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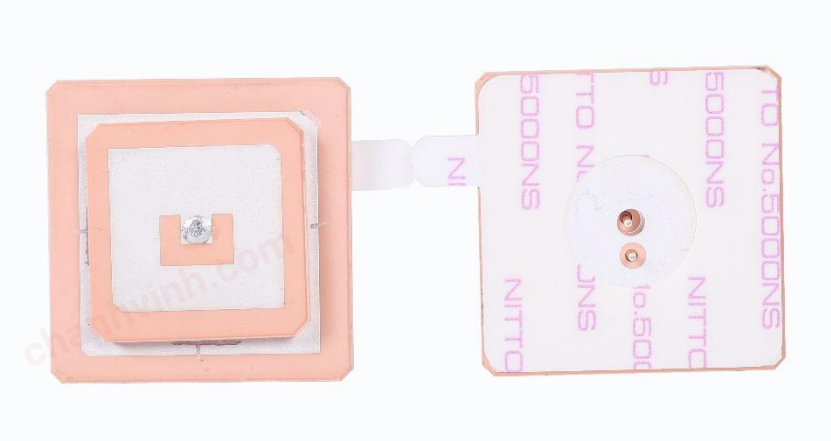
Pulse | LARSEN Antennas
A YAGEO Company

TECHNICAL DATA SHEET

Description: GNSS L1+L5 Pin Feed Patch Antenna

Series: Combo Patch

PART NUMBER: W3231



Features:

- Antenna type stacked patch
- Gain +2 dBic @ 1176.45MHz
- Gain +3 dBic @ 1575.42MHz
- Gain 0 dBic @ 1602.65MHz
- Polarization RCHP
- Size 35 x 35 x 7 mm
- Separate feed pins for L1 and L5 bands

Applications:

- GNSS multiband receivers
- High precision navigation and tracking devices

All dimensions are in mm / inches

Issue: 2020

RoHS COMPLIANT

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Tel: 86 512 6807 9998

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ELECTRICAL SPECIFICATIONS *

Antenna Type	Stacked Patch Antenna
Frequency	1176.45±1.023MHz 1575.42±1.023MHz 1602.56±4MHz
Nominal Impedance	50 Ω
Return Loss (Max)	-10 / -8 / -4 dB
Radiation Pattern	Omni Hor plane Directional Ver plane
Gain (Typ)	2 / 3 / 0 dBic
Efficiency (Min)	70 / 60 /40 %
Polarization	RHCP
Axial Ratio (Max)	14 / 4 / 6 dB

MECHANICAL SPECIFICATIONS

Size	35x35x7mm
Weight	25g
Color	Gray

ENVIRONMENTAL SPECIFICATIONS

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

* Test with 70mm*70mm ground plane.

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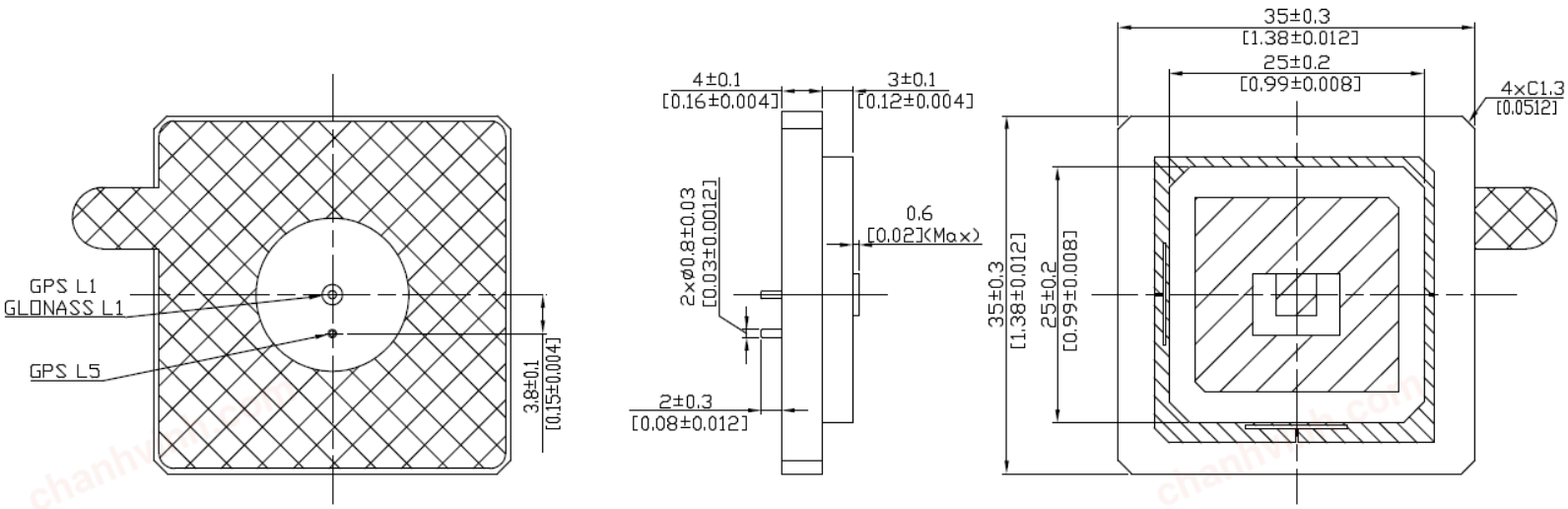
MECHANICAL DRAWING



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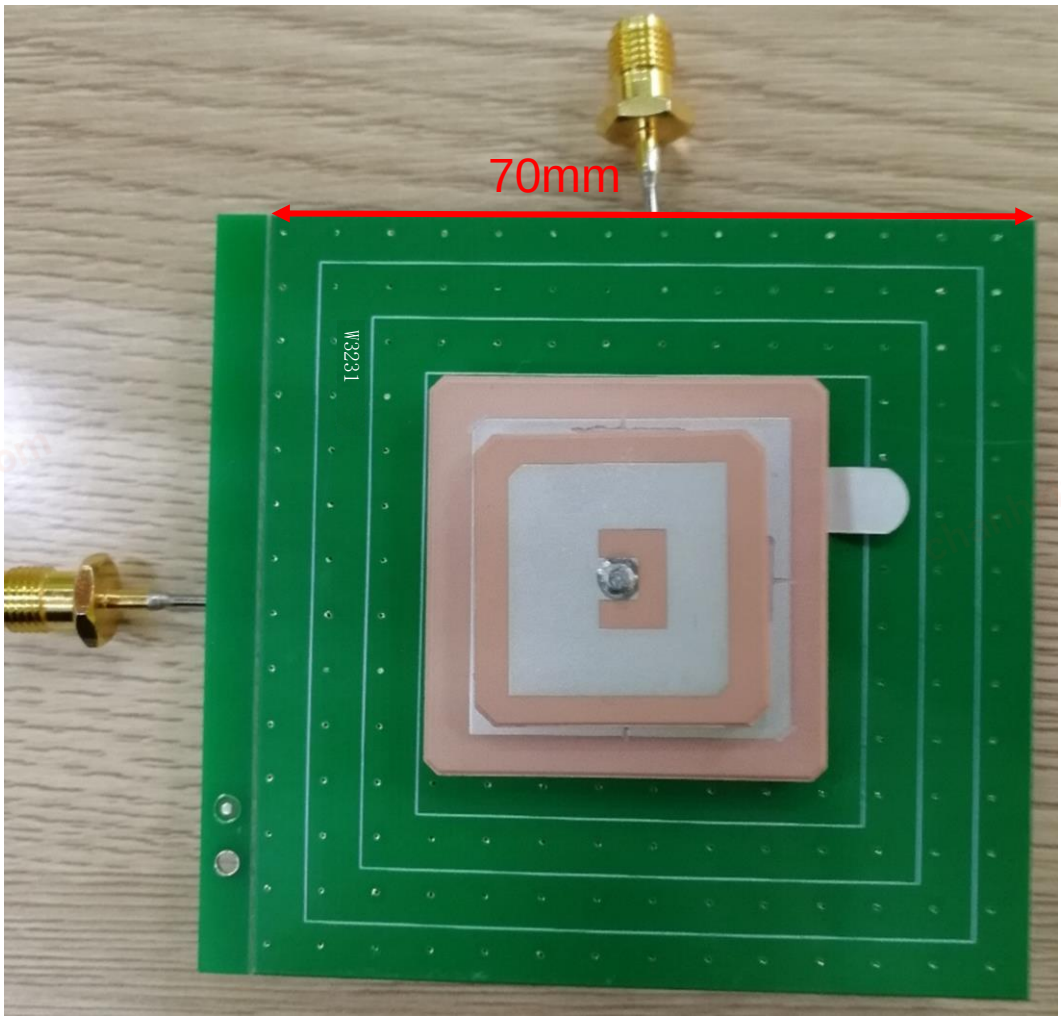
TEST SETUP



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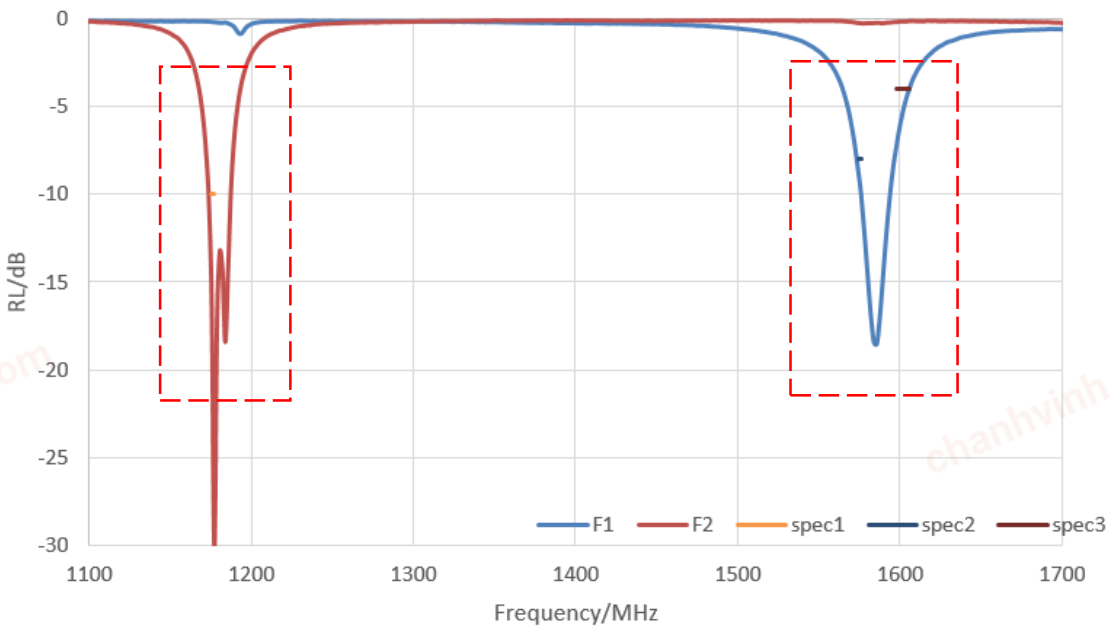
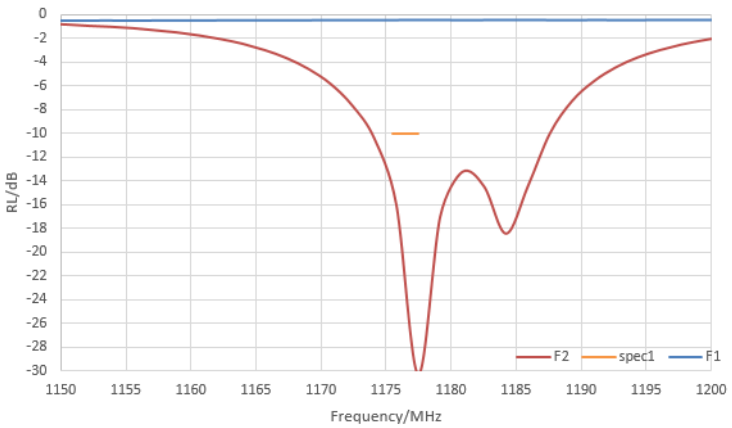
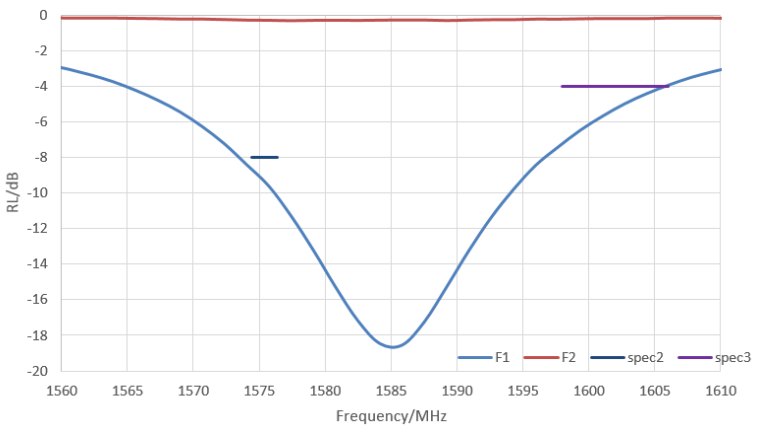
CHARTS

Return Loss vs Frequency







Issue: 2020

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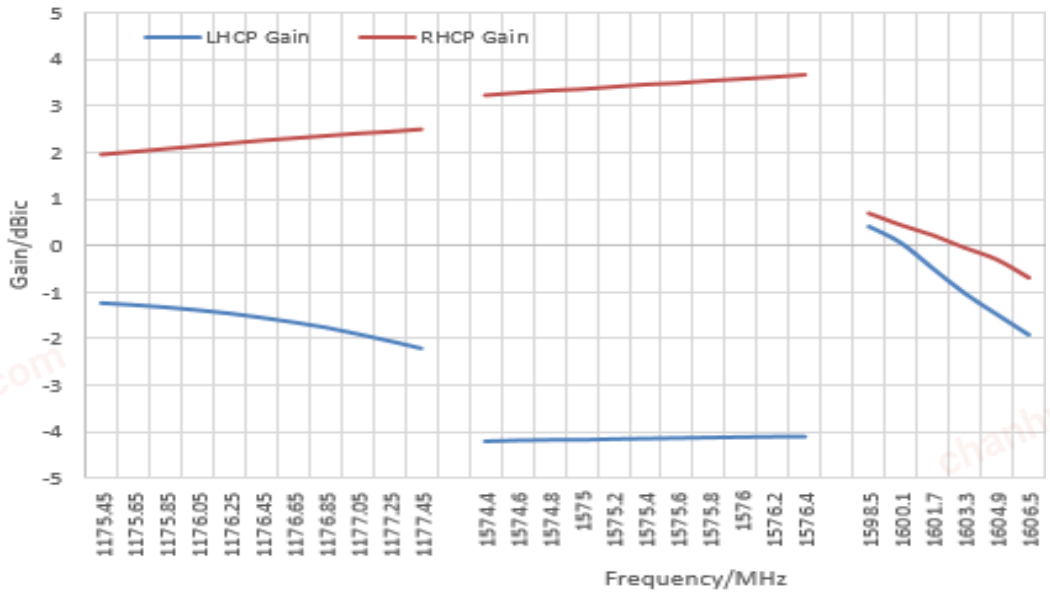
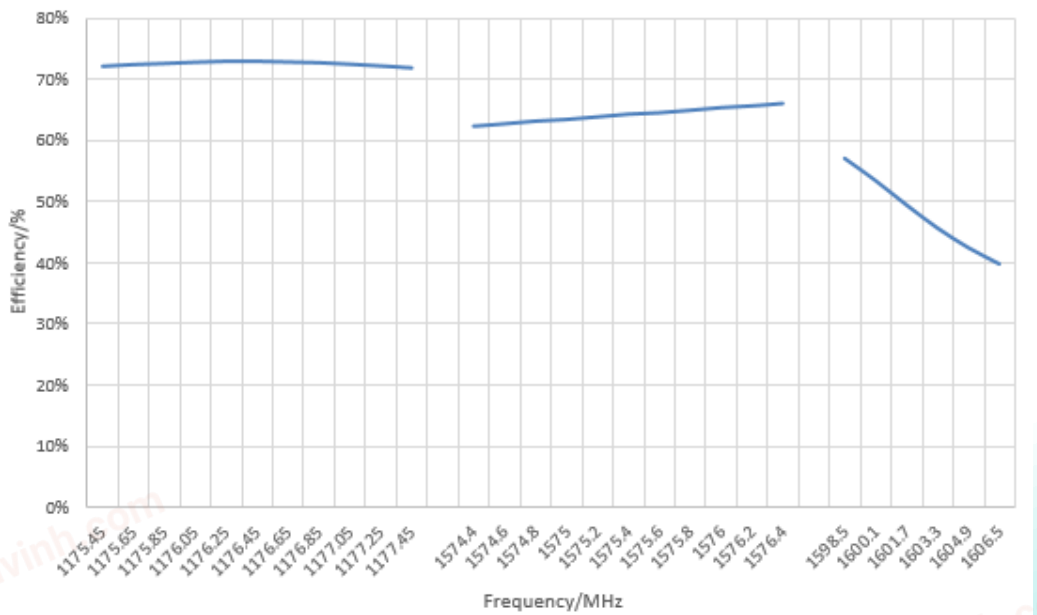
CHARTS

Gain vs Frequency



Radiation Efficiency vs Frequency



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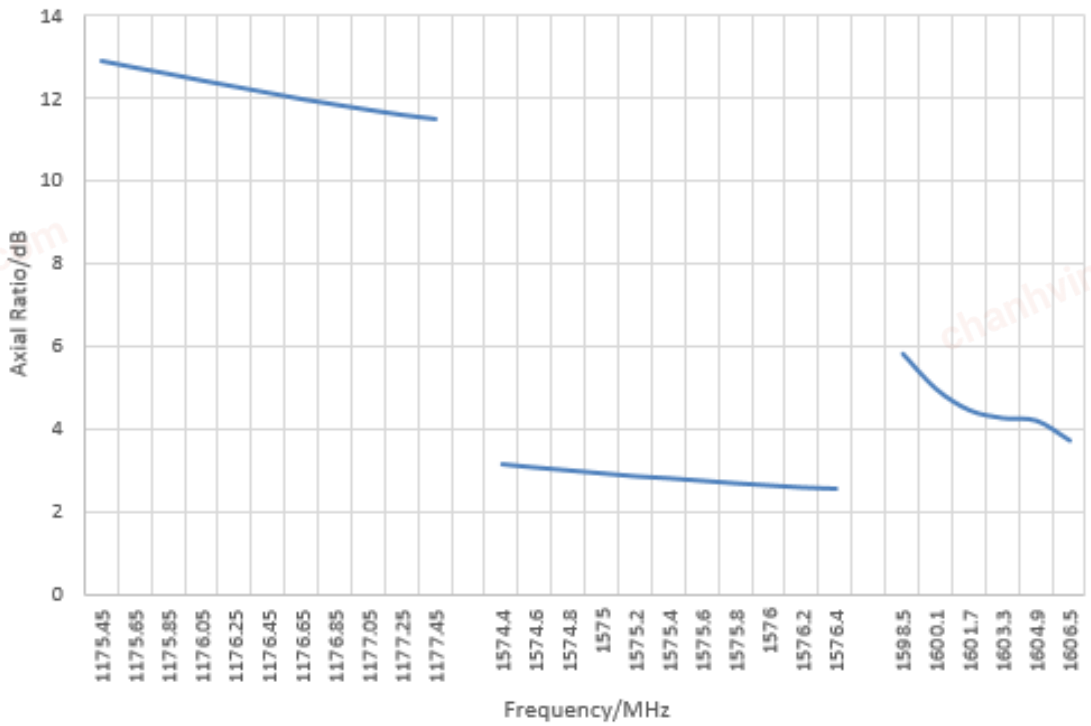
CHARTS

Axial Ratio vs Frequency



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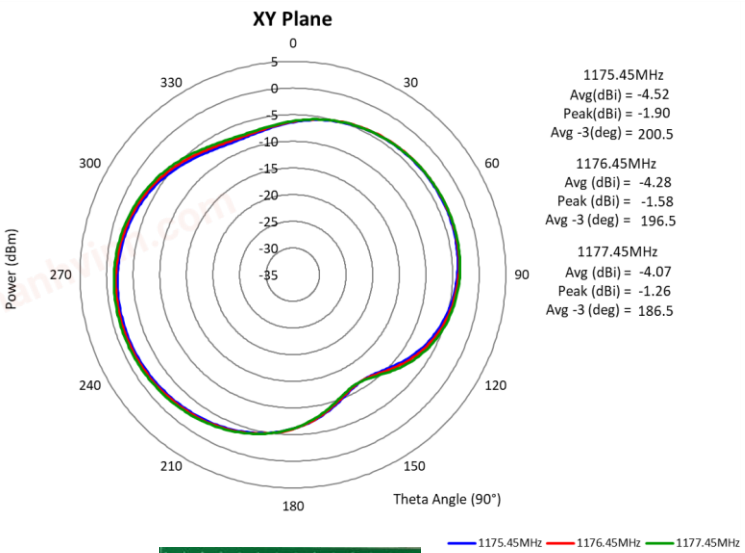
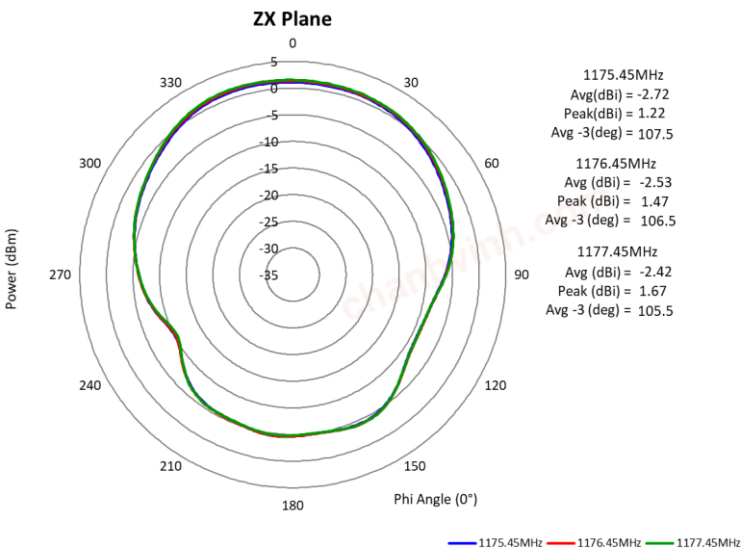
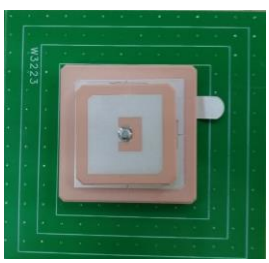
CHARTS

Radiation Pattern 2D/GPS L5









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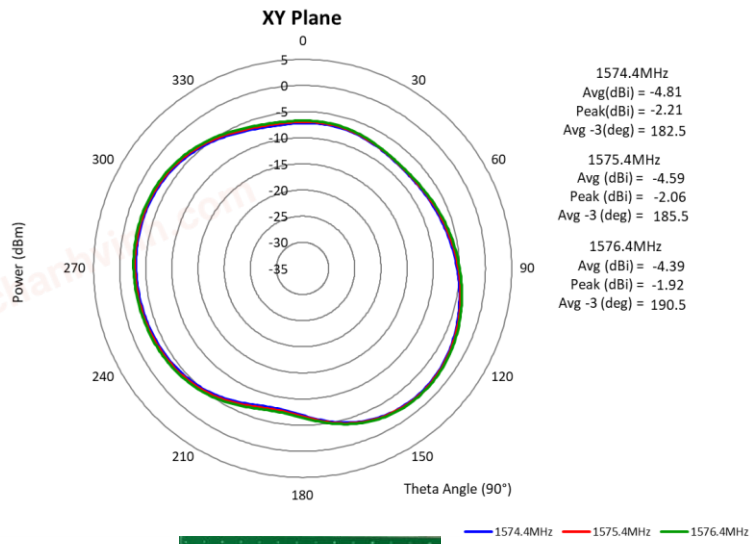
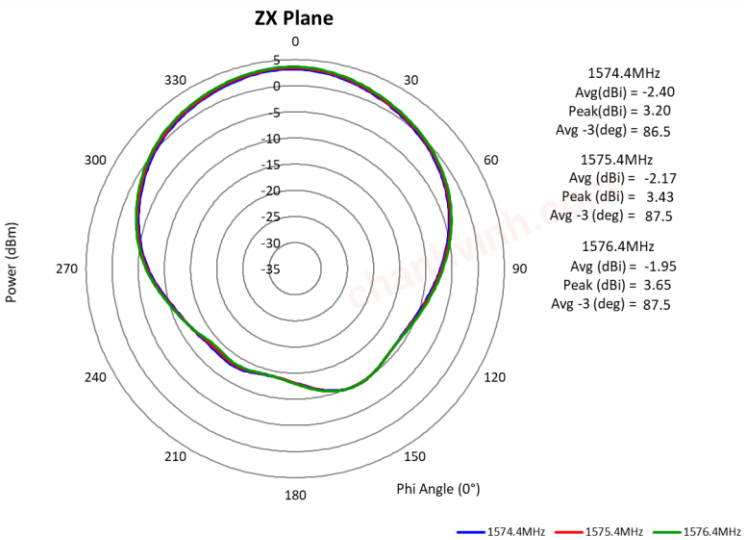
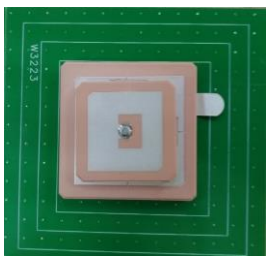
CHARTS

Radiation Pattern 2D/GPS L1









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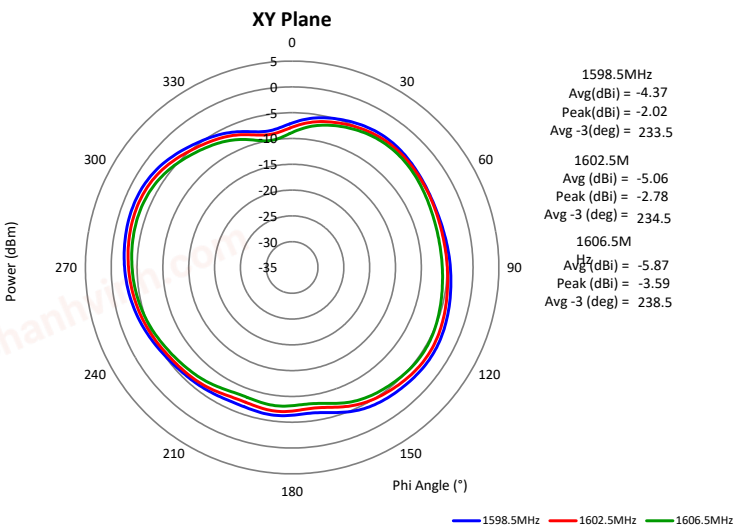
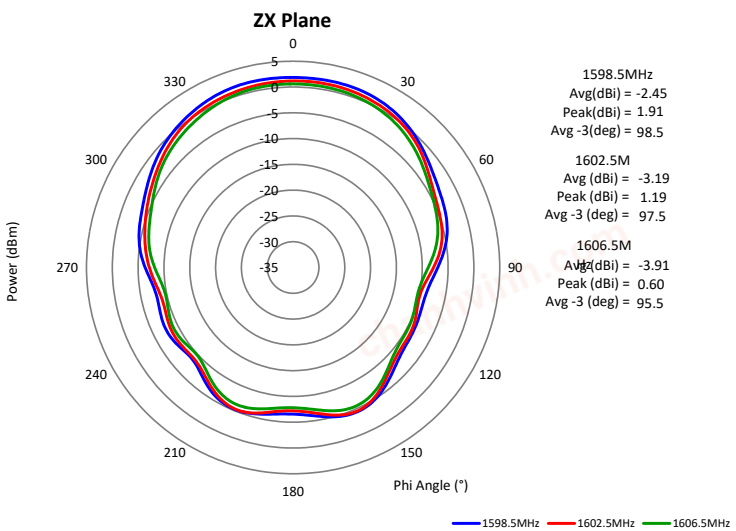
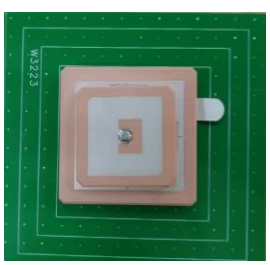
Radiation Pattern 2D/ Glonass L1









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PACKAGING

120pcs antenna per PE bag

120pcs antenna per inbox

240pcs antenna per outbox

Outbox: 400mm*300mm*180mm

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