

## Description: ISM868/915MHz, 2.4GHz Ant

Series: PCB Embedded

PART NUMBER: **W3331**

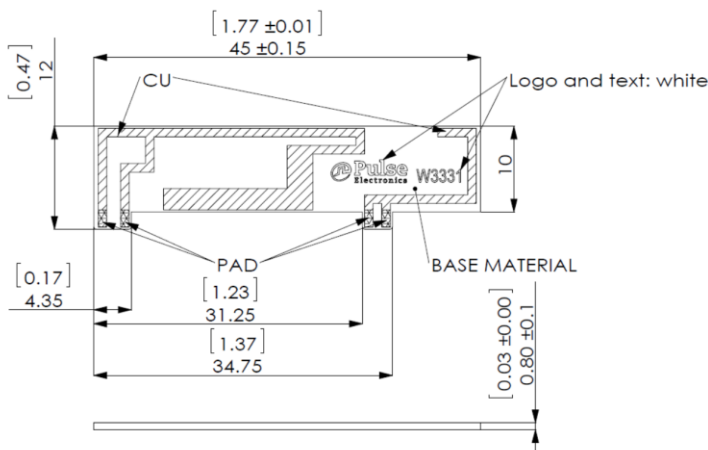


### Features:

- Small clearance needed (about 4mm)
- Test PCB size 118.5\*102mm
- High efficiency
- Small compact form factor
- Low profile
- Multi-band (ISM and 2.4 GHz)
- Board Mountable
- 2 connection points
- Lead free materials
- RoHS Compliant Product

### Applications:

- Data transmission for IoT applications
- High speed data terminals
- Routers using ISM frequencies
- ISM and WiFi dual applications
- Hot Spots
- Radio modules
- WiFi / BLE / Zigbee



All dimensions are in mm / inches

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Tel: 86 512 6807 9998



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## ELECTRICAL SPECIFICATIONS

Frequency port1	863-928MHz
Frequency port2	2400-2500MHz
Nominal Impedance	50Ω
Return Loss	-6dB max@ISM868/915MHz -12dB max@ISM2.4GHz
Isolation between port1& port2	-15dB
Average efficiency	65% @ISM868/915MHz 75%@ISM2.4GHz
Gain	2 +/- 1 dBi@ISM868/915MHz 3.5 +/- 1 dBi@ISM2.4GHz
Radiation Pattern	Omni
Polarization:	linear
Power withstanding	3W

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### MECHANICAL SPECIFICATIONS

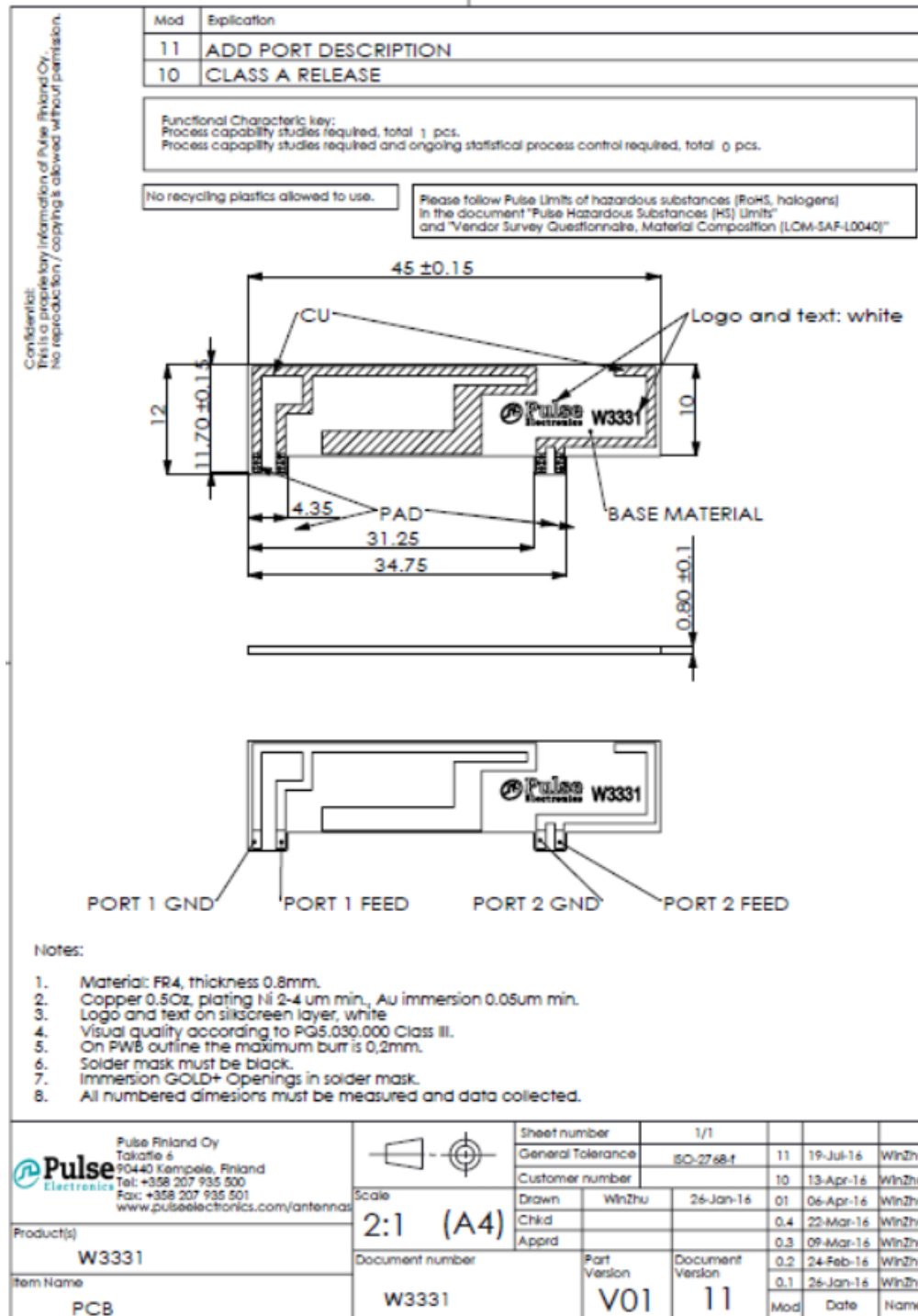
PCB material	FR4
Color	Black
Weight	0.75g
Overall Length	1.77 INCHES
Overall width	0.47 INCHES

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## MECHANICAL DRAWING



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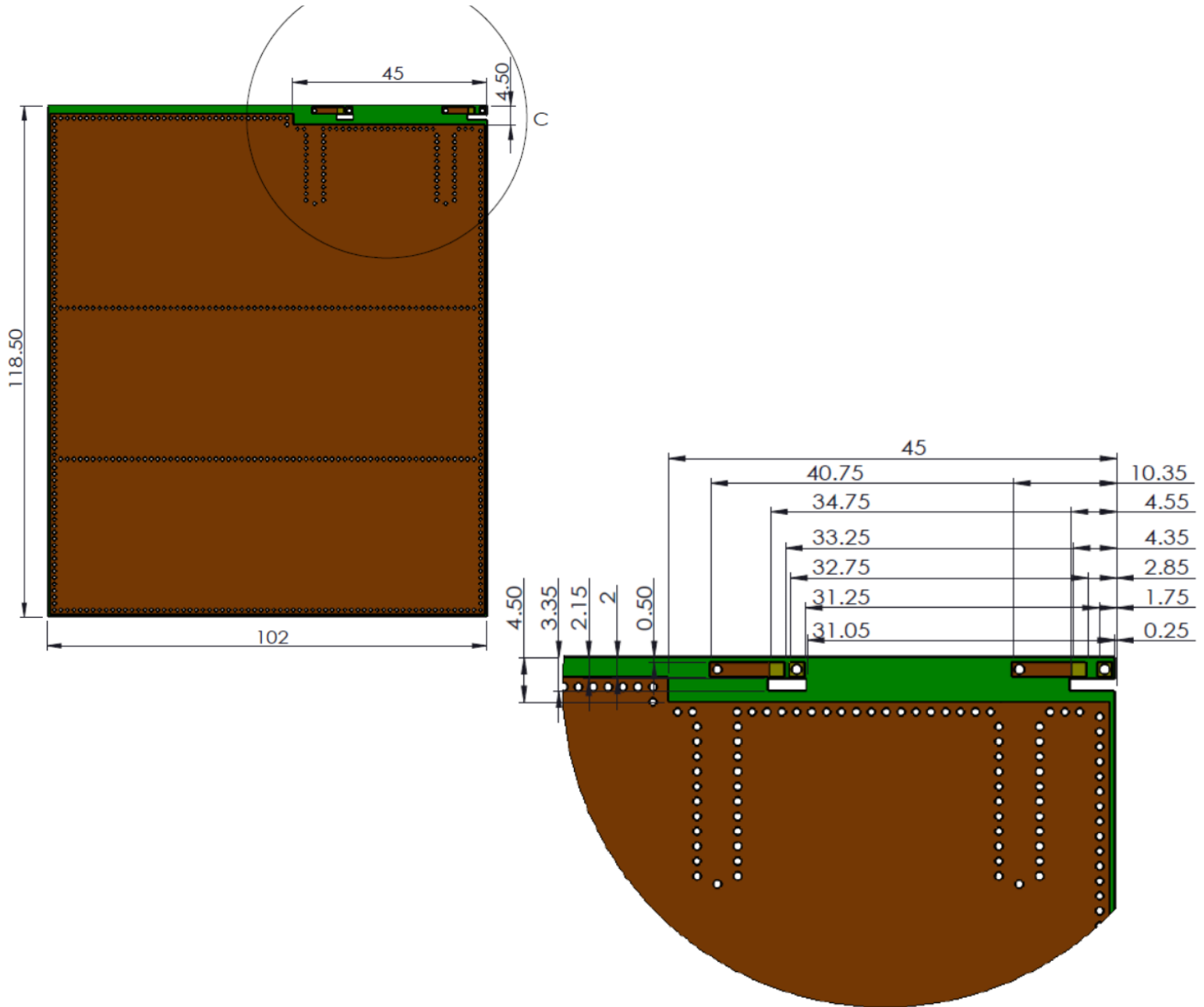
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## OTHER SPECIFICATIONS

### Recommended PCB layout(Unit:mm)



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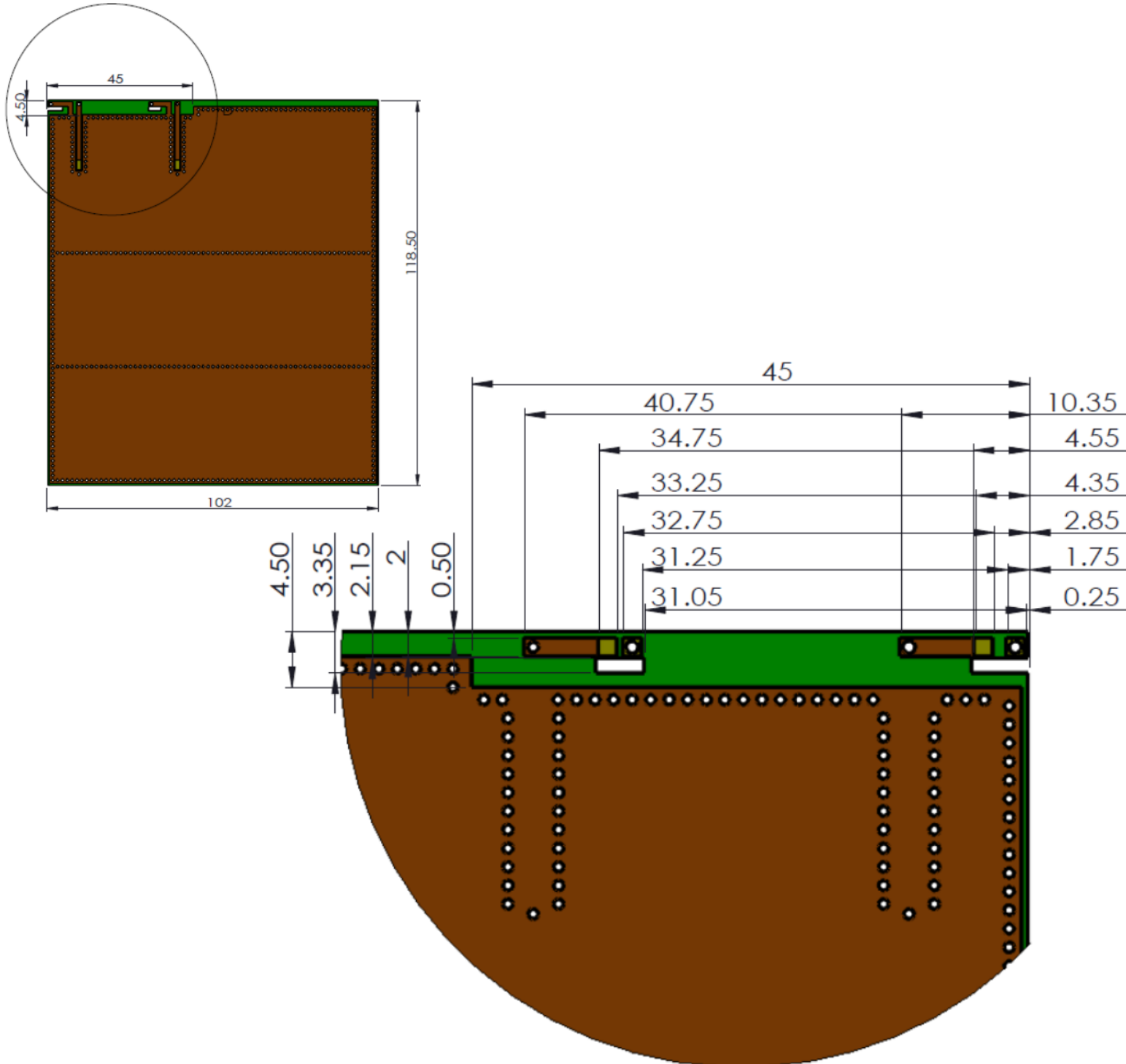
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## OTHER SPECIFICATIONS



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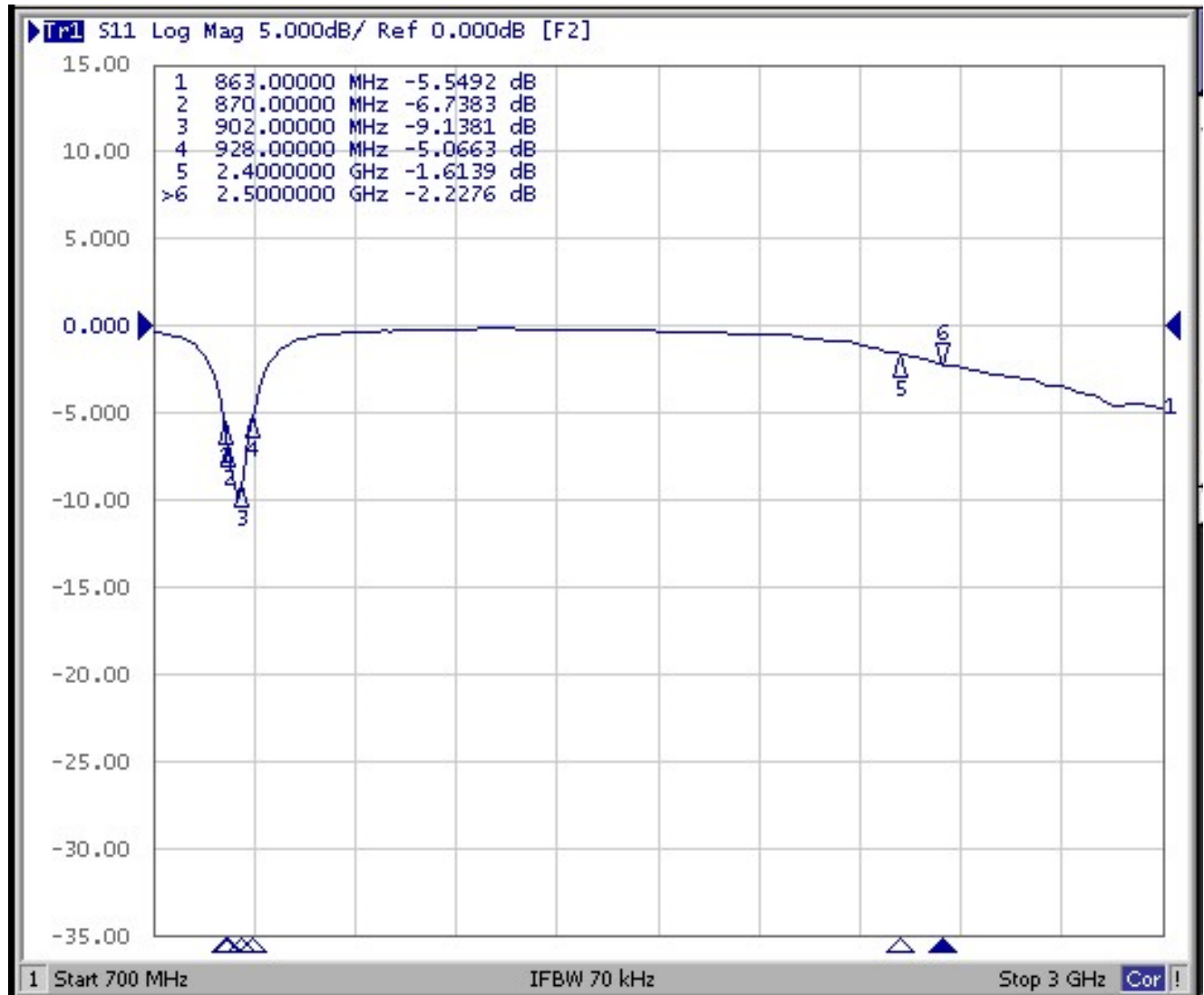
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## CHARTS

### ISM868/915MHz band Return Loss



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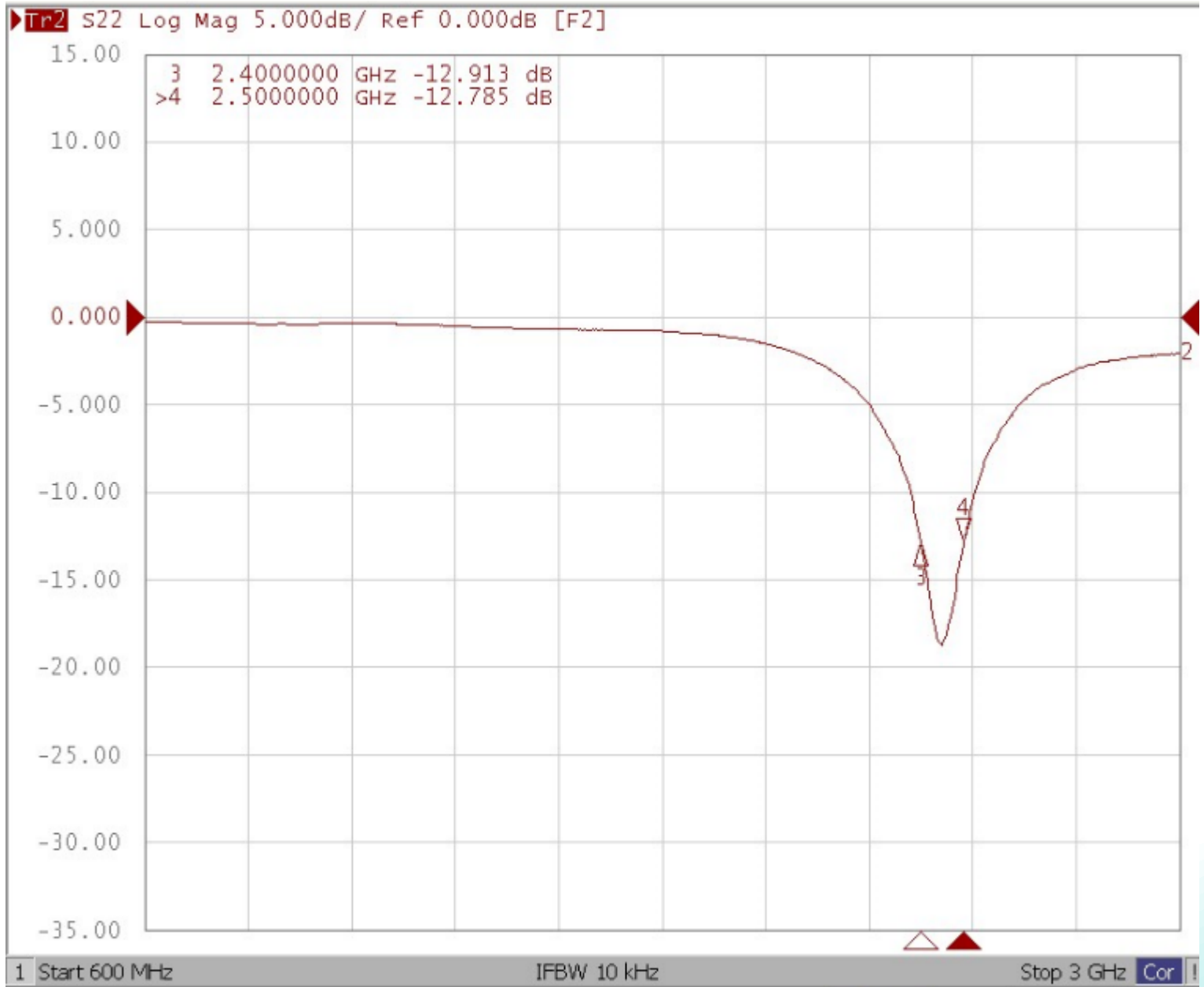
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## CHARTS

### ISM2.4GHz Return Loss



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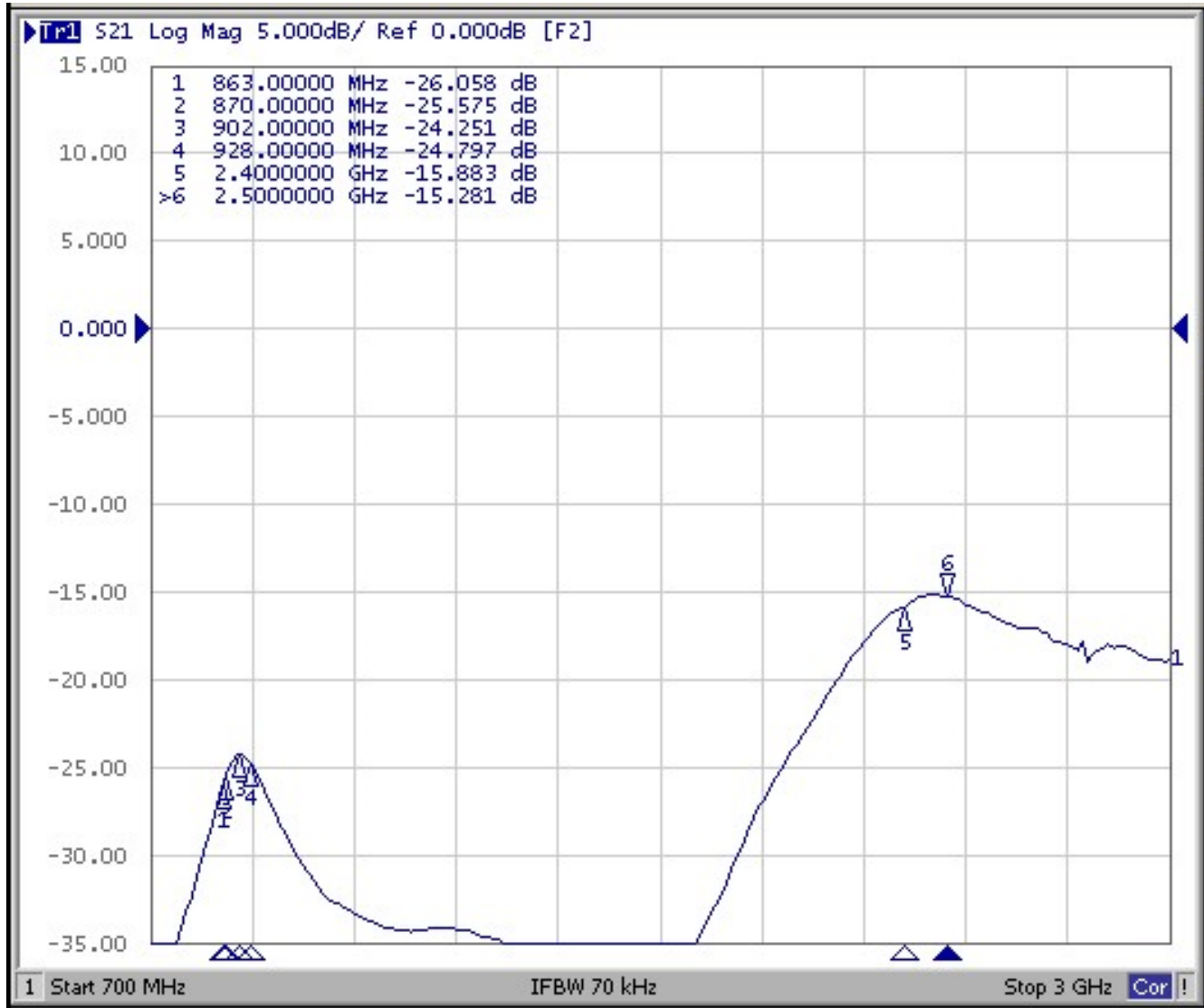
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## CHARTS

### Isolation



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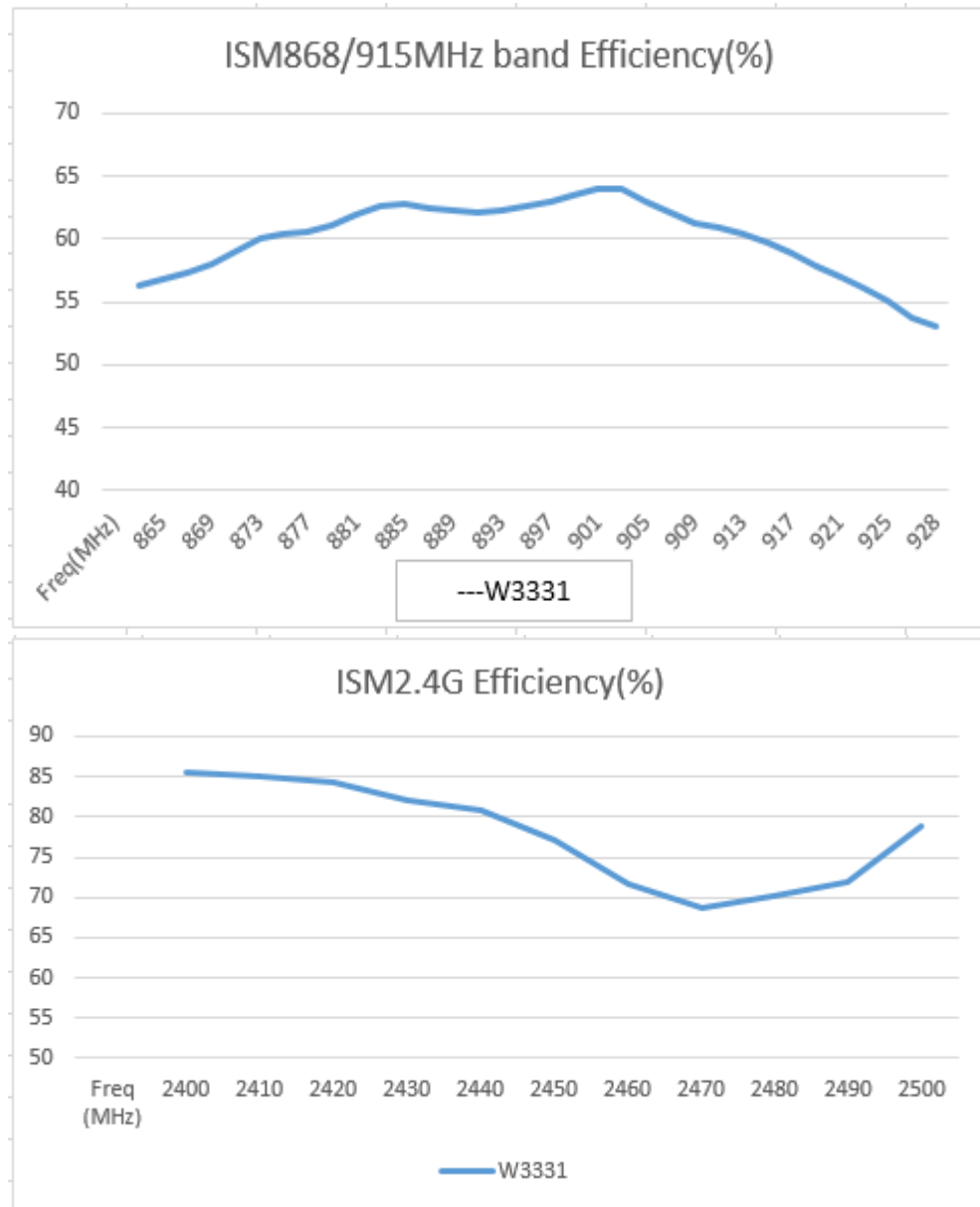
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## CHARTS

### Efficiency(%)



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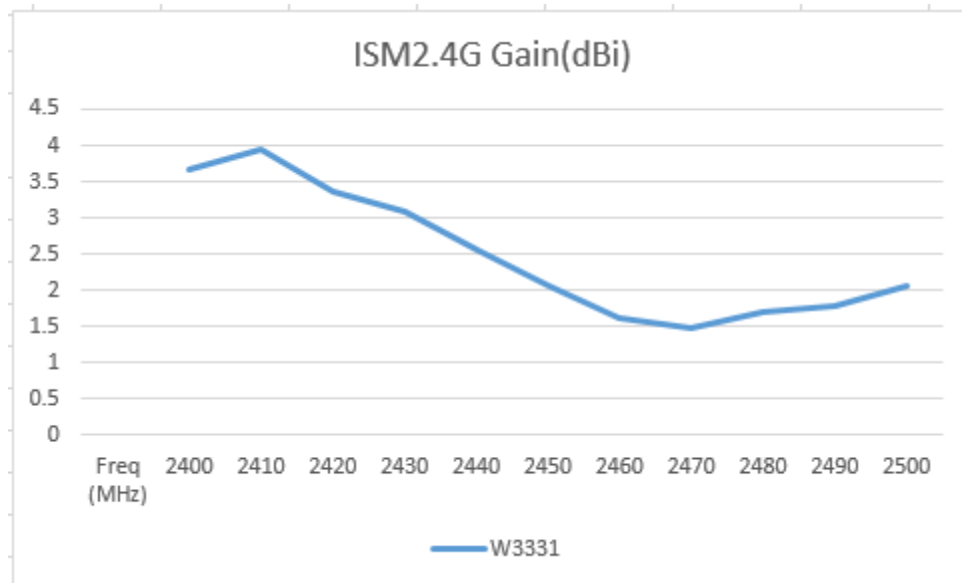
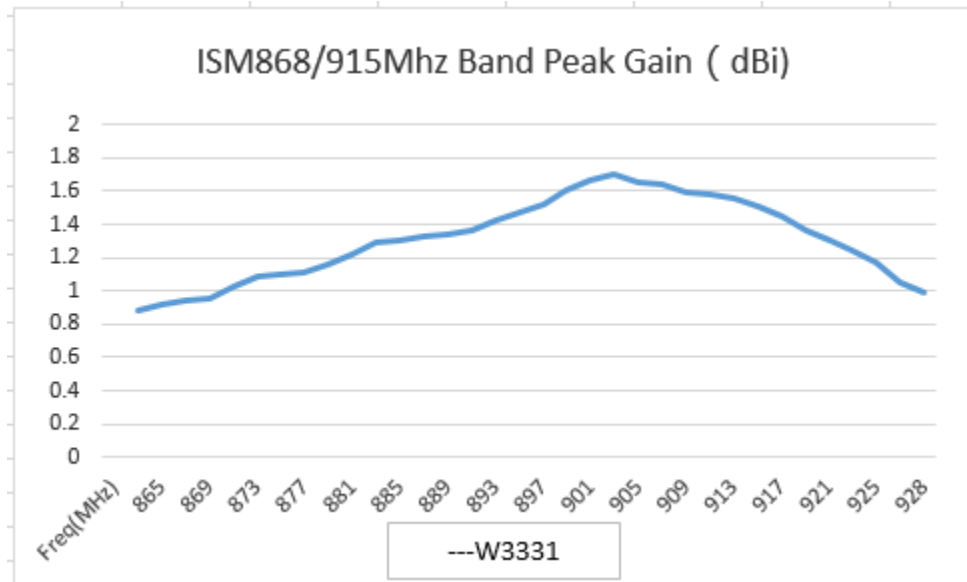
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## CHARTS

### Peak Gain ( dBi)



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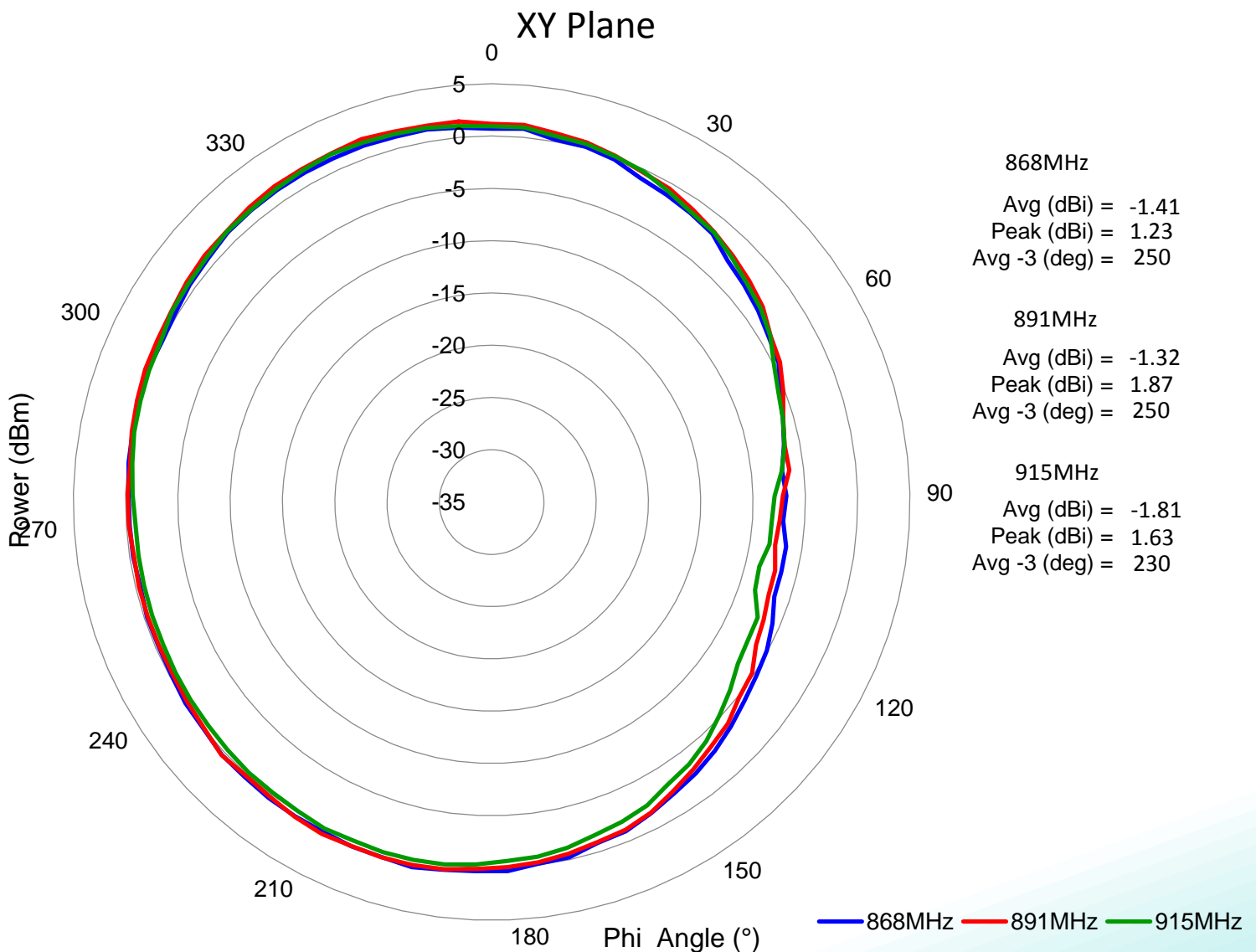
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## CHARTS

Typical free space radiation pattern  
ISM868/915MHz  
X-Y plane



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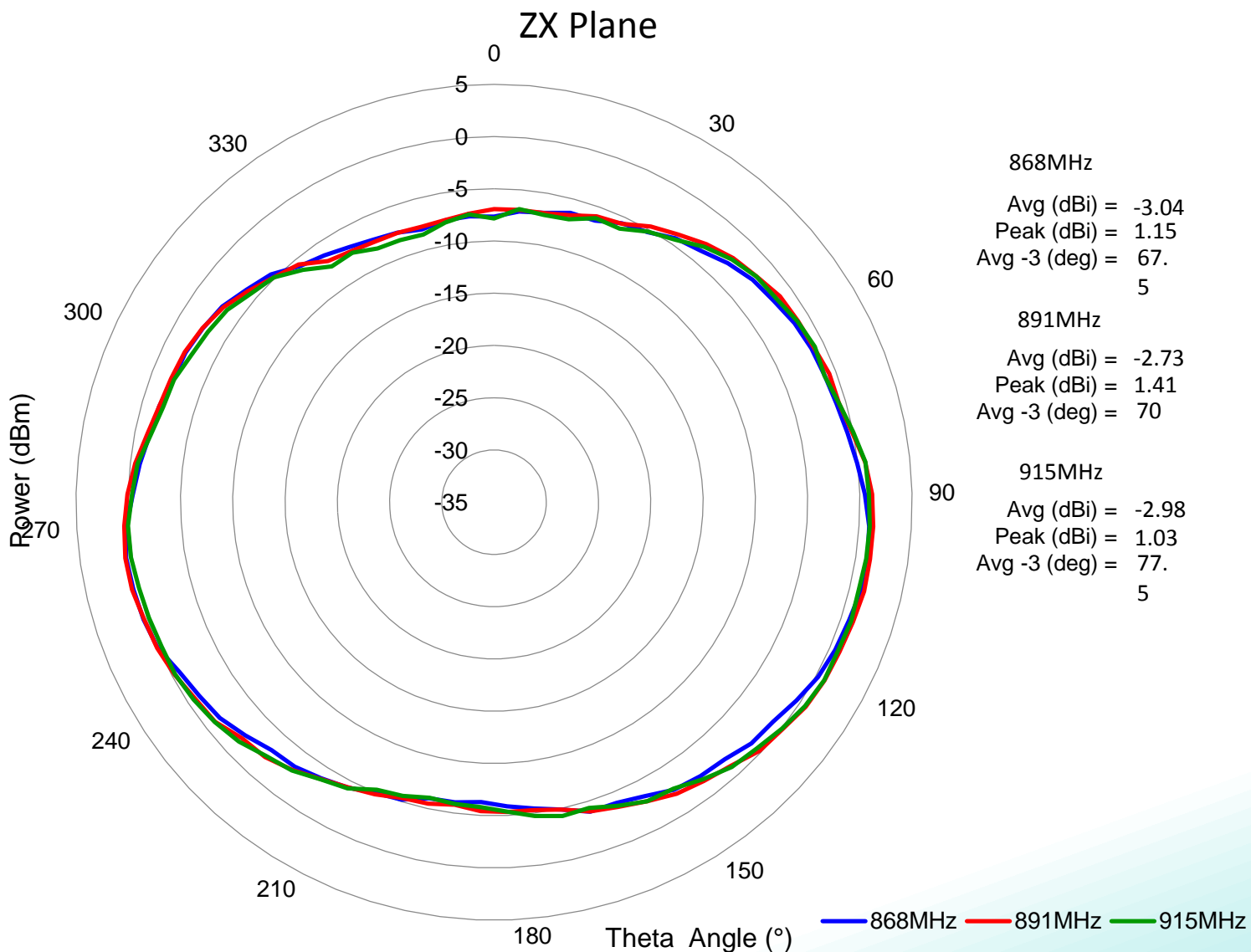
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## CHARTS

Typical free space radiation pattern  
ISM868/915MHz  
Z-X plane



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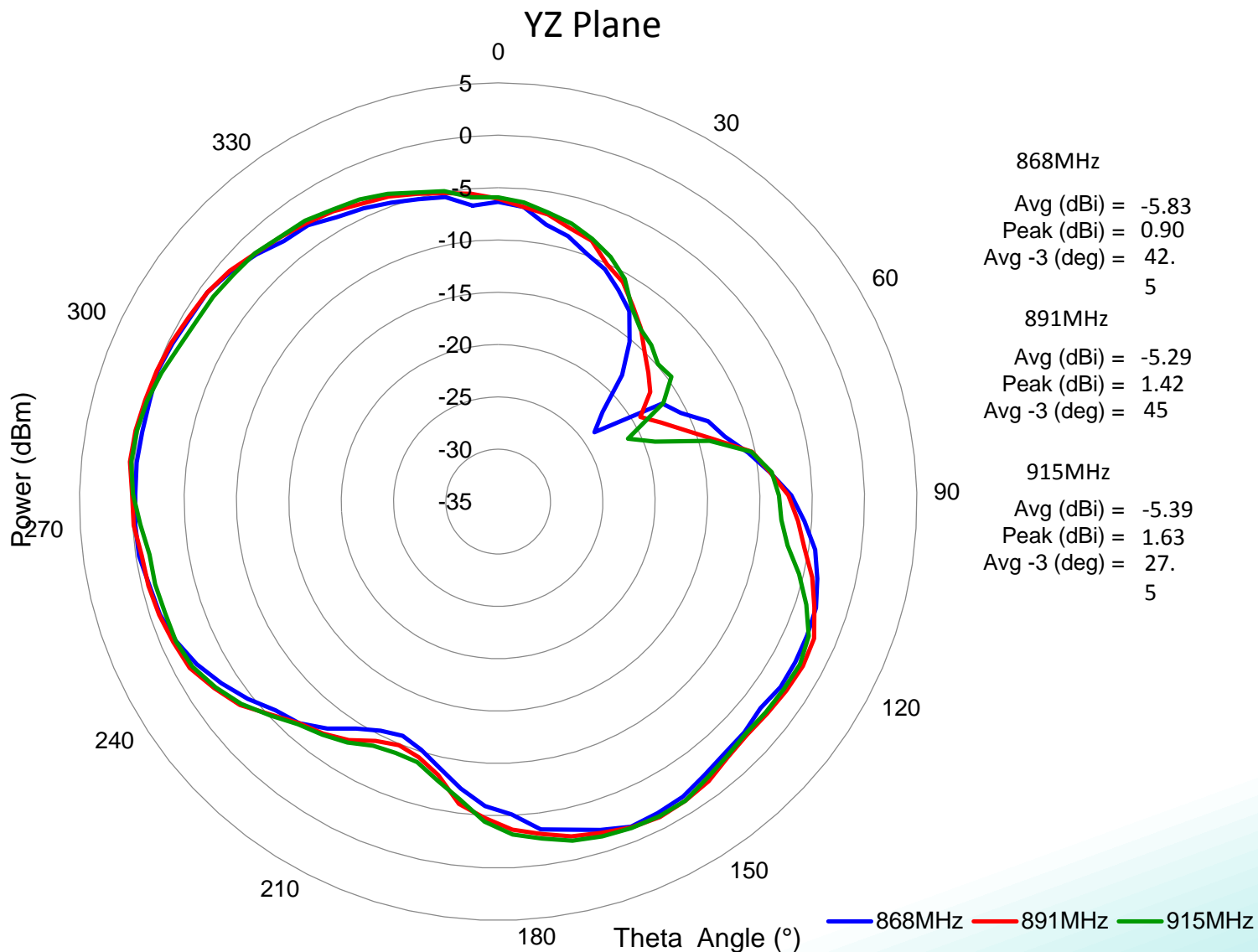
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## CHARTS

Typical free space radiation pattern  
ISM868/915MHz  
Z-Y plane



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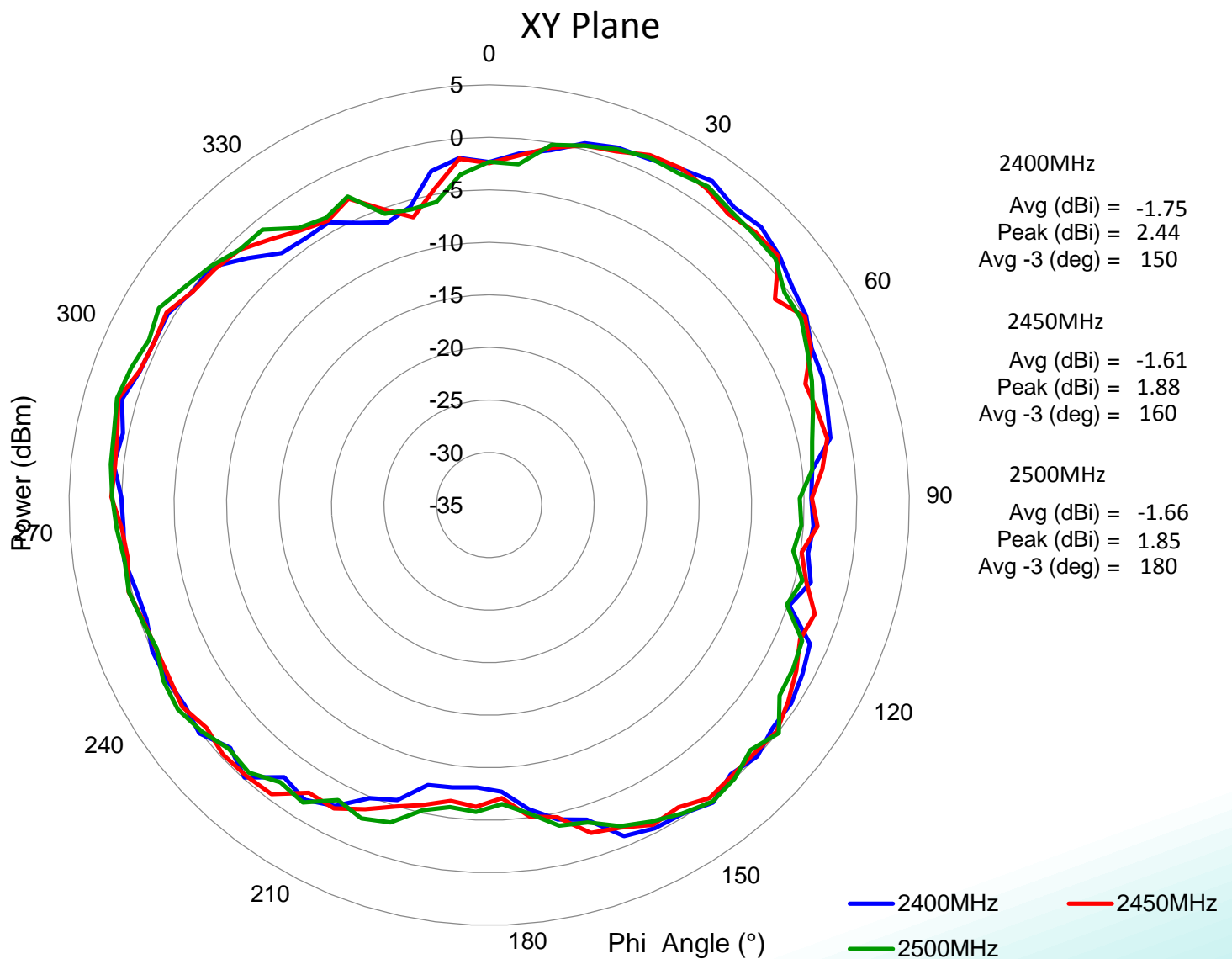
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## CHARTS

Typical free space radiation pattern  
ISM2.4GHz  
X-Y plane



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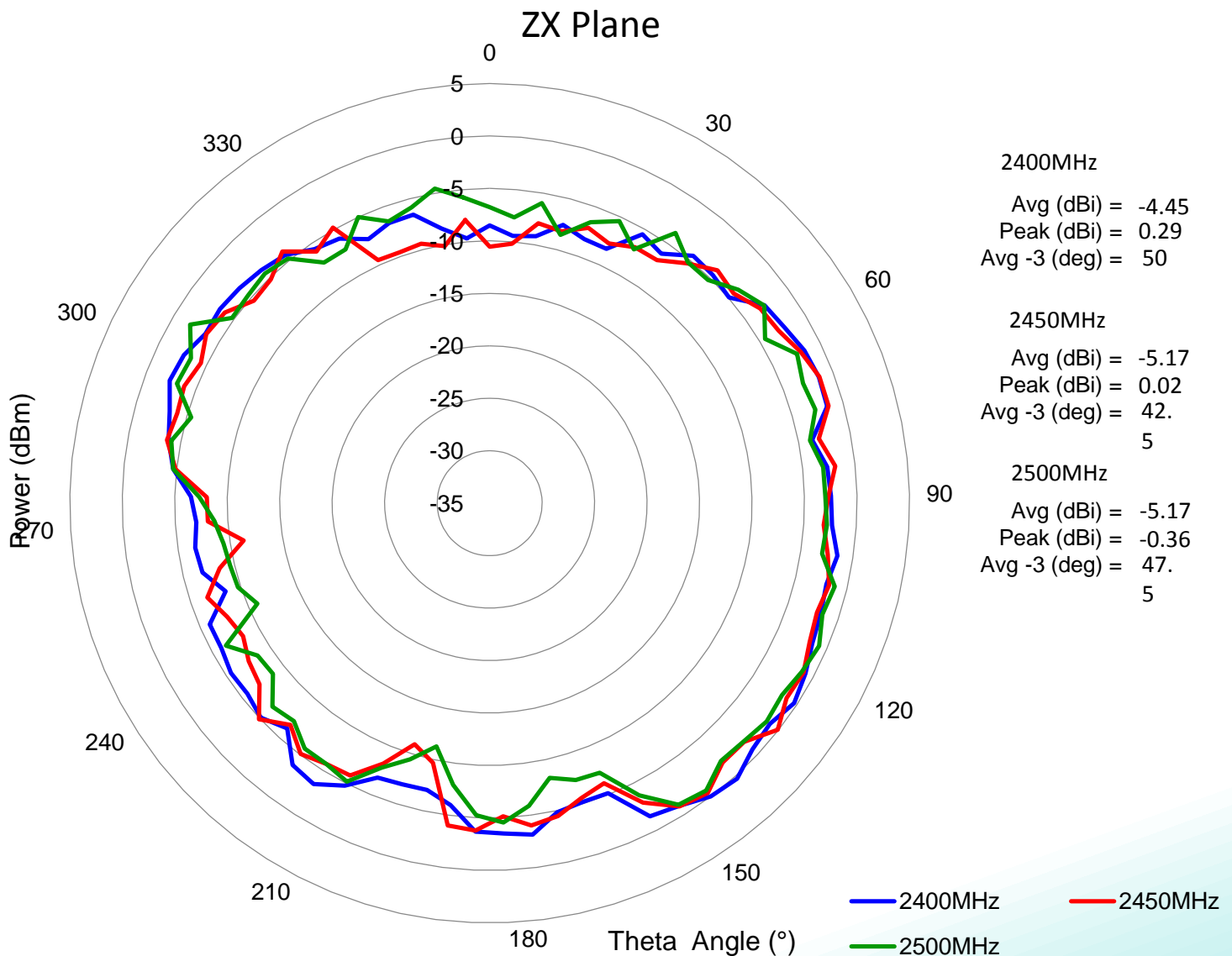
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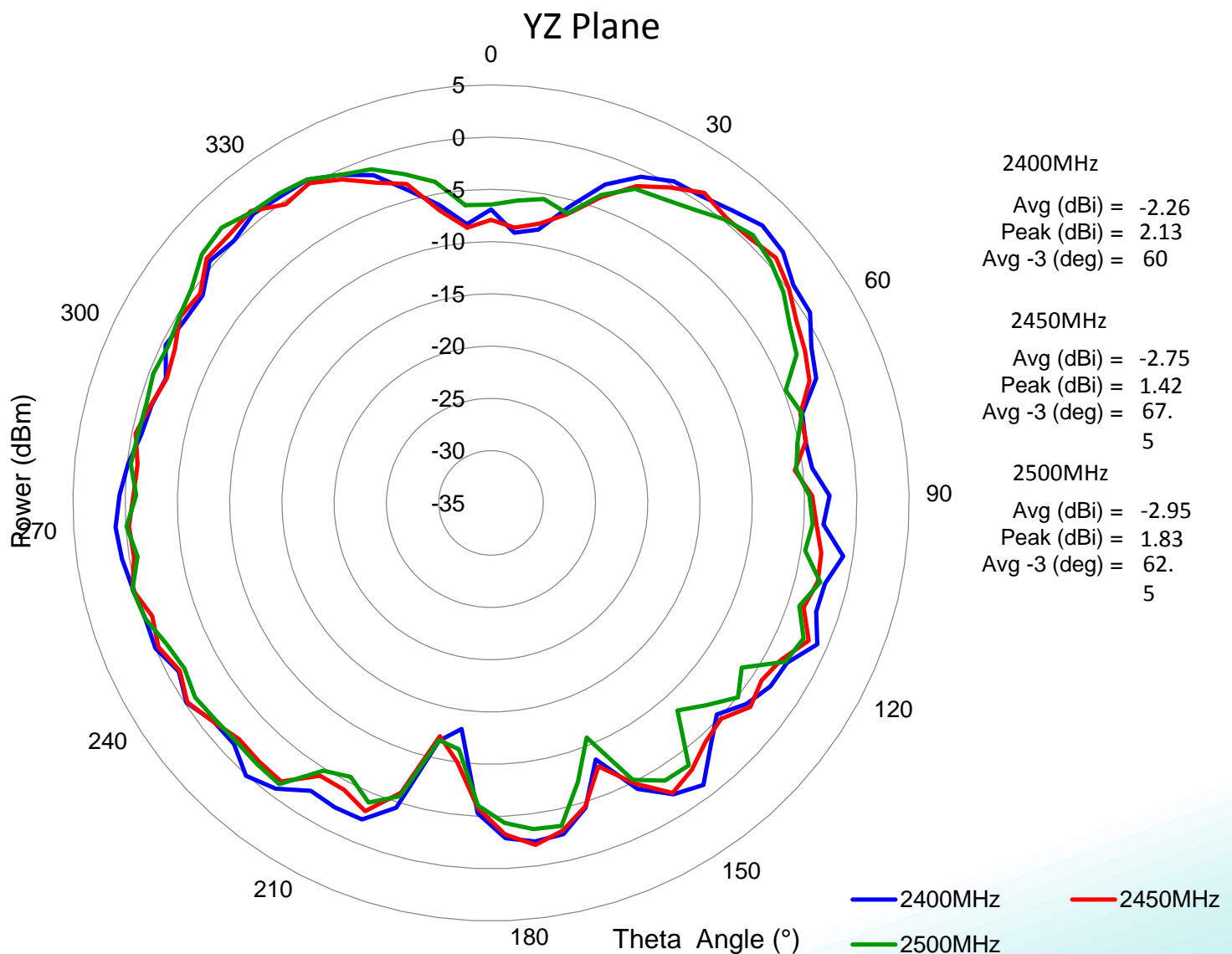
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## PACKAGING

10PCS/PE bag

1000PCS/box

# Mouser Electronics

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