

### Features:

- 2400-2500/4900-5950MHz
- Efficiency >70%
- Gain > 3dBi
- Size 19.8x18x1.6mm
- Radiation pattern Omni
- RoHS Compliant

### Applications:

- ISM band 2.4GHz radios
- ISM band 5GHz radios
- Bluetooth, BLE
- WiFi Dualband
- 2.4 and 5GHz MiMo applications
- Gateways, Data terminals, Hot Spots
- IoT, Security, Telematics

All dimensions are in mm / inches

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For more information:

Pulse Worldwide Headquarters  
15255 Innovation Drive #100  
San Diego, CA 92128  
USA  
Tel: 1-858-674-8100

Pulse/Larsen Antennas  
18110 SE 34<sup>th</sup> St Bldg 2 Suite 250  
Vancouver, WA 98683  
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, 4<sup>th</sup> Phase  
Suzhou New District  
Jiangsu Province, Suzhou 215009 PR China  
Tel: 86 512 6807 9998



Series: Embedded PCB Ant

Description: 2.4/5GHz Vertical mount PCB  
Antenna

PART NUMBER: W3712

### ELECTRICAL SPECIFICATIONS

Frequency	2400-2500/4900-5950 MHz
Nominal Impedance	50 Ω
*VSWR	2:1
Radiation Pattern	Omni
*Gain	>3dBi
*Efficiency	>60%
Polarization	Vertical
Power Withstanding	2 W

### MECHANICAL SPECIFICATIONS

Overall Length	19.8x18x1.6mm
Weight	1.06g
Antenna Material	PCB Antenna
Fix system	Solder

### ENVIRONMENTAL SPECIFICATIONS

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

### OTHER SPECIFICATIONS

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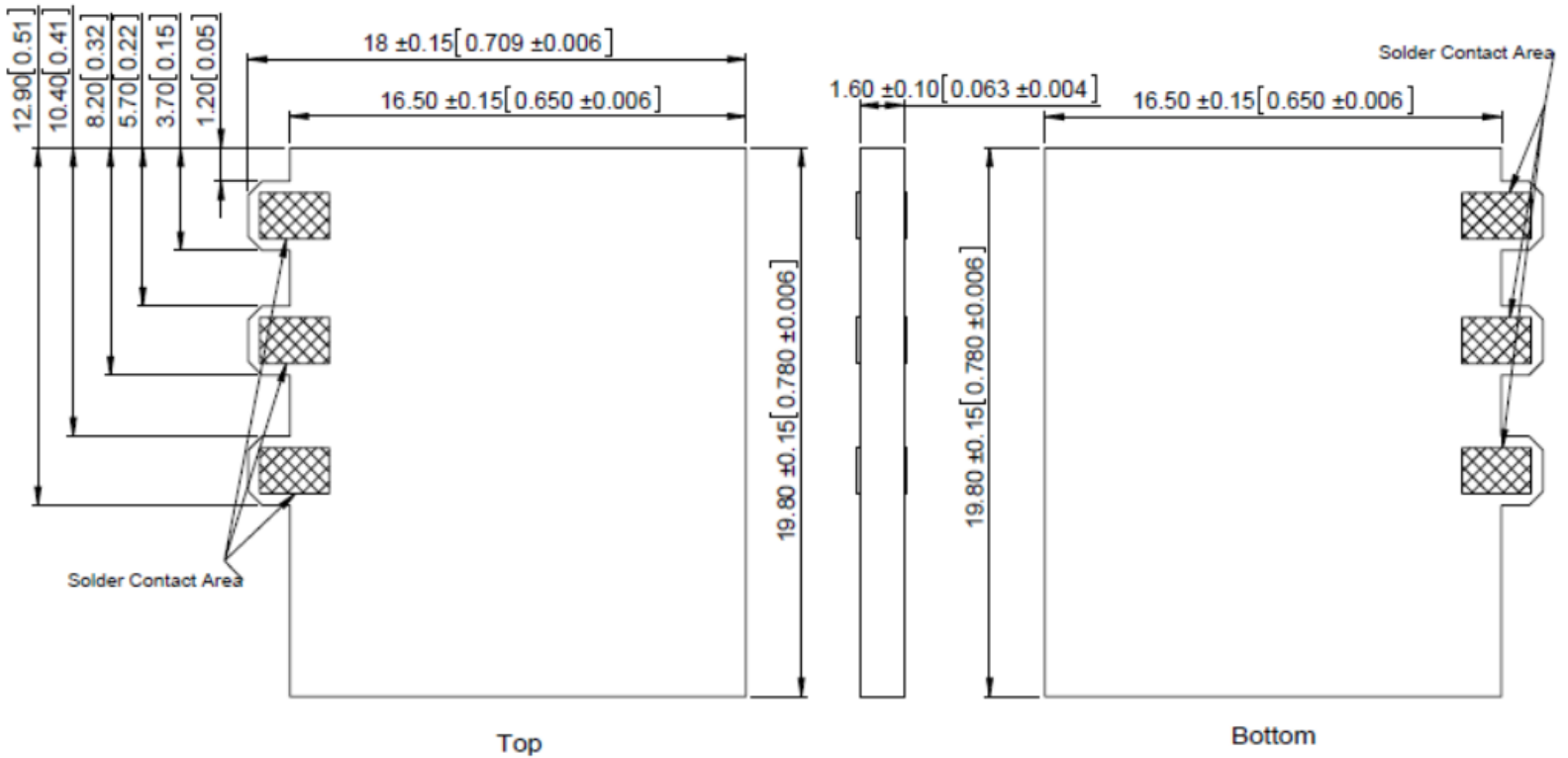
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MECHANICAL DRAWING



Dimension Unit: mm[Inch]

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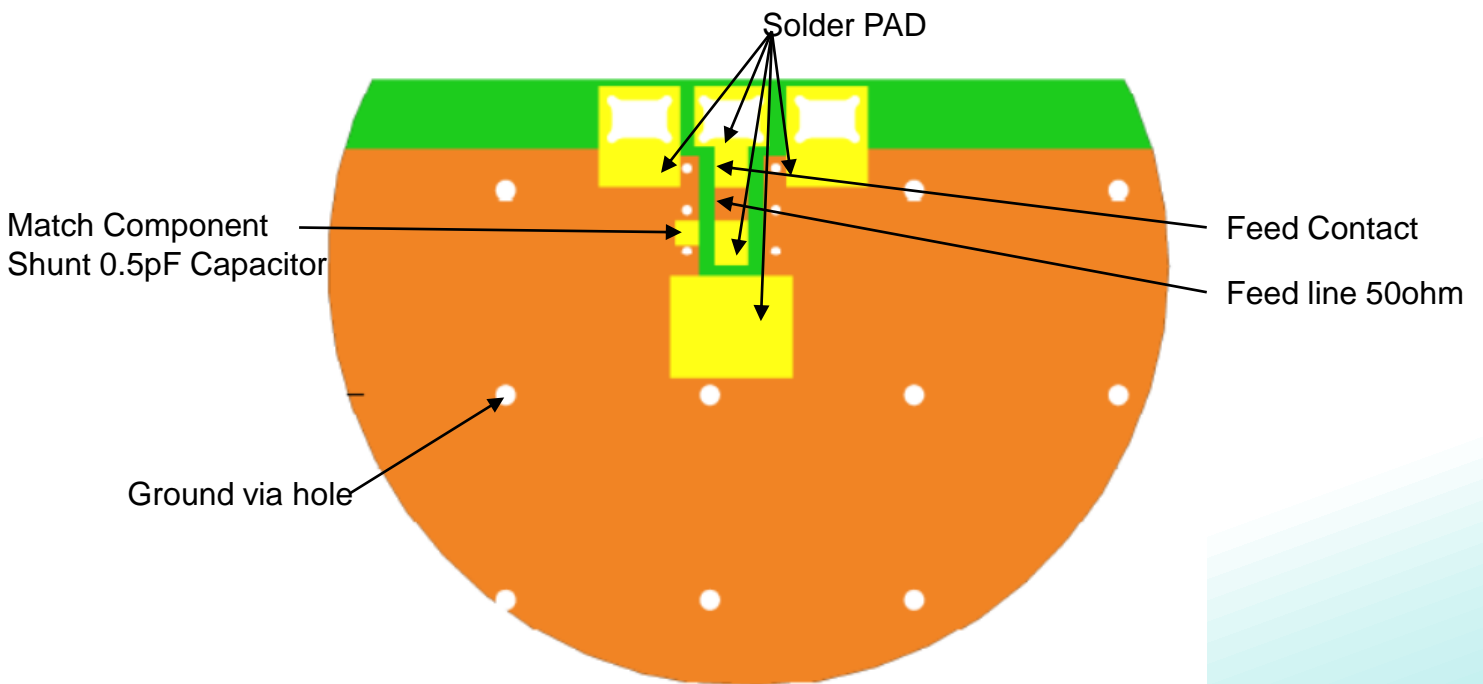
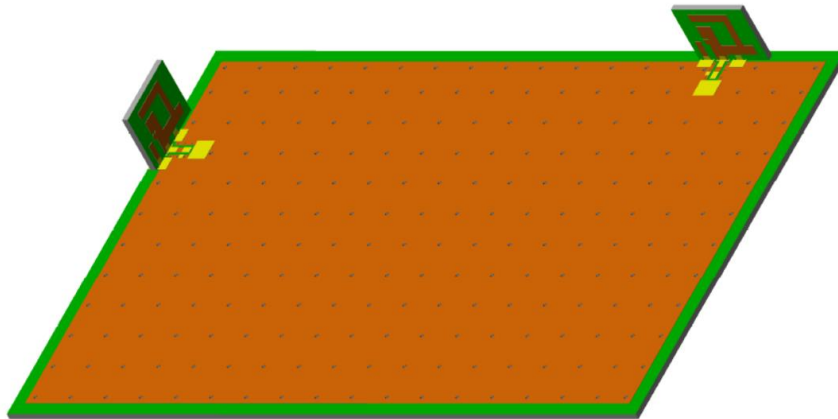
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TEST SETUP

Test PWB for PCB Antenna W3712



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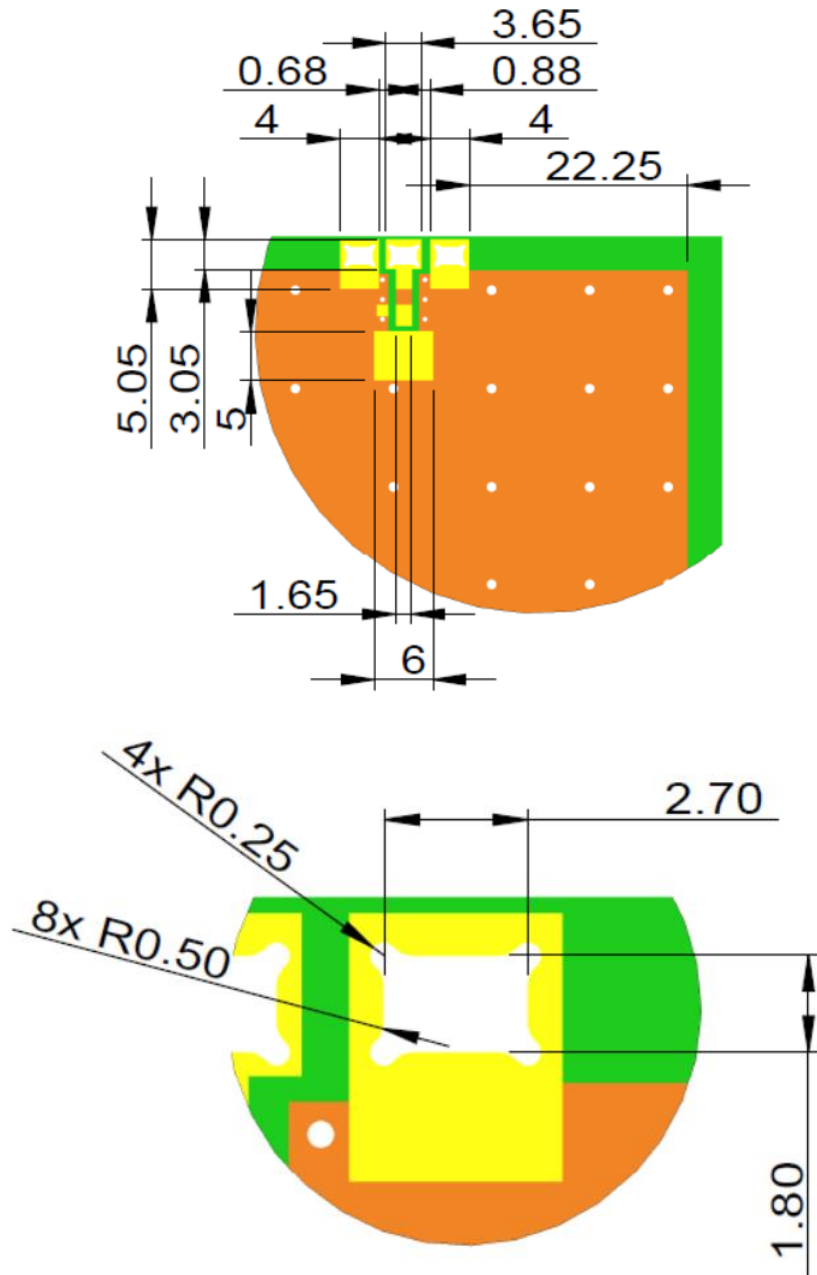
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TEST SETUP

PWB PAD Dimension in top copper



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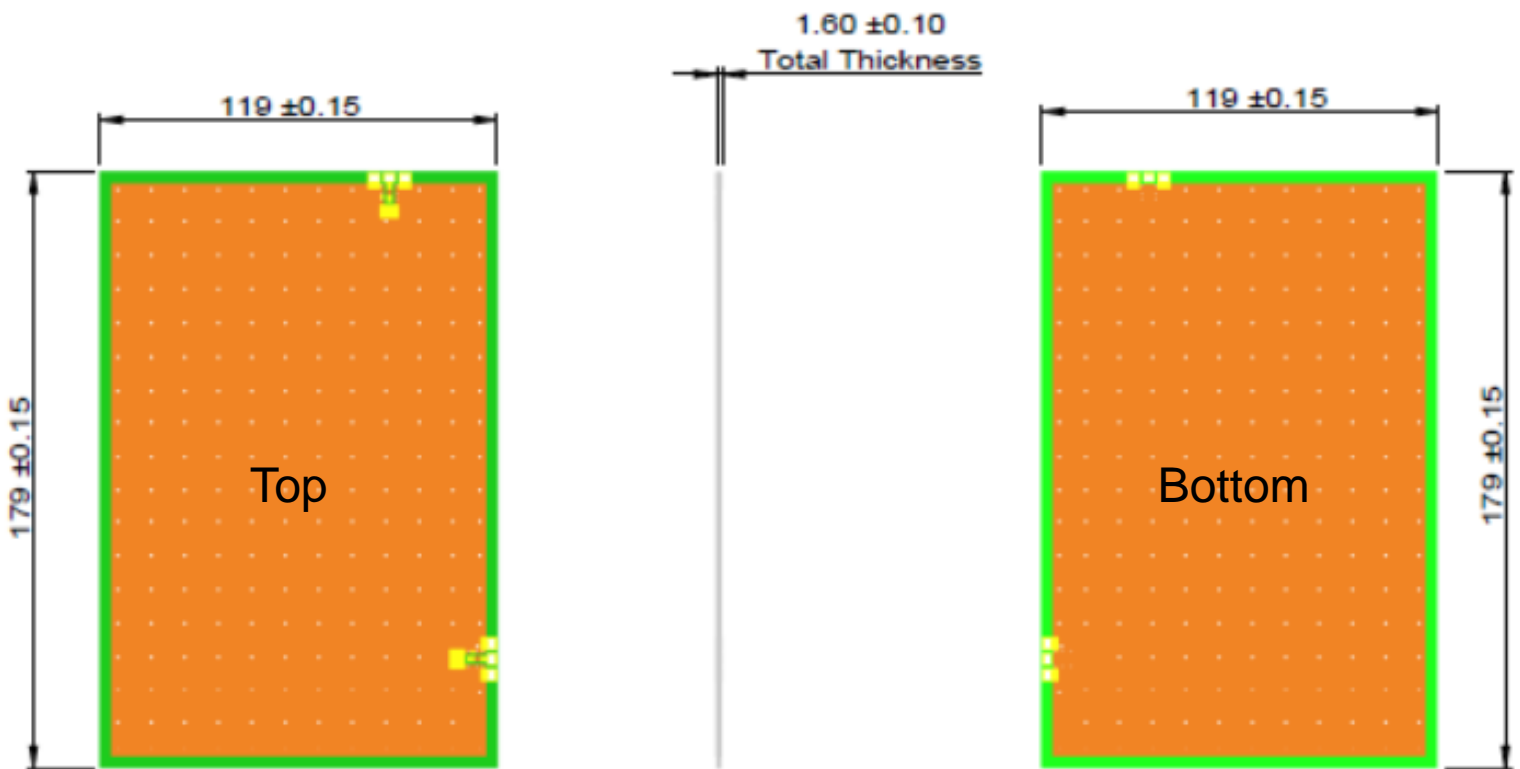
Series: Embedded PCB Ant

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PART NUMBER: W3712

TEST SETUP

PWB Layout, Pulse PWB size;119x179mm, thickness 1.6mm, other size boards can be used depending on customer size.



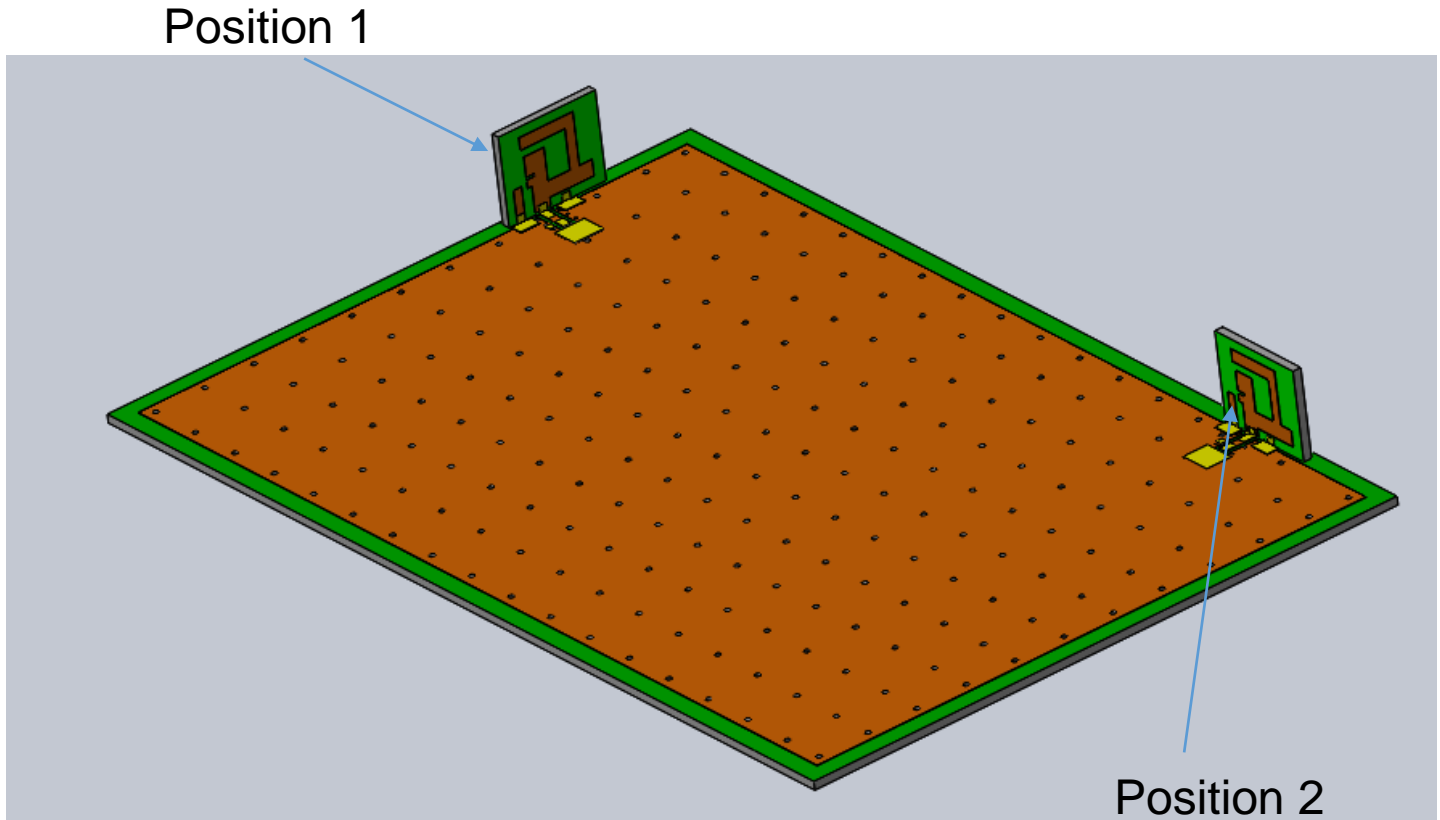
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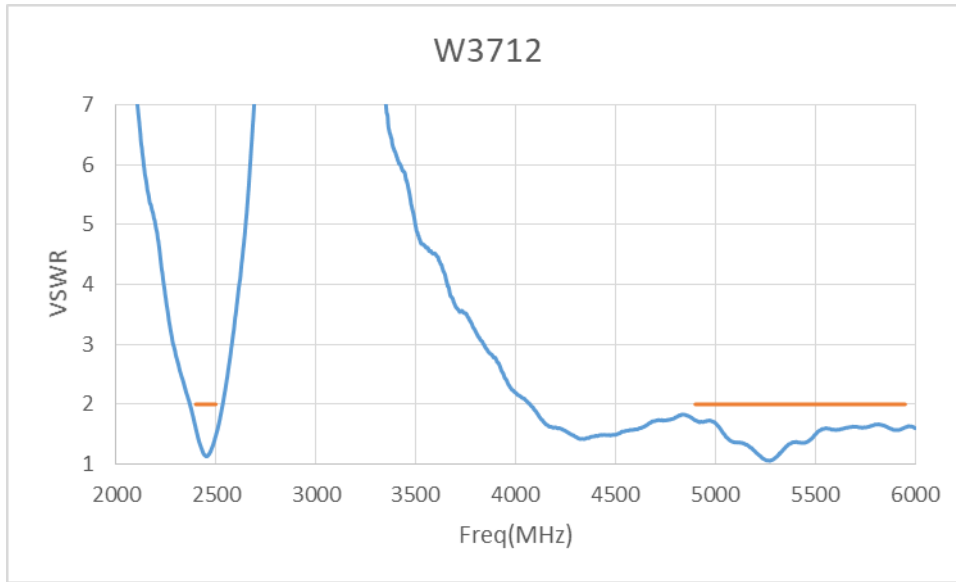
TEST SETUP



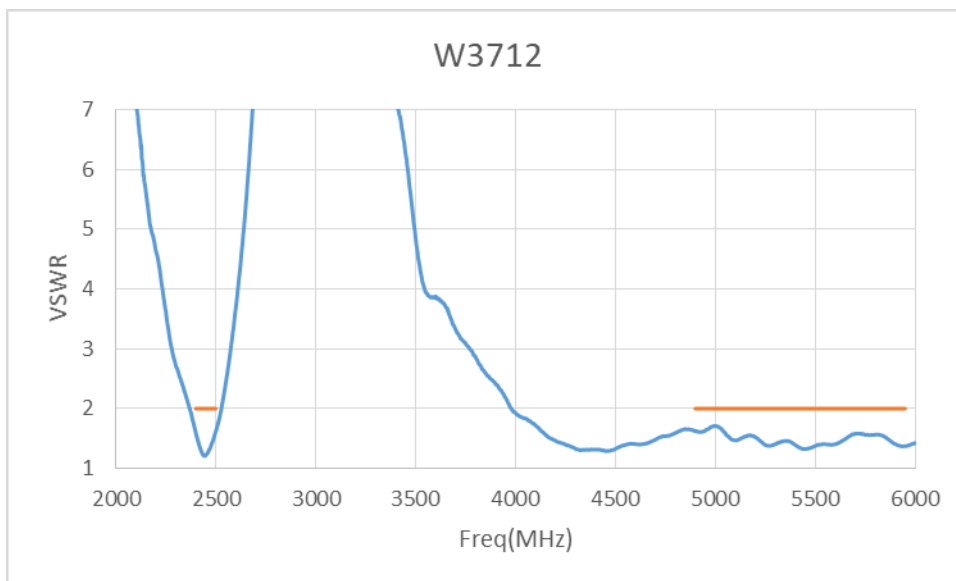
Test on Pulse test board in free space.

CHARTS

VSWR at position 1



VSWR at position 2



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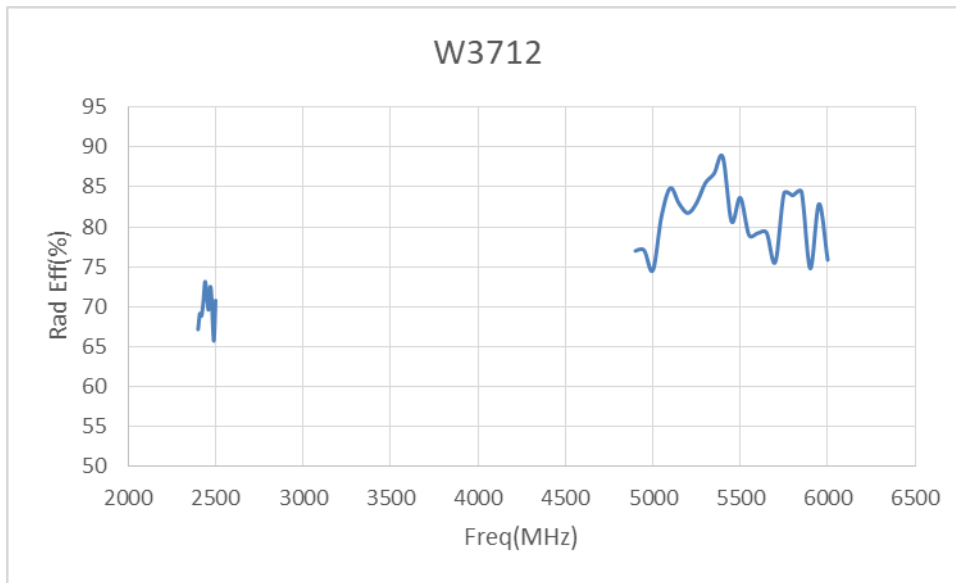
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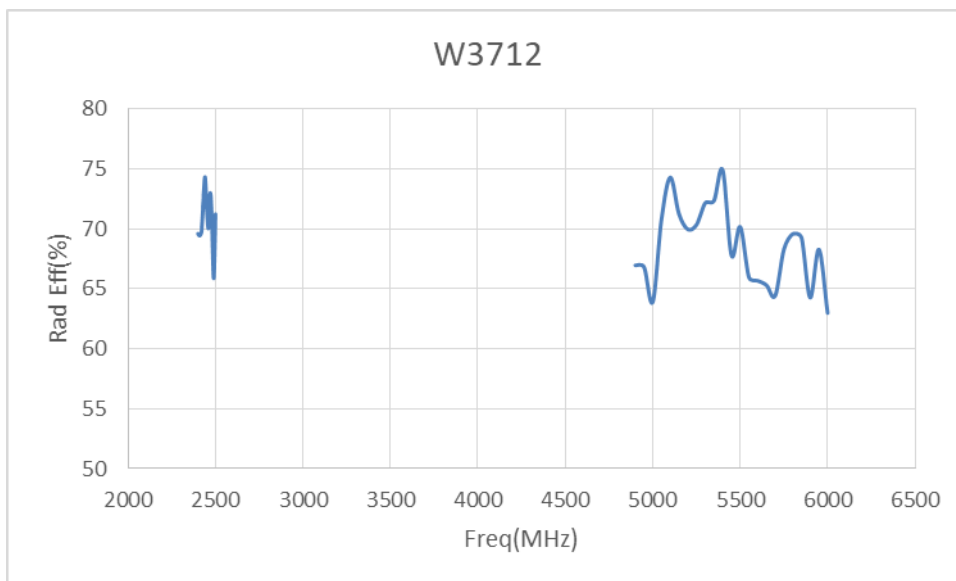


CHARTS

Radiation Efficiency at position 1



Radiation Efficiency at position 2



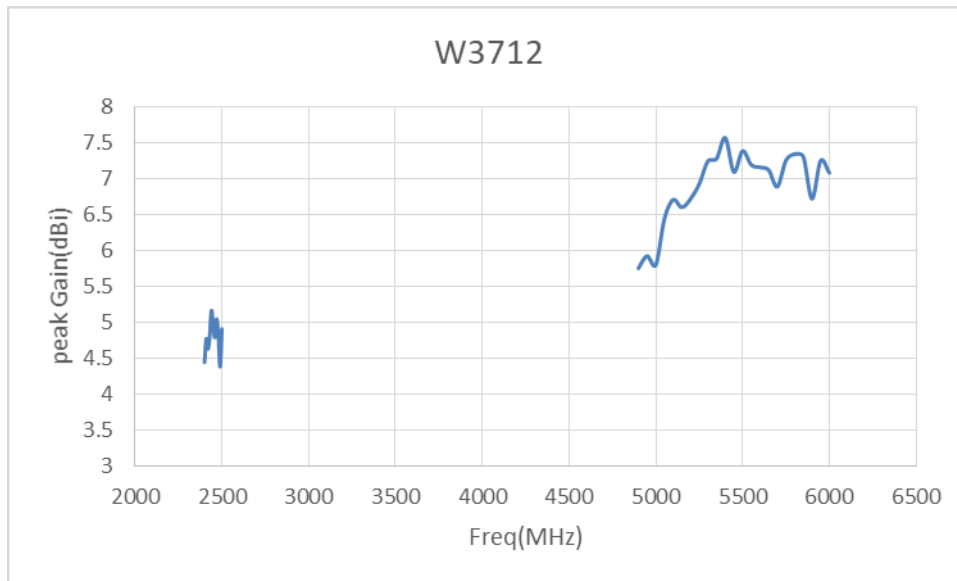
**Description:** 2.4/5GHz Vertical mount PCB Antenna

**Series:** Embedded PCB Ant

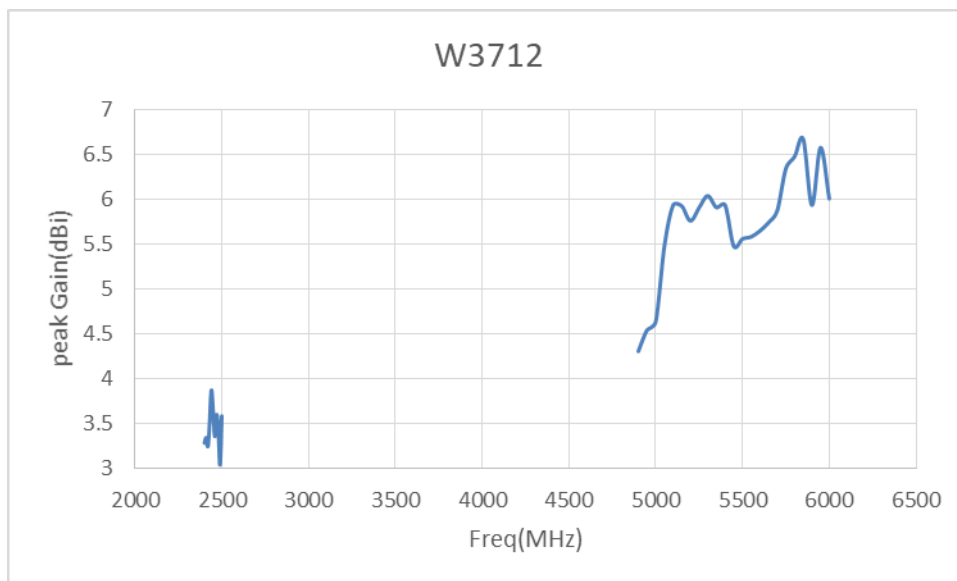
**PART NUMBER:** W3712

CHARTS

Peak Gain at position 1



Peak Gain at position 2



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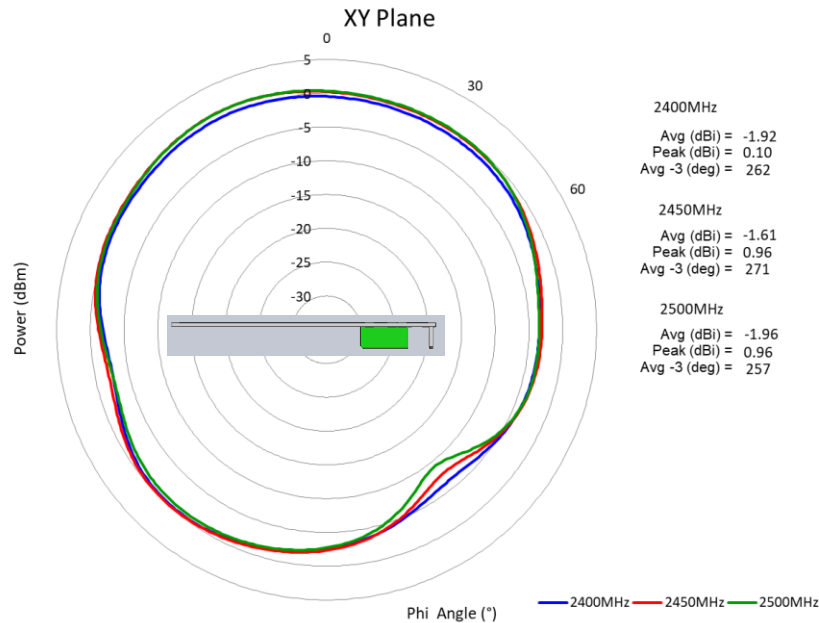
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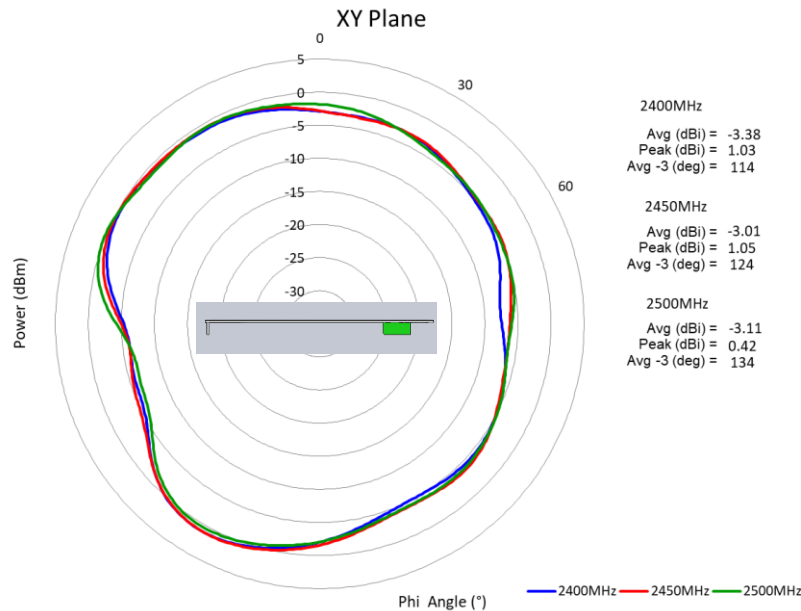
PART NUMBER: W3712

CHARTS

2.4GHz band Radiation Pattern of X-Y plane at position 1



2.4GHz Band Radiation Pattern of X-Y plane at position 2



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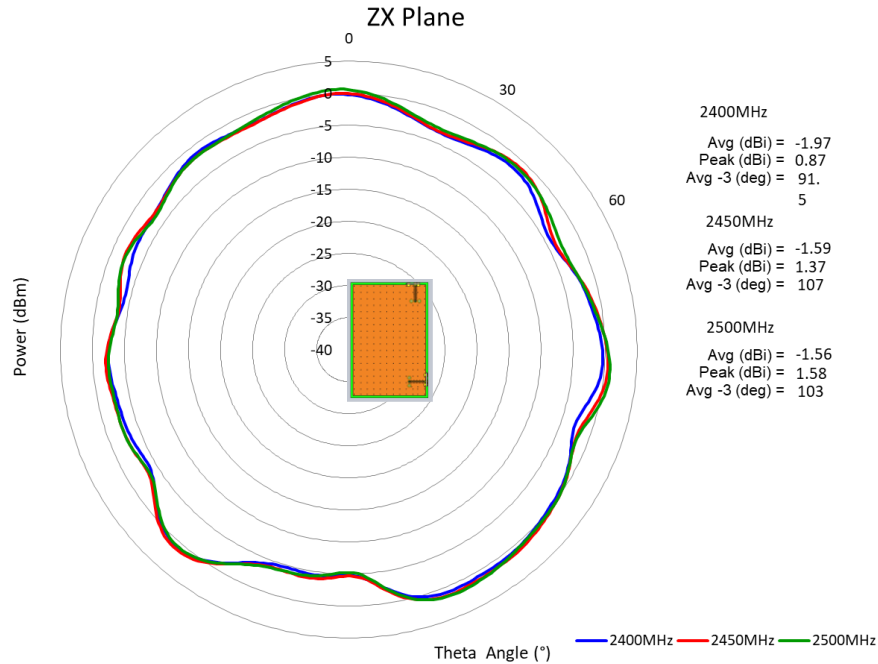
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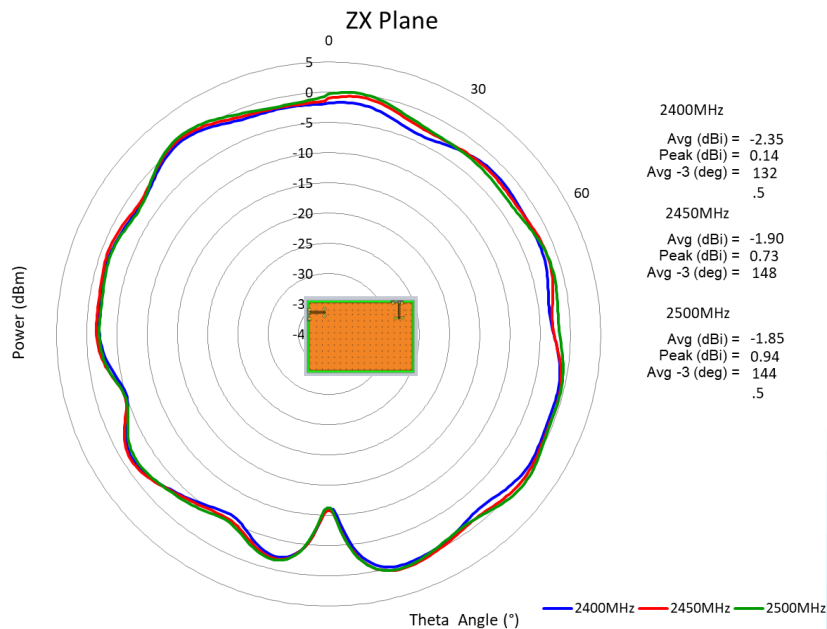
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CHARTS

2.4GHz band Radiation Pattern of Z-X plane at position 1



2.4GHz band Radiation Pattern of X-Z plane at position 2



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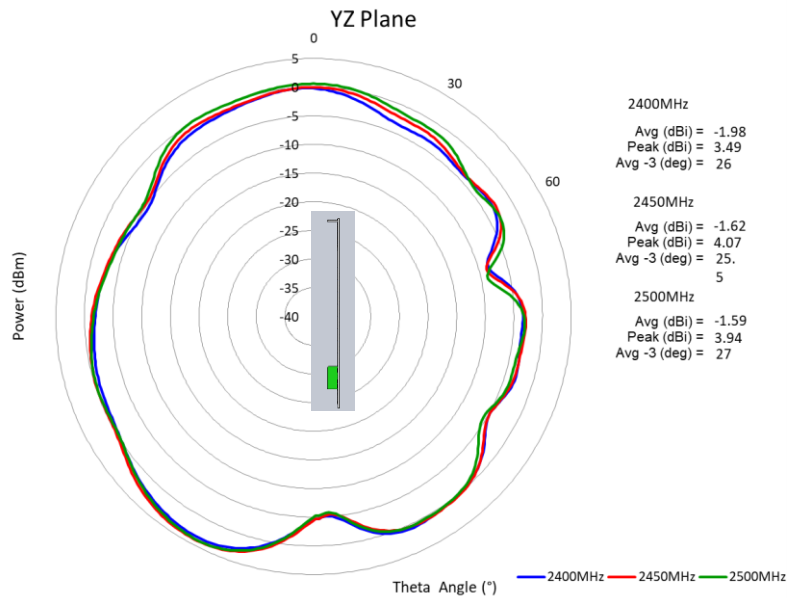
Description: 2.4/5GHz Vertical mount PCB Antenna

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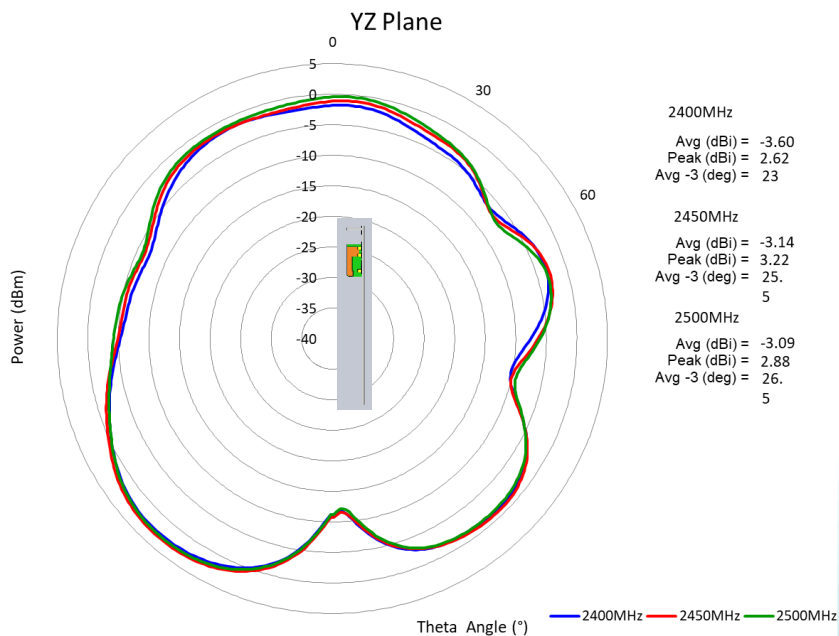
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CHARTS

2.4GHz band Radiation Pattern of Y-Z plane at position 1



2.4GHz band Radiation Pattern of Y-Z plane at position 2



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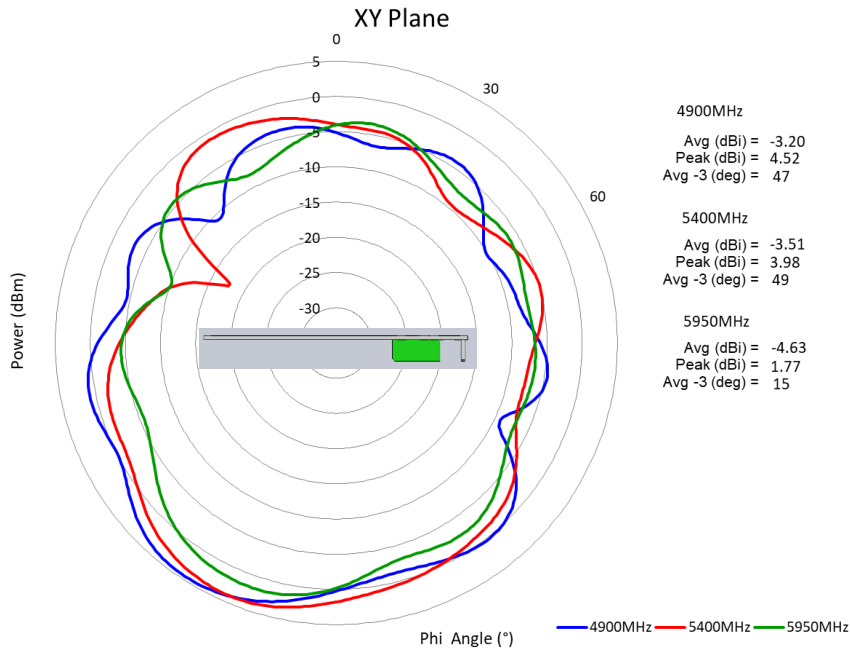
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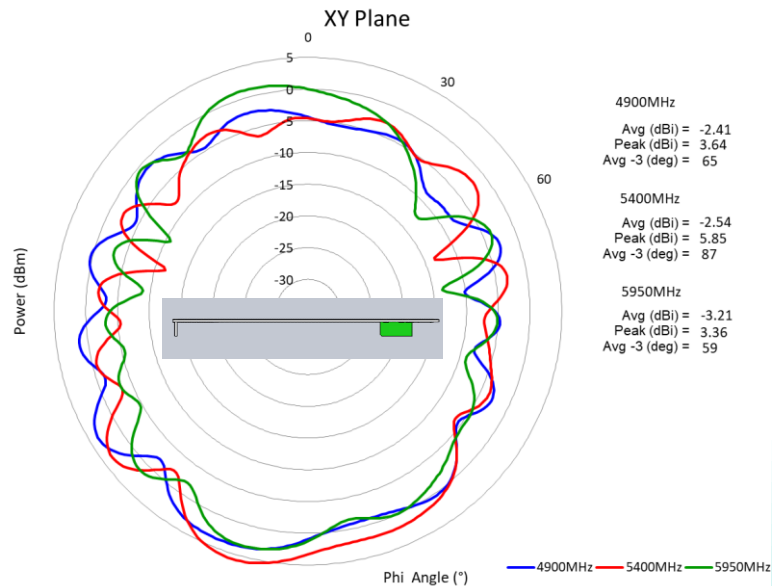
PART NUMBER: W3712

CHARTS

5GHz band Radiation Pattern of X-Y plane at position 1



5GHz Band Radiation Pattern of X-Y plane at position 2



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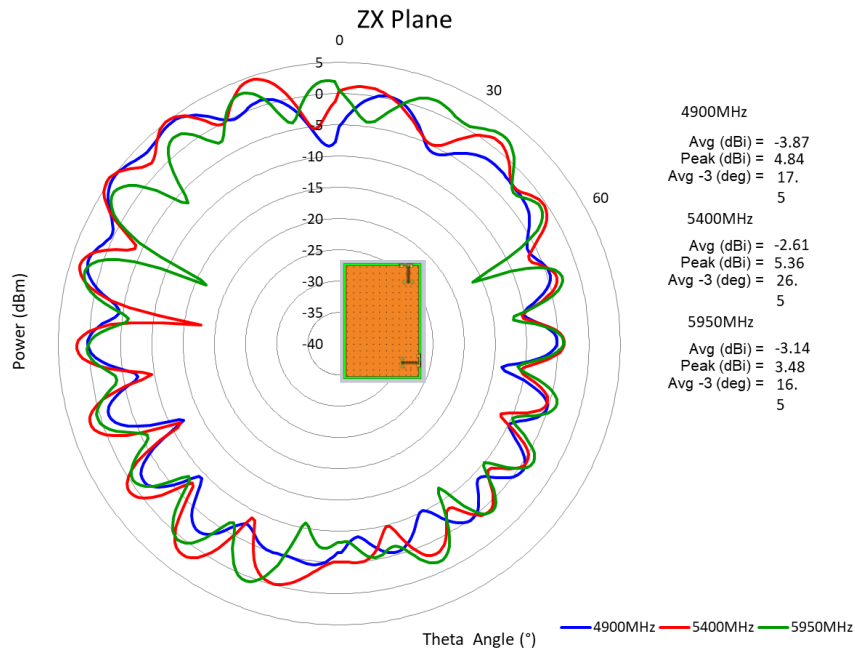
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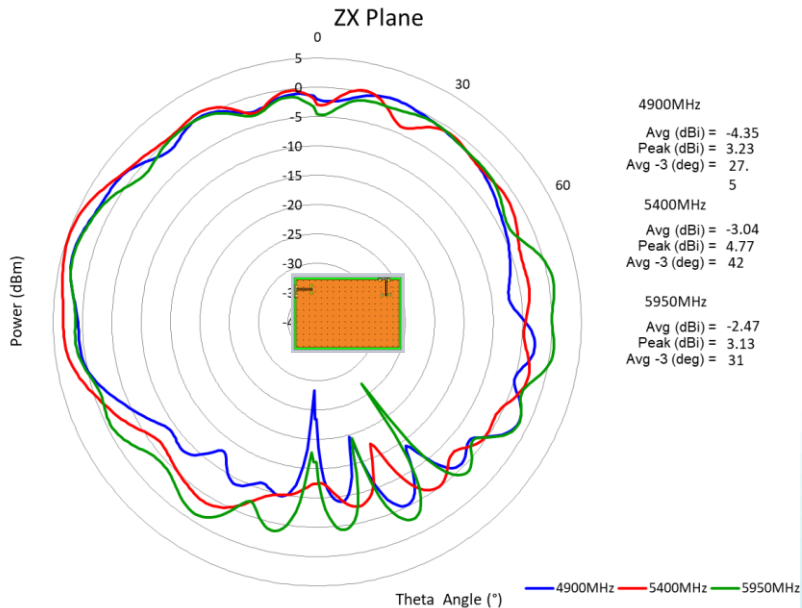
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CHARTS

5GHz band Radiation Pattern of Z-X plane at position 1



5GHz band Radiation Pattern of X-Z plane at position 2



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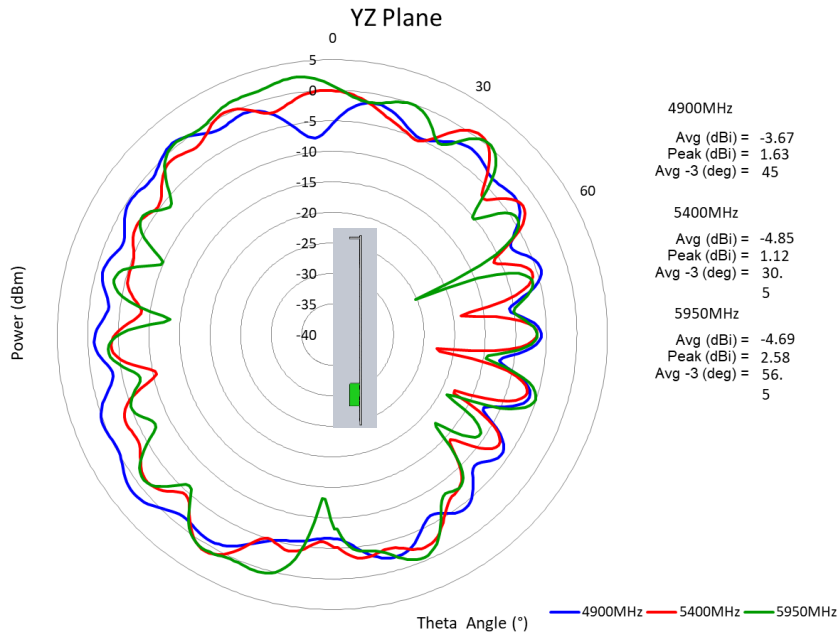
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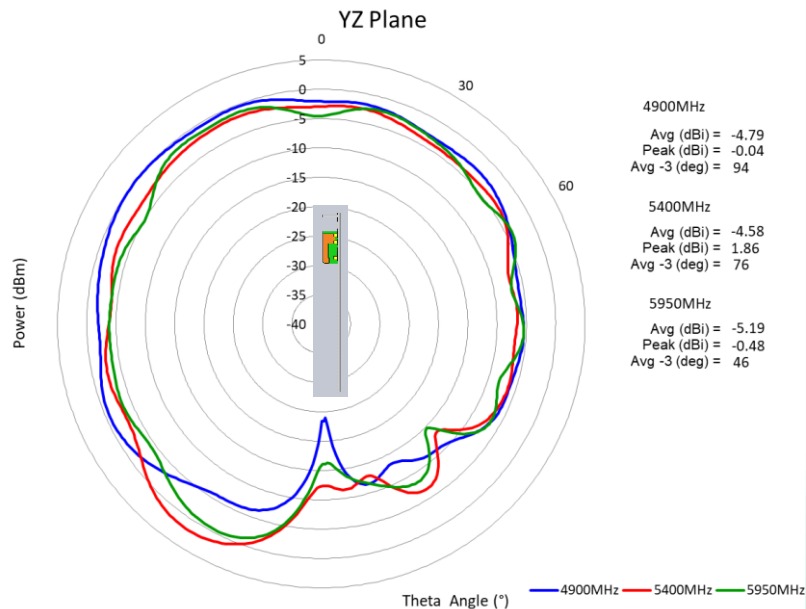
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CHARTS

5GHz band Radiation Pattern of Y-Z plane at position 1



5GHz band Radiation Pattern of Y-Z plane at position 2



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## PACKAGING

90pcs/PE bag

PE bag size:140x70x0.05mm

8 pcs PE bag/Vacuum bag

Vacuum bag size:310x310x0.08mm

5pcs Vacuum bag/package box

Package box:350x350x120mm

Total 3600pcs/ Package Box