

### 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

Issue: 1812

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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### ELECTRICAL SPECIFICATIONS

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

### MECHANICAL SPECIFICATIONS

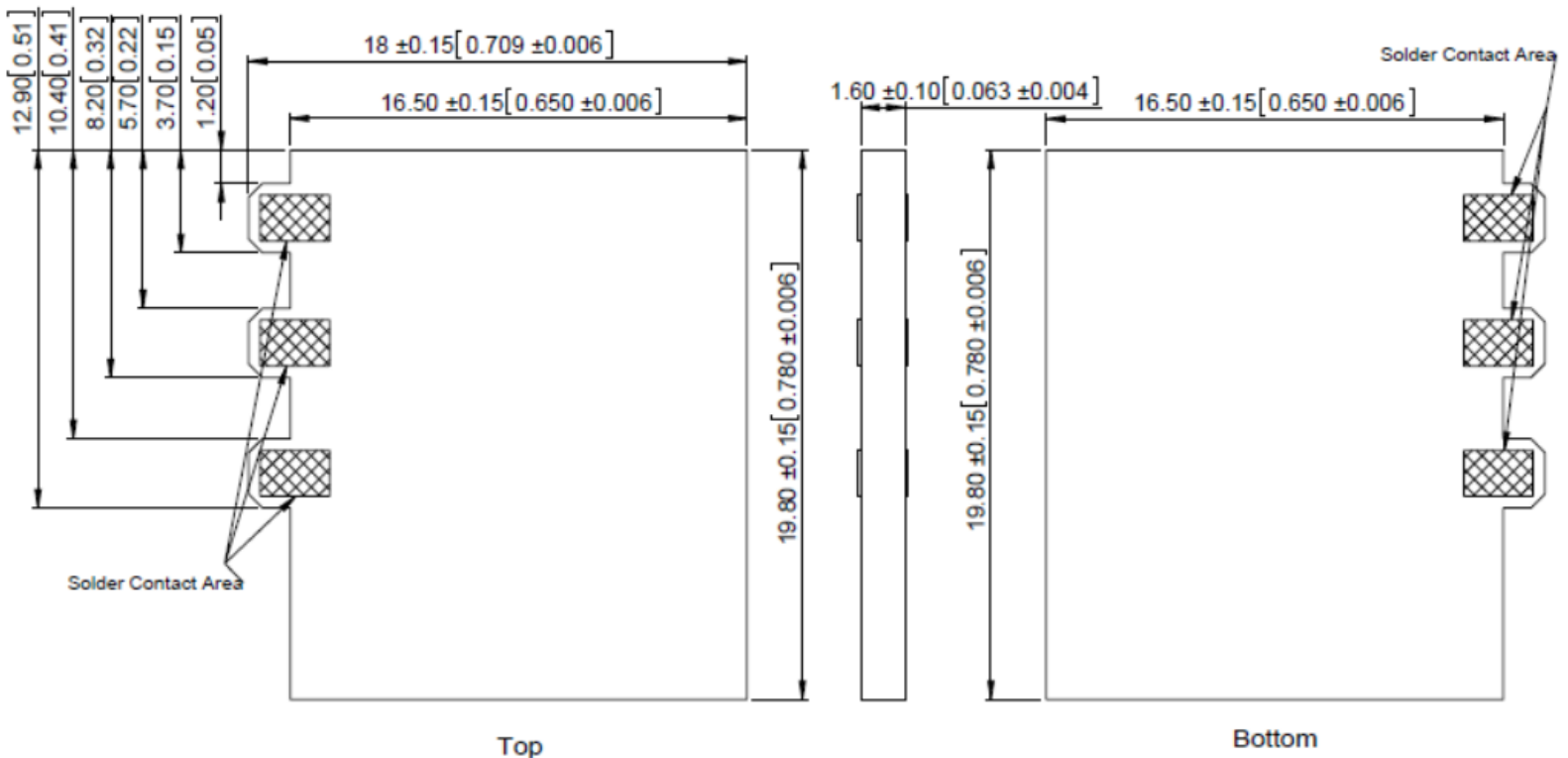
Overall Length	19.8x18x1.6mm
Weight	1.06g
Antenna Material	PCB Antenna
Fix system	Solder

### ENVIRONMENTAL SPECIFICATIONS

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

### OTHER SPECIFICATIONS

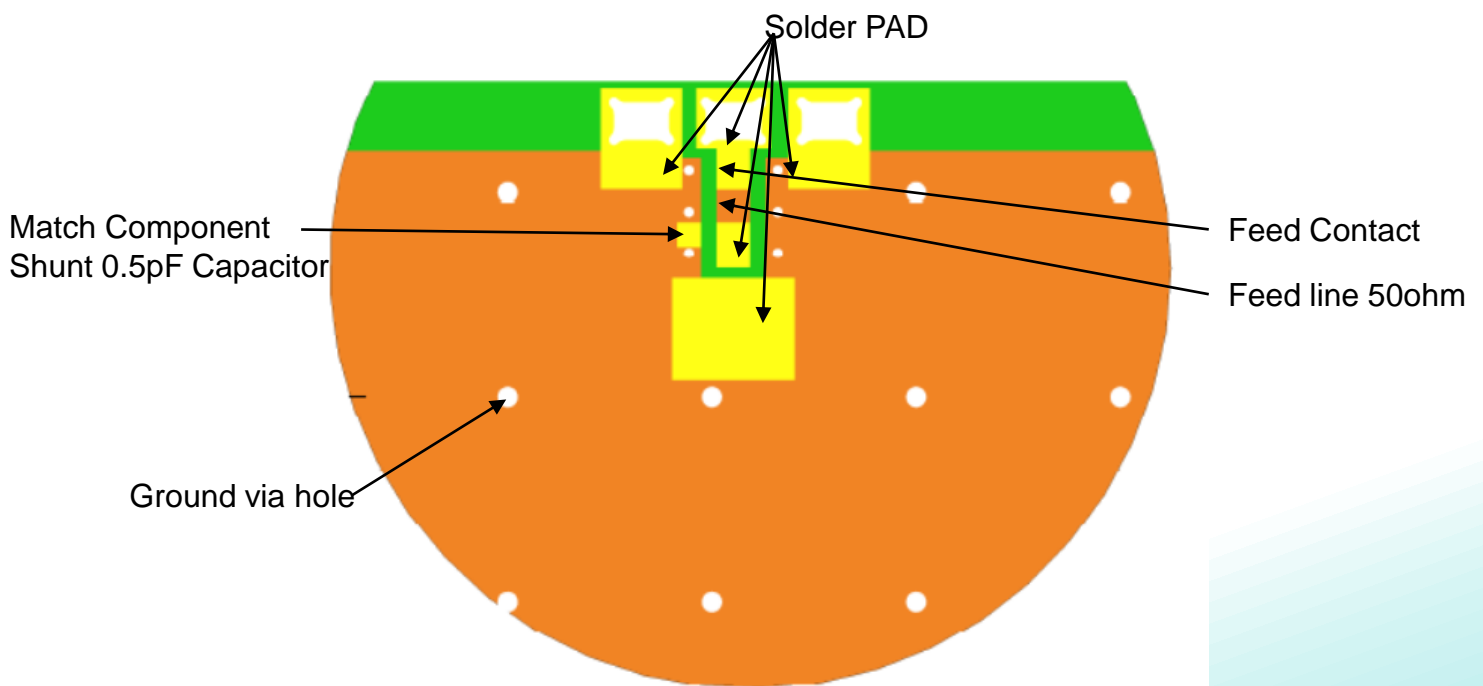
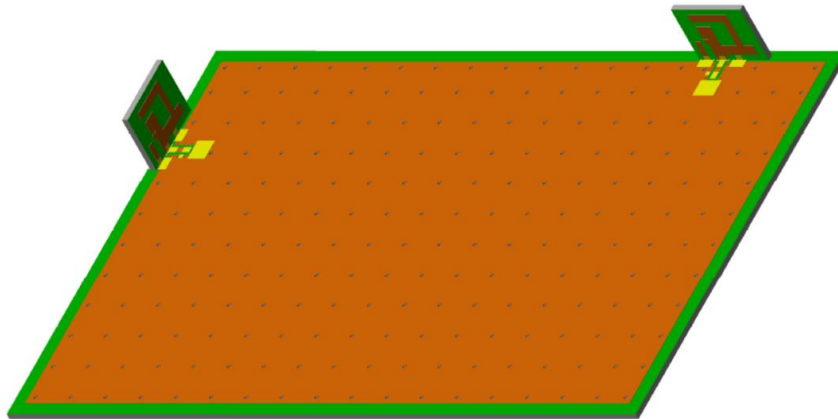
## MECHANICAL DRAWING



Dimension Unit: mm[Inch]

## TEST SETUP

### Test PWB for PCB Antenna W3712



Issue: 1812

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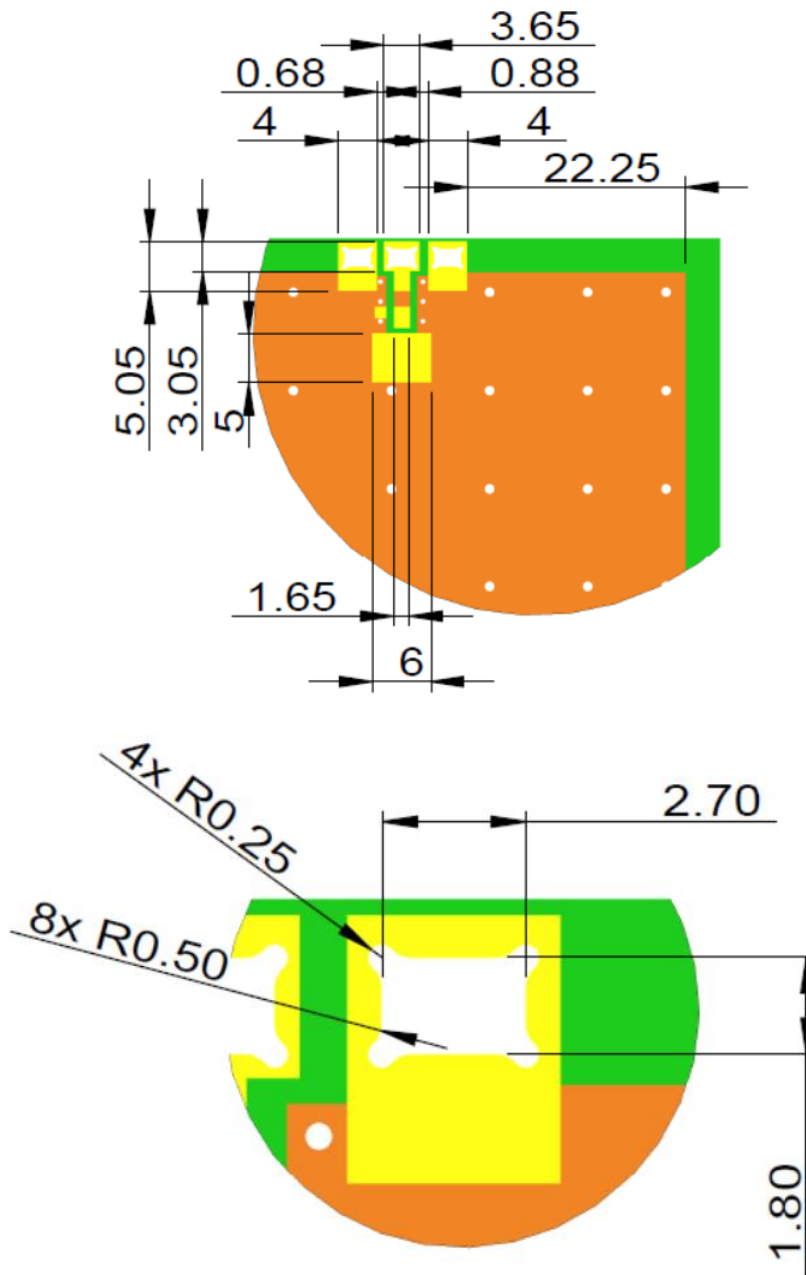
Series: Embedded PCB Ant

Description: 2.4/5GHz Vertical mount PCB Antenna

PART NUMBER: W3712

## TEST SETUP

### PWB PAD Dimension in top copper



Issue: 1812

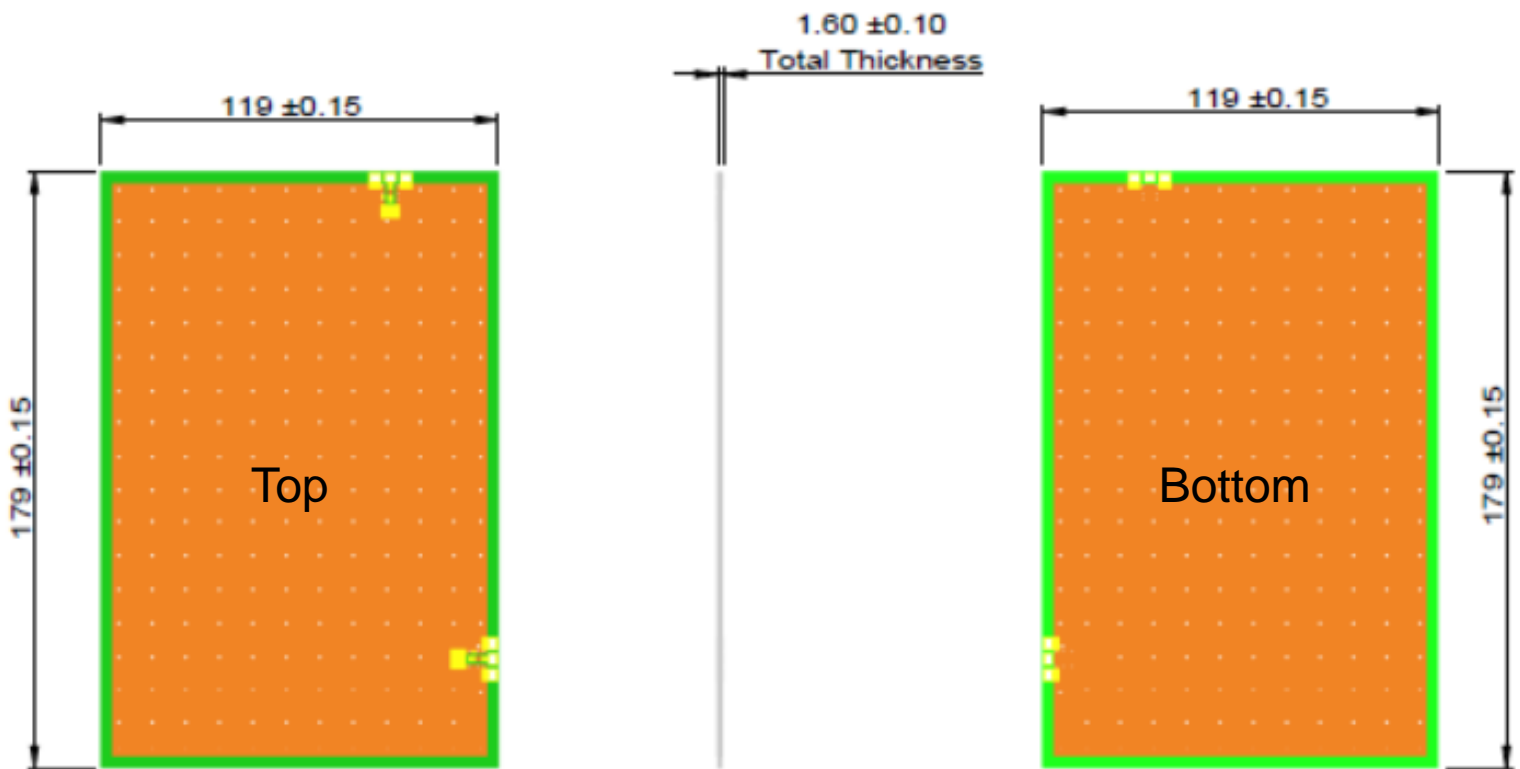
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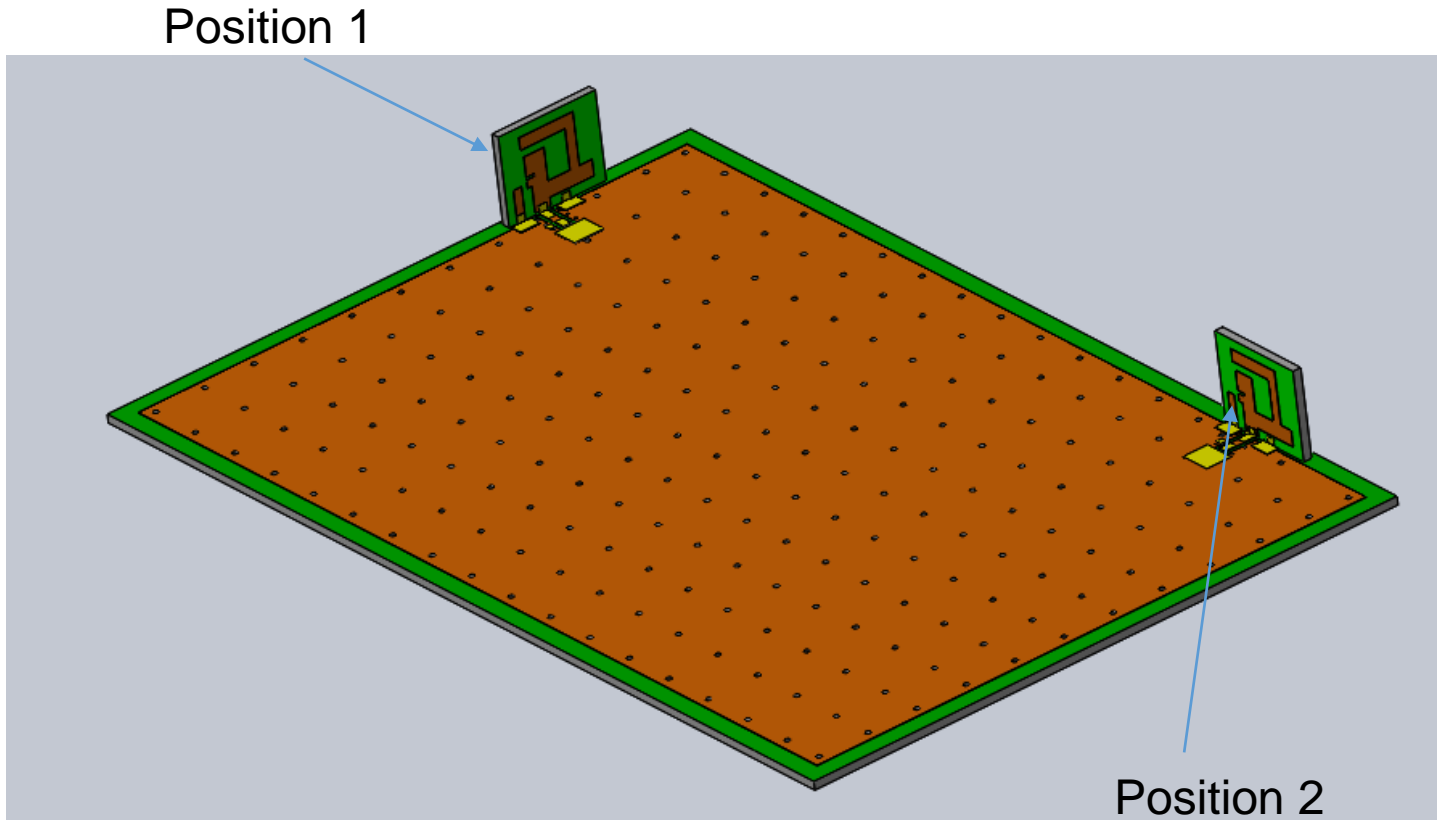
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## TEST SETUP

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



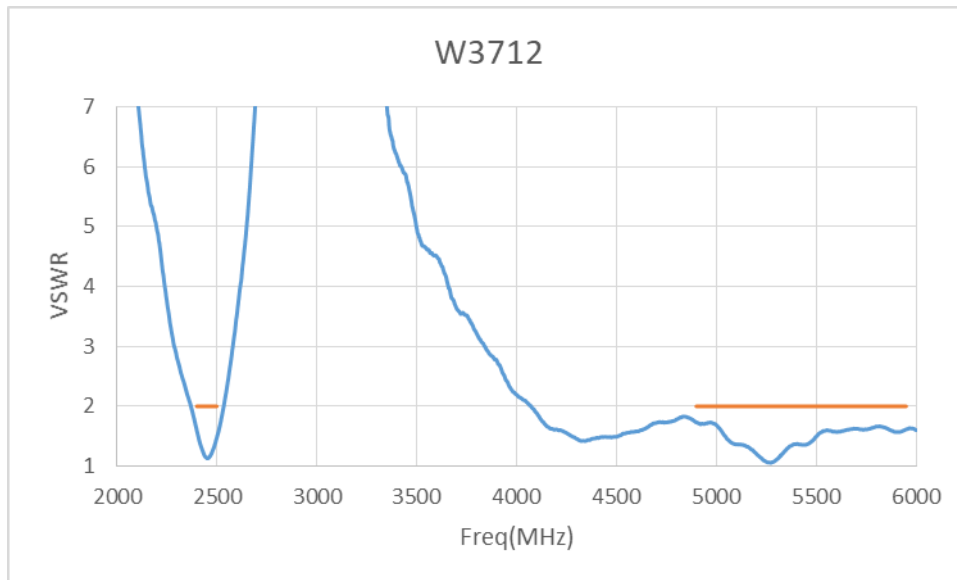
## TEST SETUP



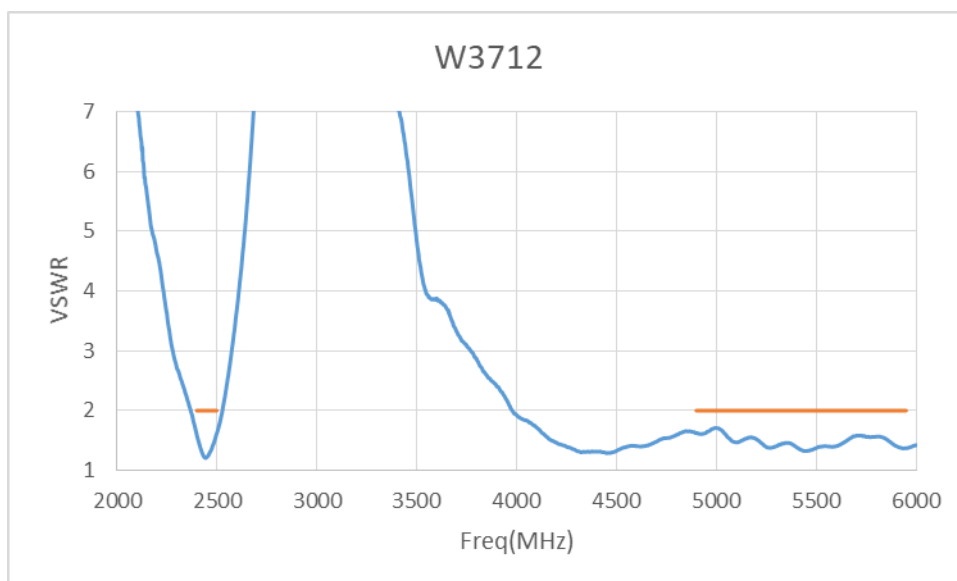
Test on Pulse test board in free space.

## CHARTS

### VSWR at position 1



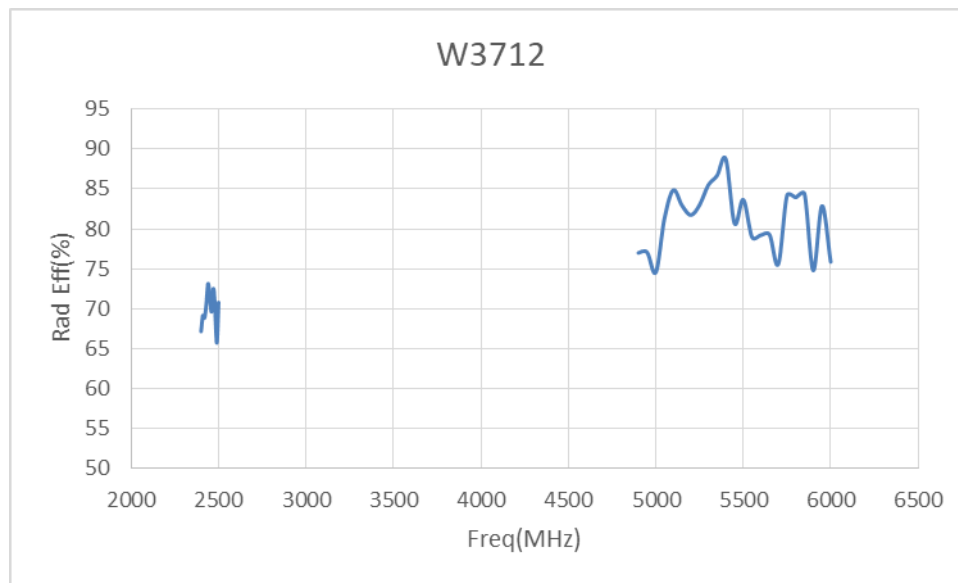
### VSWR at position 2



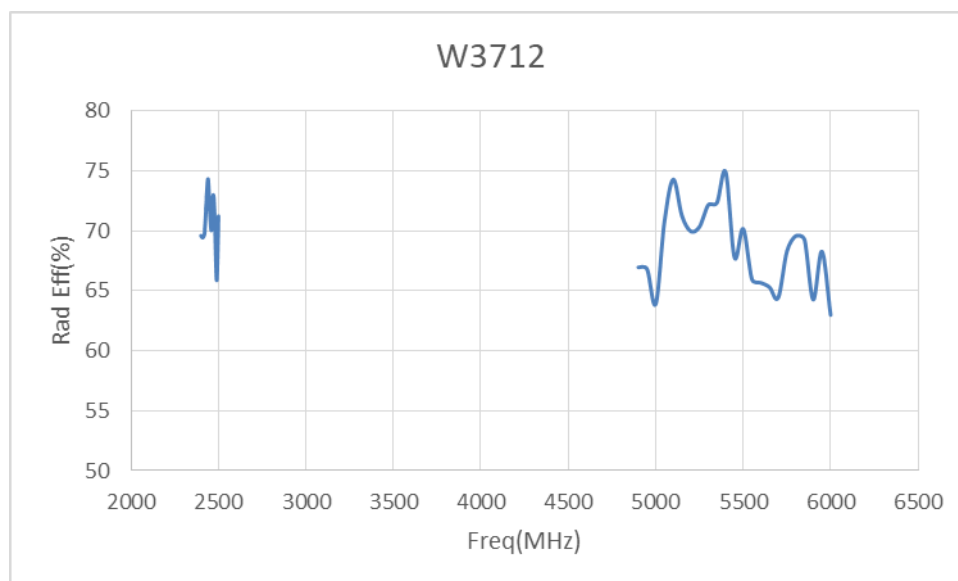


## CHARTS

### Radiation Efficiency at position 1

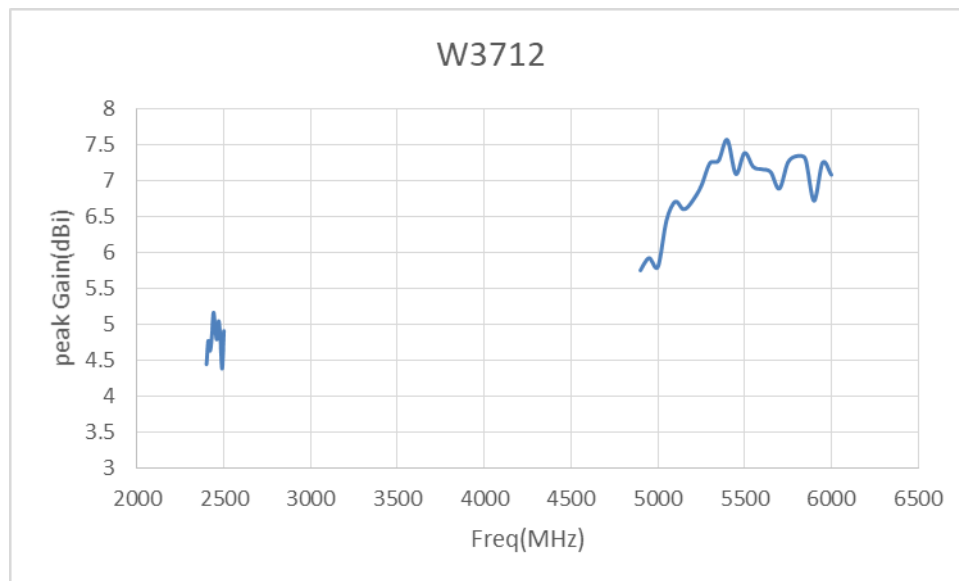


### Radiation Efficiency at position 2

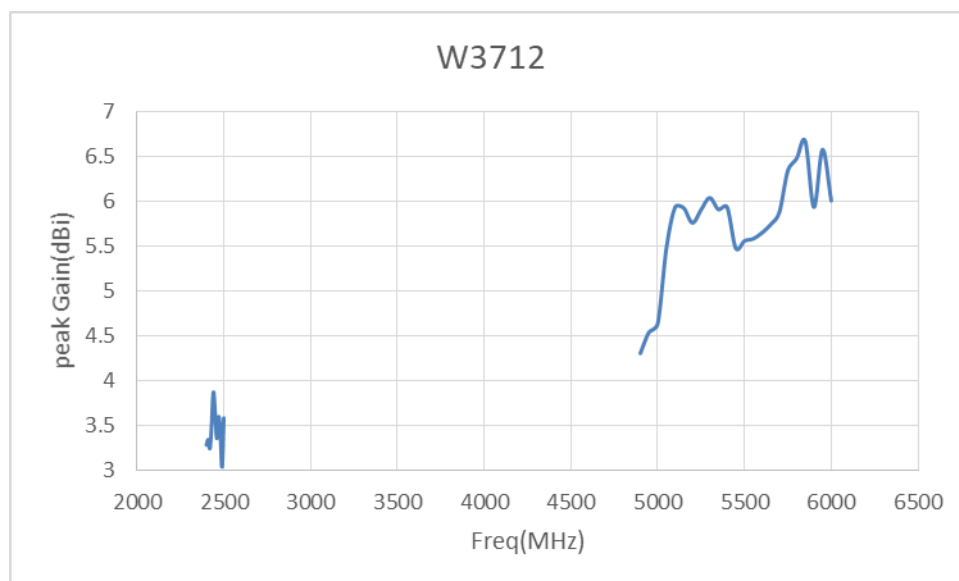


## CHARTS

### Peak Gain at position 1

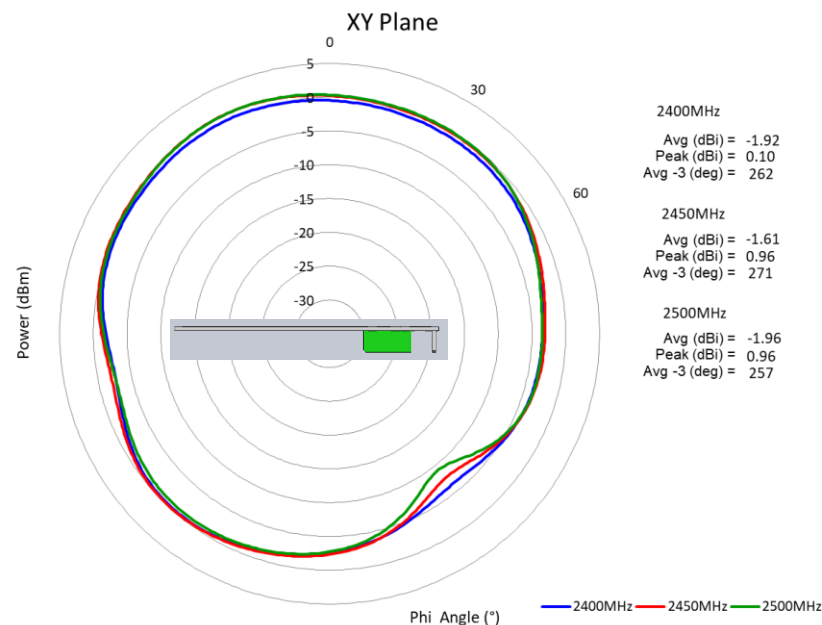


### Peak Gain at position 2

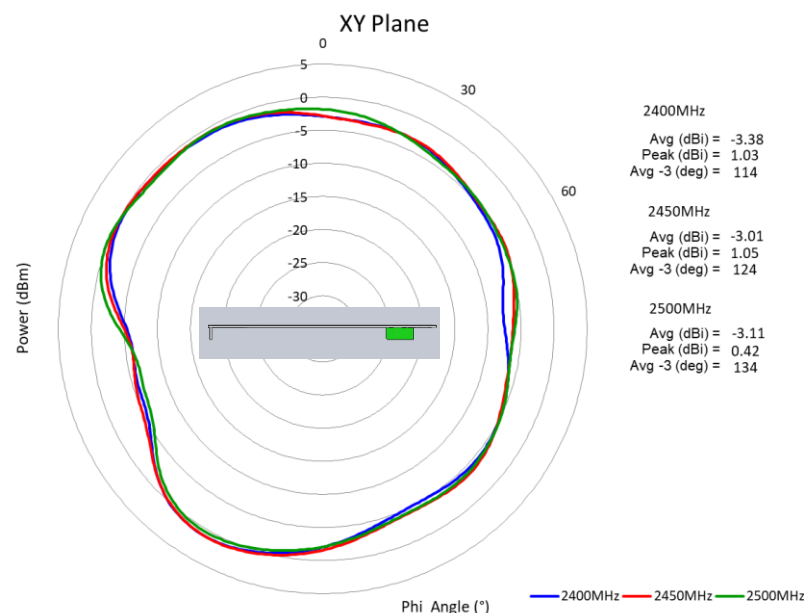


## CHARTS

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



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



Issue: 1812

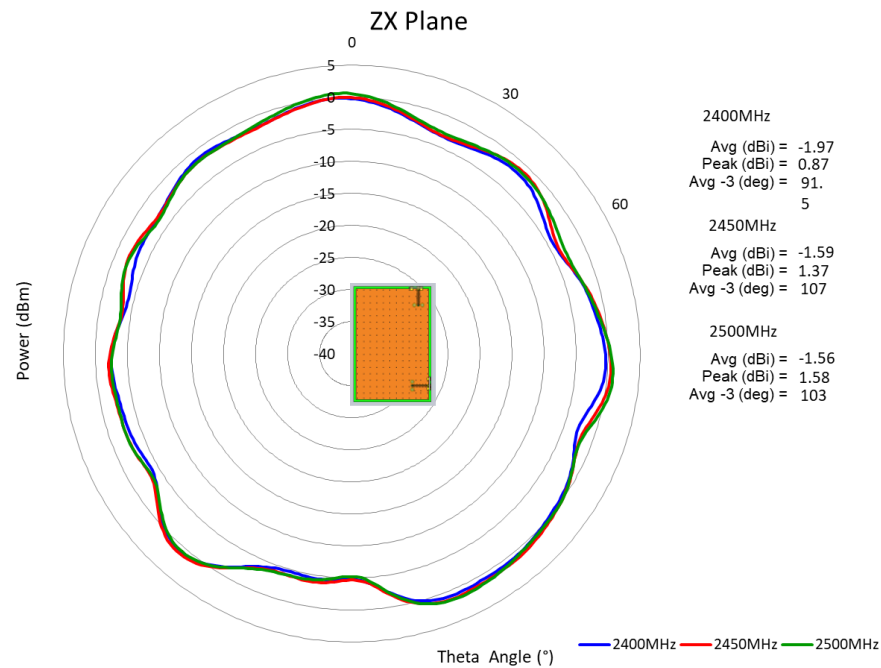
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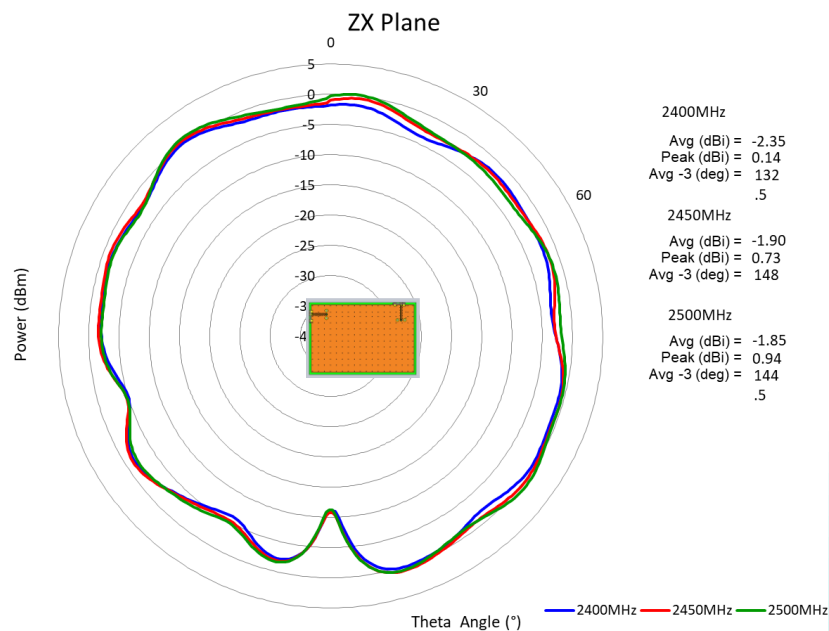
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## CHARTS

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



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



Issue: 1812

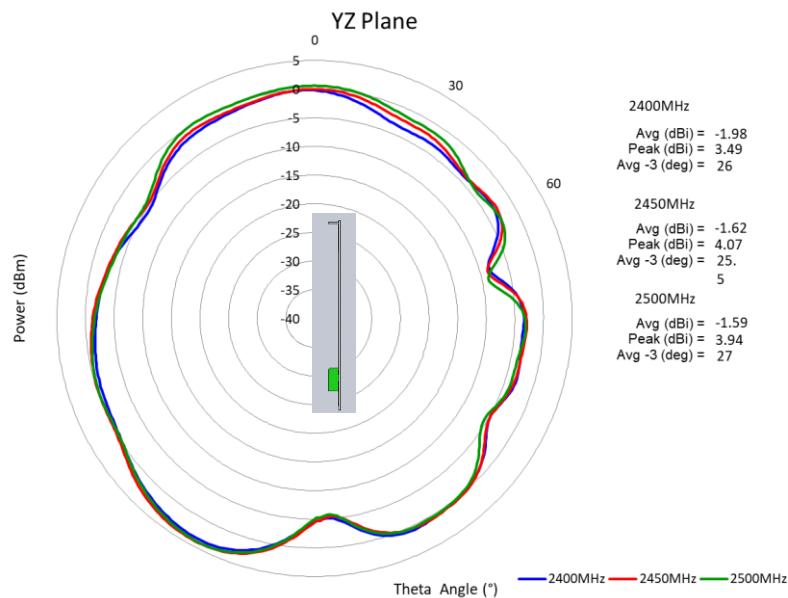
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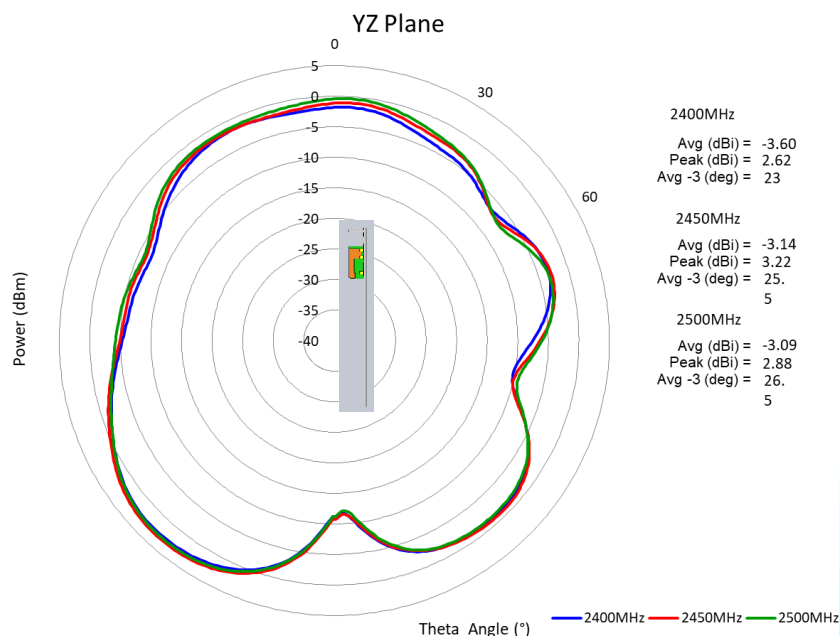
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## CHARTS

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



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



Issue: 1812

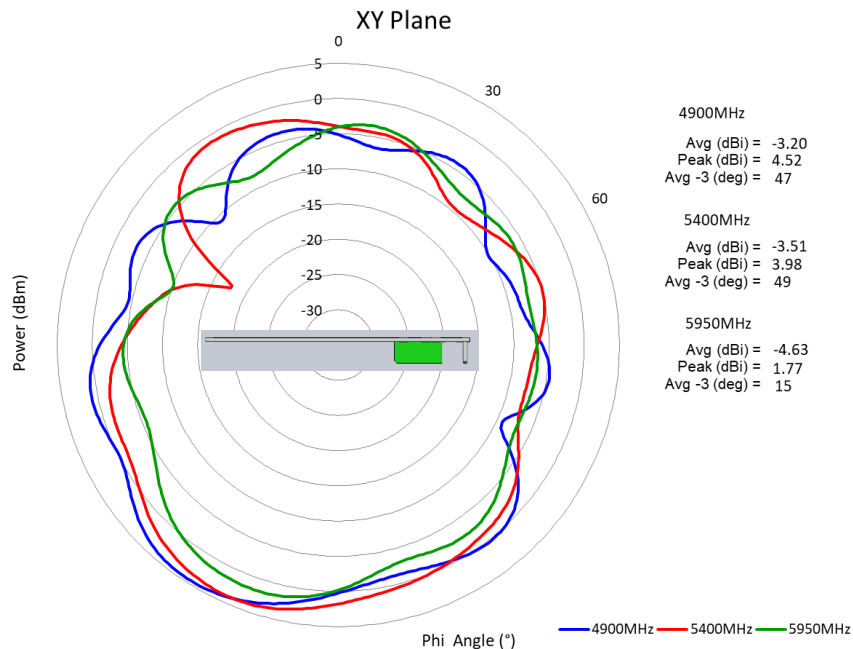
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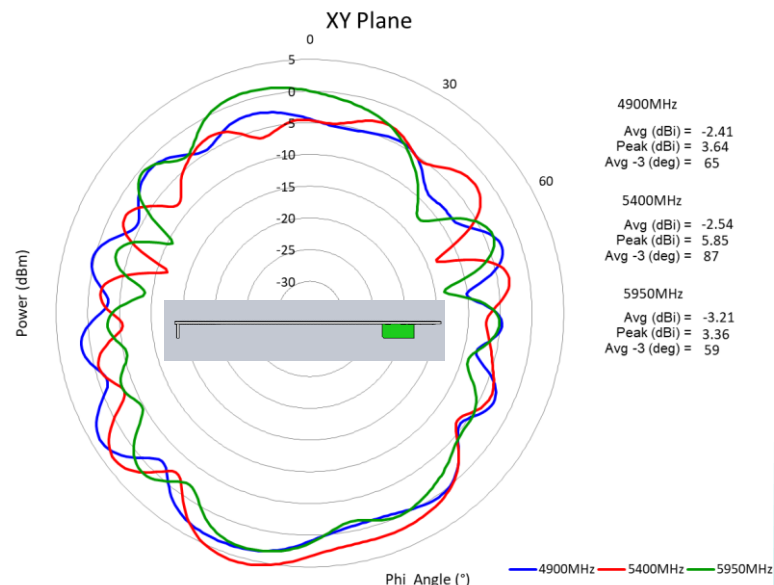
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## CHARTS

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

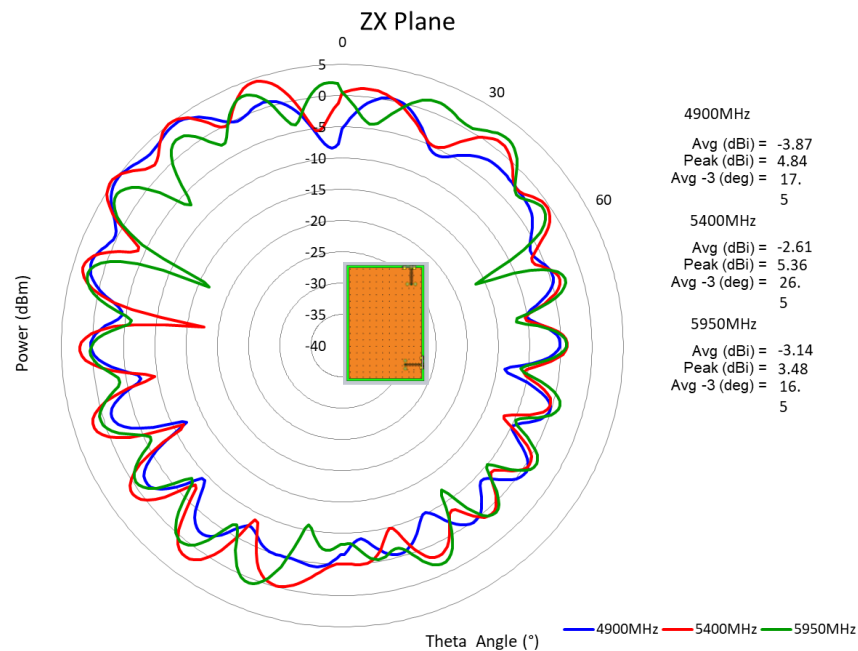


### 5GHz Band Radiation Pattern of X-Y plane at position 2

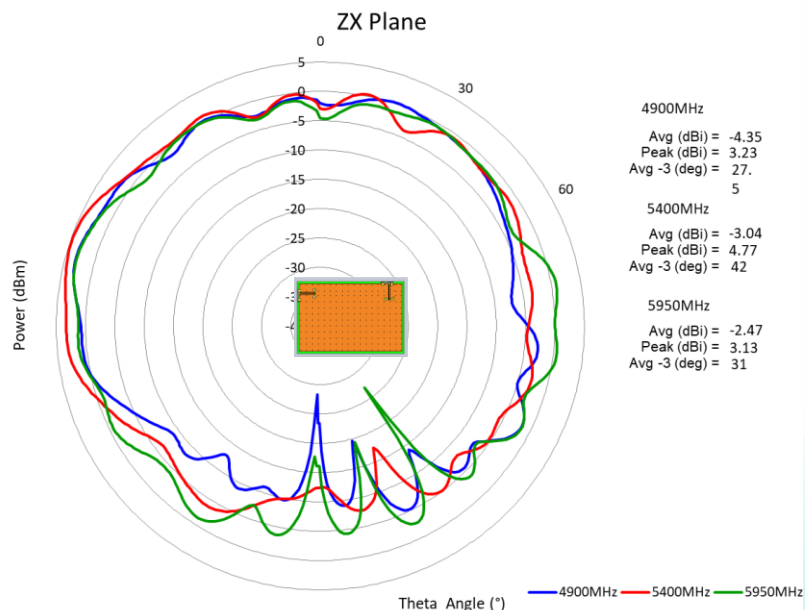


## CHARTS

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



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



Issue: 1812

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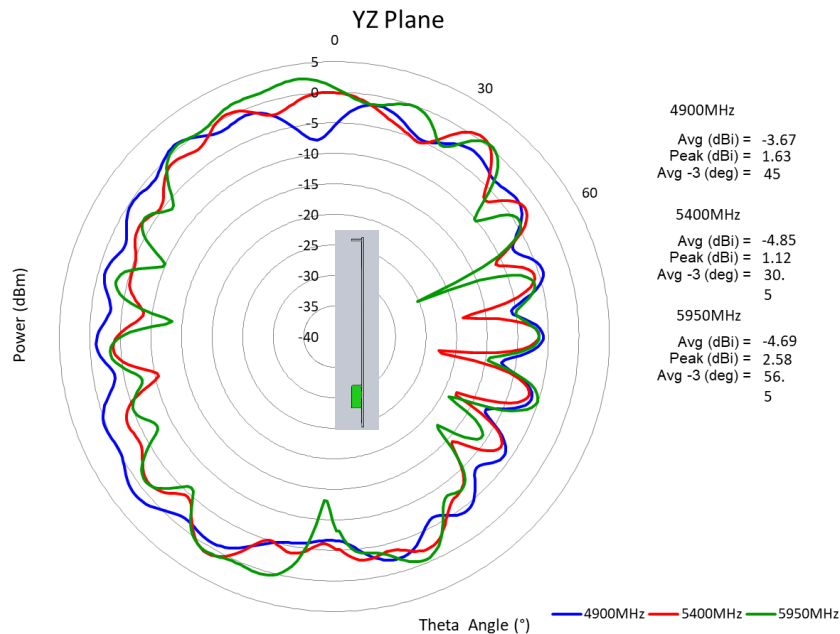
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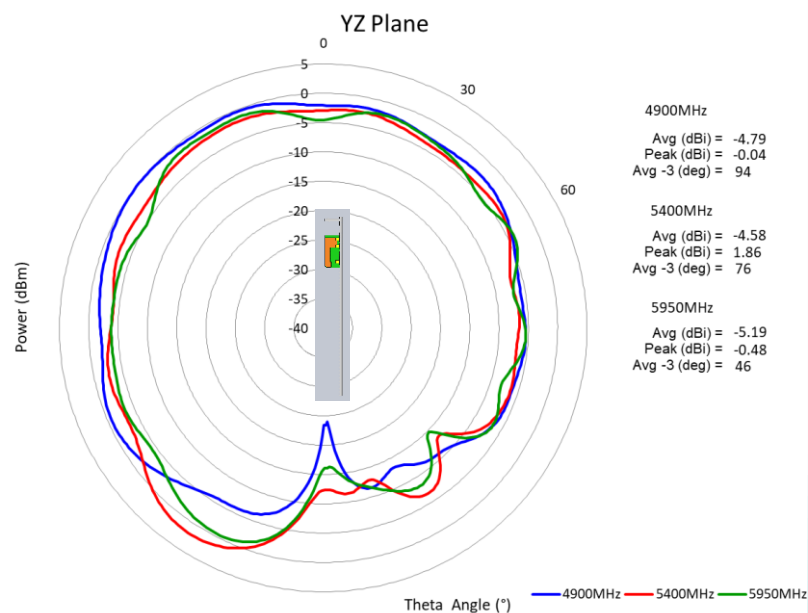


## CHARTS

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



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





## 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

# Mouser Electronics

Authorized Distributor

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Pulse:

W3712