

## 阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描述上的差异，建议读者做出适当判断。
- 4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。

## Read Statement

1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets" .

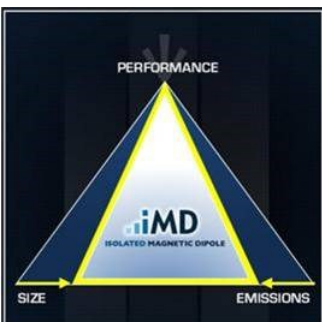
**Prestta™ Standard Octa-Band Cellular Embedded Antenna**  
700/750/850/900/1800/1900/2100/2700 MHz



Ethertronics' Prestta series of Isolated Magnetic Dipole™ (IMD) embedded antennas address the challenges facing today's product designers. IMD's high performance and isolation characteristics offer better connectivity and minimal interference. Prestta antennas can be used in a variety of applications including:

- M2M
- Automotive
- Automatic Meter Reading
- Healthcare
- Point of Sale
- Tracking...

**TECHNOLOGY ADVANTAGES**



**Stays in Tune**  
IMD antenna technology provides superior RF field containment, resulting in less interaction with surrounding components. Ethertronics IMD antennas **resist de-tuning**; providing a robust radio link regardless of the usage position.

Prestta antennas use patented IMD technology in a stamped metal configuration to provide high performance. IMD antennas requires a smaller design keep-out area, carry lower program development risk which yields a quicker time-to-market, without sacrificing RF performance.



**KEY BENEFITS**

**DESIGN ADVANTAGES**

**Reduced Costs and Time-to-Market**

- Standard antenna eliminates design fees and cycle time associated with a custom solution; getting products to market faster.

**Greater Flexibility with Unique Form Factors**

- Ethertronics' IMD technology helps you deliver more advanced ergonomic designs without adverse impact on product performance.
- SMD mountable design enables faster and lower cost manufacturing.

**RoHS Compliant**

- Ethertronics' antennas are fully compliant with the European RoHS Directive 2002/95/EC.

**END USER ADVANTAGES**

**Unique Form Factors Support Advanced Industrial Designs**

- Smaller, more efficient IMD embedded antennas break through restrictive design rules and provide new freedom in component placement.

**Superior Range**

- Better antenna function means longer range and greater sensitivity to critically precise signals—delivering greater customer satisfaction while building brand loyalty.

**SERVICE AND SUPPORT**

**Extensive RF Experience**

- Our Prestta antennas are supported by documentation, and when needed, by the expertise of RF engineers who have integrated hundreds of antenna designs into wireless devices.

**Global Operations & Design Support**

- Ethertronics' global operations supports an integrated network of design centers that can take projects from concept to production.

**PRODUCT: Cellular Antenna - P/N 1002292**

**Ethertronics' Cellular Internal (Embedded) Antenna Specifications.**

Below are the typical performances for a cellular application.

**Electrical Specifications**

Typical Characteristics. Antenna mounted directly on PC + ABS plastic carrier

Balanced Pentaband Antenna (1002292)	Low Band (LTE,GSM, EGSM)	High Band (DCS, PCS, WCDMA, LTE)
	704 – 960 MHz	1710 – 2690 MHz
Average Efficiency (No ground)	46 %	67 %
Average Efficiency (180 x 190 sq.mm ground)	51 %	67 %
VSWR	3:1 max , 5:1 max (LTE B13/B17)	
Feed Point Impedance	50 ohms unbalanced (other if required)	
Radiation Pattern	Omni-directional	
Power Handling	2 Watt cw	
Polarization	Linear	

**Mechanical Specifications**

Maximum Dimensions	85.2 x 42.1 x 0.15 mm (1.25mm high at cable solder connection)
Cable / Connector	U.fl compatible connector, Cable diameter 1.13mm, 28.5mm Cable length.
Mounting	Antenna backing using 3M468 Adhesive on FPC substrate

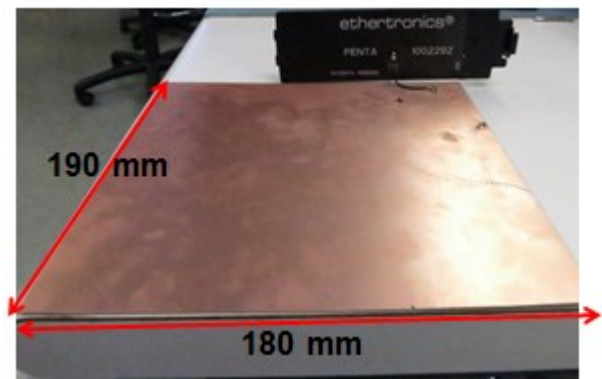
**Antenna Configuration 1**

Antenna located in Free Space



**Antenna Configuration 2**

Antenna located at the end of a PCB.

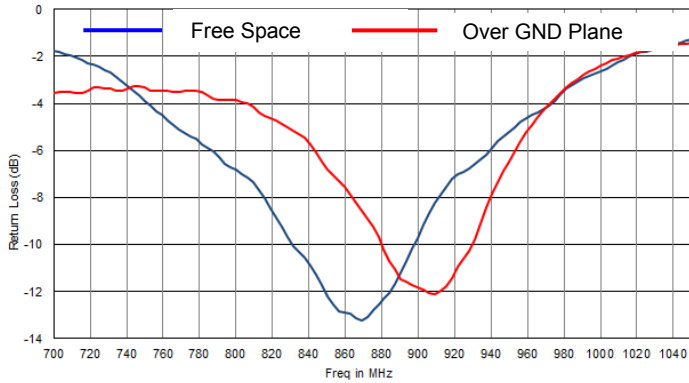


In this position, the antenna is located 1 mm away from the PCB and 5 mm above the PCB.

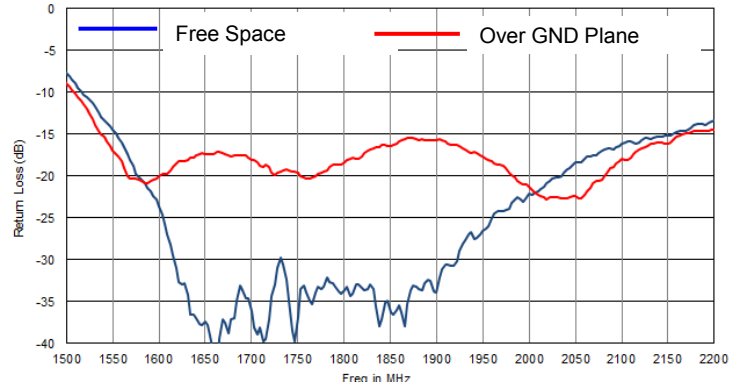
**ETHERTRONICS**

5501 Oberlin Drive, Suite 100, San Diego, CA. 92121, USA [www.ethertronics.com](http://www.ethertronics.com)  
Tel +(1) 858.550.3820 | fax +(1) 858.550.3821 | contact: [info@ethertronics.com](mailto:info@ethertronics.com)

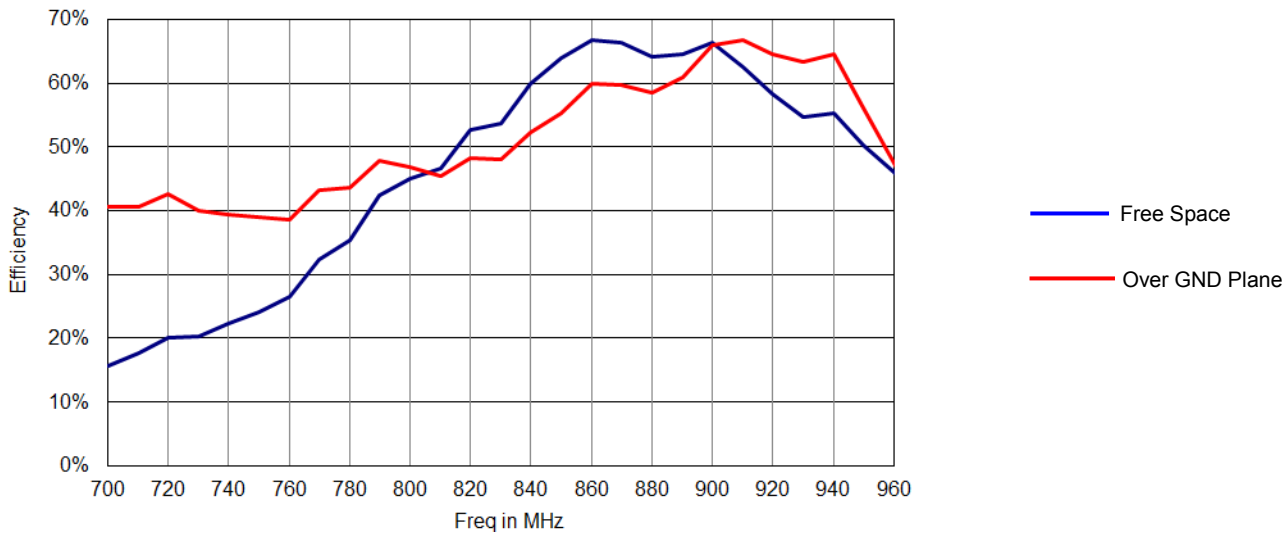
**Return Loss in dB (Low Band)**



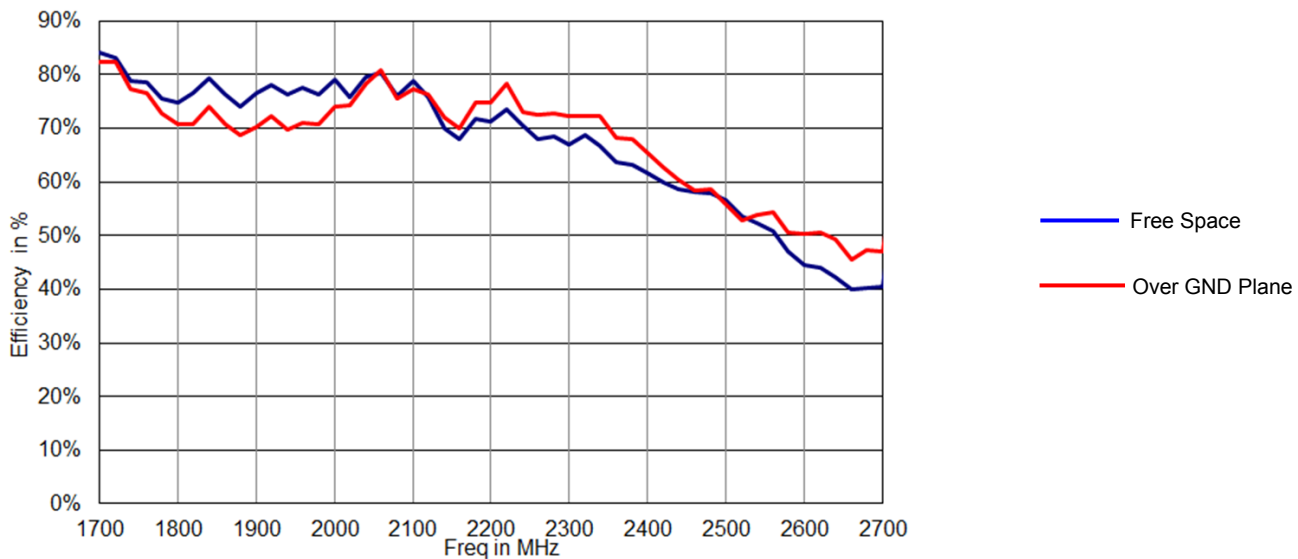
**Return Loss, in dB (High Band)**



**Typical Low Band Efficiency, 700-960MHz**

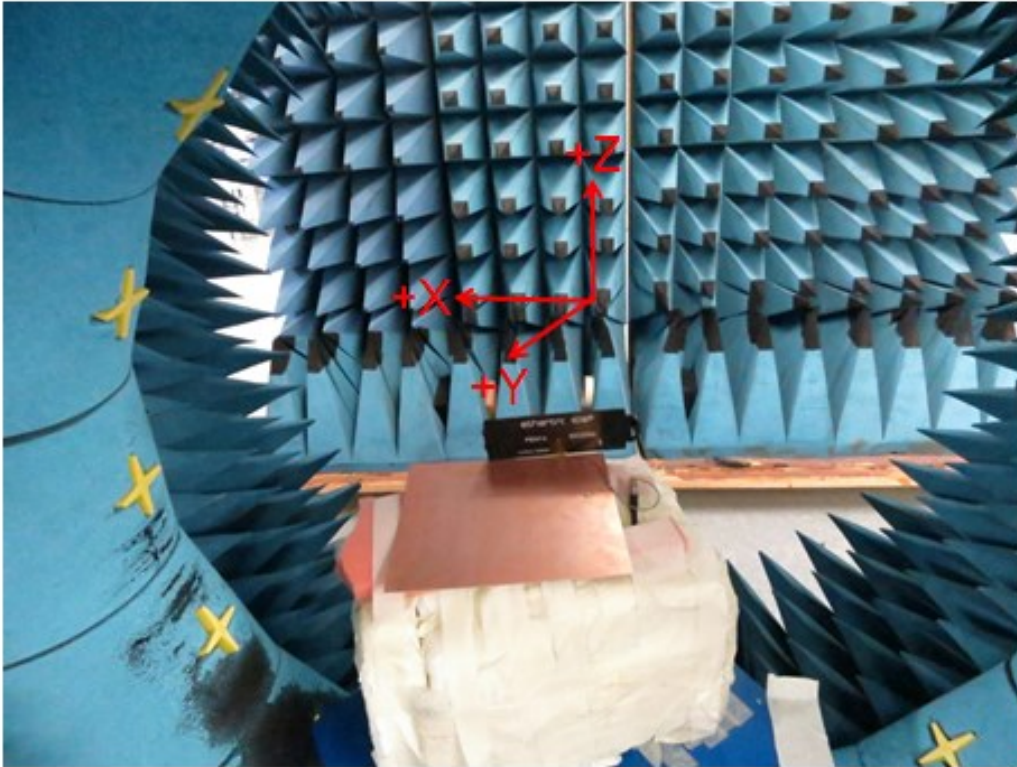


**Typical High Band Efficiency, 1700-2700MHz**



PRODUCT: Cellular Antenna - P/N 1002292

## Radiation Patterns Setup Conditions

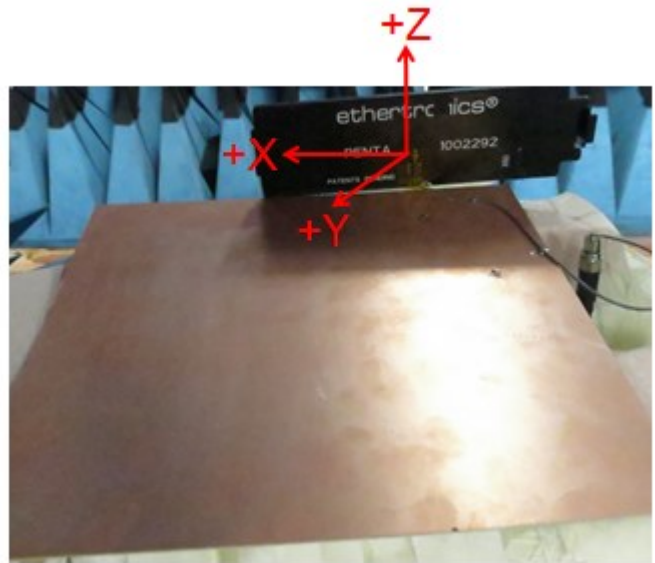


Antenna Configuration 1

Antenna located in Free Space

Antenna Configuration 2

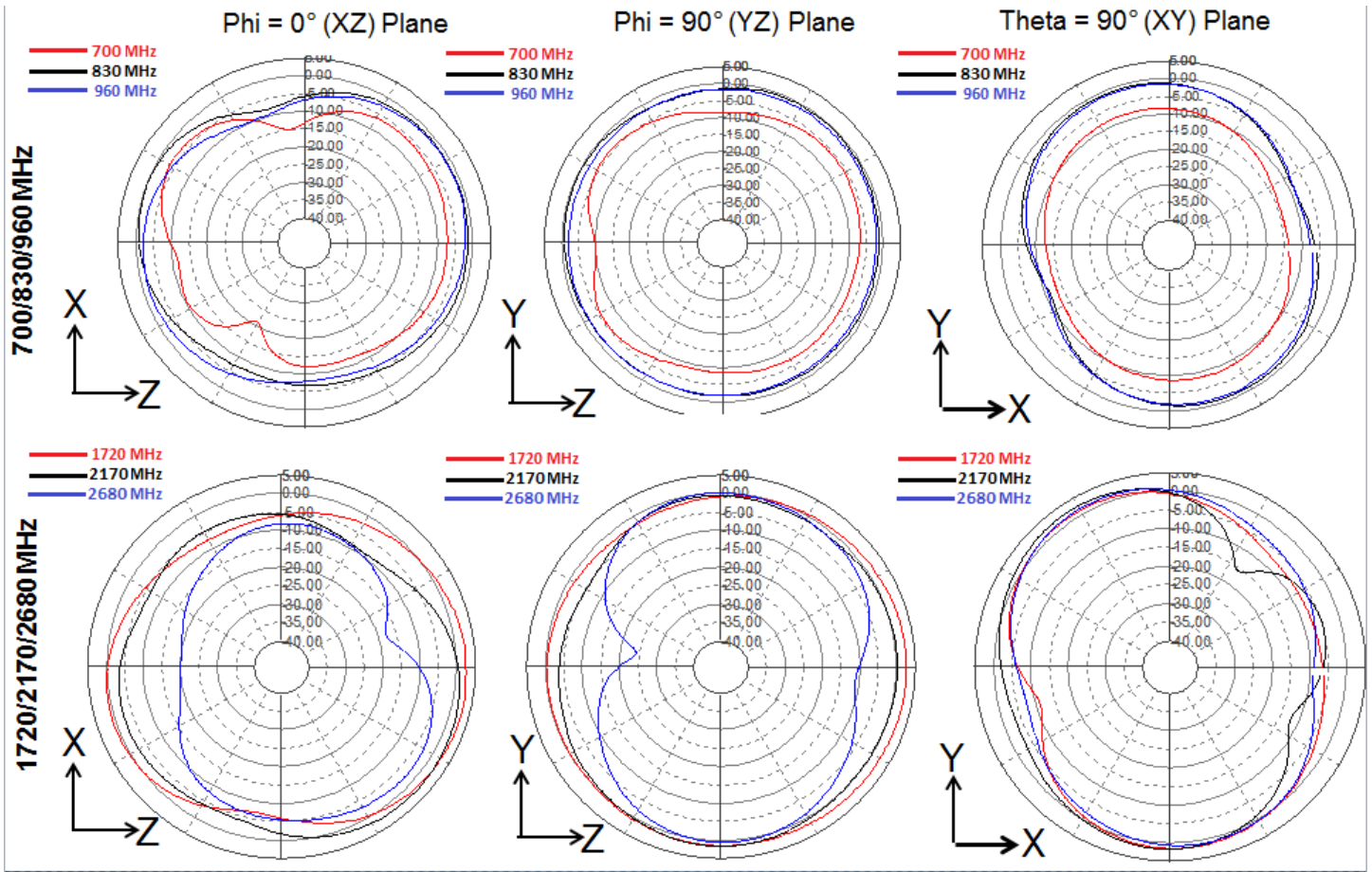
Antenna located at the end of a PCB.



### ETHERTRONICS

5501 Oberlin Drive, Suite 100, San Diego, CA. 92121, USA [www.ethertronics.com](http://www.ethertronics.com)  
Tel +(1) 858.550.3820 | fax +(1) 858.550.3821 | contact: [info@ethertronics.com](mailto:info@ethertronics.com)

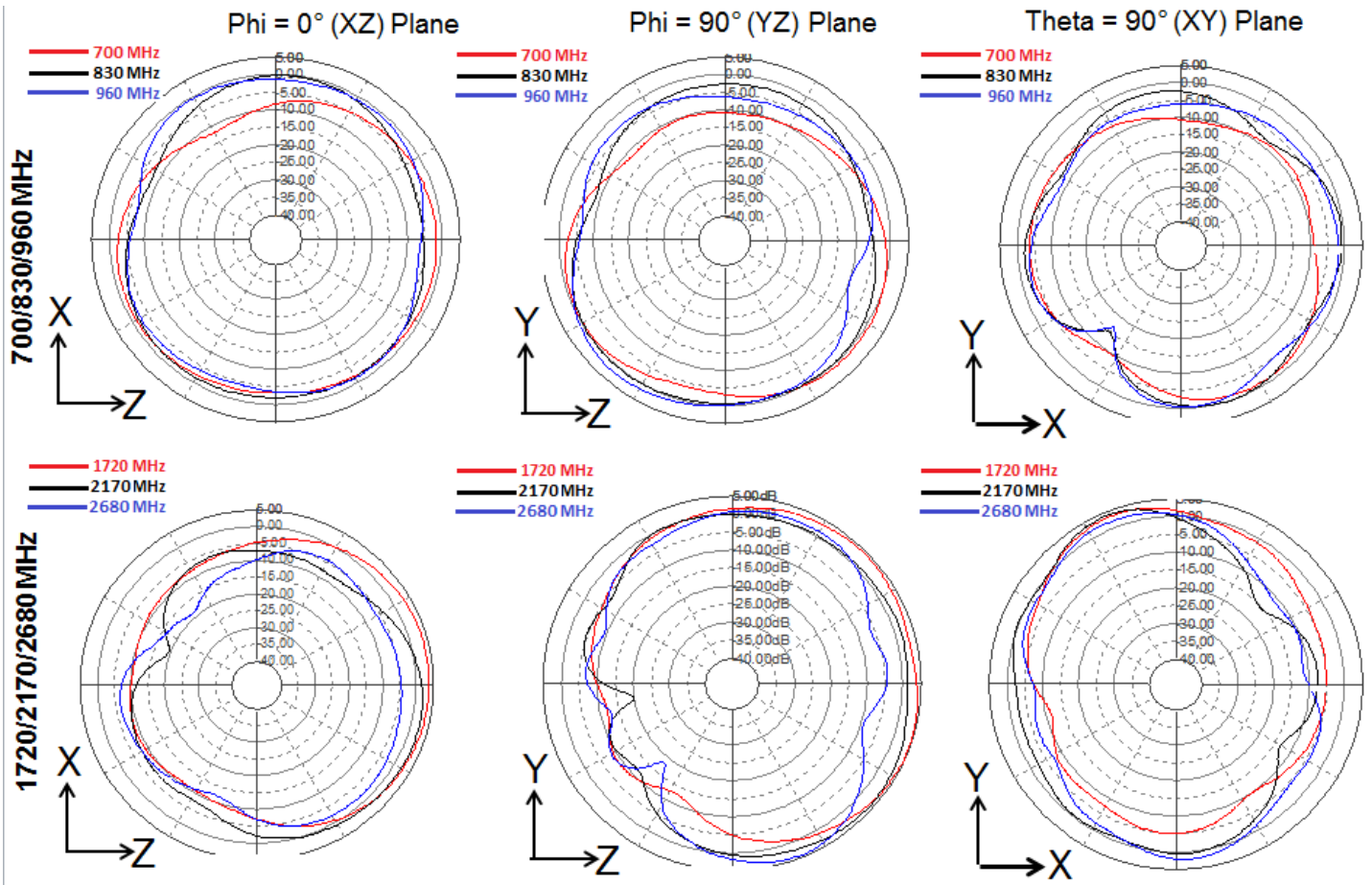
Typical Radiation Patterns - Antenna Configuration 1 : In Free Space



The Peak gain in the frequency band 700-960MHz is 0.5 dBi.

The Peak gain in the frequency band 1710-2200MHz is 3.0 dBi.

Typical Radiation Patterns - Antenna Configuration 2 : Over the Ground Plane



The Peak gain in the frequency band 820-960MHz is 3.0 dBi.

The Peak gain in the frequency band 1710-2200MHz is 5.0 dBi.