LB-08420-15-C-7/16F Multi Octave Horn Antenna 0.84-2GHz 15dB Gain 7/16 DIN Female

Multi Octave Horn Antenna Operating From 0.84GHz to 2GHz With a Nominal 15dB Gain With 7/16 DIN Female Connector

Product Information

SKU	LB-08420-15-C-7/16F

Description

Multi octave horn antenna LB-08420-15-C-7/16F, operating from 0.84 to 2GHz with a nominal 15dB gain and low VSWR 1.5:1 with 7/16 DIN Female output connector. The model LB-08420-15-C-7/16F has uniform gain through its frequency span, providing efficient performance characteristics and directionality. It can handle 500W continuously and 5000W peak power. 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	
Frequency, Min (GHz)	0.84
Frequency, Max (GHz)	2
Waveguide Type	Double Ridge
Waveguide Size EIA WRD	WRD84
Gain, Typ (dBi)	15
Polarization	Linear
3dB Beamwidth, E-Plane, Min (Deg.)	13
3dB Beamwidth, E-Plane, Max (Deg.)	50
3dB Beamwidth, H-Plane, Min (Deg.)	15
3dB Beamwidth, H-Plane, Max (Deg.)	43
Cross Pol. Isolation, Typ (dB)	35
VSWR, Typ	1.5:1
Impedance, (Ohm)	50
Power Handling, CW, (W)	500
Power Handling, Peak, (W)	5000

Interface	
Output Type	Coaxial
Connector	7/16 DIN
Connector Gender	Female
Mechanical Specification	
Figure	C Type
Body Material	Al
Finish	Chemical Conversion Coating, Gray Paint
Size, W (mm)	586
Size, H (mm)	436
Size, L (mm)	769
Weight, (kg)	10.5

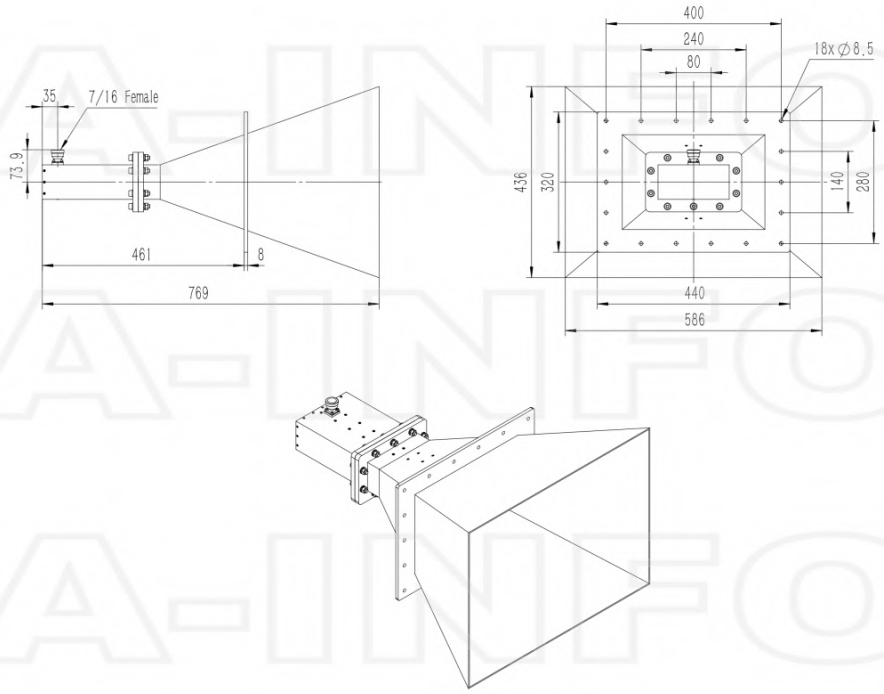
Additional Information

Application	General Purpose Indoor & Outdoor, Fixed

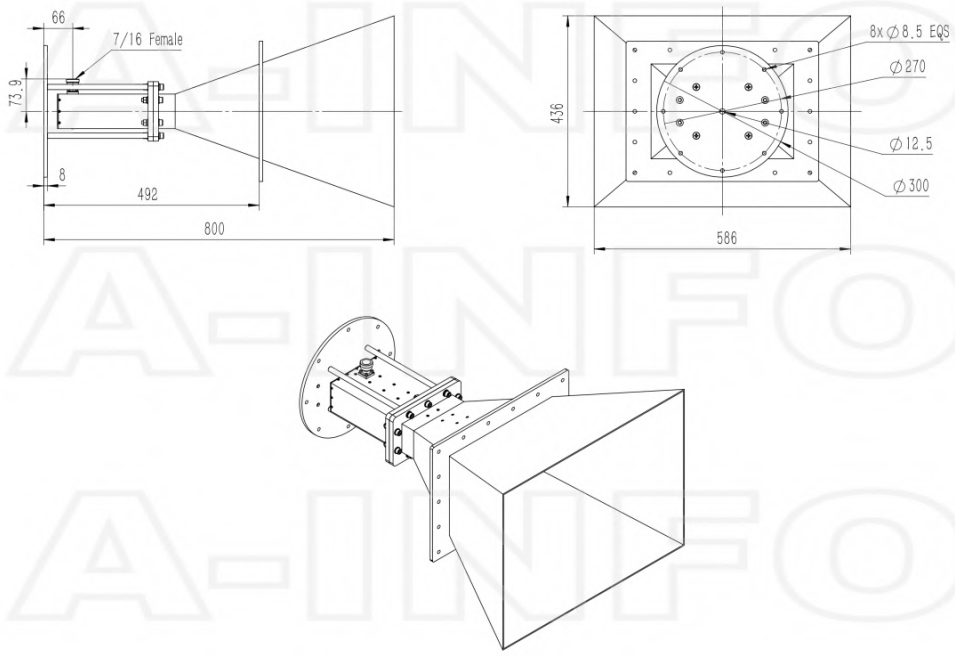
Solution for	Gain Reference Antenna Measurement Far-field Measurement System Intergration

Outline Drawing

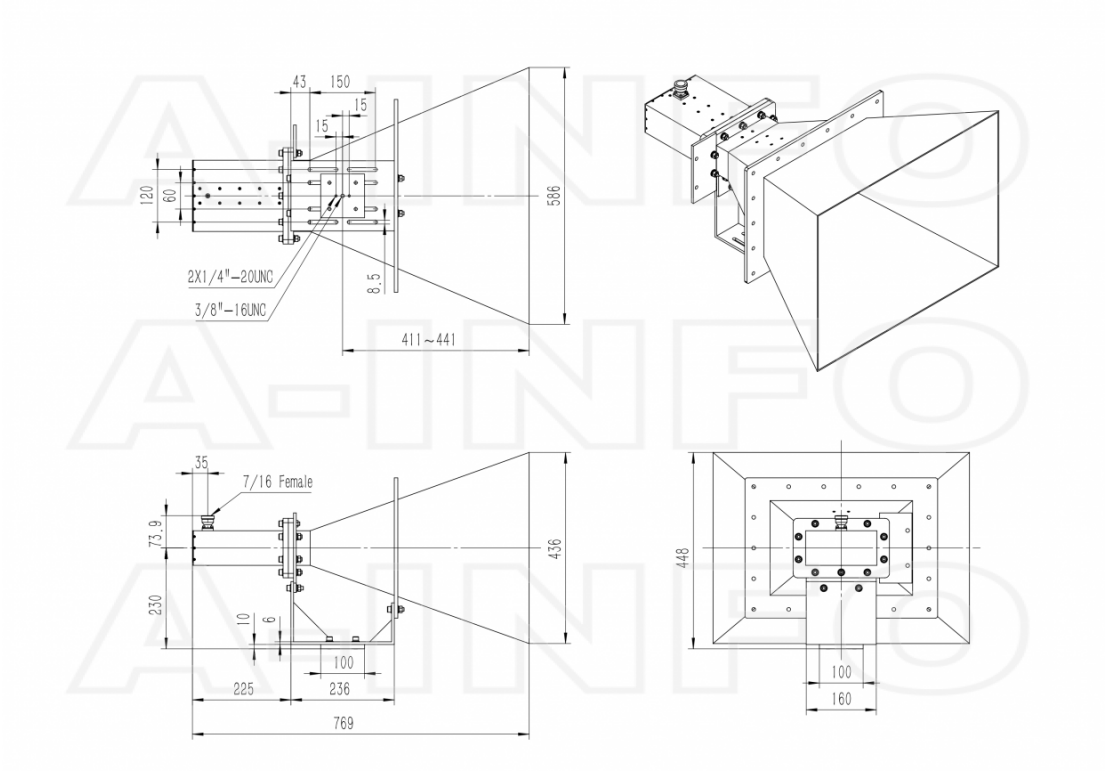
7/16 DIN-Female Output (P/N: LB-08420-15-C-7/16F)



7/16 DIN-Female Output with Round Mounting Bracket (Option, P/N: LB-08420-10-C-MB)

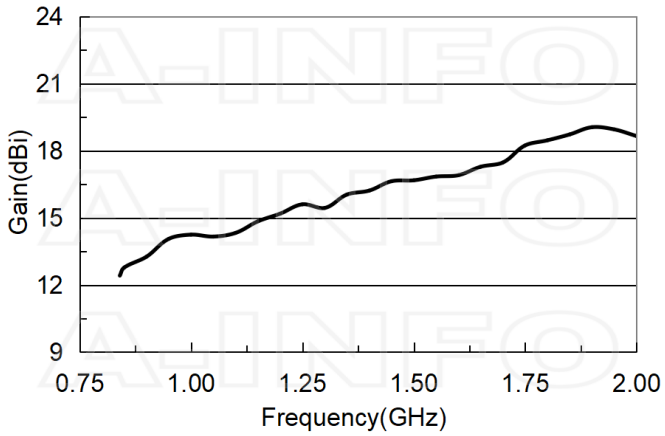


7/16 DIN-Female Output with L Type Mounting Bracket (Option, P/N: LB-08420-15-C-L)

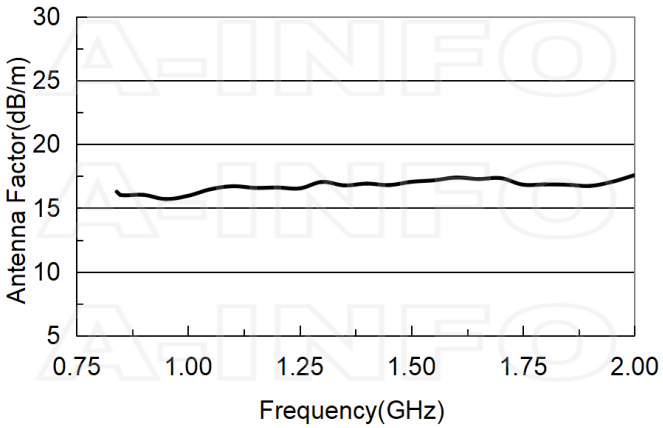


Typical Test Results

Gain



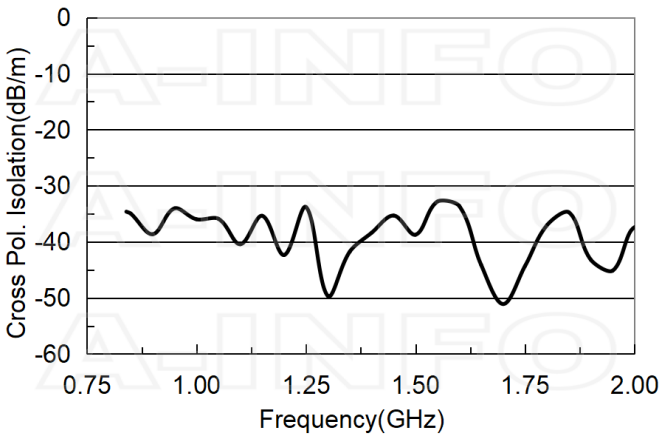
Antenna Factor



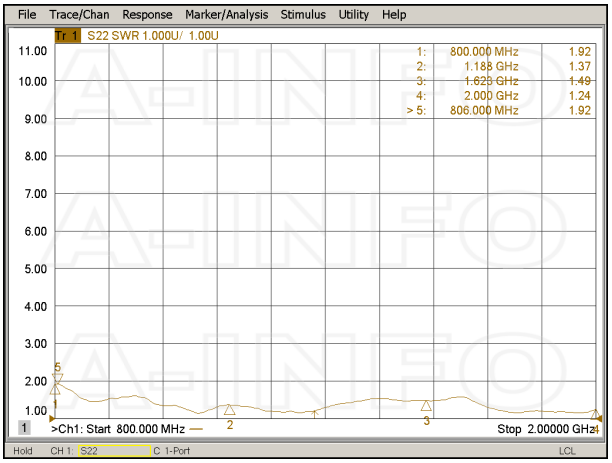
Antenna Factor (Table)

Frequency(GHz)	Gain(dBi)	AF(dB/m)
0.84	12.42	16.28
0.90	13.26	16.03
1.00	14.25	15.96
1.10	14.33	16.71
1.20	15.19	16.61
1.30	15.44	17.05
1.40	16.22	16.91
1.50	16.68	17.05
1.60	16.91	17.39
1.70	17.48	17.34
1.80	18.47	16.85
1.90	19.05	16.73
2.00	18.66	17.57

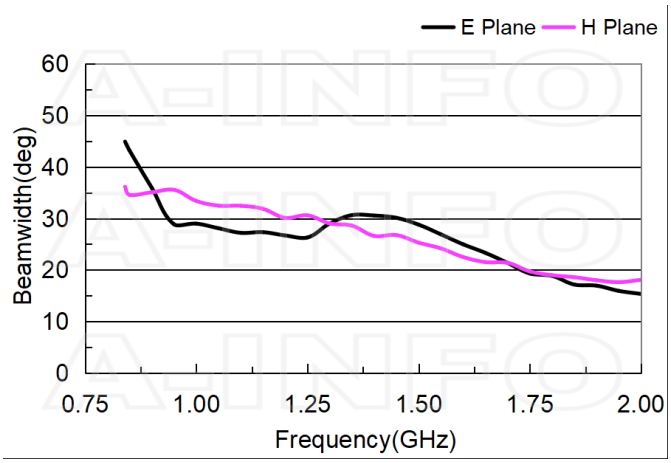
Cross Polarization Isolation



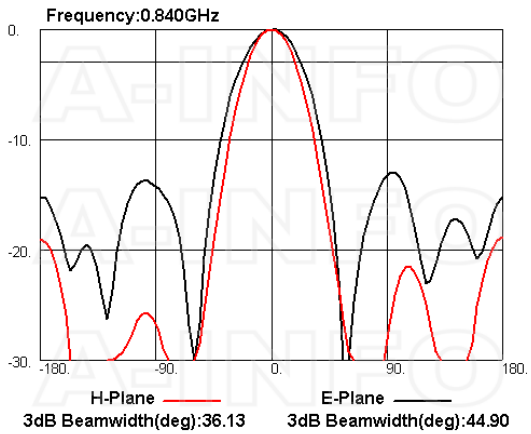
VSWR

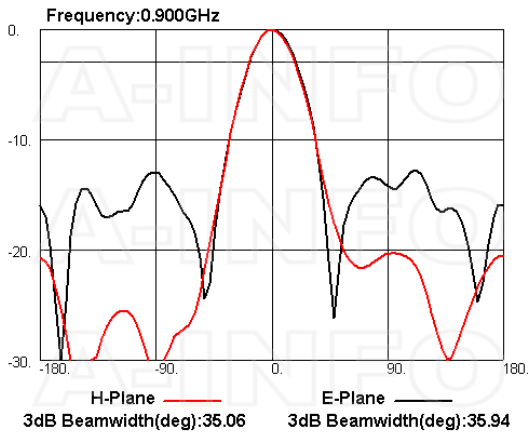


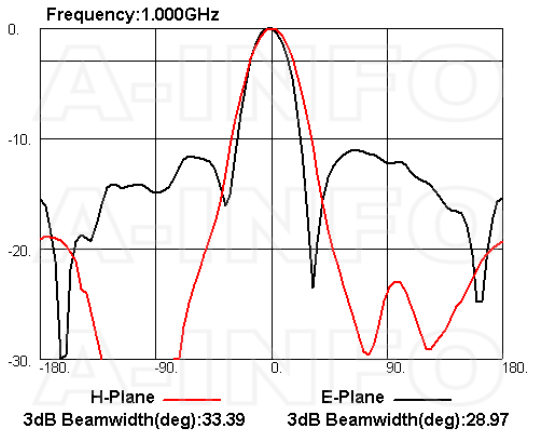
Beamwidth

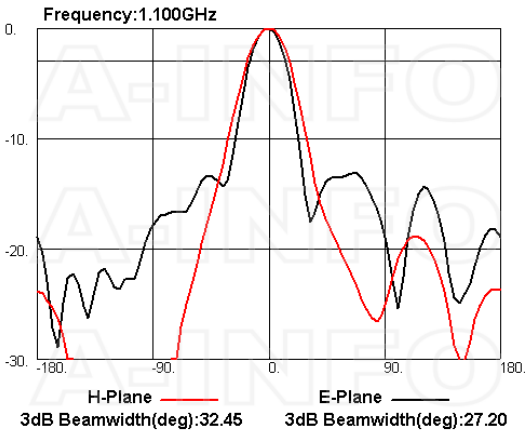


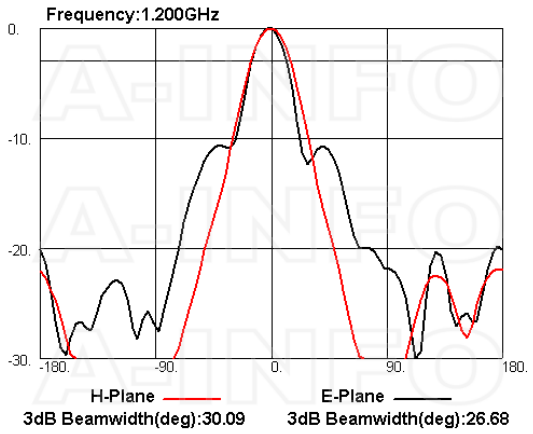
Pattern

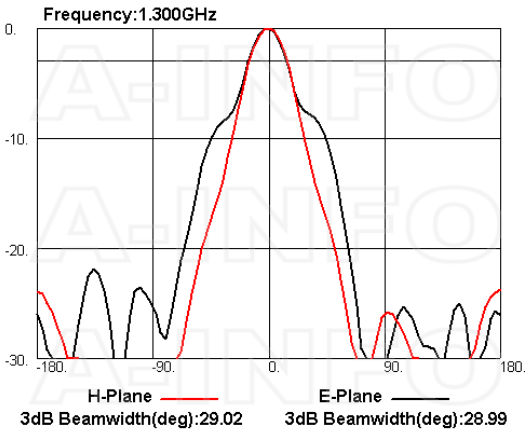


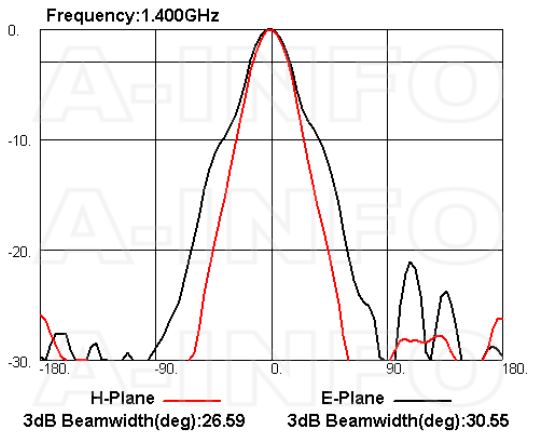


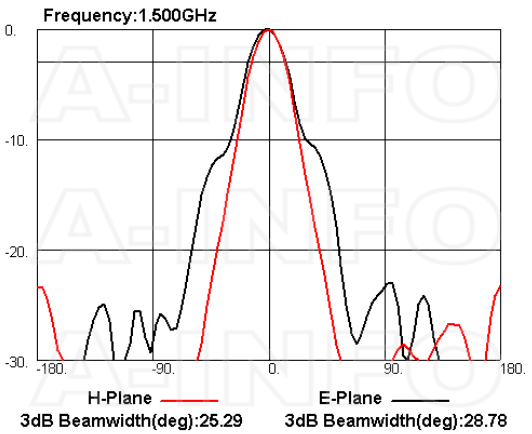

Frequency:1.000GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):33.39
3dB Beamwidth(deg):28.97

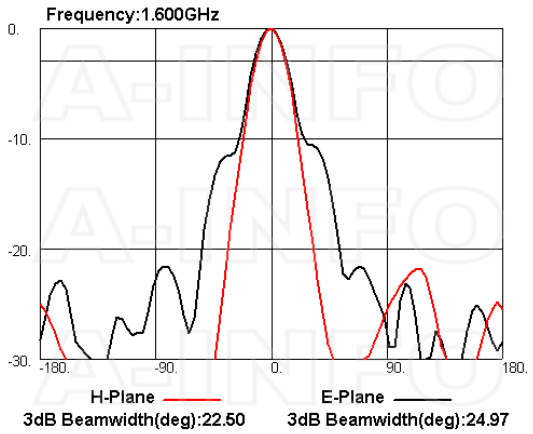

Frequency:1.100GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):32.45
3dB Beamwidth(deg):27.20

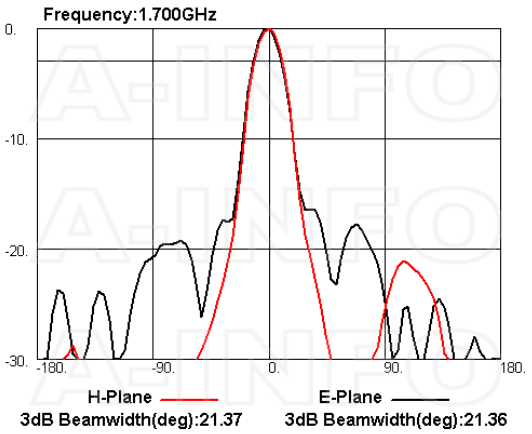

Frequency:1.200GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):30.09
3dB Beamwidth(deg):26.68

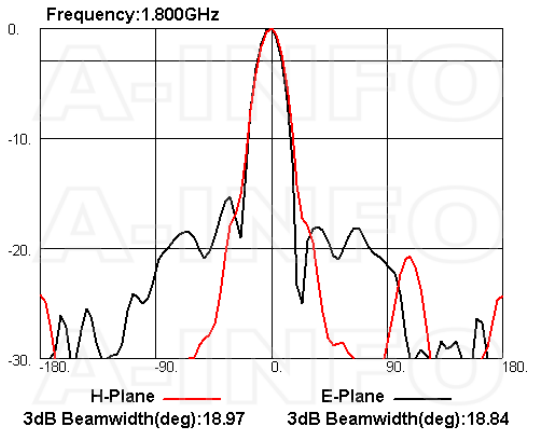

Frequency:1.300GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):29.02
3dB Beamwidth(deg):28.99

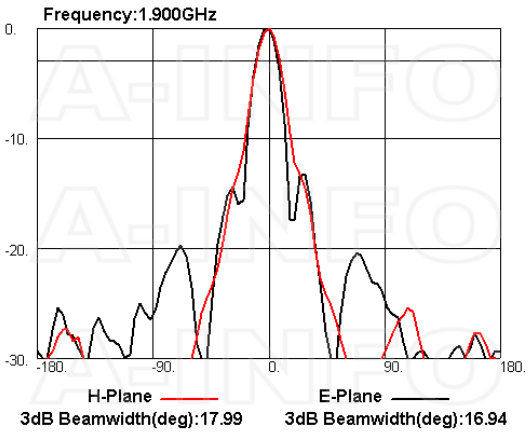

Frequency:1.400GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):26.59
3dB Beamwidth(deg):30.55

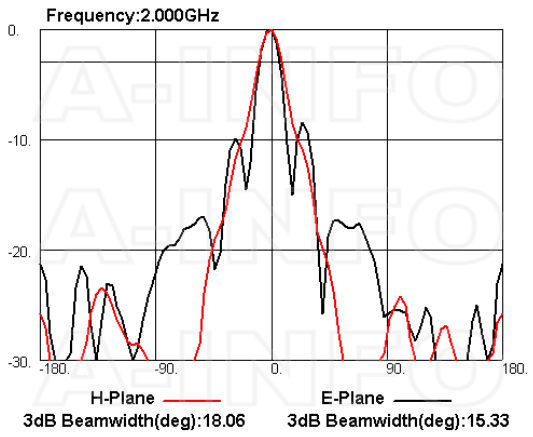

Frequency:1.500GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):25.29
3dB Beamwidth(deg):28.78


Frequency:1.600GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):22.50
3dB Beamwidth(deg):24.97


Frequency:1.700GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):21.37
3dB Beamwidth(deg):21.36


Frequency:1.800GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):18.97
3dB Beamwidth(deg):18.84


Frequency:1.900GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):17.99
3dB Beamwidth(deg):16.94


Frequency:2.000GHz
0.
-10.
-20.
-30.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):18.06
3dB Beamwidth(deg):15.33

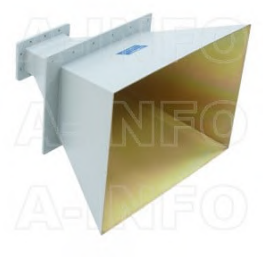
Related Products

LB-08420-10-C-MB Round Type Mounting Bracket

LB-08420-15-C-L L type mounting bracket

Tripod_50Kg Al Alloy Tripod

Similar Products

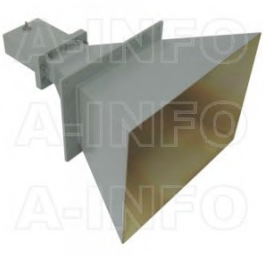


LB-08420-15-A Multi Octave Horn Antenna 0.84-2GHz 15dB Gain Double Ridge Waveguide Interface

LB-08420-15-ASPO Multi Octave Horn Antenna 0.84-2GHz 15dB Gain Double Ridge Waveguide Interface

LB-08420-15-C-NF Multi Octave Horn Antenna 0.84-2GHz 15dB Gain N Type Female

LB-08420-15-C-NFSPO Multi Octave Horn Antenna 0.84-2GHz 15dB Gain N Type Female



LB-08420-15-C-SF Multi Octave Horn Antenna 0.84-2GHz 15dB Gain SMA Female

LB-08420-15-C-SFSPO Multi Octave Horn Antenna 0.84-2GHz 15dB Gain SMA Female

LB-08420-15-C-7/16FSPO Multi Octave Horn Antenna 0.84-2GHz 15dB Gain 7/16 DIN Female

About this Datasheet

● Product Information Product Link: https://www.ainfoinc.com/lb-08420-15-c-7-16f-multi-octave-horn-antenna-0-84-2-ghz-15db-gain-7-16-din-female Data subject to change without notice. 	● Contact Us Address: 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