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Pulse | LARSEN Antennas
A YAGEO Company

TECHNICAL DATA SHEET

Description: Wide Band LTE Monopole Antenna

Series: Internal PCB Antenna

PART NUMBER: W3404SMA



Features:

- Vertical mount on PCB
- Size W x L x H
  - 42.4 x 31.0 x 0.7mm
- Gain 2.2 / 4.4 dBi
- Efficiency 80 / 66 %
- RoHS compliant
- SMA male connector

Applications:

- LTE 698-960 MHz, LTE 1710-2690 MHz.
- GSM bands (GSM850, EGSM900, PCN1800, PCS1900), WCDMA band 1
- LTE Cat1M
- NBIoT

All dimensions are in mm / inches

Issue: 1924

RoHS COMPLIANT

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ELECTRICAL SPECIFICATIONS

Antenna Type	Vertical mount monopole
Frequency	698-960/1710-2690 MHz
Nominal Impedance	50 Ω
Return Loss	-10 dB
Radiation Pattern	Omni
Average Total Efficiency (698-960MHz)	80%
Average Total Efficiency (1710-2690MHz)	66%
Peak Gain (698-960MHz)	2.2 dBi
Peak Gain (1710-2690 MHz)	4.4 dBi
Polarization	Linear
Power Withstanding	3W

All RF parameters measured on 70mm X 140mm evaluation board.

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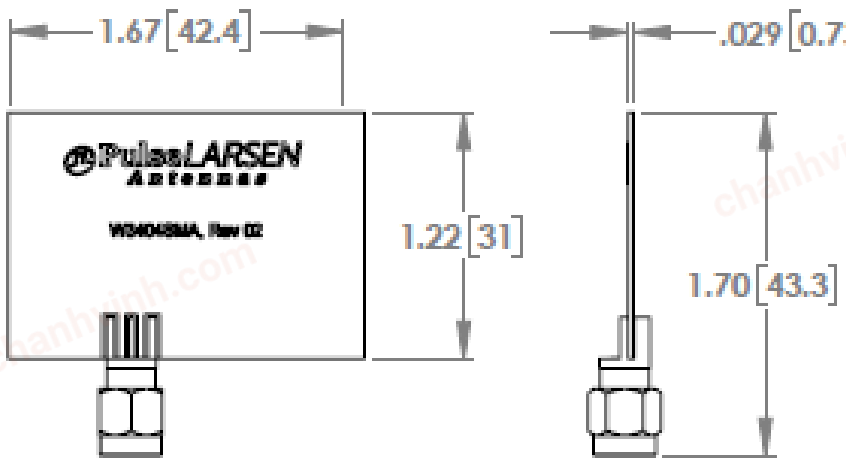
MECHANICAL SPECIFICATIONS

Overall Length	42.4 x 31.0 x 0.7mm
Antenna Color / Material	PCB black
Connector type	Edge mount SMA Plug
Weight	15g

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	40 - 85° C
Storage Temperature	5 - 23° C
RoHS Compliant	Yes

MECHANICAL DRAWING



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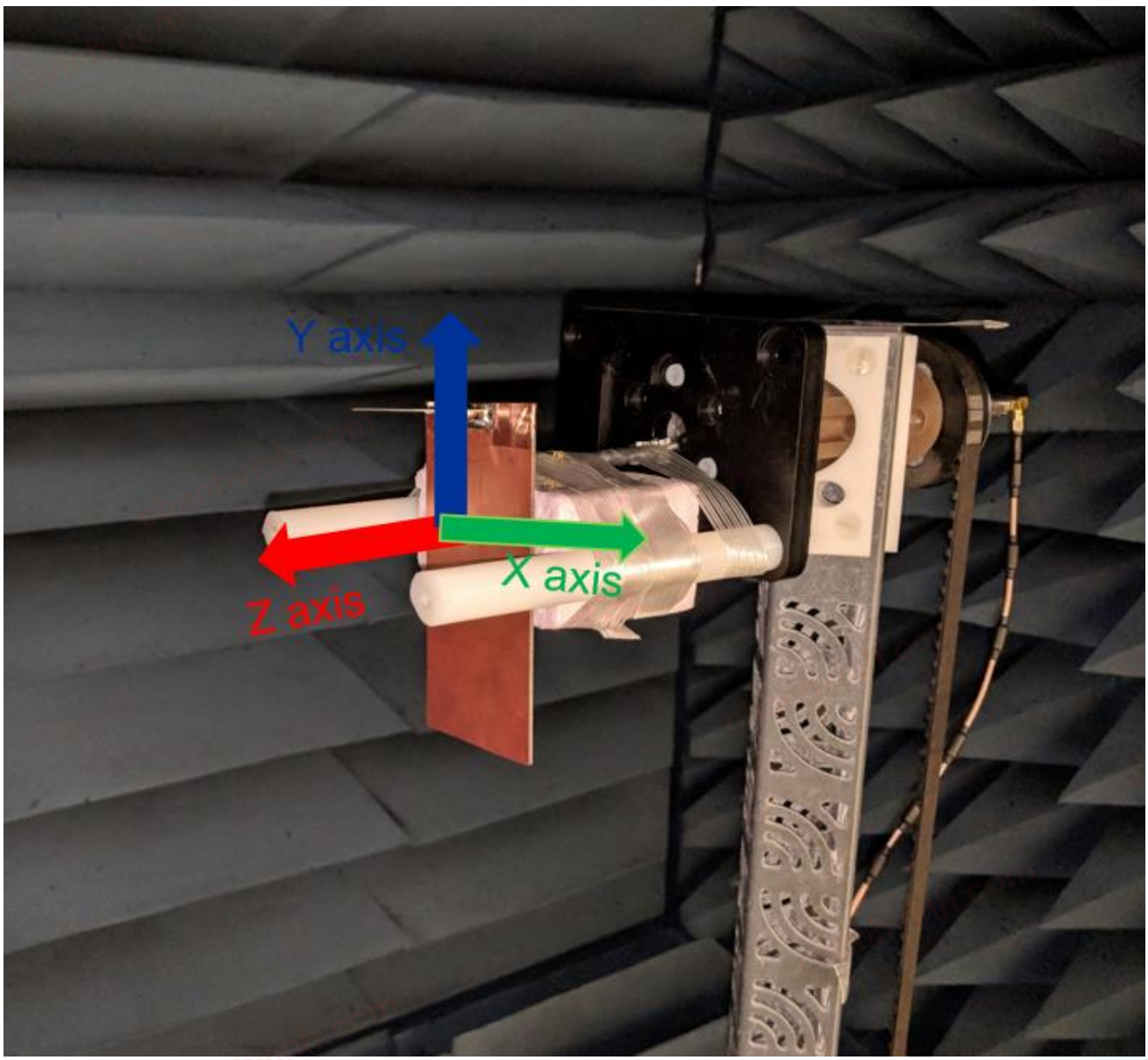
TEST SETUP



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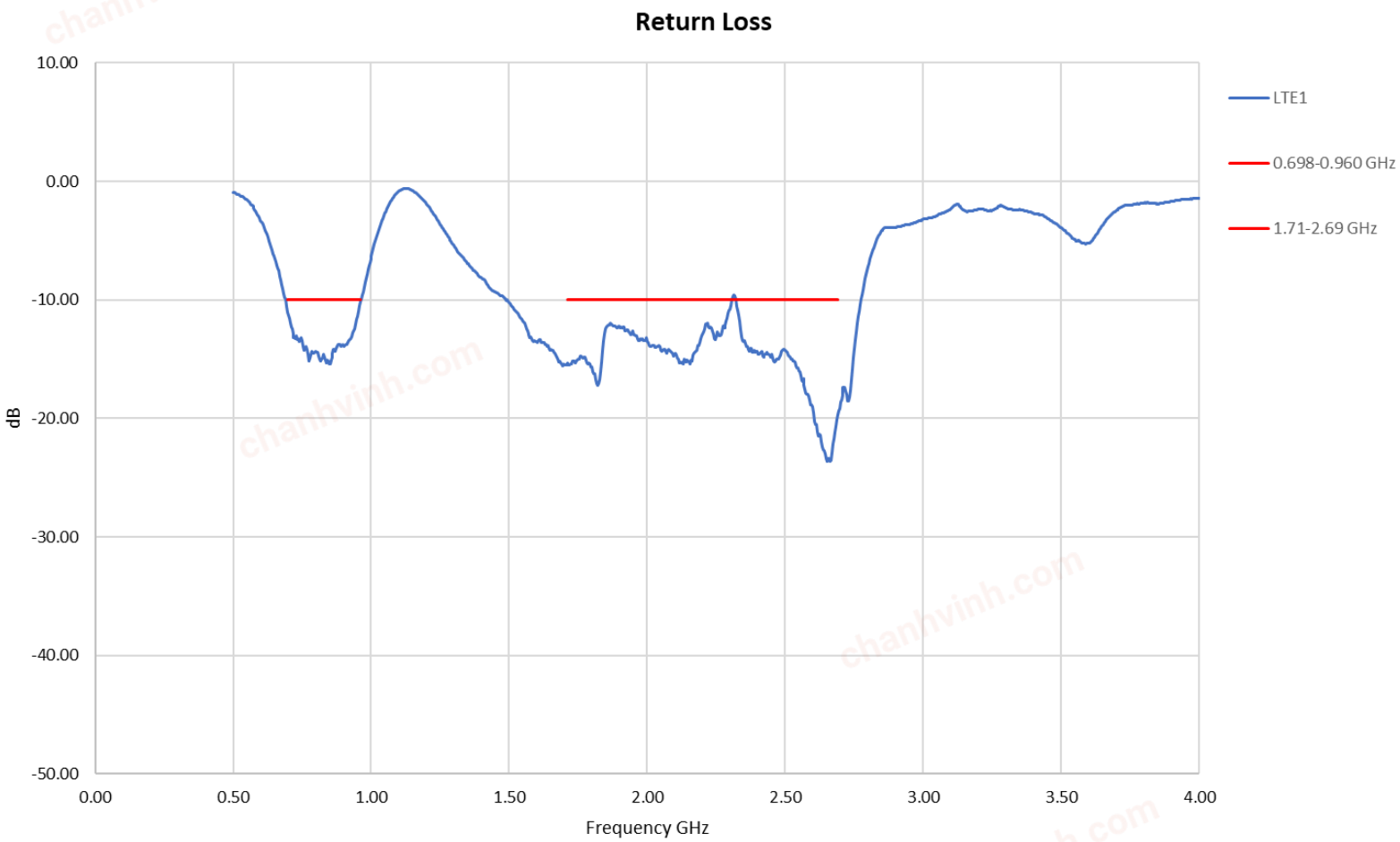
CHARTS

Return Loss



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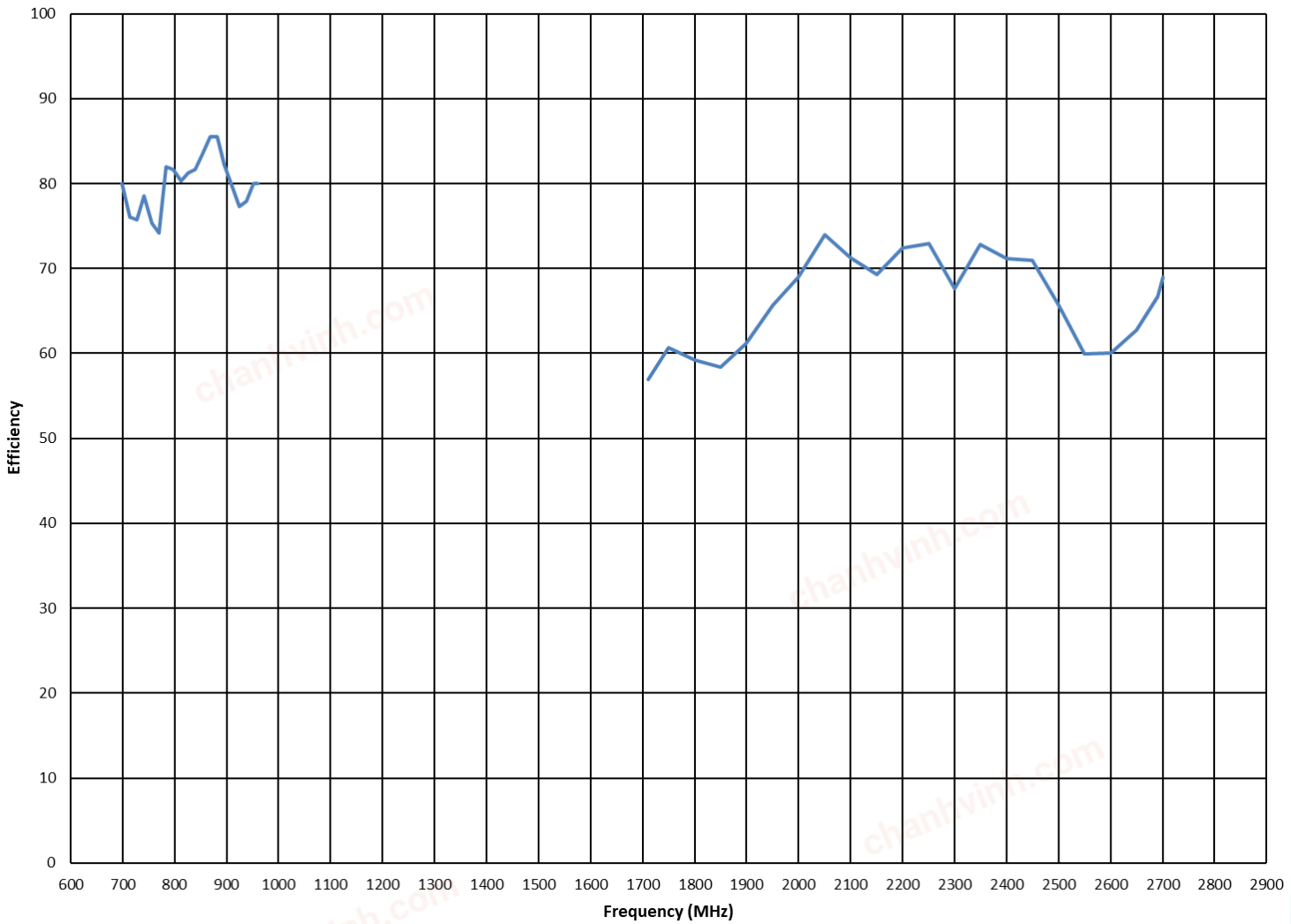
CHARTS

Efficiency %

Efficiency vs. Frequency

Measured at Pulse, USA - Apr. 17, 2018



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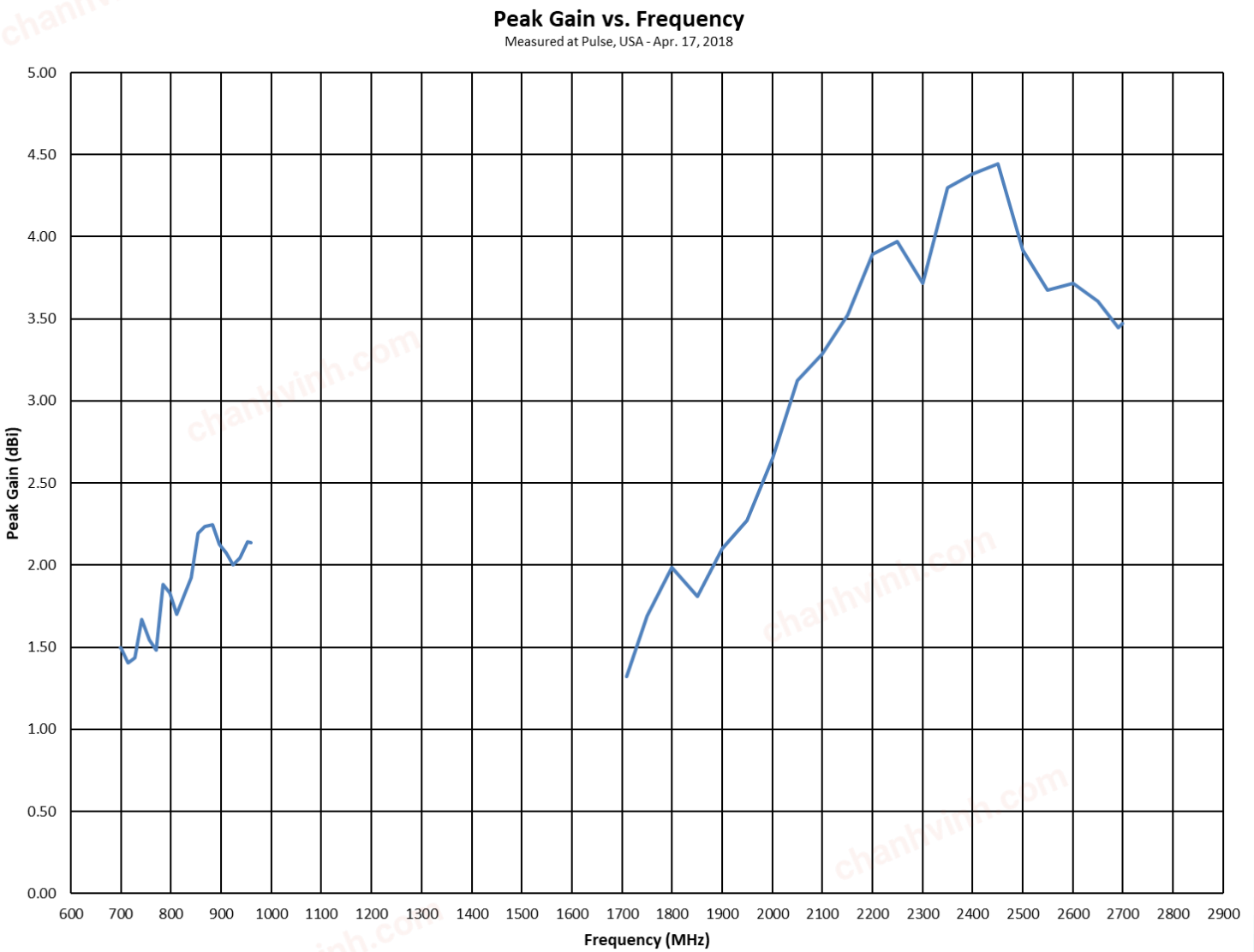
CHARTS

Peak Gain



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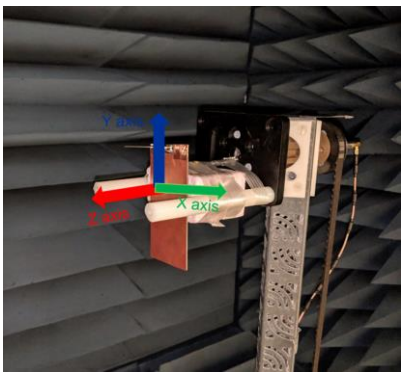
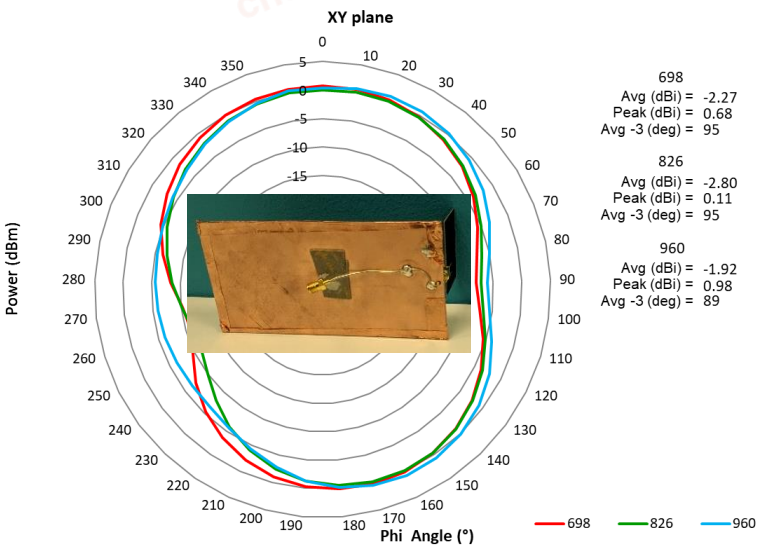
CHARTS

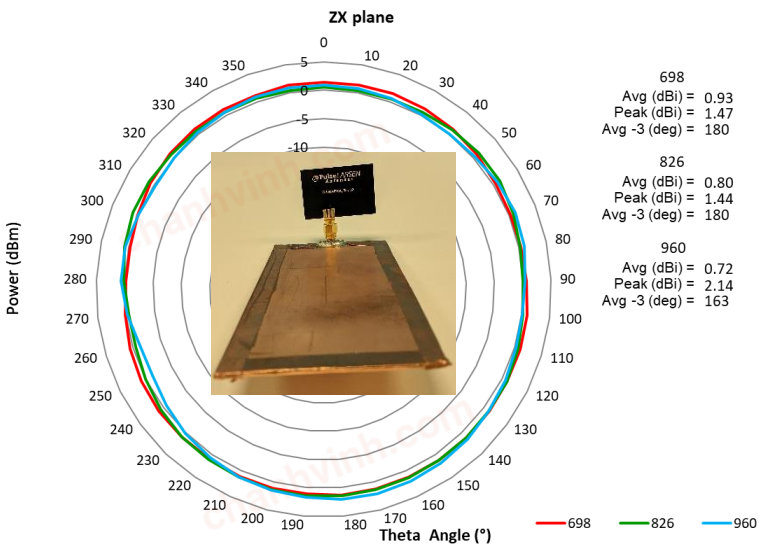
Free space radiation pattern: 698 MHz- 960 MHz



Horizontal Plane



Elevation Plane



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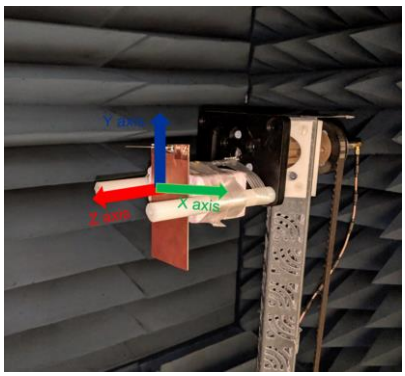
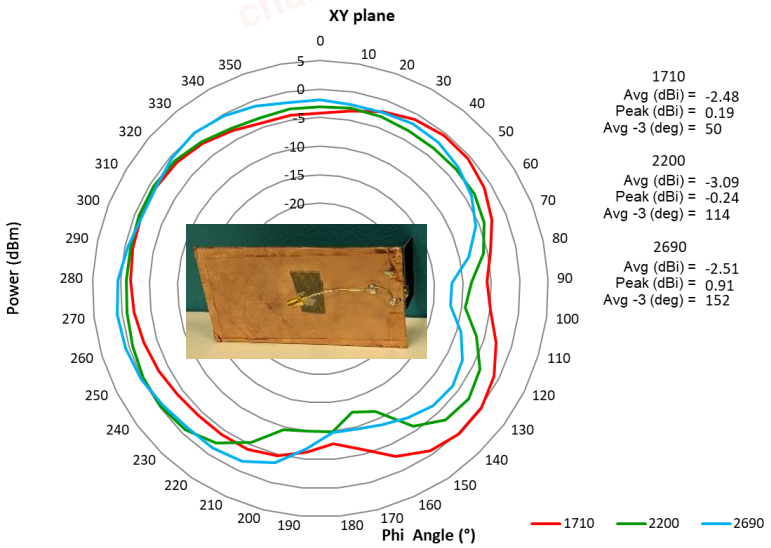
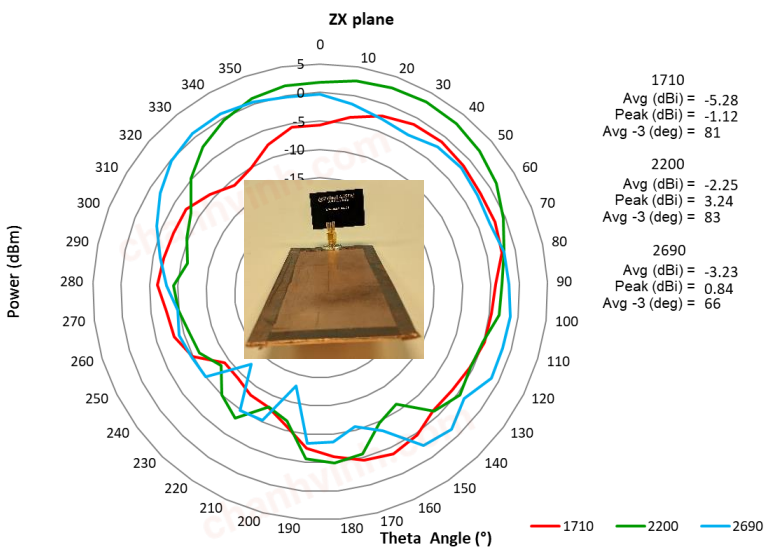
Free space radiation pattern: 1710 MHz- 2690 MHz



Horizontal Plane



Elevation Plane



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PACKAGING

Per package tray 24pcs product
Per carton box 19pcs tray + 1pcs extra empty tray
Total：456 pcs product
Big box dimensions (MM)：285x375x200MM

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