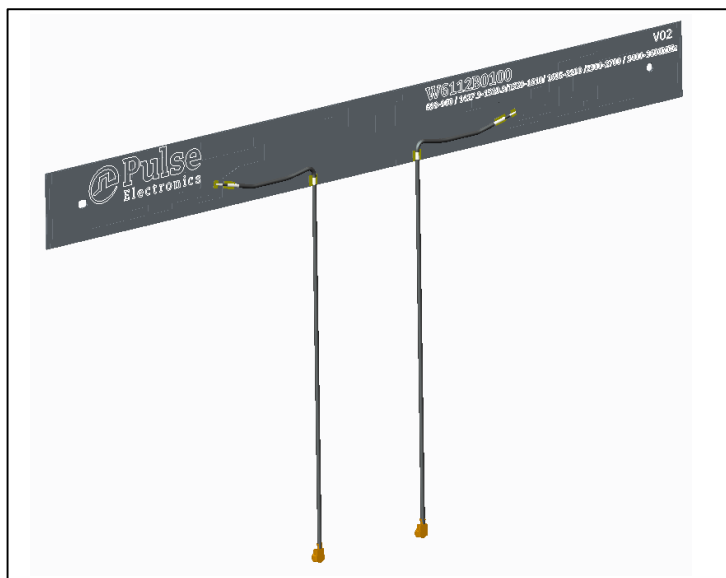


## Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

**PART NUMBER: W6112B0100**

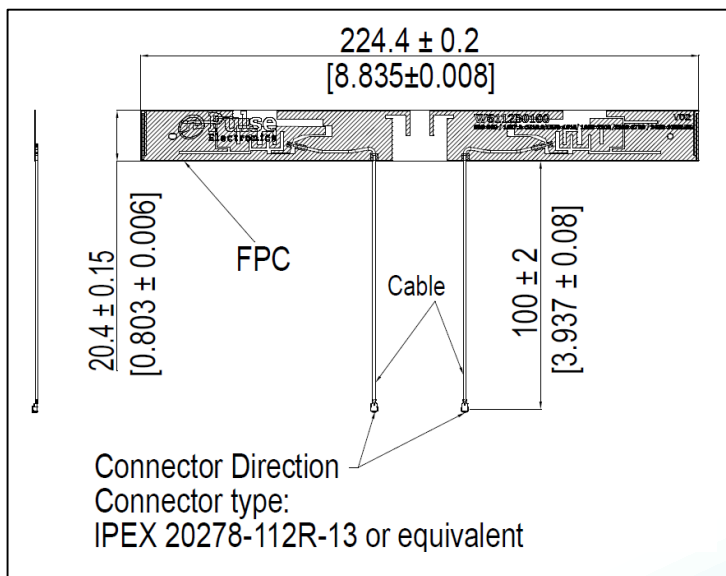


### Features:

- 2G / 3G / 4G
- Global LTE Bands:
  - B1-B23, B25-B29, B33-B42
  - N.A.; Europe, Asia (incl. Jap.)
- Single device
  - Guaranteed Port-to-Port Isolation
- Foldable for tight spaces

### Applications:

- Challenging RF Environments Demanding:
  - Highest Peak Gain
  - Lowest ECC (Envelope Correlation Coeff.).
- Matched to Radio Modules from:
  - Sierra Wireless, Telit, Huawei, Gemalto, uBlox, ZTE, and others.
- Security, Video, Graphics
- IoT, SmartGrid, Meters, Remote Monitoring, Sensor Networks
- Transportation, Tracking



All dimensions are in mm / inches

Issue: 1616

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Pulse (Suzhou) Wireless Products Co, Inc.  
99 Huo Ju Road (#29 Bldg, 4<sup>th</sup> Phase  
Suzhou New District  
Jiangsu Province, Suzhou 215009 PR China  
Tel: 86 512 6807 9998



## Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100

## ELECTRICAL SPECIFICATIONS

|   |   |
|---|---|
| Frequency   | 698-960/1427.9-1510.9/1559-1610/<br>1695-2200/2300-2700/3400-3600 MHz |
| Nominal Impedance   | 50Ω   |
| Return loss(698-960MHz)   | -6dB  |
| Return loss(1427.9-1510.9/1559-1610/<br>1695-2200/2300-2700/3400-3600MHz) | -7.5dB  |
| Isolation(698-960MHz)   | -10dB   |
| Isolation(1427.9-1510.9/1559-1610/<br>1695-2200/2300-2700/3400-3600MHz)   | -13dB   |
| Average Total Efficiency (698-960MHz)                                     | 55%   |
| Average Total Efficiency (1427.9-1510.9MHz)                               | 60%   |
| Average Total Efficiency (1559-1610MHz)                                   | 60%   |
| Average Total Efficiency (1695-2200MHz)                                   | 65%   |
| Average Total Efficiency (2300-2700MHz)                                   | 70%   |
| Average Total Efficiency (3400-3600MHz)                                   | 65%   |

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## Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100

## ELECTRICAL SPECIFICATIONS

|                              |                                      |
|------------------------------|--------------------------------------|
| Peak Gain (698-960MHz)       | 4.3dBi                               |
| Peak Gain (1427.9-1510.9MHz) | 3.4dBi                               |
| Peak Gain (1559-1610MHz)     | 2.4dBi                               |
| Peak Gain (1695-2200MHz)     | 4.1dBi                               |
| Peak Gain (2300-2700MHz)     | 4.6dBi                               |
| Peak Gain (3400-3600MHz)     | 4.0dBi                               |
| Radiation Pattern            | Omni                                 |
| Polarization                 | Linear                               |
| Power withstanding           | 3W                                   |
| Connector type               | IPEX 20278-112R-13                   |
| Cable type                   | Low loss $\Phi$ 1.13mm Coaxial Cable |
| Cable length                 | 100mm                                |

(\*) All RF parameters measured on 2mm thick PC plate

Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100

## MECHANICAL SPECIFICATIONS

|                |                          |
|----------------|--------------------------|
| Color          | Black                    |
| Weight         | 2.9 g                    |
| Overall Length | 8.835 INCHES             |
| Fixing system  | Adhesive Tape, 3M6677 PC |

## ENVIRONMENTAL SPECIFICATIONS

|                       |           |
|-----------------------|-----------|
| Operating temperature | -40~85° C |
|-----------------------|-----------|

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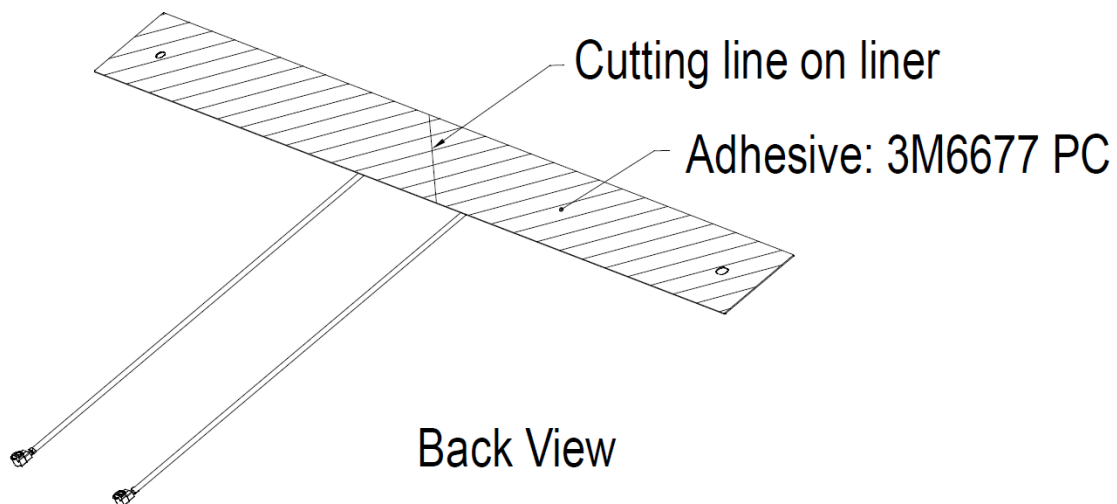
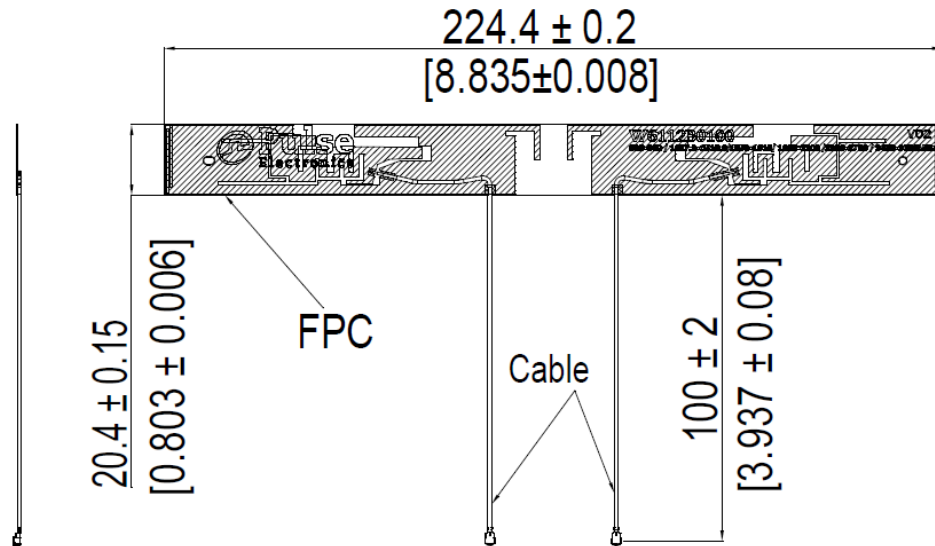
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Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100

MECHANICAL DRAWING



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Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100

CHARTS

Return Loss



Issue: 1616

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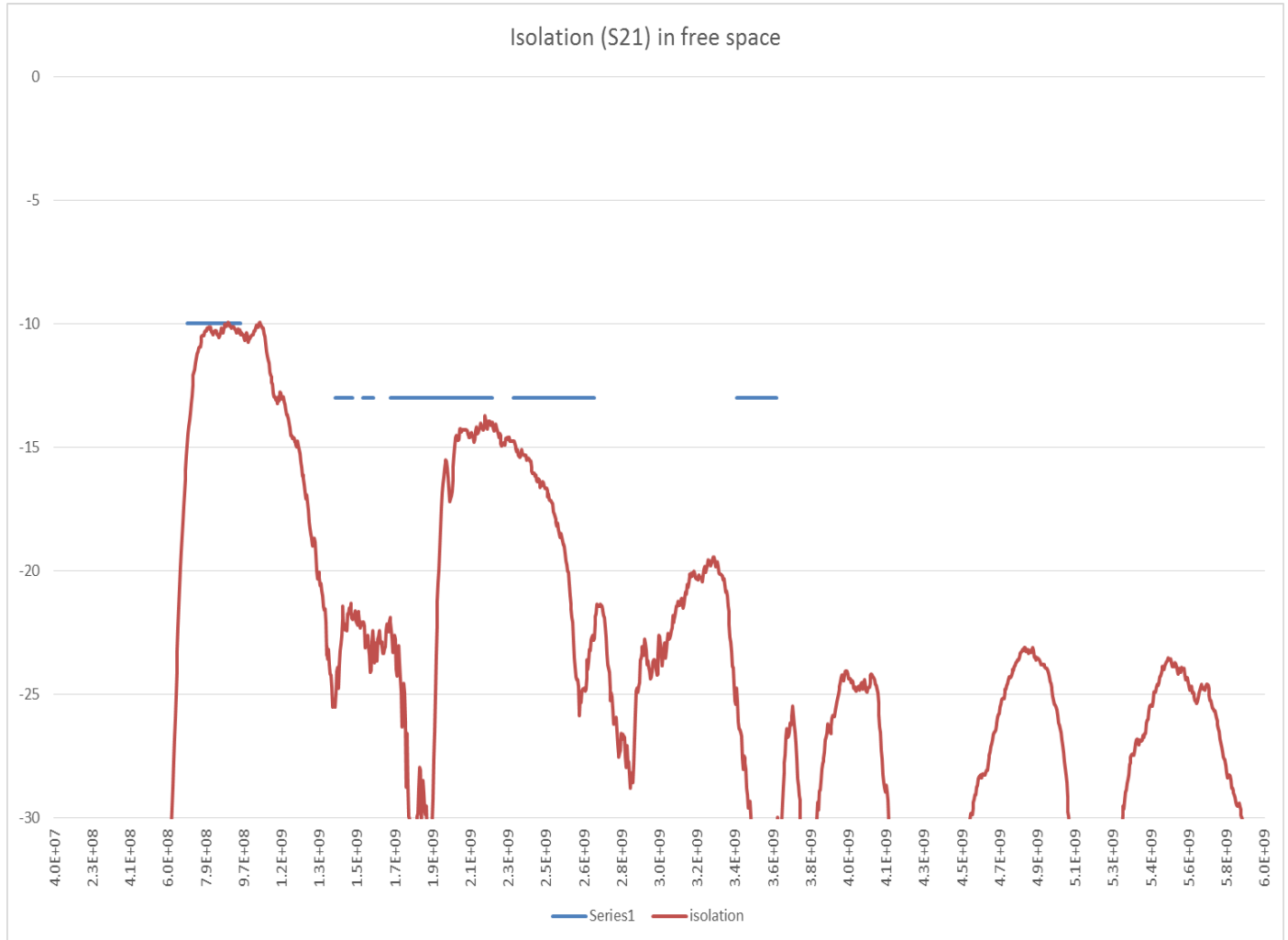
# Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100

## CHARTS

### Isolation



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## Description: 2x2 MIMO LTE FPC ANTENNA

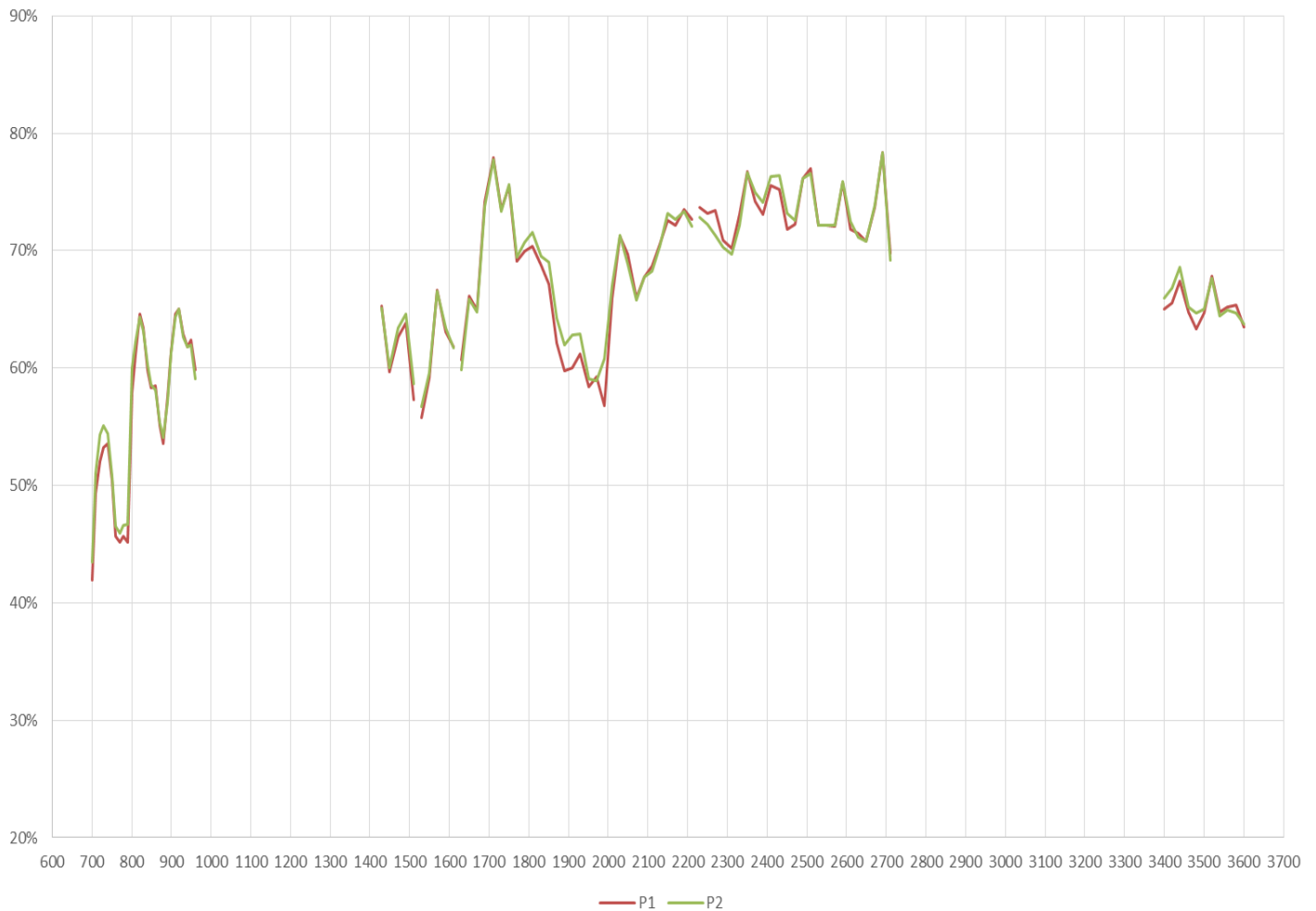
Series: Gemini

PART NUMBER: W6112B0100

### CHARTS

#### Efficiency(%)

Total Efficiency in free space, %



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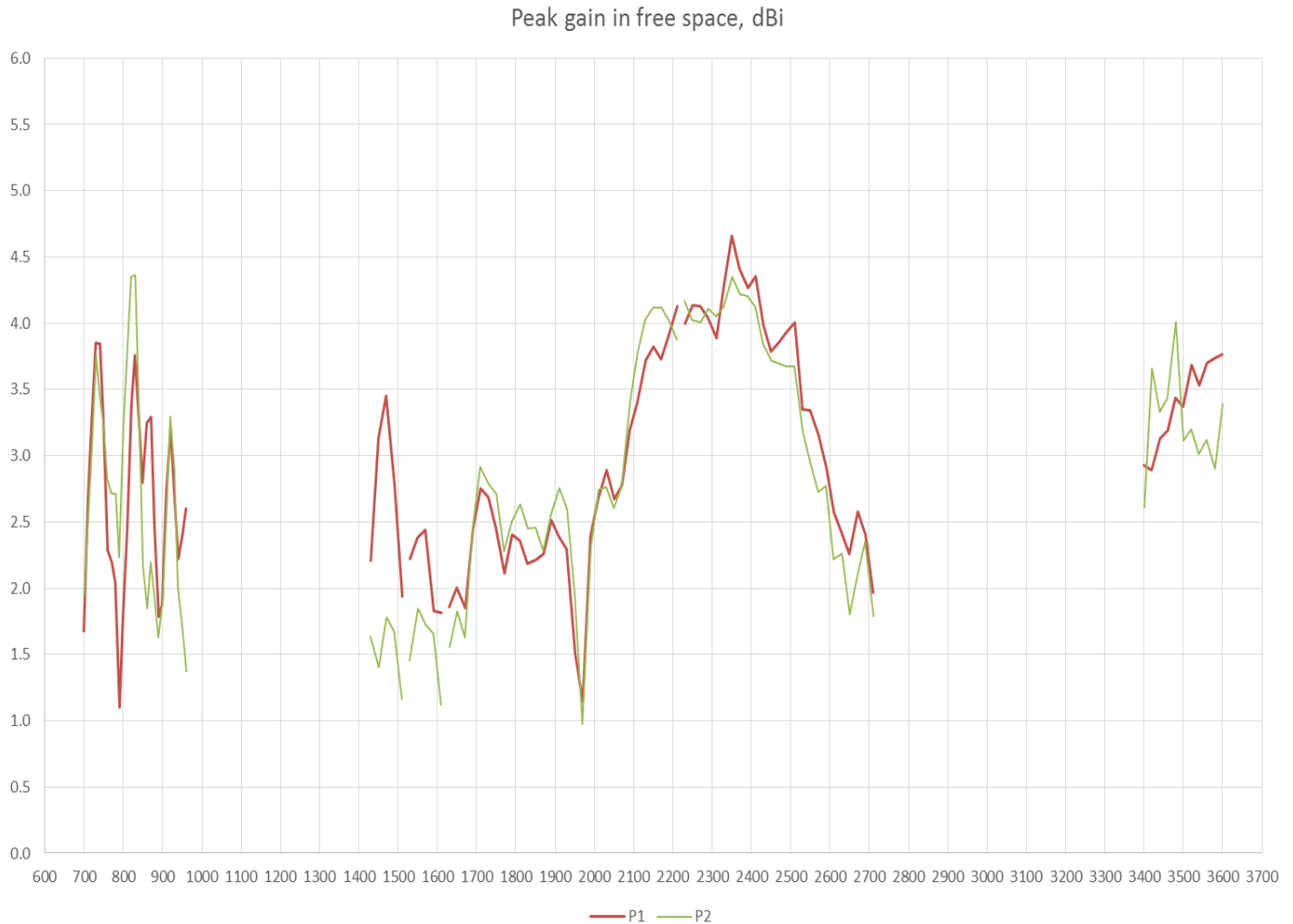
## Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100

### CHARTS

#### Peak Gain(dBi)



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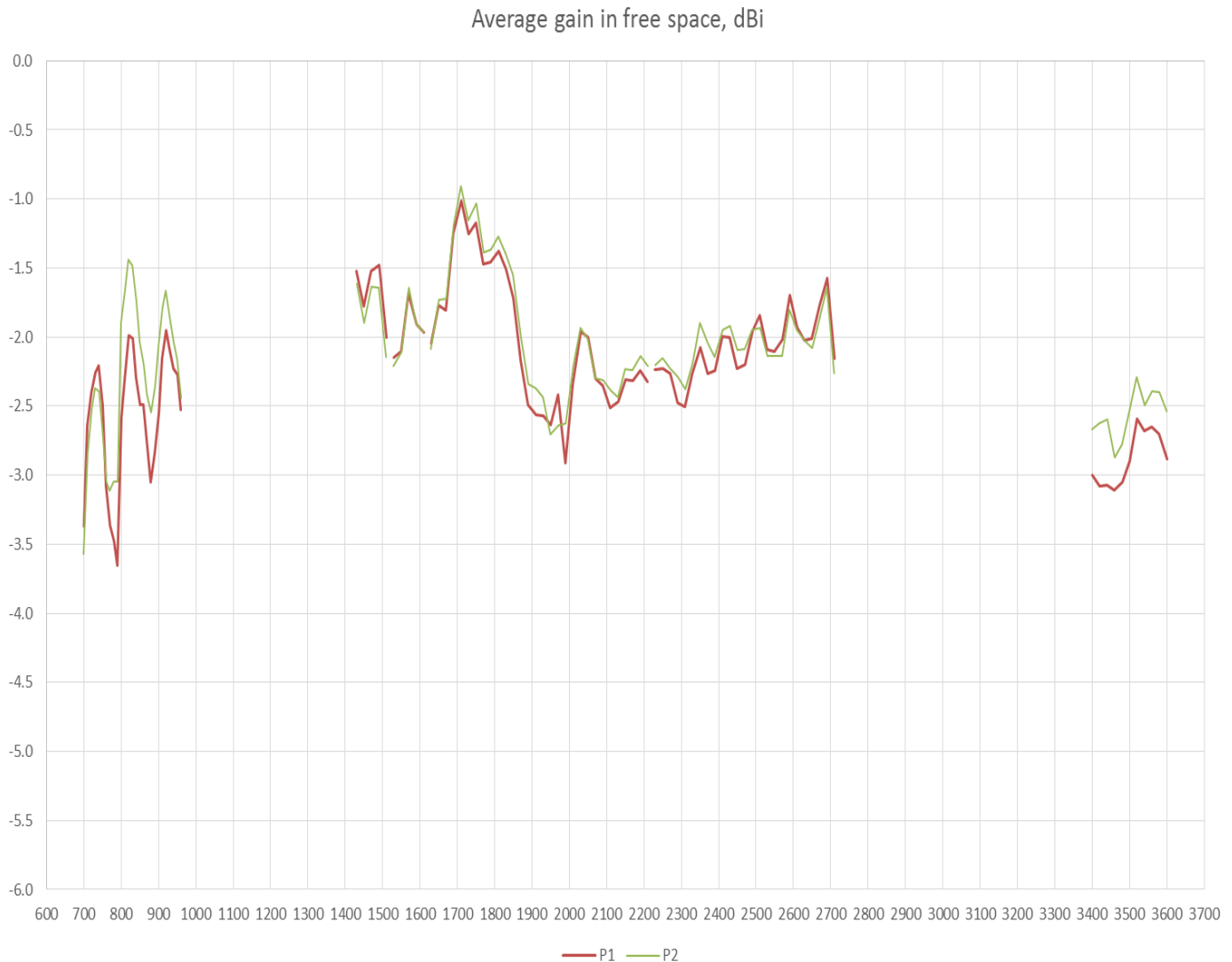
**Description: 2x2 MIMO LTE FPC ANTENNA**

**Series: Gemini**

**PART NUMBER: W6112B0100**

**CHARTS**

**Average Gain(dBi)**



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**Description: 2x2 MIMO LTE FPC ANTENNA**

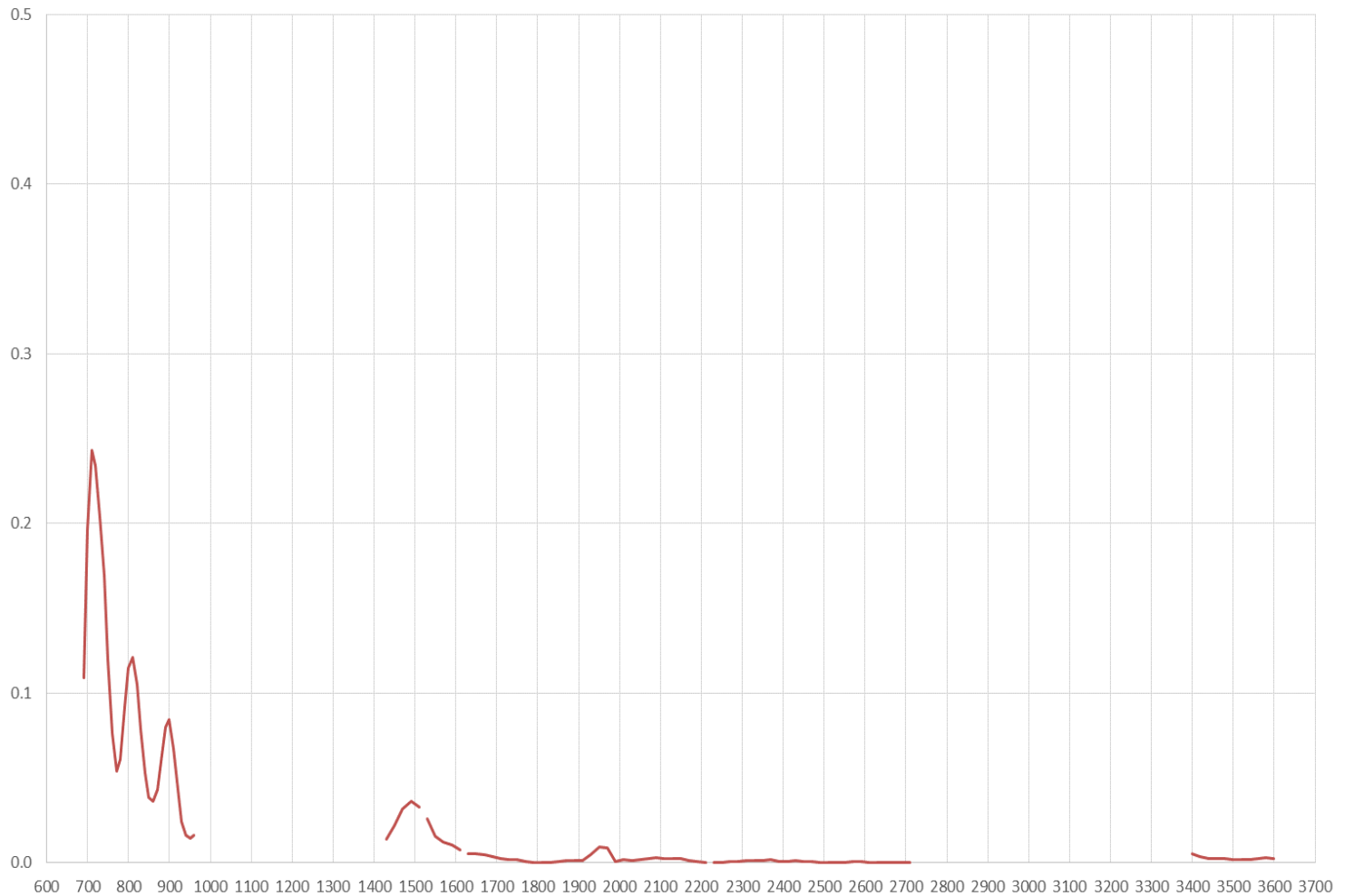
**Series: Gemini**

**PART NUMBER: W6112B0100**

**CHARTS**

**ECC**

ECC in free space, uniform pdf, XPR=0dB



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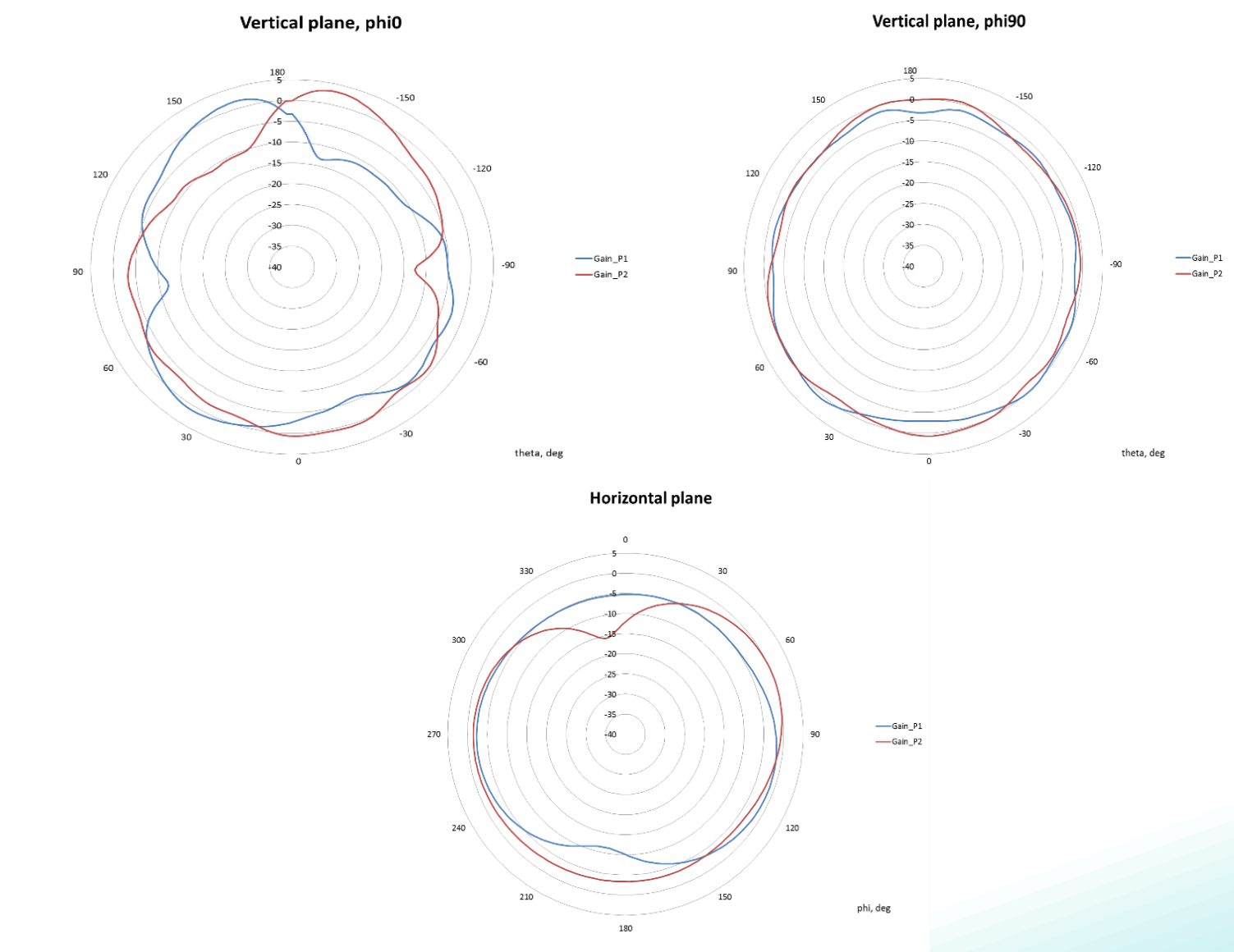
## Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100

### CHARTS

Typical free space radiation pattern  
698-960MHz  
(800MHz)



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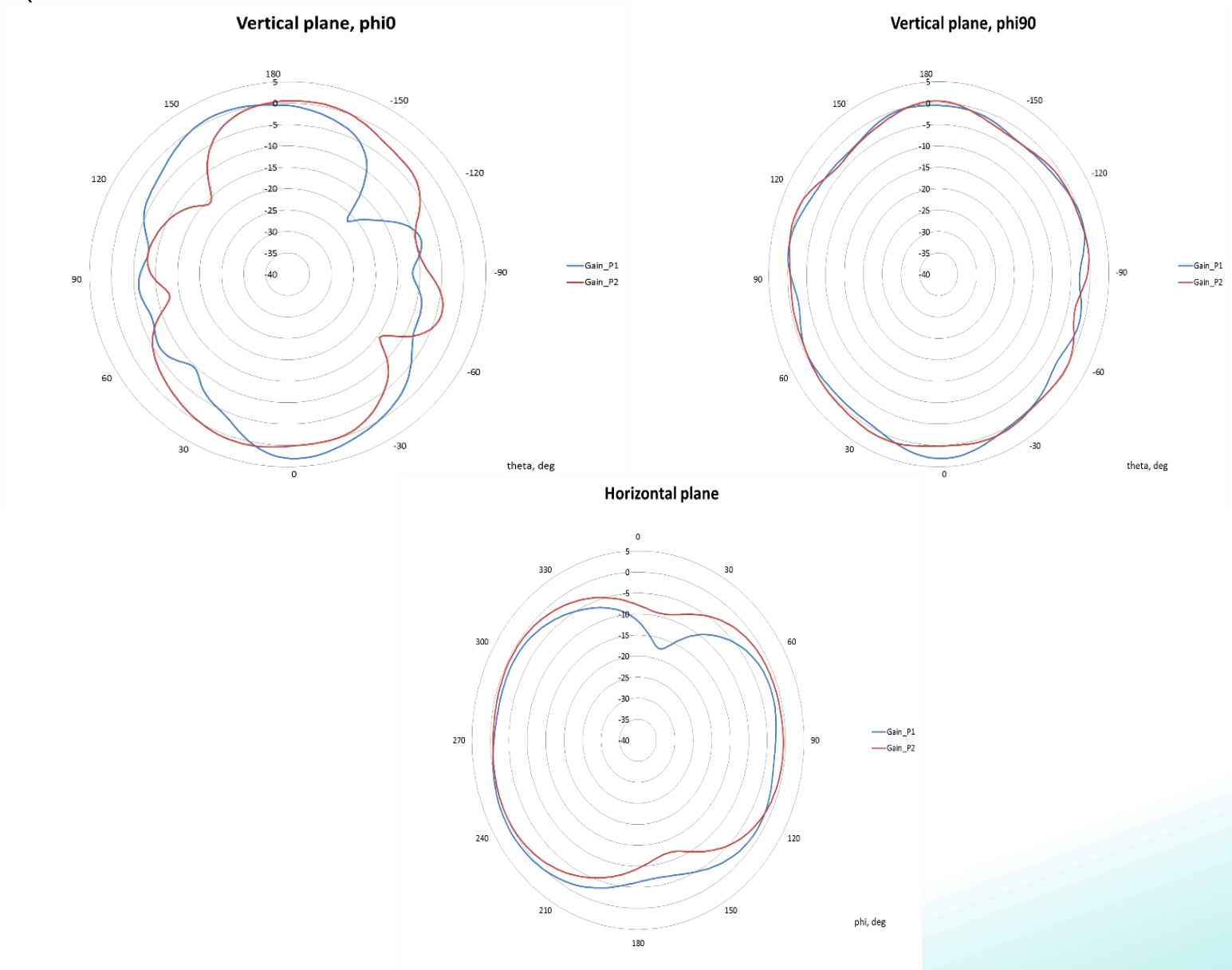
# Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100

## CHARTS

Typical free space radiation pattern  
1427.9-1510.9MHz  
(1450MHz)



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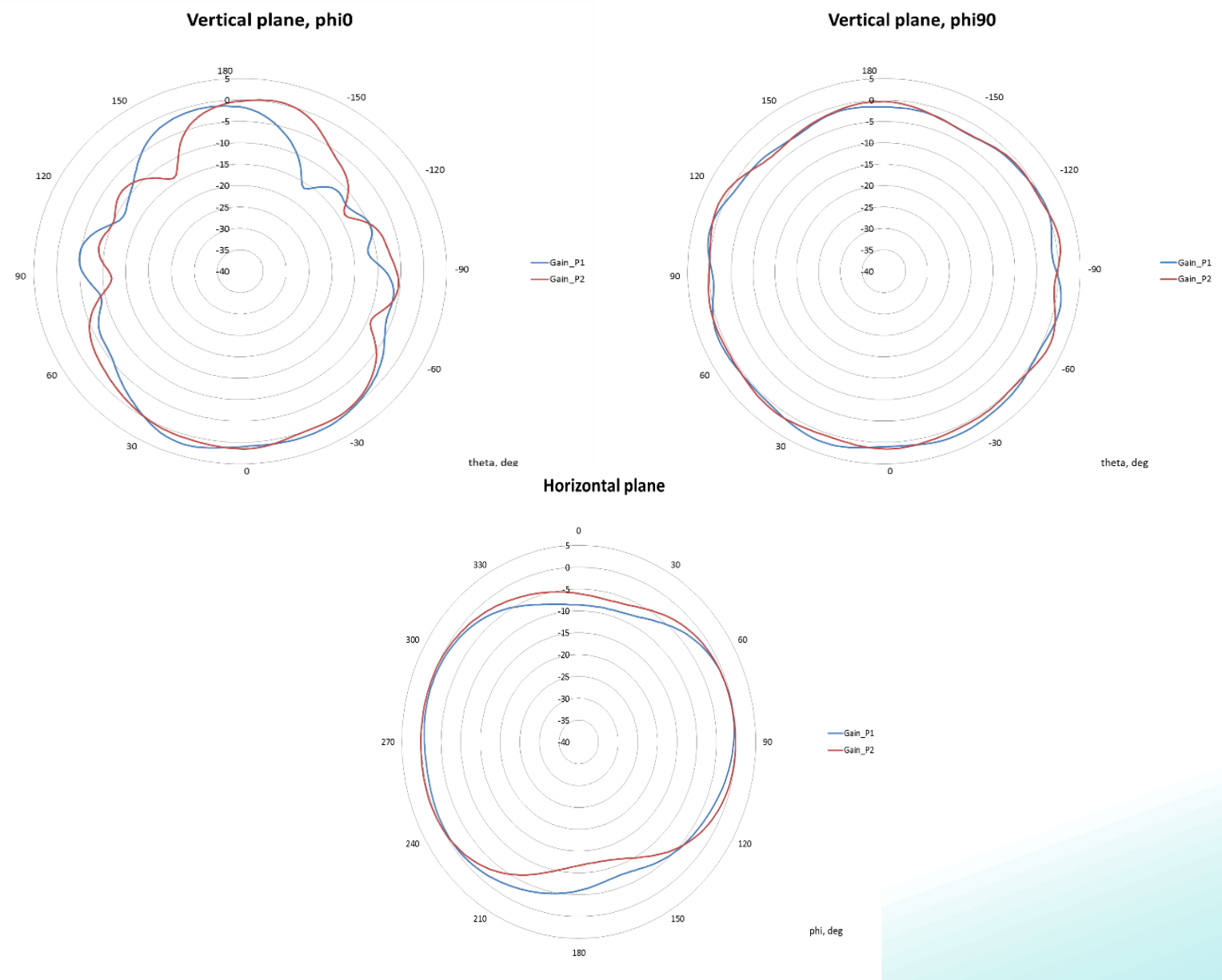
## Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100

### CHARTS

Typical free space radiation pattern  
1559-1610MHz  
(1570MHz)



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## Description: 2x2 MIMO LTE FPC ANTENNA

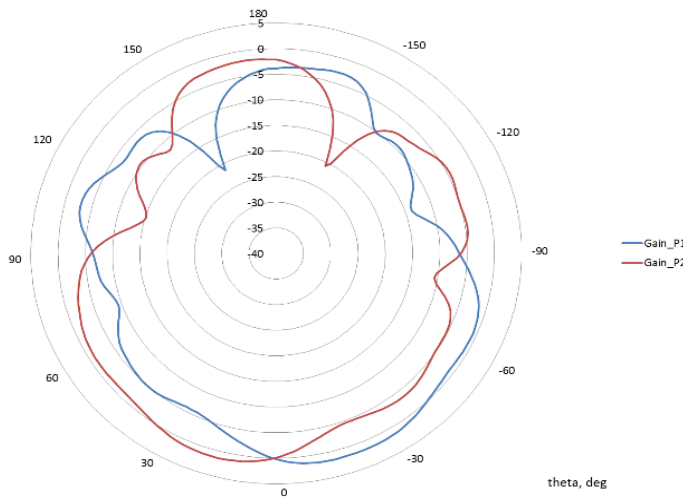
Series: Gemini

PART NUMBER: W6112B0100

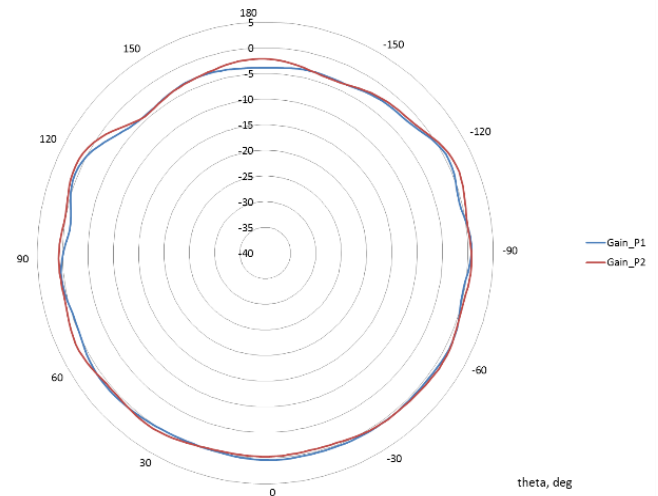
### CHARTS

Typical free space radiation pattern  
1695-2200MHz  
(1930MHz)

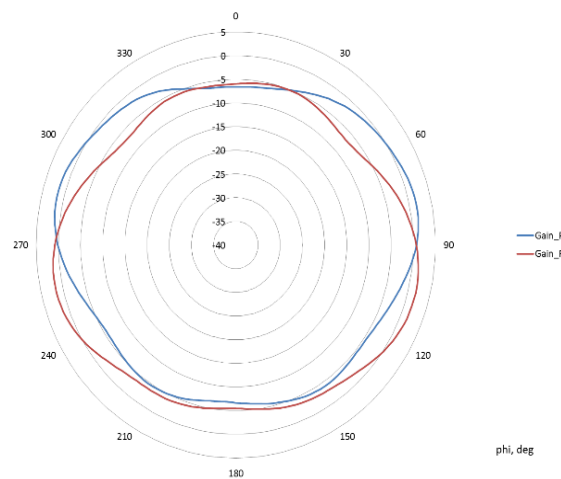
Vertical plane, phi0



Vertical plane, phi90



Horizontal plane



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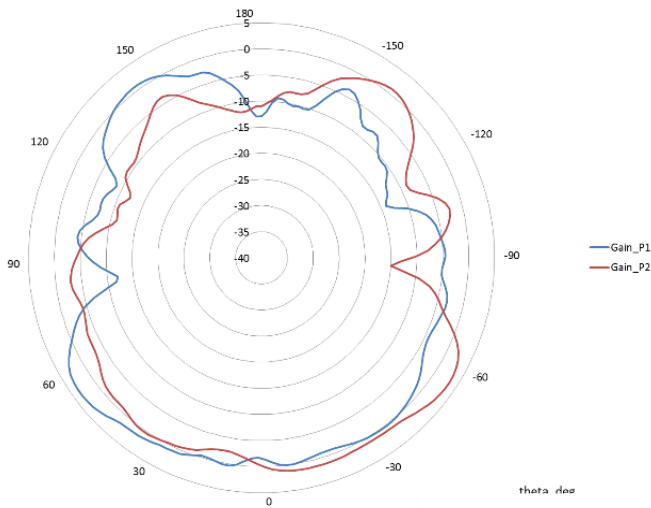
Series: Gemini

PART NUMBER: W6112B0100

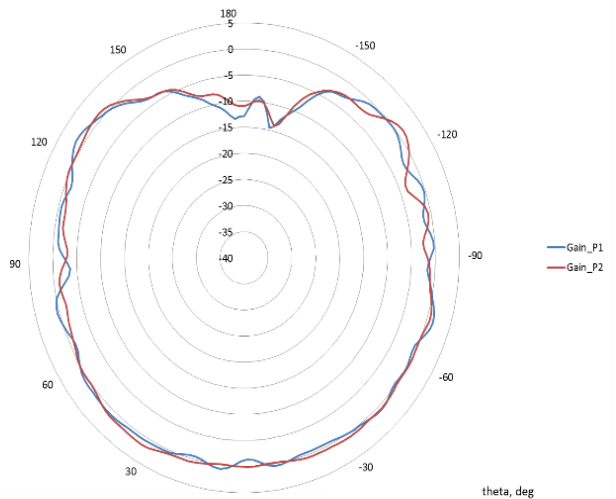
### CHARTS

Typical free space radiation pattern  
2300-2700MHz  
(2390MHz)

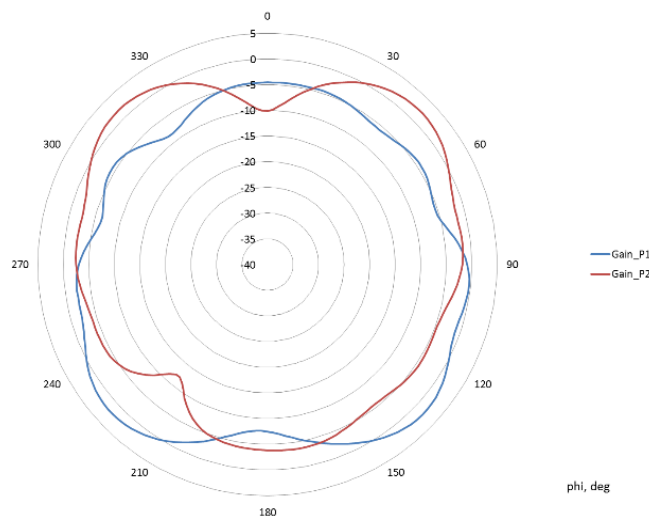
Vertical plane, phi0



Vertical plane, phi90



Horizontal plane



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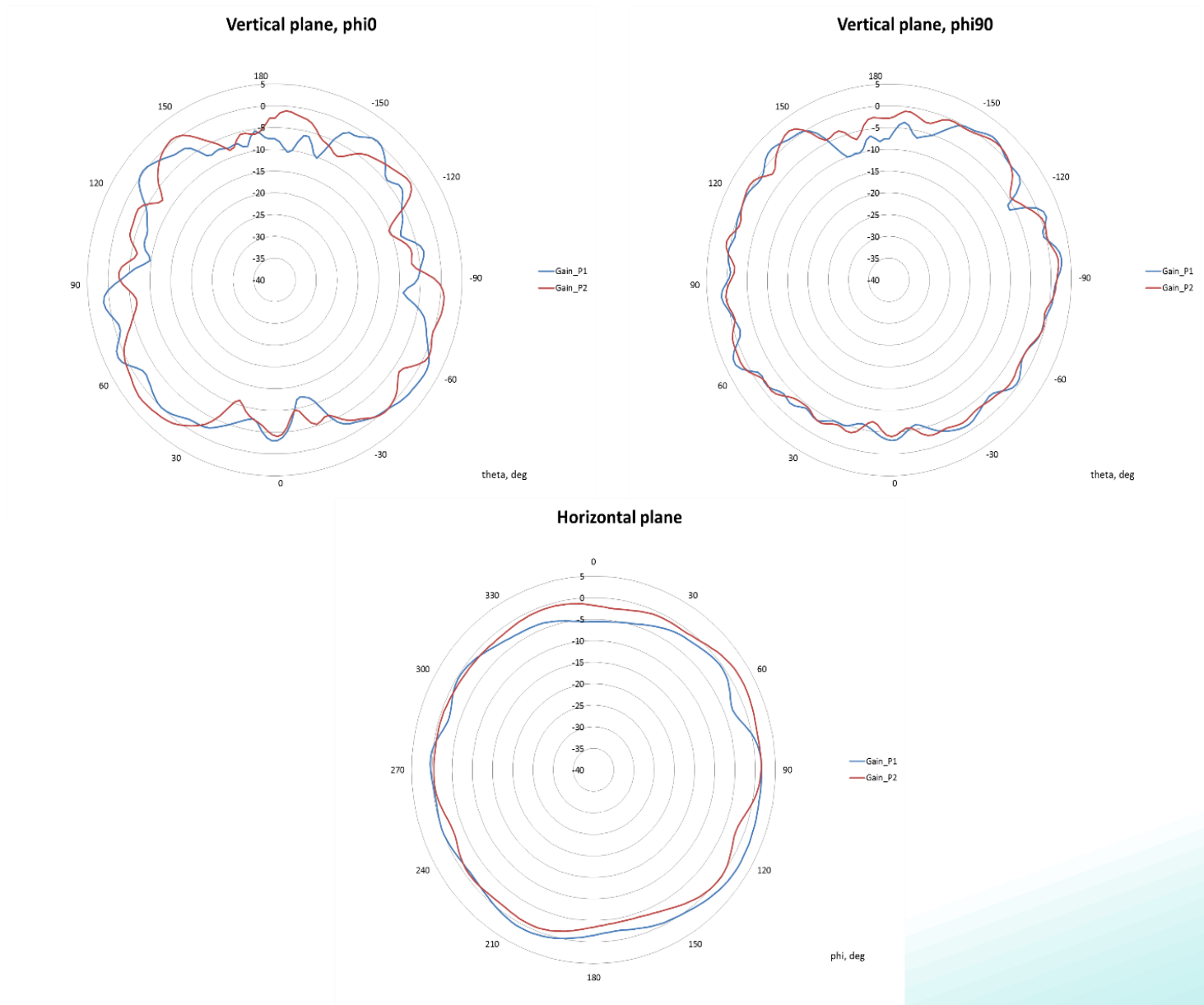
## Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100

### CHARTS

Typical free space radiation pattern  
3400-3600MHz  
(3400MHz)



Issue: 1616

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