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Pulse | LARSEN Antennas
A YAGEO Company

TECHNICAL DATA SHEET

Description: LTE Primary + GNSS FPC Antenna

Series: Gemini

PART NUMBER: W3906B0100



All dimensions are in mm / inches

Features:

- 2G / 3G / 4G Primary Ant for MiMo
- 698-3600MHz
- Used as pair for W3907B0100
- Global LTE Bands:
  - B1-B23, B25-B29, B33-B42
  - N.A.; Europe, Asia (incl. Jap.)
- GNSS (GPS, Galileo, Glonass)
- 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

Issue: 2029

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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,4th Phase
Suzhou New District
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ELECTRICAL SPECIFICATIONS

LTE :

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	-10dB
Average Total Efficiency (698-960MHz)	54%
Average Total Efficiency (1427.9-1510.9MHz)	59%
Average Total Efficiency (1559-1610MHz)	59%
Average Total Efficiency (1695-2200MHz)	64%
Average Total Efficiency (2300-2700MHz)	69%
Average Total Efficiency (3400-3600MHz)	64%

Issue: 2029

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ELECTRICAL SPECIFICATIONS

Peak Gain (698-960MHz)	2.7dBi
Peak Gain (1427.9-1510.9MHz)	1.5dBi
Peak Gain (1559-1610MHz)	1.6dBi
Peak Gain (1695-2200MHz)	3.2dBi
Peak Gain (2300-2700MHz)	3.6dBi
Peak Gain (3400-3600MHz)	4.0dBi
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

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

Issue: 2029

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MECHANICAL SPECIFICATIONS

Overall Length	120.4x26.8mm
Weight	2.0g
Antenna Color / Material	BLACK FPC
Cable type	AWG#32 1.13MM
Connector type	I-PEX MHF 20278-112R-13 or compatible
Cable length (LTE)	93mm
Cable length (GPS)	93mm

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40~+85° C
Storage Temperature	-40~+85° C
RoHS Compliant	Yes

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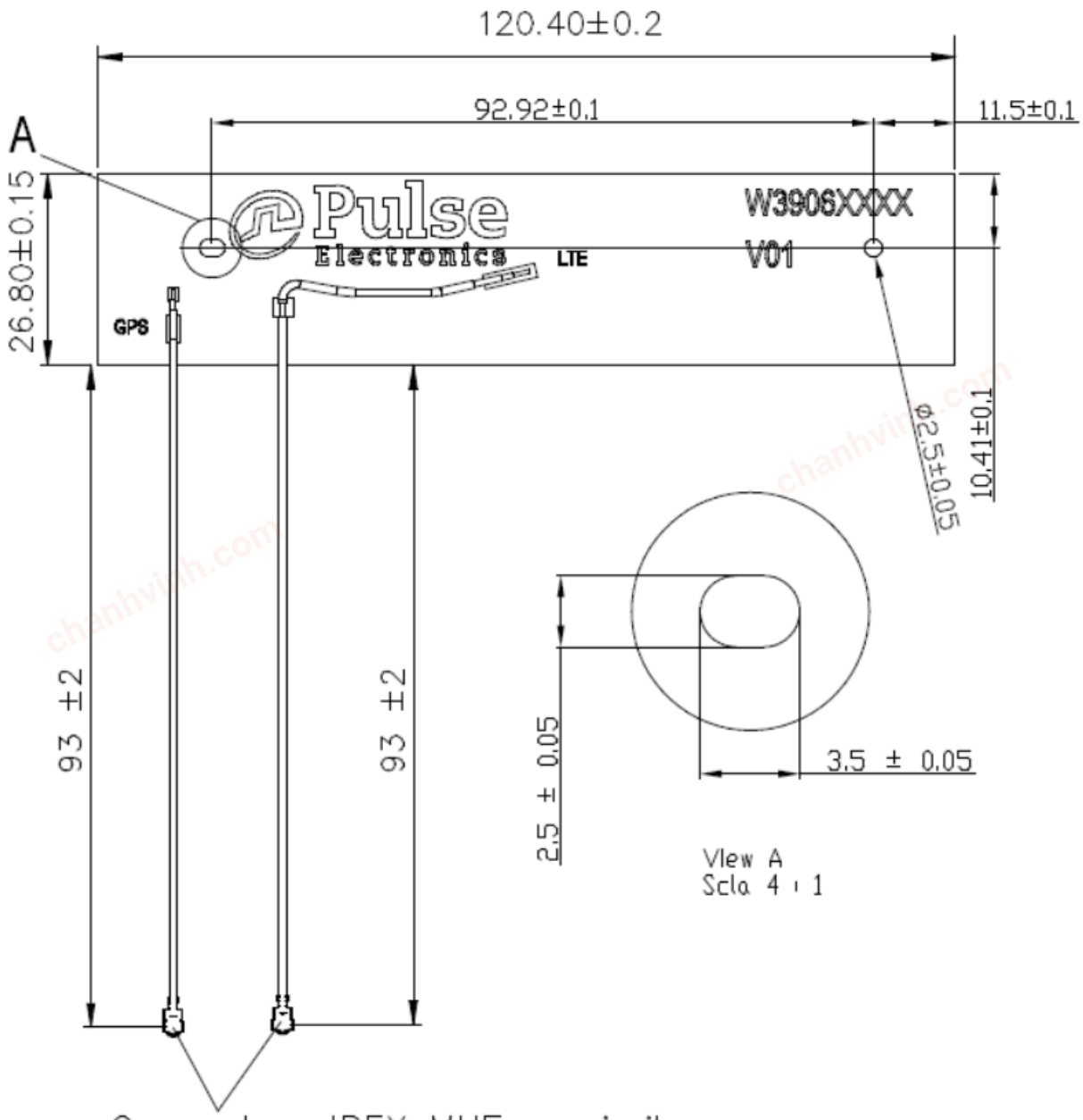
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MECHANICAL DRAWING



Unit: MM

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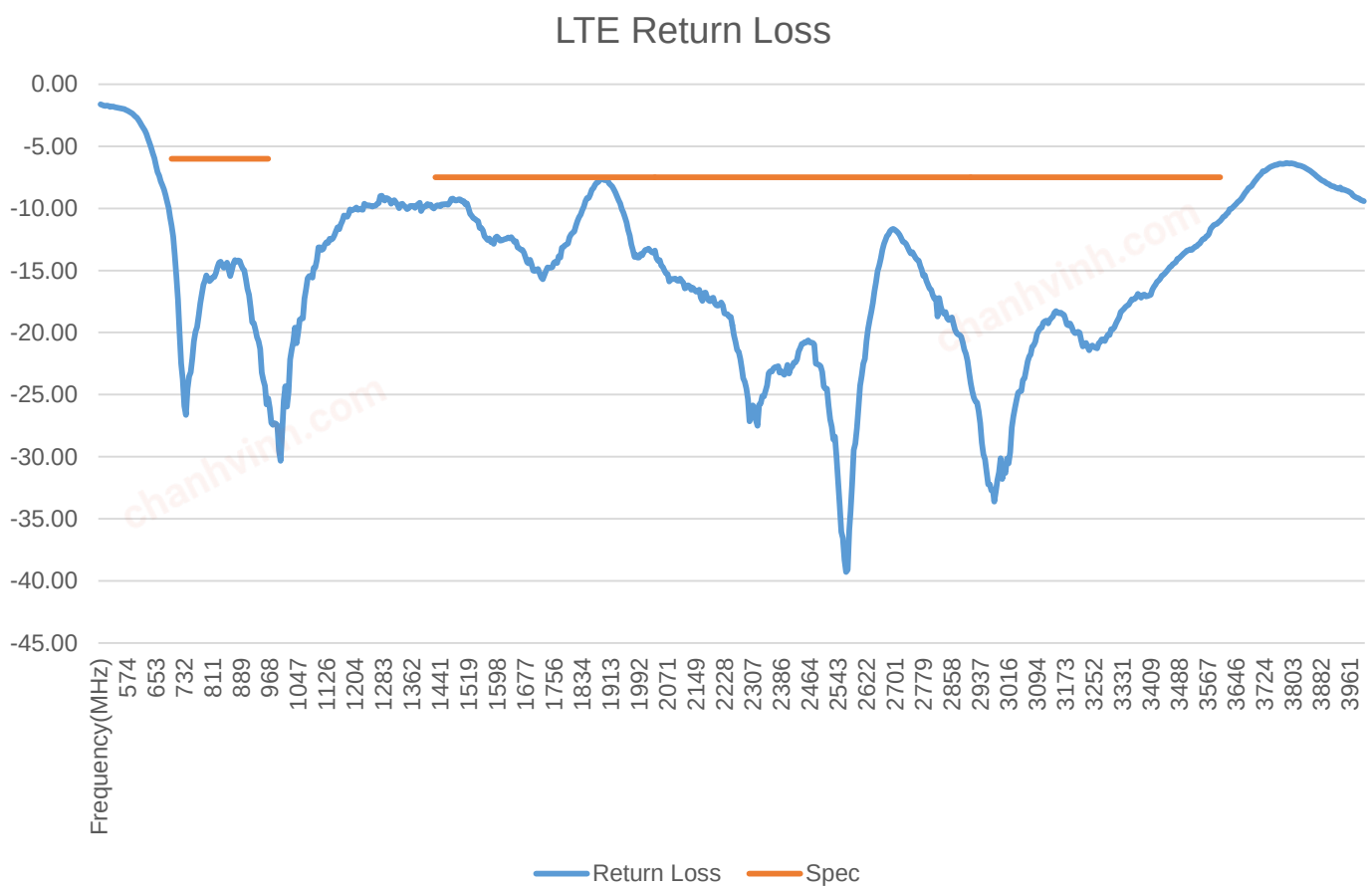
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Series: Gemini

PART NUMBER: W3906B0100

CHARTS

Return Loss



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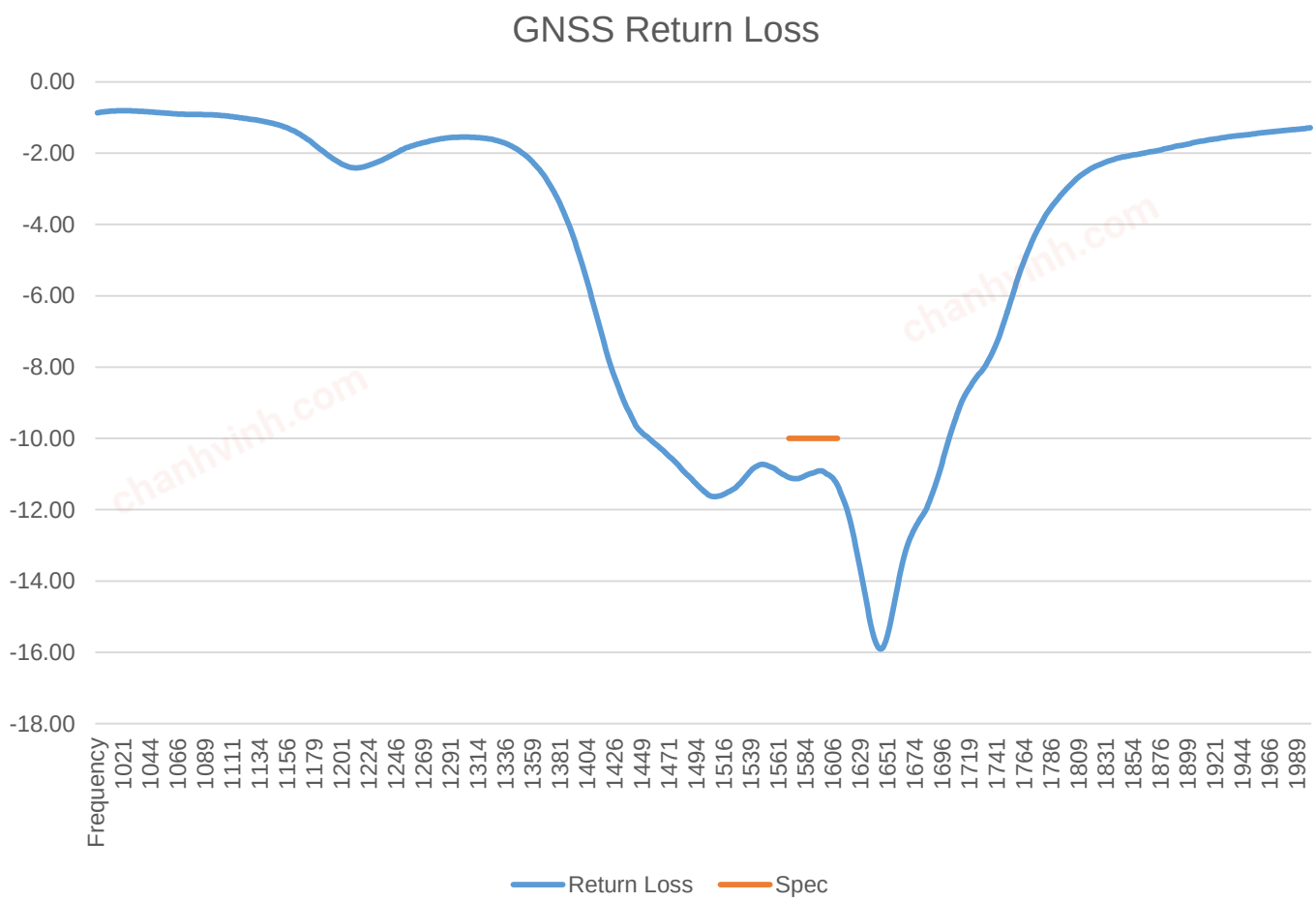
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PART NUMBER: W3906B0100

CHARTS

Return Loss



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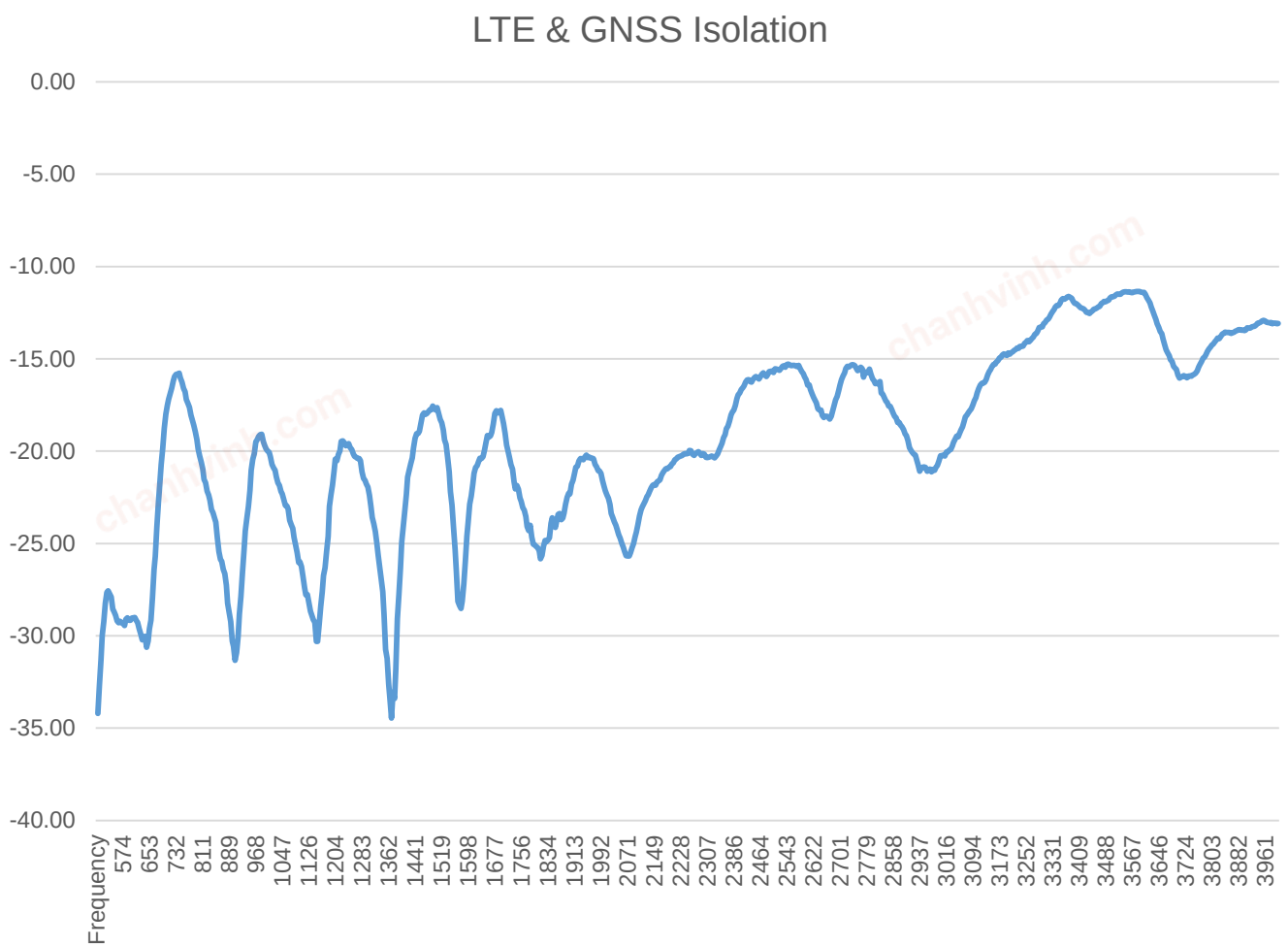
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CHARTS

Isolation



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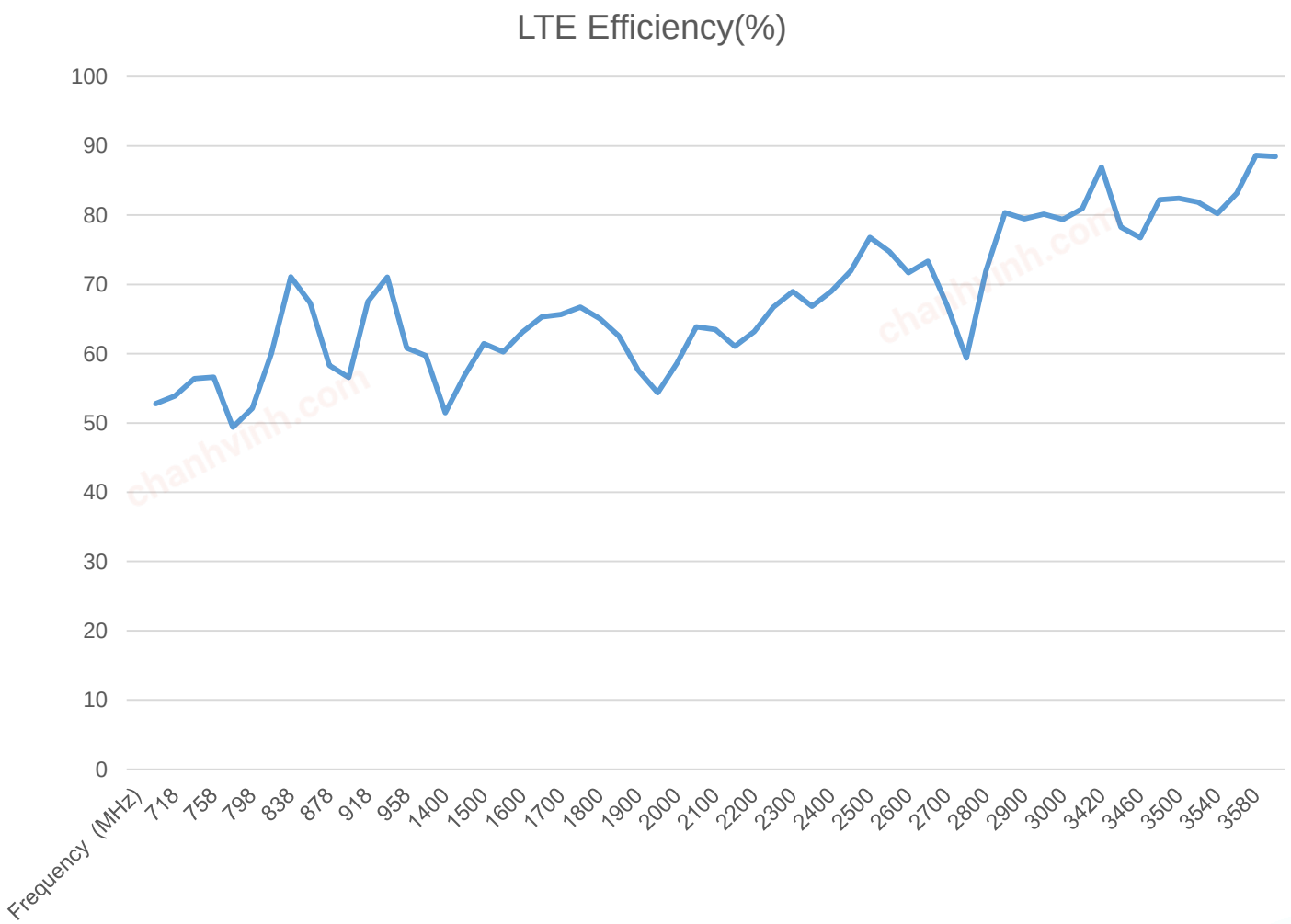
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Series: Gemini

PART NUMBER: W3906B0100

CHARTS

Efficiency(%)



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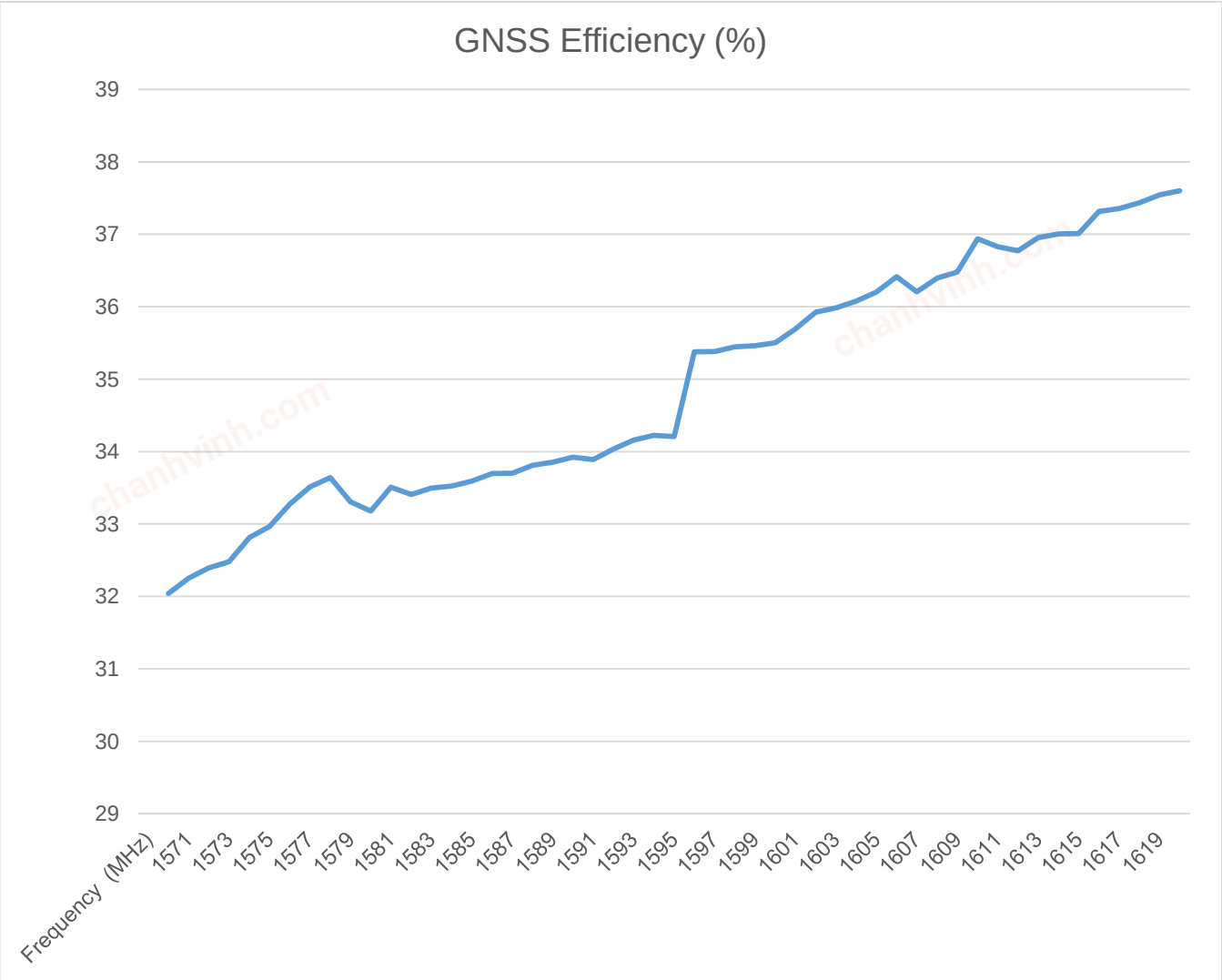
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CHARTS

Efficiency(%)



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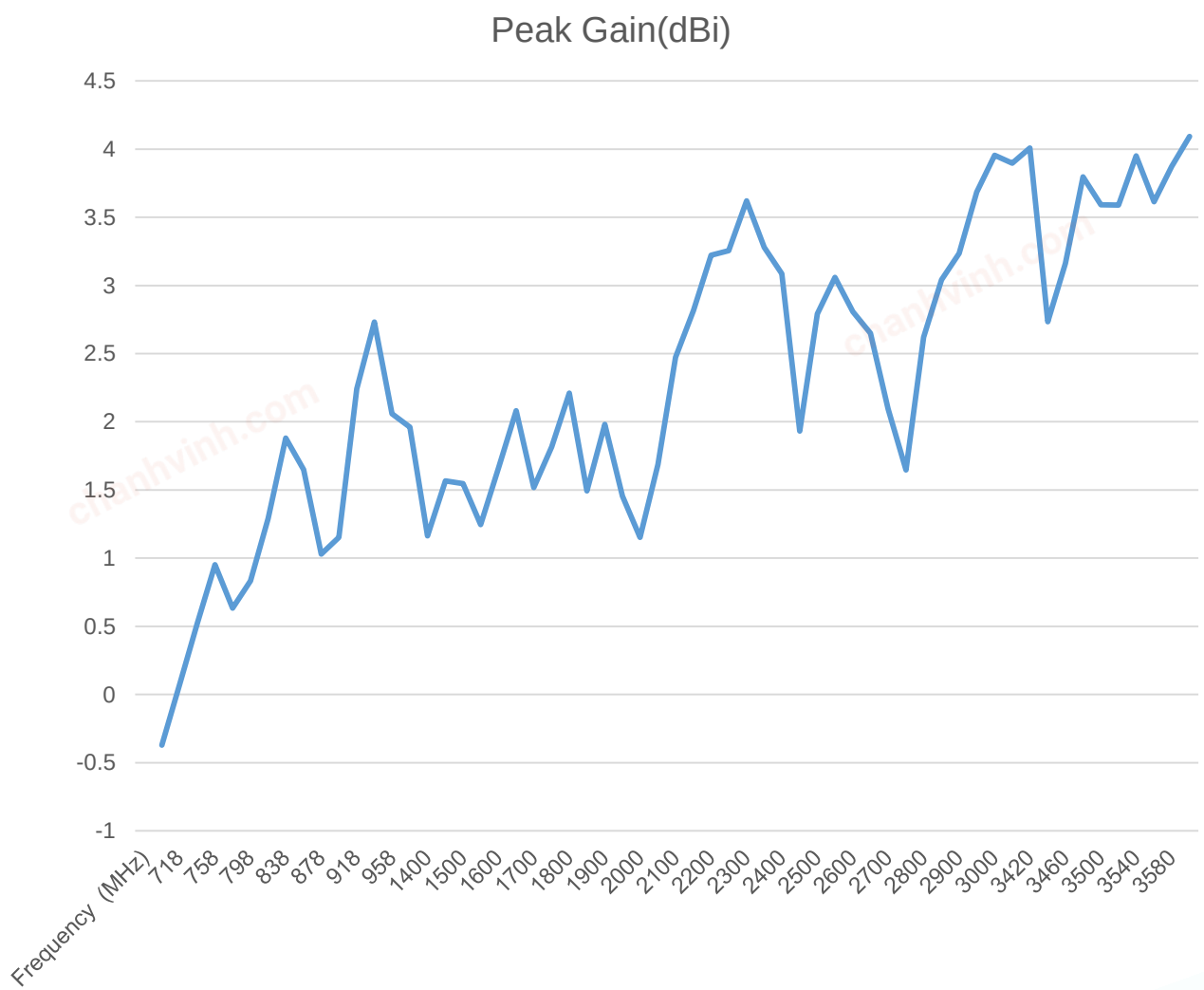
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CHARTS

Peak Gain(dBi)



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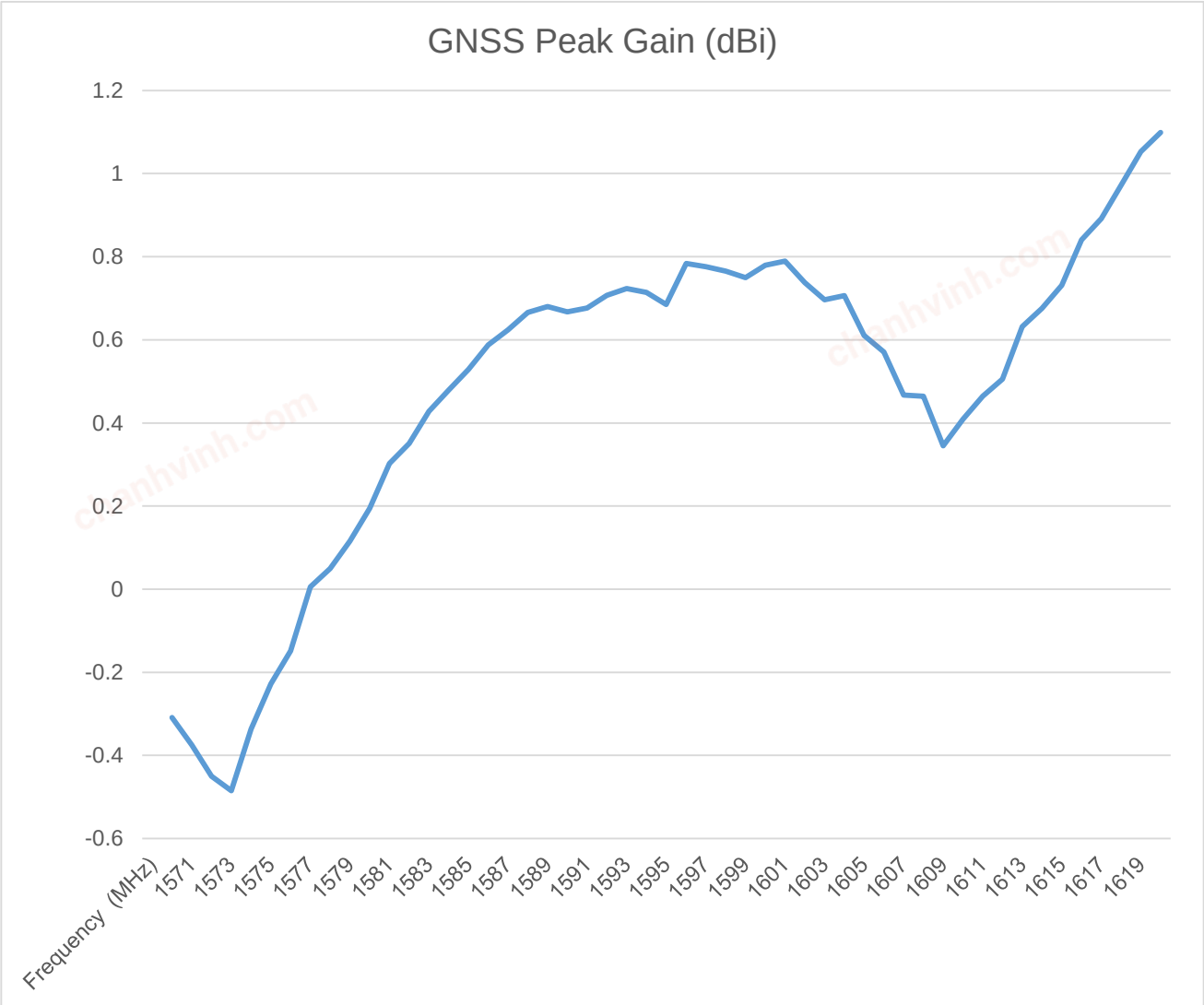
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CHARTS

Peak Gain(dBi)



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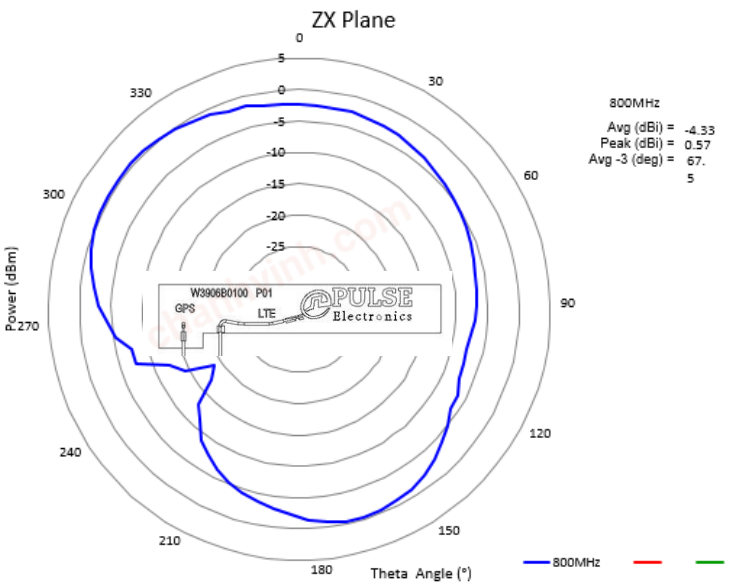
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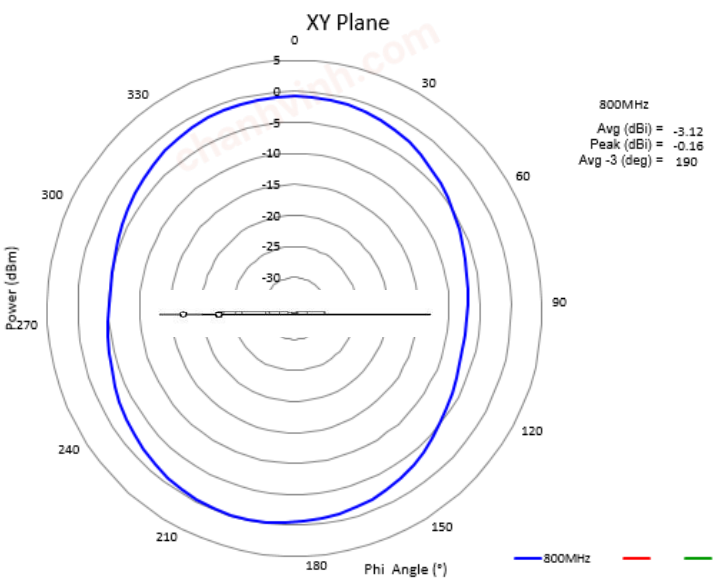
CHARTS

LTE radiation pattern
698-960MHz
(800MHz)

Elevation Plane



Horizontal Plane



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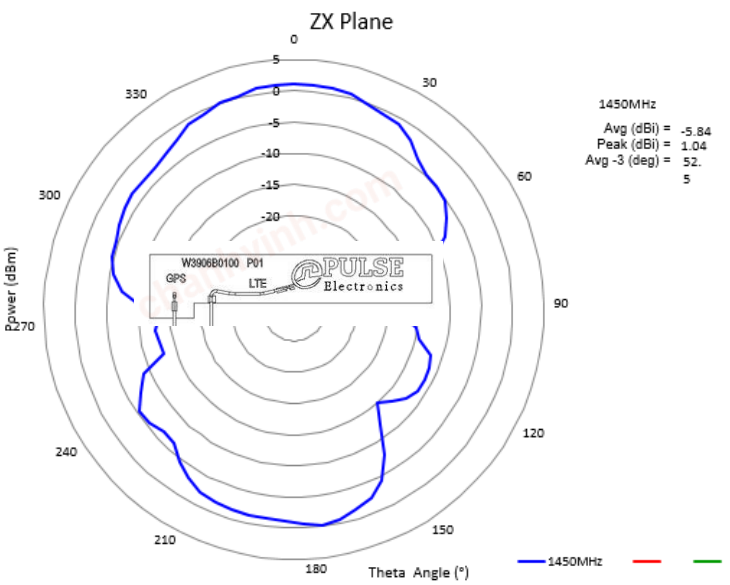
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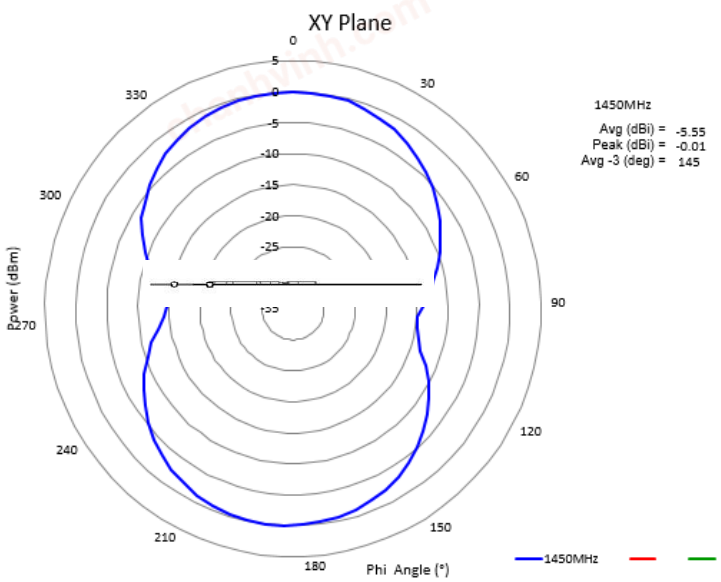
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LTE radiation pattern
1427.9-1510.9MHz
(1450MHz）

Elevation Plane



Horizontal Plane



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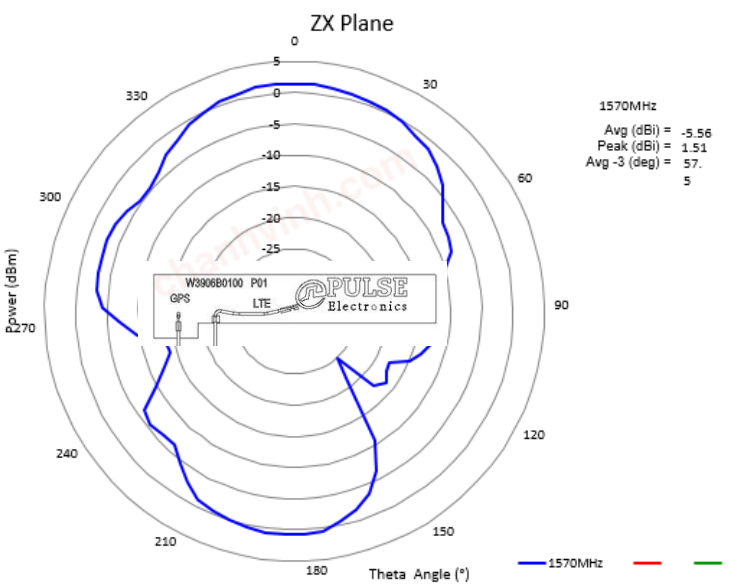
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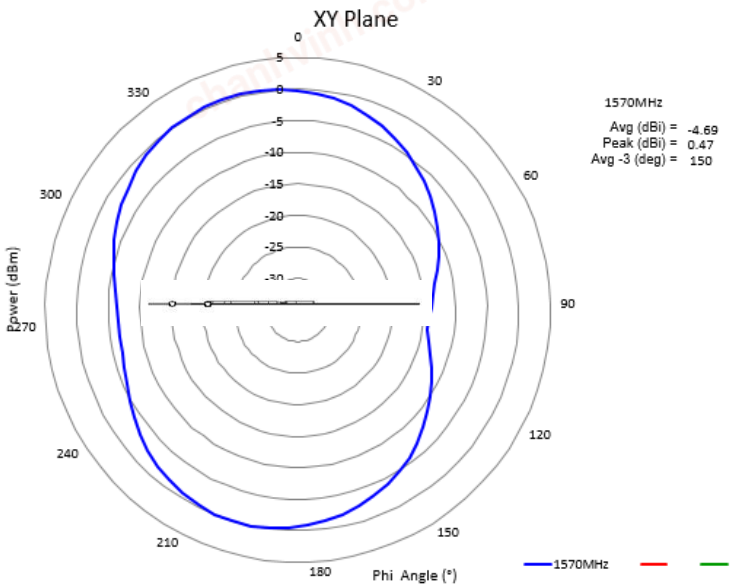
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LTE radiation pattern
1559-1610MHz
(1570MHz)

Elevation Plane



Horizontal Plane



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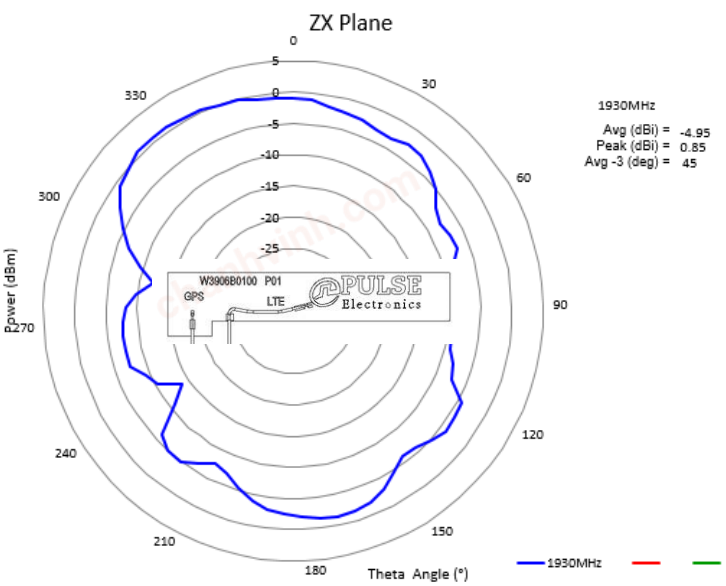
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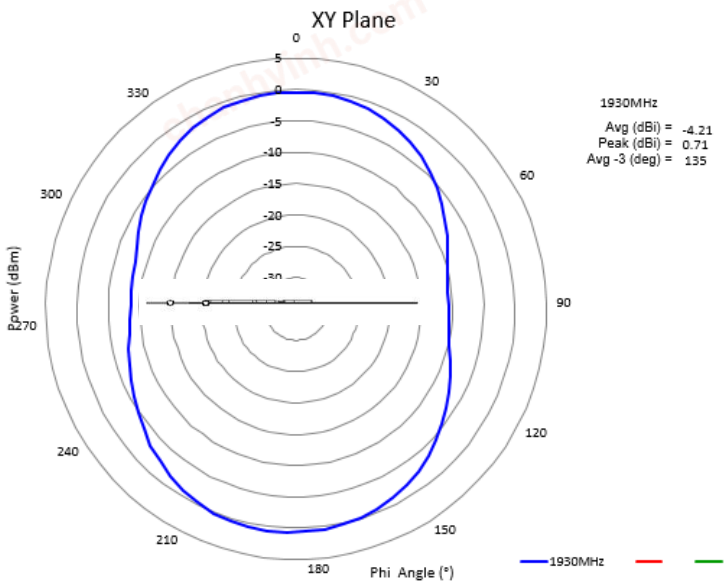
CHARTS

LTE radiation pattern
1695-2200MHz
(1930MHz)

Elevation Plane



Horizontal Plane



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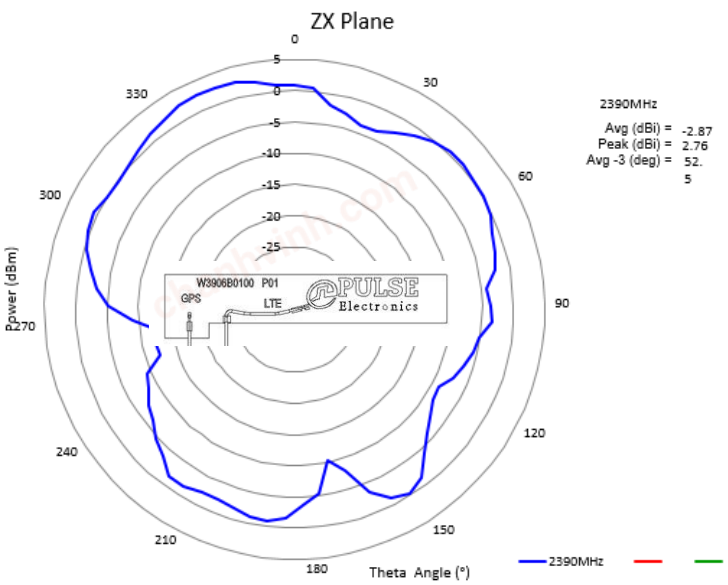
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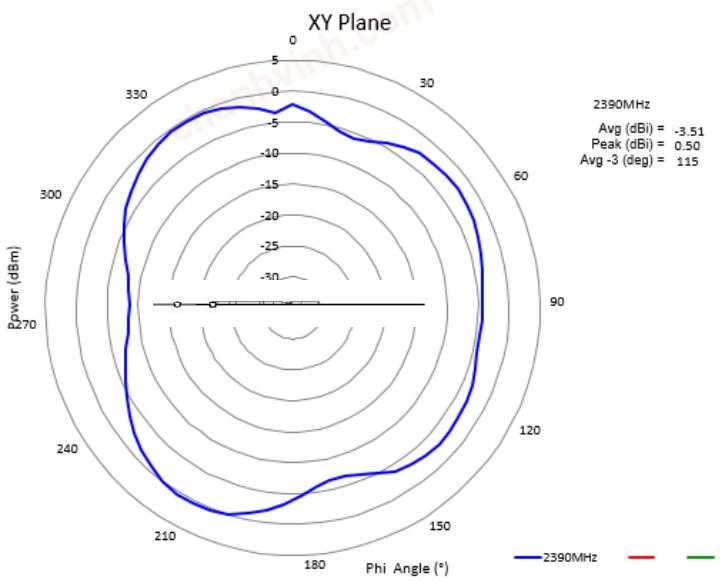
CHARTS

LTE radiation pattern
2300-2700MHz
(2390MHz)

Elevation Plane



Horizontal Plane



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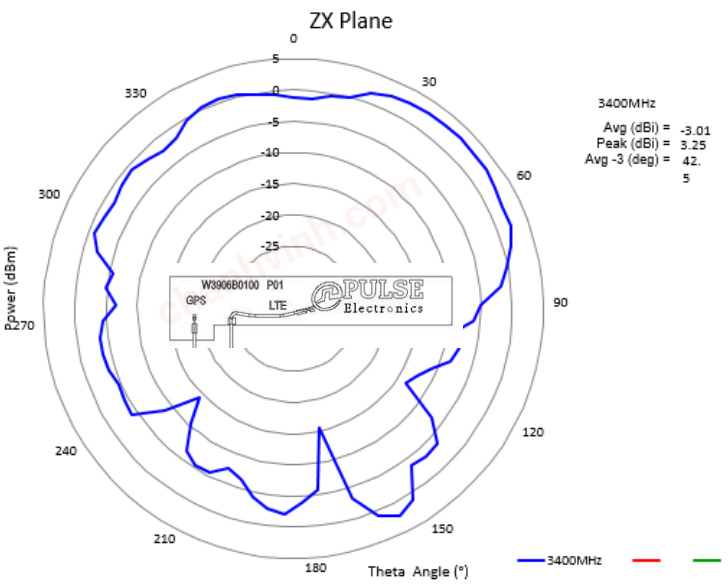
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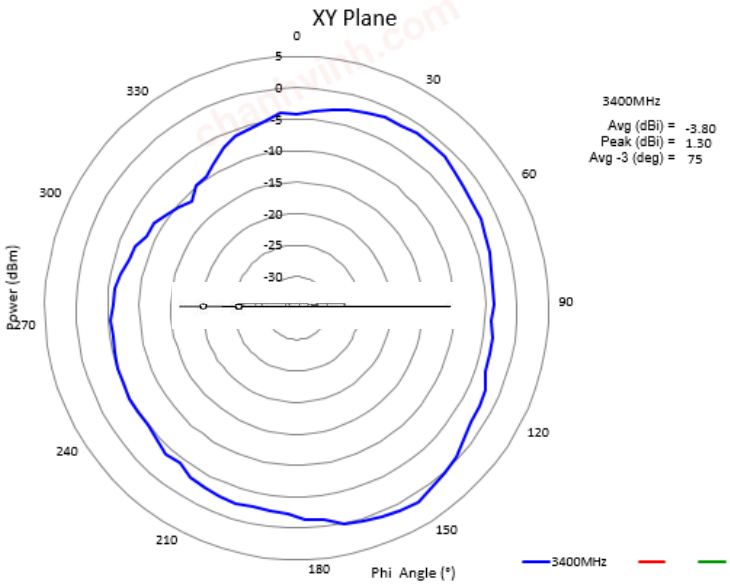
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LTE radiation pattern
3400-3600MHz
(3400MHz)

Elevation Plane



Horizontal Plane



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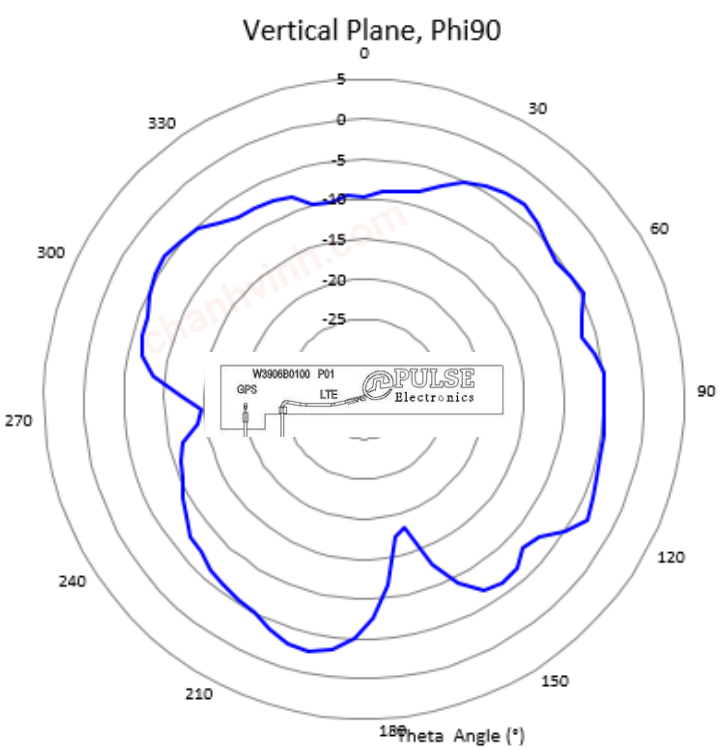
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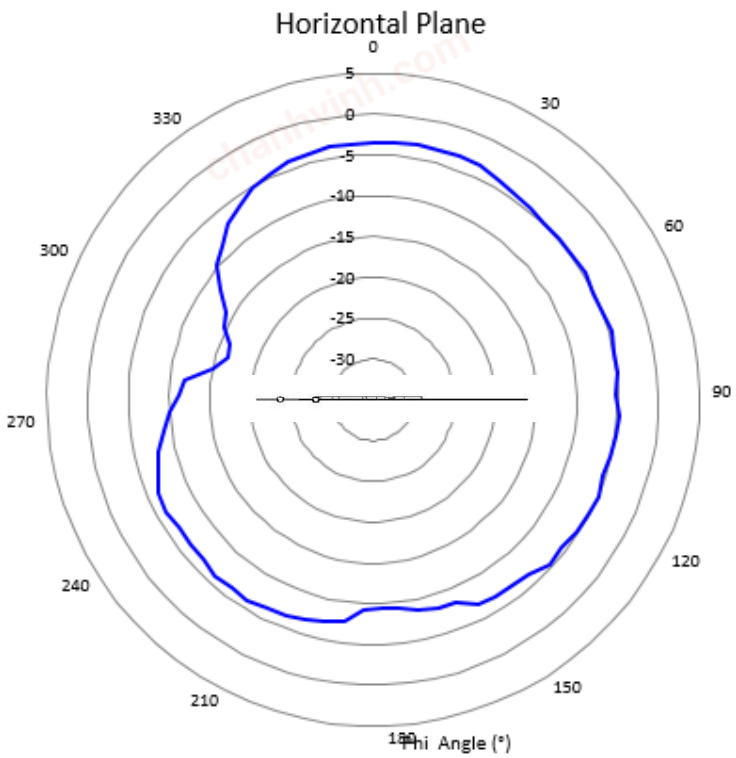
CHARTS

GNSS radiation pattern
1570-1610MHz
(1575MHz)

Elevation Plane



Horizontal Plane



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RoHS COMPLIANT

chanhvinh.com

Description: LTE Primary + GNSS FPC Antenna

Series: Gemini

PART NUMBER: W3906B0100

PACKAGING

5pcs antenna per PE bag

400pcs PE bags per form bag

2pcs form bag per package box

Total 4000pcs per package box

Package box: 460mm*235mm*140mm

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