



LB-51-20-C-SFSP0 Standard Gain Horn Antenna 15-22GHz 20dB Gain SMA Female

Standard Gain Horn Antenna Operating From 15GHz to 22GHz With a Nominal 20dB Gain With SMA Female Connector

Product Information

| | |
|-----|------------------|
| SKU | LB-51-20-C-SFSP0 |
|-----|------------------|

Description

Standard Gain Horn Antenna LB-51-20-C-SFSP0, operating from 15 to 22GHz with a nominal 20dB gain and low VSWR 1.25:1 with SMA Female connector output. The model LB-51-20-C-SFSP0 has uniform gain through its frequency span, providing efficient performance characteristics and directionality. It can handle 50W continuously and 3000W peak power. 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

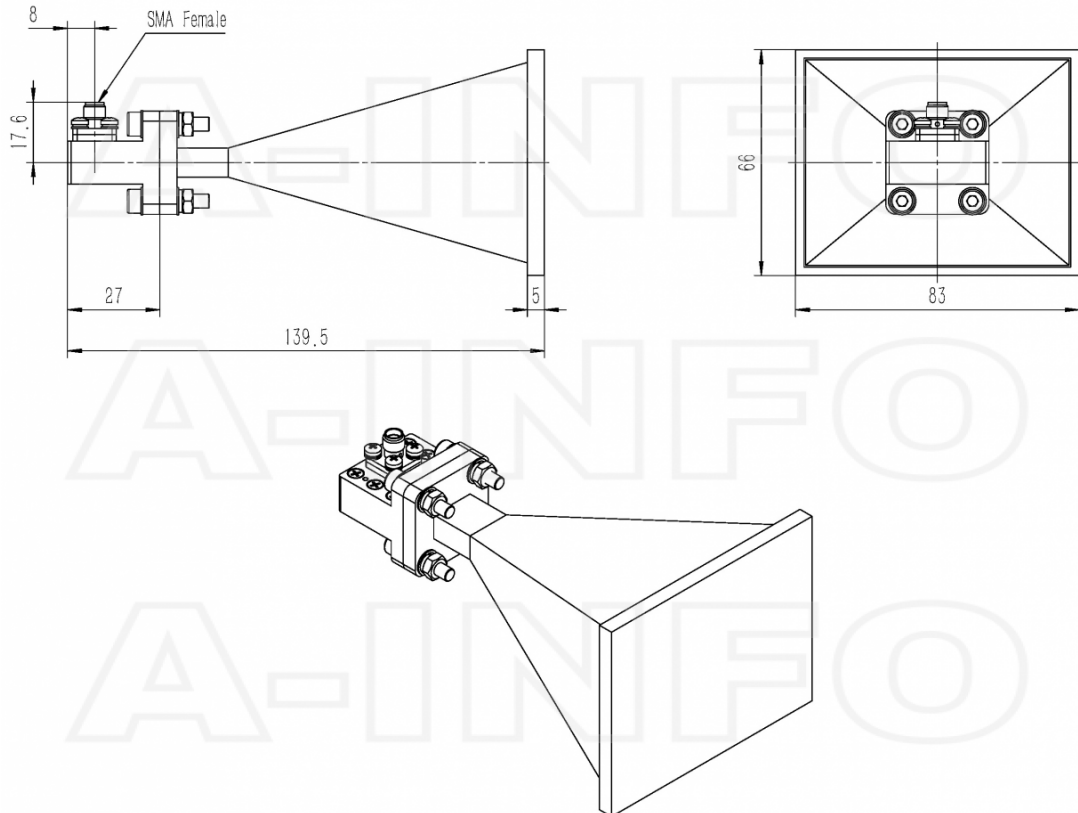
| Electrical Specification | | Interface | |
|------------------------------------|-------------|--------------------------|---------------------------|
| Frequency, Min (GHz) | 15 | Output Type | Coaxial |
| Frequency, Max (GHz) | 22 | Connector | SMA |
| Waveguide Type | Rectangular | Connector Gender | Female |
| Waveguide Size EIA WR | WR51 | Mechanical Specification | |
| Gain, Typ (dBi) | 20 | Figure | C Type |
| Polarization | Linear | Body Material | Cu |
| 3dB Beamwidth, E-Plane, Typ (Deg.) | 15 | Finish | Silver Plated, Gray Paint |
| 3dB Beamwidth, H-Plane, Typ (Deg.) | 17 | Size, W (mm) | 83 |
| Cross Pol. Isolation, Typ (dB) | 35 | Size, H (mm) | 66 |
| VSWR, Typ | 1.25:1 | Size, L (mm) | 139.5 |
| Impedance, (Ohm) | 50 | Weight, (kg) | 0.273 |
| Power Handling, CW, (W) | 50 | | |
| Power Handling, Peak, (W) | 3000 | | |

Additional Information

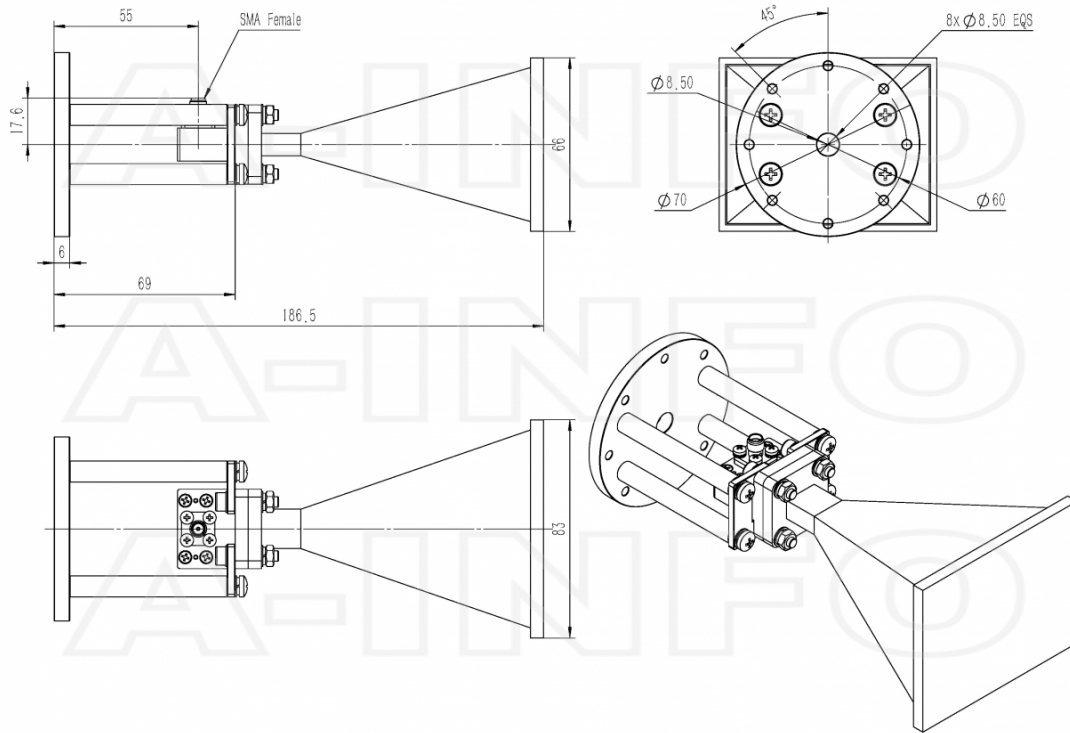
| | | | |
|-------------|--|--------------|---|
| Application | Outdoor, Waterproof and Dustproof, Fixed | Solution for | Gain Reference Antenna Measurement Reflector Feed Far-field Measurement System Intergration Material Measurement |
|-------------|--|--------------|---|

Outline Drawing

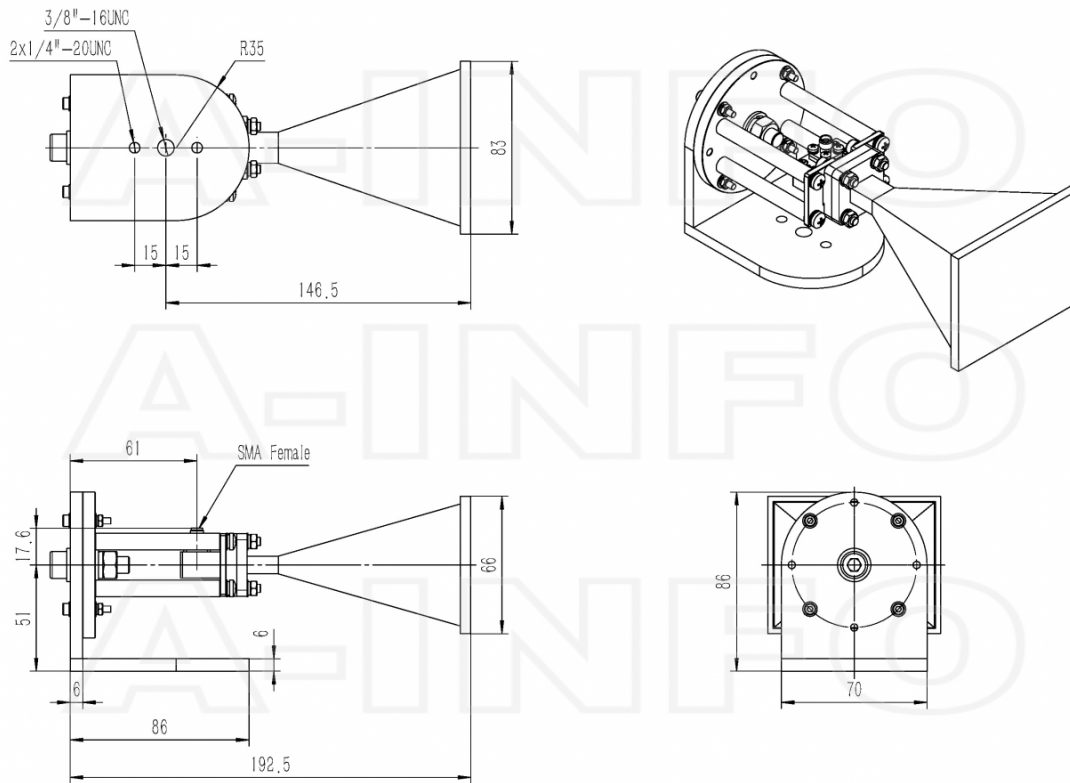
SMA-Female Output with Radome (Option, P/N: LB-51-20-C-SFSP0, Outdoor Application)



SMA-Female Output with Round Mounting Bracket & Radome (Option, P/N: LB-51-10-C-MB & LB-51-20-C-SFSP0, Outdoor Application)

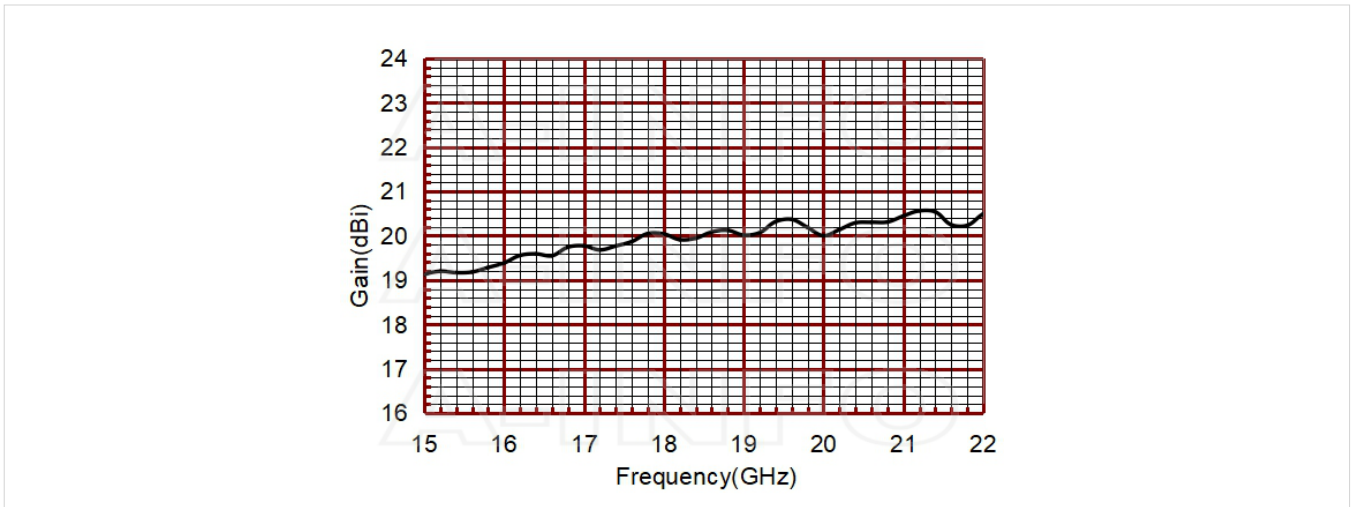


SMA-Female Output with L Type Mounting Bracket & Radome (Option, P/N: LB-51-10-C-MBL & LB-51-20-C-SFSP0, Outdoor Application)

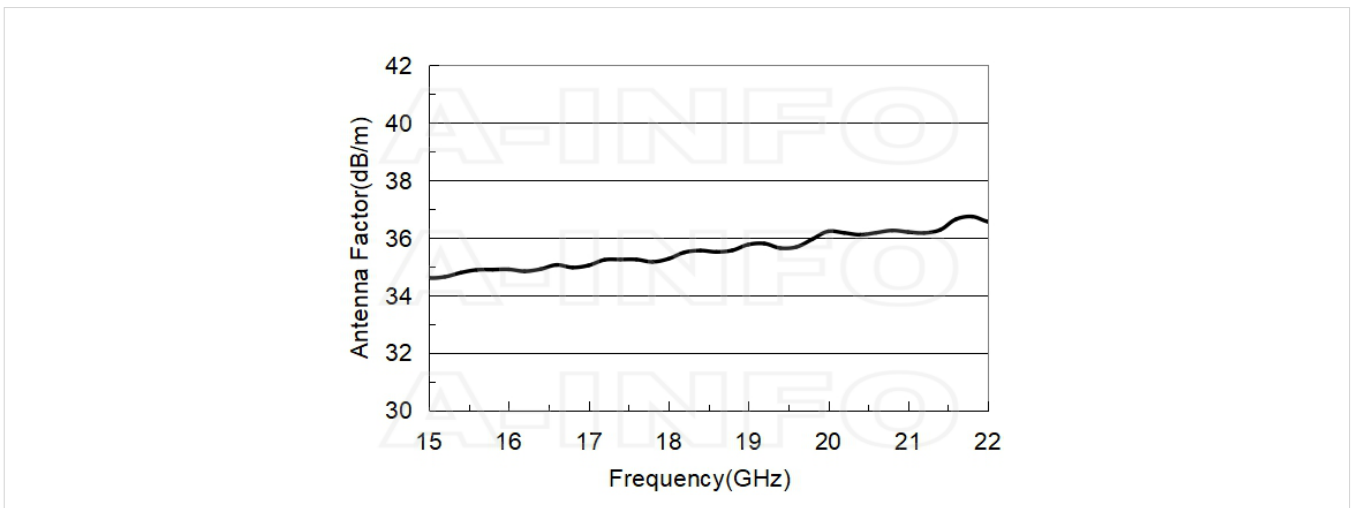


Typical Test Results

Gain



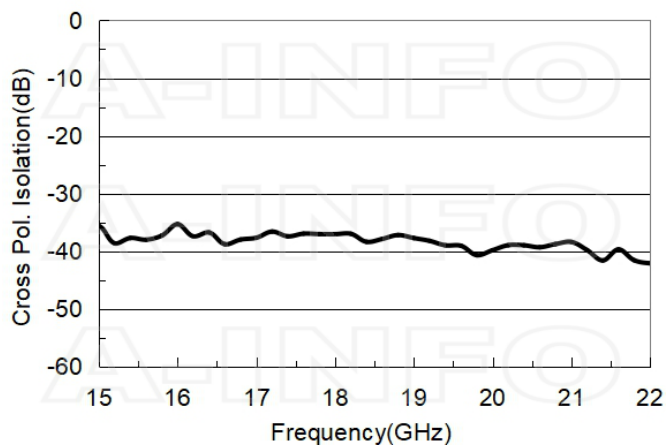
Antenna Factor



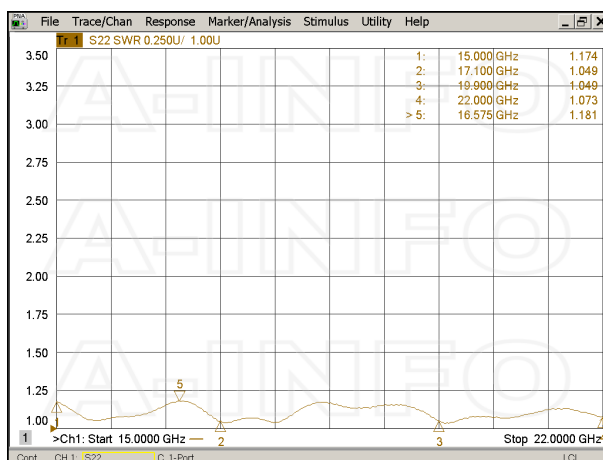
Antenna Factor (Table)

| Frequency(GHz) | Gain(dBi) | Antenna Factor(dB/m) |
|----------------|-----------|----------------------|
| 15.0 | 19.12 | 34.62 |
| 15.5 | 19.16 | 34.86 |
| 16.0 | 19.38 | 34.91 |
| 16.5 | 19.57 | 34.99 |
| 17.0 | 19.77 | 35.05 |
| 17.5 | 19.53 | 35.54 |
| 18.0 | 20.04 | 35.28 |
| 18.5 | 20.09 | 35.46 |
| 19.0 | 20.01 | 35.77 |
| 19.5 | 20.54 | 35.47 |
| 20.0 | 20.00 | 36.23 |
| 20.5 | 20.32 | 36.12 |
| 21.0 | 20.45 | 36.21 |
| 21.5 | 20.38 | 36.48 |
| 22.0 | 20.49 | 36.57 |

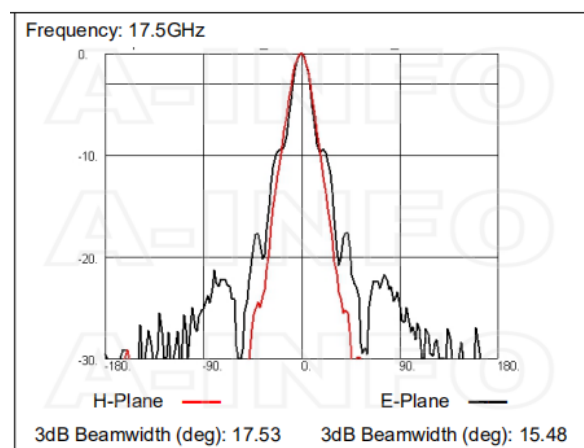
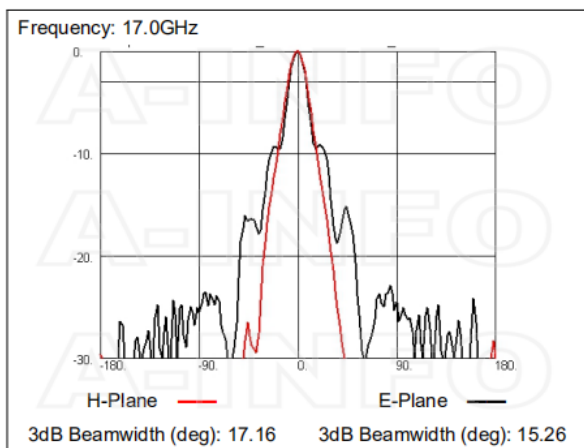
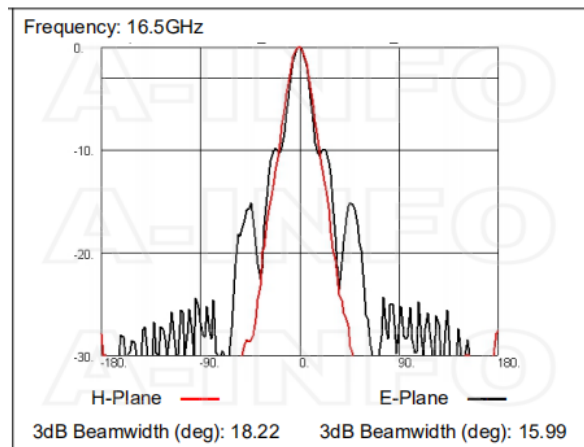
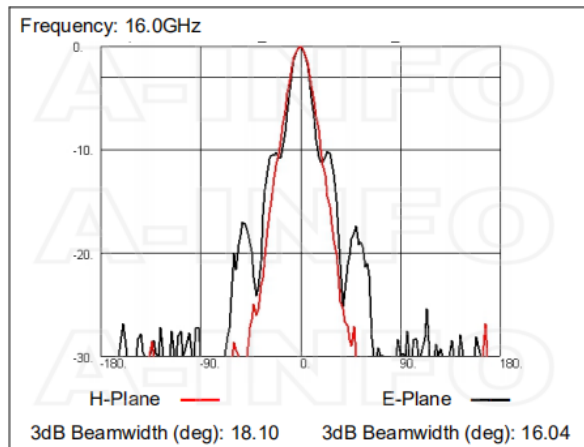
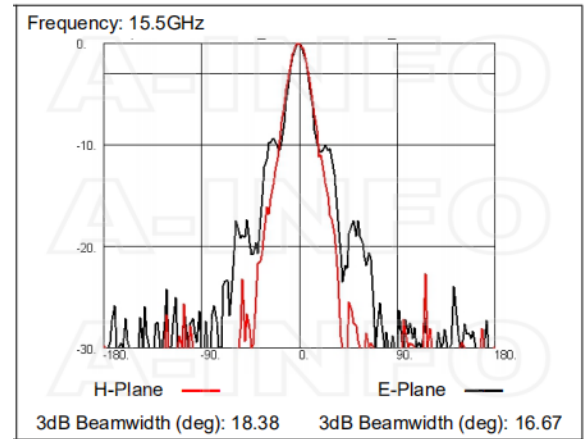
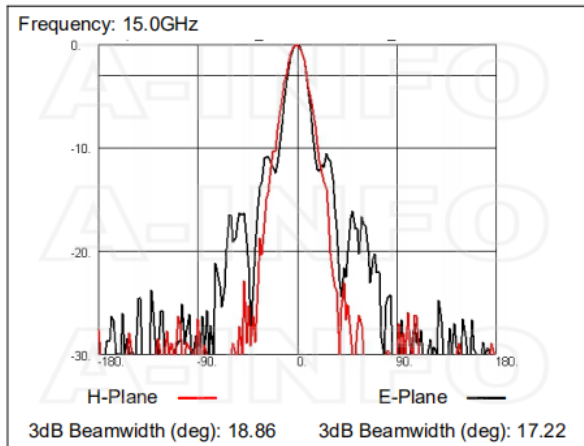
Cross Polarization Isolation

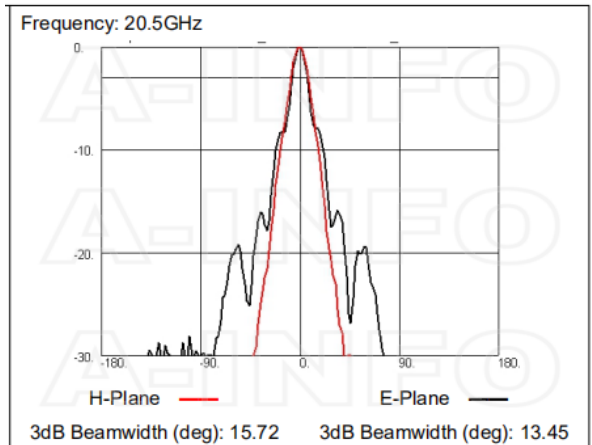
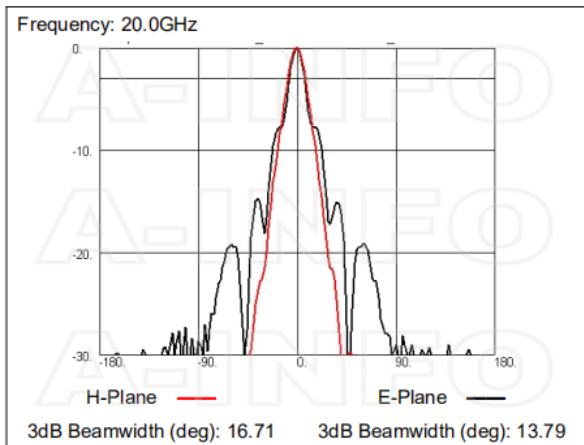
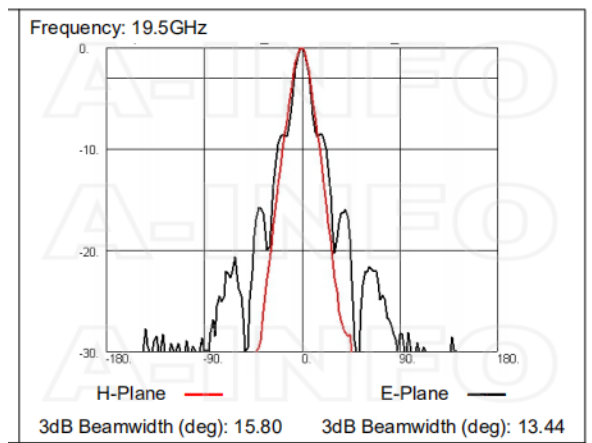
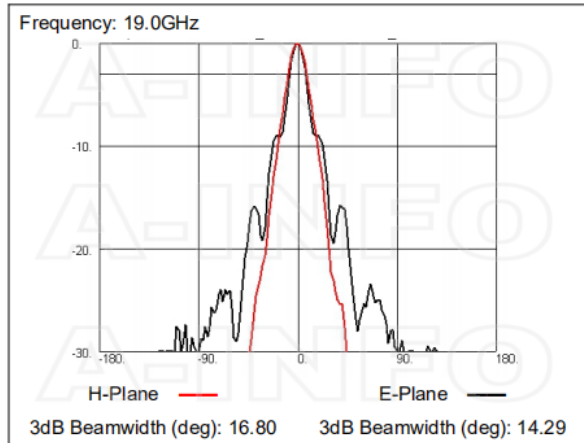
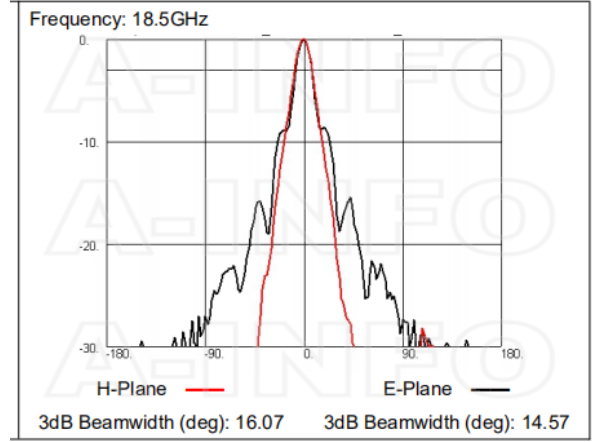
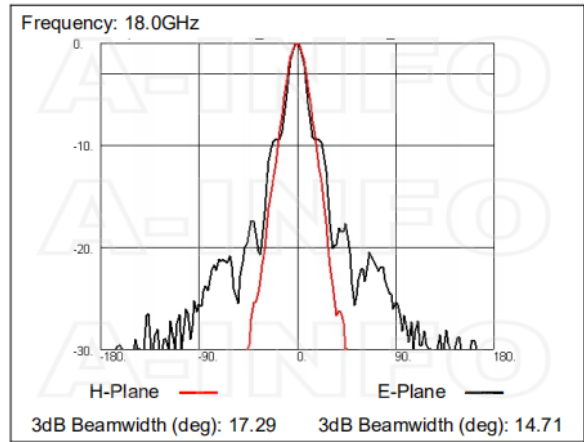


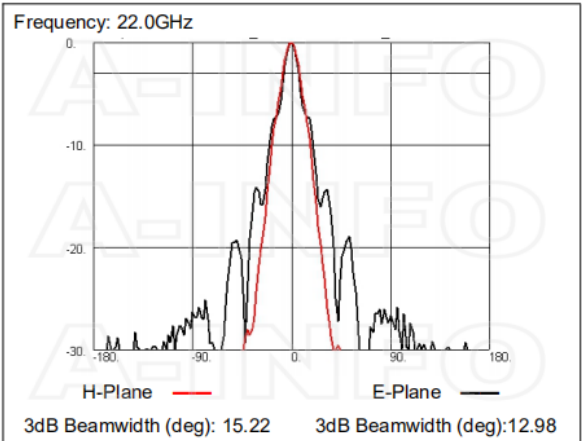
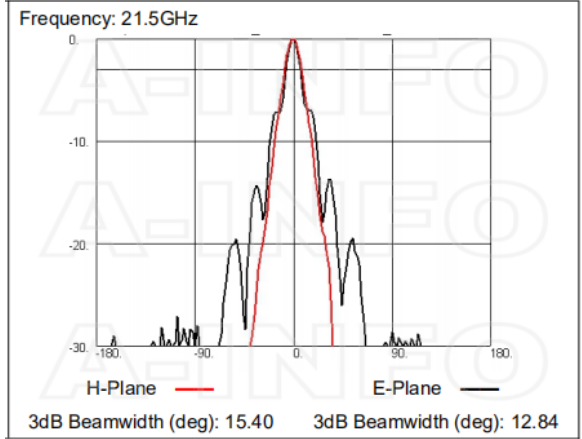
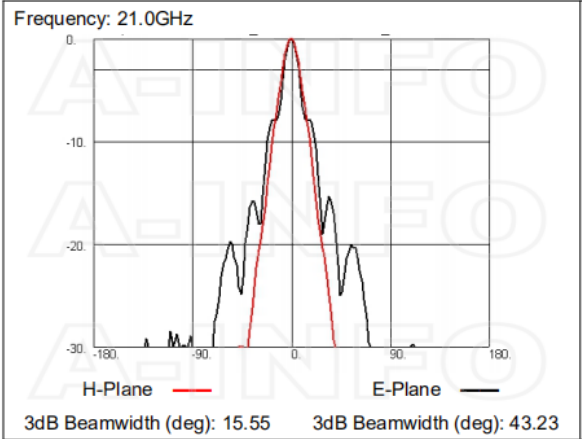
VSWR



Pattern







Related Products



LB-51-10-C-MB Round Type Mounting Bracket



LB-51-10-C-MBL L type mounting bracket



LB-51-10-C-MA Stinger Type Mounting Bracket



Tripod_15Kg Al Alloy Tripod



3033HL Wooden Tripod



3033QM Wooden Tripod Metalfree



M4x12 Hex_Pack WR51-WR112 Assembly Pack



SM-SM-A050-500 Flexible Cable Assembly 500mm DC- 26.5GHz SMA Male to SMA Male



SM-SM-A050-1000 Flexible Cable Assembly 1000mm DC- 26.5GHz SMA Male to SMA Male



SM-SM-A050-1500 Flexible Cable Assembly 1500mm DC- 26.5GHz SMA Male to SMA Male



SM-SM-A050-2000 Flexible Cable Assembly 2000mm DC- 26.5GHz SMA Male to SMA Male



SM-SM-A050-3000 Flexible Cable Assembly 3000mm DC- 26.5GHz SMA Male to SMA Male



SM-SM-A050-5000 Flexible Cable Assembly 5000mm DC- 26.5GHz SMA Male to SMA Male



SM-SM-A050-10000 Flexible Cable Assembly 10000mm DC- 26.5GHz SMA Male to SMA Male



SM-SM-A080-500 Flexible Cable Assembly 500mm DC- 26.5GHz SMA Male to SMA Male



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SM-SM-A080-1500 Flexible Cable Assembly 1500mm DC- 26.5GHz SMA Male to SMA Male



SM-SM-A080-2000 Flexible Cable Assembly 2000mm DC- 26.5GHz SMA Male to SMA Male



SM-SM-A080-3000 Flexible Cable Assembly 3000mm DC- 26.5GHz SMA Male to SMA Male



SM-SM-A080-5000 Flexible Cable Assembly 5000mm DC- 26.5GHz SMA Male to SMA Male



SM-SM-A080-10000 Flexible Cable Assembly 10000mm DC-26.5GHz SMA Male to SMA Male



SM-SM-A080-20000 Flexible Cable Assembly 20000mm DC-26.5GHz SMA Male to SMA Male

Similar Products



LB-51-20-A Standard Gain Horn Antenna 15-22GHz 20dB Gain Rectangular Waveguide Interface



LB-51-20-ASPO Standard Gain Horn Antenna 15-22GHz 20dB Gain Rectangular Waveguide Interface



LB-51-20-C-SF Standard Gain Horn Antenna 15-22GHz 20dB Gain SMA Female

About this Datasheet

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| <ul style="list-style-type: none"> ● Product Information Product Link: https://www.ainfoinc.com/lb-51-20-c-sfsp0-standard-gain-horn-antenna-15-22-ghz-20db-gain-sma-female Data subject to change without notice. © A-INFO INC. 2023. All Rights Reserved | <ul style="list-style-type: none"> ● Contact Us Address:dd 60 Tesla, Irvine, CA 92618, USA Website: www.ainfoinc.com Email: sales@ainfoinc.com | <ul style="list-style-type: none"> ● Phone & Fax Phone: +1-949-639-9688 +1-949-639-9608 Fax: +1-949-639-9670 |
|---|--|--|