

#### **TECHNICAL DATA SHEET**

**Description**: 2x2 MIMO LTE + GNSS FPC

**ANTENNA** 

**PART NUMBER: W6113B0100** 

#### **Features:**

- 2G / 3G / 4G MiMo
- Global LTE Bands:
  - B1-B23, B25-B29, B33-B42
  - N.A.; Europe, Asia (incl. Jap.)
- GNSS (GPS, Glonass)
- · 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



# W6113 XXXXX 698-940/1427 9-1510,9/1559-1610/1695-2200/2300-2700/3400-3400440

All dimensions are in mm / inches

Issue: 1707

In the effort to improve our products, we reserve the right to make changes judged to be necessary. CONFIDENTIAL AND PROPRIETARY INFORMATION

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Pulse Worldwide Headquarters 12220 World Trade Drive San Diego, CA 92128 USA Tel:1-858-674-8100 Pulse/Larsen Antennas 18110 SE 34<sup>th</sup> St Bldg 2 Suite 250 Vancouver, WA 98683 USA 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



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#### **ELECTRICAL SPECIFICATIONS**

#### **LTE1 & LTE2:**

Frequency 698-960/1427.9-1510.9/1559-1610/

1695-2200/2300-2700/3400-3600 MHz

Nominal Impedance  $50\Omega$ 

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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Peak Gain (698-960MHz)	2.9dBi
Peak Gain (1427.9-1510.9MHz)	1.7dBi
Peak Gain (1559-1610MHz)	1.8dBi
Peak Gain (1695-2200MHz)	3.4dBi
Peak Gain (2300-2700MHz)	3.8dBi
Peak Gain (3400-3600MHz)	4.2dBi
GNSS:	
Frequency	1570-1610MHz
Nominal Impedance	$50\Omega$
Return loss (1570-1610MHz)	-10dB
Average Total Efficiency (1570-1610MHz)	35%
Peak Gain (1570-1610MHz)	0.8dBi
Radiation Pattern	Omni
Polarization	Linear
Power withstanding	3W
Connector type	U.FL compatible
Cable type	Low loss Φ1.13mm Coaxial Cable
Cable length	100mm

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







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#### **MECHANICAL SPECIFICATIONS**

Color Black

Weight 3.5 g

Cable type OD 1.13mm coax cable

Cable length 100[3.94] mm[inch]

Connector U.FL compatible

Fixing system Adhesive 3M467

#### **ENVIRONMENTAL SPECIFICATIONS**

Operating temperature

-40/+85 ° C





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## **MECHANICAL DRAWING** (8.83) VO1 W6113XXXXX LTE DIVERSITY LTE PRIMARY (3.94) (3.94) ⊳Cutting line on liner >Adhesive: 3M467







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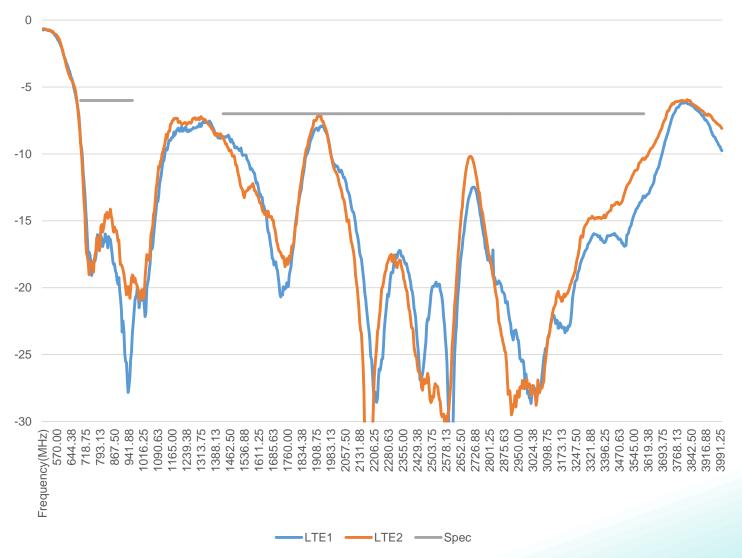
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#### **CHARTS**

## Return Loss [dB]

#### LTE1 & LTE2 Return Loss







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#### **CHARTS**

## Return Loss [dB]

#### **GNSS Return Loss**







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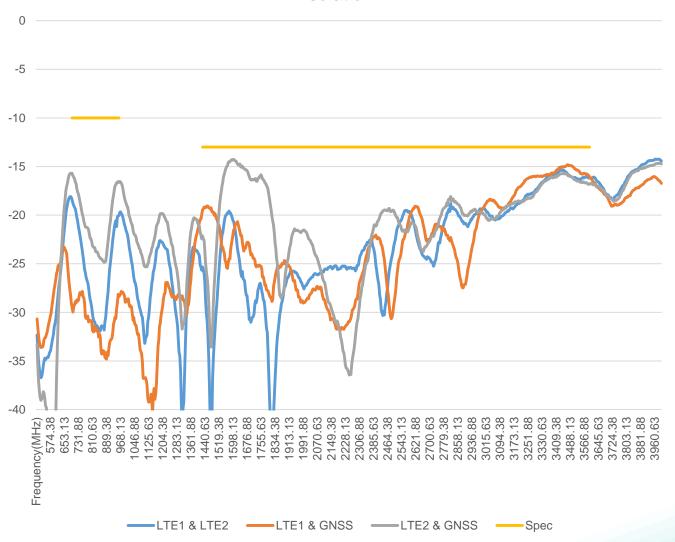
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#### **CHARTS**

## Isolation [dB]

#### Isolation









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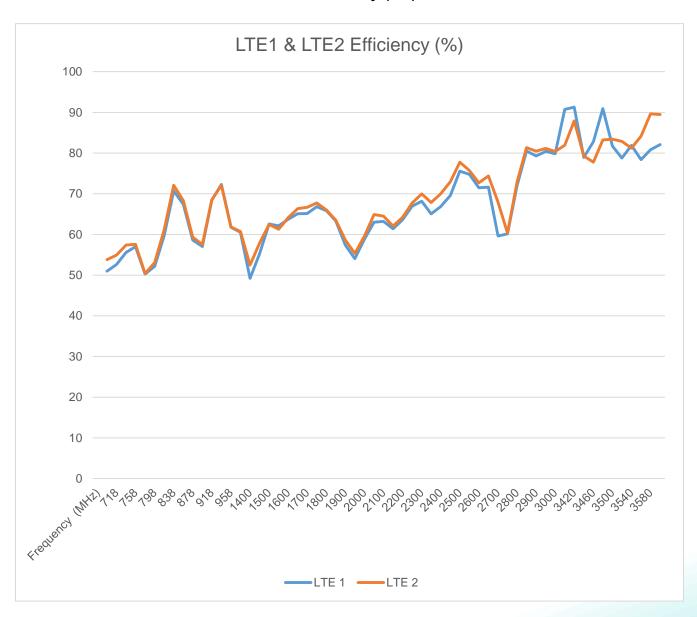
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#### **CHARTS**

### Efficiency(%)







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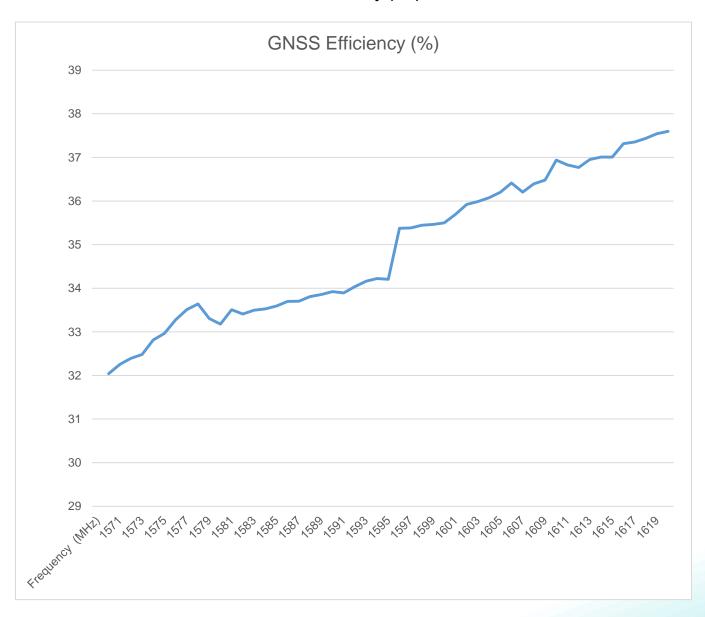
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#### **CHARTS**

### Efficiency(%)







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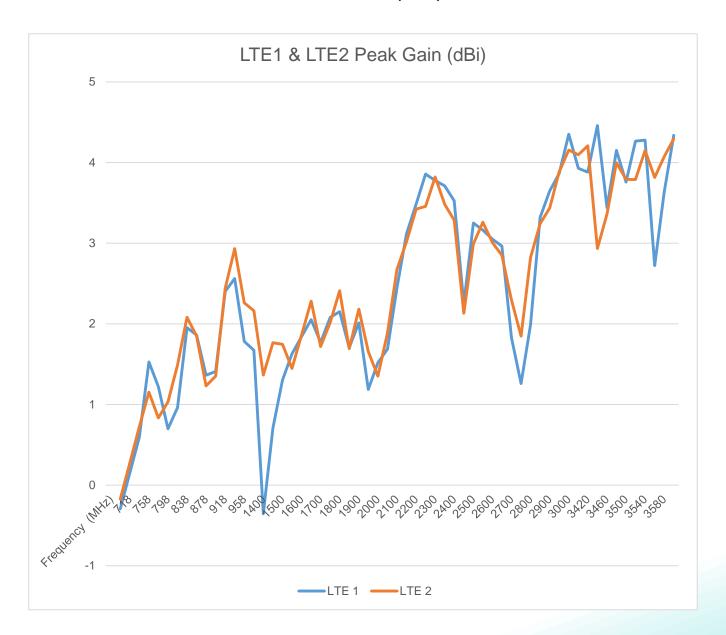
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#### **CHARTS**

### Peak Gain(dBi)







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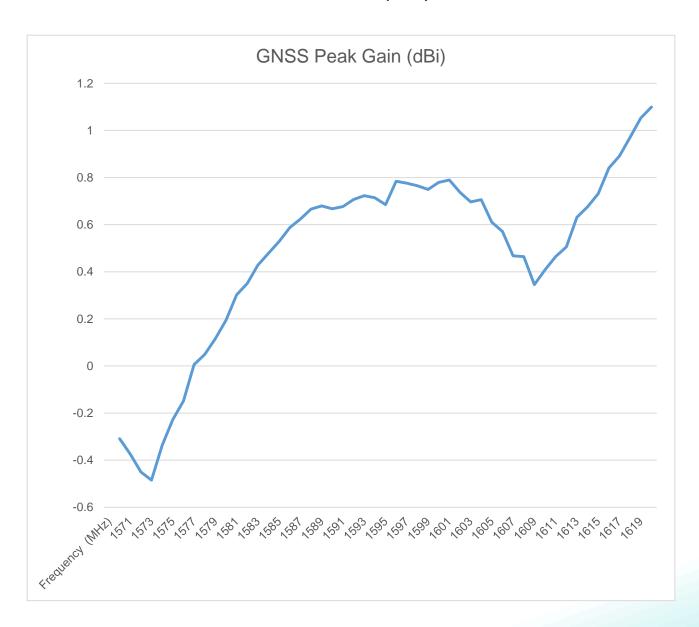
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#### **CHARTS**

### Peak Gain(dBi)









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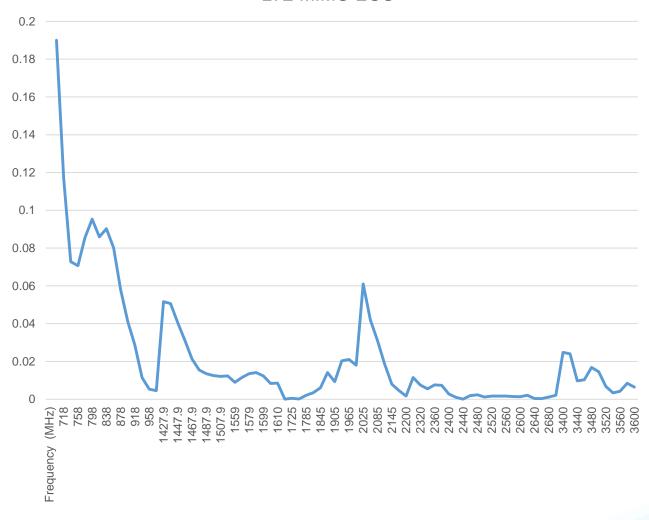
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#### **CHARTS**

#### **ECC**

#### LTE MIMO ECC









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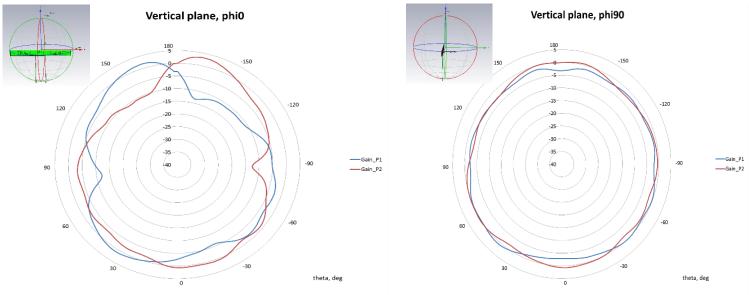
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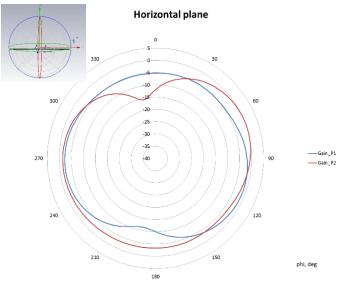
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#### **CHARTS**

## LTE1 & LTE2 radiation pattern 698-960MHz (800MHz)









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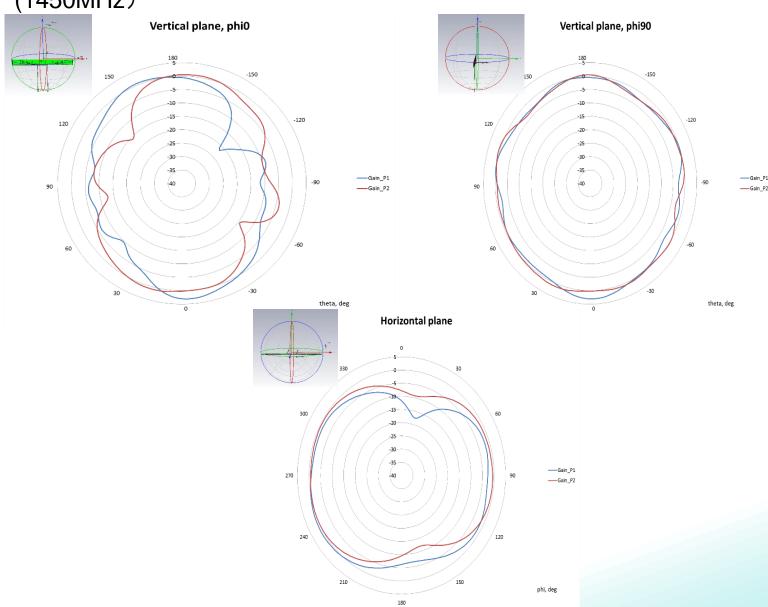
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#### **CHARTS**

## LTE1 & LTE2 radiation pattern 1427.9-1510.9MHz (1450MHz)







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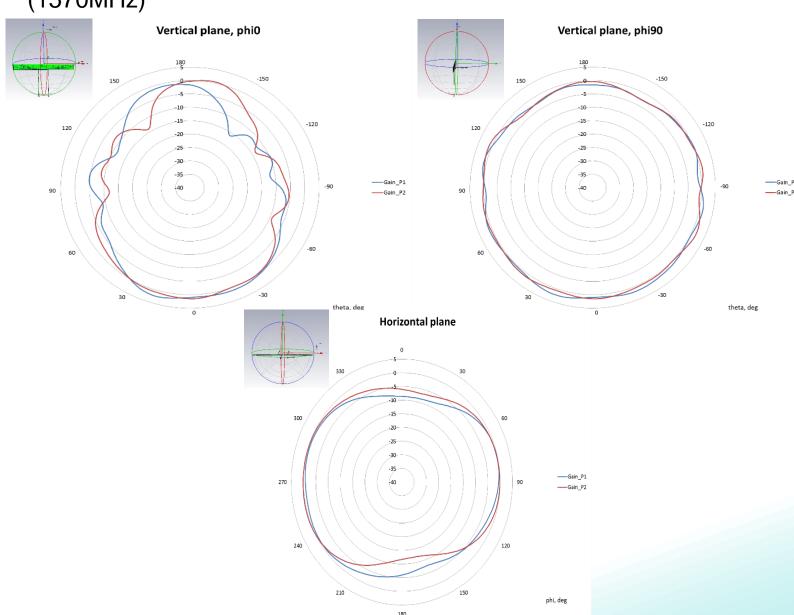
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#### **CHARTS**

## LTE1 & LTE2 radiation pattern 1559-1610MHz (1570MHz)







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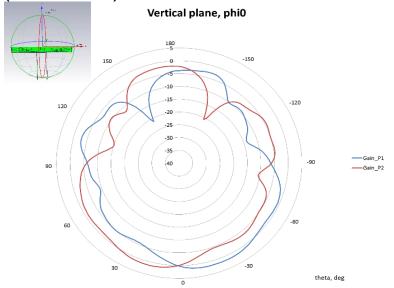
**ANTENNA** 

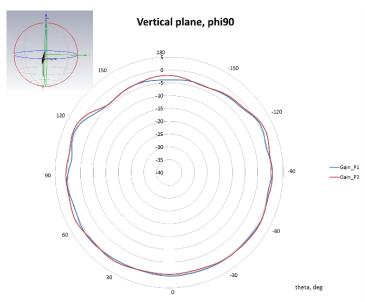
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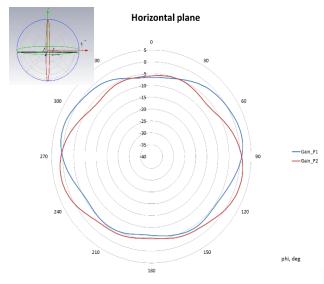
#### **CHARTS**

## LTE1 & LTE2 radiation pattern 1695-2200MHz

(1930MHz)









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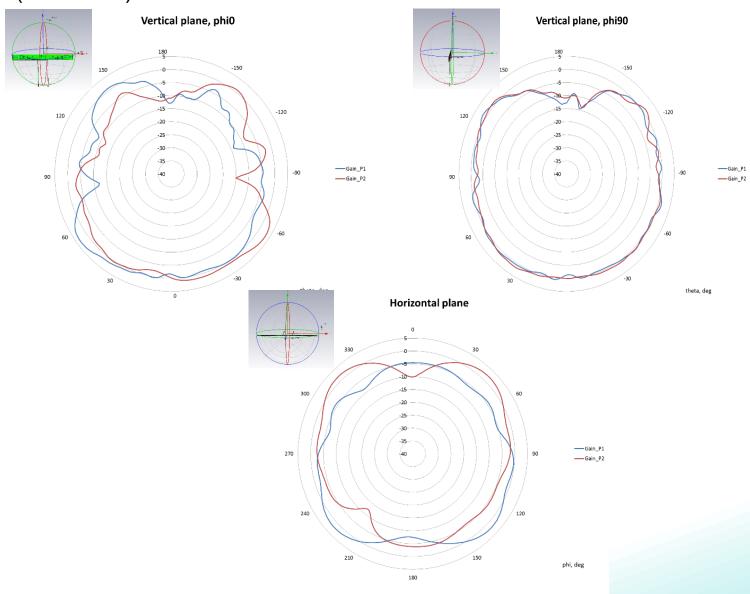
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#### **CHARTS**

## LTE1 & LTE2 radiation pattern 2300-2700MHz (2390MHz)





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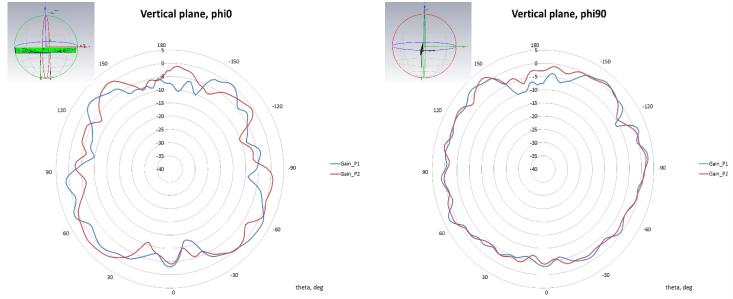
**Description**: 2x2 MIMO LTE + GNSS FPC

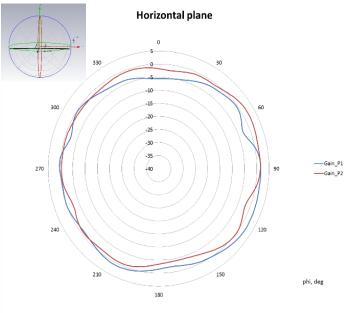
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#### **CHARTS**

## LTE1 & LTE2 radiation pattern 3400-3600MHz (3400MHz)









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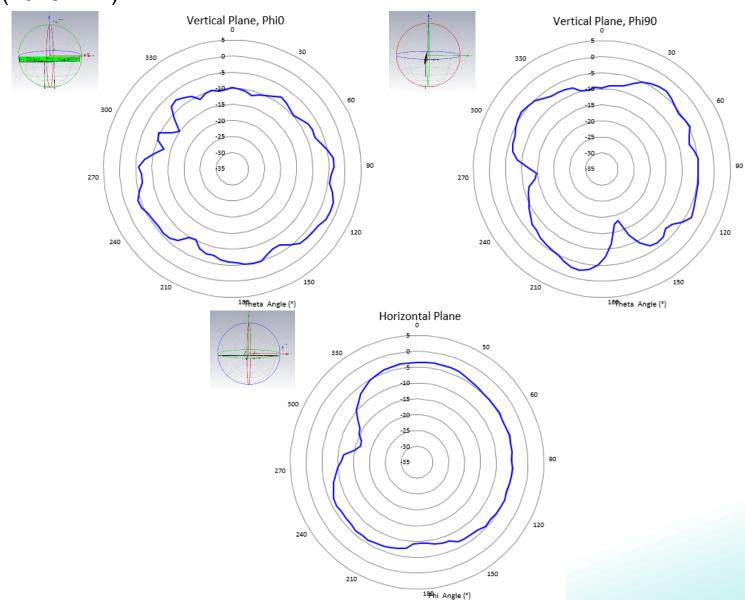
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#### **CHARTS**

## GNSS radiation pattern 1570-1610MHz (1575MHz)







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#### **PACKAGING**

5PCS/PE bag 400 PE bag/foam bag 2 foam bag/ carton box

Total 4000PCS/Carton box



