

**Series: Stubby Antenna**

**Description:**

Tri-Band 868/915/2400-2500MHz, Straight

**PART NUMBER: W1698/W1699/W1698-M**



W1698 / W1699



W1698-M

**Features:**

- Small form factor monopole
- Antenna size W x H:  
W1698 / W1699 (10.4 x 49.6mm)  
W1698-M (12 x 50mm)
- Connector Type:  
W1698 SMA (male)  
W1699 RP-SMA (male)  
W1698-M SMA (male)
- RoHS Compliant Product

**Applications:**

- Tri-band Combo
- Frequency range:  
868 / 915 / 2400 - 2500 MHz
- IoT, M2M Applications
- Sigfox, Lora
- Bluetooth, BLE, WiFi

All dimensions are in mm

Issue: 1911

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For more information:

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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**

Frequency	868-928MHz 2400-2500MHz
Nominal Impedance	50Ω
VSWR	3 868-928MHz 3 2400-2500MHz
Peak Gain	0.3dBi 868-928MHz 1.2dBi 2400-2500MHz
Efficiency	64% / 70%
Radiation Pattern	Omni
Polarization:	Linear
Power withstanding	5W

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**MECHANICAL SPECIFICATIONS**

Weight	W1698 / W1699: 7.5g W1698-M: 7.8g
Antenna Color	Black
Connector type	W1698/W1698-M SMA(Male) W1699 RP-SMA(Male)

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature	-30/+75 ° C
Storage Temperature	-30/+75 ° C
Ingress Protection	IP65 (W1698-M) IP42 (W1698 and W1699)
Wind-loading	100km/h
RoHS Compliant	Yes

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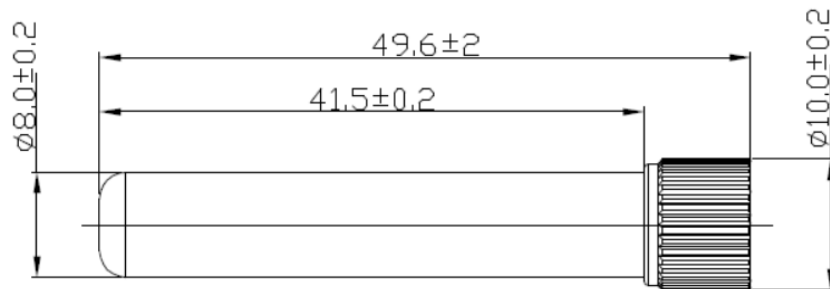
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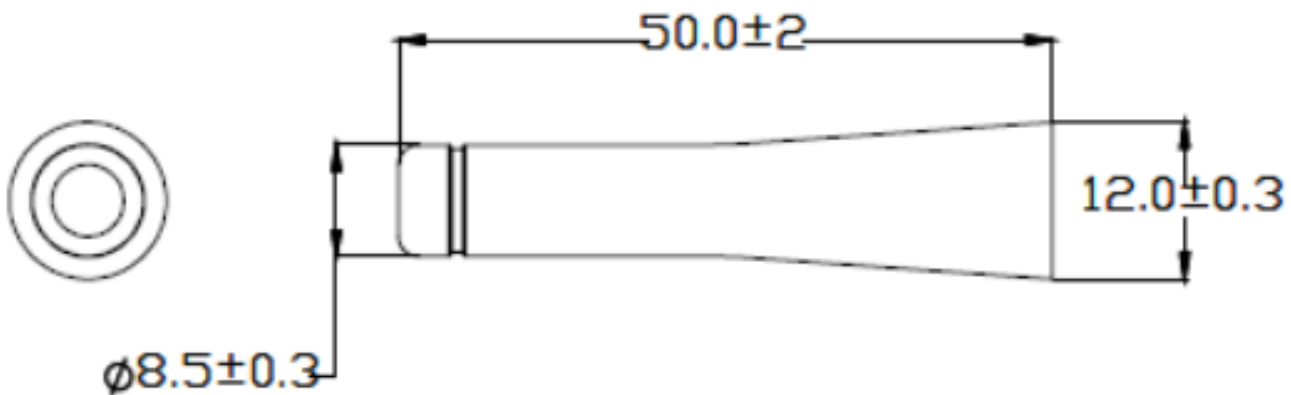
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MECHANICAL DRAWING

W1698 / W1699



W1698-M



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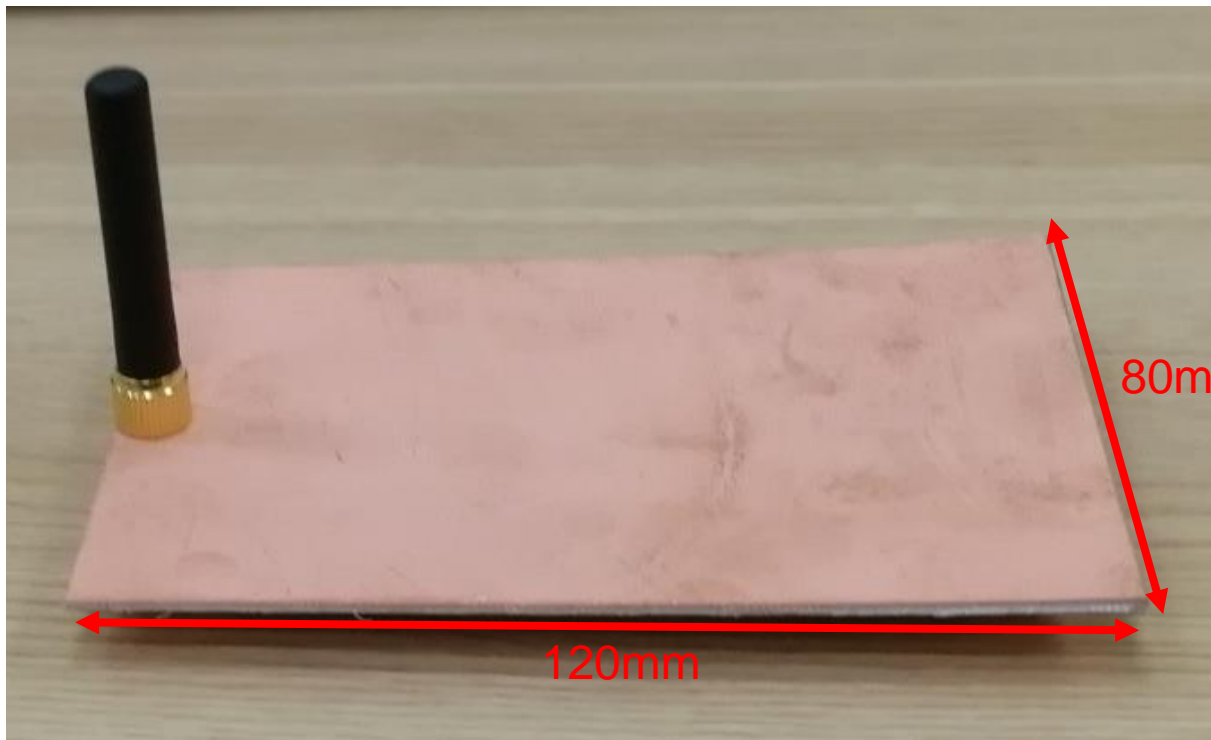
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**TEST SETUP**



Test with 80mm\*120mm ground plane.

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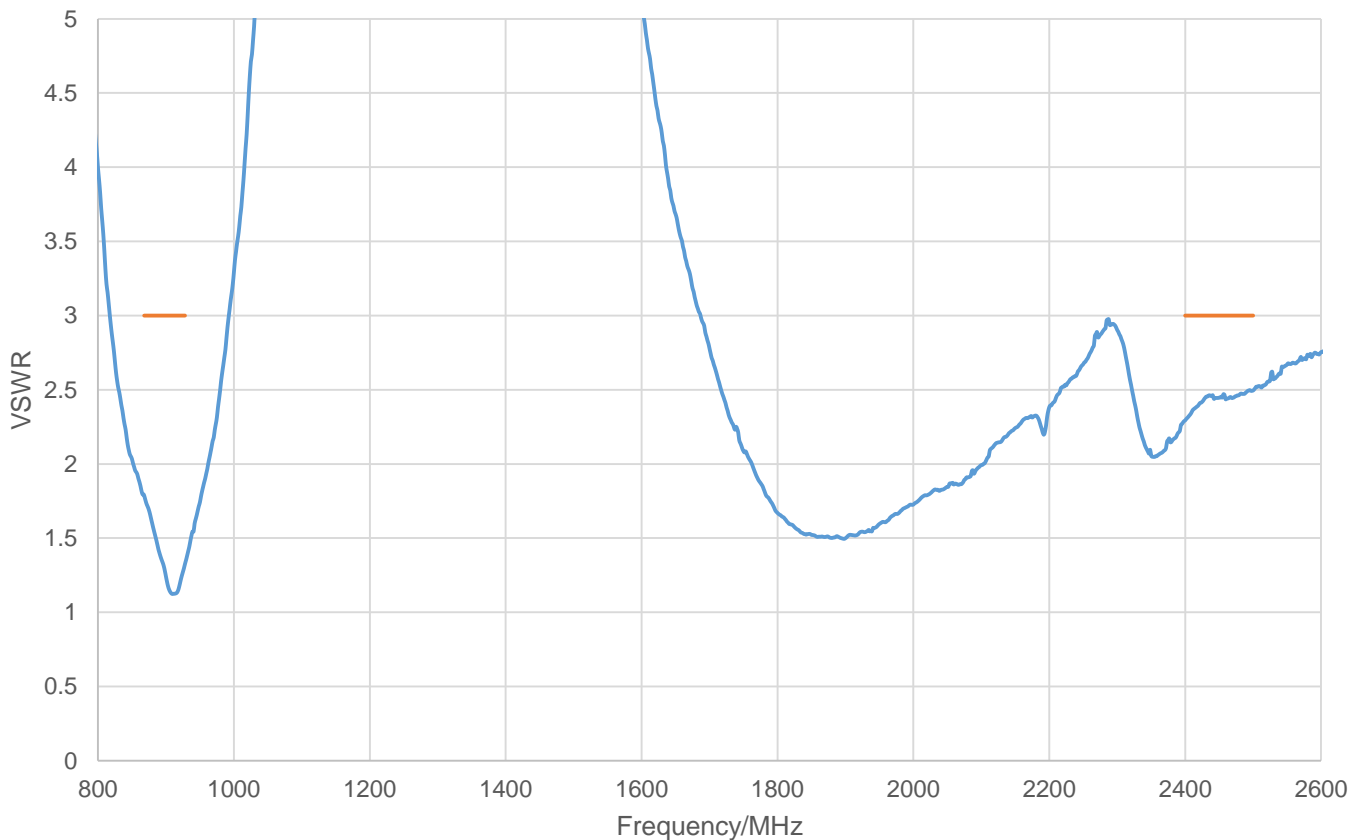
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**CHARTS**

**Return Loss vs Frequency**



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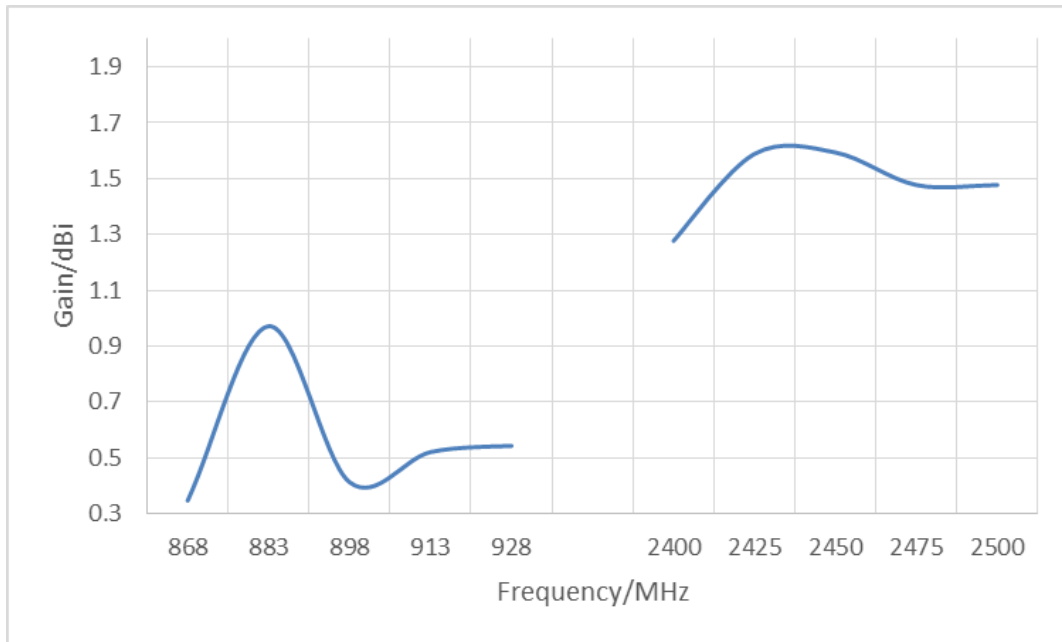
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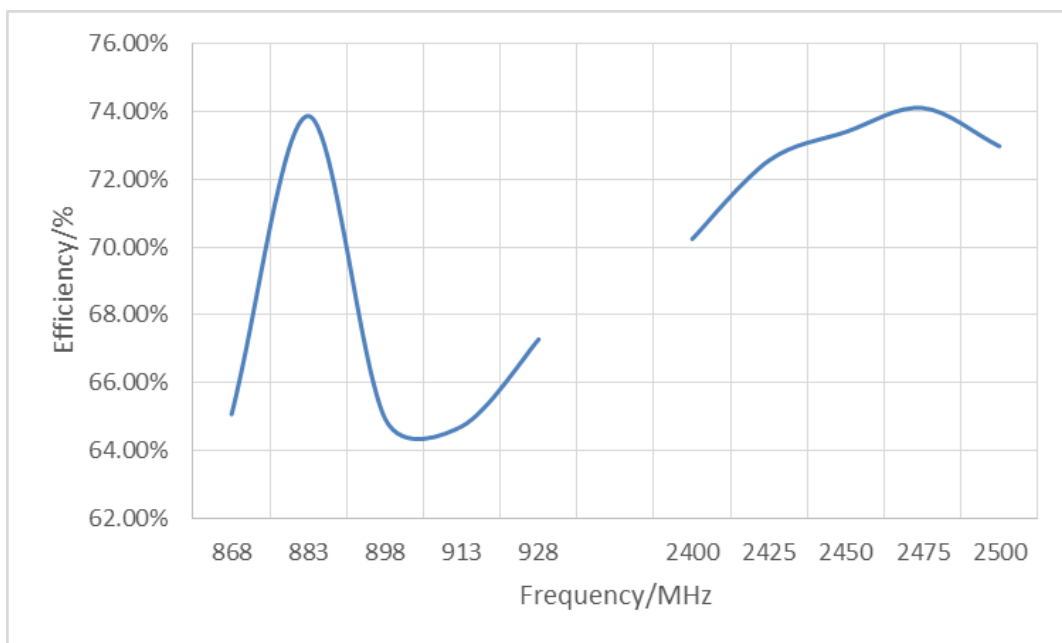
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**CHARTS**

**Peak Gain vs Frequency**



**Radiation Efficiency vs Frequency**



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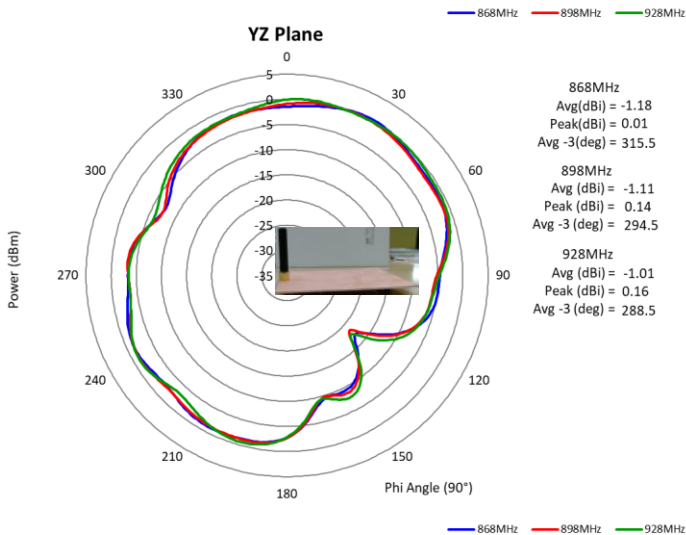
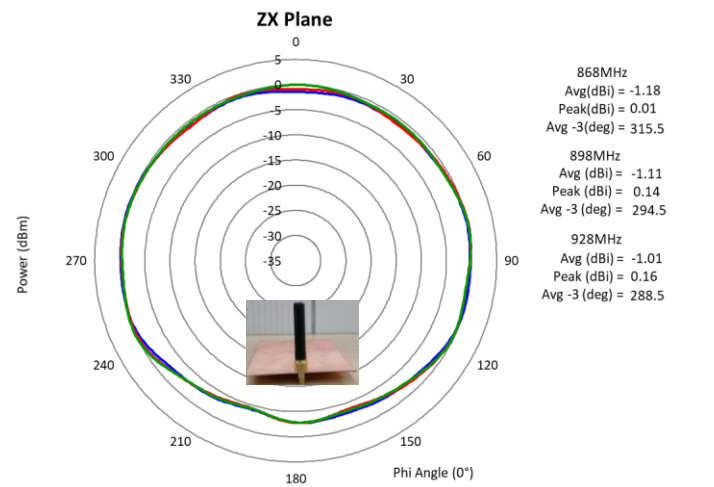
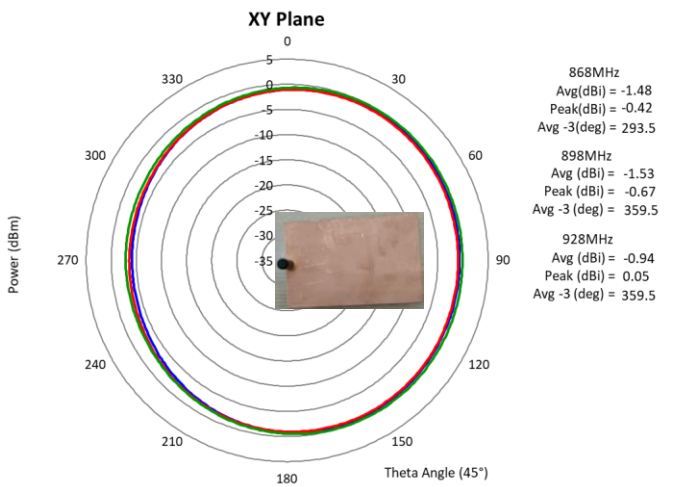
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CHARTS

Free Space Radiation Pattern(868-928MHz)



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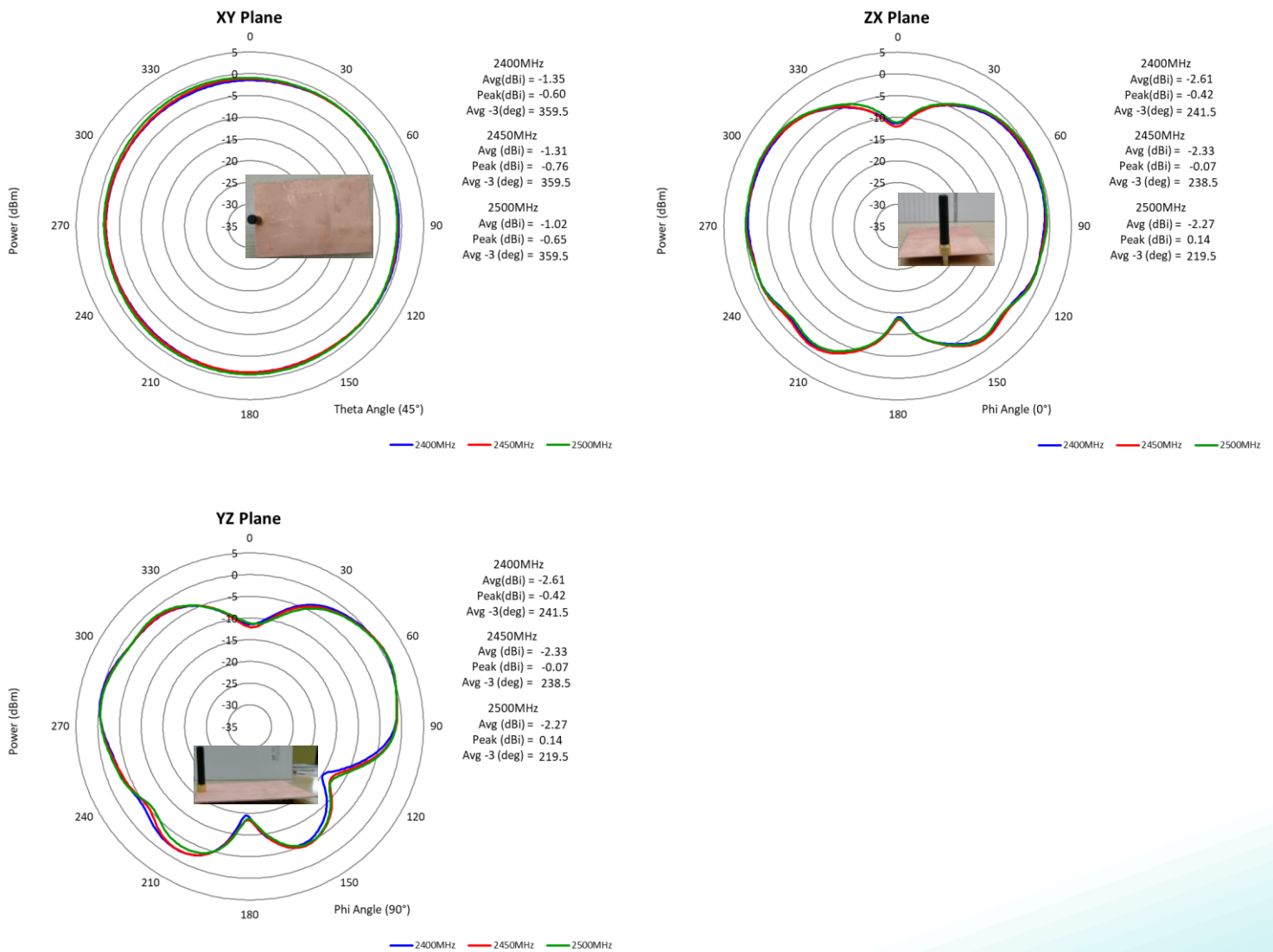
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**CHARTS**

**Free Space Radiation Pattern(2400-2500MHz)**



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**PACKAGING**

1pcs antenna per PE bag

24pcs PE bags per tray

14pcs trays per package box(2 pcs empty tray)

288pcs antenna per package

Package box: 460mm\*235mm\*140mm