

**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



All dimensions are in mm / inches

Issue: 2045

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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	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%

**ELECTRICAL SPECIFICATIONS**

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	50Ω
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

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

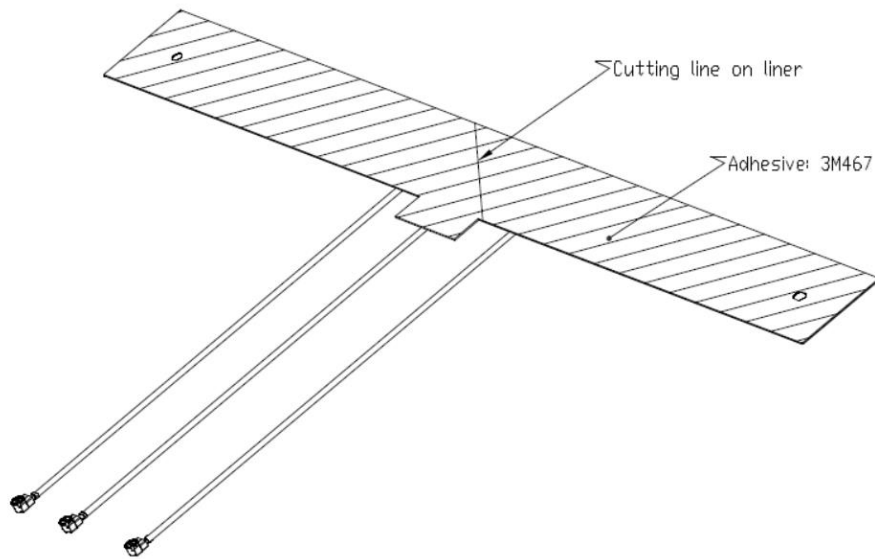
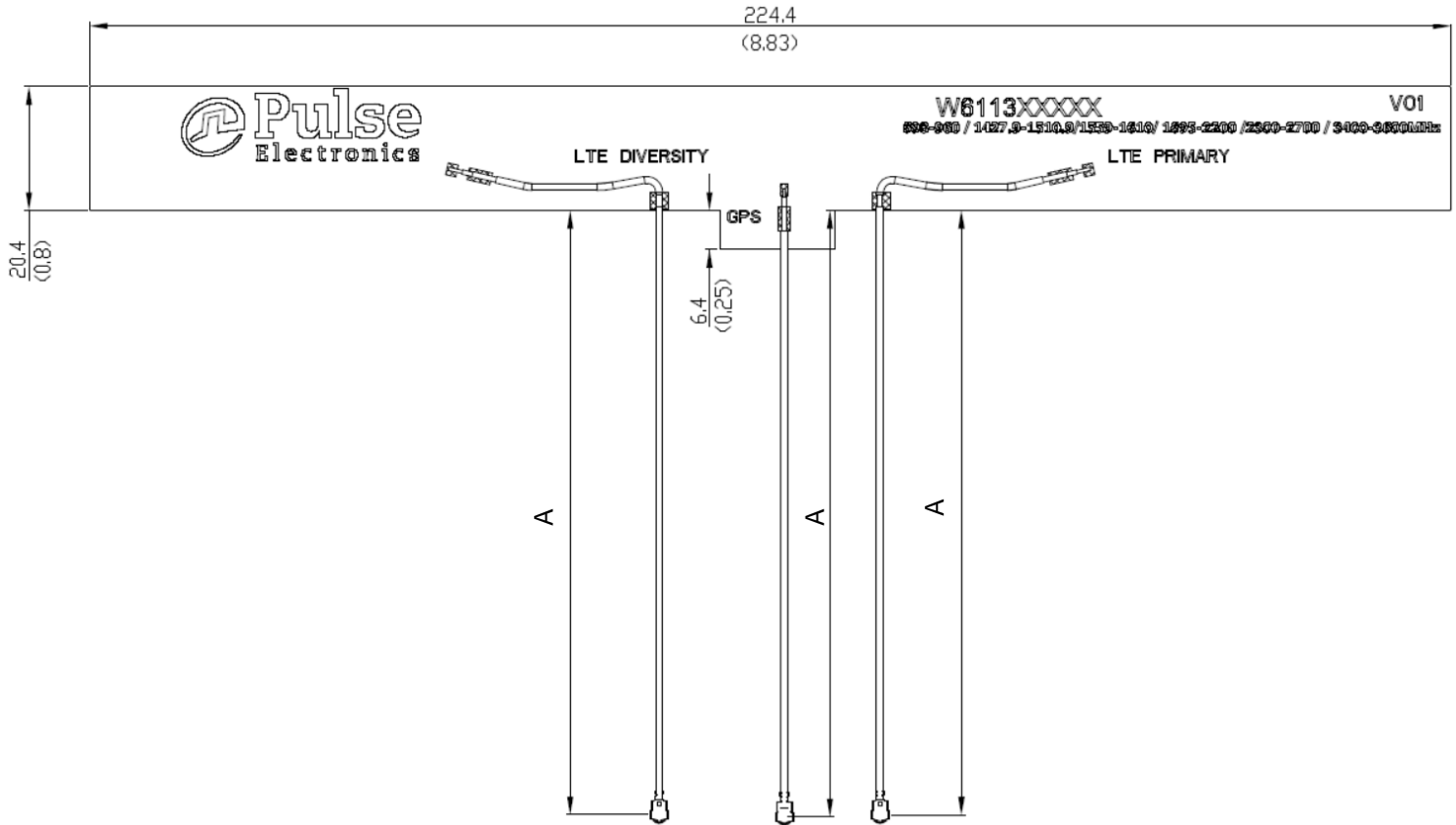
**MECHANICAL SPECIFICATIONS**

Color	Black
Weight	3.5 g
Cable type	OD 1.13mm coax cable
Cable length	SEE Page 6
Connector	U.FL compatible
Fixing system	Adhesive 3M467

**ENVIRONMENTAL SPECIFICATIONS**

Operating temperature	-40/+85 ° C
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**MECHANICAL DRAWING**



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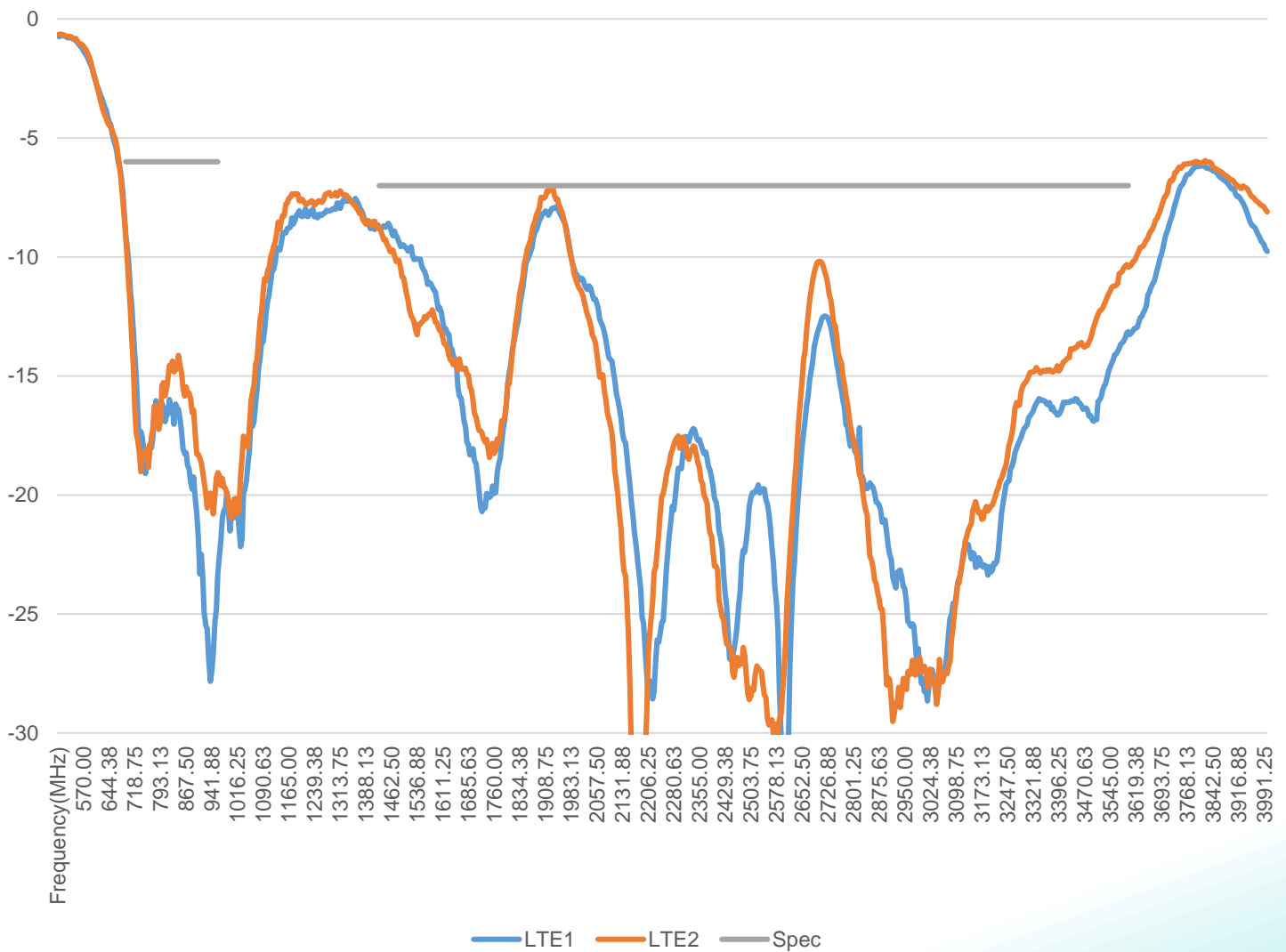
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Item	Part Number	Cable length "A" (mm/inch)
1	W6113B0100	100/3.94
2	W6113B0130	130/5.12

## CHARTS

### Return Loss [dB]

#### LTE1 & LTE2 Return Loss



**Note : All test results measured with 100mm cable length**

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

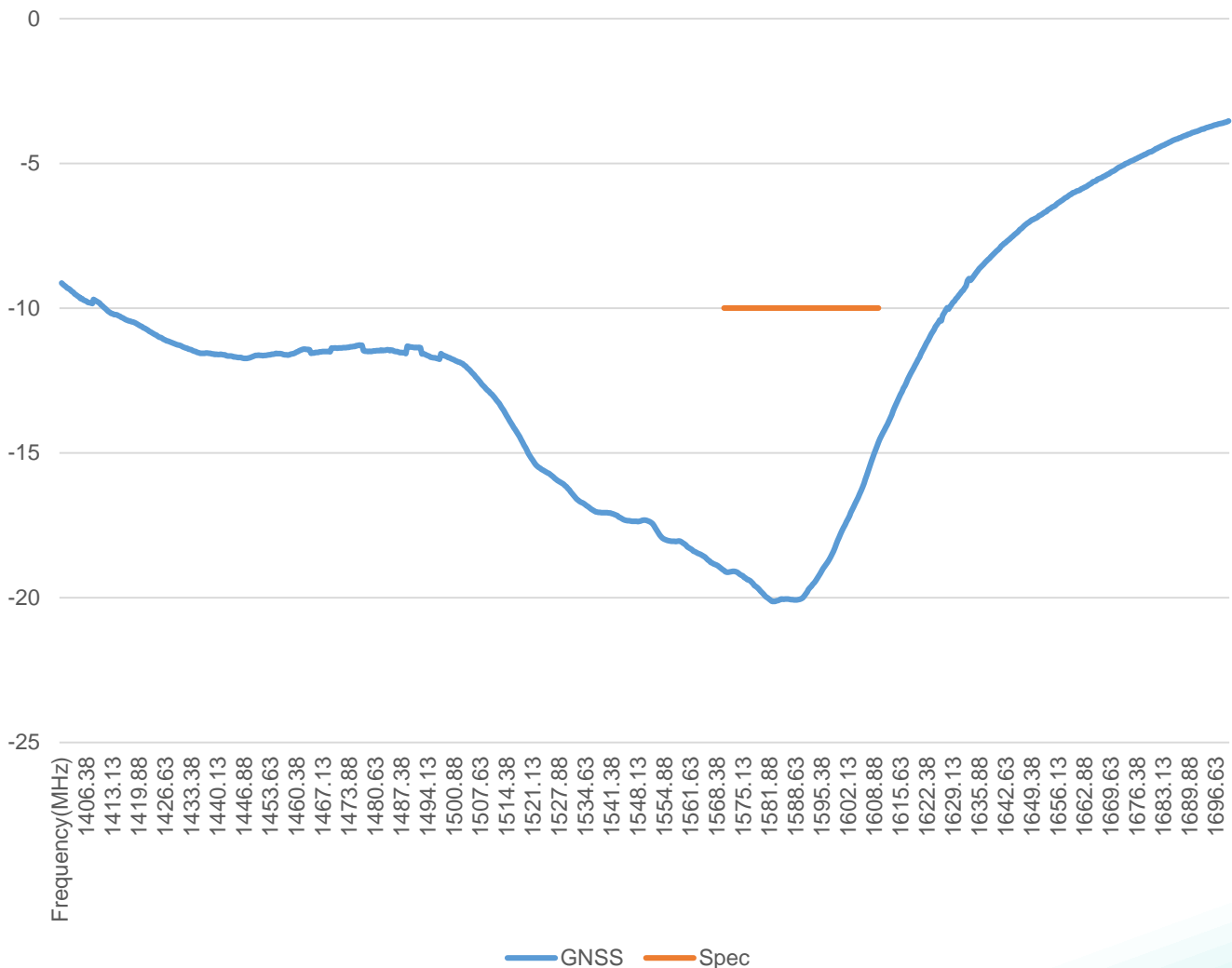
**Series:** Internal Antenna

**PART NUMBER:** W6113XXXXX

### CHARTS

## Return Loss [dB]

### GNSS Return Loss



**Note : All test results measured with 100mm cable length**

Issue: 2045

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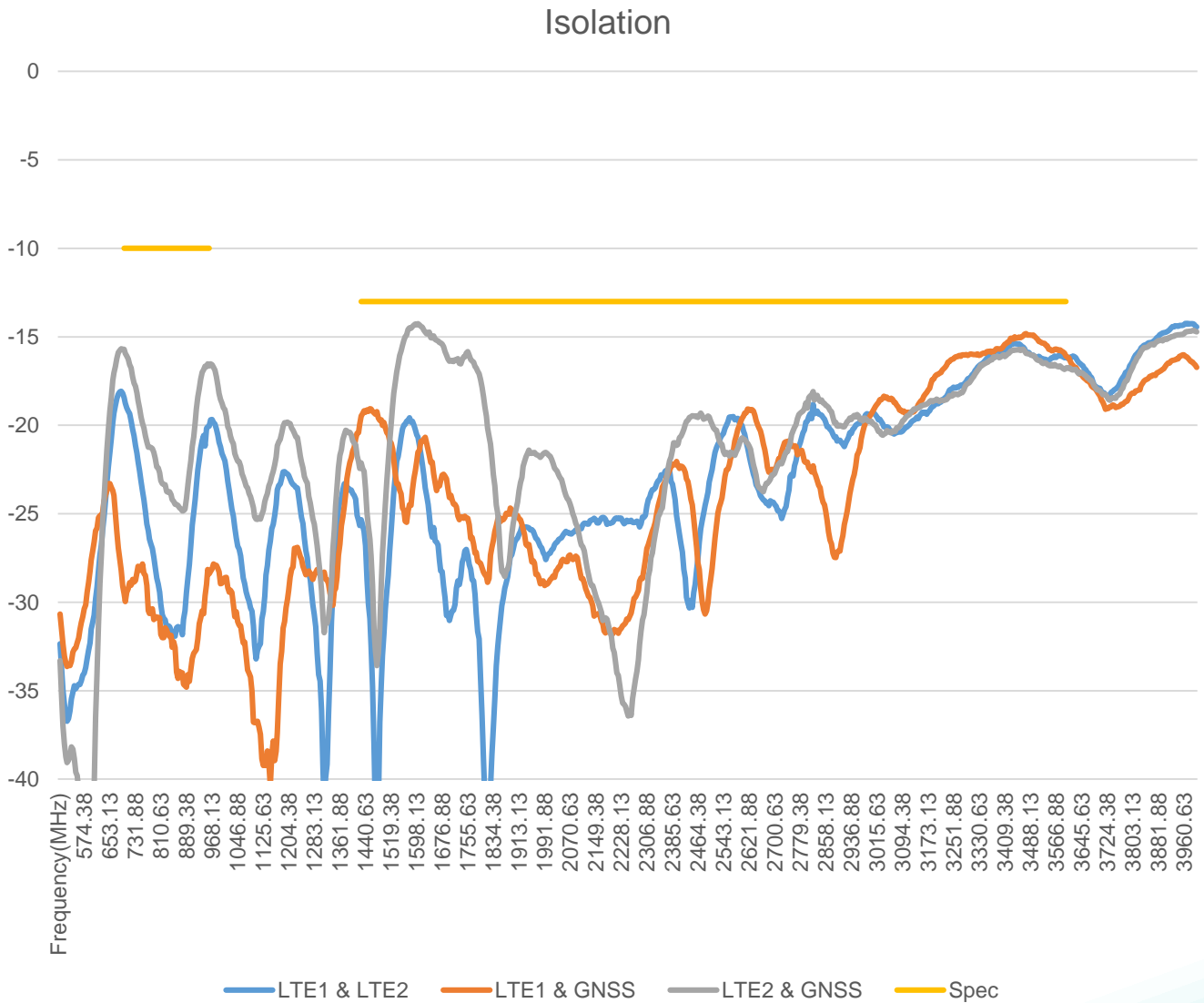
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## CHARTS

### Isolation [dB]



**Note : All test results measured with 100mm cable length**

Issue: 2045

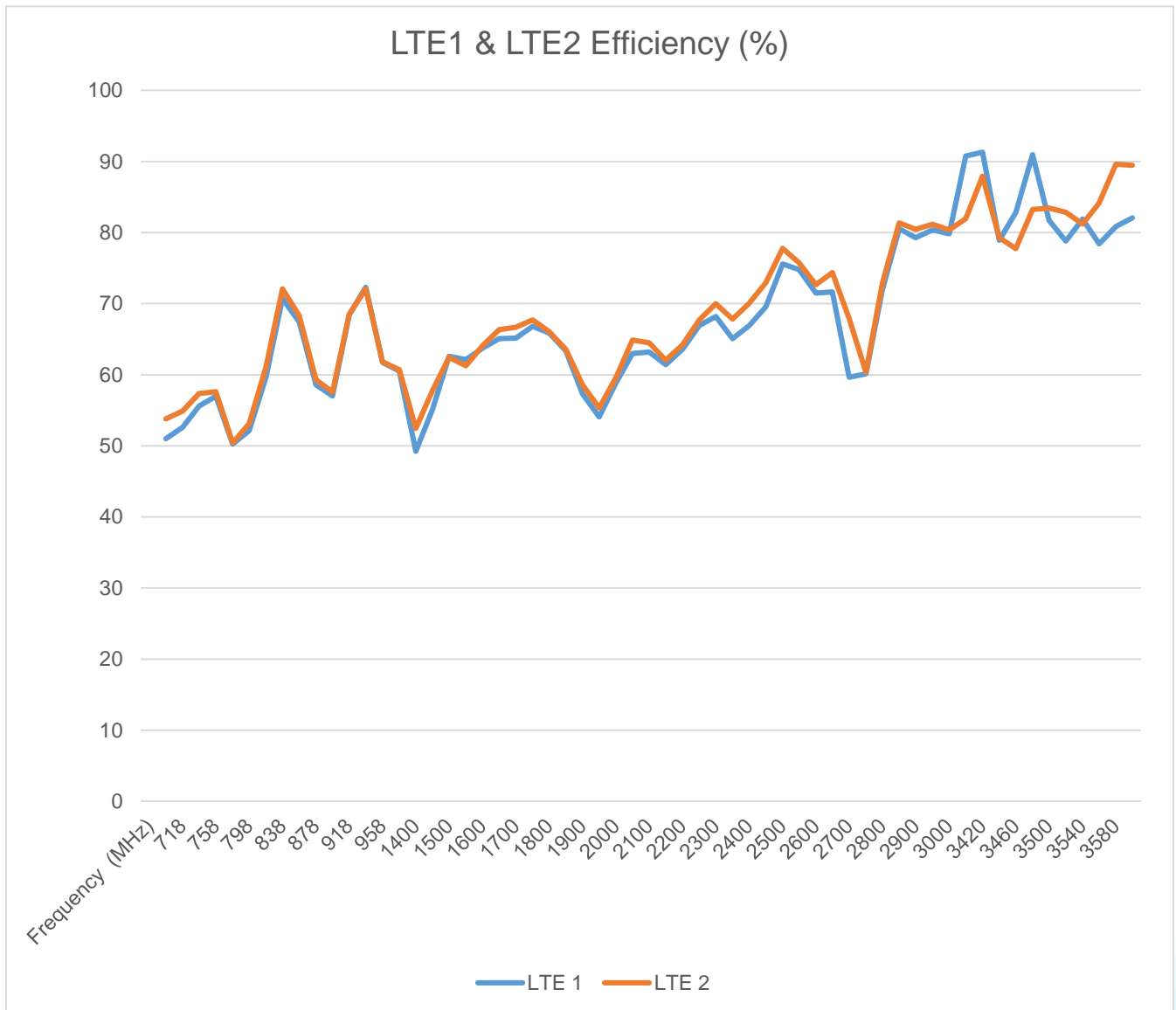
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## CHARTS

### Efficiency(%)



**Note : All test results measured with 100mm cable length**

Issue: 2045

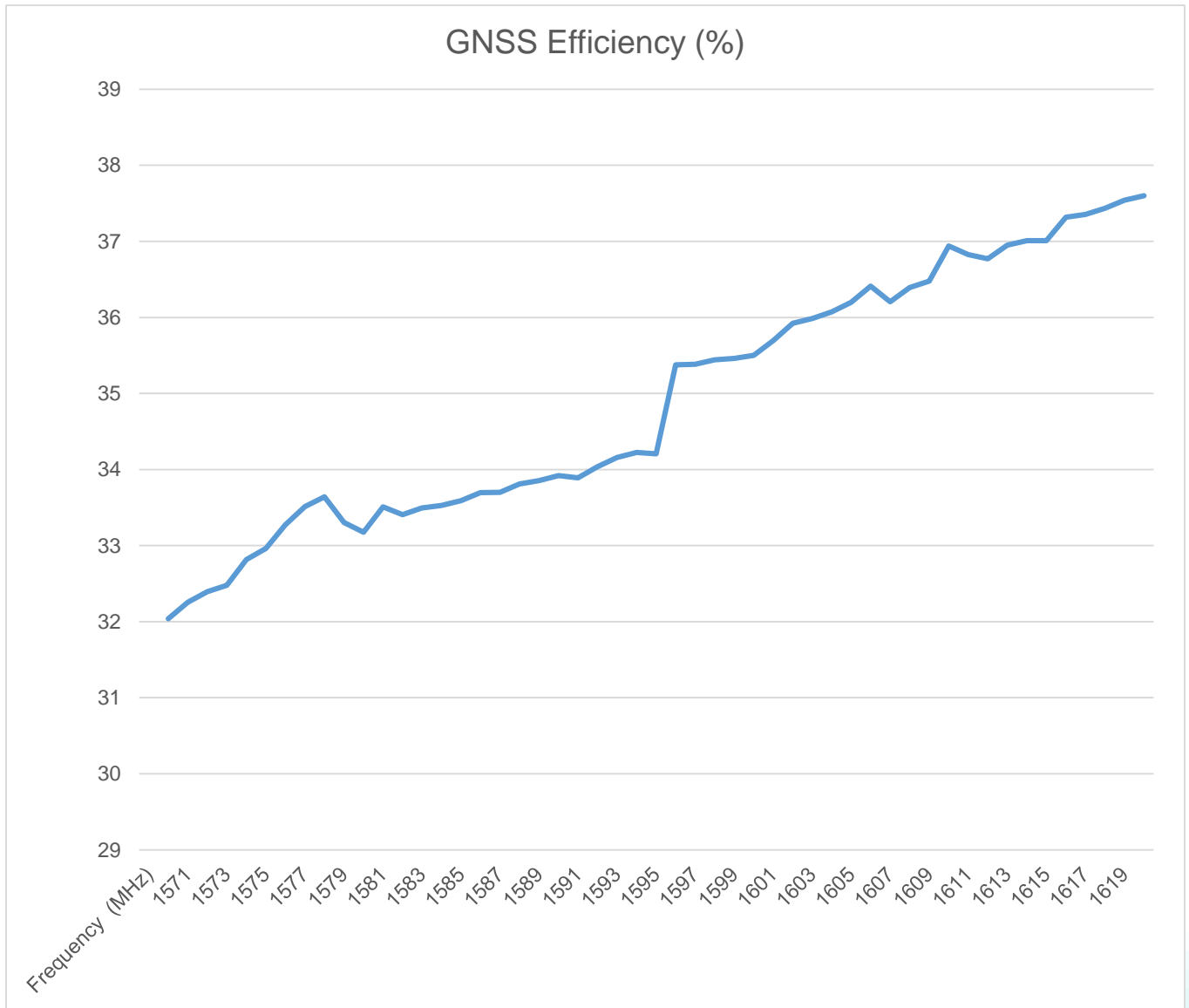
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## CHARTS

### Efficiency(%)



**Note : All test results measured with 100mm cable length**

Issue: 2045

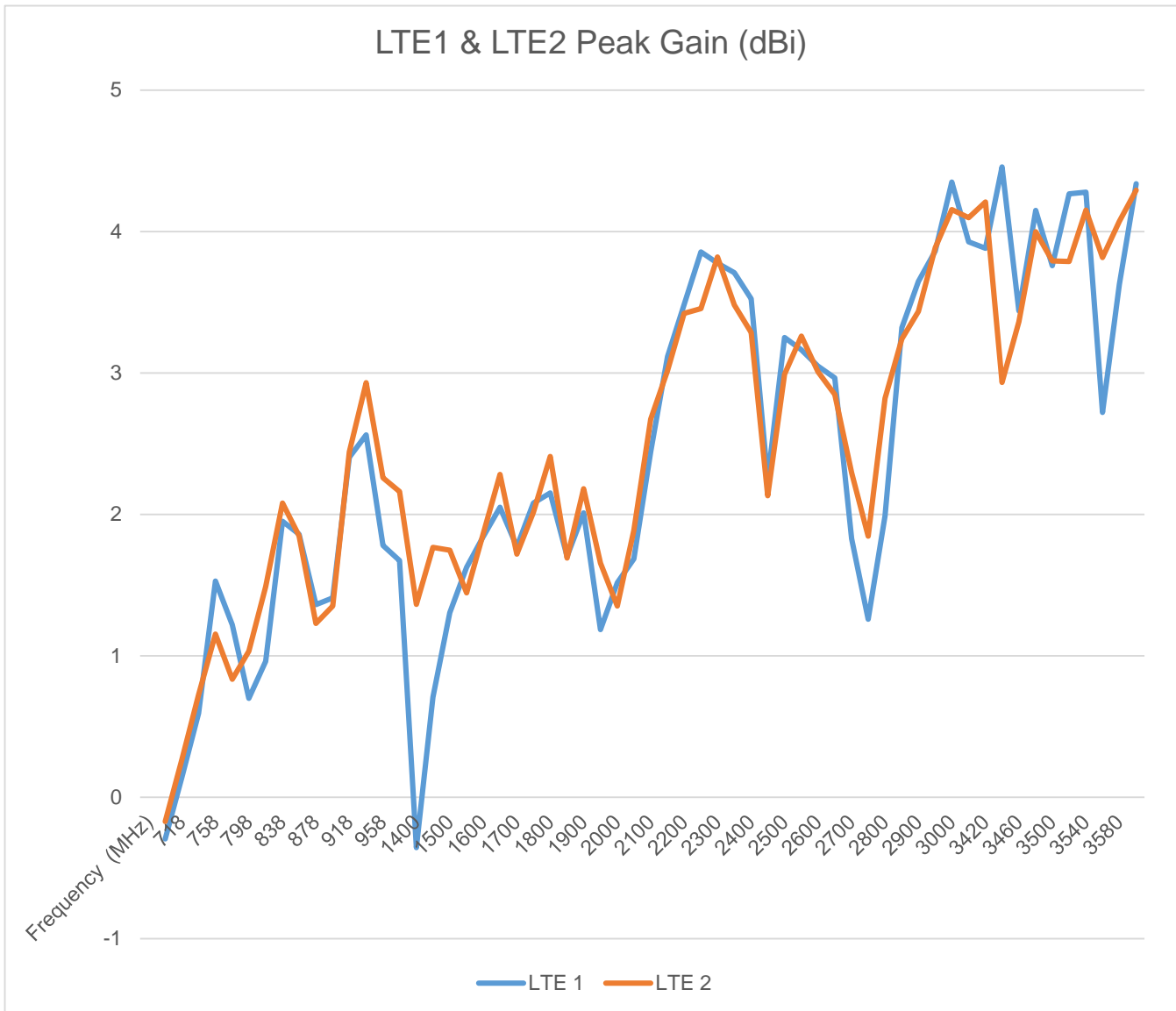
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CHARTS

Peak Gain(dBi)



**Note : All test results measured with 100mm cable length**

Issue: 2045

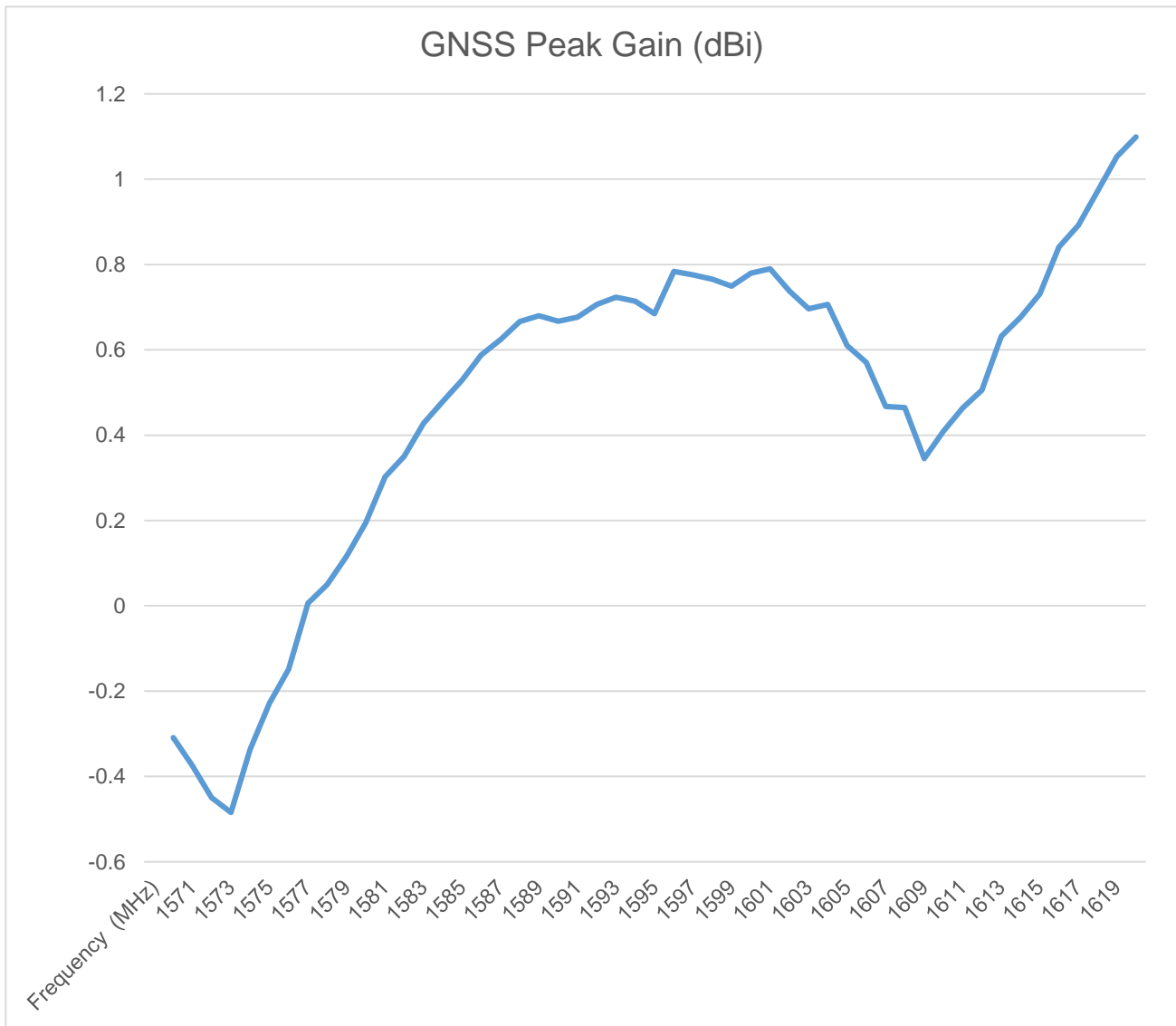
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## CHARTS

### Peak Gain(dBi)



**Note : All test results measured with 100mm cable length**

Issue: 2045

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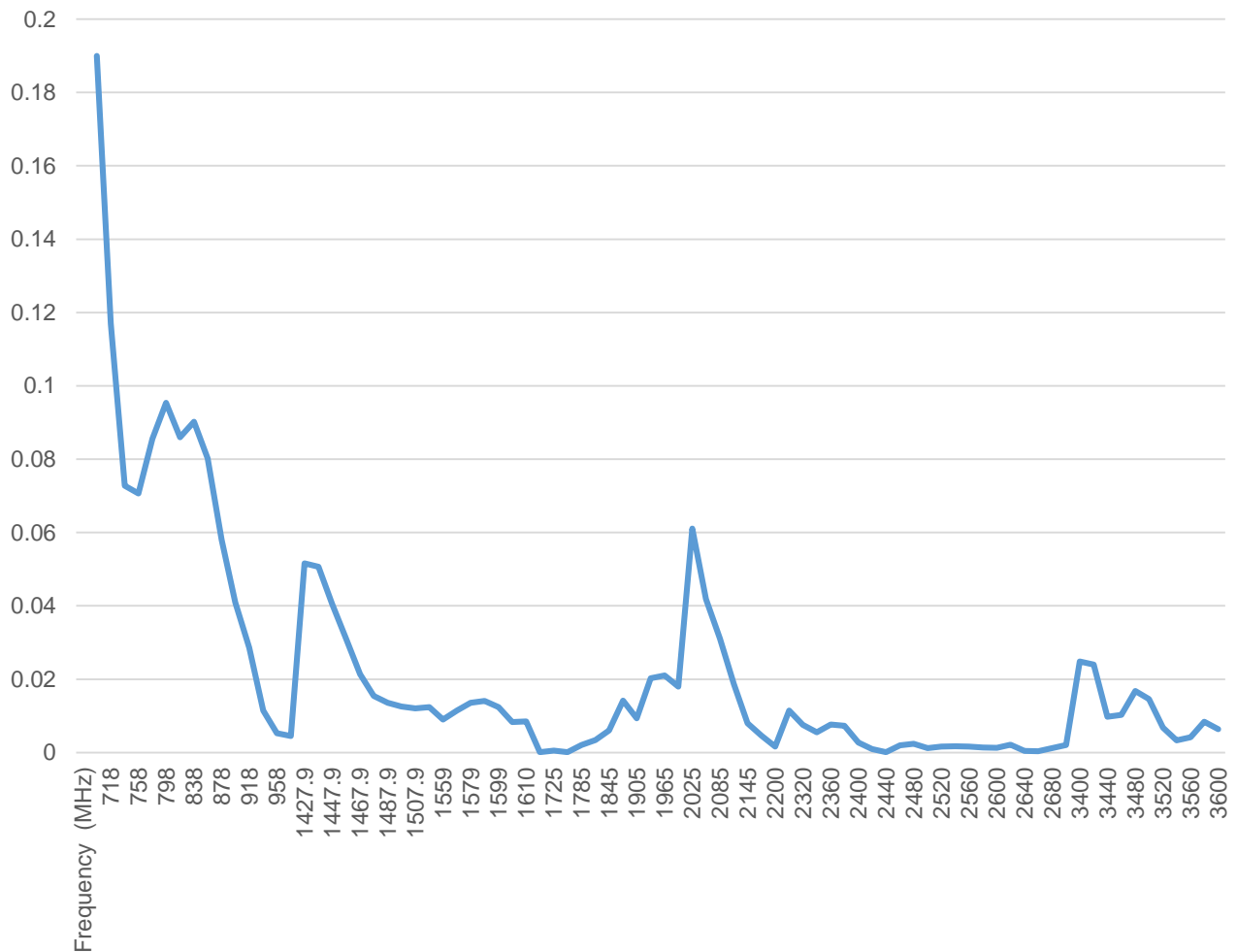
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## CHARTS

### ECC

#### LTE MIMO ECC



**Note : All test results measured with 100mm cable length**

Issue: 2045

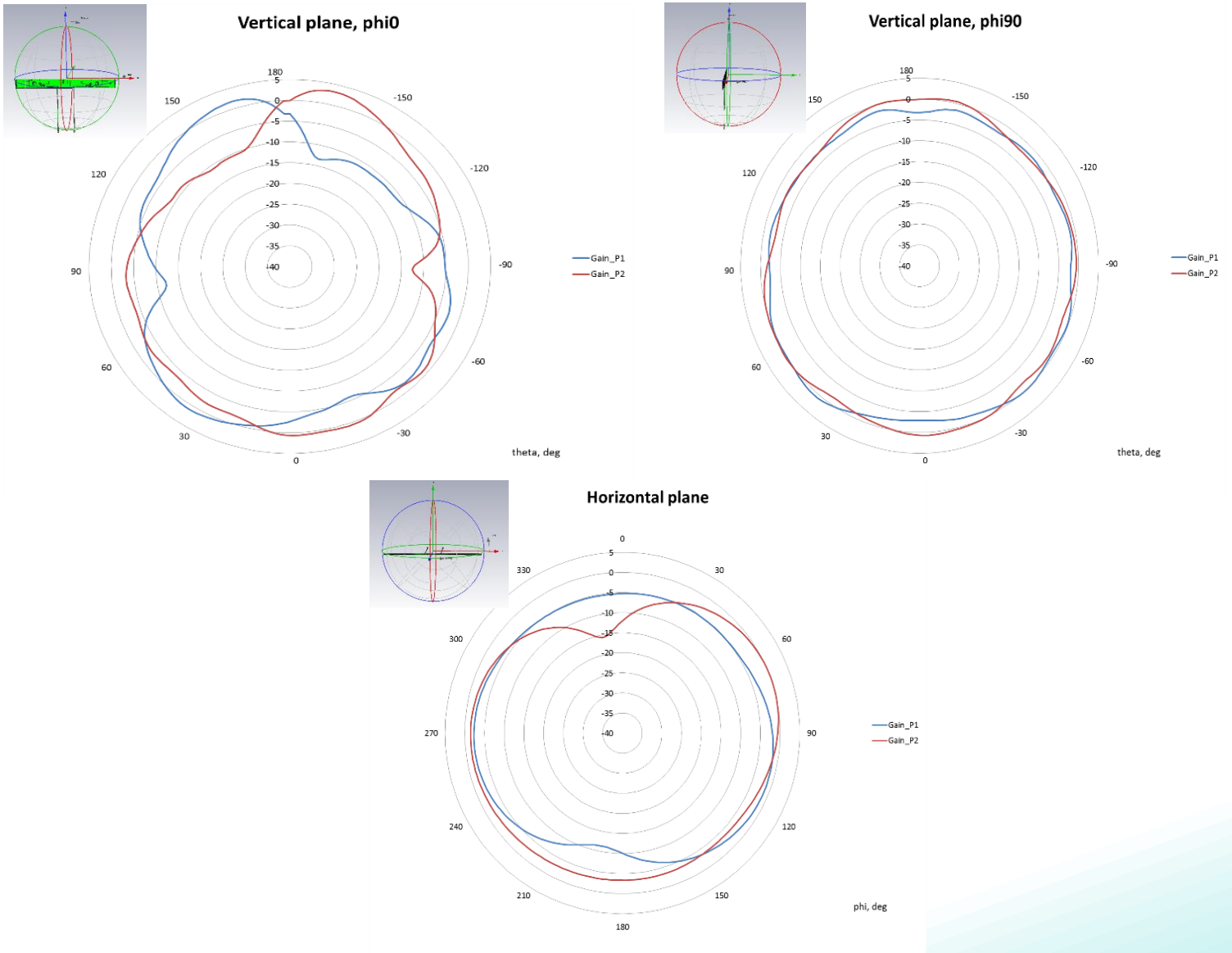
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## CHARTS

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



**Note : All test results measured with 100mm cable length**

Issue: 2045

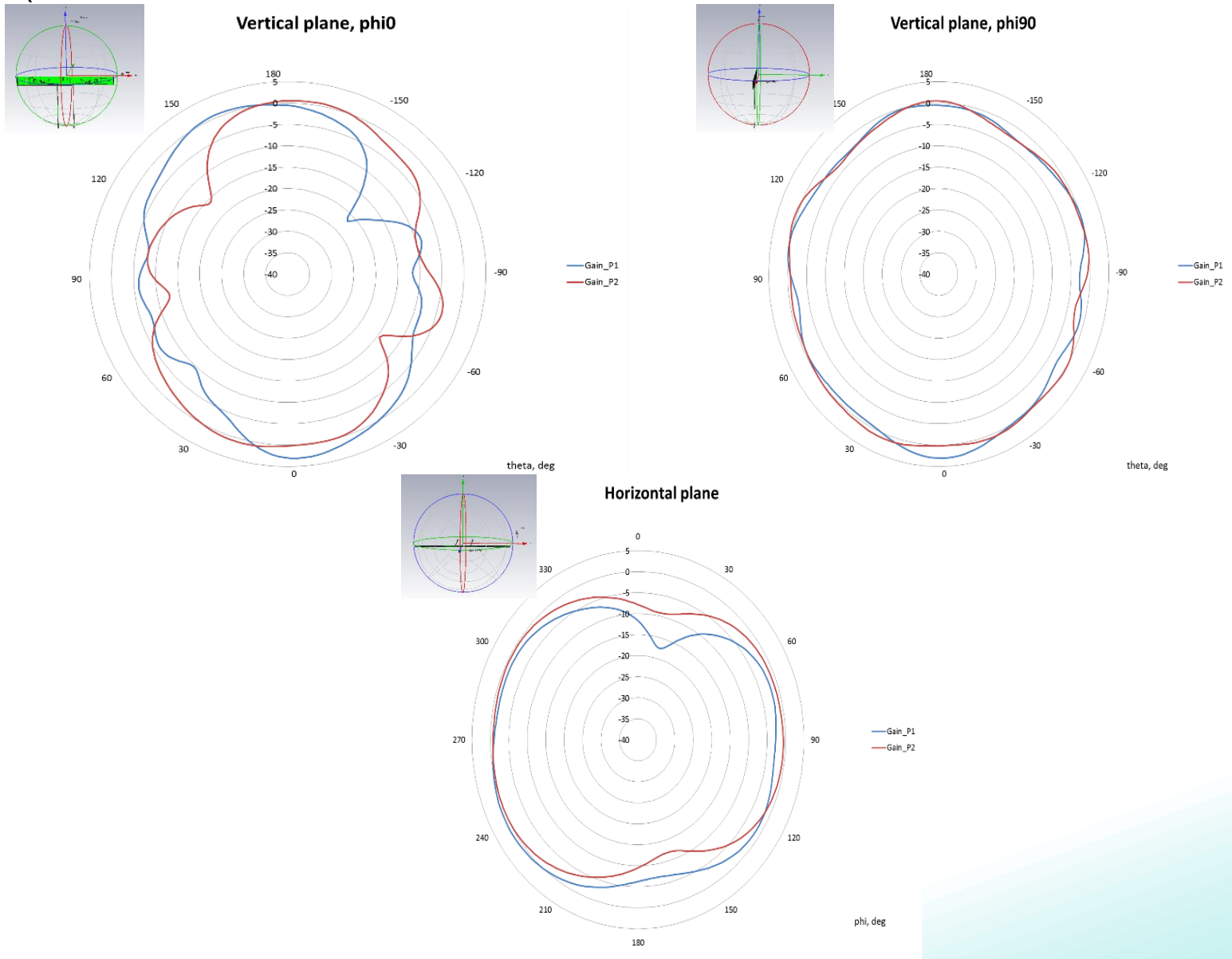
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## CHARTS

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



**Note : All test results measured with 100mm cable length**

Issue: 2045

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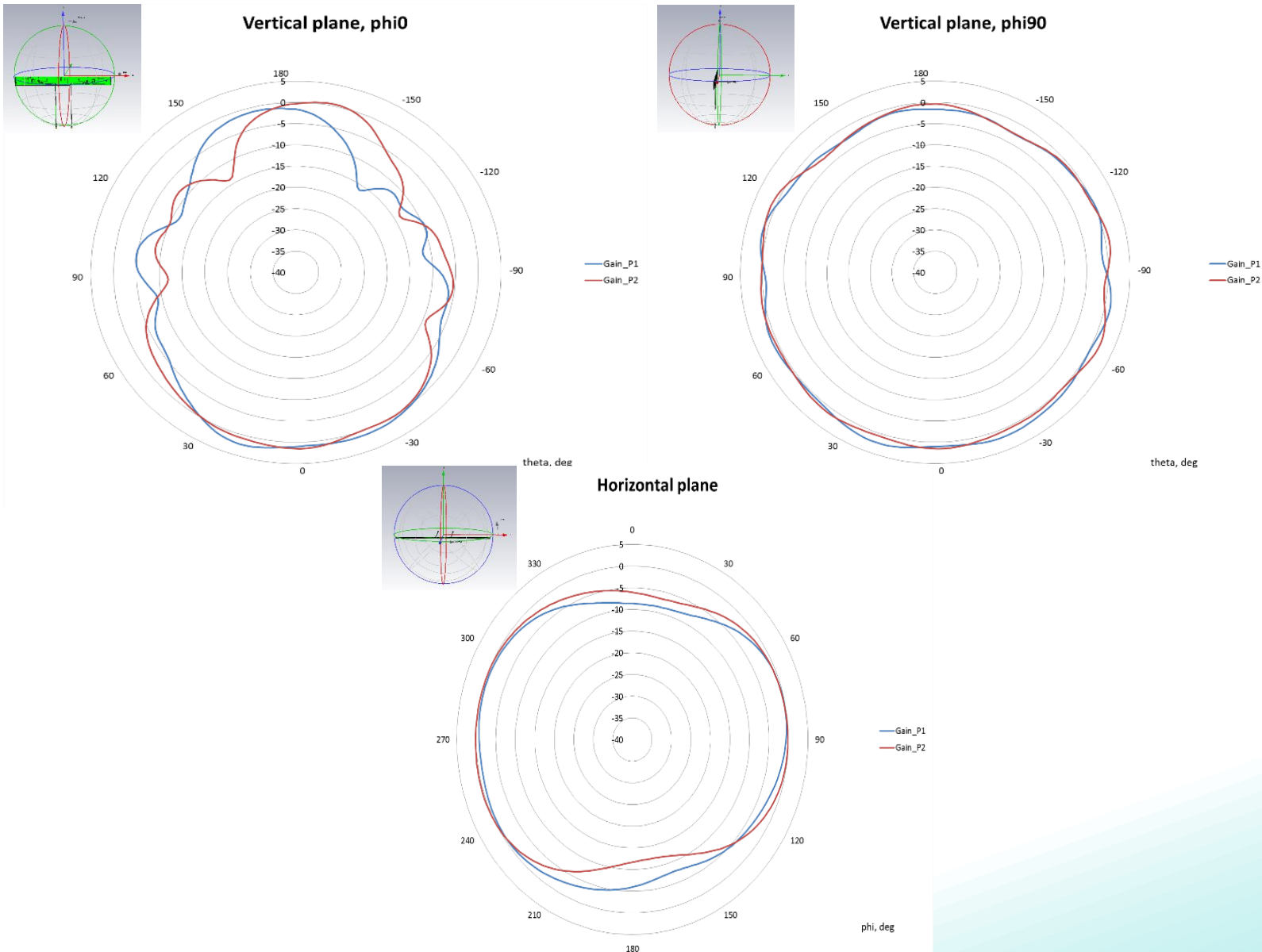
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## CHARTS

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



**Note : All test results measured with 100mm cable length**

Issue: 2045

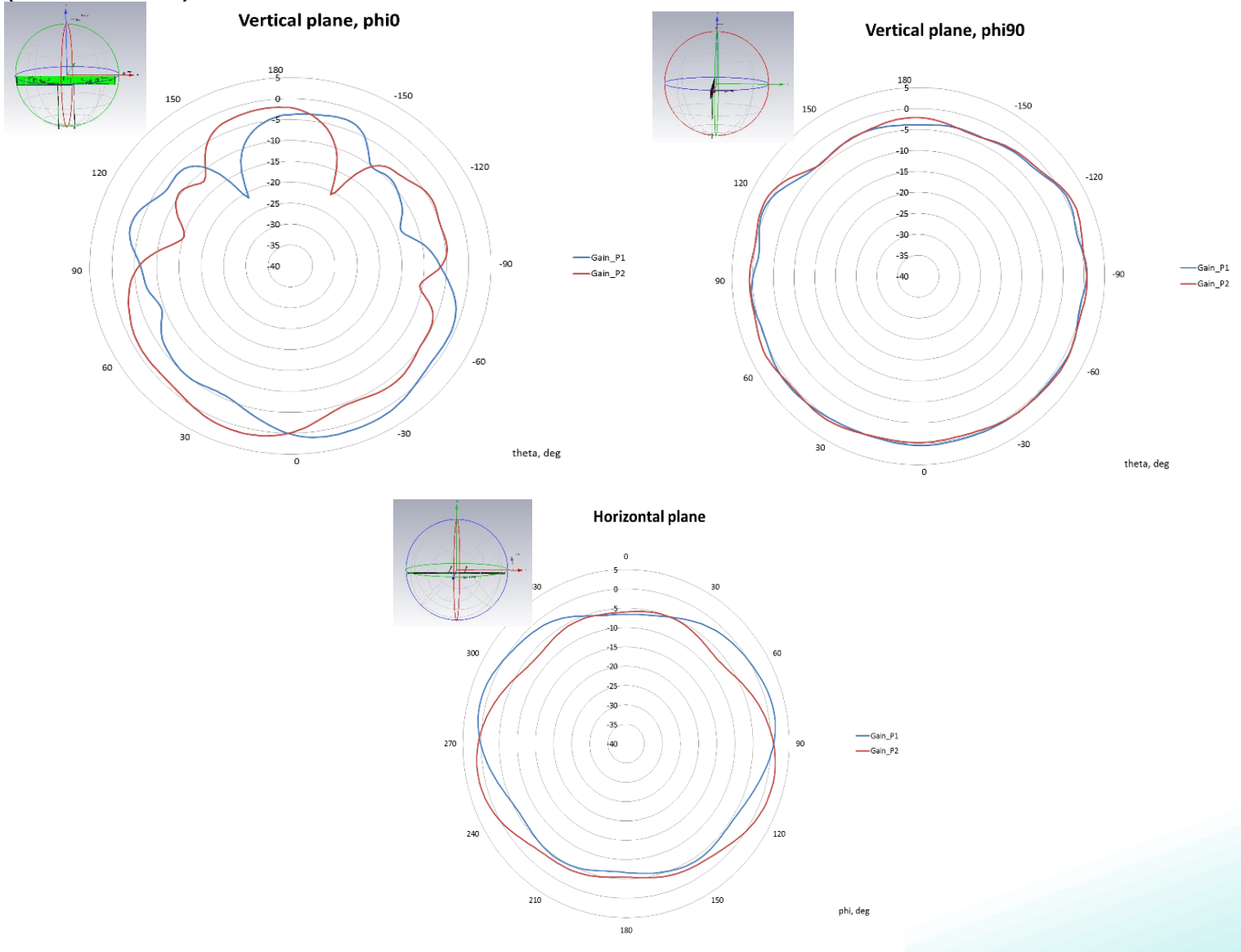
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## CHARTS

### LTE1 & LTE2 radiation pattern 1695-2200MHz (1930MHz)



**Note : All test results measured with 100mm cable length**

Issue: 2045

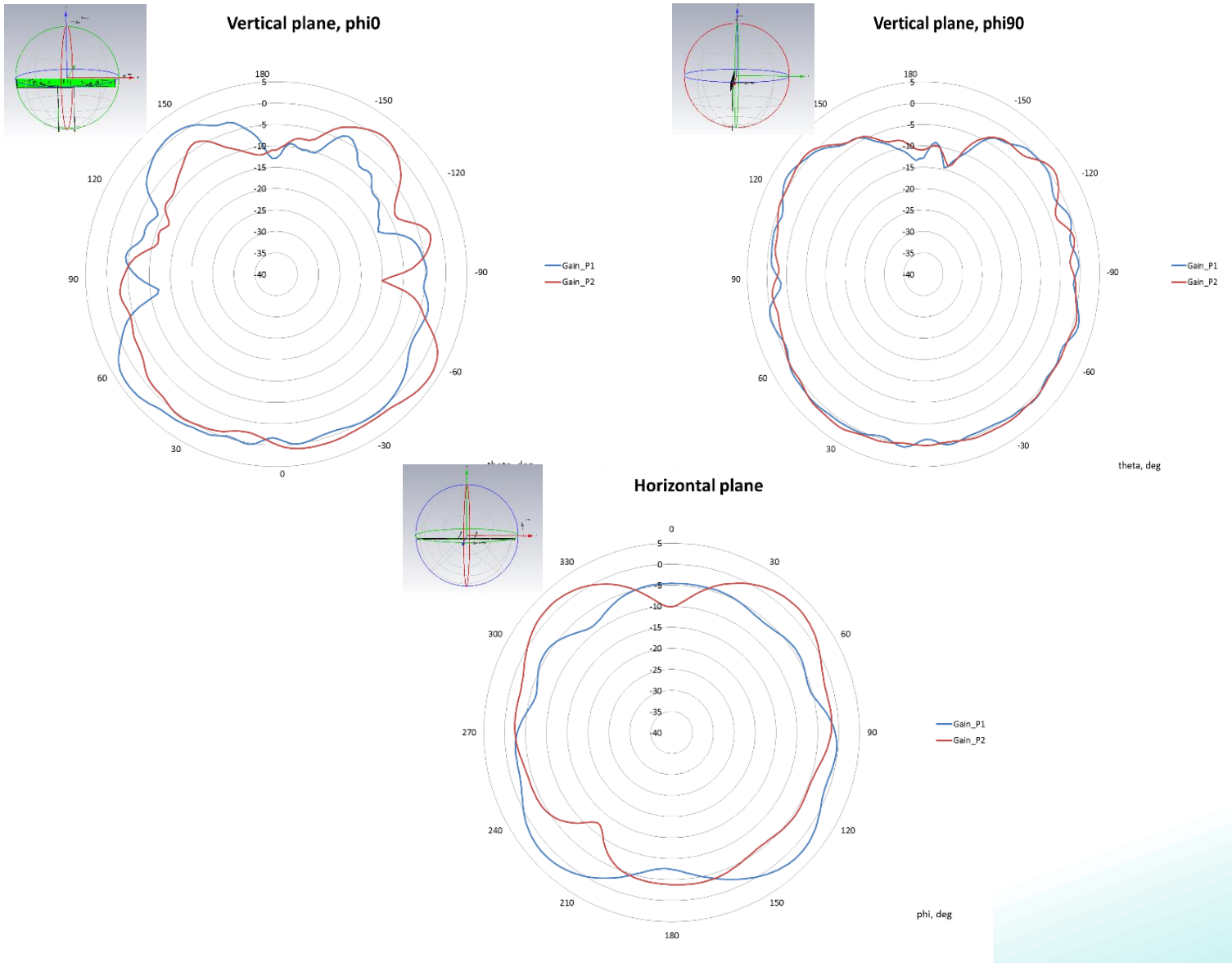
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## CHARTS

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



**Note : All test results measured with 100mm cable length**

Issue: 2045

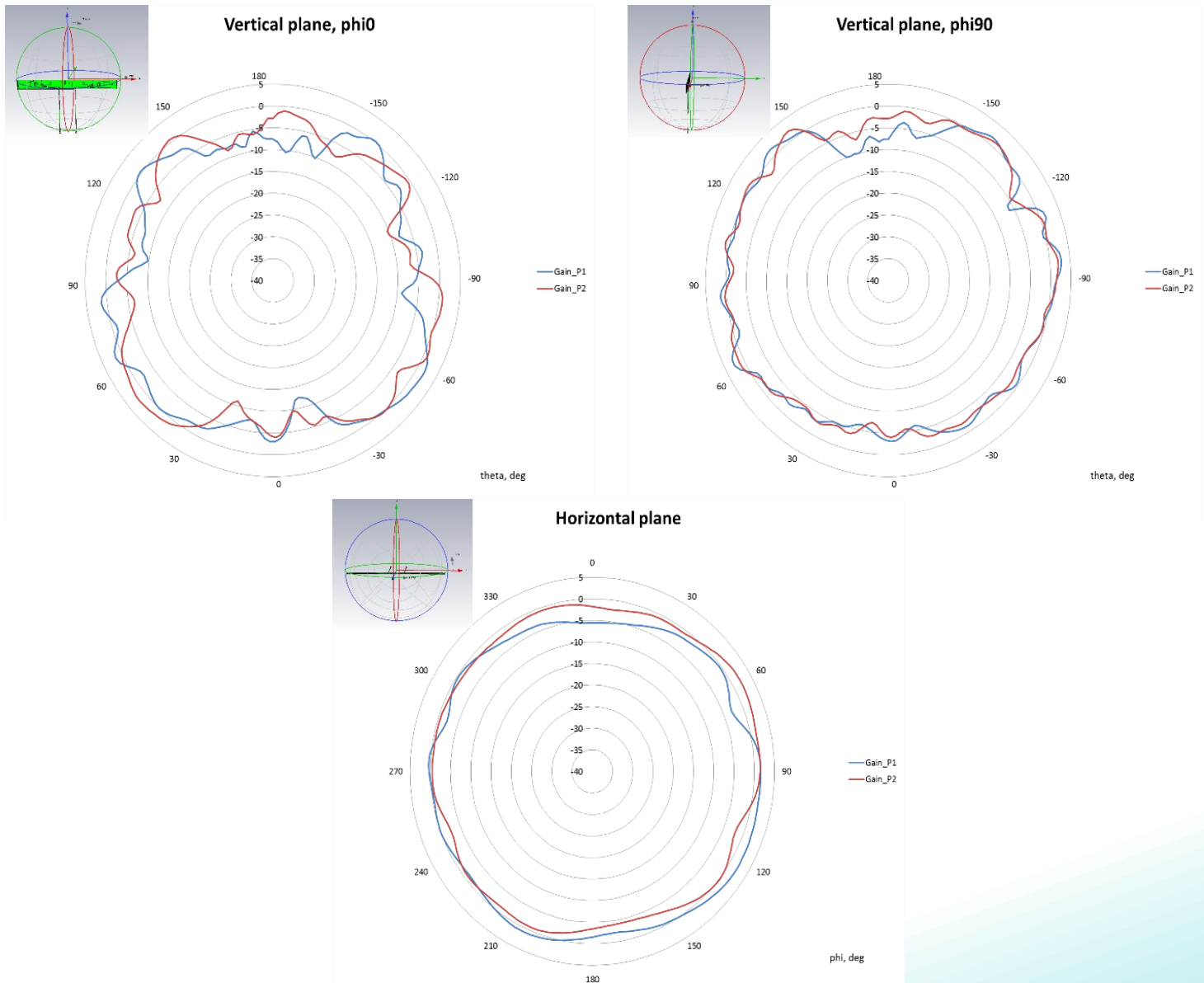
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## CHARTS

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



**Note : All test results measured with 100mm cable length**

Issue: 2045

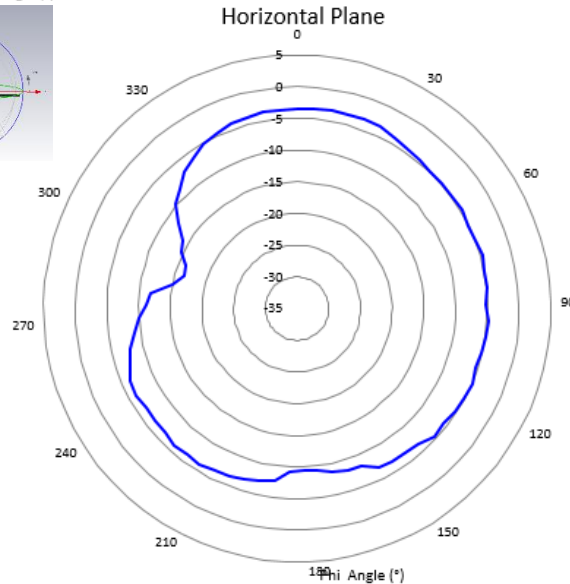
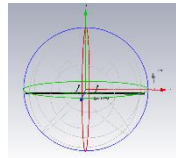
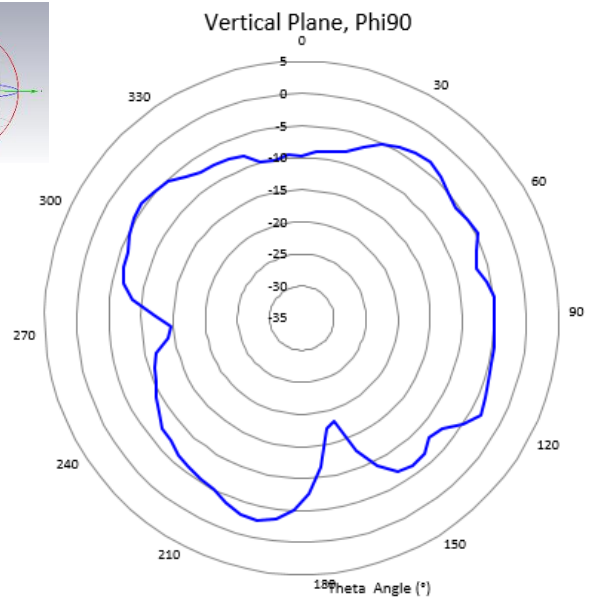
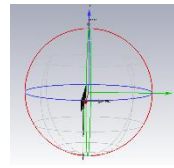
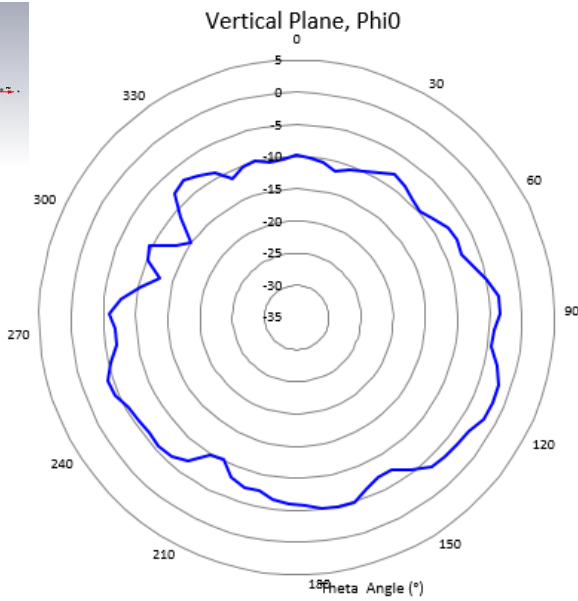
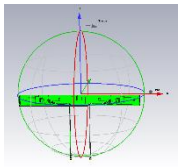
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## CHARTS

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



**Note : All test results measured with 100mm cable length**

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Series: Internal Antenna

## TECHNICAL DATA SHEET

Description: 2x2 MIMO LTE + GNSS FPC ANTENNA

PART NUMBER: W6113XXXXX

### PACKAGING

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

Total 4000PCS/Carton box



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