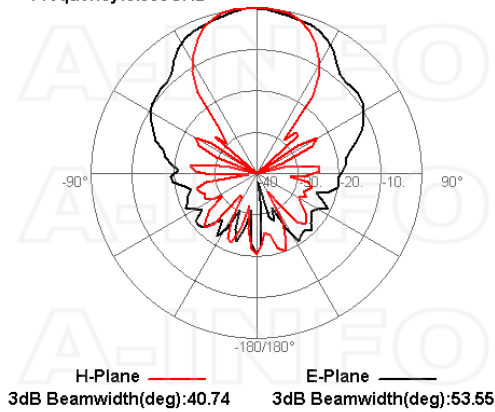
Frequency:4.000GHz



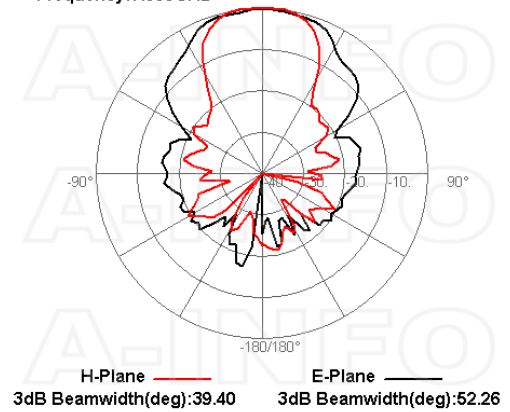
Frequency:5.000GHz



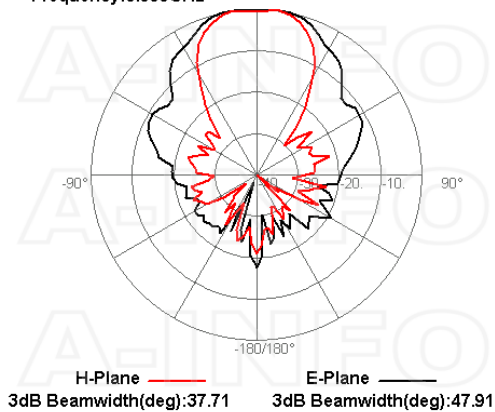
Frequency:6.000GHz



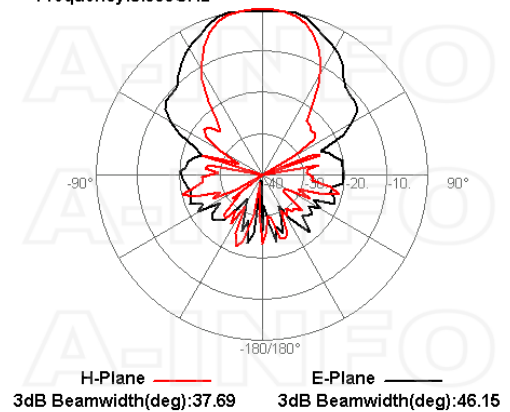
Frequency:7.000GHz



Frequency:8.000GHz

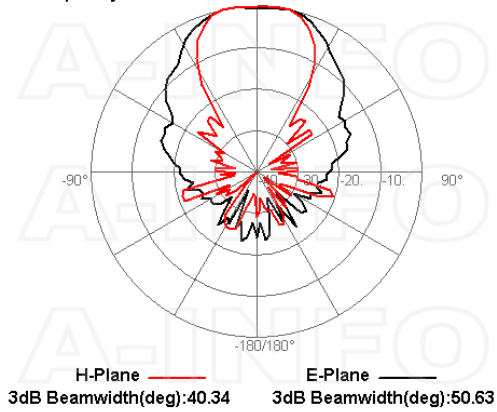


Frequency:9.000GHz

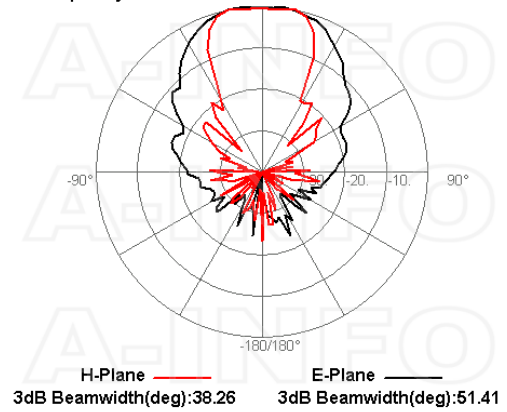




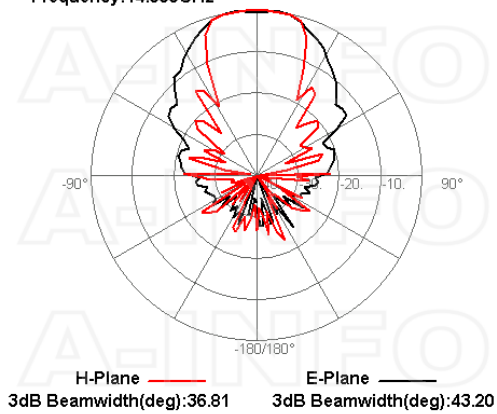
Frequency:10.000GHz



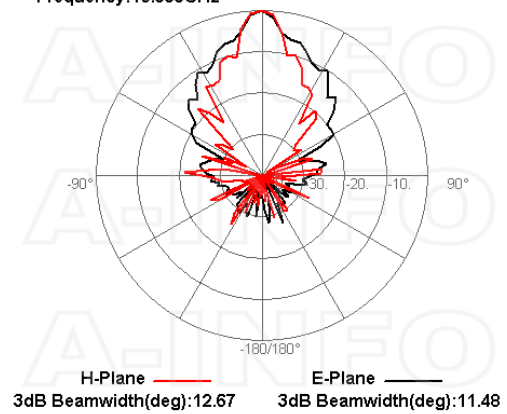
Frequency:12.000GHz



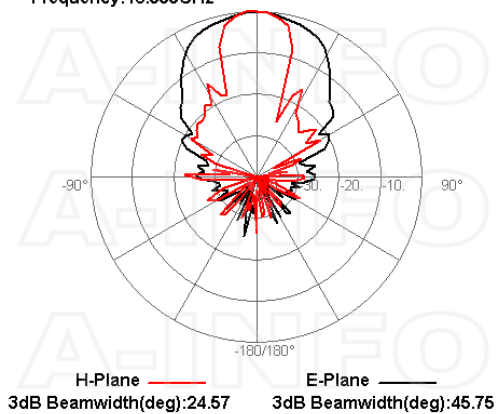
Frequency:14.000GHz



Frequency:16.000GHz



Frequency:18.000GHz





## Related Products



LB-10180-L L type mounting bracket



LB-10180-MA Stinger Type Mounting Bracket



Tripod\_15Kg Al Alloy Tripod



3033HL Wooden Tripod



3033QM Wooden Tripod Metalfree



Carrying Case\_LB-8180 Al Alloy Carrying Case



NM-NM-A050-1000 Flexible Cable Assembly 1000mm DC-18GHz N Male to N Male



NM-NM-A050-1500 Flexible Cable Assembly 1500mm DC-18GHz N Male to N Male



NM-NM-A050-2000 Flexible Cable Assembly 2000mm DC-18GHz N Male to N Male



NM-NM-A050-3000 Flexible Cable Assembly 3000mm DC-18GHz N Male to N Male



NM-NM-A050-5000 Flexible Cable Assembly 5000mm DC-18GHz N Male to N Male



NM-NM-A050-10000 Flexible Cable Assembly 10000mm DC-18GHz N Male to N Male



NM-NM-A050-20000 Flexible Cable Assembly 20000mm DC-18GHz N Male to N Male



NM-NM-A100-500 Flexible Cable Assembly 500mm DC-18GHz N Male to N Male



NM-NM-A100-1000 Flexible Cable Assembly 1000mm DC-18GHz N Male to N Male



NM-NM-A100-1500 Flexible Cable Assembly 1500mm DC-18GHz N Male to N Male



NM-NM-A100-2000 Flexible Cable Assembly 2000mm DC-18GHz N Male to N Male



NM-NM-A100-3000 Flexible Cable Assembly 3000mm DC-18GHz N Male to N Male



NM-NM-A100-5000 Flexible Cable Assembly 5000mm DC-18GHz N Male to N Male



NM-NM-A100-10000 Flexible Cable Assembly 10000mm DC-18GHz N Male to N Male



NM-NM-A100-20000 Flexible Cable Assembly 20000mm DC-18GHz N Male to N Male

## Similar Products



LB-7180-NFSPO Broadband Horn Antenna 0.7-18GHz 12dB Gain N Type Female



LB-7180-SF Broadband Horn Antenna 0.7-18.0 GHz 12dB Gain SMA Female



LB-7180-SFSPO Broadband Horn Antenna 0.7-18GHz 12dB Gain SMA Female



LB-8180-NF Broadband Horn Antenna 0.8-18GHz 12dB Gain N Type Female



LB-8180-NFSPO Broadband Horn Antenna 0.8-18GHz 12dB Gain N Type Female



LB-8180-SF Broadband Horn Antenna 0.8-18GHz 12dB Gain SMA Female



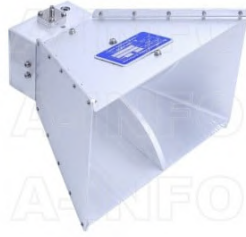
LB-8180-SFSPO Broadband Horn Antenna 0.8-18GHz 12dB Gain SMA Female



LB-1080-NF Broadband Horn Antenna 1-8GHz 11dB Gain N Type Female



LB-1080-NFSPO Broadband Horn Antenna 1-8GHz 11dB Gain N Type Female



LB-1080-SF Broadband Horn Antenna 1-8GHz 11dB Gain SMA Female



LB-1080-SFSPO Broadband Horn Antenna 1-8GHz 11dB Gain SMA Female



LB-1080-M-NF Broadband Horn Antenna 1-8GHz 10dB Gain N Type Female



LB-1080-M-SF Broadband Horn Antenna 1-8GHz 10dB Gain SMA Female



LB-10180-NF Broadband Horn Antenna 1-18GHz 11dB Gain N Type Female



LB-10180-NFSPO Broadband Horn Antenna 1-18GHz 11dB Gain N Type Female



LB-10180-NFSPS Broadband Horn Antenna 1-18GHz 11dB Gain N Type Female



LB-10180-NFP Broadband Horn Antenna 1-18GHz 11dB Gain N Type Female



LB-10180-SF Broadband Horn Antenna 1-18GHz 11dB Gain SMA Female



LB-10180-SFSPO Broadband Horn Antenna 1-18GHz 11dB Gain SMA Female



LB-OSJ-10180-NF Open Boundary Quad-Ridged Dual Polarization Horn Antenna 1-18GHz 10dB Gain N Type Female



LB-OSJ-10180-SF Open Boundary Quad-Ridged Dual Polarization Horn Antenna 1-18GHz 10dB Gain SMA Female

## About this Datasheet

<ul style="list-style-type: none"><li>● <b>Product Information</b> Product Link: <a href="https://www.ainfoinc.com/lb-7180-nf-broadband-horn-antenna-0-7-18-0-ghz-12db-gain-n-type-female">https://www.ainfoinc.com/lb-7180-nf-broadband-horn-antenna-0-7-18-0-ghz-12db-gain-n-type-female</a> Data subject to change without notice. © A-INFO INC. 2024. All Rights Reserved</li></ul>	<ul style="list-style-type: none"><li>● <b>Contact Us</b> 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></li></ul>	<ul style="list-style-type: none"><li>● <b>Phone &amp; Fax</b> Phone: +1-949-639-9688 +1-949-639-9608  Fax: +1-949-639-9670</li></ul>
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