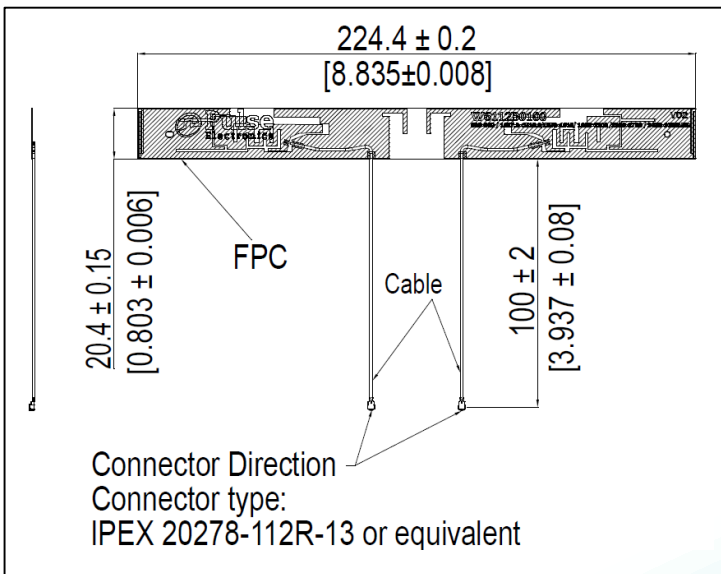


Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100



All dimensions are in mm / inches

Issue: 1616

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For more information:

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San Diego, CA 92128  
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Tel: 1-858-674-8100

Pulse/Larsen Antennas  
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Tel: 1-360-944-7551

Europe Headquarters  
Pulse GmbH & Do, KG  
Zeppelinstrasse 15  
Herrenberg, Germany  
Tel: 49 7032 7806 0

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

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



**Description: 2x2 MIMO LTE FPC ANTENNA****Series: Gemini****PART NUMBER: W6112B0100****ELECTRICAL SPECIFICATIONS**

Frequency	698-960/1427.9-1510.9/1559-1610/ 1695-2200/2300-2700/3400-3600 MHz
Nominal Impedance	50Ω
Return loss(698-960MHz)	-6dB
Return loss(1427.9-1510.9/1559-1610/ 1695-2200/2300-2700/3400-3600MHz)	-7.5dB
Isolation(698-960MHz)	-10dB
Isolation(1427.9-1510.9/1559-1610/ 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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Issue: 1616

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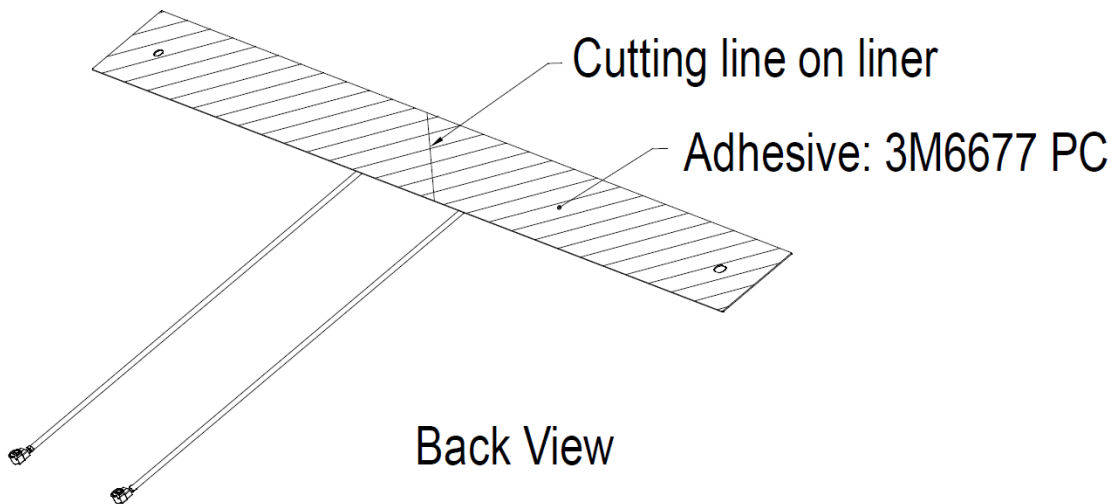
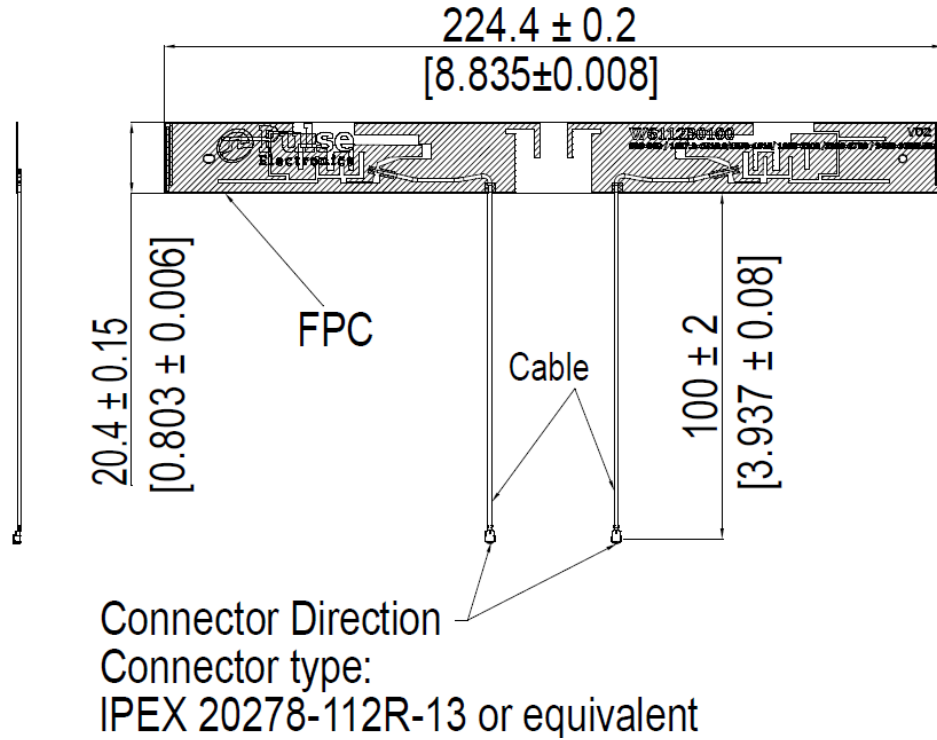
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Description: 2x2 MIMO LTE FPC ANTENNA

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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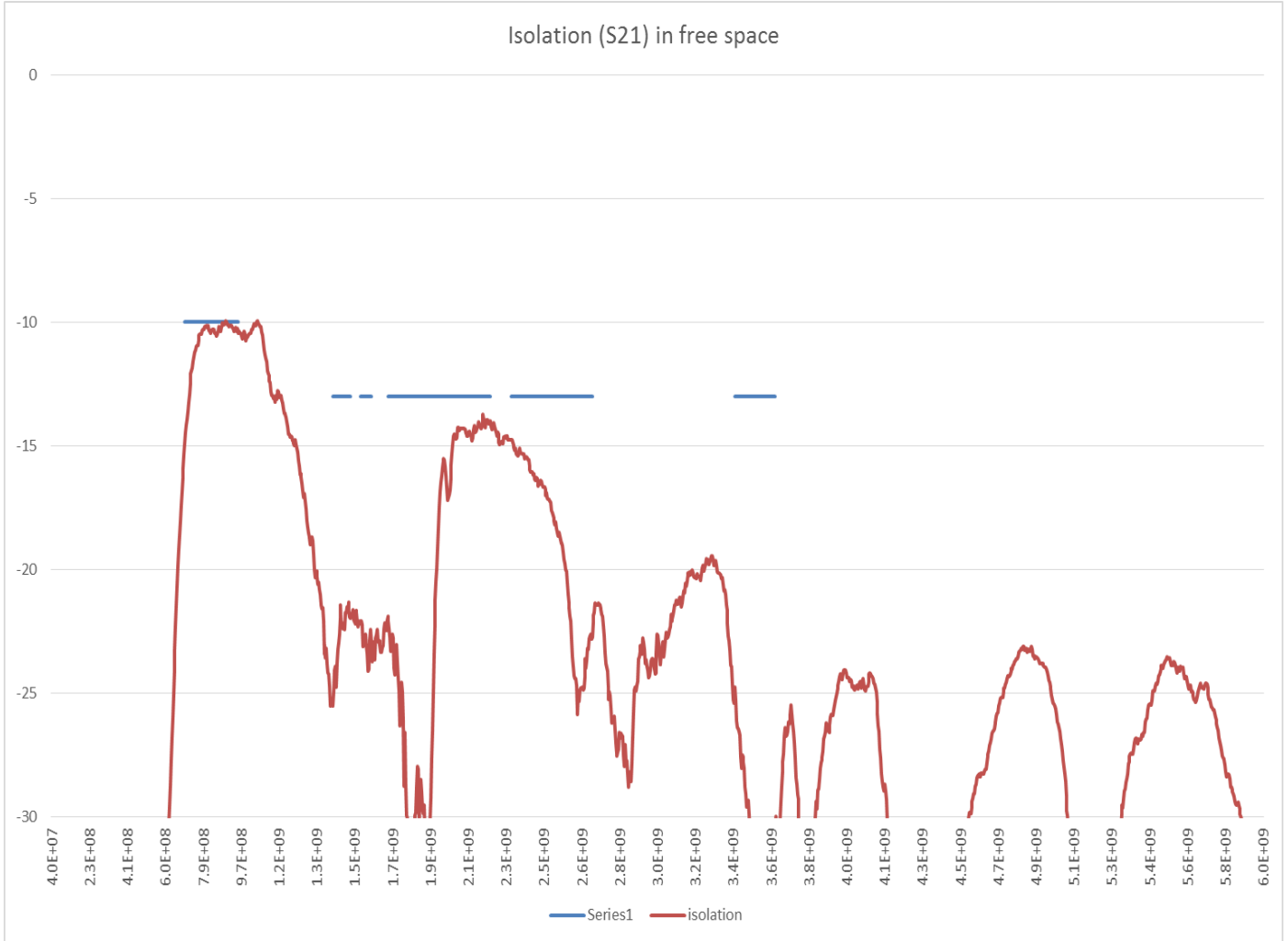
Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100

CHARTS

Isolation



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Description: 2x2 MIMO LTE FPC ANTENNA

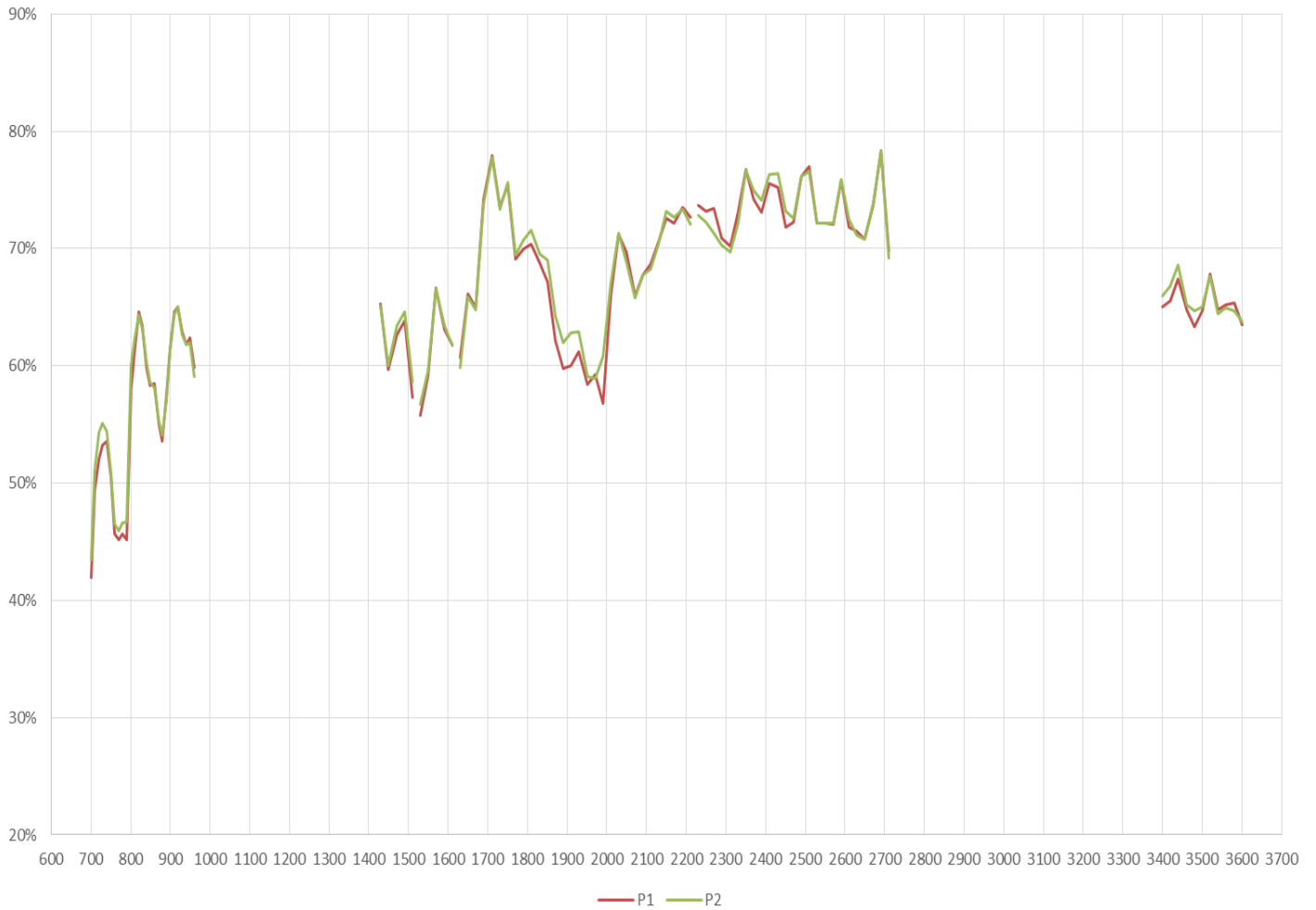
Series: Gemini

PART NUMBER: W6112B0100

CHARTS

Efficiency(%)

Total Efficiency in free space, %



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Description: 2x2 MIMO LTE FPC ANTENNA

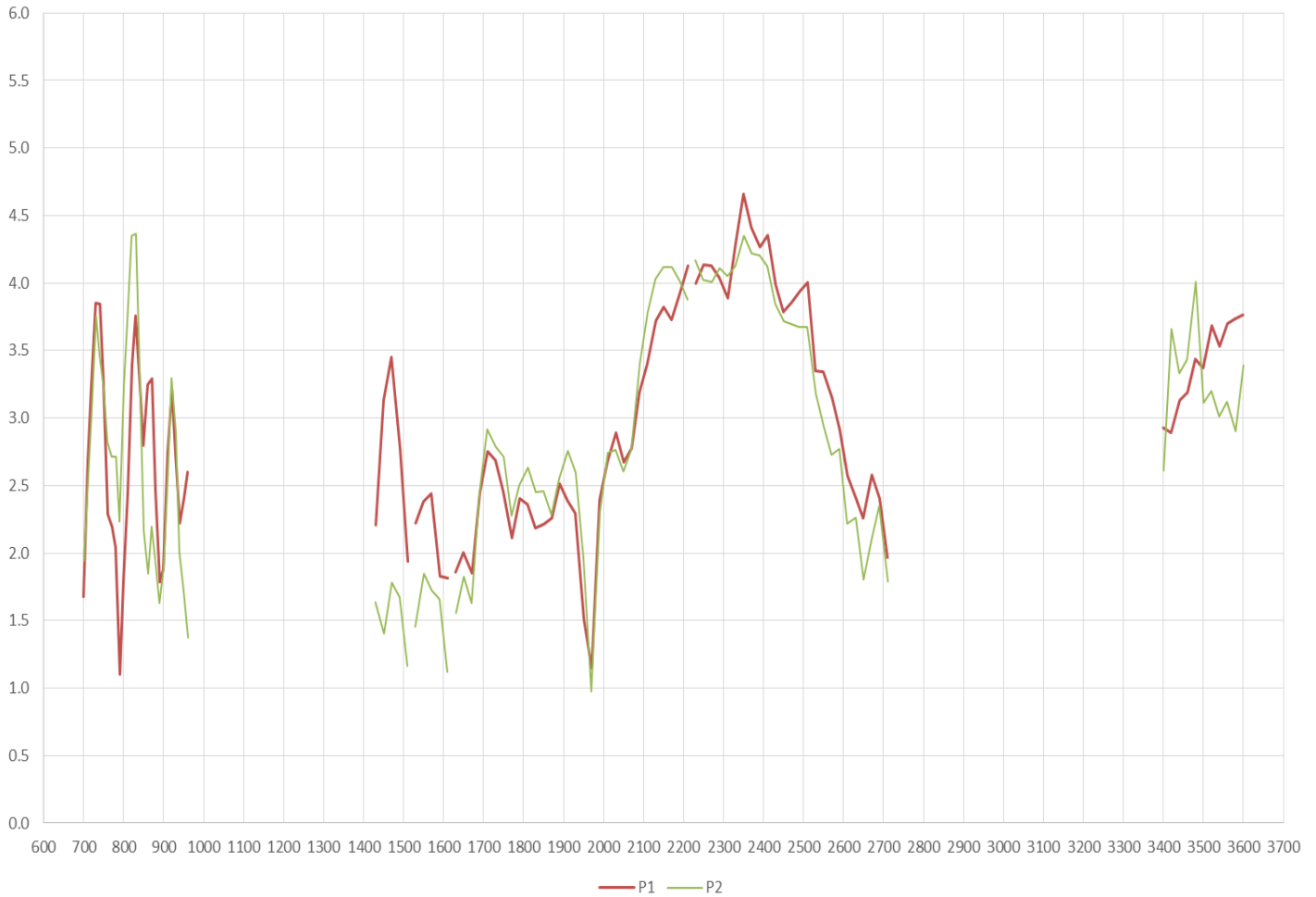
Series: Gemini

PART NUMBER: W6112B0100

CHARTS

Peak Gain(dBi)

Peak gain in free space, dBi



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Description: 2x2 MIMO LTE FPC ANTENNA

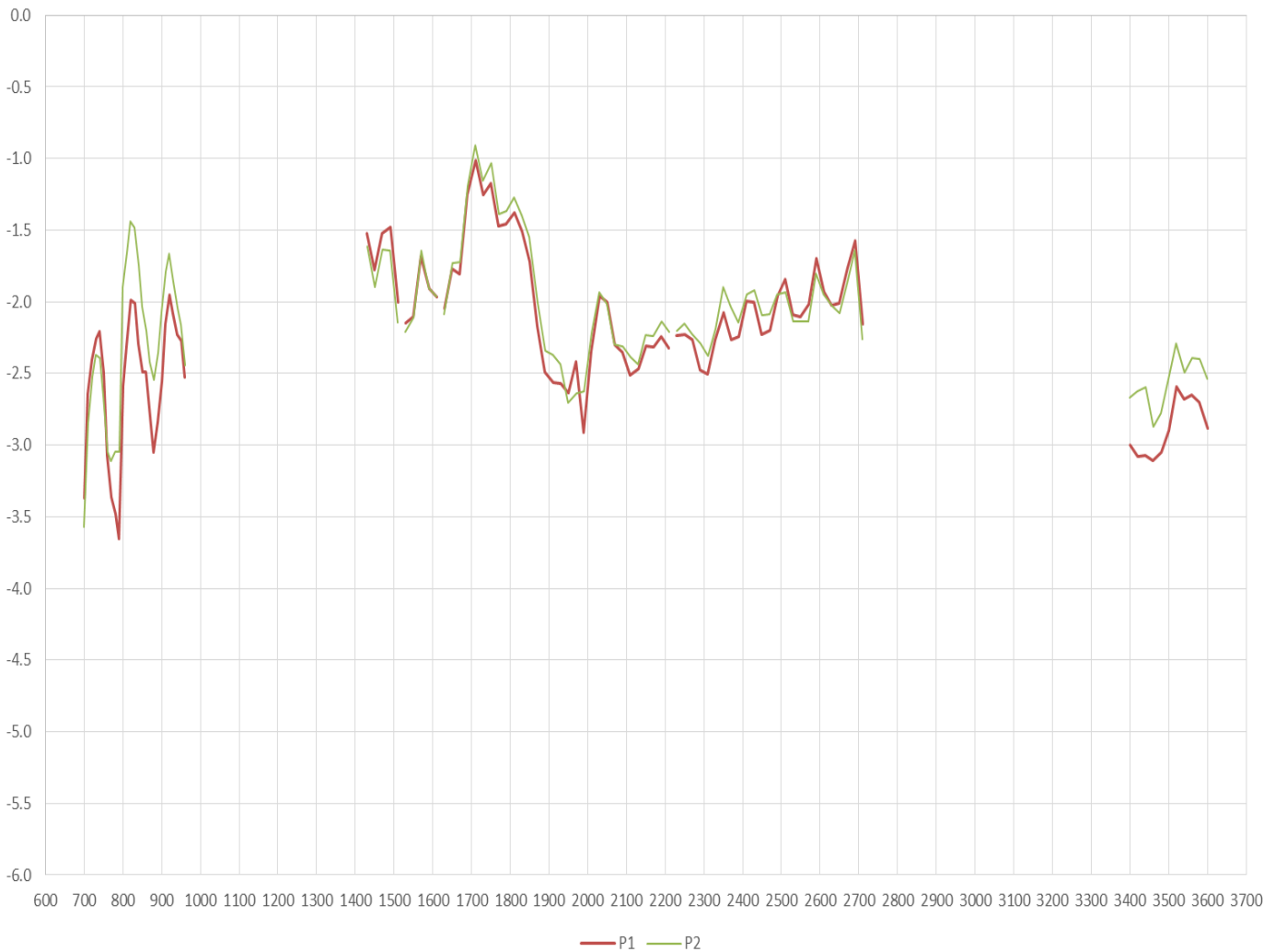
Series: Gemini

PART NUMBER: W6112B0100

CHARTS

Average Gain(dBi)

Average gain in free space, dBi



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Description: 2x2 MIMO LTE FPC ANTENNA

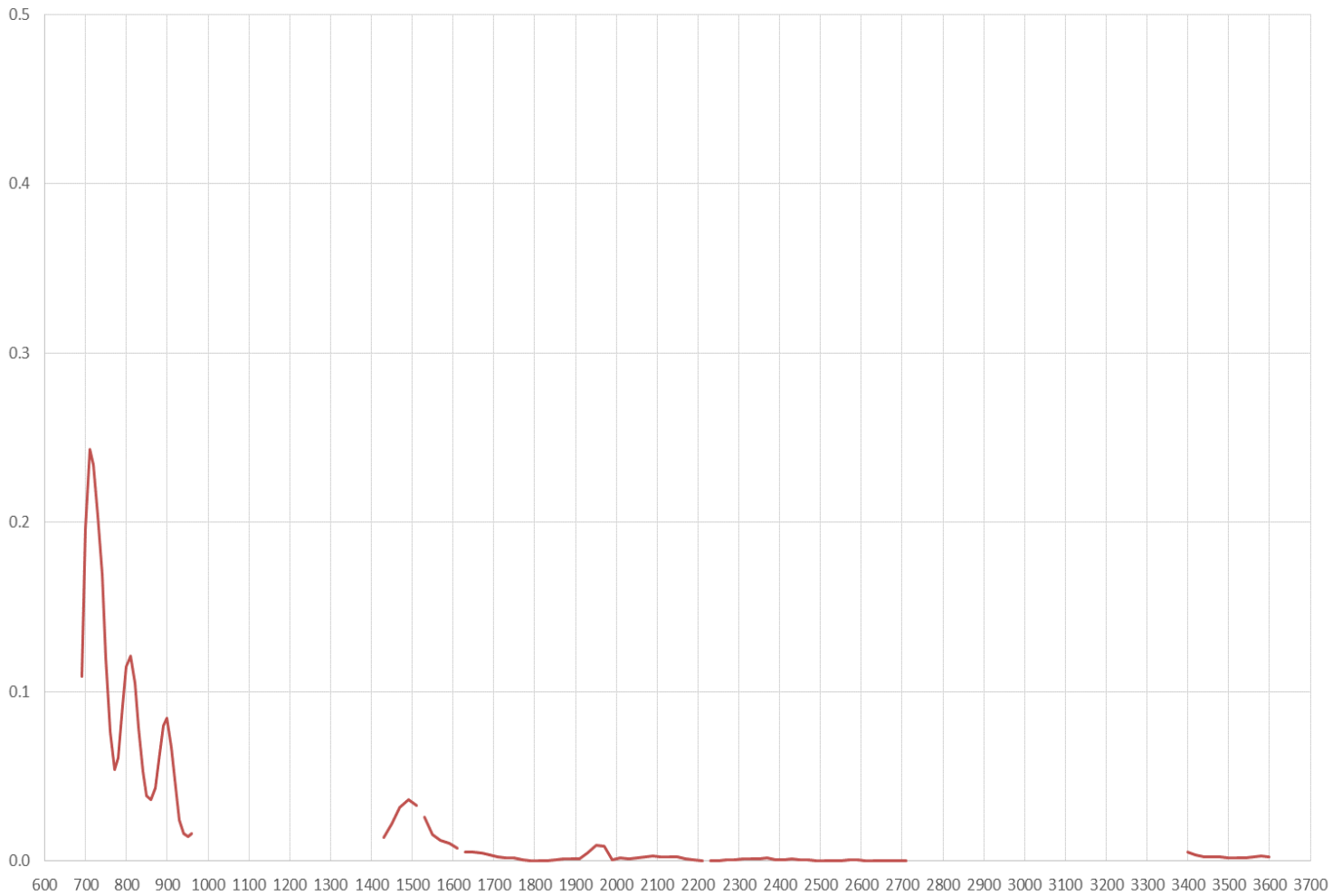
Series: Gemini

PART NUMBER: W6112B0100

CHARTS

ECC

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



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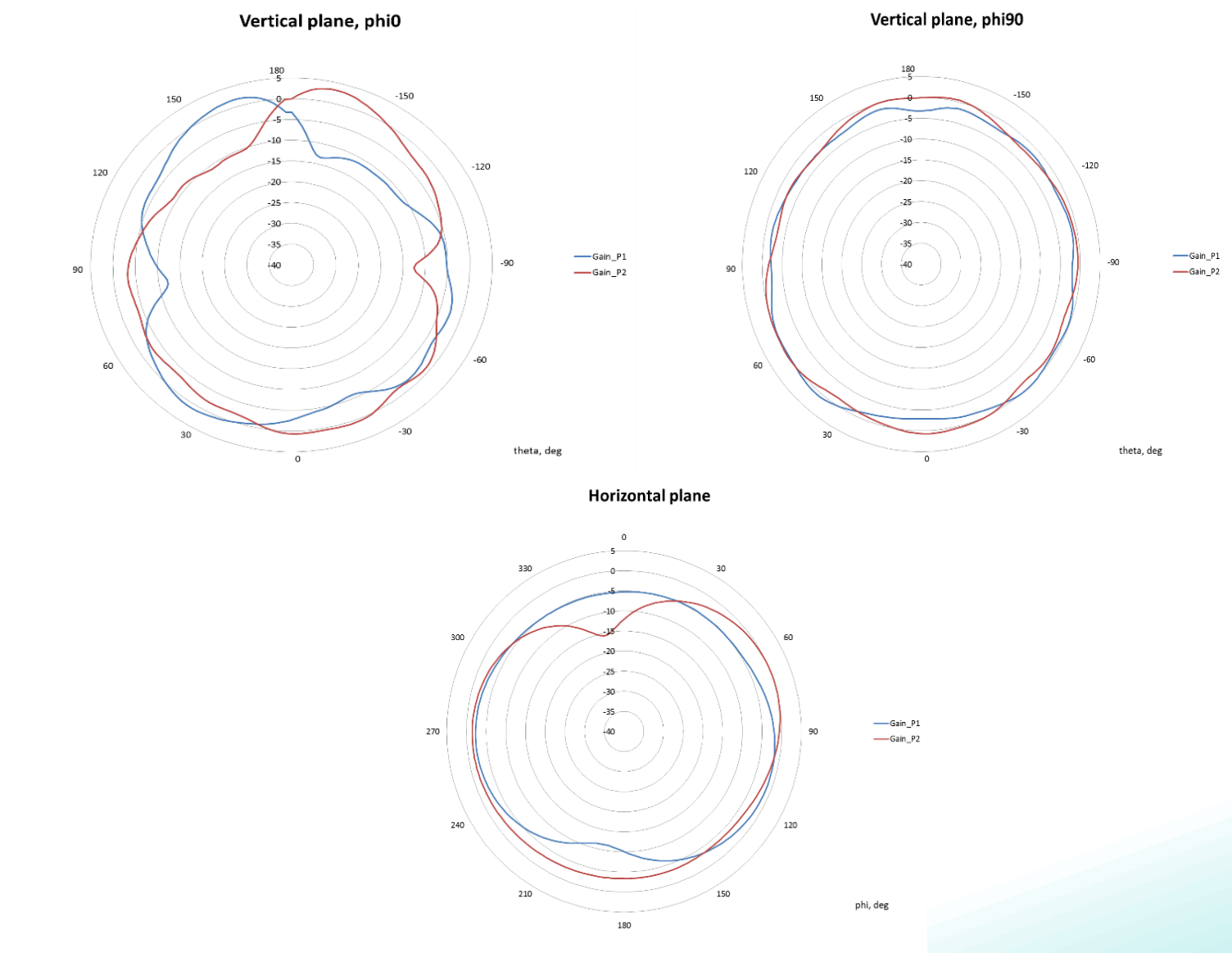
Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100

CHARTS

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



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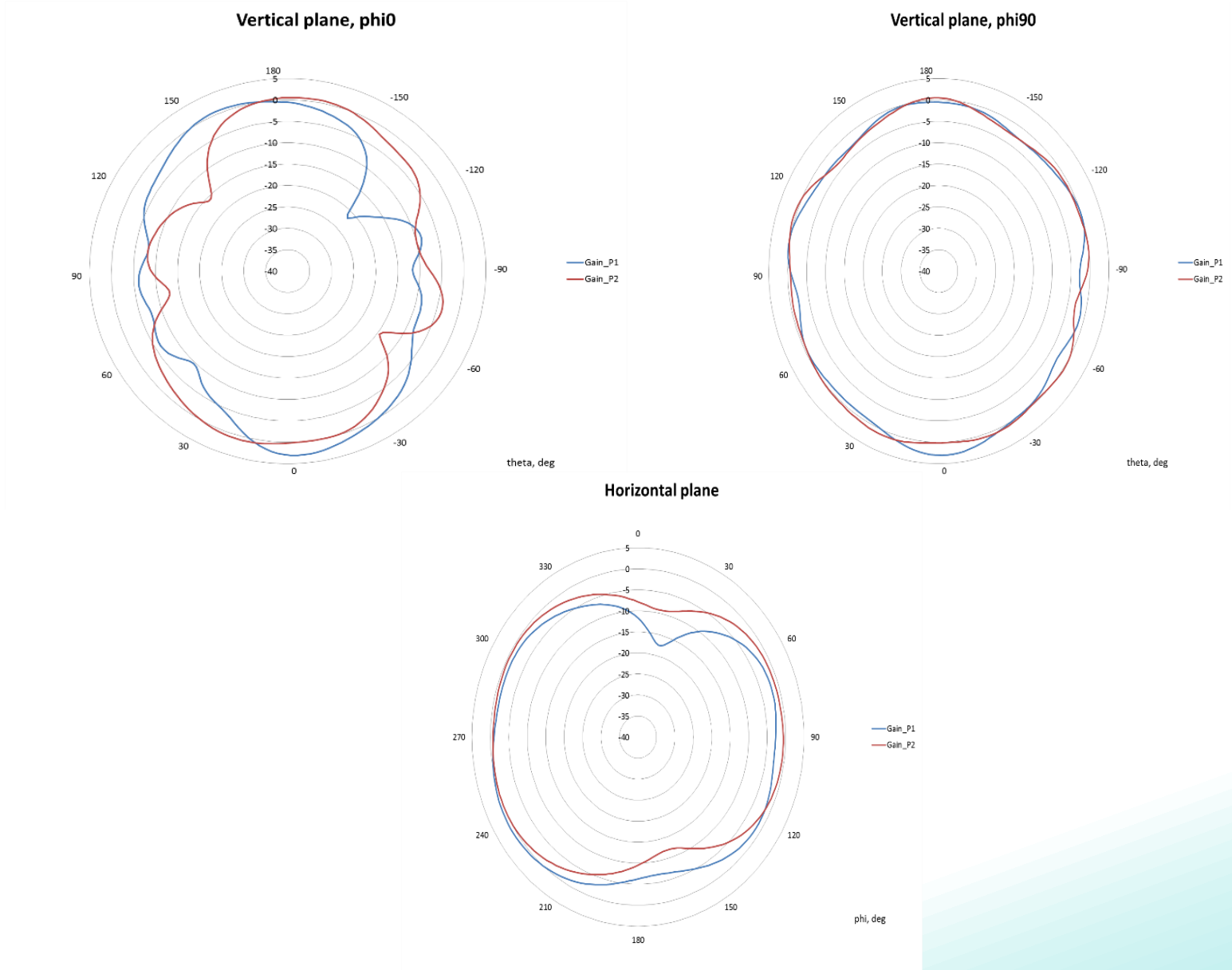
Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100

CHARTS

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



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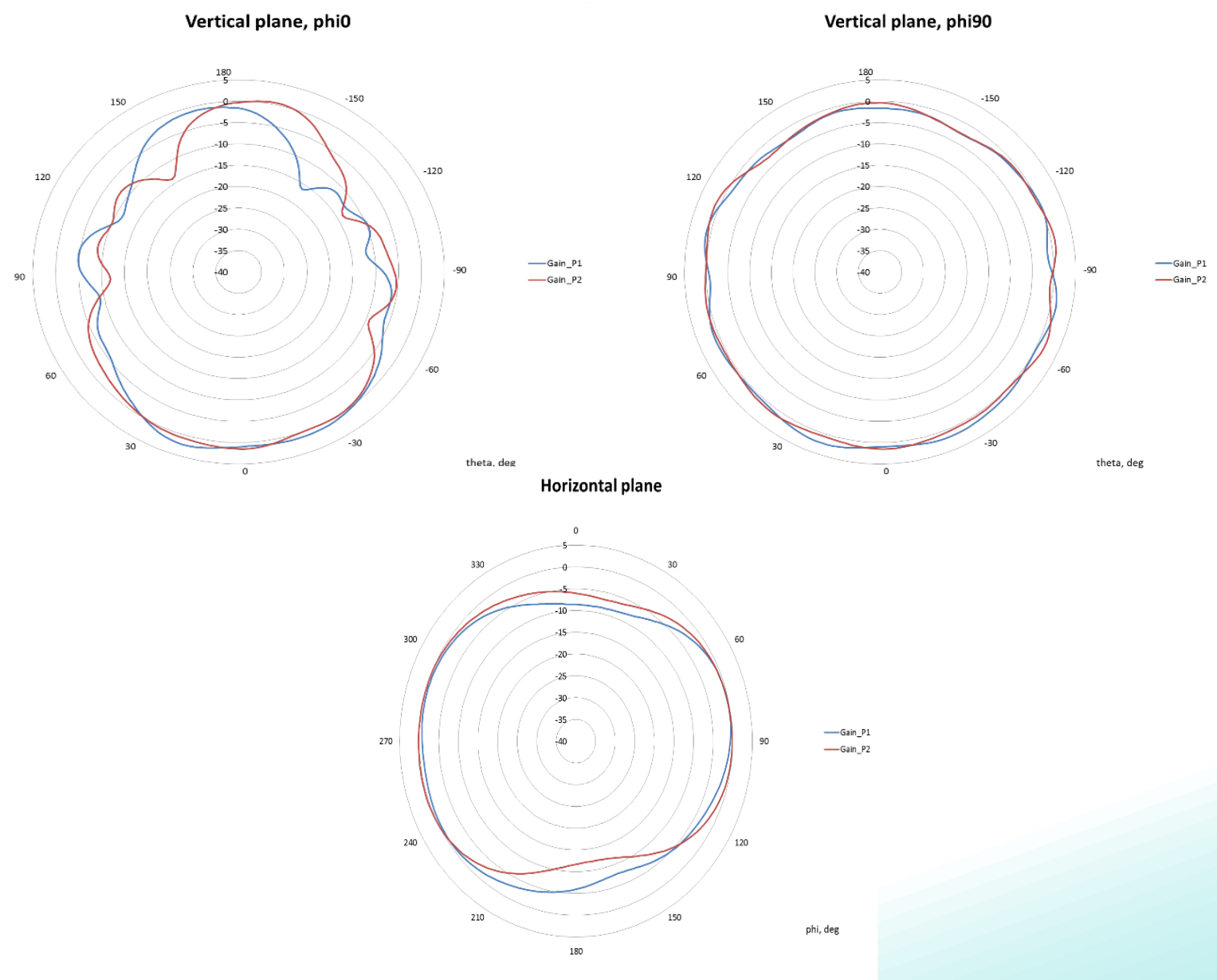
Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100

CHARTS

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



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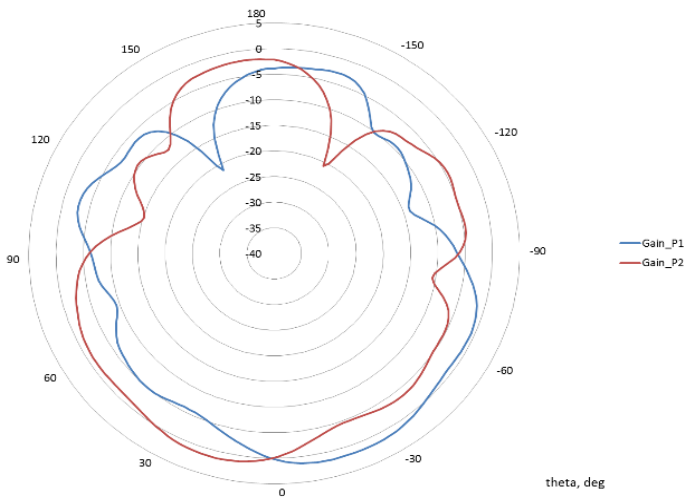
Series: Gemini

PART NUMBER: W6112B0100

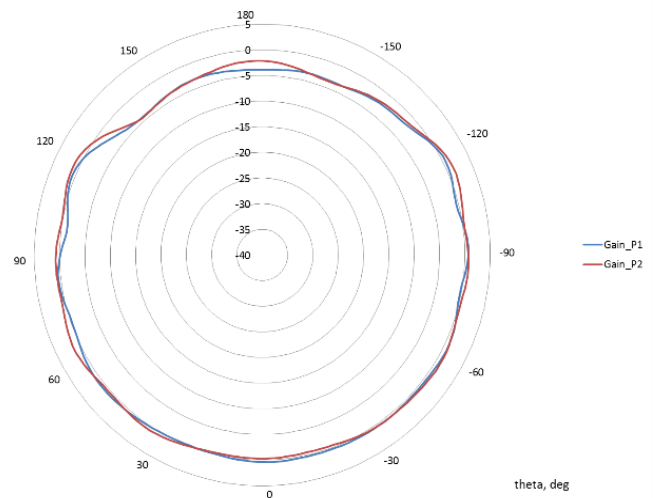
CHARTS

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

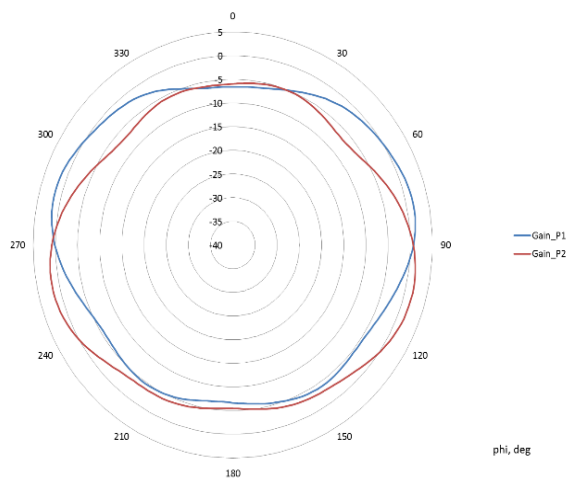
Vertical plane, phi0



Vertical plane, phi90



Horizontal plane



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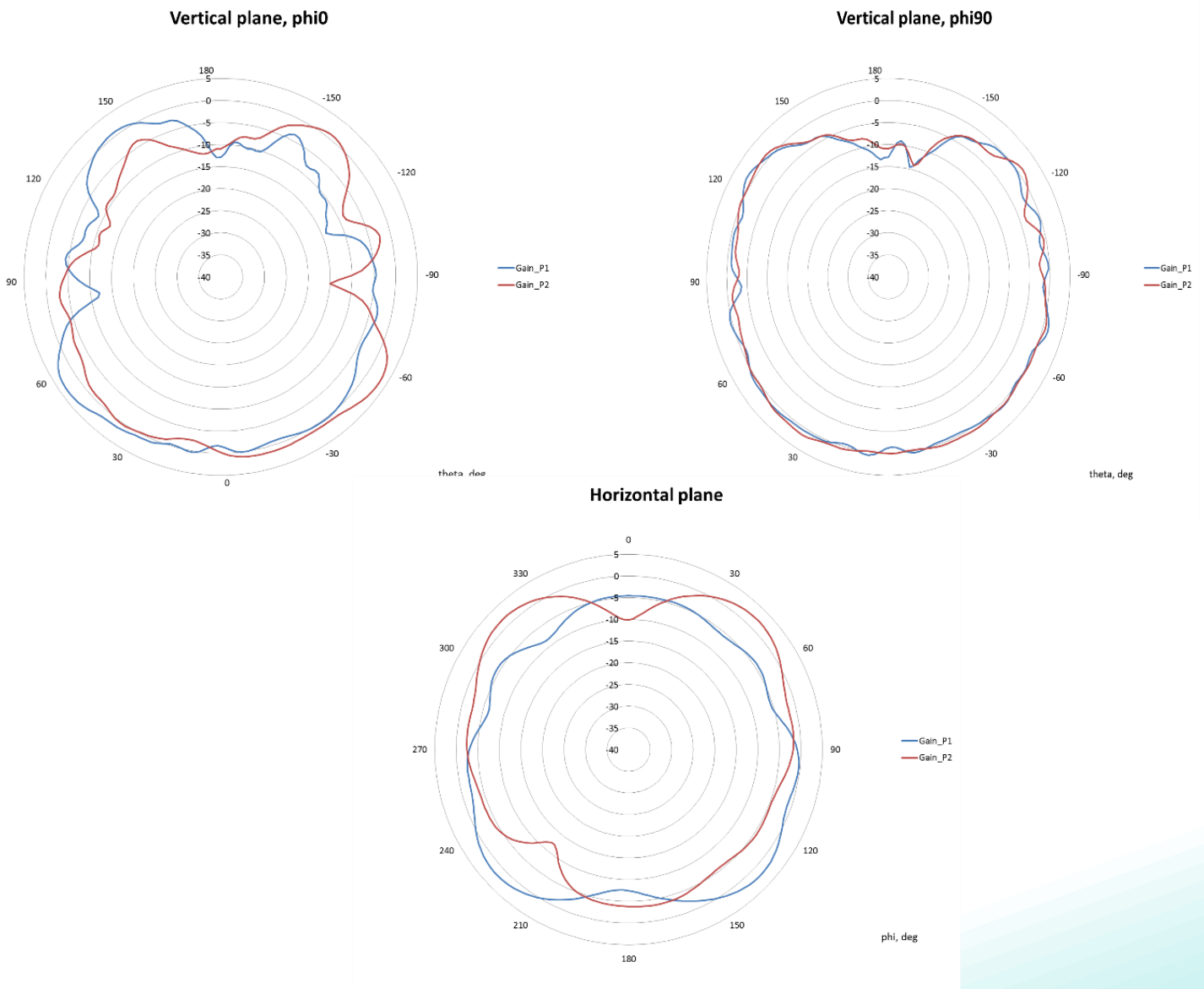
Description: 2x2 MIMO LTE FPC ANTENNA

Series: Gemini

PART NUMBER: W6112B0100

CHARTS

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



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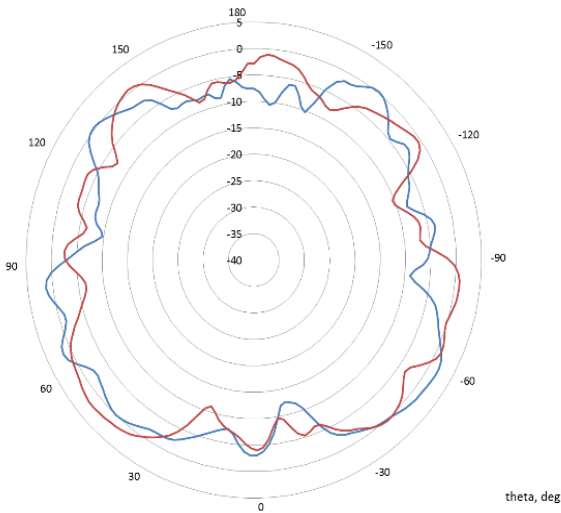
Series: Gemini

PART NUMBER: W6112B0100

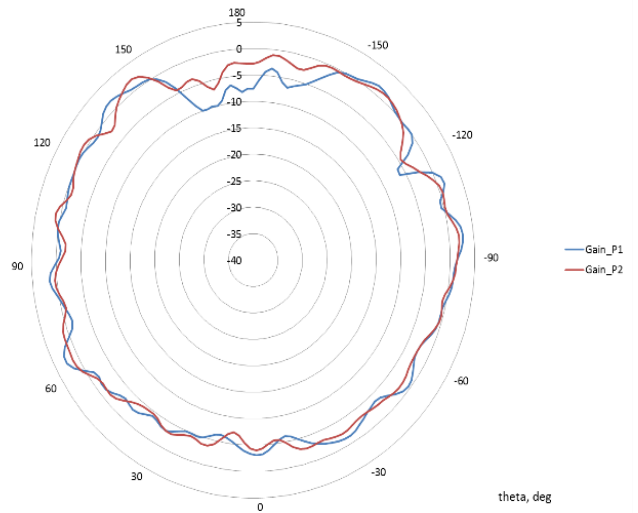
CHARTS

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

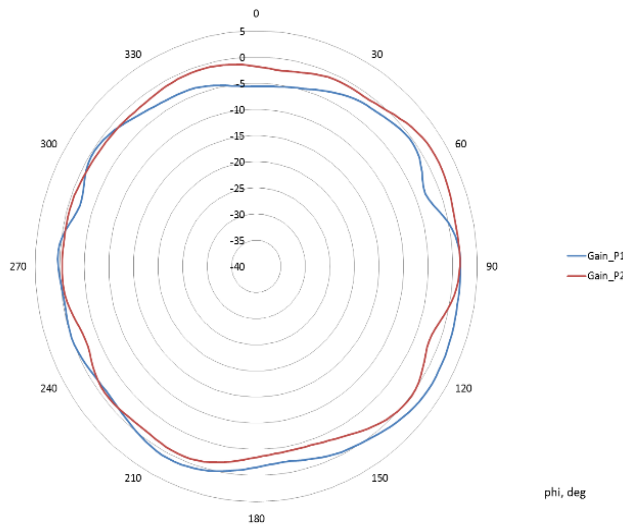
Vertical plane, phi0



Vertical plane, phi90



Horizontal plane



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