

LB-2678-20-C-SF Multi Octave Horn Antenna 2.6-7.8GHz 20dB Gain SMA Female

Multi Octave Horn Antenna Operating From 2.6GHz to 7.8GHz With a Nominal 20dB Gain With SMA Female Connector

### Product Information

|     |                 |
|-----|-----------------|
| SKU | LB-2678-20-C-SF |
|-----|-----------------|

### Description

Multi octave horn antenna LB-2678-20-C-SF, operating from 2.6 to 7.8GHz with a nominal 20dB gain and low VSWR 1.5:1 with SMA Female output connector. The model LB-2678-20-C-SF 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 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

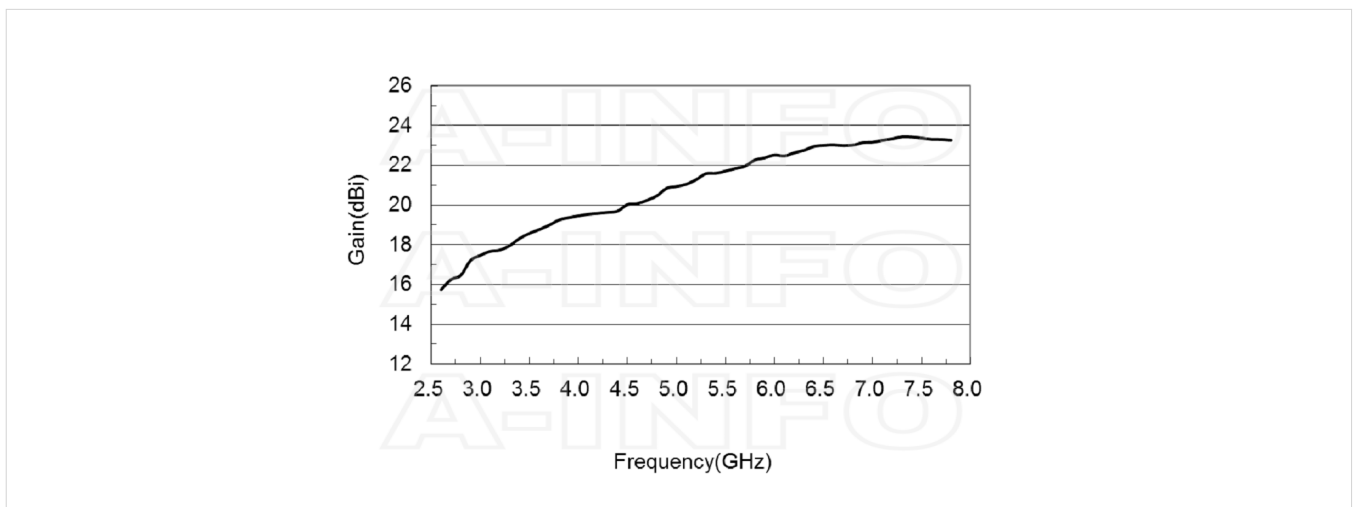
| Electrical Specification           |              | Interface                |   |
|------------------------------------|--------------|--------------------------|---|
| Frequency, Min (GHz)               | 2.6          | Output Type              | Coaxial                                 |
| Frequency, Max (GHz)               | 7.8          | Connector                | SMA                                     |
| Waveguide Type                     | Double Ridge | Connector Gender         | Female                                  |
| Waveguide Size EIA WRD             | WRD250       | Mechanical Specification |   |
| Gain, Typ (dBi)                    | 20           | Figure                   | C Type                                  |
| Polarization                       | Linear       | Body Material            | Al                                      |
| 3dB Beamwidth, E-Plane, Min (Deg.) | 8            | Finish                   | Chemical Conversion Coating, Gray Paint |
| 3dB Beamwidth, E-Plane, Max (Deg.) | 24           | Size, W (mm)             | 279                                     |
| 3dB Beamwidth, H-Plane, Min (Deg.) | 10           | Size, H (mm)             | 233                                     |
| 3dB Beamwidth, H-Plane, Max (Deg.) | 27           | Size, L (mm)             | 557                                     |
| Cross Pol. Isolation, Typ (dB)     | 35           | Weight, (kg)             | 3.12                                    |
| VSWR, Typ                          | 1.50:1       |                          |   |
| Impedance, (Ohm)                   | 50           |                          |   |
| Power Handling, CW, (W)            | 50           |                          |   |
| Power Handling, Peak, (W)          | 3000         |                          |   |

## Additional Information

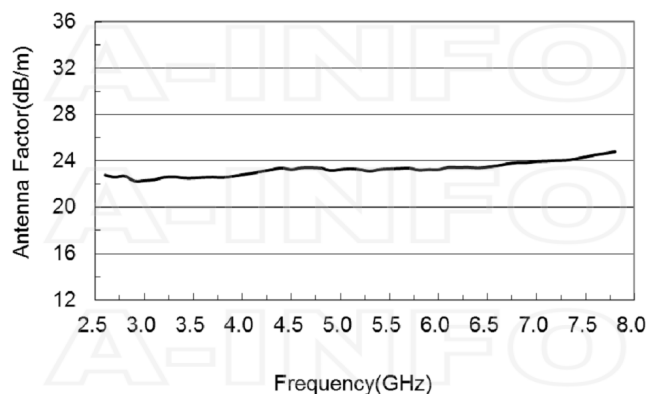
|             |   |              |   |
|-------------|---|--------------|---|
| Application | General Purpose Indoor & Outdoor, Fixed | Solution for | Gain Reference<br>Antenna Measurement<br>Far-field Measurement<br>System Intergration |
|-------------|---|--------------|---|

## Typical Test Results

### Gain



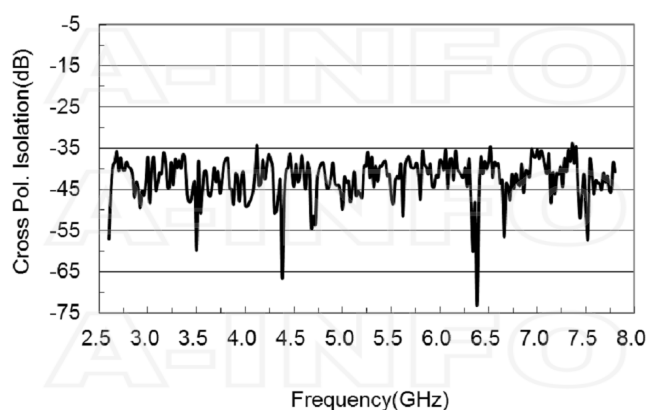
## Antenna Factor



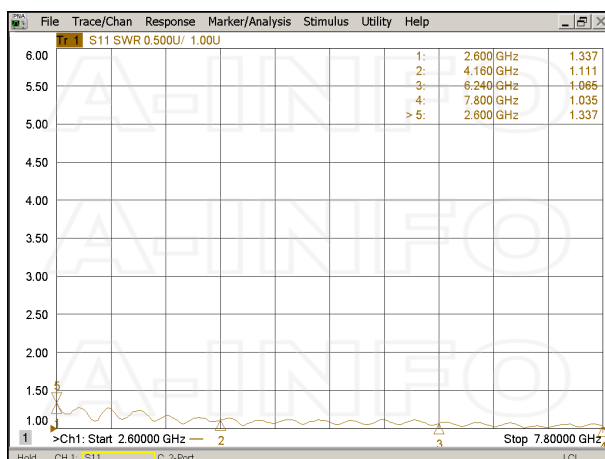
## Antenna Factor (Table)

| Frequency(GHz) | Gain(dBi) | AF(dB/m) |
|----------------|-----------|----------|
| 2.6            | 15.74     | 22.77    |
| 3.0            | 17.46     | 22.29    |
| 3.5            | 18.57     | 22.52    |
| 4.0            | 19.45     | 22.80    |
| 4.5            | 20.02     | 23.25    |
| 5.0            | 20.93     | 23.26    |
| 5.5            | 21.71     | 23.31    |
| 6.0            | 22.52     | 23.25    |
| 6.5            | 23.00     | 23.47    |
| 7.0            | 23.16     | 23.95    |
| 7.5            | 23.37     | 24.34    |
| 7.8            | 23.26     | 24.79    |

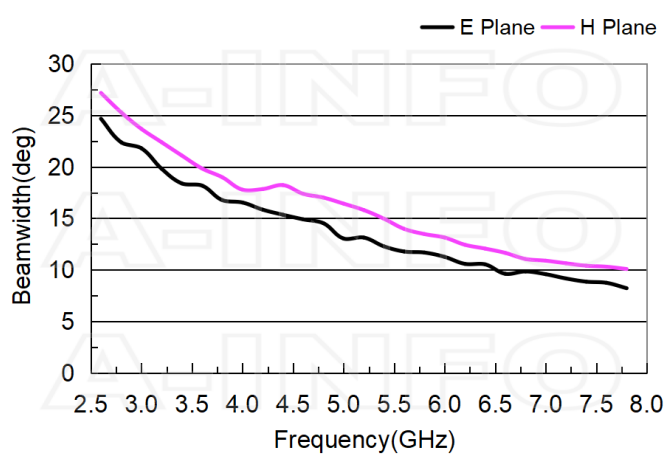
## Cross Polarization Isolation



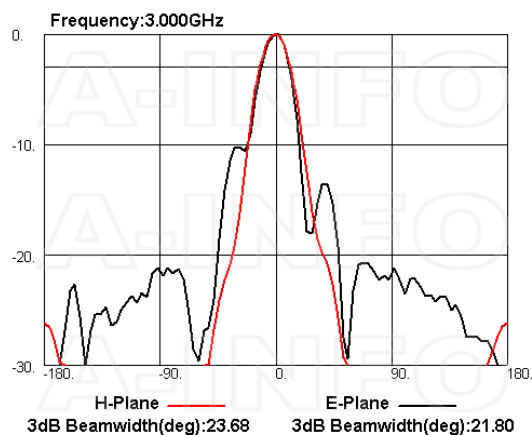
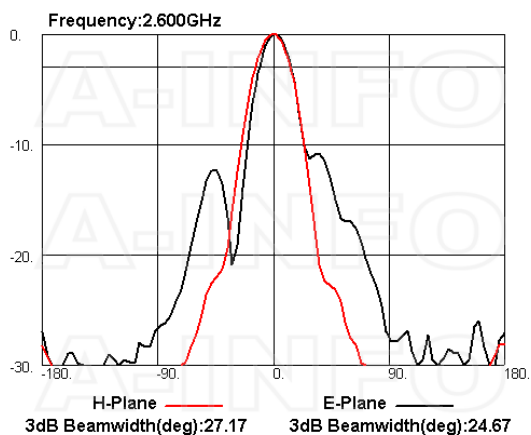
## VSWR

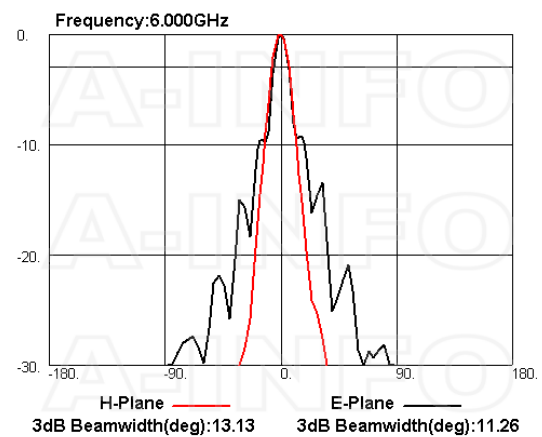
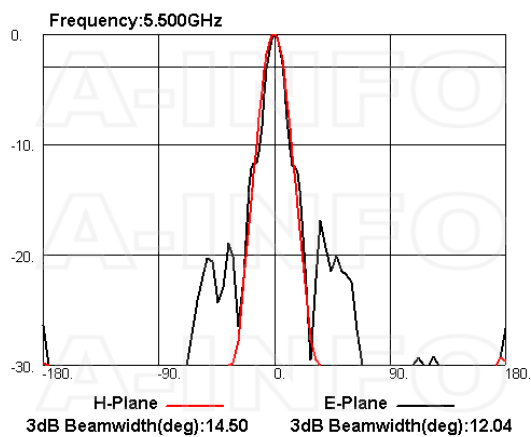
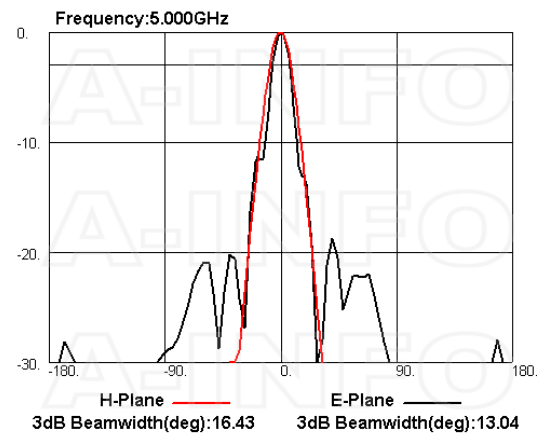
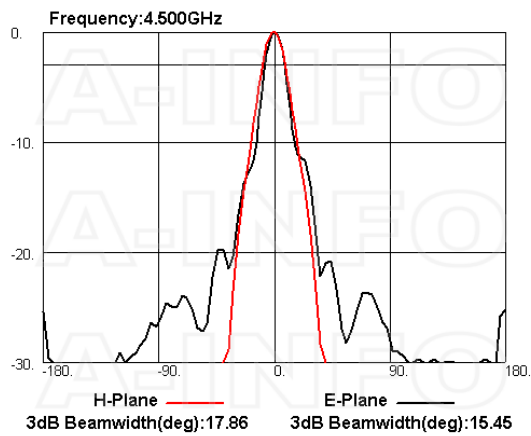
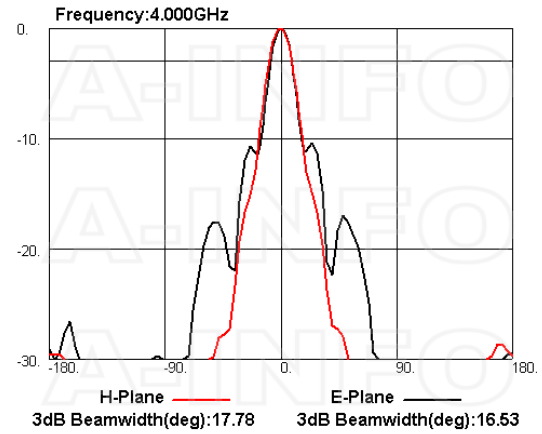
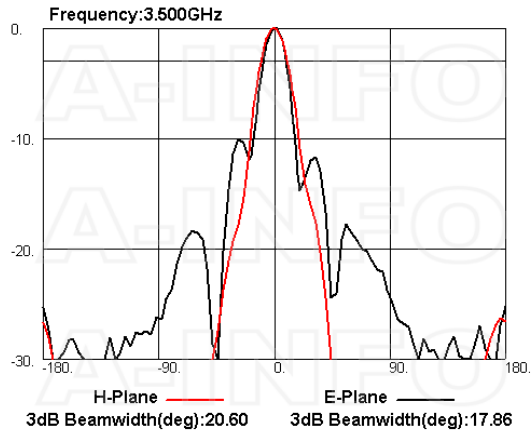


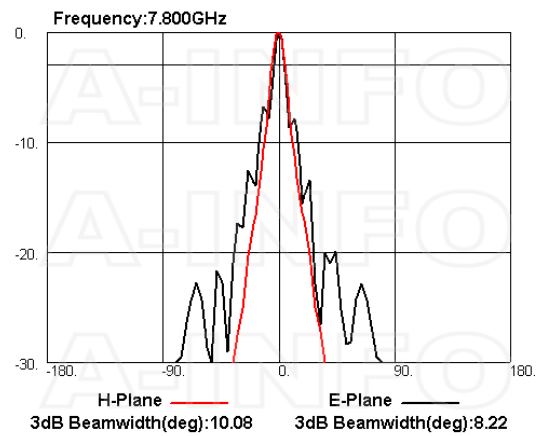
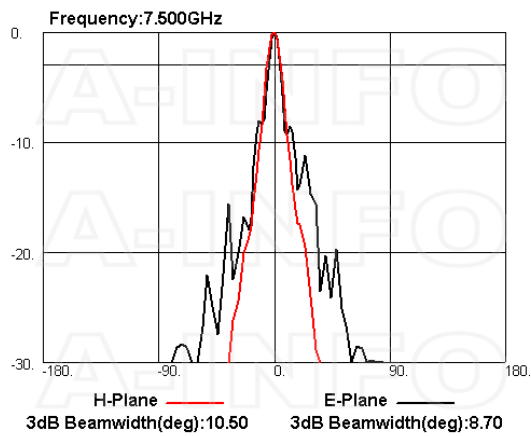
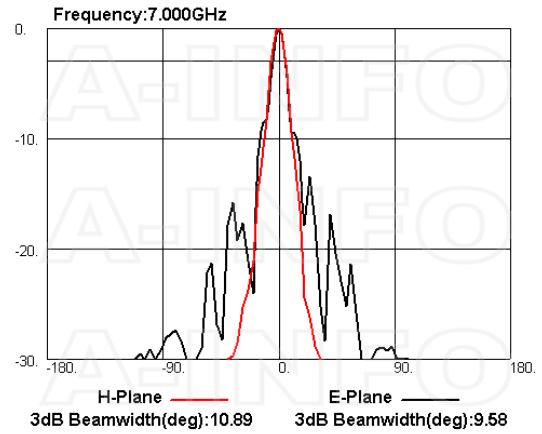
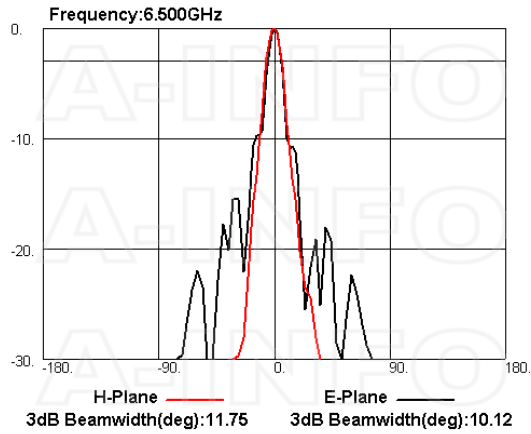
## Beamwidth



## Pattern







## Related Products



LB-90-25-MB2 Round Type Mounting Bracket



LB-90-25-L2 L Type Mounting Bracket



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-A080-10000 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



SM-SM-A100-100 Flexible Cable Assembly 100mm DC- 18GHz SMA Male to SMA Male



SM-SM-A100-200 Flexible Cable Assembly 200mm DC- 18GHz SMA Male to SMA Male



SM-SM-A100-300 Flexible Cable Assembly 300mm DC- 18GHz SMA Male to SMA Male



SM-SM-A100-500 Flexible Cable Assembly 500mm DC- 18GHz SMA Male to SMA Male



SM-SM-A100-1000 Flexible Cable Assembly 1000mm DC- 18GHz SMA Male to SMA Male



SM-SM-A100-1500 Flexible Cable Assembly 1500mm DC- 18GHz SMA Male to SMA Male



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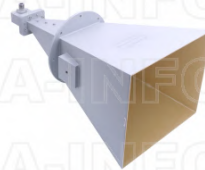
## Similar Products



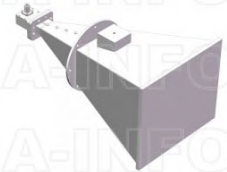
LB-2678-20-A Multi Octave Horn Antenna 2.6-7.8GHz 20dB Gain Double Ridge Waveguide Interface



LB-2678-20-ASPO Multi Octave Horn Antenna 2.6-7.8GHz 20dB Gain Double Ridge Waveguide Interface



LB-2678-20-C-NF Multi Octave Horn Antenna 2.6-7.8GHz 20dB Gain N Type Female



LB-2678-20-C-NFSP0 Multi Octave Horn Antenna 2.6-7.8GHz 20dB Gain N Type Female



LB-2678-20-C-SFSP0 Multi Octave Horn Antenna 2.6-7.8GHz 20dB Gain SMA Female

## About this Datasheet

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| <ul style="list-style-type: none"><li>● <b>Product Information</b></li></ul> Product Link:<br><a href="https://www.ainfoinc.com/lb-2678-20-c-sf-multi-octave-horn-antenna-2-6-7-8-ghz-20db-gain-sma-female">https://www.ainfoinc.com/lb-2678-20-c-sf-multi-octave-horn-antenna-2-6-7-8-ghz-20db-gain-sma-female</a><br>Data subject to change without notice.<br>© A-INFO INC. 2024. All Rights Reserved | <ul style="list-style-type: none"><li>● <b>Contact Us</b></li></ul> Address:<br>60 Tesla, Irvine, CA 92618,<br>USA<br><br>Website:<br><a href="http://www.ainfoinc.com">www.ainfoinc.com</a><br><br>Email:<br><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:<br>+1-949-639-9688<br>+1-949-639-9608<br><br>Fax:<br>+1-949-639-9670 |
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